

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: P271748

Luminaire Tested: **IST-AF-1200-LED-E1-T3-7027-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271748
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35938)-DOWNLIGHT AND
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: IST-AF-1200-LED-E1-T3-7027-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III, WITH UPLIGHT GLOW
Light Source: (16) 2700K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7705.3 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U5 - G2

Input Watts (W): 82.7
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

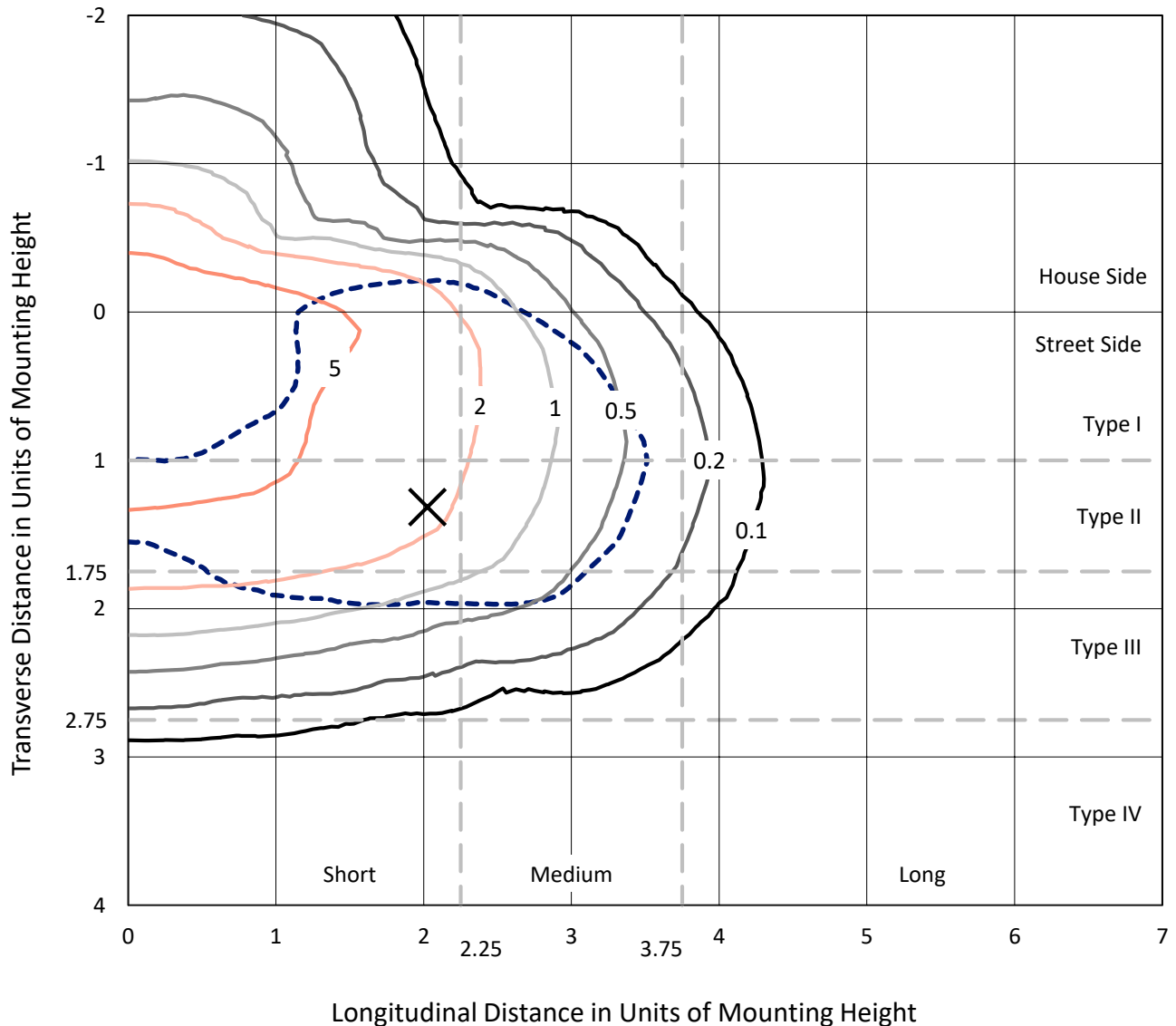


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

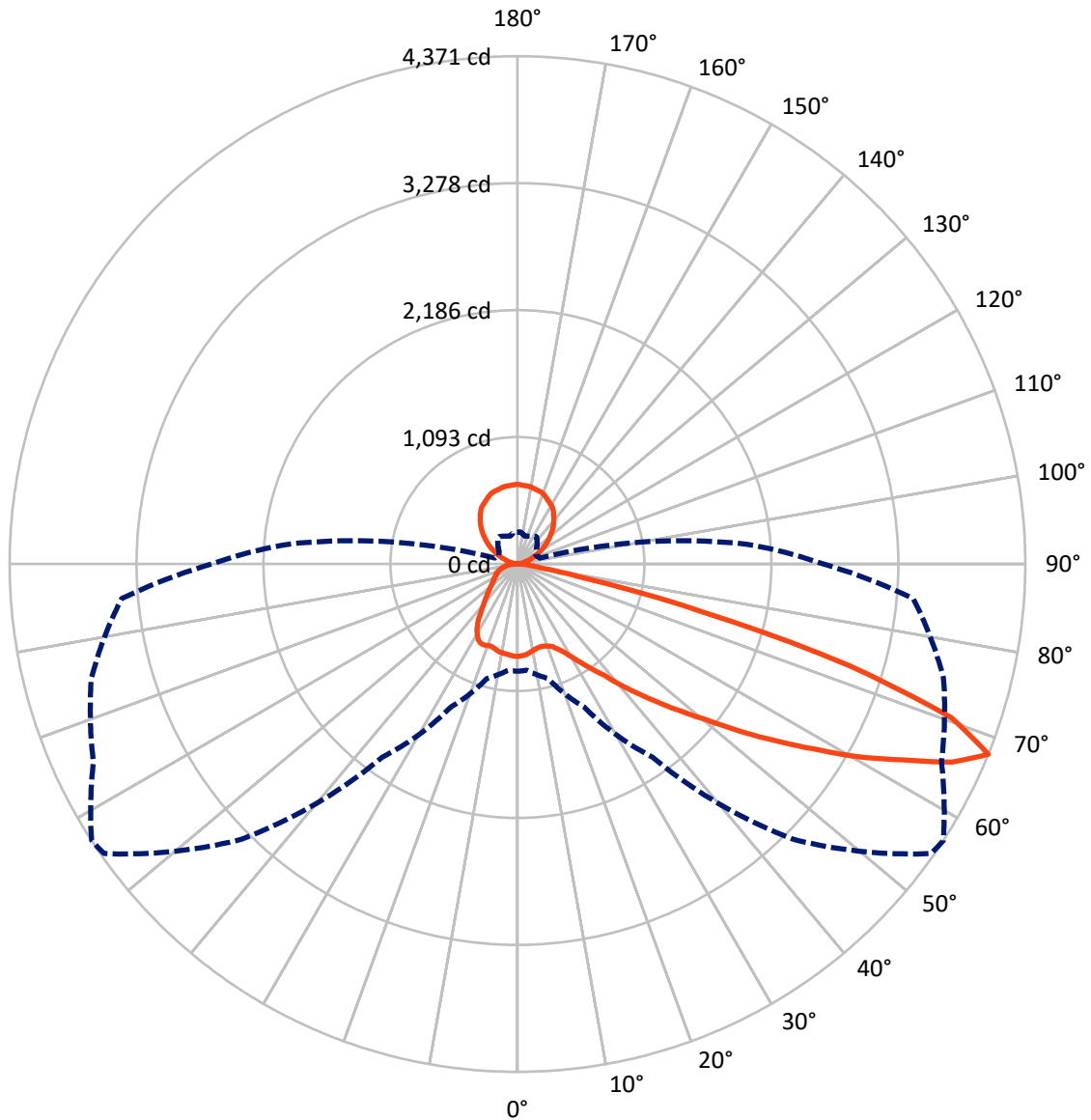


Based on 10 foot mounting height. Maximum calculated value = 8.3 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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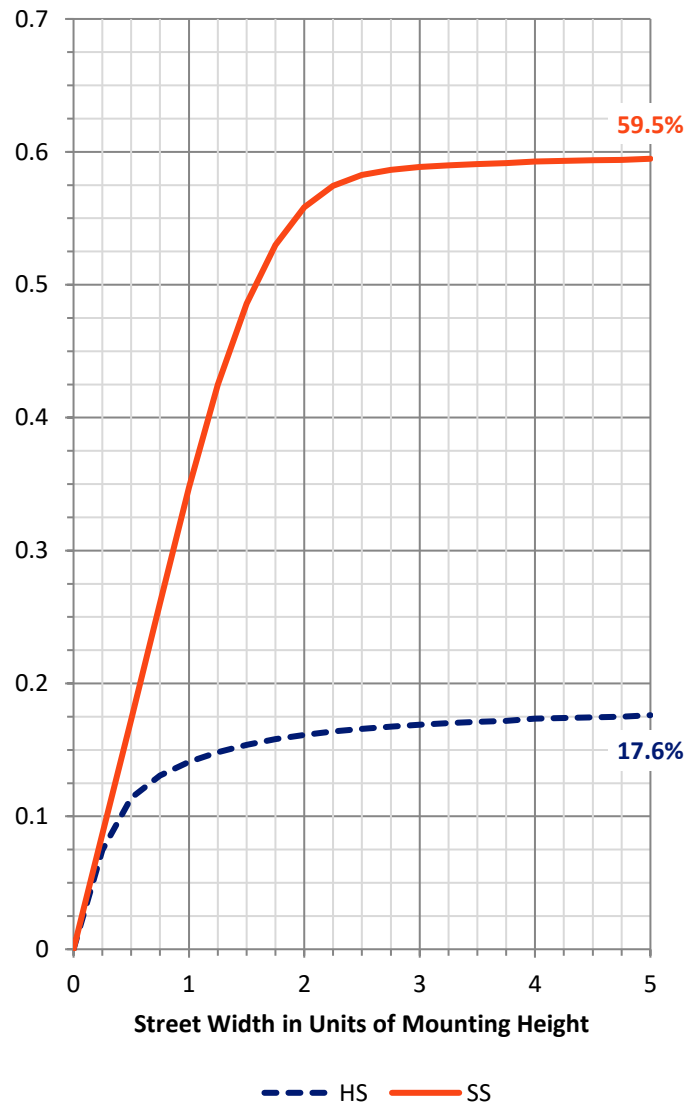
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1397.1	853.2	2250.3
	% Fixture	18.1	11.1	29.2
Street Side	Lumens	4603.0	852.0	5455.0
	% Fixture	59.7	11.1	70.8
Total	Lumens	6000.1	1705.2	7705.3
	% Fixture	77.9	22.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.4	1.0
10°-20°	213.8	2.8
20°-30°	367.9	4.8
30°-40°	598.2	7.8
40°-50°	964.9	12.5
50°-60°	1438.5	18.7
60°-70°	1620.1	21.0
70°-80°	624.6	8.1
80°-90°	97.8	1.3
90°-100°	11.3	0.1
100°-110°	56.3	0.7
110°-120°	163.0	2.1
120°-130°	268.1	3.5
130°-140°	330.6	4.3
140°-150°	338.2	4.4
150°-160°	284.9	3.7
160°-170°	187.6	2.4
170°-180°	65.0	0.8
0°-90°	6000.1	77.9
0°-180°	7705.3	100.0



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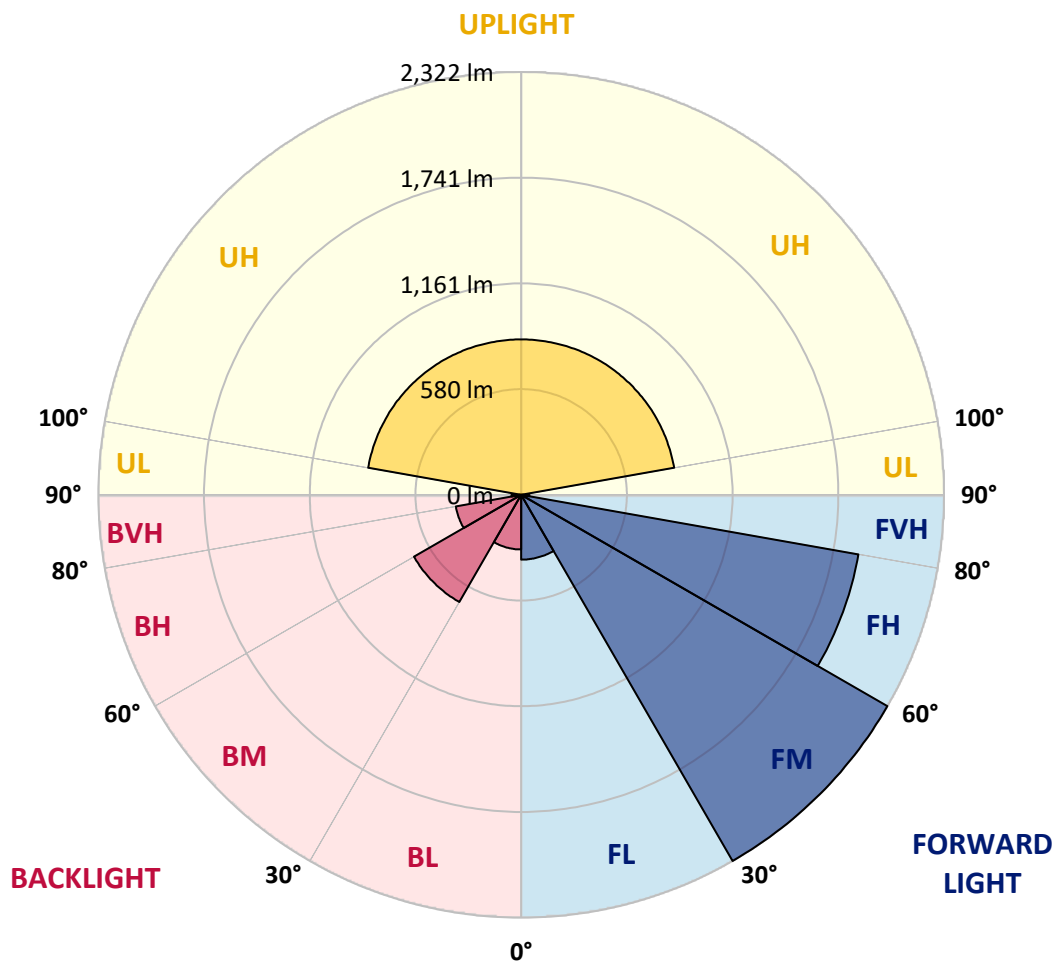
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	356.0	4.6			
FM	(30°-60°)	2321.8	30.1			
FH	(60°-80°)	1880.3	24.4			G2/5000
FVH	(80°-90°)	44.9	0.6			G1/100
BL	(0°-30°)	300.1	3.9	B1/500		
BM	(30°-60°)	679.7	8.8	B1/1000		
BH	(60°-80°)	364.4	4.7	B1/500		G1/500
BVH	(80°-90°)	52.9	0.7			G1/100
UL	(90°-100°)	11.3	0.1		U2/50	
UH	(100°-180°)	853.2	11.1		U4/1000	

BUG Rating: B1-U5-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	795.3	795.3	795.3	795.3	795.3	795.3	795.3	795.3	795.3	795.3	795.3
2.5°	789.3	791.0	792.7	791.9	791.9	791.9	791.9	791.9	792.7	792.7	791.0
5°	776.1	777.0	777.9	779.7	781.3	783.1	784.0	784.0	784.8	784.0	782.2
7.5°	757.0	757.9	761.4	761.4	763.1	766.6	768.3	770.0	772.7	772.7	771.8
10°	750.9	750.9	750.9	748.4	750.1	750.9	753.6	753.6	760.5	764.0	765.7
12.5°	757.9	757.0	757.0	750.1	744.0	741.4	744.0	744.9	752.7	757.9	761.4
15°	773.6	773.6	771.8	761.4	749.3	739.7	738.8	738.8	744.9	752.7	758.8
17.5°	810.1	813.5	801.4	784.8	764.9	749.3	743.2	742.3	746.6	752.7	758.8
20°	879.6	878.7	860.5	830.9	796.2	770.0	755.4	753.6	752.7	756.1	763.1
22.5°	962.2	958.7	936.9	899.7	851.9	804.1	775.2	771.8	764.9	767.5	777.0
25°	1050.8	1051.6	1024.8	976.1	916.1	858.7	815.3	811.8	797.1	795.3	805.7
27.5°	1139.5	1150.8	1114.3	1068.3	997.0	928.3	864.8	859.6	846.6	842.3	852.6
30°	1268.9	1264.6	1219.4	1159.5	1088.2	1002.1	941.3	931.7	905.7	911.8	923.1
32.5°	1378.4	1388.2	1347.2	1276.0	1182.1	1091.7	1021.2	1016.1	990.9	997.7	1013.5
35°	1512.4	1534.9	1481.0	1393.3	1302.9	1209.8	1125.6	1111.7	1091.7	1105.5	1117.7
37.5°	1665.4	1676.7	1634.9	1521.9	1429.8	1332.5	1236.9	1215.0	1193.4	1222.1	1243.8
40°	1811.3	1829.6	1775.7	1680.1	1573.2	1480.1	1375.9	1371.5	1321.1	1352.4	1408.9
42.5°	2027.7	2050.4	1964.3	1853.0	1756.5	1644.4	1545.4	1521.9	1467.1	1511.5	1606.2
45°	2179.0	2178.1	2119.9	2027.7	1968.6	1860.0	1726.1	1698.3	1639.2	1698.3	1825.3
47.5°	2233.7	2246.8	2226.8	2215.5	2194.6	2115.6	1918.3	1892.2	1836.6	1924.3	2041.7
50°	2314.7	2311.1	2311.1	2380.7	2440.7	2424.2	2143.4	2106.0	2047.8	2153.0	2321.6
52.5°	2335.4	2304.2	2352.8	2485.8	2676.2	2690.1	2405.0	2384.1	2314.7	2417.2	2624.8
55°	2277.2	2269.4	2346.7	2539.7	2839.6	2938.6	2708.3	2679.6	2601.4	2689.3	2952.5
57.5°	2146.9	2166.8	2291.1	2528.4	2952.5	3157.7	3041.2	3000.4	2888.3	2941.3	3277.6
60°	2010.4	2020.0	2184.2	2488.5	2983.0	3309.9	3390.7	3367.2	3175.1	3206.4	3518.4
62.5°	1859.1	1836.6	2006.9	2455.3	2949.0	3519.3	3729.7	3711.3	3484.5	3474.9	3689.7
65°	1436.7	1468.0	1613.2	2029.5	2717.0	3682.7	4133.8	4110.4	3829.6	3696.5	3671.5
67.5°	923.1	917.0	1019.6	1356.8	2030.3	3347.2	4345.0	4371.1	4026.9	3796.6	3419.3
70°	331.1	340.6	378.9	616.2	1113.4	2230.3	3830.5	3960.0	3881.8	3609.7	2783.1
72.5°	201.7	201.7	229.4	277.3	451.1	1057.8	2730.1	2986.4	3168.1	2974.3	2055.6
75°	158.2	157.3	166.8	191.2	243.4	346.7	1451.5	1649.6	2032.1	2054.7	1170.0
77.5°	125.1	124.2	133.8	145.2	181.6	183.4	463.3	603.2	932.6	877.8	418.1
80°	100.8	99.9	106.9	110.4	132.9	126.9	185.9	215.5	326.8	286.8	180.8
82.5°	91.3	91.3	98.3	84.4	92.2	89.5	115.6	123.4	164.3	170.4	108.7
85°	59.1	60.8	92.2	81.7	60.0	54.8	73.9	78.2	102.6	112.1	53.0
87.5°	27.8	30.5	70.3	67.8	40.0	29.6	41.7	44.4	55.7	68.7	31.4
90°	10.2	10.2	15.6	17.3	13.0	12.0	13.8	13.4	14.9	17.6	15.6
92.5°	4.0	4.0	4.9	5.9	5.9	5.9	6.8	6.8	6.8	5.9	5.9
95°	4.9	4.9	5.9	6.8	6.8	6.8	6.8	7.1	7.8	6.8	6.8
97.5°	6.8	6.8	7.8	7.8	8.8	8.8	11.8	11.4	9.8	8.8	7.8
100°	7.8	7.8	8.8	9.8	11.8	20.6	28.5	27.8	25.5	22.5	18.7
102.5°	10.8	10.8	12.8	17.7	26.5	39.3	49.0	48.5	46.2	41.2	38.3
105°	20.6	21.6	26.5	35.3	47.1	61.8	70.7	70.2	68.7	63.8	59.8
107.5°	40.2	41.2	48.1	57.0	71.7	86.3	93.2	93.1	92.3	88.3	85.4
110°	64.8	66.7	72.7	85.4	100.1	111.9	117.8	117.9	118.8	116.8	113.8

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
112.5°	97.2	97.2	104.0	118.8	131.5	140.3	145.3	145.6	147.2	146.2	144.3
115°	137.4	136.5	144.3	156.0	164.9	170.8	175.7	176.2	178.7	175.7	173.7
117.5°	180.6	180.6	185.5	193.3	198.3	201.2	207.1	207.9	211.0	206.1	204.2
120°	220.8	218.8	221.8	228.7	232.6	238.5	241.5	242.3	245.3	240.5	238.5
122.5°	258.2	255.2	256.2	262.0	266.0	271.8	273.8	274.6	277.8	272.8	270.9
125°	292.5	288.5	290.5	293.5	299.3	304.3	307.2	307.6	309.2	304.3	304.3
127.5°	323.9	322.9	322.9	326.8	332.7	333.7	338.6	338.8	339.6	339.6	338.6
130°	356.3	354.3	355.3	359.2	363.2	365.1	370.0	370.8	374.0	374.0	372.0
132.5°	388.7	386.7	385.7	393.5	396.5	397.5	403.4	404.3	408.3	406.3	406.3
135°	421.0	418.1	418.1	424.0	427.0	428.9	434.8	435.8	439.7	438.7	441.7
137.5°	451.5	448.5	450.5	451.5	455.4	459.3	464.2	464.6	466.2	467.2	472.1
140°	479.0	476.0	478.0	480.0	481.9	487.8	490.7	491.1	492.7	494.7	499.5
142.5°	508.4	505.5	507.5	508.4	511.3	515.3	517.2	518.4	523.2	523.2	524.1
145°	539.8	535.9	534.0	536.8	539.8	540.8	545.7	546.9	551.6	550.6	547.7
147.5°	564.3	561.4	560.5	563.3	563.3	564.3	569.3	570.2	574.2	575.2	572.2
150°	584.0	581.0	582.0	582.0	582.0	582.0	586.0	586.5	588.9	591.8	594.8
152.5°	599.7	596.7	596.7	597.7	598.7	598.7	599.7	600.2	602.7	606.5	611.5
155°	617.3	613.5	613.5	615.4	618.3	616.3	614.4	615.4	619.3	624.2	626.2
157.5°	634.0	631.1	631.1	632.0	634.0	633.0	632.0	632.9	636.0	638.0	638.0
160°	650.7	647.8	646.8	643.8	642.8	642.8	645.8	647.0	651.7	648.8	647.8
162.5°	660.5	656.6	656.6	652.7	648.8	650.7	654.7	655.4	658.5	657.6	655.7
165°	668.4	665.5	663.5	663.5	660.5	660.5	659.5	660.5	664.5	667.4	665.5
167.5°	677.2	674.3	671.3	673.3	675.3	672.3	665.5	666.6	671.3	675.3	675.3
170°	685.0	682.2	679.2	679.2	680.2	678.2	673.3	673.9	676.2	681.2	683.1
172.5°	686.0	684.1	682.2	680.2	677.2	677.2	676.2	676.9	679.2	681.2	683.1
175°	687.0	685.0	684.1	682.2	678.2	677.2	677.2	678.2	682.2	683.1	681.2
177.5°	693.9	692.0	687.0	686.0	684.1	682.2	681.2	682.2	686.0	688.0	685.0
180°	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	795.3	795.3	795.3	795.3	795.3	795.3	795.3	795.3	795.3	795.3	795.3
2.5°	793.6	791.9	792.7	793.6	794.4	797.1	798.0	798.0	798.0	797.1	798.8
5°	784.0	782.2	782.2	784.8	787.5	791.0	796.2	800.5	802.3	803.2	803.2
7.5°	773.6	771.8	772.7	777.0	781.3	784.0	789.3	791.9	798.8	798.8	800.5
10°	766.6	768.3	769.2	773.6	777.0	777.0	776.1	774.4	772.7	777.0	775.2
12.5°	762.2	764.9	764.0	769.2	770.9	764.0	753.6	739.7	738.0	739.7	741.4
15°	760.5	760.5	763.1	763.1	754.5	740.6	727.4	728.3	730.1	735.4	735.4
17.5°	760.5	761.4	763.1	757.0	741.4	729.2	726.5	724.0	714.4	711.9	709.2
20°	766.6	764.9	766.6	755.4	741.4	731.8	711.9	692.8	674.4	666.6	663.2
22.5°	781.3	778.8	777.9	766.6	749.3	717.0	678.0	648.4	617.1	606.6	603.2
25°	807.5	806.6	800.5	792.7	744.0	681.5	631.9	585.0	551.1	532.9	533.6
27.5°	853.5	853.5	850.1	815.3	717.0	637.1	570.2	522.4	487.6	470.3	467.6
30°	923.1	924.7	926.5	821.4	674.4	572.0	502.4	470.3	449.3	436.4	435.5
32.5°	1009.1	1018.7	1007.4	814.4	616.2	492.8	449.3	438.0	427.6	418.9	418.1
35°	1123.0	1149.0	1077.8	786.6	551.1	438.9	417.3	409.4	401.5	395.4	396.3
37.5°	1276.0	1301.1	1123.0	739.7	467.6	408.5	398.9	386.8	374.6	361.6	359.8
40°	1456.7	1448.9	1138.6	651.0	415.5	393.7	380.7	365.0	344.2	325.1	321.6
42.5°	1637.5	1585.4	1125.6	541.5	381.6	380.7	362.5	342.4	321.6	305.1	305.1
45°	1840.1	1705.3	1085.6	438.9	354.7	366.8	344.2	323.3	304.3	292.1	291.2
47.5°	2031.2	1817.5	1019.6	365.9	327.7	348.5	330.3	311.2	292.8	282.4	279.9
50°	2255.6	1945.2	969.1	316.3	301.7	330.3	322.4	305.1	287.6	275.5	273.8
52.5°	2482.4	2069.4	930.8	282.4	278.1	316.3	319.0	308.6	290.3	266.9	265.1
55°	2719.7	2225.1	854.4	255.6	257.3	306.0	323.3	315.6	302.5	264.2	262.5
57.5°	2918.6	2368.5	720.5	237.3	240.7	298.1	325.1	310.3	295.5	266.0	263.3
60°	3074.3	2466.7	528.5	222.5	225.9	289.4	317.2	292.1	272.9	266.0	261.7
62.5°	3122.1	2470.2	351.1	205.2	214.7	274.6	303.4	282.4	259.9	263.3	261.7
65°	3002.1	2339.8	251.2	188.6	205.2	257.3	297.2	272.9	253.8	267.8	266.0
67.5°	2632.8	1971.3	201.7	175.6	192.1	238.9	286.0	264.2	248.7	277.3	272.1
70°	2051.2	1414.1	171.3	162.5	178.1	221.6	270.3	254.7	241.6	269.4	262.5
72.5°	1352.4	832.7	151.3	150.4	161.7	206.9	253.0	246.0	230.3	244.2	233.8
75°	705.8	385.9	131.2	136.5	143.4	193.9	237.3	230.3	213.0	218.2	214.7
77.5°	277.3	180.8	113.8	119.9	127.8	174.7	217.3	210.3	195.7	191.2	190.4
80°	152.2	121.7	94.7	102.6	107.8	157.3	196.4	188.6	172.9	170.4	167.7
82.5°	96.5	79.1	78.2	83.5	90.4	140.0	176.4	164.3	151.3	178.1	144.3
85°	45.2	46.9	55.7	62.6	70.3	119.0	153.8	140.9	127.8	124.2	110.4
87.5°	25.2	31.4	36.5	42.6	48.7	83.5	121.7	109.5	95.6	81.7	84.4
90°	12.9	12.9	19.2	18.3	17.2	19.0	67.8	61.7	54.7	27.5	19.8
92.5°	5.9	5.9	5.9	6.8	6.8	5.9	5.9	5.9	4.9	4.0	4.0
95°	6.8	6.8	6.8	7.8	6.8	6.8	6.8	6.8	5.9	4.9	4.9
97.5°	7.8	7.8	8.8	9.8	11.8	8.8	8.8	7.8	7.8	6.8	6.8
100°	18.7	18.7	22.5	25.5	28.5	20.6	11.8	9.8	8.8	7.8	7.8
102.5°	37.3	38.3	41.2	46.2	49.0	39.3	26.5	17.7	12.8	10.8	10.8
105°	59.8	59.8	63.8	68.7	70.7	61.8	47.1	35.3	26.5	21.6	20.6
107.5°	84.4	85.4	88.3	92.3	93.2	86.3	71.7	57.0	48.1	41.2	40.2
110°	114.8	113.8	116.8	118.8	117.8	111.9	100.1	85.4	72.7	66.7	64.8



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	144.3	144.3	146.2	147.2	145.3	140.3	131.5	118.8	104.0	97.2	97.2
115°	174.7	173.7	175.7	178.7	175.7	170.8	164.9	156.0	144.3	136.5	137.4
117.5°	205.2	204.2	206.1	211.0	207.1	201.2	198.3	193.3	185.5	180.6	180.6
120°	238.5	238.5	240.5	245.3	241.5	238.5	232.6	228.7	221.8	218.8	220.8
122.5°	271.8	270.9	272.8	277.8	273.8	271.8	266.0	262.0	256.2	255.2	258.2
125°	304.3	304.3	304.3	309.2	307.2	304.3	299.3	293.5	290.5	288.5	292.5
127.5°	340.5	338.6	339.6	339.6	338.6	333.7	332.7	326.8	322.9	322.9	323.9
130°	373.0	372.0	374.0	374.0	370.0	365.1	363.2	359.2	355.3	354.3	356.3
132.5°	407.3	406.3	406.3	408.3	403.4	397.5	396.5	393.5	385.7	386.7	388.7
135°	442.7	441.7	438.7	439.7	434.8	428.9	427.0	424.0	418.1	418.1	421.0
137.5°	473.0	472.1	467.2	466.2	464.2	459.3	455.4	451.5	450.5	448.5	451.5
140°	501.5	499.5	494.7	492.7	490.7	487.8	481.9	480.0	478.0	476.0	479.0
142.5°	526.0	524.1	523.2	523.2	517.2	515.3	511.3	508.4	507.5	505.5	508.4
145°	549.7	547.7	550.6	551.6	545.7	540.8	539.8	536.8	534.0	535.9	539.8
147.5°	574.2	572.2	575.2	574.2	569.3	564.3	563.3	563.3	560.5	561.4	564.3
150°	598.7	594.8	591.8	588.9	586.0	582.0	582.0	582.0	582.0	581.0	584.0
152.5°	616.3	611.5	606.5	602.7	599.7	598.7	598.7	597.7	596.7	596.7	599.7
155°	629.2	626.2	624.2	619.3	614.4	616.3	618.3	615.4	613.5	613.5	617.3
157.5°	642.8	638.0	638.0	636.0	632.0	633.0	634.0	632.0	631.1	631.1	634.0
160°	653.7	647.8	648.8	651.7	645.8	642.8	642.8	643.8	646.8	647.8	650.7
162.5°	661.5	655.7	657.6	658.5	654.7	650.7	648.8	652.7	656.6	656.6	660.5
165°	669.3	665.5	667.4	664.5	659.5	660.5	660.5	663.5	663.5	665.5	668.4
167.5°	681.2	675.3	675.3	671.3	665.5	672.3	675.3	673.3	671.3	674.3	677.2
170°	688.0	683.1	681.2	676.2	673.3	678.2	680.2	679.2	679.2	682.2	685.0
172.5°	688.0	683.1	681.2	679.2	676.2	677.2	677.2	680.2	682.2	684.1	686.0
175°	686.0	681.2	683.1	682.2	677.2	677.2	678.2	682.2	684.1	685.0	687.0
177.5°	689.0	685.0	688.0	686.0	681.2	682.2	684.1	686.0	687.0	692.0	693.9
180°	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0

(END OF REPORT)