

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: P229805

Luminaire Tested: **24RLN-LD5-80-RDP-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229805
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-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: 6681.0 lumens
Efficiency: N/A
Efficacy: 99.1 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

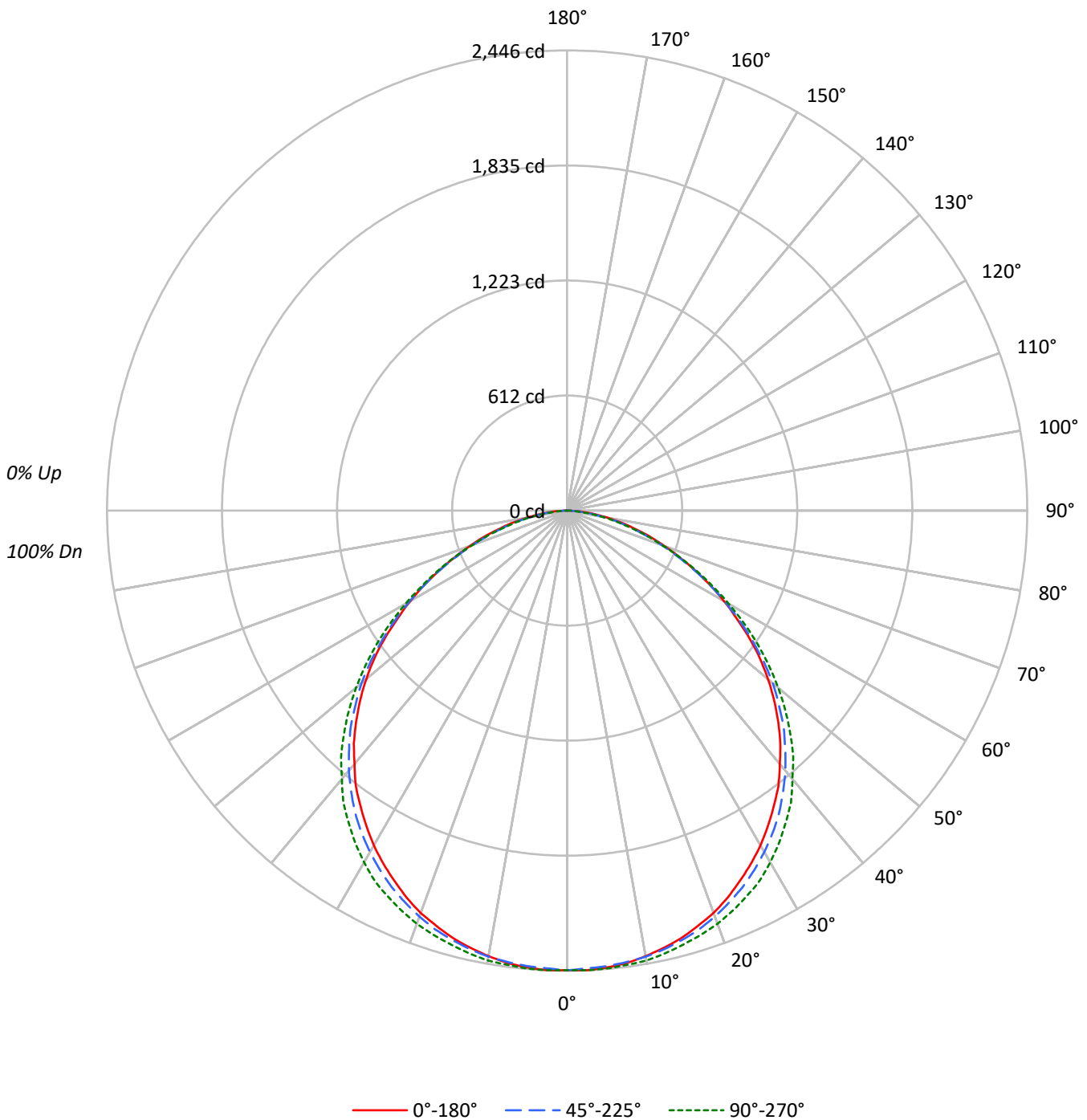
Input Watts (W): 67.45
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60					60			
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52					52			
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3742	3742	3742
5°	3749	3737	3757
10°	3741	3745	3776
15°	3730	3746	3786
20°	3710	3743	3809
25°	3671	3731	3821
30°	3635	3707	3819
35°	3583	3673	3787
40°	3517	3608	3725
45°	3437	3525	3634
50°	3322	3400	3491
55°	3161	3201	3296
60°	2950	2966	3043
65°	2710	2691	2756
70°	2463	2395	2406
75°	2190	2070	2055
80°	1900	1699	1655
85°	1559	1202	935



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.7	3.5
10°-20°	668.0	10.0
20°-30°	1019.6	15.3
30°-40°	1229.3	18.4
40°-50°	1253.6	18.8
50°-60°	1072.8	16.1
60°-70°	739.0	11.1
70°-80°	378.8	5.7
80°-90°	88.2	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°	1919.4	28.7
0°-40°	3148.6	47.1
0°-60°	5475.0	81.9
0°-90°	6681.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6681.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2443	2443	2443	2443	2443	
5°	2438	2433	2431	2438	2443	232
15°	2352	2350	2362	2380	2388	663
25°	2172	2180	2208	2246	2261	1002
35°	1916	1924	1964	2007	2025	1199
45°	1587	1589	1627	1668	1678	1222
55°	1184	1176	1199	1224	1234	1056
65°	748	730	743	748	760	743
75°	370	355	350	350	347	399
85°	89	79	68	61	53	103
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2443.3	2443.3	2443.3	2443.3	2443.3
2.5°	2445.8	2440.7	2435.7	2440.7	2445.8
5°	2438.2	2433.1	2430.6	2438.2	2443.3
7.5°	2425.5	2420.5	2420.5	2430.6	2435.7
10°	2405.2	2402.7	2407.8	2417.9	2428.1
12.5°	2379.9	2379.9	2387.5	2400.2	2410.3
15°	2352.0	2349.5	2362.2	2379.9	2387.5
17.5°	2314.0	2316.5	2334.3	2354.6	2364.7
20°	2276.0	2278.5	2296.3	2324.1	2336.8
22.5°	2227.8	2232.9	2253.2	2288.7	2301.3
25°	2172.1	2179.7	2207.6	2245.6	2260.8
27.5°	2116.3	2123.9	2154.3	2197.4	2217.7
30°	2055.5	2065.6	2096.0	2141.7	2159.4
32.5°	1987.1	1994.7	2032.7	2078.3	2096.0
35°	1916.1	1923.7	1964.2	2007.3	2025.1
37.5°	1845.1	1845.1	1885.7	1936.4	1954.1
40°	1758.9	1761.5	1804.6	1852.7	1862.9
42.5°	1677.8	1677.8	1715.9	1761.5	1779.2
45°	1586.6	1589.1	1627.2	1667.7	1677.8
47.5°	1492.8	1492.8	1525.8	1563.8	1573.9
50°	1394.0	1388.9	1426.9	1457.3	1464.9
52.5°	1292.6	1285.0	1315.4	1340.8	1350.9
55°	1183.6	1176.0	1198.8	1224.2	1234.3
57.5°	1069.6	1059.4	1084.8	1107.6	1112.6
60°	963.1	947.9	968.2	980.9	993.5
62.5°	856.7	838.9	854.1	861.7	871.9
65°	747.7	729.9	742.6	747.7	760.4
67.5°	643.8	631.1	633.6	641.2	646.3
70°	550.0	534.8	534.8	534.8	537.3
72.5°	463.8	441.0	438.5	441.0	441.0
75°	370.0	354.8	349.8	349.8	347.2
77.5°	296.5	276.3	273.7	268.7	263.6
80°	215.4	197.7	192.6	190.1	187.6
82.5°	149.5	134.3	129.3	124.2	116.6
85°	88.7	78.6	68.4	60.8	53.2
87.5°	32.9	30.4	25.3	22.8	22.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)