

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: P475659

Luminaire Tested: **24GR-LD5-42-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475659
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-L835-CD1-U
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4074.4 lumens
Efficiency: N/A
Efficacy: 134.5 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

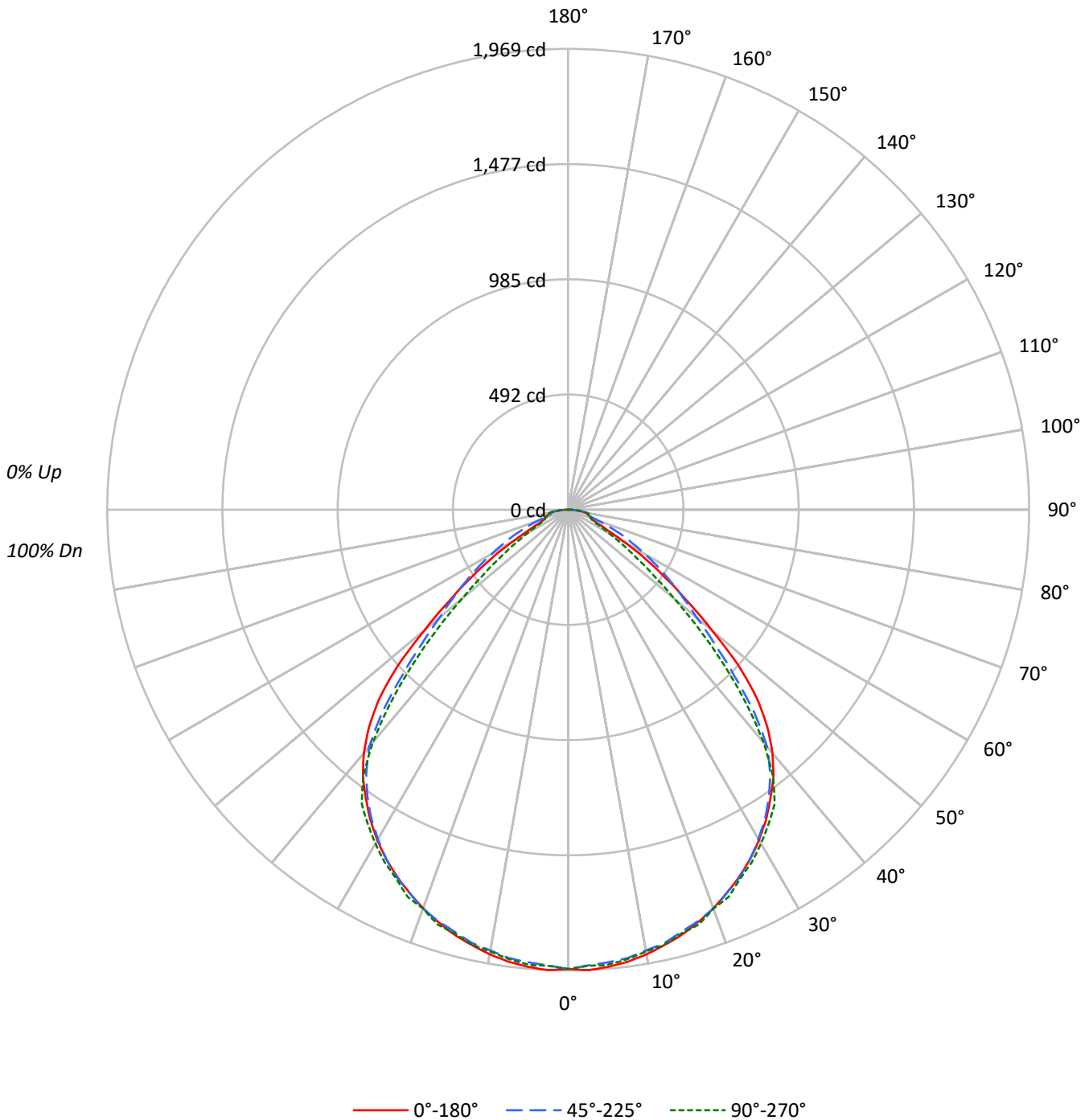
Input Watts (W): 30.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2640	2640	2640
5°	2648	2623	2636
10°	2635	2613	2619
15°	2618	2601	2610
20°	2595	2597	2596
25°	2568	2572	2581
30°	2532	2524	2558
35°	2474	2456	2524
40°	2385	2322	2280
45°	2171	1910	1802
50°	1675	1498	1238
55°	1190	1249	819
60°	753	1009	535
65°	437	794	391
70°	405	547	415
75°	466	416	494
80°	582	575	652
85°	634	673	698



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.9	4.5
10°-20°	528.9	13.0
20°-30°	798.0	19.6
30°-40°	936.6	23.0
40°-50°	788.5	19.4
50°-60°	447.9	11.0
60°-70°	223.6	5.5
70°-80°	117.2	2.9
80°-90°	48.9	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°	1511.7	37.1
0°-40°	2448.3	60.1
0°-60°	3684.8	90.4
0°-90°	4074.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4074.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1962	1962	1962	1962	1962	
5°	1961	1947	1942	1945	1952	186
15°	1879	1875	1867	1872	1874	530
25°	1730	1730	1733	1737	1738	797
35°	1506	1498	1495	1521	1537	941
45°	1141	1095	1004	986	947	859
55°	507	543	533	459	349	462
65°	137	285	249	212	123	156
75°	90	138	80	120	95	95
85°	41	49	44	55	45	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1962.0	1962.0	1962.0	1962.0	1962.0
2.5°	1969.0	1959.5	1948.7	1945.8	1950.8
5°	1960.7	1946.6	1941.7	1945.0	1951.6
7.5°	1947.9	1933.4	1932.5	1926.7	1936.7
10°	1928.8	1919.3	1912.2	1915.5	1916.8
12.5°	1904.7	1901.8	1896.5	1891.9	1903.1
15°	1879.4	1874.9	1867.4	1872.4	1873.6
17.5°	1847.1	1844.6	1843.4	1847.1	1857.9
20°	1812.7	1812.7	1813.9	1814.7	1813.1
22.5°	1771.6	1770.4	1772.0	1775.3	1791.1
25°	1729.7	1730.5	1732.6	1737.2	1738.4
27.5°	1683.2	1683.7	1682.8	1687.4	1698.2
30°	1629.7	1628.1	1624.8	1634.7	1646.3
32.5°	1571.7	1568.3	1564.6	1580.0	1592.4
35°	1506.5	1498.2	1495.3	1520.6	1536.8
37.5°	1439.8	1422.8	1416.5	1435.2	1437.3
40°	1357.6	1332.3	1322.0	1303.7	1298.3
42.5°	1258.9	1232.8	1176.8	1148.6	1128.7
45°	1140.7	1095.1	1003.8	986.4	947.0
47.5°	988.0	939.5	848.3	810.9	766.1
50°	800.1	771.9	715.5	669.1	591.5
52.5°	639.6	645.4	618.9	554.6	458.4
55°	507.3	542.6	532.6	459.2	349.3
57.5°	390.3	466.2	454.2	377.9	266.7
60°	280.0	399.4	375.0	311.1	198.7
62.5°	192.1	341.0	307.4	256.8	152.2
65°	137.3	284.6	249.3	211.5	122.8
67.5°	112.8	232.7	191.2	179.6	107.0
70°	102.9	187.5	139.0	156.8	105.4
72.5°	97.9	157.2	102.0	137.3	100.4
75°	89.6	138.1	80.1	120.3	95.0
77.5°	83.0	119.5	74.7	105.4	92.5
80°	75.1	94.6	74.2	89.2	84.2
82.5°	60.6	68.9	62.6	73.0	68.0
85°	41.1	48.9	43.6	55.2	45.2
87.5°	20.3	24.1	19.5	26.1	19.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)