

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: INVUE

Report Number: P400949

Luminaire Tested: **ENV-SA1A-740-U-SL3-HSS-ULG**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400949  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P#####)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1A-740-U-SL3-HSS-ULG  
Description: ENTRI LED LUMINAIRE WITH UPLIGHT  
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4068 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B1 - U4 - G1

Input Watts (W): 36.8  
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: 25 FT

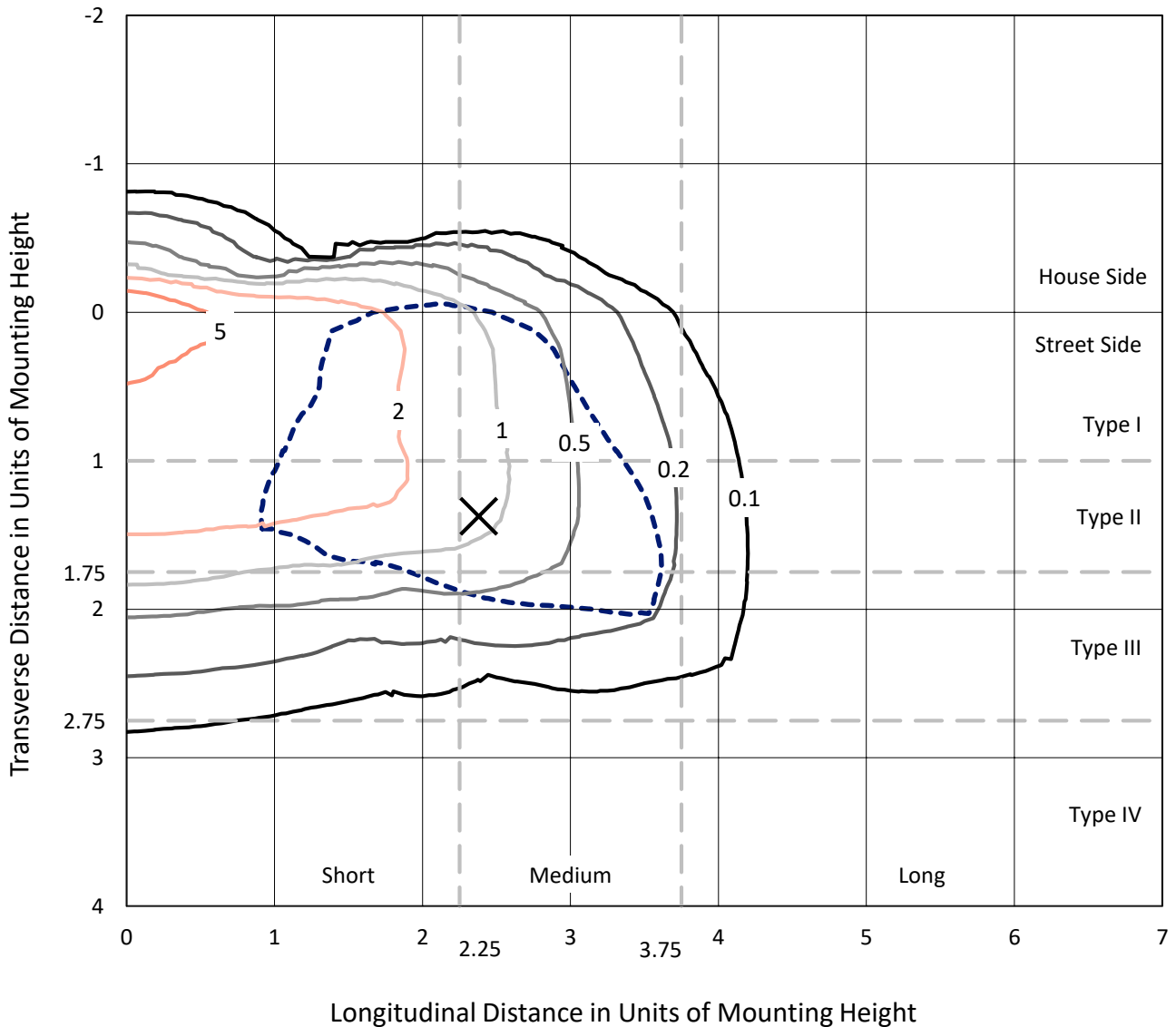


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### Iso-Footcandle Lines of Horizontal Illumination

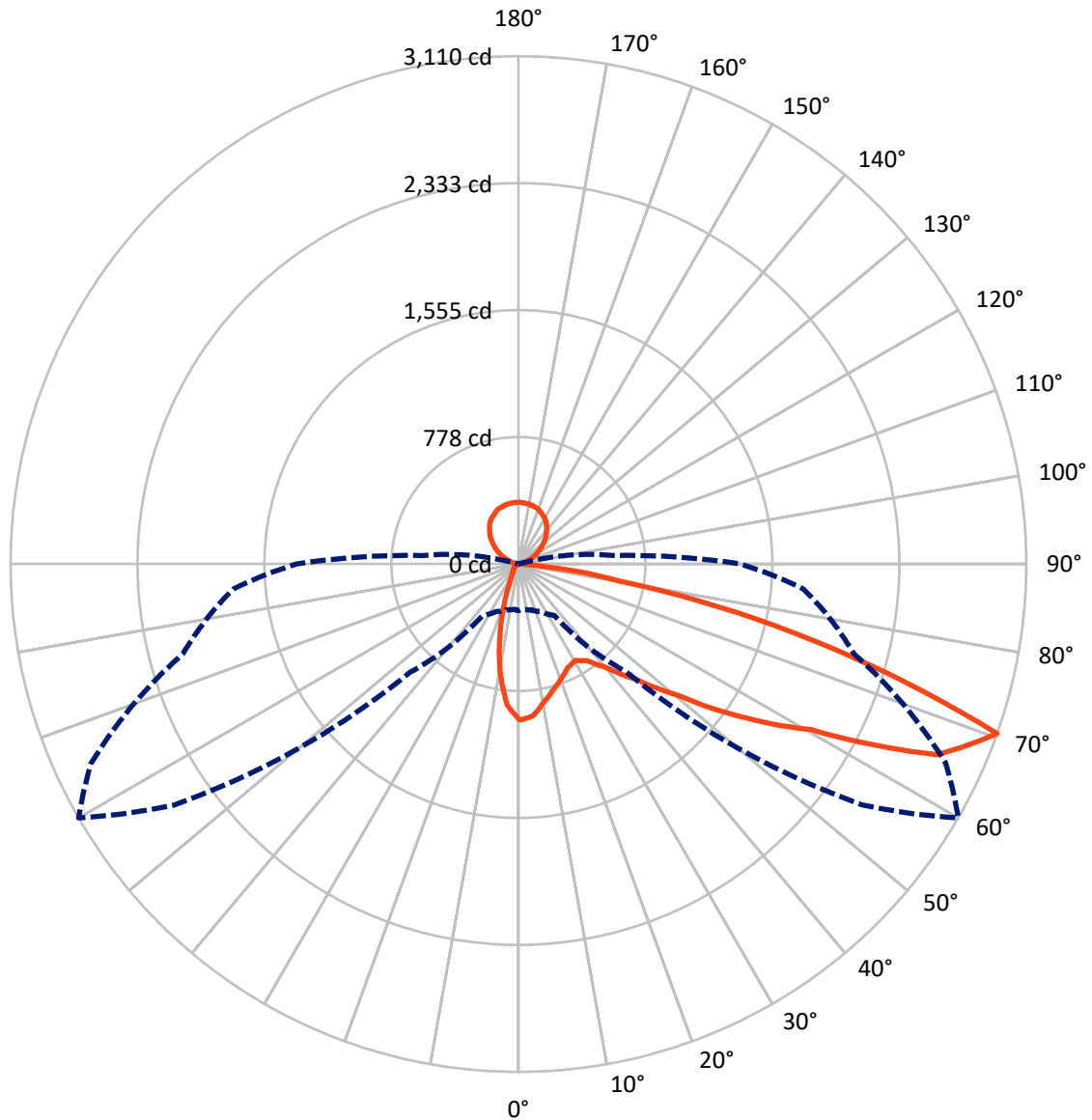
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.6 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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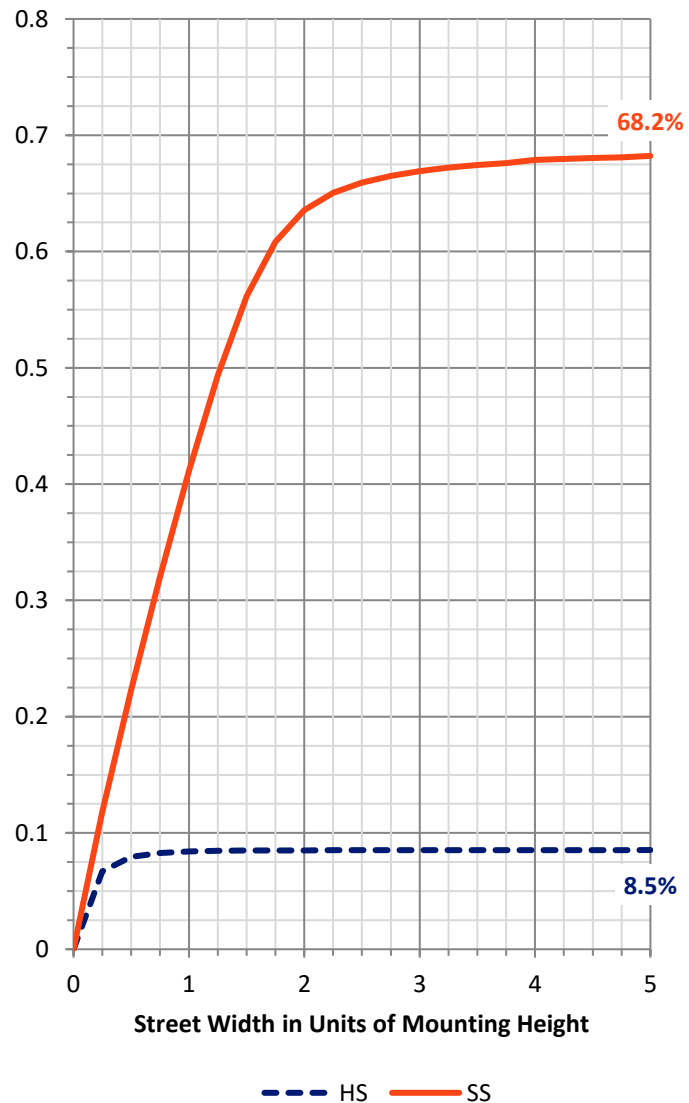
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	351.4	470.6	822.0
	% Fixture	8.6	11.6	20.2
<b>Street Side</b>	Lumens	2775.4	470.6	3246.0
	% Fixture	68.2	11.6	79.8
<b>Total</b>	Lumens	3126.8	941.2	4068.0
	% Fixture	76.9	23.1	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.0	1.9
10°-20°	160.0	3.9
20°-30°	209.2	5.1
30°-40°	288.3	7.1
40°-50°	437.0	10.7
50°-60°	701.3	17.2
60°-70°	826.2	20.3
70°-80°	399.1	9.8
80°-90°	27.9	0.7
90°-100°	4.6	0.1
100°-110°	31.8	0.8
110°-120°	90.5	2.2
120°-130°	148.1	3.6
130°-140°	182.6	4.5
140°-150°	186.7	4.6
150°-160°	157.4	3.9
160°-170°	103.6	2.5
170°-180°	35.9	0.9
0°-90°	3126.8	76.9
0°-180°	4068.0	100.0



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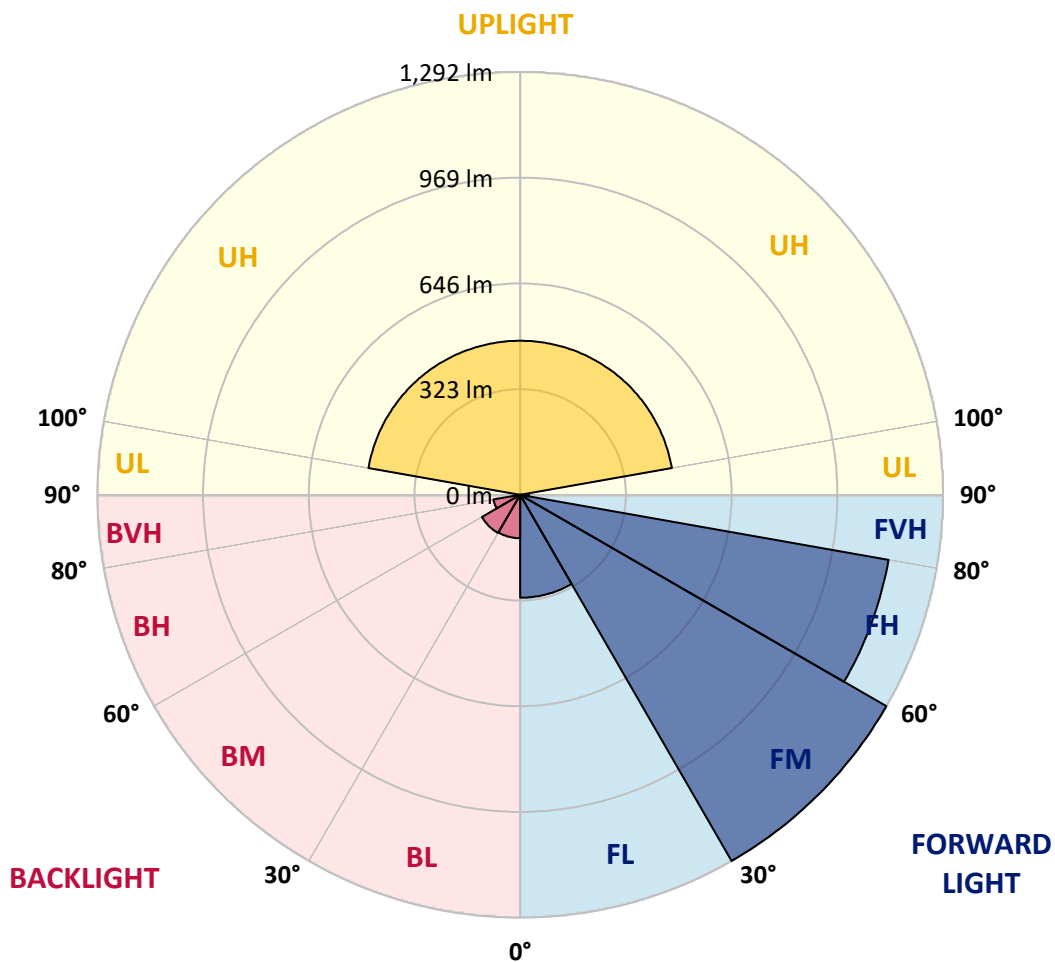
CATALOG NUMBER: ENV-SA1A-740-U-SL3-HSS-ULG

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	314.5	7.7			
FM	(30°-60°)	1291.6	31.8			
FH	(60°-80°)	1142.5	28.1			G1/1800
FVH	(80°-90°)	26.8	0.7			G1/100
BL	(0°-30°)	132.7	3.3	B1/500		
BM	(30°-60°)	134.9	3.3	B0/220		
BH	(60°-80°)	82.8	2.0	B0/110		G0/110
BVH	(80°-90°)	1.1	0.0			G0/10
UL	(90°-100°)	4.6	0.1		U1/10	
UH	(100°-180°)	470.6	11.6		U3/500	

**BUG Rating: B1-U4-G1**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	956.0	956.0	956.0	956.0	956.0	956.0	956.0	956.0	956.0	956.0	956.0
5°	882.9	886.6	889.2	891.9	895.3	898.8	902.2	905.7	913.6	921.5	924.7
10°	768.4	771.0	772.9	774.8	780.6	786.4	794.4	802.3	814.8	827.2	836.2
15°	682.0	682.5	684.9	687.3	693.1	699.0	708.5	718.1	734.5	750.9	766.3
20°	650.8	649.7	648.6	647.6	646.8	646.0	651.5	657.1	670.6	684.1	705.1
25°	672.5	672.5	669.3	666.1	659.0	651.8	648.1	644.4	646.2	648.1	662.1
30°	728.7	725.5	721.0	716.5	711.2	705.9	697.4	688.9	678.0	667.2	666.7
35°	793.8	793.3	793.8	794.4	792.5	790.7	783.5	776.3	761.2	746.1	732.9
40°	850.5	851.6	860.1	868.6	877.8	887.1	887.9	888.7	876.0	863.3	850.0
45°	903.0	911.5	928.4	945.4	968.4	991.5	1006.6	1021.7	1022.0	1022.2	1018.5
50°	994.7	1003.7	1023.6	1043.4	1075.2	1107.0	1146.2	1185.5	1212.2	1239.0	1248.2
55°	1194.5	1208.2	1230.0	1251.7	1280.8	1310.0	1355.3	1400.6	1456.8	1512.9	1573.9
60°	1069.9	1076.8	1126.9	1177.0	1258.8	1340.7	1494.4	1648.1	1837.5	2027.0	2050.8
65°	475.3	473.8	498.4	523.0	609.2	695.3	907.0	1118.7	1573.9	2029.1	2450.7
70°	285.6	278.7	284.6	290.4	306.0	321.7	353.2	384.7	660.3	935.9	1753.5
75°	120.3	127.2	147.3	167.5	195.0	222.6	261.0	299.4	308.2	316.9	769.2
80°	15.4	15.4	23.1	30.7	56.7	82.7	121.1	159.5	175.7	191.8	276.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.1	1.1	1.1	25.2
90°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.7	2.7	3.0	3.2	3.6	3.8	3.8	3.8	3.8	3.8	3.8
100°	4.3	4.3	4.6	4.9	5.1	5.4	6.0	6.5	9.0	11.4	13.6
105°	11.4	11.9	13.3	14.6	17.1	19.5	22.8	26.0	30.1	34.1	36.6
110°	35.8	36.9	38.5	40.1	43.7	47.2	51.2	55.3	58.6	61.8	63.4
115°	75.9	75.4	77.5	79.7	82.9	86.2	88.7	91.1	92.7	94.3	95.7
120°	122.0	120.9	121.7	122.5	124.4	126.3	127.4	128.5	130.1	131.7	132.5
125°	161.5	159.3	159.9	160.5	161.3	162.1	163.7	165.3	166.7	168.0	168.9
130°	196.8	195.7	196.0	196.2	197.3	198.4	199.5	200.6	201.1	201.6	203.0
135°	232.5	230.9	230.9	230.9	232.6	234.2	235.0	235.8	236.3	236.9	238.5
140°	264.5	262.9	263.5	264.0	264.5	265.1	265.7	266.2	267.8	269.4	270.3
145°	298.1	296.0	295.4	294.9	295.8	296.5	297.3	298.1	298.4	298.7	300.0
150°	322.6	320.9	321.2	321.5	321.5	321.5	321.5	321.5	321.5	321.5	322.6
155°	341.0	338.8	338.8	338.8	339.4	339.9	340.7	341.5	341.0	340.4	339.9
160°	359.4	357.8	357.5	357.2	356.4	355.6	355.4	355.1	355.1	355.1	355.9
165°	369.1	367.6	367.0	366.4	366.4	366.4	365.7	364.8	364.8	364.8	364.5
170°	378.4	376.8	376.0	375.1	375.1	375.1	375.4	375.7	375.1	374.6	373.2
175°	379.5	378.4	378.1	377.8	377.3	376.8	375.7	374.6	374.3	374.0	374.0
180°	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	956.0	956.0	956.0	956.0	956.0	956.0	956.0	956.0	956.0	956.0	956.0
5°	927.9	934.3	938.5	940.1	941.7	938.8	935.9	931.6	925.8	916.0	906.2
10°	845.2	859.0	871.7	881.5	891.3	889.0	886.6	876.0	857.4	826.7	796.0
15°	781.6	799.1	819.3	834.1	848.9	849.7	850.5	827.2	789.6	728.4	667.2
20°	726.0	748.8	776.9	801.0	825.1	825.4	825.6	786.9	723.9	631.4	538.9
25°	676.2	702.7	740.8	779.0	817.2	813.2	809.2	750.4	657.1	532.3	407.5
30°	666.1	684.7	721.2	775.8	830.4	819.3	808.1	728.7	607.8	447.8	287.8
35°	719.6	727.1	753.6	814.0	874.4	852.9	831.5	726.0	571.8	375.2	178.6
40°	836.8	836.2	848.9	907.8	966.6	934.8	903.0	765.7	564.9	333.1	101.2
45°	1014.8	1007.4	1010.6	1070.2	1129.8	1098.8	1067.8	887.6	609.4	337.6	65.7
50°	1257.5	1260.7	1249.6	1304.7	1359.8	1343.9	1328.0	1113.9	721.2	385.5	49.8
55°	1634.8	1648.1	1571.2	1598.3	1625.3	1606.0	1586.6	1351.9	854.8	447.5	40.3
60°	2074.7	2060.4	1900.3	1864.0	1827.7	1823.0	1818.2	1600.4	982.5	506.3	30.2
65°	2872.2	2816.0	2447.7	2308.4	2169.0	2165.3	2161.6	1828.8	965.5	493.4	21.2
70°	2571.2	3110.2	2887.6	2507.4	2127.1	1939.0	1750.9	1358.7	594.1	303.6	13.2
75°	1221.5	1856.9	1822.4	1566.2	1310.0	1015.9	721.8	531.5	159.5	83.5	7.4
80°	361.4	623.2	428.7	283.8	138.8	98.8	58.8	44.5	16.4	10.1	3.7
85°	49.3	49.8	23.3	13.8	4.2	8.5	12.7	10.1	2.1	1.9	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	3.8	4.1	4.3	4.1	3.8	3.8	3.8	3.8	3.8	3.8	3.8
100°	15.7	14.9	14.1	13.3	12.5	11.4	10.3	10.3	10.3	11.4	12.5
105°	39.1	38.5	37.9	36.6	35.2	34.1	33.1	33.1	33.1	34.2	35.2
110°	65.1	65.3	65.6	65.1	64.5	63.7	62.9	63.4	62.9	63.7	64.5
115°	97.0	97.8	98.7	97.8	97.0	96.5	96.0	96.5	96.0	96.5	97.0
120°	133.3	134.4	135.5	134.2	132.8	132.3	131.7	131.7	131.7	132.3	132.8
125°	169.7	170.2	170.7	169.4	168.0	168.0	168.0	168.0	168.0	168.0	168.0
130°	204.4	205.5	206.5	206.5	206.5	206.0	205.5	206.0	205.5	206.0	206.5
135°	240.2	241.5	242.9	242.6	242.3	243.1	243.9	244.5	243.9	243.1	242.3
140°	271.1	271.6	272.1	272.6	273.2	274.6	275.9	277.0	275.9	274.6	273.2
145°	301.4	303.0	304.7	304.4	304.1	303.3	302.5	303.6	302.5	303.3	304.1
150°	323.6	324.4	325.3	326.1	326.9	327.7	328.5	330.7	328.5	327.7	326.9
155°	339.4	340.7	342.1	343.4	344.8	345.3	345.8	347.5	345.8	345.3	344.8
160°	356.7	358.3	359.9	359.1	358.3	358.1	357.8	361.0	357.8	358.1	358.3
165°	364.3	365.7	367.0	367.8	368.6	368.1	367.6	369.7	367.6	368.1	368.6
170°	371.9	372.7	373.5	374.9	376.2	376.8	377.3	380.0	377.3	376.8	376.2
175°	374.0	375.4	376.8	377.0	377.3	376.8	376.2	378.9	376.2	376.8	377.3
180°	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4





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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	956.0	956.0	956.0	956.0	956.0	956.0	956.0	956.0	956.0	956.0	956.0
5°	894.3	882.3	866.2	850.0	830.9	811.9	800.7	789.6	774.2	758.9	755.7
10°	756.2	716.5	673.5	630.6	585.8	541.1	507.9	474.8	443.8	412.8	395.6
15°	596.4	525.7	449.9	374.1	314.2	254.4	214.6	174.9	153.9	133.0	125.9
20°	437.5	336.0	256.0	175.9	142.3	108.6	101.0	93.3	90.9	88.5	87.7
25°	290.9	174.3	133.3	92.2	85.8	79.5	77.6	75.8	74.7	73.7	72.6
30°	190.5	93.3	81.1	68.9	66.2	63.6	61.2	58.8	56.4	54.1	51.9
35°	121.6	64.7	60.1	55.6	52.2	48.8	45.6	42.4	39.2	36.0	33.9
40°	76.6	51.9	48.8	45.6	41.3	37.1	33.4	29.7	27.0	24.4	22.5
45°	54.8	44.0	40.0	36.0	31.5	27.0	24.1	21.2	19.1	17.0	15.4
50°	42.9	36.0	31.8	27.6	23.3	19.1	17.0	14.8	12.7	10.6	9.5
55°	34.7	29.1	24.6	20.1	17.0	13.8	11.7	9.5	7.9	6.4	5.3
60°	26.0	21.7	17.5	13.2	11.1	9.0	7.4	5.8	4.8	3.7	2.9
65°	17.8	14.3	11.4	8.5	6.9	5.3	4.2	3.2	2.6	2.1	1.6
70°	10.6	7.9	6.4	4.8	4.0	3.2	2.6	2.1	1.6	1.1	0.8
75°	5.8	4.2	3.4	2.6	2.4	2.1	1.9	1.6	1.6	1.6	1.3
80°	2.9	2.1	2.4	2.6	2.6	2.6	2.9	3.2	2.9	2.6	2.6
85°	1.3	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	4.1	4.3	4.1	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.6
100°	13.3	14.1	14.9	15.7	13.6	11.4	9.0	6.5	6.0	5.4	5.1
105°	36.6	37.9	38.5	39.1	36.6	34.1	30.1	26.0	22.8	19.5	17.1
110°	65.1	65.6	65.3	65.1	63.4	61.8	58.6	55.3	51.2	47.2	43.7
115°	97.9	98.7	97.9	97.0	95.7	94.3	92.7	91.1	88.7	86.2	82.9
120°	134.2	135.5	134.4	133.3	132.5	131.7	130.1	128.5	127.4	126.3	124.4
125°	169.4	170.7	170.2	169.7	168.9	168.0	166.7	165.3	163.7	162.1	161.3
130°	206.5	206.5	205.5	204.4	203.0	201.6	201.1	200.6	199.5	198.4	197.3
135°	242.6	242.9	241.5	240.2	238.5	236.9	236.3	235.8	235.0	234.2	232.6
140°	272.7	272.1	271.6	271.1	270.3	269.4	267.8	266.2	265.7	265.1	264.5
145°	304.4	304.7	303.1	301.4	300.0	298.7	298.4	298.1	297.3	296.5	295.8
150°	326.1	325.3	324.5	323.6	322.6	321.5	321.5	321.5	321.5	321.5	321.5
155°	343.4	342.1	340.7	339.4	339.9	340.4	341.0	341.5	340.7	339.9	339.4
160°	359.1	359.9	358.3	356.7	355.9	355.1	355.1	355.1	355.4	355.6	356.4
165°	367.8	367.0	365.7	364.3	364.5	364.8	364.8	364.8	365.7	366.4	366.4
170°	374.9	373.5	372.7	371.9	373.2	374.6	375.1	375.7	375.4	375.1	375.1
175°	377.0	376.8	375.4	374.0	374.0	374.0	374.3	374.6	375.7	376.8	377.3
180°	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4



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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	956.0	956.0	956.0	956.0
5°	752.5	744.0	735.5	745.6
10°	378.4	362.2	346.0	345.0
15°	118.7	115.3	111.8	112.9
20°	86.9	86.4	85.8	85.8
25°	71.5	70.7	70.0	70.0
30°	49.8	48.5	47.2	46.6
35°	31.8	30.5	29.1	28.6
40°	20.7	19.6	18.5	18.5
45°	13.8	13.0	12.2	12.2
50°	8.5	7.7	6.9	6.9
55°	4.2	3.7	3.2	3.2
60°	2.1	1.9	1.6	1.1
65°	1.1	0.8	0.5	0.5
70°	0.5	0.5	0.5	0.0
75°	1.1	0.8	0.5	0.5
80°	2.6	2.4	2.1	2.1
85°	1.1	0.8	0.5	0.5
90°	0.0	0.0	0.0	0.0
95°	3.2	3.0	2.7	2.7
100°	4.9	4.6	4.3	4.3
105°	14.6	13.3	11.9	11.4
110°	40.1	38.5	36.9	35.8
115°	79.7	77.5	75.4	75.9
120°	122.5	121.7	120.9	122.0
125°	160.5	159.9	159.3	161.5
130°	196.2	196.0	195.7	196.8
135°	230.9	230.9	230.9	232.5
140°	264.0	263.5	262.9	264.5
145°	294.9	295.4	296.0	298.1
150°	321.5	321.2	320.9	322.6
155°	338.8	338.8	338.8	341.0
160°	357.2	357.5	357.8	359.4
165°	366.4	367.0	367.6	369.1
170°	375.1	376.0	376.8	378.4
175°	377.8	378.1	378.4	379.5
180°	379.4	379.4	379.4	379.4

(END OF REPORT)