

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: P393565

Luminaire Tested: **24EN-LD2-49-UNV-L93050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393565
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 (4000K)
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: 4316.9 lumens
Efficiency: N/A
Efficacy: 125.5 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

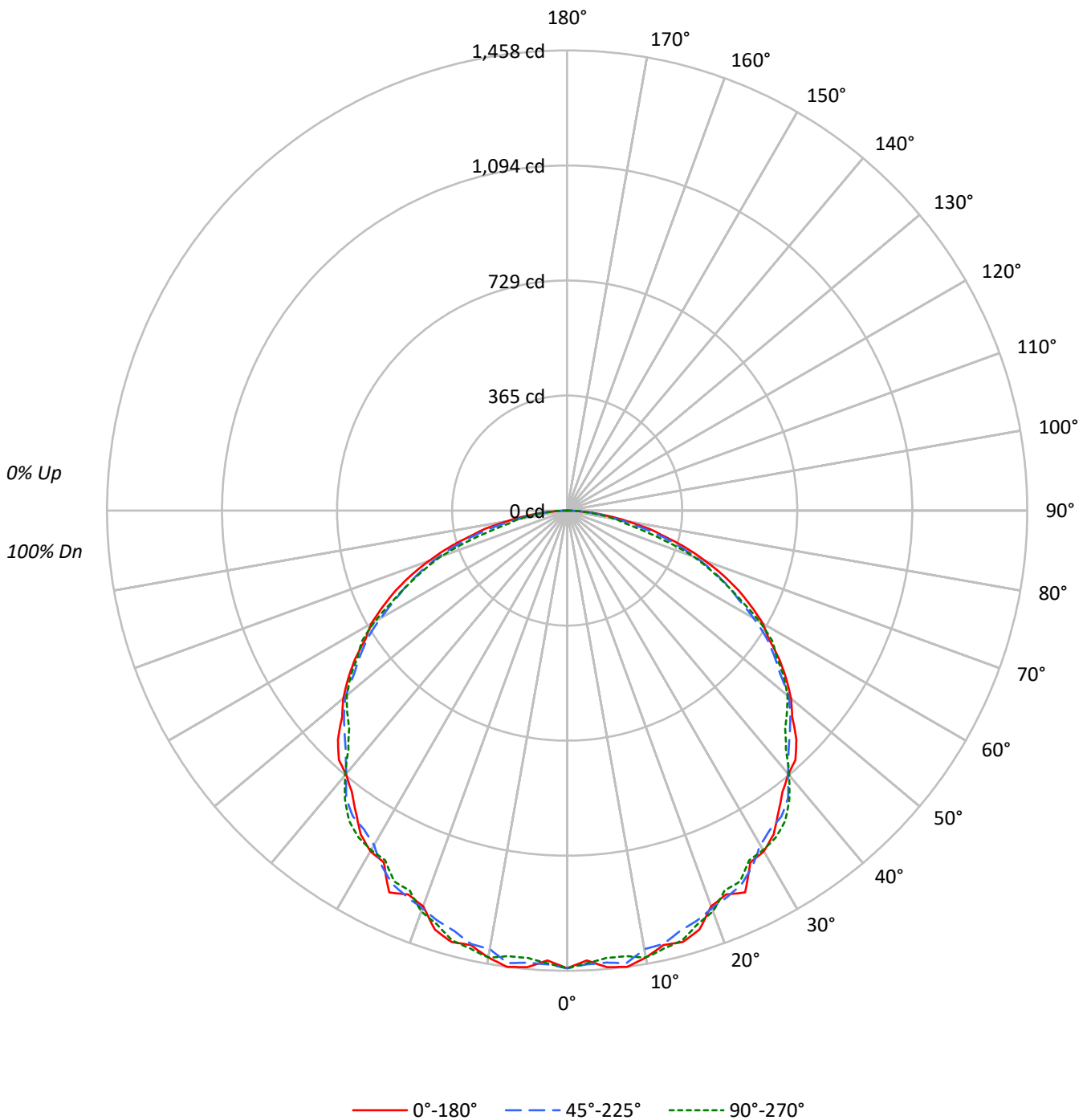
Input Watts (W): 34.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1951	1951	1951
5°	1961	1942	1922
10°	1964	1927	1964
15°	1971	1921	1963
20°	1910	1920	1935
25°	1981	1940	1924
30°	1937	1901	1930
35°	1917	1944	1976
40°	1915	1912	1922
45°	1955	1898	1858
50°	1938	1920	1907
55°	1924	1877	1901
60°	1928	1838	1897
65°	1908	1783	1769
70°	1828	1715	1677
75°	1675	1580	1317
80°	1482	1252	1212
85°	1227	1105	1025



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.4	3.2
10°-20°	394.1	9.1
20°-30°	597.2	13.8
30°-40°	735.2	17.0
40°-50°	773.4	17.9
50°-60°	719.6	16.7
60°-70°	562.4	13.0
70°-80°	315.2	7.3
80°-90°	83.4	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°	1127.7	26.1
0°-40°	1863.0	43.2
0°-60°	3355.9	77.7
0°-90°	4316.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4316.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1450	1450	1450	1450	1450	
5°	1452	1436	1438	1416	1423	138
15°	1415	1398	1379	1394	1409	396
25°	1335	1288	1307	1279	1296	600
35°	1167	1181	1184	1165	1203	732
45°	1027	1017	998	998	977	787
55°	820	814	800	798	811	732
65°	599	582	560	563	556	590
75°	322	315	304	268	253	346
85°	80	72	72	65	66	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1450.0	1450.0	1450.0	1450.0	1450.0
2.5°	1426.4	1454.4	1438.7	1457.0	1436.0
5°	1451.8	1436.0	1437.8	1416.0	1422.9
7.5°	1457.9	1399.4	1445.7	1422.1	1423.8
10°	1437.8	1411.6	1410.7	1409.8	1437.8
12.5°	1409.8	1420.3	1406.3	1393.2	1421.2
15°	1415.1	1398.5	1379.3	1394.1	1409.0
17.5°	1392.4	1384.5	1363.5	1402.0	1374.0
20°	1333.8	1364.4	1340.8	1361.8	1351.3
22.5°	1316.4	1341.7	1325.1	1338.2	1303.3
25°	1334.7	1288.4	1306.8	1278.8	1296.3
27.5°	1257.0	1248.2	1271.0	1261.3	1249.1
30°	1246.5	1232.5	1223.8	1224.7	1242.1
32.5°	1216.8	1201.9	1197.6	1205.4	1229.0
35°	1167.0	1181.0	1183.6	1165.3	1202.8
37.5°	1121.6	1132.1	1149.5	1148.7	1156.5
40°	1090.1	1108.5	1088.4	1097.1	1094.5
42.5°	1070.9	1054.3	1037.7	1043.0	1026.4
45°	1027.2	1016.8	997.5	998.4	976.6
47.5°	967.0	953.9	959.1	944.3	945.1
50°	925.9	903.2	917.2	889.2	911.1
52.5°	874.4	864.8	850.8	842.1	865.6
55°	820.2	814.1	800.1	798.4	810.6
57.5°	757.3	752.1	747.7	746.8	771.3
60°	716.3	696.2	683.1	679.6	704.9
62.5°	658.6	649.9	614.9	622.8	625.4
65°	599.2	581.8	559.9	563.4	555.5
67.5°	535.5	504.0	498.8	499.6	490.9
70°	464.7	446.4	435.9	429.8	426.3
72.5°	397.4	382.6	370.4	354.6	338.9
75°	322.3	315.3	304.0	268.2	253.3
77.5°	264.7	256.8	232.4	193.0	190.4
80°	191.3	195.7	161.6	155.5	156.4
82.5°	135.4	131.9	120.5	112.7	108.3
85°	79.5	71.6	71.6	64.6	66.4
87.5°	26.2	29.7	29.7	28.8	28.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)