

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: P291822

Luminaire Tested: **22GR-LD5-43-F1-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291822
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-2700K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3995.0 lumens
Efficiency: N/A
Efficacy: 113.6 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

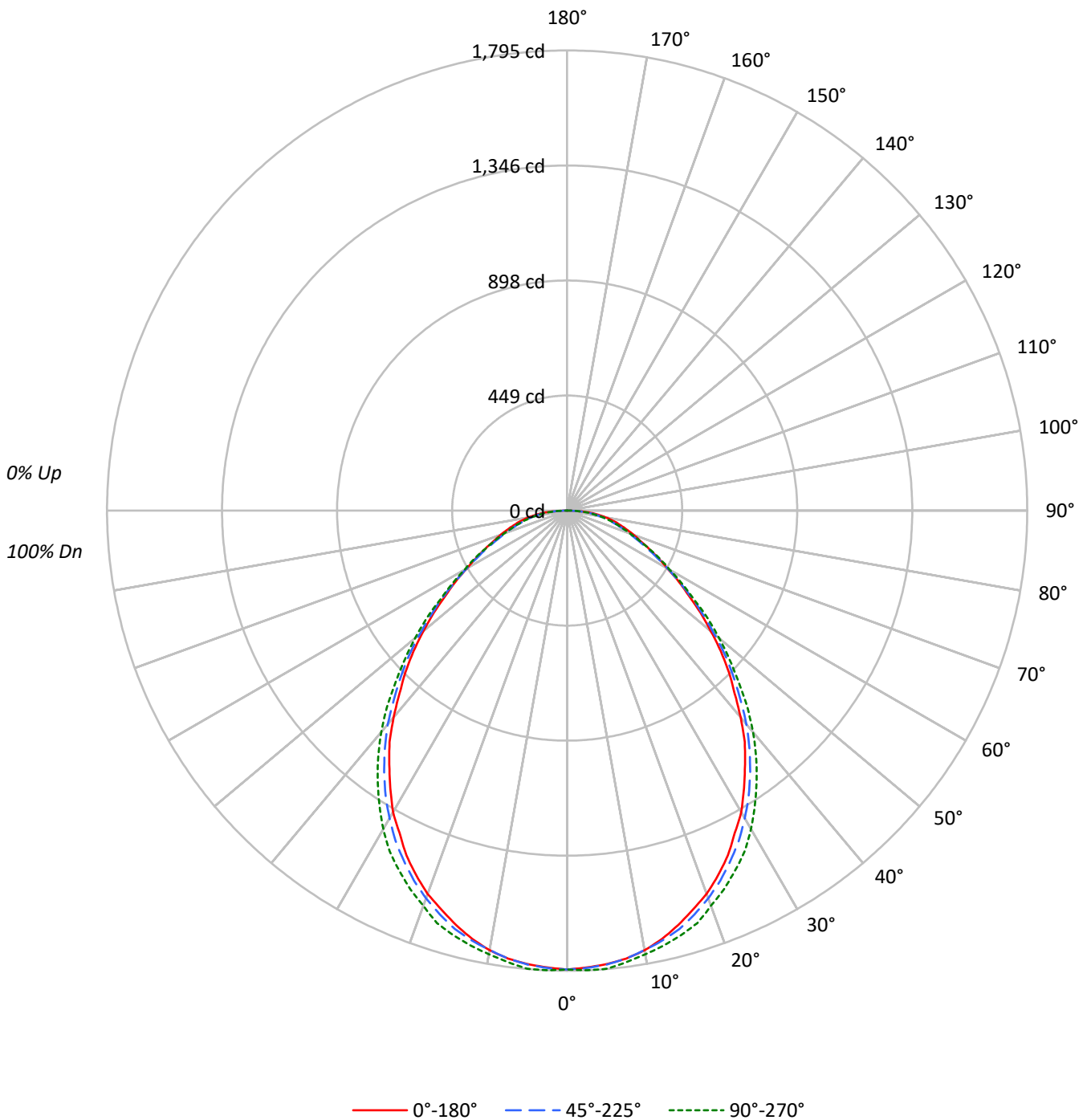
Input Watts (W): 35.154
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	4817	4817	4817
5°	4796	4801	4846
10°	4759	4756	4802
15°	4663	4709	4778
20°	4556	4609	4698
25°	4406	4476	4602
30°	4220	4305	4456
35°	3973	4088	4232
40°	3697	3823	3961
45°	3394	3492	3600
50°	3062	3139	3238
55°	2716	2781	2829
60°	2435	2440	2489
65°	2244	2167	2244
70°	2166	2007	2065
75°	2204	1965	2004
80°	2374	2063	2063
85°	2634	2183	2152



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.9	4.2
10°-20°	476.3	11.9
20°-30°	695.2	17.4
30°-40°	778.3	19.5
40°-50°	708.3	17.7
50°-60°	533.1	13.3
60°-70°	347.9	8.7
70°-80°	208.6	5.2
80°-90°	78.3	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°	1340.4	33.6
0°-40°	2118.7	53.0
0°-60°	3360.2	84.1
0°-90°	3995.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3995.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1790	1790	1790	1790	1790	
5°	1776	1773	1777	1784	1794	168
15°	1674	1676	1690	1704	1715	471
25°	1484	1488	1508	1535	1550	681
35°	1209	1220	1244	1274	1288	756
45°	892	901	918	937	946	687
55°	579	587	593	601	603	523
65°	352	349	340	346	352	352
75°	212	205	189	190	193	225
85°	85	83	71	67	70	88
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1790.2	1790.2	1790.2	1790.2	1790.2
2.5°	1783.8	1782.9	1785.7	1790.2	1794.8
5°	1775.6	1772.8	1777.4	1783.8	1793.9
7.5°	1762.7	1762.7	1762.7	1774.6	1776.5
10°	1741.6	1743.4	1740.7	1752.6	1757.2
12.5°	1711.3	1712.2	1717.8	1729.7	1737.9
15°	1673.7	1675.5	1690.2	1704.0	1715.0
17.5°	1631.5	1637.9	1651.7	1673.7	1687.5
20°	1591.1	1598.5	1609.5	1633.3	1640.7
22.5°	1539.7	1548.0	1561.8	1582.9	1598.5
25°	1483.8	1488.4	1507.6	1535.2	1549.8
27.5°	1416.8	1426.9	1450.7	1479.2	1499.4
30°	1358.1	1363.6	1385.6	1418.6	1434.2
32.5°	1283.7	1300.2	1318.6	1348.0	1362.6
35°	1209.4	1220.4	1244.3	1273.6	1288.3
37.5°	1137.8	1144.3	1168.1	1192.9	1211.2
40°	1052.5	1064.4	1088.3	1114.9	1127.7
42.5°	967.2	984.6	1000.2	1026.8	1040.6
45°	891.9	901.1	917.6	936.9	946.0
47.5°	813.0	817.6	836.9	848.8	858.9
50°	731.3	736.8	749.7	761.6	773.5
52.5°	656.1	660.7	668.9	679.9	691.9
55°	579.0	587.3	592.8	601.0	602.9
57.5°	516.6	515.7	519.4	525.8	532.2
60°	452.4	454.2	453.3	459.7	462.5
62.5°	399.2	398.2	392.7	401.9	409.3
65°	352.4	348.7	340.4	345.9	352.4
67.5°	309.2	307.4	293.6	298.2	303.7
70°	275.3	268.9	255.1	257.8	262.4
72.5°	242.2	234.9	221.1	222.1	224.8
75°	212.0	204.6	189.0	189.9	192.7
77.5°	183.5	174.3	160.6	158.7	160.6
80°	153.2	145.0	133.1	127.5	133.1
82.5°	122.0	117.5	103.7	98.2	100.0
85°	85.3	82.6	70.7	67.0	69.7
87.5°	39.5	42.2	35.8	33.0	34.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)