

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: P293425

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293425  
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-L83050-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4087.0 lumens  
Efficiency: N/A  
Efficacy: 157.5 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

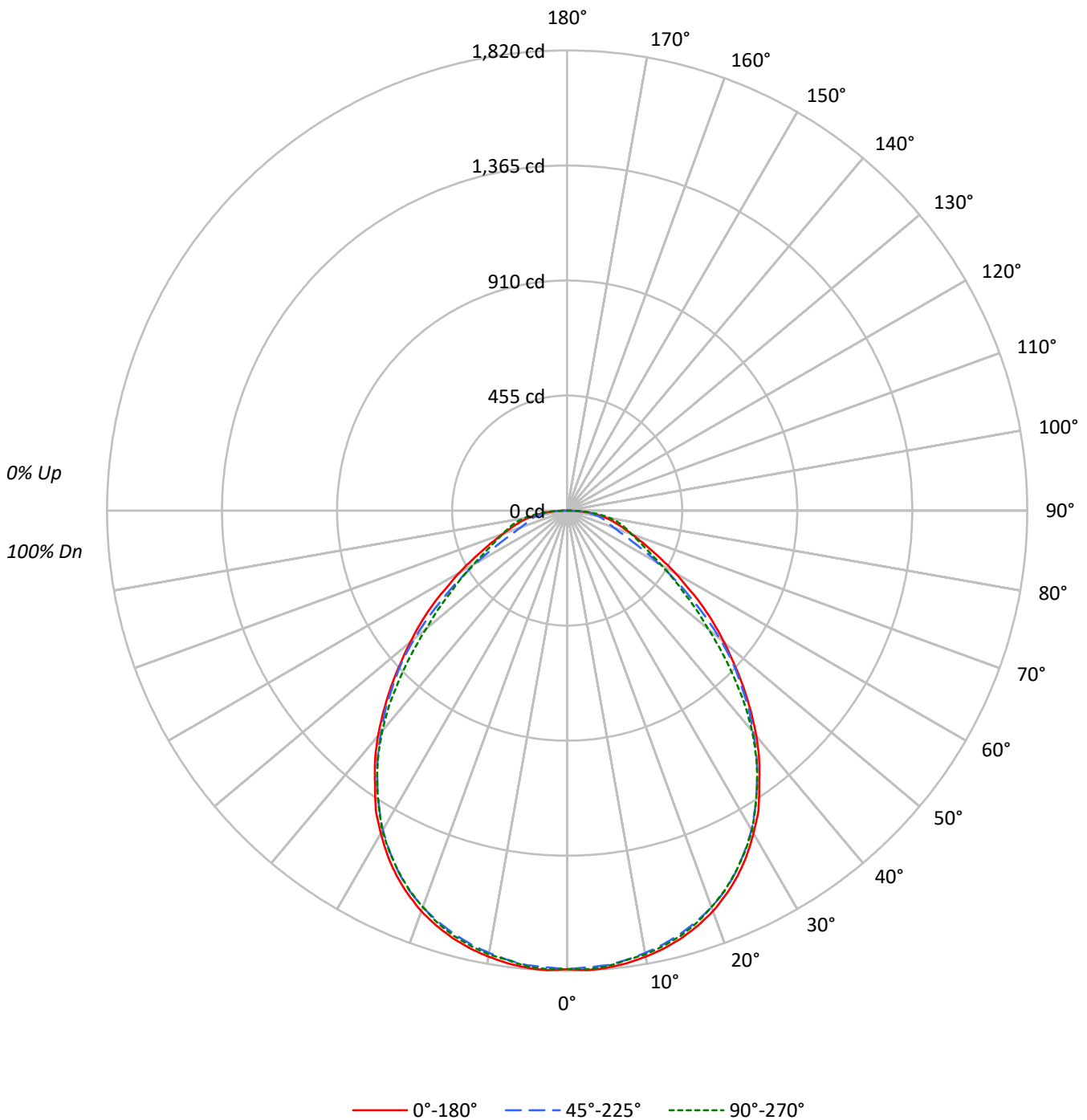
Input Watts (W): 25.947  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P293425

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

### Luminous Intensity Polar Plot





TEST NUMBER: P293425

CATALOG NUMBER: 24GR-LD5-38-A-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	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°	2440	2440	2440
5°	2452	2438	2444
10°	2447	2427	2434
15°	2438	2413	2424
20°	2415	2390	2389
25°	2368	2342	2341
30°	2290	2266	2271
35°	2175	2150	2153
40°	2045	2010	1997
45°	1874	1849	1776
50°	1694	1648	1524
55°	1521	1385	1314
60°	1332	1115	1155
65°	1162	876	1063
70°	1063	765	1063
75°	1064	814	1172
80°	1155	959	1336
85°	1267	1082	1433



TEST NUMBER: P293425

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

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	171.7	4.2
10°-20°	490.1	12.0
20°-30°	726.7	17.8
30°-40°	819.7	20.1
40°-50°	742.4	18.2
50°-60°	535.6	13.1
60°-70°	319.8	7.8
70°-80°	197.7	4.8
80°-90°	83.3	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°	1388.4	34.0
0°-40°	2208.2	54.0
0°-60°	3486.2	85.3
0°-90°	4087.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4087.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1813	1813	1813	1813	1813	
5°	1815	1813	1805	1803	1810	172
15°	1750	1740	1732	1733	1740	493
25°	1595	1586	1578	1572	1577	733
35°	1324	1322	1309	1310	1311	828
45°	985	979	972	948	933	759
55°	648	628	590	561	560	579
65°	365	321	275	312	334	367
75°	205	177	157	195	225	218
85°	82	72	70	92	93	86
90°	0	0	0	0	0	



TEST NUMBER: P293425

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

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1813.4	1813.4	1813.4	1813.4	1813.4
2.5°	1819.7	1814.6	1808.3	1812.1	1815.2
5°	1815.2	1812.7	1805.1	1803.3	1809.6
7.5°	1805.8	1799.5	1792.5	1795.7	1793.1
10°	1791.3	1785.6	1776.7	1777.4	1781.8
12.5°	1773.6	1766.6	1757.2	1759.7	1763.5
15°	1750.2	1739.5	1732.5	1733.2	1740.1
17.5°	1720.5	1712.3	1703.5	1705.4	1708.5
20°	1686.4	1682.0	1669.4	1665.6	1668.8
22.5°	1643.5	1635.3	1628.4	1626.5	1627.1
25°	1594.9	1586.1	1577.8	1572.2	1576.6
27.5°	1538.1	1530.5	1519.8	1517.9	1521.7
30°	1473.7	1468.0	1458.5	1456.0	1461.7
32.5°	1408.0	1398.5	1385.3	1385.3	1386.5
35°	1324.0	1322.1	1308.9	1309.5	1310.8
37.5°	1248.3	1239.4	1231.8	1224.3	1228.1
40°	1164.3	1154.2	1144.1	1139.0	1137.1
42.5°	1074.0	1066.4	1062.0	1043.7	1039.3
45°	985.0	978.7	971.7	947.7	933.2
47.5°	894.0	892.8	887.1	844.8	830.3
50°	809.4	807.5	787.3	742.5	728.0
52.5°	729.3	716.6	690.1	645.9	643.4
55°	648.4	628.2	590.4	561.3	560.0
57.5°	563.2	539.2	500.7	484.9	493.1
60°	495.0	458.4	414.2	416.1	429.3
62.5°	424.3	383.3	339.7	358.6	374.4
65°	364.9	321.4	275.3	312.5	334.0
67.5°	313.2	272.8	228.6	278.4	299.3
70°	270.2	237.4	194.5	246.9	270.2
72.5°	236.1	205.8	172.4	221.6	248.8
75°	204.6	177.4	156.6	195.1	225.4
77.5°	177.4	150.9	141.4	172.4	202.0
80°	149.0	125.0	123.8	150.3	172.4
82.5°	116.2	99.8	99.8	125.6	138.9
85°	82.1	72.0	70.1	91.6	92.8
87.5°	42.3	40.4	36.6	48.0	48.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)