

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: P294380

Luminaire Tested: **24GR-LD5-48-FGW080-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294380  
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-LD5-48-FGW080-UNV-L92765-W2A1-U-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3831.1 lumens  
Efficiency: N/A  
Efficacy: 114.4 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

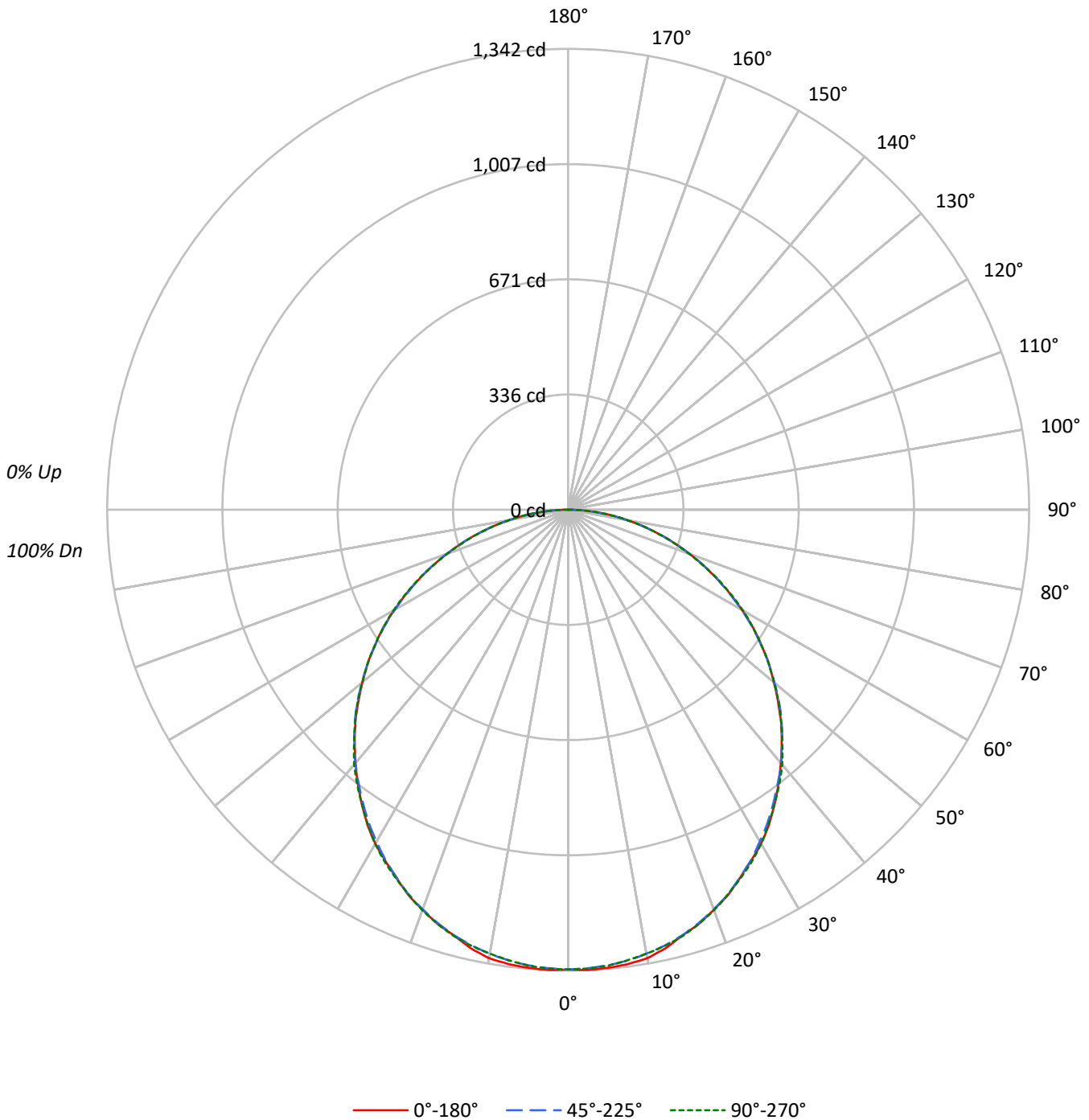
Input Watts (W): 33.48  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1802	1802	1802
5°	1808	1799	1800
10°	1812	1794	1794
15°	1788	1787	1791
20°	1775	1774	1777
25°	1756	1754	1760
30°	1745	1734	1746
35°	1720	1711	1720
40°	1692	1693	1703
45°	1668	1673	1669
50°	1636	1641	1638
55°	1611	1606	1611
60°	1573	1568	1583
65°	1525	1530	1536
70°	1475	1482	1471
75°	1423	1423	1423
80°	1344	1344	1358
85°	1241	1255	1213



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.6	3.3
10°-20°	361.9	9.4
20°-30°	545.4	14.2
30°-40°	653.3	17.1
40°-50°	676.2	17.7
50°-60°	613.2	16.0
60°-70°	475.4	12.4
70°-80°	289.1	7.5
80°-90°	89.9	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°	1034.0	27.0
0°-40°	1687.2	44.0
0°-60°	2976.6	77.7
0°-90°	3831.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3831.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1339	1339	1339	1339	1339	
5°	1339	1331	1332	1330	1333	127
15°	1284	1285	1283	1278	1286	363
25°	1183	1183	1182	1185	1185	546
35°	1047	1040	1042	1046	1047	655
45°	876	878	879	876	877	675
55°	687	683	685	688	687	614
65°	479	482	481	479	482	475
75°	274	273	274	273	274	289
85°	80	80	81	80	79	90
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1339.0	1339.0	1339.0	1339.0	1339.0
2.5°	1341.7	1336.3	1336.3	1334.5	1337.2
5°	1339.0	1330.8	1331.8	1329.9	1332.7
7.5°	1334.5	1323.6	1324.5	1322.7	1323.6
10°	1326.3	1313.7	1312.8	1311.9	1312.8
12.5°	1308.3	1301.0	1300.1	1298.3	1301.0
15°	1283.9	1284.8	1283.0	1278.4	1285.7
17.5°	1264.9	1264.0	1262.2	1257.7	1264.9
20°	1239.6	1240.5	1238.7	1236.9	1241.4
22.5°	1215.2	1212.5	1213.4	1212.5	1213.4
25°	1182.7	1182.7	1181.8	1185.4	1185.4
27.5°	1152.9	1149.2	1151.1	1154.7	1156.5
30°	1123.0	1114.0	1115.8	1119.4	1123.9
32.5°	1087.8	1078.8	1080.6	1084.2	1086.0
35°	1047.1	1039.9	1041.7	1046.2	1047.1
37.5°	1005.6	1001.1	1002.9	1006.5	1009.2
40°	963.1	961.3	964.0	963.1	969.4
42.5°	919.8	918.9	921.6	921.6	922.5
45°	876.4	878.2	879.1	875.5	877.3
47.5°	828.5	829.4	833.0	831.2	832.1
50°	781.5	780.6	784.2	785.1	782.4
52.5°	736.3	731.8	735.4	737.3	735.4
55°	686.7	683.0	684.8	687.6	686.7
57.5°	637.9	634.3	635.2	639.7	637.9
60°	584.6	583.7	582.8	586.4	588.2
62.5°	532.2	531.3	529.4	533.1	534.9
65°	478.9	481.6	480.7	478.9	482.5
67.5°	428.3	431.0	428.3	426.4	426.4
70°	375.0	377.7	376.8	375.0	374.0
72.5°	325.3	325.3	323.5	322.5	323.5
75°	273.8	272.9	273.8	272.9	273.8
77.5°	223.2	224.1	224.1	224.1	223.2
80°	173.5	173.5	173.5	174.4	175.3
82.5°	127.4	124.7	127.4	125.6	126.5
85°	80.4	79.5	81.3	80.4	78.6
87.5°	36.1	37.0	37.0	37.9	37.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)