

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: P165539

Luminaire Tested: **VST-E10-LED-E-U-SL4-HSS-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165539
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-E10-LED-E-U-SL4-HSS-7060
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (210) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20629.7 lumens
Efficiency: N/A
Efficacy: 83.3 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): 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

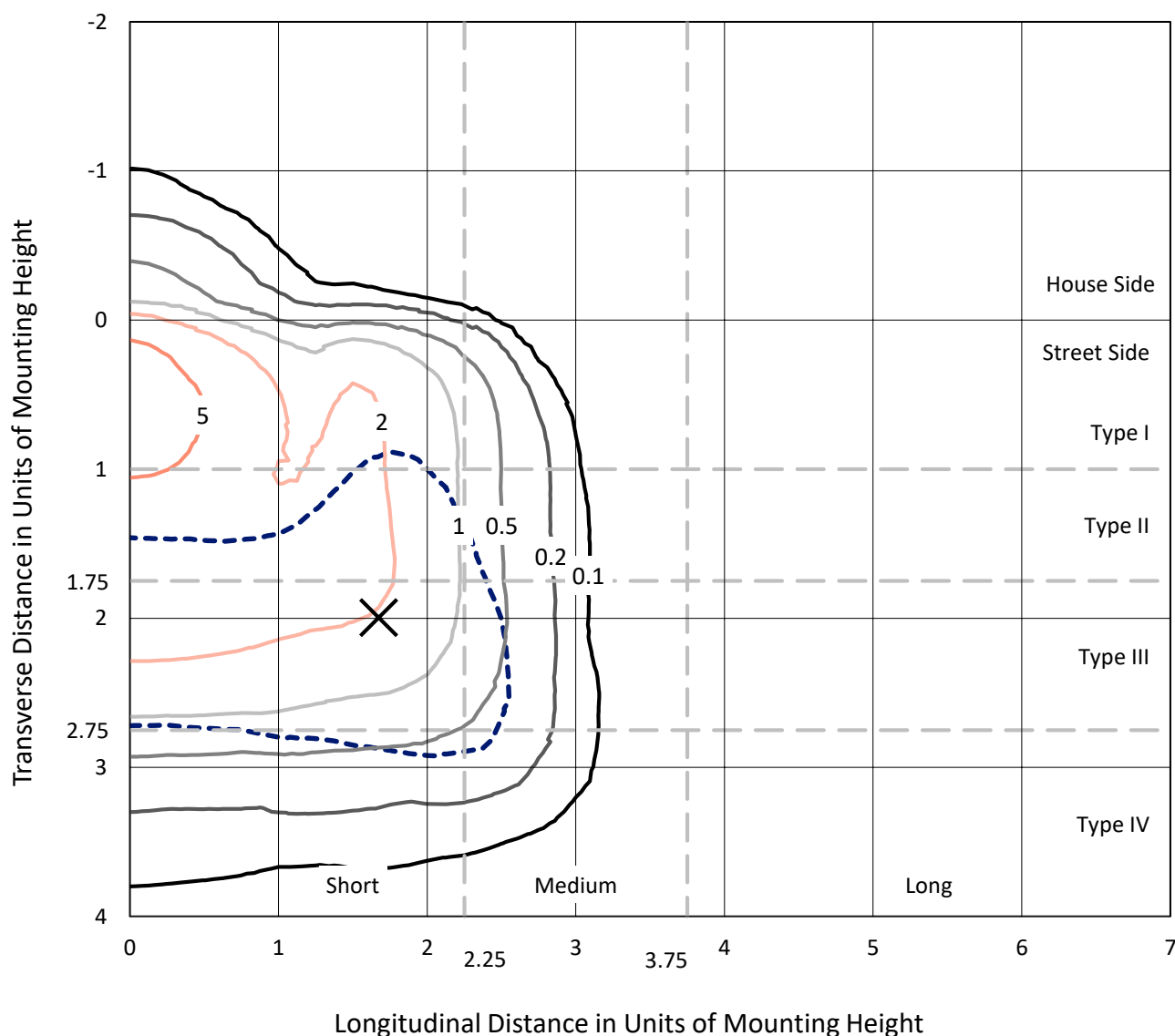


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

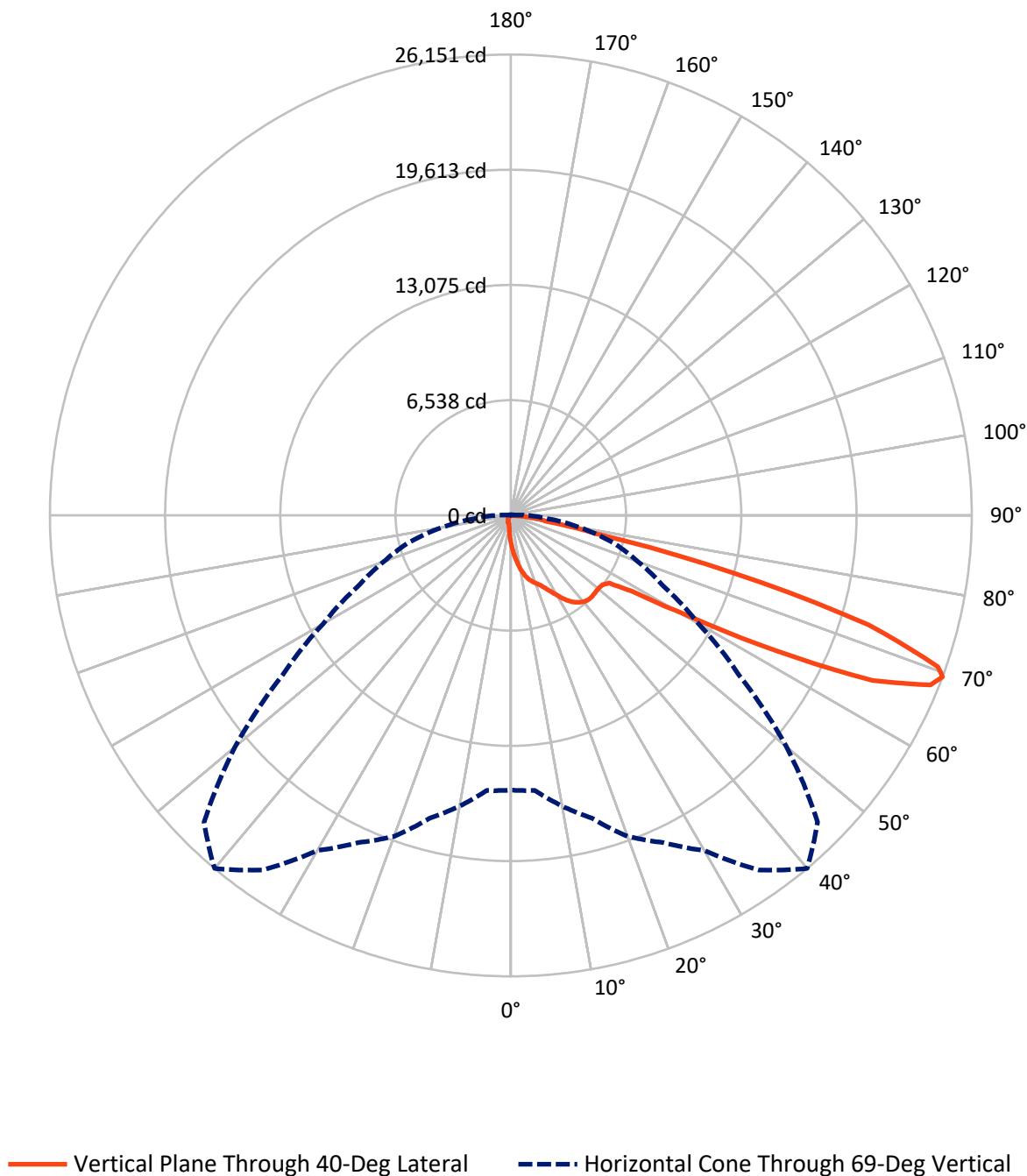


Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	614.3	0.0	614.3
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	20015.4	0.0	20015.4
	% Fixture	97.0	0.0	97.0
Total	Lumens	20629.7	0.0	20629.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.1	0.8
10°-20°	552.1	2.7
20°-30°	1056.7	5.1
30°-40°	1757.3	8.5
40°-50°	2377.9	11.5
50°-60°	3718.8	18.0
60°-70°	7645.7	37.1
70°-80°	3076.5	14.9
80°-90°	284.6	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°	20629.7	100.0
0°-180°	20629.7	100.0

Coefficient of Utilization



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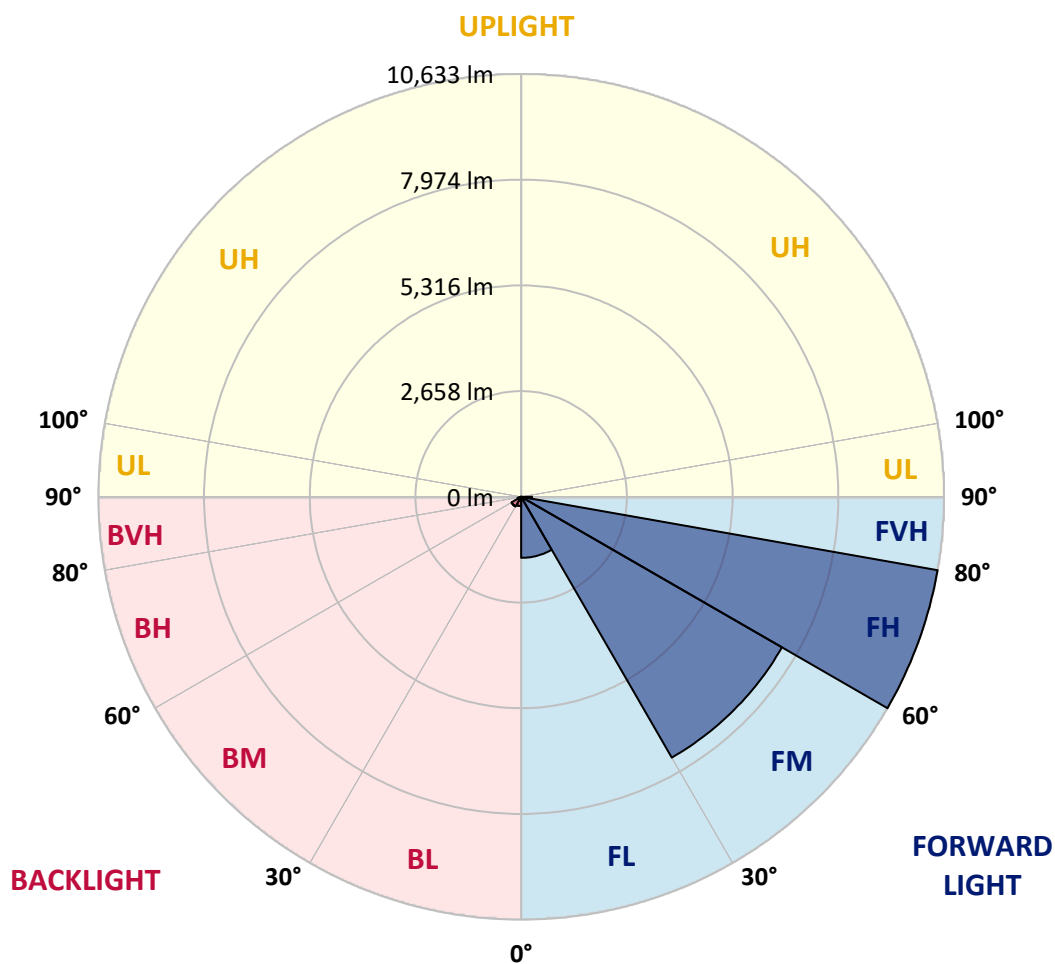
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1535.3	7.4			
FM	(30°-60°)	7573.5	36.7			
FH	(60°-80°)	10632.7	51.5			G4/12000
FVH	(80°-90°)	274.0	1.3			G3/500
BL	(0°-30°)	233.7	1.1	B1/500		
BM	(30°-60°)	280.5	1.4	B1/1000		
BH	(60°-80°)	89.6	0.4	B0/110		G0/110
BVH	(80°-90°)	10.6	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0
2.5°	2078.5	2054.7	2027.6	2027.6	1993.9	1993.9	1973.6	1919.6	1912.9	1882.3	1851.9
5°	2652.9	2632.6	2598.9	2568.3	2541.5	2494.1	2460.2	2396.0	2325.2	2257.4	2196.7
7.5°	3214.0	3203.7	3143.0	3132.7	3088.8	3011.2	2943.5	2848.9	2727.2	2632.6	2521.1
10°	3734.4	3710.6	3697.1	3639.6	3575.6	3491.0	3386.1	3271.4	3129.4	2980.6	2821.8
12.5°	4146.7	4133.2	4072.2	4048.6	3981.1	3896.5	3764.8	3616.0	3474.2	3281.5	3095.6
15°	4454.1	4430.5	4389.9	4352.7	4271.7	4197.4	4075.7	3913.4	3741.2	3531.6	3308.6
17.5°	4711.1	4667.1	4656.9	4599.4	4515.1	4427.0	4292.0	4143.2	3940.5	3730.9	3487.5
20°	5055.6	4994.9	4974.6	4890.0	4792.1	4670.4	4515.1	4329.1	4116.1	3886.5	3636.3
22.5°	5461.1	5417.2	5373.3	5299.0	5174.0	5001.6	4775.3	4572.5	4302.0	4048.6	3778.3
25°	6035.8	5998.6	5927.6	5826.2	5670.7	5464.6	5190.9	4893.5	4575.8	4251.4	3933.7
27.5°	6593.3	6559.5	6508.8	6431.2	6255.3	6029.0	5691.0	5312.6	4910.3	4518.4	4166.8
30°	7117.3	7086.7	7036.0	6958.4	6802.9	6579.8	6197.9	5792.4	5292.2	4836.0	4413.7
32.5°	7681.6	7671.4	7613.9	7502.5	7367.2	7066.6	6650.8	6214.9	5708.0	5180.8	4687.2
35°	8320.3	8242.5	8188.5	8076.9	7847.2	7526.1	7039.5	6563.0	6029.0	5488.2	4937.4
37.5°	8861.0	8786.7	8719.0	8577.2	8296.7	7887.7	7336.9	6812.9	6262.1	5711.3	5150.2
40°	9256.3	9219.1	9138.1	8952.2	8638.0	8151.4	7556.4	6985.3	6431.2	5876.9	5322.6
42.5°	9550.4	9492.9	9401.8	9209.1	8837.4	8283.1	7644.3	7056.3	6508.8	5978.3	5434.3
45°	9658.5	9611.3	9526.8	9317.2	8915.0	8320.3	7641.0	7036.0	6512.3	6008.7	5508.5
47.5°	9594.3	9547.1	9472.6	9276.6	8881.4	8276.4	7580.3	6978.5	6478.4	6018.9	5576.1
50°	9381.5	9354.4	9296.9	9131.3	8776.5	8191.8	7526.1	6948.2	6471.6	6069.6	5670.7
52.5°	9361.2	9344.3	9273.3	9107.7	8746.1	8164.7	7519.3	6965.2	6529.1	6133.9	5738.4
55°	11439.4	11199.5	10662.3	10206.1	9455.8	8563.7	7860.6	7238.8	6772.5	6387.3	6110.0
57.5°	16258.6	15900.5	15194.2	14325.7	12602.0	10908.9	9553.9	8573.7	8090.4	7914.8	8019.4
60°	18516.1	18452.0	18340.4	17928.1	17046.1	15589.6	13967.3	12213.5	11510.4	11449.7	11662.5
62.5°	19587.5	19546.9	19580.8	19530.1	19256.3	18830.5	18364.0	17607.1	16910.8	16461.4	15508.4
65°	20080.9	20108.0	20300.5	20452.5	20486.4	20597.8	20939.3	21882.1	22571.4	21412.4	18766.2
67.5°	18827.0	18985.8	19428.7	19982.8	20631.7	21260.3	22274.1	24261.2	25677.3	24315.4	20557.4
69°	15586.1	15663.9	16745.2	17789.6	19374.5	20483.1	21953.1	24558.6	26150.5	24612.8	20415.4
70°	12270.8	12341.8	13501.1	14920.4	17600.4	19026.5	20949.4	24055.2	25707.6	24217.3	19685.4
72.5°	5535.6	5434.3	5843.1	6603.4	9516.5	11780.9	15143.5	19489.4	21209.6	19401.6	14727.7
75°	3866.2	3822.2	3866.2	3869.4	4322.4	5576.1	7036.0	10564.2	13065.0	11274.0	7036.0
77.5°	2994.2	2963.8	2933.4	2899.6	2953.7	3308.6	3450.4	3747.7	4866.4	4602.9	2683.3
80°	2369.1	2342.0	2416.3	2392.7	2392.7	2433.3	2406.2	2294.6	2085.0	1933.0	1730.2
82.5°	1101.6	1108.4	1108.4	1203.0	1449.9	1693.1	1770.9	1659.4	1473.5	1253.7	1010.5
85°	104.7	118.2	199.5	307.6	611.8	689.3	692.8	574.4	574.4	452.9	364.9
87.5°	0.0	3.3	3.3	3.3	30.4	84.6	71.0	20.3	10.1	10.1	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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0
2.5°	1797.9	1787.7	1747.3	1706.6	1669.5	1628.8	1591.7	1554.5	1513.9	1483.5	1446.4
5°	2102.1	2027.6	1943.2	1862.2	1780.9	1696.6	1608.7	1530.9	1449.9	1375.4	1304.4
7.5°	2409.5	2264.2	2149.3	2004.0	1872.2	1740.5	1618.8	1493.8	1378.9	1270.7	1169.3
10°	2669.7	2494.1	2314.9	2129.2	1939.7	1764.1	1595.2	1446.4	1294.3	1162.6	1037.6
12.5°	2882.7	2659.7	2440.1	2206.7	1993.9	1770.9	1561.3	1382.2	1203.0	1054.4	926.0
15°	3075.2	2818.5	2554.8	2284.5	2014.2	1760.8	1527.5	1304.4	1121.9	953.0	807.8
17.5°	3230.8	2936.7	2639.3	2335.2	2044.6	1747.3	1483.5	1250.4	1037.6	861.7	719.9
20°	3366.0	3058.4	2737.4	2396.0	2064.9	1743.8	1446.4	1182.9	963.1	777.4	638.6
22.5°	3491.0	3183.4	2838.8	2473.7	2095.3	1740.5	1412.5	1132.2	898.9	713.1	574.4
25°	3633.0	3308.6	2947.0	2554.8	2149.3	1754.0	1392.4	1091.6	841.4	652.2	523.7
27.5°	3791.9	3450.4	3075.2	2656.2	2220.3	1780.9	1385.7	1047.7	790.7	594.7	483.3
30°	4014.7	3619.5	3203.7	2757.6	2284.5	1811.5	1378.9	1020.6	740.0	550.8	442.7
32.5°	4210.9	3785.1	3345.7	2862.4	2355.5	1841.9	1375.4	983.4	692.8	506.9	412.3
35°	4417.0	3937.2	3467.4	2963.8	2416.3	1875.5	1372.1	956.3	648.9	463.0	381.9
37.5°	4596.1	4065.4	3562.0	3051.6	2484.0	1906.1	1375.4	932.7	608.3	425.8	354.8
40°	4748.2	4197.4	3666.7	3132.7	2554.8	1953.3	1378.9	909.1	567.8	392.0	331.2
42.5°	4883.4	4322.4	3778.3	3224.0	2636.1	2007.5	1399.2	888.8	534.0	361.6	307.6
45°	4988.1	4437.3	3899.8	3352.5	2767.8	2095.3	1436.3	875.3	500.1	334.5	287.3
47.5°	5096.3	4606.2	4106.1	3555.3	2960.5	2233.8	1500.6	872.0	473.0	314.2	270.3
50°	5245.0	4775.3	4288.5	3761.3	3136.2	2375.8	1578.2	875.3	439.4	294.1	253.4
52.5°	5353.2	4947.5	4525.1	4119.6	3555.3	2808.2	1879.0	936.0	422.3	277.0	233.1
55°	5991.8	5920.8	5930.9	5998.6	5562.7	4778.6	3143.0	1351.8	496.8	314.2	229.8
57.5°	8448.7	8698.7	8844.0	8840.7	8120.8	6735.4	4221.0	1737.0	554.3	364.9	273.8
60°	11679.5	11490.3	11223.3	10564.2	9607.8	7688.4	4721.1	1868.9	479.8	290.6	250.2
62.5°	14535.2	13426.6	12443.2	11375.4	10121.5	8019.4	4822.5	1858.7	419.1	219.6	175.7
65°	16316.1	14322.2	12734.0	11395.5	9918.7	7742.4	4562.3	1706.6	354.8	179.2	145.3
67.5°	16741.9	13838.9	11591.7	9884.9	8286.4	6025.7	3349.0	1284.3	277.0	148.8	128.5
69°	15812.5	12301.4	9604.6	7668.1	6029.0	3997.9	2071.7	811.0	212.8	135.2	118.2
70°	14545.2	10699.4	7823.4	6154.0	4464.4	2808.2	1449.9	571.1	172.4	125.0	108.2
72.5°	9357.9	5620.0	3845.8	2676.5	1841.9	1118.7	567.8	256.9	131.8	104.7	87.8
75°	3629.5	2078.5	1507.3	1145.5	895.6	621.8	344.8	165.6	111.4	87.8	67.5
77.5°	1787.7	1368.6	1118.7	767.1	446.2	277.0	185.9	128.5	91.3	64.2	43.9
80°	1412.5	939.5	561.1	348.1	263.5	199.5	142.0	104.7	67.5	40.6	30.4
82.5°	723.2	395.5	290.6	236.6	196.0	155.6	114.9	74.3	43.9	27.1	23.6
85°	226.4	165.6	148.8	145.3	135.2	111.4	81.1	47.4	27.1	16.8	16.8
87.5°	16.8	23.6	30.4	23.6	27.1	23.6	30.4	20.3	13.5	13.5	10.1
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°	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0	1558.0
2.5°	1419.3	1378.9	1341.7	1317.9	1274.0	1257.2	1240.4	1233.6	1203.0	1209.8	1182.9
5°	1240.4	1169.3	1115.2	1061.2	1010.5	973.4	942.8	905.6	875.3	861.7	834.6
7.5°	1078.0	986.9	915.9	858.4	797.5	750.3	709.7	682.6	655.7	628.6	615.0
10°	936.0	838.1	757.1	699.6	642.1	601.5	571.1	550.8	534.0	523.7	520.4
12.5°	804.3	709.7	635.4	584.7	540.8	520.4	506.9	496.8	493.4	490.1	490.1
15°	702.9	608.3	550.8	513.7	493.4	483.3	479.8	473.0	466.5	463.0	463.0
17.5°	608.3	537.3	496.8	476.5	466.5	459.7	452.9	446.2	439.4	435.9	435.9
20°	544.0	486.6	466.5	452.9	442.7	435.9	425.8	419.1	415.8	412.3	409.0
22.5°	493.4	456.2	442.7	432.6	419.1	409.0	402.2	395.5	388.7	385.2	381.9
25°	456.2	432.6	422.3	409.0	395.5	385.2	375.1	364.9	358.3	354.8	348.1
27.5°	429.1	412.3	398.7	381.9	368.4	358.3	348.1	338.0	331.2	324.5	321.0
30°	405.5	388.7	371.7	358.3	341.3	331.2	317.7	307.6	304.1	297.4	290.6
32.5°	381.9	364.9	348.1	331.2	314.2	300.9	294.1	280.5	273.8	270.3	263.5
35°	354.8	338.0	317.7	304.1	287.3	273.8	263.5	253.4	246.7	239.9	236.6
37.5°	331.2	310.9	290.6	273.8	260.2	246.7	236.6	226.4	219.6	212.8	209.5
40°	304.1	283.8	263.5	246.7	233.1	223.1	212.8	202.8	196.0	192.7	192.7
42.5°	280.5	256.9	236.6	223.1	212.8	199.5	189.2	179.2	175.7	172.4	175.7
45°	256.9	233.1	216.3	202.8	192.7	179.2	168.9	162.1	158.8	162.1	165.6
47.5°	236.6	212.8	196.0	185.9	175.7	165.6	155.6	148.8	148.8	155.6	162.1
50°	216.3	192.7	179.2	172.4	162.1	152.1	138.5	135.2	138.5	145.3	152.1
52.5°	196.0	168.9	158.8	155.6	145.3	135.2	125.0	121.7	125.0	131.8	128.5
55°	175.7	148.8	145.3	142.0	131.8	118.2	108.2	108.2	108.2	104.7	98.1
57.5°	168.9	131.8	128.5	125.0	114.9	101.4	94.6	87.8	84.6	74.3	71.0
60°	175.7	118.2	118.2	111.4	101.4	87.8	77.8	67.5	60.7	54.0	54.0
62.5°	142.0	108.2	104.7	98.1	84.6	71.0	60.7	50.7	47.4	43.9	43.9
65°	114.9	98.1	91.3	81.1	71.0	57.5	47.4	40.6	37.1	37.1	40.6
67.5°	104.7	87.8	77.8	67.5	57.5	43.9	37.1	33.9	33.9	37.1	37.1
69°	98.1	81.1	71.0	60.7	50.7	40.6	33.9	33.9	33.9	33.9	37.1
70°	91.3	77.8	67.5	57.5	43.9	33.9	30.4	30.4	33.9	33.9	37.1
72.5°	71.0	60.7	57.5	47.4	33.9	30.4	27.1	30.4	30.4	33.9	33.9
75°	54.0	43.9	43.9	37.1	27.1	23.6	23.6	27.1	27.1	30.4	30.4
77.5°	37.1	30.4	30.4	27.1	23.6	20.3	20.3	23.6	27.1	27.1	30.4
80°	27.1	23.6	20.3	23.6	20.3	16.8	20.3	23.6	23.6	27.1	27.1
82.5°	20.3	20.3	20.3	20.3	16.8	16.8	20.3	20.3	23.6	27.1	27.1
85°	16.8	16.8	16.8	16.8	16.8	16.8	16.8	20.3	20.3	23.6	23.6
87.5°	10.1	10.1	10.1	13.5	13.5	16.8	16.8	16.8	16.8	20.3	20.3
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):

	165°	170°	175°	180°
0°	1558.0	1558.0	1558.0	1558.0
2.5°	1176.1	1172.6	1159.1	1162.6
5°	824.6	804.3	817.8	814.5
7.5°	605.0	601.5	598.2	605.0
10°	517.2	517.2	513.7	517.2
12.5°	486.6	486.6	486.6	486.6
15°	463.0	463.0	459.7	459.7
17.5°	435.9	435.9	435.9	432.6
20°	409.0	405.5	405.5	405.5
22.5°	378.4	375.1	375.1	375.1
25°	348.1	344.8	344.8	344.8
27.5°	317.7	314.2	310.9	310.9
30°	287.3	283.8	280.5	280.5
32.5°	256.9	253.4	250.2	250.2
35°	229.8	229.8	226.4	223.1
37.5°	206.2	206.2	206.2	206.2
40°	189.2	192.7	192.7	192.7
42.5°	179.2	182.4	185.9	189.2
45°	172.4	179.2	182.4	182.4
47.5°	168.9	172.4	175.7	175.7
50°	155.6	152.1	152.1	152.1
52.5°	125.0	118.2	114.9	111.4
55°	91.3	87.8	81.1	81.1
57.5°	64.2	64.2	60.7	60.7
60°	50.7	50.7	47.4	50.7
62.5°	43.9	43.9	43.9	43.9
65°	40.6	40.6	40.6	40.6
67.5°	40.6	40.6	40.6	40.6
69°	37.1	37.1	37.1	37.1
70°	37.1	37.1	37.1	37.1
72.5°	33.9	33.9	33.9	33.9
75°	30.4	33.9	33.9	33.9
77.5°	30.4	30.4	30.4	30.4
80°	27.1	27.1	30.4	30.4
82.5°	27.1	27.1	27.1	27.1
85°	23.6	23.6	27.1	27.1
87.5°	20.3	20.3	23.6	23.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)