

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: P296422

Luminaire Tested: **22RLN-LD5-31-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296422
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-3000K
Description: RLN LED 2x2 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (252) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2969.0 lumens
Efficiency: N/A
Efficacy: 122.3 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

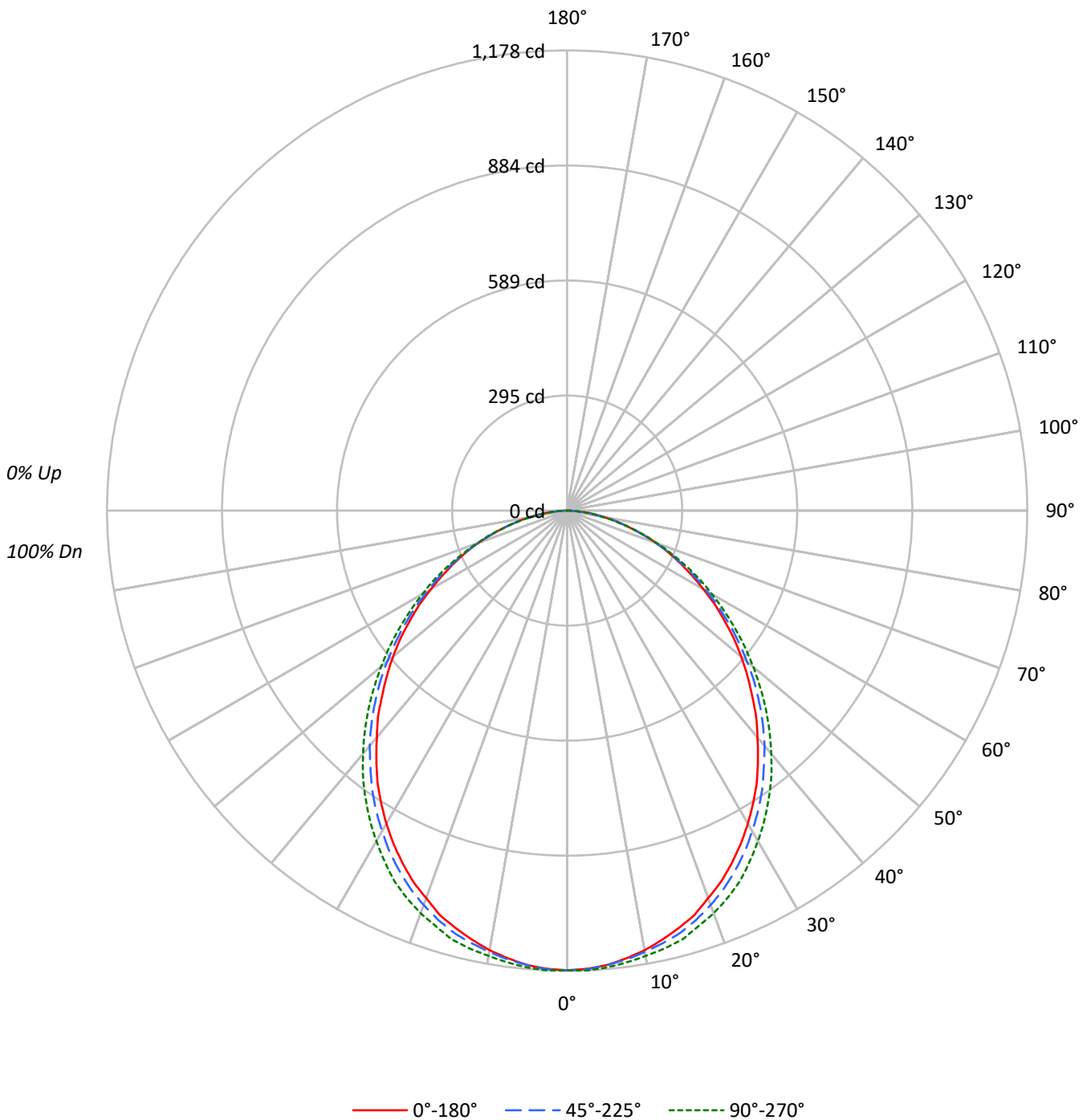
Input Watts (W): 24.273
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3167	3167	3167
5°	3155	3155	3171
10°	3123	3135	3163
15°	3081	3118	3167
20°	3023	3078	3141
25°	2958	3020	3108
30°	2875	2944	3036
35°	2781	2859	2957
40°	2662	2761	2855
45°	2546	2648	2738
50°	2436	2516	2603
55°	2306	2375	2458
60°	2167	2223	2302
65°	2036	2074	2139
70°	1899	1899	1933
75°	1693	1693	1693
80°	1491	1446	1446
85°	1189	1142	1050



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.0	3.7
10°-20°	315.5	10.6
20°-30°	468.7	15.8
30°-40°	544.0	18.3
40°-50°	535.6	18.0
50°-60°	453.3	15.3
60°-70°	323.3	10.9
70°-80°	173.7	5.9
80°-90°	43.8	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°	895.3	30.2
0°-40°	1439.3	48.5
0°-60°	2428.2	81.8
0°-90°	2969.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2969.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1177	1177	1177	1177	1177	
5°	1168	1168	1168	1172	1174	111
15°	1106	1109	1119	1130	1137	312
25°	996	999	1017	1036	1047	458
35°	847	848	870	891	900	528
45°	669	674	696	712	719	517
55°	492	493	506	520	524	440
65°	320	320	326	332	336	317
75°	163	161	163	163	163	175
85°	38	37	37	34	34	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1176.8	1176.8	1176.8	1176.8	1176.8
2.5°	1173.9	1173.9	1175.4	1176.8	1178.3
5°	1168.0	1168.0	1168.0	1172.4	1173.9
7.5°	1156.1	1157.6	1159.1	1163.5	1166.5
10°	1142.8	1144.3	1147.2	1154.6	1157.6
12.5°	1125.0	1129.5	1133.9	1144.3	1148.7
15°	1105.8	1108.8	1119.1	1129.5	1136.9
17.5°	1085.1	1086.5	1098.4	1113.2	1116.2
20°	1055.5	1059.9	1074.7	1089.5	1096.9
22.5°	1028.8	1031.8	1048.1	1067.3	1073.2
25°	996.2	999.2	1017.0	1036.2	1046.6
27.5°	962.2	965.2	984.4	1005.1	1012.5
30°	925.2	928.2	947.4	969.6	977.0
32.5°	886.7	889.7	910.4	929.6	940.0
35°	846.7	848.2	870.4	891.1	900.0
37.5°	802.3	806.8	827.5	848.2	858.6
40°	757.9	762.4	786.0	805.3	812.7
42.5°	716.5	722.4	741.6	759.4	766.8
45°	669.1	673.5	695.7	712.0	719.4
47.5°	626.2	630.6	649.9	666.1	670.6
50°	581.8	584.7	601.0	615.8	621.7
52.5°	537.4	538.8	553.6	568.4	572.9
55°	491.5	492.9	506.3	519.6	524.0
57.5°	448.5	448.5	460.4	470.7	475.2
60°	402.6	402.6	413.0	423.4	427.8
62.5°	359.7	359.7	370.1	377.5	383.4
65°	319.7	319.7	325.7	331.6	336.0
67.5°	281.3	276.8	282.7	290.1	288.7
70°	241.3	236.8	241.3	244.3	245.7
72.5°	201.3	198.4	201.3	202.8	205.8
75°	162.8	161.4	162.8	162.8	162.8
77.5°	130.3	125.8	128.8	127.3	125.8
80°	96.2	94.7	93.3	91.8	93.3
82.5°	66.6	65.1	65.1	62.2	62.2
85°	38.5	37.0	37.0	34.0	34.0
87.5°	14.8	14.8	13.3	13.3	13.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)