

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: P294306

Luminaire Tested: **24GR-LD5-38-FGW080-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294306  
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-L93050-W2A1-U-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2852.0 lumens  
Efficiency: N/A  
Efficacy: 110.2 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

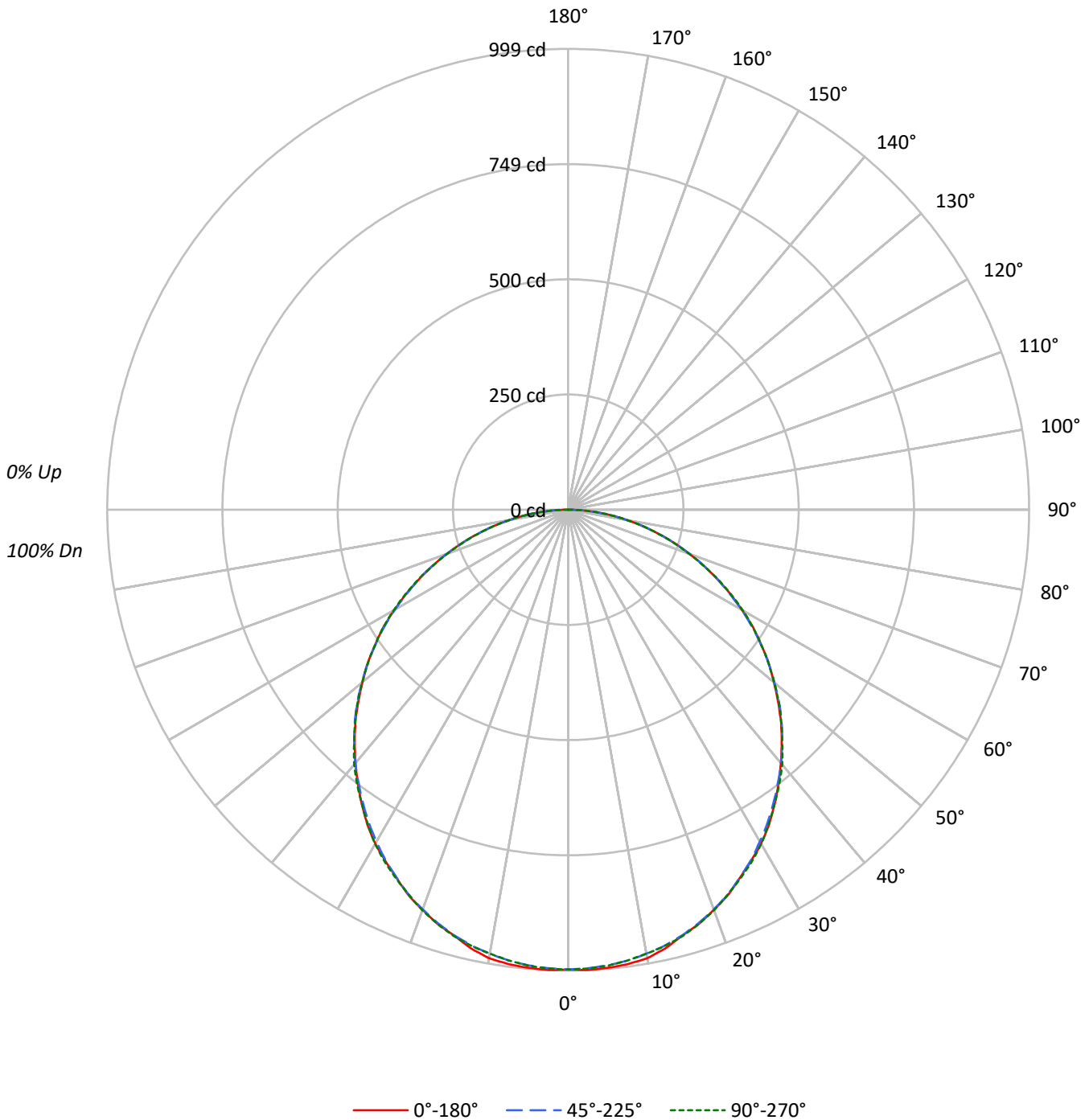
Input Watts (W): 25.871391  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1341	1341	1341
5°	1346	1339	1340
10°	1349	1335	1335
15°	1331	1330	1333
20°	1321	1320	1323
25°	1307	1306	1310
30°	1299	1291	1300
35°	1281	1274	1281
40°	1259	1261	1268
45°	1241	1245	1243
50°	1218	1222	1219
55°	1199	1196	1199
60°	1171	1167	1178
65°	1135	1139	1144
70°	1098	1103	1096
75°	1059	1059	1059
80°	1000	1000	1011
85°	925	934	903



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.3	3.3
10°-20°	269.4	9.4
20°-30°	406.0	14.2
30°-40°	486.3	17.1
40°-50°	503.4	17.7
50°-60°	456.5	16.0
60°-70°	353.9	12.4
70°-80°	215.2	7.5
80°-90°	66.9	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°	769.7	27.0
0°-40°	1256.1	44.0
0°-60°	2216.0	77.7
0°-90°	2852.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2852.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	997	997	997	997	997	
5°	997	991	991	990	992	95
15°	956	956	955	952	957	270
25°	880	880	880	882	882	406
35°	780	774	776	779	780	488
45°	652	654	654	652	653	503
55°	511	508	510	512	511	457
65°	356	358	358	356	359	354
75°	204	203	204	203	204	215
85°	60	59	60	60	58	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	996.8	996.8	996.8	996.8	996.8
2.5°	998.8	994.8	994.8	993.4	995.5
5°	996.8	990.8	991.4	990.1	992.1
7.5°	993.4	985.4	986.0	984.7	985.4
10°	987.4	978.0	977.3	976.6	977.3
12.5°	973.9	968.6	967.9	966.5	968.6
15°	955.8	956.5	955.1	951.7	957.1
17.5°	941.7	941.0	939.6	936.3	941.7
20°	922.8	923.5	922.1	920.8	924.2
22.5°	904.7	902.6	903.3	902.6	903.3
25°	880.4	880.4	879.8	882.5	882.5
27.5°	858.2	855.6	856.9	859.6	860.9
30°	836.1	829.3	830.7	833.4	836.7
32.5°	809.8	803.1	804.4	807.1	808.5
35°	779.6	774.2	775.5	778.9	779.6
37.5°	748.6	745.3	746.6	749.3	751.3
40°	717.0	715.7	717.7	717.0	721.7
42.5°	684.7	684.0	686.1	686.1	686.7
45°	652.4	653.8	654.4	651.8	653.1
47.5°	616.8	617.5	620.1	618.8	619.5
50°	581.8	581.1	583.8	584.5	582.5
52.5°	548.2	544.8	547.5	548.8	547.5
55°	511.2	508.5	509.8	511.9	511.2
57.5°	474.9	472.2	472.8	476.2	474.9
60°	435.2	434.5	433.8	436.5	437.9
62.5°	396.2	395.5	394.1	396.8	398.2
65°	356.5	358.5	357.8	356.5	359.2
67.5°	318.8	320.8	318.8	317.5	317.5
70°	279.1	281.2	280.5	279.1	278.5
72.5°	242.1	242.1	240.8	240.1	240.8
75°	203.8	203.1	203.8	203.1	203.8
77.5°	166.1	166.8	166.8	166.8	166.1
80°	129.1	129.1	129.1	129.8	130.5
82.5°	94.8	92.8	94.8	93.5	94.2
85°	59.9	59.2	60.5	59.9	58.5
87.5°	26.9	27.6	27.6	28.2	28.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)