

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: P292191

Luminaire Tested: **22GR-LD5-32-A-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292191  
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-L82765-W2A1-U-4500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3264.0 lumens  
Efficiency: N/A  
Efficacy: 130.5 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

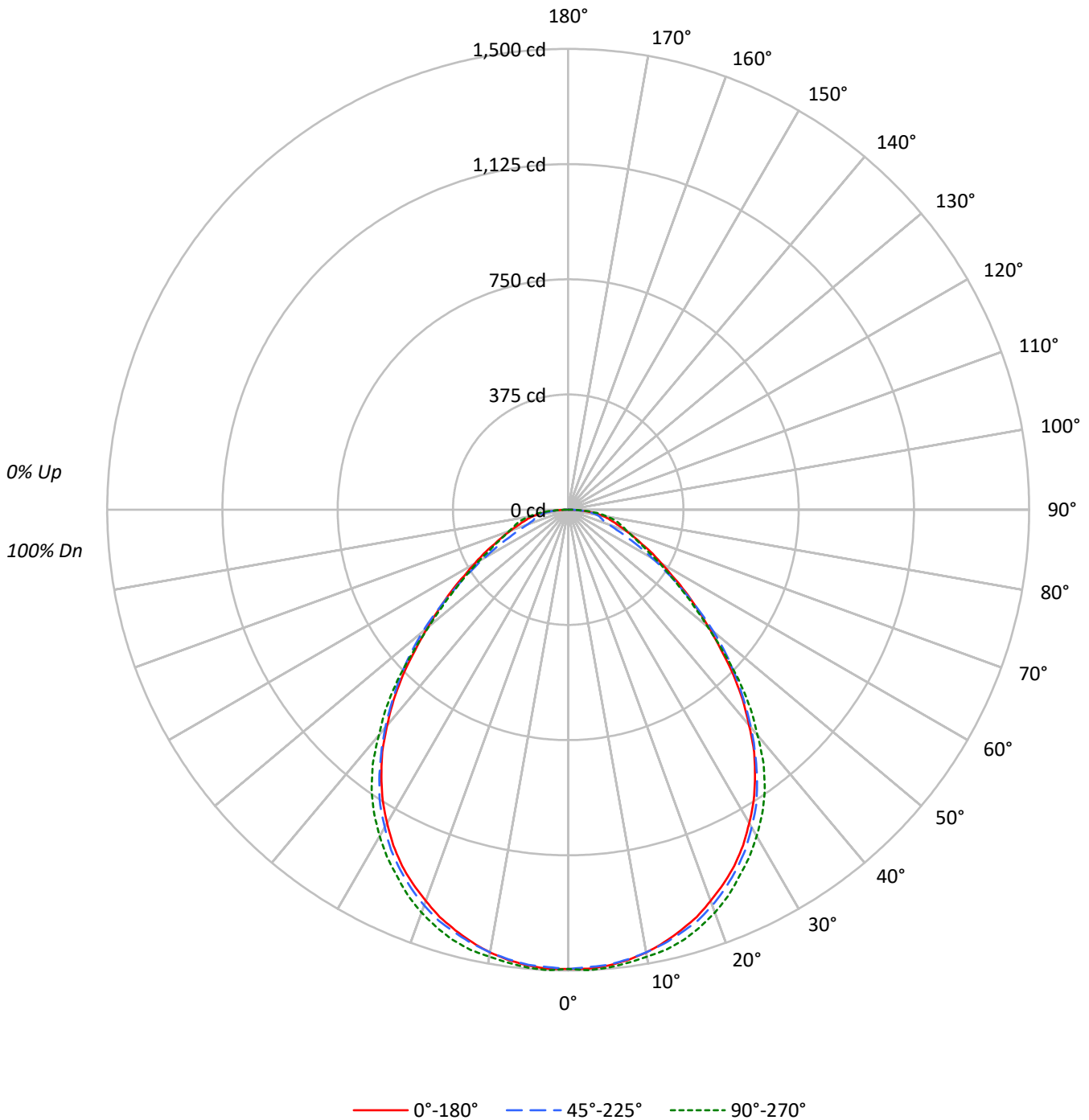
Input Watts (W): 25.017  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4022	4022	4022
5°	4024	4017	4042
10°	4000	3997	4037
15°	3948	3970	4040
20°	3880	3926	3996
25°	3798	3841	3911
30°	3661	3710	3812
35°	3481	3521	3663
40°	3218	3253	3367
45°	2890	2943	2989
50°	2499	2588	2474
55°	2181	2124	2095
60°	1889	1701	1815
65°	1688	1335	1630
70°	1566	1105	1607
75°	1564	1169	1785
80°	1731	1471	2013
85°	1806	1593	2276



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.5	4.3
10°-20°	402.9	12.3
20°-30°	595.8	18.3
30°-40°	672.4	20.6
40°-50°	592.7	18.2
50°-60°	406.6	12.5
60°-70°	239.9	7.4
70°-80°	149.7	4.6
80°-90°	62.4	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°	1140.2	34.9
0°-40°	1812.6	55.5
0°-60°	2811.9	86.1
0°-90°	3264.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3264.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1495	1495	1495	1495	1495	
5°	1490	1486	1487	1492	1496	141
15°	1417	1419	1425	1442	1450	399
25°	1279	1284	1294	1310	1317	587
35°	1060	1069	1072	1098	1115	660
45°	760	763	773	778	785	583
55°	465	454	453	438	447	417
65°	265	233	210	242	256	267
75°	150	135	112	157	172	161
85°	58	55	52	68	74	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1494.8	1494.8	1494.8	1494.8	1494.8
2.5°	1495.6	1491.8	1490.2	1496.3	1500.1
5°	1489.5	1486.4	1487.2	1492.5	1496.3
7.5°	1478.8	1476.6	1476.6	1484.2	1488.0
10°	1463.7	1462.9	1462.9	1472.0	1477.3
12.5°	1442.4	1443.1	1446.2	1458.3	1467.5
15°	1417.3	1418.8	1424.9	1442.4	1450.0
17.5°	1390.0	1390.0	1402.1	1415.8	1424.9
20°	1355.0	1357.3	1371.0	1386.2	1395.3
22.5°	1319.3	1323.1	1334.5	1352.0	1360.4
25°	1279.1	1283.6	1293.5	1310.2	1317.1
27.5°	1232.0	1238.1	1248.7	1260.9	1275.3
30°	1178.1	1187.2	1194.0	1210.7	1226.7
32.5°	1123.4	1131.7	1139.3	1156.8	1175.0
35°	1059.6	1068.7	1071.7	1097.5	1115.0
37.5°	994.3	998.0	999.6	1025.4	1044.4
40°	916.0	923.6	925.9	946.4	958.6
42.5°	840.8	843.9	848.4	863.6	878.0
45°	759.5	763.3	773.2	777.8	785.4
47.5°	674.5	685.9	697.3	682.8	683.6
50°	597.0	606.1	618.3	590.9	590.9
52.5°	527.9	532.4	533.2	510.4	515.0
55°	464.8	453.5	452.7	437.5	446.6
57.5°	401.8	386.6	381.3	376.7	387.4
60°	350.9	323.6	316.0	322.8	337.2
62.5°	309.1	274.2	259.8	277.2	290.1
65°	265.1	233.2	209.6	242.3	256.0
67.5°	230.9	200.5	170.1	216.5	226.3
70°	199.0	175.5	140.5	196.7	204.3
72.5°	173.2	154.9	121.5	177.7	186.8
75°	150.4	135.2	112.4	157.2	171.7
77.5°	132.2	115.5	104.8	136.0	153.4
80°	111.7	94.9	94.9	113.9	129.9
82.5°	88.1	74.4	76.7	92.7	104.1
85°	58.5	54.7	51.6	67.6	73.7
87.5°	29.6	30.4	27.3	34.9	35.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)