

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: P292982

Luminaire Tested: **24GR-LD5-42-F1-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292982  
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-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3958.0 lumens  
Efficiency: N/A  
Efficacy: 142.3 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

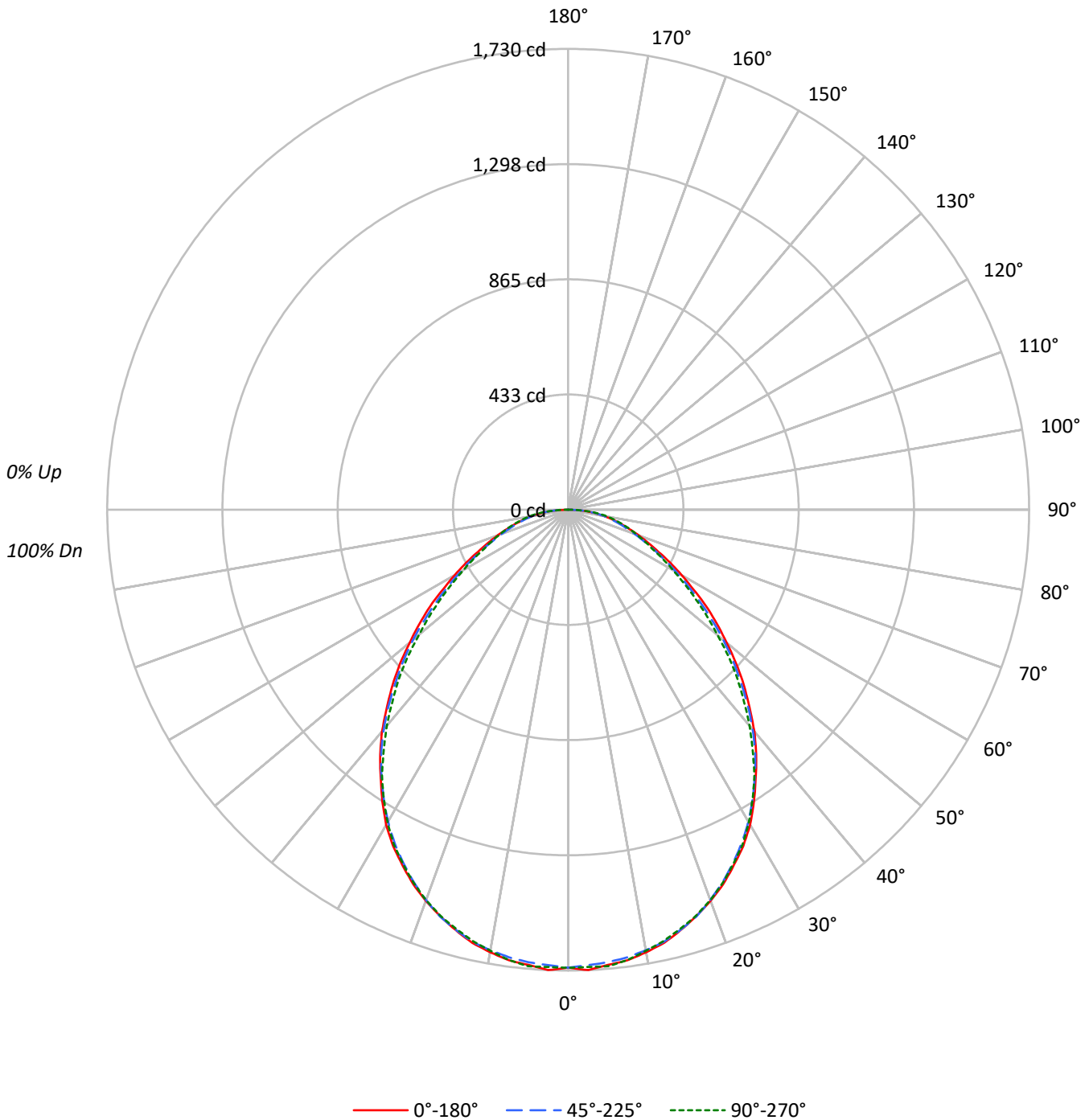
Input Watts (W): 27.807  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P292982

CATALOG NUMBER: 24GR-LD5-42-F1-UNV-L82765-W2A1-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P292982

CATALOG NUMBER: 24GR-LD5-42-F1-UNV-L82765-W2A1-U-3000K

**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°	2313	2313	2313
5°	2317	2303	2323
10°	2304	2294	2297
15°	2275	2273	2267
20°	2237	2233	2233
25°	2185	2173	2178
30°	2122	2100	2107
35°	2015	2006	2001
40°	1909	1891	1858
45°	1774	1743	1709
50°	1625	1589	1529
55°	1484	1417	1369
60°	1323	1259	1226
65°	1190	1128	1112
70°	1105	1037	1079
75°	1057	1010	1095
80°	1056	1056	1170
85°	1096	1108	1235



TEST NUMBER: P292982

CATALOG NUMBER: 24GR-LD5-42-F1-UNV-L82765-W2A1-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.4	4.1
10°-20°	459.5	11.6
20°-30°	674.4	17.0
30°-40°	762.4	19.3
40°-50°	704.6	17.8
50°-60°	542.9	13.7
60°-70°	359.5	9.1
70°-80°	214.0	5.4
80°-90°	78.4	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°	1296.2	32.7
0°-40°	2058.6	52.0
0°-60°	3306.1	83.5
0°-90°	3958.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3958.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1719	1719	1719	1719	1719	
5°	1715	1715	1705	1706	1720	163
15°	1634	1630	1632	1631	1628	460
25°	1472	1468	1464	1462	1467	678
35°	1227	1225	1221	1216	1218	768
45°	932	926	916	900	898	718
55°	633	620	604	588	584	564
65°	374	368	354	351	349	375
75°	203	198	194	203	211	217
85°	71	67	72	79	80	75
90°	0	0	0	0	0	



TEST NUMBER: P292982

CATALOG NUMBER: 24GR-LD5-42-F1-UNV-L82765-W2A1-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1719.3	1719.3	1719.3	1719.3	1719.3
2.5°	1729.9	1720.9	1711.1	1711.1	1718.4
5°	1715.2	1715.2	1705.4	1706.2	1720.1
7.5°	1706.2	1701.3	1694.8	1694.8	1705.4
10°	1686.6	1682.5	1679.3	1677.6	1680.9
12.5°	1665.4	1658.9	1661.3	1658.9	1658.0
15°	1633.5	1630.3	1631.9	1631.1	1627.8
17.5°	1599.3	1597.6	1600.9	1595.2	1597.6
20°	1562.5	1557.6	1559.3	1556.0	1559.3
22.5°	1520.9	1517.6	1513.5	1509.5	1516.0
25°	1471.9	1467.8	1463.7	1462.1	1467.0
27.5°	1422.9	1416.4	1410.7	1409.0	1416.4
30°	1365.8	1358.4	1351.9	1350.3	1356.0
32.5°	1298.0	1296.4	1288.2	1285.0	1287.4
35°	1227.0	1225.4	1221.3	1215.6	1218.0
37.5°	1159.2	1158.4	1152.7	1142.9	1136.4
40°	1086.6	1080.9	1076.8	1062.9	1058.0
42.5°	1006.6	1004.9	997.6	982.1	976.4
45°	932.3	925.8	916.0	899.6	898.0
47.5°	855.5	846.6	837.6	817.2	816.4
50°	776.4	769.8	759.2	738.8	730.6
52.5°	702.9	693.9	679.2	659.6	655.5
55°	632.7	619.6	604.1	587.8	583.7
57.5°	557.6	551.9	533.1	520.0	515.1
60°	491.5	486.6	467.8	455.5	455.5
62.5°	431.9	424.5	408.2	400.0	400.0
65°	373.9	368.2	354.3	351.0	349.4
67.5°	324.1	316.7	307.0	306.1	310.2
70°	280.8	271.8	263.7	271.8	274.3
72.5°	240.0	234.3	226.9	237.6	242.5
75°	203.3	198.4	194.3	203.3	210.6
77.5°	169.8	164.9	164.9	174.7	181.2
80°	136.3	133.1	136.3	144.5	151.0
82.5°	104.5	102.0	106.1	114.3	118.4
85°	71.0	66.9	71.8	79.2	80.0
87.5°	33.5	32.7	35.9	40.8	40.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)