

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: P475644

Luminaire Tested: **24GR-LD5-42-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475644
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-42-A19/156-UNV-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3931.8 lumens
Efficiency: N/A
Efficacy: 129.8 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

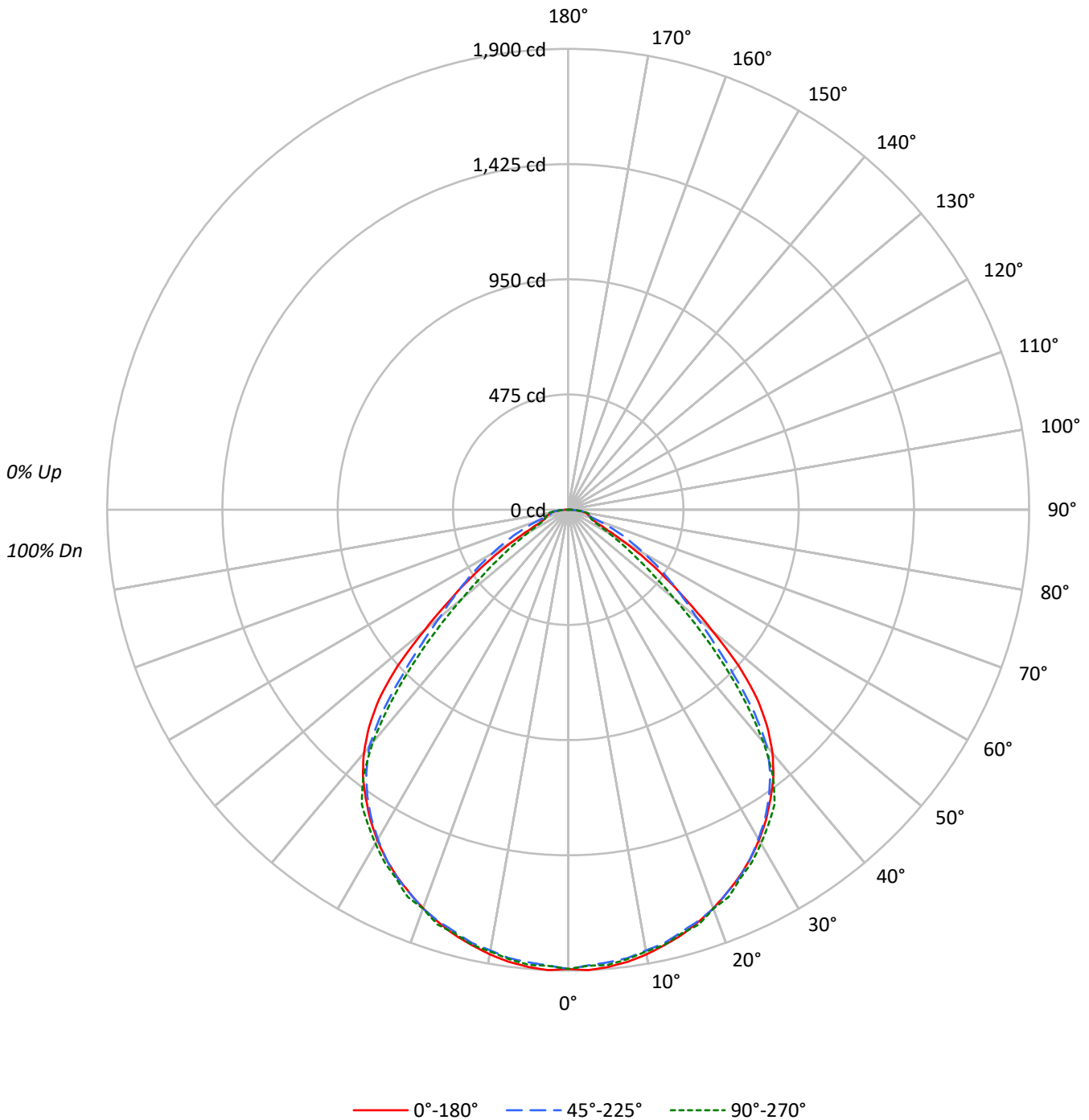
Input Watts (W): 30.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2547	2547	2547
5°	2556	2531	2544
10°	2543	2521	2527
15°	2526	2510	2519
20°	2505	2506	2505
25°	2478	2482	2491
30°	2443	2436	2468
35°	2388	2370	2436
40°	2301	2241	2201
45°	2095	1843	1739
50°	1616	1445	1195
55°	1148	1206	791
60°	727	974	516
65°	422	766	377
70°	391	528	400
75°	450	402	477
80°	562	555	630
85°	611	648	673



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.4	4.5
10°-20°	510.3	13.0
20°-30°	770.0	19.6
30°-40°	903.9	23.0
40°-50°	760.9	19.4
50°-60°	432.2	11.0
60°-70°	215.7	5.5
70°-80°	113.1	2.9
80°-90°	47.1	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°	1458.8	37.1
0°-40°	2362.7	60.1
0°-60°	3555.8	90.4
0°-90°	3931.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3931.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1893	1893	1893	1893	1893	
5°	1892	1878	1874	1877	1883	180
15°	1814	1809	1802	1807	1808	511
25°	1669	1670	1672	1676	1678	769
35°	1454	1446	1443	1467	1483	908
45°	1101	1057	969	952	914	829
55°	490	524	514	443	337	445
65°	132	275	241	204	118	151
75°	86	133	77	116	92	92
85°	40	47	42	53	44	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1893.3	1893.3	1893.3	1893.3	1893.3
2.5°	1900.1	1890.9	1880.5	1877.7	1882.5
5°	1892.1	1878.5	1873.7	1876.9	1883.3
7.5°	1879.7	1865.7	1864.9	1859.3	1868.9
10°	1861.3	1852.1	1845.3	1848.5	1849.7
12.5°	1838.1	1835.3	1830.1	1825.7	1836.5
15°	1813.7	1809.3	1802.1	1806.9	1808.1
17.5°	1782.4	1780.0	1778.8	1782.4	1792.8
20°	1749.2	1749.2	1750.4	1751.2	1749.6
22.5°	1709.6	1708.4	1710.0	1713.2	1728.4
25°	1669.2	1670.0	1672.0	1676.4	1677.6
27.5°	1624.3	1624.7	1623.9	1628.3	1638.7
30°	1572.7	1571.1	1567.9	1577.5	1588.7
32.5°	1516.7	1513.5	1509.9	1524.7	1536.7
35°	1453.8	1445.8	1443.0	1467.4	1483.0
37.5°	1389.4	1373.0	1367.0	1385.0	1387.0
40°	1310.1	1285.7	1275.7	1258.1	1252.9
42.5°	1214.8	1189.6	1135.6	1108.4	1089.2
45°	1100.8	1056.7	968.7	951.9	913.8
47.5°	953.5	906.6	818.6	782.5	739.3
50°	772.1	744.9	690.5	645.7	570.8
52.5°	617.2	622.8	597.2	535.2	442.3
55°	489.5	523.6	514.0	443.1	337.0
57.5°	376.7	449.9	438.3	364.7	257.4
60°	270.2	385.5	361.9	300.2	191.7
62.5°	185.3	329.0	296.6	247.8	146.9
65°	132.5	274.6	240.6	204.1	118.5
67.5°	108.9	224.6	184.5	173.3	103.3
70°	99.3	180.9	134.1	151.3	101.7
72.5°	94.5	151.7	98.5	132.5	96.9
75°	86.5	133.3	77.3	116.1	91.7
77.5°	80.1	115.3	72.1	101.7	89.3
80°	72.5	91.3	71.6	86.1	81.3
82.5°	58.4	66.4	60.4	70.4	65.6
85°	39.6	47.2	42.0	53.2	43.6
87.5°	19.6	23.2	18.8	25.2	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)