

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: P345195

Luminaire Tested: **PR4FS12D010 PR4M12MD9FSMW 2000Lm4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P345195
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 PR4M12MD9FSMW 2000Lm4000K
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: 1742.5 lumens
Efficiency: N/A
Efficacy: 84.2 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

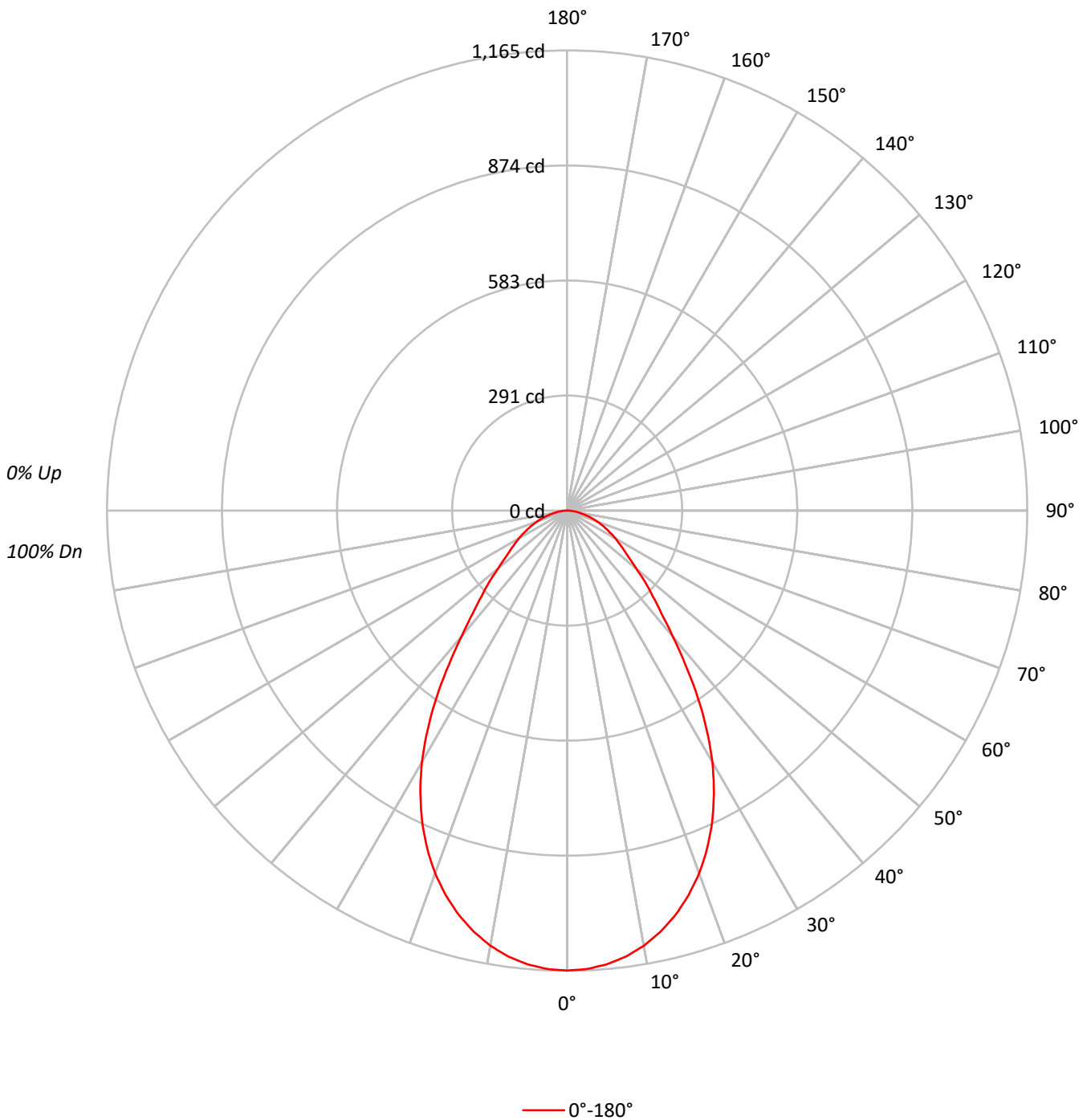
Input Watts (W): 20.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	101876
5°	101229
10°	99362
15°	95970
20°	90970
25°	83888
30°	74276
35°	61495
40°	47420
45°	37877
50°	31026
55°	26931
60°	24719
65°	22601
70°	20818
75°	18081
80°	16169
85°	12846



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.0	6.3
10°-20°	297.1	17.0
20°-30°	396.7	22.8
30°-40°	357.4	20.5
40°-50°	240.0	13.8
50°-60°	160.3	9.2
60°-70°	108.5	6.2
70°-80°	57.8	3.3
80°-90°	15.7	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°	802.8	46.1
0°-40°	1160.2	66.6
0°-60°	1560.5	89.6
0°-90°	1742.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1742.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1165	
5°	1153	109
15°	1060	297
25°	869	397
35°	576	357
45°	306	240
55°	177	160
65°	109	109
75°	54	58
85°	13	16
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1164.7
2.5°	1161.5
5°	1152.9
7.5°	1139.0
10°	1118.7
12.5°	1091.9
15°	1059.8
17.5°	1021.2
20°	977.3
22.5°	926.0
25°	869.2
27.5°	805.0
30°	735.4
32.5°	657.3
35°	575.9
37.5°	492.4
40°	415.3
42.5°	354.3
45°	306.2
47.5°	267.6
50°	228.0
52.5°	199.1
55°	176.6
57.5°	157.4
60°	141.3
62.5°	124.2
65°	109.2
67.5°	94.2
70°	81.4
72.5°	67.4
75°	53.5
77.5°	41.7
80°	32.1
82.5°	22.5
85°	12.8
87.5°	6.4
90°	0.0

(END OF REPORT)