

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: P392942

Luminaire Tested: **12EN-LD2-39-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P392942  
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-L83050-W2A-1-U (4500K)  
Description: 1X2 ENCOUNTER, 3900 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4020.2 lumens  
Efficiency: N/A  
Efficacy: 113.9 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

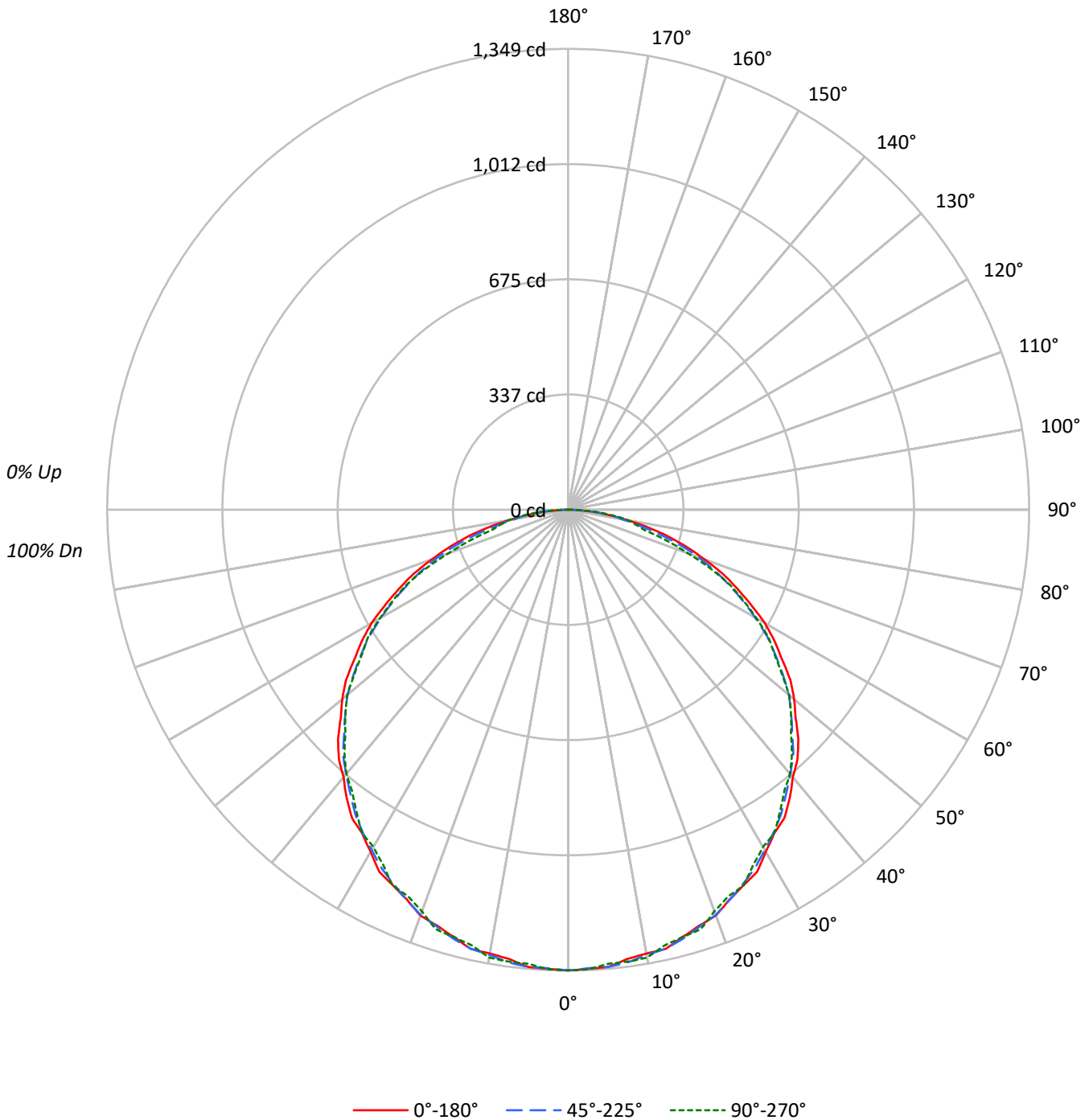
Input Watts (W): 35.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	7258	7258	7258
5°	7258	7258	7209
10°	7209	7231	7276
15°	7214	7242	7214
20°	7240	7229	7164
25°	7204	7181	7211
30°	7186	7147	7085
35°	7242	7142	7095
40°	7187	7101	7094
45°	7251	7057	7019
50°	7227	7057	7065
55°	7163	6944	6905
60°	7154	6804	6847
65°	6934	6598	6676
70°	6678	6375	5862
75°	6307	5714	4803
80°	5458	4922	5585
85°	4335	5088	5403



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.5	3.2
10°-20°	366.5	9.1
20°-30°	557.7	13.9
30°-40°	679.7	16.9
40°-50°	720.3	17.9
50°-60°	667.8	16.6
60°-70°	519.4	12.9
70°-80°	291.8	7.3
80°-90°	89.6	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°	1051.6	26.2
0°-40°	1731.3	43.1
0°-60°	3119.4	77.6
0°-90°	4020.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4020.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1349	1349	1349	1349	1349	
5°	1344	1338	1344	1340	1334	127
15°	1295	1296	1300	1300	1295	366
25°	1213	1213	1209	1205	1214	560
35°	1102	1095	1087	1080	1080	686
45°	953	942	927	924	922	732
55°	763	759	740	736	736	685
65°	544	539	518	517	524	540
75°	303	293	275	246	231	318
85°	70	72	82	84	88	83
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1348.6	1348.6	1348.6	1348.6	1348.6
2.5°	1345.6	1348.6	1343.5	1345.6	1346.6
5°	1343.5	1338.4	1343.5	1340.5	1334.4
7.5°	1326.2	1331.3	1336.4	1337.4	1334.4
10°	1319.1	1329.3	1323.2	1326.2	1331.3
12.5°	1317.1	1313.0	1316.0	1311.0	1305.9
15°	1294.7	1295.7	1299.8	1299.8	1294.7
17.5°	1276.4	1284.5	1279.4	1278.4	1287.6
20°	1264.1	1262.1	1262.1	1258.0	1250.9
22.5°	1234.6	1235.6	1235.6	1233.6	1224.4
25°	1213.2	1213.2	1209.2	1205.1	1214.3
27.5°	1195.9	1186.8	1182.7	1177.6	1172.5
30°	1156.3	1154.2	1150.1	1147.1	1140.0
32.5°	1122.7	1123.7	1119.6	1113.5	1122.7
35°	1102.3	1095.2	1087.0	1079.9	1079.9
37.5°	1064.6	1057.5	1047.3	1041.2	1038.2
40°	1022.9	1019.9	1010.7	1004.6	1009.7
42.5°	992.4	986.3	975.1	965.9	969.0
45°	952.7	942.5	927.2	924.2	922.2
47.5°	902.8	899.8	884.5	880.4	884.5
50°	863.1	858.0	842.8	834.6	843.8
52.5°	819.4	808.2	790.9	788.8	787.8
55°	763.4	759.3	740.0	735.9	735.9
57.5°	715.5	709.4	690.1	683.0	694.2
60°	664.6	653.4	632.1	630.0	636.1
62.5°	603.6	596.4	575.1	575.1	579.1
65°	544.5	539.4	518.1	517.1	524.2
67.5°	488.6	478.4	462.1	455.0	450.9
70°	424.4	417.3	405.1	381.7	372.5
72.5°	363.4	356.2	343.0	306.4	303.3
75°	303.3	293.1	274.8	246.3	231.0
77.5°	238.2	235.1	209.7	196.4	202.5
80°	176.1	177.1	158.8	172.0	180.2
82.5°	120.1	116.0	129.3	134.4	137.4
85°	70.2	72.3	82.4	84.5	87.5
87.5°	28.5	33.6	38.7	39.7	43.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)