

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: P345267

Luminaire Tested: **PR4FS12D010 PR4M12MD9FSBZ 2000Lm4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P345267
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-3)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PR4FS12D010 PR4M12MD9FSBZ 2000Lm4000K
Description: PR4 MEDIUM 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: 1452.5 lumens
Efficiency: N/A
Efficacy: 70.2 lumens/watt
Spacing Criteria (0/90/45): 1/1/2001
Luminous Opening: Circular (Dia: 0.4' x H: 0')
CIE Type: Direct

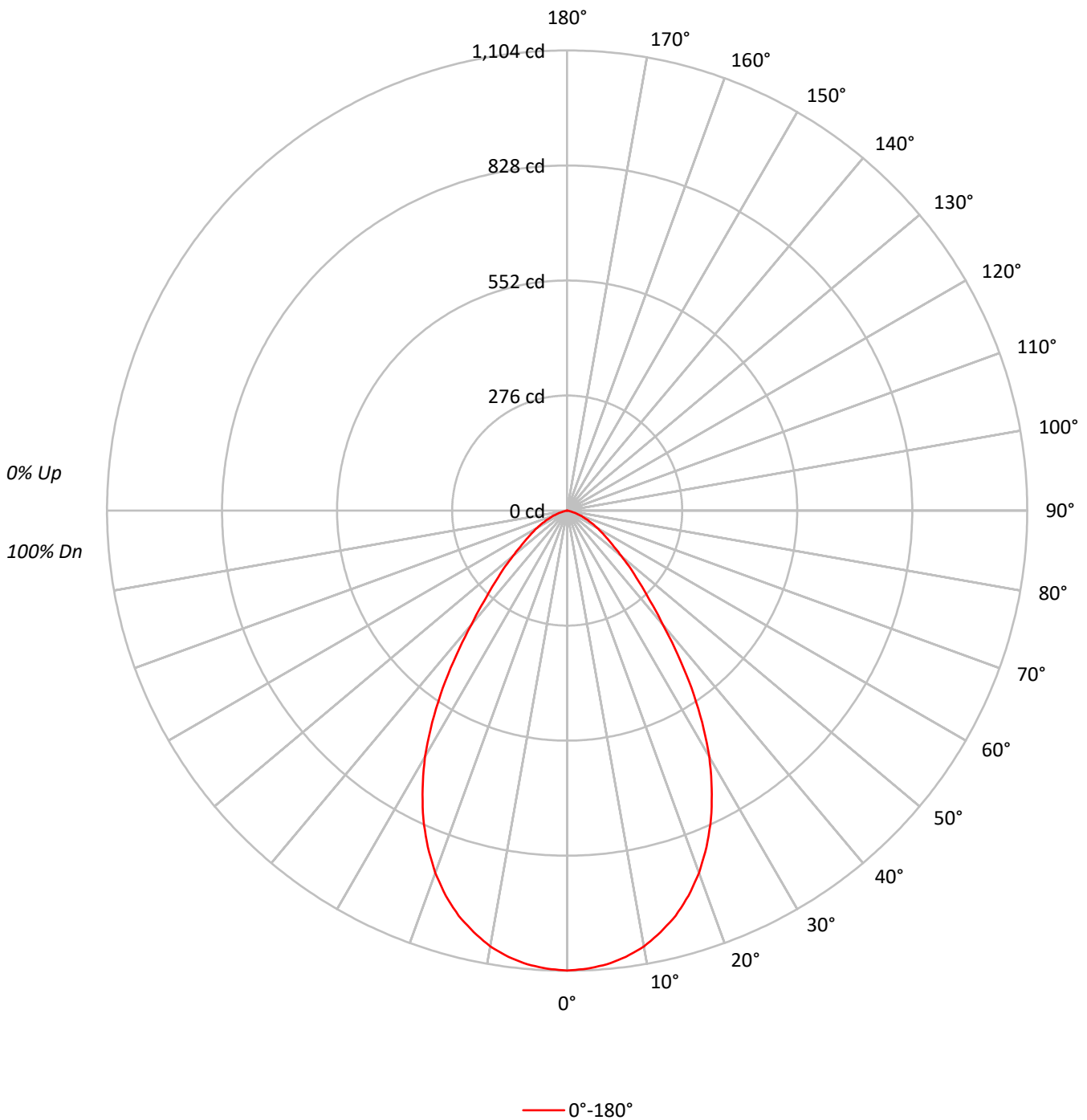
Input Watts (W): 20.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	85	75	69	64	73	68	63	72	67	63	70	66	62	60
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55
7	76	65	58	53	75	65	58	53	63	57	53	62	57	52	61	56	52	51
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	96523
5°	95952
10°	94308
15°	91107
20°	86083
25°	78821
30°	68862
35°	55547
40°	40821
45°	30455
50°	23011
55°	17949
60°	14607
65°	11301
70°	8209
75°	3988
80°	1058
85°	1104



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.3	7.1
10°-20°	281.8	19.4
20°-30°	372.2	25.6
30°-40°	322.3	22.2
40°-50°	193.9	13.3
50°-60°	108.0	7.4
60°-70°	55.2	3.8
70°-80°	14.3	1.0
80°-90°	1.5	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°	757.3	52.1
0°-40°	1079.7	74.3
0°-60°	1381.6	95.1
0°-90°	1452.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1452.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1104	
5°	1093	103
15°	1006	282
25°	817	372
35°	520	322
45°	246	194
55°	118	108
65°	55	55
75°	12	14
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1103.5
2.5°	1100.3
5°	1092.8
7.5°	1080.0
10°	1061.8
12.5°	1036.1
15°	1006.1
17.5°	968.7
20°	924.8
22.5°	873.4
25°	816.7
27.5°	751.4
30°	681.8
32.5°	602.6
35°	520.2
37.5°	435.6
40°	357.5
42.5°	295.4
45°	246.2
47.5°	206.6
50°	169.1
52.5°	141.3
55°	117.7
57.5°	99.5
60°	83.5
62.5°	68.5
65°	54.6
67.5°	42.8
70°	32.1
72.5°	21.4
75°	11.8
77.5°	4.3
80°	2.1
82.5°	2.1
85°	1.1
87.5°	1.1
90°	0.0

(END OF REPORT)