

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: P165515

Luminaire Tested: **VST-E08-LED-E-U-SL4-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165515
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-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(8) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (168) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13574.7 lumens
Efficiency: N/A
Efficacy: 69.8 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 - G3

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

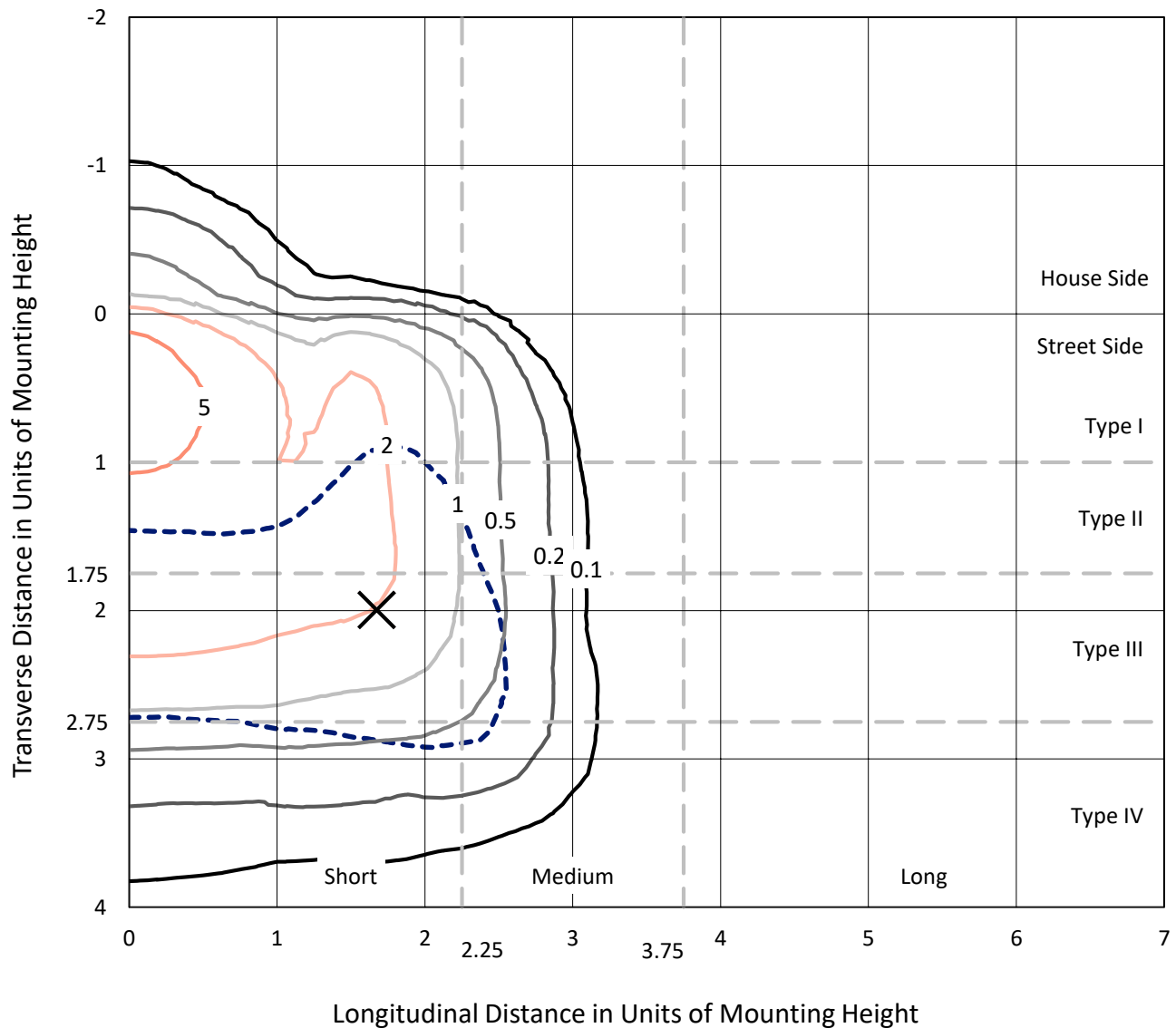


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

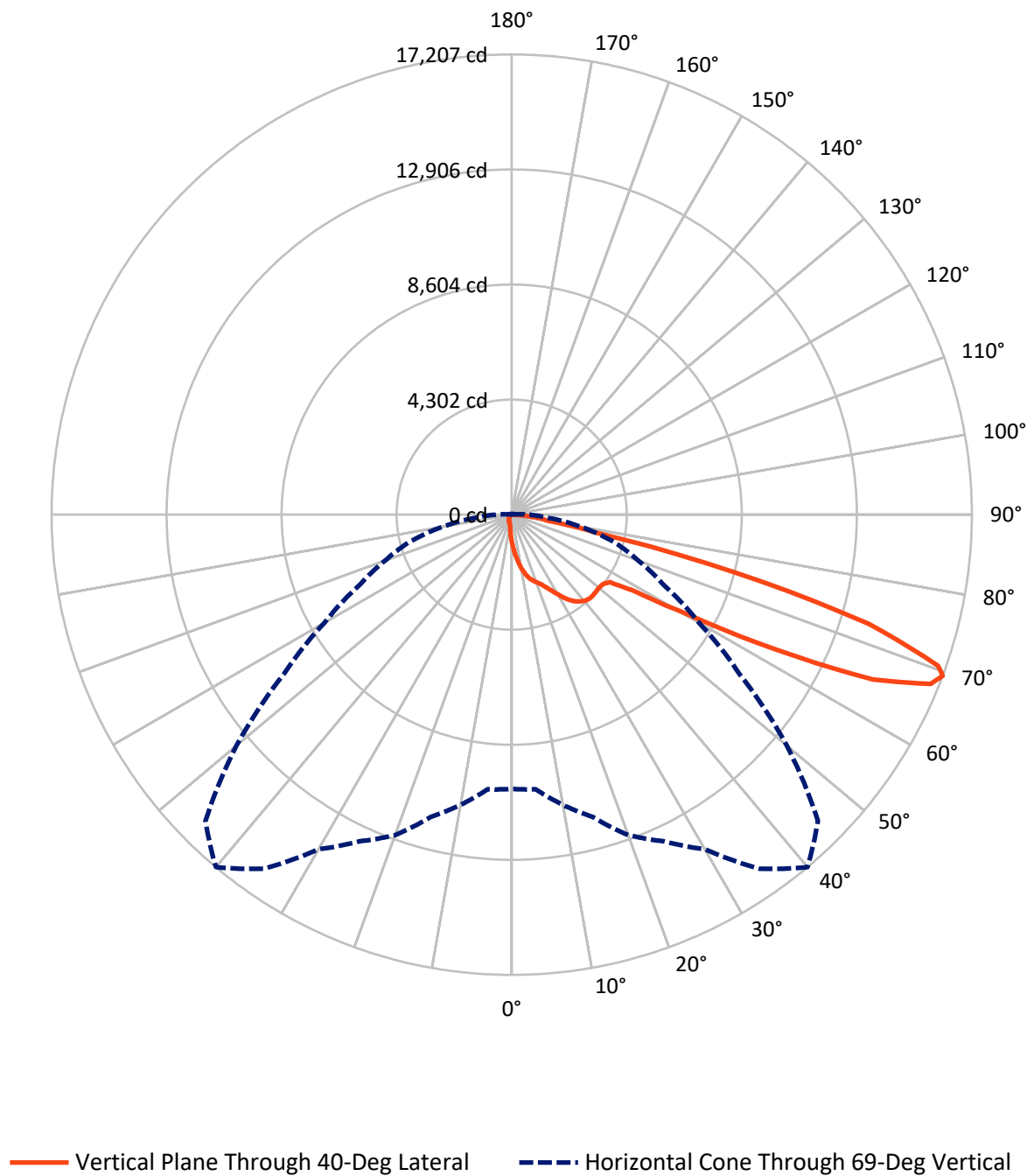


Based on 20 foot mounting height. Maximum calculated value = 7.6 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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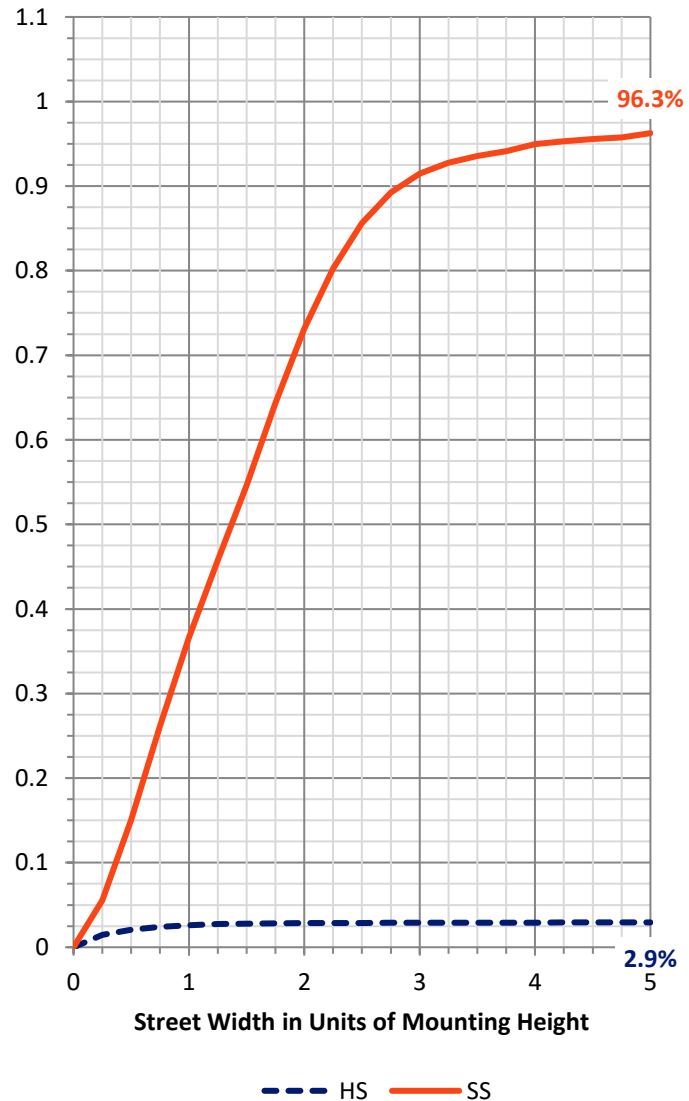
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	404.2	0.0	404.2
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	13170.4	0.0	13170.4
	% Fixture	97.0	0.0	97.0
Total	Lumens	13574.7	0.0	13574.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.4	0.8
10°-20°	363.3	2.7
20°-30°	695.3	5.1
30°-40°	1156.3	8.5
40°-50°	1564.7	11.5
50°-60°	2447.0	18.0
60°-70°	5031.0	37.1
70°-80°	2024.4	14.9
80°-90°	187.3	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°	13574.7	100.0
0°-180°	13574.7	100.0

Coefficient of Utilization



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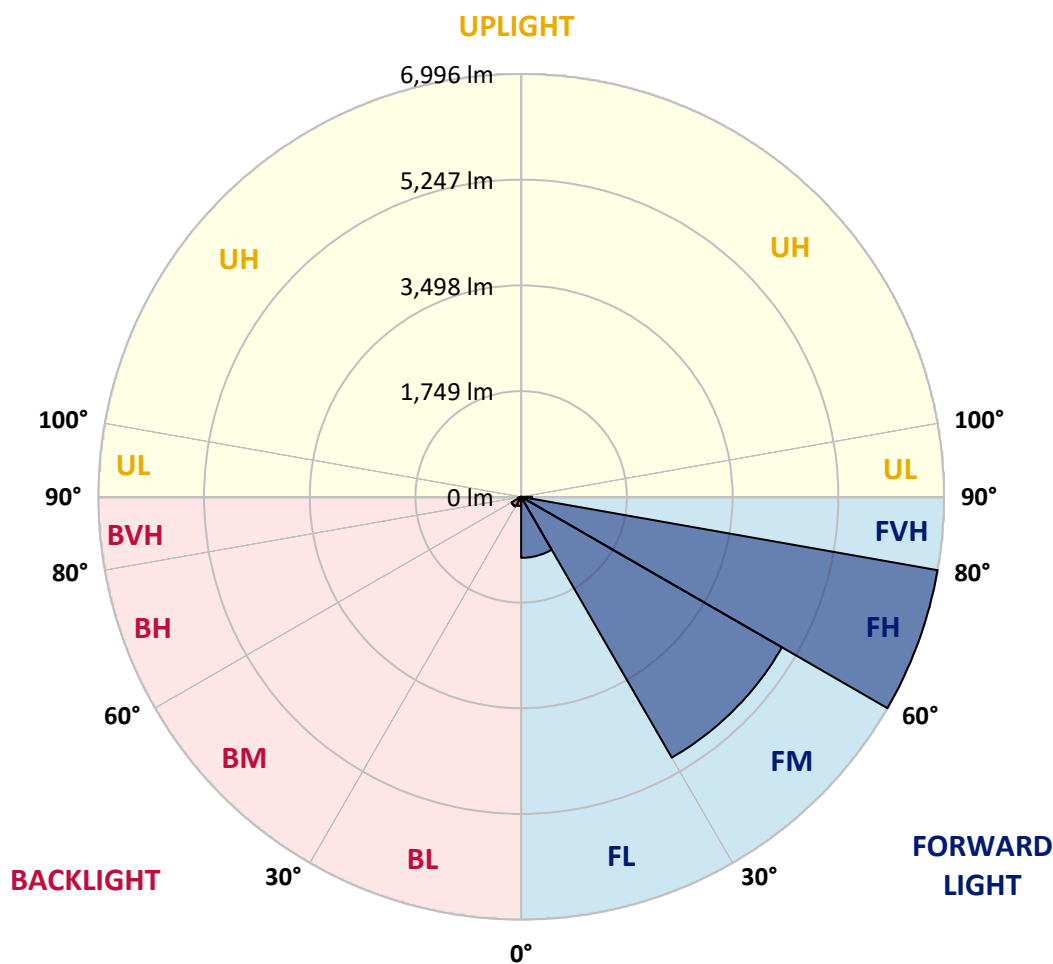
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1010.2	7.4			
FM	(30°-60°)	4983.5	36.7			
FH	(60°-80°)	6996.4	51.5			G3/7500
FVH	(80°-90°)	180.3	1.3			G2/225
BL	(0°-30°)	153.7	1.1	B1/500		
BM	(30°-60°)	184.6	1.4	B0/220		
BH	(60°-80°)	59.0	0.4	B0/110		G0/110
BVH	(80°-90°)	7.0	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-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2
2.5°	1367.7	1352.0	1334.2	1334.2	1312.0	1312.0	1298.7	1263.2	1258.7	1238.6	1218.6
5°	1745.6	1732.3	1710.1	1690.0	1672.3	1641.1	1618.8	1576.6	1530.0	1485.4	1445.5
7.5°	2114.8	2108.1	2068.1	2061.4	2032.5	1981.4	1936.9	1874.6	1794.5	1732.3	1658.9
10°	2457.3	2441.6	2432.7	2394.9	2352.8	2297.1	2228.1	2152.6	2059.2	1961.3	1856.8
12.5°	2728.6	2719.7	2679.6	2664.0	2619.6	2564.0	2477.3	2379.4	2286.1	2159.3	2036.9
15°	2930.9	2915.3	2888.6	2864.2	2810.8	2761.9	2681.9	2575.1	2461.8	2323.9	2177.1
17.5°	3099.9	3071.0	3064.3	3026.5	2971.0	2913.1	2824.2	2726.3	2592.9	2455.0	2294.8
20°	3326.7	3286.7	3273.3	3217.7	3153.3	3073.2	2971.0	2848.6	2708.5	2557.4	2392.7
22.5°	3593.5	3564.6	3535.7	3486.8	3404.6	3291.2	3142.2	3008.8	2830.8	2664.0	2486.2
25°	3971.6	3947.2	3900.5	3833.7	3731.4	3595.8	3415.7	3220.0	3011.0	2797.5	2588.4
27.5°	4338.5	4316.2	4282.9	4231.8	4116.1	3967.2	3744.8	3495.7	3231.1	2973.1	2741.8
30°	4683.3	4663.2	4629.8	4578.8	4476.4	4329.6	4078.3	3811.5	3482.4	3182.2	2904.3
32.5°	5054.6	5047.9	5010.1	4936.7	4847.7	4649.9	4376.3	4089.5	3756.0	3409.0	3084.3
35°	5474.9	5423.7	5388.2	5314.7	5163.6	4952.3	4632.1	4318.5	3967.2	3611.3	3248.9
37.5°	5830.7	5781.8	5737.2	5643.9	5459.3	5190.2	4827.8	4483.0	4120.6	3758.1	3388.9
40°	6090.8	6066.3	6013.0	5890.7	5683.9	5363.7	4972.3	4596.4	4231.8	3867.1	3502.4
42.5°	6284.3	6246.5	6186.5	6059.7	5815.2	5450.4	5030.1	4643.2	4282.9	3933.8	3575.8
45°	6355.5	6324.4	6268.8	6130.9	5866.2	5474.9	5027.9	4629.8	4285.2	3953.8	3624.7
47.5°	6313.2	6282.1	6233.1	6104.1	5844.1	5446.0	4987.9	4592.0	4262.9	3960.5	3669.1
50°	6173.2	6155.3	6117.5	6008.5	5775.1	5390.3	4952.3	4572.0	4258.4	3993.9	3731.4
52.5°	6159.8	6148.7	6102.0	5993.0	5755.1	5372.5	4947.8	4583.2	4296.3	4036.2	3775.9
55°	7527.3	7369.5	7015.9	6715.7	6222.0	5635.0	5172.4	4763.2	4456.4	4202.9	4020.5
57.5°	10698.4	10462.8	9998.0	9426.5	8292.3	7178.2	6286.6	5641.6	5323.6	5208.0	5276.9
60°	12183.9	12141.7	12068.3	11797.0	11216.6	10258.2	9190.7	8036.7	7574.0	7534.1	7674.1
62.5°	12888.9	12862.2	12884.4	12851.1	12670.9	12390.7	12083.8	11585.8	11127.6	10831.8	10204.7
65°	13213.5	13231.3	13358.0	13458.1	13480.4	13553.7	13778.4	14398.8	14852.3	14089.7	12348.5
67.5°	12388.4	12493.0	12784.4	13149.0	13576.0	13989.6	14656.7	15964.3	16896.0	15999.9	13527.1
69°	10255.9	10307.1	11018.6	11705.8	12748.7	13478.2	14445.5	16159.9	17207.4	16195.6	13433.6
70°	8074.4	8121.1	8883.9	9817.8	11581.3	12519.7	13785.0	15828.7	16916.0	15935.4	12953.3
72.5°	3642.5	3575.8	3844.8	4345.1	6262.0	7752.0	9964.6	12824.3	13956.2	12766.5	9691.0
75°	2544.0	2515.1	2544.0	2546.2	2844.2	3669.1	4629.8	6951.4	8597.0	7418.5	4629.8
77.5°	1970.2	1950.2	1930.2	1908.0	1943.6	2177.1	2270.4	2466.1	3202.2	3028.8	1765.6
80°	1558.9	1541.1	1589.9	1574.4	1574.4	1601.2	1583.3	1509.9	1372.0	1271.9	1138.5
82.5°	724.9	729.3	729.3	791.6	954.0	1114.1	1165.2	1091.9	969.6	825.0	664.9
85°	68.9	77.8	131.3	202.4	402.5	453.6	455.9	378.0	378.0	298.0	240.1
87.5°	0.0	2.2	2.2	2.2	20.0	55.6	46.7	13.4	6.6	6.6	11.1
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°	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2
2.5°	1183.1	1176.3	1149.7	1123.0	1098.5	1071.8	1047.4	1022.9	996.2	976.2	951.8
5°	1383.2	1334.2	1278.7	1225.3	1171.9	1116.4	1058.6	1007.4	954.0	905.0	858.3
7.5°	1585.5	1489.9	1414.3	1318.7	1232.0	1145.3	1065.2	982.9	907.3	836.2	769.4
10°	1756.7	1641.1	1523.2	1401.0	1276.4	1160.8	1049.7	951.8	851.7	765.0	682.8
12.5°	1896.9	1750.1	1605.6	1452.1	1312.0	1165.2	1027.4	909.5	791.6	693.8	609.3
15°	2023.6	1854.6	1681.1	1503.2	1325.4	1158.6	1005.1	858.3	738.3	627.1	531.5
17.5°	2125.9	1932.4	1736.7	1536.6	1345.4	1149.7	976.2	822.8	682.8	567.0	473.7
20°	2214.9	2012.5	1801.3	1576.6	1358.8	1147.4	951.8	778.4	633.7	511.5	420.2
22.5°	2297.1	2094.7	1868.0	1627.8	1378.7	1145.3	929.5	745.0	591.5	469.3	378.0
25°	2390.6	2177.1	1939.2	1681.1	1414.3	1154.2	916.2	718.3	553.7	429.2	344.6
27.5°	2495.1	2270.4	2023.6	1747.8	1461.0	1171.9	911.8	689.4	520.3	391.3	318.0
30°	2641.8	2381.7	2108.1	1814.5	1503.2	1192.0	907.3	671.5	486.9	362.4	291.3
32.5°	2770.9	2490.7	2201.5	1883.5	1550.0	1212.0	905.0	647.1	455.9	333.5	271.3
35°	2906.4	2590.7	2281.6	1950.2	1589.9	1234.1	902.9	629.3	427.0	304.6	251.3
37.5°	3024.3	2675.1	2343.9	2008.0	1634.5	1254.2	905.0	613.8	400.3	280.2	233.5
40°	3124.4	2761.9	2412.7	2061.4	1681.1	1285.3	907.3	598.2	373.7	257.9	218.0
42.5°	3213.4	2844.2	2486.2	2121.5	1734.6	1320.9	920.7	584.9	351.4	237.9	202.4
45°	3282.2	2919.8	2566.1	2206.0	1821.3	1378.7	945.1	575.9	329.1	220.1	189.1
47.5°	3353.4	3030.9	2701.9	2339.4	1948.1	1469.9	987.4	573.8	311.3	206.7	177.8
50°	3451.3	3142.2	2821.9	2475.0	2063.7	1563.3	1038.4	575.9	289.1	193.5	166.8
52.5°	3522.5	3255.5	2977.6	2710.8	2339.4	1847.9	1236.4	615.9	277.9	182.3	153.4
55°	3942.7	3896.0	3902.6	3947.2	3660.4	3144.4	2068.1	889.5	326.9	206.7	151.2
57.5°	5559.4	5723.9	5819.5	5817.3	5343.6	4432.0	2777.5	1143.0	364.7	240.1	180.1
60°	7685.3	7560.8	7385.1	6951.4	6322.1	5059.1	3106.6	1229.8	315.7	191.2	164.6
62.5°	9564.4	8834.9	8187.8	7485.2	6660.1	5276.9	3173.3	1223.0	275.7	144.5	115.6
65°	10736.2	9424.2	8379.1	7498.4	6526.7	5094.6	3002.0	1123.0	233.5	117.9	95.6
67.5°	11016.4	9106.2	7627.5	6504.4	5452.6	3965.0	2203.7	845.1	182.3	97.9	84.5
69°	10404.9	8094.5	6319.9	5045.7	3967.2	2630.7	1363.2	533.7	140.0	89.0	77.8
70°	9571.0	7040.4	5147.9	4049.4	2937.6	1847.9	954.0	375.8	113.4	82.2	71.2
72.5°	6157.6	3698.0	2530.6	1761.2	1212.0	736.1	373.7	169.1	86.7	68.9	57.8
75°	2388.3	1367.7	991.9	753.8	589.3	409.2	226.9	109.0	73.3	57.8	44.4
77.5°	1176.3	900.6	736.1	504.8	293.6	182.3	122.3	84.5	60.1	42.3	28.9
80°	929.5	618.2	369.2	229.0	173.4	131.3	93.4	68.9	44.4	26.7	20.0
82.5°	475.9	260.2	191.2	155.7	129.0	102.4	75.6	48.9	28.9	17.8	15.5
85°	148.9	109.0	97.9	95.6	89.0	73.3	53.3	31.2	17.8	11.1	11.1
87.5°	11.1	15.5	20.0	15.5	17.8	15.5	20.0	13.4	8.9	8.9	6.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2	1025.2
2.5°	933.9	907.3	882.9	867.2	838.3	827.2	816.2	811.7	791.6	796.1	778.4
5°	816.2	769.4	733.8	698.3	664.9	640.5	620.4	595.9	575.9	567.0	549.2
7.5°	709.4	649.4	602.7	564.9	524.8	493.7	467.0	449.1	431.4	413.6	404.7
10°	615.9	551.5	498.2	460.3	422.5	395.8	375.8	362.4	351.4	344.6	342.5
12.5°	529.2	467.0	418.1	384.7	355.8	342.5	333.5	326.9	324.6	322.5	322.5
15°	462.5	400.3	362.4	338.0	324.6	318.0	315.7	311.3	306.9	304.6	304.6
17.5°	400.3	353.5	326.9	313.6	306.9	302.5	298.0	293.6	289.1	286.8	286.8
20°	358.0	320.2	306.9	298.0	291.3	286.8	280.2	275.7	273.6	271.3	269.1
22.5°	324.6	300.2	291.3	284.7	275.7	269.1	264.7	260.2	255.8	253.5	251.3
25°	300.2	284.7	277.9	269.1	260.2	253.5	246.9	240.1	235.8	233.5	229.0
27.5°	282.4	271.3	262.4	251.3	242.4	235.8	229.0	222.4	218.0	213.5	211.2
30°	266.8	255.8	244.6	235.8	224.6	218.0	209.0	202.4	200.1	195.7	191.2
32.5°	251.3	240.1	229.0	218.0	206.7	198.0	193.5	184.6	180.1	177.8	173.4
35°	233.5	222.4	209.0	200.1	189.1	180.1	173.4	166.8	162.3	157.9	155.7
37.5°	218.0	204.6	191.2	180.1	171.2	162.3	155.7	148.9	144.5	140.0	137.9
40°	200.1	186.8	173.4	162.3	153.4	146.8	140.0	133.4	129.0	126.8	126.8
42.5°	184.6	169.1	155.7	146.8	140.0	131.3	124.5	117.9	115.6	113.4	115.6
45°	169.1	153.4	142.3	133.4	126.8	117.9	111.1	106.7	104.5	106.7	109.0
47.5°	155.7	140.0	129.0	122.3	115.6	109.0	102.4	97.9	97.9	102.4	106.7
50°	142.3	126.8	117.9	113.4	106.7	100.1	91.2	89.0	91.2	95.6	100.1
52.5°	129.0	111.1	104.5	102.4	95.6	89.0	82.2	80.1	82.2	86.7	84.5
55°	115.6	97.9	95.6	93.4	86.7	77.8	71.2	71.2	71.2	68.9	64.5
57.5°	111.1	86.7	84.5	82.2	75.6	66.7	62.3	57.8	55.6	48.9	46.7
60°	115.6	77.8	77.8	73.3	66.7	57.8	51.2	44.4	40.0	35.5	35.5
62.5°	93.4	71.2	68.9	64.5	55.6	46.7	40.0	33.4	31.2	28.9	28.9
65°	75.6	64.5	60.1	53.3	46.7	37.8	31.2	26.7	24.4	24.4	26.7
67.5°	68.9	57.8	51.2	44.4	37.8	28.9	24.4	22.3	22.3	24.4	24.4
69°	64.5	53.3	46.7	40.0	33.4	26.7	22.3	22.3	22.3	22.3	24.4
70°	60.1	51.2	44.4	37.8	28.9	22.3	20.0	20.0	22.3	22.3	24.4
72.5°	46.7	40.0	37.8	31.2	22.3	20.0	17.8	20.0	20.0	22.3	22.3
75°	35.5	28.9	28.9	24.4	17.8	15.5	15.5	17.8	17.8	20.0	20.0
77.5°	24.4	20.0	20.0	17.8	15.5	13.4	13.4	15.5	17.8	17.8	20.0
80°	17.8	15.5	13.4	15.5	13.4	11.1	13.4	15.5	15.5	17.8	17.8
82.5°	13.4	13.4	13.4	13.4	11.1	11.1	13.4	13.4	15.5	17.8	17.8
85°	11.1	11.1	11.1	11.1	11.1	11.1	11.1	13.4	13.4	15.5	15.5
87.5°	6.6	6.6	6.6	8.9	8.9	11.1	11.1	11.1	11.1	13.4	13.4
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):

	165°	170°	175°	180°
0°	1025.2	1025.2	1025.2	1025.2
2.5°	773.9	771.6	762.7	765.0
5°	542.6	529.2	538.1	536.0
7.5°	398.1	395.8	393.6	398.1
10°	340.3	340.3	338.0	340.3
12.5°	320.2	320.2	320.2	320.2
15°	304.6	304.6	302.5	302.5
17.5°	286.8	286.8	286.8	284.7
20°	269.1	266.8	266.8	266.8
22.5°	249.0	246.9	246.9	246.9
25°	229.0	226.9	226.9	226.9
27.5°	209.0	206.7	204.6	204.6
30°	189.1	186.8	184.6	184.6
32.5°	169.1	166.8	164.6	164.6
35°	151.2	151.2	148.9	146.8
37.5°	135.7	135.7	135.7	135.7
40°	124.5	126.8	126.8	126.8
42.5°	117.9	120.0	122.3	124.5
45°	113.4	117.9	120.0	120.0
47.5°	111.1	113.4	115.6	115.6
50°	102.4	100.1	100.1	100.1
52.5°	82.2	77.8	75.6	73.3
55°	60.1	57.8	53.3	53.3
57.5°	42.3	42.3	40.0	40.0
60°	33.4	33.4	31.2	33.4
62.5°	28.9	28.9	28.9	28.9
65°	26.7	26.7	26.7	26.7
67.5°	26.7	26.7	26.7	26.7
69°	24.4	24.4	24.4	24.4
70°	24.4	24.4	24.4	24.4
72.5°	22.3	22.3	22.3	22.3
75°	20.0	22.3	22.3	22.3
77.5°	20.0	20.0	20.0	20.0
80°	17.8	17.8	20.0	20.0
82.5°	17.8	17.8	17.8	17.8
85°	15.5	15.5	17.8	17.8
87.5°	13.4	13.4	15.5	15.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)