

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: P345203

Luminaire Tested: **PR4FS24D010 PR4M24MD8FSMW 3000Lm3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345203  
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 3000Lm3500K  
Description: PR4 MEDIUM LENS WITH, MATTE WHITE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2737.1 lumens  
Efficiency: N/A  
Efficacy: 104.9 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

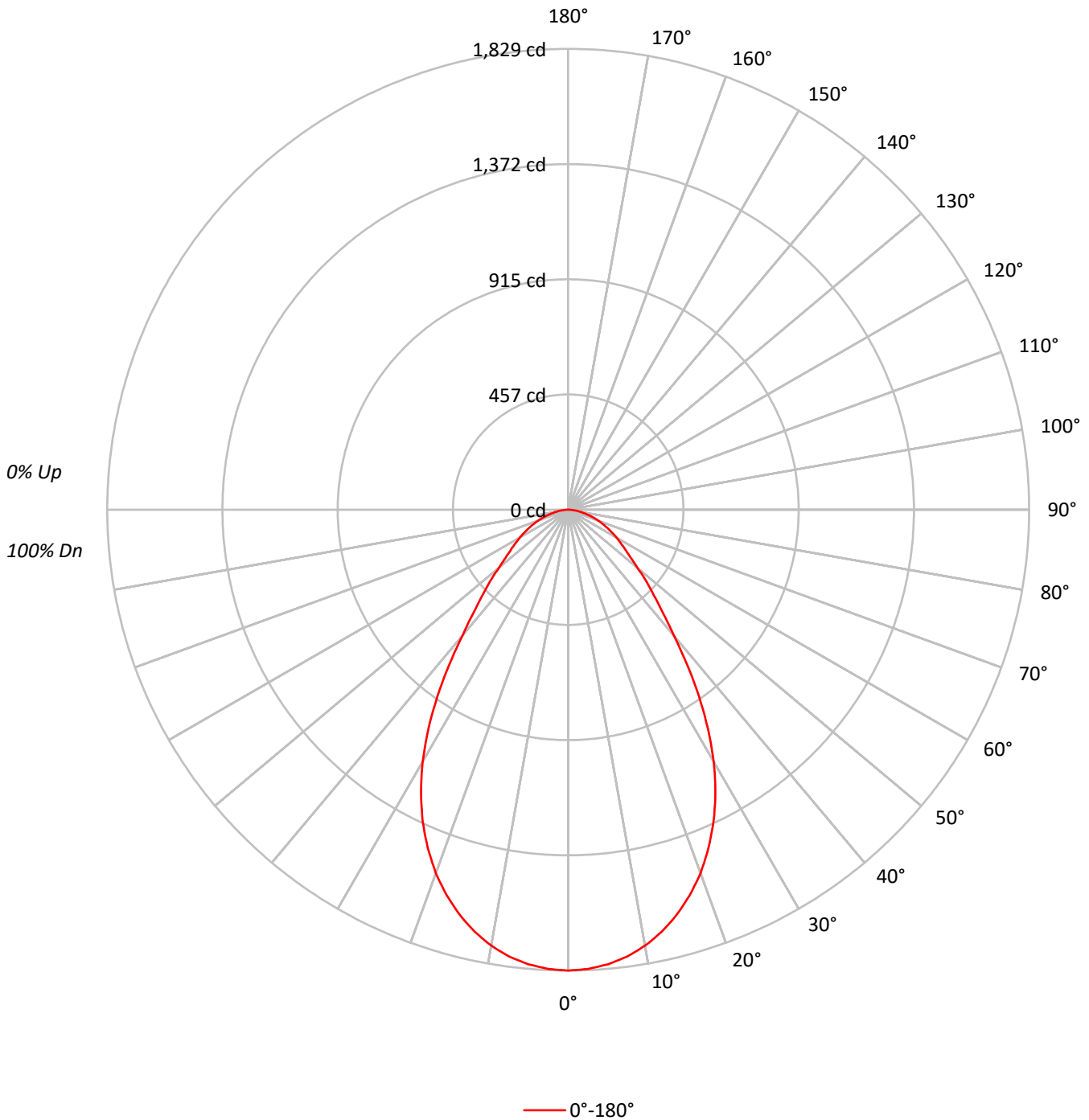
Input Watts (W): 26.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	160017
5°	159003
10°	156064
15°	150738
20°	142892
25°	131768
30°	116666
35°	96594
40°	74493
45°	59488
50°	48730
55°	42303
60°	38819
65°	35495
70°	32684
75°	28422
80°	25387
85°	20273



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	171.2	6.3
10°-20°	466.6	17.0
20°-30°	623.1	22.8
30°-40°	561.4	20.5
40°-50°	377.1	13.8
50°-60°	251.7	9.2
60°-70°	170.5	6.2
70°-80°	90.9	3.3
80°-90°	24.7	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°	1260.9	46.1
0°-40°	1822.3	66.6
0°-60°	2451.1	89.5
0°-90°	2737.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2737.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1829	
5°	1811	171
15°	1665	467
25°	1365	623
35°	905	561
45°	481	377
55°	277	252
65°	172	170
75°	84	91
85°	20	25
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1829.4
2.5°	1824.4
5°	1810.9
7.5°	1789.0
10°	1757.1
12.5°	1715.1
15°	1664.6
17.5°	1604.1
20°	1535.1
22.5°	1454.4
25°	1365.3
27.5°	1264.4
30°	1155.1
32.5°	1032.4
35°	904.6
37.5°	773.5
40°	652.4
42.5°	556.6
45°	480.9
47.5°	420.4
50°	358.1
52.5°	312.7
55°	277.4
57.5°	247.2
60°	221.9
62.5°	195.0
65°	171.5
67.5°	148.0
70°	127.8
72.5°	105.9
75°	84.1
77.5°	65.6
80°	50.4
82.5°	35.3
85°	20.2
87.5°	10.1
90°	0.0

(END OF REPORT)