

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: P291416

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291416
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-LD5-36-A19/156-UNV-L82765-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3610.0 lumens
Efficiency: N/A
Efficacy: 120.9 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

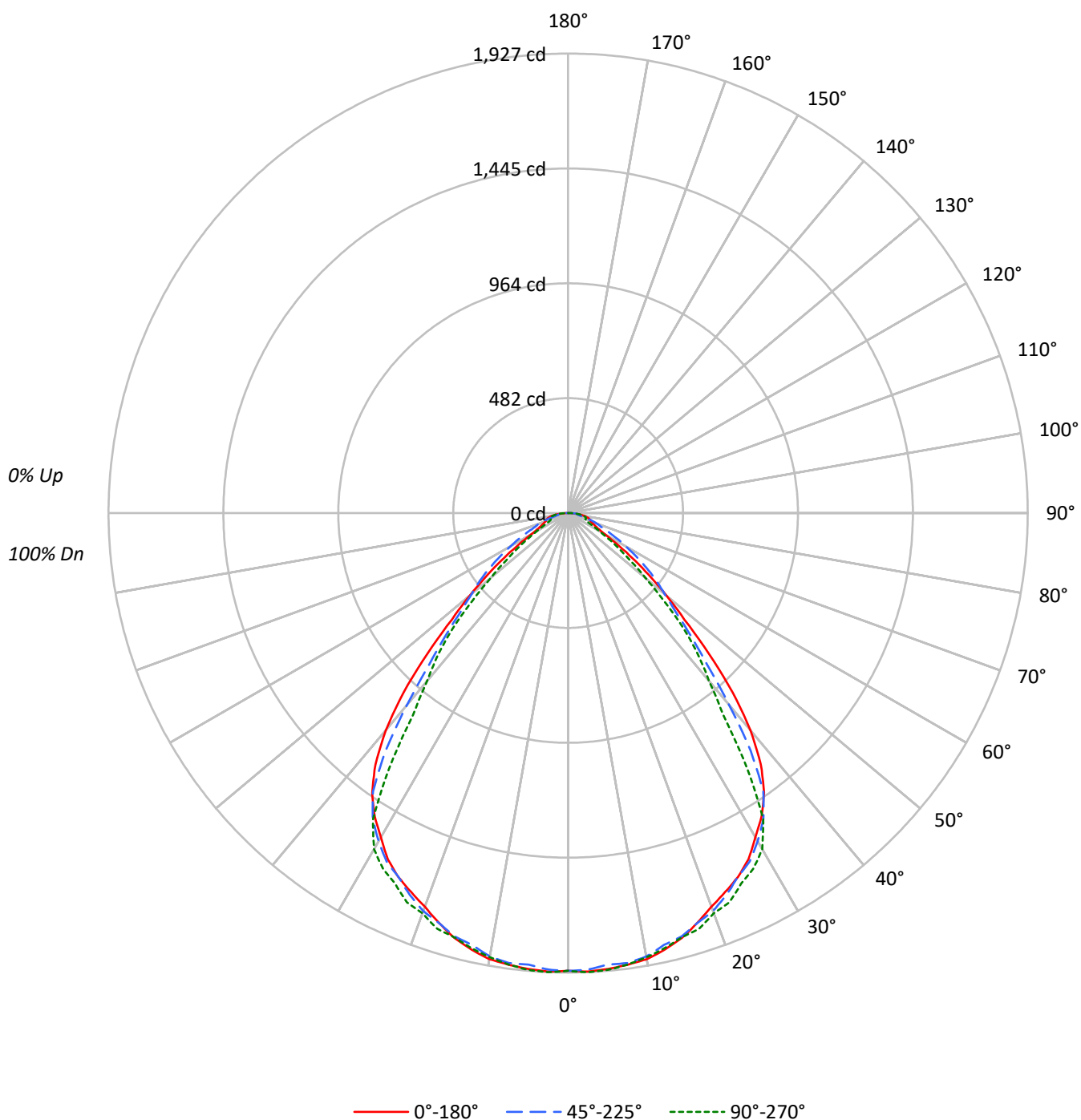
Input Watts (W): 29.853
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5166	5166	5166
5°	5183	5134	5195
10°	5191	5160	5169
15°	5139	5120	5132
20°	5031	5086	5114
25°	5000	4998	5094
30°	4879	4938	5058
35°	4705	4686	4305
40°	4177	3687	3228
45°	3170	2758	2610
50°	2249	2207	1771
55°	1539	1884	1217
60°	952	1503	814
65°	784	1158	590
70°	780	1008	605
75°	937	722	808
80°	1075	666	1012
85°	1022	1173	1149



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.1	5.0
10°-20°	519.9	14.4
20°-30°	781.8	21.7
30°-40°	852.3	23.6
40°-50°	596.8	16.5
50°-60°	337.8	9.4
60°-70°	184.8	5.1
70°-80°	112.0	3.1
80°-90°	42.5	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°	1483.8	41.1
0°-40°	2336.1	64.7
0°-60°	3270.7	90.6
0°-90°	3610.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3610.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1920	1920	1920	1920	1920	
5°	1919	1916	1901	1923	1923	183
15°	1844	1840	1838	1864	1842	519
25°	1684	1687	1683	1722	1716	773
35°	1432	1426	1426	1354	1311	882
45°	833	869	725	716	686	647
55°	328	392	402	398	260	300
65°	123	202	182	230	93	126
75°	90	130	69	136	78	93
85°	33	54	38	46	37	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1919.7	1919.7	1919.7	1919.7	1919.7
2.5°	1924.6	1922.1	1916.4	1927.9	1927.1
5°	1918.8	1915.5	1900.7	1923.0	1923.0
7.5°	1910.6	1902.3	1903.1	1915.5	1909.7
10°	1899.8	1885.8	1888.3	1891.6	1891.6
12.5°	1875.0	1861.8	1855.2	1865.9	1869.2
15°	1844.5	1839.5	1837.8	1864.3	1842.0
17.5°	1801.5	1812.2	1802.3	1823.8	1827.1
20°	1756.9	1777.5	1775.9	1790.7	1785.8
22.5°	1720.5	1733.7	1733.7	1751.9	1766.8
25°	1684.1	1687.4	1683.3	1722.2	1715.5
27.5°	1637.0	1634.6	1647.8	1667.6	1680.8
30°	1570.1	1570.9	1589.1	1615.6	1627.9
32.5°	1509.0	1501.5	1523.8	1535.4	1522.2
35°	1432.1	1425.5	1426.3	1353.6	1310.6
37.5°	1327.2	1332.9	1256.9	1123.9	1067.7
40°	1189.1	1200.7	1049.5	950.3	918.9
42.5°	1022.2	1025.5	860.3	828.0	807.4
45°	833.0	869.3	724.7	715.6	685.9
47.5°	660.3	728.0	607.4	613.2	542.1
50°	537.1	604.9	527.2	529.7	423.1
52.5°	424.8	490.9	465.2	457.8	332.2
55°	328.1	392.5	401.6	398.3	259.5
57.5°	241.3	310.7	337.2	349.6	200.0
60°	176.8	253.7	279.3	304.1	151.2
62.5°	140.5	219.8	228.9	265.3	117.3
65°	123.1	202.5	181.8	229.7	92.6
67.5°	109.9	192.5	147.9	203.3	81.0
70°	99.2	173.5	128.1	181.8	76.9
72.5°	99.2	152.1	100.8	161.1	77.7
75°	90.1	129.7	69.4	136.4	77.7
77.5°	80.2	110.7	52.1	110.7	72.7
80°	69.4	86.8	43.0	85.1	65.3
82.5°	51.2	65.3	37.2	63.6	52.9
85°	33.1	53.7	38.0	46.3	37.2
87.5°	15.7	27.3	24.0	23.1	19.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)