

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: P229725

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229725
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-L830-CD1-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

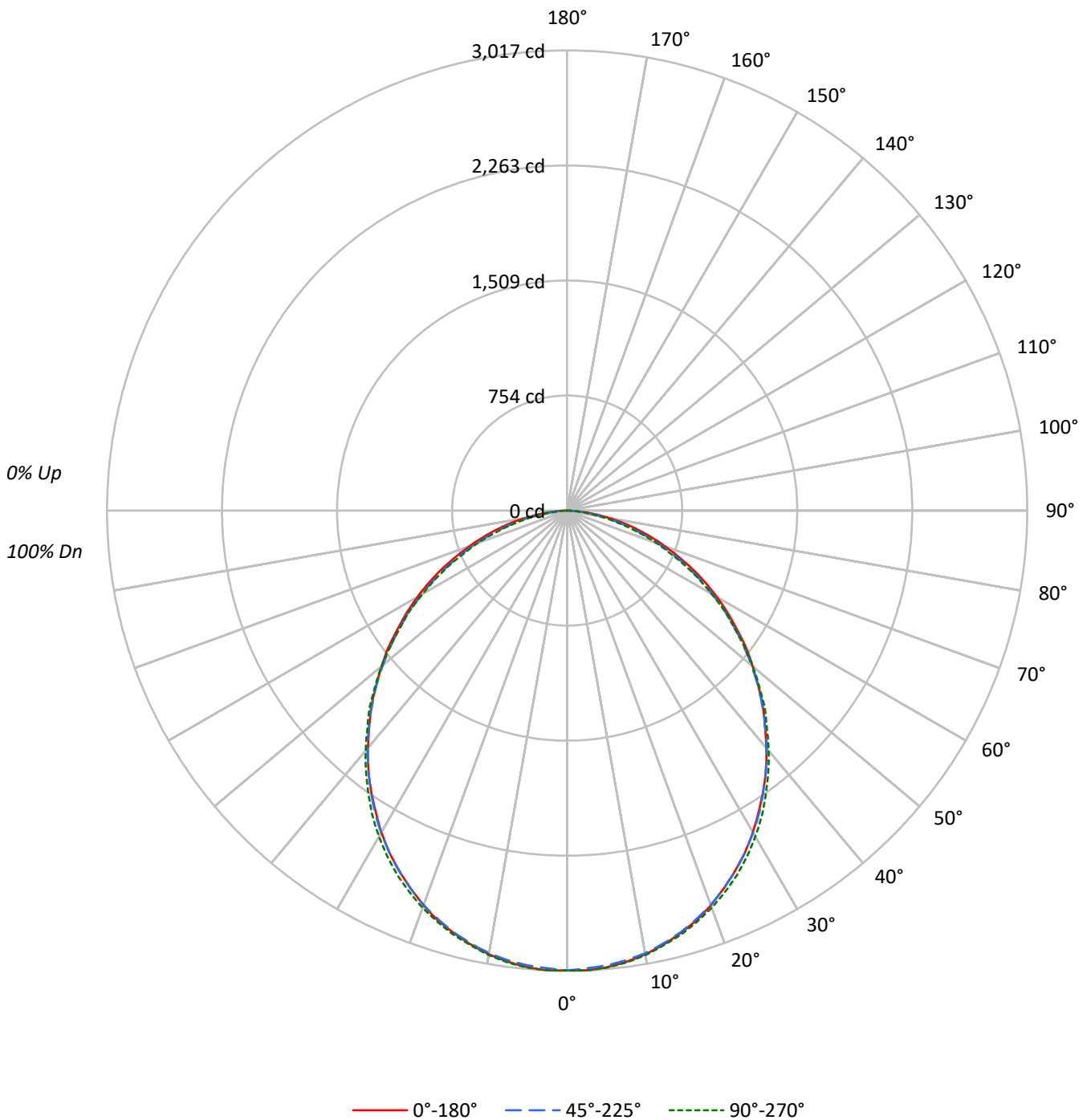
Lumens per Lamp: N/A
Luminaire Lumens: 7735.0 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	4618	4618	4618
5°	4620	4602	4624
10°	4594	4583	4602
15°	4549	4541	4565
20°	4490	4486	4517
25°	4404	4408	4454
30°	4308	4312	4364
35°	4190	4195	4245
40°	4062	4072	4111
45°	3932	3922	3969
50°	3780	3757	3786
55°	3626	3580	3567
60°	3474	3369	3354
65°	3281	3140	3095
70°	3040	2855	2801
75°	2794	2520	2390
80°	2447	2104	1911
85°	2010	1453	1155



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	284.9	3.7
10°-20°	809.2	10.5
20°-30°	1204.0	15.6
30°-40°	1406.7	18.2
40°-50°	1398.4	18.1
50°-60°	1201.6	15.5
60°-70°	862.9	11.2
70°-80°	459.6	5.9
80°-90°	107.6	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°	2298.2	29.7
0°-40°	3704.9	47.9
0°-60°	6304.9	81.5
0°-90°	7735.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7735.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3015	3015	3015	3015	3015	
5°	3005	3000	2993	3003	3008	285
15°	2869	2869	2864	2874	2879	809
25°	2606	2606	2608	2628	2635	1200
35°	2241	2236	2244	2268	2270	1401
45°	1815	1801	1810	1820	1832	1398
55°	1358	1341	1341	1341	1336	1218
65°	905	878	866	856	854	895
75°	472	445	426	414	404	503
85°	114	97	83	68	66	134
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3014.9	3014.9	3014.9	3014.9	3014.9
2.5°	3017.3	3012.4	3002.7	3014.9	3017.3
5°	3005.1	3000.3	2993.0	3002.7	3007.6
7.5°	2983.2	2978.4	2973.5	2983.2	2988.1
10°	2954.0	2951.6	2946.7	2958.9	2958.9
12.5°	2915.1	2912.7	2907.8	2920.0	2920.0
15°	2868.9	2868.9	2864.0	2873.7	2878.6
17.5°	2817.8	2815.3	2810.5	2822.6	2827.5
20°	2754.5	2754.5	2752.1	2766.7	2771.5
22.5°	2681.5	2681.5	2681.5	2701.0	2705.8
25°	2606.1	2606.1	2608.5	2628.0	2635.3
27.5°	2525.8	2523.3	2525.8	2547.7	2555.0
30°	2435.7	2430.9	2438.2	2460.1	2467.4
32.5°	2338.4	2333.5	2345.7	2365.2	2374.9
35°	2241.1	2236.2	2243.5	2267.8	2270.3
37.5°	2141.3	2129.1	2141.3	2163.2	2165.6
40°	2031.8	2022.1	2036.7	2046.4	2056.1
42.5°	1919.9	1915.0	1922.3	1939.3	1939.3
45°	1815.2	1800.6	1810.4	1820.1	1832.3
47.5°	1698.4	1691.1	1696.0	1703.3	1708.2
50°	1586.5	1574.3	1576.8	1584.1	1588.9
52.5°	1481.9	1457.5	1457.5	1462.4	1462.4
55°	1357.8	1340.7	1340.7	1340.7	1335.9
57.5°	1248.3	1226.4	1223.9	1223.9	1223.9
60°	1133.9	1107.1	1099.8	1099.8	1095.0
62.5°	1019.6	995.2	985.5	975.8	975.8
65°	905.2	878.4	866.3	856.5	854.1
67.5°	788.4	768.9	754.3	742.2	730.0
70°	678.9	657.0	637.5	625.4	625.4
72.5°	576.7	552.4	532.9	518.3	511.0
75°	472.1	445.3	425.8	413.7	403.9
77.5°	379.6	350.4	330.9	313.9	304.2
80°	277.4	255.5	238.5	221.4	216.6
82.5°	192.2	175.2	155.7	143.6	138.7
85°	114.4	97.3	82.7	68.1	65.7
87.5°	46.2	34.1	26.8	26.8	26.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)