

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: P27473

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

Test Date: 02/08/16

Test Information

Test Method: LM-79-08
Report Number: P27473
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-2STD-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: 6119.7 lumens
Efficiency: N/A
Efficacy: 89.9 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

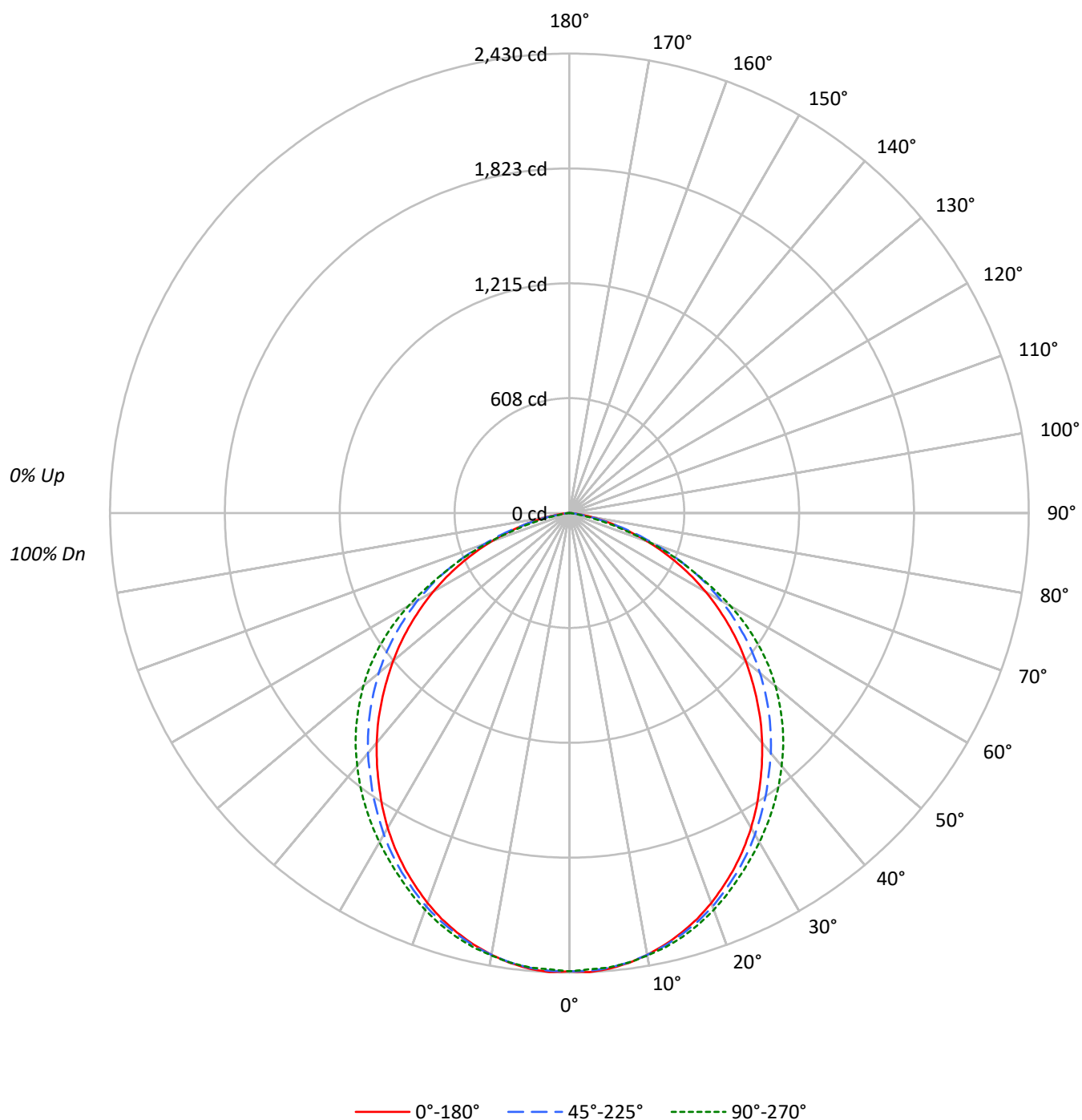
Input Watts (W): 68.1
Input Voltage (V): 120.08
Input Current (Ain): 0.56953
Voltage Rise (V): NR
Power Factor: 0.9984
Total Harmonic Distortion (THDi): 7.68%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 24 HR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	110	105	102	98	107	103	100	97	99	96	93		95	93	91		86
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		73
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		62
4	84	73	64	58	82	71	64	58	69	62	57		67	61	56		53
5	78	65	57	50	76	64	56	50	62	55	49		60	54	49		46
6	72	59	50	44	70	58	50	44	56	49	43		54	48	43		41
7	67	53	45	39	65	53	44	39	51	44	38		50	43	38		36
8	62	49	40	35	60	48	40	35	47	40	34		46	39	34		32
9	58	45	37	31	57	44	37	31	43	36	31		42	36	31		29
10	54	41	34	28	53	41	33	28	40	33	28		39	33	28		26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3260	3260	3260
5°	3267	3260	3258
10°	3241	3242	3246
15°	3198	3211	3230
20°	3141	3170	3197
25°	3070	3113	3155
30°	2986	3050	3123
35°	2884	2978	3096
40°	2786	2912	3067
45°	2672	2839	3035
50°	2547	2755	2979
55°	2407	2646	2871
60°	2239	2500	2651
65°	2015	2267	2264
70°	1723	1884	1770
75°	1336	1378	1081
80°	868	705	426
85°	417	262	232



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.8	3.7
10°-20°	649.1	10.6
20°-30°	964.1	15.8
30°-40°	1135.4	18.6
40°-50°	1151.3	18.8
50°-60°	1002.4	16.4
60°-70°	683.3	11.2
70°-80°	273.8	4.5
80°-90°	31.4	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°	1842.1	30.1
0°-40°	2977.5	48.7
0°-60°	5131.2	83.8
0°-90°	6119.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6119.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2423	2423	2423	2423	2423	
5°	2419	2404	2414	2411	2412	229
15°	2296	2287	2305	2313	2319	647
25°	2068	2068	2097	2112	2125	952
35°	1756	1767	1813	1857	1885	1099
45°	1404	1420	1492	1561	1595	1083
55°	1026	1047	1128	1196	1224	917
65°	633	662	712	716	711	627
75°	257	277	265	228	208	277
85°	27	24	17	16	15	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2423	2423	2423	2423	2423
2.5°	2430	2414	2423	2422	2415
5°	2419	2404	2414	2411	2412
7.5°	2400	2386	2397	2396	2398
10°	2372	2360	2373	2373	2376
12.5°	2338	2327	2343	2346	2351
15°	2296	2287	2305	2313	2319
17.5°	2250	2241	2263	2271	2279
20°	2194	2189	2214	2221	2233
22.5°	2133	2131	2157	2168	2181
25°	2068	2068	2097	2112	2125
27.5°	1998	1999	2033	2050	2068
30°	1922	1926	1963	1987	2010
32.5°	1842	1849	1888	1925	1949
35°	1756	1767	1813	1857	1885
37.5°	1672	1686	1733	1791	1818
40°	1586	1602	1658	1717	1746
42.5°	1497	1513	1576	1640	1674
45°	1404	1420	1492	1561	1595
47.5°	1310	1330	1405	1477	1510
50°	1217	1235	1316	1389	1423
52.5°	1123	1141	1224	1295	1329
55°	1026	1047	1128	1196	1224
57.5°	929	953	1028	1090	1111
60°	832	858	929	975	985
62.5°	733	762	824	848	846
65°	633	662	712	716	711
67.5°	535	562	599	592	587
70°	438	464	479	465	450
72.5°	344	369	371	340	320
75°	257	277	265	228	208
77.5°	178	192	169	135	120
80°	112	117	91	65	55
82.5°	61	62	39	32	29
85°	27	24	17	16	15
87.5°	9	8	7	6	5
90°	0	0	0	0	0

(END OF REPORT)