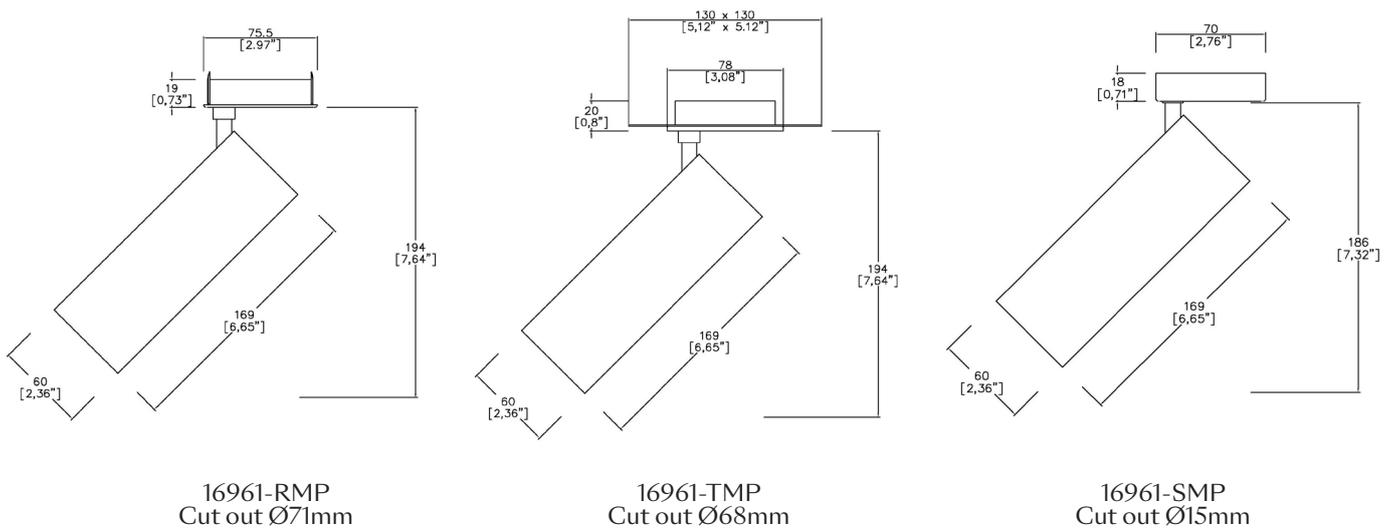


# ProSpex TubeLED Mini High Efficacy



60mm (2.36") overall diameter. LED spotlight with integral driver. Available with monopoint mounting, magnetic track adaptor and 3 circuit track adaptor. Family of matching products also available.



|                         |         |         |         |          |
|-------------------------|---------|---------|---------|----------|
| LED Source              | LED     | LED     | LED     | LED      |
| CCT                     | 3000K   | 3000K   | 3000K   | 3000K    |
| Drive Current^          | 350mA   | 350mA   | 350mA   | 350mA    |
| Power inc Driver        | 14W     | 14W     | 14W     | 14W      |
| Beam Angle              | NF(17°) | MF(24°) | FL(35°) | WFL(55°) |
| Delivered Lumens        | 1387    | 1384    | 1424    | 1365     |
| Delivered Intensisty cd | 11100   | 7089    | 4442    | 1924     |
| Efficacy lm/w           | 99      | 99      | 102     | 98       |
| Forward Volt            | 34V     | 34V     | 34V     | 34V      |
| CRI                     | ≥90 CRI | ≥90 CRI | ≥90 CRI | ≥90 CRI  |



Project Ref: \_\_\_\_\_

Location Ref: \_\_\_\_\_

Fixture Order Code: **16961** - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

Fixture  
16961

TubeLED Mini High Efficacy

CCT

- 27 2700K
- 30 3000K
- 35 3500K
- 40 4000K

Beam

- NF Narrow Flood 17°
- MF Medium Flood 24°
- FL Flood 35°
- WFL Wide Flood 55°

Protocol

- S Non-Dim
- P Phase
- A Analogue (0-10v)
- D DALI
- B Bluetooth\*\*

Colour Insert

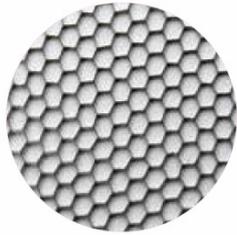
- SN Satin Nickel
- SG Satin Gold
- CP Copper
- BZ Bronze
- (Blank) Not required standard black to be supplied

Finish

- WH White
- BK Black
- RAL Custom RAL Finish\*
- ABR Antique Brass
- ABZ Antique Bronze

Fixing

- RMP Recessed Monopoint
- TMP Trimless Monopoint
- SMP Surface Monopoint



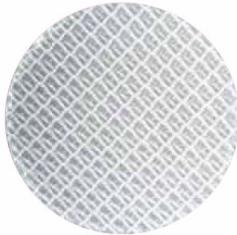
**Honeycomb Louvre**



**Diffusing Lens**



**Frosted Lens**



**Heavy Spread Lens**



**Linear Spread Lens**



**Warm Tone**

Accessories Order Code:

**Louvre/Lens**

- LL45 Honeycomb Louvre
- LLCC Warm Tone Lens
- LLUV UV Lens
- LLDF Diffusing Lens
- LLFR Frosted Lens
- LLLS Linear Spread Lens
- LLHS Heavy Spread Lens

*All photometric data is without accessories*

*Any use of accessories will reduce delivered lumen output and efficacy*

**Technical Details**

\*Custom RAL code must be specified. Custom RAL colours can increase prices and lead times

Dimming. Whilst Lucent can offer the majority of its luminaires with various dimming options, it remains the responsibility of the specifier/installer to check and ensure compatibility of any control equipment used. Additional cabling may be required depending on the dimming protocol specified.

\*\*Bluetooth (wireless) is the communication method. The exact dimming protocol must be confirmed to allow the selection of suitable bluetooth devices, which may need to be mounted remotely from the spotlight.

First Fix Requirement. Please refer to installation instructions for for first fix requirements for the monopoint types.  
IP Rating. Tested from underside of the ceiling

It is the policy of Lucent Lighting to continually review and improve its products and therefore reserve the right to change any details of product or withdraw specifications without prior notice.

Luminaires designed to comply with EN60598 and all other standards.

This specification sheet superseded all previous versions.

All intellectual property rights pertaining to the product described above and to this document are owned by or licensed to Lucent Lighting Ltd.

We reserve the right to take whatever action is necessary to protect those intellectual property rights.

Please notify Lucent Lighting Ltd of any inaccuracies immediately. E&OE

Light efficiency:

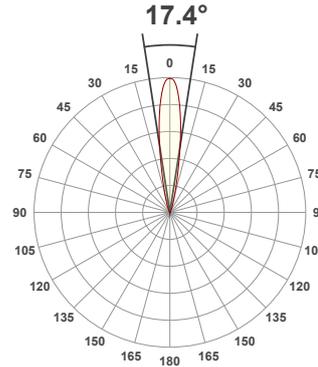
**99 Lumen/Watt**

Light quality:

**CRI: 93.5**

Color temperature:

**3000 K**



Product name:

**TubeLED High Efficacy 3000K  
NF (17°) 350mA**

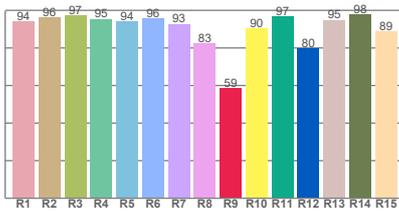
Item number:

**16961-30-NF - 350mA**

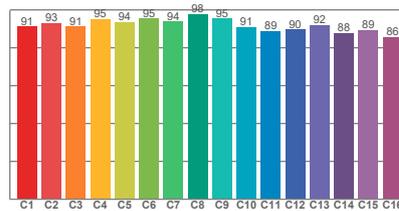
**Delivered information for  
above fixture and LED  
combination.**

**Output: 1387 Lumen Peak intensity: 11100 cd Power consumption: 14.0**

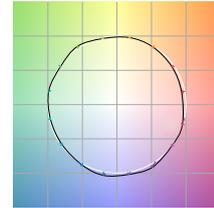
CRI R values



TM30 C Values

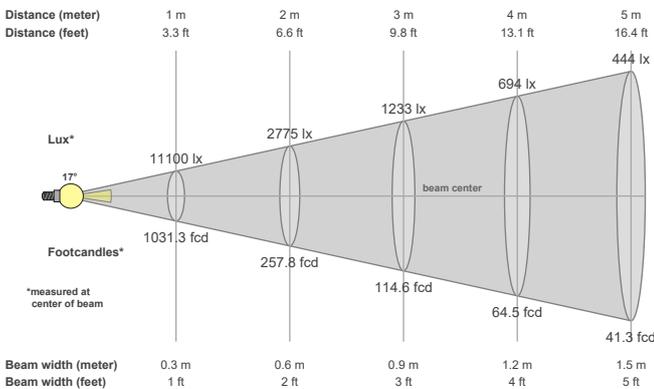


Color vector graphics



| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|------------------|------------------|---------------------------------|
| CCT               | CRI                   | CRI R9        | TM30 Rf        | TM30 Rg     | CQS                 | x                         | y                         | u                | v                | Δuv                             |
| 3000 K            | 93.5                  | 58.6          | 92.1           | 99.9        | 91.7                | 0.437                     | 0.404                     | 0.251            | 0.348            | 0.0008                          |

## Beam details



## Beam angles

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% |
|----------------|-----------------|-------------------|
| 17.4°          | 34°             | 50°               |

## Beam intensities

| Peak intensity | Int. ratio in 120° cone | Int. ratio in 90° cone |
|----------------|-------------------------|------------------------|
| 11100 cd       | 99.6%                   | 98.9%                  |

## Beam intensities from 1-20m

| 1m        | 2m       | 3m       | 4m      | 5m      | 6m      | 7m    | 8m      | 9m      | 10m     | 11m    | 12m    | 13m    | 14m    | 15m    | 16m    | 17m    | 18m    | 19m    | 20m    |
|-----------|----------|----------|---------|---------|---------|-------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3.3ft     | 6.6ft    | 9.8ft    | 13.1ft  | 16.4ft  | 19.7ft  | 23ft  | 26.2ft  | 29.5ft  | 32.8ft  | 36.1ft | 39.4ft | 42.7ft | 45.9ft | 49.2ft | 52.5ft | 55.8ft | 59.1ft | 62.3ft | 65.6ft |
| 11100lx   | 2775lx   | 1233lx   | 694lx   | 444lx   | 308lx   | 227lx | 173lx   | 137lx   | 111lx   | 92lx   | 77lx   | 66lx   | 57lx   | 49lx   | 43lx   | 38lx   | 34lx   | 31lx   | 28lx   |
| 1031.3fcd | 257.8fcd | 114.6fcd | 64.5fcd | 41.3fcd | 28.6fcd | 21fcd | 16.1fcd | 12.7fcd | 10.3fcd | 8.5fcd | 7.2fcd | 6.1fcd | 5.3fcd | 4.6fcd | 4fcd   | 3.6fcd | 3.2fcd | 2.9fcd | 2.6fcd |

The above information is for 3000K colour temperatur.

**Light efficiency:**

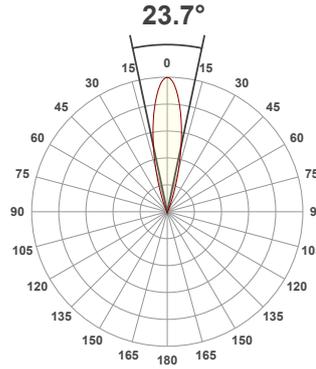
**99 Lumen/Watt**

**Light quality:**

**CRI: 93.6**

**Color temperature:**

**3000 K**



**Product name:**

**TubeLED High Efficacy 3000K MF (24°) 350mA**

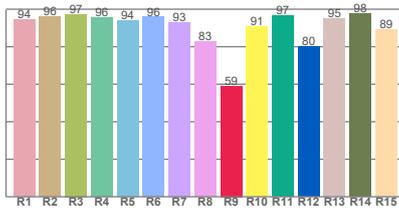
**Item number:**

**16961-30-MF - 350mA**

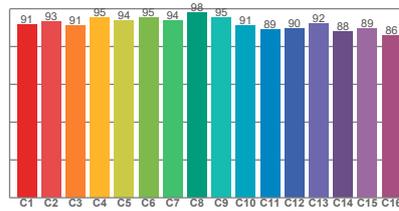
**Delivered information for above fixture and LED combination.**

**Output: 1384 Lumen Peak intensity: 7089 cd Power consumption: 14.0**

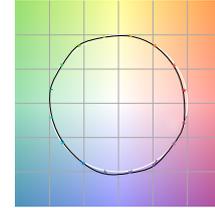
**CRI R values**



**TM30 C Values**

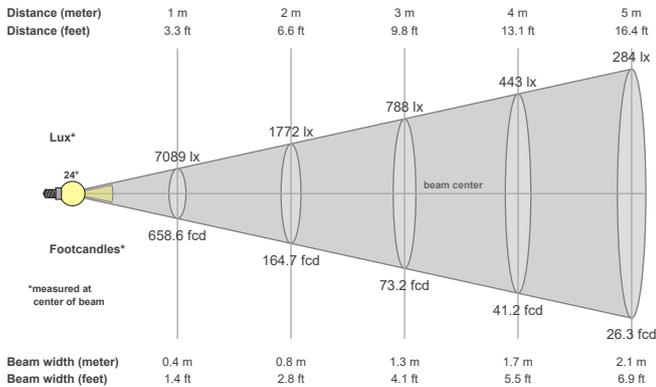


**Color vector graphics**



| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|------------------|------------------|---------------------------------|
| CCT               | CRI                   | CRI R9        | TM30 Rf        | TM30 Rg     | CQS                 | x                         | y                         | u                | v                | Δuv                             |
| 3000 K            | 93.6                  | 59.0          | 92.2           | 100.0       | 91.7                | 0.437                     | 0.404                     | 0.251            | 0.348            | 0.0006                          |

**Beam details**



**Beam angles**

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% |
|----------------|-----------------|-------------------|
| 23.7°          | 41.9°           | 55.5°             |

**Beam intensities**

| Peak intensity | Int. ratio in 120° cone | Int. ratio in 90° cone |
|----------------|-------------------------|------------------------|
| 7089 cd        | 99.7%                   | 98.7%                  |

**Beam intensities from 1-20m**

| 1m       | 2m       | 3m      | 4m      | 5m      | 6m      | 7m      | 8m      | 9m     | 10m    | 11m    | 12m    | 13m    | 14m    | 15m    | 16m    | 17m    | 18m    | 19m    | 20m    |
|----------|----------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3.3ft    | 6.6ft    | 9.8ft   | 13.1ft  | 16.4ft  | 19.7ft  | 23ft    | 26.2ft  | 29.5ft | 32.8ft | 36.1ft | 39.4ft | 42.7ft | 45.9ft | 49.2ft | 52.5ft | 55.8ft | 59.1ft | 62.3ft | 65.6ft |
| 7089lx   | 1772lx   | 788lx   | 443lx   | 284lx   | 197lx   | 145lx   | 111lx   | 88lx   | 71lx   | 59lx   | 49lx   | 42lx   | 36lx   | 32lx   | 28lx   | 25lx   | 22lx   | 20lx   | 18lx   |
| 658.6fcd | 164.7fcd | 73.2fcd | 41.2fcd | 26.3fcd | 18.3fcd | 13.4fcd | 10.3fcd | 8.1fcd | 6.6fcd | 5.4fcd | 4.6fcd | 3.9fcd | 3.4fcd | 2.9fcd | 2.6fcd | 2.3fcd | 2fcd   | 1.8fcd | 1.6fcd |

The above information is for 3000K colour temperatur.

**Light efficiency:**

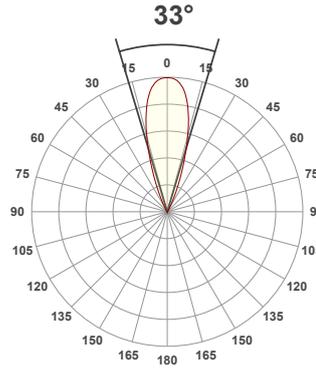
**102 Lumen/Watt**

**Light quality:**

**CRI: 93.5**

**Color temperature:**

**3000 K**



**Product name:**

**TubeLED High Efficacy 3000K FL (35°) 350mA**

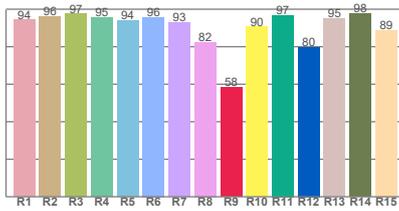
**Item number:**

**16961-30-FL - 350mA**

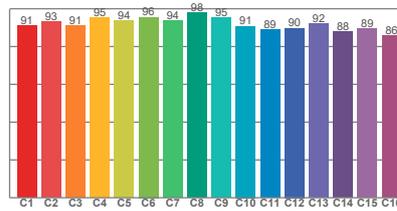
**Delivered information for above fixture and LED combination.**

**Output: 1424 Lumen Peak intensity: 4442 cd Power consumption: 14.0**

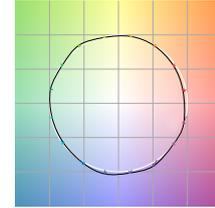
**CRI R values**



**TM30 C Values**

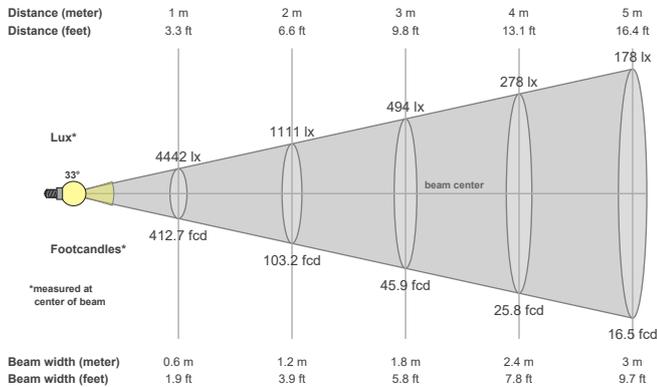


**Color vector graphics**



| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color divition from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|------------------|------------------|--------------------------------|
| CCT               | CRI                   | CRI R9        | TM30 Rf        | TM30 Rg     | CQS                 | x                         | y                         | u                | v                | Δuv                            |
| 3000 K            | 93.5                  | 58.5          | 92.1           | 99.8        | 91.7                | 0.437                     | 0.404                     | 0.251            | 0.348            | 0.0008                         |

**Beam details**



**Beam angels**

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% |
|----------------|-----------------|-------------------|
| 33°            | 51.5°           | 62.9°             |

**Beam intensities**

| Peak intensity | Int. ratio in 120° cone | Int. ratio in 90° cone |
|----------------|-------------------------|------------------------|
| 4442 cd        | 99.5%                   | 98.6%                  |

**Beam intensities from 1-20m**

| 1m       | 2m       | 3m      | 4m      | 5m      | 6m      | 7m     | 8m     | 9m     | 10m    | 11m    | 12m    | 13m    | 14m    | 15m    | 16m    | 17m    | 18m    | 19m    | 20m    |
|----------|----------|---------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3.3ft    | 6.6ft    | 9.8ft   | 13.1ft  | 16.4ft  | 19.7ft  | 23ft   | 26.2ft | 29.5ft | 32.8ft | 36.1ft | 39.4ft | 42.7ft | 45.9ft | 49.2ft | 52.5ft | 55.8ft | 59.1ft | 62.3ft | 65.6ft |
| 4442lx   | 1111lx   | 494lx   | 278lx   | 178lx   | 123lx   | 91lx   | 69lx   | 55lx   | 44lx   | 37lx   | 31lx   | 26lx   | 23lx   | 20lx   | 17lx   | 15lx   | 14lx   | 12lx   | 11lx   |
| 412.7fcd | 103.2fcd | 45.9fcd | 25.8fcd | 16.5fcd | 11.5fcd | 8.4fcd | 6.4fcd | 5.1fcd | 4.1fcd | 3.4fcd | 2.9fcd | 2.4fcd | 2.1fcd | 1.8fcd | 1.6fcd | 1.4fcd | 1.3fcd | 1.1fcd | 1fcd   |

The above information is for 3000K colour temperatur.

**Light efficiency:**

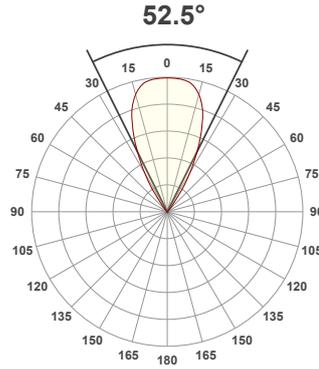
**98 Lumen/Watt**

**Light quality:**

**CRI: 93.5**

**Color temperature:**

**3000 K**



**Product name:**

**TubeLED High Efficacy 3000K WFL (55°) 350mA**

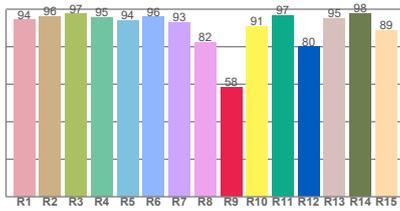
**Item number:**

**16961-30-WFL - 350mA**

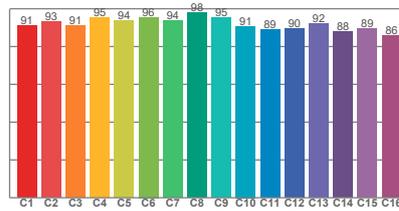
**Delivered information for above fixture and LED combination.**

**Output: 1365 Lumen    Peak intensity: 1924 cd    Power consumption: 14.0**

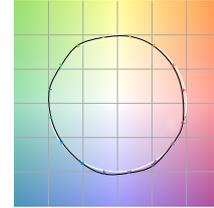
**CRI R values**



**TM30 C Values**

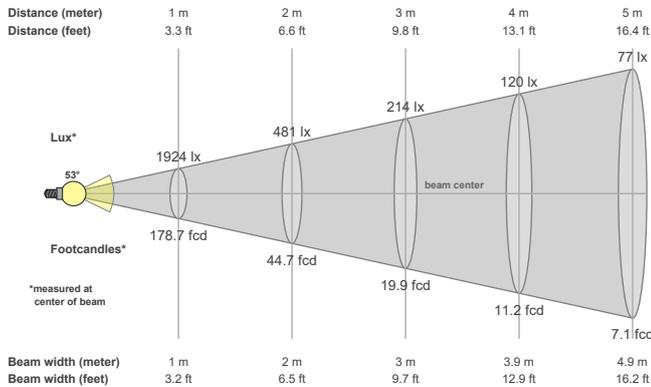


**Color vector graphics**



| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|------------------|------------------|---------------------------------|
| CCT               | CRI                   | CRI R9        | TM30 Rf        | TM30 Rg     | CQS                 | x                         | y                         | u                | v                | Δuv                             |
| 3000 K            | 93.5                  | 58.5          | 92.1           | 99.8        | 91.6                | 0.437                     | 0.404                     | 0.251            | 0.348            | 0.0007                          |

**Beam details**



**Beam angles**

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% |
|----------------|-----------------|-------------------|
| 52.5°          | 72.6°           | 85.6°             |

**Beam intensities**

| Peak intensity | Int. ratio in 120° cone | Int. ratio in 90° cone |
|----------------|-------------------------|------------------------|
| 1924 cd        | 99.6%                   | 98.8%                  |

**Beam intensities from 1-20m**

| 1m       | 2m      | 3m      | 4m      | 5m     | 6m     | 7m     | 8m     | 9m     | 10m    | 11m    | 12m    | 13m    | 14m    | 15m    | 16m    | 17m    | 18m    | 19m    | 20m    |
|----------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3.3ft    | 6.6ft   | 9.8ft   | 13.1ft  | 16.4ft | 19.7ft | 23ft   | 26.2ft | 29.5ft | 32.8ft | 36.1ft | 39.4ft | 42.7ft | 45.9ft | 49.2ft | 52.5ft | 55.8ft | 59.1ft | 62.3ft | 65.6ft |
| 1924lx   | 481lx   | 214lx   | 120lx   | 77lx   | 53lx   | 39lx   | 30lx   | 24lx   | 19lx   | 16lx   | 13lx   | 11lx   | 10lx   | 9lx    | 8lx    | 7lx    | 6lx    | 5lx    | 5lx    |
| 178.7fcd | 44.7fcd | 19.9fcd | 11.2fcd | 7.1fcd | 5fcd   | 3.6fcd | 2.8fcd | 2.2fcd | 1.8fcd | 1.5fcd | 1.2fcd | 1.1fcd | 0.9fcd | 0.8fcd | 0.7fcd | 0.6fcd | 0.6fcd | 0.5fcd | 0.4fcd |

The above information is for 3000K colour temperatur.