

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: P393539

Luminaire Tested: **24EN-LD2-49-UNV-L82765-W2A-1-U (3000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393539
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 (3000K)
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: 4533.0 lumens
Efficiency: N/A
Efficacy: 130.6 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

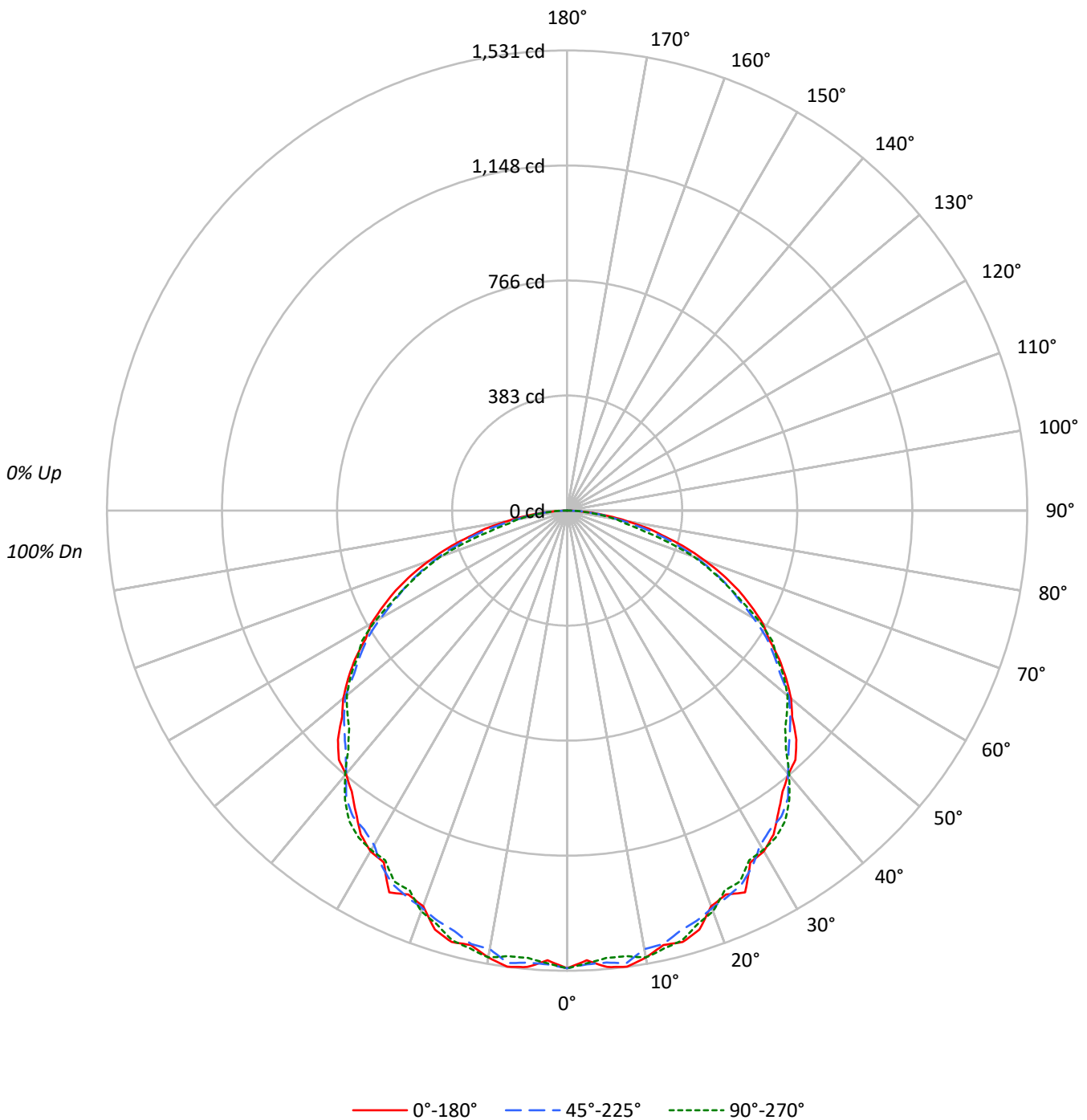
Input Watts (W): 34.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2049	2049	2049
5°	2059	2039	2018
10°	2063	2024	2063
15°	2070	2017	2061
20°	2005	2016	2032
25°	2081	2037	2021
30°	2034	1996	2026
35°	2013	2041	2075
40°	2011	2007	2019
45°	2052	1993	1951
50°	2035	2016	2003
55°	2020	1971	1997
60°	2024	1930	1992
65°	2003	1872	1857
70°	1920	1801	1761
75°	1760	1659	1383
80°	1557	1315	1272
85°	1289	1161	1076



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.2	3.2
10°-20°	413.8	9.1
20°-30°	627.1	13.8
30°-40°	772.0	17.0
40°-50°	812.1	17.9
50°-60°	755.6	16.7
60°-70°	590.5	13.0
70°-80°	331.0	7.3
80°-90°	87.6	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°	1184.2	26.1
0°-40°	1956.2	43.2
0°-60°	3523.9	77.7
0°-90°	4533.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4533.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1523	1523	1523	1523	1523	
5°	1524	1508	1510	1487	1494	145
15°	1486	1468	1448	1464	1480	416
25°	1402	1353	1372	1343	1361	630
35°	1225	1240	1243	1224	1263	769
45°	1079	1068	1048	1048	1025	826
55°	861	855	840	838	851	769
65°	629	611	588	592	583	620
75°	338	331	319	282	266	363
85°	84	75	75	68	70	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1522.6	1522.6	1522.6	1522.6	1522.6
2.5°	1497.8	1527.2	1510.7	1529.9	1507.9
5°	1524.4	1507.9	1509.7	1486.8	1494.1
7.5°	1530.8	1469.4	1518.0	1493.2	1495.1
10°	1509.7	1482.2	1481.3	1480.4	1509.7
12.5°	1480.4	1491.4	1476.7	1463.0	1492.3
15°	1485.9	1468.5	1448.3	1463.9	1479.5
17.5°	1462.0	1453.8	1431.8	1472.1	1442.8
20°	1400.6	1432.7	1407.9	1429.9	1418.9
22.5°	1382.2	1408.8	1391.4	1405.2	1368.5
25°	1401.5	1352.9	1372.2	1342.8	1361.2
27.5°	1319.9	1310.7	1334.6	1324.5	1311.6
30°	1308.9	1294.2	1285.0	1285.9	1304.3
32.5°	1277.7	1262.1	1257.5	1265.8	1290.5
35°	1225.4	1240.1	1242.8	1223.6	1263.0
37.5°	1177.7	1188.7	1207.1	1206.1	1214.4
40°	1144.7	1163.9	1142.9	1152.0	1149.3
42.5°	1124.5	1107.1	1089.7	1095.2	1077.7
45°	1078.6	1067.6	1047.5	1048.4	1025.4
47.5°	1015.4	1001.6	1007.1	991.5	992.4
50°	972.3	948.4	963.1	933.7	956.7
52.5°	918.1	908.0	893.4	884.2	909.0
55°	861.3	854.8	840.2	838.3	851.2
57.5°	795.2	789.7	785.1	784.2	809.9
60°	752.1	731.0	717.3	713.6	740.2
62.5°	691.6	682.4	645.7	654.0	656.7
65°	629.2	610.9	587.9	591.6	583.4
67.5°	562.3	529.2	523.7	524.6	515.5
70°	488.0	468.7	457.7	451.3	447.6
72.5°	417.3	401.7	388.9	372.4	355.9
75°	338.5	331.1	319.2	281.6	266.0
77.5°	277.9	269.7	244.0	202.7	200.0
80°	200.9	205.5	169.7	163.3	164.2
82.5°	142.2	138.5	126.6	118.3	113.7
85°	83.5	75.2	75.2	67.9	69.7
87.5°	27.5	31.2	31.2	30.3	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)