

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: P292240

Luminaire Tested: **22GR-LD5-32-A-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292240  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-32-A-UNV-L93050-W2A1-U-4000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2950.0 lumens  
Efficiency: N/A  
Efficacy: 117.0 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

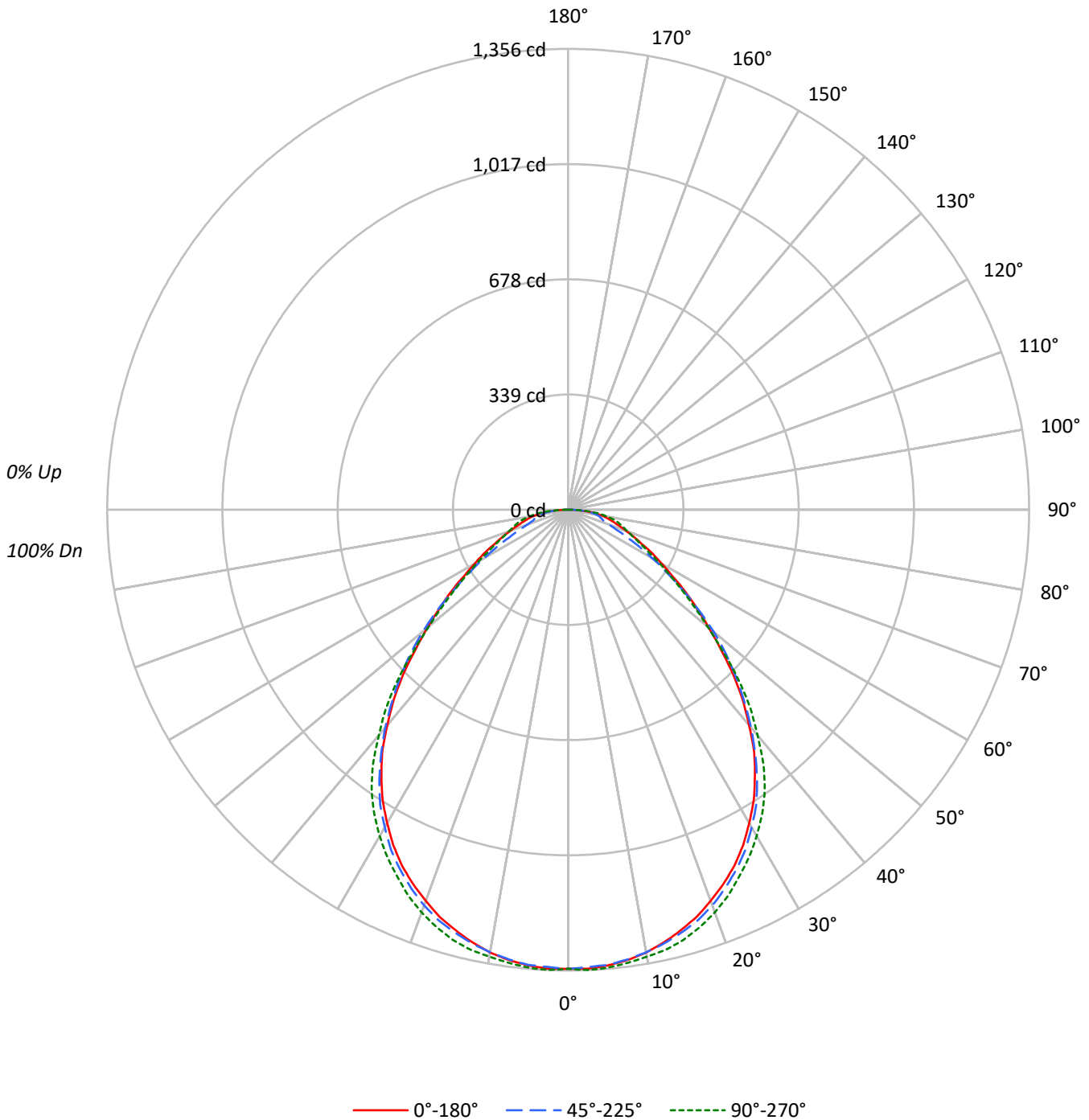
Input Watts (W): 25.203  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3636	3636	3636
5°	3636	3631	3653
10°	3615	3613	3648
15°	3569	3588	3651
20°	3507	3548	3611
25°	3432	3471	3534
30°	3308	3353	3445
35°	3146	3182	3311
40°	2908	2940	3043
45°	2613	2659	2701
50°	2259	2339	2236
55°	1971	1919	1894
60°	1707	1537	1640
65°	1526	1207	1473
70°	1415	999	1453
75°	1413	1056	1613
80°	1564	1330	1819
85°	1633	1442	2056



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.8	4.3
10°-20°	364.1	12.3
20°-30°	538.5	18.3
30°-40°	607.7	20.6
40°-50°	535.7	18.2
50°-60°	367.5	12.5
60°-70°	216.9	7.4
70°-80°	135.3	4.6
80°-90°	56.4	1.9
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°	1030.5	34.9
0°-40°	1638.2	55.5
0°-60°	2541.4	86.1
0°-90°	2950.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2950.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1351	1351	1351	1351	1351	
5°	1346	1343	1344	1349	1352	128
15°	1281	1282	1288	1304	1310	361
25°	1156	1160	1169	1184	1190	531
35°	958	966	969	992	1008	597
45°	686	690	699	703	710	527
55°	420	410	409	395	404	377
65°	240	211	190	219	231	241
75°	136	122	102	142	155	146
85°	53	49	47	61	67	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1351.0	1351.0	1351.0	1351.0	<i>1351.0</i>
2.5°	<i>1351.7</i>	<i>1348.2</i>	<i>1346.9</i>	<i>1352.4</i>	<i>1355.8</i>
5°	1346.2	1343.4	1344.1	1348.9	<i>1352.4</i>
7.5°	1336.6	1334.5	1334.5	1341.4	<i>1344.8</i>
10°	1322.8	1322.2	1322.2	1330.4	<i>1335.2</i>
12.5°	1303.6	1304.3	1307.1	1318.0	<i>1326.3</i>
15°	1281.0	1282.3	1287.8	1303.6	<i>1310.5</i>
17.5°	1256.3	1256.3	1267.2	1279.6	<i>1287.8</i>
20°	1224.7	1226.7	1239.1	1252.8	<i>1261.1</i>
22.5°	1192.4	1195.8	1206.1	1221.9	<i>1229.5</i>
25°	1156.0	1160.2	1169.1	1184.2	<i>1190.4</i>
27.5°	1113.5	1119.0	1128.6	1139.6	<i>1152.6</i>
30°	1064.7	1073.0	1079.1	1094.2	<i>1108.7</i>
32.5°	1015.3	1022.9	1029.7	1045.5	<i>1062.0</i>
35°	957.6	965.9	968.6	992.0	<i>1007.8</i>
37.5°	898.6	902.0	903.4	926.7	<i>943.9</i>
40°	827.9	834.8	836.8	855.4	<i>866.3</i>
42.5°	759.9	762.7	766.8	780.5	<i>793.6</i>
45°	686.5	689.9	698.8	703.0	<i>709.8</i>
47.5°	609.6	619.9	630.2	617.1	<i>617.8</i>
50°	539.6	547.8	558.8	534.1	<i>534.1</i>
52.5°	477.1	481.2	481.9	461.3	<i>465.4</i>
55°	420.1	409.8	409.1	395.4	<i>403.7</i>
57.5°	363.1	349.4	344.6	340.5	<i>350.1</i>
60°	317.2	292.4	285.6	291.8	<i>304.8</i>
62.5°	279.4	247.8	234.8	250.6	<i>262.2</i>
65°	239.6	210.7	189.5	219.0	<i>231.3</i>
67.5°	208.7	181.2	153.8	195.6	<i>204.6</i>
70°	179.9	158.6	127.0	177.8	<i>184.7</i>
72.5°	156.5	140.0	109.8	160.6	<i>168.9</i>
75°	135.9	122.2	101.6	142.1	<i>155.1</i>
77.5°	119.4	104.3	94.7	122.9	<i>138.7</i>
80°	100.9	85.8	85.8	103.0	<i>117.4</i>
82.5°	79.6	67.3	69.3	83.8	<i>94.0</i>
85°	52.9	49.4	46.7	61.1	<i>66.6</i>
87.5°	26.8	27.5	24.7	31.6	<i>32.3</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)