

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: P400975

Luminaire Tested: **ENV-SA1A-740-U-T4FT-ULG**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400975  
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-T4FT-ULG  
Description: ENTRI LED LUMINAIRE WITH UPLIGHT  
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD  
THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4395 lumens  
Efficiency: N/A  
Efficacy: 119.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U4 - G1

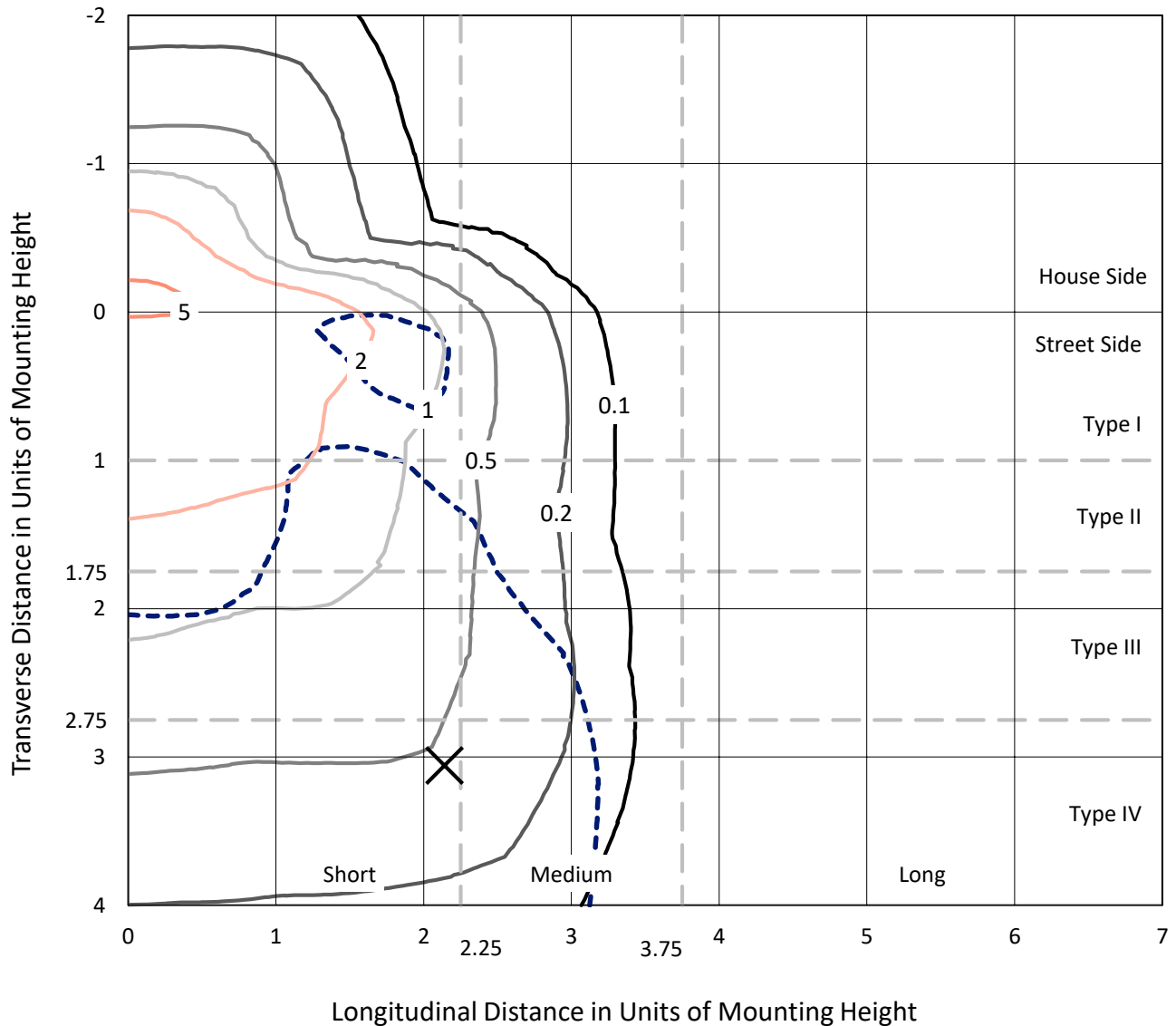
Input Watts (W): 36.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

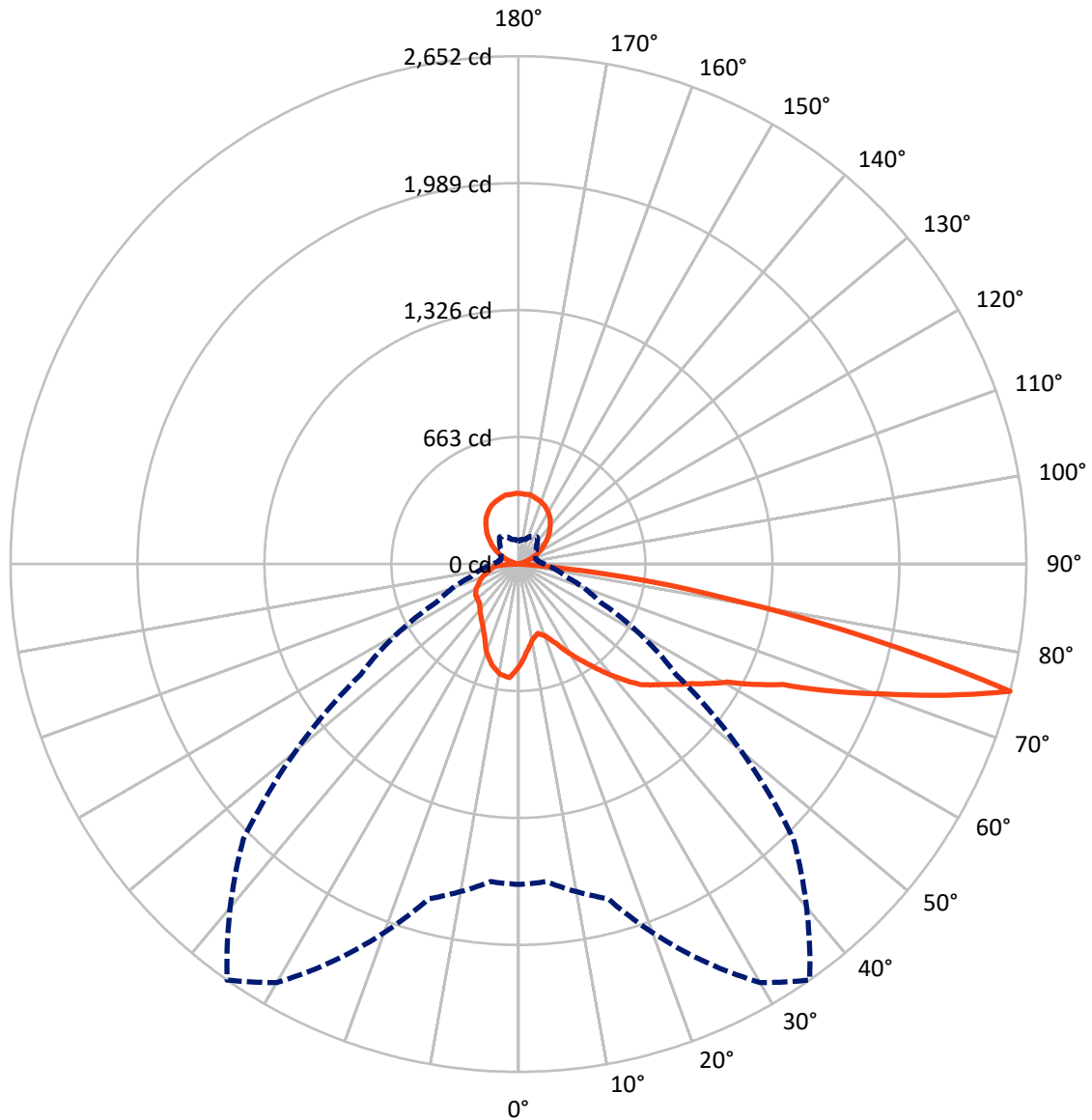
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.7 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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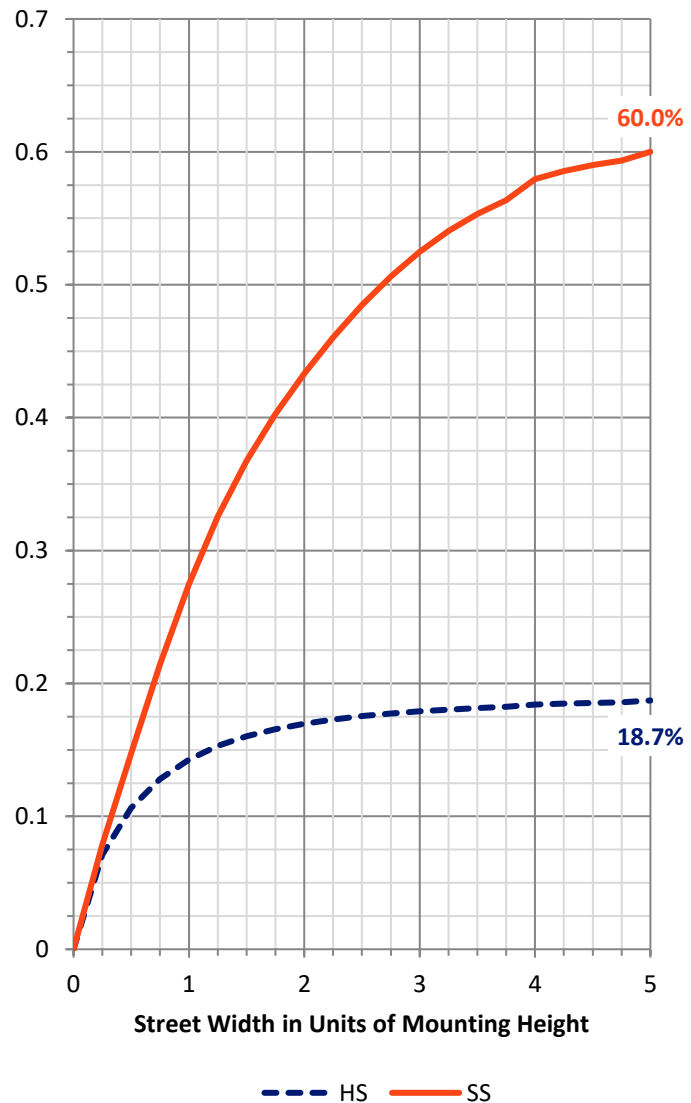
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	844.8	459.3	1304.1
	% Fixture	19.2	10.5	29.7
<b>Street Side</b>	Lumens	2631.6	459.3	3090.9
	% Fixture	59.9	10.5	70.3
<b>Total</b>	Lumens	3476.3	918.7	4395.0
	% Fixture	79.1	20.9	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.9	1.1
10°-20°	140.5	3.2
20°-30°	233.5	5.3
30°-40°	348.0	7.9
40°-50°	486.4	11.1
50°-60°	648.3	14.8
60°-70°	803.2	18.3
70°-80°	681.1	15.5
80°-90°	85.4	1.9
90°-100°	4.5	0.1
100°-110°	31.0	0.7
110°-120°	88.3	2.0
120°-130°	144.6	3.3
130°-140°	178.2	4.1
140°-150°	182.2	4.1
150°-160°	153.6	3.5
160°-170°	101.2	2.3
170°-180°	35.1	0.8
0°-90°	3476.3	79.1
0°-180°	4395.0	100.0



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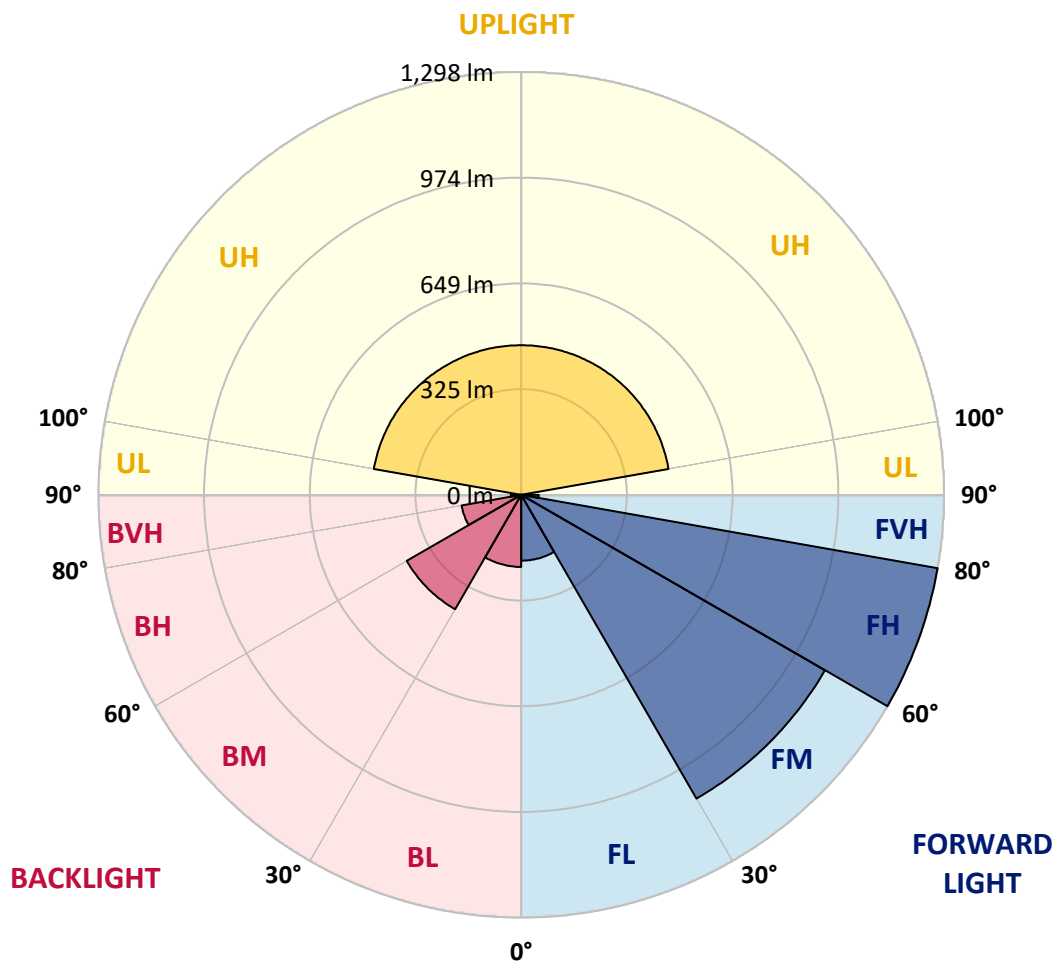
CATALOG NUMBER: ENV-SA1A-740-U-T4FT-ULG

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	202.3	4.6			
FM	(30°-60°)	1077.1	24.5			
FH	(60°-80°)	1298.4	29.5			G1/1800
FVH	(80°-90°)	53.7	1.2			G1/100
BL	(0°-30°)	221.5	5.0	B1/500		
BM	(30°-60°)	405.7	9.2	B1/1000		
BH	(60°-80°)	185.9	4.2	B1/500		G1/500
BVH	(80°-90°)	31.7	0.7			G1/100
UL	(90°-100°)	4.5	0.1		U1/10	
UH	(100°-180°)	459.3	10.5		U3/500	

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

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8
5°	443.8	445.3	446.6	447.9	450.3	452.6	456.1	459.3	465.0	470.7	476.6
10°	373.4	375.5	376.8	378.1	382.5	386.9	393.7	401.4	412.0	422.6	432.7
15°	377.1	376.5	373.7	370.9	369.3	367.8	371.0	375.5	385.1	394.7	407.3
20°	439.1	435.5	425.2	414.8	407.1	399.3	399.0	399.8	404.5	409.1	416.6
25°	545.7	540.0	521.6	503.3	487.2	471.2	465.4	459.3	459.0	458.8	458.8
30°	662.6	653.3	637.5	621.7	599.2	576.7	565.1	550.9	543.4	535.9	529.4
35°	734.0	729.3	722.3	715.3	698.5	681.7	665.9	648.6	639.3	630.0	619.9
40°	810.0	806.9	805.9	804.8	800.7	796.5	784.6	772.2	768.1	764.0	751.5
45°	938.8	920.2	895.9	871.5	870.8	870.0	881.3	899.0	912.1	925.3	913.7
50°	994.1	981.7	959.7	937.7	942.7	947.6	962.8	987.4	1037.6	1087.7	1078.7
55°	1010.7	999.8	1002.7	1005.5	1019.5	1033.4	1061.9	1102.7	1166.4	1230.0	1230.0
60°	1079.5	1058.8	1077.1	1095.5	1120.1	1144.6	1190.9	1251.7	1332.9	1414.1	1386.7
65°	1368.1	1360.3	1338.1	1315.8	1332.9	1350.0	1432.4	1516.5	1574.7	1632.9	1550.7
70°	1810.8	1785.0	1771.3	1757.6	1797.7	1837.7	1947.0	2031.7	1981.8	1931.9	1700.7
75°	1673.3	1664.5	1736.9	1809.3	2048.5	2287.7	2523.7	2651.9	2341.0	2030.1	1517.6
80°	236.9	240.0	301.8	363.6	516.5	669.3	912.7	1128.1	843.9	559.6	361.8
85°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	3.6	6.2	6.2
90°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.6	2.6	2.9	3.2	3.5	3.7	3.7	3.7	3.7	3.7	3.7
100°	4.2	4.2	4.5	4.8	5.0	5.3	5.8	6.4	8.7	11.1	13.2
105°	11.1	11.6	13.0	14.3	16.7	19.0	22.2	25.4	29.4	33.3	35.7
110°	34.9	36.0	37.6	39.2	42.6	46.0	50.0	53.9	57.2	60.3	61.9
115°	74.1	73.6	75.7	77.8	80.9	84.1	86.5	88.9	90.5	92.1	93.4
120°	119.1	118.0	118.8	119.6	121.4	123.3	124.3	125.4	127.0	128.6	129.4
125°	157.7	155.5	156.1	156.6	157.4	158.2	159.8	161.4	162.7	164.0	164.8
130°	192.0	191.0	191.3	191.5	192.6	193.7	194.7	195.8	196.3	196.8	198.2
135°	227.0	225.4	225.4	225.4	227.0	228.6	229.4	230.2	230.7	231.2	232.8
140°	258.2	256.6	257.2	257.7	258.2	258.7	259.3	259.8	261.4	263.0	263.8
145°	291.0	288.9	288.4	287.8	288.7	289.4	290.2	291.0	291.3	291.5	292.9
150°	314.8	313.2	313.5	313.8	313.8	313.8	313.8	313.8	313.8	313.8	314.8
155°	332.8	330.7	330.7	330.7	331.2	331.8	332.6	333.4	332.8	332.3	331.8
160°	350.8	349.2	348.9	348.7	347.9	347.1	346.9	346.5	346.5	346.5	347.4
165°	360.3	358.8	358.2	357.7	357.7	357.7	356.9	356.1	356.1	356.1	355.8
170°	369.3	367.8	367.0	366.2	366.2	366.2	366.4	366.7	366.2	365.6	364.3
175°	370.4	369.3	369.0	368.8	368.3	367.8	366.7	365.6	365.4	365.1	365.1
180°	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8
5°	482.6	490.1	497.6	505.6	513.6	521.4	529.1	537.9	547.8	555.5	563.3
10°	442.8	457.0	471.2	486.2	501.2	518.0	534.8	551.9	567.4	580.1	592.8
15°	420.0	438.1	456.2	477.4	498.6	523.4	548.3	572.6	594.8	603.6	612.4
20°	424.1	440.7	457.2	483.6	510.0	542.6	575.2	607.2	629.5	627.9	626.4
25°	458.8	467.3	475.9	503.3	530.7	574.4	618.1	655.3	669.8	649.1	628.4
30°	522.9	518.8	514.6	538.7	562.8	623.5	684.3	727.7	721.0	671.4	621.7
35°	609.8	598.2	586.5	603.1	619.6	709.4	799.1	825.5	782.6	689.2	595.9
40°	739.1	717.9	696.7	708.6	720.5	831.2	941.9	930.5	834.3	676.8	519.3
45°	902.1	866.9	831.7	842.6	853.4	963.4	1073.3	1009.1	850.3	616.8	383.3
50°	1069.6	1023.3	977.1	993.9	1010.7	1123.2	1235.7	1115.7	880.3	573.4	266.4
55°	1230.0	1166.6	1103.3	1149.0	1194.8	1314.0	1433.3	1260.0	920.2	555.0	189.8
60°	1359.3	1280.2	1201.0	1272.1	1343.3	1427.3	1511.4	1276.5	812.1	482.3	152.6
65°	1468.4	1345.3	1222.2	1286.4	1350.5	1350.0	1349.5	1105.3	625.3	378.6	131.9
70°	1469.5	1253.5	1037.6	996.5	955.3	841.3	727.2	596.9	334.7	224.2	113.8
75°	1005.0	737.3	469.6	363.6	257.6	211.5	165.5	135.5	110.7	101.9	93.1
80°	164.0	138.4	112.8	110.2	107.6	96.2	84.8	73.4	64.1	65.7	67.2
85°	6.2	10.6	15.0	17.1	19.1	17.1	15.0	12.9	15.5	20.9	26.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	3.7	4.0	4.2	4.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7
100°	15.4	14.5	13.8	13.0	12.2	11.1	10.0	10.0	10.0	11.1	12.2
105°	38.1	37.6	37.0	35.7	34.4	33.3	32.3	32.3	32.3	33.4	34.4
110°	63.5	63.8	64.0	63.5	62.9	62.2	61.4	61.9	61.4	62.2	62.9
115°	94.7	95.5	96.3	95.5	94.7	94.2	93.7	94.2	93.7	94.2	94.7
120°	130.1	131.2	132.3	131.0	129.6	129.1	128.6	128.6	128.6	129.1	129.6
125°	165.6	166.1	166.7	165.4	164.0	164.0	164.0	164.0	164.0	164.0	164.0
130°	199.5	200.5	201.6	201.6	201.6	201.0	200.5	201.0	200.5	201.0	201.6
135°	234.4	235.7	237.0	236.8	236.5	237.3	238.1	238.7	238.1	237.3	236.5
140°	264.6	265.1	265.6	266.1	266.7	268.0	269.3	270.4	269.3	268.0	266.7
145°	294.2	295.8	297.4	297.1	296.8	296.0	295.2	296.3	295.2	296.1	296.8
150°	315.9	316.7	317.5	318.3	319.0	319.9	320.6	322.8	320.6	319.9	319.0
155°	331.2	332.5	333.9	335.2	336.5	337.0	337.5	339.2	337.5	337.0	336.5
160°	348.2	349.8	351.3	350.5	349.8	349.5	349.2	352.4	349.2	349.5	349.8
165°	355.5	356.9	358.2	359.0	359.8	359.3	358.8	360.9	358.8	359.3	359.8
170°	362.9	363.8	364.5	365.9	367.2	367.8	368.3	370.9	368.3	367.8	367.2
175°	365.1	366.4	367.8	368.0	368.3	367.8	367.2	369.8	367.2	367.8	368.3
180°	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8
5°	570.0	576.7	581.4	586.0	587.3	588.6	591.7	594.8	594.6	594.3	594.6
10°	598.2	603.6	602.3	601.0	596.9	592.8	587.8	582.9	577.8	572.6	568.4
15°	609.3	606.2	596.9	587.6	578.0	568.4	557.1	545.7	537.9	530.2	524.0
20°	610.9	595.3	578.0	560.7	544.1	527.6	510.5	493.4	481.3	469.1	460.9
25°	597.1	565.9	536.9	507.9	481.8	455.7	439.4	423.1	417.4	411.7	410.9
30°	567.1	512.6	465.8	419.0	396.2	373.4	374.0	374.5	379.7	384.8	387.7
35°	510.3	424.6	382.2	339.8	337.5	335.2	338.8	342.4	346.5	350.7	352.5
40°	416.9	314.5	304.9	295.3	303.6	311.9	312.9	314.0	311.1	308.3	304.9
45°	312.9	242.6	249.0	255.5	270.3	285.0	287.1	289.1	281.4	273.6	264.8
50°	234.8	203.3	214.4	225.5	248.3	271.0	275.7	280.3	267.7	255.0	242.6
55°	184.1	178.4	191.9	205.3	230.2	255.0	264.8	274.7	259.1	243.6	226.5
60°	154.7	156.7	169.4	182.1	206.1	230.2	243.1	256.0	239.5	222.9	206.1
65°	135.0	138.1	146.9	155.7	175.6	195.5	211.8	228.1	215.4	202.8	188.3
70°	117.2	120.5	127.8	135.0	151.5	168.1	186.5	204.8	194.7	184.7	170.2
75°	96.2	99.3	104.0	108.6	121.8	135.0	153.6	172.2	165.5	158.8	145.9
80°	70.3	73.4	77.1	80.7	94.4	108.1	125.9	143.8	140.4	137.1	124.9
85°	32.3	38.3	43.2	48.1	64.1	80.2	104.0	127.8	118.7	109.7	97.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	4.0	4.2	4.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.5
100°	13.0	13.8	14.6	15.4	13.2	11.1	8.7	6.4	5.8	5.3	5.0
105°	35.7	37.0	37.6	38.1	35.7	33.3	29.4	25.4	22.2	19.0	16.7
110°	63.5	64.0	63.8	63.5	61.9	60.3	57.2	53.9	50.0	46.0	42.6
115°	95.5	96.3	95.5	94.7	93.4	92.1	90.5	88.9	86.5	84.1	80.9
120°	131.0	132.3	131.2	130.1	129.4	128.6	127.0	125.4	124.3	123.3	121.4
125°	165.4	166.7	166.1	165.6	164.8	164.0	162.7	161.4	159.8	158.2	157.4
130°	201.6	201.6	200.5	199.5	198.2	196.8	196.3	195.8	194.7	193.7	192.6
135°	236.8	237.0	235.8	234.4	232.8	231.2	230.7	230.2	229.4	228.6	227.0
140°	266.2	265.6	265.1	264.6	263.8	263.0	261.4	259.8	259.3	258.7	258.2
145°	297.1	297.4	295.8	294.2	292.9	291.5	291.3	291.0	290.2	289.4	288.7
150°	318.3	317.5	316.7	315.9	314.8	313.8	313.8	313.8	313.8	313.8	313.8
155°	335.2	333.9	332.6	331.2	331.8	332.3	332.8	333.4	332.6	331.8	331.2
160°	350.5	351.3	349.8	348.2	347.4	346.5	346.5	346.5	346.9	347.1	347.9
165°	359.0	358.2	356.9	355.5	355.8	356.1	356.1	356.1	356.9	357.7	357.7
170°	365.9	364.5	363.8	362.9	364.3	365.6	366.2	366.7	366.4	366.2	366.2
175°	368.0	367.8	366.4	365.1	365.1	365.1	365.4	365.6	366.7	367.8	368.3
180°	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3



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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	533.8	533.8	533.8	533.8
5°	594.8	594.8	594.8	594.3
10°	564.3	562.2	560.2	559.1
15°	517.8	513.9	510.0	509.5
20°	452.6	448.4	444.3	442.8
25°	410.2	408.9	407.6	408.6
30°	390.5	389.7	389.0	389.5
35°	354.3	353.3	352.2	353.8
40°	301.5	298.7	295.9	292.2
45°	256.0	250.9	245.7	244.1
50°	230.2	221.6	213.1	211.0
55°	209.5	197.8	186.2	182.6
60°	189.3	181.8	174.3	171.2
65°	173.8	167.1	160.3	156.7
70°	155.7	152.8	150.0	145.9
75°	132.9	129.8	126.7	119.5
80°	112.8	108.4	104.0	100.9
85°	85.3	78.4	71.4	68.8
90°	0.0	0.0	0.0	0.0
95°	3.2	2.9	2.6	2.6
100°	4.8	4.5	4.2	4.2
105°	14.3	13.0	11.6	11.1
110°	39.2	37.6	36.0	34.9
115°	77.8	75.7	73.6	74.1
120°	119.6	118.8	118.0	119.1
125°	156.6	156.1	155.5	157.7
130°	191.5	191.3	191.0	192.0
135°	225.4	225.4	225.4	227.0
140°	257.7	257.2	256.6	258.2
145°	287.8	288.4	288.9	291.0
150°	313.8	313.5	313.2	314.8
155°	330.7	330.7	330.7	332.8
160°	348.7	348.9	349.2	350.8
165°	357.7	358.2	358.8	360.3
170°	366.2	367.0	367.8	369.3
175°	368.8	369.0	369.3	370.4
180°	370.3	370.3	370.3	370.3

(END OF REPORT)