

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: P345314

Luminaire Tested: **PR4FS24D010 PR4M24WD9FSMW 3000Lm3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345314  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-4)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR4FS24D010 PR4M24WD9FSMW 3000Lm3500K  
Description: PR4 WIDE LENS WITH, MATTE WHITE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2387.3 lumens  
Efficiency: N/A  
Efficacy: 91.5 lumens/watt  
Spacing Criteria (0/90/45): 1.61 / 1.61 / 1.58  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

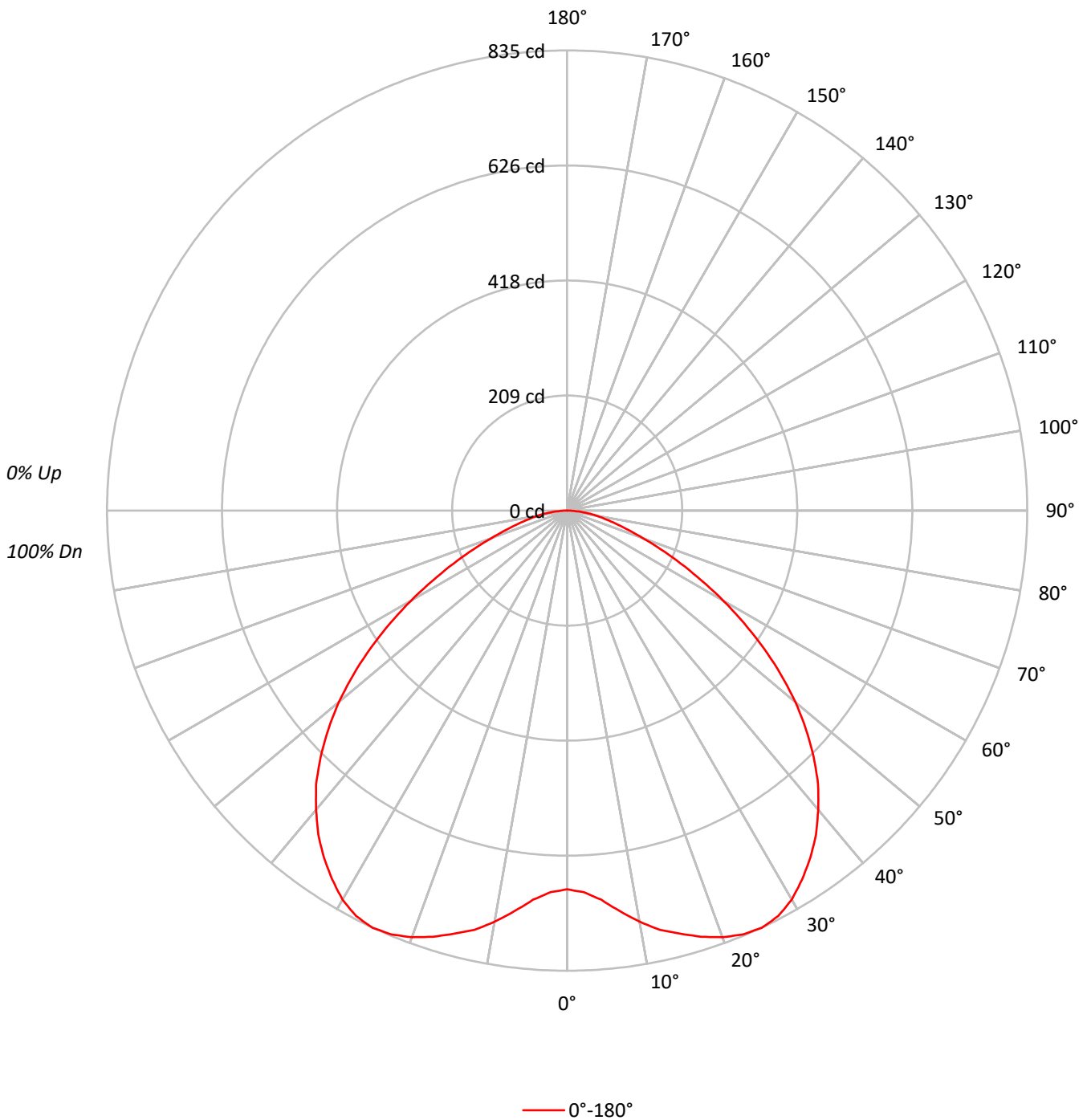
Input Watts (W): 26.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	32
9	57	44	36	31	56	44	36	31	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

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

	0°
0°	60109
5°	62226
10°	67289
15°	71991
20°	76682
25°	80616
30°	82326
35°	82125
40°	80922
45°	78253
50°	73550
55°	66428
60°	57345
65°	47003
70°	37492
75°	30619
80°	27503
85°	23083



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.3	2.9
10°-20°	226.0	9.5
20°-30°	383.7	16.1
30°-40°	480.3	20.1
40°-50°	486.0	20.4
50°-60°	388.3	16.3
60°-70°	227.9	9.5
70°-80°	99.2	4.2
80°-90°	26.6	1.1
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°	679.0	28.4
0°-40°	1159.3	48.6
0°-60°	2033.6	85.2
0°-90°	2387.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2387.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	687	
5°	709	69
15°	795	226
25°	835	384
35°	769	480
45°	633	486
55°	436	388
65°	227	228
75°	91	99
85°	23	27
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	687.2
2.5°	692.9
5°	708.7
7.5°	733.2
10°	757.6
12.5°	779.2
15°	795.0
17.5°	810.8
20°	823.8
22.5°	832.4
25°	835.3
27.5°	829.5
30°	815.1
32.5°	793.6
35°	769.1
37.5°	741.8
40°	708.7
42.5°	674.2
45°	632.6
47.5°	588.0
50°	540.5
52.5°	488.8
55°	435.6
57.5°	381.0
60°	327.8
62.5°	274.6
65°	227.1
67.5°	184.0
70°	146.6
72.5°	115.0
75°	90.6
77.5°	70.4
80°	54.6
82.5°	38.8
85°	23.0
87.5°	8.6
90°	0.0

(END OF REPORT)