

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: P291846

Luminaire Tested: **22GR-LD5-32-F1-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291846
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-LD5-32-F1-UNV-L93050-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2507.0 lumens
Efficiency: N/A
Efficacy: 99.8 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

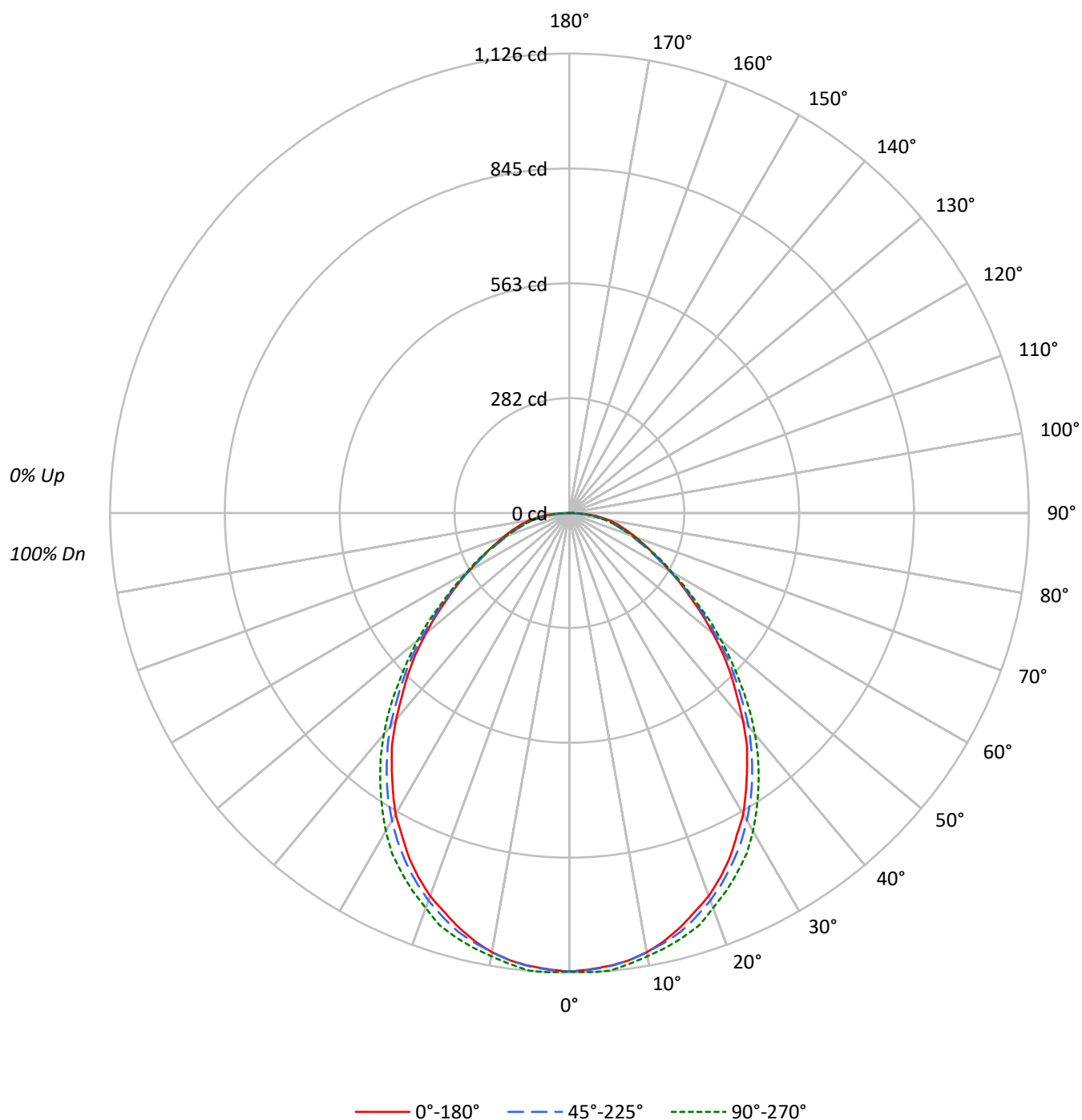
Input Watts (W): 25.11
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	105	101	98	107	103	99	96		99	96	93		95	92	90		91	89	87
2	101	93	87	81	98	91	85	80		87	83	78		84	80	77		81	78	75
3	92	83	75	69	90	81	74	68		78	72	67		75	70	66		73	69	65
4	85	74	66	59	83	73	65	59		70	63	58		68	62	57		66	61	57
5	79	67	58	52	77	66	58	52		63	56	51		62	55	51		60	54	50
6	73	60	52	46	71	59	51	46		58	51	45		56	50	45		55	49	45
7	68	55	47	41	66	54	46	41		53	46	41		51	45	40		50	44	40
8	63	51	42	37	62	50	42	37		49	42	37		47	41	36		46	40	36
9	59	47	39	33	58	46	39	33		45	38	33		44	38	33		43	37	33
10	56	43	36	31	55	43	35	30		42	35	30		41	35	30		40	34	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3023	3023	3023
5°	3010	3013	3041
10°	2986	2985	3013
15°	2926	2955	2998
20°	2859	2892	2948
25°	2765	2809	2888
30°	2648	2702	2797
35°	2493	2565	2656
40°	2320	2399	2486
45°	2130	2191	2259
50°	1921	1970	2032
55°	1704	1745	1775
60°	1528	1531	1562
65°	1408	1360	1408
70°	1359	1260	1296
75°	1383	1233	1257
80°	1491	1294	1294
85°	1655	1368	1352



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.0	4.2
10°-20°	298.9	11.9
20°-30°	436.3	17.4
30°-40°	488.4	19.5
40°-50°	444.5	17.7
50°-60°	334.6	13.3
60°-70°	218.3	8.7
70°-80°	130.9	5.2
80°-90°	49.1	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°	841.1	33.6
0°-40°	1329.6	53.0
0°-60°	2108.6	84.1
0°-90°	2507.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2507.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1123	1123	1123	1123	1123	
5°	1114	1112	1115	1119	1126	106
15°	1050	1052	1061	1069	1076	296
25°	931	934	946	963	973	427
35°	759	766	781	799	808	474
45°	560	566	576	588	594	431
55°	363	368	372	377	378	328
65°	221	219	214	217	221	221
75°	133	128	119	119	121	141
85°	54	52	44	42	44	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1123.4	1123.4	1123.4	1123.4	1123.4
2.5°	1119.4	1118.8	1120.6	1123.4	1126.3
5°	1114.2	1112.5	1115.4	1119.4	1125.7
7.5°	1106.2	1106.2	1106.2	1113.7	1114.8
10°	1092.9	1094.1	1092.3	1099.8	1102.7
12.5°	1073.9	1074.5	1078.0	1085.4	1090.6
15°	1050.3	1051.5	1060.7	1069.3	1076.2
17.5°	1023.8	1027.9	1036.5	1050.3	1058.9
20°	998.5	1003.1	1010.0	1025.0	1029.6
22.5°	966.2	971.4	980.1	993.3	1003.1
25°	931.1	934.0	946.1	963.4	972.6
27.5°	889.1	895.4	910.4	928.2	940.9
30°	852.2	855.7	869.5	890.2	900.0
32.5°	805.6	815.9	827.5	845.9	855.1
35°	758.9	765.9	780.8	799.2	808.5
37.5°	714.0	718.1	733.0	748.6	760.1
40°	660.5	668.0	682.9	699.6	707.7
42.5°	606.9	617.9	627.7	644.4	653.0
45°	559.7	565.5	575.8	587.9	593.7
47.5°	510.2	513.1	525.2	532.6	539.0
50°	458.9	462.4	470.5	477.9	485.4
52.5°	411.7	414.6	419.8	426.7	434.2
55°	363.3	368.5	372.0	377.2	378.3
57.5°	324.2	323.6	325.9	329.9	334.0
60°	283.9	285.0	284.5	288.5	290.2
62.5°	250.5	249.9	246.5	252.2	256.8
65°	221.1	218.8	213.6	217.1	221.1
67.5°	194.1	192.9	184.3	187.1	190.6
70°	172.7	168.7	160.1	161.8	164.7
72.5°	152.0	147.4	138.8	139.4	141.1
75°	133.0	128.4	118.6	119.2	120.9
77.5°	115.2	109.4	100.8	99.6	100.8
80°	96.2	91.0	83.5	80.0	83.5
82.5°	76.6	73.7	65.1	61.6	62.8
85°	53.6	51.8	44.3	42.0	43.8
87.5°	24.8	26.5	22.5	20.7	21.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)