

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: P393566

Luminaire Tested: **24EN-LD2-49-UNV-L93050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393566  
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 (4500K)  
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: 4339.6 lumens  
Efficiency: N/A  
Efficacy: 127.3 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

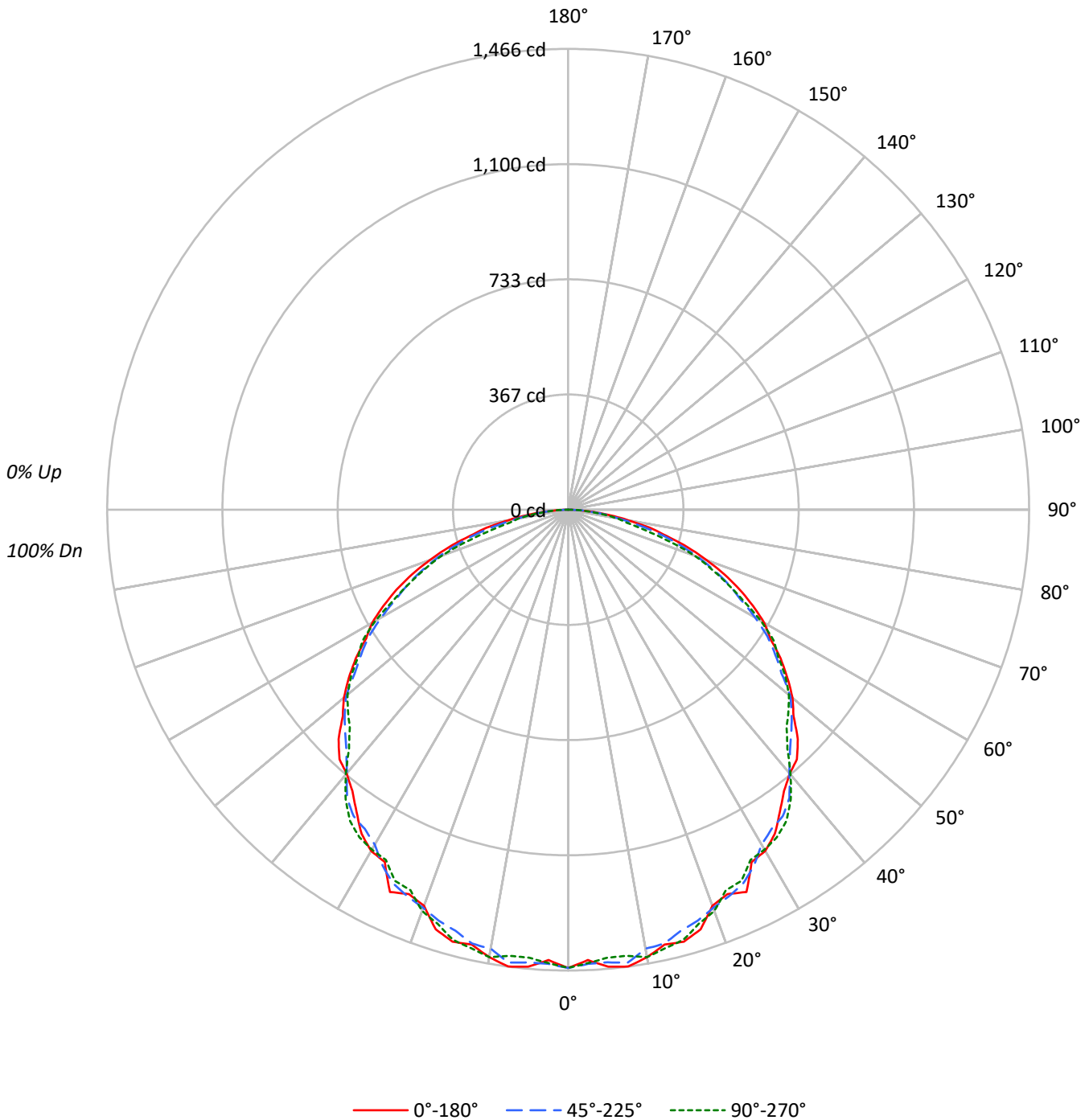
Input Watts (W): 34.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1961	1961	1961
5°	1971	1952	1932
10°	1975	1937	1975
15°	1981	1931	1973
20°	1920	1930	1945
25°	1992	1950	1935
30°	1947	1911	1940
35°	1927	1954	1986
40°	1925	1922	1932
45°	1965	1908	1868
50°	1948	1930	1917
55°	1934	1887	1912
60°	1938	1848	1907
65°	1918	1792	1778
70°	1838	1724	1686
75°	1684	1589	1324
80°	1490	1258	1218
85°	1233	1112	1030



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.1	3.2
10°-20°	396.2	9.1
20°-30°	600.4	13.8
30°-40°	739.1	17.0
40°-50°	777.4	17.9
50°-60°	723.4	16.7
60°-70°	565.4	13.0
70°-80°	316.8	7.3
80°-90°	83.8	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°	1133.7	26.1
0°-40°	1872.8	43.2
0°-60°	3373.5	77.7
0°-90°	4339.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4339.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1458	1458	1458	1458	1458	
5°	1459	1444	1445	1423	1430	139
15°	1422	1406	1386	1401	1416	398
25°	1342	1295	1314	1286	1303	603
35°	1173	1187	1190	1171	1209	736
45°	1033	1022	1003	1004	982	791
55°	824	818	804	803	815	736
65°	602	585	563	566	558	593
75°	324	317	306	270	255	348
85°	80	72	72	65	67	92
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1457.6	1457.6	1457.6	1457.6	1457.6
2.5°	1433.9	1462.0	1446.2	1464.6	1443.6
5°	1459.4	1443.6	1445.3	1423.4	1430.4
7.5°	1465.5	1406.7	1453.2	1429.5	1431.3
10°	1445.3	1419.0	1418.1	1417.2	1445.3
12.5°	1417.2	1427.8	1413.7	1400.5	1428.6
15°	1422.5	1405.8	1386.5	1401.4	1416.3
17.5°	1399.7	1391.8	1370.7	1409.3	1381.2
20°	1340.8	1371.6	1347.9	1368.9	1358.4
22.5°	1323.3	1348.7	1332.1	1345.2	1310.1
25°	1341.7	1295.2	1313.6	1285.5	1303.1
27.5°	1263.6	1254.8	1277.6	1268.0	1255.7
30°	1253.0	1239.0	1230.2	1231.1	1248.6
32.5°	1223.2	1208.2	1203.9	1211.8	1235.5
35°	1173.1	1187.2	1189.8	1171.4	1209.1
37.5°	1127.5	1138.0	1155.6	1154.7	1162.6
40°	1095.8	1114.3	1094.1	1102.9	1100.2
42.5°	1076.5	1059.8	1043.2	1048.4	1031.7
45°	1032.6	1022.1	1002.8	1003.6	981.7
47.5°	972.0	958.9	964.1	949.2	950.1
50°	930.8	907.9	922.0	893.9	915.8
52.5°	879.0	869.3	855.3	846.5	870.2
55°	824.5	818.4	804.3	802.6	814.9
57.5°	761.3	756.0	751.6	750.8	775.3
60°	720.0	699.8	686.7	683.1	708.6
62.5°	662.1	653.3	618.2	626.1	628.7
65°	602.4	584.8	562.9	566.4	558.5
67.5°	538.3	506.7	501.4	502.3	493.5
70°	467.1	448.7	438.2	432.0	428.5
72.5°	399.5	384.6	372.3	356.5	340.7
75°	324.0	317.0	305.6	269.6	254.6
77.5°	266.1	258.2	233.6	194.1	191.4
80°	192.3	196.7	162.4	156.3	157.2
82.5°	136.1	132.6	121.2	113.3	108.9
85°	79.9	72.0	72.0	65.0	66.7
87.5°	26.3	29.9	29.9	29.0	28.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)