

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: P239995

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239995
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-18)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-AF24-50-D-U-T2U-A
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
AND REFRACTOR PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4830 lumens
Efficiency: N/A
Efficacy: 89.4 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 - U3 - G2

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



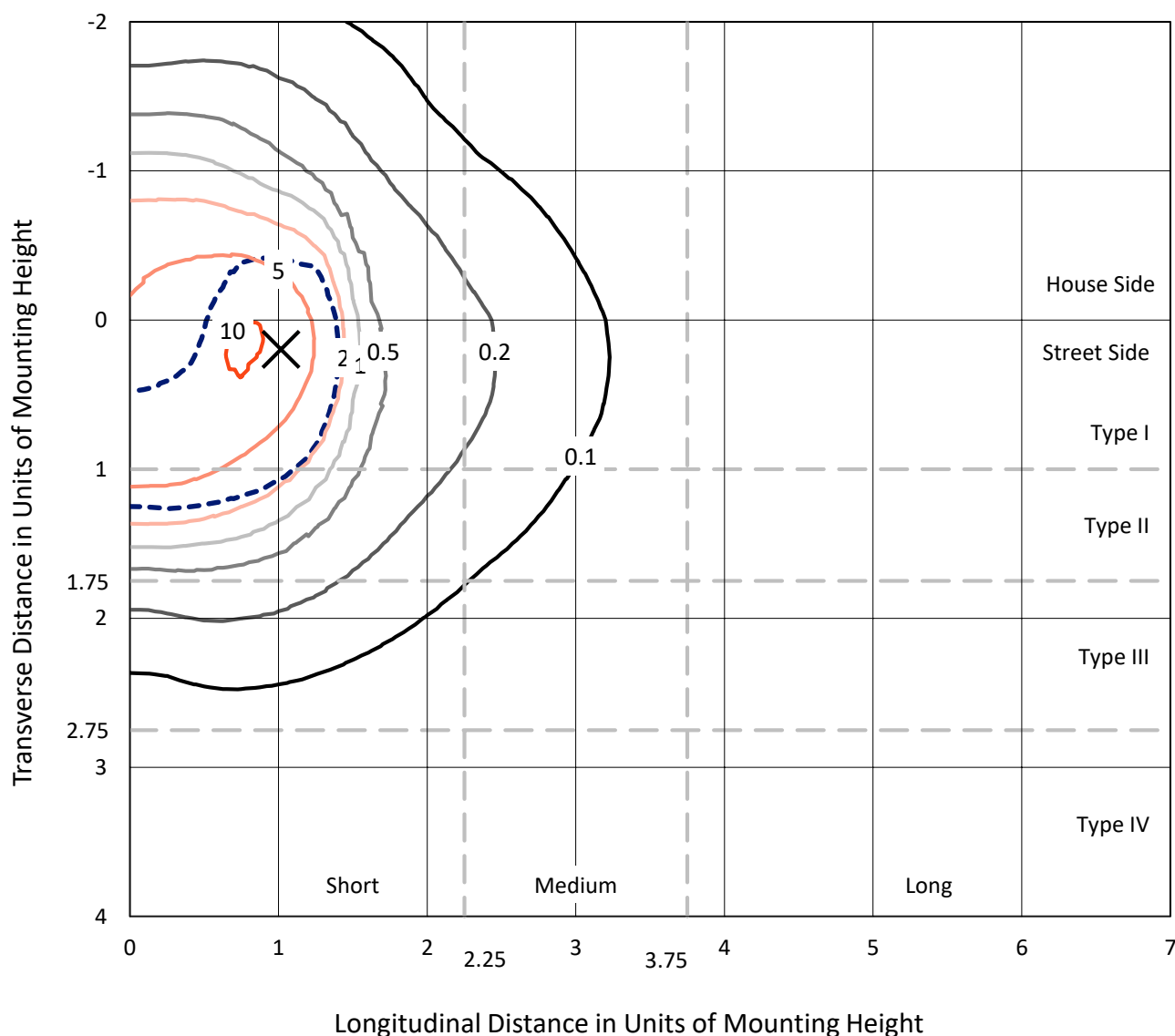
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

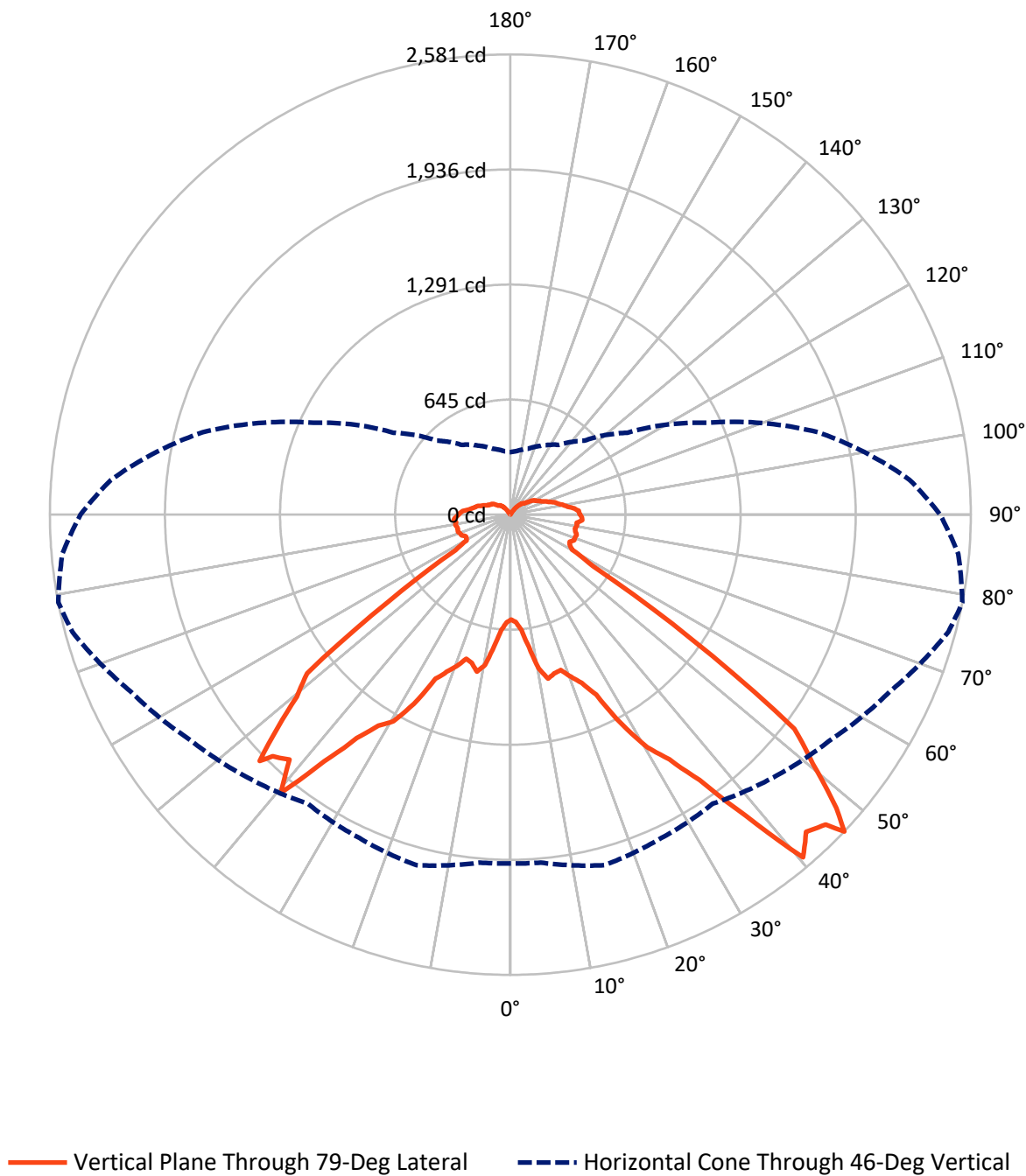


Based on 10 foot mounting height. Maximum calculated value = 10.6 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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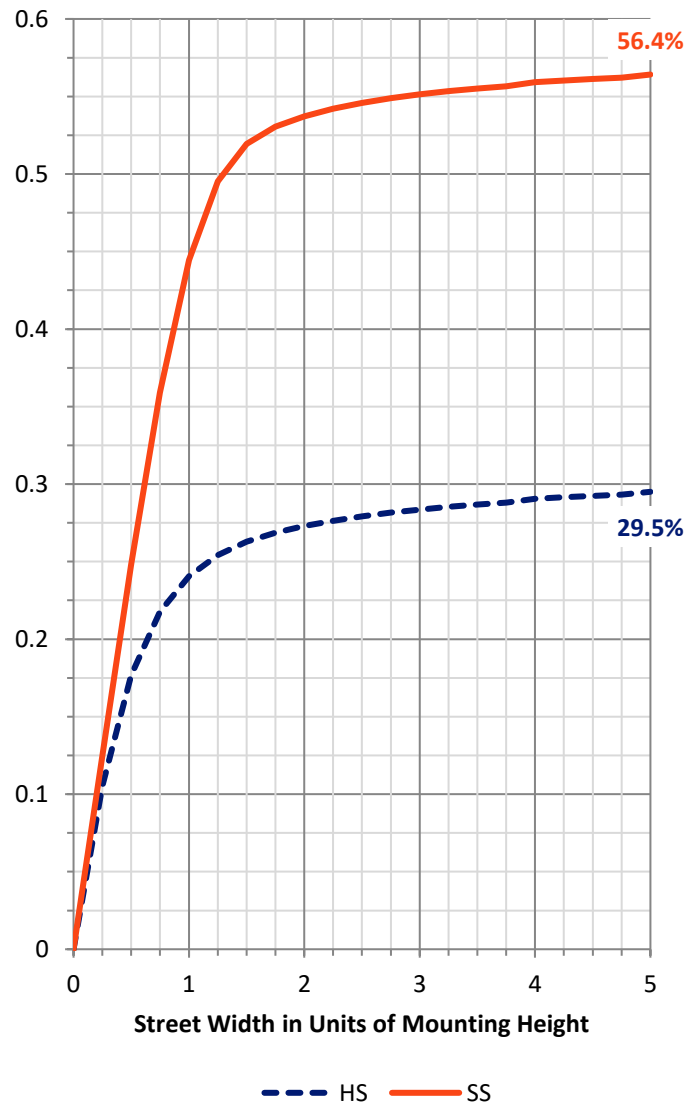
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1472.3	183.1	1655.4
	% Fixture	30.5	3.8	34.3
Street Side	Lumens	2777.3	397.3	3174.6
	% Fixture	57.5	8.2	65.7
Total	Lumens	4249.6	580.4	4830.0
	% Fixture	88.0	12.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.5	1.3
10°-20°	229.5	4.8
20°-30°	463.6	9.6
30°-40°	848.7	17.6
40°-50°	1172.8	24.3
50°-60°	748.6	15.5
60°-70°	268.2	5.6
70°-80°	240.8	5.0
80°-90°	214.1	4.4
90°-100°	196.4	4.1
100°-110°	152.7	3.2
110°-120°	106.0	2.2
120°-130°	70.9	1.5
130°-140°	42.5	0.9
140°-150°	11.3	0.2
150°-160°	0.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	4249.6	88.0
0°-180°	4830.0	100.0

Coefficient of Utilization



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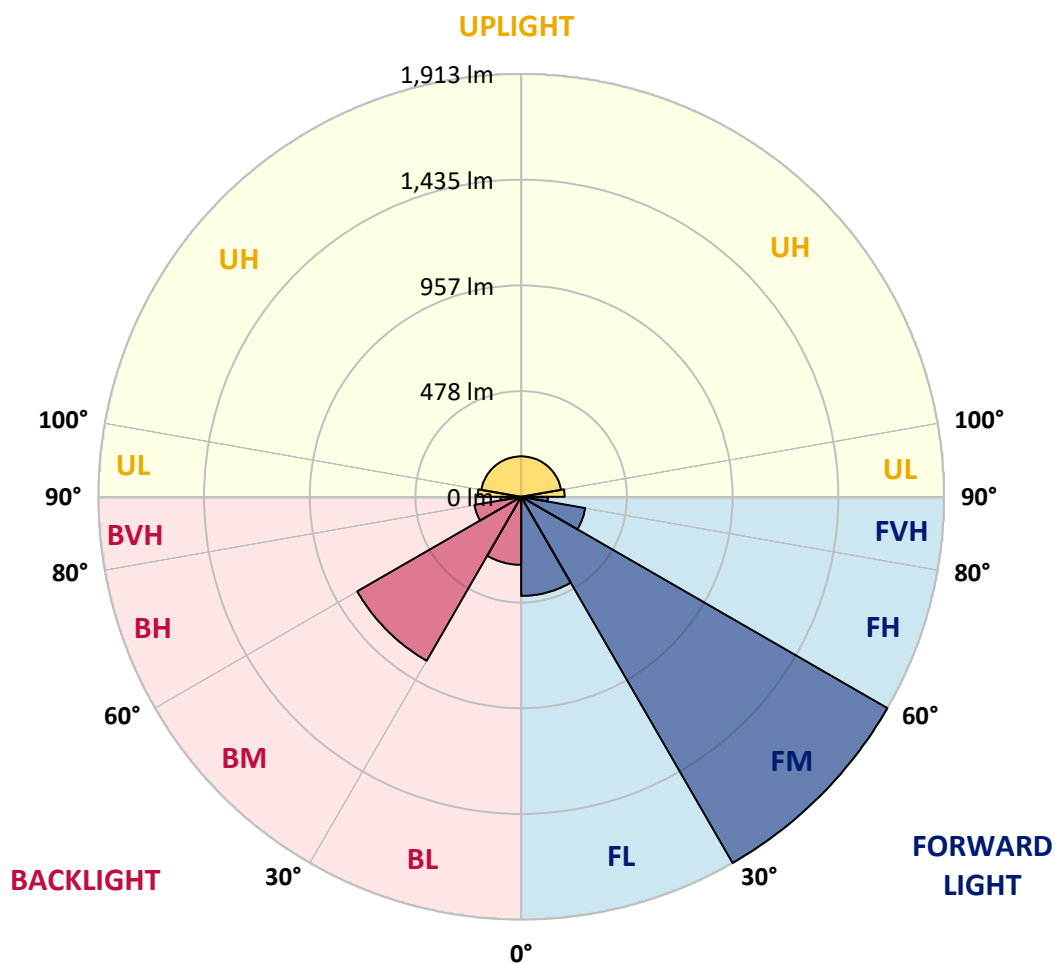
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	448.6	9.3			
FM	(30°-60°)	1913.5	39.6			
FH	(60°-80°)	294.3	6.1			G0/660
FVH	(80°-90°)	120.9	2.5			G2/225
BL	(0°-30°)	307.9	6.4	B1/500		
BM	(30°-60°)	856.6	17.7	B1/1000		
BH	(60°-80°)	214.7	4.4	B1/500		G1/500
BVH	(80°-90°)	93.2	1.9			G1/100
UL	(90°-100°)	196.4	4.1		U3/500	
UH	(100°-180°)	183.1	3.8		U3/500	

BUG Rating: B1-U3-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	588.7	588.7	588.7	588.7	588.7	588.7	588.7	588.7	588.7	588.7	588.7
2.5°	598.4	600.3	599.7	598.4	601.0	602.3	602.3	601.6	602.3	603.6	606.2
5°	626.9	626.3	628.2	633.4	640.5	642.5	648.3	647.0	650.3	650.3	654.2
7.5°	676.9	677.5	684.0	689.2	696.9	713.8	730.0	751.4	750.8	749.5	754.6
10°	728.7	728.7	741.7	760.5	792.3	827.9	843.5	862.3	881.7	878.5	873.3
12.5°	744.9	747.5	770.2	816.9	885.6	946.6	977.7	973.8	954.3	943.3	925.8
15°	774.7	778.0	802.6	873.9	955.6	1010.1	1021.8	973.8	931.6	923.9	909.0
17.5°	886.9	886.9	912.2	977.7	1039.3	1026.9	980.9	958.2	931.0	916.1	894.7
20°	964.7	969.2	1009.4	1055.5	1089.2	1049.0	1049.6	1007.5	979.6	970.5	950.4
22.5°	1039.9	1046.4	1058.1	1130.0	1139.8	1147.5	1124.2	1085.9	1039.3	1024.4	1003.6
25°	1199.4	1201.3	1213.7	1248.0	1222.1	1209.1	1175.4	1144.3	1126.1	1118.4	1096.3
27.5°	1388.7	1382.9	1388.1	1390.7	1351.1	1315.4	1266.2	1299.2	1325.2	1332.3	1312.9
30°	1427.6	1417.9	1457.4	1499.6	1480.1	1437.3	1434.1	1473.6	1522.3	1513.2	1486.0
32.5°	1584.5	1569.6	1587.7	1592.3	1589.0	1576.7	1571.5	1621.5	1656.5	1636.4	1596.8
35°	1710.9	1710.3	1646.1	1661.0	1670.1	1698.6	1727.1	1795.2	1826.3	1827.6	1794.6
37.5°	1981.3	1961.8	1937.8	1843.2	1793.3	1806.2	1904.8	2025.4	2095.4	2141.4	2088.9
40°	2074.0	2082.4	2062.3	2051.9	1979.3	1948.9	2062.3	2269.8	2459.7	2527.2	2520.7
42.5°	1921.6	1941.1	1929.4	2001.4	2059.1	2098.0	2234.8	2412.4	2448.7	2431.2	2338.5
45°	2048.7	2048.7	2017.6	1972.8	1992.9	2119.4	2227.6	2347.6	2461.0	2479.2	2428.0
46°	1956.6	1958.6	2035.1	2001.4	1978.7	2083.7	2196.5	2347.6	2541.4	2581.0	2520.7
47.5°	1786.8	1783.5	1924.2	1935.2	1950.8	2037.0	2160.9	2346.9	2456.5	2459.1	2383.9
50°	1415.9	1421.8	1615.0	1717.4	1819.8	1904.8	2072.0	2177.1	2201.7	2197.2	2115.5
52.5°	1149.5	1165.0	1267.5	1396.5	1520.3	1683.7	1878.2	1976.1	2029.9	1994.2	1919.0
55°	796.8	830.5	959.5	1075.6	1257.1	1414.0	1581.9	1591.0	1345.3	1233.1	1093.7
57.5°	492.7	499.2	613.3	777.3	913.5	1036.7	1038.6	807.2	628.2	545.9	453.8
60°	273.6	279.4	380.6	501.8	634.7	649.6	580.2	466.8	418.8	397.4	365.0
62.5°	203.6	208.1	274.2	348.8	402.0	423.4	389.6	381.9	382.5	372.8	351.4
65°	183.5	186.1	240.5	278.1	309.3	313.8	326.1	353.3	368.2	366.3	357.2
67.5°	166.6	169.9	219.1	246.4	265.2	287.2	297.6	339.7	379.9	386.4	378.0
70°	148.5	153.7	197.7	226.3	247.7	269.1	289.8	342.3	374.7	383.8	379.9
72.5°	128.4	134.9	171.8	201.6	225.6	249.0	284.6	329.3	373.4	389.6	392.2
75°	112.8	121.2	151.7	178.3	203.6	231.5	269.1	324.8	366.3	376.7	381.9
77.5°	101.8	110.9	134.2	158.8	182.8	213.3	256.7	323.5	359.2	370.8	379.9
80°	93.4	102.4	121.9	141.3	161.4	195.8	243.8	321.6	366.3	378.6	383.8
82.5°	86.9	95.3	112.2	129.7	145.9	177.0	234.7	318.3	364.4	374.7	377.3
85°	87.5	94.0	109.6	125.8	140.7	167.3	230.2	319.6	388.3	404.6	407.1
87.5°	92.1	96.6	112.8	131.6	148.5	175.7	238.6	317.0	385.8	400.7	407.1
90°	99.8	103.7	123.2	145.2	165.3	190.6	236.6	309.9	374.7	388.3	392.2
92.5°	123.8	127.1	148.5	172.5	190.0	198.4	228.9	320.9	376.7	384.5	384.5
95°	160.1	164.0	184.8	202.9	206.2	201.6	225.0	285.3	343.6	360.5	370.2
97.5°	200.3	201.6	213.3	216.5	206.8	196.4	219.8	266.5	311.8	323.5	326.1
100°	213.3	213.3	221.1	218.5	199.7	185.4	199.0	242.5	286.6	299.5	303.4
102.5°	215.9	217.2	225.0	216.5	191.3	167.9	177.0	218.5	259.3	273.6	281.4
105°	228.9	229.5	225.0	204.2	173.1	152.4	160.1	201.6	245.1	258.7	267.1
107.5°	213.9	212.0	199.7	180.2	159.5	144.6	153.7	184.1	217.2	228.2	234.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
110°	177.0	175.7	171.2	164.0	151.1	140.0	145.9	173.8	205.5	213.9	219.1
112.5°	170.5	169.2	164.7	156.2	141.3	132.9	142.6	166.6	186.1	190.0	190.6
115°	164.0	162.7	152.4	142.6	131.0	127.1	133.6	155.6	173.8	178.3	182.2
117.5°	141.3	140.0	132.3	126.4	121.9	123.8	134.9	147.2	160.1	164.0	166.6
120°	125.8	125.1	121.2	117.3	114.8	116.0	127.7	141.3	154.3	158.2	160.1
122.5°	118.6	118.0	113.5	107.6	107.6	107.6	116.7	127.1	141.3	144.6	149.1
125°	104.4	104.4	99.8	95.3	101.8	104.4	106.3	107.0	118.0	123.2	125.1
127.5°	92.7	93.4	89.5	86.2	97.9	103.7	102.4	94.0	100.5	104.4	107.0
130°	91.4	91.4	86.9	83.0	88.8	100.5	96.6	88.2	96.0	98.5	99.8
132.5°	88.8	88.8	84.3	78.4	79.7	92.7	84.3	82.3	89.5	92.1	92.7
135°	81.7	81.7	78.4	70.7	65.5	78.4	68.1	72.0	79.1	81.0	81.7
137.5°	72.6	72.6	69.4	62.9	51.9	59.0	52.5	60.9	68.1	70.0	70.7
140°	59.6	59.0	57.1	49.3	37.6	33.1	35.7	48.6	55.8	57.1	59.0
142.5°	44.1	44.7	41.5	35.0	22.7	12.3	20.7	31.1	38.9	40.8	42.1
145°	32.4	31.8	28.5	22.7	12.3	1.9	9.7	19.4	24.6	26.6	27.9
147.5°	21.4	21.4	18.8	13.6	3.9	0.6	2.6	9.7	15.6	16.9	17.5
150°	14.3	14.3	10.4	3.9	0.6	0.6	0.6	1.9	6.5	7.8	9.1
152.5°	4.5	4.5	1.9	1.3	0.6	0.0	0.0	0.6	1.3	1.3	1.9
155°	1.3	1.3	1.3	0.6	0.0	0.0	0.0	0.0	0.6	0.6	0.6
157.5°	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.6	0.6	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°	588.7	588.7	588.7	588.7	588.7	588.7	588.7	588.7	588.7	588.7	588.7
2.5°	606.8	606.2	604.2	602.3	597.1	590.6	584.1	579.6	577.0	575.1	574.4
5°	652.9	654.2	645.1	630.2	615.9	602.9	590.6	579.0	572.5	567.3	565.3
7.5°	750.8	752.7	734.6	711.2	674.9	630.8	593.2	567.9	549.8	538.8	536.8
10°	872.0	866.8	845.4	795.5	729.4	661.3	590.6	536.2	507.0	493.4	492.7
12.5°	921.3	914.1	890.1	848.7	779.3	690.5	602.9	531.0	487.5	470.0	469.4
15°	898.6	886.3	842.2	803.9	776.7	727.4	649.0	566.6	507.0	484.9	479.1
17.5°	879.1	866.8	829.9	774.7	723.5	702.1	663.9	595.8	533.6	502.5	496.0
20°	936.2	928.4	882.4	809.1	752.7	667.1	636.0	589.3	542.6	523.2	518.0
22.5°	988.7	984.8	927.1	850.6	774.7	715.1	652.9	618.5	573.1	559.5	553.7
25°	1086.6	1068.4	973.8	870.7	805.2	746.9	667.1	613.3	558.2	540.7	537.5
27.5°	1316.7	1274.6	1136.5	981.6	850.0	757.2	665.8	586.7	526.4	504.4	503.1
30°	1463.3	1425.0	1269.4	1098.9	920.0	781.9	657.4	562.1	516.7	495.3	496.0
32.5°	1552.1	1500.9	1325.8	1109.9	936.2	794.2	662.6	553.7	492.7	465.5	464.8
35°	1744.6	1673.3	1419.2	1198.8	967.9	776.0	640.5	536.2	479.8	459.7	457.1
37.5°	2018.9	1938.5	1594.2	1270.7	980.9	752.1	612.0	516.1	448.6	420.8	418.8
40°	2415.0	2297.0	1836.7	1357.6	970.5	733.9	580.9	485.6	429.8	411.7	405.9
42.5°	2218.6	2085.0	1692.1	1340.7	944.6	684.0	551.1	470.7	418.8	404.6	396.8
45°	2341.1	2185.5	1709.6	1246.7	845.4	610.1	500.5	440.9	389.0	368.9	367.0
46°	2409.2	2246.4	1785.5	1218.2	800.0	586.7	477.8	427.2	382.5	356.6	350.7
47.5°	2261.4	2080.5	1641.6	1162.4	763.7	534.2	448.0	405.9	375.4	351.4	347.5
50°	1983.2	1806.2	1419.8	991.3	657.4	471.3	399.4	374.1	343.6	317.7	313.1
52.5°	1810.1	1661.7	1299.9	899.2	558.2	397.4	356.6	334.5	303.4	272.9	269.1
55°	995.2	892.7	803.3	675.6	462.9	335.8	310.5	297.6	265.8	236.0	234.0
57.5°	409.7	368.2	365.0	344.3	318.3	282.7	268.4	260.6	228.9	192.6	191.3
60°	344.9	307.3	271.0	238.6	236.6	236.0	231.5	217.8	182.8	145.2	143.9
62.5°	335.8	298.9	263.2	223.7	206.8	212.0	203.6	186.7	160.1	123.8	122.5
65°	342.3	304.1	261.9	217.2	199.0	201.0	191.9	178.9	160.8	134.9	133.6
67.5°	364.4	324.8	277.5	214.6	192.6	196.4	190.0	180.2	169.9	153.7	150.4
70°	367.6	332.6	278.1	215.9	185.4	190.0	188.0	179.6	172.5	158.2	156.2
72.5°	377.3	345.6	284.0	211.4	177.6	179.6	182.2	179.6	175.0	166.6	163.4
75°	368.2	340.4	281.4	207.5	169.9	168.6	175.0	178.3	179.6	176.3	172.5
77.5°	366.3	343.0	282.0	204.9	162.7	157.5	162.7	167.9	170.5	167.3	164.0
80°	368.9	348.8	290.4	205.5	154.9	142.0	144.6	150.4	151.1	145.2	140.7
82.5°	363.1	343.6	281.4	198.4	142.6	126.4	127.1	132.9	133.6	126.4	121.2
85°	389.0	365.7	287.9	189.3	129.7	115.4	116.0	118.6	114.8	107.0	101.8
87.5°	388.3	360.5	274.9	175.0	121.2	108.9	108.3	107.6	101.1	92.1	87.5
90°	374.7	345.6	257.4	154.3	107.0	99.8	97.9	94.0	84.9	74.6	71.3
92.5°	365.7	334.5	245.7	145.9	94.0	87.5	86.2	82.3	73.3	62.2	60.3
95°	355.9	325.5	226.3	127.7	83.0	76.5	74.6	70.7	63.5	54.5	53.2
97.5°	313.8	284.0	199.7	116.0	73.9	66.8	65.5	62.2	56.4	49.9	49.3
100°	289.8	263.2	185.4	106.3	66.1	58.3	57.7	55.8	51.9	47.3	46.7
102.5°	271.0	245.1	171.8	98.5	59.0	51.9	51.2	50.6	48.6	45.4	45.4
105°	256.7	232.1	164.7	92.1	53.2	47.3	46.7	46.7	44.7	42.8	42.8
107.5°	223.7	202.9	143.3	81.7	48.6	43.4	43.4	43.4	42.1	40.8	41.5



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	210.7	191.3	136.1	76.5	46.7	40.2	39.5	39.5	38.9	39.5	39.5
112.5°	181.5	164.7	119.9	73.3	45.4	38.3	36.3	35.0	33.7	35.0	35.7
115°	174.4	158.8	116.0	70.7	44.1	37.0	34.4	32.4	29.8	31.8	31.8
117.5°	160.1	145.9	107.6	68.7	44.1	35.0	32.4	30.5	27.9	29.2	29.2
120°	153.7	141.3	108.3	70.7	44.7	33.1	30.5	27.2	25.3	27.2	27.2
122.5°	144.6	133.6	101.8	66.8	42.8	32.4	29.8	23.3	22.0	24.0	24.0
125°	121.2	112.2	87.5	59.0	40.8	32.4	29.2	20.7	20.7	22.0	22.7
127.5°	103.1	96.0	75.9	55.1	41.5	34.4	27.9	18.2	19.4	21.4	21.4
130°	97.2	91.4	75.2	56.4	43.4	36.3	22.7	16.9	18.2	20.1	20.1
132.5°	90.8	85.6	72.6	57.7	44.1	34.4	18.8	15.6	16.9	18.2	18.2
135°	79.7	75.9	65.5	52.5	39.5	27.2	14.9	13.6	15.6	16.9	17.5
137.5°	70.0	66.8	57.7	47.3	35.7	23.3	10.4	12.3	13.6	14.3	14.9
140°	57.7	55.8	48.6	38.9	26.6	13.0	7.8	9.7	11.0	12.3	12.3
142.5°	42.1	40.8	34.4	25.3	16.2	5.2	5.2	7.1	8.4	9.7	9.7
145°	27.9	26.6	22.0	16.2	7.1	1.3	3.2	5.2	7.1	7.8	7.8
147.5°	17.5	16.9	13.6	8.4	2.6	1.3	1.3	3.9	5.2	5.8	5.8
150°	9.1	8.4	5.8	2.6	1.3	0.6	0.6	1.3	3.2	3.9	3.9
152.5°	1.9	1.9	1.3	0.6	0.6	0.6	0.6	0.6	0.6	1.3	1.3
155°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
157.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0
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°	0.0	0.0	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

(END OF REPORT)