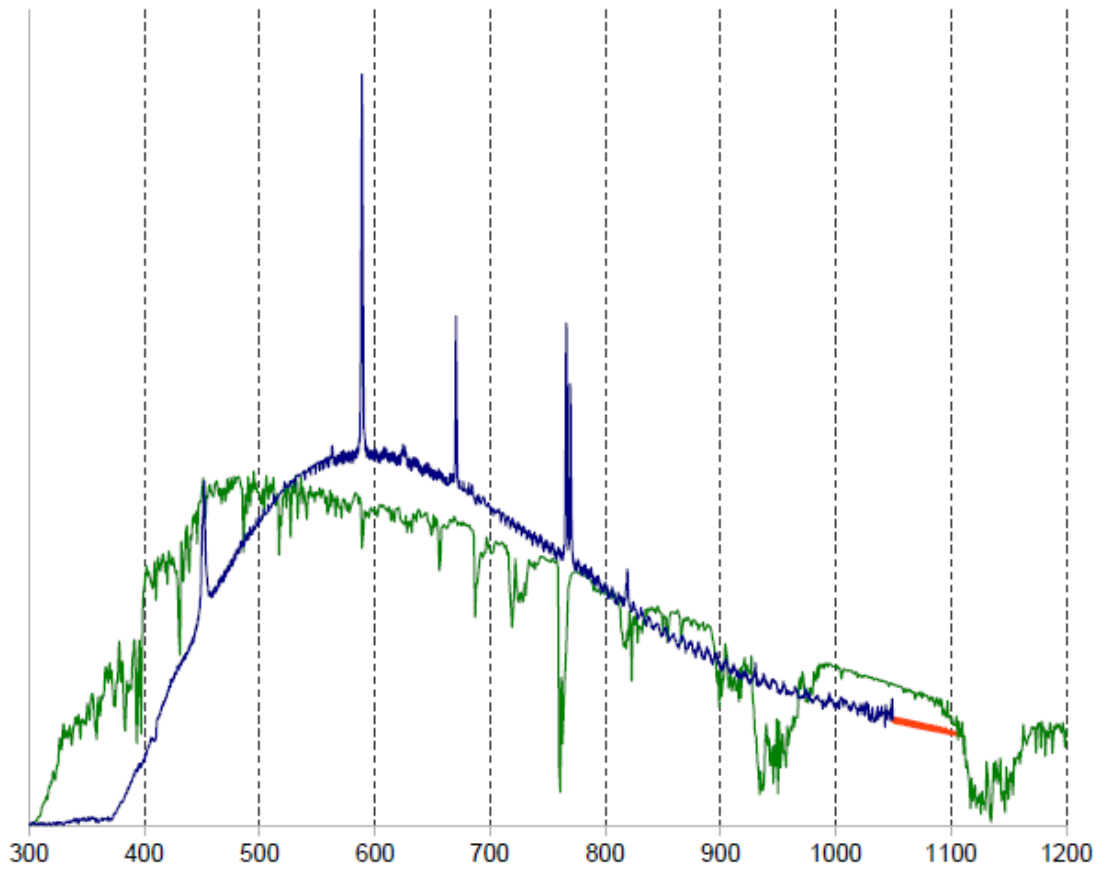# Lumartix SA ©

# Bulb M21 at 800W
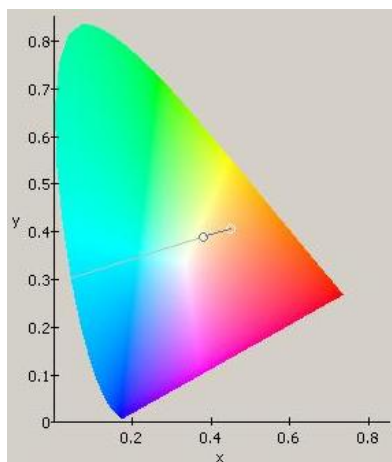


— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 11.0 | 0.60 | C |
| 500-600 nm | 19.91 | 21.1 | 1.06 | A |
| 600-700 nm | 18.36 | 21.5 | 1.17 | A |
| 700-800 nm | 14.92 | 17.9 | 1.20 | A |
| 800-900 nm | 12.46 | 12.6 | 1.01 | A |
| 900-1100 nm | 15.94 | 16.1 | 1.01 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 4100 K**

**Color Render Index = 93.5 [-]**

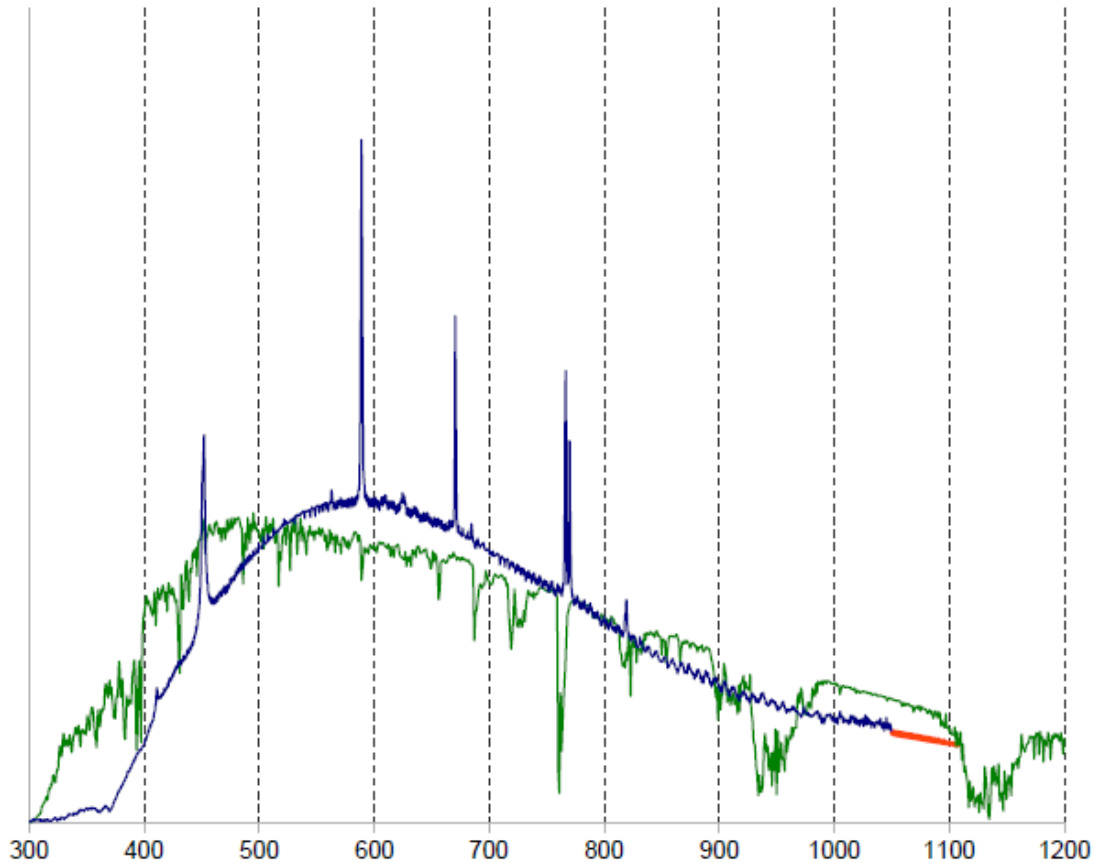**Colors coordinate:     x = 0.379     y = 0.390**

**Reference Cell Isc: 14 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
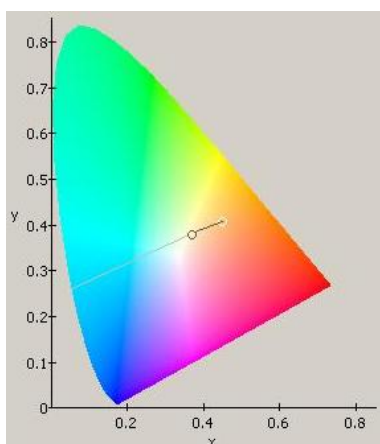
# Lumartix SA ©

# Bulb M21 at 1000W



— Normalized measured spectrum —— AM 1.5 Spectral irradiance normalized (400-1100nm)
—— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 12.4 | 0.67 | B |
| 500-600 nm | 19.91 | 21.2 | 1.06 | A |
| 600-700 nm | 18.36 | 21.2 | 1.15 | A |
| 700-800 nm | 14.92 | 17.4 | 1.17 | A |
| 800-900 nm | 12.46 | 12.2 | 0.98 | A |
| 900-1100 nm | 15.94 | 15.7 | 0.98 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 4300 K**

**Color Render Index = 94.5 [-]**
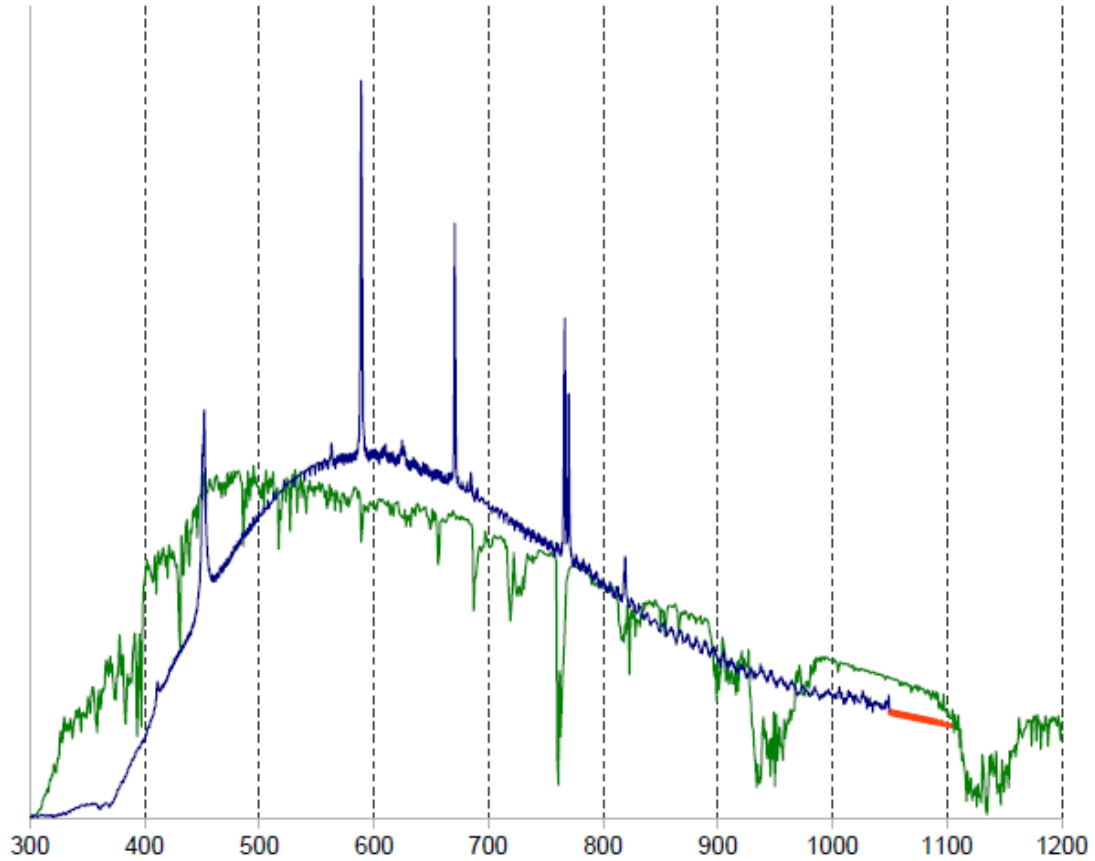
**Colors coordinate:      x = 0.369      y = 0.378**

**Reference Cell Isc: 16.1 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb M21 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 11.6 | 0.63 | B |
| 500-600 nm | 19.91 | 20.8 | 1.04 | A |
| 600-700 nm | 18.36 | 21.2 | 1.16 | A |
| 700-800 nm | 14.92 | 17.7 | 1.18 | A |
| 800-900 nm | 12.46 | 12.6 | 1.01 | A |
| 900-1100 nm | 15.94 | 16.2 | 1.01 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
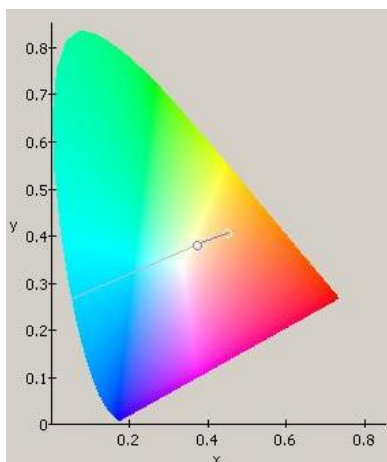


**Color temperature = 4200 K**

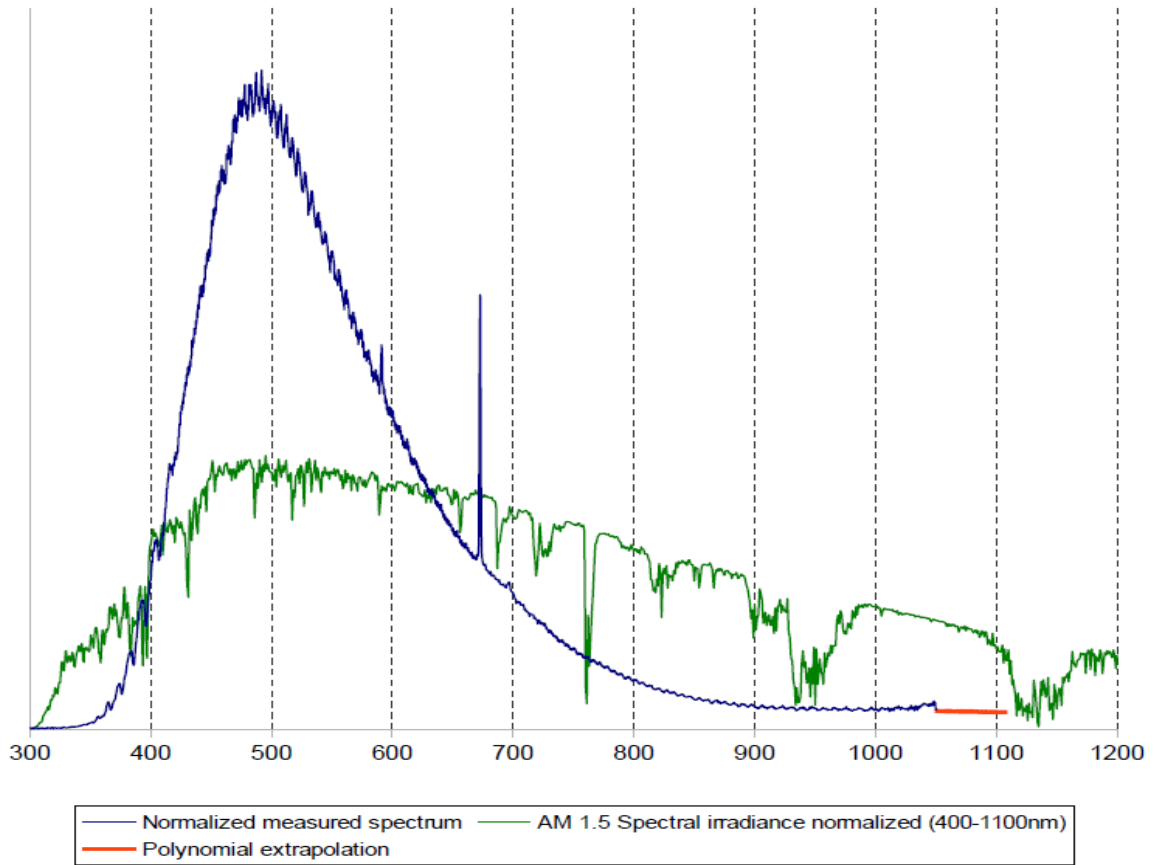**Color Render Index = 94.5 [-]**

**Colors coordinate:     x = 0.374     y = 0.381**

**Reference Cell Isc: 22 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb M22 at 1000W



— Normalized measured spectrum  — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 31.5 | 1.71 | C |
| 500-600 nm | 19.91 | 37.7 | 1.89 | C |
| 600-700 nm | 18.36 | 17.5 | 0.95 | A |
| 700-800 nm | 14.92 | 7.2 | 0.48 | C |
| 800-900 nm | 12.46 | 2.8 | 0.22 | - |
| 900-1100 nm | 15.94 | 3.4 | 0.21 | - |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 8240 K**

**Color Render Index = 82.5 [-]**

**Colors coordinate:      x = 0.279      y = 0.342**

**Reference Cell Isc: 15.3 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
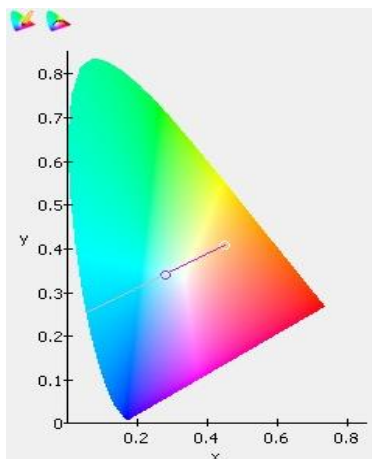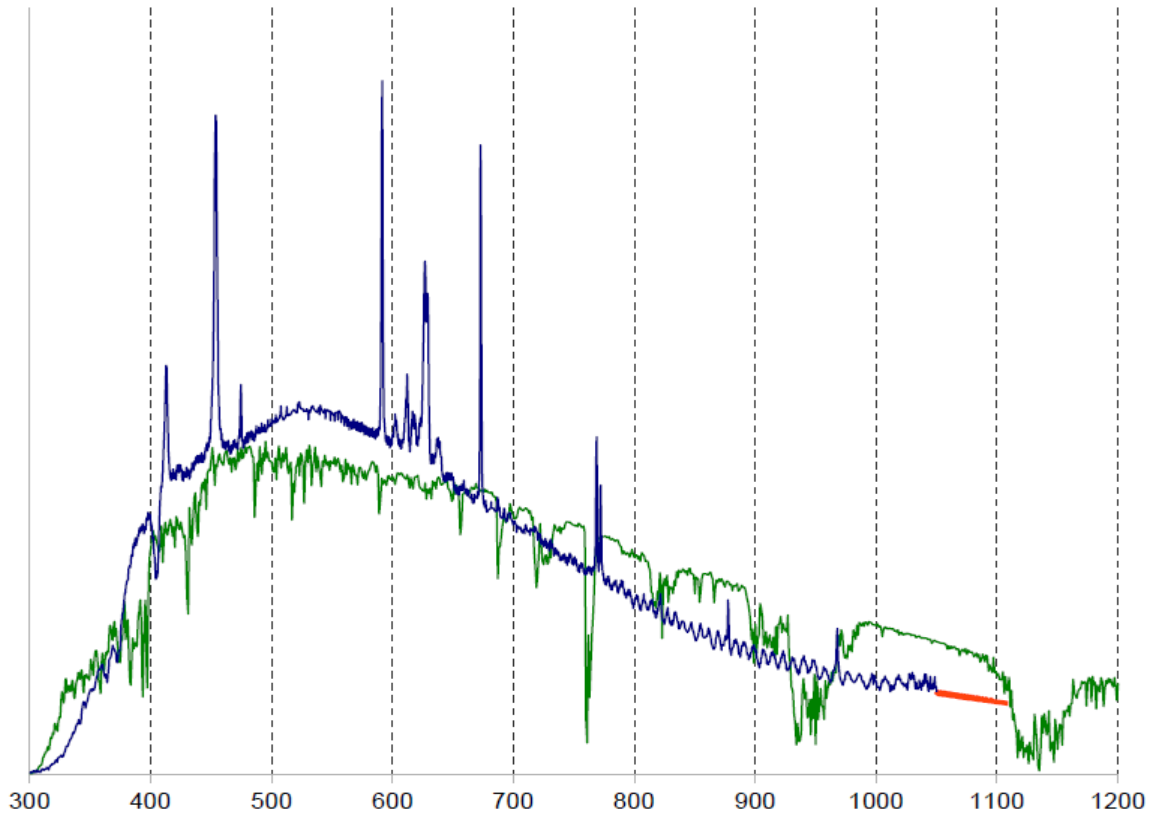
# Lumartix SA ©

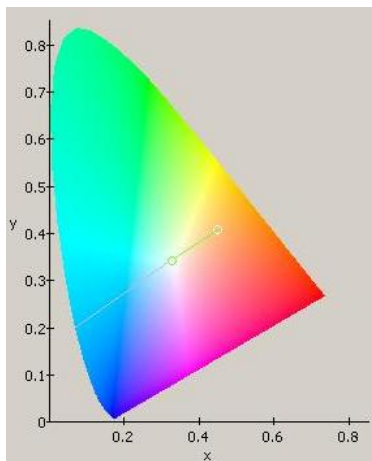# Bulb M34 at 1000W



- Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
- Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 20.0 | 1.08 | A |
| 500-600 nm | 19.91 | 22.6 | 1.14 | A |
| 600-700 nm | 18.36 | 20.3 | 1.10 | A |
| 700-800 nm | 14.92 | 14.4 | 0.97 | A |
| 800-900 nm | 12.46 | 9.8 | 0.79 | A |
| 900-1100 nm | 15.94 | 12.9 | 0.81 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 5750 K**

**Color Render Index = 98.5 [-]**
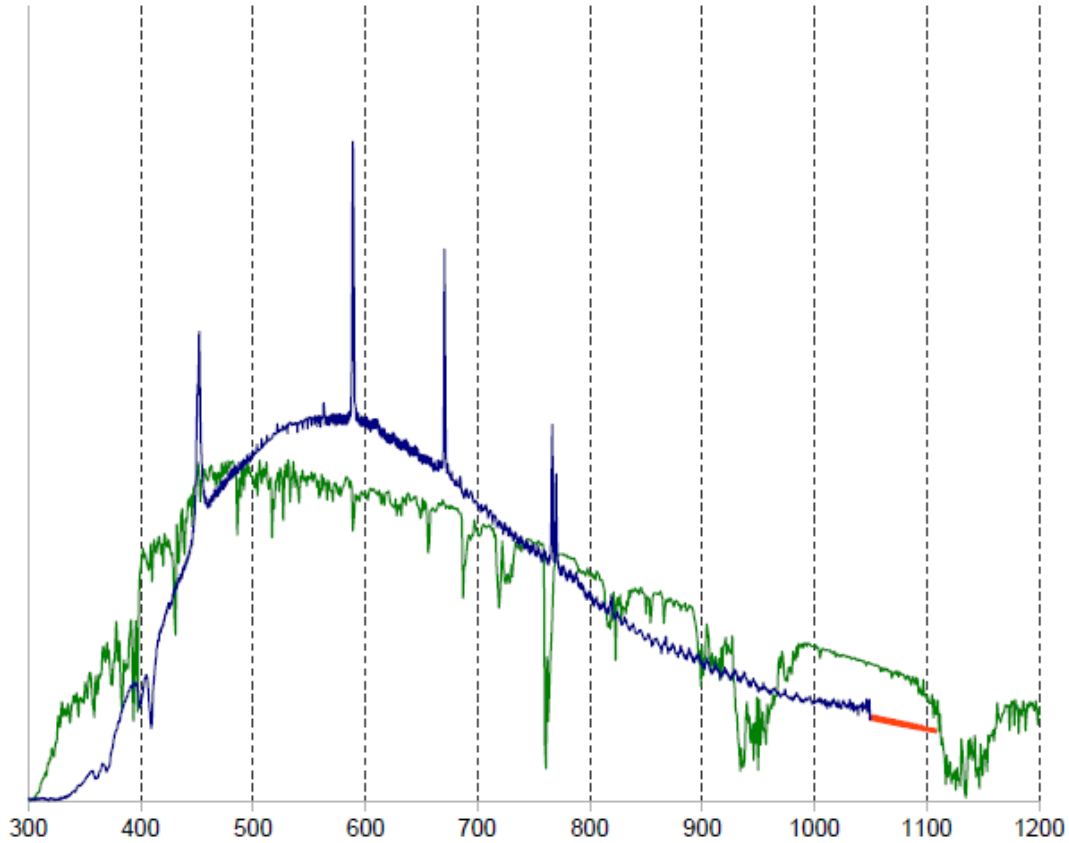
**Colors coordinate:     x = 0.327     y = 0.338**

**Reference Cell Isc: 12.7 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
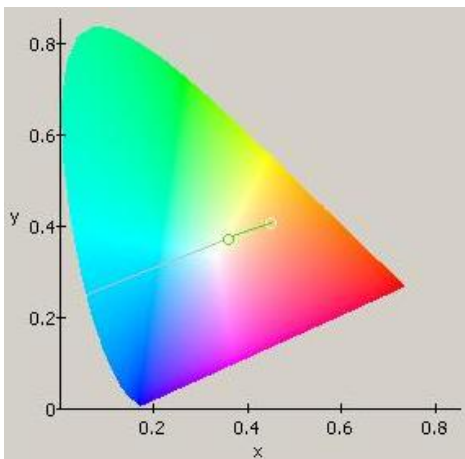
# Lumartix SA ©

# Bulb M36 at 800W



— Normalized measured spectrum  — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 14.4 | 0.78 | A |
| 500-600 nm | 19.91 | 23.0 | 1.15 | A |
| 600-700 nm | 18.36 | 21.6 | 1.18 | A |
| 700-800 nm | 14.92 | 16.4 | 1.10 | A |
| 800-900 nm | 12.46 | 11.0 | 0.88 | A |
| 900-1100 nm | 15.94 | 13.6 | 0.85 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature = 4600 K

Color Render Index = 94.5 [-]
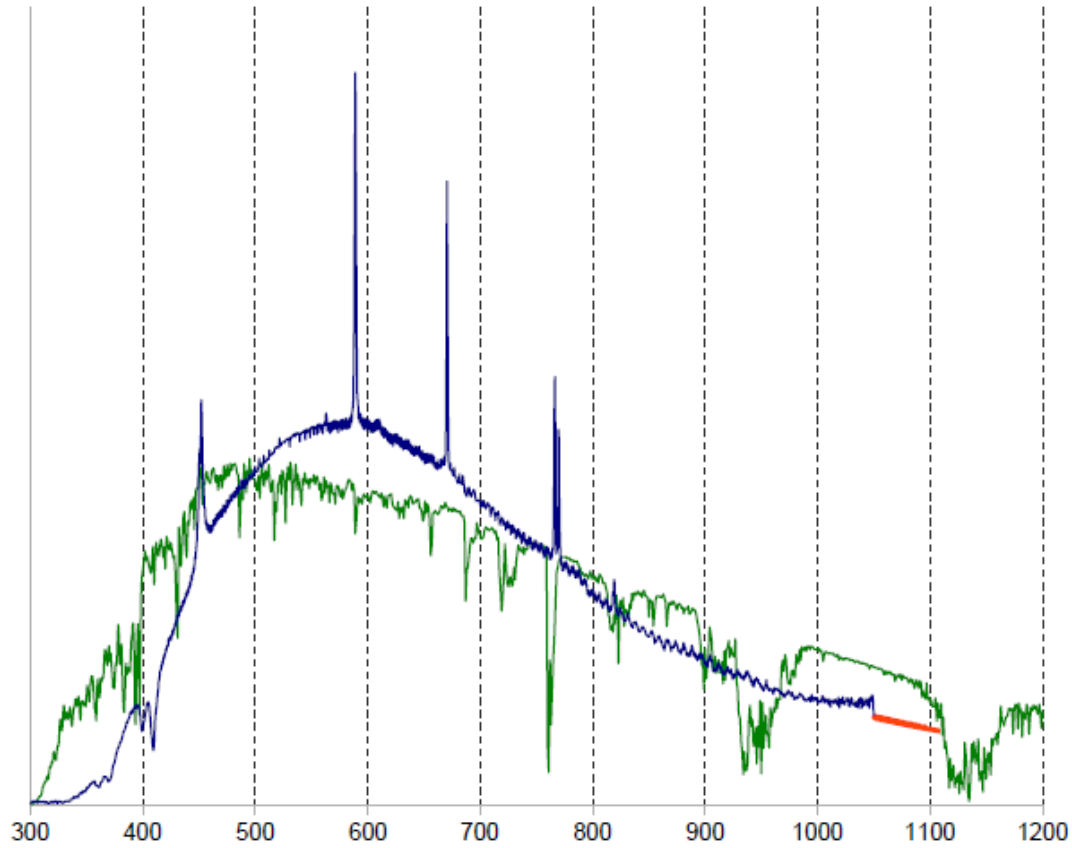
Colors coordinate:     x = 0.359     y = 0.372

Reference Cell Isc: 14 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Bulb M36 at 1000W



Legend:
—Normalized measured spectrum —AM 1.5 Spectral irradiance normalized (400-1100nm)
—Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 13.0 | 0.71 | B |
| 500-600 nm | 19.91 | 22.6 | 1.13 | A |
| 600-700 nm | 18.36 | 21.9 | 1.19 | A |
| 700-800 nm | 14.92 | 16.9 | 1.13 | A |
| 800-900 nm | 12.46 | 11.4 | 0.91 | A |
| 900-1100 nm | 15.94 | 14.2 | 0.89 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 4500 K**

**Color Render Index = 94.5 [-]**

**Colors coordinate:    x = 0.363    y = 0.375**

**Reference Cell Isc: 19.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
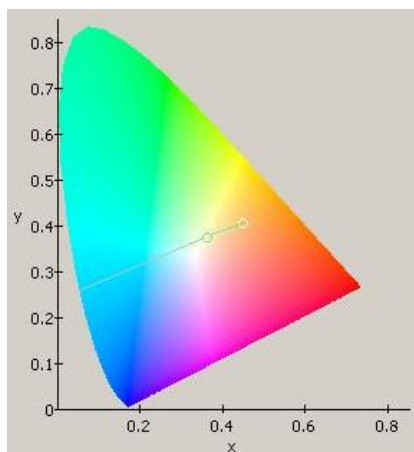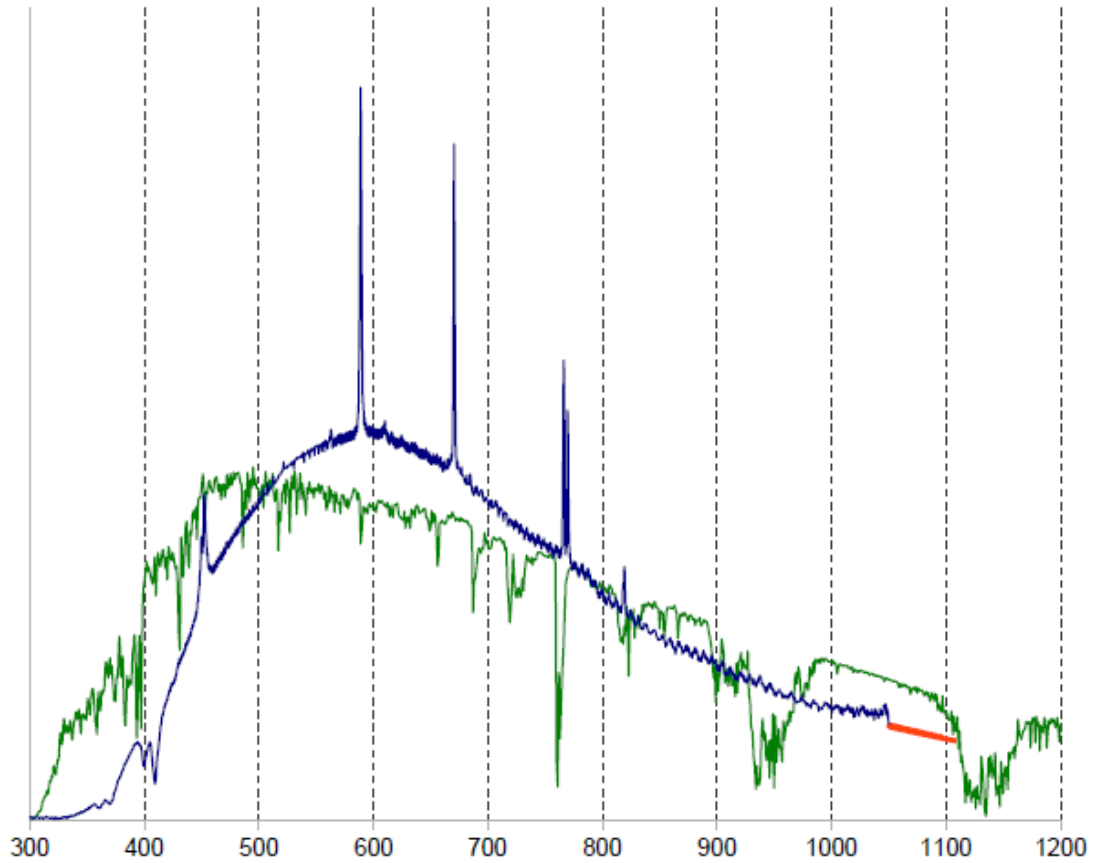
# Lumartix SA ©

# Bulb M36 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 11.2 | 0.61 | B |
| 500-600 nm | 19.91 | 21.9 | 1.10 | A |
| 600-700 nm | 18.36 | 22.3 | 1.22 | A |
| 700-800 nm | 14.92 | 17.6 | 1.18 | A |
| 800-900 nm | 12.46 | 12.0 | 0.96 | A |
| 900-1100 nm | 15.94 | 15.0 | 0.94 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
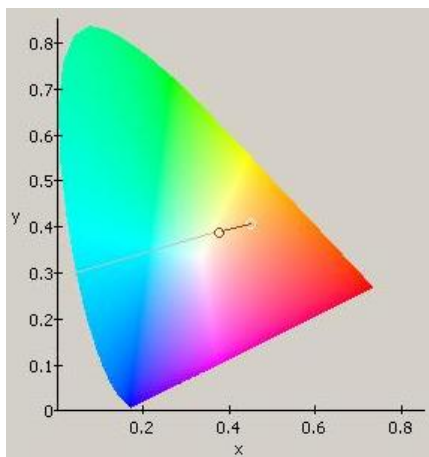


Color temperature = 4150 K

Color Render Index = 93.5 [-]

Colors coordinate:     x = 0.378     y = 0.389

Reference Cell Isc: 26 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
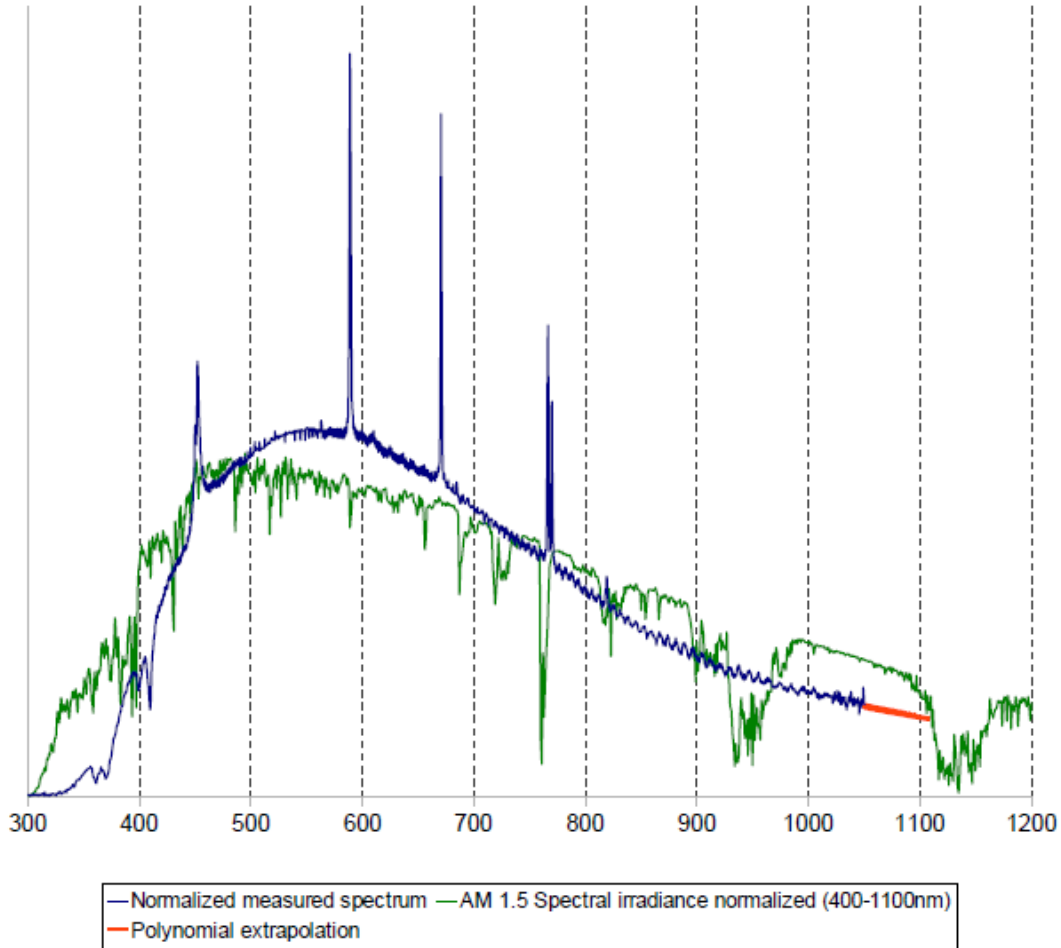
# Lumartix SA ©

# Bulb M37 at 800W



— Normalized measured spectrum  — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 15.0 | 0.82 | A |
| 500-600 nm | 19.91 | 22.4 | 1.12 | A |
| 600-700 nm | 18.36 | 20.9 | 1.14 | A |
| 700-800 nm | 14.92 | 16.4 | 1.10 | A |
| 800-900 nm | 12.46 | 11.2 | 0.90 | A |
| 900-1100 nm | 15.94 | 14.1 | 0.89 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature  =  4800 K

Color Render Index  =  95 [-]

Colors coordinate:      x = 0.352      y = 0.364

Reference Cell Isc: 15 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
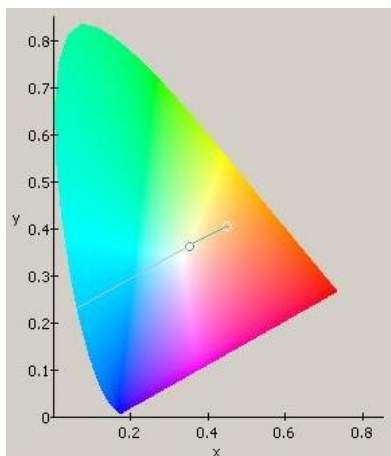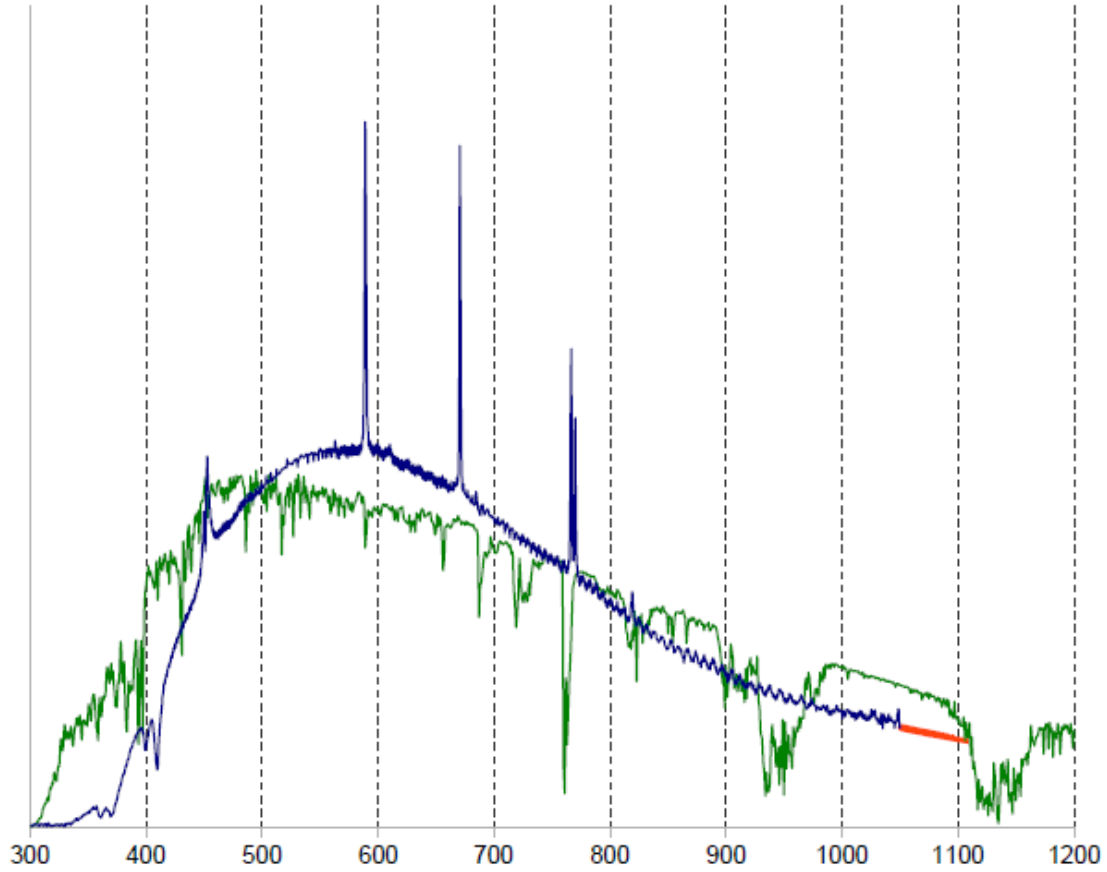
# Lumartix SA ©

# Bulb M37 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 13.1 | 0.71 | B |
| 500-600 nm | 19.91 | 21.9 | 1.10 | A |
| 600-700 nm | 18.36 | 21.2 | 1.16 | A |
| 700-800 nm | 14.92 | 17.0 | 1.14 | A |
| 800-900 nm | 12.46 | 11.8 | 0.94 | A |
| 900-1100 nm | 15.94 | 15.0 | 0.94 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature  =  4500 K

Color Render Index  =  94.5 [-]

Colors coordinate:      x = 0.363       y = 0.378

Reference Cell Isc: 20 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
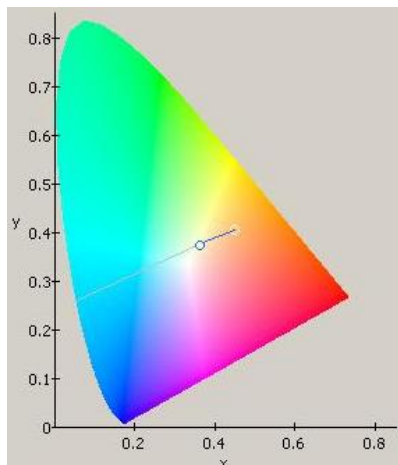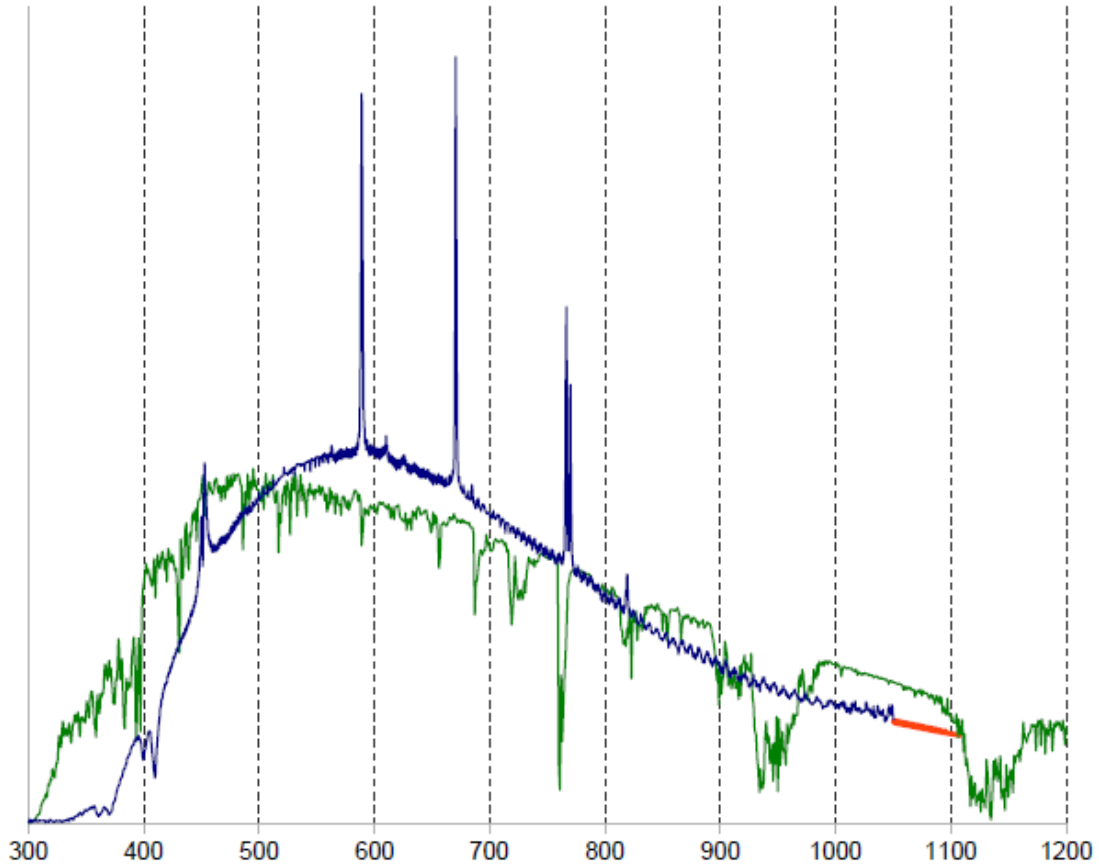
# Lumartix SA ©

# Bulb M37 at 1300W



— Normalized measured spectrum  — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 12.2 | 0.66 | B |
| 500-600 nm | 19.91 | 21.5 | 1.08 | A |
| 600-700 nm | 18.36 | 21.4 | 1.17 | A |
| 700-800 nm | 14.92 | 17.3 | 1.16 | A |
| 800-900 nm | 12.46 | 12.1 | 0.97 | A |
| 900-1100 nm | 15.94 | 15.5 | 0.97 | A |

| Class A | | Class B | Class C |
|---|---|---|---|
| 0.75 | | 0.60 | 0.40 |
| 1.25 | | 1.40 | 2.00 |

## Lighting characteristics
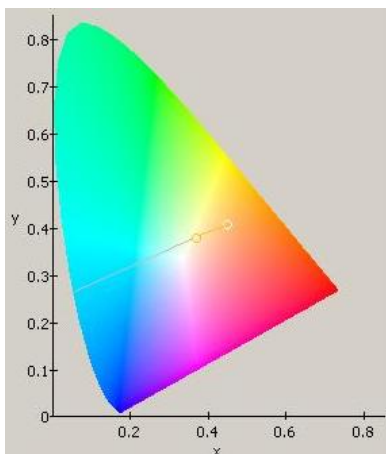


**Color temperature = 4350 K**

**Color Render Index = 94 [-]**

**Colors coordinate:** x = 0.368  y = 0.379

**Reference Cell Isc: 28 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb M38 at 1000W



Legend:
— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 14.2 | 0.77 | A |
| 500-600 nm | 19.91 | 22.4 | 1.12 | A |
| 600-700 nm | 18.36 | 20.5 | 1.12 | A |
| 700-800 nm | 14.92 | 16.4 | 1.10 | A |
| 800-900 nm | 12.46 | 11.5 | 0.92 | A |
| 900-1100 nm | 15.94 | 15.1 | 0.95 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature  =  4900 K**

**Color Render Index  =  95.3 [-]**
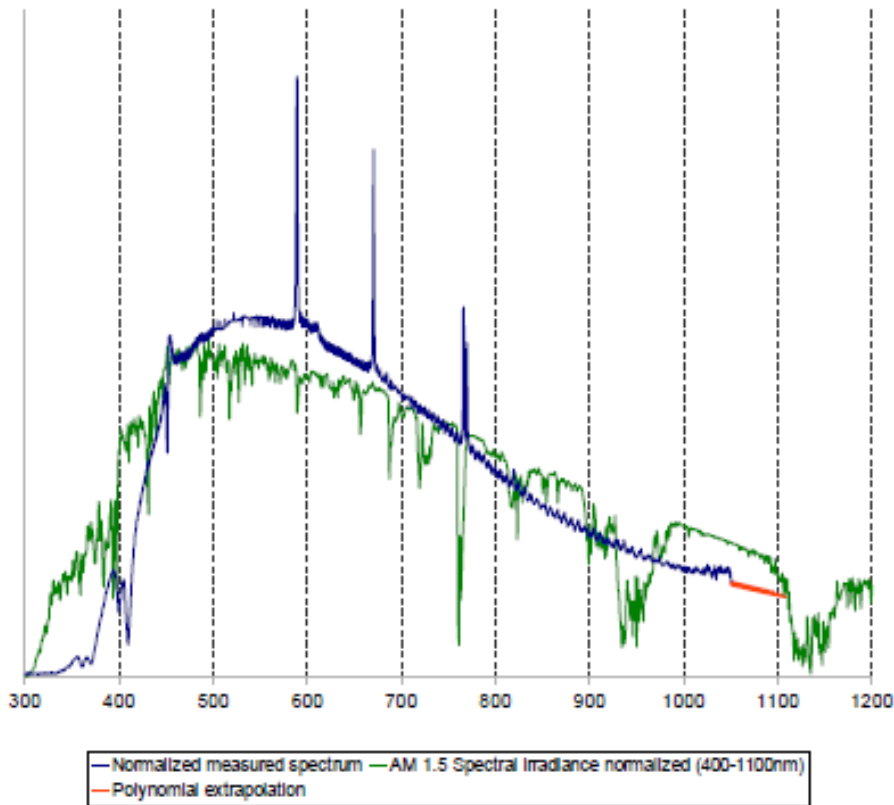
**Colors coordinate:      x = 0.350      y = 0.367**

**Reference Cell Isc:   [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
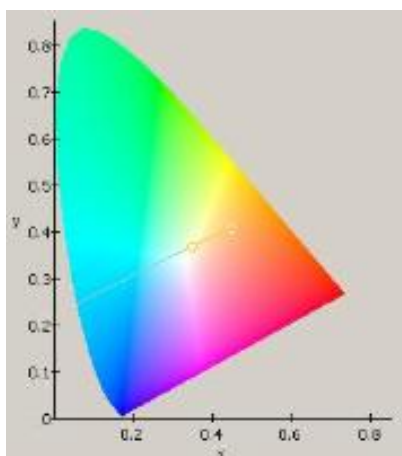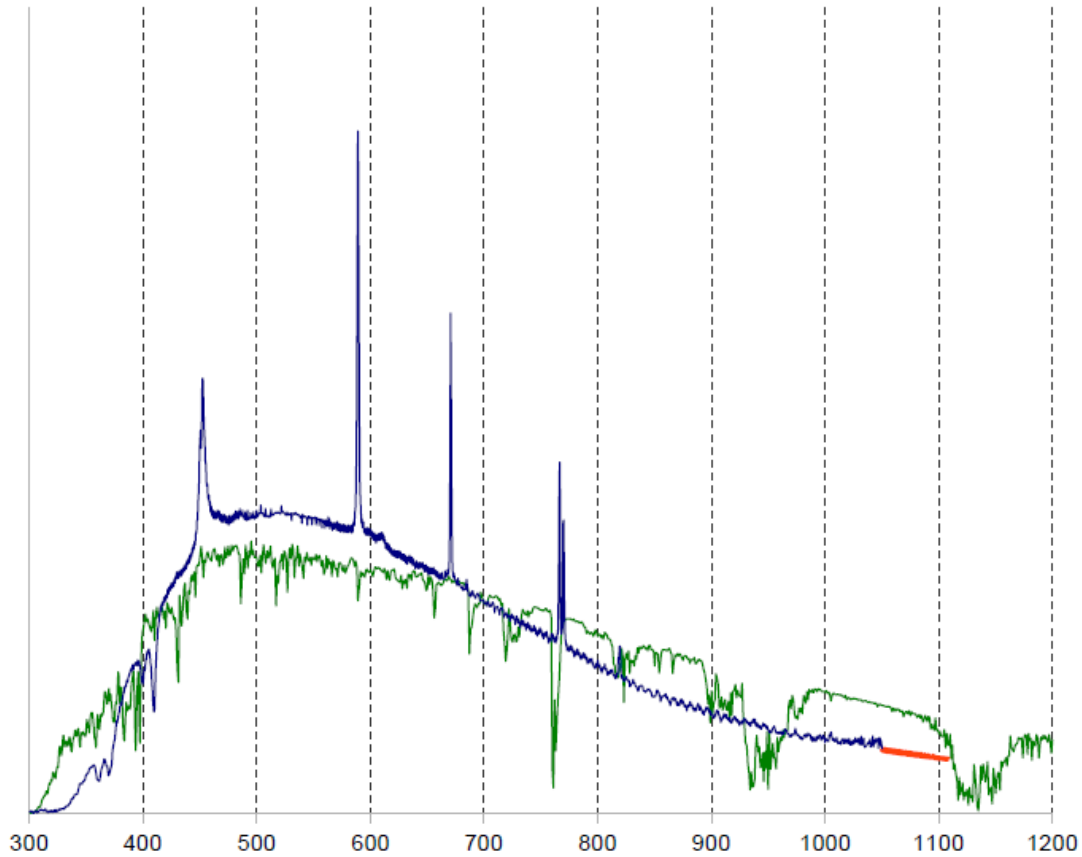
# Lumartix SA ©

# Bulb M38-85 at 800W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 19.1 | 1.04 | A |
| 500-600 nm | 19.91 | 23.2 | 1.17 | A |
| 600-700 nm | 18.36 | 19.8 | 1.08 | A |
| 700-800 nm | 14.92 | 15.0 | 1.01 | A |
| 800-900 nm | 12.46 | 10.1 | 0.81 | A |
| 900-1100 nm | 15.94 | 12.8 | 0.80 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
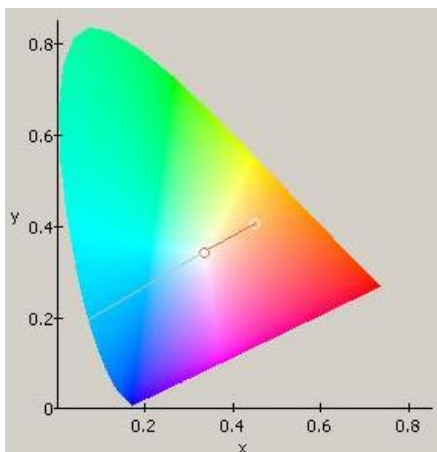


**Color temperature = 5430 K**

**Color Render Index = 96 [-]**

**Colors coordinate:** x = 0.334     y = 0.344

**Reference Cell Isc: 13 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb M38-85 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 18.2 | 0.99 | A |
| 500-600 nm | 19.91 | 23.1 | 1.16 | A |
| 600-700 nm | 18.36 | 20.0 | 1.09 | A |
| 700-800 nm | 14.92 | 15.3 | 1.02 | A |
| 800-900 nm | 12.46 | 10.3 | 0.83 | A |
| 900-1100 nm | 15.94 | 13.1 | 0.82 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 5300 K**

**Color Render Index = 96.5 [-]**
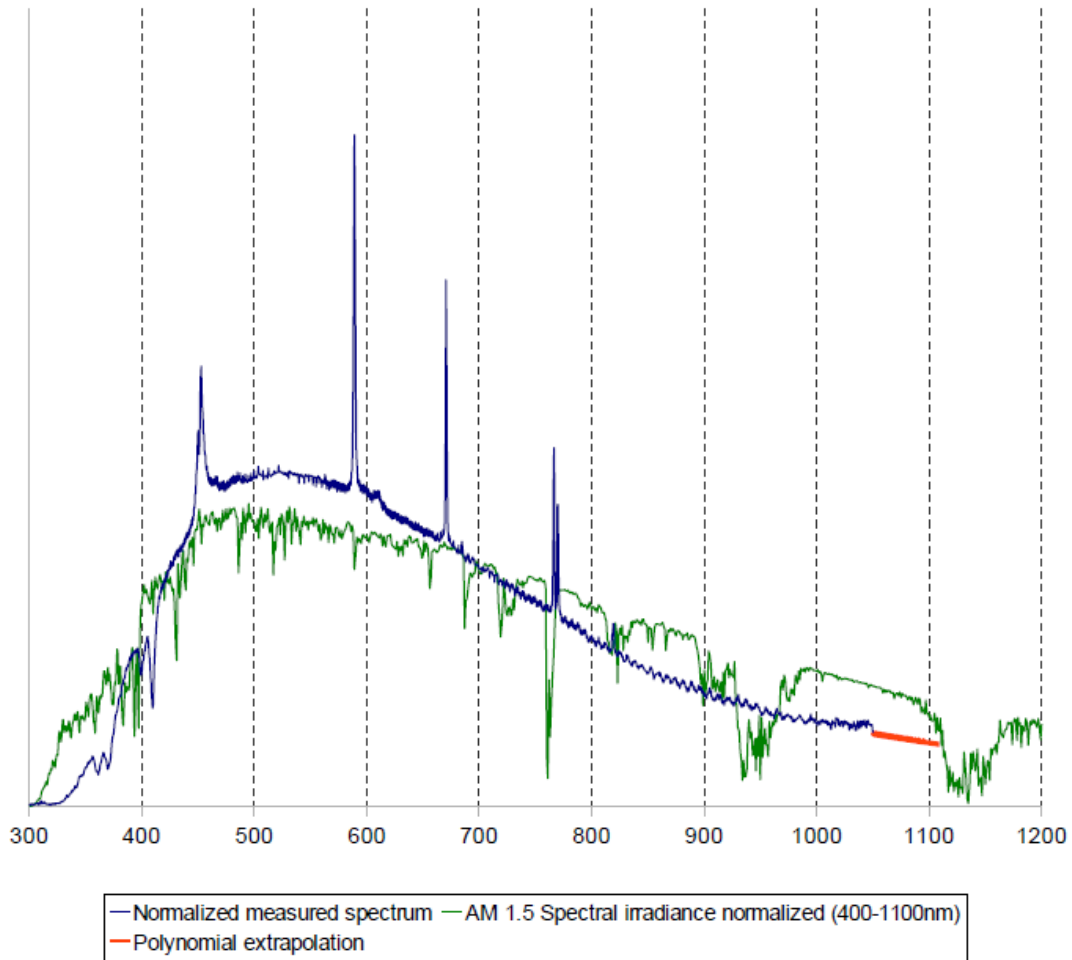
**Colors coordinate:    x = 0.337    y = 0.349**

**Reference Cell Isc: 16.7 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
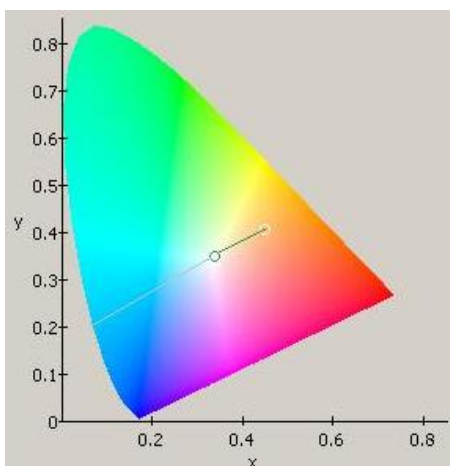
# Lumartix SA ©

# Bulb M38-85 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 15.9 | 0.86 | A |
| 500-600 nm | 19.91 | 22.8 | 1.15 | A |
| 600-700 nm | 18.36 | 20.6 | 1.12 | A |
| 700-800 nm | 14.92 | 15.9 | 1.07 | A |
| 800-900 nm | 12.46 | 10.9 | 0.88 | A |
| 900-1100 nm | 15.94 | 13.8 | 0.87 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
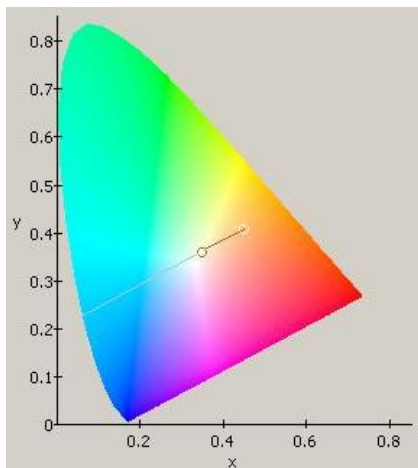


**Color temperature = 4950 K**

**Color Render Index = 95 [-]**

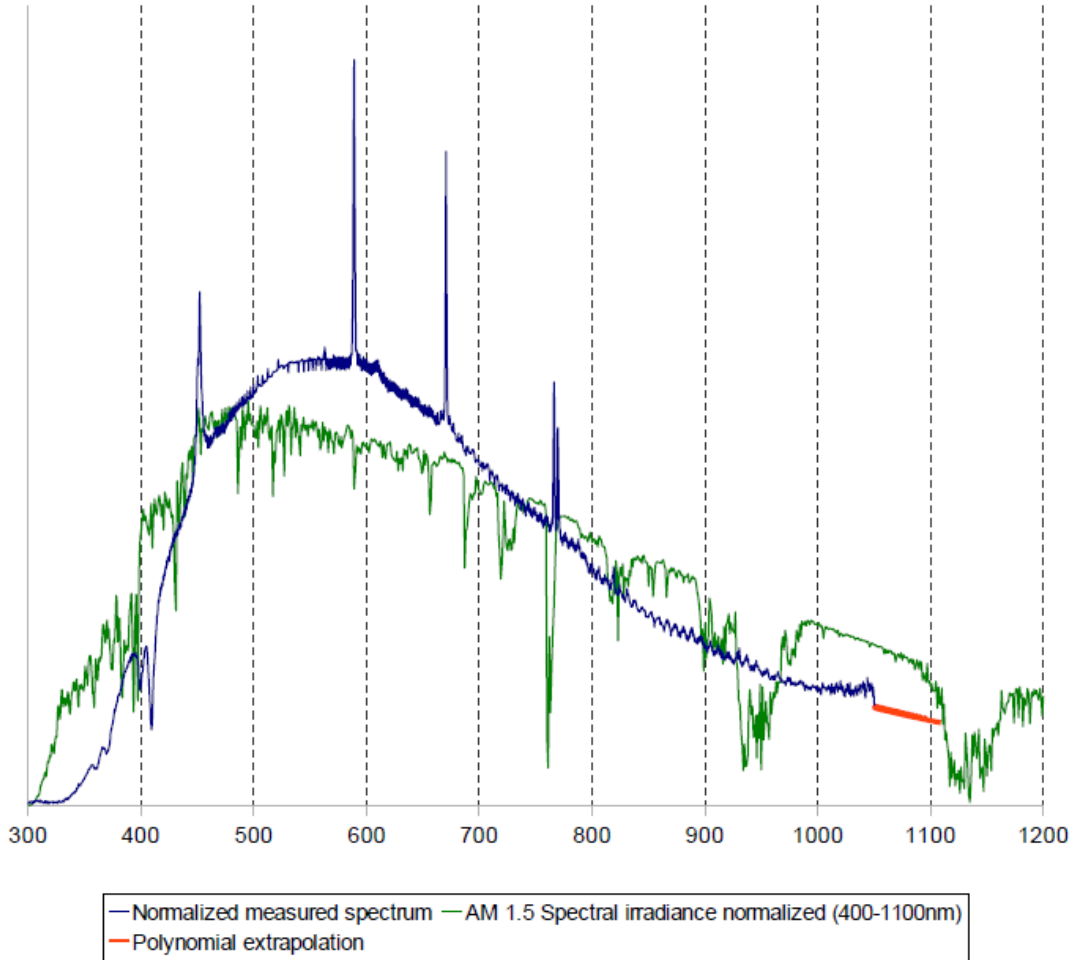**Colors coordinate:** x = 0.347    y = 0.361

**Reference Cell Isc: 23.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Bulb M39 at 800W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 15.0 | 0.82 | A |
| 500-600 nm | 19.91 | 22.9 | 1.15 | A |
| 600-700 nm | 18.36 | 21.3 | 1.16 | A |
| 700-800 nm | 14.92 | 16.2 | 1.09 | A |
| 800-900 nm | 12.46 | 10.9 | 0.87 | A |
| 900-1100 nm | 15.94 | 13.7 | 0.86 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature = 4800 K

Color Render Index = 95.5 [-]

Colors coordinate:   x = 0.353   y = 0.367

Reference Cell Isc: 12.5 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
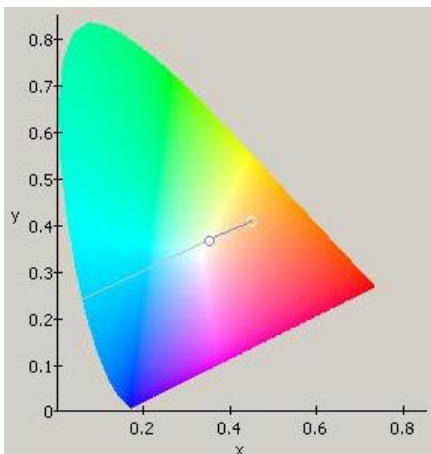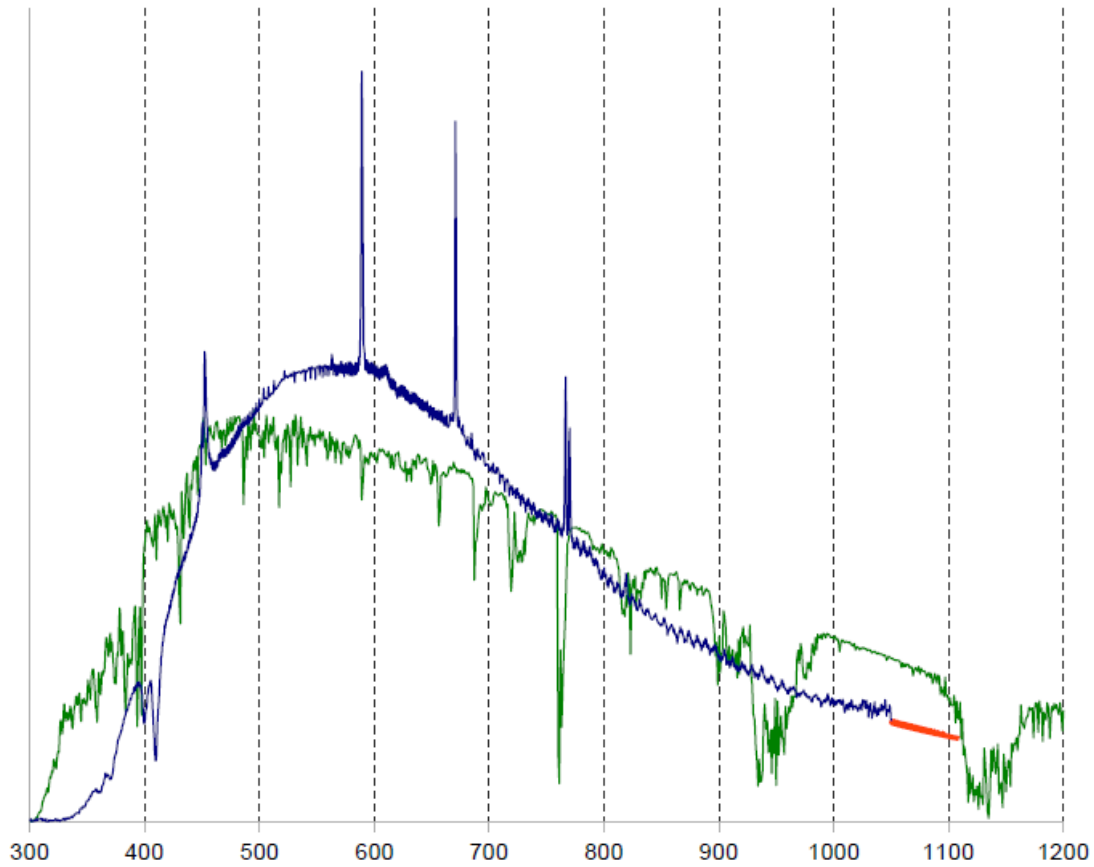
# Lumartix SA ©

# Bulb M39 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 14.1 | 0.76 | A |
| 500-600 nm | 19.91 | 22.9 | 1.15 | A |
| 600-700 nm | 18.36 | 21.7 | 1.18 | A |
| 700-800 nm | 14.92 | 16.6 | 1.11 | A |
| 800-900 nm | 12.46 | 11.1 | 0.89 | A |
| 900-1100 nm | 15.94 | 13.7 | 0.86 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 4650 K**

**Color Render Index = 95 [-]**

**Colors coordinate:     x = 0.358     y = 0.372**

**Reference Cell Isc: 16.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

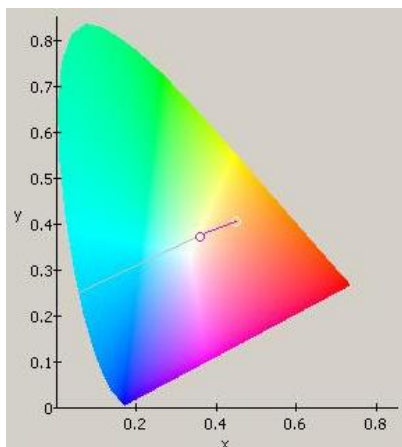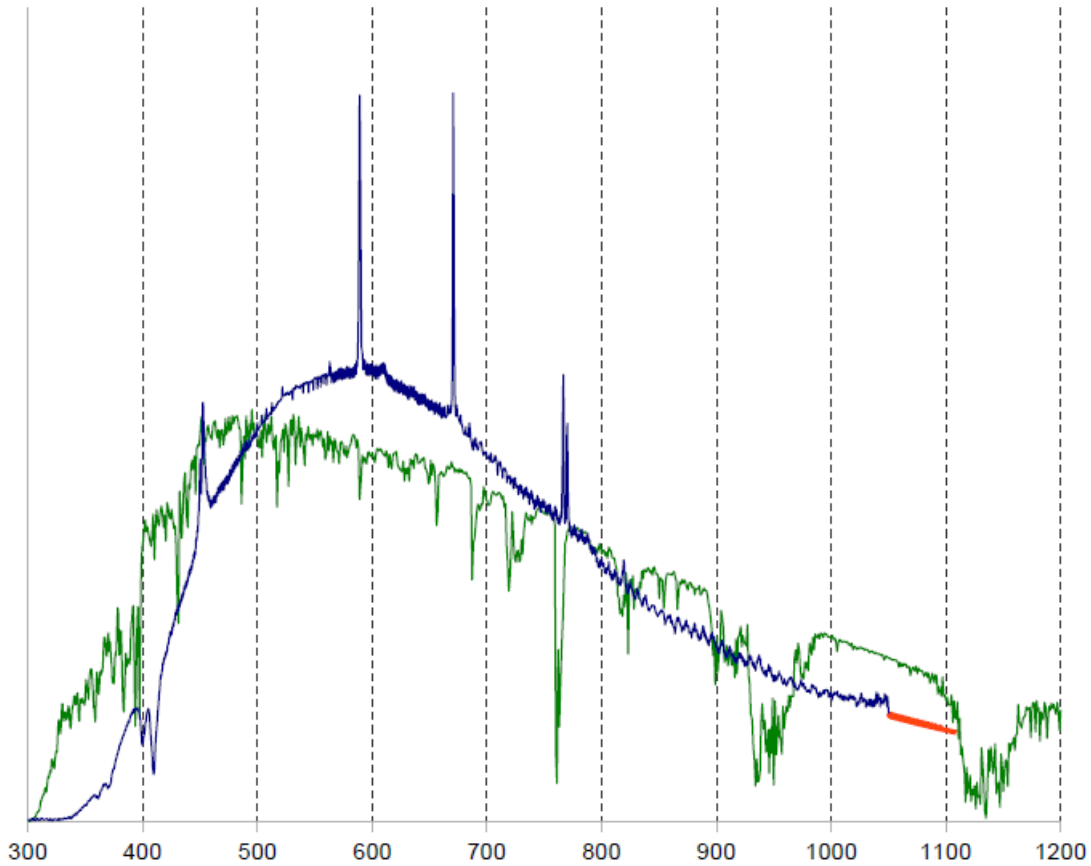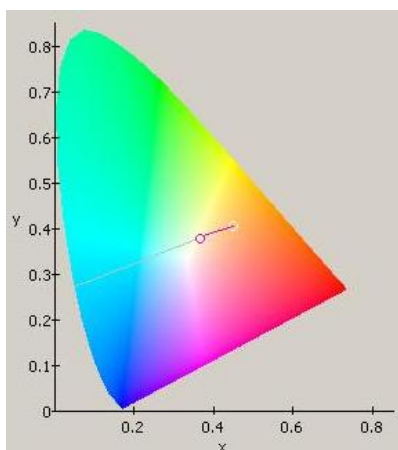# Lumartix SA ©

# Bulb M39 at 1300W



| | Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm) |
| Polynomial extrapolation |

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 12.4 | 0.67 | B |
| 500-600 nm | 19.91 | 22.2 | 1.12 | A |
| 600-700 nm | 18.36 | 22.0 | 1.20 | A |
| 700-800 nm | 14.92 | 17.2 | 1.15 | A |
| 800-900 nm | 12.46 | 11.7 | 0.94 | A |
| 900-1100 nm | 15.94 | 14.5 | 0.91 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 4400 K**

**Color Render Index = 94.5 [-]**

**Colors coordinate:      x = 0.367      y = 0.380**

**Reference Cell Isc: 22 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Bulb M40 at 800W
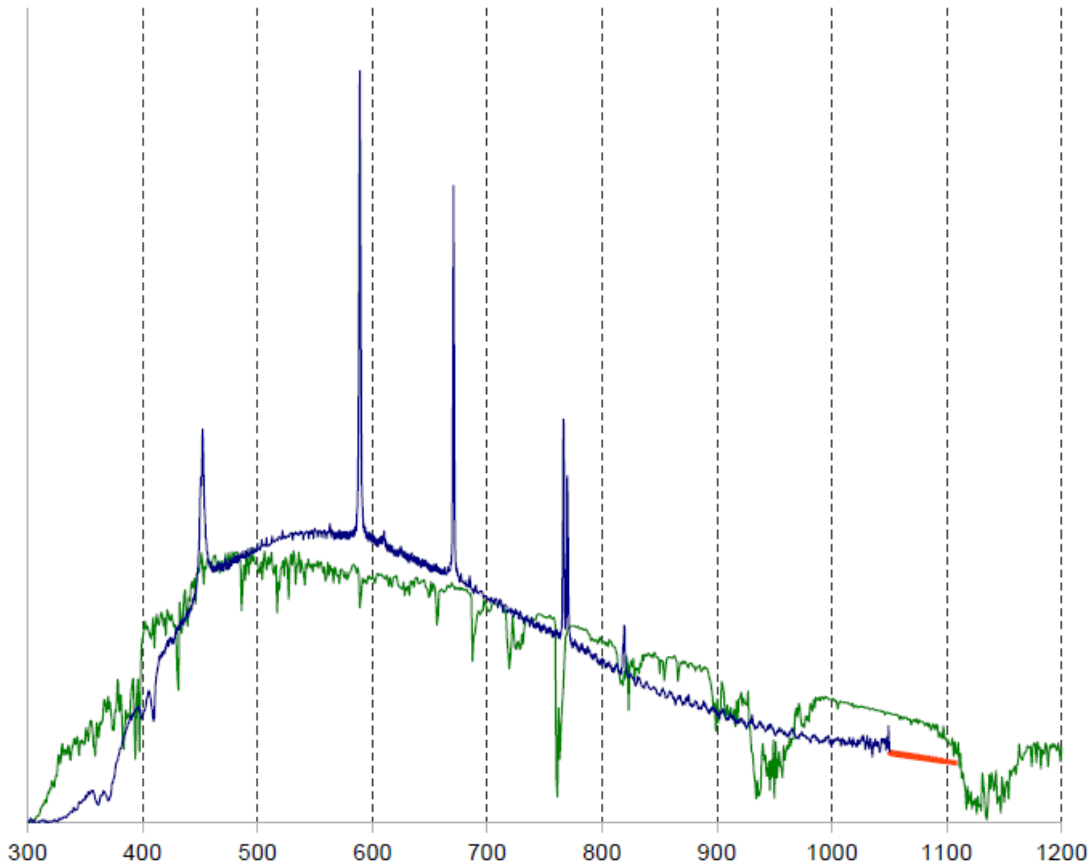


— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 16.0 | 0.87 | A |
| 500-600 nm | 19.91 | 22.5 | 1.13 | A |
| 600-700 nm | 18.36 | 20.6 | 1.12 | A |
| 700-800 nm | 14.92 | 16.1 | 1.08 | A |
| 800-900 nm | 12.46 | 11.0 | 0.88 | A |
| 900-1100 nm | 15.94 | 13.9 | 0.87 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature  =  4850 K

Color Render Index  =  95 [-]

Colors coordinate:      x  =  0.350      y  =  0.358

Reference Cell Isc: 13 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
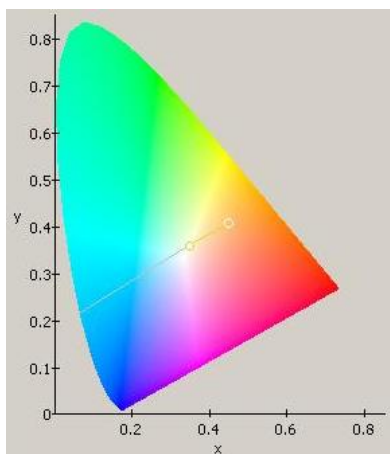
# Lumartix SA ©

# Bulb M40 at 1000W
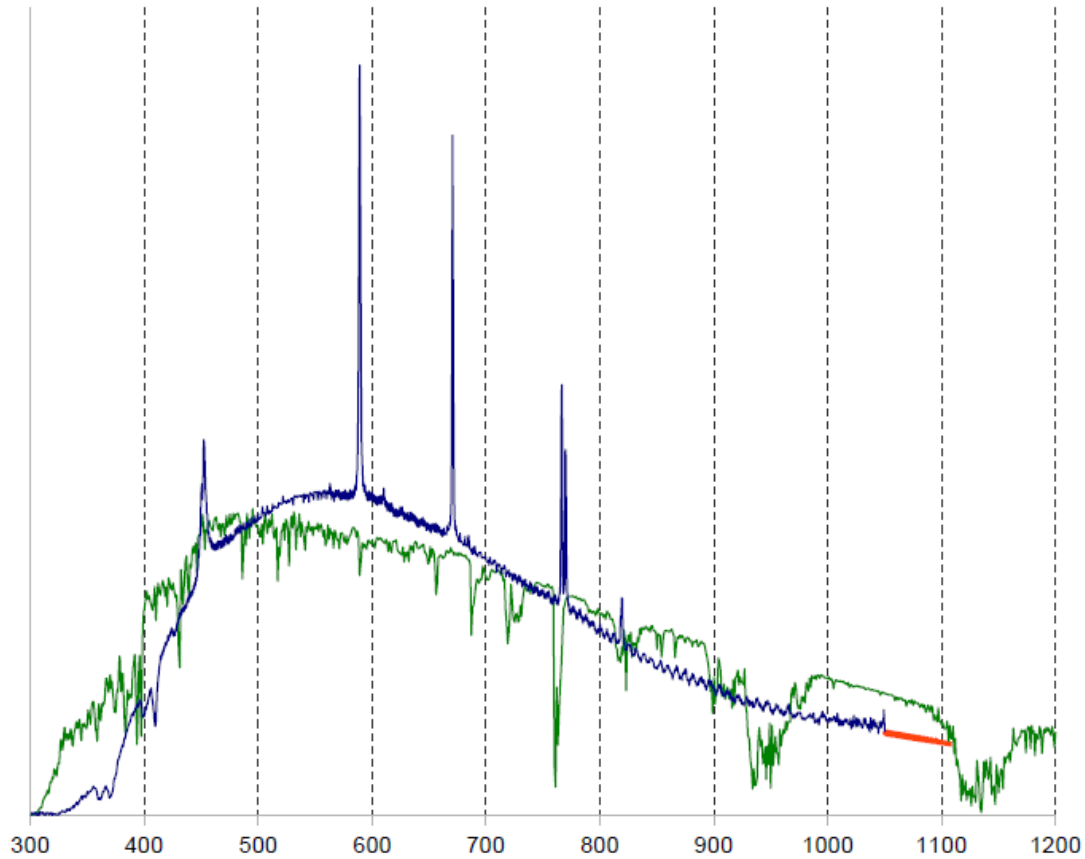


— Normalized measured spectrum  — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 14.8 | 0.80 | A |
| 500-600 nm | 19.91 | 22.2 | 1.11 | A |
| 600-700 nm | 18.36 | 20.8 | 1.13 | A |
| 700-800 nm | 14.92 | 16.4 | 1.10 | A |
| 800-900 nm | 12.46 | 11.3 | 0.91 | A |
| 900-1100 nm | 15.94 | 14.5 | 0.91 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature  =  4700 K**

**Color Render Index  =  94.5 [-]**

**Colors coordinate:        x = 0.355        y = 0.365**

**Reference Cell Isc: 17.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
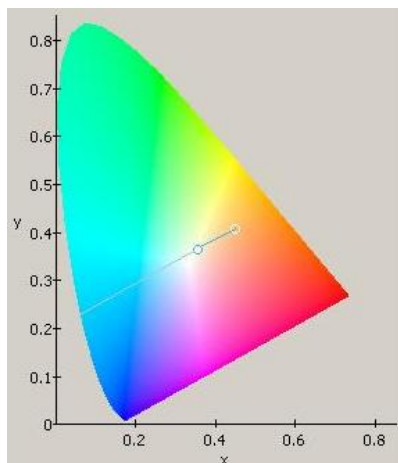
# Lumartix SA ©

# Bulb M40 at 1300W



- Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
- Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 14.0 | 0.76 | A |
| 500-600 nm | 19.91 | 21.7 | 1.09 | A |
| 600-700 nm | 18.36 | 21.0 | 1.14 | A |
| 700-800 nm | 14.92 | 16.7 | 1.12 | A |
| 800-900 nm | 12.46 | 11.6 | 0.93 | A |
| 900-1100 nm | 15.94 | 15.1 | 0.95 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature = 4550 K

Color Render Index = 95 [-]

Colors coordinate:     x = 0.360     y = 0.368

Reference Cell Isc: 23.5 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
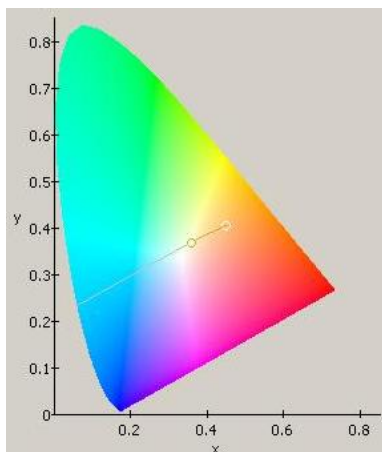
# Lumartix SA ©

# Bulb M41 at 800W



— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 16.3 | 0.89 | A |
| 500-600 nm | 19.91 | 22.3 | 1.12 | A |
| 600-700 nm | 18.36 | 20.5 | 1.11 | A |
| 700-800 nm | 14.92 | 16.0 | 1.07 | A |
| 800-900 nm | 12.46 | 11.0 | 0.89 | A |
| 900-1100 nm | 15.94 | 13.9 | 0.87 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
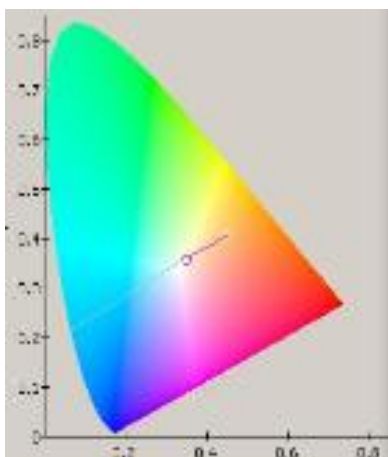


**Color temperature = 4880 K**

**Color Render Index = 95.4 [-]**
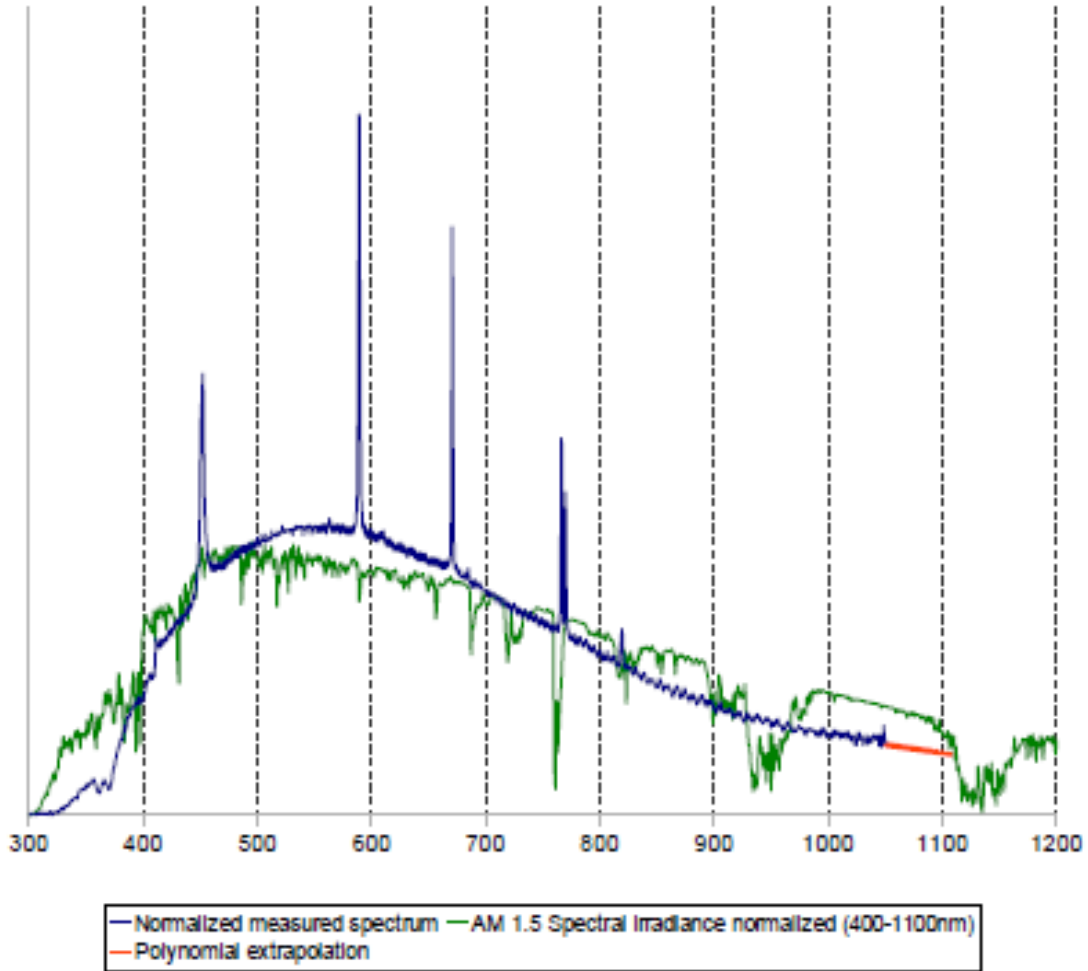
**Colors coordinate:   x = 0.349    y = 0.358**

**Reference Cell Isc: 14.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
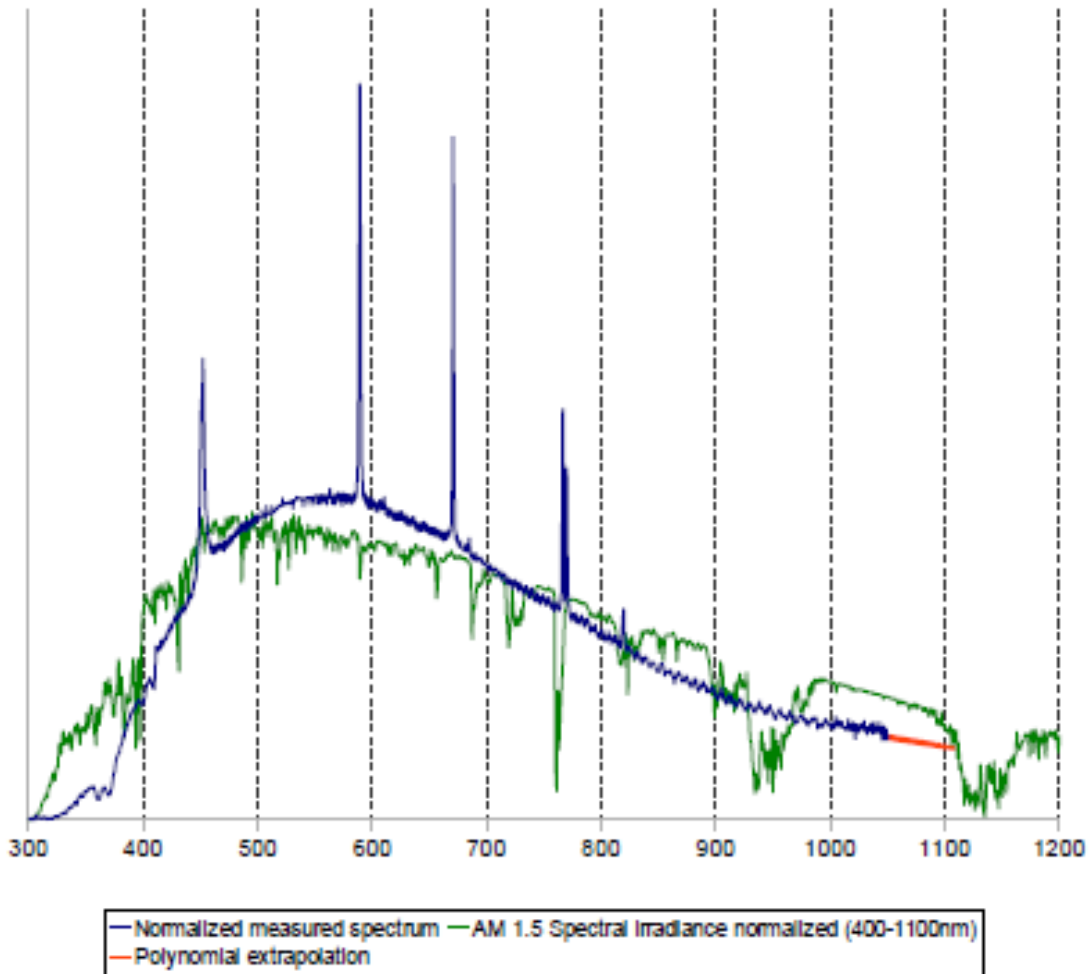
# Lumartix SA ©

# Bulb M41 at 1000W



— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 15.4 | 0.84 | A |
| 500-600 nm | 19.91 | 22.1 | 1.11 | A |
| 600-700 nm | 18.36 | 20.6 | 1.12 | A |
| 700-800 nm | 14.92 | 16.2 | 1.08 | A |
| 800-900 nm | 12.46 | 11.3 | 0.91 | A |
| 900-1100 nm | 15.94 | 14.4 | 0.90 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 4785 K**

**Color Render Index = 95.2 [-]**

**Colors coordinate:     x = 0.352     y = 0.362**

**Reference Cell Isc: 18.8 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
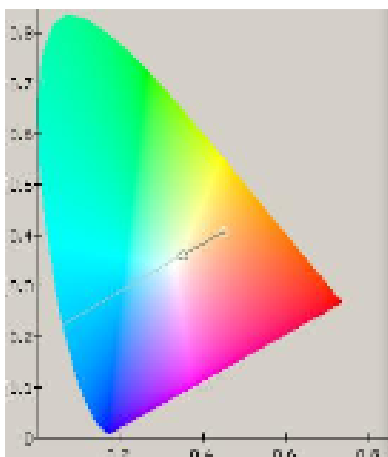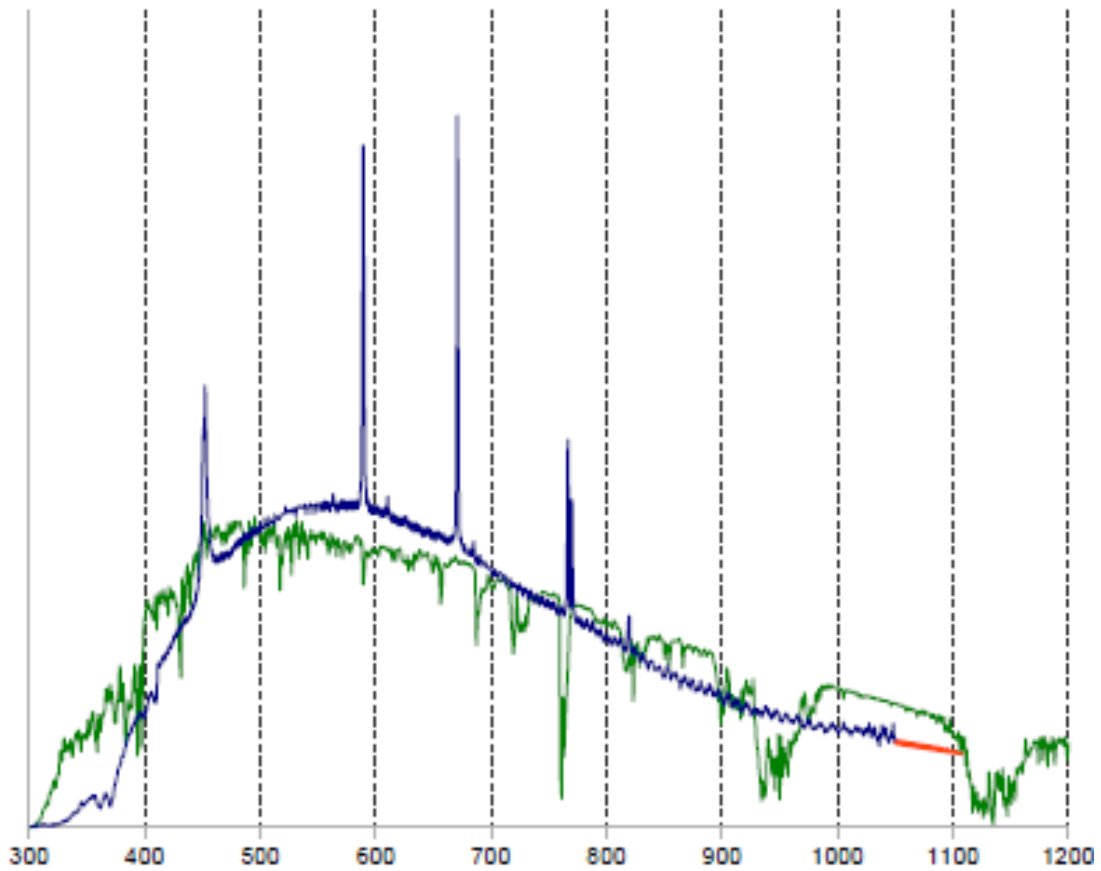
# Lumartix SA ©

# Bulb M41 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 15.0 | 0.82 | A |
| 500-600 nm | 19.91 | 21.8 | 1.10 | A |
| 600-700 nm | 18.36 | 20.7 | 1.13 | A |
| 700-800 nm | 14.92 | 16.2 | 1.09 | A |
| 800-900 nm | 12.46 | 11.5 | 0.92 | A |
| 900-1100 nm | 15.94 | 14.7 | 0.93 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
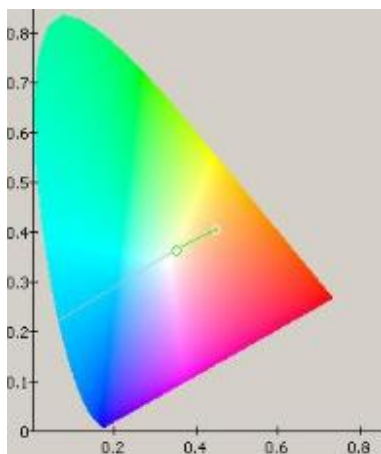


**Color temperature = 4740 K**

**Color Render Index = 95.4 [-]**

**Colors coordinate:    x = 0.354    y = 0.363**

**Reference Cell Isc: 24.2 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb M45 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 20.3 | 1.10 | A |
| 500-600 nm | 19.91 | 21.2 | 1.06 | A |
| 600-700 nm | 18.36 | 18.5 | 1.01 | A |
| 700-800 nm | 14.92 | 15.0 | 1.01 | A |
| 800-900 nm | 12.46 | 10.8 | 0.87 | A |
| 900-1100 nm | 15.94 | 14.2 | 0.89 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
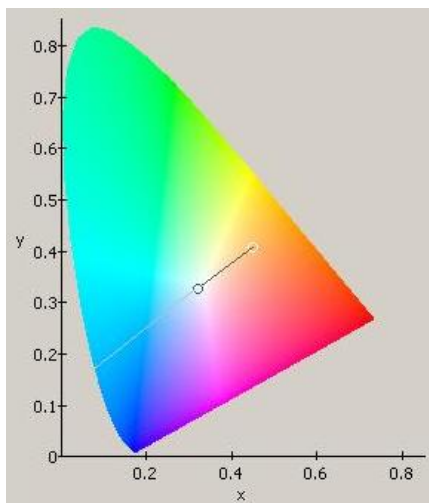


**Color temperature = 6050 K**

**Color Render Index = 96.6 [-]**
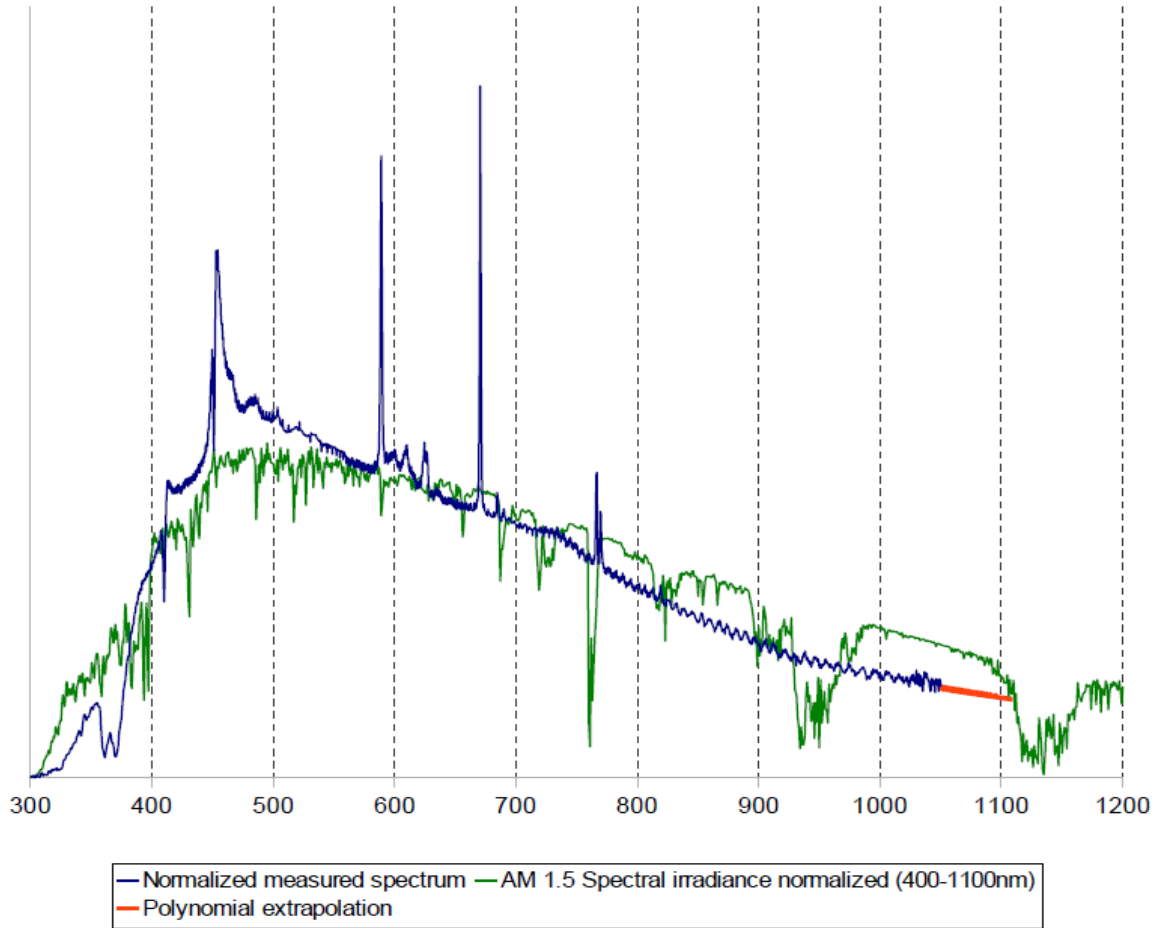
**Colors coordinate:     x = 0.321     y = 0.327**

**Reference Cell Isc: 16.6 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
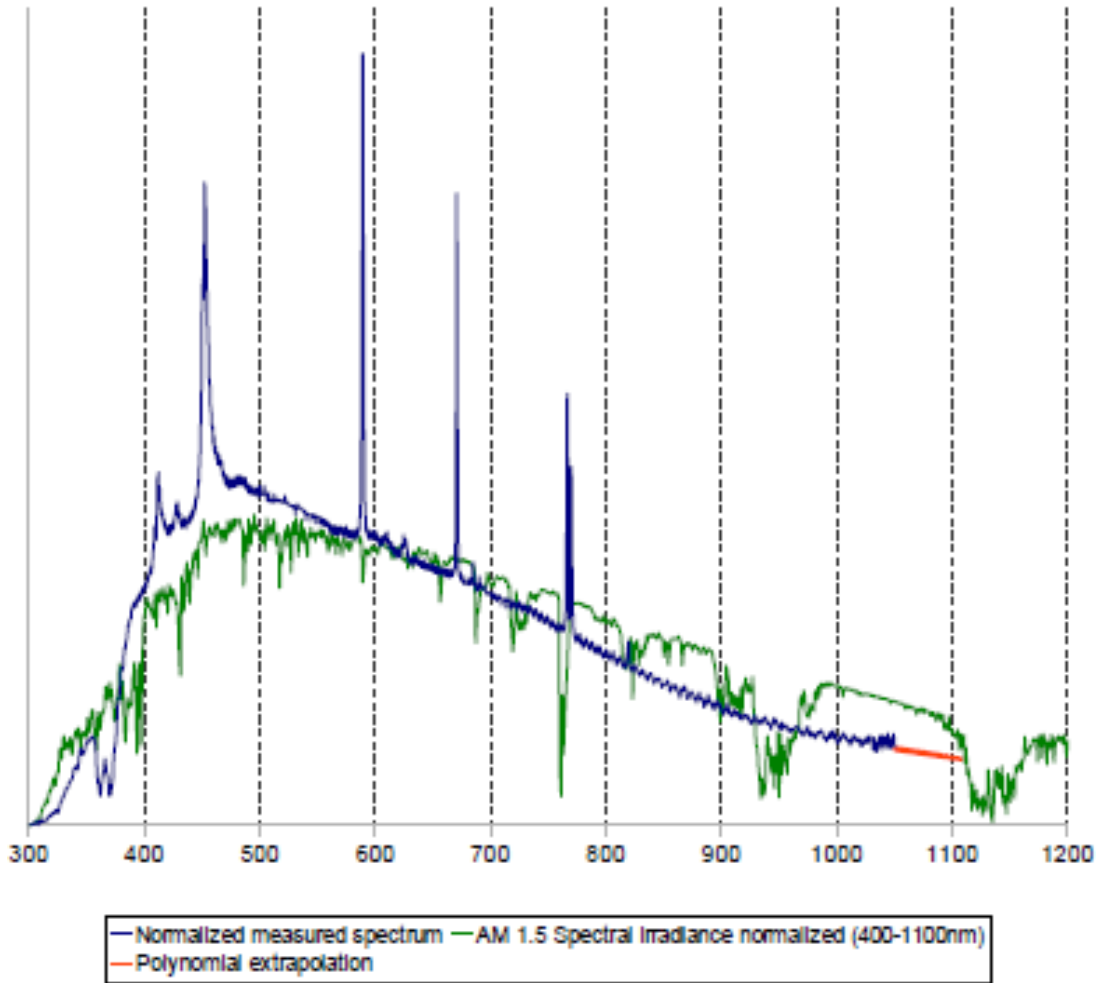
# Lumartix SA ©

# Bulb M47 at 800W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 22.1 | 1.20 | A |
| 500-600 nm | 19.91 | 21.5 | 1.08 | A |
| 600-700 nm | 18.36 | 18.2 | 0.99 | A |
| 700-800 nm | 14.92 | 14.8 | 0.99 | A |
| 800-900 nm | 12.46 | 10.3 | 0.83 | A |
| 900-1100 nm | 15.94 | 13.1 | 0.82 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 6270 K**

**Color Render Index = 96.6 [-]**

**Colors coordinate:      x = 0.318      y = 0.320**

**Reference Cell Isc: 13.2 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
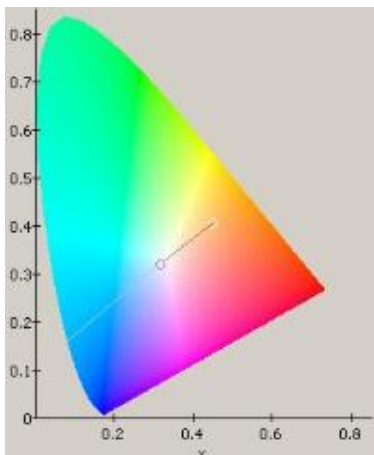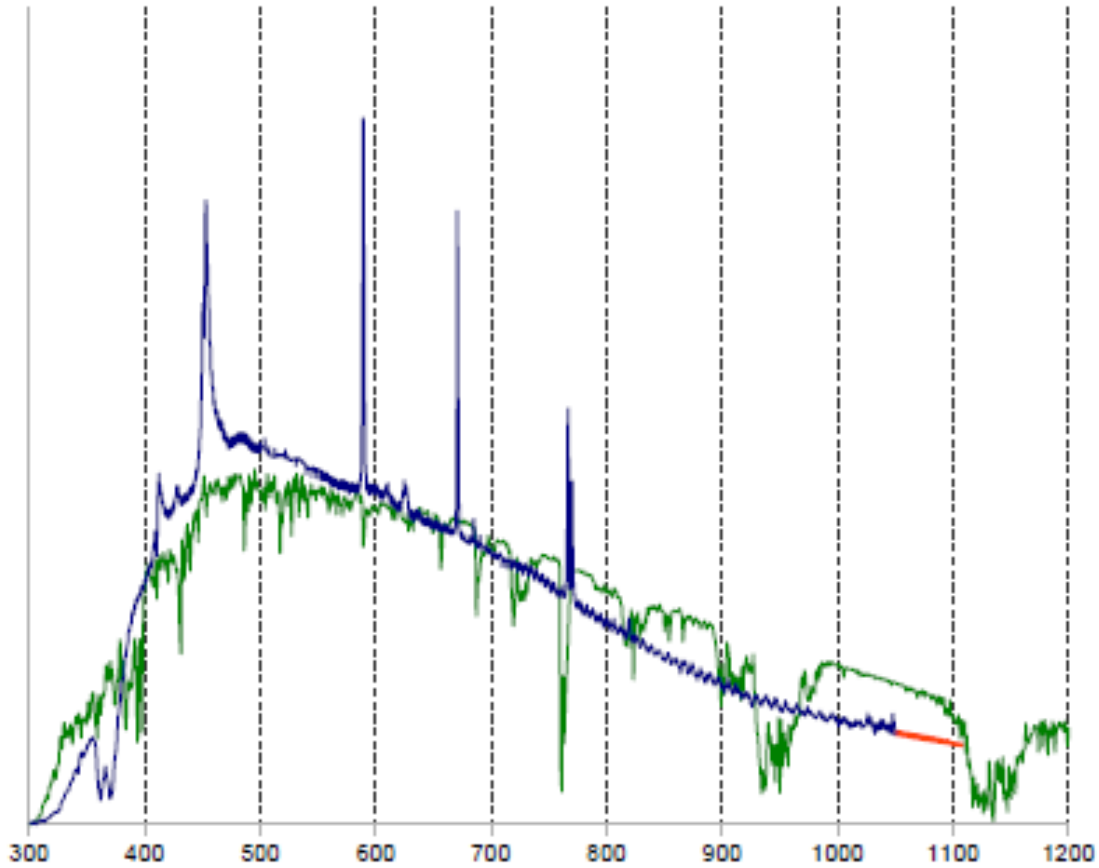
# Lumartix SA ©

# Bulb M47 at 1000W



— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 20.6 | 1.12 | A |
| 500-600 nm | 19.91 | 21.3 | 1.07 | A |
| 600-700 nm | 18.36 | 18.6 | 1.01 | A |
| 700-800 nm | 14.92 | 15.1 | 1.01 | A |
| 800-900 nm | 12.46 | 10.7 | 0.86 | A |
| 900-1100 nm | 15.94 | 13.7 | 0.86 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
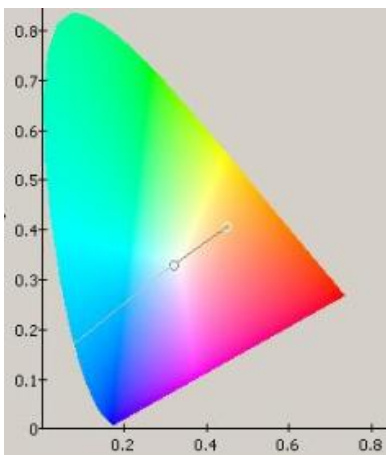


**Color temperature = 5990 K**

**Color Render Index = 97.2 [-]**

**Colors coordinate:     x = 0.323     y = 0.328**

**Reference Cell Isc: 18.4 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

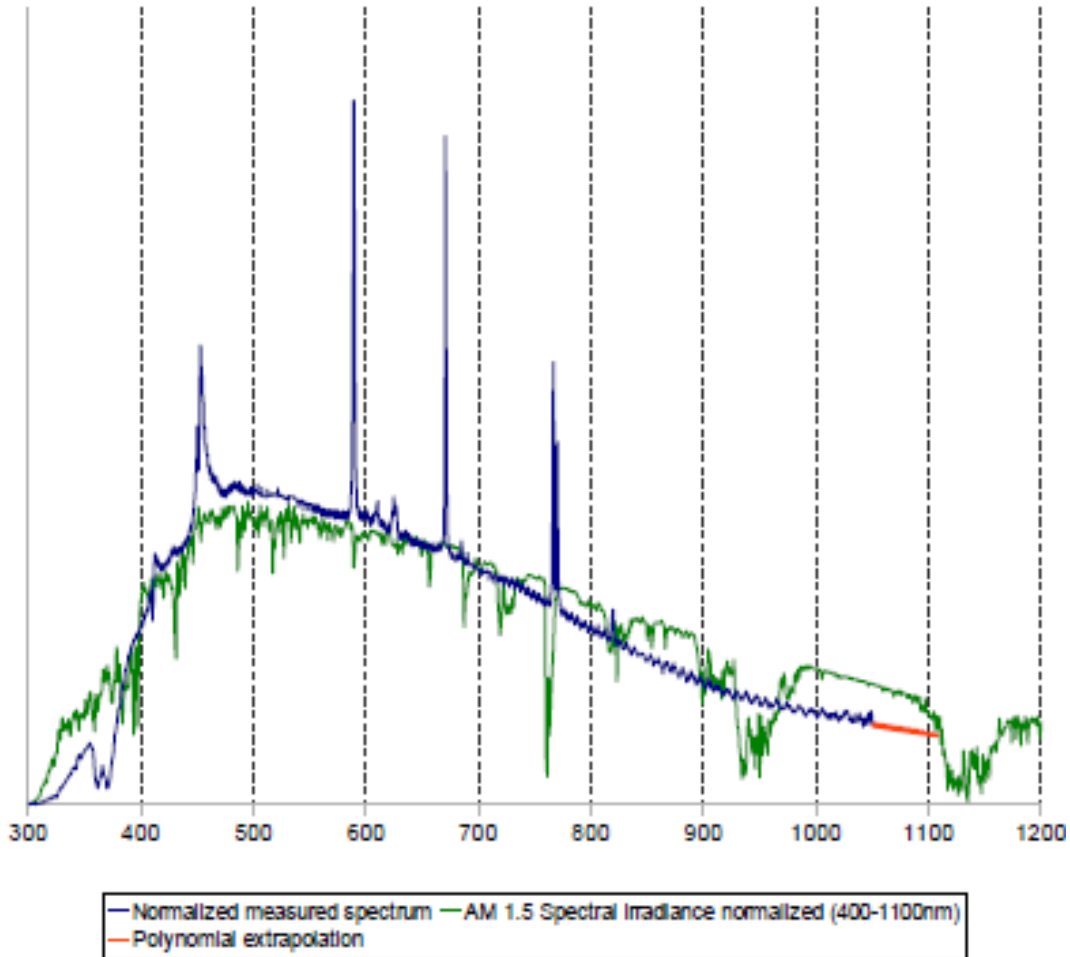# Lumartix SA ©

# Bulb M47 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 18.9 | 1.03 | A |
| 500-600 nm | 19.91 | 21.4 | 1.08 | A |
| 600-700 nm | 18.36 | 19.1 | 1.04 | A |
| 700-800 nm | 14.92 | 15.5 | 1.04 | A |
| 800-900 nm | 12.46 | 11.0 | 0.88 | A |
| 900-1100 nm | 15.94 | 14.1 | 0.88 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
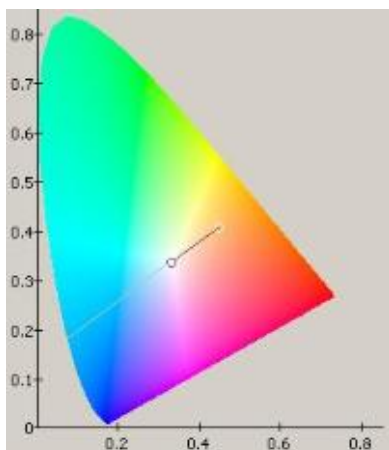


**Color temperature = 5504 K**

**Color Render Index = 96.8 [-]**

**Colors coordinate:** **x = 0.332** **y = 0.337**

**Reference Cell Isc: 26 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
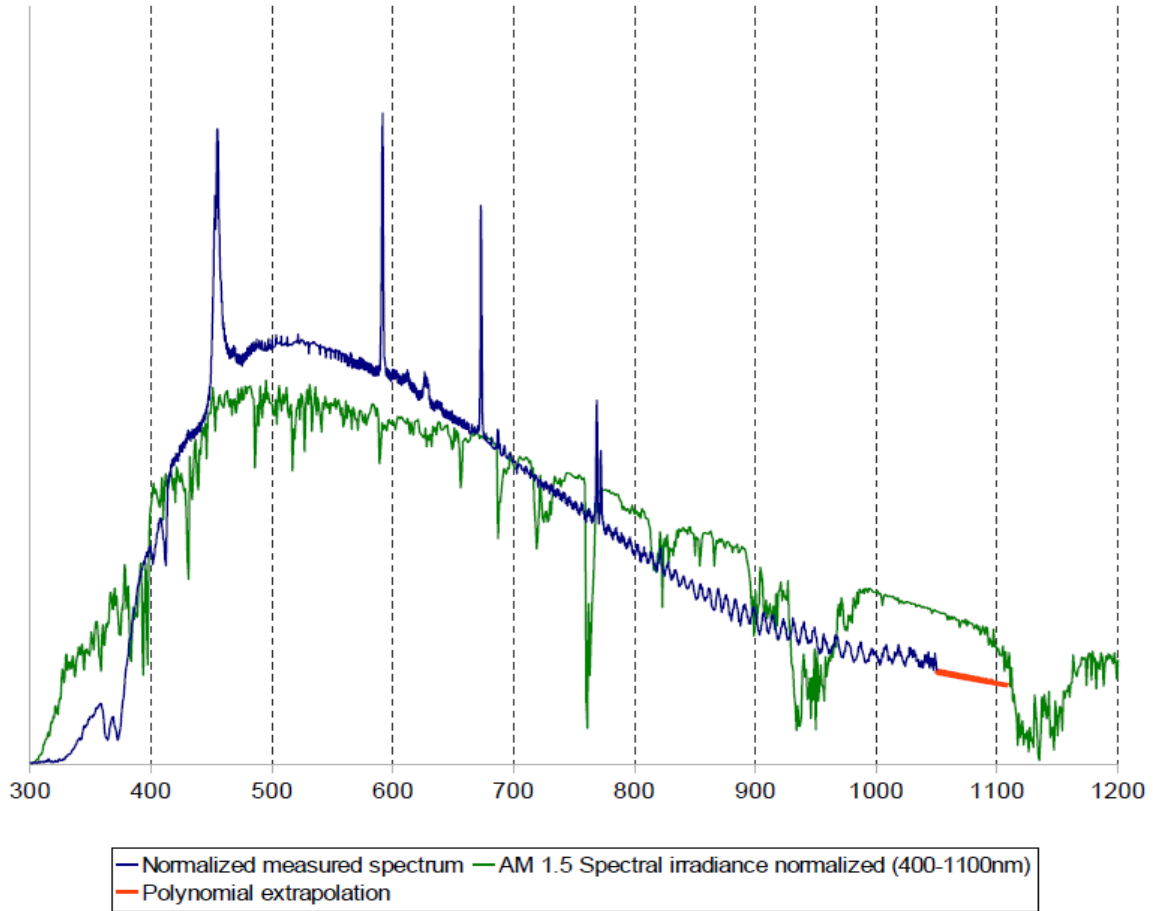
# Lumartix SA ©

# Bulb M48 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 18.9 | 1.03 | A |
| 500-600 nm | 19.91 | 22.7 | 1.14 | A |
| 600-700 nm | 18.36 | 19.8 | 1.08 | A |
| 700-800 nm | 14.92 | 15.1 | 1.01 | A |
| 800-900 nm | 12.46 | 10.4 | 0.83 | A |
| 900-1100 nm | 15.94 | 13.2 | 0.83 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
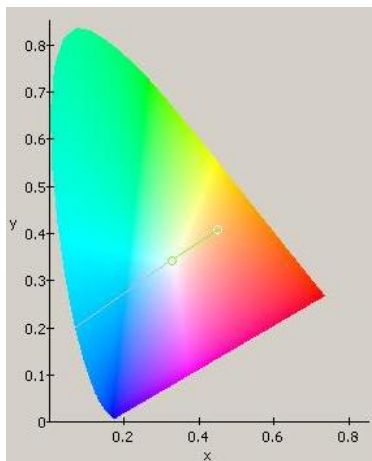


**Color temperature = 5650 K**

**Color Render Index = 99.0 [-]**

**Colors coordinate:**     x = 0.329      y = 0.342

**Reference Cell Isc: 21.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
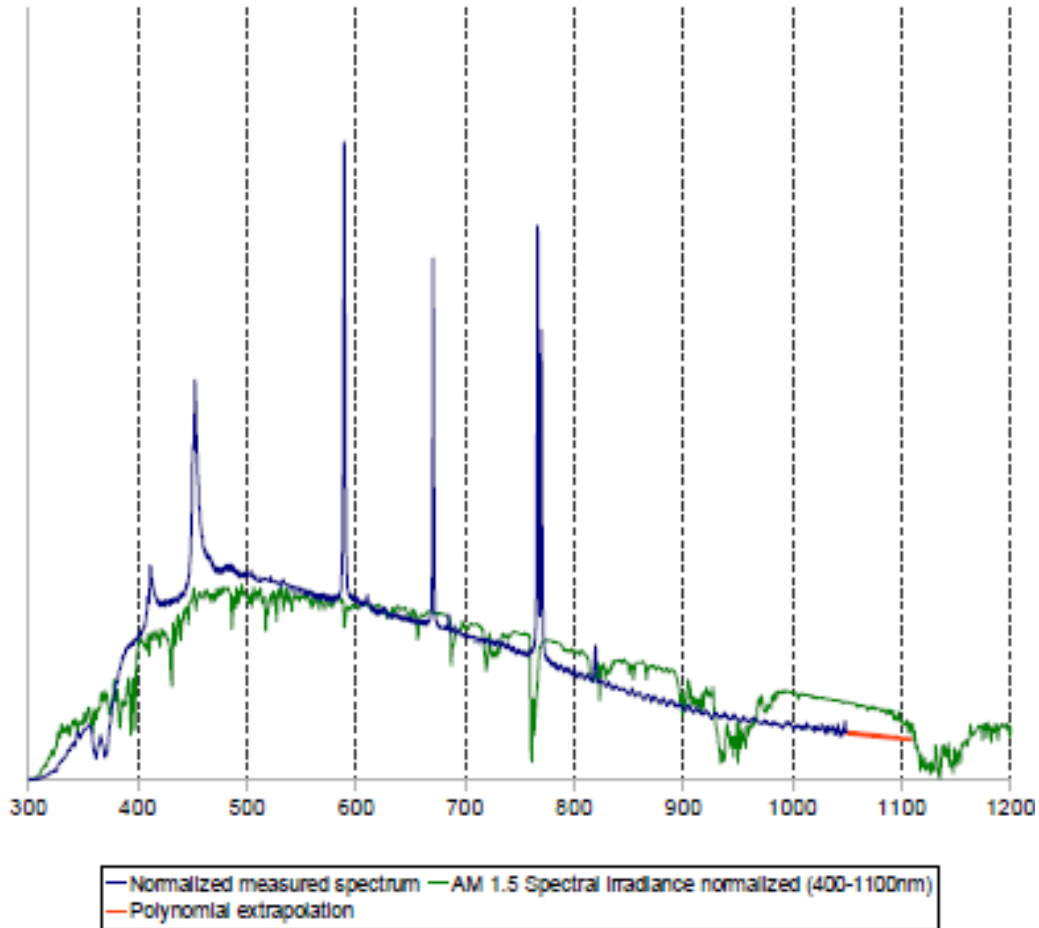
# Lumartix SA ©

# Bulb M49-3 at 800W



— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 21.3 | 1.15 | A |
| 500-600 nm | 19.91 | 21.5 | 1.08 | A |
| 600-700 nm | 18.36 | 18.3 | 1.00 | A |
| 700-800 nm | 14.92 | 15.7 | 1.05 | A |
| 800-900 nm | 12.46 | 10.3 | 0.83 | A |
| 900-1100 nm | 15.94 | 12.9 | 0.81 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
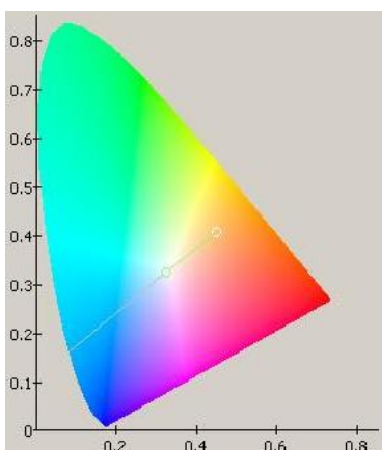


**Color temperature = 5965 K**

**Color Render Index = 95.9 [-]**

**Colors coordinate:     x = 0.323     y = 0.324**

**Reference Cell Isc: 13.3 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
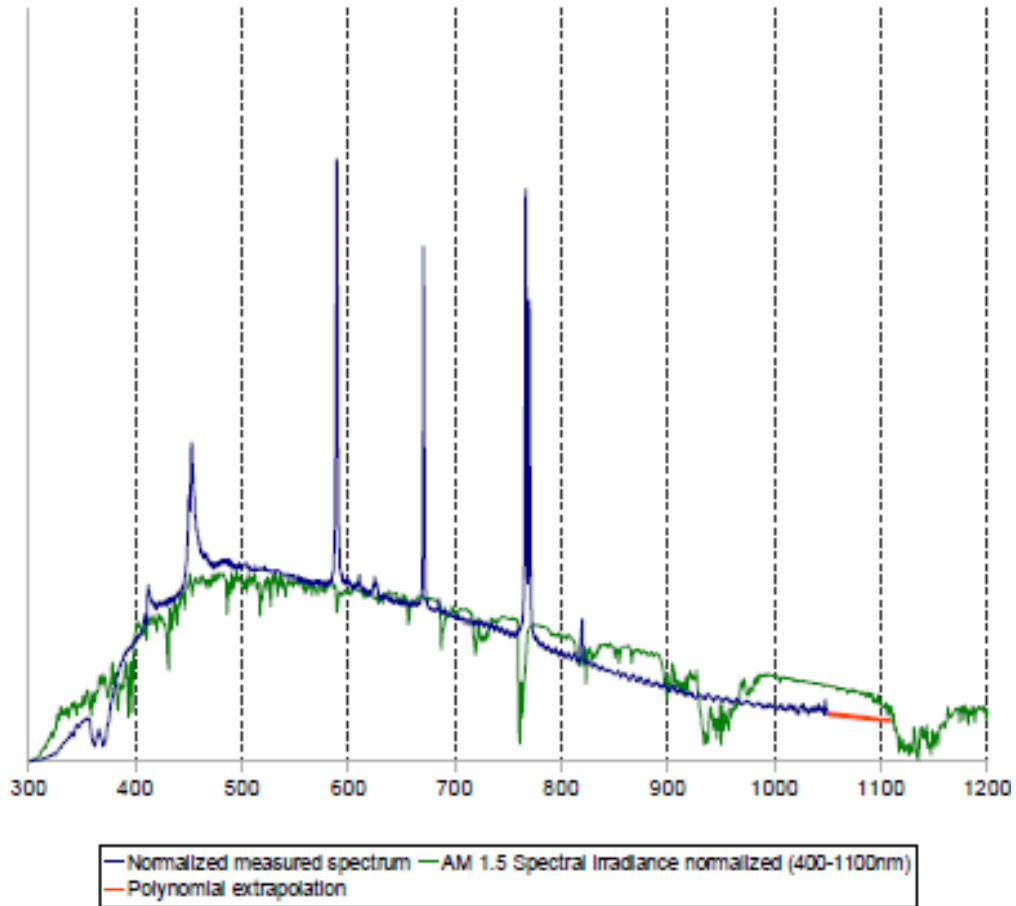
# Lumartix SA ©

# Bulb M49-3 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 19.4 | 1.06 | A |
| 500-600 nm | 19.91 | 21.4 | 1.08 | A |
| 600-700 nm | 18.36 | 18.7 | 1.02 | A |
| 700-800 nm | 14.92 | 16.4 | 1.10 | A |
| 800-900 nm | 12.46 | 10.7 | 0.85 | A |
| 900-1100 nm | 15.94 | 13.4 | 0.84 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
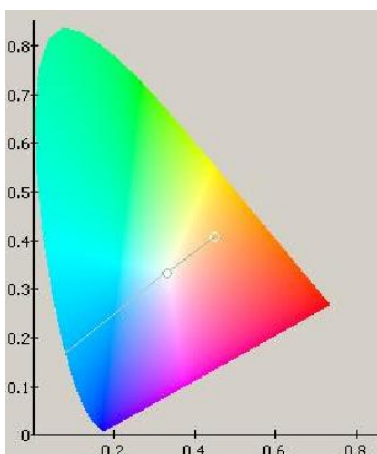


**Color temperature = 5508 K**

**Color Render Index = 95.6 [-]**

**Colors coordinate:     x = 0.332     y = 0.333**

**Reference Cell Isc: 19.6 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
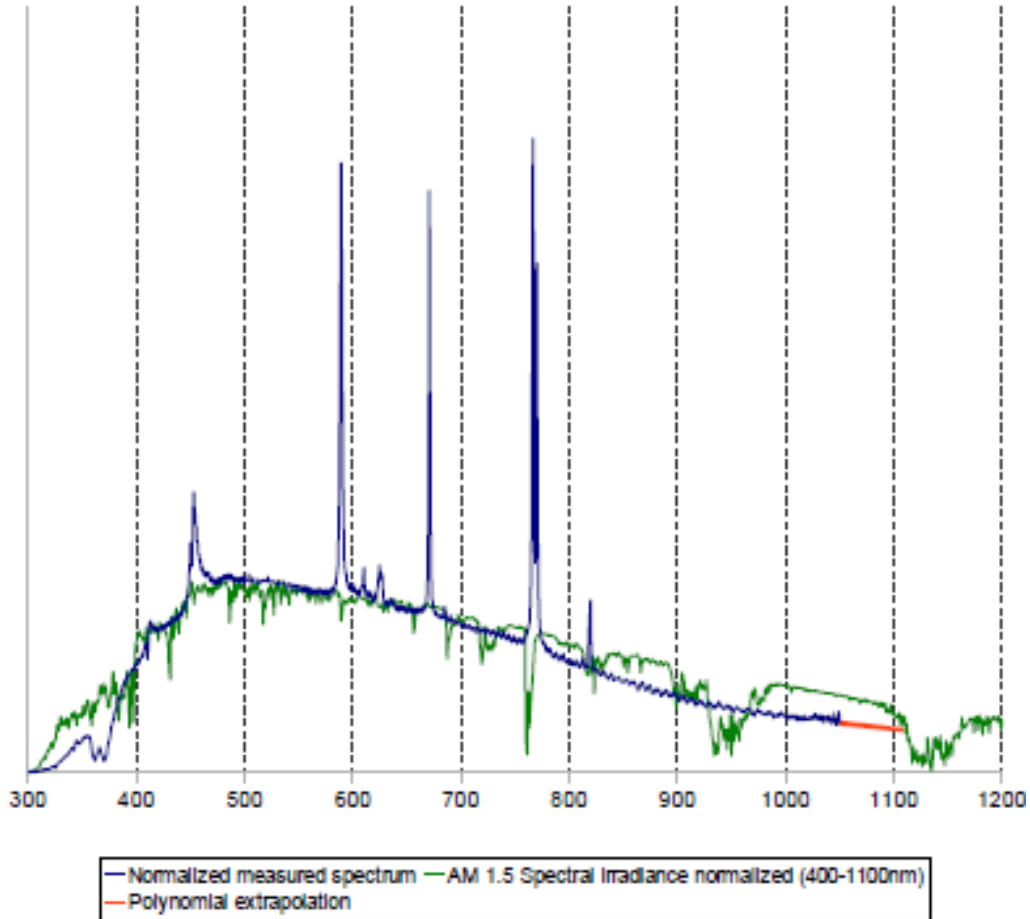
# Lumartix SA ©

# Bulb M49-3 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 17.9 | 0.97 | A |
| 500-600 nm | 19.91 | 21.4 | 1.07 | A |
| 600-700 nm | 18.36 | 19.3 | 1.05 | A |
| 700-800 nm | 14.92 | 16.9 | 1.13 | A |
| 800-900 nm | 12.45 | 10.9 | 0.87 | A |
| 900-1100 nm | 15.94 | 13.6 | 0.85 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
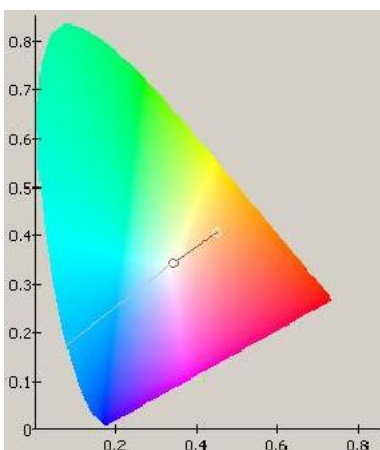


**Color temperature  =  5058 K**

**Color Render Index  =  94.5  [-]**

**Colors coordinate:       x  =  0.343       y  =  0.342**

**Reference Cell Isc:  26.8  [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
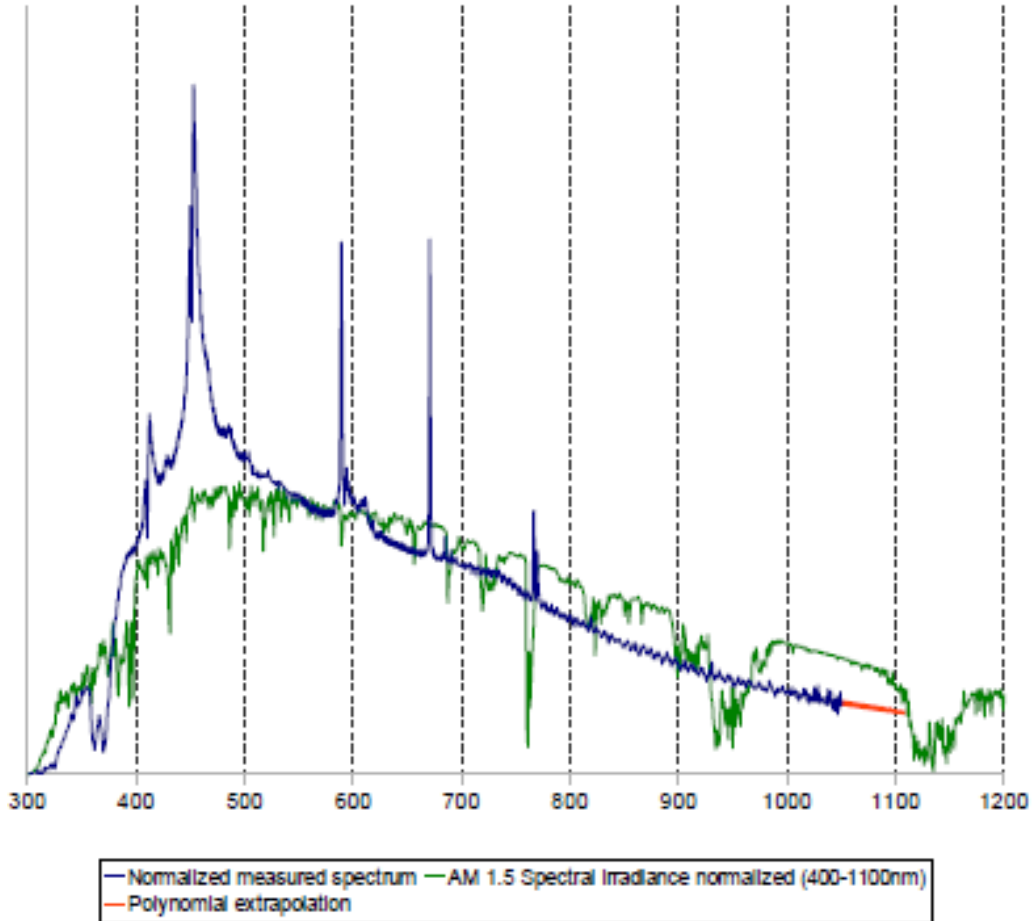
# Lumartix SA ©

# Bulb M53 at 800W



- Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
- Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 24.7 | 1.34 | B |
| 500-600 nm | 19.91 | 20.7 | 1.04 | A |
| 600-700 nm | 18.36 | 17.4 | 0.95 | A |
| 700-800 nm | 14.92 | 14.1 | 0.95 | A |
| 800-900 nm | 12.46 | 10.1 | 0.81 | A |
| 900-1100 nm | 15.94 | 13.0 | 0.82 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
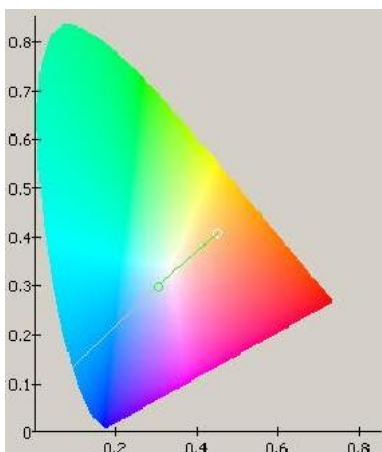


**Color temperature = 7529 K**

**Color Render Index = 93.7 [-]**

**Colors coordinate:     x = 0.303     y = 0.298**

**Reference Cell Isc:  5.3 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
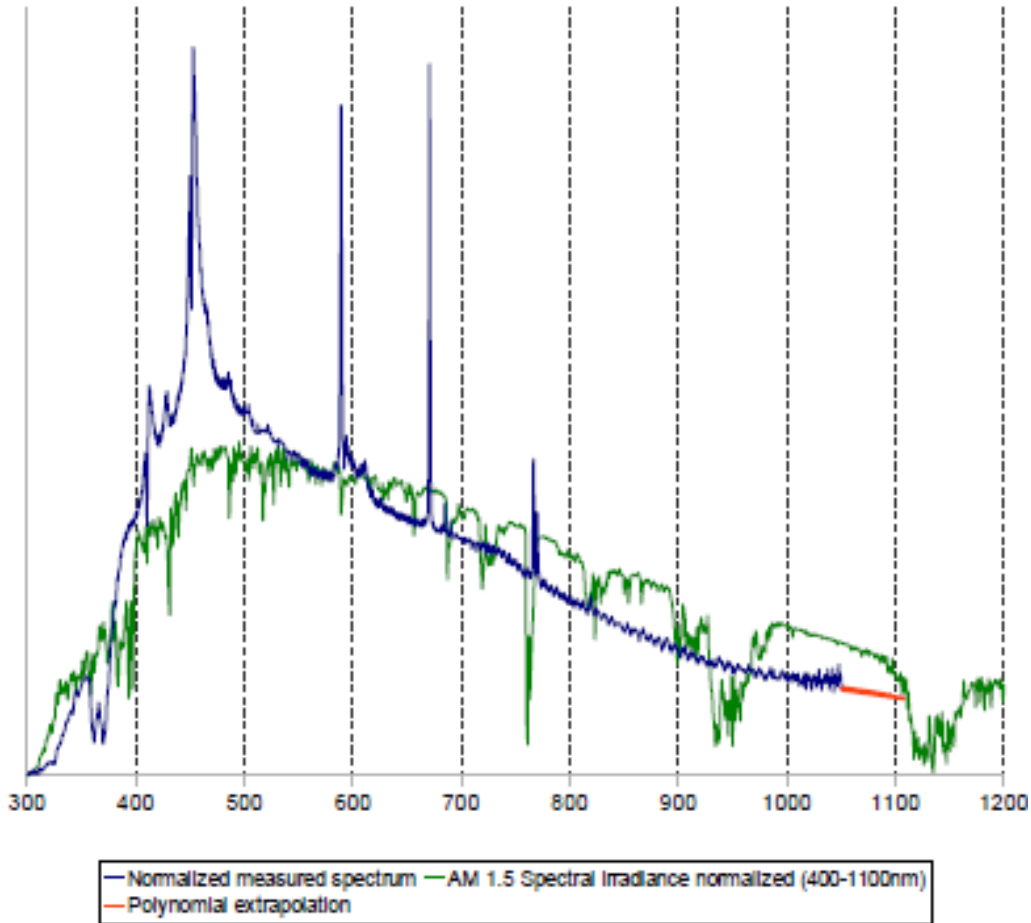
# Lumartix SA ©

# Bulb M53 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 24.2 | 1.31 | B |
| 500-600 nm | 19.91 | 20.9 | 1.05 | A |
| 600-700 nm | 18.36 | 17.4 | 0.95 | A |
| 700-800 nm | 14.92 | 14.0 | 0.94 | A |
| 800-900 nm | 12.46 | 10.0 | 0.80 | A |
| 900-1100 nm | 15.94 | 13.6 | 0.85 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.00 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
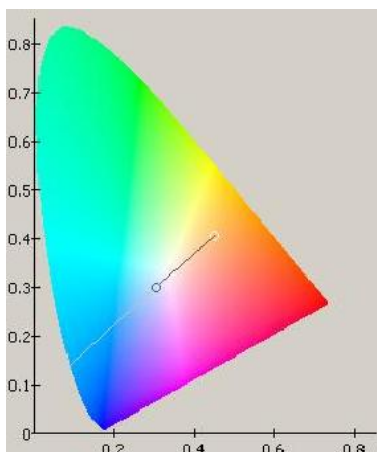


**Color temperature = 7366 K**

**Color Render Index = 94.7 [-]**
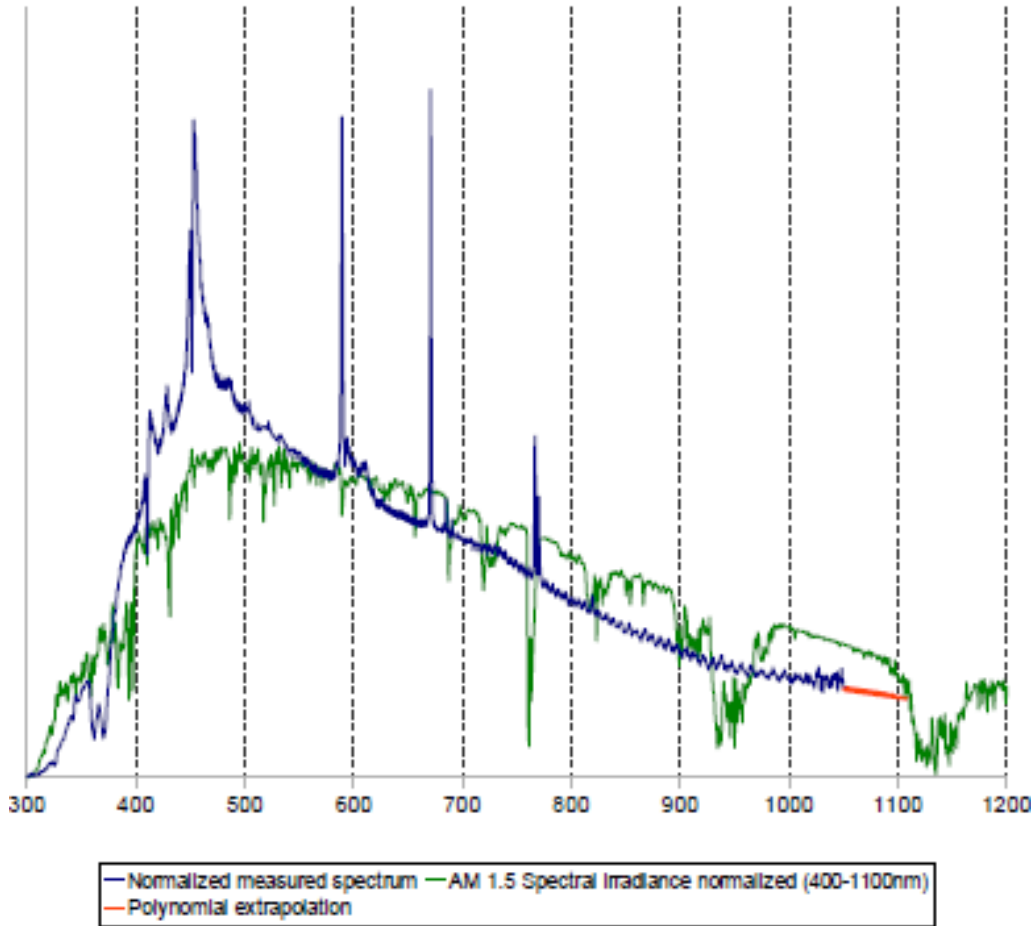
**Colors coordinate:**     x = 0.304     y = 0.302

**Reference Cell Isc: 8 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb M53 at 1300W



Legend:
- Normalized measured spectrum
- AM 1.5 Spectral Irradiance normalized (400-1100nm)
- Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 23.5 | 1.28 | B |
| 500-600 nm | 19.91 | 21.1 | 1.06 | A |
| 600-700 nm | 18.36 | 17.5 | 0.95 | A |
| 700-800 nm | 14.92 | 14.1 | 0.94 | A |
| 800-900 nm | 12.46 | 10.1 | 0.81 | A |
| 900-1100 nm | 15.94 | 13.7 | 0.86 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
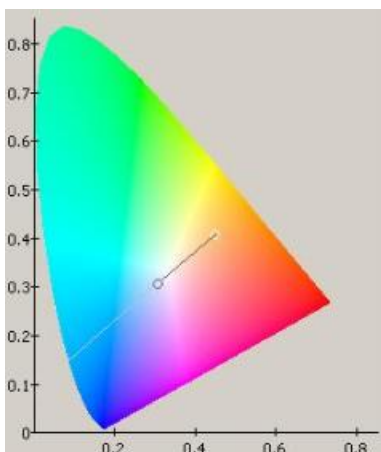


**Color temperature = 7102 K**

**Color Render Index = 95.5 [-]**

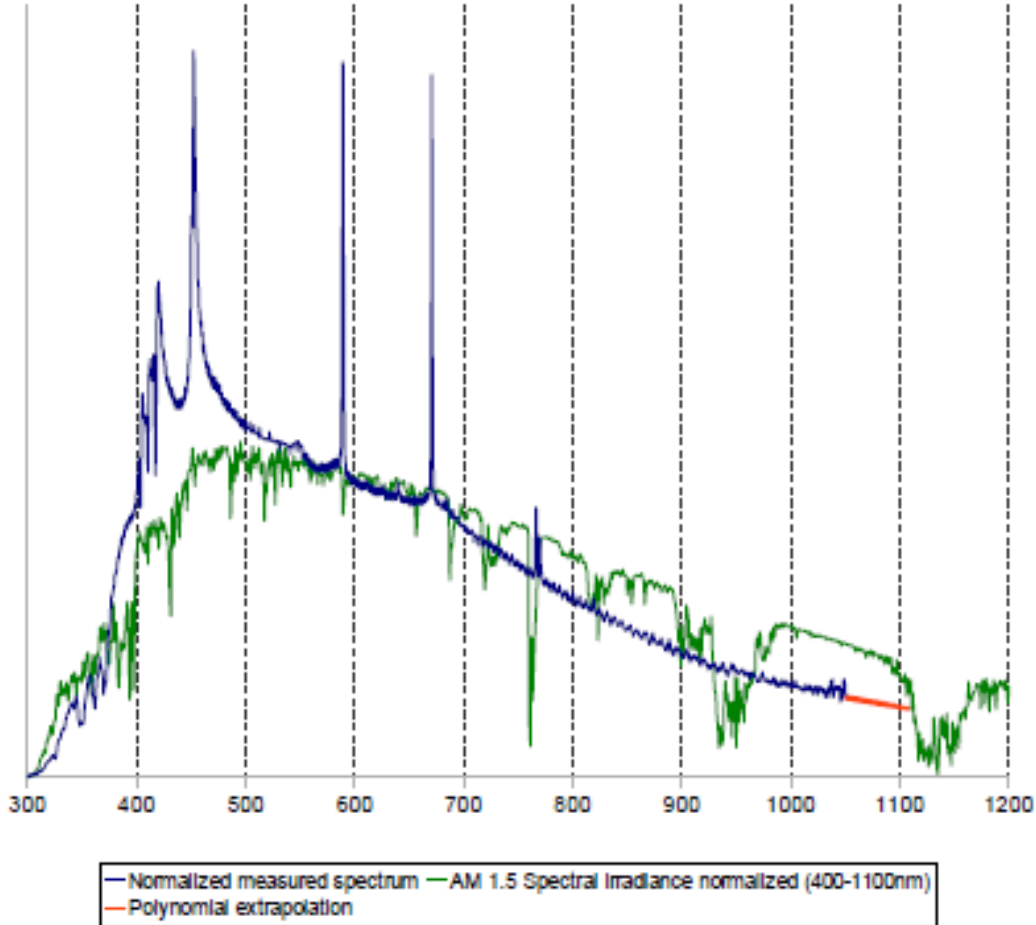**Colors coordinate:    x = 0.307    y = 0.307**

**Reference Cell Isc: 12 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
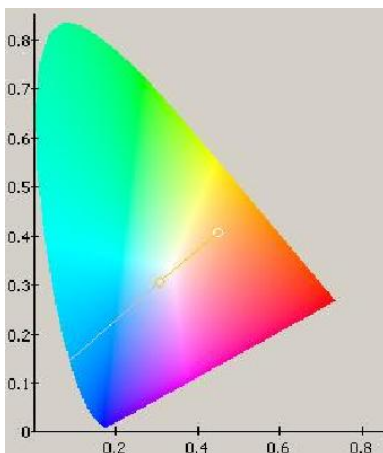
# Lumartix SA ©

# Bulb M54 at 800W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 24.2 | 1.32 | B |
| 500-600 nm | 19.91 | 20.8 | 1.05 | A |
| 600-700 nm | 18.36 | 18.0 | 0.98 | A |
| 700-800 nm | 14.92 | 14.1 | 0.95 | A |
| 800-900 nm | 12.45 | 10.0 | 0.80 | A |
| 900-1100 nm | 15.94 | 12.8 | 0.80 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 6982 K**

**Color Render Index = 94.9 [-]**
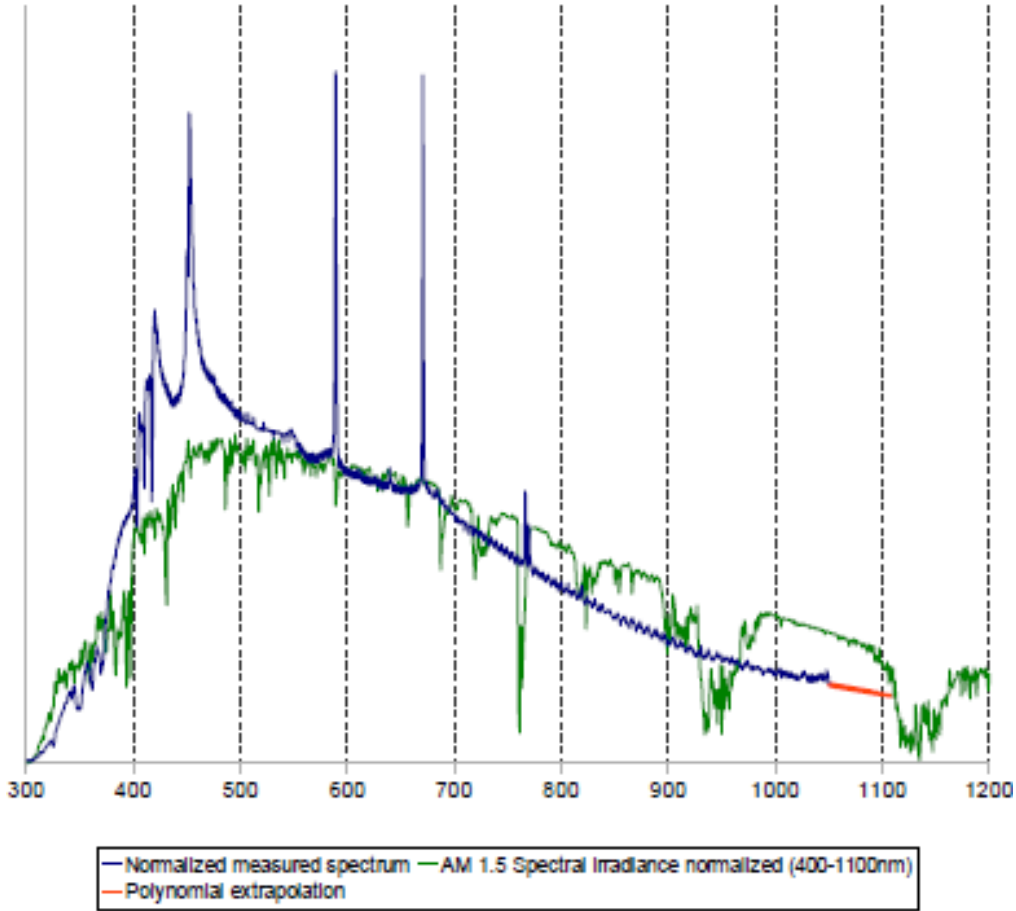
**Colors coordinate:     x = 0.309      y = 0.307**

**Reference Cell Isc: 9.6 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb M54 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 23.6 | 1.28 | B |
| 500-600 nm | 19.91 | 21.0 | 1.05 | A |
| 600-700 nm | 18.36 | 18.2 | 0.99 | A |
| 700-800 nm | 14.92 | 14.2 | 0.95 | A |
| 800-900 nm | 12.46 | 10.1 | 0.81 | A |
| 900-1100 nm | 15.94 | 12.9 | 0.81 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
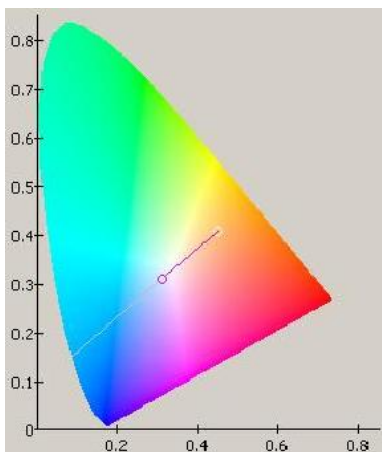


**Color temperature = 6850 K**

**Color Render Index = 95.3 [-]**
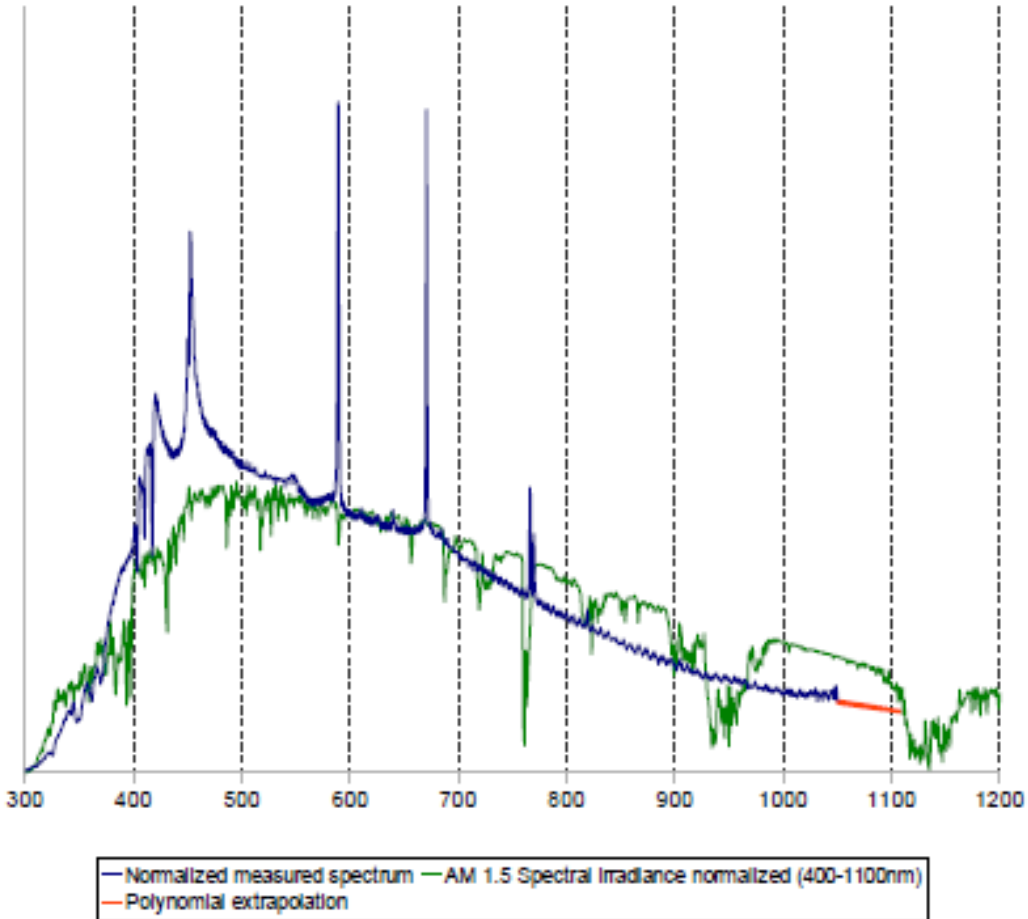
**Colors coordinate:      x = 0.310      y = 0.309**

**Reference Cell Isc: 12.2 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb M54 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 23.2 | 1.26 | B |
| 500-600 nm | 19.91 | 21.2 | 1.06 | A |
| 600-700 nm | 18.36 | 18.3 | 1.00 | A |
| 700-800 nm | 14.92 | 14.2 | 0.95 | A |
| 800-900 nm | 12.46 | 10.1 | 0.81 | A |
| 900-1100 nm | 15.94 | 13.0 | 0.81 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
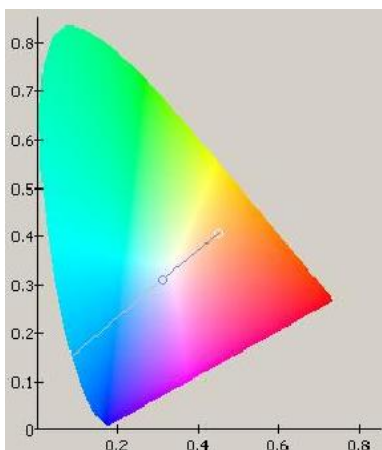


**Color temperature = 6686 K**

**Color Render Index = 95.7 [-]**
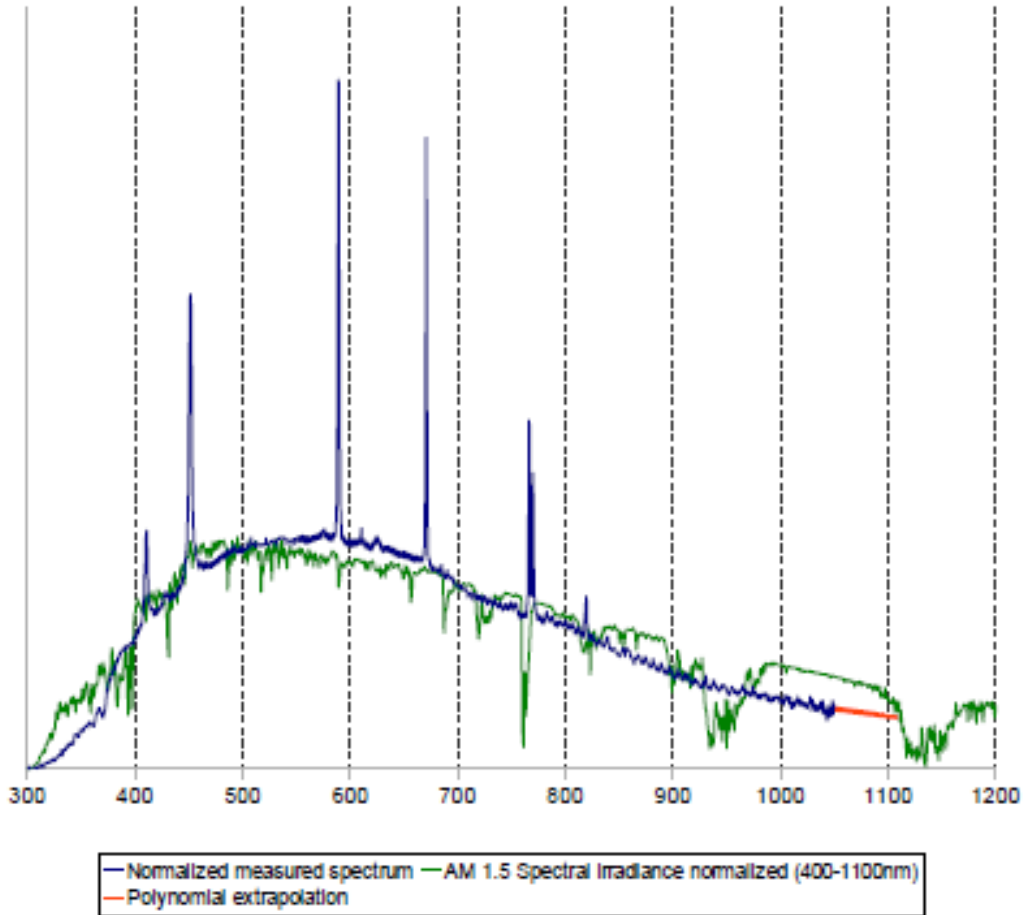
**Colors coordinate:**     x = 0.312     y = 0.312

**Reference Cell Isc: 16.4 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
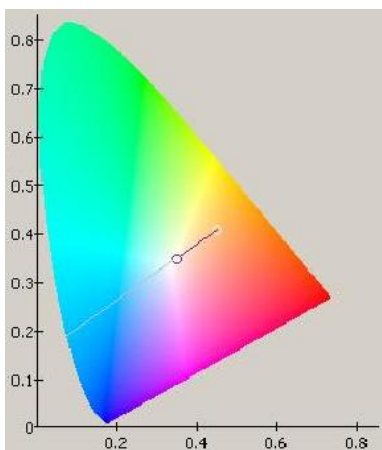
# Lumartix SA ©

# Bulb M55 at 800W



— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 17.2 | 0.93 | A |
| 500-600 nm | 19.91 | 21.3 | 1.07 | A |
| 600-700 nm | 18.36 | 20.2 | 1.10 | A |
| 700-800 nm | 14.92 | 15.8 | 1.06 | A |
| 800-900 nm | 12.46 | 11.6 | 0.93 | A |
| 900-1100 nm | 15.94 | 13.9 | 0.87 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



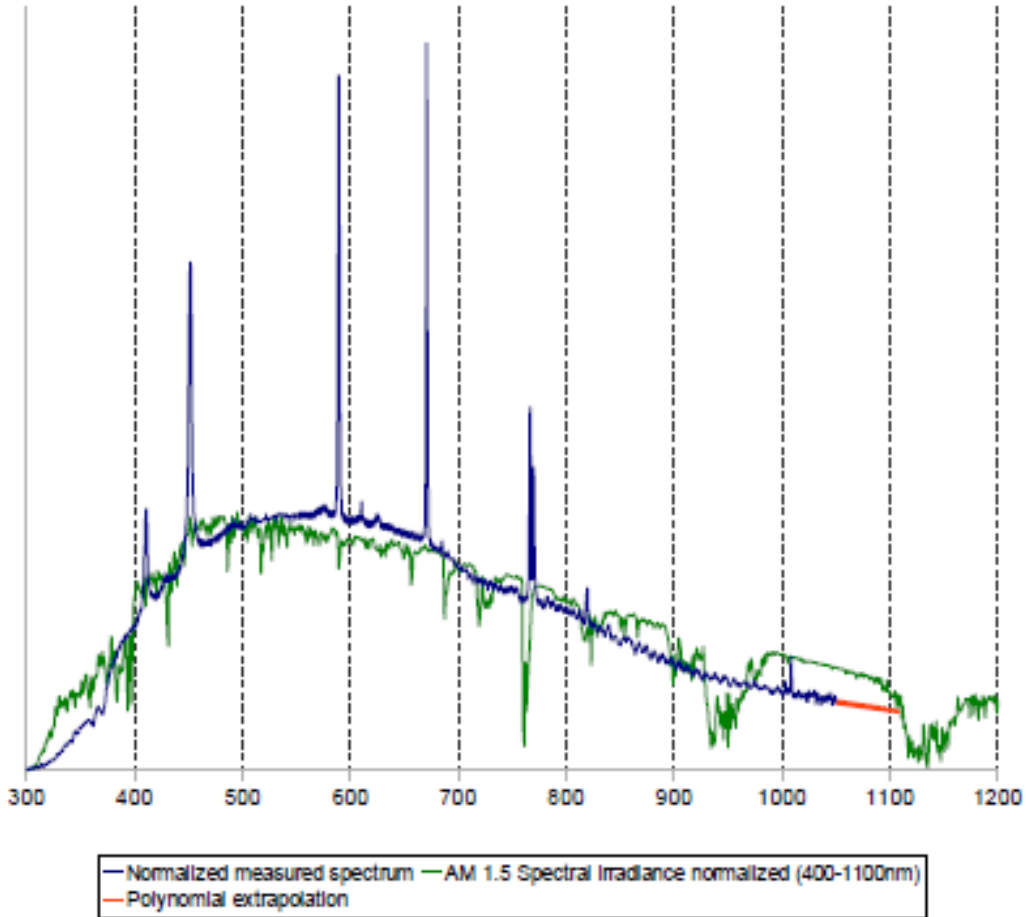Color temperature = 4892 K

Color Render Index = 96.7 [-]

Colors coordinate:     x = 0.348     y = 0.349

Reference Cell Isc: 12.4 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Bulb M55 at 1000W



Legend:
— Normalized measured spectrum  — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 17.2 | 0.93 | A |
| 500-600 nm | 19.91 | 21.2 | 1.07 | A |
| 600-700 nm | 18.36 | 20.1 | 1.10 | A |
| 700-800 nm | 14.92 | 15.7 | 1.05 | A |
| 800-900 nm | 12.45 | 11.6 | 0.93 | A |
| 900-1100 nm | 15.94 | 14.2 | 0.89 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
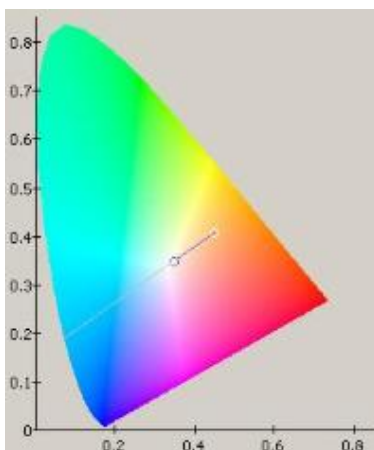


**Color temperature  =  4918 K**

**Color Render Index  =  96.7  [-]**

**Colors coordinate:        x = 0.347        y = 0.349**

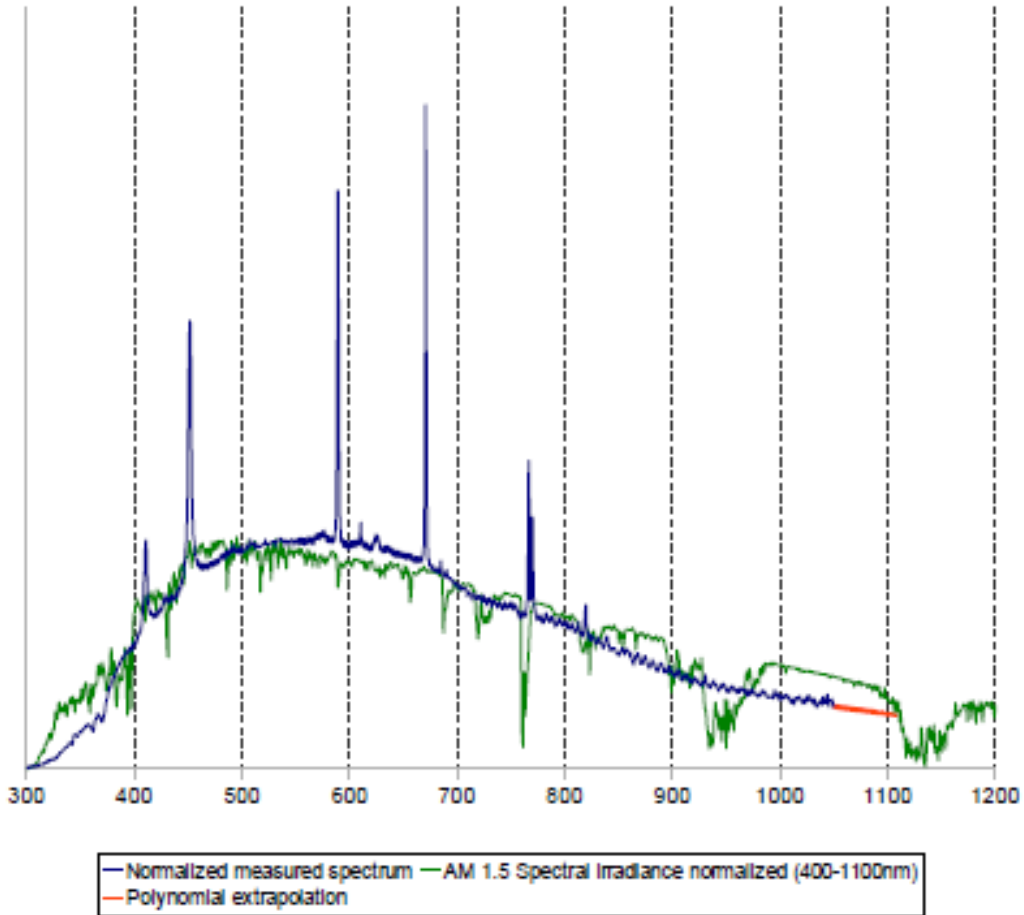**Reference Cell Isc:  16.2  [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb M55 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 17.0 | 0.92 | A |
| 500-600 nm | 19.91 | 21.1 | 1.06 | A |
| 600-700 nm | 18.36 | 20.2 | 1.10 | A |
| 700-800 nm | 14.92 | 15.7 | 1.05 | A |
| 800-900 nm | 12.46 | 11.6 | 0.93 | A |
| 900-1100 nm | 15.94 | 14.4 | 0.90 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
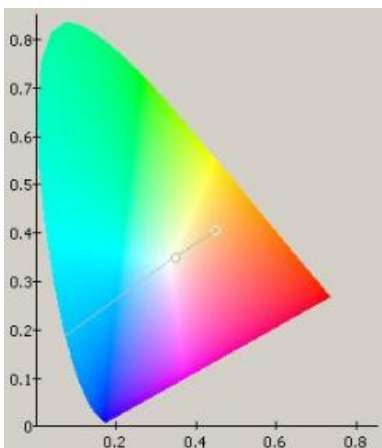


**Color temperature = 4899 K**

**Color Render Index = 97.0 [-]**
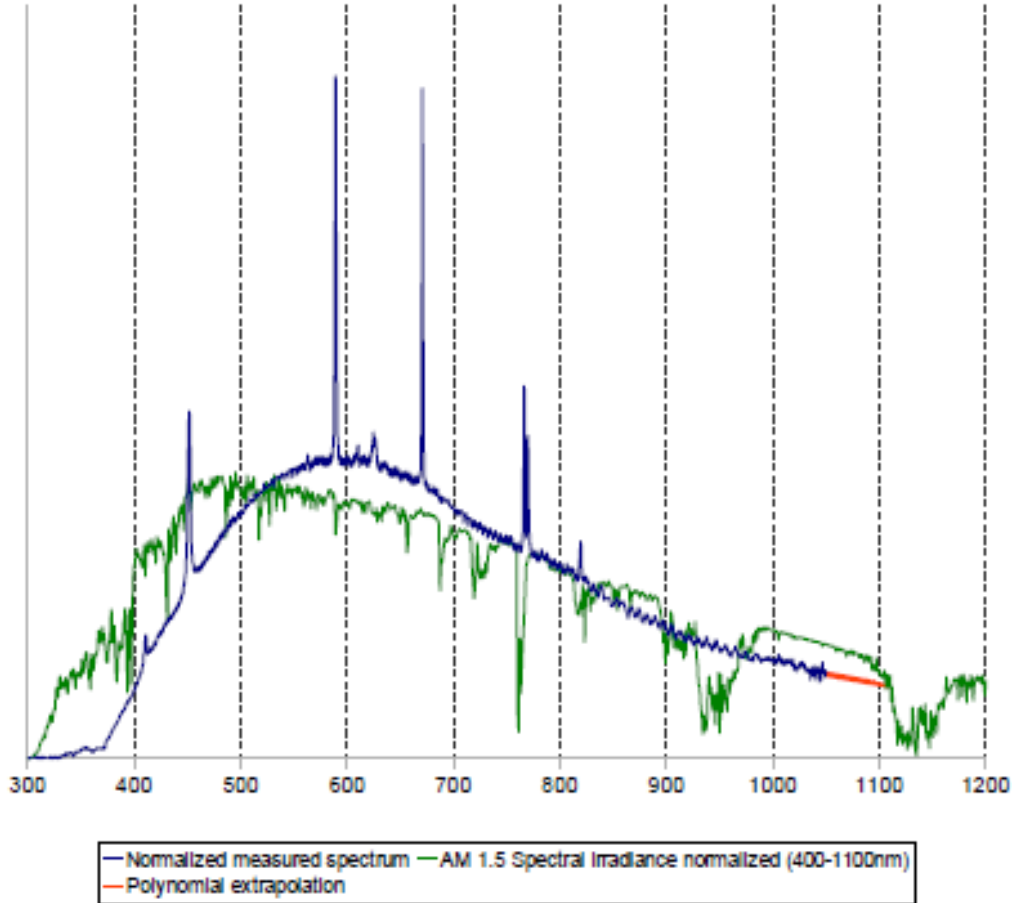
**Colors coordinate:      x = 0.348      y = 0.349**

**Reference Cell Isc: 21.4 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb M56 at 800W



Legend:
— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 11.6 | 0.63 | B |
| 500-600 nm | 19.91 | 21.0 | 1.05 | A |
| 600-700 nm | 18.36 | 21.7 | 1.18 | A |
| 700-800 nm | 14.92 | 17.2 | 1.16 | A |
| 800-900 nm | 12.46 | 12.6 | 1.01 | A |
| 900-1100 nm | 15.94 | 15.8 | 0.99 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
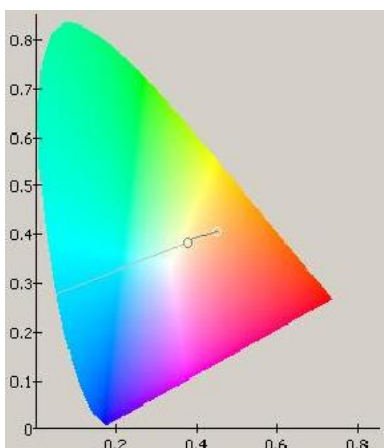


Color temperature = 4130 K

Color Render Index = 94.5 [-]
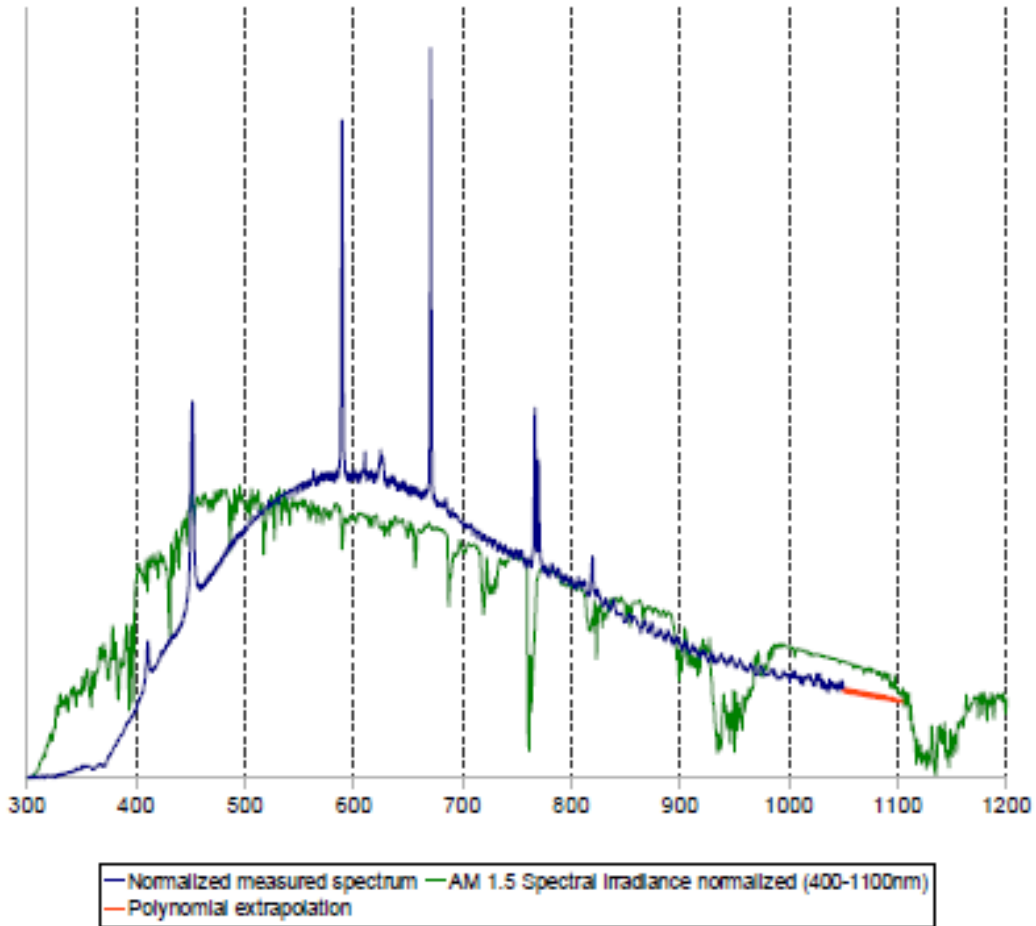
Colors coordinate:    x = 0.378    y = 0.384

Reference Cell Isc: 14.1 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb M56 at 1000W



— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 11.6 | 0.63 | B |
| 500-600 nm | 19.91 | 20.7 | 1.04 | A |
| 600-700 nm | 18.36 | 21.6 | 1.18 | A |
| 700-800 nm | 14.92 | 17.2 | 1.16 | A |
| 800-900 nm | 12.46 | 12.7 | 1.02 | A |
| 900-1100 nm | 15.94 | 16.1 | 1.01 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
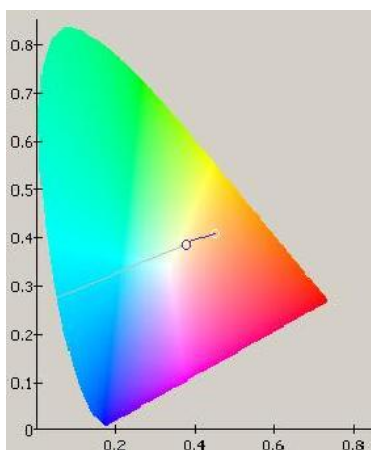


**Color temperature = 4119 K**

**Color Render Index = 94.6 [-]**
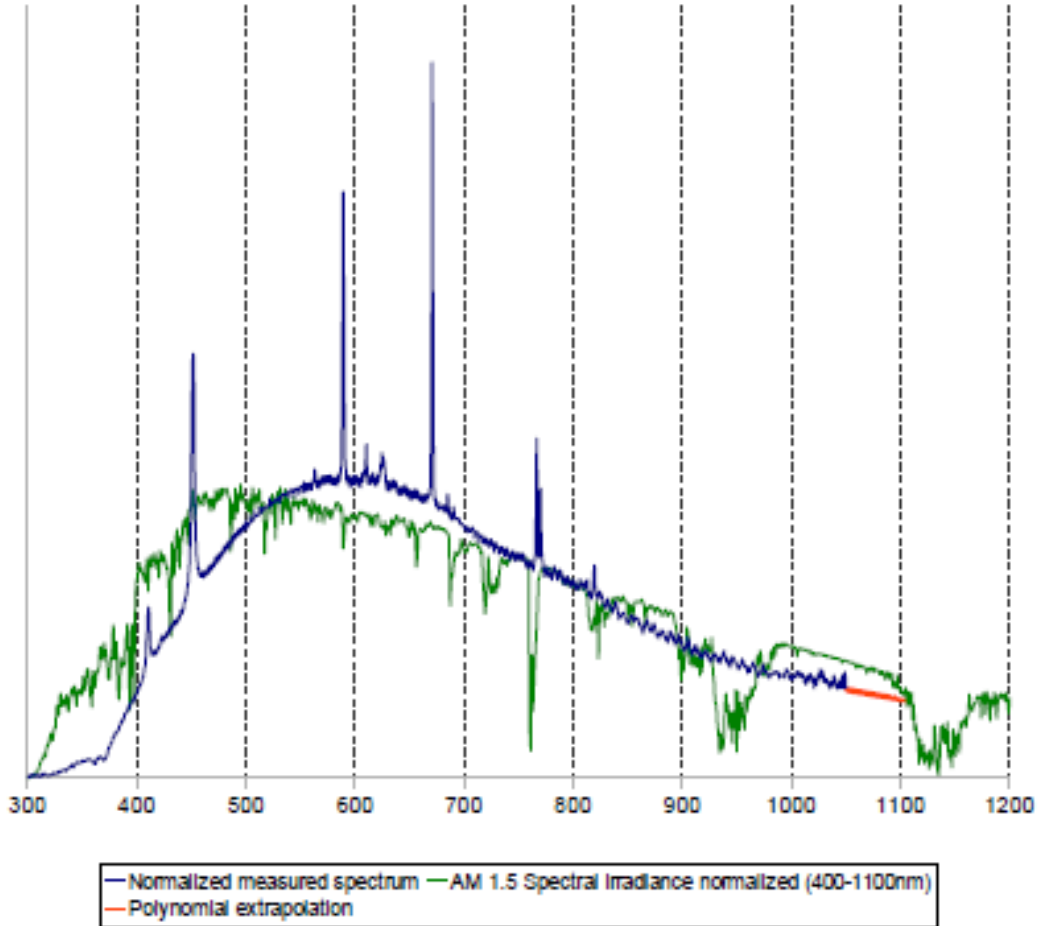
**Colors coordinate:** x = 0.378  y = 0.384

**Reference Cell Isc: 17.8 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb M56 at 1300W



- Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
- Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 12.6 | 0.68 | B |
| 500-600 nm | 19.91 | 20.6 | 1.03 | A |
| 600-700 nm | 18.36 | 21.3 | 1.16 | A |
| 700-800 nm | 14.92 | 16.9 | 1.13 | A |
| 800-900 nm | 12.46 | 12.6 | 1.01 | A |
| 900-1100 nm | 15.94 | 16.1 | 1.01 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
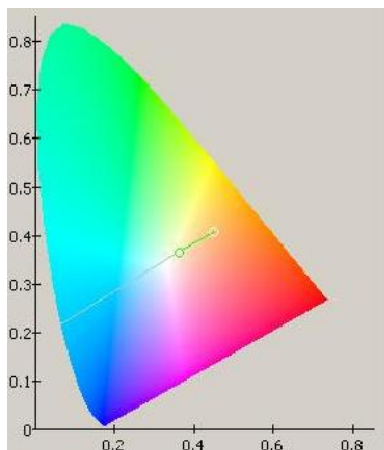


**Color temperature = 4448 K**

**Color Render Index = 96.6 [-]**
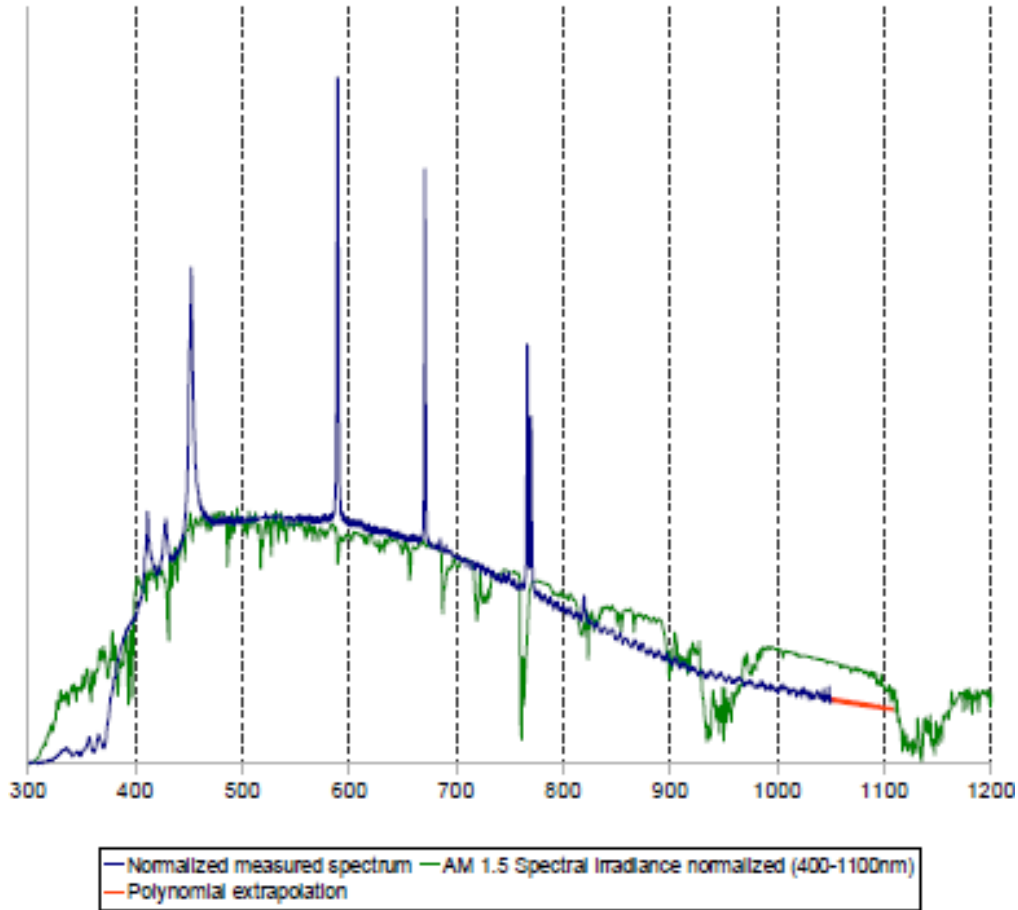
**Colors coordinate:     x = 0.363     y = 0.365**

**Reference Cell Isc: 24 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
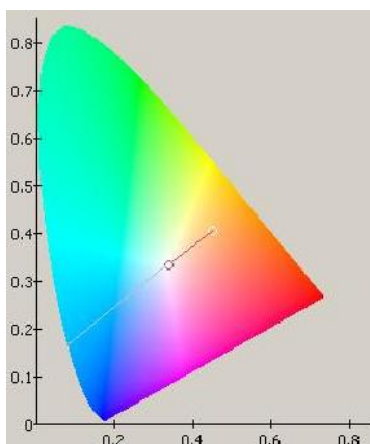
# Lumartix SA ©

# Bulb M58-1 at 800W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 18.6 | 1.01 | A |
| 500-600 nm | 19.91 | 20.7 | 1.04 | A |
| 600-700 nm | 18.36 | 19.4 | 1.06 | A |
| 700-800 nm | 14.92 | 16.2 | 1.09 | A |
| 800-900 nm | 12.46 | 11.3 | 0.91 | A |
| 900-1100 nm | 15.94 | 13.7 | 0.86 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 5303 K**

**Color Render Index = 96.6 [-]**
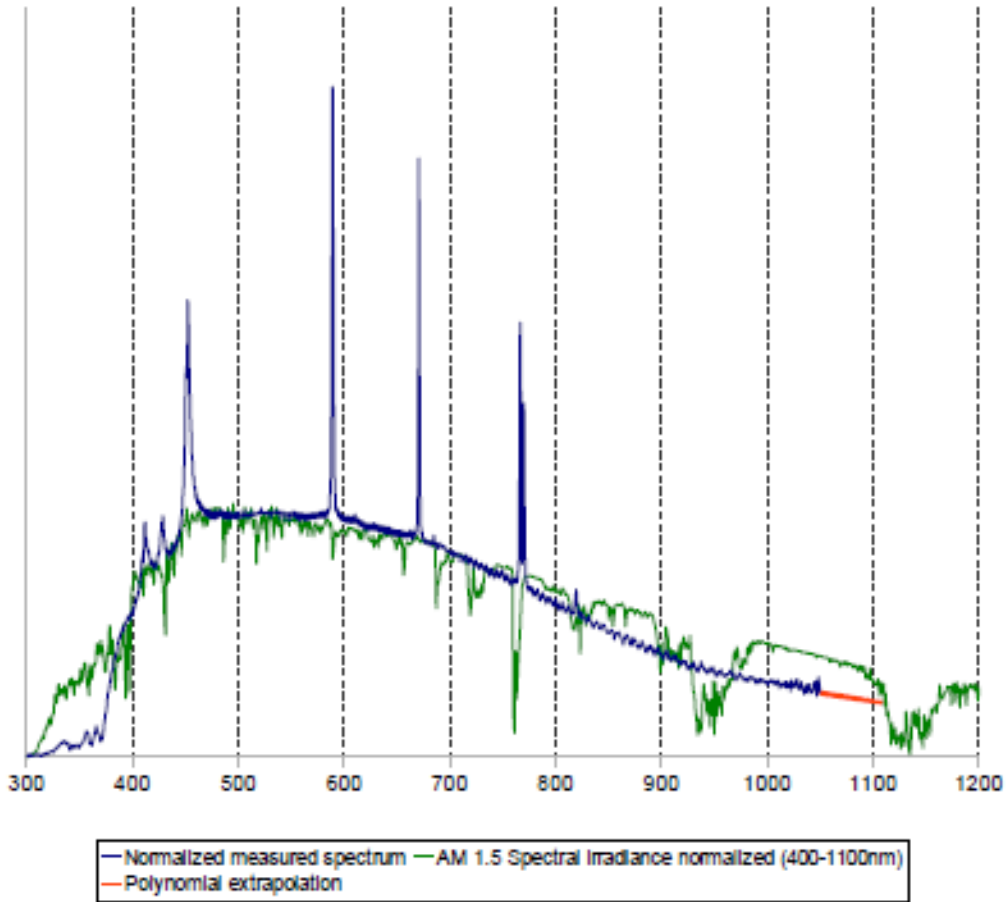
**Colors coordinate:    x = 0.334    y = 0.335**

**Reference Cell Isc: 12.8 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb M58-1 at 1000W



— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 18.6 | 1.01 | A |
| 500-600 nm | 19.91 | 20.7 | 1.04 | A |
| 600-700 nm | 18.36 | 19.4 | 1.05 | A |
| 700-800 nm | 14.92 | 16.3 | 1.09 | A |
| 800-900 nm | 12.46 | 11.3 | 0.91 | A |
| 900-1100 nm | 15.94 | 13.8 | 0.87 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 5296 K**

**Color Render Index = 96.5  [-]**

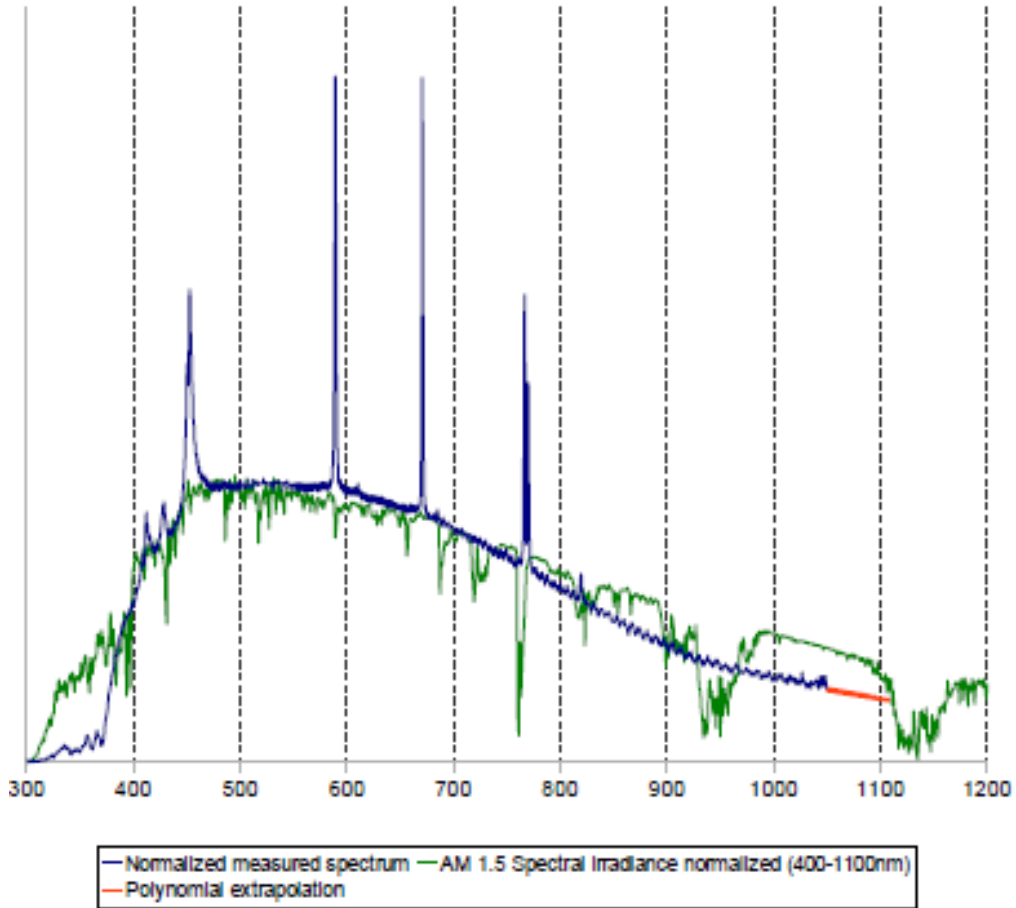**Colors coordinate:      x = 0.337      y = 0.335**

**Reference Cell Isc:  17 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
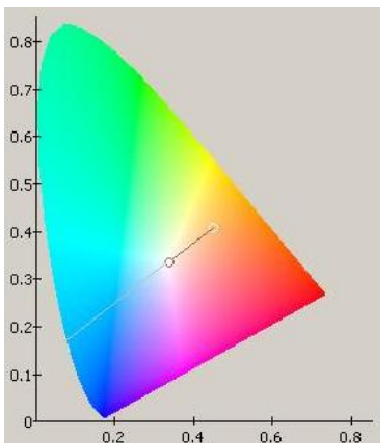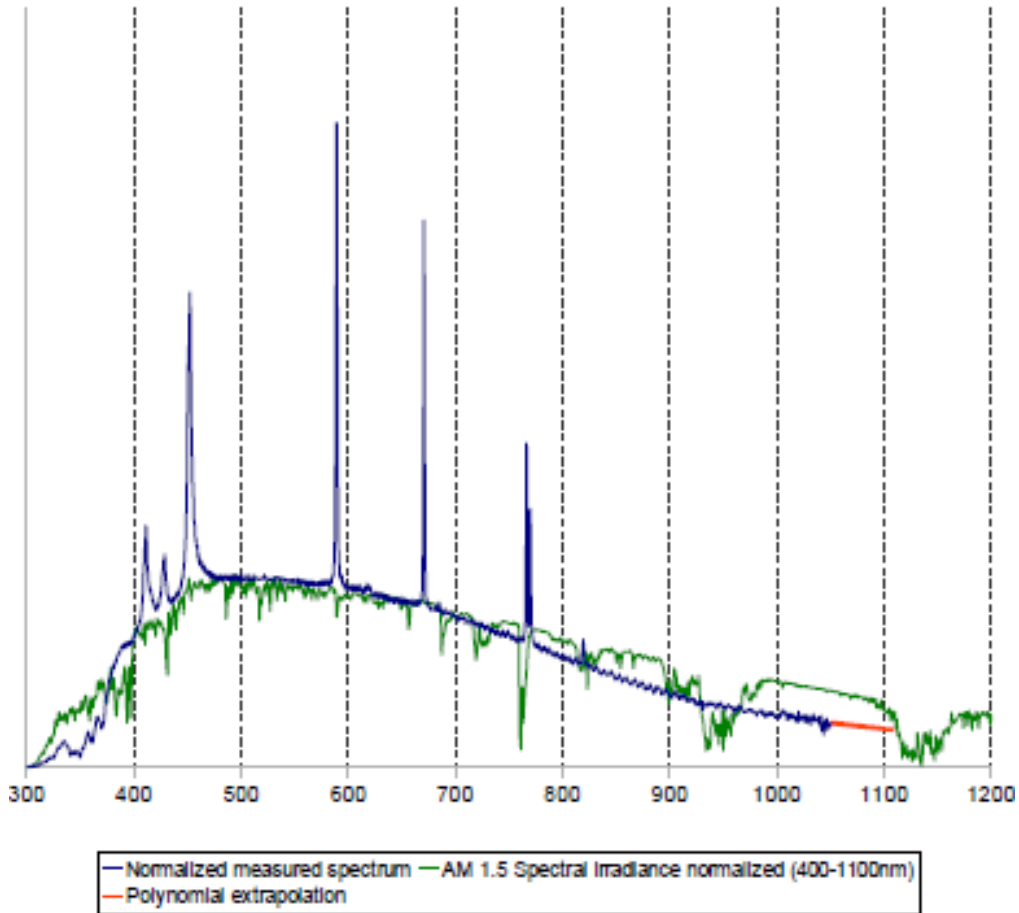
# Lumartix SA ©

# Bulb M58-1 at 1300W



Legend:
— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 18.2 | 0.99 | A |
| 500-600 nm | 19.91 | 20.8 | 1.04 | A |
| 600-700 nm | 18.36 | 19.5 | 1.06 | A |
| 700-800 nm | 14.92 | 16.3 | 1.09 | A |
| 800-900 nm | 12.46 | 11.4 | 0.91 | A |
| 900-1100 nm | 15.94 | 13.8 | 0.87 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 5308 K**

**Color Render Index = 96.8 [-]**

**Colors coordinate:        x = 0.337        y = 0.337**

**Reference Cell Isc: 23.6 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
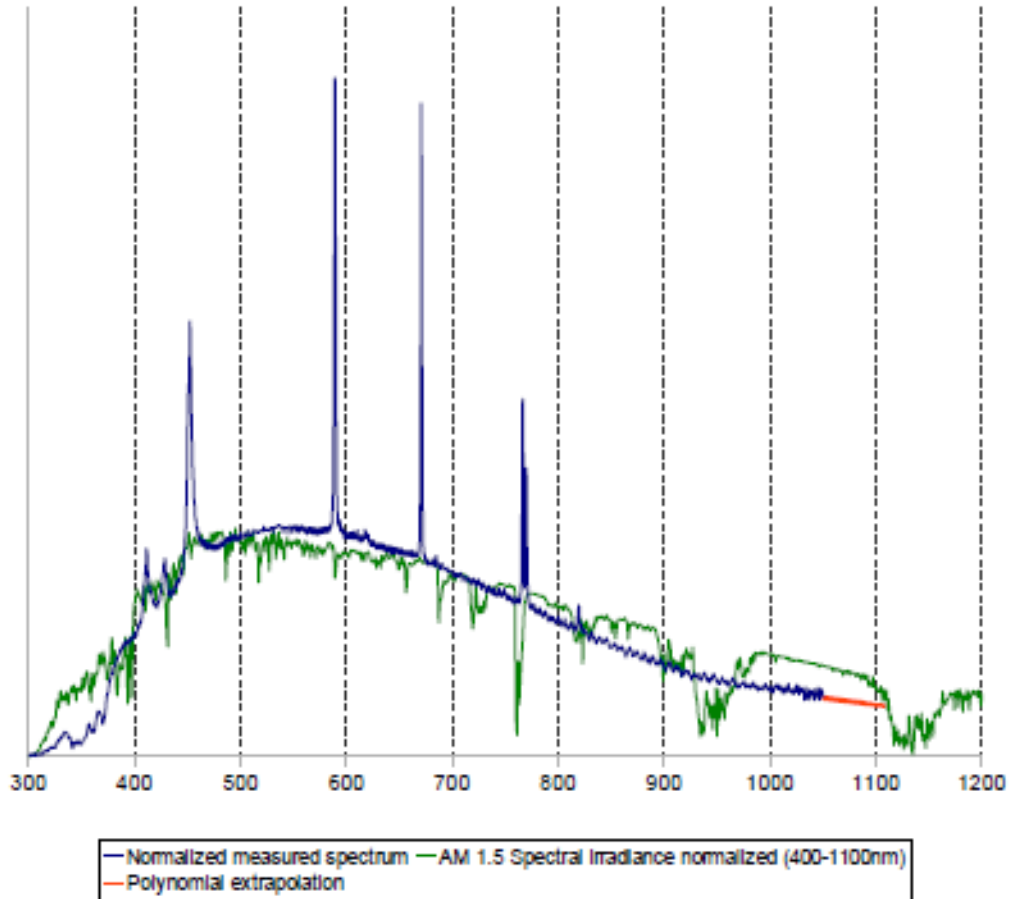
# Lumartix SA ©

# Bulb M59 at 800W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 20.7 | 1.12 | A |
| 500-600 nm | 19.91 | 21.2 | 1.07 | A |
| 600-700 nm | 18.36 | 19.2 | 1.04 | A |
| 700-800 nm | 14.92 | 15.6 | 1.05 | A |
| 800-900 nm | 12.46 | 10.7 | 0.86 | A |
| 900-1100 nm | 15.94 | 12.7 | 0.80 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
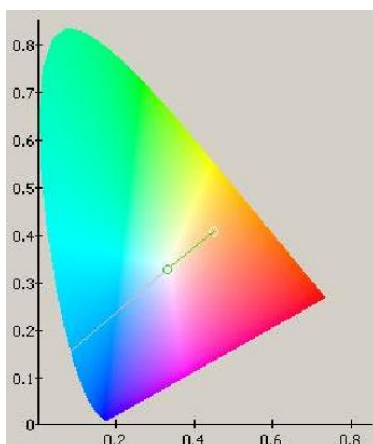


**Color temperature = 5559 K**

**Color Render Index = 95.9 [-]**

**Colors coordinate:       x = 0.331       y = 0.327**

**Reference Cell Isc: 10.1 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
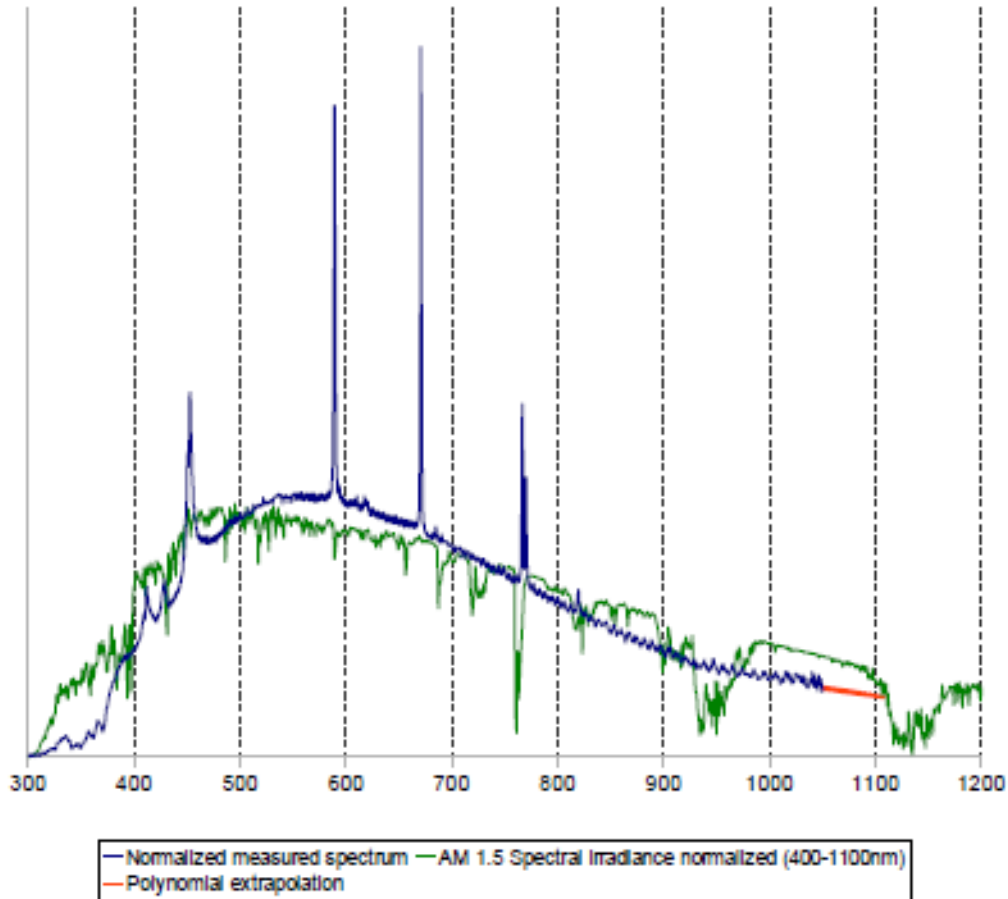
# Lumartix SA ©

# Bulb M59 at 1000W



- Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
- Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 17.5 | 0.95 | A |
| 500-600 nm | 19.91 | 21.5 | 1.08 | A |
| 600-700 nm | 18.36 | 19.9 | 1.08 | A |
| 700-800 nm | 14.92 | 16.0 | 1.07 | A |
| 800-900 nm | 12.46 | 11.1 | 0.89 | A |
| 900-1100 nm | 15.94 | 13.9 | 0.87 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
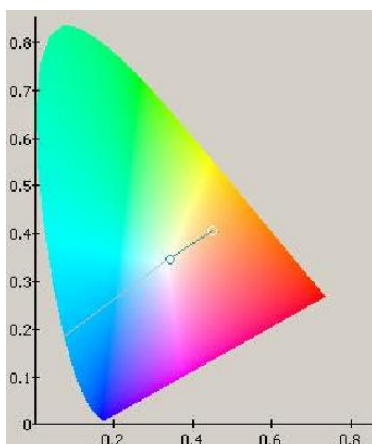


**Color temperature = 5051 K**

**Color Render Index = 96.0 [-]**

**Colors coordinate:    x = 0.343    y = 0.346**

**Reference Cell Isc: 13.6 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
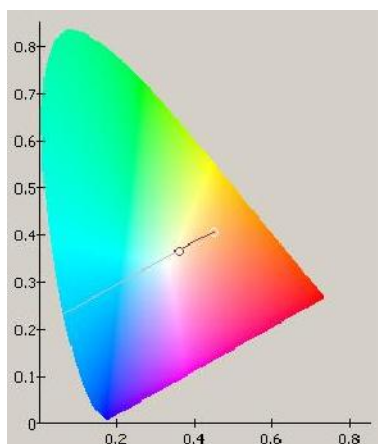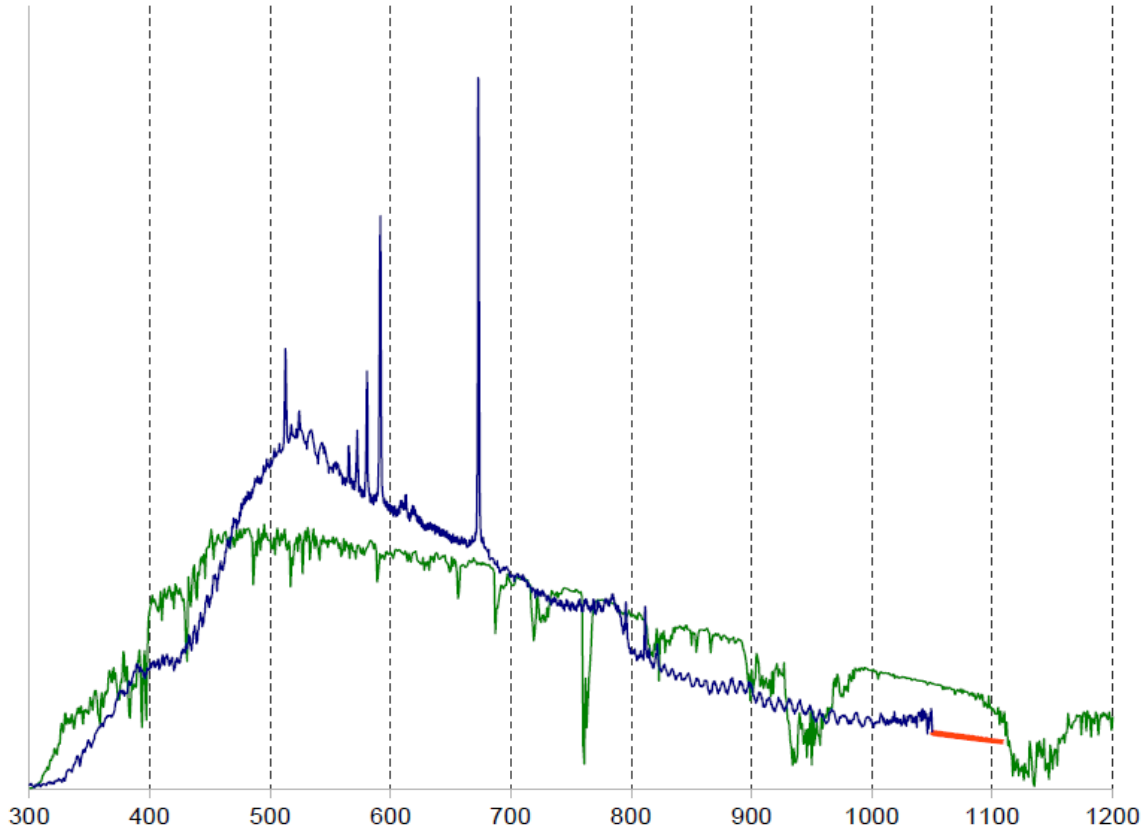
# Lumartix SA ©

# Bulb M59 at 1300W



Legend:
— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 15.1 | 0.82 | A |
| 500-600 nm | 19.91 | 21.8 | 1.09 | A |
| 600-700 nm | 18.36 | 20.6 | 1.12 | A |
| 700-800 nm | 14.92 | 16.4 | 1.10 | A |
| 800-900 nm | 12.46 | 11.5 | 0.92 | A |
| 900-1100 nm | 15.94 | 14.6 | 0.92 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 4602 K**

**Color Render Index = 94.2 [-]**

**Colors coordinate:     x = 0.358     y = 0.367**

**Reference Cell Isc: 19 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
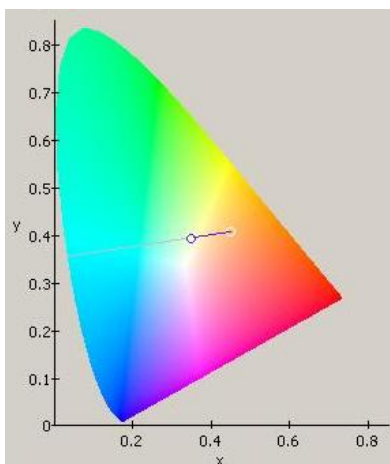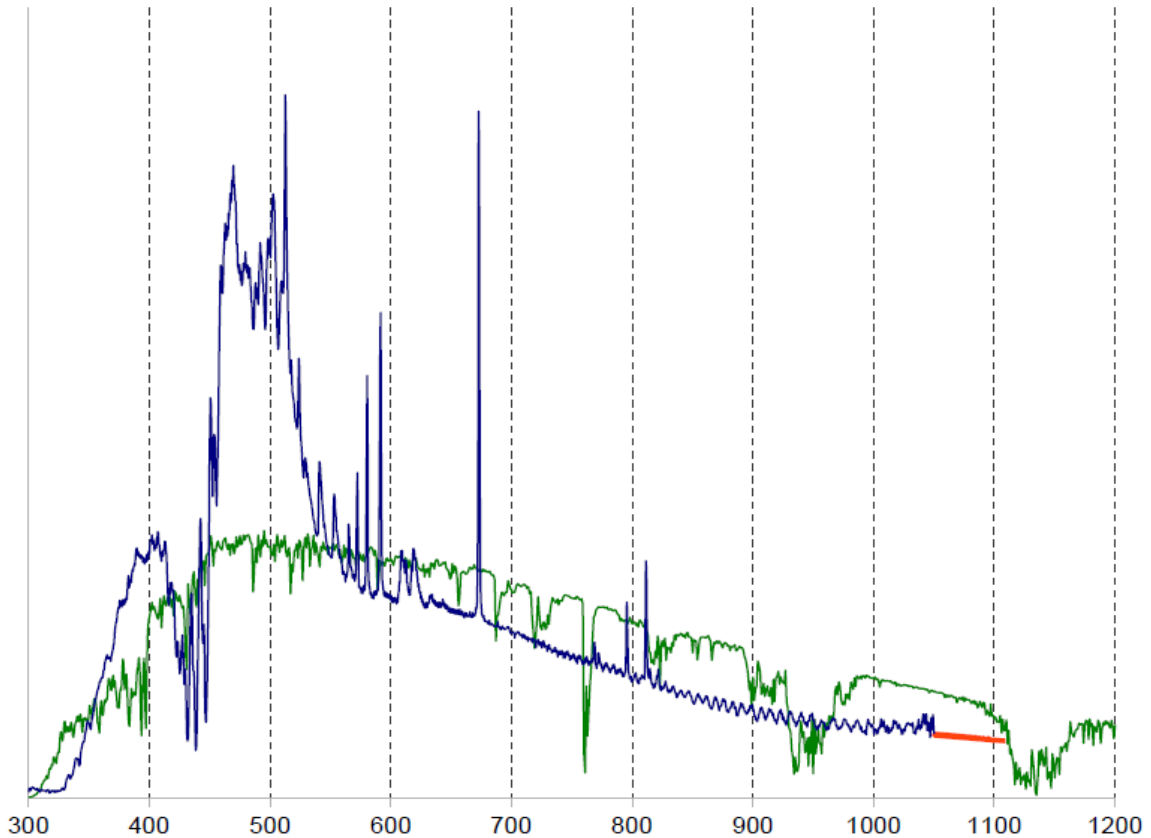
# Lumartix SA ©

# Bulb M64 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 14.8 | 0.81 | A |
| 500-600 nm | 19.91 | 26.4 | 1.33 | B |
| 600-700 nm | 18.36 | 21.3 | 1.16 | A |
| 700-800 nm | 14.92 | 15.8 | 1.06 | A |
| 800-900 nm | 12.46 | 9.7 | 0.78 | A |
| 900-1100 nm | 15.94 | 12.0 | 0.76 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature  =  5000 K

Color Render Index  =  90.0 [-]

Colors coordinate:      x  =  0.348      y  =  0.395

Reference Cell Isc: 12.0 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.

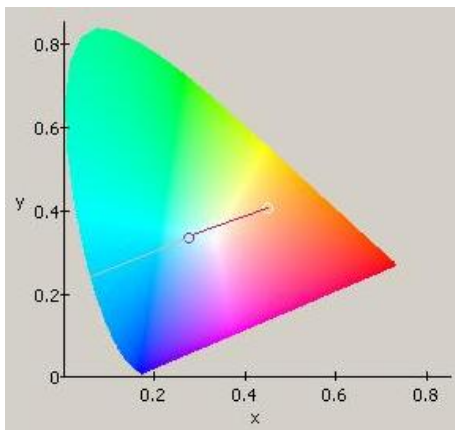# Lumartix SA ©

# Bulb M65 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 25.0 | 1.36 | B |
| 500-600 nm | 19.91 | 26.5 | 1.33 | B |
| 600-700 nm | 18.36 | 15.9 | 0.87 | A |
| 700-800 nm | 14.92 | 11.8 | 0.79 | A |
| 800-900 nm | 12.46 | 8.7 | 0.70 | B |
| 900-1100 nm | 15.94 | 12.1 | 0.76 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 8700 K**

**Color Render Index = 83.5 [-]**
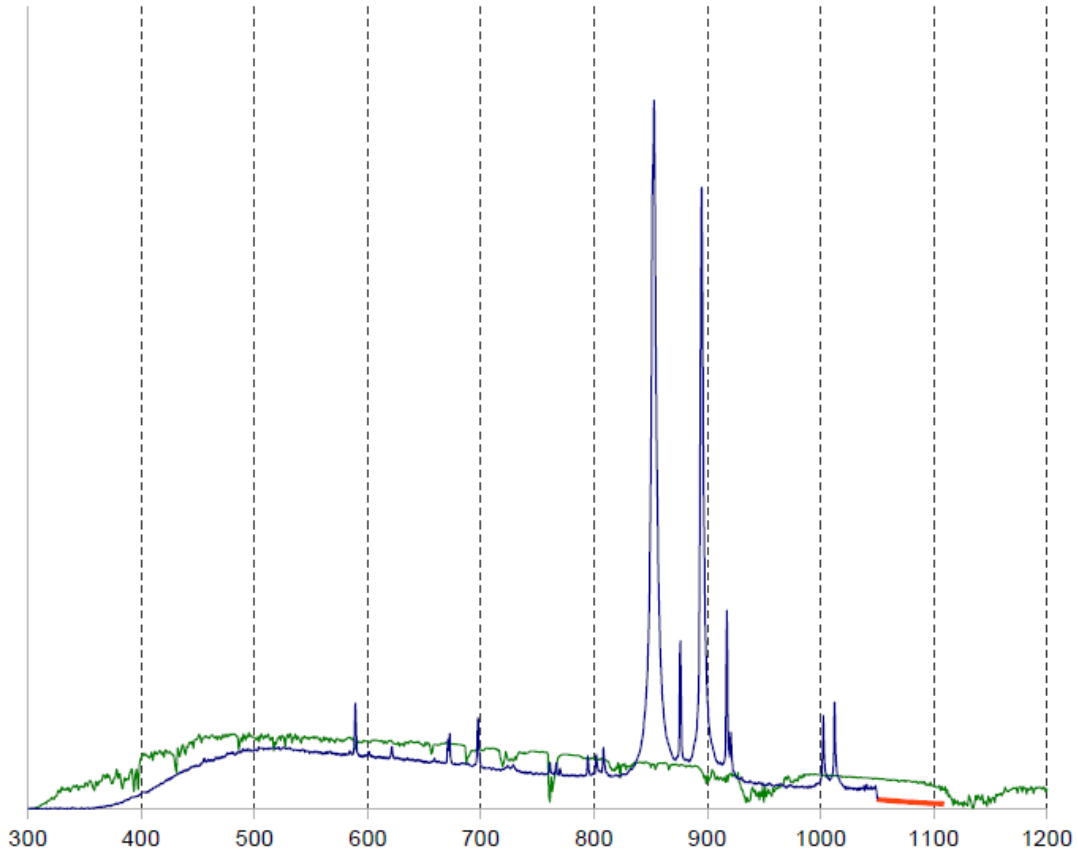
**Colors coordinate:   x = 0.275    y = 0.334**

**Reference Cell Isc: 9.1 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
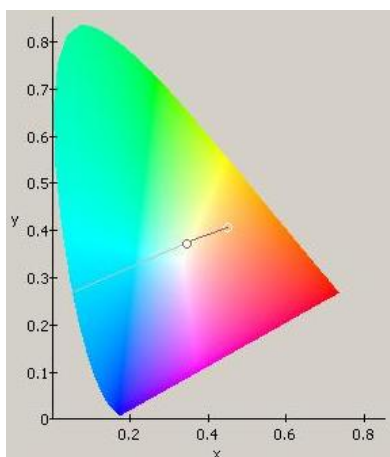
# Lumartix SA ©

# Bulb Mix1 at 800W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 10.3 | 0.56 | C |
| 500-600 nm | 19.91 | 16.2 | 0.81 | A |
| 600-700 nm | 18.36 | 13.8 | 0.75 | A |
| 700-800 nm | 14.92 | 10.9 | 0.73 | B |
| 800-900 nm | 12.46 | 26.4 | 2.12 | - |
| 900-1100 nm | 15.94 | 22.4 | 1.40 | C |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature = 5100 K

Color Render Index = 94 [-]

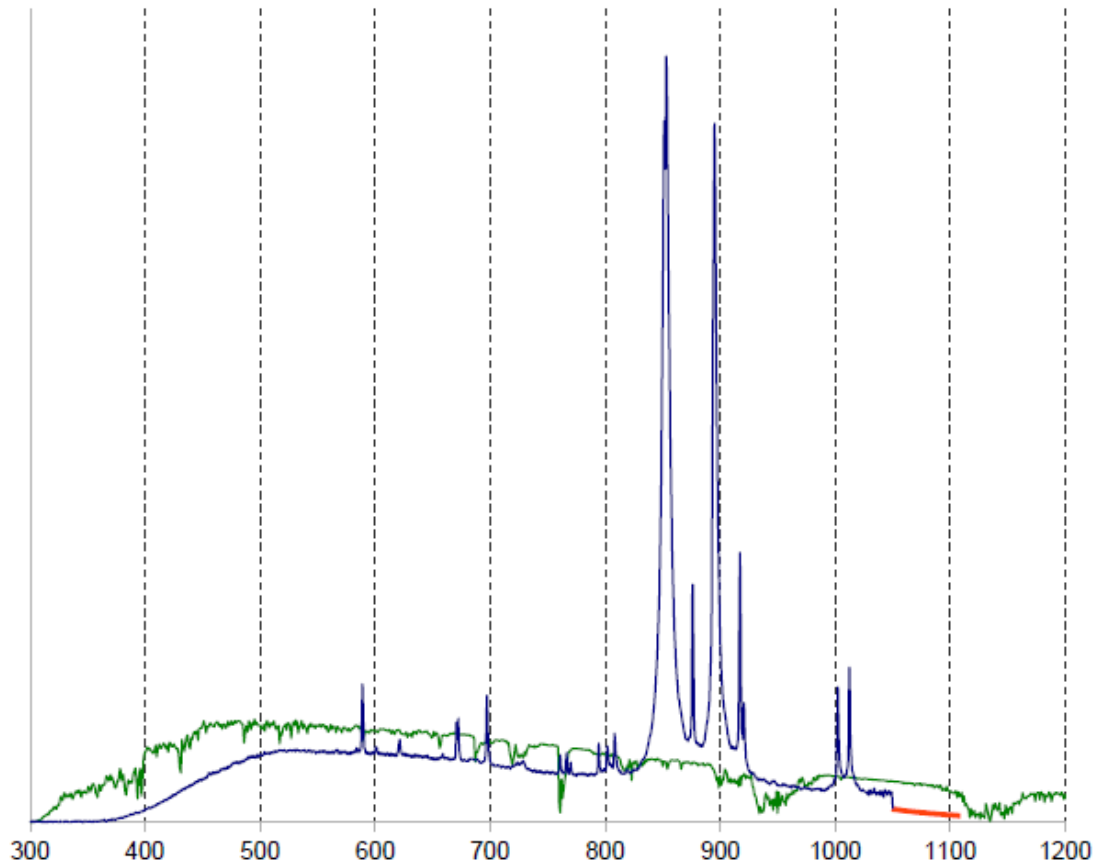Colors coordinate:     x = 0.344     y = 0.371

Reference Cell Isc: 11 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix1 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 7.6 | 0.41 | C |
| 500-600 nm | 19.91 | 14.5 | 0.73 | B |
| 600-700 nm | 18.36 | 13.8 | 0.75 | A |
| 700-800 nm | 14.92 | 11.4 | 0.77 | A |
| 800-900 nm | 12.46 | 28.5 | 2.29 | - |
| 900-1100 nm | 15.94 | 24.1 | 1.51 | C |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
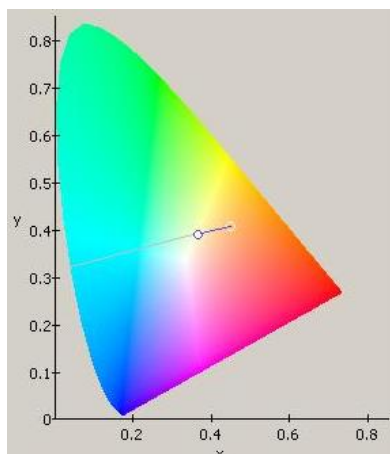


**Color temperature = 4450 K**

**Color Render Index = 93 [-]**

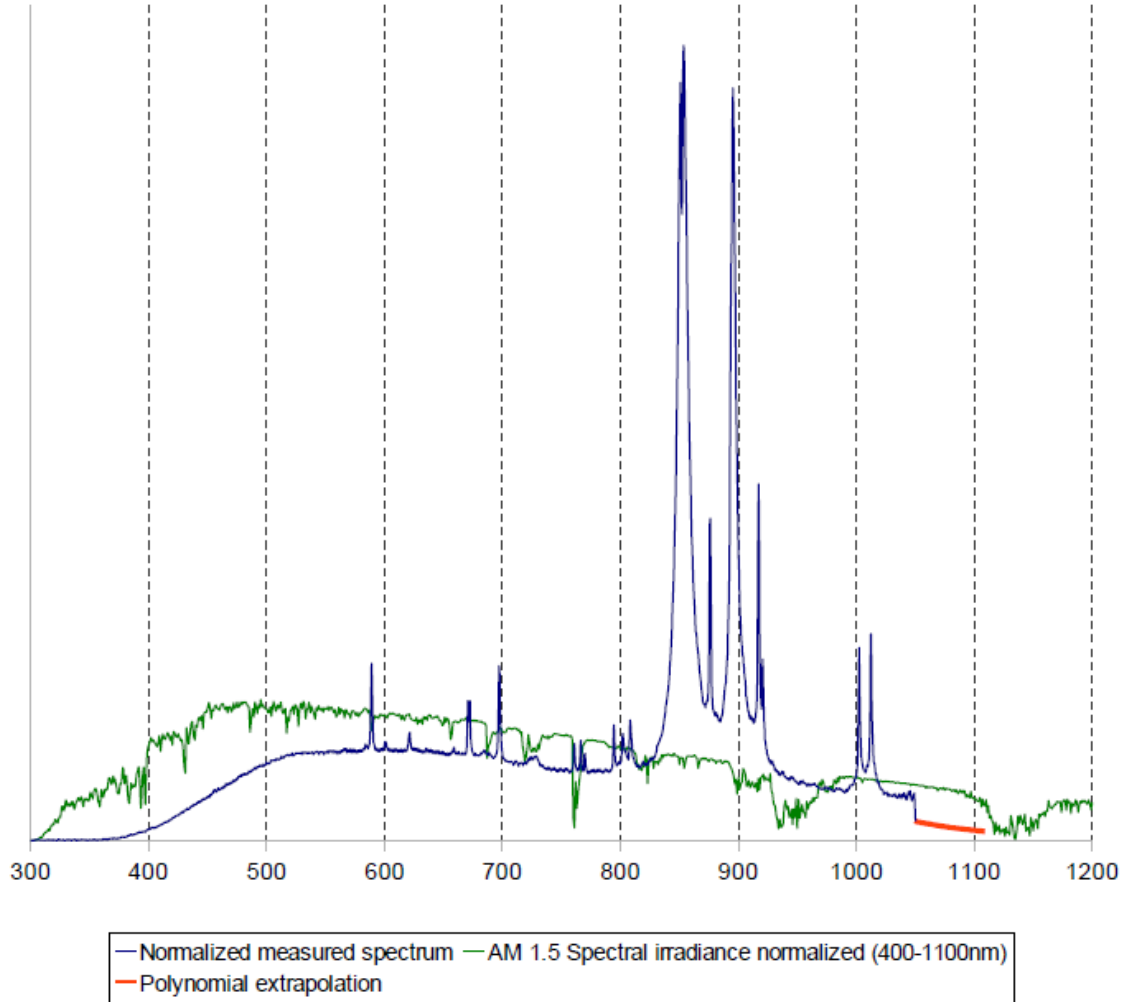**Colors coordinate:** x = 0.366  y = 0.390

**Reference Cell Isc: 15.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix1 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 5.7 | 0.31 | - |
| 500-600 nm | 19.91 | 13.2 | 0.66 | B |
| 600-700 nm | 18.36 | 13.7 | 0.75 | B |
| 700-800 nm | 14.92 | 11.9 | 0.80 | A |
| 800-900 nm | 12.46 | 29.7 | 2.38 | - |
| 900-1100 nm | 15.94 | 25.8 | 1.62 | C |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
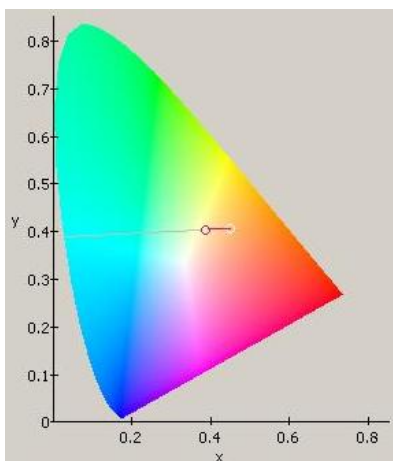


Color temperature = 4050 K

Color Render Index = 92.5 [-]

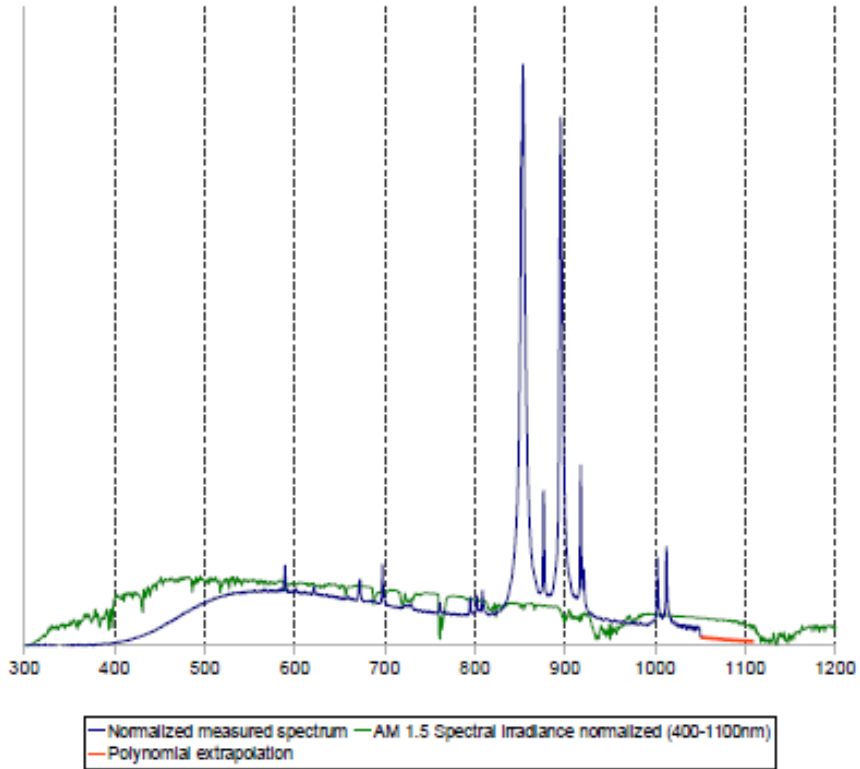Colors coordinate: x = 0.386    y = 0.405

Reference Cell Isc: 23 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix2 at 800W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 5.0 | 0.27 | - |
| 500-600 nm | 19.91 | 15.6 | 0.79 | A |
| 600-700 nm | 18.36 | 15.2 | 0.83 | A |
| 700-800 nm | 14.92 | 11.3 | 0.76 | A |
| 800-900 nm | 12.46 | 28.6 | 2.30 | - |
| 900-1100 nm | 15.94 | 24.2 | 1.52 | C |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
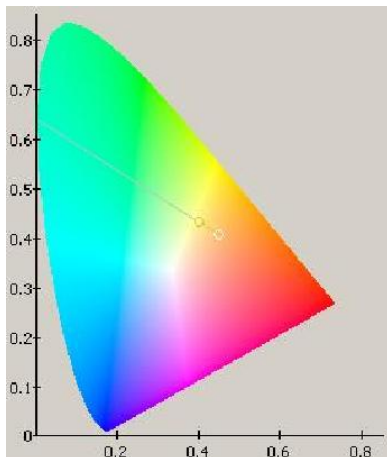


**Color temperature = 3931 K**

**Color Render Index = 86.7 [-]**

**Colors coordinate:**     x = 0.399     y = 0.433
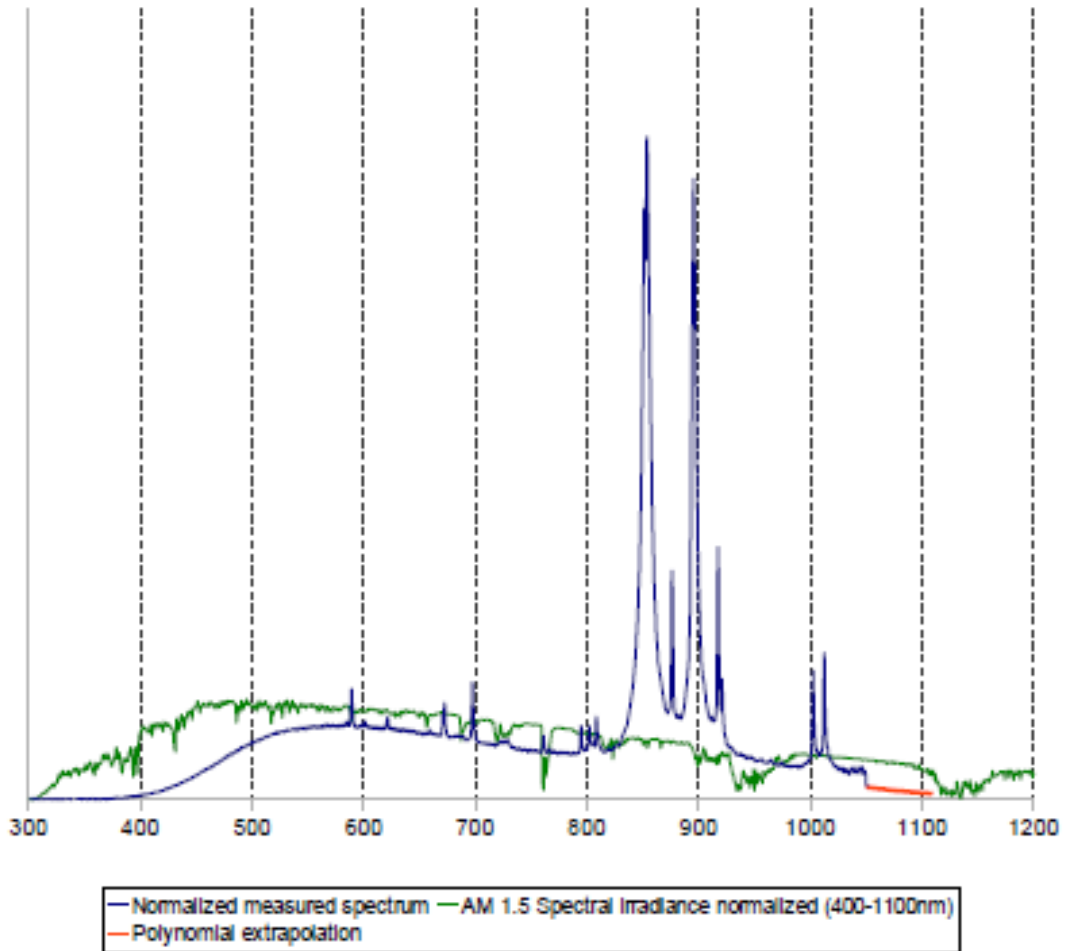
**Reference Cell Isc: 12.4 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix2 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 4.7 | 0.25 | - |
| 500-600 nm | 19.91 | 14.5 | 0.73 | B |
| 600-700 nm | 18.36 | 14.6 | 0.80 | A |
| 700-800 nm | 14.92 | 11.5 | 0.77 | A |
| 800-900 nm | 12.46 | 29.4 | 2.36 | - |
| 900-1100 nm | 15.94 | 25.3 | 1.59 | C |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
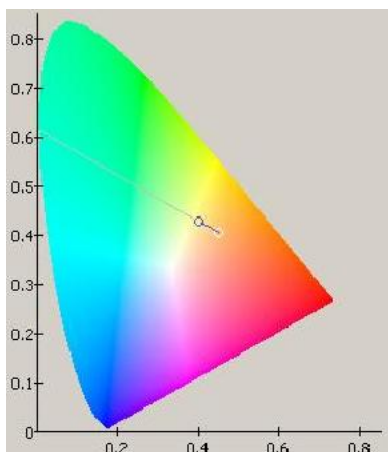


**Color temperature = 3891 K**

**Color Render Index = 87.7 [-]**
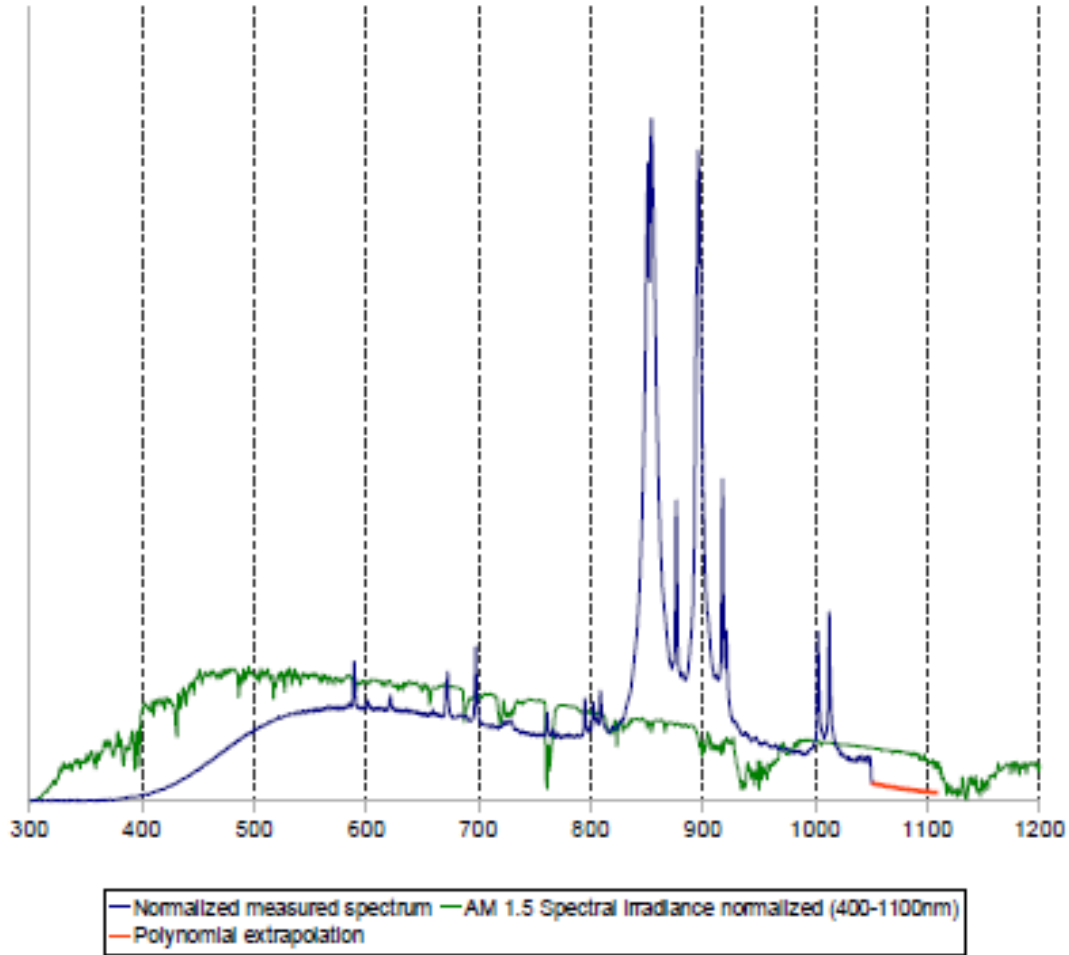
**Colors coordinate:      x = 0.400      y = 0.430**

**Reference Cell Isc: 17.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
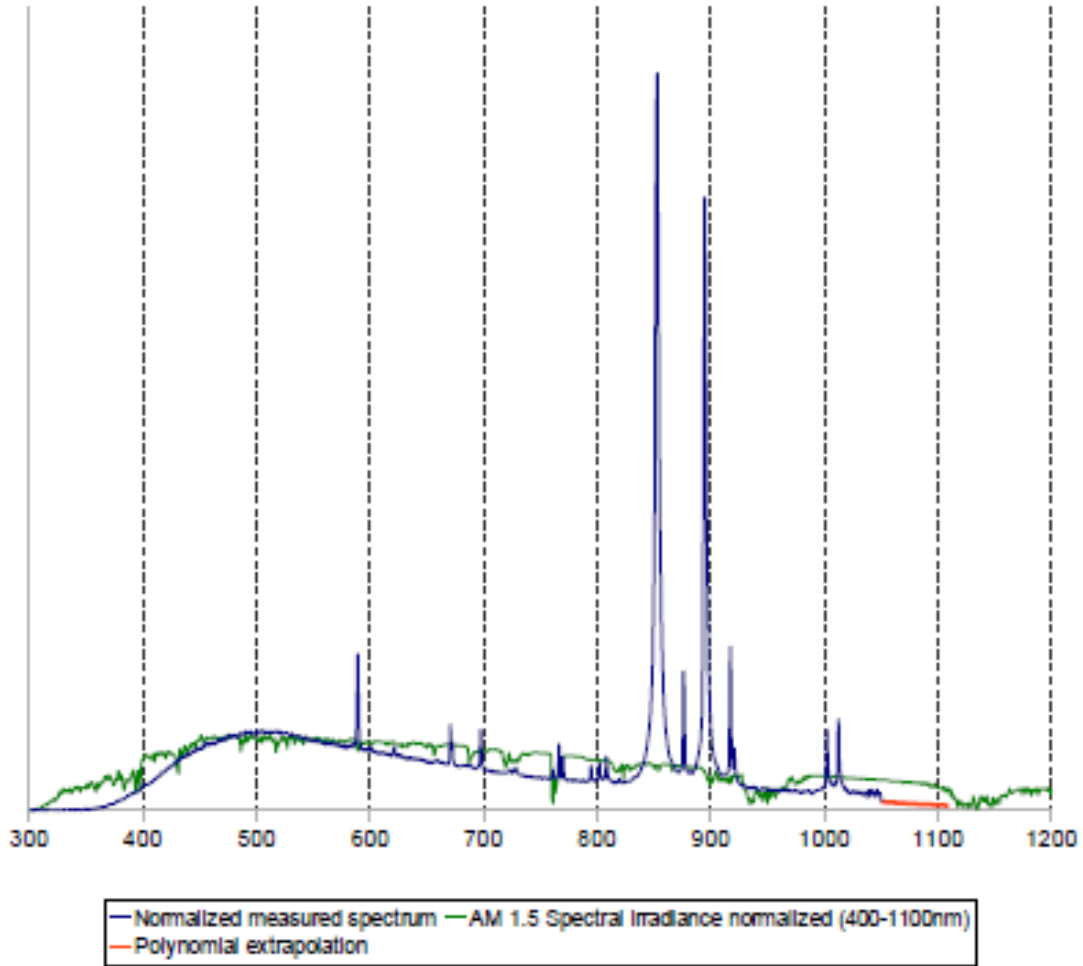
# Lumartix SA ©

# Bulb Mix2 at 1300W



— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 4.5 | 0.24 | - |
| 500-600 nm | 19.91 | 13.6 | 0.68 | B |
| 600-700 nm | 18.36 | 14.3 | 0.78 | A |
| 700-800 nm | 14.92 | 11.7 | 0.79 | A |
| 800-900 nm | 12.46 | 29.7 | 2.39 | - |
| 900-1100 nm | 15.94 | 26.2 | 1.64 | C |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
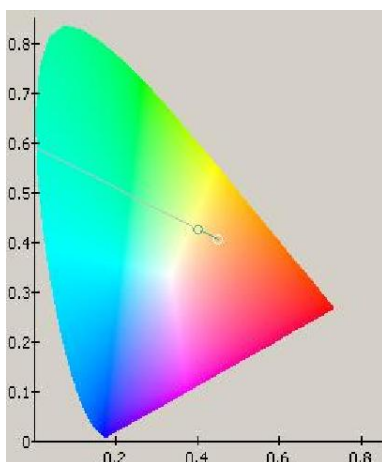


**Color temperature = 3822 K**

**Color Render Index = 89.0 [-]**

**Colors coordinate:     x = 0.402     y = 0.427**

**Reference Cell Isc: 25.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
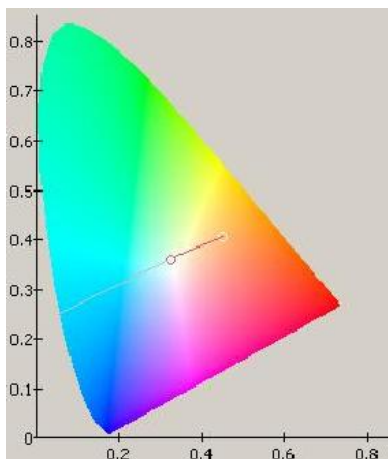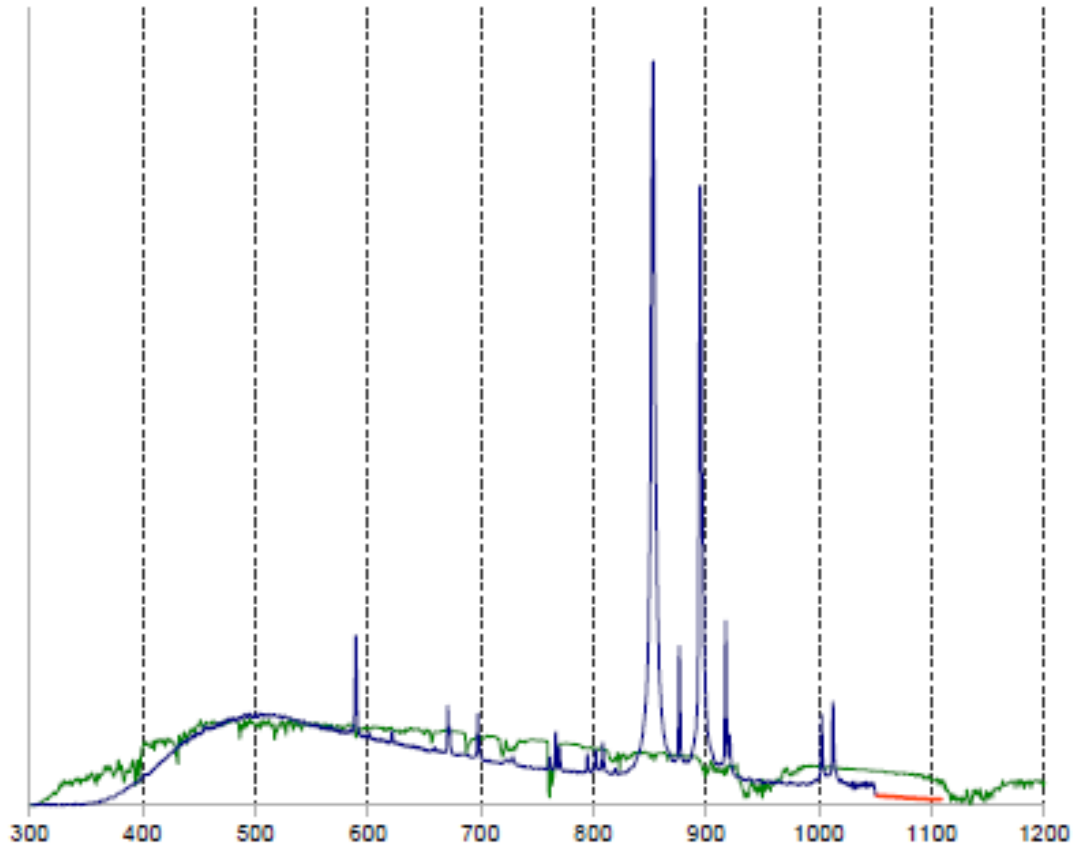
# Lumartix SA ©

# Bulb Mix5 at 800W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 14.5 | 0.79 | A |
| 500-600 nm | 19.91 | 20.1 | 1.01 | A |
| 600-700 nm | 18.36 | 14.5 | 0.79 | A |
| 700-800 nm | 14.92 | 10.3 | 0.69 | B |
| 800-900 nm | 12.46 | 21.8 | 1.75 | C |
| 900-1100 nm | 15.94 | 18.9 | 1.18 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 5860 K**

**Color Render Index = 92.0 [-]**

**Colors coordinate:      x = 0.324      y = 0.359**

**Reference Cell Isc: 11.1 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
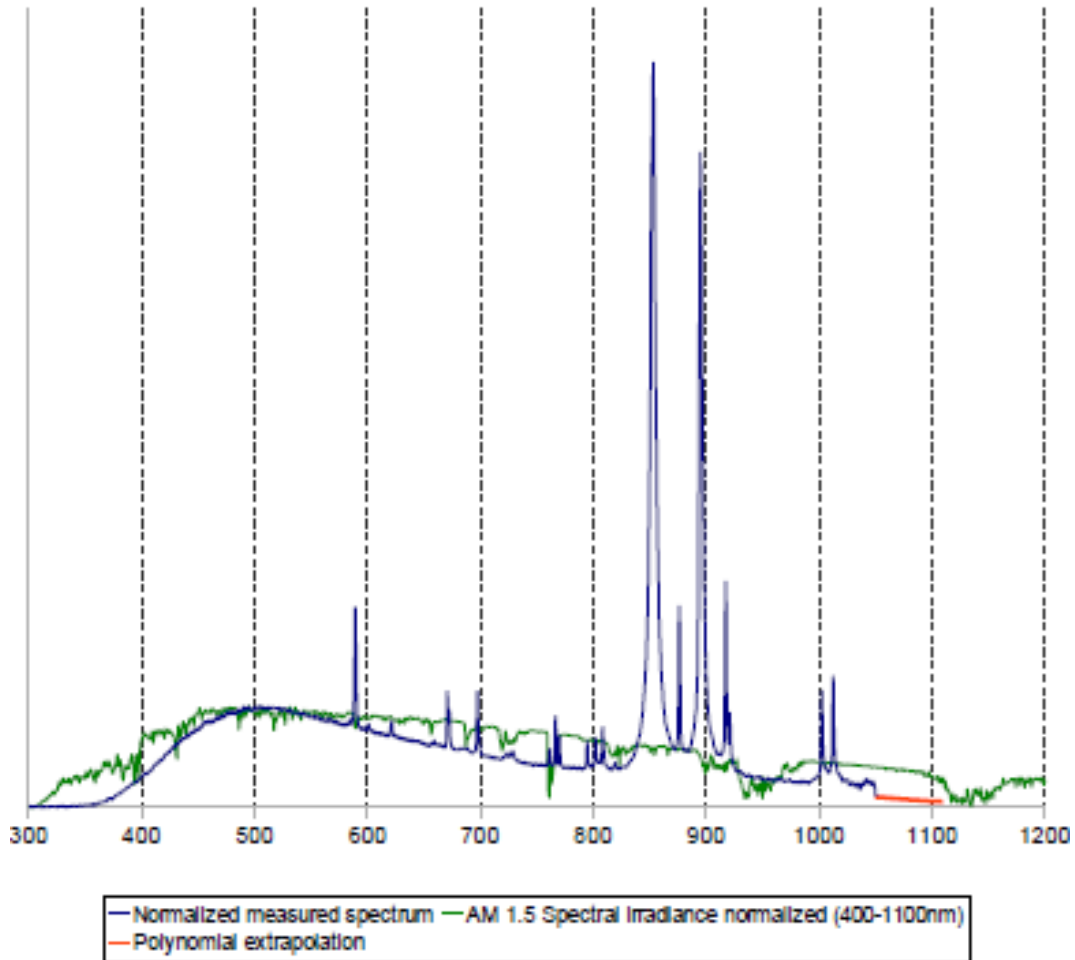
# Lumartix SA ©

# Bulb Mix5 at 1000W



— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 14.8 | 0.81 | A |
| 500-600 nm | 19.91 | 20.3 | 1.02 | A |
| 600-700 nm | 18.36 | 14.6 | 0.79 | A |
| 700-800 nm | 14.92 | 10.2 | 0.69 | B |
| 800-900 nm | 12.46 | 21.3 | 1.71 | C |
| 900-1100 nm | 15.94 | 18.7 | 1.17 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
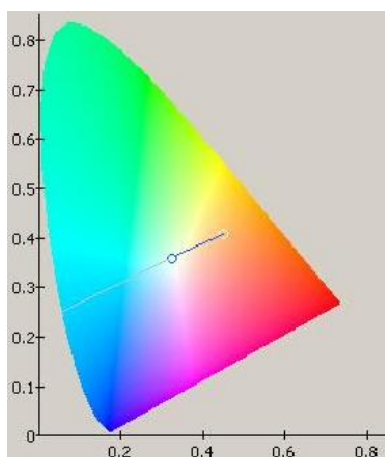


**Color temperature = 5856 K**

**Color Render Index = 92.0 [-]**

**Colors coordinate:    x = 0.324    y = 0.358**

**Reference Cell Isc: 14.3 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
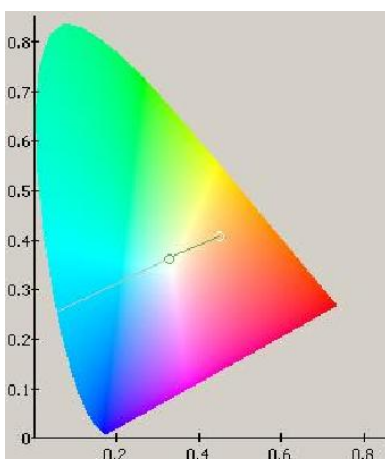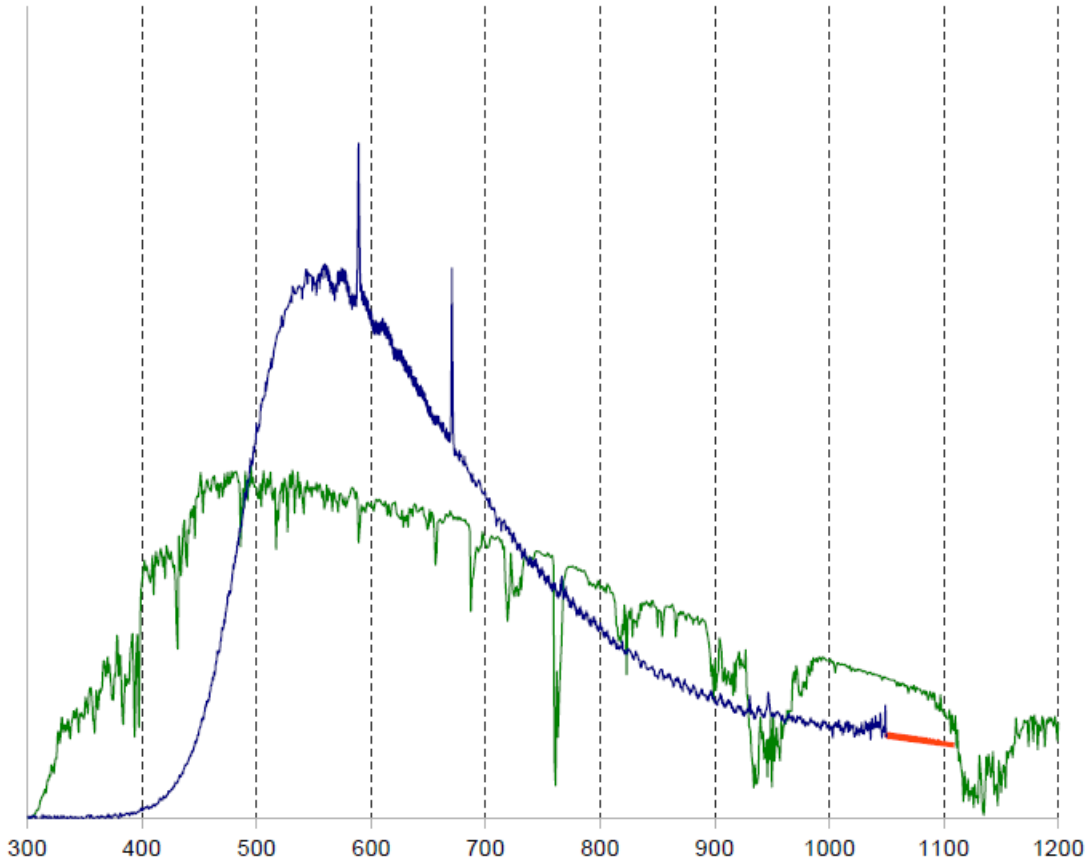
# Lumartix SA ©

# Bulb Mix5 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 13.9 | 0.76 | A |
| 500-600 nm | 19.91 | 19.5 | 0.98 | A |
| 600-700 nm | 18.36 | 14.3 | 0.78 | A |
| 700-800 nm | 14.92 | 10.2 | 0.69 | B |
| 800-900 nm | 12.45 | 22.6 | 1.82 | C |
| 900-1100 nm | 15.94 | 19.4 | 1.22 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 5683 K**

**Color Render Index = 91.7 [-]**

**Colors coordinate:    x = 0.328    y = 0.361**

**Reference Cell Isc: 19.6 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

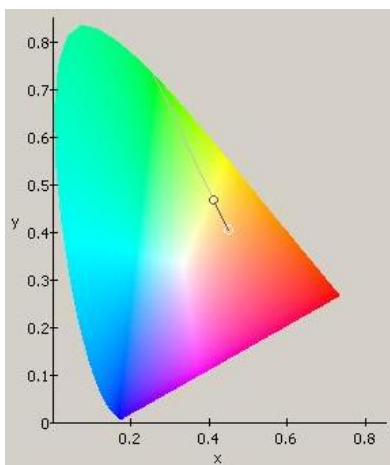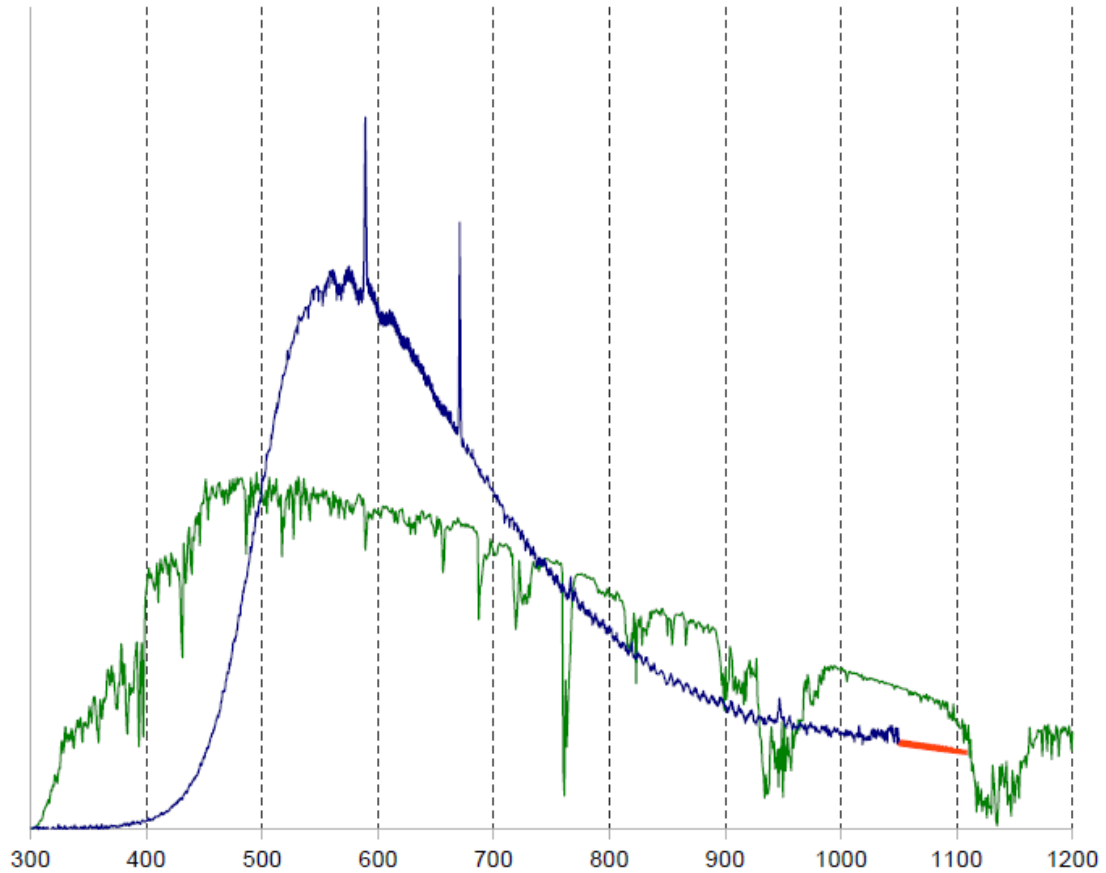# Lumartix SA ©

# Bulb Mix7 at 800W



— Normalized measured spectrum  — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 6.0 | 0.33 | - |
| 500-600 nm | 19.91 | 30.0 | 1.51 | C |
| 600-700 nm | 18.36 | 26.0 | 1.42 | C |
| 700-800 nm | 14.92 | 15.9 | 1.07 | A |
| 800-900 nm | 12.46 | 9.6 | 0.77 | A |
| 900-1100 nm | 15.94 | 12.4 | 0.78 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 3900 K**

**Color Render Index = 78 [-]**

**Colors coordinate:    x = 0.412    y = 0.468**

**Reference Cell Isc: 10.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Bulb Mix7 at 1000W



— Normalized measured spectrum  — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 5.0 | 0.27 | - |
| 500-600 nm | 19.91 | 29.1 | 1.46 | C |
| 600-700 nm | 18.36 | 26.9 | 1.46 | C |
| 700-800 nm | 14.92 | 16.5 | 1.10 | A |
| 800-900 nm | 12.46 | 9.9 | 0.79 | A |
| 900-1100 nm | 15.94 | 12.6 | 0.79 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
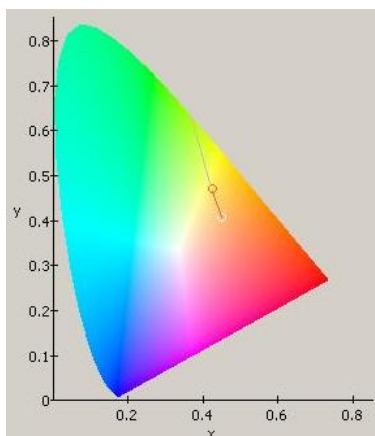


**Color temperature = 3650 K**

**Color Render Index = 78 [-]**

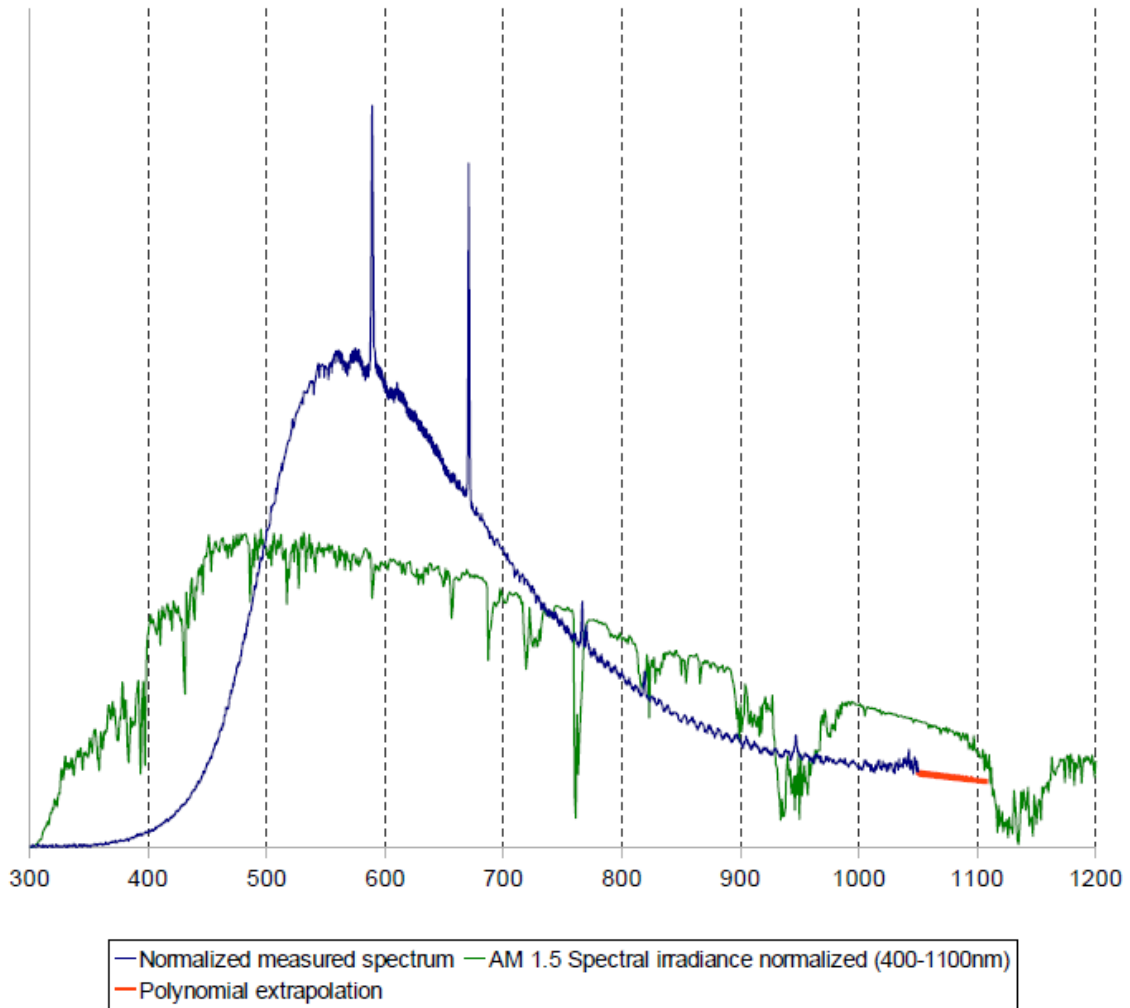**Colors coordinate:    x = 0.425    y = 0.471**

**Reference Cell Isc: 14 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
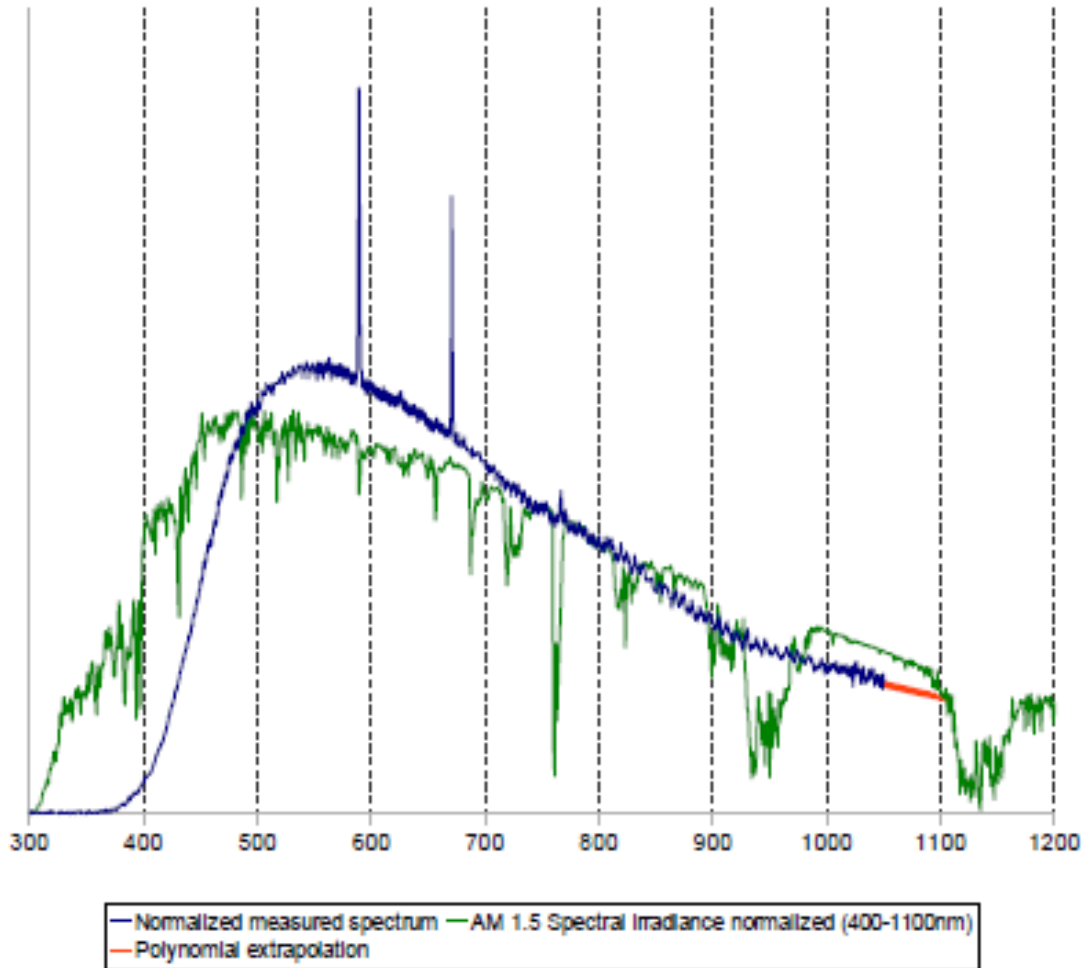
# Lumartix SA ©

# Bulb Mix7 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 6.0 | 0.32 | - |
| 500-600 nm | 19.91 | 29.3 | 1.47 | C |
| 600-700 nm | 18.36 | 26.8 | 1.46 | C |
| 700-800 nm | 14.92 | 16.2 | 1.08 | A |
| 800-900 nm | 12.46 | 9.6 | 0.77 | A |
| 900-1100 nm | 15.94 | 12.2 | 0.77 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
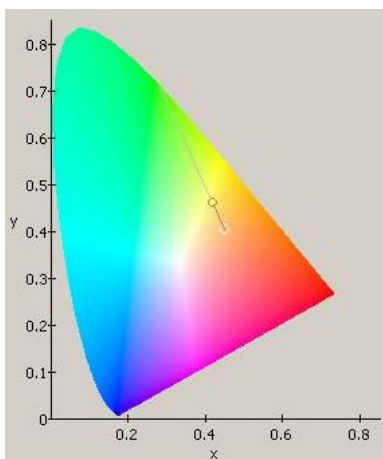


**Color temperature = 3750 K**

**Color Render Index = 80 [-]**

**Colors coordinate:     x = 0.418     y = 0.462**

**Reference Cell Isc: 19 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
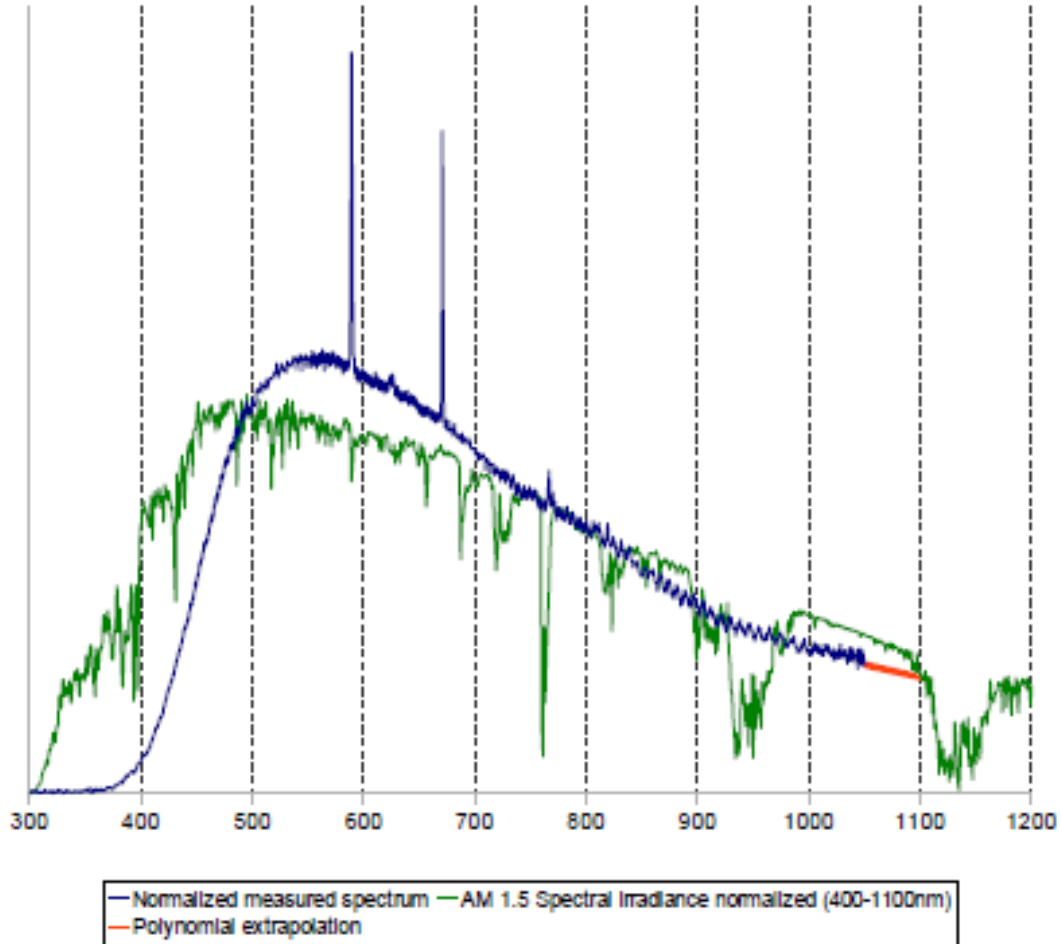
# Lumartix SA ©

# Bulb Mix12 at 800W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 10.0 | 0.55 | C |
| 500-600 nm | 19.91 | 22.7 | 1.14 | A |
| 600-700 nm | 18.36 | 20.9 | 1.14 | A |
| 700-800 nm | 14.92 | 16.7 | 1.12 | A |
| 800-900 nm | 12.46 | 12.8 | 1.03 | A |
| 900-1100 nm | 15.94 | 16.8 | 1.05 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
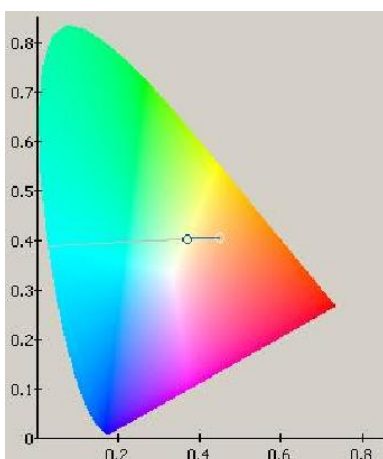


**Color temperature = 4420 K**

**Color Render Index = 89.9 [-]**

**Colors coordinate:** x = 0.371 y = 0.404

**Reference Cell Isc: 14 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
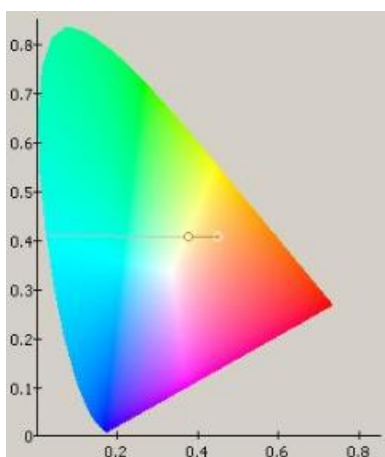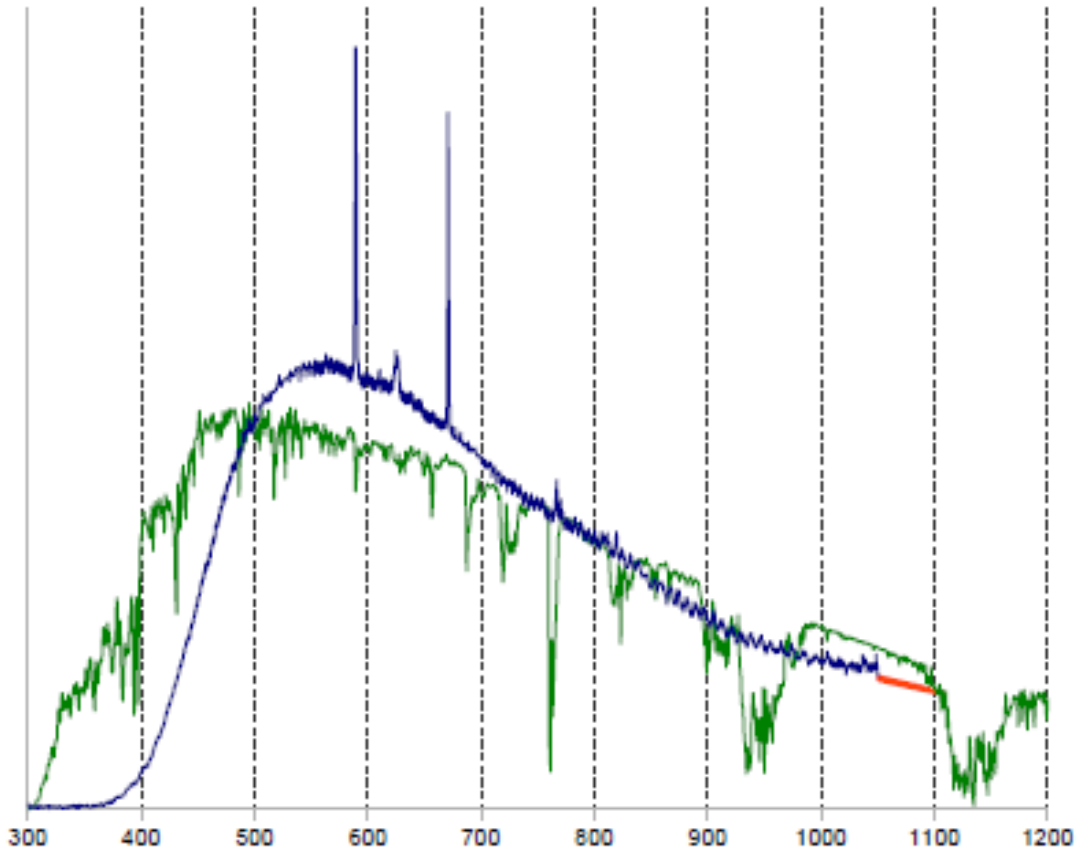
# Lumartix SA ©

# Bulb Mix12 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 9.7 | 0.53 | C |
| 500-600 nm | 19.91 | 22.6 | 1.14 | A |
| 600-700 nm | 18.36 | 21.1 | 1.15 | A |
| 700-800 nm | 14.92 | 16.8 | 1.12 | A |
| 800-900 nm | 12.46 | 12.8 | 1.03 | A |
| 900-1100 nm | 15.94 | 17.0 | 1.07 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 4305 K**

**Color Render Index = 89.7 [-]**

**Colors coordinate:    x = 0.376    y = 0.408**

**Reference Cell Isc: 17.8 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

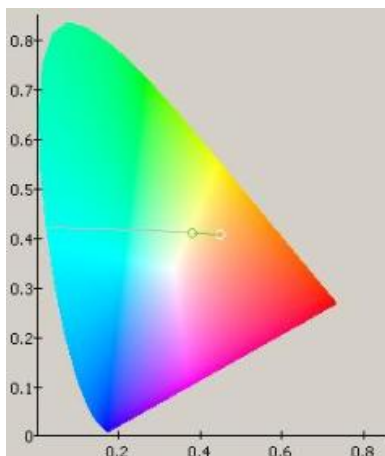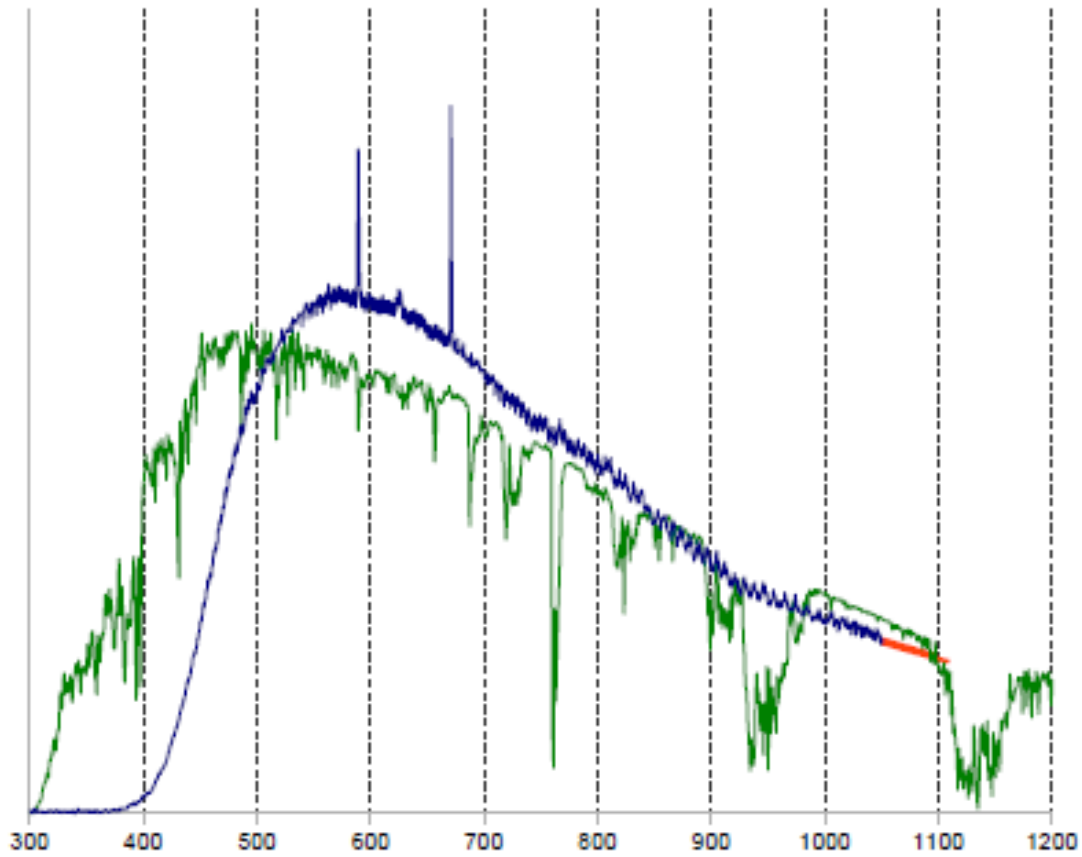# Lumartix SA ©

# Bulb Mix12 at 1300W



— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 9.4 | 0.51 | C |
| 500-600 nm | 19.91 | 22.5 | 1.13 | A |
| 600-700 nm | 18.36 | 21.4 | 1.16 | A |
| 700-800 nm | 14.92 | 16.8 | 1.13 | A |
| 800-900 nm | 12.46 | 12.8 | 1.03 | A |
| 900-1100 nm | 15.94 | 17.0 | 1.07 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature = 4210 K

Color Render Index = 90.0 [-]

Colors coordinate:       x = 0.381       y = 0.410

Reference Cell Isc: 23.8 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
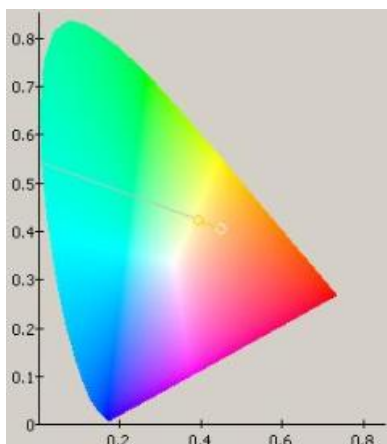
# Lumartix SA ©

# Bulb Mix14 at 800W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 7.3 | 0.40 | - |
| 500-600 nm | 19.91 | 21.2 | 1.06 | A |
| 600-700 nm | 18.36 | 21.4 | 1.17 | A |
| 700-800 nm | 14.92 | 17.7 | 1.19 | A |
| 800-900 nm | 12.46 | 13.8 | 1.11 | A |
| 900-1100 nm | 15.94 | 18.5 | 1.16 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature = 3992 K

Color Render Index = 89.2 [-]
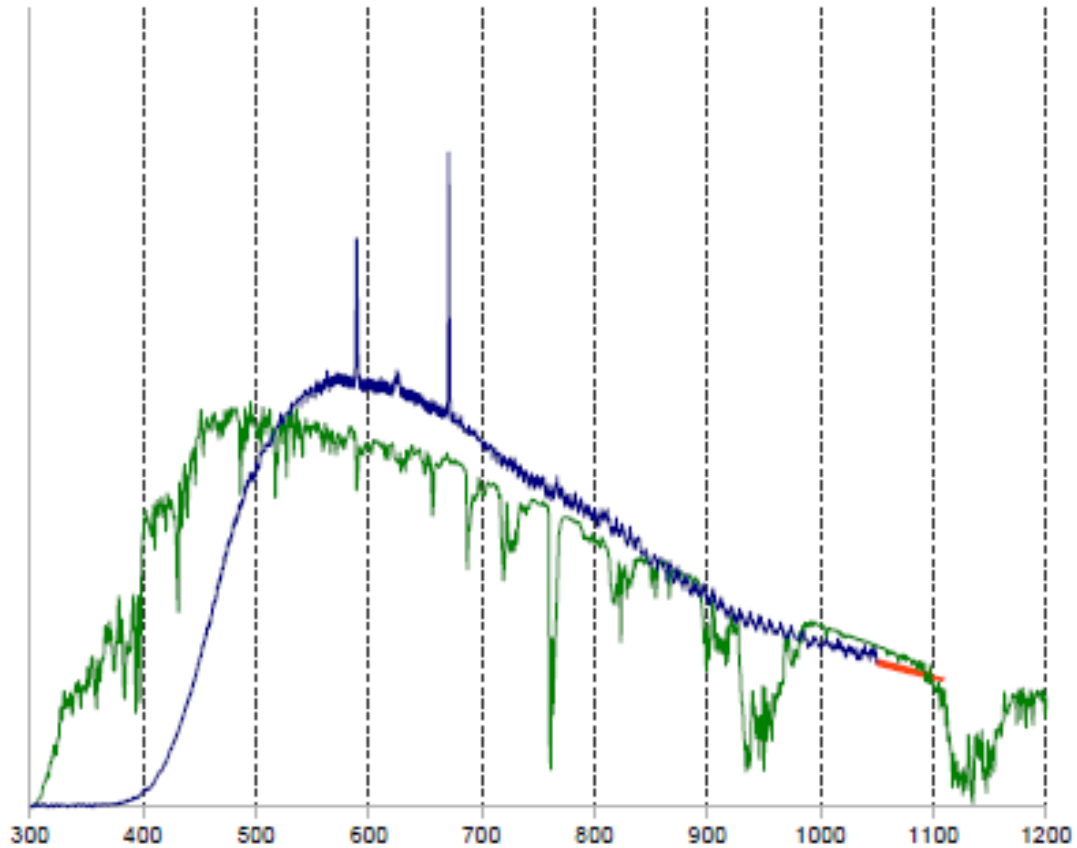
Colors coordinate:     x = 0.394     y = 0.424

Reference Cell Isc: 13.1 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
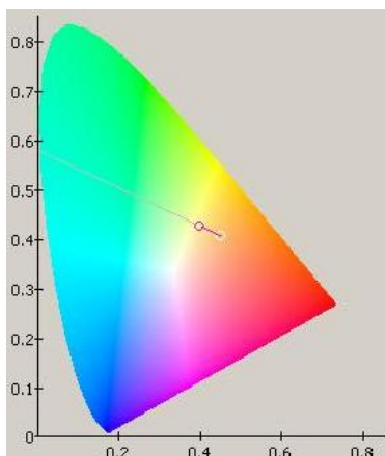
# Lumartix SA ©

# Bulb Mix14 at 1000W



Legend:
— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 6.9 | 0.38 | - |
| 500-600 nm | 19.91 | 20.9 | 1.05 | A |
| 600-700 nm | 18.36 | 21.5 | 1.17 | A |
| 700-800 nm | 14.92 | 17.8 | 1.20 | A |
| 800-900 nm | 12.46 | 14.0 | 1.12 | A |
| 900-1100 nm | 15.94 | 18.8 | 1.18 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 3908 K**

**Color Render Index = 88.9 [-]**

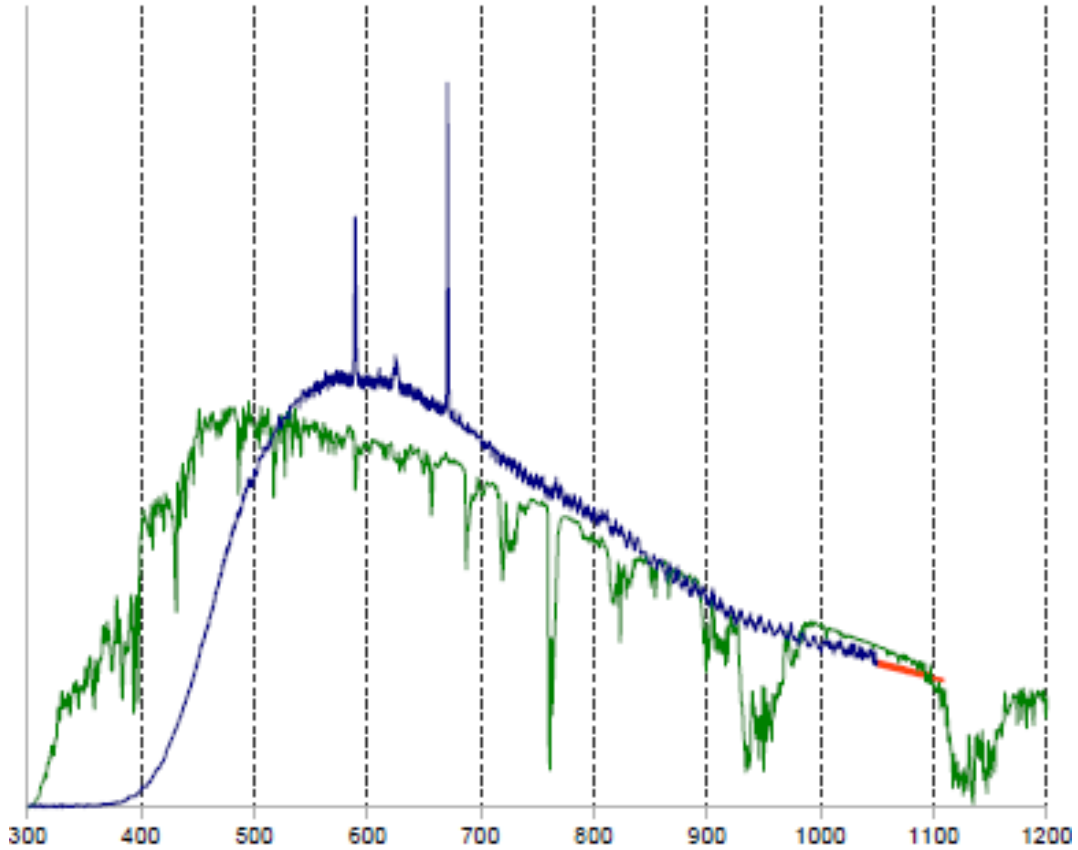**Colors coordinate:     x = 0.398     y = 0.427**

**Reference Cell Isc: 16.7 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
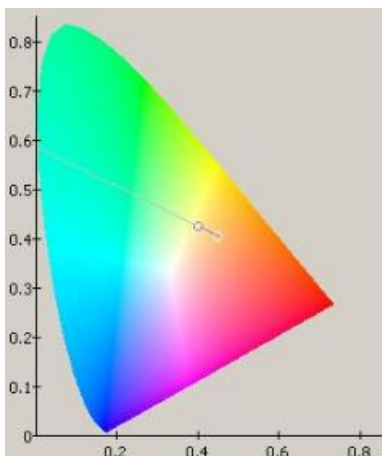
# Lumartix SA ©

# Bulb Mix14 at 1300W



— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 6.9 | 0.37 | - |
| 500-600 nm | 19.91 | 20.8 | 1.04 | A |
| 600-700 nm | 18.36 | 21.8 | 1.19 | A |
| 700-800 nm | 14.92 | 17.9 | 1.20 | A |
| 800-900 nm | 12.46 | 14.0 | 1.12 | A |
| 900-1100 nm | 15.94 | 18.7 | 1.17 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 3859 K**

**Color Render Index = 89.3 [-]**
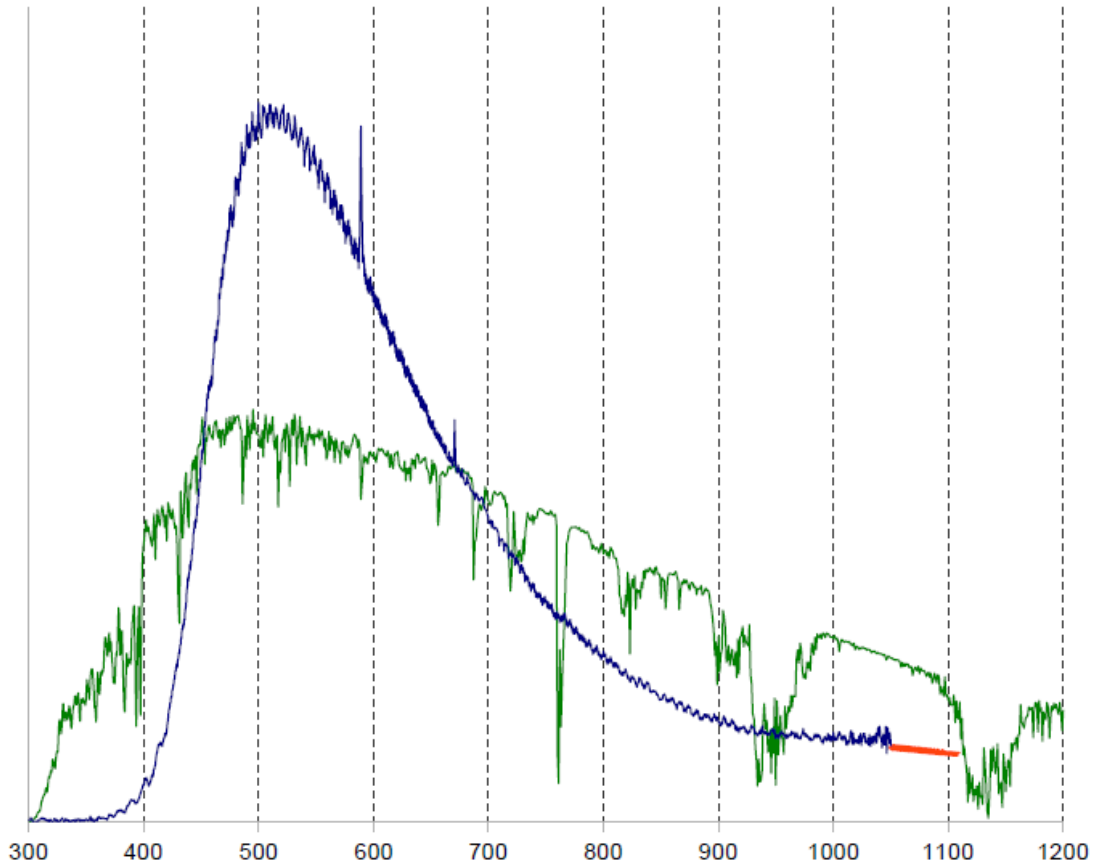
**Colors coordinate:**     x = 0.401      y = 0.427

**Reference Cell Isc: 22 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
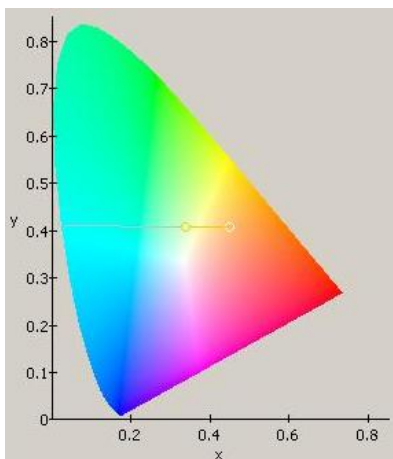
# Lumartix SA ©

# Bulb Mix15 at 800W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 15.6 | 0.85 | A |
| 500-600 nm | 19.91 | 33.6 | 1.69 | C |
| 600-700 nm | 18.36 | 21.9 | 1.19 | A |
| 700-800 nm | 14.92 | 12.5 | 0.84 | A |
| 800-900 nm | 12.46 | 7.1 | 0.57 | C |
| 900-1100 nm | 15.94 | 9.3 | 0.58 | C |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 5300 K**

**Color Render Index = 82.5 [-]**
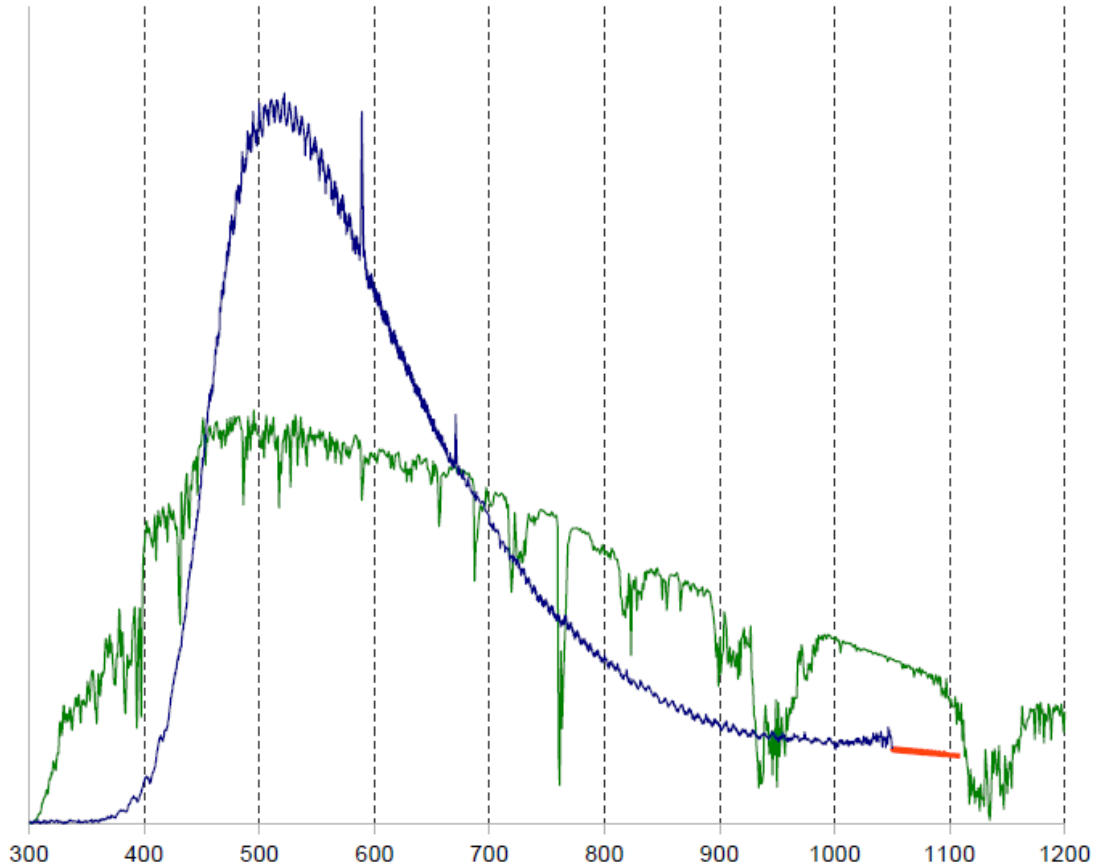
**Colors coordinate:      x = 0.339      y = 0.408**

**Reference Cell Isc: 14 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

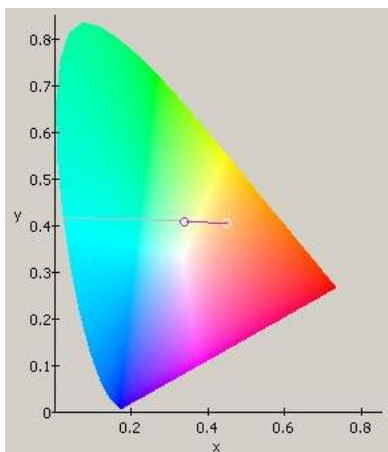# Lumartix SA ©

# Bulb Mix15 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 15.5 | 0.84 | A |
| 500-600 nm | 19.91 | 34.0 | 1.71 | C |
| 600-700 nm | 18.36 | 22.0 | 1.20 | A |
| 700-800 nm | 14.92 | 12.4 | 0.83 | A |
| 800-900 nm | 12.46 | 7.0 | 0.56 | C |
| 900-1100 nm | 15.94 | 9.2 | 0.57 | C |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature = 5300 K

Color Render Index = 82 [-]

Colors coordinate:     x = 0.340      y = 0.410
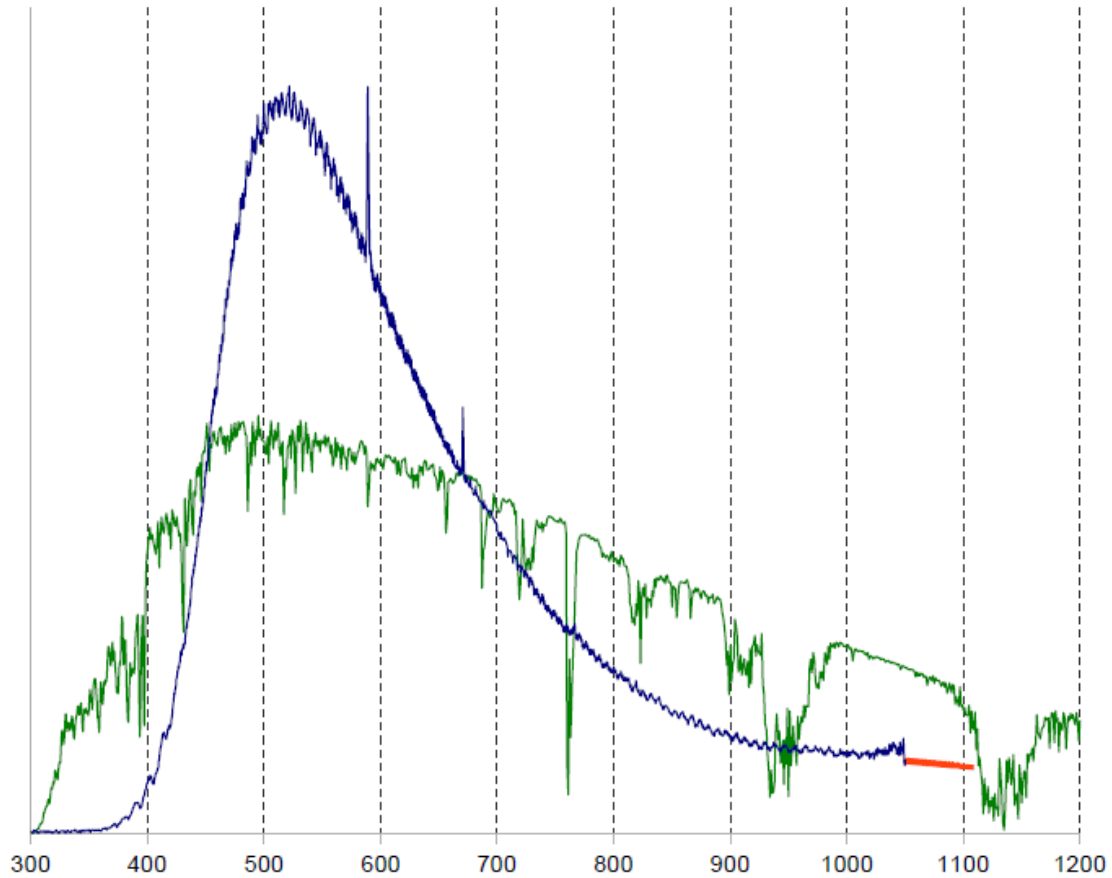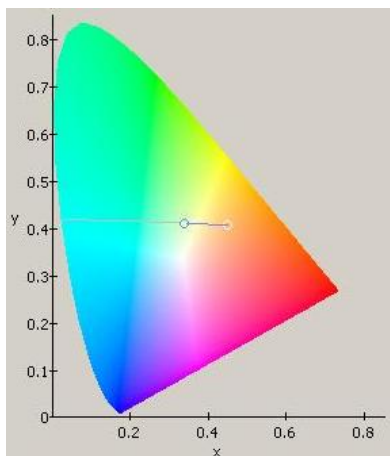
Reference Cell Isc: 18 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Bulb Mix15 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 15.8 | 0.86 | A |
| 500-600 nm | 19.91 | 34.3 | 1.72 | C |
| 600-700 nm | 18.36 | 21.9 | 1.20 | A |
| 700-800 nm | 14.92 | 12.2 | 0.82 | A |
| 800-900 nm | 12.46 | 6.9 | 0.55 | C |
| 900-1100 nm | 15.94 | 8.9 | 0.56 | C |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature = 5300 K

Color Render Index = 82 [-]
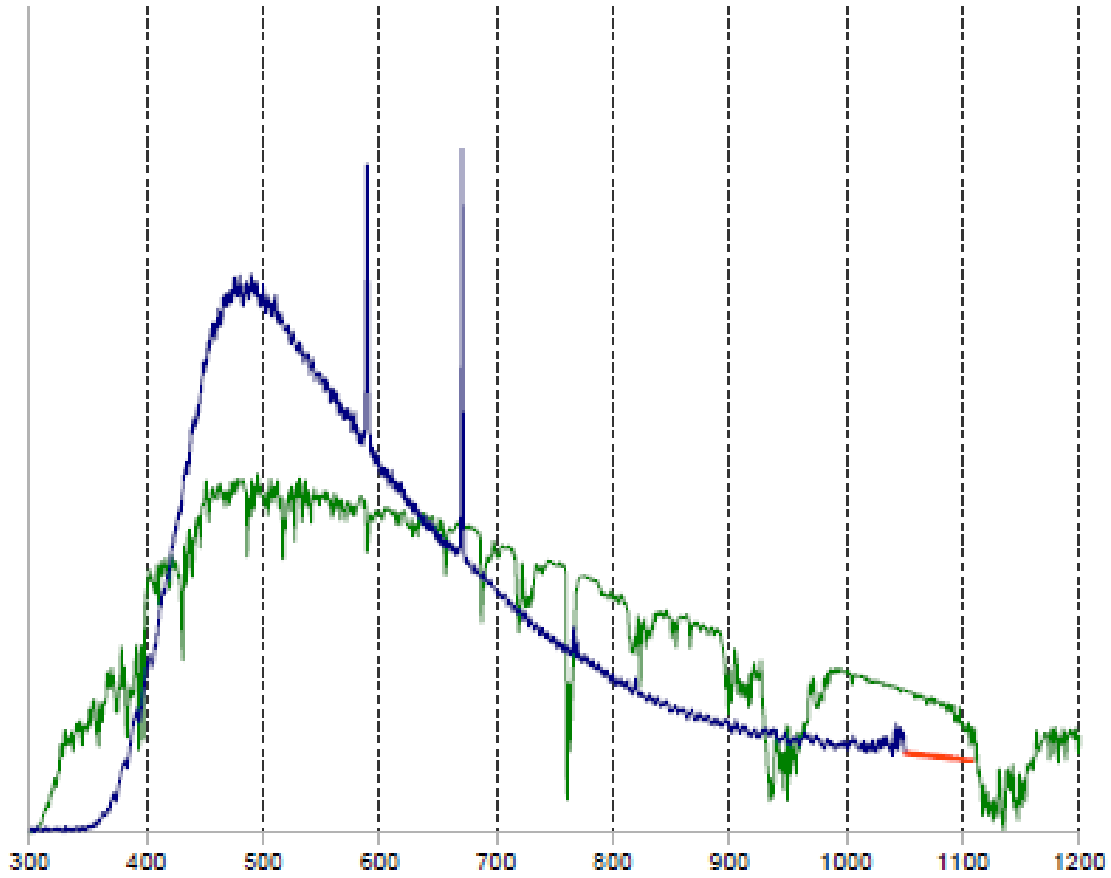
Colors coordinate:     x = 0.339     y = 0.410

Reference Cell Isc: 24.5 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix16 at 800W



Legend:
— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 22.2 | 1.21 | A |
| 500-600 nm | 19.91 | 27.5 | 1.38 | B |
| 600-700 nm | 18.36 | 18.7 | 1.02 | A |
| 700-800 nm | 14.92 | 12.2 | 0.82 | A |
| 800-900 nm | 12.46 | 8.0 | 0.64 | B |
| 900-1100 nm | 15.94 | 11.4 | 0.71 | B |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
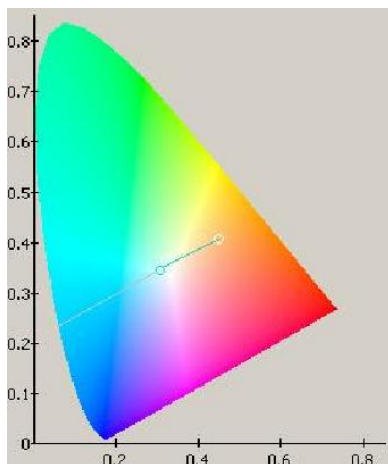


**Color temperature = 6604 K**

**Color Render Index = 92.3 [-]**

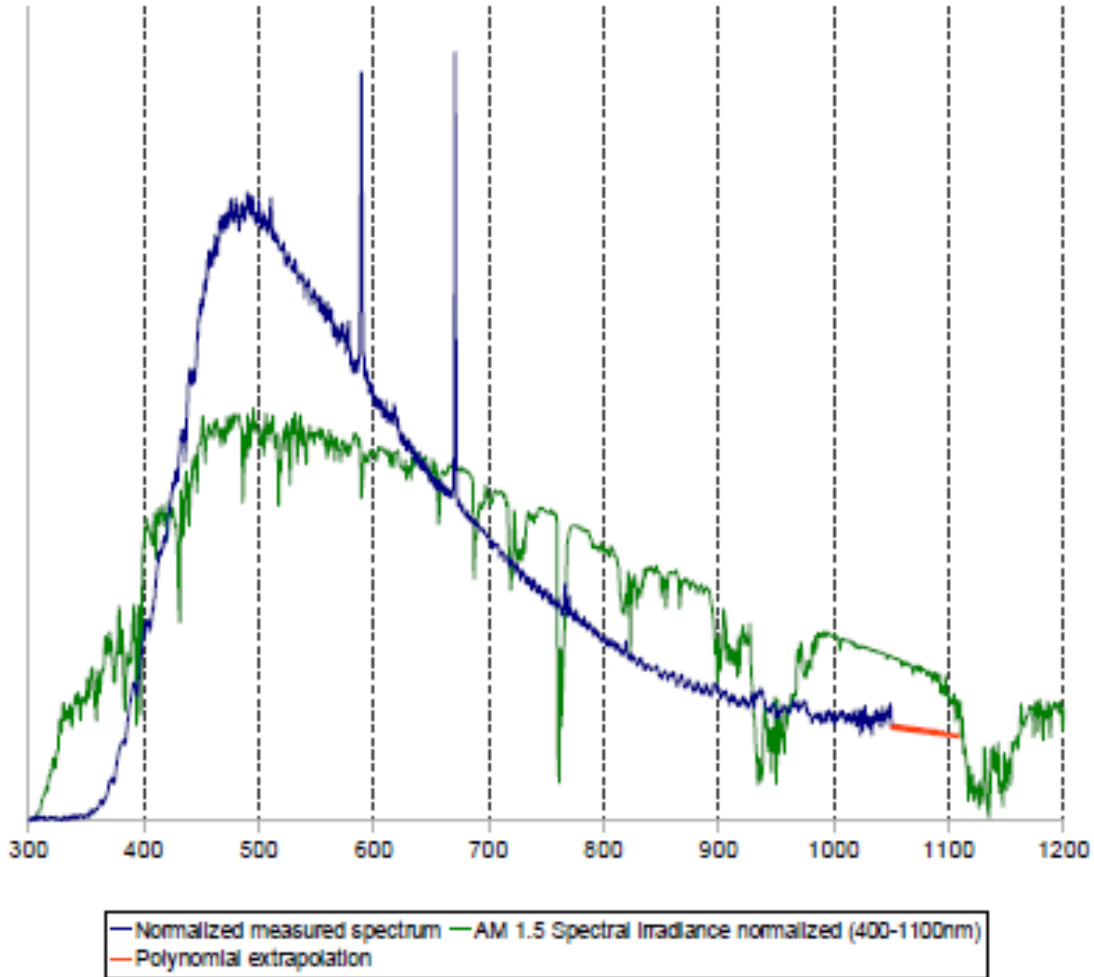**Colors coordinate:     x = 0.309     y = 0.345**

**Reference Cell Isc: 7.6 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
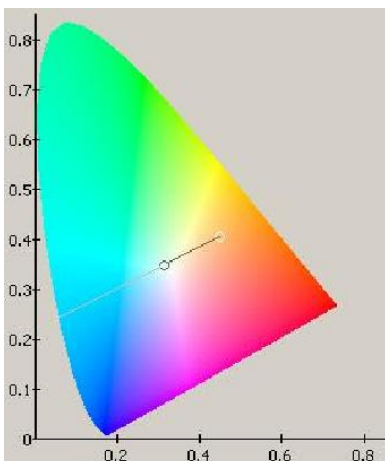
# Lumartix SA ©

# Bulb Mix16 at 1000W



Legend:
— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 21.4 | 1.16 | A |
| 500-600 nm | 19.91 | 27.4 | 1.38 | B |
| 600-700 nm | 18.36 | 18.8 | 1.03 | A |
| 700-800 nm | 14.92 | 12.4 | 0.83 | A |
| 800-900 nm | 12.46 | 8.2 | 0.66 | B |
| 900-1100 nm | 15.94 | 11.7 | 0.74 | B |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 6377 K**

**Color Render Index = 91.8 [-]**

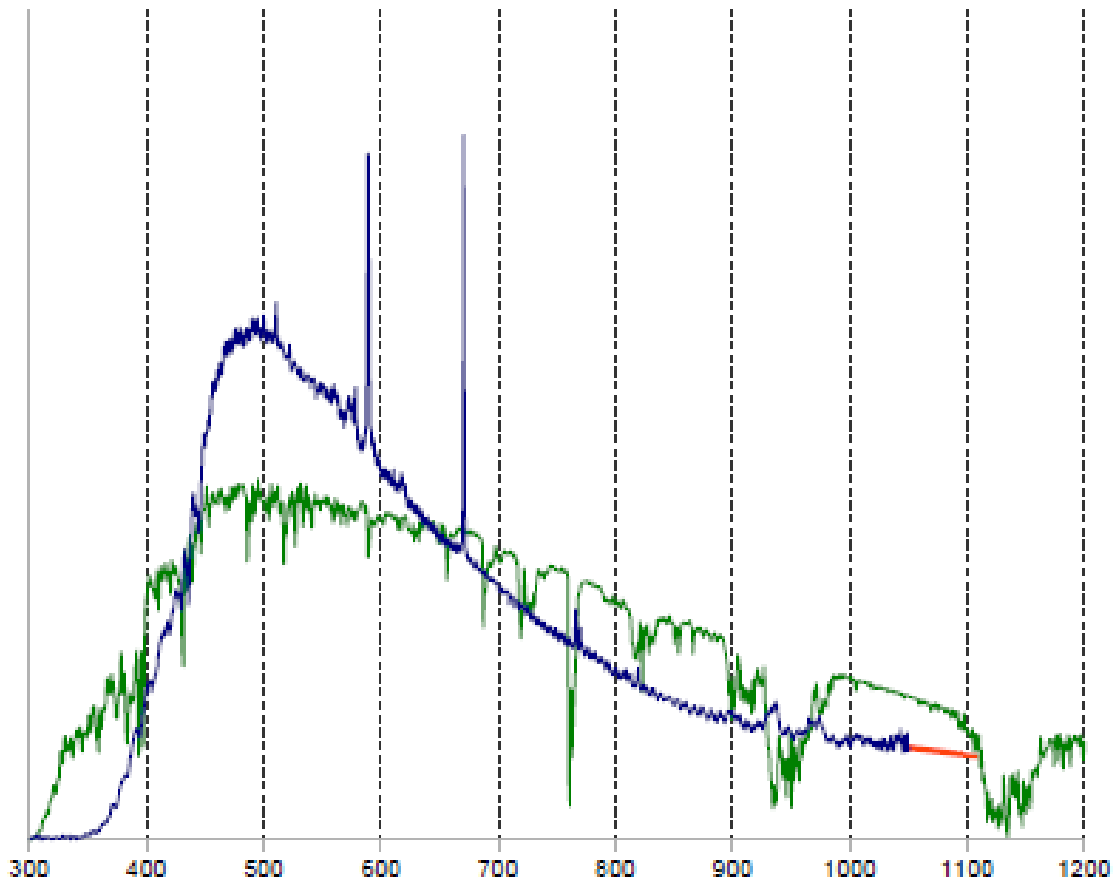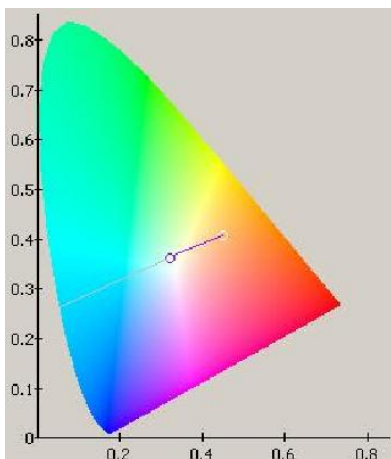**Colors coordinate:**     **x = 0.313**      **y = 0.350**

**Reference Cell Isc: 9.3 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.

# Bulb Mix16 at 1300W



| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 19.3 | 1.05 | A |
| 500-600 nm | 19.91 | 27.0 | 1.36 | B |
| 600-700 nm | 18.36 | 19.1 | 1.04 | A |
| 700-800 nm | 14.92 | 12.9 | 0.87 | A |
| 800-900 nm | 12.46 | 8.7 | 0.70 | B |
| 900-1100 nm | 15.94 | 13.0 | 0.81 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature  =  5931 K**

**Color Render Index  =  90.5 [-]**

**Colors coordinate:        x  =  0.322        y  =  0.362**
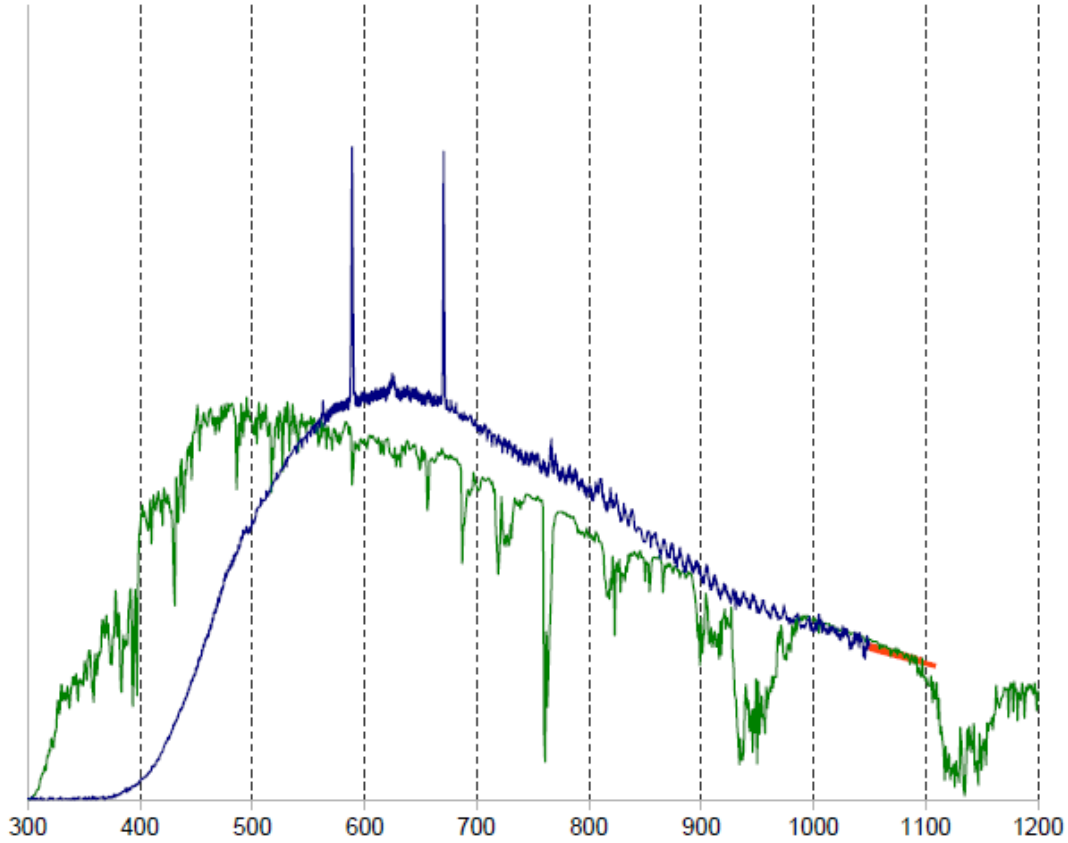
**Reference Cell Isc:  14.6 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
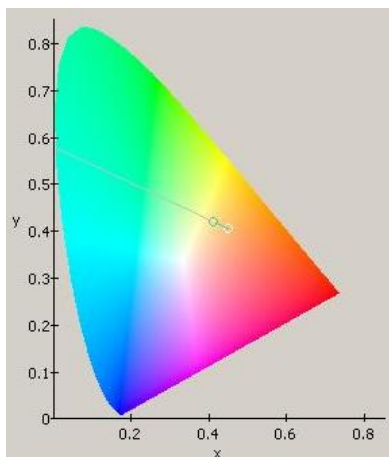
# Lumartix SA ©

# Bulb Mix18 at 800W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 6.1 | 0.33 | - |
| 500-600 nm | 19.91 | 18.5 | 0.93 | A |
| 600-700 nm | 18.36 | 21.4 | 1.17 | A |
| 700-800 nm | 14.92 | 18.8 | 1.26 | B |
| 800-900 nm | 12.46 | 15.1 | 1.21 | A |
| 900-1100 nm | 15.94 | 20.1 | 1.26 | B |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature = 3600 K

Color Render Index = 91.5 [-]

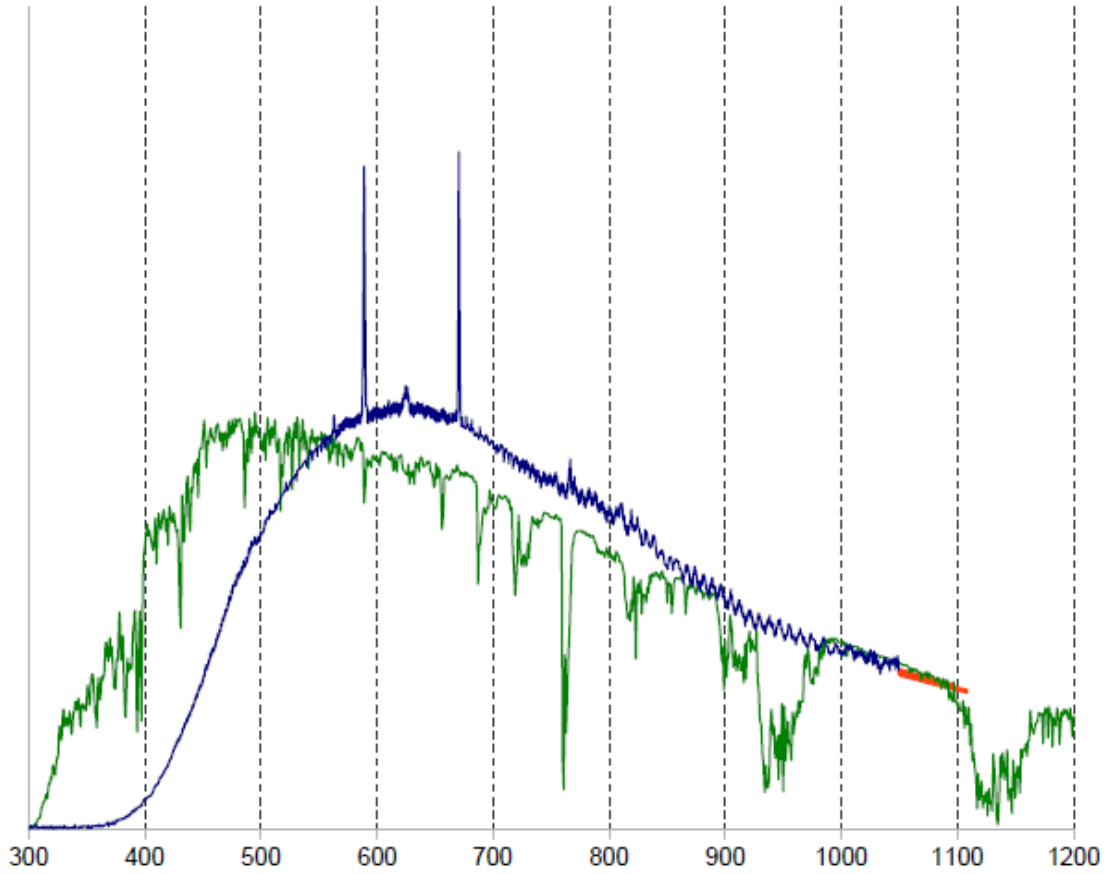Colors coordinate:     x = 0.411     y = 0.422

Reference Cell Isc: 13 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
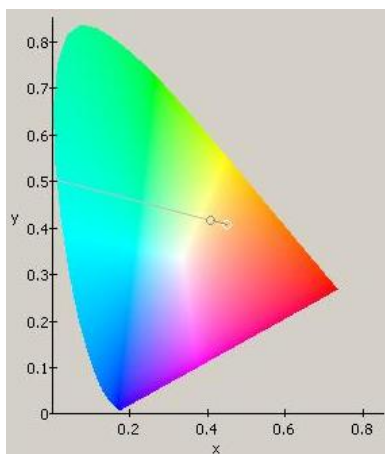
# Lumartix SA©

# Bulb Mix18 at 1000W



Legend: — Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm) — Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 6.7 | 0.37 | - |
| 500-600 nm | 19.91 | 18.6 | 0.94 | A |
| 600-700 nm | 18.36 | 21.4 | 1.16 | A |
| 700-800 nm | 14.92 | 18.6 | 1.24 | A |
| 800-900 nm | 12.46 | 14.8 | 1.19 | A |
| 900-1100 nm | 15.94 | 19.9 | 1.25 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 3675 K**

**Color Render Index = 92 [-]**

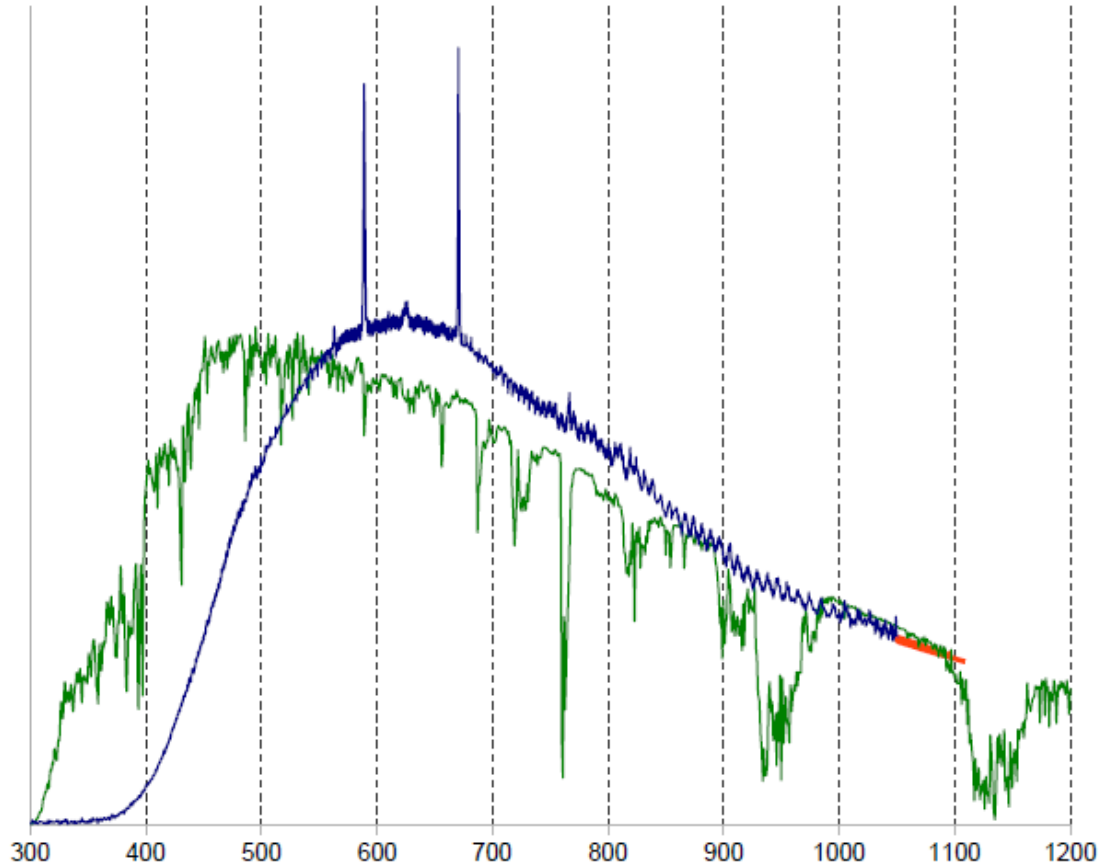**Colors coordinate:    x = 0.406    y = 0.417**

**Reference Cell Isc: 16.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix18 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 7.1 | 0.38 | - |
| 500-600 nm | 19.91 | 18.9 | 0.95 | A |
| 600-700 nm | 18.36 | 21.4 | 1.16 | A |
| 700-800 nm | 14.92 | 18.5 | 1.24 | A |
| 800-900 nm | 12.46 | 14.6 | 1.17 | A |
| 900-1100 nm | 15.94 | 19.7 | 1.23 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
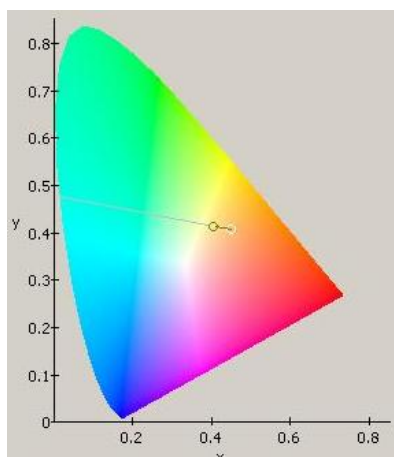


Color temperature = 3730 K

Color Render Index = 92 [-]

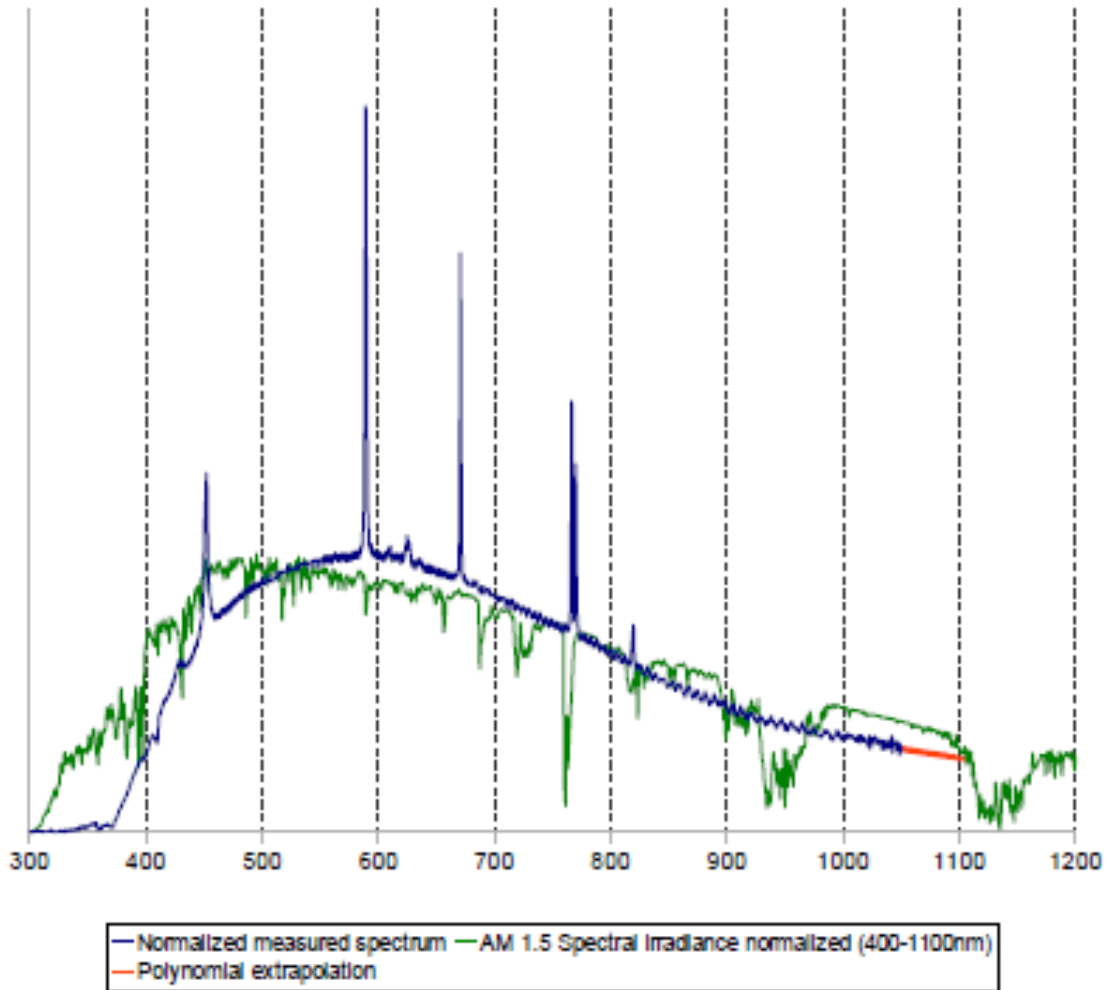Colors coordinate:     x = 0.403     y = 0.415

Reference Cell Isc: 22 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix21 at 800W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 13.4 | 0.73 | B |
| 500-600 nm | 19.91 | 20.8 | 1.05 | A |
| 600-700 nm | 18.36 | 20.5 | 1.12 | A |
| 700-800 nm | 14.92 | 17.0 | 1.14 | A |
| 800-900 nm | 12.46 | 12.2 | 0.98 | A |
| 900-1100 nm | 15.94 | 15.9 | 1.00 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
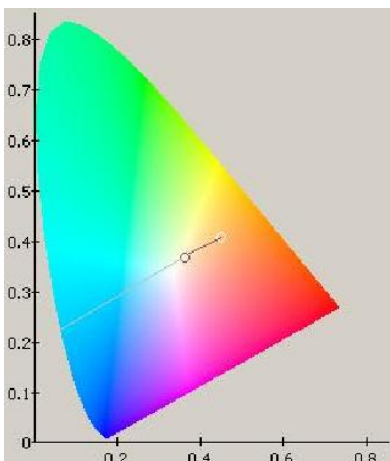


**Color temperature = 4430 K**

**Color Render Index = 95.5 [-]**

**Colors coordinate:      x = 0.364      y = 0.367**

**Reference Cell Isc:  11.2 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
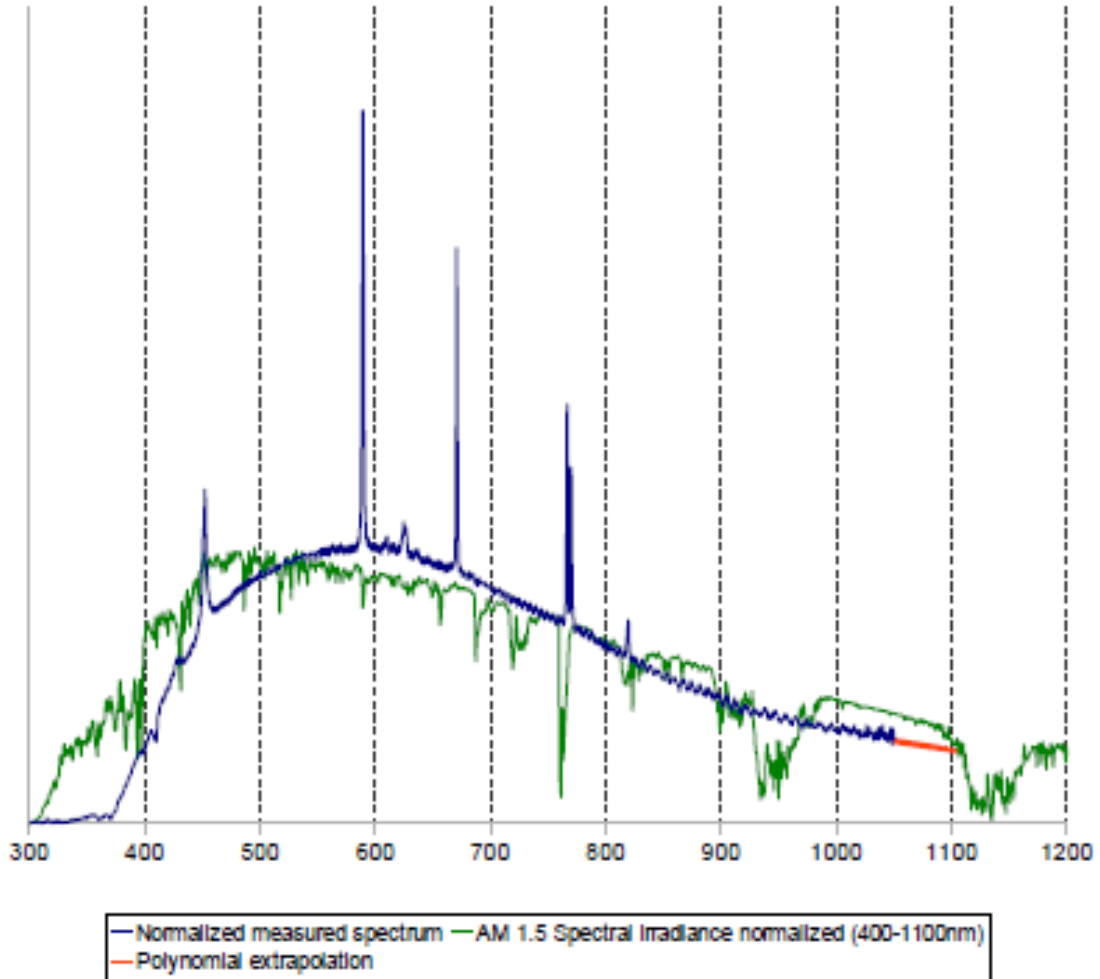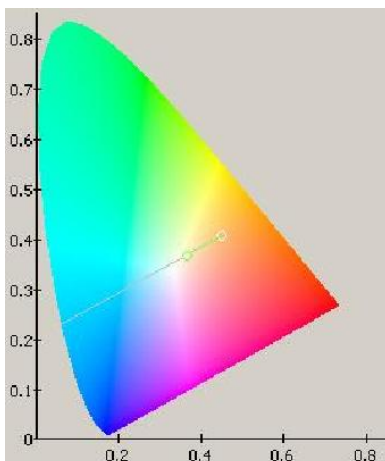
# Lumartix SA ©

# Bulb Mix21 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 13.2 | 0.72 | B |
| 500-600 nm | 19.91 | 20.9 | 1.05 | A |
| 600-700 nm | 16.36 | 20.7 | 1.13 | A |
| 700-800 nm | 14.92 | 17.1 | 1.15 | A |
| 800-900 nm | 12.46 | 12.2 | 0.98 | A |
| 900-1100 nm | 15.94 | 15.9 | 1.00 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 4410 K**

**Color Render Index = 95.3 [-]**
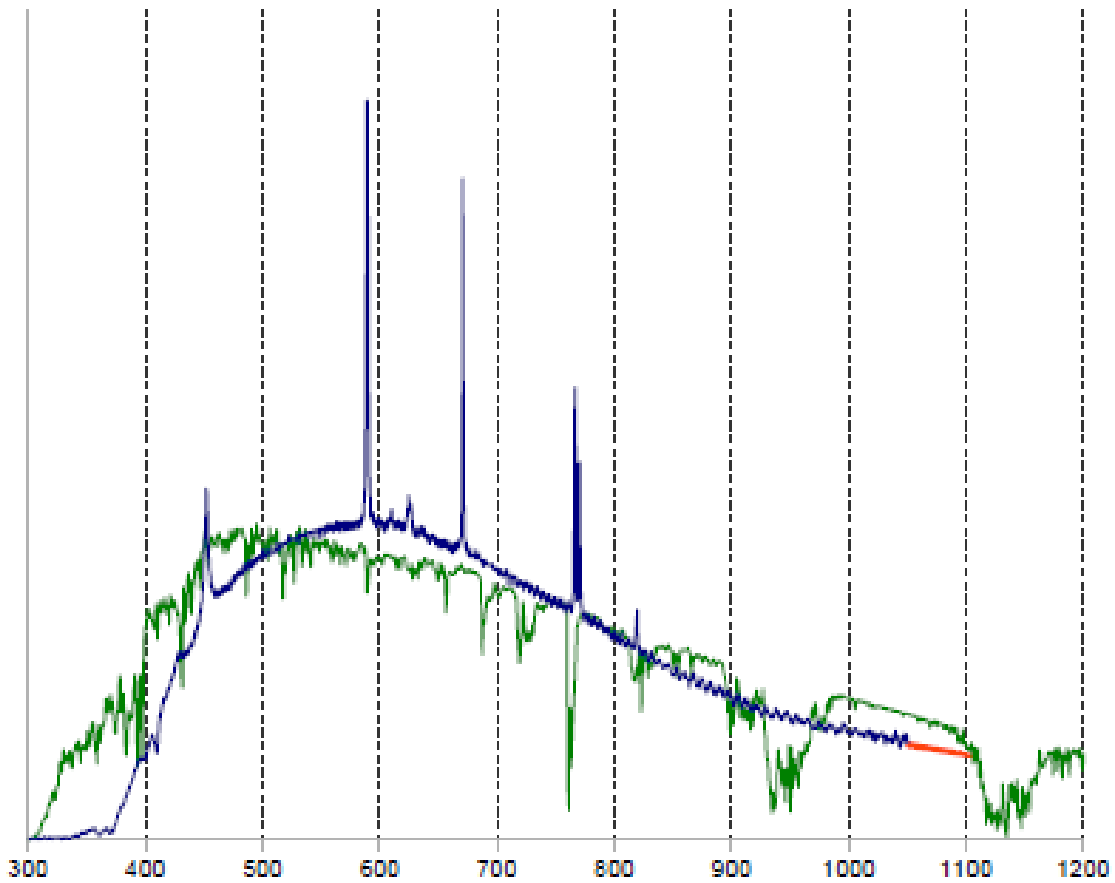
**Colors coordinate:     x = 0.365     y = 0.369**

**Reference Cell Isc: 15.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
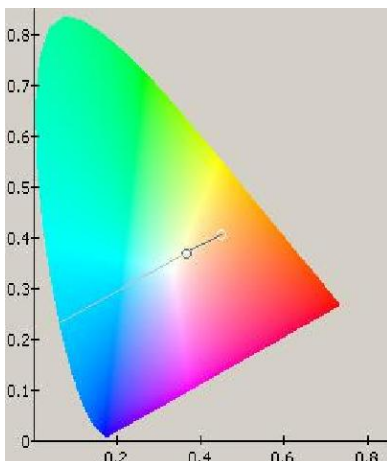
# Lumartix SA ©

# Bulb Mix21 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 13.1 | 0.71 | B |
| 500-600 nm | 19.91 | 20.8 | 1.05 | A |
| 600-700 nm | 18.36 | 20.7 | 1.13 | A |
| 700-800 nm | 14.92 | 17.1 | 1.14 | A |
| 800-900 nm | 12.46 | 12.3 | 0.98 | A |
| 900-1100 nm | 15.94 | 16.0 | 1.00 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 4411 K**

**Color Render Index = 95.5 [-]**
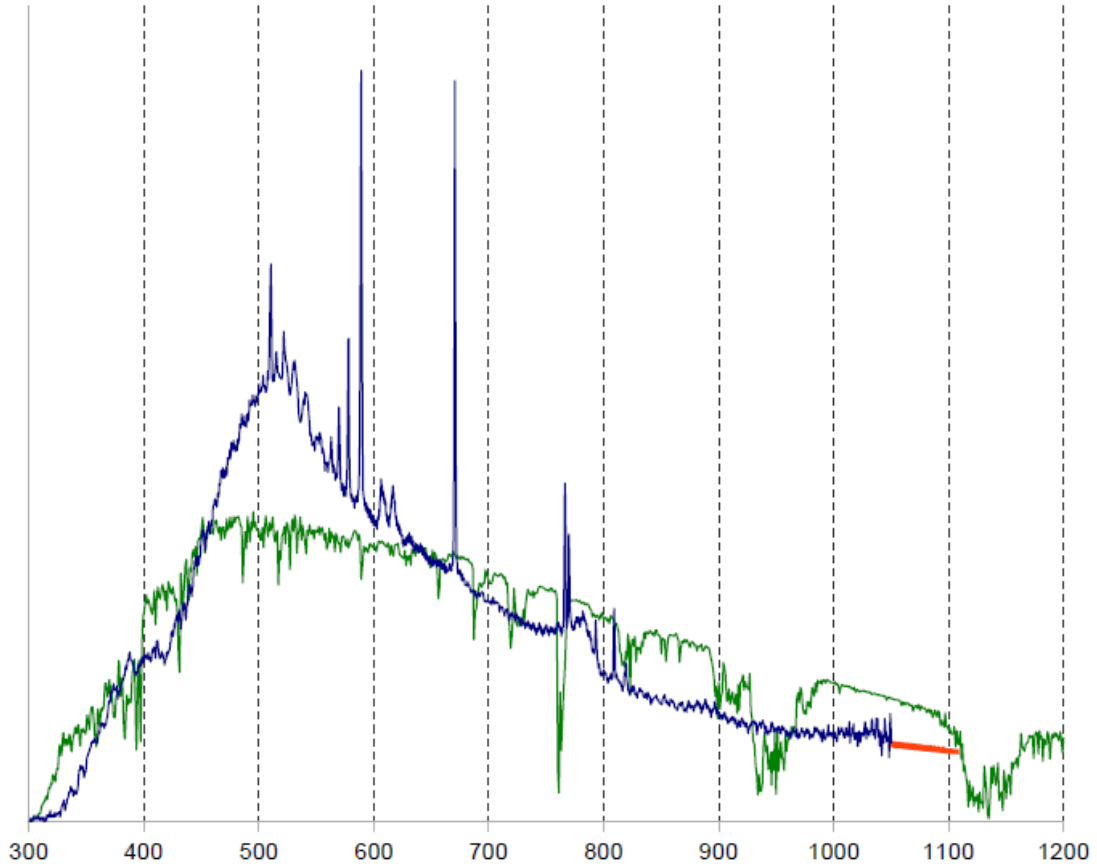
**Colors coordinate:      x = 0.365      y = 0.370**

**Reference Cell Isc: 20.9 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
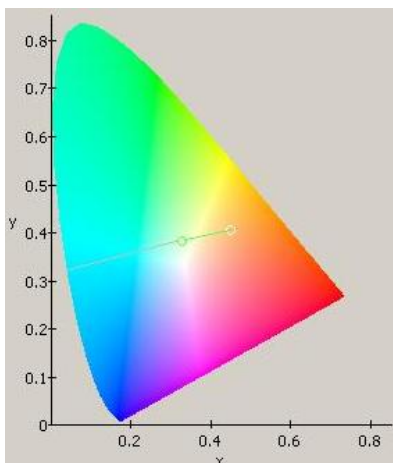
# Lumartix SA ©

# Bulb Mix23 at 800W



— Normalized measured spectrum  — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 17.2 | 0.94 | A |
| 500-600 nm | 19.91 | 27.4 | 1.38 | B |
| 600-700 nm | 18.36 | 19.1 | 1.04 | A |
| 700-800 nm | 14.92 | 14.2 | 0.95 | A |
| 800-900 nm | 12.46 | 9.1 | 0.73 | B |
| 900-1100 nm | 15.94 | 12.9 | 0.81 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 5650 K**

**Color Render Index = 89 [-]**

**Colors coordinate:        x = 0.329        y = 0.383**
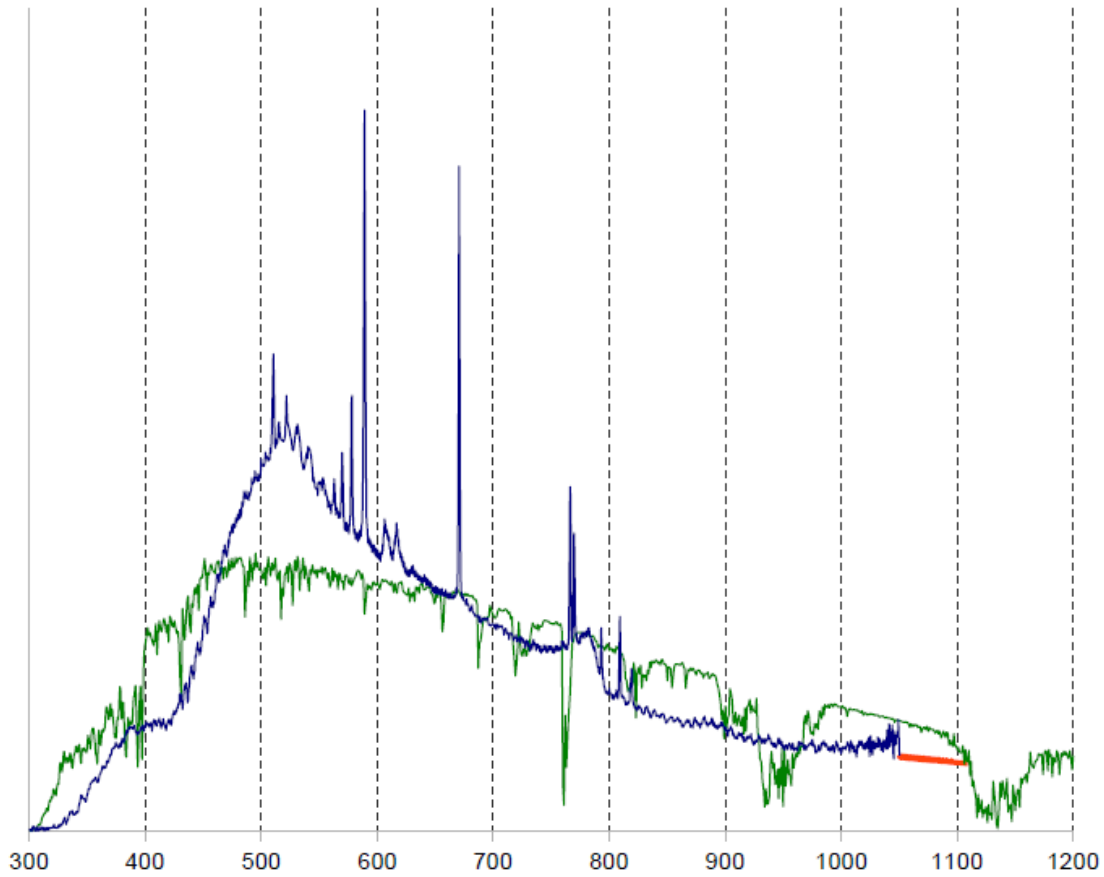
**Reference Cell Isc: 5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix23 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 14.3 | 0.78 | A |
| 500-600 nm | 19.91 | 27.4 | 1.37 | B |
| 600-700 nm | 18.36 | 19.7 | 1.08 | A |
| 700-800 nm | 14.92 | 15.1 | 1.02 | A |
| 800-900 nm | 12.46 | 9.6 | 0.77 | A |
| 900-1100 nm | 15.94 | 13.8 | 0.87 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 5150 K**

**Color Render Index = 87 [-]**

**Colors coordinate:     x = 0.344      y = 0.402**

**Reference Cell Isc: 7.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

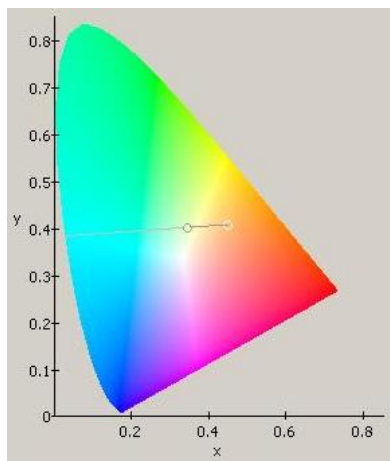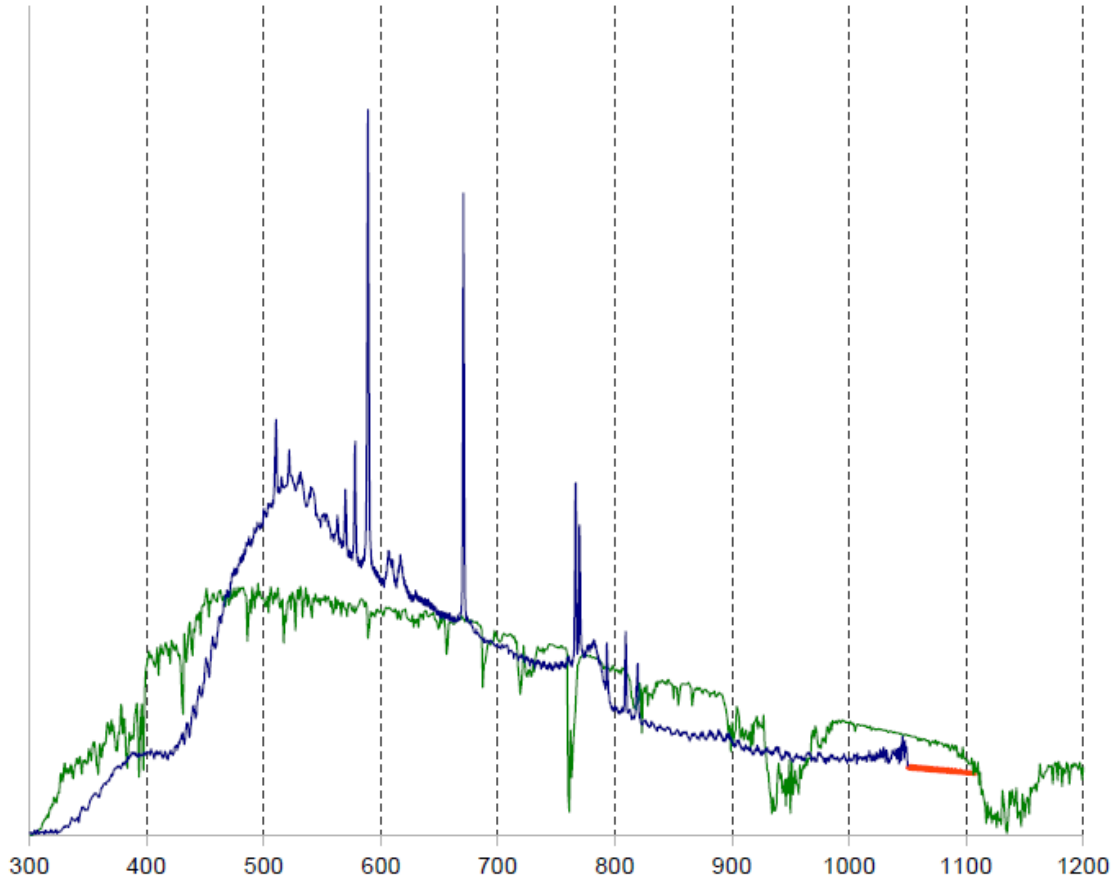# Lumartix SA ©

# Bulb Mix23 at 1300W



Legend:
— Normalized measured spectrum  — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 13.0 | 0.71 | B |
| 500-600 nm | 19.91 | 27.4 | 1.38 | B |
| 600-700 nm | 18.36 | 20.1 | 1.09 | A |
| 700-800 nm | 14.92 | 15.7 | 1.05 | A |
| 800-900 nm | 12.46 | 9.8 | 0.79 | A |
| 900-1100 nm | 15.94 | 14.0 | 0.88 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
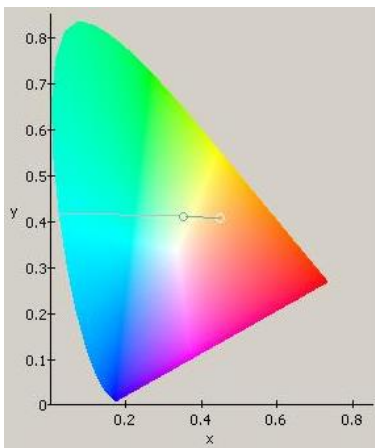


Color temperature = 4950 K

Color Render Index = 85 [-]

Colors coordinate:     x = 0.352     y = 0.410

Reference Cell Isc: 12 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
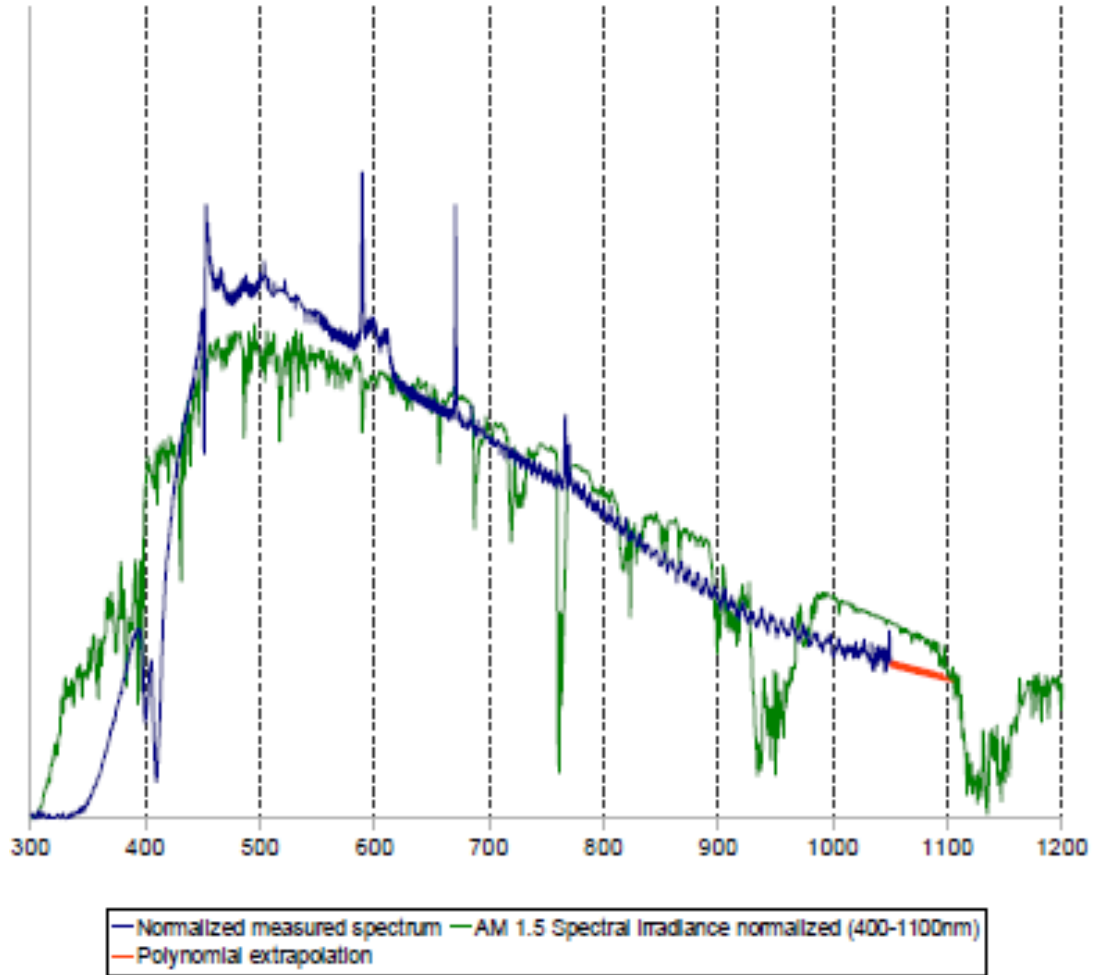
# Lumartix SA ©

# Bulb Mix27 at 800W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 16.1 | 0.88 | A |
| 500-600 nm | 19.91 | 21.7 | 1.09 | A |
| 600-700 nm | 18.36 | 18.5 | 1.01 | A |
| 700-800 nm | 14.92 | 15.4 | 1.03 | A |
| 800-900 nm | 12.46 | 11.9 | 0.95 | A |
| 900-1100 nm | 15.94 | 16.3 | 1.02 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 5591 K**

**Color Render Index = 97.1 [-]**

**Colors coordinate:     x = 0.330     y = 0.349**

**Reference Cell Isc: 8.8 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
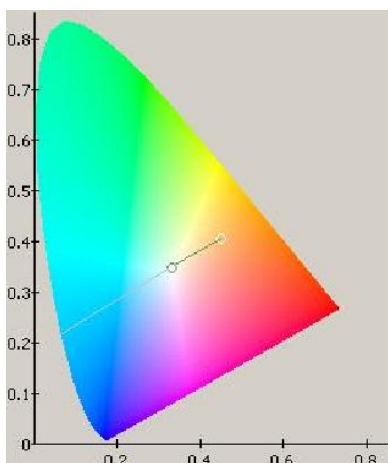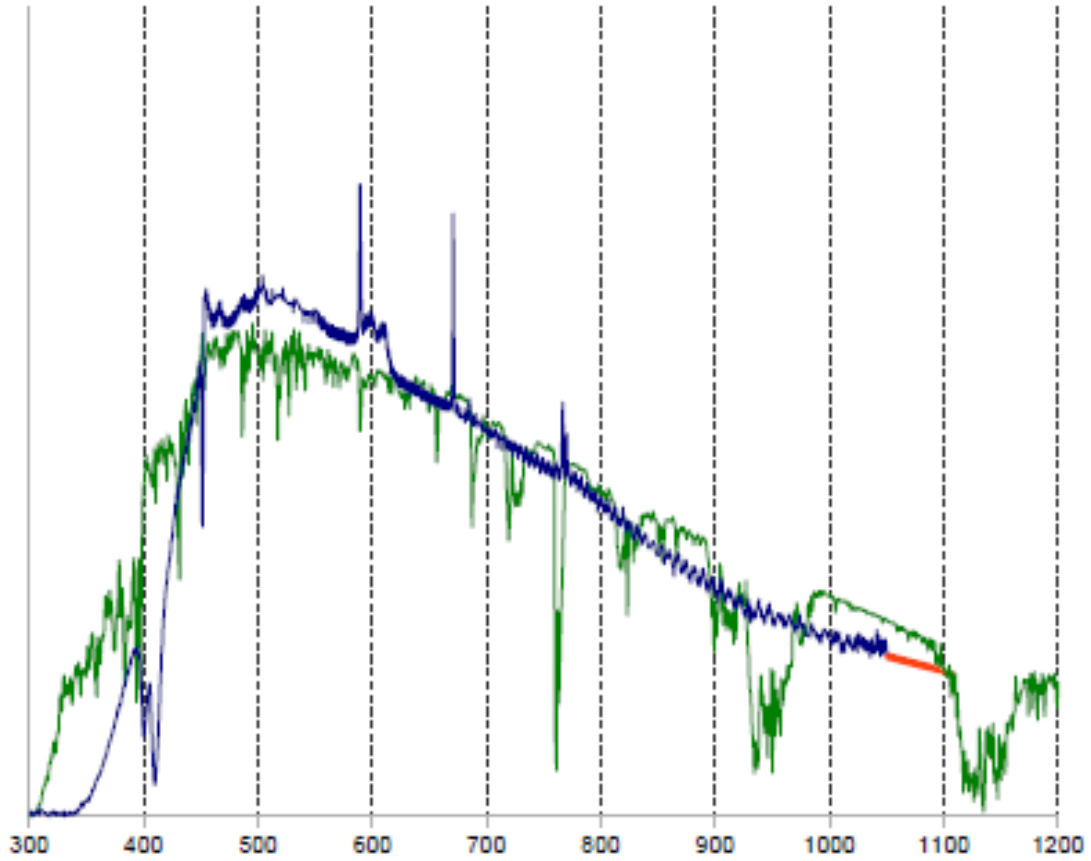
# Lumartix SA ©

# Bulb Mix27 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 14.7 | 0.80 | A |
| 500-600 nm | 19.91 | 21.6 | 1.08 | A |
| 600-700 nm | 18.36 | 18.8 | 1.02 | A |
| 700-800 nm | 14.92 | 15.8 | 1.06 | A |
| 800-900 nm | 12.46 | 12.2 | 0.98 | A |
| 900-1100 nm | 15.94 | 16.9 | 1.06 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
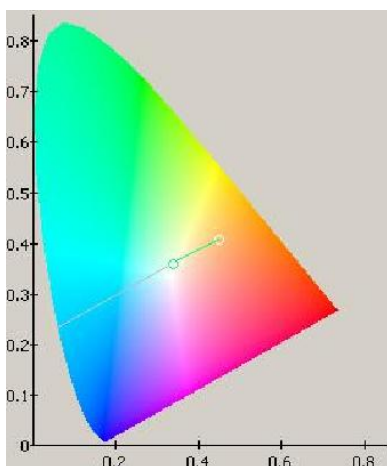


**Color temperature = 5305 K**

**Color Render Index = 96.4 [-]**

**Colors coordinate:    x = 0.338    y = 0.358**

**Reference Cell Isc: 12.9 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

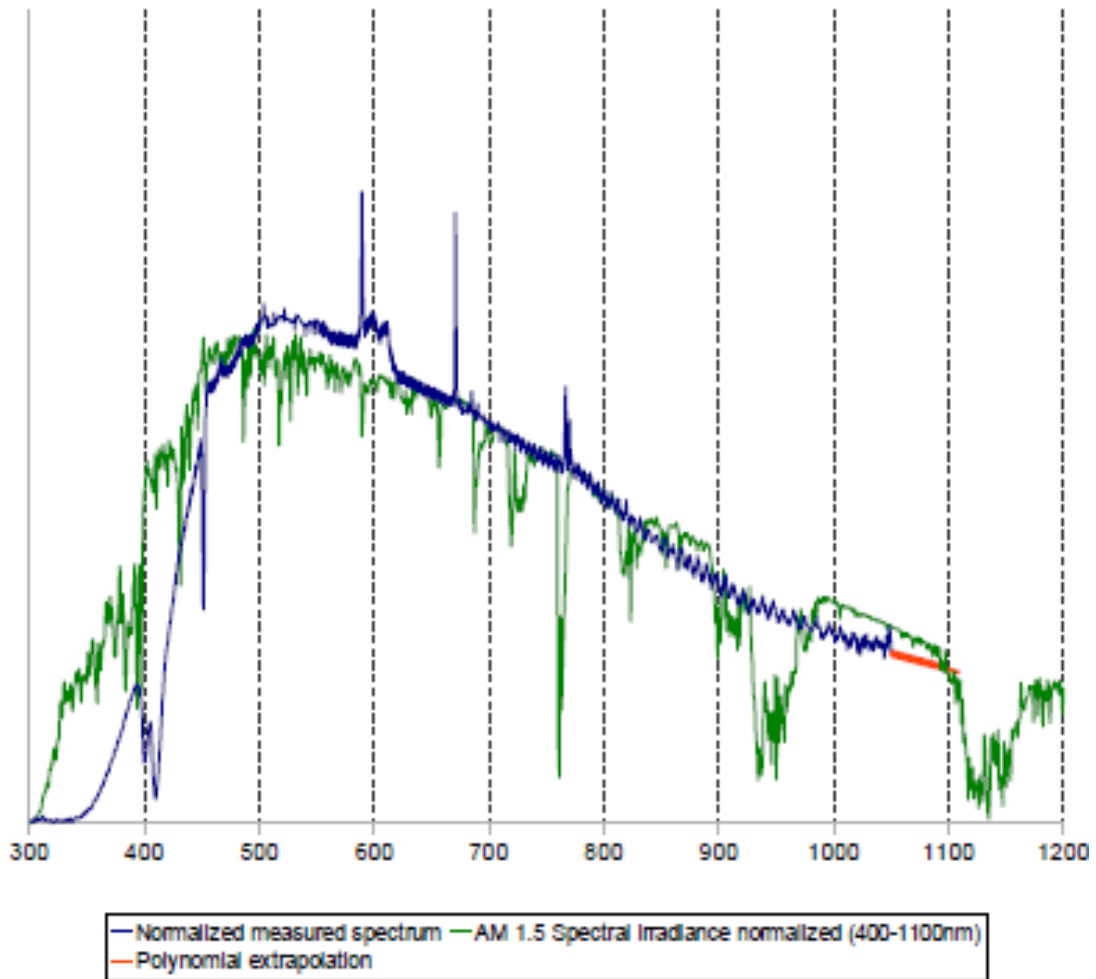# Lumartix SA ©

# Bulb Mix27 at 1300W



— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 12.7 | 0.69 | B |
| 500-600 nm | 19.91 | 21.2 | 1.06 | A |
| 600-700 nm | 18.36 | 19.2 | 1.05 | A |
| 700-800 nm | 14.92 | 16.4 | 1.10 | A |
| 800-900 nm | 12.45 | 12.8 | 1.02 | A |
| 900-1100 nm | 15.94 | 17.8 | 1.11 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
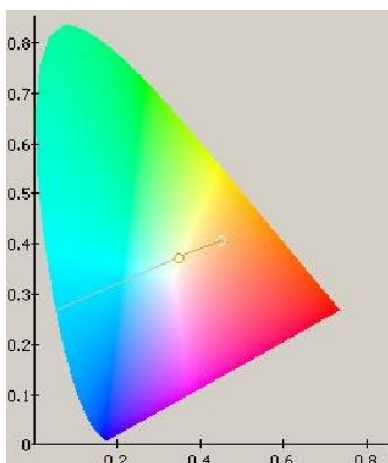


**Color temperature = 4911 K**

**Color Render Index = 94.0 [-]**

**Colors coordinate:      x = 0.350      y = 0.373**

**Reference Cell Isc: 19.4 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
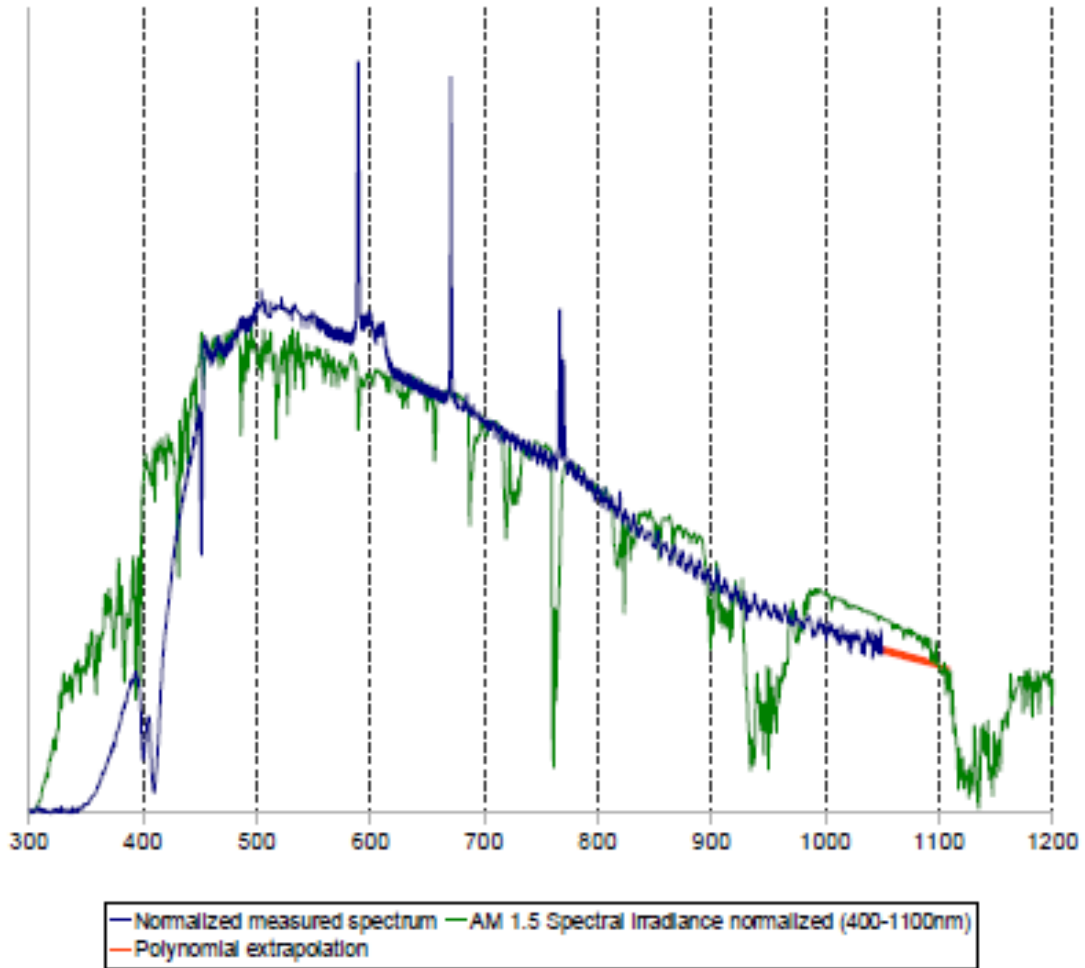
# Lumartix SA ©

# Bulb Mix28 at 800W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 13.3 | 0.72 | B |
| 500-600 nm | 19.91 | 21.4 | 1.07 | A |
| 600-700 nm | 18.36 | 19.1 | 1.04 | A |
| 700-800 nm | 14.92 | 16.3 | 1.09 | A |
| 800-900 nm | 12.46 | 12.6 | 1.01 | A |
| 900-1100 nm | 15.94 | 17.3 | 1.09 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
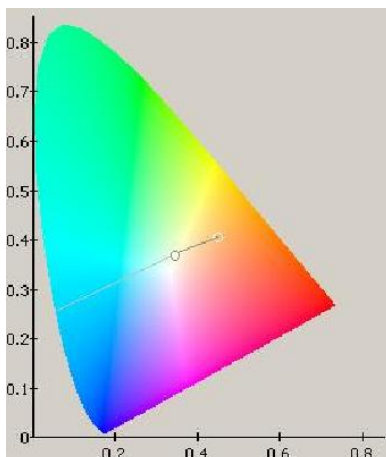


**Color temperature = 5005 K**

**Color Render Index = 95.2 [-]**

**Colors coordinate:      x = 0.347      y = 0.369**

**Reference Cell Isc: 10.8 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
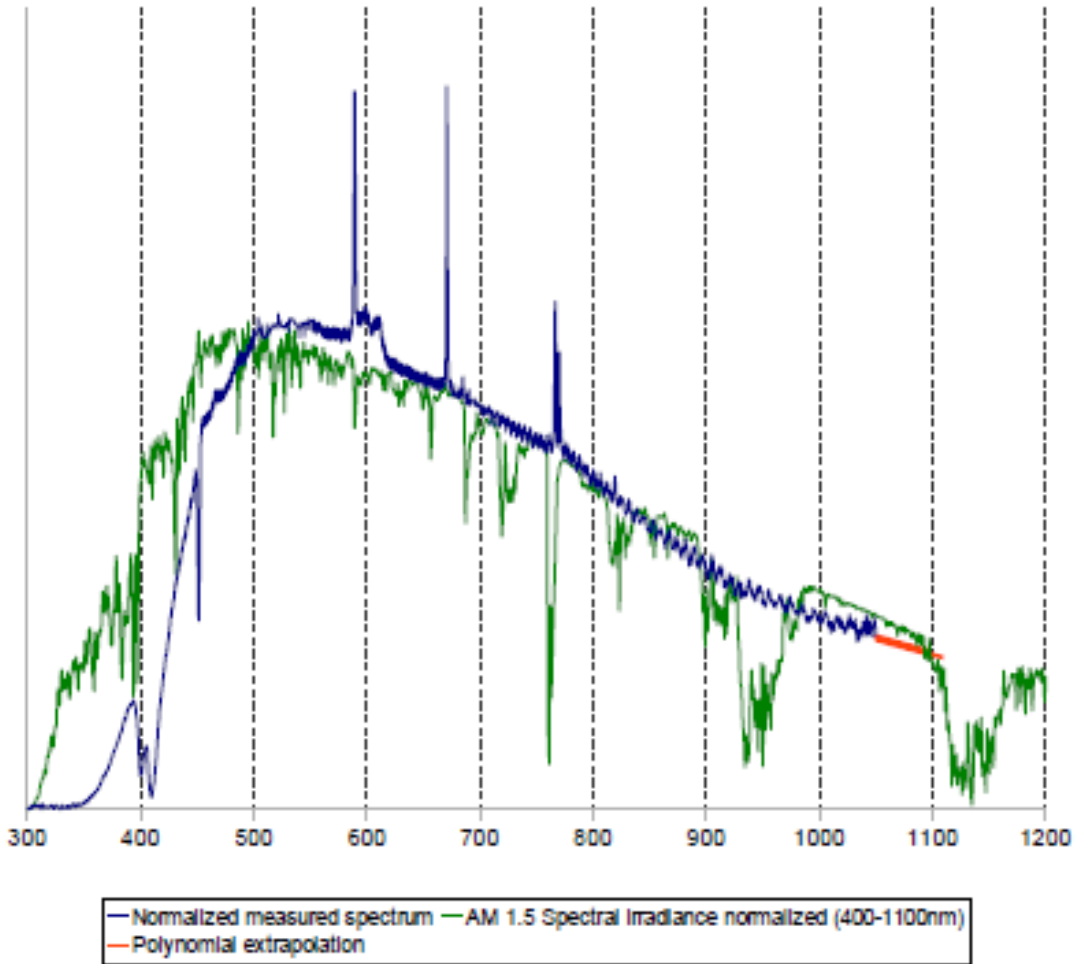
# Lumartix SA ©

# Bulb Mix28 at 1000W



Legend:
- Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
- Polynomial extrapolation

| Wavelength range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 11.2 | 0.61 | B |
| 500-600 nm | 19.91 | 20.9 | 1.05 | A |
| 600-700 nm | 18.36 | 19.5 | 1.06 | A |
| 700-800 nm | 14.92 | 16.9 | 1.13 | A |
| 800-900 nm | 12.46 | 13.2 | 1.06 | A |
| 900-1100 nm | 15.94 | 18.3 | 1.15 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
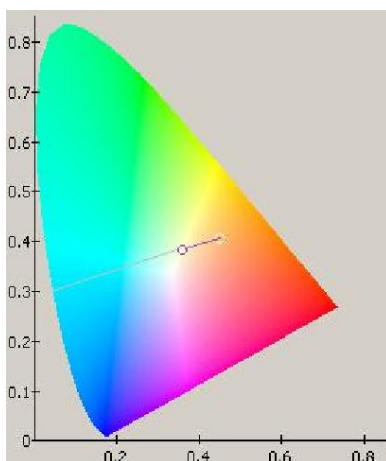


**Color temperature = 4637 K**

**Color Render Index = 93.0 [-]**

**Colors coordinate:      x = 0.360      y = 0.384**

**Reference Cell Isc: 15 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
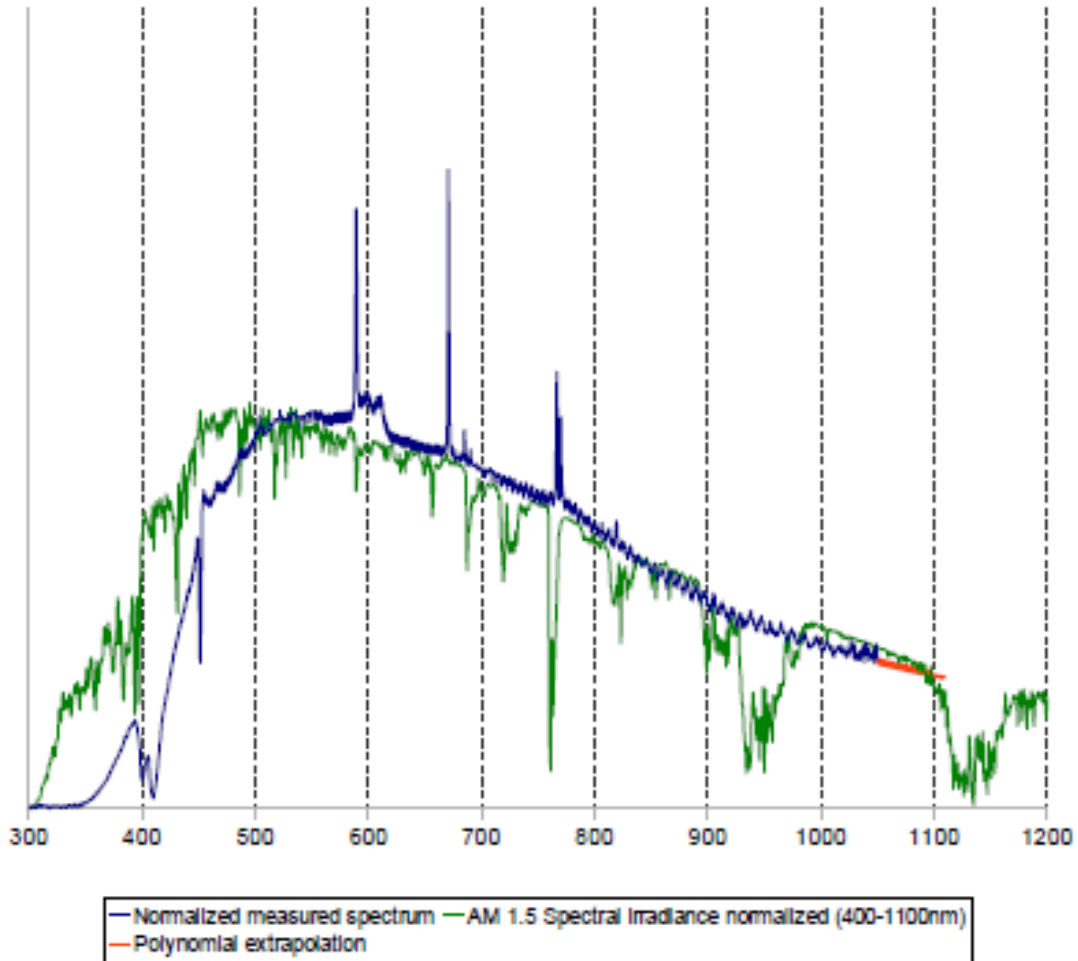
# Lumartix SA ©

# Bulb Mix28 at 1300W



— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 10.6 | 0.57 | C |
| 500-600 nm | 19.91 | 20.3 | 1.02 | A |
| 600-700 nm | 18.36 | 19.7 | 1.07 | A |
| 700-800 nm | 14.92 | 17.2 | 1.15 | A |
| 800-900 nm | 12.46 | 13.5 | 1.08 | A |
| 900-1100 nm | 15.94 | 18.8 | 1.18 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.00 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
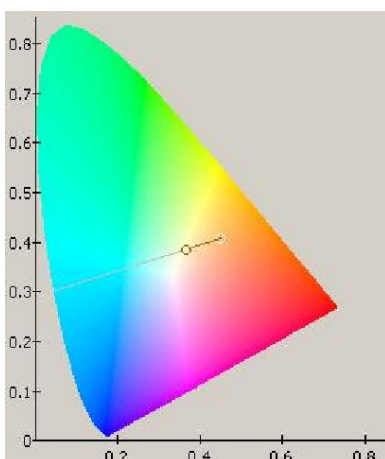


**Color temperature = 4484 K**

**Color Render Index = 93.4 [-]**

**Colors coordinate:     x = 0.365     y = 0.385**

**Reference Cell Isc: 21 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
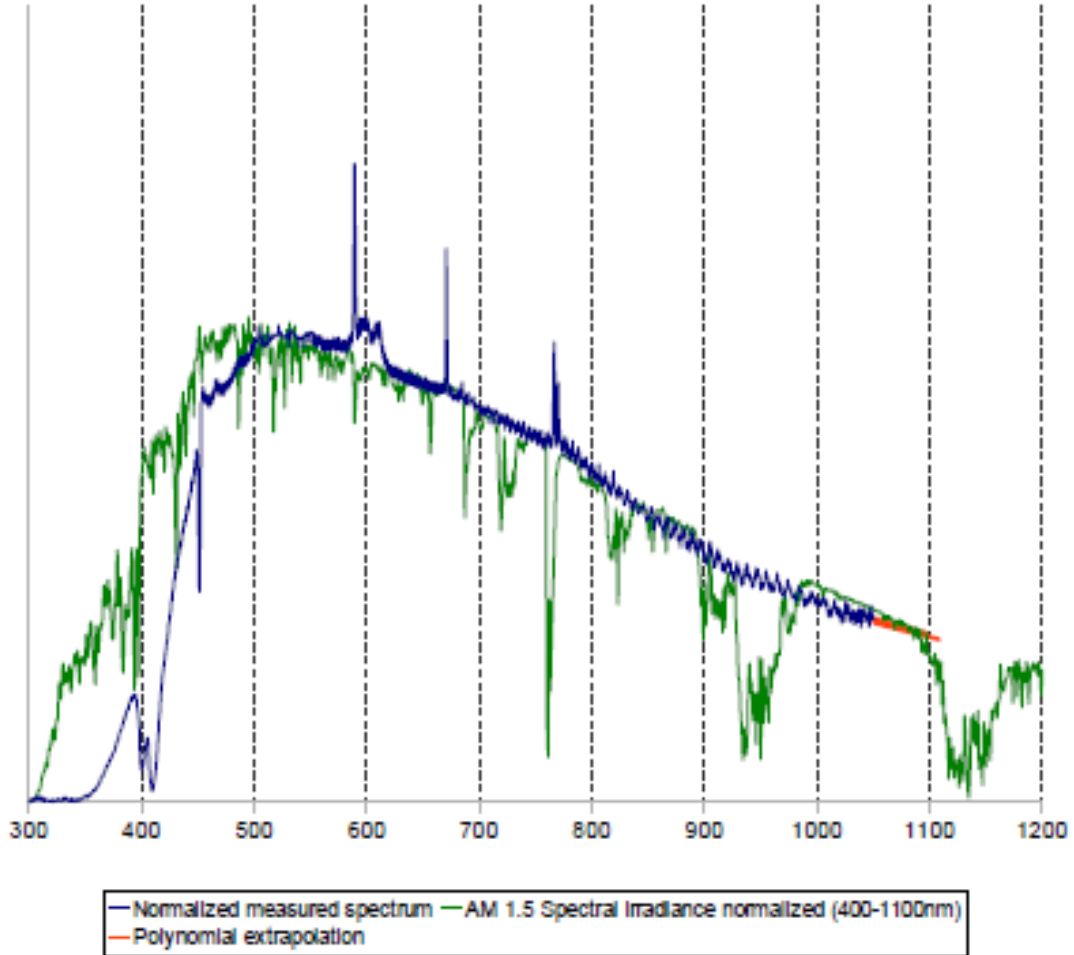
# Lumartix SA ©

# Bulb Mix29 at 800W



Legend:
- Normalized measured spectrum
- AM 1.5 Spectral Irradiance normalized (400-1100nm)
- Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 11.5 | 0.62 | B |
| 500-600 nm | 19.91 | 20.2 | 1.02 | A |
| 600-700 nm | 18.36 | 19.0 | 1.03 | A |
| 700-800 nm | 14.92 | 16.8 | 1.12 | A |
| 800-900 nm | 12.45 | 13.4 | 1.08 | A |
| 900-1100 nm | 15.94 | 19.2 | 1.20 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
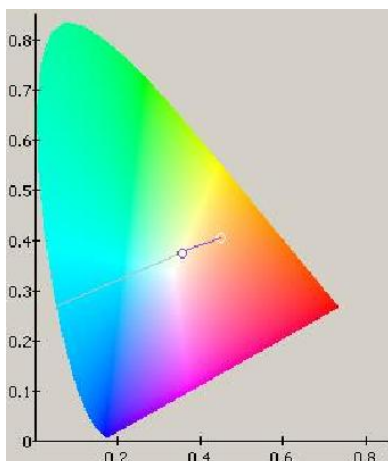


**Color temperature = 4763 K**

**Color Render Index = 94.3 [-]**

**Colors coordinate:      x = 0.355      y = 0.375**

**Reference Cell Isc: 8.7 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
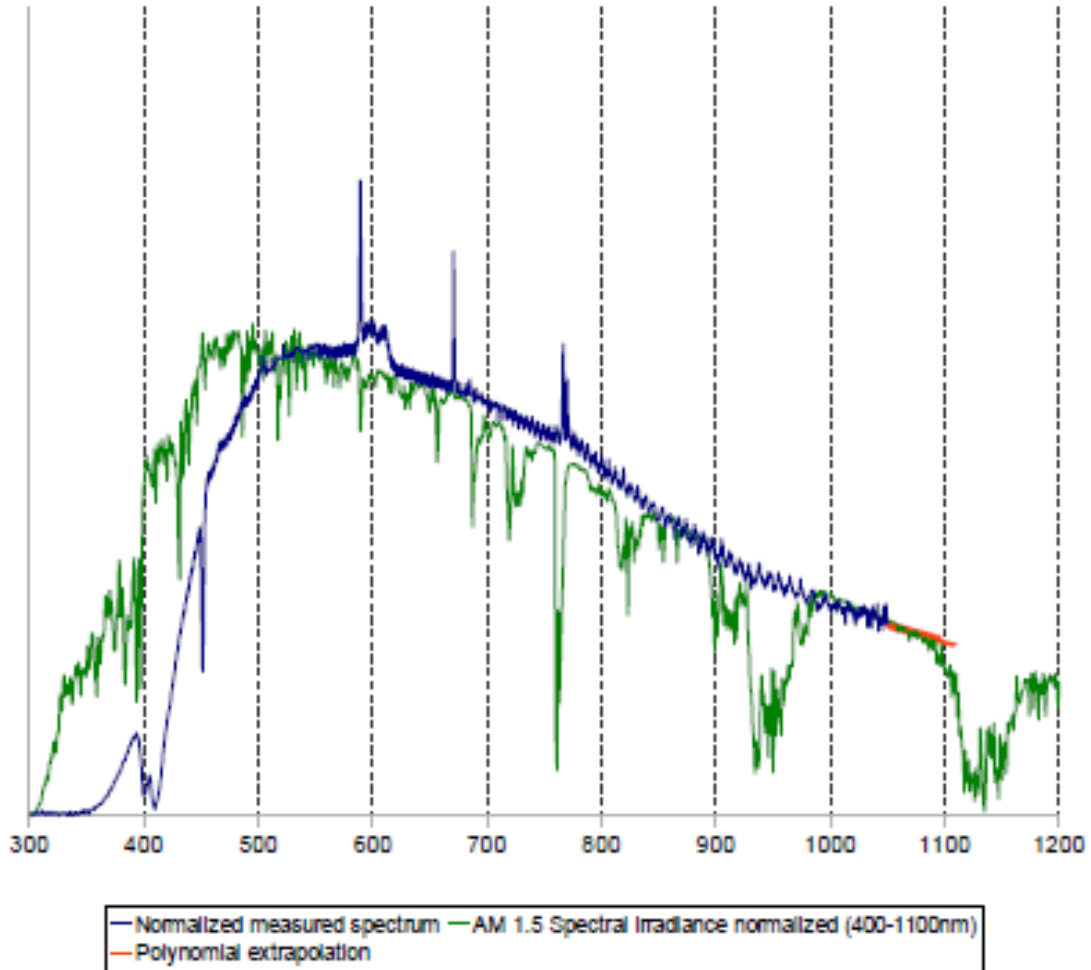
# Lumartix SA ©

# Bulb Mix29 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 9.5 | 0.52 | C |
| 500-600 nm | 19.91 | 19.8 | 1.00 | A |
| 600-700 nm | 18.36 | 19.4 | 1.06 | A |
| 700-800 nm | 14.92 | 17.3 | 1.16 | A |
| 800-900 nm | 12.45 | 13.9 | 1.12 | A |
| 900-1100 nm | 15.94 | 20.0 | 1.25 | B |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
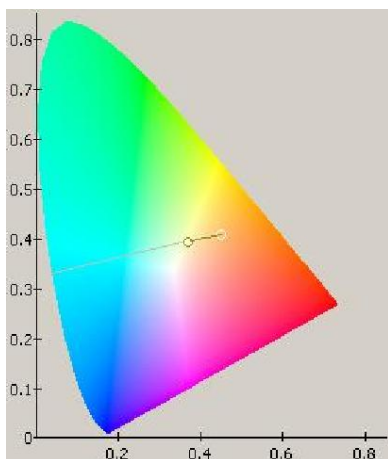


**Color temperature = 4404 K**

**Color Render Index = 92.9 [-]**
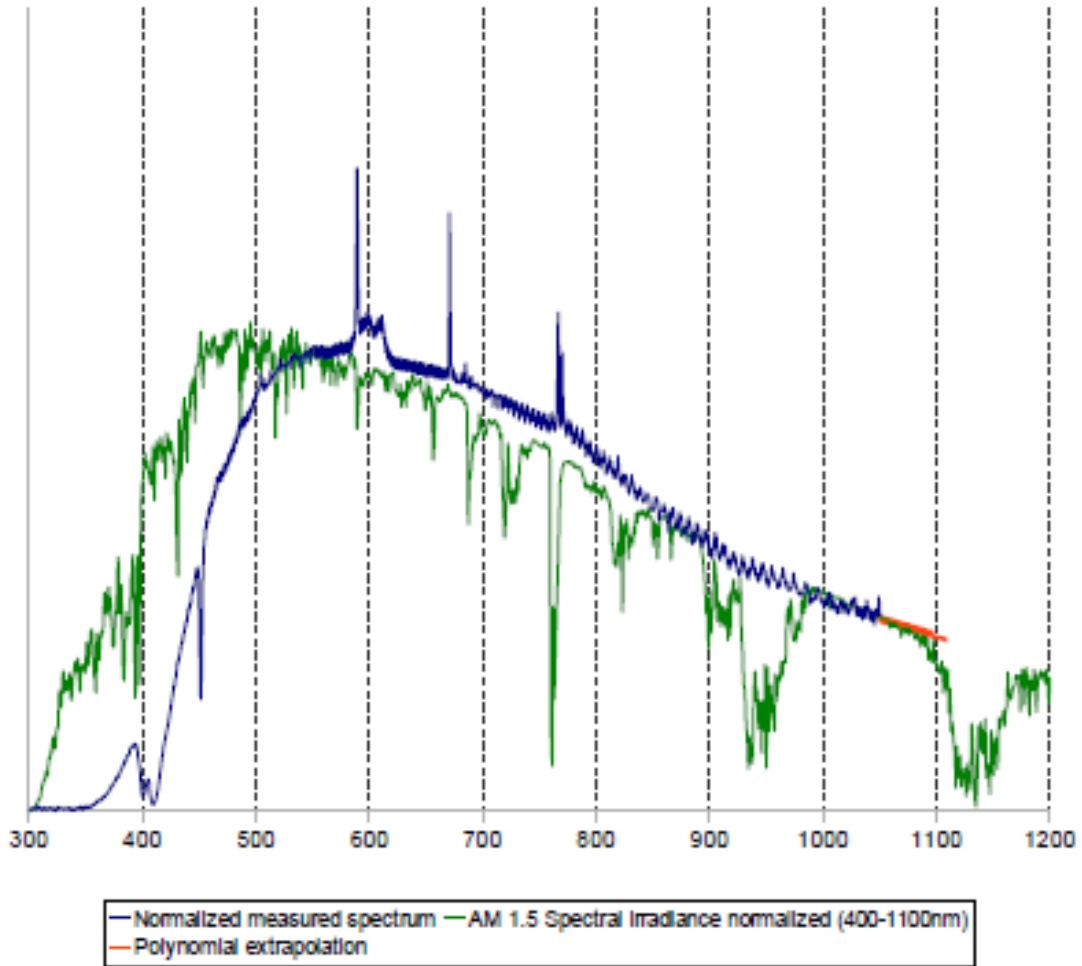
**Colors coordinate:      x = 0.369      y = 0.393**

**Reference Cell Isc: 14 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
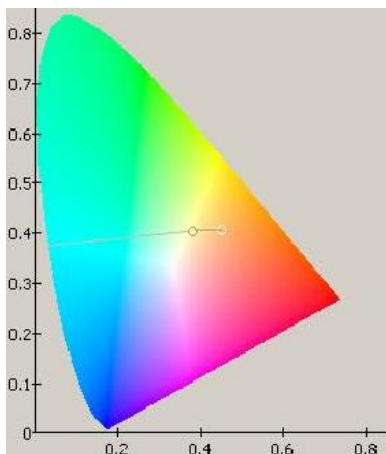
# Lumartix SA ©

# Bulb Mix29 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 8.4 | 0.46 | C |
| 500-600 nm | 19.91 | 19.5 | 0.98 | A |
| 600-700 nm | 18.36 | 19.8 | 1.08 | A |
| 700-800 nm | 14.92 | 17.8 | 1.19 | A |
| 800-900 nm | 12.45 | 14.2 | 1.14 | A |
| 900-1100 nm | 15.94 | 20.2 | 1.27 | B |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature  =  4188 K**

**Color Render Index  =  92.1 [-]**

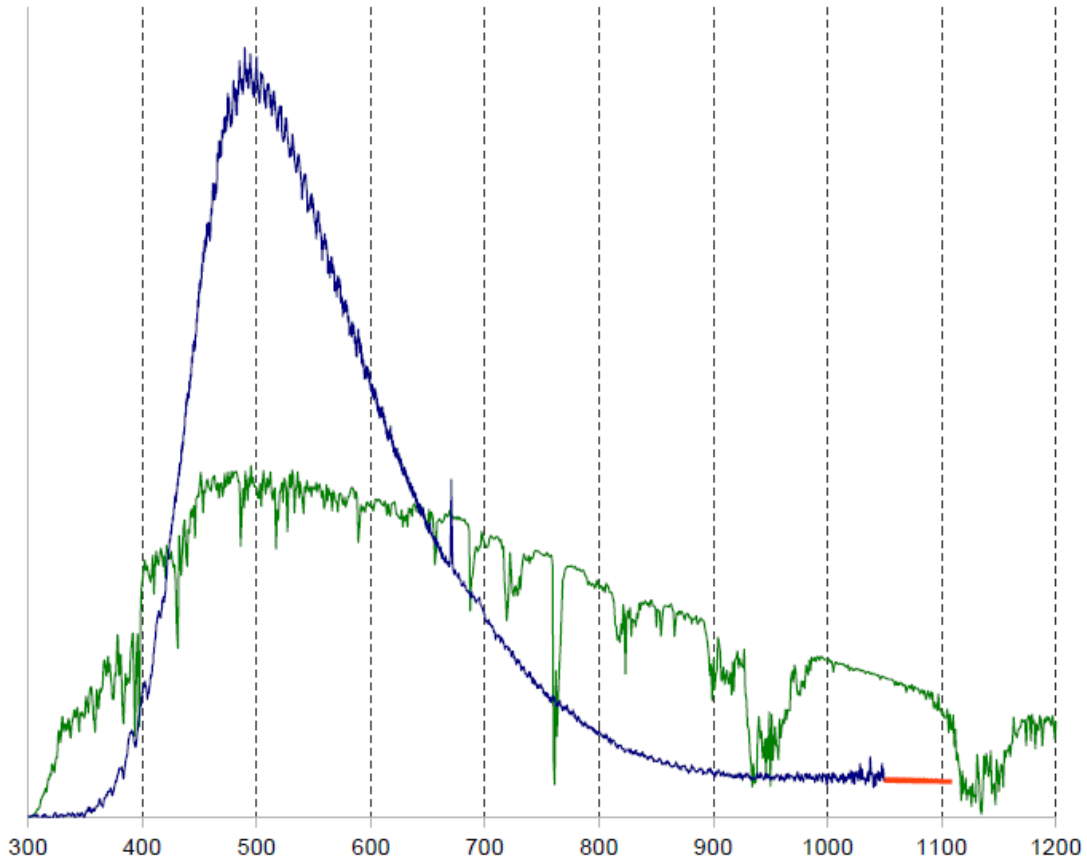**Colors coordinate:      x  =  0.380       y  =  0.402**

**Reference Cell Isc:  20.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
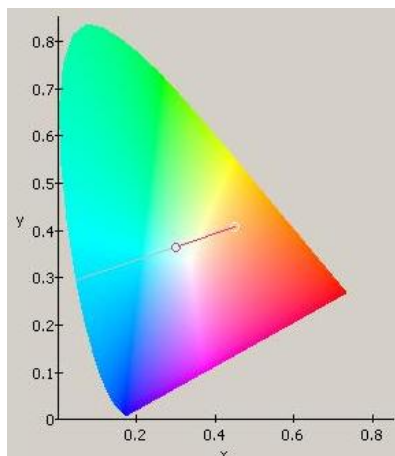
# Lumartix SA ©

# Bulb Mix32 at 800W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 25.6 | 1.39 | B |
| 500-600 nm | 19.91 | 37.2 | 1.87 | C |
| 600-700 nm | 18.36 | 19.4 | 1.06 | A |
| 700-800 nm | 14.92 | 8.8 | 0.59 | C |
| 800-900 nm | 12.46 | 3.9 | 0.31 | - |
| 900-1100 nm | 15.94 | 5.2 | 0.32 | - |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 6900 K**

**Color Render Index = 82.5 [-]**

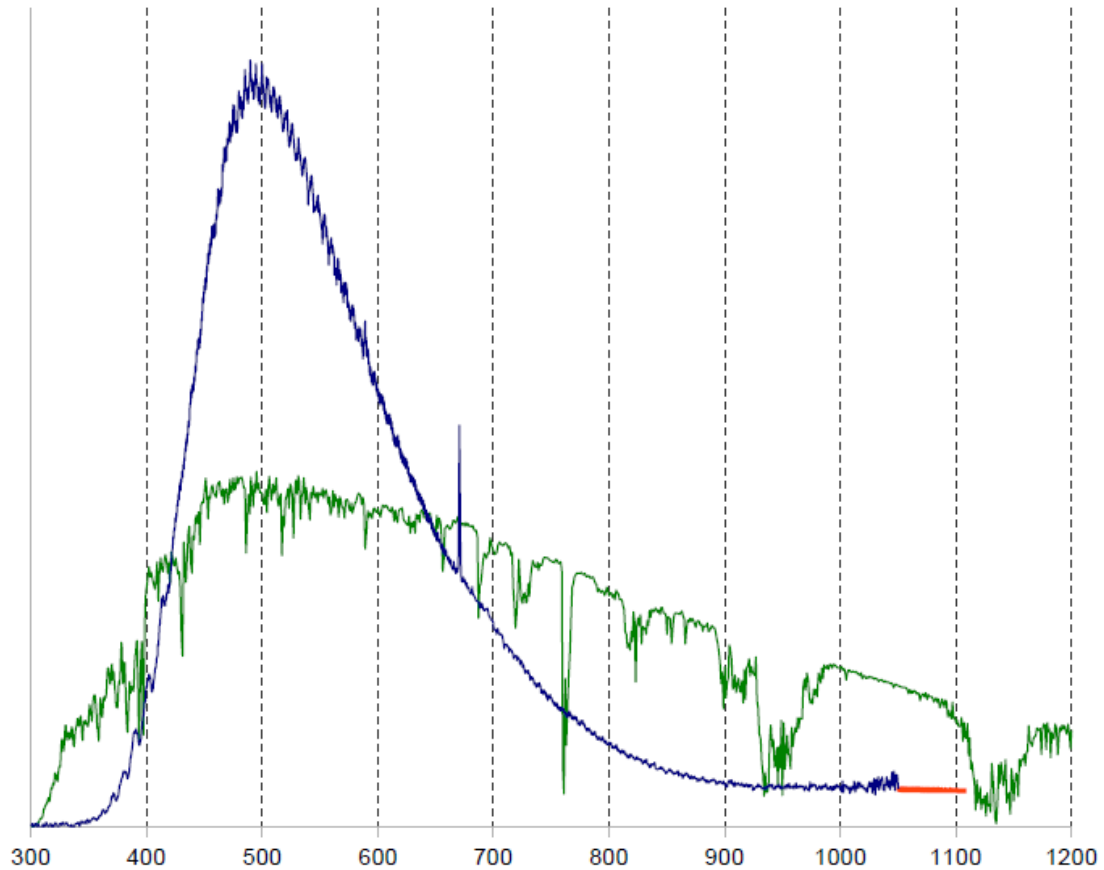**Colors coordinate:**     x = 0.299     y = 0.366

**Reference Cell Isc: 6.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
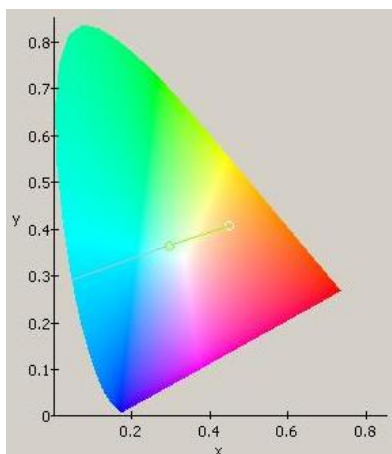
# Bulb Mix32 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 26.0 | 1.41 | C |
| 500-600 nm | 19.91 | 37.1 | 1.86 | C |
| 600-700 nm | 18.36 | 19.3 | 1.05 | A |
| 700-800 nm | 14.92 | 8.7 | 0.58 | C |
| 800-900 nm | 12.46 | 3.8 | 0.31 | - |
| 900-1100 nm | 15.94 | 5.1 | 0.32 | - |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 6950 K**

**Color Render Index = 83 [-]**

**Colors coordinate:     x = 0.298     y = 0.364**
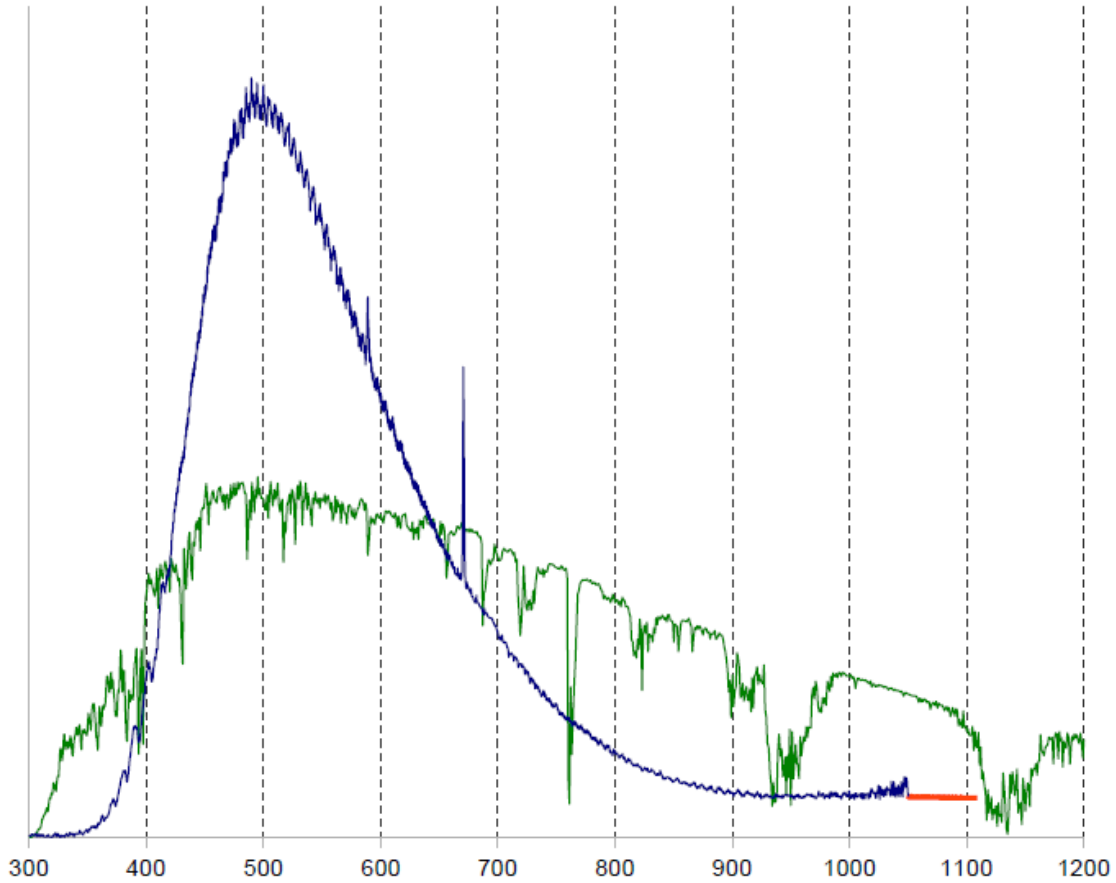
**Reference Cell Isc: 9 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix32 at 1300W



— Normalized measured spectrum  — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 26.3 | 1.43 | C |
| 500-600 nm | 19.91 | 36.5 | 1.83 | C |
| 600-700 nm | 18.36 | 19.3 | 1.05 | A |
| 700-800 nm | 14.92 | 8.7 | 0.58 | C |
| 800-900 nm | 12.46 | 3.8 | 0.31 | - |
| 900-1100 nm | 15.94 | 5.3 | 0.33 | - |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
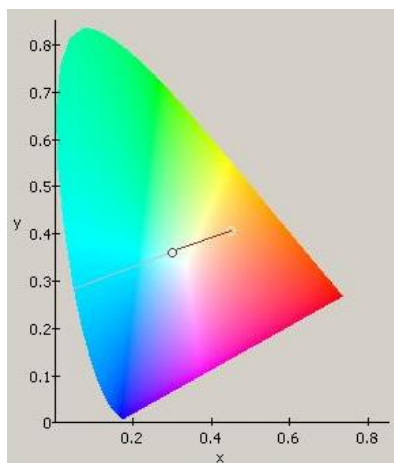


**Color temperature = 6950 K**

**Color Render Index = 84 [-]**

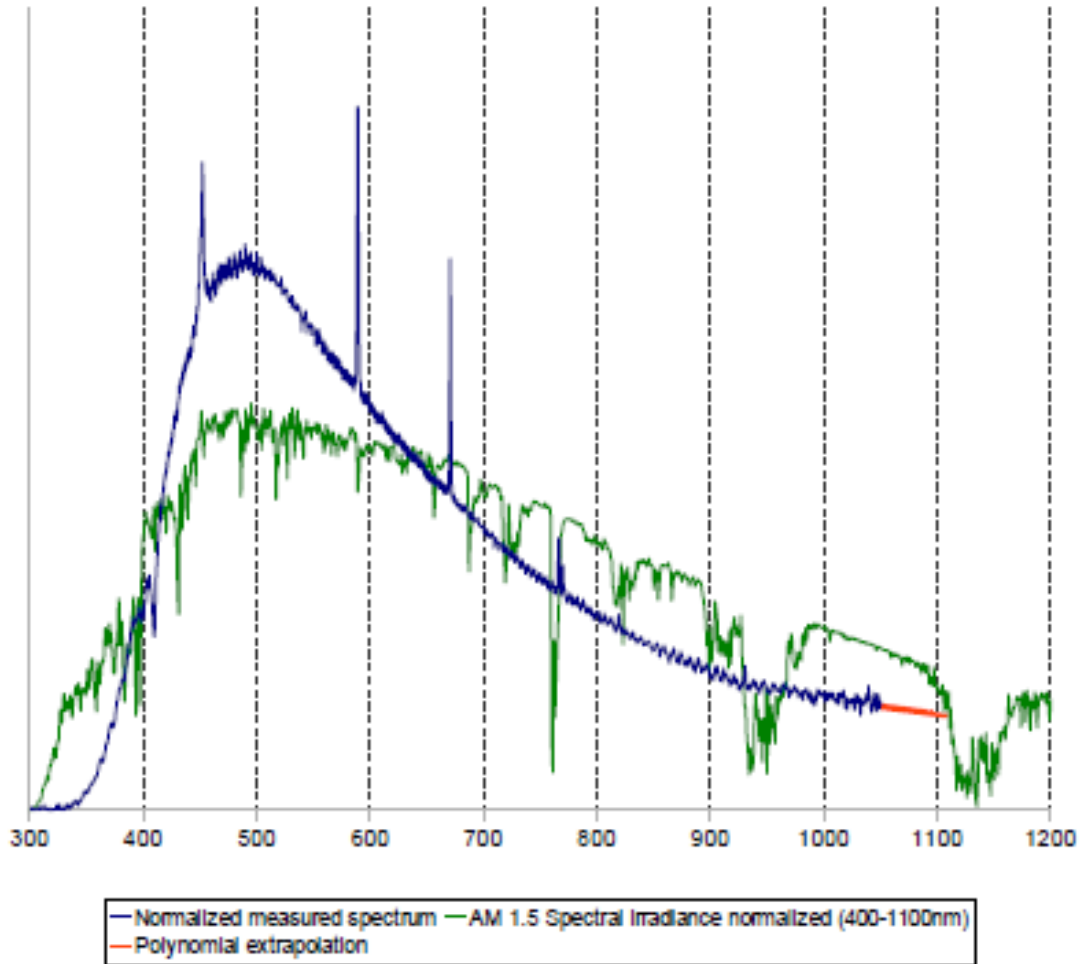**Colors coordinate:      x = 0.299      y = 0.361**

**Reference Cell Isc: 12 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Bulb Mix33 at 800W



Legend:
— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 21.5 | 1.17 | A |
| 500-600 nm | 19.91 | 25.4 | 1.28 | B |
| 600-700 nm | 18.36 | 18.3 | 1.00 | A |
| 700-800 nm | 14.92 | 12.9 | 0.86 | A |
| 800-900 nm | 12.46 | 9.1 | 0.73 | B |
| 900-1100 nm | 15.94 | 12.8 | 0.80 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
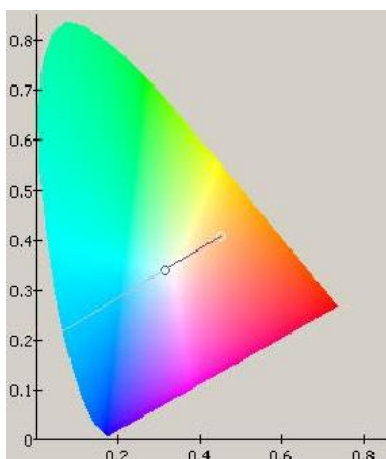


**Color temperature = 6427 K**

**Color Render Index = 95.0 [-]**

**Colors coordinate:     x = 0.313     y = 0.341**

**Reference Cell Isc: 11.3 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
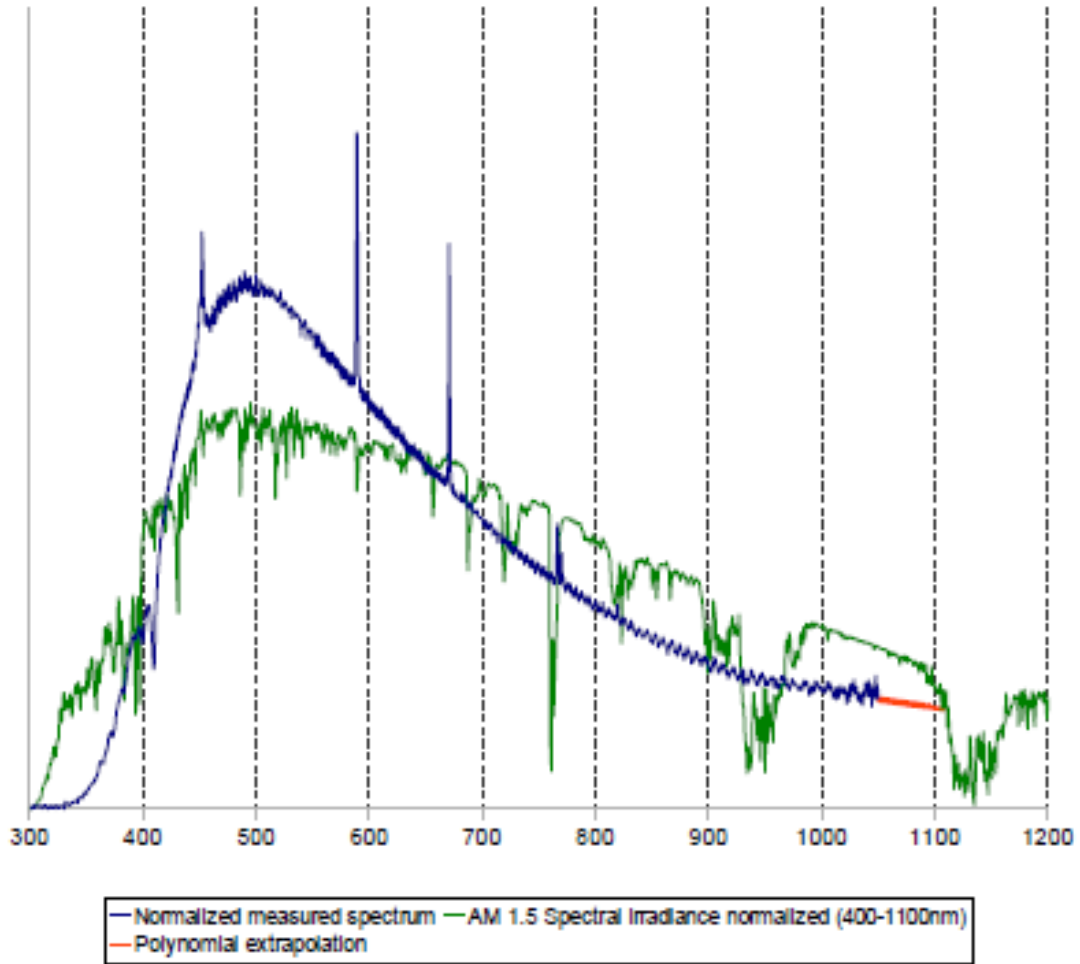
# Lumartix SA ©

# Bulb Mix33 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 19.9 | 1.08 | A |
| 500-600 nm | 19.91 | 25.0 | 1.26 | B |
| 600-700 nm | 18.35 | 18.7 | 1.02 | A |
| 700-800 nm | 14.92 | 13.3 | 0.89 | A |
| 800-900 nm | 12.46 | 9.5 | 0.76 | A |
| 900-1100 nm | 15.94 | 13.5 | 0.85 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
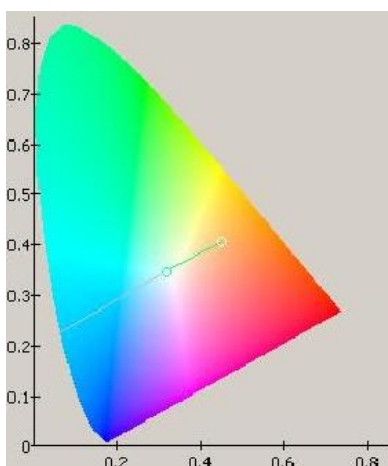


**Color temperature  =  6121 K**

**Color Render Index  =  94.9 [-]**

**Colors coordinate:        x = 0.318        y = 0.347**

**Reference Cell Isc:  15 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
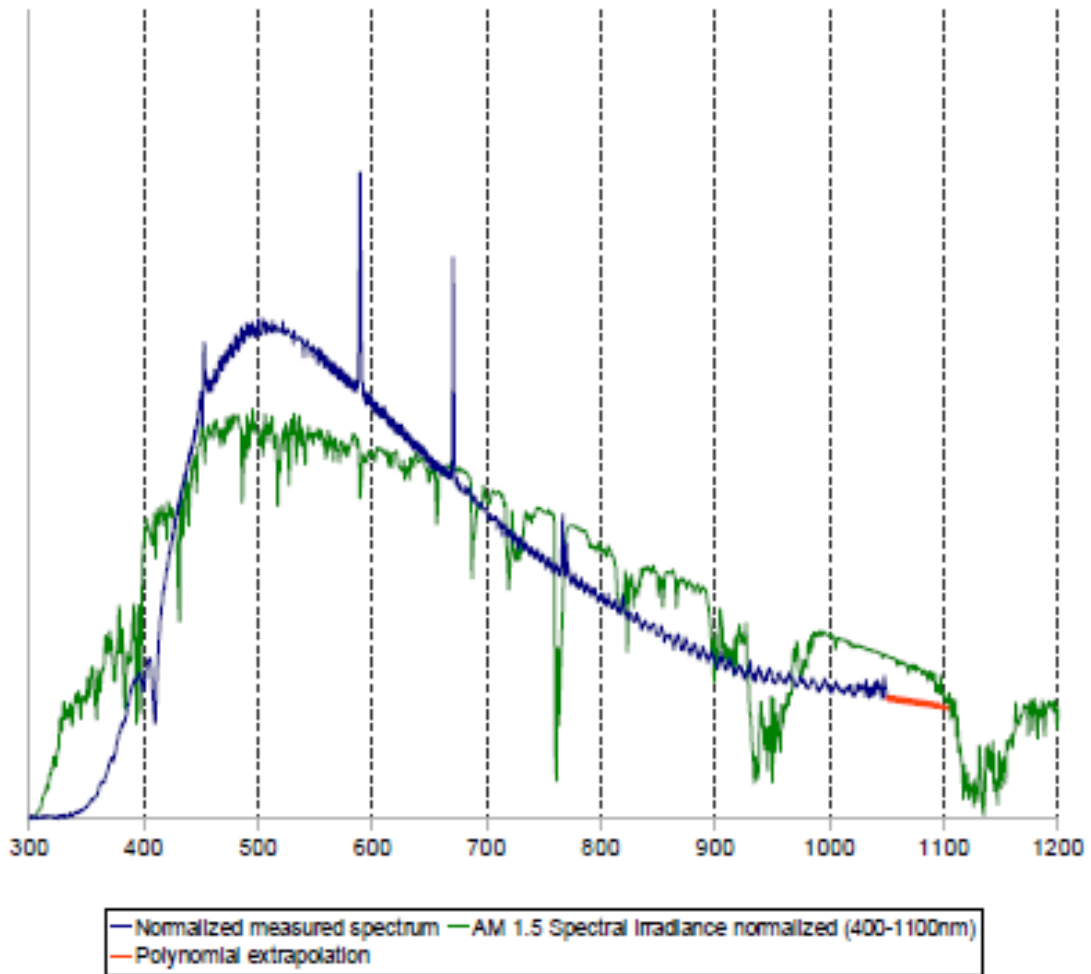
# Bulb Mix33 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 17.2 | 0.93 | A |
| 500-600 nm | 19.91 | 24.2 | 1.22 | A |
| 600-700 nm | 18.36 | 19.3 | 1.05 | A |
| 700-800 nm | 14.92 | 14.2 | 0.95 | A |
| 800-900 nm | 12.46 | 10.3 | 0.83 | A |
| 900-1100 nm | 15.94 | 14.8 | 0.93 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
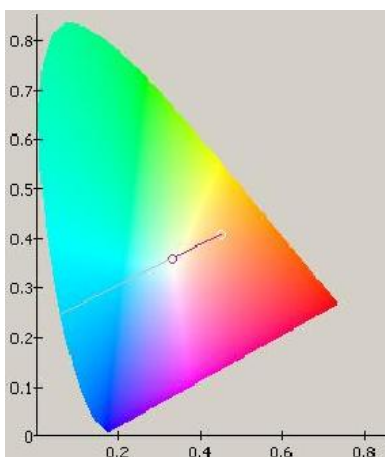


**Color temperature = 5566 K**

**Color Render Index = 94.5 [-]**

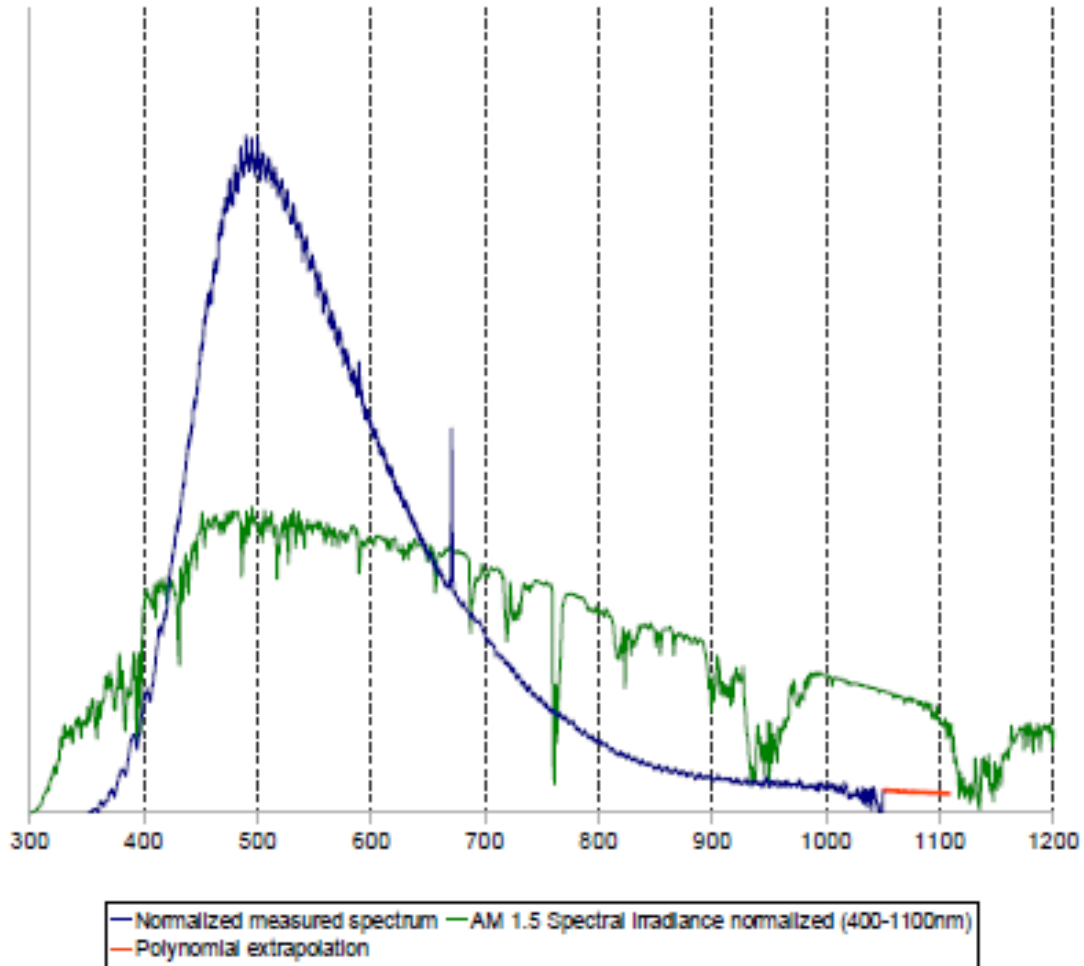**Colors coordinate:     x = 0.331     y = 0.359**

**Reference Cell Isc: 21 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix34 at 800W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 25.9 | 1.41 | C |
| 500-600 nm | 19.91 | 38.1 | 1.91 | C |
| 600-700 nm | 18.36 | 19.9 | 1.08 | A |
| 700-800 nm | 14.92 | 8.8 | 0.59 | C |
| 800-900 nm | 12.46 | 3.6 | 0.29 | - |
| 900-1100 nm | 15.94 | 3.7 | 0.23 | - |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
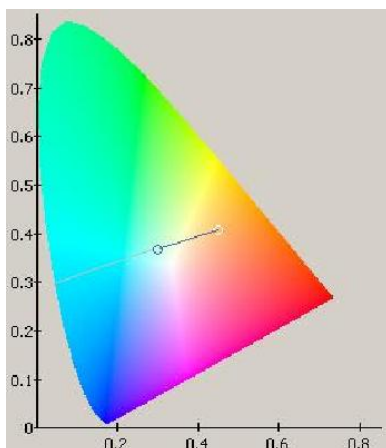


**Color temperature = 6865 K**

**Color Render Index = 82.3 [-]**

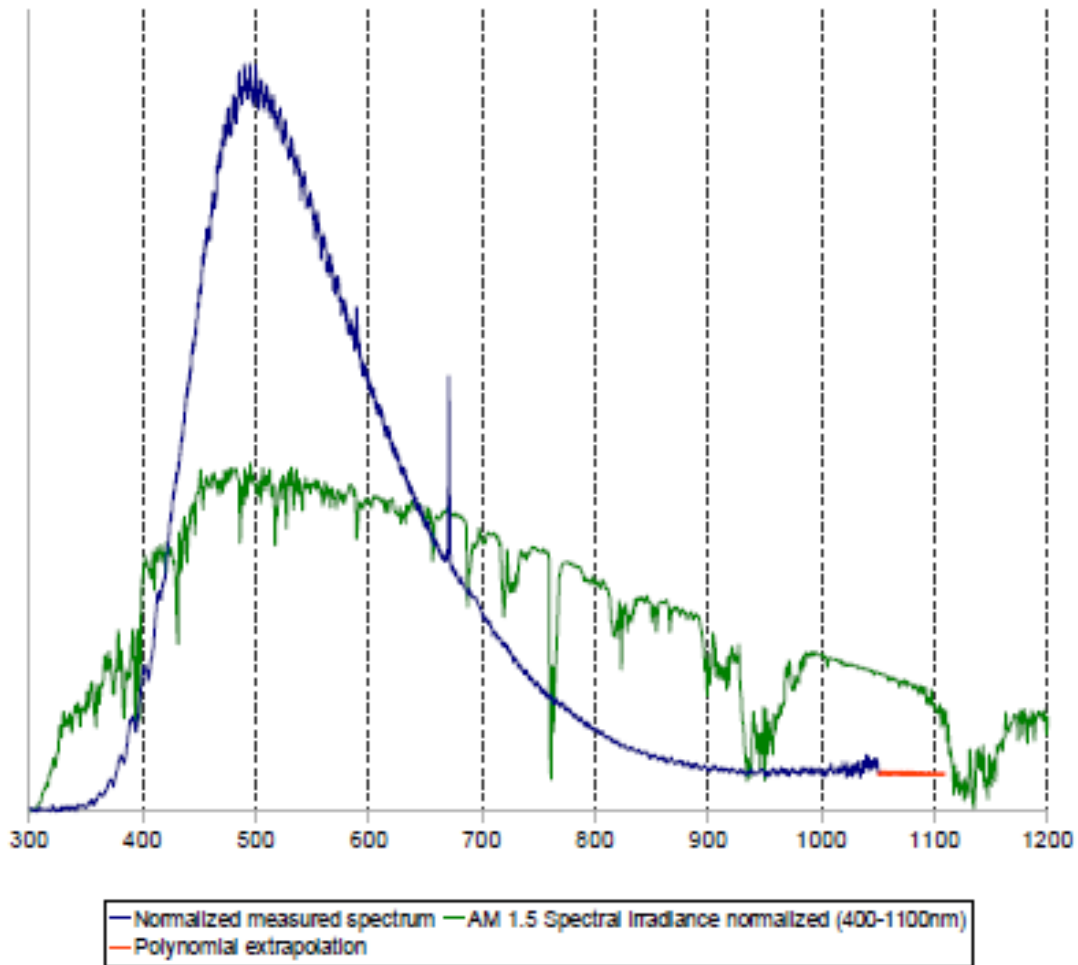**Colors coordinate:     x = 0.299     y = 0.367**

**Reference Cell Isc: 6.9 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix34 at 1000W



— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 25.7 | 1.40 | B |
| 500-600 nm | 19.91 | 37.1 | 1.86 | C |
| 600-700 nm | 18.36 | 19.4 | 1.06 | A |
| 700-800 nm | 14.92 | 8.7 | 0.58 | C |
| 800-900 nm | 12.46 | 3.8 | 0.31 | - |
| 900-1100 nm | 15.94 | 5.3 | 0.33 | - |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
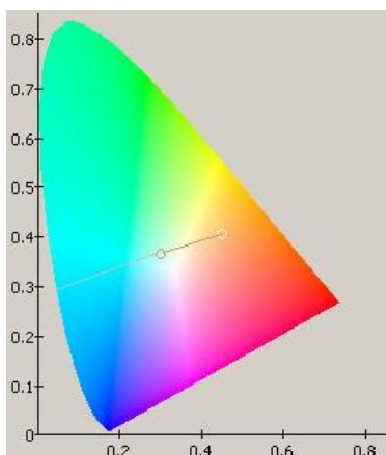


**Color temperature = 6886 K**

**Color Render Index = 82.7 [-]**
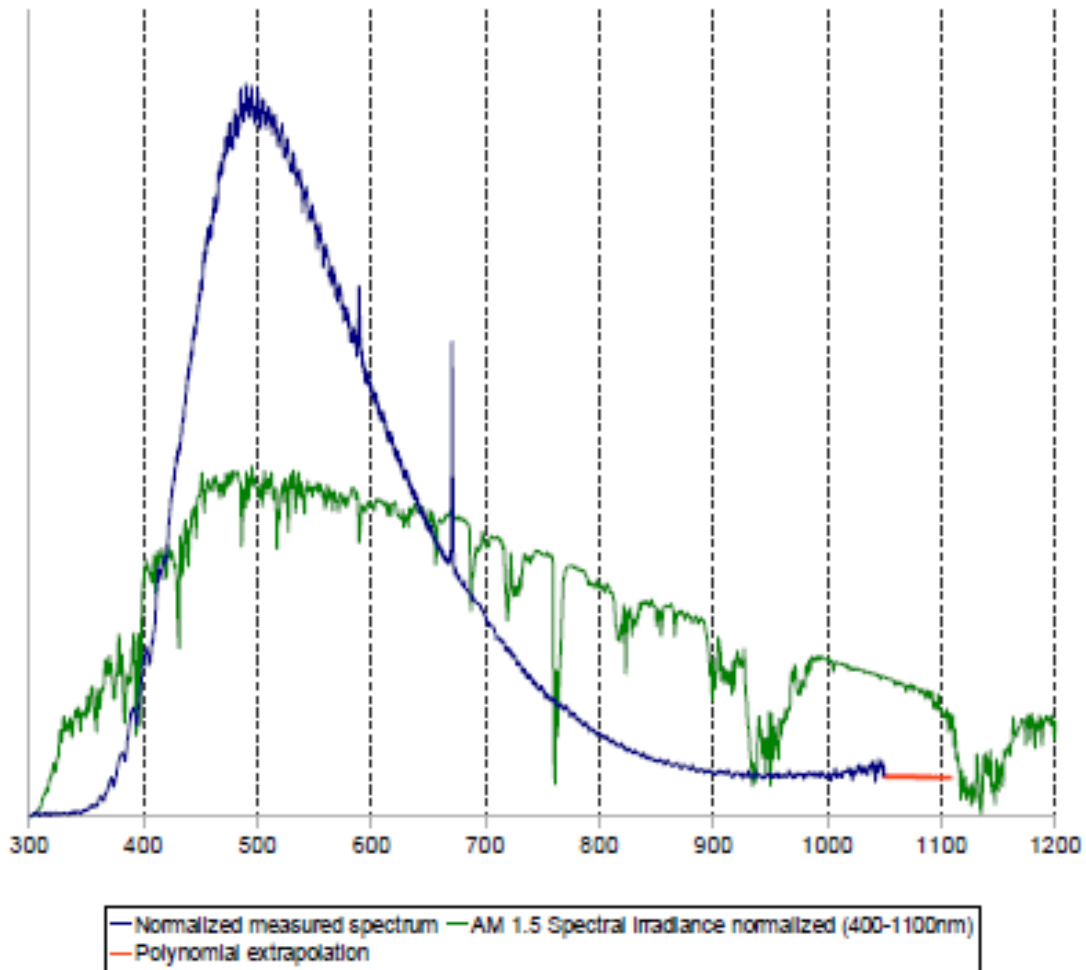
**Colors coordinate:     x = 0.299     y = 0.366**

**Reference Cell Isc:  9 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
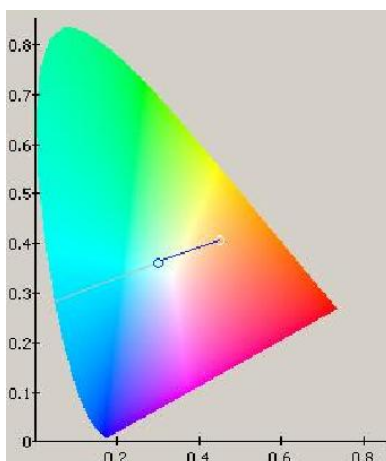
# Lumartix SA ©

# Bulb Mix34 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 26.2 | 1.43 | C |
| 500-600 nm | 19.91 | 36.4 | 1.83 | C |
| 600-700 nm | 18.36 | 19.4 | 1.05 | A |
| 700-800 nm | 14.92 | 8.7 | 0.58 | C |
| 800-900 nm | 12.46 | 3.9 | 0.31 | - |
| 900-1100 nm | 15.94 | 5.5 | 0.34 | - |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature = 6946 K

Color Render Index = 83.8 [-]
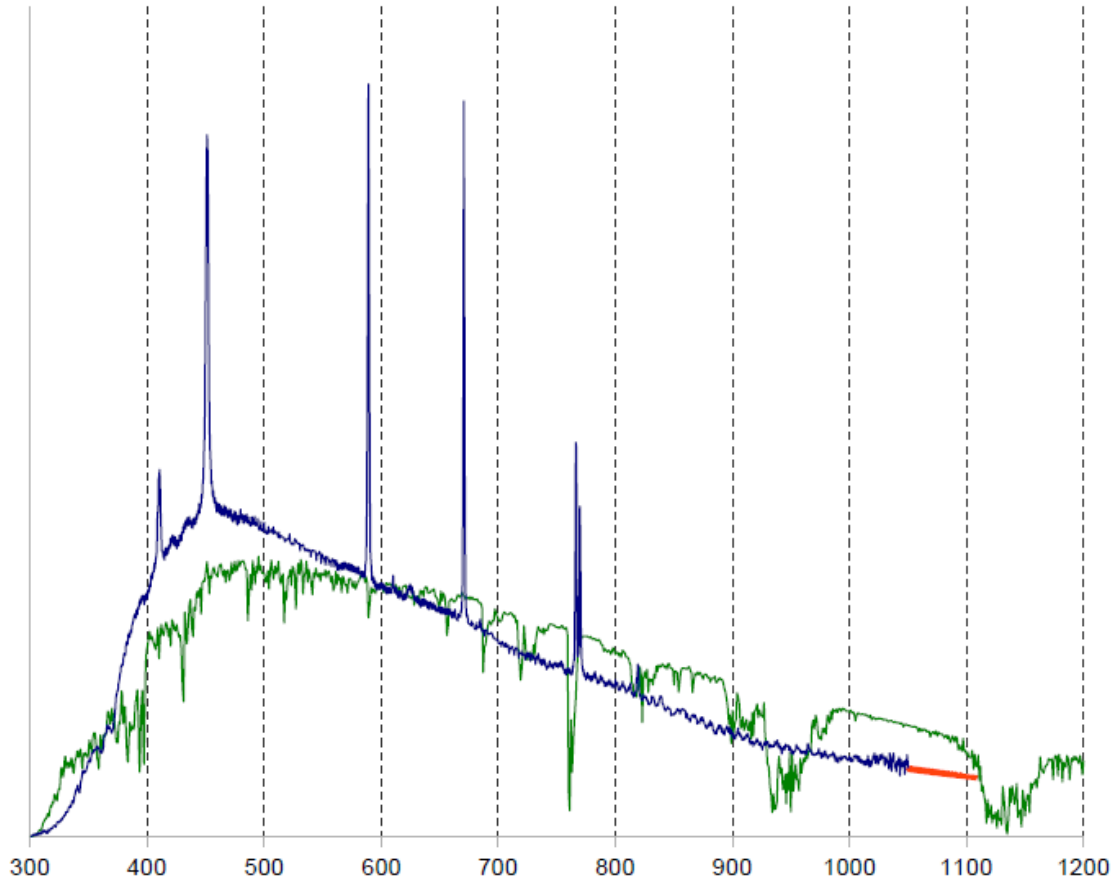
Colors coordinate:     x = 0.299      y = 0.361

Reference Cell Isc: 11.8 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
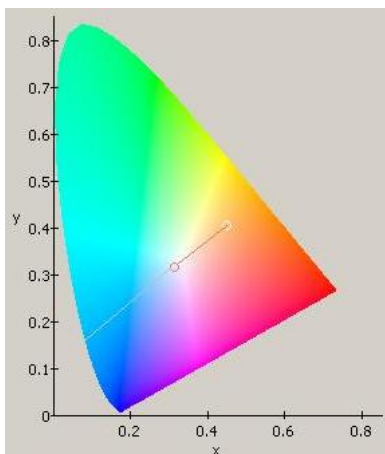
# Lumartix SA ©

# Bulb Mix35 at 800W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 23.3 | 1.27 | B |
| 500-600 nm | 19.91 | 21.8 | 1.10 | A |
| 600-700 nm | 18.36 | 17.9 | 0.97 | A |
| 700-800 nm | 14.92 | 13.9 | 0.93 | A |
| 800-900 nm | 12.46 | 10.2 | 0.82 | A |
| 900-1100 nm | 15.94 | 12.9 | 0.81 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature  =  6550 K

Color Render Index  =  97 [-]

Colors coordinate:      x = 0.314      y = 0.317
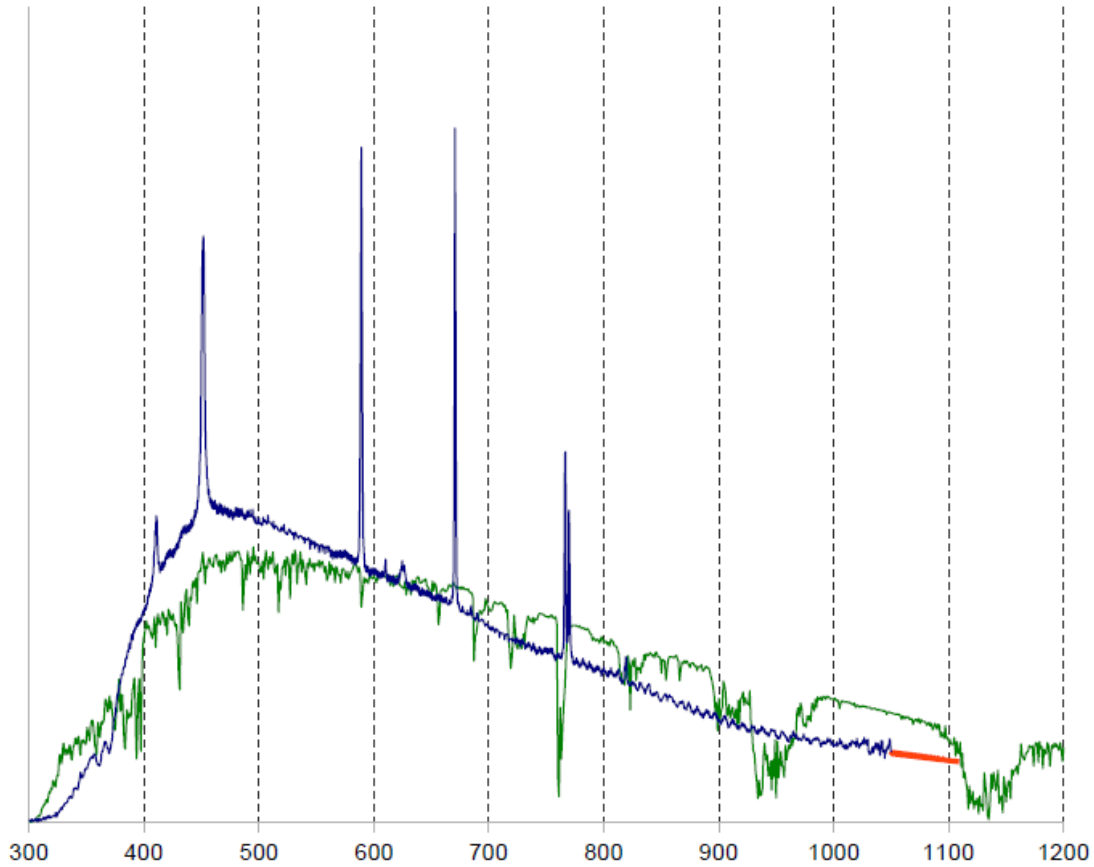
Reference Cell Isc: 9 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.
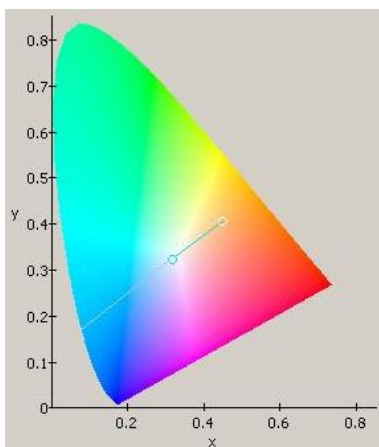
# Lumartix SA ©

# Bulb Mix35 at 1000W



—Normalized measured spectrum —AM 1.5 Spectral irradiance normalized (400-1100nm)
—Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 22.1 | 1.20 | A |
| 500-600 nm | 19.91 | 22.0 | 1.10 | A |
| 600-700 nm | 18.36 | 18.2 | 0.99 | A |
| 700-800 nm | 14.92 | 14.1 | 0.94 | A |
| 800-900 nm | 12.46 | 10.3 | 0.83 | A |
| 900-1100 nm | 15.94 | 13.3 | 0.83 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



Color temperature = 6250 K

Color Render Index = 97.5 [-]
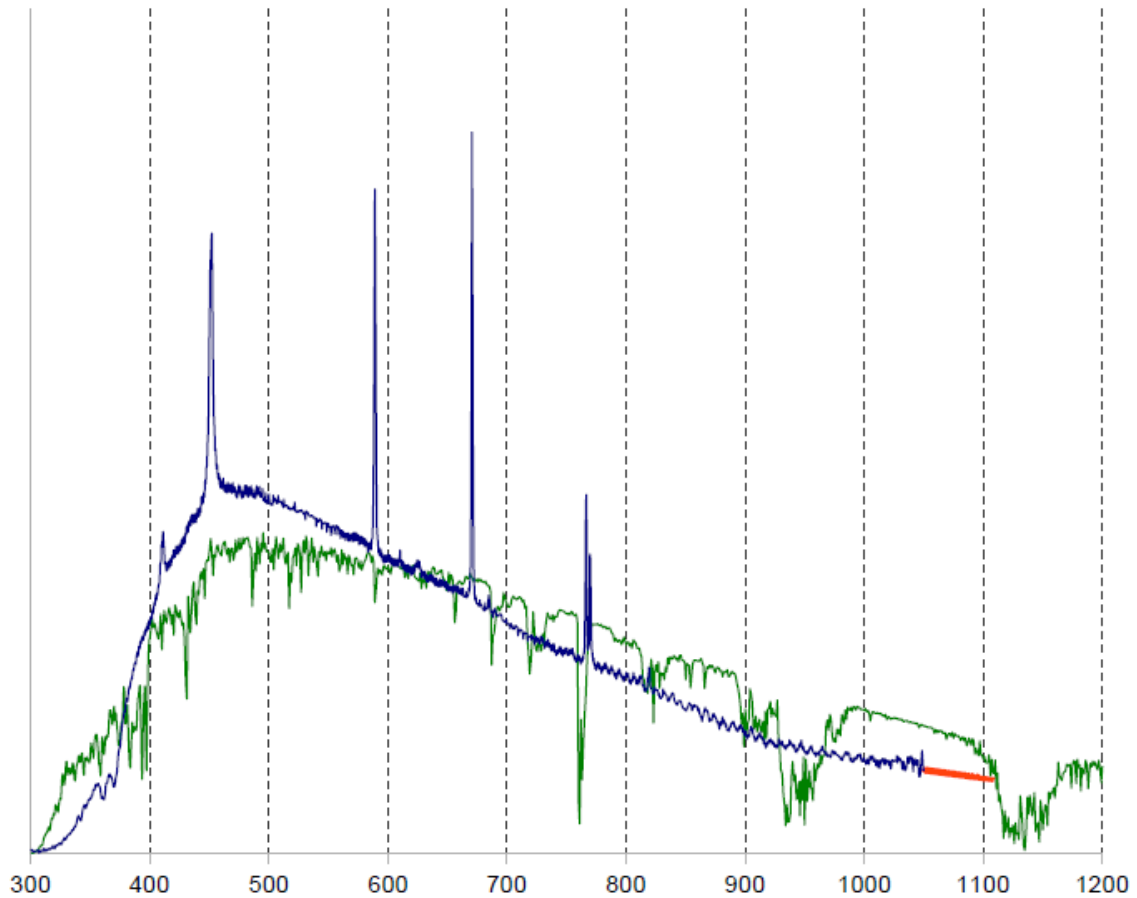
Colors coordinate:      x = 0.318      y = 0.324

Reference Cell Isc: 12 [mA]

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix35 at 1300W



— Normalized measured spectrum  — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 21.6 | 1.18 | A |
| 500-600 nm | 19.91 | 22.0 | 1.11 | A |
| 600-700 nm | 18.36 | 18.3 | 1.00 | A |
| 700-800 nm | 14.92 | 14.1 | 0.94 | A |
| 800-900 nm | 12.46 | 10.4 | 0.83 | A |
| 900-1100 nm | 15.94 | 13.5 | 0.85 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
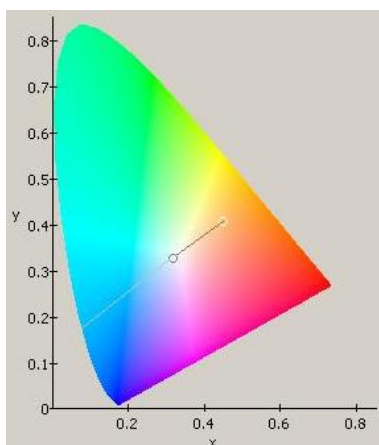


**Color temperature = 6250 K**

**Color Render Index = 98 [-]**
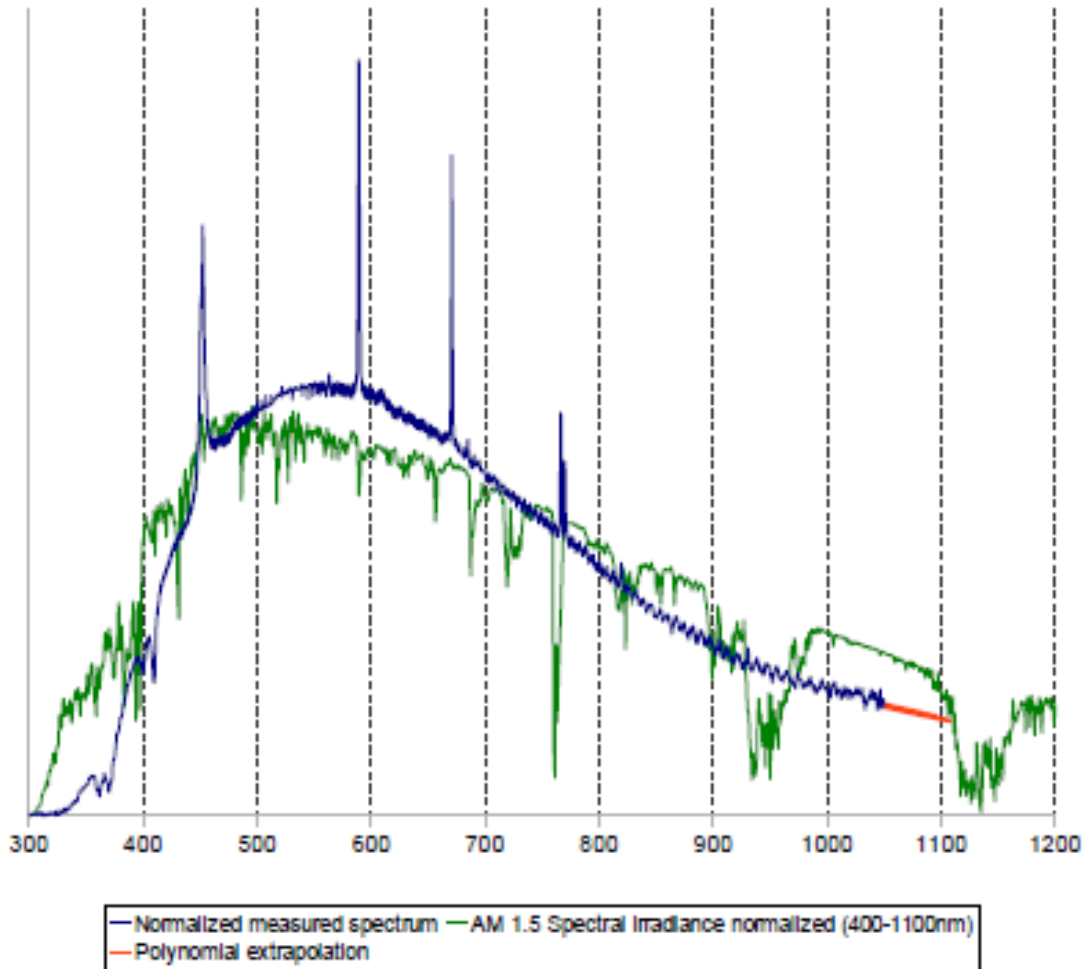
**Colors coordinate:    x = 0.318    y = 0.326**

**Reference Cell Isc: 18.5 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix37-10 at 800W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 15.5 | 0.84 | A |
| 500-600 nm | 19.91 | 22.0 | 1.10 | A |
| 600-700 nm | 18.35 | 20.5 | 1.12 | A |
| 700-800 nm | 14.92 | 16.2 | 1.09 | A |
| 800-900 nm | 12.46 | 11.4 | 0.91 | A |
| 900-1100 nm | 15.94 | 14.5 | 0.91 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics



**Color temperature = 4910 K**

**Color Render Index = 96.3 [-]**

**Colors coordinate:      x = 0.348      y = 0.360**

**Reference Cell Isc: 15.8 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
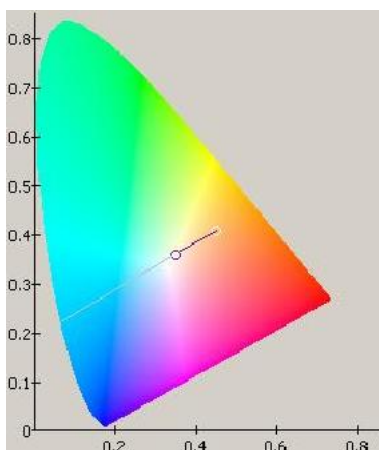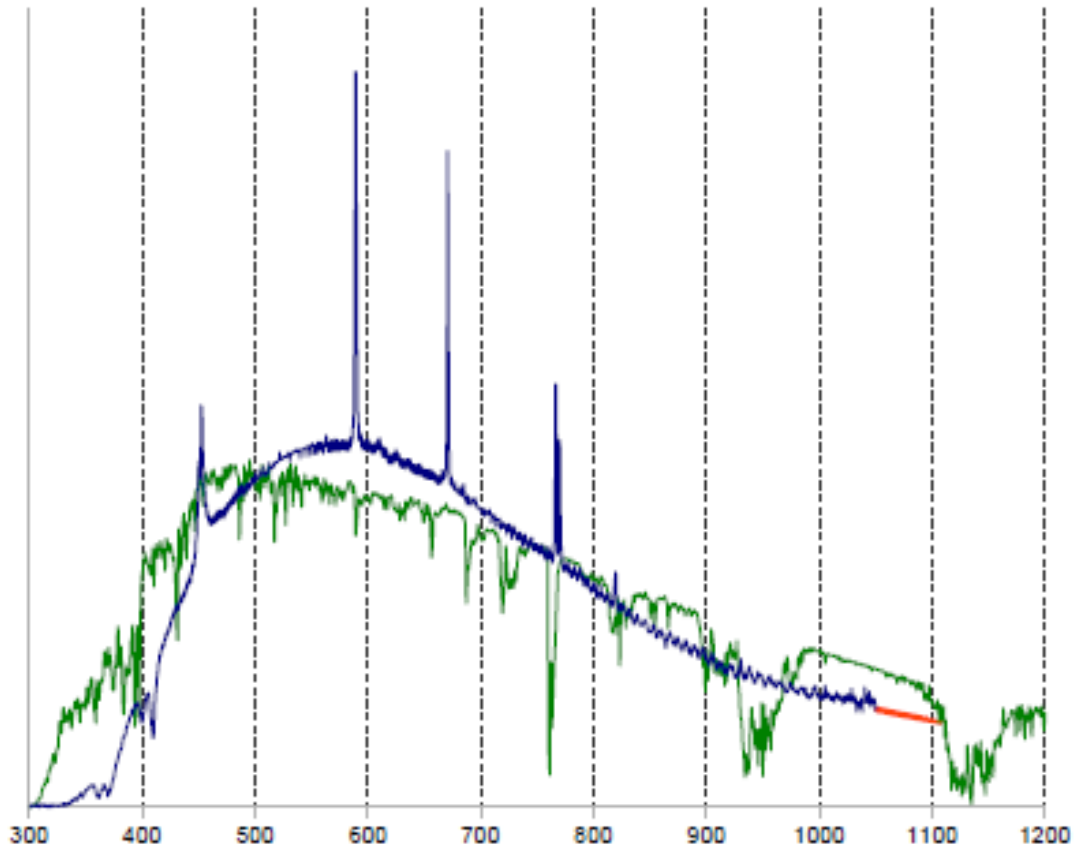
# Lumartix SA ©

# Bulb Mix37-10 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 13.5 | 0.73 | B |
| 500-600 nm | 19.91 | 21.7 | 1.09 | A |
| 600-700 nm | 18.36 | 21.0 | 1.14 | A |
| 700-800 nm | 14.92 | 16.8 | 1.13 | A |
| 800-900 nm | 12.46 | 11.8 | 0.95 | A |
| 900-1100 nm | 15.94 | 15.1 | 0.95 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
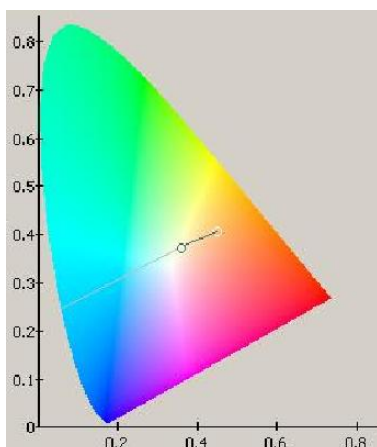


**Color temperature = 4558 K**

**Color Render Index = 95.0 [-]**

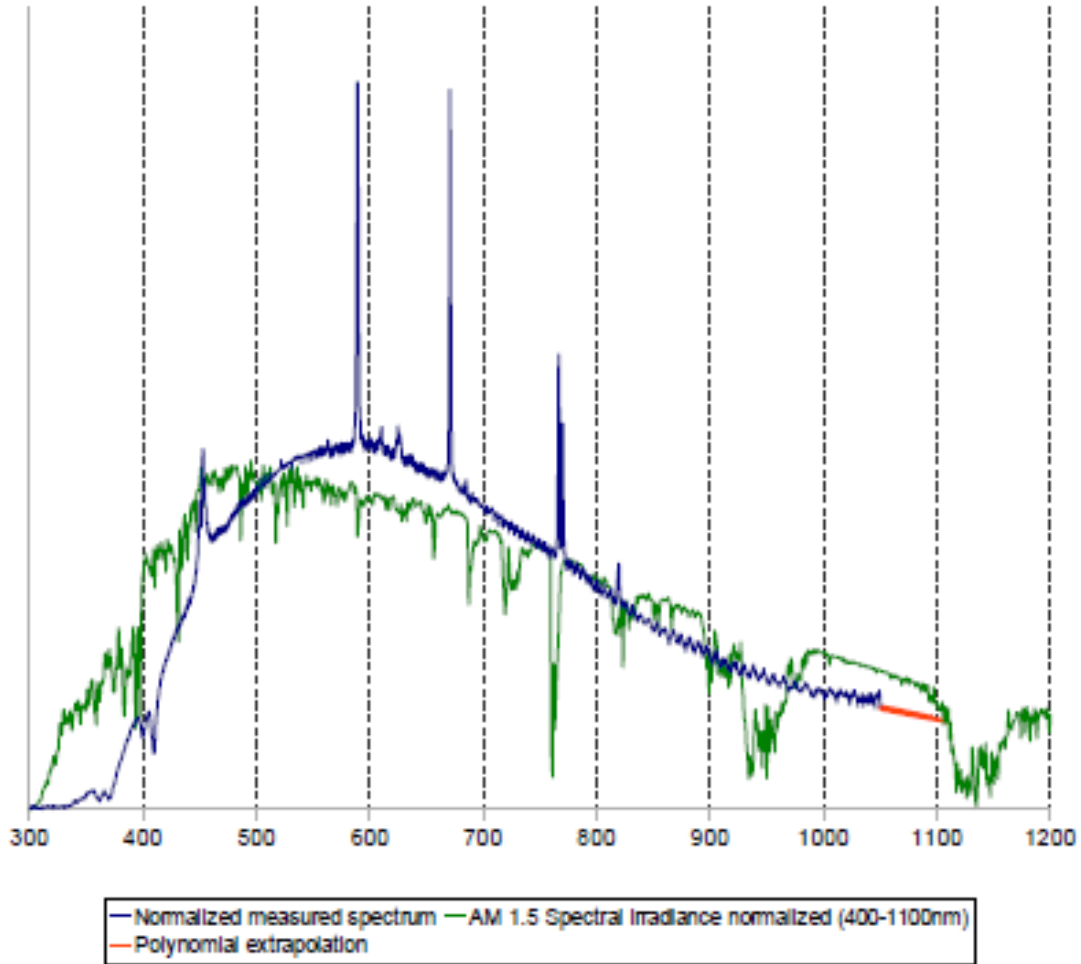**Colors coordinate:     x = 0.360      y = 0.371**

**Reference Cell Isc: 21 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix37-10 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 12.5 | 0.68 | B |
| 500-600 nm | 19.91 | 21.4 | 1.08 | A |
| 600-700 nm | 18.36 | 21.3 | 1.16 | A |
| 700-800 nm | 14.92 | 17.1 | 1.15 | A |
| 800-900 nm | 12.46 | 12.1 | 0.97 | A |
| 900-1100 nm | 15.94 | 15.6 | 0.98 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
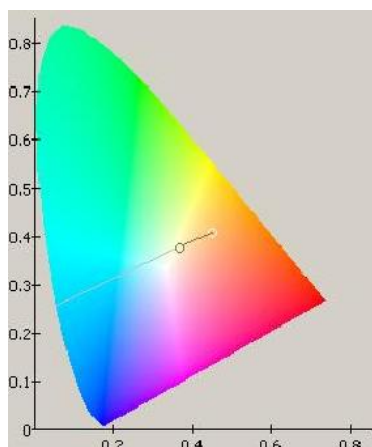


**Color temperature  =  4372 K**

**Color Render Index  =  94.8 [-]**

**Colors coordinate:        x  =  0.367        y  =  0.377**

**Reference Cell Isc:  27 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
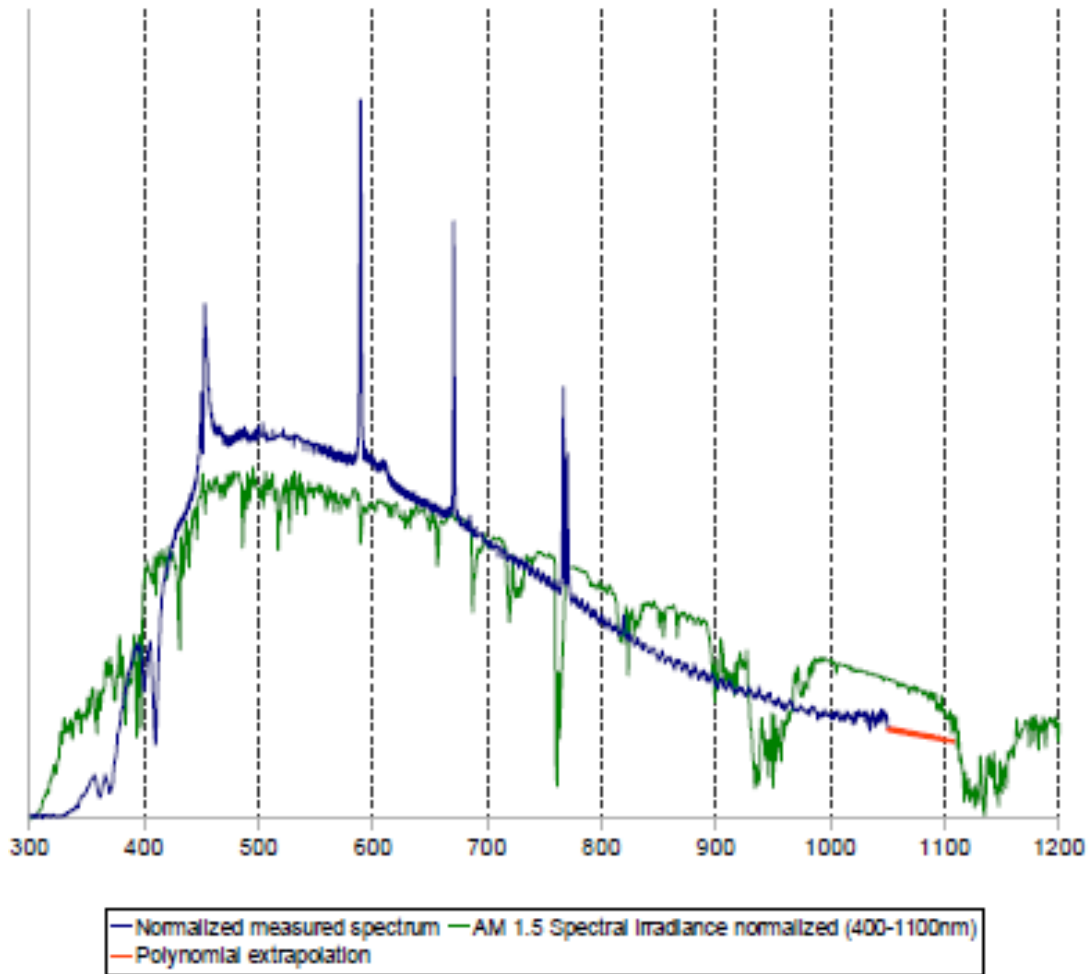
# Lumartix SA ©

# Bulb Mix38 at 800W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 18.0 | 0.98 | A |
| 500-600 nm | 19.91 | 22.7 | 1.14 | A |
| 600-700 nm | 18.36 | 19.6 | 1.07 | A |
| 700-800 nm | 14.92 | 15.3 | 1.03 | A |
| 800-900 nm | 12.46 | 10.6 | 0.85 | A |
| 900-1100 nm | 15.94 | 13.8 | 0.87 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
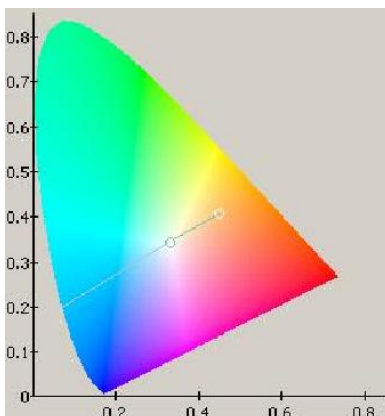


**Color temperature = 5505 K**

**Color Render Index = 96.8 [-]**
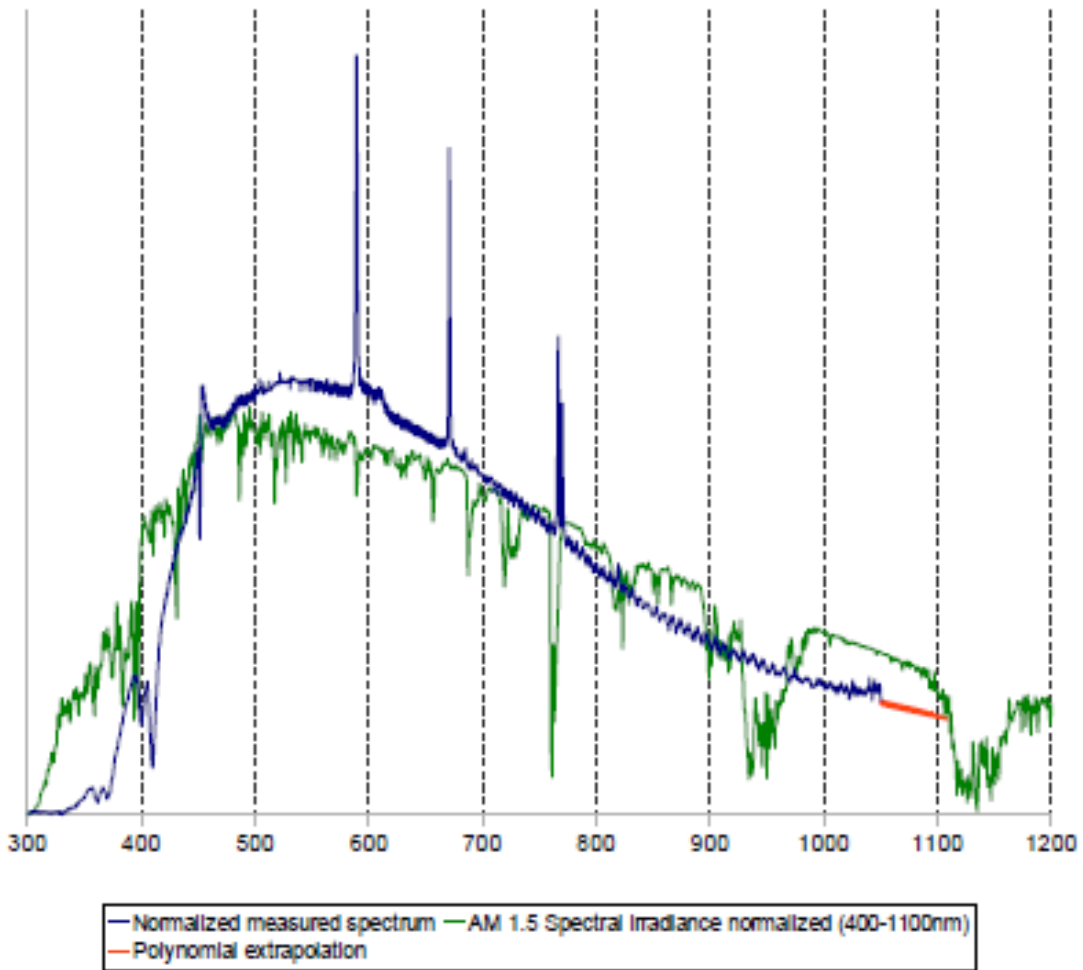
**Colors coordinate:     x = 0.332     y = 0.344**

**Reference Cell Isc: 10.7 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.
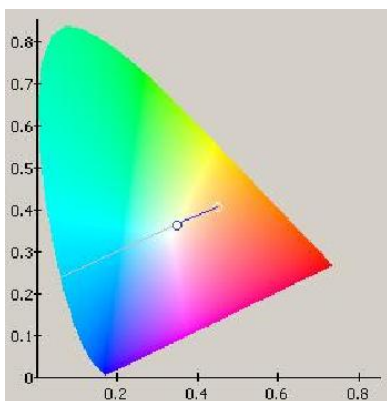
# Lumartix SA ©

# Bulb Mix38 at 1000W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 14.6 | 0.79 | A |
| 500-600 nm | 19.91 | 22.4 | 1.12 | A |
| 600-700 nm | 18.36 | 20.4 | 1.11 | A |
| 700-800 nm | 14.92 | 16.3 | 1.09 | A |
| 800-900 nm | 12.45 | 11.4 | 0.92 | A |
| 900-1100 nm | 15.94 | 14.9 | 0.93 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

**Lighting characteristics**



**Color temperature = 4935 K**

**Color Render Index = 94.8 [-]**

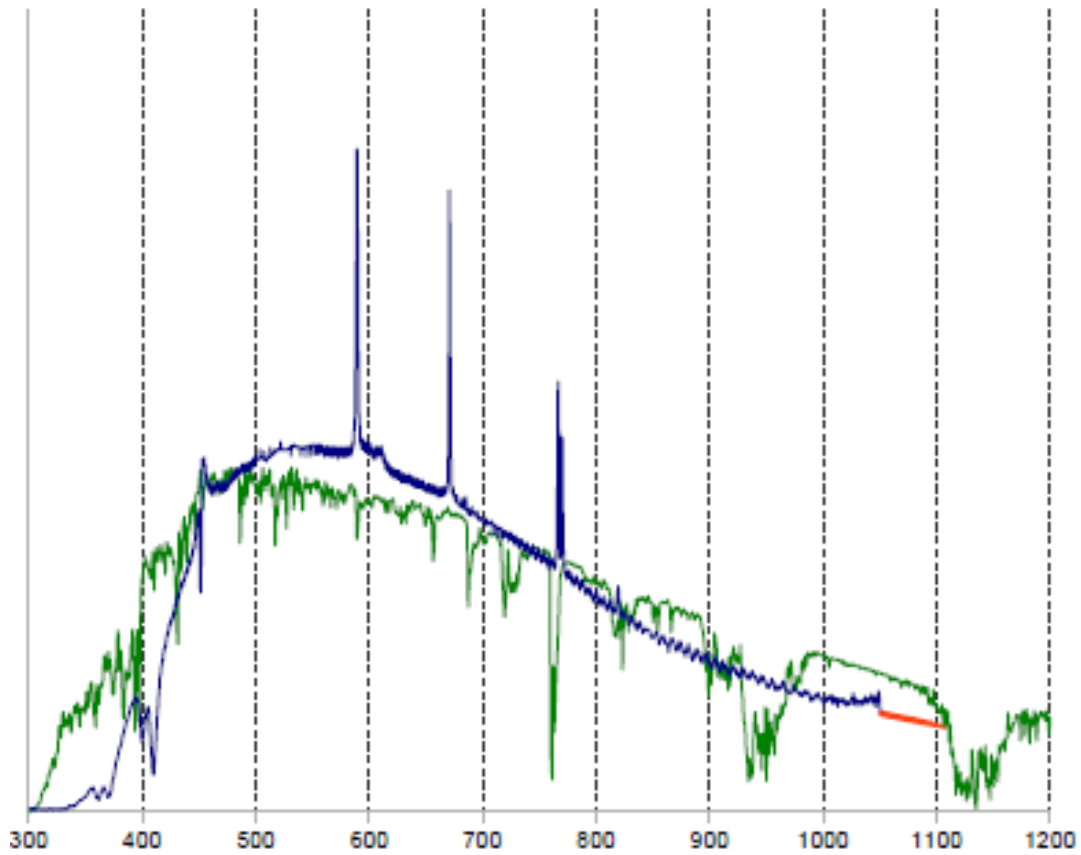**Colors coordinate:       x = 0.348       y = 0.365**

**Reference Cell Isc: 14.8 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix38 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 14.0 | 0.76 | A |
| 500-600 nm | 19.91 | 22.1 | 1.11 | A |
| 600-700 nm | 18.36 | 20.5 | 1.12 | A |
| 700-800 nm | 14.92 | 16.5 | 1.11 | A |
| 800-900 nm | 12.46 | 11.6 | 0.93 | A |
| 900-1100 nm | 15.94 | 15.3 | 0.96 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
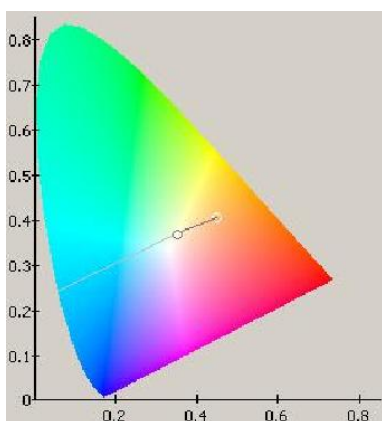


**Color temperature = 4798 K**

**Color Render Index = 94.7 [-]**

**Colors coordinate:    x = 0.352    y = 0.367**
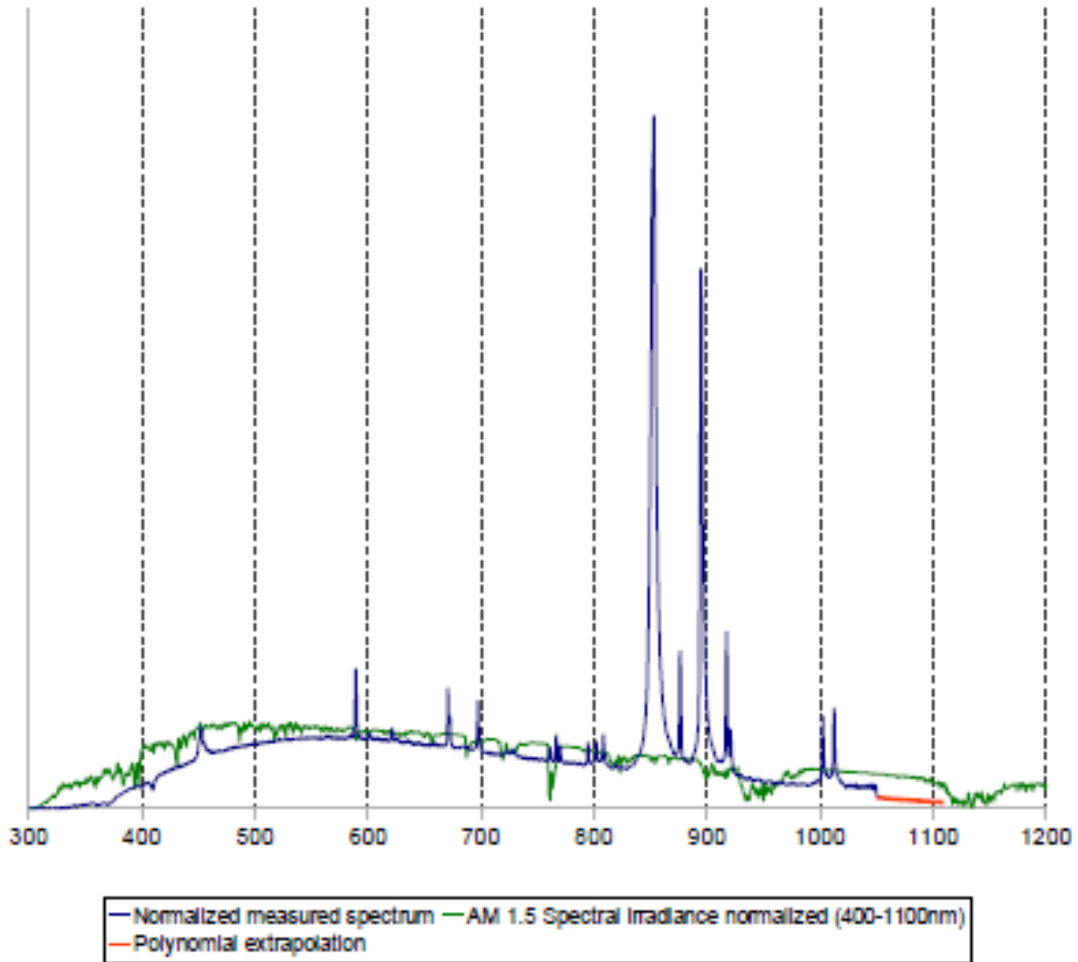
**Reference Cell Isc: 20.7 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix43 at 800W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 10.9 | 0.59 | C |
| 500-600 nm | 19.91 | 16.9 | 0.85 | A |
| 600-700 nm | 18.36 | 16.3 | 0.89 | A |
| 700-800 nm | 14.92 | 13.1 | 0.88 | A |
| 800-900 nm | 12.46 | 23.7 | 1.90 | C |
| 900-1100 nm | 15.94 | 19.1 | 1.20 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
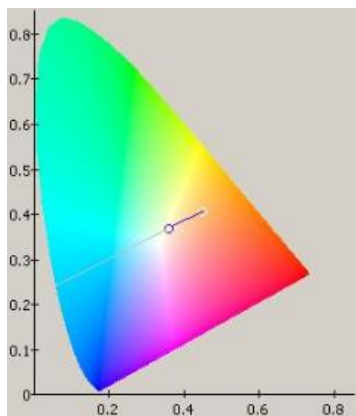


**Color temperature = 4622 K**

**Color Render Index = 95.1 [-]**
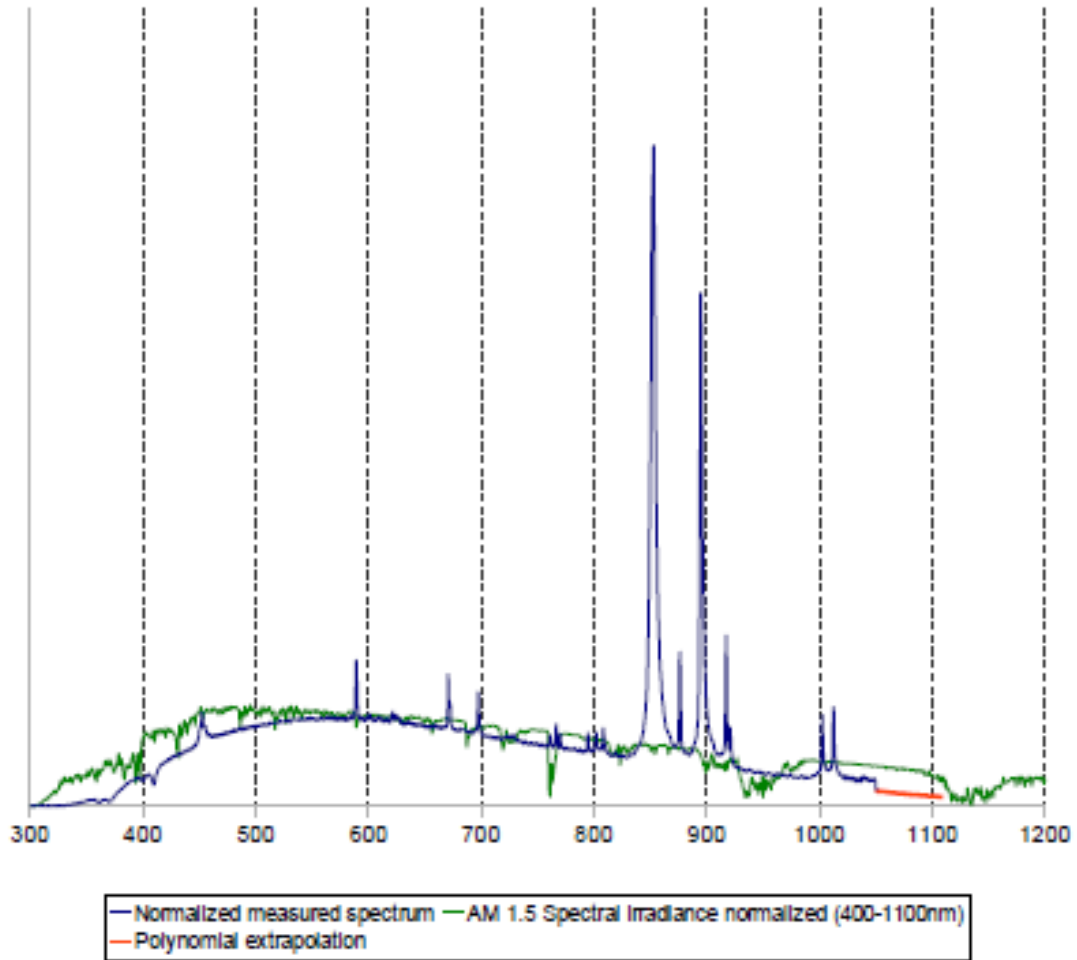
**Colors coordinate:      x = 0.358      y = 0.369**

**Reference Cell Isc: 13.7 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup. Use this value for compare the relative energetic performance between the bulbs.

# Lumartix SA ©

# Bulb Mix43 at 1000W



— Normalized measured spectrum  — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 11.6 | 0.63 | B |
| 500-600 nm | 19.91 | 17.9 | 0.90 | A |
| 600-700 nm | 18.36 | 17.4 | 0.95 | A |
| 700-800 nm | 14.92 | 13.9 | 0.93 | A |
| 800-900 nm | 12.46 | 21.0 | 1.69 | C |
| 900-1100 nm | 15.94 | 18.1 | 1.14 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
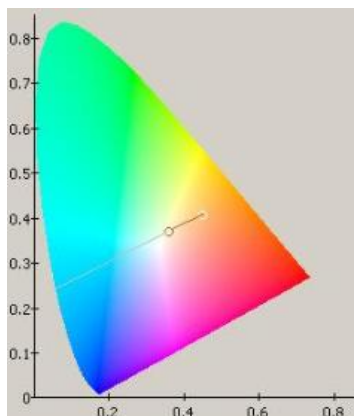


**Color temperature = 4630 K**

**Color Render Index = 95.9 [-]**
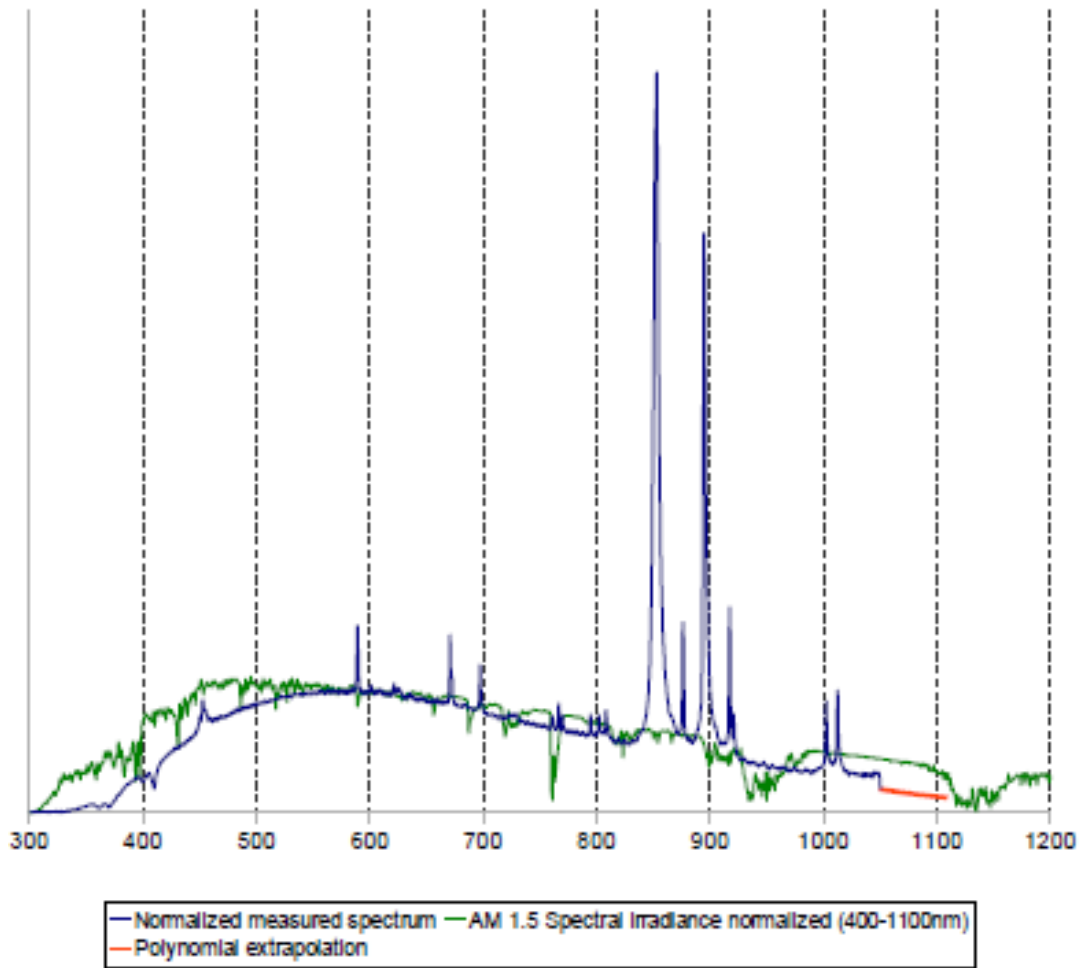
**Colors coordinate:     x = 0.358     y = 0.369**

**Reference Cell Isc: 18.6 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.

# Bulb Mix43 at 1300W



— Normalized measured spectrum — AM 1.5 Spectral Irradiance normalized (400-1100nm)
— Polynomial extrapolation

| Wavelentgh range | AM1.5 ratio | Spectrum ratio | Mismatch | Class |
|---|---|---|---|---|
| 400-500 nm | 18.4 | 11.2 | 0.61 | B |
| 500-600 nm | 19.91 | 18.3 | 0.92 | A |
| 600-700 nm | 18.36 | 18.1 | 0.98 | A |
| 700-800 nm | 14.92 | 14.6 | 0.98 | A |
| 800-900 nm | 12.46 | 19.9 | 1.60 | C |
| 900-1100 nm | 15.94 | 18.0 | 1.13 | A |

| Class A | Class B | Class C |
|---|---|---|
| 0.75 | 0.60 | 0.40 |
| 1.25 | 1.40 | 2.00 |

## Lighting characteristics
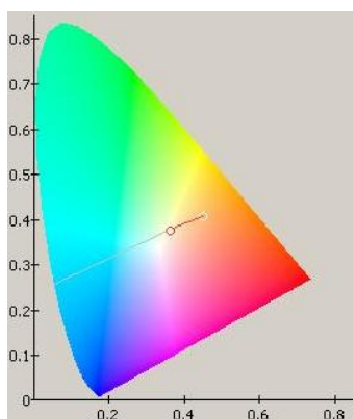


**Color temperature = 4517 K**

**Color Render Index = 95.6 [-]**

**Colors coordinate:    x = 0.362    y = 0.374**

**Reference Cell Isc: 25.4 [mA]**

- This information is indicative, following the manufacturing batch, the parameters may change slightly.
- Reference Cell Isc measurement it's performed at 50cm with a reproducible setup.  Use this value for compare the relative energetic performance between the bulbs.