

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: P291907

Luminaire Tested: **22GR-LD5-36-F1-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291907  
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-LD5-36-F1-UNV-L92765-W2A1-U-5000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3344.0 lumens  
Efficiency: N/A  
Efficacy: 116.4 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

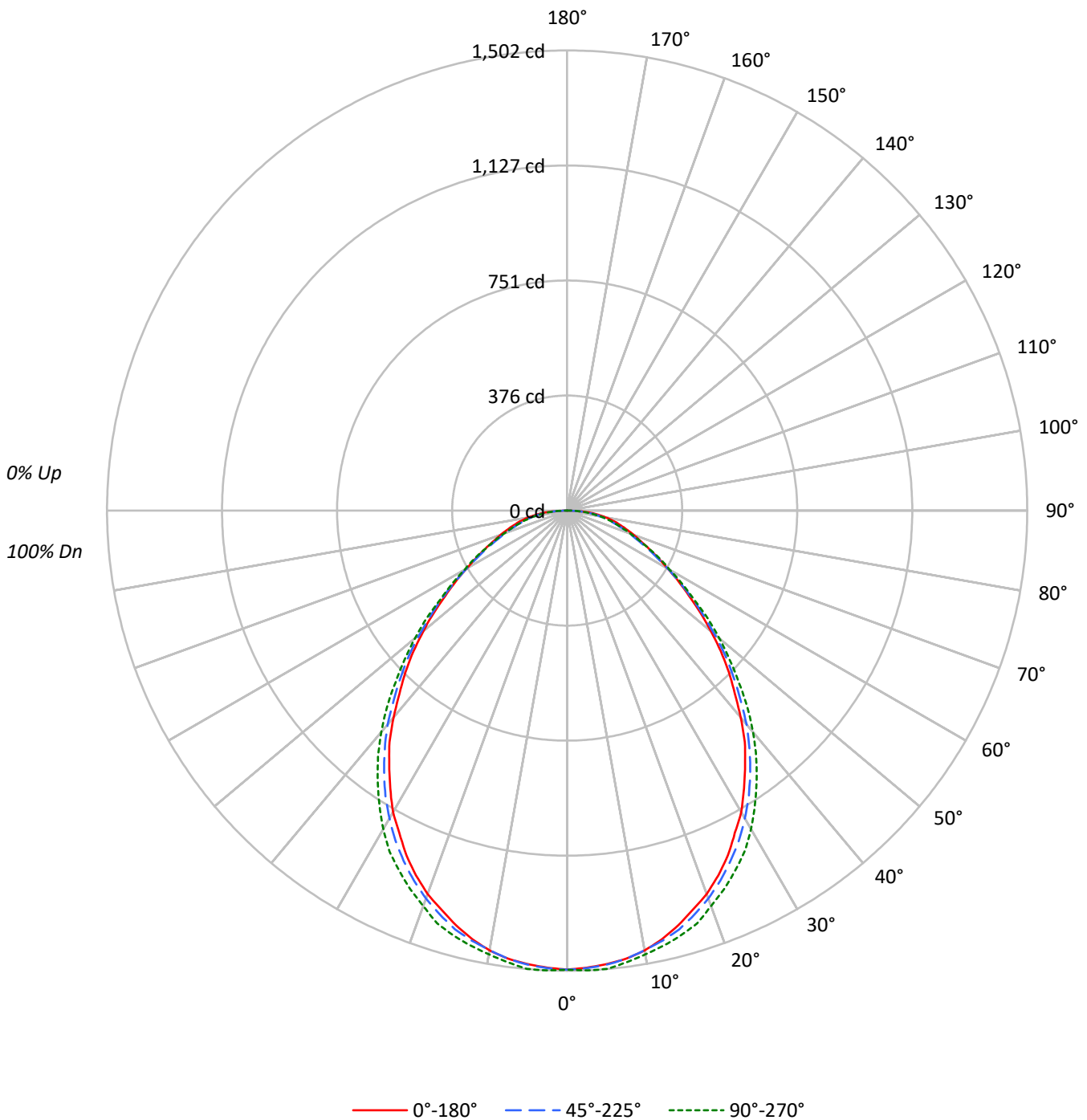
Input Watts (W): 28.737  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4032	4032	4032
5°	4015	4019	4056
10°	3983	3981	4019
15°	3903	3942	3999
20°	3814	3858	3933
25°	3688	3747	3852
30°	3532	3604	3730
35°	3325	3421	3543
40°	3095	3200	3316
45°	2841	2923	3014
50°	2563	2627	2711
55°	2274	2328	2367
60°	2038	2042	2083
65°	1878	1815	1878
70°	1813	1680	1729
75°	1844	1645	1677
80°	1988	1726	1726
85°	2205	1825	1803



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.4	4.2
10°-20°	398.7	11.9
20°-30°	581.9	17.4
30°-40°	651.5	19.5
40°-50°	592.9	17.7
50°-60°	446.3	13.3
60°-70°	291.2	8.7
70°-80°	174.7	5.2
80°-90°	65.5	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°	1122.0	33.6
0°-40°	1773.4	53.0
0°-60°	2812.6	84.1
0°-90°	3344.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3344.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1498	1498	1498	1498	1498	
5°	1486	1484	1488	1493	1502	141
15°	1401	1402	1415	1426	1436	395
25°	1242	1246	1262	1285	1297	570
35°	1012	1022	1042	1066	1078	633
45°	747	754	768	784	792	575
55°	485	492	496	503	505	438
65°	295	292	285	290	295	295
75°	177	171	158	159	161	188
85°	71	69	59	56	58	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1498.5	1498.5	1498.5	1498.5	1498.5
2.5°	1493.1	1492.4	1494.7	1498.5	1502.4
5°	1486.2	1483.9	1487.8	1493.1	1501.6
7.5°	1475.5	1475.5	1475.5	1485.5	1487.0
10°	1457.8	1459.3	1457.0	1467.0	1470.9
12.5°	1432.5	1433.2	1437.8	1447.8	1454.7
15°	1401.0	1402.5	1414.8	1426.3	1435.5
17.5°	1365.6	1371.0	1382.5	1401.0	1412.5
20°	1331.8	1338.0	1347.2	1367.2	1373.3
22.5°	1288.8	1295.7	1307.3	1324.9	1338.0
25°	1242.0	1245.8	1262.0	1285.0	1297.3
27.5°	1185.9	1194.4	1214.3	1238.1	1255.0
30°	1136.8	1141.4	1159.8	1187.4	1200.5
32.5°	1074.5	1088.4	1103.7	1128.3	1140.6
35°	1012.3	1021.5	1041.5	1066.1	1078.4
37.5°	952.4	957.8	977.8	998.5	1013.9
40°	881.0	891.0	910.9	933.2	944.0
42.5°	809.6	824.1	837.2	859.5	871.0
45°	746.6	754.3	768.1	784.2	791.9
47.5°	680.5	684.4	700.5	710.5	718.9
50°	612.2	616.8	627.5	637.5	647.5
52.5°	549.2	553.0	559.9	569.1	579.1
55°	484.7	491.6	496.2	503.1	504.6
57.5°	432.4	431.7	434.7	440.1	445.5
60°	378.7	380.2	379.4	384.8	387.1
62.5°	334.1	333.3	328.7	336.4	342.6
65°	294.9	291.9	285.0	289.6	294.9
67.5°	258.8	257.3	245.8	249.6	254.2
70°	230.4	225.0	213.5	215.8	219.7
72.5°	202.8	196.6	185.1	185.9	188.2
75°	177.4	171.3	158.2	159.0	161.3
77.5°	153.6	145.9	134.4	132.9	134.4
80°	128.3	121.4	111.4	106.8	111.4
82.5°	102.2	98.3	86.8	82.2	83.7
85°	71.4	69.1	59.1	56.1	58.4
87.5°	33.0	35.3	30.0	27.7	28.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)