

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: P393166

Luminaire Tested: **14EN-LD2-47-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393166
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 (4500K)
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: 4802.0 lumens
Efficiency: N/A
Efficacy: 102.8 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

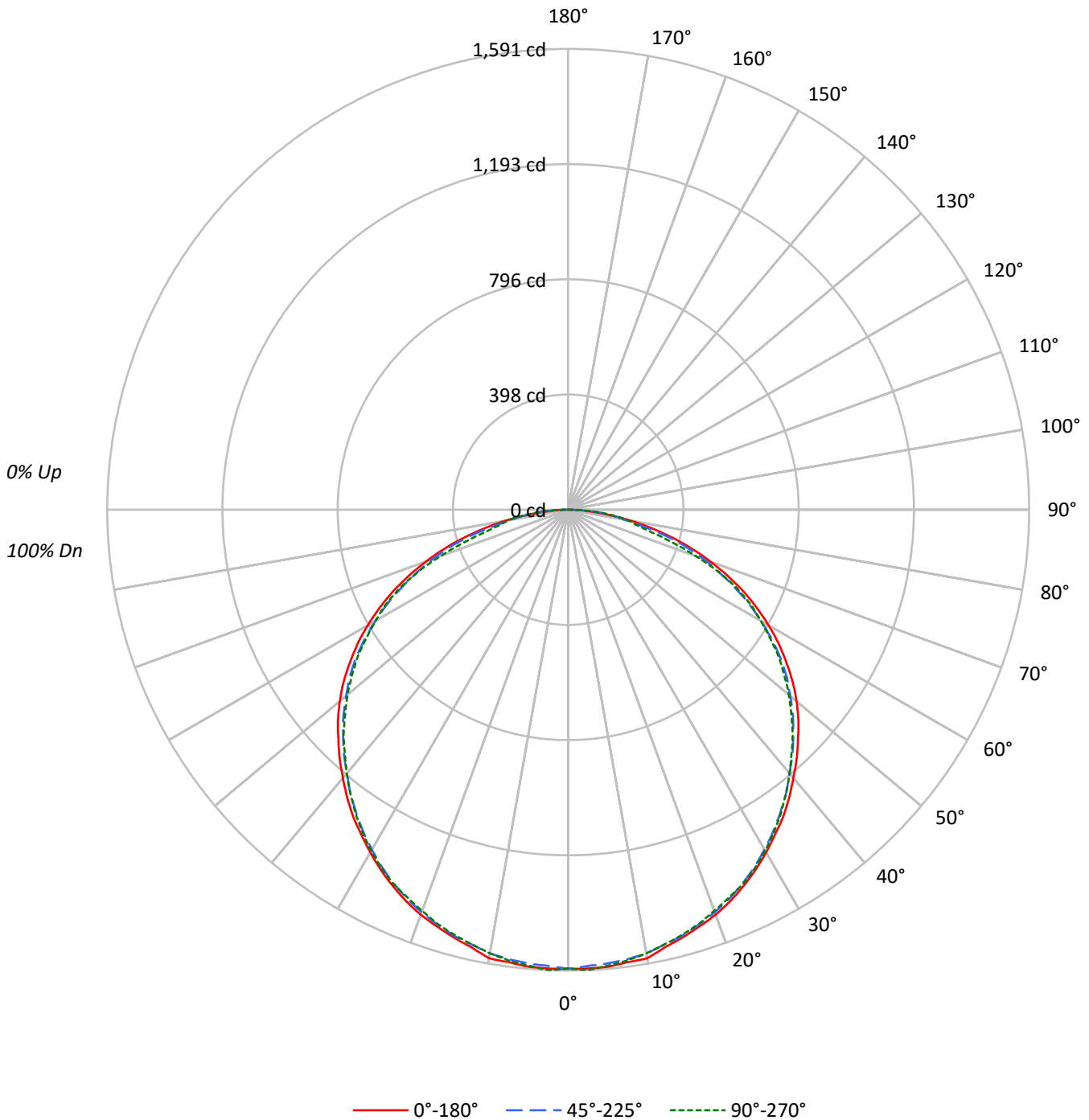
Input Watts (W): 46.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P393166

CATALOG NUMBER: 14EN-LD2-47-UNV-L83050-W2A-1-U (4500K)

Luminous Intensity Polar Plot





TEST NUMBER: P393166

CATALOG NUMBER: 14EN-LD2-47-UNV-L83050-W2A-1-U (4500K)

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°	4265	4265	4265
5°	4278	4248	4267
10°	4297	4250	4250
15°	4259	4242	4233
20°	4261	4235	4220
25°	4255	4228	4234
30°	4244	4209	4225
35°	4250	4193	4203
40°	4248	4173	4176
45°	4268	4179	4172
50°	4308	4189	4163
55°	4312	4198	4164
60°	4300	4130	4130
65°	4245	4031	4089
70°	4100	3916	3699
75°	3863	3619	3037
80°	3423	2997	3250
85°	2513	3236	3236



TEST NUMBER: P393166

CATALOG NUMBER: 14EN-LD2-47-UNV-L83050-W2A-1-U (4500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.0	3.1
10°-20°	430.5	9.0
20°-30°	657.9	13.7
30°-40°	802.0	16.7
40°-50°	852.2	17.7
50°-60°	801.8	16.7
60°-70°	636.4	13.3
70°-80°	361.9	7.5
80°-90°	109.3	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°	1238.4	25.8
0°-40°	2040.3	42.5
0°-60°	3694.3	76.9
0°-90°	4802.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4802.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1585	1585	1585	1585	1585	
5°	1584	1582	1572	1575	1580	151
15°	1529	1528	1523	1521	1520	432
25°	1433	1430	1424	1427	1426	661
35°	1294	1292	1276	1273	1279	809
45°	1122	1114	1098	1095	1096	867
55°	919	910	895	889	888	822
65°	667	656	633	641	642	657
75°	372	363	348	307	292	391
85°	81	89	105	103	105	100
90°	0	0	0	0	0	



TEST NUMBER: P393166

CATALOG NUMBER: 14EN-LD2-47-UNV-L83050-W2A-1-U (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1584.8	1584.8	1584.8	1584.8	1584.8
2.5°	1585.8	1586.8	1576.6	1582.7	1590.9
5°	1583.7	1581.7	1572.5	1574.6	1579.7
7.5°	1575.6	1573.6	1565.4	1565.4	1569.5
10°	1572.5	1562.4	1555.2	1553.2	1555.2
12.5°	1547.1	1547.1	1537.9	1539.0	1536.9
15°	1528.8	1527.8	1522.7	1520.6	1519.6
17.5°	1508.4	1506.4	1501.3	1505.4	1499.3
20°	1488.1	1485.0	1478.9	1482.0	1473.8
22.5°	1462.6	1457.5	1453.5	1458.5	1449.4
25°	1433.1	1430.0	1423.9	1427.0	1426.0
27.5°	1401.5	1399.5	1391.4	1391.4	1395.4
30°	1365.9	1364.9	1354.7	1355.7	1359.8
32.5°	1329.3	1327.2	1317.1	1314.0	1321.1
35°	1293.7	1291.6	1276.4	1273.3	1279.4
37.5°	1252.9	1249.9	1234.6	1229.5	1234.6
40°	1209.2	1207.1	1187.8	1183.7	1188.8
42.5°	1167.4	1160.3	1146.1	1140.0	1141.0
45°	1121.6	1113.5	1098.2	1095.2	1096.2
47.5°	1077.9	1066.7	1052.4	1049.4	1044.3
50°	1029.0	1015.8	1000.5	996.5	994.4
52.5°	977.1	962.9	950.7	942.5	940.5
55°	919.1	909.9	894.7	888.6	887.5
57.5°	862.1	850.9	833.6	827.5	826.5
60°	799.0	791.9	767.4	766.4	767.4
62.5°	733.9	723.7	703.3	705.4	711.5
65°	666.7	656.5	633.1	641.2	642.2
67.5°	594.4	586.3	562.9	567.9	561.8
70°	521.1	515.0	497.7	485.5	470.2
72.5°	447.8	438.7	427.5	391.9	378.6
75°	371.5	363.4	348.1	307.4	292.1
77.5°	293.1	291.1	262.6	235.1	238.2
80°	220.9	222.9	193.4	203.6	209.7
82.5°	146.6	147.6	155.7	164.9	160.8
85°	81.4	88.6	104.8	102.8	104.8
87.5°	29.5	44.8	45.8	48.9	47.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)