

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: P229737

Luminaire Tested: **24RLN-LD5-36-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229737
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36038)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-36-UNV-L840-CD1-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3651.0 lumens
Efficiency: N/A
Efficacy: 137.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

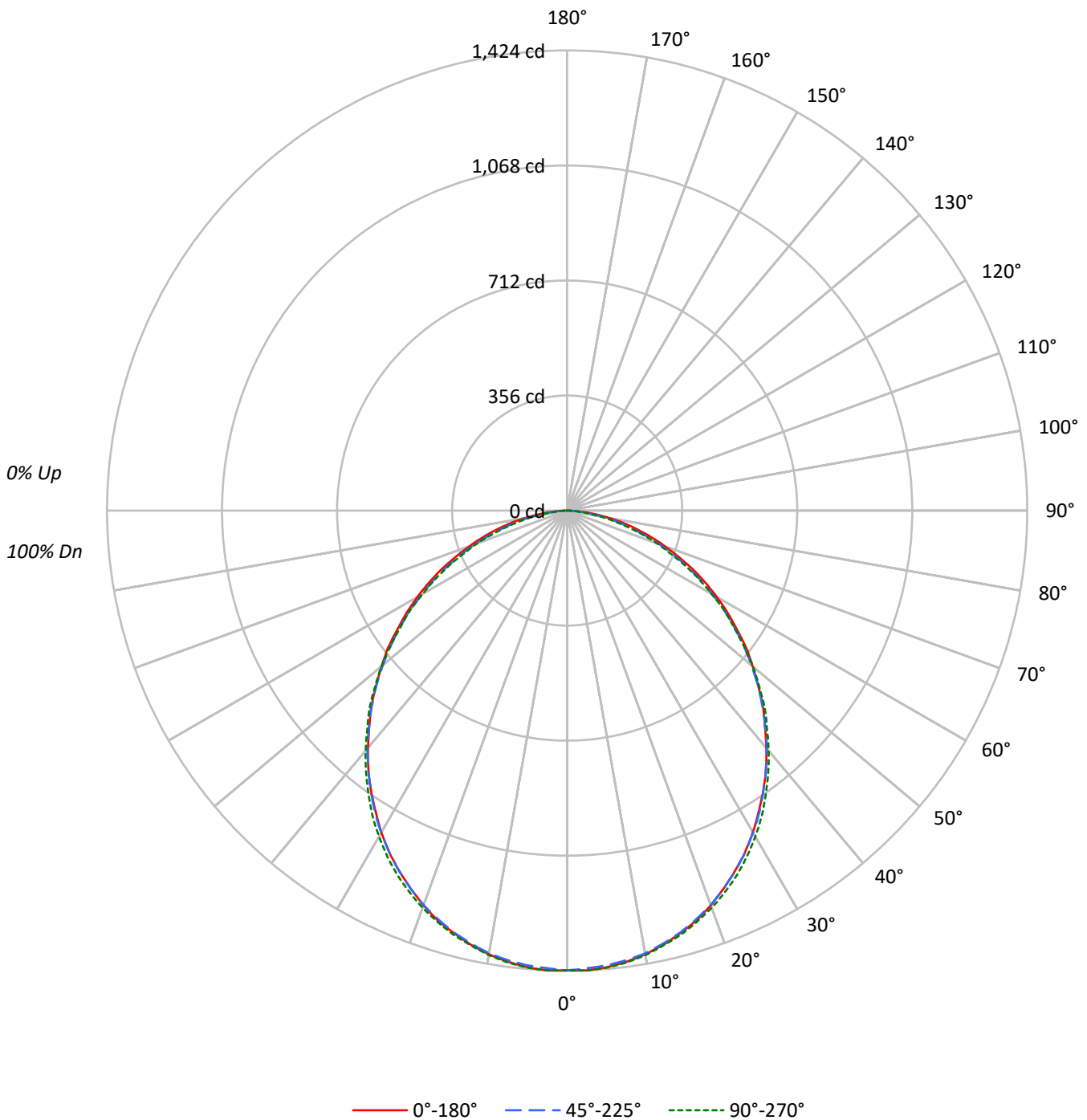
Input Watts (W): 26.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	60
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	28
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2180	2180	2180
5°	2181	2172	2183
10°	2169	2163	2172
15°	2147	2144	2154
20°	2119	2117	2132
25°	2079	2081	2102
30°	2033	2035	2060
35°	1978	1980	2004
40°	1917	1922	1940
45°	1856	1851	1873
50°	1784	1774	1787
55°	1711	1690	1684
60°	1639	1590	1583
65°	1549	1482	1461
70°	1435	1348	1322
75°	1319	1189	1129
80°	1155	993	901
85°	949	687	545



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.5	3.7
10°-20°	382.0	10.5
20°-30°	568.3	15.6
30°-40°	664.0	18.2
40°-50°	660.1	18.1
50°-60°	567.1	15.5
60°-70°	407.3	11.2
70°-80°	216.9	5.9
80°-90°	50.8	1.4
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°	1084.7	29.7
0°-40°	1748.7	47.9
0°-60°	2976.0	81.5
0°-90°	3651.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3651.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1423	1423	1423	1423	1423	
5°	1418	1416	1413	1417	1420	135
15°	1354	1354	1352	1356	1359	382
25°	1230	1230	1231	1240	1244	566
35°	1058	1056	1059	1070	1072	661
45°	857	850	854	859	865	660
55°	641	633	633	633	630	575
65°	427	415	409	404	403	423
75°	223	210	201	195	191	237
85°	54	46	39	32	31	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1423.0	1423.0	1423.0	1423.0	1423.0
2.5°	1424.2	1421.9	1417.3	1423.0	1424.2
5°	1418.4	1416.1	1412.7	1417.3	1419.6
7.5°	1408.1	1405.8	1403.5	1408.1	1410.4
10°	1394.3	1393.2	1390.9	1396.6	1396.6
12.5°	1376.0	1374.8	1372.5	1378.2	1378.2
15°	1354.1	1354.1	1351.8	1356.4	1358.7
17.5°	1330.0	1328.9	1326.6	1332.3	1334.6
20°	1300.1	1300.1	1299.0	1305.9	1308.2
22.5°	1265.7	1265.7	1265.7	1274.9	1277.2
25°	1230.1	1230.1	1231.2	1240.4	1243.9
27.5°	1192.2	1191.0	1192.2	1202.5	1206.0
30°	1149.7	1147.4	1150.8	1161.2	1164.6
32.5°	1103.7	1101.4	1107.2	1116.4	1121.0
35°	1057.8	1055.5	1059.0	1070.4	1071.6
37.5°	1010.7	1005.0	1010.7	1021.1	1022.2
40°	959.0	954.4	961.3	965.9	970.5
42.5°	906.2	903.9	907.3	915.4	915.4
45°	856.8	849.9	854.5	859.1	864.9
47.5°	801.7	798.2	800.5	804.0	806.3
50°	748.8	743.1	744.3	747.7	750.0
52.5°	699.5	688.0	688.0	690.3	690.3
55°	640.9	632.8	632.8	632.8	630.5
57.5°	589.2	578.9	577.7	577.7	577.7
60°	535.2	522.6	519.1	519.1	516.8
62.5°	481.2	469.8	465.2	460.6	460.6
65°	427.3	414.6	408.9	404.3	403.1
67.5°	372.1	362.9	356.0	350.3	344.6
70°	320.4	310.1	300.9	295.2	295.2
72.5°	272.2	260.7	251.5	244.6	241.2
75°	222.8	210.2	201.0	195.3	190.7
77.5°	179.2	165.4	156.2	148.2	143.6
80°	130.9	120.6	112.6	104.5	102.2
82.5°	90.7	82.7	73.5	67.8	65.5
85°	54.0	45.9	39.1	32.2	31.0
87.5°	21.8	16.1	12.6	12.6	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)