

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: P291943

Luminaire Tested: **22GR-LD5-28-F125-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291943  
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-L83050-W2A1-U-5000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3093.0 lumens  
Efficiency: N/A  
Efficacy: 133.6 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

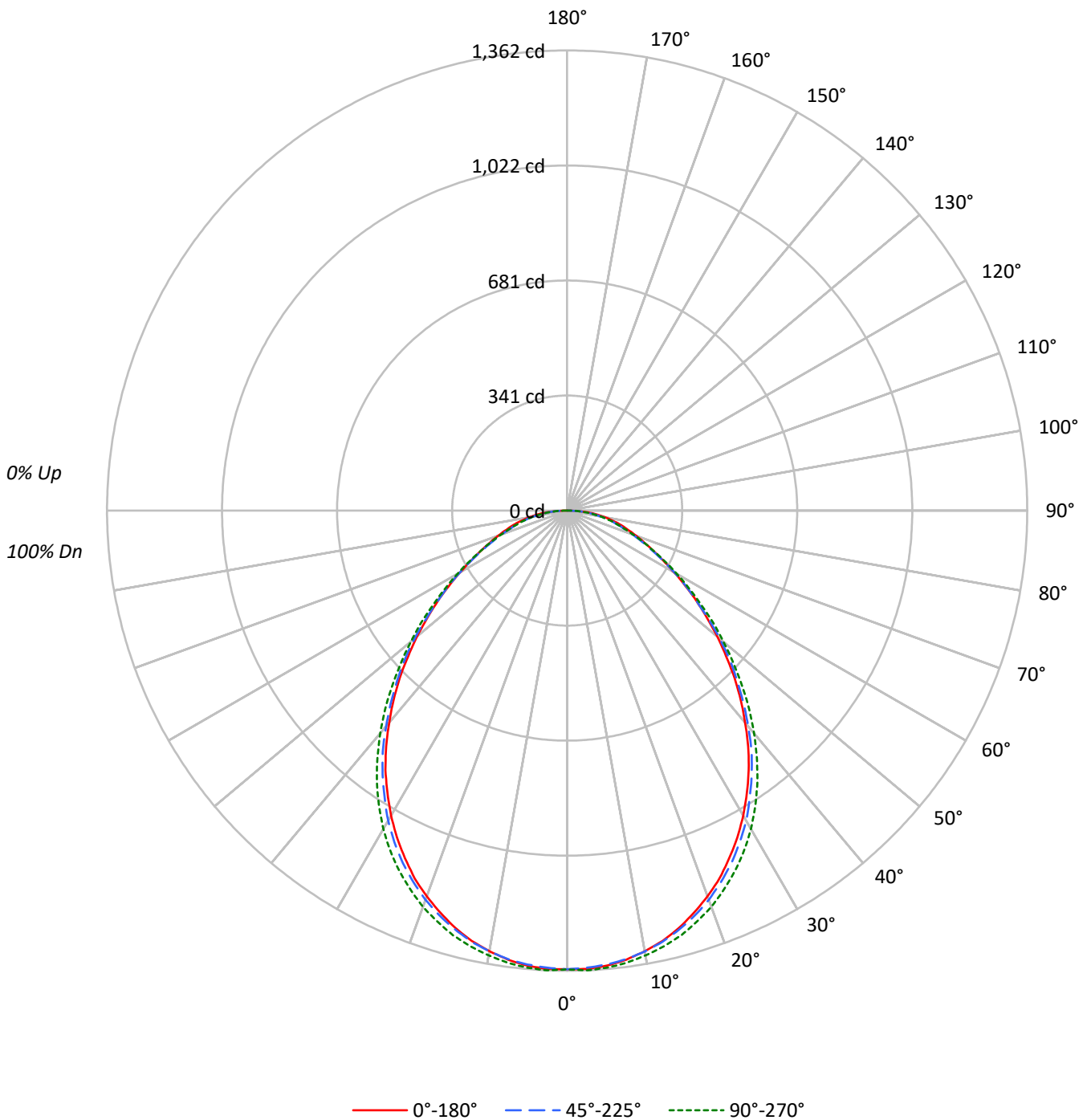
Input Watts (W): 23.157  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3654	3654	3654
5°	3652	3643	3668
10°	3618	3620	3653
15°	3563	3575	3627
20°	3479	3510	3574
25°	3371	3418	3493
30°	3238	3294	3381
35°	3079	3129	3225
40°	2879	2927	3023
45°	2666	2707	2786
50°	2428	2467	2530
55°	2192	2198	2263
60°	1966	1974	2020
65°	1791	1755	1796
70°	1705	1609	1637
75°	1717	1552	1560
80°	1779	1568	1557
85°	1951	1661	1575



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.3	4.1
10°-20°	362.4	11.7
20°-30°	530.4	17.1
30°-40°	596.3	19.3
40°-50°	550.0	17.8
50°-60°	423.9	13.7
60°-70°	279.7	9.0
70°-80°	162.8	5.3
80°-90°	59.3	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°	1021.1	33.0
0°-40°	1617.4	52.3
0°-60°	2591.2	83.8
0°-90°	3093.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3093.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1358	1358	1358	1358	1358	
5°	1352	1349	1348	1355	1358	128
15°	1279	1279	1283	1295	1302	360
25°	1135	1141	1151	1167	1176	522
35°	937	942	952	972	982	584
45°	700	701	711	726	732	539
55°	467	466	469	476	482	419
65°	281	280	276	278	282	282
75°	165	158	149	146	150	174
85°	63	62	54	50	51	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1357.8	1357.8	1357.8	1357.8	<i>1357.8</i>
2.5°	<i>1357.8</i>	<i>1355.0</i>	<i>1354.3</i>	<i>1359.3</i>	<i>1362.1</i>
5°	1352.1	1349.2	1348.5	1355.0	<i>1357.8</i>
7.5°	1340.6	1338.5	1339.2	1346.4	<i>1349.9</i>
10°	1324.1	1323.4	1324.8	1332.7	<i>1337.0</i>
12.5°	1304.7	1304.0	1306.9	1315.5	<i>1321.2</i>
15°	1278.9	1278.9	1283.2	1294.7	<i>1301.9</i>
17.5°	1248.0	1250.2	1256.6	1268.1	<i>1276.0</i>
20°	1215.0	1217.2	1225.8	1238.7	<i>1248.0</i>
22.5°	1178.4	1181.3	1189.9	1205.7	<i>1213.6</i>
25°	1135.4	1141.1	1151.1	1166.9	<i>1176.3</i>
27.5°	1090.9	1097.3	1106.7	1126.0	<i>1134.6</i>
30°	1042.1	1046.4	1060.0	1077.9	<i>1088.0</i>
32.5°	990.4	994.7	1006.2	1027.7	<i>1036.3</i>
35°	937.3	941.6	952.4	971.7	<i>981.8</i>
37.5°	879.9	883.5	896.4	911.4	<i>922.2</i>
40°	819.6	824.6	833.2	851.2	<i>860.5</i>
42.5°	760.7	762.9	772.2	790.2	<i>797.3</i>
45°	700.5	701.2	711.2	725.6	<i>732.0</i>
47.5°	638.0	639.4	651.6	660.3	<i>666.7</i>
50°	579.9	580.6	589.2	597.1	<i>604.3</i>
52.5°	521.7	521.7	526.1	534.7	<i>544.0</i>
55°	467.2	466.5	468.6	476.5	<i>482.3</i>
57.5°	415.5	414.8	417.7	422.7	<i>427.0</i>
60°	365.3	363.9	366.7	369.6	<i>375.3</i>
62.5°	320.8	322.2	318.6	323.0	<i>327.3</i>
65°	281.3	279.9	275.6	277.7	<i>282.0</i>
67.5°	247.6	245.4	238.3	239.7	<i>244.7</i>
70°	216.7	212.4	204.5	204.5	<i>208.1</i>
72.5°	188.7	184.4	174.4	175.1	<i>176.5</i>
75°	165.1	157.9	149.3	146.4	<i>150.0</i>
77.5°	139.2	133.5	125.6	123.4	<i>124.9</i>
80°	114.8	110.5	101.2	98.3	<i>100.5</i>
82.5°	91.1	87.6	76.8	74.6	<i>75.4</i>
85°	63.2	62.4	53.8	49.5	<i>51.0</i>
87.5°	33.7	34.4	28.0	25.1	<i>26.6</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)