

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: P393182

Luminaire Tested: **14EN-LD2-47-UNV-L93050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393182
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-55)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-47-UNV-L93050-W2A-1-U (4500K)
Description: 1X4 ENCOUNTER, 4700 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4142.6 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

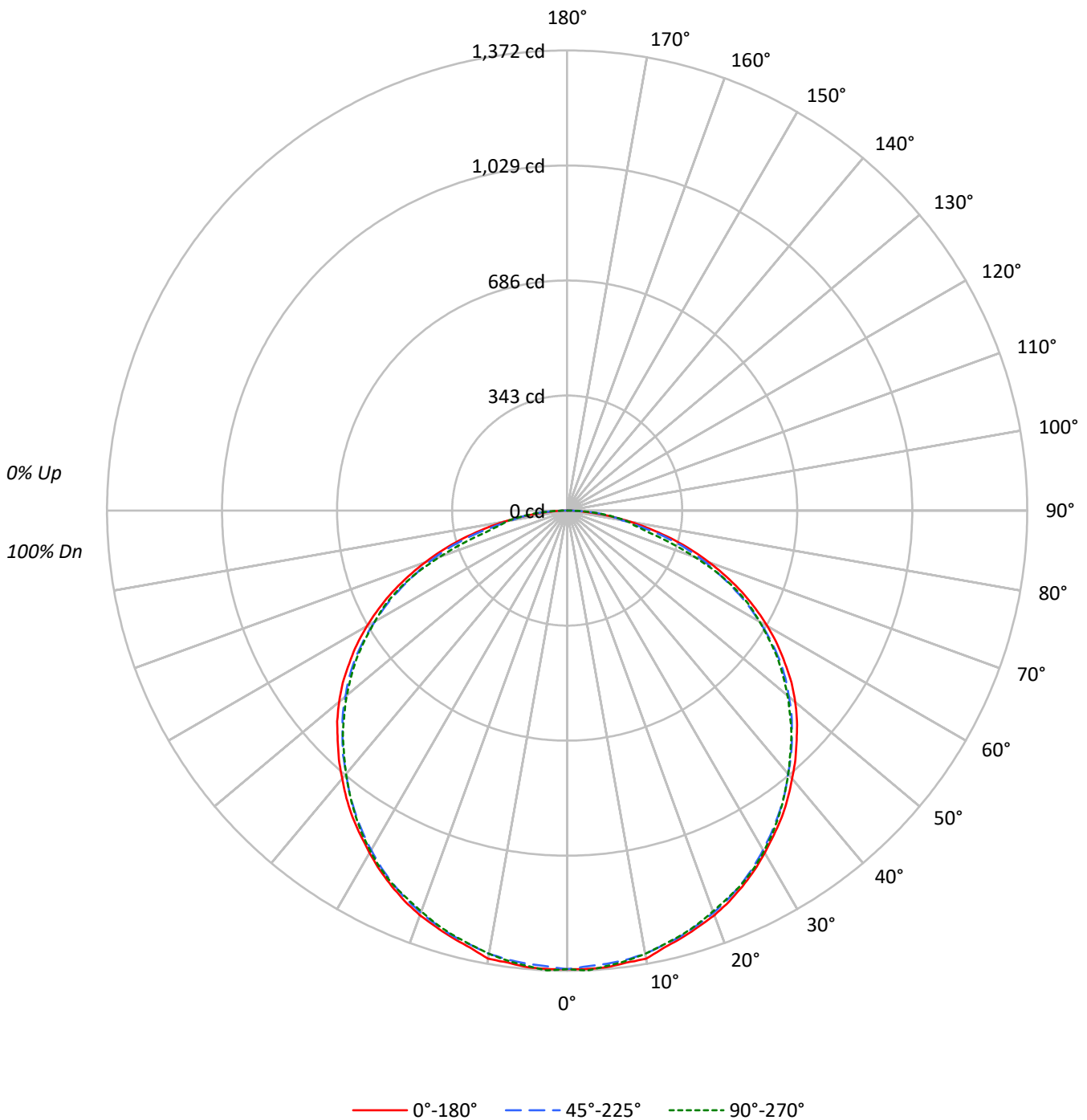
Input Watts (W): 46.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	95	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	34	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°	3679	3679	3679
5°	3691	3665	3681
10°	3707	3666	3666
15°	3674	3660	3652
20°	3676	3654	3641
25°	3671	3647	3653
30°	3662	3631	3645
35°	3666	3617	3626
40°	3665	3600	3603
45°	3682	3606	3599
50°	3716	3614	3592
55°	3720	3621	3592
60°	3710	3563	3563
65°	3662	3478	3528
70°	3537	3378	3192
75°	3332	3122	2620
80°	2952	2585	2803
85°	2167	2791	2791



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.4	3.1
10°-20°	371.4	9.0
20°-30°	567.6	13.7
30°-40°	691.9	16.7
40°-50°	735.2	17.7
50°-60°	691.7	16.7
60°-70°	549.1	13.3
70°-80°	312.2	7.5
80°-90°	94.3	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°	1068.3	25.8
0°-40°	1760.2	42.5
0°-60°	3187.1	76.9
0°-90°	4142.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4142.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1367	1367	1367	1367	1367	
5°	1366	1364	1357	1358	1363	130
15°	1319	1318	1314	1312	1311	373
25°	1236	1234	1228	1231	1230	570
35°	1116	1114	1101	1098	1104	698
45°	968	961	948	945	946	748
55°	793	785	772	767	766	709
65°	575	566	546	553	554	567
75°	320	314	300	265	252	337
85°	70	76	90	89	90	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1367.2	1367.2	1367.2	1367.2	1367.2
2.5°	1368.1	1368.9	1360.2	1365.4	1372.4
5°	1366.3	1364.5	1356.6	1358.4	1362.8
7.5°	1359.3	1357.5	1350.5	1350.5	1354.0
10°	1356.6	1347.9	1341.7	1340.0	1341.7
12.5°	1334.7	1334.7	1326.8	1327.7	1325.9
15°	1318.9	1318.0	1313.6	1311.9	1311.0
17.5°	1301.3	1299.6	1295.2	1298.7	1293.4
20°	1283.8	1281.1	1275.9	1278.5	1271.5
22.5°	1261.8	1257.4	1253.9	1258.3	1250.4
25°	1236.3	1233.7	1228.4	1231.1	1230.2
27.5°	1209.1	1207.4	1200.3	1200.3	1203.9
30°	1178.4	1177.5	1168.7	1169.6	1173.1
32.5°	1146.8	1145.0	1136.2	1133.6	1139.8
35°	1116.0	1114.3	1101.1	1098.5	1103.8
37.5°	1080.9	1078.3	1065.1	1060.7	1065.1
40°	1043.2	1041.4	1024.7	1021.2	1025.6
42.5°	1007.2	1001.0	988.7	983.5	984.3
45°	967.6	960.6	947.5	944.8	945.7
47.5°	929.9	920.2	907.9	905.3	900.9
50°	887.7	876.3	863.2	859.6	857.9
52.5°	843.0	830.7	820.1	813.1	811.3
55°	792.9	785.0	771.8	766.6	765.7
57.5°	743.7	734.1	719.2	713.9	713.0
60°	689.3	683.1	662.1	661.2	662.1
62.5°	633.1	624.3	606.8	608.5	613.8
65°	575.1	566.4	546.2	553.2	554.1
67.5°	512.8	505.8	485.6	490.0	484.7
70°	449.6	444.3	429.4	418.8	405.7
72.5°	386.4	378.5	368.8	338.1	326.6
75°	320.5	313.5	300.3	265.2	252.0
77.5°	252.9	251.1	226.5	202.8	205.5
80°	190.5	192.3	166.8	175.6	180.9
82.5°	126.4	127.3	134.3	142.2	138.7
85°	70.2	76.4	90.4	88.7	90.4
87.5°	25.5	38.6	39.5	42.1	41.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)