

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: P345350

Luminaire Tested: **PR4FS24D010 PR4M24WD9FSMMS 3000Lm3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345350  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-5)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR4FS24D010 PR4M24WD9FSMMS 3000Lm3500K  
Description: PR4 WIDE LENS WITH, MATTE METALLIC SILVER FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2227.7 lumens  
Efficiency: N/A  
Efficacy: 85.4 lumens/watt  
Spacing Criteria (0/90/45): 1.65 / 1.65 / 1.6  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

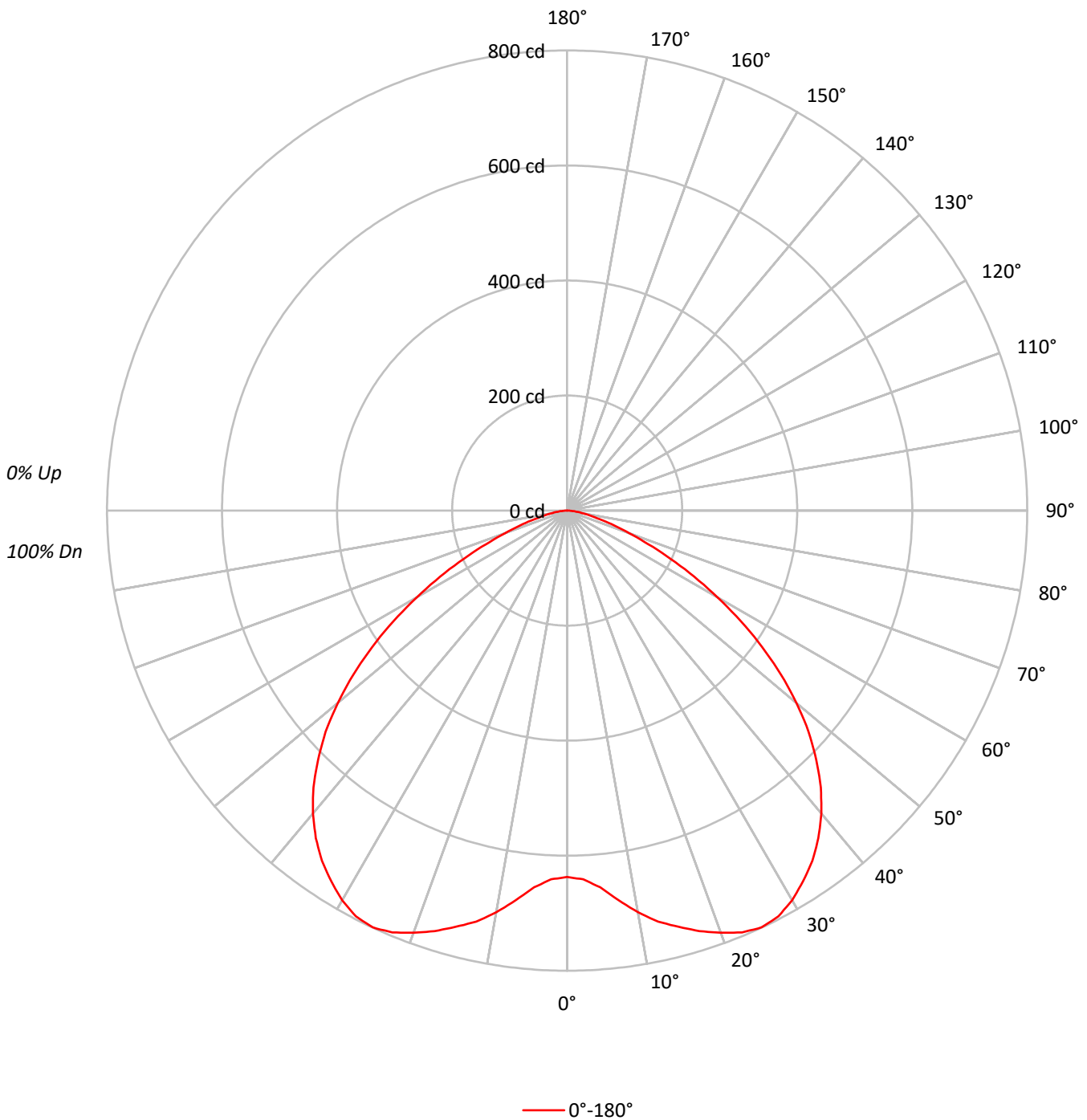
Input Watts (W): 26.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P345350

CATALOG NUMBER: PR4FS24D010 PR4M24WD9FSMMS 3000Lm3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P345350

CATALOG NUMBER: PR4FS24D010 PR4M24WD9FSMMS 3000Lm3500K

**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	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	92	83	75	69	90	81	74	69	78	72	67	76	70	66	73	69	65	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	54	50	59	53	49	47
6	72	59	51	44	70	58	50	44	57	49	44	55	48	43	53	48	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	44	39	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

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

	0°
0°	55727
5°	57705
10°	62973
15°	67844
20°	72689
25°	77171
30°	79013
35°	79391
40°	78490
45°	75779
50°	70842
55°	63165
60°	52832
65°	41084
70°	29411
75°	20413
80°	14507
85°	10136



TEST NUMBER: P345350

CATALOG NUMBER: PR4FS24D010 PR4M24WD9FSMMS 3000Lm3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.5	2.9
10°-20°	213.1	9.6
20°-30°	366.9	16.5
30°-40°	463.7	20.8
40°-50°	470.5	21.1
50°-60°	368.7	16.6
60°-70°	199.4	8.9
70°-80°	68.1	3.1
80°-90°	12.9	0.6
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°	644.5	28.9
0°-40°	1108.1	49.7
0°-60°	1947.3	87.4
0°-90°	2227.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2227.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	637	
5°	657	64
15°	749	213
25°	800	367
35°	744	464
45°	613	470
55°	414	369
65°	198	199
75°	60	68
85°	10	13
90°	0	



TEST NUMBER: P345350

CATALOG NUMBER: PR4FS24D010 PR4M24WD9FSMMS 3000Lm3500K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	637.1
2.5°	641.4
5°	657.2
7.5°	683.1
10°	709.0
12.5°	732.0
15°	749.2
17.5°	766.5
20°	780.9
22.5°	793.8
25°	799.6
27.5°	795.3
30°	782.3
32.5°	763.6
35°	743.5
37.5°	717.6
40°	687.4
42.5°	652.9
45°	612.6
47.5°	569.5
50°	520.6
52.5°	468.8
55°	414.2
57.5°	358.1
60°	302.0
62.5°	248.8
65°	198.5
67.5°	152.4
70°	115.0
72.5°	84.8
75°	60.4
77.5°	41.7
80°	28.8
82.5°	18.7
85°	10.1
87.5°	4.3
90°	0.0

(END OF REPORT)