

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: P229785

Luminaire Tested: **24RLN-LD5-80-RDP-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229785
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-LD5-80-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: 6414.0 lumens
Efficiency: N/A
Efficacy: 95.1 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

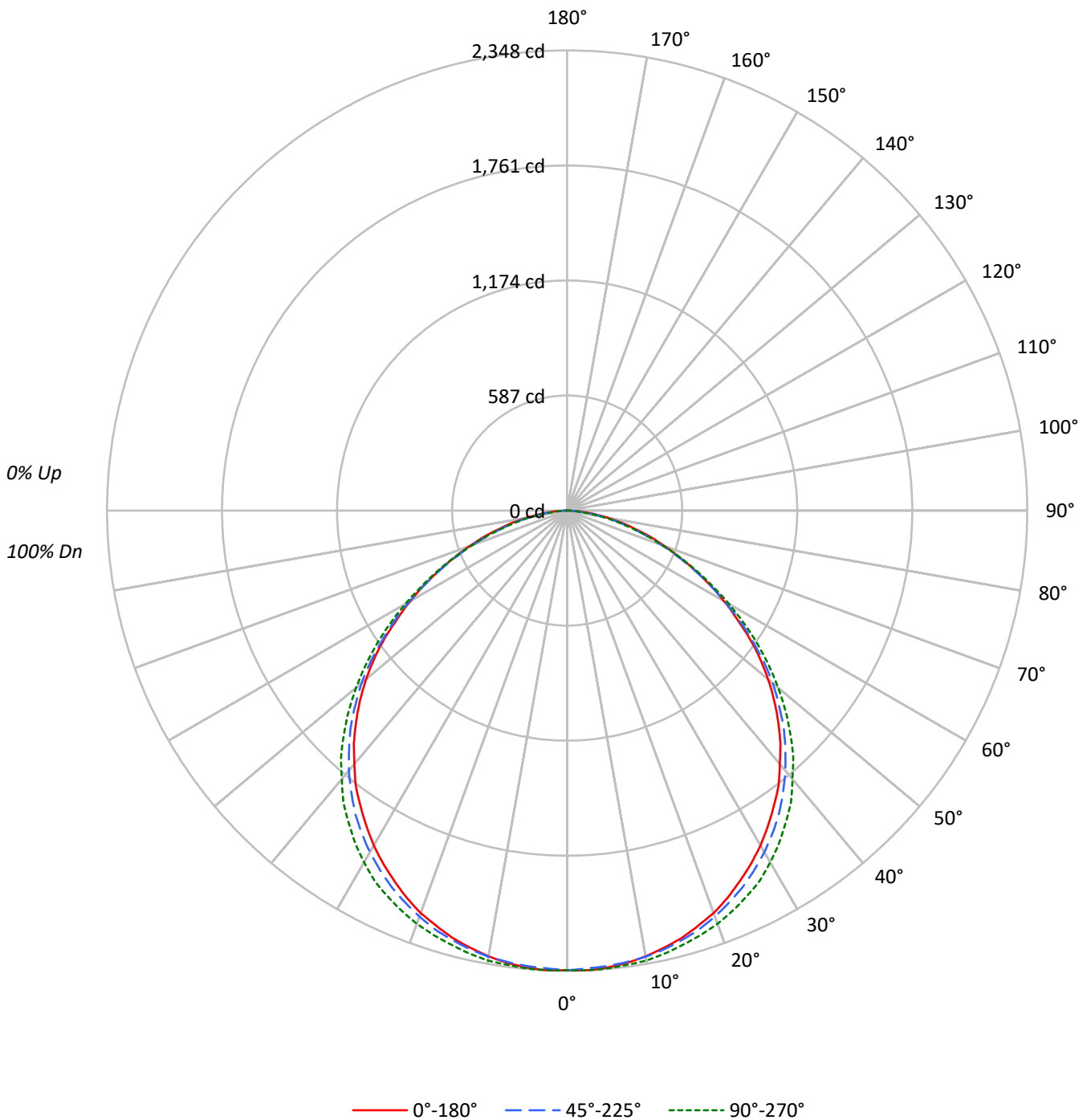
Input Watts (W): 67.45
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P229785

CATALOG NUMBER: 24RLN-LD5-80-RDP-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P229785

CATALOG NUMBER: 24RLN-LD5-80-RDP-UNV-L830-CD1-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	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°	3593	3593	3593
5°	3599	3588	3606
10°	3591	3595	3625
15°	3581	3596	3635
20°	3561	3593	3657
25°	3524	3582	3668
30°	3490	3559	3667
35°	3440	3526	3635
40°	3376	3464	3576
45°	3299	3384	3489
50°	3189	3264	3351
55°	3034	3073	3164
60°	2832	2847	2922
65°	2601	2584	2646
70°	2365	2299	2310
75°	2103	1987	1973
80°	1824	1631	1589
85°	1497	1155	898



TEST NUMBER: P229785

CATALOG NUMBER: 24RLN-LD5-80-RDP-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.5	3.5
10°-20°	641.3	10.0
20°-30°	978.9	15.3
30°-40°	1180.1	18.4
40°-50°	1203.5	18.8
50°-60°	1029.9	16.1
60°-70°	709.5	11.1
70°-80°	363.7	5.7
80°-90°	84.7	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°	1842.7	28.7
0°-40°	3022.8	47.1
0°-60°	5256.2	81.9
0°-90°	6414.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6414.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2346	2346	2346	2346	2346	
5°	2341	2336	2334	2341	2346	222
15°	2258	2256	2268	2285	2292	637
25°	2085	2093	2119	2156	2170	962
35°	1840	1847	1886	1927	1944	1151
45°	1523	1526	1562	1601	1611	1174
55°	1136	1129	1151	1175	1185	1014
65°	718	701	713	718	730	713
75°	355	341	336	336	333	383
85°	85	75	66	58	51	99
90°	0	0	0	0	0	



TEST NUMBER: P229785

CATALOG NUMBER: 24RLN-LD5-80-RDP-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2345.6	2345.6	2345.6	2345.6	2345.6
2.5°	2348.1	2343.2	2338.3	2343.2	2348.1
5°	2340.8	2335.9	2333.5	2340.8	2345.6
7.5°	2328.6	2323.7	2323.7	2333.5	2338.3
10°	2309.1	2306.7	2311.6	2321.3	2331.0
12.5°	2284.8	2284.8	2292.1	2304.3	2314.0
15°	2258.0	2255.6	2267.8	2284.8	2292.1
17.5°	2221.5	2224.0	2241.0	2260.5	2270.2
20°	2185.0	2187.5	2204.5	2231.3	2243.4
22.5°	2138.8	2143.7	2163.1	2197.2	2209.4
25°	2085.3	2092.6	2119.3	2155.8	2170.4
27.5°	2031.7	2039.0	2068.2	2109.6	2129.1
30°	1973.3	1983.1	2012.3	2056.1	2073.1
32.5°	1907.6	1914.9	1951.4	1995.2	2012.3
35°	1839.5	1846.8	1885.7	1927.1	1944.1
37.5°	1771.4	1771.4	1810.3	1859.0	1876.0
40°	1688.7	1691.1	1732.5	1778.7	1788.4
42.5°	1610.8	1610.8	1647.3	1691.1	1708.1
45°	1523.2	1525.6	1562.1	1601.1	1610.8
47.5°	1433.2	1433.2	1464.8	1501.3	1511.0
50°	1338.3	1333.4	1369.9	1399.1	1406.4
52.5°	1240.9	1233.6	1262.8	1287.2	1296.9
55°	1136.3	1129.0	1150.9	1175.2	1185.0
57.5°	1026.8	1017.1	1041.4	1063.3	1068.2
60°	924.6	910.0	929.5	941.7	953.8
62.5°	822.4	805.4	820.0	827.3	837.0
65°	717.8	700.8	712.9	717.8	730.0
67.5°	618.0	605.9	608.3	615.6	620.5
70°	528.0	513.4	513.4	513.4	515.8
72.5°	445.3	423.4	420.9	423.4	423.4
75°	355.3	340.7	335.8	335.8	333.4
77.5°	284.7	265.2	262.8	257.9	253.1
80°	206.8	189.8	184.9	182.5	180.1
82.5°	143.6	129.0	124.1	119.2	111.9
85°	85.2	75.4	65.7	58.4	51.1
87.5°	31.6	29.2	24.3	21.9	21.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)