

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: P476256

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476256
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-43-A19/156-UNV-L835-CD1-U
Description: GR 1'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: 4115.3 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.2
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

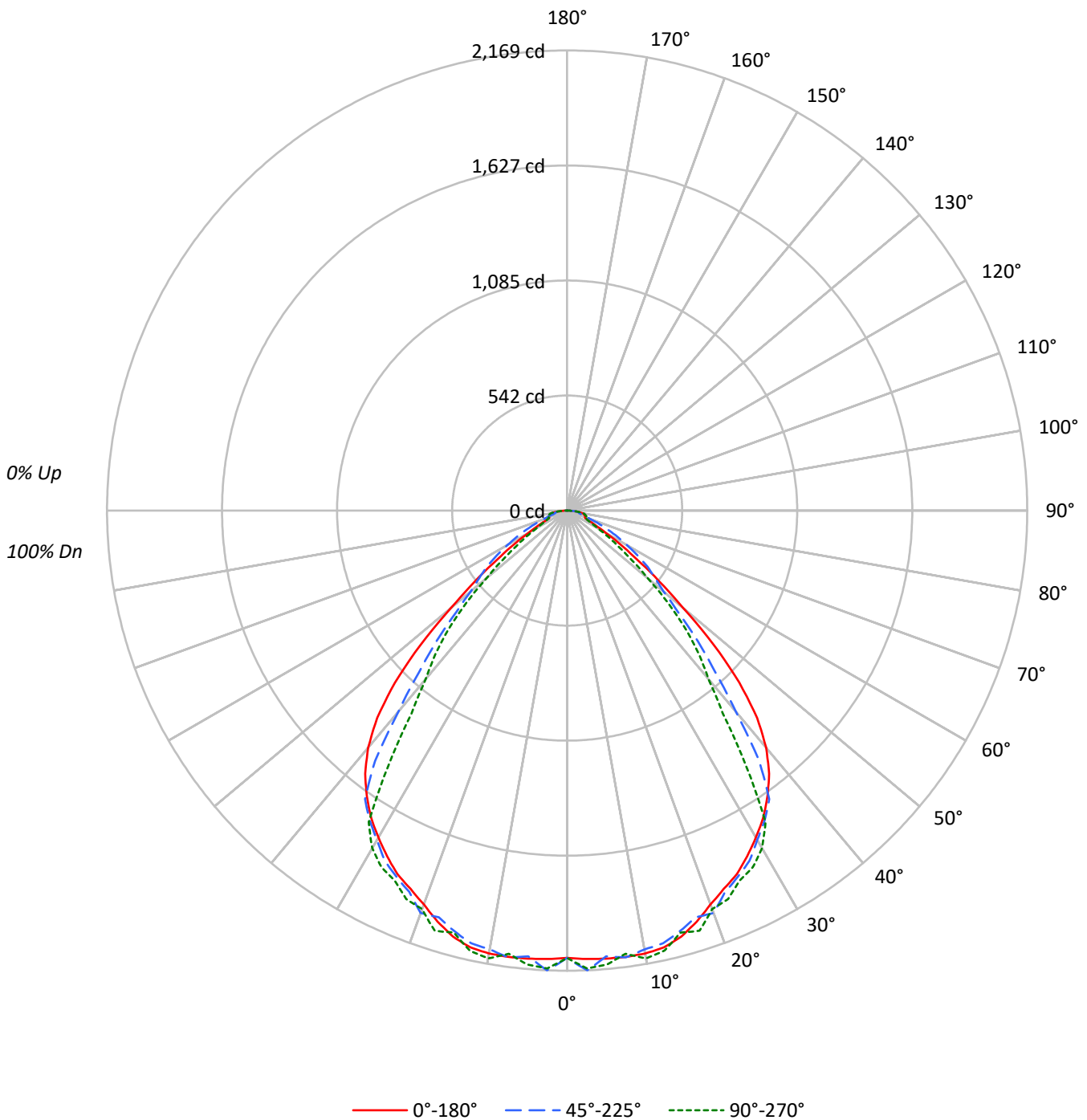
Input Watts (W): 33
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78
3	96	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	63	51	44	39	62	51	43	39	49	43	38	48	43	38	48	42	38	36
10	60	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5675	5675	5675
5°	5726	5697	5801
10°	5792	5739	5857
15°	5791	5719	5737
20°	5657	5780	5725
25°	5616	5654	5712
30°	5529	5569	5710
35°	5407	5456	4840
40°	5123	4344	3640
45°	4370	3312	3017
50°	2985	2480	2083
55°	1880	2173	1384
60°	1136	1739	893
65°	713	1344	686
70°	712	899	729
75°	896	716	941
80°	1168	868	1235
85°	1130	1198	1198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.5	4.9
10°-20°	583.2	14.2
20°-30°	880.2	21.4
30°-40°	981.7	23.9
40°-50°	713.9	17.3
50°-60°	391.5	9.5
60°-70°	199.1	4.8
70°-80°	117.0	2.8
80°-90°	45.2	1.1
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°	1666.8	40.5
0°-40°	2648.6	64.4
0°-60°	3754.0	91.2
0°-90°	4115.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4115.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2109	2109	2109	2109	2109	
5°	2120	2165	2109	2148	2148	202
15°	2079	2070	2053	2096	2059	584
25°	1891	1891	1904	1941	1924	869
35°	1646	1644	1661	1549	1473	1024
45°	1148	1060	870	808	793	863
55°	401	496	463	414	295	378
65°	112	239	211	218	108	125
75°	86	153	69	138	90	90
85°	37	47	39	50	39	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2108.9	2108.9	2108.9	2108.9	2108.9
2.5°	2115.4	2158.5	2169.2	2169.2	2160.6
5°	2119.7	2164.9	2108.9	2147.7	2147.7
7.5°	2121.8	2128.3	2124.0	2132.6	2106.8
10°	2119.7	2104.6	2100.3	2154.2	2143.4
12.5°	2108.9	2050.8	2089.5	2072.3	2124.0
15°	2078.8	2070.1	2052.9	2096.0	2059.4
17.5°	2031.4	2035.7	2009.8	2031.4	2076.6
20°	1975.4	1994.8	2018.5	2024.9	1999.1
22.5°	1930.1	1936.6	1945.2	1966.8	1981.8
25°	1891.4	1891.4	1904.3	1940.9	1923.7
27.5°	1837.5	1841.8	1861.2	1872.0	1895.7
30°	1779.3	1783.6	1792.3	1841.8	1837.5
32.5°	1719.0	1723.3	1731.9	1764.3	1740.6
35°	1645.8	1643.6	1660.9	1548.8	1473.4
37.5°	1563.9	1561.8	1486.4	1275.3	1204.2
40°	1458.4	1449.8	1236.5	1070.6	1036.2
42.5°	1324.8	1288.2	1034.0	937.1	919.8
45°	1148.2	1059.8	870.3	807.8	792.7
47.5°	939.2	872.4	708.7	680.7	644.1
50°	713.0	717.3	592.4	573.0	497.6
52.5°	545.0	596.7	521.3	484.7	385.6
55°	400.7	495.5	463.1	413.6	295.1
57.5°	297.3	411.4	392.1	355.4	226.2
60°	211.1	342.5	323.1	305.9	165.9
62.5°	152.9	286.5	265.0	258.5	127.1
65°	112.0	239.1	211.1	217.6	107.7
67.5°	90.5	200.3	159.4	189.6	92.6
70°	90.5	178.8	114.2	168.0	92.6
72.5°	90.5	168.0	90.5	152.9	96.9
75°	86.2	152.9	68.9	137.9	90.5
77.5°	79.7	124.9	58.2	118.5	86.2
80°	75.4	92.6	56.0	92.6	79.7
82.5°	58.2	64.6	51.7	68.9	62.5
85°	36.6	47.4	38.8	49.5	38.8
87.5°	17.2	25.8	17.2	25.8	17.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)