

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: P229749

Luminaire Tested: **24RLN-LD5-45-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229749
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-LD5-45-UNV-L930-CD1-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)3000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3774.0 lumens
Efficiency: N/A
Efficacy: 111.0 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

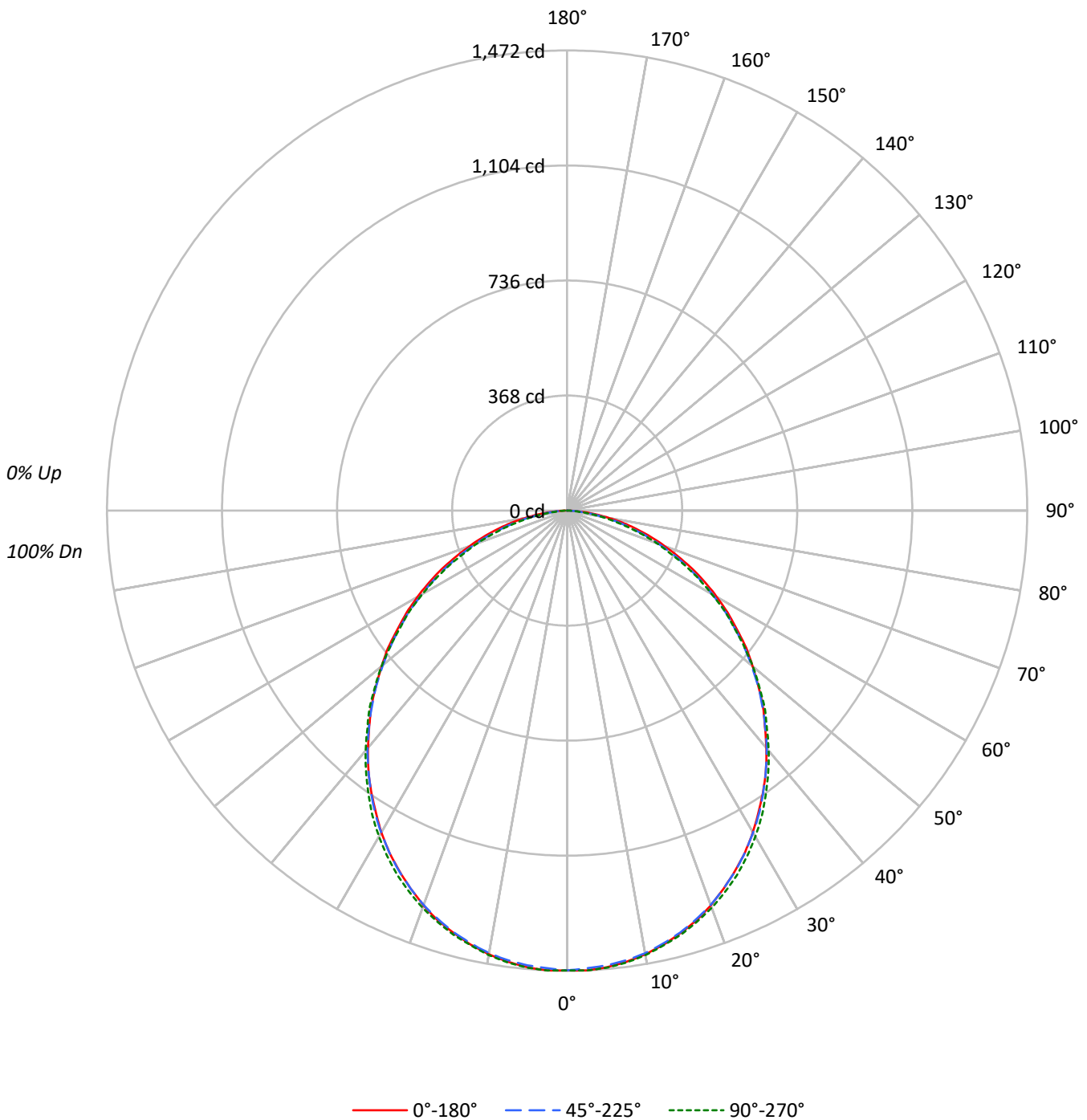
Input Watts (W): 34
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2253	2253	2253
5°	2254	2245	2256
10°	2242	2236	2245
15°	2219	2216	2227
20°	2191	2189	2204
25°	2149	2151	2173
30°	2102	2104	2129
35°	2044	2047	2071
40°	1982	1987	2006
45°	1919	1913	1936
50°	1845	1833	1847
55°	1769	1747	1741
60°	1695	1644	1637
65°	1601	1532	1510
70°	1483	1393	1366
75°	1363	1230	1166
80°	1193	1026	932
85°	981	710	564



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.0	3.7
10°-20°	394.8	10.5
20°-30°	587.5	15.6
30°-40°	686.4	18.2
40°-50°	682.3	18.1
50°-60°	586.3	15.5
60°-70°	421.0	11.2
70°-80°	224.2	5.9
80°-90°	52.5	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°	1121.3	29.7
0°-40°	1807.7	47.9
0°-60°	3076.2	81.5
0°-90°	3774.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3774.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1471	1471	1471	1471	1471	
5°	1466	1464	1460	1465	1467	139
15°	1400	1400	1397	1402	1404	395
25°	1272	1272	1273	1282	1286	586
35°	1093	1091	1095	1106	1108	684
45°	886	879	883	888	894	682
55°	662	654	654	654	652	594
65°	442	429	423	418	417	437
75°	230	217	208	202	197	245
85°	56	48	40	33	32	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1471.0	1471.0	1471.0	1471.0	1471.0
2.5°	1472.2	1469.8	1465.0	1471.0	1472.2
5°	1466.2	1463.9	1460.3	1465.0	1467.4
7.5°	1455.5	1453.2	1450.8	1455.5	1457.9
10°	1441.3	1440.1	1437.7	1443.7	1443.7
12.5°	1422.3	1421.1	1418.7	1424.7	1424.7
15°	1399.7	1399.7	1397.4	1402.1	1404.5
17.5°	1374.8	1373.6	1371.3	1377.2	1379.6
20°	1343.9	1343.9	1342.8	1349.9	1352.3
22.5°	1308.3	1308.3	1308.3	1317.8	1320.2
25°	1271.5	1271.5	1272.7	1282.2	1285.8
27.5°	1232.3	1231.2	1232.3	1243.0	1246.6
30°	1188.4	1186.0	1189.6	1200.3	1203.9
32.5°	1140.9	1138.6	1144.5	1154.0	1158.7
35°	1093.4	1091.1	1094.6	1106.5	1107.7
37.5°	1044.8	1038.8	1044.8	1055.5	1056.6
40°	991.3	986.6	993.7	998.5	1003.2
42.5°	936.7	934.4	937.9	946.2	946.2
45°	885.7	878.6	883.3	888.1	894.0
47.5°	828.7	825.1	827.5	831.1	833.4
50°	774.1	768.1	769.3	772.9	775.3
52.5°	723.0	711.2	711.2	713.5	713.5
55°	662.5	654.2	654.2	654.2	651.8
57.5°	609.1	598.4	597.2	597.2	597.2
60°	553.3	540.2	536.6	536.6	534.3
62.5°	497.5	485.6	480.8	476.1	476.1
65°	441.7	428.6	422.7	417.9	416.7
67.5°	384.7	375.2	368.0	362.1	356.2
70°	331.2	320.6	311.1	305.1	305.1
72.5°	281.4	269.5	260.0	252.9	249.3
75°	230.3	217.3	207.8	201.8	197.1
77.5°	185.2	171.0	161.5	153.2	148.4
80°	135.3	124.7	116.3	108.0	105.7
82.5°	93.8	85.5	76.0	70.0	67.7
85°	55.8	47.5	40.4	33.2	32.1
87.5°	22.6	16.6	13.1	13.1	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)