

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: P292800

Luminaire Tested: **22GR-LD5-40-FGW080-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292800  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-26)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-40-FGW080-UNV-L82765-W2A1-U-5700K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3551.0 lumens  
Efficiency: N/A  
Efficacy: 106.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

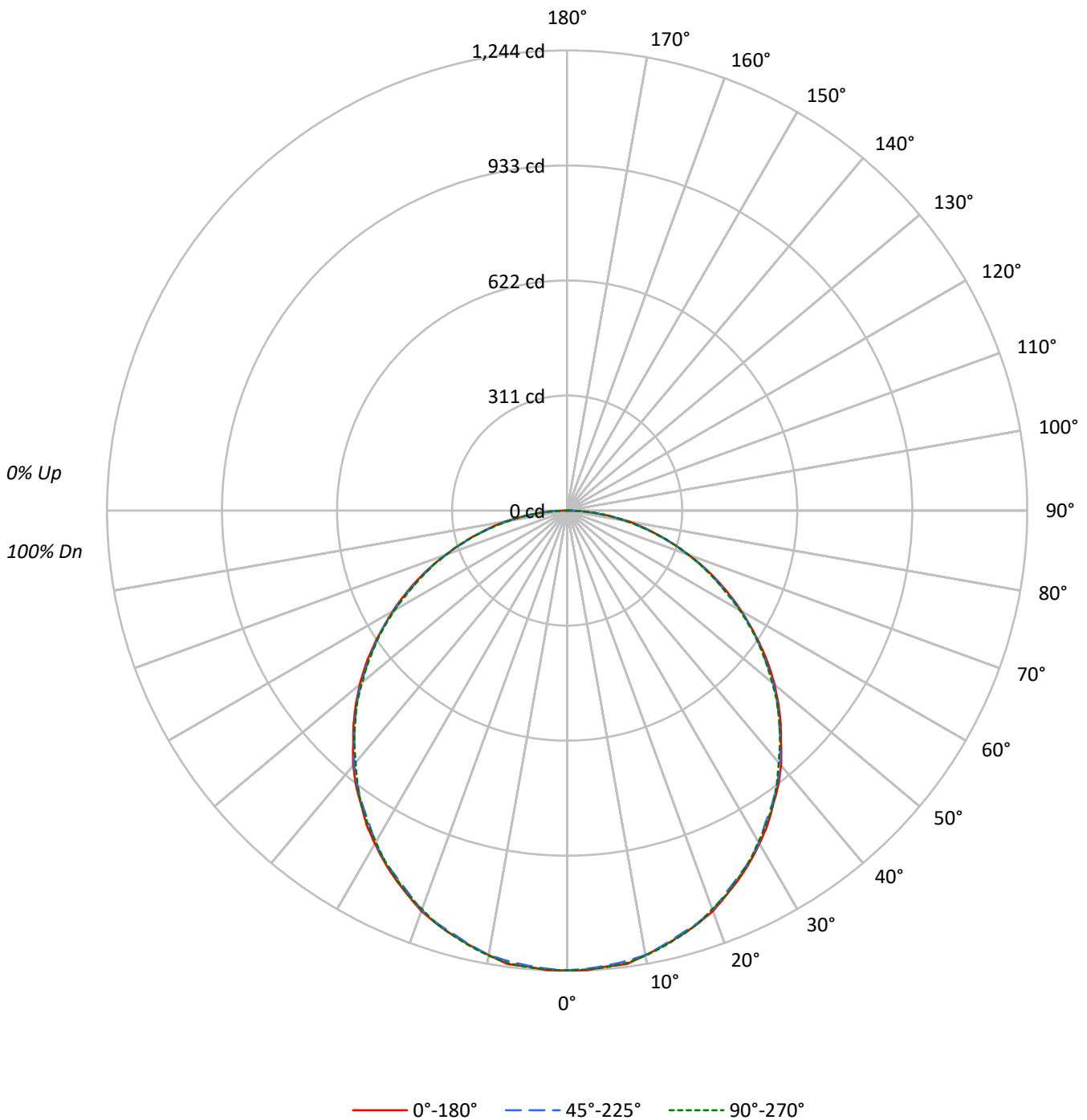
Input Watts (W): 33.294  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P292800

CATALOG NUMBER: 22GR-LD5-40-FGW080-UNV-L82765-W2A1-U-5700K

### Luminous Intensity Polar Plot





TEST NUMBER: P292800

CATALOG NUMBER: 22GR-LD5-40-FGW080-UNV-L82765-W2A1-U-5700K

**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	108	103	99	95	106	101	97	94	97	94	91		93	90	88		89	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74		81	77	73		78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40		52	45	40		50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35		47	40	35		46	40	35	33
8	60	46	38	32	58	46	37	32	44	37	32		43	36	31		42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28		40	33	28		39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36	30	26	24

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

	0°	45°	90°
0°	3345	3345	3345
5°	3340	3335	3346
10°	3333	3333	3339
15°	3312	3303	3314
20°	3300	3290	3285
25°	3263	3244	3254
30°	3230	3220	3214
35°	3189	3175	3189
40°	3161	3146	3124
45°	3107	3087	3087
50°	3064	3047	3029
55°	2999	2979	2974
60°	2929	2913	2901
65°	2855	2821	2809
70°	2740	2732	2740
75°	2645	2613	2635
80°	2617	2489	2472
85°	2319	2254	2285



TEST NUMBER: P292800

CATALOG NUMBER: 22GR-LD5-40-FGW080-UNV-L82765-W2A1-U-5700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.6	3.3
10°-20°	335.5	9.4
20°-30°	505.2	14.2
30°-40°	606.2	17.1
40°-50°	627.3	17.7
50°-60°	568.4	16.0
60°-70°	440.6	12.4
70°-80°	267.5	7.5
80°-90°	82.8	2.3
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°	958.2	27.0
0°-40°	1564.4	44.1
0°-60°	2760.1	77.7
0°-90°	3551.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3551.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1243	1243	1243	1243	1243	
5°	1237	1237	1234	1238	1239	118
15°	1189	1189	1186	1191	1190	336
25°	1099	1097	1093	1097	1096	507
35°	971	971	967	968	971	609
45°	816	815	811	811	811	630
55°	639	638	635	634	634	572
65°	448	448	443	445	441	443
75°	254	253	251	251	253	271
85°	75	74	73	73	74	85
90°	0	0	0	0	0	



TEST NUMBER: P292800

CATALOG NUMBER: 22GR-LD5-40-FGW080-UNV-L82765-W2A1-U-5700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1242.9	1242.9	1242.9	1242.9	1242.9
2.5°	1243.9	1238.7	1239.8	1241.8	1241.8
5°	1236.6	1236.6	1234.5	1237.7	1238.7
7.5°	1236.6	1231.4	1228.3	1231.4	1233.5
10°	1219.9	1217.9	1219.9	1218.9	1222.0
12.5°	1205.3	1203.3	1203.3	1206.4	1206.4
15°	1188.7	1188.7	1185.5	1190.7	1189.7
17.5°	1172.0	1172.0	1169.9	1169.9	1172.0
20°	1152.2	1147.0	1149.0	1148.0	1147.0
22.5°	1125.1	1121.9	1119.8	1123.0	1124.0
25°	1099.0	1096.9	1092.7	1096.9	1095.9
27.5°	1070.8	1068.8	1067.7	1065.6	1067.7
30°	1039.6	1037.5	1036.4	1034.3	1034.3
32.5°	1008.3	1004.1	998.9	1004.1	1003.1
35°	970.7	970.7	966.6	967.6	970.7
37.5°	937.4	935.3	933.2	930.1	931.1
40°	899.8	896.7	895.7	893.6	889.4
42.5°	856.0	856.0	851.9	852.9	851.9
45°	816.4	815.4	811.2	811.2	811.2
47.5°	774.7	773.7	770.5	768.5	770.5
50°	732.0	727.8	727.8	724.7	723.6
52.5°	687.1	684.0	679.8	680.9	678.8
55°	639.2	638.1	635.0	634.0	634.0
57.5°	591.2	592.2	590.2	586.0	587.0
60°	544.3	543.2	541.2	539.1	539.1
62.5°	496.3	496.3	492.1	492.1	488.0
65°	448.4	448.4	443.1	445.2	441.1
67.5°	400.4	399.3	396.2	395.2	396.2
70°	348.3	349.3	347.2	347.2	348.3
72.5°	301.3	300.3	299.3	299.3	301.3
75°	254.4	253.4	251.3	251.3	253.4
77.5°	211.7	206.5	205.4	207.5	204.4
80°	168.9	161.6	160.6	159.5	159.5
82.5°	118.9	115.7	116.8	115.7	117.8
85°	75.1	74.0	73.0	73.0	74.0
87.5°	35.5	33.4	33.4	32.3	32.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)