

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: RSA

Report Number: P21910-R2

Luminaire Tested: **CSVW30MED11**

Issue Date: 3/3/2020

**Test Information**

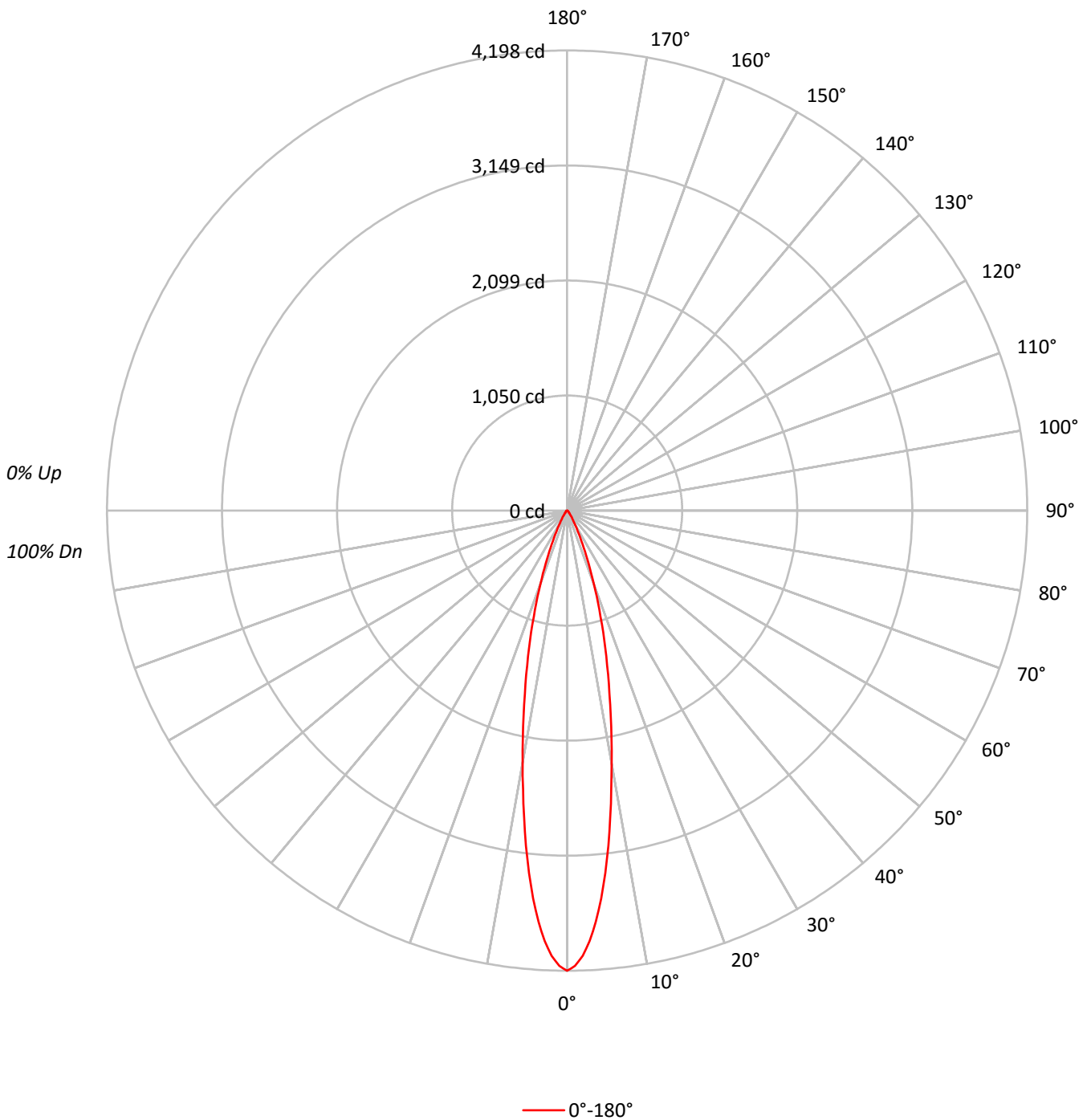
Test Method: LM-79-08  
Report Number: P21910-R2  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: RSA  
Catalog Number: CSVRW30MED11  
Description: \*\*\*THIS IS A REVISION OF P21910 TO UPDATE CATALOG  
NUMBER\*\*\*COMBOLIGHT ONE 18W LED HEAD, 7 LED UNIT FLOOD  
DISTRIBUTION, 3000K  
.---ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS  
CREATED USING A 500 WATT, NIST TRACEABLE, AND  
OMNI-DIRECTIONAL LAB LUMEN STANDARD IN THE GONIOPHOTOMETER  
WITH TEST DISTANCE OF 28.75 FEET---  
Light Source: (7) SMT LEDS  
XPG  
Ballast/Driver: (1) MAGTECH ELECTRONIC DRIVER  
LPT-1020-24-C0700

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 902.7 lumens  
Efficiency: N/A  
Efficacy: 51.6 lumens/watt  
Spacing Criteria (0/90/45): 0.37 / 0.37 / 0.41  
Luminous Opening: Circular (Dia: 0.35' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.5  
Input Voltage (V): NR  
Input Current (Ain): 0.1471  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |     | 30  |     |     |     | 10  | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 115 | 113 | 111 | 109 | 112 | 110 | 109 | 107 | 106 | 105 | 104 | 103 | 102 | 101 | 99  | 99  | 98  | 96  |
| 2   | 111 | 107 | 104 | 101 | 109 | 105 | 103 | 100 | 102 | 100 | 98  | 99  | 98  | 96  | 97  | 95  | 94  | 92  |
| 3   | 107 | 102 | 98  | 95  | 105 | 101 | 97  | 95  | 98  | 95  | 93  | 96  | 94  | 92  | 94  | 92  | 90  | 89  |
| 4   | 103 | 98  | 94  | 91  | 102 | 97  | 93  | 90  | 95  | 92  | 89  | 93  | 90  | 88  | 91  | 89  | 87  | 86  |
| 5   | 100 | 94  | 90  | 86  | 99  | 93  | 89  | 86  | 91  | 88  | 85  | 90  | 87  | 85  | 89  | 86  | 84  | 83  |
| 6   | 97  | 91  | 86  | 83  | 96  | 90  | 86  | 83  | 88  | 85  | 82  | 87  | 84  | 82  | 86  | 83  | 81  | 80  |
| 7   | 94  | 87  | 83  | 80  | 93  | 87  | 83  | 80  | 86  | 82  | 79  | 85  | 81  | 79  | 84  | 81  | 79  | 78  |
| 8   | 91  | 84  | 80  | 77  | 90  | 84  | 80  | 77  | 83  | 79  | 77  | 82  | 79  | 76  | 81  | 78  | 76  | 75  |
| 9   | 89  | 82  | 78  | 75  | 88  | 81  | 77  | 75  | 81  | 77  | 74  | 80  | 77  | 74  | 79  | 76  | 74  | 73  |
| 10  | 86  | 79  | 75  | 72  | 86  | 79  | 75  | 72  | 78  | 75  | 72  | 78  | 74  | 72  | 77  | 74  | 72  | 71  |

**AVERAGE LUMINANCE (cd/sqm):**

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 458677 |
| 5°  | 389796 |
| 10° | 259392 |
| 15° | 155873 |
| 20° | 82437  |
| 25° | 37011  |
| 30° | 16527  |
| 35° | 8136   |
| 40° | 4564   |
| 45° | 2781   |
| 50° | 2040   |
| 55° | 1524   |
| 60° | 1311   |
| 65° | 1034   |
| 70° | 639    |
| 75° | 422    |
| 80° | 0      |
| 85° | 0      |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 298.6  | 33.1      |
| 10°-20°   | 380.8  | 42.2      |
| 20°-30°   | 154.3  | 17.1      |
| 30°-40°   | 41.8   | 4.6       |
| 40°-50°   | 14.9   | 1.6       |
| 50°-60°   | 7.6    | 0.8       |
| 60°-70°   | 3.9    | 0.4       |
| 70°-80°   | 0.8    | 0.1       |
| 80°-90°   | 0.0    | 0.0       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 833.8  | 92.4      |
| 0°-40°    | 875.5  | 97.0      |
| 0°-60°    | 898.0  | 99.5      |
| 0°-90°    | 902.7  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 902.7  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 4198 |      |
| 5°  | 3554 | 299  |
| 15° | 1378 | 381  |
| 25° | 307  | 154  |
| 35° | 61   | 42   |
| 45° | 18   | 15   |
| 55° | 8    | 8    |
| 65° | 4    | 4    |
| 75° | 1    | 1    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |      |
|-------|------|
| 0°    | 4198 |
| 1°    | 4155 |
| 2°    | 4064 |
| 3°    | 3931 |
| 4°    | 3759 |
| 5°    | 3554 |
| 6°    | 3326 |
| 7°    | 3083 |
| 8°    | 2827 |
| 9°    | 2576 |
| 10°   | 2338 |
| 11°   | 2115 |
| 12°   | 1908 |
| 13°   | 1716 |
| 14°   | 1541 |
| 15°   | 1378 |
| 17.5° | 1013 |
| 20°   | 709  |
| 22.5° | 473  |
| 25°   | 307  |
| 27.5° | 200  |
| 30°   | 131  |
| 32.5° | 88   |
| 35°   | 61   |
| 37.5° | 43   |
| 40°   | 32   |
| 42.5° | 24   |
| 45°   | 18   |
| 47.5° | 14   |
| 50°   | 12   |
| 52.5° | 10   |
| 55°   | 8    |
| 57.5° | 7    |
| 60°   | 6    |
| 62.5° | 5    |
| 65°   | 4    |
| 67.5° | 3    |
| 70°   | 2    |
| 72.5° | 1    |
| 75°   | 1    |
| 77.5° | 0    |
| 80°   | 0    |
| 82.5° | 0    |
| 85°   | 0    |
| 87.5° | 0    |



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CANDELA DISTRIBUTION (continued):

90° |  $\frac{0^\circ}{0}$

(END OF REPORT)