

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: P189190

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P189190
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-3LO-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: 3035.0 lumens
Efficiency: N/A
Efficacy: 81.9 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

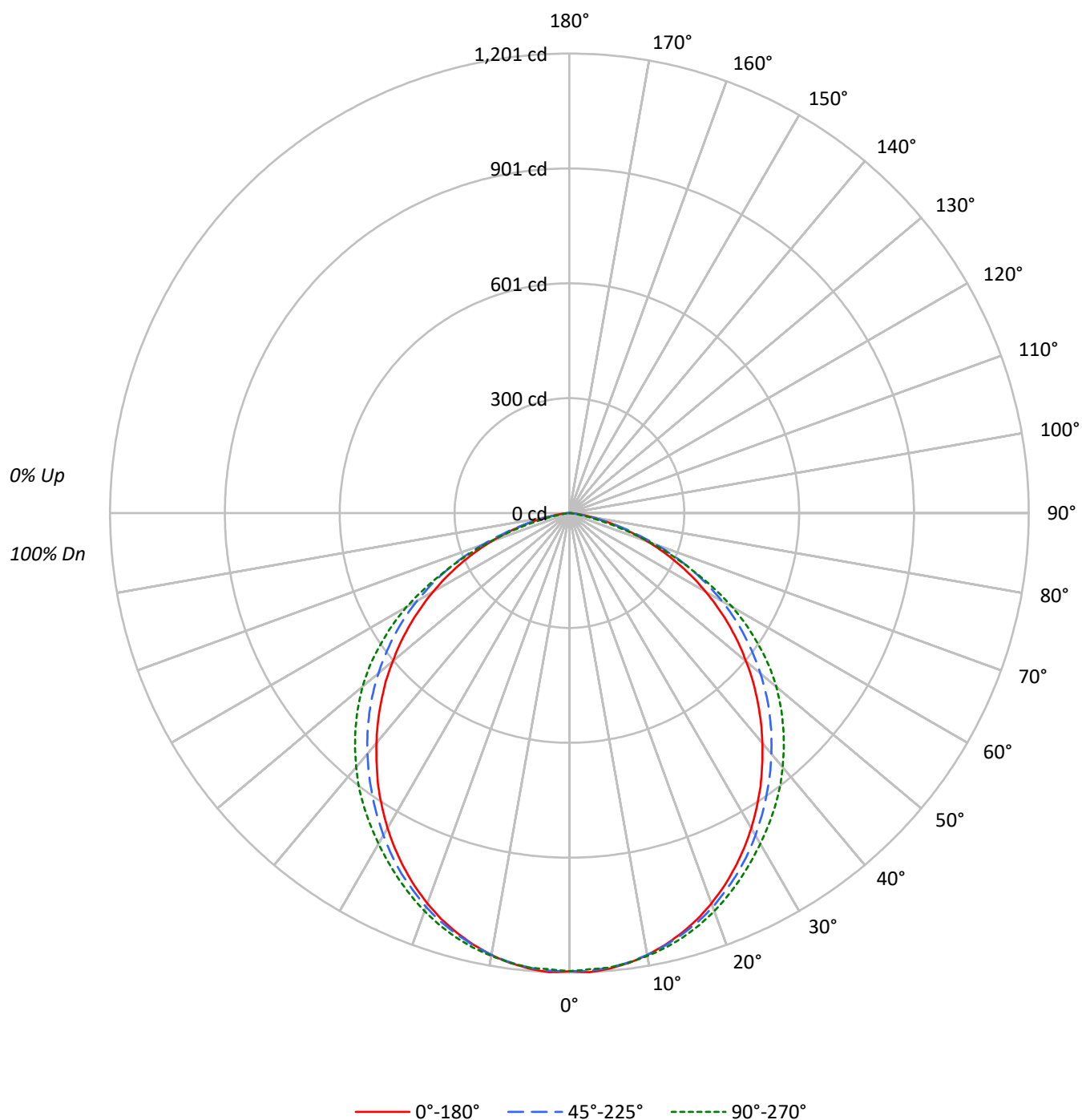
Input Watts (W): 37.05
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	96		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	57		69	62	57		67	61	56		65	59	55
5	78	65	56	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	44	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	36	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°	12966	12966	12966
5°	12995	12968	12963
10°	12899	12892	12923
15°	12735	12776	12869
20°	12514	12628	12759
25°	12223	12418	12614
30°	11891	12161	12480
35°	11518	11884	12385
40°	11099	11615	12261
45°	10646	11329	12104
50°	10153	10979	11889
55°	9608	10553	11431
60°	8916	9971	10666
65°	8051	9094	9137
70°	6874	7633	7102
75°	5397	5573	4368
80°	3523	2869	1690
85°	1690	1131	895



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.1	3.7
10°-20°	321.1	10.6
20°-30°	477.6	15.7
30°-40°	562.8	18.5
40°-50°	570.6	18.8
50°-60°	497.2	16.4
60°-70°	340.1	11.2
70°-80°	136.6	4.5
80°-90°	15.8	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°	911.8	30.0
0°-40°	1474.6	48.6
0°-60°	2542.5	83.8
0°-90°	3035.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3035.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1197	1197	1197	1197	1197	
5°	1196	1188	1193	1192	1192	113
15°	1136	1131	1140	1144	1148	320
25°	1023	1023	1039	1047	1056	471
35°	871	875	899	921	937	544
45°	695	705	740	773	790	537
55°	509	520	559	594	606	454
65°	314	328	355	358	357	311
75°	129	138	133	114	104	139
85°	14	12	9	8	7	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1197.4	1197.4	1197.4	1197.4	1197.4
2.5°	1201.3	1193.3	1197.4	1196.6	1193.6
5°	1195.5	1188.3	1193.0	1191.6	1192.5
7.5°	1186.1	1179.4	1184.4	1184.1	1185.5
10°	1173.1	1166.4	1172.5	1173.6	1175.3
12.5°	1155.9	1150.4	1157.8	1160.1	1163.4
15°	1136.0	1131.0	1139.6	1144.3	1147.9
17.5°	1112.7	1108.6	1119.6	1124.1	1129.1
20°	1085.9	1082.8	1095.8	1100.0	1107.2
22.5°	1056.0	1054.3	1067.9	1074.2	1082.5
25°	1023.0	1023.3	1039.3	1046.8	1055.7
27.5°	988.4	989.0	1007.2	1017.8	1027.2
30°	951.0	952.7	972.6	985.6	998.1
32.5°	911.4	914.8	936.4	954.1	967.9
35°	871.3	875.2	899.0	921.1	936.9
37.5°	827.8	834.2	861.0	887.3	903.7
40°	785.2	791.6	821.7	850.8	867.4
42.5°	741.2	749.2	781.3	813.7	829.8
45°	695.2	704.6	739.8	773.0	790.4
47.5°	651.2	659.5	696.6	731.2	749.2
50°	602.7	613.3	651.7	688.0	705.7
52.5°	556.5	566.2	605.8	642.9	658.9
55°	508.9	519.7	559.0	594.2	605.5
57.5°	460.1	473.2	511.1	540.4	551.2
60°	411.7	424.7	460.4	484.5	492.5
62.5°	363.5	377.4	408.7	424.7	424.7
65°	314.2	328.4	354.9	357.7	356.6
67.5°	265.0	279.1	299.3	294.3	291.0
70°	217.1	229.2	241.1	232.0	224.3
72.5°	170.5	182.2	184.1	170.8	161.1
75°	129.0	137.6	133.2	114.3	104.4
77.5°	90.0	95.0	85.6	66.4	58.4
80°	56.5	58.7	46.0	32.4	27.1
82.5°	30.5	30.7	19.9	16.3	15.2
85°	13.6	12.2	9.1	8.0	7.2
87.5°	4.7	4.2	3.3	3.0	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)