

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: STREETWORKS

Report Number: P165260

Luminaire Tested: **VST-F04-LED-E-U-SL3-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165260
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33727)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F04-LED-E-U-SL3-HSS-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (28) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4774.3 lumens
Efficiency: N/A
Efficacy: 46.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G2

Input Watts (W): 102.2
Input Voltage (V): NR
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: 28.75 FT

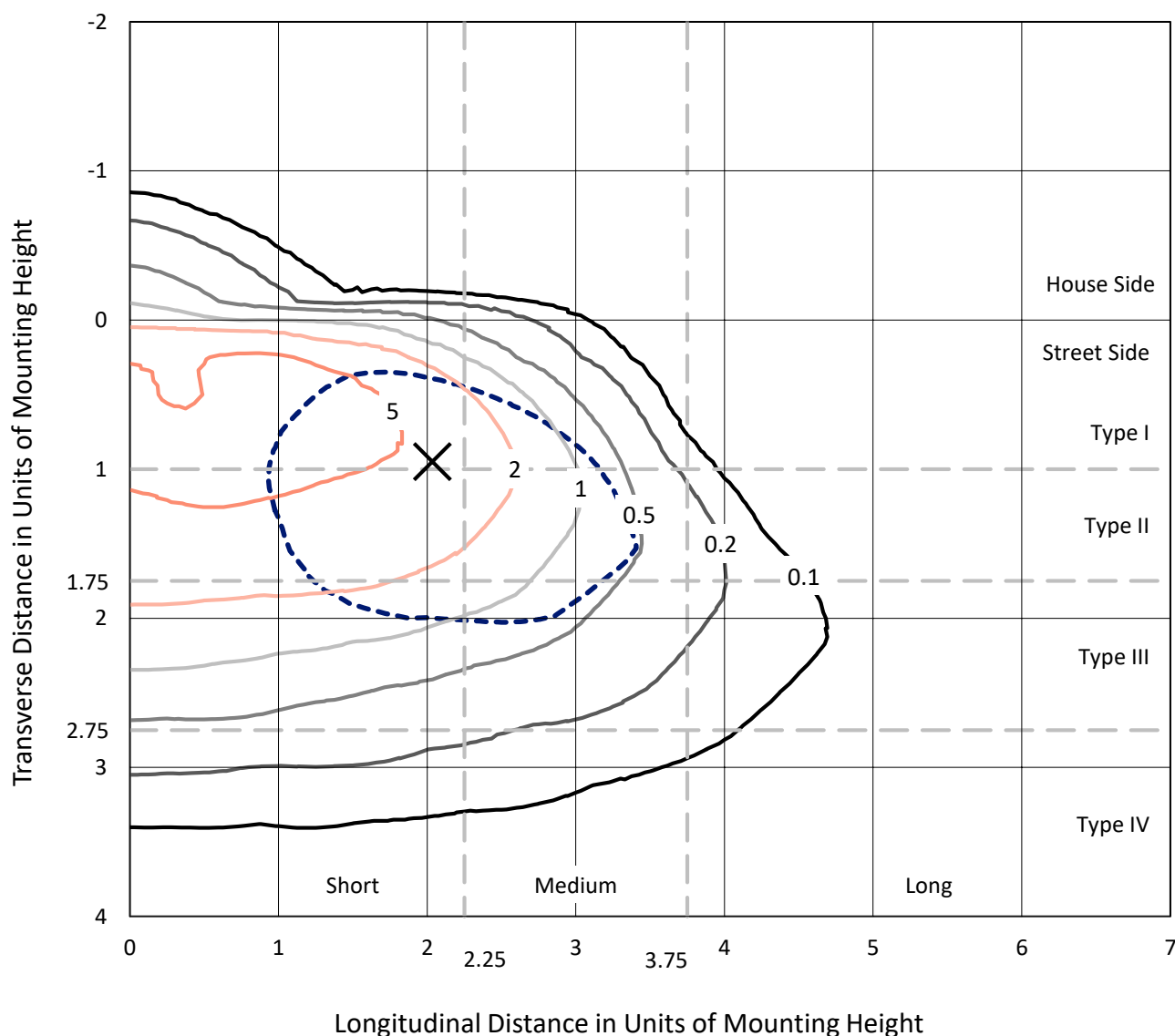


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

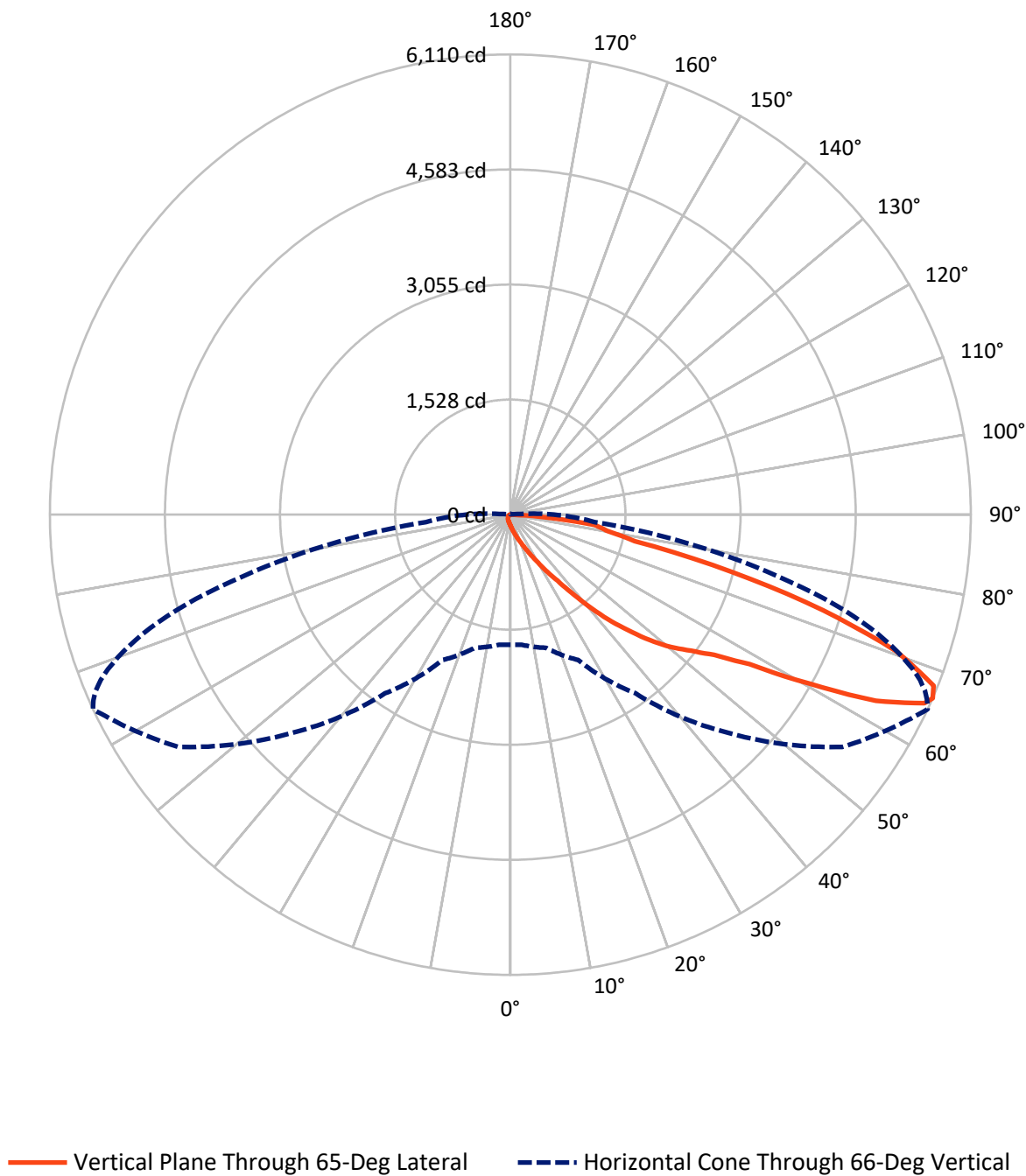


Based on 10 foot mounting height. Maximum calculated value = 7.9 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	103.5	0.0	103.5
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	4670.9	0.0	4670.9
	% Fixture	97.8	0.0	97.8
Total	Lumens	4774.3	0.0	4774.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.1	0.3
10°-20°	68.4	1.4
20°-30°	147.5	3.1
30°-40°	315.1	6.6
40°-50°	696.8	14.6
50°-60°	1180.8	24.7
60°-70°	1575.6	33.0
70°-80°	694.1	14.5
80°-90°	79.9	1.7
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°-90°	4774.3	100.0
0°-180°	4774.3	100.0

Coefficient of Utilization



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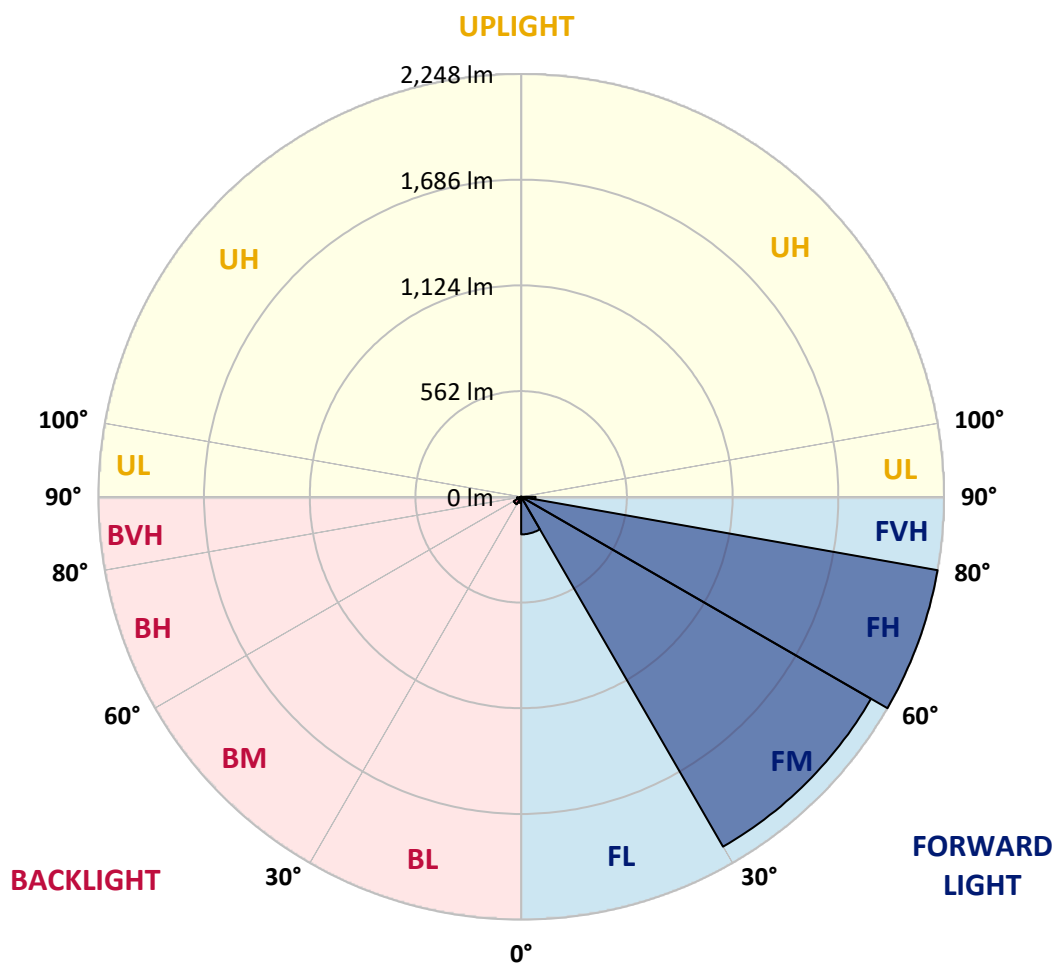
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	199.4	4.2			
FM	(30°-60°)	2147.2	45.0			
FH	(60°-80°)	2247.5	47.1			G2/5000
FVH	(80°-90°)	76.8	1.6			G1/100
BL	(0°-30°)	32.6	0.7	B0/110		
BM	(30°-60°)	45.4	1.0	B0/220		
BH	(60°-80°)	22.2	0.5	B0/110		G0/110
BVH	(80°-90°)	3.2	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	144.1	144.1	144.1	144.1	144.1	144.1	144.1	144.1	144.1	144.1	144.1
2.5°	181.8	180.8	177.1	177.1	171.6	168.0	163.4	158.8	158.8	157.9	157.0
5°	240.5	235.0	234.0	224.0	215.7	203.8	192.7	178.1	176.2	174.4	173.5
7.5°	305.7	304.7	296.5	284.5	268.0	246.0	224.0	200.1	196.4	194.6	190.9
10°	390.1	385.5	374.5	354.3	329.5	300.2	264.4	226.7	222.1	218.4	216.6
12.5°	470.9	462.6	456.2	430.5	399.3	356.1	313.0	258.9	255.2	250.6	243.2
15°	546.1	538.8	527.8	505.8	470.9	416.7	366.3	300.2	291.0	284.5	279.0
17.5°	604.9	600.3	587.4	562.7	525.0	477.3	416.7	342.3	335.0	326.7	316.7
20°	660.9	654.4	634.3	600.3	559.9	523.2	476.4	397.4	387.3	377.2	366.3
22.5°	714.1	707.7	674.7	618.6	575.5	559.9	543.4	459.8	444.2	436.0	425.0
25°	788.5	774.7	723.3	634.3	576.5	588.4	616.8	540.6	526.0	514.0	496.6
27.5°	888.5	870.1	789.4	657.2	580.1	619.6	701.3	638.8	623.2	609.4	590.2
30°	1001.4	989.5	893.1	712.3	606.7	665.5	795.8	763.7	745.3	728.8	705.9
32.5°	1115.2	1098.7	1003.2	816.9	678.3	754.5	914.2	908.7	884.9	869.2	844.4
35°	1215.3	1207.0	1136.3	988.5	841.7	910.5	1072.1	1078.5	1057.4	1040.9	1013.3
37.5°	1283.2	1283.2	1269.5	1173.0	1101.5	1152.8	1304.3	1305.2	1284.1	1246.5	1232.7
40°	1318.1	1328.1	1377.8	1396.1	1392.4	1458.5	1609.1	1592.5	1575.1	1555.8	1509.9
42.5°	1389.7	1398.8	1504.4	1631.1	1713.7	1800.9	1904.6	1899.1	1878.0	1843.1	1800.9
45°	1510.9	1522.8	1648.5	1849.5	2019.3	2143.3	2209.3	2183.6	2162.5	2129.5	2107.4
47.5°	1665.0	1688.0	1830.2	2079.0	2283.7	2488.3	2557.2	2489.3	2471.0	2445.2	2409.4
50°	1829.3	1851.4	2002.8	2287.4	2518.7	2762.8	2877.6	2762.8	2736.2	2727.9	2687.6
52.5°	1971.6	1990.0	2135.9	2448.0	2698.5	2984.9	3152.0	3000.5	2981.2	2953.7	2924.3
55°	2056.0	2070.8	2207.5	2525.1	2820.7	3185.0	3417.3	3284.2	3255.7	3244.7	3202.5
57.5°	2084.5	2099.2	2222.2	2535.2	2886.7	3367.7	3739.5	3744.0	3710.1	3670.6	3657.8
60°	2084.5	2101.0	2204.7	2510.4	2951.0	3562.3	4169.0	4551.7	4478.3	4471.0	4424.2
62.5°	1998.2	2013.8	2118.5	2434.2	3037.3	3824.8	4767.5	5443.0	5421.9	5374.2	5297.1
65°	1811.0	1820.2	1922.9	2239.6	3004.2	4066.2	5286.0	6036.0	6002.0	5908.4	5809.3
66°	1726.5	1733.9	1830.2	2128.6	2895.9	4099.3	5377.9	6110.3	6054.4	5975.4	5863.4
67.5°	1604.4	1617.3	1685.2	1922.0	2636.2	3984.5	5320.0	6058.0	6009.4	5913.9	5801.9
70°	1071.2	1062.0	1301.6	1475.0	2008.3	3246.6	4773.0	5439.3	5440.3	5395.3	5350.3
72.5°	508.5	514.0	583.8	907.8	1314.4	2169.0	3799.1	4341.6	4404.0	4323.2	4267.2
75°	365.3	373.6	415.8	555.3	783.9	1301.6	2462.7	3036.3	3038.2	2895.0	2767.4
77.5°	106.5	111.1	156.0	342.3	587.4	878.4	1414.4	1688.0	1648.5	1545.7	1449.3
80°	44.0	44.0	45.9	109.2	235.9	596.6	989.5	1299.7	1295.1	1255.7	1198.8
82.5°	16.5	17.4	22.0	45.0	56.0	146.9	659.9	1128.1	1125.3	1069.3	1028.9
85°	1.8	1.8	5.5	19.3	21.1	27.5	132.2	497.5	494.7	497.5	436.0
87.5°	0.0	0.0	0.9	1.8	2.7	3.7	5.5	19.3	21.1	20.2	18.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	144.1	144.1	144.1	144.1	144.1	144.1	144.1	144.1	144.1	144.1	144.1
2.5°	157.0	155.1	155.1	154.2	154.2	154.2	153.3	152.4	152.4	151.4	150.6
5°	171.6	169.8	168.9	167.0	166.2	165.2	163.4	162.5	160.6	159.7	158.8
7.5°	189.1	185.4	184.5	181.8	179.0	177.1	175.3	172.6	170.7	167.0	166.2
10°	211.1	206.5	202.8	199.2	196.4	191.9	189.1	185.4	181.8	179.0	176.2
12.5°	239.6	233.2	227.6	224.0	217.5	212.0	206.5	203.8	196.4	192.7	188.2
15°	270.8	263.4	257.0	249.7	245.1	235.9	228.5	220.3	216.6	210.2	202.8
17.5°	311.1	299.2	289.1	281.8	272.6	263.4	255.2	246.9	235.9	228.5	219.4
20°	354.3	344.2	330.4	317.6	306.6	295.6	283.6	272.6	262.5	250.6	239.6
22.5°	409.4	394.7	378.2	365.3	350.7	338.7	322.2	307.5	291.0	275.3	262.5
25°	479.1	459.8	444.2	425.9	408.5	390.1	369.9	351.5	330.4	315.8	293.7
27.5°	565.4	547.1	526.0	502.1	484.6	457.1	430.5	407.6	382.8	359.8	335.0
30°	675.6	649.0	626.9	604.0	569.1	542.5	511.2	480.1	446.1	423.2	385.5
32.5°	807.7	779.3	746.2	713.2	681.1	643.4	604.9	566.3	528.7	486.5	447.9
35°	969.3	935.3	897.7	861.9	812.3	771.9	723.3	670.0	627.8	579.2	530.5
37.5°	1183.2	1127.2	1094.1	1056.5	989.5	934.4	880.2	827.0	752.6	701.3	632.4
40°	1451.2	1418.1	1364.0	1303.4	1242.8	1170.3	1096.9	1026.2	939.9	868.3	788.5
42.5°	1766.0	1717.4	1662.3	1575.1	1513.6	1428.2	1344.7	1251.1	1145.5	1053.7	960.1
45°	2061.6	2003.8	1961.5	1874.3	1810.1	1709.1	1608.1	1509.0	1386.9	1268.5	1160.2
47.5°	2381.0	2333.2	2263.5	2192.8	2127.7	2013.8	1904.6	1784.4	1655.8	1515.4	1375.0
50°	2661.9	2624.2	2576.5	2491.1	2418.6	2323.1	2194.7	2063.4	1900.9	1761.4	1601.7
52.5°	2900.5	2871.1	2804.1	2743.5	2678.4	2588.4	2473.7	2347.9	2172.6	2019.3	1837.6
55°	3182.3	3161.2	3102.4	3064.8	3007.0	2920.7	2813.3	2696.8	2511.3	2344.3	2138.6
57.5°	3644.0	3627.5	3576.0	3560.4	3503.5	3428.3	3296.1	3171.3	2954.7	2747.2	2512.3
60°	4408.6	4375.6	4300.3	4261.7	4141.5	4040.5	3868.9	3697.2	3435.6	3171.3	2888.6
62.5°	5227.3	5134.6	4991.4	4868.5	4697.7	4522.4	4292.9	4030.4	3723.9	3409.9	3085.0
65°	5668.8	5511.0	5330.1	5134.6	4913.4	4655.5	4366.4	4051.5	3722.0	3390.6	3047.4
66°	5719.3	5541.2	5349.4	5131.9	4885.9	4611.4	4317.7	3987.3	3644.9	3321.8	2978.5
67.5°	5656.0	5469.7	5266.8	5025.4	4759.2	4474.7	4166.3	3823.0	3493.4	3165.7	2831.6
70°	5212.6	5027.2	4846.4	4592.2	4308.5	4022.2	3730.3	3346.6	3034.5	2733.4	2436.1
72.5°	4162.6	4036.8	3857.9	3640.3	3364.0	3028.1	2784.8	2441.6	2170.8	1878.9	1648.5
75°	2601.3	2424.1	2202.9	1925.7	1714.6	1442.0	1299.7	1039.0	884.9	749.9	619.6
77.5°	1330.0	1196.9	1041.8	885.7	736.1	587.4	454.3	321.3	216.6	150.6	112.0
80°	1098.7	981.2	852.7	710.4	578.3	448.9	323.1	220.3	140.5	91.8	71.6
82.5°	907.8	808.7	693.9	561.7	447.0	352.5	245.1	159.7	99.1	64.3	50.5
85°	386.4	350.7	270.8	214.8	161.5	119.3	83.6	56.0	39.5	32.1	29.4
87.5°	16.5	18.3	17.4	13.8	10.1	10.1	9.2	7.4	7.4	7.4	7.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	144.1	144.1	144.1	144.1	144.1	144.1	144.1	144.1	144.1	144.1	144.1
2.5°	150.6	149.6	148.7	148.7	147.8	146.9	141.4	136.8	131.3	127.6	123.9
5°	157.0	156.0	154.2	153.3	151.4	150.6	138.6	128.5	120.2	113.8	109.2
7.5°	163.4	162.5	159.7	157.0	156.0	154.2	134.9	122.1	111.1	103.7	99.1
10°	171.6	168.9	166.2	162.5	159.7	157.0	131.3	114.7	102.8	96.4	91.8
12.5°	183.5	179.0	174.4	169.8	166.2	161.5	129.4	108.3	96.4	89.0	84.4
15°	197.4	190.9	185.4	179.9	173.5	168.9	125.7	102.8	90.9	83.6	78.0
17.5°	210.2	202.8	194.6	186.3	179.9	173.5	122.1	97.3	85.3	78.0	72.5
20°	228.5	217.5	207.5	197.4	188.2	179.9	116.5	91.8	80.8	72.5	67.0
22.5°	248.8	235.9	223.1	209.3	197.4	186.3	112.0	87.2	76.2	67.9	61.5
25°	274.5	258.9	241.4	224.0	210.2	195.5	107.4	82.6	71.6	63.3	56.9
27.5°	310.2	288.2	268.9	246.9	225.8	209.3	103.7	78.9	67.0	58.7	52.3
30°	358.9	326.7	296.5	272.6	247.8	224.0	100.1	74.4	63.3	54.2	46.8
32.5°	413.0	375.4	340.5	304.7	273.5	246.0	96.4	70.7	58.7	49.6	43.1
35°	480.1	432.3	385.5	344.2	306.6	269.8	92.7	67.0	55.1	45.0	38.6
37.5°	576.5	516.8	455.3	402.0	353.4	304.7	90.0	63.3	50.5	40.4	33.9
40°	708.6	631.5	556.2	483.7	420.4	359.8	86.3	59.6	46.8	36.7	30.3
42.5°	851.8	758.2	659.1	577.3	490.2	414.0	82.6	56.0	43.1	33.1	26.6
45°	1029.9	913.3	793.1	682.0	575.5	477.3	78.9	52.3	38.6	29.4	23.0
47.5°	1224.5	1075.8	939.9	800.4	673.7	556.2	74.4	49.6	34.9	25.7	20.2
50°	1424.6	1267.6	1095.9	937.1	786.6	635.2	69.8	45.0	31.2	23.0	16.5
52.5°	1640.2	1454.8	1279.5	1082.2	906.9	738.9	65.2	41.3	28.4	20.2	13.8
55°	1914.7	1707.3	1501.7	1280.4	1069.3	859.2	60.6	36.7	24.8	17.4	11.0
57.5°	2259.8	2013.8	1761.4	1511.7	1255.7	1017.0	56.9	32.1	21.1	14.7	9.2
60°	2585.7	2298.4	1992.7	1705.4	1416.3	1138.2	51.4	28.4	18.3	11.9	9.2
62.5°	2754.6	2426.9	2097.3	1780.7	1472.3	1181.3	45.9	23.9	15.6	10.1	8.2
65°	2713.3	2379.2	2059.7	1740.3	1438.3	1153.8	40.4	21.1	13.8	9.2	8.2
66°	2653.6	2323.1	2001.9	1698.1	1409.9	1124.4	37.6	20.2	12.9	9.2	7.4
67.5°	2523.2	2203.8	1897.2	1614.5	1331.8	1068.4	33.9	18.3	11.9	8.2	7.4
70°	2155.2	1865.1	1620.0	1368.6	1138.2	900.5	27.5	15.6	10.1	7.4	7.4
72.5°	1426.4	1229.0	1065.7	917.0	766.4	594.8	23.0	12.9	8.2	7.4	6.4
75°	537.9	486.5	417.7	375.4	327.7	287.3	18.3	8.2	6.4	6.4	6.4
77.5°	95.5	88.1	78.0	71.6	66.1	60.6	14.7	5.5	5.5	6.4	6.4
80°	64.3	59.6	54.2	49.6	45.9	41.3	10.1	4.6	5.5	5.5	6.4
82.5°	45.9	43.1	40.4	36.7	33.9	30.3	6.4	4.6	5.5	5.5	5.5
85°	27.5	25.7	23.9	22.0	19.3	18.3	4.6	4.6	4.6	5.5	5.5
87.5°	7.4	6.4	7.4	7.4	5.5	6.4	3.7	3.7	3.7	4.6	4.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	144.1	144.1	144.1	144.1	144.1
2.5°	122.1	122.1	120.2	123.0	123.0
5°	105.6	105.6	104.6	105.6	105.6
7.5°	96.4	95.5	95.5	95.5	96.4
10°	88.1	87.2	87.2	87.2	87.2
12.5°	80.8	79.9	78.9	79.9	79.9
15°	74.4	72.5	72.5	72.5	72.5
17.5°	68.8	67.0	66.1	66.1	66.1
20°	63.3	60.6	60.6	60.6	60.6
22.5°	57.8	55.1	55.1	55.1	55.1
25°	52.3	49.6	49.6	49.6	49.6
27.5°	47.7	45.0	45.0	45.0	45.0
30°	42.3	40.4	40.4	41.3	40.4
32.5°	38.6	35.8	35.8	36.7	36.7
35°	33.9	32.1	32.1	32.1	32.1
37.5°	29.4	27.5	27.5	27.5	27.5
40°	25.7	23.9	23.0	23.9	23.9
42.5°	22.0	20.2	19.3	19.3	19.3
45°	19.3	16.5	15.6	16.5	16.5
47.5°	15.6	13.8	13.8	14.7	14.7
50°	11.9	11.9	12.9	14.7	14.7
52.5°	11.0	11.0	12.9	14.7	14.7
55°	10.1	11.0	12.9	13.8	14.7
57.5°	9.2	11.0	12.9	13.8	13.8
60°	9.2	10.1	11.9	13.8	13.8
62.5°	8.2	9.2	11.0	12.9	12.9
65°	8.2	9.2	11.0	12.9	12.9
66°	8.2	9.2	11.0	12.9	12.9
67.5°	8.2	9.2	11.0	12.9	12.9
70°	8.2	9.2	11.0	11.9	11.9
72.5°	7.4	8.2	10.1	11.9	11.9
75°	7.4	8.2	10.1	11.9	11.9
77.5°	7.4	8.2	10.1	11.9	11.9
80°	7.4	8.2	10.1	11.0	11.9
82.5°	6.4	8.2	9.2	11.0	11.0
85°	6.4	7.4	9.2	10.1	11.0
87.5°	5.5	6.4	7.4	9.2	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)