

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: 767214

Luminaire Tested: **MHTCPP100H120**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: 767214  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: MHTCPP100H120  
Description: FAIL-SAFE  
Light Source: 100W MH CL MED 8500 LUMENS  
Ballast/Driver: -

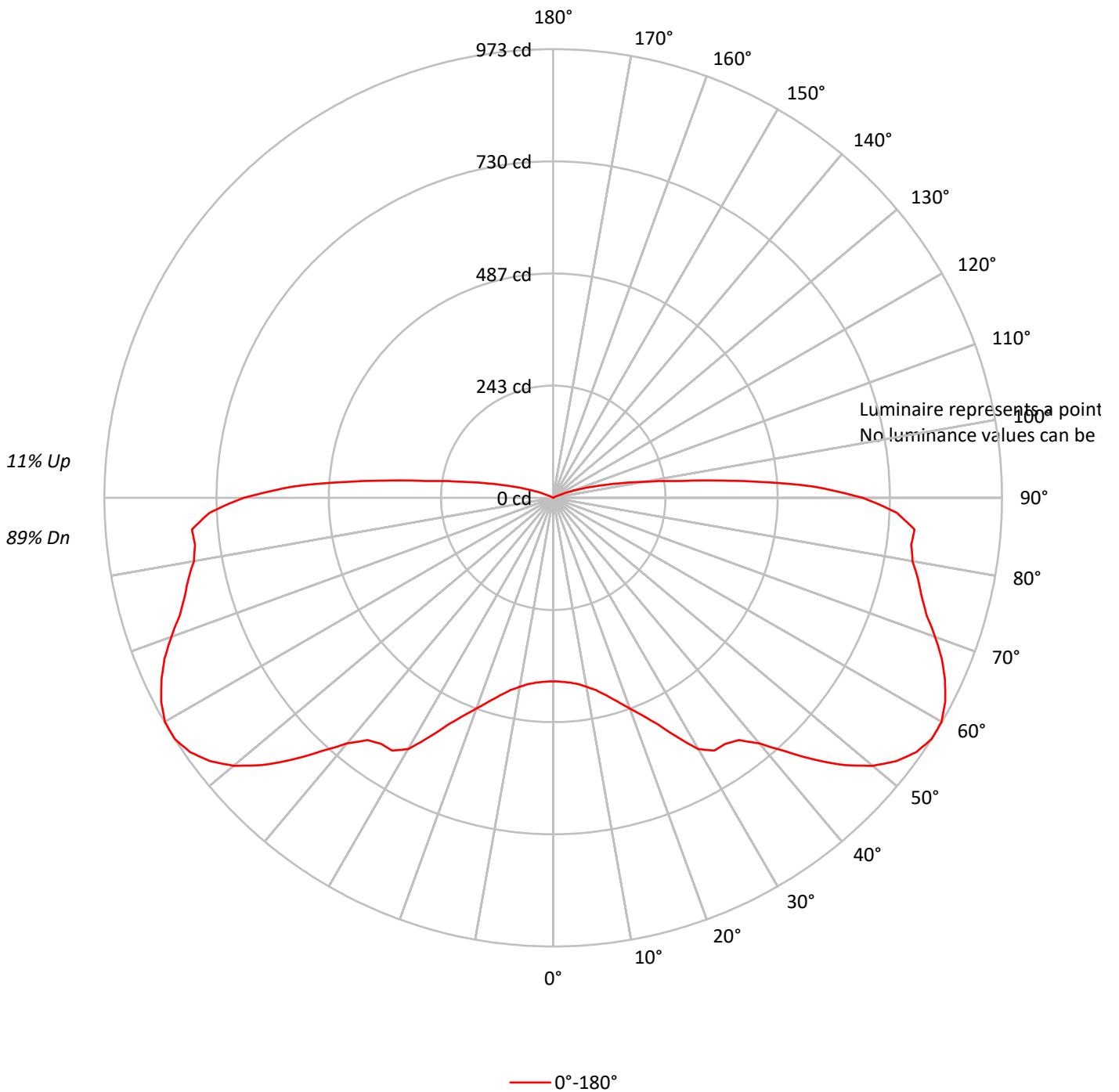
**Summary**

Lumens per Lamp: 8500 (1 lamp)  
Luminaire Lumens: 5540.5 lumens  
Efficiency: 65.2%  
Efficacy: 55.4 lumens/watt  
Spacing Criteria (0/90/45): 2.71 / 2.71 / 2.66  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Semi-Direct

Input Watts (W): 100  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	76	76	76	76	73	73	73	73	69	69	69	64	64	64	60	60	60	58
1	64	59	54	50	62	57	53	49	53	49	46	49	46	43	45	43	41	38
2	56	49	42	37	54	47	41	36	43	38	34	40	35	32	36	33	30	28
3	50	41	34	28	48	39	33	27	36	30	26	33	28	24	30	26	23	21
4	45	35	28	22	43	34	27	22	31	25	20	28	23	19	26	22	18	16
5	41	30	23	18	39	29	23	17	27	21	17	25	20	16	23	18	15	13
6	37	27	20	15	35	26	19	14	24	18	14	22	17	13	20	16	12	11
7	34	24	17	13	33	23	17	12	21	16	12	20	15	11	18	14	10	9
8	32	22	15	11	30	21	15	10	19	14	10	18	13	9	16	12	9	7
9	29	20	13	9	28	19	13	9	17	12	9	16	12	8	15	11	8	6
10	27	18	12	8	26	17	12	8	16	11	8	15	10	7	14	10	7	6

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





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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp	0°	Flux	
0°-10°	38.8	0.7	0.5	0°	398	
10°-20°	127.4	2.3	1.5	5°	402	39
20°-30°	256.5	4.6	3.0	15°	443	127
30°-40°	412.9	7.5	4.9	25°	544	256
40°-50°	623.3	11.2	7.3	35°	651	413
50°-60°	855.1	15.4	10.1	45°	804	623
60°-70°	925.9	16.7	10.9	55°	961	855
70°-80°	878.3	15.9	10.3	65°	937	926
80°-90°	830.7	15.0	9.8	75°	827	878
90°-100°	462.5	8.3	5.4	85°	786	637
100°-110°	114.7	2.1	1.3	90°	671	363
110°-120°	14.4	0.3	0.2	95°	415	293
120°-130°	0.0	0.0	0.0	105°	101	115
130°-140°	0.0	0.0	0.0	115°	10	14
140°-150°	0.0	0.0	0.0	125°	0	0
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°	422.7	7.6	5.0	165°	0	0
0°-40°	835.6	15.1	9.8	175°	0	0
0°-60°	2314.0	41.8	27.2	180°	0	0
0°-90°	4948.9	89.3	58.2			
90°-120°	591.6	10.7	7.0			
90°-150°	591.6	10.7	7.0			
90°-180°	592.0	10.7	7.0			
0°-180°	5540.5	100.0	65.2			



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	398
2.5°	399
5°	402
7.5°	407
10°	416
12.5°	427
15°	443
17.5°	463
20°	486
22.5°	512
25°	544
27.5°	586
30°	629
32.5°	650
35°	651
37.5°	662
40°	695
42.5°	746
45°	804
47.5°	858
50°	904
52.5°	938
55°	961
57.5°	973
60°	972
62.5°	958
65°	937
67.5°	912
70°	881
72.5°	849
75°	827
77.5°	810
80°	791
82.5°	783
85°	786
87.5°	746
90°	671
92.5°	564
95°	415
97.5°	279
100°	199
102.5°	143
105°	101
107.5°	67
110°	42



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**CANDELA DISTRIBUTION (continued):**

	0°
112.5°	23
115°	10
117.5°	3
120°	0
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)