

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: P292984

Luminaire Tested: **24GR-LD5-42-F1-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292984  
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-LD5-42-F1-UNV-L82765-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4184.0 lumens  
Efficiency: N/A  
Efficacy: 147.5 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

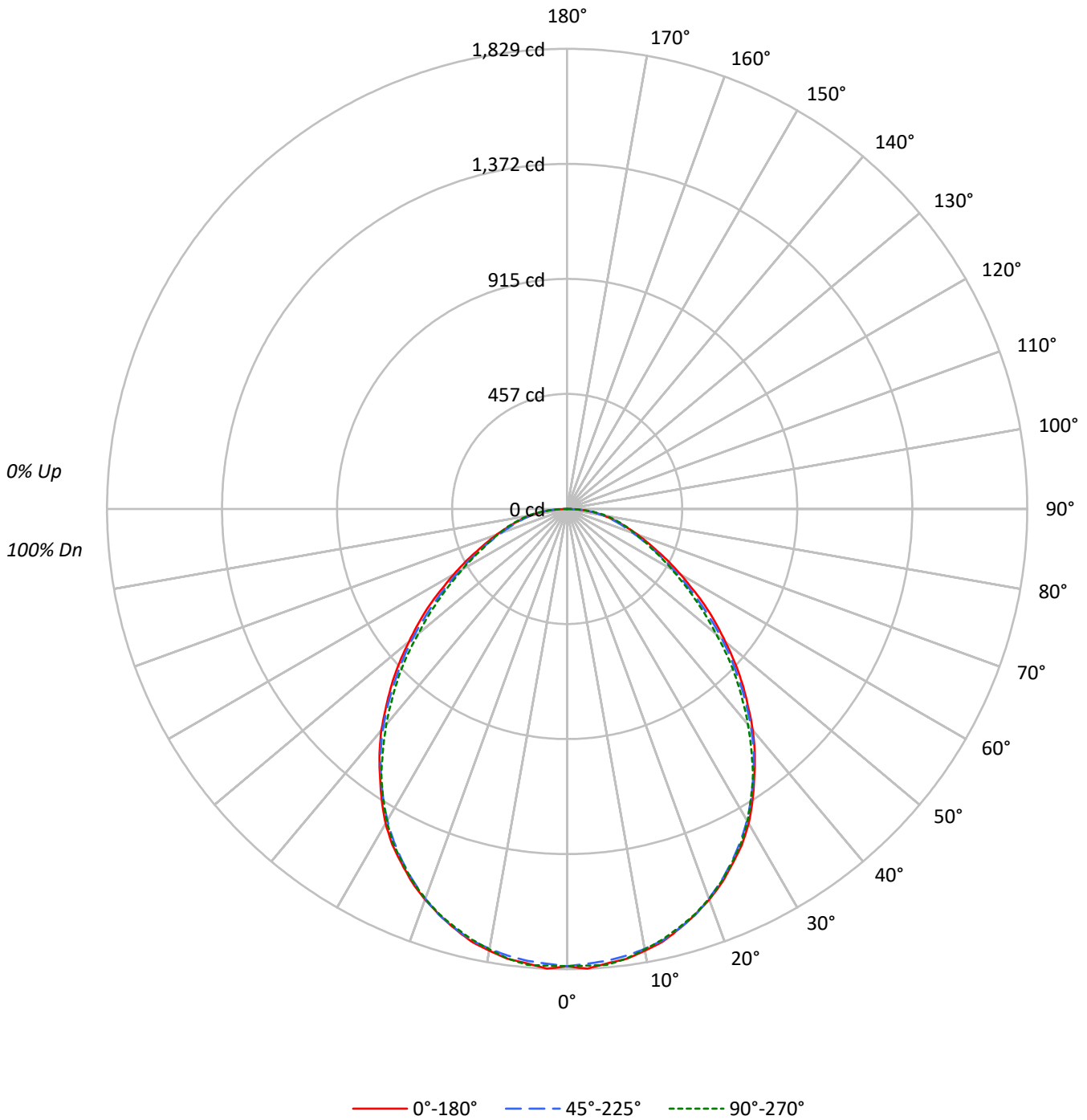
Input Watts (W): 28.365  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2445	2445	2445
5°	2449	2435	2456
10°	2436	2425	2428
15°	2405	2403	2397
20°	2365	2360	2360
25°	2310	2297	2302
30°	2243	2220	2227
35°	2131	2121	2115
40°	2017	1999	1964
45°	1875	1842	1806
50°	1718	1680	1617
55°	1569	1498	1447
60°	1398	1331	1296
65°	1258	1192	1176
70°	1168	1096	1141
75°	1117	1068	1157
80°	1117	1117	1237
85°	1159	1172	1306



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	171.6	4.1
10°-20°	485.7	11.6
20°-30°	712.9	17.0
30°-40°	805.9	19.3
40°-50°	744.9	17.8
50°-60°	573.9	13.7
60°-70°	380.0	9.1
70°-80°	226.2	5.4
80°-90°	82.9	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°	1370.2	32.7
0°-40°	2176.2	52.0
0°-60°	3494.9	83.5
0°-90°	4184.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4184.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1817	1817	1817	1817	1817	
5°	1813	1813	1803	1804	1818	172
15°	1727	1723	1725	1724	1721	487
25°	1556	1552	1547	1546	1551	716
35°	1297	1295	1291	1285	1288	812
45°	986	979	968	951	949	759
55°	669	655	639	621	617	597
65°	395	389	374	371	369	396
75°	215	210	205	215	223	229
85°	75	71	76	84	85	80
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1817.4	1817.4	1817.4	1817.4	1817.4
2.5°	1828.6	1819.2	1808.8	1808.8	1816.6
5°	1813.1	1813.1	1802.8	1803.6	1818.3
7.5°	1803.6	1798.4	1791.5	1791.5	1802.8
10°	1782.9	1778.6	1775.1	1773.4	1776.9
12.5°	1760.5	1753.6	1756.2	1753.6	1752.7
15°	1726.8	1723.4	1725.1	1724.2	1720.8
17.5°	1690.6	1688.8	1692.3	1686.3	1688.8
20°	1651.7	1646.6	1648.3	1644.8	1648.3
22.5°	1607.7	1604.3	1600.0	1595.6	1602.5
25°	1555.9	1551.6	1547.3	1545.6	1550.8
27.5°	1504.2	1497.3	1491.2	1489.5	1497.3
30°	1443.8	1436.0	1429.1	1427.4	1433.4
32.5°	1372.1	1370.4	1361.8	1358.3	1360.9
35°	1297.1	1295.3	1291.0	1285.0	1287.6
37.5°	1225.4	1224.6	1218.5	1208.2	1201.3
40°	1148.6	1142.6	1138.3	1123.6	1118.4
42.5°	1064.1	1062.3	1054.6	1038.2	1032.1
45°	985.5	978.6	968.3	951.0	949.3
47.5°	904.4	894.9	885.4	863.8	863.0
50°	820.7	813.8	802.6	781.0	772.4
52.5°	743.0	733.5	718.0	697.3	693.0
55°	668.8	655.0	638.6	621.3	617.0
57.5°	589.4	583.4	563.5	549.7	544.5
60°	519.5	514.3	494.5	481.5	481.5
62.5°	456.5	448.7	431.5	422.9	422.9
65°	395.2	389.2	374.5	371.1	369.4
67.5°	342.6	334.8	324.5	323.6	327.9
70°	296.9	287.4	278.7	287.4	290.0
72.5°	253.7	247.7	239.9	251.1	256.3
75°	214.9	209.7	205.4	214.9	222.6
77.5°	179.5	174.3	174.3	184.7	191.6
80°	144.1	140.7	144.1	152.7	159.7
82.5°	110.5	107.9	112.2	120.8	125.1
85°	75.1	70.8	75.9	83.7	84.6
87.5°	35.4	34.5	38.0	43.1	42.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)