

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: P293311

Luminaire Tested: **24GR-LD5-48-F125-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293311  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33304)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-48-F125-UNV-L93050-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4529.0 lumens  
Efficiency: N/A  
Efficacy: 132.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

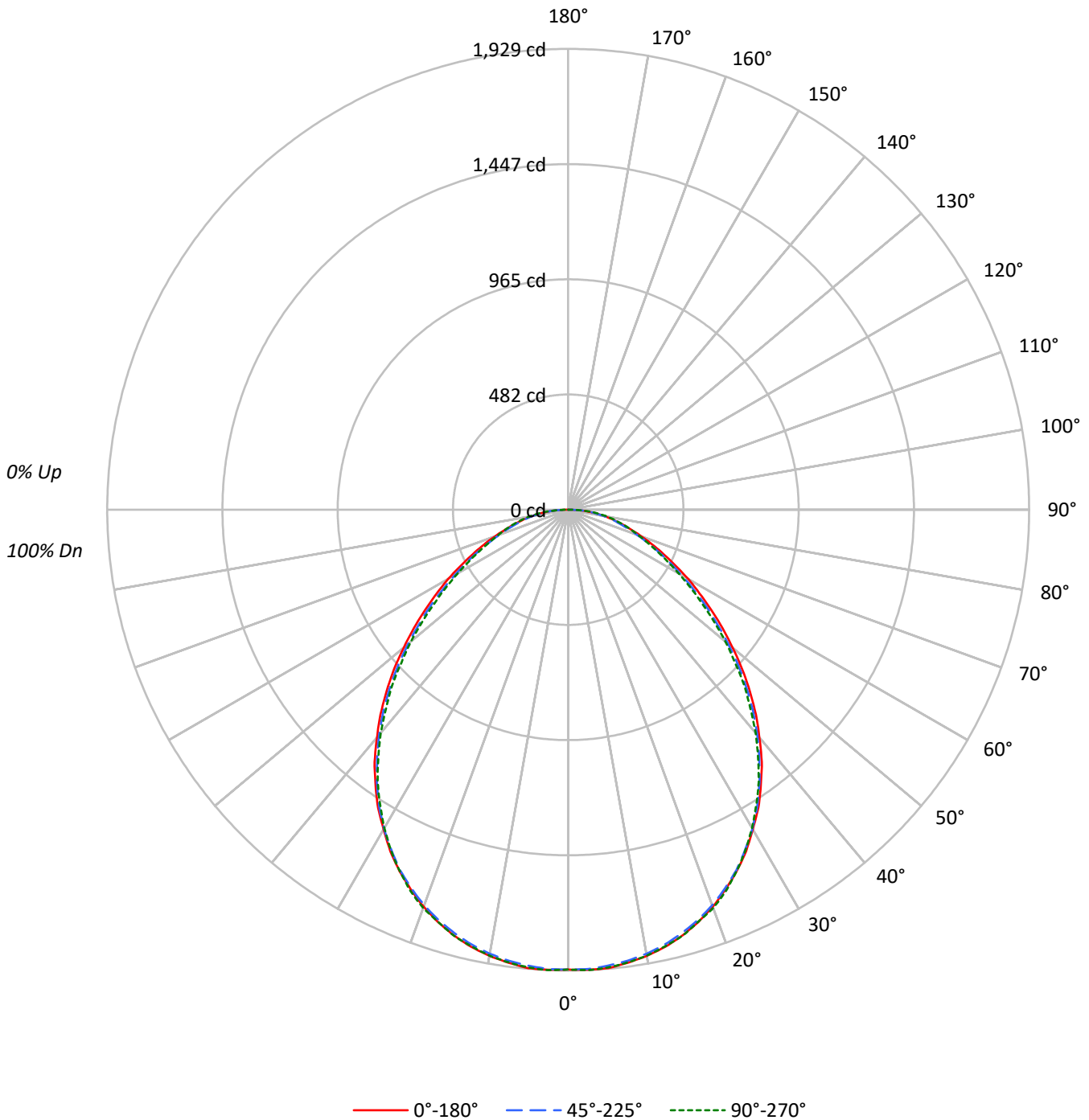
Input Watts (W): 34.207818  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P293311

CATALOG NUMBER: 24GR-LD5-48-F125-UNV-L93050-W2A1-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P293311

CATALOG NUMBER: 24GR-LD5-48-F125-UNV-L93050-W2A1-U-5000K

**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	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62					62			
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42					42			
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33					33			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

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

	0°	45°	90°
0°	2590	2590	2590
5°	2602	2587	2598
10°	2591	2579	2590
15°	2571	2557	2573
20°	2533	2523	2541
25°	2478	2472	2477
30°	2400	2395	2390
35°	2309	2292	2282
40°	2186	2161	2144
45°	2045	2007	1983
50°	1879	1829	1797
55°	1714	1651	1602
60°	1556	1473	1435
65°	1402	1323	1301
70°	1284	1200	1234
75°	1200	1145	1229
80°	1190	1168	1284
85°	1213	1224	1399



TEST NUMBER: P293311

CATALOG NUMBER: 24GR-LD5-48-F125-UNV-L93050-W2A1-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.2	4.0
10°-20°	517.9	11.4
20°-30°	765.1	16.9
30°-40°	869.9	19.2
40°-50°	812.3	17.9
50°-60°	631.7	13.9
60°-70°	419.2	9.3
70°-80°	242.6	5.4
80°-90°	88.2	1.9
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°	1465.2	32.4
0°-40°	2335.0	51.6
0°-60°	3779.1	83.4
0°-90°	4529.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4529.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1925	1925	1925	1925	1925	
5°	1926	1916	1916	1919	1923	183
15°	1846	1836	1836	1835	1847	520
25°	1669	1662	1665	1662	1669	767
35°	1406	1399	1395	1385	1390	878
45°	1075	1066	1055	1041	1042	828
55°	731	720	704	685	683	655
65°	440	427	416	408	408	440
75°	231	225	220	230	236	247
85°	79	77	79	90	91	85
90°	0	0	0	0	0	



TEST NUMBER: P293311

CATALOG NUMBER: 24GR-LD5-48-F125-UNV-L93050-W2A1-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1924.8	1924.8	1924.8	1924.8	1924.8
2.5°	1927.7	1922.0	1924.8	1922.7	1929.1
5°	1926.2	1916.3	1915.6	1919.2	1923.4
7.5°	1912.8	1902.2	1904.3	1904.3	1911.4
10°	1896.5	1885.9	1887.3	1888.0	1895.8
12.5°	1874.6	1863.9	1864.7	1863.9	1871.7
15°	1845.5	1836.3	1835.6	1834.9	1847.0
17.5°	1810.1	1797.4	1801.6	1802.4	1808.7
20°	1769.1	1759.2	1762.0	1761.3	1774.7
22.5°	1720.2	1713.2	1715.3	1713.9	1726.6
25°	1669.3	1662.2	1665.0	1661.5	1668.6
27.5°	1611.9	1607.0	1604.1	1602.0	1607.0
30°	1544.7	1541.8	1541.8	1532.6	1538.3
32.5°	1481.0	1471.8	1471.8	1468.2	1464.7
35°	1405.9	1398.8	1395.3	1385.4	1389.6
37.5°	1330.9	1314.6	1313.2	1305.4	1305.4
40°	1244.5	1235.3	1230.4	1221.9	1220.4
42.5°	1162.4	1153.2	1144.7	1130.5	1127.7
45°	1074.6	1066.1	1054.8	1041.3	1042.1
47.5°	987.5	975.5	964.9	948.6	946.5
50°	897.6	889.1	873.6	859.4	858.7
52.5°	813.4	799.9	785.8	768.8	768.8
55°	730.6	720.0	703.7	685.3	683.1
57.5°	651.3	641.4	623.0	609.5	606.0
60°	578.4	564.2	547.2	535.9	533.1
62.5°	505.5	492.7	480.0	468.6	467.9
65°	440.3	426.9	415.5	407.8	408.5
67.5°	381.6	370.2	357.5	355.4	356.1
70°	326.3	314.3	305.1	310.1	313.6
72.5°	274.0	267.6	261.2	268.3	273.3
75°	230.8	225.1	220.2	230.1	236.4
77.5°	191.1	186.9	186.2	194.7	200.3
80°	153.6	148.7	150.8	160.7	165.7
82.5°	116.8	113.3	114.0	126.0	129.5
85°	78.6	77.2	79.3	89.9	90.6
87.5°	41.8	41.8	43.2	49.6	47.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)