

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: P292261

Luminaire Tested: **22GR-LD5-20-A-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292261  
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-LD5-20-A-UNV-L92765-W2A1-U-4000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1831.0 lumens  
Efficiency: N/A  
Efficacy: 117.2 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

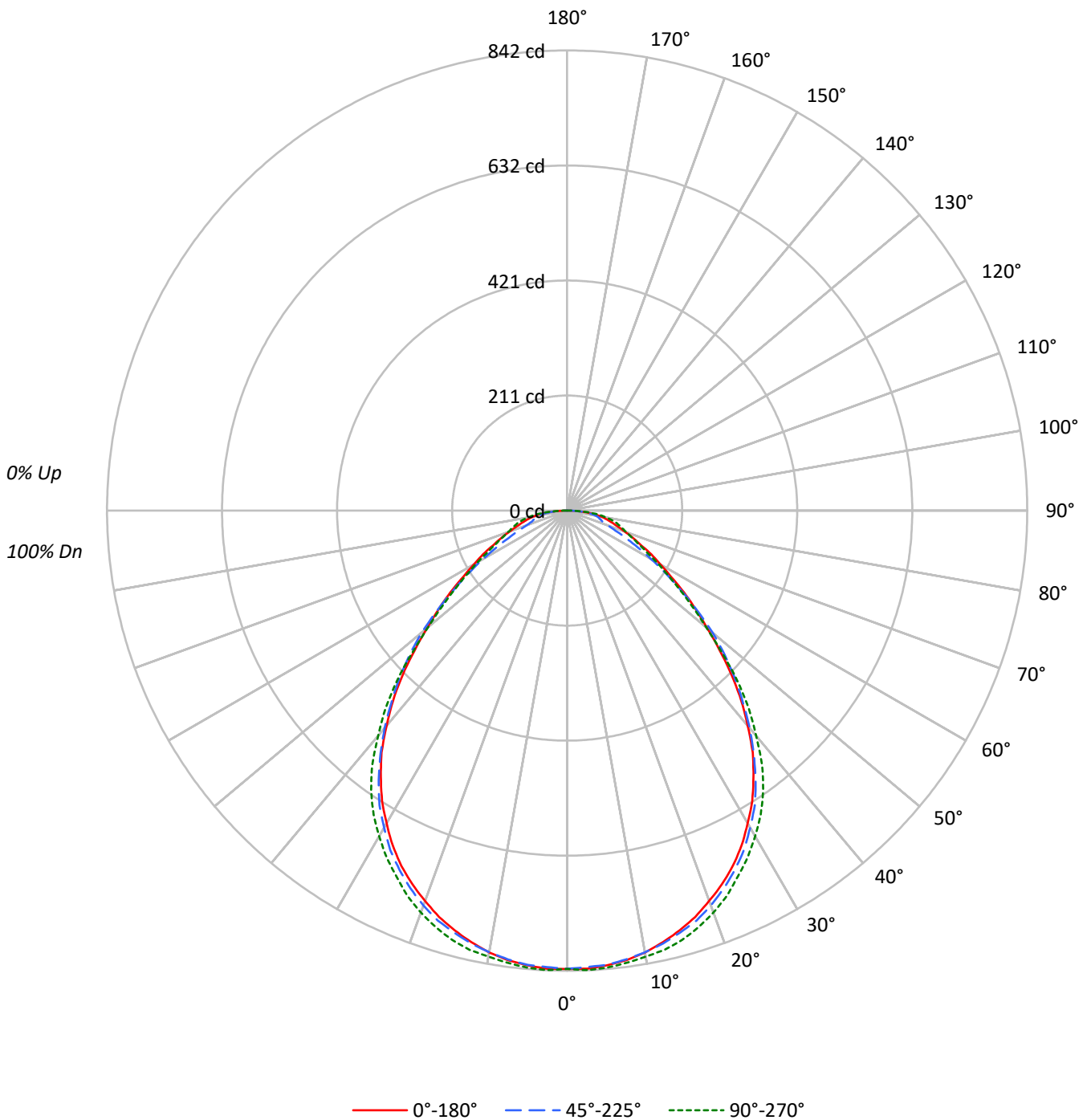
Input Watts (W): 15.624  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P292261

CATALOG NUMBER: 22GR-LD5-20-A-UNV-L92765-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P292261

CATALOG NUMBER: 22GR-LD5-20-A-UNV-L92765-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	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°	2256	2256	2256
5°	2257	2254	2267
10°	2244	2242	2264
15°	2215	2227	2266
20°	2177	2202	2241
25°	2130	2154	2194
30°	2054	2081	2138
35°	1953	1975	2055
40°	1805	1825	1889
45°	1622	1651	1677
50°	1402	1452	1388
55°	1224	1191	1175
60°	1060	954	1018
65°	947	749	914
70°	878	620	902
75°	878	656	1001
80°	970	826	1130
85°	1013	895	1275



TEST NUMBER: P292261

CATALOG NUMBER: 22GR-LD5-20-A-UNV-L92765-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.4	4.3
10°-20°	226.0	12.3
20°-30°	334.2	18.3
30°-40°	377.2	20.6
40°-50°	332.5	18.2
50°-60°	228.1	12.5
60°-70°	134.6	7.4
70°-80°	84.0	4.6
80°-90°	35.0	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°	639.6	34.9
0°-40°	1016.8	55.5
0°-60°	1577.4	86.1
0°-90°	1831.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1831.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	838	838	838	838	838	
5°	836	834	834	837	839	79
15°	795	796	799	809	813	224
25°	718	720	726	735	739	330
35°	594	600	601	616	626	370
45°	426	428	434	436	441	327
55°	261	254	254	245	250	234
65°	149	131	118	136	144	150
75°	84	76	63	88	96	90
85°	33	31	29	38	41	35
90°	0	0	0	0	0	



TEST NUMBER: P292261

CATALOG NUMBER: 22GR-LD5-20-A-UNV-L92765-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	838.5	838.5	838.5	838.5	838.5
2.5°	839.0	836.8	836.0	839.4	841.5
5°	835.5	833.8	834.3	837.3	839.4
7.5°	829.6	828.3	828.3	832.6	834.7
10°	821.1	820.6	820.6	825.7	828.7
12.5°	809.1	809.6	811.3	818.1	823.2
15°	795.1	795.9	799.3	809.1	813.4
17.5°	779.7	779.7	786.5	794.2	799.3
20°	760.1	761.4	769.1	777.6	782.7
22.5°	740.1	742.2	748.6	758.4	763.1
25°	717.5	720.1	725.6	735.0	738.8
27.5°	691.1	694.5	700.5	707.3	715.4
30°	660.9	666.0	669.8	679.2	688.1
32.5°	630.2	634.9	639.1	648.9	659.2
35°	594.4	599.5	601.2	615.7	625.5
37.5°	557.7	559.9	560.7	575.2	585.9
40°	513.9	518.1	519.4	530.9	537.7
42.5°	471.7	473.4	475.9	484.5	492.6
45°	426.1	428.2	433.8	436.3	440.6
47.5°	378.4	384.8	391.1	383.0	383.5
50°	334.9	340.0	346.8	331.5	331.5
52.5°	296.1	298.7	299.1	286.3	288.9
55°	260.8	254.4	253.9	245.4	250.5
57.5°	225.4	216.9	213.9	211.3	217.3
60°	196.9	181.5	177.3	181.1	189.2
62.5°	173.4	153.8	145.7	155.5	162.8
65°	148.7	130.8	117.6	135.9	143.6
67.5°	129.5	112.5	95.4	121.4	127.0
70°	111.6	98.4	78.8	110.4	114.6
72.5°	97.1	86.9	68.2	99.7	104.8
75°	84.4	75.8	63.1	88.2	96.3
77.5°	74.1	64.8	58.8	76.3	86.1
80°	62.6	53.3	53.3	63.9	72.9
82.5°	49.4	41.8	43.0	52.0	58.4
85°	32.8	30.7	29.0	37.9	41.3
87.5°	16.6	17.0	15.3	19.6	20.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)