

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: P291531

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291531
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-LD5-43-A19/156-UNV-L92765-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: 3747.0 lumens
Efficiency: N/A
Efficacy: 101.2 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

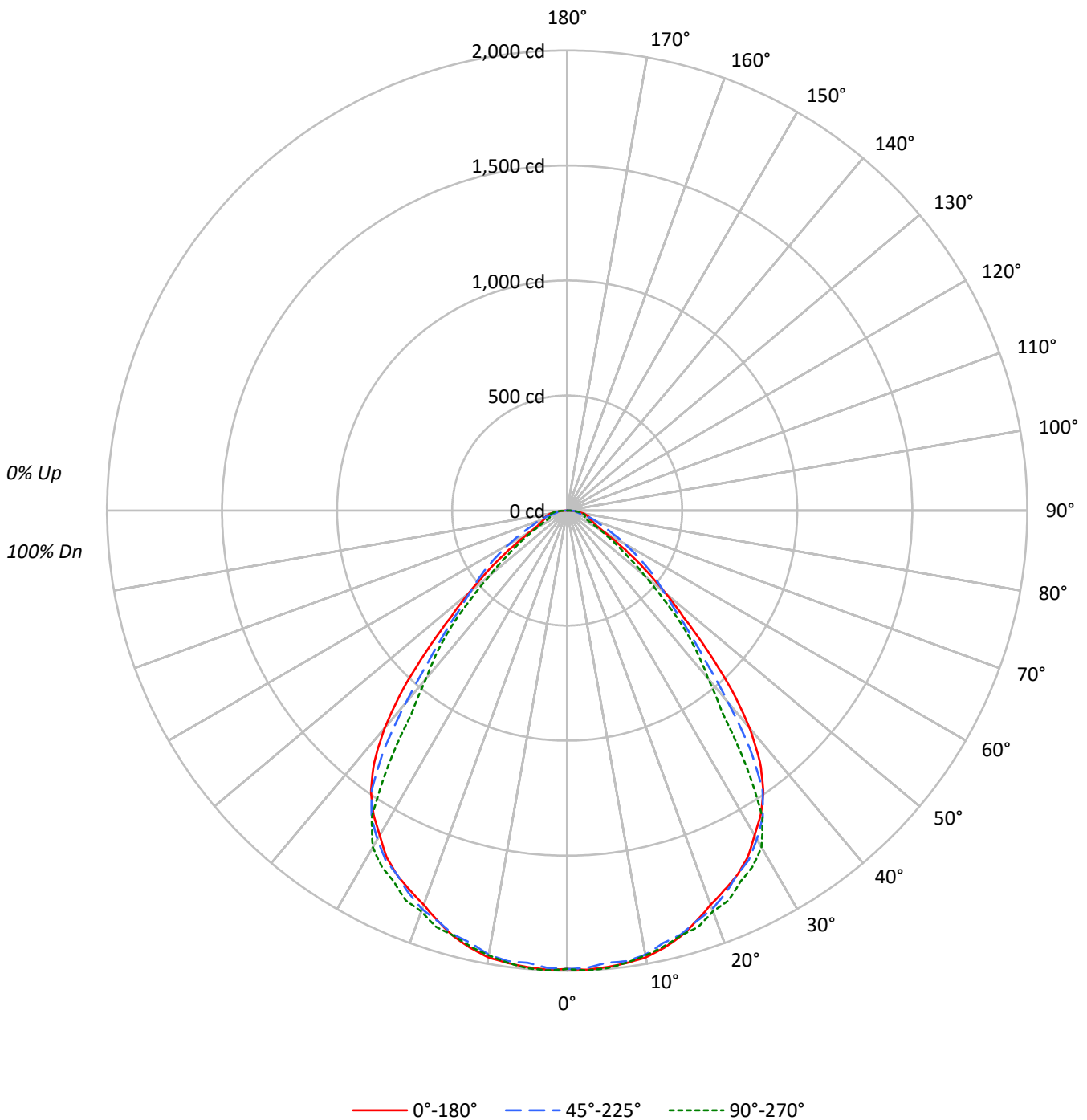
Input Watts (W): 37.014
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
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°	5362	5362	5362
5°	5380	5329	5391
10°	5388	5355	5365
15°	5334	5314	5326
20°	5222	5279	5308
25°	5190	5188	5287
30°	5064	5125	5250
35°	4883	4863	4469
40°	4336	3827	3351
45°	3290	2863	2709
50°	2334	2291	1839
55°	1597	1956	1263
60°	988	1560	845
65°	814	1202	612
70°	810	1046	628
75°	972	749	838
80°	1116	691	1051
85°	1059	1220	1192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.0	5.0
10°-20°	539.6	14.4
20°-30°	811.5	21.7
30°-40°	884.6	23.6
40°-50°	619.4	16.5
50°-60°	350.6	9.4
60°-70°	191.9	5.1
70°-80°	116.3	3.1
80°-90°	44.1	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°	1540.1	41.1
0°-40°	2424.7	64.7
0°-60°	3394.8	90.6
0°-90°	3747.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3747.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1992	1992	1992	1992	1992	
5°	1992	1988	1973	1996	1996	189
15°	1914	1909	1908	1935	1912	538
25°	1748	1752	1747	1788	1781	803
35°	1486	1480	1480	1405	1360	916
45°	865	902	752	743	712	671
55°	340	407	417	413	269	311
65°	128	210	189	238	96	131
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°	1992.5	1992.5	1992.5	1992.5	1992.5
2.5°	1997.7	1995.1	1989.1	2001.1	2000.2
5°	1991.7	1988.2	1972.8	1995.9	1995.9
7.5°	1983.1	1974.5	1975.4	1988.2	1982.2
10°	1971.9	1957.3	1959.9	1963.3	1963.3
12.5°	1946.2	1932.5	1925.6	1936.8	1940.2
15°	1914.5	1909.3	1907.6	1935.0	1911.9
17.5°	1869.9	1881.0	1870.7	1893.0	1896.4
20°	1823.5	1845.0	1843.3	1858.7	1853.6
22.5°	1785.8	1799.5	1799.5	1818.4	1833.8
25°	1748.1	1751.5	1747.2	1787.5	1780.6
27.5°	1699.2	1696.6	1710.3	1730.9	1744.6
30°	1629.7	1630.5	1649.4	1676.9	1689.7
32.5°	1566.2	1558.5	1581.7	1593.7	1579.9
35°	1486.4	1479.6	1480.4	1405.0	1360.4
37.5°	1377.5	1383.5	1304.6	1166.5	1108.2
40°	1234.3	1246.3	1089.3	986.4	953.8
42.5°	1061.0	1064.4	892.9	859.4	838.0
45°	864.6	902.3	752.2	742.8	711.9
47.5°	685.3	755.7	630.4	636.4	562.7
50°	557.5	627.9	547.2	549.8	439.2
52.5°	440.9	509.5	482.9	475.2	344.8
55°	340.5	407.4	416.9	413.4	269.3
57.5°	250.5	322.5	350.0	362.8	207.6
60°	183.6	263.3	289.9	315.6	157.0
62.5°	145.8	228.2	237.6	275.3	121.8
65°	127.8	210.1	188.7	238.4	96.1
67.5°	114.1	199.9	153.5	211.0	84.1
70°	102.9	180.1	132.9	188.7	79.8
72.5°	102.9	157.8	104.6	167.3	80.6
75°	93.5	134.7	72.0	141.5	80.6
77.5°	83.2	114.9	54.0	114.9	75.5
80°	72.0	90.1	44.6	88.3	67.8
82.5°	53.2	67.8	38.6	66.0	54.9
85°	34.3	55.8	39.5	48.0	38.6
87.5°	16.3	28.3	24.9	24.0	19.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)