

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: P345271

Luminaire Tested: **PR4FS24D010 PR4M24MD9FSBZ 2000Lm3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345271  
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 2000Lm3000K  
Description: PR4 MEDIUM LENS WITH, BRONZE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1395.6 lumens  
Efficiency: N/A  
Efficacy: 63.4 lumens/watt  
Spacing Criteria (0/90/45): 1/1/2001  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

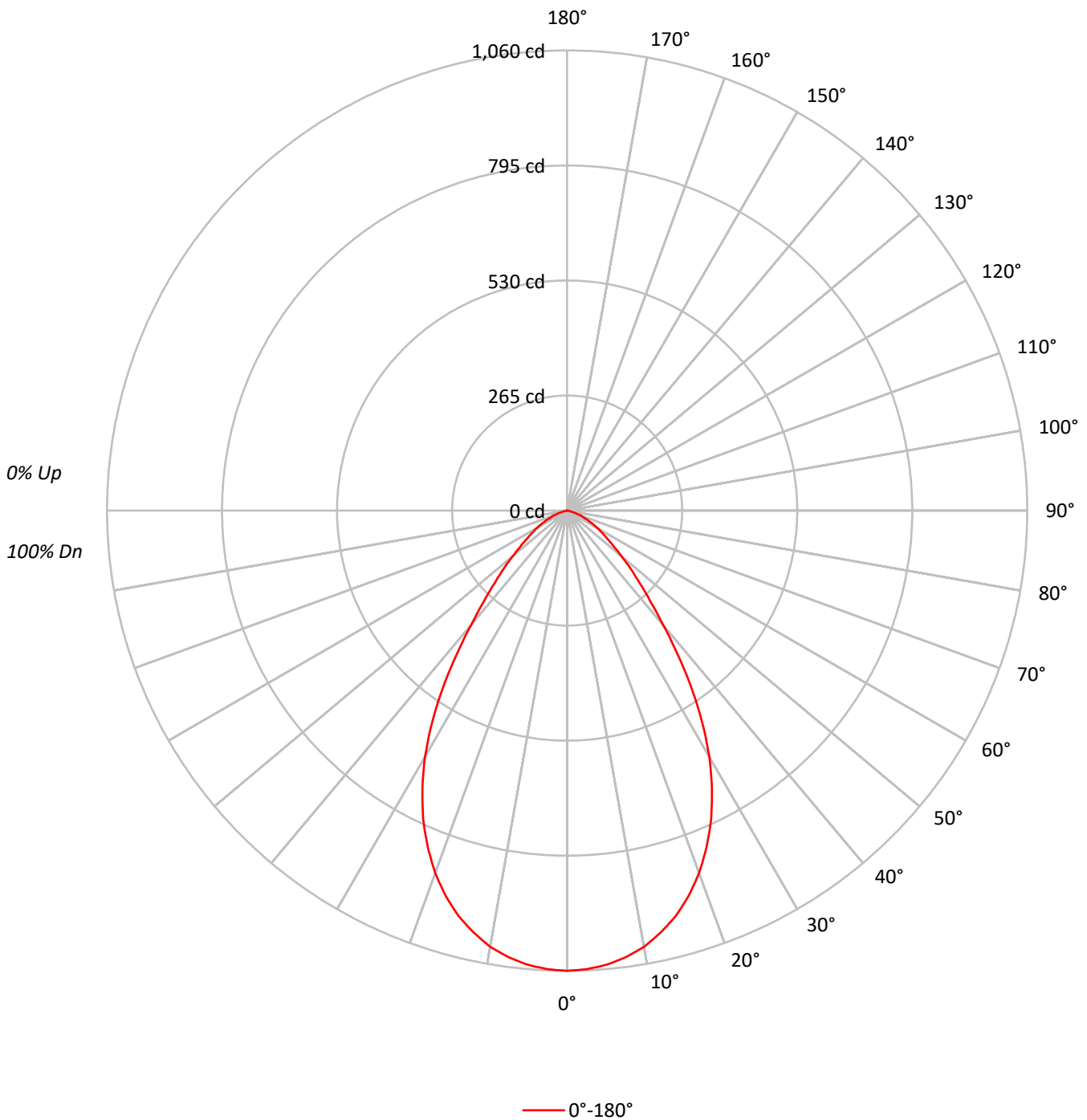
Input Watts (W): 22  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	92744
5°	92194
10°	90613
15°	87540
20°	82704
25°	75733
30°	66166
35°	53369
40°	39222
45°	29255
50°	22113
55°	17248
60°	14030
65°	10845
70°	7902
75°	3819
80°	1058
85°	1004



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.3	7.1
10°-20°	270.8	19.4
20°-30°	357.6	25.6
30°-40°	309.7	22.2
40°-50°	186.3	13.3
50°-60°	103.8	7.4
60°-70°	53.0	3.8
70°-80°	13.8	1.0
80°-90°	1.4	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°	727.6	52.1
0°-40°	1037.3	74.3
0°-60°	1327.4	95.1
0°-90°	1395.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1395.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1060	
5°	1050	99
15°	967	271
25°	785	358
35°	500	310
45°	236	186
55°	113	104
65°	52	53
75°	11	14
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1060.3
2.5°	1057.2
5°	1050.0
7.5°	1037.6
10°	1020.2
12.5°	995.5
15°	966.7
17.5°	930.7
20°	888.5
22.5°	839.2
25°	784.7
27.5°	721.9
30°	655.1
32.5°	579.0
35°	499.8
37.5°	418.6
40°	343.5
42.5°	283.8
45°	236.5
47.5°	198.5
50°	162.5
52.5°	135.7
55°	113.1
57.5°	95.6
60°	80.2
62.5°	65.8
65°	52.4
67.5°	41.1
70°	30.9
72.5°	20.6
75°	11.3
77.5°	4.1
80°	2.1
82.5°	2.1
85°	1.0
87.5°	1.0
90°	0.0

(END OF REPORT)