

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: P165318

Luminaire Tested: **VST-E10-LED-E-U-SL3-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165318
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-E10-LED-E-U-SL3-HSS-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (210) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17578.2 lumens
Efficiency: N/A
Efficacy: 71.0 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.67' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G4

Input Watts (W): 247.7
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



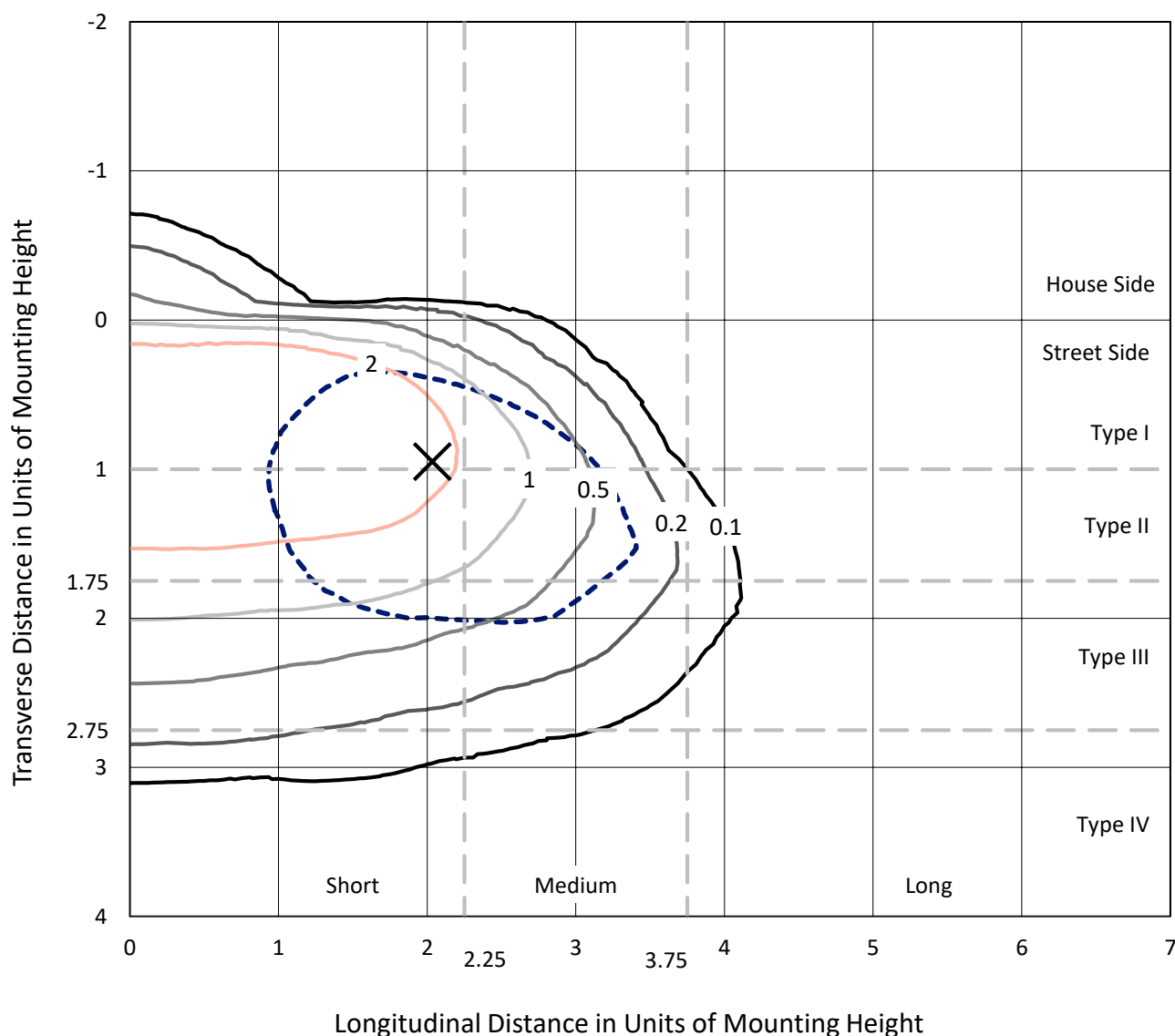
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

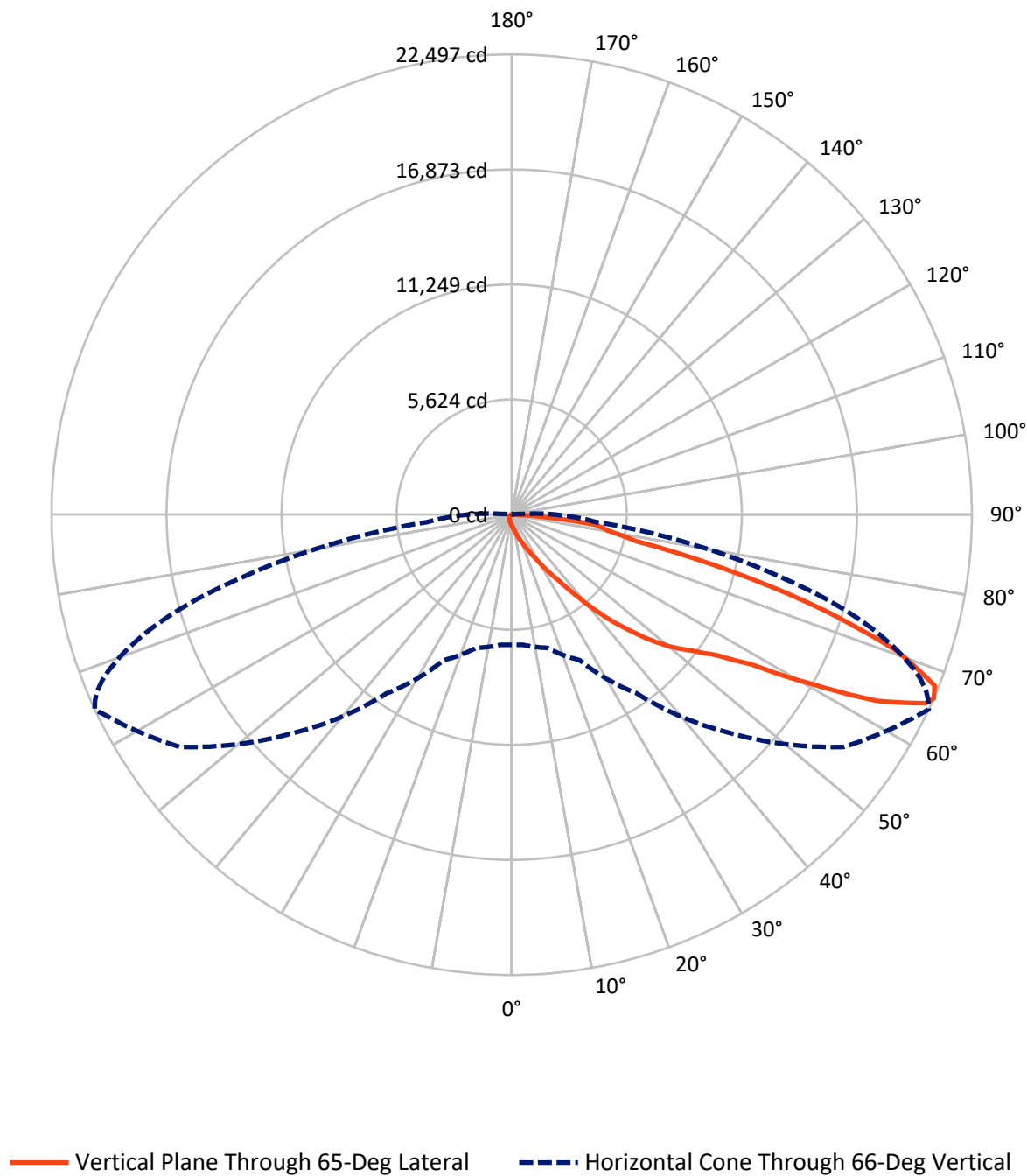


Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	380.9	0.0	380.9
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	17197.3	0.0	17197.3
	% Fixture	97.8	0.0	97.8
Total	Lumens	17578.2	0.0	17578.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.4	0.3
10°-20°	251.8	1.4
20°-30°	543.2	3.1
30°-40°	1160.0	6.6
40°-50°	2565.3	14.6
50°-60°	4347.4	24.7
60°-70°	5801.3	33.0
70°-80°	2555.4	14.5
80°-90°	294.3	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°	17578.2	100.0
0°-180°	17578.2	100.0

Coefficient of Utilization



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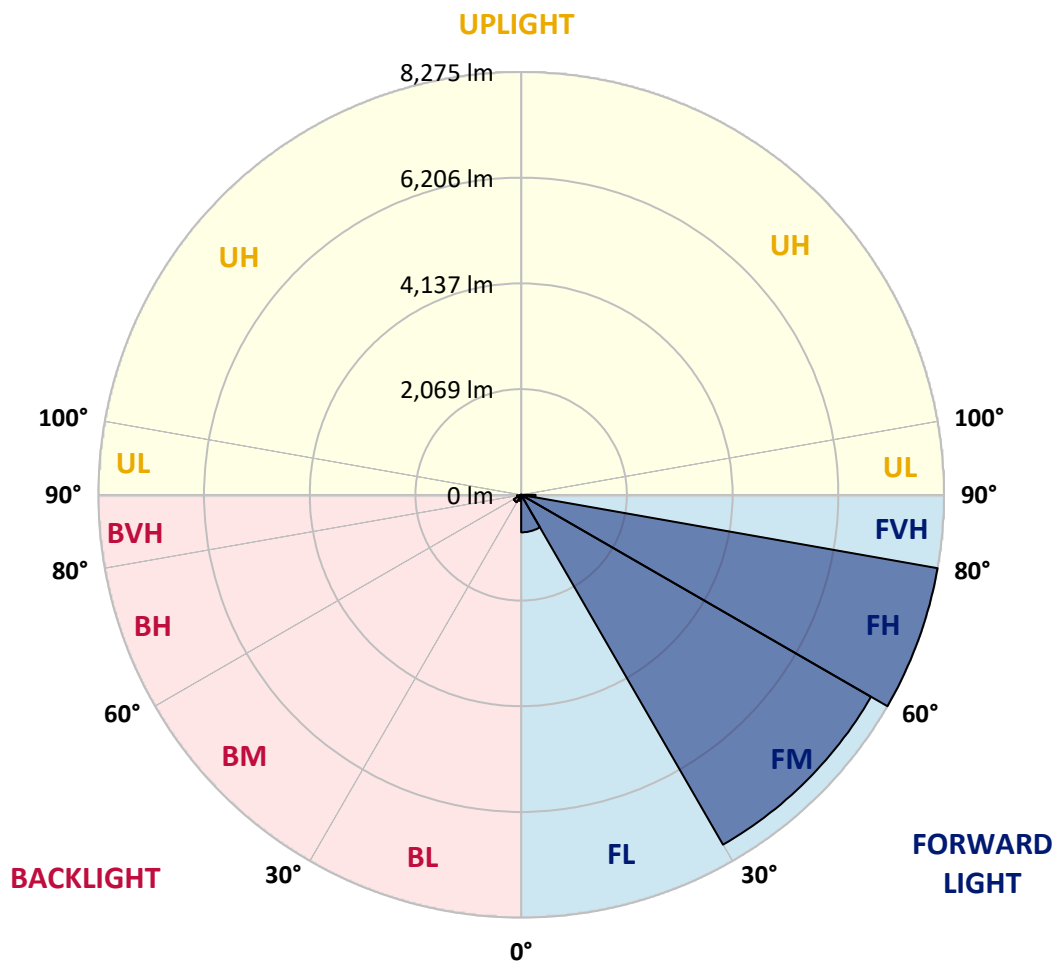
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	734.2	4.2			
FM	(30°-60°)	7905.5	45.0			
FH	(60°-80°)	8275.0	47.1			G4/12000
FVH	(80°-90°)	282.6	1.6			G3/500
BL	(0°-30°)	120.2	0.7	B1/500		
BM	(30°-60°)	167.3	1.0	B0/220		
BH	(60°-80°)	81.7	0.5	B0/110		G0/110
BVH	(80°-90°)	11.7	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°	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5
2.5°	669.2	665.7	652.2	652.2	631.9	618.5	601.5	584.7	584.7	581.2	577.9
5°	885.3	865.2	861.7	824.6	794.2	750.3	709.7	655.7	648.9	642.1	638.6
7.5°	1125.4	1121.9	1091.6	1047.7	986.9	905.6	824.6	736.7	723.2	716.4	702.9
10°	1436.3	1419.3	1378.9	1304.4	1213.3	1105.1	973.4	834.6	817.8	804.3	797.5
12.5°	1733.7	1703.3	1679.5	1584.9	1470.0	1311.2	1152.3	953.0	939.5	922.7	895.6
15°	2010.8	1983.7	1943.2	1862.2	1733.7	1534.2	1348.5	1105.1	1071.3	1047.7	1027.3
17.5°	2227.1	2210.2	2162.8	2071.7	1933.0	1757.3	1534.2	1260.5	1233.6	1203.0	1165.9
20°	2433.3	2409.5	2335.2	2210.2	2061.4	1926.2	1754.0	1463.2	1426.1	1388.9	1348.5
22.5°	2629.3	2605.5	2484.0	2277.7	2118.9	2061.4	2000.7	1693.1	1635.6	1605.2	1564.6
25°	2903.1	2852.4	2662.9	2335.2	2122.4	2166.3	2271.0	1990.4	1936.5	1892.5	1828.3
27.5°	3271.4	3203.7	2906.3	2419.8	2135.7	2281.2	2581.9	2352.0	2294.6	2243.9	2173.1
30°	3687.0	3643.1	3288.3	2622.5	2233.8	2450.1	2929.9	2811.7	2744.2	2683.3	2598.9
32.5°	4106.1	4045.3	3693.8	3007.7	2497.3	2777.9	3366.0	3345.7	3257.9	3200.4	3109.1
35°	4474.4	4444.1	4183.8	3639.6	3099.0	3352.5	3947.2	3970.8	3893.2	3832.3	3730.9
37.5°	4724.6	4724.6	4673.9	4318.9	4055.4	4244.6	4802.2	4805.7	4727.9	4589.4	4538.7
40°	4852.9	4890.0	5072.7	5140.2	5126.6	5370.0	5924.3	5863.4	5799.1	5728.1	5559.2
42.5°	5116.6	5150.2	5538.9	6005.4	6309.5	6630.5	7012.4	6992.1	6914.5	6786.0	6630.5
45°	5562.7	5606.6	6069.6	6809.6	7434.7	7891.2	8134.3	8039.7	7962.0	7840.5	7759.2
47.5°	6130.4	6214.9	6738.6	7654.5	8408.1	9161.7	9415.1	9165.2	9097.7	9002.8	8871.1
50°	6735.4	6816.4	7374.0	8421.7	9273.3	10172.2	10594.7	10172.2	10074.3	10043.7	9895.1
52.5°	7259.1	7326.8	7864.1	9013.1	9935.6	10990.0	11605.0	11047.5	10976.5	10875.1	10766.9
55°	7570.0	7624.2	8127.6	9296.9	10385.2	11726.7	12581.9	12091.8	11987.0	11946.5	11791.0
57.5°	7674.9	7728.8	8181.8	9334.1	10628.4	12399.3	13768.1	13784.9	13659.9	13514.6	13467.2
60°	7674.9	7735.6	8117.5	9243.0	10865.0	13115.7	15349.5	16758.8	16488.5	16461.4	16289.0
62.5°	7357.2	7414.6	7799.8	8962.4	11182.7	14082.3	17553.0	20040.2	19962.7	19786.8	19503.0
65°	6667.6	6701.5	7079.9	8246.0	11061.0	14971.1	19462.3	22223.4	22098.4	21753.6	21388.8
66°	6356.7	6383.8	6738.6	7837.0	10662.3	15092.8	19800.3	22497.2	22291.1	22000.3	21588.0
67.5°	5907.3	5954.7	6204.7	7076.6	9705.9	14670.2	19587.5	22304.7	22125.5	21774.0	21361.7
70°	3943.9	3910.1	4792.1	5430.8	7394.3	11953.3	17573.3	20026.7	20030.2	19864.6	19699.0
72.5°	1872.2	1892.5	2149.3	3342.2	4839.3	7985.8	13987.7	15984.9	16214.7	15917.4	15711.1
75°	1345.0	1375.4	1530.9	2044.6	2886.0	4792.1	9067.1	11179.2	11186.0	10658.8	10189.2
77.5°	392.0	409.0	574.4	1260.5	2162.8	3234.1	5207.7	6214.9	6069.6	5691.0	5336.2
80°	162.1	162.1	168.9	402.2	868.5	2196.7	3643.1	4785.3	4768.5	4623.2	4413.7
82.5°	60.7	64.2	81.1	165.6	206.2	540.8	2429.8	4153.5	4143.2	3937.2	3788.4
85°	6.8	6.8	20.3	71.0	77.8	101.4	486.6	1831.6	1821.5	1831.6	1605.2
87.5°	0.0	0.0	3.3	6.8	10.1	13.5	20.3	71.0	77.8	74.3	67.5
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5
2.5°	577.9	571.1	571.1	567.8	567.8	567.8	564.4	561.1	561.1	557.6	554.3
5°	631.9	625.1	621.8	615.0	611.8	608.3	601.5	598.2	591.4	588.0	584.7
7.5°	696.1	682.6	679.3	669.2	659.0	652.2	645.4	635.4	628.6	615.0	611.8
10°	777.4	760.3	746.8	733.3	723.2	706.4	696.1	682.6	669.2	659.0	648.9
12.5°	882.0	858.4	838.1	824.6	801.0	780.7	760.3	750.3	723.2	709.7	692.8
15°	997.0	969.9	946.3	919.2	902.4	868.5	841.4	811.0	797.5	773.9	746.8
17.5°	1145.5	1101.6	1064.5	1037.6	1003.7	969.9	939.5	909.1	868.5	841.4	807.8
20°	1304.4	1267.2	1216.6	1169.3	1128.7	1088.3	1044.2	1003.7	966.6	922.7	882.0
22.5°	1507.3	1453.2	1392.4	1345.0	1291.0	1247.1	1186.2	1132.2	1071.3	1013.8	966.6
25°	1764.1	1693.1	1635.6	1568.1	1503.9	1436.3	1361.8	1294.3	1216.6	1162.6	1081.5
27.5°	2081.8	2014.2	1936.5	1848.6	1784.4	1683.0	1584.9	1500.6	1409.3	1324.7	1233.6
30°	2487.3	2389.4	2308.1	2223.8	2095.3	1997.2	1882.3	1767.6	1642.4	1558.0	1419.3
32.5°	2973.9	2869.2	2747.5	2625.8	2507.6	2369.1	2227.1	2085.0	1946.5	1791.2	1649.2
35°	3568.8	3443.6	3305.1	3173.3	2990.9	2842.1	2662.9	2467.0	2311.6	2132.5	1953.3
37.5°	4356.2	4150.0	4028.3	3889.8	3643.1	3440.3	3240.9	3044.9	2771.1	2581.9	2328.4
40°	5342.9	5221.2	5022.0	4798.9	4575.8	4308.8	4038.5	3778.3	3460.6	3196.9	2903.1
42.5°	6502.0	6323.1	6120.3	5799.1	5572.8	5258.4	4951.0	4606.2	4217.5	3879.7	3534.9
45°	7590.3	7377.5	7221.9	6901.0	6664.3	6292.5	5920.8	5556.0	5106.3	4670.4	4271.7
47.5°	8766.4	8590.6	8333.8	8073.6	7833.7	7414.6	7012.4	6569.7	6096.5	5579.6	5062.4
50°	9800.5	9662.0	9486.1	9171.9	8905.0	8553.4	8080.4	7597.1	6998.9	6485.2	5897.2
52.5°	10679.1	10570.9	10324.3	10101.2	9861.3	9530.1	9107.7	8644.7	7999.3	7434.7	6765.7
55°	11716.7	11638.9	11422.6	11284.1	11071.3	10753.6	10358.1	9929.0	9246.2	8631.2	7874.1
57.5°	13416.5	13355.8	13166.4	13108.9	12899.4	12622.3	12135.7	11676.1	10878.6	10114.7	9249.7
60°	16231.6	16110.1	15832.8	15691.0	15248.1	14876.5	14244.6	13612.5	12649.4	11676.1	10635.2
62.5°	19246.0	18904.8	18377.5	17924.8	17296.2	16650.6	15805.7	14839.3	13710.6	12554.8	11358.4
65°	20871.6	20290.4	19624.7	18904.8	18090.4	17140.7	16076.2	14917.1	13703.8	12483.8	11219.8
66°	21057.5	20401.8	19695.7	18894.7	17989.1	16978.6	15897.0	14680.5	13419.8	12230.4	10966.4
67.5°	20824.4	20138.3	19391.5	18502.7	17522.6	16474.9	15339.5	14075.5	12862.2	11655.7	10425.6
70°	19192.1	18509.3	17843.6	16907.5	15863.2	14809.0	13734.2	12321.7	11172.6	10064.0	8969.2
72.5°	15325.9	14862.9	14204.0	13403.0	12385.7	11148.8	10253.3	8989.5	7992.5	6917.8	6069.6
75°	9577.5	8925.3	8110.7	7090.2	6312.8	5309.1	4785.3	3825.5	3257.9	2761.0	2281.2
77.5°	4896.8	4406.9	3835.8	3261.2	2710.4	2162.8	1672.8	1182.9	797.5	554.3	412.3
80°	4045.3	3612.7	3139.5	2615.7	2129.2	1652.6	1189.7	811.0	517.2	338.0	263.5
82.5°	3342.2	2977.3	2554.8	2068.2	1645.9	1297.8	902.4	588.0	364.9	236.6	185.9
85°	1422.8	1291.0	997.0	790.7	594.7	439.4	307.6	206.2	145.3	118.2	108.2
87.5°	60.7	67.5	64.2	50.7	37.1	37.1	33.9	27.1	27.1	27.1	27.1
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°	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5
2.5°	554.3	550.8	547.5	547.5	544.0	540.8	520.4	503.6	483.3	469.8	456.2
5°	577.9	574.4	567.8	564.4	557.6	554.3	510.4	473.0	442.7	419.1	402.2
7.5°	601.5	598.2	588.0	577.9	574.4	567.8	496.8	449.4	409.0	381.9	364.9
10°	631.9	621.8	611.8	598.2	588.0	577.9	483.3	422.3	378.4	354.8	338.0
12.5°	675.8	659.0	642.1	625.1	611.8	594.7	476.5	398.7	354.8	327.7	310.9
15°	726.7	702.9	682.6	662.5	638.6	621.8	463.0	378.4	334.5	307.6	287.3
17.5°	773.9	746.8	716.4	686.1	662.5	638.6	449.4	358.3	314.2	287.3	267.0
20°	841.4	801.0	763.8	726.7	692.8	662.5	429.1	338.0	297.4	267.0	246.7
22.5°	915.9	868.5	821.3	770.6	726.7	686.1	412.3	321.0	280.5	250.2	226.4
25°	1010.5	953.0	888.8	824.6	773.9	719.9	395.5	304.1	263.5	233.1	209.5
27.5°	1142.3	1061.2	990.2	909.1	831.4	770.6	381.9	290.6	246.7	216.3	192.7
30°	1321.4	1203.0	1091.6	1003.7	912.4	824.6	368.4	273.8	233.1	199.5	172.4
32.5°	1520.7	1382.2	1253.7	1121.9	1007.0	905.6	354.8	260.2	216.3	182.4	158.8
35°	1767.6	1591.7	1419.3	1267.2	1128.7	993.5	341.3	246.7	202.8	165.6	142.0
37.5°	2122.4	1902.6	1676.2	1480.3	1301.1	1121.9	331.2	233.1	185.9	148.8	125.0
40°	2609.0	2325.2	2047.9	1780.9	1547.8	1324.7	317.7	219.6	172.4	135.2	111.4
42.5°	3136.2	2791.4	2426.5	2125.7	1804.7	1524.2	304.1	206.2	158.8	121.7	98.1
45°	3791.9	3362.5	2919.9	2510.9	2118.9	1757.3	290.6	192.7	142.0	108.2	84.6
47.5°	4508.3	3960.8	3460.6	2947.0	2480.5	2047.9	273.8	182.4	128.5	94.6	74.3
50°	5245.0	4667.1	4035.1	3450.4	2896.3	2338.7	256.9	165.6	114.9	84.6	60.7
52.5°	6039.0	5356.5	4711.1	3984.4	3338.9	2720.4	239.9	152.1	104.7	74.3	50.7
55°	7049.5	6285.9	5528.9	4714.3	3937.2	3163.3	223.1	135.2	91.3	64.2	40.6
57.5°	8320.3	7414.6	6485.2	5566.0	4623.2	3744.5	209.5	118.2	77.8	54.0	33.9
60°	9520.0	8462.3	7336.9	6279.1	5214.5	4190.6	189.2	104.7	67.5	43.9	33.9
62.5°	10141.8	8935.3	7722.1	6556.2	5420.7	4349.5	168.9	87.8	57.5	37.1	30.4
65°	9989.8	8759.7	7583.5	6407.4	5295.7	4248.1	148.8	77.8	50.7	33.9	30.4
66°	9770.2	8553.4	7370.7	6252.1	5190.9	4139.9	138.5	74.3	47.4	33.9	27.1
67.5°	9290.2	8114.0	6985.3	5944.4	4903.6	3933.7	125.0	67.5	43.9	30.4	27.1
70°	7935.1	6867.1	5964.8	5038.8	4190.6	3315.3	101.4	57.5	37.1	27.1	27.1
72.5°	5251.6	4525.1	3923.6	3376.1	2821.8	2189.9	84.6	47.4	30.4	27.1	23.6
75°	1980.4	1791.2	1537.7	1382.2	1206.5	1057.7	67.5	30.4	23.6	23.6	23.6
77.5°	351.5	324.5	287.3	263.5	243.4	223.1	54.0	20.3	20.3	23.6	23.6
80°	236.6	219.6	199.5	182.4	168.9	152.1	37.1	16.8	20.3	20.3	23.6
82.5°	168.9	158.8	148.8	135.2	125.0	111.4	23.6	16.8	20.3	20.3	20.3
85°	101.4	94.6	87.8	81.1	71.0	67.5	16.8	16.8	16.8	20.3	20.3
87.5°	27.1	23.6	27.1	27.1	20.3	23.6	13.5	13.5	13.5	16.8	16.8
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):

	145°	155°	165°	175°	180°
0°	530.5	530.5	530.5	530.5	530.5
2.5°	449.4	449.4	442.7	452.9	452.9
5°	388.7	388.7	385.2	388.7	388.7
7.5°	354.8	351.5	351.5	351.5	354.8
10°	324.5	321.0	321.0	321.0	321.0
12.5°	297.4	294.1	290.6	294.1	294.1
15°	273.8	267.0	267.0	267.0	267.0
17.5°	253.4	246.7	243.4	243.4	243.4
20°	233.1	223.1	223.1	223.1	223.1
22.5°	212.8	202.8	202.8	202.8	202.8
25°	192.7	182.4	182.4	182.4	182.4
27.5°	175.7	165.6	165.6	165.6	165.6
30°	155.6	148.8	148.8	152.1	148.8
32.5°	142.0	131.8	131.8	135.2	135.2
35°	125.0	118.2	118.2	118.2	118.2
37.5°	108.2	101.4	101.4	101.4	101.4
40°	94.6	87.8	84.6	87.8	87.8
42.5°	81.1	74.3	71.0	71.0	71.0
45°	71.0	60.7	57.5	60.7	60.7
47.5°	57.5	50.7	50.7	54.0	54.0
50°	43.9	43.9	47.4	54.0	54.0
52.5°	40.6	40.6	47.4	54.0	54.0
55°	37.1	40.6	47.4	50.7	54.0
57.5°	33.9	40.6	47.4	50.7	50.7
60°	33.9	37.1	43.9	50.7	50.7
62.5°	30.4	33.9	40.6	47.4	47.4
65°	30.4	33.9	40.6	47.4	47.4
66°	30.4	33.9	40.6	47.4	47.4
67.5°	30.4	33.9	40.6	47.4	47.4
70°	30.4	33.9	40.6	43.9	43.9
72.5°	27.1	30.4	37.1	43.9	43.9
75°	27.1	30.4	37.1	43.9	43.9
77.5°	27.1	30.4	37.1	43.9	43.9
80°	27.1	30.4	37.1	40.6	43.9
82.5°	23.6	30.4	33.9	40.6	40.6
85°	23.6	27.1	33.9	37.1	40.6
87.5°	20.3	23.6	27.1	33.9	33.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)