

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: P296405

Luminaire Tested: **22RLN-LD5-20-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296405  
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-3500K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (252) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1959.0 lumens  
Efficiency: N/A  
Efficacy: 126.1 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

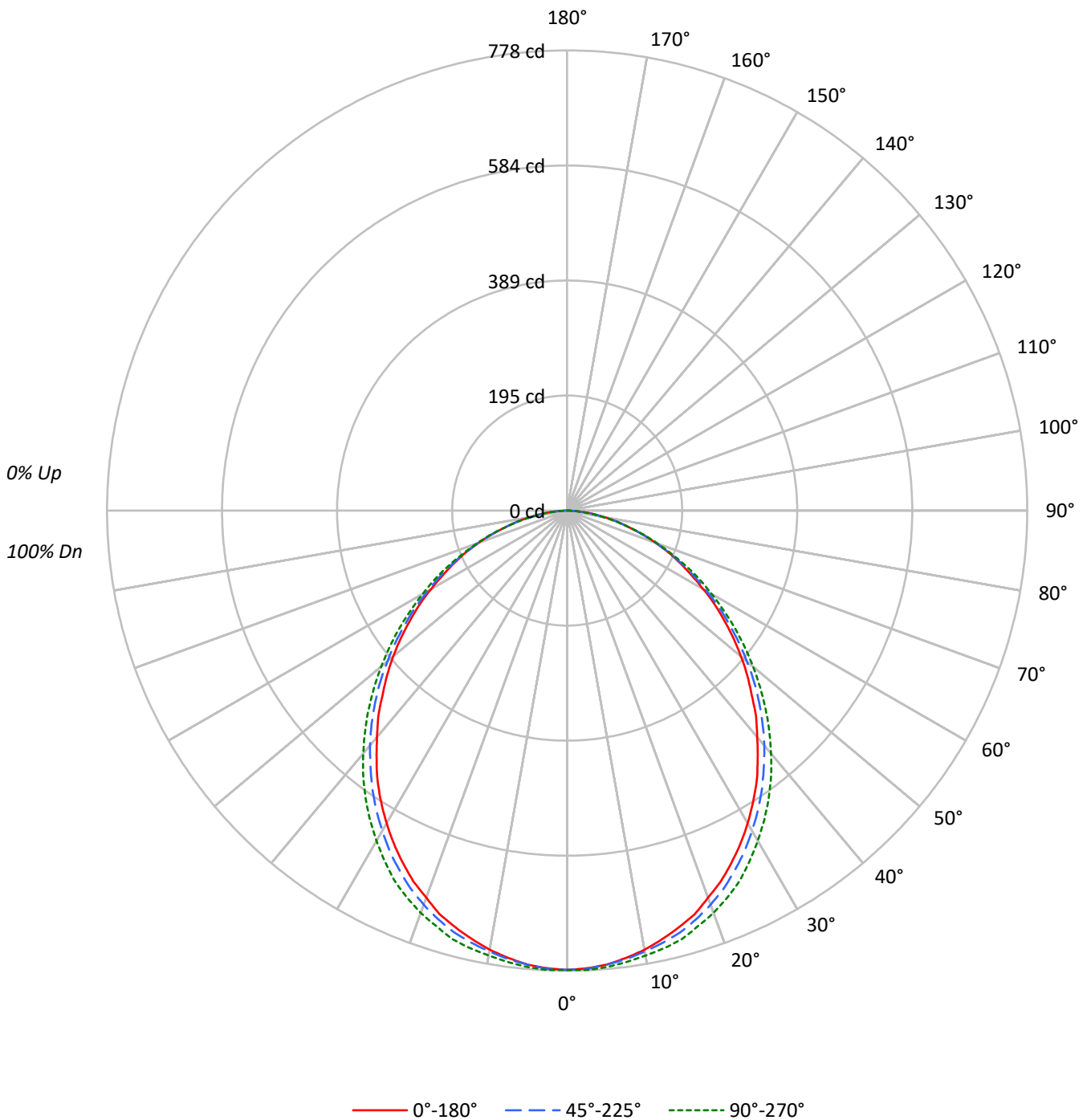
Input Watts (W): 15.531  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2090	2090	2090
5°	2082	2082	2092
10°	2060	2068	2087
15°	2033	2057	2090
20°	1994	2031	2073
25°	1952	1992	2051
30°	1897	1942	2003
35°	1835	1887	1951
40°	1757	1822	1884
45°	1680	1747	1807
50°	1607	1660	1717
55°	1521	1567	1622
60°	1430	1467	1519
65°	1344	1368	1412
70°	1253	1253	1275
75°	1117	1117	1117
80°	984	953	953
85°	784	753	695



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.2	3.7
10°-20°	208.2	10.6
20°-30°	309.3	15.8
30°-40°	358.9	18.3
40°-50°	353.4	18.0
50°-60°	299.1	15.3
60°-70°	213.3	10.9
70°-80°	114.6	5.9
80°-90°	28.9	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°	590.7	30.2
0°-40°	949.6	48.5
0°-60°	1602.2	81.8
0°-90°	1959.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1959.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	776	776	776	776	776	
5°	771	771	771	774	775	73
15°	730	732	738	745	750	206
25°	657	659	671	684	691	303
35°	559	560	574	588	594	349
45°	442	444	459	470	475	341
55°	324	325	334	343	346	291
65°	211	211	215	219	222	209
75°	107	106	107	107	107	115
85°	25	24	24	22	22	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	776.5	776.5	776.5	776.5	776.5
2.5°	774.6	774.6	775.5	776.5	777.5
5°	770.6	770.6	770.6	773.6	774.6
7.5°	762.8	763.8	764.8	767.7	769.7
10°	754.0	755.0	757.0	761.9	763.8
12.5°	742.3	745.2	748.2	755.0	757.9
15°	729.6	731.6	738.4	745.2	750.1
17.5°	715.9	716.9	724.7	734.5	736.5
20°	696.4	699.3	709.1	718.9	723.8
22.5°	678.8	680.8	691.5	704.2	708.1
25°	657.3	659.3	671.0	683.7	690.6
27.5°	634.9	636.8	649.5	663.2	668.1
30°	610.5	612.4	625.1	639.8	644.6
32.5°	585.1	587.0	600.7	613.4	620.2
35°	558.7	559.7	574.3	588.0	593.9
37.5°	529.4	532.3	546.0	559.7	566.5
40°	500.1	503.0	518.6	531.3	536.2
42.5°	472.7	476.6	489.3	501.1	505.9
45°	441.5	444.4	459.1	469.8	474.7
47.5°	413.2	416.1	428.8	439.5	442.5
50°	383.9	385.8	396.6	406.3	410.2
52.5°	354.6	355.5	365.3	375.1	378.0
55°	324.3	325.3	334.0	342.8	345.8
57.5°	296.0	296.0	303.8	310.6	313.5
60°	265.7	265.7	272.5	279.3	282.3
62.5°	237.3	237.3	244.2	249.1	253.0
65°	211.0	211.0	214.9	218.8	221.7
67.5°	185.6	182.6	186.6	191.4	190.5
70°	159.2	156.3	159.2	161.2	162.1
72.5°	132.8	130.9	132.8	133.8	135.8
75°	107.4	106.5	107.4	107.4	107.4
77.5°	86.0	83.0	85.0	84.0	83.0
80°	63.5	62.5	61.5	60.6	61.5
82.5°	44.0	43.0	43.0	41.0	41.0
85°	25.4	24.4	24.4	22.5	22.5
87.5°	9.8	9.8	8.8	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)