

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: P229780

Luminaire Tested: **24RLN-LD5-50-RDP-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229780
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-50-RDP-UNV-L830-CD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS
Light Source: (252)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3980.0 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

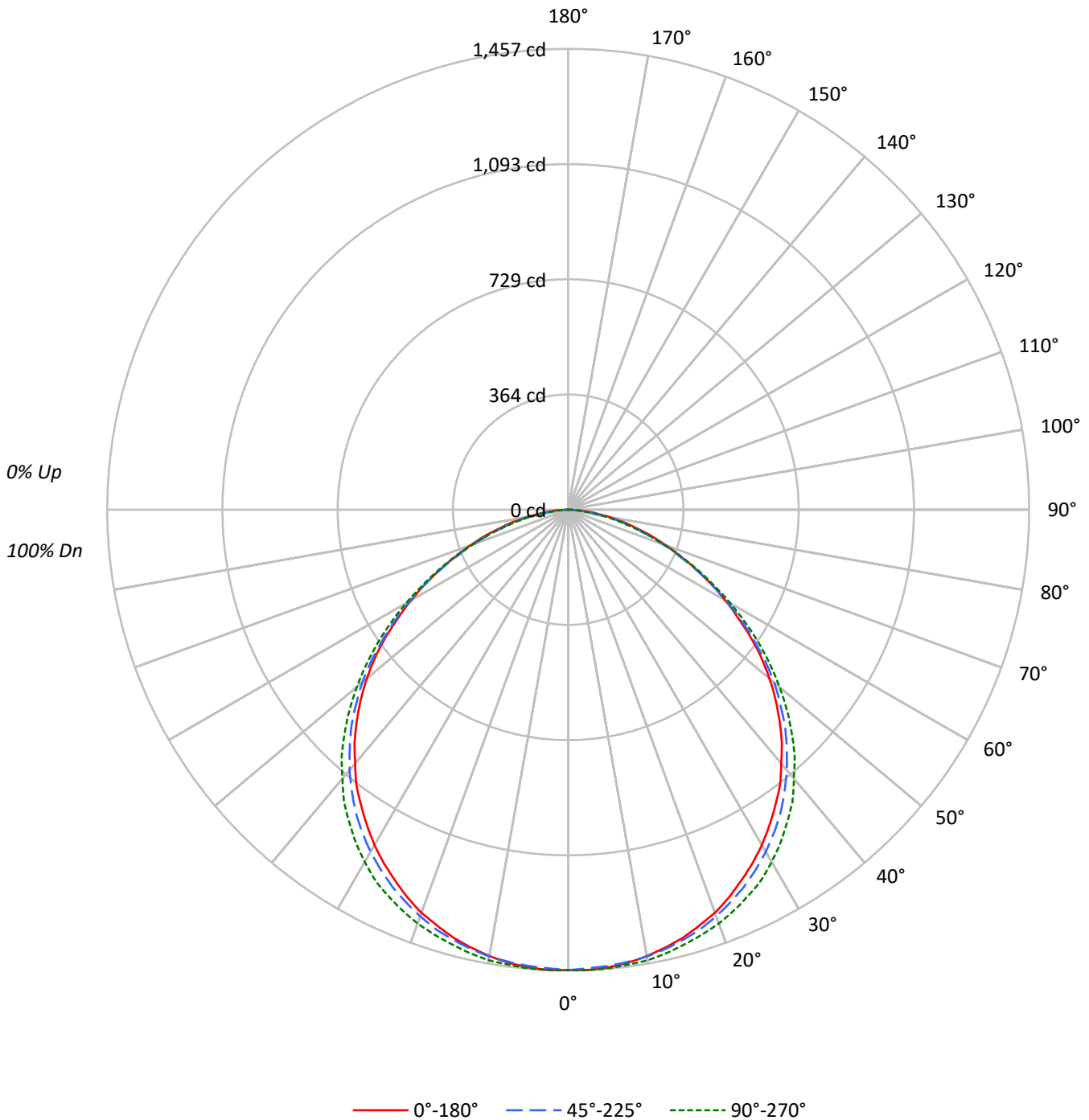
Input Watts (W): 37.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	90	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	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	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	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2229	2229	2229
5°	2233	2226	2238
10°	2229	2231	2250
15°	2222	2231	2255
20°	2210	2230	2269
25°	2187	2223	2276
30°	2166	2208	2275
35°	2134	2188	2256
40°	2095	2149	2219
45°	2047	2100	2165
50°	1979	2025	2080
55°	1883	1907	1964
60°	1757	1767	1813
65°	1614	1603	1642
70°	1467	1427	1434
75°	1304	1233	1224
80°	1132	1012	985
85°	928	717	557



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.0	3.5
10°-20°	397.9	10.0
20°-30°	607.4	15.3
30°-40°	732.3	18.4
40°-50°	746.8	18.8
50°-60°	639.1	16.1
60°-70°	440.2	11.1
70°-80°	225.7	5.7
80°-90°	52.5	1.3
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°	1143.4	28.7
0°-40°	1875.7	47.1
0°-60°	3261.6	81.9
0°-90°	3980.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3980.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1456	1456	1456	1456	1456	
5°	1452	1450	1448	1452	1456	138
15°	1401	1400	1407	1418	1422	395
25°	1294	1298	1315	1338	1347	597
35°	1142	1146	1170	1196	1206	714
45°	945	947	969	994	1000	728
55°	705	701	714	729	735	629
65°	445	435	442	445	453	443
75°	220	211	208	208	207	238
85°	53	47	41	36	32	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1455.5	1455.5	1455.5	1455.5	1455.5
2.5°	1457.0	1454.0	1451.0	1454.0	1457.0
5°	1452.5	1449.5	1448.0	1452.5	1455.5
7.5°	1444.9	1441.9	1441.9	1448.0	1451.0
10°	1432.9	1431.3	1434.4	1440.4	1446.4
12.5°	1417.8	1417.8	1422.3	1429.8	1435.9
15°	1401.1	1399.6	1407.2	1417.8	1422.3
17.5°	1378.5	1380.0	1390.6	1402.7	1408.7
20°	1355.9	1357.4	1367.9	1384.5	1392.1
22.5°	1327.2	1330.2	1342.3	1363.4	1370.9
25°	1293.9	1298.5	1315.1	1337.7	1346.8
27.5°	1260.7	1265.3	1283.4	1309.0	1321.1
30°	1224.5	1230.5	1248.7	1275.8	1286.4
32.5°	1183.7	1188.3	1210.9	1238.1	1248.7
35°	1141.5	1146.0	1170.1	1195.8	1206.4
37.5°	1099.2	1099.2	1123.3	1153.5	1164.1
40°	1047.8	1049.3	1075.0	1103.7	1109.7
42.5°	999.5	999.5	1022.2	1049.3	1059.9
45°	945.2	946.7	969.3	993.5	999.5
47.5°	889.3	889.3	908.9	931.6	937.6
50°	830.4	827.4	850.0	868.2	872.7
52.5°	770.0	765.5	783.6	798.7	804.8
55°	705.1	700.6	714.2	729.3	735.3
57.5°	637.2	631.1	646.2	659.8	662.8
60°	573.7	564.7	576.8	584.3	591.9
62.5°	510.3	499.8	508.8	513.4	519.4
65°	445.4	434.8	442.4	445.4	453.0
67.5°	383.5	376.0	377.5	382.0	385.0
70°	327.6	318.6	318.6	318.6	320.1
72.5°	276.3	262.7	261.2	262.7	262.7
75°	220.4	211.4	208.4	208.4	206.9
77.5°	176.7	164.6	163.1	160.0	157.0
80°	128.3	117.8	114.7	113.2	111.7
82.5°	89.1	80.0	77.0	74.0	69.5
85°	52.8	46.8	40.8	36.2	31.7
87.5°	19.6	18.1	15.1	13.6	13.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)