

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: P292184

Luminaire Tested: **22GR-LD5-28-A-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292184  
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-LD5-28-A-UNV-L82765-W2A1-U-5500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3025.0 lumens  
Efficiency: N/A  
Efficacy: 133.3 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

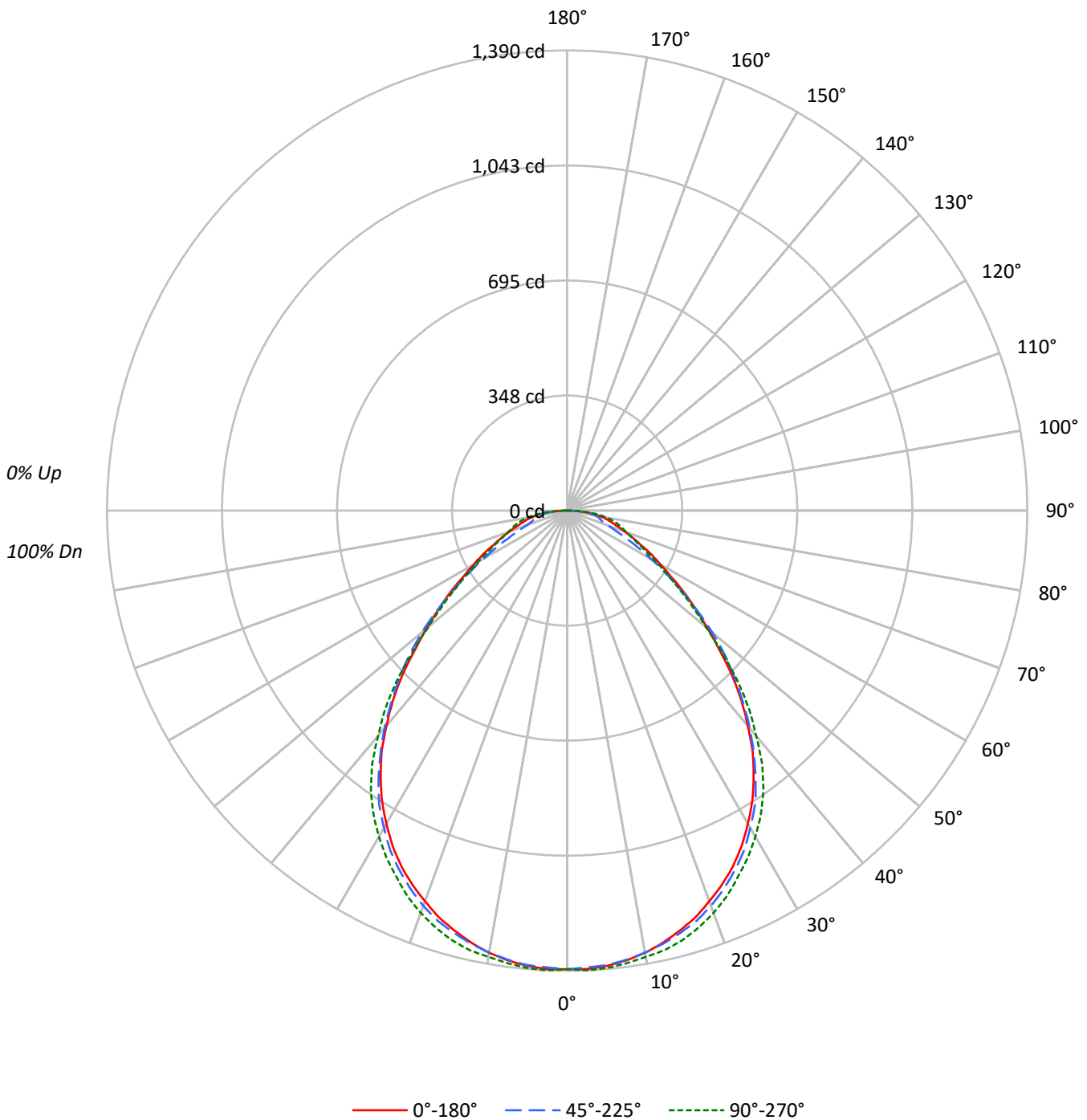
Input Watts (W): 22.692  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3728	3728	3728
5°	3729	3723	3746
10°	3707	3705	3741
15°	3659	3679	3744
20°	3596	3639	3703
25°	3520	3559	3624
30°	3393	3439	3533
35°	3226	3263	3395
40°	2982	3014	3121
45°	2679	2727	2770
50°	2316	2399	2293
55°	2021	1968	1942
60°	1750	1576	1682
65°	1564	1237	1510
70°	1451	1024	1490
75°	1449	1083	1654
80°	1604	1364	1866
85°	1673	1479	2109



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.1	4.3
10°-20°	373.4	12.3
20°-30°	552.2	18.3
30°-40°	623.2	20.6
40°-50°	549.3	18.2
50°-60°	376.8	12.5
60°-70°	222.4	7.4
70°-80°	138.8	4.6
80°-90°	57.9	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°	1056.7	34.9
0°-40°	1679.8	55.5
0°-60°	2606.0	86.1
0°-90°	3025.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3025.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1385	1385	1385	1385	1385	
5°	1380	1378	1378	1383	1387	131
15°	1314	1315	1321	1337	1344	370
25°	1185	1190	1199	1214	1221	544
35°	982	990	993	1017	1033	612
45°	704	708	717	721	728	541
55°	431	420	420	406	414	386
65°	246	216	194	225	237	248
75°	139	125	104	146	159	149
85°	54	51	48	63	68	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1385.3	1385.3	1385.3	1385.3	<i>1385.3</i>
2.5°	<i>1386.0</i>	<i>1382.5</i>	<i>1381.1</i>	<i>1386.7</i>	<i>1390.3</i>
5°	1380.4	1377.6	1378.3	1383.2	<i>1386.7</i>
7.5°	1370.6	1368.4	1368.4	1375.5	<i>1379.0</i>
10°	1356.5	1355.8	1355.8	1364.2	<i>1369.2</i>
12.5°	1336.8	1337.5	1340.3	1351.6	<i>1360.0</i>
15°	1313.5	1314.9	1320.6	1336.8	<i>1343.8</i>
17.5°	1288.2	1288.2	1299.5	1312.1	<i>1320.6</i>
20°	1255.8	1257.9	1270.6	1284.7	<i>1293.1</i>
22.5°	1222.7	1226.3	1236.8	1253.0	<i>1260.7</i>
25°	1185.4	1189.6	1198.8	1214.3	<i>1220.6</i>
27.5°	1141.8	1147.4	1157.3	1168.5	<i>1181.9</i>
30°	1091.8	1100.2	1106.6	1122.1	<i>1136.9</i>
32.5°	1041.1	1048.9	1055.9	1072.1	<i>1089.0</i>
35°	982.0	990.4	993.2	1017.2	<i>1033.4</i>
37.5°	921.4	925.0	926.4	950.3	<i>967.9</i>
40°	848.9	856.0	858.1	877.1	<i>888.4</i>
42.5°	779.3	782.1	786.3	800.4	<i>813.7</i>
45°	703.9	707.5	716.6	720.8	<i>727.9</i>
47.5°	625.1	635.7	646.2	632.8	<i>633.5</i>
50°	553.3	561.7	573.0	547.7	<i>547.7</i>
52.5°	489.2	493.5	494.2	473.0	<i>477.3</i>
55°	430.8	420.2	419.5	405.5	<i>413.9</i>
57.5°	372.4	358.3	353.4	349.2	<i>359.0</i>
60°	325.2	299.9	292.8	299.2	<i>312.5</i>
62.5°	286.5	254.1	240.7	256.9	<i>268.9</i>
65°	245.7	216.1	194.3	224.6	<i>237.2</i>
67.5°	214.0	185.8	157.7	200.6	<i>209.8</i>
70°	184.4	162.6	130.2	182.3	<i>189.4</i>
72.5°	160.5	143.6	112.6	164.7	<i>173.2</i>
75°	139.4	125.3	104.2	145.7	<i>159.1</i>
77.5°	122.5	107.0	97.1	126.0	<i>142.2</i>
80°	103.5	88.0	88.0	105.6	<i>120.4</i>
82.5°	81.7	69.0	71.1	85.9	<i>96.4</i>
85°	54.2	50.7	47.9	62.7	<i>68.3</i>
87.5°	27.5	28.2	25.3	32.4	<i>33.1</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)