

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: P165551

Luminaire Tested: **VST-F11-LED-E-U-SL4-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165551
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-F11-LED-E-U-SL4-HSS-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (77) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16674.9 lumens
Efficiency: N/A
Efficacy: 59.0 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.83' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G4

Input Watts (W): 282.7
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



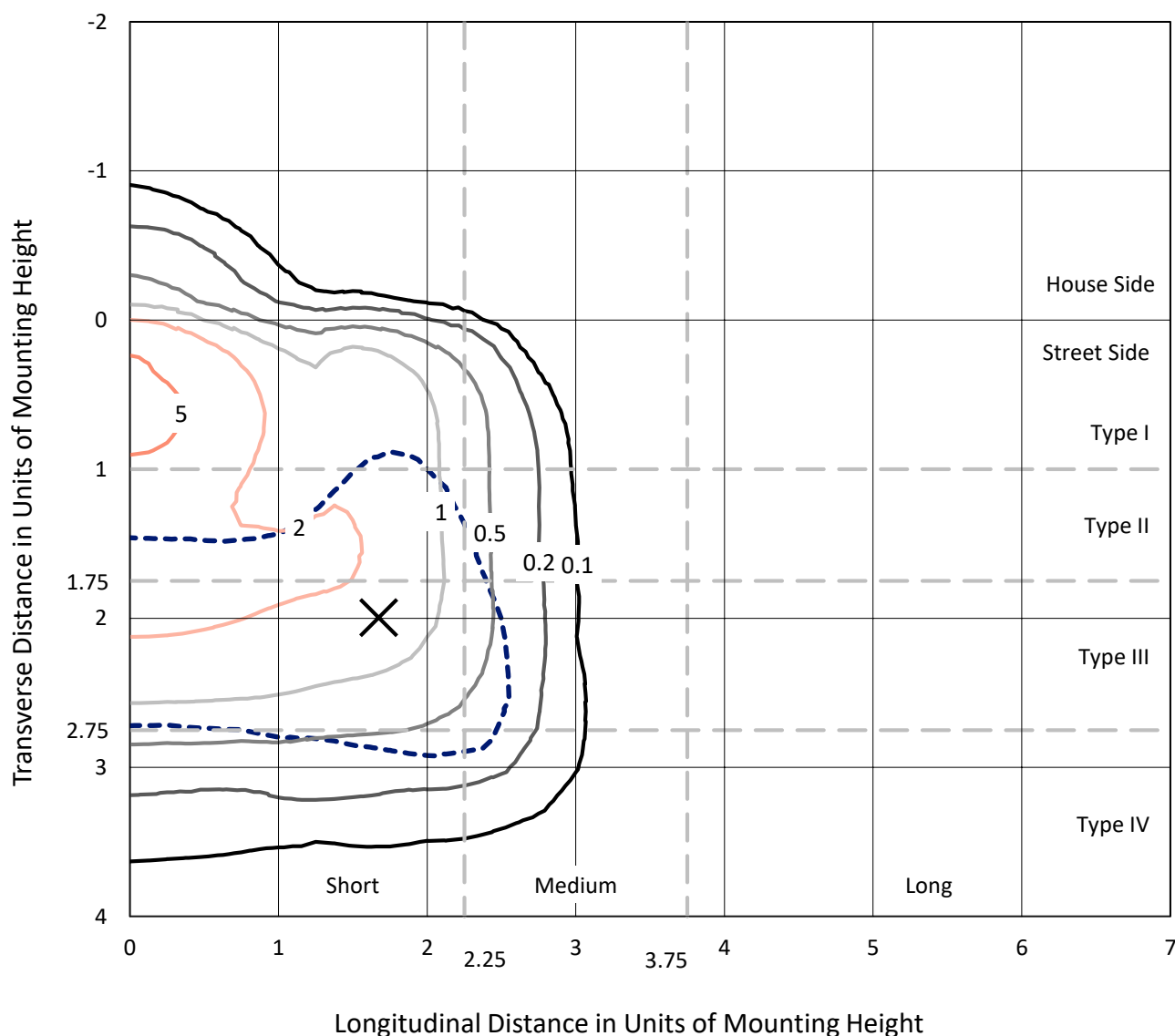
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

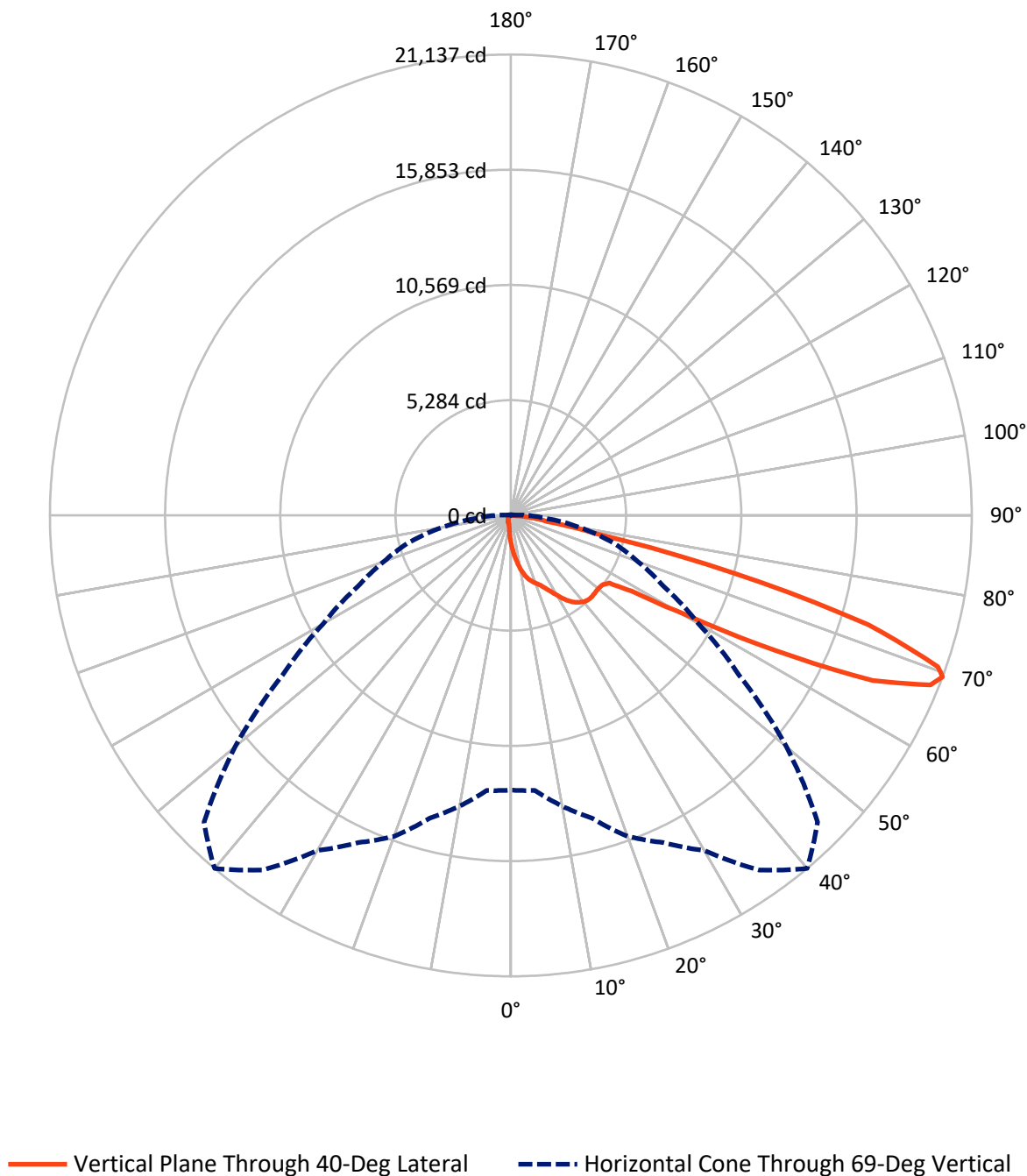


Based on 25 foot mounting height. Maximum calculated value = 6 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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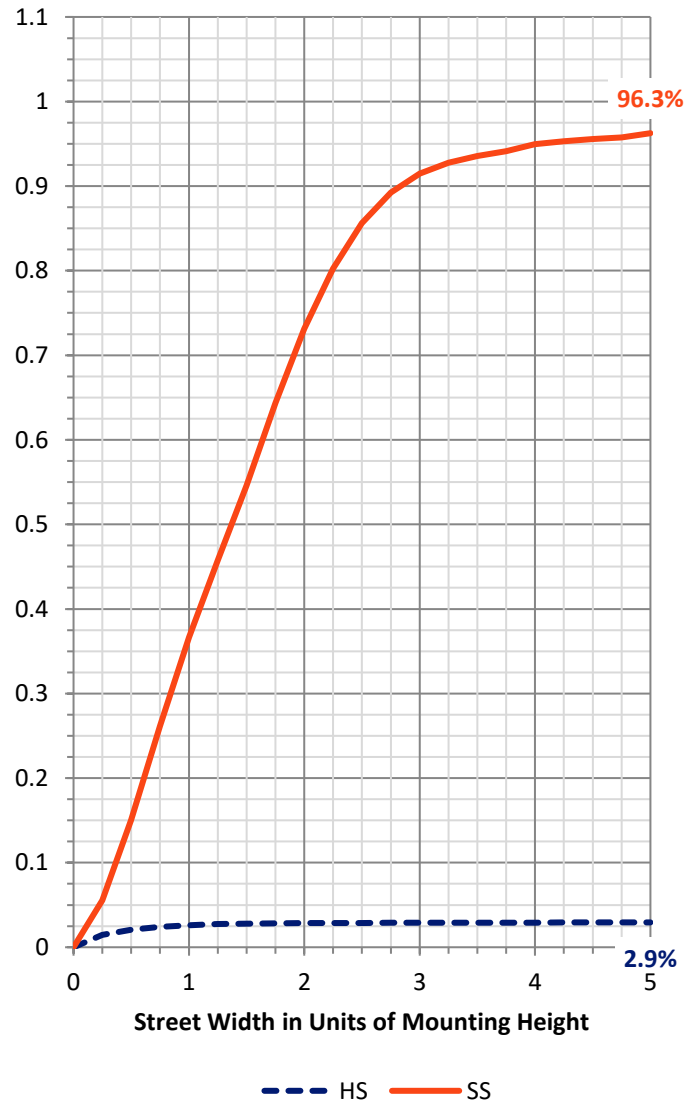
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	496.6	0.0	496.6
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	16178.3	0.0	16178.3
	% Fixture	97.0	0.0	97.0
Total	Lumens	16674.9	0.0	16674.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.4	0.8
10°-20°	446.3	2.7
20°-30°	854.1	5.1
30°-40°	1420.4	8.5
40°-50°	1922.0	11.5
50°-60°	3005.9	18.0
60°-70°	6180.0	37.1
70°-80°	2486.7	14.9
80°-90°	230.0	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°	16674.9	100.0
0°-180°	16674.9	100.0

Coefficient of Utilization



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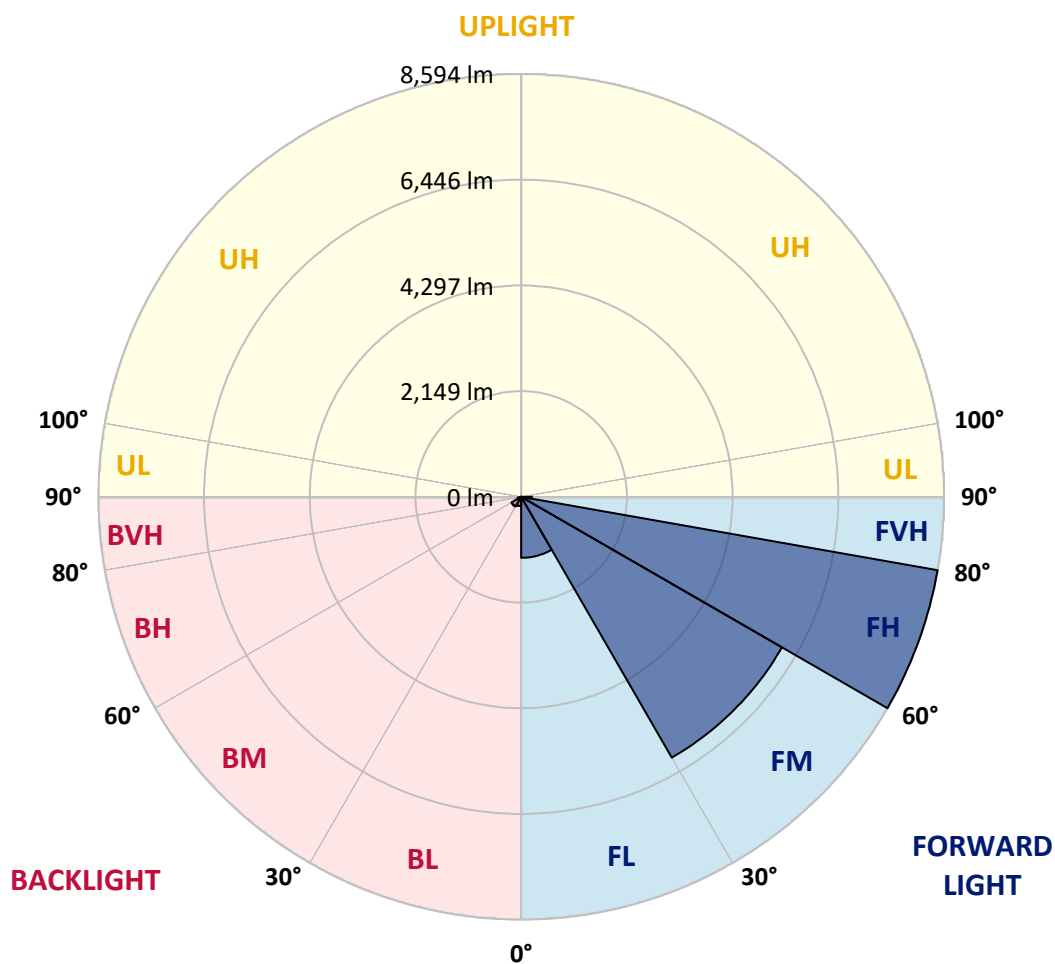
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1240.9	7.4			
FM	(30°-60°)	6121.6	36.7			
FH	(60°-80°)	8594.3	51.5			G4/12000
FVH	(80°-90°)	221.5	1.3			G2/225
BL	(0°-30°)	188.9	1.1	B1/500		
BM	(30°-60°)	226.7	1.4	B1/1000		
BH	(60°-80°)	72.4	0.4	B0/110		G0/110
BVH	(80°-90°)	8.5	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°	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4
2.5°	1680.0	1660.8	1638.9	1638.9	1611.7	1611.7	1595.3	1551.6	1546.2	1521.4	1496.9
5°	2144.3	2127.9	2100.7	2076.0	2054.2	2015.9	1988.6	1936.6	1879.4	1824.7	1775.6
7.5°	2597.8	2589.5	2540.4	2532.1	2496.6	2433.9	2379.2	2302.7	2204.4	2127.9	2037.8
10°	3018.5	2999.3	2988.3	2941.9	2890.1	2821.8	2737.0	2644.3	2529.5	2409.2	2280.8
12.5°	3351.7	3340.8	3291.5	3272.5	3217.9	3149.5	3043.0	2922.8	2808.2	2652.4	2502.1
15°	3600.2	3581.2	3548.3	3518.3	3452.8	3392.7	3294.3	3163.1	3024.0	2854.6	2674.3
17.5°	3807.9	3772.4	3764.1	3717.7	3649.5	3578.3	3469.2	3348.9	3185.0	3015.7	2818.9
20°	4086.4	4037.3	4020.9	3952.6	3873.4	3775.1	3649.5	3499.2	3327.0	3141.4	2939.2
22.5°	4414.2	4378.7	4343.2	4283.2	4182.1	4042.8	3859.8	3695.9	3477.3	3272.5	3054.0
25°	4878.7	4848.6	4791.2	4709.3	4583.6	4417.0	4195.7	3955.4	3698.6	3436.3	3179.6
27.5°	5329.3	5302.0	5261.0	5198.3	5056.1	4873.2	4600.0	4294.1	3969.0	3652.1	3368.0
30°	5752.8	5728.1	5687.1	5624.4	5498.7	5318.4	5009.7	4681.9	4277.7	3908.9	3567.6
32.5°	6209.0	6200.7	6154.3	6064.2	5954.9	5711.9	5375.8	5023.5	4613.7	4187.6	3788.7
35°	6725.2	6662.3	6618.7	6528.5	6342.9	6083.3	5690.0	5304.8	4873.2	4436.1	3990.9
37.5°	7162.3	7102.3	7047.5	6932.9	6706.1	6375.5	5930.3	5506.8	5061.6	4616.4	4162.9
40°	7481.8	7451.8	7386.2	7236.0	6982.0	6588.7	6107.8	5646.2	5198.3	4750.3	4302.2
42.5°	7719.5	7673.0	7599.4	7443.6	7143.2	6695.2	6178.8	5703.6	5261.0	4832.2	4392.5
45°	7806.9	7768.8	7700.4	7531.1	7205.9	6725.2	6176.2	5687.1	5263.8	4856.8	4452.5
47.5°	7755.0	7716.8	7656.6	7498.2	7178.7	6689.7	6127.1	5640.7	5236.5	4865.1	4507.1
50°	7583.0	7561.1	7514.6	7380.8	7094.0	6621.4	6083.3	5616.2	5231.0	4906.0	4583.6
52.5°	7566.6	7552.9	7495.6	7361.7	7069.4	6599.5	6077.8	5629.9	5277.4	4957.9	4638.3
55°	9246.4	9052.5	8618.2	8249.5	7643.0	6921.9	6353.6	5851.0	5474.2	5162.8	4938.7
57.5°	13141.7	12852.3	12281.3	11579.3	10186.1	8817.6	7722.3	6930.1	6539.4	6397.4	6482.0
60°	14966.4	14914.6	14824.4	14491.2	13778.2	12601.0	11289.7	9872.1	9303.8	9254.7	9426.7
62.5°	15832.4	15799.6	15827.0	15786.0	15564.7	15220.5	14843.5	14231.7	13668.9	13305.6	12535.3
65°	16231.2	16253.1	16408.7	16531.6	16559.0	16649.1	16925.1	17687.1	18244.3	17307.4	15168.6
67.5°	15217.7	15346.1	15704.1	16151.9	16676.4	17184.5	18004.0	19610.2	20754.7	19654.0	16616.4
69°	12598.1	12661.0	13535.0	14379.2	15660.3	16556.3	17744.5	19850.5	21137.2	19894.3	16501.6
70°	9918.4	9975.8	10912.8	12060.0	14226.2	15378.9	16933.2	19443.6	20779.3	19574.7	15911.6
72.5°	4474.4	4392.5	4722.9	5337.5	7692.1	9522.4	12240.3	15753.2	17143.5	15682.2	11904.3
75°	3125.0	3089.5	3125.0	3127.6	3493.7	4507.1	5687.1	8538.9	10560.3	9112.7	5687.1
77.5°	2420.2	2395.6	2371.1	2343.7	2387.5	2674.3	2788.9	3029.3	3933.5	3720.5	2168.9
80°	1914.9	1893.0	1953.1	1934.0	1934.0	1966.8	1944.9	1854.7	1685.3	1562.4	1398.5
82.5°	890.4	895.9	895.9	972.4	1171.9	1368.5	1431.4	1341.3	1191.0	1013.4	816.8
85°	84.6	95.5	161.2	248.7	494.5	557.2	560.0	464.3	464.3	366.1	294.9
87.5°	0.0	2.7	2.7	2.7	24.6	68.3	57.4	16.4	8.1	8.1	13.6
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°	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4
2.5°	1453.3	1445.0	1412.3	1379.4	1349.4	1316.6	1286.6	1256.5	1223.7	1199.1	1169.1
5°	1699.1	1638.9	1570.7	1505.2	1439.5	1371.3	1300.3	1237.5	1171.9	1111.7	1054.3
7.5°	1947.6	1830.1	1737.2	1619.8	1513.3	1406.8	1308.5	1207.4	1114.5	1027.1	945.2
10°	2157.9	2015.9	1871.1	1721.0	1567.9	1425.9	1289.4	1169.1	1046.2	939.7	838.7
12.5°	2330.1	2149.8	1972.3	1783.7	1611.7	1431.4	1262.0	1117.2	972.4	852.3	748.4
15°	2485.7	2278.2	2065.0	1846.6	1628.1	1423.2	1234.6	1054.3	906.9	770.3	652.9
17.5°	2611.4	2373.7	2133.4	1887.5	1652.6	1412.3	1199.1	1010.7	838.7	696.5	581.9
20°	2720.7	2472.1	2212.7	1936.6	1669.1	1409.5	1169.1	956.1	778.5	628.3	516.2
22.5°	2821.8	2573.1	2294.6	1999.5	1693.6	1406.8	1141.7	915.2	726.5	576.4	464.3
25°	2936.5	2674.3	2382.0	2065.0	1737.2	1417.8	1125.5	882.3	680.1	527.2	423.3
27.5°	3064.9	2788.9	2485.7	2147.0	1794.6	1439.5	1120.0	846.8	639.1	480.7	390.6
30°	3245.1	2925.6	2589.5	2228.9	1846.6	1464.2	1114.5	824.9	598.2	445.2	357.8
32.5°	3403.7	3059.5	2704.3	2313.7	1904.0	1488.8	1111.7	794.9	560.0	409.7	333.3
35°	3570.2	3182.4	2802.7	2395.6	1953.1	1516.0	1109.1	773.0	524.5	374.2	308.7
37.5°	3715.0	3286.1	2879.2	2466.6	2007.8	1540.7	1111.7	753.9	491.7	344.2	286.8
40°	3837.9	3392.7	2963.8	2532.1	2065.0	1578.8	1114.5	734.8	459.0	316.8	267.7
42.5°	3947.2	3493.7	3054.0	2606.0	2130.7	1622.6	1131.0	718.4	431.6	292.3	248.7
45°	4031.8	3586.6	3152.2	2709.8	2237.2	1693.6	1161.0	707.5	404.2	270.4	232.2
47.5°	4119.3	3723.1	3318.9	2873.7	2393.0	1805.6	1212.9	704.8	382.4	254.0	218.5
50°	4239.5	3859.8	3466.4	3040.2	2535.0	1920.4	1275.6	707.5	355.1	237.7	204.9
52.5°	4326.9	3999.0	3657.6	3329.8	2873.7	2269.9	1518.8	756.6	341.4	223.9	188.4
55°	4843.2	4785.8	4793.9	4848.6	4496.3	3862.5	2540.4	1092.6	401.6	254.0	185.8
57.5°	6829.1	7031.1	7148.5	7145.9	6564.0	5444.1	3411.8	1404.0	448.0	294.9	221.3
60°	9440.5	9287.5	9071.7	8538.9	7765.9	6214.5	3816.0	1510.7	387.8	234.9	202.2
62.5°	11748.7	10852.6	10057.7	9194.6	8181.1	6482.0	3898.0	1502.4	338.7	177.5	142.0
65°	13188.2	11576.5	10292.8	9210.9	8017.2	6258.1	3687.6	1379.4	286.8	144.8	117.4
67.5°	13532.4	11185.9	9369.5	7989.9	6697.8	4870.5	2707.0	1038.1	223.9	120.3	103.8
69°	12781.1	9943.1	7763.3	6198.1	4873.2	3231.5	1674.5	655.6	172.0	109.3	95.5
70°	11756.8	8648.2	6323.6	4974.2	3608.5	2269.9	1171.9	461.6	139.3	101.0	87.4
72.5°	7563.9	4542.6	3108.6	2163.4	1488.8	904.2	459.0	207.7	106.5	84.6	71.0
75°	2933.7	1680.0	1218.4	925.9	723.9	502.6	278.7	133.9	90.1	71.0	54.6
77.5°	1445.0	1106.2	904.2	620.1	360.6	223.9	150.3	103.8	73.8	51.9	35.5
80°	1141.7	759.4	453.5	281.3	213.0	161.2	114.8	84.6	54.6	32.8	24.6
82.5°	584.6	319.6	234.9	191.3	158.4	125.7	92.9	60.0	35.5	21.9	19.1
85°	183.0	133.9	120.3	117.4	109.3	90.1	65.5	38.3	21.9	13.6	13.6
87.5°	13.6	19.1	24.6	19.1	21.9	19.1	24.6	16.4	10.9	10.9	8.1
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4	1259.4
2.5°	1147.2	1114.5	1084.5	1065.3	1029.8	1016.2	1002.6	997.1	972.4	977.9	956.1
5°	1002.6	945.2	901.4	857.8	816.8	786.8	762.0	732.0	707.5	696.5	674.6
7.5°	871.4	797.7	740.3	693.9	644.6	606.5	573.6	551.7	530.0	508.1	497.1
10°	756.6	677.4	611.9	565.5	519.0	486.2	461.6	445.2	431.6	423.3	420.7
12.5°	650.1	573.6	513.6	472.6	437.1	420.7	409.7	401.6	398.8	396.1	396.1
15°	568.1	491.7	445.2	415.2	398.8	390.6	387.8	382.4	377.0	374.2	374.2
17.5°	491.7	434.3	401.6	385.2	377.0	371.6	366.1	360.6	355.1	352.3	352.3
20°	439.7	393.3	377.0	366.1	357.8	352.3	344.2	338.7	336.1	333.3	330.6
22.5°	398.8	368.7	357.8	349.7	338.7	330.6	325.1	319.6	314.2	311.4	308.7
25°	368.7	349.7	341.4	330.6	319.6	311.4	303.2	294.9	289.6	286.8	281.3
27.5°	346.9	333.3	322.3	308.7	297.8	289.6	281.3	273.2	267.7	262.3	259.4
30°	327.8	314.2	300.4	289.6	275.9	267.7	256.8	248.7	245.8	240.4	234.9
32.5°	308.7	294.9	281.3	267.7	254.0	243.2	237.7	226.8	221.3	218.5	213.0
35°	286.8	273.2	256.8	245.8	232.2	221.3	213.0	204.9	199.4	193.9	191.3
37.5°	267.7	251.3	234.9	221.3	210.3	199.4	191.3	183.0	177.5	172.0	169.4
40°	245.8	229.4	213.0	199.4	188.4	180.3	172.0	163.9	158.4	155.8	155.8
42.5°	226.8	207.7	191.3	180.3	172.0	161.2	152.9	144.8	142.0	139.3	142.0
45°	207.7	188.4	174.8	163.9	155.8	144.8	136.5	131.0	128.4	131.0	133.9
47.5°	191.3	172.0	158.4	150.3	142.0	133.9	125.7	120.3	120.3	125.7	131.0
50°	174.8	155.8	144.8	139.3	131.0	122.9	112.0	109.3	112.0	117.4	122.9
52.5°	158.4	136.5	128.4	125.7	117.4	109.3	101.0	98.4	101.0	106.5	103.8
55°	142.0	120.3	117.4	114.8	106.5	95.5	87.4	87.4	87.4	84.6	79.3
57.5°	136.5	106.5	103.8	101.0	92.9	81.9	76.5	71.0	68.3	60.0	57.4
60°	142.0	95.5	95.5	90.1	81.9	71.0	62.9	54.6	49.1	43.6	43.6
62.5°	114.8	87.4	84.6	79.3	68.3	57.4	49.1	41.0	38.3	35.5	35.5
65°	92.9	79.3	73.8	65.5	57.4	46.4	38.3	32.8	30.0	30.0	32.8
67.5°	84.6	71.0	62.9	54.6	46.4	35.5	30.0	27.4	27.4	30.0	30.0
69°	79.3	65.5	57.4	49.1	41.0	32.8	27.4	27.4	27.4	27.4	30.0
70°	73.8	62.9	54.6	46.4	35.5	27.4	24.6	24.6	27.4	27.4	30.0
72.5°	57.4	49.1	46.4	38.3	27.4	24.6	21.9	24.6	24.6	27.4	27.4
75°	43.6	35.5	35.5	30.0	21.9	19.1	19.1	21.9	21.9	24.6	24.6
77.5°	30.0	24.6	24.6	21.9	19.1	16.4	16.4	19.1	21.9	21.9	24.6
80°	21.9	19.1	16.4	19.1	16.4	13.6	16.4	19.1	19.1	21.9	21.9
82.5°	16.4	16.4	16.4	16.4	13.6	13.6	16.4	16.4	19.1	21.9	21.9
85°	13.6	13.6	13.6	13.6	13.6	13.6	13.6	16.4	16.4	19.1	19.1
87.5°	8.1	8.1	8.1	10.9	10.9	13.6	13.6	13.6	13.6	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):

	165°	170°	175°	180°
0°	1259.4	1259.4	1259.4	1259.4
2.5°	950.7	947.8	936.9	939.7
5°	666.5	650.1	661.0	658.4
7.5°	489.0	486.2	483.5	489.0
10°	418.0	418.0	415.2	418.0
12.5°	393.3	393.3	393.3	393.3
15°	374.2	374.2	371.6	371.6
17.5°	352.3	352.3	352.3	349.7
20°	330.6	327.8	327.8	327.8
22.5°	305.9	303.2	303.2	303.2
25°	281.3	278.7	278.7	278.7
27.5°	256.8	254.0	251.3	251.3
30°	232.2	229.4	226.8	226.8
32.5°	207.7	204.9	202.2	202.2
35°	185.8	185.8	183.0	180.3
37.5°	166.7	166.7	166.7	166.7
40°	152.9	155.8	155.8	155.8
42.5°	144.8	147.5	150.3	152.9
45°	139.3	144.8	147.5	147.5
47.5°	136.5	139.3	142.0	142.0
50°	125.7	122.9	122.9	122.9
52.5°	101.0	95.5	92.9	90.1
55°	73.8	71.0	65.5	65.5
57.5°	51.9	51.9	49.1	49.1
60°	41.0	41.0	38.3	41.0
62.5°	35.5	35.5	35.5	35.5
65°	32.8	32.8	32.8	32.8
67.5°	32.8	32.8	32.8	32.8
69°	30.0	30.0	30.0	30.0
70°	30.0	30.0	30.0	30.0
72.5°	27.4	27.4	27.4	27.4
75°	24.6	27.4	27.4	27.4
77.5°	24.6	24.6	24.6	24.6
80°	21.9	21.9	24.6	24.6
82.5°	21.9	21.9	21.9	21.9
85°	19.1	19.1	21.9	21.9
87.5°	16.4	16.4	19.1	19.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)