

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: P475826

Luminaire Tested: **24GR-LD5-56-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475826
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-56-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: 4670.2 lumens
Efficiency: N/A
Efficacy: 118.5 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

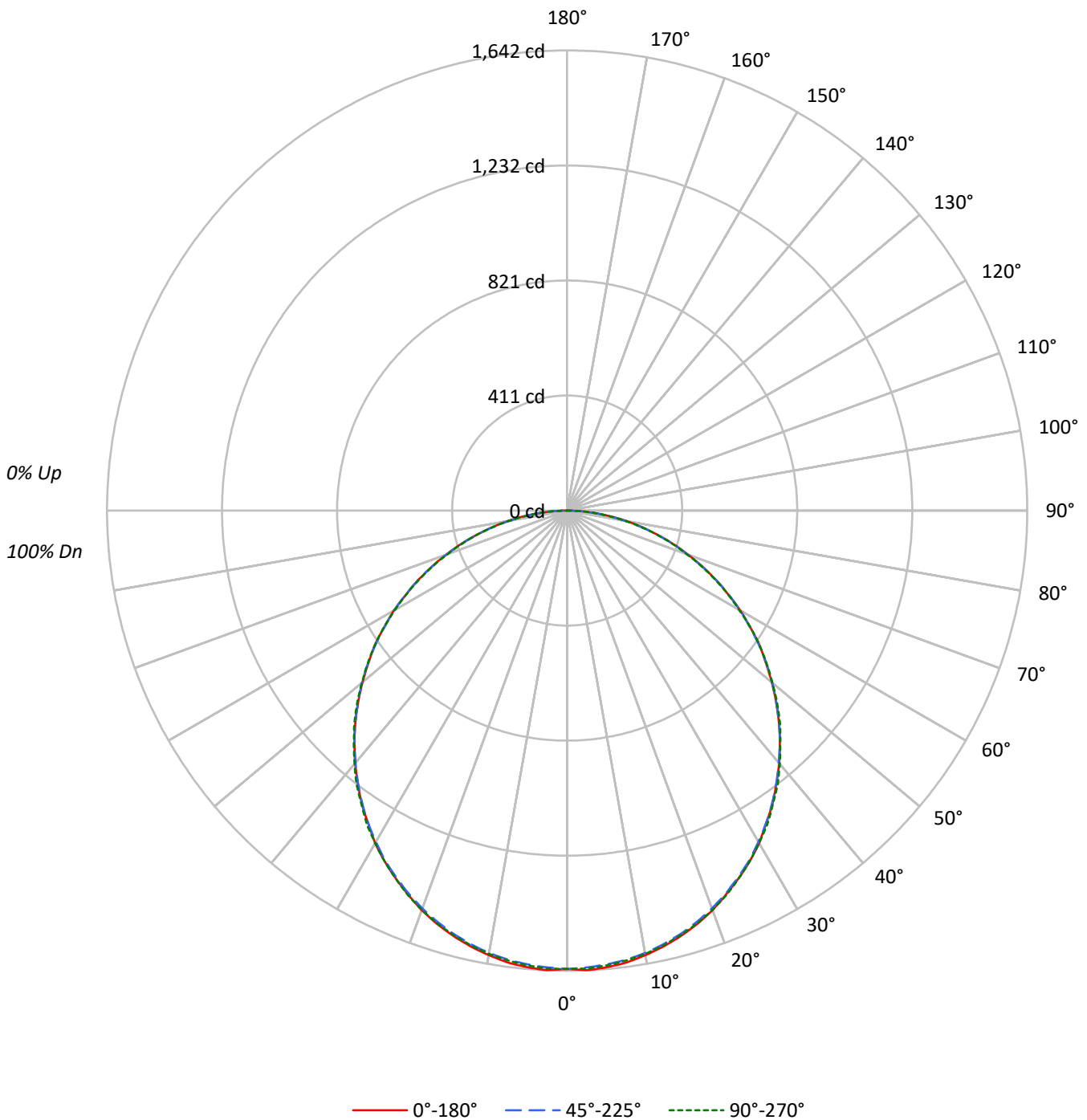
Input Watts (W): 39.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2201	2201	2201
5°	2209	2196	2201
10°	2201	2190	2194
15°	2189	2178	2184
20°	2173	2163	2171
25°	2149	2143	2151
30°	2128	2120	2128
35°	2098	2095	2103
40°	2068	2063	2074
45°	2034	2034	2043
50°	1996	2001	2001
55°	1968	1960	1966
60°	1923	1921	1909
65°	1868	1866	1854
70°	1803	1799	1788
75°	1734	1728	1731
80°	1654	1622	1629
85°	1468	1468	1485



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.7	3.3
10°-20°	441.9	9.5
20°-30°	666.2	14.3
30°-40°	798.3	17.1
40°-50°	824.8	17.7
50°-60°	747.0	16.0
60°-70°	578.6	12.4
70°-80°	350.9	7.5
80°-90°	107.7	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°	1262.7	27.0
0°-40°	2061.1	44.1
0°-60°	3632.9	77.8
0°-90°	4670.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4670.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1636	1636	1636	1636	1636	
5°	1636	1629	1626	1626	1629	155
15°	1571	1566	1564	1565	1568	443
25°	1448	1444	1443	1447	1449	667
35°	1277	1273	1275	1277	1280	799
45°	1069	1067	1069	1071	1074	824
55°	839	834	836	837	838	747
65°	587	584	586	584	582	580
75°	334	334	332	329	333	354
85°	95	97	95	94	96	109
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1635.8	1635.8	1635.8	1635.8	1635.8
2.5°	1641.6	1635.8	1631.5	1631.5	1635.2
5°	1635.8	1629.4	1625.7	1625.7	1629.4
7.5°	1626.2	1619.4	1616.2	1616.2	1619.4
10°	1610.9	1605.6	1603.0	1603.0	1606.2
12.5°	1592.9	1588.2	1585.0	1585.6	1588.7
15°	1571.3	1566.5	1563.9	1564.9	1568.1
17.5°	1545.9	1541.2	1539.0	1540.6	1544.3
20°	1517.4	1511.6	1510.5	1512.1	1516.3
22.5°	1483.0	1479.3	1478.8	1481.4	1485.1
25°	1447.6	1444.4	1443.4	1446.6	1448.7
27.5°	1411.1	1405.3	1407.4	1408.0	1411.1
30°	1369.9	1364.6	1364.6	1366.7	1369.9
32.5°	1322.3	1319.2	1321.8	1324.5	1329.2
35°	1277.4	1272.7	1275.3	1277.4	1280.1
37.5°	1226.7	1225.6	1226.2	1229.3	1233.6
40°	1177.5	1174.4	1174.4	1178.6	1180.7
42.5°	1123.6	1121.0	1123.1	1125.2	1126.3
45°	1069.2	1067.1	1069.2	1070.8	1073.9
47.5°	1011.1	1011.6	1012.1	1013.2	1016.3
50°	953.4	955.6	956.1	958.2	956.1
52.5°	893.7	894.3	896.4	896.9	897.4
55°	838.8	834.0	835.6	836.6	838.2
57.5°	774.3	772.7	772.7	774.3	775.3
60°	714.6	711.4	714.0	710.9	709.3
62.5°	648.0	649.0	650.1	649.5	646.9
65°	586.7	583.5	586.1	584.5	582.4
67.5°	522.2	519.5	520.6	520.1	519.5
70°	458.2	458.2	457.2	454.5	454.5
72.5°	398.0	394.8	395.9	392.7	392.7
75°	333.5	333.5	332.4	329.3	333.0
77.5°	273.2	271.7	270.6	268.5	268.5
80°	213.5	209.8	209.3	209.3	210.3
82.5°	154.9	152.2	151.2	151.2	151.7
85°	95.1	96.7	95.1	93.5	96.2
87.5°	44.9	42.8	42.8	44.4	45.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)