

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: P291904

Luminaire Tested: **22GR-LD5-36-F1-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291904
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-L92765-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3096.0 lumens
Efficiency: N/A
Efficacy: 109.9 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

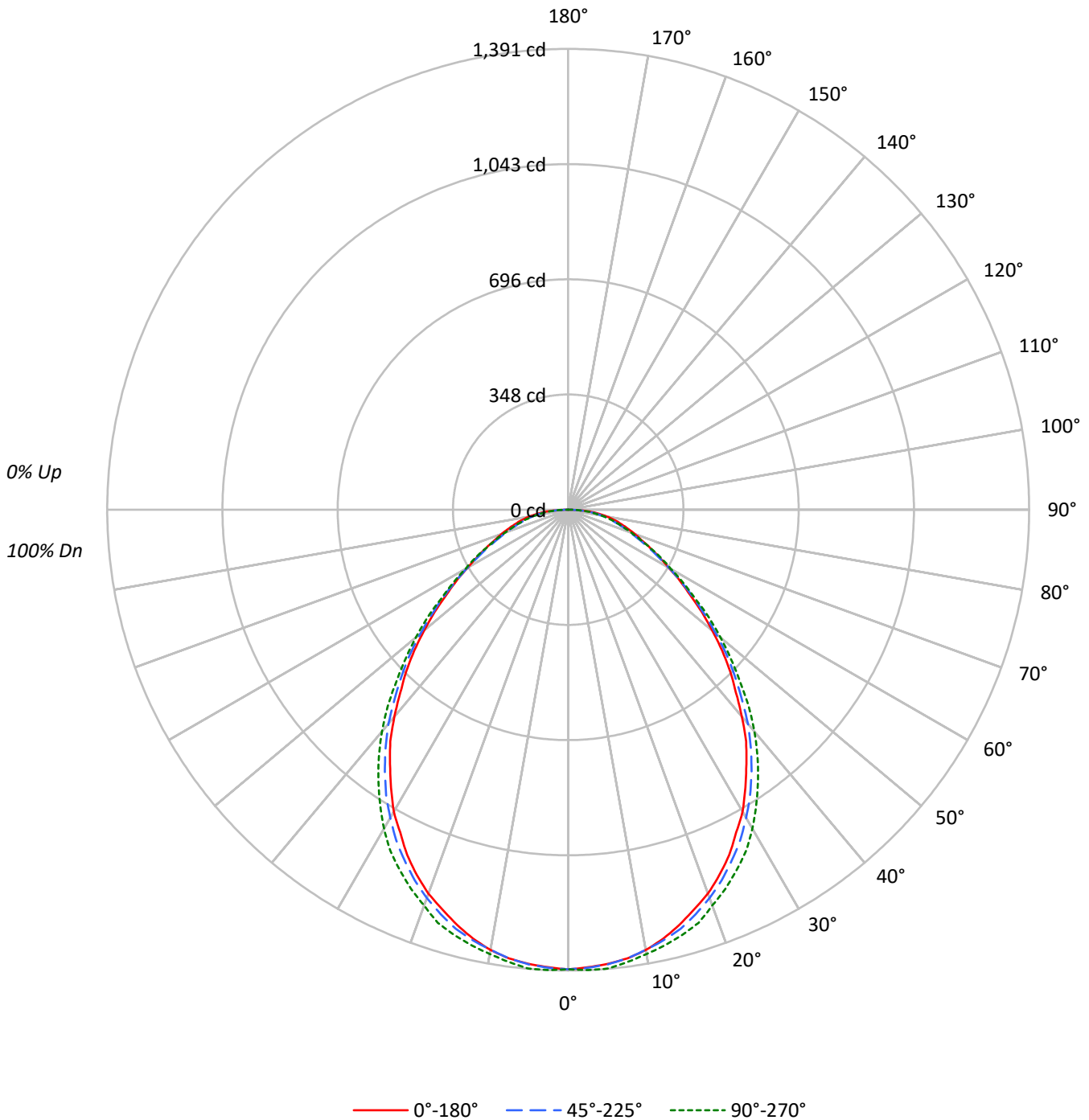
Input Watts (W): 28.179
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3733	3733	3733
5°	3717	3721	3755
10°	3688	3686	3721
15°	3614	3649	3703
20°	3531	3572	3641
25°	3414	3469	3566
30°	3270	3337	3454
35°	3079	3168	3280
40°	2865	2963	3070
45°	2630	2706	2790
50°	2373	2432	2510
55°	2105	2155	2192
60°	1887	1891	1929
65°	1739	1680	1739
70°	1678	1555	1600
75°	1708	1523	1552
80°	1841	1598	1598
85°	2041	1692	1667



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.9	4.2
10°-20°	369.1	11.9
20°-30°	538.8	17.4
30°-40°	603.2	19.5
40°-50°	548.9	17.7
50°-60°	413.2	13.3
60°-70°	269.6	8.7
70°-80°	161.7	5.2
80°-90°	60.6	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°	1038.8	33.6
0°-40°	1641.9	53.0
0°-60°	2604.0	84.1
0°-90°	3096.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3096.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1387	1387	1387	1387	1387	
5°	1376	1374	1377	1382	1390	131
15°	1297	1298	1310	1320	1329	365
25°	1150	1153	1168	1190	1201	528
35°	937	946	964	987	998	586
45°	691	698	711	726	733	532
55°	449	455	459	466	467	406
65°	273	270	264	268	273	273
75°	164	159	146	147	149	174
85°	66	64	55	52	54	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1387.4	1387.4	1387.4	1387.4	1387.4
2.5°	1382.4	1381.7	1383.8	1387.4	1390.9
5°	1376.0	1373.9	1377.4	1382.4	1390.2
7.5°	1366.1	1366.1	1366.1	1375.3	1376.7
10°	1349.7	1351.1	1349.0	1358.2	1361.8
12.5°	1326.2	1326.9	1331.2	1340.5	1346.9
15°	1297.1	1298.5	1309.9	1320.5	1329.1
17.5°	1264.4	1269.3	1280.0	1297.1	1307.7
20°	1233.1	1238.8	1247.3	1265.8	1271.5
22.5°	1193.3	1199.7	1210.3	1226.7	1238.8
25°	1149.9	1153.4	1168.4	1189.7	1201.1
27.5°	1098.0	1105.8	1124.3	1146.3	1162.0
30°	1052.4	1056.7	1073.8	1099.4	1111.5
32.5°	994.8	1007.6	1021.9	1044.6	1056.0
35°	937.2	945.8	964.3	987.0	998.4
37.5°	881.8	886.8	905.2	924.4	938.7
40°	815.6	824.9	843.4	864.0	874.0
42.5°	749.5	763.0	775.1	795.7	806.4
45°	691.2	698.3	711.1	726.0	733.2
47.5°	630.0	633.6	648.5	657.8	665.6
50°	566.8	571.0	581.0	590.2	599.5
52.5°	508.4	512.0	518.4	526.9	536.2
55°	448.7	455.1	459.4	465.8	467.2
57.5°	400.4	399.6	402.5	407.5	412.4
60°	350.6	352.0	351.3	356.3	358.4
62.5°	309.3	308.6	304.4	311.5	317.2
65°	273.1	270.2	263.8	268.1	273.1
67.5°	239.6	238.2	227.6	231.1	235.4
70°	213.3	208.4	197.7	199.8	203.4
72.5°	187.7	182.0	171.4	172.1	174.2
75°	164.3	158.6	146.5	147.2	149.3
77.5°	142.2	135.1	124.4	123.0	124.4
80°	118.8	112.4	103.1	98.8	103.1
82.5°	94.6	91.0	80.4	76.1	77.5
85°	66.1	64.0	54.8	51.9	54.0
87.5°	30.6	32.7	27.7	25.6	26.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)