

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: P189185

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P189185
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27472)
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-2HI-40-WDDCPH
Description: FAILSAFE 2X2 LED MEDICAL AMBIENT LUMINAIRE
Light Source: (84) 4000K NICHIA LEDS

Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3363.4 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

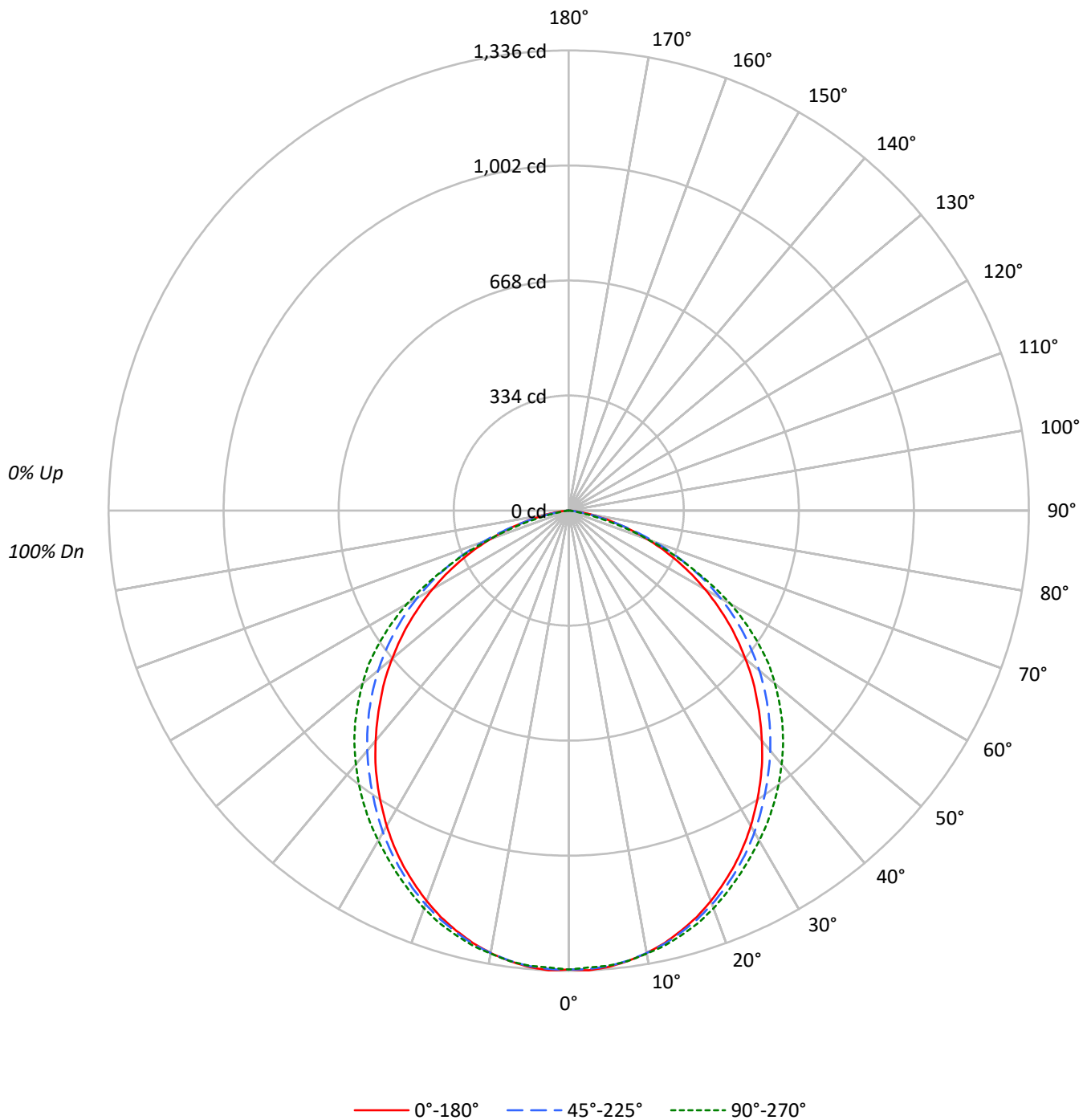
Input Watts (W): 44.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	105	102	98	107	103	100	97		99	96	93		95	93	91		92	90	88
2	100	93	86	81	98	91	85	80		87	82	78		84	80	76		81	78	75
3	92	82	74	68	89	80	73	67		77	71	66		75	69	65		72	68	64
4	84	73	64	58	82	71	64	58		69	62	57		67	61	56		65	59	55
5	78	65	57	50	76	64	56	50		62	55	49		60	54	49		58	53	48
6	72	59	50	44	70	58	50	44		56	49	43		54	48	43		53	47	43
7	67	53	45	39	65	53	45	39		51	44	38		50	43	38		48	42	38
8	62	49	40	35	60	48	40	35		47	40	34		46	39	34		44	38	34
9	58	45	37	31	57	44	37	31		43	36	31		42	36	31		41	35	31
10	54	41	34	28	53	41	33	28		40	33	28		39	33	28		38	32	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14428	14428	14428
5°	14454	14430	14415
10°	14343	14343	14363
15°	14151	14202	14288
20°	13900	14015	14160
25°	13590	13769	13975
30°	13215	13487	13827
35°	12799	13159	13720
40°	12325	12862	13590
45°	11821	12541	13441
50°	11274	12165	13171
55°	10652	11677	12676
60°	9897	11024	11769
65°	8927	10016	10075
70°	7621	8336	7792
75°	5983	6037	4866
80°	3891	3106	1865
85°	1802	1180	957



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.8	3.7
10°-20°	356.9	10.6
20°-30°	530.2	15.8
30°-40°	624.5	18.6
40°-50°	632.7	18.8
50°-60°	550.7	16.4
60°-70°	375.3	11.2
70°-80°	150.0	4.5
80°-90°	17.2	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°	1013.0	30.1
0°-40°	1637.5	48.7
0°-60°	2820.9	83.9
0°-90°	3363.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3363.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1332	1332	1332	1332	1332	
5°	1330	1322	1328	1326	1326	126
15°	1262	1257	1267	1271	1274	356
25°	1137	1138	1152	1162	1170	523
35°	968	973	995	1022	1038	605
45°	772	781	819	857	878	596
55°	564	576	618	657	671	504
65°	348	365	391	391	393	345
75°	143	152	144	124	116	154
85°	14	13	10	9	8	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1332.4	1332.4	1332.4	1332.4	1332.4
2.5°	1336.1	1327.5	1332.4	1331.5	1327.9
5°	1329.7	1322.0	1327.5	1325.7	1326.1
7.5°	1319.3	1312.1	1318.0	1317.5	1318.9
10°	1304.4	1297.2	1304.4	1304.8	1306.2
12.5°	1285.8	1279.5	1288.1	1289.9	1293.1
15°	1262.3	1256.9	1266.8	1271.4	1274.5
17.5°	1237.0	1233.4	1243.3	1249.2	1254.2
20°	1206.2	1204.4	1216.2	1222.0	1228.8
22.5°	1172.7	1171.8	1185.9	1193.1	1199.9
25°	1137.4	1137.9	1152.4	1161.9	1169.6
27.5°	1098.5	1099.4	1117.1	1128.4	1137.9
30°	1056.9	1059.2	1078.6	1094.0	1105.8
32.5°	1013.0	1017.1	1037.9	1059.2	1074.1
35°	968.2	972.8	995.4	1021.6	1037.9
37.5°	922.1	927.1	953.3	984.1	1001.3
40°	871.9	879.5	909.9	943.8	961.4
42.5°	822.5	831.1	865.1	902.2	921.2
45°	771.9	781.4	818.9	857.4	877.7
47.5°	723.0	731.1	771.4	811.7	829.8
50°	669.2	680.0	722.1	762.4	781.8
52.5°	617.6	628.0	671.0	712.1	732.1
55°	564.2	576.4	618.5	657.4	671.4
57.5°	510.4	524.4	565.1	597.2	609.4
60°	457.0	471.0	509.0	534.3	543.4
62.5°	403.1	417.6	451.1	466.5	468.3
65°	348.4	364.7	390.9	391.4	393.2
67.5°	296.4	309.9	328.9	323.5	320.8
70°	240.7	255.6	263.3	252.5	246.1
72.5°	191.4	202.2	200.9	185.0	177.4
75°	143.0	151.6	144.3	124.0	116.3
77.5°	99.1	106.3	91.8	72.8	65.2
80°	62.4	65.6	49.8	35.3	29.9
82.5°	33.5	33.0	21.3	17.6	16.3
85°	14.5	13.1	9.5	8.6	7.7
87.5°	5.0	4.5	3.6	3.2	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)