

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: P291364

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291364
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-L83050-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: 3767.0 lumens
Efficiency: N/A
Efficacy: 122.7 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

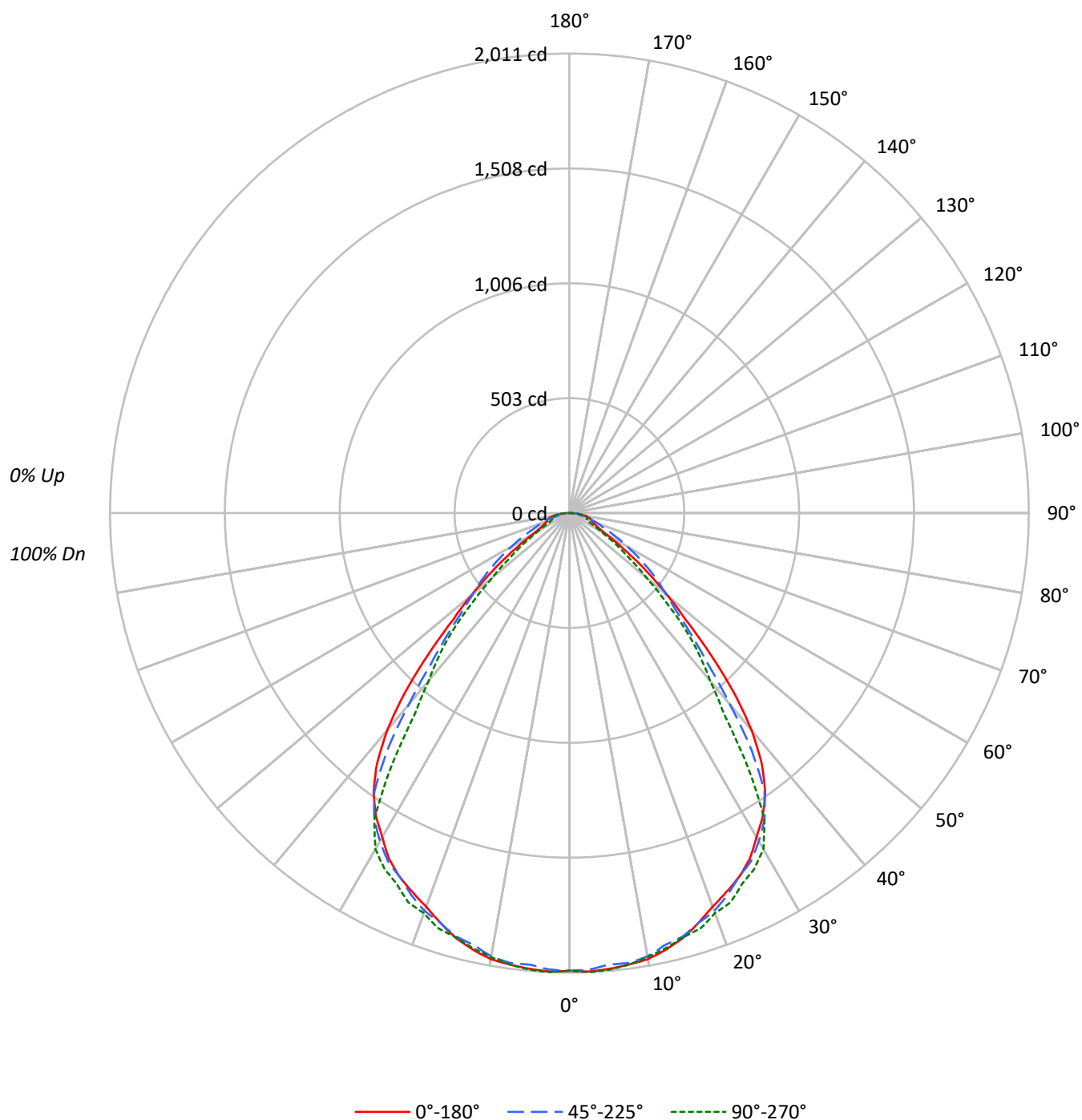
Input Watts (W): 30.69
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5390	5390	5390
5°	5409	5357	5420
10°	5417	5384	5393
15°	5362	5343	5355
20°	5250	5307	5336
25°	5218	5215	5315
30°	5091	5152	5278
35°	4909	4889	4493
40°	4359	3847	3368
45°	3308	2878	2724
50°	2346	2303	1848
55°	1606	1966	1270
60°	993	1569	849
65°	818	1208	615
70°	814	1052	631
75°	977	753	843
80°	1122	694	1055
85°	1065	1226	1198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.1	5.0
10°-20°	542.5	14.4
20°-30°	815.8	21.7
30°-40°	889.3	23.6
40°-50°	622.7	16.5
50°-60°	352.5	9.4
60°-70°	192.9	5.1
70°-80°	116.9	3.1
80°-90°	44.3	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°	1548.3	41.1
0°-40°	2437.7	64.7
0°-60°	3412.9	90.6
0°-90°	3767.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3767.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2003	2003	2003	2003	2003	
5°	2002	1999	1983	2007	2007	190
15°	1925	1920	1918	1945	1922	541
25°	1757	1761	1756	1797	1790	807
35°	1494	1488	1488	1412	1368	921
45°	869	907	756	747	716	675
55°	342	410	419	416	271	313
65°	128	211	190	240	97	132
75°	94	135	72	142	81	97
85°	34	56	40	48	39	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2003.1	2003.1	2003.1	2003.1	2003.1
2.5°	2008.3	2005.7	1999.7	2011.8	2010.9
5°	2002.3	1998.8	1983.3	2006.6	2006.6
7.5°	1993.7	1985.0	1985.9	1998.8	1992.8
10°	1982.4	1967.8	1970.4	1973.8	1973.8
12.5°	1956.6	1942.8	1935.9	1947.1	1950.5
15°	1924.7	1919.5	1917.8	1945.4	1922.1
17.5°	1879.8	1891.0	1880.7	1903.1	1906.6
20°	1833.3	1854.8	1853.1	1868.6	1863.4
22.5°	1795.3	1809.1	1809.1	1828.1	1843.6
25°	1757.4	1760.8	1756.5	1797.1	1790.2
27.5°	1708.2	1705.6	1719.4	1740.1	1753.9
30°	1638.4	1639.2	1658.2	1685.8	1698.7
32.5°	1574.6	1566.8	1590.1	1602.2	1588.4
35°	1494.4	1487.5	1488.3	1412.5	1367.6
37.5°	1384.9	1390.9	1311.6	1172.7	1114.1
40°	1240.9	1252.9	1095.1	991.7	958.9
42.5°	1066.7	1070.1	897.7	864.0	842.5
45°	869.2	907.1	756.2	746.8	715.7
47.5°	689.0	759.7	633.8	639.8	565.7
50°	560.5	631.2	550.2	552.7	441.5
52.5°	443.2	512.2	485.5	477.7	346.6
55°	342.3	409.6	419.1	415.6	270.8
57.5°	251.8	324.2	351.8	364.8	208.7
60°	184.5	264.7	291.5	317.3	157.8
62.5°	146.6	229.4	238.9	276.8	122.4
65°	128.5	211.3	189.7	239.7	96.6
67.5°	114.7	200.9	154.4	212.1	84.5
70°	103.5	181.1	133.7	189.7	80.2
72.5°	103.5	158.7	105.2	168.2	81.1
75°	94.0	135.4	72.4	142.3	81.1
77.5°	83.6	115.5	54.3	115.5	75.9
80°	72.4	90.5	44.8	88.8	68.1
82.5°	53.5	68.1	38.8	66.4	55.2
85°	34.5	56.1	39.7	48.3	38.8
87.5°	16.4	28.5	25.0	24.1	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)