

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: P239998

Luminaire Tested: **UTLD-AF24-80-D-U-T2U-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239998
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-AF24-80-D-U-T2U-A
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 1050mA 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: 6874 lumens
Efficiency: N/A
Efficacy: 82.8 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: B2 - U4 - G2

Input Watts (W): 83
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



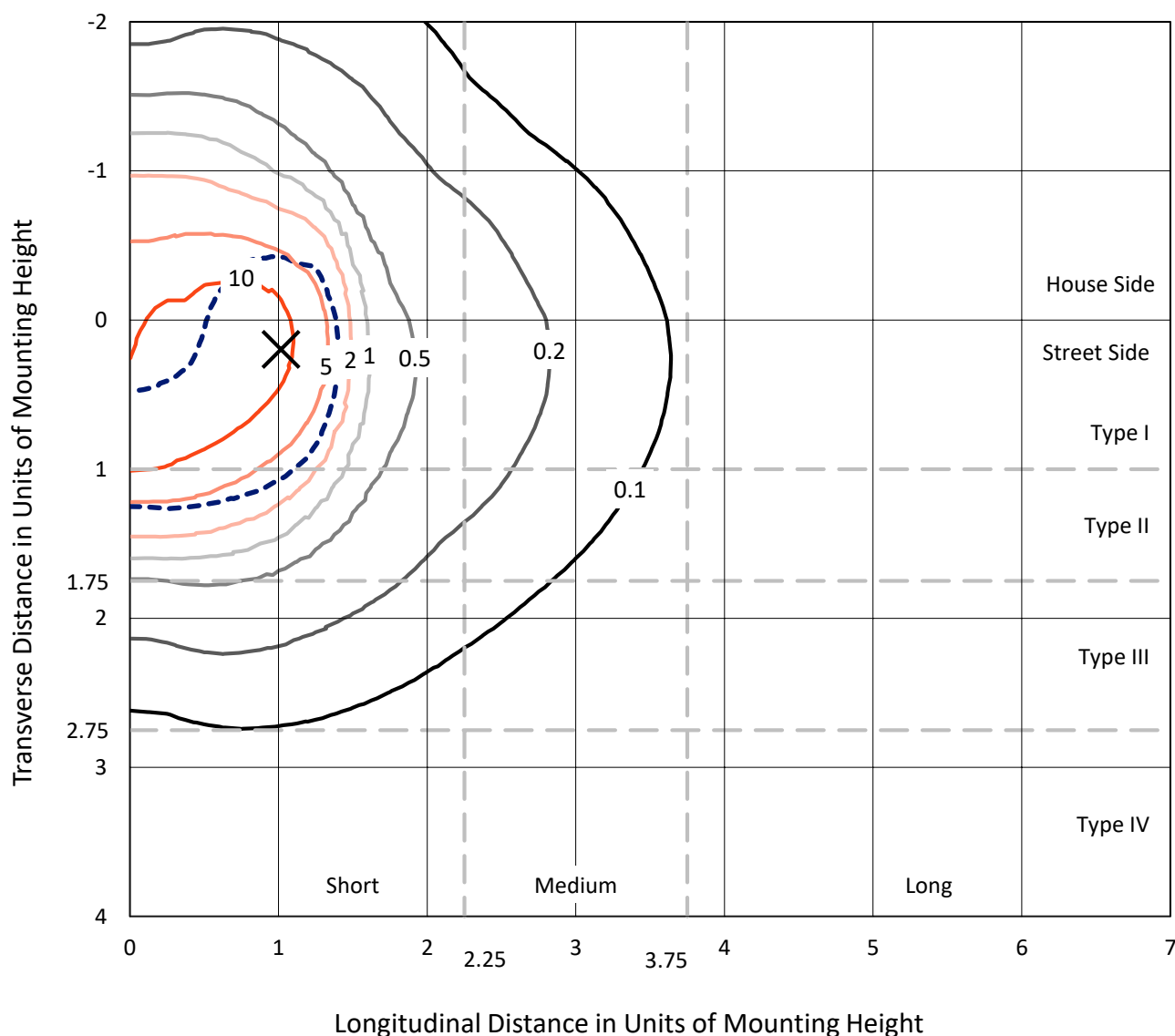
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

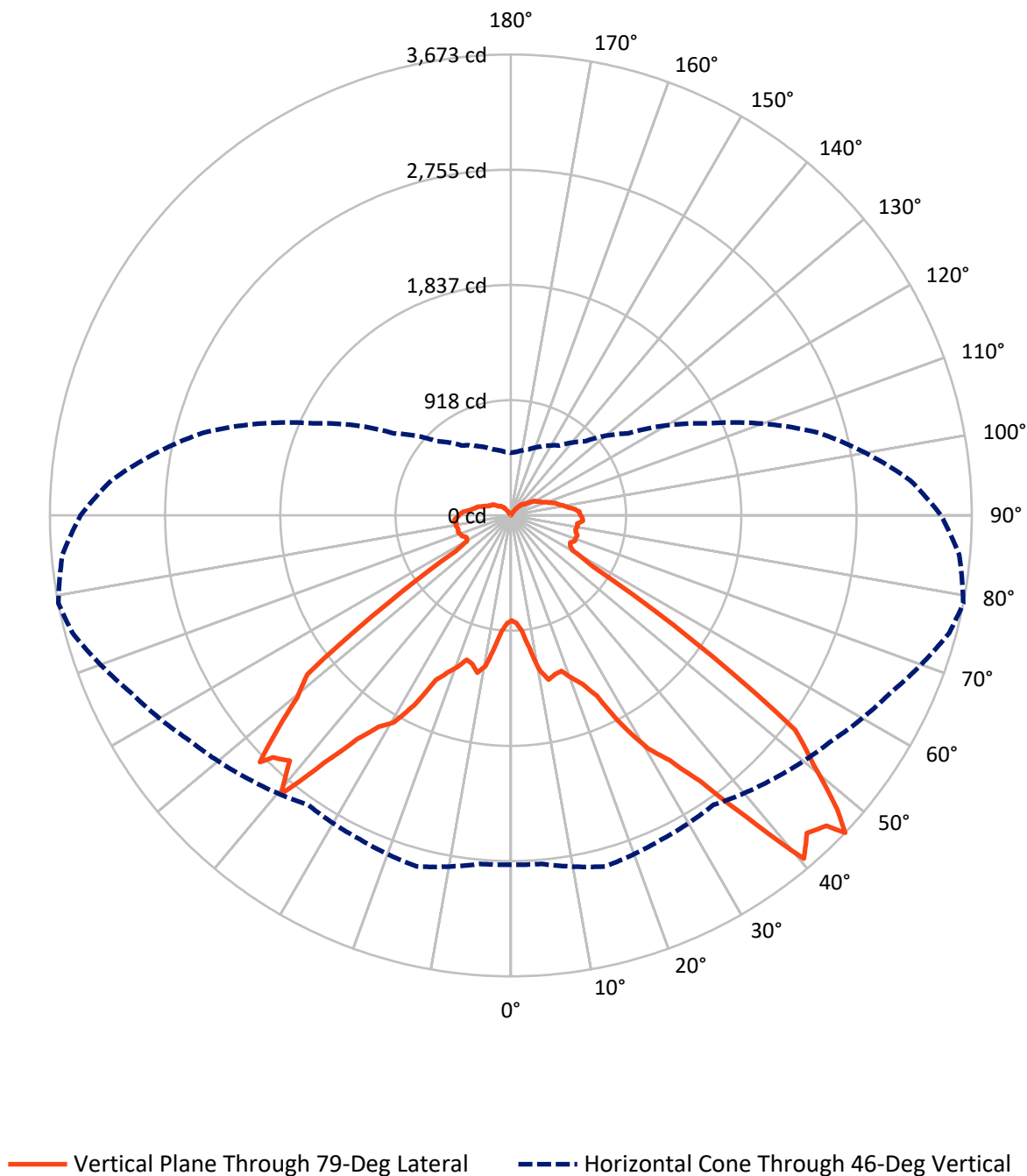


Based on 10 foot mounting height. Maximum calculated value = 15.1 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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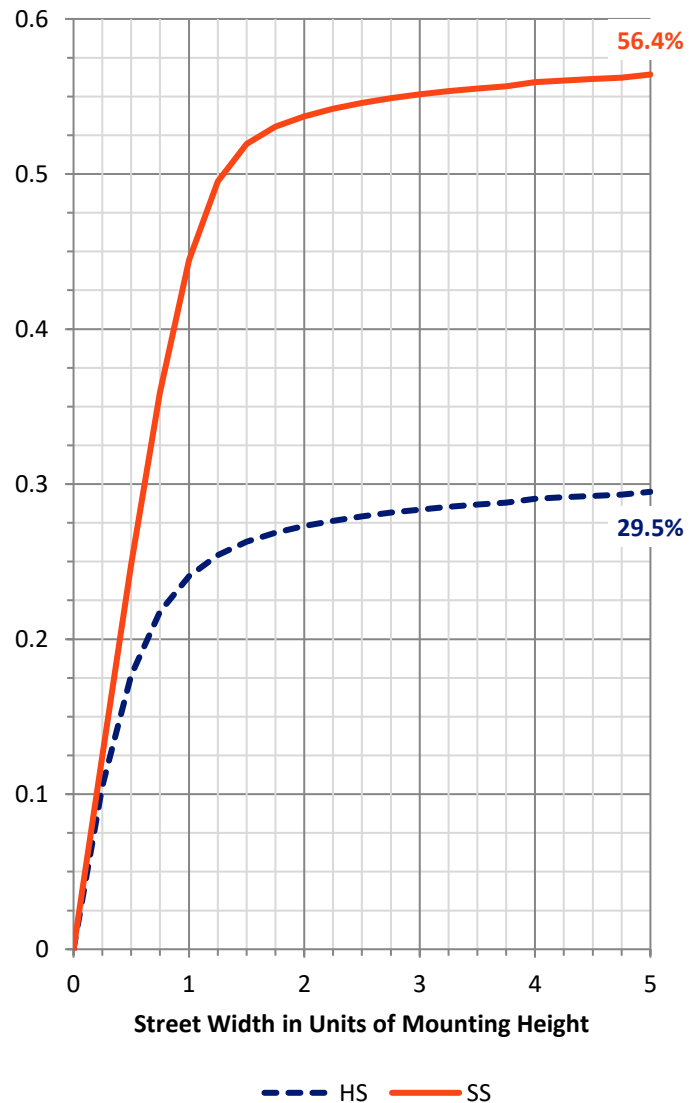
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2095.4	260.6	2355.9
	% Fixture	30.5	3.8	34.3
Street Side	Lumens	3952.7	565.4	4518.0
	% Fixture	57.5	8.2	65.7
Total	Lumens	6048.0	826.0	6874.0
	% Fixture	88.0	12.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.3	1.3
10°-20°	326.6	4.8
20°-30°	659.8	9.6
30°-40°	1207.8	17.6
40°-50°	1669.1	24.3
50°-60°	1065.4	15.5
60°-70°	381.6	5.6
70°-80°	342.7	5.0
80°-90°	304.7	4.4
90°-100°	279.5	4.1
100°-110°	217.3	3.2
110°-120°	150.8	2.2
120°-130°	101.0	1.5
130°-140°	60.5	0.9
140°-150°	16.1	0.2
150°-160°	0.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	6048.0	88.0
0°-180°	6874.0	100.0

Coefficient of Utilization



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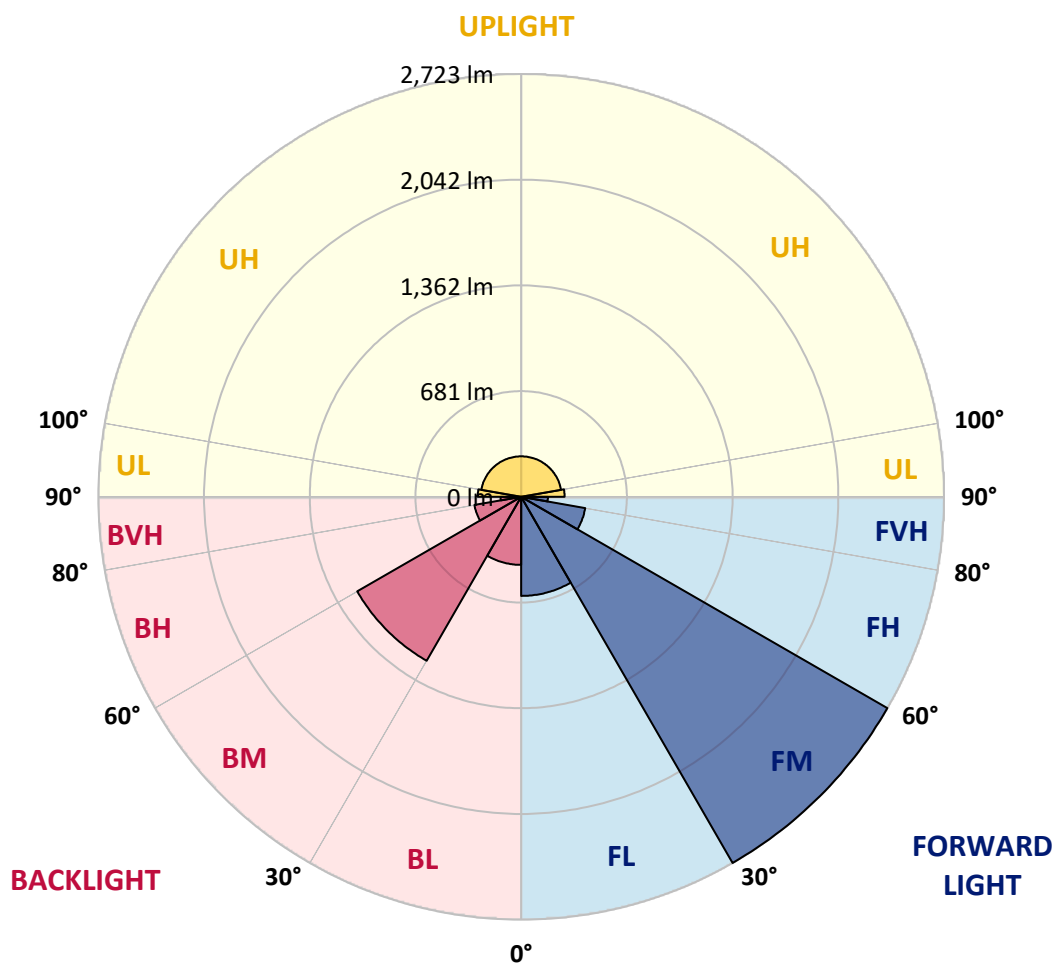
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	638.5	9.3			
FM	(30°-60°)	2723.2	39.6			
FH	(60°-80°)	418.8	6.1			G0/660
FVH	(80°-90°)	172.1	2.5			G2/225
BL	(0°-30°)	438.2	6.4	B1/500		
BM	(30°-60°)	1219.1	17.7	B2/2500		
BH	(60°-80°)	305.5	4.4	B1/500		G1/500
BVH	(80°-90°)	132.6	1.9			G2/225
UL	(90°-100°)	279.5	4.1		U3/500	
UH	(100°-180°)	260.6	3.8		U3/500	

BUG Rating: B2-U4-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	837.8	837.8	837.8	837.8	837.8	837.8	837.8	837.8	837.8	837.8	837.8
2.5°	851.6	854.4	853.5	851.6	855.3	857.2	857.2	856.3	857.2	859.0	862.7
5°	892.2	891.3	894.1	901.5	911.6	914.4	922.7	920.8	925.5	925.5	931.0
7.5°	963.3	964.2	973.4	980.8	991.9	1015.9	1038.9	1069.4	1068.5	1066.6	1074.0
10°	1037.1	1037.1	1055.6	1082.3	1127.5	1178.3	1200.4	1227.2	1254.9	1250.2	1242.9
12.5°	1060.2	1063.9	1096.2	1162.6	1260.4	1347.1	1391.4	1385.9	1358.2	1342.5	1317.6
15°	1102.6	1107.2	1142.3	1243.8	1360.0	1437.5	1454.2	1385.9	1325.9	1314.8	1293.6
17.5°	1262.2	1262.2	1298.2	1391.4	1479.1	1461.5	1396.0	1363.7	1325.0	1303.8	1273.3
20°	1373.0	1379.4	1436.6	1502.1	1550.1	1492.9	1493.8	1433.9	1394.2	1381.3	1352.7
22.5°	1480.0	1489.2	1505.8	1608.2	1622.1	1633.2	1599.9	1545.5	1479.1	1457.8	1428.3
25°	1707.0	1709.7	1727.3	1776.2	1739.3	1720.8	1672.8	1628.5	1602.7	1591.6	1560.3
27.5°	1976.4	1968.1	1975.5	1979.2	1922.9	1872.1	1802.0	1849.1	1886.0	1896.1	1868.4
30°	2031.8	2017.9	2074.2	2134.2	2106.5	2045.6	2041.0	2097.3	2166.5	2153.6	2114.8
32.5°	2255.0	2233.8	2259.7	2266.1	2261.5	2244.0	2236.6	2307.6	2357.5	2328.9	2272.6
35°	2435.0	2434.0	2342.7	2363.9	2376.8	2417.4	2458.0	2554.9	2599.2	2601.1	2554.0
37.5°	2819.7	2792.1	2757.9	2623.2	2552.2	2570.6	2710.9	2882.5	2982.1	3047.6	2972.9
40°	2951.7	2963.7	2935.1	2920.3	2817.0	2773.6	2935.1	3230.3	3500.7	3596.6	3587.4
42.5°	2734.8	2762.5	2745.9	2848.3	2930.5	2985.8	3180.5	3433.3	3485.0	3460.1	3328.1
45°	2915.7	2915.7	2871.4	2807.7	2836.3	3016.3	3170.4	3341.0	3502.5	3528.4	3455.5
46°	2784.7	2787.4	2896.3	2848.3	2816.0	2965.5	3126.1	3341.0	3616.9	3673.2	3587.4
47.5°	2542.9	2538.3	2738.5	2754.2	2776.4	2899.1	3075.3	3340.1	3496.1	3499.8	3392.7
50°	2015.1	2023.5	2298.4	2444.2	2590.0	2710.9	2948.9	3098.4	3133.4	3127.0	3010.7
52.5°	1635.9	1658.1	1803.9	1987.5	2163.7	2396.2	2673.0	2812.4	2888.9	2838.2	2731.2
55°	1134.0	1182.0	1365.6	1530.7	1789.1	2012.4	2251.4	2264.3	1914.6	1755.0	1556.6
57.5°	701.2	710.5	872.9	1106.3	1300.1	1475.4	1478.1	1148.7	894.1	776.9	645.9
60°	389.4	397.7	541.6	714.2	903.3	924.5	825.8	664.3	596.1	565.6	519.5
62.5°	289.7	296.2	390.3	496.4	572.1	602.5	554.5	543.5	544.4	530.5	500.1
65°	261.1	264.8	342.3	395.8	440.1	446.6	464.1	502.9	524.1	521.3	508.4
67.5°	237.1	241.7	311.9	350.6	377.4	408.8	423.5	483.5	540.7	549.9	537.9
70°	211.3	218.7	281.4	322.0	352.5	382.9	412.4	487.2	533.3	546.2	540.7
72.5°	182.7	191.9	244.5	287.0	321.1	354.3	405.1	468.7	531.5	554.5	558.2
75°	160.5	172.5	215.9	253.7	289.7	329.4	382.9	462.3	521.3	536.1	543.5
77.5°	144.9	157.8	191.0	226.1	260.2	303.6	365.4	460.4	511.2	527.8	540.7
80°	132.9	145.8	173.5	201.1	229.7	278.7	346.9	457.7	521.3	538.8	546.2
82.5°	123.6	135.6	159.6	184.5	207.6	251.9	334.0	453.0	518.6	533.3	537.0
85°	124.6	133.8	155.9	179.0	200.2	238.1	327.6	454.9	552.7	575.8	579.4
87.5°	131.0	137.5	160.5	187.3	211.3	250.0	339.5	451.2	549.0	570.2	579.4
90°	142.1	147.6	175.3	206.7	235.3	271.3	336.8	441.0	533.3	552.7	558.2
92.5°	176.2	180.8	211.3	245.4	270.3	282.3	325.7	456.7	536.1	547.2	547.2
95°	227.9	233.4	263.0	288.8	293.4	287.0	320.2	406.0	489.0	513.0	526.9
97.5°	285.1	287.0	303.6	308.2	294.3	279.6	312.8	379.2	443.8	460.4	464.1
100°	303.6	303.6	314.6	310.9	284.2	263.9	283.3	345.1	407.8	426.3	431.8
102.5°	307.3	309.1	320.2	308.2	272.2	239.0	251.9	310.9	369.1	389.4	400.4
105°	325.7	326.6	320.2	290.6	246.4	216.8	227.9	287.0	348.8	368.2	380.1
107.5°	304.5	301.7	284.2	256.5	227.0	205.8	218.7	262.0	309.1	324.8	333.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
110°	251.9	250.0	243.6	233.4	215.0	199.3	207.6	247.3	292.5	304.5	311.9
112.5°	242.7	240.8	234.4	222.4	201.1	189.2	203.0	237.1	264.8	270.3	271.3
115°	233.4	231.6	216.8	203.0	186.4	180.8	190.1	221.4	247.3	253.7	259.3
117.5°	201.1	199.3	188.2	179.9	173.5	176.2	191.9	209.4	227.9	233.4	237.1
120°	179.0	178.1	172.5	167.0	163.3	165.2	181.8	201.1	219.6	225.1	227.9
122.5°	168.9	167.9	161.5	153.2	153.2	153.2	166.1	180.8	201.1	205.8	212.2
125°	148.6	148.6	142.1	135.6	144.9	148.6	151.3	152.2	167.9	175.3	178.1
127.5°	131.9	132.9	127.3	122.7	139.3	147.6	145.8	133.8	143.0	148.6	152.2
130°	130.1	130.1	123.6	118.1	126.4	143.0	137.5	125.5	136.6	140.2	142.1
132.5°	126.4	126.4	119.9	111.6	113.5	131.9	119.9	117.2	127.3	131.0	131.9
135°	116.3	116.3	111.6	100.6	93.2	111.6	96.9	102.4	112.6	115.3	116.3
137.5°	103.3	103.3	98.7	89.5	73.8	84.0	74.7	86.7	96.9	99.7	100.6
140°	84.9	84.0	81.2	70.1	53.5	47.1	50.7	69.2	79.4	81.2	84.0
142.5°	62.7	63.7	59.1	49.8	32.3	17.5	29.5	44.3	55.4	58.1	60.0
145°	46.1	45.2	40.6	32.3	17.5	2.8	13.8	27.7	35.1	37.8	39.7
147.5°	30.4	30.4	26.8	19.4	5.5	0.9	3.7	13.8	22.1	24.0	24.9
150°	20.3	20.3	14.8	5.5	0.9	0.9	0.9	2.8	9.2	11.1	12.9
152.5°	6.5	6.5	2.8	1.8	0.9	0.0	0.0	0.9	1.8	1.8	2.8
155°	1.8	1.8	1.8	0.9	0.0	0.0	0.0	0.0	0.9	0.9	0.9
157.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.9	0.9	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°	837.8	837.8	837.8	837.8	837.8	837.8	837.8	837.8	837.8	837.8	837.8
2.5°	863.6	862.7	859.9	857.2	849.8	840.6	831.3	824.9	821.2	818.4	817.5
5°	929.1	931.0	918.1	896.9	876.6	858.1	840.6	824.0	814.7	807.4	804.6
7.5°	1068.5	1071.2	1045.4	1012.2	960.5	897.8	844.3	808.3	782.4	766.8	764.0
10°	1241.0	1233.6	1203.2	1132.1	1038.0	941.1	840.6	763.1	721.5	702.2	701.2
12.5°	1311.1	1301.0	1266.8	1207.8	1109.1	982.7	858.1	755.7	693.9	668.9	668.0
15°	1278.8	1261.3	1198.6	1144.1	1105.4	1035.3	923.6	806.4	721.5	690.2	681.9
17.5°	1251.2	1233.6	1181.0	1102.6	1029.7	999.3	944.8	847.9	759.4	715.1	705.9
20°	1332.4	1321.3	1255.8	1151.5	1071.2	949.4	905.2	838.7	772.3	744.6	737.2
22.5°	1407.1	1401.6	1319.4	1210.6	1102.6	1017.7	929.1	880.2	815.7	796.3	788.0
25°	1546.4	1520.6	1385.9	1239.2	1146.0	1062.9	949.4	872.9	794.4	769.5	764.9
27.5°	1874.0	1814.0	1617.5	1396.9	1209.6	1077.7	947.6	835.0	749.2	717.9	716.0
30°	2082.5	2028.1	1806.6	1564.0	1309.3	1112.8	935.6	800.0	735.4	704.9	705.9
32.5°	2208.9	2136.0	1886.9	1579.6	1332.4	1130.3	943.0	788.0	701.2	662.5	661.6
35°	2483.0	2381.5	2019.8	1706.0	1377.6	1104.5	911.6	763.1	682.8	654.2	650.5
37.5°	2873.2	2758.8	2268.9	1808.5	1396.0	1070.3	871.0	734.5	638.5	598.8	596.1
40°	3437.0	3269.1	2614.0	1932.1	1381.3	1044.5	826.7	691.1	611.7	585.9	577.6
42.5°	3157.4	2967.4	2408.2	1908.1	1344.4	973.4	784.3	669.9	596.1	575.8	564.7
45°	3331.8	3110.4	2433.1	1774.3	1203.2	868.2	712.3	627.4	553.6	525.0	522.2
46°	3428.7	3197.1	2541.1	1733.7	1138.6	835.0	680.0	608.1	544.4	507.5	499.2
47.5°	3218.3	2960.9	2336.2	1654.4	1086.9	760.3	637.6	577.6	534.2	500.1	494.6
50°	2822.5	2570.6	2020.7	1410.8	935.6	670.8	568.4	532.4	489.0	452.1	445.7
52.5°	2576.1	2364.8	1850.0	1279.8	794.4	565.6	507.5	476.1	431.8	388.5	382.9
55°	1416.3	1270.5	1143.2	961.4	658.8	478.0	442.0	423.5	378.3	335.9	333.1
57.5°	583.1	524.1	519.5	489.9	453.0	402.3	382.0	370.9	325.7	274.0	272.2
60°	490.9	437.4	385.7	339.5	336.8	335.9	329.4	310.0	260.2	206.7	204.8
62.5°	478.0	425.4	374.6	318.3	294.3	301.7	289.7	265.7	227.9	176.2	174.4
65°	487.2	432.7	372.8	309.1	283.3	286.0	273.1	254.7	228.8	191.9	190.1
67.5°	518.6	462.3	394.9	305.4	274.0	279.6	270.3	256.5	241.7	218.7	214.1
70°	523.2	473.3	395.8	307.3	263.9	270.3	267.6	255.6	245.4	225.1	222.4
72.5°	537.0	491.8	404.1	300.8	252.8	255.6	259.3	255.6	249.1	237.1	232.5
75°	524.1	484.4	400.4	295.3	241.7	239.9	249.1	253.7	255.6	251.0	245.4
77.5°	521.3	488.1	401.4	291.6	231.6	224.2	231.6	239.0	242.7	238.1	233.4
80°	525.0	496.4	413.4	292.5	220.5	202.1	205.8	214.1	215.0	206.7	200.2
82.5°	516.7	489.0	400.4	282.3	203.0	179.9	180.8	189.2	190.1	179.9	172.5
85°	553.6	520.4	409.7	269.4	184.5	164.2	165.2	168.9	163.3	152.2	144.9
87.5°	552.7	513.0	391.2	249.1	172.5	155.0	154.1	153.2	143.9	131.0	124.6
90°	533.3	491.8	366.3	219.6	152.2	142.1	139.3	133.8	120.9	106.1	101.5
92.5°	520.4	476.1	349.7	207.6	133.8	124.6	122.7	117.2	104.3	88.6	85.8
95°	506.6	463.2	322.0	181.8	118.1	108.9	106.1	100.6	90.4	77.5	75.7
97.5°	446.6	404.1	284.2	165.2	105.2	95.0	93.2	88.6	80.3	71.0	70.1
100°	412.4	374.6	263.9	151.3	94.1	83.0	82.1	79.4	73.8	67.4	66.4
102.5°	385.7	348.8	244.5	140.2	84.0	73.8	72.9	72.0	69.2	64.6	64.6
105°	365.4	330.3	234.4	131.0	75.7	67.4	66.4	66.4	63.7	60.9	60.9
107.5°	318.3	288.8	203.9	116.3	69.2	61.8	61.8	61.8	60.0	58.1	59.1



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	299.9	272.2	193.8	108.9	66.4	57.2	56.3	56.3	55.4	56.3	56.3
112.5°	258.4	234.4	170.7	104.3	64.6	54.4	51.7	49.8	48.0	49.8	50.7
115°	248.2	226.1	165.2	100.6	62.7	52.6	48.9	46.1	42.4	45.2	45.2
117.5°	227.9	207.6	153.2	97.8	62.7	49.8	46.1	43.4	39.7	41.5	41.5
120°	218.7	201.1	154.1	100.6	63.7	47.1	43.4	38.8	36.0	38.8	38.8
122.5°	205.8	190.1	144.9	95.0	60.9	46.1	42.4	33.2	31.4	34.1	34.1
125°	172.5	159.6	124.6	84.0	58.1	46.1	41.5	29.5	29.5	31.4	32.3
127.5°	146.7	136.6	108.0	78.4	59.1	48.9	39.7	25.8	27.7	30.4	30.4
130°	138.4	130.1	107.0	80.3	61.8	51.7	32.3	24.0	25.8	28.6	28.6
132.5°	129.2	121.8	103.3	82.1	62.7	48.9	26.8	22.1	24.0	25.8	25.8
135°	113.5	108.0	93.2	74.7	56.3	38.8	21.2	19.4	22.1	24.0	24.9
137.5°	99.7	95.0	82.1	67.4	50.7	33.2	14.8	17.5	19.4	20.3	21.2
140°	82.1	79.4	69.2	55.4	37.8	18.5	11.1	13.8	15.7	17.5	17.5
142.5°	60.0	58.1	48.9	36.0	23.1	7.4	7.4	10.1	12.0	13.8	13.8
145°	39.7	37.8	31.4	23.1	10.1	1.8	4.6	7.4	10.1	11.1	11.1
147.5°	24.9	24.0	19.4	12.0	3.7	1.8	1.8	5.5	7.4	8.3	8.3
150°	12.9	12.0	8.3	3.7	1.8	0.9	0.9	1.8	4.6	5.5	5.5
152.5°	2.8	2.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8
155°	0.9	0.9	0.9	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	0.9	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)