

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: P95384

Luminaire Tested: **VFS-K-B20-7-LED-E1-MST-SG**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P95384
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-B20-7-LED-E1-MST-SG
Description: ARCHITECTURAL FLOOD LUMINAIRE
MEDIUM SYMMETRIC RECTANGULAR WITH SOFTENING GLASS DISTRIBUTION
WITH 20 LED'S, 700mA DRIVE CURRENT
Light Source: -
Ballast/Driver: -

Summary

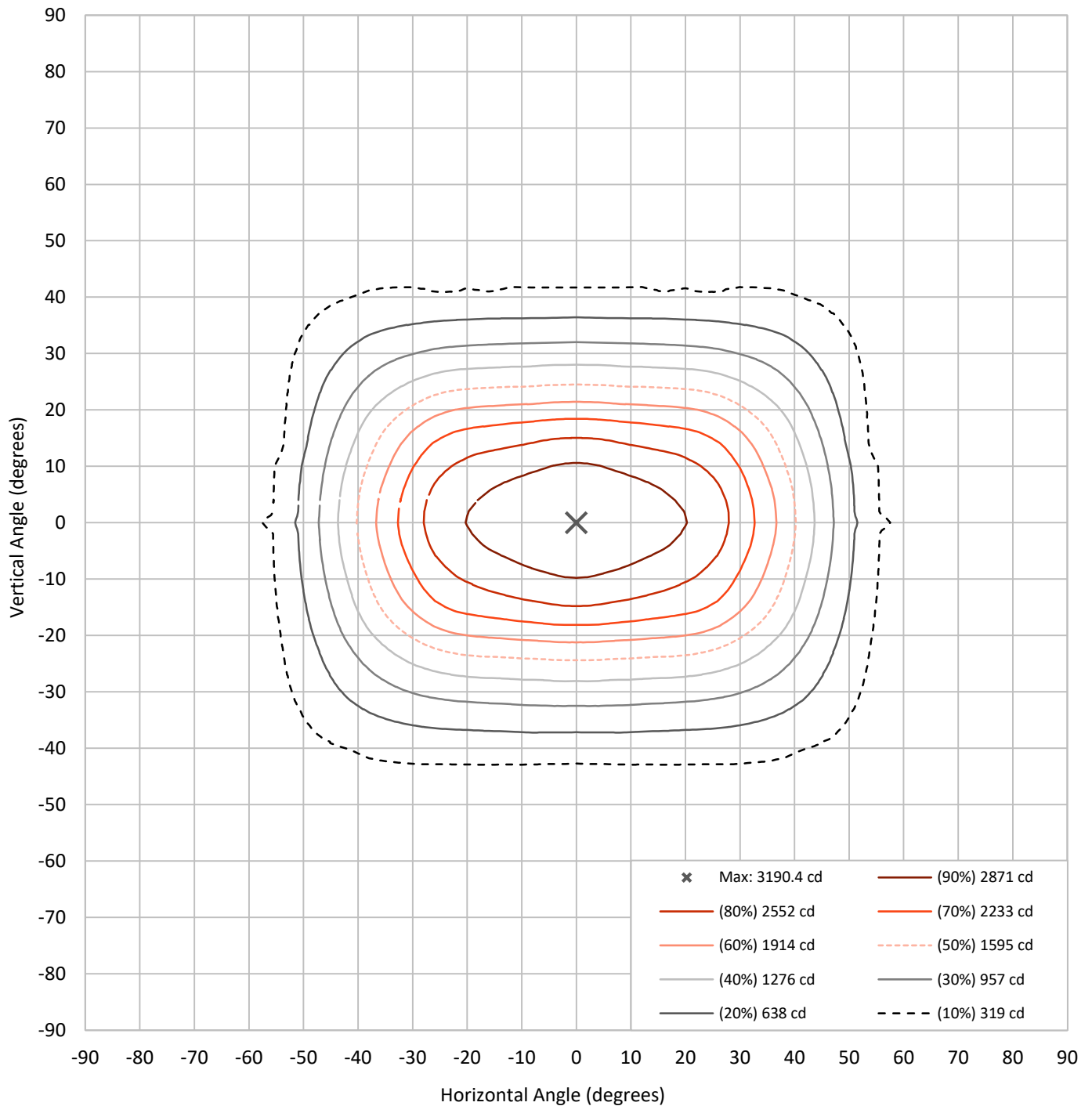
Lumens per Lamp:	N/A	NEMA Type:	6H x 5V
Luminaire Lumens:	3744.9 lumens	Max Intensity:	3190.4 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	77.1 lumens/watt		
Luminous Opening:	(L: 0.83 ' x W: 0 ' x H: 0.5 ')		
Beam Angle (50%):	80.5°H x 48.9°V	Field Angle (10%):	115.1°H x 84.2°V
Beam Lumens:	2325.7 lumens	Field Lumens:	3480 lumens
Beam Efficiency:	62.1%	Field Efficiency:	92.9%
Input Watts (W):	48.6		
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:	25 FT		



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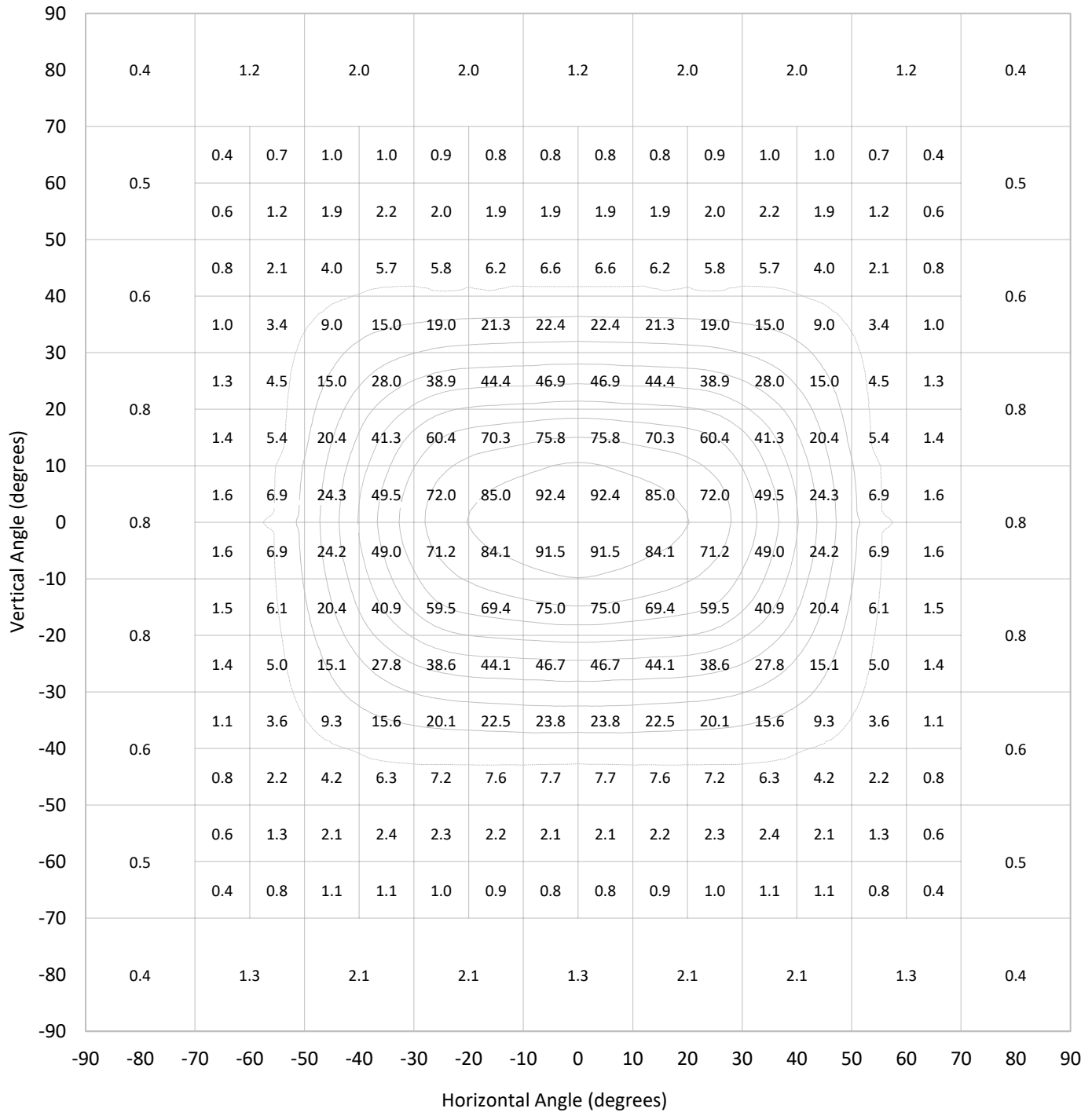
Iso-Candela Plot





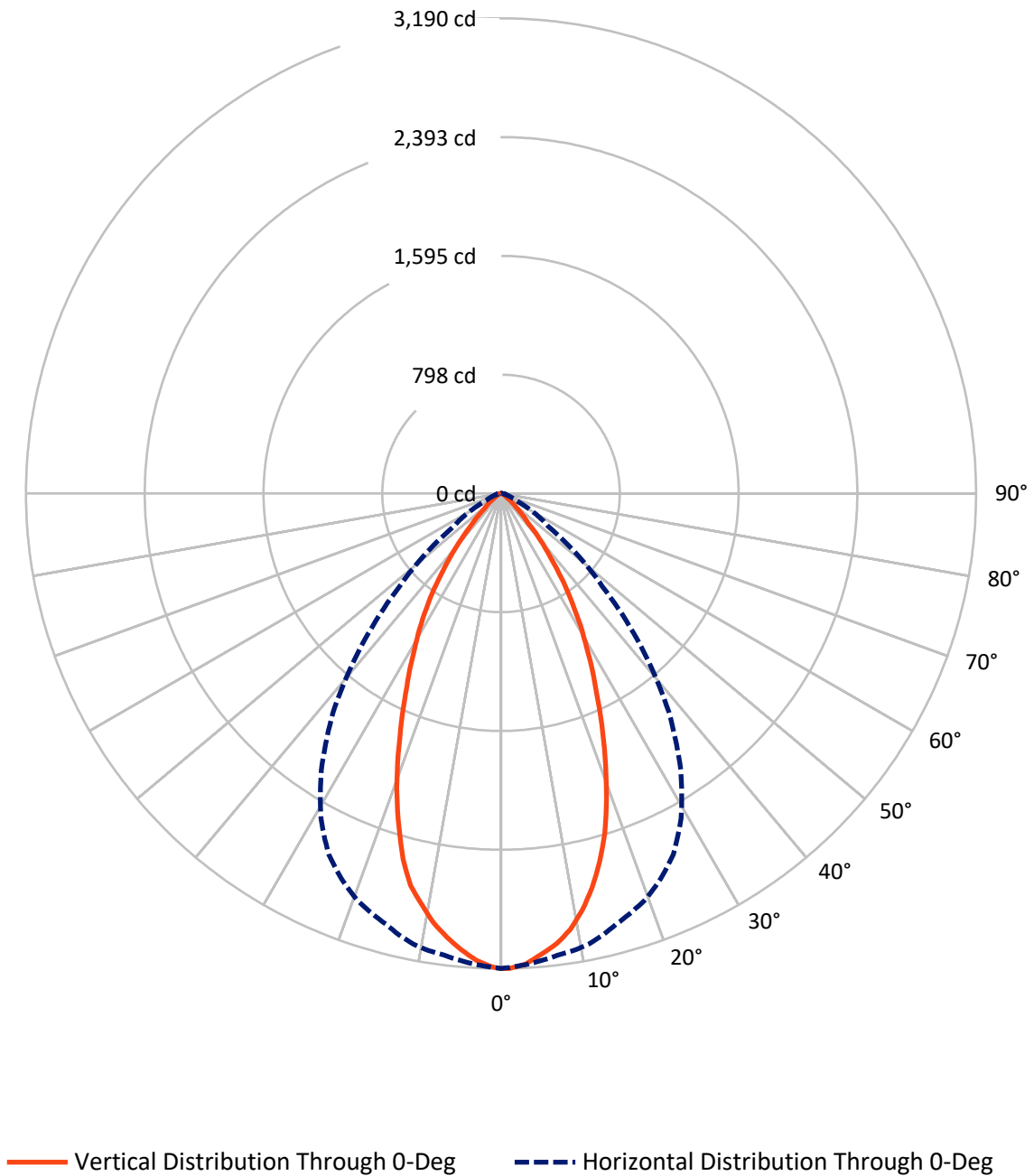
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Lumen Table



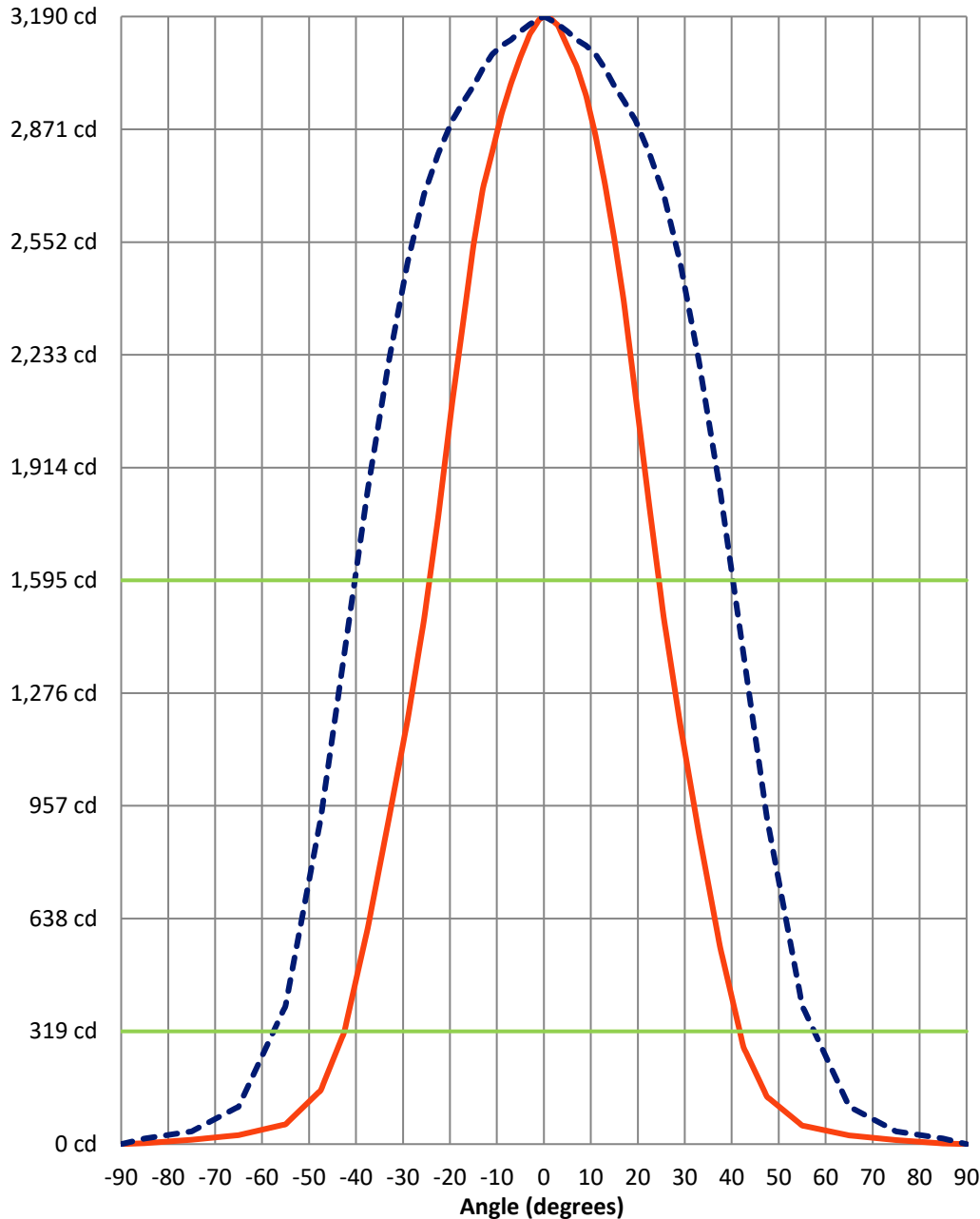
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Luminous Intensity Polar Plot



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Luminous Intensity Plot



Beam:
 H Angle: 80.5°
 V Angle: 48.9°
 Lumens: 2325.7
 Efficiency: 62.1%

Field:
 H Angle: 115.1°
 V Angle: 84.2°
 Lumens: 3480
 Efficiency: 92.9%

Spill:
 Lumens: 264.9
 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°	1.8	2.6	4.4	7.9	13.2	15.8	17.5	17.5	18.4	18.4	19.3
75°	11.4	11.4	11.4	11.4	11.4	12.3	13.2	15.8	17.5	20.2	21.9
65°	24.6	24.6	24.6	24.6	24.6	24.6	23.7	24.6	24.6	25.4	26.3
55°	52.6	52.6	51.7	51.7	51.7	51.7	52.6	51.7	52.6	54.4	55.2
47.5°	134.2	134.2	133.3	135.9	135.1	136.8	139.4	140.3	140.3	140.3	142.9
42.5°	274.5	273.6	275.4	276.2	274.5	278.9	280.6	283.3	220.1	219.2	280.6
37.5°	558.6	557.7	556.0	552.5	549.9	549.9	547.2	549.0	550.7	547.2	537.6
33°	879.6	878.7	877.0	869.1	869.9	868.2	869.1	858.5	857.7	855.0	844.5
29°	1190.0	1190.0	1189.2	1187.4	1177.7	1162.8	1169.0	1157.6	1148.8	1143.5	1132.1
25.5°	1491.7	1489.1	1483.8	1482.1	1473.3	1453.1	1461.9	1453.1	1447.0	1442.6	1431.2
22.5°	1800.4	1800.4	1793.4	1785.5	1774.1	1753.0	1760.9	1746.9	1738.1	1730.2	1711.8
19.5°	2120.5	2123.1	2117.8	2103.8	2088.0	2066.1	2067.9	2049.4	2033.7	2025.8	2003.0
17°	2386.2	2383.6	2373.9	2362.5	2342.3	2311.7	2304.6	2289.7	2261.7	2248.5	2223.1
15°	2560.7	2559.0	2553.7	2541.4	2514.2	2479.2	2460.7	2437.1	2416.0	2397.6	2362.5
13°	2716.8	2718.6	2709.8	2685.2	2651.9	2616.0	2595.8	2572.1	2546.7	2528.3	2488.8
11°	2853.6	2854.5	2840.5	2809.8	2773.8	2740.5	2727.3	2696.6	2660.7	2637.0	2594.0
9°	2965.9	2963.2	2950.1	2926.4	2891.3	2857.1	2823.8	2797.5	2765.0	2731.7	2675.6
7°	3048.3	3044.8	3030.8	3007.1	2988.7	2944.8	2912.4	2884.3	2847.5	2808.0	2748.4
5°	3106.2	3107.9	3096.5	3084.2	3062.3	3029.0	2994.8	2955.3	2913.2	2872.0	2809.8
3°	3164.9	3158.8	3143.9	3129.0	3107.0	3081.6	3052.7	3012.3	2970.2	2923.8	2864.1
1°	3190.4	3184.2	3165.8	3151.8	3129.0	3105.3	3078.1	3040.4	2992.2	2951.0	2896.6
0°	3190.4	3184.2	3168.4	3148.3	3124.6	3107.9	3083.4	3043.0	2993.9	2952.7	2896.6
-1°	3181.6	3178.1	3164.1	3139.5	3111.4	3101.8	3076.4	3036.9	2989.5	2944.8	2883.4
-3°	3140.4	3137.7	3129.0	3111.4	3082.5	3059.7	3024.6	2990.4	2953.6	2908.9	2840.5
-5°	3075.5	3077.2	3065.8	3046.5	3020.2	2992.2	2951.8	2922.0	2883.4	2845.7	2773.8
-7°	3000.9	2999.2	2986.9	2956.2	2931.7	2907.1	2869.4	2834.3	2797.5	2760.7	2695.8
-9°	2915.0	2913.2	2900.1	2872.9	2851.0	2820.3	2789.6	2756.3	2715.1	2679.1	2627.4
-11°	2807.1	2807.1	2800.1	2772.9	2749.3	2722.1	2687.9	2657.2	2624.7	2595.8	2543.2
-13°	2702.8	2700.1	2683.5	2652.8	2628.2	2607.2	2583.5	2551.1	2520.4	2487.9	2449.3
-15°	2542.3	2542.3	2531.8	2511.6	2481.8	2459.9	2441.4	2416.0	2395.0	2361.6	2329.2
-17°	2344.1	2345.9	2353.7	2337.1	2312.5	2295.9	2273.9	2250.3	2229.2	2210.8	2181.9
-19.5°	2099.4	2095.9	2089.8	2081.0	2054.7	2050.3	2036.3	2015.2	2003.0	1989.8	1967.0
-22.5°	1774.1	1772.3	1779.3	1767.9	1748.6	1749.5	1736.4	1722.3	1711.8	1708.3	1691.6
-25.5°	1485.6	1485.6	1484.7	1475.9	1461.0	1464.5	1456.6	1443.5	1433.8	1436.5	1422.4
-29°	1201.4	1201.4	1204.9	1196.2	1183.9	1188.3	1178.6	1168.1	1162.0	1162.0	1145.3
-33°	920.8	918.2	923.4	919.9	913.8	916.4	903.3	898.0	891.0	887.5	875.2
-37.5°	611.2	610.4	616.5	613.9	615.6	617.4	608.6	600.7	601.6	597.2	589.3
-42.5°	317.5	321.8	320.1	320.1	322.7	325.4	326.2	322.7	328.0	326.2	325.4
-47.5°	152.6	155.2	157.0	158.7	159.6	157.9	159.6	163.1	163.1	164.0	167.5
-55°	56.1	57.0	57.0	58.8	58.8	58.8	59.6	59.6	59.6	61.4	64.0
-65°	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	26.3	28.1
-75°	12.3	12.3	12.3	12.3	12.3	13.2	14.0	16.7	18.4	21.0	22.8
-85°	2.6	2.6	5.3	8.8	14.0	17.5	18.4	19.3	19.3	19.3	19.3
-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°	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	20.2	19.3	19.3
75°	23.7	24.6	25.4	25.4	25.4	26.3	26.3	25.4	22.8	20.2	19.3
65°	28.9	30.7	33.3	36.8	39.5	43.0	43.8	40.3	30.7	22.8	19.3
55°	58.8	63.1	69.3	75.4	81.6	85.1	83.3	67.5	40.3	25.4	19.3
47.5°	144.7	149.1	156.1	160.5	164.9	159.6	142.9	99.1	52.6	28.1	20.2
42.5°	220.1	220.1	287.6	287.6	278.9	211.3	201.7	131.5	59.6	30.7	20.2
37.5°	535.8	527.0	511.3	496.4	456.9	392.0	300.8	164.0	67.5	32.4	19.3
33°	830.5	812.9	777.0	729.6	660.3	544.6	402.5	185.0	75.4	33.3	19.3
29°	1119.9	1088.3	1029.5	956.8	845.4	677.9	489.3	198.2	82.4	35.1	19.3
25.5°	1409.3	1361.9	1275.1	1161.1	1003.2	793.6	566.5	204.3	87.7	35.1	18.4
22.5°	1684.6	1623.2	1508.4	1349.6	1151.4	891.0	621.8	207.0	92.1	36.0	18.4
19.5°	1960.0	1886.3	1740.8	1543.4	1300.5	986.6	677.9	210.5	96.5	36.0	18.4
17°	2171.3	2083.6	1928.4	1703.0	1418.9	1065.5	725.2	213.1	98.2	36.8	17.5
15°	2308.1	2223.1	2059.1	1812.7	1497.8	1119.9	761.2	214.0	100.8	36.8	17.5
13°	2424.8	2336.2	2157.3	1904.7	1571.5	1176.9	796.3	214.9	102.6	36.8	17.5
11°	2526.5	2432.7	2247.6	1982.8	1636.4	1233.0	827.0	302.5	104.4	36.8	16.7
9°	2603.7	2512.5	2330.9	2049.4	1696.9	1277.7	854.2	309.6	104.4	36.8	16.7
7°	2678.2	2581.8	2395.8	2108.2	1763.6	1318.1	879.6	312.2	105.2	36.8	16.7
5°	2730.0	2631.7	2451.1	2159.1	1808.3	1346.1	901.5	313.9	107.0	36.0	16.7
3°	2777.3	2670.3	2485.3	2197.6	1831.1	1368.9	913.8	315.7	107.0	36.0	15.8
1°	2797.5	2690.5	2499.3	2211.7	1846.9	1383.0	919.0	318.3	106.1	36.0	15.8
0°	2801.9	2687.9	2495.8	2216.1	1851.3	1386.5	922.6	392.0	106.1	36.0	15.8
-1°	2794.0	2681.7	2486.2	2211.7	1845.1	1383.0	920.8	318.3	106.1	36.8	15.8
-3°	2761.5	2652.8	2459.0	2185.4	1819.7	1364.5	911.2	318.3	105.2	36.0	15.8
-5°	2696.6	2597.5	2414.3	2138.0	1775.8	1340.9	896.2	316.6	105.2	36.0	15.8
-7°	2622.1	2536.2	2349.4	2081.0	1734.6	1301.4	877.0	313.1	105.2	36.0	16.7
-9°	2562.5	2464.2	2280.1	2024.0	1682.0	1257.6	850.6	310.4	104.4	36.0	16.7
-11°	2486.2	2395.8	2211.7	1954.7	1618.9	1212.8	826.1	304.3	102.6	36.0	16.7
-13°	2398.5	2306.4	2124.0	1881.1	1564.5	1167.2	793.6	297.3	101.7	36.0	16.7
-15°	2284.5	2191.5	2017.9	1793.4	1488.2	1118.1	763.0	292.0	100.0	36.0	16.7
-17°	2137.1	2049.4	1887.2	1680.2	1402.3	1061.1	728.7	283.3	99.1	36.0	17.5
-19.5°	1925.8	1847.7	1711.8	1526.8	1285.6	984.8	684.9	274.5	98.2	36.0	17.5
-22.5°	1653.1	1589.9	1485.6	1336.5	1135.7	887.5	624.4	261.3	93.8	36.0	17.5
-25.5°	1391.7	1346.1	1272.5	1157.6	999.7	795.4	570.0	245.5	89.4	36.0	18.4
-29°	1125.1	1093.6	1048.8	963.8	847.1	688.4	502.5	224.5	84.2	35.1	18.4
-33°	865.6	843.6	812.1	755.1	676.1	562.1	414.8	199.9	77.2	33.3	19.3
-37.5°	584.9	576.2	559.5	529.7	483.2	415.7	318.3	171.0	68.4	32.4	19.3
-42.5°	324.5	321.8	323.6	312.2	299.9	214.9	204.3	137.7	61.4	30.7	20.2
-47.5°	170.1	172.8	176.3	180.7	184.2	172.8	154.3	105.2	54.4	28.1	20.2
-55°	67.5	71.0	77.2	84.2	90.3	93.8	91.2	71.9	42.1	26.3	20.2
-65°	29.8	32.4	36.0	38.6	42.1	45.6	47.4	43.0	31.6	22.8	19.3
-75°	24.6	25.4	26.3	26.3	27.2	27.2	28.1	27.2	23.7	20.2	19.3
-85°	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	19.3	19.3
-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)