

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: P229842

Luminaire Tested: **24RLN-LD5-60-UNV-L830-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229842
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36062)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-60-UNV-L830-CD1-SVPD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR
Light Source: (252)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5688.0 lumens
Efficiency: N/A
Efficacy: 119.2 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

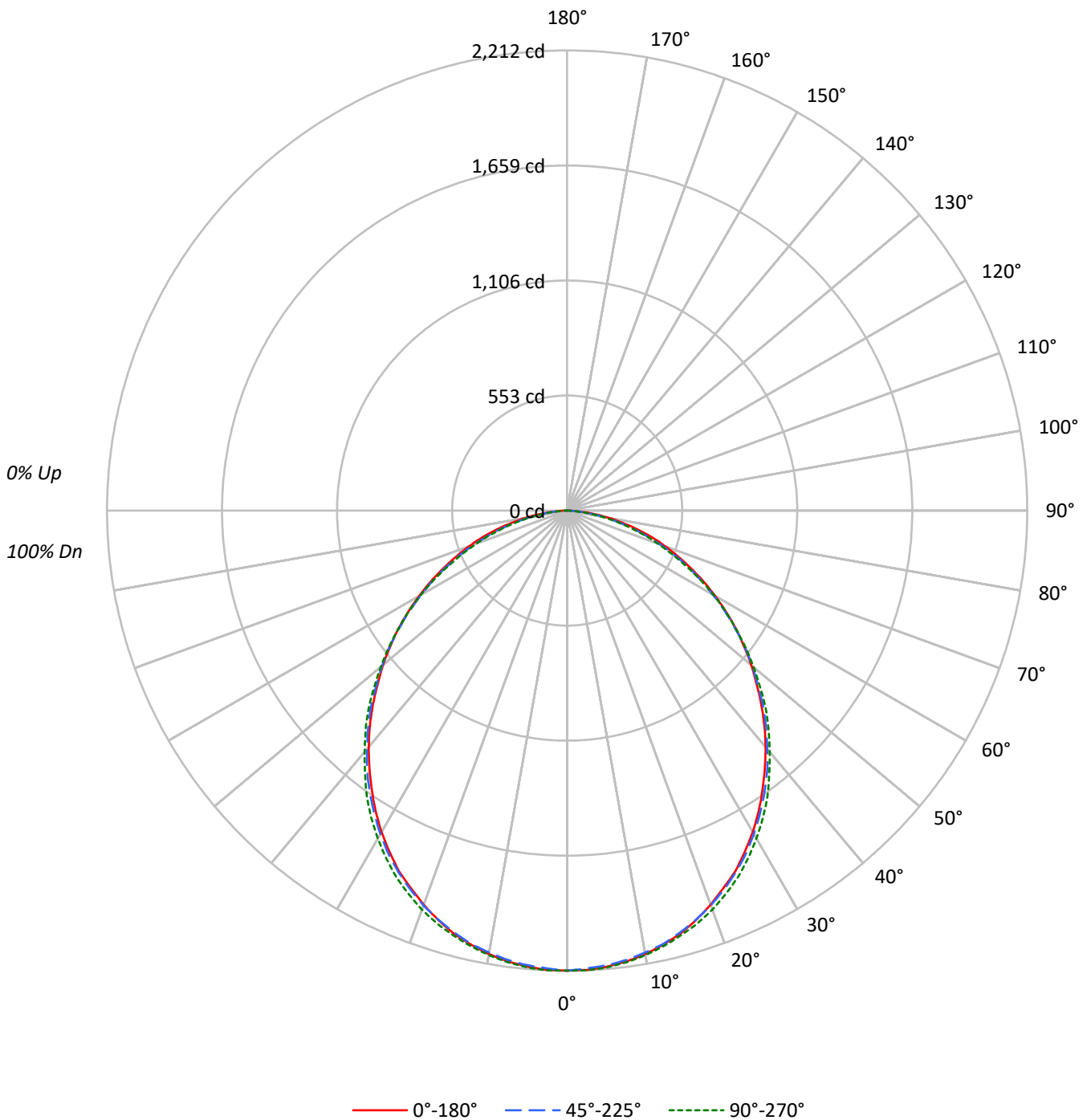
Input Watts (W): 47.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P229842

CATALOG NUMBER: 24RLN-LD5-60-UNV-L830-CD1-SVPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P229842

CATALOG NUMBER: 24RLN-LD5-60-UNV-L830-CD1-SVPD1-U

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	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	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	31
9	58	44	36	31	56	44	36	31	43	35	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°	3387	3387	3387
5°	3384	3373	3389
10°	3366	3355	3375
15°	3337	3329	3352
20°	3286	3292	3327
25°	3232	3242	3285
30°	3155	3175	3220
35°	3062	3092	3140
40°	2966	2991	3028
45°	2860	2888	2927
50°	2754	2766	2788
55°	2646	2631	2641
60°	2519	2480	2491
65°	2376	2324	2284
70°	2247	2125	2077
75°	2069	1887	1822
80°	1821	1597	1502
85°	1432	1114	828



TEST NUMBER: P229842

CATALOG NUMBER: 24RLN-LD5-60-UNV-L830-CD1-SVPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.8	3.7
10°-20°	593.5	10.4
20°-30°	884.6	15.6
30°-40°	1034.2	18.2
40°-50°	1027.0	18.1
50°-60°	881.9	15.5
60°-70°	635.3	11.2
70°-80°	342.1	6.0
80°-90°	80.7	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°	1686.9	29.7
0°-40°	2721.1	47.8
0°-60°	4630.0	81.4
0°-90°	5688.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5688.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2212	2212	2212	2212	2212	
5°	2201	2199	2194	2201	2204	209
15°	2105	2099	2099	2112	2114	593
25°	1913	1906	1918	1938	1944	879
35°	1637	1636	1654	1672	1679	1024
45°	1320	1317	1333	1344	1351	1019
55°	991	982	985	991	989	885
65°	656	645	641	636	630	651
75°	350	328	319	310	308	370
85°	82	74	63	51	47	98
90°	0	0	0	0	0	



TEST NUMBER: P229842

CATALOG NUMBER: 24RLN-LD5-60-UNV-L830-CD1-SVPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2211.6	2211.6	2211.6	2211.6	2211.6
2.5°	2209.8	2208.0	2202.5	2209.8	2211.6
5°	2200.7	2198.9	2193.5	2200.7	2204.4
7.5°	2186.2	2182.6	2179.0	2186.2	2189.9
10°	2164.5	2160.9	2157.3	2166.3	2169.9
12.5°	2137.3	2133.7	2133.7	2141.0	2144.6
15°	2104.7	2099.3	2099.3	2112.0	2113.8
17.5°	2063.1	2059.5	2061.3	2075.8	2081.2
20°	2016.0	2014.2	2019.6	2035.9	2041.3
22.5°	1963.5	1961.6	1970.7	1990.6	1994.2
25°	1912.7	1905.5	1918.2	1938.1	1943.5
27.5°	1849.3	1843.9	1860.2	1878.3	1883.8
30°	1784.1	1778.7	1795.0	1814.9	1820.4
32.5°	1713.5	1709.9	1726.2	1746.1	1751.5
35°	1637.4	1635.6	1653.7	1671.8	1679.1
37.5°	1561.3	1559.5	1579.5	1593.9	1595.8
40°	1483.5	1479.8	1496.1	1512.4	1514.3
42.5°	1403.8	1398.3	1416.4	1429.1	1434.6
45°	1320.4	1316.8	1333.1	1344.0	1351.2
47.5°	1235.3	1235.3	1244.4	1257.0	1258.9
50°	1155.6	1150.2	1161.0	1168.3	1170.1
52.5°	1072.3	1066.9	1075.9	1077.7	1081.3
55°	990.8	981.7	985.4	990.8	989.0
57.5°	905.7	891.2	898.4	898.4	902.0
60°	822.3	809.7	809.7	809.7	813.3
62.5°	739.0	726.3	726.3	724.5	722.7
65°	655.7	644.8	641.2	635.8	630.3
67.5°	576.0	563.3	556.1	548.8	543.4
70°	501.7	480.0	474.6	463.7	463.7
72.5°	427.5	405.7	394.9	387.6	385.8
75°	349.6	327.8	318.8	309.7	307.9
77.5°	273.5	259.0	244.5	237.3	233.7
80°	206.5	193.8	181.1	168.5	170.3
82.5°	141.3	128.6	119.5	108.7	105.1
85°	81.5	74.3	63.4	50.7	47.1
87.5°	34.4	25.4	18.1	18.1	18.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)