

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: P475660

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475660
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-48-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: 4613.0 lumens
Efficiency: N/A
Efficacy: 139.8 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

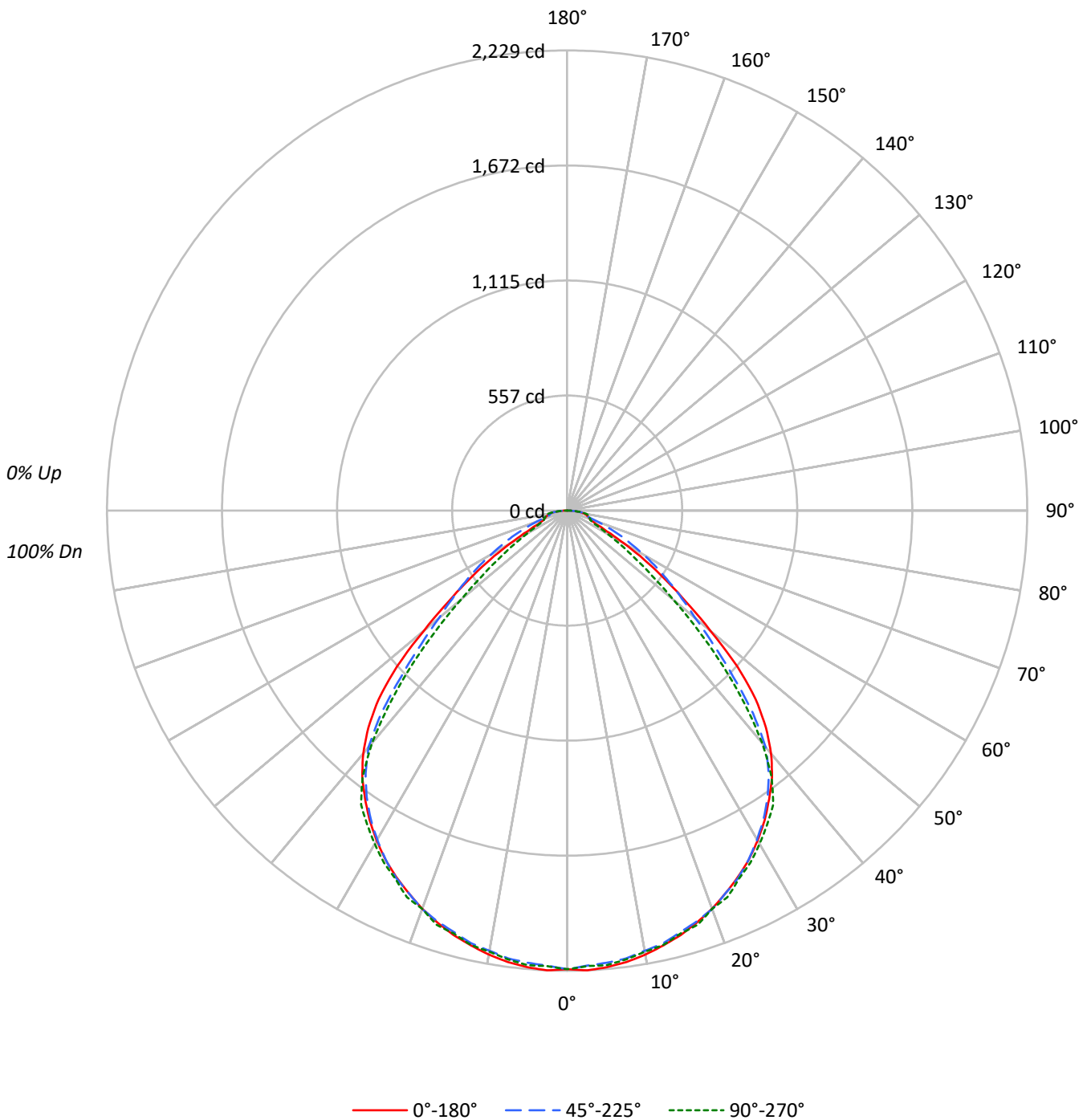
Input Watts (W): 33
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2989	2989	2989
5°	2998	2969	2984
10°	2984	2958	2965
15°	2964	2945	2955
20°	2939	2941	2939
25°	2907	2912	2922
30°	2867	2858	2896
35°	2802	2781	2858
40°	2700	2629	2582
45°	2457	2163	2040
50°	1896	1696	1402
55°	1347	1415	928
60°	853	1142	605
65°	495	898	443
70°	458	619	469
75°	527	471	559
80°	659	652	738
85°	718	761	790



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.3	4.5
10°-20°	598.8	13.0
20°-30°	903.5	19.6
30°-40°	1060.4	23.0
40°-50°	892.7	19.4
50°-60°	507.1	11.0
60°-70°	253.1	5.5
70°-80°	132.7	2.9
80°-90°	55.3	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°	1711.6	37.1
0°-40°	2772.0	60.1
0°-60°	4171.9	90.4
0°-90°	4613.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4613.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2221	2221	2221	2221	2221	
5°	2220	2204	2198	2202	2210	211
15°	2128	2123	2114	2120	2121	600
25°	1958	1959	1962	1967	1968	902
35°	1706	1696	1693	1722	1740	1065
45°	1292	1240	1136	1117	1072	973
55°	574	614	603	520	395	523
65°	155	322	282	240	139	177
75°	101	156	91	136	108	107
85°	46	55	49	62	51	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2221.4	2221.4	2221.4	2221.4	2221.4
2.5°	2229.3	2218.5	2206.3	2203.0	2208.7
5°	2220.0	2204.0	2198.3	2202.1	2209.6
7.5°	2205.4	2189.0	2188.0	2181.4	2192.7
10°	2183.8	2173.0	2165.0	2168.8	2170.2
12.5°	2156.6	2153.3	2147.2	2142.0	2154.7
15°	2127.9	2122.7	2114.3	2119.9	2121.3
17.5°	2091.3	2088.5	2087.0	2091.3	2103.5
20°	2052.3	2052.3	2053.7	2054.6	2052.8
22.5°	2005.8	2004.4	2006.3	2010.0	2027.9
25°	1958.4	1959.3	1961.7	1966.8	1968.2
27.5°	1905.8	1906.2	1905.3	1910.5	1922.7
30°	1845.2	1843.3	1839.6	1850.8	1864.0
32.5°	1779.4	1775.7	1771.5	1788.8	1802.9
35°	1705.7	1696.3	1693.0	1721.7	1740.0
37.5°	1630.1	1610.8	1603.8	1624.9	1627.3
40°	1537.1	1508.5	1496.7	1476.1	1469.9
42.5°	1425.3	1395.7	1332.3	1300.4	1277.9
45°	1291.5	1239.8	1136.5	1116.8	1072.2
47.5°	1118.7	1063.7	960.4	918.1	867.4
50°	905.9	874.0	810.1	757.5	669.7
52.5°	724.2	730.7	700.7	627.9	518.9
55°	574.4	614.3	603.0	519.9	395.4
57.5°	441.9	527.9	514.2	427.8	302.0
60°	317.0	452.3	424.5	352.2	225.0
62.5°	217.4	386.0	348.0	290.7	172.4
65°	155.4	322.2	282.2	239.5	139.0
67.5°	127.7	263.5	216.5	203.4	121.2
70°	116.5	212.3	157.3	177.5	119.3
72.5°	110.8	178.0	115.5	155.4	113.7
75°	101.4	156.4	90.6	136.2	107.5
77.5°	93.9	135.3	84.5	119.3	104.7
80°	85.0	107.1	84.1	101.0	95.3
82.5°	68.6	78.0	70.9	82.7	77.0
85°	46.5	55.4	49.3	62.5	51.2
87.5°	23.0	27.2	22.1	29.6	22.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)