

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: P393587

Luminaire Tested: **24EN-LD2-54-UNV-L92765-W2A-1-U (3000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393587  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-36)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-54-UNV-L92765-W2A-1-U (3000K)  
Description: 2X4 ENCOUNTER, 5400 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4219.9 lumens  
Efficiency: N/A  
Efficacy: 109.6 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

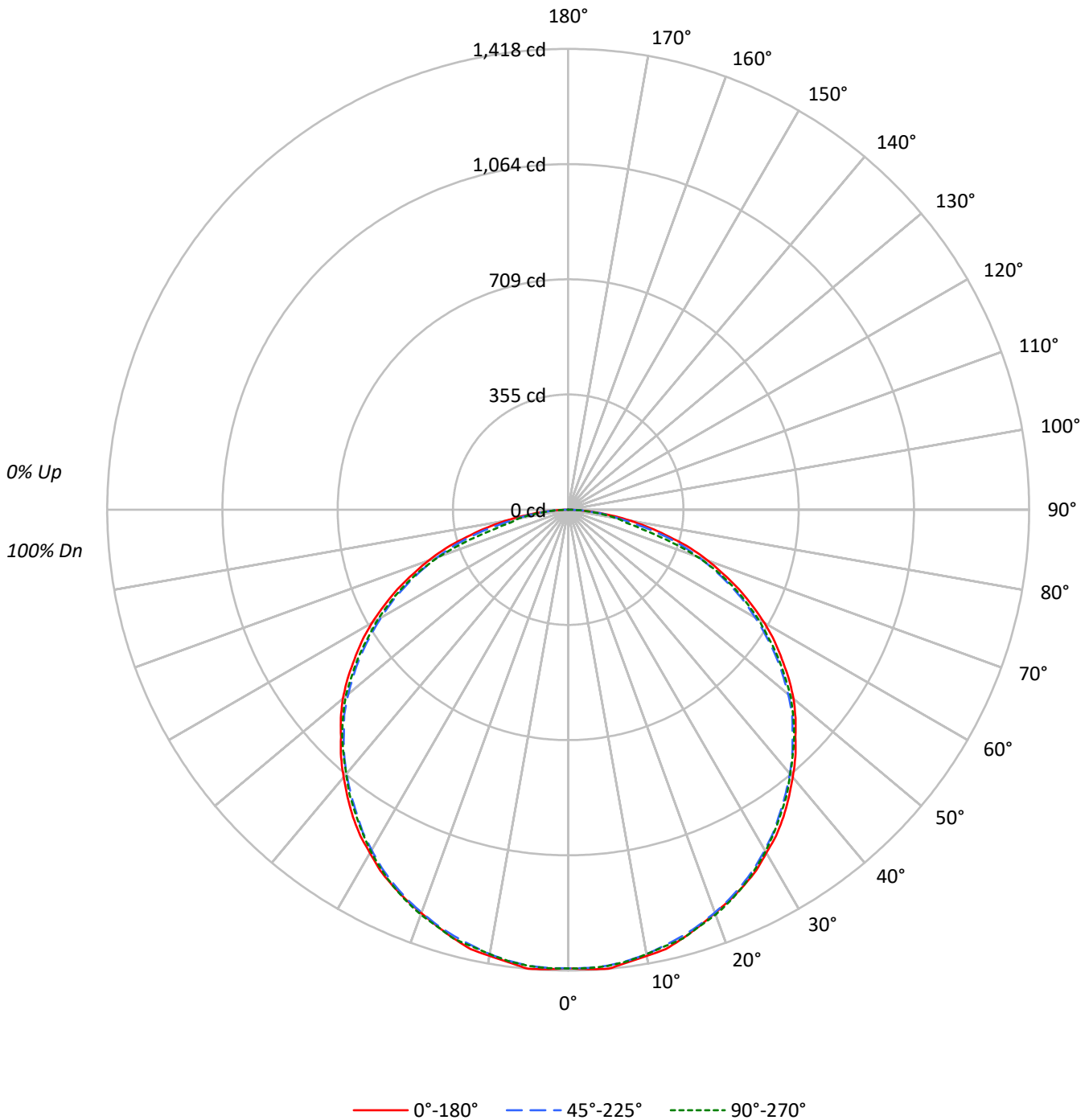
Input Watts (W): 38.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1899	1899	1899
5°	1915	1902	1903
10°	1905	1897	1897
15°	1901	1891	1902
20°	1891	1889	1899
25°	1896	1886	1895
30°	1894	1879	1886
35°	1896	1867	1874
40°	1887	1863	1865
45°	1881	1858	1871
50°	1894	1849	1870
55°	1883	1825	1845
60°	1875	1790	1819
65°	1846	1748	1779
70°	1794	1684	1663
75°	1674	1553	1260
80°	1499	1223	1182
85°	1207	1087	993



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.8	3.2
10°-20°	384.1	9.1
20°-30°	586.0	13.9
30°-40°	715.1	16.9
40°-50°	756.7	17.9
50°-60°	702.1	16.6
60°-70°	550.9	13.1
70°-80°	309.3	7.3
80°-90°	82.0	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°	1103.9	26.2
0°-40°	1819.0	43.1
0°-60°	3277.8	77.7
0°-90°	4219.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4219.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1411	1411	1411	1411	1411	
5°	1418	1409	1408	1405	1409	134
15°	1365	1362	1358	1357	1366	385
25°	1277	1268	1270	1266	1277	589
35°	1154	1146	1136	1140	1141	722
45°	989	985	976	972	983	765
55°	803	790	778	780	786	719
65°	580	564	549	549	559	572
75°	322	312	299	264	242	342
85°	78	71	70	65	64	91
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1411.3	1411.3	1411.3	1411.3	1411.3
2.5°	1415.2	1410.5	1411.3	1409.7	1412.1
5°	1418.2	1409.0	1408.2	1405.1	1409.0
7.5°	1404.3	1401.2	1399.7	1398.9	1401.2
10°	1394.2	1388.8	1388.8	1389.6	1388.8
12.5°	1385.0	1377.2	1373.3	1375.7	1375.7
15°	1364.8	1362.5	1357.9	1357.1	1365.6
17.5°	1343.2	1344.7	1340.1	1339.3	1343.9
20°	1320.7	1319.9	1319.2	1315.3	1326.1
22.5°	1299.8	1295.9	1296.7	1292.1	1302.9
25°	1277.4	1268.1	1270.4	1266.5	1276.6
27.5°	1251.8	1241.0	1242.5	1242.5	1246.4
30°	1219.3	1210.0	1209.2	1213.9	1213.9
32.5°	1189.9	1180.6	1175.9	1176.7	1178.3
35°	1154.3	1146.5	1136.5	1139.6	1141.1
37.5°	1114.8	1110.9	1099.3	1099.3	1104.7
40°	1074.5	1069.1	1060.6	1058.3	1062.1
42.5°	1034.3	1028.8	1020.3	1016.5	1022.7
45°	988.6	984.7	976.2	972.3	983.2
47.5°	948.3	939.8	934.4	931.3	939.0
50°	905.0	892.6	883.3	884.9	893.4
52.5°	855.4	843.8	830.7	833.8	838.4
55°	802.8	790.4	778.0	780.3	786.5
57.5°	752.5	740.1	720.7	724.6	729.3
60°	696.7	679.7	665.0	667.3	675.8
62.5°	637.9	624.0	609.3	610.8	618.5
65°	579.8	564.4	548.9	548.9	558.9
67.5°	516.4	505.5	488.5	488.5	494.7
70°	456.0	442.0	428.1	418.8	422.7
72.5°	394.8	377.8	366.9	343.7	333.7
75°	322.0	312.0	298.8	264.0	242.3
77.5°	256.2	250.8	225.3	188.9	179.6
80°	193.5	189.7	157.9	152.5	152.5
82.5°	132.4	128.5	119.2	109.9	108.4
85°	78.2	71.2	70.4	65.0	64.3
87.5°	25.5	29.4	27.9	28.6	28.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)