

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: P291896

Luminaire Tested: **22GR-LD5-32-F1-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291896
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-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2847.0 lumens
Efficiency: N/A
Efficacy: 114.7 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

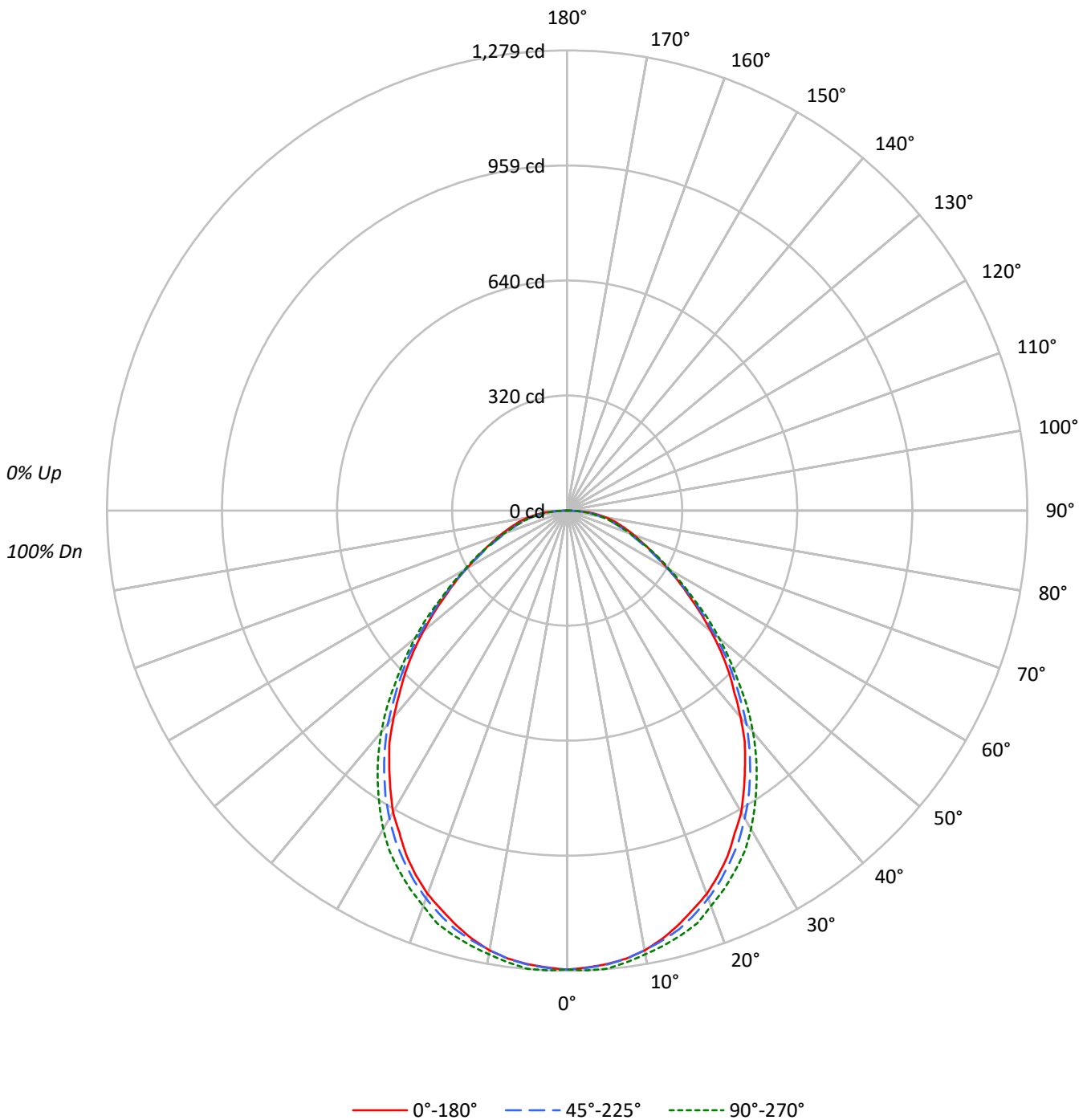
Input Watts (W): 24.831
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291896

CATALOG NUMBER: 22GR-LD5-32-F1-UNV-L92765-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P291896

CATALOG NUMBER: 22GR-LD5-32-F1-UNV-L92765-W2A1-U-4000K

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°	3433	3433	3433
5°	3418	3421	3453
10°	3391	3390	3422
15°	3323	3356	3405
20°	3247	3285	3348
25°	3140	3190	3279
30°	3007	3068	3176
35°	2831	2913	3016
40°	2635	2725	2823
45°	2419	2488	2566
50°	2182	2237	2308
55°	1936	1982	2016
60°	1735	1738	1774
65°	1599	1545	1599
70°	1544	1430	1471
75°	1571	1400	1428
80°	1692	1469	1469
85°	1877	1556	1535



TEST NUMBER: P291896

CATALOG NUMBER: 22GR-LD5-32-F1-UNV-L92765-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.3	4.2
10°-20°	339.5	11.9
20°-30°	495.4	17.4
30°-40°	554.7	19.5
40°-50°	504.8	17.7
50°-60°	379.9	13.3
60°-70°	247.9	8.7
70°-80°	148.7	5.2
80°-90°	55.8	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°	955.2	33.6
0°-40°	1509.9	53.0
0°-60°	2394.6	84.1
0°-90°	2847.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2847.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1276	1276	1276	1276	1276	
5°	1265	1263	1267	1271	1278	120
15°	1193	1194	1204	1214	1222	336
25°	1057	1061	1074	1094	1104	485
35°	862	870	887	908	918	539
45°	636	642	654	668	674	489
55°	413	418	422	428	430	373
65°	251	248	243	246	251	251
75°	151	146	135	135	137	160
85°	61	59	50	48	50	63
90°	0	0	0	0	0	



TEST NUMBER: P291896

CATALOG NUMBER: 22GR-LD5-32-F1-UNV-L92765-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1275.8	1275.8	1275.8	1275.8	1275.8
2.5°	1271.2	1270.6	1272.5	1275.8	1279.1
5°	1265.3	1263.4	1266.6	1271.2	1278.4
7.5°	1256.2	1256.2	1256.2	1264.7	1266.0
10°	1241.1	1242.5	1240.5	1249.0	1252.3
12.5°	1219.6	1220.2	1224.1	1232.6	1238.5
15°	1192.8	1194.1	1204.5	1214.3	1222.2
17.5°	1162.7	1167.3	1177.1	1192.8	1202.6
20°	1133.9	1139.1	1147.0	1164.0	1169.2
22.5°	1097.3	1103.2	1113.0	1128.0	1139.1
25°	1057.4	1060.7	1074.4	1094.0	1104.5
27.5°	1009.7	1016.8	1033.9	1054.1	1068.5
30°	967.8	971.7	987.4	1011.0	1022.1
32.5°	914.8	926.6	939.7	960.6	971.1
35°	861.9	869.7	886.7	907.6	918.1
37.5°	810.9	815.4	832.4	850.1	863.2
40°	750.0	758.5	775.6	794.5	803.7
42.5°	689.2	701.7	712.8	731.7	741.5
45°	635.6	642.2	653.9	667.7	674.2
47.5°	579.4	582.6	596.4	604.9	612.1
50°	521.2	525.1	534.3	542.8	551.3
52.5°	467.6	470.8	476.7	484.6	493.1
55°	412.6	418.5	422.4	428.3	429.6
57.5°	368.2	367.5	370.1	374.7	379.3
60°	322.4	323.7	323.0	327.6	329.6
62.5°	284.5	283.8	279.9	286.4	291.6
65°	251.1	248.5	242.6	246.5	251.1
67.5°	220.4	219.1	209.3	212.5	216.4
70°	196.2	191.6	181.8	183.8	187.0
72.5°	172.6	167.4	157.6	158.2	160.2
75°	151.1	145.8	134.7	135.4	137.3
77.5°	130.8	124.2	114.4	113.1	114.4
80°	109.2	103.3	94.8	90.9	94.8
82.5°	87.0	83.7	73.9	70.0	71.3
85°	60.8	58.9	50.4	47.7	49.7
87.5°	28.1	30.1	25.5	23.5	24.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)