

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: P345210

Luminaire Tested: **PR4FS24D010 PR4M24MD8FSMW 4000Lm4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345210  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR4FS24D010 PR4M24MD8FSMW 4000Lm4000K  
Description: PR4 MEDIUM LENS WITH, MATTE WHITE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3770.5 lumens  
Efficiency: N/A  
Efficacy: 83.8 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.02  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

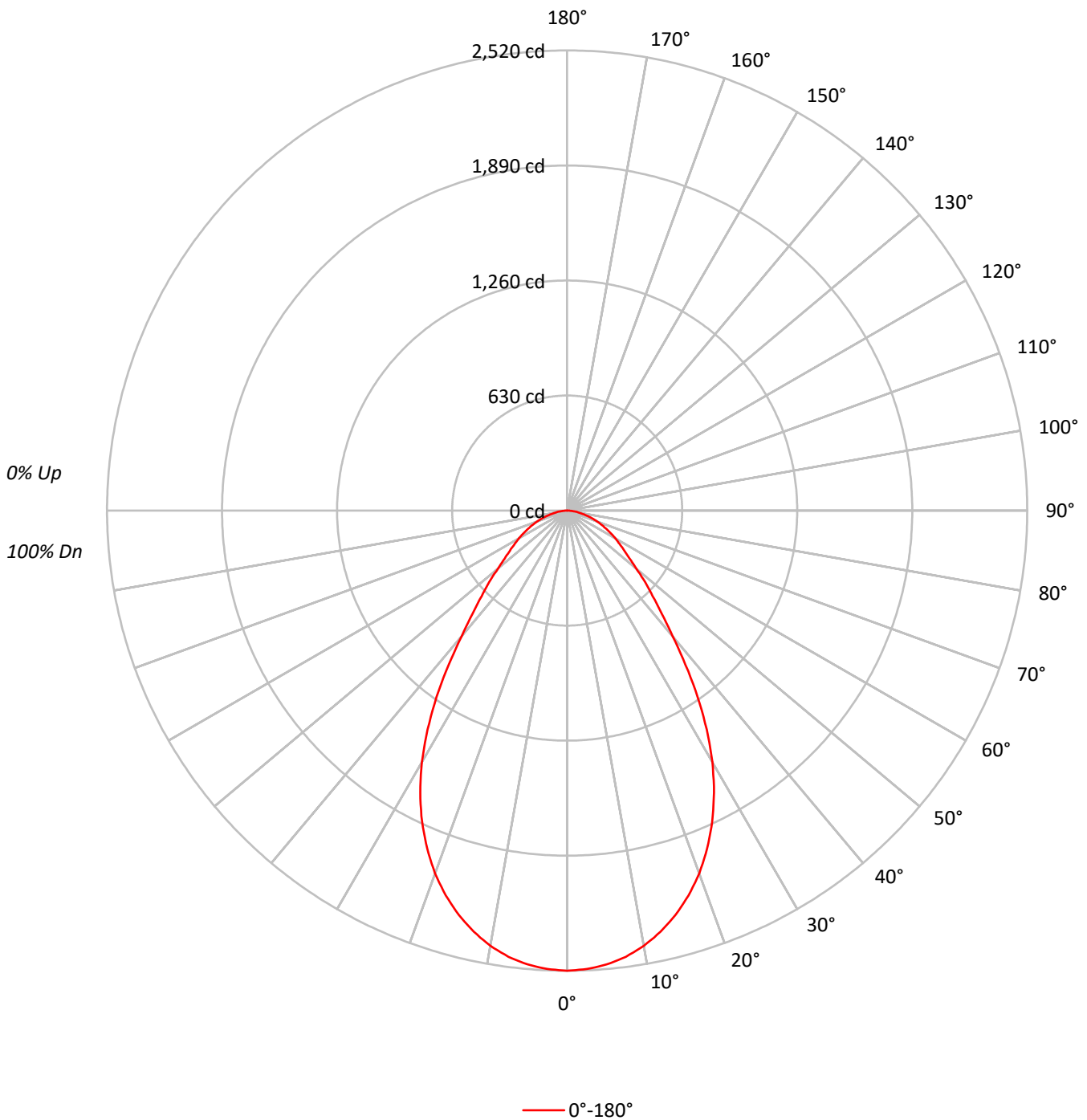
Input Watts (W): 45  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	78
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	74	68	64	72	67	64	62
5	83	73	65	59	81	72	64	59	70	63	59	68	62	58	66	61	57	56
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50
7	73	62	54	49	72	61	54	49	59	53	48	58	52	48	57	52	48	46
8	69	57	50	45	67	56	49	44	55	49	44	54	48	44	53	48	44	42
9	65	53	46	41	64	53	46	41	51	45	41	50	45	41	50	44	40	39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36

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

	0°
0°	220423
5°	219035
10°	214986
15°	207652
20°	196843
25°	181520
30°	160713
35°	133059
40°	102616
45°	81939
50°	67141
55°	58285
60°	53479
65°	48907
70°	45011
75°	39135
80°	35008
85°	27900



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	235.8	6.3
10°-20°	642.8	17.0
20°-30°	858.4	22.8
30°-40°	773.3	20.5
40°-50°	519.4	13.8
50°-60°	346.7	9.2
60°-70°	234.8	6.2
70°-80°	125.1	3.3
80°-90°	34.0	0.9
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°	1737.0	46.1
0°-40°	2510.3	66.6
0°-60°	3376.5	89.6
0°-90°	3770.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3770.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2520	
5°	2495	236
15°	2293	643
25°	1881	858
35°	1246	773
45°	662	519
55°	382	347
65°	236	235
75°	116	125
85°	28	34
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2520.0
2.5°	2513.1
5°	2494.6
7.5°	2464.5
10°	2420.5
12.5°	2362.5
15°	2293.1
17.5°	2209.7
20°	2114.7
22.5°	2003.5
25°	1880.8
27.5°	1741.8
30°	1591.2
32.5°	1422.2
35°	1246.1
37.5°	1065.5
40°	898.7
42.5°	766.7
45°	662.4
47.5°	579.1
50°	493.4
52.5°	430.8
55°	382.2
57.5°	340.5
60°	305.7
62.5°	268.7
65°	236.3
67.5°	203.8
70°	176.0
72.5°	145.9
75°	115.8
77.5°	90.3
80°	69.5
82.5°	48.6
85°	27.8
87.5°	13.9
90°	0.0

(END OF REPORT)