

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: P475857

Luminaire Tested: **24GR-LD5-64-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475857
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-64-FGW080-UNV-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5489.3 lumens
Efficiency: N/A
Efficacy: 126.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

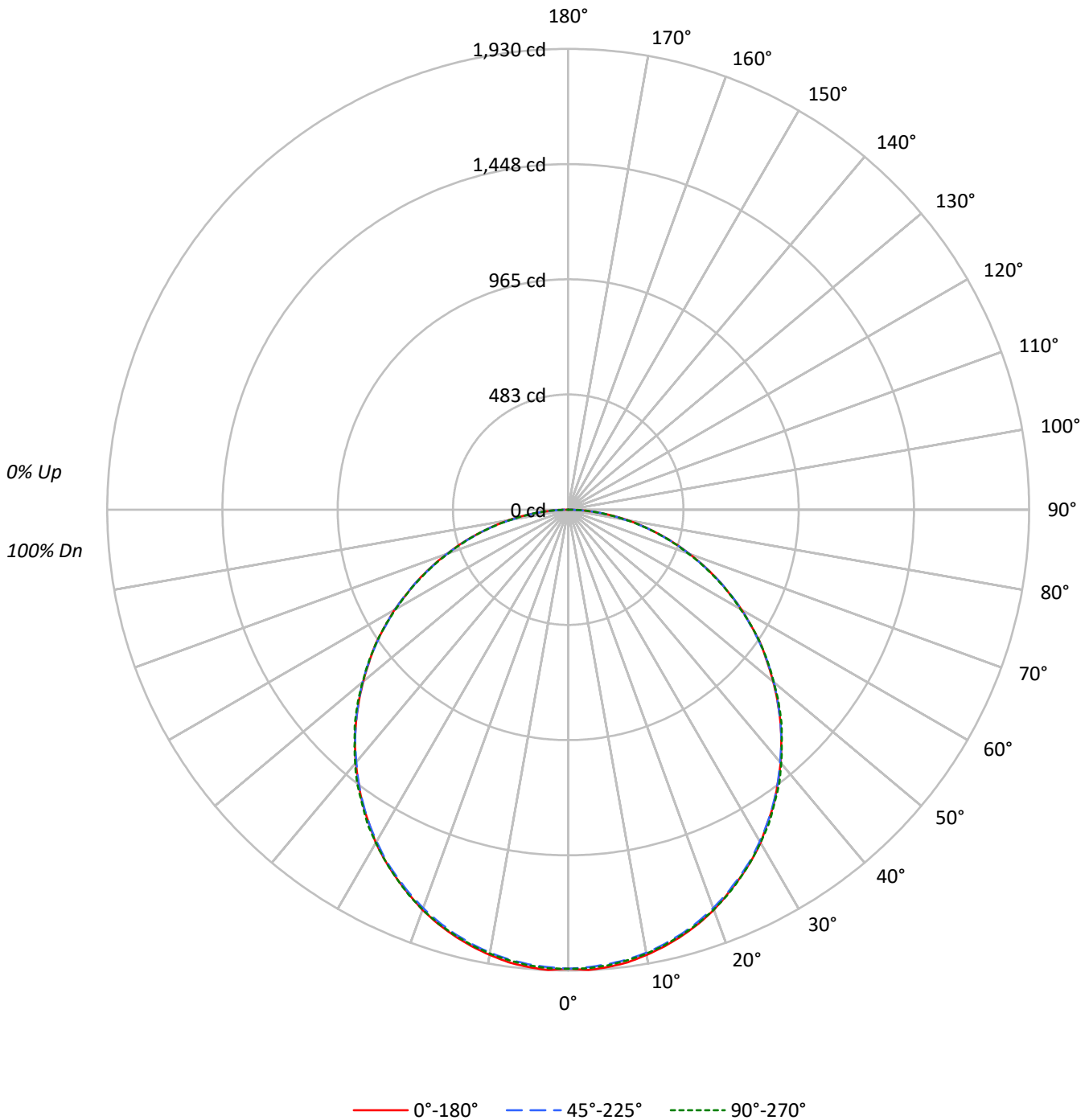
Input Watts (W): 43.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2587	2587	2587
5°	2597	2581	2587
10°	2587	2574	2579
15°	2573	2561	2567
20°	2554	2542	2552
25°	2526	2519	2528
30°	2502	2492	2502
35°	2466	2462	2471
40°	2431	2424	2438
45°	2391	2391	2402
50°	2346	2352	2352
55°	2313	2304	2311
60°	2260	2259	2243
65°	2195	2193	2180
70°	2119	2114	2102
75°	2038	2031	2035
80°	1945	1906	1915
85°	1726	1726	1746



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.8	3.3
10°-20°	519.4	9.5
20°-30°	783.0	14.3
30°-40°	938.4	17.1
40°-50°	969.5	17.7
50°-60°	878.0	16.0
60°-70°	680.1	12.4
70°-80°	412.5	7.5
80°-90°	126.7	2.3
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°	1484.2	27.0
0°-40°	2422.6	44.1
0°-60°	4270.1	77.8
0°-90°	5489.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5489.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1923	1923	1923	1923	1923	
5°	1923	1915	1911	1911	1915	183
15°	1847	1841	1838	1839	1843	521
25°	1702	1698	1696	1700	1703	785
35°	1502	1496	1499	1502	1505	939
45°	1257	1254	1257	1259	1262	969
55°	986	980	982	983	985	878
65°	690	686	689	687	685	682
75°	392	392	391	387	391	416
85°	112	114	112	110	113	128
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1922.7	1922.7	1922.7	1922.7	1922.7
2.5°	1929.5	1922.7	1917.7	1917.7	1922.0
5°	1922.7	1915.2	1910.9	1910.9	1915.2
7.5°	1911.5	1903.4	1899.7	1899.7	1903.4
10°	1893.5	1887.2	1884.1	1884.1	1887.9
12.5°	1872.3	1866.7	1863.0	1863.6	1867.4
15°	1846.9	1841.3	1838.2	1839.4	1843.1
17.5°	1817.0	1811.5	1809.0	1810.8	1815.2
20°	1783.5	1776.7	1775.4	1777.3	1782.3
22.5°	1743.1	1738.8	1738.2	1741.3	1745.6
25°	1701.5	1697.8	1696.5	1700.3	1702.7
27.5°	1658.6	1651.8	1654.3	1654.9	1658.6
30°	1610.2	1604.0	1604.0	1606.5	1610.2
32.5°	1554.3	1550.5	1553.7	1556.8	1562.4
35°	1501.5	1495.9	1499.0	1501.5	1504.6
37.5°	1441.8	1440.6	1441.2	1444.9	1449.9
40°	1384.1	1380.3	1380.3	1385.3	1387.8
42.5°	1320.7	1317.6	1320.1	1322.6	1323.8
45°	1256.7	1254.2	1256.7	1258.6	1262.3
47.5°	1188.4	1189.0	1189.6	1190.9	1194.6
50°	1120.7	1123.2	1123.8	1126.3	1123.8
52.5°	1050.5	1051.1	1053.6	1054.2	1054.8
55°	985.9	980.3	982.1	983.4	985.2
57.5°	910.1	908.2	908.2	910.1	911.3
60°	839.9	836.2	839.3	835.5	833.7
62.5°	761.6	762.8	764.1	763.5	760.4
65°	689.5	685.8	688.9	687.1	684.6
67.5°	613.8	610.7	611.9	611.3	610.7
70°	538.6	538.6	537.3	534.2	534.2
72.5°	467.8	464.0	465.3	461.6	461.6
75°	392.0	392.0	390.7	387.0	391.4
77.5°	321.2	319.3	318.1	315.6	315.6
80°	251.0	246.6	246.0	246.0	247.2
82.5°	182.0	178.9	177.7	177.7	178.3
85°	111.8	113.7	111.8	110.0	113.1
87.5°	52.8	50.3	50.3	52.2	53.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)