

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: P345363

Luminaire Tested: **PR4FS12D010 PR4M12WD9FSBZ 1000Lm4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345363  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-6)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR4FS12D010 PR4M12WD9FSBZ 1000Lm4000K  
Description: PR4 WIDE LENS WITH, BRONZE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 667.9 lumens  
Efficiency: N/A  
Efficacy: 64.2 lumens/watt  
Spacing Criteria (0/90/45): 1.62 / 1.62 / 1.57  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

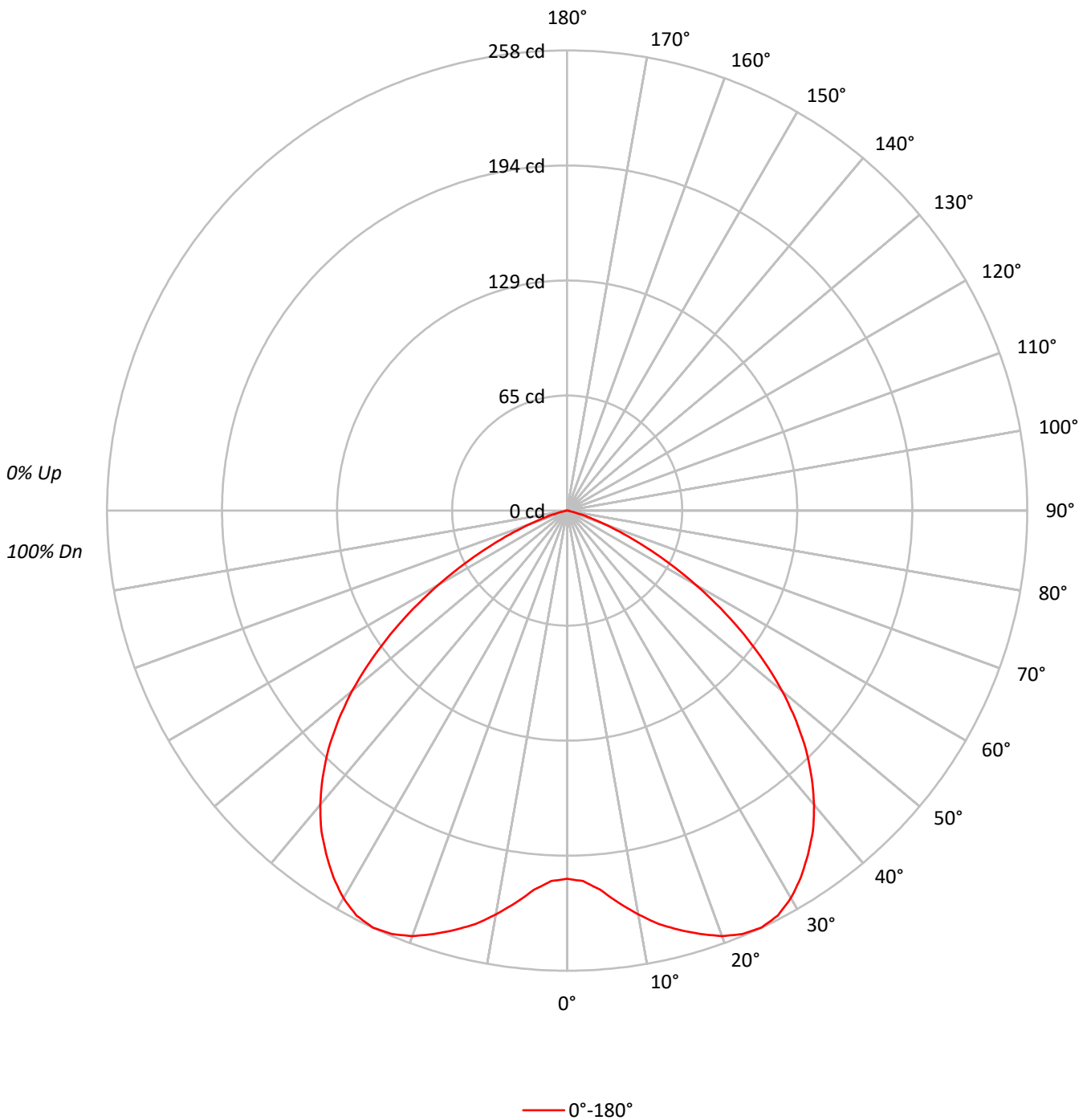
Input Watts (W): 10.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67	65
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	63	59	57
5	80	68	59	53	78	67	59	53	65	58	52	63	57	52	61	56	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38
8	63	51	42	37	62	50	42	37	49	41	36	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	32	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	29	28

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

	0°
0°	18054
5°	18737
10°	20419
15°	22041
20°	23634
25°	24890
30°	25341
35°	25136
40°	24595
45°	23429
50°	21419
55°	18452
60°	14607
65°	10142
70°	5754
75°	2366
80°	504
85°	1004



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	20.9	3.1
10°-20°	69.2	10.4
20°-30°	118.4	17.7
30°-40°	147.0	22.0
40°-50°	145.1	21.7
50°-60°	107.7	16.1
60°-70°	49.7	7.4
70°-80°	9.1	1.4
80°-90°	0.8	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°	208.5	31.2
0°-40°	355.5	53.2
0°-60°	608.3	91.1
0°-90°	667.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	667.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	206	
5°	213	21
15°	243	69
25°	258	118
35°	235	147
45°	189	145
55°	121	108
65°	49	50
75°	7	9
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	206.4
2.5°	207.9
5°	213.4
7.5°	221.9
10°	229.9
12.5°	237.4
15°	243.4
17.5°	248.9
20°	253.9
22.5°	256.9
25°	257.9
27.5°	255.9
30°	250.9
32.5°	243.9
35°	235.4
37.5°	226.4
40°	215.4
42.5°	202.9
45°	189.4
47.5°	173.9
50°	157.4
52.5°	139.4
55°	121.0
57.5°	102.0
60°	83.5
62.5°	65.5
65°	49.0
67.5°	34.5
70°	22.5
72.5°	13.5
75°	7.0
77.5°	2.5
80°	1.0
82.5°	1.0
85°	1.0
87.5°	0.5
90°	0.0

(END OF REPORT)