

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: P291901

Luminaire Tested: **22GR-LD5-32-F1-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291901  
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-6500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3059.0 lumens  
Efficiency: N/A  
Efficacy: 119.2 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

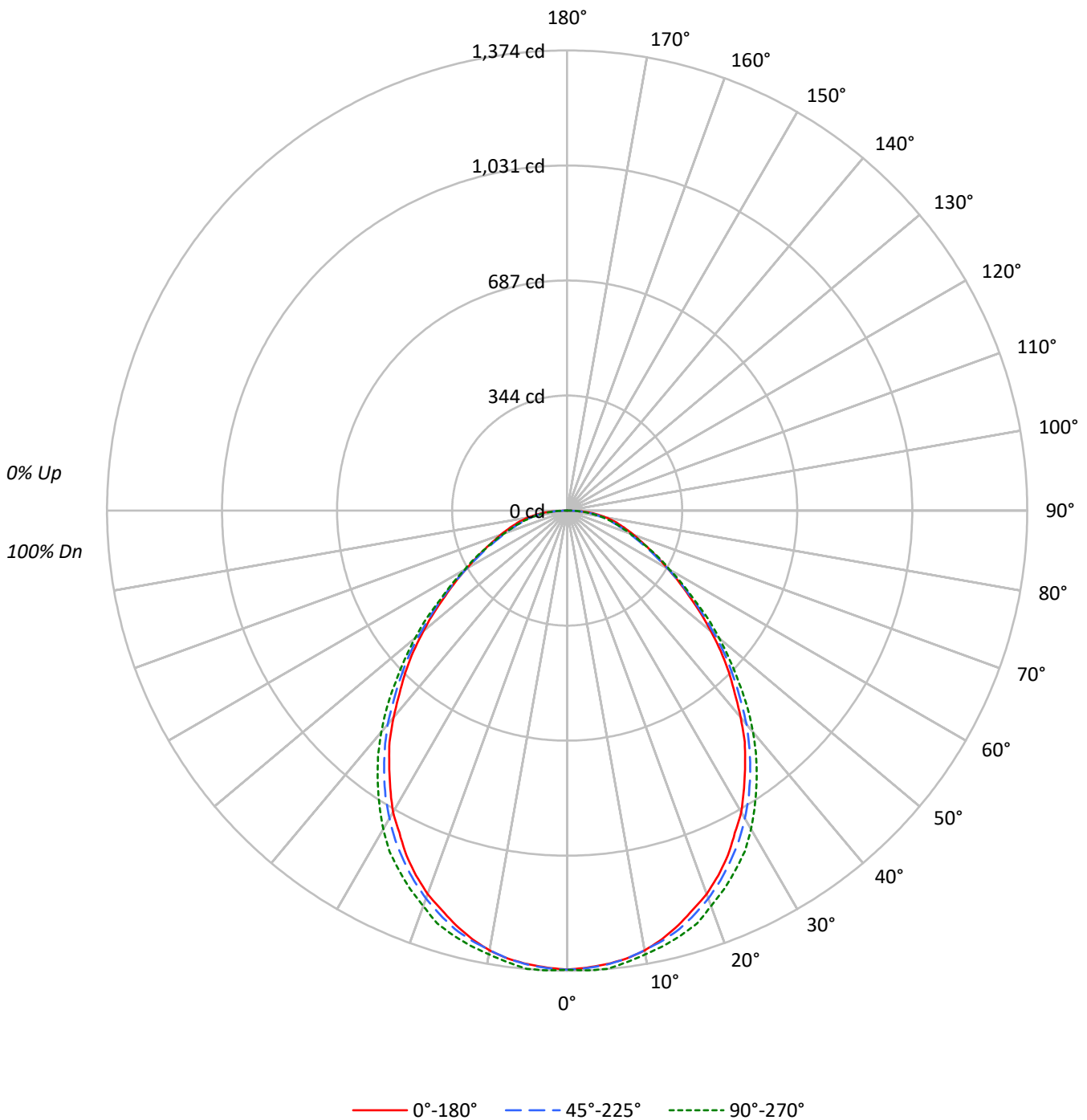
Input Watts (W): 25.668  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3689	3689	3689
5°	3673	3676	3710
10°	3644	3642	3677
15°	3570	3606	3658
20°	3489	3529	3598
25°	3373	3428	3524
30°	3231	3297	3412
35°	3042	3130	3241
40°	2831	2927	3033
45°	2599	2674	2757
50°	2344	2403	2480
55°	2080	2130	2166
60°	1864	1868	1906
65°	1718	1660	1718
70°	1659	1537	1581
75°	1687	1504	1534
80°	1818	1579	1579
85°	2016	1670	1649



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.3	4.2
10°-20°	364.7	11.9
20°-30°	532.3	17.4
30°-40°	596.0	19.5
40°-50°	542.4	17.7
50°-60°	408.2	13.3
60°-70°	266.4	8.7
70°-80°	159.8	5.2
80°-90°	59.9	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°	1026.3	33.6
0°-40°	1622.3	53.0
0°-60°	2572.9	84.1
0°-90°	3059.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3059.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1371	1371	1371	1371	1371	
5°	1360	1358	1361	1366	1374	129
15°	1282	1283	1294	1305	1313	361
25°	1136	1140	1154	1176	1187	522
35°	926	934	953	975	986	579
45°	683	690	703	717	724	526
55°	443	450	454	460	462	401
65°	270	267	261	265	270	270
75°	162	157	145	145	148	172
85°	65	63	54	51	53	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1370.8	1370.8	1370.8	1370.8	1370.8
2.5°	1365.9	1365.2	1367.3	1370.8	1374.3
5°	1359.6	1357.5	1361.0	1365.9	1373.6
7.5°	1349.7	1349.7	1349.7	1358.9	1360.3
10°	1333.6	1335.0	1332.9	1342.0	1345.5
12.5°	1310.4	1311.1	1315.3	1324.4	1330.8
15°	1281.6	1283.0	1294.2	1304.8	1313.2
17.5°	1249.3	1254.2	1264.7	1281.6	1292.1
20°	1218.3	1224.0	1232.4	1250.7	1256.3
22.5°	1179.0	1185.3	1195.9	1212.0	1224.0
25°	1136.1	1139.6	1154.4	1175.5	1186.7
27.5°	1084.8	1092.6	1110.8	1132.6	1148.1
30°	1039.9	1044.1	1061.0	1086.2	1098.2
32.5°	983.0	995.6	1009.7	1032.1	1043.4
35°	926.0	934.5	952.7	975.2	986.5
37.5°	871.2	876.2	894.4	913.4	927.5
40°	805.9	815.0	833.3	853.7	863.5
42.5°	740.6	753.9	765.9	786.2	796.8
45°	682.9	690.0	702.6	717.4	724.4
47.5°	622.5	626.0	640.8	649.9	657.6
50°	560.0	564.2	574.0	583.2	592.3
52.5°	502.4	505.9	512.2	520.6	529.8
55°	443.4	449.7	453.9	460.2	461.6
57.5°	395.6	394.9	397.7	402.6	407.5
60°	346.4	347.8	347.1	352.0	354.1
62.5°	305.6	304.9	300.7	307.7	313.4
65°	269.8	267.0	260.7	264.9	269.8
67.5°	236.8	235.4	224.8	228.4	232.6
70°	210.8	205.9	195.3	197.4	200.9
72.5°	185.5	179.9	169.3	170.0	172.1
75°	162.3	156.7	144.7	145.4	147.5
77.5°	140.5	133.5	123.0	121.6	123.0
80°	117.3	111.0	101.9	97.7	101.9
82.5°	93.4	89.9	79.4	75.2	76.6
85°	65.3	63.2	54.1	51.3	53.4
87.5°	30.2	32.3	27.4	25.3	26.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)