

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: P229834

Luminaire Tested: **24RLN-LD5-74-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229834
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-LD5-74-RDP-UNV-L940-CD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS
Light Source: (252)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5445.0 lumens
Efficiency: N/A
Efficacy: 88.4 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

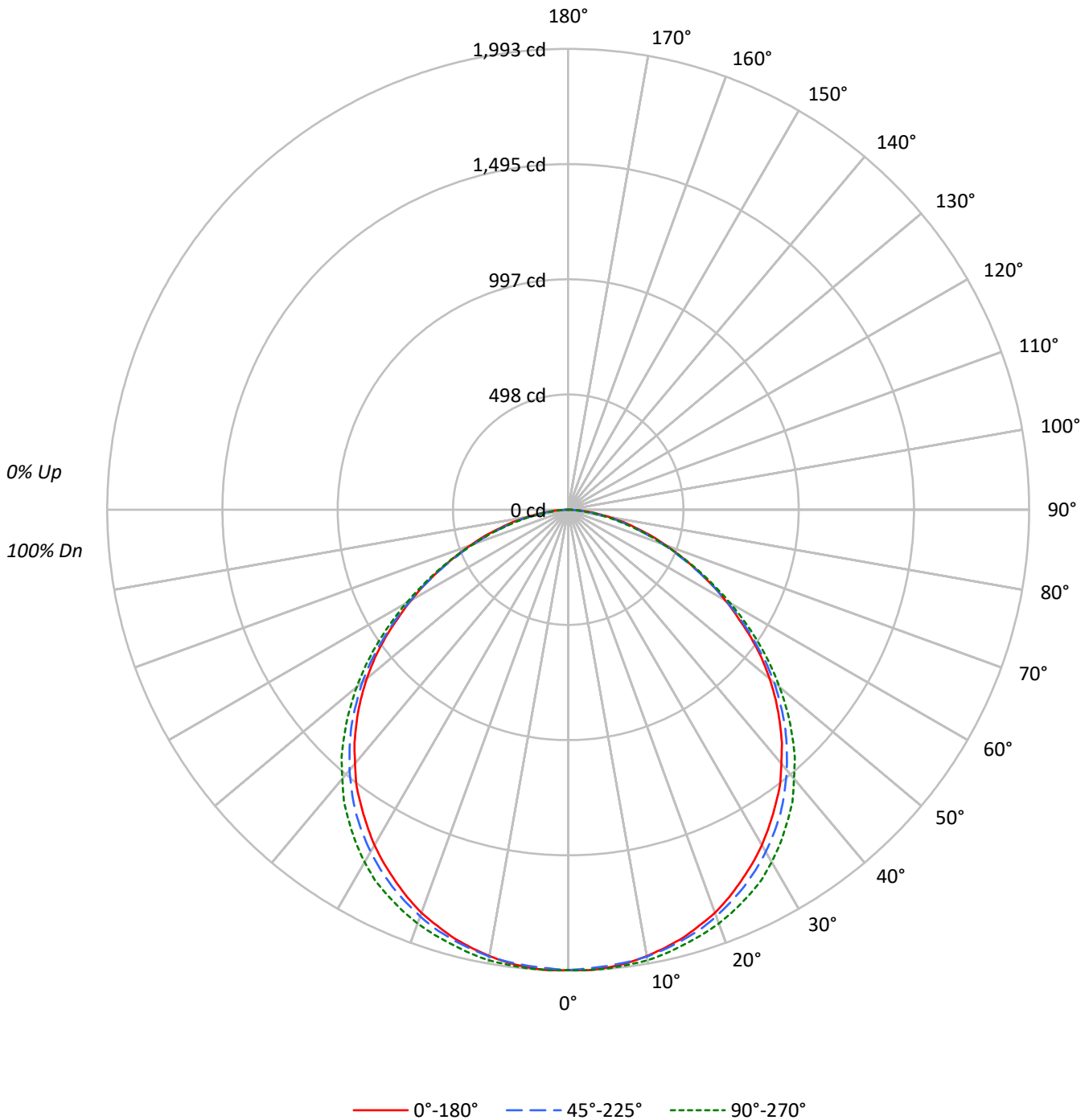
Input Watts (W): 61.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3050	3050	3050
5°	3055	3046	3062
10°	3049	3052	3078
15°	3040	3053	3085
20°	3023	3050	3104
25°	2992	3041	3114
30°	2963	3021	3113
35°	2920	2993	3086
40°	2866	2941	3036
45°	2801	2872	2962
50°	2707	2771	2845
55°	2576	2609	2686
60°	2404	2417	2480
65°	2209	2193	2246
70°	2007	1952	1961
75°	1785	1687	1675
80°	1549	1385	1349
85°	1271	981	763



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.8	3.5
10°-20°	544.4	10.0
20°-30°	831.0	15.3
30°-40°	1001.8	18.4
40°-50°	1021.6	18.8
50°-60°	874.3	16.1
60°-70°	602.3	11.1
70°-80°	308.8	5.7
80°-90°	71.9	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°	1564.3	28.7
0°-40°	2566.1	47.1
0°-60°	4462.1	81.9
0°-90°	5445.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5445.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1991	1991	1991	1991	1991	
5°	1987	1983	1981	1987	1991	189
15°	1917	1915	1925	1940	1946	541
25°	1770	1776	1799	1830	1842	816
35°	1562	1568	1601	1636	1650	977
45°	1293	1295	1326	1359	1367	996
55°	965	958	977	998	1006	861
65°	609	595	605	609	620	606
75°	302	289	285	285	283	325
85°	72	64	56	50	43	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1991.3	1991.3	1991.3	1991.3	1991.3
2.5°	1993.3	1989.2	1985.1	1989.2	1993.3
5°	1987.1	1983.0	1980.9	1987.1	1991.3
7.5°	1976.8	1972.7	1972.7	1980.9	1985.1
10°	1960.3	1958.2	1962.3	1970.6	1978.9
12.5°	1939.6	1939.6	1945.8	1956.1	1964.4
15°	1916.9	1914.8	1925.2	1939.6	1945.8
17.5°	1885.9	1888.0	1902.4	1919.0	1927.2
20°	1854.9	1857.0	1871.5	1894.2	1904.5
22.5°	1815.7	1819.8	1836.3	1865.3	1875.6
25°	1770.2	1776.4	1799.2	1830.1	1842.5
27.5°	1724.8	1731.0	1755.8	1790.9	1807.4
30°	1675.2	1683.5	1708.3	1745.4	1759.9
32.5°	1619.4	1625.6	1656.6	1693.8	1708.3
35°	1561.6	1567.8	1600.9	1636.0	1650.4
37.5°	1503.8	1503.8	1536.8	1578.1	1592.6
40°	1433.5	1435.6	1470.7	1510.0	1518.2
42.5°	1367.4	1367.4	1398.4	1435.6	1450.1
45°	1293.1	1295.1	1326.1	1359.2	1367.4
47.5°	1216.6	1216.6	1243.5	1274.5	1282.7
50°	1136.1	1132.0	1162.9	1187.7	1193.9
52.5°	1053.5	1047.3	1072.1	1092.7	1101.0
55°	964.6	958.4	977.0	997.7	1006.0
57.5°	871.7	863.4	884.1	902.7	906.8
60°	784.9	772.5	789.1	799.4	809.7
62.5°	698.2	683.7	696.1	702.3	710.6
65°	609.4	594.9	605.2	609.4	619.7
67.5°	524.7	514.3	516.4	522.6	526.7
70°	448.2	435.8	435.8	435.8	437.9
72.5°	378.0	359.4	357.4	359.4	359.4
75°	301.6	289.2	285.1	285.1	283.0
77.5°	241.7	225.2	223.1	219.0	214.8
80°	175.6	161.1	157.0	154.9	152.9
82.5°	121.9	109.5	105.3	101.2	95.0
85°	72.3	64.0	55.8	49.6	43.4
87.5°	26.9	24.8	20.7	18.6	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)