

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: P291897

Luminaire Tested: **22GR-LD5-32-F1-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291897
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-L92765-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2920.0 lumens
Efficiency: N/A
Efficacy: 116.7 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

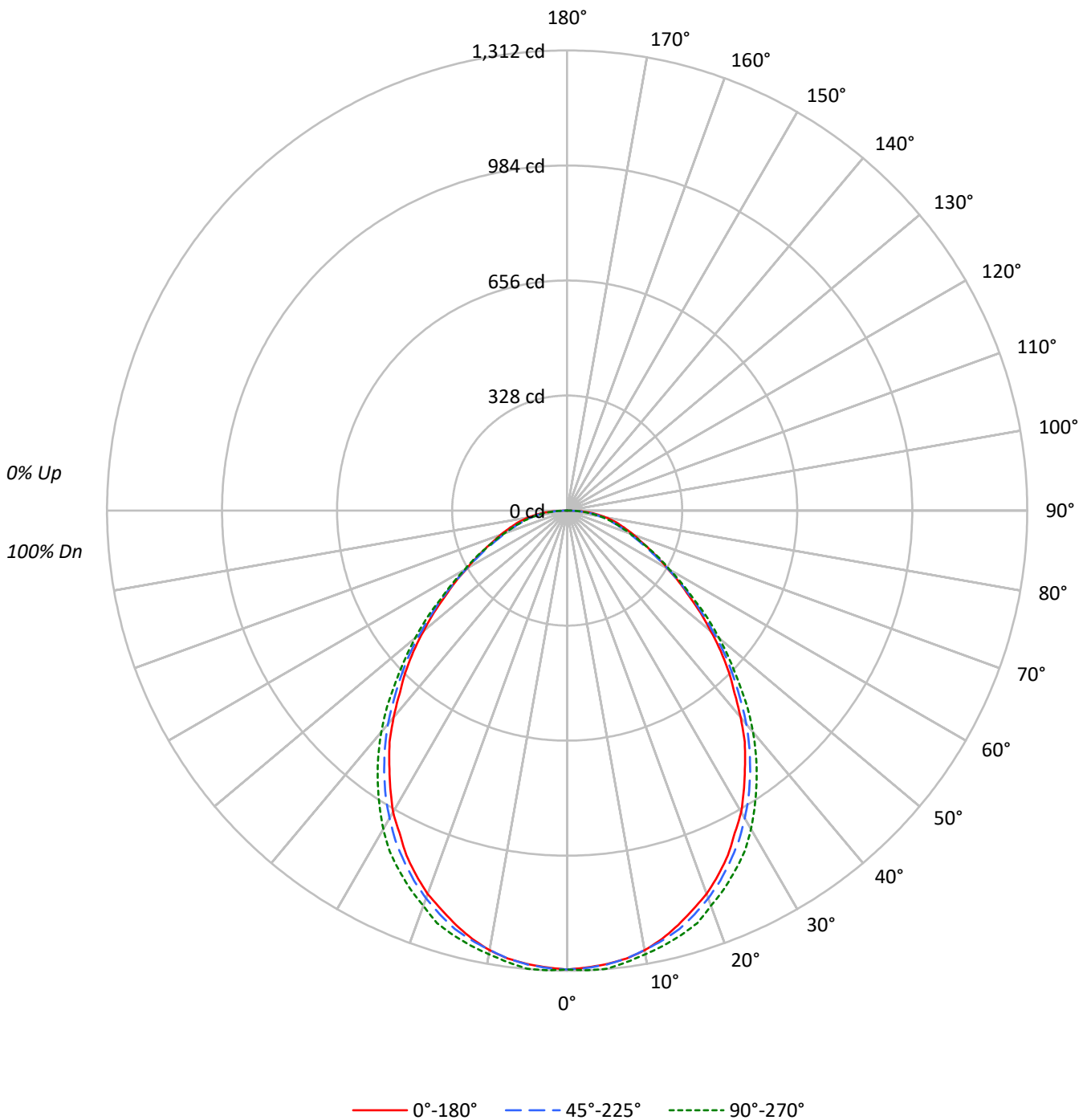
Input Watts (W): 25.017
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3521	3521	3521
5°	3506	3509	3542
10°	3478	3477	3510
15°	3408	3442	3492
20°	3330	3369	3434
25°	3220	3272	3363
30°	3084	3147	3257
35°	2904	2988	3093
40°	2702	2794	2896
45°	2481	2552	2632
50°	2238	2294	2367
55°	1985	2033	2067
60°	1779	1783	1819
65°	1640	1584	1640
70°	1583	1467	1509
75°	1611	1437	1464
80°	1736	1506	1506
85°	1927	1593	1575



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.4	4.2
10°-20°	348.2	11.9
20°-30°	508.1	17.4
30°-40°	568.9	19.5
40°-50°	517.7	17.7
50°-60°	389.7	13.3
60°-70°	254.3	8.7
70°-80°	152.5	5.2
80°-90°	57.2	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°	979.7	33.6
0°-40°	1548.6	53.0
0°-60°	2456.0	84.1
0°-90°	2920.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2920.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1308	1308	1308	1308	1308	
5°	1298	1296	1299	1304	1311	123
15°	1223	1225	1235	1246	1254	345
25°	1084	1088	1102	1122	1133	498
35°	884	892	910	931	942	552
45°	652	659	671	685	692	502
55°	423	429	433	439	441	382
65°	258	255	249	253	258	258
75°	155	150	138	139	141	164
85°	62	60	52	49	51	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1308.5	1308.5	1308.5	1308.5	1308.5
2.5°	1303.8	1303.1	1305.2	1308.5	1311.9
5°	1297.8	1295.8	1299.1	1303.8	1311.2
7.5°	1288.4	1288.4	1288.4	1297.1	1298.5
10°	1273.0	1274.3	1272.3	1281.0	1284.4
12.5°	1250.8	1251.5	1255.5	1264.2	1270.3
15°	1223.3	1224.7	1235.4	1245.5	1253.5
17.5°	1192.5	1197.2	1207.2	1223.3	1233.4
20°	1163.0	1168.3	1176.4	1193.8	1199.2
22.5°	1125.4	1131.5	1141.5	1156.9	1168.3
25°	1084.5	1087.9	1101.9	1122.1	1132.8
27.5°	1035.5	1042.9	1060.4	1081.2	1095.9
30°	992.6	996.6	1012.7	1036.9	1048.3
32.5°	938.3	950.4	963.8	985.2	996.0
35°	884.0	892.0	909.5	930.9	941.6
37.5°	831.7	836.3	853.8	871.9	885.3
40°	769.3	778.0	795.4	814.9	824.3
42.5°	706.9	719.6	731.1	750.5	760.6
45°	651.9	658.6	670.7	684.8	691.5
47.5°	594.2	597.6	611.7	620.4	627.8
50°	534.5	538.6	548.0	556.7	565.4
52.5°	479.5	482.9	488.9	497.0	505.7
55°	423.2	429.2	433.3	439.3	440.6
57.5°	377.6	376.9	379.6	384.3	389.0
60°	330.6	332.0	331.3	336.0	338.0
62.5°	291.7	291.1	287.1	293.8	299.1
65°	257.5	254.9	248.8	252.8	257.5
67.5°	226.0	224.7	214.6	218.0	222.0
70°	201.2	196.5	186.5	188.5	191.8
72.5°	177.1	171.7	161.6	162.3	164.3
75°	154.9	149.6	138.2	138.8	140.8
77.5°	134.1	127.4	117.4	116.0	117.4
80°	112.0	106.0	97.2	93.2	97.2
82.5°	89.2	85.8	75.8	71.8	73.1
85°	62.4	60.4	51.6	49.0	51.0
87.5°	28.8	30.9	26.2	24.1	24.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)