

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:

Luminaire Tested: **ENT-SA1E-740-U-T3-ULG**

Issue Date: 3/30/2022

Test Information

Test Method: LM-79-08
Report Number: REPORT IS A COMBINATION OF REPORTS P401692 AND P226775
Test Lab: INNOVATION CENTER
Issue Date: 3/30/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1E-740-U-T3-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) 70 CRI, 4000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8935.9 lumens
Efficiency: N/A
Efficacy: 120.9 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.1')
IES Classification: Type III - Short
BUG Rating: B1 - U5 - G2

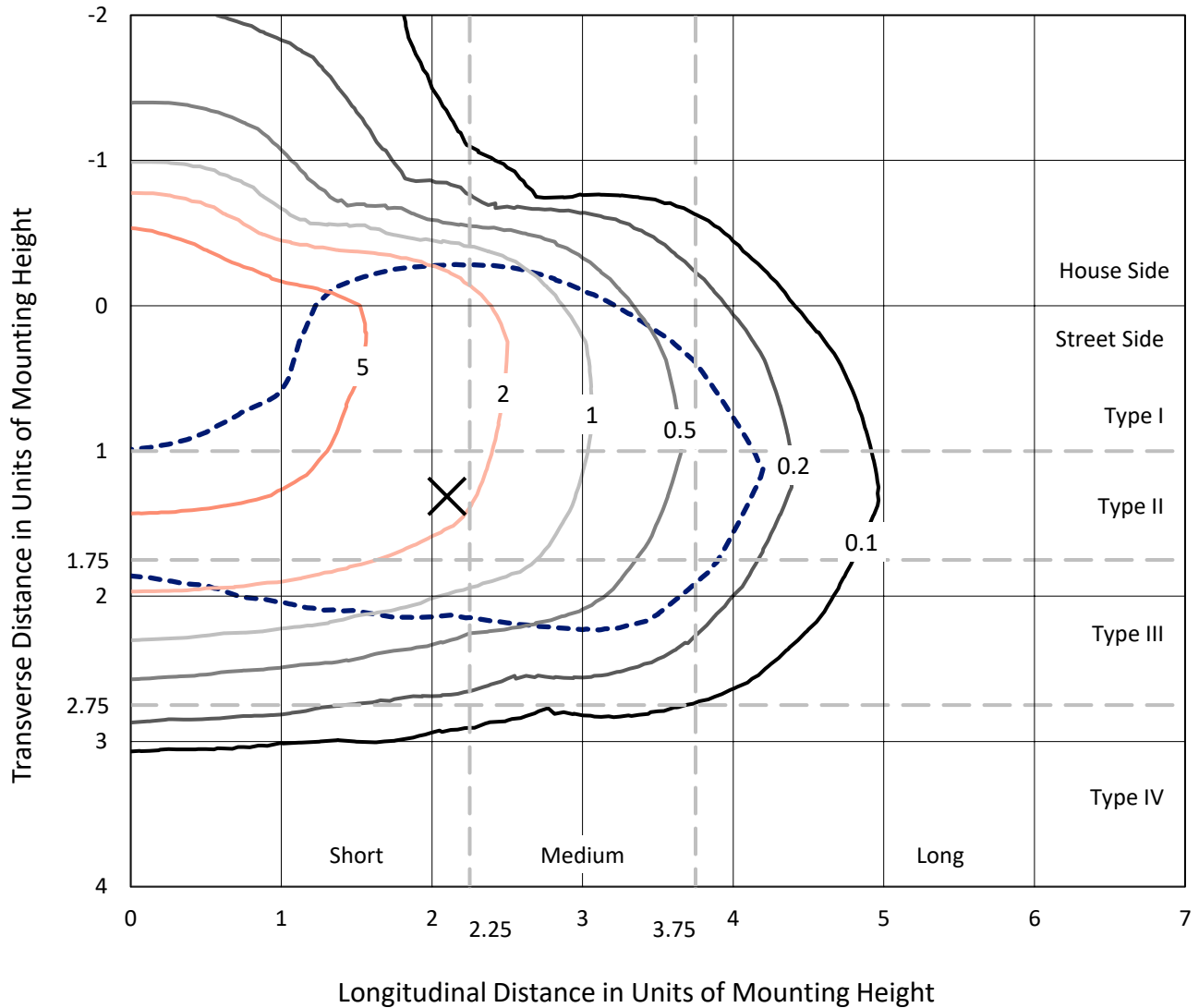
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

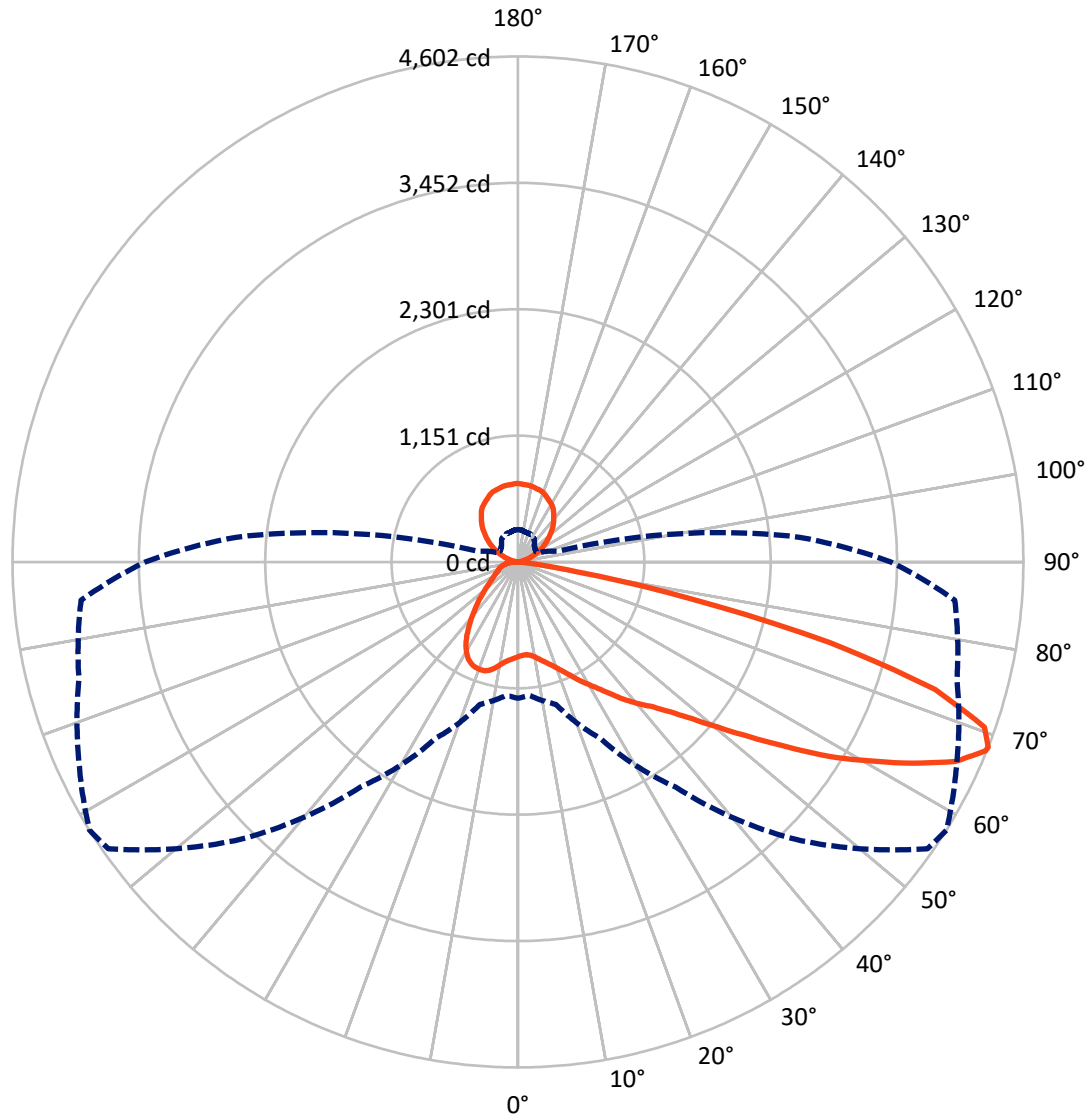
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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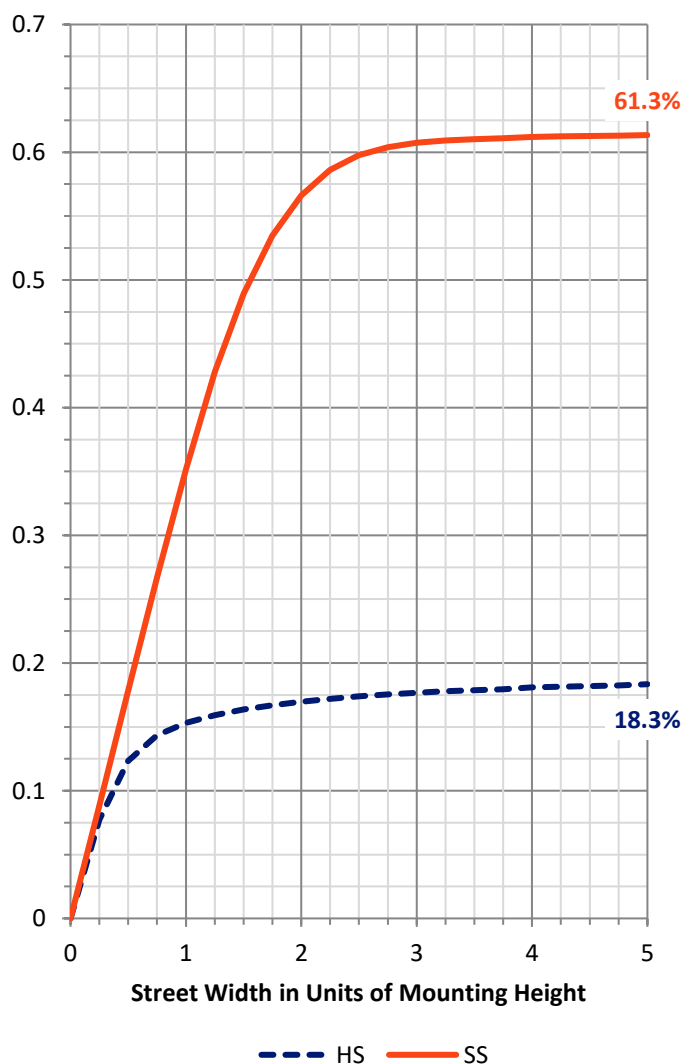
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1676.9	887.0	2563.9
	% Fixture	18.8	9.9	28.7
Street Side	Lumens	5485.1	887.0	6372.0
	% Fixture	61.4	9.9	71.3
Total	Lumens	7162.0	1773.9	8935.9
	% Fixture	80.1	19.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.7	0.9
10°-20°	277.1	3.1
20°-30°	498.3	5.6
30°-40°	732.0	8.2
40°-50°	1073.5	12.0
50°-60°	1604.7	18.0
60°-70°	1876.4	21.0
70°-80°	925.1	10.4
80°-90°	90.3	1.0
90°-100°	8.4	0.1
100°-110°	58.7	0.7
110°-120°	169.9	1.9
120°-130°	279.4	3.1
130°-140°	344.6	3.9
140°-150°	352.5	3.9
150°-160°	297.0	3.3
160°-170°	195.5	2.2
170°-180°	67.8	0.8
0°-90°	7162.0	80.1
0°-180°	8935.9	100.0

Coefficient of Utilization



REPORT NUMBER:

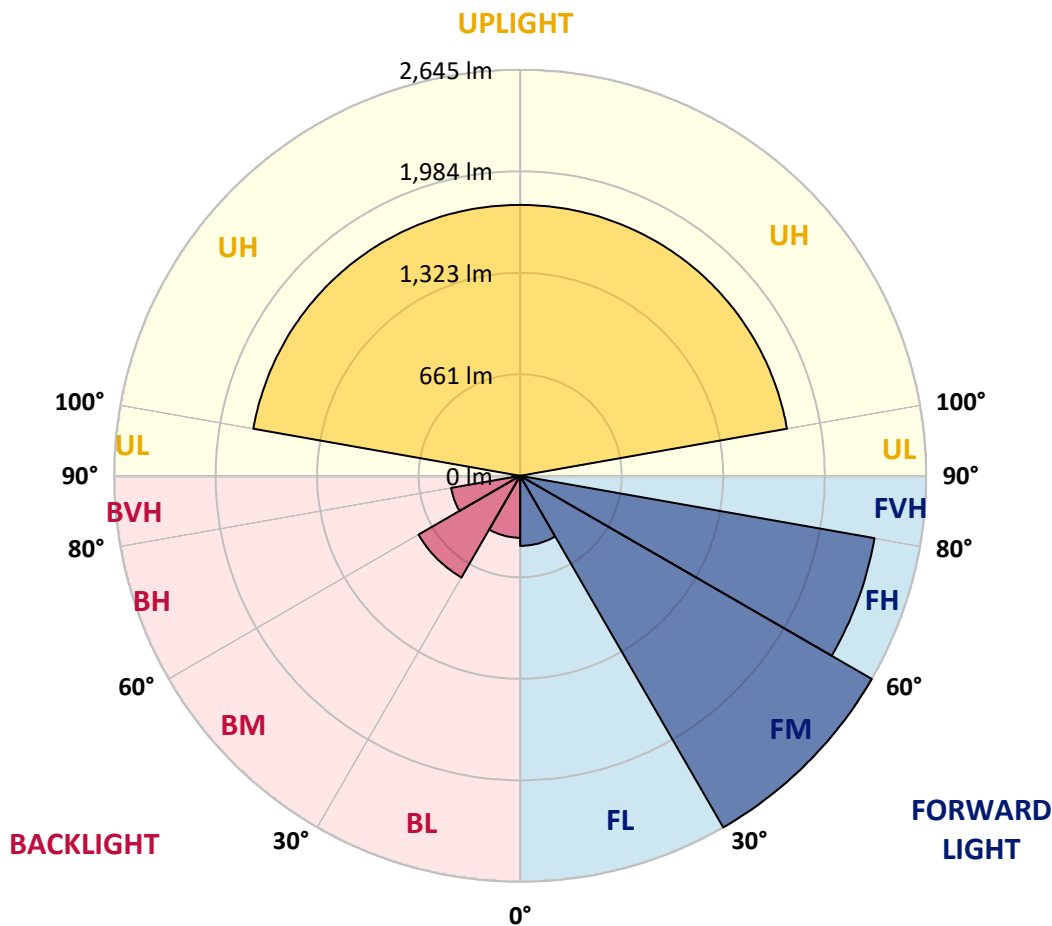
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	456.3	5.1			
FM (30°-60°)	2645.4	29.6			
FH (60°-80°)	2344.6	26.2			G2/5000
FVH (80°-90°)	38.9	0.4			G1/100
BL (0°-30°)	403.8	4.5	B1/500		
BM (30°-60°)	764.8	8.6	B1/1000		
BH (60°-80°)	456.9	5.1	B1/500		G1/500
BVH (80°-90°)	51.4	0.6			G1/100
UL (90°-100°)	8.4	0.1		U1/10	
UH (100°-180°)	1765.5	19.8		U5	

BUG Rating: B1-U5-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1
2.5°	839.1	839.1	842.1	843.1	845.1	847.1	849.1	850.1	853.1	857.1	859.1
5°	832.1	833.1	835.1	836.1	839.1	843.1	846.1	848.1	853.1	861.1	866.1
7.5°	848.1	851.1	852.1	853.1	854.1	857.1	857.1	858.1	863.1	871.1	878.1
10°	874.1	876.1	879.1	882.1	885.1	887.1	881.1	882.1	884.1	892.1	902.1
12.5°	907.1	907.1	908.1	912.1	915.1	921.1	915.1	915.1	915.1	922.1	934.1
15°	944.1	942.1	942.1	946.1	947.1	951.1	948.1	948.1	952.1	959.1	971.1
17.5°	986.1	989.1	986.1	984.1	981.1	983.1	985.1	987.1	995.1	1006.1	1013.1
20°	1047.1	1052.1	1050.1	1042.1	1029.1	1023.1	1030.1	1034.1	1050.1	1063.1	1064.1
22.5°	1144.1	1141.1	1138.1	1124.1	1098.1	1082.1	1083.1	1089.1	1114.1	1134.1	1124.1
25°	1234.1	1237.1	1237.1	1217.1	1183.1	1150.1	1153.1	1156.1	1181.1	1199.1	1172.1
27.5°	1343.1	1341.1	1340.1	1313.1	1272.1	1240.1	1223.1	1231.1	1249.1	1256.1	1204.1
30°	1456.1	1464.1	1456.1	1418.1	1379.1	1338.1	1304.1	1302.1	1311.1	1310.1	1242.1
32.5°	1592.1	1585.1	1582.1	1538.1	1489.1	1435.1	1392.1	1385.1	1380.1	1373.1	1287.1
35°	1697.1	1706.1	1706.1	1668.1	1610.1	1557.1	1490.1	1484.1	1472.1	1449.1	1346.1
37.5°	1821.1	1819.1	1826.1	1782.1	1724.1	1673.1	1611.1	1594.1	1567.1	1533.1	1416.1
40°	1942.1	1947.1	1963.1	1910.1	1857.1	1817.1	1729.1	1698.1	1657.1	1626.1	1518.1
42.5°	2107.1	2114.1	2120.1	2076.1	2013.1	1977.1	1841.1	1802.1	1779.1	1773.1	1653.1
45°	2307.2	2319.2	2324.2	2284.2	2248.2	2162.1	1982.1	1946.1	1921.1	1947.1	1837.1
47.5°	2499.2	2493.2	2516.2	2515.2	2519.2	2416.2	2185.2	2131.1	2107.1	2173.1	2048.1
50°	2607.2	2616.2	2666.2	2717.2	2788.2	2714.2	2420.2	2366.2	2338.2	2420.2	2296.2
52.5°	2663.2	2675.2	2742.2	2885.2	3036.2	3001.2	2703.2	2643.2	2619.2	2699.2	2562.2
55°	2668.2	2675.2	2765.2	2987.2	3225.2	3236.2	3026.2	2969.2	2936.2	2988.2	2852.2
57.5°	2585.2	2564.2	2719.2	3002.2	3346.2	3481.2	3381.2	3340.2	3247.2	3303.2	3212.2
60°	2437.2	2458.2	2610.2	2940.2	3397.2	3672.3	3737.3	3675.3	3567.2	3590.2	3600.2
62.5°	2213.2	2240.2	2398.2	2796.2	3356.2	3834.3	4066.3	4035.3	3890.3	3878.3	3896.3
65°	1894.1	1878.1	2054.1	2481.2	3162.2	3888.3	4389.3	4376.3	4203.3	4062.3	4069.3
67.5°	1366.1	1351.1	1474.1	1915.1	2637.2	3687.3	4561.3	4590.3	4392.3	4143.3	4035.3
68°	1240.1	1219.1	1342.1	1770.1	2502.2	3571.2	4552.3	4602.3	4406.3	4138.3	3993.3
70°	714.0	680.0	799.1	1155.1	1842.1	3006.2	4368.3	4506.3	4373.3	4041.3	3718.3
72.5°	224.0	224.0	309.0	467.0	904.1	1902.1	3737.3	3972.3	4000.3	3673.3	3090.2
75°	140.0	140.0	161.0	221.0	360.0	807.1	2578.2	2936.2	3178.2	3092.2	2253.2
77.5°	95.0	93.0	107.0	137.0	201.0	259.0	1294.1	1590.1	1944.1	2111.1	1318.1
80°	52.0	53.0	66.0	82.0	114.0	120.0	380.0	537.0	856.1	1003.1	500.0
82.5°	30.0	29.0	32.0	36.0	50.0	52.0	109.0	134.0	224.0	208.0	134.0
85°	0.0	1.0	1.0	1.0	2.0	5.0	14.0	21.0	34.0	47.0	33.0
87.5°	0.0	0.0	0.0	0.0	1.0	1.0	2.0	2.0	2.0	2.0	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	4.1	4.1	5.1	6.1	6.1	6.1	7.2	7.2	7.2	6.1	6.1
95°	5.1	5.1	6.1	7.2	7.2	7.2	7.2	7.5	8.2	7.2	7.2
97.5°	7.2	7.2	8.2	8.2	9.2	9.2	12.3	11.7	10.2	9.2	8.2
100°	8.2	8.2	9.2	10.2	12.3	21.5	29.7	28.7	26.6	23.5	19.4
102.5°	11.3	11.3	13.3	18.4	27.6	40.9	51.1	50.2	48.1	43.0	39.9
105°	21.5	22.5	27.6	36.8	49.1	64.4	73.7	73.0	71.6	66.5	62.4
107.5°	41.9	43.0	50.1	59.3	74.7	90.0	97.2	96.9	96.2	92.1	89.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
110°	67.5	69.6	75.7	89.0	104.3	116.6	122.8	123.1	123.8	121.7	118.7
112.5°	101.3	101.3	108.4	123.8	137.1	146.3	151.4	152.0	153.4	152.4	150.4
115°	143.2	142.2	150.4	162.6	171.9	178.0	183.1	184.0	186.2	183.1	181.1
117.5°	188.2	188.2	193.3	201.5	206.6	209.7	215.8	217.1	219.9	214.8	212.8
120°	230.2	228.1	231.2	238.3	242.4	248.6	251.6	252.9	255.7	250.6	248.6
122.5°	269.0	266.0	267.0	273.1	277.2	283.4	285.4	286.6	289.5	284.4	282.3
125°	304.8	300.7	302.8	305.9	312.0	317.1	320.2	320.8	322.2	317.1	317.1
127.5°	337.6	336.6	336.6	340.6	346.8	347.8	352.9	353.2	353.9	353.9	352.9
130°	371.3	369.3	370.3	374.4	378.5	380.5	385.7	386.9	389.7	389.7	387.7
132.5°	405.1	403.0	402.0	410.2	413.3	414.3	420.4	422.0	425.5	423.5	423.5
135°	438.8	435.8	435.8	441.9	445.0	447.0	453.2	454.7	458.3	457.3	460.3
137.5°	470.6	467.5	469.5	470.6	474.6	478.7	483.9	484.5	485.9	486.9	492.0
140°	499.2	496.1	498.2	500.2	502.3	508.4	511.5	512.1	513.5	515.6	520.7
142.5°	529.9	526.8	528.9	529.9	533.0	537.0	539.1	541.0	545.2	545.2	546.3
145°	562.6	558.5	556.5	559.6	562.6	563.6	568.8	570.6	574.9	573.9	570.8
147.5°	588.2	585.1	584.1	587.2	587.2	588.2	593.3	594.9	598.4	599.4	596.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	610.7	611.6	613.8	616.8	619.9
152.5°	625.0	622.0	622.0	623.0	624.0	624.0	625.0	626.0	628.1	632.2	637.3
155°	643.4	639.3	639.3	641.4	644.5	642.4	640.4	641.9	645.5	650.6	652.6
157.5°	660.8	657.8	657.8	658.8	660.8	659.8	658.8	660.0	662.9	664.9	664.9
160°	678.2	675.1	674.1	671.1	670.0	670.0	673.1	675.0	679.2	676.2	675.1
162.5°	688.4	684.4	684.4	680.3	676.2	678.2	682.3	683.6	686.4	685.4	683.3
165°	696.6	693.6	691.5	691.5	688.4	688.4	687.4	689.0	692.5	695.6	693.6
167.5°	705.8	702.8	699.7	701.7	703.8	700.7	693.6	695.4	699.7	703.8	703.8
170°	714.0	711.0	707.9	707.9	708.9	706.9	701.7	702.7	704.8	709.9	712.0
172.5°	715.0	713.0	711.0	708.9	705.8	705.8	704.8	705.7	707.9	709.9	712.0
175°	716.1	714.0	713.0	711.0	706.9	705.8	705.8	707.4	711.0	712.0	709.9
177.5°	723.2	721.2	716.1	715.0	713.0	711.0	709.9	711.5	715.0	717.1	714.0
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1
2.5°	861.1	864.1	869.1	873.1	875.1	873.1	880.1	879.1	881.1	881.1	883.1
5°	870.1	874.1	883.1	888.1	893.1	895.1	903.1	905.1	909.1	911.1	910.1
7.5°	883.1	888.1	899.1	908.1	915.1	920.1	933.1	939.1	945.1	947.1	949.1
10°	907.1	914.1	926.1	937.1	947.1	954.1	965.1	973.1	979.1	981.1	983.1
12.5°	939.1	947.1	962.1	977.1	988.1	992.1	991.1	989.1	989.1	988.1	989.1
15°	976.1	984.1	1003.1	1017.1	1018.1	1005.1	987.1	978.1	976.1	976.1	977.1
17.5°	1019.1	1029.1	1041.1	1049.1	1030.1	998.1	977.1	968.1	966.1	965.1	963.1
20°	1068.1	1074.1	1078.1	1068.1	1026.1	989.1	965.1	952.1	942.1	941.1	937.1
22.5°	1120.1	1118.1	1113.1	1077.1	1015.1	968.1	935.1	911.1	898.1	897.1	893.1
25°	1158.1	1150.1	1135.1	1079.1	995.1	934.1	887.1	849.1	832.1	824.1	826.1
27.5°	1183.1	1166.1	1140.1	1069.1	960.1	882.1	816.1	766.1	741.1	737.1	740.1
30°	1213.1	1186.1	1144.1	1044.1	910.1	809.1	723.0	673.0	659.0	652.0	654.0
32.5°	1249.1	1214.1	1157.1	1006.1	847.1	724.0	631.0	596.0	580.0	567.0	571.0
35°	1296.1	1252.1	1178.1	952.1	767.1	634.0	565.0	533.0	504.0	490.0	491.0
37.5°	1351.1	1301.1	1196.1	889.1	680.0	566.0	508.0	470.0	434.0	407.0	402.0
40°	1439.1	1398.1	1211.1	819.1	597.0	510.0	452.0	409.0	375.0	348.0	345.0
42.5°	1586.1	1515.1	1212.1	735.1	526.0	462.0	406.0	359.0	321.0	298.0	297.0
45°	1759.1	1649.1	1191.1	645.0	464.0	414.0	365.0	312.0	290.0	275.0	273.0
47.5°	1964.1	1803.1	1145.1	561.0	411.0	367.0	323.0	291.0	275.0	264.0	264.0
50°	2198.2	1984.1	1099.1	489.0	360.0	329.0	299.0	282.0	270.0	260.0	259.0
52.5°	2462.2	2198.2	1084.1	416.0	318.0	294.0	291.0	275.0	265.0	258.0	256.0
55°	2777.2	2438.2	1098.1	359.0	285.0	280.0	286.0	273.0	266.0	255.0	252.0
57.5°	3141.2	2672.2	1083.1	311.0	262.0	267.0	280.0	273.0	267.0	253.0	249.0
60°	3484.2	2881.2	981.1	271.0	240.0	251.0	272.0	264.0	255.0	252.0	250.0
62.5°	3668.3	2949.2	782.1	240.0	223.0	235.0	259.0	249.0	243.0	250.0	251.0
65°	3670.3	2872.2	575.0	217.0	209.0	221.0	246.0	243.0	247.0	263.0	266.0
67.5°	3466.2	2638.2	406.0	196.0	195.0	210.0	252.0	272.0	275.0	291.0	291.0
68°	3396.2	2580.2	377.0	193.0	192.0	210.0	257.0	277.0	279.0	294.0	293.0
70°	3012.2	2181.2	273.0	181.0	187.0	225.0	284.0	291.0	279.0	296.0	295.0
72.5°	2354.2	1613.1	204.0	168.0	178.0	222.0	286.0	279.0	261.0	265.0	260.0
75°	1591.1	1028.1	168.0	154.0	158.0	188.0	260.0	263.0	242.0	238.0	232.0
77.5°	833.1	482.0	136.0	137.0	141.0	163.0	232.0	239.0	220.0	208.0	206.0
80°	307.0	191.0	111.0	121.0	123.0	143.0	199.0	210.0	192.0	183.0	181.0
82.5°	112.0	95.0	92.0	106.0	104.0	122.0	174.0	182.0	163.0	154.0	149.0
85°	31.0	35.0	58.0	83.0	81.0	95.0	140.0	147.0	131.0	108.0	105.0
87.5°	2.0	7.0	23.0	49.0	51.0	59.0	101.0	111.0	97.0	80.0	79.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	6.1	6.1	6.1	7.2	7.2	6.1	6.1	6.1	5.1	4.1	4.1
95°	7.2	7.2	7.2	8.2	7.2	7.2	7.2	7.2	6.1	5.1	5.1
97.5°	8.2	8.2	9.2	10.2	12.3	9.2	9.2	8.2	8.2	7.2	7.2
100°	19.4	19.4	23.5	26.6	29.7	21.5	12.3	10.2	9.2	8.2	8.2
102.5°	38.9	39.9	43.0	48.1	51.1	40.9	27.6	18.4	13.3	11.3	11.3
105°	62.4	62.4	66.5	71.6	73.7	64.4	49.1	36.8	27.6	22.5	21.5
107.5°	88.0	89.0	92.1	96.2	97.2	90.0	74.7	59.3	50.1	43.0	41.9



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	119.7	118.7	121.7	123.8	122.8	116.6	104.3	89.0	75.7	69.6	67.5
112.5°	150.4	150.4	152.4	153.4	151.4	146.3	137.1	123.8	108.4	101.3	101.3
115°	182.1	181.1	183.1	186.2	183.1	178.0	171.9	162.6	150.4	142.2	143.2
117.5°	213.8	212.8	214.8	219.9	215.8	209.7	206.6	201.5	193.3	188.2	188.2
120°	248.6	248.6	250.6	255.7	251.6	248.6	242.4	238.3	231.2	228.1	230.2
122.5°	283.4	282.3	284.4	289.5	285.4	283.4	277.2	273.1	267.0	266.0	269.0
125°	317.1	317.1	317.1	322.2	320.2	317.1	312.0	305.9	302.8	300.7	304.8
127.5°	355.0	352.9	353.9	353.9	352.9	347.8	346.8	340.6	336.6	336.6	337.6
130°	388.7	387.7	389.7	389.7	385.7	380.5	378.5	374.4	370.3	369.3	371.3
132.5°	424.5	423.5	423.5	425.5	420.4	414.3	413.3	410.2	402.0	403.0	405.1
135°	461.4	460.3	457.3	458.3	453.2	447.0	445.0	441.9	435.8	435.8	438.8
137.5°	493.1	492.0	486.9	485.9	483.9	478.7	474.6	470.6	469.5	467.5	470.6
140°	522.7	520.7	515.6	513.5	511.5	508.4	502.3	500.2	498.2	496.1	499.2
142.5°	548.3	546.3	545.2	545.2	539.1	537.0	533.0	529.9	528.9	526.8	529.9
145°	572.9	570.8	573.9	574.9	568.8	563.6	562.6	559.6	556.5	558.5	562.6
147.5°	598.4	596.4	599.4	598.4	593.3	588.2	587.2	587.2	584.1	585.1	588.2
150°	624.0	619.9	616.8	613.8	610.7	606.6	606.6	606.6	606.6	605.6	608.7
152.5°	642.4	637.3	632.2	628.1	625.0	624.0	624.0	623.0	622.0	622.0	625.0
155°	655.7	652.6	650.6	645.5	640.4	642.4	644.5	641.4	639.3	639.3	643.4
157.5°	670.0	664.9	664.9	662.9	658.8	659.8	660.8	658.8	657.8	657.8	660.8
160°	681.3	675.1	676.2	679.2	673.1	670.0	670.0	671.1	674.1	675.1	678.2
162.5°	689.5	683.3	685.4	686.4	682.3	678.2	676.2	680.3	684.4	684.4	688.4
165°	697.7	693.6	695.6	692.5	687.4	688.4	688.4	691.5	691.5	693.6	696.6
167.5°	709.9	703.8	703.8	699.7	693.6	700.7	703.8	701.7	699.7	702.8	705.8
170°	717.1	712.0	709.9	704.8	701.7	706.9	708.9	707.9	707.9	711.0	714.0
172.5°	717.1	712.0	709.9	707.9	704.8	705.8	705.8	708.9	711.0	713.0	715.0
175°	715.0	709.9	712.0	711.0	705.8	705.8	706.9	711.0	713.0	714.0	716.1
177.5°	718.1	714.0	717.1	715.0	709.9	711.0	713.0	715.0	716.1	721.2	723.2
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1

(END OF REPORT)