

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: P345371

Luminaire Tested: **PR4FS12D010 PR4M12WD8FSBZ 2000Lm3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345371  
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 PR4M12WD8FSBZ 2000Lm3500K  
Description: PR4 WIDE LENS WITH, BRONZE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1753.4 lumens  
Efficiency: N/A  
Efficacy: 88.6 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

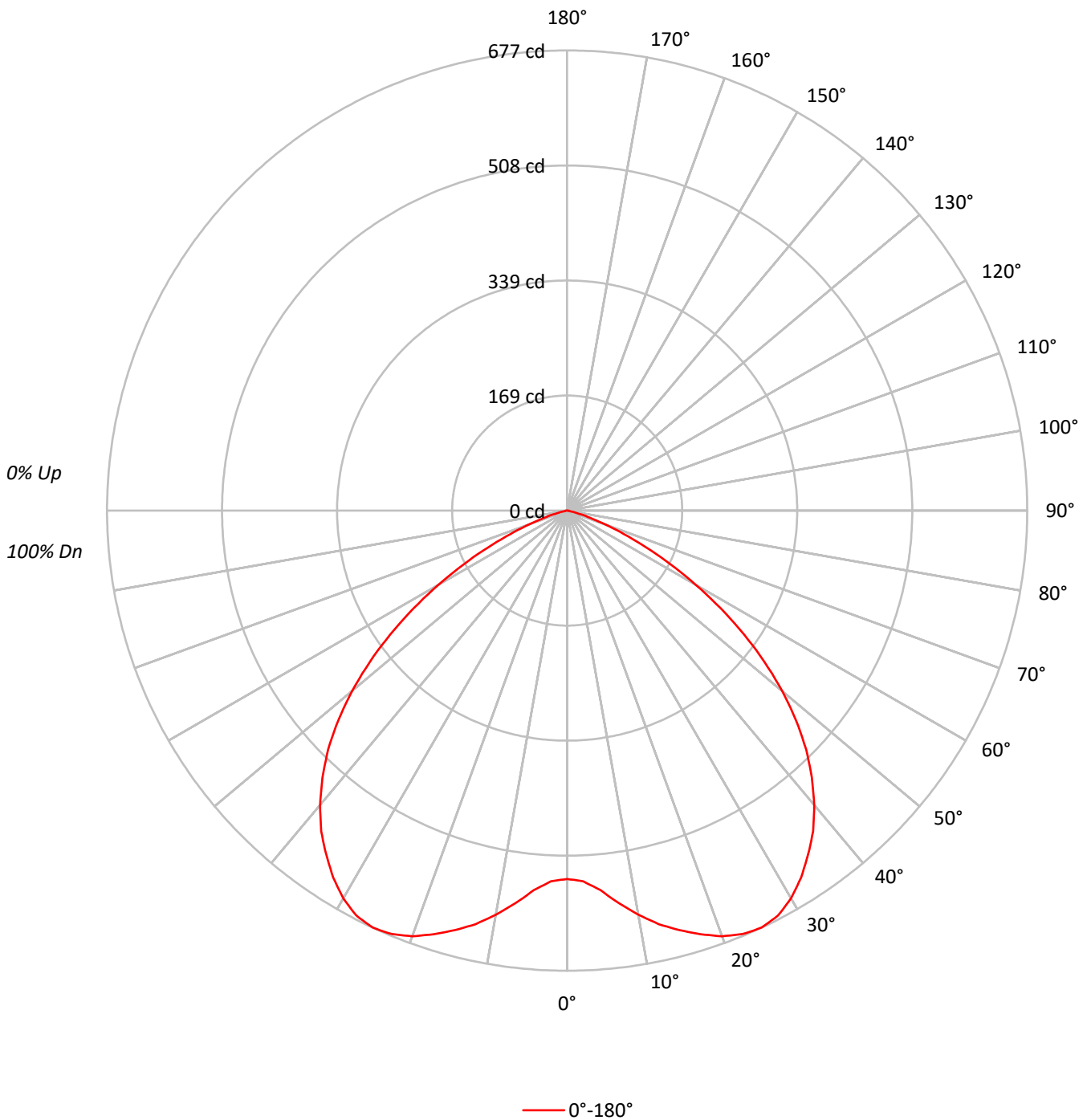
Input Watts (W): 19.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	47400
5°	49196
10°	53611
15°	57865
20°	62040
25°	65339
30°	66529
35°	65990
40°	64571
45°	61516
50°	56241
55°	48418
60°	38329
65°	26616
70°	15089
75°	6218
80°	1310
85°	2609



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.0	3.1
10°-20°	181.6	10.4
20°-30°	310.7	17.7
30°-40°	386.0	22.0
40°-50°	381.0	21.7
50°-60°	282.6	16.1
60°-70°	130.5	7.4
70°-80°	23.9	1.4
80°-90°	2.1	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°	547.3	31.2
0°-40°	933.3	53.2
0°-60°	1596.9	91.1
0°-90°	1753.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1753.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	542	
5°	560	55
15°	639	182
25°	677	311
35°	618	386
45°	497	381
55°	318	283
65°	129	131
75°	18	24
85°	3	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	541.9
2.5°	545.8
5°	560.3
7.5°	582.6
10°	603.6
12.5°	623.2
15°	639.0
17.5°	653.4
20°	666.5
22.5°	674.4
25°	677.0
27.5°	671.8
30°	658.7
32.5°	640.3
35°	618.0
37.5°	594.4
40°	565.5
42.5°	532.7
45°	497.3
47.5°	456.6
50°	413.3
52.5°	366.1
55°	317.5
57.5°	267.7
60°	219.1
62.5°	171.9
65°	128.6
67.5°	90.5
70°	59.0
72.5°	35.4
75°	18.4
77.5°	6.6
80°	2.6
82.5°	2.6
85°	2.6
87.5°	1.3
90°	0.0

(END OF REPORT)