

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: P291426

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291426
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-5000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4095.0 lumens
Efficiency: N/A
Efficacy: 119.0 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

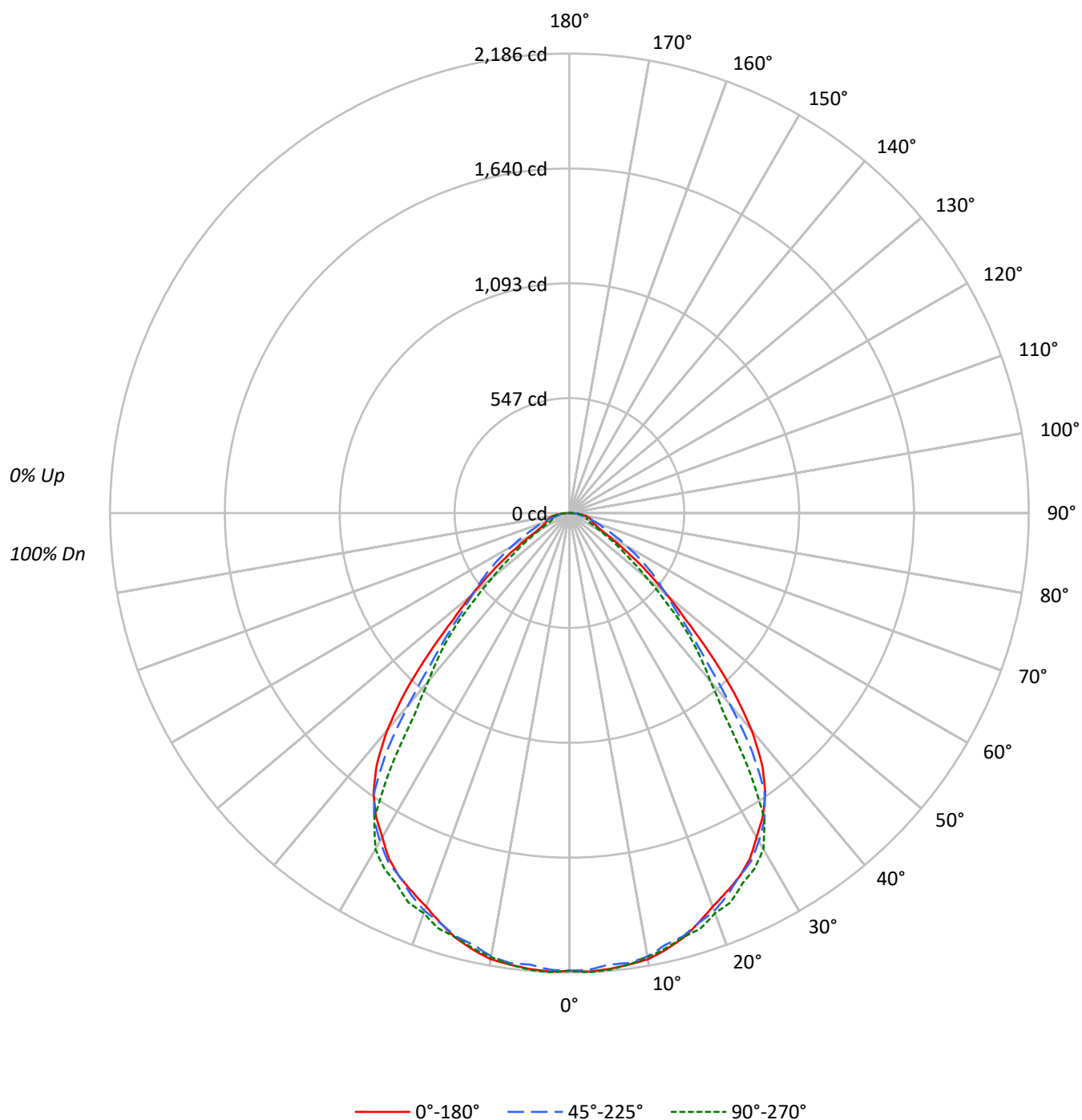
Input Watts (W): 34.41
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291426

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P291426

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-5000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	104	100	108	105	102	99	101	98	96		97	95	93		93
2	103	96	90	86	100	94	89	85	91	87	83		88	84	81		85
3	95	87	80	74	93	85	79	74	82	77	73		80	75	71		77
4	89	79	71	65	87	77	70	65	75	69	64		73	68	63		71
5	83	71	64	58	81	70	63	58	68	62	57		67	61	57		65
6	77	65	58	52	75	64	57	52	63	56	51		61	55	51		60
7	72	60	52	47	70	59	52	47	58	51	46		56	51	46		55
8	67	55	48	43	66	55	47	42	53	47	42		52	46	42		51
9	63	51	44	39	62	51	44	39	50	43	39		49	43	38		48
10	60	48	40	36	58	47	40	36	46	40	35		45	39	35		44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5860	5860	5860
5°	5880	5824	5892
10°	5889	5853	5863
15°	5829	5808	5821
20°	5707	5769	5801
25°	5672	5670	5778
30°	5534	5601	5738
35°	5337	5315	4884
40°	4738	4182	3662
45°	3596	3129	2961
50°	2551	2504	2009
55°	1746	2137	1381
60°	1080	1705	923
65°	890	1313	669
70°	885	1143	686
75°	1063	818	916
80°	1220	755	1148
85°	1158	1331	1303



TEST NUMBER: P291426

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.6	5.0
10°-20°	589.7	14.4
20°-30°	886.8	21.7
30°-40°	966.8	23.6
40°-50°	676.9	16.5
50°-60°	383.2	9.4
60°-70°	209.7	5.1
70°-80°	127.1	3.1
80°-90°	48.2	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°	1683.2	41.1
0°-40°	2649.9	64.7
0°-60°	3710.1	90.6
0°-90°	4095.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4095.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2178	2178	2178	2178	2178	
5°	2177	2173	2156	2181	2181	207
15°	2092	2087	2085	2115	2089	588
25°	1910	1914	1910	1954	1946	877
35°	1624	1617	1618	1535	1487	1001
45°	945	986	822	812	778	734
55°	372	445	456	452	294	340
65°	140	230	206	261	105	144
75°	102	147	79	155	88	106
85°	38	61	43	52	42	42
90°	0	0	0	0	0	



TEST NUMBER: P291426

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2177.6	2177.6	2177.6	2177.6	2177.6
2.5°	2183.2	2180.4	2173.8	2186.9	2186.0
5°	2176.6	2172.9	2156.0	2181.3	2181.3
7.5°	2167.3	2157.9	2158.8	2172.9	2166.3
10°	2155.1	2139.1	2141.9	2145.7	2145.7
12.5°	2126.9	2111.9	2104.4	2116.6	2120.4
15°	2092.3	2086.6	2084.8	2114.8	2089.4
17.5°	2043.5	2055.7	2044.5	2068.8	2072.6
20°	1992.9	2016.3	2014.5	2031.3	2025.7
22.5°	1951.7	1966.6	1966.6	1987.3	2004.1
25°	1910.4	1914.2	1909.5	1953.5	1946.0
27.5°	1857.0	1854.2	1869.2	1891.7	1906.7
30°	1781.0	1782.0	1802.6	1832.6	1846.7
32.5°	1711.7	1703.2	1728.6	1741.7	1726.7
35°	1624.5	1617.0	1617.9	1535.4	1486.7
37.5°	1505.5	1512.0	1425.8	1274.9	1211.1
40°	1348.9	1362.0	1190.5	1078.0	1042.4
42.5°	1159.6	1163.3	975.8	939.3	915.8
45°	944.9	986.1	822.1	811.8	778.0
47.5°	749.0	825.8	689.0	695.5	614.9
50°	609.3	686.2	598.1	600.9	479.9
52.5°	481.8	556.8	527.8	519.3	376.8
55°	372.1	445.3	455.6	451.8	294.3
57.5°	273.7	352.5	382.5	396.5	226.8
60°	200.6	287.8	316.8	345.0	171.5
62.5°	159.4	249.3	259.7	300.9	133.1
65°	139.7	229.7	206.2	260.6	105.0
67.5°	124.7	218.4	167.8	230.6	91.9
70°	112.5	196.9	145.3	206.2	87.2
72.5°	112.5	172.5	114.4	182.8	88.1
75°	102.2	147.2	78.7	154.7	88.1
77.5°	90.9	125.6	59.1	125.6	82.5
80°	78.7	98.4	48.7	96.6	74.1
82.5°	58.1	74.1	42.2	72.2	60.0
85°	37.5	60.9	43.1	52.5	42.2
87.5°	17.8	30.9	27.2	26.2	21.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)