

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: P475528

Luminaire Tested: **24GR-LD5-72-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475528
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-72-F1-UNV-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6865.8 lumens
Efficiency: N/A
Efficacy: 141.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.34
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

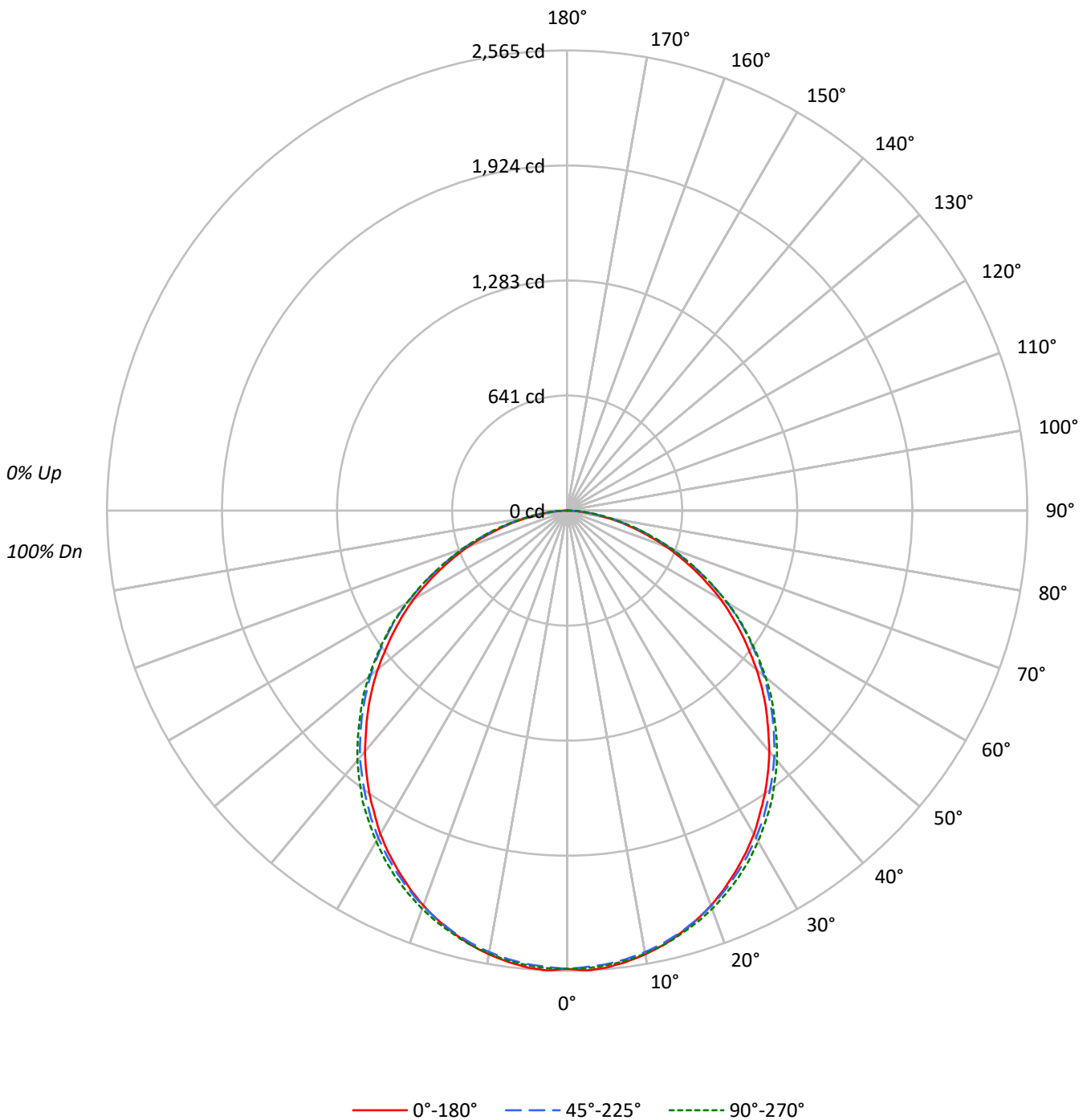
Input Watts (W): 48.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	76		82	78	74		79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64		73	67	63		70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47		58	52	47		57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42		53	46	41		51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37		48	42	37		47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33		44	38	33		43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30		41	34	30		40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3437	3437	3437
5°	3452	3428	3437
10°	3432	3414	3426
15°	3398	3392	3406
20°	3355	3359	3382
25°	3296	3318	3352
30°	3236	3271	3308
35°	3159	3212	3260
40°	3078	3155	3195
45°	2986	3077	3110
50°	2885	2996	3023
55°	2772	2895	2911
60°	2658	2776	2787
65°	2491	2609	2602
70°	2307	2413	2437
75°	2044	2163	2177
80°	1701	1826	1868
85°	1289	1414	1590



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.4	3.5
10°-20°	687.4	10.0
20°-30°	1030.0	15.0
30°-40°	1222.0	17.8
40°-50°	1241.0	18.1
50°-60°	1092.9	15.9
60°-70°	803.1	11.7
70°-80°	436.8	6.4
80°-90°	111.3	1.6
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
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0°-30°	1958.8	28.5
0°-40°	3180.7	46.3
0°-60°	5514.6	80.3
0°-90°	6865.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6865.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2555	2555	2555	2555	2555	
5°	2556	2545	2538	2538	2544	242
15°	2440	2435	2435	2438	2446	688
25°	2220	2223	2235	2248	2258	1023
35°	1923	1934	1955	1975	1985	1202
45°	1570	1582	1617	1636	1634	1210
55°	1182	1198	1234	1246	1241	1057
65°	782	795	819	826	817	775
75°	393	401	416	418	419	418
85°	84	86	92	100	103	101
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2554.6	2554.6	2554.6	2554.6	2554.6
2.5°	2565.4	2555.3	2546.5	2546.5	2552.6
5°	2556.0	2545.2	2537.8	2537.8	2544.5
7.5°	2536.4	2527.7	2521.6	2521.6	2529.0
10°	2512.2	2503.5	2498.7	2499.4	2507.5
12.5°	2479.9	2471.8	2469.8	2471.1	2481.2
15°	2439.5	2434.8	2434.8	2438.1	2445.5
17.5°	2394.4	2389.7	2393.0	2397.7	2407.2
20°	2343.2	2339.8	2345.9	2353.3	2362.1
22.5°	2284.6	2283.3	2293.4	2303.5	2312.2
25°	2220.0	2222.7	2234.8	2247.6	2257.7
27.5°	2153.3	2156.0	2172.8	2186.3	2196.4
30°	2082.6	2084.0	2105.5	2121.7	2129.1
32.5°	2000.5	2011.2	2034.1	2049.6	2056.4
35°	1923.0	1933.8	1955.4	1974.9	1985.0
37.5°	1838.9	1848.3	1876.6	1897.5	1900.8
40°	1752.7	1761.4	1796.5	1814.0	1819.3
42.5°	1658.4	1675.3	1706.9	1724.4	1727.8
45°	1569.5	1582.3	1617.3	1636.2	1634.2
47.5°	1474.6	1488.7	1523.1	1541.3	1544.6
50°	1378.3	1394.5	1431.5	1443.6	1444.3
52.5°	1277.3	1298.2	1331.9	1348.0	1342.6
55°	1181.7	1198.5	1234.2	1245.7	1241.0
57.5°	1083.4	1102.2	1135.2	1141.3	1142.0
60°	987.8	1003.3	1031.5	1037.6	1035.6
62.5°	882.7	898.2	923.8	929.9	925.2
65°	782.4	795.2	819.4	825.5	817.4
67.5°	682.8	695.6	714.4	723.8	715.1
70°	586.5	596.6	613.4	618.8	619.5
72.5°	484.1	502.3	514.4	513.8	511.7
75°	393.2	401.3	416.1	417.5	418.8
77.5°	306.4	308.4	323.9	327.9	325.2
80°	219.5	226.9	235.7	240.4	241.1
82.5°	144.8	150.2	157.6	165.6	165.6
85°	83.5	85.5	91.6	99.7	103.0
87.5°	33.7	37.0	43.1	49.2	49.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)