

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: P291909

Luminaire Tested: **22GR-LD5-36-F1-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291909
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-5700K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3411.0 lumens
Efficiency: N/A
Efficacy: 117.9 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

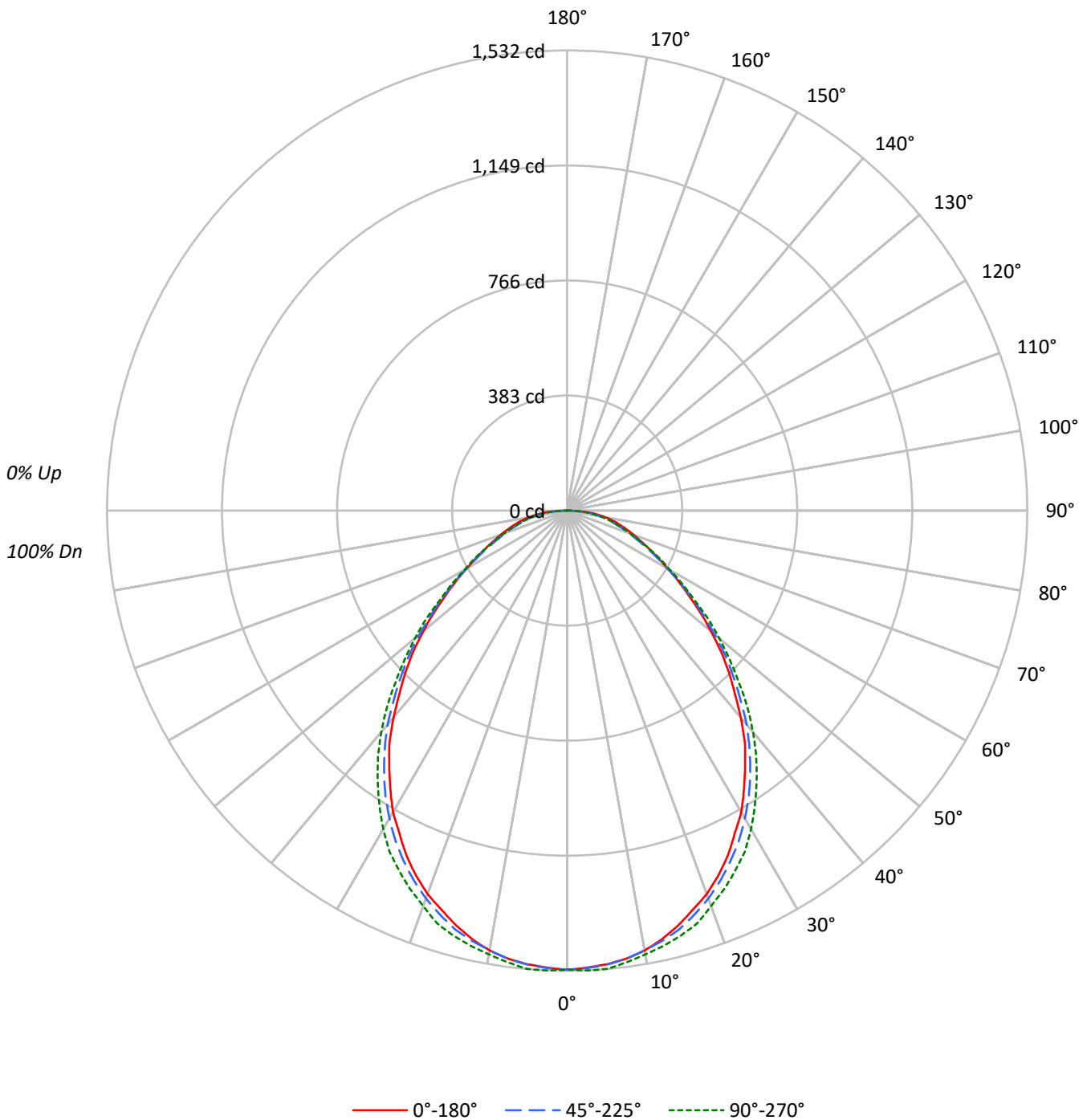
Input Watts (W): 28.923
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4113	4113	4113
5°	4095	4099	4138
10°	4063	4061	4100
15°	3981	4020	4079
20°	3890	3935	4011
25°	3762	3822	3929
30°	3603	3676	3805
35°	3392	3490	3614
40°	3157	3264	3382
45°	2898	2982	3074
50°	2614	2680	2765
55°	2320	2374	2415
60°	2079	2083	2125
65°	1916	1851	1916
70°	1849	1714	1763
75°	1882	1678	1710
80°	2027	1760	1760
85°	2251	1862	1837



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.2	4.2
10°-20°	406.7	11.9
20°-30°	593.6	17.4
30°-40°	664.5	19.5
40°-50°	604.8	17.7
50°-60°	455.2	13.3
60°-70°	297.1	8.7
70°-80°	178.2	5.2
80°-90°	66.8	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°	1144.4	33.6
0°-40°	1809.0	53.0
0°-60°	2869.0	84.1
0°-90°	3411.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3411.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1528	1528	1528	1528	1528	
5°	1516	1514	1518	1523	1532	144
15°	1429	1431	1443	1455	1464	402
25°	1267	1271	1287	1311	1323	582
35°	1033	1042	1062	1088	1100	645
45°	762	769	784	800	808	586
55°	494	501	506	513	515	447
65°	301	298	291	295	301	301
75°	181	175	161	162	164	192
85°	73	70	60	57	60	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1528.5	1528.5	1528.5	1528.5	1528.5
2.5°	1523.1	1522.3	1524.6	1528.5	1532.5
5°	1516.0	1513.7	1517.6	1523.1	1531.7
7.5°	1505.0	1505.0	1505.0	1515.2	1516.8
10°	1487.0	1488.6	1486.2	1496.4	1500.3
12.5°	1461.2	1461.9	1466.6	1476.8	1483.9
15°	1429.0	1430.6	1443.1	1454.9	1464.3
17.5°	1393.0	1398.5	1410.2	1429.0	1440.8
20°	1358.5	1364.8	1374.2	1394.6	1400.8
22.5°	1314.7	1321.7	1333.5	1351.5	1364.8
25°	1266.9	1270.8	1287.2	1310.7	1323.3
27.5°	1209.7	1218.3	1238.7	1262.9	1280.2
30°	1159.5	1164.2	1183.0	1211.2	1224.6
32.5°	1096.1	1110.2	1125.8	1150.9	1163.4
35°	1032.6	1042.0	1062.4	1087.5	1100.0
37.5°	971.5	977.0	997.4	1018.5	1034.2
40°	898.6	908.8	929.2	951.9	962.9
42.5°	825.8	840.7	854.0	876.7	888.5
45°	761.5	769.4	783.5	799.9	807.8
47.5°	694.2	698.1	714.5	724.7	733.3
50°	624.4	629.1	640.1	650.3	660.5
52.5°	560.2	564.1	571.1	580.5	590.7
55°	494.4	501.4	506.1	513.2	514.7
57.5°	441.1	440.3	443.4	448.9	454.4
60°	386.2	387.8	387.0	392.5	394.9
62.5°	340.8	340.0	335.3	343.2	349.4
65°	300.9	297.7	290.7	295.4	300.9
67.5°	264.0	262.5	250.7	254.6	259.3
70°	235.0	229.6	217.8	220.2	224.1
72.5°	206.8	200.6	188.8	189.6	191.9
75°	181.0	174.7	161.4	162.2	164.5
77.5°	156.7	148.9	137.1	135.5	137.1
80°	130.8	123.8	113.6	108.9	113.6
82.5°	104.2	100.3	88.5	83.8	85.4
85°	72.9	70.5	60.3	57.2	59.5
87.5°	33.7	36.0	30.6	28.2	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)