

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-SA1C-740-U-SL2-ULG**

Issue Date: 3/30/2022

Test Information

Test Method: LM-79-08
Report Number: REPORT IS A COMBINATION OF REPORTS P401308 AND P226775
Test Lab: INNOVATION CENTER
Issue Date: 3/30/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1C-740-U-SL2-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6229.9 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.1')
IES Classification: Type III - Medium
BUG Rating: B1 - U5 - G1

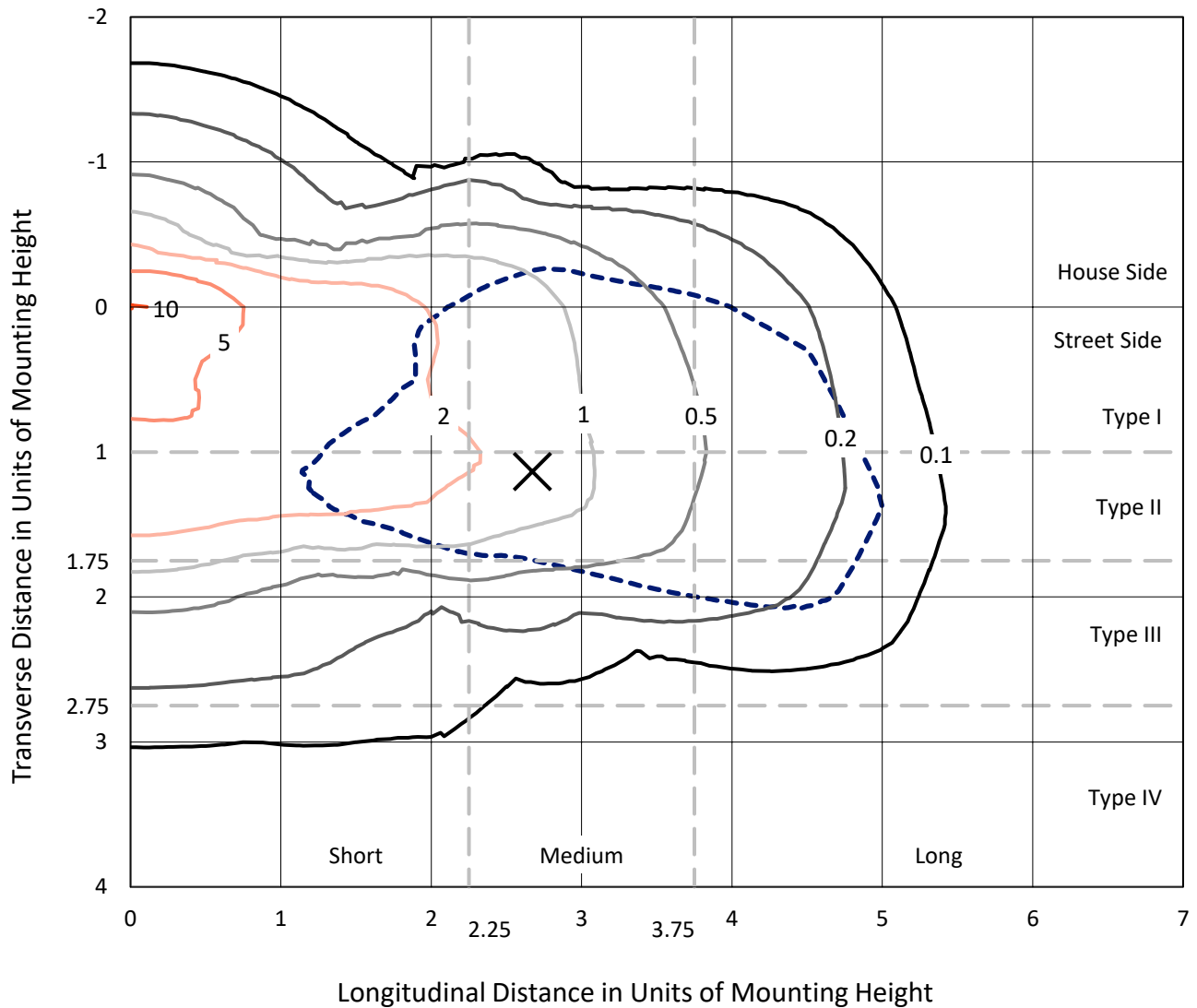
Input Watts (W): 50
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

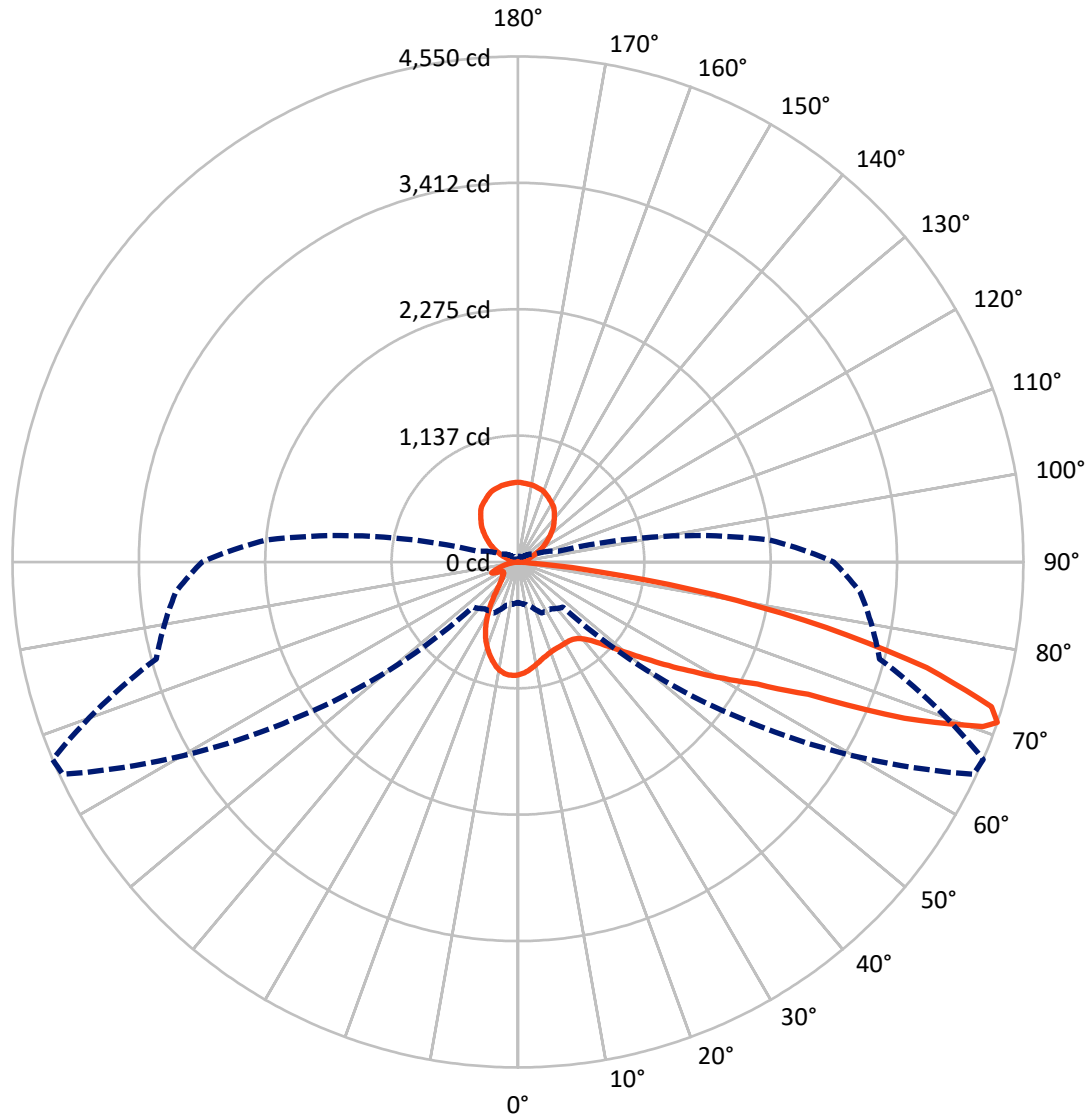
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.2 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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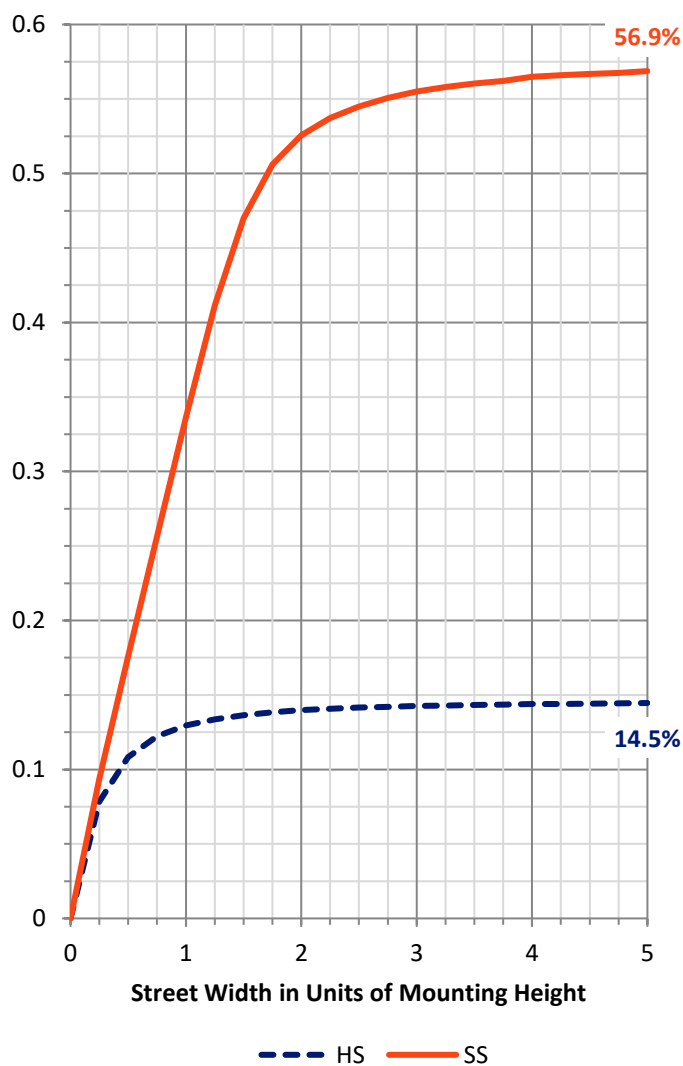
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	912.9	887.0	1799.9
	% Fixture	14.7	14.2	28.9
Street Side	Lumens	3543.1	887.0	4430.0
	% Fixture	56.9	14.2	71.1
Total	Lumens	4456.0	1773.9	6229.9
	% Fixture	71.5	28.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.0	1.4
10°-20°	221.3	3.6
20°-30°	298.7	4.8
30°-40°	393.5	6.3
40°-50°	560.4	9.0
50°-60°	856.1	13.7
60°-70°	1069.0	17.2
70°-80°	862.9	13.9
80°-90°	104.0	1.7
90°-100°	8.4	0.1
100°-110°	58.7	0.9
110°-120°	169.9	2.7
120°-130°	279.4	4.5
130°-140°	344.6	5.5
140°-150°	352.5	5.7
150°-160°	297.0	4.8
160°-170°	195.5	3.1
170°-180°	67.8	1.1
0°-90°	4456.0	71.5
0°-180°	6229.9	100.0

Coefficient of Utilization

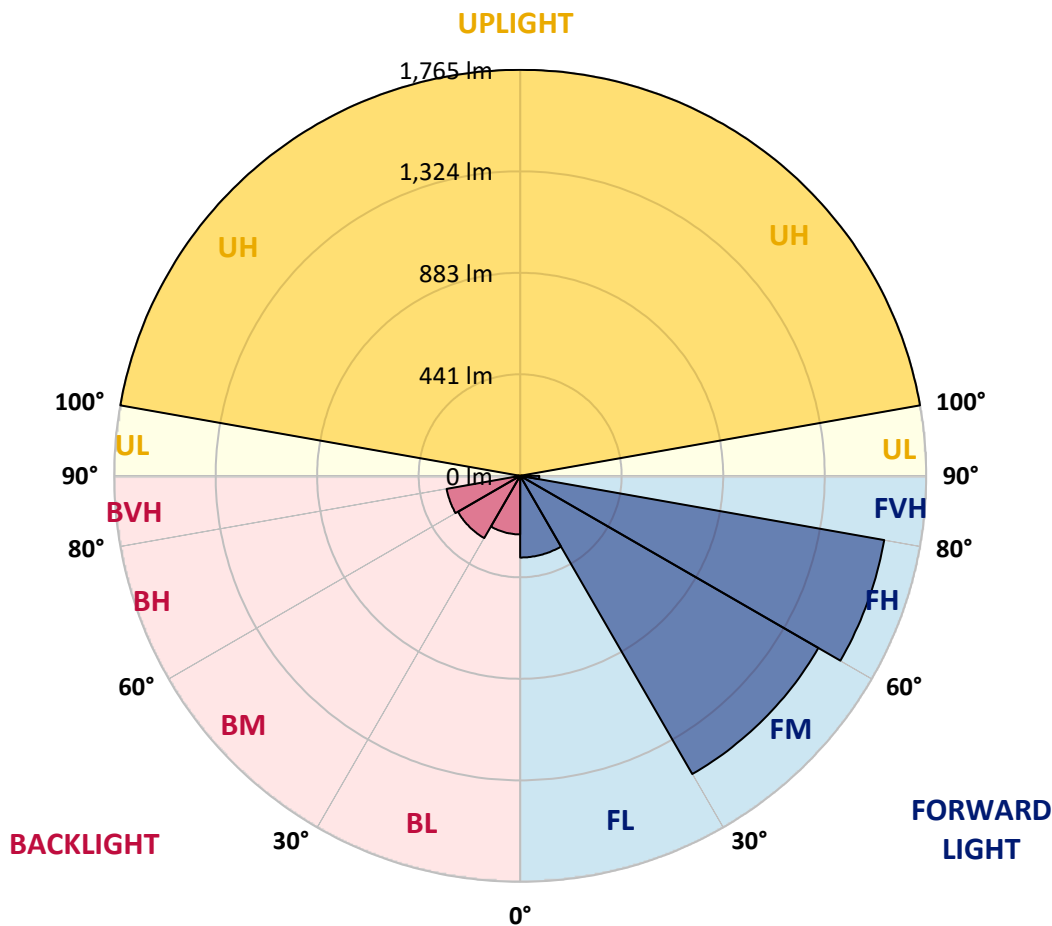


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	355.3	5.7			
FM (30°-60°)	1497.3	24.0			
FH (60°-80°)	1607.5	25.8			G1/1800
FVH (80°-90°)	82.9	1.3			G1/100
BL (0°-30°)	254.7	4.1	B1/500		
BM (30°-60°)	312.7	5.0	B1/1000		
BH (60°-80°)	324.4	5.2	B1/500		G1/500
BVH (80°-90°)	21.1	0.3			G1/100
UL (90°-100°)	8.4	0.1		U1/10	
UH (100°-180°)	1765.5	28.3		U5	

BUG Rating: B1-U5-G1
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1016.1	1016.1	1016.1	1016.1	1016.1	1016.1	1016.1	1016.1	1016.1	1016.1	1016.1
2.5°	958.4	962.8	963.5	972.5	975.7	985.9	991.7	1001.3	1002.6	1008.4	1012.2
5°	896.1	896.8	900.6	908.3	920.5	939.1	953.2	977.0	981.4	998.1	1012.9
7.5°	840.3	843.5	849.9	861.5	875.6	897.4	919.2	951.9	958.4	985.3	1013.5
10°	802.5	805.7	810.8	823.6	837.8	862.1	888.4	926.3	933.3	970.5	1011.6
12.5°	772.3	775.5	779.4	793.5	808.9	833.3	860.2	902.5	909.6	952.6	1007.1
15°	752.4	753.1	758.2	769.8	787.1	810.8	837.8	881.4	889.7	938.5	1005.8
17.5°	740.3	741.5	746.0	755.0	770.4	793.5	819.8	864.1	873.7	926.9	1006.5
20°	740.9	742.2	744.7	748.0	758.9	778.7	806.3	851.2	860.9	919.9	1011.0
22.5°	754.4	755.0	755.6	751.2	755.0	769.1	796.1	842.2	852.5	916.7	1016.1
25°	780.0	780.0	778.7	768.5	760.1	765.9	790.3	839.0	849.3	914.1	1021.2
27.5°	815.3	817.9	811.5	799.3	780.0	770.4	789.0	836.5	846.7	914.1	1023.8
30°	863.4	864.7	862.1	846.1	814.7	788.4	792.9	834.6	844.8	912.8	1024.4
32.5°	912.2	916.0	919.2	905.1	867.3	820.4	808.3	837.1	846.1	912.2	1022.5
35°	961.6	964.1	979.5	977.0	935.9	868.5	833.3	847.4	855.1	915.4	1023.8
37.5°	1003.9	1009.7	1032.1	1049.4	1017.4	934.0	876.2	869.8	874.3	931.4	1030.8
40°	1049.4	1057.8	1091.1	1123.9	1109.7	1016.1	937.2	910.2	909.0	960.9	1048.2
42.5°	1100.8	1110.4	1153.4	1200.8	1205.3	1120.6	1018.7	967.3	966.1	1011.6	1086.0
45°	1161.1	1170.0	1228.4	1284.9	1312.4	1237.4	1118.7	1048.2	1048.8	1082.2	1146.3
47.5°	1235.5	1249.6	1306.0	1377.9	1427.3	1368.9	1240.0	1161.1	1155.9	1188.6	1245.1
50°	1340.0	1351.6	1398.4	1468.3	1554.9	1528.0	1392.6	1297.0	1293.2	1308.6	1377.2
52.5°	1449.7	1453.6	1476.0	1548.5	1694.1	1721.1	1580.6	1465.8	1451.0	1459.3	1541.4
55°	1456.1	1464.5	1479.2	1571.0	1819.2	1952.6	1787.8	1664.6	1645.4	1639.6	1728.1
57.5°	1322.7	1336.2	1355.4	1474.1	1824.3	2220.1	2082.2	1896.8	1862.2	1833.3	1927.6
60°	1039.8	1057.1	1092.4	1238.0	1694.1	2372.8	2573.6	2157.3	2126.5	2028.3	2122.6
62.5°	751.8	758.9	792.9	858.3	1344.5	2381.8	3085.5	2497.2	2420.9	2218.2	2290.7
65°	605.5	617.1	627.4	626.7	796.1	2112.4	3425.4	3102.1	2871.9	2430.5	2475.4
67.5°	499.1	502.9	527.9	571.5	541.4	1304.7	3459.4	3986.1	3752.6	2716.6	2694.8
70°	417.0	418.2	443.3	521.5	518.3	673.5	2900.7	4494.8	4438.3	3186.2	3038.0
71°	365.0	375.9	403.5	504.8	515.7	575.4	2464.5	4521.7	4549.9	3370.3	3091.2
72.5°	287.4	287.4	326.5	463.1	520.2	531.1	1816.0	4374.8	4456.3	3579.4	2998.9
75°	168.7	167.4	188.6	322.7	531.8	529.2	991.7	3635.8	3800.7	3617.2	2775.6
77.5°	94.9	96.9	108.4	179.6	422.1	508.0	569.6	2647.3	2841.7	3025.8	2347.1
80°	43.6	46.2	54.5	87.2	248.9	438.8	406.7	1719.1	1792.9	1818.6	1109.1
82.5°	11.5	12.8	16.7	33.4	96.2	298.9	300.8	719.7	743.5	429.8	238.0
85°	0.0	0.0	0.0	0.0	1.3	36.6	85.3	129.6	107.8	57.1	48.8
87.5°	0.0	0.0	0.0	0.0	0.0	1.3	1.9	2.6	2.6	2.6	3.2
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	7.0	6.1	6.1
95°	5.1	5.1	6.1	7.2	7.2	7.2	7.2	8.2	8.0	7.2	7.2
97.5°	7.2	7.2	8.2	8.2	9.2	9.2	12.3	10.2	10.0	9.2	8.2
100°	8.2	8.2	9.2	10.2	12.3	21.5	29.7	26.6	26.0	23.5	19.4
102.5°	11.3	11.3	13.3	18.4	27.6	40.9	51.1	48.1	47.1	43.0	39.9
105°	21.5	22.5	27.6	36.8	49.1	64.4	73.7	71.6	70.6	66.5	62.4
107.5°	41.9	43.0	50.1	59.3	74.7	90.0	97.2	96.2	95.3	92.1	89.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
110°	67.5	69.6	75.7	89.0	104.3	116.6	122.8	123.8	123.4	121.7	118.7
112.5°	101.3	101.3	108.4	123.8	137.1	146.3	151.4	153.4	153.2	152.4	150.4
115°	143.2	142.2	150.4	162.6	171.9	178.0	183.1	186.2	185.6	183.1	181.1
117.5°	188.2	188.2	193.3	201.5	206.6	209.7	215.8	219.9	218.9	214.8	212.8
120°	230.2	228.1	231.2	238.3	242.4	248.6	251.6	255.7	254.7	250.6	248.6
122.5°	269.0	266.0	267.0	273.1	277.2	283.4	285.4	289.5	288.5	284.4	282.3
125°	304.8	300.7	302.8	305.9	312.0	317.1	320.2	322.2	321.2	317.1	317.1
127.5°	337.6	336.6	336.6	340.6	346.8	347.8	352.9	353.9	353.9	353.9	352.9
130°	371.3	369.3	370.3	374.4	378.5	380.5	385.7	389.7	389.7	389.7	387.7
132.5°	405.1	403.0	402.0	410.2	413.3	414.3	420.4	425.5	425.1	423.5	423.5
135°	438.8	435.8	435.8	441.9	445.0	447.0	453.2	458.3	458.1	457.3	460.3
137.5°	470.6	467.5	469.5	470.6	474.6	478.7	483.9	485.9	486.1	486.9	492.0
140°	499.2	496.1	498.2	500.2	502.3	508.4	511.5	513.5	513.9	515.6	520.7
142.5°	529.9	526.8	528.9	529.9	533.0	537.0	539.1	545.2	545.2	545.2	546.3
145°	562.6	558.5	556.5	559.6	562.6	563.6	568.8	574.9	574.7	573.9	570.8
147.5°	588.2	585.1	584.1	587.2	587.2	588.2	593.3	598.4	598.6	599.4	596.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	610.7	613.8	614.4	616.8	619.9
152.5°	625.0	622.0	622.0	623.0	624.0	624.0	625.0	628.1	628.9	632.2	637.3
155°	643.4	639.3	639.3	641.4	644.5	642.4	640.4	645.5	646.5	650.6	652.6
157.5°	660.8	657.8	657.8	658.8	660.8	659.8	658.8	662.9	663.3	664.9	664.9
160°	678.2	675.1	674.1	671.1	670.0	670.0	673.1	679.2	678.6	676.2	675.1
162.5°	688.4	684.4	684.4	680.3	676.2	678.2	682.3	686.4	686.2	685.4	683.3
165°	696.6	693.6	691.5	691.5	688.4	688.4	687.4	692.5	693.2	695.6	693.6
167.5°	705.8	702.8	699.7	701.7	703.8	700.7	693.6	699.7	700.5	703.8	703.8
170°	714.0	711.0	707.9	707.9	708.9	706.9	701.7	704.8	705.8	709.9	712.0
172.5°	715.0	713.0	711.0	708.9	705.8	705.8	704.8	707.9	708.3	709.9	712.0
175°	716.1	714.0	713.0	711.0	706.9	705.8	705.8	711.0	711.2	712.0	709.9
177.5°	723.2	721.2	716.1	715.0	713.0	711.0	709.9	715.0	715.5	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°	1016.1	1016.1	1016.1	1016.1	1016.1	1016.1	1016.1	1016.1	1016.1	1016.1	1016.1
2.5°	1015.4	1018.0	1022.5	1021.9	1020.6	1012.9	1017.4	1012.9	1012.2	1010.3	1011.0
5°	1018.0	1021.9	1024.4	1018.7	1009.0	992.4	986.6	971.8	962.2	957.1	954.5
7.5°	1021.9	1024.4	1023.1	1007.1	982.1	950.7	923.7	902.5	880.1	876.2	875.0
10°	1021.9	1024.4	1014.2	983.4	940.4	891.0	849.9	815.3	780.7	767.8	769.8
12.5°	1019.3	1020.6	996.8	947.4	885.2	817.9	760.1	703.0	658.8	631.8	626.7
15°	1017.4	1015.4	973.7	902.5	819.8	736.4	649.2	572.2	519.6	484.3	479.8
17.5°	1017.4	1010.3	946.2	851.2	748.6	633.8	518.3	434.9	376.5	356.0	355.4
20°	1018.7	1003.3	916.7	798.0	660.1	511.9	386.8	315.6	293.8	290.6	291.2
22.5°	1019.9	993.6	884.6	737.7	561.3	381.7	276.5	250.8	252.7	260.4	259.8
25°	1018.7	980.8	846.7	670.3	453.5	275.2	223.2	216.8	228.4	237.3	239.9
27.5°	1015.4	964.1	806.3	590.2	345.8	216.8	195.0	194.4	205.9	214.3	213.6
30°	1005.8	944.2	759.5	505.5	249.5	184.7	175.8	177.7	185.4	193.1	193.1
32.5°	995.6	921.8	710.1	413.1	191.8	167.4	164.2	164.9	170.0	175.8	175.1
35°	984.7	900.0	659.4	316.9	168.1	157.2	155.9	155.2	157.2	158.4	158.4
37.5°	978.2	880.7	603.6	238.6	155.2	150.7	148.2	145.6	145.0	143.7	142.4
40°	980.8	867.9	549.7	184.7	147.5	143.7	139.8	136.0	133.4	132.1	131.5
42.5°	998.8	864.1	490.1	159.1	140.5	137.3	132.1	125.7	123.2	123.2	122.5
45°	1040.5	875.6	434.3	146.3	134.1	130.2	121.9	117.4	115.5	116.1	116.1
47.5°	1105.9	908.3	384.2	139.8	129.6	123.8	114.2	109.7	108.4	109.0	109.0
50°	1204.0	969.9	332.9	134.1	124.4	116.7	108.4	103.3	101.4	101.4	101.4
52.5°	1347.7	1071.3	295.7	130.2	120.0	111.0	102.6	96.9	94.3	94.3	93.7
55°	1522.8	1203.4	281.6	127.7	114.2	105.8	96.9	91.1	87.2	86.0	86.6
57.5°	1714.6	1374.7	302.1	127.0	107.8	100.1	91.1	84.0	80.2	79.5	78.9
60°	1912.2	1544.7	361.1	123.8	102.6	93.0	84.7	78.3	74.4	73.1	72.5
62.5°	2082.8	1714.0	458.7	121.2	98.8	86.6	77.6	71.8	68.6	66.7	66.7
65°	2288.8	1908.4	607.5	124.4	96.9	80.2	71.2	66.1	63.5	61.6	61.6
67.5°	2569.7	2196.4	720.4	139.8	101.4	75.1	64.1	60.3	58.4	57.1	57.1
70°	2846.2	2358.0	501.0	164.2	112.9	70.6	57.7	55.2	53.9	52.6	52.6
71°	2842.3	2271.4	376.5	170.0	116.7	69.3	55.2	53.2	52.0	51.3	50.7
72.5°	2699.9	2064.9	270.1	164.9	114.8	65.4	52.0	50.0	48.8	48.8	48.1
75°	2421.5	1819.8	211.0	137.9	96.2	58.4	46.2	44.9	43.6	43.0	43.6
77.5°	1984.1	1456.1	166.1	109.0	73.1	48.1	41.1	39.1	38.5	37.8	38.5
80°	911.5	634.4	121.2	84.7	54.5	38.5	34.6	34.0	33.4	32.7	32.7
82.5°	219.4	177.7	64.8	56.4	37.2	29.5	27.6	27.6	27.6	26.9	26.9
85°	48.1	48.1	26.3	26.3	22.5	20.5	21.8	21.8	21.8	20.5	20.5
87.5°	2.6	7.7	8.3	12.2	12.8	12.2	14.8	15.4	14.8	14.1	13.5
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



REPORT NUMBER:
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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)