

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: METALUX

Report Number: P393098

Luminaire Tested: **14EN-LD2-38-UNV-L83050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393098
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-53)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-38-UNV-L83050-W2A-1-U (2700K)
Description: 1X4 ENCOUNTER, 3800 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3640.5 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

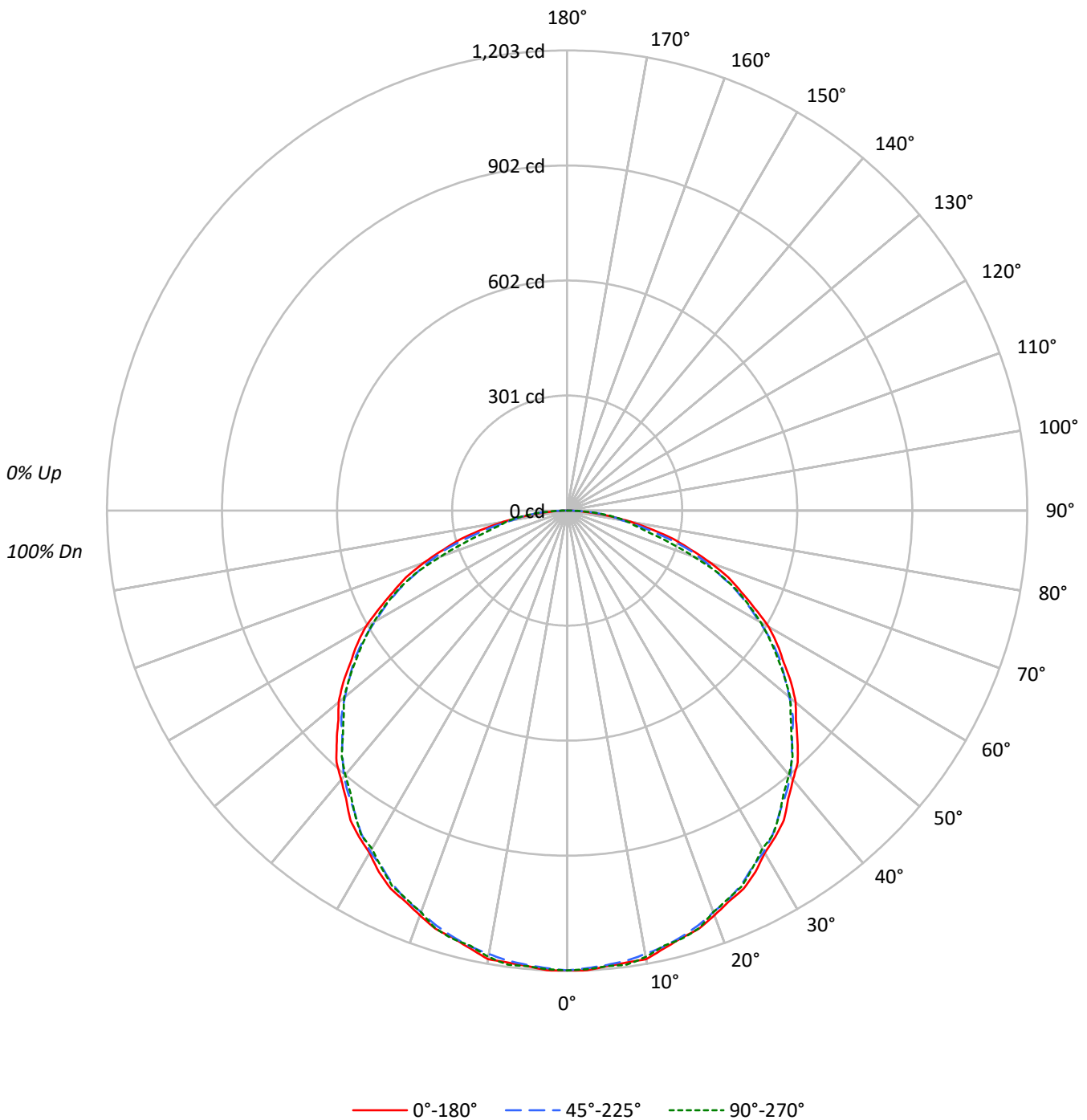
Input Watts (W): 36.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10	0		
RW	70	50	30	10	70	50	30	10	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		102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62		71	65	60		68	64	59	57
4	82	69	60	53	79	68	59	53	65	58	52		63	57	51		61	55	51	48
5	75	62	52	46	73	61	52	45	58	51	45		56	50	44		54	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35		46	39	34		45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31		42	36	31		41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28		39	32	27		38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3235	3235	3235
5°	3229	3221	3229
10°	3253	3216	3237
15°	3220	3215	3228
20°	3224	3200	3200
25°	3240	3203	3214
30°	3211	3199	3172
35°	3246	3176	3179
40°	3227	3189	3169
45°	3242	3165	3154
50°	3264	3175	3187
55°	3241	3182	3150
60°	3277	3121	3147
65°	3195	3072	3096
70°	3127	2976	2771
75°	2980	2708	2297
80°	2602	2242	2438
85°	1905	2414	2442



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.8	3.1
10°-20°	326.5	9.0
20°-30°	498.1	13.7
30°-40°	608.5	16.7
40°-50°	647.1	17.8
50°-60°	607.6	16.7
60°-70°	481.8	13.2
70°-80°	274.5	7.5
80°-90°	82.6	2.3
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°	938.4	25.8
0°-40°	1546.9	42.5
0°-60°	2801.6	77.0
0°-90°	3640.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3640.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1202	1202	1202	1202	1202	
5°	1195	1202	1192	1196	1195	114
15°	1156	1158	1154	1156	1159	327
25°	1091	1081	1079	1080	1082	501
35°	988	976	967	968	968	615
45°	852	847	832	833	829	658
55°	691	687	678	672	672	621
65°	502	499	482	484	486	499
75°	287	276	260	234	221	299
85°	62	68	78	78	79	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1202.2	1202.2	1202.2	1202.2	1202.2
2.5°	1203.1	1202.2	1197.3	1203.1	1200.2
5°	1195.4	1202.2	1192.5	1196.4	1195.4
7.5°	1191.6	1189.6	1186.7	1193.5	1197.3
10°	1190.6	1180.9	1177.1	1183.8	1184.8
12.5°	1172.3	1175.2	1167.4	1169.4	1165.5
15°	1155.9	1157.8	1153.9	1155.9	1158.8
17.5°	1146.2	1140.4	1137.5	1141.4	1145.2
20°	1125.9	1126.9	1117.3	1122.1	1117.3
22.5°	1105.7	1106.7	1100.9	1100.9	1098.9
25°	1091.2	1080.6	1078.7	1079.6	1082.5
27.5°	1065.2	1061.3	1049.7	1053.6	1051.7
30°	1033.3	1037.2	1029.5	1021.7	1020.8
32.5°	1012.1	1005.3	1001.5	998.6	1003.4
35°	988.0	976.4	966.8	967.7	967.7
37.5°	949.4	948.4	937.8	933.0	930.1
40°	918.5	914.7	907.9	901.1	902.1
42.5°	892.5	879.9	869.3	867.4	872.2
45°	851.9	847.1	831.7	832.6	828.8
47.5°	811.4	810.5	800.8	793.1	792.1
50°	779.6	769.9	758.3	756.4	761.2
52.5°	738.1	733.3	716.9	716.9	716.9
55°	690.8	687.0	678.3	671.5	671.5
57.5°	651.3	643.5	632.9	628.1	628.1
60°	608.8	597.2	579.9	581.8	584.7
62.5°	552.8	547.1	531.6	529.7	535.5
65°	501.7	498.8	482.4	484.3	486.3
67.5°	456.4	443.8	425.5	432.2	428.4
70°	397.5	390.8	378.2	364.7	352.2
72.5°	338.7	334.8	328.0	295.2	283.7
75°	286.6	275.9	260.5	233.5	220.9
77.5°	224.8	221.9	199.7	178.5	180.4
80°	167.9	169.8	144.7	153.4	157.3
82.5°	110.0	113.8	118.7	124.5	121.6
85°	61.7	68.5	78.2	78.2	79.1
87.5°	22.2	32.8	34.7	34.7	34.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)