

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: P291755

Luminaire Tested: **22GR-LD5-36-F1-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291755
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-L83050-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3799.0 lumens
Efficiency: N/A
Efficacy: 132.2 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

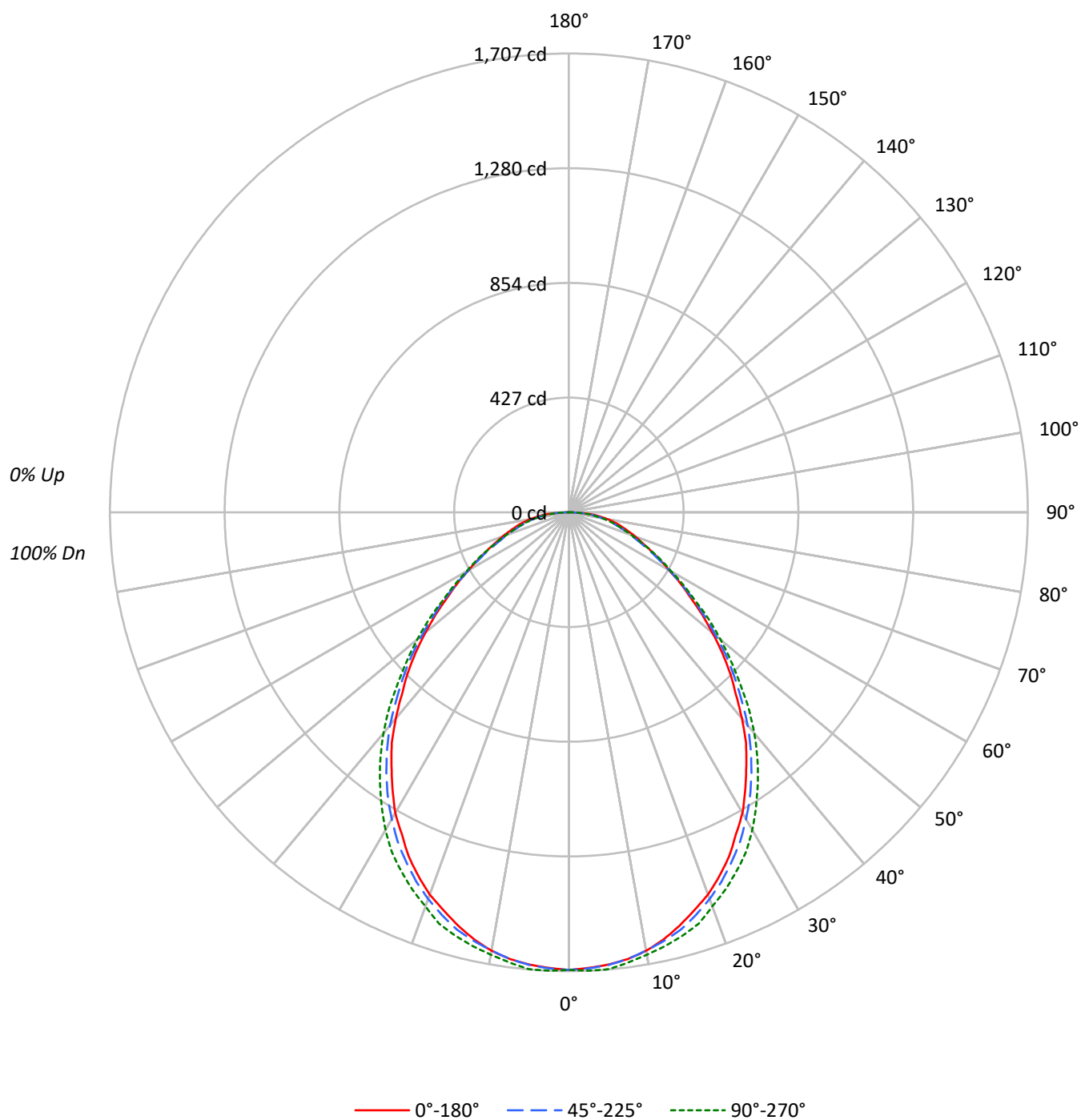
Input Watts (W): 28.737
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	105	101	98	107	103	99	96		99	96	93		95	92	90		91	89	87
2	101	93	87	81	98	91	85	80		87	83	78		84	80	77		81	78	75
3	92	83	75	69	90	81	74	68		78	72	67		75	70	66		73	69	65
4	85	74	66	59	83	73	65	59		70	63	58		68	62	57		66	61	57
5	79	67	58	52	77	66	58	52		63	56	51		62	55	51		60	54	50
6	73	60	52	46	71	59	51	46		58	51	45		56	50	45		55	49	45
7	68	55	47	41	66	54	46	41		53	46	41		51	45	40		50	44	40
8	63	51	42	37	62	50	42	37		49	42	37		47	41	36		46	40	36
9	59	47	39	33	58	46	39	33		45	38	33		44	38	33		43	37	33
10	56	43	36	31	55	43	35	30		42	35	30		41	35	30		40	34	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4581	4581	4581
5°	4561	4566	4608
10°	4526	4523	4566
15°	4434	4478	4544
20°	4333	4383	4468
25°	4189	4257	4376
30°	4013	4094	4238
35°	3778	3887	4025
40°	3516	3635	3767
45°	3228	3321	3424
50°	2912	2984	3080
55°	2583	2645	2690
60°	2315	2320	2367
65°	2134	2061	2134
70°	2060	1909	1964
75°	2096	1869	1905
80°	2258	1960	1960
85°	2507	2075	2047



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.6	4.2
10°-20°	453.0	11.9
20°-30°	661.1	17.4
30°-40°	740.1	19.5
40°-50°	673.6	17.7
50°-60°	507.0	13.3
60°-70°	330.9	8.7
70°-80°	198.4	5.2
80°-90°	74.4	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°	1274.6	33.6
0°-40°	2014.7	53.0
0°-60°	3195.3	84.1
0°-90°	3799.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3799.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1702	1702	1702	1702	1702	
5°	1688	1686	1690	1696	1706	160
15°	1592	1593	1607	1620	1631	448
25°	1411	1415	1434	1460	1474	648
35°	1150	1160	1183	1211	1225	719
45°	848	857	873	891	900	653
55°	551	558	564	572	573	498
65°	335	332	324	329	335	335
75°	202	195	180	181	183	214
85°	81	78	67	64	66	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1702.4	1702.4	1702.4	1702.4	1702.4
2.5°	1696.3	1695.4	1698.1	1702.4	1706.8
5°	1688.5	1685.8	1690.2	1696.3	1705.9
7.5°	1676.2	1676.2	1676.2	1687.6	1689.3
10°	1656.2	1657.9	1655.3	1666.6	1671.0
12.5°	1627.4	1628.2	1633.5	1644.8	1652.7
15°	1591.6	1593.3	1607.3	1620.4	1630.9
17.5°	1551.5	1557.6	1570.7	1591.6	1604.7
20°	1513.1	1520.0	1530.5	1553.2	1560.2
22.5°	1464.2	1472.1	1485.1	1505.2	1520.0
25°	1411.0	1415.3	1433.7	1459.8	1473.8
27.5°	1347.3	1356.9	1379.6	1406.6	1425.8
30°	1291.4	1296.7	1317.6	1349.0	1363.9
32.5°	1220.7	1236.5	1253.9	1281.8	1295.8
35°	1150.1	1160.5	1183.2	1211.1	1225.1
37.5°	1082.0	1088.1	1110.8	1134.4	1151.8
40°	1000.9	1012.2	1034.9	1060.2	1072.4
42.5°	919.7	936.3	951.1	976.4	989.5
45°	848.2	856.9	872.6	890.9	899.6
47.5°	773.1	777.5	795.8	807.1	816.7
50°	695.5	700.7	712.9	724.2	735.6
52.5°	623.9	628.3	636.1	646.6	657.9
55°	550.6	558.5	563.7	571.5	573.3
57.5°	491.3	490.4	493.9	500.0	506.1
60°	430.2	431.9	431.1	437.2	439.8
62.5°	379.6	378.7	373.5	382.2	389.2
65°	335.1	331.6	323.7	329.0	335.1
67.5°	294.1	292.3	279.2	283.6	288.8
70°	261.8	255.7	242.6	245.2	249.6
72.5°	230.4	223.4	210.3	211.2	213.8
75°	201.6	194.6	179.8	180.6	183.2
77.5°	174.5	165.8	152.7	151.0	152.7
80°	145.7	137.9	126.5	121.3	126.5
82.5°	116.1	111.7	98.6	93.4	95.1
85°	81.2	78.5	67.2	63.7	66.3
87.5°	37.5	40.1	34.0	31.4	32.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)