

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: P165247

Luminaire Tested: **VST-E03-LED-E-U-SL3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165247
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-E03-LED-E-U-SL3-HSS
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 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: 5139.3 lumens
Efficiency: N/A
Efficacy: 68.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-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

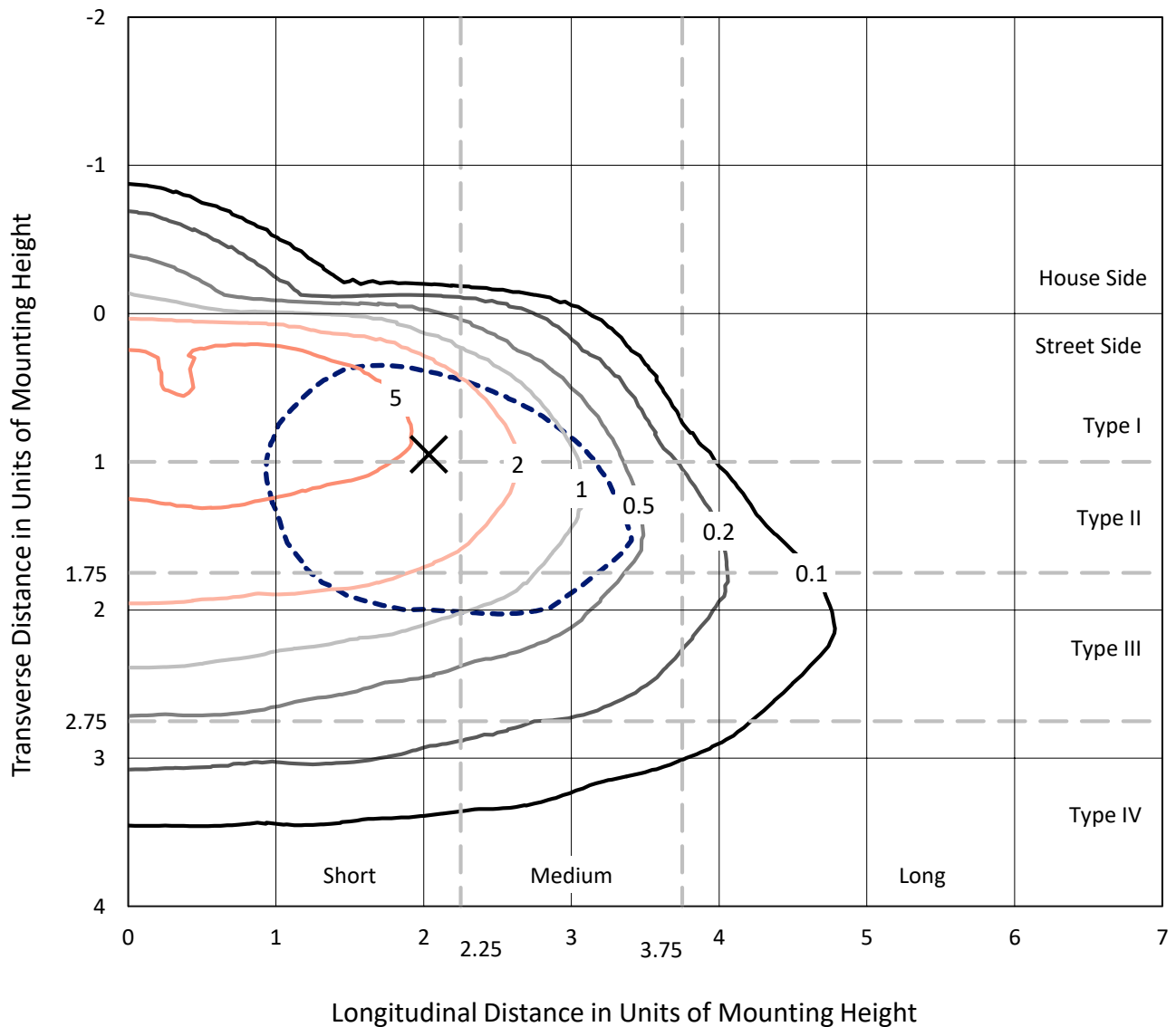


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

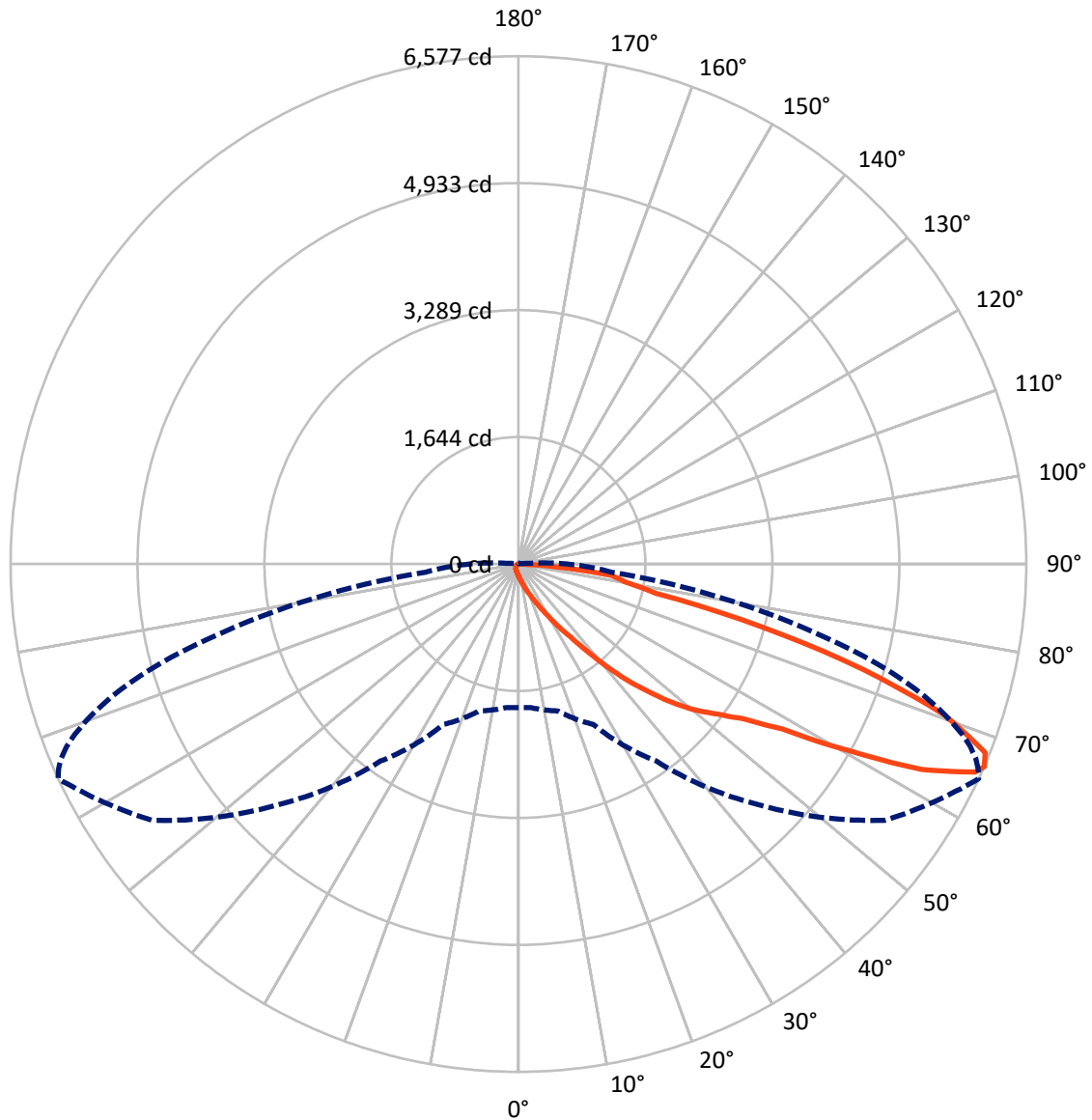


Based on 10 foot mounting height. Maximum calculated value = 8.5 fc
 Type III - Short - Non-Cutoff

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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	111.4	0.0	111.4
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	5027.9	0.0	5027.9
	% Fixture	97.8	0.0	97.8
Total	Lumens	5139.3	0.0	5139.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.4	0.3
10°-20°	73.6	1.4
20°-30°	158.8	3.1
30°-40°	339.1	6.6
40°-50°	750.0	14.6
50°-60°	1271.0	24.7
60°-70°	1696.1	33.0
70°-80°	747.1	14.5
80°-90°	86.1	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°	5139.3	100.0
0°-180°	5139.3	100.0

Coefficient of Utilization



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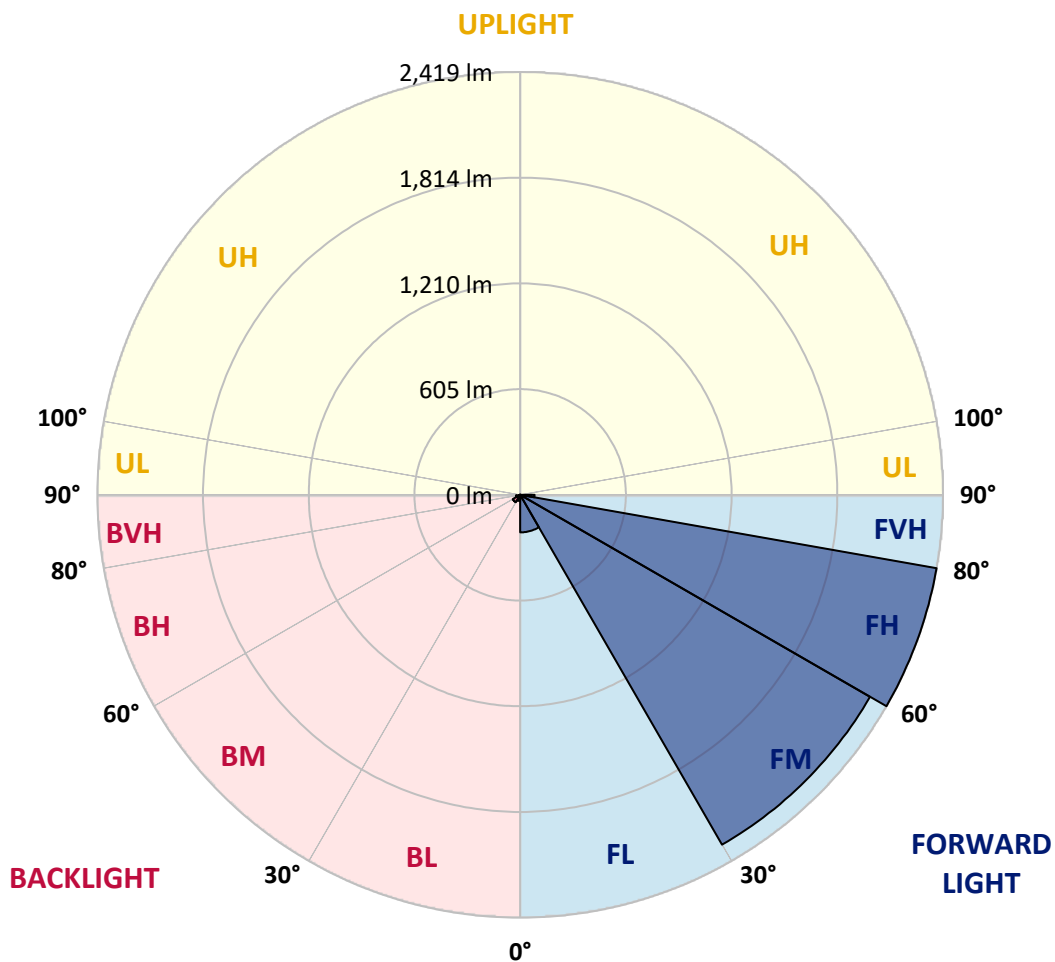
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	214.7	4.2			
FM	(30°-60°)	2311.3	45.0			
FH	(60°-80°)	2419.3	47.1			G2/5000
FVH	(80°-90°)	82.6	1.6			G1/100
BL	(0°-30°)	35.1	0.7	B0/110		
BM	(30°-60°)	48.9	1.0	B0/220		
BH	(60°-80°)	23.9	0.5	B0/110		G0/110
BVH	(80°-90°)	3.4	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°	155.1	155.1	155.1	155.1	155.1	155.1	155.1	155.1	155.1	155.1	155.1
2.5°	195.7	194.6	190.7	190.7	184.7	180.8	175.9	170.9	170.9	169.9	169.0
5°	258.8	253.0	251.9	241.1	232.2	219.4	207.5	191.7	189.7	187.7	186.7
7.5°	329.0	328.0	319.1	306.3	288.5	264.8	241.1	215.4	211.4	209.5	205.5
10°	419.9	415.0	403.1	381.4	354.7	323.1	284.6	244.0	239.1	235.1	233.2
12.5°	506.9	498.0	491.0	463.4	429.8	383.3	336.9	278.6	274.7	269.8	261.8
15°	587.9	580.0	568.1	544.4	506.9	448.6	394.3	323.1	313.2	306.3	300.4
17.5°	651.1	646.2	632.3	605.7	565.1	513.8	448.6	368.5	360.7	351.7	340.9
20°	711.4	704.5	682.7	646.2	602.7	563.2	512.8	427.8	416.9	406.1	394.3
22.5°	768.7	761.8	726.2	665.9	619.5	602.7	584.9	495.0	478.2	469.3	457.4
25°	848.8	833.9	778.6	682.7	620.5	633.4	664.0	581.9	566.2	553.3	534.5
27.5°	956.5	936.7	849.7	707.5	624.4	667.0	754.9	687.7	670.9	656.0	635.3
30°	1078.0	1065.1	961.4	766.7	653.1	716.3	856.6	822.1	802.3	784.5	759.8
32.5°	1200.5	1182.7	1079.9	879.4	730.1	812.2	984.1	978.2	952.5	935.7	909.0
35°	1308.2	1299.3	1223.2	1064.1	906.1	980.2	1154.0	1160.9	1138.3	1120.4	1090.8
37.5°	1381.3	1381.3	1366.5	1262.7	1185.7	1241.0	1404.0	1405.0	1382.3	1341.8	1327.0
40°	1418.8	1429.7	1483.1	1502.8	1498.9	1570.0	1732.1	1714.3	1695.5	1674.7	1625.3
42.5°	1495.9	1505.8	1619.4	1755.8	1844.7	1938.5	2050.2	2044.3	2021.6	1984.0	1938.5
45°	1626.4	1639.2	1774.6	1990.9	2173.7	2307.1	2378.2	2350.6	2327.8	2292.3	2268.5
47.5°	1792.3	1817.0	1970.2	2237.9	2458.3	2678.6	2752.7	2679.6	2659.9	2632.1	2593.6
50°	1969.2	1992.9	2155.9	2462.2	2711.2	2974.0	3097.6	2974.0	2945.4	2936.5	2893.0
52.5°	2122.3	2142.1	2299.2	2635.1	2904.8	3213.1	3392.9	3229.9	3209.2	3179.5	3147.9
55°	2213.2	2229.1	2376.2	2718.1	3036.3	3428.5	3678.5	3535.3	3504.6	3492.8	3447.3
57.5°	2243.9	2259.7	2392.1	2729.0	3107.4	3625.1	4025.3	4030.3	3993.7	3951.2	3937.4
60°	2243.9	2261.6	2373.3	2702.3	3176.6	3834.6	4487.7	4899.7	4820.7	4812.8	4762.4
62.5°	2151.0	2167.8	2280.4	2620.3	3269.5	4117.2	5131.9	5859.1	5836.4	5785.0	5702.0
65°	1949.4	1959.3	2069.9	2410.9	3233.9	4377.1	5690.2	6497.4	6460.9	6360.1	6253.4
66°	1858.5	1866.4	1970.2	2291.3	3117.3	4412.6	5789.0	6577.4	6517.2	6432.2	6311.6
67.5°	1727.1	1741.0	1814.0	2069.0	2837.7	4289.1	5726.8	6521.2	6468.8	6366.0	6245.5
70°	1153.1	1143.2	1401.1	1587.8	2161.9	3494.8	5137.9	5855.2	5856.2	5807.8	5759.3
72.5°	547.4	553.3	628.4	977.2	1414.9	2334.8	4089.5	4673.5	4740.7	4653.7	4593.4
75°	393.2	402.1	447.6	597.8	843.8	1401.1	2650.9	3268.4	3270.4	3116.3	2979.0
77.5°	114.6	119.6	167.9	368.5	632.3	945.5	1522.6	1817.0	1774.6	1663.9	1560.1
80°	47.4	47.4	49.4	117.6	253.9	642.2	1065.1	1399.1	1394.2	1351.7	1290.4
82.5°	17.8	18.8	23.7	48.4	60.3	158.1	710.4	1214.3	1211.3	1151.1	1107.6
85°	2.0	2.0	5.9	20.8	22.7	29.6	142.3	535.5	532.6	535.5	469.3
87.5°	0.0	0.0	1.0	2.0	2.9	4.0	5.9	20.8	22.7	21.7	19.7
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°	155.1	155.1	155.1	155.1	155.1	155.1	155.1	155.1	155.1	155.1	155.1
2.5°	169.0	167.0	167.0	166.0	166.0	166.0	165.0	164.0	164.0	163.0	162.1
5°	184.7	182.8	181.8	179.8	178.9	177.8	175.9	174.9	172.9	171.9	170.9
7.5°	203.5	199.6	198.6	195.7	192.7	190.7	188.7	185.8	183.8	179.8	178.9
10°	227.3	222.3	218.3	214.4	211.4	206.5	203.5	199.6	195.7	192.7	189.7
12.5°	257.9	251.0	245.0	241.1	234.2	228.2	222.3	219.4	211.4	207.5	202.6
15°	291.5	283.6	276.7	268.7	263.8	253.9	246.0	237.1	233.2	226.3	218.3
17.5°	334.9	322.1	311.2	303.4	293.5	283.6	274.7	265.8	253.9	246.0	236.2
20°	381.4	370.5	355.7	341.9	330.0	318.2	305.3	293.5	282.6	269.8	257.9
22.5°	440.7	424.9	407.1	393.2	377.5	364.6	346.8	331.0	313.2	296.4	282.6
25°	515.8	495.0	478.2	458.5	439.7	419.9	398.2	378.4	355.7	339.9	316.2
27.5°	608.6	588.9	566.2	540.5	521.7	492.1	463.4	438.7	412.0	387.3	360.7
30°	727.2	698.6	674.8	650.2	612.6	583.9	550.3	516.8	480.2	455.5	415.0
32.5°	869.5	838.9	803.3	767.7	733.1	692.6	651.1	609.6	569.1	523.7	482.2
35°	1043.4	1006.8	966.3	927.8	874.4	830.9	778.6	721.3	675.8	623.5	571.1
37.5°	1273.6	1213.3	1177.7	1137.2	1065.1	1005.8	947.5	890.2	810.2	754.9	680.8
40°	1562.1	1526.5	1468.3	1403.0	1337.8	1259.8	1180.7	1104.7	1011.8	934.7	848.8
42.5°	1901.0	1848.7	1789.4	1695.5	1629.3	1537.4	1447.5	1346.7	1233.1	1134.3	1033.5
45°	2219.2	2156.9	2111.5	2017.6	1948.4	1839.7	1731.1	1624.4	1492.9	1365.5	1248.9
47.5°	2563.0	2511.6	2436.5	2360.5	2290.3	2167.8	2050.2	1920.8	1782.4	1631.3	1480.1
50°	2865.4	2824.9	2773.4	2681.6	2603.5	2500.7	2362.4	2221.1	2046.2	1896.1	1724.2
52.5°	3122.2	3090.6	3018.5	2953.3	2883.1	2786.3	2662.8	2527.4	2338.7	2173.7	1978.1
55°	3425.6	3402.8	3339.6	3299.1	3236.9	3144.0	3028.4	2902.9	2703.3	2523.5	2302.1
57.5°	3922.6	3904.8	3849.4	3832.6	3771.4	3690.4	3548.1	3413.7	3180.5	2957.2	2704.3
60°	4745.6	4710.1	4629.0	4587.5	4458.1	4349.4	4164.7	3979.9	3698.3	3413.7	3109.4
62.5°	5626.9	5527.1	5373.0	5240.6	5056.9	4868.1	4621.1	4338.5	4008.5	3670.6	3320.8
65°	6102.2	5932.3	5737.6	5527.1	5289.1	5011.4	4700.2	4361.3	4006.6	3649.9	3280.3
66°	6156.5	5964.8	5758.4	5524.2	5259.4	4964.0	4647.8	4292.1	3923.5	3575.8	3206.2
67.5°	6088.4	5887.8	5669.5	5409.6	5123.0	4816.7	4484.8	4115.2	3760.5	3407.8	3048.1
70°	5611.1	5411.5	5216.9	4943.2	4637.9	4329.7	4015.4	3602.5	3266.5	2942.4	2622.3
72.5°	4480.8	4345.4	4152.8	3918.6	3621.2	3259.6	2997.7	2628.2	2336.8	2022.5	1774.6
75°	2800.1	2609.5	2371.3	2072.9	1845.7	1552.2	1399.1	1118.5	952.5	807.2	667.0
77.5°	1431.7	1288.4	1121.5	953.5	792.4	632.3	489.1	345.8	233.2	162.1	120.5
80°	1182.7	1056.2	917.9	764.8	622.5	483.2	347.8	237.1	151.2	98.8	77.0
82.5°	977.2	870.5	746.9	604.7	481.2	379.4	263.8	171.9	106.7	69.2	54.4
85°	416.0	377.5	291.5	231.2	173.9	128.5	89.9	60.3	42.5	34.6	31.6
87.5°	17.8	19.7	18.8	14.8	10.9	10.9	9.9	7.9	7.9	7.9	7.9
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	155.1	155.1	155.1	155.1	155.1	155.1	155.1	155.1	155.1	155.1	155.1
2.5°	162.1	161.0	160.1	160.1	159.1	158.1	152.2	147.2	141.3	137.3	133.4
5°	169.0	167.9	166.0	165.0	163.0	162.1	149.2	138.3	129.4	122.5	117.6
7.5°	175.9	174.9	171.9	169.0	167.9	166.0	145.3	131.4	119.6	111.7	106.7
10°	184.7	181.8	178.9	174.9	171.9	169.0	141.3	123.5	110.6	103.7	98.8
12.5°	197.6	192.7	187.7	182.8	178.9	173.9	139.3	116.6	103.7	95.8	90.9
15°	212.5	205.5	199.6	193.7	186.7	181.8	135.4	110.6	97.8	89.9	84.0
17.5°	226.3	218.3	209.5	200.6	193.7	186.7	131.4	104.8	91.9	84.0	78.1
20°	246.0	234.2	223.3	212.5	202.6	193.7	125.5	98.8	86.9	78.1	72.1
22.5°	267.8	253.9	240.1	225.3	212.5	200.6	120.5	93.8	82.0	73.1	66.2
25°	295.4	278.6	259.9	241.1	226.3	210.5	115.6	88.9	77.0	68.2	61.3
27.5°	334.0	310.3	289.5	265.8	243.1	225.3	111.7	85.0	72.1	63.2	56.3
30°	386.3	351.7	319.1	293.5	266.8	241.1	107.7	80.0	68.2	58.3	50.4
32.5°	444.6	404.1	366.5	328.0	294.4	264.8	103.7	76.1	63.2	53.3	46.4
35°	516.8	465.4	415.0	370.5	330.0	290.5	99.8	72.1	59.3	48.4	41.5
37.5°	620.5	556.3	490.1	432.8	380.4	328.0	96.8	68.2	54.4	43.5	36.5
40°	762.8	679.8	598.7	520.7	452.5	387.3	92.9	64.2	50.4	39.5	32.6
42.5°	916.9	816.1	709.4	621.5	527.6	445.6	88.9	60.3	46.4	35.6	28.7
45°	1108.6	983.1	853.7	734.1	619.5	513.8	85.0	56.3	41.5	31.6	24.7
47.5°	1318.1	1158.0	1011.8	861.6	725.2	598.7	80.0	53.3	37.6	27.7	21.7
50°	1533.5	1364.5	1179.7	1008.8	846.8	683.8	75.1	48.4	33.6	24.7	17.8
52.5°	1765.6	1566.1	1377.4	1164.9	976.2	795.4	70.1	44.5	30.6	21.7	14.8
55°	2061.1	1837.8	1616.5	1378.3	1151.1	924.8	65.2	39.5	26.7	18.8	11.9
57.5°	2432.6	2167.8	1896.1	1627.3	1351.7	1094.8	61.3	34.6	22.7	15.8	9.9
60°	2783.3	2474.1	2145.1	1835.8	1524.5	1225.2	55.3	30.6	19.7	12.8	9.9
62.5°	2965.1	2612.4	2257.7	1916.8	1584.8	1271.6	49.4	25.7	16.8	10.9	8.9
65°	2920.7	2561.0	2217.2	1873.3	1548.3	1242.0	43.5	22.7	14.8	9.9	8.9
66°	2856.5	2500.7	2155.0	1827.9	1517.6	1210.4	40.5	21.7	13.9	9.9	7.9
67.5°	2716.1	2372.3	2042.3	1738.0	1433.6	1150.1	36.5	19.7	12.8	8.9	7.9
70°	2320.0	2007.7	1743.9	1473.2	1225.2	969.3	29.6	16.8	10.9	7.9	7.9
72.5°	1535.4	1323.0	1147.1	987.1	825.0	640.3	24.7	13.9	8.9	7.9	6.9
75°	579.0	523.7	449.6	404.1	352.7	309.2	19.7	8.9	6.9	6.9	6.9
77.5°	102.8	94.9	84.0	77.0	71.2	65.2	15.8	5.9	5.9	6.9	6.9
80°	69.2	64.2	58.3	53.3	49.4	44.5	10.9	4.9	5.9	5.9	6.9
82.5°	49.4	46.4	43.5	39.5	36.5	32.6	6.9	4.9	5.9	5.9	5.9
85°	29.6	27.7	25.7	23.7	20.8	19.7	4.9	4.9	4.9	5.9	5.9
87.5°	7.9	6.9	7.9	7.9	5.9	6.9	4.0	4.0	4.0	4.9	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):

	145°	155°	165°	175°	180°
0°	155.1	155.1	155.1	155.1	155.1
2.5°	131.4	131.4	129.4	132.4	132.4
5°	113.6	113.6	112.6	113.6	113.6
7.5°	103.7	102.8	102.8	102.8	103.7
10°	94.9	93.8	93.8	93.8	93.8
12.5°	86.9	86.0	85.0	86.0	86.0
15°	80.0	78.1	78.1	78.1	78.1
17.5°	74.1	72.1	71.2	71.2	71.2
20°	68.2	65.2	65.2	65.2	65.2
22.5°	62.2	59.3	59.3	59.3	59.3
25°	56.3	53.3	53.3	53.3	53.3
27.5°	51.4	48.4	48.4	48.4	48.4
30°	45.5	43.5	43.5	44.5	43.5
32.5°	41.5	38.5	38.5	39.5	39.5
35°	36.5	34.6	34.6	34.6	34.6
37.5°	31.6	29.6	29.6	29.6	29.6
40°	27.7	25.7	24.7	25.7	25.7
42.5°	23.7	21.7	20.8	20.8	20.8
45°	20.8	17.8	16.8	17.8	17.8
47.5°	16.8	14.8	14.8	15.8	15.8
50°	12.8	12.8	13.9	15.8	15.8
52.5°	11.9	11.9	13.9	15.8	15.8
55°	10.9	11.9	13.9	14.8	15.8
57.5°	9.9	11.9	13.9	14.8	14.8
60°	9.9	10.9	12.8	14.8	14.8
62.5°	8.9	9.9	11.9	13.9	13.9
65°	8.9	9.9	11.9	13.9	13.9
66°	8.9	9.9	11.9	13.9	13.9
67.5°	8.9	9.9	11.9	13.9	13.9
70°	8.9	9.9	11.9	12.8	12.8
72.5°	7.9	8.9	10.9	12.8	12.8
75°	7.9	8.9	10.9	12.8	12.8
77.5°	7.9	8.9	10.9	12.8	12.8
80°	7.9	8.9	10.9	11.9	12.8
82.5°	6.9	8.9	9.9	11.9	11.9
85°	6.9	7.9	9.9	10.9	11.9
87.5°	5.9	6.9	7.9	9.9	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)