

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: P229798

Luminaire Tested: **24RLN-LD5-42-RDP-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229798
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-L840-CD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS
Light Source: (252)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3489.0 lumens
Efficiency: N/A
Efficacy: 111.8 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

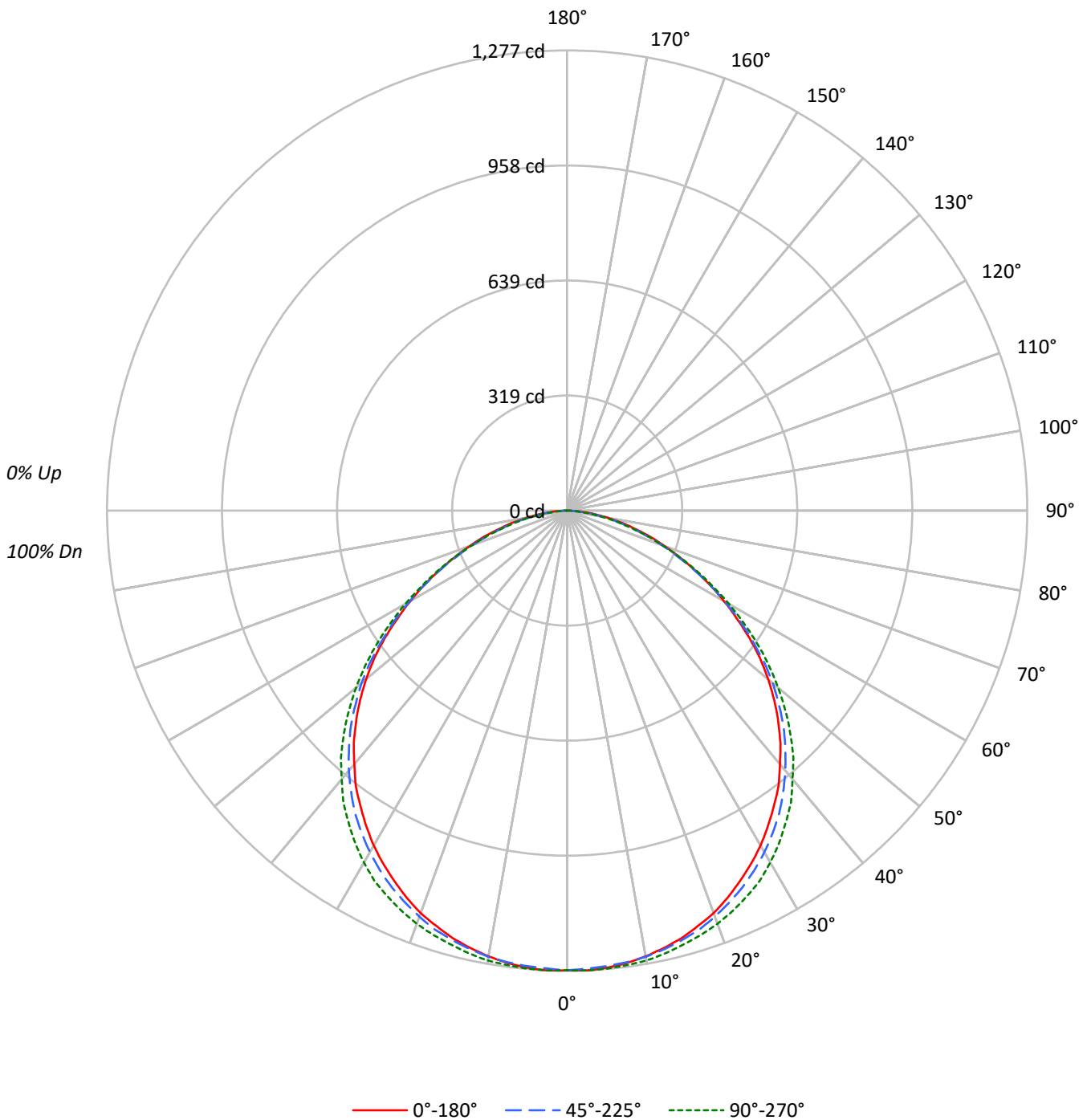
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1954	1954	1954
5°	1958	1952	1962
10°	1954	1956	1972
15°	1948	1956	1977
20°	1937	1955	1989
25°	1917	1948	1995
30°	1898	1936	1994
35°	1871	1918	1977
40°	1837	1884	1945
45°	1795	1841	1898
50°	1735	1776	1823
55°	1651	1672	1721
60°	1541	1549	1589
65°	1415	1405	1439
70°	1286	1251	1257
75°	1143	1081	1073
80°	992	887	864
85°	814	627	489



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.0	3.5
10°-20°	348.9	10.0
20°-30°	532.5	15.3
30°-40°	641.9	18.4
40°-50°	654.6	18.8
50°-60°	560.3	16.1
60°-70°	385.9	11.1
70°-80°	197.8	5.7
80°-90°	46.0	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°	1002.3	28.7
0°-40°	1644.3	47.1
0°-60°	2859.2	81.9
0°-90°	3489.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3489.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1276	1276	1276	1276	1276	
5°	1273	1271	1269	1273	1276	121
15°	1228	1227	1234	1243	1247	346
25°	1134	1138	1153	1173	1181	523
35°	1001	1005	1026	1048	1058	626
45°	829	830	850	871	876	638
55°	618	614	626	639	645	551
65°	390	381	388	390	397	388
75°	193	185	183	183	181	208
85°	46	41	36	32	28	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1275.9	1275.9	1275.9	1275.9	1275.9
2.5°	1277.3	1274.6	1272.0	1274.6	1277.3
5°	1273.3	1270.6	1269.3	1273.3	1275.9
7.5°	1266.7	1264.0	1264.0	1269.3	1272.0
10°	1256.1	1254.8	1257.4	1262.7	1268.0
12.5°	1242.9	1242.9	1246.8	1253.4	1258.7
15°	1228.3	1227.0	1233.6	1242.9	1246.8
17.5°	1208.4	1209.8	1219.0	1229.6	1234.9
20°	1188.6	1189.9	1199.2	1213.7	1220.3
22.5°	1163.4	1166.1	1176.7	1195.2	1201.8
25°	1134.3	1138.3	1152.8	1172.7	1180.6
27.5°	1105.2	1109.2	1125.1	1147.6	1158.1
30°	1073.4	1078.7	1094.6	1118.4	1127.7
32.5°	1037.7	1041.7	1061.5	1085.3	1094.6
35°	1000.6	1004.6	1025.8	1048.3	1057.5
37.5°	963.6	963.6	984.8	1011.2	1020.5
40°	918.6	919.9	942.4	967.5	972.8
42.5°	876.2	876.2	896.1	919.9	929.2
45°	828.6	829.9	849.7	870.9	876.2
47.5°	779.6	779.6	796.8	816.7	821.9
50°	728.0	725.3	745.2	761.1	765.0
52.5°	675.0	671.1	686.9	700.2	705.5
55°	618.1	614.1	626.1	639.3	644.6
57.5°	558.6	553.3	566.5	578.4	581.1
60°	503.0	495.0	505.6	512.2	518.8
62.5°	447.4	438.1	446.0	450.0	455.3
65°	390.5	381.2	387.8	390.5	397.1
67.5°	336.2	329.6	330.9	334.9	337.5
70°	287.2	279.3	279.3	279.3	280.6
72.5°	242.2	230.3	229.0	230.3	230.3
75°	193.2	185.3	182.7	182.7	181.3
77.5°	154.9	144.3	142.9	140.3	137.7
80°	112.5	103.2	100.6	99.3	97.9
82.5°	78.1	70.2	67.5	64.9	60.9
85°	46.3	41.0	35.7	31.8	27.8
87.5°	17.2	15.9	13.2	11.9	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)