

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: P291783

Luminaire Tested: **22GR-LD5-24-F1-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291783
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-LD5-24-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: 2537.0 lumens
Efficiency: N/A
Efficacy: 136.4 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

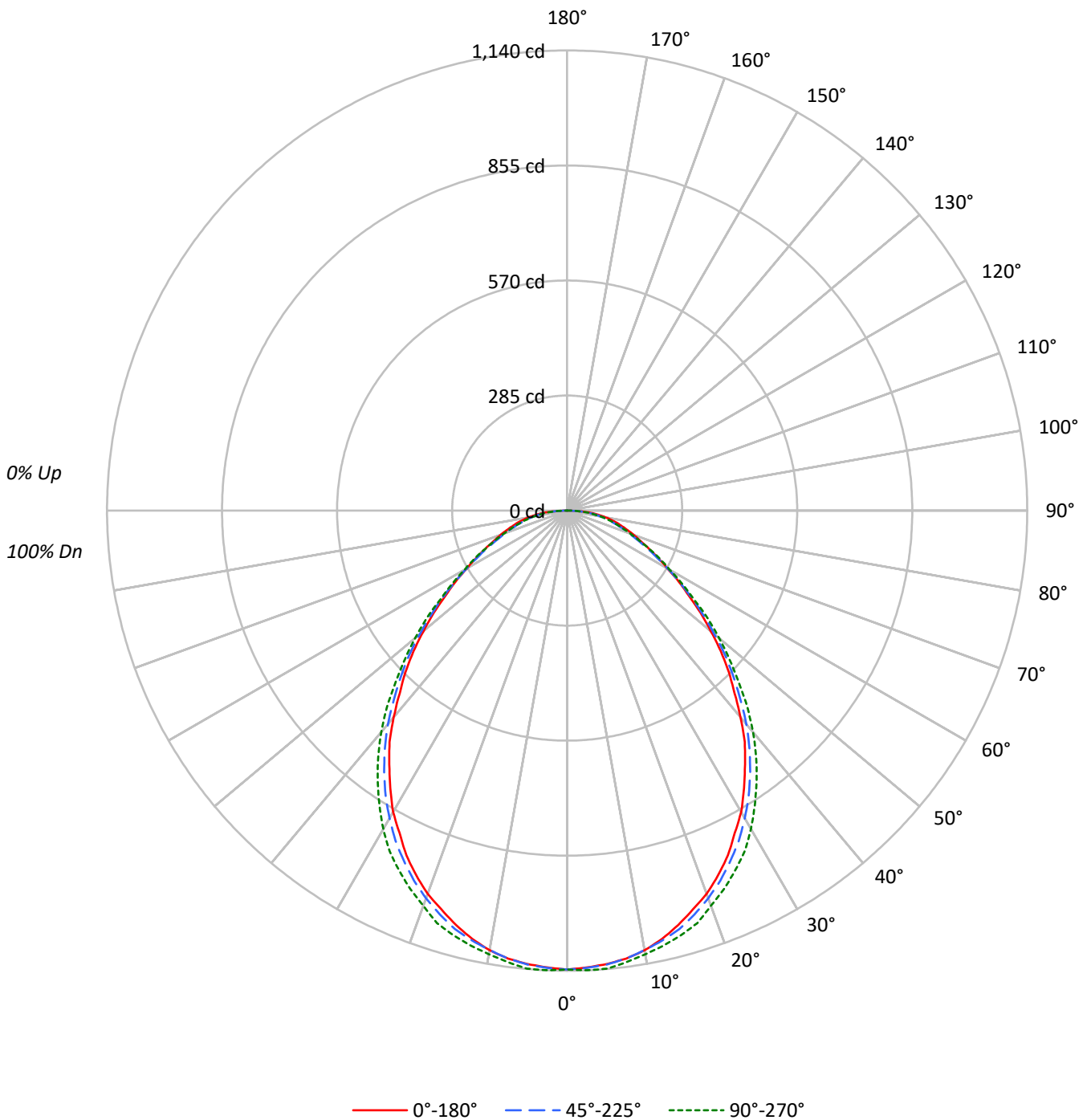
Input Watts (W): 18.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3059	3059	3059
5°	3046	3049	3077
10°	3022	3020	3049
15°	2961	2990	3034
20°	2893	2927	2984
25°	2798	2843	2922
30°	2680	2734	2830
35°	2523	2596	2688
40°	2348	2428	2516
45°	2156	2218	2286
50°	1944	1993	2056
55°	1725	1766	1796
60°	1546	1549	1581
65°	1425	1377	1425
70°	1375	1275	1312
75°	1399	1248	1273
80°	1508	1309	1309
85°	1673	1386	1368



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.2	4.2
10°-20°	302.5	11.9
20°-30°	441.5	17.4
30°-40°	494.3	19.5
40°-50°	449.8	17.7
50°-60°	338.6	13.3
60°-70°	220.9	8.7
70°-80°	132.5	5.2
80°-90°	49.7	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°	851.2	33.6
0°-40°	1345.5	53.0
0°-60°	2133.9	84.1
0°-90°	2537.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2537.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1137	1137	1137	1137	1137	
5°	1128	1126	1129	1133	1139	107
15°	1063	1064	1073	1082	1089	299
25°	942	945	957	975	984	433
35°	768	775	790	809	818	480
45°	566	572	583	595	601	436
55°	368	373	376	382	383	332
65°	224	221	216	220	224	224
75°	135	130	120	121	122	143
85°	54	52	45	42	44	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1136.9	1136.9	1136.9	1136.9	<i>1136.9</i>
2.5°	<i>1132.8</i>	<i>1132.2</i>	<i>1134.0</i>	<i>1136.9</i>	<i>1139.8</i>
5°	1127.6	1125.8	1128.7	1132.8	<i>1139.2</i>
7.5°	1119.4	1119.4	1119.4	1127.0	<i>1128.1</i>
10°	1106.0	1107.2	1105.4	1113.0	<i>1115.9</i>
12.5°	1086.8	1087.4	1090.8	1098.4	<i>1103.7</i>
15°	1062.9	1064.0	1073.4	1082.1	<i>1089.1</i>
17.5°	1036.1	1040.2	1048.9	1062.9	<i>1071.6</i>
20°	1010.4	1015.1	1022.1	1037.2	<i>1041.9</i>
22.5°	977.8	983.0	991.8	1005.2	<i>1015.1</i>
25°	942.3	945.2	957.4	974.9	<i>984.2</i>
27.5°	899.7	906.1	921.3	939.3	<i>952.2</i>
30°	862.4	865.9	879.9	900.9	<i>910.8</i>
32.5°	815.2	825.7	837.4	856.0	<i>865.3</i>
35°	768.0	775.0	790.2	808.8	<i>818.1</i>
37.5°	722.6	726.7	741.8	757.5	<i>769.2</i>
40°	668.4	676.0	691.1	708.0	<i>716.2</i>
42.5°	614.2	625.3	635.2	652.1	<i>660.8</i>
45°	566.4	572.2	582.7	595.0	<i>600.8</i>
47.5°	516.3	519.2	531.4	539.0	<i>545.4</i>
50°	464.4	467.9	476.1	483.7	<i>491.2</i>
52.5°	416.6	419.6	424.8	431.8	<i>439.4</i>
55°	367.7	372.9	376.4	381.7	<i>382.8</i>
57.5°	328.1	327.5	329.8	333.9	<i>338.0</i>
60°	287.3	288.4	287.9	291.9	<i>293.7</i>
62.5°	253.5	252.9	249.4	255.2	<i>259.9</i>
65°	223.8	221.4	216.2	219.7	<i>223.8</i>
67.5°	196.4	195.2	186.5	189.4	<i>192.9</i>
70°	174.8	170.7	162.0	163.7	<i>166.7</i>
72.5°	153.8	149.2	140.4	141.0	<i>142.8</i>
75°	134.6	129.9	120.0	120.6	<i>122.4</i>
77.5°	116.5	110.7	102.0	100.8	<i>102.0</i>
80°	97.3	92.1	84.5	81.0	<i>84.5</i>
82.5°	77.5	74.6	65.8	62.4	<i>63.5</i>
85°	54.2	52.4	44.9	42.5	<i>44.3</i>
87.5°	25.1	26.8	22.7	21.0	<i>21.6</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)