

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: P165561

Luminaire Tested: **VST-F12-LED-E-U-SL4-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165561
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-F12-LED-E-U-SL4-HSS-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (84) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18190.8 lumens
Efficiency: N/A
Efficacy: 59.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G4

Input Watts (W): 306.6
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

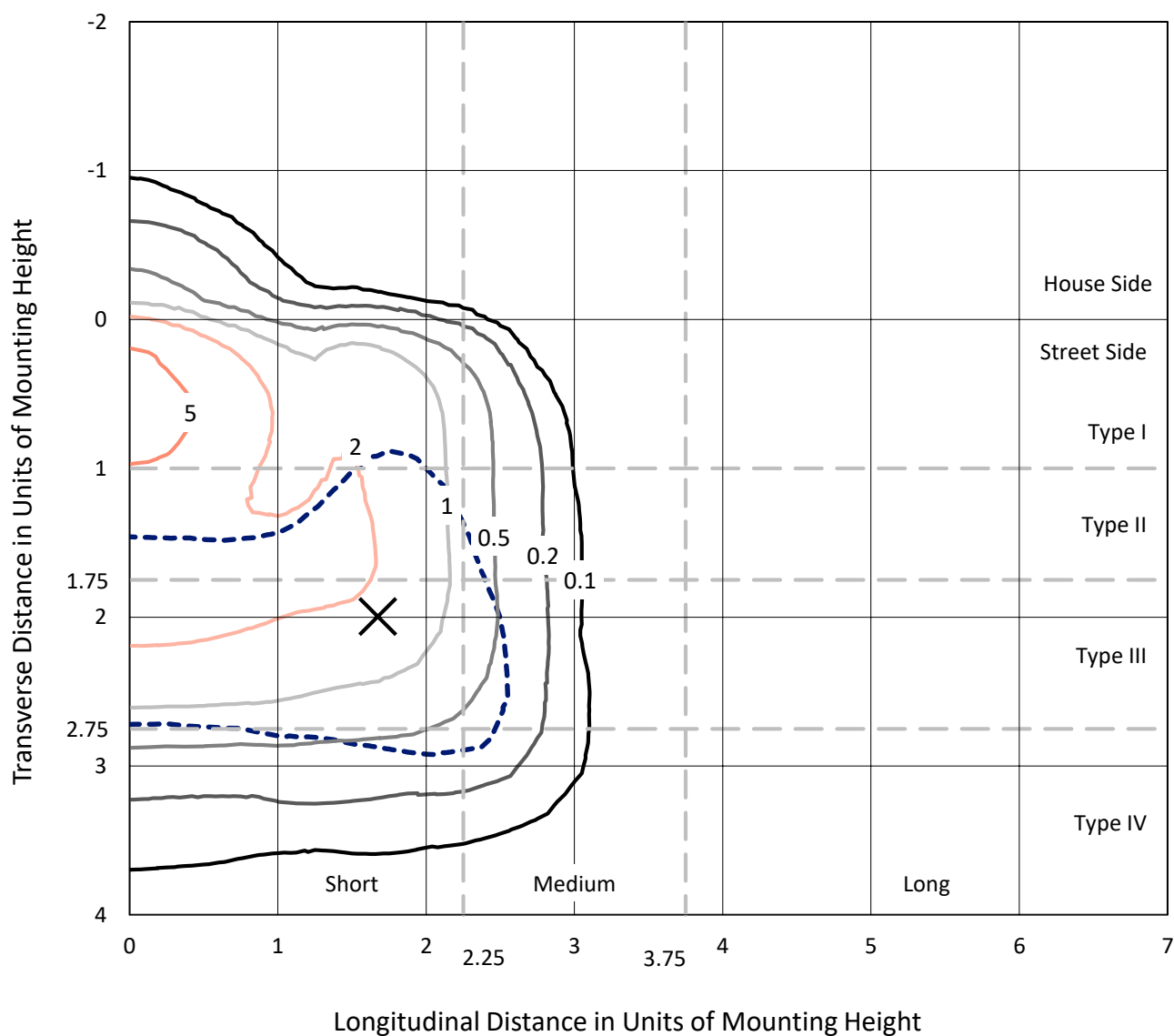


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

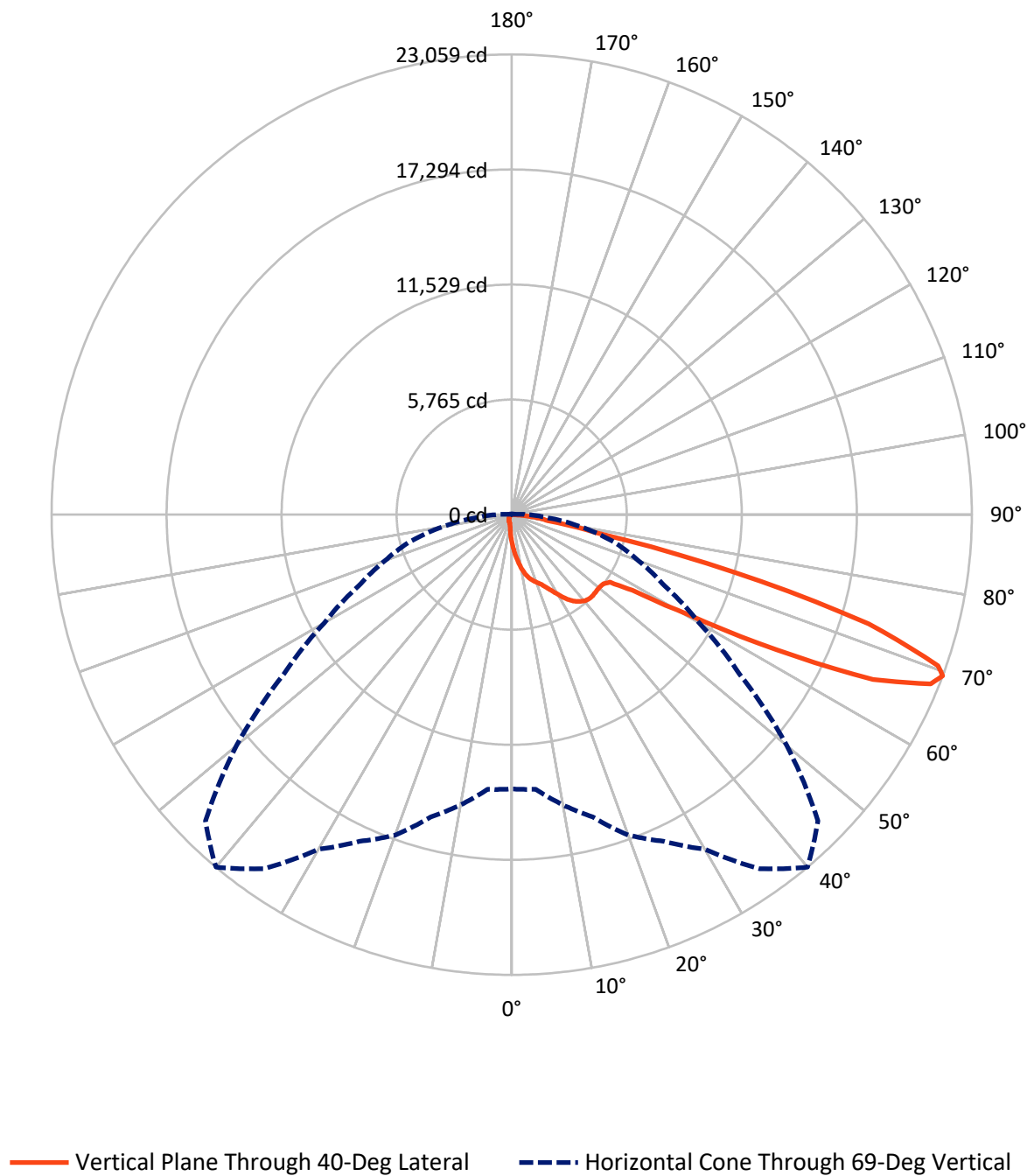


Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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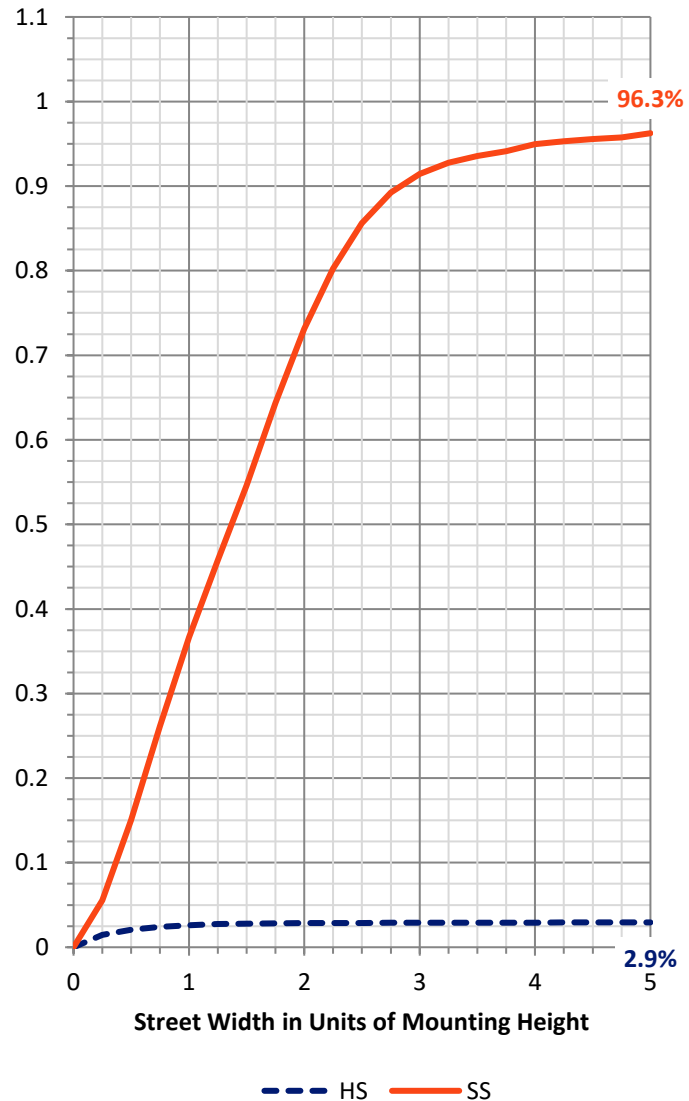
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	541.7	0.0	541.7
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	17649.1	0.0	17649.1
	% Fixture	97.0	0.0	97.0
Total	Lumens	18190.8	0.0	18190.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.2	0.8
10°-20°	486.8	2.7
20°-30°	931.8	5.1
30°-40°	1549.5	8.5
40°-50°	2096.8	11.5
50°-60°	3279.1	18.0
60°-70°	6741.8	37.1
70°-80°	2712.8	14.9
80°-90°	250.9	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°	18190.8	100.0
0°-180°	18190.8	100.0

Coefficient of Utilization



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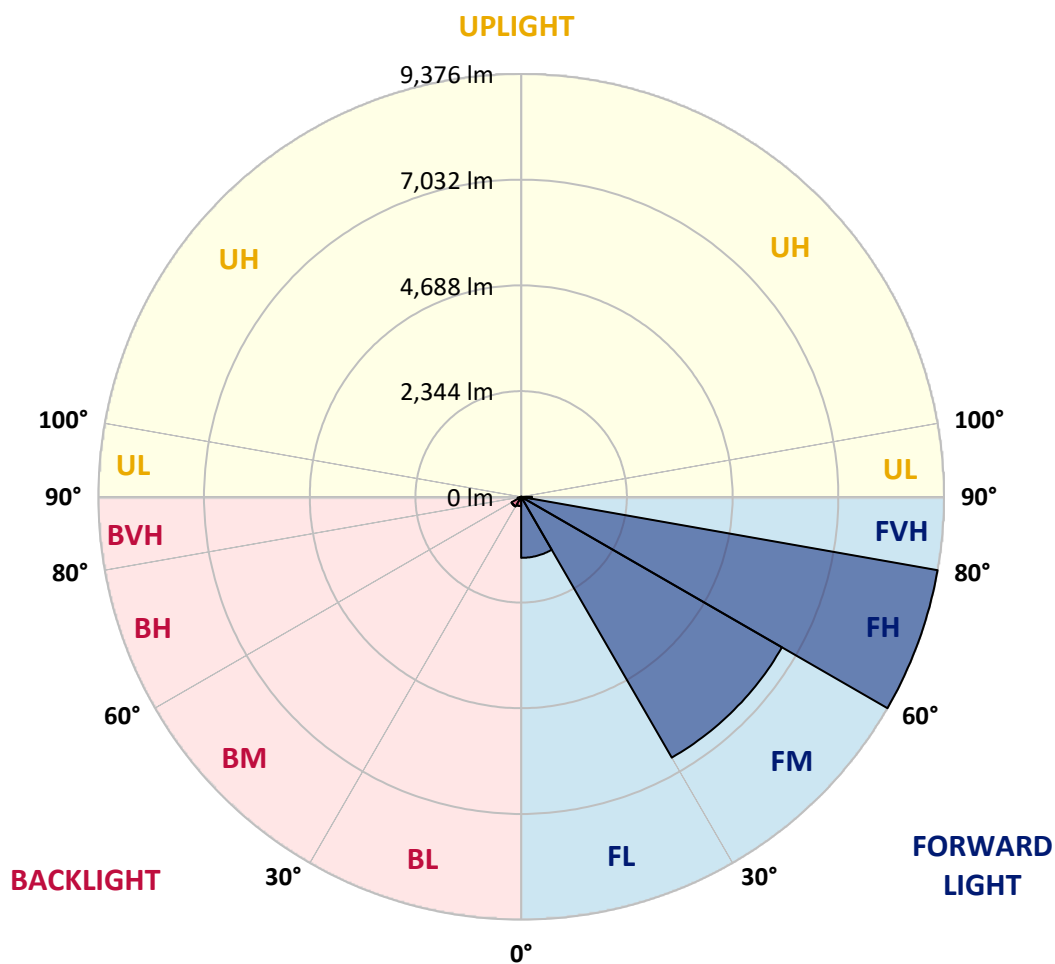
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1353.7	7.4			
FM	(30°-60°)	6678.1	36.7			
FH	(60°-80°)	9375.6	51.5			G4/12000
FVH	(80°-90°)	241.6	1.3			G3/500
BL	(0°-30°)	206.0	1.1	B1/500		
BM	(30°-60°)	247.3	1.4	B1/1000		
BH	(60°-80°)	79.0	0.4	B0/110		G0/110
BVH	(80°-90°)	9.3	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°	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8
2.5°	1832.7	1811.8	1787.9	1787.9	1758.2	1758.2	1740.3	1692.7	1686.7	1659.8	1633.0
5°	2339.2	2321.3	2291.7	2264.7	2241.0	2199.2	2169.3	2112.7	2050.3	1990.5	1937.0
7.5°	2834.0	2824.9	2771.4	2762.3	2723.6	2655.2	2595.5	2512.1	2404.8	2321.3	2223.1
10°	3292.9	3271.9	3260.0	3209.3	3152.8	3078.3	2985.8	2884.7	2759.4	2628.2	2488.2
12.5°	3656.4	3644.5	3590.8	3569.9	3510.4	3435.9	3319.7	3188.5	3063.4	2893.5	2729.6
15°	3927.5	3906.7	3870.9	3838.1	3766.6	3701.1	3593.8	3450.7	3298.9	3114.1	2917.4
17.5°	4154.1	4115.4	4106.3	4055.6	3981.3	3903.6	3784.6	3653.4	3474.6	3289.8	3075.2
20°	4457.9	4404.3	4386.4	4311.9	4225.6	4118.3	3981.3	3817.3	3629.5	3427.0	3206.4
22.5°	4815.5	4776.8	4738.0	4672.5	4562.3	4410.3	4210.7	4031.9	3793.4	3569.9	3331.6
25°	5322.2	5289.4	5226.8	5137.4	5000.2	4818.6	4577.2	4315.0	4034.8	3748.7	3468.6
27.5°	5813.8	5784.0	5739.3	5670.9	5515.8	5316.2	5018.2	4684.5	4329.8	3984.2	3674.2
30°	6275.8	6248.9	6204.2	6135.8	5998.6	5801.9	5465.1	5107.6	4666.6	4264.3	3891.9
32.5°	6773.5	6764.4	6713.7	6615.5	6496.2	6231.1	5864.5	5480.1	5033.2	4568.3	4133.1
35°	7336.6	7268.0	7220.4	7122.0	6919.5	6636.3	6207.2	5787.1	5316.2	4839.4	4353.7
37.5°	7813.4	7747.9	7688.2	7563.2	7315.8	6955.1	6469.4	6007.5	5521.8	5036.1	4541.3
40°	8161.9	8129.2	8057.7	7893.8	7616.7	7187.7	6663.1	6159.5	5670.9	5182.1	4693.3
42.5°	8421.3	8370.6	8290.2	8120.3	7792.6	7303.8	6740.5	6222.1	5739.3	5271.5	4791.8
45°	8516.6	8475.0	8400.5	8215.7	7861.0	7336.6	6737.6	6204.2	5742.4	5298.3	4857.3
47.5°	8460.0	8418.4	8352.7	8179.9	7831.3	7297.9	6684.1	6153.5	5712.5	5307.3	4916.8
50°	8272.3	8248.4	8197.8	8051.7	7738.9	7223.3	6636.3	6126.7	5706.5	5352.0	5000.2
52.5°	8254.4	8239.6	8177.0	8030.9	7712.1	7199.4	6630.3	6141.7	5757.2	5408.7	5060.0
55°	10087.0	9875.4	9401.7	8999.4	8337.8	7551.2	6931.3	6382.9	5971.8	5632.2	5387.7
57.5°	14336.4	14020.7	13397.8	12632.0	11112.1	9619.2	8424.3	7560.1	7133.9	6979.0	7071.3
60°	16327.0	16270.5	16172.1	15808.5	15030.8	13746.5	12316.0	10769.6	10149.6	10096.0	10283.7
62.5°	17271.8	17235.9	17265.8	17221.1	16979.7	16604.2	16192.9	15525.5	14911.5	14515.2	13674.8
65°	17706.8	17730.7	17900.4	18034.5	18064.4	18162.6	18463.7	19295.1	19902.9	18880.8	16547.6
67.5°	16601.1	16741.2	17131.7	17620.3	18192.5	18746.8	19640.7	21392.9	22641.5	21440.7	18127.0
69°	13743.4	13812.0	14765.5	15686.4	17083.9	18061.5	19357.7	21655.1	23058.8	21702.9	18001.7
70°	10820.0	10882.7	11904.9	13156.4	15519.5	16777.0	18472.6	21211.2	22668.3	21354.2	17358.1
72.5°	4881.2	4791.8	5152.2	5822.7	8391.4	10388.1	13353.1	17185.3	18702.1	17107.8	12986.5
75°	3409.1	3370.4	3409.1	3412.0	3811.3	4916.8	6204.2	9315.2	11520.4	9941.1	6204.2
77.5°	2640.2	2613.4	2586.6	2556.8	2604.5	2917.4	3042.5	3304.7	4291.1	4058.7	2366.0
80°	2089.0	2065.1	2130.6	2109.8	2109.8	2145.6	2121.7	2023.3	1838.5	1704.4	1525.7
82.5°	971.4	977.4	977.4	1060.8	1278.5	1492.9	1561.5	1463.2	1299.3	1105.5	891.0
85°	92.3	104.2	175.9	271.3	539.4	607.8	610.9	506.5	506.5	399.4	321.7
87.5°	0.0	2.9	2.9	2.9	26.8	74.6	62.6	17.9	8.9	8.9	14.8
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8
2.5°	1585.4	1576.3	1540.7	1504.9	1472.1	1436.3	1403.5	1370.8	1334.9	1308.1	1275.4
5°	1853.6	1787.9	1713.5	1642.0	1570.4	1496.0	1418.5	1349.9	1278.5	1212.8	1150.2
7.5°	2124.6	1996.5	1895.2	1767.1	1650.9	1534.7	1427.4	1317.2	1215.9	1120.5	1031.1
10°	2354.1	2199.2	2041.2	1877.4	1710.4	1555.5	1406.6	1275.4	1141.3	1025.1	914.9
12.5°	2541.9	2345.2	2151.6	1945.8	1758.2	1561.5	1376.7	1218.8	1060.8	929.8	816.5
15°	2711.7	2485.3	2252.8	2014.4	1776.1	1552.6	1346.9	1150.2	989.3	840.4	712.3
17.5°	2848.8	2589.5	2327.3	2059.1	1802.9	1540.7	1308.1	1102.6	914.9	759.8	634.8
20°	2968.1	2696.8	2413.8	2112.7	1820.8	1537.6	1275.4	1043.0	849.2	685.5	563.1
22.5°	3078.3	2807.0	2503.2	2181.3	1847.6	1534.7	1245.5	998.3	792.6	628.8	506.5
25°	3203.5	2917.4	2598.6	2252.8	1895.2	1546.7	1227.8	962.5	741.9	575.1	461.8
27.5°	3343.6	3042.5	2711.7	2342.1	1957.8	1570.4	1221.8	923.8	697.2	524.4	426.2
30°	3540.1	3191.6	2824.9	2431.5	2014.4	1597.3	1215.9	899.9	652.5	485.7	390.3
32.5°	3713.1	3337.6	2950.2	2524.0	2077.0	1624.1	1212.8	867.2	610.9	447.0	363.5
35°	3894.8	3471.7	3057.5	2613.4	2130.6	1653.8	1209.9	843.3	572.2	408.2	336.8
37.5°	4052.7	3584.8	3140.9	2690.9	2190.3	1680.7	1212.8	822.5	536.4	375.5	312.9
40°	4186.8	3701.1	3233.2	2762.3	2252.8	1722.4	1215.9	801.6	500.7	345.6	292.1
42.5°	4306.1	3811.3	3331.6	2842.9	2324.4	1770.1	1233.8	783.7	470.9	318.8	271.3
45°	4398.4	3912.7	3438.8	2956.1	2440.6	1847.6	1266.5	771.8	441.0	295.0	253.3
47.5°	4493.7	4061.6	3620.6	3134.9	2610.5	1969.7	1323.2	768.9	417.1	277.0	238.3
50°	4624.9	4210.7	3781.5	3316.6	2765.4	2095.0	1391.6	771.8	387.4	259.3	223.5
52.5°	4720.3	4362.5	3990.1	3632.6	3134.9	2476.2	1656.9	825.4	372.4	244.3	205.6
55°	5283.4	5220.8	5229.7	5289.4	4905.1	4213.6	2771.4	1192.0	438.1	277.0	202.7
57.5°	7449.9	7670.3	7798.4	7795.5	7160.7	5939.1	3722.0	1531.6	488.8	321.7	241.4
60°	10298.7	10131.9	9896.4	9315.2	8471.9	6779.4	4162.9	1648.0	423.1	256.2	220.6
62.5°	12816.7	11839.2	10972.1	10030.5	8924.9	7071.3	4252.3	1638.9	369.5	193.6	154.9
65°	14387.1	12628.9	11228.5	10048.3	8746.1	6827.0	4022.9	1504.9	312.9	158.0	128.1
67.5°	14762.6	12202.8	10221.3	8716.2	7306.7	5313.3	2953.1	1132.4	244.3	131.2	113.3
69°	13943.0	10847.0	8469.0	6761.5	5316.2	3525.3	1826.8	715.1	187.7	119.3	104.2
70°	12825.6	9434.4	6898.5	5426.4	3936.6	2476.2	1278.5	503.6	152.0	110.2	95.4
72.5°	8251.5	4955.5	3391.2	2360.1	1624.1	986.4	500.7	226.6	116.2	92.3	77.5
75°	3200.4	1832.7	1329.1	1010.1	789.7	548.3	304.0	146.0	98.3	77.5	59.5
77.5°	1576.3	1206.8	986.4	676.4	393.4	244.3	163.9	113.3	80.5	56.6	38.7
80°	1245.5	828.4	494.7	306.9	232.4	175.9	125.2	92.3	59.5	35.8	26.8
82.5°	637.7	348.7	256.2	208.6	172.8	137.2	101.3	65.5	38.7	23.9	20.8
85°	199.6	146.0	131.2	128.1	119.3	98.3	71.5	41.8	23.9	14.8	14.8
87.5°	14.8	20.8	26.8	20.8	23.9	20.8	26.8	17.9	11.9	11.9	8.9
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8	1373.8
2.5°	1251.5	1215.9	1183.1	1162.1	1123.4	1108.6	1093.7	1087.7	1060.8	1066.7	1043.0
5°	1093.7	1031.1	983.3	935.7	891.0	858.3	831.3	798.6	771.8	759.8	736.0
7.5°	950.6	870.2	807.6	756.9	703.2	661.6	625.8	601.9	578.2	554.3	542.3
10°	825.4	739.0	667.6	616.9	566.2	530.4	503.6	485.7	470.9	461.8	458.9
12.5°	709.2	625.8	560.2	515.6	476.8	458.9	447.0	438.1	435.0	432.1	432.1
15°	619.8	536.4	485.7	452.9	435.0	426.2	423.1	417.1	411.3	408.2	408.2
17.5°	536.4	473.7	438.1	420.2	411.3	405.3	399.4	393.4	387.4	384.4	384.4
20°	479.7	429.1	411.3	399.4	390.3	384.4	375.5	369.5	366.6	363.5	360.7
22.5°	435.0	402.3	390.3	381.5	369.5	360.7	354.7	348.7	342.7	339.7	336.8
25°	402.3	381.5	372.4	360.7	348.7	339.7	330.8	321.7	316.0	312.9	306.9
27.5°	378.4	363.5	351.6	336.8	324.8	316.0	306.9	298.0	292.1	286.1	283.0
30°	357.6	342.7	327.7	316.0	300.9	292.1	280.1	271.3	268.2	262.2	256.2
32.5°	336.8	321.7	306.9	292.1	277.0	265.3	259.3	247.4	241.4	238.3	232.4
35°	312.9	298.0	280.1	268.2	253.3	241.4	232.4	223.5	217.5	211.5	208.6
37.5°	292.1	274.2	256.2	241.4	229.5	217.5	208.6	199.6	193.6	187.7	184.8
40°	268.2	250.3	232.4	217.5	205.6	196.7	187.7	178.8	172.8	169.9	169.9
42.5°	247.4	226.6	208.6	196.7	187.7	175.9	166.8	158.0	154.9	152.0	154.9
45°	226.6	205.6	190.7	178.8	169.9	158.0	148.9	143.0	140.1	143.0	146.0
47.5°	208.6	187.7	172.8	163.9	154.9	146.0	137.2	131.2	131.2	137.2	143.0
50°	190.7	169.9	158.0	152.0	143.0	134.1	122.1	119.3	122.1	128.1	134.1
52.5°	172.8	148.9	140.1	137.2	128.1	119.3	110.2	107.3	110.2	116.2	113.3
55°	154.9	131.2	128.1	125.2	116.2	104.2	95.4	95.4	95.4	92.3	86.5
57.5°	148.9	116.2	113.3	110.2	101.3	89.4	83.4	77.5	74.6	65.5	62.6
60°	154.9	104.2	104.2	98.3	89.4	77.5	68.6	59.5	53.6	47.6	47.6
62.5°	125.2	95.4	92.3	86.5	74.6	62.6	53.6	44.7	41.8	38.7	38.7
65°	101.3	86.5	80.5	71.5	62.6	50.7	41.8	35.8	32.8	32.8	35.8
67.5°	92.3	77.5	68.6	59.5	50.7	38.7	32.8	29.9	29.9	32.8	32.8
69°	86.5	71.5	62.6	53.6	44.7	35.8	29.9	29.9	29.9	29.9	32.8
70°	80.5	68.6	59.5	50.7	38.7	29.9	26.8	26.8	29.9	29.9	32.8
72.5°	62.6	53.6	50.7	41.8	29.9	26.8	23.9	26.8	26.8	29.9	29.9
75°	47.6	38.7	38.7	32.8	23.9	20.8	20.8	23.9	23.9	26.8	26.8
77.5°	32.8	26.8	26.8	23.9	20.8	17.9	17.9	20.8	23.9	23.9	26.8
80°	23.9	20.8	17.9	20.8	17.9	14.8	17.9	20.8	20.8	23.9	23.9
82.5°	17.9	17.9	17.9	17.9	14.8	14.8	17.9	17.9	20.8	23.9	23.9
85°	14.8	14.8	14.8	14.8	14.8	14.8	14.8	17.9	17.9	20.8	20.8
87.5°	8.9	8.9	8.9	11.9	11.9	14.8	14.8	14.8	14.8	17.9	17.9
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):

	165°	170°	175°	180°
0°	1373.8	1373.8	1373.8	1373.8
2.5°	1037.1	1034.0	1022.1	1025.1
5°	727.1	709.2	721.1	718.2
7.5°	533.5	530.4	527.5	533.5
10°	456.0	456.0	452.9	456.0
12.5°	429.1	429.1	429.1	429.1
15°	408.2	408.2	405.3	405.3
17.5°	384.4	384.4	384.4	381.5
20°	360.7	357.6	357.6	357.6
22.5°	333.7	330.8	330.8	330.8
25°	306.9	304.0	304.0	304.0
27.5°	280.1	277.0	274.2	274.2
30°	253.3	250.3	247.4	247.4
32.5°	226.6	223.5	220.6	220.6
35°	202.7	202.7	199.6	196.7
37.5°	181.9	181.9	181.9	181.9
40°	166.8	169.9	169.9	169.9
42.5°	158.0	160.9	163.9	166.8
45°	152.0	158.0	160.9	160.9
47.5°	148.9	152.0	154.9	154.9
50°	137.2	134.1	134.1	134.1
52.5°	110.2	104.2	101.3	98.3
55°	80.5	77.5	71.5	71.5
57.5°	56.6	56.6	53.6	53.6
60°	44.7	44.7	41.8	44.7
62.5°	38.7	38.7	38.7	38.7
65°	35.8	35.8	35.8	35.8
67.5°	35.8	35.8	35.8	35.8
69°	32.8	32.8	32.8	32.8
70°	32.8	32.8	32.8	32.8
72.5°	29.9	29.9	29.9	29.9
75°	26.8	29.9	29.9	29.9
77.5°	26.8	26.8	26.8	26.8
80°	23.9	23.9	26.8	26.8
82.5°	23.9	23.9	23.9	23.9
85°	20.8	20.8	23.9	23.9
87.5°	17.9	17.9	20.8	20.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)