

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: P165543

Luminaire Tested: **VST-F10-LED-E-U-SL4-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165543
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-F10-LED-E-U-SL4-HSS-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (70) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17030.4 lumens
Efficiency: N/A
Efficacy: 65.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.67' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G4

Input Watts (W): 258.7
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



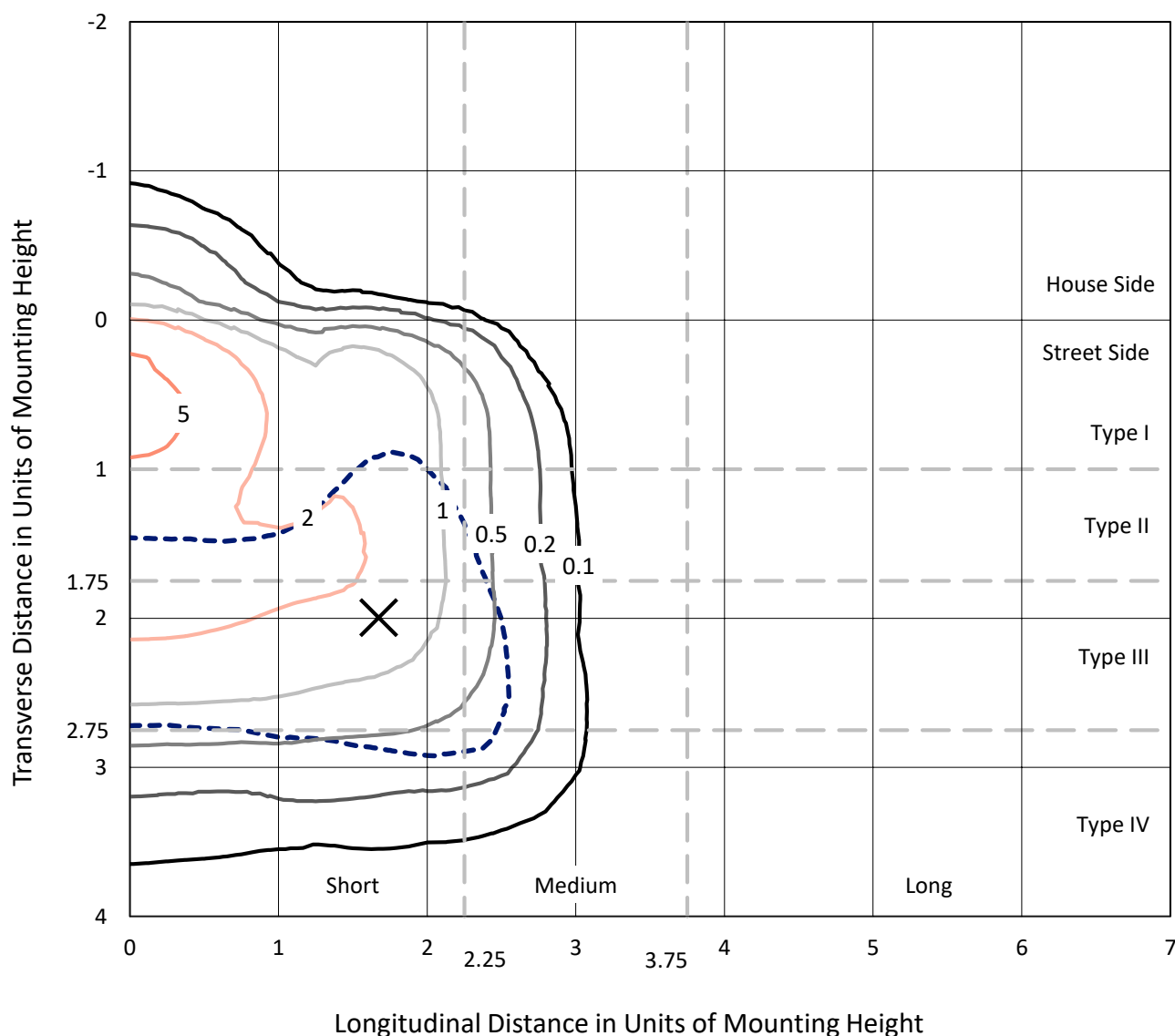
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

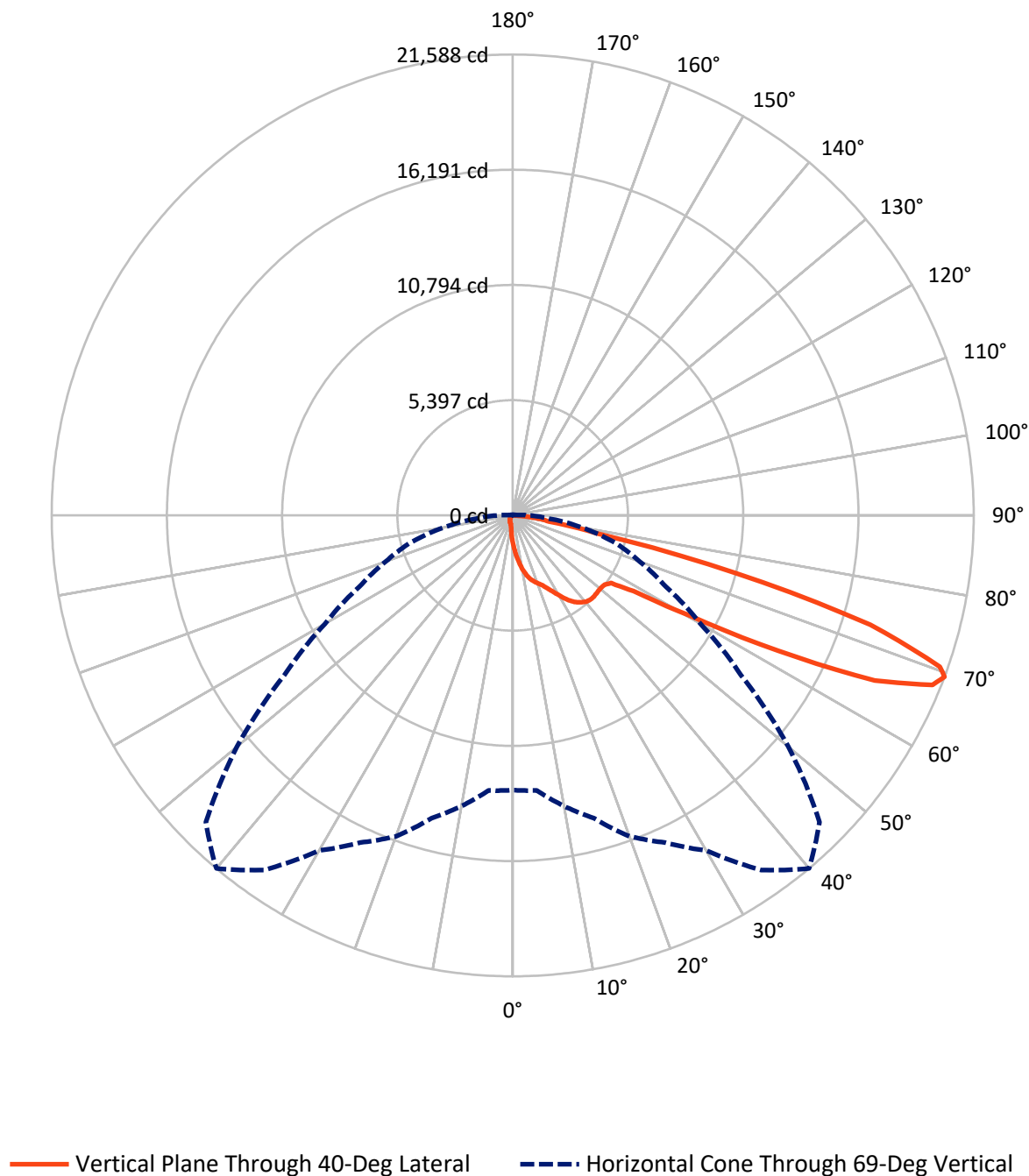


Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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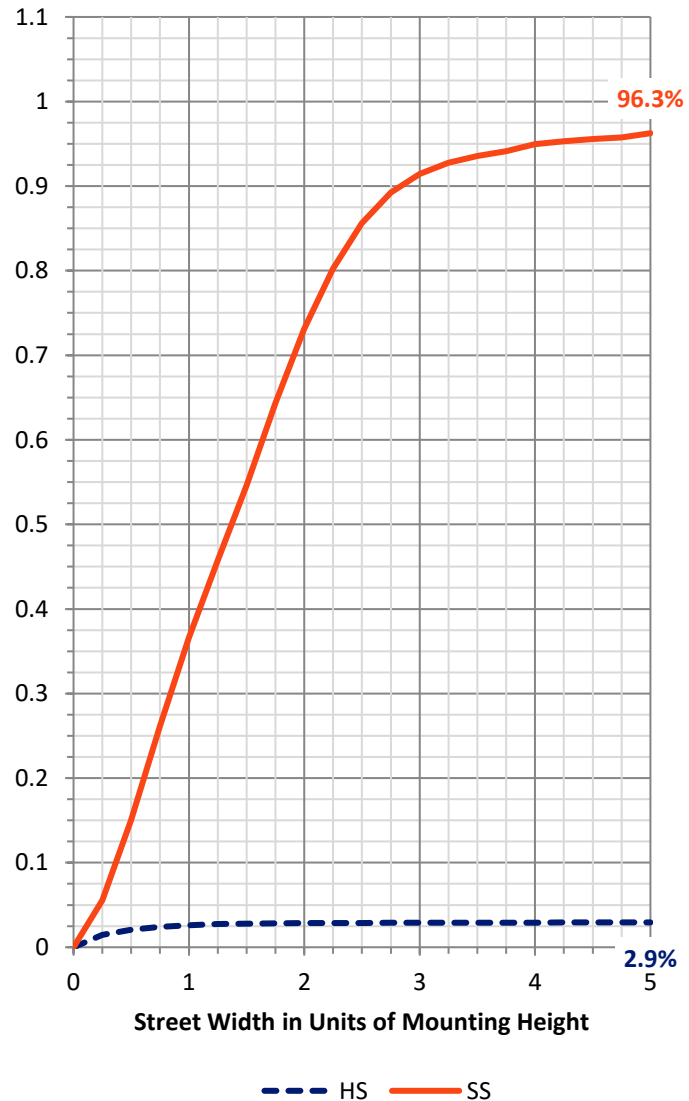
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	507.2	0.0	507.2
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	16523.2	0.0	16523.2
	% Fixture	97.0	0.0	97.0
Total	Lumens	17030.4	0.0	17030.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.2	0.8
10°-20°	455.8	2.7
20°-30°	872.3	5.1
30°-40°	1450.7	8.5
40°-50°	1963.0	11.5
50°-60°	3070.0	18.0
60°-70°	6311.8	37.1
70°-80°	2539.8	14.9
80°-90°	234.9	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°	17030.4	100.0
0°-180°	17030.4	100.0

Coefficient of Utilization



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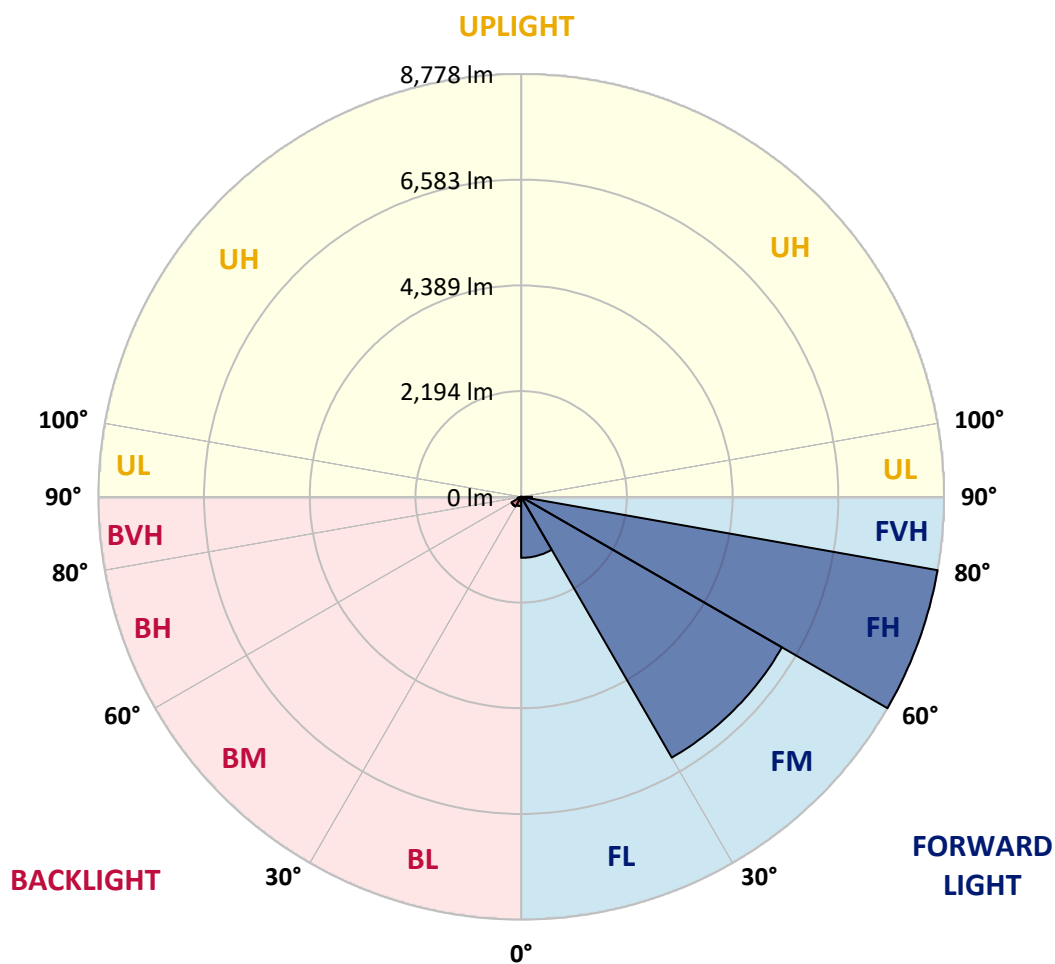
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1267.4	7.4			
FM	(30°-60°)	6252.1	36.7			
FH	(60°-80°)	8777.5	51.5			G4/12000
FVH	(80°-90°)	226.2	1.3			G3/500
BL	(0°-30°)	192.9	1.1	B1/500		
BM	(30°-60°)	231.6	1.4	B1/1000		
BH	(60°-80°)	74.0	0.4	B0/110		G0/110
BVH	(80°-90°)	8.7	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-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2
2.5°	1715.8	1696.2	1673.8	1673.8	1646.0	1646.0	1629.3	1584.7	1579.1	1553.9	1528.8
5°	2190.0	2173.3	2145.5	2120.2	2098.0	2058.9	2030.9	1977.9	1919.5	1863.6	1813.4
7.5°	2653.2	2644.7	2594.6	2586.1	2549.9	2485.8	2429.9	2351.8	2251.4	2173.3	2081.3
10°	3082.8	3063.2	3052.0	3004.6	2951.7	2881.9	2795.3	2700.6	2583.4	2460.6	2329.5
12.5°	3423.2	3412.0	3361.7	3342.2	3286.5	3216.7	3107.9	2985.1	2868.0	2708.9	2555.5
15°	3677.0	3657.5	3624.0	3593.3	3526.4	3465.0	3364.6	3230.6	3088.4	2915.5	2731.3
17.5°	3889.1	3852.8	3844.4	3796.9	3727.3	3654.6	3543.1	3420.3	3252.9	3080.0	2879.0
20°	4173.5	4123.4	4106.6	4036.8	3956.0	3855.5	3727.3	3573.8	3398.0	3208.4	3001.9
22.5°	4508.3	4472.1	4435.8	4374.5	4271.3	4129.0	3942.1	3774.7	3551.4	3342.2	3119.1
25°	4982.7	4952.0	4893.4	4809.7	4681.3	4511.2	4285.2	4039.7	3777.4	3509.6	3247.3
27.5°	5443.0	5415.0	5373.2	5309.1	5163.9	4977.1	4698.1	4385.6	4053.6	3730.0	3439.8
30°	5875.5	5850.2	5808.4	5744.4	5615.9	5431.8	5116.5	4781.7	4368.9	3992.3	3643.6
32.5°	6341.4	6332.9	6285.5	6193.5	6081.8	5833.6	5490.4	5130.6	4712.1	4276.9	3869.4
35°	6868.6	6804.4	6759.8	6667.7	6478.1	6213.0	5811.3	5417.9	4977.1	4530.7	4076.0
37.5°	7315.0	7253.7	7197.8	7080.7	6849.1	6511.5	6056.8	5624.2	5169.5	4714.8	4251.6
40°	7641.3	7610.6	7543.7	7390.2	7130.9	6729.2	6238.0	5766.6	5309.1	4851.5	4394.0
42.5°	7884.1	7836.6	7761.4	7602.3	7295.5	6837.9	6310.5	5825.2	5373.2	4935.2	4486.1
45°	7973.4	7934.4	7864.6	7691.6	7359.6	6868.6	6307.8	5808.4	5376.1	4960.3	4547.4
47.5°	7920.3	7881.4	7819.9	7658.1	7331.8	6832.3	6257.7	5761.0	5348.1	4968.8	4603.2
50°	7744.6	7722.3	7674.8	7538.1	7245.2	6762.5	6213.0	5735.9	5342.5	5010.6	4681.3
52.5°	7727.9	7714.0	7655.4	7518.6	7220.1	6740.2	6207.4	5749.9	5389.9	5063.6	4737.2
55°	9443.5	9245.5	8802.0	8425.4	7806.0	7069.5	6489.1	5975.8	5590.9	5272.9	5044.0
57.5°	13421.9	13126.3	12543.2	11826.2	10403.3	9005.6	7887.0	7077.8	6678.9	6533.8	6620.2
60°	15285.5	15232.6	15140.5	14800.1	14072.0	12869.6	11530.4	10082.6	9502.2	9452.0	9627.7
62.5°	16170.0	16136.5	16164.4	16122.6	15896.6	15545.0	15159.9	14535.1	13960.3	13589.3	12802.5
65°	16577.3	16599.6	16758.5	16884.1	16912.0	17004.0	17285.9	18064.2	18633.3	17676.4	15492.0
67.5°	15542.1	15673.3	16038.9	16496.3	17032.0	17550.9	18387.8	20028.3	21197.2	20073.0	16970.7
69°	12866.7	12930.9	13823.6	14685.7	15994.1	16909.3	18122.8	20273.7	21587.9	20318.5	16853.4
70°	10129.8	10188.5	11145.5	12317.2	14529.5	15706.8	17294.2	19858.2	21222.3	19992.0	16250.8
72.5°	4569.8	4486.1	4823.6	5451.3	7856.1	9725.4	12501.3	16089.0	17509.1	16016.5	12158.1
75°	3191.6	3155.4	3191.6	3194.3	3568.2	4603.2	5808.4	8721.0	10785.5	9307.0	5808.4
77.5°	2471.8	2446.7	2421.6	2393.7	2438.4	2731.3	2848.4	3093.9	4017.3	3799.8	2215.1
80°	1955.7	1933.4	1994.7	1975.2	1975.2	2008.8	1986.4	1894.2	1721.3	1595.7	1428.3
82.5°	909.4	915.0	915.0	993.1	1196.9	1397.7	1461.9	1369.9	1216.4	1035.0	834.2
85°	86.4	97.6	164.7	254.0	505.0	569.1	571.9	474.2	474.2	373.9	301.2
87.5°	0.0	2.7	2.7	2.7	25.1	69.8	58.6	16.8	8.3	8.3	13.9
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2
2.5°	1484.2	1475.8	1442.4	1408.9	1378.2	1344.6	1314.0	1283.3	1249.8	1224.7	1194.0
5°	1735.3	1673.8	1604.2	1537.3	1470.2	1400.6	1328.0	1263.8	1196.9	1135.4	1076.8
7.5°	1989.1	1869.2	1774.3	1654.3	1545.6	1436.8	1336.3	1233.2	1138.3	1049.0	965.3
10°	2203.9	2058.9	1911.0	1757.7	1601.3	1456.3	1316.9	1194.0	1068.5	959.7	856.6
12.5°	2379.8	2195.6	2014.3	1821.7	1646.0	1461.9	1288.9	1141.0	993.1	870.5	764.4
15°	2538.7	2326.7	2109.0	1885.9	1662.8	1453.6	1261.0	1076.8	926.2	786.8	666.8
17.5°	2667.1	2424.3	2178.8	1927.8	1687.9	1442.4	1224.7	1032.2	856.6	711.4	594.3
20°	2778.7	2524.8	2259.8	1977.9	1704.7	1439.5	1194.0	976.5	795.1	641.7	527.2
22.5°	2881.9	2628.0	2343.5	2042.1	1729.7	1436.8	1166.1	934.7	742.0	588.7	474.2
25°	2999.2	2731.3	2432.8	2109.0	1774.3	1448.0	1149.5	901.1	694.6	538.4	432.3
27.5°	3130.3	2848.4	2538.7	2192.7	1832.9	1470.2	1143.9	864.9	652.8	491.0	399.0
30°	3314.3	2988.0	2644.7	2276.4	1885.9	1495.4	1138.3	842.5	610.9	454.7	365.4
32.5°	3476.2	3124.7	2762.0	2363.0	1944.5	1520.5	1135.4	811.8	571.9	418.5	340.4
35°	3646.3	3250.2	2862.4	2446.7	1994.7	1548.3	1132.7	789.5	535.7	382.2	315.3
37.5°	3794.2	3356.1	2940.5	2519.2	2050.6	1573.5	1135.4	770.0	502.1	351.5	292.9
40°	3919.8	3465.0	3026.9	2586.1	2109.0	1612.5	1138.3	750.5	468.8	323.6	273.4
42.5°	4031.4	3568.2	3119.1	2661.5	2176.1	1657.2	1155.1	733.7	440.8	298.5	254.0
45°	4117.8	3663.1	3219.4	2767.6	2284.9	1729.7	1185.7	722.6	412.9	276.1	237.2
47.5°	4207.1	3802.5	3389.7	2934.9	2444.0	1844.1	1238.8	719.8	390.5	259.4	223.1
50°	4329.9	3942.1	3540.3	3105.0	2589.0	1961.3	1302.8	722.6	362.7	242.8	209.2
52.5°	4419.2	4084.3	3735.6	3400.8	2934.9	2318.3	1551.2	772.7	348.7	228.7	192.5
55°	4946.4	4887.8	4896.1	4952.0	4592.2	3944.8	2594.6	1115.9	410.2	259.4	189.7
57.5°	6974.7	7181.0	7300.9	7298.2	6703.9	5560.2	3484.5	1433.9	457.6	301.2	226.0
60°	9641.8	9485.6	9265.1	8721.0	7931.5	6347.0	3897.4	1542.9	396.1	239.9	206.5
62.5°	11999.2	11084.0	10272.1	9390.7	8355.6	6620.2	3981.1	1534.4	345.9	181.3	145.0
65°	13469.3	11823.3	10512.2	9407.3	8188.2	6391.5	3766.3	1408.9	292.9	147.9	119.9
67.5°	13820.9	11424.3	9569.2	8160.2	6840.6	4974.4	2764.7	1060.2	228.7	122.8	106.1
69°	13053.6	10155.1	7928.8	6330.2	4977.1	3300.4	1710.2	669.5	175.7	111.6	97.6
70°	12007.5	8832.6	6458.4	5080.3	3685.5	2318.3	1196.9	471.5	142.3	103.2	89.3
72.5°	7725.2	4639.4	3174.8	2209.5	1520.5	923.5	468.8	212.1	108.8	86.4	72.5
75°	2996.3	1715.8	1244.4	945.7	739.3	513.3	284.6	136.7	92.0	72.5	55.7
77.5°	1475.8	1129.8	923.5	633.3	368.3	228.7	153.5	106.1	75.4	53.0	36.3
80°	1166.1	775.6	463.2	287.3	217.5	164.7	117.2	86.4	55.7	33.5	25.1
82.5°	597.0	326.5	239.9	195.3	161.8	128.4	94.9	61.3	36.3	22.4	19.5
85°	186.9	136.7	122.8	119.9	111.6	92.0	66.9	39.1	22.4	13.9	13.9
87.5°	13.9	19.5	25.1	19.5	22.4	19.5	25.1	16.8	11.2	11.2	8.3
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°	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2	1286.2
2.5°	1171.7	1138.3	1107.6	1088.0	1051.7	1037.8	1023.9	1018.4	993.1	998.7	976.5
5°	1023.9	965.3	920.6	876.0	834.2	803.5	778.3	747.6	722.6	711.4	689.0
7.5°	889.9	814.7	756.1	708.7	658.3	619.4	585.8	563.5	541.3	518.9	507.7
10°	772.7	691.9	625.0	577.5	530.1	496.6	471.5	454.7	440.8	432.3	429.6
12.5°	663.9	585.8	524.5	482.7	446.4	429.6	418.5	410.2	407.3	404.6	404.6
15°	580.2	502.1	454.7	424.0	407.3	399.0	396.1	390.5	385.1	382.2	382.2
17.5°	502.1	443.5	410.2	393.4	385.1	379.5	373.9	368.3	362.7	359.8	359.8
20°	449.1	401.7	385.1	373.9	365.4	359.8	351.5	345.9	343.2	340.4	337.6
22.5°	407.3	376.6	365.4	357.1	345.9	337.6	332.1	326.5	320.9	318.0	315.3
25°	376.6	357.1	348.7	337.6	326.5	318.0	309.7	301.2	295.8	292.9	287.3
27.5°	354.2	340.4	329.2	315.3	304.1	295.8	287.3	279.0	273.4	267.8	265.0
30°	334.8	320.9	306.8	295.8	281.7	273.4	262.3	254.0	251.1	245.5	239.9
32.5°	315.3	301.2	287.3	273.4	259.4	248.4	242.8	231.6	226.0	223.1	217.5
35°	292.9	279.0	262.3	251.1	237.2	226.0	217.5	209.2	203.6	198.0	195.3
37.5°	273.4	256.7	239.9	226.0	214.8	203.6	195.3	186.9	181.3	175.7	173.0
40°	251.1	234.3	217.5	203.6	192.5	184.2	175.7	167.4	161.8	159.1	159.1
42.5°	231.6	212.1	195.3	184.2	175.7	164.7	156.2	147.9	145.0	142.3	145.0
45°	212.1	192.5	178.6	167.4	159.1	147.9	139.4	133.8	131.1	133.8	136.7
47.5°	195.3	175.7	161.8	153.5	145.0	136.7	128.4	122.8	122.8	128.4	133.8
50°	178.6	159.1	147.9	142.3	133.8	125.5	114.4	111.6	114.4	119.9	125.5
52.5°	161.8	139.4	131.1	128.4	119.9	111.6	103.2	100.5	103.2	108.8	106.1
55°	145.0	122.8	119.9	117.2	108.8	97.6	89.3	89.3	89.3	86.4	81.0
57.5°	139.4	108.8	106.1	103.2	94.9	83.7	78.1	72.5	69.8	61.3	58.6
60°	145.0	97.6	97.6	92.0	83.7	72.5	64.2	55.7	50.1	44.6	44.6
62.5°	117.2	89.3	86.4	81.0	69.8	58.6	50.1	41.8	39.1	36.3	36.3
65°	94.9	81.0	75.4	66.9	58.6	47.4	39.1	33.5	30.7	30.7	33.5
67.5°	86.4	72.5	64.2	55.7	47.4	36.3	30.7	28.0	28.0	30.7	30.7
69°	81.0	66.9	58.6	50.1	41.8	33.5	28.0	28.0	28.0	28.0	30.7
70°	75.4	64.2	55.7	47.4	36.3	28.0	25.1	25.1	28.0	28.0	30.7
72.5°	58.6	50.1	47.4	39.1	28.0	25.1	22.4	25.1	25.1	28.0	28.0
75°	44.6	36.3	36.3	30.7	22.4	19.5	19.5	22.4	22.4	25.1	25.1
77.5°	30.7	25.1	25.1	22.4	19.5	16.8	16.8	19.5	22.4	22.4	25.1
80°	22.4	19.5	16.8	19.5	16.8	13.9	16.8	19.5	19.5	22.4	22.4
82.5°	16.8	16.8	16.8	16.8	13.9	13.9	16.8	16.8	19.5	22.4	22.4
85°	13.9	13.9	13.9	13.9	13.9	13.9	13.9	16.8	16.8	19.5	19.5
87.5°	8.3	8.3	8.3	11.2	11.2	13.9	13.9	13.9	13.9	16.8	16.8
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):

	165°	170°	175°	180°
0°	1286.2	1286.2	1286.2	1286.2
2.5°	970.9	968.0	956.9	959.7
5°	680.7	663.9	675.1	672.4
7.5°	499.4	496.6	493.8	499.4
10°	426.9	426.9	424.0	426.9
12.5°	401.7	401.7	401.7	401.7
15°	382.2	382.2	379.5	379.5
17.5°	359.8	359.8	359.8	357.1
20°	337.6	334.8	334.8	334.8
22.5°	312.4	309.7	309.7	309.7
25°	287.3	284.6	284.6	284.6
27.5°	262.3	259.4	256.7	256.7
30°	237.2	234.3	231.6	231.6
32.5°	212.1	209.2	206.5	206.5
35°	189.7	189.7	186.9	184.2
37.5°	170.3	170.3	170.3	170.3
40°	156.2	159.1	159.1	159.1
42.5°	147.9	150.6	153.5	156.2
45°	142.3	147.9	150.6	150.6
47.5°	139.4	142.3	145.0	145.0
50°	128.4	125.5	125.5	125.5
52.5°	103.2	97.6	94.9	92.0
55°	75.4	72.5	66.9	66.9
57.5°	53.0	53.0	50.1	50.1
60°	41.8	41.8	39.1	41.8
62.5°	36.3	36.3	36.3	36.3
65°	33.5	33.5	33.5	33.5
67.5°	33.5	33.5	33.5	33.5
69°	30.7	30.7	30.7	30.7
70°	30.7	30.7	30.7	30.7
72.5°	28.0	28.0	28.0	28.0
75°	25.1	28.0	28.0	28.0
77.5°	25.1	25.1	25.1	25.1
80°	22.4	22.4	25.1	25.1
82.5°	22.4	22.4	22.4	22.4
85°	19.5	19.5	22.4	22.4
87.5°	16.8	16.8	19.5	19.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)