

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: P291895

Luminaire Tested: **22GR-LD5-32-F1-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291895  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-23)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-32-F1-UNV-L92765-W2A1-U-3500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2758.0 lumens  
Efficiency: N/A  
Efficacy: 111.9 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

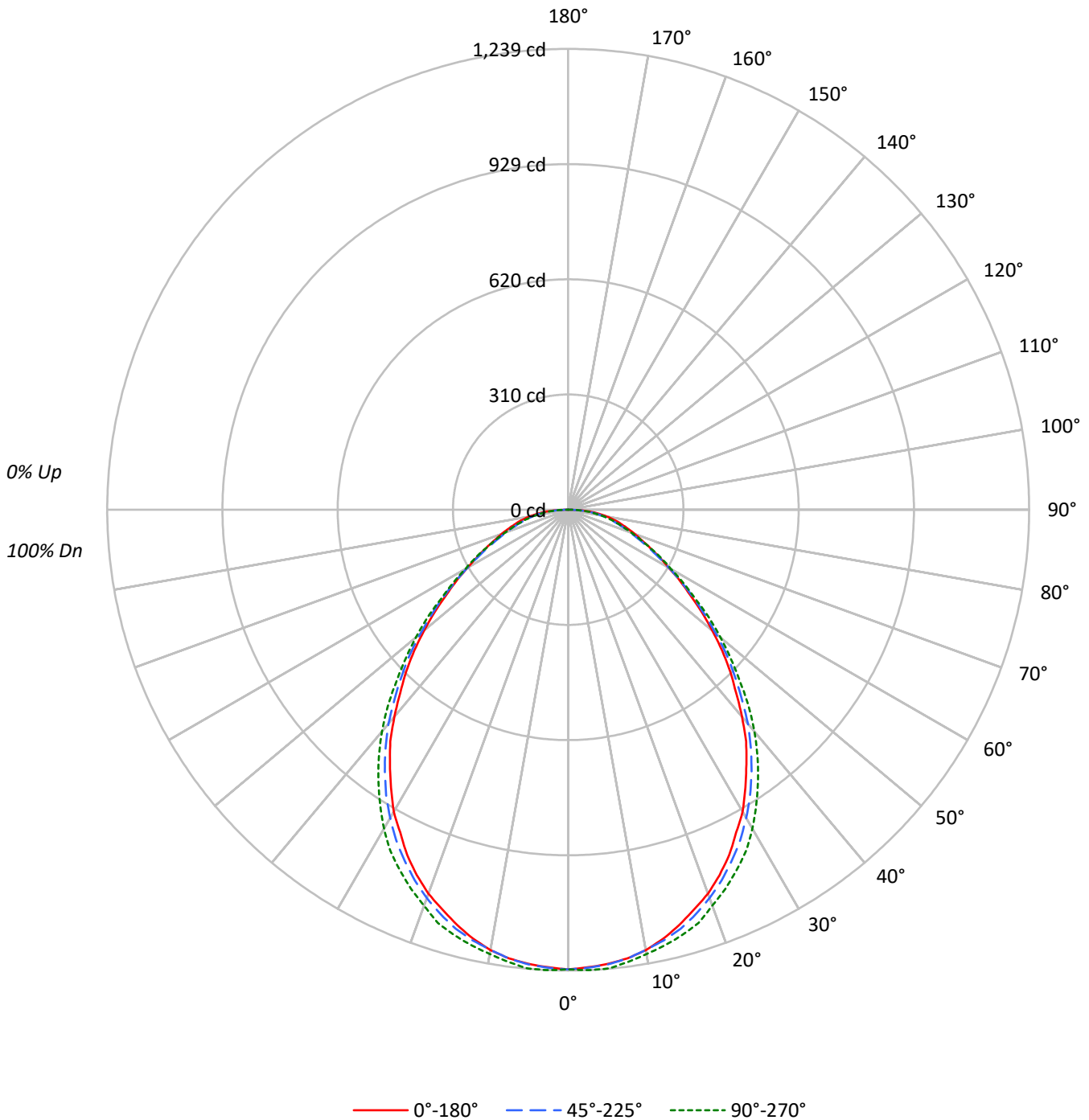
Input Watts (W): 24.645  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48					48			
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38					38			
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34					34			
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28					28			

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

	0°	45°	90°
0°	3326	3326	3326
5°	3311	3315	3346
10°	3285	3284	3315
15°	3219	3251	3299
20°	3146	3182	3244
25°	3041	3090	3177
30°	2913	2972	3077
35°	2743	2822	2922
40°	2552	2639	2735
45°	2343	2411	2485
50°	2114	2167	2236
55°	1875	1920	1953
60°	1681	1684	1718
65°	1549	1496	1549
70°	1495	1386	1426
75°	1521	1357	1383
80°	1640	1424	1424
85°	1819	1507	1485



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.6	4.2
10°-20°	328.8	11.9
20°-30°	479.9	17.4
30°-40°	537.3	19.5
40°-50°	489.0	17.7
50°-60°	368.1	13.3
60°-70°	240.2	8.7
70°-80°	144.1	5.2
80°-90°	54.0	2.0
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°	925.4	33.6
0°-40°	1462.7	53.0
0°-60°	2319.7	84.1
0°-90°	2758.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2758.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1236	1236	1236	1236	1236	
5°	1226	1224	1227	1232	1238	116
15°	1156	1157	1167	1176	1184	325
25°	1024	1028	1041	1060	1070	470
35°	835	842	859	879	889	522
45°	616	622	634	647	653	474
55°	400	405	409	415	416	361
65°	243	241	235	239	243	243
75°	146	141	130	131	133	155
85°	59	57	49	46	48	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1235.9	1235.9	1235.9	1235.9	1235.9
2.5°	1231.5	1230.9	1232.8	1235.9	1239.1
5°	1225.8	1223.9	1227.1	1231.5	1238.5
7.5°	1216.9	1216.9	1216.9	1225.2	1226.4
10°	1202.3	1203.6	1201.7	1209.9	1213.1
12.5°	1181.4	1182.1	1185.9	1194.1	1199.8
15°	1155.5	1156.7	1166.9	1176.4	1184.0
17.5°	1126.3	1130.8	1140.3	1155.5	1165.0
20°	1098.5	1103.5	1111.1	1127.6	1132.7
22.5°	1063.0	1068.7	1078.2	1092.8	1103.5
25°	1024.3	1027.5	1040.8	1059.8	1069.9
27.5°	978.1	985.1	1001.5	1021.2	1035.1
30°	937.6	941.4	956.6	979.4	990.1
32.5°	886.2	897.6	910.3	930.6	940.7
35°	834.9	842.5	859.0	879.3	889.4
37.5°	785.5	789.9	806.4	823.5	836.2
40°	726.6	734.8	751.3	769.7	778.5
42.5°	667.7	679.7	690.5	708.9	718.4
45°	615.7	622.1	633.5	646.8	653.1
47.5°	561.3	564.4	577.7	586.0	592.9
50°	504.9	508.7	517.6	525.8	534.0
52.5°	452.9	456.1	461.8	469.4	477.6
55°	399.7	405.4	409.2	414.9	416.2
57.5°	356.6	356.0	358.5	363.0	367.4
60°	312.3	313.6	312.9	317.4	319.3
62.5°	275.6	274.9	271.1	277.5	282.5
65°	243.3	240.7	235.0	238.8	243.3
67.5°	213.5	212.2	202.7	205.9	209.7
70°	190.0	185.6	176.1	178.0	181.2
72.5°	167.2	162.2	152.7	153.3	155.2
75°	146.3	141.3	130.5	131.1	133.0
77.5°	126.7	120.4	110.9	109.6	110.9
80°	105.8	100.1	91.9	88.1	91.9
82.5°	84.3	81.1	71.6	67.8	69.0
85°	58.9	57.0	48.8	46.2	48.1
87.5°	27.2	29.1	24.7	22.8	23.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)