

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: P291799

Luminaire Tested: **22GR-LD5-32-F1-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291799
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-L82765-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3274.0 lumens
Efficiency: N/A
Efficacy: 130.9 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

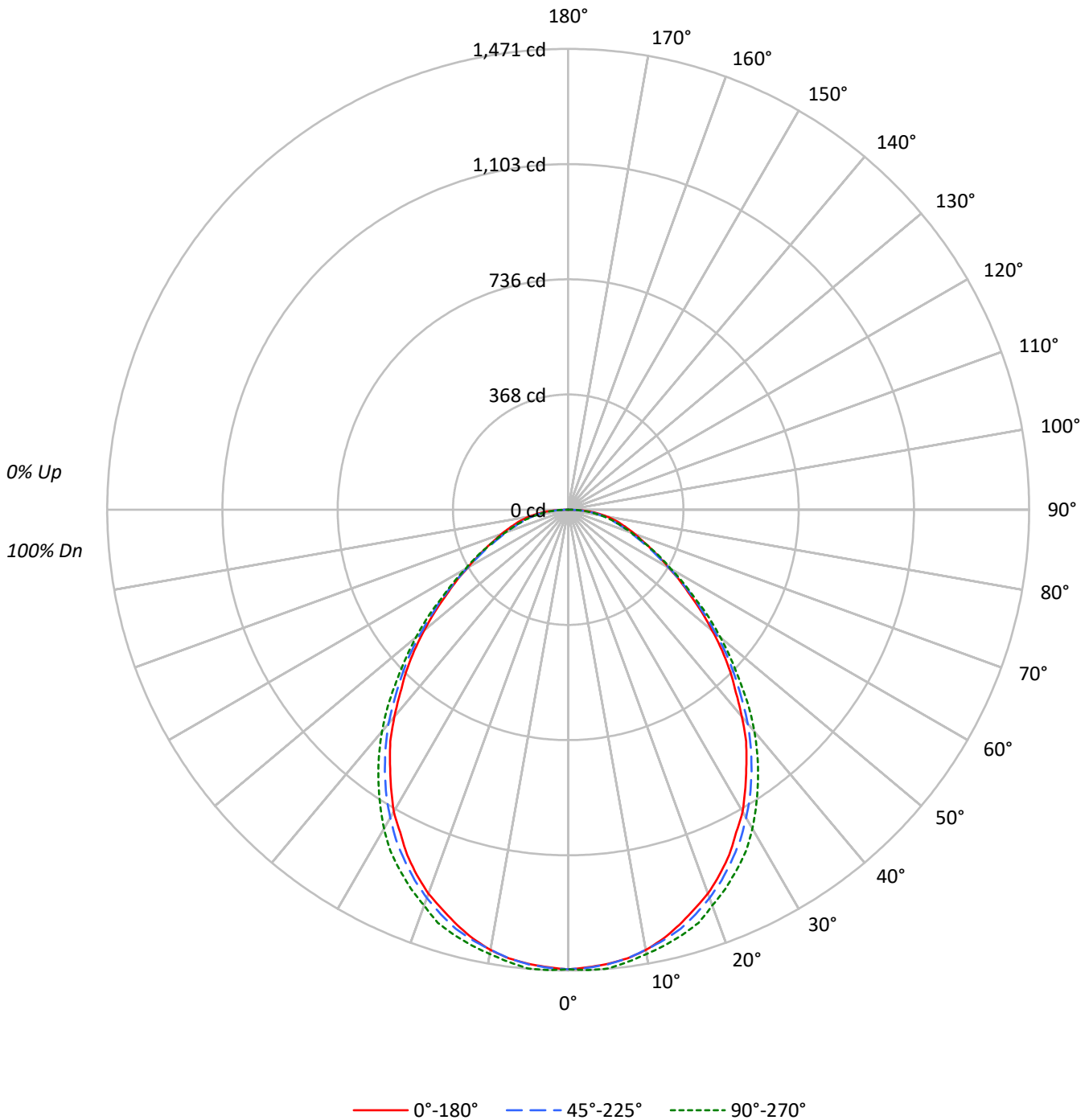
Input Watts (W): 25.017
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3948	3948	3948
5°	3931	3935	3971
10°	3900	3898	3935
15°	3821	3859	3916
20°	3734	3777	3851
25°	3611	3668	3771
30°	3458	3528	3652
35°	3256	3350	3468
40°	3030	3133	3247
45°	2782	2862	2950
50°	2509	2572	2654
55°	2226	2279	2318
60°	1995	1999	2040
65°	1839	1777	1839
70°	1775	1645	1692
75°	1806	1611	1642
80°	1946	1689	1689
85°	2158	1788	1766



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.4	4.2
10°-20°	390.4	11.9
20°-30°	569.7	17.4
30°-40°	637.8	19.5
40°-50°	580.5	17.7
50°-60°	436.9	13.3
60°-70°	285.1	8.7
70°-80°	171.0	5.2
80°-90°	64.1	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°	1098.5	33.6
0°-40°	1736.3	53.0
0°-60°	2753.8	84.1
0°-90°	3274.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3274.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1467	1467	1467	1467	1467	
5°	1455	1453	1457	1462	1470	138
15°	1372	1373	1385	1396	1406	386
25°	1216	1220	1236	1258	1270	558
35°	991	1000	1020	1044	1056	619
45°	731	738	752	768	775	563
55°	474	481	486	493	494	429
65°	289	286	279	284	289	289
75°	174	168	155	156	158	184
85°	70	68	58	55	57	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1467.2	1467.2	1467.2	1467.2	1467.2
2.5°	1461.9	1461.1	1463.4	1467.2	1470.9
5°	1455.1	1452.9	1456.6	1461.9	1470.2
7.5°	1444.6	1444.6	1444.6	1454.4	1455.9
10°	1427.3	1428.8	1426.5	1436.3	1440.1
12.5°	1402.5	1403.2	1407.7	1417.5	1424.3
15°	1371.6	1373.2	1385.2	1396.5	1405.5
17.5°	1337.1	1342.3	1353.6	1371.6	1382.9
20°	1304.0	1310.0	1319.0	1338.6	1344.6
22.5°	1261.9	1268.6	1279.9	1297.2	1310.0
25°	1216.0	1219.7	1235.5	1258.1	1270.1
27.5°	1161.1	1169.4	1188.9	1212.2	1228.8
30°	1113.0	1117.5	1135.5	1162.6	1175.4
32.5°	1052.0	1065.6	1080.6	1104.7	1116.7
35°	991.1	1000.2	1019.7	1043.8	1055.8
37.5°	932.5	937.7	957.3	977.6	992.6
40°	862.5	872.3	891.9	913.7	924.2
42.5°	792.6	806.9	819.7	841.5	852.8
45°	730.9	738.5	752.0	767.8	775.3
47.5°	666.3	670.0	685.8	695.6	703.9
50°	599.3	603.9	614.4	624.2	633.9
52.5°	537.7	541.4	548.2	557.2	567.0
55°	474.5	481.3	485.8	492.6	494.1
57.5°	423.4	422.6	425.6	430.9	436.2
60°	370.7	372.2	371.5	376.8	379.0
62.5°	327.1	326.4	321.9	329.4	335.4
65°	288.8	285.8	279.0	283.5	288.8
67.5°	253.4	251.9	240.6	244.4	248.9
70°	225.6	220.3	209.1	211.3	215.1
72.5°	198.5	192.5	181.2	182.0	184.2
75°	173.7	167.7	154.9	155.7	157.9
77.5°	150.4	142.9	131.6	130.1	131.6
80°	125.6	118.8	109.0	104.5	109.0
82.5°	100.0	96.3	85.0	80.5	82.0
85°	69.9	67.7	57.9	54.9	57.2
87.5°	32.3	34.6	29.3	27.1	27.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)