

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: P291823

Luminaire Tested: **22GR-LD5-43-F1-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291823
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-L82765-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4111.0 lumens
Efficiency: N/A
Efficacy: 117.9 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

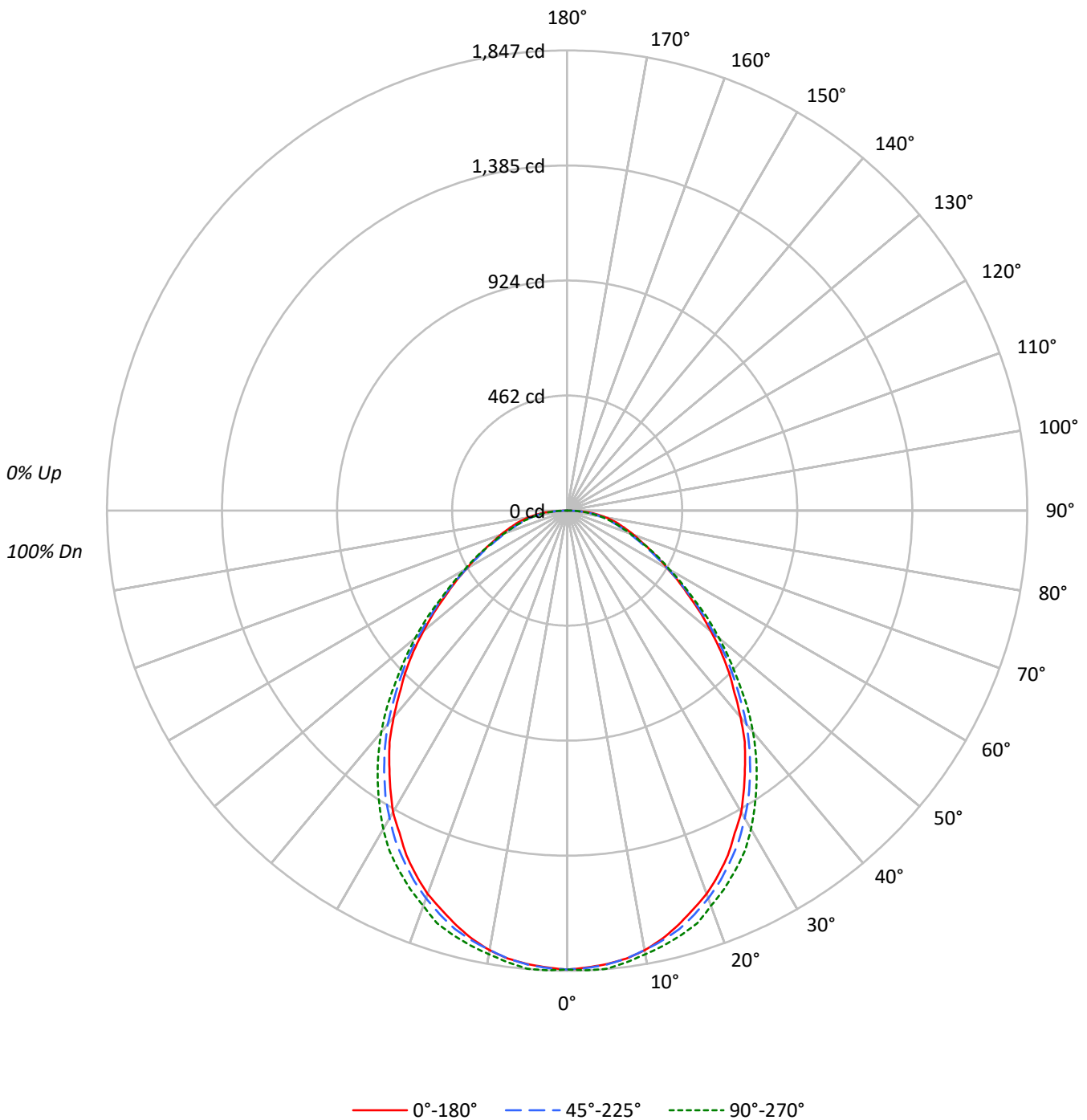
Input Watts (W): 34.875
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291823

CATALOG NUMBER: 22GR-LD5-43-F1-UNV-L82765-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P291823

CATALOG NUMBER: 22GR-LD5-43-F1-UNV-L82765-W2A1-U-3000K

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				
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75					73				
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65					63				
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57					55				
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50					48				
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45					43				
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40					38				
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36					34				
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33					31				
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30					28				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4957	4957	4957
5°	4935	4941	4987
10°	4897	4894	4941
15°	4798	4846	4917
20°	4689	4743	4835
25°	4533	4606	4735
30°	4342	4430	4586
35°	4088	4206	4355
40°	3805	3934	4077
45°	3493	3593	3705
50°	3151	3230	3332
55°	2795	2862	2911
60°	2505	2511	2561
65°	2309	2230	2309
70°	2229	2065	2125
75°	2268	2022	2062
80°	2444	2122	2122
85°	2711	2245	2217



TEST NUMBER: P291823

CATALOG NUMBER: 22GR-LD5-43-F1-UNV-L82765-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.8	4.2
10°-20°	490.2	11.9
20°-30°	715.4	17.4
30°-40°	800.9	19.5
40°-50°	728.9	17.7
50°-60°	548.6	13.3
60°-70°	358.0	8.7
70°-80°	214.7	5.2
80°-90°	80.5	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°	1379.3	33.6
0°-40°	2180.2	53.0
0°-60°	3457.7	84.1
0°-90°	4111.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4111.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1842	1842	1842	1842	1842	
5°	1827	1824	1829	1836	1846	173
15°	1722	1724	1739	1754	1765	485
25°	1527	1532	1551	1580	1595	701
35°	1244	1256	1280	1311	1326	778
45°	918	927	944	964	974	707
55°	596	604	610	618	620	538
65°	363	359	350	356	363	363
75°	218	211	194	196	198	231
85°	88	85	73	69	72	91
90°	0	0	0	0	0	



TEST NUMBER: P291823

CATALOG NUMBER: 22GR-LD5-43-F1-UNV-L82765-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1842.2	1842.2	1842.2	1842.2	1842.2
2.5°	1835.6	1834.7	1837.5	1842.2	1846.9
5°	1827.1	1824.3	1829.0	1835.6	1846.0
7.5°	1813.9	1813.9	1813.9	1826.2	1828.1
10°	1792.2	1794.1	1791.2	1803.5	1808.2
12.5°	1761.0	1762.0	1767.6	1779.9	1788.4
15°	1722.3	1724.2	1739.3	1753.5	1764.8
17.5°	1678.9	1685.5	1699.6	1722.3	1736.5
20°	1637.3	1644.9	1656.2	1680.8	1688.3
22.5°	1584.4	1592.9	1607.1	1628.8	1644.9
25°	1526.8	1531.6	1551.4	1579.7	1594.8
27.5°	1457.9	1468.3	1492.9	1522.1	1542.9
30°	1397.5	1403.2	1425.8	1459.8	1475.9
32.5°	1321.0	1338.0	1356.9	1387.1	1402.2
35°	1244.5	1255.8	1280.4	1310.6	1325.7
37.5°	1170.9	1177.5	1202.0	1227.5	1246.4
40°	1083.1	1095.3	1119.9	1147.3	1160.5
42.5°	995.2	1013.2	1029.2	1056.6	1070.8
45°	917.8	927.3	944.2	964.1	973.5
47.5°	836.6	841.3	861.2	873.4	883.8
50°	752.6	758.2	771.5	783.7	796.0
52.5°	675.1	679.9	688.4	699.7	712.0
55°	595.8	604.3	610.0	618.5	620.4
57.5°	531.6	530.7	534.4	541.1	547.7
60°	465.5	467.4	466.5	473.1	475.9
62.5°	410.7	409.8	404.1	413.6	421.1
65°	362.6	358.8	350.3	356.0	362.6
67.5°	318.2	316.3	302.2	306.9	312.5
70°	283.3	276.7	262.5	265.3	270.1
72.5°	249.3	241.7	227.6	228.5	231.3
75°	218.1	210.6	194.5	195.5	198.3
77.5°	188.8	179.4	165.2	163.4	165.2
80°	157.7	149.2	136.9	131.3	136.9
82.5°	125.6	120.9	106.7	101.0	102.9
85°	87.8	85.0	72.7	68.9	71.8
87.5°	40.6	43.4	36.8	34.0	34.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)