

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: P239937

Luminaire Tested: **UTLD-AF24-100-D-U-T4W-A-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239937
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-16)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-AF24-100-D-U-T4W-A-7030
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 3000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS AND REFRACTOR PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6402 lumens
Efficiency: N/A
Efficacy: 66.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.96')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B1 - U4 - G3

Input Watts (W): 96
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



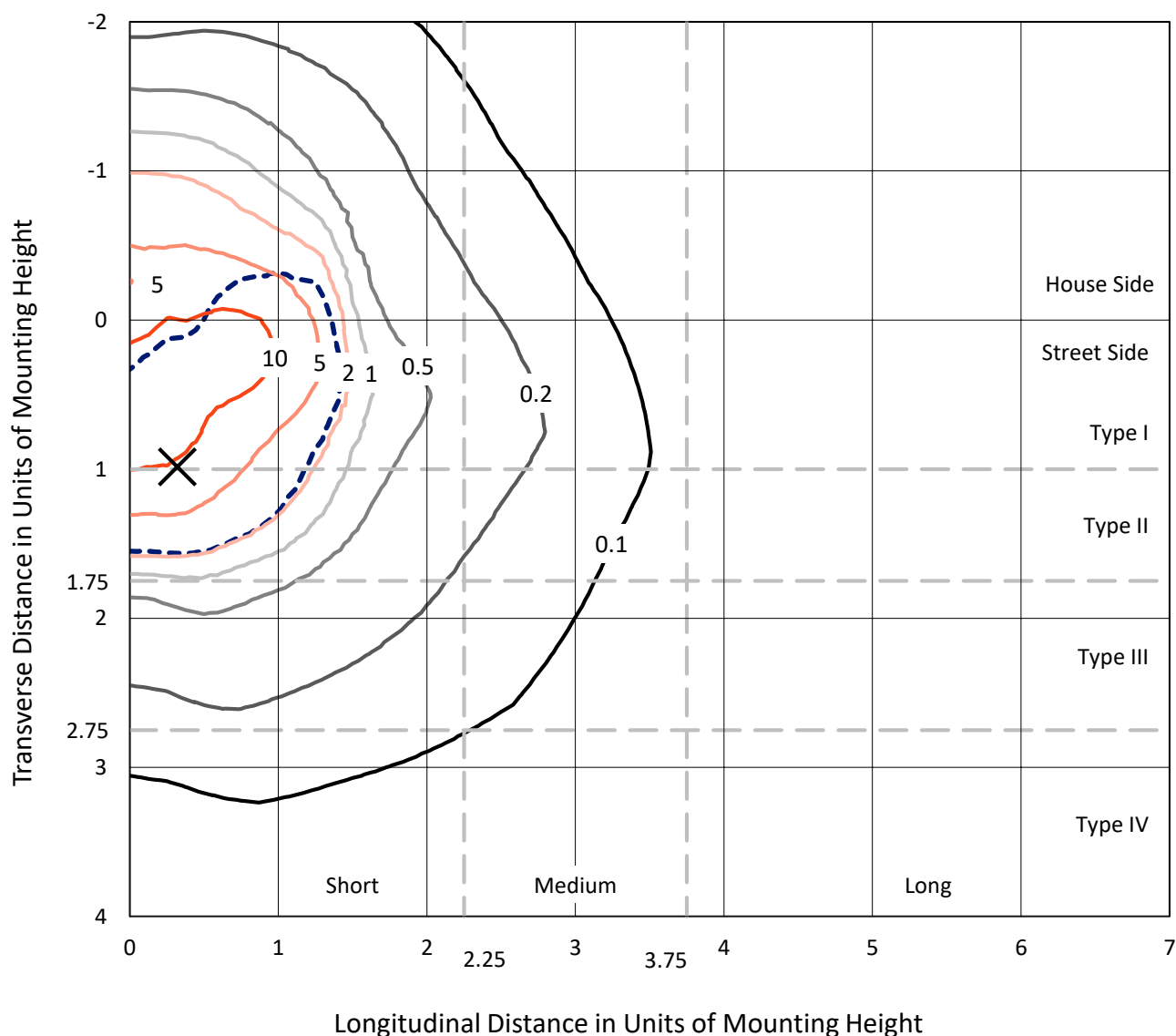
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

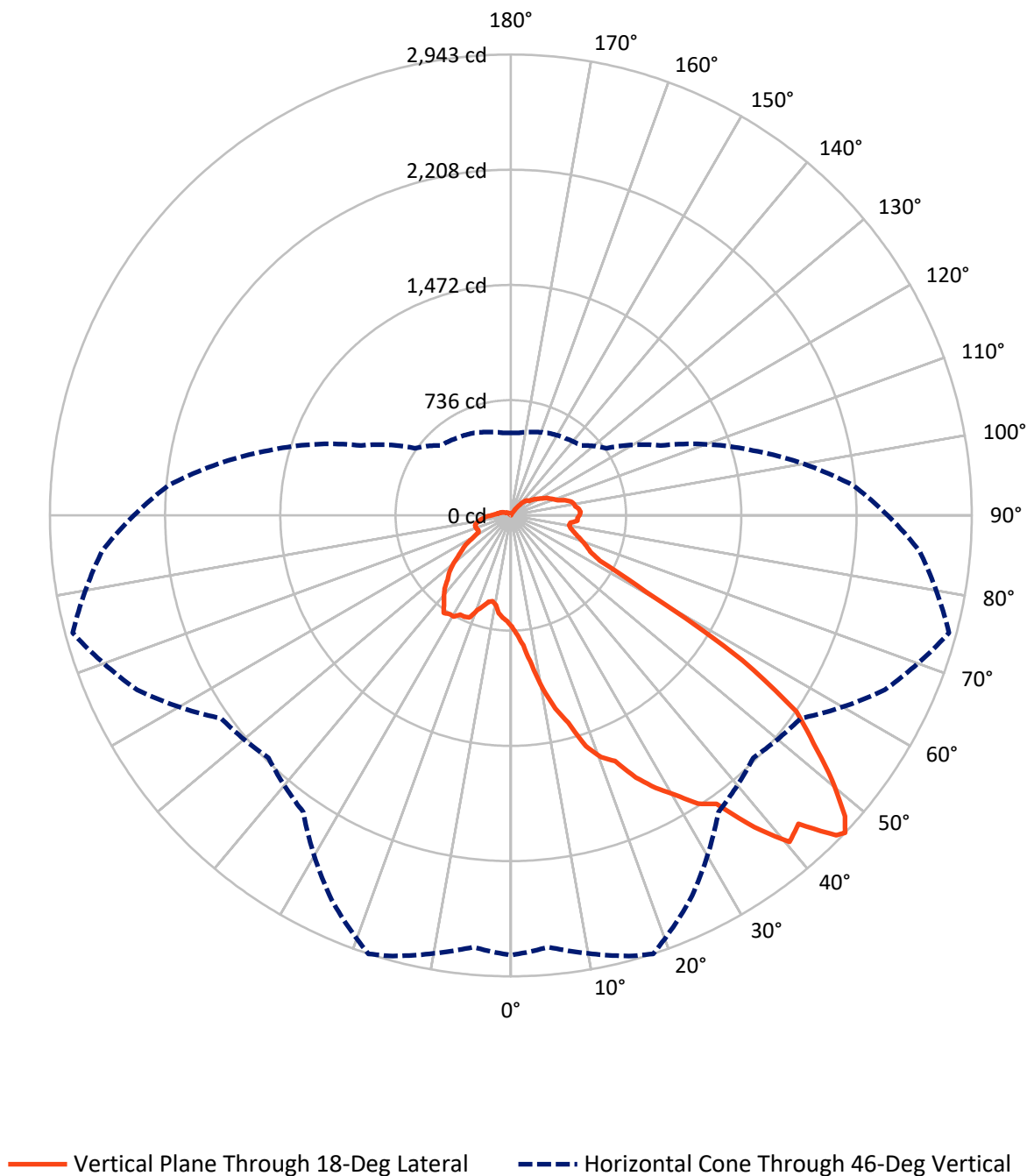


Based on 10 foot mounting height. Maximum calculated value = 15.6 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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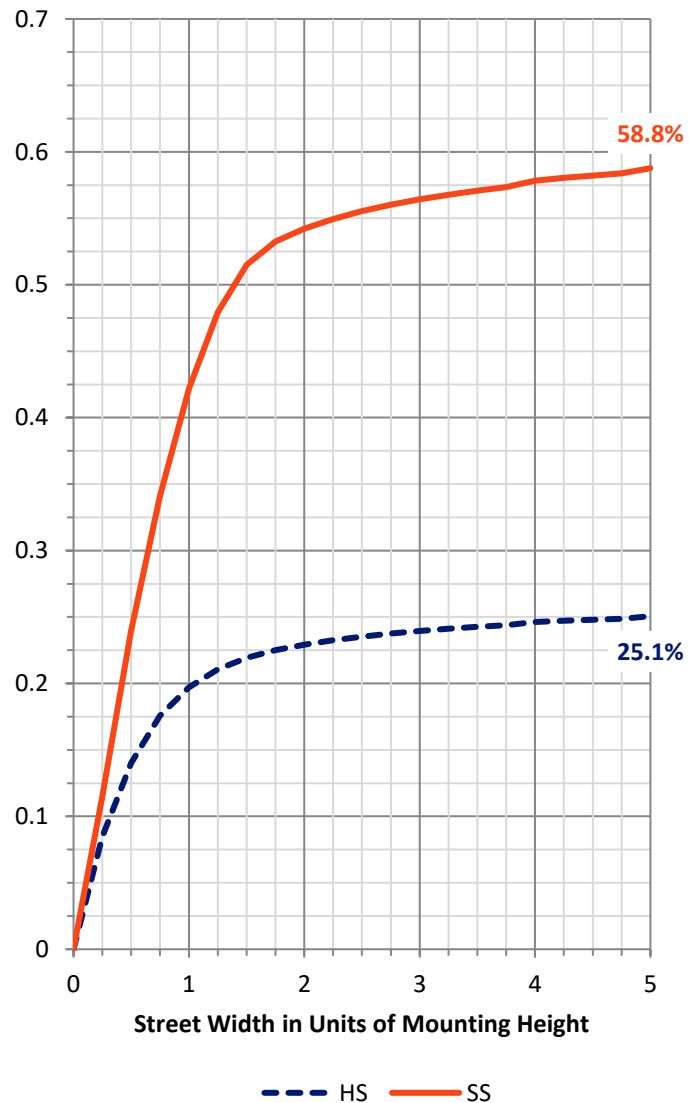
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1665.3	207.3	1872.6
	% Fixture	26.0	3.2	29.3
Street Side	Lumens	3907.9	621.5	4529.4
	% Fixture	61.0	9.7	70.7
Total	Lumens	5573.2	828.9	6402.0
	% Fixture	87.1	12.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.0	1.2
10°-20°	309.9	4.8
20°-30°	630.3	9.8
30°-40°	1031.9	16.1
40°-50°	1343.1	21.0
50°-60°	1005.0	15.7
60°-70°	418.6	6.5
70°-80°	380.8	5.9
80°-90°	377.5	5.9
90°-100°	303.6	4.7
100°-110°	215.8	3.4
110°-120°	145.9	2.3
120°-130°	93.9	1.5
130°-140°	55.6	0.9
140°-150°	13.5	0.2
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5573.2	87.1
0°-180°	6402.0	100.0

Coefficient of Utilization



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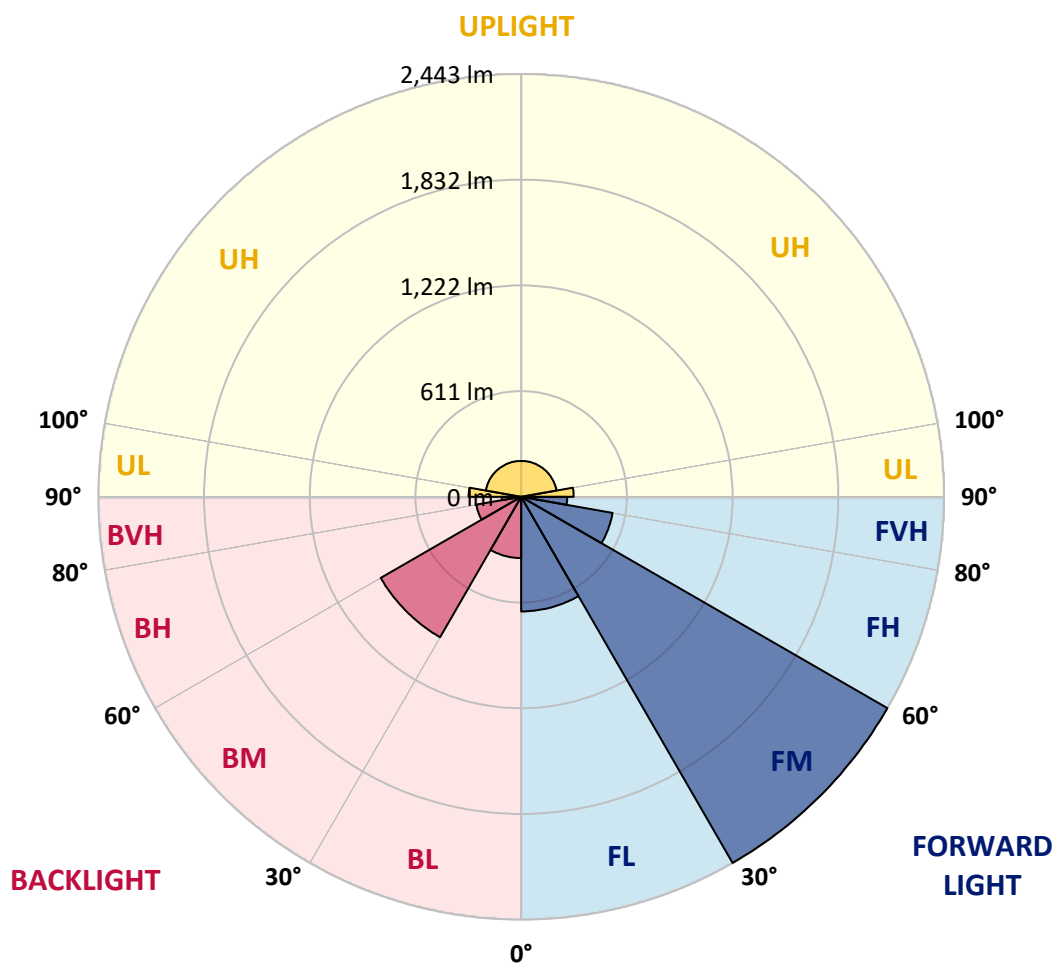
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	662.2	10.3			
FM	(30°-60°)	2443.3	38.2			
FH	(60°-80°)	536.2	8.4			G0/660
FVH	(80°-90°)	266.2	4.2			G3/500
BL	(0°-30°)	354.0	5.5	B1/500		
BM	(30°-60°)	936.7	14.6	B1/1000		
BH	(60°-80°)	263.2	4.1	B1/500		G1/500
BVH	(80°-90°)	111.3	1.7			G2/225
UL	(90°-100°)	303.6	4.7		U3/500	
UH	(100°-180°)	207.3	3.2		U3/500	

BUG Rating: B1-U4-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	18°	25°	35°	45°	55°	65°	75°	85°
0°	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1
2.5°	762.2	758.6	760.4	760.4	756.0	754.2	749.8	744.5	737.4	729.4	722.4
5°	837.4	834.8	833.9	833.0	832.1	820.6	807.3	795.8	783.4	770.2	751.6
7.5°	976.4	975.5	970.2	964.0	955.2	935.7	911.8	900.3	883.5	863.1	834.8
10°	1149.9	1137.5	1126.0	1126.0	1108.3	1101.2	1094.2	1077.3	1066.7	1038.4	997.7
12.5°	1249.1	1242.9	1266.8	1265.0	1288.0	1329.6	1343.8	1358.0	1293.3	1211.0	1134.9
15°	1342.0	1342.0	1372.1	1373.0	1441.2	1533.2	1603.2	1535.0	1416.4	1283.6	1181.8
17.5°	1469.5	1477.5	1520.8	1550.0	1642.1	1800.6	1752.8	1627.1	1450.0	1291.6	1177.4
20°	1525.3	1543.0	1609.4	1647.4	1789.9	1939.6	1893.5	1745.7	1540.3	1359.7	1244.6
22.5°	1559.8	1572.2	1650.1	1704.1	1886.4	2013.0	2005.9	1856.3	1662.5	1436.7	1304.0
25°	1701.4	1709.4	1797.9	1853.7	2046.7	2087.4	2006.8	1903.3	1712.9	1478.3	1361.5
27.5°	1749.2	1750.1	1886.4	1970.5	2129.0	2114.8	2010.4	1967.0	1870.5	1685.5	1606.7
30°	1813.8	1812.1	1980.3	2070.6	2167.1	2106.9	2022.8	2060.8	2067.0	1916.5	1773.1
32.5°	1893.5	1886.4	2087.4	2195.4	2226.4	2105.1	2043.1	2107.7	2201.6	2045.8	1891.7
35°	1967.0	1973.2	2189.2	2262.7	2291.9	2115.7	2053.7	2195.4	2385.7	2265.3	2006.8
37.5°	2439.7	2432.6	2500.8	2526.5	2453.0	2152.0	2094.5	2304.3	2583.1	2530.9	2253.8
40°	2546.8	2522.9	2726.5	2741.6	2612.3	2280.4	2206.0	2369.8	2738.9	2831.9	2611.4
42.5°	2456.5	2450.3	2672.5	2692.9	2599.9	2367.1	2279.5	2422.9	2756.6	2832.8	2466.3
45°	2854.0	2821.2	2937.2	2913.3	2655.7	2329.9	2234.3	2363.6	2695.5	2908.9	2618.5
46°	2808.9	2767.2	2913.3	2943.4	2708.8	2311.4	2189.2	2259.1	2634.5	2896.5	2620.3
47.5°	2670.8	2674.3	2869.1	2870.8	2654.8	2314.0	2114.8	2196.3	2498.1	2738.0	2369.8
50°	2331.7	2291.9	2647.7	2659.2	2453.0	2214.0	2038.7	2075.9	2363.6	2510.5	2136.1
52.5°	2245.0	2214.0	2423.8	2422.0	2236.1	2061.7	1899.7	1938.7	2263.5	2430.9	2163.5
55°	2062.6	2052.0	2228.1	2213.1	2083.0	1874.0	1758.1	1782.0	1877.6	1812.1	1078.2
57.5°	1370.3	1411.1	1715.6	1744.8	1745.7	1647.4	1502.2	1281.8	1109.2	943.7	527.6
60°	559.5	606.4	945.4	989.7	1054.3	1234.9	1088.8	856.9	716.2	744.5	455.9
62.5°	422.3	440.0	631.2	639.1	663.9	751.6	742.7	621.4	611.7	673.7	436.4
65°	393.0	409.0	559.5	556.8	545.3	569.2	567.4	539.1	549.7	627.6	434.7
67.5°	371.8	387.7	519.6	520.5	510.8	515.2	518.7	504.6	529.4	609.9	446.2
70°	350.6	367.4	478.0	480.7	487.8	503.7	509.9	499.3	521.4	587.8	445.3
72.5°	324.9	343.5	439.1	443.5	457.7	494.0	515.2	512.6	515.2	555.0	443.5
75°	316.0	334.6	406.3	414.3	434.7	489.5	544.4	526.7	509.0	533.8	432.9
77.5°	277.1	298.3	371.8	389.5	434.7	503.7	563.9	557.7	524.9	519.6	421.4
80°	266.5	286.8	357.6	377.1	425.8	516.1	583.4	584.3	567.4	539.1	432.9
82.5°	268.2	287.7	361.2	383.3	439.1	524.9	567.4	589.6	591.3	555.9	446.2
85°	315.1	333.7	403.7	426.7	475.4	522.3	555.0	571.0	586.9	586.9	489.5
87.5°	336.4	353.2	406.3	426.7	473.6	528.5	523.2	549.7	565.7	586.0	504.6
90°	355.9	366.5	421.4	440.8	465.6	509.9	495.7	487.8	501.0	522.3	472.7
92.5°	370.0	379.8	428.5	445.3	466.5	476.3	455.0	432.0	464.7	481.6	440.0
95°	395.7	404.6	430.2	436.4	433.8	442.6	409.9	401.0	415.2	433.8	407.2
97.5°	378.0	384.2	409.0	416.1	414.3	401.0	368.3	362.9	375.3	389.5	360.3
100°	378.0	386.0	404.6	409.0	398.4	364.7	331.1	329.3	337.3	344.4	316.9
102.5°	386.0	389.5	393.0	395.7	376.2	339.0	314.3	308.1	310.7	314.3	289.5
105°	365.6	366.5	368.3	360.3	344.4	316.0	291.2	280.6	289.5	300.1	279.7
107.5°	316.0	315.1	316.0	313.4	311.6	294.8	277.1	263.8	263.8	267.3	247.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	18°	25°	35°	45°	55°	65°	75°	85°
110°	294.8	295.7	294.8	294.8	286.8	275.3	258.5	244.3	237.2	239.0	221.3
112.5°	270.0	270.0	270.9	271.8	267.3	256.7	239.9	225.7	216.9	215.1	198.3
115°	270.0	267.3	259.4	258.5	249.6	234.6	222.2	204.5	198.3	198.3	187.7
117.5°	240.8	239.0	232.8	231.0	225.7	213.3	206.3	192.1	187.7	185.0	175.3
120°	213.3	213.3	210.7	209.8	204.5	197.4	182.4	177.0	173.5	177.0	170.9
122.5°	198.3	198.3	193.9	192.1	185.9	180.6	167.3	157.6	151.4	158.5	154.9
125°	182.4	181.5	175.3	174.4	163.8	163.8	156.7	144.3	127.5	134.6	132.8
127.5°	160.2	159.3	151.4	150.5	144.3	151.4	149.6	133.7	110.7	115.1	115.1
130°	154.0	152.3	145.2	143.4	137.2	135.4	142.5	116.9	103.6	108.0	107.1
132.5°	154.0	152.3	143.4	140.8	131.0	121.3	128.4	101.8	99.1	104.5	103.6
135°	139.0	139.0	131.0	125.7	116.0	98.3	100.0	78.8	86.8	94.7	94.7
137.5°	117.7	117.7	109.8	108.0	96.5	78.8	70.8	60.2	73.5	82.3	83.2
140°	92.1	92.1	85.9	82.3	74.4	52.2	32.8	37.2	55.8	63.7	66.4
142.5°	66.4	65.5	60.2	55.8	47.8	28.3	10.6	21.2	32.8	43.4	46.9
145°	46.0	45.1	39.0	36.3	29.2	13.3	2.7	8.9	19.5	25.7	30.1
147.5°	27.4	27.4	23.0	22.1	15.0	3.5	1.8	2.7	9.7	15.9	18.6
150°	15.9	15.9	11.5	8.9	3.5	0.9	0.9	0.9	2.7	7.1	8.9
152.5°	3.5	3.5	2.7	1.8	1.8	0.9	0.0	0.9	0.9	0.9	1.8
155°	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
157.5°	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.9	0.9	0.9	0.9
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9
162.5°	0.9	0.9	0.0	0.0	0.9	0.0	0.9	0.0	0.9	0.9	0.9
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°	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1
2.5°	718.8	715.3	707.3	697.6	690.5	684.3	679.9	677.2	675.4	671.0	672.8
5°	745.4	738.3	719.7	704.6	688.7	674.5	663.9	656.8	654.2	650.6	650.6
7.5°	821.5	804.7	776.4	740.9	708.2	679.9	653.3	638.3	625.0	617.9	616.1
10°	971.1	949.0	887.9	815.3	743.6	679.9	628.5	591.3	573.6	567.4	567.4
12.5°	1095.0	1060.5	980.8	899.4	803.8	703.8	627.6	577.2	553.3	545.3	545.3
15°	1132.2	1087.1	993.2	913.6	827.7	743.6	672.8	600.2	556.8	543.5	539.1
17.5°	1120.7	1076.4	991.5	895.0	798.5	735.6	672.8	633.8	594.0	571.0	567.4
20°	1194.2	1153.5	1064.9	956.9	838.3	697.6	657.7	648.9	639.1	624.1	624.1
22.5°	1255.3	1217.2	1128.7	1012.7	870.2	778.1	718.8	710.0	699.3	696.7	694.9
25°	1302.2	1261.5	1140.2	1006.5	902.9	835.7	759.5	729.4	703.8	695.8	693.1
27.5°	1552.7	1489.9	1295.1	1105.7	956.9	855.1	767.5	728.5	704.6	694.9	701.1
30°	1699.7	1631.5	1418.1	1169.4	1021.6	897.6	783.4	737.4	743.6	751.6	757.8
32.5°	1812.1	1722.7	1472.1	1177.4	1010.9	905.6	809.1	754.2	736.5	747.1	748.9
35°	1922.7	1813.8	1542.1	1227.8	1025.1	876.4	791.4	759.5	754.2	768.4	765.7
37.5°	2147.6	2005.1	1628.8	1242.0	1011.8	841.9	761.3	727.7	700.2	696.7	701.1
40°	2441.5	2250.3	1715.6	1235.8	949.9	800.3	723.2	685.2	663.9	650.6	642.7
42.5°	2294.5	2102.4	1604.0	1186.2	874.6	725.9	684.3	650.6	623.2	606.4	602.0
45°	2455.6	2268.0	1632.4	1086.2	788.7	659.5	625.9	602.8	564.8	548.8	546.2
46°	2407.0	2194.5	1600.5	1055.2	747.1	631.2	602.8	578.9	550.6	528.5	526.7
47.5°	2229.9	1982.0	1506.7	972.0	718.8	584.3	564.8	550.6	535.6	509.9	506.4
50°	1990.0	1800.6	1337.6	864.0	605.5	521.4	504.6	500.2	483.3	452.4	455.0
52.5°	1971.4	1788.2	1245.5	794.9	537.3	456.8	451.5	438.2	424.0	396.6	395.7
55°	950.7	808.2	691.4	622.3	449.7	404.6	401.9	395.7	378.0	353.2	357.6
57.5°	450.6	392.2	339.0	359.4	353.2	355.0	356.8	355.9	335.5	301.9	308.9
60°	394.8	342.6	293.0	278.0	292.1	314.3	314.3	301.0	272.7	232.8	229.3
62.5°	380.7	328.4	283.3	262.9	270.0	283.3	276.2	254.9	226.6	190.3	188.6
65°	382.4	326.7	282.4	256.7	262.9	268.2	254.9	238.1	223.1	197.4	197.4
67.5°	390.4	333.7	285.9	254.1	258.5	262.0	249.6	237.2	228.4	208.9	210.7
70°	392.2	338.2	289.5	254.9	254.1	257.6	248.8	237.2	232.8	219.5	218.7
72.5°	392.2	341.7	285.9	248.8	247.0	248.8	243.4	237.2	236.4	228.4	226.6
75°	378.9	333.7	273.5	236.4	234.6	236.4	234.6	233.7	237.2	233.7	230.2
77.5°	365.6	325.8	264.7	226.6	224.0	223.1	222.2	223.1	228.4	225.7	220.4
80°	371.8	329.3	262.9	218.7	210.7	207.1	207.1	208.0	208.0	200.1	192.1
82.5°	382.4	335.5	254.1	203.6	190.3	184.1	185.9	192.1	194.8	188.6	182.4
85°	421.4	363.8	255.8	193.0	173.5	166.4	169.1	177.0	171.7	162.9	155.8
87.5°	438.2	373.6	250.5	177.0	161.1	158.5	158.5	162.9	159.3	145.2	139.0
90°	418.7	357.6	226.6	150.5	139.9	142.5	143.4	139.0	123.9	108.0	102.7
92.5°	392.2	334.6	209.8	138.1	123.9	123.0	122.2	119.5	108.0	90.3	86.8
95°	370.0	315.1	193.9	126.6	113.3	110.7	109.8	106.2	95.6	82.3	80.6
97.5°	322.2	275.3	176.2	116.9	101.8	100.0	99.1	94.7	85.0	75.2	74.4
100°	289.5	245.2	157.6	105.3	92.1	89.4	88.5	85.9	77.9	70.8	69.9
102.5°	262.9	224.8	146.1	96.5	82.3	78.8	78.8	77.0	72.6	68.2	68.2
105°	255.8	220.4	141.6	88.5	73.5	71.7	70.8	70.8	67.3	64.6	64.6
107.5°	224.8	193.0	122.2	78.8	66.4	64.6	64.6	64.6	63.7	62.9	63.7



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	202.7	174.4	112.4	73.5	62.0	59.3	59.3	59.3	59.3	61.1	61.1
112.5°	180.6	156.7	103.6	69.9	57.5	54.9	53.1	52.2	51.3	54.9	55.8
115°	170.9	149.6	99.1	66.4	54.9	52.2	48.7	46.9	44.3	46.9	47.8
117.5°	161.1	141.6	97.4	65.5	53.1	48.7	45.1	43.4	39.8	42.5	42.5
120°	158.5	140.8	99.1	66.4	51.3	45.1	42.5	38.1	36.3	38.1	39.0
122.5°	146.1	130.1	92.9	62.0	48.7	43.4	39.8	32.8	31.9	34.5	34.5
125°	123.9	111.5	80.6	55.8	46.0	42.5	39.0	29.2	30.1	31.9	32.8
127.5°	108.9	98.3	73.5	54.0	46.0	43.4	36.3	25.7	28.3	31.0	31.9
130°	101.8	93.8	73.5	55.8	47.8	44.3	30.1	23.9	26.6	29.2	29.2
132.5°	99.1	92.9	75.2	59.3	49.6	42.5	24.8	22.1	24.8	26.6	26.6
135°	91.2	85.9	71.7	57.5	45.1	33.6	19.5	19.5	23.0	24.8	24.8
137.5°	80.6	76.1	64.6	53.1	39.8	25.7	14.2	16.8	19.5	21.2	21.2
140°	64.6	62.0	53.1	41.6	28.3	14.2	10.6	13.3	15.9	17.7	17.7
142.5°	46.0	44.3	37.2	26.6	16.8	6.2	7.1	9.7	12.4	14.2	14.2
145°	30.1	28.3	23.0	16.8	7.1	1.8	4.4	7.1	9.7	10.6	10.6
147.5°	18.6	17.7	14.2	8.0	2.7	1.8	1.8	5.3	7.1	8.0	8.0
150°	9.7	8.9	6.2	2.7	0.9	0.9	0.9	1.8	4.4	5.3	6.2
152.5°	2.7	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	1.8	2.7
155°	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0
157.5°	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.9	0.0	0.9	0.9	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

(END OF REPORT)