

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: McGRAW-EDISON

Report Number: P227819

Luminaire Tested: **ISS-AF-1000-LED-E1-T4FT-7030-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P227819  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29760)-DOWNLIGHT AND  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISS-AF-1000-LED-E1-T4FT-7030-ULG  
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE WITH UPLIGHT  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV FORWARD THROW, WITH UPLIGHT GLOW  
Light Source: (16) 3000K CCT, 70 CRI LEDs and (1) UPLIGHT LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6489.2 lumens  
Efficiency: N/A  
Efficacy: 91.0 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U5 - G2  
  
Input Watts (W): 71.3  
Input Voltage (V): 120  
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

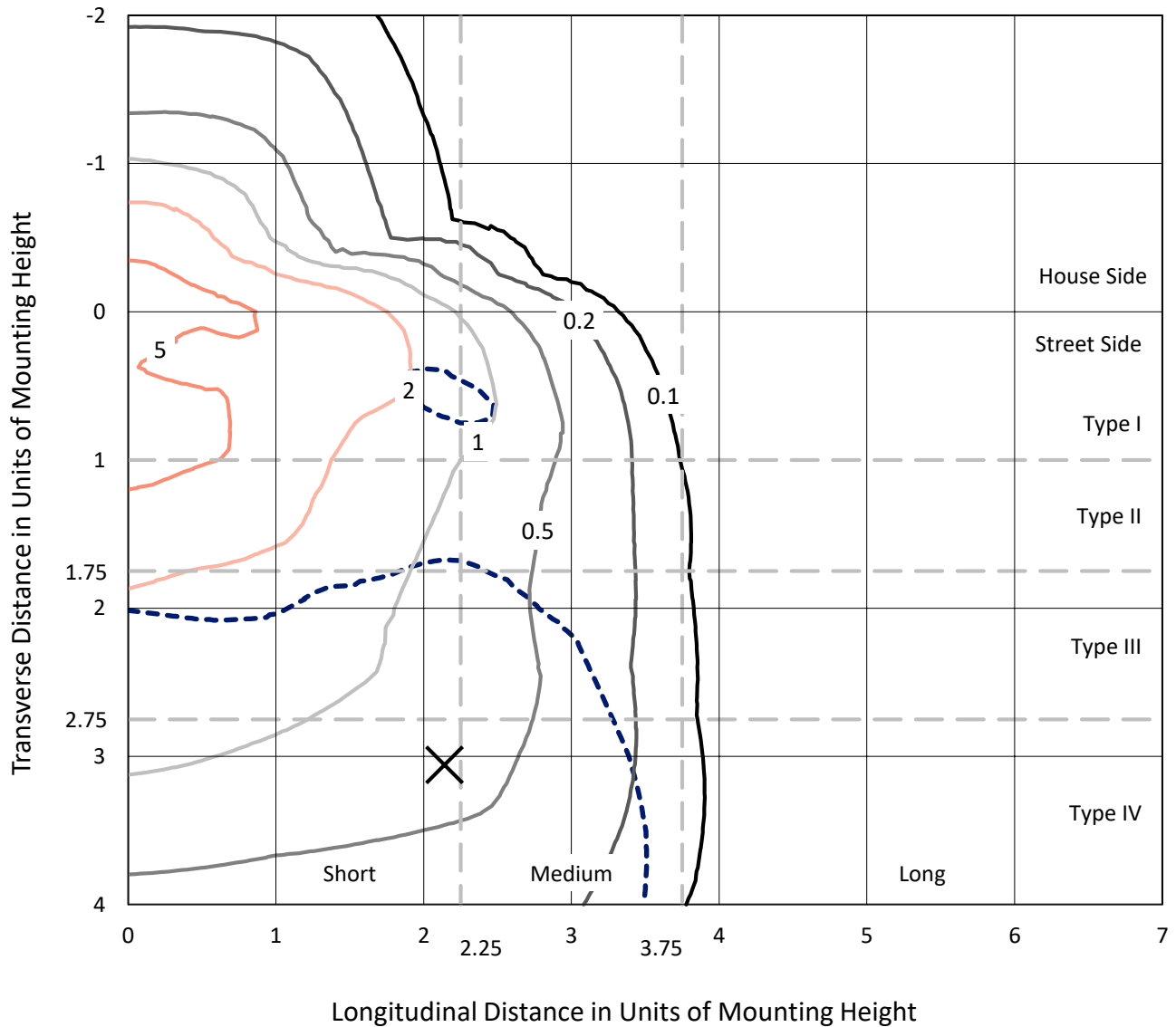


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

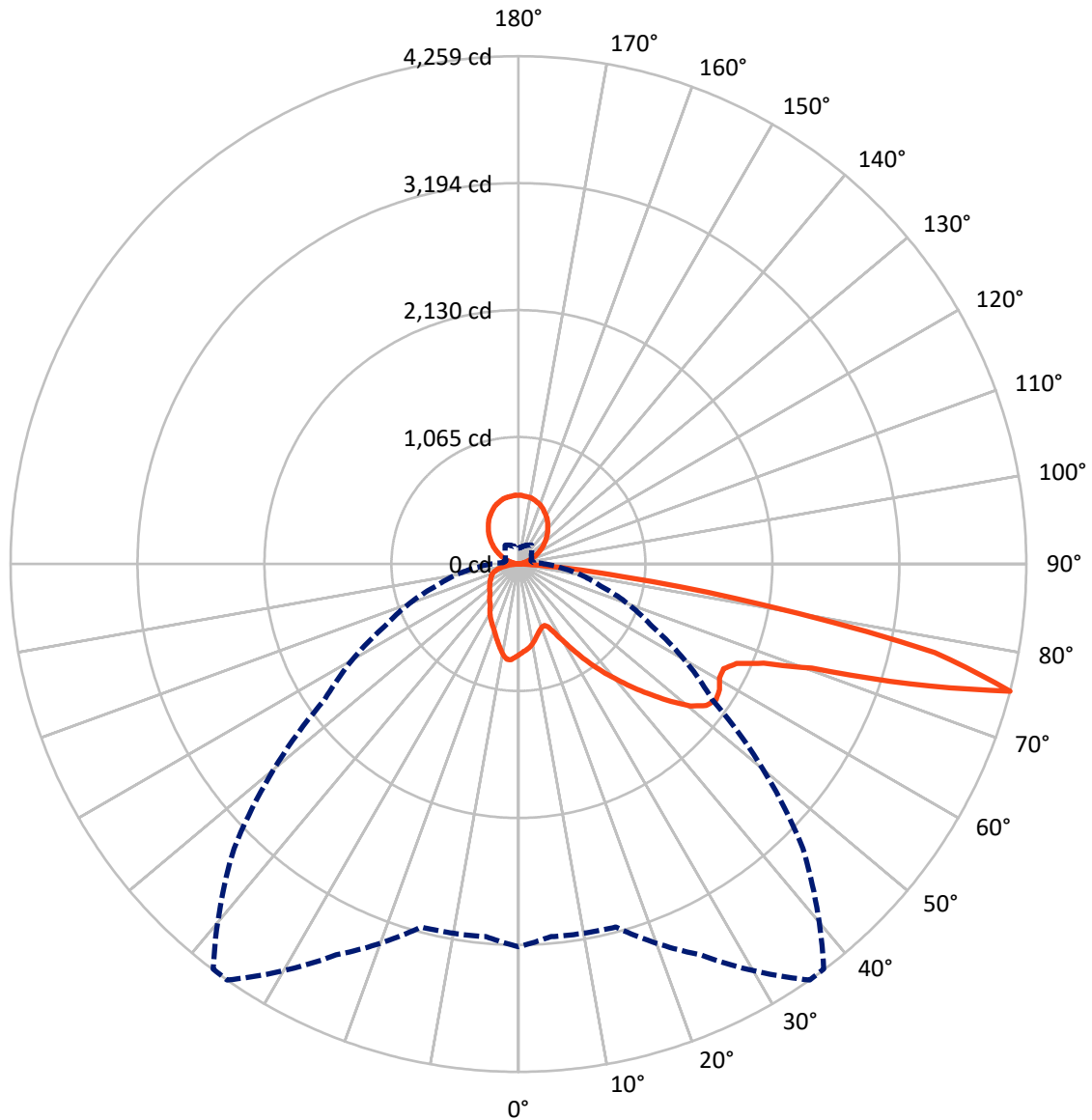


Based on 10 foot mounting height. Maximum calculated value = 7.8 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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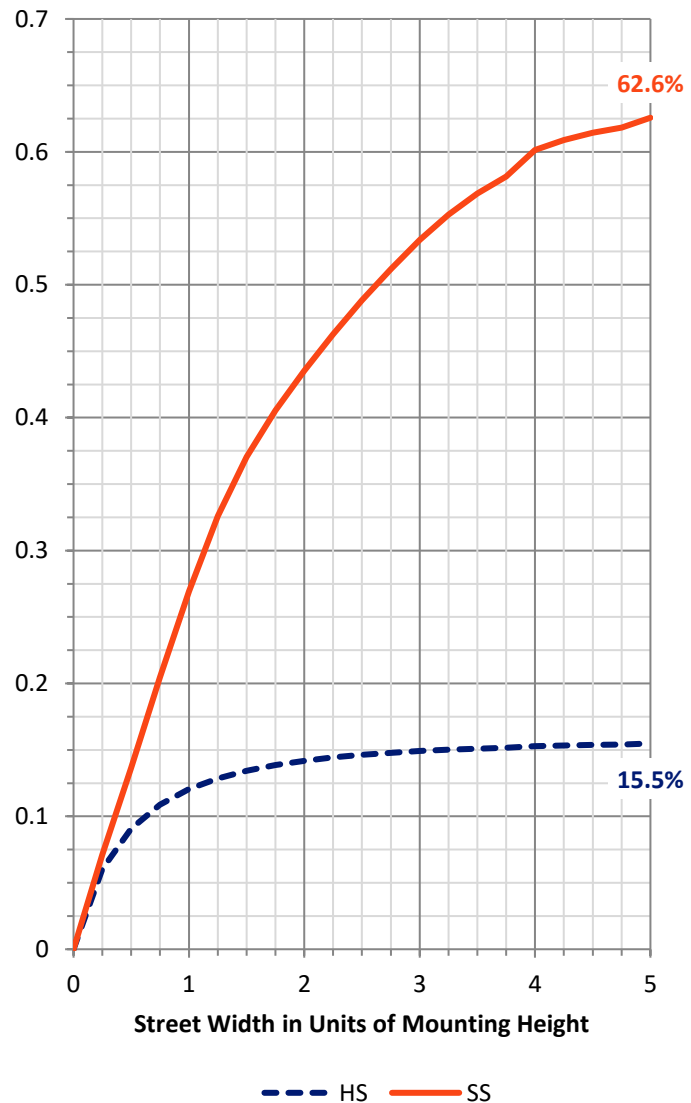
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1016.2	713.1	1729.3
	% Fixture	15.7	11.0	26.6
<b>Street Side</b>	Lumens	4046.8	713.1	4759.9
	% Fixture	62.4	11.0	73.4
<b>Total</b>	Lumens	5063.0	1426.2	6489.2
	% Fixture	78.0	22.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.4	1.1
10°-20°	188.4	2.9
20°-30°	298.1	4.6
30°-40°	481.1	7.4
40°-50°	711.8	11.0
50°-60°	915.2	14.1
60°-70°	1133.2	17.5
70°-80°	1141.9	17.6
80°-90°	121.9	1.9
90°-100°	4.7	0.1
100°-110°	69.0	1.1
110°-120°	153.0	2.4
120°-130°	223.9	3.4
130°-140°	265.6	4.1
140°-150°	269.3	4.1
150°-160°	231.1	3.6
160°-170°	155.1	2.4
170°-180°	54.3	0.8
0°-90°	5063.0	78.0
0°-180°	6489.2	100.0



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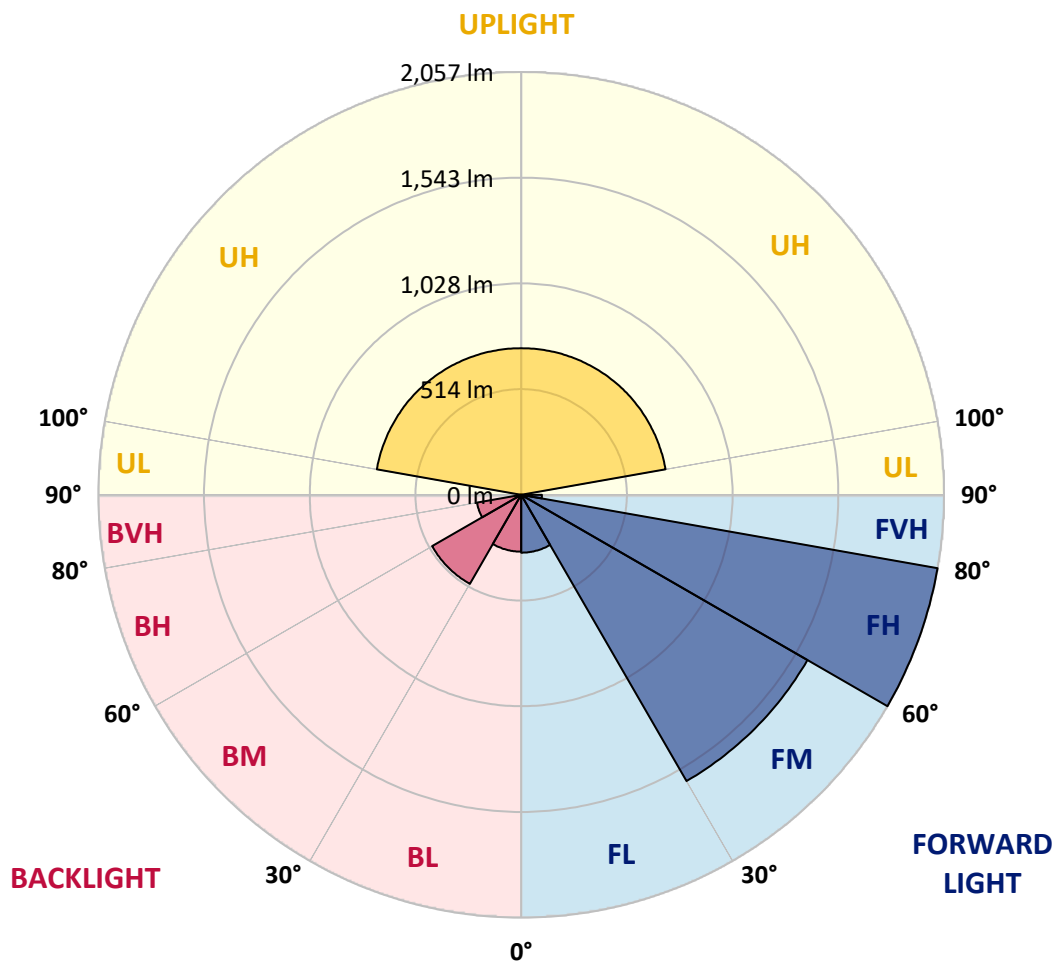
CATALOG NUMBER: ISS-AF-1000-LED-E1-T4FT-7030-ULG

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	281.5	4.3			
FM	(30°-60°)	1607.7	24.8			
FH	(60°-80°)	2056.8	31.7			G2/5000
FVH	(80°-90°)	100.8	1.6			G2/225
BL	(0°-30°)	276.4	4.3	B1/500		
BM	(30°-60°)	500.4	7.7	B1/1000		
BH	(60°-80°)	218.3	3.4	B1/500		G1/500
BVH	(80°-90°)	21.1	0.3			G1/100
UL	(90°-100°)	4.7	0.1		U1/10	
UH	(100°-180°)	713.1	11.0		U4/1000	

**BUG Rating: B1-U5-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	760.6	760.6	760.6	760.6	760.6	760.6	760.6	760.6	760.6	760.6	760.6
2.5°	738.6	736.9	735.2	735.2	738.6	738.6	740.3	742.0	743.7	748.8	755.5
5°	718.3	716.6	715.0	716.6	721.7	721.7	726.8	730.2	733.5	742.0	750.4
7.5°	691.3	691.3	689.6	696.4	701.4	699.7	706.5	709.9	718.3	726.8	740.3
10°	655.8	655.8	655.8	664.2	672.7	672.7	677.8	686.2	693.0	704.8	721.7
12.5°	625.4	623.7	623.7	630.4	640.6	642.3	650.7	662.6	671.0	686.2	704.8
15°	615.2	611.9	603.4	603.4	608.5	608.5	622.0	638.9	652.4	667.6	689.6
17.5°	616.9	611.9	589.9	583.1	583.1	584.8	598.3	616.9	633.8	652.4	681.2
20°	632.1	623.7	583.1	567.9	564.5	566.2	578.0	596.6	616.9	642.3	674.4
22.5°	698.1	684.5	608.5	574.7	559.5	559.5	566.2	586.5	611.9	645.7	686.2
25°	850.2	828.2	693.0	632.1	586.5	581.4	569.6	589.9	620.3	660.9	720.0
27.5°	1005.7	983.7	797.8	731.9	660.9	645.7	601.7	606.8	640.6	694.7	770.7
30°	1135.8	1117.2	929.6	853.6	758.9	742.0	674.4	642.3	676.1	742.0	846.8
32.5°	1146.0	1137.5	1071.6	993.8	878.9	855.2	765.7	715.0	731.9	806.2	929.6
35°	1240.6	1233.8	1198.4	1124.0	1009.0	982.0	887.4	809.6	804.5	877.2	1024.3
37.5°	1333.6	1325.1	1301.5	1250.7	1144.3	1122.3	1047.9	922.8	887.4	960.0	1117.2
40°	1421.5	1409.6	1379.2	1350.5	1272.7	1272.7	1193.3	1031.0	966.8	1032.7	1195.0
42.5°	1583.7	1546.5	1465.4	1443.4	1421.5	1421.5	1304.8	1105.4	1031.0	1112.2	1269.3
45°	1739.2	1703.7	1593.9	1549.9	1561.7	1555.0	1394.4	1147.6	1088.5	1186.5	1340.3
47.5°	1862.6	1830.5	1718.9	1688.5	1722.3	1695.3	1468.8	1181.5	1161.2	1266.0	1399.5
50°	1972.5	1896.4	1788.2	1828.8	1871.1	1825.4	1534.7	1232.2	1233.8	1350.5	1485.7
52.5°	1822.0	1813.6	1837.2	1931.9	1972.5	1921.8	1593.9	1296.4	1311.6	1458.6	1583.7
55°	1641.2	1639.5	1778.1	1962.3	2011.3	1964.0	1632.7	1374.1	1392.7	1592.2	1707.1
57.5°	1605.7	1588.8	1683.4	1898.1	1987.7	1953.9	1653.0	1446.8	1470.5	1761.2	1828.8
60°	1720.6	1688.5	1673.3	1828.8	1937.0	1920.1	1678.4	1533.0	1565.1	1953.9	1942.0
62.5°	1970.8	1926.8	1818.7	1833.9	1931.9	1918.4	1739.2	1634.4	1671.6	2146.6	2006.3
65°	2302.1	2269.9	2097.5	1974.2	2011.3	1992.7	1849.1	1762.9	1783.2	2285.2	1933.6
67.5°	2665.4	2621.5	2433.9	2264.9	2217.5	2182.0	2023.2	1915.0	1842.3	2264.9	1739.2
70°	3076.2	3028.8	2866.6	2692.5	2611.4	2572.5	2327.4	2046.8	1820.3	2041.8	1372.4
72.5°	3581.5	3517.3	3427.7	3446.3	3432.8	3324.6	2812.5	2090.8	1659.8	1519.5	819.7
75°	3209.7	3137.0	3152.2	3617.0	4259.3	4254.2	3373.6	1982.6	1237.2	716.6	354.9
77.5°	1151.0	1272.7	1877.8	2709.4	3571.4	3566.3	2611.4	1240.6	530.7	305.9	214.7
80°	289.0	294.1	466.5	1112.2	2085.7	2068.8	1480.6	468.2	221.4	185.9	147.0
82.5°	93.0	99.7	170.7	383.7	892.4	872.1	459.7	153.8	138.6	120.0	89.6
85°	30.4	30.4	60.8	131.8	294.1	282.3	93.0	55.8	76.1	62.5	40.6
87.5°	0.0	0.0	1.7	3.4	6.8	3.4	0.0	3.4	10.1	11.8	8.5
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°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	2.0	2.0	2.0	3.0	4.0	5.0	9.0	13.0	7.0	5.0	4.0
100°	8.0	8.0	10.0	14.0	22.0	23.6	30.0	32.0	30.0	27.0	26.0
102.5°	28.0	28.0	32.0	38.0	45.0	46.0	50.0	51.0	50.0	48.0	49.0
105°	54.0	54.0	56.0	61.0	66.0	66.8	70.0	71.0	71.0	69.0	71.0
107.5°	78.0	77.0	80.0	84.0	88.0	88.6	91.0	93.0	92.0	91.0	92.0
110°	101.0	102.0	103.0	106.0	110.0	110.4	112.0	114.0	114.0	113.0	114.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
112.5°	124.0	124.0	126.0	129.0	132.0	132.4	134.0	136.0	136.0	135.0	137.0
115°	146.0	147.0	149.0	151.0	154.0	154.4	156.0	158.0	158.0	158.0	160.0
117.5°	169.0	170.0	172.0	174.0	177.0	177.4	179.0	180.0	181.0	180.0	182.0
120°	193.0	195.0	196.0	198.0	201.0	201.2	202.0	204.0	204.0	204.0	206.0
122.5°	219.0	220.0	221.0	223.0	226.0	226.2	227.0	228.0	228.0	229.0	233.0
125°	244.0	246.0	247.0	248.0	251.0	251.2	252.0	253.0	254.0	254.0	257.0
127.5°	267.0	269.0	270.0	272.0	274.0	274.4	276.0	278.0	277.0	278.0	281.0
130°	290.0	292.0	293.0	294.0	298.0	298.2	299.0	301.0	301.0	302.0	305.0
132.5°	313.0	314.0	317.0	318.0	321.0	321.2	322.0	325.0	325.0	326.0	329.0
135°	336.0	337.0	339.0	341.0	345.0	345.0	345.0	348.0	348.0	349.0	351.0
137.5°	359.0	360.0	363.0	364.0	367.0	367.0	367.0	369.0	369.0	370.0	374.0
140°	382.0	383.0	385.0	386.0	388.0	388.2	389.0	390.0	390.0	392.0	396.0
142.5°	404.0	406.0	408.0	407.0	410.0	410.0	410.0	412.0	412.0	413.0	416.0
145°	425.0	426.0	428.0	428.0	431.0	431.2	432.0	434.0	433.0	434.0	437.0
147.5°	444.0	444.0	447.0	448.0	452.0	452.2	453.0	454.0	452.0	453.0	456.0
150°	461.0	462.0	464.0	465.0	469.0	469.2	470.0	471.0	469.0	469.0	473.0
152.5°	479.0	480.0	483.0	482.0	485.0	485.2	486.0	487.0	486.0	486.0	489.0
155°	499.0	500.0	502.0	501.0	503.0	503.0	503.0	504.0	503.0	504.0	507.0
157.5°	513.0	515.0	517.0	516.0	519.0	519.0	519.0	519.0	517.0	518.0	523.0
160°	525.0	527.0	529.0	529.0	532.0	532.0	532.0	532.0	530.0	530.0	533.0
162.5°	535.0	536.0	539.0	538.0	541.0	541.0	541.0	542.0	540.0	538.0	540.0
165°	546.0	547.0	549.0	548.0	552.0	552.0	552.0	553.0	550.0	548.0	550.0
167.5°	555.0	556.0	559.0	558.0	561.0	560.8	560.0	560.0	558.0	559.0	563.0
170°	562.0	563.0	566.0	565.0	567.0	566.8	566.0	565.0	564.0	566.0	571.0
172.5°	565.0	566.0	569.0	567.0	569.0	568.8	568.0	569.0	567.0	568.0	571.0
175°	567.0	569.0	570.0	569.0	572.0	572.0	572.0	573.0	570.0	568.0	571.0
177.5°	572.0	573.0	575.0	574.0	578.0	577.8	577.0	577.0	574.0	574.0	577.0
180°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	760.6	760.6	760.6	760.6	760.6	760.6	760.6	760.6	760.6	760.6	760.6
2.5°	760.6	758.9	765.7	770.7	772.4	777.5	782.6	785.9	784.3	782.6	782.6
5°	758.9	760.6	772.4	782.6	791.0	799.5	806.2	809.6	807.9	807.9	807.9
7.5°	748.8	755.5	769.0	785.9	797.8	802.8	804.5	799.5	796.1	791.0	791.0
10°	731.9	742.0	764.0	782.6	787.6	780.9	770.7	760.6	747.1	738.6	738.6
12.5°	718.3	730.2	757.2	772.4	765.7	748.8	726.8	709.9	696.4	686.2	684.5
15°	706.5	721.7	750.4	753.8	738.6	709.9	681.2	662.6	647.3	640.6	640.6
17.5°	698.1	718.3	743.7	733.5	703.1	665.9	638.9	623.7	611.9	605.1	603.4
20°	699.7	725.1	736.9	708.2	664.2	625.4	600.0	591.6	583.1	579.7	579.7
22.5°	718.3	742.0	735.2	686.2	628.8	584.8	567.9	566.2	562.8	559.5	557.8
25°	758.9	775.8	740.3	664.2	591.6	547.6	539.2	544.2	542.6	539.2	539.2
27.5°	814.7	818.1	748.8	642.3	551.0	512.1	512.1	520.6	517.2	512.1	515.5
30°	882.3	863.7	752.1	606.8	503.7	478.3	483.4	488.5	485.1	478.3	478.3
32.5°	955.0	911.0	752.1	561.1	458.0	447.9	449.6	451.3	444.5	436.1	436.1
35°	1026.0	956.7	743.7	507.1	422.6	417.5	415.8	422.6	417.5	405.6	405.6
37.5°	1093.6	992.1	721.7	451.3	395.5	393.8	398.9	395.5	388.7	371.8	368.5
40°	1140.9	1015.8	677.8	405.6	373.5	383.7	380.3	361.7	351.6	339.7	339.7
42.5°	1183.1	1027.6	623.7	370.2	358.3	371.8	358.3	334.7	321.1	319.4	321.1
45°	1222.0	1037.8	571.3	341.4	339.7	358.3	341.4	316.1	300.9	300.9	302.5
47.5°	1259.2	1047.9	518.9	314.4	317.8	338.0	327.9	302.5	287.3	277.2	277.2
50°	1318.4	1071.6	442.8	285.6	292.4	321.1	317.8	289.0	272.1	256.9	253.5
52.5°	1389.3	1112.2	360.0	255.2	273.8	305.9	305.9	277.2	258.6	238.3	234.9
55°	1484.0	1156.1	289.0	233.2	255.2	289.0	294.1	272.1	245.1	226.5	223.1
57.5°	1578.6	1171.3	233.2	211.3	231.6	272.1	285.6	262.0	229.9	216.3	214.7
60°	1644.6	1122.3	196.1	192.7	214.7	251.8	273.8	250.1	219.7	206.2	206.2
62.5°	1634.4	973.6	175.8	180.9	201.1	236.6	263.7	240.0	213.0	204.5	202.8
65°	1490.8	735.2	158.9	170.7	189.3	221.4	253.5	234.9	209.6	201.1	197.8
67.5°	1255.8	488.5	147.0	160.6	177.5	209.6	245.1	228.2	199.4	194.4	191.0
70°	909.3	285.6	135.2	150.4	165.6	196.1	233.2	214.7	187.6	184.2	175.8
72.5°	491.8	179.2	121.7	136.9	150.4	179.2	214.7	197.8	172.4	158.9	153.8
75°	224.8	130.1	108.2	121.7	131.8	157.2	192.7	174.1	153.8	136.9	133.5
77.5°	150.4	98.0	91.3	104.8	109.9	131.8	170.7	138.6	120.0	108.2	104.8
80°	103.1	72.7	74.4	86.2	84.5	104.8	128.5	111.6	94.7	98.0	89.6
82.5°	65.9	50.7	57.5	60.8	59.2	79.4	99.7	84.5	71.0	59.2	50.7
85°	28.7	27.0	33.8	35.5	35.5	43.9	52.4	42.3	32.1	23.7	23.7
87.5°	1.7	3.4	3.4	5.1	3.4	1.7	0.0	0.0	0.0	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°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	4.0	4.0	5.0	7.0	13.0	9.0	4.0	3.0	2.0	2.0	2.0
100°	25.0	26.0	27.0	30.0	32.0	30.0	22.0	14.0	10.0	8.0	8.0
102.5°	48.0	49.0	48.0	50.0	51.0	50.0	45.0	38.0	32.0	28.0	28.0
105°	69.0	71.0	69.0	71.0	71.0	70.0	66.0	61.0	56.0	54.0	54.0
107.5°	91.0	92.0	91.0	92.0	93.0	91.0	88.0	84.0	80.0	77.0	78.0
110°	113.0	114.0	113.0	114.0	114.0	112.0	110.0	106.0	103.0	102.0	101.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	135.0	137.0	135.0	136.0	136.0	134.0	132.0	129.0	126.0	124.0	124.0
115°	159.0	160.0	158.0	158.0	158.0	156.0	154.0	151.0	149.0	147.0	146.0
117.5°	180.0	182.0	180.0	181.0	180.0	179.0	177.0	174.0	172.0	170.0	169.0
120°	204.0	206.0	204.0	204.0	204.0	202.0	201.0	198.0	196.0	195.0	193.0
122.5°	232.0	233.0	229.0	228.0	228.0	227.0	226.0	223.0	221.0	220.0	219.0
125°	256.0	257.0	254.0	254.0	253.0	252.0	251.0	248.0	247.0	246.0	244.0
127.5°	278.0	281.0	278.0	277.0	278.0	276.0	274.0	272.0	270.0	269.0	267.0
130°	303.0	305.0	302.0	301.0	301.0	299.0	298.0	294.0	293.0	292.0	290.0
132.5°	327.0	329.0	326.0	325.0	325.0	322.0	321.0	318.0	317.0	314.0	313.0
135°	350.0	351.0	349.0	348.0	348.0	345.0	345.0	341.0	339.0	337.0	336.0
137.5°	372.0	374.0	370.0	369.0	369.0	367.0	367.0	364.0	363.0	360.0	359.0
140°	394.0	396.0	392.0	390.0	390.0	389.0	388.0	386.0	385.0	383.0	382.0
142.5°	415.0	416.0	413.0	412.0	412.0	410.0	410.0	407.0	408.0	406.0	404.0
145°	435.0	437.0	434.0	433.0	434.0	432.0	431.0	428.0	428.0	426.0	425.0
147.5°	453.0	456.0	453.0	452.0	454.0	453.0	452.0	448.0	447.0	444.0	444.0
150°	470.0	473.0	469.0	469.0	471.0	470.0	469.0	465.0	464.0	462.0	461.0
152.5°	486.0	489.0	486.0	486.0	487.0	486.0	485.0	482.0	483.0	480.0	479.0
155°	505.0	507.0	504.0	503.0	504.0	503.0	503.0	501.0	502.0	500.0	499.0
157.5°	520.0	523.0	518.0	517.0	519.0	519.0	519.0	516.0	517.0	515.0	513.0
160°	531.0	533.0	530.0	530.0	532.0	532.0	532.0	529.0	529.0	527.0	525.0
162.5°	537.0	540.0	538.0	540.0	542.0	541.0	541.0	538.0	539.0	536.0	535.0
165°	548.0	550.0	548.0	550.0	553.0	552.0	552.0	548.0	549.0	547.0	546.0
167.5°	561.0	563.0	559.0	558.0	560.0	560.0	561.0	558.0	559.0	556.0	555.0
170°	569.0	571.0	566.0	564.0	565.0	566.0	567.0	565.0	566.0	563.0	562.0
172.5°	568.0	571.0	568.0	567.0	569.0	568.0	569.0	567.0	569.0	566.0	565.0
175°	568.0	571.0	568.0	570.0	573.0	572.0	572.0	569.0	570.0	569.0	567.0
177.5°	574.0	577.0	574.0	574.0	577.0	577.0	578.0	574.0	575.0	573.0	572.0
180°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0

(END OF REPORT)