

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: P296375

Luminaire Tested: **22RLN-LD5-20-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296375  
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-LD5-20-UNV-L83050-W2A1-U-4000K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (252) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2106.1 lumens  
Efficiency: N/A  
Efficacy: 133.2 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

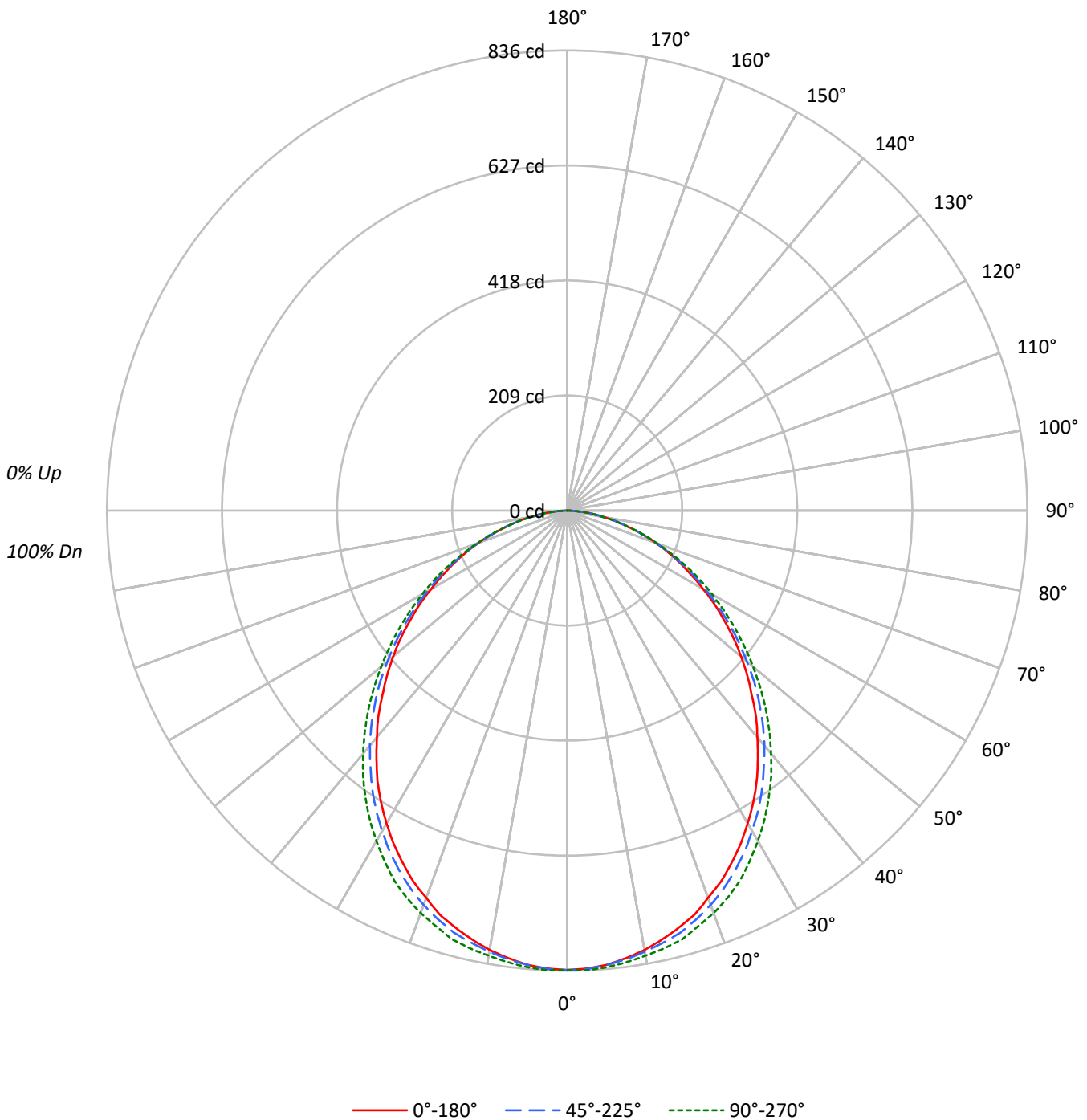
Input Watts (W): 15.81  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	37	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°	2246	2246	2246
5°	2238	2238	2249
10°	2215	2224	2244
15°	2185	2211	2247
20°	2144	2183	2228
25°	2098	2142	2204
30°	2039	2088	2153
35°	1973	2028	2097
40°	1888	1959	2025
45°	1806	1878	1942
50°	1728	1785	1846
55°	1635	1685	1744
60°	1537	1577	1633
65°	1444	1471	1518
70°	1347	1347	1371
75°	1201	1201	1201
80°	1058	1026	1026
85°	843	812	747



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.7	3.7
10°-20°	223.8	10.6
20°-30°	332.5	15.8
30°-40°	385.9	18.3
40°-50°	380.0	18.0
50°-60°	321.6	15.3
60°-70°	229.3	10.9
70°-80°	123.2	5.9
80°-90°	31.1	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°	635.0	30.2
0°-40°	1020.9	48.5
0°-60°	1722.4	81.8
0°-90°	2106.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2106.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	835	835	835	835	835	
5°	828	828	828	832	833	78
15°	784	786	794	801	806	221
25°	707	709	721	735	742	325
35°	601	602	617	632	638	375
45°	475	478	494	505	510	367
55°	349	350	359	369	372	312
65°	227	227	231	235	238	225
75°	116	114	116	116	116	124
85°	27	26	26	24	24	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	834.8	834.8	834.8	834.8	834.8
2.5°	832.7	832.7	833.7	834.8	835.8
5°	828.5	828.5	828.5	831.6	832.7
7.5°	820.1	821.1	822.2	825.3	827.4
10°	810.6	811.7	813.8	819.0	821.1
12.5°	798.0	801.2	804.3	811.7	814.8
15°	784.4	786.5	793.8	801.2	806.4
17.5°	769.7	770.7	779.1	789.6	791.7
20°	748.7	751.8	762.3	772.8	778.1
22.5°	729.8	731.9	743.4	757.1	761.3
25°	706.7	708.8	721.4	735.0	742.4
27.5°	682.5	684.6	698.3	713.0	718.2
30°	656.3	658.4	672.0	687.8	693.0
32.5°	629.0	631.1	645.8	659.4	666.8
35°	600.6	601.7	617.4	632.1	638.4
37.5°	569.1	572.3	587.0	601.7	609.0
40°	537.6	540.8	557.6	571.2	576.5
42.5°	508.2	512.4	526.1	538.7	543.9
45°	474.6	477.8	493.5	505.1	510.3
47.5°	444.2	447.3	461.0	472.5	475.7
50°	412.7	414.8	426.3	436.8	441.0
52.5°	381.2	382.2	392.7	403.2	406.4
55°	348.6	349.7	359.1	368.6	371.7
57.5°	318.2	318.2	326.6	333.9	337.1
60°	285.6	285.6	293.0	300.3	303.5
62.5°	255.2	255.2	262.5	267.8	272.0
65°	226.8	226.8	231.0	235.2	238.4
67.5°	199.5	196.4	200.6	205.8	204.8
70°	171.2	168.0	171.2	173.3	174.3
72.5°	142.8	140.7	142.8	143.9	146.0
75°	115.5	114.5	115.5	115.5	115.5
77.5°	92.4	89.3	91.4	90.3	89.3
80°	68.3	67.2	66.2	65.1	66.2
82.5°	47.3	46.2	46.2	44.1	44.1
85°	27.3	26.3	26.3	24.2	24.2
87.5°	10.5	10.5	9.5	9.5	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)