

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: P345333

Luminaire Tested: **PR4FS12D010 PR4M12WD9FSMMS 1500Lm4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345333  
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 PR4M12WD9FSMMS 1500Lm4000K  
Description: PR4 WIDE LENS WITH, MATTE METALLIC SILVER FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1023.1 lumens  
Efficiency: N/A  
Efficacy: 73.6 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

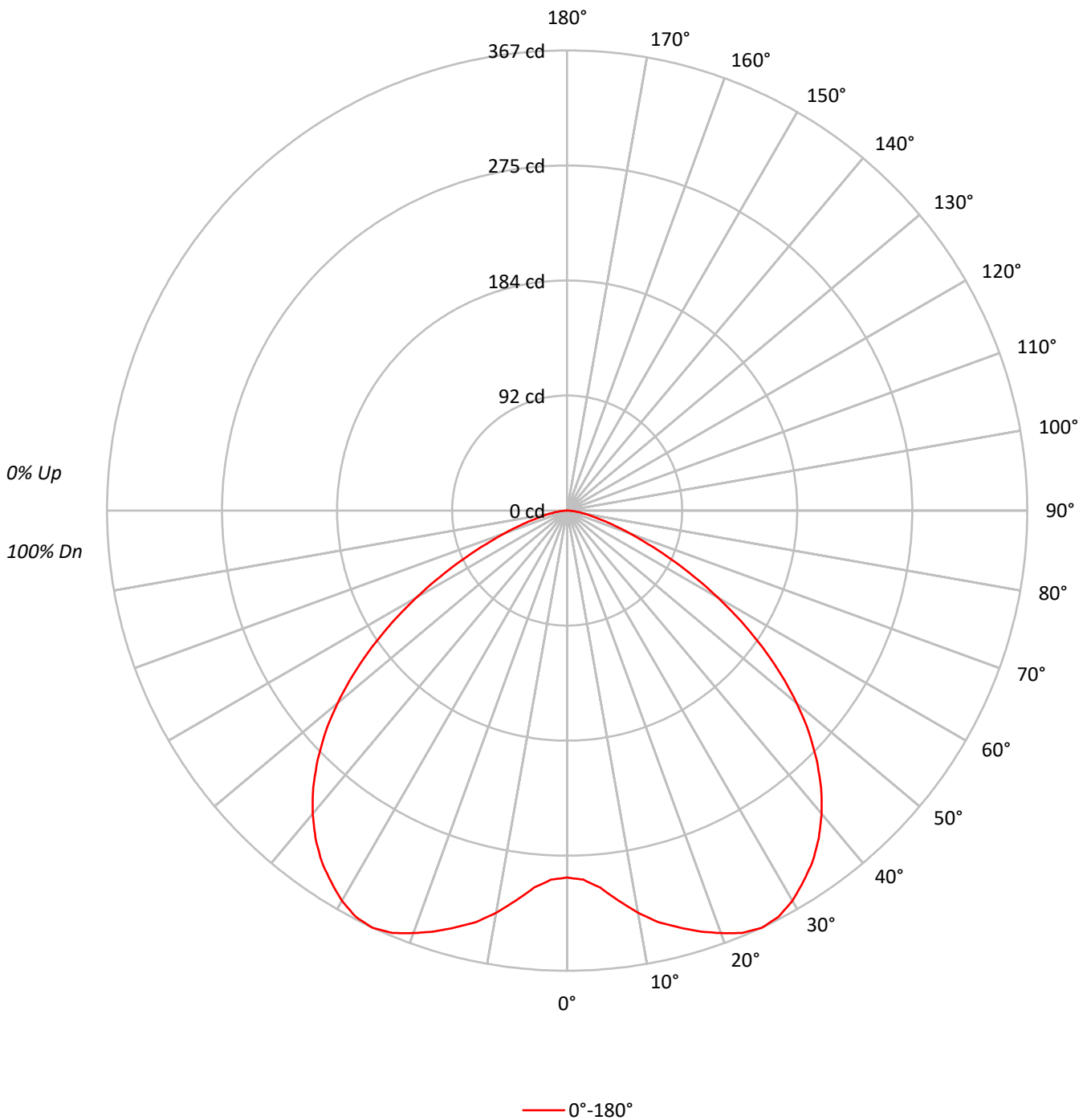
Input Watts (W): 13.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	25594
5°	26499
10°	28919
15°	31160
20°	33380
25°	35439
30°	36290
35°	36466
40°	36048
45°	34809
50°	32536
55°	29005
60°	24264
65°	18855
70°	13503
75°	9361
80°	6649
85°	4617



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.6	2.9
10°-20°	97.9	9.6
20°-30°	168.5	16.5
30°-40°	213.0	20.8
40°-50°	216.1	21.1
50°-60°	169.3	16.6
60°-70°	91.6	8.9
70°-80°	31.3	3.1
80°-90°	5.9	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°	296.0	28.9
0°-40°	508.9	49.7
0°-60°	894.3	87.4
0°-90°	1023.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1023.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	293	
5°	302	30
15°	344	98
25°	367	168
35°	342	213
45°	281	216
55°	190	169
65°	91	92
75°	28	31
85°	5	6
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	292.6
2.5°	294.6
5°	301.8
7.5°	313.7
10°	325.6
12.5°	336.2
15°	344.1
17.5°	352.0
20°	358.6
22.5°	364.6
25°	367.2
27.5°	365.2
30°	359.3
32.5°	350.7
35°	341.5
37.5°	329.6
40°	315.7
42.5°	299.8
45°	281.4
47.5°	261.5
50°	239.1
52.5°	215.3
55°	190.2
57.5°	164.5
60°	138.7
62.5°	114.3
65°	91.1
67.5°	70.0
70°	52.8
72.5°	39.0
75°	27.7
77.5°	19.2
80°	13.2
82.5°	8.6
85°	4.6
87.5°	2.0
90°	0.0

(END OF REPORT)