

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: P292981

Luminaire Tested: **24GR-LD5-42-F1-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292981  
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-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: 3847.0 lumens  
Efficiency: N/A  
Efficacy: 137.4 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

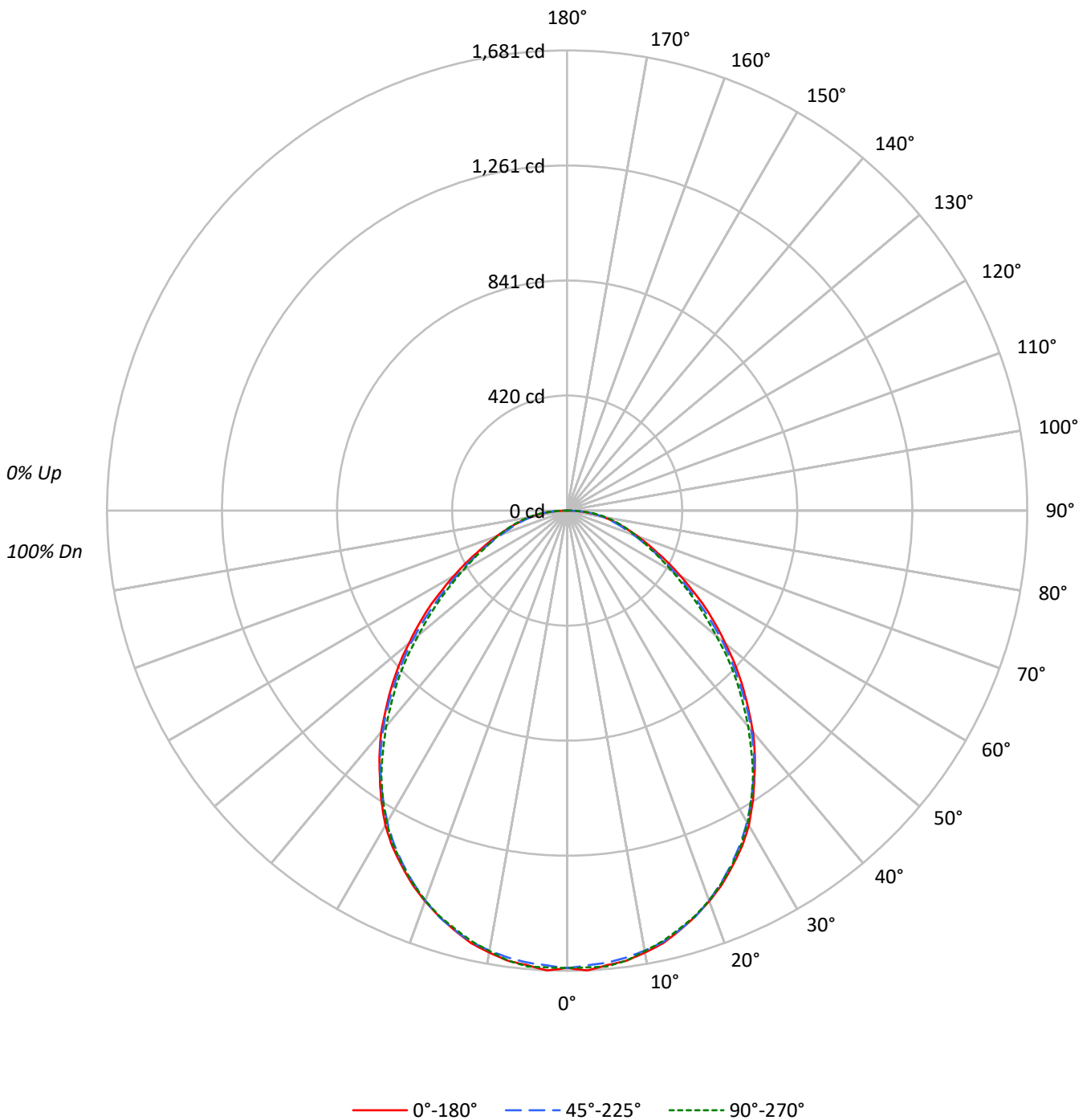
Input Watts (W): 27.993  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2248	2248	2248
5°	2252	2239	2258
10°	2240	2230	2232
15°	2212	2209	2204
20°	2175	2170	2170
25°	2124	2112	2117
30°	2062	2041	2048
35°	1959	1950	1945
40°	1855	1838	1806
45°	1724	1694	1661
50°	1580	1545	1487
55°	1442	1377	1331
60°	1285	1224	1192
65°	1157	1096	1081
70°	1074	1008	1049
75°	1027	981	1064
80°	1027	1027	1137
85°	1065	1078	1201



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.8	4.1
10°-20°	446.6	11.6
20°-30°	655.4	17.0
30°-40°	741.0	19.3
40°-50°	684.9	17.8
50°-60°	527.7	13.7
60°-70°	349.4	9.1
70°-80°	208.0	5.4
80°-90°	76.2	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°	1259.9	32.7
0°-40°	2000.9	52.0
0°-60°	3213.4	83.5
0°-90°	3847.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3847.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1671	1671	1671	1671	1671	
5°	1667	1667	1658	1658	1672	158
15°	1588	1585	1586	1585	1582	447
25°	1431	1427	1423	1421	1426	659
35°	1193	1191	1187	1182	1184	746
45°	906	900	890	874	873	698
55°	615	602	587	571	567	548
65°	363	358	344	341	340	364
75°	198	193	189	198	205	211
85°	69	65	70	77	78	73
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1671.0	1671.0	1671.0	1671.0	1671.0
2.5°	1681.4	1672.6	1663.1	1663.1	1670.3
5°	1667.1	1667.1	1657.6	1658.4	1671.8
7.5°	1658.4	1653.6	1647.2	1647.2	1657.6
10°	1639.3	1635.3	1632.2	1630.6	1633.8
12.5°	1618.7	1612.3	1614.7	1612.3	1611.5
15°	1587.7	1584.6	1586.1	1585.4	1582.2
17.5°	1554.4	1552.8	1556.0	1550.4	1552.8
20°	1518.7	1513.9	1515.5	1512.4	1515.5
22.5°	1478.2	1475.1	1471.1	1467.1	1473.5
25°	1430.6	1426.7	1422.7	1421.1	1425.9
27.5°	1383.0	1376.7	1371.1	1369.5	1376.7
30°	1327.5	1320.3	1314.0	1312.4	1318.0
32.5°	1261.6	1260.0	1252.1	1248.9	1251.3
35°	1192.6	1191.0	1187.0	1181.5	1183.9
37.5°	1126.7	1125.9	1120.4	1110.9	1104.5
40°	1056.1	1050.6	1046.6	1033.1	1028.3
42.5°	978.3	976.8	969.6	954.5	949.0
45°	906.1	899.8	890.3	874.4	872.8
47.5°	831.6	822.8	814.1	794.3	793.5
50°	754.6	748.2	737.9	718.1	710.2
52.5°	683.2	674.4	660.2	641.1	637.2
55°	614.9	602.2	587.2	571.3	567.3
57.5°	541.9	536.4	518.1	505.4	500.7
60°	477.7	472.9	454.7	442.8	442.8
62.5°	419.7	412.6	396.7	388.8	388.8
65°	363.4	357.9	344.4	341.2	339.6
67.5°	315.0	307.9	298.3	297.6	301.5
70°	273.0	264.2	256.3	264.2	266.6
72.5°	233.3	227.7	220.6	230.9	235.7
75°	197.6	192.8	188.8	197.6	204.7
77.5°	165.0	160.3	160.3	169.8	176.2
80°	132.5	129.3	132.5	140.4	146.8
82.5°	101.6	99.2	103.2	111.1	115.1
85°	69.0	65.1	69.8	77.0	77.8
87.5°	32.5	31.7	34.9	39.7	38.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)