

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: P189189

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P189189
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-3STD-40-WDDCPH
Description: FAILSAFE 2X2 LED MEDICAL AMBIENT LUMINAIRE
Light Source: (126) 4000K NICHIA LEDS
2UT119028A8404A
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4055.6 lumens
Efficiency: N/A
Efficacy: 78.1 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

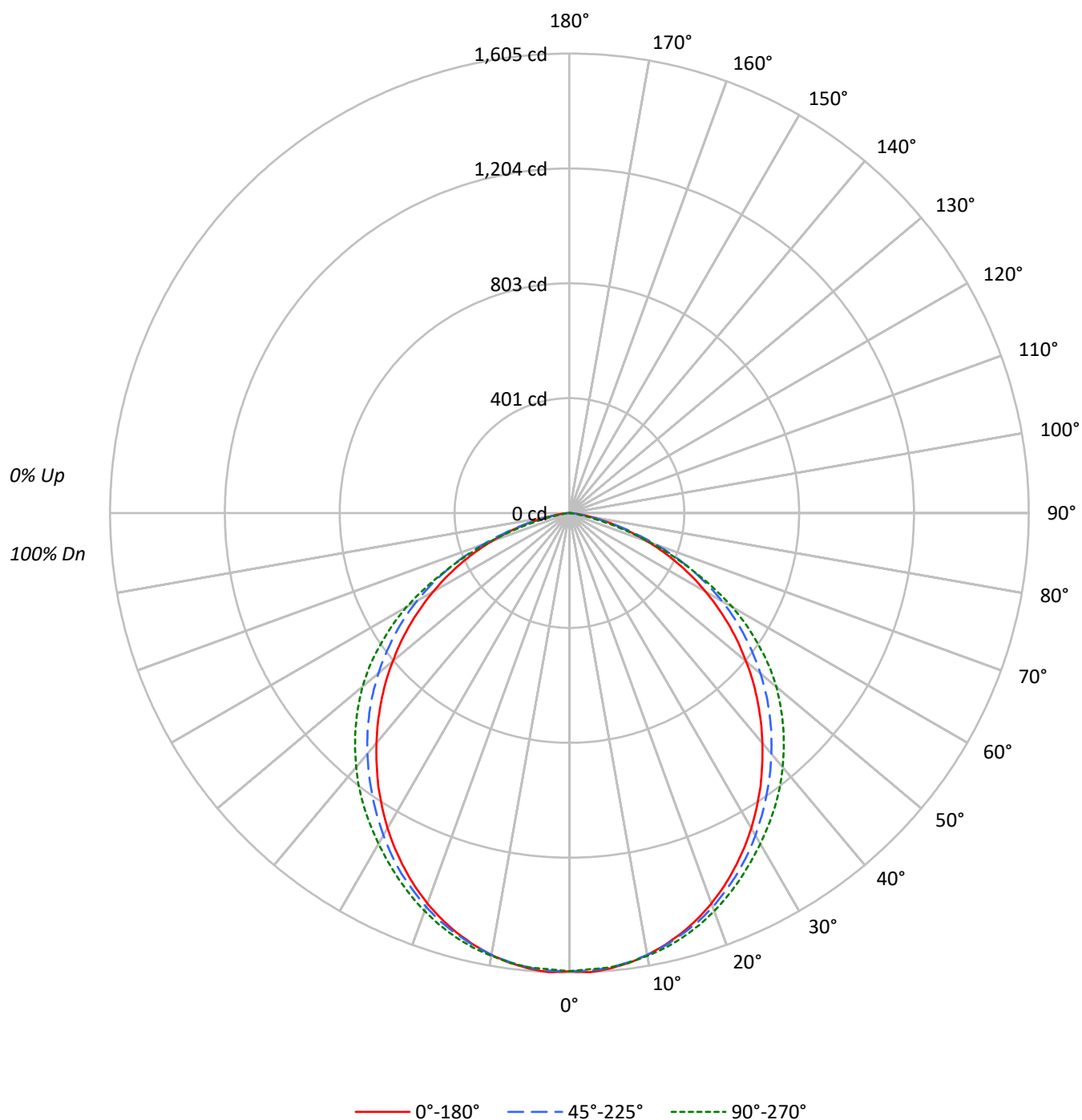
Input Watts (W): 51.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	17327	17327	17327
5°	17365	17329	17321
10°	17237	17228	17269
15°	17018	17072	17196
20°	16721	16874	17049
25°	16333	16595	16855
30°	15891	16251	16676
35°	15391	15880	16551
40°	14831	15523	16385
45°	14227	15139	16176
50°	13568	14672	15888
55°	12838	14103	15275
60°	11914	13326	14255
65°	10759	12153	12209
70°	9185	10201	9489
75°	7213	7447	5837
80°	4708	3829	2264
85°	2249	1516	1193



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.2	3.7
10°-20°	429.1	10.6
20°-30°	638.2	15.7
30°-40°	752.1	18.5
40°-50°	762.5	18.8
50°-60°	664.4	16.4
60°-70°	454.4	11.2
70°-80°	182.5	4.5
80°-90°	21.2	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°	1218.5	30.0
0°-40°	1970.5	48.6
0°-60°	3397.5	83.8
0°-90°	4055.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4055.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1600	1600	1600	1600	1600	
5°	1598	1588	1594	1592	1594	152
15°	1518	1511	1523	1529	1534	428
25°	1367	1367	1389	1399	1411	629
35°	1164	1170	1201	1231	1252	727
45°	929	942	989	1033	1056	717
55°	680	694	747	794	809	607
65°	420	439	474	478	476	415
75°	172	184	178	153	140	185
85°	18	16	12	11	10	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1600.1	1600.1	1600.1	1600.1	1600.1
2.5°	1605.3	1594.6	1600.1	1599.0	1594.9
5°	1597.5	1587.9	1594.2	1592.4	1593.5
7.5°	1585.0	1576.1	1582.7	1582.4	1584.2
10°	1567.6	1558.7	1566.8	1568.3	1570.5
12.5°	1544.6	1537.2	1547.2	1550.2	1554.6
15°	1518.0	1511.3	1522.8	1529.1	1533.9
17.5°	1486.9	1481.4	1496.2	1502.1	1508.7
20°	1451.0	1447.0	1464.3	1469.9	1479.5
22.5°	1411.1	1408.9	1427.0	1435.5	1446.6
25°	1367.0	1367.4	1388.9	1398.9	1410.7
27.5°	1320.8	1321.5	1346.0	1360.0	1372.6
30°	1270.9	1273.1	1299.7	1317.1	1333.7
32.5°	1217.9	1222.4	1251.2	1274.9	1293.4
35°	1164.3	1169.5	1201.3	1230.9	1252.0
37.5°	1106.2	1114.7	1150.6	1185.8	1207.6
40°	1049.2	1057.7	1098.1	1136.9	1159.1
42.5°	990.4	1001.1	1044.1	1087.3	1108.8
45°	929.0	941.6	988.6	1033.0	1056.3
47.5°	870.2	881.3	930.8	977.1	1001.1
50°	805.4	819.5	870.9	919.4	943.1
52.5°	743.6	756.6	809.5	859.1	880.5
55°	680.0	694.4	747.0	794.0	809.1
57.5°	614.9	632.3	683.0	722.2	736.6
60°	550.1	567.5	615.3	647.4	658.2
62.5°	485.8	504.3	546.1	567.5	567.5
65°	419.9	438.8	474.3	478.0	476.5
67.5°	354.1	372.9	399.9	393.3	388.8
70°	290.1	306.3	322.2	310.0	299.7
72.5°	227.9	243.4	246.0	228.3	215.3
75°	172.4	183.9	178.0	152.8	139.5
77.5°	120.2	126.9	114.3	88.8	78.1
80°	75.5	78.4	61.4	43.3	36.3
82.5°	40.7	41.1	26.6	21.8	20.3
85°	18.1	16.3	12.2	10.7	9.6
87.5°	6.3	5.5	4.4	4.1	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)