

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: P345260

Luminaire Tested: **PR4FS12D010 PR4M12MD9FSBZ 1500Lm3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345260  
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 1500Lm3500K  
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: 921.1 lumens  
Efficiency: N/A  
Efficacy: 69.3 lumens/watt  
Spacing Criteria (0/90/45): 1/1/2001  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

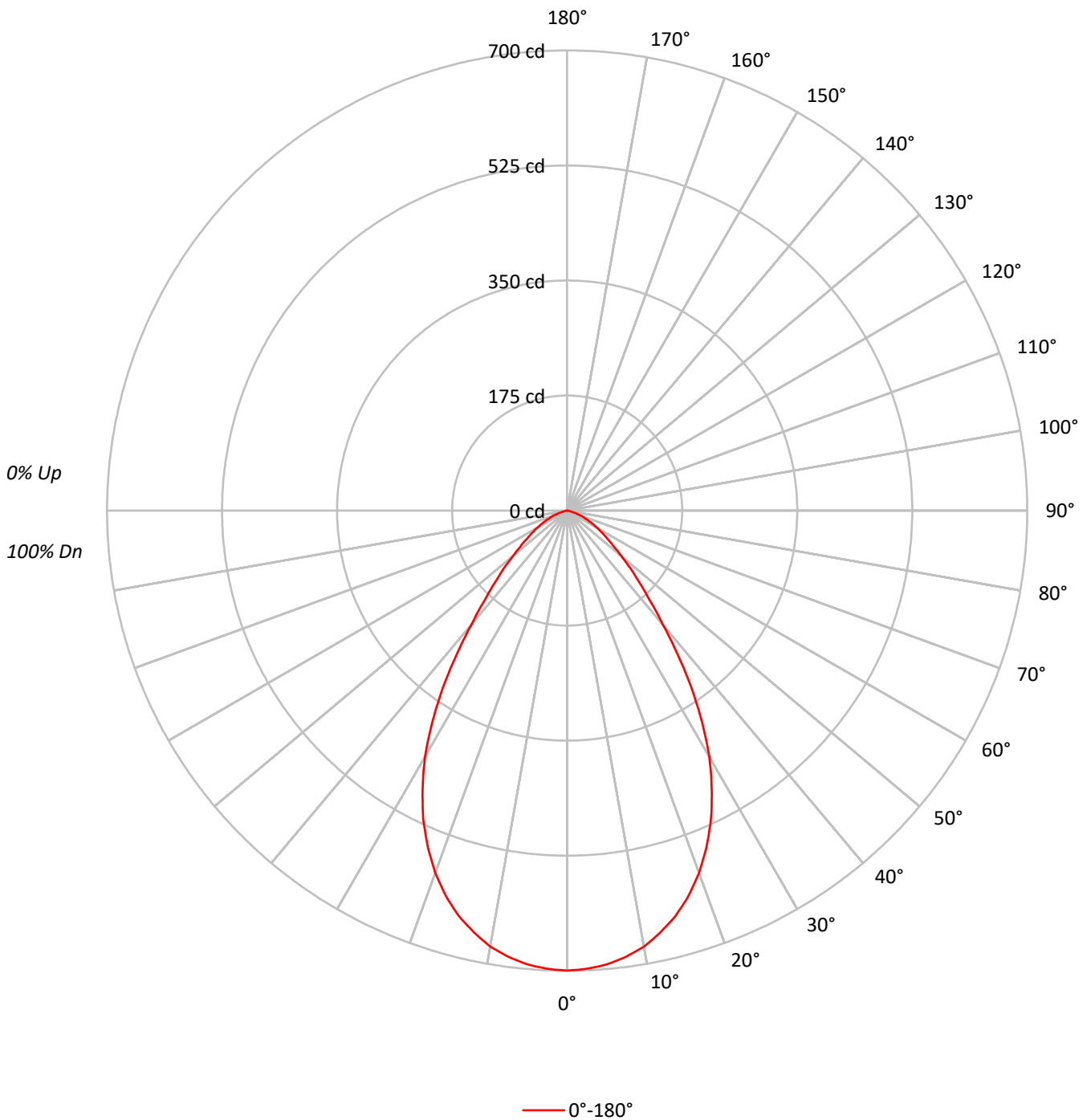
Input Watts (W): 13.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	61211
5°	60848
10°	59802
15°	57774
20°	54584
25°	49983
30°	43673
35°	35227
40°	25885
45°	19310
50°	14588
55°	11392
60°	9254
65°	7161
70°	5217
75°	2535
80°	705
85°	703



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.5	7.1
10°-20°	178.7	19.4
20°-30°	236.0	25.6
30°-40°	204.4	22.2
40°-50°	122.9	13.3
50°-60°	68.5	7.4
60°-70°	35.0	3.8
70°-80°	9.1	1.0
80°-90°	1.0	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°	480.2	52.1
0°-40°	684.6	74.3
0°-60°	876.1	95.1
0°-90°	921.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	921.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	700	
5°	693	66
15°	638	179
25°	518	236
35°	330	204
45°	156	123
55°	75	68
65°	35	35
75°	8	9
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	699.8
2.5°	697.7
5°	693.0
7.5°	684.8
10°	673.3
12.5°	657.0
15°	638.0
17.5°	614.3
20°	586.4
22.5°	553.8
25°	517.9
27.5°	476.5
30°	432.4
32.5°	382.1
35°	329.9
37.5°	276.2
40°	226.7
42.5°	187.3
45°	156.1
47.5°	131.0
50°	107.2
52.5°	89.6
55°	74.7
57.5°	63.1
60°	52.9
62.5°	43.4
65°	34.6
67.5°	27.1
70°	20.4
72.5°	13.6
75°	7.5
77.5°	2.7
80°	1.4
82.5°	1.4
85°	0.7
87.5°	0.7
90°	0.0

(END OF REPORT)