

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: P165546

Luminaire Tested: **VST-E11-LED-E-U-SL4-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165546
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-E11-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: (231) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20199.1 lumens
Efficiency: N/A
Efficacy: 74.9 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): 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

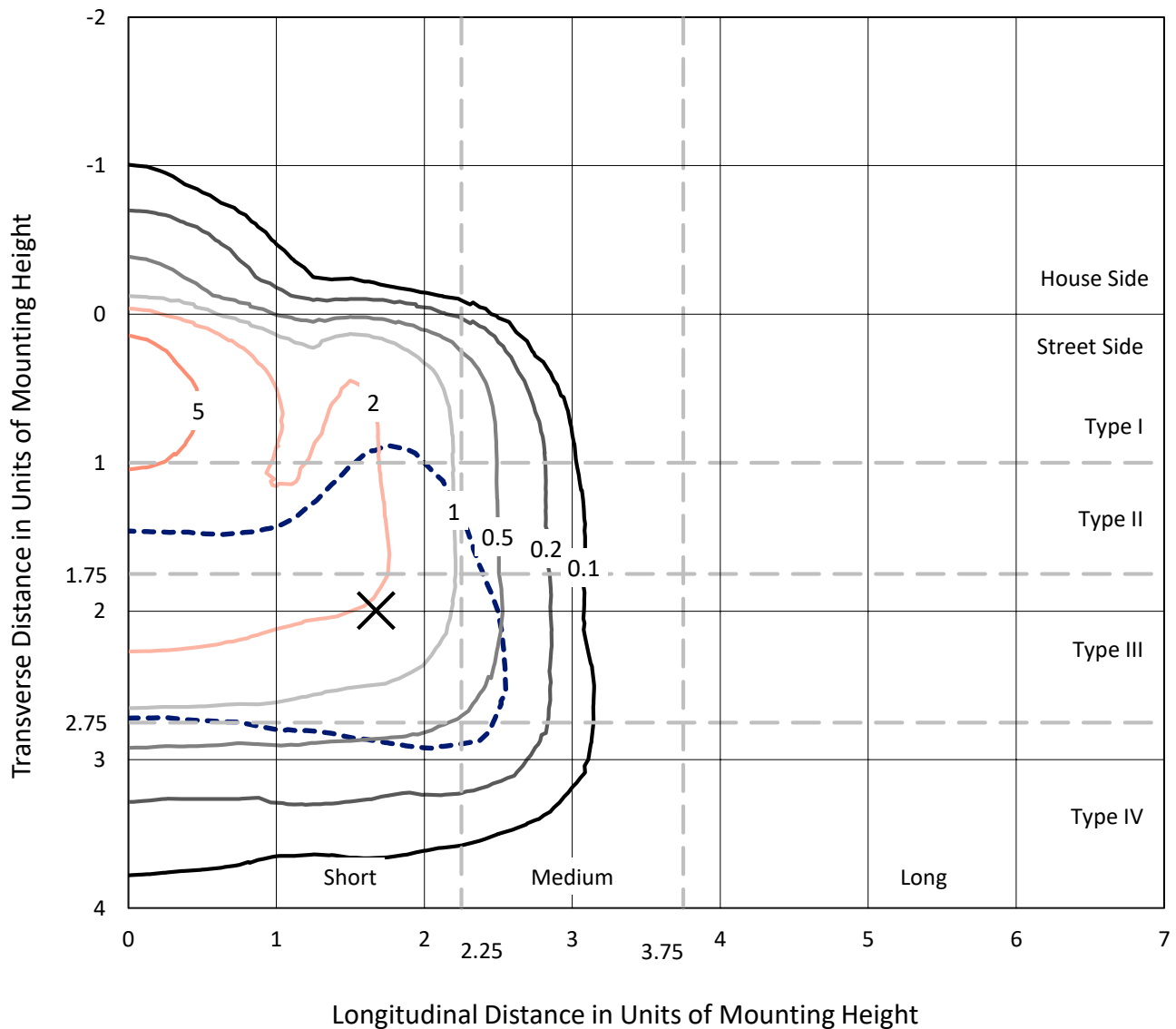


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

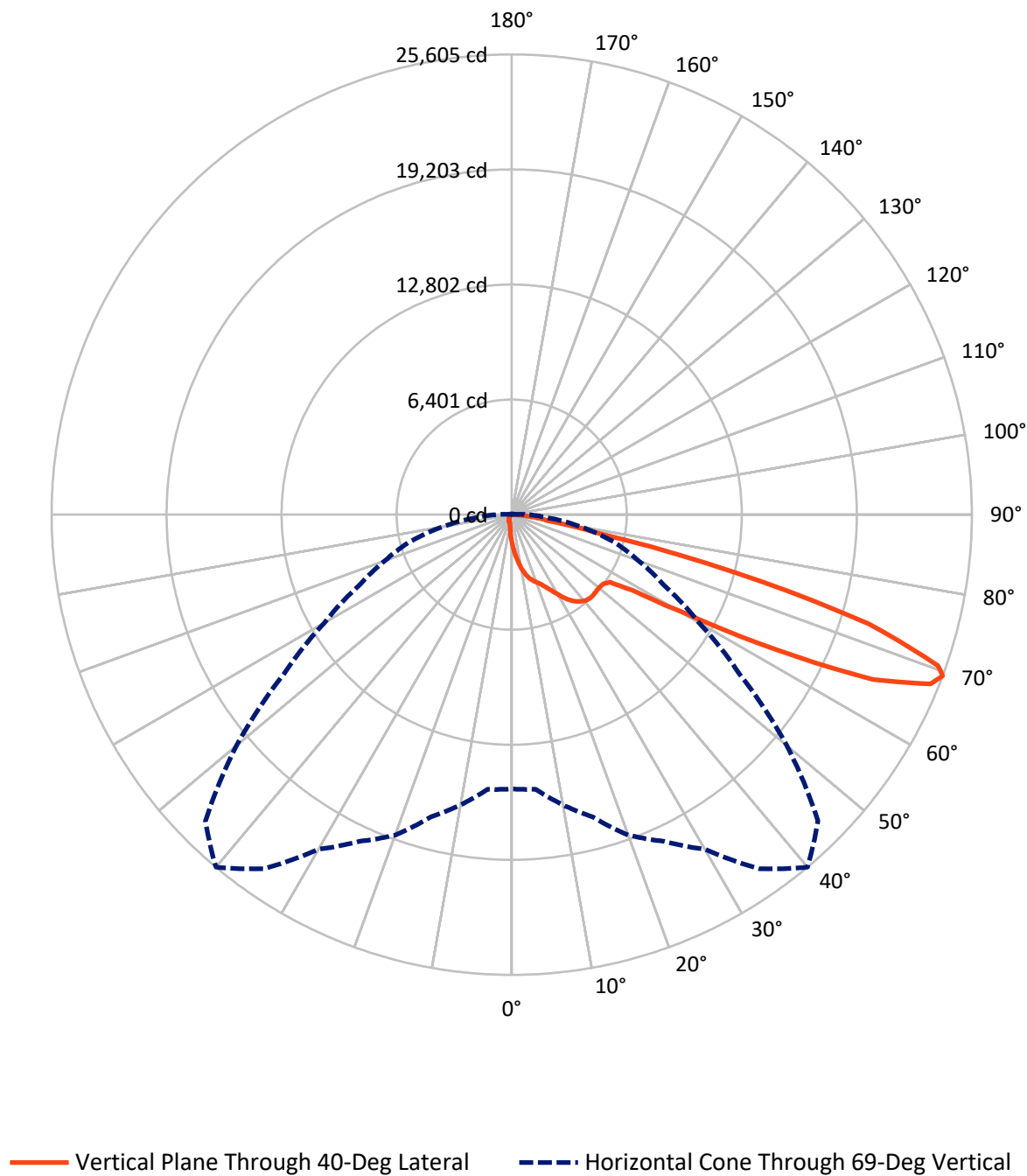


Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	601.5	0.0	601.5
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	19597.6	0.0	19597.6
	% Fixture	97.0	0.0	97.0
Total	Lumens	20199.1	0.0	20199.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.8	0.8
10°-20°	540.6	2.7
20°-30°	1034.6	5.1
30°-40°	1720.6	8.5
40°-50°	2328.3	11.5
50°-60°	3641.2	18.0
60°-70°	7486.1	37.1
70°-80°	3012.3	14.9
80°-90°	278.6	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°	20199.1	100.0
0°-180°	20199.1	100.0

Coefficient of Utilization



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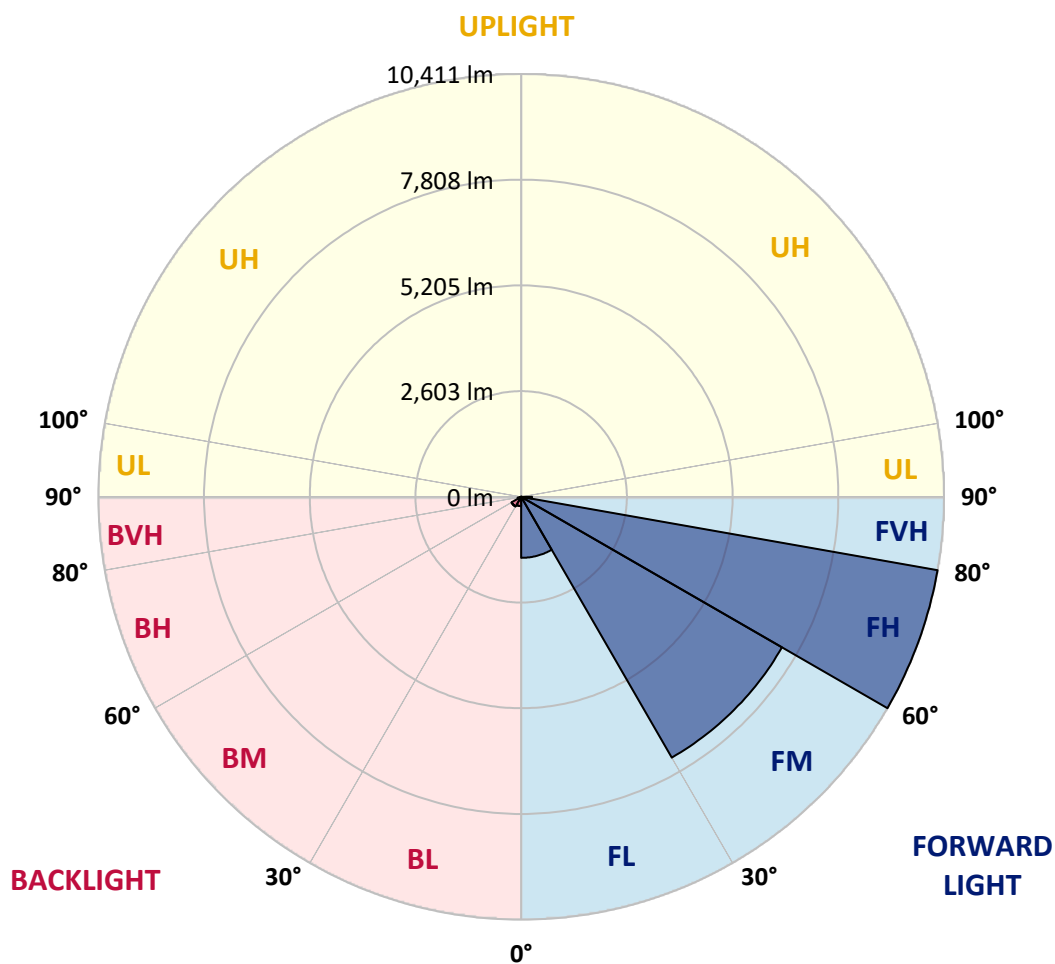
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1503.2	7.4			
FM	(30°-60°)	7415.4	36.7			
FH	(60°-80°)	10410.7	51.5			G4/12000
FVH	(80°-90°)	268.3	1.3			G3/500
BL	(0°-30°)	228.8	1.1	B1/500		
BM	(30°-60°)	274.6	1.4	B1/1000		
BH	(60°-80°)	87.7	0.4	B0/110		G0/110
BVH	(80°-90°)	10.4	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°	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5
2.5°	2035.1	2011.8	1985.3	1985.3	1952.3	1952.3	1932.4	1879.6	1872.9	1843.0	1813.3
5°	2597.5	2577.6	2544.7	2514.7	2488.4	2442.0	2408.8	2345.9	2276.6	2210.3	2150.8
7.5°	3146.9	3136.8	3077.4	3067.3	3024.3	2948.3	2882.0	2789.4	2670.3	2577.6	2468.5
10°	3656.5	3633.1	3619.9	3563.6	3500.9	3418.1	3315.5	3203.1	3064.1	2918.4	2762.9
12.5°	4060.1	4046.9	3987.2	3964.1	3898.0	3815.2	3686.2	3540.5	3401.7	3213.0	3030.9
15°	4361.1	4338.0	4298.2	4261.9	4182.5	4109.8	3990.6	3831.7	3663.1	3457.9	3239.5
17.5°	4612.7	4569.7	4559.7	4503.4	4420.8	4334.6	4202.4	4056.7	3858.2	3653.0	3414.7
20°	4950.1	4890.6	4870.7	4787.9	4692.1	4572.9	4420.8	4238.8	4030.2	3805.3	3560.4
22.5°	5347.1	5304.1	5261.1	5188.4	5066.0	4897.2	4675.6	4477.1	4212.2	3964.1	3699.5
25°	5909.8	5873.4	5803.9	5704.6	5552.3	5350.6	5082.5	4791.3	4480.3	4162.6	3851.6
27.5°	6455.7	6422.6	6372.9	6297.0	6124.8	5903.1	5572.2	5201.7	4807.8	4424.0	4079.8
30°	6968.7	6938.8	6889.1	6813.2	6660.9	6442.4	6068.5	5671.4	5181.8	4735.1	4321.6
32.5°	7521.3	7511.2	7455.0	7345.9	7213.4	6919.1	6512.0	6085.2	5588.9	5072.7	4589.4
35°	8146.6	8070.4	8017.6	7908.3	7683.4	7369.0	6892.5	6426.0	5903.1	5373.7	4834.3
37.5°	8676.1	8603.3	8537.0	8398.2	8123.5	7723.0	7183.7	6670.7	6131.4	5592.1	5042.7
40°	9063.1	9026.7	8947.3	8765.3	8457.6	7981.2	7398.7	6839.5	6297.0	5754.2	5211.5
42.5°	9351.0	9294.7	9205.5	9016.9	8653.0	8110.2	7484.7	6909.0	6372.9	5853.5	5320.8
45°	9456.9	9410.7	9327.9	9122.7	8728.9	8146.6	7481.5	6889.1	6376.3	5883.2	5393.6
47.5°	9394.0	9347.8	9274.9	9083.0	8696.0	8103.6	7422.0	6832.9	6343.2	5893.3	5459.7
50°	9185.6	9159.1	9102.9	8940.7	8593.3	8020.8	7369.0	6803.1	6336.6	5942.9	5552.3
52.5°	9165.7	9149.3	9079.7	8917.6	8563.5	7994.3	7362.3	6819.8	6392.8	6005.8	5618.6
55°	11200.6	10965.7	10439.7	9993.0	9258.4	8384.9	7696.5	7087.7	6631.1	6254.0	5982.5
57.5°	15919.2	15568.6	14877.0	14026.6	12338.9	10681.2	9354.4	8394.7	7921.5	7749.5	7852.0
60°	18129.5	18066.9	17957.5	17553.9	16690.2	15264.2	13675.8	11958.6	11270.2	11210.7	11419.1
62.5°	19178.6	19138.9	19172.0	19122.4	18854.3	18437.4	17980.7	17239.6	16557.8	16117.8	15184.6
65°	19661.7	19688.2	19876.7	20025.6	20058.7	20167.9	20502.2	21425.3	22100.3	20965.4	18374.5
67.5°	18434.0	18589.5	19023.1	19565.6	20201.0	20816.5	21809.1	23754.8	25141.2	23807.8	20128.3
69°	15260.8	15336.9	16395.7	17418.2	18970.1	20055.5	21494.8	24045.9	25604.6	24099.0	19989.2
70°	12014.6	12084.2	13219.2	14608.9	17233.0	18629.3	20512.1	23553.0	25171.0	23711.8	19274.5
72.5°	5420.1	5320.8	5721.1	6465.6	9317.9	11535.0	14827.3	19082.6	20766.8	18996.6	14420.2
75°	3785.5	3742.5	3785.5	3788.7	4232.1	5459.7	6889.1	10343.6	12792.3	11038.7	6889.1
77.5°	2931.7	2901.9	2872.2	2839.0	2892.1	3239.5	3378.4	3669.5	4764.8	4506.8	2627.3
80°	2319.6	2293.1	2365.8	2342.7	2342.7	2382.5	2356.0	2246.7	2041.5	1892.6	1694.1
82.5°	1078.6	1085.3	1085.3	1177.9	1419.6	1657.7	1733.9	1624.8	1442.7	1227.5	989.4
85°	102.5	115.7	195.3	301.2	599.0	674.9	678.4	562.4	562.4	443.5	357.3
87.5°	0.0	3.2	3.2	3.2	29.7	82.8	69.5	19.9	9.8	9.8	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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5
2.5°	1760.4	1750.4	1710.8	1671.0	1634.6	1594.8	1558.5	1522.1	1482.3	1452.6	1416.2
5°	2058.2	1985.3	1902.7	1823.3	1743.7	1661.1	1575.1	1499.0	1419.6	1346.7	1277.2
7.5°	2359.2	2216.9	2104.4	1962.2	1833.1	1704.1	1585.0	1462.6	1350.1	1244.2	1144.9
10°	2614.0	2442.0	2266.6	2084.7	1899.3	1727.3	1561.9	1416.2	1267.3	1138.3	1015.9
12.5°	2822.6	2604.1	2389.1	2160.7	1952.3	1733.9	1528.7	1353.3	1177.9	1032.4	906.6
15°	3011.0	2759.7	2501.5	2236.8	1972.2	1724.0	1495.6	1277.2	1098.5	933.2	790.9
17.5°	3163.4	2875.4	2584.3	2286.5	2001.9	1710.8	1452.6	1224.3	1015.9	843.7	704.9
20°	3295.8	2994.6	2680.3	2345.9	2021.8	1707.4	1416.2	1158.2	943.0	761.1	625.3
22.5°	3418.1	3116.9	2779.6	2422.1	2051.6	1704.1	1383.0	1108.6	880.1	698.3	562.4
25°	3557.2	3239.5	2885.5	2501.5	2104.4	1717.4	1363.4	1068.8	823.8	638.6	512.8
27.5°	3712.7	3378.4	3011.0	2600.7	2173.9	1743.7	1356.7	1025.8	774.2	582.3	473.2
30°	3930.9	3543.9	3136.8	2700.0	2236.8	1773.7	1350.1	999.3	724.6	539.3	433.4
32.5°	4123.0	3706.1	3275.9	2802.7	2306.4	1803.4	1346.7	962.9	678.4	496.3	403.7
35°	4324.8	3855.0	3395.0	2901.9	2365.8	1836.4	1343.5	936.4	635.4	453.3	373.9
37.5°	4500.2	3980.6	3487.7	2987.9	2432.1	1866.3	1346.7	913.3	595.6	416.9	347.4
40°	4649.1	4109.8	3590.1	3067.3	2501.5	1912.5	1350.1	890.2	556.0	383.8	324.3
42.5°	4781.5	4232.1	3699.5	3156.7	2581.0	1965.6	1370.0	870.3	522.8	354.1	301.2
45°	4884.0	4344.7	3818.4	3282.5	2710.0	2051.6	1406.4	857.0	489.7	327.5	281.3
47.5°	4989.9	4510.0	4020.3	3481.0	2898.7	2187.2	1469.3	853.8	463.2	307.6	264.6
50°	5135.5	4675.6	4199.0	3682.8	3070.7	2326.2	1545.2	857.0	430.2	287.9	248.2
52.5°	5241.4	4844.2	4430.7	4033.6	3481.0	2749.6	1839.8	916.5	413.5	271.3	228.3
55°	5866.8	5797.2	5807.1	5873.4	5446.6	4678.8	3077.4	1323.6	486.5	307.6	225.0
57.5°	8272.4	8517.1	8659.4	8656.2	7951.3	6594.8	4132.9	1700.7	542.7	357.3	268.1
60°	11435.7	11250.5	10989.0	10343.6	9407.3	7527.9	4622.6	1829.9	469.8	284.5	244.9
62.5°	14231.8	13146.3	12183.4	11137.9	9910.2	7852.0	4721.8	1819.9	410.3	215.0	172.0
65°	15975.5	14023.2	12468.1	11157.6	9711.7	7580.8	4467.0	1671.0	347.4	175.4	142.3
67.5°	16392.4	13550.0	11349.7	9678.5	8113.4	5899.9	3279.1	1257.5	271.3	145.7	125.8
69°	15482.4	12044.6	9404.1	7508.0	5903.1	3914.5	2028.5	794.1	208.4	132.4	115.7
70°	14241.6	10476.1	7660.1	6025.5	4371.2	2749.6	1419.6	559.2	168.8	122.4	105.9
72.5°	9162.5	5502.7	3765.6	2620.6	1803.4	1095.3	556.0	251.6	129.0	102.5	86.0
75°	3553.8	2035.1	1475.9	1121.6	876.9	608.8	337.6	162.2	109.1	86.0	66.1
77.5°	1750.4	1340.0	1095.3	751.1	436.8	271.3	182.0	125.8	89.4	62.9	43.0
80°	1383.0	919.9	549.4	340.8	258.0	195.3	139.0	102.5	66.1	39.8	29.7
82.5°	708.1	387.2	284.5	231.7	191.9	152.3	112.5	72.7	43.0	26.5	23.1
85°	221.6	162.2	145.7	142.3	132.4	109.1	79.4	46.4	26.5	16.5	16.5
87.5°	16.5	23.1	29.7	23.1	26.5	23.1	29.7	19.9	13.3	13.3	9.8
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5	1525.5
2.5°	1389.7	1350.1	1313.7	1290.4	1247.4	1230.9	1214.5	1207.8	1177.9	1184.5	1158.2
5°	1214.5	1144.9	1091.9	1039.0	989.4	953.0	923.1	886.7	857.0	843.7	817.2
7.5°	1055.5	966.3	896.8	840.5	780.8	734.6	694.8	668.3	642.0	615.5	602.2
10°	916.5	820.6	741.3	685.0	628.7	588.9	559.2	539.3	522.8	512.8	509.6
12.5°	787.5	694.8	622.1	572.5	529.5	509.6	496.3	486.5	483.1	479.8	479.8
15°	688.2	595.6	539.3	502.9	483.1	473.2	469.8	463.2	456.7	453.3	453.3
17.5°	595.6	526.1	486.5	466.6	456.7	450.1	443.5	436.8	430.2	426.8	426.8
20°	532.7	476.4	456.7	443.5	433.4	426.8	416.9	410.3	407.1	403.7	400.5
22.5°	483.1	446.7	433.4	423.6	410.3	400.5	393.8	387.2	380.6	377.2	373.9
25°	446.7	423.6	413.5	400.5	387.2	377.2	367.3	357.3	350.8	347.4	340.8
27.5°	420.2	403.7	390.4	373.9	360.7	350.8	340.8	330.9	324.3	317.7	314.3
30°	397.1	380.6	363.9	350.8	334.2	324.3	311.1	301.2	297.8	291.2	284.5
32.5°	373.9	357.3	340.8	324.3	307.6	294.6	287.9	274.7	268.1	264.6	258.0
35°	347.4	330.9	311.1	297.8	281.3	268.1	258.0	248.2	241.5	234.9	231.7
37.5°	324.3	304.4	284.5	268.1	254.8	241.5	231.7	221.6	215.0	208.4	205.2
40°	297.8	277.9	258.0	241.5	228.3	218.4	208.4	198.5	191.9	188.7	188.7
42.5°	274.7	251.6	231.7	218.4	208.4	195.3	185.3	175.4	172.0	168.8	172.0
45°	251.6	228.3	211.8	198.5	188.7	175.4	165.4	158.7	155.5	158.7	162.2
47.5°	231.7	208.4	191.9	182.0	172.0	162.2	152.3	145.7	145.7	152.3	158.7
50°	211.8	188.7	175.4	168.8	158.7	148.9	135.6	132.4	135.6	142.3	148.9
52.5°	191.9	165.4	155.5	152.3	142.3	132.4	122.4	119.2	122.4	129.0	125.8
55°	172.0	145.7	142.3	139.0	129.0	115.7	105.9	105.9	105.9	102.5	96.0
57.5°	165.4	129.0	125.8	122.4	112.5	99.3	92.6	86.0	82.8	72.7	69.5
60°	172.0	115.7	115.7	109.1	99.3	86.0	76.2	66.1	59.5	52.8	52.8
62.5°	139.0	105.9	102.5	96.0	82.8	69.5	59.5	49.6	46.4	43.0	43.0
65°	112.5	96.0	89.4	79.4	69.5	56.3	46.4	39.8	36.4	36.4	39.8
67.5°	102.5	86.0	76.2	66.1	56.3	43.0	36.4	33.2	33.2	36.4	36.4
69°	96.0	79.4	69.5	59.5	49.6	39.8	33.2	33.2	33.2	33.2	36.4
70°	89.4	76.2	66.1	56.3	43.0	33.2	29.7	29.7	33.2	33.2	36.4
72.5°	69.5	59.5	56.3	46.4	33.2	29.7	26.5	29.7	29.7	33.2	33.2
75°	52.8	43.0	43.0	36.4	26.5	23.1	23.1	26.5	26.5	29.7	29.7
77.5°	36.4	29.7	29.7	26.5	23.1	19.9	19.9	23.1	26.5	26.5	29.7
80°	26.5	23.1	19.9	23.1	19.9	16.5	19.9	23.1	23.1	26.5	26.5
82.5°	19.9	19.9	19.9	19.9	16.5	16.5	19.9	19.9	23.1	26.5	26.5
85°	16.5	16.5	16.5	16.5	16.5	16.5	16.5	19.9	19.9	23.1	23.1
87.5°	9.8	9.8	9.8	13.3	13.3	16.5	16.5	16.5	16.5	19.9	19.9
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°	1525.5	1525.5	1525.5	1525.5
2.5°	1151.6	1148.2	1134.9	1138.3
5°	807.4	787.5	800.7	797.5
7.5°	592.4	588.9	585.7	592.4
10°	506.4	506.4	502.9	506.4
12.5°	476.4	476.4	476.4	476.4
15°	453.3	453.3	450.1	450.1
17.5°	426.8	426.8	426.8	423.6
20°	400.5	397.1	397.1	397.1
22.5°	370.5	367.3	367.3	367.3
25°	340.8	337.6	337.6	337.6
27.5°	311.1	307.6	304.4	304.4
30°	281.3	277.9	274.7	274.7
32.5°	251.6	248.2	244.9	244.9
35°	225.0	225.0	221.6	218.4
37.5°	201.9	201.9	201.9	201.9
40°	185.3	188.7	188.7	188.7
42.5°	175.4	178.6	182.0	185.3
45°	168.8	175.4	178.6	178.6
47.5°	165.4	168.8	172.0	172.0
50°	152.3	148.9	148.9	148.9
52.5°	122.4	115.7	112.5	109.1
55°	89.4	86.0	79.4	79.4
57.5°	62.9	62.9	59.5	59.5
60°	49.6	49.6	46.4	49.6
62.5°	43.0	43.0	43.0	43.0
65°	39.8	39.8	39.8	39.8
67.5°	39.8	39.8	39.8	39.8
69°	36.4	36.4	36.4	36.4
70°	36.4	36.4	36.4	36.4
72.5°	33.2	33.2	33.2	33.2
75°	29.7	33.2	33.2	33.2
77.5°	29.7	29.7	29.7	29.7
80°	26.5	26.5	29.7	29.7
82.5°	26.5	26.5	26.5	26.5
85°	23.1	23.1	26.5	26.5
87.5°	19.9	19.9	23.1	23.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)