

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: P345315

Luminaire Tested: **PR4FS24D010 PR4M24WD9FSMW 3000Lm4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345315  
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 3000Lm4000K  
Description: PR4 WIDE LENS WITH, MATTE WHITE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2275.0 lumens  
Efficiency: N/A  
Efficacy: 79.8 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

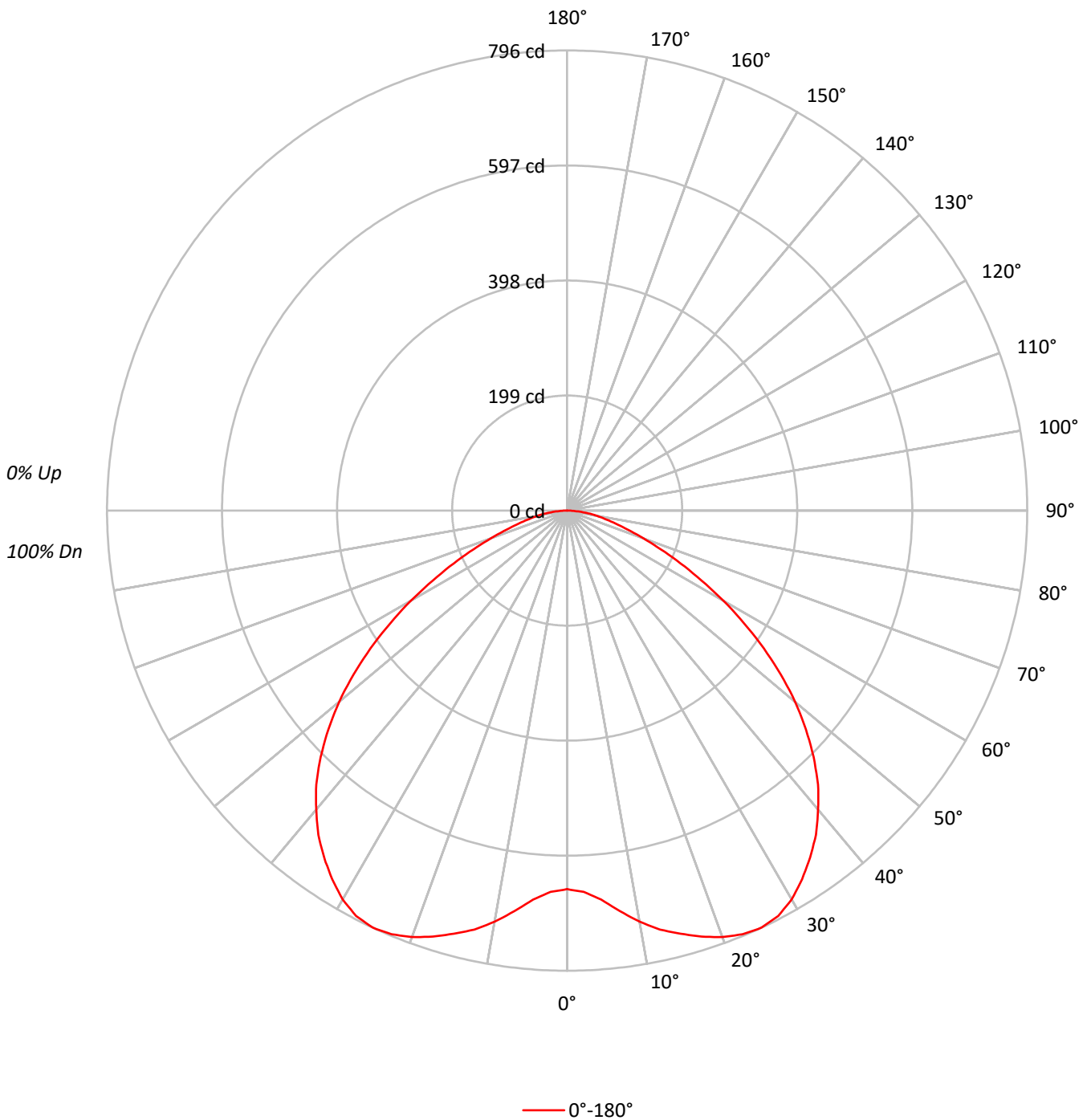
Input Watts (W): 28.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P345315

CATALOG NUMBER: PR4FS24D010 PR4M24WD9FSMW 3000Lm4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P345315

CATALOG NUMBER: PR4FS24D010 PR4M24WD9FSMW 3000Lm4000K

**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°	57275
5°	59303
10°	64127
15°	68604
20°	73070
25°	76823
30°	78458
35°	78259
40°	77119
45°	74567
50°	70094
55°	63302
60°	54651
65°	44809
70°	35727
75°	29166
80°	26244
85°	21979



TEST NUMBER: P345315

CATALOG NUMBER: PR4FS24D010 PR4M24WD9FSMW 3000Lm4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.0	2.9
10°-20°	215.4	9.5
20°-30°	365.6	16.1
30°-40°	457.7	20.1
40°-50°	463.1	20.4
50°-60°	370.0	16.3
60°-70°	217.2	9.5
70°-80°	94.6	4.2
80°-90°	25.3	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°	647.0	28.4
0°-40°	1104.7	48.6
0°-60°	1937.9	85.2
0°-90°	2275.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2275.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	655	
5°	675	66
15°	758	215
25°	796	366
35°	733	458
45°	603	463
55°	415	370
65°	216	217
75°	86	95
85°	22	25
90°	0	



TEST NUMBER: P345315

CATALOG NUMBER: PR4FS24D010 PR4M24WD9FSMW 3000Lm4000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	654.8
2.5°	660.3
5°	675.4
7.5°	698.7
10°	722.0
12.5°	742.5
15°	757.6
17.5°	772.7
20°	785.0
22.5°	793.2
25°	796.0
27.5°	790.5
30°	776.8
32.5°	756.2
35°	732.9
37.5°	706.9
40°	675.4
42.5°	642.5
45°	602.8
47.5°	560.3
50°	515.1
52.5°	465.8
55°	415.1
57.5°	363.0
60°	312.4
62.5°	261.7
65°	216.5
67.5°	175.4
70°	139.7
72.5°	109.6
75°	86.3
77.5°	67.1
80°	52.1
82.5°	37.0
85°	21.9
87.5°	8.2
90°	0.0

(END OF REPORT)