

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: P393158

Luminaire Tested: **14EN-LD2-47-UNV-L82765-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393158  
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-L82765-W2A-1-U (4500K)  
Description: 1X4 ENCOUNTER, 4700 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 3000K/5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4537.8 lumens  
Efficiency: N/A  
Efficacy: 97.2 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

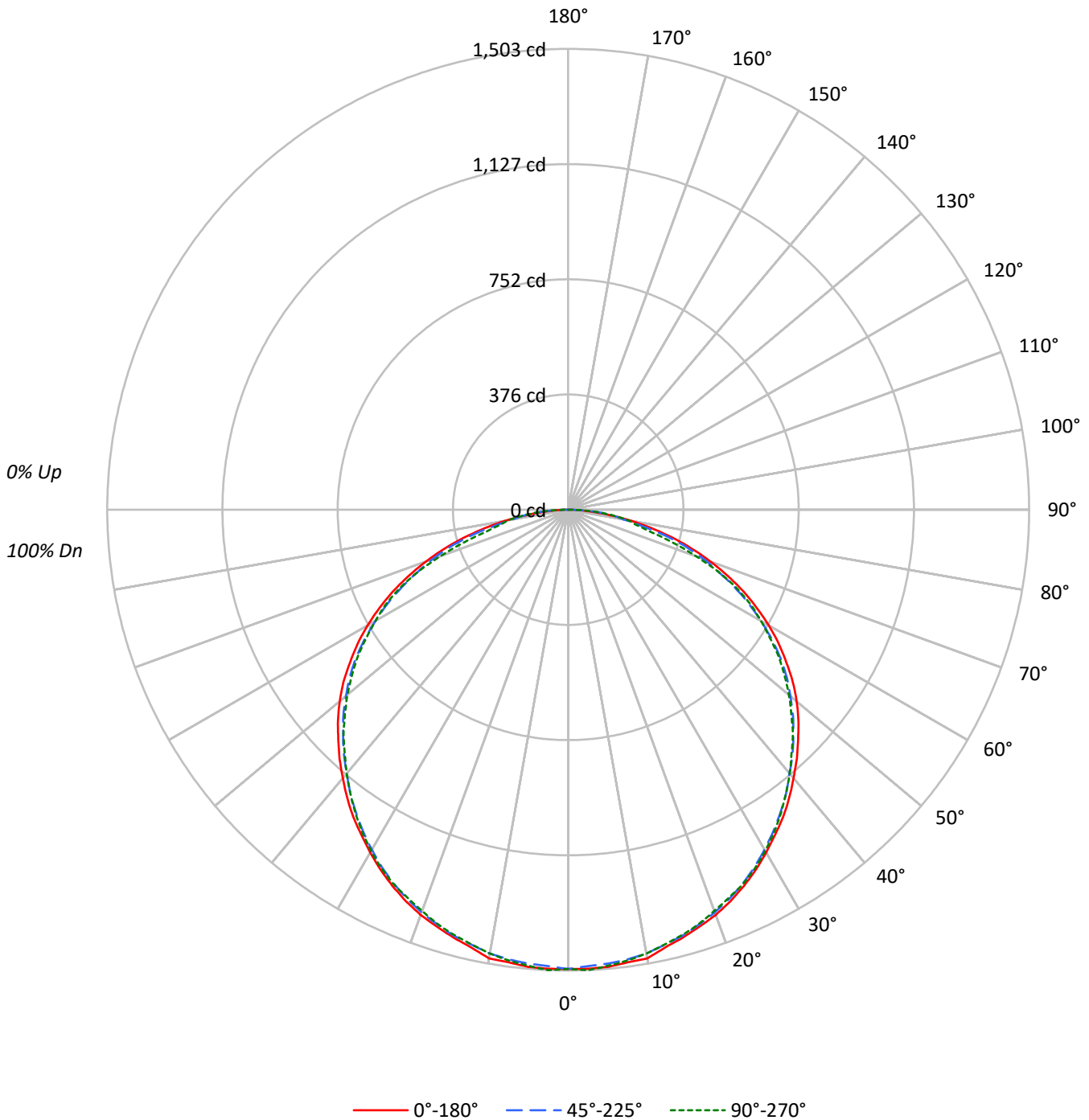
Input Watts (W): 46.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P393158

CATALOG NUMBER: 14EN-LD2-47-UNV-L82765-W2A-1-U (4500K)

### Luminous Intensity Polar Plot





TEST NUMBER: P393158

CATALOG NUMBER: 14EN-LD2-47-UNV-L82765-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°	4030	4030	4030
5°	4043	4014	4032
10°	4060	4016	4016
15°	4025	4009	4001
20°	4027	4002	3988
25°	4021	3995	4001
30°	4011	3978	3993
35°	4016	3962	3972
40°	4014	3943	3946
45°	4034	3949	3942
50°	4071	3958	3934
55°	4075	3966	3935
60°	4063	3903	3903
65°	4011	3810	3864
70°	3875	3700	3496
75°	3650	3420	2870
80°	3234	2831	3070
85°	2374	3060	3060



TEST NUMBER: P393158

CATALOG NUMBER: 14EN-LD2-47-UNV-L82765-W2A-1-U (4500K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.7	3.1
10°-20°	406.8	9.0
20°-30°	621.7	13.7
30°-40°	757.9	16.7
40°-50°	805.3	17.7
50°-60°	757.7	16.7
60°-70°	601.4	13.3
70°-80°	342.0	7.5
80°-90°	103.3	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°	1170.2	25.8
0°-40°	1928.1	42.5
0°-60°	3491.1	76.9
0°-90°	4537.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4537.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1498	1498	1498	1498	1498	
5°	1497	1495	1486	1488	1493	142
15°	1445	1444	1439	1437	1436	408
25°	1354	1351	1346	1348	1348	624
35°	1222	1221	1206	1203	1209	765
45°	1060	1052	1038	1035	1036	819
55°	868	860	845	840	839	776
65°	630	620	598	606	607	621
75°	351	343	329	290	276	370
85°	77	84	99	97	99	95
90°	0	0	0	0	0	



TEST NUMBER: P393158

CATALOG NUMBER: 14EN-LD2-47-UNV-L82765-W2A-1-U (4500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1497.6	1497.6	1497.6	1497.6	1497.6
2.5°	1498.5	1499.5	1489.9	1495.6	1503.3
5°	1496.6	1494.7	1486.0	1488.0	1492.8
7.5°	1488.9	1487.0	1479.3	1479.3	1483.1
10°	1486.0	1476.4	1469.7	1467.8	1469.7
12.5°	1462.0	1462.0	1453.3	1454.3	1452.4
15°	1444.7	1443.7	1438.9	1437.0	1436.0
17.5°	1425.4	1423.5	1418.7	1422.5	1416.8
20°	1406.2	1403.3	1397.5	1400.4	1392.7
22.5°	1382.2	1377.3	1373.5	1378.3	1369.6
25°	1354.3	1351.4	1345.6	1348.5	1347.5
27.5°	1324.4	1322.5	1314.8	1314.8	1318.7
30°	1290.8	1289.8	1280.2	1281.2	1285.0
32.5°	1256.2	1254.2	1244.6	1241.7	1248.5
35°	1222.5	1220.6	1206.1	1203.3	1209.0
37.5°	1184.0	1181.1	1166.7	1161.9	1166.7
40°	1142.7	1140.7	1122.5	1118.6	1123.4
42.5°	1103.2	1096.5	1083.0	1077.3	1078.2
45°	1059.9	1052.2	1037.8	1034.9	1035.9
47.5°	1018.6	1008.0	994.5	991.6	986.8
50°	972.4	959.9	945.5	941.6	939.7
52.5°	923.4	909.9	898.4	890.7	888.7
55°	868.5	859.9	845.4	839.7	838.7
57.5°	814.7	804.1	787.7	782.0	781.0
60°	755.0	748.3	725.2	724.3	725.2
62.5°	693.5	683.9	664.6	666.5	672.3
65°	630.0	620.4	598.3	606.0	606.9
67.5°	561.7	554.0	531.9	536.7	530.9
70°	492.5	486.7	470.3	458.8	444.4
72.5°	423.2	414.5	404.0	370.3	357.8
75°	351.1	343.4	328.9	290.5	276.0
77.5°	277.0	275.1	248.2	222.2	225.1
80°	208.7	210.6	182.7	192.4	198.1
82.5°	138.5	139.5	147.2	155.8	152.0
85°	76.9	83.7	99.1	97.1	99.1
87.5°	27.9	42.3	43.3	46.2	45.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)