

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: P296131

Luminaire Tested: **24RLN-LD5-67-RDP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296131  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059-R2)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-67-RDP-UNV-L83050-W2A1-U-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5886.0 lumens  
Efficiency: N/A  
Efficacy: 115.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

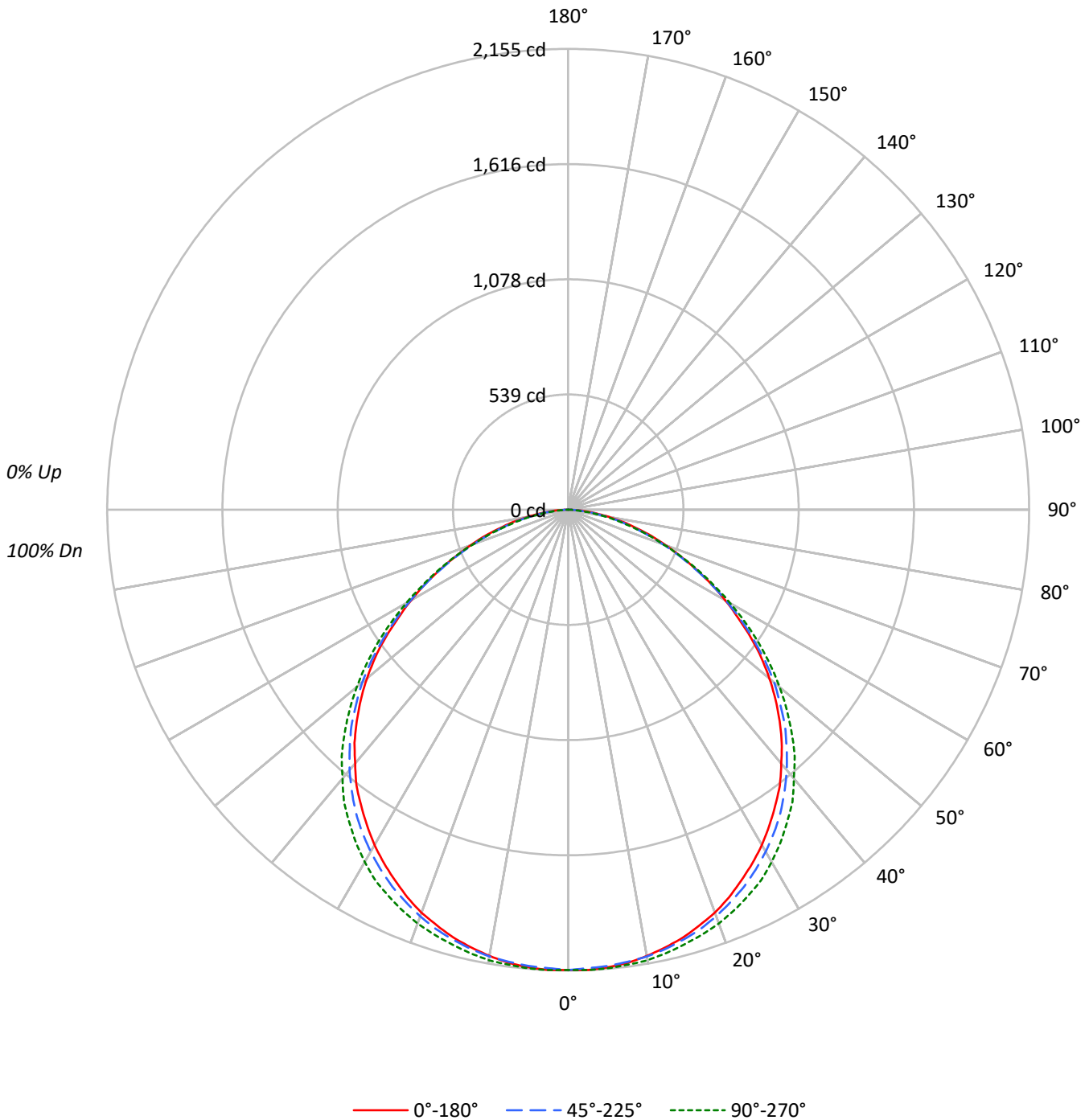
Input Watts (W): 51.057  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60					60			
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52					52			
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25					25			

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

	0°	45°	90°
0°	2896	2896	2896
5°	2901	2892	2907
10°	2895	2898	2923
15°	2886	2899	2930
20°	2871	2897	2948
25°	2841	2887	2957
30°	2813	2869	2956
35°	2773	2842	2930
40°	2722	2792	2883
45°	2660	2728	2813
50°	2571	2631	2701
55°	2446	2478	2551
60°	2283	2295	2355
65°	2097	2083	2133
70°	1906	1853	1862
75°	1695	1602	1590
80°	1471	1315	1280
85°	1207	931	724



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.1	3.5
10°-20°	588.5	10.0
20°-30°	898.3	15.3
30°-40°	1083.0	18.4
40°-50°	1104.4	18.8
50°-60°	945.2	16.1
60°-70°	651.0	11.1
70°-80°	333.8	5.7
80°-90°	77.7	1.3
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°	1691.0	28.7
0°-40°	2773.9	47.1
0°-60°	4823.5	81.9
0°-90°	5886.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5886.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2152	2152	2152	2152	2152	
5°	2148	2144	2141	2148	2152	204
15°	2072	2070	2081	2097	2103	584
25°	1914	1920	1945	1978	1992	882
35°	1688	1695	1730	1768	1784	1056
45°	1398	1400	1434	1469	1478	1077
55°	1043	1036	1056	1078	1087	930
65°	659	643	654	659	670	655
75°	326	313	308	308	306	351
85°	78	69	60	54	47	91
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2152.5	2152.5	2152.5	2152.5	2152.5
2.5°	2154.8	2150.3	2145.8	2150.3	2154.8
5°	2148.1	2143.6	2141.4	2148.1	2152.5
7.5°	2136.9	2132.4	2132.4	2141.4	2145.8
10°	2119.0	2116.8	2121.3	2130.2	2139.1
12.5°	2096.7	2096.7	2103.4	2114.6	2123.5
15°	2072.1	2069.9	2081.1	2096.7	2103.4
17.5°	2038.7	2040.9	2056.5	2074.4	2083.3
20°	2005.2	2007.4	2023.0	2047.6	2058.8
22.5°	1962.7	1967.2	1985.1	2016.3	2027.5
25°	1913.6	1920.3	1944.9	1978.4	1991.8
27.5°	1864.5	1871.2	1898.0	1935.9	1953.8
30°	1810.9	1819.8	1846.6	1886.8	1902.4
32.5°	1750.6	1757.3	1790.8	1831.0	1846.6
35°	1688.1	1694.8	1730.5	1768.5	1784.1
37.5°	1625.6	1625.6	1661.3	1705.9	1721.6
40°	1549.6	1551.9	1589.8	1632.3	1641.2
42.5°	1478.2	1478.2	1511.7	1551.9	1567.5
45°	1397.8	1400.0	1433.5	1469.3	1478.2
47.5°	1315.2	1315.2	1344.2	1377.7	1386.6
50°	1228.1	1223.6	1257.1	1283.9	1290.6
52.5°	1138.8	1132.1	1158.9	1181.2	1190.1
55°	1042.8	1036.1	1056.2	1078.5	1087.4
57.5°	942.3	933.4	955.7	975.8	980.3
60°	848.5	835.1	853.0	864.1	875.3
62.5°	754.7	739.1	752.5	759.2	768.1
65°	658.7	643.1	654.2	658.7	669.9
67.5°	567.2	556.0	558.2	564.9	569.4
70°	484.5	471.1	471.1	471.1	473.4
72.5°	408.6	388.5	386.3	388.5	388.5
75°	326.0	312.6	308.1	308.1	305.9
77.5°	261.3	243.4	241.2	236.7	232.2
80°	189.8	174.2	169.7	167.5	165.2
82.5°	131.7	118.3	113.9	109.4	102.7
85°	78.2	69.2	60.3	53.6	46.9
87.5°	29.0	26.8	22.3	20.1	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)