

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-SL3-HSS-ULG**

Issue Date: 3/30/2022

Test Information

Test Method: LM-79-08
Report Number: REPORT IS A COMBINATION OF REPORTS P401310 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-SL3-HSS-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) 70 CRI, 4000K, 615mA 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: 5553.9 lumens
Efficiency: N/A
Efficacy: 111.1 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 - G1

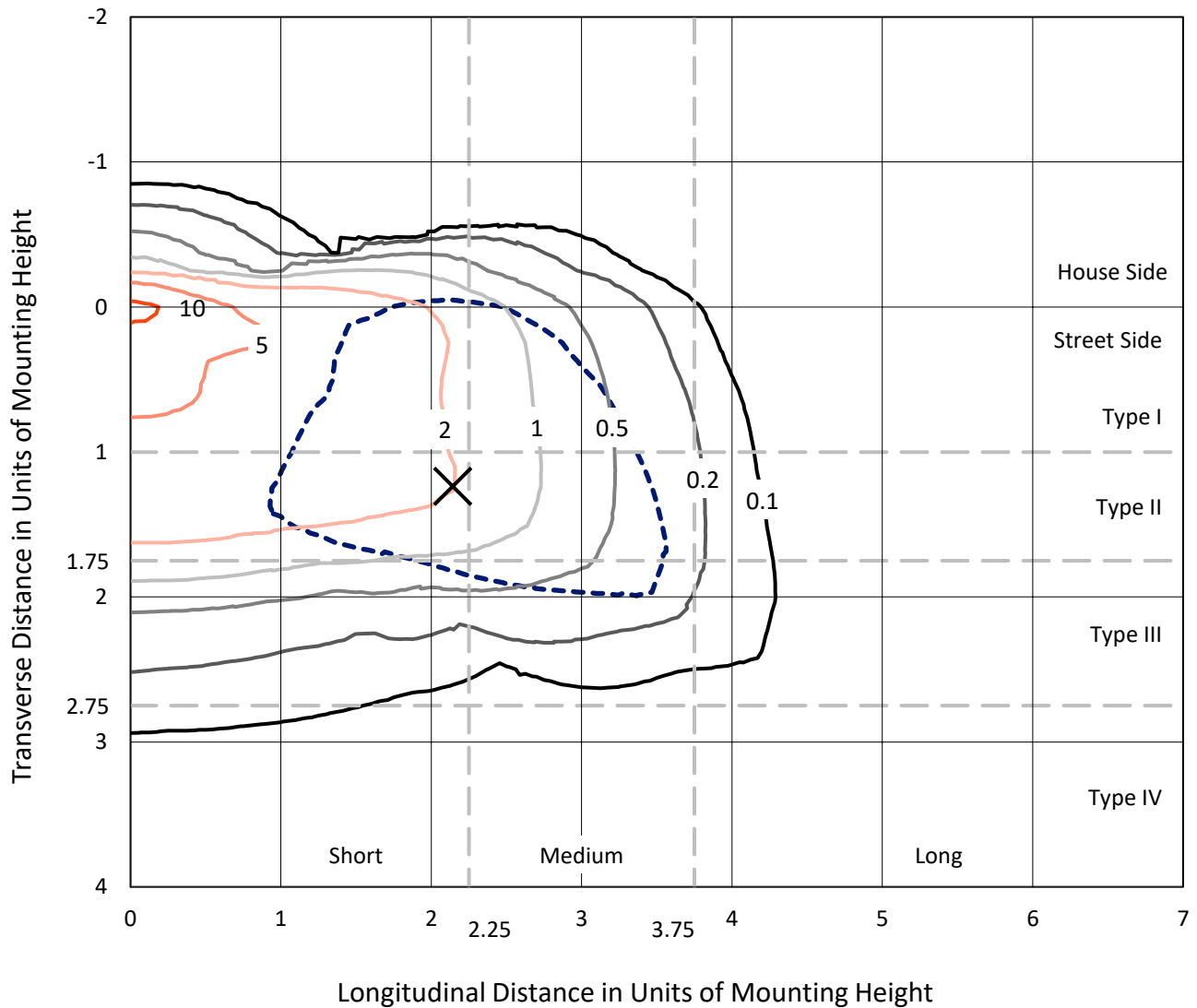
Input Watts (W): 50
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

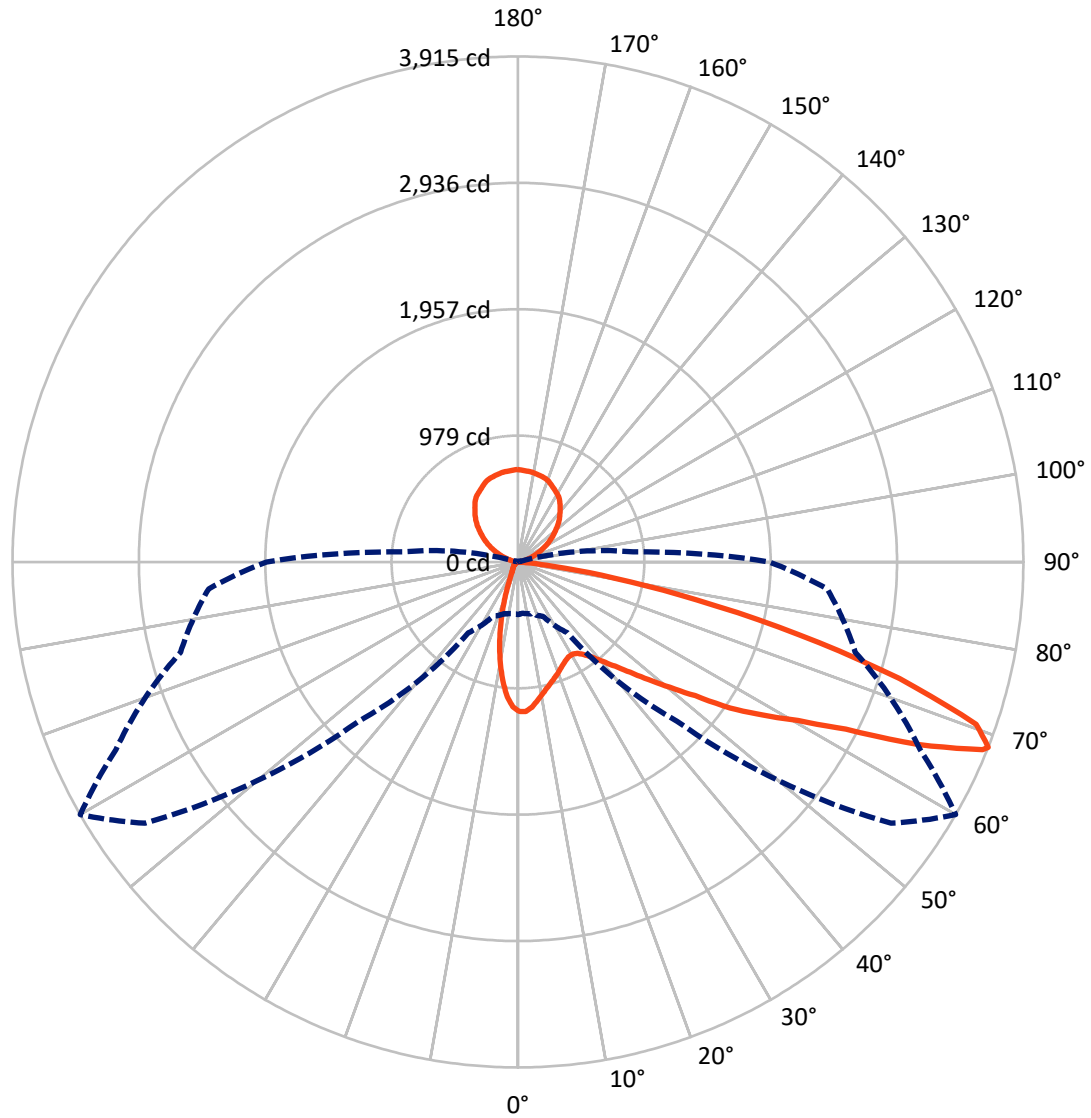
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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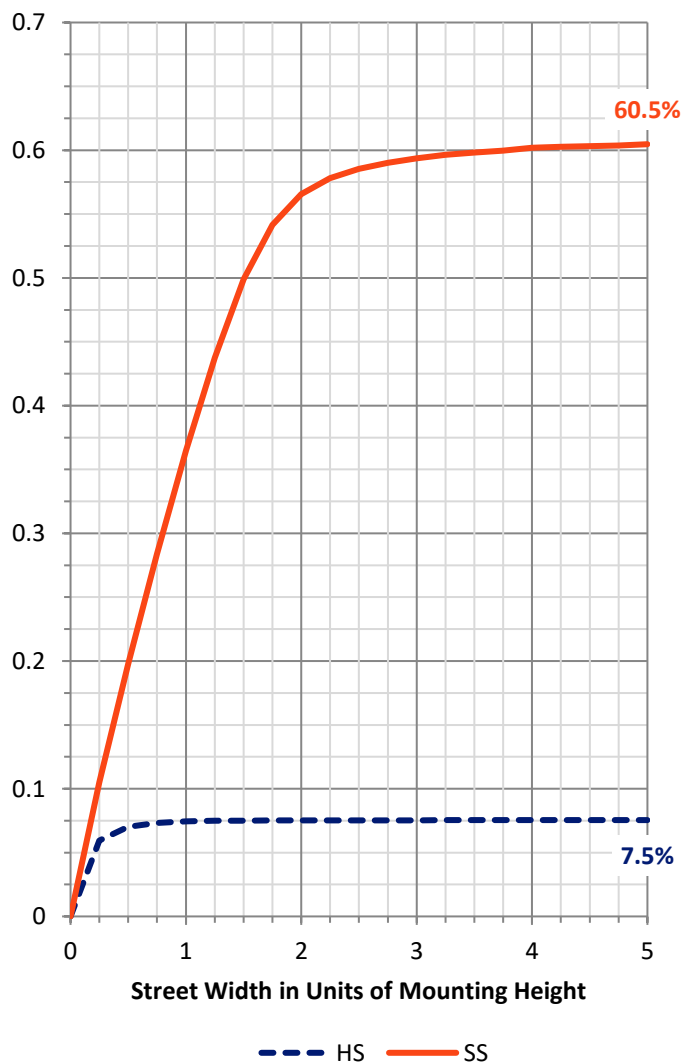
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	422.6	887.0	1309.6
	% Fixture	7.6	16.0	23.6
Street Side	Lumens	3357.4	887.0	4244.3
	% Fixture	60.5	16.0	76.4
Total	Lumens	3780.0	1773.9	5553.9
	% Fixture	68.1	31.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.9	1.7
10°-20°	191.5	3.4
20°-30°	252.1	4.5
30°-40°	347.9	6.3
40°-50°	527.4	9.5
50°-60°	851.1	15.3
60°-70°	1011.0	18.2
70°-80°	476.6	8.6
80°-90°	28.5	0.5
90°-100°	8.4	0.2
100°-110°	58.7	1.1
110°-120°	169.9	3.1
120°-130°	279.4	5.0
130°-140°	344.6	6.2
140°-150°	352.5	6.3
150°-160°	297.0	5.3
160°-170°	195.5	3.5
170°-180°	67.8	1.2
0°-90°	3780.0	68.1
0°-180°	5553.9	100.0

Coefficient of Utilization



REPORT NUMBER:

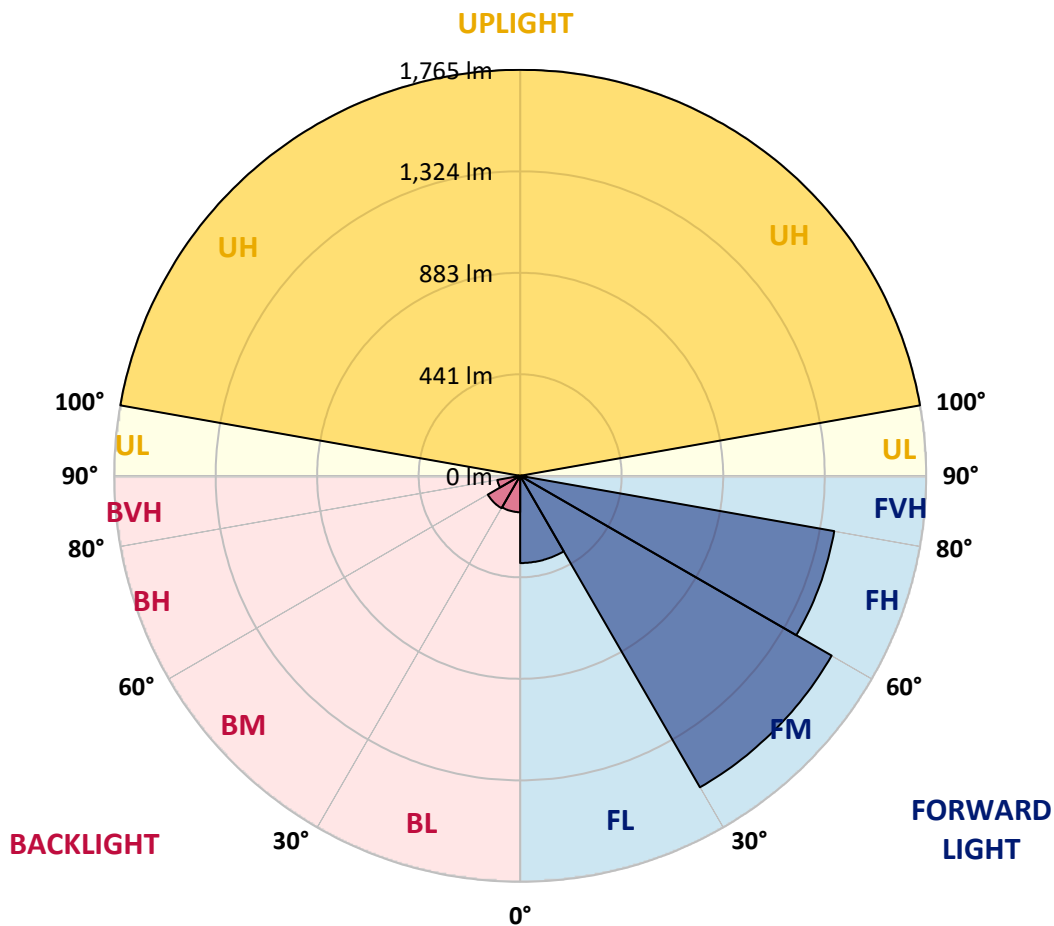
CATALOG NUMBER: ENT-SA1C-740-U-SL3-HSS-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	379.4	6.8			
FM (30°-60°)	1564.0	28.2			
FH (60°-80°)	1386.8	25.0			G1/1800
FVH (80°-90°)	27.2	0.5			G1/100
BL (0°-30°)	158.1	2.8	B1/500		
BM (30°-60°)	162.5	2.9	B0/220		
BH (60°-80°)	100.8	1.8	B0/110		G0/110
BVH (80°-90°)	1.2	0.0			G0/10
UL (90°-100°)	8.4	0.2		U1/10	
UH (100°-180°)	1765.5	31.8		U5	

BUG Rating: B1-U5-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	1157.0	1157.0	1157.0	1157.0	1157.0	1157.0	1157.0	1157.0	1157.0	1157.0	1157.0
2.5°	1146.8	1144.2	1151.2	1153.2	1155.1	1158.9	1158.3	1158.9	1159.6	1158.3	1150.6
5°	1068.5	1073.0	1079.4	1087.7	1096.1	1115.3	1123.0	1130.7	1135.9	1139.7	1132.6
7.5°	991.5	1000.5	1005.7	1021.0	1033.9	1053.8	1070.4	1083.9	1096.7	1110.8	1103.8
10°	930.0	933.2	937.7	951.8	971.0	1001.2	1023.0	1039.6	1055.0	1078.8	1073.0
12.5°	869.7	871.6	880.6	896.0	915.9	953.1	981.9	1001.2	1018.5	1048.0	1048.6
15°	825.4	826.1	831.8	846.0	869.0	908.8	946.0	967.2	991.5	1027.5	1029.4
17.5°	796.6	795.9	797.2	806.2	828.0	865.8	910.7	935.7	964.6	1010.8	1012.7
20°	787.6	786.3	783.7	781.8	795.3	828.0	878.7	906.2	940.2	998.6	999.2
22.5°	795.3	792.7	787.0	776.0	779.9	801.1	843.4	876.7	918.4	992.2	987.7
25°	813.9	813.9	806.2	788.9	779.9	784.4	818.4	850.4	896.6	989.0	979.4
27.5°	844.7	843.4	833.1	815.2	798.5	786.3	803.0	833.1	880.6	992.8	975.5
30°	881.9	878.0	867.1	854.3	833.8	807.5	806.2	828.6	872.9	1005.0	978.1
32.5°	917.1	917.1	912.7	900.5	880.6	846.0	826.1	844.0	882.5	1024.9	986.4
35°	960.8	960.1	961.4	956.9	939.6	903.0	871.0	879.9	912.0	1058.2	1006.3
37.5°	995.4	996.0	1006.9	1014.6	1006.9	968.5	935.1	935.1	962.0	1108.3	1040.3
40°	1029.4	1030.7	1051.2	1073.6	1075.6	1044.8	1012.7	1012.1	1027.5	1169.8	1092.9
42.5°	1060.2	1065.3	1094.8	1133.3	1155.7	1135.2	1111.5	1103.8	1111.5	1262.8	1178.2
45°	1092.9	1103.1	1144.2	1200.0	1236.5	1237.2	1228.2	1219.2	1223.1	1367.4	1292.3
47.5°	1135.2	1146.8	1198.1	1266.7	1336.0	1353.9	1362.3	1359.0	1348.8	1499.5	1439.9
50°	1203.8	1214.7	1262.8	1339.8	1434.7	1499.5	1522.0	1525.8	1512.3	1645.7	1607.3
52.5°	1320.6	1327.0	1371.9	1432.8	1539.3	1660.5	1719.5	1720.1	1690.0	1817.0	1788.1
55°	1445.6	1462.3	1514.9	1585.4	1695.1	1831.1	1978.6	1994.6	1901.6	1967.1	1920.2
57.5°	1447.6	1463.6	1550.8	1686.1	1915.7	2096.0	2227.4	2239.0	2135.7	2087.6	2044.7
60°	1294.9	1303.2	1424.5	1622.6	1994.6	2453.2	2510.9	2493.6	2299.9	2212.1	2200.5
62.5°	913.9	917.8	1061.5	1322.5	1820.2	2623.8	2942.6	2849.6	2533.4	2395.5	2434.0
65°	575.3	573.4	633.0	841.5	1353.9	2455.8	3476.2	3408.2	2962.4	2625.1	2616.1
67.5°	424.6	414.3	430.4	495.1	773.5	1927.9	3574.3	3880.9	3371.0	2720.7	2458.3
68°	407.3	398.3	415.0	465.0	668.9	1745.1	3526.8	3914.9	3435.8	2705.3	2404.5
70°	345.7	337.4	351.5	389.3	465.6	1132.6	3111.9	3764.1	3494.8	2574.4	2119.1
72.5°	245.6	250.1	287.3	334.1	394.4	581.1	2291.6	3091.4	3006.1	2289.7	1612.4
75°	145.6	153.9	202.7	269.4	362.4	383.5	1478.3	2247.3	2205.6	1585.4	873.5
77.5°	51.3	54.5	100.7	179.6	298.9	304.0	823.5	1412.9	1314.1	647.8	257.8
80°	18.6	18.6	37.2	100.1	193.0	232.2	437.4	754.2	518.9	168.0	71.2
82.5°	3.2	3.2	8.3	34.0	85.3	123.8	203.3	268.1	153.9	37.2	35.3
85°	0.0	0.0	0.0	0.0	1.3	1.3	59.6	60.3	28.2	5.1	15.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.6	1.3	1.3	1.3	1.3	1.9
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	7.7	8.2	7.2	7.2
97.5°	7.2	7.2	8.2	8.2	9.2	9.2	12.3	11.3	10.2	9.2	8.2
100°	8.2	8.2	9.2	10.2	12.3	21.5	29.7	28.1	26.6	23.5	19.4
102.5°	11.3	11.3	13.3	18.4	27.6	40.9	51.1	49.6	48.1	43.0	39.9
105°	21.5	22.5	27.6	36.8	49.1	64.4	73.7	72.6	71.6	66.5	62.4
107.5°	41.9	43.0	50.1	59.3	74.7	90.0	97.2	96.7	96.2	92.1	89.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
110°	67.5	69.6	75.7	89.0	104.3	116.6	122.8	123.3	123.8	121.7	118.7
112.5°	101.3	101.3	108.4	123.8	137.1	146.3	151.4	152.4	153.4	152.4	150.4
115°	143.2	142.2	150.4	162.6	171.9	178.0	183.1	184.6	186.2	183.1	181.1
117.5°	188.2	188.2	193.3	201.5	206.6	209.7	215.8	217.9	219.9	214.8	212.8
120°	230.2	228.1	231.2	238.3	242.4	248.6	251.6	253.7	255.7	250.6	248.6
122.5°	269.0	266.0	267.0	273.1	277.2	283.4	285.4	287.4	289.5	284.4	282.3
125°	304.8	300.7	302.8	305.9	312.0	317.1	320.2	321.2	322.2	317.1	317.1
127.5°	337.6	336.6	336.6	340.6	346.8	347.8	352.9	353.4	353.9	353.9	352.9
130°	371.3	369.3	370.3	374.4	378.5	380.5	385.7	387.7	389.7	389.7	387.7
132.5°	405.1	403.0	402.0	410.2	413.3	414.3	420.4	423.0	425.5	423.5	423.5
135°	438.8	435.8	435.8	441.9	445.0	447.0	453.2	455.7	458.3	457.3	460.3
137.5°	470.6	467.5	469.5	470.6	474.6	478.7	483.9	484.9	485.9	486.9	492.0
140°	499.2	496.1	498.2	500.2	502.3	508.4	511.5	512.5	513.5	515.6	520.7
142.5°	529.9	526.8	528.9	529.9	533.0	537.0	539.1	542.2	545.2	545.2	546.3
145°	562.6	558.5	556.5	559.6	562.6	563.6	568.8	571.8	574.9	573.9	570.8
147.5°	588.2	585.1	584.1	587.2	587.2	588.2	593.3	595.9	598.4	599.4	596.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	610.7	612.2	613.8	616.8	619.9
152.5°	625.0	622.0	622.0	623.0	624.0	624.0	625.0	626.6	628.1	632.2	637.3
155°	643.4	639.3	639.3	641.4	644.5	642.4	640.4	642.9	645.5	650.6	652.6
157.5°	660.8	657.8	657.8	658.8	660.8	659.8	658.8	660.8	662.9	664.9	664.9
160°	678.2	675.1	674.1	671.1	670.0	670.0	673.1	676.2	679.2	676.2	675.1
162.5°	688.4	684.4	684.4	680.3	676.2	678.2	682.3	684.4	686.4	685.4	683.3
165°	696.6	693.6	691.5	691.5	688.4	688.4	687.4	690.0	692.5	695.6	693.6
167.5°	705.8	702.8	699.7	701.7	703.8	700.7	693.6	696.6	699.7	703.8	703.8
170°	714.0	711.0	707.9	707.9	708.9	706.9	701.7	703.3	704.8	709.9	712.0
172.5°	715.0	713.0	711.0	708.9	705.8	705.8	704.8	706.3	707.9	709.9	712.0
175°	716.1	714.0	713.0	711.0	706.9	705.8	705.8	708.4	711.0	712.0	709.9
177.5°	723.2	721.2	716.1	715.0	713.0	711.0	709.9	712.5	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°	1157.0	1157.0	1157.0	1157.0	1157.0	1157.0	1157.0	1157.0	1157.0	1157.0	1157.0
2.5°	1147.4	1146.1	1139.1	1126.2	1115.3	1097.4	1094.2	1076.8	1070.4	1065.3	1070.4
5°	1127.5	1120.5	1096.7	1067.9	1028.7	982.6	955.6	918.4	910.7	890.2	902.4
7.5°	1094.8	1078.8	1034.5	972.3	900.5	829.9	776.0	724.1	679.8	664.5	660.0
10°	1060.2	1037.7	963.3	867.1	763.2	654.8	574.7	499.6	457.9	418.8	417.5
12.5°	1027.5	993.5	885.7	751.7	606.7	477.8	373.9	295.0	245.6	218.7	225.8
15°	1001.2	955.6	807.5	636.2	452.8	307.9	211.6	161.0	143.7	135.3	136.6
17.5°	975.5	915.2	731.8	515.7	322.6	189.8	137.3	119.9	114.8	112.9	111.6
20°	952.4	876.1	652.3	406.6	212.9	131.5	112.9	107.1	105.2	103.9	103.9
22.5°	929.3	835.1	572.7	301.4	145.6	107.7	101.3	98.8	97.5	95.6	95.6
25°	908.2	795.3	493.2	211.0	111.6	96.2	91.7	89.1	86.6	84.7	84.7
27.5°	892.1	765.1	419.5	149.4	93.6	86.6	82.1	77.6	74.4	71.8	71.8
30°	881.9	735.6	348.3	112.9	83.4	77.0	71.2	65.4	60.3	57.1	56.4
32.5°	876.1	711.3	282.2	92.4	74.4	67.3	60.3	53.9	48.1	44.3	44.3
35°	878.7	692.0	216.1	78.2	67.3	59.0	51.3	43.6	38.5	35.3	34.6
37.5°	895.3	681.1	161.0	69.3	60.3	51.3	43.6	35.9	30.8	28.2	27.6
40°	926.8	683.7	122.5	62.9	55.2	44.9	35.9	29.5	25.0	22.4	22.4
42.5°	990.3	702.3	96.8	57.7	49.4	38.5	30.1	24.4	20.5	18.6	18.0
45°	1074.3	737.6	79.5	53.2	43.6	32.7	25.7	20.5	16.7	14.8	14.8
47.5°	1201.3	794.0	68.6	48.7	37.8	27.6	21.2	16.7	12.8	11.5	10.9
50°	1348.1	872.9	60.3	43.6	33.4	23.1	18.0	12.8	10.3	8.3	8.3
52.5°	1498.2	960.8	54.5	39.1	28.9	19.9	14.1	9.6	7.1	5.8	5.8
55°	1636.1	1034.5	48.7	35.3	24.4	16.7	11.5	7.7	5.1	3.8	3.8
57.5°	1769.5	1101.9	42.3	30.8	19.9	13.5	9.0	5.8	3.8	2.6	2.6
60°	1936.9	1189.1	36.6	26.3	16.0	10.9	7.1	4.5	2.6	1.9	1.3
62.5°	2138.9	1252.6	30.8	21.2	12.8	8.3	5.1	3.2	1.9	0.6	0.6
65°	2213.3	1168.6	25.7	17.3	10.3	6.4	3.8	2.6	1.3	0.6	0.6
67.5°	2005.5	941.5	20.5	13.5	7.7	4.5	3.2	1.9	1.3	0.6	0.6
68°	1947.8	895.3	19.9	12.8	7.1	4.5	2.6	1.9	0.6	0.6	0.0
70°	1644.5	719.0	16.0	9.6	5.8	3.8	2.6	1.3	0.6	0.6	0.0
72.5°	1219.2	495.8	11.5	6.4	3.8	2.6	1.9	1.3	0.6	0.6	0.0
75°	643.3	193.0	9.0	5.1	3.2	2.6	1.9	1.9	1.3	0.6	0.6
77.5°	184.7	60.9	7.1	3.8	3.2	3.2	3.2	2.6	2.6	1.9	1.3
80°	53.9	19.9	4.5	2.6	3.2	3.2	3.8	3.2	3.2	2.6	2.6
82.5°	28.9	7.7	2.6	1.9	1.9	2.6	3.2	2.6	1.9	1.3	0.6
85°	12.2	2.6	1.9	1.3	1.3	1.3	1.3	1.3	1.3	0.6	0.6
87.5°	0.6	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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)