

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: P239987

Luminaire Tested: **UTLD-AF24-60-D-U-T2U-A-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239987
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-AF24-60-D-U-T2U-A-7030
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 3000K, 800mA 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: 4970 lumens
Efficiency: N/A
Efficacy: 77.7 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 - U3 - G2

Input Watts (W): 64
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

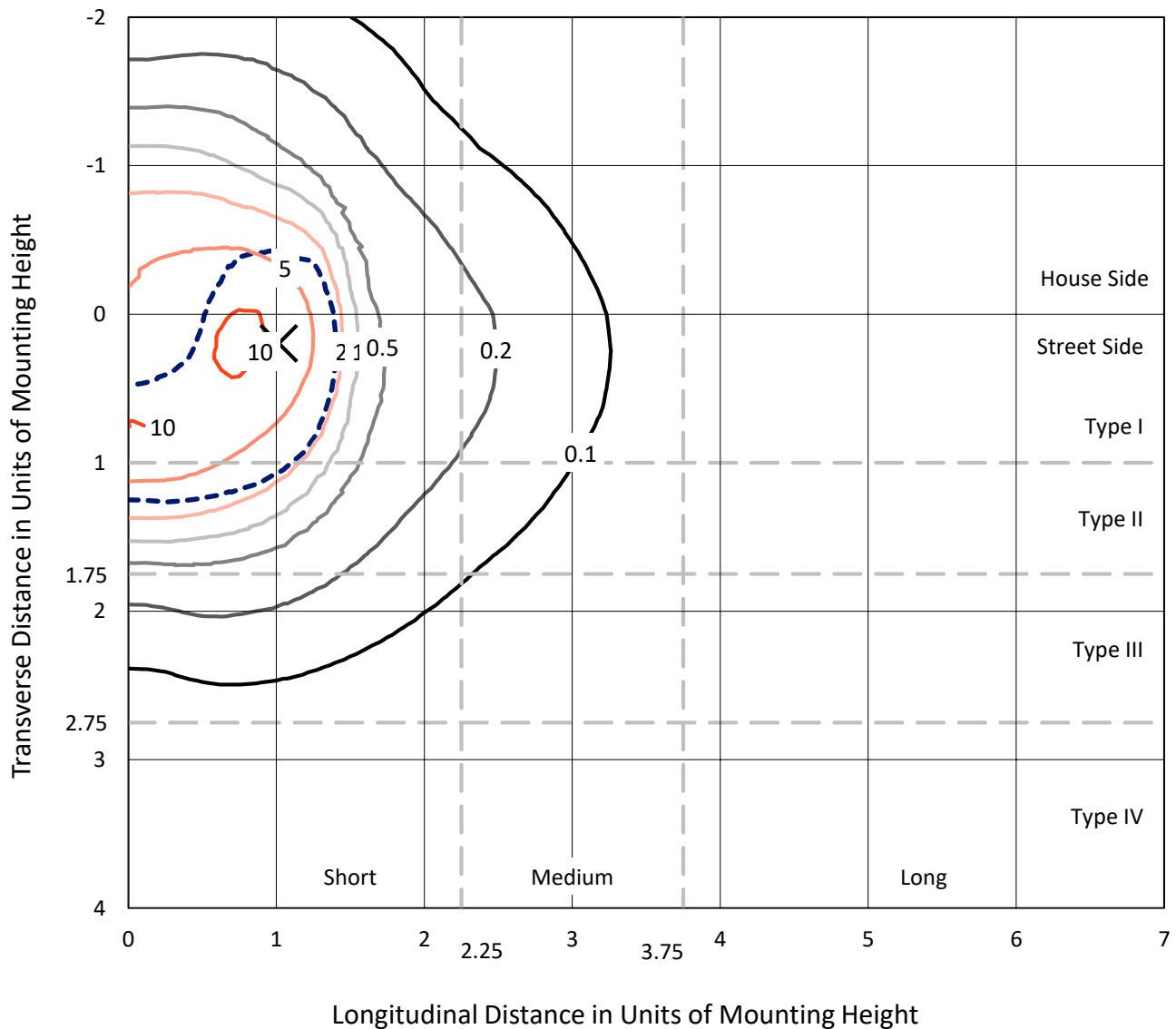


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

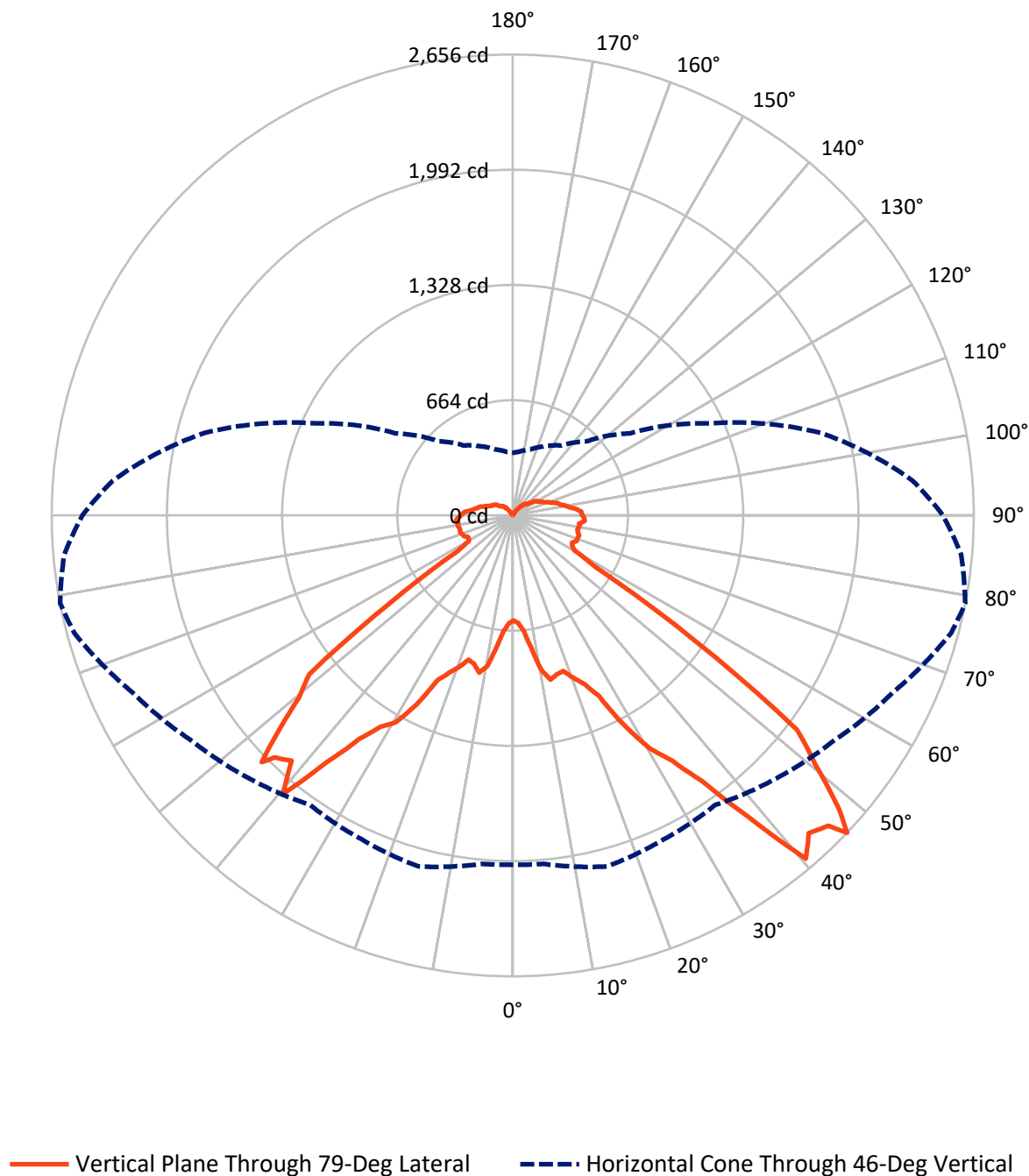


Based on 10 foot mounting height. Maximum calculated value = 10.9 fc
Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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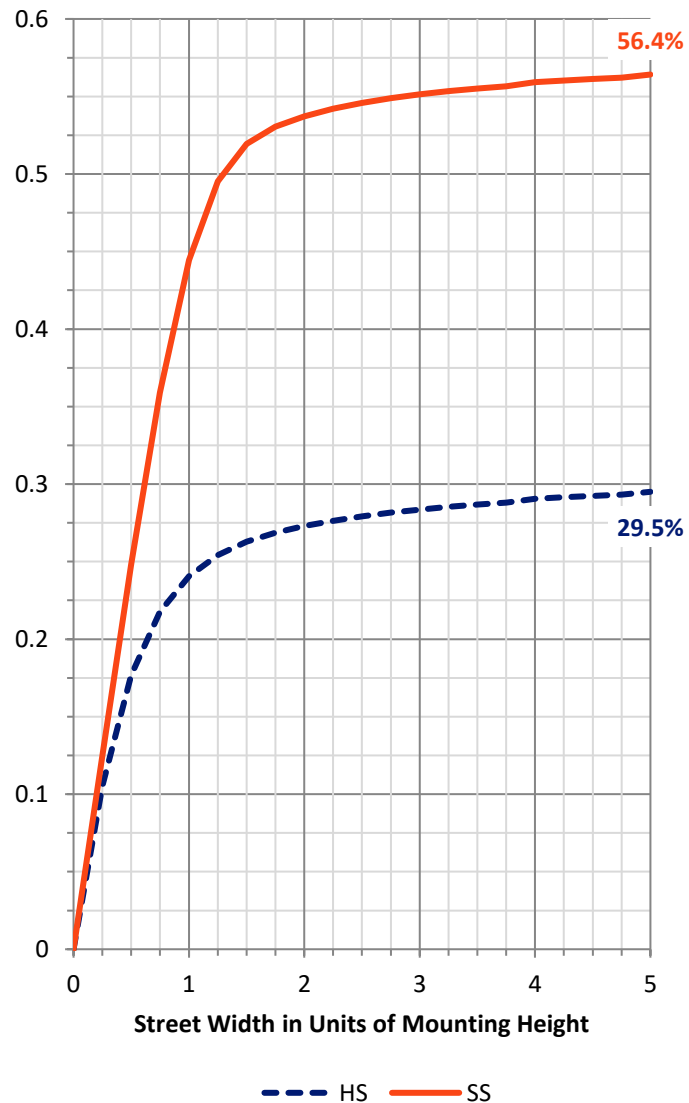
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1515.0	188.4	1703.4
	% Fixture	30.5	3.8	34.3
Street Side	Lumens	2857.8	408.8	3266.6
	% Fixture	57.5	8.2	65.7
Total	Lumens	4372.8	597.2	4970.0
	% Fixture	88.0	12.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	1.3
10°-20°	236.1	4.8
20°-30°	477.0	9.6
30°-40°	873.3	17.6
40°-50°	1206.8	24.3
50°-60°	770.3	15.5
60°-70°	275.9	5.6
70°-80°	247.8	5.0
80°-90°	220.3	4.4
90°-100°	202.1	4.1
100°-110°	157.1	3.2
110°-120°	109.1	2.2
120°-130°	73.0	1.5
130°-140°	43.8	0.9
140°-150°	11.6	0.2
150°-160°	0.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	4372.8	88.0
0°-180°	4970.0	100.0

Coefficient of Utilization



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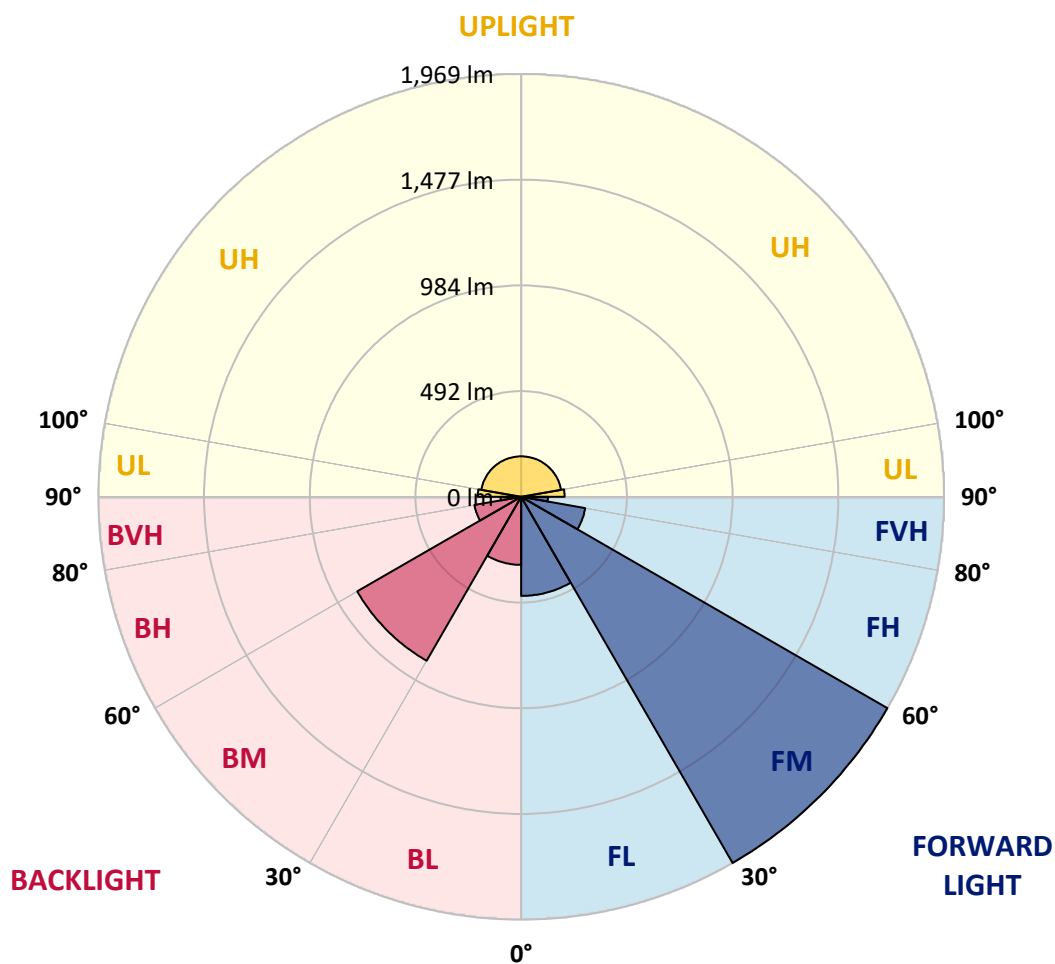
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	461.6	9.3			
FM	(30°-60°)	1968.9	39.6			
FH	(60°-80°)	302.8	6.1			G0/660
FVH	(80°-90°)	124.4	2.5			G2/225
BL	(0°-30°)	316.8	6.4	B1/500		
BM	(30°-60°)	881.4	17.7	B1/1000		
BH	(60°-80°)	220.9	4.4	B1/500		G1/500
BVH	(80°-90°)	95.9	1.9			G1/100
UL	(90°-100°)	202.1	4.1		U3/500	
UH	(100°-180°)	188.4	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°	605.7	605.7	605.7	605.7	605.7	605.7	605.7	605.7	605.7	605.7	605.7
2.5°	615.7	617.7	617.1	615.7	618.4	619.8	619.8	619.1	619.8	621.1	623.8
5°	645.1	644.4	646.4	651.8	659.1	661.1	667.1	665.8	669.1	669.1	673.1
7.5°	696.5	697.1	703.8	709.1	717.1	734.5	751.2	773.2	772.5	771.2	776.5
10°	749.8	749.8	763.2	782.5	815.2	851.9	867.9	887.3	907.3	903.9	898.6
12.5°	766.5	769.2	792.5	840.6	911.3	974.0	1006.0	1002.0	982.0	970.7	952.6
15°	797.2	800.5	825.9	899.3	983.3	1039.4	1051.4	1002.0	958.6	950.6	935.3
17.5°	912.6	912.6	938.6	1006.0	1069.4	1056.7	1009.3	986.0	958.0	942.6	920.6
20°	992.7	997.3	1038.7	1086.1	1120.8	1079.4	1080.1	1036.7	1008.0	998.7	978.0
22.5°	1070.1	1076.7	1088.7	1162.8	1172.8	1180.8	1156.8	1117.4	1069.4	1054.0	1032.7
25°	1234.2	1236.2	1248.8	1284.2	1257.5	1244.2	1209.5	1177.5	1158.8	1150.8	1128.1
27.5°	1429.0	1423.0	1428.3	1431.0	1390.3	1353.6	1302.9	1336.9	1363.6	1370.9	1350.9
30°	1469.0	1459.0	1499.7	1543.0	1523.0	1479.0	1475.7	1516.4	1566.4	1557.0	1529.0
32.5°	1630.4	1615.1	1633.8	1638.4	1635.1	1622.4	1617.1	1668.5	1704.5	1683.8	1643.1
35°	1760.5	1759.9	1693.8	1709.2	1718.5	1747.8	1777.2	1847.2	1879.3	1880.6	1846.6
37.5°	2038.7	2018.7	1994.0	1896.6	1845.2	1858.6	1960.0	2084.1	2156.1	2203.5	2149.4
40°	2134.1	2142.8	2122.1	2111.4	2036.7	2005.4	2122.1	2335.6	2531.0	2600.4	2593.7
42.5°	1977.3	1997.3	1985.3	2059.4	2118.8	2158.8	2299.5	2482.3	2519.7	2501.7	2406.3
45°	2108.1	2108.1	2076.1	2030.0	2050.7	2180.8	2292.2	2415.6	2532.4	2551.1	2498.3
46°	2013.4	2015.4	2094.1	2059.4	2036.0	2144.1	2260.2	2415.6	2615.1	2655.8	2593.7
47.5°	1838.6	1835.2	1980.0	1991.3	2007.4	2096.1	2223.5	2415.0	2527.7	2530.4	2453.0
50°	1457.0	1463.0	1661.8	1767.2	1872.6	1960.0	2132.1	2240.2	2265.5	2260.9	2176.8
52.5°	1182.8	1198.8	1304.2	1437.0	1564.4	1732.5	1932.6	2033.4	2088.7	2052.0	1974.7
55°	819.9	854.6	987.3	1106.7	1293.5	1455.0	1627.8	1637.1	1384.3	1268.9	1125.4
57.5°	507.0	513.7	631.1	799.9	940.0	1066.7	1068.7	830.6	646.4	561.7	467.0
60°	281.5	287.5	391.6	516.3	653.1	668.5	597.1	480.3	431.0	408.9	375.6
62.5°	209.5	214.1	282.2	358.9	413.6	435.6	400.9	392.9	393.6	383.6	361.6
65°	188.8	191.5	247.5	286.2	318.2	322.9	335.6	363.6	378.9	376.9	367.6
67.5°	171.4	174.8	225.5	253.5	272.9	295.5	306.2	349.6	390.9	397.6	388.9
70°	152.8	158.1	203.5	232.8	254.8	276.9	298.2	352.2	385.6	394.9	390.9
72.5°	132.1	138.8	176.8	207.5	232.2	256.2	292.9	338.9	384.3	400.9	403.6
75°	116.1	124.8	156.1	183.5	209.5	238.2	276.9	334.2	376.9	387.6	392.9
77.5°	104.7	114.1	138.1	163.4	188.1	219.5	264.2	332.9	369.6	381.6	390.9
80°	96.1	105.4	125.4	145.4	166.1	201.5	250.8	330.9	376.9	389.6	394.9
82.5°	89.4	98.1	115.4	133.4	150.1	182.1	241.5	327.6	374.9	385.6	388.3
85°	90.1	96.7	112.7	129.4	144.8	172.1	236.8	328.9	399.6	416.3	418.9
87.5°	94.7	99.4	116.1	135.4	152.8	180.8	245.5	326.2	396.9	412.3	418.9
90°	102.7	106.7	126.8	149.4	170.1	196.1	243.5	318.9	385.6	399.6	403.6
92.5°	127.4	130.8	152.8	177.5	195.5	204.1	235.5	330.2	387.6	395.6	395.6
95°	164.8	168.8	190.1	208.8	212.1	207.5	231.5	293.5	353.6	370.9	380.9
97.5°	206.1	207.5	219.5	222.8	212.8	202.1	226.2	274.2	320.9	332.9	335.6
100°	219.5	219.5	227.5	224.8	205.5	190.8	204.8	249.5	294.9	308.2	312.2
102.5°	222.1	223.5	231.5	222.8	196.8	172.8	182.1	224.8	266.8	281.5	289.5
105°	235.5	236.2	231.5	210.1	178.1	156.8	164.8	207.5	252.2	266.2	274.9
107.5°	220.1	218.1	205.5	185.5	164.1	148.8	158.1	189.5	223.5	234.8	240.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
110°	182.1	180.8	176.1	168.8	155.4	144.1	150.1	178.8	211.5	220.1	225.5
112.5°	175.5	174.1	169.4	160.8	145.4	136.8	146.8	171.4	191.5	195.5	196.1
115°	168.8	167.4	156.8	146.8	134.8	130.8	137.4	160.1	178.8	183.5	187.5
117.5°	145.4	144.1	136.1	130.1	125.4	127.4	138.8	151.4	164.8	168.8	171.4
120°	129.4	128.8	124.8	120.7	118.1	119.4	131.4	145.4	158.8	162.8	164.8
122.5°	122.1	121.4	116.7	110.7	110.7	110.7	120.1	130.8	145.4	148.8	153.4
125°	107.4	107.4	102.7	98.1	104.7	107.4	109.4	110.1	121.4	126.8	128.8
127.5°	95.4	96.1	92.1	88.7	100.7	106.7	105.4	96.7	103.4	107.4	110.1
130°	94.1	94.1	89.4	85.4	91.4	103.4	99.4	90.7	98.7	101.4	102.7
132.5°	91.4	91.4	86.7	80.7	82.1	95.4	86.7	84.7	92.1	94.7	95.4
135°	84.1	84.1	80.7	72.7	67.4	80.7	70.0	74.0	81.4	83.4	84.1
137.5°	74.7	74.7	71.4	64.7	53.4	60.7	54.0	62.7	70.0	72.0	72.7
140°	61.4	60.7	58.7	50.7	38.7	34.0	36.7	50.0	57.4	58.7	60.7
142.5°	45.4	46.0	42.7	36.0	23.3	12.7	21.3	32.0	40.0	42.0	43.4
145°	33.4	32.7	29.4	23.3	12.7	2.0	10.0	20.0	25.4	27.4	28.7
147.5°	22.0	22.0	19.3	14.0	4.0	0.7	2.7	10.0	16.0	17.3	18.0
150°	14.7	14.7	10.7	4.0	0.7	0.7	0.7	2.0	6.7	8.0	9.3
152.5°	4.7	4.7	2.0	1.3	0.7	0.0	0.0	0.7	1.3	1.3	2.0
155°	1.3	1.3	1.3	0.7	0.0	0.0	0.0	0.0	0.7	0.7	0.7
157.5°	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.7	0.7	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°	605.7	605.7	605.7	605.7	605.7	605.7	605.7	605.7	605.7	605.7	605.7
2.5°	624.4	623.8	621.8	619.8	614.4	607.7	601.1	596.4	593.7	591.7	591.1
5°	671.8	673.1	663.8	648.4	633.8	620.4	607.7	595.7	589.1	583.7	581.7
7.5°	772.5	774.5	755.8	731.8	694.5	649.1	610.4	584.4	565.7	554.4	552.4
10°	897.3	891.9	869.9	818.6	750.5	680.5	607.7	551.7	521.7	507.7	507.0
12.5°	948.0	940.6	916.0	873.3	801.9	710.5	620.4	546.4	501.7	483.7	483.0
15°	924.6	911.9	866.6	827.2	799.2	748.5	667.8	583.1	521.7	499.0	493.0
17.5°	904.6	891.9	853.9	797.2	744.5	722.5	683.1	613.1	549.0	517.0	510.3
20°	963.3	955.3	907.9	832.6	774.5	686.5	654.4	606.4	558.4	538.4	533.0
22.5°	1017.4	1013.3	954.0	875.3	797.2	735.8	671.8	636.4	589.7	575.7	569.7
25°	1118.1	1099.4	1002.0	895.9	828.6	768.5	686.5	631.1	574.4	556.4	553.0
27.5°	1354.9	1311.5	1169.5	1010.0	874.6	779.2	685.1	603.7	541.7	519.0	517.7
30°	1505.7	1466.3	1306.2	1130.8	946.6	804.5	676.5	578.4	531.7	509.7	510.3
32.5°	1597.1	1544.4	1364.3	1142.1	963.3	817.2	681.8	569.7	507.0	479.0	478.3
35°	1795.2	1721.8	1460.3	1233.5	996.0	798.5	659.1	551.7	493.7	473.0	470.3
37.5°	2077.4	1994.7	1640.4	1307.5	1009.3	773.9	629.8	531.0	461.6	433.0	431.0
40°	2485.0	2363.6	1889.9	1396.9	998.7	755.2	597.7	499.7	442.3	423.6	417.6
42.5°	2282.9	2145.4	1741.2	1379.6	972.0	703.8	567.0	484.3	431.0	416.3	408.3
45°	2409.0	2248.8	1759.2	1282.9	869.9	627.8	515.0	453.6	400.3	379.6	377.6
46°	2479.0	2311.6	1837.2	1253.5	823.2	603.7	491.7	439.6	393.6	366.9	360.9
47.5°	2326.9	2140.8	1689.1	1196.1	785.9	549.7	461.0	417.6	386.3	361.6	357.6
50°	2040.7	1858.6	1461.0	1020.0	676.5	485.0	410.9	384.9	353.6	326.9	322.2
52.5°	1862.6	1709.8	1337.6	925.3	574.4	408.9	366.9	344.2	312.2	280.9	276.9
55°	1024.0	918.6	826.6	695.1	476.3	345.6	319.5	306.2	273.5	242.8	240.8
57.5°	421.6	378.9	375.6	354.2	327.6	290.9	276.2	268.2	235.5	198.1	196.8
60°	354.9	316.2	278.9	245.5	243.5	242.8	238.2	224.2	188.1	149.4	148.1
62.5°	345.6	307.5	270.8	230.2	212.8	218.1	209.5	192.1	164.8	127.4	126.1
65°	352.2	312.9	269.5	223.5	204.8	206.8	197.5	184.1	165.4	138.8	137.4
67.5°	374.9	334.2	285.5	220.8	198.1	202.1	195.5	185.5	174.8	158.1	154.8
70°	378.3	342.2	286.2	222.1	190.8	195.5	193.5	184.8	177.5	162.8	160.8
72.5°	388.3	355.6	292.2	217.5	182.8	184.8	187.5	184.8	180.1	171.4	168.1
75°	378.9	350.2	289.5	213.5	174.8	173.5	180.1	183.5	184.8	181.5	177.5
77.5°	376.9	352.9	290.2	210.8	167.4	162.1	167.4	172.8	175.5	172.1	168.8
80°	379.6	358.9	298.9	211.5	159.4	146.1	148.8	154.8	155.4	149.4	144.8
82.5°	373.6	353.6	289.5	204.1	146.8	130.1	130.8	136.8	137.4	130.1	124.8
85°	400.3	376.3	296.2	194.8	133.4	118.7	119.4	122.1	118.1	110.1	104.7
87.5°	399.6	370.9	282.9	180.1	124.8	112.1	111.4	110.7	104.1	94.7	90.1
90°	385.6	355.6	264.8	158.8	110.1	102.7	100.7	96.7	87.4	76.7	73.4
92.5°	376.3	344.2	252.8	150.1	96.7	90.1	88.7	84.7	75.4	64.0	62.0
95°	366.2	334.9	232.8	131.4	85.4	78.7	76.7	72.7	65.4	56.0	54.7
97.5°	322.9	292.2	205.5	119.4	76.1	68.7	67.4	64.0	58.0	51.4	50.7
100°	298.2	270.8	190.8	109.4	68.0	60.0	59.4	57.4	53.4	48.7	48.0
102.5°	278.9	252.2	176.8	101.4	60.7	53.4	52.7	52.0	50.0	46.7	46.7
105°	264.2	238.8	169.4	94.7	54.7	48.7	48.0	48.0	46.0	44.0	44.0
107.5°	230.2	208.8	147.4	84.1	50.0	44.7	44.7	44.7	43.4	42.0	42.7



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	216.8	196.8	140.1	78.7	48.0	41.4	40.7	40.7	40.0	40.7	40.7
112.5°	186.8	169.4	123.4	75.4	46.7	39.4	37.4	36.0	34.7	36.0	36.7
115°	179.5	163.4	119.4	72.7	45.4	38.0	35.4	33.4	30.7	32.7	32.7
117.5°	164.8	150.1	110.7	70.7	45.4	36.0	33.4	31.4	28.7	30.0	30.0
120°	158.1	145.4	111.4	72.7	46.0	34.0	31.4	28.0	26.0	28.0	28.0
122.5°	148.8	137.4	104.7	68.7	44.0	33.4	30.7	24.0	22.7	24.7	24.7
125°	124.8	115.4	90.1	60.7	42.0	33.4	30.0	21.3	21.3	22.7	23.3
127.5°	106.1	98.7	78.1	56.7	42.7	35.4	28.7	18.7	20.0	22.0	22.0
130°	100.1	94.1	77.4	58.0	44.7	37.4	23.3	17.3	18.7	20.7	20.7
132.5°	93.4	88.1	74.7	59.4	45.4	35.4	19.3	16.0	17.3	18.7	18.7
135°	82.1	78.1	67.4	54.0	40.7	28.0	15.3	14.0	16.0	17.3	18.0
137.5°	72.0	68.7	59.4	48.7	36.7	24.0	10.7	12.7	14.0	14.7	15.3
140°	59.4	57.4	50.0	40.0	27.4	13.3	8.0	10.0	11.3	12.7	12.7
142.5°	43.4	42.0	35.4	26.0	16.7	5.3	5.3	7.3	8.7	10.0	10.0
145°	28.7	27.4	22.7	16.7	7.3	1.3	3.3	5.3	7.3	8.0	8.0
147.5°	18.0	17.3	14.0	8.7	2.7	1.3	1.3	4.0	5.3	6.0	6.0
150°	9.3	8.7	6.0	2.7	1.3	0.7	0.7	1.3	3.3	4.0	4.0
152.5°	2.0	2.0	1.3	0.7	0.7	0.7	0.7	0.7	0.7	1.3	1.3
155°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
157.5°	0.7	0.7	0.7	0.7	0.7	0.7	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)