

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: P393531

Luminaire Tested: **24EN-LD2-45-UNV-L93050-W2A-1-U (3000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393531
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-34)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-45-UNV-L93050-W2A-1-U (3000K)
Description: 2X4 ENCOUNTER, 4500 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3764.8 lumens
Efficiency: N/A
Efficacy: 118.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

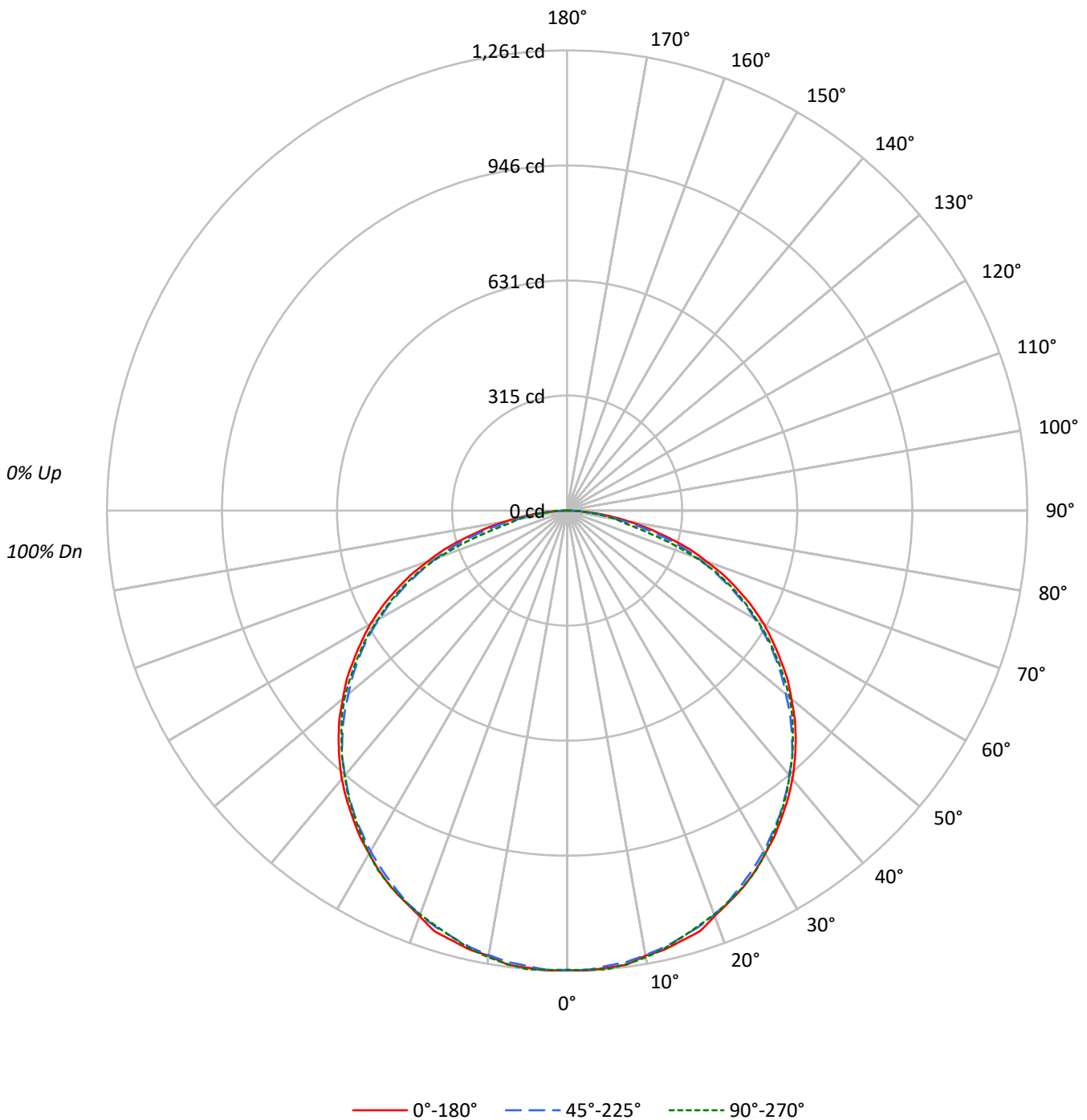
Input Watts (W): 31.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P393531

CATALOG NUMBER: 24EN-LD2-45-UNV-L93050-W2A-1-U (3000K)

Luminous Intensity Polar Plot





TEST NUMBER: P393531

CATALOG NUMBER: 24EN-LD2-45-UNV-L93050-W2A-1-U (3000K)

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	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1694	1694	1694
5°	1698	1691	1704
10°	1692	1690	1699
15°	1699	1686	1687
20°	1693	1688	1686
25°	1692	1680	1691
30°	1686	1674	1686
35°	1684	1670	1674
40°	1687	1663	1666
45°	1686	1657	1664
50°	1679	1638	1665
55°	1675	1629	1642
60°	1676	1601	1614
65°	1651	1559	1585
70°	1594	1503	1468
75°	1491	1380	1149
80°	1318	1108	1063
85°	1078	977	888



TEST NUMBER: P393531

CATALOG NUMBER: 24EN-LD2-45-UNV-L93050-W2A-1-U (3000K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.3	3.2
10°-20°	342.6	9.1
20°-30°	522.7	13.9
30°-40°	637.7	16.9
40°-50°	675.0	17.9
50°-60°	626.0	16.6
60°-70°	492.1	13.1
70°-80°	275.8	7.3
80°-90°	73.6	2.0
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°	984.6	26.2
0°-40°	1622.3	43.1
0°-60°	2923.3	77.6
0°-90°	3764.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3764.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1259	1259	1259	1259	1259	
5°	1257	1255	1252	1252	1261	120
15°	1220	1214	1210	1213	1211	344
25°	1140	1134	1132	1132	1139	525
35°	1026	1022	1016	1016	1019	642
45°	886	880	871	869	874	683
55°	714	706	694	695	700	639
65°	518	505	490	493	498	513
75°	287	280	265	233	221	305
85°	70	64	63	60	58	81
90°	0	0	0	0	0	



TEST NUMBER: P393531

CATALOG NUMBER: 24EN-LD2-45-UNV-L93050-W2A-1-U (3000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1258.9	1258.9	1258.9	1258.9	1258.9
2.5°	1261.4	1257.3	1259.7	1254.8	1259.7
5°	1257.3	1254.8	1252.3	1251.5	1261.4
7.5°	1254.8	1249.9	1247.4	1244.9	1253.2
10°	1238.4	1240.0	1236.7	1237.5	1243.3
12.5°	1232.6	1227.7	1226.0	1226.0	1229.3
15°	1219.5	1214.5	1210.4	1212.9	1211.2
17.5°	1208.8	1195.6	1196.5	1196.5	1194.0
20°	1182.5	1176.7	1179.2	1175.1	1177.6
22.5°	1160.3	1157.0	1157.8	1153.7	1159.5
25°	1139.8	1134.0	1131.5	1132.4	1138.9
27.5°	1114.3	1108.5	1105.2	1104.4	1115.9
30°	1085.5	1081.4	1077.3	1077.3	1085.5
32.5°	1057.6	1051.8	1046.9	1046.1	1051.0
35°	1025.5	1022.2	1016.5	1016.5	1019.0
37.5°	994.3	987.7	982.8	983.6	985.3
40°	960.6	954.0	946.6	946.6	948.3
42.5°	923.6	917.9	913.0	909.7	913.0
45°	885.8	880.1	871.0	868.6	874.3
47.5°	846.4	839.0	828.3	830.0	837.4
50°	802.0	794.6	782.3	786.4	795.4
52.5°	761.8	752.7	739.6	743.7	747.8
55°	714.1	705.9	694.4	695.2	700.1
57.5°	668.1	659.0	646.7	645.9	653.3
60°	622.9	610.6	594.9	595.8	599.9
62.5°	572.8	559.6	544.0	544.0	551.4
65°	518.5	504.6	489.8	493.0	498.0
67.5°	465.9	447.8	434.7	436.3	442.1
70°	405.1	392.8	382.1	376.4	373.1
72.5°	351.7	334.4	326.2	305.7	299.1
75°	286.8	280.2	265.4	232.6	221.0
77.5°	229.3	222.7	203.0	167.6	161.1
80°	170.1	171.7	143.0	137.2	137.2
82.5°	119.2	114.2	104.4	99.4	97.0
85°	69.8	64.1	63.3	60.0	57.5
87.5°	23.0	26.3	25.5	26.3	26.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)