

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: P475733

Luminaire Tested: **24GR-LD5-38-A-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475733
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-38-A-UNV-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ A LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3768.9 lumens
Efficiency: N/A
Efficacy: 141.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

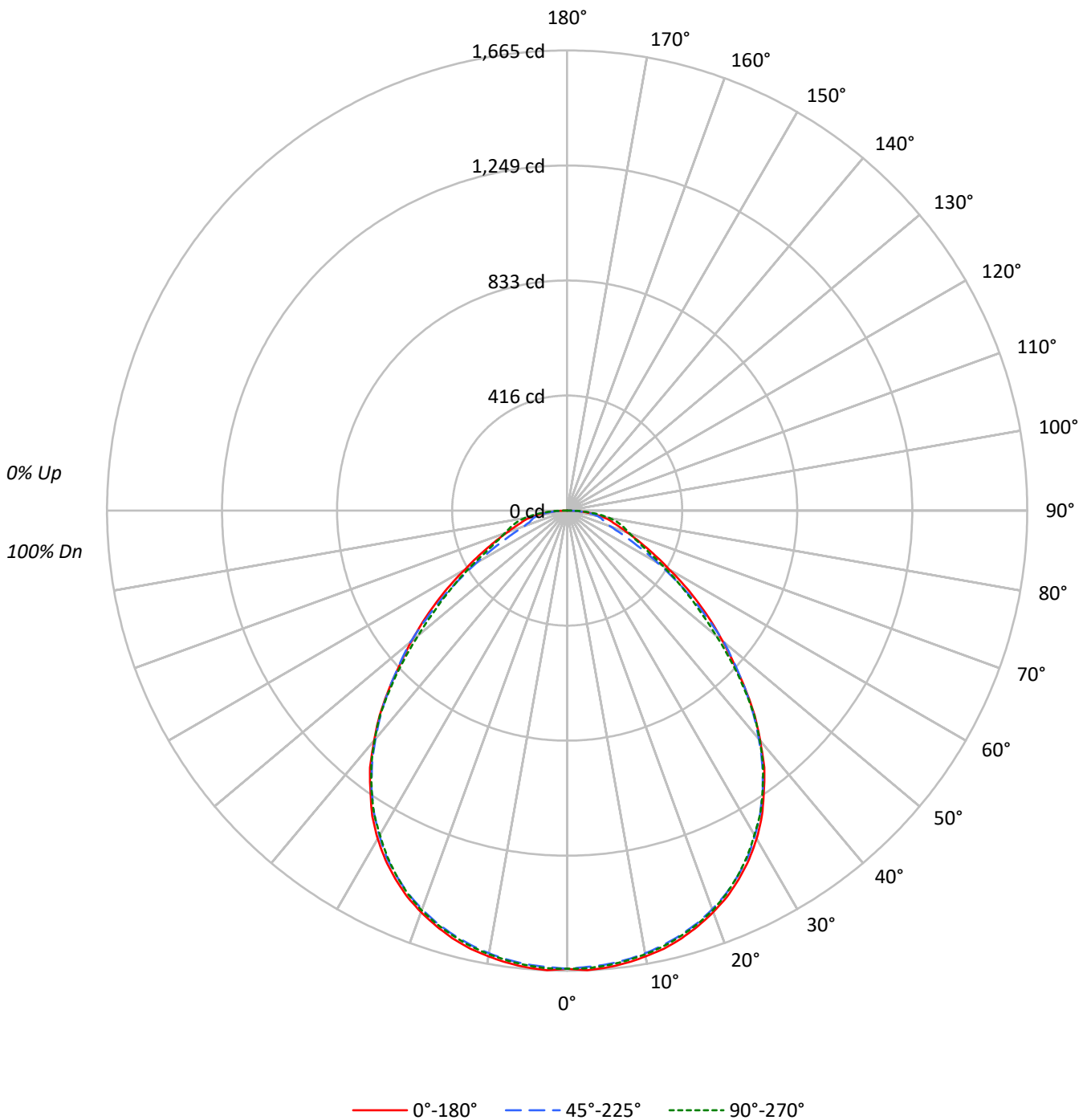
Input Watts (W): 26.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	58	56
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2230	2230	2230
5°	2242	2226	2231
10°	2238	2223	2227
15°	2232	2214	2219
20°	2214	2198	2204
25°	2183	2167	2166
30°	2130	2111	2106
35°	2039	2026	2026
40°	1908	1897	1905
45°	1732	1729	1715
50°	1536	1548	1472
55°	1350	1291	1261
60°	1149	1020	1073
65°	1004	793	947
70°	908	653	945
75°	909	697	1055
80°	1000	857	1208
85°	1031	962	1318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.0	4.2
10°-20°	449.4	11.9
20°-30°	672.2	17.8
30°-40°	769.3	20.4
40°-50°	697.0	18.5
50°-60°	493.5	13.1
60°-70°	285.1	7.6
70°-80°	172.8	4.6
80°-90°	72.7	1.9
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°	1278.6	33.9
0°-40°	2047.9	54.3
0°-60°	3238.3	85.9
0°-90°	3768.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3768.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1658	1658	1658	1658	1658	
5°	1660	1654	1648	1648	1652	158
15°	1602	1596	1589	1589	1593	452
25°	1471	1465	1460	1459	1459	676
35°	1241	1236	1234	1232	1234	774
45°	910	908	909	902	901	701
55°	576	556	550	534	537	516
65°	315	283	249	285	297	317
75°	175	157	134	172	203	187
85°	67	60	62	80	85	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1657.7	1657.7	1657.7	1657.7	1657.7
2.5°	1664.8	1658.4	1652.9	1653.6	1657.7
5°	1659.6	1653.6	1648.4	1648.1	1652.1
7.5°	1650.6	1645.5	1639.5	1639.5	1642.9
10°	1638.0	1632.8	1626.9	1626.5	1630.2
12.5°	1623.2	1616.5	1610.2	1610.2	1614.3
15°	1602.0	1595.7	1589.4	1589.4	1593.1
17.5°	1576.1	1570.5	1565.3	1565.7	1568.6
20°	1546.4	1540.8	1535.2	1536.0	1539.3
22.5°	1512.2	1505.5	1501.1	1500.7	1503.0
25°	1470.7	1464.7	1459.9	1458.8	1458.8
27.5°	1424.3	1418.0	1414.6	1409.4	1410.9
30°	1371.2	1364.5	1358.6	1355.6	1355.3
32.5°	1311.5	1304.8	1299.6	1299.2	1300.7
35°	1241.3	1235.8	1233.5	1231.7	1233.5
37.5°	1171.9	1161.5	1159.7	1159.3	1164.1
40°	1086.2	1082.5	1079.9	1078.0	1084.4
42.5°	1003.8	996.4	997.1	990.1	1001.2
45°	910.3	908.5	908.8	902.1	901.4
47.5°	817.5	817.2	822.7	804.2	803.1
50°	734.0	730.3	739.6	711.0	703.2
52.5°	654.2	643.9	640.9	614.9	614.9
55°	575.6	556.3	550.3	534.0	537.4
57.5°	501.0	473.5	461.3	460.9	466.5
60°	427.1	396.0	378.9	392.3	398.6
62.5°	368.5	334.4	308.4	333.6	339.6
65°	315.4	282.8	249.0	285.0	297.3
67.5°	269.8	242.7	200.4	247.5	263.9
70°	230.8	206.7	165.9	218.2	240.1
72.5°	200.0	180.0	144.4	194.8	221.2
75°	174.8	156.6	134.0	172.2	203.0
77.5°	154.7	133.2	125.4	150.7	182.2
80°	129.1	109.5	110.6	129.5	155.9
82.5°	99.5	84.6	89.1	107.2	122.5
85°	66.8	60.1	62.3	79.8	85.4
87.5°	33.0	31.9	34.1	46.8	46.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)