

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: P345278

Luminaire Tested: **PR4FS24D010 PR4M24MD9FSBZ 3000Lm3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345278  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-3)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR4FS24D010 PR4M24MD9FSBZ 3000Lm3500K  
Description: PR4 MEDIUM LENS WITH, BRONZE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1951.5 lumens  
Efficiency: N/A  
Efficacy: 74.8 lumens/watt  
Spacing Criteria (0/90/45): 1/1/2001  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

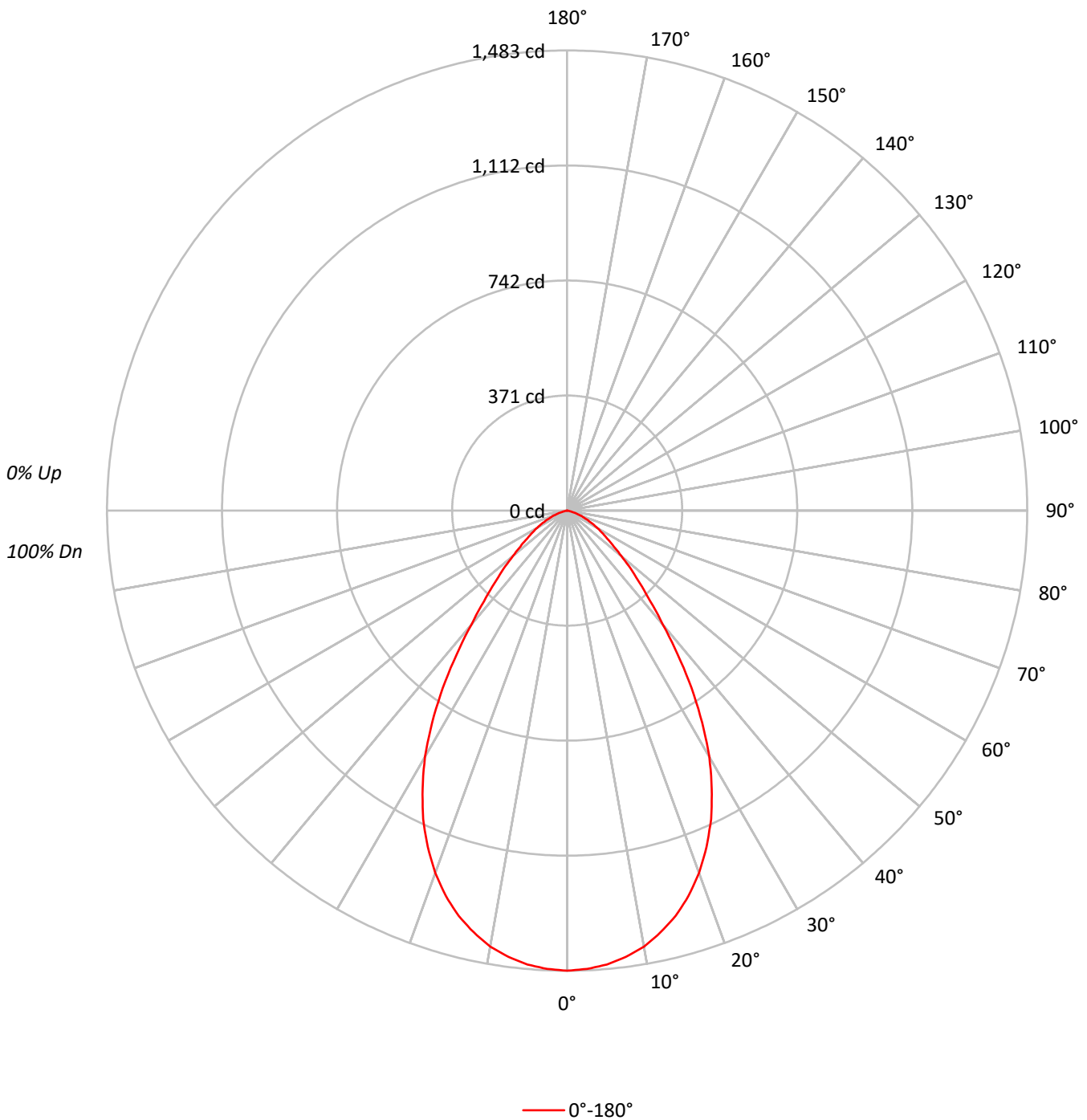
Input Watts (W): 26.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	85	75	69	64	73	68	63	72	67	63	70	66	62	60
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55
7	76	65	58	53	75	65	58	53	63	57	53	62	57	52	61	56	52	51
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40

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

	0°
0°	129691
5°	128922
10°	126709
15°	122412
20°	115656
25°	105902
30°	92527
35°	74629
40°	54842
45°	40920
50°	30917
55°	24125
60°	19628
65°	15171
70°	11023
75°	5340
80°	1461
85°	1405



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.8	7.1
10°-20°	378.6	19.4
20°-30°	500.0	25.6
30°-40°	433.1	22.2
40°-50°	260.5	13.3
50°-60°	145.1	7.4
60°-70°	74.1	3.8
70°-80°	19.2	1.0
80°-90°	1.9	0.1
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°	1017.5	52.1
0°-40°	1450.6	74.3
0°-60°	1856.2	95.1
0°-90°	1951.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1951.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1483	
5°	1468	139
15°	1352	379
25°	1097	500
35°	699	433
45°	331	261
55°	158	145
65°	73	74
75°	16	19
85°	1	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1482.7
2.5°	1478.4
5°	1468.3
7.5°	1451.0
10°	1426.6
12.5°	1392.1
15°	1351.8
17.5°	1301.5
20°	1242.5
22.5°	1173.5
25°	1097.3
27.5°	1009.5
30°	916.1
32.5°	809.6
35°	698.9
37.5°	585.3
40°	480.3
42.5°	396.9
45°	330.8
47.5°	277.6
50°	227.2
52.5°	189.8
55°	158.2
57.5°	133.7
60°	112.2
62.5°	92.0
65°	73.3
67.5°	57.5
70°	43.1
72.5°	28.8
75°	15.8
77.5°	5.8
80°	2.9
82.5°	2.9
85°	1.4
87.5°	1.4
90°	0.0

(END OF REPORT)