

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: P22189-R2

Luminaire Tested: **CSHRM40SML11**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P22189-R2
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: RSA
Catalog Number: CSHRM40SML11
Description: ***THIS IS A REVISION OF P22189 TO UPDATE CATALOG
NUMBER***COMBOLIGHT ONE 8W LED HEAD, 3 LED UNIT NARROW
FLOOD DISTRIBUTION, 4000K
Light Source: (3) 4000K SMT LEDS
XPG
Ballast/Driver: (1) MAGTECH HIGH PERFECTION ELECTRONIC DRIVER
LP1020-12-C700

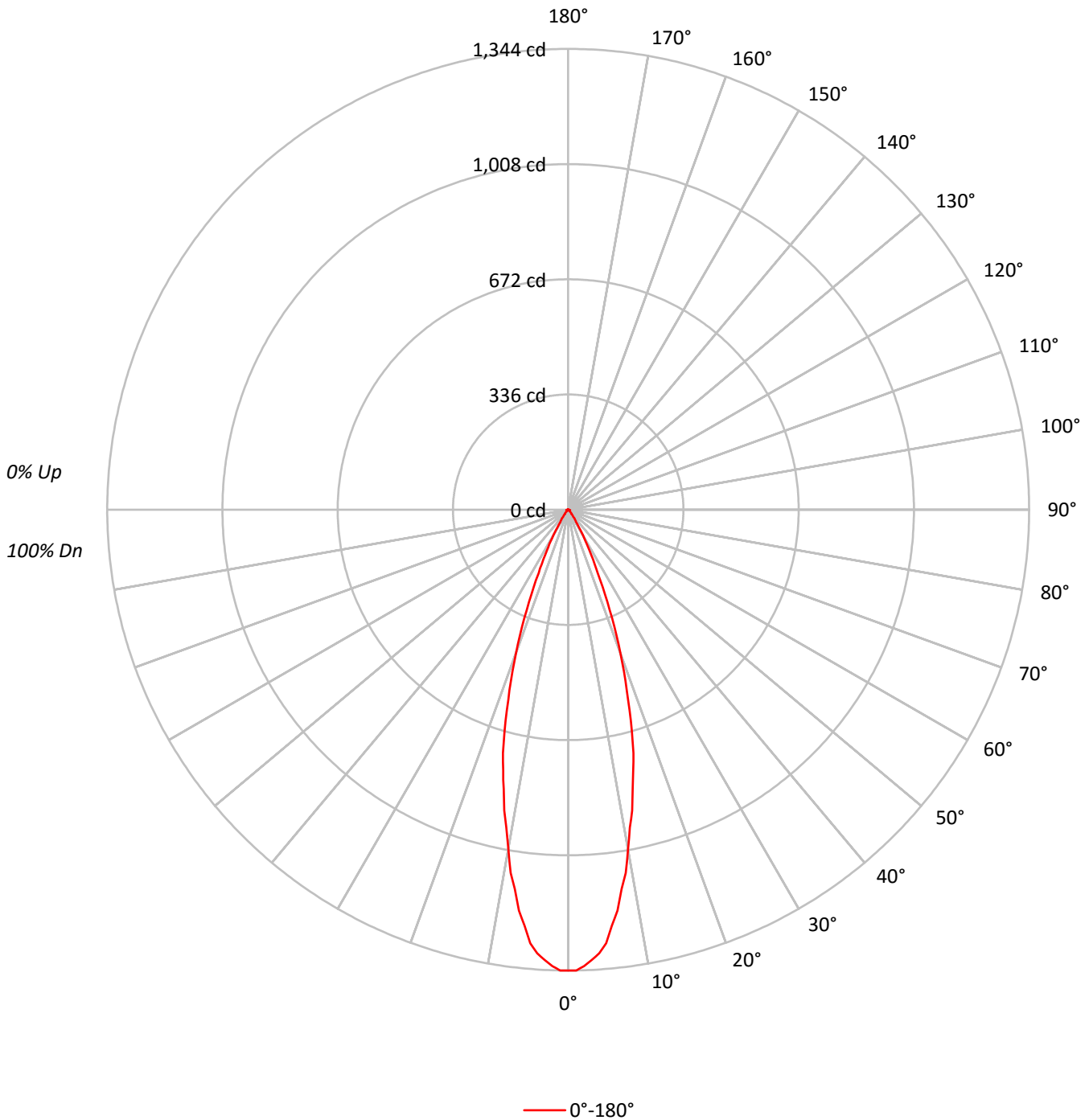
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 445.8 lumens
Efficiency: N/A
Efficacy: 57.2 lumens/watt
Spacing Criteria (0/90/45): 0.53 / 0.53 / 0.53
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.8
Input Voltage (V): NR
Input Current (Ain): 0.06786
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

TEST NUMBER: P22189-R2
CATALOG NUMBER: CSHRM40SML11

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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
2	110	106	102	100	108	104	101	98	101	99	96	98	96	94	95	94	92	91
3	106	101	97	93	104	99	96	93	97	94	91	94	92	90	92	90	88	87
4	102	96	92	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83
5	99	92	87	84	97	91	87	83	89	86	83	88	85	82	86	84	81	80
6	95	88	83	80	94	87	83	80	86	82	79	85	81	79	84	81	78	77
7	92	85	80	77	91	84	80	77	83	79	76	82	78	76	81	78	75	74
8	89	82	77	74	88	81	77	74	80	76	73	79	76	73	78	75	73	72
9	86	79	74	71	85	78	74	71	77	73	71	77	73	70	76	73	70	69
10	84	76	72	69	83	76	71	68	75	71	68	74	71	68	74	70	68	67

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	294713
5°	279330
10°	223777
15°	166857
20°	103609
25°	49358
30°	21776
35°	8834
40°	4008
45°	1240
50°	341
55°	765
60°	439
65°	2075
70°	0
75°	4236
80°	6314
85°	5032



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.2	25.2
10°-20°	197.4	44.3
20°-30°	101.4	22.7
30°-40°	22.0	4.9
40°-50°	3.8	0.9
50°-60°	1.6	0.4
60°-70°	1.4	0.3
70°-80°	4.1	0.9
80°-90°	2.0	0.5
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°	410.9	92.2
0°-40°	432.9	97.1
0°-60°	438.3	98.3
0°-90°	445.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	445.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1344	
5°	1269	112
15°	735	197
25°	204	101
35°	33	22
45°	4	4
55°	2	2
65°	4	1
75°	5	4
85°	2	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1344
1°	1344
2°	1332
3°	1315
4°	1297
5°	1269
6°	1220
7°	1178
8°	1117
9°	1073
10°	1005
11°	944
12°	897
13°	836
14°	784
15°	735
17.5°	581
20°	444
22.5°	315
25°	204
27.5°	134
30°	86
32.5°	45
35°	33
37.5°	17
40°	14
42.5°	8
45°	4
47.5°	1
50°	1
52.5°	2
55°	2
57.5°	2
60°	1
62.5°	1
65°	4
67.5°	0
70°	0
72.5°	2
75°	5
77.5°	6
80°	5
82.5°	3
85°	2
87.5°	0



TEST NUMBER: P22189-R2
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CANDELA DISTRIBUTION (continued):

90° | $\frac{0^\circ}{0}$

(END OF REPORT)