

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: P475705

Luminaire Tested: **24GR-LD5-48-A-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475705
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-48-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: 4545.5 lumens
Efficiency: N/A
Efficacy: 137.7 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

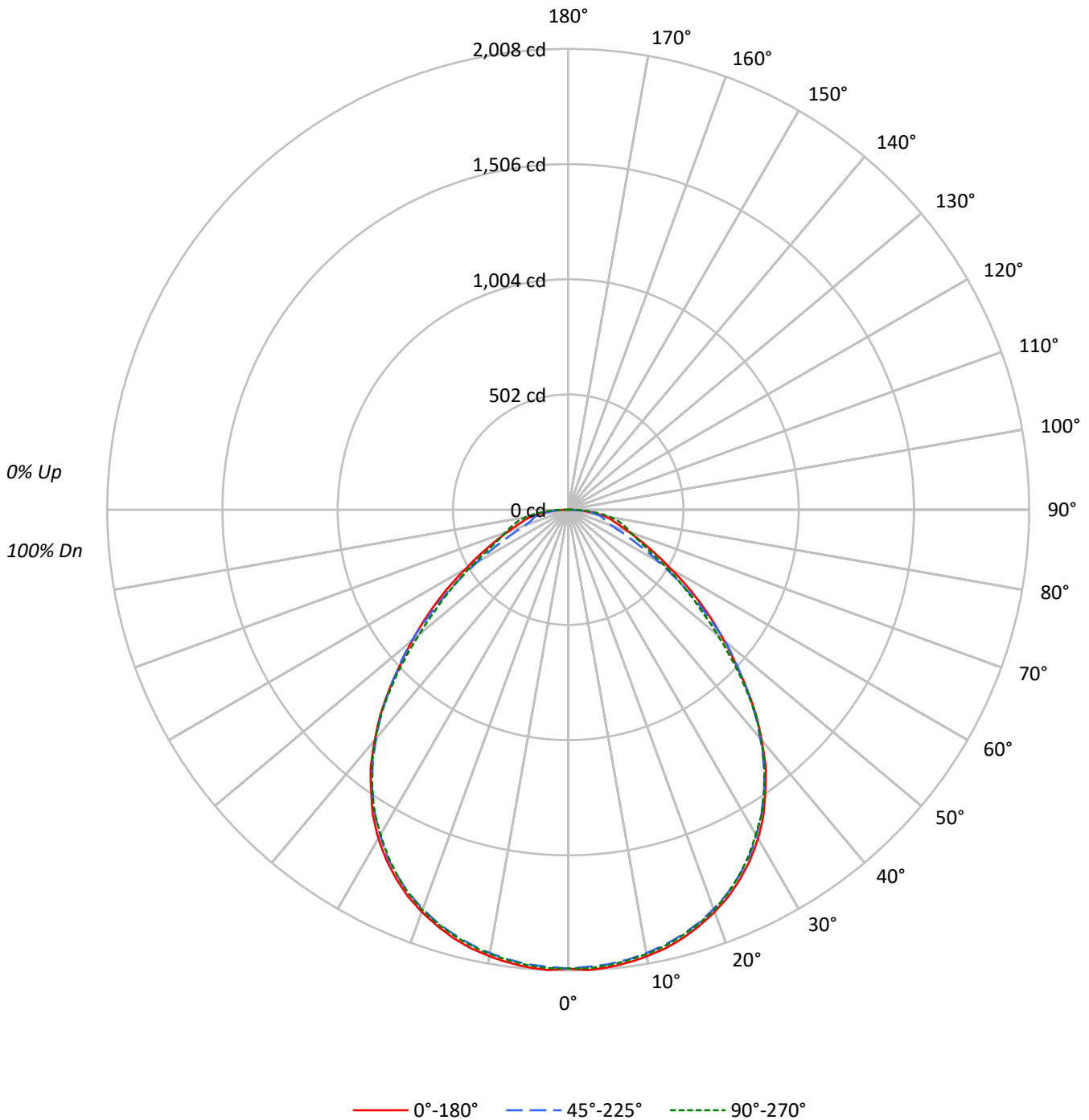
Input Watts (W): 33
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	58	56
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2690	2690	2690
5°	2703	2685	2691
10°	2699	2681	2686
15°	2691	2670	2676
20°	2670	2651	2658
25°	2633	2614	2612
30°	2569	2546	2539
35°	2459	2444	2444
40°	2301	2288	2297
45°	2089	2086	2069
50°	1853	1867	1775
55°	1628	1557	1520
60°	1386	1230	1294
65°	1211	956	1141
70°	1095	787	1139
75°	1096	840	1273
80°	1207	1034	1457
85°	1244	1161	1589



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.3	4.2
10°-20°	542.0	11.9
20°-30°	810.8	17.8
30°-40°	927.8	20.4
40°-50°	840.6	18.5
50°-60°	595.1	13.1
60°-70°	343.8	7.6
70°-80°	208.4	4.6
80°-90°	87.7	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°	1542.1	33.9
0°-40°	2469.8	54.3
0°-60°	3905.6	85.9
0°-90°	4545.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4545.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1999	1999	1999	1999	1999	
5°	2002	1994	1988	1988	1993	190
15°	1932	1924	1917	1917	1921	545
25°	1774	1766	1761	1759	1759	816
35°	1497	1490	1488	1486	1488	934
45°	1098	1096	1096	1088	1087	846
55°	694	671	664	644	648	622
65°	380	341	300	344	358	382
75°	211	189	162	208	245	226
85°	81	72	75	96	103	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1999.3	1999.3	1999.3	1999.3	1999.3
2.5°	2007.8	2000.2	1993.4	1994.3	1999.3
5°	2001.5	1994.3	1988.1	1987.6	1992.6
7.5°	1990.8	1984.5	1977.3	1977.3	1981.4
10°	1975.5	1969.3	1962.1	1961.7	1966.1
12.5°	1957.6	1949.6	1942.0	1942.0	1946.9
15°	1932.1	1924.5	1916.9	1916.9	1921.4
17.5°	1900.8	1894.1	1887.8	1888.3	1891.9
20°	1865.0	1858.3	1851.6	1852.5	1856.5
22.5°	1823.8	1815.8	1810.4	1809.9	1812.6
25°	1773.7	1766.5	1760.7	1759.4	1759.4
27.5°	1717.8	1710.1	1706.1	1699.8	1701.6
30°	1653.7	1645.7	1638.5	1635.0	1634.5
32.5°	1581.7	1573.6	1567.4	1566.9	1568.7
35°	1497.1	1490.4	1487.7	1485.5	1487.7
37.5°	1413.4	1400.9	1398.6	1398.2	1404.0
40°	1310.0	1305.5	1302.4	1300.2	1307.8
42.5°	1210.7	1201.7	1202.6	1194.1	1207.5
45°	1097.9	1095.6	1096.1	1088.0	1087.1
47.5°	986.0	985.5	992.2	969.9	968.5
50°	885.3	880.8	892.0	857.5	848.1
52.5°	789.1	776.5	772.9	741.6	741.6
55°	694.2	670.9	663.7	644.0	648.1
57.5°	604.2	571.1	556.3	555.9	562.6
60°	515.1	477.6	457.0	473.1	480.7
62.5°	444.4	403.3	371.9	402.4	409.5
65°	380.4	341.0	300.3	343.7	358.5
67.5°	325.4	292.7	241.7	298.5	318.2
70°	278.4	249.3	200.1	263.2	289.6
72.5°	241.2	217.1	174.1	235.0	266.7
75°	210.8	188.9	161.6	207.7	244.8
77.5°	186.6	160.7	151.3	181.7	219.8
80°	155.8	132.0	133.4	156.2	188.0
82.5°	119.9	102.0	107.4	129.3	147.7
85°	80.6	72.5	75.2	96.2	102.9
87.5°	39.8	38.5	41.2	56.4	56.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)