

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: P475855

Luminaire Tested: **24GR-LD5-48-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475855
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-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: 4205.8 lumens
Efficiency: N/A
Efficacy: 127.4 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

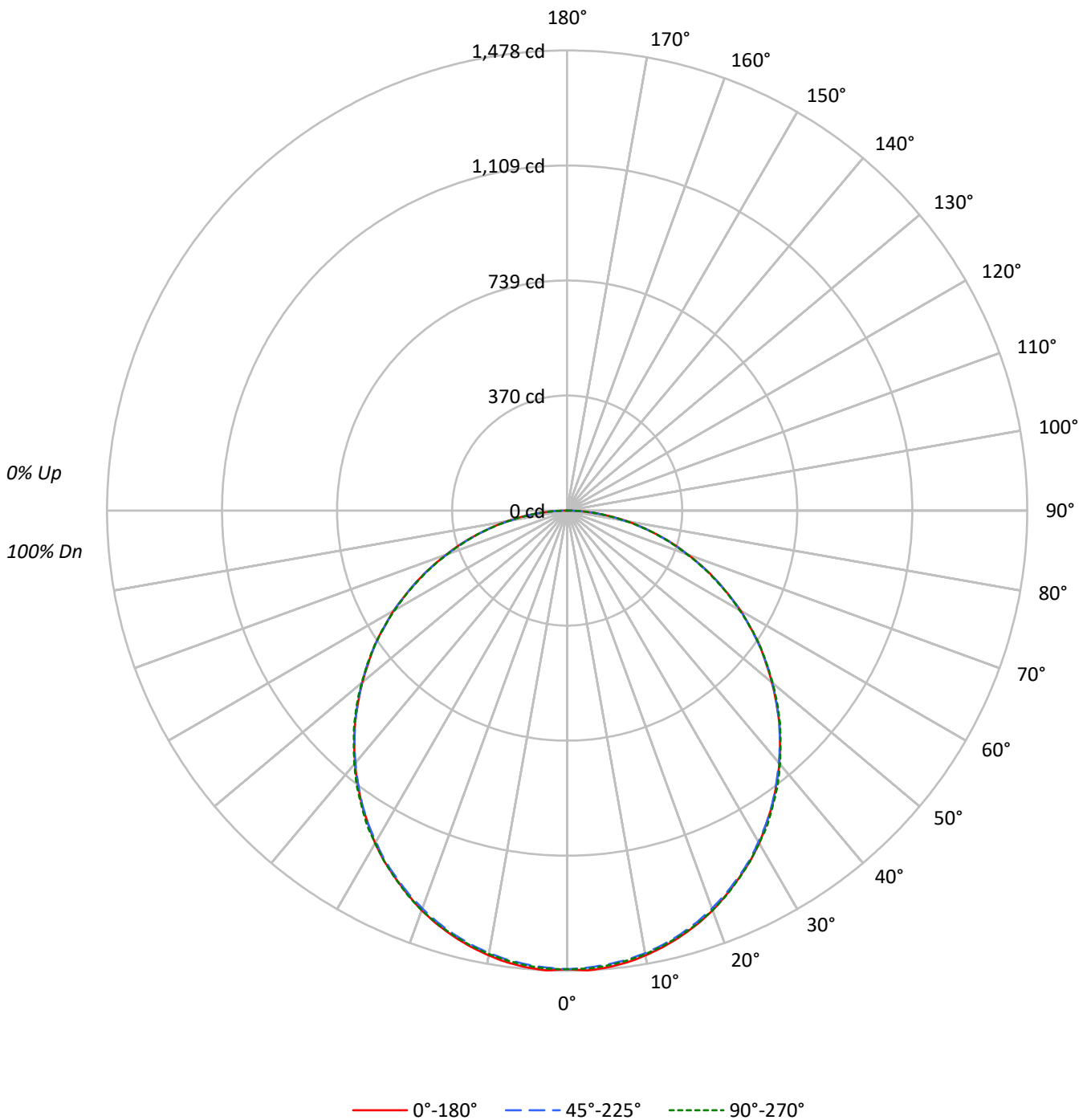
Input Watts (W): 33
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1982	1982	1982
5°	1990	1977	1982
10°	1982	1972	1976
15°	1971	1962	1967
20°	1957	1948	1955
25°	1935	1930	1937
30°	1917	1909	1917
35°	1890	1886	1894
40°	1862	1858	1868
45°	1832	1832	1840
50°	1797	1802	1802
55°	1772	1765	1771
60°	1732	1730	1719
65°	1682	1680	1670
70°	1624	1620	1610
75°	1561	1556	1559
80°	1490	1461	1468
85°	1323	1323	1337



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.3	3.3
10°-20°	397.9	9.5
20°-30°	599.9	14.3
30°-40°	719.0	17.1
40°-50°	742.8	17.7
50°-60°	672.7	16.0
60°-70°	521.1	12.4
70°-80°	316.0	7.5
80°-90°	97.0	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°	1137.2	27.0
0°-40°	1856.1	44.1
0°-60°	3271.6	77.8
0°-90°	4205.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4205.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1473	1473	1473	1473	1473	
5°	1473	1467	1464	1464	1467	140
15°	1415	1411	1408	1409	1412	399
25°	1304	1301	1300	1303	1305	601
35°	1150	1146	1148	1150	1153	719
45°	963	961	963	964	967	742
55°	755	751	752	753	755	673
65°	528	526	528	526	524	522
75°	300	300	299	296	300	318
85°	86	87	86	84	87	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1473.1	1473.1	1473.1	1473.1	1473.1
2.5°	1478.3	1473.1	1469.3	1469.3	1472.6
5°	1473.1	1467.4	1464.0	1464.0	1467.4
7.5°	1464.5	1458.3	1455.5	1455.5	1458.3
10°	1450.7	1446.0	1443.6	1443.6	1446.4
12.5°	1434.5	1430.2	1427.4	1427.9	1430.7
15°	1415.0	1410.7	1408.4	1409.3	1412.2
17.5°	1392.2	1387.9	1386.0	1387.4	1390.7
20°	1366.5	1361.2	1360.3	1361.7	1365.5
22.5°	1335.5	1332.2	1331.7	1334.1	1337.4
25°	1303.6	1300.8	1299.8	1302.7	1304.6
27.5°	1270.8	1265.6	1267.5	1267.9	1270.8
30°	1233.7	1228.9	1228.9	1230.8	1233.7
32.5°	1190.8	1188.0	1190.4	1192.7	1197.0
35°	1150.4	1146.1	1148.5	1150.4	1152.8
37.5°	1104.7	1103.7	1104.2	1107.1	1110.9
40°	1060.4	1057.6	1057.6	1061.4	1063.3
42.5°	1011.9	1009.5	1011.4	1013.3	1014.3
45°	962.9	961.0	962.9	964.3	967.1
47.5°	910.5	911.0	911.5	912.4	915.3
50°	858.6	860.5	861.0	862.9	861.0
52.5°	804.8	805.3	807.2	807.7	808.2
55°	755.3	751.1	752.5	753.4	754.9
57.5°	697.3	695.8	695.8	697.3	698.2
60°	643.5	640.6	643.0	640.2	638.7
62.5°	583.5	584.5	585.4	585.0	582.6
65°	528.3	525.5	527.8	526.4	524.5
67.5°	470.2	467.9	468.8	468.3	467.9
70°	412.7	412.7	411.7	409.3	409.3
72.5°	358.4	355.5	356.5	353.6	353.6
75°	300.3	300.3	299.4	296.5	299.9
77.5°	246.1	244.6	243.7	241.8	241.8
80°	192.3	189.0	188.5	188.5	189.4
82.5°	139.5	137.1	136.1	136.1	136.6
85°	85.7	87.1	85.7	84.2	86.6
87.5°	40.5	38.6	38.6	40.0	40.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)