

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: INVUE

Report Number: P95383

Luminaire Tested: **VFS-K-B20-5-LED-E1-MST-SG**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P95383
REPORT SCALED FROM IESNA LM79-08 TEST DATA (P22792)
Test Lab: INNOVATION CENTER
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: VFS-K-B20-5-LED-E1-MST-SG
Description: ARCHITECTURAL FLOOD LUMINAIRE
MEDIUM SYMMETRIC RECTANGULAR WITH SOFTENING GLASS DISTRIBUTION
WITH 20 LED'S, 525mA DRIVE CURRENT
Light Source: -
Ballast/Driver: -

Summary

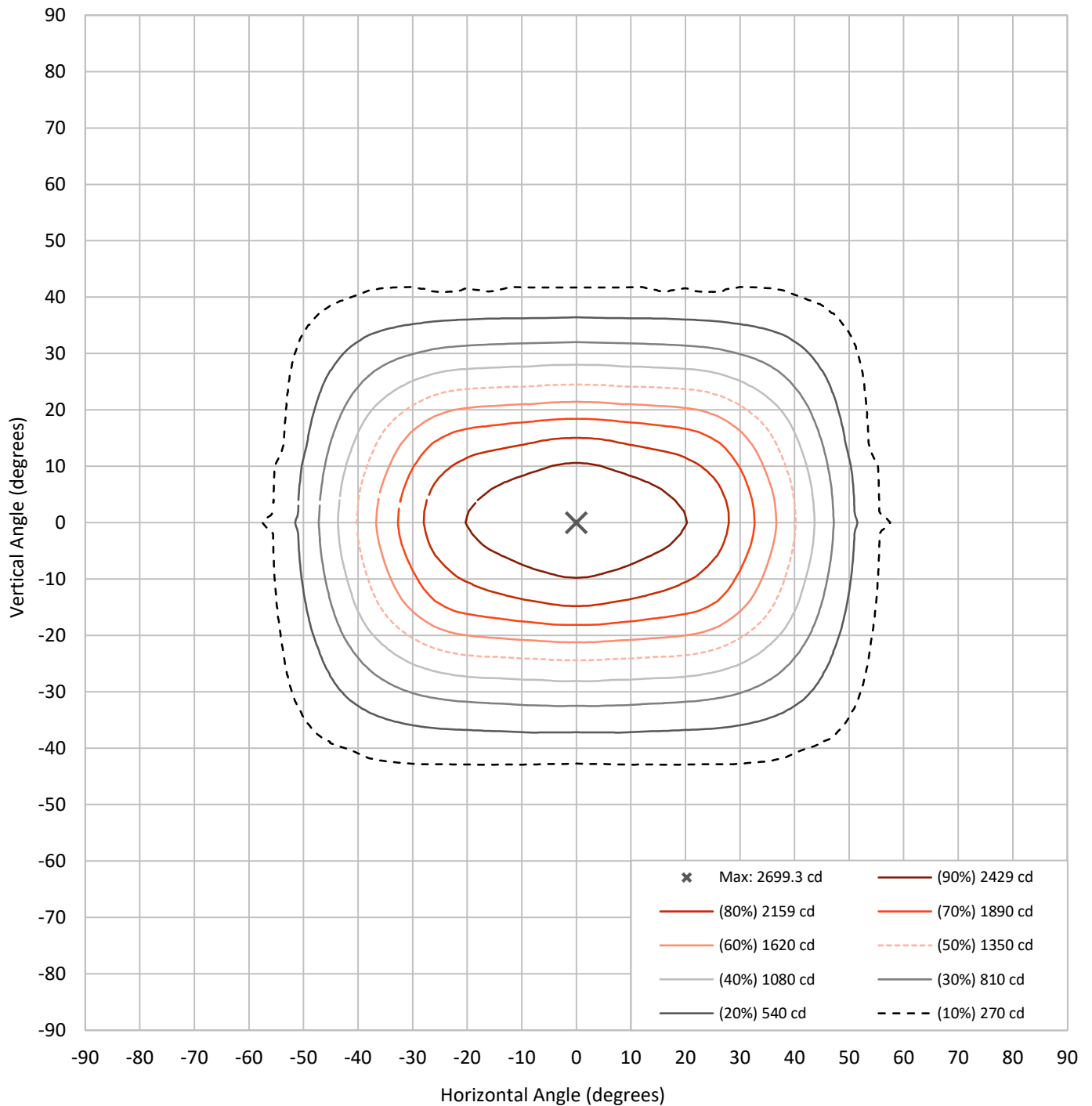
Lumens per Lamp:	N/A	NEMA Type:	6H x 5V
Luminaire Lumens:	3168.4 lumens	Max Intensity:	2699.3 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	90.8 lumens/watt		
Luminous Opening:	(L: 0.83 ' x W: 0 ' x H: 0.5 ')		
Beam Angle (50%):	80.5°H x 48.9°V	Field Angle (10%):	115.1°H x 84.2°V
Beam Lumens:	1967.7 lumens	Field Lumens:	2944.4 lumens
Beam Efficiency:	62.1%	Field Efficiency:	92.9%
Input Watts (W):	34.9		
Input Voltage (V):	NR		
Input Current (A _{in}):	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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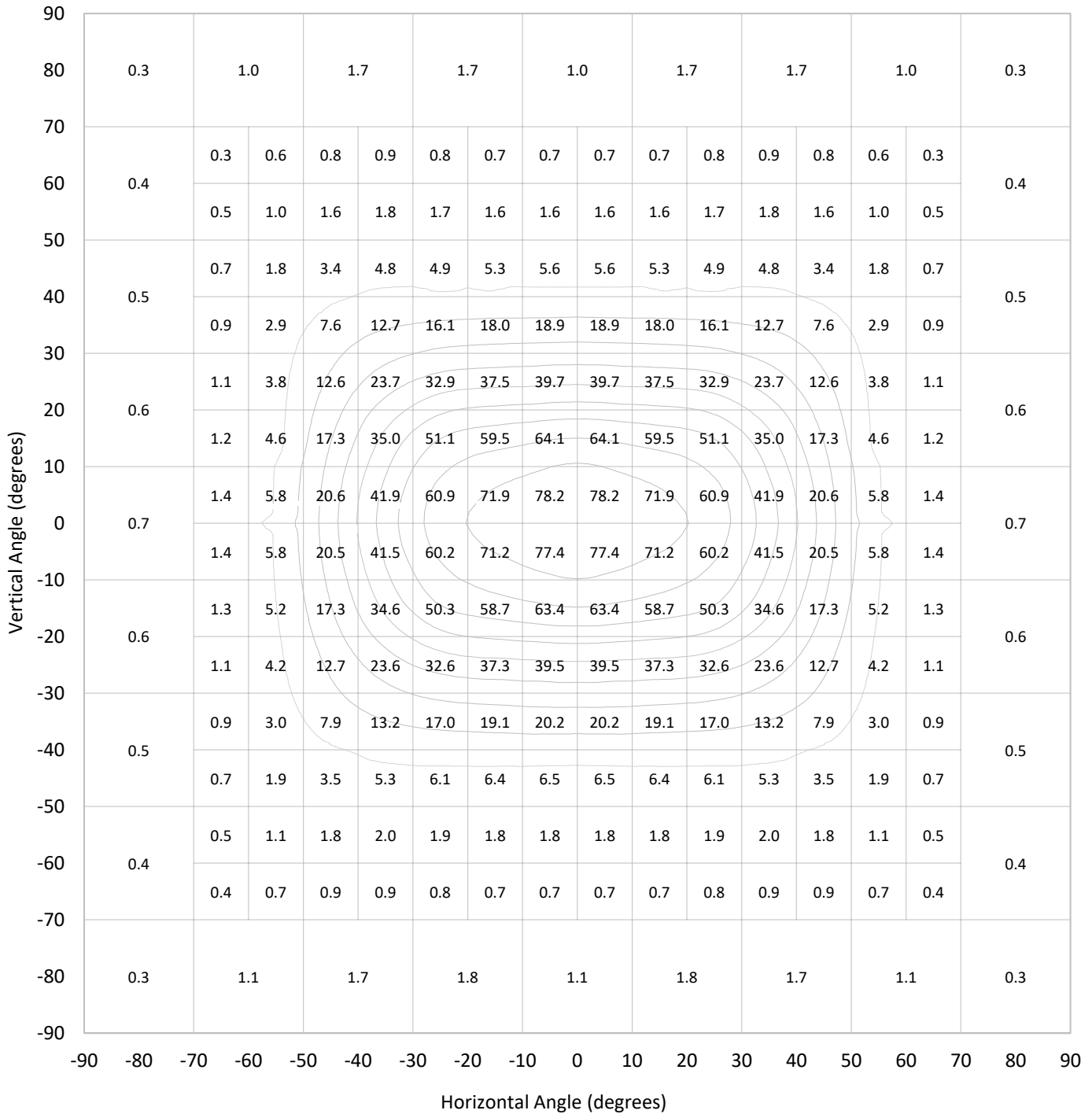
Iso-Candela Plot





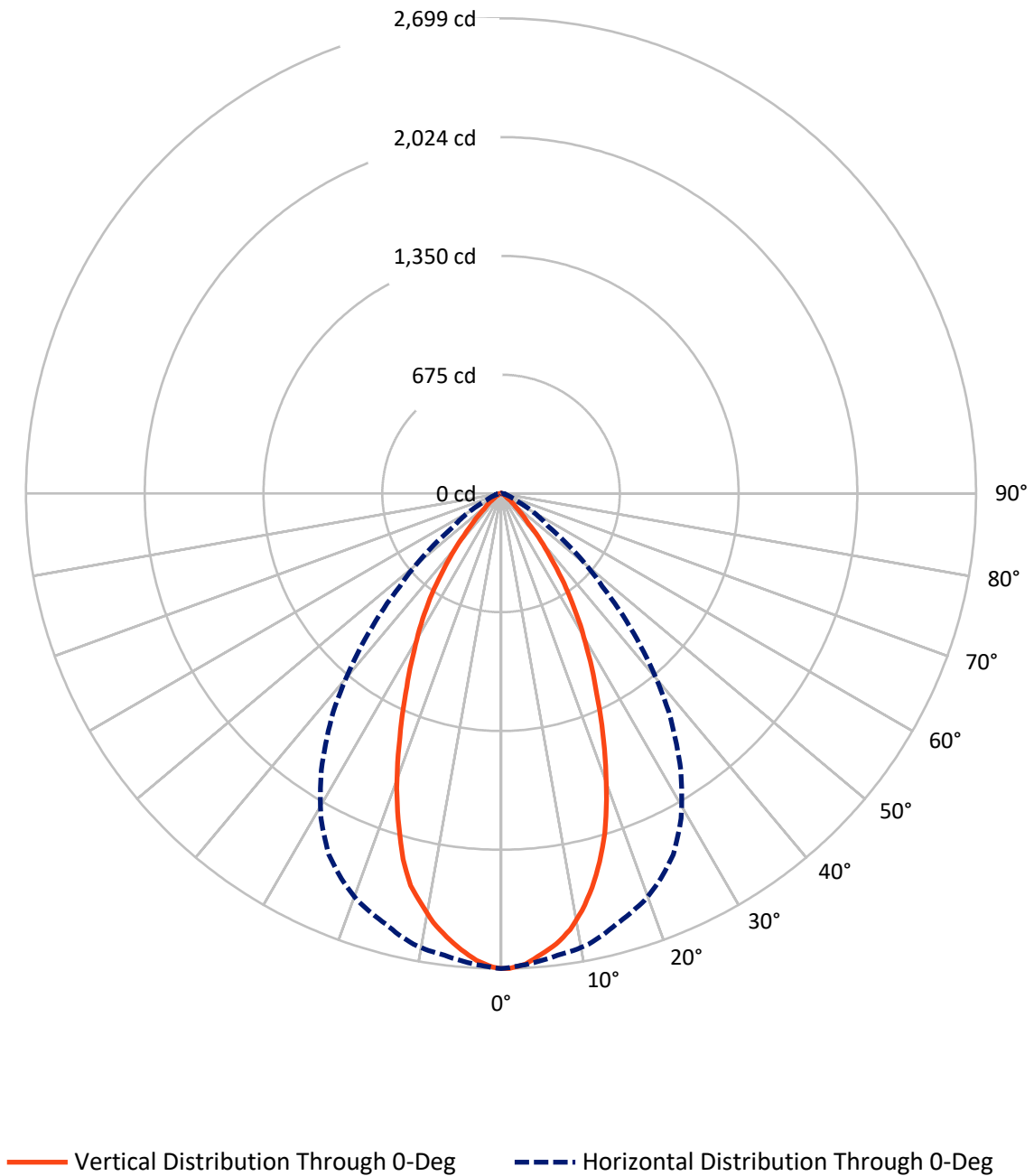
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Lumen Table



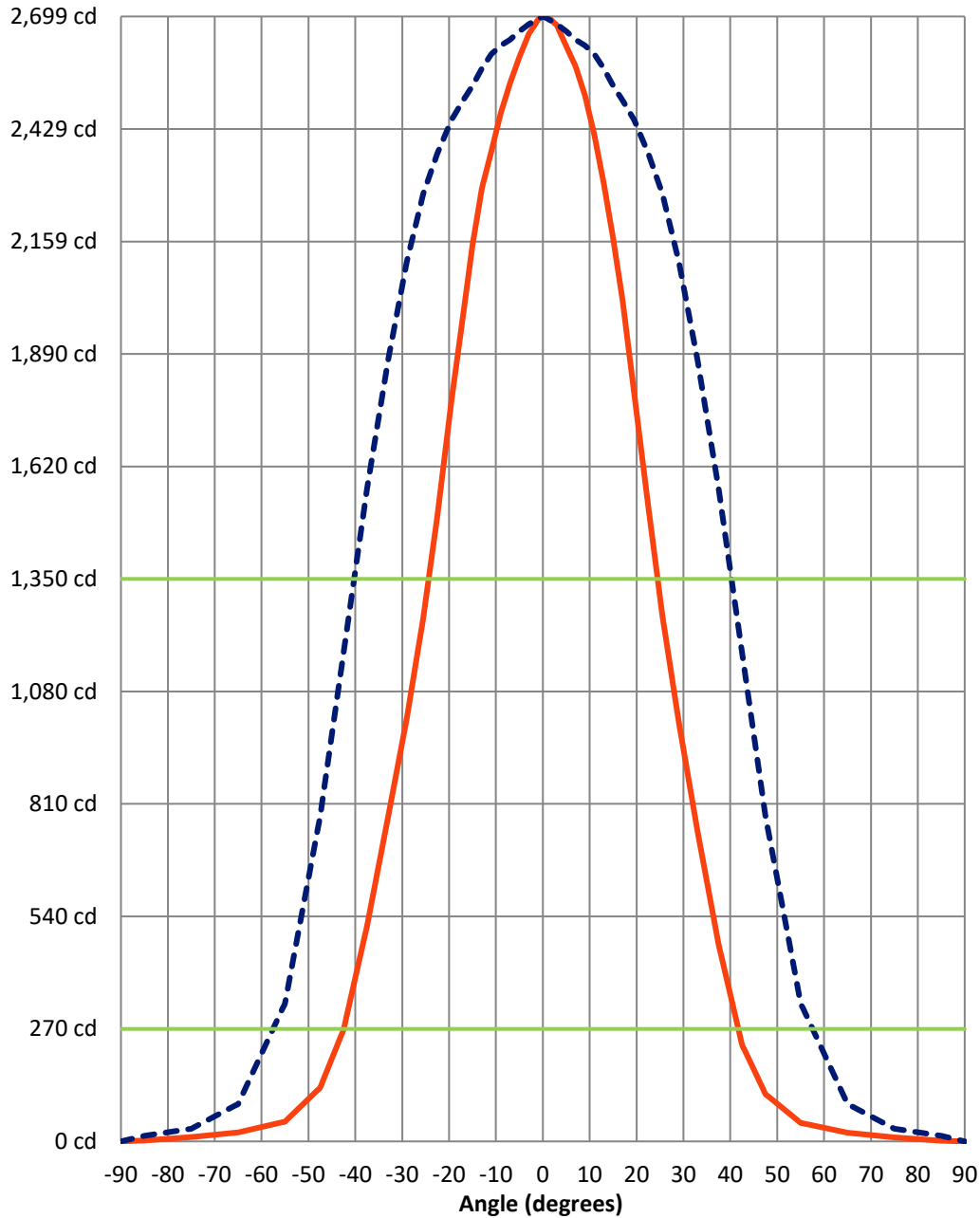
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Luminous Intensity Polar Plot



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Luminous Intensity Plot



Beam:
 H Angle: 80.5°
 V Angle: 48.9°
 Lumens: 1967.7
 Efficiency: 62.1%

Field:
 H Angle: 115.1°
 V Angle: 84.2°
 Lumens: 2944.4
 Efficiency: 92.9%

Spill:
 Lumens: 224.1
 Efficiency: 7.1%

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



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FIELD
BEAM

CANDELA DISTRIBUTION:

	0°	1°	3°	5°	7°	9°	11°	13°	15°	17°	19.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.5	2.2	3.7	6.7	11.1	13.4	14.8	14.8	15.6	15.6	16.3
75°	9.6	9.6	9.6	9.6	9.6	10.4	11.1	13.4	14.8	17.1	18.5
65°	20.8	20.8	20.8	20.8	20.8	20.8	20.0	20.8	20.8	21.5	22.3
55°	44.5	44.5	43.8	43.8	43.8	43.8	44.5	43.8	44.5	46.0	46.7
47.5°	113.5	113.5	112.8	115.0	114.3	115.7	118.0	118.7	118.7	118.7	120.9
42.5°	232.2	231.5	233.0	233.7	232.2	235.9	237.4	239.7	186.2	185.5	237.4
37.5°	472.6	471.9	470.4	467.4	465.2	465.2	463.0	464.5	466.0	463.0	454.8
33°	744.2	743.4	742.0	735.3	736.0	734.5	735.3	726.4	725.6	723.4	714.5
29°	1006.8	1006.8	1006.1	1004.6	996.5	983.8	989.0	979.4	972.0	967.5	957.9
25.5°	1262.1	1259.9	1255.4	1253.9	1246.5	1229.4	1236.9	1229.4	1224.2	1220.5	1210.9
22.5°	1523.3	1523.3	1517.3	1510.6	1501.0	1483.2	1489.9	1478.0	1470.6	1463.9	1448.3
19.5°	1794.1	1796.3	1791.8	1780.0	1766.6	1748.1	1749.6	1734.0	1720.6	1713.9	1694.6
17°	2018.9	2016.7	2008.5	1998.9	1981.8	1955.8	1949.9	1937.3	1913.5	1902.4	1880.9
15°	2166.5	2165.1	2160.6	2150.2	2127.2	2097.5	2082.0	2061.9	2044.1	2028.5	1998.9
13°	2298.6	2300.1	2292.7	2271.9	2243.7	2213.3	2196.2	2176.2	2154.7	2139.1	2105.7
11°	2414.4	2415.1	2403.2	2377.3	2346.8	2318.6	2307.5	2281.5	2251.1	2231.1	2194.7
9°	2509.3	2507.1	2496.0	2475.9	2446.3	2417.3	2389.1	2366.9	2339.4	2311.2	2263.7
7°	2579.1	2576.1	2564.2	2544.2	2528.6	2491.5	2464.1	2440.3	2409.2	2375.8	2325.3
5°	2628.0	2629.5	2619.9	2609.5	2590.9	2562.7	2533.8	2500.4	2464.8	2429.9	2377.3
3°	2677.8	2672.6	2659.9	2647.3	2628.8	2607.3	2582.8	2548.7	2513.0	2473.7	2423.3
1°	2699.3	2694.1	2678.5	2666.6	2647.3	2627.3	2604.3	2572.4	2531.6	2496.7	2450.7
0°	2699.3	2694.1	2680.7	2663.7	2643.6	2629.5	2608.7	2574.6	2533.1	2498.2	2450.7
-1°	2691.8	2688.9	2677.0	2656.2	2632.5	2624.3	2602.8	2569.4	2529.4	2491.5	2439.6
-3°	2657.0	2654.8	2647.3	2632.5	2608.0	2588.7	2559.0	2530.1	2498.9	2461.1	2403.2
-5°	2602.1	2603.6	2593.9	2577.6	2555.3	2531.6	2497.5	2472.2	2439.6	2407.7	2346.8
-7°	2539.0	2537.5	2527.1	2501.2	2480.4	2459.6	2427.7	2398.0	2366.9	2335.7	2280.8
-9°	2466.3	2464.8	2453.7	2430.7	2412.1	2386.2	2360.2	2332.0	2297.1	2266.7	2222.9
-11°	2375.0	2375.0	2369.1	2346.1	2326.1	2303.1	2274.1	2248.2	2220.7	2196.2	2151.7
-13°	2286.7	2284.5	2270.4	2244.4	2223.7	2205.9	2185.8	2158.4	2132.4	2105.0	2072.3
-15°	2151.0	2151.0	2142.1	2125.0	2099.8	2081.2	2065.6	2044.1	2026.3	1998.1	1970.7
-17°	1983.3	1984.8	1991.4	1977.3	1956.6	1942.5	1923.9	1903.9	1886.1	1870.5	1846.0
-19.5°	1776.3	1773.3	1768.1	1760.7	1738.4	1734.7	1722.8	1705.0	1694.6	1683.5	1664.2
-22.5°	1501.0	1499.5	1505.4	1495.8	1479.5	1480.2	1469.1	1457.2	1448.3	1445.3	1431.3
-25.5°	1256.9	1256.9	1256.1	1248.7	1236.1	1239.1	1232.4	1221.3	1213.1	1215.3	1203.5
-29°	1016.5	1016.5	1019.5	1012.0	1001.7	1005.4	997.2	988.3	983.1	983.1	969.0
-33°	779.1	776.8	781.3	778.3	773.1	775.4	764.2	759.8	753.8	750.9	740.5
-37.5°	517.1	516.4	521.6	519.4	520.9	522.3	514.9	508.2	509.0	505.3	498.6
-42.5°	268.6	272.3	270.8	270.8	273.0	275.3	276.0	273.0	277.5	276.0	275.3
-47.5°	129.1	131.3	132.8	134.3	135.0	133.6	135.0	138.0	138.0	138.7	141.7
-55°	47.5	48.2	48.2	49.7	49.7	49.7	50.5	50.5	50.5	51.9	54.2
-65°	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	22.3	23.7
-75°	10.4	10.4	10.4	10.4	10.4	11.1	11.9	14.1	15.6	17.8	19.3
-85°	2.2	2.2	4.5	7.4	11.9	14.8	15.6	16.3	16.3	16.3	16.3
-90°	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):

	22.5°	25.5°	29°	33°	37.5°	42.5°	47.5°	55°	65°	75°	85°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	17.1	16.3	16.3
75°	20.0	20.8	21.5	21.5	21.5	22.3	22.3	21.5	19.3	17.1	16.3
65°	24.5	26.0	28.2	31.2	33.4	36.4	37.1	34.1	26.0	19.3	16.3
55°	49.7	53.4	58.6	63.8	69.0	72.0	70.5	57.1	34.1	21.5	16.3
47.5°	122.4	126.1	132.1	135.8	139.5	135.0	120.9	83.8	44.5	23.7	17.1
42.5°	186.2	186.2	243.4	243.4	235.9	178.8	170.7	111.3	50.5	26.0	17.1
37.5°	453.3	445.9	432.6	420.0	386.6	331.7	254.5	138.7	57.1	27.5	16.3
33°	702.6	687.8	657.4	617.3	558.7	460.8	340.6	156.6	63.8	28.2	16.3
29°	947.5	920.8	871.1	809.5	715.3	573.5	414.0	167.7	69.7	29.7	16.3
25.5°	1192.3	1152.3	1078.8	982.4	848.8	671.5	479.3	172.9	74.2	29.7	15.6
22.5°	1425.3	1373.4	1276.2	1141.9	974.2	753.8	526.1	175.1	77.9	30.4	15.6
19.5°	1658.3	1596.0	1472.8	1305.9	1100.3	834.7	573.5	178.1	81.6	30.4	15.6
17°	1837.1	1762.9	1631.6	1440.9	1200.5	901.5	613.6	180.3	83.1	31.2	14.8
15°	1952.9	1880.9	1742.1	1533.6	1267.3	947.5	644.0	181.0	85.3	31.2	14.8
13°	2051.5	1976.6	1825.2	1611.5	1329.6	995.7	673.7	181.8	86.8	31.2	14.8
11°	2137.6	2058.2	1901.7	1677.6	1384.5	1043.2	699.7	256.0	88.3	31.2	14.1
9°	2202.9	2125.7	1972.1	1734.0	1435.7	1081.0	722.7	261.9	88.3	31.2	14.1
7°	2266.0	2184.3	2027.0	1783.7	1492.1	1115.2	744.2	264.1	89.0	31.2	14.1
5°	2309.7	2226.6	2073.8	1826.7	1529.9	1138.9	762.7	265.6	90.5	30.4	14.1
3°	2349.8	2259.3	2102.7	1859.4	1549.2	1158.2	773.1	267.1	90.5	30.4	13.4
1°	2366.9	2276.3	2114.6	1871.2	1562.6	1170.1	777.6	269.3	89.8	30.4	13.4
0°	2370.6	2274.1	2111.6	1874.9	1566.3	1173.0	780.5	331.7	89.8	30.4	13.4
-1°	2363.9	2268.9	2103.5	1871.2	1561.1	1170.1	779.1	269.3	89.8	31.2	13.4
-3°	2336.4	2244.4	2080.5	1849.0	1539.6	1154.5	770.9	269.3	89.0	30.4	13.4
-5°	2281.5	2197.7	2042.6	1808.9	1502.5	1134.5	758.3	267.8	89.0	30.4	13.4
-7°	2218.5	2145.8	1987.7	1760.7	1467.6	1101.1	742.0	264.9	89.0	30.4	14.1
-9°	2168.0	2084.9	1929.1	1712.5	1423.1	1064.0	719.7	262.7	88.3	30.4	14.1
-11°	2103.5	2027.0	1871.2	1653.8	1369.7	1026.1	698.9	257.5	86.8	30.4	14.1
-13°	2029.3	1951.4	1797.0	1591.5	1323.7	987.6	671.5	251.5	86.1	30.4	14.1
-15°	1932.8	1854.2	1707.3	1517.3	1259.1	946.0	645.5	247.1	84.6	30.4	14.1
-17°	1808.2	1734.0	1596.7	1421.6	1186.4	897.8	616.6	239.7	83.8	30.4	14.8
-19.5°	1629.4	1563.3	1448.3	1291.8	1087.7	833.2	579.5	232.2	83.1	30.4	14.8
-22.5°	1398.6	1345.2	1256.9	1130.8	960.8	750.9	528.3	221.1	79.4	30.4	14.8
-25.5°	1177.5	1138.9	1076.6	979.4	845.8	673.0	482.3	207.8	75.7	30.4	15.6
-29°	951.9	925.2	887.4	815.4	716.7	582.4	425.1	189.9	71.2	29.7	15.6
-33°	732.3	713.8	687.1	638.8	572.1	475.6	350.9	169.2	65.3	28.2	16.3
-37.5°	494.9	487.5	473.4	448.1	408.8	351.7	269.3	144.7	57.9	27.5	16.3
-42.5°	274.5	272.3	273.8	264.1	253.8	181.8	172.9	116.5	51.9	26.0	17.1
-47.5°	143.9	146.2	149.1	152.8	155.8	146.2	130.6	89.0	46.0	23.7	17.1
-55°	57.1	60.1	65.3	71.2	76.4	79.4	77.2	60.8	35.6	22.3	17.1
-65°	25.2	27.5	30.4	32.6	35.6	38.6	40.1	36.4	26.7	19.3	16.3
-75°	20.8	21.5	22.3	22.3	23.0	23.0	23.7	23.0	20.0	17.1	16.3
-85°	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	16.3	16.3
-90°	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°
90°	0.0
85°	0.0
75°	0.0
65°	0.0
55°	0.0
47.5°	0.0
42.5°	0.0
37.5°	0.0
33°	0.0
29°	0.0
25.5°	0.0
22.5°	0.0
19.5°	0.0
17°	0.0
15°	0.0
13°	0.0
11°	0.0
9°	0.0
7°	0.0
5°	0.0
3°	0.0
1°	0.0
0°	0.0
-1°	0.0
-3°	0.0
-5°	0.0
-7°	0.0
-9°	0.0
-11°	0.0
-13°	0.0
-15°	0.0
-17°	0.0
-19.5°	0.0
-22.5°	0.0
-25.5°	0.0
-29°	0.0
-33°	0.0
-37.5°	0.0
-42.5°	0.0
-47.5°	0.0
-55°	0.0
-65°	0.0
-75°	0.0
-85°	0.0
-90°	0.0

(END OF REPORT)