

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: P227791

Luminaire Tested: **ISS-AF-800-LED-E1-T4FT-8030-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P227791  
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-800-LED-E1-T4FT-8030-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, 80 CRI LEDs and (1) UPLIGHT LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5375.2 lumens  
Efficiency: N/A  
Efficacy: 89.3 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 - G1  
  
Input Watts (W): 60.2  
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

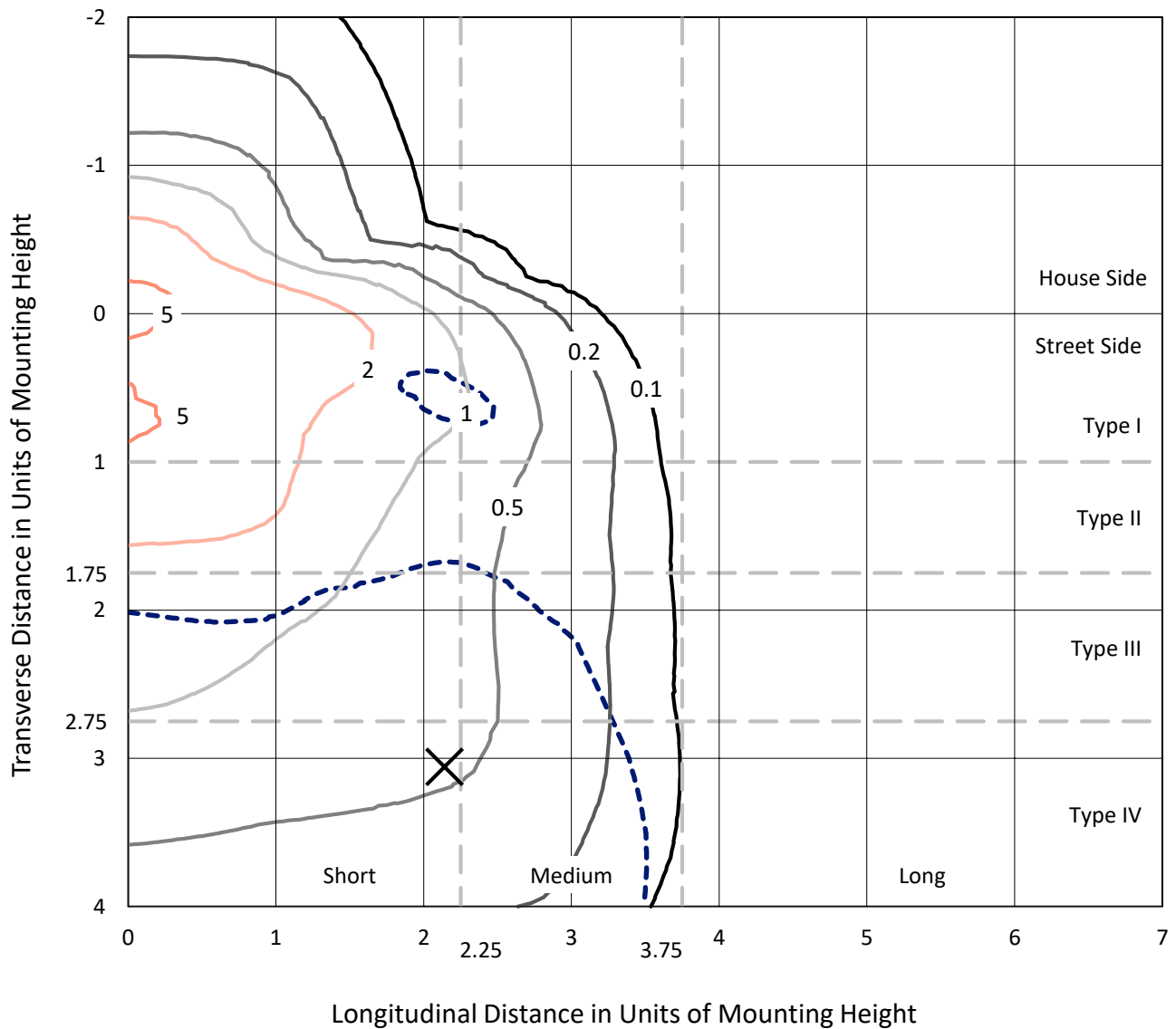


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### Iso-Footcandle Lines of Horizontal Illumination

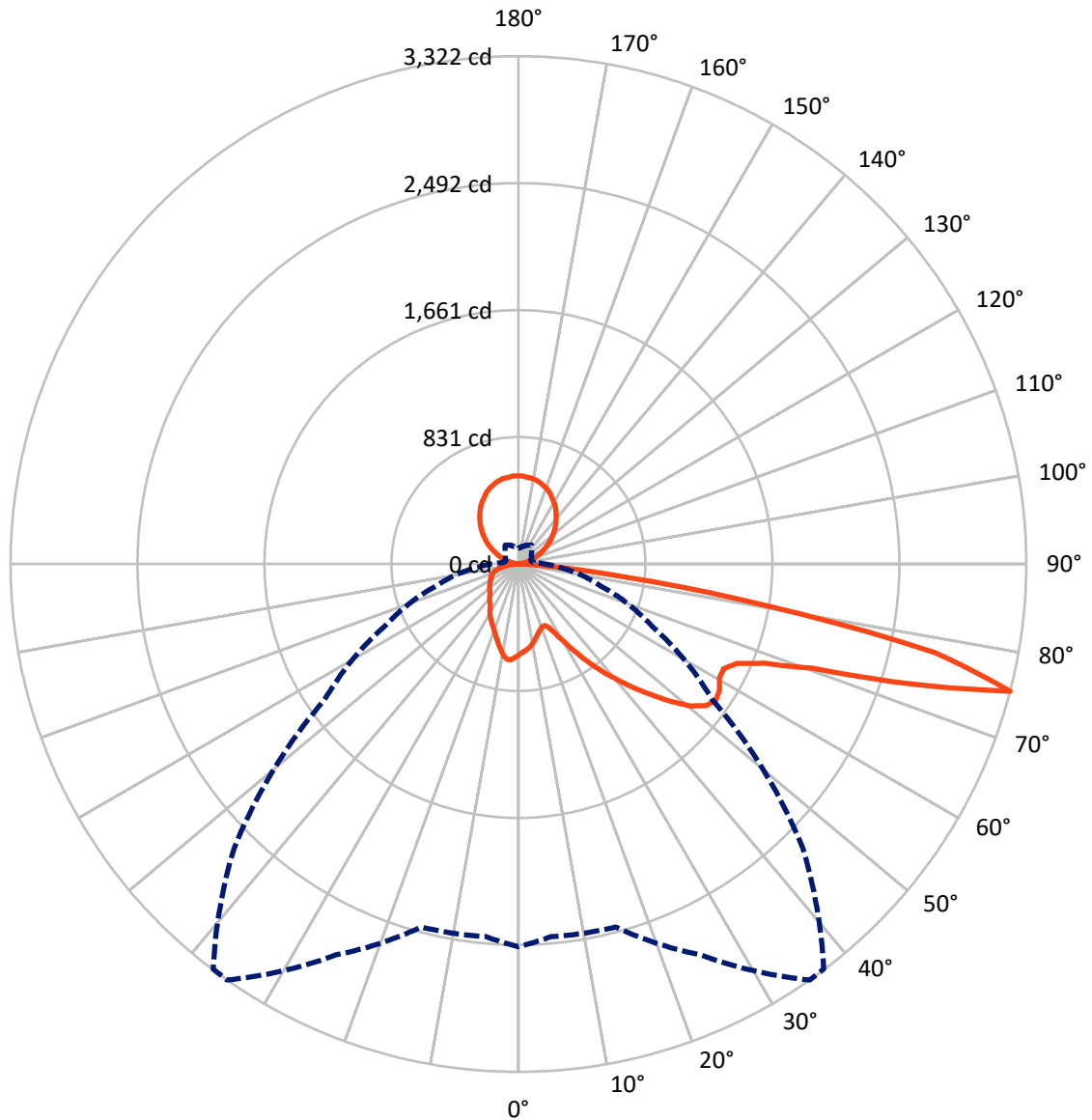
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6 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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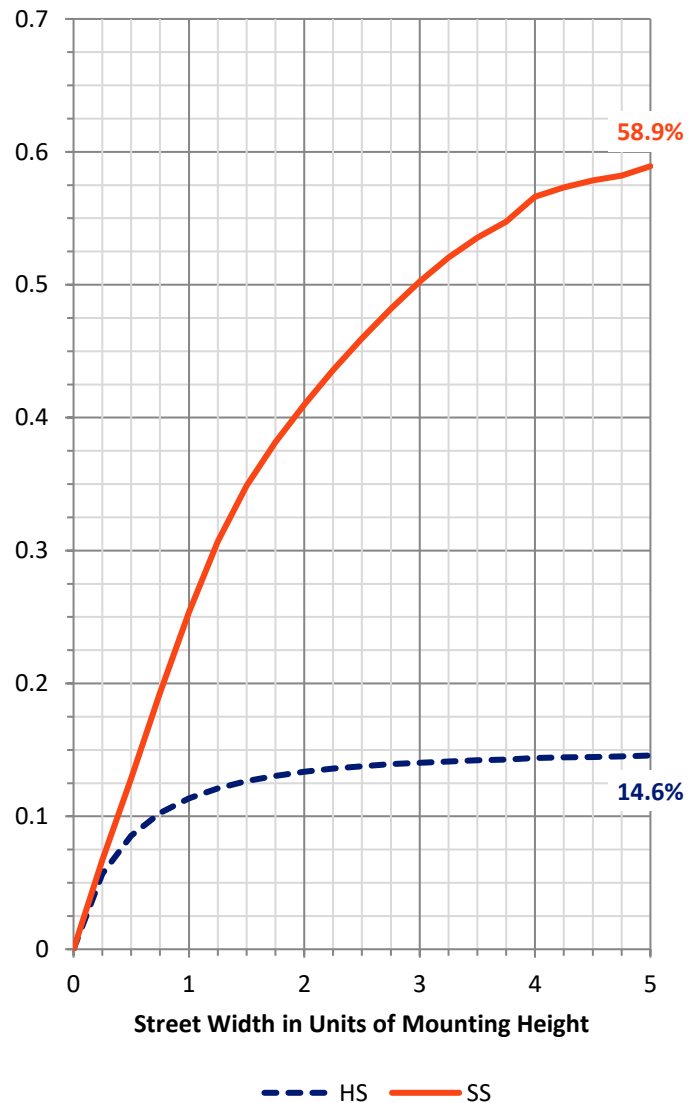
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	792.6	713.1	1505.7
	% Fixture	14.7	13.3	28.0
<b>Street Side</b>	Lumens	3156.4	713.1	3869.5
	% Fixture	58.7	13.3	72.0
<b>Total</b>	Lumens	3949.0	1426.2	5375.2
	% Fixture	73.5	26.5	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.7	1.0
10°-20°	147.0	2.7
20°-30°	232.5	4.3
30°-40°	375.2	7.0
40°-50°	555.2	10.3
50°-60°	713.8	13.3
60°-70°	883.8	16.4
70°-80°	890.7	16.6
80°-90°	95.1	1.8
90°-100°	4.7	0.1
100°-110°	69.0	1.3
110°-120°	153.0	2.8
120°-130°	223.9	4.2
130°-140°	265.6	4.9
140°-150°	269.3	5.0
150°-160°	231.1	4.3
160°-170°	155.1	2.9
170°-180°	54.3	1.0
0°-90°	3949.0	73.5
0°-180°	5375.2	100.0

**Coefficient of Utilization**



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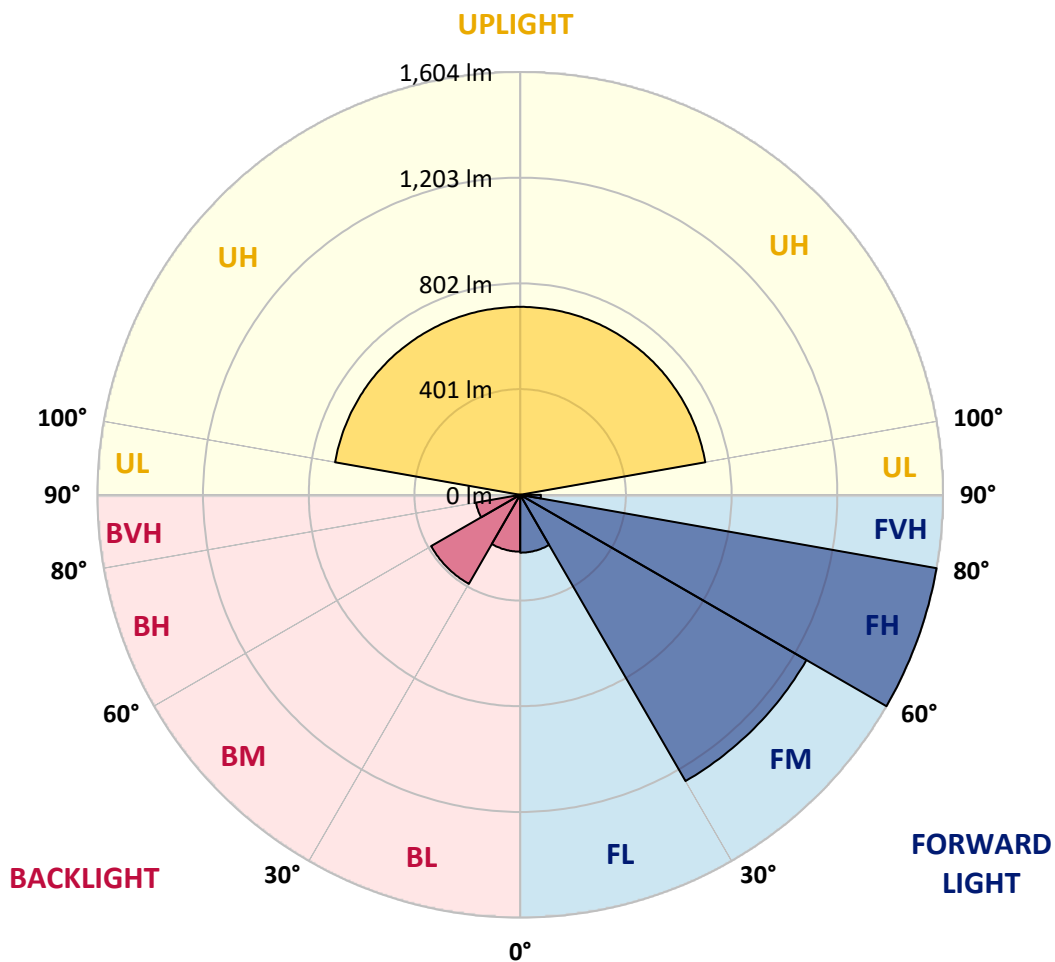
CATALOG NUMBER: ISS-AF-800-LED-E1-T4FT-8030-ULG

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	219.6	4.1			
FM	(30°-60°)	1254.0	23.3			
FH	(60°-80°)	1604.2	29.8			G1/1800
FVH	(80°-90°)	78.6	1.5			G1/100
BL	(0°-30°)	215.6	4.0	B1/500		
BM	(30°-60°)	390.3	7.3	B1/1000		
BH	(60°-80°)	170.3	3.2	B1/500		G1/500
BVH	(80°-90°)	16.5	0.3			G1/100
UL	(90°-100°)	4.7	0.1		U1/10	
UH	(100°-180°)	713.1	13.3		U4/1000	

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

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2
2.5°	576.1	574.8	573.5	573.5	576.1	576.1	577.4	578.7	580.1	584.0	589.3
5°	560.3	559.0	557.6	559.0	562.9	562.9	566.9	569.5	572.1	578.7	585.3
7.5°	539.2	539.2	537.9	543.1	547.1	545.8	551.1	553.7	560.3	566.9	577.4
10°	511.5	511.5	511.5	518.1	524.7	524.7	528.6	535.2	540.5	549.7	562.9
12.5°	487.8	486.5	486.5	491.7	499.6	501.0	507.5	516.8	523.4	535.2	549.7
15°	479.9	477.2	470.6	470.6	474.6	474.6	485.1	498.3	508.9	520.7	537.9
17.5°	481.2	477.2	460.1	454.8	454.8	456.1	466.7	481.2	494.4	508.9	531.3
20°	493.0	486.5	454.8	443.0	440.3	441.6	450.9	465.4	481.2	501.0	526.0
22.5°	544.5	533.9	474.6	448.2	436.4	436.4	441.6	457.5	477.2	503.6	535.2
25°	663.1	646.0	540.5	493.0	457.5	453.5	444.3	460.1	483.8	515.5	561.6
27.5°	784.4	767.3	622.2	570.8	515.5	503.6	469.3	473.3	499.6	541.8	601.1
30°	885.9	871.4	725.1	665.7	591.9	578.7	526.0	501.0	527.3	578.7	660.5
32.5°	893.8	887.2	835.8	775.2	685.5	667.1	597.2	557.6	570.8	628.8	725.1
35°	967.6	962.4	934.7	876.7	787.0	765.9	692.1	631.5	627.5	684.2	798.9
37.5°	1040.1	1033.6	1015.1	975.5	892.5	875.4	817.4	719.8	692.1	748.8	871.4
40°	1108.7	1099.5	1075.7	1053.3	992.7	992.7	930.7	804.2	754.1	805.5	932.0
42.5°	1235.3	1206.3	1143.0	1125.8	1108.7	1108.7	1017.7	862.2	804.2	867.4	990.1
45°	1356.5	1328.9	1243.2	1208.9	1218.1	1212.8	1087.6	895.1	849.0	925.5	1045.4
47.5°	1452.8	1427.7	1340.7	1317.0	1343.4	1322.3	1145.6	921.5	905.7	987.4	1091.6
50°	1538.5	1479.1	1394.8	1426.4	1459.4	1423.8	1197.0	961.0	962.4	1053.3	1158.8
52.5°	1421.1	1414.5	1433.0	1506.8	1538.5	1498.9	1243.2	1011.1	1023.0	1137.7	1235.3
55°	1280.1	1278.8	1386.9	1530.6	1568.8	1531.9	1273.5	1071.8	1086.3	1241.8	1331.5
57.5°	1252.4	1239.2	1313.0	1480.5	1550.3	1524.0	1289.3	1128.5	1146.9	1373.7	1426.4
60°	1342.0	1317.0	1305.1	1426.4	1510.8	1497.6	1309.1	1195.7	1220.8	1524.0	1514.7
62.5°	1537.1	1502.9	1418.5	1430.4	1506.8	1496.3	1356.5	1274.8	1303.8	1674.3	1564.8
65°	1795.5	1770.5	1636.0	1539.8	1568.8	1554.3	1442.2	1375.0	1390.8	1782.4	1508.1
67.5°	2079.0	2044.7	1898.4	1766.5	1729.6	1701.9	1578.0	1493.6	1437.0	1766.5	1356.5
70°	2399.3	2362.4	2235.9	2100.1	2036.8	2006.5	1815.3	1596.5	1419.8	1592.5	1070.5
72.5°	2793.5	2743.4	2673.5	2688.0	2677.5	2593.1	2193.7	1630.7	1294.6	1185.2	639.4
75°	2503.5	2446.8	2458.6	2821.2	3322.1	3318.2	2631.3	1546.4	965.0	559.0	276.8
77.5°	897.8	992.7	1464.6	2113.3	2785.6	2781.6	2036.8	967.6	413.9	238.6	167.4
80°	225.4	229.4	363.9	867.4	1626.8	1613.6	1154.8	365.2	172.7	145.0	114.7
82.5°	72.5	77.8	133.1	299.3	696.1	680.2	358.6	120.0	108.1	93.6	69.9
85°	23.7	23.7	47.5	102.8	229.4	220.2	72.5	43.5	59.3	48.8	31.6
87.5°	0.0	0.0	1.3	2.6	5.3	2.6	0.0	2.6	7.9	9.2	6.6
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°	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°	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2	593.2
2.5°	593.2	591.9	597.2	601.1	602.5	606.4	610.4	613.0	611.7	610.4	610.4
5°	591.9	593.2	602.5	610.4	617.0	623.6	628.8	631.5	630.2	630.2	630.2
7.5°	584.0	589.3	599.8	613.0	622.2	626.2	627.5	623.6	620.9	617.0	617.0
10°	570.8	578.7	595.9	610.4	614.3	609.1	601.1	593.2	582.7	576.1	576.1
12.5°	560.3	569.5	590.6	602.5	597.2	584.0	566.9	553.7	543.1	535.2	533.9
15°	551.1	562.9	585.3	588.0	576.1	553.7	531.3	516.8	504.9	499.6	499.6
17.5°	544.5	560.3	580.1	572.1	548.4	519.4	498.3	486.5	477.2	472.0	470.6
20°	545.8	565.6	574.8	552.4	518.1	487.8	468.0	461.4	454.8	452.2	452.2
22.5°	560.3	578.7	573.5	535.2	490.4	456.1	443.0	441.6	439.0	436.4	435.0
25°	591.9	605.1	577.4	518.1	461.4	427.1	420.5	424.5	423.2	420.5	420.5
27.5°	635.4	638.1	584.0	501.0	429.8	399.4	399.4	406.0	403.4	399.4	402.1
30°	688.2	673.7	586.6	473.3	392.9	373.1	377.0	381.0	378.4	373.1	373.1
32.5°	744.8	710.6	586.6	437.7	357.3	349.4	350.7	352.0	346.7	340.1	340.1
35°	800.2	746.2	580.1	395.5	329.6	325.6	324.3	329.6	325.6	316.4	316.4
37.5°	852.9	773.8	562.9	352.0	308.5	307.2	311.1	308.5	303.2	290.0	287.4
40°	889.9	792.3	528.6	316.4	291.3	299.3	296.6	282.1	274.2	265.0	265.0
42.5°	922.8	801.5	486.5	288.7	279.5	290.0	279.5	261.0	250.5	249.2	250.5
45°	953.1	809.4	445.6	266.3	265.0	279.5	266.3	246.5	234.7	234.7	236.0
47.5°	982.1	817.4	404.7	245.2	247.8	263.7	255.8	236.0	224.1	216.2	216.2
50°	1028.3	835.8	345.4	222.8	228.1	250.5	247.8	225.4	212.2	200.4	197.7
52.5°	1083.7	867.4	280.8	199.1	213.6	238.6	238.6	216.2	201.7	185.9	183.2
55°	1157.5	901.7	225.4	181.9	199.1	225.4	229.4	212.2	191.2	176.7	174.0
57.5°	1231.3	913.6	181.9	164.8	180.6	212.2	222.8	204.3	179.3	168.7	167.4
60°	1282.7	875.4	152.9	150.3	167.4	196.4	213.6	195.1	171.4	160.8	160.8
62.5°	1274.8	759.3	137.1	141.1	156.9	184.6	205.7	187.2	166.1	159.5	158.2
65°	1162.7	573.5	123.9	133.1	147.7	172.7	197.7	183.2	163.5	156.9	154.2
67.5°	979.5	381.0	114.7	125.2	138.4	163.5	191.2	178.0	155.6	151.6	149.0
70°	709.3	222.8	105.5	117.3	129.2	152.9	181.9	167.4	146.3	143.7	137.1
72.5°	383.6	139.7	94.9	106.8	117.3	139.7	167.4	154.2	134.5	123.9	120.0
75°	175.3	101.5	84.4	94.9	102.8	122.6	150.3	135.8	120.0	106.8	104.1
77.5°	117.3	76.5	71.2	81.7	85.7	102.8	133.1	108.1	93.6	84.4	81.7
80°	80.4	56.7	58.0	67.2	65.9	81.7	100.2	87.0	73.8	76.5	69.9
82.5°	51.4	39.5	44.8	47.5	46.1	62.0	77.8	65.9	55.4	46.1	39.5
85°	22.4	21.1	26.4	27.7	27.7	34.3	40.9	33.0	25.0	18.5	18.5
87.5°	1.3	2.6	2.6	4.0	2.6	1.3	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)