

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: P22179-R2

Luminaire Tested: **CSHRN40MED11**

Issue Date: 3/3/2020

**Test Information**

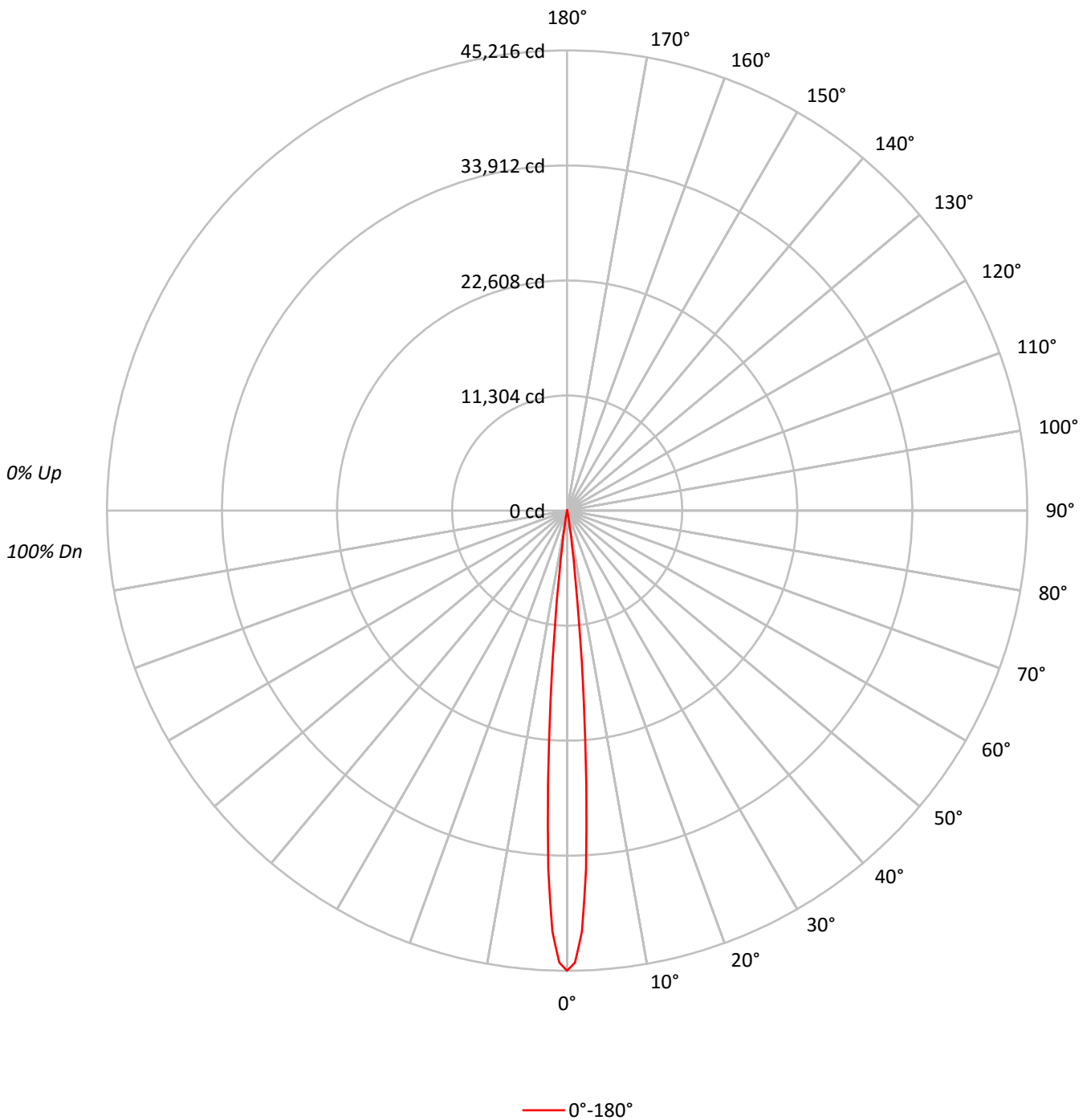
Test Method: LM-79-08  
Report Number: P22179-R2  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: RSA  
Catalog Number: CSHRN40MED11  
Description: \*\*\*THIS IS A REVISION OF P22179 TO UPDATE CATALOG  
NUMBER\*\*\*COMBOLIGHT ONE 18W LED HEAD, 7 LED UNIT SPOT  
DISTRIBUTION,4000K  
Light Source: (7) 4000K SMT LEDS  
XPG  
Ballast/Driver: (1) MAGTECH HIGH PERFECTION ELECTRONIC DRIVER  
LP1020-24-C700

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1240.9 lumens  
Efficiency: N/A  
Efficacy: 72.6 lumens/watt  
Spacing Criteria (0/90/45): 0.16 / 0.16 / 0.15  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (Ain): 0.14335  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: HR  
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							
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10				
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	111	106	106	106	106	102	102	102	102	100	100	100	100
1	116	115	113	112	114	113	111	110	109	108	107	107	105	104	104	104	102	101	101	101	99	99	99	99
2	114	111	109	108	112	110	108	106	107	105	104	104	104	103	102	102	102	101	100	100	99	99	99	99
3	112	109	107	105	111	108	106	104	105	104	102	102	103	102	101	101	101	100	99	99	98	98	98	98
4	111	107	104	103	109	106	104	102	104	102	101	101	103	101	100	100	101	100	99	99	98	98	98	98
5	109	105	103	101	108	105	102	101	103	101	100	100	102	100	99	99	101	99	98	98	97	97	97	97
6	108	104	102	100	107	104	101	100	102	100	99	99	101	100	98	98	100	99	98	98	97	97	97	97
7	107	103	101	99	106	103	100	99	102	100	98	98	101	99	98	98	100	99	98	98	97	97	97	97
8	106	102	100	98	105	102	100	98	101	99	98	98	100	99	98	98	100	98	97	97	96	96	96	96
9	105	102	99	98	105	101	99	98	101	99	98	98	100	98	97	97	100	98	97	97	96	96	96	96
10	105	101	99	97	104	101	99	97	100	98	97	97	100	98	97	97	99	98	97	97	96	96	96	96

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

	0°
0°	5577196
5°	2307821
10°	113350
15°	10727
20°	4200
25°	2994
30°	4985
35°	3915
40°	161
45°	2093
50°	384
55°	1935
60°	740
65°	3210
70°	1803
75°	477
80°	710
85°	4246



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1158.1	93.3
10°-20°	41.5	3.3
20°-30°	10.5	0.8
30°-40°	10.6	0.9
40°-50°	5.5	0.4
50°-60°	6.1	0.5
60°-70°	4.5	0.4
70°-80°	2.9	0.2
80°-90°	1.2	0.1
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°	1210.1	97.5
0°-40°	1220.8	98.4
0°-60°	1232.3	99.3
0°-90°	1240.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1240.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	45216	
5°	18639	###
15°	84	41
25°	22	11
35°	26	11
45°	12	5
55°	9	6
65°	11	4
75°	1	3
85°	3	1
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	45216
1°	44419
2°	41379
3°	35266
4°	26891
5°	18639
6°	11482
7°	6372
8°	3399
9°	1754
10°	905
11°	473
12°	254
13°	161
14°	111
15°	84
17.5°	49
20°	32
22.5°	16
25°	22
27.5°	19
30°	35
32.5°	11
35°	26
37.5°	14
40°	1
42.5°	11
45°	12
47.5°	4
50°	2
52.5°	15
55°	9
57.5°	1
60°	3
62.5°	1
65°	11
67.5°	2
70°	5
72.5°	5
75°	1
77.5°	2
80°	1
82.5°	1
85°	3
87.5°	0



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CANDELA DISTRIBUTION (continued):

90° |  $\frac{0^\circ}{0}$

(END OF REPORT)