

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: P475558

Luminaire Tested: **24GR-LD5-72-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475558
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-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7249.9 lumens
Efficiency: N/A
Efficacy: 148.9 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

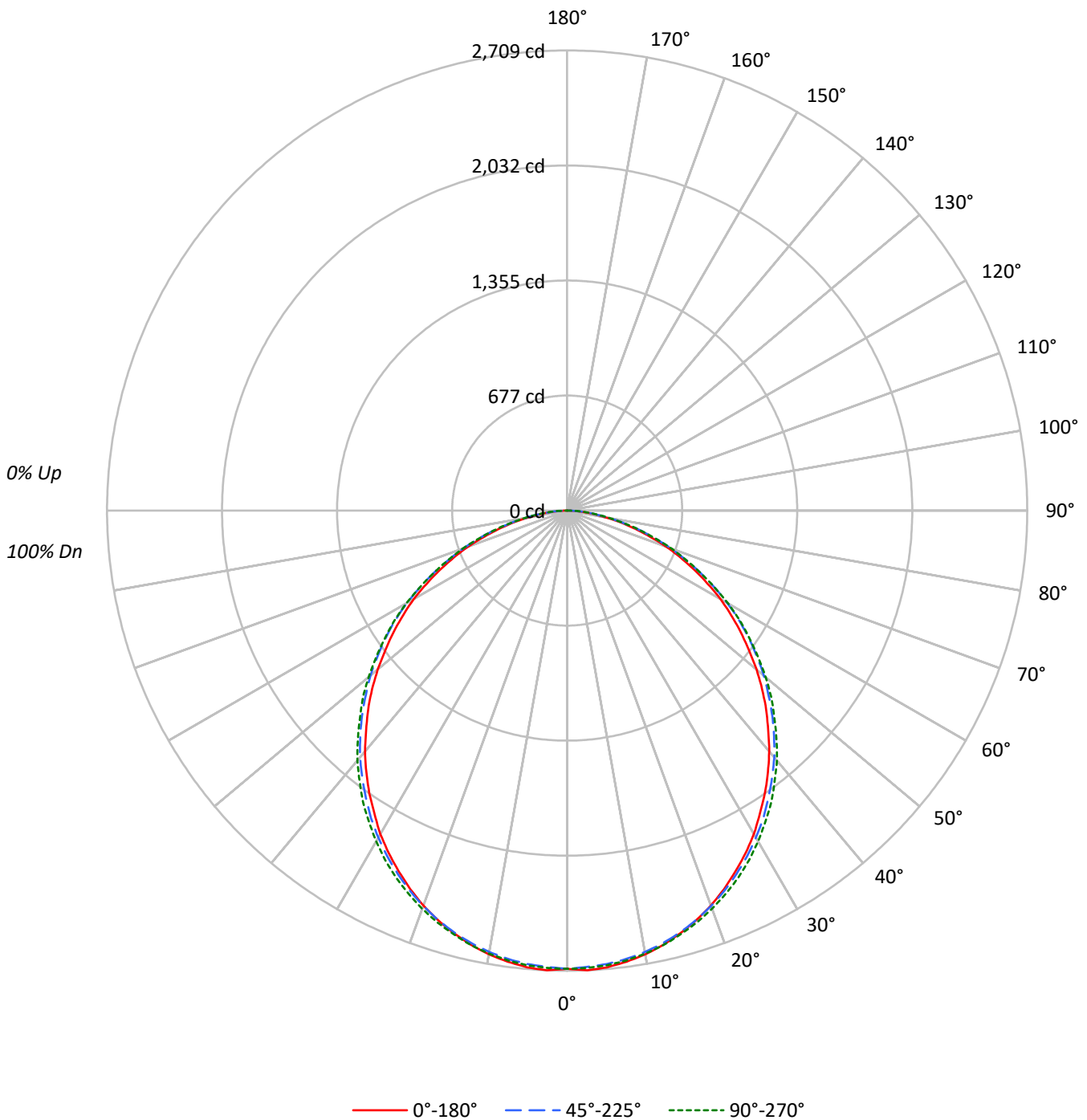
Input Watts (W): 48.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3630	3630	3630
5°	3645	3619	3629
10°	3624	3605	3618
15°	3588	3581	3597
20°	3543	3547	3571
25°	3480	3503	3539
30°	3417	3454	3493
35°	3335	3392	3443
40°	3251	3332	3374
45°	3154	3250	3283
50°	3046	3164	3192
55°	2927	3057	3074
60°	2807	2931	2943
65°	2630	2755	2748
70°	2436	2548	2573
75°	2158	2284	2299
80°	1796	1929	1972
85°	1362	1493	1680



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.9	3.5
10°-20°	725.9	10.0
20°-30°	1087.6	15.0
30°-40°	1290.3	17.8
40°-50°	1310.4	18.1
50°-60°	1154.1	15.9
60°-70°	848.0	11.7
70°-80°	461.2	6.4
80°-90°	117.5	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°	2068.4	28.5
0°-40°	3358.7	46.3
0°-60°	5823.2	80.3
0°-90°	7249.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7249.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2698	2698	2698	2698	2698	
5°	2699	2688	2680	2680	2687	256
15°	2576	2571	2571	2575	2582	726
25°	2344	2347	2360	2373	2384	1080
35°	2031	2042	2065	2085	2096	1269
45°	1657	1671	1708	1728	1726	1277
55°	1248	1266	1303	1315	1310	1116
65°	826	840	865	872	863	819
75°	415	424	439	441	442	442
85°	88	90	97	105	109	107
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2697.6	2697.6	2697.6	2697.6	2697.6
2.5°	2709.0	2698.3	2689.0	2689.0	2695.4
5°	2699.0	2687.6	2679.8	2679.8	2686.9
7.5°	2678.4	2669.1	2662.7	2662.7	2670.6
10°	2652.8	2643.5	2638.6	2639.3	2647.8
12.5°	2618.7	2610.1	2608.0	2609.4	2620.1
15°	2576.0	2571.0	2571.0	2574.6	2582.4
17.5°	2528.4	2523.4	2526.9	2531.9	2541.9
20°	2474.3	2470.8	2477.2	2485.0	2494.2
22.5°	2412.5	2411.0	2421.7	2432.4	2441.6
25°	2344.2	2347.0	2359.8	2373.4	2384.0
27.5°	2273.8	2276.7	2294.4	2308.7	2319.3
30°	2199.2	2200.6	2223.3	2240.4	2248.2
32.5°	2112.4	2123.8	2148.0	2164.3	2171.4
35°	2030.6	2042.0	2064.8	2085.4	2096.1
37.5°	1941.8	1951.7	1981.6	2003.6	2007.2
40°	1850.8	1860.0	1897.0	1915.5	1921.2
42.5°	1751.2	1769.0	1802.4	1820.9	1824.5
45°	1657.4	1670.9	1707.8	1727.8	1725.6
47.5°	1557.1	1572.0	1608.3	1627.5	1631.1
50°	1455.4	1472.5	1511.6	1524.4	1525.1
52.5°	1348.8	1370.8	1406.4	1423.4	1417.8
55°	1247.8	1265.6	1303.3	1315.4	1310.4
57.5°	1144.0	1163.9	1198.8	1205.2	1205.9
60°	1043.1	1059.4	1089.3	1095.7	1093.5
62.5°	932.1	948.5	975.5	981.9	976.9
65°	826.2	839.7	865.3	871.7	863.2
67.5°	721.0	734.5	754.4	764.3	755.1
70°	619.3	630.0	647.7	653.4	654.1
72.5°	511.2	530.4	543.2	542.5	540.4
75°	415.2	423.8	439.4	440.8	442.2
77.5°	323.5	325.6	342.0	346.3	343.4
80°	231.8	239.6	248.9	253.8	254.5
82.5°	152.9	158.6	166.4	174.9	174.9
85°	88.2	90.3	96.7	105.2	108.8
87.5°	35.6	39.1	45.5	51.9	52.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)