

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: P345392

Luminaire Tested: **PR4FS24D010 PR4M24WD9FSBZ 4000Lm3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345392  
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: PR4FS24D010 PR4M24WD9FSBZ 4000Lm3500K  
Description: PR4 WIDE 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: 2758.7 lumens  
Efficiency: N/A  
Efficacy: 70.7 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

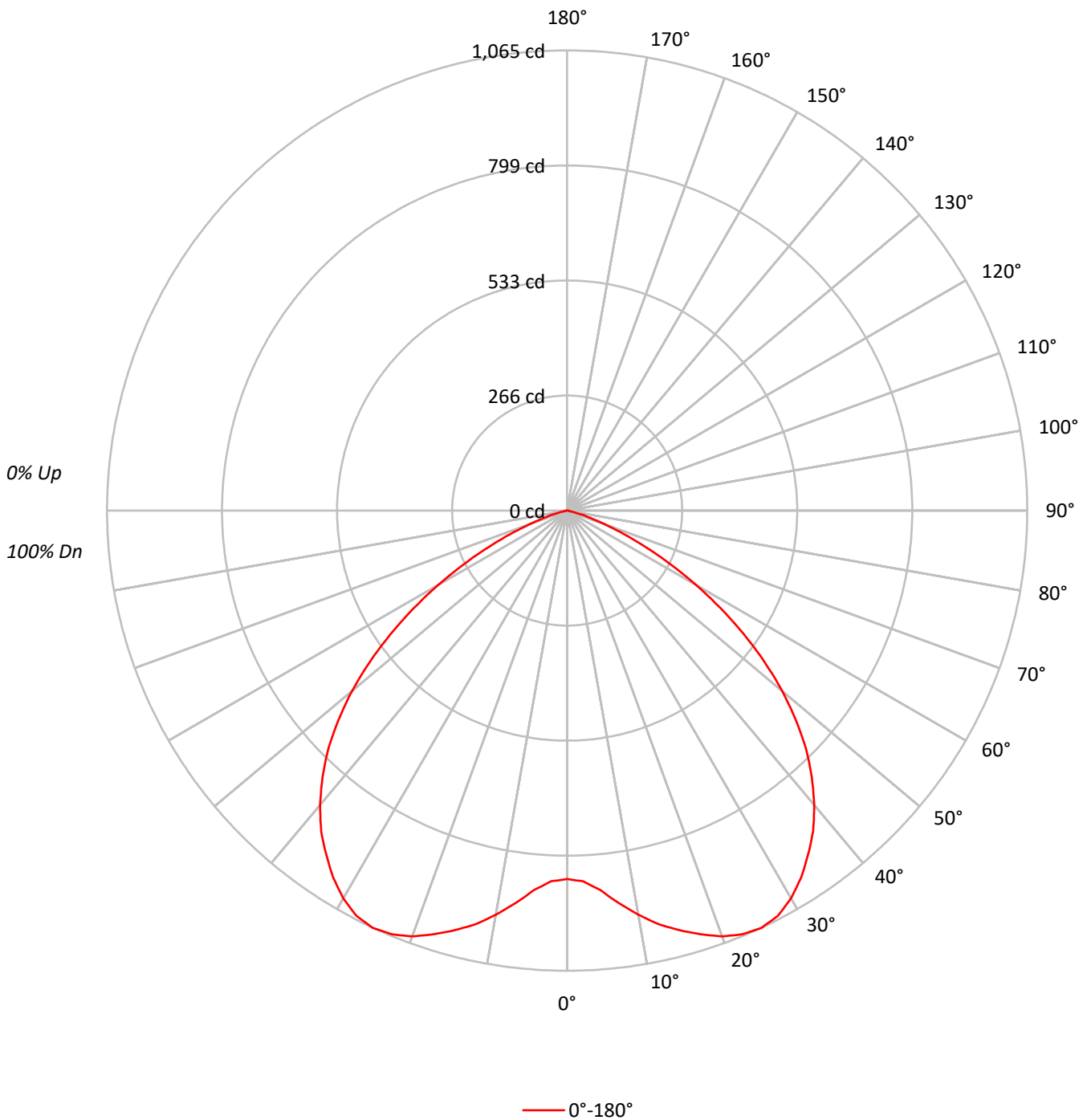
Input Watts (W): 39  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	74576
5°	77399
10°	84342
15°	91044
20°	97616
25°	102804
30°	104667
35°	103823
40°	101600
45°	96783
50°	88492
55°	76188
60°	60319
65°	41870
70°	23759
75°	9767
80°	2065
85°	4115



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.5	3.1
10°-20°	285.8	10.4
20°-30°	488.9	17.7
30°-40°	607.2	22.0
40°-50°	599.4	21.7
50°-60°	444.7	16.1
60°-70°	205.3	7.4
70°-80°	37.6	1.4
80°-90°	3.4	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°	861.1	31.2
0°-40°	1468.4	53.2
0°-60°	2512.5	91.1
0°-90°	2758.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2758.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	853	
5°	882	86
15°	1005	286
25°	1065	489
35°	972	607
45°	782	599
55°	500	445
65°	202	205
75°	29	38
85°	4	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	852.6
2.5°	858.8
5°	881.5
7.5°	916.6
10°	949.6
12.5°	980.6
15°	1005.4
17.5°	1028.1
20°	1048.7
22.5°	1061.1
25°	1065.2
27.5°	1057.0
30°	1036.3
32.5°	1007.4
35°	972.3
37.5°	935.2
40°	889.8
42.5°	838.2
45°	782.4
47.5°	718.4
50°	650.3
52.5°	576.0
55°	499.6
57.5°	421.1
60°	344.8
62.5°	270.4
65°	202.3
67.5°	142.4
70°	92.9
72.5°	55.7
75°	28.9
77.5°	10.3
80°	4.1
82.5°	4.1
85°	4.1
87.5°	2.1
90°	0.0

(END OF REPORT)