

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: P292977

Luminaire Tested: **24GR-LD5-38-F1-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292977  
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-LD5-38-F1-UNV-L82765-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3962.0 lumens  
Efficiency: N/A  
Efficacy: 152.7 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

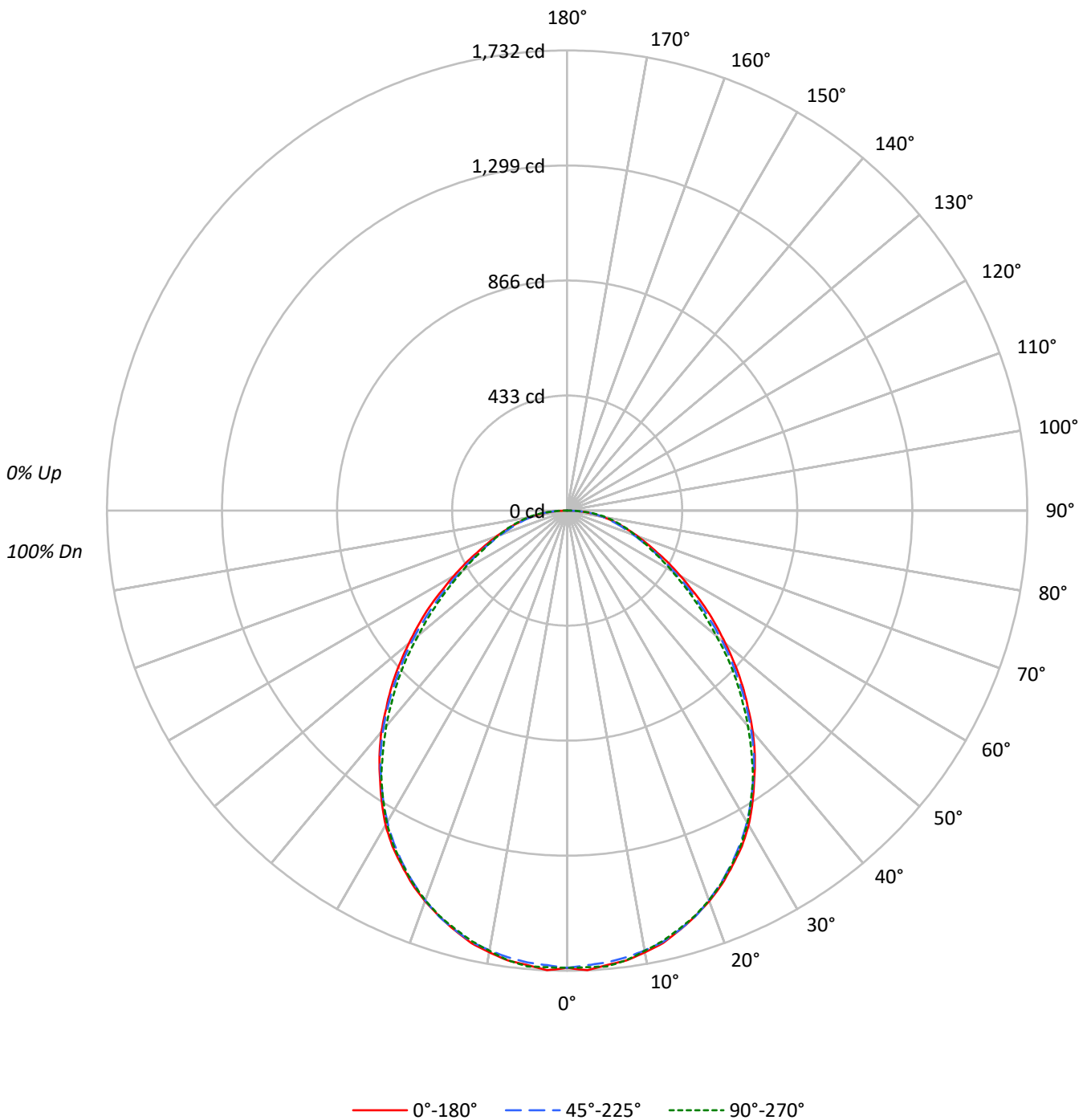
Input Watts (W): 25.947  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2316	2316	2316
5°	2319	2306	2326
10°	2307	2297	2299
15°	2278	2276	2270
20°	2240	2235	2235
25°	2187	2175	2180
30°	2124	2103	2109
35°	2017	2008	2003
40°	1910	1893	1860
45°	1776	1745	1710
50°	1627	1591	1531
55°	1486	1418	1371
60°	1324	1260	1227
65°	1192	1129	1114
70°	1106	1039	1080
75°	1058	1011	1096
80°	1058	1058	1172
85°	1098	1110	1237



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.5	4.1
10°-20°	459.9	11.6
20°-30°	675.0	17.0
30°-40°	763.2	19.3
40°-50°	705.3	17.8
50°-60°	543.4	13.7
60°-70°	359.8	9.1
70°-80°	214.2	5.4
80°-90°	78.5	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°	1297.5	32.7
0°-40°	2060.7	52.0
0°-60°	3309.5	83.5
0°-90°	3962.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3962.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1721	1721	1721	1721	1721	
5°	1717	1717	1707	1708	1722	163
15°	1635	1632	1634	1633	1630	461
25°	1473	1469	1465	1464	1468	678
35°	1228	1227	1222	1217	1219	769
45°	933	927	917	900	899	719
55°	633	620	605	588	584	565
65°	374	369	355	351	350	375
75°	204	199	194	204	211	217
85°	71	67	72	79	80	75
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1721.0	1721.0	1721.0	1721.0	1721.0
2.5°	1731.6	1722.6	1712.8	1712.8	1720.2
5°	1716.9	1716.9	1707.1	1707.9	1721.8
7.5°	1707.9	1703.0	1696.5	1696.5	1707.1
10°	1688.3	1684.2	1681.0	1679.3	1682.6
12.5°	1667.1	1660.5	1663.0	1660.5	1659.7
15°	1635.2	1631.9	1633.6	1632.7	1629.5
17.5°	1600.9	1599.2	1602.5	1596.8	1599.2
20°	1564.1	1559.2	1560.8	1557.6	1560.8
22.5°	1522.4	1519.2	1515.1	1511.0	1517.5
25°	1473.4	1469.3	1465.2	1463.6	1468.5
27.5°	1424.4	1417.8	1412.1	1410.5	1417.8
30°	1367.2	1359.8	1353.3	1351.6	1357.4
32.5°	1299.3	1297.7	1289.5	1286.3	1288.7
35°	1228.2	1226.6	1222.5	1216.8	1219.2
37.5°	1160.4	1159.6	1153.9	1144.1	1137.5
40°	1087.7	1082.0	1077.9	1064.0	1059.1
42.5°	1007.6	1006.0	998.6	983.1	977.4
45°	933.2	926.7	916.9	900.5	898.9
47.5°	856.4	847.4	838.4	818.0	817.2
50°	777.1	770.6	760.0	739.6	731.4
52.5°	703.6	694.6	679.9	660.3	656.2
55°	633.3	620.2	604.7	588.4	584.3
57.5°	558.1	552.4	533.6	520.5	515.6
60°	491.9	487.0	468.2	456.0	456.0
62.5°	432.3	424.9	408.6	400.4	400.4
65°	374.3	368.6	354.7	351.4	349.8
67.5°	324.4	317.1	307.3	306.4	310.5
70°	281.1	272.1	264.0	272.1	274.6
72.5°	240.3	234.5	227.2	237.8	242.7
75°	203.5	198.6	194.5	203.5	210.8
77.5°	170.0	165.1	165.1	174.9	181.4
80°	136.5	133.2	136.5	144.6	151.2
82.5°	104.6	102.1	106.2	114.4	118.5
85°	71.1	67.0	71.9	79.3	80.1
87.5°	33.5	32.7	36.0	40.9	40.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)