

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: P392958

Luminaire Tested: **12EN-LD2-39-UNV-L93050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392958
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-563-40)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 12EN-LD2-39-UNV-L93050-W2A-1-U (4500K)
Description: 1X2 ENCOUNTER, 3900 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3468.2 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

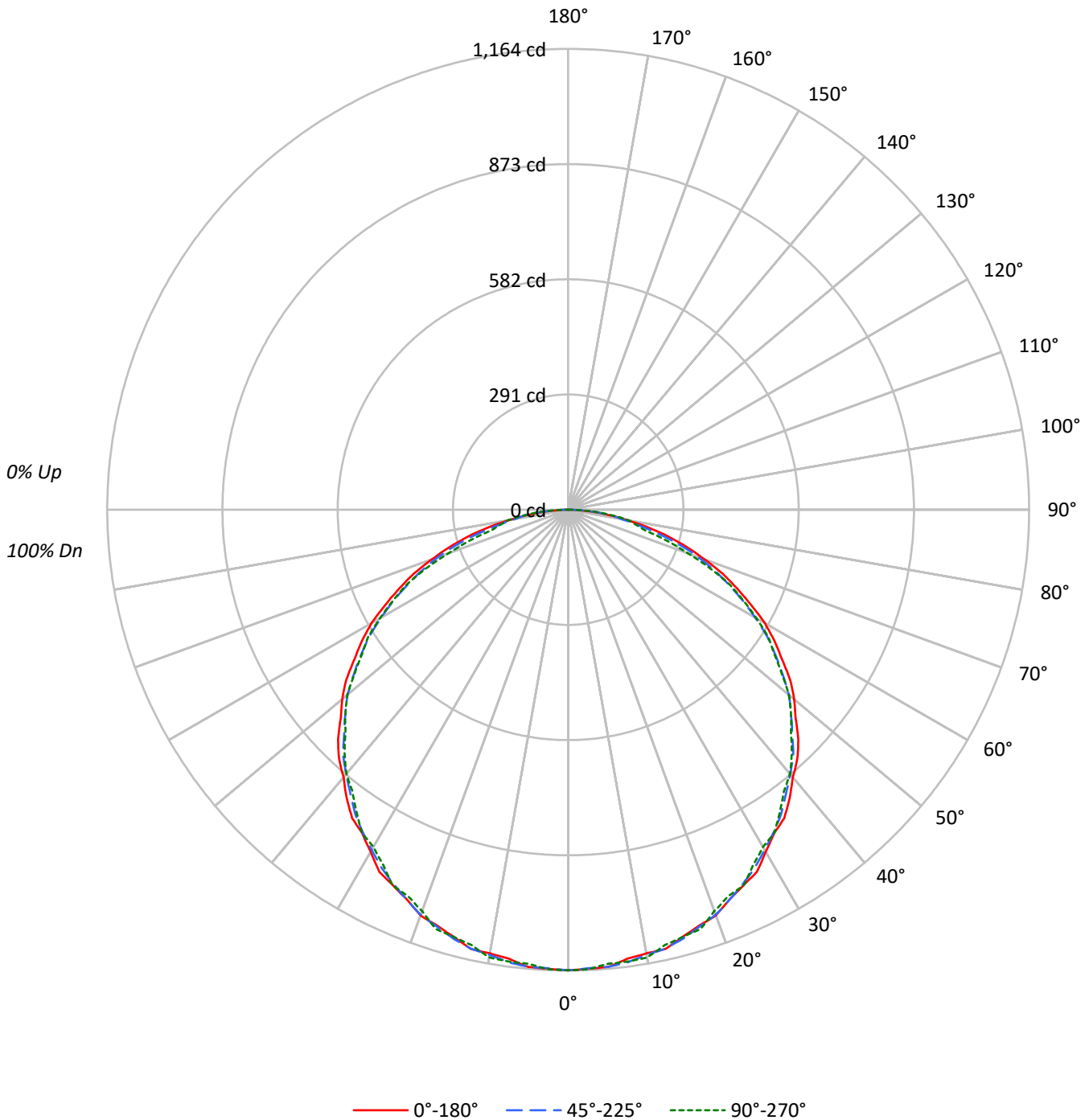
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6262	6262	6262
5°	6262	6262	6219
10°	6219	6238	6277
15°	6223	6248	6223
20°	6246	6236	6181
25°	6216	6195	6221
30°	6199	6166	6112
35°	6248	6161	6121
40°	6200	6126	6120
45°	6256	6088	6055
50°	6234	6088	6095
55°	6180	5990	5957
60°	6172	5870	5907
65°	5983	5691	5759
70°	5762	5500	5057
75°	5442	4930	4144
80°	4708	4246	4816
85°	3742	4390	4662



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.0	3.2
10°-20°	316.1	9.1
20°-30°	481.1	13.9
30°-40°	586.4	16.9
40°-50°	621.4	17.9
50°-60°	576.1	16.6
60°-70°	448.1	12.9
70°-80°	251.7	7.3
80°-90°	77.3	2.2
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°	907.2	26.2
0°-40°	1493.6	43.1
0°-60°	2691.1	77.6
0°-90°	3468.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3468.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1164	1164	1164	1164	1164	
5°	1159	1155	1159	1156	1151	110
15°	1117	1118	1121	1121	1117	316
25°	1047	1047	1043	1040	1048	483
35°	951	945	938	932	932	592
45°	822	813	800	797	796	632
55°	659	655	638	635	635	591
65°	470	465	447	446	452	466
75°	262	253	237	212	199	274
85°	61	62	71	73	76	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1163.5	1163.5	1163.5	1163.5	1163.5
2.5°	1160.8	1163.5	1159.1	1160.8	1161.7
5°	1159.1	1154.7	1159.1	1156.4	1151.2
7.5°	1144.1	1148.5	1152.9	1153.8	1151.2
10°	1138.0	1146.8	1141.5	1144.1	1148.5
12.5°	1136.2	1132.7	1135.4	1131.0	1126.6
15°	1116.9	1117.8	1121.3	1121.3	1116.9
17.5°	1101.1	1108.1	1103.8	1102.9	1110.8
20°	1090.6	1088.8	1088.8	1085.3	1079.2
22.5°	1065.1	1066.0	1066.0	1064.2	1056.3
25°	1046.7	1046.7	1043.2	1039.7	1047.6
27.5°	1031.7	1023.8	1020.3	1015.9	1011.6
30°	997.5	995.7	992.2	989.6	983.5
32.5°	968.5	969.4	965.9	960.6	968.5
35°	951.0	944.8	937.8	931.6	931.6
37.5°	918.5	912.3	903.5	898.3	895.6
40°	882.5	879.8	871.9	866.7	871.1
42.5°	856.1	850.9	841.2	833.3	835.9
45°	821.9	813.1	799.9	797.3	795.5
47.5°	778.9	776.2	763.1	759.5	763.1
50°	744.6	740.2	727.1	720.0	727.9
52.5°	706.9	697.2	682.3	680.5	679.6
55°	658.6	655.0	638.4	634.9	634.9
57.5°	617.3	612.0	595.3	589.2	598.9
60°	573.4	563.7	545.3	543.5	548.8
62.5°	520.7	514.6	496.1	496.1	499.6
65°	469.8	465.4	446.9	446.1	452.2
67.5°	421.5	412.7	398.6	392.5	389.0
70°	366.2	360.0	349.5	329.3	321.4
72.5°	313.5	307.3	295.9	264.3	261.7
75°	261.7	252.9	237.1	212.5	199.3
77.5°	205.5	202.8	180.9	169.5	174.7
80°	151.9	152.8	137.0	148.4	155.4
82.5°	103.6	100.1	111.5	115.9	118.5
85°	60.6	62.3	71.1	72.9	75.5
87.5°	24.6	29.0	33.4	34.2	37.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)