

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: P229779

Luminaire Tested: **24RLN-LD5-45-RDP-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229779
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-LD5-45-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: 3620.0 lumens
Efficiency: N/A
Efficacy: 106.5 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

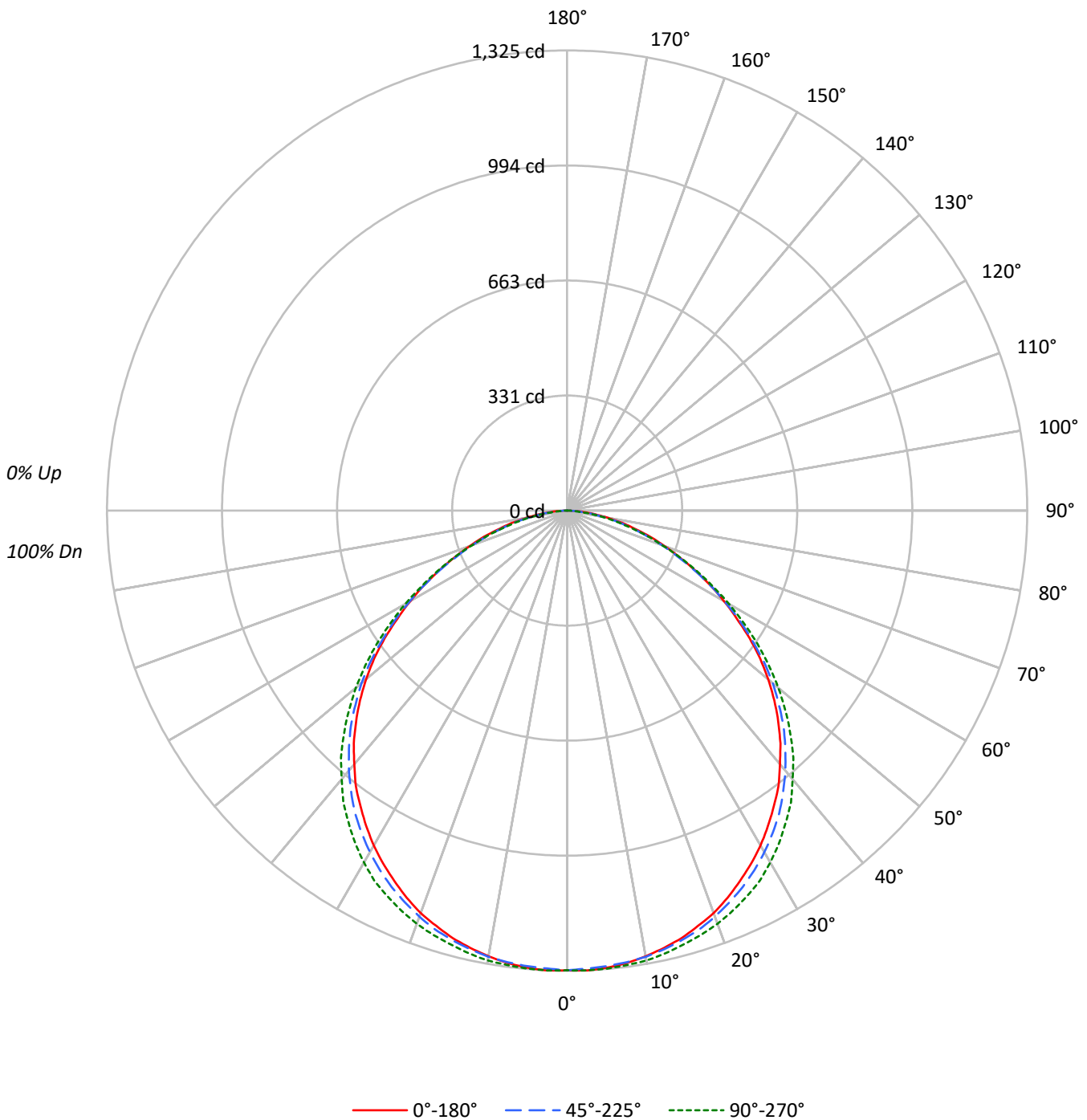
Input Watts (W): 34
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2028	2028	2028
5°	2031	2025	2035
10°	2027	2029	2046
15°	2021	2030	2051
20°	2010	2028	2064
25°	1989	2021	2070
30°	1970	2009	2069
35°	1941	1990	2052
40°	1906	1955	2018
45°	1862	1910	1969
50°	1800	1842	1892
55°	1713	1735	1786
60°	1598	1607	1649
65°	1468	1458	1493
70°	1335	1298	1304
75°	1187	1121	1113
80°	1029	921	896
85°	845	652	506



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.5	3.5
10°-20°	361.9	10.0
20°-30°	552.5	15.3
30°-40°	666.1	18.4
40°-50°	679.2	18.8
50°-60°	581.3	16.1
60°-70°	400.4	11.1
70°-80°	205.3	5.7
80°-90°	47.8	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°	1040.0	28.7
0°-40°	1706.0	47.1
0°-60°	2966.5	81.9
0°-90°	3620.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3620.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1324	1324	1324	1324	1324	
5°	1321	1318	1317	1321	1324	126
15°	1274	1273	1280	1290	1294	359
25°	1177	1181	1196	1217	1225	543
35°	1038	1042	1064	1088	1097	650
45°	860	861	882	904	909	662
55°	641	637	650	663	669	572
65°	405	396	402	405	412	403
75°	200	192	190	190	188	216
85°	48	43	37	33	29	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1325.2	1322.5	1319.7	1322.5	1325.2
5°	1321.1	1318.4	1317.0	1321.1	1323.8
7.5°	1314.2	1311.5	1311.5	1317.0	1319.7
10°	1303.2	1301.9	1304.6	1310.1	1315.6
12.5°	1289.5	1289.5	1293.6	1300.5	1306.0
15°	1274.4	1273.0	1279.9	1289.5	1293.6
17.5°	1253.8	1255.2	1264.8	1275.8	1281.3
20°	1233.2	1234.6	1244.2	1259.3	1266.2
22.5°	1207.1	1209.9	1220.9	1240.1	1246.9
25°	1176.9	1181.0	1196.1	1216.7	1225.0
27.5°	1146.7	1150.8	1167.3	1190.6	1201.6
30°	1113.7	1119.2	1135.7	1160.4	1170.0
32.5°	1076.7	1080.8	1101.4	1126.1	1135.7
35°	1038.2	1042.3	1064.3	1087.6	1097.3
37.5°	999.8	999.8	1021.7	1049.2	1058.8
40°	953.1	954.4	977.8	1003.9	1009.4
42.5°	909.1	909.1	929.7	954.4	964.0
45°	859.7	861.1	881.6	903.6	909.1
47.5°	808.9	808.9	826.7	847.3	852.8
50°	755.3	752.6	773.2	789.6	793.8
52.5°	700.4	696.3	712.7	726.5	732.0
55°	641.3	637.2	649.6	663.3	668.8
57.5°	579.5	574.0	587.8	600.1	602.9
60°	521.8	513.6	524.6	531.5	538.3
62.5°	464.2	454.6	462.8	466.9	472.4
65°	405.1	395.5	402.4	405.1	412.0
67.5°	348.8	341.9	343.3	347.4	350.2
70°	298.0	289.8	289.8	289.8	291.1
72.5°	251.3	239.0	237.6	239.0	239.0
75°	200.5	192.3	189.5	189.5	188.1
77.5°	160.7	149.7	148.3	145.6	142.8
80°	116.7	107.1	104.4	103.0	101.6
82.5°	81.0	72.8	70.0	67.3	63.2
85°	48.1	42.6	37.1	33.0	28.8
87.5°	17.9	16.5	13.7	12.4	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)