

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: P292333

Luminaire Tested: **22GR-LD5-28-A125-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292333  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33297)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-28-A125-UNV-L83050-W2A1-U-4000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A125 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3049.0 lumens  
Efficiency: N/A  
Efficacy: 135.5 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.22 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

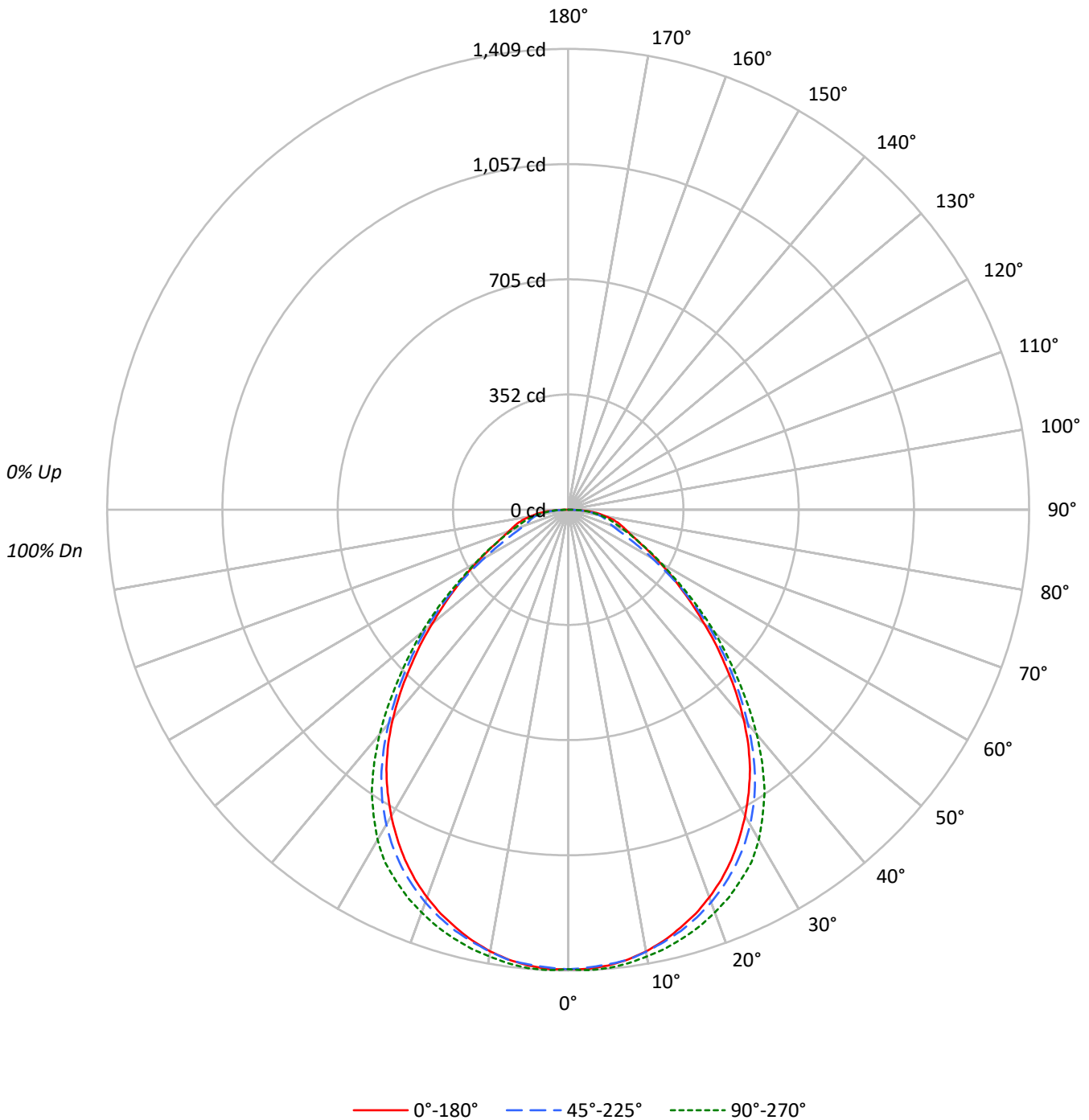
Input Watts (W): 22.506  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86					86			
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74					74			
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	70	66	64					64			
4	86	75	67	61	84	74	66	60	71	65	59	69	63	59	67	62	58	56					56			
5	80	68	59	53	78	67	59	53	65	58	52	63	57	52	61	56	51	49					49			
6	74	61	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	52	46	41	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	34	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	29					29			

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

	0°	45°	90°
0°	3782	3782	3782
5°	3779	3770	3800
10°	3747	3751	3790
15°	3688	3713	3777
20°	3611	3658	3752
25°	3506	3578	3708
30°	3360	3455	3621
35°	3183	3272	3438
40°	2927	2999	3149
45°	2600	2695	2792
50°	2271	2375	2447
55°	1974	2001	2075
60°	1737	1591	1771
65°	1543	1272	1552
70°	1516	1130	1432
75°	1655	1241	1464
80°	1818	1477	1564
85°	2174	1711	1757



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.8	4.4
10°-20°	376.7	12.4
20°-30°	556.1	18.2
30°-40°	622.2	20.4
40°-50°	546.4	17.9
50°-60°	386.6	12.7
60°-70°	225.0	7.4
70°-80°	140.3	4.6
80°-90°	62.7	2.1
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°	1065.6	34.9
0°-40°	1687.8	55.4
0°-60°	2620.9	86.0
0°-90°	3049.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3049.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1405	1405	1405	1405	1405	
5°	1399	1396	1396	1403	1407	133
15°	1324	1326	1333	1347	1356	373
25°	1181	1186	1205	1233	1249	542
35°	969	973	996	1026	1046	603
45°	683	691	708	725	734	528
55°	421	429	426	434	442	380
65°	242	223	200	218	244	246
75°	159	137	119	122	141	166
85°	70	73	55	54	57	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1405.4	1405.4	1405.4	1405.4	1405.4
2.5°	1405.4	1402.6	1401.2	1406.1	1409.0
5°	1399.0	1395.5	1395.5	1402.6	1406.9
7.5°	1387.7	1384.1	1388.4	1394.8	1399.0
10°	1371.3	1369.9	1372.7	1381.3	1387.0
12.5°	1350.0	1350.7	1353.5	1367.0	1374.2
15°	1323.7	1326.5	1332.9	1347.1	1355.7
17.5°	1295.2	1297.4	1307.3	1323.7	1335.8
20°	1261.1	1265.4	1277.5	1298.1	1310.2
22.5°	1223.4	1228.4	1243.4	1268.2	1283.2
25°	1180.8	1185.8	1205.0	1233.4	1249.0
27.5°	1132.5	1140.3	1161.6	1192.9	1214.2
30°	1081.3	1087.7	1111.8	1147.4	1165.2
32.5°	1026.5	1034.4	1057.1	1091.2	1106.9
35°	968.9	973.2	996.0	1025.8	1046.4
37.5°	903.5	905.7	927.0	954.7	973.2
40°	833.2	834.6	853.8	880.1	896.4
42.5°	759.9	760.7	781.3	801.2	815.4
45°	683.2	691.0	708.1	725.1	733.6
47.5°	614.2	619.9	635.5	650.5	658.3
50°	542.4	556.6	567.3	575.1	584.4
52.5°	480.6	492.6	495.5	504.7	512.6
55°	420.8	429.4	426.5	434.4	442.2
57.5°	370.4	366.1	356.9	370.4	380.3
60°	322.7	311.4	295.7	314.2	329.1
62.5°	280.1	261.6	242.4	260.9	285.8
65°	242.4	223.2	199.8	217.5	243.8
67.5°	214.0	194.1	166.3	184.1	210.4
70°	192.7	172.0	143.6	158.5	182.0
72.5°	175.6	153.6	128.7	138.6	158.5
75°	159.2	137.2	119.4	122.3	140.8
77.5°	140.0	123.7	109.5	108.1	122.3
80°	117.3	112.3	95.3	93.1	100.9
82.5°	96.7	94.5	78.2	76.1	78.9
85°	70.4	73.2	55.4	54.0	56.9
87.5°	37.0	40.5	29.1	30.6	31.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)