

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: P165467

Luminaire Tested: **VST-E03-LED-E-U-SL4-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165467
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-E03-LED-E-U-SL4-HSS
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (63) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6031.5 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G2

Input Watts (W): 75.2
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

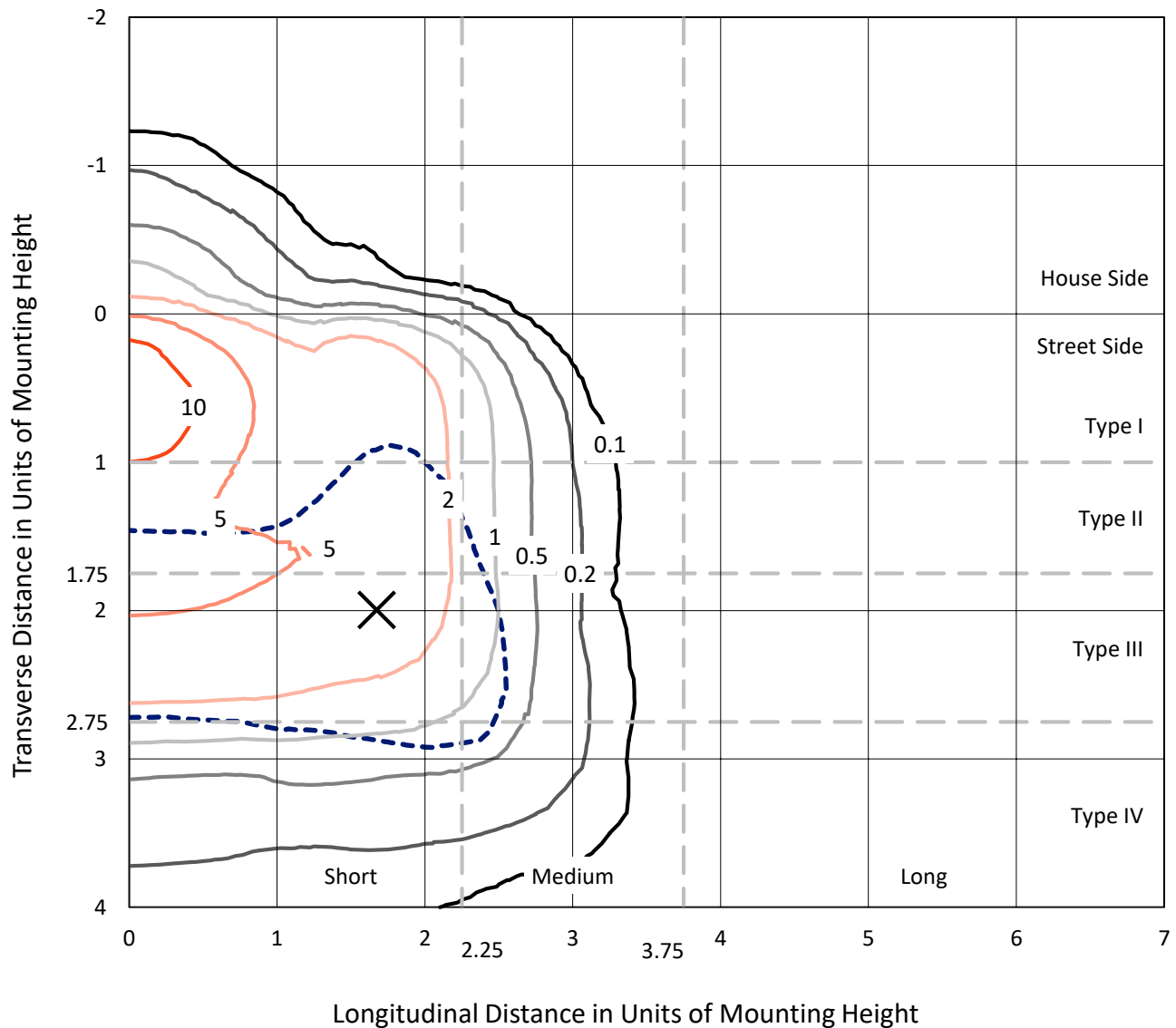


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

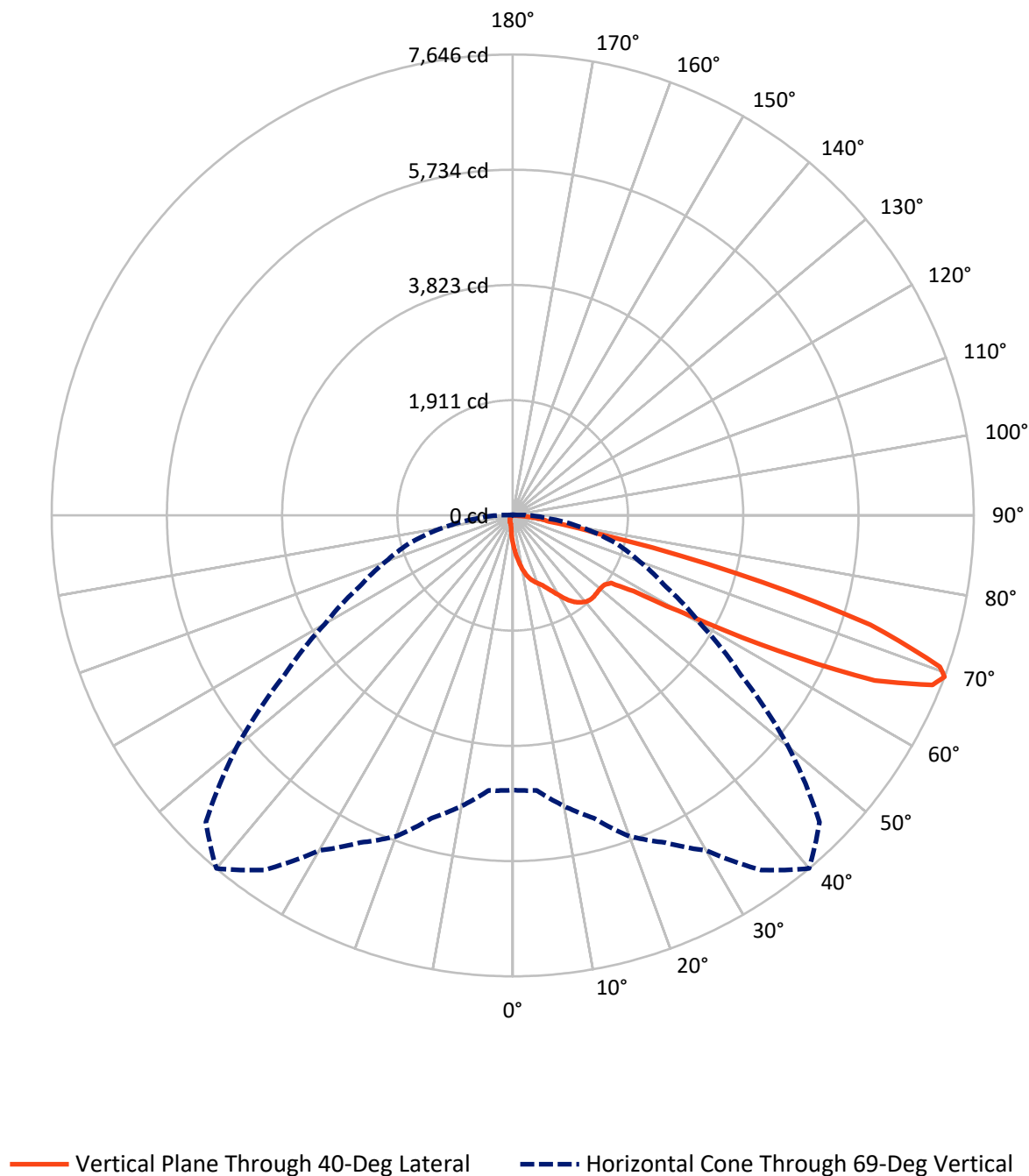


Based on 10 foot mounting height. Maximum calculated value = 13.5 fc
Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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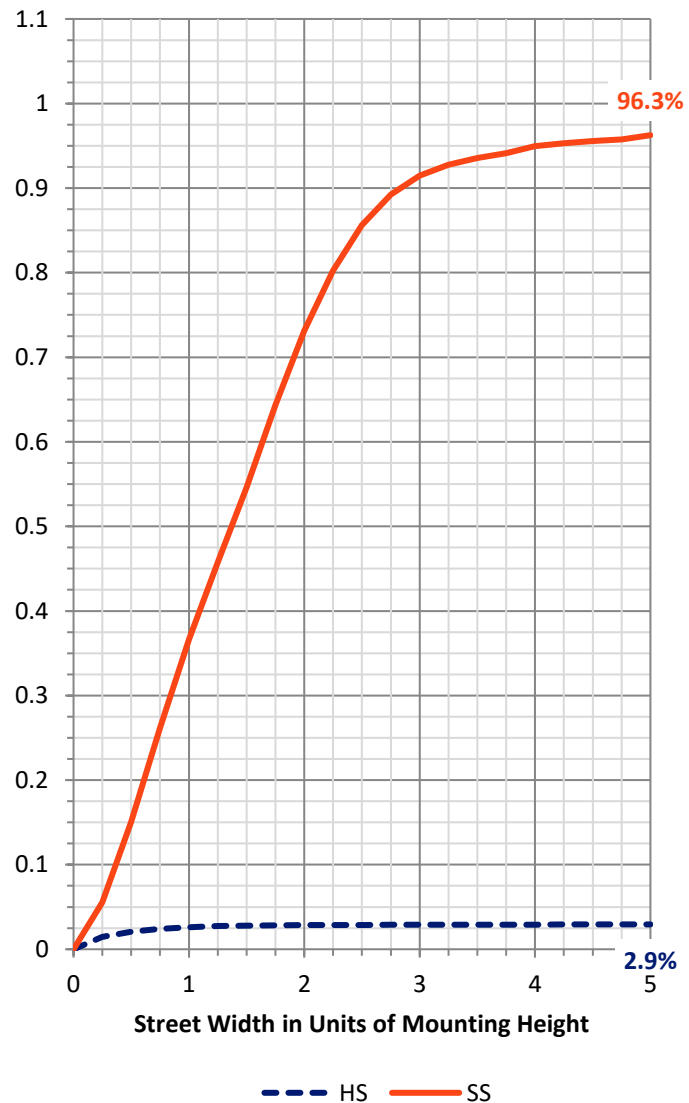
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	179.6	0.0	179.6
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	5851.9	0.0	5851.9
	% Fixture	97.0	0.0	97.0
Total	Lumens	6031.5	0.0	6031.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.8	0.8
10°-20°	161.4	2.7
20°-30°	308.9	5.1
30°-40°	513.8	8.5
40°-50°	695.2	11.5
50°-60°	1087.3	18.0
60°-70°	2235.4	37.1
70°-80°	899.5	14.9
80°-90°	83.2	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°	6031.5	100.0
0°-180°	6031.5	100.0

Coefficient of Utilization



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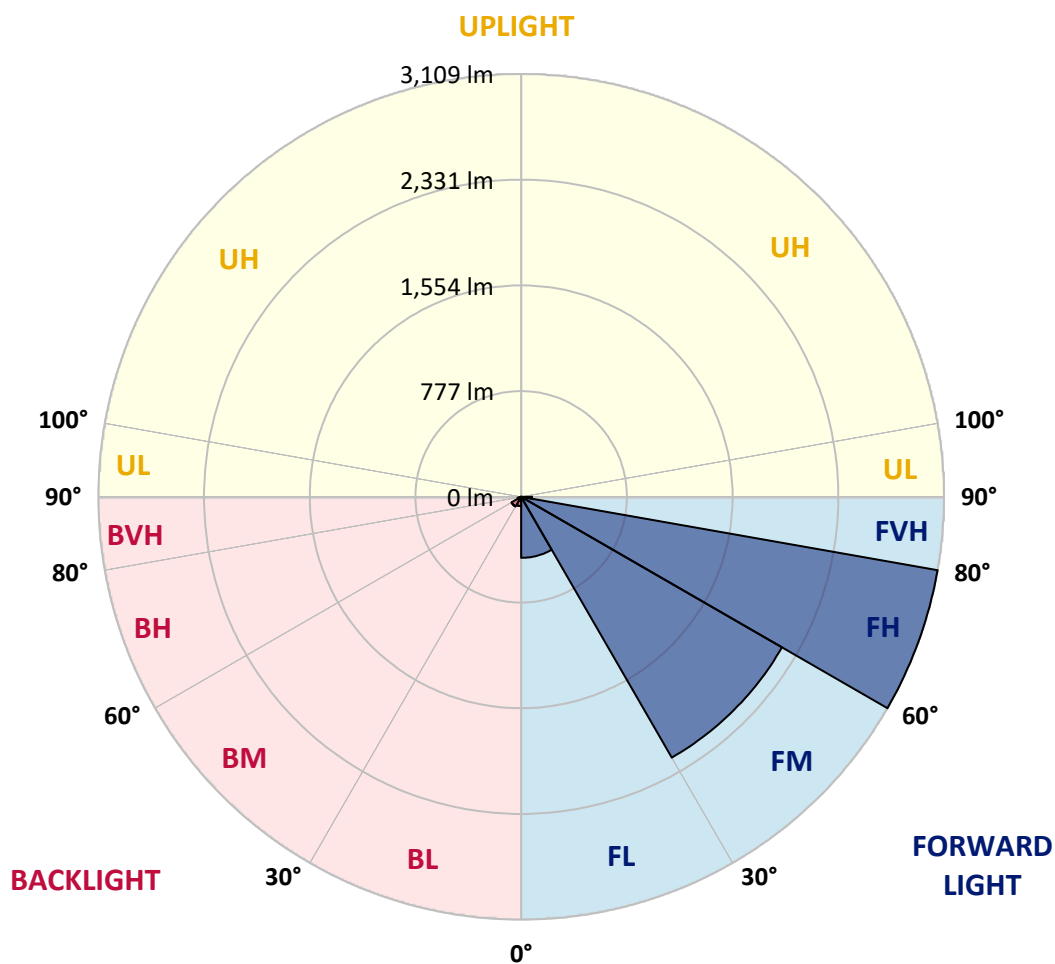
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	448.9	7.4			
FM	(30°-60°)	2214.2	36.7			
FH	(60°-80°)	3108.6	51.5			G2/5000
FVH	(80°-90°)	80.1	1.3			G1/100
BL	(0°-30°)	68.3	1.1	B0/110		
BM	(30°-60°)	82.0	1.4	B0/220		
BH	(60°-80°)	26.2	0.4	B0/110		G0/110
BVH	(80°-90°)	3.1	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5
2.5°	607.7	600.7	592.8	592.8	583.0	583.0	577.0	561.2	559.3	550.3	541.4
5°	775.6	769.7	759.8	750.9	743.0	729.2	719.3	700.5	679.8	660.0	642.2
7.5°	939.7	936.7	918.9	915.9	903.1	880.4	860.6	832.9	797.3	769.7	737.1
10°	1091.8	1084.9	1080.9	1064.1	1045.4	1020.7	990.0	956.5	914.9	871.4	825.0
12.5°	1212.4	1208.4	1190.6	1183.7	1163.9	1139.2	1100.7	1057.2	1015.7	959.4	905.0
15°	1302.2	1295.3	1283.5	1272.6	1248.9	1227.2	1191.6	1144.1	1093.8	1032.5	967.3
17.5°	1377.4	1364.5	1361.5	1344.7	1320.1	1294.3	1254.8	1211.3	1152.1	1090.8	1019.6
20°	1478.1	1460.3	1454.4	1429.7	1401.1	1365.5	1320.1	1265.7	1203.4	1136.3	1063.1
22.5°	1596.7	1583.8	1571.0	1549.3	1512.7	1462.3	1396.1	1336.9	1257.8	1183.7	1104.7
25°	1764.7	1753.8	1733.0	1703.4	1657.9	1597.7	1517.6	1430.7	1337.8	1243.0	1150.1
27.5°	1927.7	1917.8	1903.0	1880.3	1828.9	1762.7	1663.9	1553.2	1435.6	1321.0	1218.2
30°	2080.9	2071.9	2057.1	2034.4	1988.9	1923.7	1812.1	1693.5	1547.3	1413.9	1290.4
32.5°	2245.9	2242.9	2226.1	2193.5	2153.9	2066.0	1944.5	1817.0	1668.8	1514.7	1370.4
35°	2432.6	2409.8	2394.1	2361.4	2294.3	2200.4	2058.1	1918.8	1762.7	1604.6	1443.5
37.5°	2590.7	2569.0	2549.2	2507.7	2425.7	2306.1	2145.1	1991.9	1830.8	1669.8	1505.8
40°	2706.2	2695.4	2671.7	2617.3	2525.5	2383.2	2209.3	2042.3	1880.3	1718.2	1556.2
42.5°	2792.2	2775.4	2748.8	2692.4	2583.8	2421.7	2234.9	2063.0	1903.0	1747.9	1588.8
45°	2823.8	2810.0	2785.3	2724.1	2606.5	2432.6	2234.0	2057.1	1904.0	1756.7	1610.5
47.5°	2805.1	2791.3	2769.5	2712.2	2596.6	2419.7	2216.2	2040.3	1894.1	1759.7	1630.3
50°	2742.8	2734.9	2718.1	2669.7	2566.0	2395.0	2200.4	2031.4	1892.1	1774.6	1657.9
52.5°	2736.9	2732.0	2711.2	2662.8	2557.1	2387.1	2198.4	2036.4	1908.9	1793.3	1677.7
55°	3344.5	3274.4	3117.3	2983.9	2764.6	2503.7	2298.2	2116.4	1980.1	1867.4	1786.4
57.5°	4753.5	4648.8	4442.3	4188.4	3684.4	3189.4	2793.2	2506.7	2365.4	2314.0	2344.6
60°	5413.5	5394.8	5362.1	5241.6	4983.7	4557.9	4083.6	3570.8	3365.3	3347.5	3409.7
62.5°	5726.8	5714.9	5724.8	5710.0	5629.9	5505.4	5369.0	5147.8	4944.2	4812.8	4534.1
65°	5871.0	5878.9	5935.2	5979.7	5989.6	6022.1	6122.0	6397.6	6599.2	6260.3	5486.6
67.5°	5504.4	5550.8	5680.3	5842.3	6032.0	6215.8	6512.2	7093.2	7507.2	7109.0	6010.3
69°	4556.9	4579.6	4895.8	5201.1	5664.5	5988.6	6418.4	7180.1	7645.6	7196.0	5968.8
70°	3587.6	3608.3	3947.3	4362.2	5145.8	5562.7	6124.9	7033.0	7516.1	7080.4	5755.4
72.5°	1618.4	1588.8	1708.3	1930.6	2782.3	3444.4	4427.5	5698.1	6201.0	5672.4	4305.9
75°	1130.3	1117.5	1130.3	1131.3	1263.7	1630.3	2057.1	3088.6	3819.8	3296.2	2057.1
77.5°	875.4	866.5	857.6	847.7	863.6	967.3	1008.8	1095.7	1422.8	1345.7	784.5
80°	692.6	684.7	706.4	699.5	699.5	711.4	703.5	670.9	609.6	565.1	505.9
82.5°	322.1	324.1	324.1	351.7	423.9	495.0	517.7	485.2	430.8	366.5	295.4
85°	30.6	34.6	58.3	89.9	178.9	201.5	202.6	167.9	167.9	132.4	106.7
87.5°	0.0	1.0	1.0	1.0	8.9	24.7	20.8	5.9	2.9	2.9	4.9
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5
2.5°	525.7	522.7	510.8	499.0	488.1	476.2	465.4	454.5	442.6	433.7	422.9
5°	614.6	592.8	568.1	544.4	520.7	496.0	470.3	447.6	423.9	402.1	381.4
7.5°	704.5	662.0	628.4	585.9	547.4	508.9	473.3	436.7	403.1	371.5	341.9
10°	780.5	729.2	676.8	622.5	567.1	515.8	466.4	422.9	378.4	339.9	303.4
12.5°	842.8	777.6	713.4	645.2	583.0	517.7	456.5	404.1	351.7	308.3	270.7
15°	899.1	824.0	746.9	667.9	588.9	514.8	446.6	381.4	328.0	278.6	236.2
17.5°	944.6	858.6	771.7	682.7	597.8	510.8	433.7	365.6	303.4	251.9	210.5
20°	984.1	894.2	800.3	700.5	603.7	509.8	422.9	345.8	281.6	227.3	186.7
22.5°	1020.7	930.7	830.0	723.2	612.6	508.9	413.0	331.0	262.8	208.5	167.9
25°	1062.2	967.3	861.6	746.9	628.4	512.8	407.1	319.1	246.0	190.7	153.1
27.5°	1108.6	1008.8	899.1	776.6	649.1	520.7	405.1	306.3	231.2	173.9	141.3
30°	1173.8	1058.2	936.7	806.2	667.9	529.6	403.1	298.4	216.4	161.0	129.4
32.5°	1231.1	1106.6	978.2	836.9	688.7	538.5	402.1	287.5	202.6	148.2	120.5
35°	1291.4	1151.1	1013.8	866.5	706.4	548.3	401.2	279.6	189.7	135.4	111.7
37.5°	1343.8	1188.6	1041.4	892.2	726.2	557.3	402.1	272.7	177.8	124.5	103.7
40°	1388.2	1227.2	1072.0	915.9	746.9	571.1	403.1	265.8	166.0	114.6	96.8
42.5°	1427.8	1263.7	1104.7	942.6	770.7	586.9	409.1	259.9	156.1	105.7	89.9
45°	1458.4	1297.3	1140.2	980.2	809.2	612.6	419.9	255.9	146.2	97.8	84.0
47.5°	1490.0	1346.7	1200.5	1039.4	865.6	653.1	438.7	254.9	138.3	91.9	79.0
50°	1533.5	1396.1	1253.8	1099.7	916.9	694.6	461.4	255.9	128.5	86.0	74.1
52.5°	1565.1	1446.5	1323.0	1204.4	1039.4	821.0	549.4	273.7	123.5	81.0	68.2
55°	1751.8	1731.1	1734.0	1753.8	1626.4	1397.1	918.9	395.2	145.3	91.9	67.2
57.5°	2470.1	2543.2	2585.7	2584.7	2374.3	1969.2	1234.1	507.8	162.1	106.7	80.0
60°	3414.7	3359.4	3281.3	3088.6	2809.0	2247.8	1380.3	546.4	140.3	85.0	73.1
62.5°	4249.6	3925.5	3638.0	3325.8	2959.2	2344.6	1409.9	543.4	122.5	64.2	51.4
65°	4770.3	4187.3	3723.0	3331.7	2899.9	2263.6	1333.9	499.0	103.7	52.4	42.5
67.5°	4894.8	4046.0	3389.0	2890.0	2422.7	1761.7	979.1	375.5	81.0	43.5	37.6
69°	4623.1	3596.5	2808.1	2241.9	1762.7	1168.9	605.7	237.1	62.2	39.5	34.6
70°	4252.6	3128.2	2287.3	1799.2	1305.2	821.0	423.9	167.0	50.4	36.5	31.6
72.5°	2735.9	1643.1	1124.4	782.5	538.5	327.1	166.0	75.1	38.5	30.6	25.7
75°	1061.2	607.7	440.7	334.9	261.8	181.8	100.8	48.4	32.6	25.7	19.7
77.5°	522.7	400.1	327.1	224.3	130.4	81.0	54.4	37.6	26.7	18.8	12.8
80°	413.0	274.7	164.0	101.8	77.0	58.3	41.5	30.6	19.7	11.9	8.9
82.5°	211.4	115.6	85.0	69.2	57.3	45.5	33.6	21.7	12.8	7.9	6.9
85°	66.2	48.4	43.5	42.5	39.5	32.6	23.7	13.9	7.9	4.9	4.9
87.5°	4.9	6.9	8.9	6.9	7.9	6.9	8.9	5.9	4.0	4.0	2.9
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5	455.5
2.5°	415.0	403.1	392.3	385.3	372.5	367.6	362.6	360.7	351.7	353.7	345.8
5°	362.6	341.9	326.0	310.3	295.4	284.6	275.6	264.8	255.9	251.9	244.0
7.5°	315.2	288.5	267.8	251.0	233.2	219.4	207.5	199.6	191.7	183.8	179.8
10°	273.7	245.0	221.3	204.5	187.7	175.9	167.0	161.0	156.1	153.1	152.2
12.5°	235.1	207.5	185.8	170.9	158.1	152.2	148.2	145.3	144.2	143.3	143.3
15°	205.5	177.8	161.0	150.2	144.2	141.3	140.3	138.3	136.4	135.4	135.4
17.5°	177.8	157.1	145.3	139.3	136.4	134.4	132.4	130.4	128.5	127.4	127.4
20°	159.1	142.3	136.4	132.4	129.4	127.4	124.5	122.5	121.6	120.5	119.6
22.5°	144.2	133.4	129.4	126.5	122.5	119.6	117.6	115.6	113.6	112.6	111.7
25°	133.4	126.5	123.5	119.6	115.6	112.6	109.7	106.7	104.8	103.7	101.8
27.5°	125.5	120.5	116.6	111.7	107.7	104.8	101.8	98.8	96.8	94.9	93.8
30°	118.6	113.6	108.7	104.8	99.8	96.8	92.9	89.9	88.9	86.9	85.0
32.5°	111.7	106.7	101.8	96.8	91.9	88.0	86.0	82.0	80.0	79.0	77.0
35°	103.7	98.8	92.9	88.9	84.0	80.0	77.0	74.1	72.1	70.1	69.2
37.5°	96.8	90.9	85.0	80.0	76.1	72.1	69.2	66.2	64.2	62.2	61.3
40°	88.9	83.0	77.0	72.1	68.2	65.2	62.2	59.3	57.3	56.3	56.3
42.5°	82.0	75.1	69.2	65.2	62.2	58.3	55.3	52.4	51.4	50.4	51.4
45°	75.1	68.2	63.2	59.3	56.3	52.4	49.4	47.4	46.4	47.4	48.4
47.5°	69.2	62.2	57.3	54.4	51.4	48.4	45.5	43.5	43.5	45.5	47.4
50°	63.2	56.3	52.4	50.4	47.4	44.5	40.5	39.5	40.5	42.5	44.5
52.5°	57.3	49.4	46.4	45.5	42.5	39.5	36.5	35.6	36.5	38.5	37.6
55°	51.4	43.5	42.5	41.5	38.5	34.6	31.6	31.6	31.6	30.6	28.7
57.5°	49.4	38.5	37.6	36.5	33.6	29.6	27.7	25.7	24.7	21.7	20.8
60°	51.4	34.6	34.6	32.6	29.6	25.7	22.7	19.7	17.8	15.8	15.8
62.5°	41.5	31.6	30.6	28.7	24.7	20.8	17.8	14.8	13.9	12.8	12.8
65°	33.6	28.7	26.7	23.7	20.8	16.8	13.9	11.9	10.9	10.9	11.9
67.5°	30.6	25.7	22.7	19.7	16.8	12.8	10.9	9.9	9.9	10.9	10.9
69°	28.7	23.7	20.8	17.8	14.8	11.9	9.9	9.9	9.9	9.9	10.9
70°	26.7	22.7	19.7	16.8	12.8	9.9	8.9	8.9	9.9	9.9	10.9
72.5°	20.8	17.8	16.8	13.9	9.9	8.9	7.9	8.9	8.9	9.9	9.9
75°	15.8	12.8	12.8	10.9	7.9	6.9	6.9	7.9	7.9	8.9	8.9
77.5°	10.9	8.9	8.9	7.9	6.9	5.9	5.9	6.9	7.9	7.9	8.9
80°	7.9	6.9	5.9	6.9	5.9	4.9	5.9	6.9	6.9	7.9	7.9
82.5°	5.9	5.9	5.9	5.9	4.9	4.9	5.9	5.9	6.9	7.9	7.9
85°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	5.9	5.9	6.9	6.9
87.5°	2.9	2.9	2.9	4.0	4.0	4.9	4.9	4.9	4.9	5.9	5.9
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°	455.5	455.5	455.5	455.5
2.5°	343.9	342.8	338.9	339.9
5°	241.1	235.1	239.1	238.1
7.5°	176.9	175.9	174.9	176.9
10°	151.2	151.2	150.2	151.2
12.5°	142.3	142.3	142.3	142.3
15°	135.4	135.4	134.4	134.4
17.5°	127.4	127.4	127.4	126.5
20°	119.6	118.6	118.6	118.6
22.5°	110.6	109.7	109.7	109.7
25°	101.8	100.8	100.8	100.8
27.5°	92.9	91.9	90.9	90.9
30°	84.0	83.0	82.0	82.0
32.5°	75.1	74.1	73.1	73.1
35°	67.2	67.2	66.2	65.2
37.5°	60.3	60.3	60.3	60.3
40°	55.3	56.3	56.3	56.3
42.5°	52.4	53.3	54.4	55.3
45°	50.4	52.4	53.3	53.3
47.5°	49.4	50.4	51.4	51.4
50°	45.5	44.5	44.5	44.5
52.5°	36.5	34.6	33.6	32.6
55°	26.7	25.7	23.7	23.7
57.5°	18.8	18.8	17.8	17.8
60°	14.8	14.8	13.9	14.8
62.5°	12.8	12.8	12.8	12.8
65°	11.9	11.9	11.9	11.9
67.5°	11.9	11.9	11.9	11.9
69°	10.9	10.9	10.9	10.9
70°	10.9	10.9	10.9	10.9
72.5°	9.9	9.9	9.9	9.9
75°	8.9	9.9	9.9	9.9
77.5°	8.9	8.9	8.9	8.9
80°	7.9	7.9	8.9	8.9
82.5°	7.9	7.9	7.9	7.9
85°	6.9	6.9	7.9	7.9
87.5°	5.9	5.9	6.9	6.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)