

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: P292281

Luminaire Tested: **22GR-LD5-28-A-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292281  
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-LD5-28-A-UNV-L92765-W2A1-U-5000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2689.0 lumens  
Efficiency: N/A  
Efficacy: 119.0 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

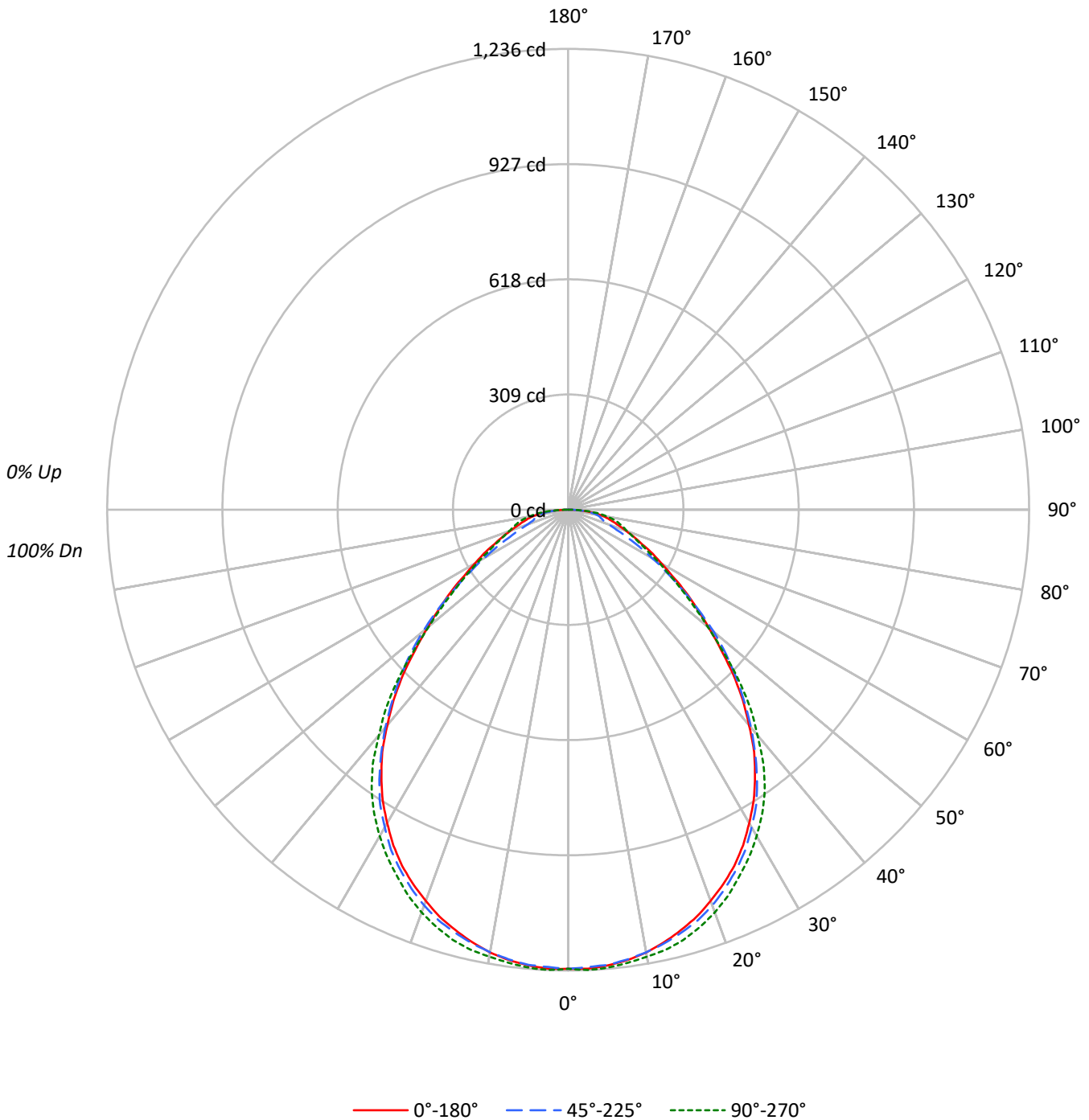
Input Watts (W): 22.599  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P292281

CATALOG NUMBER: 22GR-LD5-28-A-UNV-L92765-W2A1-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P292281

CATALOG NUMBER: 22GR-LD5-28-A-UNV-L92765-W2A1-U-5000K

**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°	3314	3314	3314
5°	3315	3310	3330
10°	3295	3293	3326
15°	3253	3270	3328
20°	3197	3235	3292
25°	3129	3164	3222
30°	3016	3057	3140
35°	2868	2900	3018
40°	2651	2680	2774
45°	2381	2424	2462
50°	2059	2133	2038
55°	1797	1749	1726
60°	1556	1401	1495
65°	1391	1100	1343
70°	1290	911	1324
75°	1288	963	1470
80°	1426	1212	1658
85°	1488	1315	1874



TEST NUMBER: P292281

CATALOG NUMBER: 22GR-LD5-28-A-UNV-L92765-W2A1-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.5	4.3
10°-20°	331.9	12.3
20°-30°	490.9	18.3
30°-40°	553.9	20.6
40°-50°	488.3	18.2
50°-60°	335.0	12.5
60°-70°	197.7	7.4
70°-80°	123.3	4.6
80°-90°	51.4	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°	939.3	34.9
0°-40°	1493.2	55.5
0°-60°	2316.5	86.1
0°-90°	2689.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2689.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1227	1225	1225	1230	1233	116
15°	1168	1169	1174	1188	1194	329
25°	1054	1058	1066	1079	1085	484
35°	873	880	883	904	919	544
45°	626	629	637	641	647	481
55°	383	374	373	360	368	344
65°	218	192	173	200	211	220
75°	124	111	93	130	141	133
85°	48	45	43	56	61	52
90°	0	0	0	0	0	



TEST NUMBER: P292281

CATALOG NUMBER: 22GR-LD5-28-A-UNV-L92765-W2A1-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1231.5	1231.5	1231.5	1231.5	1231.5
2.5°	1232.1	1229.0	1227.7	1232.7	1235.8
5°	1227.1	1224.6	1225.2	1229.6	1232.7
7.5°	1218.3	1216.4	1216.4	1222.7	1225.8
10°	1205.8	1205.2	1205.2	1212.7	1217.1
12.5°	1188.3	1188.9	1191.4	1201.4	1208.9
15°	1167.6	1168.9	1173.9	1188.3	1194.5
17.5°	1145.1	1145.1	1155.1	1166.4	1173.9
20°	1116.3	1118.2	1129.5	1142.0	1149.5
22.5°	1086.9	1090.0	1099.4	1113.8	1120.7
25°	1053.8	1057.5	1065.6	1079.4	1085.0
27.5°	1015.0	1020.0	1028.7	1038.7	1050.6
30°	970.5	978.0	983.7	997.4	1010.6
32.5°	925.5	932.4	938.6	953.0	968.0
35°	872.9	880.4	882.9	904.2	918.6
37.5°	819.1	822.2	823.5	844.8	860.4
40°	754.6	760.9	762.8	779.7	789.7
42.5°	692.7	695.2	699.0	711.5	723.4
45°	625.7	628.9	637.0	640.8	647.0
47.5°	555.7	565.0	574.4	562.5	563.2
50°	491.8	499.3	509.4	486.8	486.8
52.5°	434.9	438.6	439.3	420.5	424.3
55°	383.0	373.6	372.9	360.4	367.9
57.5°	331.0	318.5	314.1	310.4	319.1
60°	289.1	266.6	260.3	265.9	277.8
62.5°	254.7	225.9	214.0	228.4	239.0
65°	218.4	192.1	172.7	199.6	210.9
67.5°	190.2	165.2	140.2	178.3	186.5
70°	163.9	144.5	115.8	162.1	168.3
72.5°	142.7	127.7	100.1	146.4	153.9
75°	123.9	111.4	92.6	129.5	141.4
77.5°	108.9	95.1	86.4	112.0	126.4
80°	92.0	78.2	78.2	93.9	107.0
82.5°	72.6	61.3	63.2	76.3	85.7
85°	48.2	45.1	42.6	55.7	60.7
87.5°	24.4	25.0	22.5	28.8	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)