

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: P393564

Luminaire Tested: **24EN-LD2-49-UNV-L93050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393564
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-35)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-49-UNV-L93050-W2A-1-U (3500K)
Description: 2X4 ENCOUNTER, 4900 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4155.9 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

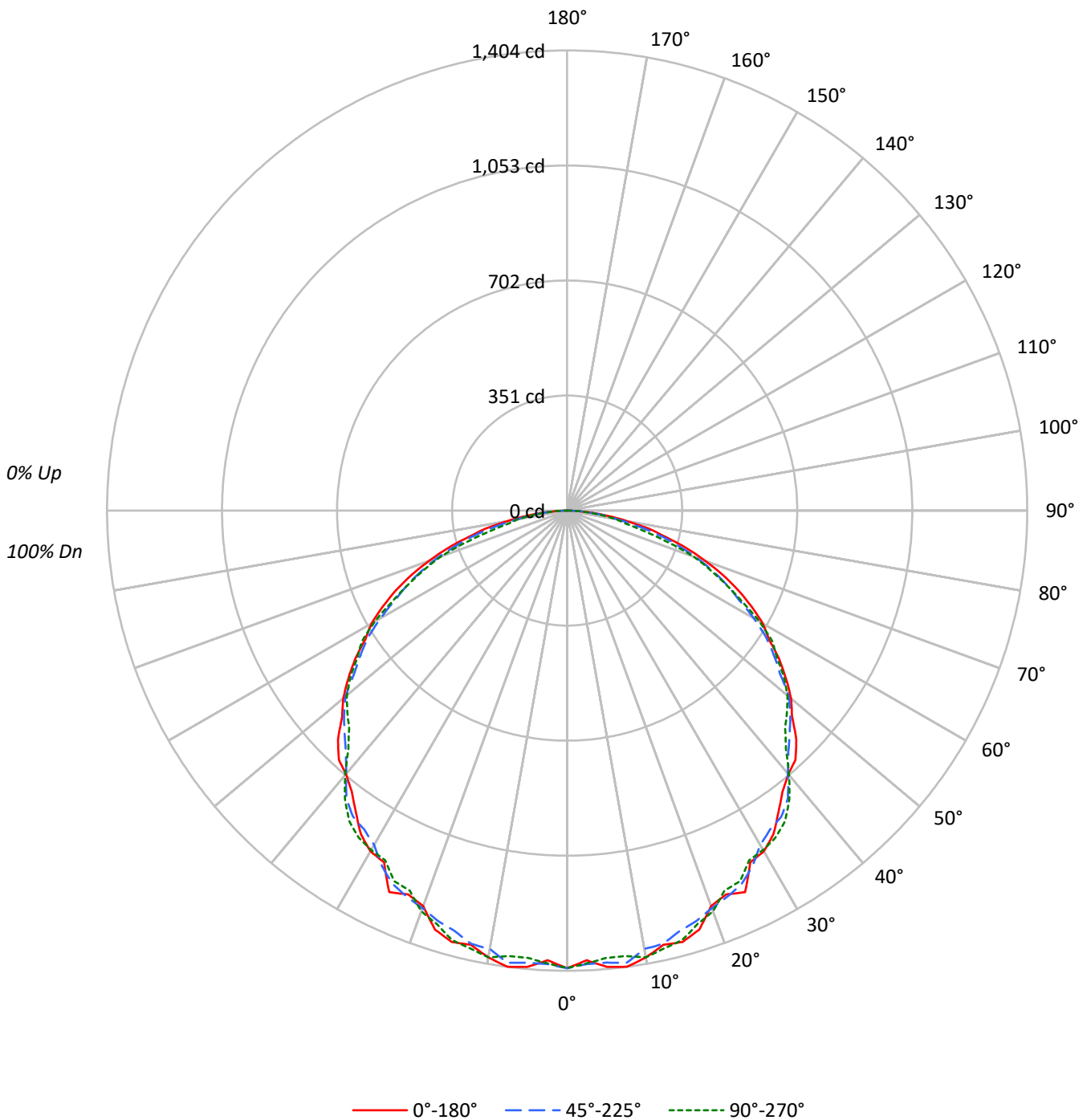
Input Watts (W): 34.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P393564

CATALOG NUMBER: 24EN-LD2-49-UNV-L93050-W2A-1-U (3500K)

Luminous Intensity Polar Plot





TEST NUMBER: P393564

CATALOG NUMBER: 24EN-LD2-49-UNV-L93050-W2A-1-U (3500K)

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	109	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	85	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	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°	1878	1878	1878
5°	1888	1870	1850
10°	1891	1855	1891
15°	1898	1850	1889
20°	1839	1848	1863
25°	1908	1868	1853
30°	1864	1830	1858
35°	1845	1872	1902
40°	1843	1840	1851
45°	1882	1827	1789
50°	1866	1848	1836
55°	1852	1807	1831
60°	1856	1770	1826
65°	1837	1716	1703
70°	1760	1651	1614
75°	1613	1521	1268
80°	1427	1206	1166
85°	1181	1065	986



TEST NUMBER: P393564

CATALOG NUMBER: 24EN-LD2-49-UNV-L93050-W2A-1-U (3500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.3	3.2
10°-20°	379.4	9.1
20°-30°	575.0	13.8
30°-40°	707.8	17.0
40°-50°	744.5	17.9
50°-60°	692.7	16.7
60°-70°	541.4	13.0
70°-80°	303.4	7.3
80°-90°	80.3	1.9
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°	1085.7	26.1
0°-40°	1793.5	43.2
0°-60°	3230.8	77.7
0°-90°	4155.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4155.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1396	1396	1396	1396	1396	
5°	1398	1382	1384	1363	1370	133
15°	1362	1346	1328	1342	1356	381
25°	1285	1240	1258	1231	1248	578
35°	1124	1137	1140	1122	1158	705
45°	989	979	960	961	940	757
55°	790	784	770	769	780	705
65°	577	560	539	542	535	568
75°	310	304	293	258	244	333
85°	76	69	69	62	64	88
90°	0	0	0	0	0	



TEST NUMBER: P393564

CATALOG NUMBER: 24EN-LD2-49-UNV-L93050-W2A-1-U (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1395.9	1395.9	1395.9	1395.9	1395.9
2.5°	1373.2	1400.1	1385.0	1402.7	1382.5
5°	1397.6	1382.5	1384.2	1363.1	1369.9
7.5°	1403.5	1347.2	1391.7	1369.0	1370.7
10°	1384.2	1358.9	1358.1	1357.3	1384.2
12.5°	1357.3	1367.3	1353.9	1341.3	1368.2
15°	1362.3	1346.3	1327.8	1342.1	1356.4
17.5°	1340.4	1332.9	1312.7	1349.7	1322.8
20°	1284.1	1313.5	1290.8	1311.0	1300.9
22.5°	1267.3	1291.7	1275.7	1288.3	1254.7
25°	1284.9	1240.4	1258.0	1231.1	1247.9
27.5°	1210.1	1201.7	1223.5	1214.3	1202.5
30°	1200.0	1186.5	1178.1	1179.0	1195.8
32.5°	1171.4	1157.1	1152.9	1160.5	1183.2
35°	1123.5	1136.9	1139.5	1121.8	1158.0
37.5°	1079.8	1089.8	1106.7	1105.8	1113.4
40°	1049.5	1067.1	1047.8	1056.2	1053.7
42.5°	1031.0	1015.0	999.0	1004.1	988.1
45°	988.9	978.8	960.3	961.2	940.2
47.5°	930.9	918.3	923.3	909.0	909.9
50°	891.4	869.5	883.0	856.1	877.1
52.5°	841.8	832.5	819.1	810.7	833.4
55°	789.6	783.7	770.3	768.6	780.4
57.5°	729.1	724.0	719.8	719.0	742.5
60°	689.6	670.2	657.6	654.2	678.6
62.5°	634.1	625.6	592.0	599.6	602.1
65°	576.9	560.1	539.0	542.4	534.8
67.5°	515.5	485.2	480.2	481.0	472.6
70°	447.4	429.7	419.6	413.7	410.4
72.5°	382.6	368.3	356.6	341.4	326.3
75°	310.3	303.6	292.6	258.2	243.9
77.5°	254.8	247.2	223.7	185.8	183.3
80°	184.2	188.4	155.6	149.7	150.5
82.5°	130.3	127.0	116.0	108.5	104.3
85°	76.5	69.0	69.0	62.2	63.9
87.5°	25.2	28.6	28.6	27.8	26.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)