

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: P165331

Luminaire Tested: **VST-F11-LED-E-U-SL3-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165331
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-F11-LED-E-U-SL3-HSS-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (77) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14208.3 lumens
Efficiency: N/A
Efficacy: 50.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.83' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G3

Input Watts (W): 282.7
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

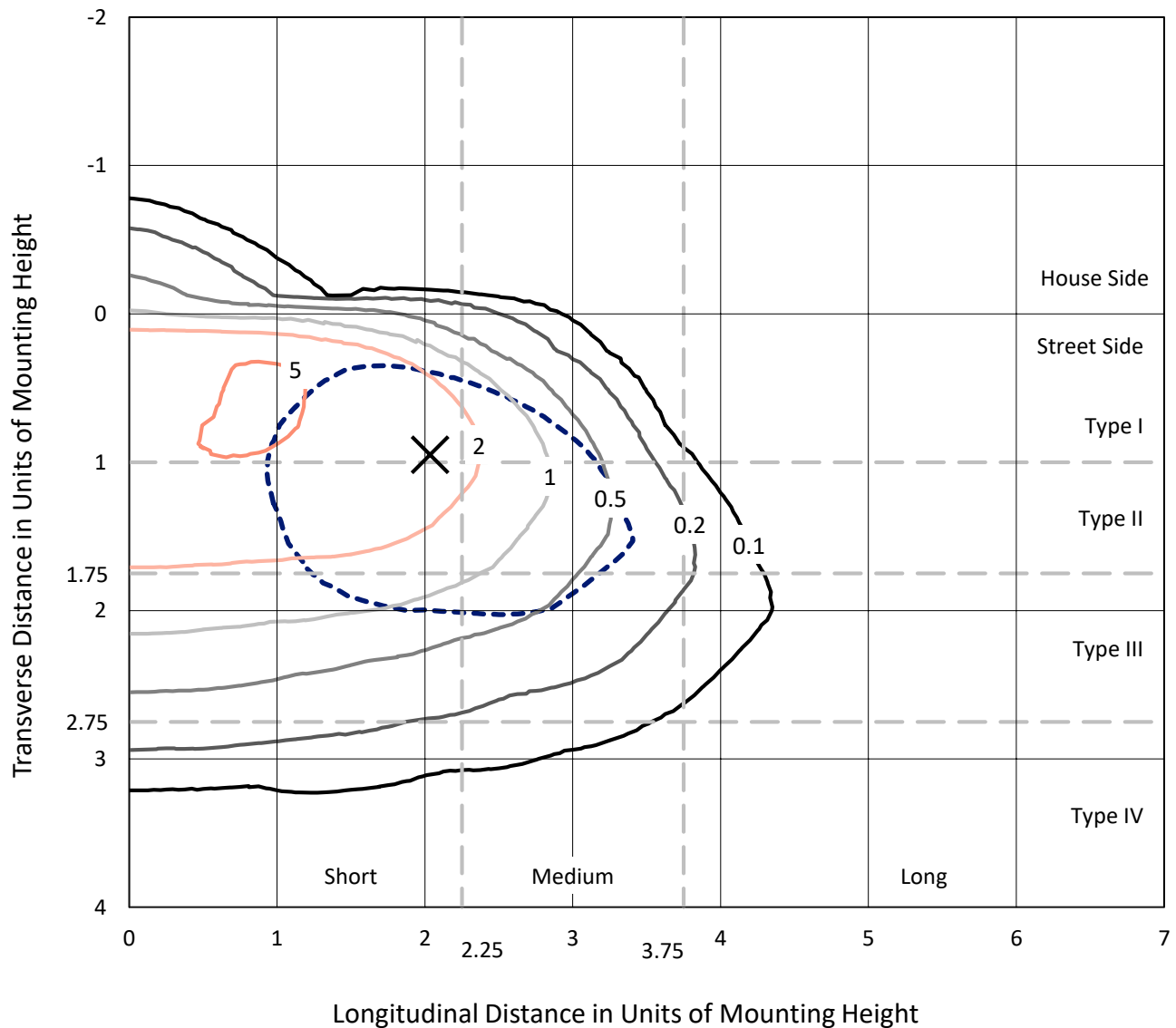


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

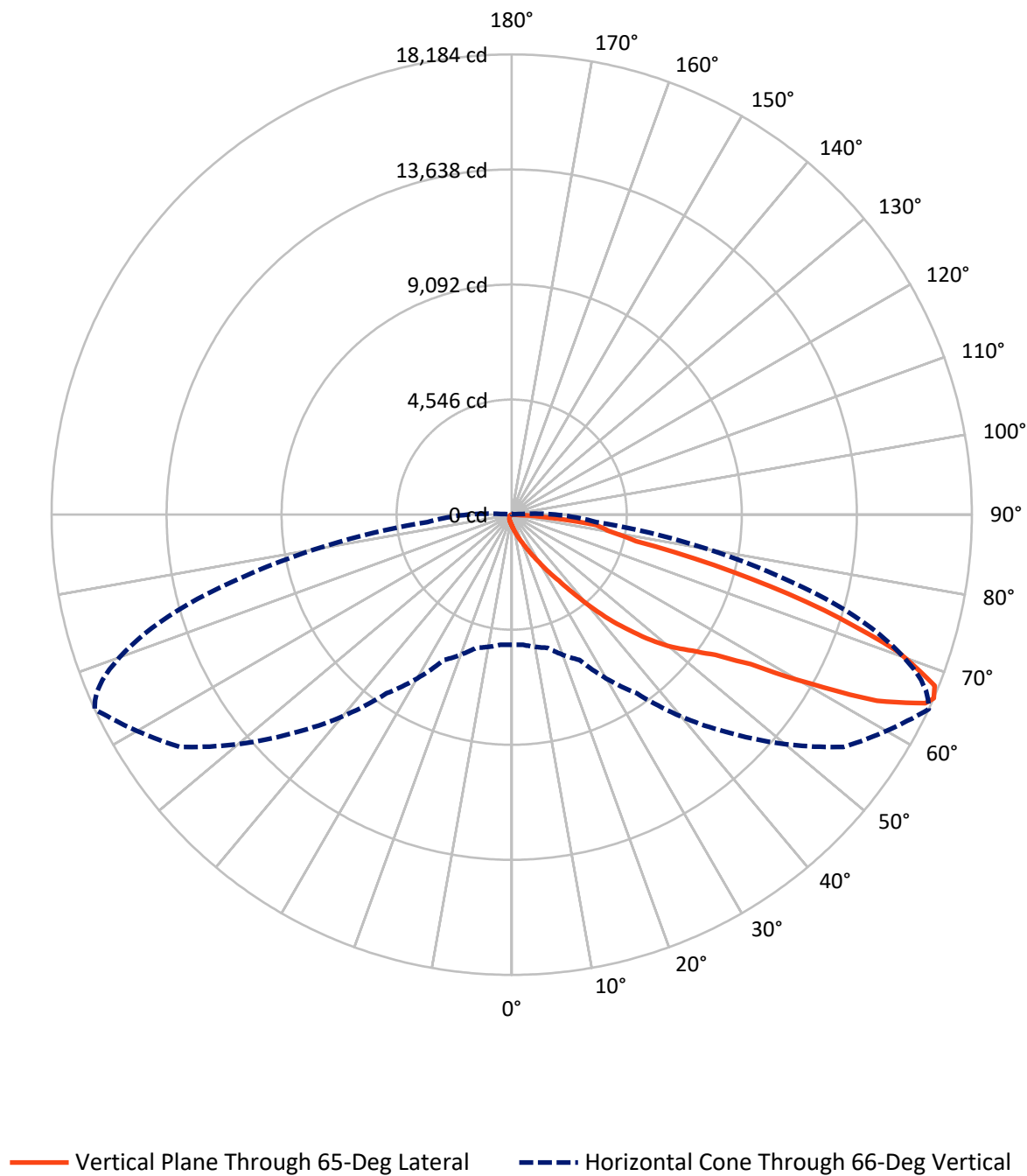


Based on 20 foot mounting height. Maximum calculated value = 5.9 fc
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Luminous Intensity Polar Plot



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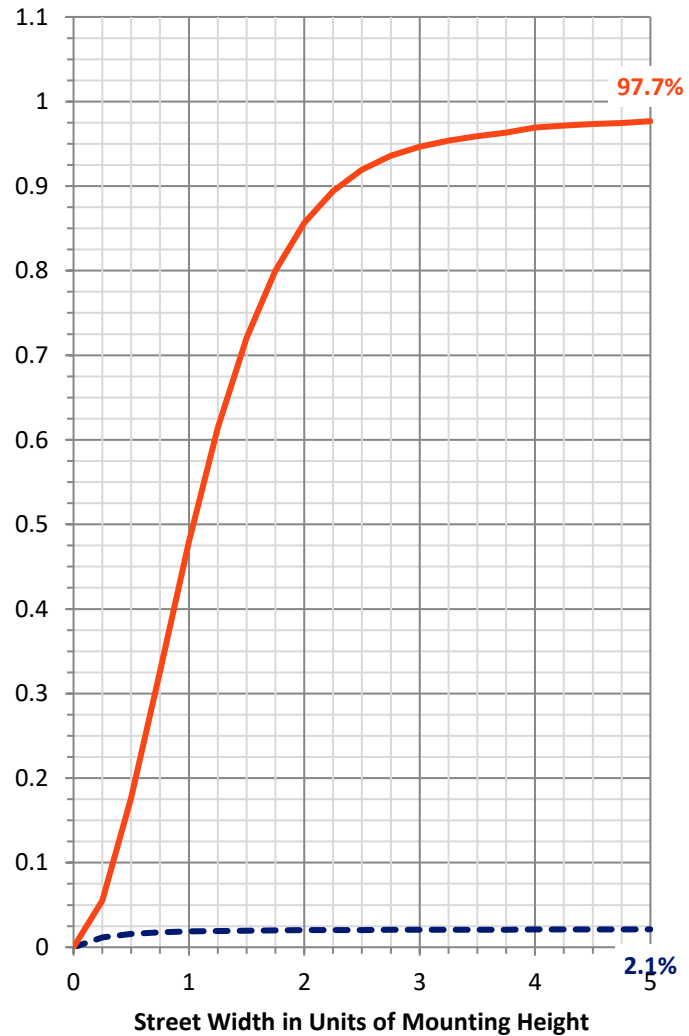
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	307.9	0.0	307.9
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	13900.4	0.0	13900.4
	% Fixture	97.8	0.0	97.8
Total	Lumens	14208.3	0.0	14208.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.0	0.3
10°-20°	203.6	1.4
20°-30°	439.1	3.1
30°-40°	937.6	6.6
40°-50°	2073.5	14.6
50°-60°	3514.0	24.7
60°-70°	4689.1	33.0
70°-80°	2065.5	14.5
80°-90°	237.9	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°	14208.3	100.0
0°-180°	14208.3	100.0

Coefficient of Utilization



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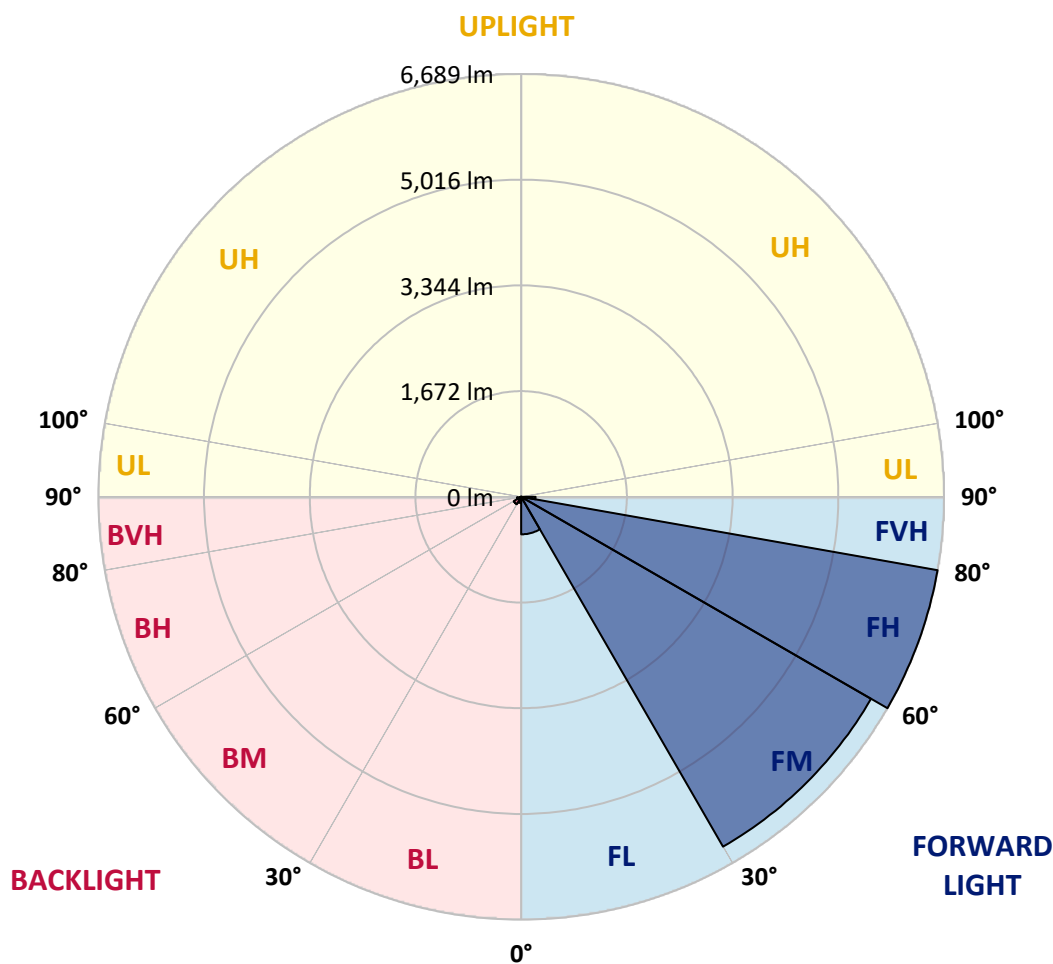
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	593.5	4.2			
FM	(30°-60°)	6389.9	45.0			
FH	(60°-80°)	6688.6	47.1			G3/7500
FVH	(80°-90°)	228.4	1.6			G3/500
BL	(0°-30°)	97.2	0.7	B0/110		
BM	(30°-60°)	135.2	1.0	B0/220		
BH	(60°-80°)	66.1	0.5	B0/110		G0/110
BVH	(80°-90°)	9.5	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-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	428.8	428.8	428.8	428.8	428.8	428.8	428.8	428.8	428.8	428.8	428.8
2.5°	540.9	538.1	527.2	527.2	510.7	500.0	486.2	472.6	472.6	469.8	467.1
5°	715.6	699.3	696.5	666.5	642.0	606.5	573.6	530.0	524.5	519.0	516.2
7.5°	909.7	906.9	882.3	846.8	797.7	732.0	666.5	595.5	584.6	579.1	568.1
10°	1161.0	1147.2	1114.5	1054.3	980.7	893.3	786.8	674.6	661.0	650.1	644.6
12.5°	1401.3	1376.8	1357.6	1281.1	1188.2	1059.8	931.4	770.3	759.4	745.8	723.9
15°	1625.3	1603.4	1570.7	1505.2	1401.3	1240.1	1090.0	893.3	865.9	846.8	830.4
17.5°	1800.1	1786.5	1748.2	1674.5	1562.4	1420.4	1240.1	1018.8	997.1	972.4	942.4
20°	1966.8	1947.6	1887.5	1786.5	1666.3	1556.9	1417.8	1182.7	1152.7	1122.7	1090.0
22.5°	2125.2	2106.0	2007.8	1841.1	1712.7	1666.3	1617.2	1368.5	1322.1	1297.5	1264.7
25°	2346.5	2305.5	2152.4	1887.5	1715.5	1751.0	1835.6	1608.9	1565.2	1529.7	1477.8
27.5°	2644.3	2589.5	2349.2	1955.9	1726.3	1843.9	2086.9	1901.1	1854.7	1813.7	1756.5
30°	2980.2	2944.7	2657.9	2119.8	1805.6	1980.4	2368.2	2272.7	2218.1	2168.9	2100.7
32.5°	3318.9	3269.8	2985.6	2431.1	2018.6	2245.3	2720.7	2704.3	2633.3	2586.9	2513.1
35°	3616.7	3592.1	3381.8	2941.9	2504.9	2709.8	3190.5	3209.6	3146.9	3097.6	3015.7
37.5°	3818.9	3818.9	3777.9	3490.9	3277.9	3430.9	3881.6	3884.4	3821.5	3709.5	3668.6
40°	3922.5	3952.6	4100.2	4154.8	4143.8	4340.5	4788.6	4739.3	4687.4	4630.0	4493.5
42.5°	4135.7	4162.9	4477.1	4854.1	5099.9	5359.4	5668.1	5651.6	5588.9	5485.1	5359.4
45°	4496.3	4531.8	4906.0	5504.2	6009.4	6378.4	6574.9	6498.5	6435.6	6337.4	6271.7
47.5°	4955.1	5023.5	5446.8	6187.1	6796.2	7405.3	7610.2	7408.1	7353.6	7276.9	7170.4
50°	5444.1	5509.7	5960.3	6807.2	7495.6	8222.1	8563.6	8222.1	8143.0	8118.3	7998.2
52.5°	5867.5	5922.2	6356.5	7285.2	8030.8	8883.1	9380.3	8929.6	8872.2	8790.2	8702.8
55°	6118.8	6162.6	6569.5	7514.6	8394.3	9478.6	10169.8	9773.7	9689.0	9656.3	9530.6
57.5°	6203.5	6247.2	6613.2	7544.7	8590.9	10022.2	11128.6	11142.2	11041.2	10923.8	10885.4
60°	6203.5	6252.6	6561.3	7471.0	8782.1	10601.3	12406.9	13546.0	13327.5	13305.6	13166.3
62.5°	5946.7	5993.2	6304.5	7244.2	9038.9	11382.6	14187.9	16198.4	16135.7	15993.5	15764.1
65°	5389.4	5416.8	5722.6	6665.2	8940.5	12101.0	15731.3	17963.0	17862.0	17583.3	17288.4
66°	5138.1	5160.0	5446.8	6334.6	8618.2	12199.4	16004.5	18184.3	18017.7	17782.7	17449.4
67.5°	4774.8	4813.1	5015.2	5720.0	7845.2	11857.8	15832.4	18028.7	17883.9	17599.7	17266.5
70°	3187.9	3160.5	3873.4	4389.6	5976.8	9661.8	14204.3	16187.4	16190.2	16056.4	15922.5
72.5°	1513.3	1529.7	1737.2	2701.5	3911.6	6454.8	11306.1	12920.4	13106.2	12865.9	12699.2
75°	1087.2	1111.7	1237.5	1652.6	2332.8	3873.4	7328.8	9036.1	9041.5	8615.4	8235.9
77.5°	316.8	330.6	464.3	1018.8	1748.2	2614.1	4209.3	5023.5	4906.0	4600.0	4313.2
80°	131.0	131.0	136.5	325.1	702.0	1775.6	2944.7	3868.0	3854.4	3736.9	3567.6
82.5°	49.1	51.9	65.5	133.9	166.7	437.1	1964.0	3357.2	3348.9	3182.4	3062.1
85°	5.5	5.5	16.4	57.4	62.9	81.9	393.3	1480.5	1472.3	1480.5	1297.5
87.5°	0.0	0.0	2.7	5.5	8.1	10.9	16.4	57.4	62.9	60.0	54.6
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	428.8	428.8	428.8	428.8	428.8	428.8	428.8	428.8	428.8	428.8	428.8
2.5°	467.1	461.6	461.6	459.0	459.0	459.0	456.2	453.5	453.5	450.7	448.0
5°	510.7	505.3	502.6	497.1	494.5	491.7	486.2	483.5	478.1	475.2	472.6
7.5°	562.7	551.7	549.1	540.9	532.6	527.2	521.7	513.6	508.1	497.1	494.5
10°	628.3	614.6	603.6	592.7	584.6	571.0	562.7	551.7	540.9	532.6	524.5
12.5°	712.9	693.9	677.4	666.5	647.4	631.0	614.6	606.5	584.6	573.6	560.0
15°	805.8	783.9	764.9	743.0	729.4	702.0	680.1	655.6	644.6	625.5	603.6
17.5°	925.9	890.4	860.4	838.7	811.3	783.9	759.4	734.8	702.0	680.1	652.9
20°	1054.3	1024.3	983.3	945.2	912.3	879.7	844.0	811.3	781.3	745.8	712.9
22.5°	1218.4	1174.6	1125.5	1087.2	1043.5	1008.0	958.8	915.2	865.9	819.4	781.3
25°	1425.9	1368.5	1322.1	1267.5	1215.6	1161.0	1100.8	1046.2	983.3	939.7	874.2
27.5°	1682.7	1628.1	1565.2	1494.2	1442.3	1360.4	1281.1	1212.9	1139.1	1070.7	997.1
30°	2010.4	1931.3	1865.6	1797.5	1693.6	1614.3	1521.4	1428.7	1327.5	1259.4	1147.2
32.5°	2403.7	2319.1	2220.8	2122.4	2026.9	1914.9	1800.1	1685.3	1573.4	1447.8	1333.0
35°	2884.6	2783.4	2671.5	2565.0	2417.5	2297.3	2152.4	1994.0	1868.5	1723.6	1578.8
37.5°	3521.1	3354.4	3256.0	3144.1	2944.7	2780.8	2619.6	2461.1	2239.9	2086.9	1882.1
40°	4318.6	4220.3	4059.2	3878.9	3698.6	3482.8	3264.3	3054.0	2797.2	2584.1	2346.5
42.5°	5255.5	5110.9	4947.0	4687.4	4504.4	4250.3	4001.8	3723.1	3409.0	3135.9	2857.3
45°	6135.2	5963.2	5837.4	5578.0	5386.7	5086.2	4785.8	4490.8	4127.4	3775.1	3452.8
47.5°	7085.8	6943.7	6736.2	6525.8	6331.9	5993.2	5668.1	5310.3	4927.8	4509.9	4091.9
50°	7921.7	7809.7	7667.6	7413.6	7197.8	6913.7	6531.3	6140.7	5657.1	5241.9	4766.7
52.5°	8631.8	8544.4	8345.0	8164.7	7970.8	7703.1	7361.7	6987.5	6465.8	6009.4	5468.7
55°	9470.5	9407.6	9232.8	9120.8	8948.8	8692.0	8372.4	8025.5	7473.7	6976.5	6364.6
57.5°	10844.5	10795.4	10642.3	10595.8	10426.5	10202.5	9809.2	9437.7	8793.1	8175.7	7476.5
60°	13119.8	13021.6	12797.5	12682.9	12324.9	12024.5	11513.8	11002.9	10224.4	9437.7	8596.3
62.5°	15556.4	15280.6	14854.4	14488.5	13980.4	13458.6	12775.6	11994.5	11082.2	10148.0	9180.9
65°	16870.3	16400.6	15862.5	15280.6	14622.4	13854.7	12994.3	12057.4	11076.7	10090.6	9068.9
66°	17020.6	16490.7	15919.9	15272.4	14540.4	13723.6	12849.5	11866.1	10847.1	9885.7	8864.1
67.5°	16832.2	16277.7	15674.0	14955.6	14163.4	13316.6	12398.8	11377.1	10396.4	9421.2	8427.0
70°	15512.8	14960.9	14422.8	13666.2	12822.1	11970.0	11101.3	9959.5	9030.8	8134.7	7249.7
72.5°	12387.8	12013.6	11481.0	10833.5	10011.3	9011.5	8287.6	7266.1	6460.3	5591.6	4906.0
75°	7741.4	7214.2	6555.9	5730.9	5102.6	4291.3	3868.0	3092.1	2633.3	2231.7	1843.9
77.5°	3958.0	3562.1	3100.4	2636.0	2190.8	1748.2	1352.1	956.1	644.6	448.0	333.3
80°	3269.8	2920.1	2537.6	2114.3	1721.0	1335.8	961.6	655.6	418.0	273.2	213.0
82.5°	2701.5	2406.6	2065.0	1671.7	1330.3	1049.0	729.4	475.2	294.9	191.3	150.3
85°	1150.0	1043.5	805.8	639.1	480.7	355.1	248.7	166.7	117.4	95.5	87.4
87.5°	49.1	54.6	51.9	41.0	30.0	30.0	27.4	21.9	21.9	21.9	21.9
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°	428.8	428.8	428.8	428.8	428.8	428.8	428.8	428.8	428.8	428.8	428.8
2.5°	448.0	445.2	442.6	442.6	439.7	437.1	420.7	407.1	390.6	379.7	368.7
5°	467.1	464.3	459.0	456.2	450.7	448.0	412.5	382.4	357.8	338.7	325.1
7.5°	486.2	483.5	475.2	467.1	464.3	459.0	401.6	363.3	330.6	308.7	294.9
10°	510.7	502.6	494.5	483.5	475.2	467.1	390.6	341.4	305.9	286.8	273.2
12.5°	546.2	532.6	519.0	505.3	494.5	480.7	385.2	322.3	286.8	264.9	251.3
15°	587.4	568.1	551.7	535.5	516.2	502.6	374.2	305.9	270.4	248.7	232.2
17.5°	625.5	603.6	579.1	554.5	535.5	516.2	363.3	289.6	254.0	232.2	215.8
20°	680.1	647.4	617.4	587.4	560.0	535.5	346.9	273.2	240.4	215.8	199.4
22.5°	740.3	702.0	663.8	622.9	587.4	554.5	333.3	259.4	226.8	202.2	183.0
25°	816.8	770.3	718.4	666.5	625.5	581.9	319.6	245.8	213.0	188.4	169.4
27.5°	923.3	857.8	800.4	734.8	672.0	622.9	308.7	234.9	199.4	174.8	155.8
30°	1068.1	972.4	882.3	811.3	737.5	666.5	297.8	221.3	188.4	161.2	139.3
32.5°	1229.2	1117.2	1013.4	906.9	814.0	732.0	286.8	210.3	174.8	147.5	128.4
35°	1428.7	1286.6	1147.2	1024.3	912.3	803.0	275.9	199.4	163.9	133.9	114.8
37.5°	1715.5	1537.9	1354.9	1196.5	1051.7	906.9	267.7	188.4	150.3	120.3	101.0
40°	2108.8	1879.4	1655.3	1439.5	1251.1	1070.7	256.8	177.5	139.3	109.3	90.1
42.5°	2535.0	2256.3	1961.3	1718.2	1458.7	1232.0	245.8	166.7	128.4	98.4	79.3
45°	3064.9	2717.9	2360.1	2029.5	1712.7	1420.4	234.9	155.8	114.8	87.4	68.3
47.5°	3644.0	3201.5	2797.2	2382.0	2005.0	1655.3	221.3	147.5	103.8	76.5	60.0
50°	4239.5	3772.4	3261.5	2788.9	2341.0	1890.4	207.7	133.9	92.9	68.3	49.1
52.5°	4881.3	4329.6	3807.9	3220.5	2698.8	2198.9	193.9	122.9	84.6	60.0	41.0
55°	5698.1	5080.9	4468.9	3810.6	3182.4	2556.9	180.3	109.3	73.8	51.9	32.8
57.5°	6725.2	5993.2	5241.9	4499.0	3736.9	3026.6	169.4	95.5	62.9	43.6	27.4
60°	7694.9	6840.0	5930.3	5075.4	4214.8	3387.2	152.9	84.6	54.6	35.5	27.4
62.5°	8197.6	7222.4	6241.7	5299.3	4381.5	3515.6	136.5	71.0	46.4	30.0	24.6
65°	8074.6	7080.4	6129.7	5179.1	4280.5	3433.7	120.3	62.9	41.0	27.4	24.6
66°	7897.1	6913.7	5957.7	5053.5	4195.7	3346.3	112.0	60.0	38.3	27.4	21.9
67.5°	7509.2	6558.5	5646.2	4804.8	3963.5	3179.6	101.0	54.6	35.5	24.6	21.9
70°	6413.9	5550.6	4821.3	4072.8	3387.2	2679.8	81.9	46.4	30.0	21.9	21.9
72.5°	4244.8	3657.6	3171.4	2728.9	2280.8	1770.1	68.3	38.3	24.6	21.9	19.1
75°	1600.7	1447.8	1242.9	1117.2	975.2	854.9	54.6	24.6	19.1	19.1	19.1
77.5°	284.1	262.3	232.2	213.0	196.7	180.3	43.6	16.4	16.4	19.1	19.1
80°	191.3	177.5	161.2	147.5	136.5	122.9	30.0	13.6	16.4	16.4	19.1
82.5°	136.5	128.4	120.3	109.3	101.0	90.1	19.1	13.6	16.4	16.4	16.4
85°	81.9	76.5	71.0	65.5	57.4	54.6	13.6	13.6	13.6	16.4	16.4
87.5°	21.9	19.1	21.9	21.9	16.4	19.1	10.9	10.9	10.9	13.6	13.6
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°	428.8	428.8	428.8	428.8	428.8
2.5°	363.3	363.3	357.8	366.1	366.1
5°	314.2	314.2	311.4	314.2	314.2
7.5°	286.8	284.1	284.1	284.1	286.8
10°	262.3	259.4	259.4	259.4	259.4
12.5°	240.4	237.7	234.9	237.7	237.7
15°	221.3	215.8	215.8	215.8	215.8
17.5°	204.9	199.4	196.7	196.7	196.7
20°	188.4	180.3	180.3	180.3	180.3
22.5°	172.0	163.9	163.9	163.9	163.9
25°	155.8	147.5	147.5	147.5	147.5
27.5°	142.0	133.9	133.9	133.9	133.9
30°	125.7	120.3	120.3	122.9	120.3
32.5°	114.8	106.5	106.5	109.3	109.3
35°	101.0	95.5	95.5	95.5	95.5
37.5°	87.4	81.9	81.9	81.9	81.9
40°	76.5	71.0	68.3	71.0	71.0
42.5°	65.5	60.0	57.4	57.4	57.4
45°	57.4	49.1	46.4	49.1	49.1
47.5°	46.4	41.0	41.0	43.6	43.6
50°	35.5	35.5	38.3	43.6	43.6
52.5°	32.8	32.8	38.3	43.6	43.6
55°	30.0	32.8	38.3	41.0	43.6
57.5°	27.4	32.8	38.3	41.0	41.0
60°	27.4	30.0	35.5	41.0	41.0
62.5°	24.6	27.4	32.8	38.3	38.3
65°	24.6	27.4	32.8	38.3	38.3
66°	24.6	27.4	32.8	38.3	38.3
67.5°	24.6	27.4	32.8	38.3	38.3
70°	24.6	27.4	32.8	35.5	35.5
72.5°	21.9	24.6	30.0	35.5	35.5
75°	21.9	24.6	30.0	35.5	35.5
77.5°	21.9	24.6	30.0	35.5	35.5
80°	21.9	24.6	30.0	32.8	35.5
82.5°	19.1	24.6	27.4	32.8	32.8
85°	19.1	21.9	27.4	30.0	32.8
87.5°	16.4	19.1	21.9	27.4	27.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)