

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: P292041

Luminaire Tested: **22GR-LD5-28-F125-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292041  
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-L93050-W2A1-U-5000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2725.0 lumens  
Efficiency: N/A  
Efficacy: 118.6 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

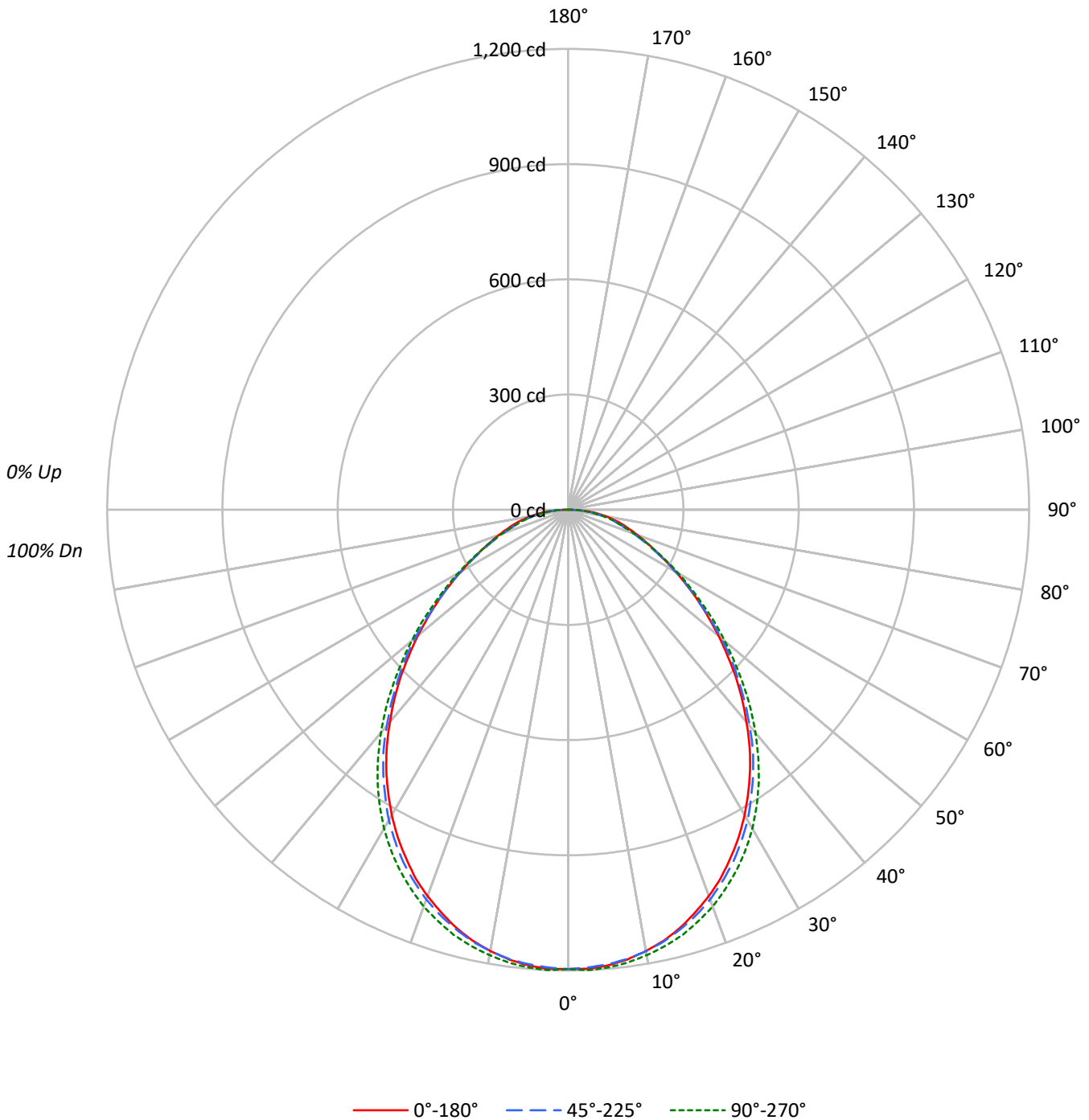
Input Watts (W): 22.971  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					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°	3219	3219	3219
5°	3218	3209	3232
10°	3188	3189	3219
15°	3139	3149	3195
20°	3066	3092	3149
25°	2970	3011	3077
30°	2853	2902	2978
35°	2713	2756	2842
40°	2537	2579	2663
45°	2348	2385	2454
50°	2139	2173	2229
55°	1931	1937	1993
60°	1732	1739	1780
65°	1578	1546	1582
70°	1503	1418	1443
75°	1512	1367	1373
80°	1568	1382	1371
85°	1717	1463	1386



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.0	4.1
10°-20°	319.3	11.7
20°-30°	467.3	17.1
30°-40°	525.4	19.3
40°-50°	484.5	17.8
50°-60°	373.4	13.7
60°-70°	246.4	9.0
70°-80°	143.4	5.3
80°-90°	52.2	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°	899.6	33.0
0°-40°	1425.0	52.3
0°-60°	2282.9	83.8
0°-90°	2725.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2725.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1196	1196	1196	1196	1196	
5°	1191	1189	1188	1194	1196	113
15°	1127	1127	1130	1141	1147	317
25°	1000	1005	1014	1028	1036	460
35°	826	830	839	856	865	515
45°	617	618	627	639	645	475
55°	412	411	413	420	425	369
65°	248	247	243	245	248	249
75°	145	139	132	129	132	153
85°	56	55	47	44	45	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1196.3	1196.3	1196.3	1196.3	<i>1196.3</i>
2.5°	<i>1196.3</i>	<i>1193.8</i>	<i>1193.1</i>	<i>1197.6</i>	<i>1200.1</i>
5°	1191.2	1188.7	1188.1	1193.8	<i>1196.3</i>
7.5°	1181.1	1179.2	1179.8	1186.2	<i>1189.3</i>
10°	1166.6	1165.9	1167.2	1174.2	<i>1178.0</i>
12.5°	1149.5	1148.9	1151.4	1159.0	<i>1164.0</i>
15°	1126.7	1126.7	1130.5	1140.6	<i>1147.0</i>
17.5°	1099.5	1101.4	1107.1	1117.3	<i>1124.2</i>
20°	1070.5	1072.4	1079.9	1091.3	<i>1099.5</i>
22.5°	1038.2	1040.7	1048.3	1062.2	<i>1069.2</i>
25°	1000.3	1005.3	1014.2	1028.1	<i>1036.3</i>
27.5°	961.1	966.8	975.0	992.1	<i>999.6</i>
30°	918.1	921.9	933.9	949.7	<i>958.5</i>
32.5°	872.6	876.3	886.5	905.4	<i>913.0</i>
35°	825.8	829.6	839.0	856.1	<i>865.0</i>
37.5°	775.2	778.3	789.7	803.0	<i>812.5</i>
40°	722.1	726.5	734.1	749.9	<i>758.1</i>
42.5°	670.2	672.1	680.3	696.1	<i>702.5</i>
45°	617.1	617.7	626.6	639.2	<i>644.9</i>
47.5°	562.1	563.4	574.1	581.7	<i>587.4</i>
50°	510.9	511.5	519.1	526.1	<i>532.4</i>
52.5°	459.7	459.7	463.5	471.1	<i>479.3</i>
55°	411.6	411.0	412.9	419.8	<i>424.9</i>
57.5°	366.1	365.5	368.0	372.4	<i>376.2</i>
60°	321.8	320.6	323.1	325.6	<i>330.7</i>
62.5°	282.6	283.9	280.7	284.5	<i>288.3</i>
65°	247.9	246.6	242.8	244.7	<i>248.5</i>
67.5°	218.1	216.2	209.9	211.2	<i>215.6</i>
70°	191.0	187.2	180.2	180.2	<i>183.4</i>
72.5°	166.3	162.5	153.6	154.3	<i>155.5</i>
75°	145.4	139.1	131.5	129.0	<i>132.1</i>
77.5°	122.7	117.6	110.7	108.8	<i>110.0</i>
80°	101.2	97.4	89.2	86.6	<i>88.5</i>
82.5°	80.3	77.1	67.7	65.8	<i>66.4</i>
85°	55.6	55.0	47.4	43.6	<i>44.9</i>
87.5°	29.7	30.3	24.7	22.1	<i>23.4</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)