

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: P345297

Luminaire Tested: **PR4FS12D010 PR4M12WD9FSMW 1500Lm4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345297  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-4)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR4FS12D010 PR4M12WD9FSMW 1500Lm4000K  
Description: PR4 WIDE LENS WITH, MATTE WHITE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1096.4 lumens  
Efficiency: N/A  
Efficacy: 78.9 lumens/watt  
Spacing Criteria (0/90/45): 1.61 / 1.61 / 1.58  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

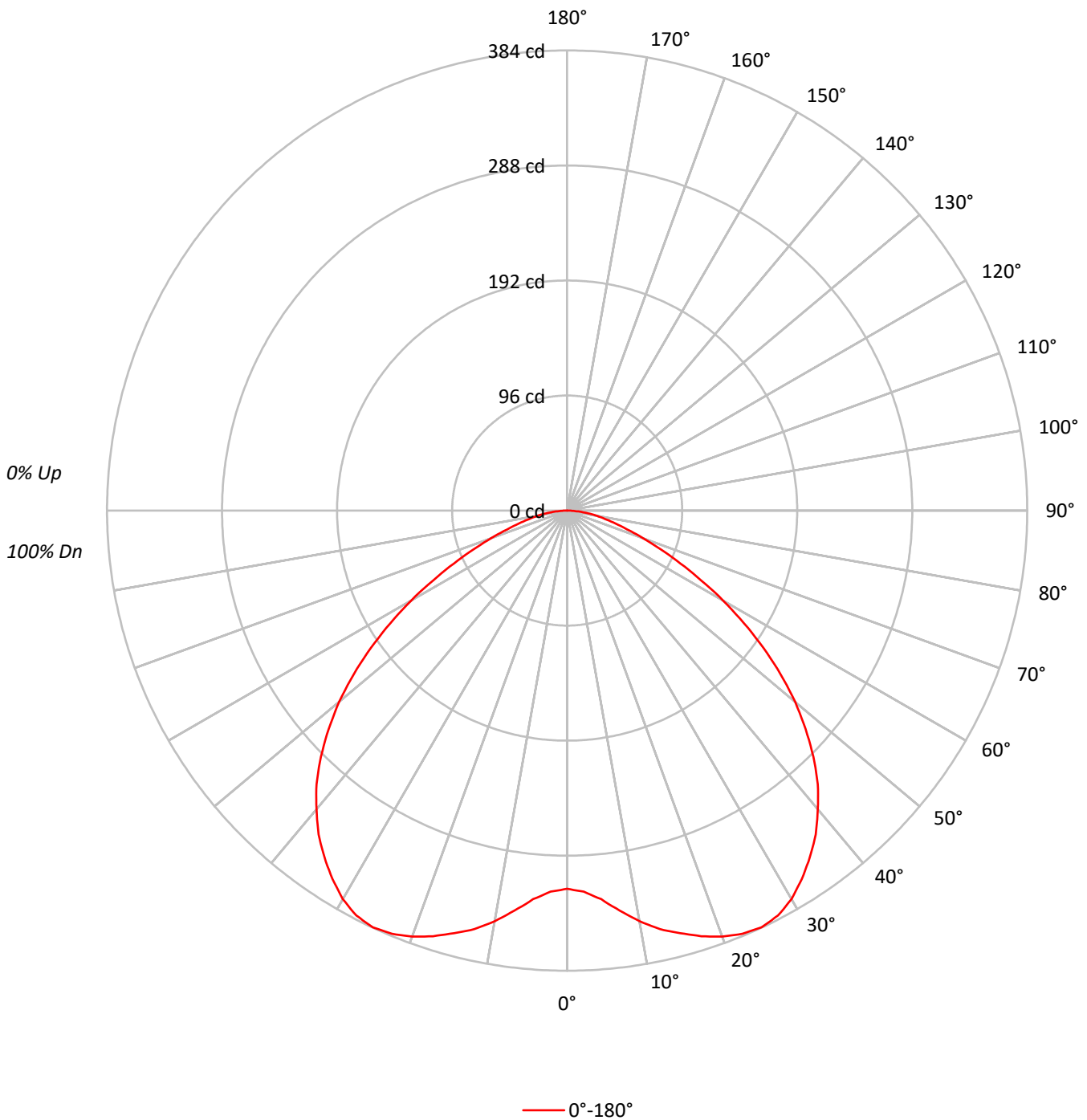
Input Watts (W): 13.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	32
9	57	44	36	31	56	44	36	31	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

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

	0°
0°	27605
5°	28580
10°	30900
15°	33062
20°	35213
25°	37022
30°	37815
35°	37715
40°	37167
45°	35935
50°	33788
55°	30515
60°	26328
65°	21587
70°	17212
75°	14059
80°	12643
85°	10638



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.8	2.9
10°-20°	103.8	9.5
20°-30°	176.2	16.1
30°-40°	220.6	20.1
40°-50°	223.2	20.4
50°-60°	178.4	16.3
60°-70°	104.6	9.5
70°-80°	45.6	4.2
80°-90°	12.2	1.1
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°	311.8	28.4
0°-40°	532.4	48.6
0°-60°	934.0	85.2
0°-90°	1096.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1096.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	316	
5°	326	32
15°	365	104
25°	384	176
35°	353	221
45°	290	223
55°	200	178
65°	104	105
75°	42	46
85°	11	12
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	315.6
2.5°	318.2
5°	325.5
7.5°	336.7
10°	347.9
12.5°	357.8
15°	365.1
17.5°	372.4
20°	378.3
22.5°	382.3
25°	383.6
27.5°	381.0
30°	374.4
32.5°	364.5
35°	353.2
37.5°	340.7
40°	325.5
42.5°	309.7
45°	290.5
47.5°	270.0
50°	248.3
52.5°	224.5
55°	200.1
57.5°	175.0
60°	150.5
62.5°	126.1
65°	104.3
67.5°	84.5
70°	67.3
72.5°	52.8
75°	41.6
77.5°	32.4
80°	25.1
82.5°	17.8
85°	10.6
87.5°	4.0
90°	0.0

(END OF REPORT)