

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: P165285

Luminaire Tested: **VST-E07-LED-E-U-SL3-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165285
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-E07-LED-E-U-SL3-HSS-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(7) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (147) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10120.9 lumens
Efficiency: N/A
Efficacy: 58.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.17' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G2

Input Watts (W): 172.5
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

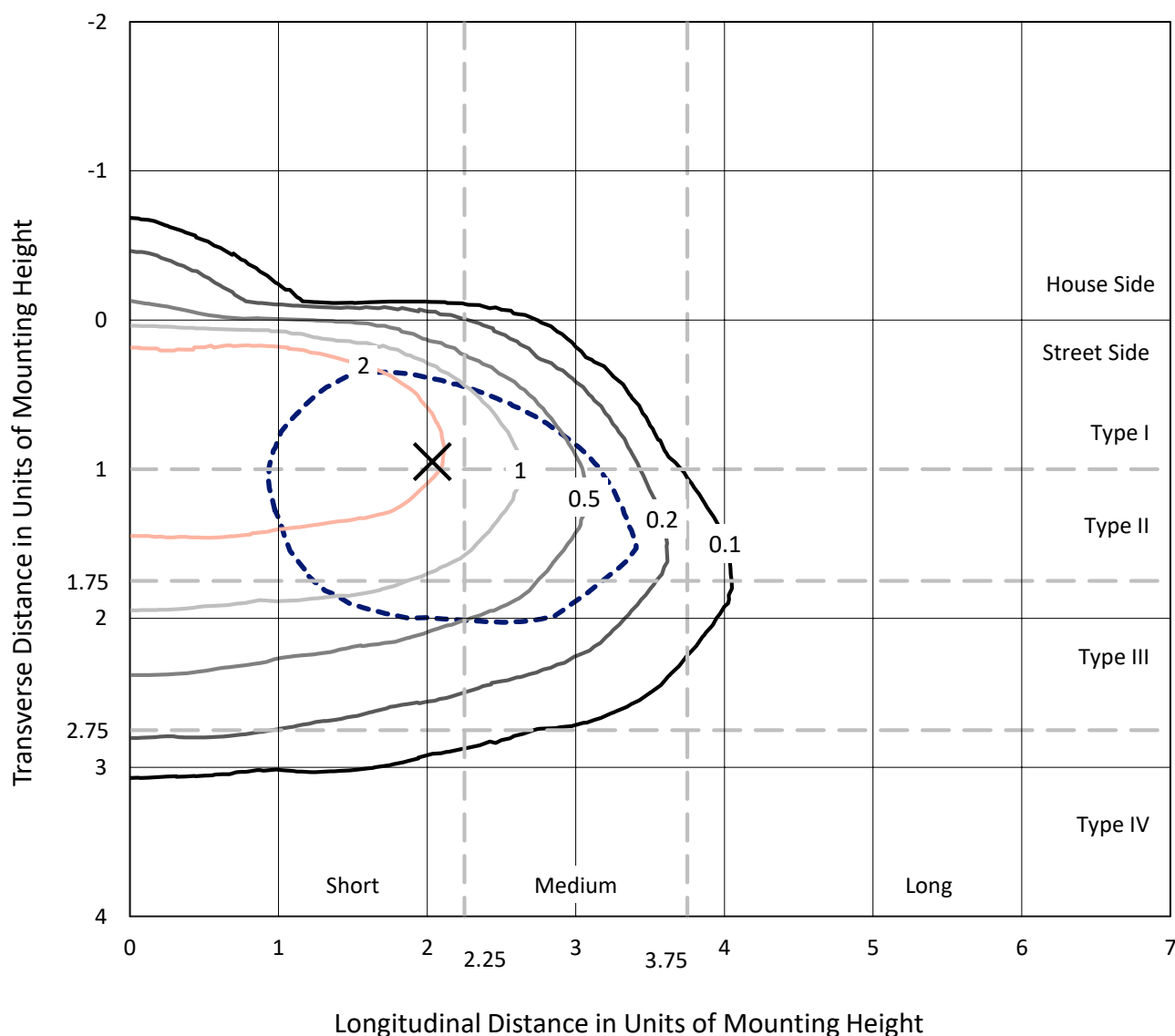


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

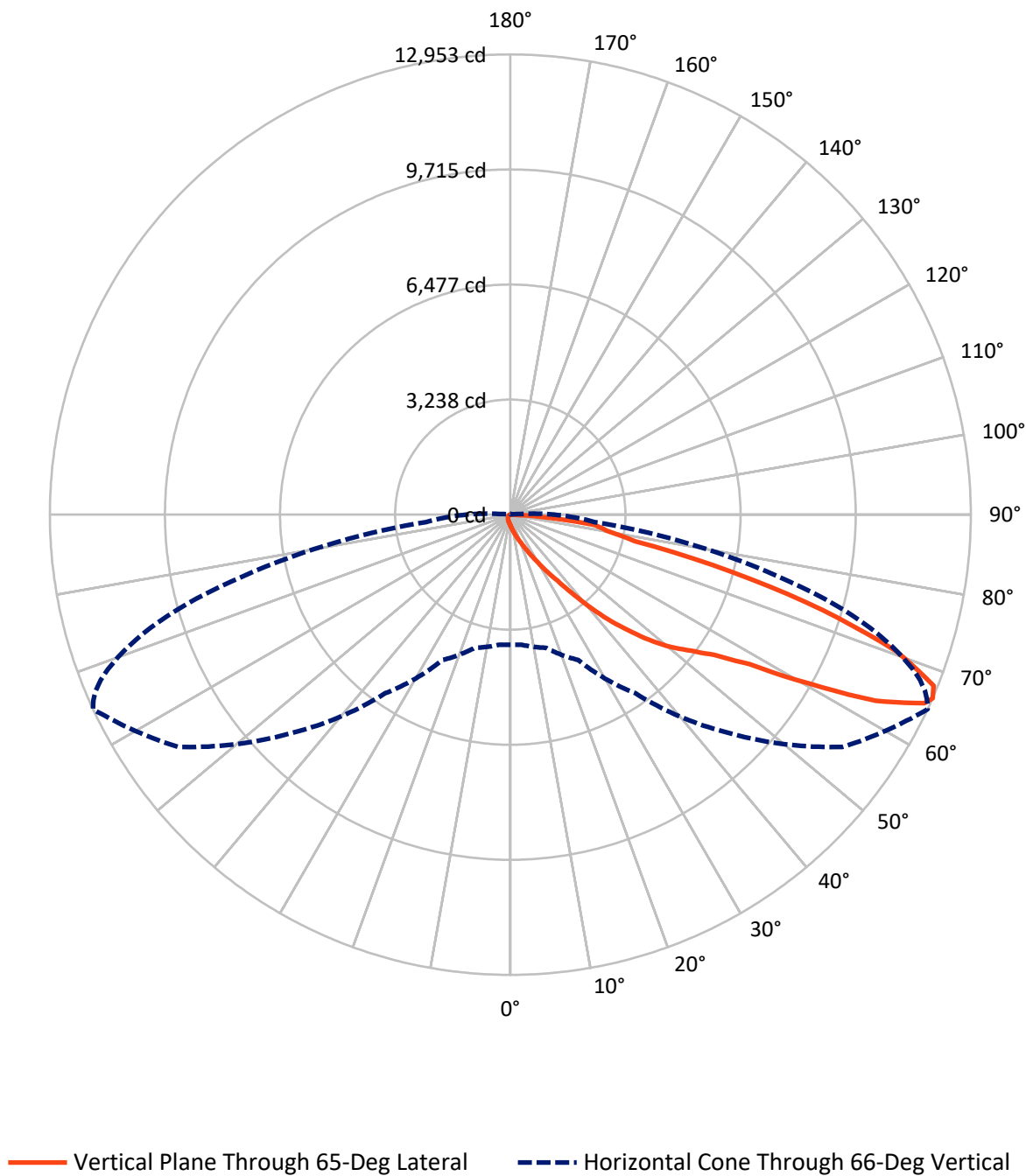


Based on 20 foot mounting height. Maximum calculated value = 4.2 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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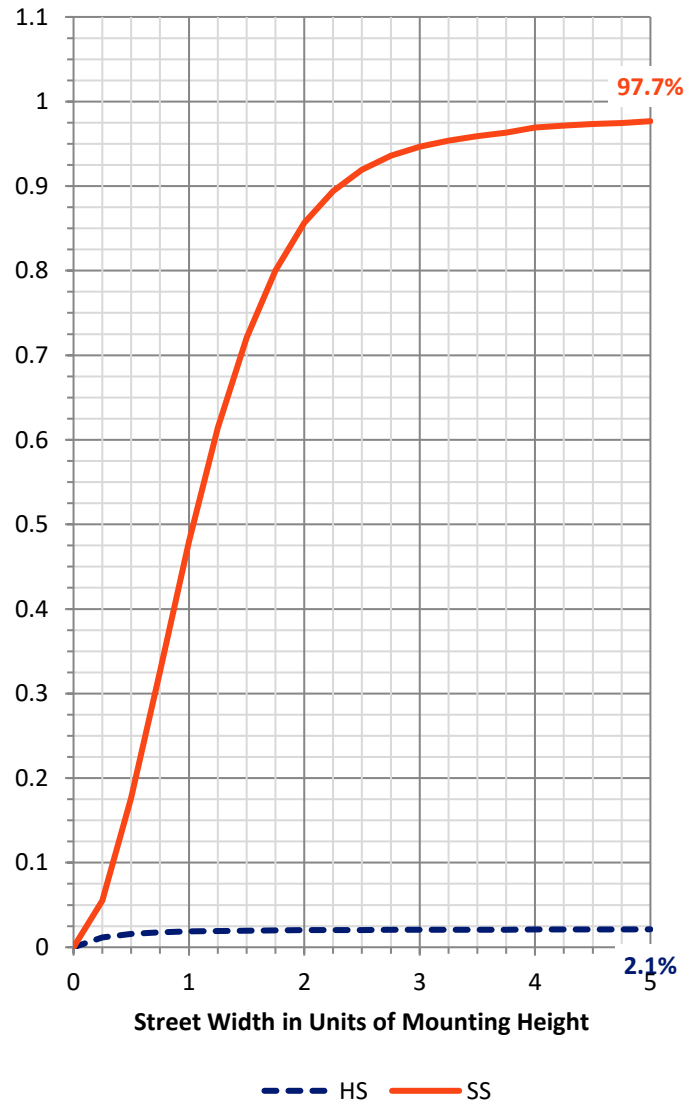
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	219.4	0.0	219.4
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	9901.6	0.0	9901.6
	% Fixture	97.8	0.0	97.8
Total	Lumens	10120.9	0.0	10120.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.2	0.3
10°-20°	145.0	1.4
20°-30°	312.7	3.1
30°-40°	667.9	6.6
40°-50°	1477.0	14.6
50°-60°	2503.1	24.7
60°-70°	3340.2	33.0
70°-80°	1471.3	14.5
80°-90°	169.5	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°	10120.9	100.0
0°-180°	10120.9	100.0

Coefficient of Utilization



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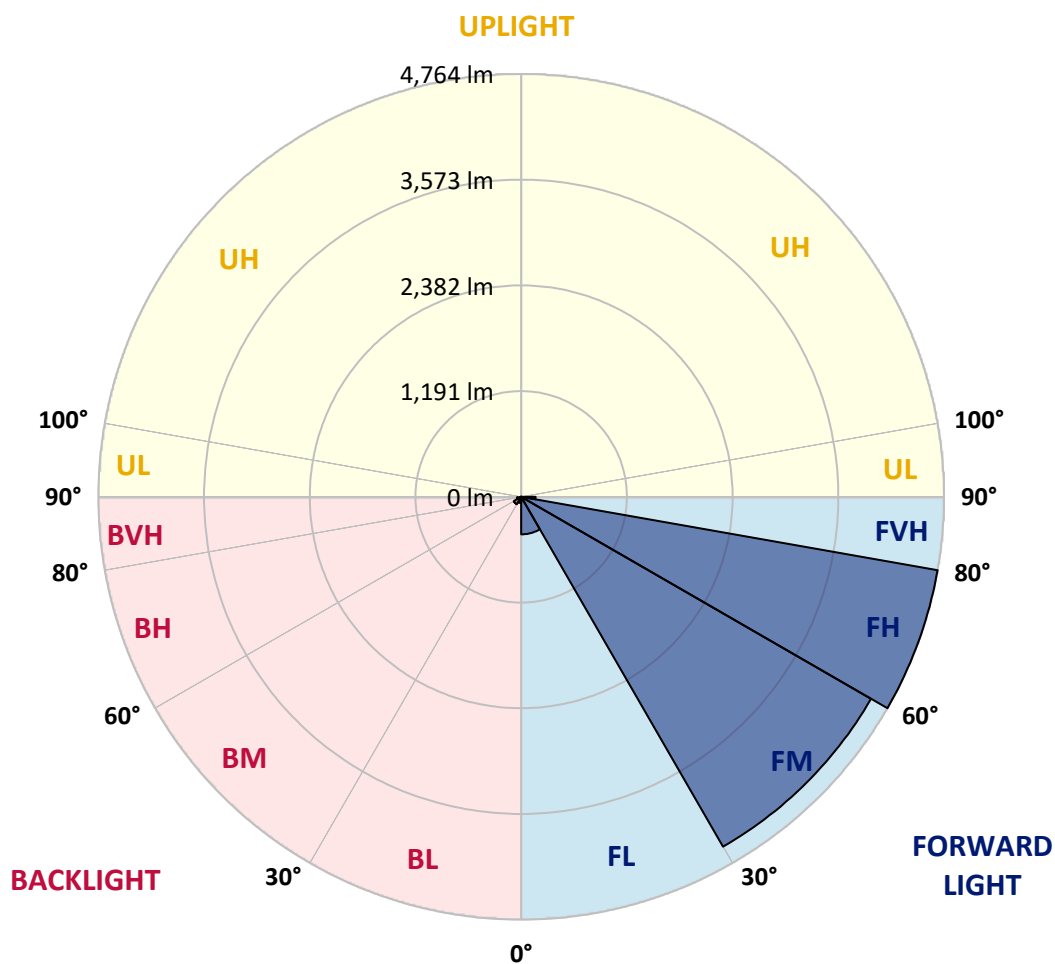
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	422.7	4.2			
FM	(30°-60°)	4551.7	45.0			
FH	(60°-80°)	4764.4	47.1			G2/5000
FVH	(80°-90°)	162.7	1.6			G2/225
BL	(0°-30°)	69.2	0.7	B0/110		
BM	(30°-60°)	96.3	1.0	B0/220		
BH	(60°-80°)	47.1	0.5	B0/110		G0/110
BVH	(80°-90°)	6.8	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°	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4
2.5°	385.3	383.3	375.5	375.5	363.8	356.1	346.3	336.6	336.6	334.6	332.7
5°	509.7	498.2	496.1	474.8	457.3	432.0	408.6	377.5	373.6	369.7	367.7
7.5°	648.0	646.0	628.5	603.2	568.2	521.4	474.8	424.2	416.4	412.5	404.7
10°	827.0	817.2	793.9	751.0	698.6	636.3	560.4	480.6	470.9	463.1	459.2
12.5°	998.2	980.7	967.0	912.5	846.4	754.9	663.5	548.7	540.9	531.2	515.6
15°	1157.7	1142.1	1118.8	1072.2	998.2	883.4	776.4	636.3	616.8	603.2	591.5
17.5°	1282.3	1272.6	1245.3	1192.8	1112.9	1011.8	883.4	725.7	710.3	692.6	671.3
20°	1401.0	1387.3	1344.5	1272.6	1186.9	1109.0	1009.9	842.5	821.1	799.7	776.4
22.5°	1513.8	1500.1	1430.2	1311.4	1220.0	1186.9	1151.9	974.8	941.7	924.2	900.8
25°	1671.5	1642.3	1533.2	1344.5	1222.0	1247.3	1307.5	1146.0	1114.9	1089.7	1052.7
27.5°	1883.6	1844.6	1673.4	1393.2	1229.7	1313.5	1486.6	1354.2	1321.1	1291.9	1251.2
30°	2122.8	2097.6	1893.3	1510.0	1286.2	1410.7	1687.0	1618.9	1580.0	1544.9	1496.4
32.5°	2364.1	2329.1	2126.7	1731.7	1437.9	1599.4	1938.0	1926.3	1875.8	1842.7	1790.1
35°	2576.2	2558.7	2408.9	2095.5	1784.3	1930.2	2272.7	2286.3	2241.6	2206.5	2148.1
37.5°	2720.3	2720.3	2691.1	2486.7	2334.9	2443.9	2764.9	2766.9	2722.1	2642.4	2613.2
40°	2794.1	2815.5	2920.6	2959.5	2951.7	3091.9	3411.0	3375.9	3338.9	3298.0	3200.8
42.5°	2945.9	2965.3	3189.1	3457.7	3632.8	3817.6	4037.5	4025.8	3981.1	3907.2	3817.6
45°	3202.8	3228.1	3494.7	3920.7	4280.7	4543.4	4683.5	4629.0	4584.2	4514.3	4467.5
47.5°	3529.6	3578.3	3879.9	4407.2	4841.1	5275.0	5420.9	5277.0	5238.1	5183.5	5107.6
50°	3878.0	3924.6	4245.7	4848.9	5339.2	5856.8	6100.1	5856.8	5800.4	5782.8	5697.3
52.5°	4179.5	4218.5	4527.8	5189.4	5720.5	6327.6	6681.8	6360.7	6319.8	6261.5	6199.2
55°	4358.5	4389.7	4679.6	5352.8	5979.4	6751.8	7244.2	6962.0	6901.7	6878.4	6788.8
57.5°	4418.9	4450.0	4710.8	5374.2	6119.4	7139.0	7927.2	7936.8	7864.9	7781.2	7753.9
60°	4418.9	4453.9	4673.8	5321.8	6255.7	7551.5	8837.7	9649.1	9493.5	9477.9	9378.6
62.5°	4236.0	4269.1	4490.9	5160.2	6438.6	8108.1	10106.4	11538.4	11493.8	11392.5	11229.1
65°	3839.0	3858.5	4076.4	4747.7	6368.5	8619.8	11205.7	12795.4	12723.5	12524.9	12314.9
66°	3660.0	3675.6	3879.9	4512.2	6138.9	8689.9	11400.3	12953.0	12834.4	12667.0	12429.6
67.5°	3401.2	3428.5	3572.4	4074.5	5588.3	8446.6	11277.8	12842.2	12739.0	12536.6	12299.3
70°	2270.8	2251.3	2759.1	3126.8	4257.4	6882.3	10118.1	11530.6	11532.6	11437.3	11341.9
72.5°	1078.0	1089.7	1237.5	1924.3	2786.3	4597.9	8053.6	9203.5	9335.8	9164.6	9045.9
75°	774.4	791.9	881.5	1177.2	1661.7	2759.1	5220.5	6436.6	6440.5	6136.9	5866.6
77.5°	225.7	235.5	330.7	725.7	1245.3	1862.1	2998.4	3578.3	3494.7	3276.7	3072.4
80°	93.3	93.3	97.2	231.6	500.0	1264.8	2097.6	2755.2	2745.5	2661.9	2541.2
82.5°	35.0	37.0	46.7	95.4	118.7	311.3	1399.0	2391.4	2385.5	2266.9	2181.2
85°	3.9	3.9	11.7	40.9	44.8	58.4	280.2	1054.6	1048.8	1054.6	924.2
87.5°	0.0	0.0	1.9	3.9	5.8	7.8	11.7	40.9	44.8	42.8	38.9
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4
2.5°	332.7	328.8	328.8	326.9	326.9	326.9	324.9	323.0	323.0	321.0	319.1
5°	363.8	359.9	358.0	354.1	352.2	350.2	346.3	344.4	340.5	338.5	336.6
7.5°	400.8	393.0	391.1	385.3	379.4	375.5	371.6	365.8	361.9	354.1	352.2
10°	447.6	437.8	430.0	422.2	416.4	406.7	400.8	393.0	385.3	379.4	373.6
12.5°	507.8	494.3	482.6	474.8	461.2	449.5	437.8	432.0	416.4	408.6	398.9
15°	574.0	558.4	544.8	529.2	519.5	500.0	484.5	467.0	459.2	445.6	430.0
17.5°	659.6	634.3	612.9	597.4	577.9	558.4	540.9	523.4	500.0	484.5	465.1
20°	751.0	729.6	700.4	673.3	649.9	626.6	601.2	577.9	556.5	531.2	507.8
22.5°	867.9	836.7	801.7	774.4	743.3	718.1	683.0	651.9	616.8	583.7	556.5
25°	1015.7	974.8	941.7	902.9	865.9	827.0	784.1	745.2	700.4	669.4	622.7
27.5°	1198.6	1159.7	1114.9	1064.4	1027.4	969.0	912.5	864.0	811.4	762.7	710.3
30°	1432.1	1375.7	1328.9	1280.4	1206.4	1149.9	1083.8	1017.7	945.6	897.1	817.2
32.5°	1712.2	1652.0	1581.9	1511.8	1443.8	1364.0	1282.3	1200.5	1120.7	1031.3	949.5
35°	2054.8	1982.7	1902.9	1827.1	1722.0	1636.4	1533.2	1420.4	1330.9	1227.8	1124.6
37.5°	2508.2	2389.4	2319.3	2239.6	2097.6	1980.8	1866.0	1753.1	1595.5	1486.6	1340.6
40°	3076.3	3006.2	2891.5	2763.0	2634.6	2480.9	2325.2	2175.4	1992.5	1840.7	1671.5
42.5°	3743.6	3640.6	3523.8	3338.9	3208.6	3027.6	2850.6	2652.1	2428.3	2233.8	2035.3
45°	4370.2	4247.7	4158.1	3973.3	3837.1	3623.0	3409.0	3198.9	2940.0	2689.1	2459.5
47.5°	5047.4	4946.1	4798.3	4648.5	4510.4	4269.1	4037.5	3782.6	3510.1	3212.5	2914.7
50°	5642.8	5563.0	5461.8	5280.9	5127.1	4924.7	4652.4	4374.1	4029.7	3733.9	3395.4
52.5°	6148.6	6086.4	5944.3	5815.9	5677.8	5487.1	5243.9	4977.3	4605.7	4280.7	3895.5
55°	6746.0	6701.3	6576.7	6497.0	6374.4	6191.5	5963.8	5716.8	5323.6	4969.5	4533.6
57.5°	7724.7	7689.8	7580.7	7547.6	7427.0	7267.5	6987.3	6722.6	6263.5	5823.7	5325.7
60°	9345.5	9275.6	9115.9	9034.3	8779.3	8565.3	8201.5	7837.6	7283.1	6722.6	6123.3
62.5°	11081.2	10884.7	10581.1	10320.5	9958.5	9586.8	9100.3	8543.9	7894.1	7228.6	6539.7
65°	12017.1	11682.5	11299.2	10884.7	10415.8	9869.0	9256.1	8588.7	7890.2	7187.7	6460.0
66°	12124.1	11746.6	11340.0	10878.9	10357.4	9775.6	9152.9	8452.5	7726.6	7041.8	6314.0
67.5°	11989.9	11594.9	11164.9	10653.2	10088.9	9485.7	8831.9	8104.2	7405.6	6710.9	6002.7
70°	11050.1	10657.0	10273.7	9734.7	9133.4	8526.5	7907.7	7094.4	6432.8	5794.5	5164.1
72.5°	8824.1	8557.5	8178.1	7716.9	7131.2	6419.1	5903.4	5175.8	4601.8	3983.0	3494.7
75°	5514.3	5138.8	4669.9	4082.3	3634.7	3056.8	2755.2	2202.6	1875.8	1589.7	1313.5
77.5°	2819.4	2537.3	2208.5	1877.7	1560.5	1245.3	963.1	681.1	459.2	319.1	237.4
80°	2329.1	2080.1	1807.6	1506.1	1225.9	951.5	685.0	467.0	297.8	194.6	151.7
82.5°	1924.3	1714.2	1471.0	1190.8	947.6	747.2	519.5	338.5	210.1	136.2	107.1
85°	819.2	743.3	574.0	455.3	342.4	253.0	177.1	118.7	83.7	68.1	62.3
87.5°	35.0	38.9	37.0	29.2	21.4	21.4	19.5	15.6	15.6	15.6	15.6
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4
2.5°	319.1	317.1	315.2	315.2	313.2	311.3	299.7	290.0	278.3	270.5	262.7
5°	332.7	330.7	326.9	324.9	321.0	319.1	293.9	272.4	254.9	241.3	231.6
7.5°	346.3	344.4	338.5	332.7	330.7	326.9	286.1	258.8	235.5	219.9	210.1
10°	363.8	358.0	352.2	344.4	338.5	332.7	278.3	243.2	217.9	204.3	194.6
12.5°	389.1	379.4	369.7	359.9	352.2	342.4	274.4	229.6	204.3	188.7	179.0
15°	418.4	404.7	393.0	381.4	367.7	358.0	266.6	217.9	192.6	177.1	165.4
17.5°	445.6	430.0	412.5	395.0	381.4	367.7	258.8	206.3	180.9	165.4	153.7
20°	484.5	461.2	439.8	418.4	398.9	381.4	247.1	194.6	171.2	153.7	142.0
22.5°	527.3	500.0	472.9	443.7	418.4	395.0	237.4	184.8	161.5	144.0	130.3
25°	581.8	548.7	511.7	474.8	445.6	414.5	227.7	175.1	151.7	134.2	120.6
27.5°	657.7	611.0	570.1	523.4	478.7	443.7	219.9	167.3	142.0	124.5	111.0
30°	760.8	692.6	628.5	577.9	525.3	474.8	212.1	157.6	134.2	114.9	99.3
32.5°	875.6	795.8	721.8	646.0	579.8	521.4	204.3	149.8	124.5	105.0	91.5
35°	1017.7	916.4	817.2	729.6	649.9	572.0	196.5	142.0	116.7	95.4	81.8
37.5°	1222.0	1095.4	965.1	852.3	749.1	646.0	190.7	134.2	107.1	85.7	72.0
40°	1502.2	1338.7	1179.1	1025.4	891.2	762.7	182.9	126.4	99.3	77.9	64.2
42.5°	1805.7	1607.2	1397.1	1223.9	1039.1	877.6	175.1	118.7	91.5	70.1	56.5
45°	2183.2	1936.0	1681.2	1445.7	1220.0	1011.8	167.3	111.0	81.8	62.3	48.7
47.5°	2595.7	2280.5	1992.5	1696.8	1428.2	1179.1	157.6	105.0	74.0	54.5	42.8
50°	3019.9	2687.2	2323.2	1986.6	1667.6	1346.5	147.9	95.4	66.2	48.7	35.0
52.5°	3477.1	3084.1	2712.5	2294.1	1922.4	1566.3	138.1	87.6	60.3	42.8	29.2
55°	4058.9	3619.2	3183.3	2714.3	2266.9	1821.3	128.4	77.9	52.6	37.0	23.4
57.5°	4790.5	4269.1	3733.9	3204.7	2661.9	2155.9	120.6	68.1	44.8	31.1	19.5
60°	5481.3	4872.3	4224.3	3615.3	3002.3	2412.8	108.9	60.3	38.9	25.3	19.5
62.5°	5839.3	5144.6	4446.1	3774.8	3121.0	2504.3	97.2	50.6	33.1	21.4	17.5
65°	5751.7	5043.5	4366.3	3689.2	3049.1	2445.9	85.7	44.8	29.2	19.5	17.5
66°	5625.3	4924.7	4243.8	3599.7	2988.7	2383.6	79.8	42.8	27.3	19.5	15.6
67.5°	5348.9	4671.8	4021.9	3422.6	2823.3	2264.9	72.0	38.9	25.3	17.5	15.6
70°	4568.7	3953.8	3434.3	2901.2	2412.8	1908.9	58.4	33.1	21.4	15.6	15.6
72.5°	3023.7	2605.4	2259.1	1943.8	1624.7	1260.9	48.7	27.3	17.5	15.6	13.6
75°	1140.2	1031.3	885.4	795.8	694.7	609.0	38.9	17.5	13.6	13.6	13.6
77.5°	202.4	186.8	165.4	151.7	140.1	128.4	31.1	11.7	11.7	13.6	13.6
80°	136.2	126.4	114.9	105.0	97.2	87.6	21.4	9.7	11.7	11.7	13.6
82.5°	97.2	91.5	85.7	77.9	72.0	64.2	13.6	9.7	11.7	11.7	11.7
85°	58.4	54.5	50.6	46.7	40.9	38.9	9.7	9.7	9.7	11.7	11.7
87.5°	15.6	13.6	15.6	15.6	11.7	13.6	7.8	7.8	7.8	9.7	9.7
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°	305.4	305.4	305.4	305.4	305.4
2.5°	258.8	258.8	254.9	260.8	260.8
5°	223.8	223.8	221.8	223.8	223.8
7.5°	204.3	202.4	202.4	202.4	204.3
10°	186.8	184.8	184.8	184.8	184.8
12.5°	171.2	169.3	167.3	169.3	169.3
15°	157.6	153.7	153.7	153.7	153.7
17.5°	145.9	142.0	140.1	140.1	140.1
20°	134.2	128.4	128.4	128.4	128.4
22.5°	122.5	116.7	116.7	116.7	116.7
25°	111.0	105.0	105.0	105.0	105.0
27.5°	101.1	95.4	95.4	95.4	95.4
30°	89.6	85.7	85.7	87.6	85.7
32.5°	81.8	75.9	75.9	77.9	77.9
35°	72.0	68.1	68.1	68.1	68.1
37.5°	62.3	58.4	58.4	58.4	58.4
40°	54.5	50.6	48.7	50.6	50.6
42.5°	46.7	42.8	40.9	40.9	40.9
45°	40.9	35.0	33.1	35.0	35.0
47.5°	33.1	29.2	29.2	31.1	31.1
50°	25.3	25.3	27.3	31.1	31.1
52.5°	23.4	23.4	27.3	31.1	31.1
55°	21.4	23.4	27.3	29.2	31.1
57.5°	19.5	23.4	27.3	29.2	29.2
60°	19.5	21.4	25.3	29.2	29.2
62.5°	17.5	19.5	23.4	27.3	27.3
65°	17.5	19.5	23.4	27.3	27.3
66°	17.5	19.5	23.4	27.3	27.3
67.5°	17.5	19.5	23.4	27.3	27.3
70°	17.5	19.5	23.4	25.3	25.3
72.5°	15.6	17.5	21.4	25.3	25.3
75°	15.6	17.5	21.4	25.3	25.3
77.5°	15.6	17.5	21.4	25.3	25.3
80°	15.6	17.5	21.4	23.4	25.3
82.5°	13.6	17.5	19.5	23.4	23.4
85°	13.6	15.6	19.5	21.4	23.4
87.5°	11.7	13.6	15.6	19.5	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)