

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: P345231

Luminaire Tested: **PR4FS12D010 PR4M12MD9FSMMS 2000Lm4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P345231
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PR4FS12D010 PR4M12MD9FSMMS 2000Lm4000K
Description: PR4 MEDIUM LENS WITH, MATTE METALLIC SILVER FINISH
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1634.4 lumens
Efficiency: N/A
Efficacy: 79.0 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.02 / 1.02
Luminous Opening: Circular (Dia: 0.4' x H: 0')
CIE Type: Direct

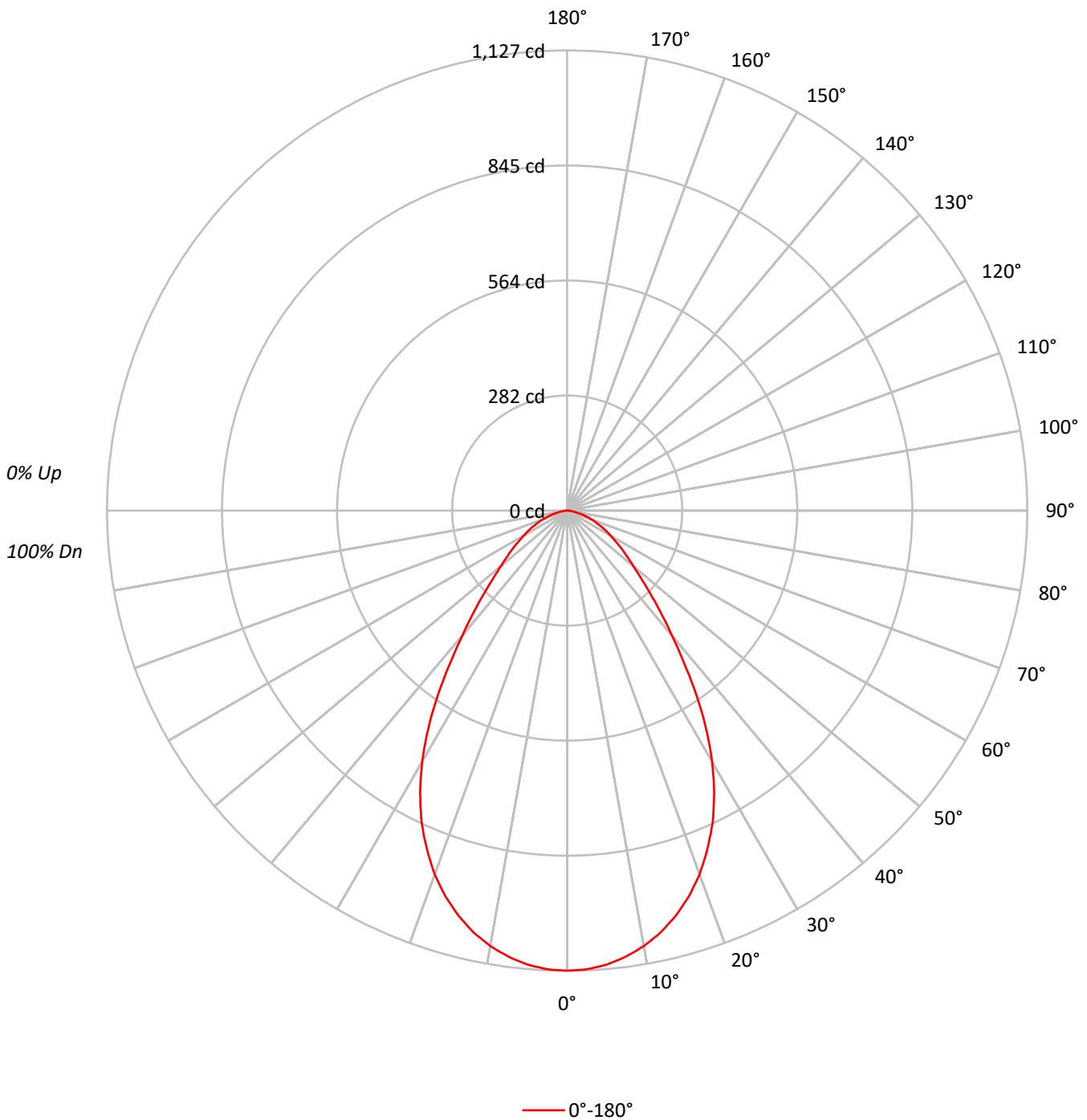
Input Watts (W): 20.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	73	67	77	71	67	75	70	66	73	68	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	63	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	51	45	42	40
10	62	50	44	39	61	50	43	39	49	43	39	48	43	39	47	42	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	98552
5°	97989
10°	96173
15°	93009
20°	88243
25°	81369
30°	71751
35°	58954
40°	45571
45°	35601
50°	28821
55°	24796
60°	21517
65°	19041
70°	16419
75°	13011
80°	9168
85°	5319



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.5	6.5
10°-20°	288.0	17.6
20°-30°	384.4	23.5
30°-40°	343.2	21.0
40°-50°	226.0	13.8
50°-60°	146.4	9.0
60°-70°	91.3	5.6
70°-80°	41.8	2.6
80°-90°	7.7	0.5
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°	777.9	47.6
0°-40°	1121.1	68.6
0°-60°	1493.5	91.4
0°-90°	1634.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1634.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1127	
5°	1116	105
15°	1027	288
25°	843	384
35°	552	343
45°	288	226
55°	163	146
65°	92	91
75°	38	42
85°	5	8
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1126.7
2.5°	1124.5
5°	1116.0
7.5°	1102.0
10°	1082.8
12.5°	1058.2
15°	1027.1
17.5°	990.8
20°	948.0
22.5°	897.7
25°	843.1
27.5°	780.0
30°	710.4
32.5°	633.4
35°	552.1
37.5°	469.7
40°	399.1
42.5°	339.2
45°	287.8
47.5°	245.0
50°	211.8
52.5°	185.1
55°	162.6
57.5°	141.2
60°	123.0
62.5°	107.0
65°	92.0
67.5°	77.0
70°	64.2
72.5°	51.4
75°	38.5
77.5°	27.8
80°	18.2
82.5°	10.7
85°	5.3
87.5°	3.2
90°	0.0

(END OF REPORT)