

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: P293477

Luminaire Tested: **24GR-LD5-38-A-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293477  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-38-A-UNV-L82765-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3675.0 lumens  
Efficiency: N/A  
Efficacy: 145.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

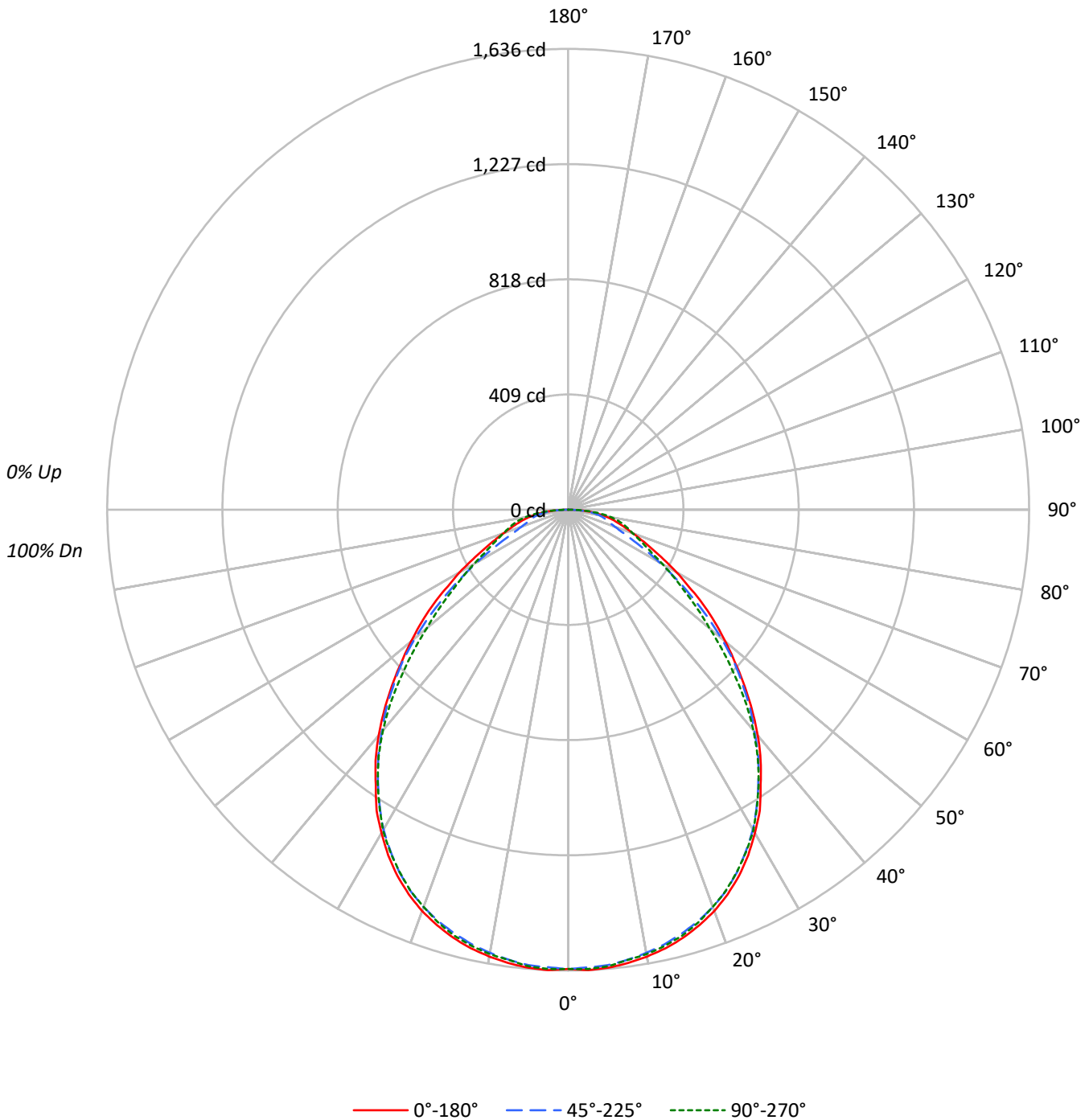
Input Watts (W): 25.203  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29

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

	0°	45°	90°
0°	2194	2194	2194
5°	2205	2192	2198
10°	2201	2183	2189
15°	2192	2170	2180
20°	2171	2149	2148
25°	2129	2106	2105
30°	2059	2038	2042
35°	1956	1933	1936
40°	1839	1807	1796
45°	1685	1663	1597
50°	1523	1482	1370
55°	1368	1245	1181
60°	1198	1002	1039
65°	1045	788	956
70°	956	688	956
75°	956	732	1054
80°	1038	862	1201
85°	1139	973	1289



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.4	4.2
10°-20°	440.7	12.0
20°-30°	653.4	17.8
30°-40°	737.1	20.1
40°-50°	667.6	18.2
50°-60°	481.6	13.1
60°-70°	287.6	7.8
70°-80°	177.7	4.8
80°-90°	74.9	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°	1248.5	34.0
0°-40°	1985.6	54.0
0°-60°	3134.8	85.3
0°-90°	3675.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3675.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1631	1631	1631	1631	1631	
5°	1632	1630	1623	1622	1627	155
15°	1574	1564	1558	1558	1565	444
25°	1434	1426	1419	1414	1418	659
35°	1191	1189	1177	1178	1179	745
45°	886	880	874	852	839	683
55°	583	565	531	505	504	520
65°	328	289	248	281	300	330
75°	184	160	141	175	203	196
85°	74	65	63	82	84	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1630.6	1630.6	1630.6	1630.6	1630.6
2.5°	1636.2	1631.7	1626.0	1629.4	1632.3
5°	1632.3	1630.0	1623.2	1621.5	1627.1
7.5°	1623.7	1618.1	1611.8	1614.7	1612.4
10°	1610.7	1605.6	1597.6	1598.2	1602.2
12.5°	1594.8	1588.5	1580.0	1582.3	1585.7
15°	1573.8	1564.1	1557.9	1558.5	1564.7
17.5°	1547.1	1539.7	1531.8	1533.5	1536.3
20°	1516.4	1512.5	1501.1	1497.7	1500.5
22.5°	1477.8	1470.5	1464.2	1462.5	1463.1
25°	1434.1	1426.2	1418.8	1413.7	1417.7
27.5°	1383.0	1376.2	1366.6	1364.9	1368.3
30°	1325.1	1320.0	1311.5	1309.2	1314.3
32.5°	1266.1	1257.5	1245.6	1245.6	1246.8
35°	1190.6	1188.9	1176.9	1177.5	1178.6
37.5°	1122.4	1114.5	1107.7	1100.9	1104.3
40°	1046.9	1037.8	1028.7	1024.2	1022.5
42.5°	965.7	958.9	954.9	938.5	934.5
45°	885.7	880.0	873.8	852.2	839.1
47.5°	803.9	802.8	797.7	759.6	746.6
50°	727.8	726.1	708.0	667.7	654.6
52.5°	655.7	644.4	620.5	580.8	578.5
55°	583.1	564.9	530.8	504.7	503.6
57.5°	506.4	484.9	450.2	436.0	443.4
60°	445.1	412.2	372.4	374.1	386.1
62.5°	381.5	344.6	305.4	322.5	336.7
65°	328.2	289.0	247.5	281.0	300.3
67.5°	281.6	245.3	205.5	250.4	269.1
70°	243.0	213.5	174.9	222.0	243.0
72.5°	212.3	185.1	155.0	199.3	223.7
75°	183.9	159.5	140.8	175.4	202.7
77.5°	159.5	135.7	127.2	155.0	181.7
80°	134.0	112.4	111.3	135.1	155.0
82.5°	104.5	89.7	89.7	113.0	124.9
85°	73.8	64.7	63.0	82.3	83.5
87.5°	38.0	36.3	32.9	43.1	43.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)