

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: P475882

Luminaire Tested: **22GR-LD5-24-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475882  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-24-F1-UNV-L830-CD1-U  
Description: GR 2'X2' LED TROFFER w/ F1 LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2347.1 lumens  
Efficiency: N/A  
Efficacy: 131.1 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

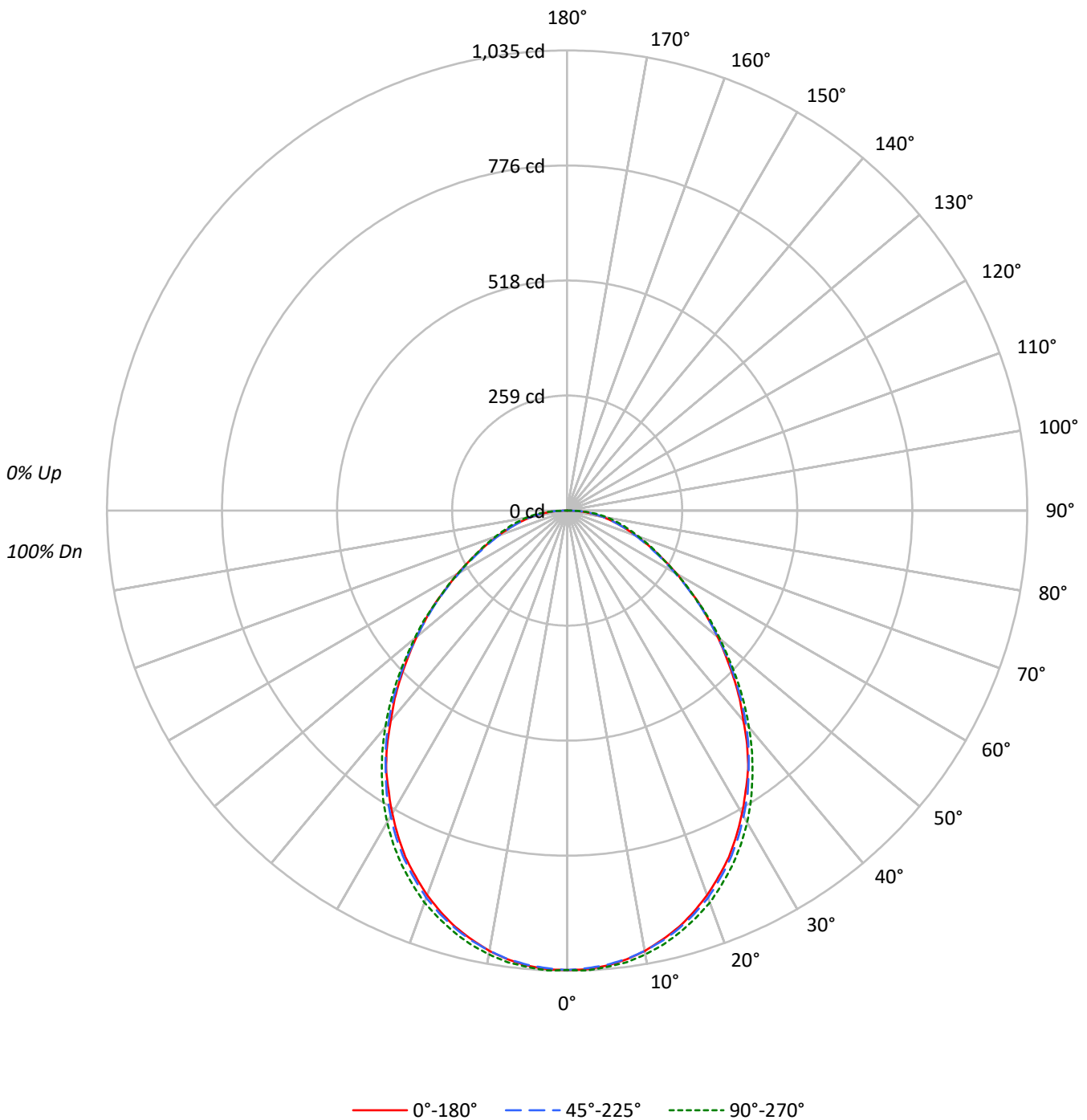
Input Watts (W): 17.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P475882

CATALOG NUMBER: 22GR-LD5-24-F1-UNV-L830-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P475882

CATALOG NUMBER: 22GR-LD5-24-F1-UNV-L830-CD1-U

**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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

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

	0°	45°	90°
0°	2781	2781	2781
5°	2775	2770	2783
10°	2748	2748	2770
15°	2702	2711	2735
20°	2636	2653	2687
25°	2554	2572	2613
30°	2445	2467	2516
35°	2331	2338	2387
40°	2166	2198	2236
45°	2012	2030	2060
50°	1848	1848	1877
55°	1695	1676	1686
60°	1534	1507	1529
65°	1399	1368	1412
70°	1293	1285	1347
75°	1246	1235	1359
80°	1258	1258	1441
85°	1315	1374	1652



TEST NUMBER: P475882

CATALOG NUMBER: 22GR-LD5-24-F1-UNV-L830-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.4	4.2
10°-20°	274.3	11.7
20°-30°	398.8	17.0
30°-40°	446.4	19.0
40°-50°	412.1	17.6
50°-60°	321.5	13.7
60°-70°	217.7	9.3
70°-80°	130.0	5.5
80°-90°	48.8	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°	770.6	32.8
0°-40°	1217.0	51.9
0°-60°	1950.6	83.1
0°-90°	2347.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2347.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1033	1033	1033	1033	1033	
5°	1027	1026	1026	1029	1030	97
15°	970	970	973	979	982	273
25°	860	860	866	875	880	395
35°	710	709	712	723	726	441
45°	529	532	534	538	541	408
55°	361	358	357	359	359	322
65°	220	218	215	219	222	219
75°	120	119	119	126	131	127
85°	43	42	44	52	54	45
90°	0	0	0	0	0	



TEST NUMBER: P475882

CATALOG NUMBER: 22GR-LD5-24-F1-UNV-L830-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1033.4	1033.4	1033.4	1033.4	1033.4
2.5°	1032.4	1030.4	1030.4	1033.4	1035.3
5°	1027.4	1025.5	1025.5	1029.4	1030.4
7.5°	1018.5	1017.5	1017.5	1021.5	1024.5
10°	1005.7	1004.7	1005.7	1009.6	1013.6
12.5°	988.8	988.8	990.8	995.8	999.7
15°	970.0	970.0	973.0	978.9	981.9
17.5°	946.3	947.3	951.2	958.1	961.1
20°	920.5	922.5	926.5	932.4	938.3
22.5°	890.8	892.8	896.8	905.7	909.6
25°	860.2	860.2	866.1	875.0	879.9
27.5°	824.5	825.5	831.4	841.3	846.3
30°	786.9	789.9	793.8	802.7	809.7
32.5°	747.3	750.3	755.2	765.1	770.1
35°	709.7	708.7	711.7	722.6	726.5
37.5°	665.2	666.1	670.1	678.0	683.0
40°	616.7	621.6	625.6	631.5	636.5
42.5°	574.1	577.1	580.0	586.0	589.9
45°	528.6	531.5	533.5	537.5	541.4
47.5°	484.0	485.0	488.0	490.0	492.9
50°	441.5	442.4	441.5	444.4	448.4
52.5°	399.9	398.9	398.9	399.9	405.8
55°	361.3	358.3	357.3	359.3	359.3
57.5°	318.7	317.7	317.7	316.7	321.7
60°	285.1	282.1	280.1	282.1	284.1
62.5°	250.4	247.5	245.5	249.4	249.4
65°	219.7	217.8	214.8	218.7	221.7
67.5°	190.0	188.1	187.1	192.0	196.0
70°	164.3	163.3	163.3	168.3	171.2
72.5°	140.6	139.6	139.6	146.5	149.5
75°	119.8	118.8	118.8	125.7	130.7
77.5°	99.0	98.0	101.0	106.9	111.8
80°	81.2	80.2	81.2	89.1	93.0
82.5°	61.4	61.4	63.3	71.3	75.2
85°	42.6	41.6	44.5	51.5	53.5
87.5°	21.8	22.8	23.8	27.7	27.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)