

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: P165267

Luminaire Tested: **VST-E05-LED-E-U-SL3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165267
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33727)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E05-LED-E-U-SL3-HSS
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (105) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8565.5 lumens
Efficiency: N/A
Efficacy: 67.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G2

Input Watts (W): 127.3
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

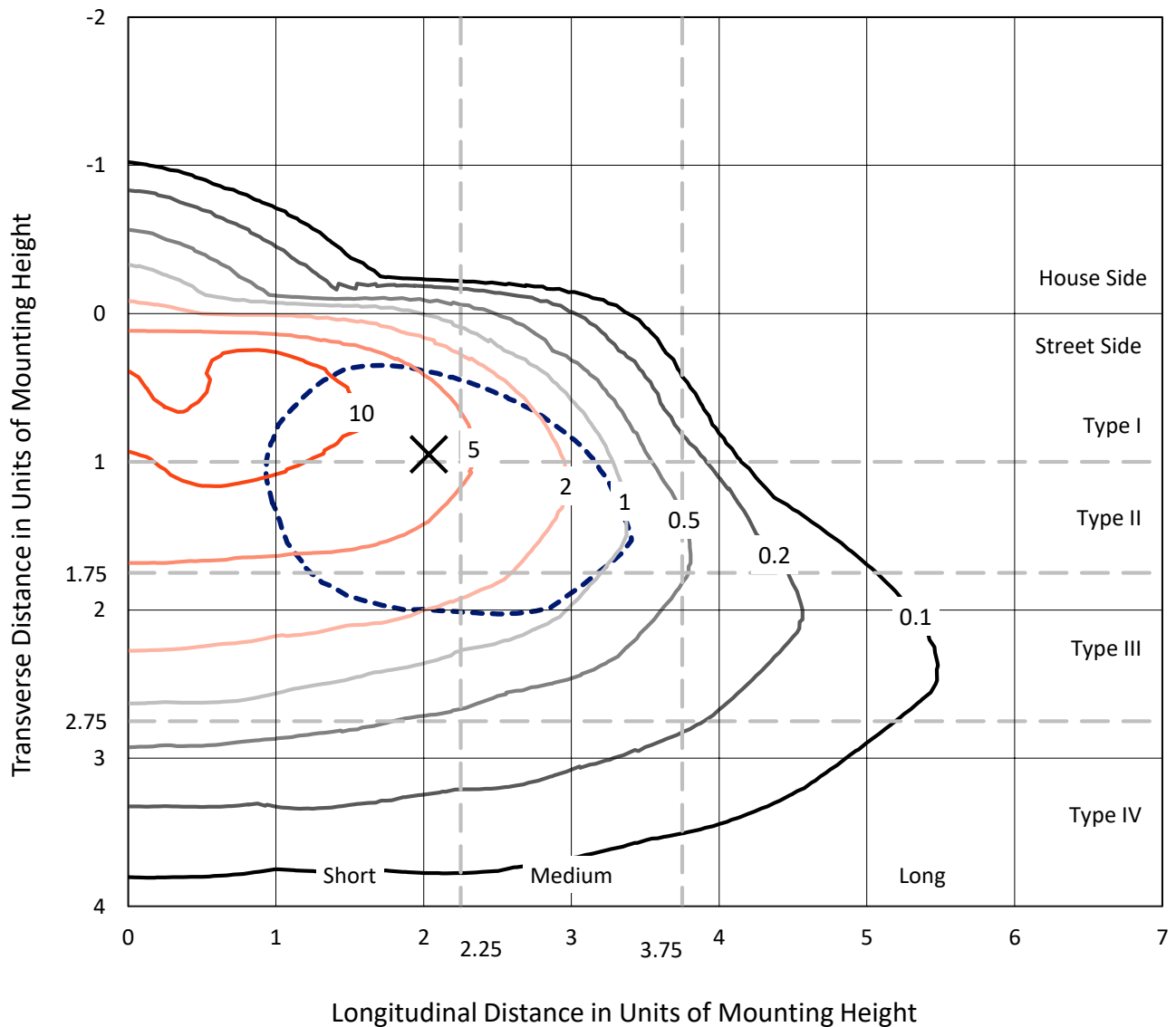


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

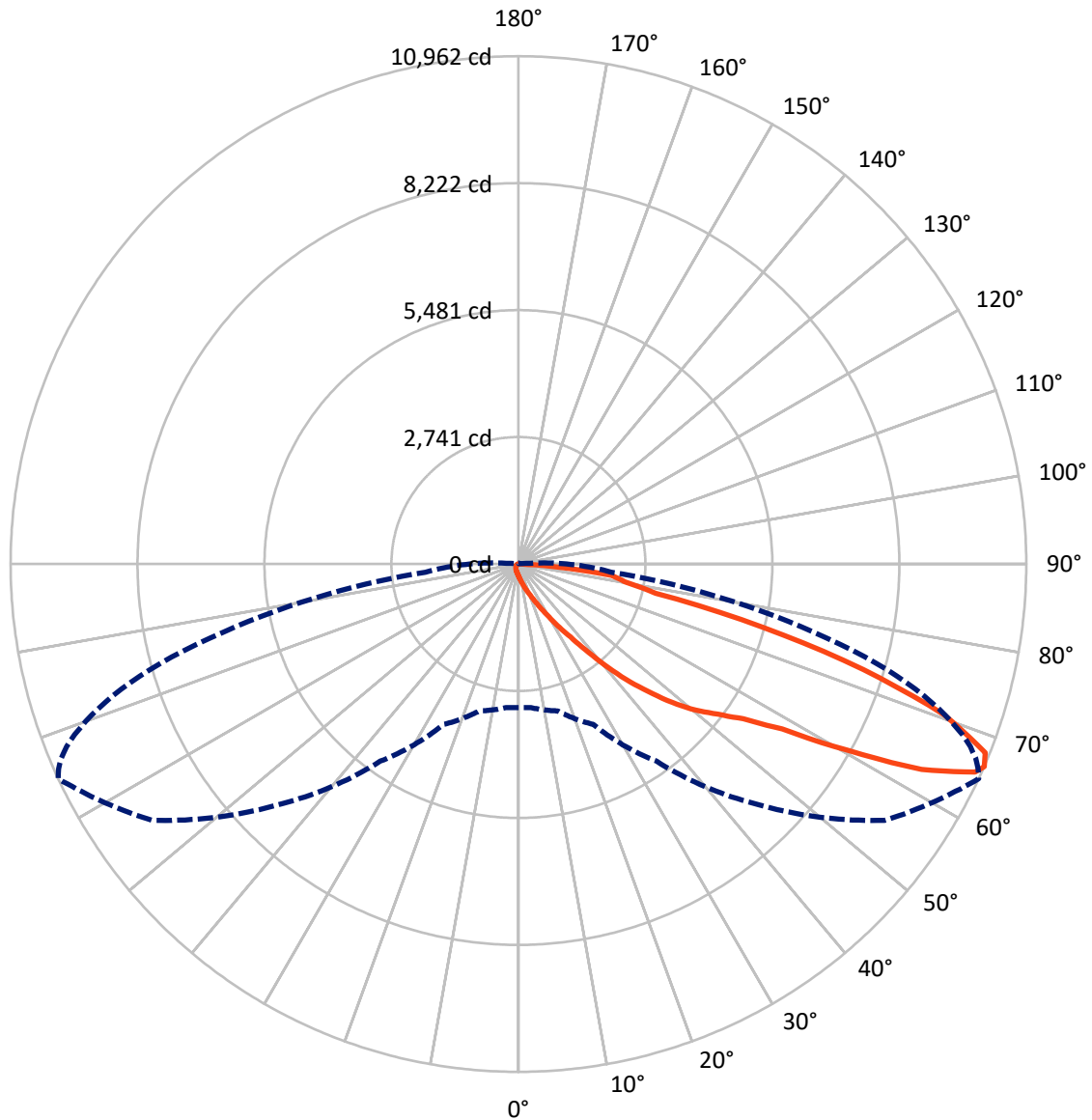


Based on 10 foot mounting height. Maximum calculated value = 14.1 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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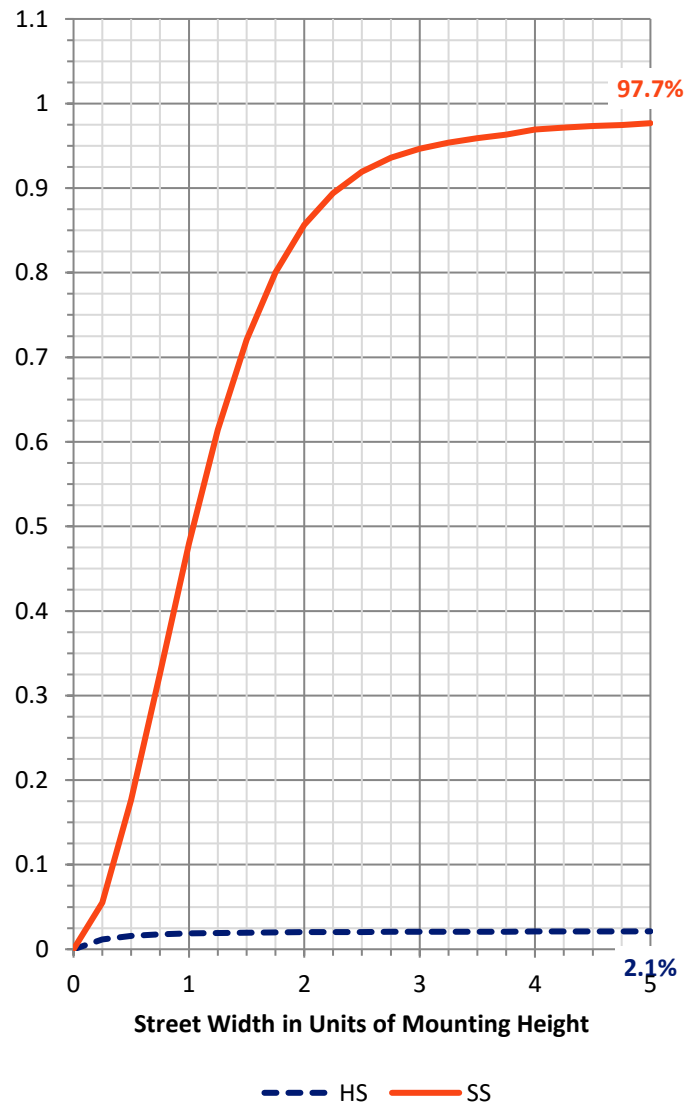
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	185.6	0.0	185.6
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	8379.9	0.0	8379.9
	% Fixture	97.8	0.0	97.8
Total	Lumens	8565.5	0.0	8565.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.9	0.3
10°-20°	122.7	1.4
20°-30°	264.7	3.1
30°-40°	565.2	6.6
40°-50°	1250.0	14.6
50°-60°	2118.4	24.7
60°-70°	2826.8	33.0
70°-80°	1245.2	14.5
80°-90°	143.4	1.7
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°	8565.5	100.0
0°-180°	8565.5	100.0

Coefficient of Utilization



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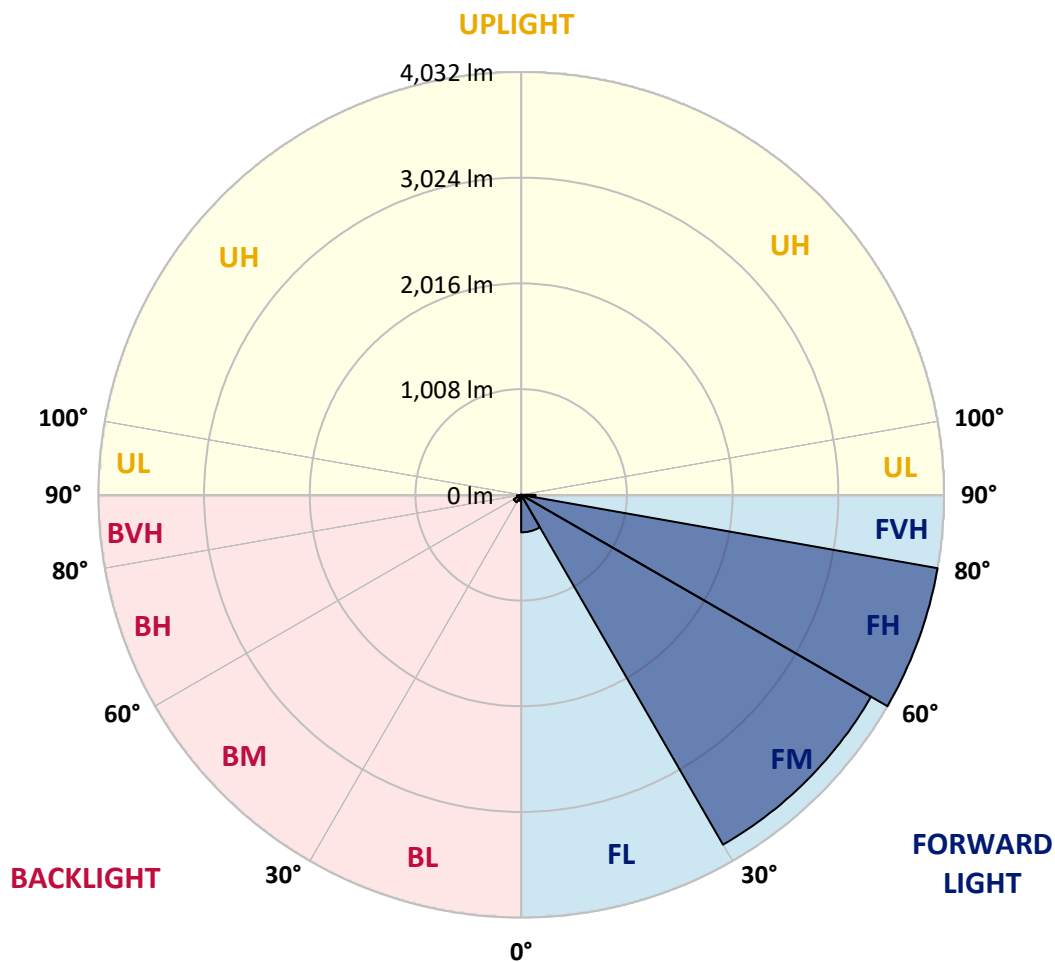
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	357.8	4.2			
FM	(30°-60°)	3852.2	45.0			
FH	(60°-80°)	4032.2	47.1			G2/5000
FVH	(80°-90°)	137.7	1.6			G2/225
BL	(0°-30°)	58.6	0.7	B0/110		
BM	(30°-60°)	81.5	1.0	B0/220		
BH	(60°-80°)	39.8	0.5	B0/110		G0/110
BVH	(80°-90°)	5.7	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5
2.5°	326.1	324.4	317.8	317.8	307.9	301.4	293.1	284.9	284.9	283.2	281.6
5°	431.4	421.6	419.9	401.8	387.0	365.6	345.8	319.5	316.2	312.9	311.2
7.5°	548.4	546.7	531.9	510.5	480.9	441.3	401.8	359.0	352.4	349.1	342.5
10°	699.9	691.6	671.9	635.6	591.2	538.5	474.3	406.7	398.5	391.9	388.6
12.5°	844.8	830.0	818.4	772.3	716.3	638.9	561.5	464.4	457.8	449.6	436.4
15°	979.8	966.6	946.9	907.4	844.8	747.6	657.1	538.5	522.0	510.5	500.6
17.5°	1085.2	1077.0	1053.9	1009.5	941.9	856.3	747.6	614.2	601.1	586.2	568.1
20°	1185.7	1174.1	1137.9	1077.0	1004.5	938.6	854.7	713.0	694.9	676.8	657.1
22.5°	1281.2	1269.6	1210.4	1109.9	1032.5	1004.5	974.9	825.0	797.0	782.2	762.4
25°	1414.6	1389.9	1297.6	1137.9	1034.2	1055.6	1106.6	969.9	943.6	922.2	890.9
27.5°	1594.1	1561.1	1416.2	1179.1	1040.7	1111.6	1258.1	1146.1	1118.1	1093.4	1058.9
30°	1796.6	1775.2	1602.3	1277.9	1088.5	1193.9	1427.7	1370.1	1337.2	1307.5	1266.4
32.5°	2000.8	1971.2	1799.9	1465.6	1216.9	1353.6	1640.2	1630.3	1587.5	1559.5	1515.0
35°	2180.3	2165.5	2038.7	1773.5	1510.1	1633.6	1923.4	1934.9	1897.1	1867.4	1818.0
37.5°	2302.2	2302.2	2277.5	2104.5	1976.1	2068.3	2340.0	2341.7	2303.8	2236.3	2211.6
40°	2364.7	2382.8	2471.8	2504.7	2498.1	2616.7	2886.8	2857.1	2825.8	2791.2	2708.9
42.5°	2493.2	2509.6	2699.0	2926.3	3074.5	3230.9	3417.0	3407.1	3369.3	3306.7	3230.9
45°	2710.6	2732.0	2957.6	3318.2	3622.8	3845.2	3963.7	3917.6	3879.7	3820.5	3780.9
47.5°	2987.2	3028.4	3283.6	3729.9	4097.1	4464.3	4587.8	4466.0	4433.1	4386.9	4322.7
50°	3282.0	3321.5	3593.2	4103.7	4518.7	4956.7	5162.6	4956.7	4909.0	4894.1	4821.7
52.5°	3537.2	3570.2	3832.0	4391.9	4841.4	5355.2	5654.9	5383.2	5348.6	5299.2	5246.5
55°	3688.7	3715.1	3960.4	4530.2	5060.5	5714.2	6130.9	5892.1	5841.0	5821.3	5745.5
57.5°	3739.8	3766.1	3986.8	4548.3	5179.0	6041.9	6708.9	6717.1	6656.2	6585.4	6562.3
60°	3739.8	3769.4	3955.5	4503.9	5294.3	6391.0	7479.5	8166.2	8034.5	8021.3	7937.3
62.5°	3585.0	3613.0	3800.7	4367.2	5449.1	6862.0	8553.2	9765.2	9727.4	9641.7	9503.4
65°	3249.0	3265.5	3449.9	4018.1	5389.8	7295.1	9483.6	10829.0	10768.1	10600.1	10422.3
66°	3097.5	3110.7	3283.6	3818.8	5195.5	7354.4	9648.3	10962.4	10862.0	10720.3	10519.4
67.5°	2878.5	2901.6	3023.4	3448.3	4729.5	7148.5	9544.6	10868.6	10781.3	10610.0	10409.1
70°	1921.8	1905.3	2335.1	2646.3	3603.1	5824.6	8563.1	9758.6	9760.3	9679.6	9598.9
72.5°	912.3	922.2	1047.3	1628.6	2358.1	3891.3	6815.9	7789.1	7901.1	7756.2	7655.7
75°	655.4	670.2	746.0	996.3	1406.3	2335.1	4418.2	5447.4	5450.7	5193.8	4965.0
77.5°	191.0	199.3	279.9	614.2	1053.9	1575.9	2537.6	3028.4	2957.6	2773.1	2600.2
80°	79.0	79.0	82.3	196.0	423.2	1070.4	1775.2	2331.8	2323.6	2252.8	2150.7
82.5°	29.6	31.3	39.5	80.7	100.5	263.5	1184.0	2023.9	2018.9	1918.5	1846.0
85°	3.3	3.3	9.9	34.6	37.9	49.4	237.1	892.5	887.6	892.5	782.2
87.5°	0.0	0.0	1.6	3.3	4.9	6.6	9.9	34.6	37.9	36.2	32.9
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5
2.5°	281.6	278.3	278.3	276.7	276.7	276.7	275.0	273.4	273.4	271.7	270.1
5°	307.9	304.6	303.0	299.7	298.1	296.4	293.1	291.5	288.2	286.5	284.9
7.5°	339.2	332.6	331.0	326.1	321.1	317.8	314.5	309.6	306.3	299.7	298.1
10°	378.8	370.5	363.9	357.3	352.4	344.2	339.2	332.6	326.1	321.1	316.2
12.5°	429.8	418.3	408.4	401.8	390.3	380.4	370.5	365.6	352.4	345.8	337.6
15°	485.8	472.6	461.1	447.9	439.7	423.2	410.0	395.2	388.6	377.1	363.9
17.5°	558.2	536.8	518.7	505.6	489.1	472.6	457.8	443.0	423.2	410.0	393.6
20°	635.6	617.5	592.8	569.8	550.0	530.3	508.8	489.1	471.0	449.6	429.8
22.5°	734.5	708.1	678.5	655.4	629.1	607.7	578.0	551.7	522.0	494.0	471.0
25°	859.6	825.0	797.0	764.1	732.8	699.9	663.6	630.7	592.8	566.5	527.0
27.5°	1014.4	981.5	943.6	900.8	869.5	820.1	772.3	731.2	686.7	645.5	601.1
30°	1212.0	1164.3	1124.7	1083.6	1021.0	973.2	917.2	861.3	800.3	759.2	691.6
32.5°	1449.1	1398.1	1338.8	1279.5	1221.9	1154.4	1085.2	1016.0	948.5	872.8	803.6
35°	1739.0	1678.0	1610.5	1546.3	1457.4	1384.9	1297.6	1202.1	1126.4	1039.1	951.8
37.5°	2122.7	2022.2	1962.9	1895.4	1775.2	1676.4	1579.2	1483.7	1350.3	1258.1	1134.6
40°	2603.5	2544.2	2447.1	2338.4	2229.7	2099.6	1967.9	1841.1	1686.3	1557.8	1414.6
42.5°	3168.3	3081.1	2982.3	2825.8	2715.5	2562.3	2412.5	2244.5	2055.1	1890.5	1722.5
45°	3698.6	3594.9	3519.1	3362.7	3247.4	3066.2	2885.1	2707.3	2488.2	2275.8	2081.5
47.5°	4271.7	4186.0	4060.9	3934.1	3817.2	3613.0	3417.0	3201.3	2970.7	2718.8	2466.8
50°	4775.6	4708.1	4622.4	4469.3	4339.2	4167.9	3937.4	3701.9	3410.4	3160.1	2873.6
52.5°	5203.7	5151.0	5030.8	4922.1	4805.2	4643.8	4438.0	4212.4	3897.9	3622.8	3296.8
55°	5709.3	5671.4	5566.0	5498.5	5394.8	5240.0	5047.3	4838.2	4505.5	4205.8	3836.9
57.5°	6537.6	6508.0	6415.7	6387.7	6285.6	6150.6	5913.5	5689.5	5300.9	4928.7	4507.2
60°	7909.3	7850.1	7715.0	7645.9	7430.1	7249.0	6941.1	6633.1	6163.8	5689.5	5182.3
62.5°	9378.2	9211.9	8955.0	8734.4	8428.1	8113.5	7701.8	7230.9	6680.9	6117.7	5534.7
65°	10170.3	9887.1	9562.7	9211.9	8815.1	8352.3	7833.6	7268.8	6677.6	6083.1	5467.2
66°	10260.9	9941.4	9597.3	9207.0	8765.7	8273.3	7746.3	7153.5	6539.2	5959.6	5343.7
67.5°	10147.3	9813.0	9449.1	9016.0	8538.4	8027.9	7474.6	6858.7	6267.5	5679.6	5080.2
70°	9351.9	9019.2	8694.8	8238.7	7729.8	7216.1	6692.4	6004.1	5444.2	4904.0	4370.5
72.5°	7468.0	7242.4	6921.3	6531.0	6035.3	5432.6	4996.2	4380.4	3894.6	3370.9	2957.6
75°	4666.9	4349.1	3952.2	3454.9	3076.1	2587.0	2331.8	1864.1	1587.5	1345.4	1111.6
77.5°	2386.1	2147.4	1869.1	1589.1	1320.7	1053.9	815.1	576.4	388.6	270.1	200.9
80°	1971.2	1760.4	1529.8	1274.6	1037.5	805.3	579.7	395.2	252.0	164.7	128.4
82.5°	1628.6	1450.8	1244.9	1007.8	802.0	632.4	439.7	286.5	177.8	115.3	90.6
85°	693.3	629.1	485.8	385.3	289.8	214.1	149.9	100.5	70.8	57.6	52.7
87.5°	29.6	32.9	31.3	24.7	18.1	18.1	16.5	13.2	13.2	13.2	13.2
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5	258.5
2.5°	270.1	268.4	266.8	266.8	265.1	263.5	253.6	245.4	235.5	228.9	222.3
5°	281.6	279.9	276.7	275.0	271.7	270.1	248.7	230.5	215.7	204.2	196.0
7.5°	293.1	291.5	286.5	281.6	279.9	276.7	242.1	219.0	199.3	186.1	177.8
10°	307.9	303.0	298.1	291.5	286.5	281.6	235.5	205.8	184.4	172.9	164.7
12.5°	329.3	321.1	312.9	304.6	298.1	289.8	232.2	194.3	172.9	159.7	151.5
15°	354.1	342.5	332.6	322.8	311.2	303.0	225.6	184.4	163.0	149.9	140.0
17.5°	377.1	363.9	349.1	334.3	322.8	311.2	219.0	174.6	153.1	140.0	130.1
20°	410.0	390.3	372.2	354.1	337.6	322.8	209.1	164.7	144.9	130.1	120.2
22.5°	446.3	423.2	400.2	375.5	354.1	334.3	200.9	156.4	136.7	121.9	110.3
25°	492.4	464.4	433.1	401.8	377.1	350.8	192.7	148.2	128.4	113.6	102.1
27.5°	556.6	517.1	482.5	443.0	405.1	375.5	186.1	141.6	120.2	105.4	93.9
30°	643.9	586.2	531.9	489.1	444.6	401.8	179.5	133.4	113.6	97.2	84.0
32.5°	741.0	673.5	610.9	546.7	490.7	441.3	172.9	126.8	105.4	88.9	77.4
35°	861.3	775.6	691.6	617.5	550.0	484.1	166.3	120.2	98.8	80.7	69.2
37.5°	1034.2	927.1	816.8	721.3	634.0	546.7	161.4	113.6	90.6	72.5	60.9
40°	1271.3	1133.0	997.9	867.8	754.2	645.5	154.8	107.0	84.0	65.9	54.3
42.5°	1528.2	1360.2	1182.4	1035.8	879.4	742.7	148.2	100.5	77.4	59.3	47.8
45°	1847.7	1638.5	1422.8	1223.5	1032.5	856.3	141.6	93.9	69.2	52.7	41.2
47.5°	2196.8	1930.0	1686.3	1436.0	1208.7	997.9	133.4	88.9	62.6	46.1	36.2
50°	2555.8	2274.2	1966.2	1681.3	1411.3	1139.6	125.2	80.7	56.0	41.2	29.6
52.5°	2942.7	2610.1	2295.6	1941.5	1627.0	1325.6	116.9	74.1	51.0	36.2	24.7
55°	3435.1	3063.0	2694.1	2297.2	1918.5	1541.4	108.7	65.9	44.5	31.3	19.8
57.5°	4054.3	3613.0	3160.1	2712.2	2252.8	1824.6	102.1	57.6	37.9	26.3	16.5
60°	4638.9	4123.5	3575.1	3059.7	2540.9	2042.0	92.2	51.0	32.9	21.4	16.5
62.5°	4941.9	4354.0	3762.8	3194.7	2641.4	2119.4	82.3	42.8	28.0	18.1	14.8
65°	4867.8	4268.4	3695.3	3122.2	2580.5	2070.0	72.5	37.9	24.7	16.5	14.8
66°	4760.8	4167.9	3591.6	3046.5	2529.4	2017.3	67.5	36.2	23.1	16.5	13.2
67.5°	4526.9	3953.8	3403.8	2896.6	2389.4	1916.8	60.9	32.9	21.4	14.8	13.2
70°	3866.6	3346.2	2906.5	2455.3	2042.0	1615.5	49.4	28.0	18.1	13.2	13.2
72.5°	2559.0	2205.0	1911.9	1645.1	1375.0	1067.1	41.2	23.1	14.8	13.2	11.5
75°	965.0	872.8	749.3	673.5	587.9	515.4	32.9	14.8	11.5	11.5	11.5
77.5°	171.3	158.1	140.0	128.4	118.6	108.7	26.3	9.9	9.9	11.5	11.5
80°	115.3	107.0	97.2	88.9	82.3	74.1	18.1	8.2	9.9	9.9	11.5
82.5°	82.3	77.4	72.5	65.9	60.9	54.3	11.5	8.2	9.9	9.9	9.9
85°	49.4	46.1	42.8	39.5	34.6	32.9	8.2	8.2	8.2	9.9	9.9
87.5°	13.2	11.5	13.2	13.2	9.9	11.5	6.6	6.6	6.6	8.2	8.2
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):

	145°	155°	165°	175°	180°
0°	258.5	258.5	258.5	258.5	258.5
2.5°	219.0	219.0	215.7	220.7	220.7
5°	189.4	189.4	187.7	189.4	189.4
7.5°	172.9	171.3	171.3	171.3	172.9
10°	158.1	156.4	156.4	156.4	156.4
12.5°	144.9	143.3	141.6	143.3	143.3
15°	133.4	130.1	130.1	130.1	130.1
17.5°	123.5	120.2	118.6	118.6	118.6
20°	113.6	108.7	108.7	108.7	108.7
22.5°	103.7	98.8	98.8	98.8	98.8
25°	93.9	88.9	88.9	88.9	88.9
27.5°	85.6	80.7	80.7	80.7	80.7
30°	75.8	72.5	72.5	74.1	72.5
32.5°	69.2	64.2	64.2	65.9	65.9
35°	60.9	57.6	57.6	57.6	57.6
37.5°	52.7	49.4	49.4	49.4	49.4
40°	46.1	42.8	41.2	42.8	42.8
42.5°	39.5	36.2	34.6	34.6	34.6
45°	34.6	29.6	28.0	29.6	29.6
47.5°	28.0	24.7	24.7	26.3	26.3
50°	21.4	21.4	23.1	26.3	26.3
52.5°	19.8	19.8	23.1	26.3	26.3
55°	18.1	19.8	23.1	24.7	26.3
57.5°	16.5	19.8	23.1	24.7	24.7
60°	16.5	18.1	21.4	24.7	24.7
62.5°	14.8	16.5	19.8	23.1	23.1
65°	14.8	16.5	19.8	23.1	23.1
66°	14.8	16.5	19.8	23.1	23.1
67.5°	14.8	16.5	19.8	23.1	23.1
70°	14.8	16.5	19.8	21.4	21.4
72.5°	13.2	14.8	18.1	21.4	21.4
75°	13.2	14.8	18.1	21.4	21.4
77.5°	13.2	14.8	18.1	21.4	21.4
80°	13.2	14.8	18.1	19.8	21.4
82.5°	11.5	14.8	16.5	19.8	19.8
85°	11.5	13.2	16.5	18.1	19.8
87.5°	9.9	11.5	13.2	16.5	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)