

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: P345335

Luminaire Tested: **PR4FS12D010 PR4M12WD8FSMMS 2000Lm3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345335  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-5)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR4FS12D010 PR4M12WD8FSMMS 2000Lm3500K  
Description: PR4 WIDE LENS WITH, MATTE METALLIC SILVER FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2031.4 lumens  
Efficiency: N/A  
Efficacy: 102.6 lumens/watt  
Spacing Criteria (0/90/45): 1.65 / 1.65 / 1.6  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

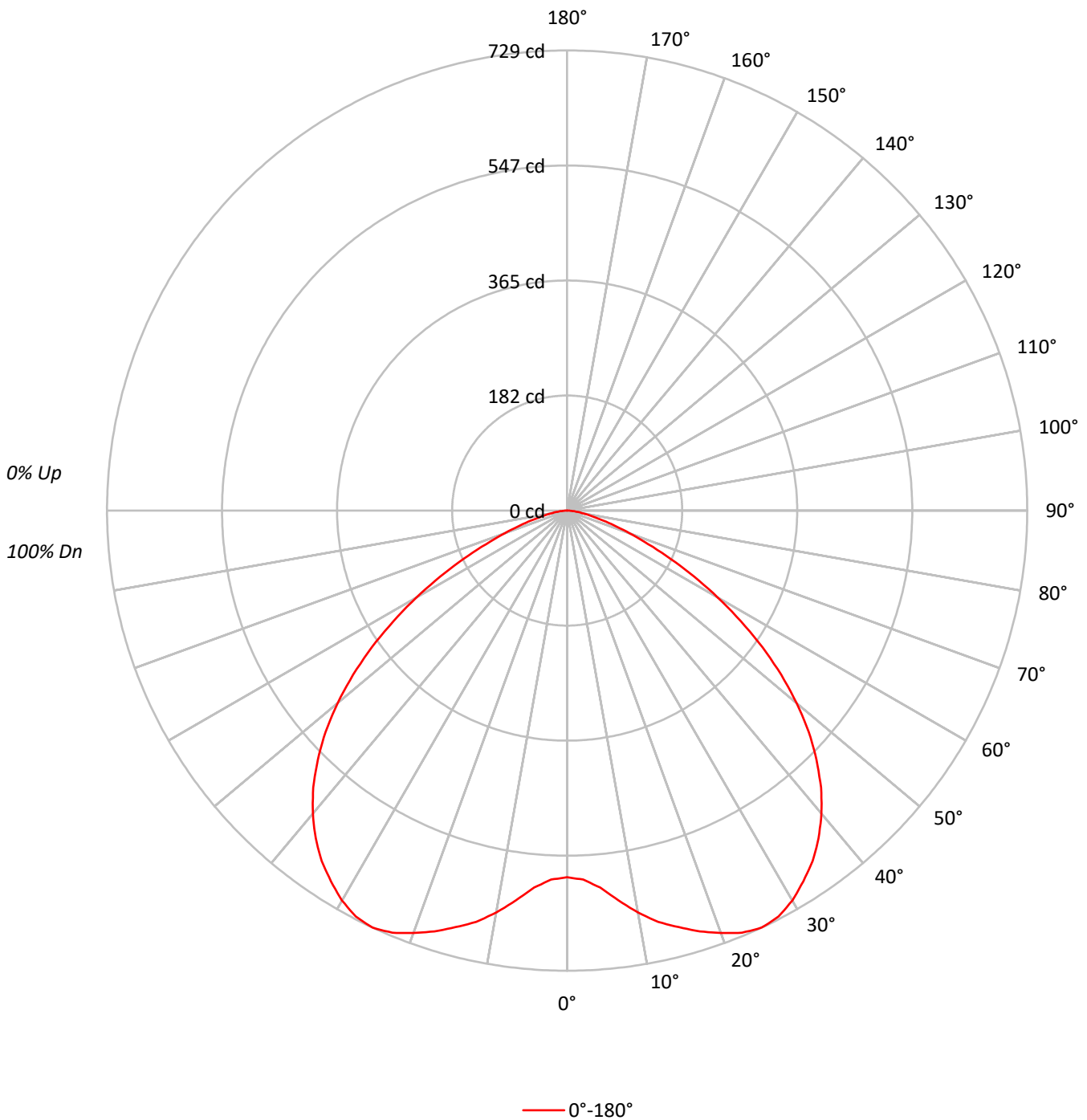
Input Watts (W): 19.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	92	83	75	69	90	81	74	69	78	72	67	76	70	66	73	69	65	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	54	50	59	53	49	47
6	72	59	51	44	70	58	50	44	57	49	44	55	48	43	53	48	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	44	39	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

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

	0°
0°	50811
5°	52621
10°	57421
15°	61867
20°	66284
25°	70367
30°	72054
35°	72397
40°	71570
45°	69099
50°	64596
55°	57599
60°	48178
65°	37462
70°	26827
75°	18621
80°	13197
85°	9233



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.8	2.9
10°-20°	194.3	9.6
20°-30°	334.6	16.5
30°-40°	422.8	20.8
40°-50°	429.0	21.1
50°-60°	336.2	16.6
60°-70°	181.8	8.9
70°-80°	62.1	3.1
80°-90°	11.7	0.6
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°	587.7	28.9
0°-40°	1010.5	49.7
0°-60°	1775.7	87.4
0°-90°	2031.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2031.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	581	
5°	599	59
15°	683	194
25°	729	335
35°	678	423
45°	559	429
55°	378	336
65°	181	182
75°	55	62
85°	9	12
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	580.9
2.5°	584.9
5°	599.3
7.5°	622.9
10°	646.5
12.5°	667.5
15°	683.2
17.5°	699.0
20°	712.1
22.5°	723.9
25°	729.1
27.5°	725.2
30°	713.4
32.5°	696.3
35°	678.0
37.5°	654.4
40°	626.8
42.5°	595.4
45°	558.6
47.5°	519.3
50°	474.7
52.5°	427.5
55°	377.7
57.5°	326.5
60°	275.4
62.5°	226.9
65°	181.0
67.5°	139.0
70°	104.9
72.5°	77.4
75°	55.1
77.5°	38.0
80°	26.2
82.5°	17.0
85°	9.2
87.5°	3.9
90°	0.0

(END OF REPORT)