

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: P296467

Luminaire Tested: **22RLN-LD5-31-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296467
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-3000K
Description: RLN LED 2x2 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (252) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2447.0 lumens
Efficiency: N/A
Efficacy: 97.8 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

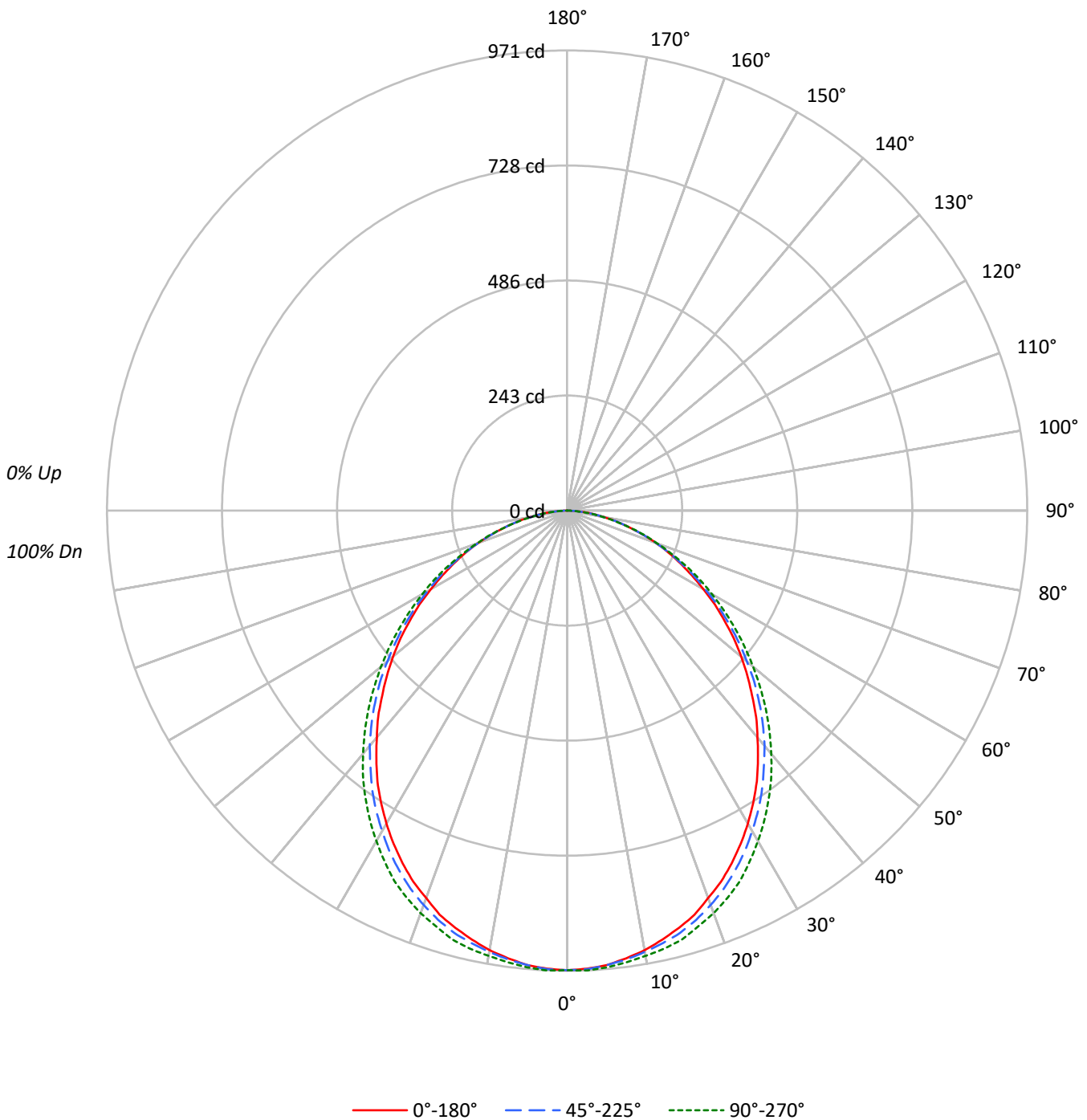
Input Watts (W): 25.017
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	71					71			
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61					61			
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52					52			
5	77	65	56	49	75	64	55	49	61	54	49	59	53	48	58	52	48	46					46			
6	71	58	50	43	70	57	49	43	56	48	43	54	47	42	52	47	42	40					40			
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	38	36					36			
8	62	49	40	34	60	48	40	34	47	39	34	45	39	34	44	38	34	32					32			
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29					29			
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2610	2610	2610
5°	2600	2600	2613
10°	2574	2584	2607
15°	2539	2570	2610
20°	2491	2537	2589
25°	2438	2489	2561
30°	2369	2426	2502
35°	2293	2357	2437
40°	2194	2276	2353
45°	2099	2182	2256
50°	2007	2074	2145
55°	1901	1958	2026
60°	1786	1832	1898
65°	1678	1709	1764
70°	1565	1565	1593
75°	1395	1395	1395
80°	1229	1192	1192
85°	979	942	868



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	3.7
10°-20°	260.1	10.6
20°-30°	386.3	15.8
30°-40°	448.4	18.3
40°-50°	441.5	18.0
50°-60°	373.6	15.3
60°-70°	266.4	10.9
70°-80°	143.2	5.9
80°-90°	36.1	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°	737.9	30.2
0°-40°	1186.2	48.5
0°-60°	2001.3	81.8
0°-90°	2447.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2447.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	963	963	963	966	968	91
15°	911	914	922	931	937	257
25°	821	824	838	854	863	378
35°	698	699	717	734	742	435
45°	552	555	573	587	593	426
55°	405	406	417	428	432	363
65°	264	264	268	273	277	262
75°	134	133	134	134	134	144
85°	32	30	30	28	28	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	969.9	969.9	969.9	969.9	969.9
2.5°	967.5	967.5	968.7	969.9	971.2
5°	962.6	962.6	962.6	966.3	967.5
7.5°	952.9	954.1	955.3	959.0	961.4
10°	941.9	943.1	945.5	951.6	954.1
12.5°	927.2	930.9	934.6	943.1	946.8
15°	911.4	913.8	922.4	930.9	937.0
17.5°	894.3	895.5	905.3	917.5	919.9
20°	869.9	873.6	885.8	898.0	904.1
22.5°	847.9	850.4	863.8	879.7	884.5
25°	821.1	823.5	838.2	854.0	862.6
27.5°	793.0	795.5	811.3	828.4	834.5
30°	762.5	765.0	780.8	799.1	805.2
32.5°	730.8	733.2	750.3	766.2	774.7
35°	697.9	699.1	717.4	734.5	741.8
37.5°	661.3	664.9	682.0	699.1	707.6
40°	624.7	628.3	647.8	663.7	669.8
42.5°	590.5	595.4	611.2	625.9	632.0
45°	551.5	555.1	573.4	586.8	592.9
47.5°	516.1	519.7	535.6	549.0	552.7
50°	479.5	481.9	495.3	507.5	512.4
52.5°	442.9	444.1	456.3	468.5	472.2
55°	405.1	406.3	417.3	428.2	431.9
57.5°	369.7	369.7	379.4	388.0	391.6
60°	331.9	331.9	340.4	348.9	352.6
62.5°	296.5	296.5	305.0	311.1	316.0
65°	263.5	263.5	268.4	273.3	277.0
67.5°	231.8	228.1	233.0	239.1	237.9
70°	198.9	195.2	198.9	201.3	202.5
72.5°	165.9	163.5	165.9	167.1	169.6
75°	134.2	133.0	134.2	134.2	134.2
77.5°	107.4	103.7	106.1	104.9	103.7
80°	79.3	78.1	76.9	75.6	76.9
82.5°	54.9	53.7	53.7	51.2	51.2
85°	31.7	30.5	30.5	28.1	28.1
87.5°	12.2	12.2	11.0	11.0	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)