

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-SL4-ULG**

Issue Date: 3/30/2022

**Test Information**

Test Method: LM-79-08  
Report Number:  
REPORT IS A COMBINATION OF REPORTS P401316 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-SL4-ULG  
Description: ENTRI LED LUMINAIRE WITH UPLIGHT  
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL LIGHT  
ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6050.9 lumens  
Efficiency: N/A  
Efficacy: 121.0 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.1')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U5 - G1

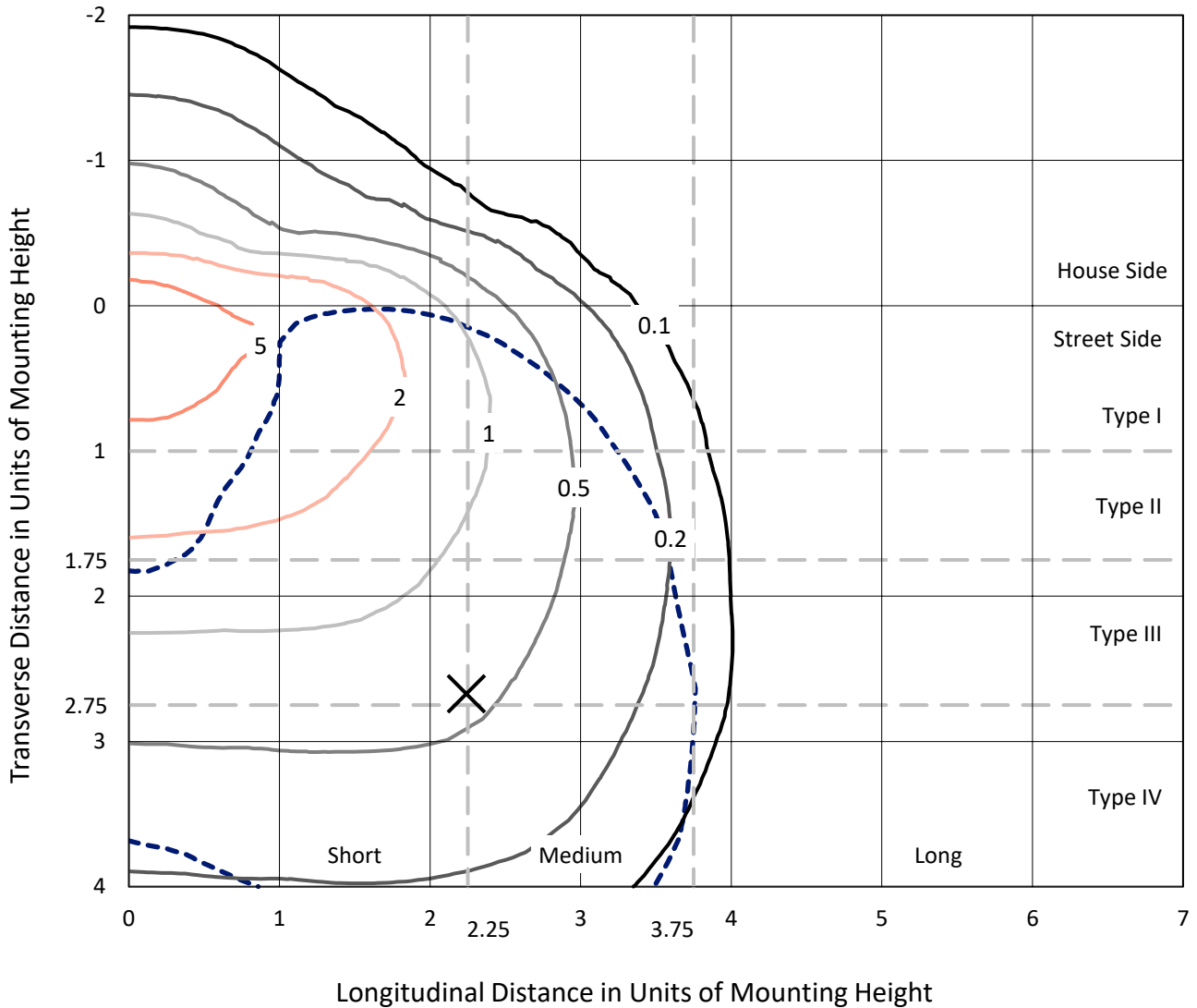
Input Watts (W): 50  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

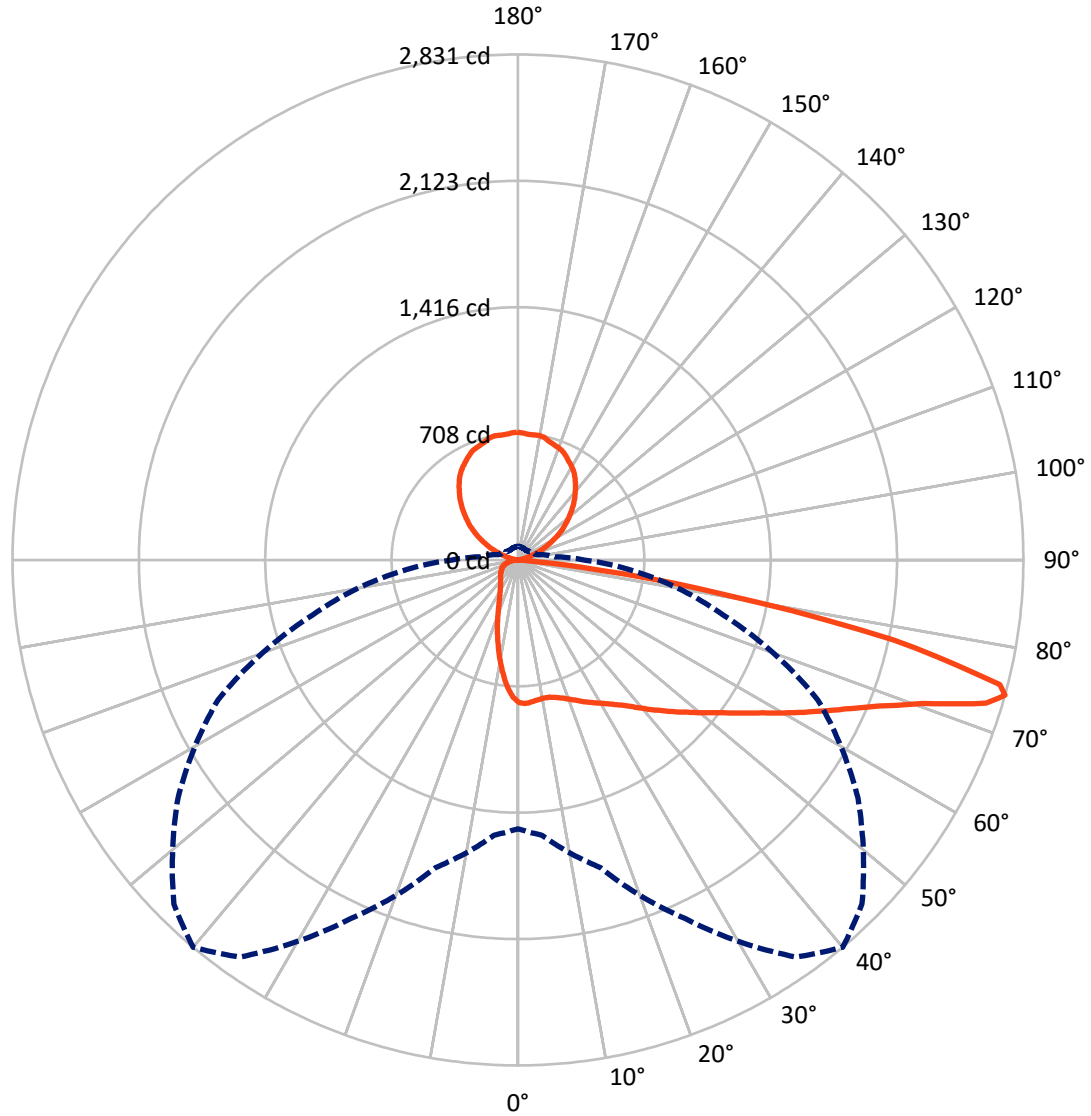
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 74-Deg Vertical

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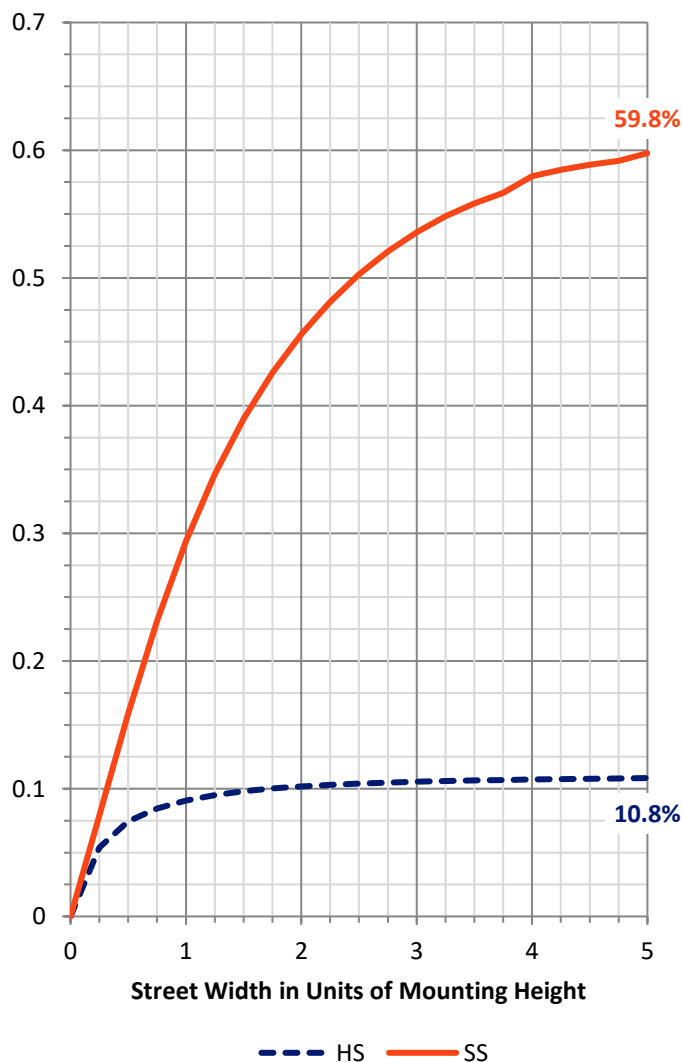
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	666.9	887.0	1553.8
	% Fixture	11.0	14.7	25.7
<b>Street Side</b>	Lumens	3610.1	887.0	4497.1
	% Fixture	59.7	14.7	74.3
<b>Total</b>	Lumens	4277.0	1773.9	6050.9
	% Fixture	70.7	29.3	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.5	1.2
10°-20°	181.5	3.0
20°-30°	278.4	4.6
30°-40°	402.0	6.6
40°-50°	578.4	9.6
50°-60°	798.7	13.2
60°-70°	1006.9	16.6
70°-80°	873.2	14.4
80°-90°	87.4	1.4
90°-100°	8.4	0.1
100°-110°	58.7	1.0
110°-120°	169.9	2.8
120°-130°	279.4	4.6
130°-140°	344.6	5.7
140°-150°	352.5	5.8
150°-160°	297.0	4.9
160°-170°	195.5	3.2
170°-180°	67.8	1.1
0°-90°	4277.0	70.7
0°-180°	6050.9	100.0

**Coefficient of Utilization**



REPORT NUMBER:

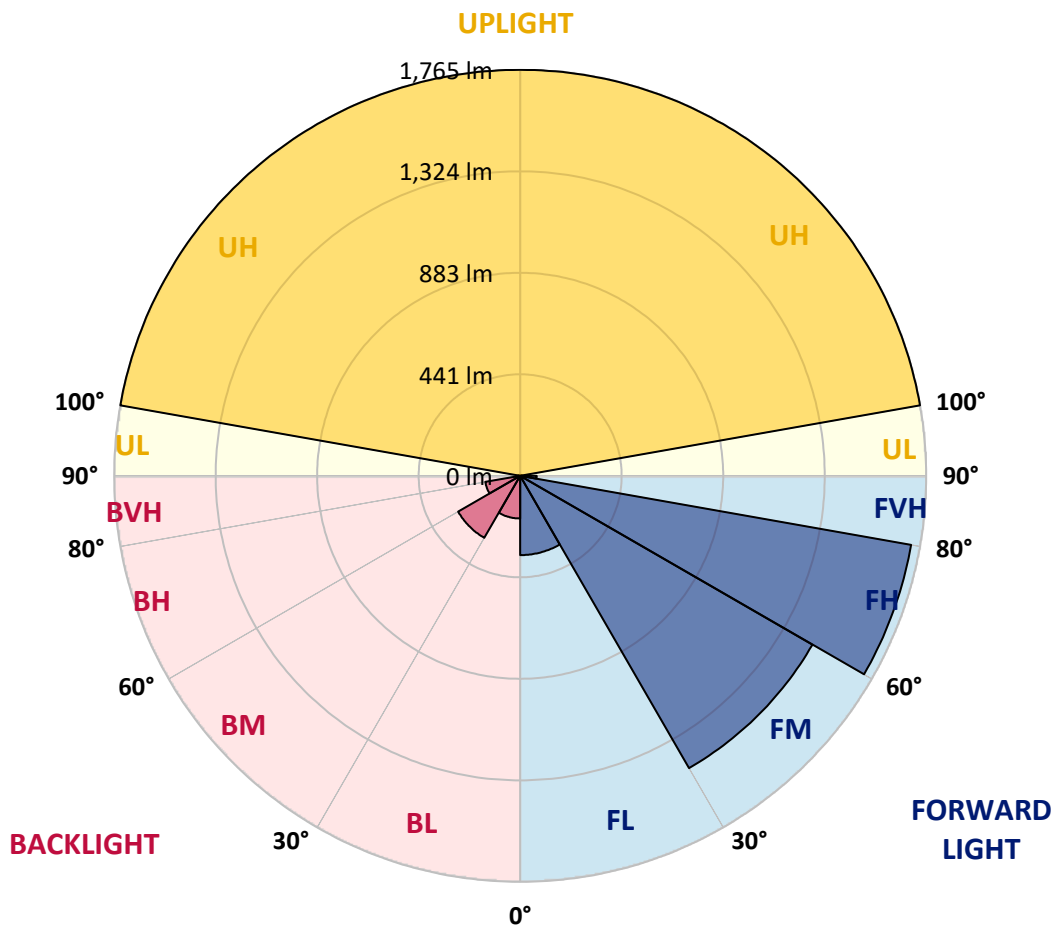
CATALOG NUMBER: ENT-SA1C-740-U-SL4-ULG

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	344.8	5.7			
FM (30°-60°)	1467.7	24.3			
FH (60°-80°)	1726.2	28.5			G1/1800
FVH (80°-90°)	71.5	1.2			G1/100
BL (0°-30°)	185.6	3.1	B1/500		
BM (30°-60°)	311.4	5.1	B1/1000		
BH (60°-80°)	153.9	2.5	B1/500		G1/500
BVH (80°-90°)	15.9	0.3			G1/100
UL (90°-100°)	8.4	0.1		U1/10	
UH (100°-180°)	1765.5	29.2		U5	

**BUG Rating: B1-U5-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	798.4	798.4	798.4	798.4	798.4	798.4	798.4	798.4	798.4	798.4	798.4
2.5°	808.6	808.0	809.9	808.6	806.7	805.4	804.8	800.9	799.6	795.8	790.7
5°	805.4	805.4	805.4	804.1	800.3	799.0	797.7	791.9	788.1	781.7	772.1
7.5°	794.5	796.4	795.8	795.2	791.9	790.7	788.7	781.7	776.6	766.9	754.8
10°	784.2	784.2	784.9	787.5	786.2	786.8	786.2	778.5	771.4	759.2	743.9
12.5°	769.5	772.1	775.9	783.0	786.2	788.7	788.7	783.0	775.3	760.5	742.6
15°	760.5	763.7	773.3	786.2	793.9	798.4	799.6	792.6	783.0	768.2	748.3
17.5°	756.7	760.5	778.5	796.4	809.9	813.7	814.4	806.7	796.4	778.5	755.4
20°	760.5	765.0	788.7	813.1	829.1	832.3	833.6	822.7	809.9	792.6	762.4
22.5°	775.3	781.7	808.0	834.3	850.9	855.4	854.1	838.8	825.9	807.3	771.4
25°	807.3	811.2	834.9	863.1	875.9	881.1	877.9	860.6	843.9	825.3	784.2
27.5°	844.5	849.7	874.7	895.8	904.2	905.4	902.2	884.3	865.7	850.3	804.1
30°	889.4	893.9	914.4	930.5	931.1	931.7	929.8	909.3	893.9	881.7	833.0
32.5°	936.9	937.5	958.7	966.4	961.2	963.2	961.2	938.8	927.9	924.0	870.8
35°	980.5	981.1	1002.9	1005.5	997.1	997.8	1001.6	975.3	975.3	984.3	927.2
37.5°	1022.2	1024.1	1043.3	1040.8	1037.5	1043.3	1048.4	1026.0	1038.8	1064.5	995.9
40°	1053.6	1058.1	1083.7	1082.4	1089.5	1095.3	1099.7	1088.2	1108.7	1158.7	1080.5
42.5°	1074.1	1083.1	1119.6	1128.6	1140.8	1151.0	1158.7	1158.1	1194.0	1263.3	1170.3
45°	1095.3	1104.2	1153.0	1174.8	1195.3	1211.3	1226.1	1233.8	1290.8	1373.6	1274.8
47.5°	1120.9	1128.6	1183.1	1226.1	1252.4	1274.2	1300.5	1317.1	1389.6	1485.8	1371.6
50°	1160.0	1165.2	1213.9	1280.6	1313.9	1344.1	1376.8	1410.8	1496.0	1600.6	1456.3
52.5°	1210.7	1213.9	1249.8	1335.7	1388.9	1421.0	1469.7	1514.6	1604.4	1704.4	1525.5
55°	1268.4	1265.8	1293.4	1401.8	1464.0	1512.1	1572.3	1617.9	1718.6	1794.9	1580.7
57.5°	1326.1	1324.2	1346.0	1465.3	1558.9	1615.3	1677.5	1725.6	1823.1	1879.5	1620.4
60°	1381.3	1374.2	1405.0	1539.6	1673.7	1738.4	1794.2	1838.5	1921.8	1940.4	1641.6
62.5°	1430.0	1430.0	1474.9	1631.3	1810.9	1869.2	1913.5	1943.0	2016.1	1985.3	1633.3
65°	1474.9	1480.6	1544.8	1733.9	1953.3	2012.9	2051.4	2062.9	2109.7	1987.2	1562.7
67.5°	1525.5	1534.5	1624.9	1853.9	2117.4	2180.9	2214.2	2210.4	2176.4	1957.7	1411.4
70°	1574.9	1589.7	1724.3	2008.4	2320.0	2406.0	2442.5	2366.9	2211.0	1794.2	1172.2
72.5°	1610.8	1635.8	1805.8	2162.9	2610.5	2742.6	2727.9	2409.8	2048.8	1478.7	886.8
74°	1505.7	1547.3	1783.3	2216.2	2715.1	2831.1	2725.3	2324.5	1853.2	1190.8	628.4
75°	1383.2	1423.6	1669.8	2195.0	2734.9	2786.9	2593.2	2174.5	1662.1	922.8	410.4
77.5°	1024.1	1055.5	1282.5	1730.7	2162.9	2147.5	1930.8	1473.6	818.9	278.3	173.1
80°	452.1	475.8	632.9	870.8	1171.6	1167.1	1086.9	677.2	264.2	145.6	105.8
82.5°	136.6	135.9	182.1	253.9	445.0	453.4	385.4	233.4	126.3	60.3	51.3
85°	0.6	0.6	0.6	0.6	1.9	16.7	14.1	44.9	23.1	10.9	18.6
87.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0
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	6.1	7.2	7.2	6.1	6.1
95°	5.1	5.1	6.1	7.2	7.2	7.2	7.2	7.2	8.2	7.2	7.2
97.5°	7.2	7.2	8.2	8.2	9.2	9.2	9.2	12.3	10.2	9.2	8.2
100°	8.2	8.2	9.2	10.2	12.3	16.9	21.5	29.7	26.6	23.5	19.4
102.5°	11.3	11.3	13.3	18.4	27.6	34.2	40.9	51.1	48.1	43.0	39.9
105°	21.5	22.5	27.6	36.8	49.1	56.8	64.4	73.7	71.6	66.5	62.4
107.5°	41.9	43.0	50.1	59.3	74.7	82.4	90.0	97.2	96.2	92.1	89.0



REPORT NUMBER:  
 CATALOG NUMBER: ENT-SA1C-740-U-SL4-ULG

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
110°	67.5	69.6	75.7	89.0	104.3	110.4	116.6	122.8	123.8	121.7	118.7
112.5°	101.3	101.3	108.4	123.8	137.1	141.7	146.3	151.4	153.4	152.4	150.4
115°	143.2	142.2	150.4	162.6	171.9	175.0	178.0	183.1	186.2	183.1	181.1
117.5°	188.2	188.2	193.3	201.5	206.6	208.2	209.7	215.8	219.9	214.8	212.8
120°	230.2	228.1	231.2	238.3	242.4	245.5	248.6	251.6	255.7	250.6	248.6
122.5°	269.0	266.0	267.0	273.1	277.2	280.3	283.4	285.4	289.5	284.4	282.3
125°	304.8	300.7	302.8	305.9	312.0	314.6	317.1	320.2	322.2	317.1	317.1
127.5°	337.6	336.6	336.6	340.6	346.8	347.3	347.8	352.9	353.9	353.9	352.9
130°	371.3	369.3	370.3	374.4	378.5	379.5	380.5	385.7	389.7	389.7	387.7
132.5°	405.1	403.0	402.0	410.2	413.3	413.8	414.3	420.4	425.5	423.5	423.5
135°	438.8	435.8	435.8	441.9	445.0	446.0	447.0	453.2	458.3	457.3	460.3
137.5°	470.6	467.5	469.5	470.6	474.6	476.6	478.7	483.9	485.9	486.9	492.0
140°	499.2	496.1	498.2	500.2	502.3	505.4	508.4	511.5	513.5	515.6	520.7
142.5°	529.9	526.8	528.9	529.9	533.0	535.0	537.0	539.1	545.2	545.2	546.3
145°	562.6	558.5	556.5	559.6	562.6	563.1	563.6	568.8	574.9	573.9	570.8
147.5°	588.2	585.1	584.1	587.2	587.2	587.7	588.2	593.3	598.4	599.4	596.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	606.6	610.7	613.8	616.8	619.9
152.5°	625.0	622.0	622.0	623.0	624.0	624.0	624.0	625.0	628.1	632.2	637.3
155°	643.4	639.3	639.3	641.4	644.5	643.4	642.4	640.4	645.5	650.6	652.6
157.5°	660.8	657.8	657.8	658.8	660.8	660.3	659.8	658.8	662.9	664.9	664.9
160°	678.2	675.1	674.1	671.1	670.0	670.0	670.0	673.1	679.2	676.2	675.1
162.5°	688.4	684.4	684.4	680.3	676.2	677.2	678.2	682.3	686.4	685.4	683.3
165°	696.6	693.6	691.5	691.5	688.4	688.4	688.4	687.4	692.5	695.6	693.6
167.5°	705.8	702.8	699.7	701.7	703.8	702.2	700.7	693.6	699.7	703.8	703.8
170°	714.0	711.0	707.9	707.9	708.9	707.9	706.9	701.7	704.8	709.9	712.0
172.5°	715.0	713.0	711.0	708.9	705.8	705.8	705.8	704.8	707.9	709.9	712.0
175°	716.1	714.0	713.0	711.0	706.9	706.3	705.8	705.8	711.0	712.0	709.9
177.5°	723.2	721.2	716.1	715.0	713.0	712.0	711.0	709.9	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°	798.4	798.4	798.4	798.4	798.4	798.4	798.4	798.4	798.4	798.4	798.4
2.5°	787.5	786.8	784.9	780.4	777.2	767.6	770.8	764.4	763.7	762.4	761.8
5°	767.6	765.0	757.3	748.3	738.1	722.0	716.9	707.3	701.5	699.6	700.9
7.5°	747.1	741.3	726.5	707.3	686.8	663.1	645.7	632.3	622.7	619.4	615.0
10°	734.2	724.6	699.6	667.5	634.2	600.9	572.0	552.1	537.4	525.8	525.8
12.5°	729.7	716.9	680.4	633.6	585.5	538.0	496.3	470.0	445.0	432.8	430.9
15°	732.3	714.4	664.3	602.8	538.7	477.1	425.8	388.0	364.2	349.5	354.6
17.5°	734.9	712.4	647.7	570.1	493.1	421.9	362.3	319.3	290.5	282.8	279.6
20°	738.1	708.6	626.5	534.8	446.3	368.7	305.9	262.3	240.5	230.9	230.9
22.5°	742.6	703.5	604.7	495.7	398.2	316.8	258.4	225.7	208.4	202.6	202.6
25°	749.0	700.2	582.3	456.6	352.7	275.7	227.0	201.4	192.4	188.5	187.9
27.5°	761.2	700.9	560.5	416.8	307.8	241.1	204.6	187.9	180.8	178.9	178.3
30°	779.8	707.3	537.4	374.5	268.0	214.8	189.2	177.6	173.1	171.9	171.9
32.5°	805.4	718.8	518.1	336.7	238.5	193.7	176.3	168.6	166.1	164.8	165.4
35°	845.2	738.7	495.0	302.0	211.0	178.9	166.1	160.3	158.4	158.4	159.0
37.5°	897.1	769.5	472.6	270.0	192.4	166.1	156.5	153.3	151.3	152.6	153.3
40°	962.5	806.1	451.4	241.1	177.0	155.8	148.1	145.6	144.9	146.2	147.5
42.5°	1033.1	850.3	432.2	217.4	164.8	147.5	141.1	139.8	139.2	139.8	141.7
45°	1115.1	901.0	416.2	199.4	155.8	140.4	134.7	133.4	132.7	134.0	135.3
47.5°	1190.8	946.5	403.3	187.2	148.1	135.3	129.5	127.6	127.6	127.6	128.9
50°	1252.4	982.4	395.7	178.9	141.7	129.5	124.4	122.5	121.8	121.2	121.8
52.5°	1305.6	1009.3	393.1	173.8	136.6	124.4	119.3	118.0	116.7	115.4	116.1
55°	1340.9	1022.8	388.0	169.3	132.1	118.6	114.1	112.9	111.6	109.7	109.7
57.5°	1361.4	1021.5	376.4	166.7	129.5	113.5	109.0	109.0	107.7	104.5	105.2
60°	1363.3	999.1	348.2	163.5	127.6	108.4	103.2	104.5	104.5	102.0	102.0
62.5°	1330.6	940.1	293.7	155.2	125.0	104.5	98.8	102.0	103.2	100.7	100.7
65°	1229.9	800.9	236.0	143.0	118.6	100.0	93.6	100.0	103.9	102.0	101.3
67.5°	1036.9	634.2	194.9	129.5	111.6	94.3	88.5	96.8	102.0	102.0	101.3
70°	832.3	481.6	160.3	114.8	100.7	87.2	82.7	89.8	94.3	95.5	95.5
72.5°	573.3	294.3	130.2	98.8	88.5	78.9	75.0	79.5	82.1	84.6	84.0
74°	370.0	206.5	114.1	89.8	80.8	72.5	70.5	72.5	73.7	76.3	77.0
75°	247.5	168.6	106.4	83.4	76.3	68.0	66.7	68.6	69.9	71.8	71.8
77.5°	142.4	120.6	85.9	69.3	63.5	58.4	57.7	58.4	60.3	62.2	61.6
80°	98.8	91.7	68.0	53.9	50.0	47.5	48.1	48.7	51.9	52.6	51.9
82.5°	59.6	66.0	48.1	40.4	37.8	37.2	39.1	40.4	43.0	43.6	43.0
85°	23.7	31.4	23.7	22.4	25.0	27.6	30.8	32.7	34.0	34.0	34.0
87.5°	0.0	4.5	5.8	9.0	14.1	16.7	21.8	23.7	25.0	24.4	23.7
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)