

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: P296465

Luminaire Tested: **22RLN-LD5-25-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296465  
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-LD5-25-UNV-L93050-W2A1-U-4500K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (252) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2302.0 lumens  
Efficiency: N/A  
Efficacy: 116.8 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

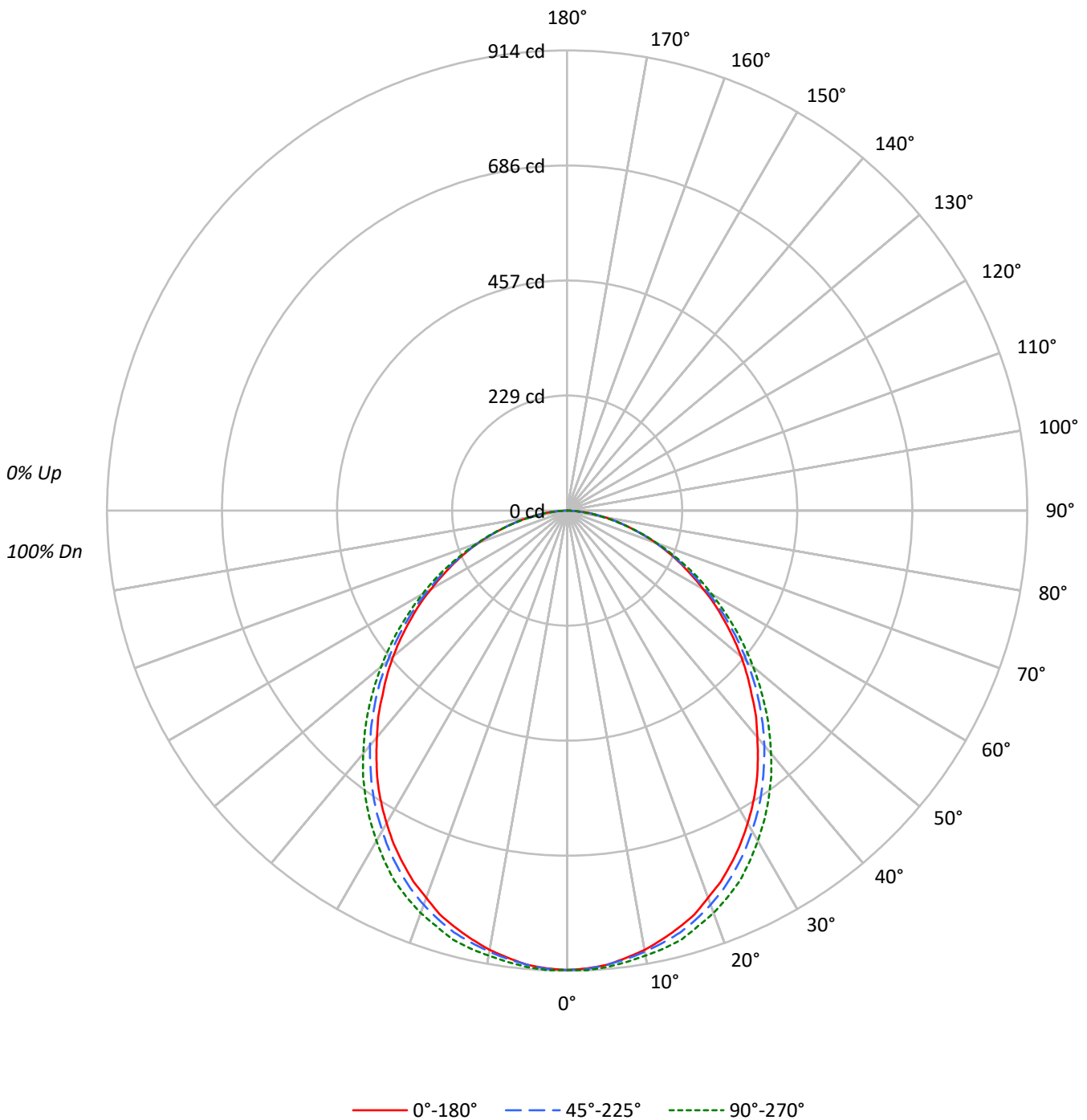
Input Watts (W): 19.716  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	71
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	65	56	49	75	64	55	49	61	54	49	59	53	48	58	52	48	46
6	71	58	50	43	70	57	49	43	56	48	43	54	47	42	52	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	38	36
8	62	49	40	34	60	48	40	34	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2456	2456	2456
5°	2446	2446	2459
10°	2421	2431	2452
15°	2389	2417	2456
20°	2343	2386	2436
25°	2293	2341	2409
30°	2229	2283	2354
35°	2157	2217	2292
40°	2064	2141	2213
45°	1974	2053	2123
50°	1888	1951	2018
55°	1788	1841	1906
60°	1680	1723	1785
65°	1578	1608	1659
70°	1472	1472	1499
75°	1313	1313	1313
80°	1156	1120	1120
85°	920	886	815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.1	3.7
10°-20°	244.7	10.6
20°-30°	363.4	15.8
30°-40°	421.8	18.3
40°-50°	415.3	18.0
50°-60°	351.5	15.3
60°-70°	250.7	10.9
70°-80°	134.7	5.9
80°-90°	33.9	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°	694.1	30.2
0°-40°	1115.9	48.5
0°-60°	1882.7	81.8
0°-90°	2302.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2302.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	912	912	912	912	912	
5°	906	906	906	909	910	86
15°	857	860	868	876	882	242
25°	772	775	788	803	812	355
35°	656	658	675	691	698	410
45°	519	522	539	552	558	401
55°	381	382	392	403	406	341
65°	248	248	252	257	260	246
75°	126	125	126	126	126	136
85°	30	29	29	26	26	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	912.5	912.5	912.5	912.5	912.5
2.5°	910.2	910.2	911.3	912.5	913.6
5°	905.6	905.6	905.6	909.0	910.2
7.5°	896.4	897.5	898.7	902.1	904.4
10°	886.1	887.2	889.5	895.2	897.5
12.5°	872.3	875.7	879.2	887.2	890.7
15°	857.4	859.7	867.7	875.7	881.5
17.5°	841.3	842.4	851.6	863.1	865.4
20°	818.3	821.8	833.3	844.7	850.5
22.5°	797.7	800.0	812.6	827.5	832.1
25°	772.4	774.7	788.5	803.4	811.5
27.5°	746.0	748.3	763.3	779.3	785.1
30°	717.3	719.6	734.6	751.8	757.5
32.5°	687.5	689.8	705.9	720.8	728.8
35°	656.5	657.7	674.9	690.9	697.8
37.5°	622.1	625.5	641.6	657.7	665.7
40°	587.6	591.1	609.5	624.4	630.1
42.5°	555.5	560.1	575.0	588.8	594.5
45°	518.8	522.2	539.4	552.1	557.8
47.5°	485.5	488.9	503.9	516.5	519.9
50°	451.1	453.4	466.0	477.5	482.1
52.5°	416.6	417.8	429.3	440.7	444.2
55°	381.1	382.2	392.5	402.9	406.3
57.5°	347.8	347.8	357.0	365.0	368.4
60°	312.2	312.2	320.2	328.3	331.7
62.5°	278.9	278.9	286.9	292.7	297.3
65°	247.9	247.9	252.5	257.1	260.5
67.5°	218.1	214.6	219.2	225.0	223.8
70°	187.1	183.6	187.1	189.4	190.5
72.5°	156.1	153.8	156.1	157.2	159.5
75°	126.3	125.1	126.3	126.3	126.3
77.5°	101.0	97.6	99.9	98.7	97.6
80°	74.6	73.5	72.3	71.2	72.3
82.5°	51.6	50.5	50.5	48.2	48.2
85°	29.8	28.7	28.7	26.4	26.4
87.5°	11.5	11.5	10.3	10.3	10.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)