



# LM-79 Test Report

## **Relevant Standards**

IES LM-79-2008

IES TM-30-2015

CIE 13.3-1995

IESNA TM-15-11

CIE 117:1995

## **Product SKU**

VALENT® WARM DIM Wet Location 24V LED Tape Light

DI-24V-VL4-WD3018-W

## **Test Conditions**

Test Temperature: 26.5 °C

Luminaire Sample Length: 1000 mm.

Power Supply: Agilent E3634A DC Power Supply

Voltage: 24.0 VDC

Current: 0.732 A

Power Consumption: 17.6 W

## **Test Date**

6/22/2026

The results contained in this report pertain only to the tested sample.

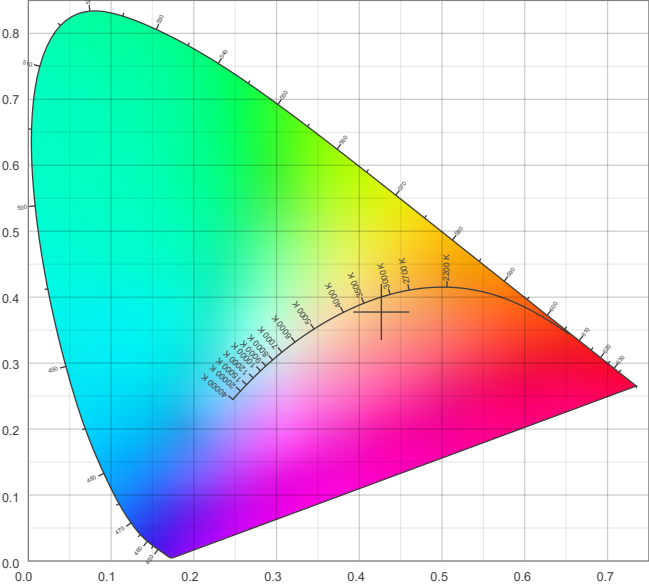
Photometric & Colorimetry data measured in accordance to IES LM-79-2008 standards, at the Elemental LED, Inc. Innovation Lab.

Color Details

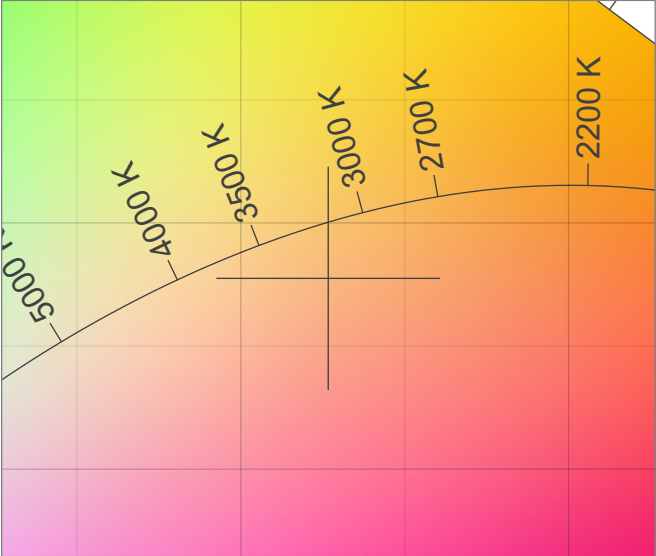
|                                         |                  |       |
|-----------------------------------------|------------------|-------|
| Correlated Color Temperature            | CCT =            | 2955  |
| CIE Test Color Method General Index     | CRI =            | 94.4  |
| CIE Test Color Method Sample Nine Score | R9 =             | 90.9  |
| IES TM-30-15 Fidelity Index             | R <sub>f</sub> = | 93.9  |
| IES TM-30-15 Gamut Index                | R <sub>g</sub> = | 105.3 |
| Luminous Flux                           | Lm =             | 1386  |

|                            |           |               |
|----------------------------|-----------|---------------|
| Color coordinates CIE 1931 | (x;y) =   | (0.427;0.377) |
| Color coordinate CIEs 1960 | (u;v) =   | (0.256;0.339) |
| Color coordinate CIEs 1976 | (u';v') = | (0.256;0.509) |
| Color deviation from BBL   | Duv =     | -0.0096       |
| Color Quality Scale (CQS)  | CQS =     | 93.6          |

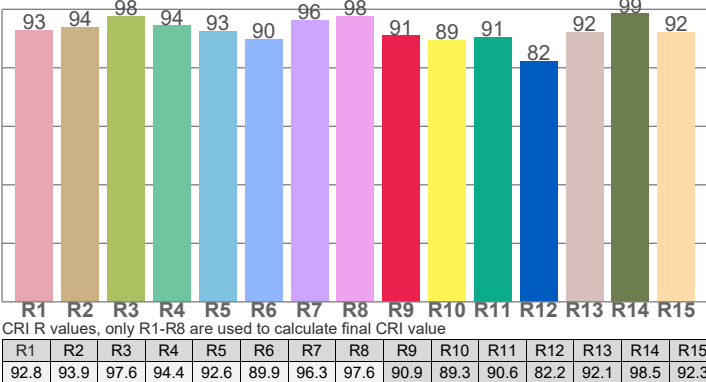
CIE 1931



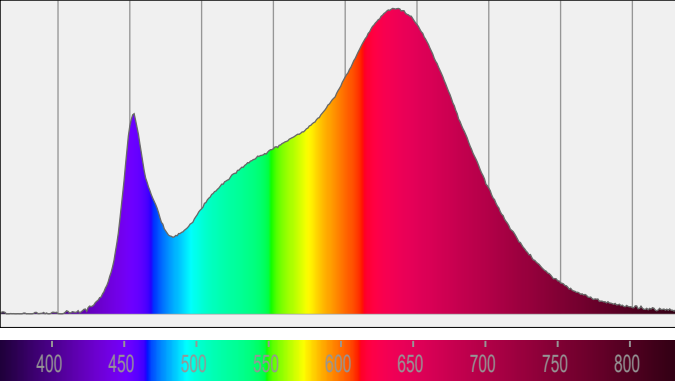
CIE 1931 – zoomed on Planckian locus



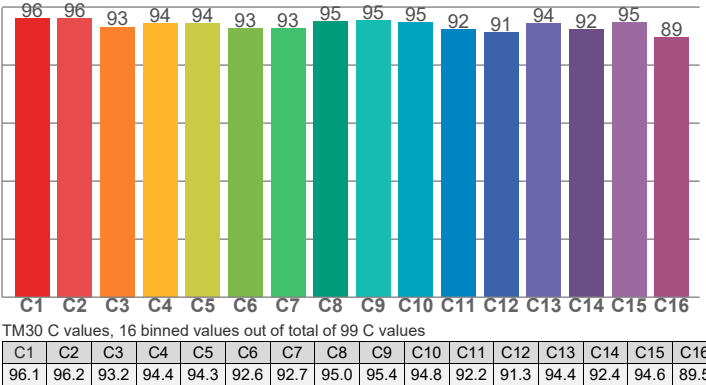
Color Rendering Index per Reference Color (CIE 1995)



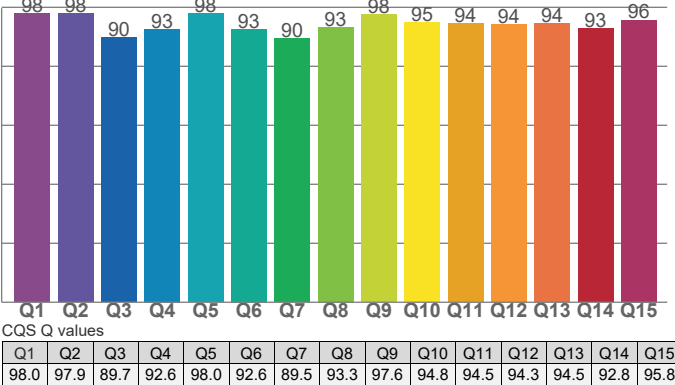
Spectral Power Distribution (SPD) / W/nm – 0-100%



TM30-18 Rf-Values per Hue Bin



Color Quality Scale by Reference Color



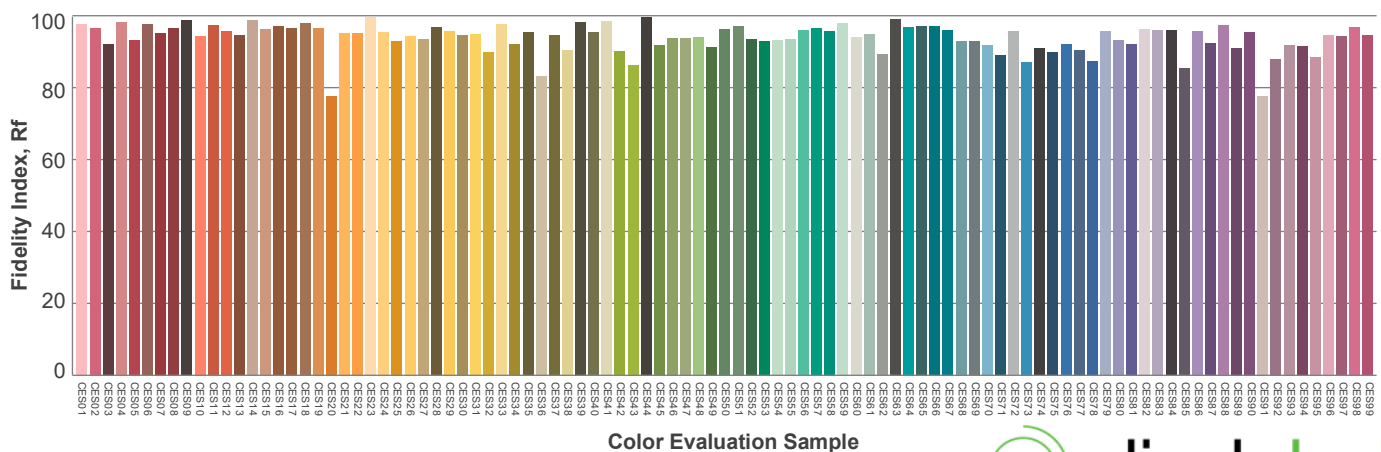
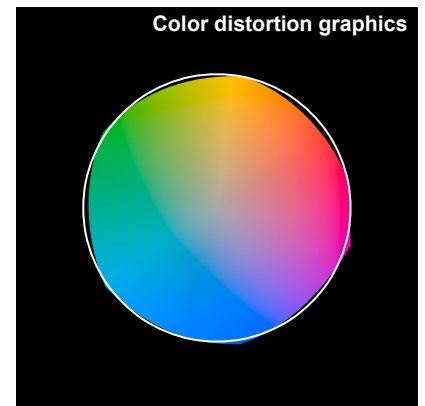
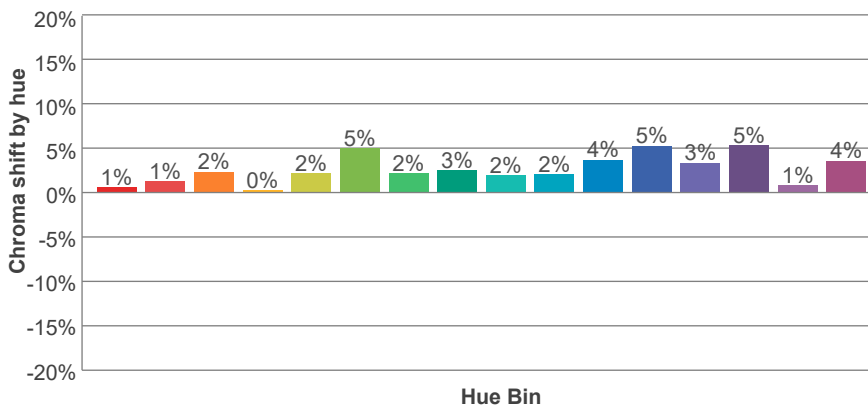
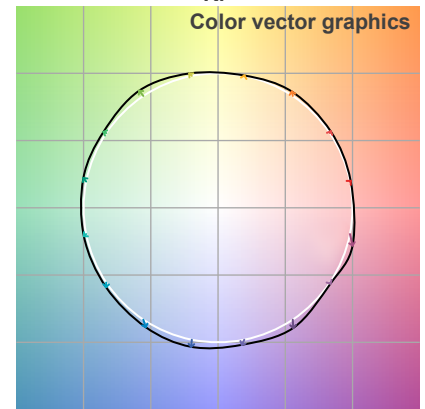
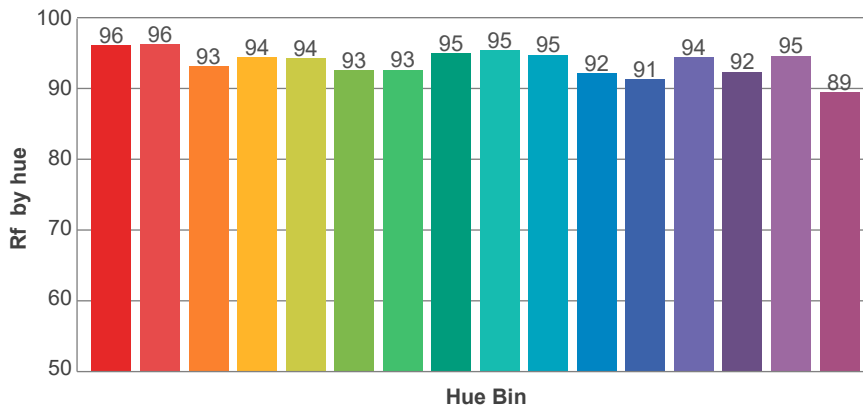
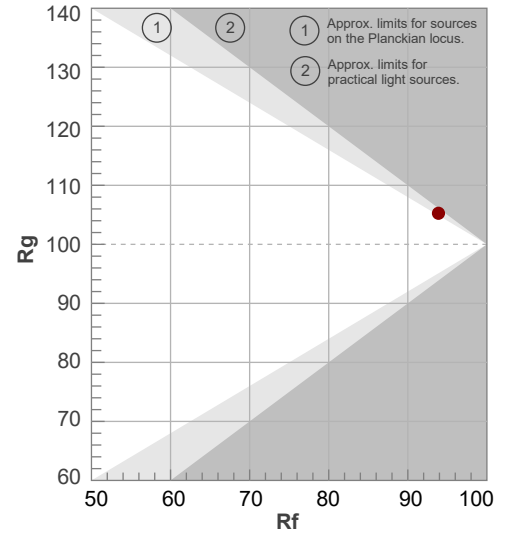
**Rf 93.9**

Fidelity index Rf

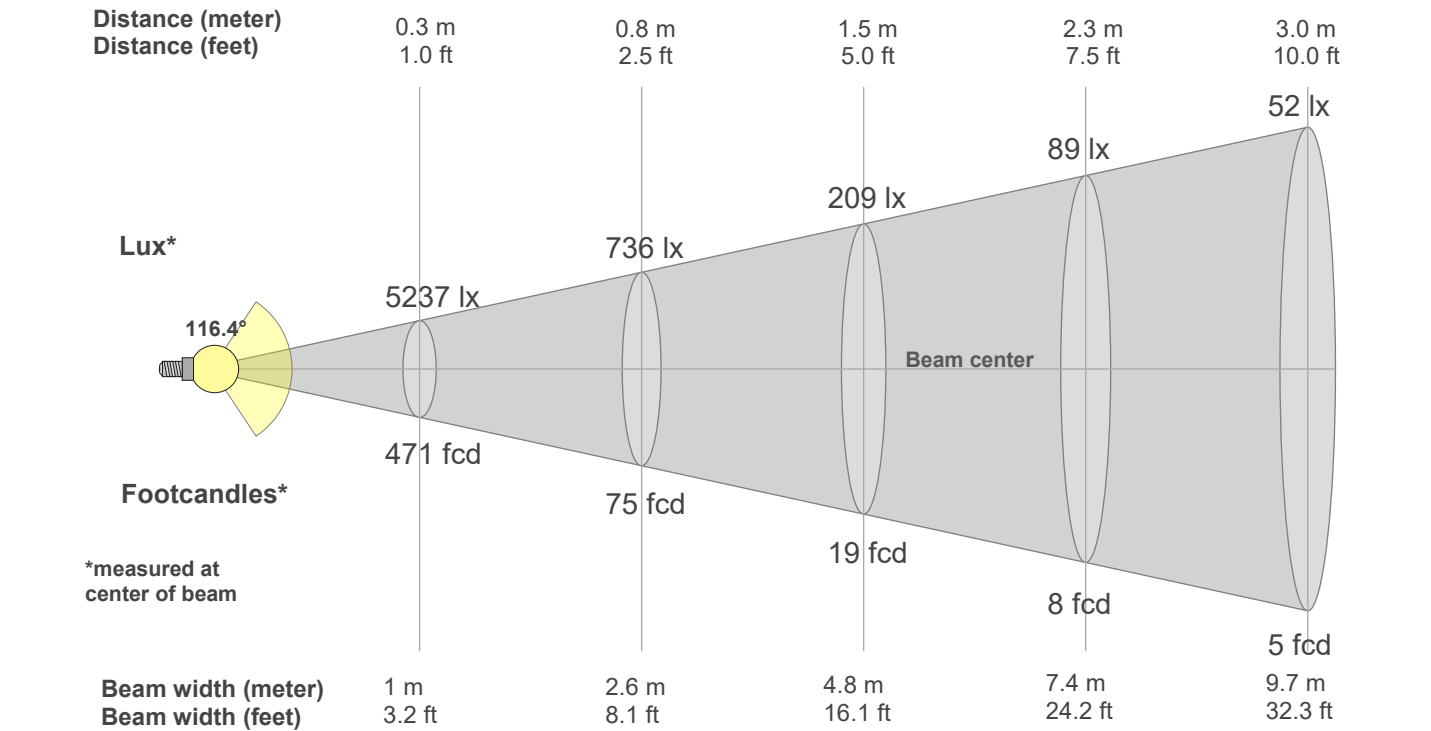
**Rg 105.3**

Gamut index Rg

| Hue Bin | R <sub>f</sub> | Shifts (%) |     |
|---------|----------------|------------|-----|
|         |                | Chroma     | Hue |
| 1       | 96             | 1%         | 0%  |
| 2       | 96             | 1%         | 1%  |
| 3       | 93             | 2%         | 2%  |
| 4       | 94             | 0%         | 0%  |
| 5       | 94             | 2%         | 1%  |
| 6       | 93             | 5%         | 0%  |
| 7       | 93             | 2%         | 0%  |
| 8       | 95             | 3%         | -2% |
| 9       | 95             | 2%         | 1%  |
| 10      | 95             | 2%         | 3%  |
| 11      | 92             | 4%         | 5%  |
| 12      | 91             | 5%         | 1%  |
| 13      | 94             | 3%         | -3% |
| 14      | 92             | 5%         | -3% |
| 15      | 95             | 1%         | 0%  |
| 16      | 89             | 4%         | -8% |



Beam Details



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 |
| 471lx   | 118lx   | 52lx   | 29lx   | 19lx   | 13lx   | 10lx   | 7lx    | 6lx    | 5lx    | 4lx    | 3lx    | 3lx    | 2lx    | 2lx    | 2lx    | 2lx    | 1lx    | 1lx    | 1lx    |
| 43.8fcd | 10.9fcd | 4.9fcd | 2.7fcd | 1.8fcd | 1.2fcd | 0.9fcd | 0.7fcd | 0.5fcd | 0.4fcd | 0.4fcd | 0.3fcd | 0.3fcd | 0.2fcd | 0.2fcd | 0.2fcd | 0.2fcd | 0.1fcd | 0.1fcd | 0.1fcd |

Intensities in 0° c-plane

| 0°   | 5°   | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 471  | 471  | 465 | 458 | 445 | 425 | 393 | 369 | 344 | 323 | 303 | 261 | 222 | 182 | 146 | 110 | 83  | 30  | 13  | 2   |
| 100% | 100% | 99% | 97% | 95% | 90% | 83% | 78% | 73% | 68% | 64% | 55% | 47% | 39% | 31% | 23% | 18% | 6%  | 3%  | 0%  |

Intensities in 90° c-plane

| 0°   | 5°  | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 471  | 467 | 460 | 450 | 436 | 417 | 396 | 370 | 340 | 307 | 269 | 228 | 184 | 139 | 95  | 57  | 29  | 12  | 3   | 2   |
| 100% | 99% | 98% | 95% | 92% | 89% | 84% | 79% | 72% | 65% | 57% | 48% | 39% | 29% | 20% | 12% | 6%  | 2%  | 1%  | 1%  |

Intensities in 180° c-plane

| 0°   | 5°   | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 471  | 471  | 465 | 458 | 445 | 425 | 393 | 369 | 344 | 323 | 303 | 261 | 222 | 182 | 146 | 110 | 83  | 30  | 13  | 2   |
| 100% | 100% | 99% | 97% | 95% | 90% | 83% | 78% | 73% | 68% | 64% | 55% | 47% | 39% | 31% | 23% | 18% | 6%  | 3%  | 0%  |

Intensities in 270° c-plane

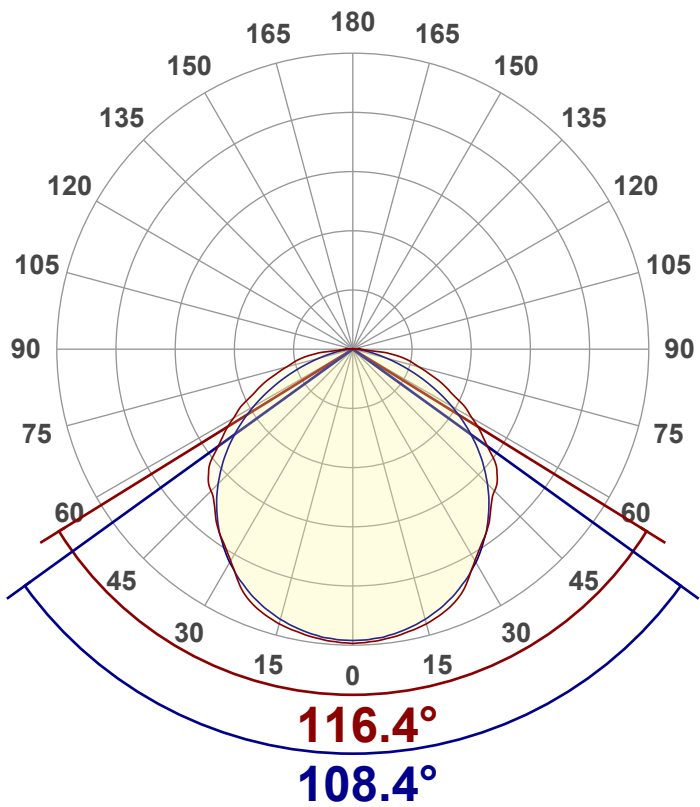
| 0°   | 5°  | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 471  | 467 | 460 | 450 | 436 | 417 | 396 | 370 | 340 | 307 | 269 | 228 | 184 | 139 | 95  | 57  | 29  | 12  | 3   | 2   |
| 100% | 99% | 98% | 95% | 92% | 89% | 84% | 79% | 72% | 65% | 57% | 48% | 39% | 29% | 20% | 12% | 6%  | 2%  | 1%  | 1%  |

| Beam angle 50° | Field angle 10° | Cutoff angle 2,5° | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 112.8°         | 164.1°          | 181°              | 76.9%                        | 52.2%                       |



Luminous Intensity Diagram

Unit: 0-100% of peak intensity



Main Values

|                      |                |
|----------------------|----------------|
| Output (Total Lumen) | 1386 lm        |
| Lumen Up% / Down%    | 1.97% / 98.03% |
| Peak Intensity       | 473 cd         |
| Beam Angle (50%)     | 112.8°         |
| Beam Angle (90%)     | 108.4°         |
| Beam Angle (10%)     | 116.4°         |

Cut-off Angle

|              |      |
|--------------|------|
| Average 2,5% | 181° |
|--------------|------|

Field Angle

|             |        |
|-------------|--------|
| Average 10% | 164.1° |
|-------------|--------|

Intensity Ratio

|              |       |
|--------------|-------|
| In 120° cone | 76.9% |
| In 90° cone  | 52.2% |

C000-C180 C090-C270

Zonal Lumen Summary

| 0°-10°   | 10°-20°   | 20°-30°   | 30°-40°   | 40°-50°   | 50°-60°   | 60°-70°   | 70°-80°   | 80°-90°   |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 44.6 lm  | 128 lm    | 195 lm    | 234 lm    | 244 lm    | 221 lm    | 163 lm    | 94.4 lm   | 35.4 lm   |
| 90°-100° | 100°-110° | 110°-120° | 120°-130° | 130°-140° | 140°-150° | 150°-160° | 160°-170° | 170°-180° |
| 11.0 lm  | 3.43 lm   | 3.22 lm   | 2.91 lm   | 2.38 lm   | 1.84 lm   | 1.35 lm   | 0.828 lm  | 0.279 lm  |

LCS Table

| BUG rating:       | B1 U0 G1 |          |
|-------------------|----------|----------|
| Forward light     | Lumens   | Lumens % |
| Low(0-30):        | 187.7    | 13.5%    |
| Medium(30-60):    | 356.2    | 25.7%    |
| High(60-80):      | 131.1    | 9.5%     |
| Very high(80-90): | 18       | 1.3%     |
| Back light        |          |          |
| Low(0-30):        | 187.7    | 13.5%    |
| Medium(30-60):    | 356.2    | 25.7%    |
| High(60-80):      | 131.1    | 9.5%     |
| Very high(80-90): | 18       | 1.3%     |
| Uplight           |          |          |
| Low(90-100):      | 0        | 0%       |
| High(100-180):    | 0        | 0%       |
|                   |          |          |

LCS Graph

