

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: P294236

Luminaire Tested: **24GR-LD5-38-FGW080-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294236  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-25)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-38-FGW080-UNV-L82765-W2A1-U-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3407.9 lumens  
Efficiency: N/A  
Efficacy: 131.8 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

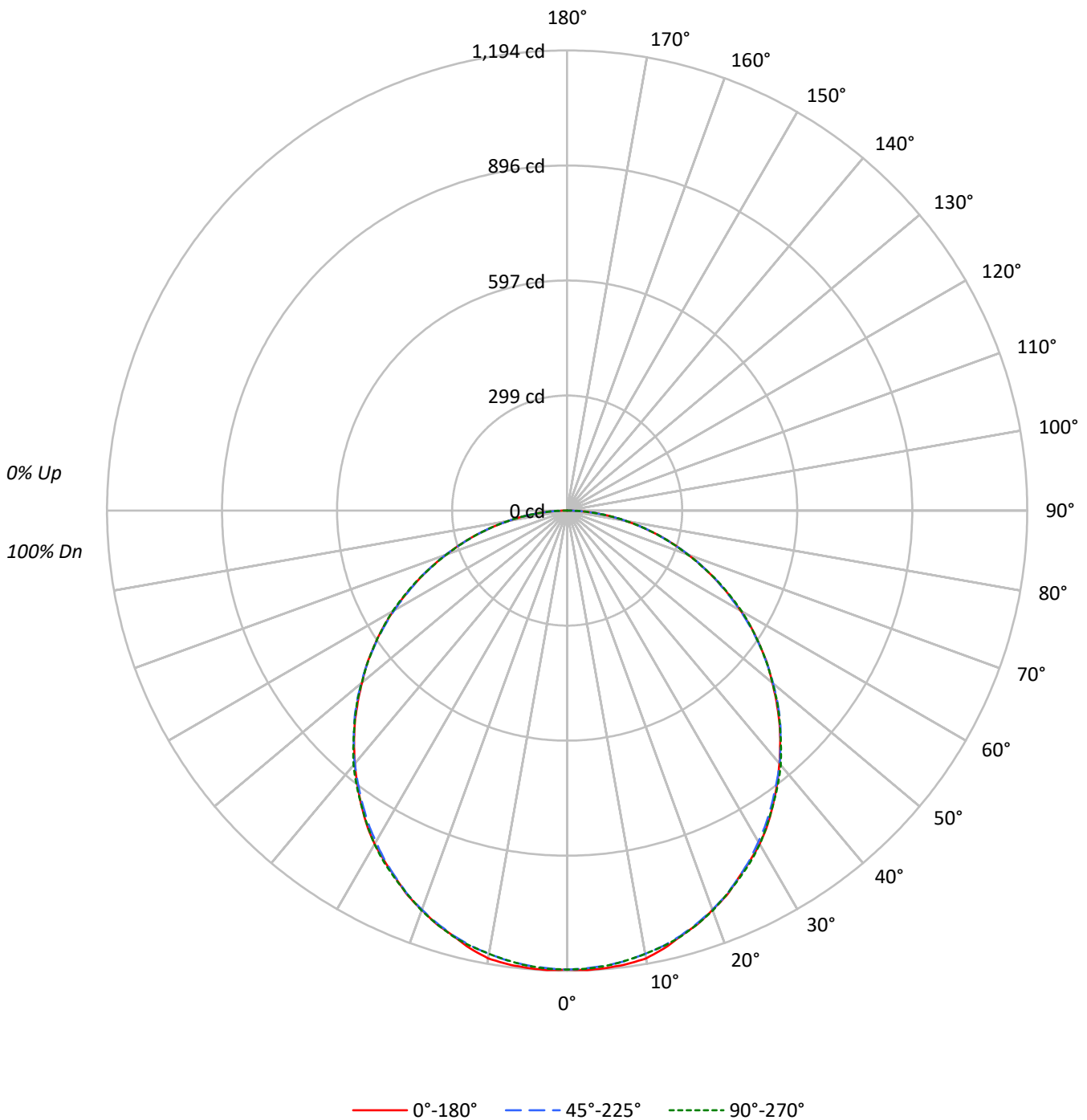
Input Watts (W): 25.854  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P294236

CATALOG NUMBER: 24GR-LD5-38-FGW080-UNV-L82765-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P294236

CATALOG NUMBER: 24GR-LD5-38-FGW080-UNV-L82765-W2A1-U-4500K

**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	108	103	99	95	106	101	97	94	97	94	91		93	90	88		89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40		52	45	40		50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35		47	40	35		46	40	35	33
8	60	46	38	32	58	46	37	32	44	37	32		43	36	31		42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28		40	33	28		39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36	30	26	24

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

	0°	45°	90°
0°	1603	1603	1603
5°	1609	1600	1601
10°	1612	1596	1596
15°	1591	1590	1593
20°	1579	1578	1581
25°	1562	1561	1565
30°	1552	1542	1553
35°	1530	1522	1530
40°	1505	1506	1515
45°	1483	1488	1485
50°	1455	1460	1457
55°	1433	1429	1433
60°	1399	1395	1408
65°	1356	1361	1366
70°	1312	1319	1309
75°	1266	1266	1266
80°	1196	1196	1208
85°	1104	1116	1079



TEST NUMBER: P294236

CATALOG NUMBER: 24GR-LD5-38-FGW080-UNV-L82765-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.6	3.3
10°-20°	322.0	9.4
20°-30°	485.2	14.2
30°-40°	581.1	17.1
40°-50°	601.5	17.7
50°-60°	545.4	16.0
60°-70°	422.9	12.4
70°-80°	257.1	7.5
80°-90°	80.0	2.3
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°	919.8	27.0
0°-40°	1501.0	44.0
0°-60°	2647.9	77.7
0°-90°	3407.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3407.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1191	1191	1191	1191	1191	
5°	1191	1184	1185	1183	1186	113
15°	1142	1143	1141	1137	1144	323
25°	1052	1052	1051	1054	1054	486
35°	932	925	927	931	932	583
45°	780	781	782	779	780	601
55°	611	608	609	612	611	546
65°	426	428	428	426	429	422
75°	244	243	244	243	244	257
85°	72	71	72	72	70	80
90°	0	0	0	0	0	



TEST NUMBER: P294236

CATALOG NUMBER: 24GR-LD5-38-FGW080-UNV-L82765-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1191.1	1191.1	1191.1	1191.1	1191.1
2.5°	1193.5	1188.7	1188.7	1187.1	1189.5
5°	1191.1	1183.9	1184.7	1183.1	1185.5
7.5°	1187.1	1177.5	1178.3	1176.7	1177.5
10°	1179.9	1168.6	1167.8	1167.0	1167.8
12.5°	1163.8	1157.4	1156.6	1155.0	1157.4
15°	1142.1	1142.9	1141.3	1137.3	1143.7
17.5°	1125.2	1124.4	1122.8	1118.8	1125.2
20°	1102.7	1103.5	1101.9	1100.3	1104.3
22.5°	1081.0	1078.6	1079.4	1078.6	1079.4
25°	1052.1	1052.1	1051.3	1054.5	1054.5
27.5°	1025.6	1022.4	1024.0	1027.2	1028.8
30°	999.0	991.0	992.6	995.8	999.8
32.5°	967.7	959.7	961.3	964.5	966.1
35°	931.5	925.1	926.7	930.7	931.5
37.5°	894.6	890.5	892.1	895.4	897.8
40°	856.8	855.2	857.6	856.8	862.4
42.5°	818.2	817.4	819.8	819.8	820.6
45°	779.6	781.2	782.0	778.8	780.4
47.5°	737.0	737.8	741.0	739.4	740.2
50°	695.2	694.4	697.6	698.4	696.0
52.5°	655.0	651.0	654.2	655.8	654.2
55°	610.8	607.6	609.2	611.6	610.8
57.5°	567.4	564.2	565.0	569.0	567.4
60°	520.0	519.2	518.4	521.6	523.2
62.5°	473.4	472.6	471.0	474.2	475.8
65°	426.0	428.4	427.6	426.0	429.2
67.5°	381.0	383.4	381.0	379.4	379.4
70°	333.5	336.0	335.2	333.5	332.7
72.5°	289.3	289.3	287.7	286.9	287.7
75°	243.5	242.7	243.5	242.7	243.5
77.5°	198.5	199.3	199.3	199.3	198.5
80°	154.3	154.3	154.3	155.1	155.9
82.5°	113.3	110.9	113.3	111.7	112.5
85°	71.5	70.7	72.3	71.5	69.9
87.5°	32.1	33.0	33.0	33.8	33.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)