

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: P345243

Luminaire Tested: **PR4FS24D010 PR4M24MD9FSMMS 3000Lm4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345243  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-2)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR4FS24D010 PR4M24MD9FSMMS 3000Lm4000K  
Description: PR4 MEDIUM 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: 2092.7 lumens  
Efficiency: N/A  
Efficacy: 73.4 lumens/watt  
Spacing Criteria (0/90/45): 1.02 / 1.02 / 1.02  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

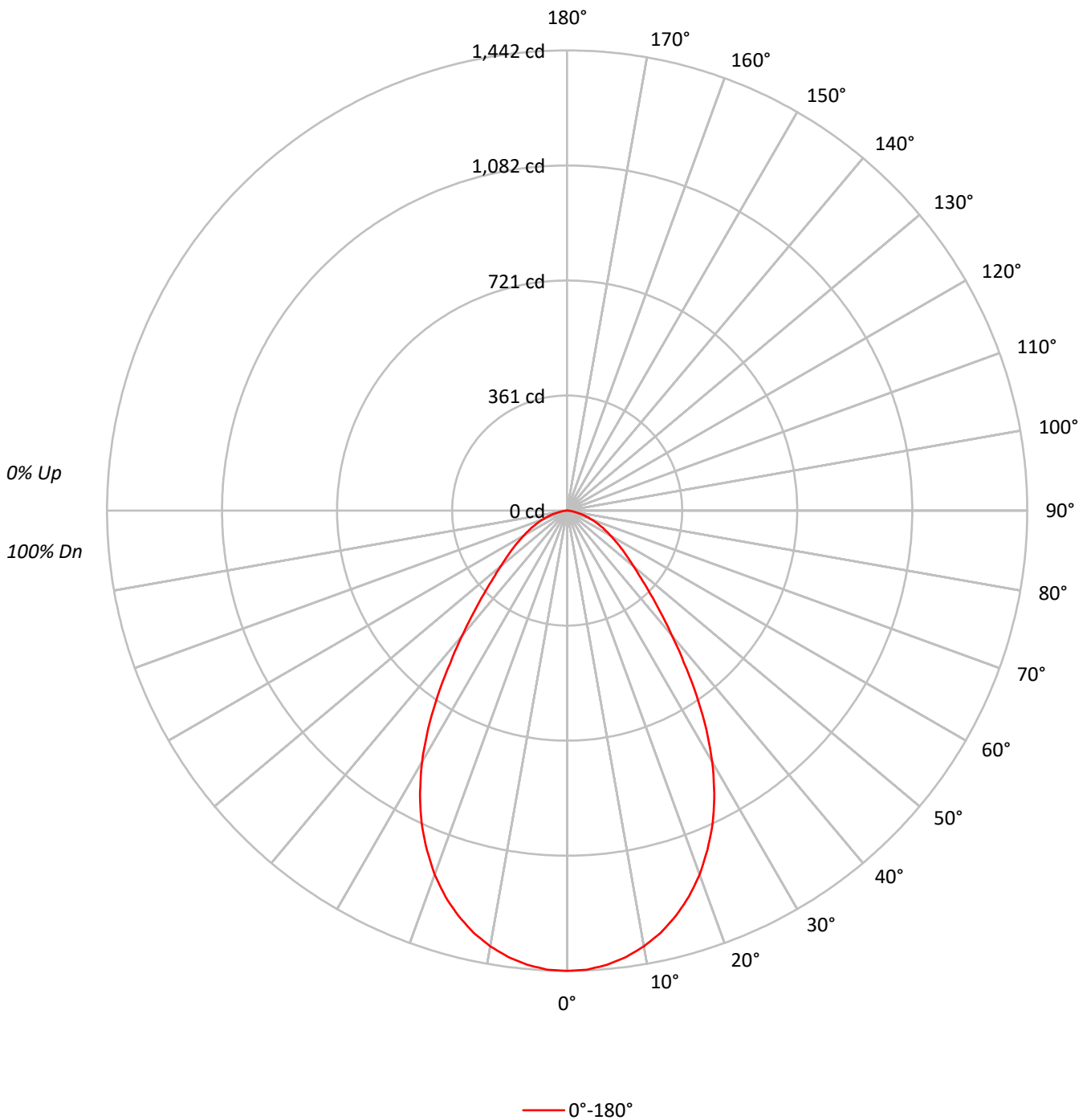
Input Watts (W): 28.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	73	67	77	71	67	75	70	66	73	68	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	63	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	51	45	42	40
10	62	50	44	39	61	50	43	39	49	43	39	48	43	39	47	42	39	37

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

	0°
0°	126175
5°	125454
10°	123138
15°	119089
20°	112984
25°	104185
30°	91871
35°	75483
40°	58348
45°	45584
50°	36904
55°	31750
60°	27553
65°	24381
70°	21022
75°	16661
80°	11737
85°	6824



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.0	6.5
10°-20°	368.8	17.6
20°-30°	492.2	23.5
30°-40°	439.4	21.0
40°-50°	289.3	13.8
50°-60°	187.5	9.0
60°-70°	117.0	5.6
70°-80°	53.6	2.6
80°-90°	9.9	0.5
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°	996.0	47.6
0°-40°	1435.4	68.6
0°-60°	1912.3	91.4
0°-90°	2092.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2092.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1442	
5°	1429	135
15°	1315	369
25°	1080	492
35°	707	439
45°	368	289
55°	208	188
65°	118	117
75°	49	54
85°	7	10
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1442.5
2.5°	1439.8
5°	1428.8
7.5°	1411.0
10°	1386.4
12.5°	1354.9
15°	1315.1
17.5°	1268.5
20°	1213.8
22.5°	1149.4
25°	1079.5
27.5°	998.7
30°	909.6
32.5°	811.0
35°	706.9
37.5°	601.4
40°	511.0
42.5°	434.3
45°	368.5
47.5°	313.7
50°	271.2
52.5°	237.0
55°	208.2
57.5°	180.8
60°	157.5
62.5°	137.0
65°	117.8
67.5°	98.6
70°	82.2
72.5°	65.8
75°	49.3
77.5°	35.6
80°	23.3
82.5°	13.7
85°	6.8
87.5°	4.1
90°	0.0

(END OF REPORT)