

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: HALO COMMERCIAL

Report Number: P345179

Luminaire Tested: **PR4FS12D010 PR4M12MD8FSMW 1000Lm3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345179  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR4FS12D010 PR4M12MD8FSMW 1000Lm3500K  
Description: PR4 MEDIUM LENS WITH, MATTE WHITE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 996.5 lumens  
Efficiency: N/A  
Efficacy: 98.7 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.02  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

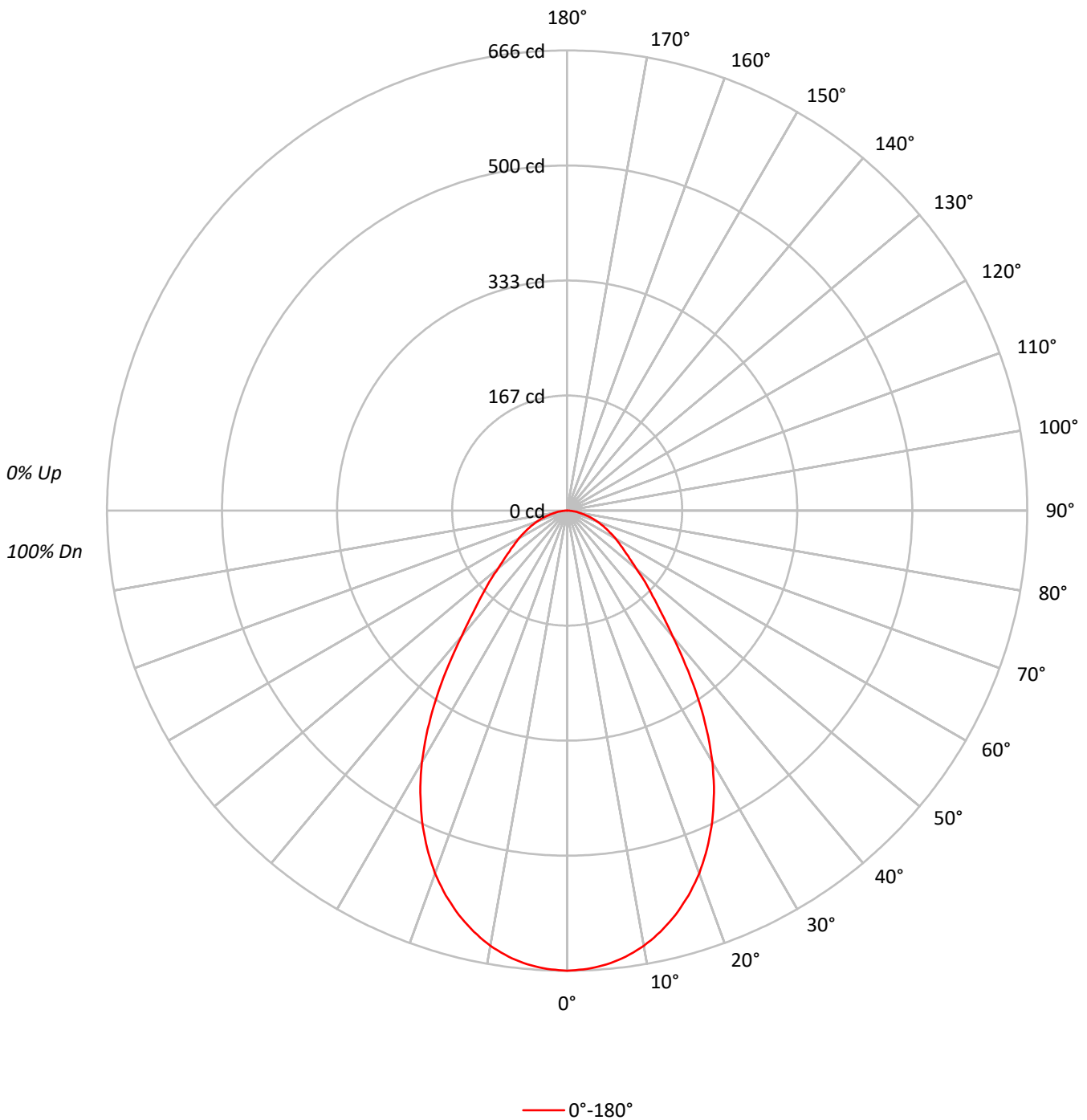
Input Watts (W): 10.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	78
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	74	68	64	72	67	64	62
5	83	73	65	59	81	72	64	59	70	63	59	68	62	58	66	61	57	56
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50
7	73	62	54	49	72	61	54	49	59	53	48	58	52	48	57	52	48	46
8	69	57	50	45	67	56	49	44	55	49	44	54	48	44	53	48	44	42
9	65	53	46	41	64	53	46	41	51	45	41	50	45	41	50	44	40	39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36

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

	0°
0°	58255
5°	57889
10°	56817
15°	54876
20°	52024
25°	47966
30°	42471
35°	35163
40°	27119
45°	21660
50°	17745
55°	15402
60°	14135
65°	12915
70°	11892
75°	10341
80°	9268
85°	7326



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.3	6.3
10°-20°	169.9	17.0
20°-30°	226.8	22.8
30°-40°	204.4	20.5
40°-50°	137.3	13.8
50°-60°	91.7	9.2
60°-70°	62.1	6.2
70°-80°	33.1	3.3
80°-90°	9.0	0.9
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°	459.0	46.1
0°-40°	663.4	66.6
0°-60°	892.3	89.5
0°-90°	996.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	996.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	666	
5°	659	62
15°	606	170
25°	497	227
35°	329	204
45°	175	137
55°	101	92
65°	62	62
75°	31	33
85°	7	9
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	666.0
2.5°	664.2
5°	659.3
7.5°	651.3
10°	639.7
12.5°	624.4
15°	606.0
17.5°	584.0
20°	558.9
22.5°	529.5
25°	497.0
27.5°	460.3
30°	420.5
32.5°	375.8
35°	329.3
37.5°	281.6
40°	237.5
42.5°	202.6
45°	175.1
47.5°	153.0
50°	130.4
52.5°	113.9
55°	101.0
57.5°	90.0
60°	80.8
62.5°	71.0
65°	62.4
67.5°	53.9
70°	46.5
72.5°	38.6
75°	30.6
77.5°	23.9
80°	18.4
82.5°	12.9
85°	7.3
87.5°	3.7
90°	0.0

(END OF REPORT)