

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: P393538

Luminaire Tested: **24EN-LD2-49-UNV-L82765-W2A-1-U (2700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393538
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 (2700K)
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: 4489.5 lumens
Efficiency: N/A
Efficacy: 129.4 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

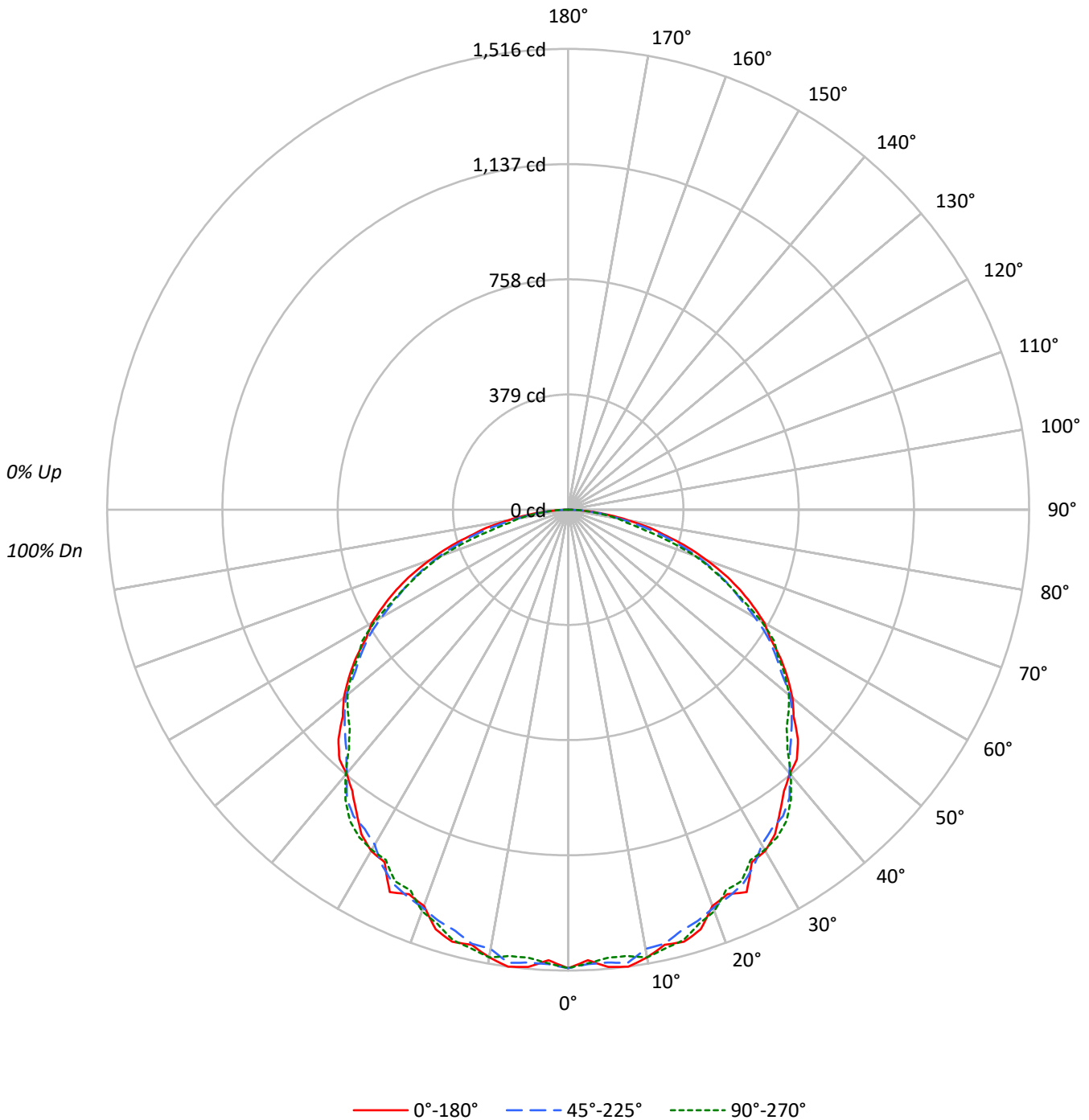
Input Watts (W): 34.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2029	2029	2029
5°	2039	2020	1999
10°	2043	2004	2043
15°	2050	1998	2041
20°	1986	1997	2012
25°	2061	2018	2001
30°	2014	1977	2007
35°	1994	2022	2055
40°	1991	1988	1999
45°	2033	1974	1932
50°	2016	1997	1983
55°	2001	1952	1978
60°	2005	1912	1973
65°	1984	1854	1840
70°	1901	1783	1744
75°	1743	1643	1369
80°	1541	1303	1260
85°	1277	1150	1065



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.9	3.2
10°-20°	409.8	9.1
20°-30°	621.1	13.8
30°-40°	764.6	17.0
40°-50°	804.3	17.9
50°-60°	748.3	16.7
60°-70°	584.9	13.0
70°-80°	327.8	7.3
80°-90°	86.7	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°	1172.8	26.1
0°-40°	1937.5	43.2
0°-60°	3490.1	77.7
0°-90°	4489.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4489.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1508	1508	1508	1508	1508	
5°	1510	1494	1495	1473	1480	144
15°	1472	1454	1434	1450	1465	412
25°	1388	1340	1359	1330	1348	624
35°	1214	1228	1231	1212	1251	761
45°	1068	1057	1037	1038	1016	818
55°	853	847	832	830	843	761
65°	623	605	582	586	578	614
75°	335	328	316	279	263	360
85°	83	74	74	67	69	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1508.0	1508.0	1508.0	1508.0	1508.0
2.5°	1483.5	1512.5	1496.2	1515.3	1493.5
5°	1509.8	1493.5	1495.3	1472.6	1479.8
7.5°	1516.2	1455.3	1503.5	1478.9	1480.7
10°	1495.3	1468.0	1467.1	1466.2	1495.3
12.5°	1466.2	1477.1	1462.6	1448.9	1478.0
15°	1471.7	1454.4	1434.4	1449.9	1465.3
17.5°	1448.0	1439.9	1418.1	1458.0	1429.0
20°	1387.2	1419.0	1394.4	1416.2	1405.3
22.5°	1369.0	1395.3	1378.1	1391.7	1355.4
25°	1388.1	1339.9	1359.0	1329.9	1348.1
27.5°	1307.2	1298.1	1321.8	1311.8	1299.1
30°	1296.3	1281.8	1272.7	1273.6	1291.8
32.5°	1265.4	1250.0	1245.5	1253.6	1278.2
35°	1213.7	1228.2	1230.9	1211.8	1250.9
37.5°	1166.4	1177.3	1195.5	1194.6	1202.8
40°	1133.7	1152.8	1131.9	1141.0	1138.3
42.5°	1113.7	1096.5	1079.2	1084.7	1067.4
45°	1068.3	1057.4	1037.4	1038.3	1015.6
47.5°	1005.6	992.0	997.5	982.0	982.9
50°	962.9	939.3	953.9	924.8	947.5
52.5°	909.3	899.3	884.8	875.7	900.3
55°	853.0	846.7	832.1	830.3	843.0
57.5°	787.6	782.2	777.6	776.7	802.1
60°	744.9	724.0	710.4	706.8	733.1
62.5°	685.0	675.9	639.5	647.7	650.4
65°	623.2	605.0	582.3	585.9	577.8
67.5°	556.9	524.2	518.7	519.6	510.5
70°	483.3	464.2	453.3	446.9	443.3
72.5°	413.3	397.9	385.2	368.8	352.5
75°	335.2	327.9	316.1	278.9	263.4
77.5°	275.3	267.1	241.6	200.8	198.0
80°	198.9	203.5	168.1	161.7	162.6
82.5°	140.8	137.2	125.4	117.2	112.6
85°	82.7	74.5	74.5	67.2	69.0
87.5°	27.3	30.9	30.9	30.0	29.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)