

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: P393488

Luminaire Tested: **24EN-LD2-40-UNV-L83050-W2A-1-U (5700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393488  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-33)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-40-UNV-L83050-W2A-1-U (5700K)  
Description: 2X4 ENCOUNTER, 4000 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4127.1 lumens  
Efficiency: N/A  
Efficacy: 147.9 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

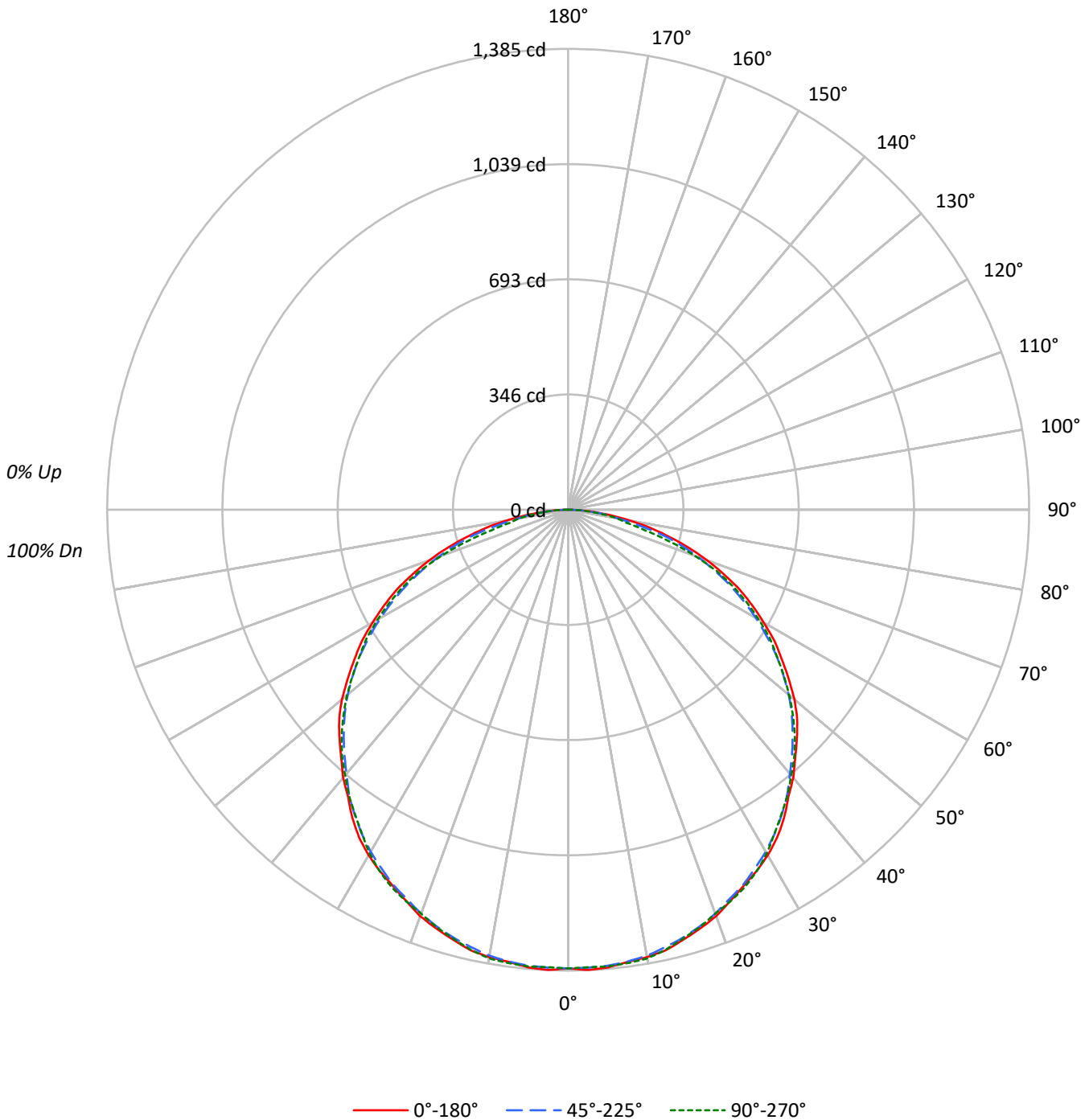
Input Watts (W): 27.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	80	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	42	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	36	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1855	1855	1855
5°	1865	1858	1860
10°	1865	1860	1871
15°	1863	1855	1859
20°	1862	1850	1850
25°	1851	1847	1860
30°	1863	1844	1854
35°	1858	1838	1834
40°	1847	1820	1831
45°	1850	1815	1832
50°	1858	1811	1815
55°	1838	1790	1792
60°	1826	1752	1779
65°	1810	1703	1742
70°	1744	1631	1587
75°	1631	1520	1239
80°	1453	1176	1161
85°	1149	1085	976



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.9	3.2
10°-20°	376.2	9.1
20°-30°	574.4	13.9
30°-40°	700.8	17.0
40°-50°	740.0	17.9
50°-60°	686.1	16.6
60°-70°	537.5	13.0
70°-80°	300.8	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°	1081.6	26.2
0°-40°	1782.4	43.2
0°-60°	3208.5	77.7
0°-90°	4127.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4127.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1378	1378	1378	1378	1378	
5°	1381	1381	1376	1376	1378	131
15°	1338	1332	1332	1329	1335	378
25°	1247	1247	1244	1242	1253	577
35°	1131	1121	1119	1118	1117	707
45°	972	963	954	952	963	750
55°	784	773	763	763	764	702
65°	568	551	535	538	547	559
75°	314	305	292	254	238	333
85°	74	71	70	66	63	87
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1378.5	1378.5	1378.5	1378.5	1378.5
2.5°	1384.6	1381.6	1377.5	1378.5	1376.5
5°	1380.6	1380.6	1375.5	1376.5	1377.5
7.5°	1370.4	1371.4	1369.4	1365.3	1374.4
10°	1365.3	1358.1	1361.2	1353.1	1369.4
12.5°	1356.1	1344.9	1346.9	1340.8	1354.1
15°	1337.8	1331.7	1331.7	1328.6	1334.7
17.5°	1319.4	1315.4	1313.3	1315.4	1315.4
20°	1300.1	1297.0	1291.9	1296.0	1291.9
22.5°	1272.6	1274.6	1266.4	1275.6	1273.6
25°	1247.1	1247.1	1244.0	1242.0	1253.2
27.5°	1224.7	1217.5	1215.5	1211.4	1225.7
30°	1199.2	1186.0	1187.0	1180.9	1193.1
32.5°	1168.6	1153.4	1154.4	1148.3	1153.4
35°	1130.9	1120.8	1118.7	1117.7	1116.7
37.5°	1087.1	1086.1	1081.0	1084.1	1082.0
40°	1051.5	1049.4	1036.2	1039.2	1042.3
42.5°	1009.7	1006.6	995.4	997.5	1005.6
45°	972.0	962.8	953.7	951.6	962.8
47.5°	933.3	919.0	910.9	904.8	916.0
50°	887.4	875.2	865.0	858.9	867.1
52.5°	834.4	824.3	814.1	812.0	815.1
55°	783.5	773.3	763.1	763.1	764.1
57.5°	734.6	721.4	706.1	709.1	717.3
60°	678.6	666.3	651.1	651.1	661.2
62.5°	623.5	608.3	593.0	595.0	605.2
65°	568.5	551.2	534.9	538.0	547.1
67.5°	505.4	490.1	474.8	478.9	484.0
70°	443.2	427.9	414.7	410.6	403.5
72.5°	380.0	367.8	356.6	334.2	323.0
75°	313.8	304.6	292.4	253.7	238.4
77.5°	252.7	245.5	218.0	182.4	177.3
80°	187.5	187.5	151.8	148.8	149.8
82.5°	127.4	125.3	115.1	108.0	104.9
85°	74.4	71.3	70.3	66.2	63.2
87.5°	24.5	28.5	28.5	27.5	28.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)