

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: P475856

Luminaire Tested: **24GR-LD5-56-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475856
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-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: 4931.5 lumens
Efficiency: N/A
Efficacy: 125.2 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

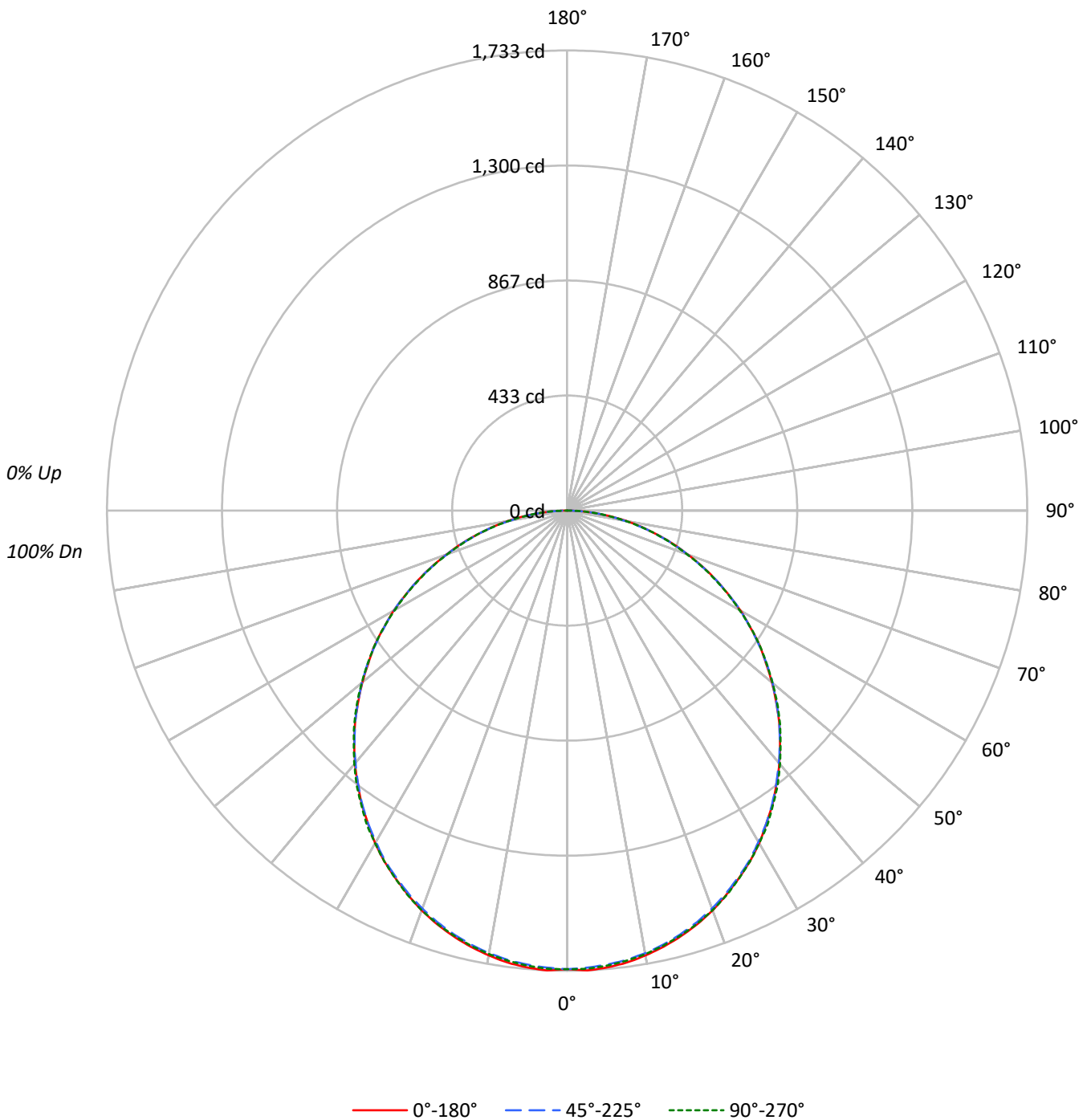
Input Watts (W): 39.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2324	2324	2324
5°	2333	2319	2324
10°	2324	2313	2317
15°	2311	2300	2307
20°	2294	2284	2293
25°	2269	2263	2271
30°	2247	2239	2247
35°	2216	2212	2220
40°	2184	2178	2190
45°	2148	2148	2158
50°	2107	2113	2113
55°	2078	2070	2076
60°	2030	2029	2016
65°	1972	1970	1958
70°	1904	1899	1888
75°	1831	1825	1828
80°	1747	1712	1721
85°	1551	1551	1568



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.4	3.3
10°-20°	466.6	9.5
20°-30°	703.5	14.3
30°-40°	843.0	17.1
40°-50°	871.0	17.7
50°-60°	788.8	16.0
60°-70°	611.0	12.4
70°-80°	370.6	7.5
80°-90°	113.8	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°	1333.4	27.0
0°-40°	2176.4	44.1
0°-60°	3836.2	77.8
0°-90°	4931.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4931.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1727	1727	1727	1727	1727	
5°	1727	1721	1717	1717	1721	164
15°	1659	1654	1651	1652	1656	468
25°	1529	1525	1524	1528	1530	705
35°	1349	1344	1347	1349	1352	843
45°	1129	1127	1129	1131	1134	870
55°	886	881	882	884	885	789
65°	620	616	619	617	615	612
75°	352	352	351	348	352	373
85°	100	102	100	99	102	115
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1727.3	1727.3	1727.3	1727.3	1727.3
2.5°	1733.4	1727.3	1722.8	1722.8	1726.7
5°	1727.3	1720.6	1716.7	1716.7	1720.6
7.5°	1717.2	1710.0	1706.6	1706.6	1710.0
10°	1701.1	1695.5	1692.7	1692.7	1696.0
12.5°	1682.1	1677.1	1673.7	1674.3	1677.6
15°	1659.2	1654.2	1651.4	1652.5	1655.9
17.5°	1632.4	1627.4	1625.2	1626.8	1630.7
20°	1602.3	1596.1	1595.0	1596.7	1601.2
22.5°	1566.0	1562.1	1561.5	1564.3	1568.2
25°	1528.6	1525.3	1524.1	1527.5	1529.7
27.5°	1490.1	1484.0	1486.2	1486.8	1490.1
30°	1446.6	1441.0	1441.0	1443.2	1446.6
32.5°	1396.3	1393.0	1395.8	1398.6	1403.6
35°	1348.9	1343.9	1346.7	1348.9	1351.7
37.5°	1295.3	1294.2	1294.8	1298.1	1302.6
40°	1243.4	1240.1	1240.1	1244.5	1246.8
42.5°	1186.5	1183.7	1185.9	1188.2	1189.3
45°	1129.0	1126.8	1129.0	1130.7	1134.0
47.5°	1067.6	1068.2	1068.7	1069.9	1073.2
50°	1006.8	1009.0	1009.6	1011.8	1009.6
52.5°	943.7	944.3	946.5	947.1	947.6
55°	885.7	880.7	882.3	883.5	885.1
57.5°	817.6	815.9	815.9	817.6	818.7
60°	754.5	751.2	754.0	750.6	749.0
62.5°	684.2	685.3	686.5	685.9	683.1
65°	619.5	616.1	618.9	617.2	615.0
67.5°	551.4	548.6	549.7	549.2	548.6
70°	483.9	483.9	482.7	480.0	480.0
72.5°	420.2	416.9	418.0	414.7	414.7
75°	352.2	352.2	351.0	347.7	351.6
77.5°	288.5	286.9	285.7	283.5	283.5
80°	225.5	221.6	221.0	221.0	222.1
82.5°	163.5	160.7	159.6	159.6	160.2
85°	100.5	102.1	100.5	98.8	101.6
87.5°	47.4	45.2	45.2	46.9	48.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)