

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: P227816

Luminaire Tested: **ISS-AF-1000-LED-E1-T4FT-8030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227816
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-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: 6093.2 lumens
Efficiency: N/A
Efficacy: 85.5 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

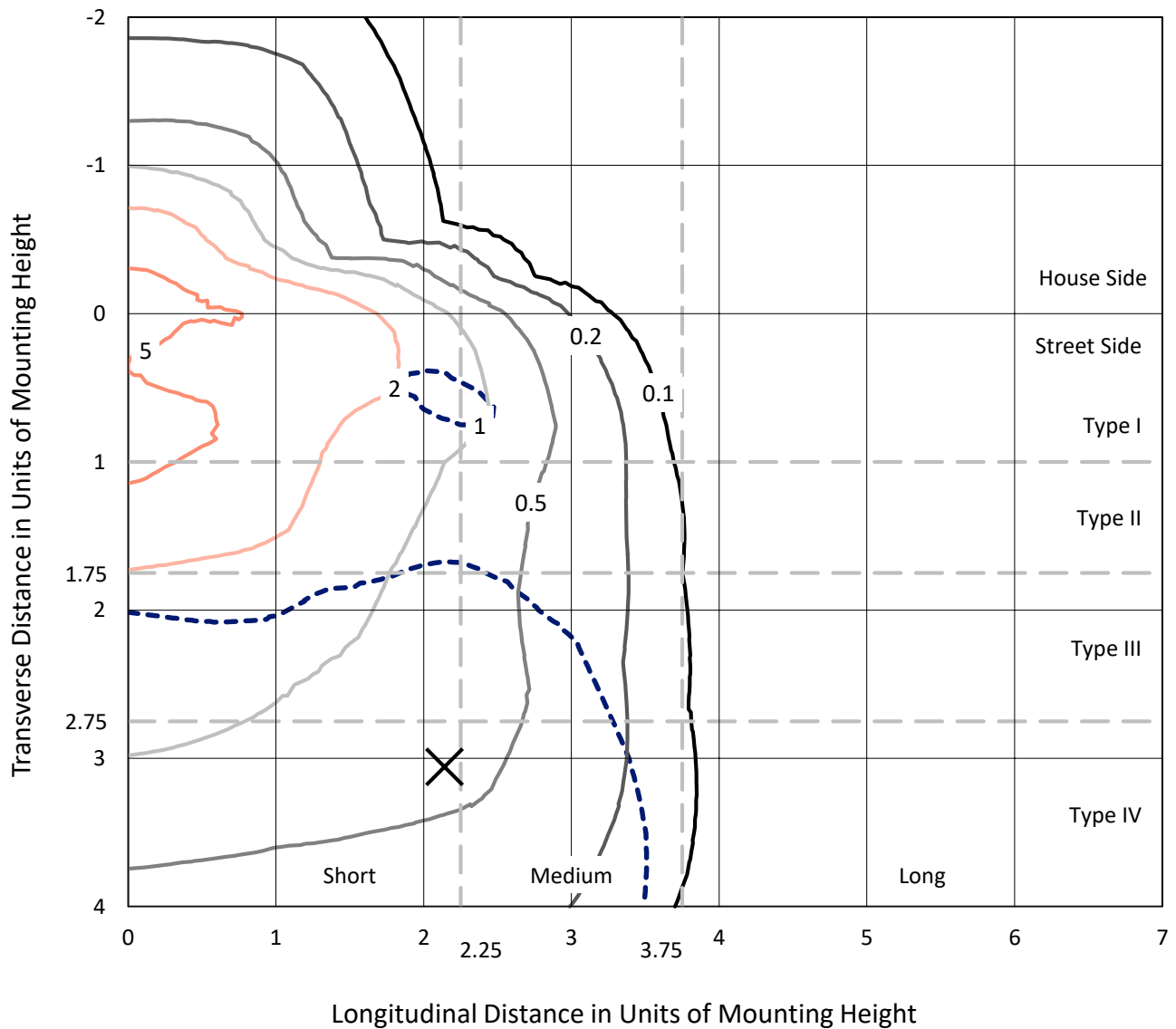


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

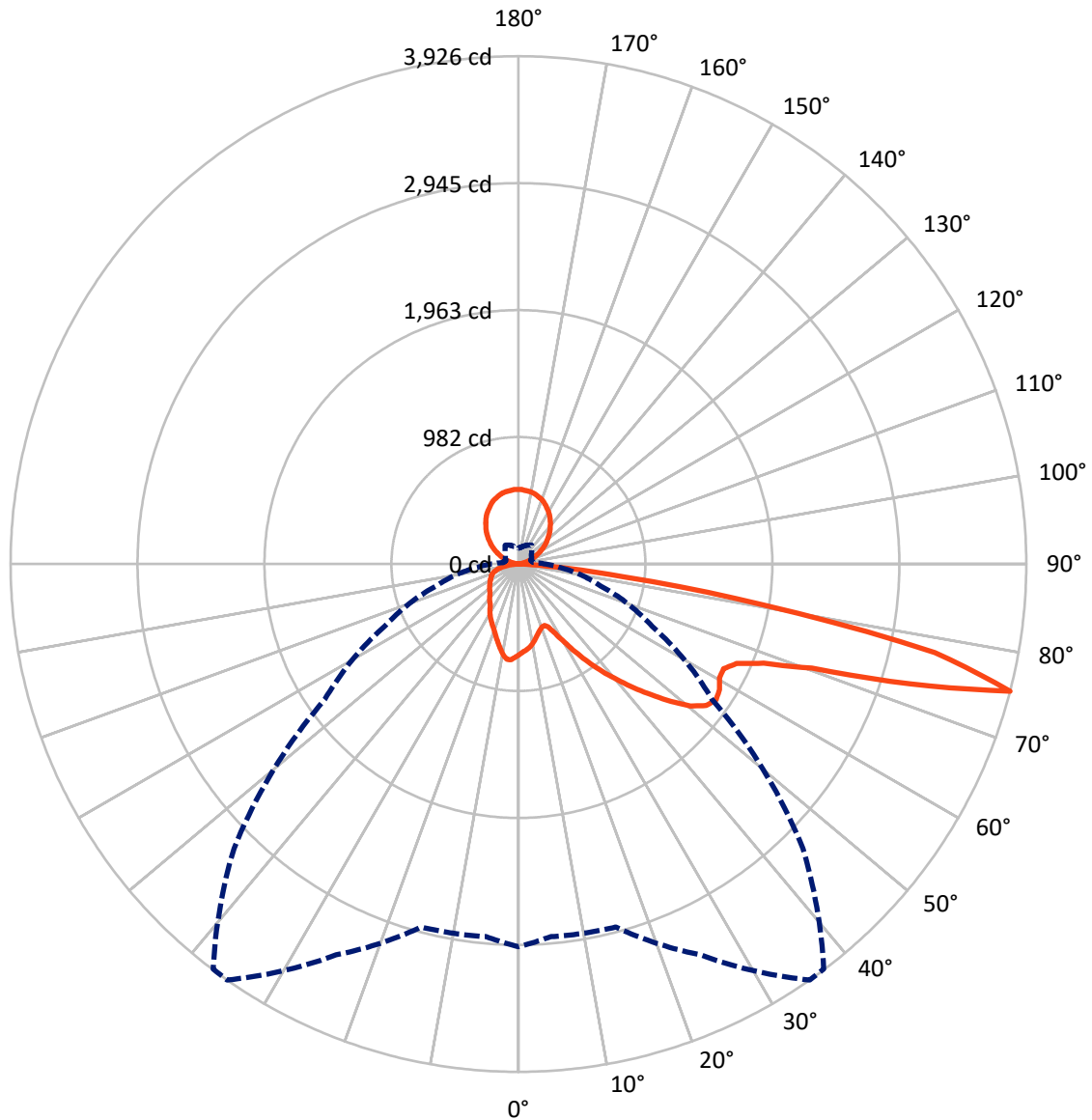


Based on 10 foot mounting height. Maximum calculated value = 7.1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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

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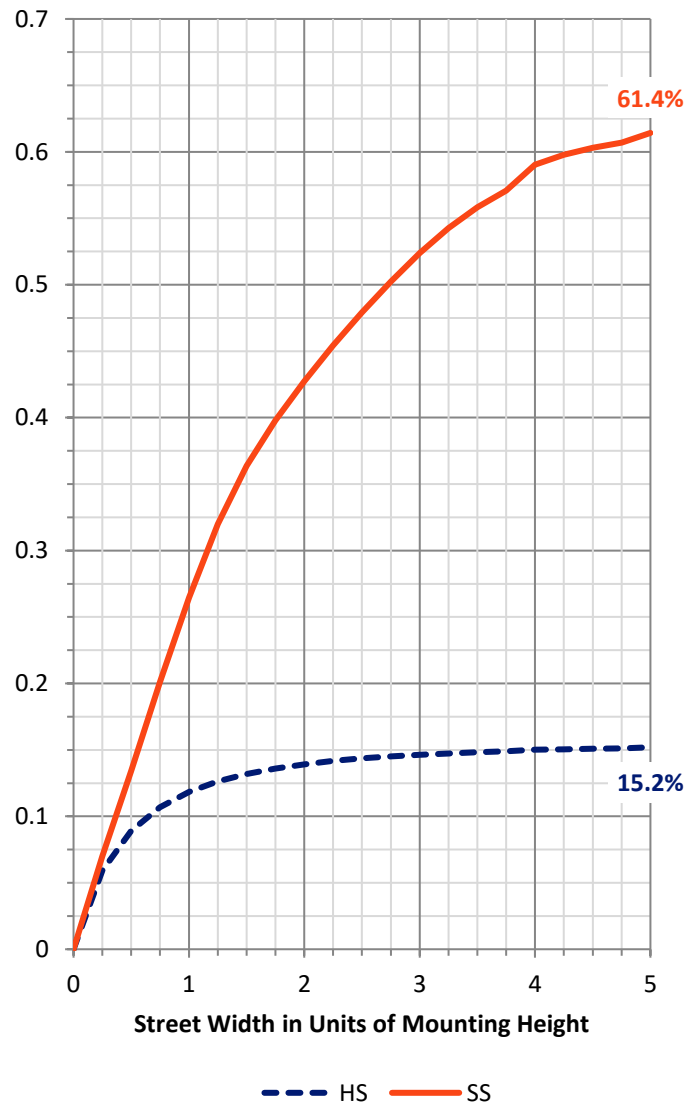
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	936.7	713.1	1649.8
	% Fixture	15.4	11.7	27.1
Street Side	Lumens	3730.3	713.1	4443.4
	% Fixture	61.2	11.7	72.9
Total	Lumens	4667.0	1426.2	6093.2
	% Fixture	76.6	23.4	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.8	1.1
10°-20°	173.7	2.9
20°-30°	274.8	4.5
30°-40°	443.5	7.3
40°-50°	656.1	10.8
50°-60°	843.6	13.8
60°-70°	1044.5	17.1
70°-80°	1052.6	17.3
80°-90°	112.4	1.8
90°-100°	4.7	0.1
100°-110°	69.0	1.1
110°-120°	153.0	2.5
120°-130°	223.9	3.7
130°-140°	265.6	4.4
140°-150°	269.3	4.4
150°-160°	231.1	3.8
160°-170°	155.1	2.5
170°-180°	54.3	0.9
0°-90°	4667.0	76.6
0°-180°	6093.2	100.0



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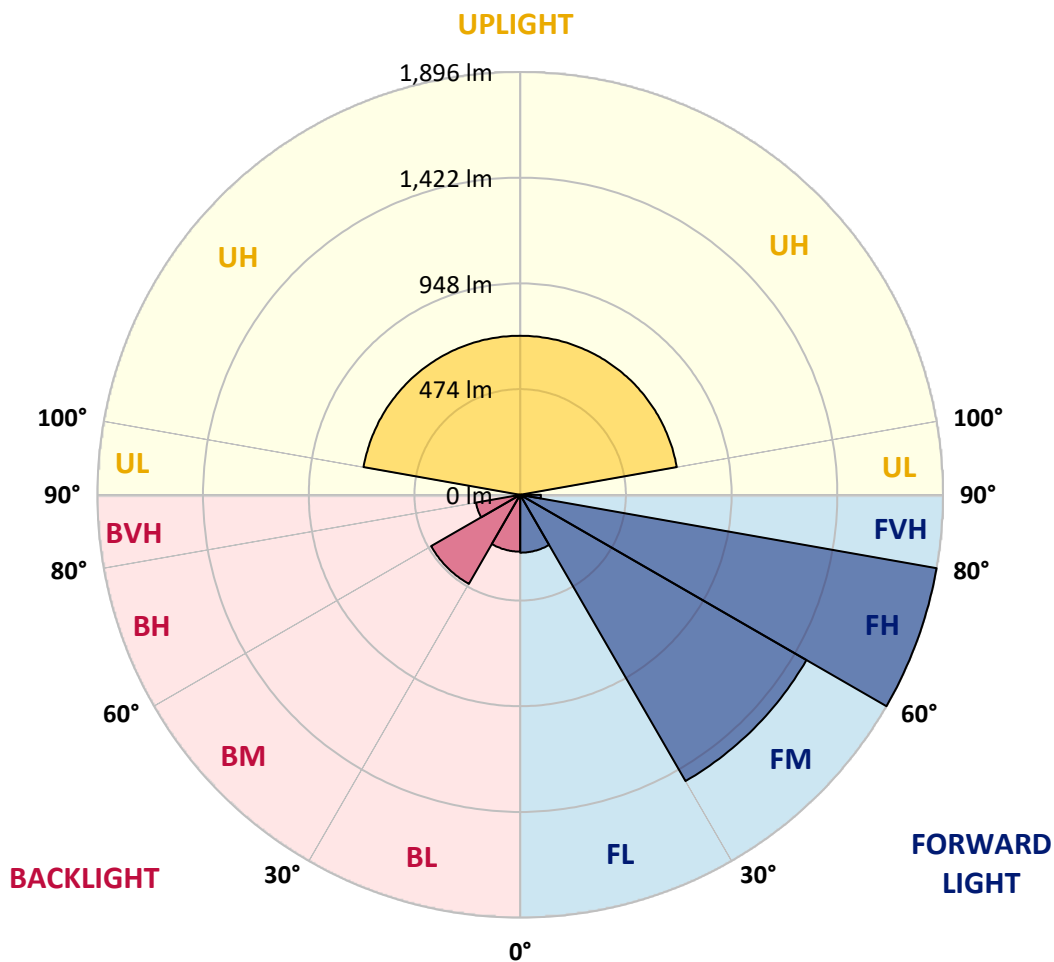
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	259.5	4.3			
FM	(30°-60°)	1482.0	24.3			
FH	(60°-80°)	1895.9	31.1			G2/5000
FVH	(80°-90°)	92.9	1.5			G1/100
BL	(0°-30°)	254.8	4.2	B1/500		
BM	(30°-60°)	461.3	7.6	B1/1000		
BH	(60°-80°)	201.2	3.3	B1/500		G1/500
BVH	(80°-90°)	19.4	0.3			G1/100
UL	(90°-100°)	4.7	0.1		U1/10	
UH	(100°-180°)	713.1	11.7		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°	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1
2.5°	680.8	679.3	677.7	677.7	680.8	680.8	682.4	684.0	685.5	690.2	696.4
5°	662.2	660.6	659.0	660.6	665.3	665.3	669.9	673.1	676.2	684.0	691.8
7.5°	637.2	637.2	635.7	641.9	646.6	645.0	651.2	654.4	662.2	669.9	682.4
10°	604.5	604.5	604.5	612.3	620.1	620.1	624.8	632.5	638.8	649.7	665.3
12.5°	576.5	574.9	574.9	581.1	590.5	592.0	599.8	610.7	618.5	632.5	649.7
15°	567.1	564.0	556.2	556.2	560.9	560.9	573.3	588.9	601.4	615.4	635.7
17.5°	568.7	564.0	543.7	537.5	537.5	539.1	551.5	568.7	584.3	601.4	627.9
20°	582.7	574.9	537.5	523.5	520.4	521.9	532.8	550.0	568.7	592.0	621.6
22.5°	643.5	631.0	560.9	529.7	515.7	515.7	521.9	540.6	564.0	595.2	632.5
25°	783.7	763.4	638.8	582.7	540.6	536.0	525.0	543.7	571.8	609.2	663.7
27.5°	927.0	906.8	735.4	674.6	609.2	595.2	554.6	559.3	590.5	640.3	710.4
30°	1047.0	1029.8	856.9	786.8	699.5	684.0	621.6	592.0	623.2	684.0	780.6
32.5°	1056.3	1048.5	987.8	916.1	810.2	788.3	705.8	659.0	674.6	743.2	856.9
35°	1143.6	1137.3	1104.6	1036.1	930.1	905.2	818.0	746.3	741.6	808.6	944.1
37.5°	1229.3	1221.5	1199.7	1152.9	1054.8	1034.5	966.0	850.7	818.0	884.9	1029.8
40°	1310.3	1299.4	1271.3	1244.8	1173.2	1173.2	1099.9	950.4	891.2	951.9	1101.5
42.5°	1459.8	1425.6	1350.8	1330.5	1310.3	1310.3	1202.8	1018.9	950.4	1025.2	1170.1
45°	1603.2	1570.5	1469.2	1428.7	1439.6	1433.4	1285.4	1057.9	1003.4	1093.7	1235.5
47.5°	1716.9	1687.3	1584.5	1556.4	1587.6	1562.7	1353.9	1089.0	1070.3	1166.9	1290.0
50°	1818.2	1748.1	1648.4	1685.8	1724.7	1682.6	1414.7	1135.8	1137.3	1244.8	1369.5
52.5°	1679.5	1671.7	1693.5	1780.8	1818.2	1771.4	1469.2	1195.0	1209.0	1344.6	1459.8
55°	1512.8	1511.3	1639.0	1808.8	1854.0	1810.4	1505.0	1266.7	1283.8	1467.6	1573.6
57.5°	1480.1	1464.5	1551.8	1749.6	1832.2	1801.1	1523.7	1333.7	1355.5	1623.4	1685.8
60°	1586.0	1556.4	1542.4	1685.8	1785.5	1769.9	1547.1	1413.1	1442.7	1801.1	1790.1
62.5°	1816.6	1776.1	1676.4	1690.4	1780.8	1768.3	1603.2	1506.6	1540.9	1978.7	1849.3
65°	2122.0	2092.4	1933.5	1819.7	1854.0	1836.9	1704.5	1625.0	1643.7	2106.4	1782.4
67.5°	2457.0	2416.5	2243.5	2087.7	2044.1	2011.4	1864.9	1765.2	1698.2	2087.7	1603.2
70°	2835.6	2791.9	2642.4	2481.9	2407.1	2371.3	2145.4	1886.7	1678.0	1882.1	1265.1
72.5°	3301.4	3242.2	3159.6	3176.8	3164.3	3064.6	2592.5	1927.2	1530.0	1400.6	755.6
75°	2958.6	2891.7	2905.7	3334.1	3926.2	3921.5	3109.8	1827.5	1140.5	660.6	327.2
77.5°	1061.0	1173.2	1730.9	2497.5	3292.1	3287.4	2407.1	1143.6	489.2	282.0	197.9
80°	266.4	271.1	430.0	1025.2	1922.6	1907.0	1364.8	431.6	204.1	171.4	135.5
82.5°	85.7	91.9	157.4	353.7	822.6	803.9	423.8	141.8	127.8	110.6	82.6
85°	28.0	28.0	56.1	121.5	271.1	260.2	85.7	51.4	70.1	57.6	37.4
87.5°	0.0	0.0	1.6	3.1	6.2	3.1	0.0	3.1	9.3	10.9	7.8
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°	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1
2.5°	701.1	699.5	705.8	710.4	712.0	716.7	721.4	724.5	722.9	721.4	721.4
5°	699.5	701.1	712.0	721.4	729.1	736.9	743.2	746.3	744.7	744.7	744.7
7.5°	690.2	696.4	708.9	724.5	735.4	740.1	741.6	736.9	733.8	729.1	729.1
10°	674.6	684.0	704.2	721.4	726.0	719.8	710.4	701.1	688.6	680.8	680.8
12.5°	662.2	673.1	698.0	712.0	705.8	690.2	669.9	654.4	641.9	632.5	631.0
15°	651.2	665.3	691.8	694.9	680.8	654.4	627.9	610.7	596.7	590.5	590.5
17.5°	643.5	662.2	685.5	676.2	648.1	613.9	588.9	574.9	564.0	557.8	556.2
20°	645.0	668.4	679.3	652.8	612.3	576.5	553.1	545.3	537.5	534.4	534.4
22.5°	662.2	684.0	677.7	632.5	579.6	539.1	523.5	521.9	518.8	515.7	514.1
25°	699.5	715.1	682.4	612.3	545.3	504.8	497.0	501.7	500.1	497.0	497.0
27.5°	751.0	754.1	690.2	592.0	507.9	472.1	472.1	479.9	476.7	472.1	475.2
30°	813.3	796.1	693.3	559.3	464.3	440.9	445.6	450.3	447.1	440.9	440.9
32.5°	880.3	839.8	693.3	517.3	422.2	412.9	414.4	416.0	409.8	402.0	402.0
35°	945.7	881.8	685.5	467.4	389.5	384.8	383.3	389.5	384.8	373.9	373.9
37.5°	1008.0	914.5	665.3	416.0	364.6	363.0	367.7	364.6	358.3	342.8	339.6
40°	1051.7	936.4	624.8	373.9	344.3	353.7	350.6	333.4	324.1	313.2	313.2
42.5°	1090.6	947.3	574.9	341.2	330.3	342.8	330.3	308.5	296.0	294.5	296.0
45°	1126.4	956.6	526.6	314.7	313.2	330.3	314.7	291.3	277.3	277.3	278.9
47.5°	1160.7	966.0	478.3	289.8	292.9	311.6	302.3	278.9	264.9	255.5	255.5
50°	1215.2	987.8	408.2	263.3	269.5	296.0	292.9	266.4	250.8	236.8	233.7
52.5°	1280.7	1025.2	331.9	235.3	252.4	282.0	282.0	255.5	238.4	219.7	216.6
55°	1367.9	1065.7	266.4	215.0	235.3	266.4	271.1	250.8	225.9	208.8	205.7
57.5°	1455.2	1079.7	215.0	194.8	213.4	250.8	263.3	241.5	211.9	199.4	197.9
60°	1515.9	1034.5	180.7	177.6	197.9	232.1	252.4	230.6	202.5	190.1	190.1
62.5°	1506.6	897.4	162.0	166.7	185.4	218.1	243.0	221.2	196.3	188.5	187.0
65°	1374.2	677.7	146.5	157.4	174.5	204.1	233.7	216.6	193.2	185.4	182.3
67.5°	1157.6	450.3	135.5	148.0	163.6	193.2	225.9	210.3	183.8	179.2	176.1
70°	838.2	263.3	124.6	138.7	152.7	180.7	215.0	197.9	172.9	169.8	162.0
72.5°	453.4	165.1	112.2	126.2	138.7	165.1	197.9	182.3	158.9	146.5	141.8
75°	207.2	120.0	99.7	112.2	121.5	144.9	177.6	160.5	141.8	126.2	123.1
77.5°	138.7	90.4	84.1	96.6	101.3	121.5	157.4	127.8	110.6	99.7	96.6
80°	95.0	67.0	68.6	79.5	77.9	96.6	118.4	102.8	87.2	90.4	82.6
82.5°	60.8	46.7	53.0	56.1	54.5	73.2	91.9	77.9	65.4	54.5	46.7
85°	26.5	24.9	31.2	32.7	32.7	40.5	48.3	39.0	29.6	21.8	21.8
87.5°	1.6	3.1	3.1	4.7	3.1	1.6	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)