

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: P229736

Luminaire Tested: **24RLN-LD5-31-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229736
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-LD5-31-UNV-L840-CD1-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

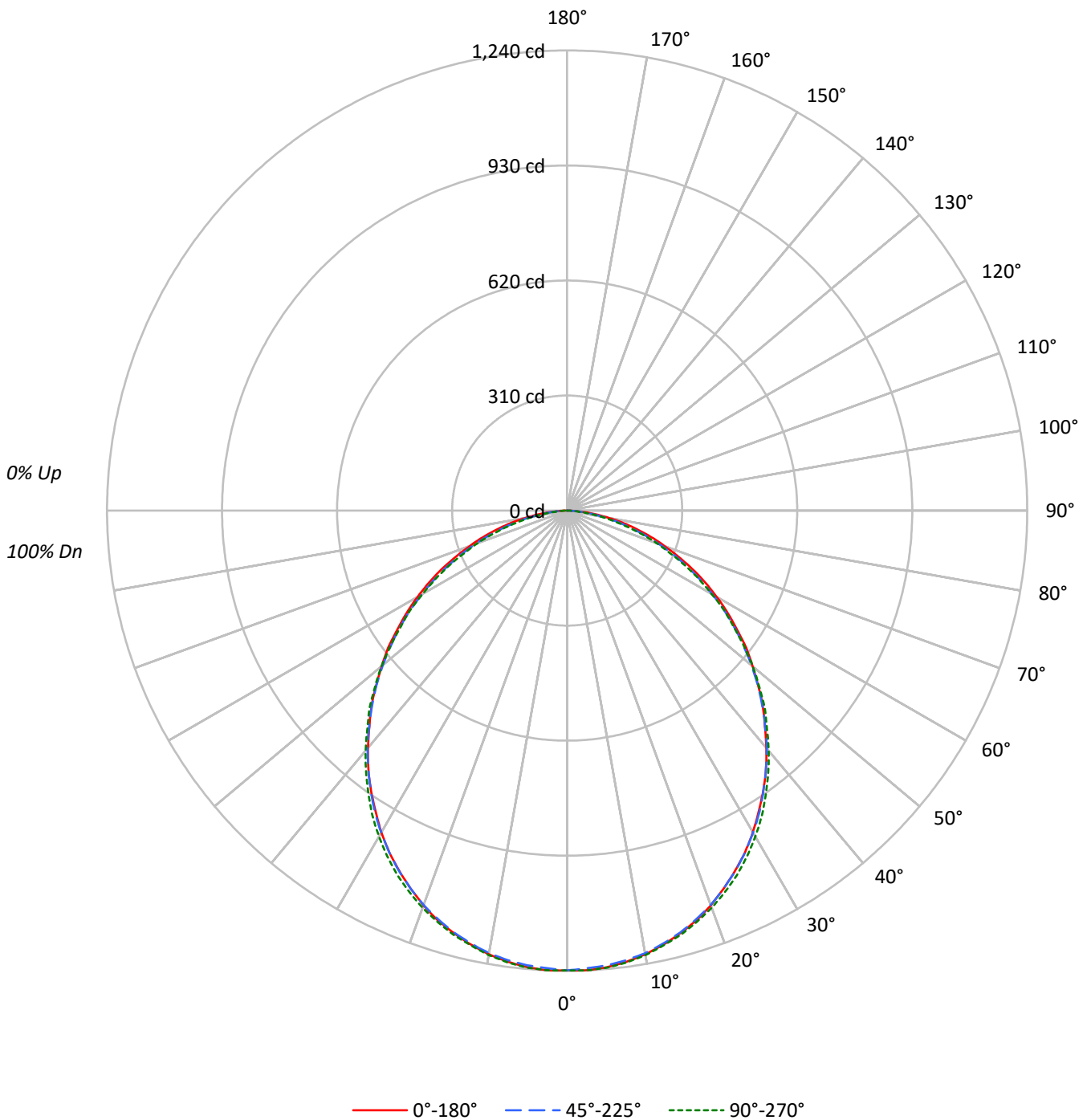
Lumens per Lamp: N/A
Luminaire Lumens: 3179.0 lumens
Efficiency: N/A
Efficacy: 138.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 22.9
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°	1898	1898	1898
5°	1899	1891	1901
10°	1888	1884	1891
15°	1870	1867	1876
20°	1845	1844	1857
25°	1810	1812	1830
30°	1771	1772	1794
35°	1722	1724	1745
40°	1670	1674	1690
45°	1616	1612	1631
50°	1554	1544	1556
55°	1490	1471	1466
60°	1428	1385	1378
65°	1348	1290	1272
70°	1249	1173	1151
75°	1148	1036	982
80°	1006	864	785
85°	826	598	474



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.1	3.7
10°-20°	332.6	10.5
20°-30°	494.9	15.6
30°-40°	578.2	18.2
40°-50°	574.7	18.1
50°-60°	493.8	15.5
60°-70°	354.6	11.2
70°-80°	188.9	5.9
80°-90°	44.2	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°	944.5	29.7
0°-40°	1522.7	47.9
0°-60°	2591.2	81.5
0°-90°	3179.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3179.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1239	1239	1239	1239	1239	
5°	1235	1233	1230	1234	1236	117
15°	1179	1179	1177	1181	1183	332
25°	1071	1071	1072	1080	1083	493
35°	921	919	922	932	933	576
45°	746	740	744	748	753	574
55°	558	551	551	551	549	501
65°	372	361	356	352	351	368
75°	194	183	175	170	166	207
85°	47	40	34	28	27	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1239.1	1239.1	1239.1	1239.1	1239.1
2.5°	1240.1	1238.1	1234.1	1239.1	1240.1
5°	1235.1	1233.1	1230.1	1234.1	1236.1
7.5°	1226.1	1224.1	1222.1	1226.1	1228.1
10°	1214.1	1213.1	1211.1	1216.1	1216.1
12.5°	1198.1	1197.1	1195.1	1200.1	1200.1
15°	1179.1	1179.1	1177.1	1181.1	1183.1
17.5°	1158.1	1157.1	1155.1	1160.1	1162.1
20°	1132.1	1132.1	1131.1	1137.1	1139.1
22.5°	1102.1	1102.1	1102.1	1110.1	1112.1
25°	1071.1	1071.1	1072.1	1080.1	1083.1
27.5°	1038.1	1037.1	1038.1	1047.1	1050.1
30°	1001.1	999.1	1002.1	1011.1	1014.1
32.5°	961.1	959.1	964.1	972.1	976.1
35°	921.1	919.1	922.1	932.1	933.1
37.5°	880.1	875.1	880.1	889.1	890.1
40°	835.0	831.0	837.0	841.0	845.0
42.5°	789.0	787.0	790.0	797.0	797.0
45°	746.0	740.0	744.0	748.0	753.0
47.5°	698.0	695.0	697.0	700.0	702.0
50°	652.0	647.0	648.0	651.0	653.0
52.5°	609.0	599.0	599.0	601.0	601.0
55°	558.0	551.0	551.0	551.0	549.0
57.5°	513.0	504.0	503.0	503.0	503.0
60°	466.0	455.0	452.0	452.0	450.0
62.5°	419.0	409.0	405.0	401.0	401.0
65°	372.0	361.0	356.0	352.0	351.0
67.5°	324.0	316.0	310.0	305.0	300.0
70°	279.0	270.0	262.0	257.0	257.0
72.5°	237.0	227.0	219.0	213.0	210.0
75°	194.0	183.0	175.0	170.0	166.0
77.5°	156.0	144.0	136.0	129.0	125.0
80°	114.0	105.0	98.0	91.0	89.0
82.5°	79.0	72.0	64.0	59.0	57.0
85°	47.0	40.0	34.0	28.0	27.0
87.5°	19.0	14.0	11.0	11.0	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)