

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: P165255

Luminaire Tested: **VST-E04-LED-E-U-SL3-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165255
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-E04-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: (84) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5783.4 lumens
Efficiency: N/A
Efficacy: 59.5 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): 97.2
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



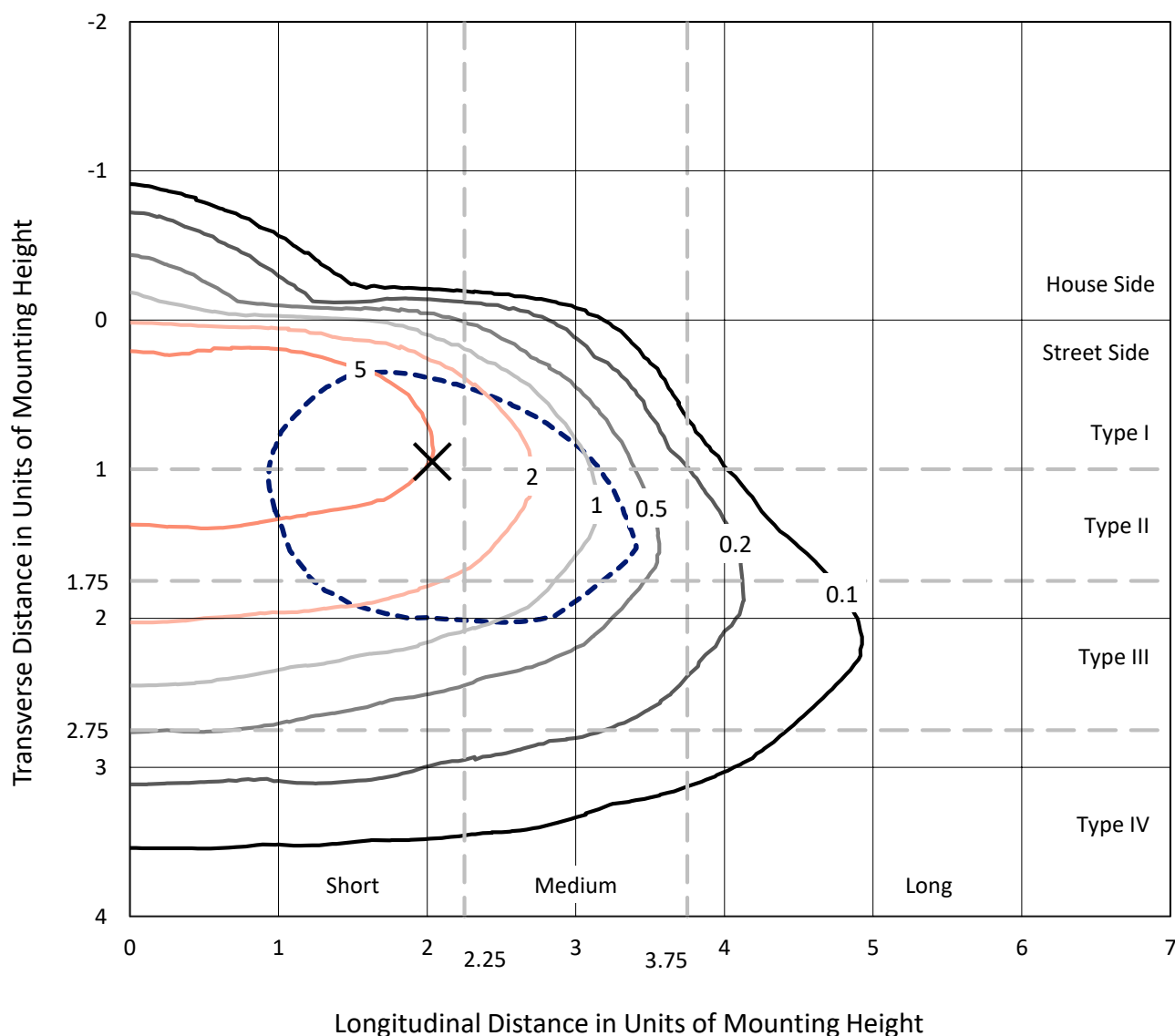
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

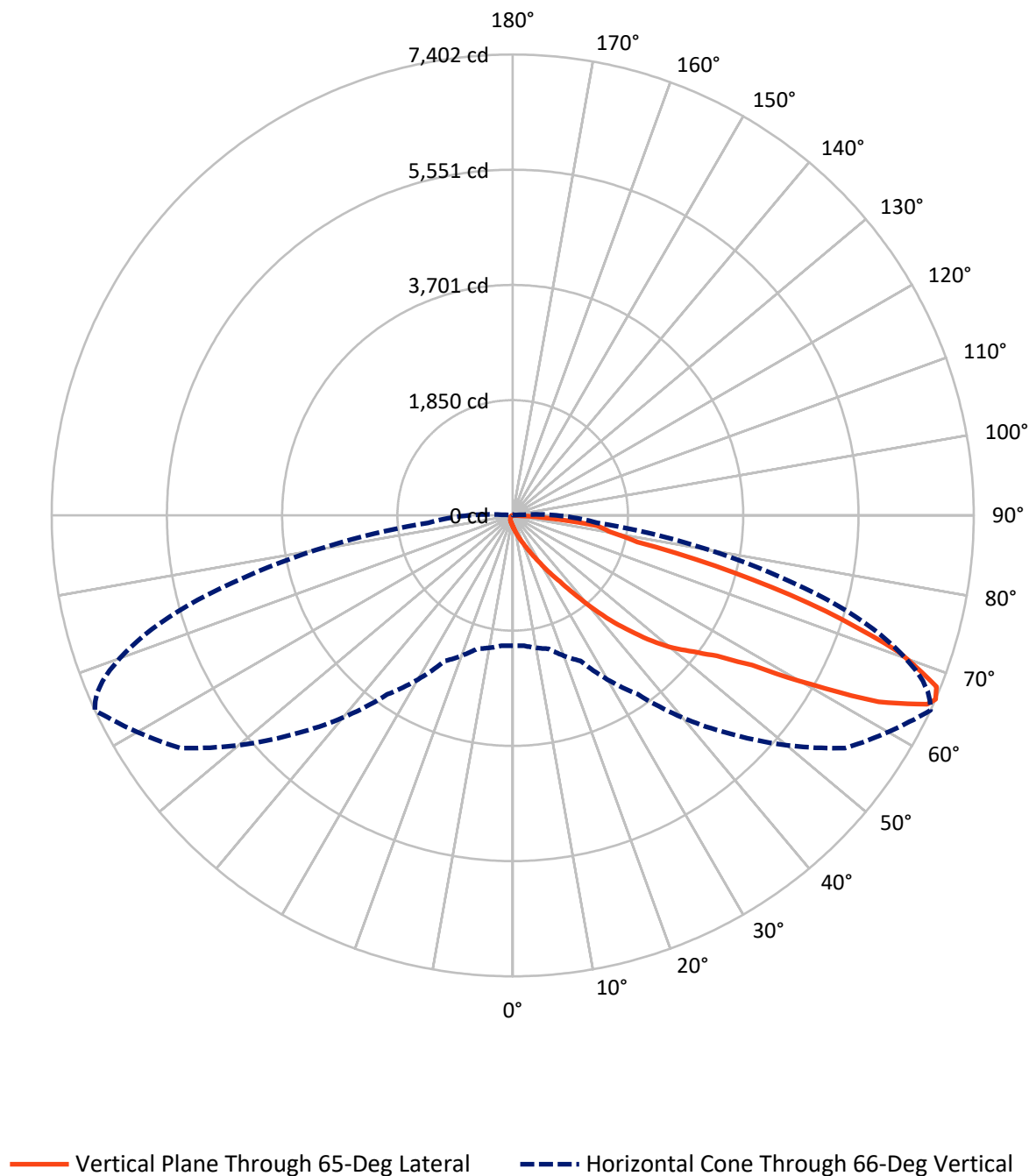


Based on 10 foot mounting height. Maximum calculated value = 9.5 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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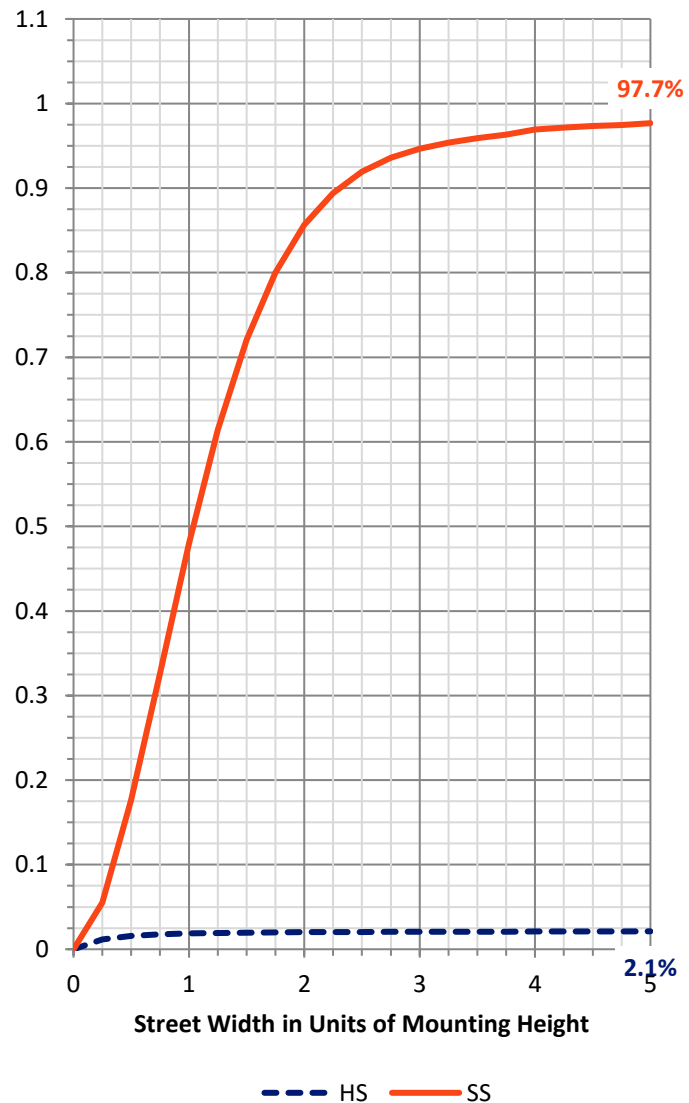
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	125.3	0.0	125.3
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	5658.0	0.0	5658.0
	% Fixture	97.8	0.0	97.8
Total	Lumens	5783.4	0.0	5783.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.5	0.3
10°-20°	82.9	1.4
20°-30°	178.7	3.1
30°-40°	381.7	6.6
40°-50°	844.0	14.6
50°-60°	1430.3	24.7
60°-70°	1908.7	33.0
70°-80°	840.7	14.5
80°-90°	96.8	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°	5783.4	100.0
0°-180°	5783.4	100.0

Coefficient of Utilization



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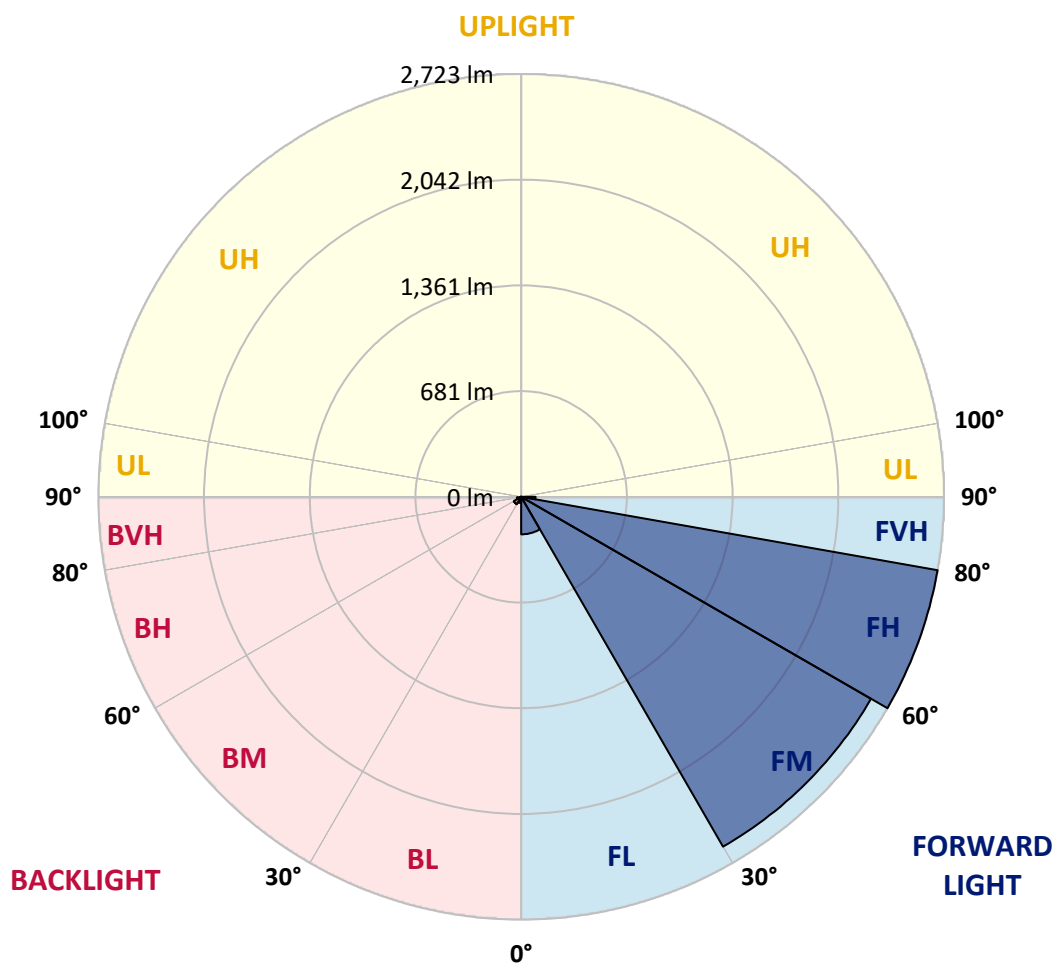
CATALOG NUMBER: VST-E04-LED-E-U-SL3-HSS-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	241.6	4.2			
FM	(30°-60°)	2601.0	45.0			
FH	(60°-80°)	2722.5	47.1			G2/5000
FVH	(80°-90°)	93.0	1.6			G1/100
BL	(0°-30°)	39.5	0.7	B0/110		
BM	(30°-60°)	55.0	1.0	B0/220		
BH	(60°-80°)	26.9	0.5	B0/110		G0/110
BVH	(80°-90°)	3.9	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°	174.5	174.5	174.5	174.5	174.5	174.5	174.5	174.5	174.5	174.5	174.5
2.5°	220.2	219.0	214.6	214.6	207.9	203.5	197.9	192.4	192.4	191.2	190.1
5°	291.3	284.7	283.5	271.3	261.3	246.9	233.5	215.7	213.5	211.3	210.1
7.5°	370.3	369.1	359.1	344.7	324.7	298.0	271.3	242.4	237.9	235.7	231.3
10°	472.6	467.0	453.7	429.2	399.2	363.6	320.2	274.6	269.1	264.6	262.4
12.5°	570.4	560.4	552.6	521.5	483.6	431.4	379.1	313.6	309.1	303.6	294.7
15°	661.6	652.6	639.3	612.7	570.4	504.8	443.7	363.6	352.5	344.7	338.0
17.5°	732.7	727.2	711.6	681.6	636.0	578.2	504.8	414.7	405.9	395.8	383.6
20°	800.6	792.7	768.3	727.2	678.2	633.7	577.1	481.4	469.2	457.0	443.7
22.5°	865.1	857.2	817.3	749.4	697.1	678.2	658.2	557.0	538.1	528.1	514.8
25°	955.1	938.5	876.1	768.3	698.3	712.7	747.2	654.9	637.1	622.7	601.5
27.5°	1076.3	1054.0	956.2	796.1	702.7	750.5	849.5	773.8	754.9	738.3	715.0
30°	1213.1	1198.6	1081.9	862.8	734.9	806.1	964.0	925.1	902.9	882.8	855.1
32.5°	1350.9	1330.9	1215.3	989.6	821.6	913.9	1107.5	1100.8	1071.9	1053.0	1022.9
35°	1472.1	1462.1	1376.5	1197.5	1019.6	1103.0	1298.7	1306.4	1280.9	1260.9	1227.5
37.5°	1554.4	1554.4	1537.8	1420.9	1334.2	1396.5	1580.0	1581.1	1555.5	1509.9	1493.3
40°	1596.6	1608.8	1668.9	1691.2	1686.7	1766.8	1949.1	1929.1	1908.0	1884.6	1829.0
42.5°	1683.4	1694.5	1822.3	1975.8	2075.9	2181.5	2307.1	2300.4	2274.9	2232.7	2181.5
45°	1830.2	1844.6	1997.0	2240.4	2446.1	2596.3	2676.3	2645.1	2619.5	2579.6	2552.8
47.5°	2016.9	2044.8	2217.1	2518.4	2766.3	3014.3	3097.6	3015.4	2993.2	2962.0	2918.7
50°	2216.0	2242.7	2426.1	2770.8	3051.0	3346.7	3485.8	3346.7	3314.5	3304.5	3255.6
52.5°	2388.3	2410.6	2587.3	2965.4	3268.9	3615.8	3818.1	3634.7	3611.3	3578.0	3542.4
55°	2490.6	2508.4	2674.0	3058.8	3416.8	3858.2	4139.5	3978.3	3943.8	3930.5	3879.3
57.5°	2525.1	2542.8	2691.9	3071.0	3496.8	4079.4	4529.8	4535.3	4494.2	4446.4	4430.8
60°	2525.1	2545.1	2670.7	3041.0	3574.7	4315.2	5050.1	5513.8	5424.8	5415.9	5359.2
62.5°	2420.6	2439.5	2566.2	2948.7	3679.2	4633.2	5775.1	6593.4	6567.9	6510.0	6416.6
65°	2193.7	2204.8	2329.3	2713.0	3639.2	4925.6	6403.3	7311.7	7270.5	7157.1	7037.1
66°	2091.4	2100.3	2217.1	2578.4	3508.0	4965.6	6514.5	7401.7	7333.9	7238.3	7102.6
67.5°	1943.5	1959.1	2041.4	2328.3	3193.3	4826.6	6444.4	7338.4	7279.5	7163.8	7028.1
70°	1297.6	1286.4	1576.6	1786.8	2432.8	3932.7	5781.7	6588.9	6590.1	6535.6	6481.1
72.5°	616.0	622.7	707.1	1099.6	1592.2	2627.4	4602.0	5259.1	5334.8	5236.9	5169.1
75°	442.5	452.5	503.7	672.7	949.5	1576.6	2983.1	3678.0	3680.3	3506.8	3352.3
77.5°	129.0	134.6	189.0	414.7	711.6	1064.0	1713.4	2044.8	1997.0	1872.4	1755.6
80°	53.3	53.3	55.6	132.3	285.7	722.7	1198.6	1574.4	1568.9	1521.1	1452.1
82.5°	20.0	21.1	26.7	54.5	67.9	177.9	799.4	1366.5	1363.1	1295.4	1246.4
85°	2.2	2.2	6.7	23.4	25.6	33.4	160.1	602.6	599.3	602.6	528.1
87.5°	0.0	0.0	1.1	2.2	3.3	4.5	6.7	23.4	25.6	24.4	22.2
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°	174.5	174.5	174.5	174.5	174.5	174.5	174.5	174.5	174.5	174.5	174.5
2.5°	190.1	187.9	187.9	186.8	186.8	186.8	185.7	184.6	184.6	183.4	182.4
5°	207.9	205.7	204.6	202.4	201.3	200.1	197.9	196.8	194.6	193.4	192.4
7.5°	229.0	224.6	223.5	220.2	216.8	214.6	212.3	209.0	206.8	202.4	201.3
10°	255.8	250.2	245.7	241.2	237.9	232.4	229.0	224.6	220.2	216.8	213.5
12.5°	290.2	282.4	275.7	271.3	263.5	256.8	250.2	246.9	237.9	233.5	227.9
15°	328.0	319.1	311.3	302.4	296.9	285.7	276.8	266.8	262.4	254.6	245.7
17.5°	376.9	362.4	350.2	341.4	330.2	319.1	309.1	299.1	285.7	276.8	265.8
20°	429.2	416.9	400.3	384.7	371.4	358.1	343.5	330.2	318.0	303.6	290.2
22.5°	495.9	478.1	458.1	442.5	424.8	410.3	390.3	372.5	352.5	333.5	318.0
25°	580.4	557.0	538.1	515.9	494.8	472.6	448.1	425.8	400.3	382.5	355.8
27.5°	684.9	662.7	637.1	608.2	587.1	553.7	521.5	493.7	463.7	435.8	405.9
30°	818.3	786.1	759.4	731.6	689.4	657.1	619.3	581.5	540.4	512.6	467.0
32.5°	978.4	944.0	903.9	863.9	825.0	779.4	732.7	686.0	640.4	589.3	542.6
35°	1174.2	1133.0	1087.4	1044.1	984.0	935.1	876.1	811.6	760.5	701.6	642.6
37.5°	1433.2	1365.4	1325.3	1279.8	1198.6	1131.9	1066.3	1001.8	911.7	849.5	766.1
40°	1757.9	1717.8	1652.3	1578.9	1505.5	1417.6	1328.7	1243.1	1138.6	1051.8	955.1
42.5°	2139.2	2080.3	2013.6	1908.0	1833.5	1730.0	1628.9	1515.5	1387.6	1276.5	1163.0
45°	2497.3	2427.3	2376.1	2270.5	2192.6	2070.3	1948.0	1827.9	1680.0	1536.6	1405.4
47.5°	2884.2	2826.4	2741.9	2656.3	2577.3	2439.5	2307.1	2161.5	2005.8	1835.7	1665.6
50°	3224.5	3178.9	3121.0	3017.6	2929.8	2814.1	2658.5	2499.5	2302.7	2133.7	1940.2
52.5°	3513.5	3477.9	3396.8	3323.4	3244.4	3135.5	2996.5	2844.2	2631.8	2446.1	2226.0
55°	3854.9	3829.3	3758.1	3712.5	3642.5	3538.0	3407.9	3266.7	3042.1	2839.7	2590.6
57.5°	4414.1	4394.2	4331.8	4312.9	4244.0	4152.8	3992.8	3841.5	3579.1	3327.8	3043.2
60°	5340.3	5300.3	5209.1	5162.5	5016.7	4894.5	4686.6	4478.6	4161.8	3841.5	3499.1
62.5°	6332.1	6219.8	6046.4	5897.4	5690.6	5478.2	5200.2	4882.3	4510.9	4130.6	3737.0
65°	6866.9	6675.7	6456.7	6219.8	5951.9	5639.4	5289.2	4907.8	4508.7	4107.3	3691.4
66°	6928.1	6712.4	6480.0	6216.5	5918.5	5586.1	5230.2	4830.0	4415.2	4023.9	3608.0
67.5°	6851.4	6625.7	6380.0	6087.5	5765.1	5420.4	5046.8	4630.9	4231.8	3834.8	3430.1
70°	6314.3	6089.7	5870.7	5562.7	5219.1	4872.3	4518.7	4053.9	3675.9	3311.1	2950.9
72.5°	5042.3	4890.0	4673.2	4409.7	4075.0	3668.1	3373.4	2957.6	2629.6	2276.0	1997.0
75°	3151.1	2936.5	2668.5	2332.7	2077.0	1746.7	1574.4	1258.6	1071.9	908.4	750.5
77.5°	1611.1	1449.9	1262.0	1072.9	891.7	711.6	550.3	389.2	262.4	182.4	135.6
80°	1330.9	1188.6	1032.9	860.6	700.5	543.7	391.4	266.8	170.1	111.2	86.7
82.5°	1099.6	979.6	840.5	680.5	541.5	427.0	296.9	193.4	120.0	77.8	61.2
85°	468.1	424.8	328.0	260.2	195.7	144.6	101.2	67.9	47.8	38.9	35.6
87.5°	20.0	22.2	21.1	16.7	12.2	12.2	11.1	8.9	8.9	8.9	8.9
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°	174.5	174.5	174.5	174.5	174.5	174.5	174.5	174.5	174.5	174.5	174.5
2.5°	182.4	181.2	180.1	180.1	179.0	177.9	171.2	165.7	159.0	154.6	150.1
5°	190.1	189.0	186.8	185.7	183.4	182.4	167.9	155.6	145.6	137.9	132.3
7.5°	197.9	196.8	193.4	190.1	189.0	186.8	163.5	147.9	134.6	125.7	120.0
10°	207.9	204.6	201.3	196.8	193.4	190.1	159.0	139.0	124.5	116.7	111.2
12.5°	222.3	216.8	211.3	205.7	201.3	195.7	156.8	131.2	116.7	107.8	102.3
15°	239.1	231.3	224.6	218.0	210.1	204.6	152.3	124.5	110.1	101.2	94.5
17.5°	254.6	245.7	235.7	225.7	218.0	210.1	147.9	117.9	103.4	94.5	87.8
20°	276.8	263.5	251.3	239.1	227.9	218.0	141.2	111.2	97.8	87.8	81.2
22.5°	301.3	285.7	270.2	253.5	239.1	225.7	135.6	105.6	92.3	82.3	74.5
25°	332.5	313.6	292.4	271.3	254.6	236.9	130.1	100.1	86.7	76.7	68.9
27.5°	375.8	349.1	325.8	299.1	273.5	253.5	125.7	95.6	81.2	71.2	63.4
30°	434.8	395.8	359.1	330.2	300.2	271.3	121.2	90.1	76.7	65.6	56.7
32.5°	500.3	454.7	412.5	369.1	331.3	298.0	116.7	85.6	71.2	60.0	52.3
35°	581.5	523.7	467.0	416.9	371.4	326.9	112.3	81.2	66.7	54.5	46.7
37.5°	698.3	626.0	551.5	487.0	428.1	369.1	109.0	76.7	61.2	49.0	41.1
40°	858.4	765.0	673.8	585.9	509.2	435.8	104.5	72.2	56.7	44.5	36.7
42.5°	1031.8	918.4	798.3	699.4	593.8	501.5	100.1	67.9	52.3	40.0	32.3
45°	1247.6	1106.3	960.7	826.1	697.1	578.2	95.6	63.4	46.7	35.6	27.8
47.5°	1483.3	1303.1	1138.6	969.6	816.1	673.8	90.1	60.0	42.3	31.1	24.4
50°	1725.7	1535.5	1327.6	1135.2	952.9	769.4	84.5	54.5	37.8	27.8	20.0
52.5°	1986.9	1762.3	1550.0	1310.9	1098.5	895.0	78.9	50.0	34.4	24.4	16.7
55°	2319.4	2068.1	1819.0	1551.1	1295.4	1040.7	73.4	44.5	30.0	21.1	13.4
57.5°	2737.4	2439.5	2133.7	1831.3	1521.1	1232.0	68.9	38.9	25.6	17.8	11.1
60°	3132.2	2784.2	2413.9	2065.9	1715.6	1378.7	62.3	34.4	22.2	14.4	11.1
62.5°	3336.7	2939.8	2540.6	2157.0	1783.5	1431.0	55.6	28.9	18.9	12.2	10.0
65°	3286.7	2882.0	2495.0	2108.1	1742.3	1397.6	49.0	25.6	16.7	11.1	10.0
66°	3214.5	2814.1	2425.0	2057.0	1707.8	1362.1	45.6	24.4	15.6	11.1	8.9
67.5°	3056.5	2669.6	2298.2	1955.8	1613.3	1294.2	41.1	22.2	14.4	10.0	8.9
70°	2610.7	2259.3	1962.4	1657.8	1378.7	1090.8	33.4	18.9	12.2	8.9	8.9
72.5°	1727.8	1488.8	1290.9	1110.8	928.4	720.5	27.8	15.6	10.0	8.9	7.8
75°	651.6	589.3	505.9	454.7	396.9	348.0	22.2	10.0	7.8	7.8	7.8
77.5°	115.7	106.7	94.5	86.7	80.1	73.4	17.8	6.7	6.7	7.8	7.8
80°	77.8	72.2	65.6	60.0	55.6	50.0	12.2	5.5	6.7	6.7	7.8
82.5°	55.6	52.3	49.0	44.5	41.1	36.7	7.8	5.5	6.7	6.7	6.7
85°	33.4	31.1	28.9	26.7	23.4	22.2	5.5	5.5	5.5	6.7	6.7
87.5°	8.9	7.8	8.9	8.9	6.7	7.8	4.5	4.5	4.5	5.5	5.5
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°	174.5	174.5	174.5	174.5	174.5
2.5°	147.9	147.9	145.6	149.0	149.0
5°	127.9	127.9	126.7	127.9	127.9
7.5°	116.7	115.7	115.7	115.7	116.7
10°	106.7	105.6	105.6	105.6	105.6
12.5°	97.8	96.8	95.6	96.8	96.8
15°	90.1	87.8	87.8	87.8	87.8
17.5°	83.4	81.2	80.1	80.1	80.1
20°	76.7	73.4	73.4	73.4	73.4
22.5°	70.0	66.7	66.7	66.7	66.7
25°	63.4	60.0	60.0	60.0	60.0
27.5°	57.8	54.5	54.5	54.5	54.5
30°	51.2	49.0	49.0	50.0	49.0
32.5°	46.7	43.3	43.3	44.5	44.5
35°	41.1	38.9	38.9	38.9	38.9
37.5°	35.6	33.4	33.4	33.4	33.4
40°	31.1	28.9	27.8	28.9	28.9
42.5°	26.7	24.4	23.4	23.4	23.4
45°	23.4	20.0	18.9	20.0	20.0
47.5°	18.9	16.7	16.7	17.8	17.8
50°	14.4	14.4	15.6	17.8	17.8
52.5°	13.4	13.4	15.6	17.8	17.8
55°	12.2	13.4	15.6	16.7	17.8
57.5°	11.1	13.4	15.6	16.7	16.7
60°	11.1	12.2	14.4	16.7	16.7
62.5°	10.0	11.1	13.4	15.6	15.6
65°	10.0	11.1	13.4	15.6	15.6
66°	10.0	11.1	13.4	15.6	15.6
67.5°	10.0	11.1	13.4	15.6	15.6
70°	10.0	11.1	13.4	14.4	14.4
72.5°	8.9	10.0	12.2	14.4	14.4
75°	8.9	10.0	12.2	14.4	14.4
77.5°	8.9	10.0	12.2	14.4	14.4
80°	8.9	10.0	12.2	13.4	14.4
82.5°	7.8	10.0	11.1	13.4	13.4
85°	7.8	8.9	11.1	12.2	13.4
87.5°	6.7	7.8	8.9	11.1	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)