

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: P296407

Luminaire Tested: **22RLN-LD5-20-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296407  
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-4500K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (252) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2038.0 lumens  
Efficiency: N/A  
Efficacy: 129.7 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

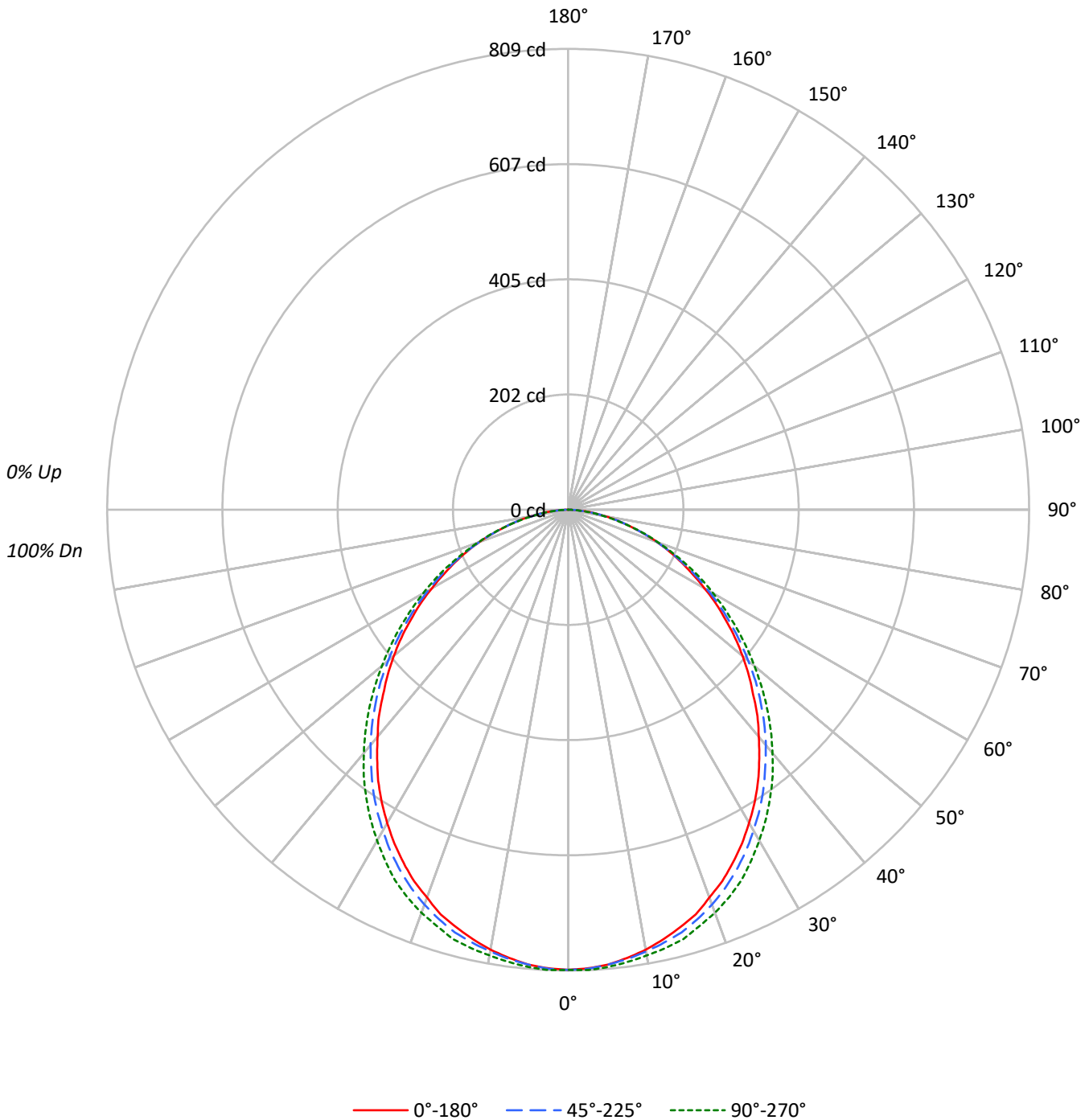
Input Watts (W): 15.717  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2174	2174	2174
5°	2166	2166	2177
10°	2143	2152	2171
15°	2115	2140	2174
20°	2075	2113	2156
25°	2031	2073	2133
30°	1973	2021	2084
35°	1909	1963	2030
40°	1828	1896	1960
45°	1748	1818	1879
50°	1672	1727	1787
55°	1583	1630	1688
60°	1488	1526	1581
65°	1398	1423	1469
70°	1303	1303	1327
75°	1162	1162	1162
80°	1023	992	992
85°	815	784	722



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.2	3.7
10°-20°	216.6	10.6
20°-30°	321.8	15.8
30°-40°	373.4	18.3
40°-50°	367.7	18.0
50°-60°	311.2	15.3
60°-70°	221.9	10.9
70°-80°	119.3	5.9
80°-90°	30.0	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°	614.5	30.2
0°-40°	987.9	48.5
0°-60°	1666.8	81.8
0°-90°	2038.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2038.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	808	808	808	808	808	
5°	802	802	802	805	806	76
15°	759	761	768	775	780	214
25°	684	686	698	711	718	315
35°	581	582	598	612	618	363
45°	459	462	478	489	494	355
55°	337	338	348	357	360	302
65°	220	220	224	228	231	218
75°	112	111	112	112	112	120
85°	26	25	25	23	23	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	807.8	807.8	807.8	807.8	807.8
2.5°	805.8	805.8	806.8	807.8	808.8
5°	801.7	801.7	801.7	804.8	805.8
7.5°	793.6	794.6	795.6	798.7	800.7
10°	784.4	785.5	787.5	792.6	794.6
12.5°	772.3	775.3	778.4	785.5	788.5
15°	759.0	761.1	768.2	775.3	780.4
17.5°	744.8	745.8	754.0	764.1	766.2
20°	724.5	727.5	737.7	747.9	752.9
22.5°	706.2	708.2	719.4	732.6	736.7
25°	683.9	685.9	698.1	711.3	718.4
27.5°	660.5	662.5	675.7	689.9	695.0
30°	635.1	637.1	650.3	665.6	670.6
32.5°	608.7	610.7	624.9	638.1	645.2
35°	581.2	582.2	597.5	611.7	617.8
37.5°	550.7	553.8	568.0	582.2	589.4
40°	520.3	523.3	539.6	552.8	557.9
42.5°	491.8	495.9	509.1	521.3	526.4
45°	459.3	462.3	477.6	488.8	493.8
47.5°	429.8	432.9	446.1	457.3	460.3
50°	399.3	401.4	412.5	422.7	426.8
52.5°	368.9	369.9	380.0	390.2	393.2
55°	337.4	338.4	347.5	356.7	359.7
57.5°	307.9	307.9	316.0	323.1	326.2
60°	276.4	276.4	283.5	290.6	293.7
62.5°	246.9	246.9	254.0	259.1	263.2
65°	219.5	219.5	223.5	227.6	230.7
67.5°	193.1	190.0	194.1	199.2	198.1
70°	165.6	162.6	165.6	167.7	168.7
72.5°	138.2	136.2	138.2	139.2	141.2
75°	111.8	110.8	111.8	111.8	111.8
77.5°	89.4	86.4	88.4	87.4	86.4
80°	66.0	65.0	64.0	63.0	64.0
82.5°	45.7	44.7	44.7	42.7	42.7
85°	26.4	25.4	25.4	23.4	23.4
87.5°	10.2	10.2	9.1	9.1	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)