

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: P291989

Luminaire Tested: **22GR-LD5-28-F125-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291989  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33295)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-28-F125-UNV-L82765-W2A1-U-5700K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3042.0 lumens  
Efficiency: N/A  
Efficacy: 134.1 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.19 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

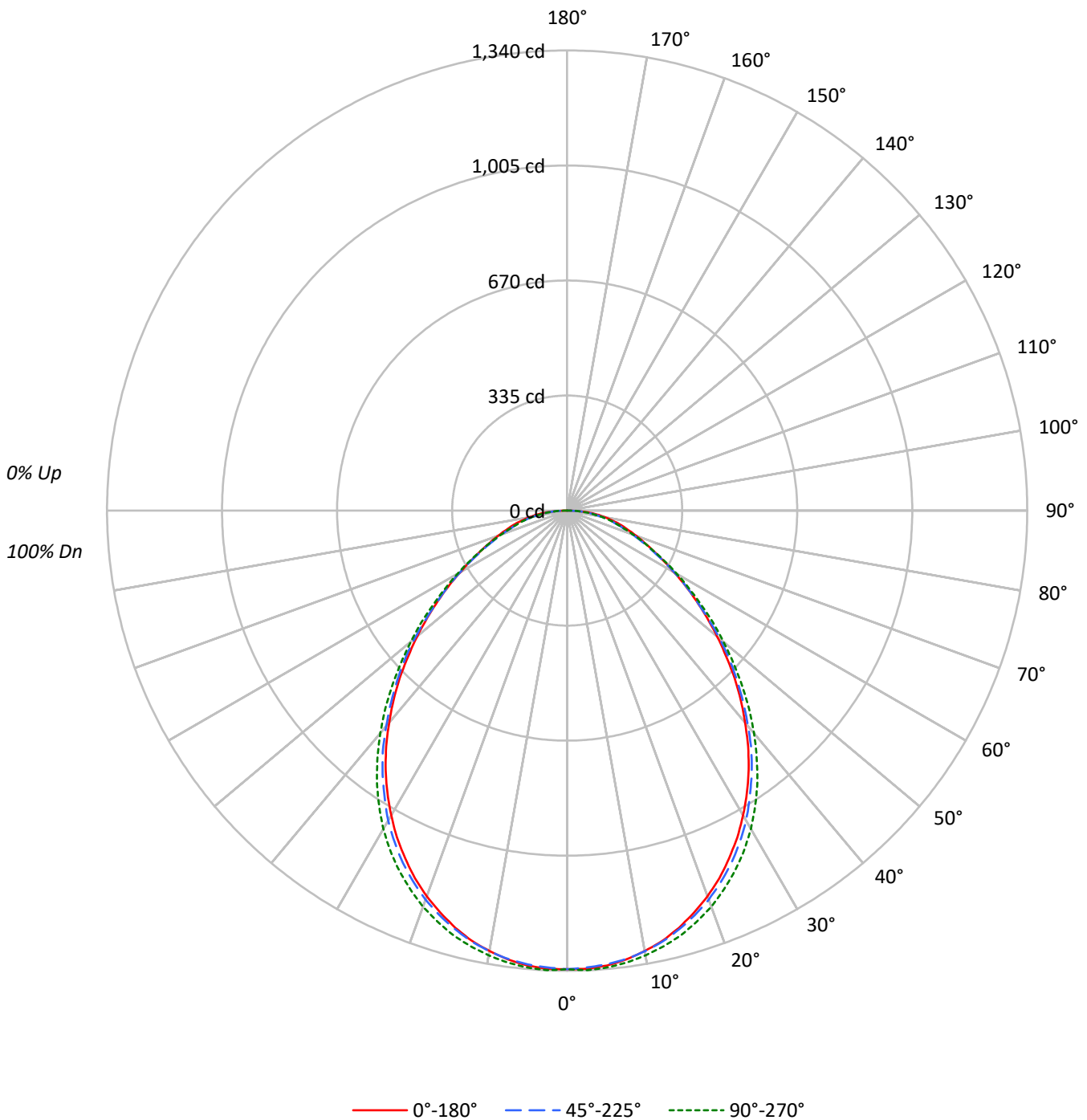
Input Watts (W): 22.692  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**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	97	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	75	73
3	92	82	75	69	90	81	74	68	78	72	67		75	70	66		73	68	65	62
4	85	74	65	59	83	72	65	59	70	63	58		68	62	57		65	60	56	54
5	78	66	58	52	76	65	57	51	63	56	51		61	55	50		59	54	50	48
6	73	60	52	45	71	59	51	45	57	50	45		56	49	45		54	49	44	42
7	68	55	46	41	66	54	46	40	53	45	40		51	45	40		50	44	40	38
8	63	50	42	36	62	50	42	36	48	41	36		47	41	36		46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33		44	37	33		43	37	33	31
10	56	43	35	30	54	42	35	30	41	35	30		40	34	30		40	34	30	28

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

	0°	45°	90°
0°	3594	3594	3594
5°	3592	3583	3608
10°	3559	3560	3593
15°	3504	3516	3567
20°	3422	3452	3515
25°	3315	3362	3435
30°	3185	3239	3325
35°	3028	3077	3172
40°	2832	2879	2973
45°	2622	2662	2740
50°	2388	2426	2488
55°	2156	2162	2225
60°	1934	1941	1987
65°	1762	1726	1766
70°	1677	1583	1611
75°	1687	1526	1534
80°	1750	1542	1531
85°	1917	1633	1547



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.2	4.1
10°-20°	356.4	11.7
20°-30°	521.7	17.1
30°-40°	586.5	19.3
40°-50°	540.9	17.8
50°-60°	416.9	13.7
60°-70°	275.1	9.0
70°-80°	160.1	5.3
80°-90°	58.3	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°	1004.2	33.0
0°-40°	1590.7	52.3
0°-60°	2548.5	83.8
0°-90°	3042.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3042.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1336	1336	1336	1336	1336	
5°	1330	1327	1326	1333	1336	126
15°	1258	1258	1262	1273	1280	354
25°	1117	1122	1132	1148	1157	514
35°	922	926	937	956	966	575
45°	689	690	700	714	720	530
55°	460	459	461	469	474	412
65°	277	275	271	273	277	277
75°	162	155	147	144	148	171
85°	62	61	53	49	50	66
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1335.5	1335.5	1335.5	1335.5	1335.5
2.5°	1335.5	1332.6	1331.9	1336.9	1339.7
5°	1329.8	1327.0	1326.3	1332.6	1335.5
7.5°	1318.5	1316.4	1317.1	1324.2	1327.7
10°	1302.3	1301.6	1303.0	1310.7	1315.0
12.5°	1283.2	1282.5	1285.3	1293.8	1299.5
15°	1257.8	1257.8	1262.0	1273.3	1280.4
17.5°	1227.5	1229.6	1235.9	1247.2	1255.0
20°	1195.0	1197.1	1205.6	1218.3	1227.5
22.5°	1159.0	1161.8	1170.3	1185.8	1193.6
25°	1116.6	1122.3	1132.2	1147.7	1156.9
27.5°	1072.9	1079.2	1088.4	1107.5	1115.9
30°	1024.9	1029.1	1042.5	1060.2	1070.1
32.5°	974.1	978.3	989.6	1010.8	1019.2
35°	921.8	926.1	936.7	955.7	965.6
37.5°	865.4	868.9	881.6	896.4	907.0
40°	806.1	811.0	819.5	837.1	846.3
42.5°	748.2	750.3	759.5	777.1	784.2
45°	688.9	689.6	699.5	713.6	720.0
47.5°	627.5	628.9	640.9	649.4	655.7
50°	570.3	571.0	579.5	587.3	594.3
52.5°	513.1	513.1	517.4	525.9	535.0
55°	459.5	458.8	460.9	468.7	474.3
57.5°	408.7	408.0	410.8	415.7	420.0
60°	359.3	357.9	360.7	363.5	369.2
62.5°	315.5	316.9	313.4	317.6	321.9
65°	276.7	275.3	271.0	273.2	277.4
67.5°	243.5	241.4	234.3	235.8	240.7
70°	213.2	208.9	201.2	201.2	204.7
72.5°	185.6	181.4	171.5	172.2	173.6
75°	162.3	155.3	146.8	144.0	147.5
77.5°	136.9	131.3	123.5	121.4	122.8
80°	112.9	108.7	99.5	96.7	98.8
82.5°	89.6	86.1	75.5	73.4	74.1
85°	62.1	61.4	52.9	48.7	50.1
87.5°	33.2	33.9	27.5	24.7	26.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)