

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: P165256

Luminaire Tested: **VST-E04-LED-E-U-SL3-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165256
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-E04-LED-E-U-SL3-HSS-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (84) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6258.6 lumens
Efficiency: N/A
Efficacy: 64.4 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G2

Input Watts (W): 97.2
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



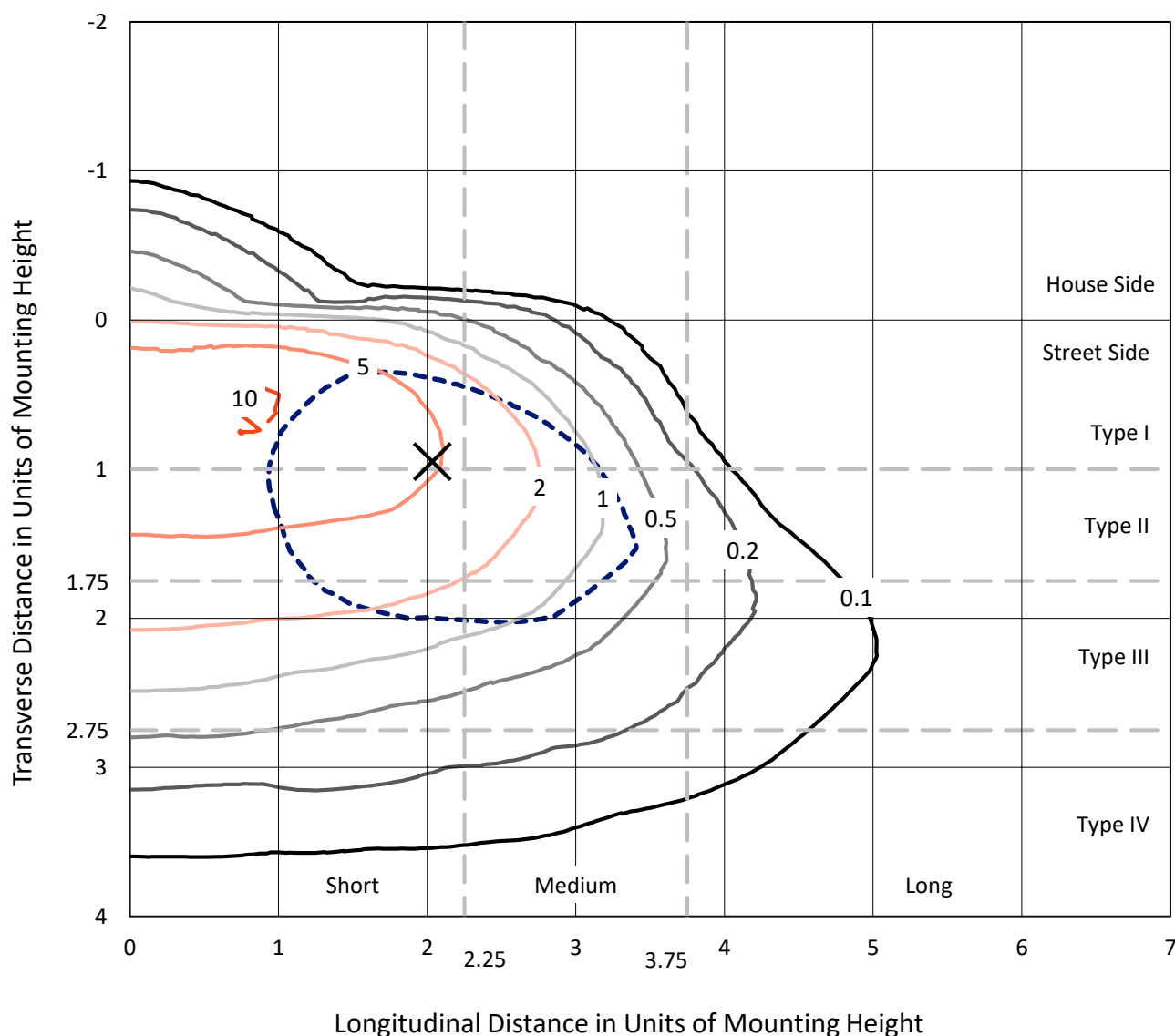
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

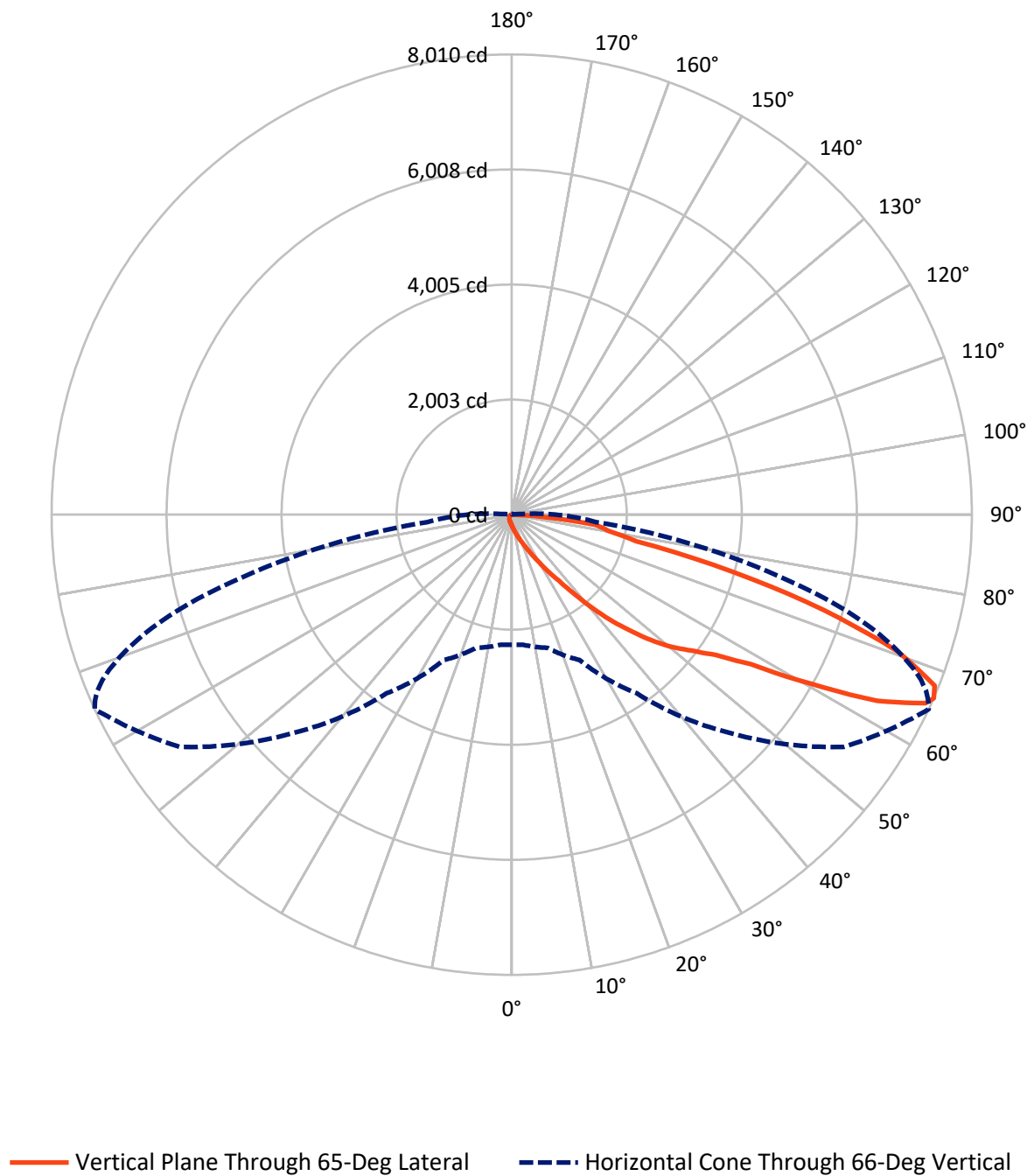


Based on 10 foot mounting height. Maximum calculated value = 10.3 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	135.6	0.0	135.6
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	6123.0	0.0	6123.0
	% Fixture	97.8	0.0	97.8
Total	Lumens	6258.6	0.0	6258.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.1	0.3
10°-20°	89.7	1.4
20°-30°	193.4	3.1
30°-40°	413.0	6.6
40°-50°	913.4	14.6
50°-60°	1547.9	24.7
60°-70°	2065.5	33.0
70°-80°	909.8	14.5
80°-90°	104.8	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°	6258.6	100.0
0°-180°	6258.6	100.0

Coefficient of Utilization



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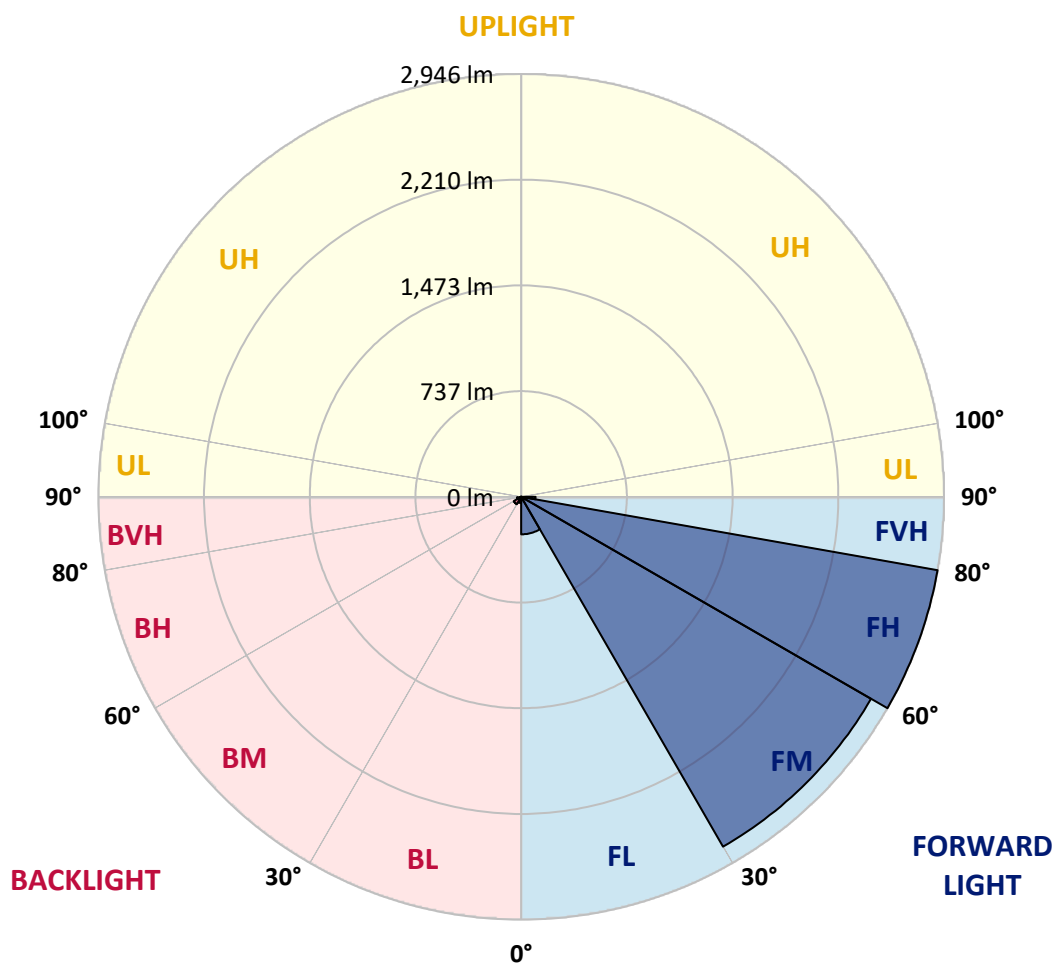
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	261.4	4.2			
FM	(30°-60°)	2814.7	45.0			
FH	(60°-80°)	2946.3	47.1			G2/5000
FVH	(80°-90°)	100.6	1.6			G2/225
BL	(0°-30°)	42.8	0.7	B0/110		
BM	(30°-60°)	59.6	1.0	B0/220		
BH	(60°-80°)	29.1	0.5	B0/110		G0/110
BVH	(80°-90°)	4.2	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°	188.9	188.9	188.9	188.9	188.9	188.9	188.9	188.9	188.9	188.9	188.9
2.5°	238.3	237.0	232.2	232.2	225.0	220.2	214.2	208.2	208.2	206.9	205.8
5°	315.2	308.1	306.8	293.6	282.8	267.1	252.7	233.5	231.0	228.6	227.4
7.5°	400.7	399.5	388.6	373.0	351.4	322.4	293.6	262.3	257.5	255.1	250.3
10°	511.4	505.3	490.9	464.4	432.0	393.5	346.6	297.2	291.2	286.4	283.9
12.5°	617.3	606.5	598.0	564.3	523.4	466.8	410.3	339.3	334.5	328.5	318.9
15°	715.9	706.3	691.9	663.0	617.3	546.3	480.1	393.5	381.4	373.0	365.8
17.5°	792.9	786.9	770.1	737.6	688.2	625.7	546.3	448.8	439.2	428.3	415.1
20°	866.4	857.9	831.4	786.9	734.0	685.8	624.5	521.0	507.7	494.5	480.1
22.5°	936.1	927.7	884.4	811.0	754.4	734.0	712.3	602.8	582.4	571.5	557.1
25°	1033.6	1015.6	948.1	831.4	755.7	771.3	808.6	708.7	689.5	673.8	651.0
27.5°	1164.8	1140.7	1034.8	861.5	760.4	812.2	919.3	837.4	817.0	798.9	773.7
30°	1312.7	1297.1	1170.8	933.7	795.3	872.4	1043.2	1001.1	977.1	955.4	925.3
32.5°	1461.9	1440.3	1315.2	1070.9	889.2	989.0	1198.5	1191.2	1160.0	1139.5	1107.0
35°	1593.1	1582.3	1489.6	1295.9	1103.4	1193.6	1405.4	1413.8	1386.2	1364.5	1328.4
37.5°	1682.2	1682.2	1664.1	1537.7	1443.9	1511.3	1709.8	1711.0	1683.3	1634.0	1616.0
40°	1727.8	1741.1	1806.1	1830.1	1825.3	1912.0	2109.3	2087.6	2064.8	2039.5	1979.3
42.5°	1821.7	1833.7	1972.1	2138.2	2246.5	2360.8	2496.7	2489.5	2461.9	2416.1	2360.8
45°	1980.6	1996.2	2161.1	2424.5	2647.1	2809.6	2896.2	2862.5	2834.8	2791.6	2762.6
47.5°	2182.7	2212.8	2399.3	2725.4	2993.7	3262.0	3352.2	3263.2	3239.2	3205.4	3158.5
50°	2398.1	2427.0	2625.5	2998.5	3301.7	3621.8	3772.2	3621.8	3586.9	3576.0	3523.1
52.5°	2584.6	2608.7	2800.0	3209.1	3537.5	3912.9	4131.9	3933.4	3908.1	3872.0	3833.5
55°	2695.3	2714.6	2893.8	3310.1	3697.6	4175.3	4479.7	4305.2	4267.9	4253.5	4198.1
57.5°	2732.6	2751.8	2913.1	3323.4	3784.2	4414.7	4902.1	4908.1	4863.6	4811.8	4794.9
60°	2732.6	2754.2	2890.2	3290.9	3868.4	4669.8	5465.1	5966.9	5870.7	5861.0	5799.6
62.5°	2619.5	2639.9	2777.1	3191.0	3981.5	5013.9	6249.7	7135.2	7107.6	7045.0	6943.9
65°	2374.0	2386.0	2520.8	2935.9	3938.2	5330.4	6929.5	7912.5	7868.0	7745.3	7615.4
66°	2263.3	2272.9	2399.3	2790.3	3796.2	5373.7	7049.8	8010.0	7936.6	7833.1	7686.3
67.5°	2103.3	2120.1	2209.1	2519.6	3455.8	5223.3	6974.1	7941.5	7877.7	7752.5	7605.7
70°	1404.2	1392.2	1706.2	1933.6	2632.7	4255.9	6256.9	7130.4	7131.7	7072.7	7013.7
72.5°	666.6	673.8	765.2	1190.0	1723.0	2843.3	4980.2	5691.3	5773.2	5667.3	5593.9
75°	478.9	489.7	545.1	728.0	1027.6	1706.2	3228.3	3980.3	3982.7	3795.0	3627.8
77.5°	139.6	145.6	204.5	448.8	770.1	1151.5	1854.2	2212.8	2161.1	2026.2	1899.9
80°	57.7	57.7	60.1	143.2	309.2	782.1	1297.1	1703.8	1697.8	1646.1	1571.5
82.5°	21.6	22.9	28.9	59.0	73.4	192.5	865.1	1478.8	1475.2	1401.8	1348.8
85°	2.4	2.4	7.2	25.3	27.7	36.1	173.2	652.1	648.6	652.1	571.5
87.5°	0.0	0.0	1.2	2.4	3.6	4.8	7.2	25.3	27.7	26.5	24.0
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	188.9	188.9	188.9	188.9	188.9	188.9	188.9	188.9	188.9	188.9	188.9
2.5°	205.8	203.3	203.3	202.2	202.2	202.2	200.9	199.8	199.8	198.5	197.4
5°	225.0	222.6	221.4	219.0	217.8	216.6	214.2	213.0	210.6	209.3	208.2
7.5°	247.8	243.0	241.9	238.3	234.6	232.2	229.8	226.2	223.8	219.0	217.8
10°	276.8	270.7	265.9	261.1	257.5	251.5	247.8	243.0	238.3	234.6	231.0
12.5°	314.0	305.6	298.4	293.6	285.2	278.0	270.7	267.1	257.5	252.7	246.7
15°	355.0	345.3	336.9	327.3	321.3	309.2	299.6	288.8	283.9	275.5	265.9
17.5°	407.9	392.2	379.0	369.4	357.4	345.3	334.5	323.7	309.2	299.6	287.6
20°	464.4	451.2	433.1	416.3	401.9	387.5	371.8	357.4	344.2	328.5	314.0
22.5°	536.7	517.4	495.8	478.9	459.7	444.0	422.3	403.1	381.4	361.0	344.2
25°	628.1	602.8	582.4	558.3	535.4	511.4	484.9	460.8	433.1	413.9	385.1
27.5°	741.2	717.2	689.5	658.2	635.3	599.2	564.3	534.3	501.8	471.7	439.2
30°	885.6	850.7	821.8	791.8	746.0	711.1	670.2	629.3	584.8	554.7	505.3
32.5°	1058.8	1021.6	978.2	934.9	892.8	843.5	792.9	742.4	693.1	637.7	587.2
35°	1270.7	1226.1	1176.8	1129.9	1064.9	1011.9	948.1	878.4	823.0	759.2	695.5
37.5°	1551.0	1477.6	1434.3	1384.9	1297.1	1224.9	1153.9	1084.1	986.6	919.3	829.0
40°	1902.3	1859.0	1788.0	1708.6	1629.2	1534.1	1437.9	1345.3	1232.1	1138.3	1033.6
42.5°	2315.0	2251.3	2179.1	2064.8	1984.2	1872.2	1762.8	1640.0	1501.6	1381.4	1258.6
45°	2702.5	2626.7	2571.3	2457.1	2372.8	2240.4	2108.1	1978.2	1818.1	1662.9	1520.9
47.5°	3121.2	3058.6	2967.2	2874.6	2789.2	2639.9	2496.7	2339.1	2170.6	1986.6	1802.4
50°	3489.4	3440.1	3377.5	3265.6	3170.6	3045.4	2877.0	2704.9	2491.9	2309.0	2099.7
52.5°	3802.2	3763.7	3675.9	3596.5	3511.1	3393.1	3242.8	3077.9	2848.1	2647.1	2408.9
55°	4171.7	4144.0	4067.0	4017.6	3941.9	3828.8	3688.0	3535.2	3292.1	3073.1	2803.5
57.5°	4776.9	4755.3	4687.8	4667.4	4592.8	4494.1	4320.9	4157.2	3873.3	3601.3	3293.3
60°	5779.2	5735.9	5637.2	5586.7	5429.0	5296.7	5071.7	4846.7	4503.8	4157.2	3786.6
62.5°	6852.5	6731.0	6543.2	6382.1	6158.2	5928.4	5627.6	5283.5	4881.6	4470.1	4044.1
65°	7431.2	7224.3	6987.3	6731.0	6441.0	6102.9	5723.9	5311.2	4879.2	4444.8	3994.8
66°	7497.4	7264.0	7012.6	6727.4	6404.9	6045.1	5660.1	5226.9	4778.1	4354.6	3904.5
67.5°	7414.4	7170.2	6904.3	6587.8	6238.8	5865.8	5461.5	5011.5	4579.5	4150.0	3712.0
70°	6833.2	6590.2	6353.1	6019.9	5648.0	5272.7	4890.0	4387.1	3978.0	3583.3	3193.4
72.5°	5456.7	5291.9	5057.3	4772.1	4409.9	3969.5	3650.6	3200.7	2845.7	2463.1	2161.1
75°	3410.0	3177.8	2887.8	2524.4	2247.6	1890.3	1703.8	1362.1	1160.0	983.1	812.2
77.5°	1743.5	1569.1	1365.7	1161.1	965.0	770.1	595.6	421.2	283.9	197.4	146.8
80°	1440.3	1286.3	1117.8	931.3	758.1	588.4	423.6	288.8	184.1	120.3	93.8
82.5°	1190.0	1060.1	909.6	736.4	586.0	462.1	321.3	209.3	129.9	84.2	66.2
85°	506.6	459.7	355.0	281.5	211.8	156.4	109.5	73.4	51.7	42.1	38.5
87.5°	21.6	24.0	22.9	18.0	13.2	13.2	12.1	9.6	9.6	9.6	9.6
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°	188.9	188.9	188.9	188.9	188.9	188.9	188.9	188.9	188.9	188.9	188.9
2.5°	197.4	196.1	194.9	194.9	193.7	192.5	185.3	179.3	172.1	167.3	162.4
5°	205.8	204.5	202.2	200.9	198.5	197.4	181.7	168.4	157.6	149.2	143.2
7.5°	214.2	213.0	209.3	205.8	204.5	202.2	176.9	160.0	145.6	136.0	129.9
10°	225.0	221.4	217.8	213.0	209.3	205.8	172.1	150.4	134.7	126.3	120.3
12.5°	240.6	234.6	228.6	222.6	217.8	211.8	169.7	142.0	126.3	116.7	110.7
15°	258.7	250.3	243.0	235.9	227.4	221.4	164.8	134.7	119.1	109.5	102.3
17.5°	275.5	265.9	255.1	244.3	235.9	227.4	160.0	127.6	111.9	102.3	95.1
20°	299.6	285.2	272.0	258.7	246.7	235.9	152.8	120.3	105.9	95.1	87.8
22.5°	326.1	309.2	292.4	274.4	258.7	244.3	146.8	114.3	99.9	89.1	80.6
25°	359.8	339.3	316.5	293.6	275.5	256.3	140.8	108.3	93.8	83.0	74.6
27.5°	406.7	377.8	352.6	323.7	296.0	274.4	136.0	103.5	87.8	77.0	68.6
30°	470.5	428.3	388.6	357.4	324.9	293.6	131.2	97.5	83.0	71.0	61.4
32.5°	541.4	492.1	446.4	399.5	358.5	322.4	126.3	92.7	77.0	65.0	56.6
35°	629.3	566.7	505.3	451.2	401.9	353.7	121.5	87.8	72.2	59.0	50.6
37.5°	755.7	677.4	596.8	527.0	463.3	399.5	117.9	83.0	66.2	53.0	44.5
40°	928.9	827.9	729.1	634.1	551.1	471.7	113.1	78.2	61.4	48.2	39.7
42.5°	1116.6	993.9	864.0	756.8	642.6	542.7	108.3	73.4	56.6	43.3	34.9
45°	1350.1	1197.2	1039.6	894.0	754.4	625.7	103.5	68.6	50.6	38.5	30.1
47.5°	1605.2	1410.2	1232.1	1049.3	883.2	729.1	97.5	65.0	45.7	33.7	26.5
50°	1867.5	1661.7	1436.7	1228.5	1031.2	832.7	91.5	59.0	40.9	30.1	21.6
52.5°	2150.2	1907.1	1677.3	1418.6	1188.8	968.6	85.4	54.1	37.3	26.5	18.0
55°	2510.0	2238.1	1968.5	1678.5	1401.8	1126.3	79.4	48.2	32.5	22.9	14.5
57.5°	2962.4	2639.9	2309.0	1981.8	1646.1	1333.2	74.6	42.1	27.7	19.2	12.1
60°	3389.6	3013.0	2612.3	2235.7	1856.6	1492.0	67.4	37.3	24.0	15.6	12.1
62.5°	3610.9	3181.4	2749.4	2334.3	1930.0	1548.6	60.1	31.3	20.5	13.2	10.8
65°	3556.8	3118.8	2700.1	2281.3	1885.5	1512.5	53.0	27.7	18.0	12.1	10.8
66°	3478.6	3045.4	2624.3	2226.0	1848.2	1474.0	49.3	26.5	16.9	12.1	9.6
67.5°	3307.7	2889.0	2487.1	2116.5	1745.9	1400.6	44.5	24.0	15.6	10.8	9.6
70°	2825.2	2445.0	2123.7	1794.0	1492.0	1180.4	36.1	20.5	13.2	9.6	9.6
72.5°	1869.8	1611.2	1397.0	1202.0	1004.7	779.7	30.1	16.9	10.8	9.6	8.4
75°	705.1	637.7	547.5	492.1	429.6	376.6	24.0	10.8	8.4	8.4	8.4
77.5°	125.2	115.5	102.3	93.8	86.7	79.4	19.2	7.2	7.2	8.4	8.4
80°	84.2	78.2	71.0	65.0	60.1	54.1	13.2	6.0	7.2	7.2	8.4
82.5°	60.1	56.6	53.0	48.2	44.5	39.7	8.4	6.0	7.2	7.2	7.2
85°	36.1	33.7	31.3	28.9	25.3	24.0	6.0	6.0	6.0	7.2	7.2
87.5°	9.6	8.4	9.6	9.6	7.2	8.4	4.8	4.8	4.8	6.0	6.0
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):

	145°	155°	165°	175°	180°
0°	188.9	188.9	188.9	188.9	188.9
2.5°	160.0	160.0	157.6	161.3	161.3
5°	138.4	138.4	137.1	138.4	138.4
7.5°	126.3	125.2	125.2	125.2	126.3
10°	115.5	114.3	114.3	114.3	114.3
12.5°	105.9	104.7	103.5	104.7	104.7
15°	97.5	95.1	95.1	95.1	95.1
17.5°	90.2	87.8	86.7	86.7	86.7
20°	83.0	79.4	79.4	79.4	79.4
22.5°	75.8	72.2	72.2	72.2	72.2
25°	68.6	65.0	65.0	65.0	65.0
27.5°	62.5	59.0	59.0	59.0	59.0
30°	55.4	53.0	53.0	54.1	53.0
32.5°	50.6	46.9	46.9	48.2	48.2
35°	44.5	42.1	42.1	42.1	42.1
37.5°	38.5	36.1	36.1	36.1	36.1
40°	33.7	31.3	30.1	31.3	31.3
42.5°	28.9	26.5	25.3	25.3	25.3
45°	25.3	21.6	20.5	21.6	21.6
47.5°	20.5	18.0	18.0	19.2	19.2
50°	15.6	15.6	16.9	19.2	19.2
52.5°	14.5	14.5	16.9	19.2	19.2
55°	13.2	14.5	16.9	18.0	19.2
57.5°	12.1	14.5	16.9	18.0	18.0
60°	12.1	13.2	15.6	18.0	18.0
62.5°	10.8	12.1	14.5	16.9	16.9
65°	10.8	12.1	14.5	16.9	16.9
66°	10.8	12.1	14.5	16.9	16.9
67.5°	10.8	12.1	14.5	16.9	16.9
70°	10.8	12.1	14.5	15.6	15.6
72.5°	9.6	10.8	13.2	15.6	15.6
75°	9.6	10.8	13.2	15.6	15.6
77.5°	9.6	10.8	13.2	15.6	15.6
80°	9.6	10.8	13.2	14.5	15.6
82.5°	8.4	10.8	12.1	14.5	14.5
85°	8.4	9.6	12.1	13.2	14.5
87.5°	7.2	8.4	9.6	12.1	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)