

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: P291820

Luminaire Tested: **22GR-LD5-40-F1-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291820
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-5700K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4252.0 lumens
Efficiency: N/A
Efficacy: 127.7 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

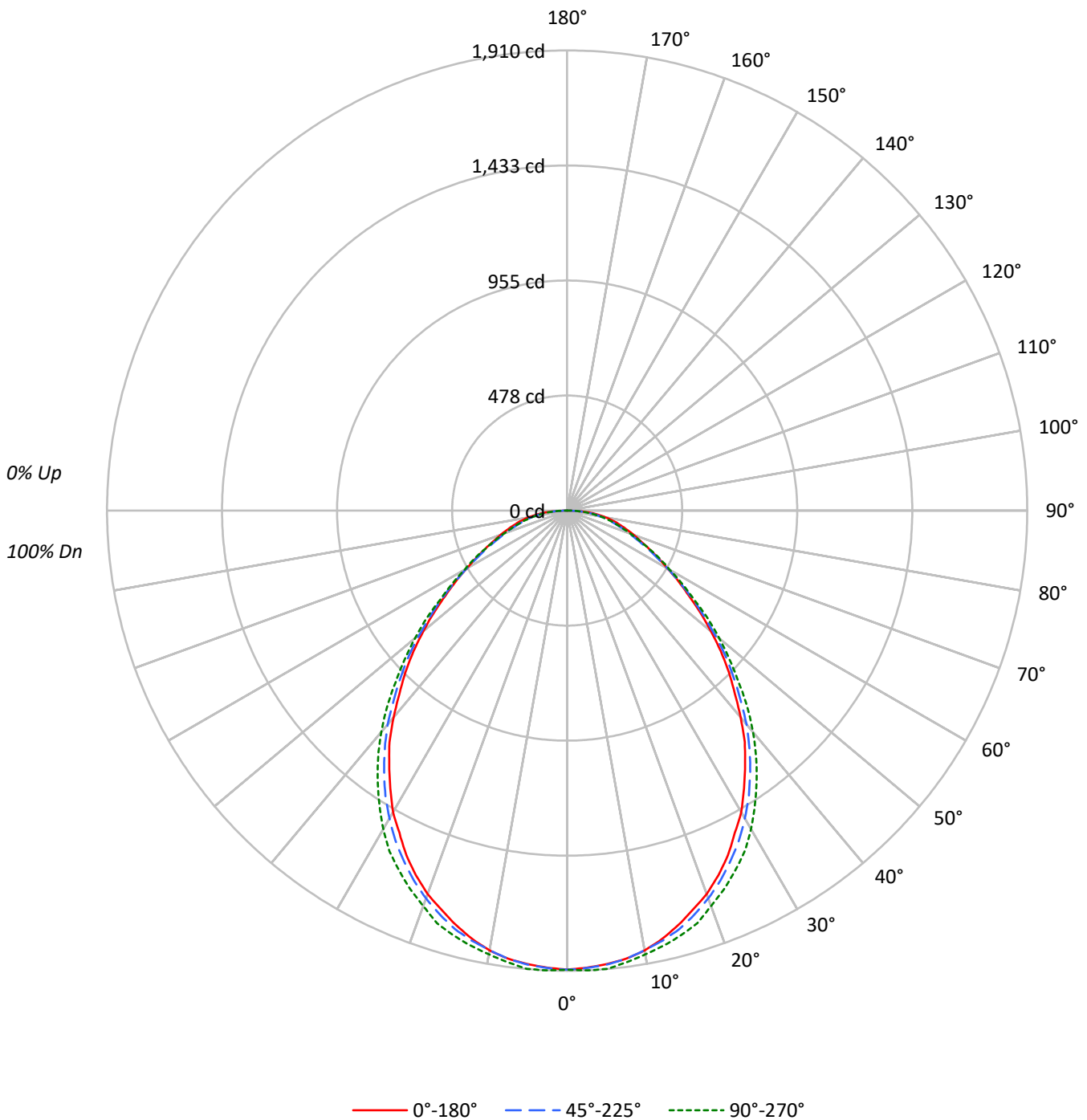
Input Watts (W): 33.294
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5127	5127	5127
5°	5105	5110	5158
10°	5065	5062	5111
15°	4963	5012	5085
20°	4850	4905	5001
25°	4689	4764	4898
30°	4491	4582	4743
35°	4229	4350	4504
40°	3935	4069	4216
45°	3613	3717	3832
50°	3259	3340	3447
55°	2891	2960	3010
60°	2591	2597	2649
65°	2388	2307	2388
70°	2305	2136	2198
75°	2346	2092	2132
80°	2528	2194	2194
85°	2803	2322	2291



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.7	4.2
10°-20°	507.0	11.9
20°-30°	739.9	17.4
30°-40°	828.4	19.5
40°-50°	753.9	17.7
50°-60°	567.4	13.3
60°-70°	370.3	8.7
70°-80°	222.1	5.2
80°-90°	83.3	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°	1426.6	33.6
0°-40°	2255.0	53.0
0°-60°	3576.3	84.1
0°-90°	4252.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4252.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1905	1905	1905	1905	1905	
5°	1890	1887	1892	1899	1909	179
15°	1781	1783	1799	1814	1825	502
25°	1579	1584	1605	1634	1650	725
35°	1287	1299	1324	1356	1371	804
45°	949	959	977	997	1007	731
55°	616	625	631	640	642	557
65°	375	371	362	368	375	375
75°	226	218	201	202	205	239
85°	91	88	75	71	74	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1905.4	1905.4	1905.4	1905.4	1905.4
2.5°	1898.6	1897.6	1900.5	1905.4	1910.3
5°	1889.8	1886.9	1891.7	1898.6	1909.3
7.5°	1876.1	1876.1	1876.1	1888.8	1890.8
10°	1853.7	1855.6	1852.7	1865.4	1870.3
12.5°	1821.4	1822.4	1828.3	1841.0	1849.7
15°	1781.4	1783.3	1799.0	1813.6	1825.3
17.5°	1736.5	1743.3	1757.9	1781.4	1796.0
20°	1693.5	1701.3	1713.0	1738.4	1746.2
22.5°	1638.8	1647.6	1662.2	1684.7	1701.3
25°	1579.2	1584.1	1604.6	1633.9	1649.5
27.5°	1507.9	1518.7	1544.1	1574.3	1595.8
30°	1445.4	1451.3	1474.7	1509.9	1526.5
32.5°	1366.3	1383.9	1403.4	1434.7	1450.3
35°	1287.2	1298.9	1324.3	1355.6	1371.2
37.5°	1211.0	1217.9	1243.3	1269.6	1289.2
40°	1120.2	1132.9	1158.3	1186.6	1200.3
42.5°	1029.4	1047.9	1064.5	1092.9	1107.5
45°	949.3	959.1	976.6	997.1	1006.9
47.5°	865.3	870.2	890.7	903.4	914.1
50°	778.4	784.2	797.9	810.6	823.3
52.5°	698.3	703.2	712.0	723.7	736.4
55°	616.3	625.0	630.9	639.7	641.6
57.5°	549.8	548.9	552.8	559.6	566.4
60°	481.5	483.4	482.5	489.3	492.2
62.5°	424.8	423.9	418.0	427.8	435.6
65°	375.0	371.1	362.3	368.2	375.0
67.5°	329.1	327.2	312.5	317.4	323.3
70°	293.0	286.2	271.5	274.4	279.3
72.5°	257.8	250.0	235.4	236.3	239.3
75°	225.6	217.8	201.2	202.2	205.1
77.5°	195.3	185.6	170.9	169.0	170.9
80°	163.1	154.3	141.6	135.8	141.6
82.5°	129.9	125.0	110.4	104.5	106.5
85°	90.8	87.9	75.2	71.3	74.2
87.5°	42.0	44.9	38.1	35.2	36.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)