

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: P291753

Luminaire Tested: **22GR-LD5-36-F1-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291753
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-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3419.0 lumens
Efficiency: N/A
Efficacy: 122.1 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

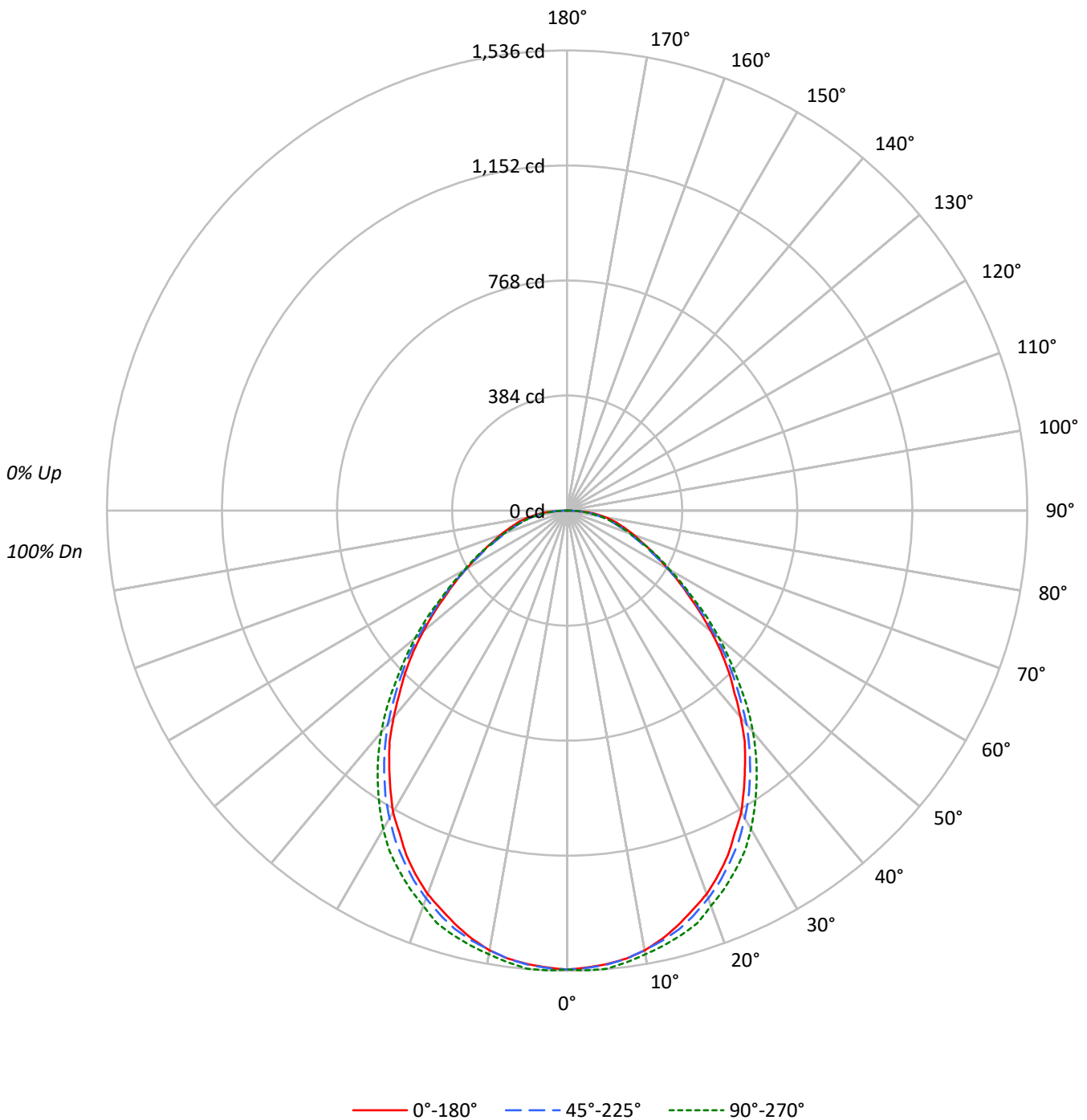
Input Watts (W): 27.993
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4123	4123	4123
5°	4105	4109	4147
10°	4073	4071	4109
15°	3991	4030	4089
20°	3899	3944	4021
25°	3770	3831	3938
30°	3611	3685	3814
35°	3400	3498	3622
40°	3164	3272	3390
45°	2905	2989	3081
50°	2620	2686	2771
55°	2325	2380	2420
60°	2084	2088	2130
65°	1920	1855	1920
70°	1854	1718	1767
75°	1886	1682	1714
80°	2032	1765	1765
85°	2254	1868	1843



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.5	4.2
10°-20°	407.6	11.9
20°-30°	594.9	17.4
30°-40°	666.1	19.5
40°-50°	606.2	17.7
50°-60°	456.3	13.3
60°-70°	297.7	8.7
70°-80°	178.6	5.2
80°-90°	67.0	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°	1147.1	33.6
0°-40°	1813.2	53.0
0°-60°	2875.7	84.1
0°-90°	3419.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3419.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1532	1532	1532	1532	1532	
5°	1520	1517	1521	1527	1535	144
15°	1432	1434	1446	1458	1468	403
25°	1270	1274	1290	1314	1326	583
35°	1035	1044	1065	1090	1103	647
45°	763	771	785	802	810	588
55°	496	503	507	514	516	448
65°	302	298	291	296	302	302
75°	181	175	162	163	165	192
85°	73	71	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°	1532.1	1532.1	1532.1	1532.1	1532.1
2.5°	1526.6	1525.8	1528.2	1532.1	1536.1
5°	1519.6	1517.2	1521.1	1526.6	1535.3
7.5°	1508.6	1508.6	1508.6	1518.8	1520.3
10°	1490.5	1492.1	1489.7	1499.9	1503.9
12.5°	1464.6	1465.4	1470.1	1480.3	1487.4
15°	1432.4	1434.0	1446.5	1458.3	1467.7
17.5°	1396.3	1401.8	1413.5	1432.4	1444.2
20°	1361.7	1368.0	1377.4	1397.8	1404.1
22.5°	1317.7	1324.8	1336.6	1354.6	1368.0
25°	1269.8	1273.8	1290.3	1313.8	1326.4
27.5°	1212.5	1221.1	1241.6	1265.9	1283.2
30°	1162.2	1167.0	1185.8	1214.1	1227.4
32.5°	1098.6	1112.8	1128.5	1153.6	1166.2
35°	1035.0	1044.5	1064.9	1090.0	1102.6
37.5°	973.8	979.3	999.7	1020.9	1036.6
40°	900.7	911.0	931.4	954.1	965.1
42.5°	827.7	842.6	856.0	878.8	890.5
45°	763.3	771.2	785.3	801.8	809.6
47.5°	695.8	699.7	716.2	726.4	735.0
50°	625.9	630.6	641.6	651.8	662.0
52.5°	561.5	565.4	572.5	581.9	592.1
55°	495.5	502.6	507.3	514.4	515.9
57.5°	442.1	441.3	444.5	450.0	455.5
60°	387.2	388.7	387.9	393.4	395.8
62.5°	341.6	340.8	336.1	344.0	350.2
65°	301.6	298.4	291.3	296.1	301.6
67.5°	264.6	263.1	251.3	255.2	259.9
70°	235.6	230.1	218.3	220.7	224.6
72.5°	207.3	201.0	189.3	190.0	192.4
75°	181.4	175.1	161.8	162.6	164.9
77.5°	157.1	149.2	137.4	135.9	137.4
80°	131.1	124.1	113.9	109.2	113.9
82.5°	104.4	100.5	88.7	84.0	85.6
85°	73.0	70.7	60.5	57.3	59.7
87.5°	33.8	36.1	30.6	28.3	29.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)