

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: P292990

Luminaire Tested: **24GR-LD5-48-F1-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292990
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-48-F1-UNV-L82765-W2A1-U-2700K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4449.0 lumens
Efficiency: N/A
Efficacy: 135.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

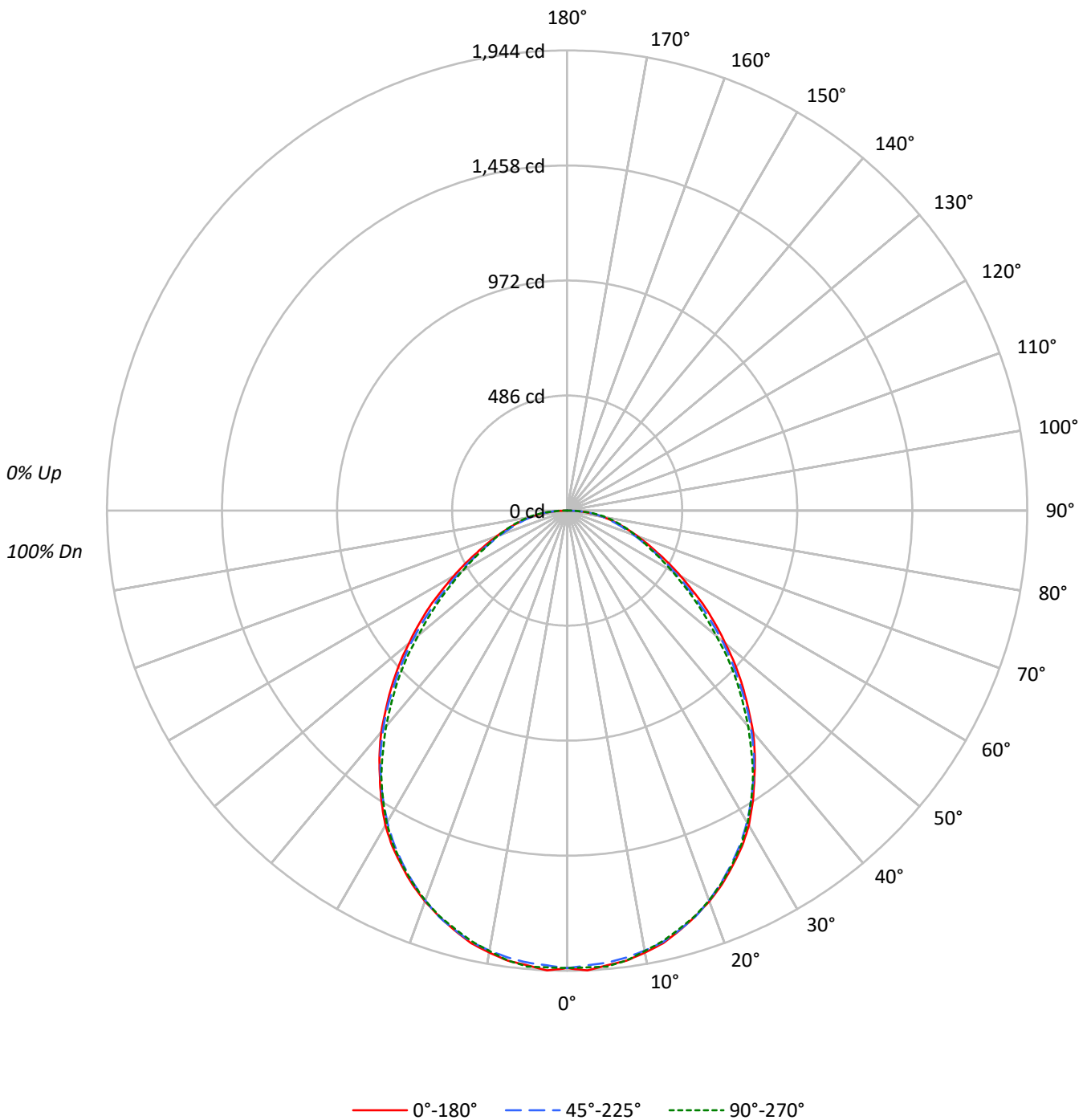
Input Watts (W): 32.829
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P292990

CATALOG NUMBER: 24GR-LD5-48-F1-UNV-L82765-W2A1-U-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P292990

CATALOG NUMBER: 24GR-LD5-48-F1-UNV-L82765-W2A1-U-2700K

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	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2600	2600	2600
5°	2604	2589	2611
10°	2590	2579	2581
15°	2558	2555	2549
20°	2515	2510	2510
25°	2456	2443	2448
30°	2385	2361	2368
35°	2265	2255	2249
40°	2145	2126	2089
45°	1994	1959	1921
50°	1827	1786	1719
55°	1668	1593	1539
60°	1486	1415	1378
65°	1338	1268	1250
70°	1242	1166	1213
75°	1188	1135	1231
80°	1187	1187	1316
85°	1232	1247	1388



TEST NUMBER: P292990

CATALOG NUMBER: 24GR-LD5-48-F1-UNV-L82765-W2A1-U-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.5	4.1
10°-20°	516.5	11.6
20°-30°	758.0	17.0
30°-40°	857.0	19.3
40°-50°	792.0	17.8
50°-60°	610.2	13.7
60°-70°	404.1	9.1
70°-80°	240.6	5.4
80°-90°	88.1	2.0
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°	1457.0	32.7
0°-40°	2314.0	52.0
0°-60°	3716.3	83.5
0°-90°	4449.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4449.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1932	1932	1932	1932	1932	
5°	1928	1928	1917	1918	1934	183
15°	1836	1832	1834	1833	1830	518
25°	1654	1650	1645	1644	1649	762
35°	1379	1377	1373	1366	1369	863
45°	1048	1041	1030	1011	1009	807
55°	711	696	679	661	656	634
65°	420	414	398	395	393	421
75°	228	223	218	228	237	244
85°	80	75	81	89	90	85
90°	0	0	0	0	0	



TEST NUMBER: P292990

CATALOG NUMBER: 24GR-LD5-48-F1-UNV-L82765-W2A1-U-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1932.5	1932.5	1932.5	1932.5	1932.5
2.5°	1944.5	1934.4	1923.4	1923.4	1931.6
5°	1928.0	1928.0	1916.9	1917.9	1933.5
7.5°	1917.9	1912.4	1905.0	1905.0	1916.9
10°	1895.8	1891.2	1887.6	1885.7	1889.4
12.5°	1872.0	1864.6	1867.4	1864.6	1863.7
15°	1836.2	1832.5	1834.4	1833.4	1829.8
17.5°	1797.6	1795.8	1799.5	1793.1	1795.8
20°	1756.4	1750.8	1752.7	1749.0	1752.7
22.5°	1709.6	1705.9	1701.3	1696.7	1704.0
25°	1654.5	1649.9	1645.3	1643.5	1649.0
27.5°	1599.4	1592.1	1585.7	1583.8	1592.1
30°	1535.2	1526.9	1519.6	1517.8	1524.2
32.5°	1459.0	1457.2	1448.0	1444.4	1447.1
35°	1379.2	1377.4	1372.8	1366.4	1369.1
37.5°	1303.0	1302.1	1295.7	1284.7	1277.3
40°	1221.4	1214.9	1210.4	1194.8	1189.3
42.5°	1131.4	1129.6	1121.4	1103.9	1097.5
45°	1047.9	1040.6	1029.6	1011.2	1009.4
47.5°	961.7	951.6	941.5	918.6	917.6
50°	872.7	865.3	853.4	830.5	821.3
52.5°	790.1	780.0	763.5	741.4	736.9
55°	711.2	696.5	679.1	660.7	656.1
57.5°	626.7	620.3	599.2	584.5	579.0
60°	552.4	546.9	525.8	512.0	512.0
62.5°	485.4	477.2	458.8	449.6	449.6
65°	420.3	413.9	398.3	394.6	392.7
67.5°	364.3	356.0	345.0	344.1	348.7
70°	315.7	305.6	296.4	305.6	308.3
72.5°	269.8	263.4	255.1	267.0	272.5
75°	228.5	223.0	218.4	228.5	236.7
77.5°	190.9	185.4	185.4	196.4	203.7
80°	153.2	149.6	153.2	162.4	169.8
82.5°	117.5	114.7	119.3	128.5	133.1
85°	79.8	75.2	80.8	89.0	89.9
87.5°	37.6	36.7	40.4	45.9	45.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)