

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: P475825

Luminaire Tested: **24GR-LD5-48-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475825
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-48-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: 3982.9 lumens
Efficiency: N/A
Efficacy: 120.7 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

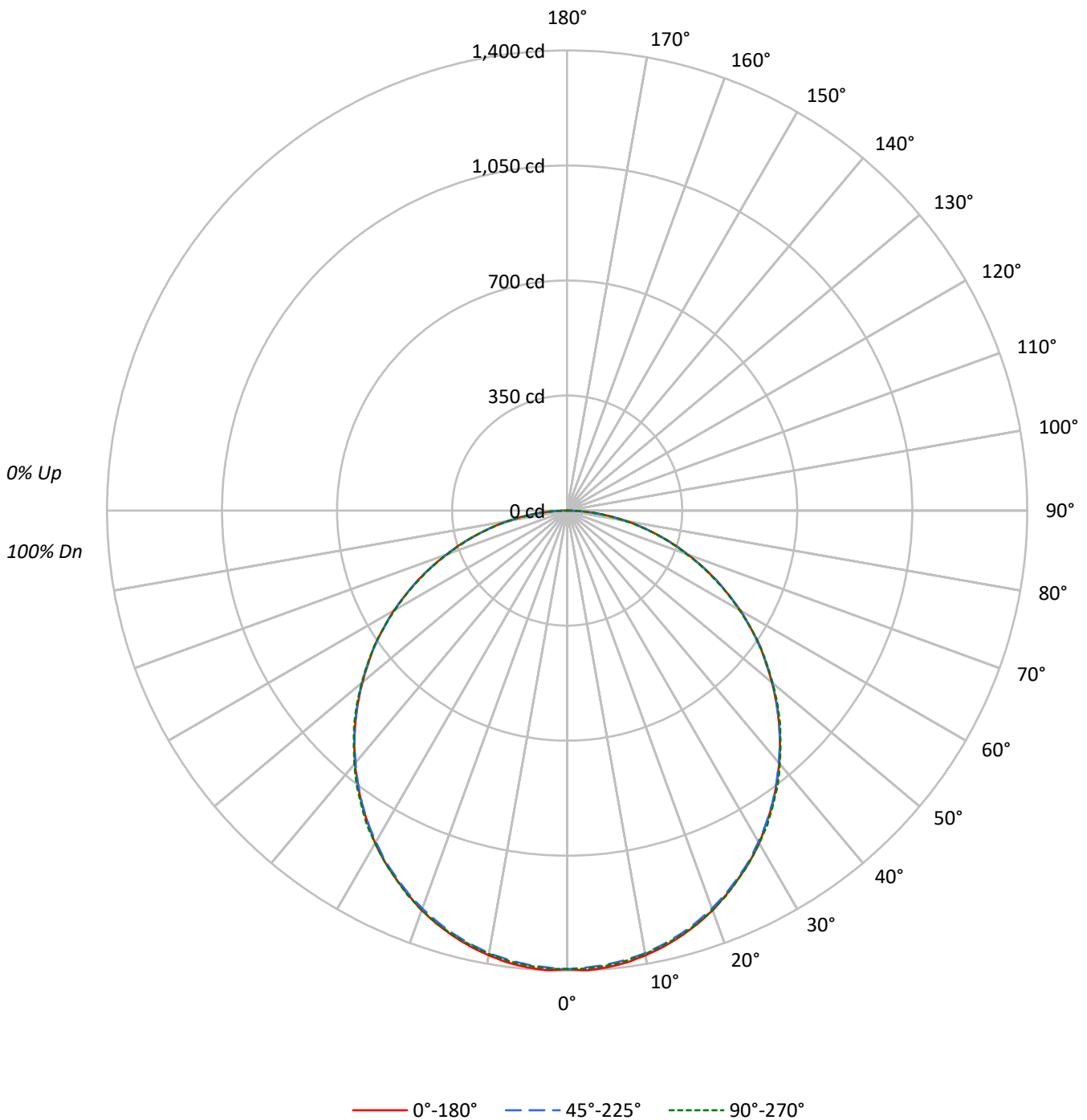
Input Watts (W): 33
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1877	1877	1877
5°	1884	1873	1877
10°	1877	1868	1871
15°	1867	1858	1863
20°	1853	1844	1852
25°	1833	1828	1834
30°	1815	1808	1815
35°	1789	1786	1793
40°	1764	1759	1769
45°	1735	1735	1743
50°	1702	1707	1707
55°	1678	1672	1677
60°	1640	1639	1628
65°	1593	1592	1581
70°	1537	1534	1525
75°	1478	1474	1476
80°	1411	1383	1390
85°	1252	1252	1266



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	3.3
10°-20°	376.8	9.5
20°-30°	568.1	14.3
30°-40°	680.8	17.1
40°-50°	703.4	17.7
50°-60°	637.0	16.0
60°-70°	493.5	12.4
70°-80°	299.3	7.5
80°-90°	91.9	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°	1076.9	27.0
0°-40°	1757.8	44.1
0°-60°	3098.2	77.8
0°-90°	3982.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3982.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1395	1395	1395	1395	1395	
5°	1395	1390	1386	1386	1390	132
15°	1340	1336	1334	1335	1337	378
25°	1235	1232	1231	1234	1236	569
35°	1089	1085	1088	1089	1092	681
45°	912	910	912	913	916	703
55°	715	711	713	714	715	637
65°	500	498	500	498	497	495
75°	284	284	284	281	284	302
85°	81	82	81	80	82	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1395.0	1395.0	1395.0	1395.0	1395.0
2.5°	1400.0	1395.0	1391.4	1391.4	1394.6
5°	1395.0	1389.6	1386.5	1386.5	1389.6
7.5°	1386.9	1381.0	1378.3	1378.3	1381.0
10°	1373.8	1369.3	1367.1	1367.1	1369.8
12.5°	1358.5	1354.5	1351.8	1352.2	1354.9
15°	1340.0	1336.0	1333.7	1334.6	1337.3
17.5°	1318.4	1314.3	1312.5	1313.9	1317.0
20°	1294.1	1289.1	1288.2	1289.5	1293.2
22.5°	1264.8	1261.6	1261.2	1263.4	1266.6
25°	1234.6	1231.9	1231.0	1233.7	1235.5
27.5°	1203.5	1198.5	1200.3	1200.8	1203.5
30°	1168.3	1163.8	1163.8	1165.6	1168.3
32.5°	1127.7	1125.0	1127.3	1129.5	1133.6
35°	1089.4	1085.4	1087.6	1089.4	1091.7
37.5°	1046.2	1045.3	1045.7	1048.4	1052.0
40°	1004.2	1001.5	1001.5	1005.1	1006.9
42.5°	958.3	956.0	957.8	959.6	960.5
45°	911.8	910.0	911.8	913.2	915.9
47.5°	862.3	862.7	863.2	864.1	866.8
50°	813.1	814.9	815.4	817.2	815.4
52.5°	762.2	762.6	764.4	764.9	765.3
55°	715.3	711.3	712.6	713.5	714.9
57.5°	660.3	659.0	659.0	660.3	661.2
60°	609.4	606.7	608.9	606.2	604.9
62.5°	552.6	553.5	554.4	554.0	551.7
65°	500.3	497.6	499.9	498.5	496.7
67.5°	445.3	443.1	444.0	443.5	443.1
70°	390.8	390.8	389.9	387.6	387.6
72.5°	339.4	336.7	337.6	334.9	334.9
75°	284.4	284.4	283.5	280.8	284.0
77.5°	233.0	231.7	230.8	229.0	229.0
80°	182.1	178.9	178.5	178.5	179.4
82.5°	132.1	129.8	128.9	128.9	129.4
85°	81.1	82.5	81.1	79.8	82.0
87.5°	38.3	36.5	36.5	37.9	38.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)