

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: P345244

Luminaire Tested: **PR4FS24D010 PR4M24MD8FSMMS 4000Lm3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345244  
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 4000Lm3000K  
Description: PR4 MEDIUM LENS WITH, MATTE METALLIC SILVER FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3316.7 lumens  
Efficiency: N/A  
Efficacy: 73.7 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

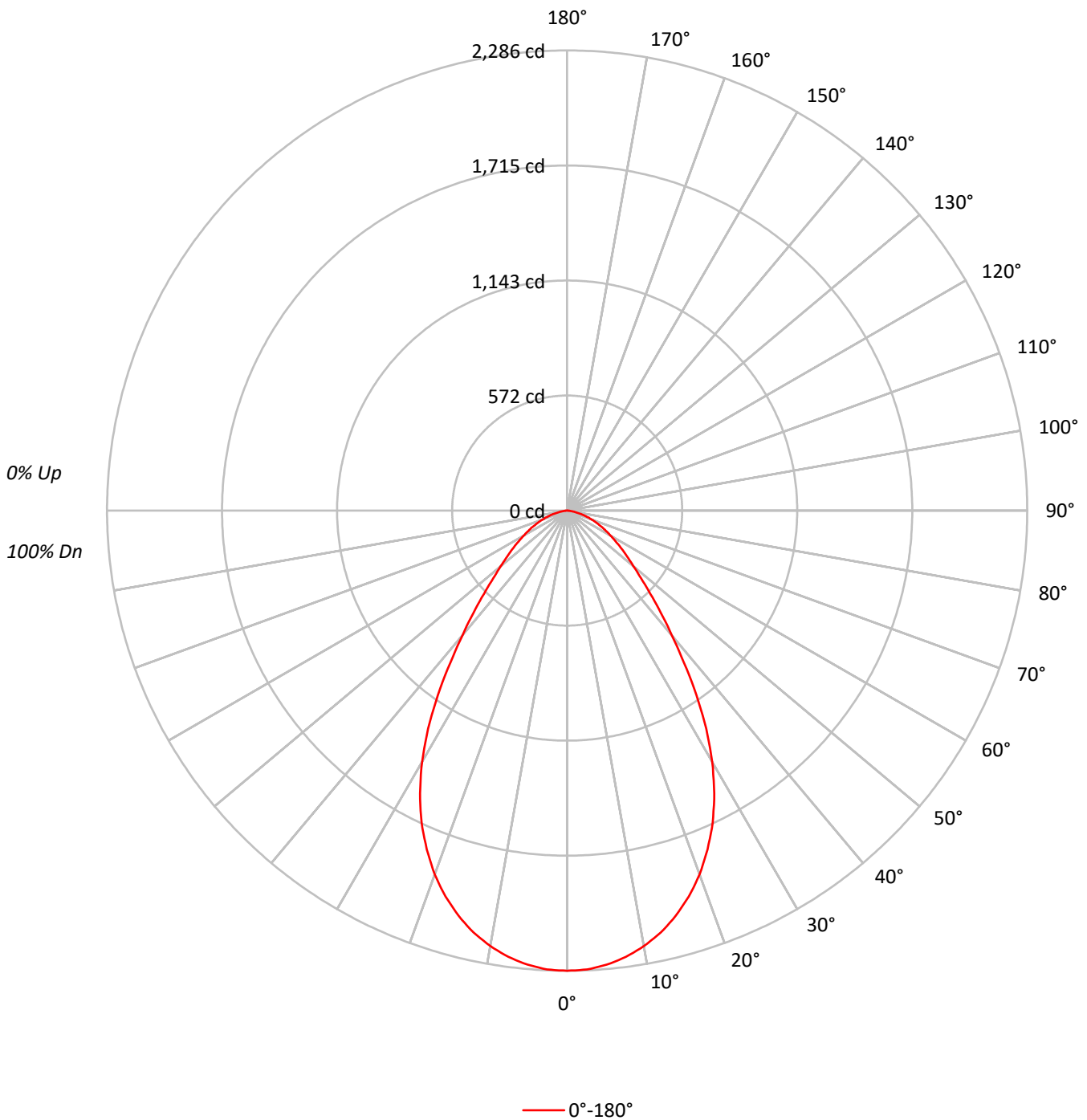
Input Watts (W): 45  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	199973
5°	198831
10°	195153
15°	188744
20°	179055
25°	165122
30°	145603
35°	119626
40°	92466
45°	72241
50°	58500
55°	50324
60°	43682
65°	38641
70°	33323
75°	26428
80°	18587
85°	10939



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.0	6.5
10°-20°	584.4	17.6
20°-30°	780.1	23.5
30°-40°	696.4	21.0
40°-50°	458.6	13.8
50°-60°	297.2	9.0
60°-70°	185.4	5.6
70°-80°	84.9	2.6
80°-90°	15.7	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°	1578.6	47.6
0°-40°	2275.0	68.6
0°-60°	3030.7	91.4
0°-90°	3316.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3316.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2286	
5°	2264	214
15°	2084	584
25°	1711	780
35°	1120	696
45°	584	459
55°	330	297
65°	187	185
75°	78	85
85°	11	16
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2286.2
2.5°	2281.9
5°	2264.5
7.5°	2236.3
10°	2197.2
12.5°	2147.3
15°	2084.3
17.5°	2010.5
20°	1923.6
22.5°	1821.6
25°	1710.9
27.5°	1582.8
30°	1441.6
32.5°	1285.3
35°	1120.3
37.5°	953.1
40°	809.8
42.5°	688.3
45°	584.0
47.5°	497.2
50°	429.9
52.5°	375.6
55°	330.0
57.5°	286.6
60°	249.7
62.5°	217.1
65°	186.7
67.5°	156.3
70°	130.3
72.5°	104.2
75°	78.2
77.5°	56.4
80°	36.9
82.5°	21.7
85°	10.9
87.5°	6.5
90°	0.0

(END OF REPORT)