

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: P291804

Luminaire Tested: **22GR-LD5-36-F1-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291804
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-LD5-36-F1-UNV-L82765-W2A1-U-2700K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3320.0 lumens
Efficiency: N/A
Efficacy: 118.2 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

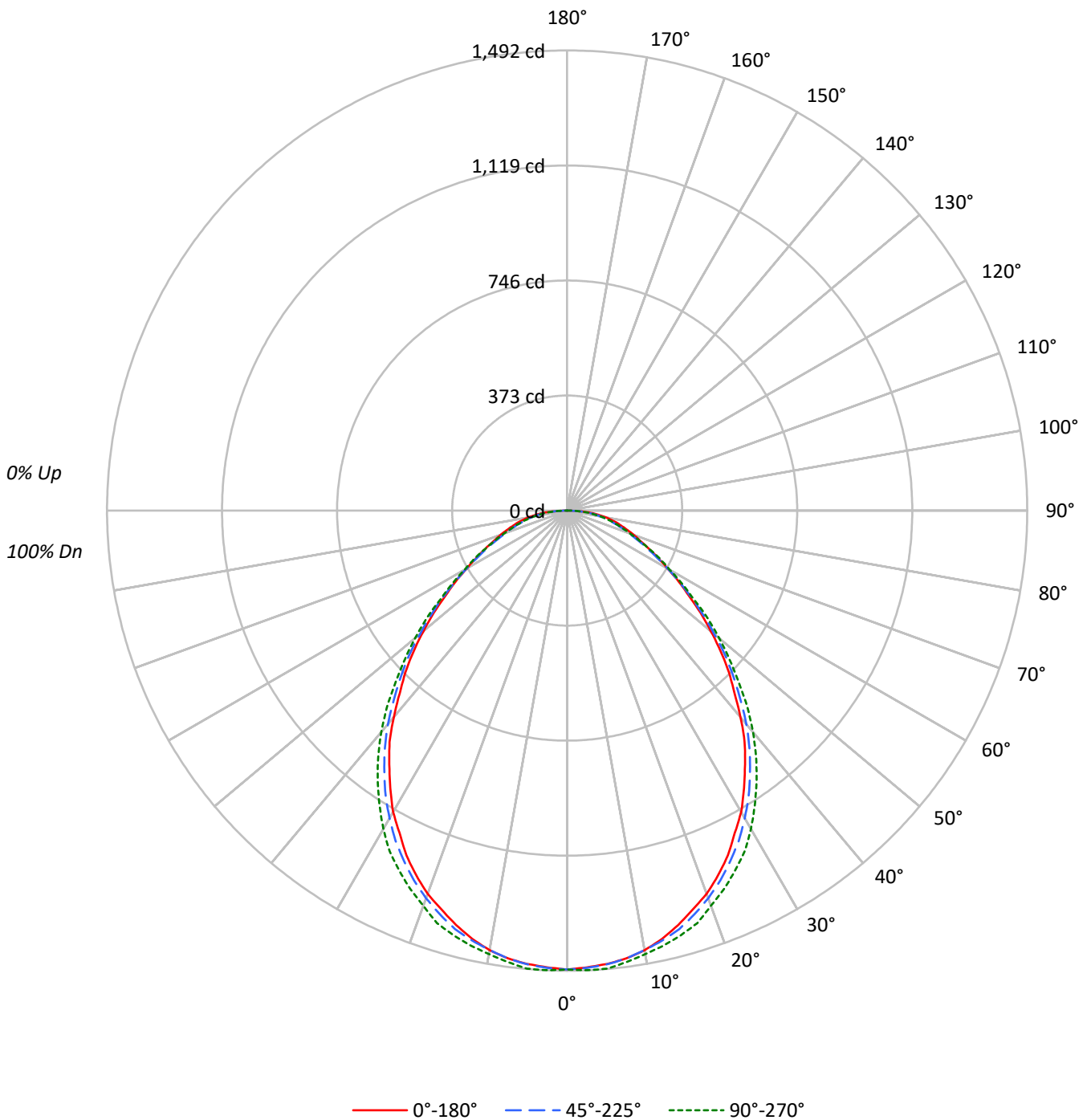
Input Watts (W): 28.086
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4004	4004	4004
5°	3986	3990	4027
10°	3955	3953	3990
15°	3875	3913	3970
20°	3787	3830	3905
25°	3661	3720	3824
30°	3507	3578	3704
35°	3302	3397	3517
40°	3073	3177	3292
45°	2821	2902	2992
50°	2545	2608	2691
55°	2258	2311	2350
60°	2023	2027	2068
65°	1864	1801	1864
70°	1800	1668	1716
75°	1832	1633	1665
80°	1973	1714	1714
85°	2189	1812	1791



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.3	4.2
10°-20°	395.8	11.9
20°-30°	577.7	17.4
30°-40°	646.8	19.5
40°-50°	588.7	17.7
50°-60°	443.1	13.3
60°-70°	289.1	8.7
70°-80°	173.4	5.2
80°-90°	65.0	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°	1113.9	33.6
0°-40°	1760.7	53.0
0°-60°	2792.4	84.1
0°-90°	3320.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3320.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1488	1488	1488	1488	1488	
5°	1476	1473	1477	1482	1491	140
15°	1391	1392	1405	1416	1425	392
25°	1233	1237	1253	1276	1288	566
35°	1005	1014	1034	1058	1071	628
45°	741	749	763	779	786	571
55°	481	488	493	500	501	435
65°	293	290	283	288	293	293
75°	176	170	157	158	160	187
85°	71	69	59	56	58	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1487.8	1487.8	1487.8	1487.8	1487.8
2.5°	1482.4	1481.7	1484.0	1487.8	1491.6
5°	1475.6	1473.3	1477.1	1482.4	1490.8
7.5°	1464.9	1464.9	1464.9	1474.8	1476.3
10°	1447.3	1448.9	1446.6	1456.5	1460.3
12.5°	1422.2	1422.9	1427.5	1437.4	1444.3
15°	1390.9	1392.4	1404.6	1416.1	1425.2
17.5°	1355.8	1361.2	1372.6	1390.9	1402.4
20°	1322.3	1328.4	1337.5	1357.4	1363.5
22.5°	1279.6	1286.4	1297.9	1315.4	1328.4
25°	1233.1	1236.9	1252.9	1275.8	1288.0
27.5°	1177.4	1185.8	1205.6	1229.3	1246.0
30°	1128.6	1133.2	1151.5	1178.9	1191.9
32.5°	1066.8	1080.6	1095.8	1120.2	1132.4
35°	1005.1	1014.2	1034.0	1058.4	1070.6
37.5°	945.6	950.9	970.7	991.3	1006.6
40°	874.7	884.6	904.4	926.5	937.2
42.5°	803.7	818.2	831.2	853.3	864.7
45°	741.2	748.8	762.6	778.6	786.2
47.5°	675.6	679.4	695.5	705.4	713.8
50°	607.8	612.3	623.0	632.9	642.8
52.5°	545.2	549.0	555.9	565.1	575.0
55°	481.2	488.0	492.6	499.5	501.0
57.5°	429.3	428.6	431.6	436.9	442.3
60°	375.9	377.5	376.7	382.0	384.3
62.5°	331.7	331.0	326.4	334.0	340.1
65°	292.8	289.8	282.9	287.5	292.8
67.5°	257.0	255.5	244.0	247.8	252.4
70°	228.8	223.4	212.0	214.3	218.1
72.5°	201.3	195.2	183.8	184.5	186.8
75°	176.2	170.1	157.1	157.9	160.1
77.5°	152.5	144.9	133.4	131.9	133.4
80°	127.3	120.5	110.6	106.0	110.6
82.5°	101.4	97.6	86.2	81.6	83.1
85°	70.9	68.6	58.7	55.7	58.0
87.5°	32.8	35.1	29.7	27.5	28.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)