

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: P393183

Luminaire Tested: **14EN-LD2-47-UNV-L93050-W2A-1-U (5000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393183
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 (5000K)
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: 4161.8 lumens
Efficiency: N/A
Efficacy: 90.5 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

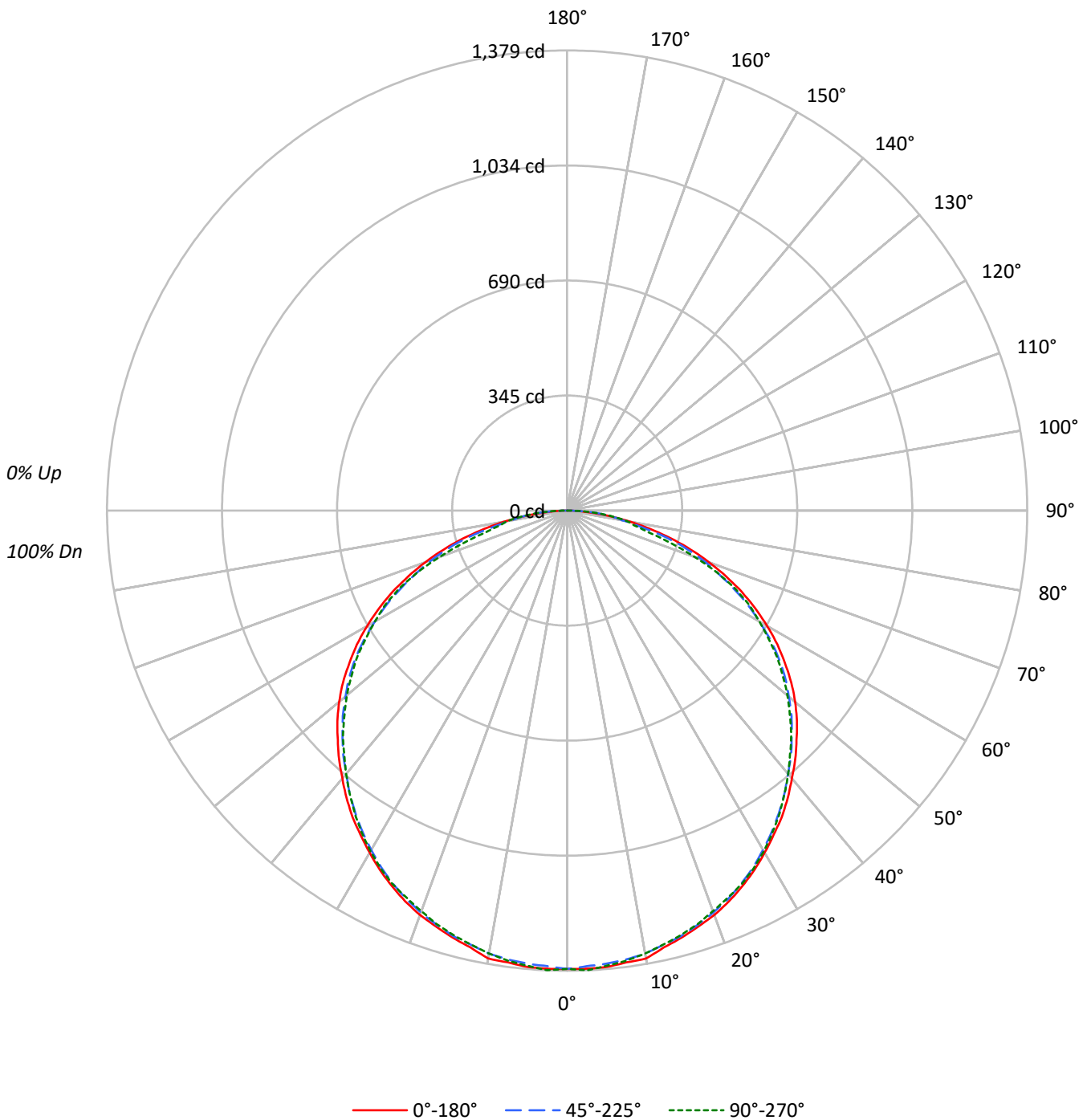
Input Watts (W): 46
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3696	3696	3696
5°	3708	3682	3698
10°	3724	3683	3683
15°	3691	3677	3669
20°	3693	3671	3658
25°	3688	3664	3670
30°	3678	3648	3662
35°	3683	3634	3643
40°	3681	3616	3620
45°	3699	3622	3616
50°	3734	3630	3608
55°	3737	3638	3609
60°	3727	3580	3580
65°	3679	3494	3544
70°	3554	3394	3207
75°	3348	3137	2633
80°	2966	2597	2816
85°	2180	2807	2807



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.0	3.1
10°-20°	373.1	9.0
20°-30°	570.2	13.7
30°-40°	695.1	16.7
40°-50°	738.6	17.7
50°-60°	694.9	16.7
60°-70°	551.6	13.3
70°-80°	313.7	7.5
80°-90°	94.7	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°	1073.3	25.8
0°-40°	1768.3	42.5
0°-60°	3201.9	76.9
0°-90°	4161.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4161.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1374	1374	1374	1374	1374	
5°	1373	1371	1363	1365	1369	131
15°	1325	1324	1320	1318	1317	375
25°	1242	1239	1234	1237	1236	573
35°	1121	1119	1106	1104	1109	701
45°	972	965	952	949	950	751
55°	797	789	775	770	769	712
65°	578	569	549	556	557	570
75°	322	315	302	266	253	339
85°	71	77	91	89	91	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1373.5	1373.5	1373.5	1373.5	1373.5
2.5°	1374.4	1375.3	1366.5	1371.7	1378.8
5°	1372.6	1370.9	1362.9	1364.7	1369.1
7.5°	1365.6	1363.8	1356.7	1356.7	1360.3
10°	1362.9	1354.1	1347.9	1346.2	1347.9
12.5°	1340.9	1340.9	1332.9	1333.8	1332.0
15°	1325.0	1324.1	1319.7	1317.9	1317.0
17.5°	1307.3	1305.6	1301.2	1304.7	1299.4
20°	1289.7	1287.1	1281.8	1284.4	1277.4
22.5°	1267.6	1263.2	1259.7	1264.1	1256.2
25°	1242.1	1239.4	1234.1	1236.8	1235.9
27.5°	1214.7	1213.0	1205.9	1205.9	1209.4
30°	1183.8	1183.0	1174.1	1175.0	1178.6
32.5°	1152.1	1150.3	1141.5	1138.9	1145.0
35°	1121.2	1119.4	1106.2	1103.6	1108.9
37.5°	1085.9	1083.3	1070.0	1065.6	1070.0
40°	1048.0	1046.2	1029.5	1025.9	1030.4
42.5°	1011.8	1005.7	993.3	988.0	988.9
45°	972.1	965.1	951.8	949.2	950.1
47.5°	934.2	924.5	912.1	909.5	905.1
50°	891.9	880.4	867.2	863.6	861.9
52.5°	846.9	834.5	823.9	816.9	815.1
55°	796.6	788.6	775.4	770.1	769.2
57.5°	747.2	737.5	722.5	717.2	716.3
60°	692.5	686.3	665.1	664.3	665.1
62.5°	636.0	627.2	609.6	611.3	616.6
65°	577.8	569.0	548.7	555.8	556.6
67.5°	515.2	508.1	487.8	492.2	486.9
70°	451.7	446.4	431.4	420.8	407.6
72.5°	388.1	380.2	370.5	339.6	328.2
75°	322.0	314.9	301.7	266.4	253.2
77.5°	254.1	252.3	227.6	203.8	206.4
80°	191.4	193.2	167.6	176.4	181.7
82.5°	127.0	127.9	135.0	142.9	139.4
85°	70.6	76.7	90.9	89.1	90.9
87.5°	25.6	38.8	39.7	42.3	41.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)