

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: P165518

Luminaire Tested: **VST-E08-LED-E-U-SL4-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165518
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-E08-LED-E-U-SL4-HSS-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(8) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (168) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16503.8 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.33' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G4

Input Watts (W): 194.5
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

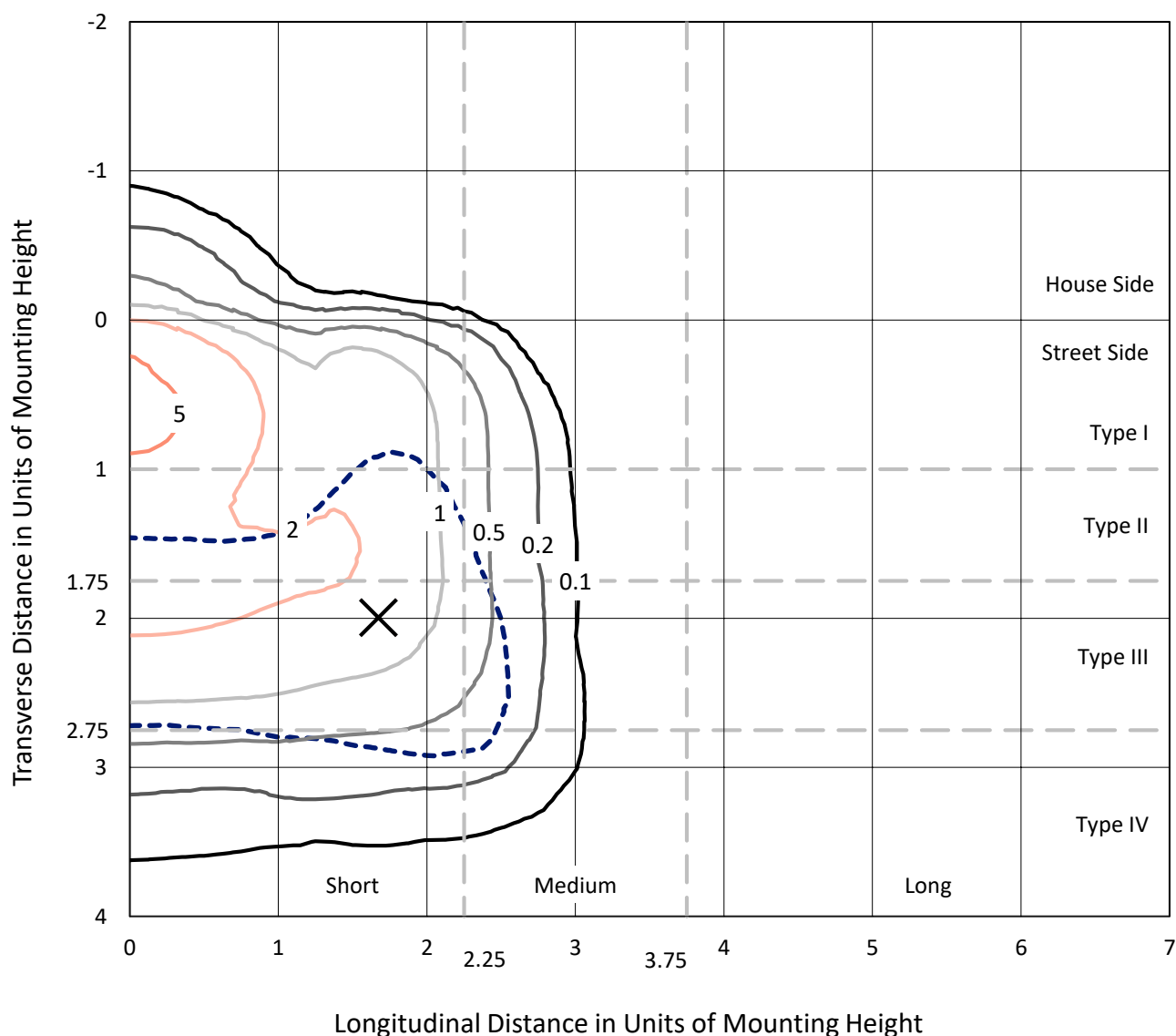


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

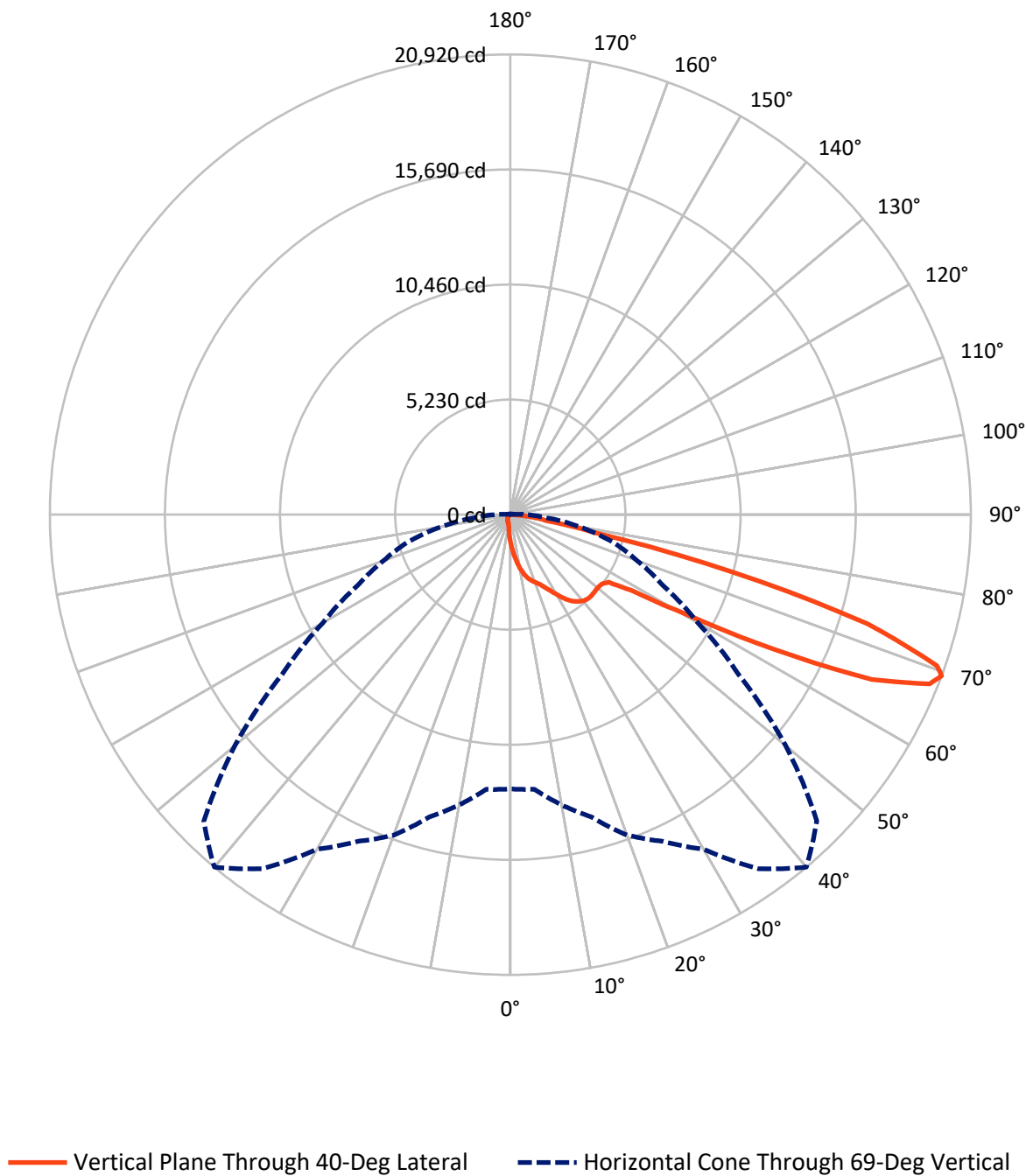


Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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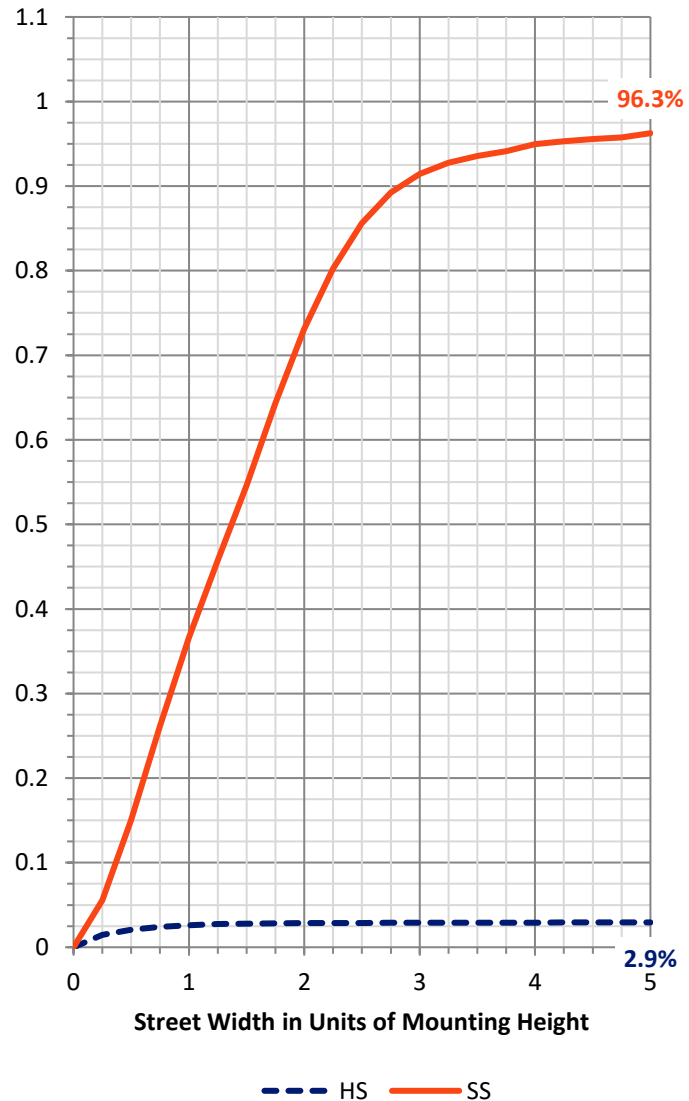
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	491.5	0.0	491.5
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	16012.3	0.0	16012.3
	% Fixture	97.0	0.0	97.0
Total	Lumens	16503.8	0.0	16503.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.1	0.8
10°-20°	441.7	2.7
20°-30°	845.3	5.1
30°-40°	1405.8	8.5
40°-50°	1902.3	11.5
50°-60°	2975.0	18.0
60°-70°	6116.6	37.1
70°-80°	2461.2	14.9
80°-90°	227.7	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°	16503.8	100.0
0°-180°	16503.8	100.0

Coefficient of Utilization



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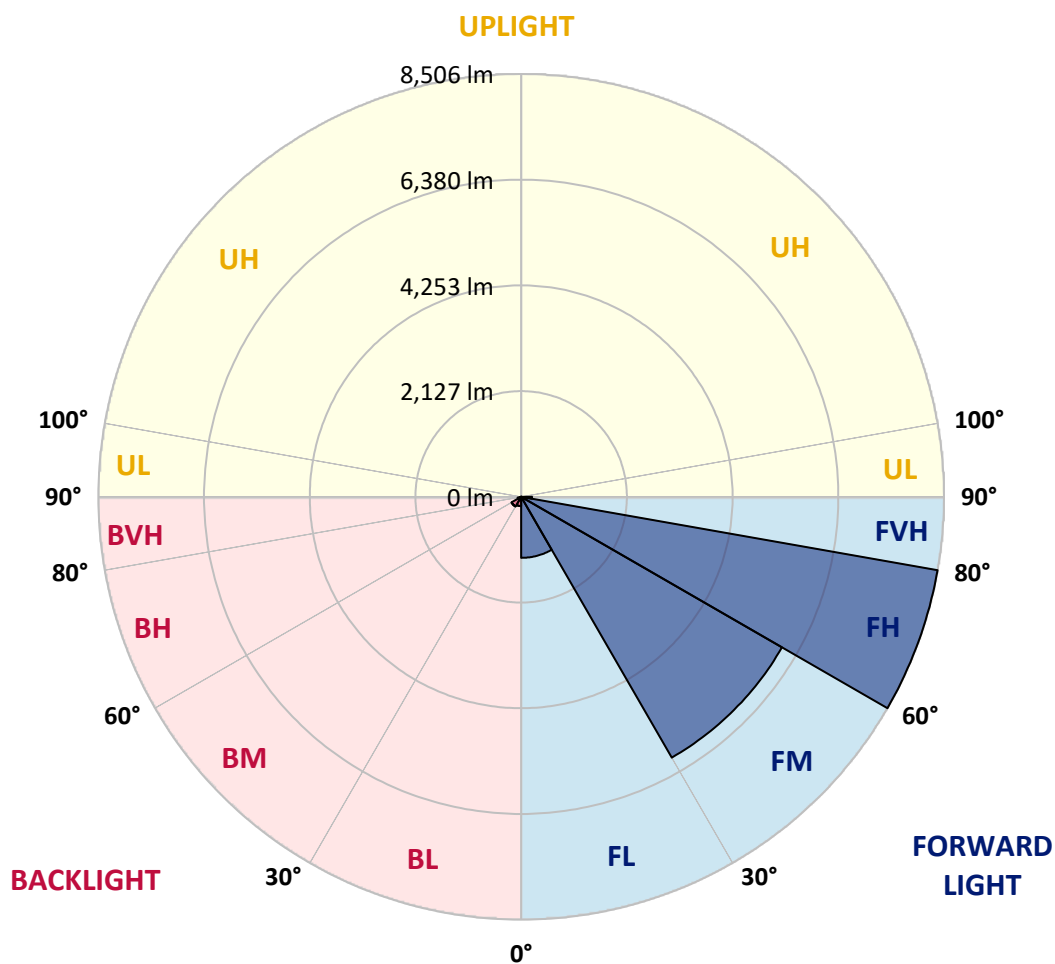
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1228.2	7.4			
FM	(30°-60°)	6058.8	36.7			
FH	(60°-80°)	8506.1	51.5			G4/12000
FVH	(80°-90°)	219.2	1.3			G2/225
BL	(0°-30°)	186.9	1.1	B1/500		
BM	(30°-60°)	224.4	1.4	B1/1000		
BH	(60°-80°)	71.7	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°	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4
2.5°	1662.8	1643.7	1622.1	1622.1	1595.1	1595.1	1578.9	1535.7	1530.3	1505.8	1481.5
5°	2122.3	2106.1	2079.1	2054.7	2033.2	1995.2	1968.2	1916.8	1860.1	1805.9	1757.3
7.5°	2571.2	2563.0	2514.4	2506.2	2471.0	2409.0	2354.8	2279.1	2181.7	2106.1	2016.9
10°	2987.5	2968.5	2957.6	2911.7	2860.5	2792.8	2708.9	2617.1	2503.5	2384.5	2257.4
12.5°	3317.4	3306.5	3257.8	3238.9	3184.9	3117.2	3011.8	2892.8	2779.4	2625.2	2476.4
15°	3563.3	3544.4	3511.9	3482.2	3417.3	3357.9	3260.6	3130.7	2992.9	2825.3	2646.9
17.5°	3768.8	3733.7	3725.5	3679.5	3612.1	3541.6	3433.6	3314.6	3152.4	2984.7	2790.0
20°	4044.5	3995.9	3979.6	3912.0	3833.7	3736.3	3612.1	3463.3	3292.9	3109.2	2909.0
22.5°	4368.9	4333.8	4298.6	4239.2	4139.2	4001.3	3820.2	3658.0	3441.6	3238.9	3022.7
25°	4828.6	4798.9	4742.1	4661.0	4536.5	4371.7	4152.7	3914.8	3660.7	3401.1	3146.9
27.5°	5274.7	5247.6	5207.0	5145.0	5004.3	4823.2	4552.8	4250.0	3928.3	3614.7	3333.4
30°	5693.8	5669.4	5628.8	5566.7	5442.3	5263.8	4958.3	4633.9	4233.8	3868.8	3531.0
32.5°	6145.3	6137.1	6091.1	6002.0	5893.8	5653.3	5320.6	4971.9	4566.4	4144.6	3749.8
35°	6656.2	6594.0	6550.8	6461.5	6277.8	6020.9	5631.6	5250.4	4823.2	4390.6	3949.9
37.5°	7088.8	7029.4	6975.2	6861.8	6637.3	6310.1	5869.5	5450.3	5009.7	4569.0	4120.2
40°	7405.0	7375.3	7310.5	7161.7	6910.4	6521.1	6045.2	5588.3	5145.0	4701.5	4258.1
42.5°	7640.3	7594.3	7521.4	7367.3	7069.9	6626.5	6115.4	5645.1	5207.0	4782.6	4347.4
45°	7726.8	7689.1	7621.4	7453.8	7132.0	6656.2	6112.8	5628.8	5209.8	4806.9	4406.8
47.5°	7675.4	7637.7	7578.1	7421.3	7105.1	6621.1	6064.2	5582.8	5182.7	4815.1	4460.8
50°	7505.2	7483.5	7437.5	7305.0	7021.2	6553.4	6020.9	5558.5	5177.3	4855.7	4536.5
52.5°	7488.9	7475.5	7418.7	7286.2	6996.9	6531.8	6015.4	5572.2	5223.3	4907.1	4590.7
55°	9151.5	8959.6	8529.8	8164.8	7564.6	6850.9	6288.5	5791.0	5418.0	5109.8	4888.0
57.5°	13006.9	12720.4	12155.3	11460.5	10081.6	8727.1	7643.1	6859.0	6472.3	6331.8	6415.5
60°	14812.9	14761.6	14672.3	14342.5	13636.9	12471.7	11173.9	9770.8	9208.4	9159.8	9330.0
62.5°	15670.0	15637.5	15664.6	15624.1	15405.0	15064.4	14691.2	14085.7	13528.7	13169.1	12406.7
65°	16064.7	16086.4	16240.4	16362.0	16389.1	16478.3	16751.5	17505.7	18057.2	17129.9	15013.0
67.5°	15061.6	15188.7	15543.0	15986.2	16505.4	17008.2	17819.3	19409.0	20541.8	19452.3	16445.9
69°	12468.9	12531.1	13396.2	14231.7	15499.6	16386.5	17562.5	19646.9	20920.4	19690.2	16332.3
70°	9816.6	9873.4	10800.9	11936.3	14080.3	15221.2	16759.5	19244.2	20566.1	19373.9	15748.3
72.5°	4428.5	4347.4	4674.4	5282.7	7613.2	9424.7	12114.8	15591.5	16967.7	15521.3	11782.2
75°	3092.9	3057.8	3092.9	3095.6	3457.9	4460.8	5628.8	8451.3	10452.0	9019.2	5628.8
77.5°	2395.3	2371.0	2346.7	2319.7	2363.0	2646.9	2760.3	2998.2	3893.1	3682.3	2146.6
80°	1895.3	1873.6	1933.0	1914.1	1914.1	1946.6	1925.0	1835.7	1668.0	1546.4	1384.2
82.5°	881.3	886.7	886.7	962.4	1159.9	1354.5	1416.7	1327.5	1178.8	1003.0	808.4
85°	83.7	94.6	159.6	246.1	489.4	551.5	554.3	459.5	459.5	362.3	291.9
87.5°	0.0	2.6	2.6	2.6	24.3	67.6	56.8	16.3	8.0	8.0	13.5
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°	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4
2.5°	1438.4	1430.1	1397.8	1365.3	1335.6	1303.1	1273.4	1243.6	1211.1	1186.8	1157.1
5°	1681.7	1622.1	1554.6	1489.7	1424.7	1357.3	1287.0	1224.8	1159.9	1100.3	1043.5
7.5°	1927.6	1811.4	1719.4	1603.2	1497.8	1392.4	1295.0	1195.0	1103.1	1016.6	935.5
10°	2135.8	1995.2	1851.9	1703.3	1551.8	1411.3	1276.1	1157.1	1035.5	930.1	830.1
12.5°	2306.2	2127.7	1952.1	1765.4	1595.1	1416.7	1249.1	1105.7	962.4	843.5	740.8
15°	2460.2	2254.8	2043.8	1827.6	1611.4	1408.6	1222.0	1043.5	897.6	762.4	646.2
17.5°	2584.6	2349.4	2111.5	1868.2	1635.7	1397.8	1186.8	1000.3	830.1	689.4	575.9
20°	2692.8	2446.7	2190.0	1916.8	1651.9	1395.0	1157.1	946.3	770.5	621.9	510.9
22.5°	2792.8	2546.7	2271.1	1979.0	1676.2	1392.4	1130.0	905.8	719.1	570.5	459.5
25°	2906.4	2646.9	2357.6	2043.8	1719.4	1403.2	1113.9	873.3	673.1	521.8	419.0
27.5°	3033.5	2760.3	2460.2	2124.9	1776.2	1424.7	1108.5	838.1	632.6	475.8	386.6
30°	3211.8	2895.6	2563.0	2206.0	1827.6	1449.2	1103.1	816.5	592.0	440.7	354.1
32.5°	3368.7	3028.1	2676.6	2289.9	1884.4	1473.5	1100.3	786.7	554.3	405.5	329.8
35°	3533.6	3149.7	2773.9	2371.0	1933.0	1500.4	1097.7	765.1	519.1	370.4	305.5
37.5°	3676.9	3252.3	2849.6	2441.3	1987.2	1524.9	1100.3	746.2	486.6	340.7	283.9
40°	3798.6	3357.9	2933.3	2506.2	2043.8	1562.6	1103.1	727.3	454.3	313.6	265.0
42.5°	3906.8	3457.9	3022.7	2579.2	2108.9	1606.0	1119.4	711.1	427.2	289.3	246.1
45°	3990.5	3549.8	3119.9	2682.0	2214.3	1676.2	1149.1	700.2	400.1	267.6	229.8
47.5°	4077.0	3684.9	3284.9	2844.2	2368.4	1787.1	1200.5	697.6	378.4	251.4	216.2
50°	4196.0	3820.2	3430.8	3009.0	2509.0	1900.7	1262.5	700.2	351.5	235.3	202.8
52.5°	4282.6	3958.0	3620.1	3295.7	2844.2	2246.6	1503.2	748.8	337.9	221.6	186.5
55°	4793.5	4736.7	4744.7	4798.9	4450.2	3822.9	2514.4	1081.4	397.5	251.4	183.9
57.5°	6759.0	6959.0	7075.2	7072.6	6496.6	5388.3	3376.8	1389.6	443.4	291.9	219.0
60°	9343.6	9192.3	8978.7	8451.3	7686.3	6150.7	3776.9	1495.2	383.8	232.5	200.1
62.5°	11628.2	10741.3	9954.5	9100.3	8097.2	6415.5	3858.0	1486.9	335.2	175.7	140.5
65°	13052.9	11457.7	10187.2	9116.4	7935.0	6193.9	3649.8	1365.3	283.9	143.3	116.2
67.5°	13393.5	11071.1	9273.4	7907.9	6629.1	4820.6	2679.2	1027.4	221.6	119.0	102.8
69°	12650.0	9841.1	7683.6	6134.5	4823.2	3198.3	1657.4	648.8	170.3	108.2	94.6
70°	11636.2	8559.5	6258.8	4923.2	3571.5	2246.6	1159.9	456.9	137.9	100.0	86.5
72.5°	7486.3	4496.0	3076.7	2141.2	1473.5	894.9	454.3	205.5	105.4	83.7	70.3
75°	2903.6	1662.8	1205.9	916.4	716.5	497.5	275.8	132.5	89.1	70.3	54.0
77.5°	1430.1	1094.9	894.9	613.7	356.9	221.6	148.7	102.8	73.1	51.4	35.1
80°	1130.0	751.6	448.9	278.4	210.8	159.6	113.6	83.7	54.0	32.5	24.3
82.5°	578.6	316.4	232.5	189.3	156.8	124.4	91.9	59.4	35.1	21.7	18.9
85°	181.1	132.5	119.0	116.2	108.2	89.1	64.8	37.9	21.7	13.5	13.5
87.5°	13.5	18.9	24.3	18.9	21.7	18.9	24.3	16.3	10.8	10.8	8.0
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°	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4	1246.4
2.5°	1135.4	1103.1	1073.4	1054.3	1019.2	1005.7	992.3	986.9	962.4	967.8	946.3
5°	992.3	935.5	892.1	849.0	808.4	778.7	754.2	724.5	700.2	689.4	667.7
7.5°	862.4	789.5	732.7	686.8	638.0	600.2	567.7	546.1	524.5	502.9	492.0
10°	748.8	670.5	605.6	559.7	513.7	481.2	456.9	440.7	427.2	419.0	416.4
12.5°	643.4	567.7	508.3	467.7	432.6	416.4	405.5	397.5	394.7	392.1	392.1
15°	562.3	486.6	440.7	410.9	394.7	386.6	383.8	378.4	373.2	370.4	370.4
17.5°	486.6	429.8	397.5	381.2	373.2	367.8	362.3	356.9	351.5	348.7	348.7
20°	435.2	389.3	373.2	362.3	354.1	348.7	340.7	335.2	332.6	329.8	327.2
22.5°	394.7	365.0	354.1	346.1	335.2	327.2	321.8	316.4	311.0	308.2	305.5
25°	365.0	346.1	337.9	327.2	316.4	308.2	300.1	291.9	286.7	283.9	278.4
27.5°	343.3	329.8	319.0	305.5	294.7	286.7	278.4	270.4	265.0	259.6	256.8
30°	324.4	311.0	297.3	286.7	273.0	265.0	254.1	246.1	243.3	237.9	232.5
32.5°	305.5	291.9	278.4	265.0	251.4	240.7	235.3	224.4	219.0	216.2	210.8
35°	283.9	270.4	254.1	243.3	229.8	219.0	210.8	202.8	197.3	191.9	189.3
37.5°	265.0	248.7	232.5	219.0	208.2	197.3	189.3	181.1	175.7	170.3	167.6
40°	243.3	227.1	210.8	197.3	186.5	178.5	170.3	162.2	156.8	154.2	154.2
42.5°	224.4	205.5	189.3	178.5	170.3	159.6	151.4	143.3	140.5	137.9	140.5
45°	205.5	186.5	173.0	162.2	154.2	143.3	135.1	129.7	127.1	129.7	132.5
47.5°	189.3	170.3	156.8	148.7	140.5	132.5	124.4	119.0	119.0	124.4	129.7
50°	173.0	154.2	143.3	137.9	129.7	121.7	110.8	108.2	110.8	116.2	121.7
52.5°	156.8	135.1	127.1	124.4	116.2	108.2	100.0	97.4	100.0	105.4	102.8
55°	140.5	119.0	116.2	113.6	105.4	94.6	86.5	86.5	86.5	83.7	78.5
57.5°	135.1	105.4	102.8	100.0	91.9	81.1	75.7	70.3	67.6	59.4	56.8
60°	140.5	94.6	94.6	89.1	81.1	70.3	62.2	54.0	48.6	43.2	43.2
62.5°	113.6	86.5	83.7	78.5	67.6	56.8	48.6	40.6	37.9	35.1	35.1
65°	91.9	78.5	73.1	64.8	56.8	46.0	37.9	32.5	29.7	29.7	32.5
67.5°	83.7	70.3	62.2	54.0	46.0	35.1	29.7	27.1	27.1	29.7	29.7
69°	78.5	64.8	56.8	48.6	40.6	32.5	27.1	27.1	27.1	27.1	29.7
70°	73.1	62.2	54.0	46.0	35.1	27.1	24.3	24.3	27.1	27.1	29.7
72.5°	56.8	48.6	46.0	37.9	27.1	24.3	21.7	24.3	24.3	27.1	27.1
75°	43.2	35.1	35.1	29.7	21.7	18.9	18.9	21.7	21.7	24.3	24.3
77.5°	29.7	24.3	24.3	21.7	18.9	16.3	16.3	18.9	21.7	21.7	24.3
80°	21.7	18.9	16.3	18.9	16.3	13.5	16.3	18.9	18.9	21.7	21.7
82.5°	16.3	16.3	16.3	16.3	13.5	13.5	16.3	16.3	18.9	21.7	21.7
85°	13.5	13.5	13.5	13.5	13.5	13.5	13.5	16.3	16.3	18.9	18.9
87.5°	8.0	8.0	8.0	10.8	10.8	13.5	13.5	13.5	13.5	16.3	16.3
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°	1246.4	1246.4	1246.4	1246.4
2.5°	940.9	938.1	927.3	930.1
5°	659.7	643.4	654.2	651.6
7.5°	484.0	481.2	478.6	484.0
10°	413.7	413.7	410.9	413.7
12.5°	389.3	389.3	389.3	389.3
15°	370.4	370.4	367.8	367.8
17.5°	348.7	348.7	348.7	346.1
20°	327.2	324.4	324.4	324.4
22.5°	302.7	300.1	300.1	300.1
25°	278.4	275.8	275.8	275.8
27.5°	254.1	251.4	248.7	248.7
30°	229.8	227.1	224.4	224.4
32.5°	205.5	202.8	200.1	200.1
35°	183.9	183.9	181.1	178.5
37.5°	165.0	165.0	165.0	165.0
40°	151.4	154.2	154.2	154.2
42.5°	143.3	146.0	148.7	151.4
45°	137.9	143.3	146.0	146.0
47.5°	135.1	137.9	140.5	140.5
50°	124.4	121.7	121.7	121.7
52.5°	100.0	94.6	91.9	89.1
55°	73.1	70.3	64.8	64.8
57.5°	51.4	51.4	48.6	48.6
60°	40.6	40.6	37.9	40.6
62.5°	35.1	35.1	35.1	35.1
65°	32.5	32.5	32.5	32.5
67.5°	32.5	32.5	32.5	32.5
69°	29.7	29.7	29.7	29.7
70°	29.7	29.7	29.7	29.7
72.5°	27.1	27.1	27.1	27.1
75°	24.3	27.1	27.1	27.1
77.5°	24.3	24.3	24.3	24.3
80°	21.7	21.7	24.3	24.3
82.5°	21.7	21.7	21.7	21.7
85°	18.9	18.9	21.7	21.7
87.5°	16.3	16.3	18.9	18.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)