

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: P296411

Luminaire Tested: **22RLN-LD5-20-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296411  
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-L82765-W2A1-U-6500K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (252) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2097.0 lumens  
Efficiency: N/A  
Efficacy: 130.3 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

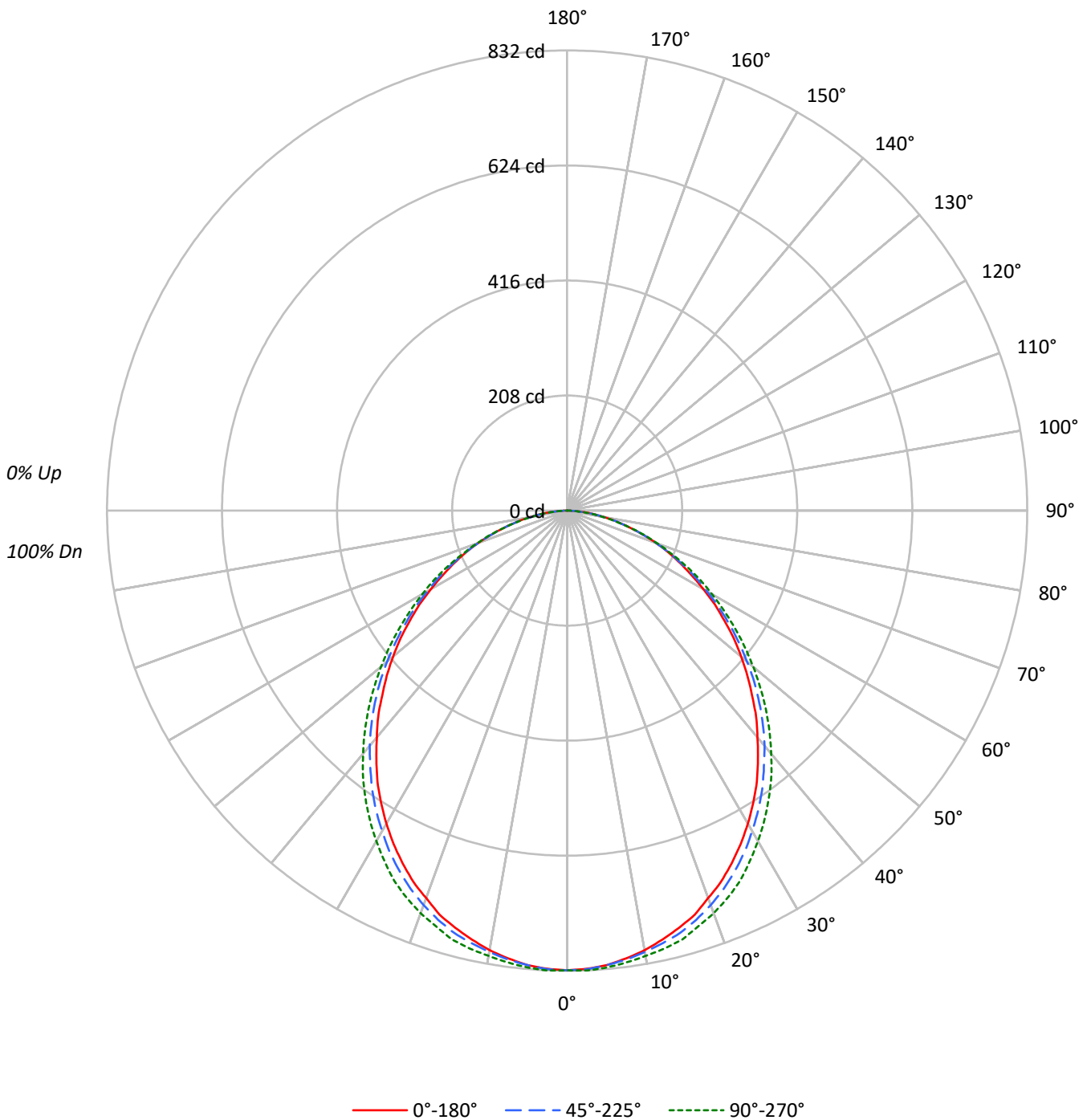
Input Watts (W): 16.089  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2237	2237	2237
5°	2228	2228	2240
10°	2206	2214	2234
15°	2176	2202	2237
20°	2135	2174	2218
25°	2089	2133	2195
30°	2031	2079	2144
35°	1964	2020	2088
40°	1880	1950	2016
45°	1799	1870	1934
50°	1720	1777	1838
55°	1628	1678	1736
60°	1531	1570	1626
65°	1438	1465	1511
70°	1341	1341	1366
75°	1196	1196	1196
80°	1054	1021	1021
85°	840	806	741



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.4	3.7
10°-20°	222.9	10.6
20°-30°	331.1	15.8
30°-40°	384.2	18.3
40°-50°	378.3	18.0
50°-60°	320.2	15.3
60°-70°	228.3	10.9
70°-80°	122.7	5.9
80°-90°	30.9	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°	632.3	30.2
0°-40°	1016.5	48.5
0°-60°	1715.0	81.8
0°-90°	2097.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2097.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	831	831	831	831	831	
5°	825	825	825	828	829	78
15°	781	783	790	798	803	220
25°	704	706	718	732	739	324
35°	598	599	615	629	636	373
45°	473	476	491	503	508	365
55°	347	348	358	367	370	311
65°	226	226	230	234	237	224
75°	115	114	115	115	115	123
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°	831.2	831.2	831.2	831.2	831.2
2.5°	829.1	829.1	830.2	831.2	832.3
5°	824.9	824.9	824.9	828.1	829.1
7.5°	816.6	817.6	818.7	821.8	823.9
10°	807.2	808.2	810.3	815.5	817.6
12.5°	794.6	797.7	800.9	808.2	811.3
15°	781.0	783.1	790.4	797.7	803.0
17.5°	766.4	767.4	775.8	786.2	788.3
20°	745.5	748.6	759.1	769.5	774.7
22.5°	726.7	728.7	740.2	753.8	758.0
25°	703.6	705.7	718.3	731.9	739.2
27.5°	679.6	681.7	695.3	709.9	715.1
30°	653.5	655.6	669.1	684.8	690.1
32.5°	626.3	628.4	643.0	656.6	663.9
35°	598.0	599.1	614.8	629.4	635.7
37.5°	566.7	569.8	584.5	599.1	606.4
40°	535.3	538.5	555.2	568.8	574.0
42.5°	506.0	510.2	523.8	536.4	541.6
45°	472.6	475.7	491.4	502.9	508.1
47.5°	442.3	445.4	459.0	470.5	473.6
50°	410.9	413.0	424.5	434.9	439.1
52.5°	379.5	380.6	391.0	401.5	404.6
55°	347.1	348.2	357.6	367.0	370.1
57.5°	316.8	316.8	325.2	332.5	335.6
60°	284.4	284.4	291.7	299.0	302.2
62.5°	254.1	254.1	261.4	266.6	270.8
65°	225.8	225.8	230.0	234.2	237.3
67.5°	198.7	195.5	199.7	204.9	203.9
70°	170.4	167.3	170.4	172.5	173.6
72.5°	142.2	140.1	142.2	143.2	145.3
75°	115.0	114.0	115.0	115.0	115.0
77.5°	92.0	88.9	91.0	89.9	88.9
80°	68.0	66.9	65.9	64.8	65.9
82.5°	47.0	46.0	46.0	43.9	43.9
85°	27.2	26.1	26.1	24.0	24.0
87.5°	10.5	10.5	9.4	9.4	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)