

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: P229873

Luminaire Tested: **24RLN-LD5-67-UNV-L930-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229873  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36062)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-67-UNV-L930-CD1-SVPD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR  
Light Source: (252)3000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5538.0 lumens  
Efficiency: N/A  
Efficacy: 102.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

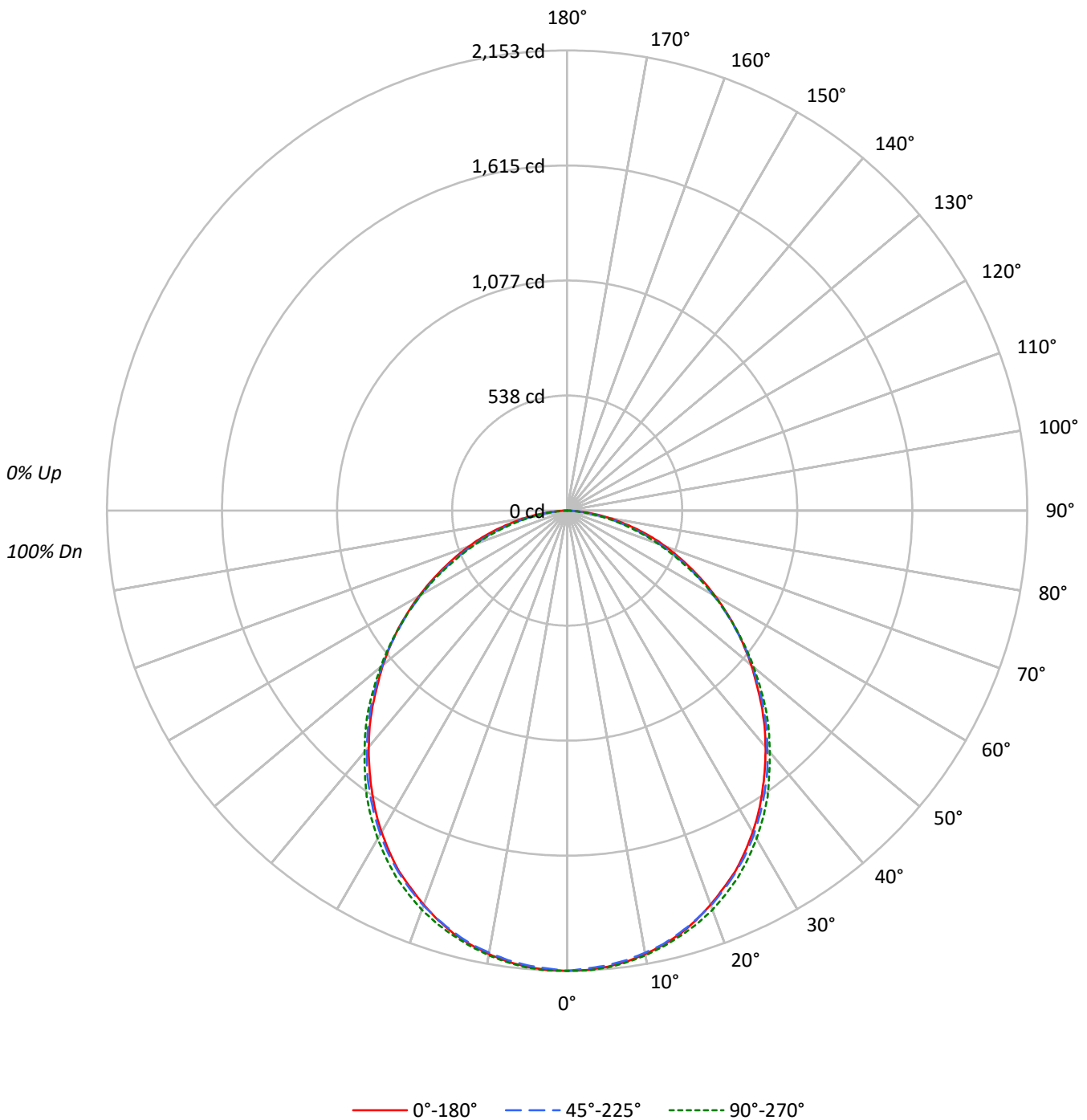
Input Watts (W): 53.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P229873

CATALOG NUMBER: 24RLN-LD5-67-UNV-L930-CD1-SVPD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P229873

CATALOG NUMBER: 24RLN-LD5-67-UNV-L930-CD1-SVPD1-U

**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	89	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60					60			
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52					52			
5	77	64	56	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	54	47	42	52	46	42	40					40			
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35					35			
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	31					31			
9	58	44	36	31	56	44	36	31	43	35	31	42	35	30	41	35	30	28					28			
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26					26			

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

	0°	45°	90°
0°	3298	3298	3298
5°	3294	3284	3300
10°	3278	3267	3286
15°	3249	3241	3264
20°	3199	3205	3240
25°	3147	3156	3198
30°	3072	3091	3135
35°	2981	3011	3057
40°	2888	2913	2948
45°	2785	2812	2850
50°	2681	2694	2715
55°	2576	2562	2571
60°	2453	2415	2426
65°	2314	2263	2224
70°	2188	2069	2022
75°	2014	1837	1774
80°	1773	1556	1462
85°	1395	1084	807



TEST NUMBER: P229873

CATALOG NUMBER: 24RLN-LD5-67-UNV-L930-CD1-SVPD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.3	3.7
10°-20°	577.8	10.4
20°-30°	861.3	15.6
30°-40°	1006.9	18.2
40°-50°	999.9	18.1
50°-60°	858.6	15.5
60°-70°	618.5	11.2
70°-80°	333.1	6.0
80°-90°	78.5	1.4
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°	1642.4	29.7
0°-40°	2649.3	47.8
0°-60°	4507.9	81.4
0°-90°	5538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5538.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2153	2153	2153	2153	2153	
5°	2143	2141	2136	2143	2146	203
15°	2049	2044	2044	2056	2058	577
25°	1862	1855	1868	1887	1892	856
35°	1594	1592	1610	1628	1635	997
45°	1286	1282	1298	1308	1316	992
55°	965	956	959	965	963	861
65°	638	628	624	619	614	634
75°	340	319	310	302	300	361
85°	79	72	62	49	46	95
90°	0	0	0	0	0	



TEST NUMBER: P229873

CATALOG NUMBER: 24RLN-LD5-67-UNV-L930-CD1-SVPD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2153.3	2153.3	2153.3	2153.3	2153.3
2.5°	2151.5	2149.8	2144.5	2151.5	2153.3
5°	2142.7	2140.9	2135.6	2142.7	2146.2
7.5°	2128.6	2125.1	2121.5	2128.6	2132.1
10°	2107.4	2103.9	2100.4	2109.2	2112.7
12.5°	2081.0	2077.4	2077.4	2084.5	2088.0
15°	2049.2	2043.9	2043.9	2056.3	2058.1
17.5°	2008.7	2005.1	2006.9	2021.0	2026.3
20°	1962.8	1961.1	1966.3	1982.2	1987.5
22.5°	1911.7	1909.9	1918.7	1938.1	1941.7
25°	1862.3	1855.2	1867.6	1887.0	1892.3
27.5°	1800.6	1795.3	1811.2	1828.8	1834.1
30°	1737.1	1731.8	1747.7	1767.1	1772.4
32.5°	1668.3	1664.8	1680.7	1700.1	1705.3
35°	1594.2	1592.5	1610.1	1627.7	1634.8
37.5°	1520.2	1518.4	1537.8	1551.9	1553.7
40°	1444.3	1440.8	1456.7	1472.6	1474.3
42.5°	1366.7	1361.5	1379.1	1391.4	1396.7
45°	1285.6	1282.1	1298.0	1308.5	1315.6
47.5°	1202.7	1202.7	1211.6	1223.9	1225.7
50°	1125.1	1119.8	1130.4	1137.5	1139.2
52.5°	1044.0	1038.7	1047.5	1049.3	1052.8
55°	964.7	955.8	959.4	964.7	962.9
57.5°	881.8	867.7	874.7	874.7	878.2
60°	800.6	788.3	788.3	788.3	791.8
62.5°	719.5	707.2	707.2	705.4	703.7
65°	638.4	627.8	624.3	619.0	613.7
67.5°	560.8	548.5	541.4	534.4	529.1
70°	488.5	467.3	462.0	451.5	451.5
72.5°	416.2	395.0	384.5	377.4	375.6
75°	340.4	319.2	310.4	301.6	299.8
77.5°	266.3	252.2	238.1	231.0	227.5
80°	201.0	188.7	176.4	164.0	165.8
82.5°	137.6	125.2	116.4	105.8	102.3
85°	79.4	72.3	61.7	49.4	45.9
87.5°	33.5	24.7	17.6	17.6	17.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)