

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: P291925

Luminaire Tested: **22GR-LD5-43-F1-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291925  
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-LD5-43-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: 4025.0 lumens  
Efficiency: N/A  
Efficacy: 111.8 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

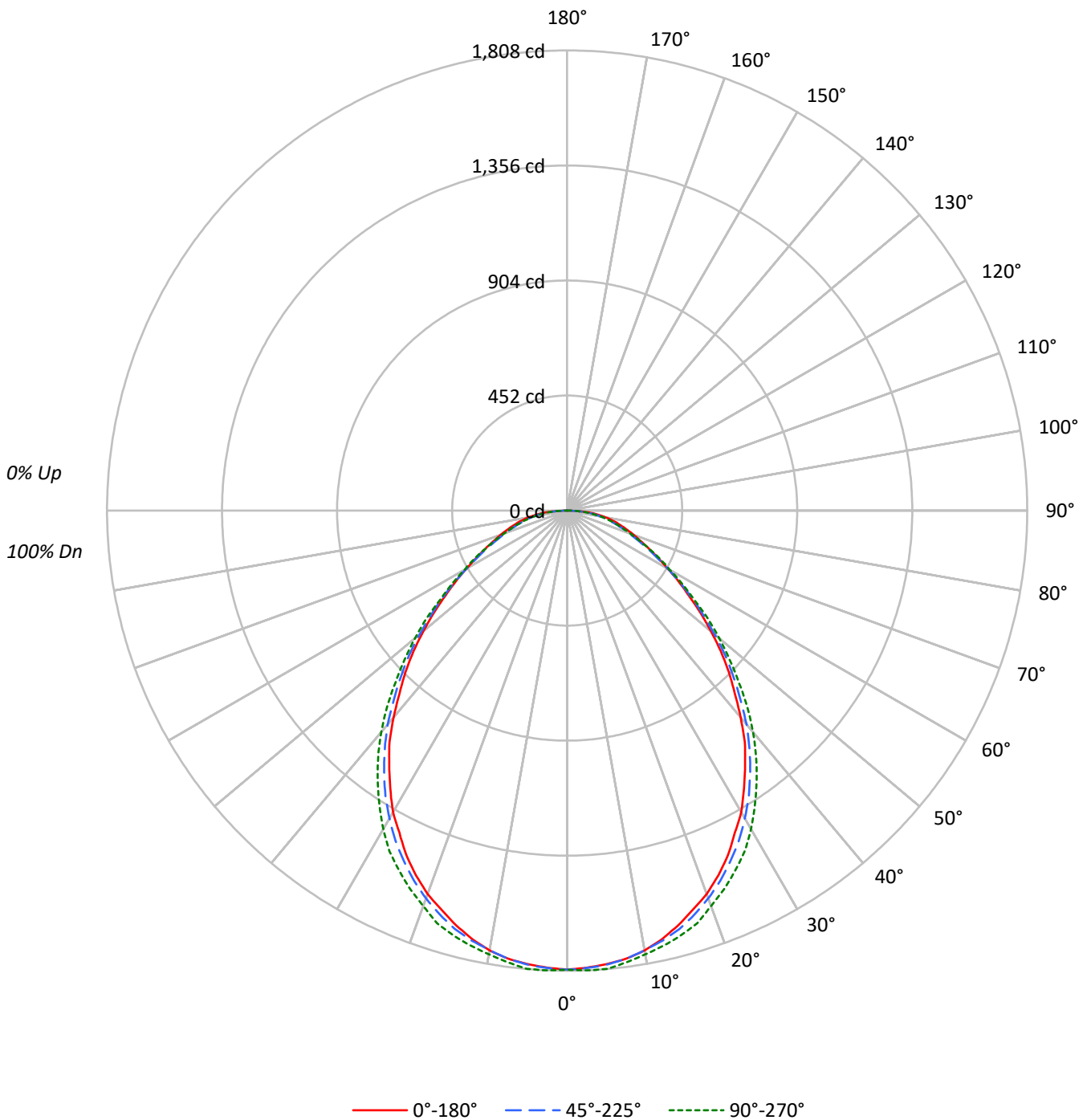
Input Watts (W): 35.991  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4854	4854	4854
5°	4832	4837	4882
10°	4795	4792	4838
15°	4698	4744	4814
20°	4591	4644	4734
25°	4439	4510	4636
30°	4252	4338	4490
35°	4003	4118	4264
40°	3725	3852	3991
45°	3420	3518	3628
50°	3085	3162	3262
55°	2737	2802	2850
60°	2453	2458	2507
65°	2260	2184	2260
70°	2182	2022	2080
75°	2221	1980	2018
80°	2393	2078	2078
85°	2655	2198	2171



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.1	4.2
10°-20°	479.9	11.9
20°-30°	700.4	17.4
30°-40°	784.2	19.5
40°-50°	713.7	17.7
50°-60°	537.2	13.3
60°-70°	350.5	8.7
70°-80°	210.2	5.2
80°-90°	78.9	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°	1350.4	33.6
0°-40°	2134.6	53.0
0°-60°	3385.4	84.1
0°-90°	4025.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4025.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1804	1804	1804	1804	1804	
5°	1789	1786	1791	1797	1807	170
15°	1686	1688	1703	1717	1728	475
25°	1495	1500	1519	1547	1562	686
35°	1218	1230	1254	1283	1298	762
45°	899	908	924	944	953	692
55°	583	592	597	606	607	527
65°	355	351	343	348	355	355
75°	214	206	190	191	194	227
85°	86	83	71	68	70	89
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1803.7	1803.7	1803.7	1803.7	1803.7
2.5°	1797.2	1796.3	1799.1	1803.7	1808.3
5°	1788.9	1786.1	1790.7	1797.2	1807.4
7.5°	1776.0	1776.0	1776.0	1788.0	1789.8
10°	1754.7	1756.5	1753.8	1765.8	1770.4
12.5°	1724.2	1725.1	1730.7	1742.7	1751.0
15°	1686.3	1688.1	1702.9	1716.8	1727.9
17.5°	1643.8	1650.2	1664.1	1686.3	1700.1
20°	1603.1	1610.5	1621.6	1645.6	1653.0
22.5°	1551.3	1559.6	1573.5	1594.8	1610.5
25°	1494.9	1499.5	1518.9	1546.7	1561.5
27.5°	1427.4	1437.6	1461.6	1490.3	1510.6
30°	1368.3	1373.8	1396.0	1429.3	1445.0
32.5°	1293.4	1310.0	1328.5	1358.1	1372.9
35°	1218.5	1229.6	1253.6	1283.2	1298.0
37.5°	1146.4	1152.8	1176.9	1201.8	1220.3
40°	1060.4	1072.4	1096.5	1123.3	1136.2
42.5°	974.4	992.0	1007.7	1034.5	1048.4
45°	898.6	907.9	924.5	943.9	953.2
47.5°	819.1	823.7	843.1	855.2	865.3
50°	736.8	742.4	755.3	767.3	779.3
52.5°	661.0	665.6	674.0	685.1	697.1
55°	583.4	591.7	597.2	605.5	607.4
57.5°	520.5	519.6	523.3	529.7	536.2
60°	455.8	457.6	456.7	463.2	465.9
62.5°	402.2	401.2	395.7	404.9	412.3
65°	355.0	351.3	343.0	348.5	355.0
67.5°	311.6	309.7	295.8	300.5	306.0
70°	277.3	270.9	257.0	259.8	264.4
72.5°	244.1	236.7	222.8	223.7	226.5
75°	213.6	206.2	190.4	191.4	194.1
77.5°	184.9	175.7	161.8	159.9	161.8
80°	154.4	146.1	134.1	128.5	134.1
82.5°	123.0	118.3	104.5	98.9	100.8
85°	86.0	83.2	71.2	67.5	70.3
87.5°	39.8	42.5	36.1	33.3	34.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)