

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: P291428

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291428
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-5700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4146.0 lumens
Efficiency: N/A
Efficacy: 119.8 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

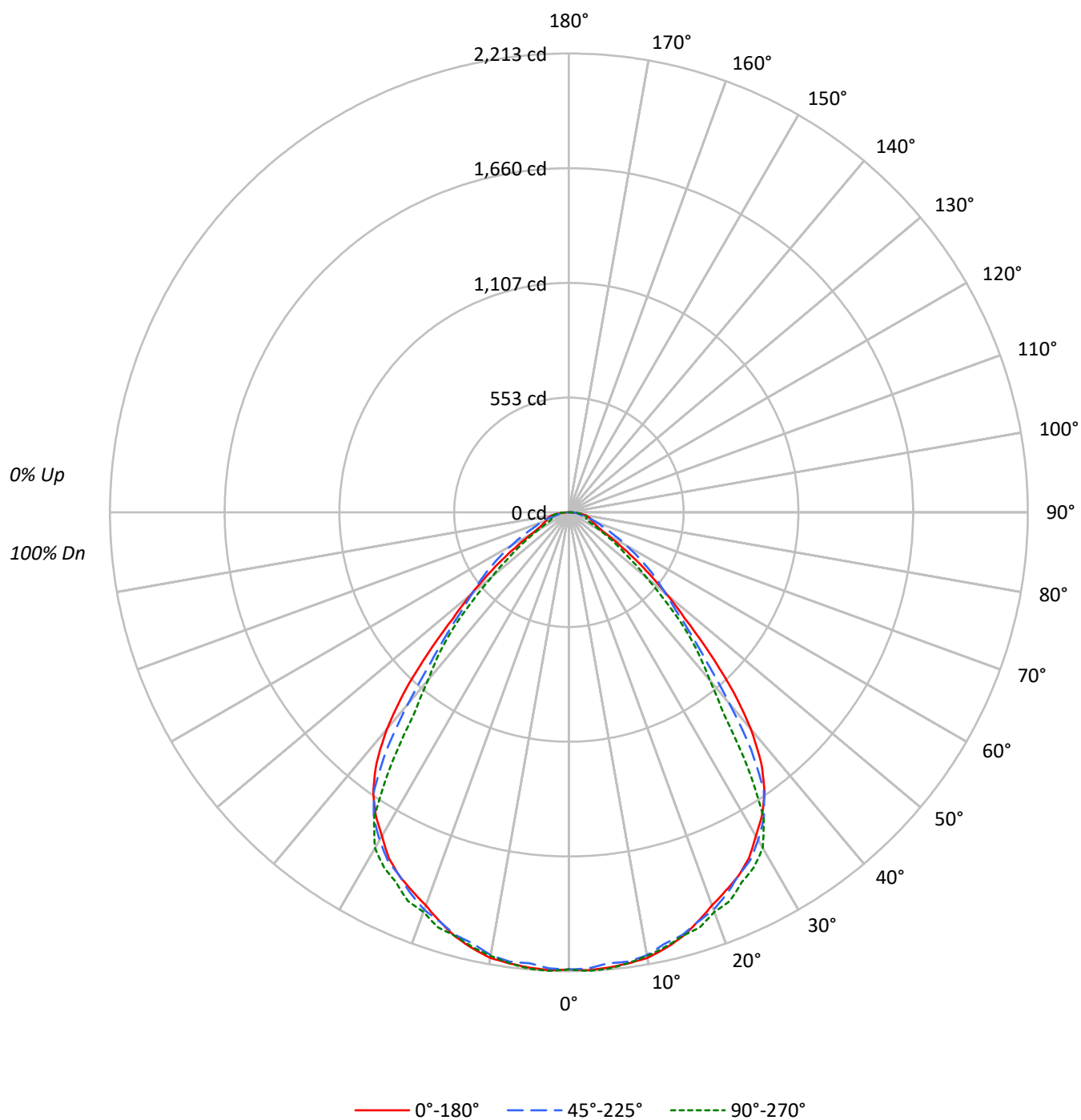
Input Watts (W): 34.596
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291428

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-5700K

Luminous Intensity Polar Plot





TEST NUMBER: P291428

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-5700K

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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77		
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	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	51	46	55	50	46	44		
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40		
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37		
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5933	5933	5933
5°	5953	5897	5966
10°	5962	5926	5936
15°	5901	5880	5894
20°	5778	5840	5873
25°	5743	5740	5850
30°	5603	5671	5810
35°	5403	5381	4945
40°	4797	4234	3707
45°	3641	3167	2998
50°	2583	2535	2034
55°	1768	2164	1398
60°	1093	1727	935
65°	900	1330	677
70°	896	1157	695
75°	1075	829	927
80°	1235	766	1162
85°	1173	1349	1318



TEST NUMBER: P291428

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.2	5.0
10°-20°	597.1	14.4
20°-30°	897.9	21.7
30°-40°	978.8	23.6
40°-50°	685.4	16.5
50°-60°	388.0	9.4
60°-70°	212.3	5.1
70°-80°	128.7	3.1
80°-90°	48.8	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°	1704.1	41.1
0°-40°	2682.9	64.7
0°-60°	3756.3	90.6
0°-90°	4146.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4146.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2205	2205	2205	2205	2205	
5°	2204	2200	2183	2208	2208	210
15°	2118	2113	2111	2141	2116	596
25°	1934	1938	1933	1978	1970	888
35°	1645	1637	1638	1555	1505	1013
45°	957	998	832	822	788	743
55°	377	451	461	458	298	344
65°	141	232	209	264	106	145
75°	103	149	80	157	89	107
85°	38	62	44	53	43	42
90°	0	0	0	0	0	



TEST NUMBER: P291428

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2204.7	2204.7	2204.7	2204.7	2204.7
2.5°	2210.4	2207.5	2200.9	2214.2	2213.2
5°	2203.7	2199.9	2182.9	2208.5	2208.5
7.5°	2194.2	2184.8	2185.7	2199.9	2193.3
10°	2181.9	2165.8	2168.6	2172.4	2172.4
12.5°	2153.4	2138.2	2130.7	2143.0	2146.8
15°	2118.3	2112.6	2110.7	2141.1	2115.5
17.5°	2069.0	2081.3	2069.9	2094.6	2098.4
20°	2017.7	2041.4	2039.5	2056.6	2050.9
22.5°	1976.0	1991.1	1991.1	2012.0	2029.1
25°	1934.2	1938.0	1933.2	1977.9	1970.3
27.5°	1880.1	1877.3	1892.4	1915.2	1930.4
30°	1803.2	1804.2	1825.1	1855.4	1869.7
32.5°	1733.0	1724.5	1750.1	1763.4	1748.2
35°	1644.7	1637.1	1638.1	1554.6	1505.2
37.5°	1524.2	1530.8	1443.5	1290.7	1226.2
40°	1365.7	1379.0	1205.3	1091.4	1055.4
42.5°	1174.0	1177.8	988.0	951.0	927.2
45°	956.7	998.4	832.3	821.9	787.7
47.5°	758.3	836.1	697.6	704.2	622.6
50°	616.9	694.7	605.5	608.4	485.9
52.5°	487.8	563.7	534.3	525.8	381.5
55°	376.8	450.8	461.2	457.5	298.0
57.5°	277.1	356.8	387.2	401.5	229.7
60°	203.1	291.4	320.8	349.3	173.7
62.5°	161.3	252.5	262.9	304.7	134.8
65°	141.4	232.5	208.8	263.8	106.3
67.5°	126.2	221.1	169.9	233.5	93.0
70°	113.9	199.3	147.1	208.8	88.3
72.5°	113.9	174.6	115.8	185.1	89.2
75°	103.4	149.0	79.7	156.6	89.2
77.5°	92.1	127.2	59.8	127.2	83.5
80°	79.7	99.7	49.4	97.8	75.0
82.5°	58.8	75.0	42.7	73.1	60.7
85°	38.0	61.7	43.7	53.1	42.7
87.5°	18.0	31.3	27.5	26.6	21.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)