

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: P293177

Luminaire Tested: **24GR-LD5-42-F125-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293177  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33304)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-42-F125-UNV-L83050-W2A1-U-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4192.0 lumens  
Efficiency: N/A  
Efficacy: 149.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

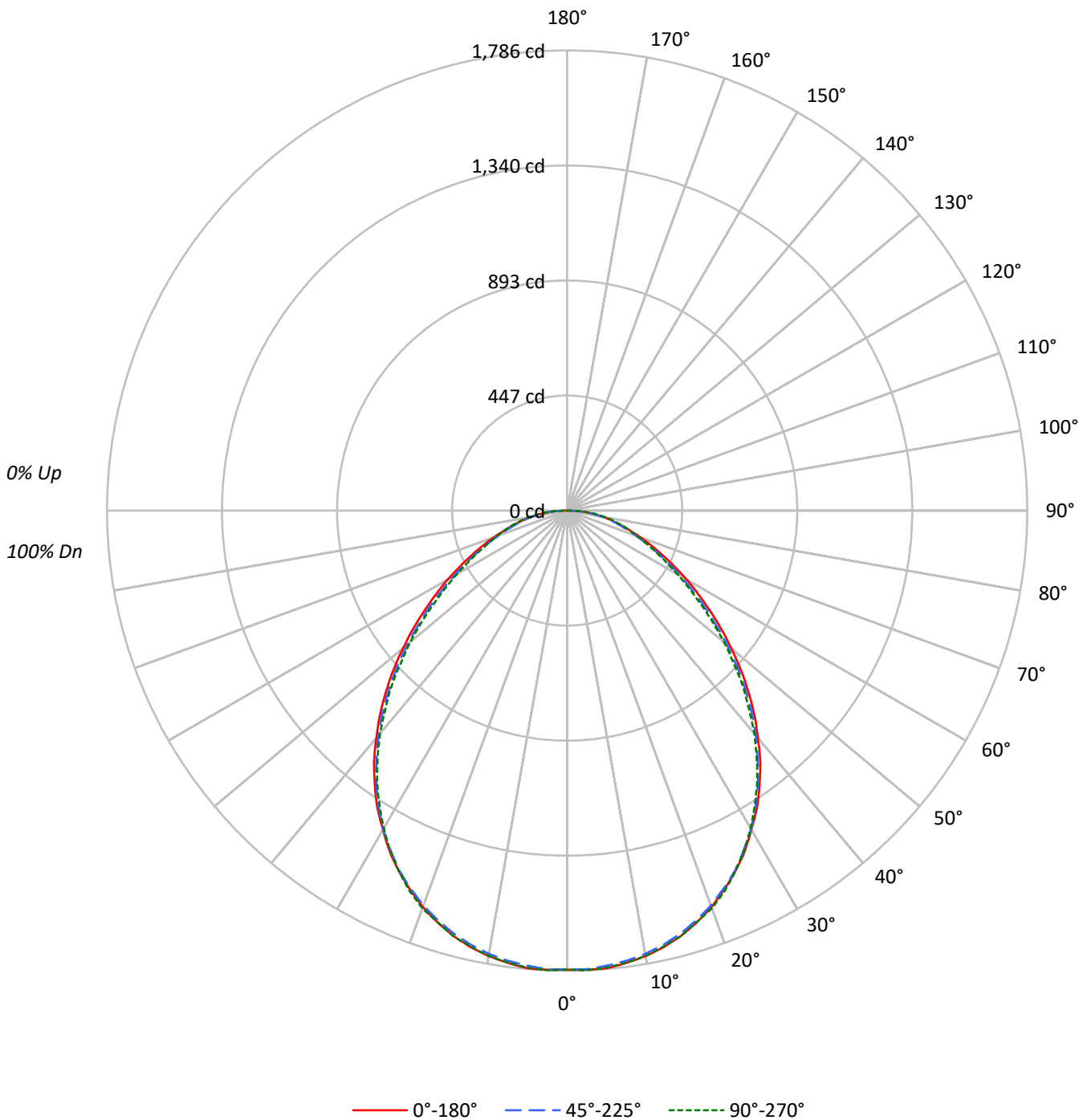
Input Watts (W): 27.993  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28

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

	0°	45°	90°
0°	2397	2397	2397
5°	2408	2395	2405
10°	2398	2387	2397
15°	2379	2367	2381
20°	2344	2335	2352
25°	2294	2288	2293
30°	2221	2217	2212
35°	2137	2121	2113
40°	2023	2000	1984
45°	1893	1858	1835
50°	1739	1693	1664
55°	1586	1528	1483
60°	1440	1363	1328
65°	1298	1224	1204
70°	1188	1111	1142
75°	1110	1059	1138
80°	1102	1082	1188
85°	1122	1133	1295



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.6	4.0
10°-20°	479.4	11.4
20°-30°	708.2	16.9
30°-40°	805.1	19.2
40°-50°	751.9	17.9
50°-60°	584.7	13.9
60°-70°	388.0	9.3
70°-80°	224.5	5.4
80°-90°	81.6	1.9
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°	1356.1	32.4
0°-40°	2161.3	51.6
0°-60°	3497.9	83.4
0°-90°	4192.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4192.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1782	1782	1782	1782	1782	
5°	1783	1774	1773	1776	1780	169
15°	1708	1700	1699	1698	1710	481
25°	1545	1538	1541	1538	1544	710
35°	1301	1295	1292	1282	1286	812
45°	995	987	976	964	964	766
55°	676	666	651	634	632	606
65°	408	395	385	377	378	407
75°	214	208	204	213	219	228
85°	73	71	73	83	84	79
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1781.6	1781.6	1781.6	1781.6	1781.6
2.5°	1784.2	1779.0	1781.6	1779.6	1785.5
5°	1782.9	1773.7	1773.1	1776.4	1780.3
7.5°	1770.5	1760.6	1762.6	1762.6	1769.1
10°	1755.4	1745.6	1746.9	1747.5	1754.7
12.5°	1735.1	1725.2	1725.9	1725.2	1732.5
15°	1708.2	1699.7	1699.0	1698.4	1709.5
17.5°	1675.5	1663.7	1667.6	1668.2	1674.1
20°	1637.4	1628.3	1630.9	1630.2	1642.7
22.5°	1592.2	1585.7	1587.6	1586.3	1598.1
25°	1545.1	1538.5	1541.1	1537.8	1544.4
27.5°	1492.0	1487.4	1484.8	1482.8	1487.4
30°	1429.7	1427.1	1427.1	1418.6	1423.8
32.5°	1370.8	1362.2	1362.2	1359.0	1355.7
35°	1301.3	1294.8	1291.5	1282.3	1286.2
37.5°	1231.9	1216.8	1215.5	1208.3	1208.3
40°	1151.9	1143.4	1138.8	1130.9	1129.6
42.5°	1075.9	1067.4	1059.5	1046.4	1043.8
45°	994.7	986.8	976.3	963.9	964.5
47.5°	914.1	902.9	893.1	878.0	876.1
50°	830.8	823.0	808.6	795.5	794.8
52.5°	752.9	740.4	727.3	711.6	711.6
55°	676.2	666.4	651.3	634.3	632.3
57.5°	602.8	593.6	576.6	564.2	560.9
60°	535.3	522.2	506.5	496.0	493.4
62.5°	467.8	456.0	444.3	433.8	433.1
65°	407.6	395.1	384.6	377.4	378.1
67.5°	353.2	342.7	330.9	328.9	329.6
70°	302.1	290.9	282.4	287.0	290.3
72.5°	253.6	247.7	241.8	248.3	252.9
75°	213.6	208.4	203.8	213.0	218.9
77.5°	176.9	173.0	172.3	180.2	185.4
80°	142.2	137.6	139.6	148.7	153.3
82.5°	108.1	104.8	105.5	116.6	119.9
85°	72.7	71.4	73.4	83.2	83.9
87.5°	38.7	38.7	40.0	45.9	43.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)