

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: P291819

Luminaire Tested: **22GR-LD5-40-F1-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291819  
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-LD5-40-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: 4240.0 lumens  
Efficiency: N/A  
Efficacy: 127.4 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

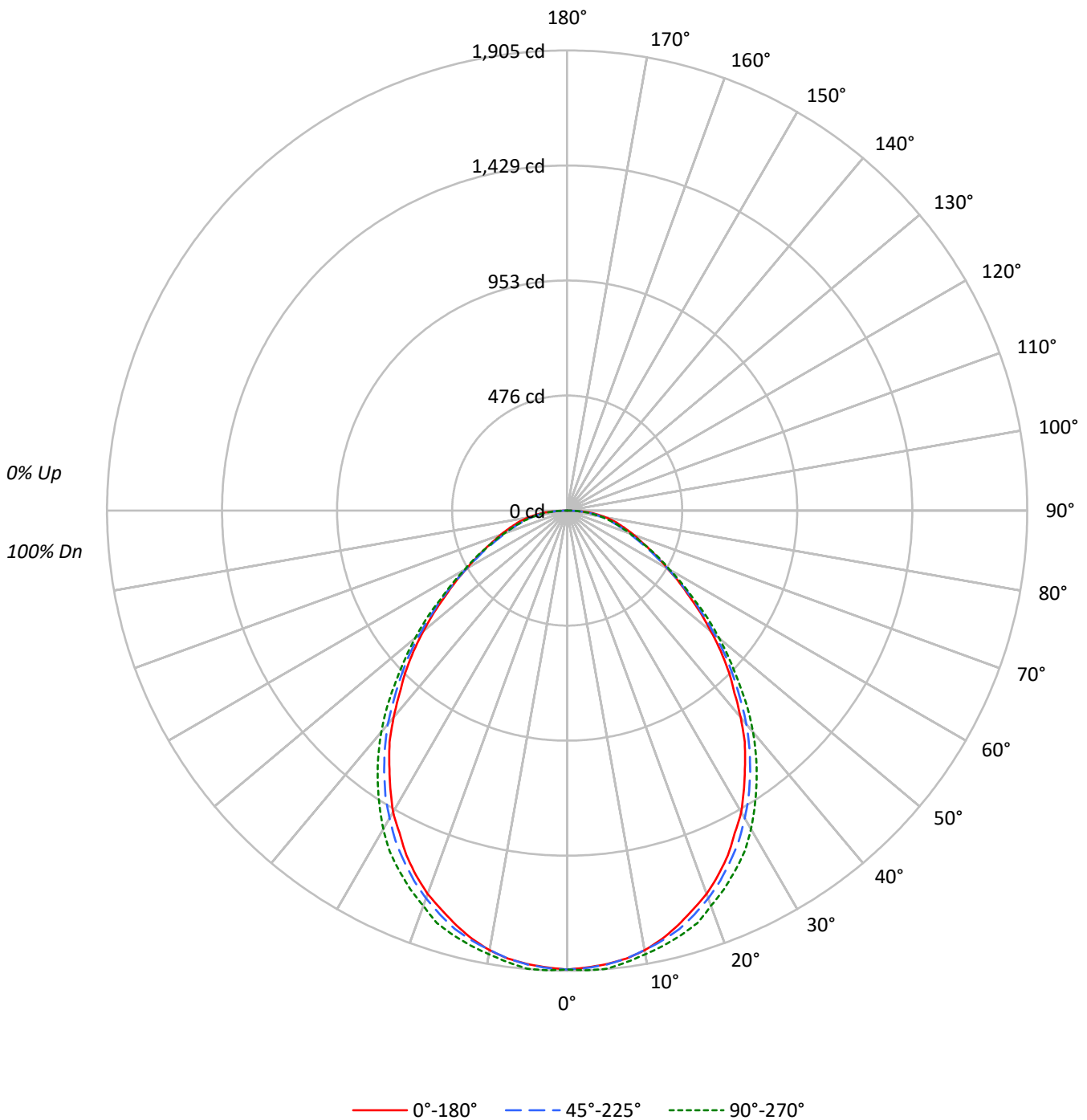
Input Watts (W): 33.294  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5113	5113	5113
5°	5091	5096	5143
10°	5051	5048	5096
15°	4949	4998	5071
20°	4836	4892	4987
25°	4676	4751	4884
30°	4479	4570	4730
35°	4217	4338	4492
40°	3924	4057	4204
45°	3602	3706	3821
50°	3249	3331	3437
55°	2883	2951	3002
60°	2584	2589	2641
65°	2381	2301	2381
70°	2299	2130	2191
75°	2339	2086	2126
80°	2520	2188	2188
85°	2797	2316	2285



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	179.2	4.2
10°-20°	505.5	11.9
20°-30°	737.8	17.4
30°-40°	826.0	19.5
40°-50°	751.8	17.7
50°-60°	565.8	13.3
60°-70°	369.3	8.7
70°-80°	221.4	5.2
80°-90°	83.1	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°	1422.6	33.6
0°-40°	2248.6	53.0
0°-60°	3566.2	84.1
0°-90°	4240.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4240.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1900	1900	1900	1900	1900	
5°	1884	1882	1886	1893	1904	179
15°	1776	1778	1794	1808	1820	500
25°	1575	1580	1600	1629	1645	723
35°	1284	1295	1321	1352	1367	802
45°	947	956	974	994	1004	729
55°	614	623	629	638	640	555
65°	374	370	361	367	374	374
75°	225	217	201	202	204	239
85°	91	88	75	71	74	93
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1900.0	1900.0	1900.0	1900.0	1900.0
2.5°	1893.2	1892.2	1895.2	1900.0	1904.9
5°	1884.5	1881.5	1886.4	1893.2	1903.9
7.5°	1870.8	1870.8	1870.8	1883.5	1885.4
10°	1848.4	1850.4	1847.4	1860.1	1865.0
12.5°	1816.3	1817.3	1823.1	1835.8	1844.5
15°	1776.4	1778.3	1793.9	1808.5	1820.2
17.5°	1731.6	1738.4	1753.0	1776.4	1791.0
20°	1688.7	1696.5	1708.2	1733.5	1741.3
22.5°	1634.2	1642.9	1657.5	1679.9	1696.5
25°	1574.8	1579.6	1600.1	1629.3	1644.9
27.5°	1503.7	1514.4	1539.7	1569.9	1591.3
30°	1441.3	1447.2	1470.6	1505.6	1522.2
32.5°	1362.5	1380.0	1399.5	1430.6	1446.2
35°	1283.6	1295.3	1320.6	1351.7	1367.3
37.5°	1207.6	1214.4	1239.7	1266.0	1285.5
40°	1117.0	1129.7	1155.0	1183.3	1196.9
42.5°	1026.5	1045.0	1061.5	1089.8	1104.4
45°	946.6	956.3	973.9	994.3	1004.1
47.5°	862.9	867.7	888.2	900.8	911.5
50°	776.2	782.0	795.7	808.3	821.0
52.5°	696.3	701.2	710.0	721.6	734.3
55°	614.5	623.3	629.1	637.9	639.8
57.5°	548.3	547.3	551.2	558.0	564.8
60°	480.1	482.1	481.1	487.9	490.8
62.5°	423.6	422.7	416.8	426.6	434.3
65°	374.0	370.1	361.3	367.2	374.0
67.5°	328.2	326.2	311.6	316.5	322.4
70°	292.2	285.3	270.7	273.7	278.5
72.5°	257.1	249.3	234.7	235.7	238.6
75°	225.0	217.2	200.6	201.6	204.5
77.5°	194.8	185.0	170.4	168.5	170.4
80°	162.6	153.9	141.2	135.4	141.2
82.5°	129.5	124.7	110.0	104.2	106.2
85°	90.6	87.6	75.0	71.1	74.0
87.5°	41.9	44.8	38.0	35.1	36.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)