

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: P393165

Luminaire Tested: **14EN-LD2-47-UNV-L83050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393165
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-L83050-W2A-1-U (4000K)
Description: 1X4 ENCOUNTER, 4700 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4737.9 lumens
Efficiency: N/A
Efficacy: 100.6 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

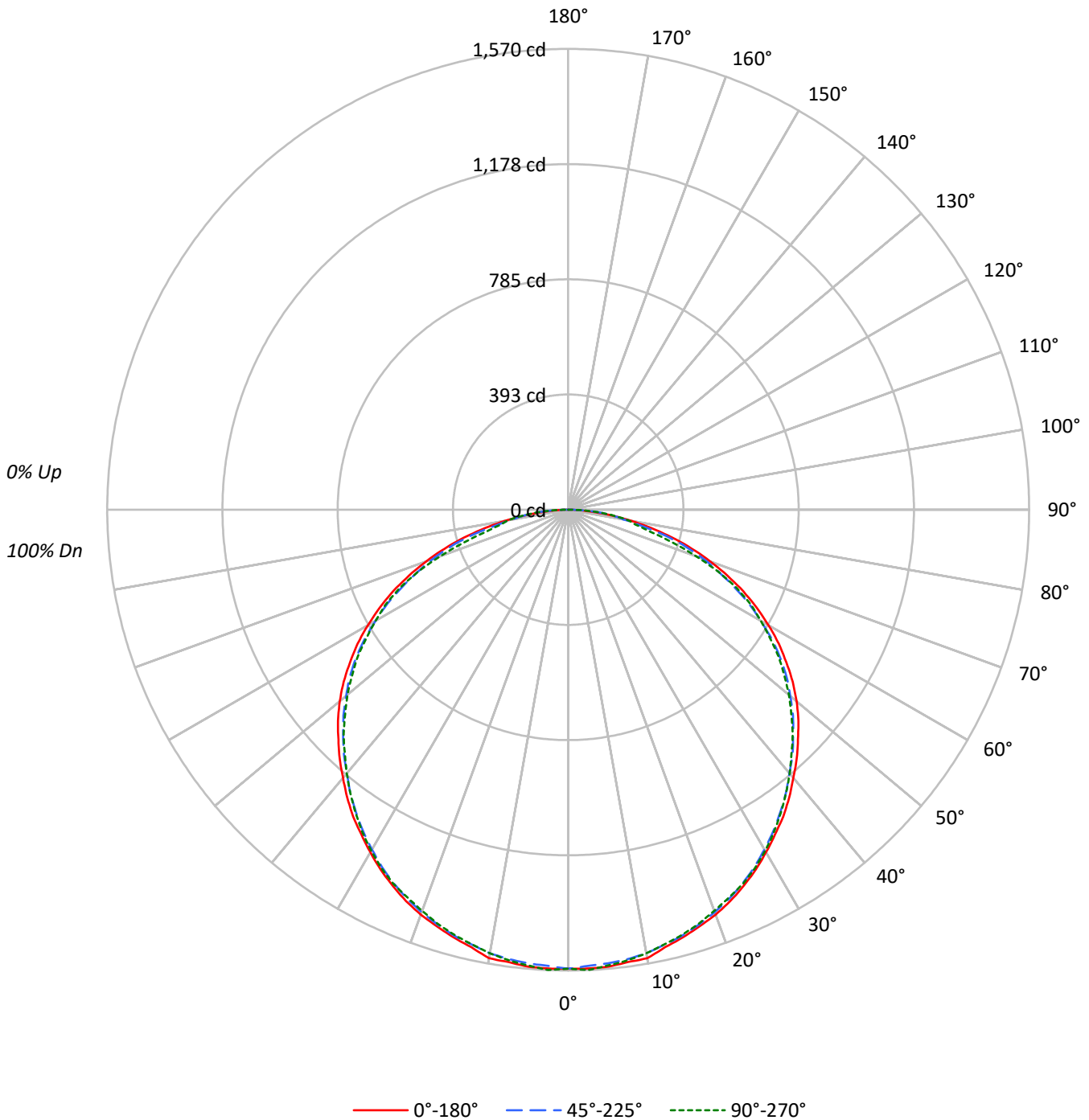
Input Watts (W): 47.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4208	4208	4208
5°	4221	4191	4210
10°	4240	4193	4193
15°	4202	4186	4177
20°	4204	4179	4164
25°	4198	4172	4178
30°	4188	4153	4169
35°	4193	4137	4147
40°	4191	4117	4121
45°	4212	4124	4116
50°	4250	4133	4108
55°	4254	4141	4108
60°	4243	4075	4075
65°	4188	3977	4035
70°	4046	3864	3651
75°	3812	3571	2996
80°	3377	2957	3206
85°	2479	3193	3193



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.0	3.1
10°-20°	424.7	9.0
20°-30°	649.1	13.7
30°-40°	791.3	16.7
40°-50°	840.8	17.7
50°-60°	791.1	16.7
60°-70°	627.9	13.3
70°-80°	357.1	7.5
80°-90°	107.8	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°	1221.9	25.8
0°-40°	2013.1	42.5
0°-60°	3645.1	76.9
0°-90°	4737.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4737.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1564	1564	1564	1564	1564	
5°	1563	1561	1552	1554	1559	149
15°	1508	1507	1502	1500	1499	426
25°	1414	1411	1405	1408	1407	652
35°	1276	1274	1259	1256	1262	798
45°	1107	1099	1084	1081	1082	855
55°	907	898	883	877	876	811
65°	658	648	625	633	634	648
75°	367	358	344	303	288	386
85°	80	87	103	101	103	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1563.6	1563.6	1563.6	1563.6	1563.6
2.5°	1564.6	1565.6	1555.6	1561.6	1569.6
5°	1562.6	1560.6	1551.6	1553.6	1558.6
7.5°	1554.6	1552.6	1544.5	1544.5	1548.6
10°	1551.6	1541.5	1534.5	1532.5	1534.5
12.5°	1526.5	1526.5	1517.4	1518.4	1516.4
15°	1508.4	1507.4	1502.4	1500.4	1499.4
17.5°	1488.3	1486.3	1481.3	1485.3	1479.3
20°	1468.2	1465.2	1459.2	1462.2	1454.2
22.5°	1443.1	1438.1	1434.1	1439.1	1430.1
25°	1414.0	1411.0	1405.0	1408.0	1407.0
27.5°	1382.9	1380.8	1372.8	1372.8	1376.8
30°	1347.7	1346.7	1336.7	1337.7	1341.7
32.5°	1311.6	1309.5	1299.5	1296.5	1303.5
35°	1276.4	1274.4	1259.3	1256.3	1262.3
37.5°	1236.2	1233.2	1218.2	1213.1	1218.2
40°	1193.1	1191.0	1172.0	1167.9	1173.0
42.5°	1151.9	1144.8	1130.8	1124.8	1125.8
45°	1106.7	1098.7	1083.6	1080.6	1081.6
47.5°	1063.5	1052.5	1038.4	1035.4	1030.4
50°	1015.3	1002.2	987.2	983.2	981.2
52.5°	964.1	950.0	938.0	929.9	927.9
55°	906.8	897.8	882.7	876.7	875.7
57.5°	850.6	839.6	822.5	816.5	815.5
60°	788.3	781.3	757.2	756.2	757.2
62.5°	724.1	714.0	693.9	695.9	702.0
65°	657.8	647.7	624.6	632.7	633.7
67.5°	586.5	578.4	555.4	560.4	554.3
70°	514.2	508.2	491.1	479.0	464.0
72.5°	441.9	432.8	421.8	386.6	373.6
75°	366.6	358.5	343.5	303.3	288.2
77.5°	289.2	287.2	259.1	232.0	235.0
80°	217.9	219.9	190.8	200.9	206.9
82.5°	144.6	145.6	153.7	162.7	158.7
85°	80.3	87.4	103.4	101.4	103.4
87.5°	29.1	44.2	45.2	48.2	47.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)