

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: P295954

Luminaire Tested: **24RLN-LD5-31-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295954
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-31-UNV-L93050-W2A1-U-3500K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (504) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2635.0 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

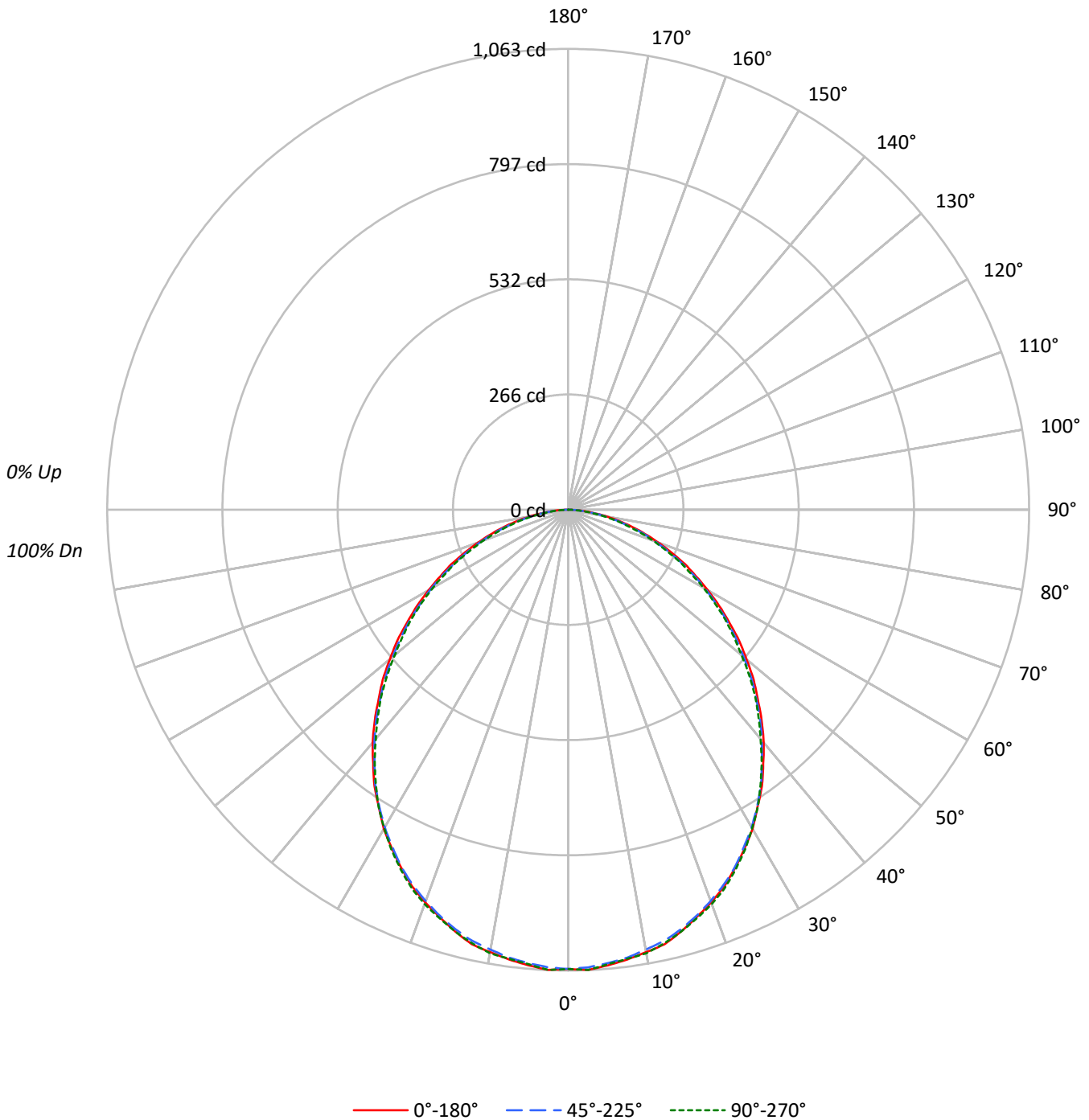
Input Watts (W): 21.576
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	74	72
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1425	1425	1425
5°	1425	1418	1421
10°	1416	1408	1419
15°	1403	1396	1403
20°	1380	1375	1386
25°	1353	1350	1358
30°	1321	1314	1318
35°	1279	1273	1271
40°	1232	1220	1212
45°	1176	1165	1160
50°	1123	1105	1092
55°	1063	1047	1037
60°	1000	981	970
65°	945	909	901
70°	866	833	816
75°	795	747	716
80°	698	652	613
85°	565	525	446



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	3.8
10°-20°	283.3	10.8
20°-30°	419.1	15.9
30°-40°	483.7	18.4
40°-50°	472.4	17.9
50°-60°	398.9	15.1
60°-70°	284.1	10.8
70°-80°	153.9	5.8
80°-90°	39.7	1.5
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°	802.3	30.4
0°-40°	1286.0	48.8
0°-60°	2157.3	81.9
0°-90°	2635.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2635.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1055	1055	1050	1052	1052	100
15°	1007	1003	1002	1006	1007	284
25°	911	906	910	913	915	420
35°	779	773	775	773	774	486
45°	618	613	612	610	610	478
55°	453	447	446	442	442	406
65°	297	291	286	282	283	293
75°	153	148	144	140	138	162
85°	37	36	34	30	29	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1059.2	1059.2	1059.2	1059.2	1059.2
2.5°	1062.6	1058.3	1056.6	1057.5	1062.6
5°	1054.9	1054.9	1049.8	1052.4	1052.4
7.5°	1046.4	1047.3	1042.2	1046.4	1044.7
10°	1036.2	1033.7	1030.3	1037.1	1038.8
12.5°	1026.9	1020.9	1019.2	1023.5	1024.3
15°	1007.3	1003.1	1002.2	1006.5	1007.3
17.5°	985.2	986.1	982.7	988.6	987.8
20°	964.0	962.3	960.6	967.4	968.2
22.5°	940.2	935.1	936.8	942.7	944.4
25°	911.3	906.2	909.6	913.0	914.7
27.5°	880.7	878.1	877.3	881.5	883.2
30°	850.1	845.8	845.8	850.9	848.4
32.5°	812.7	809.3	811.0	812.7	813.5
35°	778.7	772.7	775.3	772.7	773.6
37.5°	738.7	734.5	733.6	732.8	732.8
40°	701.3	697.9	694.5	694.5	690.3
42.5°	660.5	656.3	654.6	652.0	649.5
45°	618.0	612.9	612.1	609.5	609.5
47.5°	579.8	572.1	571.3	566.2	566.2
50°	536.4	531.3	527.9	524.5	521.9
52.5°	497.3	492.2	487.1	483.7	481.1
55°	453.1	447.1	446.3	442.0	442.0
57.5°	413.1	408.0	404.6	399.5	400.4
60°	371.5	366.4	364.7	360.4	360.4
62.5°	332.4	328.1	325.6	321.3	317.9
65°	296.7	290.7	285.6	282.2	283.1
67.5°	257.6	250.8	248.2	244.8	242.3
70°	220.2	215.9	211.7	207.4	207.4
72.5°	185.3	181.1	178.5	173.4	171.7
75°	153.0	147.9	143.7	140.3	137.7
77.5°	120.7	115.6	113.1	108.8	108.8
80°	90.1	86.7	84.2	82.5	79.1
82.5°	62.1	60.4	57.8	55.3	52.7
85°	36.6	35.7	34.0	29.8	28.9
87.5°	14.5	14.5	12.8	11.9	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)