

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: P345240

Luminaire Tested: **PR4FS24D010 PR4M24MD8FSMMS 3000Lm4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345240  
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 PR4M24MD8FSMMS 3000Lm4000K  
Description: PR4 MEDIUM LENS WITH, MATTE METALLIC SILVER FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2464.9 lumens  
Efficiency: N/A  
Efficacy: 86.5 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

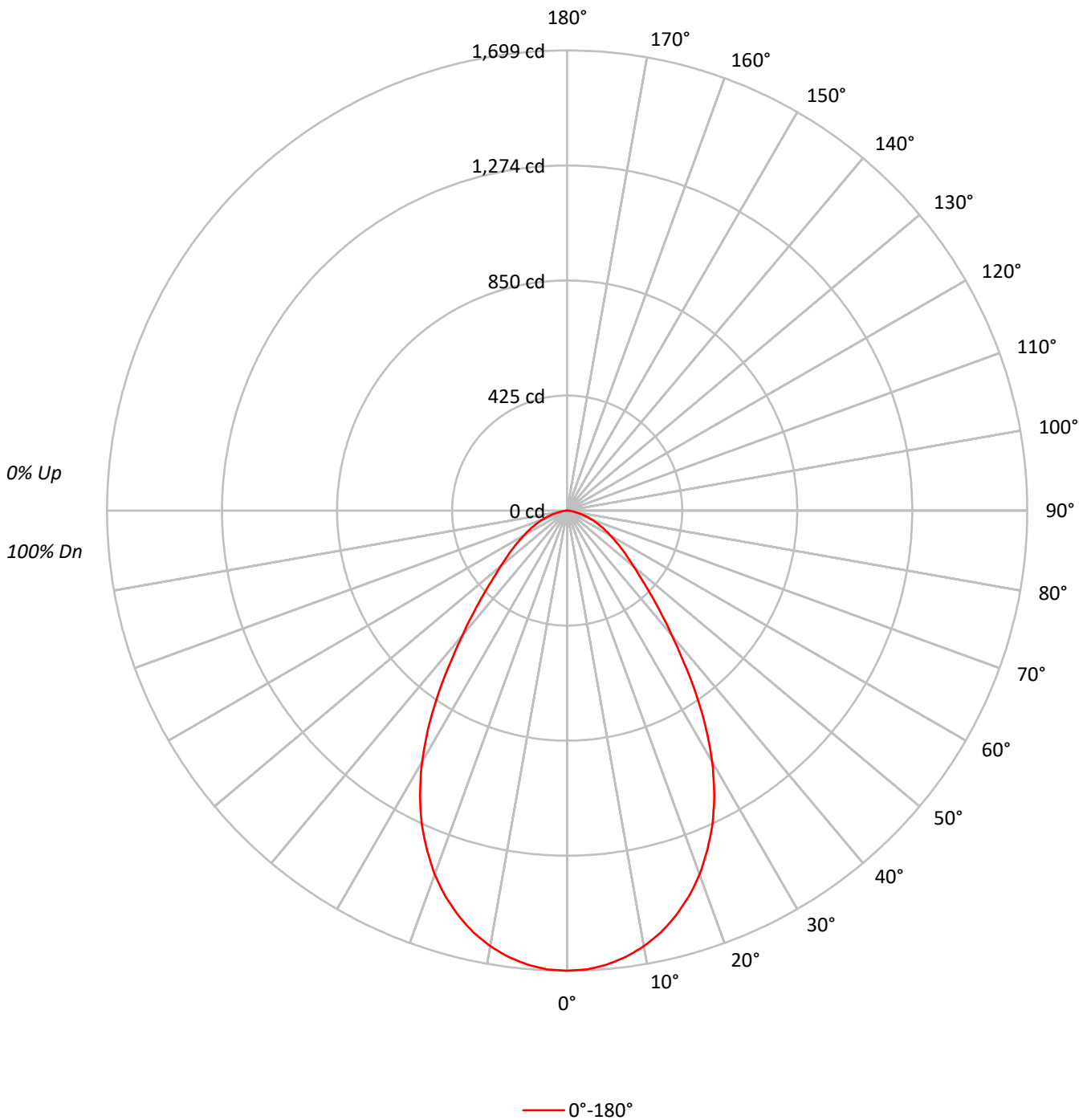
Input Watts (W): 28.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	148611
5°	147765
10°	145032
15°	140270
20°	133072
25°	122715
30°	108212
35°	88905
40°	68715
45°	53686
50°	43477
55°	37408
60°	32469
65°	28727
70°	24756
75°	19635
80°	13802
85°	8129



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.1	6.5
10°-20°	434.3	17.6
20°-30°	579.8	23.5
30°-40°	517.5	21.0
40°-50°	340.8	13.8
50°-60°	220.9	9.0
60°-70°	137.8	5.6
70°-80°	63.1	2.6
80°-90°	11.6	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
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0°-30°	1173.2	47.6
0°-40°	1690.7	68.6
0°-60°	2252.4	91.4
0°-90°	2464.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2464.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1699	
5°	1683	159
15°	1549	434
25°	1272	580
35°	833	518
45°	434	341
55°	245	221
65°	139	138
75°	58	63
85°	8	12
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1699.0
2.5°	1695.8
5°	1682.9
7.5°	1661.9
10°	1632.9
12.5°	1595.8
15°	1549.0
17.5°	1494.1
20°	1429.6
22.5°	1353.8
25°	1271.5
27.5°	1176.3
30°	1071.4
32.5°	955.2
35°	832.6
37.5°	708.3
40°	601.8
42.5°	511.5
45°	434.0
47.5°	369.5
50°	319.5
52.5°	279.1
55°	245.3
57.5°	213.0
60°	185.6
62.5°	161.4
65°	138.8
67.5°	116.2
70°	96.8
72.5°	77.4
75°	58.1
77.5°	42.0
80°	27.4
82.5°	16.1
85°	8.1
87.5°	4.8
90°	0.0

(END OF REPORT)