

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: P292289

Luminaire Tested: **22GR-LD5-32-A-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292289  
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-L92765-W2A1-U-4500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2911.0 lumens  
Efficiency: N/A  
Efficacy: 116.4 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

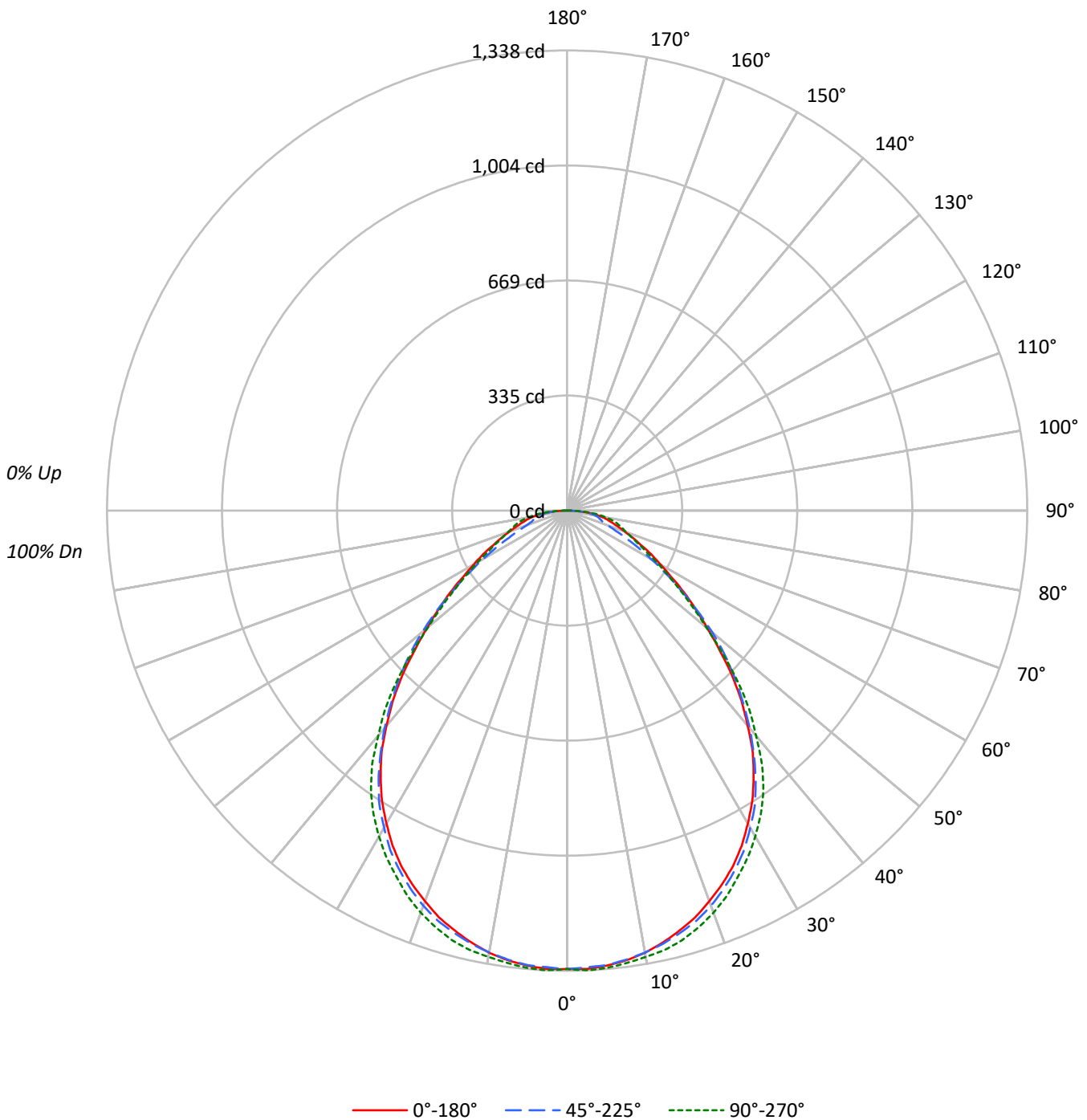
Input Watts (W): 25.017  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3587	3587	3587
5°	3588	3583	3605
10°	3567	3565	3600
15°	3521	3540	3603
20°	3461	3501	3564
25°	3387	3425	3488
30°	3265	3309	3399
35°	3104	3140	3267
40°	2870	2901	3003
45°	2578	2624	2665
50°	2229	2308	2206
55°	1945	1894	1869
60°	1685	1517	1619
65°	1505	1191	1454
70°	1397	986	1434
75°	1394	1043	1592
80°	1543	1313	1795
85°	1612	1423	2029



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.2	4.3
10°-20°	359.3	12.3
20°-30°	531.4	18.3
30°-40°	599.7	20.6
40°-50°	528.6	18.2
50°-60°	362.6	12.5
60°-70°	214.0	7.4
70°-80°	133.5	4.6
80°-90°	55.7	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°	1016.9	34.9
0°-40°	1616.5	55.5
0°-60°	2507.8	86.1
0°-90°	2911.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2911.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1333	1333	1333	1333	1333	
5°	1328	1326	1326	1331	1334	126
15°	1264	1265	1271	1286	1293	356
25°	1141	1145	1154	1168	1175	524
35°	945	953	956	979	994	589
45°	677	681	690	694	700	520
55°	415	404	404	390	398	372
65°	236	208	187	216	228	238
75°	134	121	100	140	153	144
85°	52	49	46	60	66	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1333.1	1333.1	1333.1	1333.1	1333.1
2.5°	1333.8	1330.4	1329.1	1334.5	1337.9
5°	1328.4	1325.7	1326.4	1331.1	1334.5
7.5°	1318.9	1316.9	1316.9	1323.6	1327.0
10°	1305.4	1304.7	1304.7	1312.8	1317.6
12.5°	1286.4	1287.1	1289.8	1300.6	1308.7
15°	1264.0	1265.4	1270.8	1286.4	1293.2
17.5°	1239.7	1239.7	1250.5	1262.7	1270.8
20°	1208.5	1210.5	1222.7	1236.3	1244.4
22.5°	1176.7	1180.0	1190.2	1205.8	1213.2
25°	1140.7	1144.8	1153.6	1168.5	1174.6
27.5°	1098.8	1104.2	1113.7	1124.5	1137.4
30°	1050.7	1058.8	1064.9	1079.8	1094.0
32.5°	1001.9	1009.3	1016.1	1031.7	1047.9
35°	945.0	953.1	955.8	978.8	994.4
37.5°	886.7	890.1	891.5	914.5	931.4
40°	817.0	823.7	825.8	844.0	854.9
42.5°	749.9	752.6	756.7	770.2	783.1
45°	677.4	680.8	689.6	693.7	700.4
47.5°	601.5	611.7	621.9	609.0	609.7
50°	532.4	540.6	551.4	527.0	527.0
52.5°	470.8	474.9	475.5	455.2	459.3
55°	414.6	404.4	403.7	390.2	398.3
57.5°	358.3	344.8	340.1	336.0	345.5
60°	313.0	288.6	281.8	287.9	300.8
62.5°	275.7	244.5	231.7	247.3	258.8
65°	236.4	208.0	187.0	216.1	228.3
67.5°	205.9	178.8	151.7	193.1	201.9
70°	177.5	156.5	125.3	175.4	182.2
72.5°	154.4	138.2	108.4	158.5	166.6
75°	134.1	120.6	100.3	140.2	153.1
77.5°	117.9	103.0	93.5	121.3	136.8
80°	99.6	84.7	84.7	101.6	115.8
82.5°	78.6	66.4	68.4	82.6	92.8
85°	52.2	48.8	46.1	60.3	65.7
87.5°	26.4	27.1	24.4	31.2	31.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)