

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: FAIL-SAFE

Report Number: 767212

Luminaire Tested: **MHUCPP175H120**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: 767212  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: MHUCPP175H120  
Description: FAIL-SAFE  
Light Source: 175W MH CL MED 14000 LUMENS  
Ballast/Driver: -

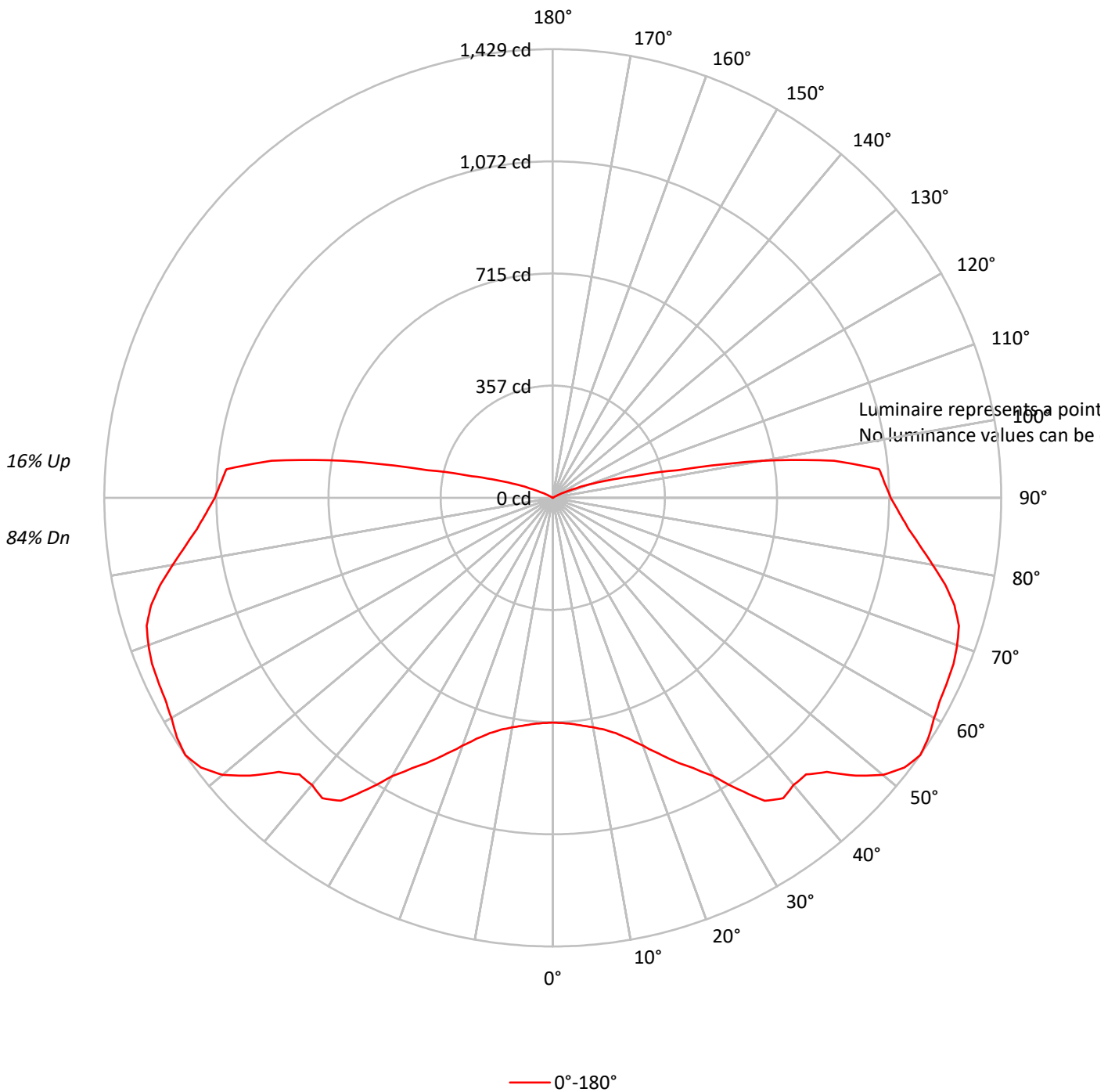
**Summary**

Lumens per Lamp: 14000 (1 lamp)  
Luminaire Lumens: 9154.7 lumens  
Efficiency: 65.4%  
Efficacy: 52.3 lumens/watt  
Spacing Criteria (0/90/45): 2.41 / 2.41 / 2.43  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Semi-Direct

Input Watts (W): 175  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	75	75	75	75	72	72	72	72	67	67	67	62	62	62	57	57	57	55
1	64	59	55	51	61	57	53	49	52	48	45	47	45	42	43	41	39	37
2	56	49	43	37	54	47	41	36	43	38	34	39	35	31	35	32	29	27
3	50	41	34	29	48	39	33	28	36	30	26	33	28	24	29	26	22	20
4	45	36	28	23	43	34	27	22	31	25	21	28	23	19	25	21	18	16
5	41	31	24	19	39	30	23	18	27	21	17	25	20	16	22	18	15	13
6	38	27	21	16	36	26	20	15	24	18	14	22	17	13	20	16	12	11
7	35	25	18	13	33	23	17	13	21	16	12	20	15	11	18	14	10	9
8	32	22	16	12	30	21	15	11	19	14	10	18	13	10	16	12	9	8
9	30	20	14	10	28	19	14	10	18	13	9	16	12	9	15	11	8	7
10	28	18	13	9	26	18	12	9	16	11	8	15	11	8	14	10	7	6

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





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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp	0°	Flux	
0°-10°	69.7	0.8	0.5	0°	716	
10°-20°	223.0	2.4	1.6	5°	723	70
20°-30°	432.0	4.7	3.1	15°	776	223
30°-40°	723.8	7.9	5.2	25°	927	432
40°-50°	974.7	10.6	7.0	35°	1178	724
50°-60°	1267.2	13.8	9.1	45°	1235	975
60°-70°	1376.6	15.0	9.8	55°	1429	1267
70°-80°	1391.4	15.2	9.9	65°	1387	1377
80°-90°	1248.2	13.6	8.9	75°	1325	1391
90°-100°	1060.2	11.6	7.6	85°	1138	949
100°-110°	335.2	3.7	2.4	90°	1077	592
110°-120°	52.1	0.6	0.4	95°	1044	768
120°-130°	0.6	0.0	0.0	105°	266	335
130°-140°	0.0	0.0	0.0	115°	44	52
140°-150°	0.0	0.0	0.0	125°	0	1
150°-160°	0.0	0.0	0.0	135°	0	0
160°-170°	0.0	0.0	0.0	145°	0	0
170°-180°	0.0	0.0	0.0	155°	0	0
0°-30°	724.7	7.9	5.2	165°	0	0
0°-40°	1448.4	15.8	10.3	175°	0	0
0°-60°	3690.4	40.3	26.4	180°	0	0
0°-90°	7706.6	84.2	55.0			
90°-120°	1447.5	15.8	10.3			
90°-150°	1448.1	15.8	10.3			
90°-180°	1448.0	15.8	10.3			
0°-180°	9154.7	100.0	65.4			



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	716
2.5°	718
5°	723
7.5°	732
10°	742
12.5°	756
15°	776
17.5°	804
20°	840
22.5°	882
25°	927
27.5°	971
30°	1024
32.5°	1101
35°	1178
37.5°	1206
40°	1194
42.5°	1195
45°	1235
47.5°	1310
50°	1373
52.5°	1412
55°	1429
57.5°	1420
60°	1403
62.5°	1392
65°	1387
67.5°	1382
70°	1371
72.5°	1357
75°	1325
77.5°	1281
80°	1229
82.5°	1181
85°	1138
87.5°	1105
90°	1077
92.5°	1059
95°	1044
97.5°	904
100°	679
102.5°	407
105°	266
107.5°	185
110°	125



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**CANDELA DISTRIBUTION (continued):**

	0°
112.5°	78
115°	44
117.5°	20
120°	5
122.5°	0
125°	0
127.5°	0
130°	0
132.5°	0
135°	0
137.5°	0
140°	0
142.5°	0
145°	0
147.5°	0
150°	0
152.5°	0
155°	0
157.5°	0
160°	0
162.5°	0
165°	0
167.5°	0
170°	0
172.5°	0
175°	0
177.5°	0
180°	0

(END OF REPORT)