

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: P345259

Luminaire Tested: **PR4FS12D010 PR4M12MD9FSBZ 1500Lm3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345259  
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: PR4FS12D010 PR4M12MD9FSBZ 1500Lm3000K  
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: 861.2 lumens  
Efficiency: N/A  
Efficacy: 62.0 lumens/watt  
Spacing Criteria (0/90/45): 1/1/2001  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

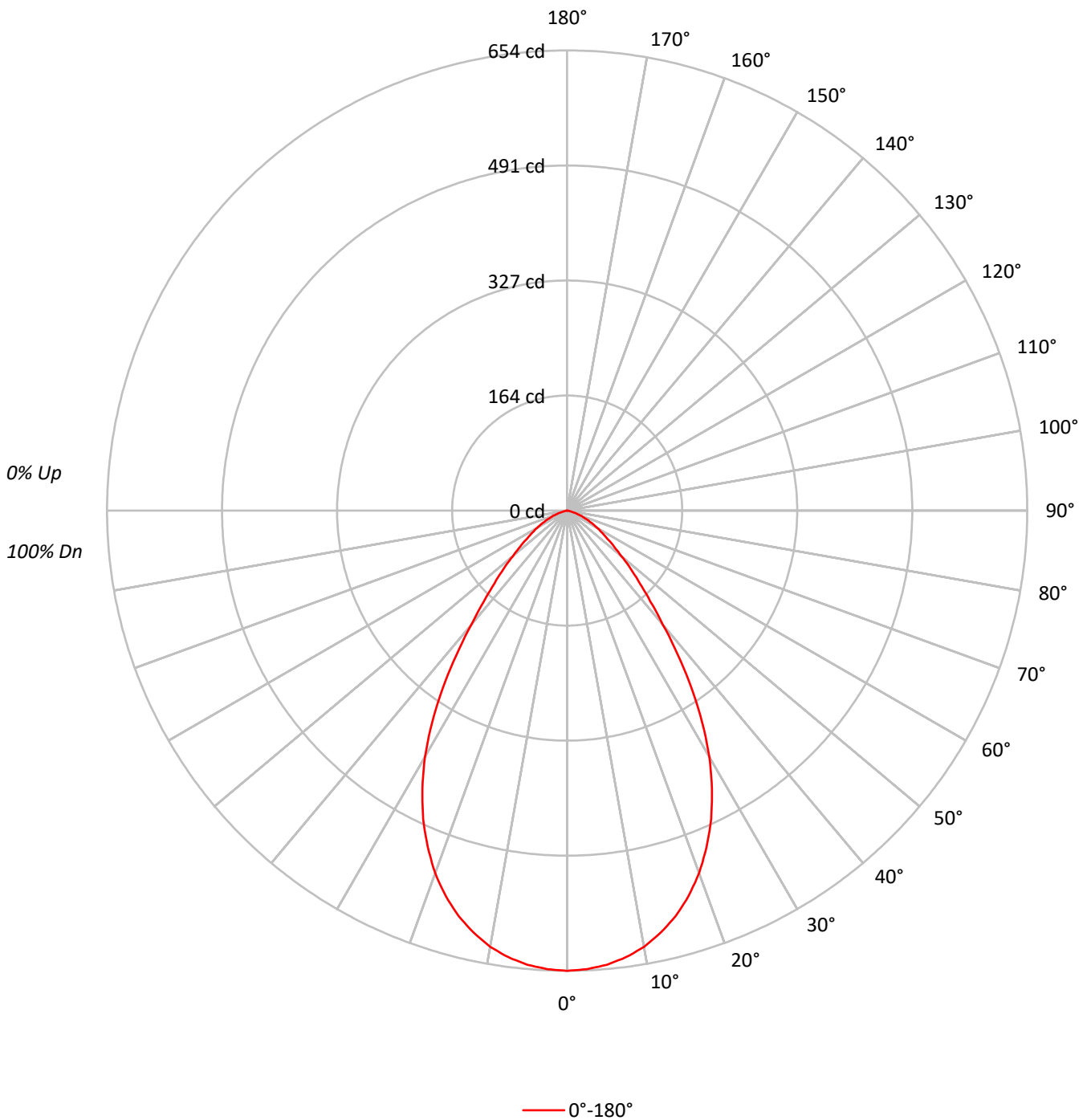
Input Watts (W): 13.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	57223
5°	56888
10°	55911
15°	54016
20°	51037
25°	46731
30°	40825
35°	32931
40°	24195
45°	18060
50°	13649
55°	10644
60°	8659
65°	6706
70°	4859
75°	2366
80°	655
85°	602



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.3	7.1
10°-20°	167.1	19.4
20°-30°	220.7	25.6
30°-40°	191.1	22.2
40°-50°	115.0	13.3
50°-60°	64.1	7.4
60°-70°	32.7	3.8
70°-80°	8.5	1.0
80°-90°	0.9	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°	449.0	52.1
0°-40°	640.1	74.3
0°-60°	819.1	95.1
0°-90°	861.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	861.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	654	
5°	648	61
15°	596	167
25°	484	221
35°	308	191
45°	146	115
55°	70	64
65°	32	33
75°	7	8
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	654.2
2.5°	652.3
5°	647.9
7.5°	640.3
10°	629.5
12.5°	614.3
15°	596.5
17.5°	574.3
20°	548.3
22.5°	517.8
25°	484.2
27.5°	445.5
30°	404.2
32.5°	357.3
35°	308.4
37.5°	258.3
40°	211.9
42.5°	175.1
45°	146.0
47.5°	122.5
50°	100.3
52.5°	83.8
55°	69.8
57.5°	59.0
60°	49.5
62.5°	40.6
65°	32.4
67.5°	25.4
70°	19.0
72.5°	12.7
75°	7.0
77.5°	2.5
80°	1.3
82.5°	1.3
85°	0.6
87.5°	0.6
90°	0.0

(END OF REPORT)