

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: P165261

Luminaire Tested: **VST-F04-LED-E-U-SL3-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165261
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-F04-LED-E-U-SL3-HSS-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (28) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5166.7 lumens
Efficiency: N/A
Efficacy: 50.6 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

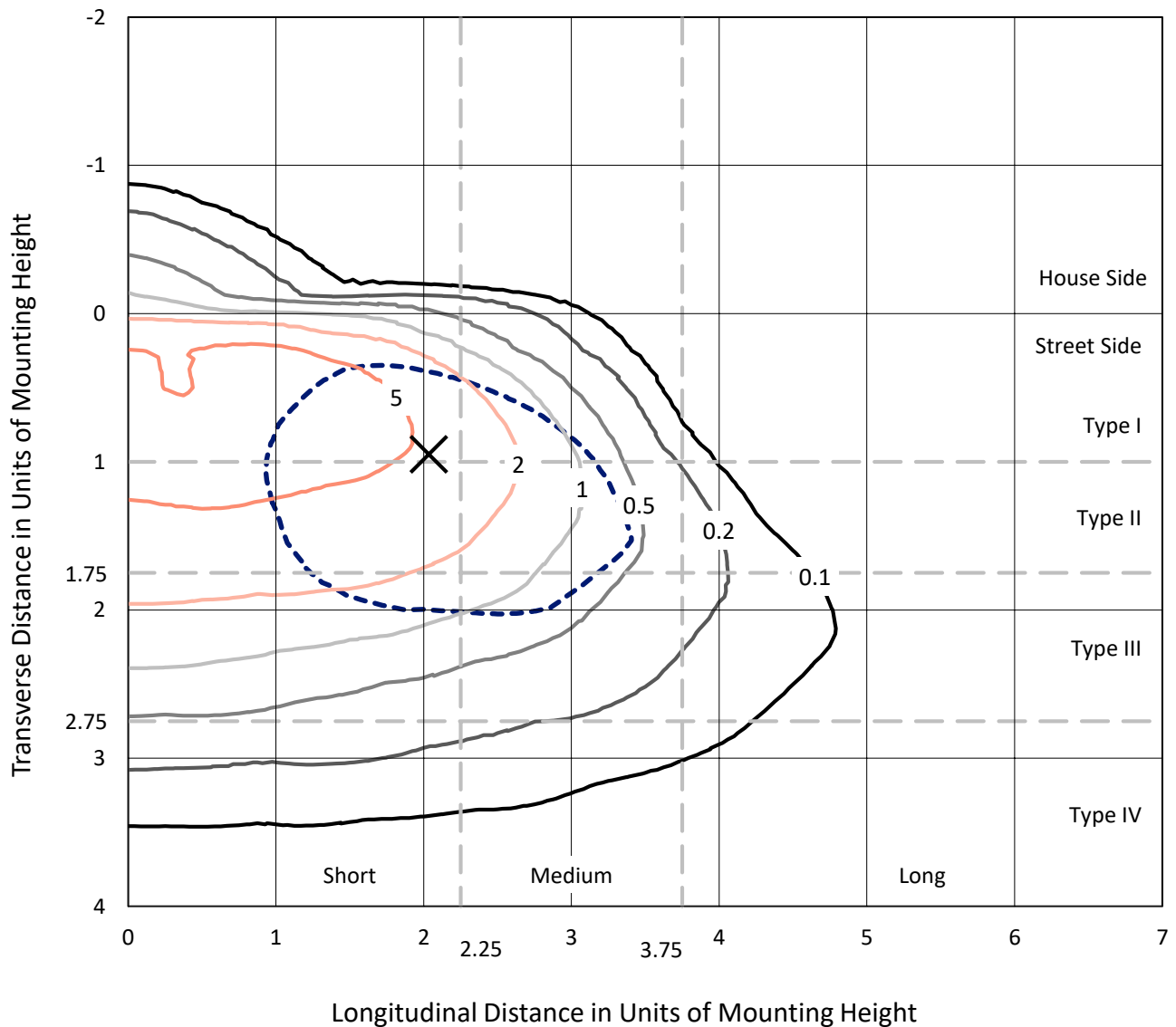
Input Watts (W): 102.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

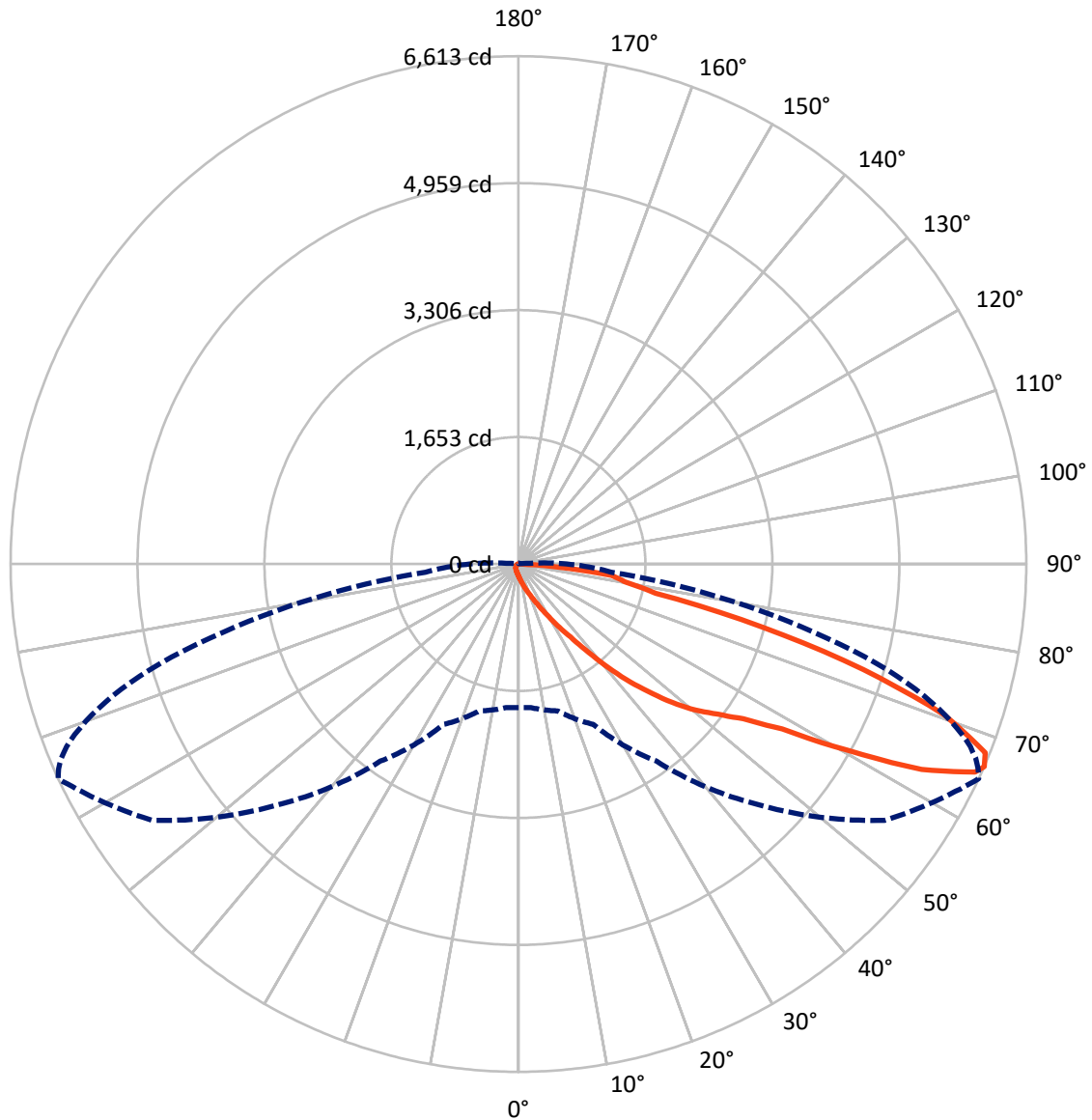
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.5 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	112.0	0.0	112.0
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	5054.7	0.0	5054.7
	% Fixture	97.8	0.0	97.8
Total	Lumens	5166.7	0.0	5166.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.5	0.3
10°-20°	74.0	1.4
20°-30°	159.7	3.1
30°-40°	341.0	6.6
40°-50°	754.0	14.6
50°-60°	1277.8	24.7
60°-70°	1705.1	33.0
70°-80°	751.1	14.5
80°-90°	86.5	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°	5166.7	100.0
0°-180°	5166.7	100.0

Coefficient of Utilization



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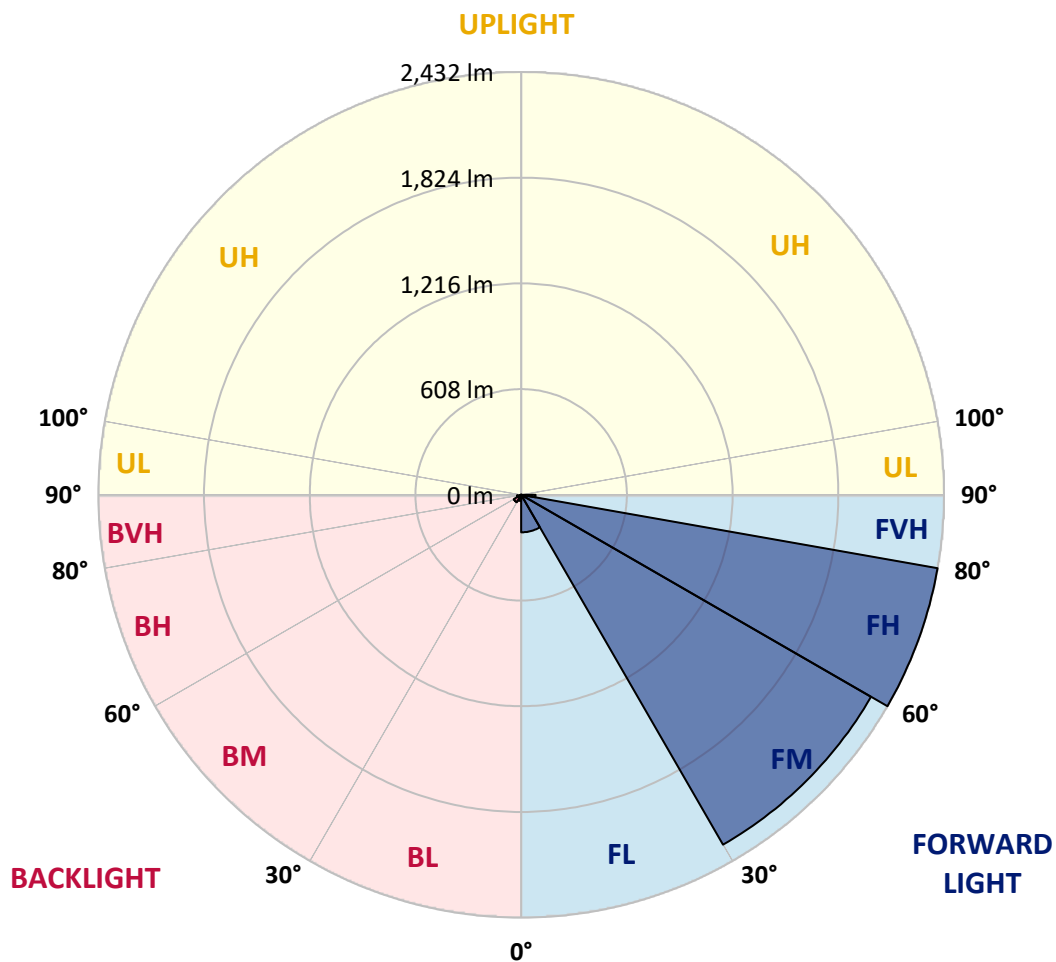
CATALOG NUMBER: VST-F04-LED-E-U-SL3-HSS-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	215.8	4.2			
FM	(30°-60°)	2323.6	45.0			
FH	(60°-80°)	2432.2	47.1			G2/5000
FVH	(80°-90°)	83.1	1.6			G1/100
BL	(0°-30°)	35.3	0.7	B0/110		
BM	(30°-60°)	49.2	1.0	B0/220		
BH	(60°-80°)	24.0	0.5	B0/110		G0/110
BVH	(80°-90°)	3.4	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9
2.5°	196.7	195.7	191.7	191.7	185.7	181.8	176.8	171.9	171.9	170.8	169.9
5°	260.2	254.3	253.3	242.4	233.4	220.5	208.6	192.7	190.7	188.7	187.7
7.5°	330.8	329.8	320.8	307.9	290.1	266.2	242.4	216.5	212.6	210.6	206.6
10°	422.2	417.2	405.3	383.4	356.6	324.8	286.1	245.3	240.4	236.4	234.4
12.5°	509.6	500.7	493.7	465.8	432.1	385.4	338.7	280.1	276.1	271.2	263.2
15°	591.0	583.0	571.2	547.3	509.6	450.9	396.4	324.8	314.9	307.9	302.0
17.5°	654.6	649.6	635.7	608.9	568.1	516.5	450.9	370.5	362.6	353.6	342.7
20°	715.2	708.2	686.4	649.6	605.9	566.2	515.6	430.1	419.2	408.2	396.4
22.5°	772.8	765.8	730.1	669.5	622.8	605.9	588.1	497.6	480.7	471.8	459.9
25°	853.3	838.4	782.7	686.4	623.8	636.7	667.5	585.0	569.2	556.3	537.4
27.5°	961.6	941.6	854.2	711.2	627.7	670.5	758.9	691.3	674.4	659.5	638.7
30°	1083.7	1070.8	966.5	770.8	656.6	720.2	861.2	826.4	806.6	788.7	763.9
32.5°	1206.9	1189.0	1085.7	884.0	734.0	816.5	989.4	983.4	957.6	940.7	913.8
35°	1315.1	1306.2	1229.7	1069.8	910.9	985.4	1160.2	1167.1	1144.3	1126.4	1096.6
37.5°	1388.7	1388.7	1373.8	1269.4	1192.0	1247.6	1411.5	1412.5	1389.6	1348.9	1334.0
40°	1426.4	1437.3	1491.0	1510.8	1506.8	1578.4	1741.3	1723.4	1704.5	1683.6	1634.0
42.5°	1503.9	1513.8	1628.0	1765.1	1854.5	1948.9	2061.1	2055.1	2032.3	1994.6	1948.9
45°	1635.0	1647.9	1784.0	2001.5	2185.3	2319.4	2390.9	2363.1	2340.2	2304.5	2280.6
47.5°	1801.9	1826.7	1980.7	2249.9	2471.3	2692.8	2767.3	2693.9	2674.0	2646.2	2607.4
50°	1979.7	2003.5	2167.4	2475.3	2725.7	2989.9	3114.1	2989.9	2961.1	2952.1	2908.4
52.5°	2133.6	2153.5	2311.4	2649.2	2920.3	3230.2	3411.0	3247.1	3226.2	3196.4	3164.7
55°	2225.0	2240.9	2388.9	2732.6	3052.5	3446.8	3698.1	3554.1	3523.3	3511.4	3465.7
57.5°	2255.8	2271.7	2404.8	2743.5	3123.9	3644.4	4046.8	4051.7	4015.0	3972.3	3958.3
60°	2255.8	2273.7	2385.9	2716.7	3193.5	3855.0	4511.6	4925.8	4846.4	4838.4	4787.7
62.5°	2162.5	2179.3	2292.6	2634.3	3286.9	4139.1	5159.2	5890.3	5867.5	5815.8	5732.4
65°	1959.8	1969.7	2081.0	2423.7	3251.1	4400.4	5720.5	6532.0	6495.3	6393.9	6286.7
66°	1868.4	1876.4	1980.7	2303.5	3133.9	4436.1	5819.8	6612.5	6551.9	6466.4	6345.2
67.5°	1736.3	1750.2	1823.7	2080.0	2852.8	4311.9	5757.3	6555.9	6503.2	6399.9	6278.7
70°	1159.2	1149.3	1408.5	1596.2	2173.4	3513.4	5165.2	5886.3	5887.4	5838.7	5790.0
72.5°	550.3	556.3	631.7	982.4	1422.4	2347.2	4111.3	4698.3	4765.9	4678.5	4617.9
75°	395.3	404.3	450.0	601.0	848.3	1408.5	2665.0	3285.8	3287.8	3132.9	2994.9
77.5°	115.2	120.2	168.8	370.5	635.7	950.6	1530.7	1826.7	1784.0	1672.7	1568.4
80°	47.7	47.7	49.6	118.2	255.3	645.7	1070.8	1406.5	1401.6	1358.9	1297.3
82.5°	17.9	18.9	23.8	48.7	60.6	158.9	714.2	1220.8	1217.8	1157.2	1113.5
85°	2.0	2.0	6.0	20.9	22.9	29.8	143.0	538.4	535.4	538.4	471.8
87.5°	0.0	0.0	1.0	2.0	3.0	4.0	6.0	20.9	22.9	21.8	19.8
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9
2.5°	169.9	167.9	167.9	166.9	166.9	166.9	165.9	164.9	164.9	163.9	162.9
5°	185.7	183.7	182.8	180.8	179.8	178.8	176.8	175.8	173.8	172.8	171.9
7.5°	204.6	200.6	199.7	196.7	193.7	191.7	189.7	186.7	184.8	180.8	179.8
10°	228.5	223.5	219.5	215.5	212.6	207.6	204.6	200.6	196.7	193.7	190.7
12.5°	259.3	252.3	246.3	242.4	235.4	229.5	223.5	220.5	212.6	208.6	203.6
15°	293.0	285.1	278.1	270.2	265.2	255.3	247.3	238.4	234.4	227.5	219.5
17.5°	336.7	323.8	312.9	305.0	295.0	285.1	276.1	267.2	255.3	247.3	237.4
20°	383.4	372.5	357.6	343.7	331.8	319.9	306.9	295.0	284.1	271.2	259.3
22.5°	443.0	427.1	409.3	395.3	379.5	366.6	348.6	332.8	314.9	298.0	284.1
25°	518.5	497.6	480.7	460.9	442.0	422.2	400.3	380.4	357.6	341.7	317.9
27.5°	611.9	592.0	569.2	543.4	524.5	494.7	465.8	441.1	414.2	389.4	362.6
30°	731.1	702.3	678.4	653.6	615.9	587.0	553.3	519.5	482.7	457.9	417.2
32.5°	874.1	843.3	807.6	771.8	737.0	696.3	654.6	612.8	572.1	526.5	484.7
35°	1049.0	1012.2	971.4	932.7	879.1	835.4	782.7	725.1	679.4	626.8	574.1
37.5°	1280.4	1219.8	1184.0	1143.3	1070.8	1011.2	952.6	895.0	814.5	758.9	684.4
40°	1570.4	1534.6	1476.1	1410.5	1344.9	1266.5	1187.0	1110.5	1017.2	939.7	853.3
42.5°	1911.1	1858.5	1798.9	1704.5	1638.0	1545.6	1455.2	1353.9	1239.6	1140.3	1039.0
45°	2231.0	2168.4	2122.7	2028.4	1958.8	1849.5	1740.3	1633.0	1500.9	1372.8	1255.5
47.5°	2576.7	2525.0	2449.5	2373.0	2302.5	2179.3	2061.1	1931.0	1791.9	1640.0	1488.0
50°	2880.6	2839.9	2788.2	2695.9	2617.4	2514.1	2375.0	2233.0	2057.1	1906.2	1733.3
52.5°	3138.8	3107.1	3034.6	2969.0	2898.5	2801.1	2677.0	2540.9	2351.2	2185.3	1988.6
55°	3443.8	3421.0	3357.4	3316.7	3254.1	3160.7	3044.5	2918.4	2717.7	2536.9	2314.4
57.5°	3943.4	3925.6	3869.9	3853.0	3791.4	3710.0	3567.0	3431.9	3197.5	2973.0	2718.7
60°	4770.8	4735.1	4653.6	4612.0	4481.8	4372.6	4186.8	4001.1	3718.0	3431.9	3125.9
62.5°	5656.9	5556.6	5401.6	5268.5	5083.8	4894.0	4645.7	4361.6	4029.9	3690.2	3338.5
65°	6134.7	5963.8	5768.2	5556.6	5317.2	5038.1	4725.2	4384.5	4027.9	3669.3	3297.8
66°	6189.3	5996.6	5789.0	5553.6	5287.4	4990.4	4672.5	4315.0	3944.4	3594.8	3223.3
67.5°	6120.8	5919.2	5699.6	5438.4	5150.3	4842.4	4508.6	4137.1	3780.5	3425.9	3064.4
70°	5641.0	5440.3	5244.7	4969.5	4662.6	4352.7	4036.8	3621.6	3283.9	2958.1	2636.3
72.5°	4504.7	4368.6	4174.9	3939.5	3640.5	3276.9	3013.7	2642.2	2349.2	2033.3	1784.0
75°	2815.0	2623.4	2383.9	2084.0	1855.5	1560.5	1406.5	1124.4	957.6	811.5	670.5
77.5°	1439.3	1295.3	1127.4	958.5	796.6	635.7	491.7	347.7	234.4	162.9	121.2
80°	1189.0	1061.9	922.8	768.8	625.8	485.8	349.7	238.4	152.0	99.3	77.5
82.5°	982.4	875.1	750.9	607.9	483.8	381.5	265.2	172.8	107.2	69.5	54.6
85°	418.2	379.5	293.0	232.4	174.8	129.1	90.4	60.6	42.7	34.7	31.8
87.5°	17.9	19.8	18.9	14.9	10.9	10.9	10.0	8.0	8.0	8.0	8.0
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9
2.5°	162.9	161.9	160.9	160.9	159.9	158.9	153.0	148.0	142.1	138.1	134.1
5°	169.9	168.8	166.9	165.9	163.9	162.9	150.0	139.0	130.1	123.2	118.2
7.5°	176.8	175.8	172.8	169.9	168.8	166.9	146.0	132.1	120.2	112.3	107.2
10°	185.7	182.8	179.8	175.8	172.8	169.9	142.1	124.1	111.2	104.3	99.3
12.5°	198.6	193.7	188.7	183.7	179.8	174.8	140.1	117.2	104.3	96.3	91.4
15°	213.6	206.6	200.6	194.7	187.7	182.8	136.1	111.2	98.3	90.4	84.4
17.5°	227.5	219.5	210.6	201.6	194.7	187.7	132.1	105.3	92.3	84.4	78.5
20°	247.3	235.4	224.5	213.6	203.6	194.7	126.1	99.3	87.4	78.5	72.5
22.5°	269.2	255.3	241.4	226.5	213.6	201.6	121.2	94.3	82.5	73.5	66.5
25°	297.0	280.1	261.2	242.4	227.5	211.6	116.2	89.4	77.5	68.5	61.6
27.5°	335.7	311.9	291.0	267.2	244.4	226.5	112.3	85.4	72.5	63.6	56.6
30°	388.4	353.6	320.8	295.0	268.2	242.4	108.3	80.5	68.5	58.6	50.7
32.5°	447.0	406.3	368.5	329.8	296.0	266.2	104.3	76.5	63.6	53.6	46.7
35°	519.5	467.8	417.2	372.5	331.8	292.0	100.3	72.5	59.6	48.7	41.7
37.5°	623.8	559.2	492.7	435.1	382.4	329.8	97.4	68.5	54.6	43.7	36.7
40°	766.8	683.4	601.9	523.5	454.9	389.4	93.4	64.5	50.7	39.8	32.8
42.5°	921.8	820.5	713.2	624.8	530.4	448.0	89.4	60.6	46.7	35.8	28.8
45°	1114.5	988.3	858.2	738.0	622.8	516.5	85.4	56.6	41.7	31.8	24.9
47.5°	1325.1	1164.2	1017.2	866.2	729.1	601.9	80.5	53.6	37.8	27.8	21.8
50°	1541.6	1371.8	1186.0	1014.2	851.3	687.4	75.5	48.7	33.8	24.9	17.9
52.5°	1775.0	1574.4	1384.7	1171.1	981.4	799.6	70.5	44.7	30.8	21.8	14.9
55°	2072.0	1847.6	1625.1	1385.7	1157.2	929.8	65.6	39.8	26.8	18.9	11.9
57.5°	2445.5	2179.3	1906.2	1636.0	1358.9	1100.6	61.6	34.7	22.9	15.9	10.0
60°	2798.2	2487.3	2156.5	1845.6	1532.7	1231.7	55.6	30.8	19.8	12.9	10.0
62.5°	2980.9	2626.3	2269.7	1927.0	1593.3	1278.4	49.6	25.8	16.9	10.9	8.9
65°	2936.2	2574.7	2229.0	1883.3	1556.5	1248.6	43.7	22.9	14.9	10.0	8.9
66°	2871.7	2514.1	2166.4	1837.6	1525.7	1216.8	40.7	21.8	13.9	10.0	8.0
67.5°	2730.6	2384.9	2053.2	1747.2	1441.3	1156.2	36.7	19.8	12.9	8.9	8.0
70°	2332.3	2018.4	1753.2	1481.0	1231.7	974.5	29.8	16.9	10.9	8.0	8.0
72.5°	1543.6	1330.0	1153.2	992.3	829.4	643.7	24.9	13.9	8.9	8.0	6.9
75°	582.1	526.5	452.0	406.3	354.6	310.9	19.8	8.9	6.9	6.9	6.9
77.5°	103.3	95.4	84.4	77.5	71.5	65.6	15.9	6.0	6.0	6.9	6.9
80°	69.5	64.5	58.6	53.6	49.6	44.7	10.9	4.9	6.0	6.0	6.9
82.5°	49.6	46.7	43.7	39.8	36.7	32.8	6.9	4.9	6.0	6.0	6.0
85°	29.8	27.8	25.8	23.8	20.9	19.8	4.9	4.9	4.9	6.0	6.0
87.5°	8.0	6.9	8.0	8.0	6.0	6.9	4.0	4.0	4.0	4.9	4.9
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):

	145°	155°	165°	175°	180°
0°	155.9	155.9	155.9	155.9	155.9
2.5°	132.1	132.1	130.1	133.1	133.1
5°	114.2	114.2	113.2	114.2	114.2
7.5°	104.3	103.3	103.3	103.3	104.3
10°	95.4	94.3	94.3	94.3	94.3
12.5°	87.4	86.4	85.4	86.4	86.4
15°	80.5	78.5	78.5	78.5	78.5
17.5°	74.5	72.5	71.5	71.5	71.5
20°	68.5	65.6	65.6	65.6	65.6
22.5°	62.6	59.6	59.6	59.6	59.6
25°	56.6	53.6	53.6	53.6	53.6
27.5°	51.6	48.7	48.7	48.7	48.7
30°	45.7	43.7	43.7	44.7	43.7
32.5°	41.7	38.7	38.7	39.8	39.8
35°	36.7	34.7	34.7	34.7	34.7
37.5°	31.8	29.8	29.8	29.8	29.8
40°	27.8	25.8	24.9	25.8	25.8
42.5°	23.8	21.8	20.9	20.9	20.9
45°	20.9	17.9	16.9	17.9	17.9
47.5°	16.9	14.9	14.9	15.9	15.9
50°	12.9	12.9	13.9	15.9	15.9
52.5°	11.9	11.9	13.9	15.9	15.9
55°	10.9	11.9	13.9	14.9	15.9
57.5°	10.0	11.9	13.9	14.9	14.9
60°	10.0	10.9	12.9	14.9	14.9
62.5°	8.9	10.0	11.9	13.9	13.9
65°	8.9	10.0	11.9	13.9	13.9
66°	8.9	10.0	11.9	13.9	13.9
67.5°	8.9	10.0	11.9	13.9	13.9
70°	8.9	10.0	11.9	12.9	12.9
72.5°	8.0	8.9	10.9	12.9	12.9
75°	8.0	8.9	10.9	12.9	12.9
77.5°	8.0	8.9	10.9	12.9	12.9
80°	8.0	8.9	10.9	11.9	12.9
82.5°	6.9	8.9	10.0	11.9	11.9
85°	6.9	8.0	10.0	10.9	11.9
87.5°	6.0	6.9	8.0	10.0	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)