

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: P392957

Luminaire Tested: **12EN-LD2-39-UNV-L93050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392957
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 (4000K)
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: 3450.2 lumens
Efficiency: N/A
Efficacy: 98.6 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

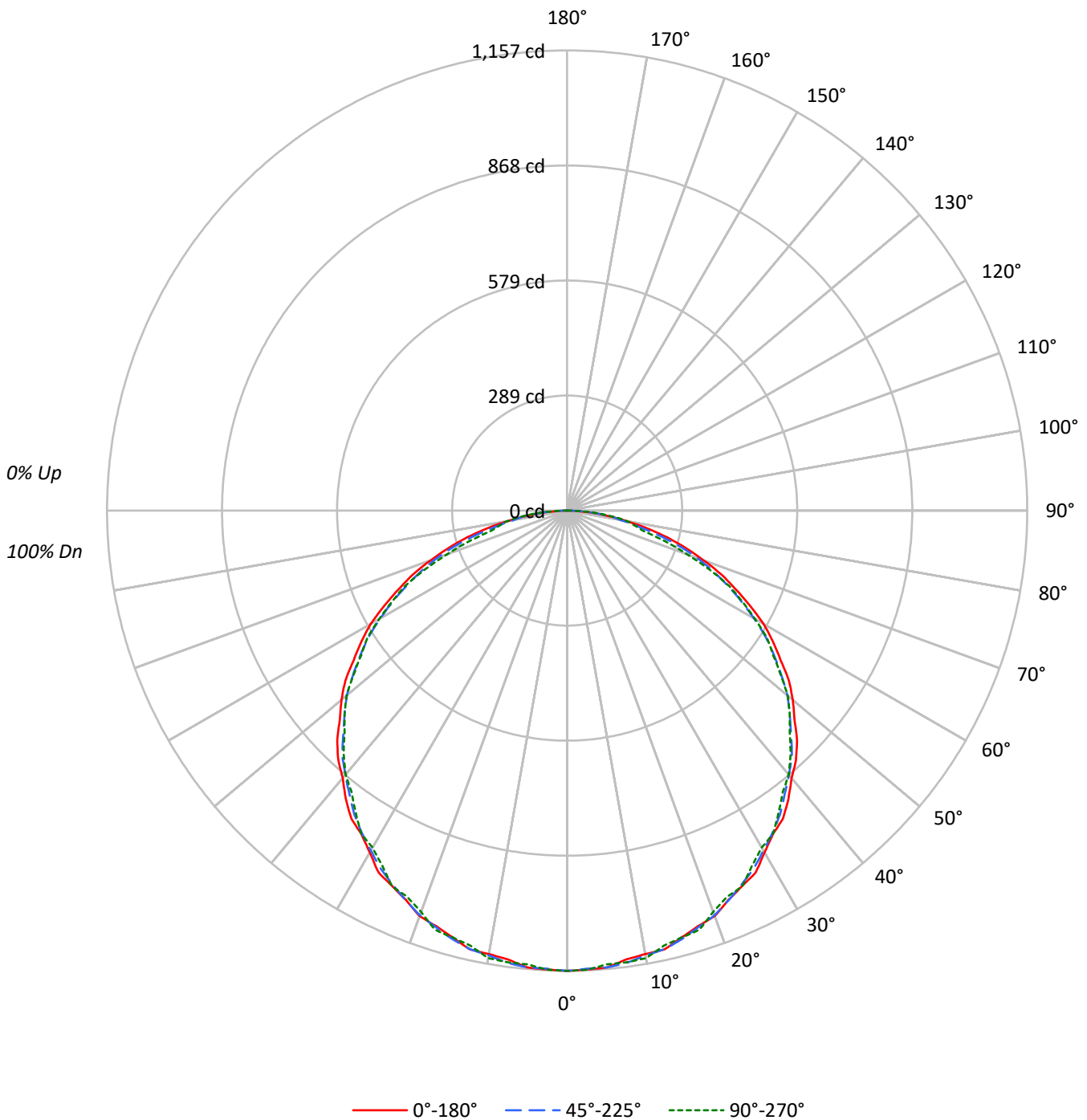
Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6229	6229	6229
5°	6229	6229	6187
10°	6187	6206	6244
15°	6191	6215	6191
20°	6214	6203	6148
25°	6183	6162	6188
30°	6167	6134	6080
35°	6215	6129	6089
40°	6168	6094	6088
45°	6223	6057	6024
50°	6202	6056	6063
55°	6147	5958	5925
60°	6140	5838	5876
65°	5951	5662	5729
70°	5733	5471	5031
75°	5413	4903	4124
80°	4683	4224	4792
85°	3724	4372	4638



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.4	3.2
10°-20°	314.5	9.1
20°-30°	478.6	13.9
30°-40°	583.4	16.9
40°-50°	618.2	17.9
50°-60°	573.1	16.6
60°-70°	445.7	12.9
70°-80°	250.4	7.3
80°-90°	76.9	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°	902.5	26.2
0°-40°	1485.9	43.1
0°-60°	2677.1	77.6
0°-90°	3450.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3450.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1157	1157	1157	1157	1157	
5°	1153	1149	1153	1150	1145	109
15°	1111	1112	1116	1116	1111	314
25°	1041	1041	1038	1034	1042	481
35°	946	940	933	927	927	589
45°	818	809	796	793	791	628
55°	655	652	635	632	632	588
65°	467	463	445	444	450	463
75°	260	252	236	211	198	273
85°	60	62	71	72	75	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1157.4	1157.4	1157.4	1157.4	1157.4
2.5°	1154.8	1157.4	1153.0	1154.8	1155.6
5°	1153.0	1148.7	1153.0	1150.4	1145.2
7.5°	1138.2	1142.5	1146.9	1147.8	1145.2
10°	1132.1	1140.8	1135.6	1138.2	1142.5
12.5°	1130.3	1126.8	1129.4	1125.1	1120.7
15°	1111.1	1112.0	1115.5	1115.5	1111.1
17.5°	1095.4	1102.4	1098.0	1097.1	1105.0
20°	1084.9	1083.1	1083.1	1079.7	1073.5
22.5°	1059.6	1060.4	1060.4	1058.7	1050.8
25°	1041.2	1041.2	1037.7	1034.2	1042.1
27.5°	1026.4	1018.5	1015.0	1010.6	1006.3
30°	992.3	990.6	987.1	984.4	978.3
32.5°	963.5	964.4	960.9	955.6	963.5
35°	946.0	939.9	932.9	926.8	926.8
37.5°	913.7	907.6	898.8	893.6	891.0
40°	877.9	875.3	867.4	862.2	866.5
42.5°	851.7	846.4	836.8	829.0	831.6
45°	817.6	808.9	795.8	793.1	791.4
47.5°	774.8	772.2	759.1	755.6	759.1
50°	740.7	736.4	723.3	716.3	724.1
52.5°	703.2	693.6	678.7	677.0	676.1
55°	655.1	651.6	635.0	631.5	631.5
57.5°	614.1	608.8	592.2	586.1	595.7
60°	570.4	560.8	542.4	540.7	545.9
62.5°	518.0	511.9	493.5	493.5	497.0
65°	467.3	463.0	444.6	443.7	449.9
67.5°	419.3	410.5	396.6	390.5	387.0
70°	364.3	358.1	347.7	327.6	319.7
72.5°	311.8	305.7	294.4	262.9	260.3
75°	260.3	251.6	235.8	211.4	198.3
77.5°	204.4	201.8	179.9	168.6	173.8
80°	151.1	152.0	136.3	147.6	154.6
82.5°	103.1	99.6	110.9	115.3	117.9
85°	60.3	62.0	70.8	72.5	75.1
87.5°	24.5	28.8	33.2	34.1	37.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)