

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: P291801

Luminaire Tested: **22GR-LD5-32-F1-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291801  
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-5500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3351.0 lumens  
Efficiency: N/A  
Efficacy: 133.0 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

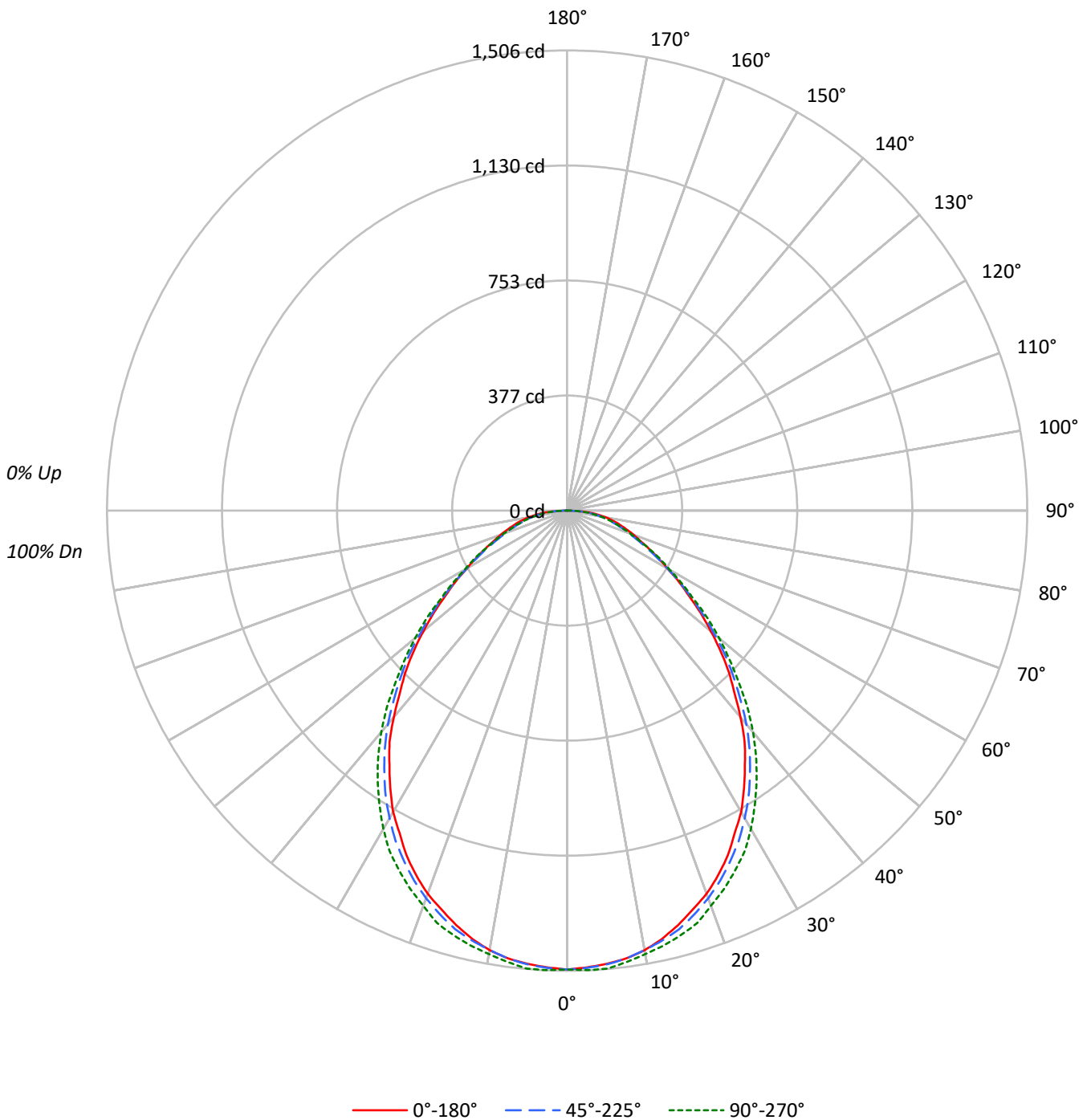
Input Watts (W): 25.203  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4041	4041	4041
5°	4023	4027	4065
10°	3992	3990	4027
15°	3911	3950	4008
20°	3822	3866	3941
25°	3695	3755	3860
30°	3539	3611	3738
35°	3332	3429	3550
40°	3101	3207	3323
45°	2847	2929	3020
50°	2568	2632	2716
55°	2279	2333	2373
60°	2042	2046	2088
65°	1882	1819	1882
70°	1817	1684	1732
75°	1849	1649	1680
80°	1991	1729	1729
85°	2211	1831	1806



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.6	4.2
10°-20°	399.5	11.9
20°-30°	583.1	17.4
30°-40°	652.8	19.5
40°-50°	594.2	17.7
50°-60°	447.2	13.3
60°-70°	291.8	8.7
70°-80°	175.0	5.2
80°-90°	65.6	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°	1124.3	33.6
0°-40°	1777.2	53.0
0°-60°	2818.5	84.1
0°-90°	3351.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3351.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1502	1502	1502	1502	1502	
5°	1489	1487	1491	1496	1505	141
15°	1404	1405	1418	1429	1438	395
25°	1245	1248	1265	1288	1300	571
35°	1014	1024	1044	1068	1081	634
45°	748	756	770	786	794	576
55°	486	493	497	504	506	439
65°	296	292	286	290	296	296
75°	178	172	159	159	162	189
85°	72	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°	1501.7	1501.7	1501.7	1501.7	1501.7
2.5°	1496.3	1495.5	1497.8	1501.7	1505.5
5°	1489.3	1487.0	1490.9	1496.3	1504.7
7.5°	1478.6	1478.6	1478.6	1488.6	1490.1
10°	1460.9	1462.4	1460.1	1470.1	1473.9
12.5°	1435.5	1436.2	1440.9	1450.9	1457.8
15°	1403.9	1405.4	1417.8	1429.3	1438.5
17.5°	1368.5	1373.9	1385.4	1403.9	1415.5
20°	1334.6	1340.8	1350.0	1370.0	1376.2
22.5°	1291.5	1298.5	1310.0	1327.7	1340.8
25°	1244.6	1248.4	1264.6	1287.7	1300.0
27.5°	1188.4	1196.9	1216.9	1240.7	1257.7
30°	1139.1	1143.8	1162.2	1189.9	1203.0
32.5°	1076.8	1090.6	1106.0	1130.7	1143.0
35°	1014.4	1023.7	1043.7	1068.3	1080.6
37.5°	954.4	959.8	979.8	1000.6	1016.0
40°	882.8	892.8	912.8	935.2	945.9
42.5°	811.2	825.9	839.0	861.3	872.8
45°	748.1	755.8	769.7	785.8	793.5
47.5°	681.9	685.8	702.0	712.0	720.4
50°	613.4	618.1	628.8	638.8	648.8
52.5°	550.3	554.2	561.1	570.3	580.3
55°	485.7	492.6	497.2	504.1	505.7
57.5°	433.3	432.6	435.6	441.0	446.4
60°	379.5	381.0	380.2	385.6	387.9
62.5°	334.8	334.0	329.4	337.1	343.3
65°	295.6	292.5	285.6	290.2	295.6
67.5°	259.4	257.8	246.3	250.1	254.8
70°	230.9	225.5	214.0	216.3	220.1
72.5°	203.2	197.0	185.5	186.3	188.6
75°	177.8	171.6	158.6	159.3	161.6
77.5°	153.9	146.2	134.7	133.2	134.7
80°	128.5	121.6	111.6	107.0	111.6
82.5°	102.4	98.5	87.0	82.4	83.9
85°	71.6	69.3	59.3	56.2	58.5
87.5°	33.1	35.4	30.0	27.7	28.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)