

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: P345184

Luminaire Tested: **PR4FS12D010 PR4M12MD8FSMW 1500Lm3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345184  
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 1500Lm3000K  
Description: PR4 MEDIUM LENS WITH, MATTE WHITE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1211.6 lumens  
Efficiency: N/A  
Efficacy: 87.2 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

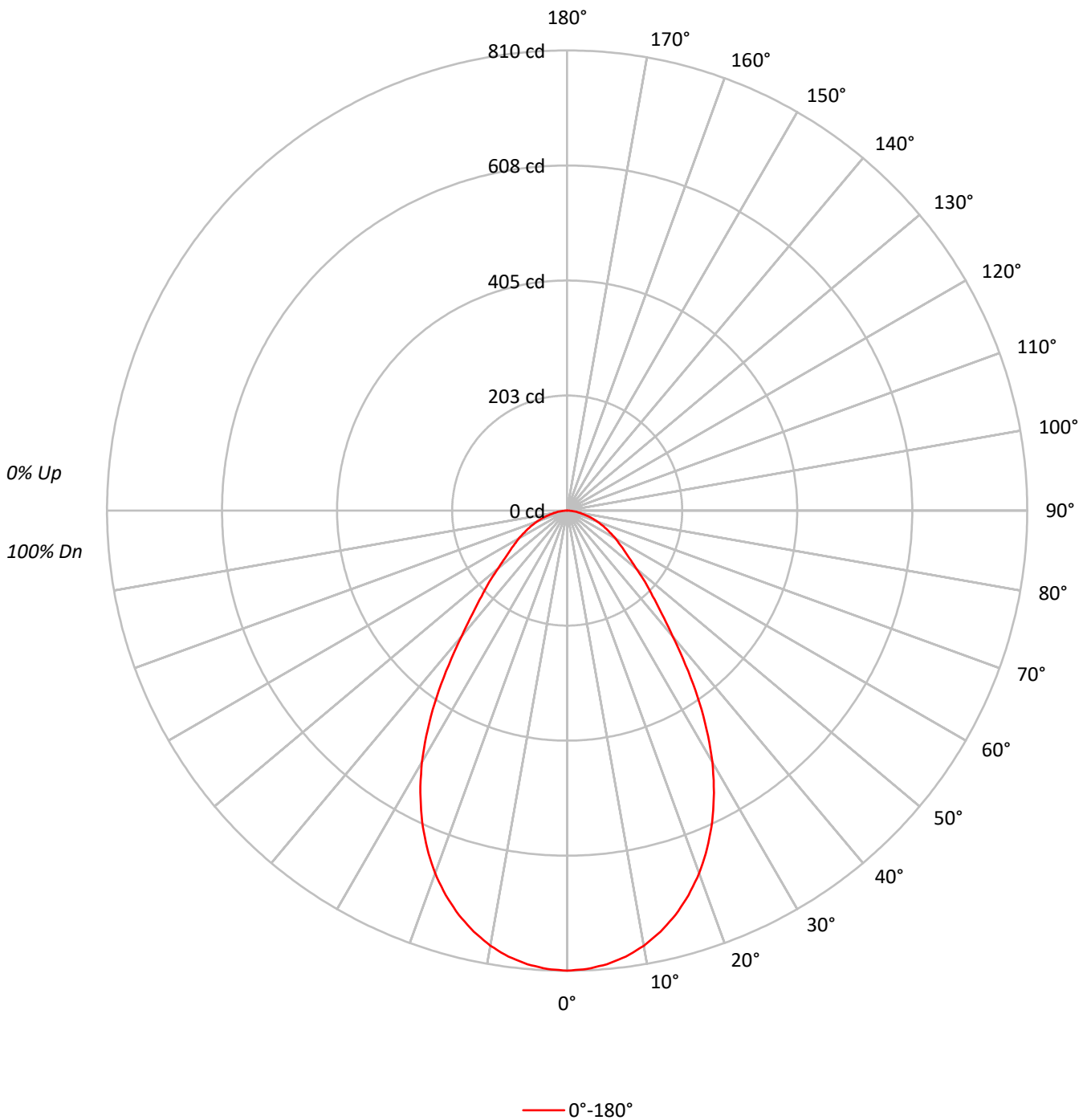
Input Watts (W): 13.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	70833
5°	70383
10°	69083
15°	66730
20°	63259
25°	58332
30°	51642
35°	42755
40°	32976
45°	26336
50°	21568
55°	18727
60°	17179
65°	15709
70°	14475
75°	12572
80°	11233
85°	8932



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.8	6.3
10°-20°	206.6	17.0
20°-30°	275.8	22.8
30°-40°	248.5	20.5
40°-50°	166.9	13.8
50°-60°	111.4	9.2
60°-70°	75.4	6.2
70°-80°	40.2	3.3
80°-90°	10.9	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°	558.2	46.1
0°-40°	806.7	66.6
0°-60°	1085.0	89.6
0°-90°	1211.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1211.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	810	
5°	802	76
15°	737	207
25°	604	276
35°	400	248
45°	213	167
55°	123	111
65°	76	75
75°	37	40
85°	9	11
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	809.8
2.5°	807.6
5°	801.6
7.5°	792.0
10°	777.8
12.5°	759.2
15°	736.9
17.5°	710.1
20°	679.6
22.5°	643.8
25°	604.4
27.5°	559.7
30°	511.3
32.5°	457.0
35°	400.4
37.5°	342.4
40°	288.8
42.5°	246.4
45°	212.9
47.5°	186.1
50°	158.5
52.5°	138.4
55°	122.8
57.5°	109.4
60°	98.2
62.5°	86.3
65°	75.9
67.5°	65.5
70°	56.6
72.5°	46.9
75°	37.2
77.5°	29.0
80°	22.3
82.5°	15.6
85°	8.9
87.5°	4.5
90°	0.0

(END OF REPORT)