

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: P475870

Luminaire Tested: **24GR-LD5-48-FGW080-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475870
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-L850-CD1-U
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4209.9 lumens
Efficiency: N/A
Efficacy: 127.6 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

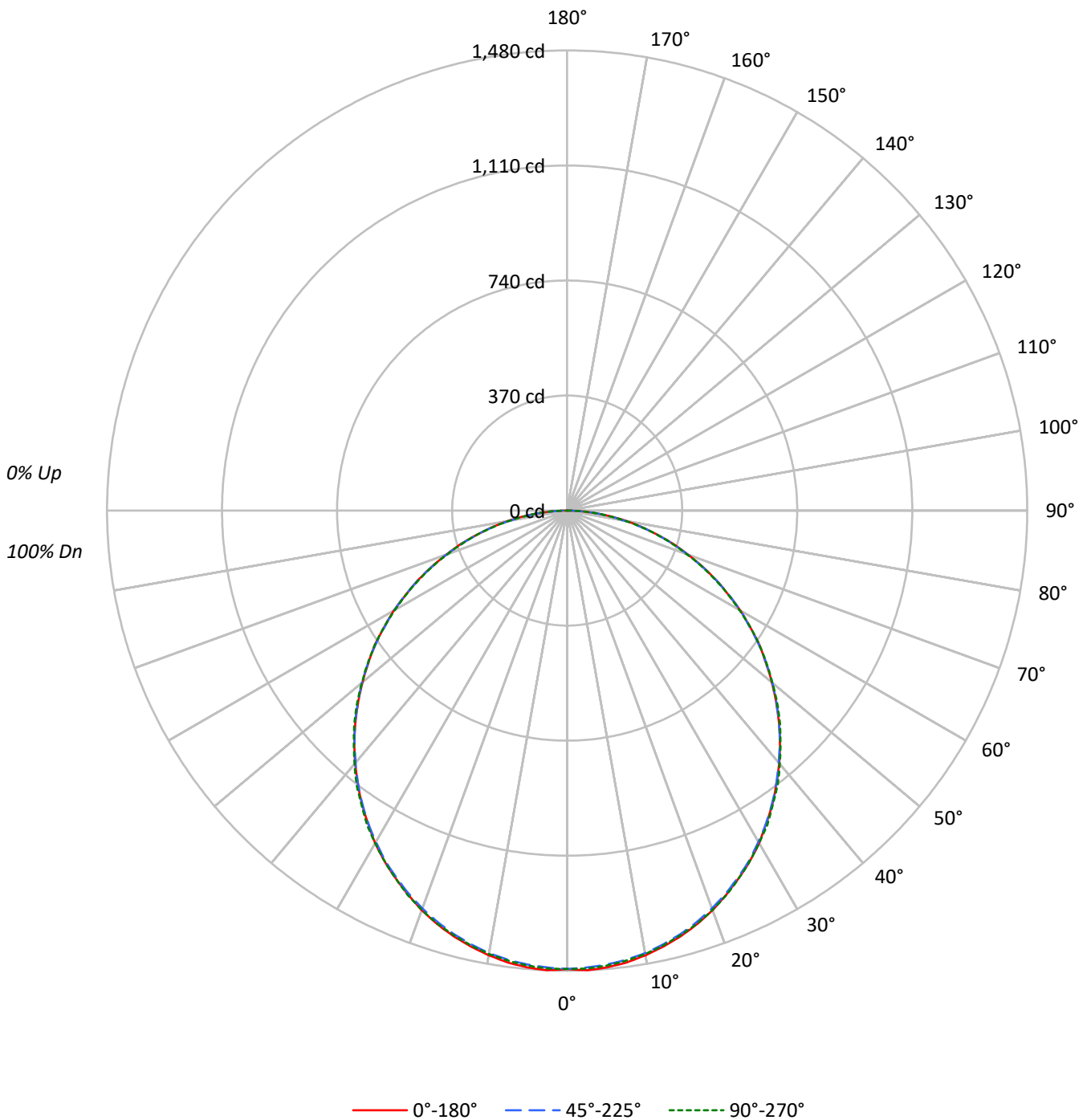
Input Watts (W): 33
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1984	1984	1984
5°	1992	1979	1984
10°	1984	1974	1978
15°	1973	1964	1969
20°	1958	1950	1957
25°	1937	1932	1939
30°	1919	1911	1919
35°	1891	1888	1895
40°	1864	1859	1869
45°	1834	1834	1842
50°	1799	1804	1804
55°	1774	1767	1772
60°	1733	1732	1721
65°	1684	1682	1671
70°	1625	1621	1612
75°	1563	1558	1560
80°	1492	1462	1469
85°	1325	1325	1338



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.4	3.3
10°-20°	398.3	9.5
20°-30°	600.5	14.3
30°-40°	719.7	17.1
40°-50°	743.5	17.7
50°-60°	673.3	16.0
60°-70°	521.6	12.4
70°-80°	316.3	7.5
80°-90°	97.1	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°	1138.3	27.0
0°-40°	1857.9	44.1
0°-60°	3274.8	77.8
0°-90°	4209.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4209.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1474	1474	1474	1474	1474	
5°	1474	1469	1466	1466	1469	140
15°	1416	1412	1410	1411	1414	400
25°	1305	1302	1301	1304	1306	602
35°	1152	1147	1150	1152	1154	720
45°	964	962	964	965	968	743
55°	756	752	753	754	756	674
65°	529	526	528	527	525	523
75°	301	301	300	297	300	319
85°	86	87	86	84	87	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1474.5	1474.5	1474.5	1474.5	1474.5
2.5°	1479.8	1474.5	1470.7	1470.7	1474.1
5°	1474.5	1468.8	1465.5	1465.5	1468.8
7.5°	1466.0	1459.8	1456.9	1456.9	1459.8
10°	1452.1	1447.4	1445.0	1445.0	1447.9
12.5°	1435.9	1431.7	1428.8	1429.3	1432.1
15°	1416.4	1412.1	1409.7	1410.7	1413.5
17.5°	1393.5	1389.3	1387.3	1388.8	1392.1
20°	1367.8	1362.6	1361.6	1363.0	1366.9
22.5°	1336.8	1333.5	1333.0	1335.4	1338.7
25°	1304.9	1302.1	1301.1	1304.0	1305.9
27.5°	1272.0	1266.8	1268.7	1269.2	1272.0
30°	1234.9	1230.1	1230.1	1232.0	1234.9
32.5°	1192.0	1189.2	1191.5	1193.9	1198.2
35°	1151.5	1147.2	1149.6	1151.5	1153.9
37.5°	1105.8	1104.8	1105.3	1108.2	1112.0
40°	1061.5	1058.6	1058.6	1062.4	1064.3
42.5°	1012.9	1010.5	1012.4	1014.3	1015.3
45°	963.8	961.9	963.8	965.2	968.1
47.5°	911.4	911.9	912.4	913.3	916.2
50°	859.5	861.4	861.8	863.8	861.8
52.5°	805.6	806.1	808.0	808.5	809.0
55°	756.1	751.8	753.2	754.2	755.6
57.5°	698.0	696.5	696.5	698.0	698.9
60°	644.1	641.3	643.6	640.8	639.4
62.5°	584.1	585.0	586.0	585.5	583.1
65°	528.8	526.0	528.4	526.9	525.0
67.5°	470.7	468.3	469.3	468.8	468.3
70°	413.1	413.1	412.1	409.7	409.7
72.5°	358.7	355.9	356.8	354.0	354.0
75°	300.6	300.6	299.7	296.8	300.1
77.5°	246.3	244.9	243.9	242.0	242.0
80°	192.5	189.1	188.7	188.7	189.6
82.5°	139.6	137.2	136.3	136.3	136.7
85°	85.8	87.2	85.8	84.3	86.7
87.5°	40.5	38.6	38.6	40.0	41.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)