

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: P27474

Luminaire Tested: **MAE-G-4-LD4-UNV-AMBIENT-2LO-40-WDDCPH**

Test Date: 02/08/16

Test Information

Test Method: LM-79-08
Report Number: P27474
Test Lab: INNOVATION CENTER-P2
Test Date: 02/08/16
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MAE-G-4-LD4-UNV-AMBIENT-2LO-40-WDDCPH
Description: FAILSAFE 2X4 LED MEDICAL AMBIENT LUMINAIRE
Light Source: (168) 4000K NICHIA LEDS
2UT119028A8404A
Ballast/Driver: (2) OSRAM ELECTRONIC DRIVER
OT50W

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4594.9 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

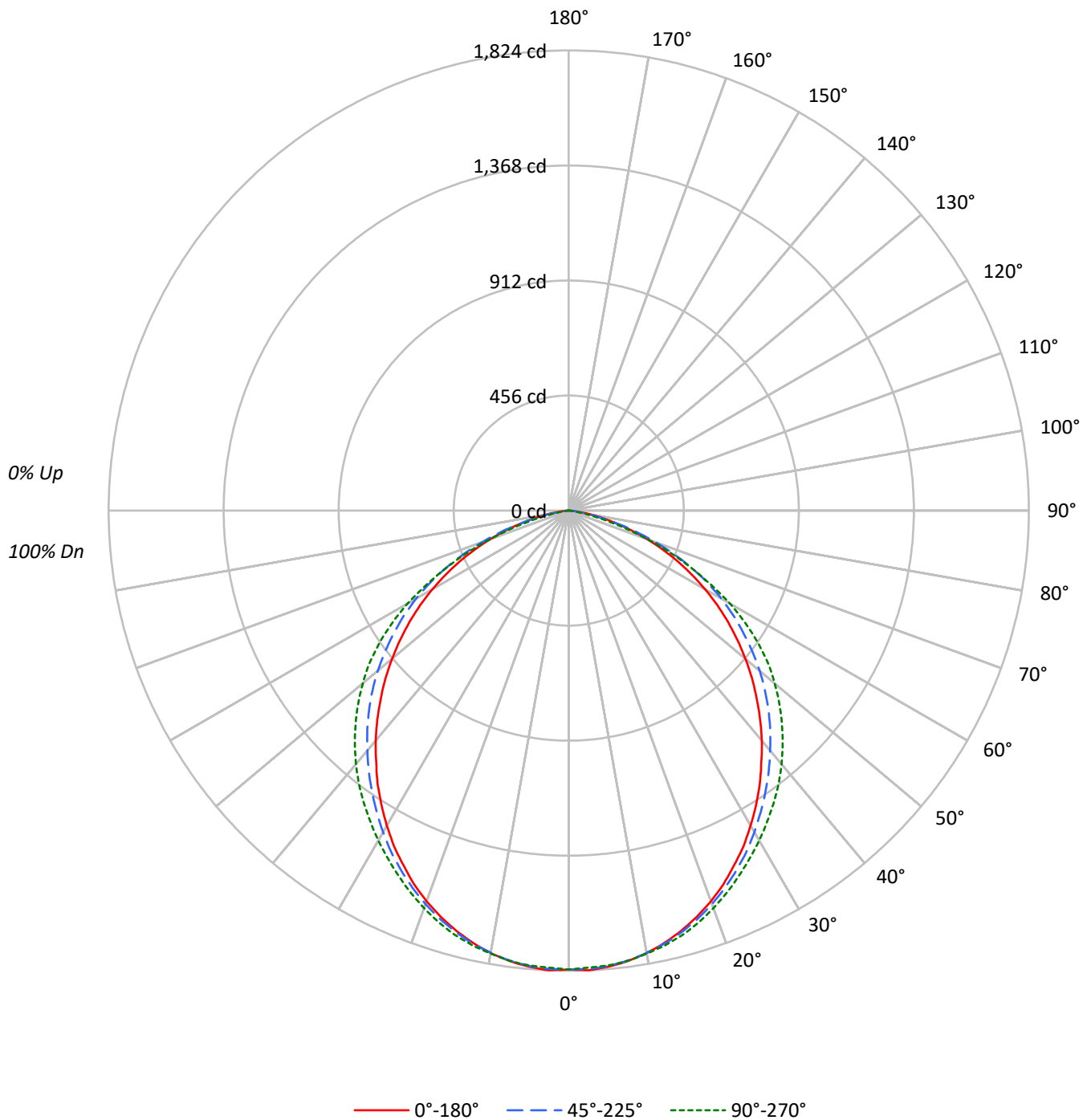
Input Watts (W): 47.7
Input Voltage (V): 120.02
Input Current (Ain): 0.39970
Voltage Rise (V): NR
Power Factor: 0.9961
Total Harmonic Distortion (THDi): 7.39%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 24 HR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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	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	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	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°	2447	2447	2447
5°	2451	2447	2445
10°	2433	2432	2436
15°	2401	2410	2427
20°	2360	2377	2401
25°	2303	2335	2371
30°	2240	2287	2346
35°	2170	2234	2326
40°	2092	2181	2304
45°	2006	2131	2274
50°	1913	2068	2231
55°	1809	1982	2151
60°	1679	1881	1989
65°	1515	1710	1697
70°	1294	1428	1310
75°	1003	1035	801
80°	651	535	318
85°	293	201	154



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.8	3.7
10°-20°	487.2	10.6
20°-30°	723.6	15.7
30°-40°	852.1	18.5
40°-50°	863.9	18.8
50°-60°	752.7	16.4
60°-70°	514.3	11.2
70°-80°	205.9	4.5
80°-90°	23.4	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°	1382.5	30.1
0°-40°	2234.7	48.6
0°-60°	3851.2	83.8
0°-90°	4594.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4594.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1819	1819	1819	1819	1819	
5°	1815	1805	1812	1810	1810	172
15°	1724	1717	1730	1736	1742	486
25°	1551	1551	1573	1586	1597	715
35°	1321	1327	1360	1394	1416	825
45°	1054	1069	1120	1171	1195	813
55°	771	787	845	899	917	689
65°	476	498	537	541	533	471
75°	193	209	199	172	154	209
85°	19	18	13	12	10	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1819	1819	1819	1819	1819
2.5°	1824	1812	1819	1818	1813
5°	1815	1805	1812	1810	1810
7.5°	1801	1791	1799	1798	1800
10°	1781	1772	1780	1781	1783
12.5°	1755	1746	1758	1760	1765
15°	1724	1717	1730	1736	1742
17.5°	1688	1683	1697	1705	1712
20°	1648	1643	1660	1667	1677
22.5°	1603	1599	1618	1627	1639
25°	1551	1551	1573	1586	1597
27.5°	1500	1500	1525	1539	1554
30°	1442	1445	1472	1492	1510
32.5°	1382	1389	1416	1445	1463
35°	1321	1327	1360	1394	1416
37.5°	1254	1264	1302	1343	1366
40°	1191	1201	1242	1287	1312
42.5°	1123	1135	1182	1231	1255
45°	1054	1069	1120	1171	1195
47.5°	985	999	1055	1107	1132
50°	914	928	988	1040	1066
52.5°	843	856	917	975	997
55°	771	787	845	899	917
57.5°	698	716	774	818	830
60°	624	645	699	735	739
62.5°	551	573	621	643	634
65°	476	498	537	541	533
67.5°	402	423	452	445	434
70°	329	350	363	350	333
72.5°	259	279	279	256	238
75°	193	209	199	172	154
77.5°	134	146	127	101	86
80°	84	89	69	48	41
82.5°	45	46	29	24	22
85°	19	18	13	12	10
87.5°	6	6	5	4	4
90°	0	0	0	0	0

(END OF REPORT)