

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: P189188

Luminaire Tested: **MAE-G-2-LD4-UNV-AMBIENT-3HI-40-WDDCPH**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P189188
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27475)
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-3HI-40-WDDCPH
Description: FAILSAFE 2X2 LED MEDICAL AMBIENT LUMINAIRE
Light Source: (126) 4000K NICHIA LEDS

Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4959.5 lumens
Efficiency: N/A
Efficacy: 74.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.33
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

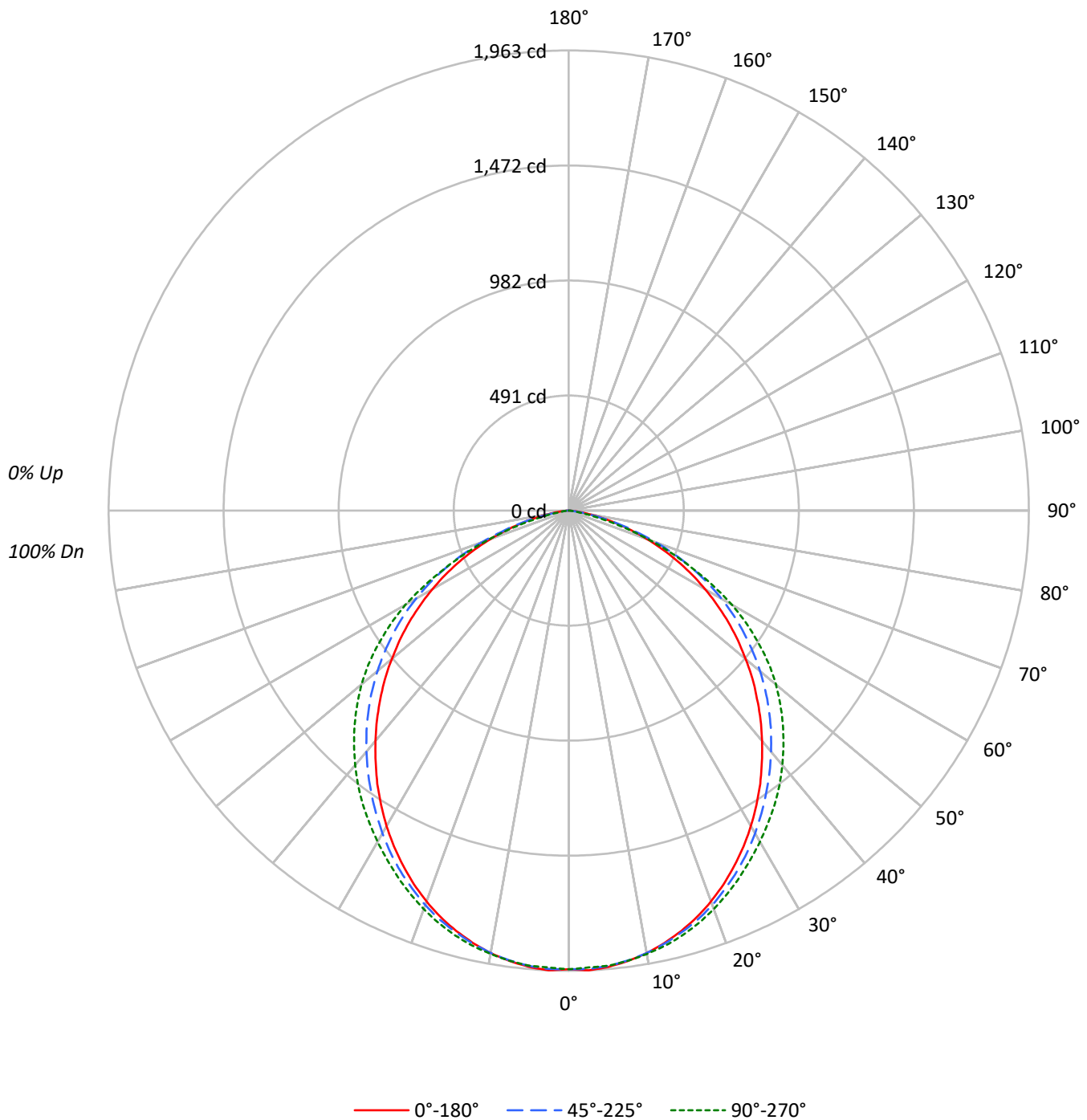
Input Watts (W): 66.75
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10
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	96	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	57	69	62	57	67	61	56	65	59	55	53		
5	78	65	56	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	44	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	36	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°	21190	21190	21190
5°	21236	21191	21181
10°	21079	21069	21118
15°	20810	20877	21029
20°	20448	20635	20850
25°	19974	20293	20612
30°	19432	19874	20394
35°	18822	19421	20239
40°	18138	18982	20038
45°	17398	18513	19781
50°	16592	17941	19429
55°	15700	17246	18681
60°	14571	16295	17432
65°	13157	14861	14930
70°	11230	12478	11604
75°	8820	9104	7138
80°	5756	4683	2763
85°	2758	1851	1466



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.8	3.7
10°-20°	524.8	10.6
20°-30°	780.5	15.7
30°-40°	919.7	18.5
40°-50°	932.5	18.8
50°-60°	812.5	16.4
60°-70°	555.7	11.2
70°-80°	223.2	4.5
80°-90°	25.9	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°	1490.1	30.0
0°-40°	2409.7	48.6
0°-60°	4154.7	83.8
0°-90°	4959.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4959.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1957	1957	1957	1957	1957	
5°	1954	1942	1950	1947	1949	185
15°	1856	1848	1862	1870	1876	523
25°	1672	1672	1698	1711	1725	770
35°	1424	1430	1469	1505	1531	889
45°	1136	1151	1209	1263	1292	877
55°	832	849	914	971	990	742
65°	514	537	580	584	583	508
75°	211	225	218	187	171	226
85°	22	20	15	13	12	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1956.8	1956.8	1956.8	1956.8	1956.8
2.5°	1963.1	1950.0	1956.8	1955.4	1950.4
5°	1953.6	1941.8	1949.5	1947.3	1948.6
7.5°	1938.2	1927.4	1935.5	1935.1	1937.3
10°	1917.0	1906.1	1916.1	1917.9	1920.6
12.5°	1888.9	1879.9	1892.1	1895.7	1901.1
15°	1856.3	1848.2	1862.2	1869.9	1875.8
17.5°	1818.3	1811.5	1829.6	1836.9	1845.0
20°	1774.4	1769.5	1790.7	1797.5	1809.3
22.5°	1725.6	1722.9	1745.0	1755.4	1769.0
25°	1671.7	1672.2	1698.4	1710.7	1725.1
27.5°	1615.2	1616.1	1646.0	1663.1	1678.5
30°	1554.1	1556.8	1589.4	1610.7	1631.0
32.5°	1489.4	1494.8	1530.1	1559.1	1581.7
35°	1423.8	1430.1	1469.1	1505.2	1531.0
37.5°	1352.8	1363.2	1407.1	1450.1	1476.7
40°	1283.1	1293.5	1342.8	1390.3	1417.5
42.5°	1211.2	1224.3	1276.8	1329.7	1355.9
45°	1136.1	1151.4	1208.9	1263.2	1291.7
47.5°	1064.1	1077.7	1138.3	1194.9	1224.3
50°	984.9	1002.1	1065.0	1124.3	1153.3
52.5°	909.4	925.2	989.9	1050.6	1076.8
55°	831.6	849.2	913.5	970.9	989.5
57.5°	751.9	773.2	835.2	883.2	900.8
60°	672.8	694.0	752.4	791.8	804.9
62.5°	594.0	616.7	667.8	694.0	694.0
65°	513.5	536.6	580.0	584.5	582.7
67.5°	433.0	456.1	489.1	480.9	475.5
70°	354.7	374.6	394.1	379.1	366.5
72.5°	278.7	297.7	300.9	279.2	263.3
75°	210.8	224.9	217.6	186.9	170.6
77.5°	147.0	155.2	139.8	108.6	95.5
80°	92.3	95.9	75.1	52.9	44.3
82.5°	49.8	50.2	32.6	26.7	24.9
85°	22.2	19.9	14.9	13.1	11.8
87.5°	7.7	6.8	5.4	5.0	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)