

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: P292976

Luminaire Tested: **24GR-LD5-38-F1-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292976  
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-LD5-38-F1-UNV-L82765-W2A1-U-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3909.0 lumens  
Efficiency: N/A  
Efficacy: 151.2 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

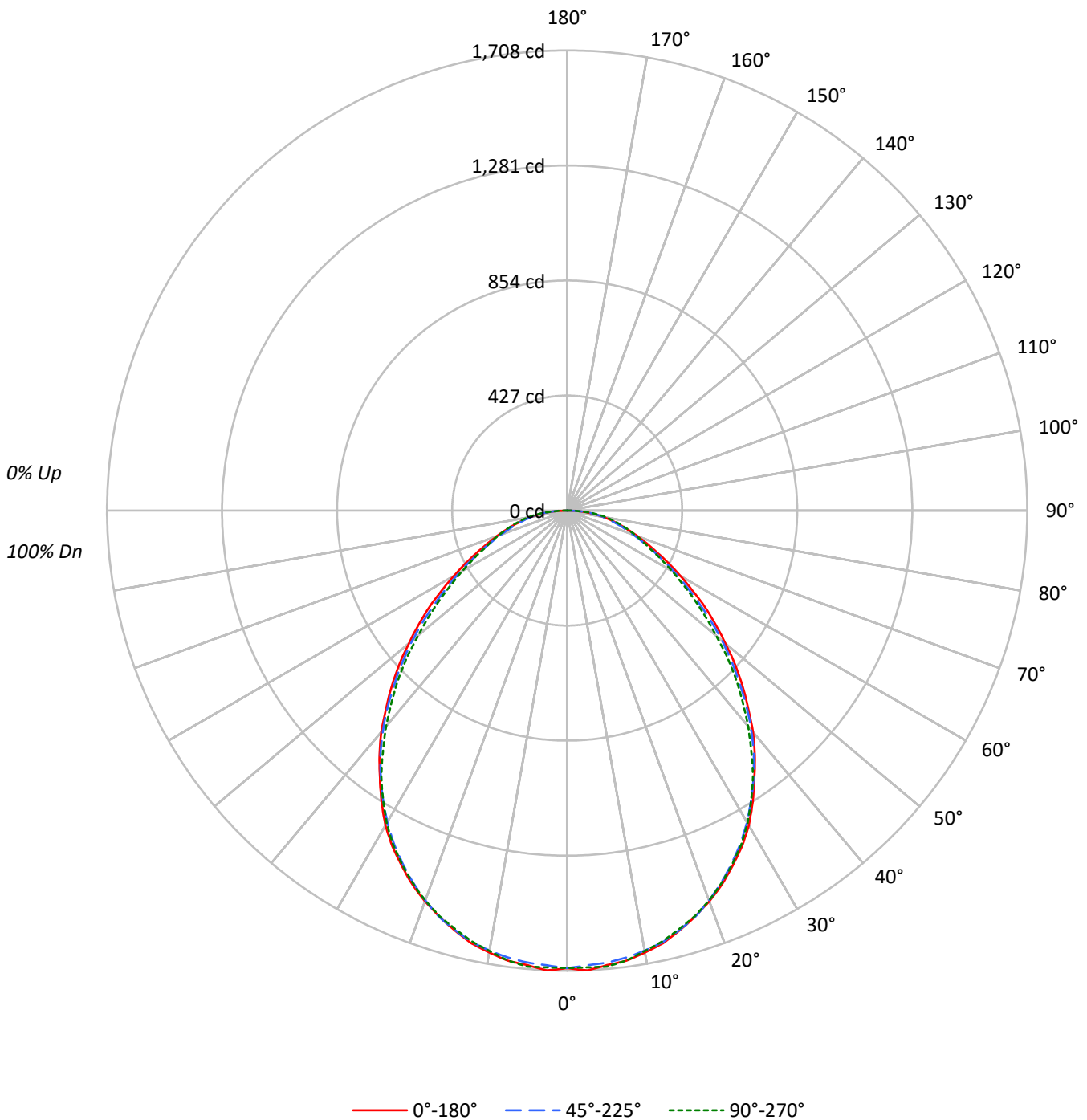
Input Watts (W): 25.854  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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																												
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85																												
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72																												
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62																												
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54																												
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47																												
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																												
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37																												
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34																												
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31																												
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28																												

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

	0°	45°	90°
0°	2285	2285	2285
5°	2288	2275	2294
10°	2276	2266	2268
15°	2247	2245	2239
20°	2210	2205	2205
25°	2158	2146	2151
30°	2096	2074	2081
35°	1990	1981	1976
40°	1885	1868	1835
45°	1752	1721	1688
50°	1605	1569	1510
55°	1466	1399	1352
60°	1306	1243	1211
65°	1176	1114	1099
70°	1091	1024	1066
75°	1044	998	1081
80°	1043	1043	1156
85°	1082	1096	1220



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	160.4	4.1
10°-20°	453.8	11.6
20°-30°	666.0	17.0
30°-40°	753.0	19.3
40°-50°	695.9	17.8
50°-60°	536.2	13.7
60°-70°	355.0	9.1
70°-80°	211.4	5.4
80°-90°	77.4	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°	1280.2	32.7
0°-40°	2033.1	52.0
0°-60°	3265.2	83.5
0°-90°	3909.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3909.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1698	1698	1698	1698	1698	
5°	1694	1694	1684	1685	1699	161
15°	1613	1610	1612	1611	1608	455
25°	1454	1450	1446	1444	1449	669
35°	1212	1210	1206	1200	1203	758
45°	921	914	905	888	887	709
55°	625	612	597	580	576	557
65°	369	364	350	347	345	370
75°	201	196	192	201	208	214
85°	70	66	71	78	79	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1698.0	1698.0	1698.0	1698.0	1698.0
2.5°	1708.5	1699.6	1689.9	1689.9	1697.2
5°	1693.9	1693.9	1684.3	1685.1	1698.8
7.5°	1685.1	1680.2	1673.8	1673.8	1684.3
10°	1665.7	1661.7	1658.5	1656.9	1660.1
12.5°	1644.8	1638.3	1640.7	1638.3	1637.5
15°	1613.3	1610.1	1611.7	1610.9	1607.7
17.5°	1579.5	1577.8	1581.1	1575.4	1577.8
20°	1543.2	1538.3	1540.0	1536.7	1540.0
22.5°	1502.1	1498.8	1494.8	1490.8	1497.2
25°	1453.7	1449.6	1445.6	1444.0	1448.8
27.5°	1405.3	1398.9	1393.2	1391.6	1398.9
30°	1348.9	1341.6	1335.2	1333.5	1339.2
32.5°	1281.9	1280.3	1272.3	1269.0	1271.5
35°	1211.8	1210.2	1206.2	1200.5	1202.9
37.5°	1144.9	1144.1	1138.4	1128.8	1122.3
40°	1073.1	1067.5	1063.5	1049.7	1044.9
42.5°	994.1	992.5	985.2	969.9	964.3
45°	920.7	914.3	904.6	888.5	886.9
47.5°	845.0	836.1	827.2	807.1	806.3
50°	766.8	760.3	749.8	729.7	721.6
52.5°	694.2	685.3	670.8	651.5	647.4
55°	624.8	611.9	596.6	580.5	576.5
57.5°	550.7	545.0	526.5	513.6	508.7
60°	485.4	480.5	462.0	449.9	449.9
62.5°	426.5	419.3	403.1	395.1	395.1
65°	369.3	363.6	349.9	346.7	345.1
67.5°	320.1	312.8	303.2	302.3	306.4
70°	277.4	268.5	260.4	268.5	270.9
72.5°	237.0	231.4	224.1	234.6	239.5
75°	200.8	195.9	191.9	200.8	208.0
77.5°	167.7	162.9	162.9	172.5	179.0
80°	134.6	131.4	134.6	142.7	149.2
82.5°	103.2	100.8	104.8	112.9	116.9
85°	70.1	66.1	71.0	78.2	79.0
87.5°	33.1	32.3	35.5	40.3	39.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)