

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: P475557

Luminaire Tested: **24GR-LD5-64-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475557
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-64-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: 6458.2 lumens
Efficiency: N/A
Efficacy: 148.8 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

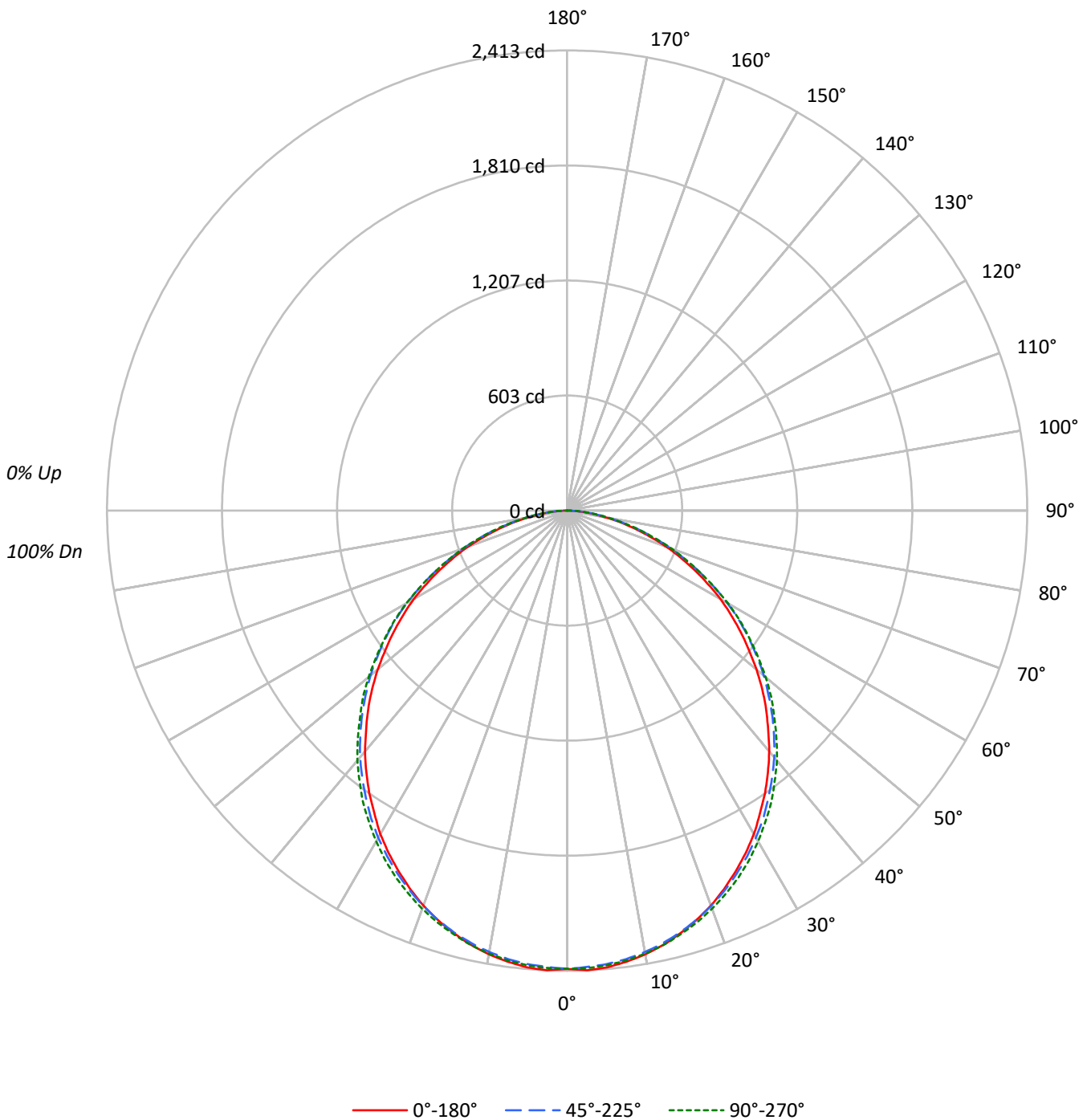
Input Watts (W): 43.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3233	3233	3233
5°	3247	3224	3233
10°	3229	3211	3223
15°	3196	3190	3204
20°	3156	3159	3181
25°	3100	3121	3153
30°	3044	3077	3111
35°	2971	3021	3067
40°	2896	2968	3006
45°	2809	2895	2925
50°	2714	2819	2844
55°	2608	2723	2738
60°	2500	2611	2621
65°	2343	2454	2448
70°	2170	2270	2292
75°	1923	2035	2048
80°	1600	1718	1757
85°	1212	1329	1496



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.1	3.5
10°-20°	646.6	10.0
20°-30°	968.8	15.0
30°-40°	1149.4	17.8
40°-50°	1167.3	18.1
50°-60°	1028.0	15.9
60°-70°	755.4	11.7
70°-80°	410.9	6.4
80°-90°	104.6	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°	1842.5	28.5
0°-40°	2991.9	46.3
0°-60°	5187.3	80.3
0°-90°	6458.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6458.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2403	2403	2403	2403	2403	
5°	2404	2394	2387	2387	2394	228
15°	2295	2290	2290	2293	2300	647
25°	2088	2091	2102	2114	2124	962
35°	1809	1819	1839	1858	1867	1131
45°	1476	1488	1521	1539	1537	1138
55°	1112	1127	1161	1172	1167	994
65°	736	748	771	776	769	729
75°	370	378	391	393	394	393
85°	78	80	86	94	97	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2403.0	2403.0	2403.0	2403.0	2403.0
2.5°	2413.1	2403.6	2395.4	2395.4	2401.1
5°	2404.3	2394.1	2387.2	2387.2	2393.5
7.5°	2385.9	2377.7	2372.0	2372.0	2378.9
10°	2363.1	2354.9	2350.4	2351.1	2358.7
12.5°	2332.7	2325.1	2323.2	2324.4	2333.9
15°	2294.7	2290.2	2290.2	2293.4	2300.4
17.5°	2252.2	2247.8	2251.0	2255.4	2264.3
20°	2204.1	2200.9	2206.6	2213.6	2221.8
22.5°	2149.0	2147.7	2157.2	2166.7	2175.0
25°	2088.2	2090.7	2102.1	2114.2	2123.7
27.5°	2025.5	2028.0	2043.9	2056.5	2066.0
30°	1959.0	1960.3	1980.5	1995.7	2002.7
32.5°	1881.7	1891.9	1913.4	1928.0	1934.3
35°	1808.9	1819.0	1839.3	1857.7	1867.2
37.5°	1729.7	1738.6	1765.2	1784.8	1788.0
40°	1648.6	1656.9	1689.8	1706.3	1711.4
42.5°	1560.0	1575.8	1605.6	1622.0	1625.2
45°	1476.4	1488.4	1521.3	1539.1	1537.2
47.5°	1387.1	1400.4	1432.7	1449.8	1452.9
50°	1296.5	1311.7	1346.5	1357.9	1358.6
52.5°	1201.5	1221.1	1252.8	1268.0	1262.9
55°	1111.6	1127.4	1161.0	1171.7	1167.3
57.5°	1019.1	1036.8	1067.9	1073.6	1074.2
60°	929.1	943.7	970.3	976.0	974.1
62.5°	830.3	844.9	869.0	874.7	870.2
65°	736.0	748.0	770.8	776.5	768.9
67.5°	642.2	654.3	672.0	680.9	672.6
70°	551.7	561.2	577.0	582.1	582.7
72.5°	455.4	472.5	483.9	483.3	481.4
75°	369.9	377.5	391.4	392.7	394.0
77.5°	288.2	290.1	304.6	308.4	305.9
80°	206.5	213.4	221.7	226.1	226.7
82.5°	136.2	141.2	148.2	155.8	155.8
85°	78.5	80.4	86.1	93.7	96.9
87.5°	31.7	34.8	40.5	46.2	46.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)