

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: P291422

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291422
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-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3754.0 lumens
Efficiency: N/A
Efficacy: 112.4 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

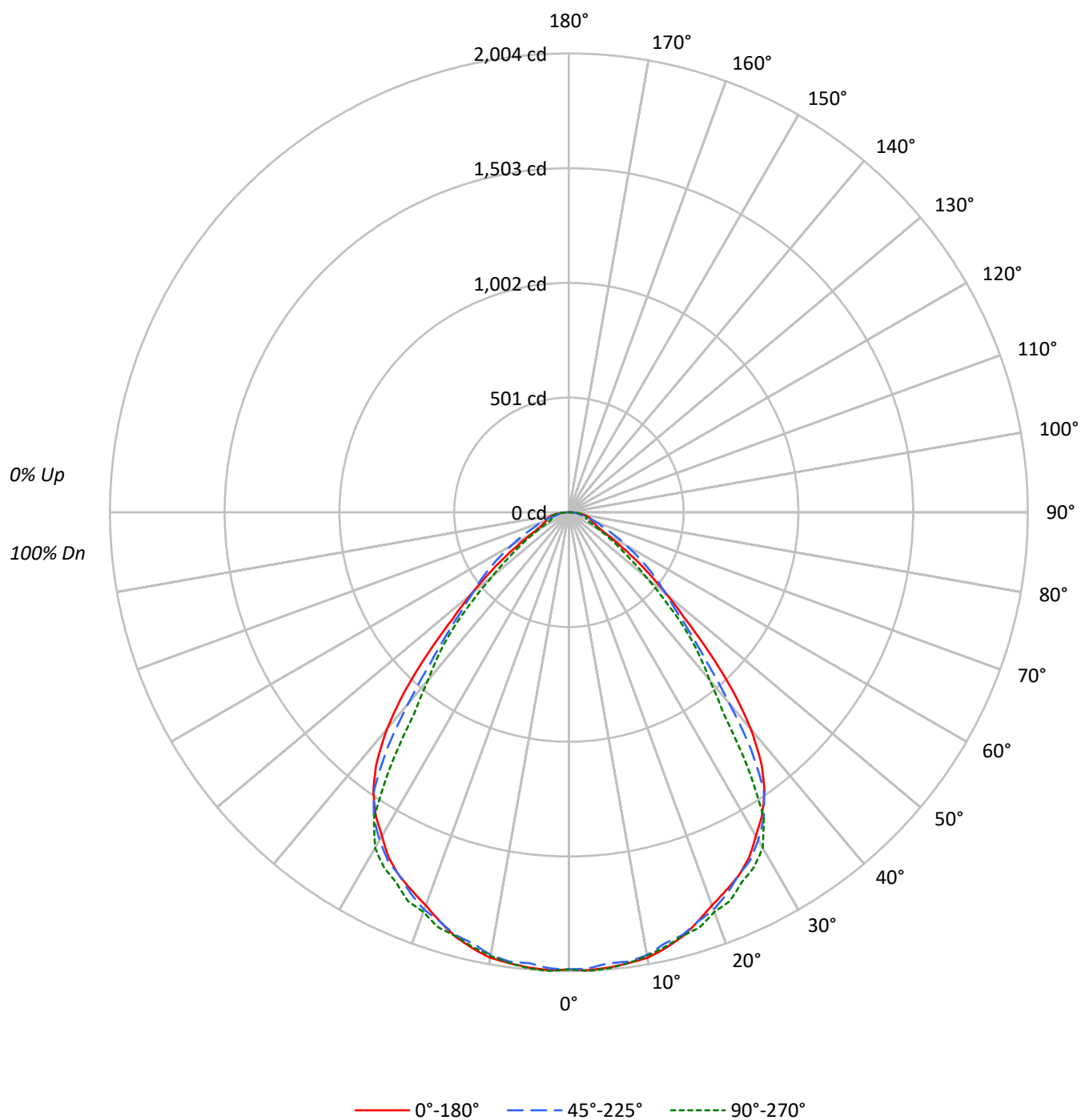
Input Watts (W): 33.387
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5372	5372	5372
5°	5390	5339	5402
10°	5398	5366	5375
15°	5343	5324	5336
20°	5232	5288	5318
25°	5200	5198	5297
30°	5073	5135	5260
35°	4892	4872	4477
40°	4344	3834	3357
45°	3296	2868	2714
50°	2339	2295	1842
55°	1601	1959	1266
60°	990	1563	847
65°	815	1204	613
70°	811	1048	629
75°	974	751	840
80°	1119	693	1052
85°	1062	1220	1195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.4	5.0
10°-20°	540.6	14.4
20°-30°	813.0	21.7
30°-40°	886.3	23.6
40°-50°	620.6	16.5
50°-60°	351.3	9.4
60°-70°	192.2	5.1
70°-80°	116.5	3.1
80°-90°	44.2	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°	1543.0	41.1
0°-40°	2429.3	64.7
0°-60°	3401.1	90.6
0°-90°	3754.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3754.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1996	1996	1996	1996	1996	
5°	1995	1992	1976	2000	2000	190
15°	1918	1913	1911	1939	1916	539
25°	1751	1755	1750	1791	1784	804
35°	1489	1482	1483	1408	1363	918
45°	866	904	754	744	713	673
55°	341	408	418	414	270	312
65°	128	210	189	239	96	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°	1996.2	1996.2	1996.2	1996.2	1996.2
2.5°	2001.4	1998.8	1992.8	2004.8	2004.0
5°	1995.4	1991.9	1976.5	1999.7	1999.7
7.5°	1986.8	1978.2	1979.0	1991.9	1985.9
10°	1975.6	1961.0	1963.6	1967.0	1967.0
12.5°	1949.8	1936.1	1929.2	1940.4	1943.8
15°	1918.0	1912.9	1911.2	1938.7	1915.5
17.5°	1873.3	1884.5	1874.2	1896.5	1900.0
20°	1826.9	1848.4	1846.7	1862.2	1857.0
22.5°	1789.1	1802.9	1802.9	1821.8	1837.3
25°	1751.3	1754.8	1750.5	1790.9	1784.0
27.5°	1702.3	1699.8	1713.5	1734.1	1747.9
30°	1632.7	1633.6	1652.5	1680.0	1692.9
32.5°	1569.1	1561.4	1584.6	1596.6	1582.9
35°	1489.2	1482.3	1483.2	1407.6	1362.9
37.5°	1380.1	1386.1	1307.0	1168.7	1110.3
40°	1236.6	1248.6	1091.4	988.2	955.6
42.5°	1063.0	1066.4	894.6	861.1	839.6
45°	866.2	904.0	753.6	744.2	713.2
47.5°	686.6	757.1	631.6	637.6	563.7
50°	558.6	629.0	548.3	550.8	440.0
52.5°	441.7	510.4	483.8	476.1	345.5
55°	341.2	408.2	417.6	414.2	269.8
57.5°	250.9	323.1	350.6	363.5	208.0
60°	183.9	263.8	290.5	316.2	157.3
62.5°	146.1	228.6	238.0	275.8	122.0
65°	128.0	210.5	189.1	238.9	96.2
67.5°	114.3	200.2	153.8	211.4	84.2
70°	103.1	180.5	133.2	189.1	79.9
72.5°	103.1	158.1	104.8	167.6	80.8
75°	93.7	134.9	72.2	141.8	80.8
77.5°	83.4	115.2	54.1	115.2	75.6
80°	72.2	90.2	44.7	88.5	67.9
82.5°	53.3	67.9	38.7	66.2	55.0
85°	34.4	55.9	39.5	48.1	38.7
87.5°	16.3	28.4	24.9	24.1	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)