

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: P291466

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291466
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-L93050-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3651.0 lumens
Efficiency: N/A
Efficacy: 105.8 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

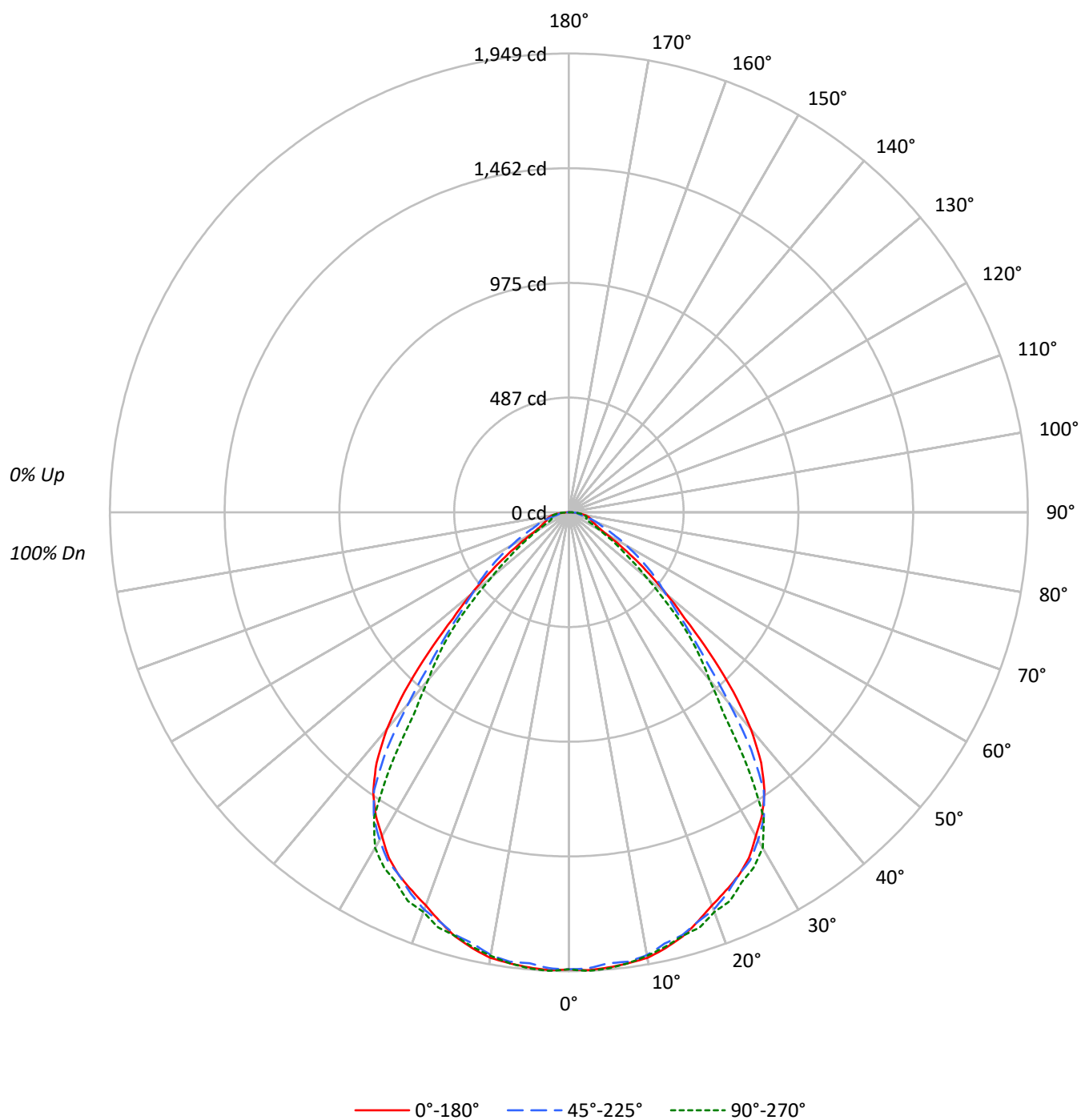
Input Watts (W): 34.503
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	5225	5225	5225
5°	5242	5192	5253
10°	5250	5218	5227
15°	5197	5178	5190
20°	5088	5143	5172
25°	5057	5055	5152
30°	4934	4994	5116
35°	4758	4739	4354
40°	4225	3729	3265
45°	3206	2790	2640
50°	2274	2232	1791
55°	1557	1906	1231
60°	963	1520	823
65°	793	1171	596
70°	789	1019	611
75°	947	730	817
80°	1088	674	1023
85°	1031	1186	1161



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.2	5.0
10°-20°	525.8	14.4
20°-30°	790.7	21.7
30°-40°	862.0	23.6
40°-50°	603.6	16.5
50°-60°	341.6	9.4
60°-70°	186.9	5.1
70°-80°	113.3	3.1
80°-90°	43.0	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°	1500.6	41.1
0°-40°	2362.6	64.7
0°-60°	3307.8	90.6
0°-90°	3651.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3651.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1942	1942	1942	1942	1942	
5°	1941	1937	1922	1945	1945	185
15°	1865	1860	1859	1886	1863	525
25°	1703	1707	1702	1742	1735	782
35°	1448	1442	1442	1369	1326	892
45°	842	879	733	724	694	654
55°	332	397	406	403	262	303
65°	124	205	184	232	94	128
75°	91	131	70	138	79	94
85°	33	54	38	47	38	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1941.5	1941.5	1941.5	1941.5	1941.5
2.5°	1946.5	1944.0	1938.1	1949.8	1949.0
5°	1940.6	1937.3	1922.2	1944.8	1944.8
7.5°	1932.3	1923.9	1924.7	1937.3	1931.4
10°	1921.4	1907.2	1909.7	1913.0	1913.0
12.5°	1896.3	1883.0	1876.3	1887.1	1890.5
15°	1865.4	1860.4	1858.7	1885.5	1862.9
17.5°	1821.9	1832.8	1822.8	1844.5	1847.9
20°	1776.8	1797.7	1796.0	1811.1	1806.1
22.5°	1740.0	1753.4	1753.4	1771.8	1786.8
25°	1703.3	1706.6	1702.4	1741.7	1735.0
27.5°	1655.6	1653.1	1666.5	1686.6	1699.9
30°	1587.9	1588.8	1607.2	1633.9	1646.4
32.5°	1526.1	1518.6	1541.1	1552.8	1539.5
35°	1448.4	1441.7	1442.5	1369.0	1325.5
37.5°	1342.2	1348.1	1271.2	1136.6	1079.8
40°	1202.7	1214.4	1061.4	961.1	929.4
42.5°	1033.8	1037.2	870.0	837.4	816.5
45°	842.4	879.2	733.0	723.8	693.7
47.5°	667.8	736.3	614.3	620.1	548.3
50°	543.2	611.8	533.2	535.7	427.9
52.5°	429.6	496.4	470.5	463.0	336.0
55°	331.8	397.0	406.2	402.8	262.4
57.5°	244.0	314.2	341.0	353.5	202.3
60°	178.9	256.6	282.5	307.6	152.9
62.5°	142.1	222.3	231.5	268.3	118.7
65°	124.5	204.8	183.9	232.3	93.6
67.5°	111.2	194.7	149.6	205.6	81.9
70°	100.3	175.5	129.5	183.9	77.7
72.5°	100.3	153.8	102.0	163.0	78.6
75°	91.1	131.2	70.2	137.9	78.6
77.5°	81.1	112.0	52.7	112.0	73.5
80°	70.2	87.8	43.5	86.1	66.0
82.5°	51.8	66.0	37.6	64.4	53.5
85°	33.4	54.3	38.4	46.8	37.6
87.5°	15.9	27.6	24.2	23.4	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)