

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: P475827

Luminaire Tested: **24GR-LD5-64-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475827
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-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5198.4 lumens
Efficiency: N/A
Efficacy: 119.8 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

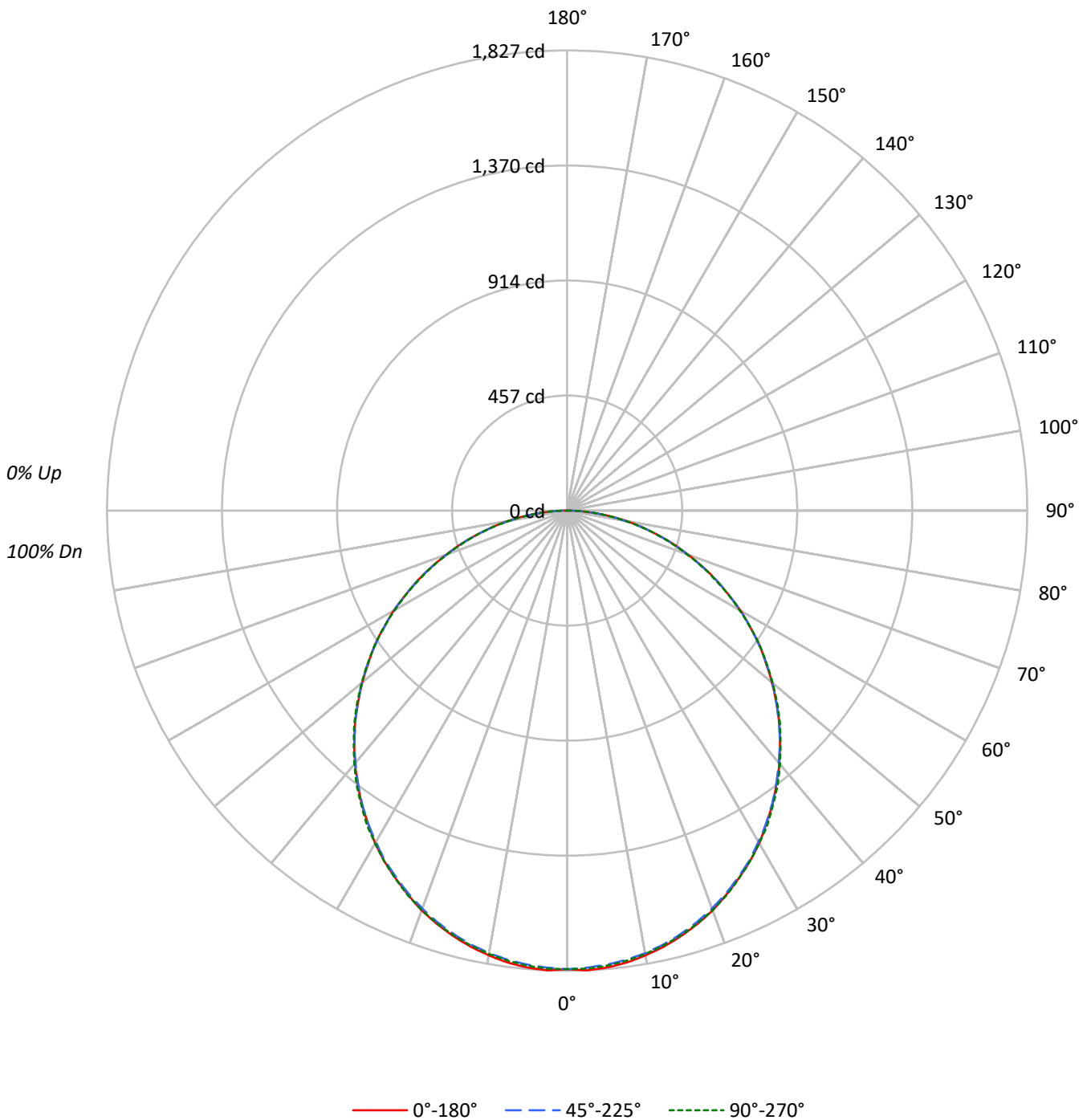
Input Watts (W): 43.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2450	2450	2450
5°	2459	2444	2450
10°	2450	2438	2443
15°	2436	2425	2431
20°	2418	2407	2417
25°	2392	2385	2394
30°	2369	2360	2369
35°	2336	2332	2340
40°	2302	2296	2308
45°	2265	2265	2275
50°	2222	2228	2228
55°	2190	2182	2189
60°	2140	2139	2125
65°	2079	2077	2064
70°	2006	2002	1990
75°	1930	1923	1927
80°	1842	1805	1814
85°	1635	1635	1653



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.2	3.3
10°-20°	491.9	9.5
20°-30°	741.5	14.3
30°-40°	888.6	17.1
40°-50°	918.1	17.7
50°-60°	831.4	16.0
60°-70°	644.1	12.4
70°-80°	390.6	7.5
80°-90°	120.0	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°	1405.6	27.0
0°-40°	2294.2	44.1
0°-60°	4043.8	77.8
0°-90°	5198.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5198.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1821	1821	1821	1821	1821	
5°	1821	1814	1810	1810	1814	173
15°	1749	1744	1741	1742	1746	493
25°	1611	1608	1607	1610	1612	743
35°	1422	1417	1420	1422	1425	889
45°	1190	1188	1190	1192	1195	917
55°	934	928	930	931	933	832
65°	653	650	652	651	648	645
75°	371	371	370	366	371	394
85°	106	108	106	104	107	122
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1820.8	1820.8	1820.8	1820.8	1820.8
2.5°	1827.2	1820.8	1816.1	1816.1	1820.2
5°	1820.8	1813.7	1809.6	1809.6	1813.7
7.5°	1810.2	1802.5	1799.0	1799.0	1802.5
10°	1793.1	1787.2	1784.3	1784.3	1787.8
12.5°	1773.1	1767.8	1764.3	1764.9	1768.4
15°	1749.0	1743.7	1740.8	1741.9	1745.5
17.5°	1720.8	1715.5	1713.1	1714.9	1719.0
20°	1689.0	1682.5	1681.3	1683.1	1687.8
22.5°	1650.7	1646.6	1646.0	1649.0	1653.1
25°	1611.3	1607.8	1606.6	1610.2	1612.5
27.5°	1570.7	1564.3	1566.6	1567.2	1570.7
30°	1524.9	1519.0	1519.0	1521.3	1524.9
32.5°	1471.9	1468.4	1471.3	1474.3	1479.6
35°	1421.9	1416.6	1419.6	1421.9	1424.8
37.5°	1365.4	1364.3	1364.8	1368.4	1373.1
40°	1310.7	1307.2	1307.2	1311.9	1314.2
42.5°	1250.7	1247.8	1250.1	1252.5	1253.7
45°	1190.1	1187.8	1190.1	1191.9	1195.4
47.5°	1125.4	1126.0	1126.6	1127.8	1131.3
50°	1061.3	1063.6	1064.2	1066.6	1064.2
52.5°	994.8	995.4	997.7	998.3	998.9
55°	933.6	928.3	930.1	931.3	933.0
57.5°	861.8	860.1	860.1	861.8	863.0
60°	795.4	791.8	794.8	791.3	789.5
62.5°	721.2	722.4	723.6	723.0	720.1
65°	653.0	649.5	652.4	650.7	648.3
67.5°	581.2	578.3	579.5	578.9	578.3
70°	510.0	510.0	508.9	505.9	505.9
72.5°	443.0	439.5	440.6	437.1	437.1
75°	371.2	371.2	370.0	366.5	370.6
77.5°	304.1	302.4	301.2	298.9	298.9
80°	237.7	233.6	233.0	233.0	234.1
82.5°	172.4	169.4	168.3	168.3	168.8
85°	105.9	107.7	105.9	104.1	107.1
87.5°	50.0	47.7	47.7	49.4	50.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)