

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: P292238

Luminaire Tested: **22GR-LD5-32-A-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292238  
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-3000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2499.0 lumens  
Efficiency: N/A  
Efficacy: 99.5 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

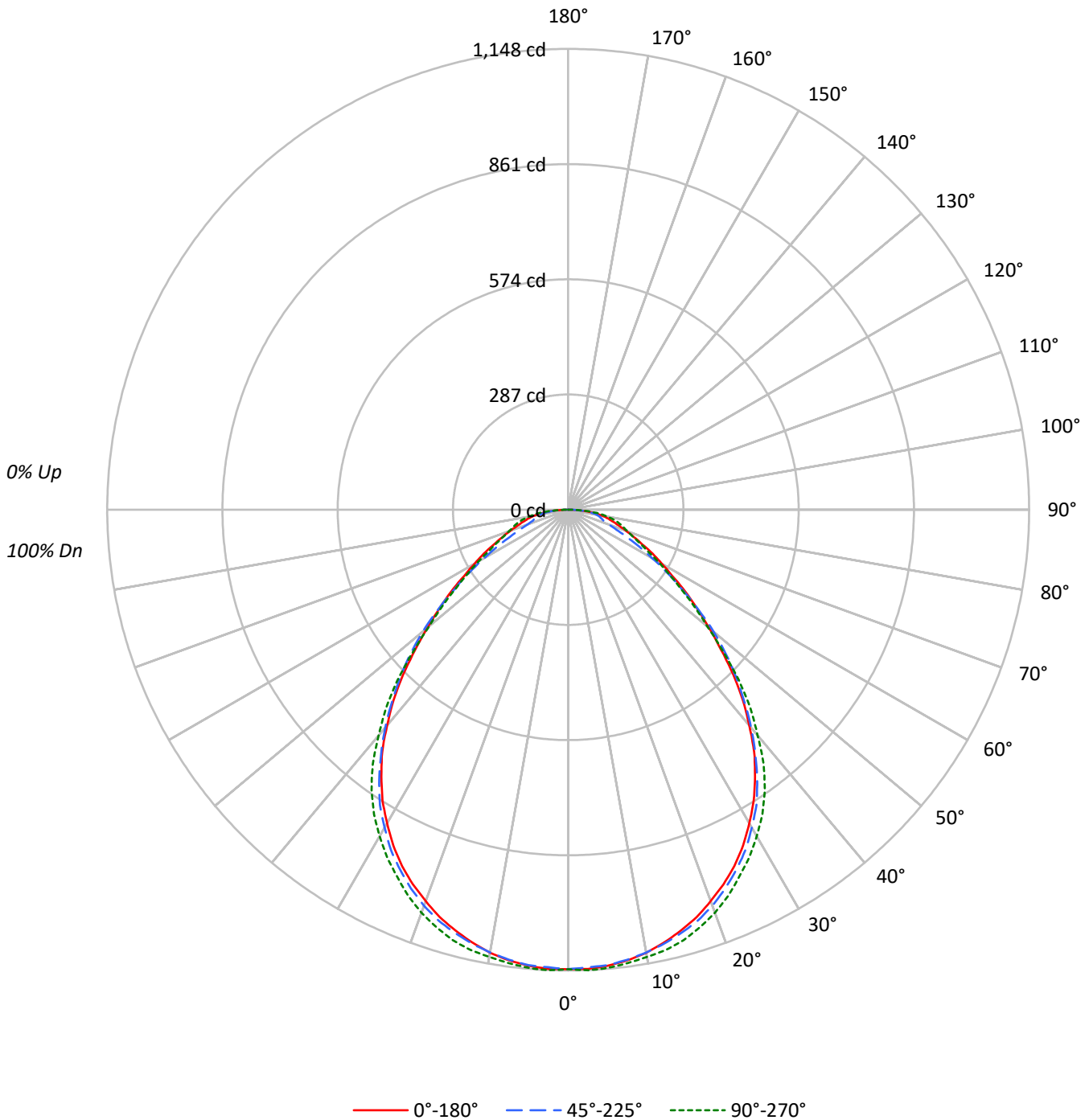
Input Watts (W): 25.11  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3080	3080	3080
5°	3081	3076	3095
10°	3062	3060	3091
15°	3023	3039	3093
20°	2971	3006	3059
25°	2908	2940	2994
30°	2803	2841	2918
35°	2665	2695	2804
40°	2464	2490	2578
45°	2213	2253	2288
50°	1914	1982	1894
55°	1670	1626	1604
60°	1446	1302	1390
65°	1293	1022	1248
70°	1199	847	1231
75°	1197	895	1366
80°	1325	1127	1540
85°	1383	1220	1741



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.3	4.3
10°-20°	308.5	12.3
20°-30°	456.2	18.3
30°-40°	514.8	20.6
40°-50°	453.8	18.2
50°-60°	311.3	12.5
60°-70°	183.7	7.4
70°-80°	114.6	4.6
80°-90°	47.8	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°	872.9	34.9
0°-40°	1387.7	55.5
0°-60°	2152.9	86.1
0°-90°	2499.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2499.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1144	1144	1144	1144	1144	
5°	1140	1138	1139	1143	1146	108
15°	1085	1086	1091	1104	1110	306
25°	979	983	990	1003	1008	450
35°	811	818	820	840	854	505
45°	582	584	592	596	601	447
55°	356	347	347	335	342	319
65°	203	178	160	186	196	204
75°	115	104	86	120	131	123
85°	45	42	40	52	56	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1144.5	1144.5	1144.5	1144.5	1144.5
2.5°	1145.0	1142.1	1141.0	1145.6	1148.5
5°	1140.4	1138.1	1138.6	1142.7	1145.6
7.5°	1132.2	1130.5	1130.5	1136.3	1139.2
10°	1120.6	1120.0	1120.0	1127.0	1131.1
12.5°	1104.3	1104.9	1107.2	1116.5	1123.5
15°	1085.1	1086.3	1091.0	1104.3	1110.1
17.5°	1064.2	1064.2	1073.5	1084.0	1091.0
20°	1037.5	1039.2	1049.7	1061.3	1068.3
22.5°	1010.1	1013.0	1021.7	1035.1	1041.5
25°	979.3	982.8	990.3	1003.1	1008.4
27.5°	943.2	947.9	956.0	965.3	976.4
30°	902.0	908.9	914.2	927.0	939.2
32.5°	860.1	866.5	872.3	885.7	899.6
35°	811.2	818.2	820.5	840.3	853.7
37.5°	761.2	764.1	765.3	785.1	799.6
40°	701.3	707.1	708.9	724.6	733.9
42.5°	643.8	646.1	649.6	661.2	672.2
45°	581.5	584.4	592.0	595.5	601.3
47.5°	516.4	525.1	533.8	522.8	523.4
50°	457.1	464.1	473.4	452.4	452.4
52.5°	404.2	407.7	408.2	390.8	394.3
55°	355.9	347.2	346.6	335.0	341.9
57.5°	307.6	296.0	291.9	288.4	296.6
60°	268.7	247.7	241.9	247.2	258.2
62.5°	236.7	209.9	198.9	212.3	222.1
65°	203.0	178.5	160.5	185.5	196.0
67.5°	176.8	153.5	130.3	165.7	173.3
70°	152.4	134.3	107.6	150.6	156.4
72.5°	132.6	118.6	93.0	136.1	143.1
75°	115.1	103.5	86.1	120.4	131.4
77.5°	101.2	88.4	80.3	104.1	117.5
80°	85.5	72.7	72.7	87.2	99.4
82.5°	67.5	57.0	58.7	70.9	79.7
85°	44.8	41.9	39.5	51.8	56.4
87.5°	22.7	23.3	20.9	26.8	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)