

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: P165326

Luminaire Tested: **VST-E11-LED-E-U-SL3-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165326
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-E11-LED-E-U-SL3-HSS-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (231) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17211.3 lumens
Efficiency: N/A
Efficacy: 63.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.83' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G4

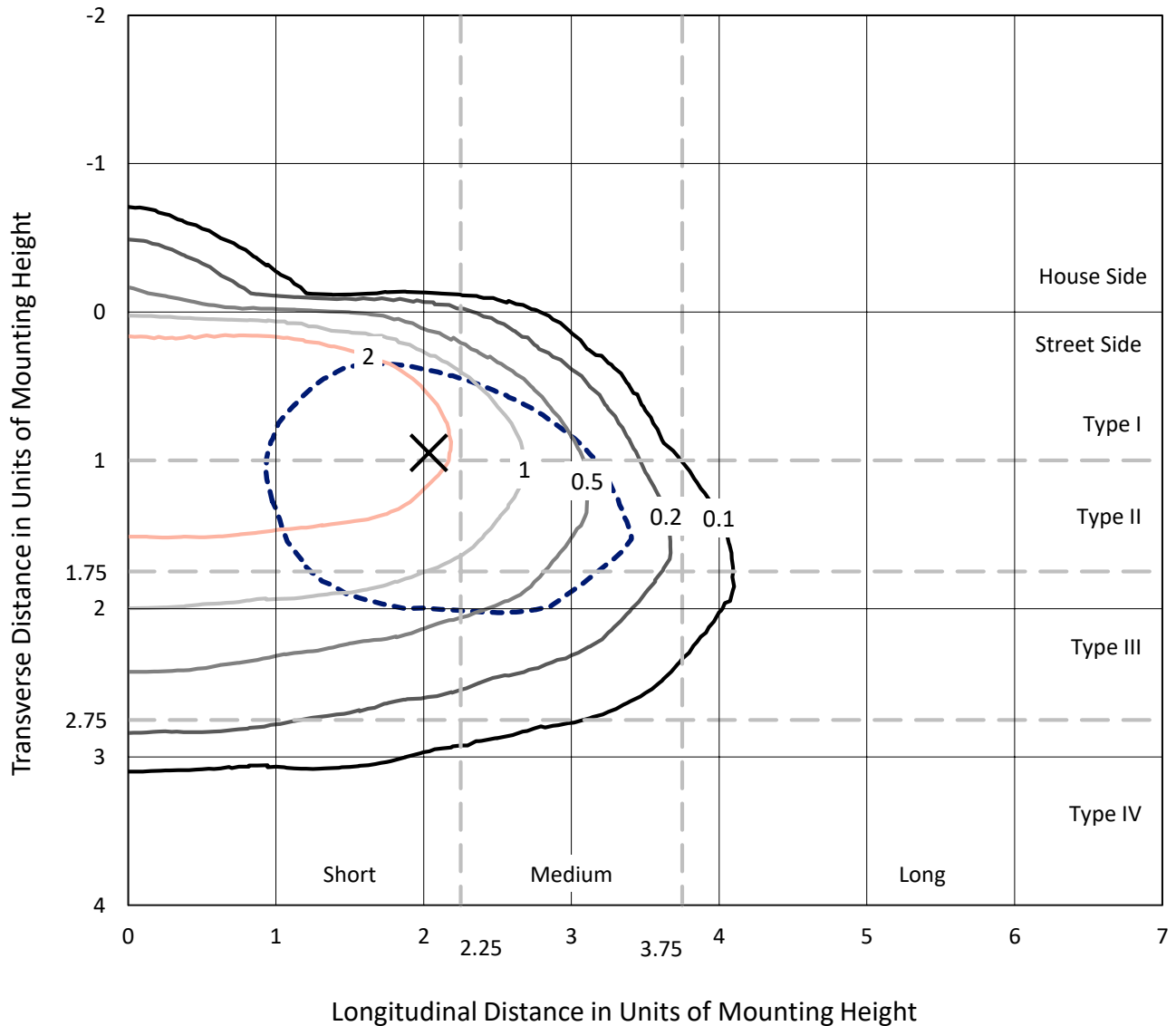
Input Watts (W): 269.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

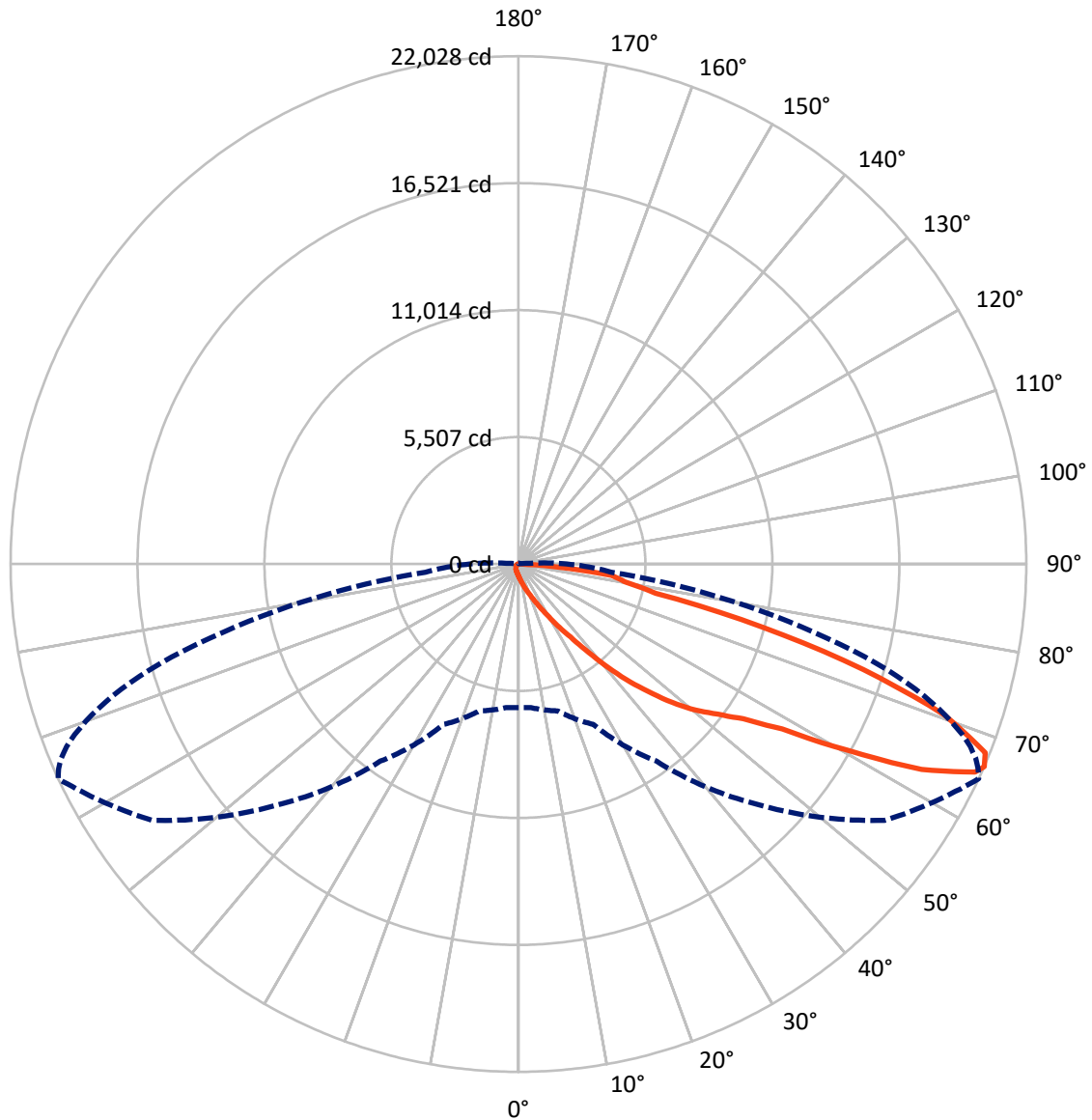
✕ Max cd
 - - - 1/2 Max cd



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



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	373.0	0.0	373.0
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	16838.3	0.0	16838.3
	% Fixture	97.8	0.0	97.8
Total	Lumens	17211.3	0.0	17211.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.2	0.3
10°-20°	246.6	1.4
20°-30°	531.8	3.1
30°-40°	1135.8	6.6
40°-50°	2511.8	14.6
50°-60°	4256.7	24.7
60°-70°	5680.2	33.0
70°-80°	2502.0	14.5
80°-90°	288.2	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°	17211.3	100.0
0°-180°	17211.3	100.0



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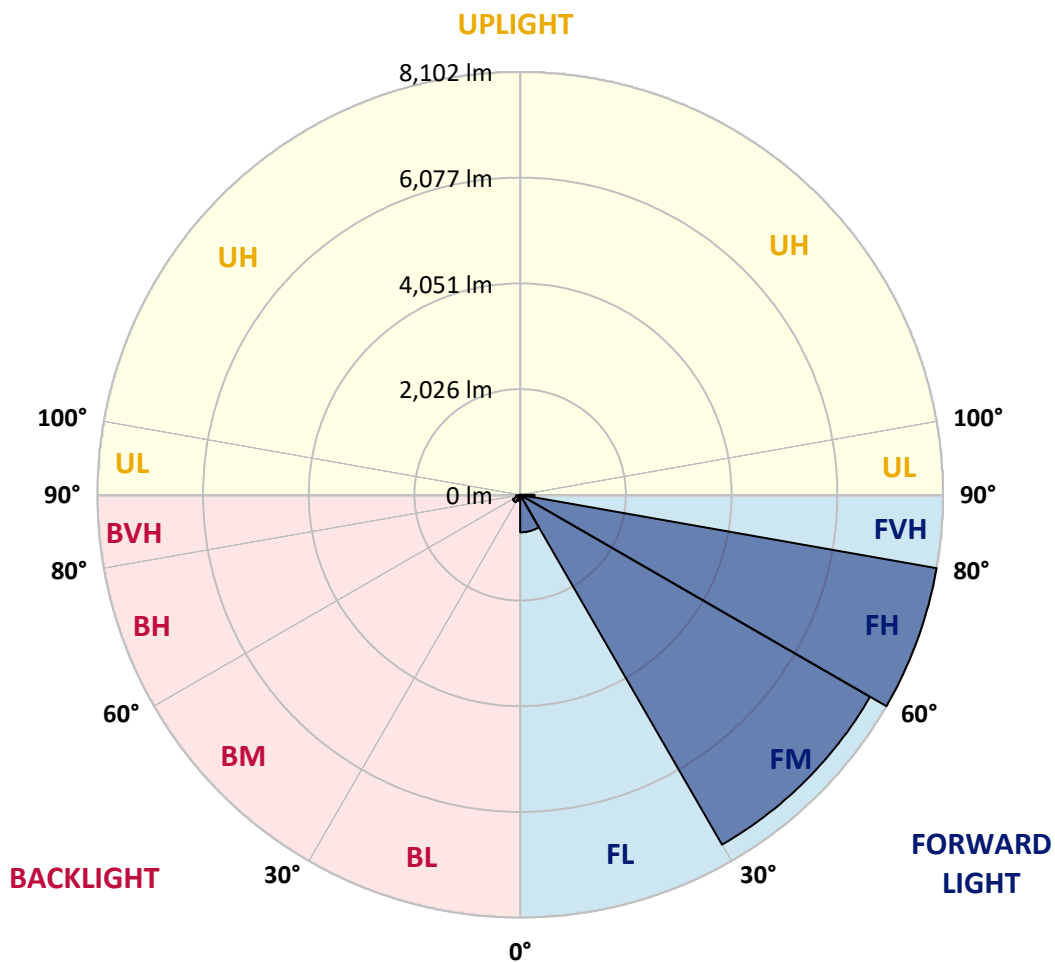
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	718.9	4.2			
FM	(30°-60°)	7740.5	45.0			
FH	(60°-80°)	8102.2	47.1			G4/12000
FVH	(80°-90°)	276.7	1.6			G3/500
BL	(0°-30°)	117.7	0.7	B1/500		
BM	(30°-60°)	163.8	1.0	B0/220		
BH	(60°-80°)	80.0	0.5	B0/110		G0/110
BVH	(80°-90°)	11.5	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°	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4
2.5°	655.3	651.8	638.6	638.6	618.7	605.6	588.9	572.5	572.5	569.1	565.8
5°	866.8	847.2	843.7	807.4	777.6	734.6	694.8	642.0	635.4	628.7	625.3
7.5°	1101.9	1098.5	1068.8	1025.8	966.3	886.7	807.4	721.4	708.1	701.5	688.2
10°	1406.4	1389.7	1350.1	1277.2	1187.9	1082.0	953.0	817.2	800.7	787.5	780.8
12.5°	1697.5	1667.8	1644.5	1551.8	1439.3	1283.8	1128.3	933.2	919.9	903.4	876.9
15°	1968.8	1942.3	1902.7	1823.3	1697.5	1502.2	1320.4	1082.0	1048.9	1025.8	1005.9
17.5°	2180.6	2164.1	2117.7	2028.5	1892.6	1720.6	1502.2	1234.2	1207.8	1177.9	1141.5
20°	2382.5	2359.2	2286.5	2164.1	2018.4	1886.0	1717.4	1432.7	1396.3	1359.9	1320.4
22.5°	2574.4	2551.1	2432.1	2230.2	2074.7	2018.4	1958.9	1657.7	1601.5	1571.7	1531.9
25°	2842.5	2792.8	2607.4	2286.5	2078.1	2121.1	2223.6	1948.9	1896.0	1853.0	1790.1
27.5°	3203.1	3136.8	2845.7	2369.2	2091.2	2233.6	2528.0	2302.9	2246.7	2197.0	2127.7
30°	3610.0	3567.0	3219.6	2567.8	2187.2	2399.0	2868.8	2753.0	2686.9	2627.3	2544.7
32.5°	4020.3	3960.9	3616.7	2944.9	2445.2	2719.9	3295.8	3275.9	3189.9	3133.6	3044.2
35°	4381.0	4351.3	4096.5	3563.6	3034.4	3282.5	3864.8	3887.9	3812.0	3752.3	3653.0
37.5°	4626.0	4626.0	4576.3	4228.7	3970.7	4156.0	4701.9	4705.3	4629.2	4493.6	4443.9
40°	4751.6	4787.9	4966.8	5032.9	5019.6	5257.9	5800.7	5741.0	5678.1	5608.6	5443.2
42.5°	5009.8	5042.7	5423.3	5880.0	6177.8	6492.1	6866.0	6846.1	6770.2	6644.4	6492.1
45°	5446.6	5489.6	5942.9	6667.5	7279.5	7726.4	7964.5	7871.9	7795.8	7676.8	7597.2
47.5°	6002.4	6085.2	6598.0	7494.8	8232.6	8970.4	9218.6	8973.8	8907.7	8814.9	8685.9
50°	6594.8	6674.1	7220.1	8245.9	9079.7	9959.8	10373.6	9959.8	9864.0	9834.1	9688.6
52.5°	7107.5	7173.9	7699.9	8825.0	9728.2	10760.6	11362.8	10816.8	10747.3	10648.1	10542.2
55°	7412.0	7465.0	7957.9	9102.9	10168.4	11481.9	12319.3	11839.4	11736.7	11697.1	11544.8
57.5°	7514.6	7567.5	8011.0	9139.2	10406.5	12140.4	13480.7	13497.1	13374.8	13232.5	13186.1
60°	7514.6	7574.1	7948.1	9050.0	10638.2	12841.9	15029.1	16408.9	16144.3	16117.8	15949.0
62.5°	7203.6	7259.9	7637.0	8775.3	10949.3	13788.3	17186.5	19621.9	19546.0	19373.7	19095.9
65°	6528.4	6561.6	6932.1	8073.9	10830.1	14658.6	19056.1	21759.5	21637.1	21299.5	20942.3
66°	6224.0	6250.5	6598.0	7673.4	10439.7	14777.7	19387.0	22027.5	21825.8	21541.1	21137.4
67.5°	5784.0	5830.4	6075.1	6928.9	9503.3	14364.0	19178.6	21839.0	21663.6	21319.4	20915.7
70°	3861.6	3828.5	4692.1	5317.4	7240.0	11703.8	17206.4	19608.6	19612.1	19449.9	19287.7
72.5°	1833.1	1853.0	2104.4	3272.5	4738.3	7819.1	13695.7	15651.2	15876.2	15585.1	15383.1
75°	1316.9	1346.7	1499.0	2001.9	2825.8	4692.1	8877.8	10945.8	10952.5	10436.3	9976.5
77.5°	383.8	400.5	562.4	1234.2	2117.7	3166.6	5099.0	6085.2	5942.9	5572.2	5224.8
80°	158.7	158.7	165.4	393.8	850.4	2150.8	3567.0	4685.5	4669.0	4526.7	4321.6
82.5°	59.5	62.9	79.4	162.2	201.9	529.5	2379.1	4066.8	4056.7	3855.0	3709.3
85°	6.6	6.6	19.9	69.5	76.2	99.3	476.4	1793.4	1783.5	1793.4	1571.7
87.5°	0.0	0.0	3.2	6.6	9.8	13.3	19.9	69.5	76.2	72.7	66.1
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°	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4
2.5°	565.8	559.2	559.2	556.0	556.0	556.0	552.6	549.4	549.4	545.9	542.7
5°	618.7	612.1	608.8	602.2	599.0	595.6	588.9	585.7	579.1	575.7	572.5
7.5°	681.6	668.3	665.1	655.3	645.2	638.6	631.9	622.1	615.5	602.2	599.0
10°	761.1	744.5	731.2	717.9	708.1	691.6	681.6	668.3	655.3	645.2	635.4
12.5°	863.6	840.5	820.6	807.4	784.3	764.4	744.5	734.6	708.1	694.8	678.4
15°	976.2	949.6	926.5	900.0	883.5	850.4	823.8	794.1	780.8	757.7	731.2
17.5°	1121.6	1078.6	1042.3	1015.9	982.8	949.6	919.9	890.2	850.4	823.8	790.9
20°	1277.2	1240.8	1191.2	1144.9	1105.2	1065.6	1022.4	982.8	946.4	903.4	863.6
22.5°	1475.9	1422.8	1363.4	1316.9	1264.1	1221.1	1161.4	1108.6	1048.9	992.6	946.4
25°	1727.3	1657.7	1601.5	1535.4	1472.5	1406.4	1333.4	1267.3	1191.2	1138.3	1058.9
27.5°	2038.3	1972.2	1896.0	1810.0	1747.1	1647.9	1551.8	1469.3	1379.8	1297.0	1207.8
30°	2435.4	2339.5	2259.9	2177.4	2051.6	1955.5	1843.0	1730.7	1608.1	1525.5	1389.7
32.5°	2911.8	2809.3	2690.1	2571.0	2455.3	2319.6	2180.6	2041.5	1905.9	1753.8	1614.7
35°	3494.3	3371.7	3236.1	3107.1	2928.5	2782.8	2607.4	2415.5	2263.4	2087.9	1912.5
37.5°	4265.3	4063.3	3944.2	3808.6	3567.0	3368.5	3173.2	2981.3	2713.3	2528.0	2279.8
40°	5231.4	5112.2	4917.1	4698.7	4480.3	4218.9	3954.2	3699.5	3388.4	3130.2	2842.5
42.5°	6366.3	6191.1	5992.5	5678.1	5456.4	5148.6	4847.6	4510.0	4129.5	3798.7	3461.1
45°	7431.9	7223.5	7071.2	6756.9	6525.2	6161.1	5797.2	5440.0	4999.7	4572.9	4182.5
47.5°	8583.4	8411.2	8159.9	7905.1	7670.2	7259.9	6866.0	6432.6	5969.2	5463.1	4956.7
50°	9596.0	9460.3	9288.1	8980.5	8719.1	8374.9	7911.7	7438.5	6852.8	6349.8	5774.1
52.5°	10456.2	10350.3	10108.7	9890.3	9655.4	9331.1	8917.6	8464.3	7832.3	7279.5	6624.5
55°	11472.1	11395.9	11184.2	11048.5	10840.2	10529.1	10141.9	9721.7	9053.2	8451.0	7709.8
57.5°	13136.5	13077.0	12891.5	12835.3	12630.1	12358.8	11882.4	11432.3	10651.5	9903.6	9056.6
60°	15892.7	15773.8	15502.3	15363.4	14929.8	14565.9	13947.2	13328.4	12385.4	11432.3	10413.2
62.5°	18844.3	18510.1	17993.9	17550.6	16935.2	16303.0	15475.8	14529.6	13424.4	12292.7	11121.3
65°	20435.9	19866.8	19215.0	18510.1	17712.8	16782.9	15740.6	14605.7	13417.8	12223.2	10985.6
66°	20618.0	19976.0	19284.5	18500.3	17613.5	16624.1	15565.2	14374.0	13139.7	11975.0	10737.5
67.5°	20389.7	19718.0	18986.7	18116.5	17156.8	16131.0	15019.2	13781.7	12593.7	11412.4	10208.0
70°	18791.4	18122.9	17471.1	16554.6	15532.0	14499.8	13447.5	12064.5	10939.4	9854.0	8782.0
72.5°	15006.0	14552.7	13907.5	13123.2	12127.2	10916.1	10039.2	8801.8	7825.7	6773.4	5942.9
75°	9377.5	8739.0	7941.4	6942.2	6181.0	5198.2	4685.5	3745.7	3189.9	2703.4	2233.6
77.5°	4794.6	4314.9	3755.7	3193.1	2653.8	2117.7	1637.8	1158.2	780.8	542.7	403.7
80°	3960.9	3537.3	3073.9	2561.1	2084.7	1618.1	1164.8	794.1	506.4	330.9	258.0
82.5°	3272.5	2915.2	2501.5	2025.0	1611.5	1270.7	883.5	575.7	357.3	231.7	182.0
85°	1393.1	1264.1	976.2	774.2	582.3	430.2	301.2	201.9	142.3	115.7	105.9
87.5°	59.5	66.1	62.9	49.6	36.4	36.4	33.2	26.5	26.5	26.5	26.5
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4
2.5°	542.7	539.3	536.1	536.1	532.7	529.5	509.6	493.1	473.2	459.9	446.7
5°	565.8	562.4	556.0	552.6	545.9	542.7	499.7	463.2	433.4	410.3	393.8
7.5°	588.9	585.7	575.7	565.8	562.4	556.0	486.5	440.1	400.5	373.9	357.3
10°	618.7	608.8	599.0	585.7	575.7	565.8	473.2	413.5	370.5	347.4	330.9
12.5°	661.7	645.2	628.7	612.1	599.0	582.3	466.6	390.4	347.4	320.9	304.4
15°	711.5	688.2	668.3	648.6	625.3	608.8	453.3	370.5	327.5	301.2	281.3
17.5°	757.7	731.2	701.5	671.7	648.6	625.3	440.1	350.8	307.6	281.3	261.4
20°	823.8	784.3	747.9	711.5	678.4	648.6	420.2	330.9	291.2	261.4	241.5
22.5°	896.8	850.4	804.2	754.5	711.5	671.7	403.7	314.3	274.7	244.9	221.6
25°	989.4	933.2	870.3	807.4	757.7	704.9	387.2	297.8	258.0	228.3	205.2
27.5°	1118.4	1039.0	969.5	890.2	814.0	754.5	373.9	284.5	241.5	211.8	188.7
30°	1293.8	1177.9	1068.8	982.8	893.4	807.4	360.7	268.1	228.3	195.3	168.8
32.5°	1488.9	1353.3	1227.5	1098.5	986.0	886.7	347.4	254.8	211.8	178.6	155.5
35°	1730.7	1558.5	1389.7	1240.8	1105.2	972.7	334.2	241.5	198.5	162.2	139.0
37.5°	2078.1	1862.9	1641.3	1449.4	1273.9	1098.5	324.3	228.3	182.0	145.7	122.4
40°	2554.5	2276.6	2005.2	1743.7	1515.5	1297.0	311.1	215.0	168.8	132.4	109.1
42.5°	3070.7	2733.1	2375.9	2081.3	1767.0	1492.4	297.8	201.9	155.5	119.2	96.0
45°	3712.7	3292.4	2858.9	2458.5	2074.7	1720.6	284.5	188.7	139.0	105.9	82.8
47.5°	4414.2	3878.1	3388.4	2885.5	2428.7	2005.2	268.1	178.6	125.8	92.6	72.7
50°	5135.5	4569.7	3950.8	3378.4	2835.8	2289.9	251.6	162.2	112.5	82.8	59.5
52.5°	5913.0	5244.7	4612.7	3901.2	3269.2	2663.6	234.9	148.9	102.5	72.7	49.6
55°	6902.4	6154.7	5413.4	4615.9	3855.0	3097.2	218.4	132.4	89.4	62.9	39.8
57.5°	8146.6	7259.9	6349.8	5449.8	4526.7	3666.3	205.2	115.7	76.2	52.8	33.2
60°	9321.3	8285.6	7183.7	6148.1	5105.6	4103.1	185.3	102.5	66.1	43.0	33.2
62.5°	9930.1	8748.8	7560.9	6419.3	5307.6	4258.7	165.4	86.0	56.3	36.4	29.7
65°	9781.2	8576.8	7425.2	6273.7	5185.2	4159.4	145.7	76.2	49.6	33.2	29.7
66°	9566.2	8374.9	7216.9	6121.5	5082.5	4053.5	135.6	72.7	46.4	33.2	26.5
67.5°	9096.2	7944.7	6839.5	5820.3	4801.2	3851.6	122.4	66.1	43.0	29.7	26.5
70°	7769.4	6723.8	5840.2	4933.6	4103.1	3246.1	99.3	56.3	36.4	26.5	26.5
72.5°	5142.0	4430.7	3841.7	3305.6	2762.9	2144.2	82.8	46.4	29.7	26.5	23.1
75°	1939.0	1753.8	1505.6	1353.3	1181.3	1035.6	66.1	29.7	23.1	23.1	23.1
77.5°	344.2	317.7	281.3	258.0	238.3	218.4	52.8	19.9	19.9	23.1	23.1
80°	231.7	215.0	195.3	178.6	165.4	148.9	36.4	16.5	19.9	19.9	23.1
82.5°	165.4	155.5	145.7	132.4	122.4	109.1	23.1	16.5	19.9	19.9	19.9
85°	99.3	92.6	86.0	79.4	69.5	66.1	16.5	16.5	16.5	19.9	19.9
87.5°	26.5	23.1	26.5	26.5	19.9	23.1	13.3	13.3	13.3	16.5	16.5
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°	519.4	519.4	519.4	519.4	519.4
2.5°	440.1	440.1	433.4	443.5	443.5
5°	380.6	380.6	377.2	380.6	380.6
7.5°	347.4	344.2	344.2	344.2	347.4
10°	317.7	314.3	314.3	314.3	314.3
12.5°	291.2	287.9	284.5	287.9	287.9
15°	268.1	261.4	261.4	261.4	261.4
17.5°	248.2	241.5	238.3	238.3	238.3
20°	228.3	218.4	218.4	218.4	218.4
22.5°	208.4	198.5	198.5	198.5	198.5
25°	188.7	178.6	178.6	178.6	178.6
27.5°	172.0	162.2	162.2	162.2	162.2
30°	152.3	145.7	145.7	148.9	145.7
32.5°	139.0	129.0	129.0	132.4	132.4
35°	122.4	115.7	115.7	115.7	115.7
37.5°	105.9	99.3	99.3	99.3	99.3
40°	92.6	86.0	82.8	86.0	86.0
42.5°	79.4	72.7	69.5	69.5	69.5
45°	69.5	59.5	56.3	59.5	59.5
47.5°	56.3	49.6	49.6	52.8	52.8
50°	43.0	43.0	46.4	52.8	52.8
52.5°	39.8	39.8	46.4	52.8	52.8
55°	36.4	39.8	46.4	49.6	52.8
57.5°	33.2	39.8	46.4	49.6	49.6
60°	33.2	36.4	43.0	49.6	49.6
62.5°	29.7	33.2	39.8	46.4	46.4
65°	29.7	33.2	39.8	46.4	46.4
66°	29.7	33.2	39.8	46.4	46.4
67.5°	29.7	33.2	39.8	46.4	46.4
70°	29.7	33.2	39.8	43.0	43.0
72.5°	26.5	29.7	36.4	43.0	43.0
75°	26.5	29.7	36.4	43.0	43.0
77.5°	26.5	29.7	36.4	43.0	43.0
80°	26.5	29.7	36.4	39.8	43.0
82.5°	23.1	29.7	33.2	39.8	39.8
85°	23.1	26.5	33.2	36.4	39.8
87.5°	19.9	23.1	26.5	33.2	33.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)