

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: P165317

Luminaire Tested: **VST-E10-LED-E-U-SL3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165317
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-E10-LED-E-U-SL3-HSS
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (210) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17131 lumens
Efficiency: N/A
Efficacy: 69.2 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.67' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G4

Input Watts (W): 247.7
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



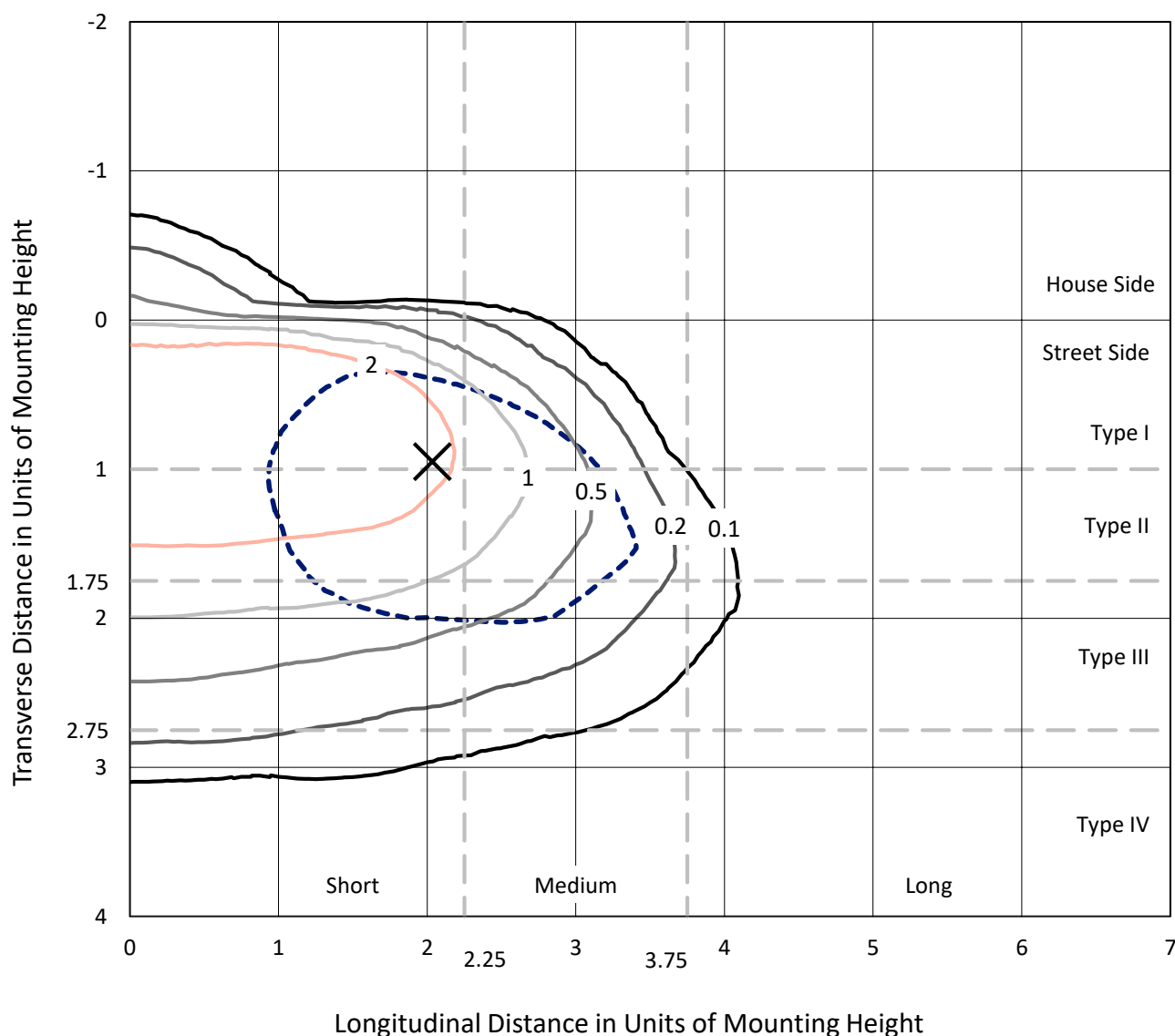
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

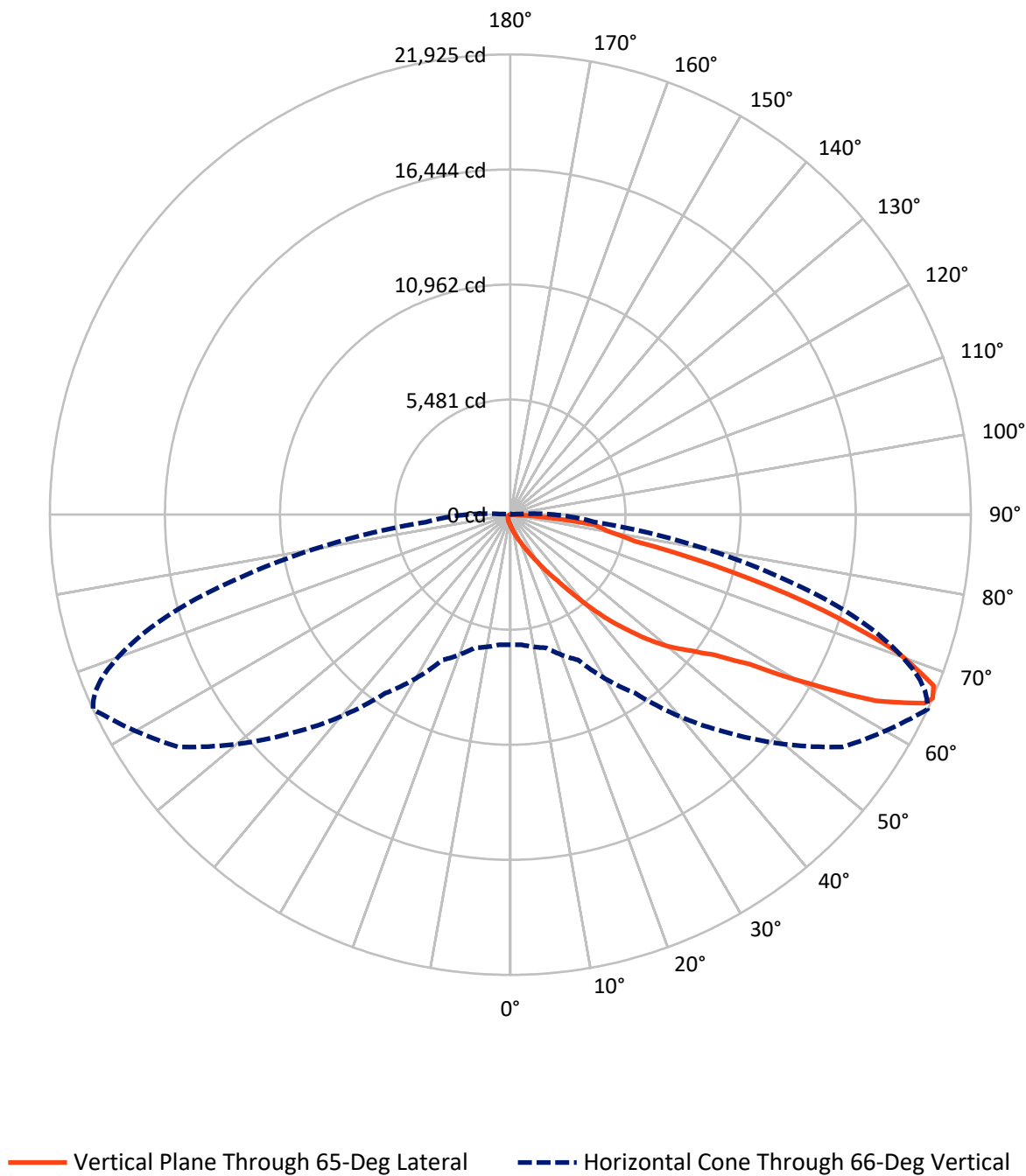


Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	371.2	0.0	371.2
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	16759.8	0.0	16759.8
	% Fixture	97.8	0.0	97.8
Total	Lumens	17131.0	0.0	17131.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.9	0.3
10°-20°	245.4	1.4
20°-30°	529.4	3.1
30°-40°	1130.5	6.6
40°-50°	2500.1	14.6
50°-60°	4236.8	24.7
60°-70°	5653.7	33.0
70°-80°	2490.4	14.5
80°-90°	286.9	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°	17131.0	100.0
0°-180°	17131.0	100.0

Coefficient of Utilization



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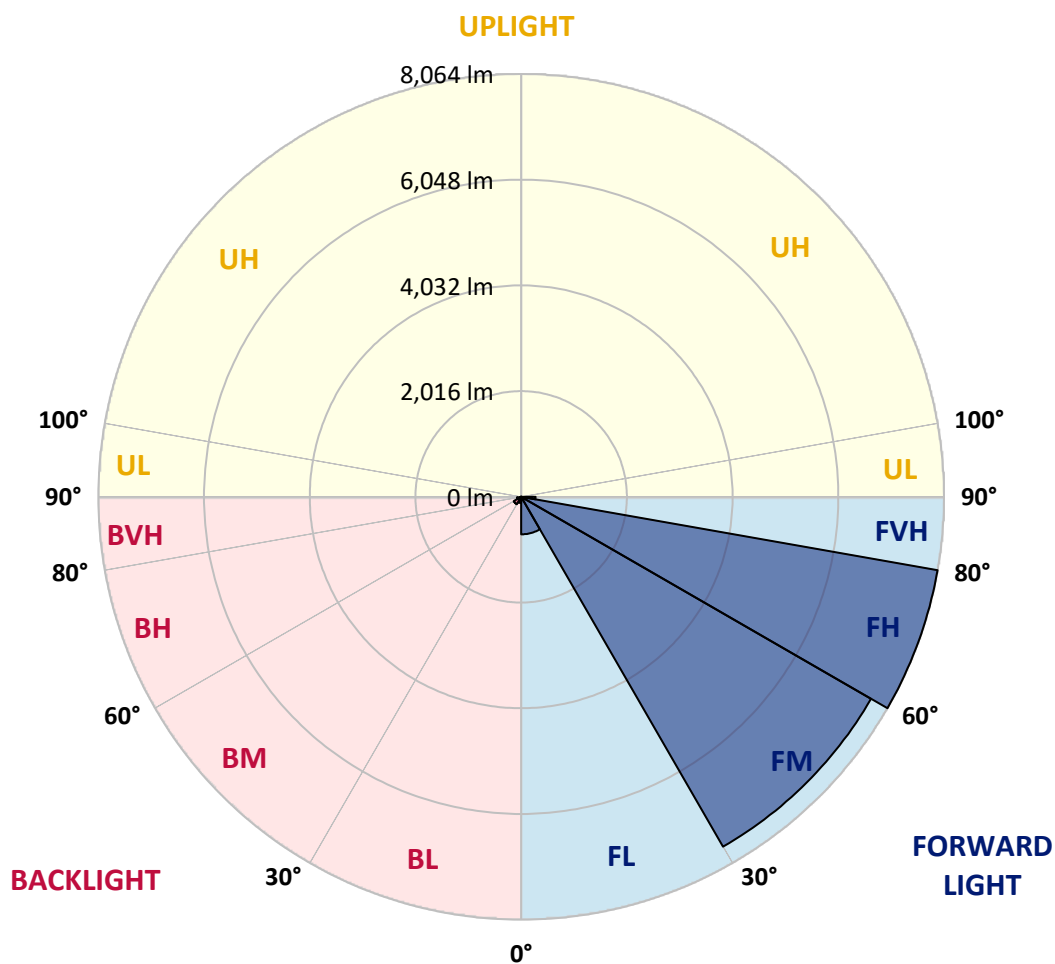
CATALOG NUMBER: VST-E10-LED-E-U-SL3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	715.6	4.2			
FM	(30°-60°)	7704.4	45.0			
FH	(60°-80°)	8064.4	47.1			G4/12000
FVH	(80°-90°)	275.4	1.6			G3/500
BL	(0°-30°)	117.1	0.7	B1/500		
BM	(30°-60°)	163.0	1.0	B0/220		
BH	(60°-80°)	79.6	0.5	B0/110		G0/110
BVH	(80°-90°)	11.4	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	517.0	517.0	517.0	517.0	517.0	517.0	517.0	517.0	517.0	517.0	517.0
2.5°	652.2	648.8	635.6	635.6	615.8	602.8	586.2	569.8	569.8	566.4	563.2
5°	862.8	843.2	839.8	803.6	774.0	731.2	691.6	639.0	632.4	625.8	622.4
7.5°	1096.8	1093.4	1063.8	1021.0	961.8	882.6	803.6	718.0	704.8	698.2	685.0
10°	1399.8	1383.2	1343.8	1271.2	1182.4	1077.0	948.6	813.4	797.0	783.8	777.2
12.5°	1689.6	1660.0	1636.8	1544.6	1432.6	1277.8	1123.0	928.8	915.6	899.2	872.8
15°	1959.6	1933.2	1893.8	1814.8	1689.6	1495.2	1314.2	1077.0	1044.0	1021.0	1001.2
17.5°	2170.4	2154.0	2107.8	2019.0	1883.8	1712.6	1495.2	1228.4	1202.2	1172.4	1136.2
20°	2371.4	2348.2	2275.8	2154.0	2009.0	1877.2	1709.4	1426.0	1389.8	1353.6	1314.2
22.5°	2562.4	2539.2	2420.8	2219.8	2065.0	2009.0	1949.8	1650.0	1594.0	1564.4	1524.8
25°	2829.2	2779.8	2595.2	2275.8	2068.4	2111.2	2213.2	1939.8	1887.2	1844.4	1781.8
27.5°	3188.2	3122.2	2832.4	2358.2	2081.4	2223.2	2516.2	2292.2	2236.2	2186.8	2117.8
30°	3593.2	3550.4	3204.6	2555.8	2177.0	2387.8	2855.4	2740.2	2674.4	2615.0	2532.8
32.5°	4001.6	3942.4	3599.8	2931.2	2433.8	2707.2	3280.4	3260.6	3175.0	3119.0	3030.0
35°	4360.6	4331.0	4077.4	3547.0	3020.2	3267.2	3846.8	3869.8	3794.2	3734.8	3636.0
37.5°	4604.4	4604.4	4555.0	4209.0	3952.2	4136.6	4680.0	4683.4	4607.6	4472.6	4423.2
40°	4729.4	4765.6	4943.6	5009.4	4996.2	5233.4	5773.6	5714.2	5651.6	5582.4	5417.8
42.5°	4986.4	5019.2	5398.0	5852.6	6149.0	6461.8	6834.0	6814.2	6738.6	6613.4	6461.8
45°	5421.2	5464.0	5915.2	6636.4	7245.6	7690.4	7927.4	7835.2	7759.4	7641.0	7561.8
47.5°	5974.4	6056.8	6567.2	7459.8	8194.2	8928.6	9175.6	8932.0	8866.2	8773.8	8645.4
50°	6564.0	6643.0	7186.4	8207.4	9037.4	9913.4	10325.2	9913.4	9818.0	9788.2	9643.4
52.5°	7074.4	7140.4	7664.0	8783.8	9682.8	10710.4	11309.8	10766.4	10697.2	10598.4	10493.0
55°	7377.4	7430.2	7920.8	9060.4	10121.0	11428.4	12261.8	11784.2	11682.0	11642.6	11491.0
57.5°	7479.6	7532.2	7973.6	9096.6	10358.0	12083.8	13417.8	13434.2	13312.4	13170.8	13124.6
60°	7479.6	7538.8	7911.0	9007.8	10588.6	12782.0	14959.0	16332.4	16069.0	16042.6	15874.6
62.5°	7170.0	7226.0	7601.4	8734.4	10898.2	13724.0	17106.4	19530.4	19454.8	19283.4	19006.8
65°	6498.0	6531.0	6899.8	8036.2	10779.6	14590.2	18967.2	21658.0	21536.2	21200.2	20844.6
66°	6195.0	6221.4	6567.2	7637.6	10391.0	14708.8	19296.6	21924.8	21724.0	21440.6	21038.8
67.5°	5757.0	5803.2	6046.8	6896.6	9459.0	14297.0	19089.2	21737.2	21562.6	21220.0	20818.2
70°	3843.6	3810.6	4670.2	5292.6	7206.2	11649.2	17126.2	19517.2	19520.6	19359.2	19197.8
72.5°	1824.6	1844.4	2094.6	3257.2	4716.2	7782.6	13631.8	15578.2	15802.2	15512.4	15311.4
75°	1310.8	1340.4	1492.0	1992.6	2812.6	4670.2	8836.4	10894.8	10901.4	10387.6	9930.0
77.5°	382.0	398.6	559.8	1228.4	2107.8	3151.8	5075.2	6056.8	5915.2	5546.2	5200.4
80°	158.0	158.0	164.6	392.0	846.4	2140.8	3550.4	4663.6	4647.2	4505.6	4301.4
82.5°	59.2	62.6	79.0	161.4	201.0	527.0	2368.0	4047.8	4037.8	3837.0	3692.0
85°	6.6	6.6	19.8	69.2	75.8	98.8	474.2	1785.0	1775.2	1785.0	1564.4
87.5°	0.0	0.0	3.2	6.6	9.8	13.2	19.8	69.2	75.8	72.4	65.8
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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CATALOG NUMBER: VST-E10-LED-E-U-SL3-HSS

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	517.0	517.0	517.0	517.0	517.0	517.0	517.0	517.0	517.0	517.0	517.0
2.5°	563.2	556.6	556.6	553.4	553.4	553.4	550.0	546.8	546.8	543.4	540.2
5°	615.8	609.2	606.0	599.4	596.2	592.8	586.2	583.0	576.4	573.0	569.8
7.5°	678.4	665.2	662.0	652.2	642.2	635.6	629.0	619.2	612.6	599.4	596.2
10°	757.6	741.0	727.8	714.6	704.8	688.4	678.4	665.2	652.2	642.2	632.4
12.5°	859.6	836.6	816.8	803.6	780.6	760.8	741.0	731.2	704.8	691.6	675.2
15°	971.6	945.2	922.2	895.8	879.4	846.4	820.0	790.4	777.2	754.2	727.8
17.5°	1116.4	1073.6	1037.4	1011.2	978.2	945.2	915.6	886.0	846.4	820.0	787.2
20°	1271.2	1235.0	1185.6	1139.6	1100.0	1060.6	1017.6	978.2	942.0	899.2	859.6
22.5°	1469.0	1416.2	1357.0	1310.8	1258.2	1215.4	1156.0	1103.4	1044.0	988.0	942.0
25°	1719.2	1650.0	1594.0	1528.2	1465.6	1399.8	1327.2	1261.4	1185.6	1133.0	1054.0
27.5°	2028.8	1963.0	1887.2	1801.6	1739.0	1640.2	1544.6	1462.4	1373.4	1291.0	1202.2
30°	2424.0	2328.6	2249.4	2167.2	2042.0	1946.4	1834.4	1722.6	1600.6	1518.4	1383.2
32.5°	2898.2	2796.2	2677.6	2559.0	2443.8	2308.8	2170.4	2032.0	1897.0	1745.6	1607.2
35°	3478.0	3356.0	3221.0	3092.6	2914.8	2769.8	2595.2	2404.2	2252.8	2078.2	1903.6
37.5°	4245.4	4044.4	3925.8	3790.8	3550.4	3352.8	3158.4	2967.4	2700.6	2516.2	2269.2
40°	5207.0	5088.4	4894.2	4676.8	4459.4	4199.2	3935.8	3682.2	3372.6	3115.6	2829.2
42.5°	6336.6	6162.2	5964.6	5651.6	5431.0	5124.6	4825.0	4489.0	4110.2	3781.0	3445.0
45°	7397.2	7189.8	7038.2	6725.4	6494.8	6132.4	5770.2	5414.6	4976.4	4551.6	4163.0
47.5°	8543.4	8372.0	8121.8	7868.2	7634.4	7226.0	6834.0	6402.6	5941.4	5437.6	4933.6
50°	9551.2	9416.2	9244.8	8938.6	8678.4	8335.8	7874.8	7403.8	6820.8	6320.2	5747.2
52.5°	10407.4	10302.0	10061.6	9844.2	9610.4	9287.6	8876.0	8424.8	7795.8	7245.6	6593.6
55°	11418.6	11342.8	11132.0	10997.0	10789.6	10480.0	10094.6	9676.4	9011.0	8411.6	7673.8
57.5°	13075.2	13016.0	12831.4	12775.4	12571.2	12301.2	11827.0	11379.0	10601.8	9857.4	9014.4
60°	15818.6	15700.2	15430.0	15291.8	14860.2	14498.0	13882.2	13266.2	12327.6	11379.0	10364.6
62.5°	18756.4	18423.8	17910.0	17468.8	16856.2	16227.0	15403.6	14461.8	13361.8	12235.4	11069.4
65°	20340.6	19774.2	19125.4	18423.8	17630.2	16704.6	15667.2	14537.6	13355.2	12166.2	10934.4
66°	20521.8	19882.8	19194.6	18414.0	17531.4	16546.6	15492.6	14307.0	13078.4	11919.2	10687.4
67.5°	20294.6	19626.0	18898.2	18032.0	17076.8	16055.8	14949.2	13717.4	12535.0	11359.2	10160.4
70°	18703.8	18038.4	17389.6	16477.4	15459.6	14432.2	13384.8	12008.2	10888.4	9808.0	8741.0
72.5°	14936.0	14484.8	13842.6	13062.0	12070.6	10865.2	9992.4	8760.8	7789.2	6741.8	5915.2
75°	9333.8	8698.2	7904.4	6909.8	6152.2	5174.0	4663.6	3728.2	3175.0	2690.8	2223.2
77.5°	4772.2	4294.8	3738.2	3178.2	2641.4	2107.8	1630.2	1152.8	777.2	540.2	401.8
80°	3942.4	3520.8	3059.6	2549.2	2075.0	1610.6	1159.4	790.4	504.0	329.4	256.8
82.5°	3257.2	2901.6	2489.8	2015.6	1604.0	1264.8	879.4	573.0	355.6	230.6	181.2
85°	1386.6	1258.2	971.6	770.6	579.6	428.2	299.8	201.0	141.6	115.2	105.4
87.5°	59.2	65.8	62.6	49.4	36.2	36.2	33.0	26.4	26.4	26.4	26.4
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°	517.0	517.0	517.0	517.0	517.0	517.0	517.0	517.0	517.0	517.0	517.0
2.5°	540.2	536.8	533.6	533.6	530.2	527.0	507.2	490.8	471.0	457.8	444.6
5°	563.2	559.8	553.4	550.0	543.4	540.2	497.4	461.0	431.4	408.4	392.0
7.5°	586.2	583.0	573.0	563.2	559.8	553.4	484.2	438.0	398.6	372.2	355.6
10°	615.8	606.0	596.2	583.0	573.0	563.2	471.0	411.6	368.8	345.8	329.4
12.5°	658.6	642.2	625.8	609.2	596.2	579.6	464.4	388.6	345.8	319.4	303.0
15°	708.2	685.0	665.2	645.6	622.4	606.0	451.2	368.8	326.0	299.8	280.0
17.5°	754.2	727.8	698.2	668.6	645.6	622.4	438.0	349.2	306.2	280.0	260.2
20°	820.0	780.6	744.4	708.2	675.2	645.6	418.2	329.4	289.8	260.2	240.4
22.5°	892.6	846.4	800.4	751.0	708.2	668.6	401.8	312.8	273.4	243.8	220.6
25°	984.8	928.8	866.2	803.6	754.2	701.6	385.4	296.4	256.8	227.2	204.2
27.5°	1113.2	1034.2	965.0	886.0	810.2	751.0	372.2	283.2	240.4	210.8	187.8
30°	1287.8	1172.4	1063.8	978.2	889.2	803.6	359.0	266.8	227.2	194.4	168.0
32.5°	1482.0	1347.0	1221.8	1093.4	981.4	882.6	345.8	253.6	210.8	177.8	154.8
35°	1722.6	1551.2	1383.2	1235.0	1100.0	968.2	332.6	240.4	197.6	161.4	138.4
37.5°	2068.4	1854.2	1633.6	1442.6	1268.0	1093.4	322.8	227.2	181.2	145.0	121.8
40°	2542.6	2266.0	1995.8	1735.6	1508.4	1291.0	309.6	214.0	168.0	131.8	108.6
42.5°	3056.4	2720.4	2364.8	2071.6	1758.8	1485.4	296.4	201.0	154.8	118.6	95.6
45°	3695.4	3277.0	2845.6	2447.0	2065.0	1712.6	283.2	187.8	138.4	105.4	82.4
47.5°	4393.6	3860.0	3372.6	2872.0	2417.4	1995.8	266.8	177.8	125.2	92.2	72.4
50°	5111.6	4548.4	3932.4	3362.6	2822.6	2279.2	250.4	161.4	112.0	82.4	59.2
52.5°	5885.4	5220.2	4591.2	3883.0	3254.0	2651.2	233.8	148.2	102.0	72.4	49.4
55°	6870.2	6126.0	5388.2	4594.4	3837.0	3082.8	217.4	131.8	89.0	62.6	39.6
57.5°	8108.6	7226.0	6320.2	5424.4	4505.6	3649.2	204.2	115.2	75.8	52.6	33.0
60°	9277.8	8247.0	7150.2	6119.4	5081.8	4084.0	184.4	102.0	65.8	42.8	33.0
62.5°	9883.8	8708.0	7525.6	6389.4	5282.8	4238.8	164.6	85.6	56.0	36.2	29.6
65°	9735.6	8536.8	7390.6	6244.4	5161.0	4140.0	145.0	75.8	49.4	33.0	29.6
66°	9521.6	8335.8	7183.2	6093.0	5058.8	4034.6	135.0	72.4	46.2	33.0	26.4
67.5°	9053.8	7907.6	6807.6	5793.2	4778.8	3833.6	121.8	65.8	42.8	29.6	26.4
70°	7733.2	6692.4	5813.0	4910.6	4084.0	3231.0	98.8	56.0	36.2	26.4	26.4
72.5°	5118.0	4410.0	3823.8	3290.2	2750.0	2134.2	82.4	46.2	29.6	26.4	23.0
75°	1930.0	1745.6	1498.6	1347.0	1175.8	1030.8	65.8	29.6	23.0	23.0	23.0
77.5°	342.6	316.2	280.0	256.8	237.2	217.4	52.6	19.8	19.8	23.0	23.0
80°	230.6	214.0	194.4	177.8	164.6	148.2	36.2	16.4	19.8	19.8	23.0
82.5°	164.6	154.8	145.0	131.8	121.8	108.6	23.0	16.4	19.8	19.8	19.8
85°	98.8	92.2	85.6	79.0	69.2	65.8	16.4	16.4	16.4	19.8	19.8
87.5°	26.4	23.0	26.4	26.4	19.8	23.0	13.2	13.2	13.2	16.4	16.4
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°	517.0	517.0	517.0	517.0	517.0
2.5°	438.0	438.0	431.4	441.4	441.4
5°	378.8	378.8	375.4	378.8	378.8
7.5°	345.8	342.6	342.6	342.6	345.8
10°	316.2	312.8	312.8	312.8	312.8
12.5°	289.8	286.6	283.2	286.6	286.6
15°	266.8	260.2	260.2	260.2	260.2
17.5°	247.0	240.4	237.2	237.2	237.2
20°	227.2	217.4	217.4	217.4	217.4
22.5°	207.4	197.6	197.6	197.6	197.6
25°	187.8	177.8	177.8	177.8	177.8
27.5°	171.2	161.4	161.4	161.4	161.4
30°	151.6	145.0	145.0	148.2	145.0
32.5°	138.4	128.4	128.4	131.8	131.8
35°	121.8	115.2	115.2	115.2	115.2
37.5°	105.4	98.8	98.8	98.8	98.8
40°	92.2	85.6	82.4	85.6	85.6
42.5°	79.0	72.4	69.2	69.2	69.2
45°	69.2	59.2	56.0	59.2	59.2
47.5°	56.0	49.4	49.4	52.6	52.6
50°	42.8	42.8	46.2	52.6	52.6
52.5°	39.6	39.6	46.2	52.6	52.6
55°	36.2	39.6	46.2	49.4	52.6
57.5°	33.0	39.6	46.2	49.4	49.4
60°	33.0	36.2	42.8	49.4	49.4
62.5°	29.6	33.0	39.6	46.2	46.2
65°	29.6	33.0	39.6	46.2	46.2
66°	29.6	33.0	39.6	46.2	46.2
67.5°	29.6	33.0	39.6	46.2	46.2
70°	29.6	33.0	39.6	42.8	42.8
72.5°	26.4	29.6	36.2	42.8	42.8
75°	26.4	29.6	36.2	42.8	42.8
77.5°	26.4	29.6	36.2	42.8	42.8
80°	26.4	29.6	36.2	39.6	42.8
82.5°	23.0	29.6	33.0	39.6	39.6
85°	23.0	26.4	33.0	36.2	39.6
87.5°	19.8	23.0	26.4	33.0	33.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)