

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: P345207

Luminaire Tested: **PR4FS24D010 PR4M24MD9FSMW 3000Lm4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P345207
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PR4FS24D010 PR4M24MD9FSMW 3000Lm4000K
Description: PR4 MEDIUM 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: 2231.1 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.02
Luminous Opening: Circular (Dia: 0.4' x H: 0')
CIE Type: Direct

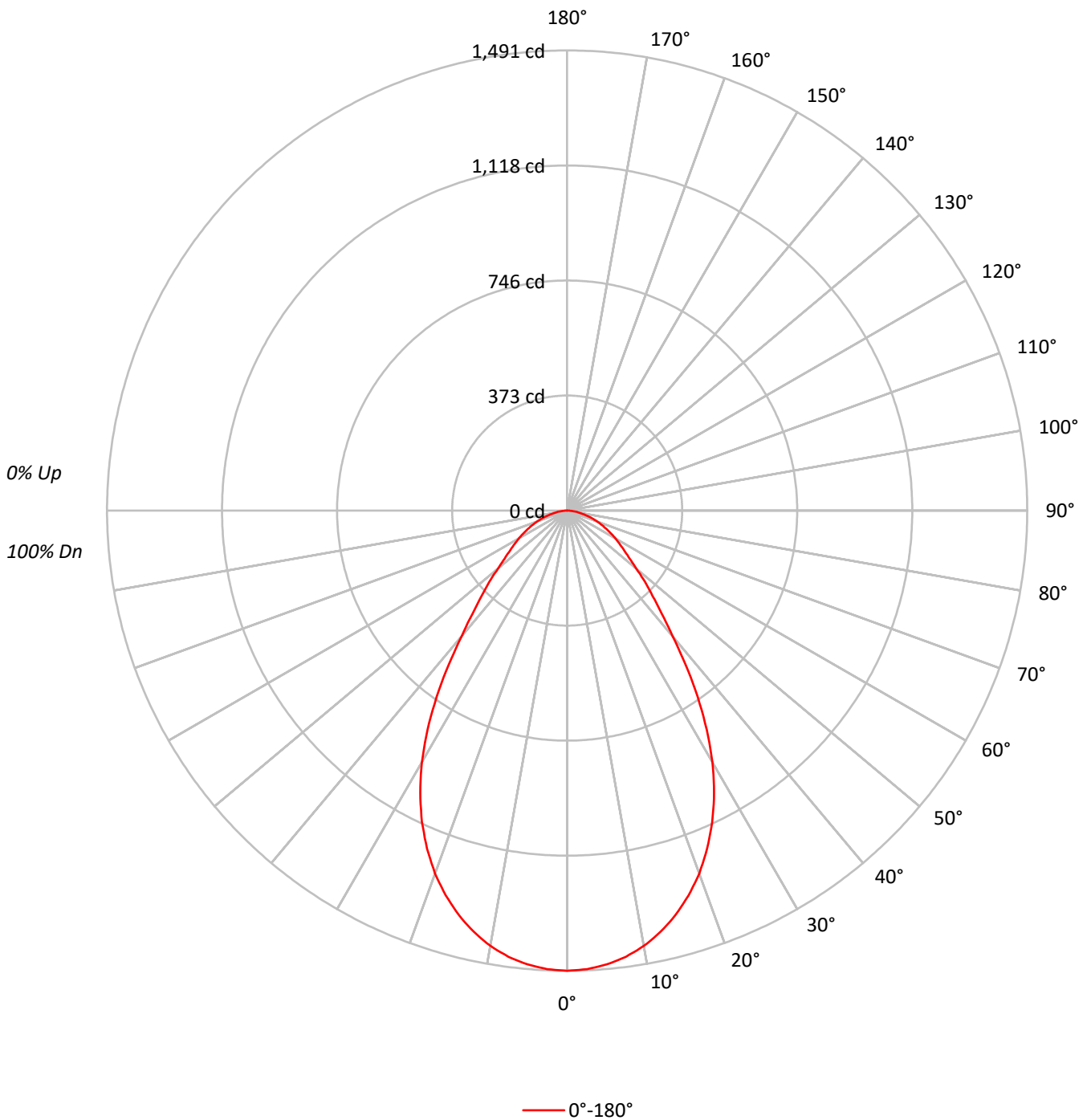
Input Watts (W): 28.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P345207

CATALOG NUMBER: PR4FS24D010 PR4M24MD9FSMW 3000Lm4000K

Luminous Intensity Polar Plot





TEST NUMBER: P345207

CATALOG NUMBER: PR4FS24D010 PR4M24MD9FSMW 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	111	107	104	101	108	105	102	99	101	98	96		97	95	93		94	92	90	88
2	103	96	91	86	101	95	90	85	91	87	83		88	85	82		85	82	80	78
3	96	87	81	75	94	86	80	75	83	78	73		80	76	72		78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65		74	68	64		72	67	64	62
5	83	73	65	59	81	72	64	59	70	63	59		68	62	58		66	61	57	56
6	78	67	59	54	76	66	59	53	64	58	53		63	57	53		61	56	52	50
7	73	62	54	49	72	61	54	49	59	53	48		58	52	48		57	52	48	46
8	69	57	50	45	67	56	49	44	55	49	44		54	48	44		53	48	44	42
9	65	53	46	41	64	53	46	41	51	45	41		50	45	41		50	44	40	39
10	61	50	43	38	60	49	42	38	48	42	38		47	42	38		46	41	37	36

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	130434
5°	129607
10°	127215
15°	122874
20°	116484
25°	107408
30°	95103
35°	78740
40°	60723
45°	48491
50°	39721
55°	34495
60°	31646
65°	28934
70°	26648
75°	23150
80°	20703
85°	16459



TEST NUMBER: P345207

CATALOG NUMBER: PR4FS24D010 PR4M24MD9FSMW 3000Lm4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.5	6.3
10°-20°	380.4	17.0
20°-30°	507.9	22.8
30°-40°	457.6	20.5
40°-50°	307.4	13.8
50°-60°	205.2	9.2
60°-70°	139.0	6.2
70°-80°	74.1	3.3
80°-90°	20.1	0.9
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°	1027.8	46.1
0°-40°	1485.5	66.6
0°-60°	1998.0	89.6
0°-90°	2231.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2231.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1491	
5°	1476	140
15°	1357	380
25°	1113	508
35°	737	458
45°	392	307
55°	226	205
65°	140	139
75°	68	74
85°	16	20
90°	0	



TEST NUMBER: P345207

CATALOG NUMBER: PR4FS24D010 PR4M24MD9FSMW 3000Lm4000K

CANDELA DISTRIBUTION (FULL):

0°	
0°	1491.2
2.5°	1487.1
5°	1476.1
7.5°	1458.3
10°	1432.3
12.5°	1398.0
15°	1356.9
17.5°	1307.6
20°	1251.4
22.5°	1185.6
25°	1112.9
27.5°	1030.7
30°	941.6
32.5°	841.6
35°	737.4
37.5°	630.5
40°	531.8
42.5°	453.7
45°	392.0
47.5°	342.7
50°	291.9
52.5°	254.9
55°	226.2
57.5°	201.5
60°	180.9
62.5°	159.0
65°	139.8
67.5°	120.6
70°	104.2
72.5°	86.3
75°	68.5
77.5°	53.5
80°	41.1
82.5°	28.8
85°	16.4
87.5°	8.2
90°	0.0

(END OF REPORT)