

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: P345190

Luminaire Tested: **PR4FS12D010 PR4M12MD8FSMW 2000Lm3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345190  
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: PR4FS12D010 PR4M12MD8FSMW 2000Lm3000K  
Description: PR4 MEDIUM LENS WITH, MATTE WHITE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1963.6 lumens  
Efficiency: N/A  
Efficacy: 94.9 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

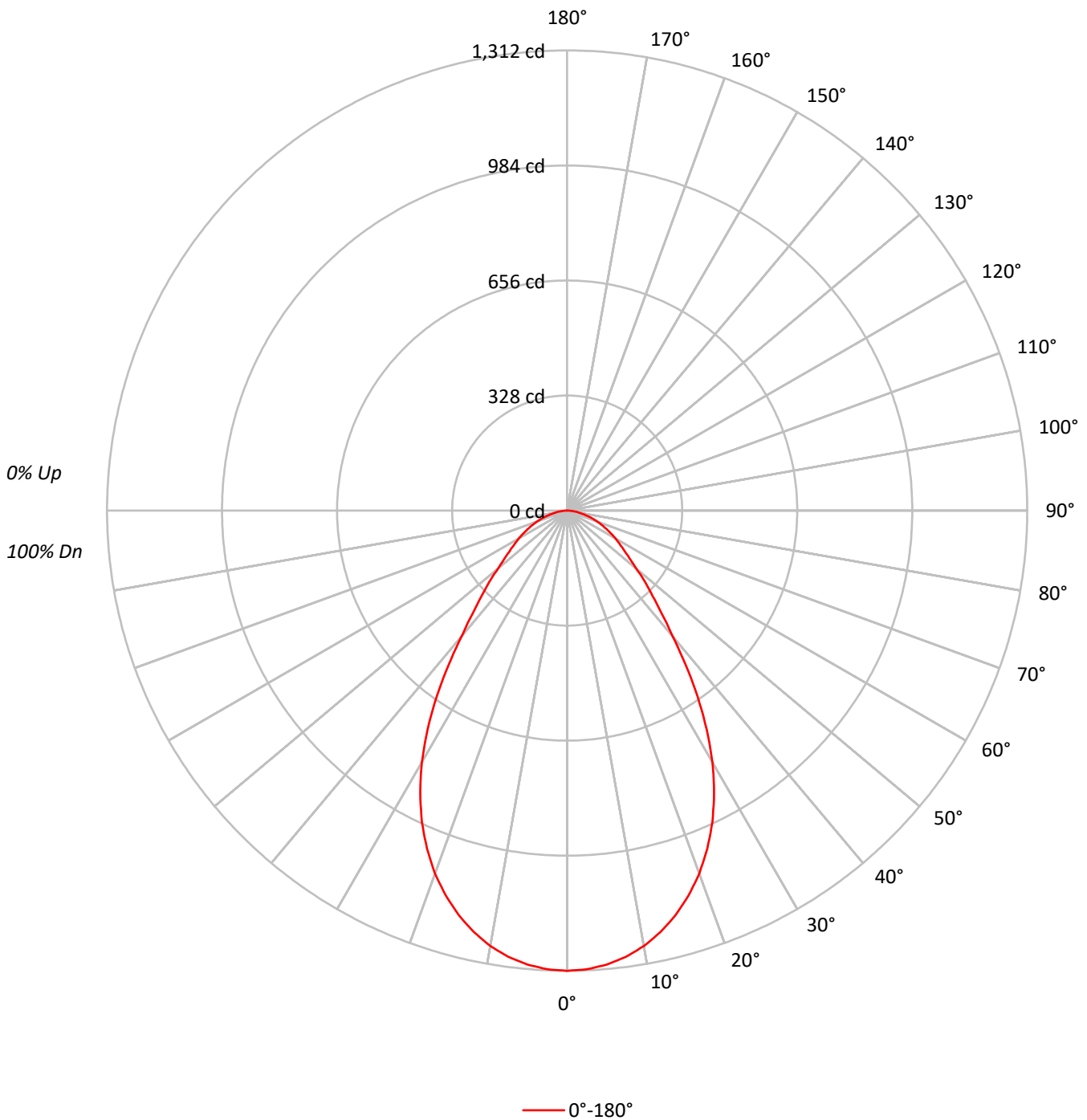
Input Watts (W): 20.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P345190

CATALOG NUMBER: PR4FS12D010 PR4M12MD8FSMW 2000Lm3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P345190

CATALOG NUMBER: PR4FS12D010 PR4M12MD8FSMW 2000Lm3000K

**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°	114795
5°	114066
10°	111956
15°	108141
20°	102512
25°	94533
30°	83700
35°	69301
40°	53438
45°	42677
50°	34959
55°	30347
60°	27850
65°	25457
70°	23452
75°	20379
80°	18235
85°	14552



TEST NUMBER: P345190

CATALOG NUMBER: PR4FS12D010 PR4M12MD8FSMW 2000Lm3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.8	6.3
10°-20°	334.8	17.0
20°-30°	447.0	22.8
30°-40°	402.7	20.5
40°-50°	270.5	13.8
50°-60°	180.6	9.2
60°-70°	122.3	6.2
70°-80°	65.2	3.3
80°-90°	17.7	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°	904.6	46.1
0°-40°	1307.3	66.6
0°-60°	1758.4	89.6
0°-90°	1963.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1963.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1312	
5°	1299	123
15°	1194	335
25°	980	447
35°	649	403
45°	345	271
55°	199	181
65°	123	122
75°	60	65
85°	14	18
90°	0	



TEST NUMBER: P345190

CATALOG NUMBER: PR4FS12D010 PR4M12MD8FSMW 2000Lm3000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1312.4
2.5°	1308.8
5°	1299.1
7.5°	1283.4
10°	1260.5
12.5°	1230.4
15°	1194.2
17.5°	1150.8
20°	1101.3
22.5°	1043.4
25°	979.5
27.5°	907.1
30°	828.7
32.5°	740.6
35°	649.0
37.5°	554.9
40°	468.0
42.5°	399.3
45°	345.0
47.5°	301.6
50°	256.9
52.5°	224.4
55°	199.0
57.5°	177.3
60°	159.2
62.5°	139.9
65°	123.0
67.5°	106.1
70°	91.7
72.5°	76.0
75°	60.3
77.5°	47.0
80°	36.2
82.5°	25.3
85°	14.5
87.5°	7.2
90°	0.0

(END OF REPORT)