

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: P158418

Luminaire Tested: **VST-E02-LED-E-U-SL3-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158418
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33713)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E02-LED-E-U-SL3-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (42) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5092.4 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 52.1
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

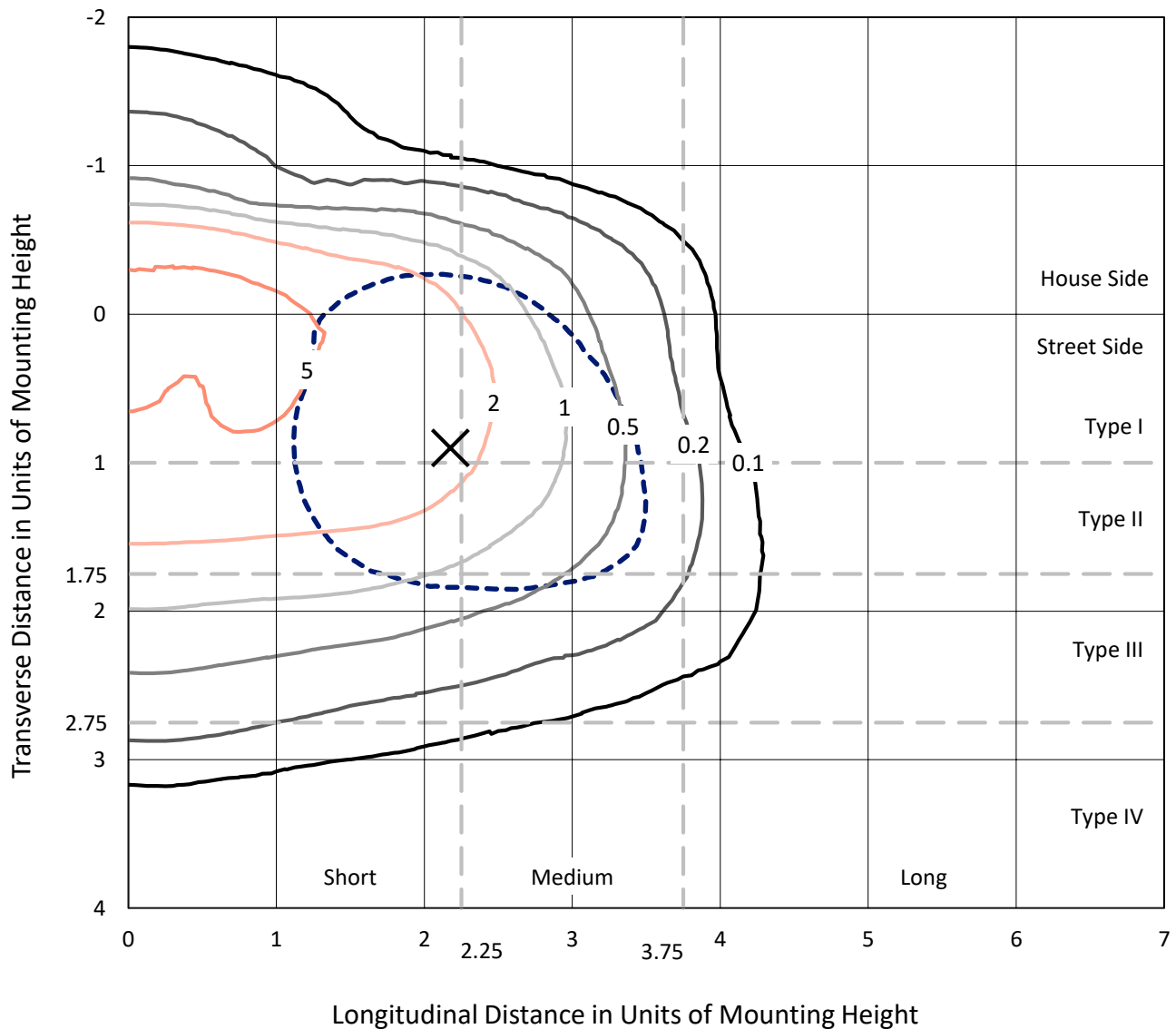


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

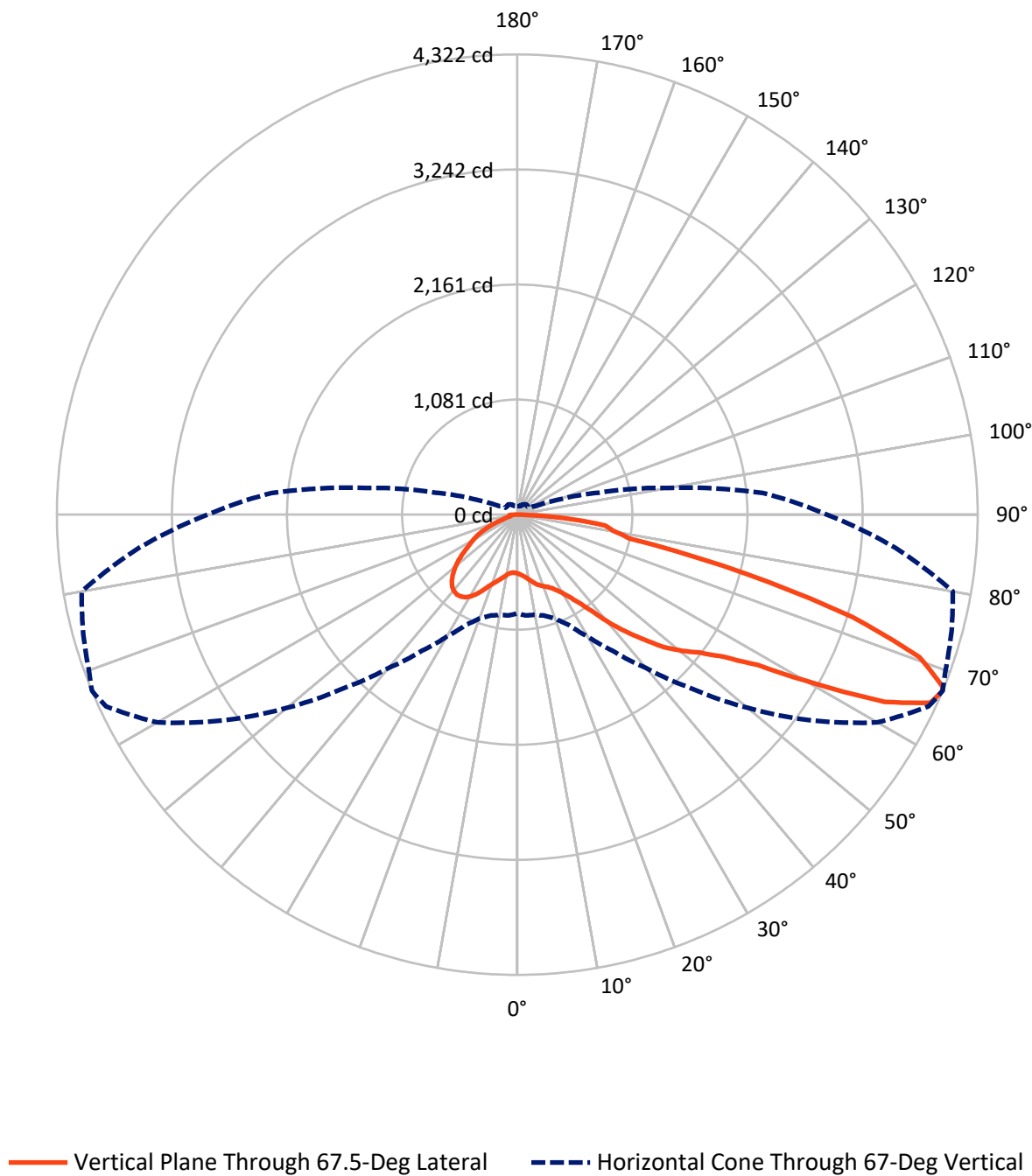


Based on 10 foot mounting height. Maximum calculated value = 6.9 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1221.7	0.0	1221.7
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	3870.7	0.0	3870.7
	% Fixture	76.0	0.0	76.0
Total	Lumens	5092.4	0.0	5092.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.9	1.1
10°-20°	186.9	3.7
20°-30°	333.7	6.6
30°-40°	489.0	9.6
40°-50°	755.6	14.8
50°-60°	1100.3	21.6
60°-70°	1433.3	28.1
70°-80°	641.6	12.6
80°-90°	97.0	1.9
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°	5092.4	100.0
0°-180°	5092.4	100.0

Coefficient of Utilization



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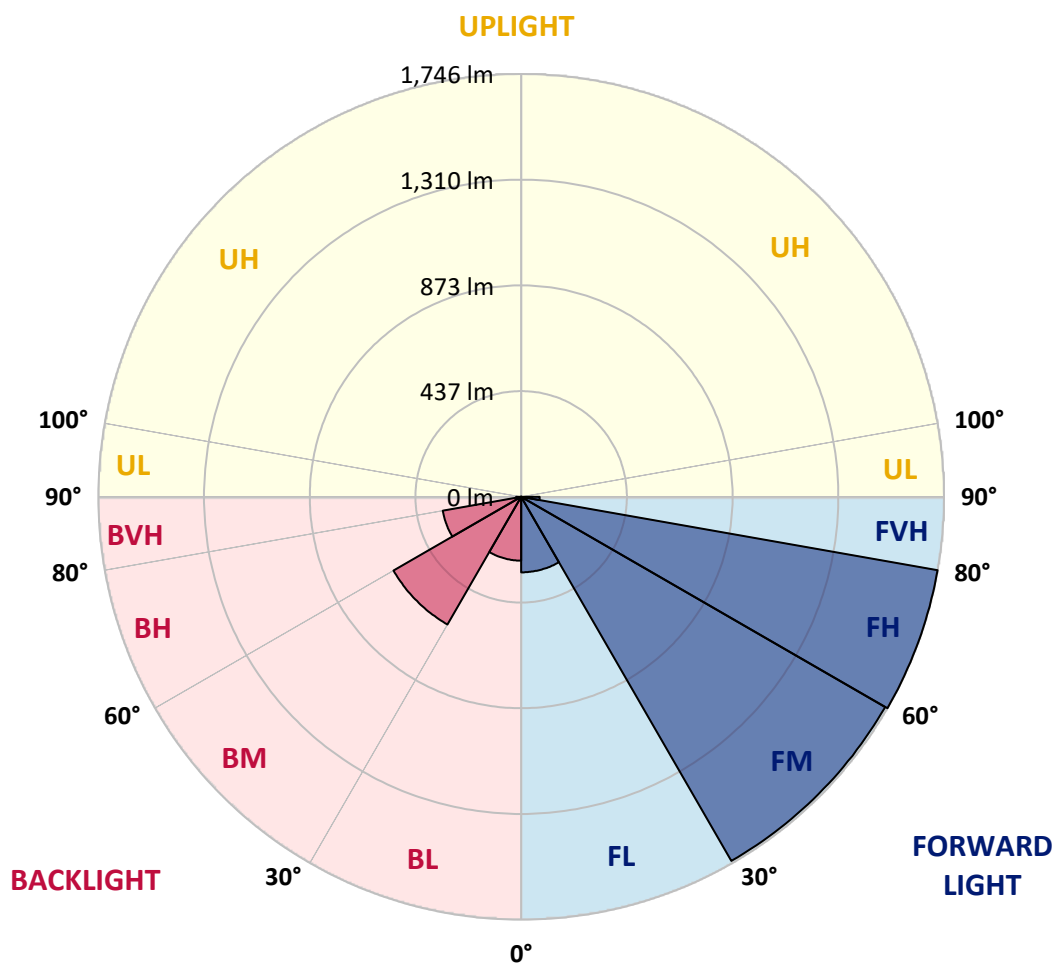
CATALOG NUMBER: VST-E02-LED-E-U-SL3-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	312.0	6.1			
FM	(30°-60°)	1736.2	34.1			
FH	(60°-80°)	1746.3	34.3			G1/1800
FVH	(80°-90°)	76.2	1.5			G1/100
BL	(0°-30°)	263.4	5.2	B1/500		
BM	(30°-60°)	608.7	12.0	B1/1000		
BH	(60°-80°)	328.7	6.5	B1/500		G1/500
BVH	(80°-90°)	20.8	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	552.0	552.0	552.0	552.0	552.0	552.0	552.0	552.0	552.0	552.0	552.0
2.5°	573.6	574.9	575.3	574.9	575.3	573.9	573.6	571.6	572.6	569.9	569.2
5°	604.6	605.6	606.3	603.6	604.3	602.9	601.3	599.2	596.5	592.8	590.5
7.5°	635.0	636.7	636.4	635.3	633.0	631.6	628.3	625.2	620.5	616.1	613.1
10°	675.8	675.5	675.5	669.8	666.4	663.4	657.3	652.6	647.8	641.5	638.0
12.5°	723.1	720.8	719.8	715.7	708.6	703.2	694.4	685.3	676.9	670.1	664.7
15°	768.7	768.7	766.0	759.6	752.8	745.7	733.3	720.1	706.3	695.5	690.1
17.5°	810.2	806.5	804.2	795.7	788.6	777.1	763.3	749.1	731.9	716.7	706.3
20°	840.6	837.6	832.5	822.1	809.9	796.4	780.2	763.6	745.1	728.5	716.7
22.5°	858.2	854.5	846.7	832.9	816.3	797.4	778.5	763.0	746.1	733.6	723.8
25°	867.3	863.6	853.1	834.9	812.6	787.6	766.0	750.8	741.0	738.0	736.6
27.5°	866.9	863.9	852.8	831.8	803.2	774.4	751.1	738.3	737.3	749.1	757.9
30°	858.2	856.1	846.0	825.1	795.1	765.0	743.4	736.6	747.1	772.1	793.7
32.5°	849.4	848.4	841.3	822.4	796.7	771.4	756.5	757.2	778.9	817.3	852.1
35°	850.4	851.8	850.7	840.6	824.4	811.3	804.2	819.0	852.8	899.3	946.0
37.5°	859.2	864.2	870.7	871.7	872.0	870.0	884.8	916.3	965.5	1026.3	1099.2
40°	878.4	884.2	902.8	919.0	939.8	964.9	994.9	1038.4	1099.6	1174.5	1264.0
42.5°	938.2	946.3	969.2	999.3	1037.8	1076.9	1121.8	1181.2	1256.2	1335.2	1429.0
45°	1016.2	1033.0	1058.3	1091.8	1149.5	1204.6	1262.6	1329.1	1408.8	1507.7	1602.2
47.5°	1113.4	1130.3	1167.1	1202.9	1271.0	1339.6	1403.0	1472.6	1559.0	1660.3	1765.0
50°	1198.4	1217.7	1250.5	1298.8	1377.7	1461.8	1532.0	1607.3	1679.9	1786.6	1892.2
52.5°	1265.3	1279.1	1310.5	1354.8	1442.9	1535.0	1623.8	1707.5	1793.6	1900.3	1998.2
55°	1273.7	1286.6	1317.3	1367.9	1457.4	1559.7	1662.0	1761.2	1883.1	1999.6	2129.2
57.5°	1237.3	1247.8	1278.8	1324.1	1411.1	1527.6	1656.9	1784.2	1940.2	2097.5	2255.8
60°	1185.7	1196.1	1220.4	1256.5	1335.2	1460.8	1611.7	1785.9	1993.1	2220.4	2453.3
62.5°	1128.9	1138.0	1157.6	1183.3	1252.5	1368.3	1541.1	1774.7	2036.4	2342.6	2701.8
65°	1033.4	1055.3	1063.7	1090.1	1159.3	1268.7	1444.6	1699.4	2018.8	2396.9	2857.7
67°	927.7	950.0	954.4	981.1	1036.4	1141.4	1320.4	1560.1	1879.7	2303.1	2823.3
67.5°	893.9	912.8	919.6	946.3	998.6	1097.5	1267.3	1509.7	1837.2	2251.7	2781.8
70°	657.3	678.2	685.7	696.8	734.3	816.7	929.0	1139.4	1464.8	1837.6	2346.7
72.5°	351.8	368.6	375.7	392.3	411.5	456.4	542.5	693.4	899.0	1229.5	1669.4
75°	238.0	244.7	249.8	261.3	281.2	317.0	354.8	407.8	532.1	693.8	950.0
77.5°	135.7	138.8	139.4	141.5	157.3	191.4	253.6	343.3	440.2	502.7	607.7
80°	58.7	64.8	69.5	66.5	65.5	72.6	90.8	135.4	265.4	421.3	500.0
82.5°	31.7	34.4	38.5	38.8	40.9	43.2	46.9	55.7	78.3	158.0	344.7
85°	16.6	17.2	23.0	26.3	28.0	29.4	30.1	33.4	38.5	49.0	85.7
87.5°	2.3	3.4	4.1	5.4	6.1	6.4	7.4	9.5	11.2	13.5	23.0
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):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	552.0	552.0	552.0	552.0	552.0	552.0	552.0	552.0	552.0	552.0	552.0
2.5°	566.2	565.5	563.5	562.1	560.8	559.4	557.7	556.4	554.0	552.3	550.3
5°	587.1	583.0	580.3	576.6	575.9	571.6	567.2	565.1	561.1	557.7	553.7
7.5°	608.3	603.6	599.2	596.2	594.5	588.4	584.0	579.0	574.3	569.9	565.1
10°	633.4	628.6	623.9	621.8	618.8	613.1	609.4	602.9	598.2	592.8	586.4
12.5°	659.3	655.9	652.6	649.9	648.5	645.8	640.4	635.0	628.6	623.2	615.8
15°	682.3	679.9	678.5	677.9	677.9	676.2	671.2	666.1	659.3	653.2	645.1
17.5°	698.5	697.5	698.5	699.5	700.9	699.5	698.5	692.8	688.4	680.9	672.8
20°	707.9	710.0	715.0	718.4	721.4	723.8	724.8	720.1	714.4	709.0	703.6
22.5°	718.1	723.8	732.6	737.6	742.7	751.1	753.2	749.8	745.4	742.0	736.3
25°	734.9	743.4	758.6	766.7	773.8	786.2	787.9	788.6	787.6	784.9	777.8
27.5°	761.3	777.8	798.1	808.6	816.3	832.5	838.9	838.9	836.2	839.3	839.3
30°	807.2	829.1	855.5	861.5	873.7	887.9	898.3	899.7	900.1	906.4	915.9
32.5°	877.7	898.7	928.1	934.8	945.2	958.8	970.6	969.2	972.3	986.1	998.6
35°	980.4	1001.6	1020.9	1030.0	1034.8	1046.9	1051.3	1058.7	1067.8	1085.0	1083.4
37.5°	1132.3	1151.2	1153.9	1159.6	1153.9	1156.3	1159.6	1168.4	1192.7	1208.3	1183.3
40°	1315.3	1346.7	1343.6	1336.9	1324.1	1306.9	1312.9	1326.4	1352.8	1339.3	1272.1
42.5°	1487.8	1520.2	1514.1	1506.4	1478.0	1471.6	1470.9	1482.1	1496.2	1457.8	1341.6
45°	1657.6	1690.7	1680.2	1675.8	1656.9	1643.1	1654.6	1655.2	1651.5	1569.1	1402.4
47.5°	1832.8	1863.2	1856.5	1860.2	1840.6	1831.4	1832.5	1827.7	1793.0	1663.7	1449.7
50°	1974.2	2015.1	2019.2	2010.7	2000.3	1986.4	2021.9	2009.0	1931.7	1755.5	1495.2
52.5°	2084.3	2139.4	2160.3	2154.9	2146.4	2148.1	2214.7	2229.1	2101.2	1871.3	1545.5
55°	2214.7	2301.4	2335.5	2355.7	2347.0	2380.7	2533.0	2540.4	2336.8	2022.5	1611.0
57.5°	2402.7	2526.9	2634.6	2663.3	2691.0	2800.7	3047.8	2972.5	2642.7	2251.4	1694.0
60°	2688.6	2960.7	3135.6	3227.4	3292.3	3445.5	3680.5	3489.7	3023.9	2523.9	1798.4
62.5°	3089.0	3486.7	3779.0	3871.2	3897.9	3986.0	4156.1	3791.2	3231.5	2646.1	1807.5
65°	3387.1	3864.1	4214.2	4261.5	4229.8	4231.4	4276.0	3775.3	3154.1	2539.4	1650.8
67°	3367.5	3901.6	4260.1	4322.2	4278.4	4220.6	4151.1	3560.3	2905.7	2315.9	1445.6
67.5°	3337.5	3865.5	4240.2	4305.7	4265.5	4199.7	4098.1	3476.9	2828.4	2246.3	1403.7
70°	2885.1	3409.4	3914.1	4006.3	4023.1	3963.1	3677.8	2931.7	2296.3	1827.4	1090.1
72.5°	2245.7	2712.6	3211.9	3291.9	3356.7	3183.5	2676.8	2024.9	1673.8	1316.9	789.3
75°	1482.7	1957.7	2209.6	2221.4	2138.7	1817.9	1307.8	1014.1	933.5	774.1	488.5
77.5°	793.4	1151.2	1158.3	1072.6	1033.4	770.4	312.6	172.5	192.1	218.1	194.5
80°	591.8	733.3	849.7	913.6	932.5	660.7	161.7	91.5	80.0	72.9	71.9
82.5°	533.8	708.3	794.0	828.8	820.0	543.5	90.8	61.4	51.0	55.4	63.1
85°	209.3	378.1	497.3	481.4	404.5	202.6	49.6	33.1	33.1	47.9	62.1
87.5°	42.9	77.6	105.4	100.6	90.5	39.2	24.3	19.9	20.3	38.8	58.7
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	552.0	552.0	552.0	552.0	552.0	552.0	552.0	552.0	552.0	552.0	552.0
2.5°	548.3	546.2	544.9	543.5	542.2	541.5	540.5	540.5	538.4	537.8	537.1
5°	550.6	547.3	544.9	541.9	539.5	537.5	534.8	534.1	531.7	530.0	529.4
7.5°	560.8	555.7	550.6	546.9	543.5	539.2	536.1	533.4	531.1	529.4	527.3
10°	580.0	574.6	567.5	560.8	556.4	549.6	544.9	540.2	537.5	535.4	532.7
12.5°	608.3	600.6	592.1	584.0	576.6	567.8	563.1	557.4	554.0	552.3	550.3
15°	637.4	628.9	618.5	610.7	602.3	595.5	591.1	586.1	583.4	581.3	580.0
17.5°	667.1	657.3	649.9	642.1	638.0	633.0	627.2	620.8	613.1	608.3	601.9
20°	697.5	690.1	685.7	681.2	676.6	669.5	658.0	644.8	630.3	616.4	603.3
22.5°	732.9	728.5	727.9	723.8	714.0	697.1	675.8	651.2	626.6	603.6	585.7
25°	782.9	782.9	779.5	763.0	740.0	709.6	673.9	638.4	605.6	574.3	550.6
27.5°	845.7	843.3	826.8	792.7	751.5	704.2	656.3	611.4	569.5	535.1	504.7
30°	914.9	898.3	862.9	809.2	747.4	686.7	627.9	575.9	526.7	484.4	448.7
32.5°	986.8	946.6	882.8	809.2	733.3	660.4	592.5	528.7	472.3	425.0	382.5
35°	1052.0	978.7	887.5	796.1	705.6	621.5	542.9	470.6	403.1	352.1	305.5
37.5°	1111.0	1000.0	882.5	770.4	665.4	566.8	474.7	395.0	318.7	269.4	229.6
40°	1149.5	1004.3	861.5	730.2	608.0	492.9	391.0	301.8	241.4	196.5	169.8
42.5°	1173.5	995.9	827.8	675.2	530.7	400.1	293.4	216.4	171.5	146.5	136.4
45°	1187.0	974.0	777.8	599.9	437.2	304.2	208.3	156.3	132.0	123.2	119.8
47.5°	1186.3	938.5	715.4	512.8	333.9	212.0	147.5	121.9	115.1	112.4	111.7
50°	1179.2	895.0	642.1	418.3	241.0	147.8	116.8	109.4	107.7	106.0	105.4
52.5°	1169.5	841.0	561.1	326.1	171.2	118.1	106.0	104.0	102.6	100.9	100.3
55°	1151.2	774.4	473.3	245.5	134.0	106.7	102.3	101.6	99.9	97.6	96.2
57.5°	1128.9	706.9	389.2	191.8	118.5	104.0	101.6	100.6	98.2	95.5	92.8
60°	1120.8	651.2	323.4	161.7	114.8	105.0	103.3	101.9	98.6	94.5	91.5
62.5°	1070.2	588.4	276.2	149.9	116.8	109.4	108.7	106.7	101.6	96.9	92.2
65°	939.2	497.6	233.9	141.8	120.8	116.8	117.5	114.4	109.4	103.0	94.5
67°	794.3	405.8	194.8	134.0	123.9	124.6	127.0	124.6	118.1	109.0	97.6
67.5°	755.9	382.5	185.0	131.6	124.6	126.6	129.3	127.6	121.2	110.8	98.9
70°	561.8	269.4	138.1	119.2	124.6	132.7	138.8	140.5	133.4	118.9	101.6
72.5°	395.6	173.9	106.0	103.3	113.1	123.9	135.4	141.1	133.0	117.1	97.9
75°	237.7	108.7	86.1	87.8	95.2	106.3	115.4	117.8	107.7	97.6	84.7
77.5°	110.0	72.2	67.5	69.9	77.0	82.0	82.0	77.3	69.5	63.5	60.8
80°	64.8	59.1	58.7	63.1	67.9	64.1	58.4	52.0	47.9	45.9	44.9
82.5°	60.8	63.1	67.2	68.2	64.5	55.4	48.3	41.9	39.8	38.8	37.8
85°	71.6	76.6	69.9	64.5	57.1	46.6	37.8	32.4	31.4	30.4	29.0
87.5°	66.2	63.1	55.0	47.3	39.2	28.4	20.6	18.5	19.9	19.6	18.9
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):

	160°	165°	170°	175°	180°
0°	552.0	552.0	552.0	552.0	552.0
2.5°	537.5	537.5	536.1	535.4	537.1
5°	528.0	528.4	527.3	527.0	527.3
7.5°	526.0	525.7	524.9	524.3	524.9
10°	532.1	531.7	530.7	531.4	530.3
12.5°	550.3	552.3	552.0	552.7	554.0
15°	580.0	579.7	578.6	579.3	580.3
17.5°	596.9	594.2	591.8	590.8	590.8
20°	592.8	585.1	581.0	578.6	578.0
22.5°	568.9	557.7	549.2	547.3	545.6
25°	529.7	515.8	505.0	502.7	498.3
27.5°	484.1	465.5	452.7	450.0	447.7
30°	424.4	403.1	388.3	378.8	381.8
32.5°	351.4	331.2	314.0	298.8	296.4
35°	271.4	249.1	233.9	227.2	222.8
37.5°	202.6	184.0	173.9	167.5	167.8
40°	155.0	145.1	139.7	135.4	135.7
42.5°	129.3	124.9	123.5	121.6	120.5
45°	117.1	115.8	116.2	114.1	113.5
47.5°	110.4	109.4	109.7	108.4	108.1
50°	105.0	104.3	104.6	103.6	103.3
52.5°	99.6	99.9	99.6	98.9	98.9
55°	94.9	94.5	95.2	94.2	94.2
57.5°	91.1	90.8	90.8	90.5	90.5
60°	89.1	87.8	87.4	87.4	87.8
62.5°	88.1	85.7	85.4	85.4	85.7
65°	88.4	84.7	83.4	83.0	82.7
67°	88.8	83.4	80.7	79.3	79.0
67.5°	89.1	82.7	79.7	78.3	77.6
70°	87.1	78.0	73.6	71.2	70.6
72.5°	82.0	72.2	66.8	63.8	63.1
75°	72.9	65.5	60.8	57.4	56.0
77.5°	56.4	53.0	51.3	49.3	48.6
80°	43.9	42.2	41.5	40.2	39.8
82.5°	36.5	34.8	33.8	32.1	31.1
85°	28.4	26.3	25.7	24.3	23.6
87.5°	18.5	17.6	17.2	15.5	14.9
90°	0.0	0.0	0.0	0.0	0.0

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