

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: P165268

Luminaire Tested: **VST-E05-LED-E-U-SL3-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165268
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-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (105) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8789.1 lumens
Efficiency: N/A
Efficacy: 69.0 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

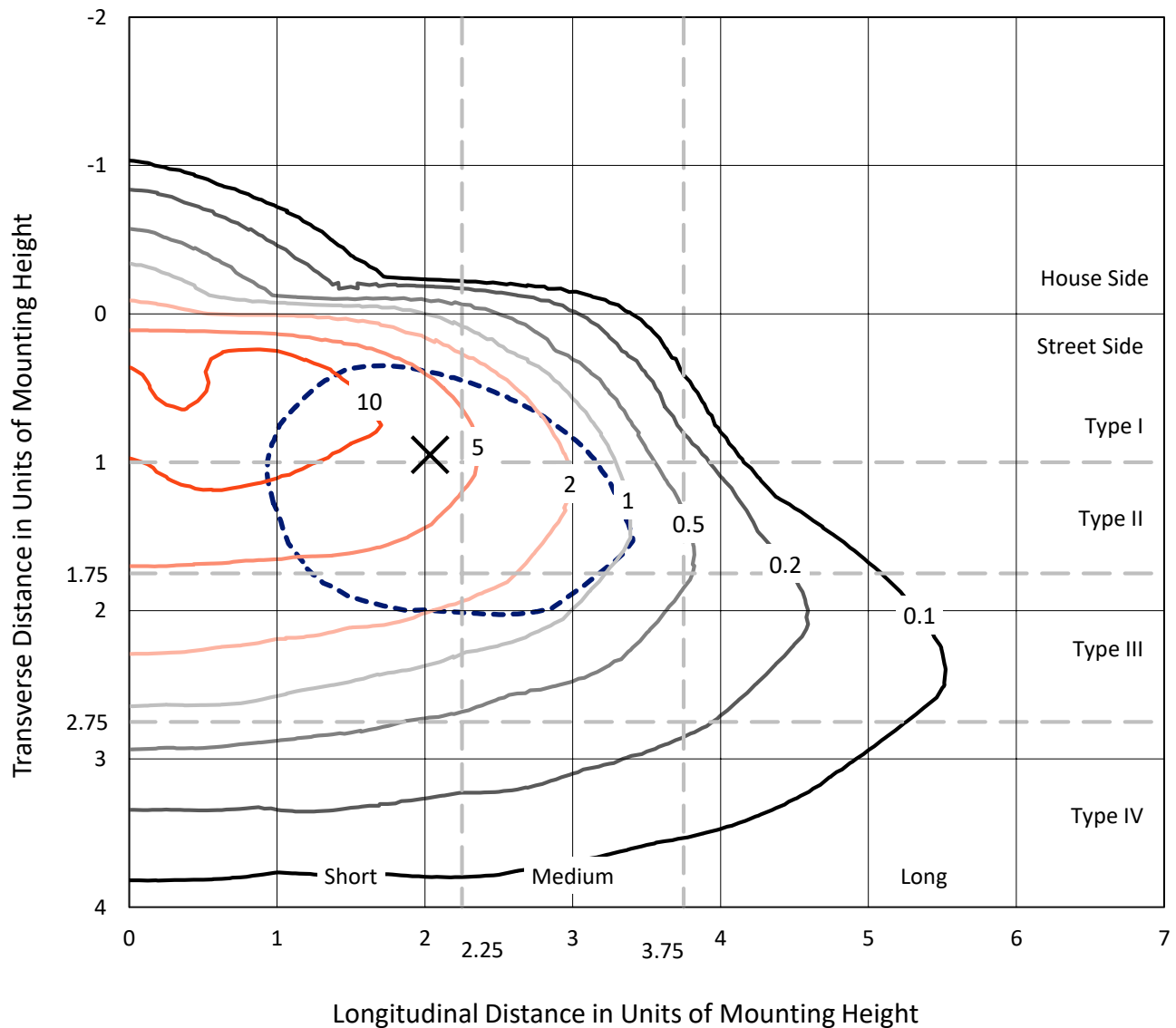


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

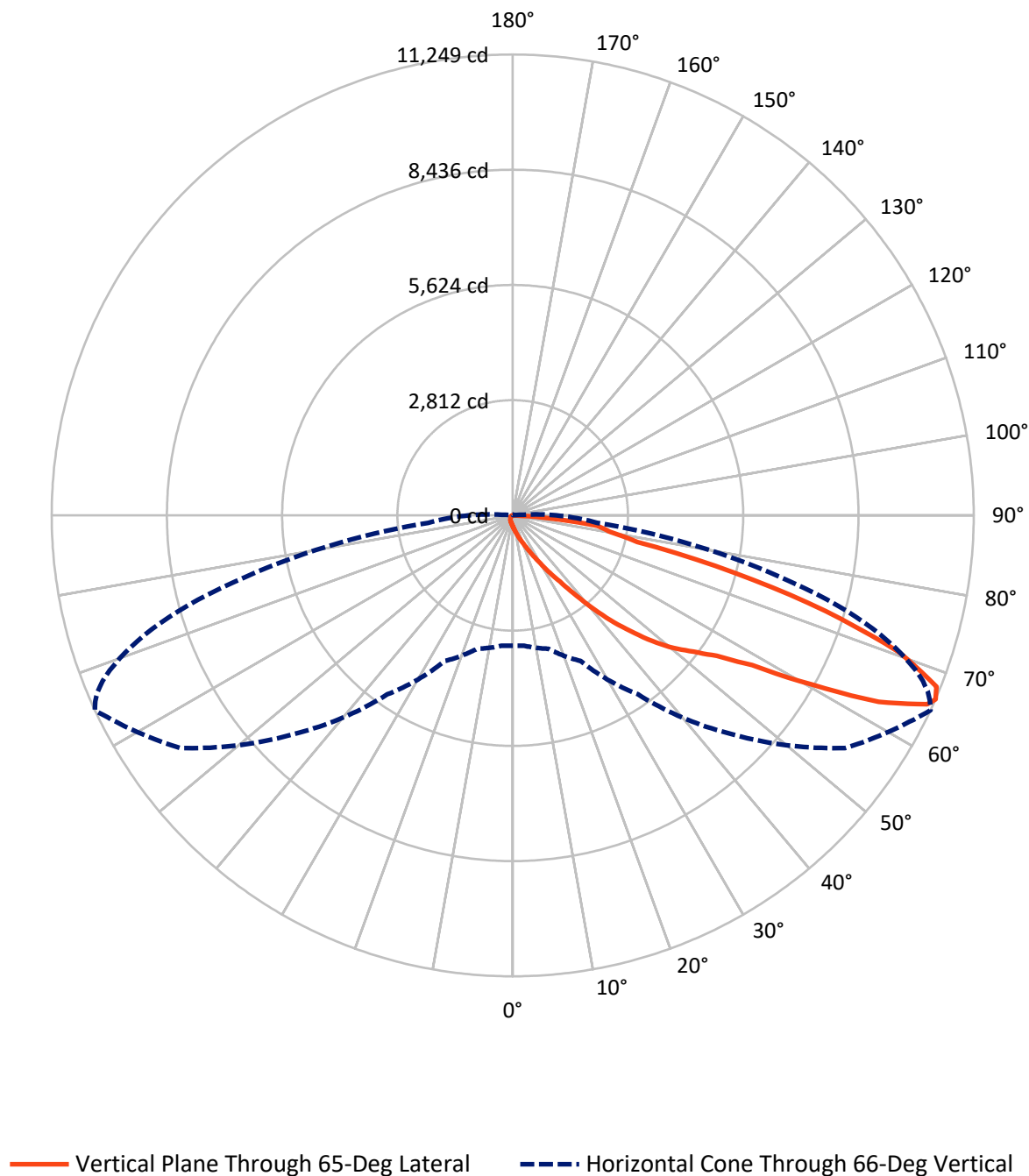


Based on 10 foot mounting height. Maximum calculated value = 14.5 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	190.5	0.0	190.5
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	8598.6	0.0	8598.6
	% Fixture	97.8	0.0	97.8
Total	Lumens	8789.1	0.0	8789.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.7	0.3
10°-20°	125.9	1.4
20°-30°	271.6	3.1
30°-40°	580.0	6.6
40°-50°	1282.7	14.6
50°-60°	2173.7	24.7
60°-70°	2900.6	33.0
70°-80°	1277.7	14.5
80°-90°	147.2	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°	8789.1	100.0
0°-180°	8789.1	100.0

Coefficient of Utilization



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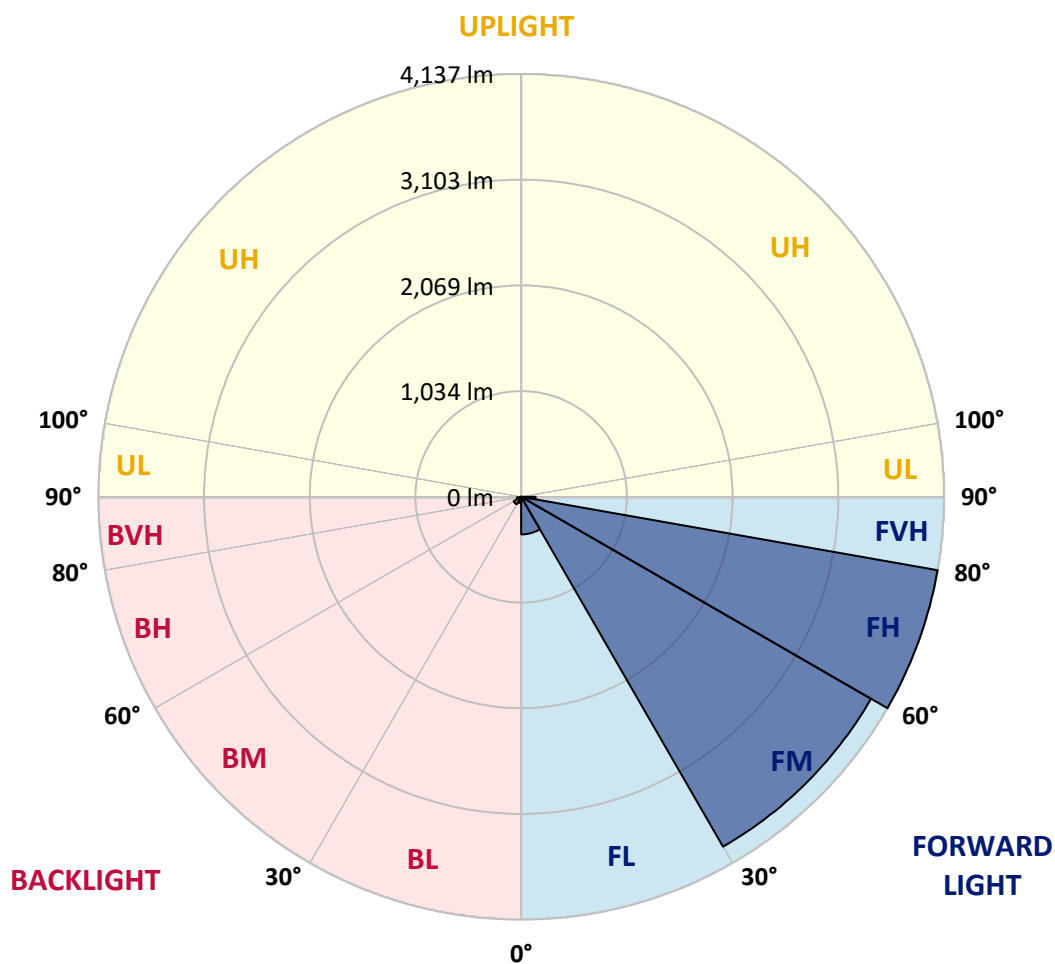
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	367.1	4.2			
FM	(30°-60°)	3952.7	45.0			
FH	(60°-80°)	4137.5	47.1			G2/5000
FVH	(80°-90°)	141.3	1.6			G2/225
BL	(0°-30°)	60.1	0.7	B0/110		
BM	(30°-60°)	83.6	1.0	B0/220		
BH	(60°-80°)	40.9	0.5	B0/110		G0/110
BVH	(80°-90°)	5.9	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°	265.2	265.2	265.2	265.2	265.2	265.2	265.2	265.2	265.2	265.2	265.2
2.5°	334.6	332.9	326.1	326.1	315.9	309.3	300.8	292.3	292.3	290.6	289.0
5°	442.7	432.6	430.9	412.3	397.1	375.1	354.8	327.8	324.5	321.1	319.3
7.5°	562.7	561.0	545.8	523.8	493.5	452.8	412.3	368.4	361.6	358.2	351.4
10°	718.2	709.7	689.4	652.2	606.6	552.6	486.7	417.3	408.9	402.1	398.7
12.5°	866.9	851.7	839.8	792.5	735.0	655.6	576.2	476.5	469.8	461.3	447.8
15°	1005.4	991.8	971.6	931.1	866.9	767.1	674.3	552.6	535.6	523.8	513.7
17.5°	1113.5	1105.1	1081.4	1035.9	966.5	878.7	767.1	630.2	616.8	601.5	582.9
20°	1216.7	1204.8	1167.6	1105.1	1030.7	963.1	877.0	731.6	713.0	694.5	674.3
22.5°	1314.6	1302.7	1242.0	1138.9	1059.5	1030.7	1000.4	846.5	817.8	802.6	782.3
25°	1451.5	1426.2	1331.5	1167.6	1061.2	1083.2	1135.5	995.2	968.2	946.3	914.2
27.5°	1635.7	1601.9	1453.2	1209.9	1067.9	1140.6	1290.9	1176.0	1147.3	1121.9	1086.5
30°	1843.5	1821.5	1644.1	1311.3	1116.9	1225.1	1465.0	1405.9	1372.1	1341.6	1299.5
32.5°	2053.0	2022.7	1846.9	1503.9	1248.7	1388.9	1683.0	1672.9	1628.9	1600.2	1554.5
35°	2237.2	2222.0	2091.9	1819.8	1549.5	1676.2	1973.6	1985.4	1946.6	1916.1	1865.5
37.5°	2362.3	2362.3	2337.0	2159.4	2027.7	2122.3	2401.1	2402.8	2363.9	2294.7	2269.3
40°	2426.4	2445.0	2536.3	2570.1	2563.3	2685.0	2962.2	2931.7	2899.6	2864.1	2779.6
42.5°	2558.3	2575.1	2769.5	3002.7	3154.8	3315.2	3506.2	3496.0	3457.3	3393.0	3315.2
45°	2781.4	2803.3	3034.8	3404.8	3717.4	3945.6	4067.2	4019.9	3981.0	3920.2	3879.6
47.5°	3065.2	3107.5	3369.3	3827.3	4204.1	4580.8	4707.6	4582.6	4548.8	4501.4	4435.5
50°	3367.7	3408.2	3687.0	4210.8	4636.7	5086.1	5297.4	5086.1	5037.2	5021.9	4947.6
52.5°	3629.5	3663.4	3932.0	4506.6	4967.8	5495.0	5802.5	5523.7	5488.2	5437.5	5383.5
55°	3785.0	3812.1	4063.8	4648.5	5192.6	5863.4	6290.9	6045.9	5993.5	5973.3	5895.5
57.5°	3837.4	3864.4	4090.9	4667.0	5314.2	6199.6	6884.0	6892.5	6830.0	6757.3	6733.6
60°	3837.4	3867.8	4058.8	4621.5	5432.5	6557.8	7674.8	8379.4	8244.2	8230.7	8144.5
62.5°	3678.6	3707.3	3899.9	4481.2	5591.4	7041.1	8776.5	10020.1	9981.3	9893.4	9751.5
65°	3333.8	3350.7	3540.0	4123.0	5530.5	7485.5	9731.2	11111.7	11049.2	10876.8	10694.4
66°	3178.4	3191.9	3369.3	3918.5	5331.1	7546.4	9900.2	11248.6	11145.6	11000.2	10794.0
67.5°	2953.6	2977.3	3102.3	3538.3	4853.0	7335.1	9793.8	11152.3	11062.8	10887.0	10680.8
70°	1972.0	1955.0	2396.1	2715.4	3697.2	5976.7	8786.6	10013.4	10015.1	9932.3	9849.5
72.5°	936.1	946.3	1074.6	1671.1	2419.7	3992.9	6993.8	7992.4	8107.4	7958.7	7855.6
75°	672.5	687.7	765.5	1022.3	1443.0	2396.1	4533.5	5589.6	5593.0	5329.4	5094.6
77.5°	196.0	204.5	287.2	630.2	1081.4	1617.0	2603.8	3107.5	3034.8	2845.5	2668.1
80°	81.1	81.1	84.4	201.1	434.2	1098.3	1821.5	2392.7	2384.3	2311.6	2206.8
82.5°	30.4	32.1	40.5	82.8	103.1	270.4	1214.9	2076.7	2071.6	1968.6	1894.2
85°	3.4	3.4	10.2	35.5	38.9	50.7	243.3	915.8	910.8	915.8	802.6
87.5°	0.0	0.0	1.6	3.4	5.0	6.8	10.2	35.5	38.9	37.1	33.8
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	265.2	265.2	265.2	265.2	265.2	265.2	265.2	265.2	265.2	265.2	265.2
2.5°	289.0	285.6	285.6	283.9	283.9	283.9	282.2	280.5	280.5	278.8	277.2
5°	315.9	312.6	310.9	307.5	305.9	304.1	300.8	299.1	295.7	294.0	292.3
7.5°	348.1	341.3	339.6	334.6	329.5	326.1	322.7	317.7	314.3	307.5	305.9
10°	388.7	380.2	373.4	366.6	361.6	353.2	348.1	341.3	334.6	329.5	324.5
12.5°	441.0	429.2	419.1	412.3	400.5	390.3	380.2	375.1	361.6	354.8	346.4
15°	498.5	484.9	473.1	459.6	451.2	434.2	420.7	405.5	398.7	386.9	373.4
17.5°	572.8	550.8	532.2	518.8	501.9	484.9	469.8	454.6	434.2	420.7	403.9
20°	652.2	633.6	608.3	584.7	564.4	544.1	522.1	501.9	483.3	461.3	441.0
22.5°	753.7	726.6	696.2	672.5	645.5	623.6	593.1	566.1	535.6	506.9	483.3
25°	882.0	846.5	817.8	784.0	751.9	718.2	680.9	647.2	608.3	581.3	540.8
27.5°	1040.9	1007.1	968.2	924.3	892.2	841.5	792.5	750.3	704.6	662.4	616.8
30°	1243.6	1194.7	1154.1	1111.9	1047.7	998.6	941.1	883.8	821.2	779.0	709.7
32.5°	1486.9	1434.6	1373.7	1312.9	1253.8	1184.5	1113.5	1042.5	973.3	895.6	824.6
35°	1784.4	1721.8	1652.5	1586.7	1495.4	1421.1	1331.5	1233.5	1155.8	1066.2	976.6
37.5°	2178.1	2075.0	2014.1	1944.9	1821.5	1720.2	1620.4	1522.4	1385.6	1290.9	1164.2
40°	2671.5	2610.6	2511.0	2399.4	2287.9	2154.4	2019.3	1889.2	1730.3	1598.5	1451.5
42.5°	3251.0	3161.5	3060.2	2899.6	2786.4	2629.2	2475.5	2303.1	2108.7	1939.9	1767.5
45°	3795.2	3688.7	3611.0	3450.5	3332.2	3146.2	2960.4	2778.0	2553.2	2335.2	2135.8
47.5°	4383.2	4295.3	4166.9	4036.8	3916.8	3707.3	3506.2	3284.9	3048.3	2789.8	2531.2
50°	4900.3	4831.0	4743.1	4586.0	4452.5	4276.7	4040.2	3798.5	3499.4	3242.6	2948.6
52.5°	5339.5	5285.5	5162.1	5050.6	4930.6	4765.0	4553.9	4322.4	3999.7	3717.4	3382.9
55°	5858.3	5819.5	5711.3	5642.0	5535.6	5376.8	5179.1	4964.5	4623.1	4315.6	3937.1
57.5°	6708.3	6677.9	6583.2	6554.5	6449.7	6311.2	6067.9	5838.0	5439.3	5057.4	4624.9
60°	8115.8	8055.0	7916.4	7845.5	7624.1	7438.2	7122.3	6806.3	6324.7	5838.0	5317.6
62.5°	9623.0	9452.4	9188.8	8962.4	8648.1	8325.3	7902.9	7419.7	6855.3	6277.4	5679.2
65°	10435.8	10145.2	9812.3	9452.4	9045.2	8570.3	8038.1	7458.6	6851.9	6241.9	5609.9
66°	10528.8	10200.9	9847.8	9447.4	8994.5	8489.3	7948.5	7340.2	6709.9	6115.2	5483.2
67.5°	10412.2	10069.2	9695.8	9251.4	8761.3	8237.5	7669.7	7037.7	6431.1	5827.9	5212.8
70°	9596.0	9254.7	8921.8	8453.8	7931.6	7404.5	6867.1	6160.8	5586.3	5032.0	4484.6
72.5°	7663.0	7431.5	7102.0	6701.5	6192.9	5574.4	5126.6	4494.8	3996.3	3458.9	3034.8
75°	4788.7	4462.6	4055.4	3545.1	3156.4	2654.5	2392.7	1912.8	1628.9	1380.5	1140.6
77.5°	2448.4	2203.5	1917.9	1630.6	1355.2	1081.4	836.4	591.4	398.7	277.2	206.1
80°	2022.7	1806.4	1569.7	1307.9	1064.6	826.3	594.8	405.5	258.6	169.0	131.8
82.5°	1671.1	1488.7	1277.4	1034.1	822.9	648.9	451.2	294.0	182.4	118.3	93.0
85°	711.4	645.5	498.5	395.4	297.4	219.7	153.8	103.1	72.6	59.1	54.1
87.5°	30.4	33.8	32.1	25.3	18.6	18.6	16.9	13.5	13.5	13.5	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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	265.2	265.2	265.2	265.2	265.2	265.2	265.2	265.2	265.2	265.2	265.2
2.5°	277.2	275.4	273.8	273.8	272.0	270.4	260.2	251.8	241.6	234.9	228.1
5°	289.0	287.2	283.9	282.2	278.8	277.2	255.2	236.5	221.3	209.5	201.1
7.5°	300.8	299.1	294.0	289.0	287.2	283.9	248.4	224.7	204.5	191.0	182.4
10°	315.9	310.9	305.9	299.1	294.0	289.0	241.6	211.2	189.2	177.4	169.0
12.5°	337.9	329.5	321.1	312.6	305.9	297.4	238.3	199.4	177.4	163.9	155.5
15°	363.3	351.4	341.3	331.2	319.3	310.9	231.5	189.2	167.3	153.8	143.7
17.5°	386.9	373.4	358.2	343.0	331.2	319.3	224.7	179.2	157.1	143.7	133.5
20°	420.7	400.5	381.9	363.3	346.4	331.2	214.6	169.0	148.7	133.5	123.3
22.5°	458.0	434.2	410.6	385.3	363.3	343.0	206.1	160.5	140.3	125.1	113.2
25°	505.3	476.5	444.4	412.3	386.9	360.0	197.7	152.1	131.8	116.6	104.8
27.5°	571.1	530.6	495.1	454.6	415.7	385.3	191.0	145.3	123.3	108.2	96.4
30°	660.7	601.5	545.8	501.9	456.2	412.3	184.2	136.9	116.6	99.7	86.2
32.5°	760.3	691.1	626.8	561.0	503.5	452.8	177.4	130.1	108.2	91.2	79.4
35°	883.8	795.8	709.7	633.6	564.4	496.7	170.6	123.3	101.4	82.8	71.0
37.5°	1061.2	951.3	838.1	740.1	650.6	561.0	165.6	116.6	93.0	74.4	62.5
40°	1304.5	1162.6	1024.0	890.5	773.9	662.4	158.8	109.8	86.2	67.6	55.7
42.5°	1568.1	1395.7	1213.3	1062.8	902.4	762.1	152.1	103.1	79.4	60.8	49.0
45°	1895.9	1681.3	1459.9	1255.4	1059.5	878.7	145.3	96.4	71.0	54.1	42.3
47.5°	2254.1	1980.4	1730.3	1473.5	1240.3	1024.0	136.9	91.2	64.2	47.3	37.1
50°	2622.5	2333.6	2017.5	1725.2	1448.1	1169.3	128.5	82.8	57.5	42.3	30.4
52.5°	3019.5	2678.2	2355.5	1992.2	1669.5	1360.2	120.0	76.0	52.3	37.1	25.3
55°	3524.8	3143.0	2764.4	2357.2	1968.6	1581.6	111.5	67.6	45.7	32.1	20.3
57.5°	4160.1	3707.3	3242.6	2783.0	2311.6	1872.2	104.8	59.1	38.9	27.0	16.9
60°	4760.0	4231.1	3668.4	3139.6	2607.2	2095.3	94.6	52.3	33.8	22.0	16.9
62.5°	5070.9	4467.7	3861.0	3278.1	2710.4	2174.7	84.4	43.9	28.7	18.6	15.2
65°	4994.9	4379.8	3791.8	3203.7	2647.9	2124.0	74.4	38.9	25.3	16.9	15.2
66°	4885.1	4276.7	3685.4	3126.0	2595.4	2070.0	69.3	37.1	23.7	16.9	13.5
67.5°	4645.1	4057.0	3492.7	2972.2	2451.8	1966.8	62.5	33.8	22.0	15.2	13.5
70°	3967.5	3433.6	2982.4	2519.4	2095.3	1657.7	50.7	28.7	18.6	13.5	13.5
72.5°	2625.8	2262.6	1961.8	1688.0	1410.9	1095.0	42.3	23.7	15.2	13.5	11.8
75°	990.2	895.6	768.9	691.1	603.2	528.9	33.8	15.2	11.8	11.8	11.8
77.5°	175.8	162.2	143.7	131.8	121.7	111.5	27.0	10.2	10.2	11.8	11.8
80°	118.3	109.8	99.7	91.2	84.4	76.0	18.6	8.4	10.2	10.2	11.8
82.5°	84.4	79.4	74.4	67.6	62.5	55.7	11.8	8.4	10.2	10.2	10.2
85°	50.7	47.3	43.9	40.5	35.5	33.8	8.4	8.4	8.4	10.2	10.2
87.5°	13.5	11.8	13.5	13.5	10.2	11.8	6.8	6.8	6.8	8.4	8.4
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°	265.2	265.2	265.2	265.2	265.2
2.5°	224.7	224.7	221.3	226.5	226.5
5°	194.3	194.3	192.6	194.3	194.3
7.5°	177.4	175.8	175.8	175.8	177.4
10°	162.2	160.5	160.5	160.5	160.5
12.5°	148.7	147.0	145.3	147.0	147.0
15°	136.9	133.5	133.5	133.5	133.5
17.5°	126.7	123.3	121.7	121.7	121.7
20°	116.6	111.5	111.5	111.5	111.5
22.5°	106.4	101.4	101.4	101.4	101.4
25°	96.4	91.2	91.2	91.2	91.2
27.5°	87.8	82.8	82.8	82.8	82.8
30°	77.8	74.4	74.4	76.0	74.4
32.5°	71.0	65.9	65.9	67.6	67.6
35°	62.5	59.1	59.1	59.1	59.1
37.5°	54.1	50.7	50.7	50.7	50.7
40°	47.3	43.9	42.3	43.9	43.9
42.5°	40.5	37.1	35.5	35.5	35.5
45°	35.5	30.4	28.7	30.4	30.4
47.5°	28.7	25.3	25.3	27.0	27.0
50°	22.0	22.0	23.7	27.0	27.0
52.5°	20.3	20.3	23.7	27.0	27.0
55°	18.6	20.3	23.7	25.3	27.0
57.5°	16.9	20.3	23.7	25.3	25.3
60°	16.9	18.6	22.0	25.3	25.3
62.5°	15.2	16.9	20.3	23.7	23.7
65°	15.2	16.9	20.3	23.7	23.7
66°	15.2	16.9	20.3	23.7	23.7
67.5°	15.2	16.9	20.3	23.7	23.7
70°	15.2	16.9	20.3	22.0	22.0
72.5°	13.5	15.2	18.6	22.0	22.0
75°	13.5	15.2	18.6	22.0	22.0
77.5°	13.5	15.2	18.6	22.0	22.0
80°	13.5	15.2	18.6	20.3	22.0
82.5°	11.8	15.2	16.9	20.3	20.3
85°	11.8	13.5	16.9	18.6	20.3
87.5°	10.2	11.8	13.5	16.9	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)