

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: P393562

Luminaire Tested: **24EN-LD2-49-UNV-L93050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393562
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 (2700K)
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: 4267.1 lumens
Efficiency: N/A
Efficacy: 123.3 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

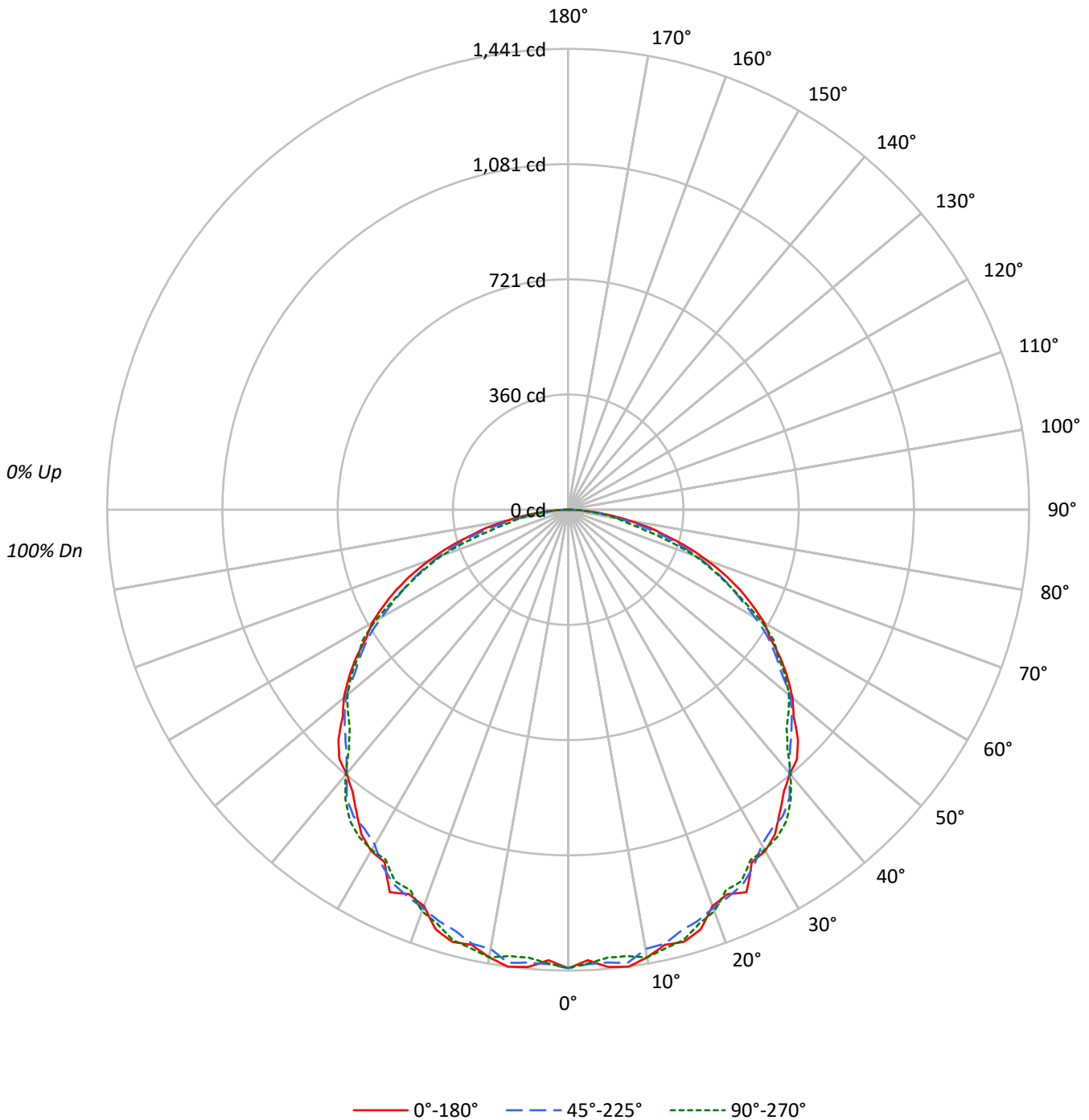
Input Watts (W): 34.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1928	1928	1928
5°	1938	1920	1900
10°	1942	1905	1942
15°	1948	1899	1940
20°	1888	1898	1913
25°	1959	1918	1902
30°	1914	1879	1908
35°	1895	1922	1953
40°	1893	1890	1900
45°	1932	1876	1837
50°	1916	1898	1885
55°	1902	1855	1880
60°	1905	1817	1875
65°	1886	1762	1748
70°	1807	1695	1658
75°	1656	1562	1302
80°	1465	1237	1198
85°	1213	1093	1013



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.8	3.2
10°-20°	389.5	9.1
20°-30°	590.4	13.8
30°-40°	726.8	17.0
40°-50°	764.5	17.9
50°-60°	711.3	16.7
60°-70°	555.9	13.0
70°-80°	311.5	7.3
80°-90°	82.4	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°	1114.7	26.1
0°-40°	1841.5	43.2
0°-60°	3317.2	77.7
0°-90°	4267.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4267.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1433	1433	1433	1433	1433	
5°	1435	1420	1421	1400	1406	137
15°	1399	1382	1363	1378	1393	391
25°	1319	1274	1292	1264	1281	593
35°	1154	1167	1170	1152	1189	723
45°	1015	1005	986	987	965	778
55°	811	805	791	789	801	724
65°	592	575	554	557	549	583
75°	319	312	300	265	250	342
85°	79	71	71	64	66	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1433.3	1433.3	1433.3	1433.3	1433.3
2.5°	1410.0	1437.6	1422.1	1440.2	1419.5
5°	1435.0	1419.5	1421.2	1399.6	1406.5
7.5°	1441.1	1383.2	1429.0	1405.7	1407.4
10°	1421.2	1395.3	1394.4	1393.6	1421.2
12.5°	1393.6	1403.9	1390.1	1377.2	1404.8
15°	1398.8	1382.4	1363.4	1378.0	1392.7
17.5°	1376.3	1368.5	1347.8	1385.8	1358.2
20°	1318.5	1348.7	1325.4	1346.1	1335.7
22.5°	1301.2	1326.2	1309.8	1322.8	1288.2
25°	1319.3	1273.6	1291.7	1264.1	1281.3
27.5°	1242.5	1233.8	1256.3	1246.8	1234.7
30°	1232.1	1218.3	1209.7	1210.5	1227.8
32.5°	1202.8	1188.1	1183.8	1191.5	1214.8
35°	1153.5	1167.4	1169.9	1151.8	1188.9
37.5°	1108.6	1119.0	1136.3	1135.4	1143.2
40°	1077.6	1095.7	1075.8	1084.5	1081.9
42.5°	1058.6	1042.2	1025.8	1030.9	1014.5
45°	1015.4	1005.0	986.0	986.9	965.3
47.5°	955.8	942.9	948.0	933.4	934.2
50°	915.2	892.8	906.6	879.0	900.6
52.5°	864.3	854.8	841.0	832.3	855.7
55°	810.8	804.7	790.9	789.2	801.3
57.5°	748.6	743.4	739.1	738.2	762.4
60°	708.0	688.2	675.2	671.7	696.8
62.5°	651.0	642.4	607.9	615.6	618.2
65°	592.3	575.0	553.5	556.9	549.1
67.5°	529.3	498.2	493.0	493.9	485.2
70°	459.3	441.2	430.9	424.8	421.4
72.5°	392.9	378.2	366.1	350.6	335.0
75°	318.6	311.7	300.5	265.1	250.4
77.5°	261.6	253.8	229.7	190.8	188.2
80°	189.1	193.4	159.7	153.7	154.6
82.5°	133.8	130.4	119.2	111.4	107.1
85°	78.6	70.8	70.8	63.9	65.6
87.5°	25.9	29.4	29.4	28.5	27.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)