

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: P291791

Luminaire Tested: **22GR-LD5-28-F1-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291791
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-LD5-28-F1-UNV-L82765-W2A1-U-5000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3005.0 lumens
Efficiency: N/A
Efficacy: 133.0 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

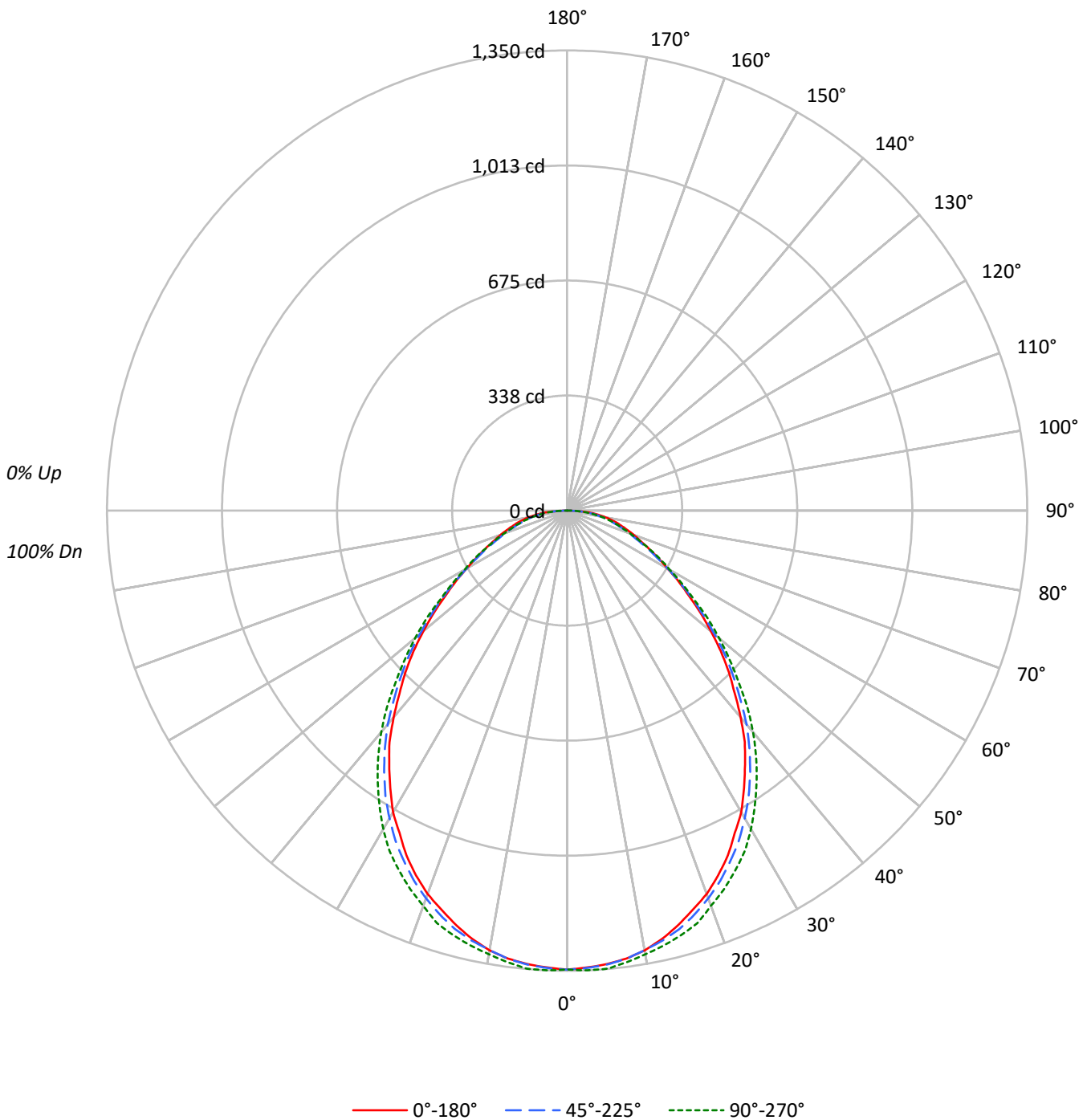
Input Watts (W): 22.599
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3624	3624	3624
5°	3608	3611	3645
10°	3580	3578	3612
15°	3507	3542	3594
20°	3427	3467	3534
25°	3314	3367	3461
30°	3174	3238	3352
35°	2988	3075	3184
40°	2781	2876	2980
45°	2553	2627	2708
50°	2303	2361	2436
55°	2043	2092	2128
60°	1831	1835	1872
65°	1687	1631	1687
70°	1629	1510	1553
75°	1657	1478	1507
80°	1787	1551	1551
85°	1982	1639	1621



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.0	4.2
10°-20°	358.3	11.9
20°-30°	522.9	17.4
30°-40°	585.4	19.5
40°-50°	532.8	17.7
50°-60°	401.0	13.3
60°-70°	261.7	8.7
70°-80°	156.9	5.2
80°-90°	58.9	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°	1008.2	33.6
0°-40°	1593.7	53.0
0°-60°	2527.5	84.1
0°-90°	3005.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3005.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1347	1347	1347	1347	1347	
5°	1336	1334	1337	1342	1349	127
15°	1259	1260	1271	1282	1290	355
25°	1116	1120	1134	1155	1166	512
35°	910	918	936	958	969	569
45°	671	678	690	705	712	517
55°	436	442	446	452	454	394
65°	265	262	256	260	265	265
75°	159	154	142	143	145	169
85°	64	62	53	50	52	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1346.6	1346.6	1346.6	1346.6	1346.6
2.5°	1341.8	1341.1	1343.2	1346.6	1350.1
5°	1335.6	1333.5	1336.9	1341.8	1349.4
7.5°	1325.9	1325.9	1325.9	1334.9	1336.3
10°	1310.0	1311.4	1309.3	1318.3	1321.8
12.5°	1287.2	1287.9	1292.1	1301.1	1307.3
15°	1258.9	1260.3	1271.4	1281.7	1290.0
17.5°	1227.2	1232.0	1242.4	1258.9	1269.3
20°	1196.8	1202.4	1210.6	1228.6	1234.1
22.5°	1158.2	1164.4	1174.7	1190.6	1202.4
25°	1116.1	1119.5	1134.0	1154.7	1165.8
27.5°	1065.7	1073.3	1091.2	1112.6	1127.8
30°	1021.5	1025.7	1042.2	1067.1	1078.8
32.5°	965.6	978.0	991.8	1013.9	1025.0
35°	909.7	918.0	935.9	958.0	969.1
37.5°	855.9	860.7	878.6	897.3	911.1
40°	791.7	800.6	818.6	838.6	848.3
42.5°	727.5	740.6	752.3	772.3	782.7
45°	670.9	677.8	690.2	704.7	711.6
47.5°	611.5	615.0	629.5	638.4	646.0
50°	550.1	554.2	563.9	572.9	581.8
52.5°	493.5	497.0	503.2	511.4	520.4
55°	435.5	441.7	445.9	452.1	453.5
57.5°	388.6	387.9	390.7	395.5	400.3
60°	340.3	341.7	341.0	345.8	347.9
62.5°	300.2	299.6	295.4	302.3	307.8
65°	265.0	262.3	256.1	260.2	265.0
67.5°	232.6	231.2	220.9	224.3	228.5
70°	207.1	202.2	191.9	193.9	197.4
72.5°	182.2	176.7	166.3	167.0	169.1
75°	159.4	153.9	142.2	142.9	144.9
77.5°	138.0	131.1	120.8	119.4	120.8
80°	115.3	109.1	100.1	95.9	100.1
82.5°	91.8	88.3	78.0	73.9	75.2
85°	64.2	62.1	53.1	50.4	52.5
87.5°	29.7	31.7	26.9	24.8	25.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)