

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: P393541

Luminaire Tested: **24EN-LD2-49-UNV-L82765-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393541
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-L82765-W2A-1-U (4000K)
Description: 2X4 ENCOUNTER, 4900 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4616.6 lumens
Efficiency: N/A
Efficacy: 133.0 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

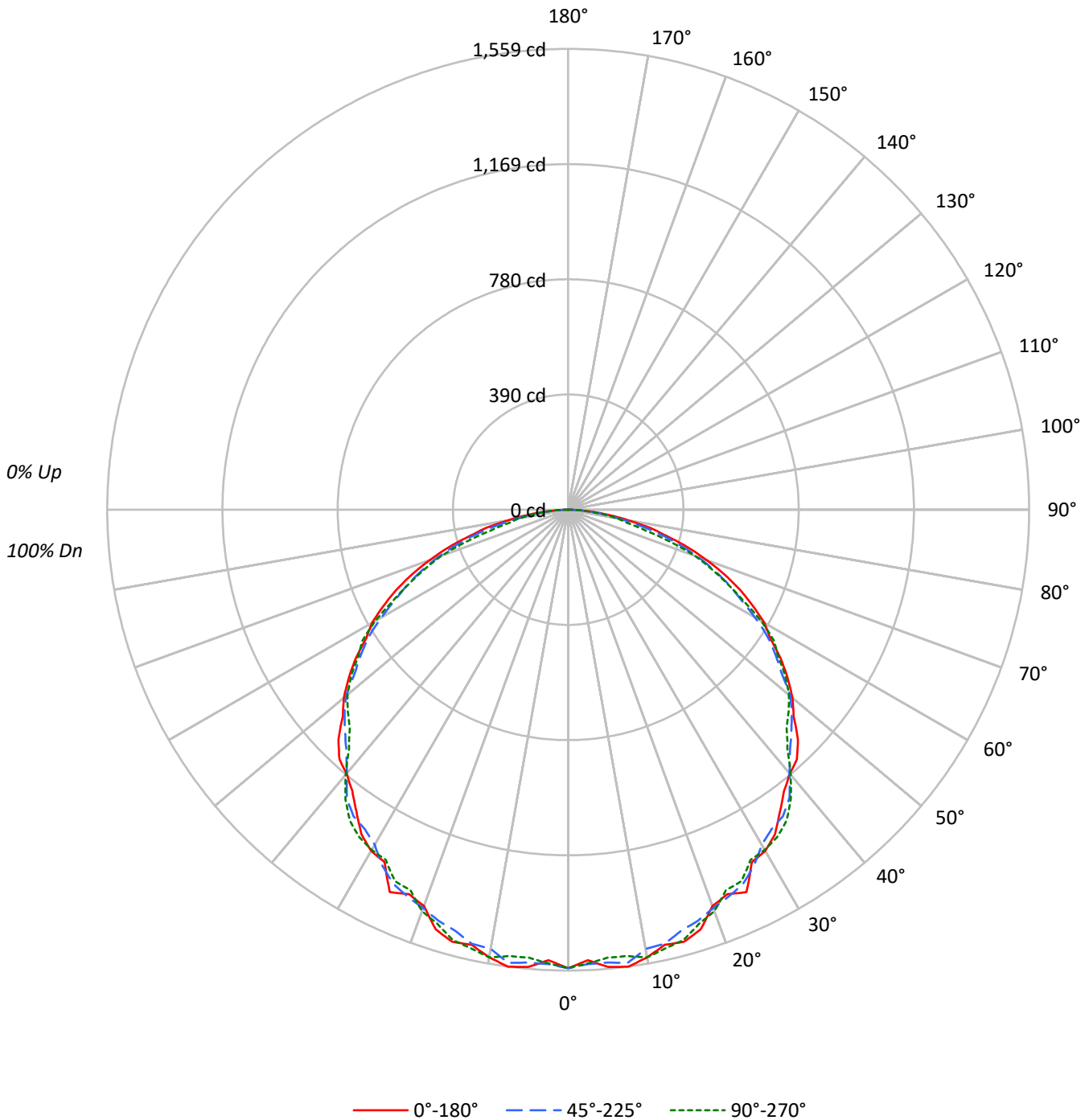
Input Watts (W): 34.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2086	2086	2086
5°	2097	2077	2055
10°	2101	2061	2101
15°	2108	2055	2099
20°	2042	2053	2069
25°	2119	2075	2058
30°	2071	2033	2064
35°	2050	2079	2113
40°	2048	2044	2056
45°	2090	2030	1987
50°	2073	2053	2039
55°	2058	2007	2034
60°	2061	1966	2029
65°	2040	1906	1891
70°	1955	1834	1793
75°	1792	1690	1408
80°	1585	1339	1296
85°	1312	1183	1096



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.9	3.2
10°-20°	421.4	9.1
20°-30°	638.7	13.8
30°-40°	786.3	17.0
40°-50°	827.1	17.9
50°-60°	769.5	16.7
60°-70°	601.4	13.0
70°-80°	337.1	7.3
80°-90°	89.2	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°	1206.0	26.1
0°-40°	1992.3	43.2
0°-60°	3588.9	77.7
0°-90°	4616.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4616.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1551	1551	1551	1551	1551	
5°	1552	1536	1538	1514	1522	148
15°	1513	1496	1475	1491	1507	423
25°	1427	1378	1398	1368	1386	642
35°	1248	1263	1266	1246	1286	783
45°	1099	1087	1067	1068	1044	841
55°	877	871	856	854	867	783
65°	641	622	599	602	594	631
75°	345	337	325	287	271	370
85°	85	77	77	69	71	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1550.7	1550.7	1550.7	1550.7	1550.7
2.5°	1525.5	1555.4	1538.5	1558.2	1535.7
5°	1552.5	1535.7	1537.6	1514.2	1521.7
7.5°	1559.1	1496.5	1546.0	1520.8	1522.7
10°	1537.6	1509.6	1508.6	1507.7	1537.6
12.5°	1507.7	1518.9	1504.0	1490.0	1519.9
15°	1513.3	1495.6	1475.0	1490.9	1506.8
17.5°	1489.0	1480.6	1458.2	1499.3	1469.4
20°	1426.4	1459.1	1433.9	1456.3	1445.1
22.5°	1407.8	1434.8	1417.1	1431.1	1393.7
25°	1427.4	1377.9	1397.5	1367.6	1386.3
27.5°	1344.2	1334.9	1359.2	1348.9	1335.8
30°	1333.0	1318.1	1308.7	1309.7	1328.4
32.5°	1301.3	1285.4	1280.7	1289.1	1314.3
35°	1248.0	1263.0	1265.8	1246.1	1286.3
37.5°	1199.4	1210.7	1229.3	1228.4	1236.8
40°	1165.8	1185.4	1163.9	1173.3	1170.5
42.5°	1145.3	1127.5	1109.8	1115.4	1097.6
45°	1098.6	1087.3	1066.8	1067.7	1044.4
47.5°	1034.1	1020.1	1025.7	1009.8	1010.7
50°	990.2	965.9	980.9	951.0	974.3
52.5°	935.1	924.8	909.9	900.5	925.7
55°	877.2	870.6	855.7	853.8	866.9
57.5°	809.9	804.3	799.6	798.7	824.8
60°	766.0	744.5	730.5	726.8	753.9
62.5°	704.3	695.0	657.6	666.0	668.8
65°	640.8	622.1	598.8	602.5	594.1
67.5°	572.6	539.0	533.4	534.3	525.0
70°	497.0	477.3	466.1	459.6	455.9
72.5°	425.0	409.2	396.1	379.3	362.4
75°	344.7	337.2	325.1	286.8	270.9
77.5°	283.0	274.6	248.5	206.4	203.6
80°	204.6	209.2	172.8	166.3	167.2
82.5°	144.8	141.1	128.9	120.5	115.8
85°	85.0	76.6	76.6	69.1	71.0
87.5°	28.0	31.8	31.8	30.8	29.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)