

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P624047

Luminaire Tested: **IFLD-S-SA2E-830-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624047
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2E-830-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

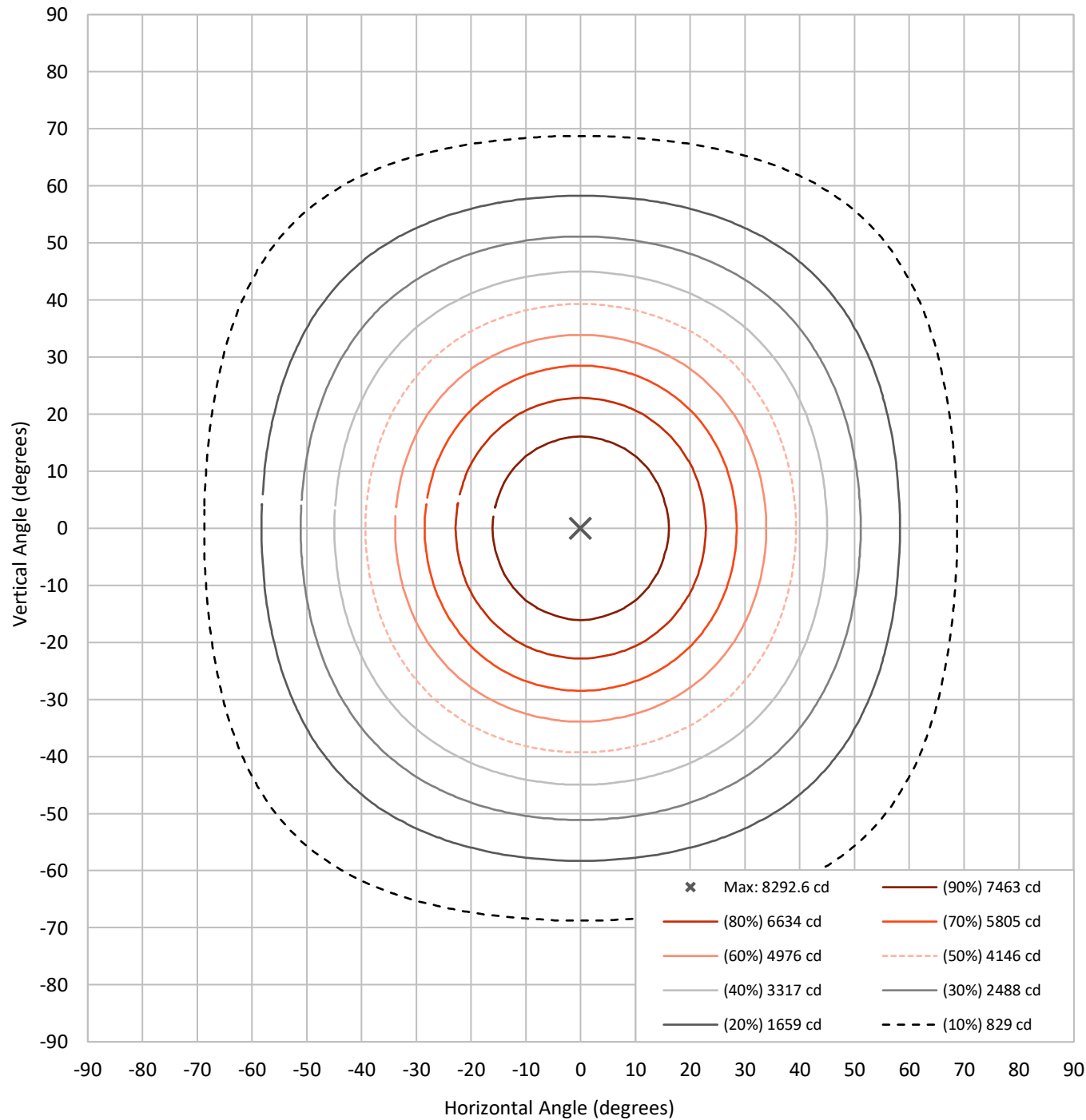
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	14931 lumens	Max Intensity:	8292.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	95.6 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	6460.5 lumens	Field Lumens:	10578.8 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	156.2		
Input Voltage (V):	120		
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:	25 FT		





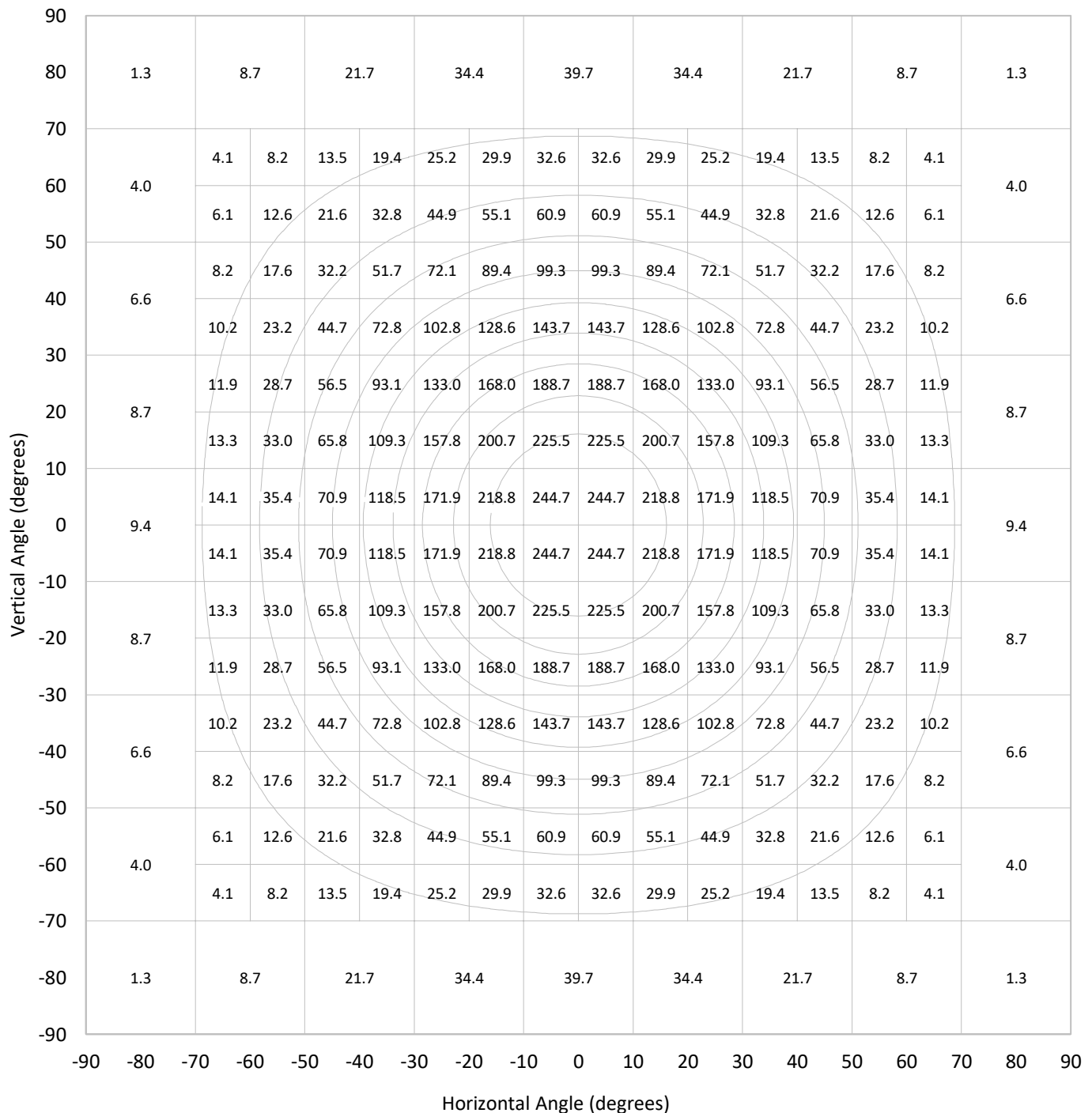
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Iso-Candela Plot



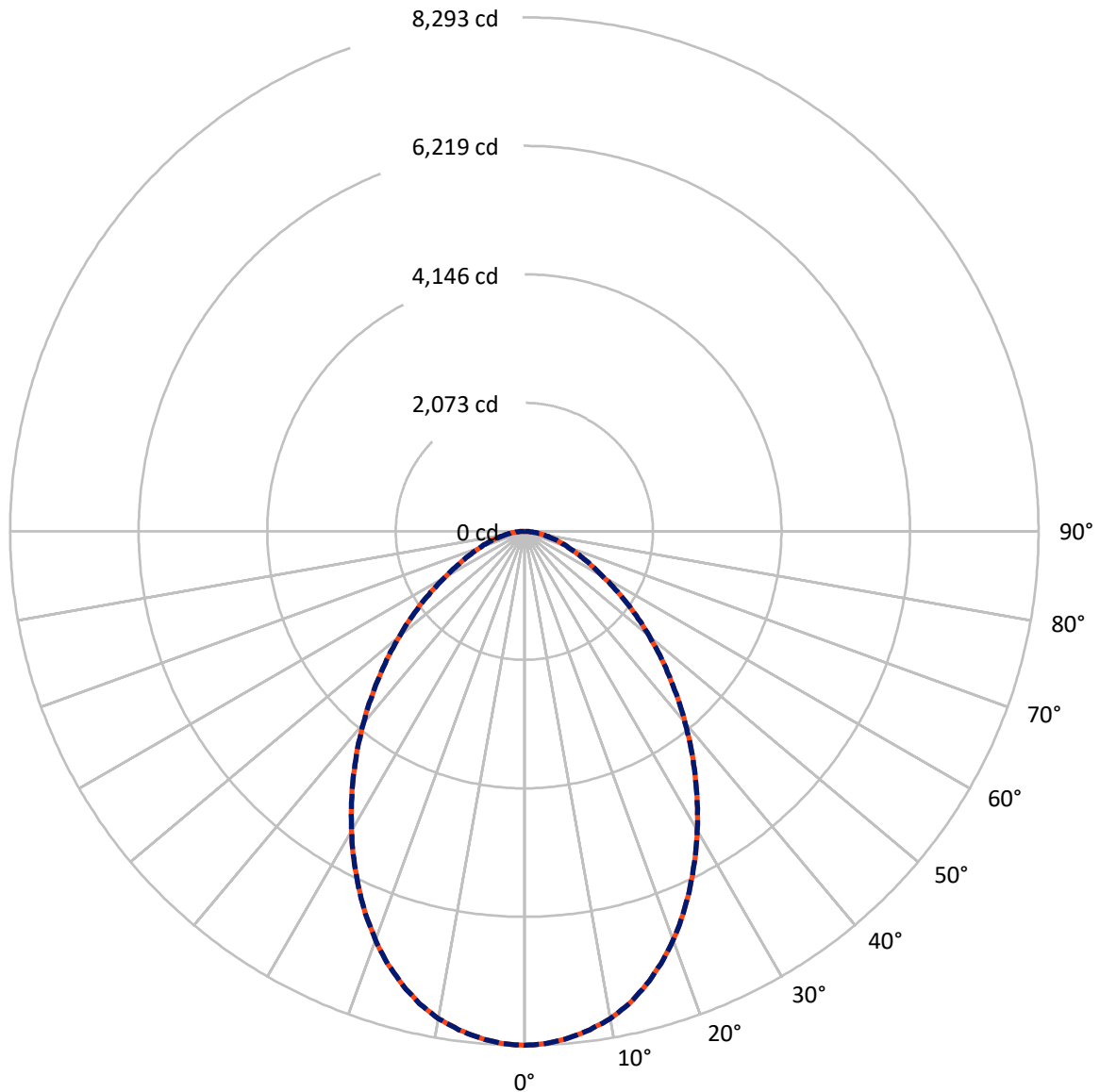
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Lumen Table



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Luminous Intensity Polar Plot

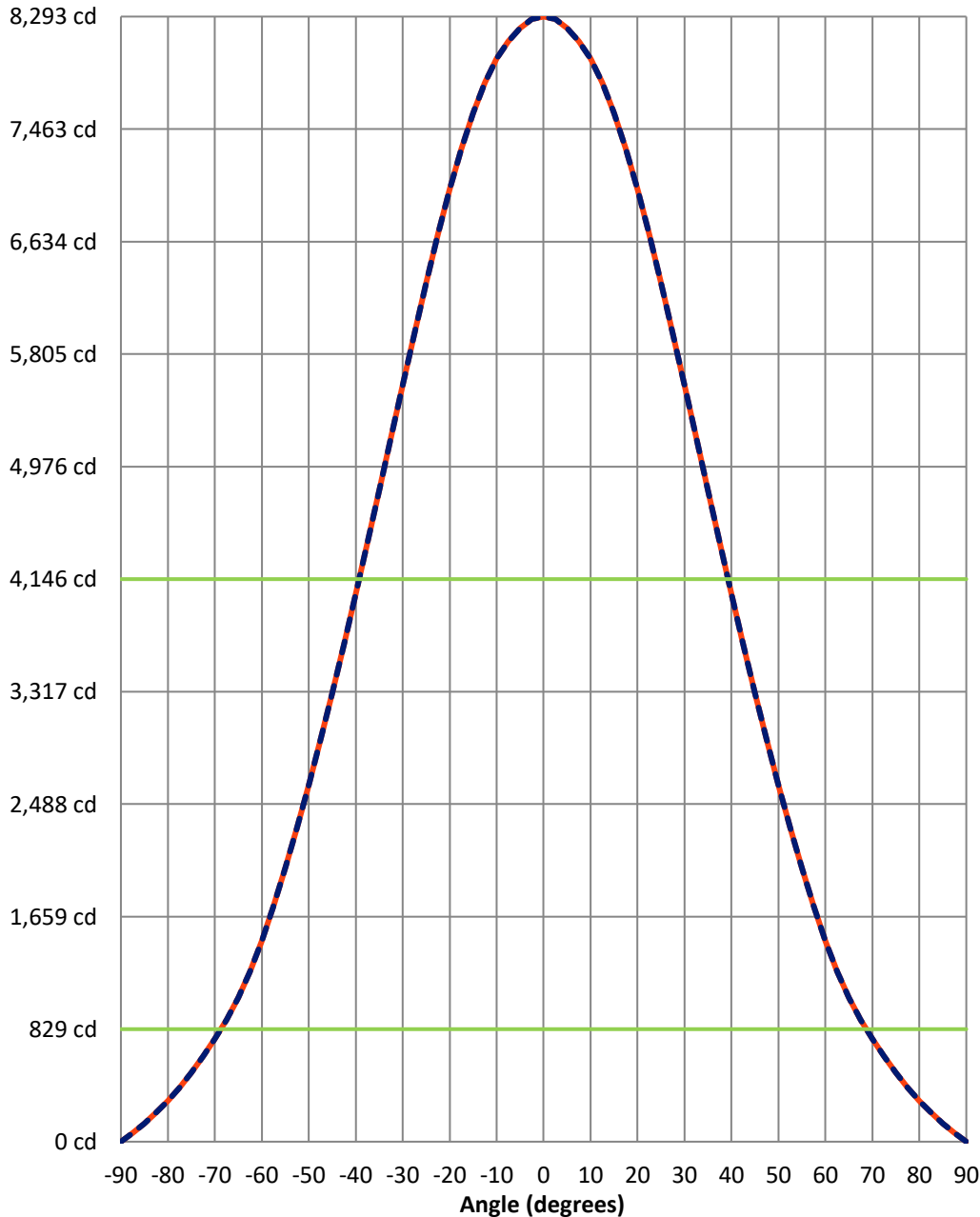


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg



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Luminous Intensity Plot



Beam:
H Angle: 78.6°
V Angle: 78.6°
Lumens: 6460.5
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 10578.8
Efficiency: 70.9%

Spill:
Lumens: 4352.2
Efficiency: 29.1%

— Vertical Distribution through 0-Deg
- - - Horizontal Distribution through 0-Deg

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FIELD
BEAM

CANDELA DISTRIBUTION:

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	63.8	63.8	63.8	63.8	63.8	63.8	63.8	60.7	60.7	59.2	57.6
85°	133.9	133.9	133.9	133.9	133.9	130.8	129.2	127.7	126.1	123.0	121.4
82.5°	214.8	214.8	214.8	214.8	211.7	208.6	207.0	203.9	200.8	196.1	191.5
80°	300.4	300.4	300.4	300.4	295.8	292.7	288.0	284.9	280.2	274.0	267.8
77.5°	398.5	398.5	398.5	393.8	390.7	386.1	381.4	375.2	368.9	361.2	351.8
75°	509.0	509.0	509.0	502.8	498.1	493.5	485.7	477.9	468.6	457.7	445.2
72.5°	628.9	628.9	628.9	621.1	616.5	608.7	599.3	588.4	577.5	563.5	548.0
70°	758.1	758.1	758.1	748.8	741.0	733.2	720.8	708.3	692.7	677.2	658.5
67.5°	898.2	898.2	898.2	887.3	878.0	867.1	853.1	837.5	818.8	797.0	775.2
65°	1061.7	1061.7	1055.4	1046.1	1035.2	1019.6	1002.5	980.7	957.4	929.4	899.8
62.5°	1254.7	1254.7	1245.4	1234.5	1220.5	1200.2	1176.9	1148.9	1116.2	1080.4	1044.6
60°	1478.9	1478.9	1468.0	1454.0	1433.7	1408.8	1377.7	1341.9	1301.4	1256.3	1212.7
57.5°	1737.3	1737.3	1723.3	1704.6	1679.7	1648.6	1609.6	1564.5	1513.1	1457.1	1402.6
55°	2017.5	2017.5	2000.4	1978.6	1949.0	1911.6	1864.9	1812.0	1749.7	1685.9	1615.9
52.5°	2314.8	2314.8	2294.6	2269.7	2235.4	2191.8	2138.9	2076.7	2005.0	1930.3	1847.8
50°	2627.7	2627.7	2604.4	2576.4	2537.4	2486.1	2425.4	2353.7	2274.4	2187.2	2092.2
47.5°	2962.4	2962.4	2936.0	2903.3	2856.6	2797.4	2725.8	2643.3	2553.0	2454.9	2347.5
45°	3306.5	3306.5	3276.9	3239.5	3188.1	3121.2	3041.8	2962.4	2847.2	2733.6	2609.0
42.5°	3664.5	3664.5	3630.2	3588.2	3529.1	3455.9	3365.6	3262.9	3149.2	3021.6	2886.1
40°	4036.5	4036.5	3997.6	3949.4	3884.0	3799.9	3698.7	3583.5	3455.9	3314.2	3164.8
37.5°	4416.4	4416.4	4372.8	4319.9	4246.7	4153.3	4039.7	3912.0	3768.8	3611.6	3446.6
35°	4799.3	4799.3	4751.1	4693.5	4612.5	4509.8	4386.8	4245.1	4086.4	3915.1	3729.9
32.5°	5190.1	5190.1	5137.1	5071.8	4979.9	4866.3	4730.8	4576.7	4416.4	4217.1	4014.8
30°	5576.1	5576.1	5518.5	5446.9	5348.9	5224.3	5076.4	4906.7	4718.4	4514.5	4296.5
27.5°	5956.0	5940.4	5892.1	5815.9	5708.5	5576.1	5415.8	5232.1	5028.2	4804.0	4570.5
25°	6329.6	6312.5	6259.5	6175.5	6060.3	5915.5	5742.7	5546.6	5327.1	5090.4	4835.1
22.5°	6687.6	6668.9	6612.9	6522.6	6399.6	6242.4	6057.2	5847.0	5613.5	5359.8	5090.4
20°	7019.2	6999.0	6941.4	6846.4	6718.8	6552.2	6356.0	6130.3	5881.2	5613.5	5327.1
17.5°	7318.1	7297.9	7237.1	7139.1	7019.2	6834.0	6631.6	6393.4	6130.3	5847.0	5546.6
15°	7581.2	7559.4	7497.1	7399.0	7262.1	7087.7	6874.4	6631.6	6356.0	6057.2	5742.7
12.5°	7805.3	7783.5	7719.7	7621.7	7480.0	7305.6	7087.7	6834.0	6552.2	6242.4	5915.5
10°	7982.8	7961.0	7900.3	7806.9	7660.6	7480.0	7262.1	7019.2	6718.8	6399.6	6060.3
7.5°	8110.5	8090.2	8034.2	7940.8	7806.9	7621.7	7399.0	7139.1	6846.4	6522.6	6175.5
5°	8207.0	8183.6	8127.6	8034.2	7900.3	7719.7	7497.1	7237.1	6941.4	6612.9	6259.5
2.5°	8273.9	8245.9	8183.6	8090.2	7961.0	7783.5	7559.4	7297.9	6999.0	6668.9	6312.5
0°	8292.6	8273.9	8207.0	8110.5	7982.8	7805.3	7581.2	7318.1	7019.2	6687.6	6329.6

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CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	56.0	56.0	54.5	52.9	51.4	48.3	46.7	45.1	43.6	40.5	38.9
85°	118.3	115.2	112.1	109.0	104.3	101.2	96.5	93.4	88.7	84.1	79.4
82.5°	186.8	182.1	175.9	171.2	165.0	157.2	151.0	143.2	135.4	129.2	121.4
80°	261.5	253.7	246.0	238.2	228.8	219.5	210.2	200.8	189.9	179.0	168.1
77.5°	342.5	331.6	320.7	308.2	297.3	284.9	272.4	260.0	246.0	231.9	217.9
75°	432.8	418.8	403.2	387.6	373.6	356.5	339.4	322.2	303.6	286.4	267.8
72.5°	530.8	513.7	495.0	476.4	456.1	434.3	412.5	389.2	367.4	345.6	322.2
70°	636.7	616.5	593.1	569.8	544.8	518.4	491.9	463.9	435.9	407.9	379.8
67.5°	750.3	725.4	697.4	669.4	638.3	607.1	576.0	543.3	509.0	474.8	442.1
65°	871.8	840.6	807.9	772.1	736.3	700.5	663.2	624.2	585.3	544.8	509.0
62.5°	1007.2	968.3	926.2	882.7	842.2	798.6	758.1	709.9	663.2	618.0	572.9
60°	1164.4	1113.0	1061.7	1007.2	955.8	899.8	850.0	797.0	744.1	692.7	639.8
57.5°	1340.3	1274.9	1212.7	1147.3	1078.8	1016.5	952.7	888.9	829.7	769.0	711.4
55°	1539.6	1460.2	1382.4	1301.4	1222.0	1144.2	1063.2	991.6	918.5	850.0	783.0
52.5°	1757.5	1667.2	1570.7	1478.9	1377.7	1281.2	1190.9	1100.6	1015.0	932.5	856.2
50°	1991.0	1885.2	1774.6	1662.6	1547.4	1433.7	1324.8	1218.9	1119.3	1022.8	932.5
47.5°	2233.9	2114.0	1987.9	1860.3	1737.3	1598.7	1468.0	1348.1	1228.2	1119.3	1015.0
45°	2483.0	2347.5	2209.0	2064.2	1919.4	1770.0	1625.2	1478.9	1348.1	1218.9	1100.6
42.5°	2739.8	2587.3	2433.1	2272.8	2112.5	1949.0	1785.5	1625.2	1468.0	1324.8	1190.9
40°	3004.4	2836.3	2660.4	2486.1	2314.8	2128.0	1949.0	1770.0	1598.7	1433.7	1281.2
37.5°	3269.1	3085.4	2895.5	2699.3	2503.2	2314.8	2112.5	1919.4	1737.3	1547.4	1377.7
35°	3535.3	3332.9	3127.4	2914.2	2699.3	2486.1	2272.8	2064.2	1860.3	1662.6	1478.9
32.5°	3803.0	3582.0	3354.7	3127.4	2895.5	2660.4	2433.1	2209.0	1987.9	1774.6	1570.7
30°	4066.1	3826.4	3582.0	3332.9	3085.4	2836.3	2587.3	2347.5	2114.0	1885.2	1667.2
27.5°	4323.0	4066.1	3803.0	3535.3	3269.1	3004.4	2739.8	2483.0	2233.9	1991.0	1757.5
25°	4570.5	4296.5	4014.8	3729.9	3446.6	3164.8	2886.1	2609.0	2347.5	2092.2	1847.8
22.5°	4804.0	4514.5	4217.1	3915.1	3611.6	3314.2	3021.6	2733.6	2454.9	2187.2	1930.3
20°	5028.2	4718.4	4416.4	4086.4	3768.8	3455.9	3149.2	2847.2	2553.0	2274.4	2005.0
17.5°	5232.1	4906.7	4576.7	4245.1	3912.0	3583.5	3262.9	2962.4	2643.3	2353.7	2076.7
15°	5415.8	5076.4	4730.8	4386.8	4039.7	3698.7	3365.6	3041.8	2725.8	2425.4	2138.9
12.5°	5576.1	5224.3	4866.3	4509.8	4153.3	3799.9	3455.9	3121.2	2797.4	2486.1	2191.8
10°	5708.5	5348.9	4979.9	4612.5	4246.7	3884.0	3529.1	3188.1	2856.6	2537.4	2235.4
7.5°	5815.9	5446.9	5071.8	4693.5	4319.9	3949.4	3588.2	3239.5	2903.3	2576.4	2269.7
5°	5892.1	5518.5	5137.1	4751.1	4372.8	3997.6	3630.2	3276.9	2936.0	2604.4	2294.6
2.5°	5940.4	5576.1	5190.1	4799.3	4416.4	4036.5	3664.5	3306.5	2962.4	2627.7	2314.8
0°	5956.0	5576.1	5190.1	4799.3	4416.4	4036.5	3664.5	3306.5	2962.4	2627.7	2314.8

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CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	37.4	34.2	31.1	29.6	26.5	24.9	21.8	18.7	17.1	14.0	10.9
85°	74.7	68.5	63.8	59.2	54.5	48.3	43.6	38.9	32.7	28.0	21.8
82.5°	113.6	105.9	98.1	90.3	82.5	74.7	65.4	57.6	49.8	42.0	32.7
80°	157.2	144.8	133.9	123.0	112.1	101.2	88.7	77.8	65.4	54.5	43.6
77.5°	202.4	188.4	172.8	157.2	141.7	127.7	112.1	98.1	84.1	68.5	54.5
75°	250.6	231.9	214.8	194.6	175.9	155.7	137.0	118.3	101.2	84.1	65.4
72.5°	300.4	277.1	253.7	231.9	208.6	185.2	163.5	140.1	118.3	98.1	77.8
70°	351.8	323.8	295.8	269.3	242.8	214.8	189.9	163.5	137.0	112.1	88.7
67.5°	406.3	373.6	340.9	306.7	277.1	246.0	214.8	185.2	155.7	127.7	101.2
65°	465.5	426.5	386.1	350.3	311.3	277.1	242.8	208.6	175.9	141.7	112.1
62.5°	526.2	481.0	435.9	390.7	350.3	306.7	269.3	231.9	194.6	157.2	123.0
60°	588.4	537.1	485.7	435.9	386.1	340.9	295.8	253.7	214.8	172.8	133.9
57.5°	652.3	594.7	537.1	481.0	426.5	373.6	323.8	277.1	231.9	188.4	144.8
55°	717.6	652.3	588.4	526.2	465.5	406.3	351.8	300.4	250.6	202.4	157.2
52.5°	783.0	711.4	639.8	572.9	509.0	442.1	379.8	322.2	267.8	217.9	168.1
50°	850.0	769.0	692.7	618.0	544.8	474.8	407.9	345.6	286.4	231.9	179.0
47.5°	918.5	829.7	744.1	663.2	585.3	509.0	435.9	367.4	303.6	246.0	189.9
45°	991.6	888.9	797.0	709.9	624.2	543.3	463.9	389.2	322.2	260.0	200.8
42.5°	1063.2	952.7	850.0	758.1	663.2	576.0	491.9	412.5	339.4	272.4	210.2
40°	1144.2	1016.5	899.8	798.6	700.5	607.1	518.4	434.3	356.5	284.9	219.5
37.5°	1222.0	1078.8	955.8	842.2	736.3	638.3	544.8	456.1	373.6	297.3	228.8
35°	1301.4	1147.3	1007.2	882.7	772.1	669.4	569.8	476.4	387.6	308.2	238.2
32.5°	1382.4	1212.7	1061.7	926.2	807.9	697.4	593.1	495.0	403.2	320.7	246.0
30°	1460.2	1274.9	1113.0	968.3	840.6	725.4	616.5	513.7	418.8	331.6	253.7
27.5°	1539.6	1340.3	1164.4	1007.2	871.8	750.3	636.7	530.8	432.8	342.5	261.5
25°	1615.9	1402.6	1212.7	1044.6	899.8	775.2	658.5	548.0	445.2	351.8	267.8
22.5°	1685.9	1457.1	1256.3	1080.4	929.4	797.0	677.2	563.5	457.7	361.2	274.0
20°	1749.7	1513.1	1301.4	1116.2	957.4	818.8	692.7	577.5	468.6	368.9	280.2
17.5°	1812.0	1564.5	1341.9	1148.9	980.7	837.5	708.3	588.4	477.9	375.2	284.9
15°	1864.9	1609.6	1377.7	1176.9	1002.5	853.1	720.8	599.3	485.7	381.4	288.0
12.5°	1911.6	1648.6	1408.8	1200.2	1019.6	867.1	733.2	608.7	493.5	386.1	292.7
10°	1949.0	1679.7	1433.7	1220.5	1035.2	878.0	741.0	616.5	498.1	390.7	295.8
7.5°	1978.6	1704.6	1454.0	1234.5	1046.1	887.3	748.8	621.1	502.8	393.8	300.4
5°	2000.4	1723.3	1468.0	1245.4	1055.4	898.2	758.1	628.9	509.0	398.5	300.4
2.5°	2017.5	1737.3	1478.9	1254.7	1061.7	898.2	758.1	628.9	509.0	398.5	300.4
0°	2017.5	1737.3	1478.9	1254.7	1061.7	898.2	758.1	628.9	509.0	398.5	300.4

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	7.8	6.2	3.1	0.0
85°	17.1	10.9	6.2	0.0
82.5°	24.9	17.1	7.8	0.0
80°	32.7	21.8	10.9	0.0
77.5°	42.0	28.0	14.0	0.0
75°	49.8	32.7	17.1	0.0
72.5°	57.6	38.9	18.7	0.0
70°	65.4	43.6	21.8	0.0
67.5°	74.7	48.3	24.9	0.0
65°	82.5	54.5	26.5	0.0
62.5°	90.3	59.2	29.6	0.0
60°	98.1	63.8	31.1	0.0
57.5°	105.9	68.5	34.2	0.0
55°	113.6	74.7	37.4	0.0
52.5°	121.4	79.4	38.9	0.0
50°	129.2	84.1	40.5	0.0
47.5°	135.4	88.7	43.6	0.0
45°	143.2	93.4	45.1	0.0
42.5°	151.0	96.5	46.7	0.0
40°	157.2	101.2	48.3	0.0
37.5°	165.0	104.3	51.4	0.0
35°	171.2	109.0	52.9	0.0
32.5°	175.9	112.1	54.5	0.0
30°	182.1	115.2	56.0	0.0
27.5°	186.8	118.3	56.0	0.0
25°	191.5	121.4	57.6	0.0
22.5°	196.1	123.0	59.2	0.0
20°	200.8	126.1	60.7	0.0
17.5°	203.9	127.7	60.7	0.0
15°	207.0	129.2	63.8	0.0
12.5°	208.6	130.8	63.8	0.0
10°	211.7	133.9	63.8	0.0
7.5°	214.8	133.9	63.8	0.0
5°	214.8	133.9	63.8	0.0
2.5°	214.8	133.9	63.8	0.0
0°	214.8	133.9	63.8	0.0

(END OF REPORT)