

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: P291800

Luminaire Tested: **22GR-LD5-32-F1-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291800  
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-L82765-W2A1-U-5000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3319.0 lumens  
Efficiency: N/A  
Efficacy: 132.2 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

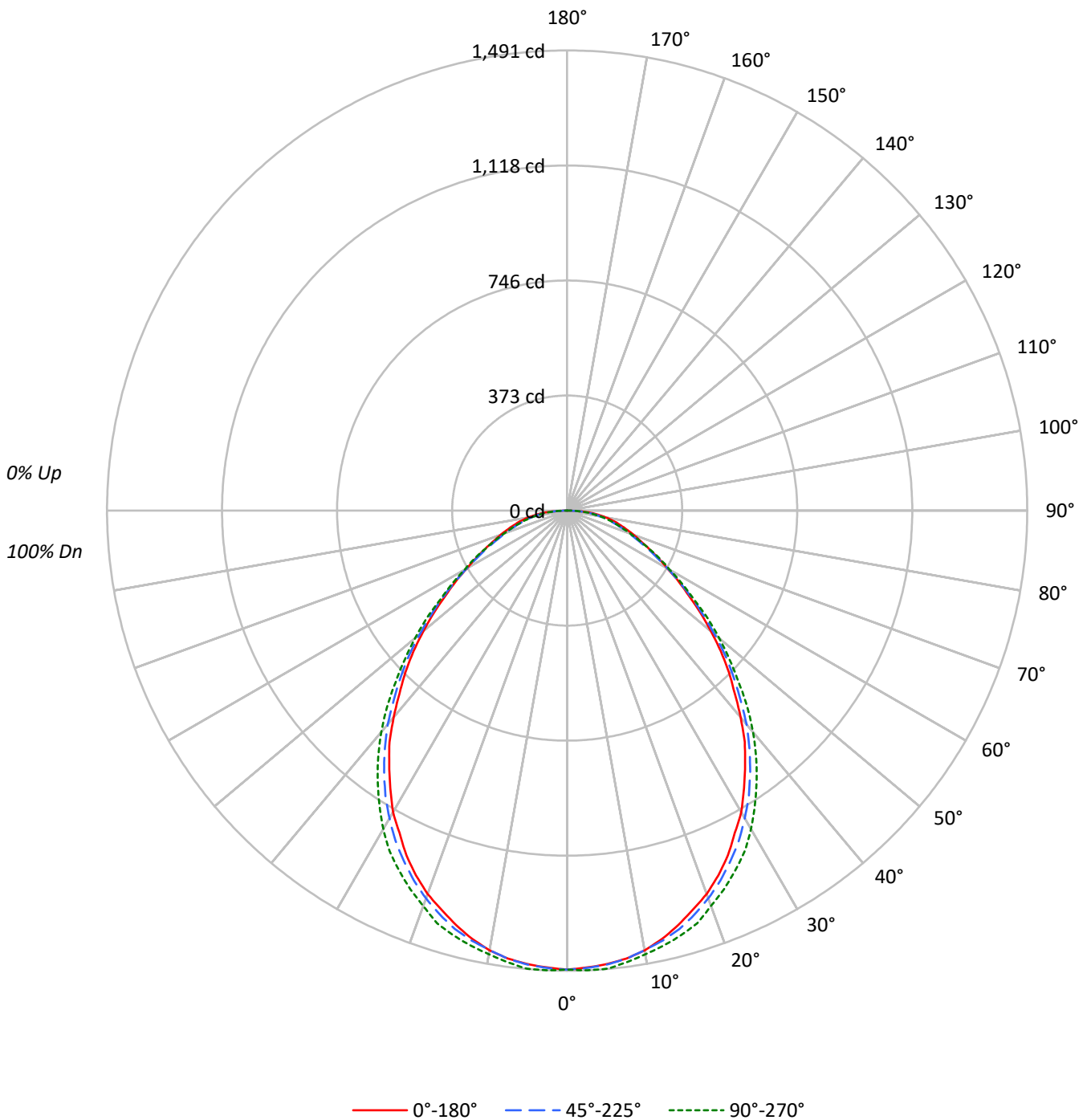
Input Watts (W): 25.11  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4002	4002	4002
5°	3985	3989	4026
10°	3954	3951	3989
15°	3874	3912	3969
20°	3785	3829	3903
25°	3660	3719	3823
30°	3506	3577	3702
35°	3301	3396	3516
40°	3072	3176	3291
45°	2820	2901	2991
50°	2544	2607	2690
55°	2257	2311	2350
60°	2023	2027	2068
65°	1864	1801	1864
70°	1799	1667	1715
75°	1831	1632	1665
80°	1973	1712	1712
85°	2189	1812	1788



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.3	4.2
10°-20°	395.7	11.9
20°-30°	577.5	17.4
30°-40°	646.6	19.5
40°-50°	588.5	17.7
50°-60°	442.9	13.3
60°-70°	289.0	8.7
70°-80°	173.3	5.2
80°-90°	65.0	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°	1113.6	33.6
0°-40°	1760.2	53.0
0°-60°	2791.6	84.1
0°-90°	3319.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3319.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1487	1487	1487	1487	1487	
5°	1475	1473	1477	1482	1490	140
15°	1390	1392	1404	1416	1425	392
25°	1233	1236	1252	1275	1288	566
35°	1005	1014	1034	1058	1070	628
45°	741	749	762	778	786	570
55°	481	488	492	499	501	435
65°	293	290	283	287	293	293
75°	176	170	157	158	160	187
85°	71	69	59	56	58	73
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1487.3	1487.3	1487.3	1487.3	1487.3
2.5°	1482.0	1481.2	1483.5	1487.3	1491.1
5°	1475.1	1472.8	1476.6	1482.0	1490.4
7.5°	1464.4	1464.4	1464.4	1474.4	1475.9
10°	1446.9	1448.4	1446.1	1456.1	1459.9
12.5°	1421.8	1422.5	1427.1	1437.0	1443.9
15°	1390.5	1392.0	1404.2	1415.7	1424.8
17.5°	1355.4	1360.8	1372.2	1390.5	1401.9
20°	1321.9	1328.0	1337.1	1357.0	1363.1
22.5°	1279.2	1286.1	1297.5	1315.0	1328.0
25°	1232.7	1236.5	1252.5	1275.4	1287.6
27.5°	1177.0	1185.4	1205.3	1228.9	1245.7
30°	1128.3	1132.8	1151.1	1178.6	1191.5
32.5°	1066.5	1080.2	1095.5	1119.9	1132.1
35°	1004.8	1013.9	1033.7	1058.1	1070.3
37.5°	945.3	950.6	970.5	991.0	1006.3
40°	874.4	884.3	904.1	926.2	936.9
42.5°	803.5	818.0	830.9	853.1	864.5
45°	741.0	748.6	762.3	778.3	786.0
47.5°	675.4	679.2	695.2	705.2	713.5
50°	607.6	612.2	622.8	632.7	642.6
52.5°	545.1	548.9	555.7	564.9	574.8
55°	481.0	487.9	492.5	499.3	500.9
57.5°	429.2	428.4	431.5	436.8	442.2
60°	375.8	377.4	376.6	381.9	384.2
62.5°	331.6	330.9	326.3	333.9	340.0
65°	292.7	289.7	282.8	287.4	292.7
67.5°	256.9	255.4	243.9	247.8	252.3
70°	228.7	223.4	211.9	214.2	218.0
72.5°	201.3	195.2	183.7	184.5	186.8
75°	176.1	170.0	157.0	157.8	160.1
77.5°	152.5	144.8	133.4	131.9	133.4
80°	127.3	120.4	110.5	106.0	110.5
82.5°	101.4	97.6	86.1	81.6	83.1
85°	70.9	68.6	58.7	55.7	57.9
87.5°	32.8	35.1	29.7	27.4	28.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)