

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: P296460

Luminaire Tested: **22RLN-LD5-20-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296460  
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-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: 1874.0 lumens  
Efficiency: N/A  
Efficacy: 116.5 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

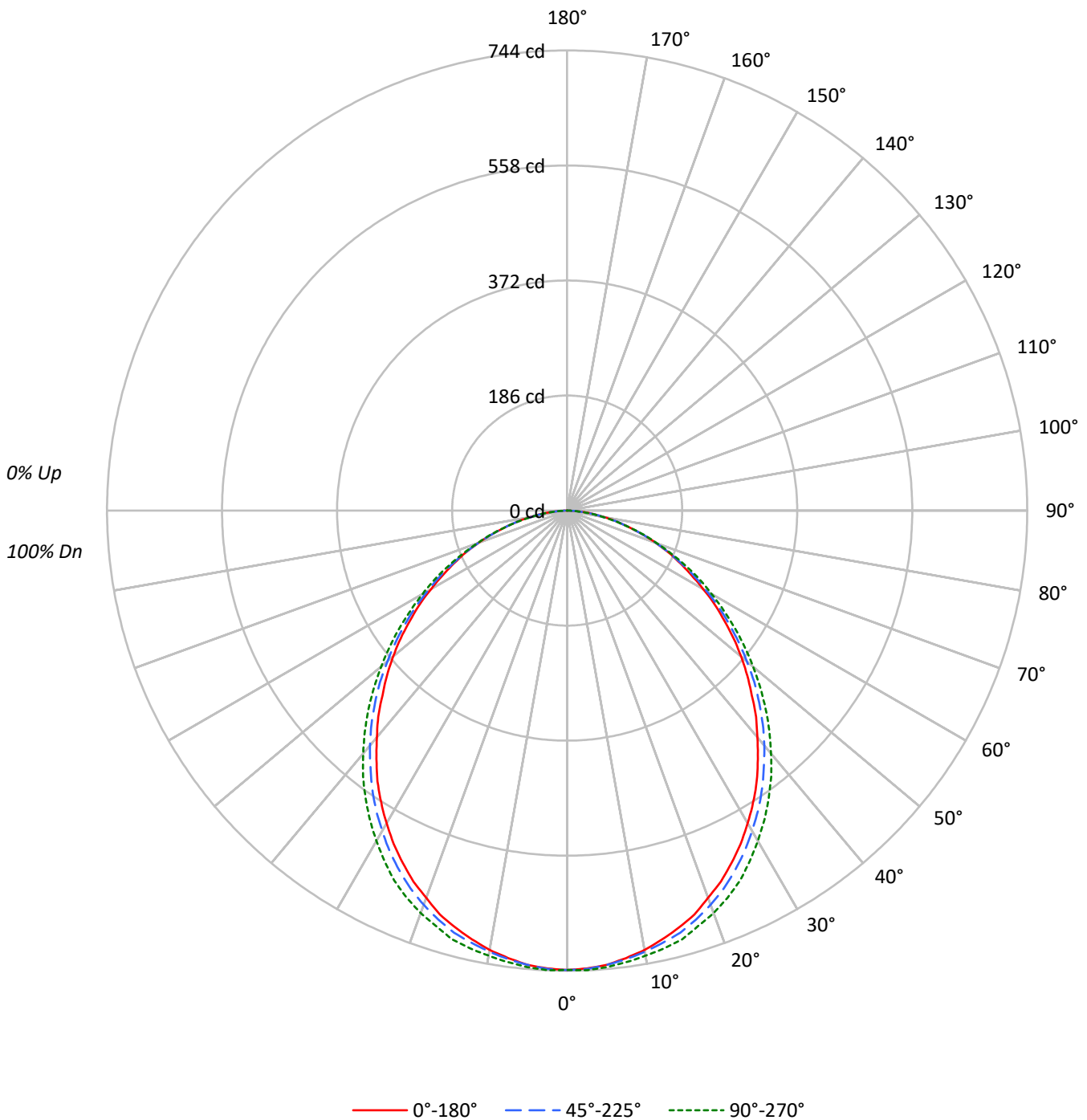
Input Watts (W): 16.089  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1999	1999	1999
5°	1991	1991	2001
10°	1971	1979	1997
15°	1945	1968	1999
20°	1908	1942	1983
25°	1867	1906	1961
30°	1815	1858	1916
35°	1756	1805	1866
40°	1681	1743	1802
45°	1607	1671	1728
50°	1537	1588	1643
55°	1455	1499	1552
60°	1368	1403	1453
65°	1285	1309	1351
70°	1198	1198	1220
75°	1069	1069	1069
80°	941	913	913
85°	750	722	664



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.1	3.7
10°-20°	199.2	10.6
20°-30°	295.9	15.8
30°-40°	343.4	18.3
40°-50°	338.1	18.0
50°-60°	286.1	15.3
60°-70°	204.0	10.9
70°-80°	109.7	5.9
80°-90°	27.6	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°	565.1	30.2
0°-40°	908.4	48.5
0°-60°	1532.6	81.8
0°-90°	1874.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1874.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	743	743	743	743	743	
5°	737	737	737	740	741	70
15°	698	700	706	713	718	197
25°	629	631	642	654	661	289
35°	534	535	549	562	568	334
45°	422	425	439	449	454	327
55°	310	311	320	328	331	278
65°	202	202	206	209	212	200
75°	103	102	103	103	103	110
85°	24	23	23	22	22	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	742.8	742.8	742.8	742.8	742.8
2.5°	740.9	740.9	741.9	742.8	743.7
5°	737.2	737.2	737.2	740.0	740.9
7.5°	729.7	730.7	731.6	734.4	736.3
10°	721.3	722.3	724.1	728.8	730.7
12.5°	710.1	712.9	715.7	722.3	725.1
15°	698.0	699.8	706.4	712.9	717.6
17.5°	684.9	685.8	693.3	702.6	704.5
20°	666.2	669.0	678.3	687.7	692.4
22.5°	649.4	651.2	661.5	673.7	677.4
25°	628.8	630.7	641.9	654.0	660.6
27.5°	607.3	609.2	621.3	634.4	639.1
30°	584.0	585.8	598.0	612.0	616.7
32.5°	559.7	561.5	574.6	586.8	593.3
35°	534.5	535.4	549.4	562.5	568.1
37.5°	506.4	509.2	522.3	535.4	541.9
40°	478.4	481.2	496.1	508.3	513.0
42.5°	452.2	456.0	468.1	479.3	484.0
45°	422.3	425.1	439.1	449.4	454.1
47.5°	395.2	398.0	410.2	420.5	423.3
50°	367.2	369.1	379.3	388.7	392.4
52.5°	339.2	340.1	349.4	358.8	361.6
55°	310.2	311.1	319.5	328.0	330.8
57.5°	283.1	283.1	290.6	297.1	299.9
60°	254.1	254.1	260.7	267.2	270.0
62.5°	227.0	227.0	233.6	238.3	242.0
65°	201.8	201.8	205.6	209.3	212.1
67.5°	177.5	174.7	178.5	183.1	182.2
70°	152.3	149.5	152.3	154.2	155.1
72.5°	127.1	125.2	127.1	128.0	129.9
75°	102.8	101.8	102.8	102.8	102.8
77.5°	82.2	79.4	81.3	80.4	79.4
80°	60.7	59.8	58.9	57.9	58.9
82.5°	42.0	41.1	41.1	39.2	39.2
85°	24.3	23.4	23.4	21.5	21.5
87.5°	9.3	9.3	8.4	8.4	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)