

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: P229745

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229745
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36038)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-80-UNV-L840-CD1-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

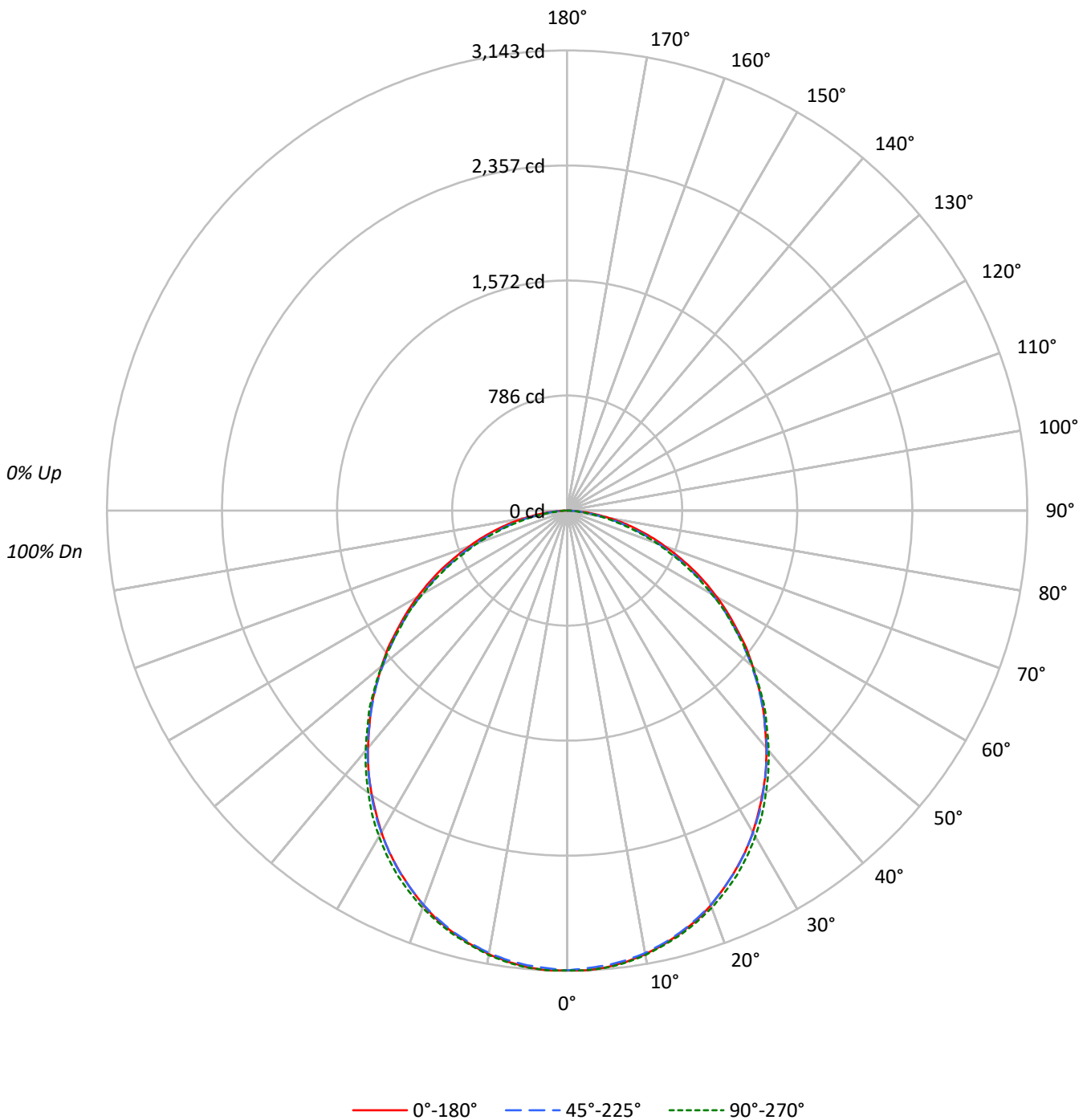
Lumens per Lamp: N/A
Luminaire Lumens: 8057.0 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	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	32
9	58	44	36	31	56	44	36	31	43	36	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°	4810	4810	4810
5°	4813	4793	4817
10°	4786	4774	4794
15°	4739	4730	4755
20°	4677	4672	4706
25°	4588	4592	4639
30°	4487	4492	4546
35°	4365	4370	4422
40°	4232	4242	4282
45°	4096	4085	4134
50°	3938	3914	3944
55°	3777	3729	3716
60°	3618	3509	3494
65°	3417	3270	3224
70°	3167	2974	2917
75°	2910	2625	2490
80°	2548	2191	1990
85°	2093	1515	1202



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.7	3.7
10°-20°	842.9	10.5
20°-30°	1254.2	15.6
30°-40°	1465.3	18.2
40°-50°	1456.6	18.1
50°-60°	1251.6	15.5
60°-70°	898.8	11.2
70°-80°	478.7	5.9
80°-90°	112.1	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°	2393.8	29.7
0°-40°	3859.1	47.9
0°-60°	6567.3	81.5
0°-90°	8057.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8057.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3140	3140	3140	3140	3140	
5°	3130	3125	3118	3128	3133	297
15°	2988	2988	2983	2993	2998	843
25°	2714	2714	2717	2737	2745	1250
35°	2334	2329	2337	2362	2365	1460
45°	1891	1876	1886	1896	1908	1456
55°	1414	1397	1397	1397	1392	1269
65°	943	915	902	892	890	933
75°	492	464	444	431	421	524
85°	119	101	86	71	68	139
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3140.4	3140.4	3140.4	3140.4	3140.4
2.5°	3142.9	3137.8	3127.7	3140.4	3142.9
5°	3130.2	3125.1	3117.5	3127.7	3132.8
7.5°	3107.4	3102.3	3097.3	3107.4	3112.5
10°	3077.0	3074.5	3069.4	3082.1	3082.1
12.5°	3036.4	3033.9	3028.8	3041.5	3041.5
15°	2988.3	2988.3	2983.2	2993.4	2998.4
17.5°	2935.1	2932.5	2927.5	2940.1	2945.2
20°	2869.2	2869.2	2866.6	2881.8	2886.9
22.5°	2793.1	2793.1	2793.1	2813.4	2818.5
25°	2714.5	2714.5	2717.1	2737.4	2745.0
27.5°	2630.9	2628.4	2630.9	2653.7	2661.3
30°	2537.1	2532.1	2539.7	2562.5	2570.1
32.5°	2435.7	2430.7	2443.3	2463.6	2473.8
35°	2334.4	2329.3	2336.9	2362.2	2364.8
37.5°	2230.4	2217.8	2230.4	2253.3	2255.8
40°	2116.4	2106.2	2121.5	2131.6	2141.7
42.5°	1999.8	1994.7	2002.3	2020.1	2020.1
45°	1890.8	1875.6	1885.7	1895.9	1908.5
47.5°	1769.1	1761.5	1766.6	1774.2	1779.3
50°	1652.6	1639.9	1642.4	1650.0	1655.1
52.5°	1543.6	1518.2	1518.2	1523.3	1523.3
55°	1414.3	1396.6	1396.6	1396.6	1391.5
57.5°	1300.2	1277.4	1274.9	1274.9	1274.9
60°	1181.1	1153.2	1145.6	1145.6	1140.6
62.5°	1062.0	1036.6	1026.5	1016.4	1016.4
65°	942.9	915.0	902.3	892.2	889.6
67.5°	821.2	800.9	785.7	773.0	760.4
70°	707.2	684.3	664.1	651.4	651.4
72.5°	600.7	575.4	555.1	539.9	532.3
75°	491.7	463.8	443.6	430.9	420.7
77.5°	395.4	365.0	344.7	327.0	316.8
80°	288.9	266.1	248.4	230.6	225.6
82.5°	200.2	182.5	162.2	149.5	144.5
85°	119.1	101.4	86.2	71.0	68.4
87.5°	48.2	35.5	27.9	27.9	27.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)