

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: P475689

Luminaire Tested: **24GR-LD5-42-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475689
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-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: 4155.9 lumens
Efficiency: N/A
Efficacy: 137.2 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

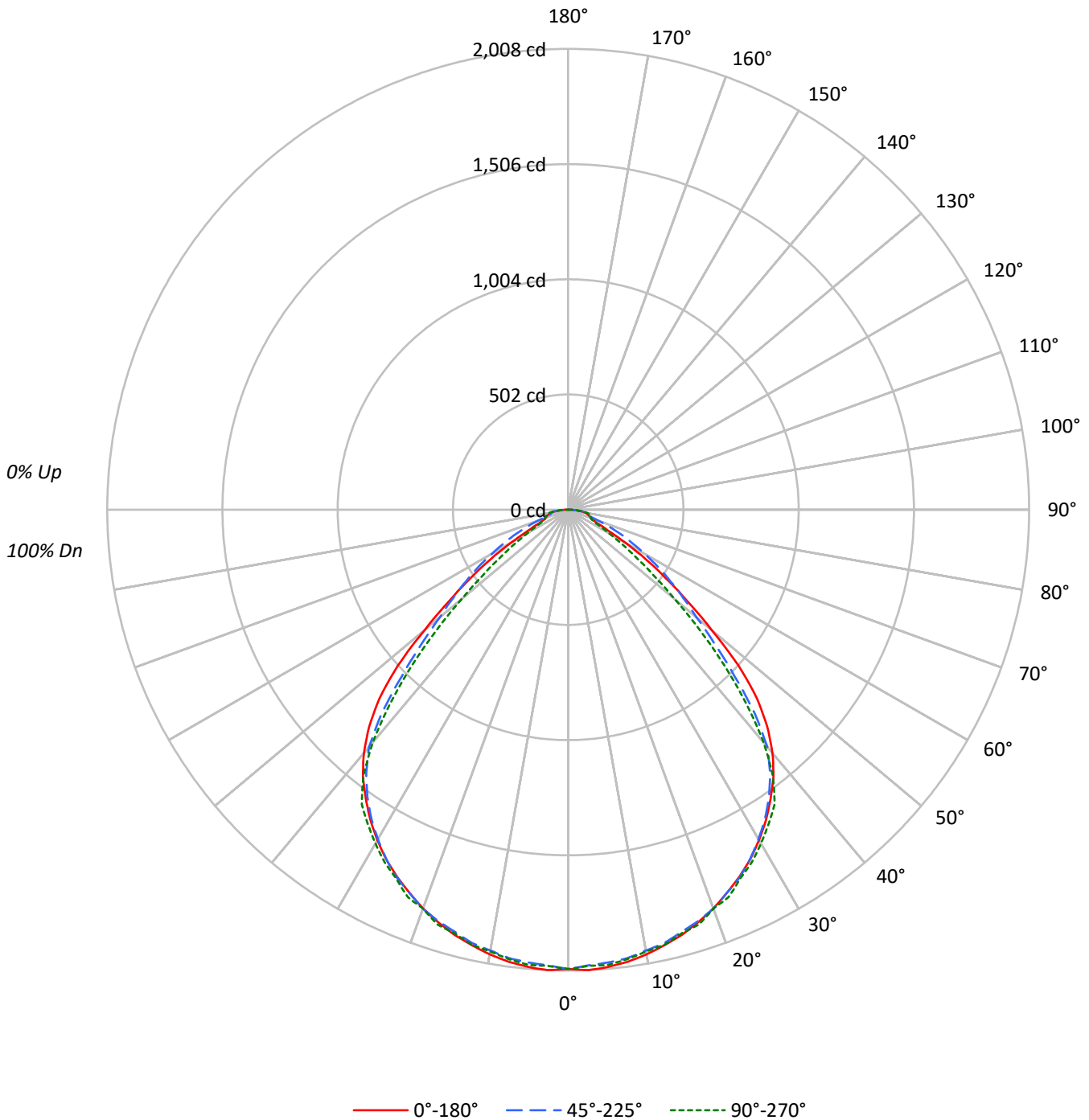
Input Watts (W): 30.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2693	2693	2693
5°	2701	2675	2689
10°	2688	2665	2671
15°	2670	2653	2662
20°	2647	2649	2648
25°	2619	2624	2632
30°	2583	2575	2609
35°	2524	2505	2575
40°	2432	2368	2326
45°	2214	1948	1838
50°	1708	1528	1263
55°	1214	1274	836
60°	769	1029	545
65°	446	810	399
70°	413	557	423
75°	475	425	504
80°	594	587	666
85°	647	685	712



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.6	4.5
10°-20°	539.4	13.0
20°-30°	813.9	19.6
30°-40°	955.4	23.0
40°-50°	804.3	19.4
50°-60°	456.9	11.0
60°-70°	228.0	5.5
70°-80°	119.6	2.9
80°-90°	49.8	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°	1541.9	37.1
0°-40°	2497.3	60.1
0°-60°	3758.5	90.4
0°-90°	4155.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4155.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2001	2001	2001	2001	2001	
5°	2000	1986	1980	1984	1991	190
15°	1917	1912	1905	1910	1911	541
25°	1764	1765	1767	1772	1773	813
35°	1537	1528	1525	1551	1568	960
45°	1164	1117	1024	1006	966	876
55°	517	553	543	468	356	471
65°	140	290	254	216	125	159
75°	91	141	82	123	97	97
85°	42	50	44	56	46	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	2008.4	1998.7	1987.7	1984.7	1989.8
5°	2000.0	1985.6	1980.5	1983.9	1990.7
7.5°	1986.8	1972.0	1971.2	1965.3	1975.4
10°	1967.4	1957.7	1950.5	1953.8	1955.1
12.5°	1942.8	1939.9	1934.4	1929.7	1941.1
15°	1917.0	1912.4	1904.8	1909.8	1911.1
17.5°	1884.0	1881.5	1880.2	1884.0	1895.0
20°	1848.9	1848.9	1850.2	1851.0	1849.3
22.5°	1807.0	1805.8	1807.5	1810.8	1826.9
25°	1764.3	1765.1	1767.3	1771.9	1773.2
27.5°	1716.9	1717.3	1716.5	1721.1	1732.1
30°	1662.3	1660.6	1657.3	1667.4	1679.3
32.5°	1603.1	1599.7	1595.9	1611.6	1624.3
35°	1536.7	1528.2	1525.2	1551.1	1567.6
37.5°	1468.6	1451.2	1444.9	1463.9	1466.0
40°	1384.8	1359.0	1348.4	1329.8	1324.3
42.5°	1284.1	1257.4	1200.3	1171.5	1151.2
45°	1163.5	1117.0	1023.9	1006.1	965.9
47.5°	1007.8	958.3	865.2	827.1	781.5
50°	816.1	787.4	729.8	682.4	603.3
52.5°	652.4	658.3	631.3	565.7	467.5
55°	517.4	553.4	543.3	468.4	356.2
57.5°	398.1	475.6	463.3	385.4	272.0
60°	285.6	407.4	382.5	317.3	202.7
62.5°	195.9	347.8	313.5	261.9	155.3
65°	140.0	290.2	254.3	215.8	125.2
67.5°	115.1	237.4	195.0	183.2	109.2
70°	104.9	191.2	141.7	159.9	107.5
72.5°	99.8	160.4	104.1	140.0	102.4
75°	91.4	140.9	81.7	122.7	96.9
77.5°	84.6	121.9	76.2	107.5	94.3
80°	76.6	96.5	75.7	91.0	85.9
82.5°	61.8	70.2	63.9	74.5	69.4
85°	41.9	49.9	44.4	56.3	46.1
87.5°	20.7	24.5	19.9	26.7	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)