

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: P345375

Luminaire Tested: **PR4FS12D010 PR4M12WD9FSBZ 2000Lm4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P345375
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-6)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PR4FS12D010 PR4M12WD9FSBZ 2000Lm4000K
Description: PR4 WIDE LENS WITH, BRONZE FINISH
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1431.1 lumens
Efficiency: N/A
Efficacy: 69.1 lumens/watt
Spacing Criteria (0/90/45): 1.62 / 1.62 / 1.57
Luminous Opening: Circular (Dia: 0.4' x H: 0')
CIE Type: Direct

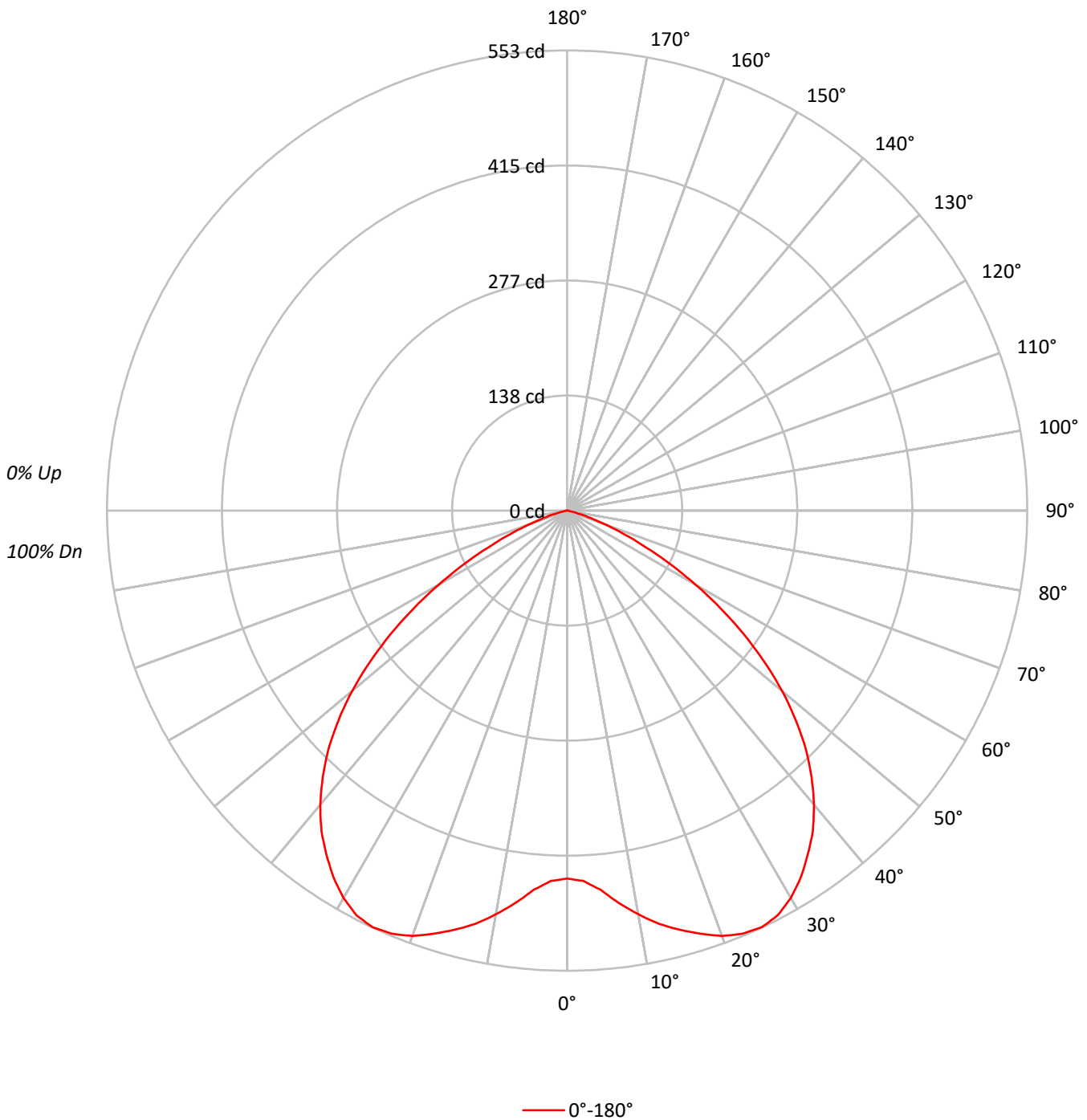
Input Watts (W): 20.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67	65
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	63	59	57
5	80	68	59	53	78	67	59	53	65	58	52	63	57	52	61	56	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38
8	63	51	42	37	62	50	42	37	49	41	36	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	32	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	29	28

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	38688
5°	40153
10°	43752
15°	47224
20°	50637
25°	53332
30°	54298
35°	53860
40°	52707
45°	50210
50°	45899
55°	39528
60°	31279
65°	21711
70°	12327
75°	5069
80°	1058
85°	2108



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.9	3.1
10°-20°	148.3	10.4
20°-30°	253.6	17.7
30°-40°	315.0	22.0
40°-50°	311.0	21.7
50°-60°	230.7	16.1
60°-70°	106.5	7.4
70°-80°	19.5	1.4
80°-90°	1.7	0.1
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°	446.7	31.2
0°-40°	761.7	53.2
0°-60°	1303.3	91.1
0°-90°	1431.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1431.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	442	
5°	457	45
15°	522	148
25°	553	254
35°	504	315
45°	406	311
55°	259	231
65°	105	107
75°	15	20
85°	2	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	442.3
2.5°	445.5
5°	457.3
7.5°	475.5
10°	492.6
12.5°	508.7
15°	521.5
17.5°	533.3
20°	544.0
22.5°	550.4
25°	552.6
27.5°	548.3
30°	537.6
32.5°	522.6
35°	504.4
37.5°	485.1
40°	461.6
42.5°	434.8
45°	405.9
47.5°	372.7
50°	337.3
52.5°	298.8
55°	259.2
57.5°	218.5
60°	178.8
62.5°	140.3
65°	104.9
67.5°	73.9
70°	48.2
72.5°	28.9
75°	15.0
77.5°	5.4
80°	2.1
82.5°	2.1
85°	2.1
87.5°	1.1
90°	0.0

(END OF REPORT)