

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: P293173

Luminaire Tested: **24GR-LD5-38-F125-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293173  
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-LD5-38-F125-UNV-L83050-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4040.0 lumens  
Efficiency: N/A  
Efficacy: 155.7 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

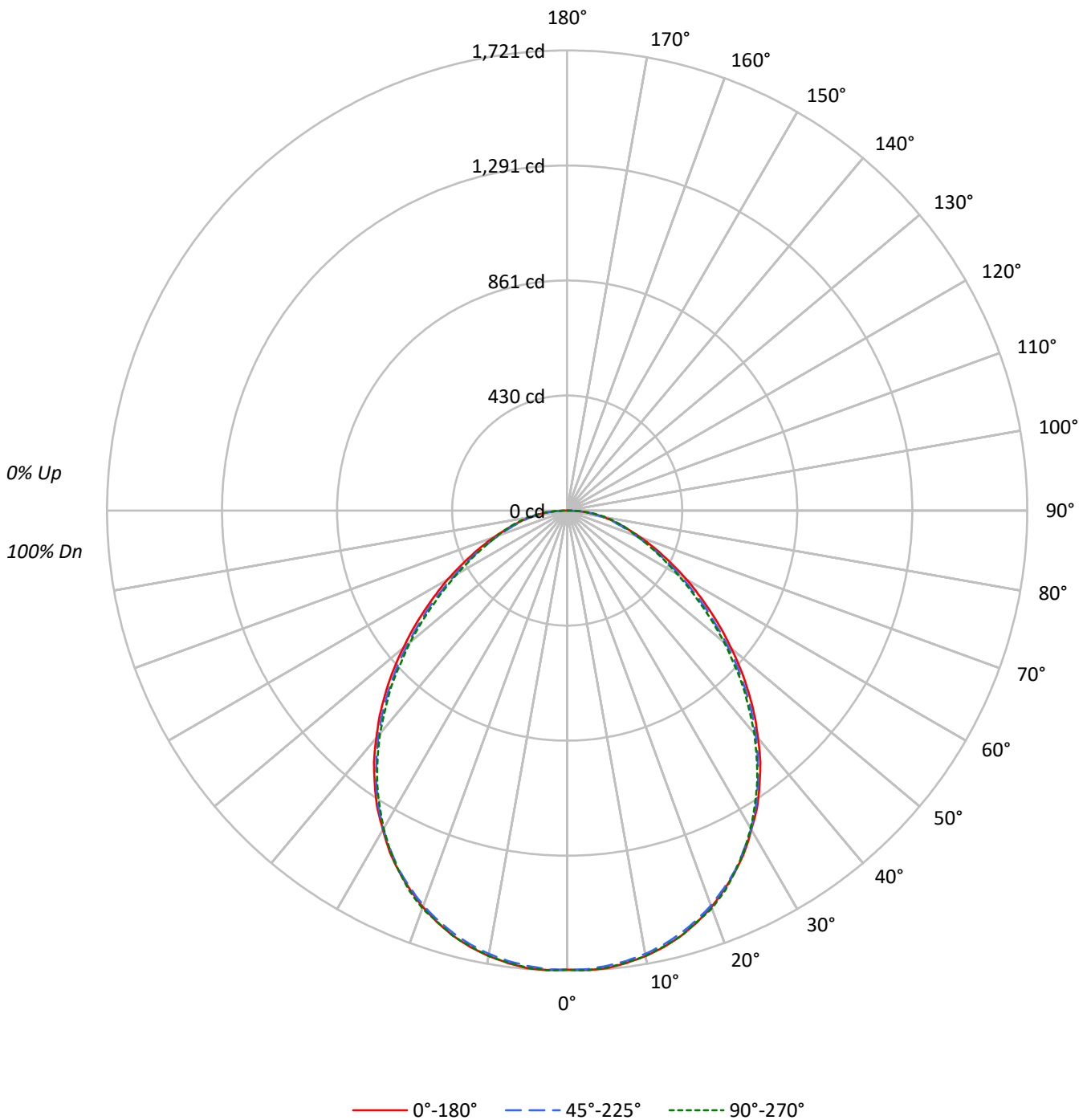
Input Watts (W): 25.947  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P293173

CATALOG NUMBER: 24GR-LD5-38-F125-UNV-L83050-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P293173

CATALOG NUMBER: 24GR-LD5-38-F125-UNV-L83050-W2A1-U-4000K

**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	73	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°	2310	2310	2310
5°	2321	2308	2317
10°	2311	2300	2310
15°	2293	2281	2295
20°	2260	2251	2267
25°	2211	2205	2210
30°	2141	2137	2132
35°	2060	2044	2036
40°	1950	1928	1912
45°	1824	1790	1769
50°	1676	1631	1603
55°	1529	1472	1430
60°	1388	1313	1280
65°	1251	1180	1160
70°	1145	1071	1100
75°	1070	1021	1096
80°	1062	1042	1145
85°	1082	1091	1247



TEST NUMBER: P293173

CATALOG NUMBER: 24GR-LD5-38-F125-UNV-L83050-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.5	4.0
10°-20°	462.0	11.4
20°-30°	682.5	16.9
30°-40°	775.9	19.2
40°-50°	724.6	17.9
50°-60°	563.5	13.9
60°-70°	373.9	9.3
70°-80°	216.4	5.4
80°-90°	78.7	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°	1307.0	32.4
0°-40°	2082.9	51.6
0°-60°	3371.0	83.4
0°-90°	4040.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4040.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1717	1717	1717	1717	1717	
5°	1718	1709	1709	1712	1716	163
15°	1646	1638	1637	1637	1648	464
25°	1489	1483	1485	1482	1488	685
35°	1254	1248	1245	1236	1240	783
45°	959	951	941	929	930	739
55°	652	642	628	611	609	584
65°	393	381	371	364	364	393
75°	206	201	196	205	211	220
85°	70	69	71	80	81	76
90°	0	0	0	0	0	



TEST NUMBER: P293173

CATALOG NUMBER: 24GR-LD5-38-F125-UNV-L83050-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1717.0	1717.0	1717.0	1717.0	1717.0
2.5°	1719.5	1714.5	1717.0	1715.1	1720.8
5°	1718.3	1709.4	1708.8	1711.9	1715.7
7.5°	1706.3	1696.8	1698.7	1698.7	1705.0
10°	1691.7	1682.3	1683.5	1684.2	1691.1
12.5°	1672.2	1662.7	1663.3	1662.7	1669.6
15°	1646.3	1638.1	1637.4	1636.8	1647.5
17.5°	1614.7	1603.3	1607.1	1607.8	1613.4
20°	1578.1	1569.2	1571.8	1571.1	1583.1
22.5°	1534.5	1528.2	1530.1	1528.8	1540.2
25°	1489.0	1482.7	1485.2	1482.1	1488.4
27.5°	1437.9	1433.5	1430.9	1429.0	1433.5
30°	1377.9	1375.4	1375.4	1367.2	1372.2
32.5°	1321.1	1312.9	1312.9	1309.7	1306.5
35°	1254.1	1247.8	1244.7	1235.8	1239.6
37.5°	1187.2	1172.7	1171.4	1164.5	1164.5
40°	1110.1	1101.9	1097.5	1089.9	1088.7
42.5°	1036.9	1028.7	1021.1	1008.5	1006.0
45°	958.6	951.0	940.9	928.9	929.5
47.5°	880.9	870.2	860.7	846.2	844.3
50°	800.7	793.1	779.2	766.6	766.0
52.5°	725.6	713.6	700.9	685.8	685.8
55°	651.7	642.2	627.7	611.3	609.4
57.5°	581.0	572.1	555.7	543.7	540.5
60°	515.9	503.3	488.1	478.0	475.5
62.5°	450.9	439.5	428.1	418.0	417.4
65°	392.8	380.8	370.7	363.7	364.4
67.5°	340.4	330.3	318.9	317.0	317.6
70°	291.1	280.4	272.2	276.6	279.7
72.5°	244.4	238.7	233.0	239.3	243.8
75°	205.9	200.8	196.4	205.2	210.9
77.5°	170.5	166.7	166.1	173.7	178.7
80°	137.0	132.6	134.5	143.3	147.8
82.5°	104.2	101.0	101.7	112.4	115.6
85°	70.1	68.8	70.7	80.2	80.8
87.5°	37.3	37.3	38.5	44.2	42.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)