

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: P229778

Luminaire Tested: **24RLN-LD5-42-RDP-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229778
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-LD5-42-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: 3350.0 lumens
Efficiency: N/A
Efficacy: 107.4 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

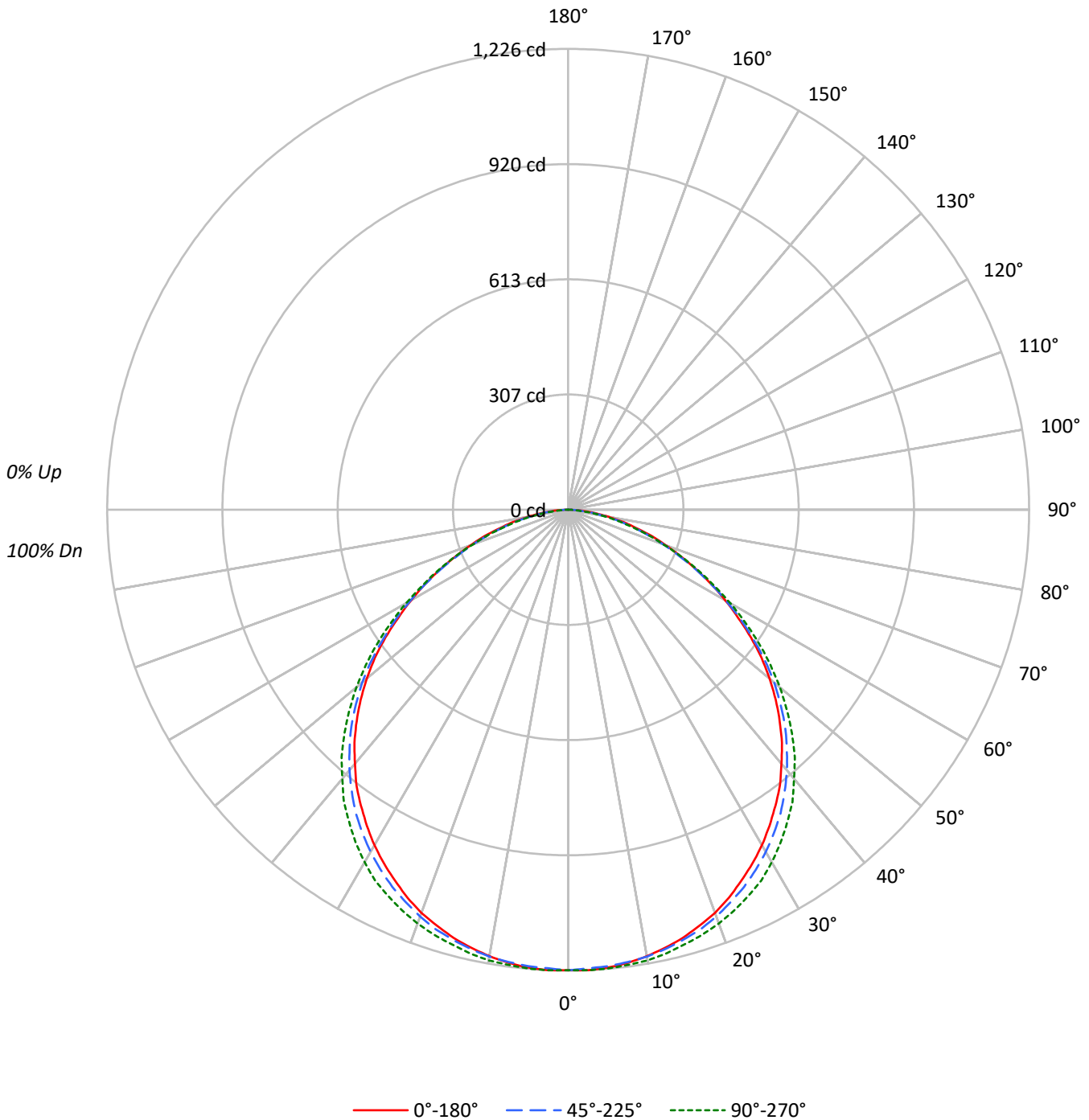
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1876	1876	1876
5°	1880	1874	1884
10°	1876	1878	1894
15°	1870	1878	1898
20°	1860	1877	1910
25°	1841	1871	1916
30°	1823	1859	1915
35°	1797	1842	1899
40°	1764	1809	1868
45°	1723	1767	1822
50°	1666	1705	1750
55°	1585	1605	1653
60°	1479	1487	1526
65°	1359	1350	1382
70°	1235	1201	1206
75°	1098	1038	1030
80°	953	852	829
85°	782	603	469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.2	3.5
10°-20°	334.9	10.0
20°-30°	511.3	15.3
30°-40°	616.4	18.4
40°-50°	628.6	18.8
50°-60°	537.9	16.1
60°-70°	370.6	11.1
70°-80°	190.0	5.7
80°-90°	44.2	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°	962.4	28.7
0°-40°	1578.8	47.1
0°-60°	2745.3	81.9
0°-90°	3350.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3350.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1225	1225	1225	1225	1225	
5°	1223	1220	1219	1223	1225	116
15°	1179	1178	1184	1193	1197	333
25°	1089	1093	1107	1126	1134	502
35°	961	965	985	1006	1015	601
45°	796	797	816	836	841	613
55°	594	590	601	614	619	529
65°	375	366	372	375	381	373
75°	186	178	175	175	174	200
85°	44	39	34	30	27	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1225.1	1225.1	1225.1	1225.1	1225.1
2.5°	1226.4	1223.8	1221.3	1223.8	1226.4
5°	1222.6	1220.0	1218.8	1222.6	1225.1
7.5°	1216.2	1213.7	1213.7	1218.8	1221.3
10°	1206.0	1204.8	1207.3	1212.4	1217.5
12.5°	1193.3	1193.3	1197.1	1203.5	1208.6
15°	1179.4	1178.1	1184.4	1193.3	1197.1
17.5°	1160.3	1161.6	1170.5	1180.6	1185.7
20°	1141.2	1142.5	1151.4	1165.4	1171.7
22.5°	1117.1	1119.6	1129.8	1147.6	1153.9
25°	1089.1	1092.9	1106.9	1126.0	1133.6
27.5°	1061.2	1065.0	1080.2	1101.8	1112.0
30°	1030.7	1035.7	1051.0	1073.9	1082.8
32.5°	996.4	1000.2	1019.2	1042.1	1051.0
35°	960.8	964.6	984.9	1006.5	1015.4
37.5°	925.2	925.2	945.5	970.9	979.8
40°	882.0	883.2	904.9	929.0	934.1
42.5°	841.3	841.3	860.4	883.2	892.1
45°	795.6	796.8	815.9	836.2	841.3
47.5°	748.5	748.5	765.1	784.1	789.2
50°	699.0	696.4	715.5	730.7	734.6
52.5°	648.1	644.3	659.6	672.3	677.4
55°	593.5	589.7	601.1	613.8	618.9
57.5°	536.3	531.2	543.9	555.4	557.9
60°	482.9	475.3	485.5	491.8	498.2
62.5°	429.6	420.7	428.3	432.1	437.2
65°	374.9	366.0	372.4	374.9	381.3
67.5°	322.8	316.4	317.7	321.5	324.1
70°	275.8	268.2	268.2	268.2	269.4
72.5°	232.6	221.1	219.9	221.1	221.1
75°	185.5	177.9	175.4	175.4	174.1
77.5°	148.7	138.5	137.3	134.7	132.2
80°	108.0	99.1	96.6	95.3	94.0
82.5°	75.0	67.4	64.8	62.3	58.5
85°	44.5	39.4	34.3	30.5	26.7
87.5°	16.5	15.3	12.7	11.4	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)