

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: P296425

Luminaire Tested: **22RLN-LD5-31-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296425
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-11)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22RLN-LD5-31-UNV-L82765-W2A1-U-4500K
Description: RLN LED 2x2 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (252) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3195.0 lumens
Efficiency: N/A
Efficacy: 128.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.23 / 1.3
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

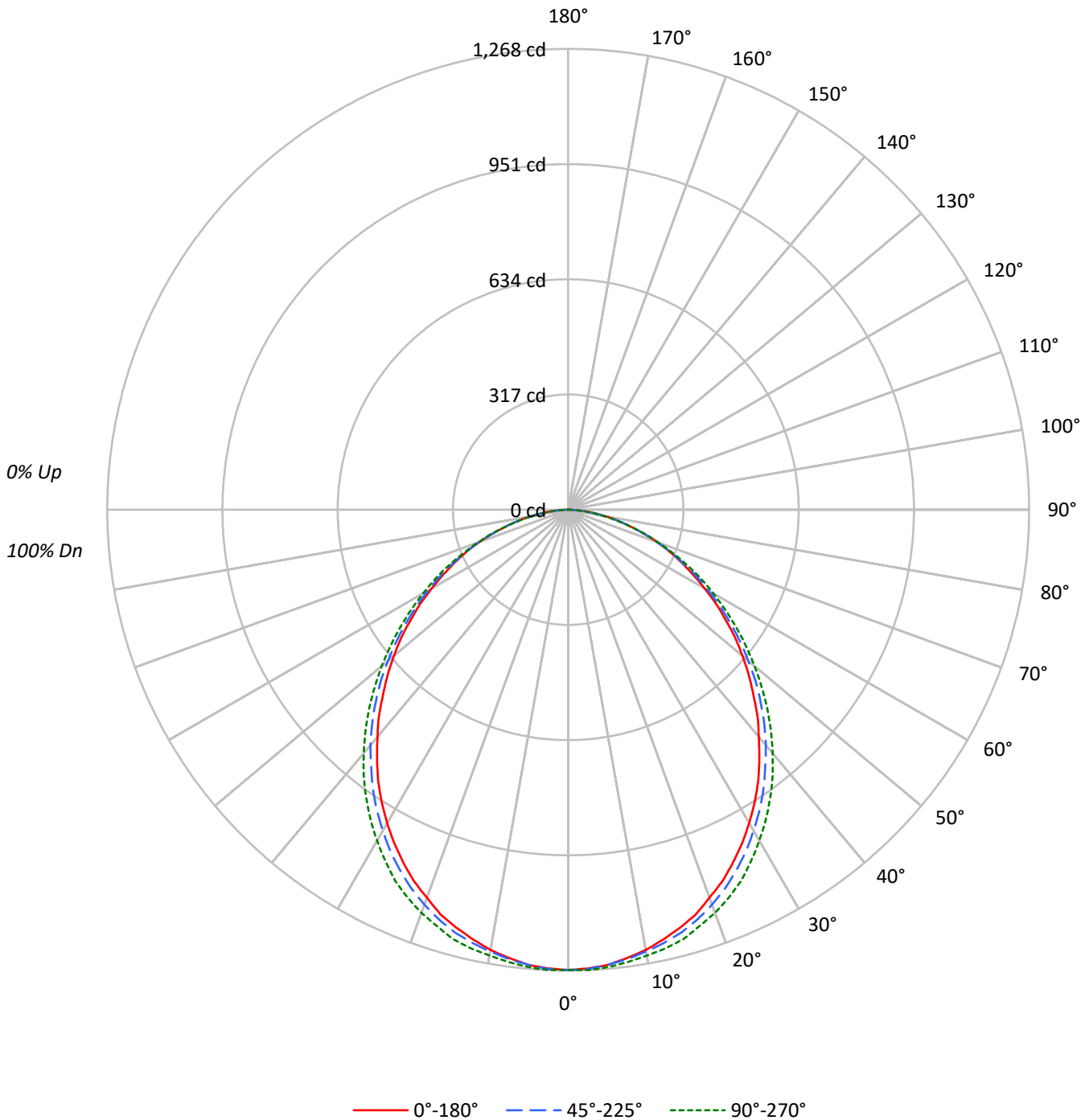
Input Watts (W): 24.924
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	71																												
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61																												
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52																												
5	77	65	56	49	75	64	55	49	61	54	49	59	53	48	58	52	48	46																												
6	71	58	50	43	70	57	49	43	56	48	43	54	47	42	52	47	42	40																												
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	38	36																												
8	62	49	40	34	60	48	40	34	47	39	34	45	39	34	44	38	34	32																												
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29																												
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3408	3408	3408
5°	3395	3395	3412
10°	3360	3374	3404
15°	3315	3355	3408
20°	3253	3312	3380
25°	3183	3249	3344
30°	3094	3168	3267
35°	2993	3077	3182
40°	2865	2971	3072
45°	2740	2849	2946
50°	2621	2708	2801
55°	2481	2556	2646
60°	2332	2392	2478
65°	2191	2232	2302
70°	2043	2043	2080
75°	1822	1822	1822
80°	1604	1556	1556
85°	1278	1229	1130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.4	3.7
10°-20°	339.6	10.6
20°-30°	504.4	15.8
30°-40°	585.4	18.3
40°-50°	576.4	18.0
50°-60°	487.8	15.3
60°-70°	347.9	10.9
70°-80°	186.9	5.9
80°-90°	47.1	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°	963.4	30.2
0°-40°	1548.8	48.5
0°-60°	2613.1	81.8
0°-90°	3195.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3195.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1266	1266	1266	1266	1266	
5°	1257	1257	1257	1262	1263	119
15°	1190	1193	1204	1216	1223	335
25°	1072	1075	1094	1115	1126	493
35°	911	913	937	959	968	569
45°	720	725	749	766	774	557
55°	529	530	545	559	564	474
65°	344	344	350	357	362	341
75°	175	174	175	175	175	188
85°	41	40	40	37	37	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1266.4	1266.4	1266.4	1266.4	1266.4
2.5°	1263.2	1263.2	1264.8	1266.4	1268.0
5°	1256.9	1256.9	1256.9	1261.6	1263.2
7.5°	1244.1	1245.7	1247.3	1252.1	1255.3
10°	1229.8	1231.4	1234.6	1242.5	1245.7
12.5°	1210.7	1215.5	1220.2	1231.4	1236.2
15°	1190.0	1193.2	1204.3	1215.5	1223.4
17.5°	1167.7	1169.3	1182.0	1197.9	1201.1
20°	1135.8	1140.6	1156.5	1172.4	1180.4
22.5°	1107.1	1110.3	1127.8	1148.5	1154.9
25°	1072.1	1075.3	1094.4	1115.1	1126.2
27.5°	1035.4	1038.6	1059.3	1081.6	1089.6
30°	995.6	998.8	1019.5	1043.4	1051.4
32.5°	954.2	957.4	979.7	1000.4	1011.5
35°	911.2	912.8	936.7	959.0	968.5
37.5°	863.4	868.2	890.5	912.8	923.9
40°	815.6	820.4	845.9	866.6	874.6
42.5°	771.0	777.4	798.1	817.2	825.2
45°	720.0	724.8	748.7	766.2	774.2
47.5°	673.8	678.6	699.3	716.8	721.6
50°	626.0	629.2	646.8	662.7	669.1
52.5°	578.3	579.8	595.8	611.7	616.5
55°	528.9	530.5	544.8	559.1	563.9
57.5°	482.7	482.7	495.4	506.6	511.4
60°	433.3	433.3	444.4	455.6	460.4
62.5°	387.1	387.1	398.2	406.2	412.6
65°	344.1	344.1	350.5	356.8	361.6
67.5°	302.7	297.9	304.3	312.2	310.6
70°	259.7	254.9	259.7	262.8	264.4
72.5°	216.6	213.5	216.6	218.2	221.4
75°	175.2	173.6	175.2	175.2	175.2
77.5°	140.2	135.4	138.6	137.0	135.4
80°	103.5	102.0	100.4	98.8	100.4
82.5°	71.7	70.1	70.1	66.9	66.9
85°	41.4	39.8	39.8	36.6	36.6
87.5°	15.9	15.9	14.3	14.3	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)