

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: P165328

Luminaire Tested: **VST-E11-LED-E-U-SL3-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165328
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-E11-LED-E-U-SL3-HSS-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (231) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19336 lumens
Efficiency: N/A
Efficacy: 71.7 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: B1 - U0 - G4

Input Watts (W): 269.7
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



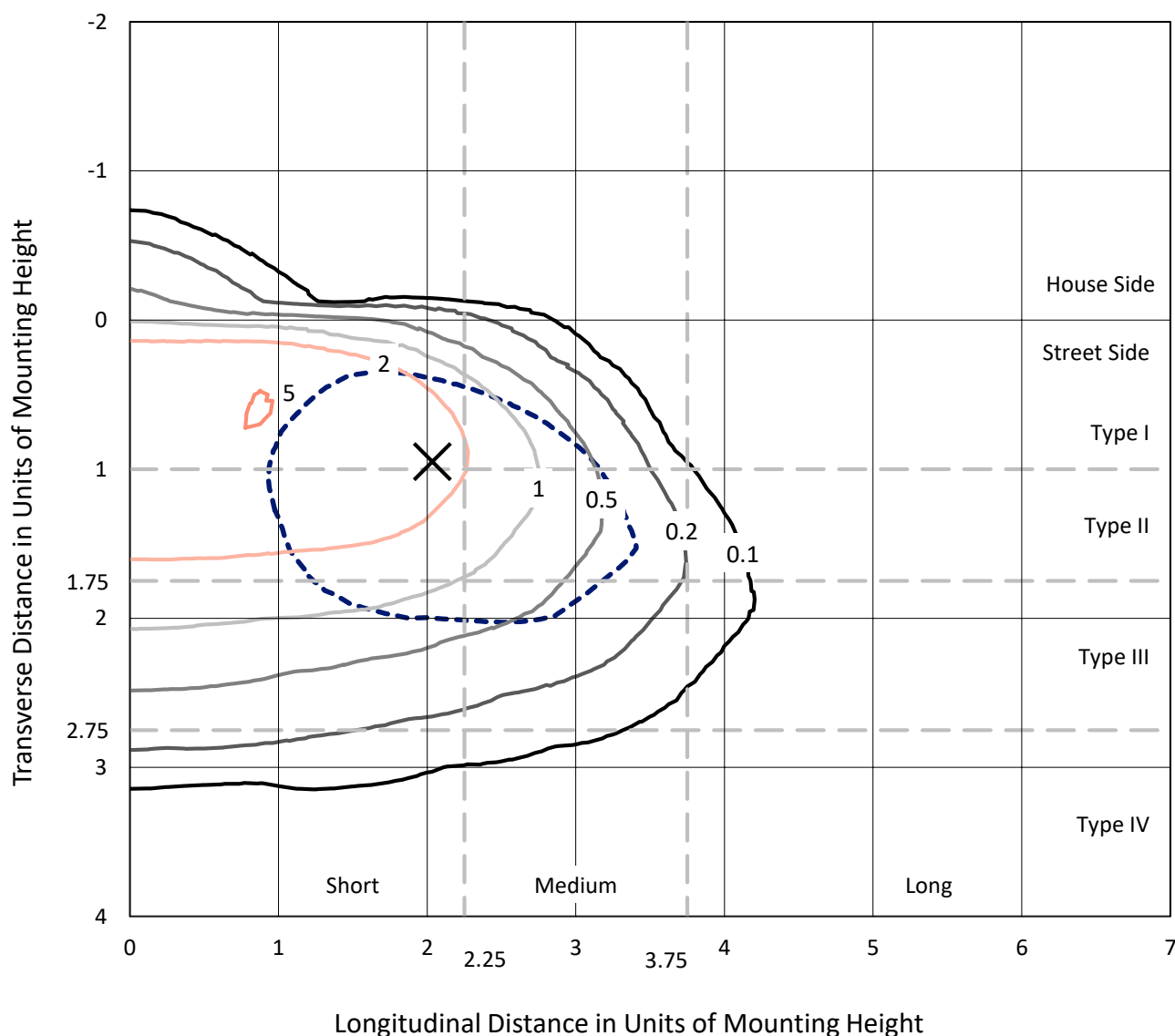
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

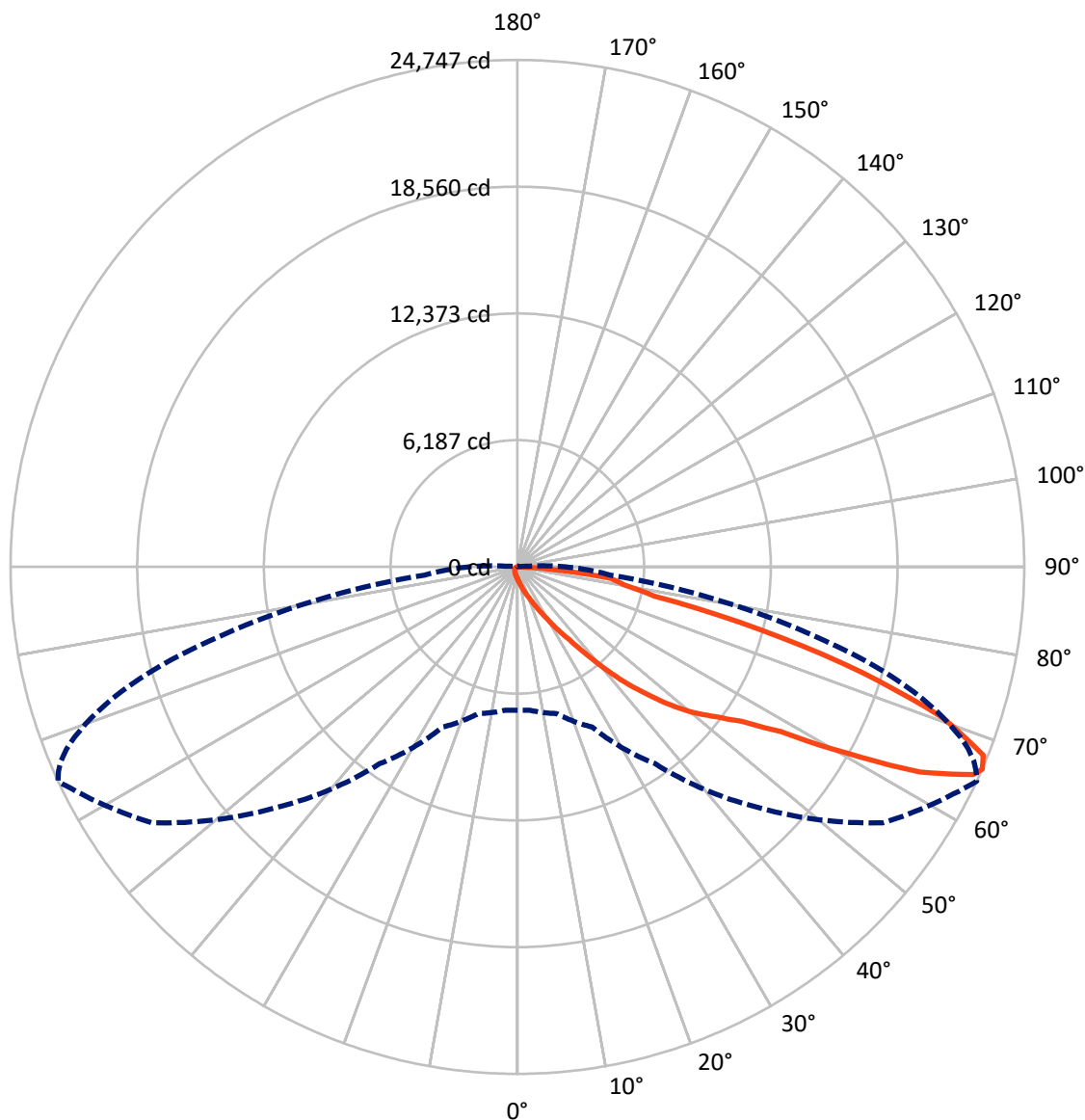


Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	419.0	0.0	419.0
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	18917.0	0.0	18917.0
	% Fixture	97.8	0.0	97.8
Total	Lumens	19336.0	0.0	19336.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	0.3
10°-20°	277.0	1.4
20°-30°	597.5	3.1
30°-40°	1276.0	6.6
40°-50°	2821.9	14.6
50°-60°	4782.2	24.7
60°-70°	6381.4	33.0
70°-80°	2810.9	14.5
80°-90°	323.8	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°	19336.0	100.0
0°-180°	19336.0	100.0

Coefficient of Utilization



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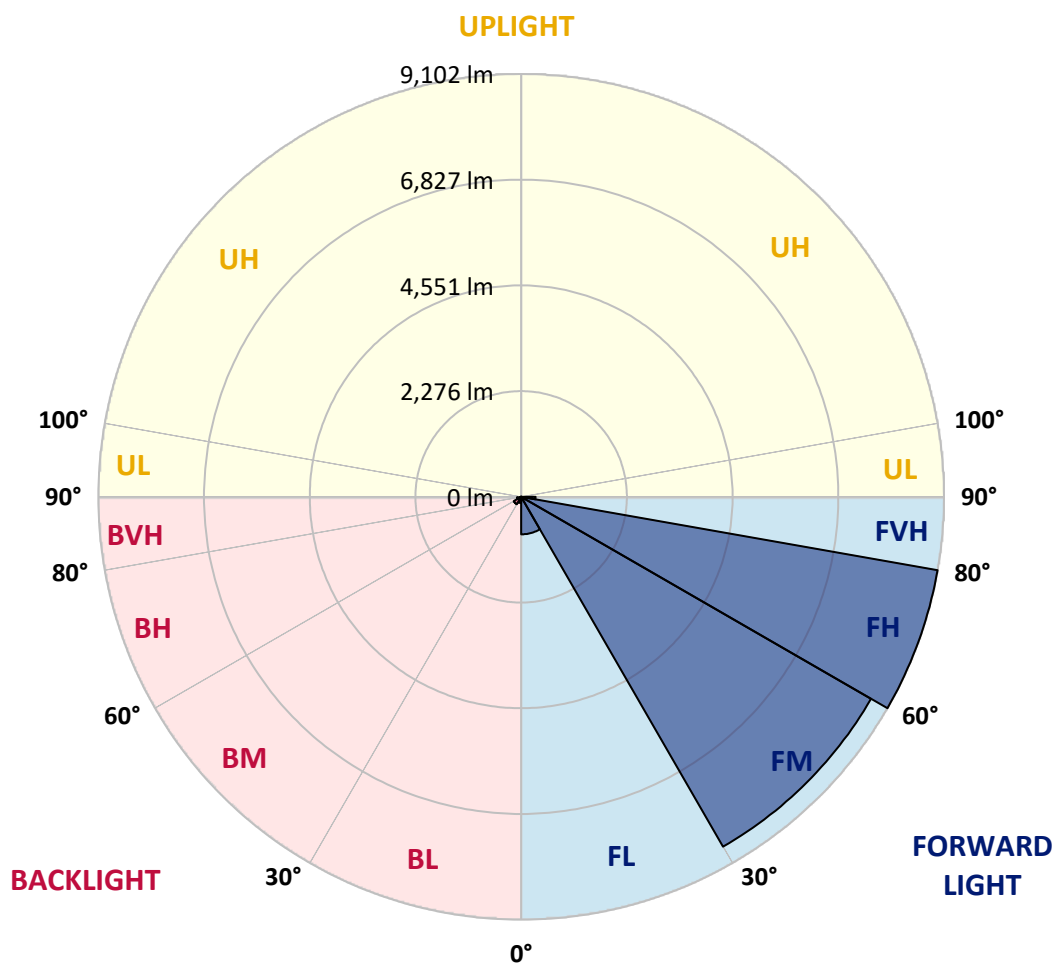
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	807.7	4.2			
FM	(30°-60°)	8696.0	45.0			
FH	(60°-80°)	9102.5	47.1			G4/12000
FVH	(80°-90°)	310.9	1.6			G3/500
BL	(0°-30°)	132.2	0.7	B1/500		
BM	(30°-60°)	184.0	1.0	B0/220		
BH	(60°-80°)	89.9	0.5	B0/110		G0/110
BVH	(80°-90°)	12.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5
2.5°	736.1	732.3	717.4	717.4	695.1	680.4	661.7	643.1	643.1	639.3	635.7
5°	973.9	951.7	947.9	907.0	873.6	825.3	780.6	721.2	713.8	706.4	702.5
7.5°	1238.0	1234.1	1200.7	1152.4	1085.6	996.2	907.0	810.4	795.5	788.1	773.2
10°	1580.0	1561.2	1516.8	1434.8	1334.6	1215.6	1070.7	918.1	899.6	884.7	877.2
12.5°	1907.1	1873.7	1847.5	1743.4	1617.0	1442.3	1267.5	1048.4	1033.5	1014.9	985.1
15°	2211.8	2182.0	2137.6	2048.4	1907.1	1687.7	1483.4	1215.6	1178.4	1152.4	1130.1
17.5°	2449.8	2431.3	2379.1	2278.9	2126.3	1933.0	1687.7	1386.5	1356.9	1323.3	1282.4
20°	2676.6	2650.5	2568.7	2431.3	2267.6	2118.8	1929.4	1609.5	1568.7	1527.8	1483.4
22.5°	2892.2	2866.0	2732.4	2505.5	2330.8	2267.6	2200.8	1862.4	1799.2	1765.8	1721.1
25°	3193.4	3137.6	2929.2	2568.7	2334.6	2382.9	2498.1	2189.5	2130.1	2081.8	2011.1
27.5°	3598.6	3524.1	3197.0	2661.7	2349.3	2509.4	2840.1	2587.2	2524.0	2468.3	2390.4
30°	4055.7	4007.4	3617.1	2884.8	2457.2	2695.1	3222.9	3092.9	3018.6	2951.6	2858.8
32.5°	4516.7	4449.8	4063.2	3308.5	2747.1	3055.7	3702.6	3680.3	3583.7	3520.5	3420.0
35°	4921.9	4888.5	4602.2	4003.6	3408.9	3687.7	4341.9	4367.9	4282.6	4215.5	4104.0
37.5°	5197.1	5197.1	5141.3	4750.8	4460.9	4669.0	5282.4	5286.2	5200.7	5048.3	4992.5
40°	5338.1	5379.0	5579.9	5654.2	5639.3	5907.0	6516.8	6449.7	6379.1	6300.9	6115.2
42.5°	5628.2	5665.3	6092.8	6605.9	6940.5	7293.5	7713.6	7691.3	7606.0	7464.7	7293.5
45°	6119.0	6167.3	6676.6	7490.6	8178.2	8680.3	8947.8	8843.7	8758.2	8624.5	8535.1
47.5°	6743.4	6836.4	7412.5	8420.0	9248.9	10077.9	10356.6	10081.7	10007.4	9903.1	9758.2
50°	7408.9	7498.1	8111.4	9263.8	10200.7	11189.4	11654.2	11189.4	11081.7	11048.1	10884.7
52.5°	7985.0	8059.5	8650.5	9914.4	10929.1	12089.0	12765.6	12152.2	12074.1	11962.6	11843.6
55°	8327.0	8386.6	8940.3	10226.6	11423.7	12899.4	13840.1	13301.0	13185.7	13141.2	12970.1
57.5°	8442.3	8501.7	8999.9	10267.5	11691.2	13639.2	15144.9	15163.4	15025.9	14866.1	14813.9
60°	8442.3	8509.2	8929.3	10167.2	11951.5	14427.2	16884.5	18434.6	18137.3	18107.5	17917.9
62.5°	8092.9	8156.1	8579.8	9858.7	12301.0	15490.5	19308.3	22044.3	21958.9	21765.5	21453.3
65°	7334.4	7371.6	7787.9	9070.6	12167.1	16468.2	21408.6	24445.7	24308.3	23929.0	23527.6
66°	6992.4	7022.2	7412.5	8620.7	11728.5	16602.1	21780.4	24746.9	24520.2	24200.3	23746.8
67.5°	6498.0	6550.2	6825.1	7784.3	10676.5	16137.3	21546.3	24535.1	24338.1	23951.4	23497.8
70°	4338.3	4301.1	5271.3	5973.8	8133.8	13148.6	19330.6	22029.4	22033.2	21851.0	21668.9
72.5°	2059.5	2081.8	2364.2	3676.5	5323.3	8784.3	15386.4	17583.4	17836.2	17509.1	17282.2
75°	1479.5	1512.9	1684.0	2249.1	3174.6	5271.3	9973.8	12297.1	12304.6	11724.7	11208.1
77.5°	431.2	449.9	631.9	1386.5	2379.1	3557.5	5728.5	6836.4	6676.6	6260.1	5869.8
80°	178.3	178.3	185.8	442.5	955.3	2416.4	4007.4	5263.9	5245.4	5085.5	4855.1
82.5°	66.8	70.7	89.2	182.2	226.9	594.8	2672.8	4568.8	4557.5	4330.9	4167.2
85°	7.4	7.4	22.3	78.1	85.6	111.5	535.2	2014.8	2003.7	2014.8	1765.8
87.5°	0.0	0.0	3.6	7.4	11.1	14.9	22.3	78.1	85.6	81.7	74.3
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°	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5
2.5°	635.7	628.2	628.2	624.6	624.6	624.6	620.8	617.2	617.2	613.3	609.7
5°	695.1	687.6	684.0	676.6	672.9	669.1	661.7	658.0	650.6	646.8	643.1
7.5°	765.7	750.8	747.2	736.1	724.9	717.4	710.0	698.9	691.5	676.6	672.9
10°	855.1	836.4	821.5	806.6	795.5	777.0	765.7	750.8	736.1	724.9	713.8
12.5°	970.2	944.3	921.9	907.0	881.1	858.7	836.4	825.3	795.5	780.6	762.1
15°	1096.7	1066.9	1040.9	1011.1	992.6	955.3	925.5	892.1	877.2	851.3	821.5
17.5°	1260.1	1211.8	1170.9	1141.4	1104.1	1066.9	1033.5	1000.0	955.3	925.5	888.5
20°	1434.8	1394.0	1338.2	1286.3	1241.6	1197.1	1148.6	1104.1	1063.3	1014.9	970.2
22.5°	1658.1	1598.5	1531.7	1479.5	1420.2	1371.8	1304.8	1245.4	1178.4	1115.2	1063.3
25°	1940.5	1862.4	1799.2	1724.9	1654.2	1580.0	1498.0	1423.8	1338.2	1278.8	1189.7
27.5°	2289.9	2215.7	2130.1	2033.5	1962.8	1851.3	1743.4	1650.6	1550.2	1457.2	1356.9
30°	2736.0	2628.3	2538.9	2446.2	2304.8	2196.9	2070.5	1944.3	1806.6	1713.8	1561.2
32.5°	3271.2	3156.1	3022.2	2888.4	2758.4	2606.0	2449.8	2293.6	2141.2	1970.3	1814.1
35°	3925.7	3788.0	3635.6	3490.7	3290.0	3126.3	2929.2	2713.7	2542.8	2345.7	2148.6
37.5°	4791.9	4565.0	4431.1	4278.7	4007.4	3784.4	3564.9	3349.4	3048.2	2840.1	2561.3
40°	5877.2	5743.4	5524.2	5278.8	5033.4	4739.7	4442.4	4156.2	3806.7	3516.6	3193.4
42.5°	7152.2	6955.4	6732.3	6379.1	6130.1	5784.2	5446.1	5066.8	4639.2	4267.7	3888.4
45°	8349.3	8115.2	7944.1	7591.1	7330.8	6921.7	6512.9	6111.5	5616.9	5137.5	4698.8
47.5°	9643.1	9449.6	9167.2	8881.0	8617.1	8156.1	7713.6	7226.7	6706.2	6137.5	5568.6
50°	10780.6	10628.2	10434.8	10089.1	9795.4	9408.8	8888.4	8356.8	7698.7	7133.7	6487.0
52.5°	11747.0	11628.0	11356.7	11111.3	10847.4	10483.1	10018.5	9509.2	8799.2	8178.2	7442.3
55°	12888.4	12802.8	12564.9	12412.5	12178.4	11828.9	11393.9	10921.9	10170.9	9494.3	8661.5
57.5°	14758.2	14691.4	14483.0	14419.8	14189.3	13884.6	13349.3	12843.7	11966.4	11126.2	10174.7
60°	17854.7	17721.1	17416.1	17260.1	16772.9	16364.1	15669.1	14973.8	13914.4	12843.7	11698.7
62.5°	21170.6	20795.2	20215.3	19717.3	19025.9	18315.7	17386.3	16323.3	15081.7	13810.3	12494.2
65°	22958.8	22319.5	21587.1	20795.2	19899.5	18854.7	17683.8	16408.8	15074.2	13732.2	12341.8
66°	23163.3	22442.0	21665.3	20784.2	19788.0	18676.4	17486.7	16148.5	14761.8	13453.4	12063.0
67.5°	22906.8	22152.2	21330.7	20353.0	19274.9	18122.4	16873.4	15483.0	14148.5	12821.3	11468.2
70°	21111.3	20360.2	19627.9	18598.3	17449.5	16289.9	15107.6	13553.8	12289.9	11070.4	9866.1
72.5°	16858.5	16349.2	15624.4	14743.3	13624.3	12263.7	11278.6	9888.5	8791.8	7609.6	6676.6
75°	10535.2	9817.8	8921.8	7799.2	6944.1	5840.0	5263.9	4208.1	3583.7	3037.1	2509.4
77.5°	5386.5	4847.6	4219.4	3587.3	2981.4	2379.1	1840.0	1301.2	877.2	609.7	453.5
80°	4449.8	3974.0	3453.4	2877.3	2342.1	1817.9	1308.6	892.1	568.9	371.8	289.9
82.5°	3676.5	3275.1	2810.3	2275.0	1810.5	1427.6	992.6	646.8	401.4	260.3	204.5
85°	1565.1	1420.2	1096.7	869.8	654.2	483.3	338.4	226.9	159.8	130.0	119.0
87.5°	66.8	74.3	70.7	55.8	40.9	40.9	37.2	29.8	29.8	29.8	29.8
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°	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5	583.5
2.5°	609.7	605.9	602.3	602.3	598.4	594.8	572.5	554.0	531.6	516.7	501.8
5°	635.7	631.9	624.6	620.8	613.3	609.7	561.4	520.3	486.9	461.0	442.5
7.5°	661.7	658.0	646.8	635.7	631.9	624.6	546.5	494.4	449.9	420.1	401.4
10°	695.1	684.0	672.9	658.0	646.8	635.7	531.6	464.6	416.3	390.3	371.8
12.5°	743.4	724.9	706.4	687.6	672.9	654.2	524.2	438.6	390.3	360.5	342.0
15°	799.4	773.2	750.8	728.7	702.5	684.0	509.3	416.3	368.0	338.4	316.0
17.5°	851.3	821.5	788.1	754.7	728.7	702.5	494.4	394.1	345.6	316.0	293.7
20°	925.5	881.1	840.2	799.4	762.1	728.7	472.0	371.8	327.1	293.7	271.3
22.5°	1007.5	955.3	903.4	847.7	799.4	754.7	453.5	353.1	308.6	275.2	249.0
25°	1111.6	1048.4	977.7	907.0	851.3	791.9	435.0	334.6	289.9	256.4	230.5
27.5°	1256.5	1167.3	1089.2	1000.0	914.5	847.7	420.1	319.7	271.3	237.9	212.0
30°	1453.6	1323.3	1200.7	1104.1	1003.7	907.0	405.2	301.1	256.4	219.4	189.6
32.5°	1672.8	1520.4	1379.1	1234.1	1107.7	996.2	390.3	286.2	237.9	200.7	174.7
35°	1944.3	1750.9	1561.2	1394.0	1241.6	1092.8	375.4	271.3	223.0	182.2	156.2
37.5°	2334.6	2092.9	1843.9	1628.3	1431.2	1234.1	364.3	256.4	204.5	163.7	137.5
40°	2869.9	2557.7	2252.7	1959.0	1702.6	1457.2	349.5	241.5	189.6	148.8	122.6
42.5°	3449.8	3070.6	2669.2	2338.2	1985.2	1676.6	334.6	226.9	174.7	133.9	107.9
45°	4171.1	3698.8	3211.9	2762.0	2330.8	1933.0	319.7	212.0	156.2	119.0	93.0
47.5°	4959.1	4356.8	3806.7	3241.7	2728.6	2252.7	301.1	200.7	141.3	104.1	81.7
50°	5769.5	5133.9	4438.6	3795.4	3185.9	2572.6	282.6	182.2	126.4	93.0	66.8
52.5°	6642.9	5892.1	5182.2	4382.8	3672.8	2992.5	263.9	167.3	115.1	81.7	55.8
55°	7754.5	6914.5	6081.7	5185.8	4330.9	3479.6	245.4	148.8	100.5	70.7	44.7
57.5°	9152.3	8156.1	7133.7	6122.6	5085.5	4118.9	230.5	130.0	85.6	59.4	37.2
60°	10472.0	9308.5	8070.5	6907.1	5735.9	4609.7	208.1	115.1	74.3	48.3	37.2
62.5°	11156.0	9828.9	8494.3	7211.8	5962.8	4784.4	185.8	96.6	63.2	40.9	33.4
65°	10988.7	9635.6	8341.9	7048.2	5825.3	4672.9	163.7	85.6	55.8	37.2	33.4
66°	10747.2	9408.8	8107.8	6877.3	5709.9	4553.9	152.4	81.7	52.1	37.2	29.8
67.5°	10219.2	8925.4	7683.8	6538.9	5393.9	4327.0	137.5	74.3	48.3	33.4	29.8
70°	8728.6	7553.8	6561.2	5542.7	4609.7	3646.9	111.5	63.2	40.9	29.8	29.8
72.5°	5776.8	4977.6	4316.0	3713.7	3104.0	2408.9	93.0	52.1	33.4	29.8	26.0
75°	2178.4	1970.3	1691.5	1520.4	1327.1	1163.5	74.3	33.4	26.0	26.0	26.0
77.5°	386.7	356.9	316.0	289.9	267.7	245.4	59.4	22.3	22.3	26.0	26.0
80°	260.3	241.5	219.4	200.7	185.8	167.3	40.9	18.5	22.3	22.3	26.0
82.5°	185.8	174.7	163.7	148.8	137.5	122.6	26.0	18.5	22.3	22.3	22.3
85°	111.5	104.1	96.6	89.2	78.1	74.3	18.5	18.5	18.5	22.3	22.3
87.5°	29.8	26.0	29.8	29.8	22.3	26.0	14.9	14.9	14.9	18.5	18.5
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°	583.5	583.5	583.5	583.5	583.5
2.5°	494.4	494.4	486.9	498.2	498.2
5°	427.6	427.6	423.7	427.6	427.6
7.5°	390.3	386.7	386.7	386.7	390.3
10°	356.9	353.1	353.1	353.1	353.1
12.5°	327.1	323.5	319.7	323.5	323.5
15°	301.1	293.7	293.7	293.7	293.7
17.5°	278.8	271.3	267.7	267.7	267.7
20°	256.4	245.4	245.4	245.4	245.4
22.5°	234.1	223.0	223.0	223.0	223.0
25°	212.0	200.7	200.7	200.7	200.7
27.5°	193.2	182.2	182.2	182.2	182.2
30°	171.1	163.7	163.7	167.3	163.7
32.5°	156.2	144.9	144.9	148.8	148.8
35°	137.5	130.0	130.0	130.0	130.0
37.5°	119.0	111.5	111.5	111.5	111.5
40°	104.1	96.6	93.0	96.6	96.6
42.5°	89.2	81.7	78.1	78.1	78.1
45°	78.1	66.8	63.2	66.8	66.8
47.5°	63.2	55.8	55.8	59.4	59.4
50°	48.3	48.3	52.1	59.4	59.4
52.5°	44.7	44.7	52.1	59.4	59.4
55°	40.9	44.7	52.1	55.8	59.4
57.5°	37.2	44.7	52.1	55.8	55.8
60°	37.2	40.9	48.3	55.8	55.8
62.5°	33.4	37.2	44.7	52.1	52.1
65°	33.4	37.2	44.7	52.1	52.1
66°	33.4	37.2	44.7	52.1	52.1
67.5°	33.4	37.2	44.7	52.1	52.1
70°	33.4	37.2	44.7	48.3	48.3
72.5°	29.8	33.4	40.9	48.3	48.3
75°	29.8	33.4	40.9	48.3	48.3
77.5°	29.8	33.4	40.9	48.3	48.3
80°	29.8	33.4	40.9	44.7	48.3
82.5°	26.0	33.4	37.2	44.7	44.7
85°	26.0	29.8	37.2	40.9	44.7
87.5°	22.3	26.0	29.8	37.2	37.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)