

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: P475543

Luminaire Tested: **24GR-LD5-72-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475543
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-L835-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7114.7 lumens
Efficiency: N/A
Efficacy: 146.1 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

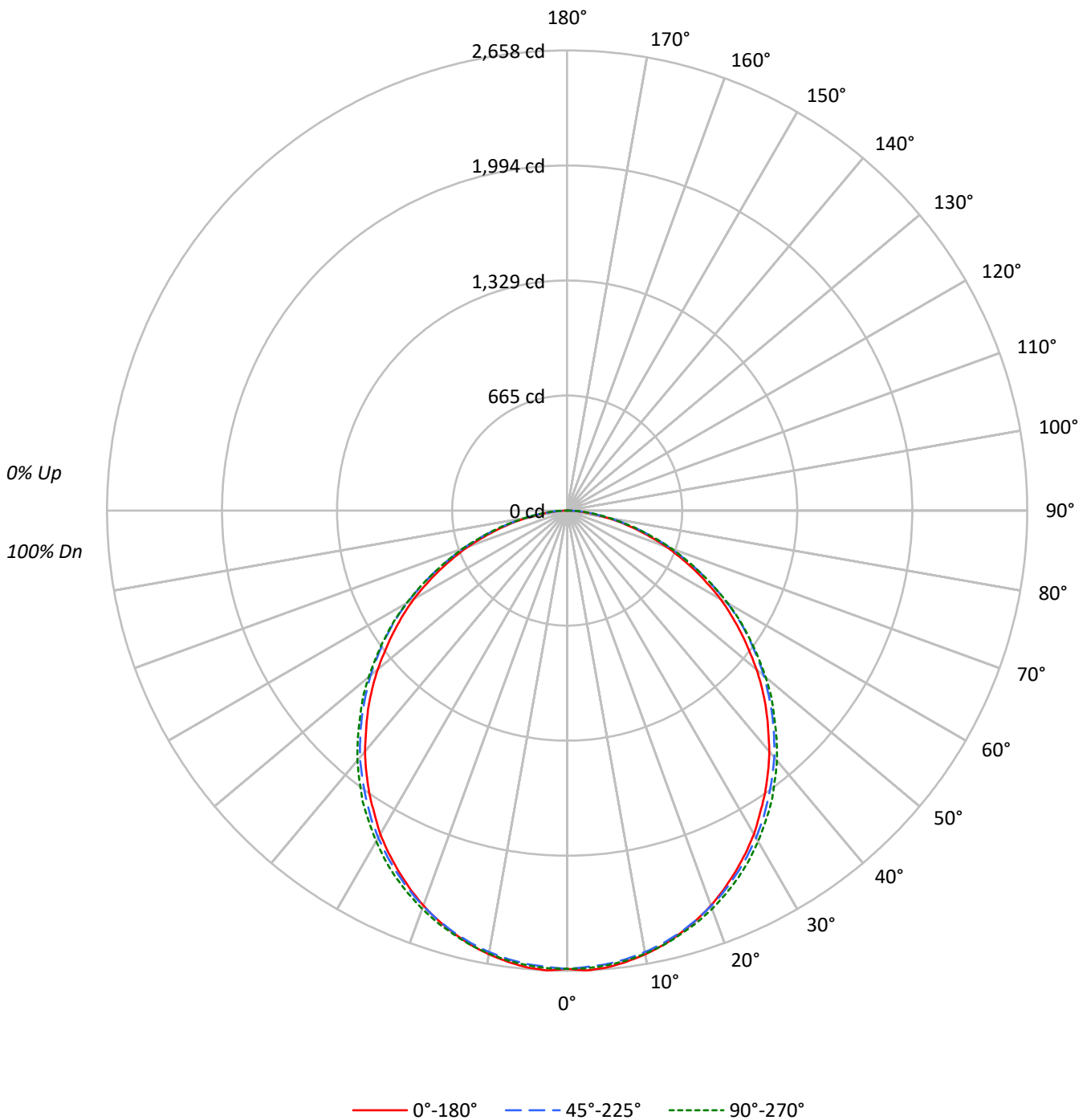
Input Watts (W): 48.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3562	3562	3562
5°	3577	3552	3561
10°	3557	3538	3550
15°	3521	3515	3530
20°	3477	3481	3505
25°	3415	3438	3473
30°	3353	3390	3428
35°	3273	3328	3379
40°	3190	3270	3311
45°	3095	3189	3222
50°	2990	3105	3133
55°	2873	3000	3017
60°	2754	2877	2888
65°	2581	2704	2697
70°	2391	2501	2525
75°	2118	2242	2256
80°	1763	1892	1936
85°	1335	1465	1649



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.2	3.5
10°-20°	712.3	10.0
20°-30°	1067.3	15.0
30°-40°	1266.3	17.8
40°-50°	1286.0	18.1
50°-60°	1132.5	15.9
60°-70°	832.2	11.7
70°-80°	452.6	6.4
80°-90°	115.3	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
0°-30°	2029.8	28.5
0°-40°	3296.1	46.3
0°-60°	5714.6	80.3
0°-90°	7114.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7114.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2647	2647	2647	2647	2647	
5°	2649	2638	2630	2630	2637	251
15°	2528	2523	2523	2527	2534	713
25°	2300	2303	2316	2329	2340	1060
35°	1993	2004	2026	2046	2057	1246
45°	1626	1640	1676	1696	1693	1254
55°	1225	1242	1279	1291	1286	1095
65°	811	824	849	855	847	804
75°	408	416	431	433	434	433
85°	86	89	95	103	107	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2647.3	2647.3	2647.3	2647.3	2647.3
2.5°	2658.4	2648.0	2638.9	2638.9	2645.2
5°	2648.7	2637.5	2629.8	2629.8	2636.8
7.5°	2628.4	2619.4	2613.1	2613.1	2620.8
10°	2603.3	2594.3	2589.4	2590.1	2598.4
12.5°	2569.8	2561.5	2559.4	2560.8	2571.2
15°	2528.0	2523.1	2523.1	2526.6	2534.2
17.5°	2481.2	2476.3	2479.8	2484.7	2494.5
20°	2428.2	2424.7	2431.0	2438.7	2447.7
22.5°	2367.5	2366.1	2376.6	2387.0	2396.1
25°	2300.5	2303.3	2315.8	2329.1	2339.6
27.5°	2231.4	2234.2	2251.7	2265.6	2276.1
30°	2158.2	2159.5	2181.9	2198.6	2206.3
32.5°	2073.0	2084.2	2107.9	2124.0	2130.9
35°	1992.8	2004.0	2026.3	2046.5	2057.0
37.5°	1905.6	1915.3	1944.6	1966.3	1969.8
40°	1816.3	1825.3	1861.6	1879.7	1885.3
42.5°	1718.6	1736.0	1768.8	1786.9	1790.4
45°	1626.5	1639.7	1676.0	1695.5	1693.4
47.5°	1528.1	1542.7	1578.3	1597.2	1600.6
50°	1428.3	1445.0	1483.4	1496.0	1496.7
52.5°	1323.6	1345.3	1380.2	1396.9	1391.3
55°	1224.6	1242.0	1279.0	1290.8	1286.0
57.5°	1122.7	1142.2	1176.4	1182.7	1183.4
60°	1023.6	1039.7	1069.0	1075.2	1073.1
62.5°	914.8	930.8	957.3	963.6	958.7
65°	810.8	824.0	849.2	855.4	847.1
67.5°	707.5	720.8	740.3	750.1	741.0
70°	607.7	618.2	635.7	641.2	641.9
72.5°	501.7	520.5	533.1	532.4	530.3
75°	407.5	415.9	431.2	432.6	434.0
77.5°	317.5	319.6	335.6	339.8	337.0
80°	227.5	235.1	244.2	249.1	249.8
82.5°	150.0	155.6	163.3	171.6	171.6
85°	86.5	88.6	94.9	103.3	106.8
87.5°	34.9	38.4	44.7	50.9	51.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)