

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: P291750

Luminaire Tested: **22GR-LD5-32-F1-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291750
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-LD5-32-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: 3384.0 lumens
Efficiency: N/A
Efficacy: 134.8 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

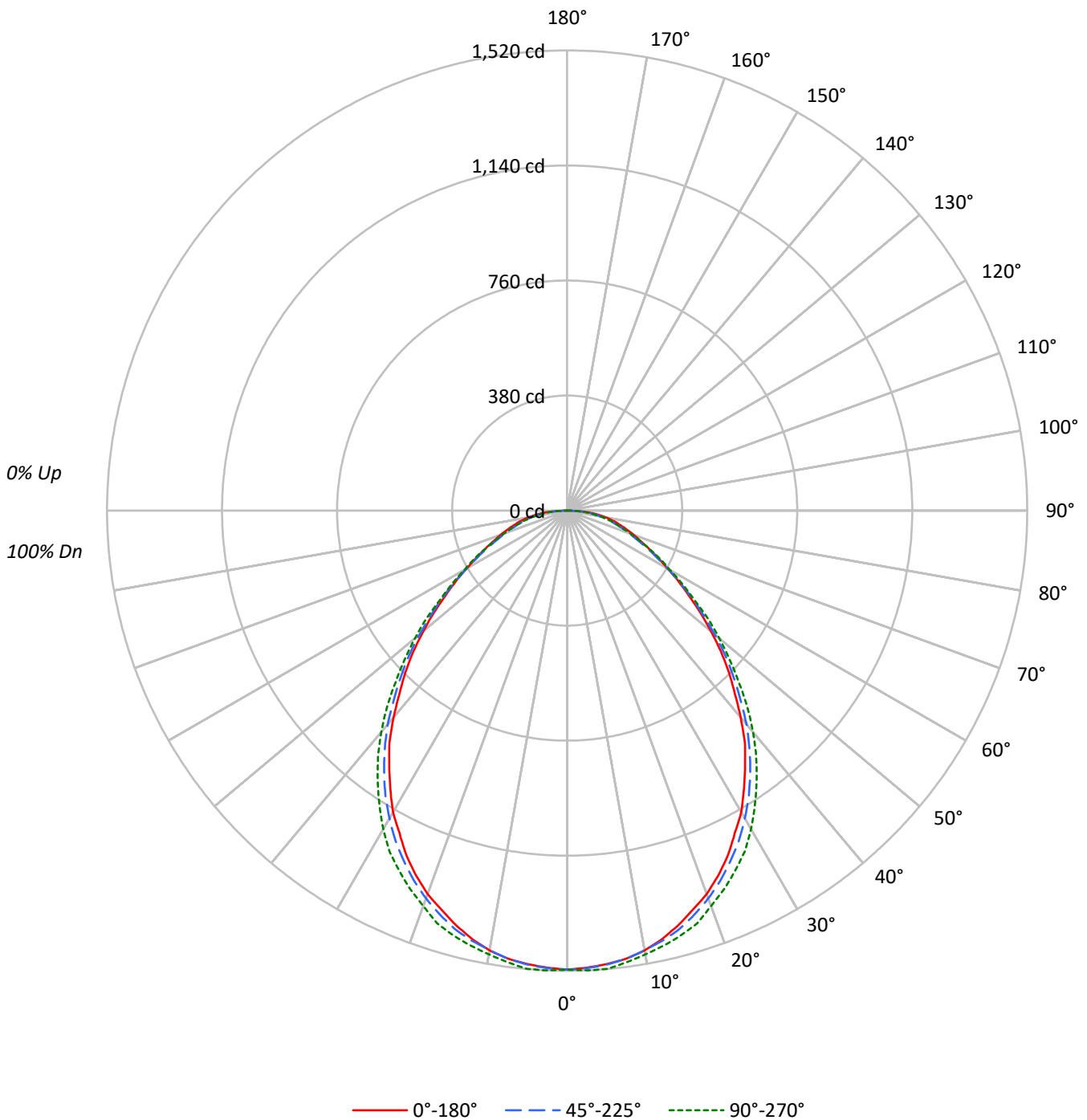
Input Watts (W): 25.11
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4081	4081	4081
5°	4063	4067	4105
10°	4031	4029	4067
15°	3950	3989	4047
20°	3860	3904	3980
25°	3732	3792	3898
30°	3575	3647	3775
35°	3365	3462	3585
40°	3132	3238	3356
45°	2875	2958	3050
50°	2593	2658	2743
55°	2301	2356	2396
60°	2062	2067	2108
65°	1901	1836	1901
70°	1835	1700	1749
75°	1866	1665	1697
80°	2011	1746	1746
85°	2232	1846	1825



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.0	4.2
10°-20°	403.5	11.9
20°-30°	588.9	17.4
30°-40°	659.3	19.5
40°-50°	600.0	17.7
50°-60°	451.6	13.3
60°-70°	294.7	8.7
70°-80°	176.7	5.2
80°-90°	66.3	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°	1135.4	33.6
0°-40°	1794.7	53.0
0°-60°	2846.3	84.1
0°-90°	3384.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3384.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1516	1516	1516	1516	1516	
5°	1504	1502	1506	1511	1520	143
15°	1418	1419	1432	1443	1453	399
25°	1257	1261	1277	1300	1313	577
35°	1024	1034	1054	1079	1091	640
45°	756	763	777	794	801	582
55°	490	497	502	509	511	443
65°	298	295	288	293	298	298
75°	180	173	160	161	163	190
85°	72	70	60	57	59	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1516.4	1516.4	1516.4	1516.4	1516.4
2.5°	1511.0	1510.2	1512.6	1516.4	1520.3
5°	1504.0	1501.7	1505.6	1511.0	1519.6
7.5°	1493.1	1493.1	1493.1	1503.2	1504.8
10°	1475.2	1476.8	1474.5	1484.6	1488.5
12.5°	1449.6	1450.4	1455.0	1465.1	1472.1
15°	1417.7	1419.3	1431.7	1443.4	1452.7
17.5°	1382.0	1387.4	1399.1	1417.7	1429.4
20°	1347.8	1354.0	1363.3	1383.5	1389.7
22.5°	1304.3	1311.2	1322.9	1340.8	1354.0
25°	1256.8	1260.7	1277.0	1300.4	1312.8
27.5°	1200.1	1208.6	1228.9	1253.0	1270.1
30°	1150.4	1155.0	1173.7	1201.7	1214.9
32.5°	1087.4	1101.4	1116.9	1141.8	1154.2
35°	1024.4	1033.8	1054.0	1078.8	1091.3
37.5°	963.8	969.2	989.5	1010.4	1026.0
40°	891.5	901.6	921.8	944.4	955.3
42.5°	819.2	834.0	847.2	869.8	881.4
45°	755.5	763.3	777.3	793.6	801.4
47.5°	688.7	692.5	708.9	719.0	727.5
50°	619.5	624.1	635.0	645.1	655.2
52.5°	555.7	559.6	566.6	576.0	586.1
55°	490.5	497.4	502.1	509.1	510.7
57.5°	437.6	436.8	439.9	445.4	450.8
60°	383.2	384.7	384.0	389.4	391.7
62.5°	338.1	337.3	332.7	340.4	346.7
65°	298.5	295.4	288.4	293.0	298.5
67.5°	261.9	260.4	248.7	252.6	257.3
70°	233.2	227.7	216.1	218.4	222.3
72.5°	205.2	199.0	187.3	188.1	190.4
75°	179.5	173.3	160.1	160.9	163.2
77.5°	155.5	147.7	136.0	134.5	136.0
80°	129.8	122.8	112.7	108.0	112.7
82.5°	103.4	99.5	87.8	83.2	84.7
85°	72.3	70.0	59.8	56.7	59.1
87.5°	33.4	35.8	30.3	28.0	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)