

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: P27472

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

Test Date: 02/08/16

Test Information

Test Method: LM-79-08
Report Number: P27472
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-2HI-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: 7433.8 lumens
Efficiency: N/A
Efficacy: 82.7 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

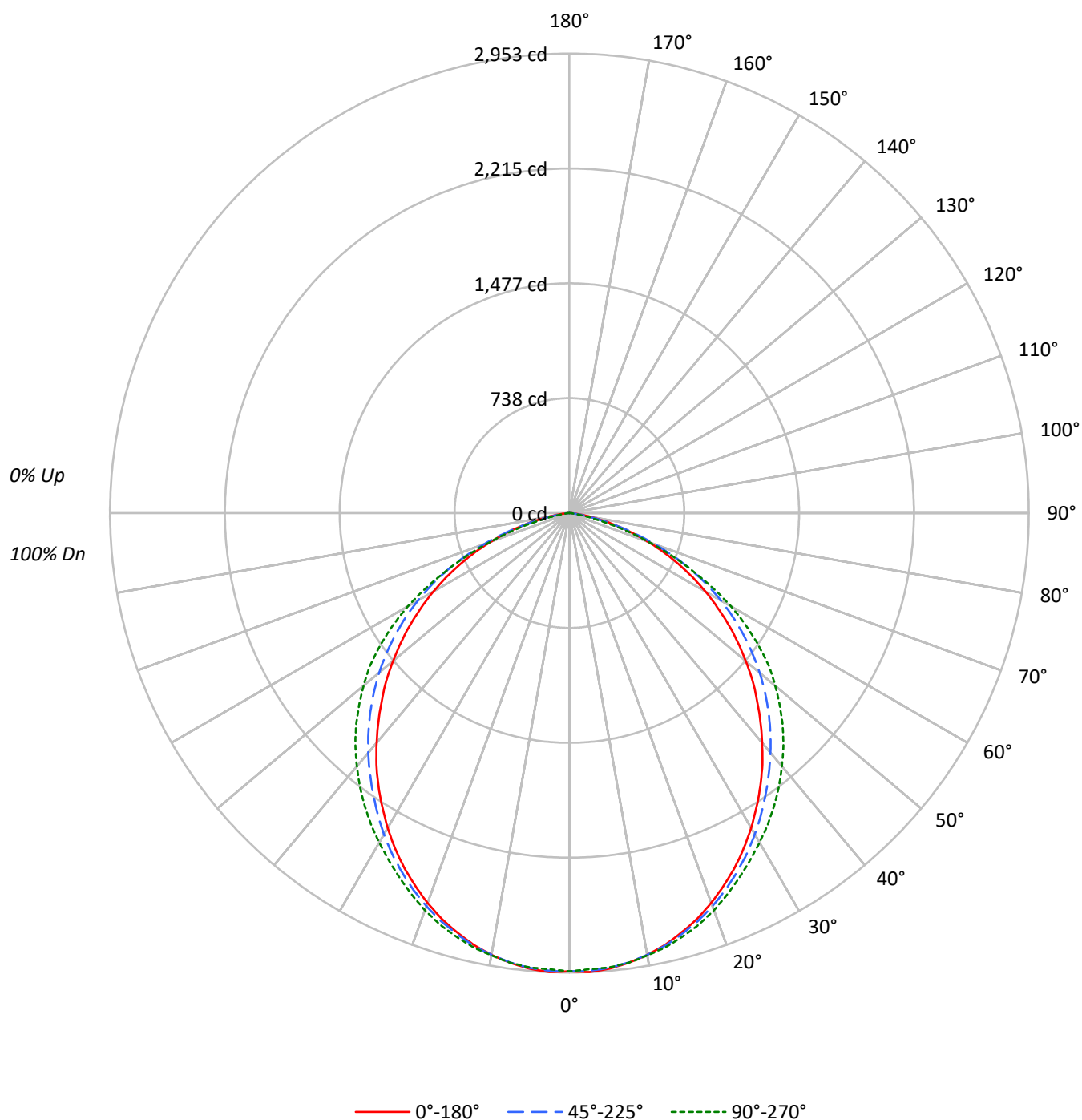
Input Watts (W): 89.9
Input Voltage (V): 120.01
Input Current (Ain): 0.75231
Voltage Rise (V): NR
Power Factor: 0.9993
Total Harmonic Distortion (THDi): 8.00%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 24 HR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P27472

CATALOG NUMBER: MAE-G-4-LD4-UNV-AMBIENT-2HI-40-WDDCPH

Luminous Intensity Polar Plot





TEST NUMBER: P27472

CATALOG NUMBER: MAE-G-4-LD4-UNV-AMBIENT-2HI-40-WDDCPH

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	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	45	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°	3962	3962	3962
5°	3969	3963	3959
10°	3939	3939	3944
15°	3886	3900	3924
20°	3817	3849	3889
25°	3732	3781	3838
30°	3629	3704	3797
35°	3515	3614	3768
40°	3385	3532	3732
45°	3246	3444	3691
50°	3096	3341	3617
55°	2925	3207	3481
60°	2718	3027	3232
65°	2451	2751	2767
70°	2093	2290	2140
75°	1643	1658	1336
80°	1069	852	511
85°	494	324	262



TEST NUMBER: P27472

CATALOG NUMBER: MAE-G-4-LD4-UNV-AMBIENT-2HI-40-WDDCPH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.1	3.7
10°-20°	788.9	10.6
20°-30°	1171.9	15.8
30°-40°	1380.3	18.6
40°-50°	1398.4	18.8
50°-60°	1217.2	16.4
60°-70°	829.4	11.2
70°-80°	331.6	4.5
80°-90°	37.9	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°	2238.9	30.1
0°-40°	3619.3	48.7
0°-60°	6234.9	83.9
0°-90°	7433.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7433.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2945	2945	2945	2945	2945	
5°	2939	2922	2934	2930	2931	279
15°	2790	2778	2800	2810	2817	786
25°	2514	2515	2547	2568	2585	1157
35°	2140	2150	2200	2258	2294	1338
45°	1706	1727	1810	1895	1940	1317
55°	1247	1274	1367	1453	1484	1114
65°	770	806	864	865	869	763
75°	316	335	319	274	257	340
85°	32	29	21	19	17	51
90°	0	0	0	0	0	



TEST NUMBER: P27472

CATALOG NUMBER: MAE-G-4-LD4-UNV-AMBIENT-2HI-40-WDDCPH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2945	2945	2945	2945	2945
2.5°	2953	2934	2945	2943	2935
5°	2939	2922	2934	2930	2931
7.5°	2916	2900	2913	2912	2915
10°	2883	2867	2883	2884	2887
12.5°	2842	2828	2847	2851	2858
15°	2790	2778	2800	2810	2817
17.5°	2734	2726	2748	2761	2772
20°	2666	2662	2688	2701	2716
22.5°	2592	2590	2621	2637	2652
25°	2514	2515	2547	2568	2585
27.5°	2428	2430	2469	2494	2515
30°	2336	2341	2384	2418	2444
32.5°	2239	2248	2294	2341	2374
35°	2140	2150	2200	2258	2294
37.5°	2038	2049	2107	2175	2213
40°	1927	1944	2011	2086	2125
42.5°	1818	1837	1912	1994	2036
45°	1706	1727	1810	1895	1940
47.5°	1598	1616	1705	1794	1834
50°	1479	1503	1596	1685	1728
52.5°	1365	1388	1483	1574	1618
55°	1247	1274	1367	1453	1484
57.5°	1128	1159	1249	1320	1347
60°	1010	1041	1125	1181	1201
62.5°	891	923	997	1031	1035
65°	770	806	864	865	869
67.5°	655	685	727	715	709
70°	532	565	582	558	544
72.5°	423	447	444	409	392
75°	316	335	319	274	257
77.5°	219	235	203	161	144
80°	138	145	110	78	66
82.5°	74	73	47	39	36
85°	32	29	21	19	17
87.5°	11	10	8	7	6
90°	0	0	0	0	0

(END OF REPORT)