

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: FAIL-SAFE

Report Number: P189186

Luminaire Tested: **MAE-G-2-LD4-UNV-AMBIENT-2STD-40-WDDCPH**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P189186
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27472)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MAE-G-2-LD4-UNV-AMBIENT-2STD-40-WDDCPH
Description: FAILSAFE 2X2 LED MEDICAL AMBIENT LUMINAIRE
Light Source: (84) 4000K NICHIA LEDS
2UT119028A8404A
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2750.3 lumens
Efficiency: N/A
Efficacy: 79.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

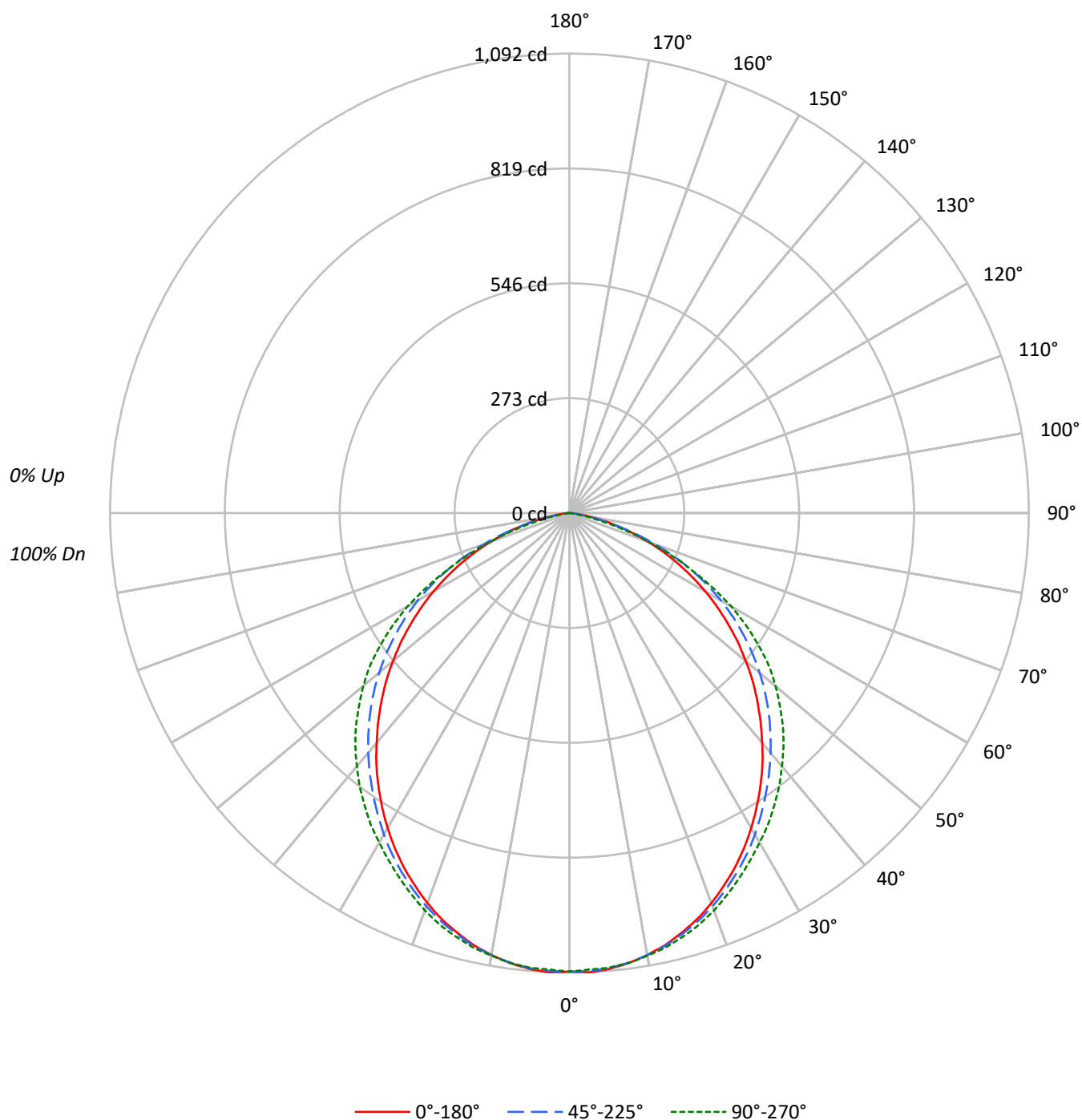
Input Watts (W): 34.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	102	98	107	103	100	97	99	96	93	95	93	91	92	90	88	86			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62			
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53			
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46			
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41			
7	67	53	45	39	65	53	45	39	51	44	38	50	43	38	48	42	38	36			
8	62	49	40	35	60	48	40	35	47	40	34	46	39	34	44	38	34	32			
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29			
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11799	11799	11799
5°	11820	11799	11787
10°	11728	11728	11745
15°	11572	11613	11684
20°	11367	11460	11580
25°	11113	11259	11427
30°	10807	11028	11306
35°	10467	10761	11219
40°	10077	10517	11114
45°	9666	10256	10992
50°	9218	9948	10770
55°	8711	9549	10365
60°	8093	9014	9622
65°	7300	8192	8238
70°	6231	6817	6373
75°	4891	4937	3979
80°	3187	2538	1522
85°	1466	969	783



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.9	3.7
10°-20°	291.9	10.6
20°-30°	433.6	15.8
30°-40°	510.7	18.6
40°-50°	517.4	18.8
50°-60°	450.3	16.4
60°-70°	306.8	11.2
70°-80°	122.7	4.5
80°-90°	14.0	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°	828.3	30.1
0°-40°	1339.0	48.7
0°-60°	2306.8	83.9
0°-90°	2750.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2750.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1090	1090	1090	1090	1090	
5°	1087	1081	1086	1084	1084	103
15°	1032	1028	1036	1040	1042	291
25°	930	930	942	950	956	428
35°	792	796	814	835	849	495
45°	631	639	670	701	718	487
55°	461	471	506	538	549	412
65°	285	298	320	320	322	282
75°	117	124	118	101	95	126
85°	12	11	8	7	6	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1089.6	1089.6	1089.6	1089.6	1089.6
2.5°	1092.5	1085.5	1089.6	1088.8	1085.9
5°	1087.4	1081.1	1085.5	1084.0	1084.4
7.5°	1078.9	1072.9	1077.7	1077.4	1078.5
10°	1066.6	1060.7	1066.6	1067.0	1068.1
12.5°	1051.5	1046.3	1053.3	1054.8	1057.4
15°	1032.2	1027.8	1035.9	1039.6	1042.2
17.5°	1011.5	1008.6	1016.7	1021.5	1025.6
20°	986.4	984.9	994.5	999.3	1004.9
22.5°	959.0	958.2	969.7	975.6	981.2
25°	930.1	930.5	942.3	950.1	956.4
27.5°	898.3	899.0	913.5	922.7	930.5
30°	864.3	866.1	882.0	894.6	904.2
32.5°	828.4	831.7	848.7	866.1	878.3
35°	791.8	795.5	814.0	835.4	848.7
37.5°	754.0	758.1	779.5	804.7	818.8
40°	712.9	719.2	744.0	771.8	786.2
42.5°	672.6	679.6	707.4	737.7	753.3
45°	631.2	639.0	669.7	701.1	717.8
47.5°	591.2	597.9	630.8	663.7	678.5
50°	547.2	556.1	590.5	623.4	639.3
52.5°	505.0	513.5	548.7	582.3	598.6
55°	461.4	471.4	505.8	537.6	549.0
57.5°	417.3	428.8	462.1	488.4	498.4
60°	373.7	385.1	416.2	436.9	444.3
62.5°	329.7	341.5	368.9	381.4	382.9
65°	284.9	298.2	319.7	320.0	321.5
67.5°	242.3	253.4	269.0	264.5	262.3
70°	196.8	209.0	215.3	206.4	201.3
72.5°	156.5	165.4	164.3	151.3	145.0
75°	116.9	123.9	118.0	101.4	95.1
77.5°	81.0	86.9	75.1	59.6	53.3
80°	51.1	53.6	40.7	28.9	24.4
82.5°	27.4	27.0	17.4	14.4	13.3
85°	11.8	10.7	7.8	7.0	6.3
87.5°	4.1	3.7	3.0	2.6	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)