

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: P475704

Luminaire Tested: **24GR-LD5-42-A-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475704  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-42-A-UNV-L830-CD1-U  
Description: GR 2'X4' LED TROFFER w/ A LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4014.8 lumens  
Efficiency: N/A  
Efficacy: 132.5 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.28  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

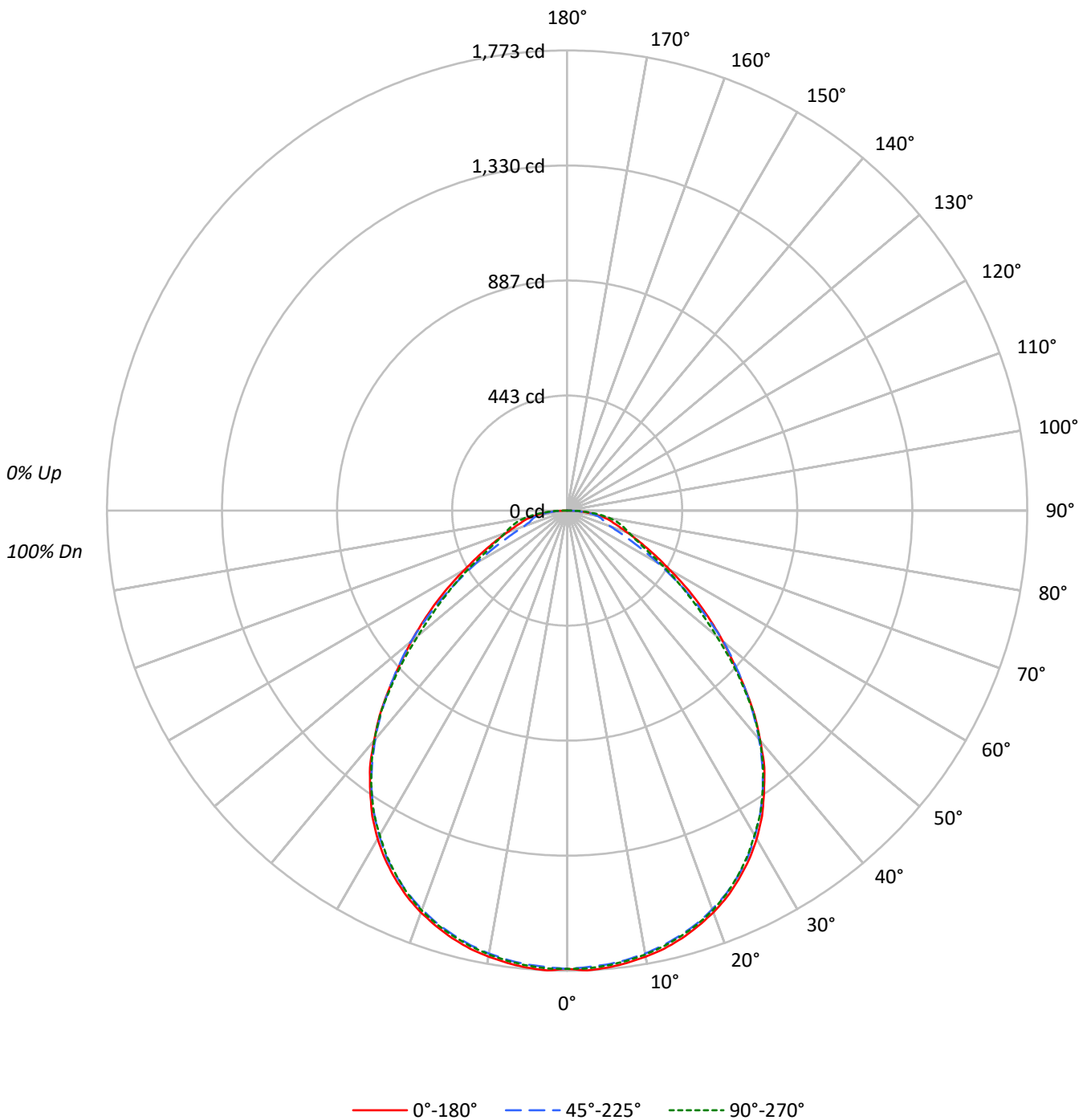
Input Watts (W): 30.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P475704

CATALOG NUMBER: 24GR-LD5-42-A-UNV-L830-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P475704

CATALOG NUMBER: 24GR-LD5-42-A-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	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	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74				74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64				64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	58	56				56
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43				43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39				39
8	64	51	43	38	62	50	43	37	49	42	37	48	42	37	47	41	37	35				35
9	60	47	39	34	59	47	39	34	45	39	34	44	38	34	43	38	33	32				32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29				29

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

	0°	45°	90°
0°	2376	2376	2376
5°	2388	2372	2377
10°	2384	2368	2373
15°	2377	2358	2364
20°	2359	2342	2348
25°	2326	2309	2307
30°	2269	2248	2243
35°	2172	2158	2158
40°	2032	2020	2029
45°	1845	1842	1827
50°	1637	1649	1568
55°	1438	1375	1343
60°	1224	1086	1143
65°	1070	844	1008
70°	967	695	1006
75°	968	742	1124
80°	1066	913	1286
85°	1099	1025	1403



TEST NUMBER: P475704

CATALOG NUMBER: 24GR-LD5-42-A-UNV-L830-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.2	4.2
10°-20°	478.7	11.9
20°-30°	716.1	17.8
30°-40°	819.5	20.4
40°-50°	742.5	18.5
50°-60°	525.6	13.1
60°-70°	303.7	7.6
70°-80°	184.1	4.6
80°-90°	77.5	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°	1362.0	33.9
0°-40°	2181.5	54.3
0°-60°	3449.6	85.9
0°-90°	4014.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4014.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1766	1766	1766	1766	1766	
5°	1768	1762	1756	1756	1760	168
15°	1706	1700	1693	1693	1697	481
25°	1567	1560	1555	1554	1554	721
35°	1322	1316	1314	1312	1314	825
45°	970	968	968	961	960	747
55°	613	593	586	569	572	549
65°	336	301	265	304	317	338
75°	186	167	143	183	216	200
85°	71	64	66	85	91	76
90°	0	0	0	0	0	



TEST NUMBER: P475704

CATALOG NUMBER: 24GR-LD5-42-A-UNV-L830-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1765.8	1765.8	1765.8	1765.8	1765.8
2.5°	1773.3	1766.6	1760.7	1761.5	1765.8
5°	1767.8	1761.5	1755.9	1755.5	1759.9
7.5°	1758.3	1752.8	1746.5	1746.5	1750.0
10°	1744.9	1739.3	1733.0	1732.6	1736.6
12.5°	1729.1	1721.9	1715.2	1715.2	1719.6
15°	1706.5	1699.8	1693.1	1693.1	1697.0
17.5°	1678.9	1672.9	1667.4	1667.8	1671.0
20°	1647.2	1641.3	1635.4	1636.2	1639.7
22.5°	1610.9	1603.8	1599.0	1598.6	1601.0
25°	1566.6	1560.3	1555.1	1553.9	1553.9
27.5°	1517.2	1510.5	1506.9	1501.4	1502.9
30°	1460.7	1453.5	1447.2	1444.0	1443.7
32.5°	1397.0	1389.9	1384.4	1384.0	1385.5
35°	1322.3	1316.4	1314.0	1312.0	1314.0
37.5°	1248.4	1237.3	1235.3	1234.9	1240.1
40°	1157.1	1153.1	1150.3	1148.4	1155.1
42.5°	1069.3	1061.4	1062.2	1054.7	1066.5
45°	969.7	967.7	968.1	961.0	960.2
47.5°	870.9	870.5	876.4	856.6	855.4
50°	781.9	778.0	787.8	757.4	749.1
52.5°	696.9	685.9	682.7	655.0	655.0
55°	613.1	592.6	586.2	568.8	572.4
57.5°	533.7	504.4	491.4	491.0	496.9
60°	455.0	421.8	403.6	417.8	424.6
62.5°	392.5	356.2	328.5	355.4	361.7
65°	336.0	301.2	265.2	303.6	316.6
67.5°	287.4	258.5	213.5	263.7	281.1
70°	245.9	220.2	176.7	232.4	255.8
72.5°	213.1	191.7	153.8	207.5	235.6
75°	186.2	166.8	142.7	183.4	216.2
77.5°	164.8	141.9	133.6	160.5	194.1
80°	137.6	116.6	117.8	138.0	166.0
82.5°	105.9	90.1	94.9	114.2	130.5
85°	71.2	64.0	66.4	85.0	90.9
87.5°	35.2	34.0	36.4	49.8	49.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)