

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: P189187

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P189187
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-2LO-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: 2058.2 lumens
Efficiency: N/A
Efficacy: 83.3 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

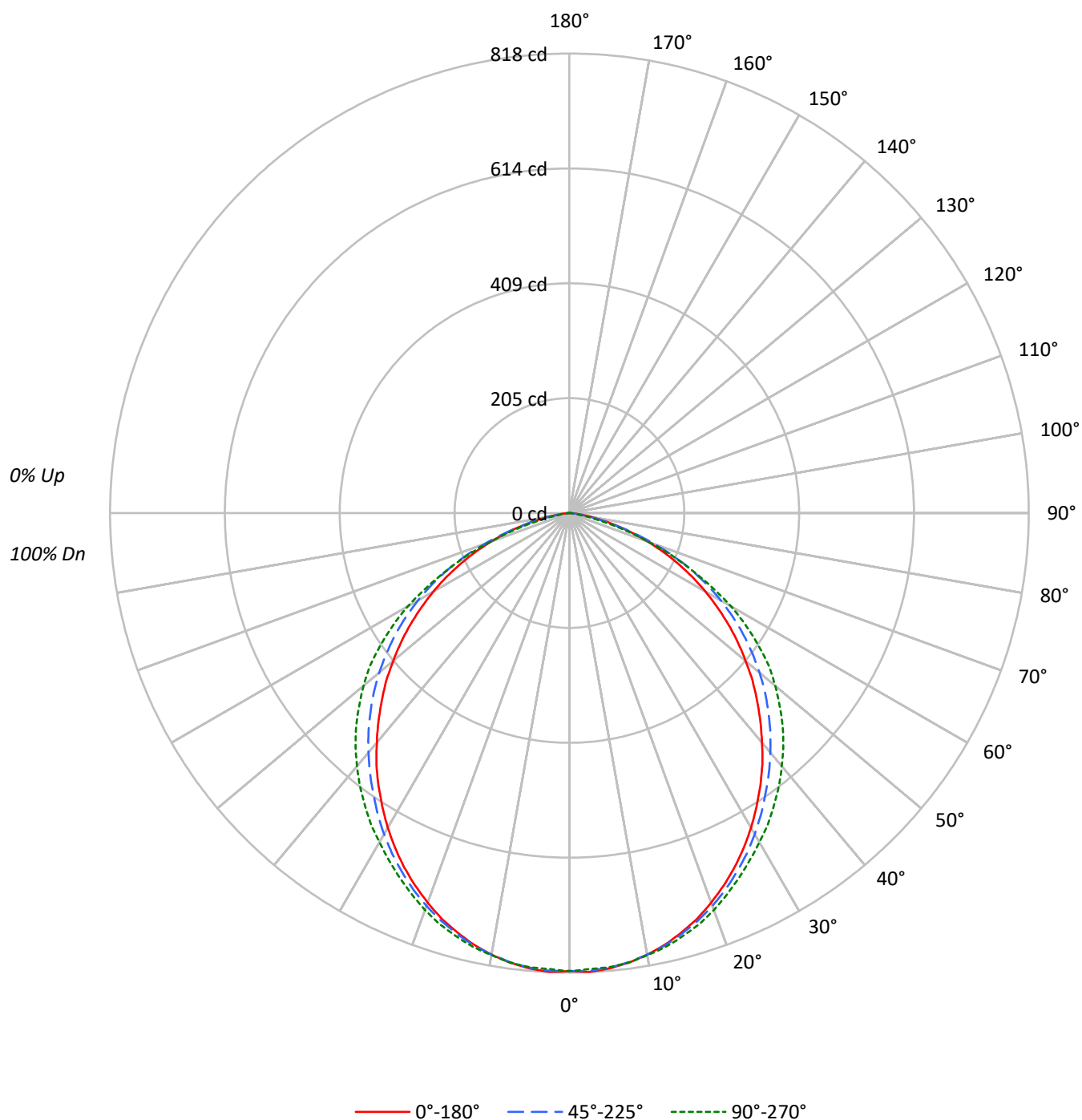
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	105	102	98	107	103	100	97		99	96	93		95	93	91		92	90	88
2	100	93	86	81	98	91	85	80		87	82	78		84	80	76		81	78	75
3	92	82	74	68	89	80	73	67		77	71	66		75	69	65		72	68	64
4	84	73	64	58	82	71	64	58		69	62	57		67	61	56		65	59	55
5	78	65	57	50	76	64	56	50		62	55	49		60	54	49		58	53	48
6	72	59	50	44	70	58	50	44		56	49	43		54	48	43		53	47	43
7	67	53	45	39	65	53	45	39		51	44	38		50	43	38		48	42	38
8	62	49	40	35	60	48	40	35		47	40	34		46	39	34		44	38	34
9	58	45	37	31	57	44	37	31		43	36	31		42	36	31		41	35	31
10	54	41	34	28	53	41	33	28		40	33	28		39	33	28		38	32	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8830	8830	8830
5°	8845	8830	8821
10°	8777	8777	8789
15°	8660	8691	8743
20°	8506	8576	8666
25°	8316	8426	8551
30°	8088	8254	8461
35°	7832	8052	8396
40°	7541	7871	8316
45°	7233	7674	8225
50°	6899	7444	8059
55°	6519	7146	7757
60°	6055	6746	7201
65°	5463	6129	6165
70°	4664	5101	4768
75°	3661	3694	2979
80°	2382	1902	1141
85°	1106	721	584



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.0	3.7
10°-20°	218.4	10.6
20°-30°	324.5	15.8
30°-40°	382.2	18.6
40°-50°	387.2	18.8
50°-60°	337.0	16.4
60°-70°	229.6	11.2
70°-80°	91.8	4.5
80°-90°	10.5	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°	619.9	30.1
0°-40°	1002.1	48.7
0°-60°	1726.2	83.9
0°-90°	2058.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2058.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	815	815	815	815	815	
5°	814	809	812	811	812	77
15°	772	769	775	778	780	218
25°	696	696	705	711	716	320
35°	592	595	609	625	635	370
45°	472	478	501	525	537	365
55°	345	353	378	402	411	308
65°	213	223	239	240	241	211
75°	88	93	88	76	71	94
85°	9	8	6	5	5	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	815.4	815.4	815.4	815.4	815.4
2.5°	817.6	812.3	815.4	814.8	812.6
5°	813.7	809.0	812.3	811.2	811.5
7.5°	807.4	802.9	806.5	806.2	807.1
10°	798.2	793.8	798.2	798.5	799.3
12.5°	786.9	783.0	788.2	789.4	791.3
15°	772.5	769.1	775.2	778.0	779.9
17.5°	757.0	754.7	760.8	764.4	767.5
20°	738.1	737.0	744.2	747.8	752.0
22.5°	717.6	717.1	725.7	730.1	734.3
25°	696.0	696.3	705.2	711.0	715.7
27.5°	672.2	672.8	683.6	690.5	696.3
30°	646.8	648.2	660.1	669.5	676.7
32.5°	619.9	622.4	635.1	648.2	657.3
35°	592.5	595.3	609.1	625.2	635.1
37.5°	564.3	567.3	583.4	602.2	612.7
40°	533.5	538.2	556.8	577.5	588.3
42.5°	503.3	508.6	529.4	552.1	563.7
45°	472.3	478.2	501.1	524.7	537.1
47.5°	442.4	447.4	472.1	496.7	507.8
50°	409.5	416.1	441.9	466.5	478.4
52.5°	377.9	384.3	410.6	435.8	448.0
55°	345.3	352.7	378.5	402.3	410.9
57.5°	312.3	320.9	345.8	365.5	372.9
60°	279.6	288.2	311.5	327.0	332.5
62.5°	246.7	255.6	276.0	285.5	286.6
65°	213.2	223.2	239.2	239.5	240.6
67.5°	181.3	189.7	201.3	198.0	196.3
70°	147.3	156.4	161.1	154.5	150.6
72.5°	117.1	123.8	122.9	113.2	108.5
75°	87.5	92.8	88.3	75.9	71.2
77.5°	60.6	65.1	56.2	44.6	39.9
80°	38.2	40.1	30.5	21.6	18.3
82.5°	20.5	20.2	13.0	10.8	10.0
85°	8.9	8.0	5.8	5.3	4.7
87.5°	3.0	2.8	2.2	1.9	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)