

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: P292222

Luminaire Tested: **22GR-LD5-43-A-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292222  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-43-A-UNV-L82765-W2A1-U-6500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4537.0 lumens  
Efficiency: N/A  
Efficacy: 123.5 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

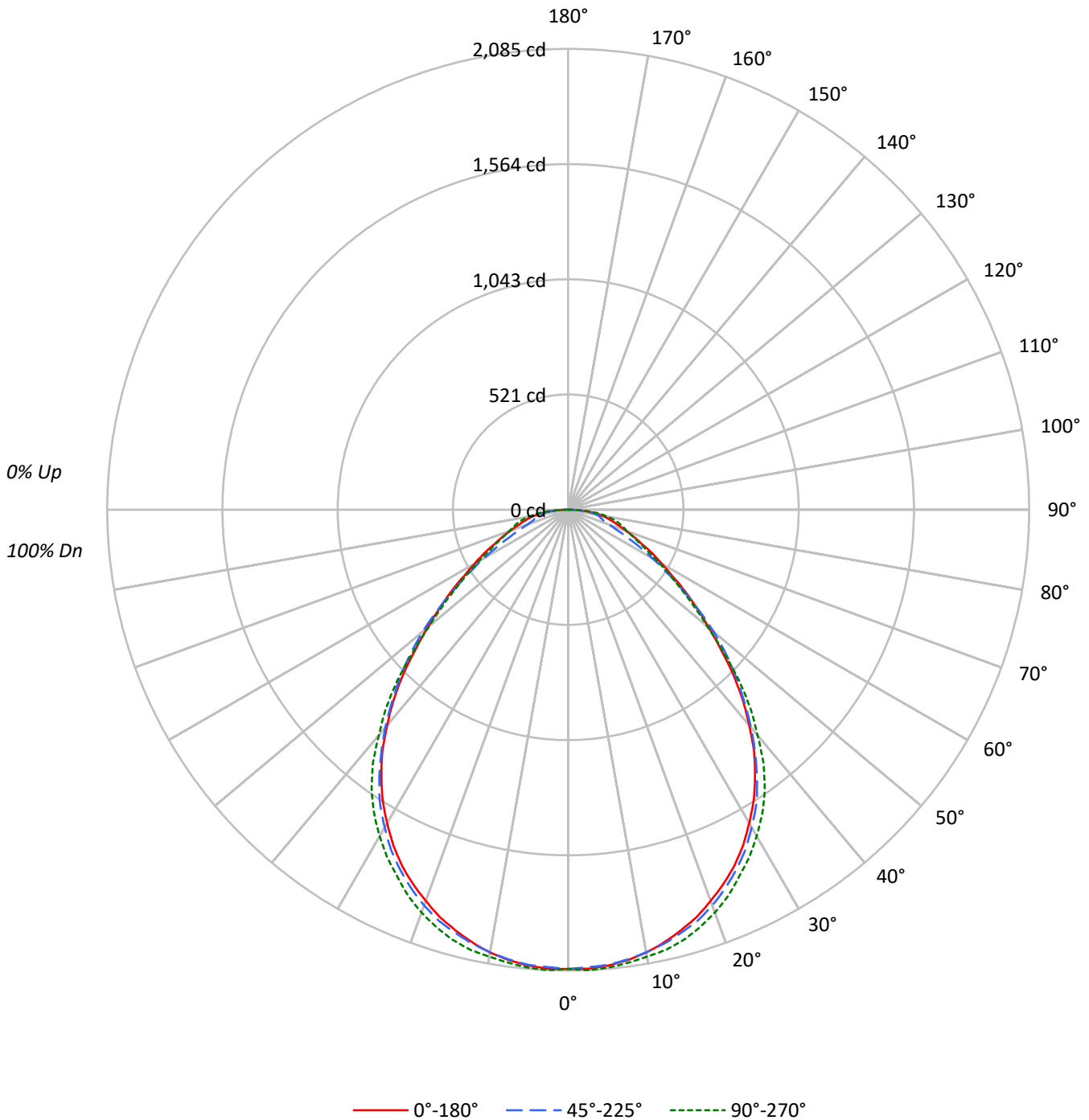
Input Watts (W): 36.735  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P292222

CATALOG NUMBER: 22GR-LD5-43-A-UNV-L82765-W2A1-U-6500K

### Luminous Intensity Polar Plot





TEST NUMBER: P292222

CATALOG NUMBER: 22GR-LD5-43-A-UNV-L82765-W2A1-U-6500K

**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	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

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

	0°	45°	90°
0°	5591	5591	5591
5°	5593	5584	5618
10°	5559	5556	5611
15°	5489	5518	5615
20°	5394	5457	5554
25°	5279	5339	5436
30°	5088	5157	5298
35°	4838	4894	5092
40°	4473	4521	4680
45°	4018	4090	4155
50°	3474	3598	3439
55°	3031	2952	2913
60°	2625	2364	2523
65°	2346	1855	2266
70°	2176	1537	2234
75°	2173	1625	2481
80°	2405	2046	2797
85°	2510	2217	3162



TEST NUMBER: P292222

CATALOG NUMBER: 22GR-LD5-43-A-UNV-L82765-W2A1-U-6500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	196.6	4.3
10°-20°	560.0	12.3
20°-30°	828.2	18.3
30°-40°	934.6	20.6
40°-50°	823.9	18.2
50°-60°	565.2	12.5
60°-70°	333.5	7.4
70°-80°	208.1	4.6
80°-90°	86.8	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°	1584.9	34.9
0°-40°	2519.5	55.5
0°-60°	3908.6	86.1
0°-90°	4537.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4537.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2078	2078	2078	2078	2078	
5°	2070	2066	2067	2075	2080	196
15°	1970	1972	1981	2005	2016	555
25°	1778	1784	1798	1821	1831	817
35°	1473	1486	1490	1526	1550	918
45°	1056	1061	1075	1081	1092	811
55°	646	630	629	608	621	580
65°	368	324	291	337	356	371
75°	209	188	156	218	239	224
85°	81	76	72	94	102	88
90°	0	0	0	0	0	



TEST NUMBER: P292222

CATALOG NUMBER: 22GR-LD5-43-A-UNV-L82765-W2A1-U-6500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2077.8	2077.8	2077.8	2077.8	2077.8
2.5°	2078.8	2073.6	2071.4	2079.9	2085.2
5°	2070.4	2066.2	2067.2	2074.6	2079.9
7.5°	2055.6	2052.4	2052.4	2063.0	2068.3
10°	2034.5	2033.4	2033.4	2046.1	2053.5
12.5°	2004.9	2006.0	2010.2	2027.1	2039.8
15°	1970.1	1972.2	1980.6	2004.9	2015.5
17.5°	1932.1	1932.1	1949.0	1968.0	1980.6
20°	1883.5	1886.7	1905.7	1926.8	1939.5
22.5°	1833.9	1839.2	1855.0	1879.3	1890.9
25°	1777.9	1784.3	1798.0	1821.2	1830.7
27.5°	1712.5	1720.9	1735.7	1752.6	1772.7
30°	1637.5	1650.2	1659.7	1682.9	1705.1
32.5°	1561.5	1573.1	1583.7	1608.0	1633.3
35°	1472.8	1485.5	1489.7	1525.6	1549.9
37.5°	1382.0	1387.3	1389.4	1425.3	1451.7
40°	1273.3	1283.8	1287.0	1315.5	1332.4
42.5°	1168.8	1173.0	1179.3	1200.4	1220.5
45°	1055.8	1061.1	1074.8	1081.1	1091.7
47.5°	937.5	953.4	969.2	949.1	950.2
50°	829.8	842.5	859.4	821.4	821.4
52.5°	733.8	740.1	741.2	709.5	715.8
55°	646.1	630.3	629.2	608.1	620.8
57.5°	558.5	537.4	530.0	523.7	538.4
60°	487.8	449.8	439.2	448.7	468.8
62.5°	429.7	381.1	361.1	385.4	403.3
65°	368.5	324.1	291.4	336.8	355.8
67.5°	321.0	278.7	236.5	300.9	314.6
70°	276.6	243.9	195.3	273.4	284.0
72.5°	240.7	215.4	168.9	247.1	259.7
75°	209.0	187.9	156.3	218.5	238.6
77.5°	183.7	160.5	145.7	189.0	213.3
80°	155.2	132.0	132.0	158.4	180.5
82.5°	122.5	103.5	106.6	128.8	144.6
85°	81.3	76.0	71.8	94.0	102.4
87.5°	41.2	42.2	38.0	48.6	49.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)