

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: STREETWORKS

Report Number: P240319

Luminaire Tested: **UTLD-AF24-50-D-U-T2U-FP**

Issue Date: 5/28/2020

Test Information

Test Method: LM-79-08
Report Number: P240319
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-28)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-AF24-50-D-U-T2U-FP
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
AND FROSTED LENS PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4937.8 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.96')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U3 - G3

Input Watts (W): 54
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: 28.75 FT



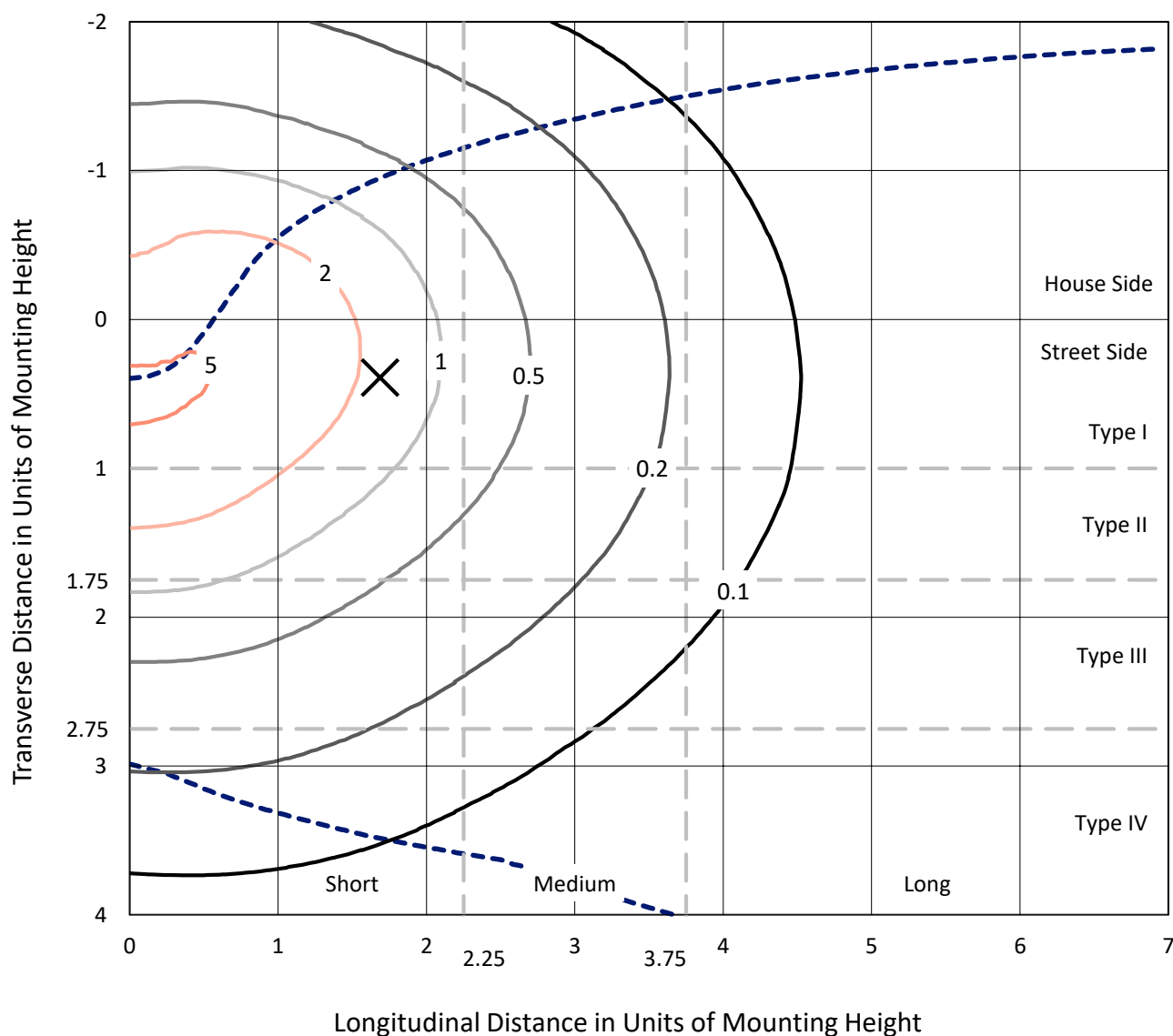
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

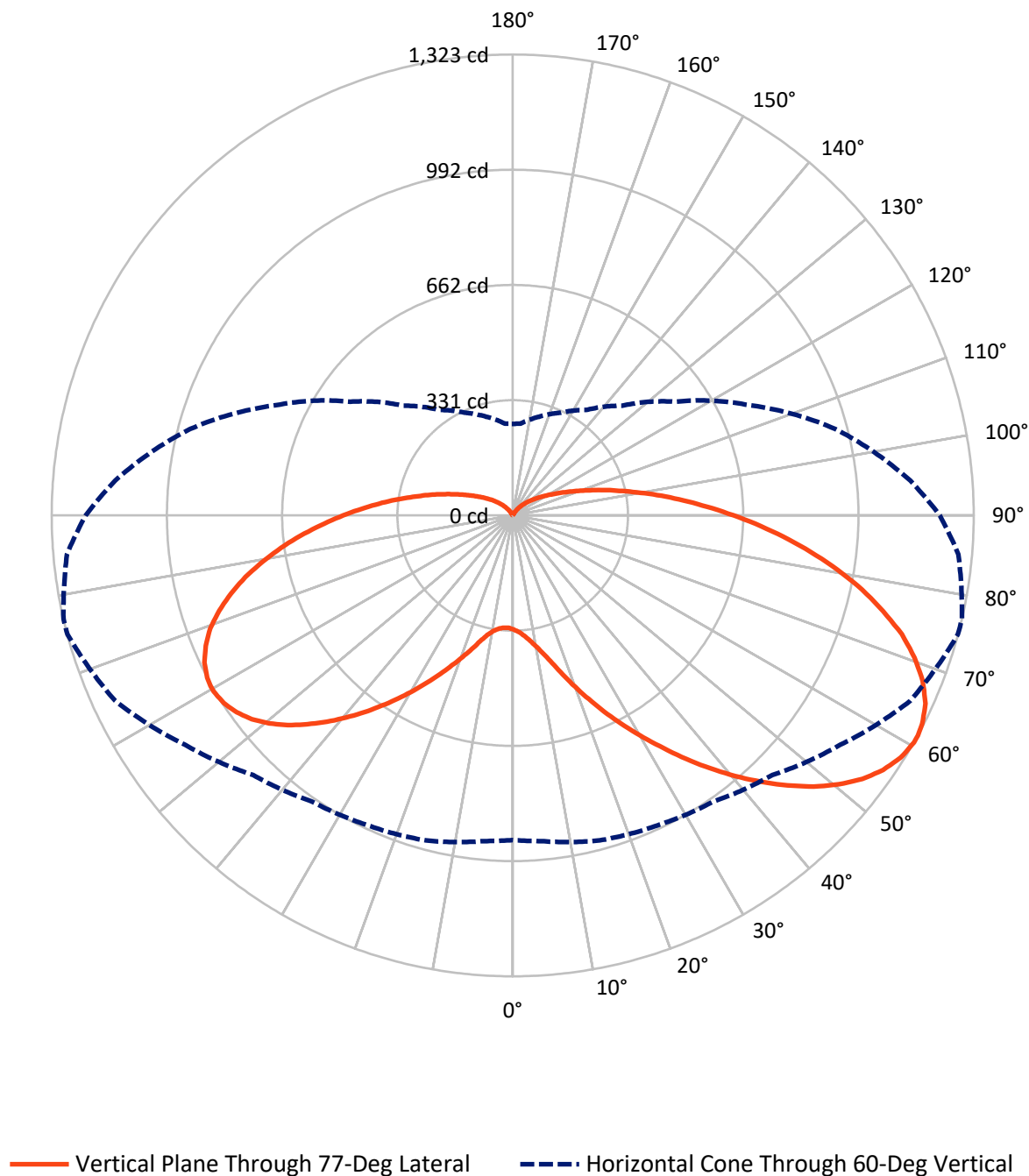


Based on 10 foot mounting height. Maximum calculated value = 5.4 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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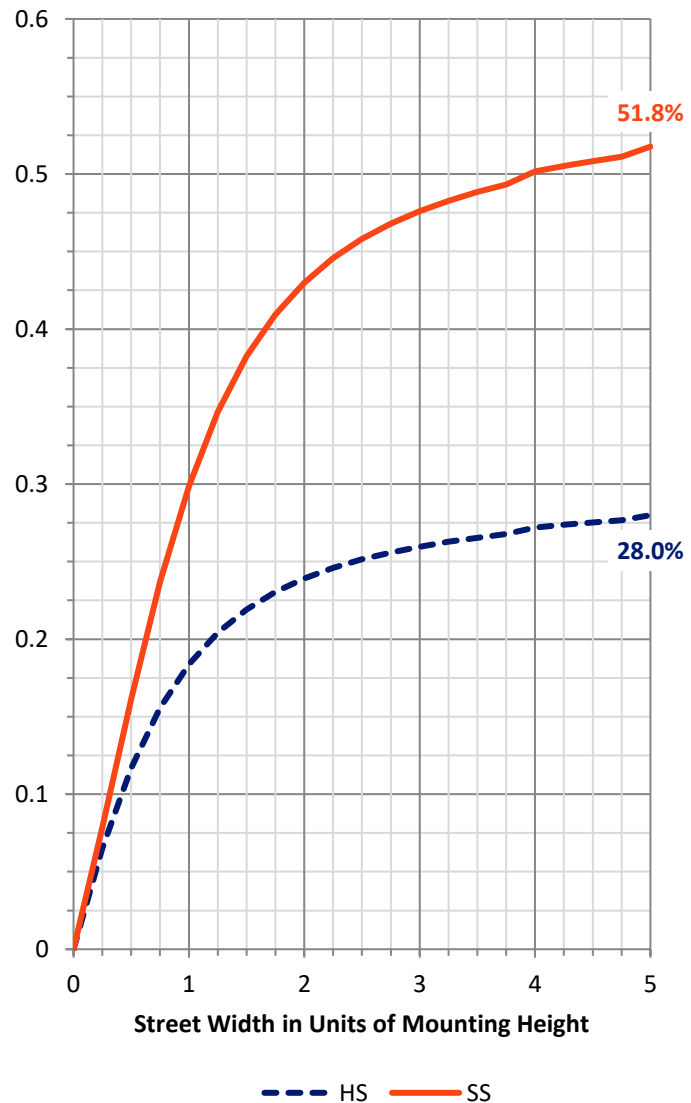
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1468.4	315.4	1783.8
	% Fixture	29.7	6.4	36.1
Street Side	Lumens	2708.9	445.1	3154.0
	% Fixture	54.9	9.0	63.9
Total	Lumens	4177.3	760.5	4937.8
	% Fixture	84.6	15.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.6	0.7
10°-20°	115.0	2.3
20°-30°	246.4	5.0
30°-40°	424.8	8.6
40°-50°	616.7	12.5
50°-60°	758.9	15.4
60°-70°	786.3	15.9
70°-80°	685.6	13.9
80°-90°	511.0	10.3
90°-100°	337.8	6.8
100°-110°	206.2	4.2
110°-120°	118.1	2.4
120°-130°	62.4	1.3
130°-140°	27.6	0.6
140°-150°	7.7	0.2
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	4177.3	84.6
0°-180°	4937.8	100.0

Coefficient of Utilization



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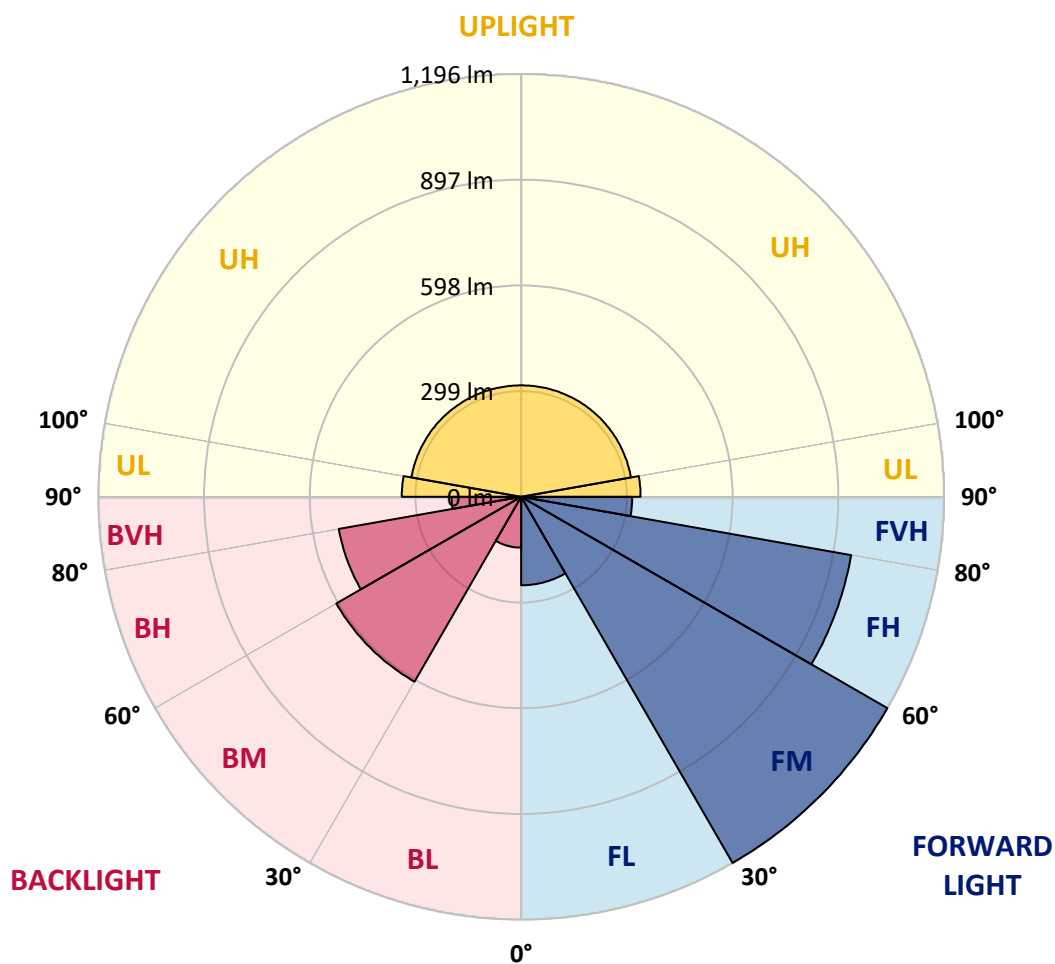
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	250.2	5.1			
FM	(30°-60°)	1196.3	24.2			
FH	(60°-80°)	948.2	19.2			G1/1800
FVH	(80°-90°)	314.1	6.4			G3/500
BL	(0°-30°)	143.8	2.9	B1/500		
BM	(30°-60°)	604.0	12.2	B1/1000		
BH	(60°-80°)	523.7	10.6	B2/1000		G2/1000
BVH	(80°-90°)	196.9	4.0			G2/225
UL	(90°-100°)	337.8	6.8		U3/500	
UH	(100°-180°)	315.4	6.4		U3/500	

BUG Rating: B2-U3-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	327.8	327.8	327.8	327.8	327.8	327.8	327.8	327.8	327.8	327.8	327.8
2.5°	356.0	356.0	354.7	354.0	351.5	348.2	345.0	340.5	336.0	334.8	332.3
5°	386.8	386.8	385.4	382.3	377.8	371.9	365.0	357.9	348.9	347.0	339.9
7.5°	421.4	420.1	416.9	413.7	407.2	399.0	389.3	378.4	366.2	363.7	353.4
10°	456.0	456.0	452.8	447.6	440.0	429.0	417.6	404.1	388.0	384.8	371.3
12.5°	495.8	494.5	489.4	485.5	476.5	464.3	451.5	434.9	415.6	412.4	395.1
15°	538.1	537.5	533.0	524.7	514.3	502.9	489.4	471.4	450.9	445.8	426.5
17.5°	585.5	581.8	579.2	570.2	559.2	544.5	534.3	515.7	493.2	487.4	463.7
20°	629.2	629.8	624.1	616.3	606.1	595.9	581.0	564.4	540.0	532.3	505.4
22.5°	678.5	678.5	672.8	665.1	654.8	649.7	633.0	615.7	586.3	580.4	550.2
25°	729.9	727.9	722.2	715.1	710.0	703.6	688.1	667.7	637.5	631.8	597.7
27.5°	777.3	778.0	770.9	765.2	764.6	756.2	743.4	721.6	692.6	684.4	647.7
30°	826.0	826.7	821.6	814.6	815.2	810.1	799.1	776.7	749.1	739.5	700.4
32.5°	874.8	873.5	866.4	865.8	863.9	860.1	851.7	837.6	807.5	797.2	756.8
35°	918.4	918.4	911.3	913.9	910.1	909.5	906.8	896.0	869.1	858.8	815.2
37.5°	958.8	958.2	954.3	955.0	952.5	951.8	956.3	955.0	930.0	921.7	876.8
40°	996.0	992.2	989.0	991.5	989.0	992.9	1003.7	1011.4	990.3	983.9	938.4
42.5°	1021.7	1020.4	1019.2	1023.7	1019.8	1028.8	1046.1	1064.7	1051.8	1045.5	999.9
45°	1042.2	1039.6	1042.2	1046.7	1044.1	1055.7	1086.5	1114.7	1114.7	1105.7	1058.9
47.5°	1050.6	1050.0	1056.3	1060.2	1058.9	1077.5	1118.6	1161.6	1170.5	1163.4	1115.9
50°	1048.6	1048.6	1058.9	1064.7	1065.9	1090.4	1142.3	1198.7	1219.3	1213.4	1166.7
52.5°	1036.5	1036.5	1051.8	1058.9	1064.1	1094.9	1158.3	1230.1	1260.3	1257.1	1210.3
55°	1013.3	1012.7	1032.6	1041.6	1052.5	1090.4	1164.7	1250.7	1292.4	1289.8	1247.5
57.5°	977.4	978.8	1003.1	1017.2	1031.3	1076.2	1161.6	1260.9	1314.2	1312.9	1271.2
60°	931.9	938.4	965.9	981.9	1003.1	1053.7	1148.1	1259.0	1322.5	1323.2	1284.0
61°	912.7	919.1	947.3	966.6	989.0	1042.9	1140.4	1255.2	1321.9	1323.2	1285.3
62.5°	881.9	885.8	919.1	942.1	966.6	1023.0	1124.9	1244.9	1317.4	1319.3	1283.4
65°	824.2	831.2	865.2	894.1	922.9	984.5	1091.6	1218.6	1298.7	1302.0	1268.7
67.5°	760.7	769.0	808.1	841.5	874.8	940.3	1050.6	1180.8	1265.4	1269.3	1240.4
70°	697.9	708.1	749.1	782.5	823.5	890.9	1000.5	1132.0	1219.9	1223.8	1198.7
72.5°	633.7	645.2	687.5	726.0	767.7	836.4	944.7	1074.3	1162.8	1167.9	1144.9
75°	569.6	584.3	624.1	668.3	710.0	780.5	887.0	1012.7	1092.9	1098.0	1080.0
77.5°	511.8	524.7	563.7	610.0	655.5	722.8	824.2	939.6	1023.0	1025.5	1009.6
80°	453.5	466.9	509.2	552.9	601.0	665.7	759.3	865.8	938.4	945.4	928.7
82.5°	401.5	415.0	454.7	502.2	548.4	610.6	693.4	790.1	854.3	862.0	850.5
85°	357.9	367.5	406.6	452.1	497.1	556.1	635.6	719.6	777.3	778.7	767.1
87.5°	314.3	324.6	361.7	406.0	451.5	505.4	573.4	645.9	692.6	697.1	685.6
90°	278.3	284.8	320.1	363.7	408.0	457.3	516.3	580.4	618.3	618.3	609.3
92.5°	246.9	250.1	285.4	327.1	369.4	411.7	463.7	513.1	545.8	545.1	534.9
95°	218.1	221.9	251.4	291.8	332.9	371.9	414.3	453.5	477.8	479.2	466.9
97.5°	192.4	195.0	222.6	262.3	298.9	335.4	370.7	402.1	418.2	418.8	409.8
100°	171.9	171.9	198.1	233.4	268.7	301.5	331.5	355.3	362.3	361.7	354.0
102.5°	154.0	152.6	175.1	209.1	241.8	270.1	294.4	309.7	315.6	313.6	308.5
105°	136.6	137.9	155.2	187.3	216.8	241.8	260.4	273.2	273.2	271.9	266.8
107.5°	123.8	123.2	136.6	166.1	194.4	216.1	230.9	237.3	235.4	233.4	230.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
110°	111.0	111.0	121.2	148.8	173.2	193.0	203.4	207.1	201.4	200.7	200.1
112.5°	100.0	100.0	108.4	131.4	154.6	171.2	179.6	180.2	173.8	173.2	173.8
115°	91.8	91.8	96.2	116.7	137.9	152.6	159.7	156.5	150.1	149.5	151.4
117.5°	83.4	83.4	87.3	102.0	121.8	135.3	139.8	135.3	129.5	129.5	132.2
120°	76.3	76.3	77.6	89.2	107.1	118.7	121.8	116.7	112.2	112.2	114.8
122.5°	69.9	69.3	69.9	77.6	92.4	103.2	104.5	100.0	96.9	97.5	101.4
125°	63.5	63.5	62.8	67.3	79.5	88.5	89.8	84.7	84.7	84.7	87.9
127.5°	57.7	57.7	56.5	58.4	67.3	75.1	75.1	71.2	72.4	73.8	76.3
130°	52.6	52.6	51.4	51.4	55.8	62.2	62.2	59.6	62.8	63.5	66.1
132.5°	47.5	46.9	45.5	43.6	45.5	49.4	49.4	48.8	53.9	54.5	56.5
135°	42.4	41.7	40.4	37.2	36.5	37.8	37.8	39.8	44.9	45.5	48.1
137.5°	36.5	36.5	34.7	31.4	27.6	27.6	27.6	31.4	36.5	37.8	39.1
140°	31.4	31.4	29.5	25.7	20.6	18.6	19.2	24.3	29.5	30.2	31.4
142.5°	25.7	25.7	23.7	19.8	14.7	10.9	12.2	17.3	21.8	23.1	24.3
145°	19.8	19.8	18.0	14.1	9.0	5.7	7.1	12.2	15.3	16.1	17.3
147.5°	14.7	14.7	12.8	9.6	5.1	1.9	3.9	7.1	10.2	10.9	12.2
150°	9.6	9.6	8.4	5.1	2.6	0.0	1.3	3.9	5.7	6.4	7.1
152.5°	5.1	5.1	3.9	2.6	0.6	0.0	0.0	1.3	2.6	2.6	3.2
155°	2.6	1.9	1.3	0.6	0.0	0.0	0.0	0.0	0.6	0.6	1.3
157.5°	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	327.8	327.8	327.8	327.8	327.8	327.8	327.8	327.8	327.8	327.8	327.8
2.5°	329.7	327.1	321.9	318.1	313.6	309.7	306.6	304.0	303.4	301.5	302.1
5°	335.4	330.9	321.3	313.0	304.0	296.3	289.9	285.4	282.2	280.9	279.7
7.5°	346.4	338.6	324.6	311.1	298.2	286.7	276.4	270.1	264.8	262.3	262.3
10°	361.7	352.1	332.3	314.3	296.3	280.9	268.1	257.8	251.4	248.2	248.9
12.5°	382.9	370.1	345.7	321.3	299.5	279.7	262.3	251.4	243.8	239.9	239.9
15°	413.1	399.0	366.2	334.8	305.2	280.9	262.3	250.1	244.4	241.8	241.1
17.5°	449.6	431.0	393.8	356.0	318.8	288.6	270.1	258.5	250.1	246.9	246.3
20°	486.8	465.6	422.1	379.7	338.0	305.2	282.8	267.5	256.6	252.1	251.4
22.5°	529.2	504.7	453.5	403.5	358.5	327.1	295.6	275.8	263.0	257.2	256.6
25°	572.8	545.8	488.0	431.7	386.1	348.2	311.7	284.2	268.7	261.7	261.1
27.5°	618.9	590.0	524.0	459.8	412.4	368.2	326.4	291.8	273.8	266.2	265.6
30°	670.2	635.6	563.1	492.6	438.7	386.8	340.5	300.8	279.0	270.1	268.7
32.5°	723.4	685.0	602.9	527.2	463.1	403.5	352.1	310.5	284.2	273.8	273.2
35°	779.3	736.3	643.9	561.2	484.9	418.2	362.3	318.8	288.0	277.1	275.8
37.5°	837.6	790.1	686.9	593.3	506.1	431.0	370.7	325.8	291.8	279.0	277.7
40°	896.0	841.5	729.3	625.9	525.3	441.9	377.8	330.9	294.4	280.9	279.7
42.5°	952.5	896.6	772.2	656.1	542.0	450.2	382.9	335.4	297.0	282.2	280.3
45°	1007.6	949.2	813.2	681.8	556.1	456.6	386.1	338.0	300.1	282.2	280.3
47.5°	1062.7	998.6	853.7	704.2	566.3	461.1	387.4	339.3	302.1	281.5	279.7
50°	1112.8	1042.9	888.3	724.1	574.0	462.5	386.8	338.6	302.7	280.3	277.7
52.5°	1153.8	1082.0	917.2	738.3	578.5	461.8	384.8	337.4	302.1	277.7	275.8
55°	1189.1	1112.2	938.4	747.2	578.5	458.6	381.7	334.8	299.5	274.5	271.9
57.5°	1212.2	1134.6	952.5	751.1	575.9	452.8	375.8	330.3	297.0	270.1	267.5
60°	1225.7	1145.5	958.2	748.5	568.9	445.1	369.4	325.2	293.1	264.8	262.3
61°	1226.9	1146.7	958.2	745.9	565.7	441.9	366.8	323.3	291.1	263.0	259.7
62.5°	1225.7	1145.5	955.0	740.1	559.2	436.1	361.7	318.8	287.3	258.5	256.6
65°	1212.8	1133.3	942.1	725.4	545.1	424.6	352.7	311.7	280.9	252.1	248.9
67.5°	1185.3	1108.9	919.1	704.9	528.5	411.1	342.5	303.4	273.8	244.4	240.5
70°	1145.5	1073.0	890.2	681.2	509.8	396.4	330.9	293.8	264.8	236.7	231.5
72.5°	1096.1	1029.4	849.8	651.0	488.0	380.9	318.8	283.5	255.2	227.7	221.3
75°	1034.5	973.6	805.0	617.7	463.7	363.0	306.0	271.9	244.4	218.1	211.0
77.5°	966.6	912.1	756.2	581.0	439.4	345.7	291.8	259.1	232.8	207.1	200.1
80°	892.1	844.7	701.0	542.6	413.7	327.8	277.7	246.9	221.3	196.3	187.9
82.5°	815.8	773.5	645.9	503.5	386.1	309.1	262.3	233.4	208.5	184.7	175.7
85°	738.3	701.6	590.0	463.1	358.5	290.5	248.2	220.0	195.0	172.6	164.8
87.5°	661.2	629.8	533.0	424.6	333.5	272.6	233.4	206.5	182.2	160.3	152.6
90°	589.4	562.5	480.4	388.6	308.5	254.0	218.7	193.0	169.3	147.5	142.4
92.5°	521.4	498.4	429.7	350.9	283.5	236.0	204.0	178.9	155.2	135.3	132.2
95°	459.8	438.0	383.5	317.5	260.4	220.0	189.9	166.1	142.4	123.8	121.2
97.5°	399.6	386.1	340.5	285.4	237.9	202.6	175.7	153.2	130.2	112.8	111.6
100°	349.5	335.4	298.9	255.9	217.4	187.3	162.2	140.5	118.7	102.6	102.0
102.5°	304.0	294.4	263.6	230.9	197.5	170.6	148.8	128.3	107.1	93.0	93.0
105°	265.6	256.6	233.4	205.2	178.3	156.5	135.3	115.5	95.5	83.4	84.0
107.5°	228.9	223.2	204.0	181.5	160.3	141.8	122.5	103.2	84.0	74.4	75.1



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	199.5	193.6	178.9	162.2	144.3	128.3	110.3	91.8	73.1	67.3	67.3
112.5°	173.2	169.3	157.1	143.6	129.5	115.5	99.4	80.8	64.1	59.6	60.3
115°	151.4	148.1	137.9	127.7	116.1	103.9	88.5	70.6	55.8	53.9	53.9
117.5°	131.4	129.5	121.2	112.2	103.2	92.4	78.3	61.0	48.1	48.1	48.1
120°	114.8	112.8	106.5	98.8	91.0	81.4	67.3	52.0	42.4	42.4	43.0
122.5°	100.7	99.4	93.0	87.3	80.2	70.6	57.7	43.6	37.2	37.8	37.8
125°	87.9	86.5	82.1	75.7	69.3	60.3	48.8	35.9	32.0	33.3	33.3
127.5°	76.3	75.7	71.2	65.5	59.0	51.4	39.8	30.2	28.2	29.5	29.5
130°	66.7	66.1	61.6	55.8	50.0	41.7	32.0	25.1	24.3	25.7	25.7
132.5°	57.1	56.5	52.6	46.9	41.0	33.3	25.1	19.8	21.2	22.4	22.4
135°	48.1	47.5	44.9	38.5	33.3	26.3	19.2	16.7	18.0	19.2	19.2
137.5°	39.8	39.1	36.5	30.8	25.1	19.2	14.1	13.5	14.7	16.1	16.1
140°	32.0	31.4	28.8	23.7	18.0	13.5	9.6	10.9	12.2	13.5	13.5
142.5°	24.3	24.3	22.4	18.0	12.2	8.4	6.4	8.4	9.6	10.9	10.9
145°	18.0	18.0	15.3	12.2	7.1	4.5	3.9	5.7	7.7	8.4	8.4
147.5°	12.2	12.2	10.2	7.7	3.9	1.9	2.6	3.9	5.1	5.7	6.4
150°	7.1	7.1	5.7	3.9	1.9	0.6	0.6	2.6	3.2	3.9	3.9
152.5°	3.2	3.2	2.6	1.3	0.6	0.6	0.6	0.6	1.9	1.9	1.9
155°	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6
157.5°	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)