

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: P291423

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291423
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3884.0 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

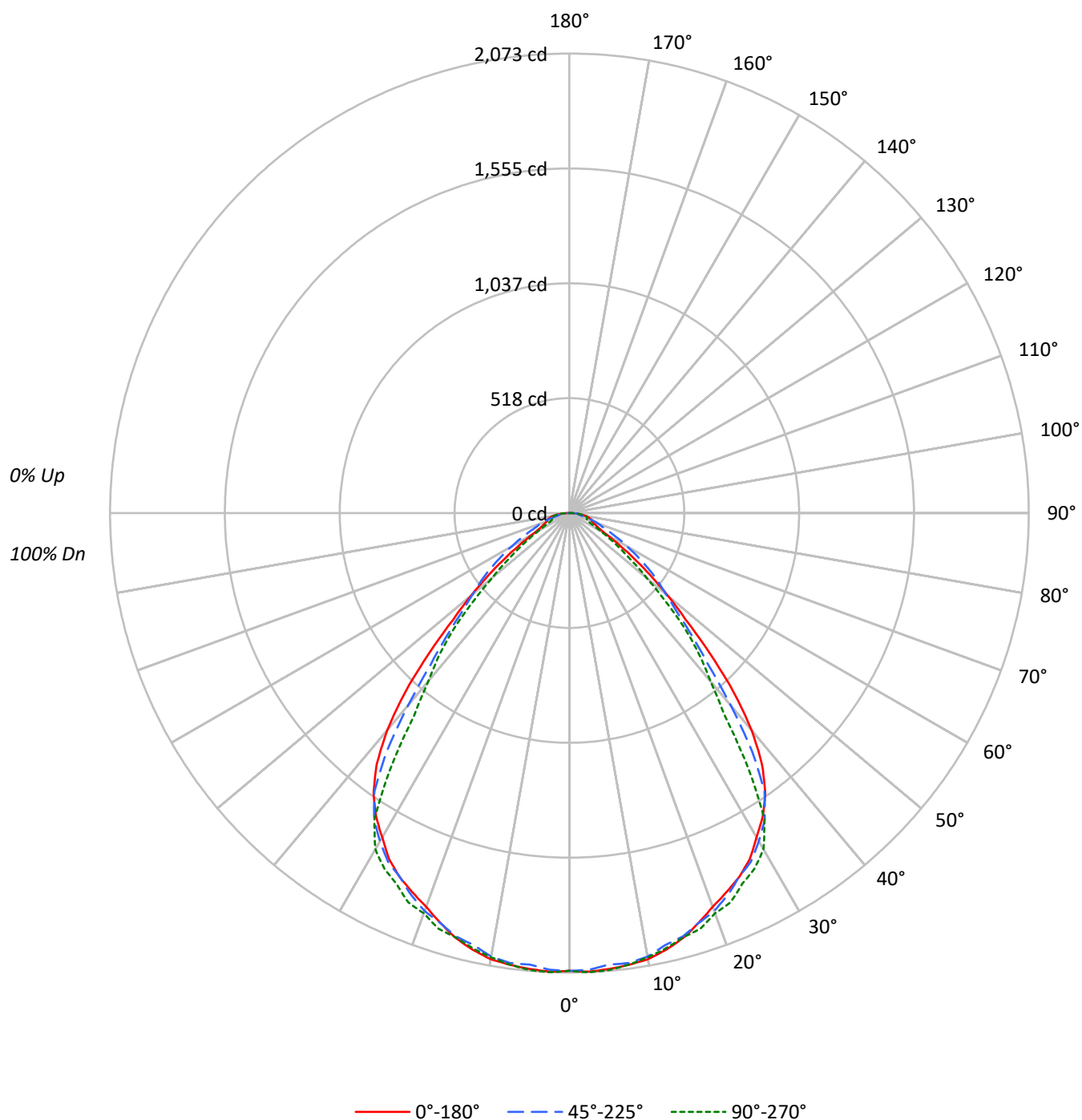
Input Watts (W): 33.852
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20				
RC	80				70					50					30				0
RW	70	50	30	10	70	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		100
1	111	107	104	100	108	105	102	99		101	98	96			97	95	93		88
2	103	96	90	86	100	94	89	85		91	87	83			88	84	81		77
3	95	87	80	74	93	85	79	74		82	77	73			80	75	71		68
4	89	79	71	65	87	77	70	65		75	69	64			73	68	63		61
5	83	71	64	58	81	70	63	58		68	62	57			67	61	57		54
6	77	65	58	52	75	64	57	52		63	56	51			61	55	51		49
7	72	60	52	47	70	59	52	47		58	51	46			56	51	46		44
8	67	55	48	43	66	55	47	42		53	47	42			52	46	42		40
9	63	51	44	39	62	51	44	39		50	43	39			49	43	38		37
10	60	48	40	36	58	47	40	36		46	40	35			45	39	35		34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5558	5558	5558
5°	5577	5524	5589
10°	5585	5551	5561
15°	5529	5509	5521
20°	5413	5472	5502
25°	5380	5377	5480
30°	5249	5313	5442
35°	5062	5041	4632
40°	4494	3966	3473
45°	3411	2967	2808
50°	2419	2375	1906
55°	1656	2027	1310
60°	1024	1617	876
65°	844	1245	634
70°	840	1084	651
75°	1007	777	869
80°	1158	716	1088
85°	1099	1263	1235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.0	5.0
10°-20°	559.3	14.4
20°-30°	841.1	21.7
30°-40°	917.0	23.6
40°-50°	642.1	16.5
50°-60°	363.4	9.4
60°-70°	198.9	5.1
70°-80°	120.5	3.1
80°-90°	45.7	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°	1596.4	41.1
0°-40°	2513.4	64.7
0°-60°	3518.9	90.6
0°-90°	3884.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3884.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2065	2065	2065	2065	2065	
5°	2064	2061	2045	2069	2069	196
15°	1984	1979	1977	2006	1982	558
25°	1812	1816	1811	1853	1846	832
35°	1541	1534	1535	1456	1410	949
45°	896	935	780	770	738	696
55°	353	422	432	428	279	323
65°	132	218	196	247	100	136
75°	97	140	75	147	84	100
85°	36	58	41	50	40	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2065.4	2065.4	2065.4	2065.4	2065.4
2.5°	2070.7	2068.0	2061.8	2074.3	2073.4
5°	2064.5	2060.9	2044.9	2068.9	2068.9
7.5°	2055.6	2046.7	2047.6	2060.9	2054.7
10°	2044.0	2028.9	2031.6	2035.1	2035.1
12.5°	2017.3	2003.1	1996.0	2007.6	2011.1
15°	1984.5	1979.1	1977.3	2005.8	1981.8
17.5°	1938.2	1949.8	1939.1	1962.2	1965.8
20°	1890.2	1912.4	1910.7	1926.7	1921.3
22.5°	1851.1	1865.3	1865.3	1884.9	1900.9
25°	1812.0	1815.5	1811.1	1852.9	1845.8
27.5°	1761.3	1758.6	1772.8	1794.2	1808.4
30°	1689.3	1690.2	1709.7	1738.2	1751.5
32.5°	1623.5	1615.5	1639.5	1651.9	1637.7
35°	1540.8	1533.7	1534.6	1456.3	1410.1
37.5°	1427.9	1434.1	1352.3	1209.2	1148.7
40°	1279.4	1291.9	1129.1	1022.5	988.7
42.5°	1099.8	1103.4	925.5	890.9	868.6
45°	896.2	935.3	779.7	770.0	737.9
47.5°	710.4	783.3	653.5	659.7	583.2
50°	577.9	650.8	567.2	569.9	455.2
52.5°	457.0	528.1	500.6	492.6	357.4
55°	353.0	422.3	432.1	428.5	279.2
57.5°	259.6	334.3	362.7	376.1	215.2
60°	190.3	273.0	300.5	327.2	162.7
62.5°	151.1	236.5	246.3	285.4	126.3
65°	132.5	217.8	195.6	247.2	99.6
67.5°	118.2	207.2	159.1	218.7	87.1
70°	106.7	186.7	137.8	195.6	82.7
72.5°	106.7	163.6	108.5	173.4	83.6
75°	96.9	139.6	74.7	146.7	83.6
77.5°	86.2	119.1	56.0	119.1	78.2
80°	74.7	93.4	46.2	91.6	70.2
82.5°	55.1	70.2	40.0	68.5	56.9
85°	35.6	57.8	40.9	49.8	40.0
87.5°	16.9	29.3	25.8	24.9	20.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)