

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: P165509

Luminaire Tested: **VST-E07-LED-E-U-SL4-HSS-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P165509  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)  
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-SL4-HSS-7060  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(7) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD  
Light Source: (147) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

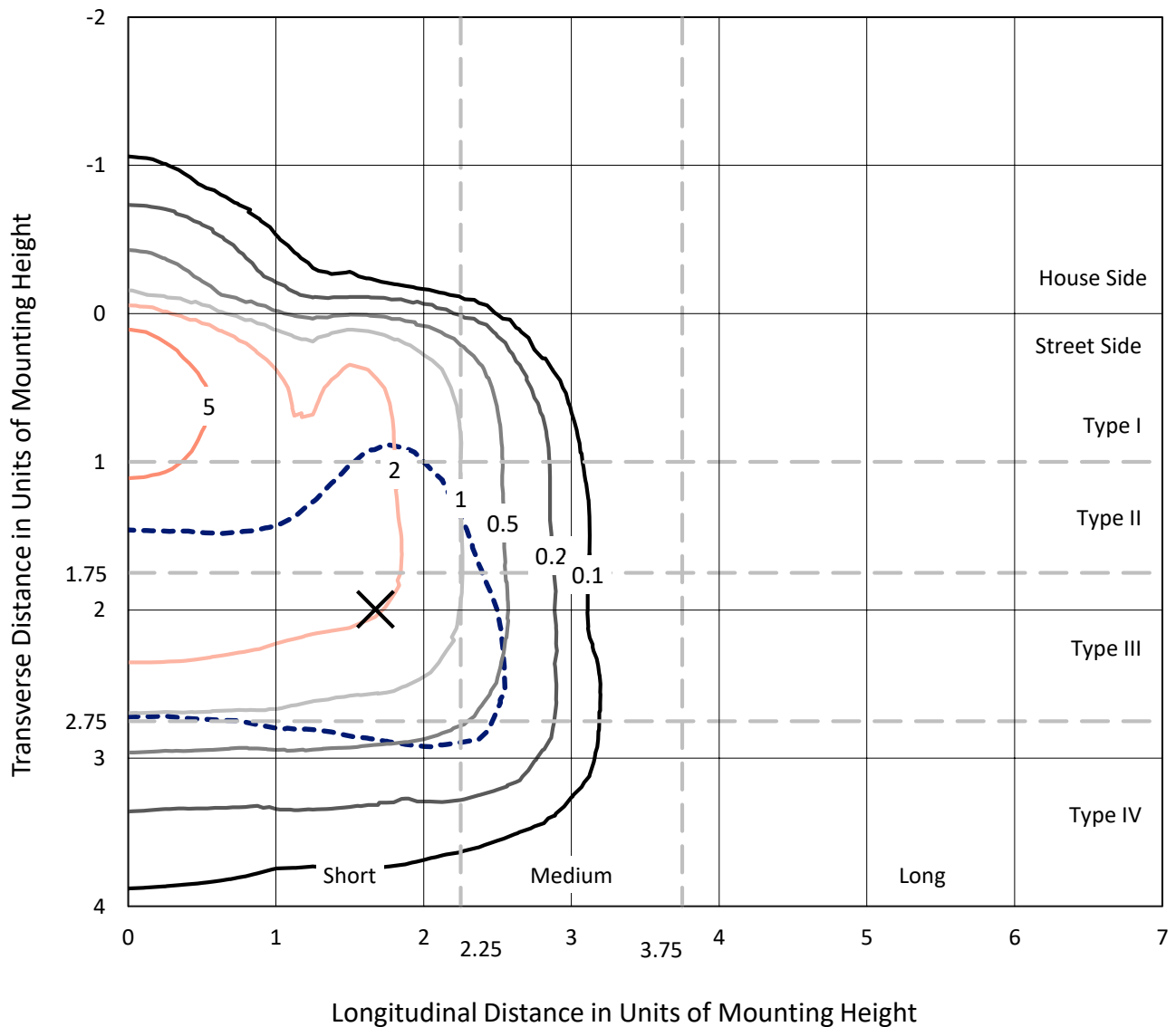
Lumens per Lamp: N/A  
Luminaire Lumens: 14440.8 lumens  
Efficiency: N/A  
Efficacy: 83.7 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.17' x L: 1' x H: 0.1')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G3  
  
Input Watts (W): 172.5  
Input Voltage (V): 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

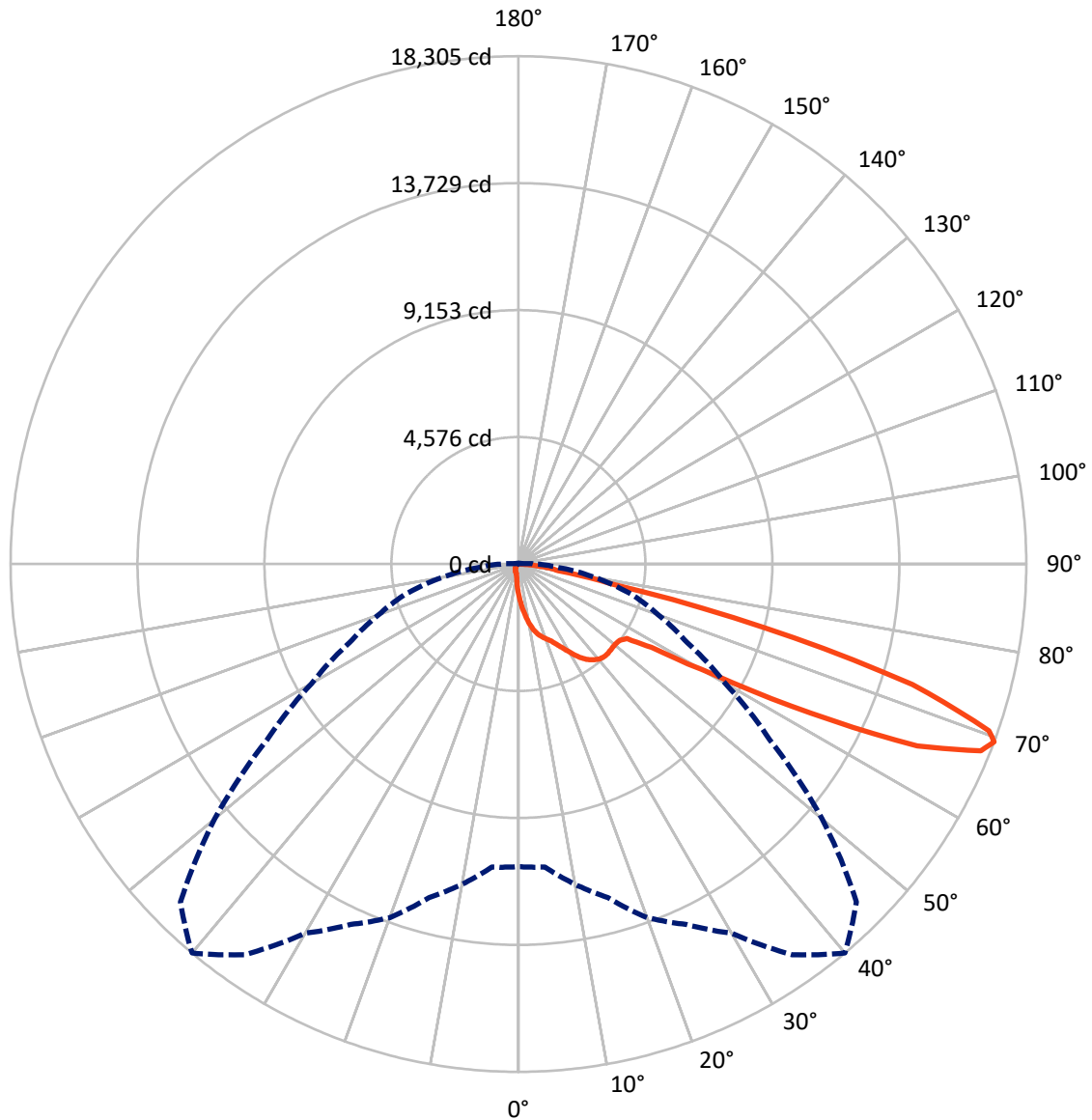
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.1 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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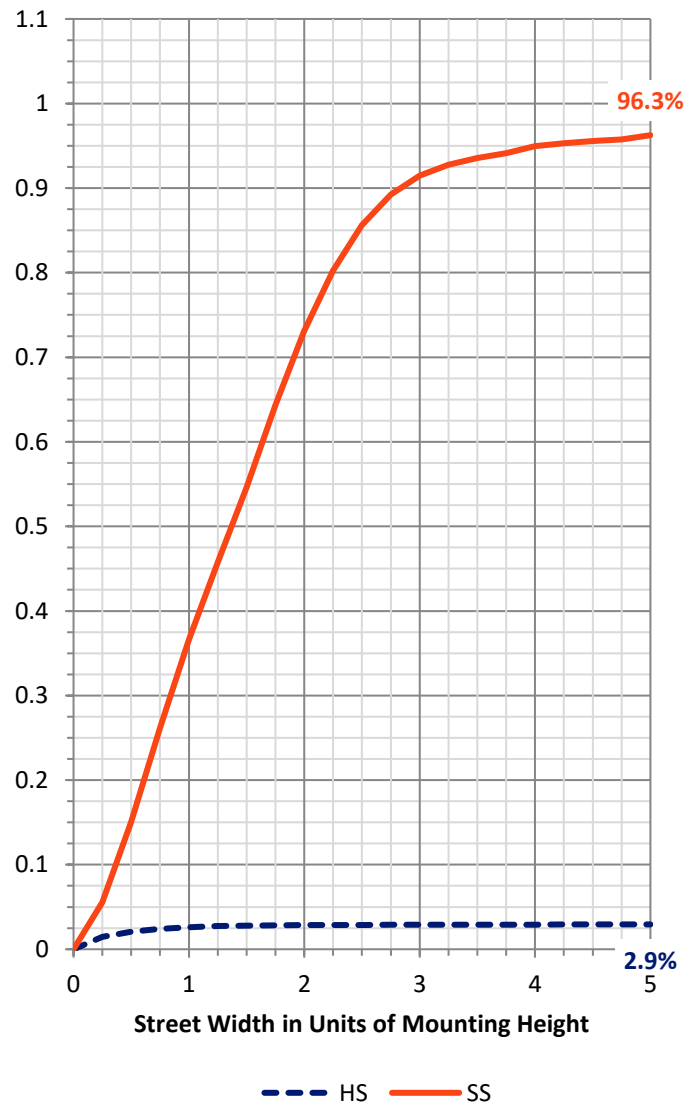
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	430.0	0.0	430.0
	% Fixture	3.0	0.0	3.0
<b>Street Side</b>	Lumens	14010.8	0.0	14010.8
	% Fixture	97.0	0.0	97.0
<b>Total</b>	Lumens	14440.8	0.0	14440.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.1	0.8
10°-20°	386.5	2.7
20°-30°	739.7	5.1
30°-40°	1230.1	8.5
40°-50°	1664.5	11.5
50°-60°	2603.1	18.0
60°-70°	5352.0	37.1
70°-80°	2153.6	14.9
80°-90°	199.2	1.4
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°	14440.8	100.0
0°-180°	14440.8	100.0



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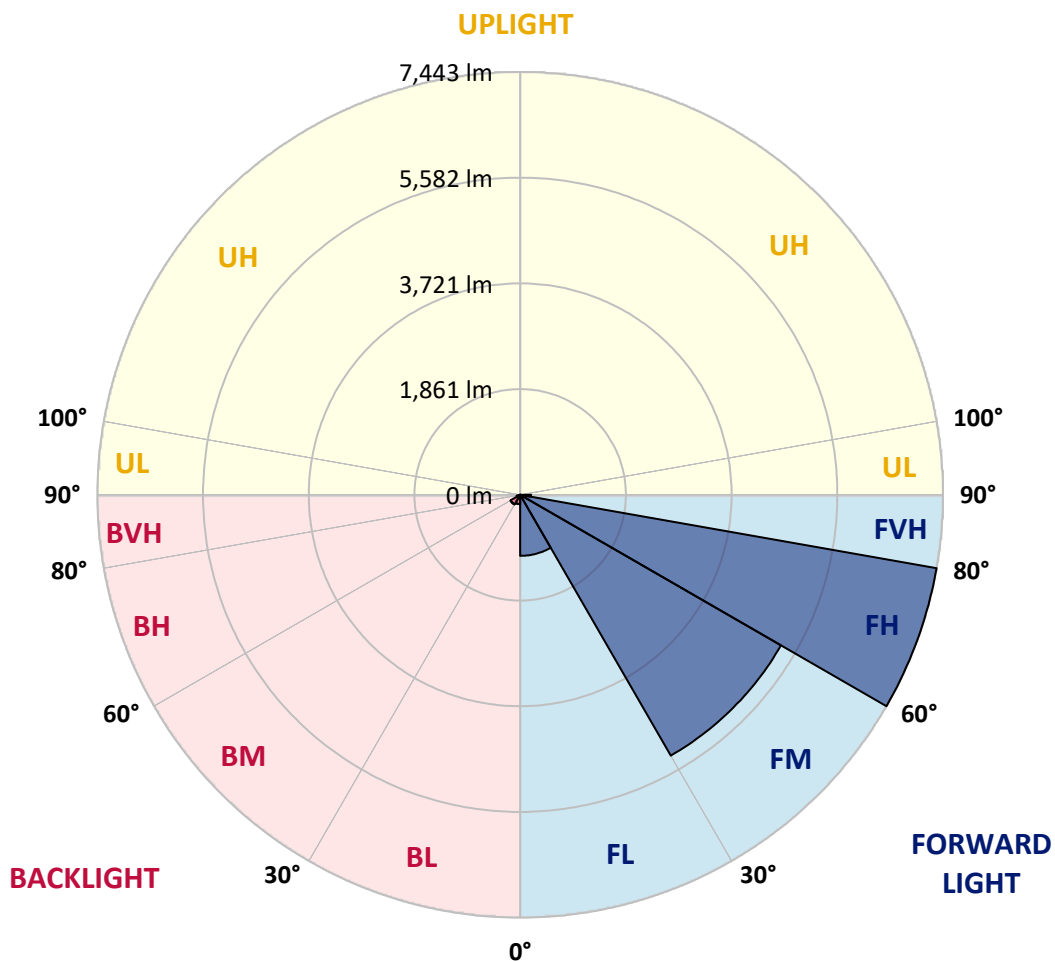
CATALOG NUMBER: VST-E07-LED-E-U-SL4-HSS-7060

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1074.7	7.4			
FM	(30°-60°)	5301.5	36.7			
FH	(60°-80°)	7442.9	51.5			G3/7500
FVH	(80°-90°)	191.8	1.3			G2/225
BL	(0°-30°)	163.6	1.1	B1/500		
BM	(30°-60°)	196.3	1.4	B0/220		
BH	(60°-80°)	62.7	0.4	B0/110		G0/110
BVH	(80°-90°)	7.4	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6
2.5°	1454.9	1438.3	1419.3	1419.3	1395.7	1395.7	1381.5	1343.7	1339.0	1317.6	1296.3
5°	1857.0	1842.8	1819.2	1797.8	1779.0	1745.8	1722.1	1677.2	1627.6	1580.2	1537.7
7.5°	2249.8	2242.6	2200.1	2192.9	2162.1	2107.8	2060.4	1994.2	1909.0	1842.8	1764.8
10°	2614.1	2597.4	2587.9	2547.7	2502.9	2443.7	2370.3	2290.0	2190.6	2086.4	1975.3
12.5°	2902.7	2893.2	2850.5	2834.0	2786.8	2727.6	2635.3	2531.2	2431.9	2297.0	2166.9
15°	3117.9	3101.4	3072.9	3046.9	2990.2	2938.2	2853.0	2739.4	2618.8	2472.2	2316.0
17.5°	3297.7	3267.0	3259.8	3219.6	3160.5	3098.9	3004.4	2900.2	2758.3	2611.6	2441.3
20°	3538.9	3496.4	3482.2	3423.0	3354.5	3269.3	3160.5	3030.4	2881.3	2720.5	2545.4
22.5°	3822.8	3792.1	3761.3	3709.3	3621.8	3501.2	3342.7	3200.8	3011.4	2834.0	2644.8
25°	4225.0	4199.0	4149.3	4078.4	3969.5	3825.2	3633.6	3425.4	3203.1	2976.0	2753.6
27.5°	4615.3	4591.6	4556.2	4501.9	4378.7	4220.3	3983.7	3718.8	3437.2	3162.8	2916.8
30°	4982.1	4960.7	4925.2	4870.9	4762.0	4605.9	4338.5	4054.7	3704.6	3385.2	3089.6
32.5°	5377.1	5370.0	5329.7	5251.7	5157.1	4946.6	4655.6	4350.4	3995.6	3626.6	3281.1
35°	5824.2	5769.7	5732.0	5653.8	5493.1	5268.3	4927.6	4594.1	4220.3	3841.8	3456.2
37.5°	6202.7	6150.7	6103.3	6004.1	5807.7	5521.4	5135.8	4769.1	4383.5	3997.9	3605.2
40°	6479.4	6453.4	6396.7	6266.5	6046.6	5706.0	5289.5	4889.7	4501.9	4113.8	3725.8
42.5°	6685.3	6645.0	6581.3	6446.4	6186.2	5798.2	5351.0	4939.4	4556.2	4184.8	3804.0
45°	6761.0	6727.9	6668.7	6522.1	6240.5	5824.2	5348.7	4925.2	4558.6	4206.1	3856.0
47.5°	6716.0	6683.0	6630.8	6493.6	6216.9	5793.5	5306.2	4885.0	4534.9	4213.3	3903.2
50°	6567.0	6548.1	6507.8	6391.9	6143.5	5734.3	5268.3	4863.7	4530.2	4248.7	3969.5
52.5°	6552.8	6541.0	6491.3	6375.4	6122.3	5715.3	5263.5	4875.6	4570.4	4293.7	4016.9
55°	8007.6	7839.7	7463.6	7144.2	6619.0	5994.6	5502.4	5067.1	4740.8	4471.1	4277.0
57.5°	11381.0	11130.4	10635.9	10028.0	8821.4	7636.3	6687.7	6001.6	5663.3	5540.3	5613.6
60°	12961.3	12916.4	12838.3	12549.7	11932.3	10912.7	9777.1	8549.5	8057.3	8014.8	8163.8
62.5°	13711.3	13682.8	13706.5	13671.0	13479.4	13181.3	12854.8	12325.0	11837.6	11523.0	10855.8
65°	14056.6	14075.6	14210.3	14316.8	14340.5	14418.5	14657.5	15317.5	15800.0	14988.7	13136.4
67.5°	13178.9	13290.1	13600.1	13988.0	14442.2	14882.2	15591.9	16982.9	17974.1	17020.8	14390.2
69°	10910.3	10964.7	11721.7	12452.7	13562.2	14338.2	15367.2	17191.0	18305.4	17228.9	14290.8
70°	8589.5	8639.3	9450.8	10444.3	12320.3	13318.5	14664.6	16838.6	17995.3	16952.1	13779.8
72.5°	3874.9	3804.0	4090.1	4622.4	6661.6	8246.6	10600.4	13642.6	14846.7	13581.1	10309.4
75°	2706.3	2675.6	2706.3	2708.6	3025.7	3903.2	4925.2	7394.9	9145.5	7891.8	4925.2
77.5°	2095.9	2074.7	2053.4	2029.7	2067.6	2316.0	2415.3	2623.4	3406.5	3222.0	1878.3
80°	1658.4	1639.4	1691.4	1674.9	1674.9	1703.3	1684.4	1606.2	1459.5	1353.1	1211.2
82.5°	771.1	775.9	775.9	842.1	1014.9	1185.2	1239.6	1161.6	1031.4	877.6	707.4
85°	73.3	82.7	139.6	215.3	428.2	482.5	485.0	402.1	402.1	317.0	255.4
87.5°	0.0	2.3	2.3	2.3	21.3	59.2	49.7	14.2	7.0	7.0	11.8
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6
2.5°	1258.6	1251.4	1223.1	1194.6	1168.6	1140.2	1114.2	1088.2	1059.7	1038.5	1012.5
5°	1471.5	1419.3	1360.3	1303.5	1246.6	1187.6	1126.1	1071.7	1014.9	962.8	913.1
7.5°	1686.7	1584.9	1504.5	1402.8	1310.6	1218.3	1133.1	1045.7	965.2	889.5	818.5
10°	1868.8	1745.8	1620.4	1490.4	1357.8	1234.9	1116.6	1012.5	906.0	813.8	726.3
12.5°	2017.9	1861.8	1708.1	1544.7	1395.7	1239.6	1092.9	967.5	842.1	738.1	648.2
15°	2152.7	1973.0	1788.4	1599.2	1410.0	1232.6	1069.2	913.1	785.4	667.1	565.4
17.5°	2261.6	2055.7	1847.5	1634.6	1431.2	1223.1	1038.5	875.3	726.3	603.2	503.9
20°	2356.2	2140.9	1916.2	1677.2	1445.5	1220.6	1012.5	828.0	674.2	544.2	447.1
22.5°	2443.7	2228.4	1987.2	1731.6	1466.7	1218.3	988.8	792.5	629.2	499.2	402.1
25°	2543.1	2316.0	2062.9	1788.4	1504.5	1227.8	974.7	764.1	589.0	456.5	366.6
27.5°	2654.3	2415.3	2152.7	1859.3	1554.2	1246.6	970.0	733.4	553.5	416.3	338.3
30°	2810.3	2533.6	2242.6	1930.3	1599.2	1268.0	965.2	714.4	518.0	385.6	309.9
32.5°	2947.7	2649.6	2342.0	2003.7	1648.9	1289.3	962.8	688.4	485.0	354.8	288.6
35°	3091.9	2756.0	2427.2	2074.7	1691.4	1312.9	960.5	669.4	454.2	324.1	267.3
37.5°	3217.3	2845.8	2493.4	2136.1	1738.8	1334.3	962.8	652.9	425.8	298.1	248.4
40°	3323.7	2938.2	2566.7	2192.9	1788.4	1367.3	965.2	636.4	397.5	274.4	231.9
42.5°	3418.4	3025.7	2644.8	2256.8	1845.2	1405.2	979.4	622.2	373.8	253.1	215.3
45°	3491.7	3106.1	2729.9	2346.7	1937.5	1466.7	1005.4	612.7	350.1	234.2	201.1
47.5°	3567.4	3224.3	2874.2	2488.7	2072.4	1563.7	1050.4	610.4	331.1	219.9	189.2
50°	3671.5	3342.7	3002.0	2632.9	2195.3	1663.1	1104.7	612.7	307.6	205.9	177.4
52.5°	3747.2	3463.2	3167.6	2883.7	2488.7	1965.8	1315.3	655.2	295.6	193.9	163.2
55°	4194.3	4144.6	4151.6	4199.0	3893.9	3345.0	2200.1	946.3	347.8	219.9	160.9
57.5°	5914.1	6089.1	6190.8	6188.5	5684.6	4714.7	2954.7	1215.9	388.0	255.4	191.6
60°	8175.7	8043.2	7856.3	7394.9	6725.5	5381.9	3304.8	1308.3	335.9	203.4	175.1
62.5°	10174.6	9398.6	8710.2	7962.8	7085.1	5613.6	3375.7	1301.1	293.3	153.7	123.0
65°	11421.3	10025.5	8913.8	7976.9	6943.1	5419.7	3193.6	1194.6	248.4	125.4	101.7
67.5°	11719.4	9687.2	8114.2	6919.4	5800.5	4218.0	2344.3	899.0	193.9	104.1	89.9
69°	11068.7	8611.0	6723.2	5367.7	4220.3	2798.5	1450.2	567.7	149.0	94.7	82.7
70°	10181.7	7489.6	5476.4	4307.8	3125.1	1965.8	1014.9	399.8	120.7	87.5	75.7
72.5°	6550.5	3934.0	2692.1	1873.5	1289.3	783.1	397.5	179.9	92.2	73.3	61.5
75°	2540.7	1454.9	1055.1	801.9	626.9	435.3	241.3	115.9	78.0	61.5	47.3
77.5°	1251.4	958.0	783.1	537.0	312.3	193.9	130.2	89.9	63.9	45.0	30.7
80°	988.8	657.7	392.8	243.6	184.5	139.6	99.4	73.3	47.3	28.4	21.3
82.5°	506.2	276.8	203.4	165.6	137.2	108.9	80.4	52.0	30.7	19.0	16.5
85°	158.5	115.9	104.1	101.7	94.7	78.0	56.7	33.2	19.0	11.8	11.8
87.5°	11.8	16.5	21.3	16.5	19.0	16.5	21.3	14.2	9.5	9.5	7.0
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6
2.5°	993.5	965.2	939.2	922.6	891.8	880.0	868.2	863.5	842.1	846.8	828.0
5°	868.2	818.5	780.6	742.8	707.4	681.4	659.9	633.9	612.7	603.2	584.2
7.5°	754.6	690.8	641.1	600.9	558.2	525.2	496.8	477.8	459.0	440.0	430.5
10°	655.2	586.7	529.9	489.7	449.5	421.1	399.8	385.6	373.8	366.6	364.3
12.5°	563.0	496.8	444.8	409.3	378.5	364.3	354.8	347.8	345.3	343.0	343.0
15°	492.0	425.8	385.6	359.6	345.3	338.3	335.9	331.1	326.5	324.1	324.1
17.5°	425.8	376.1	347.8	333.6	326.5	321.8	317.0	312.3	307.6	305.1	305.1
20°	380.8	340.6	326.5	317.0	309.9	305.1	298.1	293.3	291.0	288.6	286.3
22.5°	345.3	319.3	309.9	302.8	293.3	286.3	281.6	276.8	272.1	269.6	267.3
25°	319.3	302.8	295.6	286.3	276.8	269.6	262.6	255.4	250.8	248.4	243.6
27.5°	300.4	288.6	279.1	267.3	257.9	250.8	243.6	236.6	231.9	227.1	224.7
30°	283.9	272.1	260.2	250.8	238.9	231.9	222.4	215.3	212.9	208.2	203.4
32.5°	267.3	255.4	243.6	231.9	219.9	210.6	205.9	196.4	191.6	189.2	184.5
35°	248.4	236.6	222.4	212.9	201.1	191.6	184.5	177.4	172.7	167.9	165.6
37.5°	231.9	217.6	203.4	191.6	182.2	172.7	165.6	158.5	153.7	149.0	146.7
40°	212.9	198.7	184.5	172.7	163.2	156.2	149.0	141.9	137.2	134.9	134.9
42.5°	196.4	179.9	165.6	156.2	149.0	139.6	132.4	125.4	123.0	120.7	123.0
45°	179.9	163.2	151.4	141.9	134.9	125.4	118.2	113.5	111.2	113.5	115.9
47.5°	165.6	149.0	137.2	130.2	123.0	115.9	108.9	104.1	104.1	108.9	113.5
50°	151.4	134.9	125.4	120.7	113.5	106.4	97.0	94.7	97.0	101.7	106.4
52.5°	137.2	118.2	111.2	108.9	101.7	94.7	87.5	85.2	87.5	92.2	89.9
55°	123.0	104.1	101.7	99.4	92.2	82.7	75.7	75.7	75.7	73.3	68.7
57.5°	118.2	92.2	89.9	87.5	80.4	71.0	66.2	61.5	59.2	52.0	49.7
60°	123.0	82.7	82.7	78.0	71.0	61.5	54.4	47.3	42.5	37.8	37.8
62.5°	99.4	75.7	73.3	68.7	59.2	49.7	42.5	35.5	33.2	30.7	30.7
65°	80.4	68.7	63.9	56.7	49.7	40.2	33.2	28.4	26.0	26.0	28.4
67.5°	73.3	61.5	54.4	47.3	40.2	30.7	26.0	23.7	23.7	26.0	26.0
69°	68.7	56.7	49.7	42.5	35.5	28.4	23.7	23.7	23.7	23.7	26.0
70°	63.9	54.4	47.3	40.2	30.7	23.7	21.3	21.3	23.7	23.7	26.0
72.5°	49.7	42.5	40.2	33.2	23.7	21.3	19.0	21.3	21.3	23.7	23.7
75°	37.8	30.7	30.7	26.0	19.0	16.5	16.5	19.0	19.0	21.3	21.3
77.5°	26.0	21.3	21.3	19.0	16.5	14.2	14.2	16.5	19.0	19.0	21.3
80°	19.0	16.5	14.2	16.5	14.2	11.8	14.2	16.5	16.5	19.0	19.0
82.5°	14.2	14.2	14.2	14.2	11.8	11.8	14.2	14.2	16.5	19.0	19.0
85°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	14.2	14.2	16.5	16.5
87.5°	7.0	7.0	7.0	9.5	9.5	11.8	11.8	11.8	11.8	14.2	14.2
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):**

	165°	170°	175°	180°
0°	1090.6	1090.6	1090.6	1090.6
2.5°	823.3	820.8	811.4	813.8
5°	577.2	563.0	572.5	570.2
7.5°	423.5	421.1	418.8	423.5
10°	362.0	362.0	359.6	362.0
12.5°	340.6	340.6	340.6	340.6
15°	324.1	324.1	321.8	321.8
17.5°	305.1	305.1	305.1	302.8
20°	286.3	283.9	283.9	283.9
22.5°	264.9	262.6	262.6	262.6
25°	243.6	241.3	241.3	241.3
27.5°	222.4	219.9	217.6	217.6
30°	201.1	198.7	196.4	196.4
32.5°	179.9	177.4	175.1	175.1
35°	160.9	160.9	158.5	156.2
37.5°	144.4	144.4	144.4	144.4
40°	132.4	134.9	134.9	134.9
42.5°	125.4	127.7	130.2	132.4
45°	120.7	125.4	127.7	127.7
47.5°	118.2	120.7	123.0	123.0
50°	108.9	106.4	106.4	106.4
52.5°	87.5	82.7	80.4	78.0
55°	63.9	61.5	56.7	56.7
57.5°	45.0	45.0	42.5	42.5
60°	35.5	35.5	33.2	35.5
62.5°	30.7	30.7	30.7	30.7
65°	28.4	28.4	28.4	28.4
67.5°	28.4	28.4	28.4	28.4
69°	26.0	26.0	26.0	26.0
70°	26.0	26.0	26.0	26.0
72.5°	23.7	23.7	23.7	23.7
75°	21.3	23.7	23.7	23.7
77.5°	21.3	21.3	21.3	21.3
80°	19.0	19.0	21.3	21.3
82.5°	19.0	19.0	19.0	19.0
85°	16.5	16.5	19.0	19.0
87.5°	14.2	14.2	16.5	16.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)