

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: P345264

Luminaire Tested: **PR4FS12D010 PR4M12MD8FSBZ 2000Lm4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345264  
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 PR4M12MD8FSBZ 2000Lm4000K  
Description: PR4 MEDIUM LENS WITH, BRONZE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1737.3 lumens  
Efficiency: N/A  
Efficacy: 83.9 lumens/watt  
Spacing Criteria (0/90/45): 1/1/2001  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

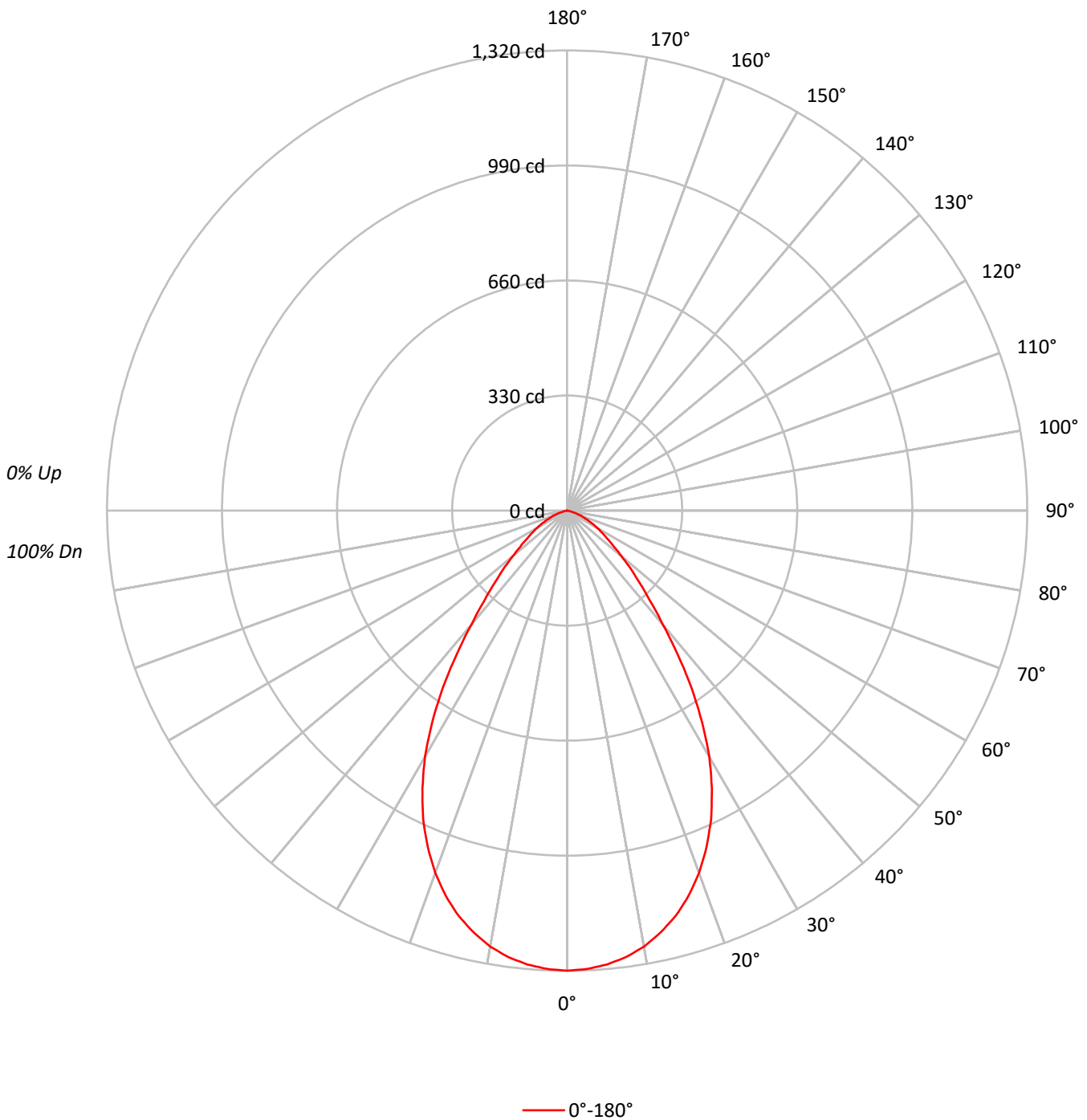
Input Watts (W): 20.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66					66			
5	86	76	69	64	85	75	69	64	73	68	63	72	67	63	70	66	62	60					60			
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55					55			
7	76	65	58	53	75	65	58	53	63	57	53	62	57	52	61	56	52	51					51			
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47					47			
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43					43			
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40					40			

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

	0°
0°	115442
5°	114759
10°	112791
15°	108965
20°	102950
25°	94263
30°	82356
35°	66428
40°	48825
45°	36417
50°	27529
55°	21472
60°	17476
65°	13515
70°	9821
75°	4765
80°	1310
85°	1305



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.6	7.1
10°-20°	337.0	19.4
20°-30°	445.1	25.6
30°-40°	385.5	22.2
40°-50°	231.9	13.3
50°-60°	129.2	7.4
60°-70°	66.0	3.8
70°-80°	17.1	1.0
80°-90°	1.8	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°	905.7	52.1
0°-40°	1291.2	74.3
0°-60°	1652.4	95.1
0°-90°	1737.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1737.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1320	
5°	1307	124
15°	1203	337
25°	977	445
35°	622	386
45°	294	232
55°	141	129
65°	65	66
75°	14	17
85°	1	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1319.8
2.5°	1316.0
5°	1307.0
7.5°	1291.7
10°	1269.9
12.5°	1239.2
15°	1203.3
17.5°	1158.5
20°	1106.0
22.5°	1044.6
25°	976.7
27.5°	898.7
30°	815.4
32.5°	720.7
35°	622.1
37.5°	521.0
40°	427.6
42.5°	353.3
45°	294.4
47.5°	247.1
50°	202.3
52.5°	169.0
55°	140.8
57.5°	119.1
60°	99.9
62.5°	81.9
65°	65.3
67.5°	51.2
70°	38.4
72.5°	25.6
75°	14.1
77.5°	5.1
80°	2.6
82.5°	2.6
85°	1.3
87.5°	1.3
90°	0.0

(END OF REPORT)