

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: P345194

Luminaire Tested: **PR4FS12D010 PR4M12MD9FSMW 2000Lm3500K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P345194
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 2000Lm3500K
Description: PR4 MEDIUM LENS WITH, MATTE WHITE FINISH
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1790.8 lumens
Efficiency: N/A
Efficacy: 90.4 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

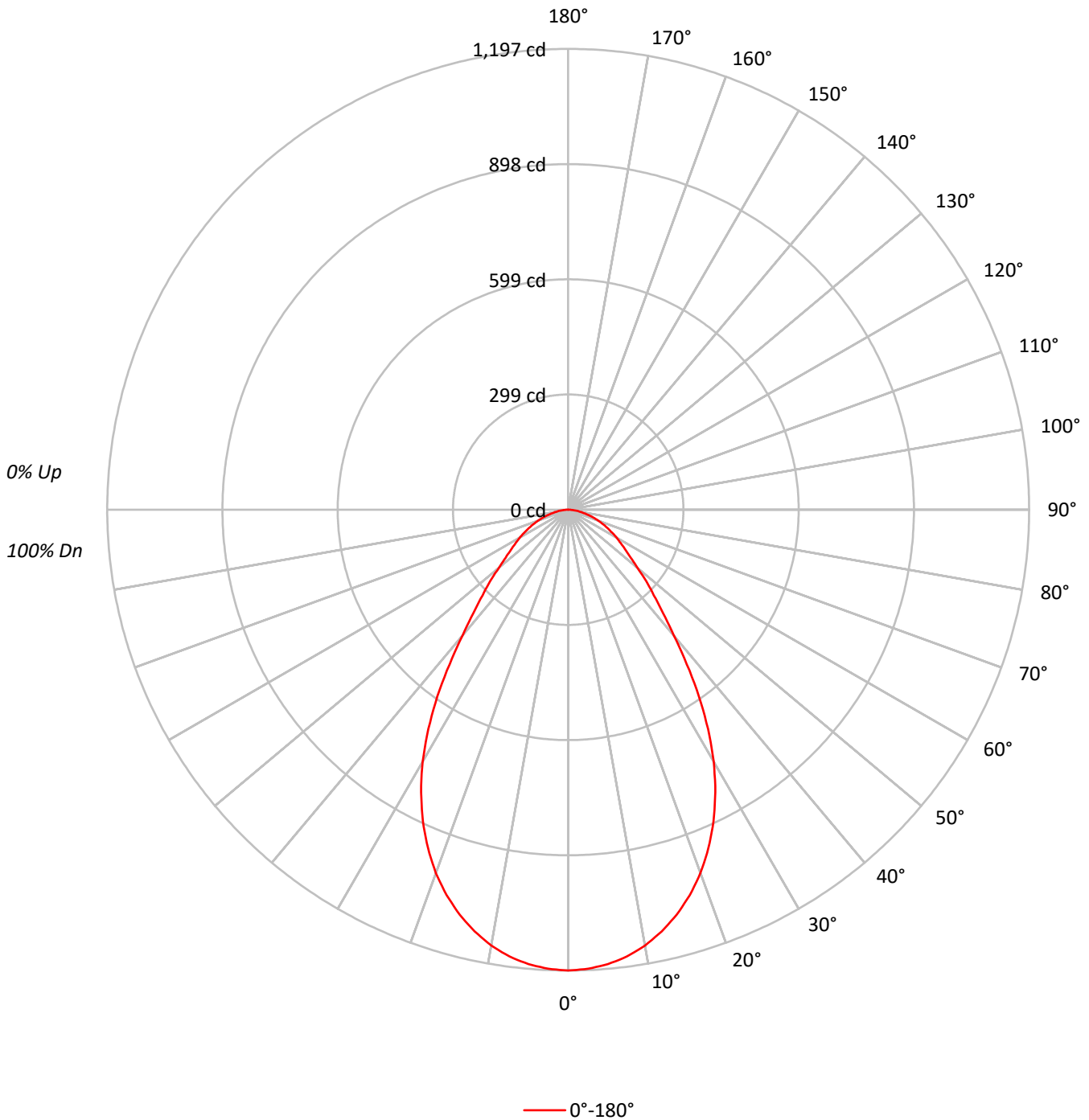
Input Watts (W): 19.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	104692
5°	104030
10°	102106
15°	98623
20°	93493
25°	86214
30°	76337
35°	63203
40°	48733
45°	38916
50°	31883
55°	27678
60°	25401
65°	23222
70°	21380
75°	18588
80°	16623
85°	13248



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.0	6.3
10°-20°	305.3	17.0
20°-30°	407.7	22.8
30°-40°	367.3	20.5
40°-50°	246.7	13.8
50°-60°	164.7	9.2
60°-70°	111.5	6.2
70°-80°	59.4	3.3
80°-90°	16.2	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°	825.0	46.1
0°-40°	1192.3	66.6
0°-60°	1603.6	89.6
0°-90°	1790.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1790.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1197	
5°	1185	112
15°	1089	305
25°	893	408
35°	592	367
45°	315	247
55°	182	165
65°	112	112
75°	55	59
85°	13	16
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1196.9
2.5°	1193.6
5°	1184.8
7.5°	1170.5
10°	1149.6
12.5°	1122.1
15°	1089.1
17.5°	1049.5
20°	1004.4
22.5°	951.6
25°	893.3
27.5°	827.3
30°	755.8
32.5°	675.5
35°	591.9
37.5°	506.0
40°	426.8
42.5°	364.1
45°	314.6
47.5°	275.0
50°	234.3
52.5°	204.6
55°	181.5
57.5°	161.7
60°	145.2
62.5°	127.6
65°	112.2
67.5°	96.8
70°	83.6
72.5°	69.3
75°	55.0
77.5°	42.9
80°	33.0
82.5°	23.1
85°	13.2
87.5°	6.6
90°	0.0

(END OF REPORT)