

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: P296469

Luminaire Tested: **22RLN-LD5-31-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296469  
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-L93050-W2A1-U-4000K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (252) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2887.0 lumens  
Efficiency: N/A  
Efficacy: 115.0 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

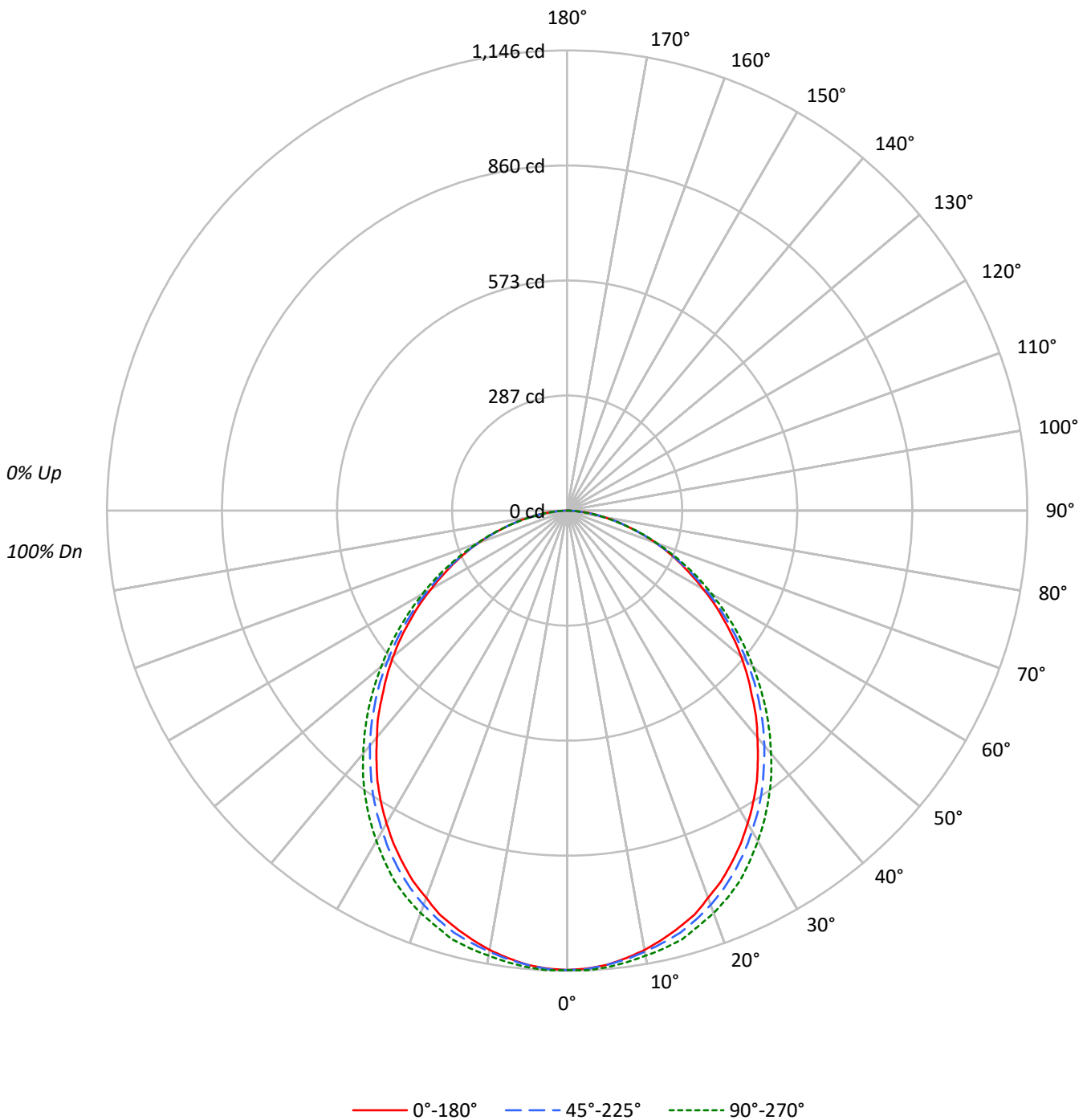
Input Watts (W): 25.11  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3079	3079	3079
5°	3068	3068	3083
10°	3036	3048	3076
15°	2996	3032	3080
20°	2939	2993	3054
25°	2876	2936	3022
30°	2795	2862	2952
35°	2705	2780	2875
40°	2589	2685	2776
45°	2476	2575	2662
50°	2368	2447	2531
55°	2242	2310	2391
60°	2107	2161	2239
65°	1980	2017	2080
70°	1846	1846	1880
75°	1646	1646	1646
80°	1450	1406	1406
85°	1155	1112	1022



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.9	3.7
10°-20°	306.8	10.6
20°-30°	455.8	15.8
30°-40°	529.0	18.3
40°-50°	520.9	18.0
50°-60°	440.8	15.3
60°-70°	314.3	10.9
70°-80°	168.9	5.9
80°-90°	42.6	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°	870.5	30.2
0°-40°	1399.5	48.5
0°-60°	2361.1	81.8
0°-90°	2887.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2887.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1144	1144	1144	1144	1144	
5°	1136	1136	1136	1140	1142	108
15°	1075	1078	1088	1098	1106	303
25°	969	972	989	1008	1018	446
35°	823	825	846	866	875	514
45°	651	655	676	692	700	503
55°	478	479	492	505	510	428
65°	311	311	317	322	327	309
75°	158	157	158	158	158	170
85°	37	36	36	33	33	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1144.3	1144.3	1144.3	1144.3	1144.3
2.5°	1141.5	1141.5	1142.9	1144.3	1145.8
5°	1135.7	1135.7	1135.7	1140.0	1141.5
7.5°	1124.2	1125.6	1127.1	1131.4	1134.3
10°	1111.2	1112.7	1115.6	1122.8	1125.6
12.5°	1094.0	1098.3	1102.6	1112.7	1117.0
15°	1075.3	1078.1	1088.2	1098.3	1105.5
17.5°	1055.1	1056.5	1068.1	1082.4	1085.3
20°	1026.3	1030.6	1045.0	1059.4	1066.6
22.5°	1000.4	1003.3	1019.1	1037.8	1043.6
25°	968.7	971.6	988.9	1007.6	1017.7
27.5°	935.6	938.5	957.2	977.4	984.6
30°	899.6	902.5	921.2	942.8	950.0
32.5°	862.2	865.1	885.2	904.0	914.0
35°	823.4	824.8	846.4	866.5	875.2
37.5°	780.2	784.5	804.6	824.8	834.9
40°	737.0	741.3	764.3	783.0	790.2
42.5°	696.7	702.4	721.2	738.4	745.6
45°	650.6	654.9	676.5	692.4	699.6
47.5°	608.9	613.2	631.9	647.7	652.1
50°	565.7	568.6	584.4	598.8	604.6
52.5°	522.5	524.0	538.3	552.7	557.1
55°	477.9	479.3	492.3	505.2	509.6
57.5°	436.1	436.1	447.7	457.7	462.1
60°	391.5	391.5	401.6	411.7	416.0
62.5°	349.8	349.8	359.9	367.1	372.8
65°	310.9	310.9	316.7	322.4	326.7
67.5°	273.5	269.2	274.9	282.1	280.7
70°	234.6	230.3	234.6	237.5	238.9
72.5°	195.8	192.9	195.8	197.2	200.1
75°	158.3	156.9	158.3	158.3	158.3
77.5°	126.7	122.4	125.2	123.8	122.4
80°	93.6	92.1	90.7	89.2	90.7
82.5°	64.8	63.3	63.3	60.5	60.5
85°	37.4	36.0	36.0	33.1	33.1
87.5°	14.4	14.4	13.0	13.0	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)