

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: P475688

Luminaire Tested: **24GR-LD5-38-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475688
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-38-A19/156-UNV-L850-CD1-U
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3694.7 lumens
Efficiency: N/A
Efficacy: 138.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.25 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

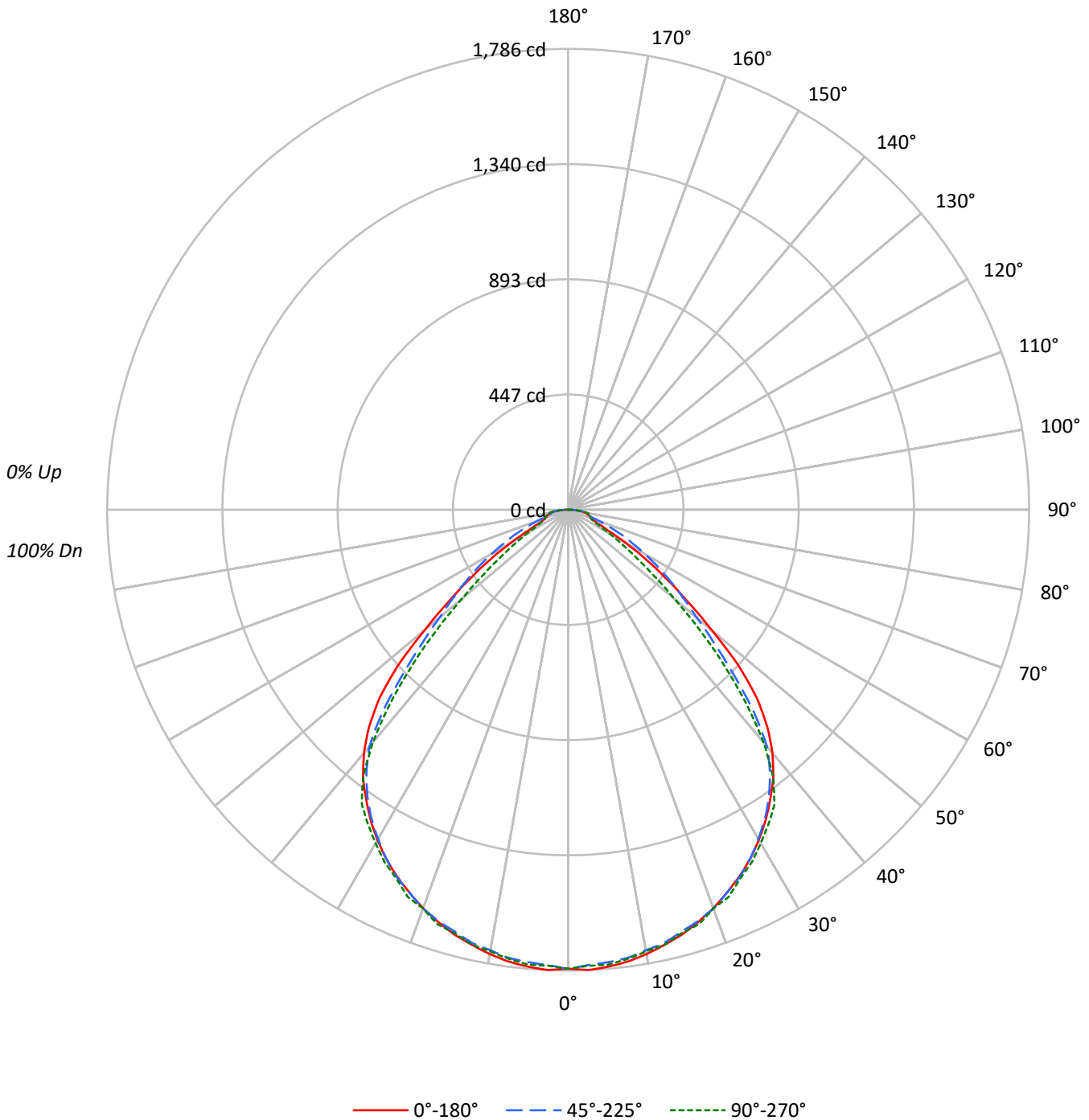
Input Watts (W): 26.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90					88				
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78					76				
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69					67				
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61					59				
5	81	70	62	56	79	69	62	56	67	60	55	65	59	55	63	58	54					52				
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49					47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44					42				
8	66	54	46	40	65	53	46	40	52	45	40	50	44	40	49	44	40					38				
9	62	49	42	37	61	49	42	37	48	41	37	47	41	36	46	40	36					34				
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33					31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2394	2394	2394
5°	2401	2378	2390
10°	2390	2369	2375
15°	2374	2359	2367
20°	2354	2355	2354
25°	2329	2332	2340
30°	2296	2289	2319
35°	2244	2227	2289
40°	2162	2105	2068
45°	1968	1732	1634
50°	1519	1358	1123
55°	1079	1133	743
60°	683	915	485
65°	396	720	354
70°	367	496	376
75°	422	377	448
80°	528	521	592
85°	574	610	633



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.7	4.5
10°-20°	479.6	13.0
20°-30°	723.6	19.6
30°-40°	849.3	23.0
40°-50°	715.0	19.4
50°-60°	406.2	11.0
60°-70°	202.7	5.5
70°-80°	106.3	2.9
80°-90°	44.3	1.2
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°	1370.8	37.1
0°-40°	2220.1	60.1
0°-60°	3341.4	90.4
0°-90°	3694.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3694.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1779	1779	1779	1779	1779	
5°	1778	1765	1761	1764	1770	169
15°	1704	1700	1693	1698	1699	481
25°	1568	1569	1571	1575	1576	722
35°	1366	1359	1356	1379	1394	853
45°	1034	993	910	894	859	779
55°	460	492	483	416	317	419
65°	124	258	226	192	111	142
75°	81	125	73	109	86	86
85°	37	44	40	50	41	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1779.1	1779.1	1779.1	1779.1	1779.1
2.5°	1785.5	1776.9	1767.1	1764.5	1769.0
5°	1778.0	1765.2	1760.7	1763.7	1769.7
7.5°	1766.3	1753.2	1752.4	1747.2	1756.2
10°	1749.0	1740.4	1734.0	1737.0	1738.1
12.5°	1727.2	1724.6	1719.7	1715.6	1725.7
15°	1704.3	1700.1	1693.4	1697.9	1699.0
17.5°	1674.9	1672.7	1671.6	1674.9	1684.7
20°	1643.7	1643.7	1644.8	1645.6	1644.1
22.5°	1606.5	1605.4	1606.9	1609.9	1624.2
25°	1568.5	1569.2	1571.1	1575.3	1576.4
27.5°	1526.4	1526.7	1526.0	1530.1	1539.9
30°	1477.8	1476.3	1473.3	1482.4	1492.9
32.5°	1425.2	1422.2	1418.8	1432.7	1444.0
35°	1366.1	1358.6	1356.0	1378.9	1393.6
37.5°	1305.6	1290.2	1284.5	1301.4	1303.3
40°	1231.1	1208.2	1198.7	1182.2	1177.3
42.5°	1141.6	1117.9	1067.1	1041.5	1023.5
45°	1034.4	993.0	910.3	894.5	858.7
47.5°	896.0	852.0	769.2	735.3	694.7
50°	725.6	700.0	648.8	606.7	536.4
52.5°	580.0	585.3	561.2	502.9	415.6
55°	460.0	492.0	483.0	416.4	316.7
57.5°	353.9	422.8	411.9	342.7	241.9
60°	253.9	362.2	340.0	282.1	180.2
62.5°	174.2	309.2	278.7	232.8	138.0
65°	124.5	258.0	226.1	191.8	111.3
67.5°	102.3	211.0	173.4	162.9	97.0
70°	93.3	170.0	126.0	142.2	95.5
72.5°	88.8	142.6	92.5	124.5	91.0
75°	81.2	125.3	72.6	109.1	86.1
77.5°	75.2	108.3	67.7	95.5	83.9
80°	68.1	85.8	67.3	80.9	76.4
82.5°	54.9	62.4	56.8	66.2	61.7
85°	37.2	44.4	39.5	50.0	41.0
87.5°	18.4	21.8	17.7	23.7	18.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)