

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: P291421

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291421
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-2700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3649.0 lumens
Efficiency: N/A
Efficacy: 108.4 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

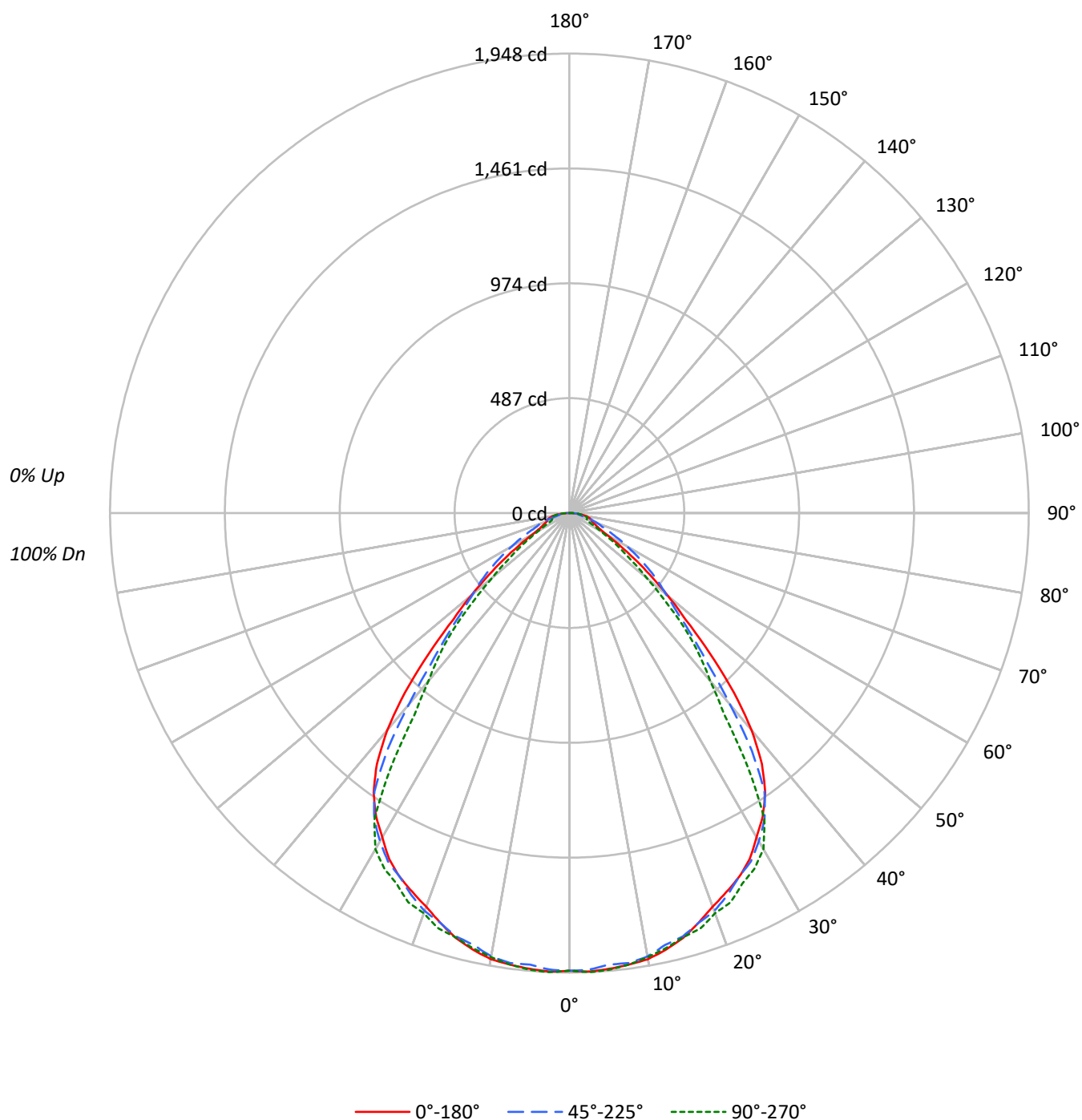
Input Watts (W): 33.666
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5222	5222	5222
5°	5239	5190	5250
10°	5247	5216	5225
15°	5194	5175	5187
20°	5085	5141	5169
25°	5054	5052	5149
30°	4932	4991	5113
35°	4755	4736	4352
40°	4222	3726	3263
45°	3204	2788	2638
50°	2273	2231	1791
55°	1556	1905	1231
60°	962	1519	823
65°	793	1170	596
70°	788	1019	611
75°	946	730	816
80°	1088	673	1023
85°	1031	1186	1161



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.1	5.0
10°-20°	525.5	14.4
20°-30°	790.2	21.7
30°-40°	861.5	23.6
40°-50°	603.2	16.5
50°-60°	341.5	9.4
60°-70°	186.8	5.1
70°-80°	113.2	3.1
80°-90°	42.9	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°	1499.8	41.1
0°-40°	2361.3	64.7
0°-60°	3306.0	90.6
0°-90°	3649.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3649.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1940	1940	1940	1940	1940	
5°	1940	1936	1921	1944	1944	185
15°	1864	1859	1858	1884	1862	524
25°	1702	1706	1702	1741	1734	782
35°	1448	1441	1442	1368	1325	892
45°	842	879	733	723	693	654
55°	332	397	406	403	262	303
65°	124	205	184	232	94	128
75°	91	131	70	138	78	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°	1940.4	1940.4	1940.4	1940.4	1940.4
2.5°	1945.4	1942.9	1937.1	1948.7	1947.9
5°	1939.6	1936.2	1921.2	1943.7	1943.7
7.5°	1931.2	1922.9	1923.7	1936.2	1930.4
10°	1920.3	1906.1	1908.7	1912.0	1912.0
12.5°	1895.3	1881.9	1875.2	1886.1	1889.4
15°	1864.4	1859.4	1857.7	1884.4	1861.9
17.5°	1820.9	1831.8	1821.8	1843.5	1846.8
20°	1775.8	1796.7	1795.1	1810.1	1805.1
22.5°	1739.1	1752.5	1752.5	1770.8	1785.9
25°	1702.3	1705.7	1701.5	1740.8	1734.1
27.5°	1654.7	1652.2	1665.6	1685.6	1699.0
30°	1587.1	1587.9	1606.3	1633.0	1645.5
32.5°	1525.3	1517.7	1540.3	1552.0	1538.6
35°	1447.6	1440.9	1441.7	1368.2	1324.8
37.5°	1341.5	1347.3	1270.5	1136.0	1079.2
40°	1202.0	1213.7	1060.8	960.6	928.9
42.5°	1033.3	1036.6	869.5	837.0	816.1
45°	842.0	878.7	732.6	723.4	693.3
47.5°	667.4	735.9	613.9	619.8	548.0
50°	542.9	611.4	532.9	535.4	427.7
52.5°	429.3	496.2	470.3	462.8	335.8
55°	331.6	396.8	406.0	402.6	262.3
57.5°	243.9	314.1	340.8	353.3	202.1
60°	178.8	256.4	282.3	307.4	152.9
62.5°	142.0	222.2	231.4	268.1	118.6
65°	124.5	204.6	183.8	232.2	93.6
67.5°	111.1	194.6	149.5	205.5	81.9
70°	100.2	175.4	129.5	183.8	77.7
72.5°	100.2	153.7	101.9	162.9	78.5
75°	91.0	131.1	70.2	137.8	78.5
77.5°	81.0	111.9	52.6	111.9	73.5
80°	70.2	87.7	43.4	86.0	66.0
82.5°	51.8	66.0	37.6	64.3	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)