

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: P291903

Luminaire Tested: **22GR-LD5-36-F1-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291903
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-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2948.0 lumens
Efficiency: N/A
Efficacy: 106.0 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

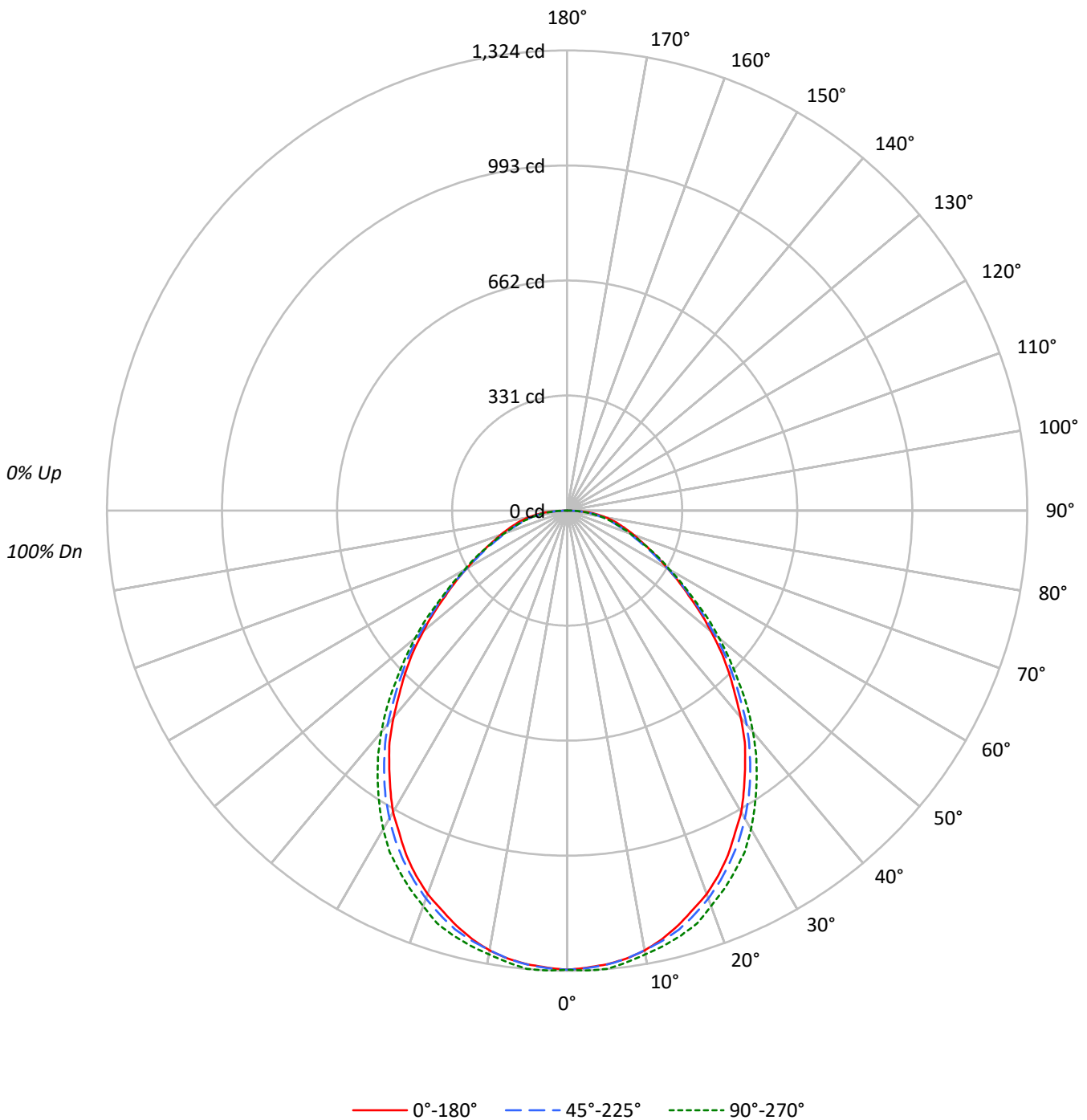
Input Watts (W): 27.807
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3555	3555	3555
5°	3539	3543	3576
10°	3512	3510	3543
15°	3441	3475	3526
20°	3362	3401	3467
25°	3251	3303	3396
30°	3114	3177	3288
35°	2932	3016	3123
40°	2728	2821	2923
45°	2505	2577	2657
50°	2259	2316	2390
55°	2005	2052	2087
60°	1796	1800	1837
65°	1656	1599	1656
70°	1598	1481	1524
75°	1626	1450	1478
80°	1753	1522	1522
85°	1945	1609	1590



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.6	4.2
10°-20°	351.5	11.9
20°-30°	513.0	17.4
30°-40°	574.3	19.5
40°-50°	522.7	17.7
50°-60°	393.4	13.3
60°-70°	256.7	8.7
70°-80°	154.0	5.2
80°-90°	57.7	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°	989.1	33.6
0°-40°	1563.4	53.0
0°-60°	2479.5	84.1
0°-90°	2948.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2948.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1321	1321	1321	1321	1321	
5°	1310	1308	1312	1316	1324	124
15°	1235	1236	1247	1257	1266	348
25°	1095	1098	1112	1133	1144	503
35°	892	901	918	940	951	558
45°	658	665	677	691	698	507
55°	427	433	437	444	445	386
65°	260	257	251	255	260	260
75°	156	151	140	140	142	166
85°	63	61	52	49	52	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1321.1	1321.1	1321.1	1321.1	1321.1
2.5°	1316.3	1315.6	1317.7	1321.1	1324.4
5°	1310.2	1308.2	1311.6	1316.3	1323.8
7.5°	1300.7	1300.7	1300.7	1309.6	1310.9
10°	1285.2	1286.5	1284.5	1293.3	1296.7
12.5°	1262.8	1263.5	1267.6	1276.4	1282.5
15°	1235.1	1236.4	1247.3	1257.4	1265.5
17.5°	1203.9	1208.7	1218.8	1235.1	1245.2
20°	1174.1	1179.5	1187.7	1205.3	1210.7
22.5°	1136.2	1142.3	1152.5	1168.0	1179.5
25°	1094.9	1098.3	1112.5	1132.8	1143.7
27.5°	1045.5	1052.9	1070.5	1091.5	1106.4
30°	1002.1	1006.2	1022.5	1046.8	1058.3
32.5°	947.3	959.5	973.0	994.7	1005.5
35°	892.4	900.6	918.2	939.8	950.7
37.5°	839.6	844.4	862.0	880.3	893.8
40°	776.7	785.5	803.1	822.7	832.2
42.5°	713.7	726.6	738.1	757.7	767.9
45°	658.2	664.9	677.1	691.3	698.1
47.5°	599.9	603.3	617.5	626.3	633.8
50°	539.7	543.7	553.2	562.0	570.8
52.5°	484.1	487.5	493.6	501.7	510.5
55°	427.3	433.4	437.4	443.5	444.9
57.5°	381.2	380.5	383.3	388.0	392.7
60°	333.8	335.2	334.5	339.2	341.3
62.5°	294.5	293.9	289.8	296.6	302.0
65°	260.0	257.3	251.2	255.3	260.0
67.5°	228.2	226.8	216.7	220.1	224.1
70°	203.1	198.4	188.2	190.3	193.7
72.5°	178.8	173.3	163.2	163.9	165.9
75°	156.4	151.0	139.5	140.2	142.2
77.5°	135.4	128.7	118.5	117.1	118.5
80°	113.1	107.0	98.2	94.1	98.2
82.5°	90.1	86.7	76.5	72.5	73.8
85°	63.0	60.9	52.1	49.4	51.5
87.5°	29.1	31.1	26.4	24.4	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)