

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: P296373

Luminaire Tested: **22RLN-LD5-20-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296373  
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-L83050-W2A1-U-3000K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (252) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1896.0 lumens  
Efficiency: N/A  
Efficacy: 122.8 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

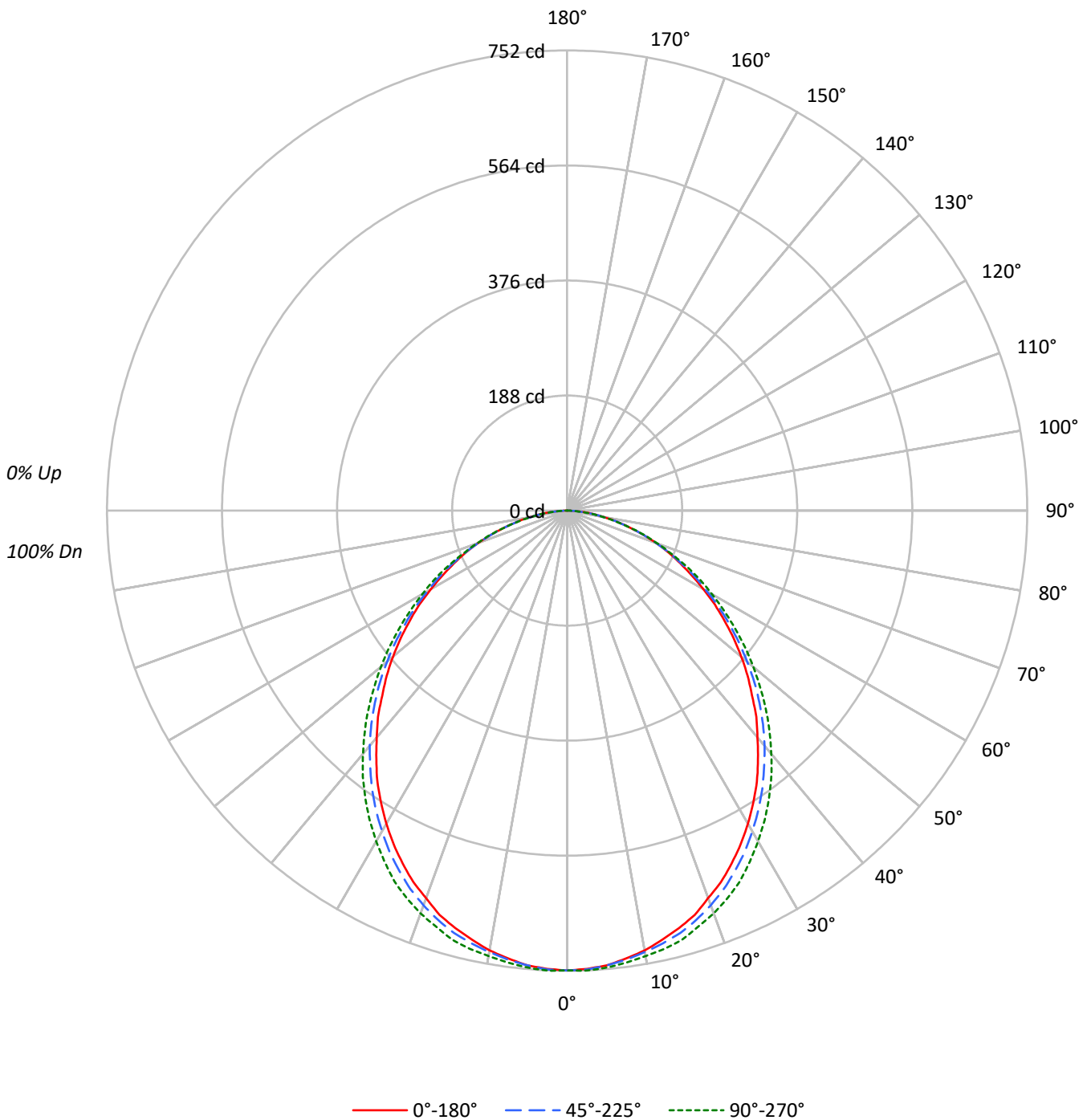
Input Watts (W): 15.438  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2022	2022	2022
5°	2015	2015	2025
10°	1994	2002	2020
15°	1967	1991	2023
20°	1930	1965	2006
25°	1889	1928	1984
30°	1836	1880	1939
35°	1776	1826	1888
40°	1700	1763	1823
45°	1626	1691	1748
50°	1555	1607	1662
55°	1472	1517	1570
60°	1384	1419	1470
65°	1300	1324	1366
70°	1212	1212	1234
75°	1081	1081	1081
80°	951	924	924
85°	760	729	670



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.9	3.7
10°-20°	201.5	10.6
20°-30°	299.3	15.8
30°-40°	347.4	18.3
40°-50°	342.1	18.0
50°-60°	289.5	15.3
60°-70°	206.5	10.9
70°-80°	110.9	5.9
80°-90°	28.0	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°	571.7	30.2
0°-40°	919.1	48.5
0°-60°	1550.7	81.8
0°-90°	1896.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1896.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	752	752	752	752	752	
5°	746	746	746	749	750	71
15°	706	708	715	721	726	199
25°	636	638	649	662	668	293
35°	541	542	556	569	575	337
45°	427	430	444	455	459	330
55°	314	315	323	332	335	281
65°	204	204	208	212	215	203
75°	104	103	104	104	104	112
85°	25	24	24	22	22	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	751.5	751.5	751.5	751.5	751.5
2.5°	749.6	749.6	750.6	751.5	752.5
5°	745.9	745.9	745.9	748.7	749.6
7.5°	738.3	739.2	740.2	743.0	744.9
10°	729.8	730.7	732.6	737.4	739.2
12.5°	718.4	721.3	724.1	730.7	733.6
15°	706.2	708.0	714.7	721.3	726.0
17.5°	692.9	693.9	701.4	710.9	712.8
20°	674.0	676.9	686.3	695.8	700.5
22.5°	657.0	658.9	669.3	681.6	685.4
25°	636.2	638.1	649.4	661.7	668.3
27.5°	614.5	616.4	628.6	641.9	646.6
30°	590.8	592.7	605.0	619.2	623.9
32.5°	566.2	568.1	581.4	593.7	600.3
35°	540.7	541.7	555.9	569.1	574.8
37.5°	512.4	515.2	528.4	541.7	548.3
40°	484.0	486.8	502.0	514.3	519.0
42.5°	457.5	461.3	473.6	485.0	489.7
45°	427.3	430.1	444.3	454.7	459.4
47.5°	399.9	402.7	415.0	425.4	428.2
50°	371.5	373.4	383.8	393.3	397.0
52.5°	343.2	344.1	353.6	363.0	365.8
55°	313.8	314.8	323.3	331.8	334.6
57.5°	286.4	286.4	294.0	300.6	303.4
60°	257.1	257.1	263.7	270.4	273.2
62.5°	229.7	229.7	236.3	241.1	244.8
65°	204.2	204.2	208.0	211.8	214.6
67.5°	179.6	176.8	180.6	185.3	184.3
70°	154.1	151.3	154.1	156.0	156.9
72.5°	128.6	126.7	128.6	129.5	131.4
75°	104.0	103.0	104.0	104.0	104.0
77.5°	83.2	80.4	82.2	81.3	80.4
80°	61.4	60.5	59.6	58.6	59.6
82.5°	42.5	41.6	41.6	39.7	39.7
85°	24.6	23.6	23.6	21.7	21.7
87.5°	9.5	9.5	8.5	8.5	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)