

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: NEO-RAY

Report Number: P332805-840

Luminaire Tested: **S124DIW-S1020D470U840-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332805-840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124DIW-S1020D470U840-4F0-1E-UDD-A  
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 470 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6544.3 lumens  
Efficiency: N/A  
Efficacy: 141.7 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: Semi-Direct

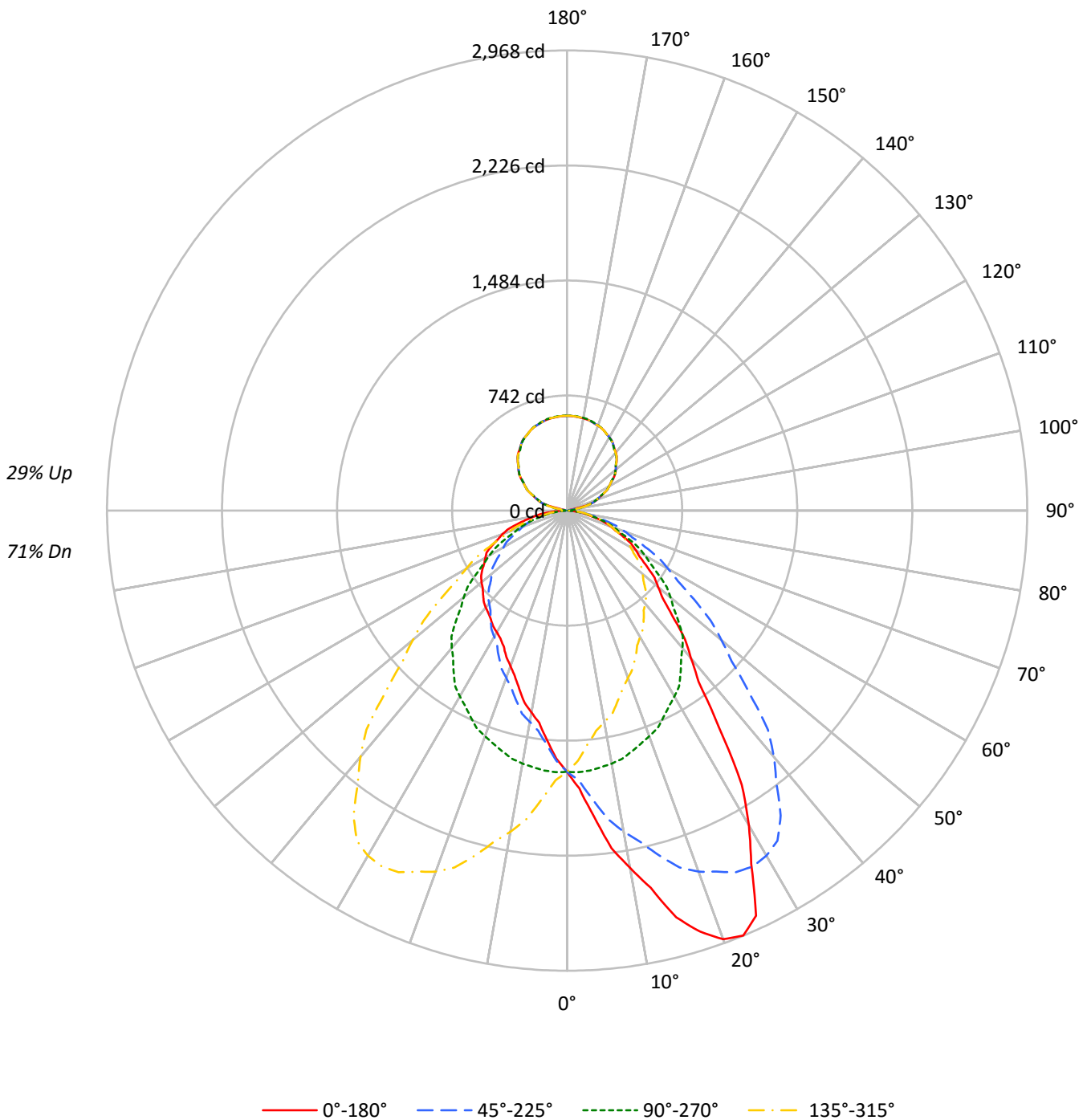
Input Watts (W): 46.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	71
1	103	98	95	91	97	93	90	87	84	81	79	75	73	71	67	66	64	60
2	94	86	80	75	89	82	77	72	74	70	66	66	63	60	60	57	55	51
3	86	76	69	63	81	73	66	60	66	60	56	59	55	51	53	50	47	44
4	79	68	60	54	74	65	57	52	59	53	48	53	48	44	48	44	41	38
5	73	61	52	46	69	58	50	45	53	46	42	48	43	39	43	39	36	33
6	67	55	46	40	63	52	45	39	48	41	37	43	38	34	39	35	32	29
7	62	50	41	36	59	47	40	35	43	37	32	40	34	30	36	32	28	26
8	58	45	37	32	55	43	36	31	40	33	29	36	31	27	33	29	25	23
9	54	41	34	29	51	40	33	28	36	30	26	33	28	25	31	26	23	21
10	51	38	31	26	48	37	30	25	34	28	24	31	26	22	28	24	21	19

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	13605	13605	13605	13605
5°	16022	13639	12039	13639
10°	19184	13581	10839	13581
15°	22697	13443	9954	13443
20°	25274	13302	9164	13302
25°	25683	13097	8620	13097
30°	21853	12899	8447	12899
35°	16802	12577	8449	12577
40°	13095	12198	8608	12198
45°	10919	11628	8752	11628
50°	9610	10934	9048	10934
55°	8804	10101	9413	10101
60°	8251	9357	9852	9357
65°	7681	8521	10214	8521
70°	7020	7695	10447	7695
75°	6273	6772	10321	6772
80°	5258	5551	9995	5551
85°	3881	4011	9568	4011



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.2	2.5
10°-20°	506.1	7.7
20°-30°	802.5	12.3
30°-40°	893.1	13.6
40°-50°	812.9	12.4
50°-60°	664.3	10.2
60°-70°	474.2	7.2
70°-80°	261.1	4.0
80°-90°	73.1	1.1
90°-100°	20.9	0.3
100°-110°	133.4	2.0
110°-120°	255.3	3.9
120°-130°	324.0	5.0
130°-140°	346.7	5.3
140°-150°	324.2	5.0
150°-160°	261.4	4.0
160°-170°	168.6	2.6
170°-180°	58.1	0.9
0°-30°	1472.7	22.5
0°-40°	2365.8	36.2
0°-60°	3843.0	58.7
0°-90°	4651.5	71.1
90°-120°	409.6	6.3
90°-150°	1404.6	21.5
90°-180°	1893.0	28.9
0°-180°	6544.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1685	1685	1685	1685	1685	
5°	1977	1683	1486	1683	1977	201
15°	2716	1608	1191	1608	2716	767
25°	2883	1470	968	1470	2883	1271
35°	1705	1276	857	1276	1705	1082
45°	956	1018	767	1018	956	753
55°	626	718	669	718	626	565
65°	402	446	535	446	402	398
75°	201	217	331	217	201	214
85°	42	43	103	43	42	51
90°	14	1	14	1	14	8
95°	13	25	13	25	13	11
105°	130	138	130	138	130	114
115°	259	257	259	257	259	256
125°	364	362	364	362	364	324
135°	452	448	452	448	452	348
145°	520	517	520	517	520	325
155°	567	567	567	567	567	261
165°	595	598	595	598	595	168
175°	608	612	608	612	608	58
180°	612	612	612	612	612	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1793.6	1793.1	1787.5	1786.4	1782.4	1777.5	1776.4	1767.4	1749.5	1741.1	1738.9
5°	1977.1	1991.0	1972.9	1969.4	1967.3	1944.3	1932.4	1918.4	1886.3	1867.4	1852.8
7.5°	2196.1	2197.7	2189.8	2183.3	2165.6	2145.5	2115.4	2083.3	2045.0	2005.2	1975.1
10°	2340.2	2345.7	2336.6	2335.2	2299.7	2277.2	2232.6	2194.9	2151.6	2103.4	2059.5
12.5°	2492.0	2484.2	2479.6	2449.7	2443.2	2402.4	2350.5	2311.7	2244.9	2189.5	2130.9
15°	2715.7	2700.4	2690.6	2649.4	2629.2	2572.6	2517.4	2474.9	2387.6	2304.5	2241.7
17.5°	2846.9	2862.4	2839.7	2822.8	2770.5	2730.8	2674.4	2585.1	2516.8	2413.6	2334.3
20°	2941.9	2943.3	2930.7	2913.3	2872.1	2821.9	2760.4	2662.6	2581.0	2478.3	2369.4
22.5°	2967.6	2967.9	2962.5	2946.2	2915.1	2874.3	2812.4	2730.8	2631.8	2520.2	2411.4
25°	2883.3	2880.4	2886.8	2904.9	2893.1	2880.4	2844.9	2784.1	2692.0	2573.9	2456.7
27.5°	2569.9	2589.2	2624.6	2669.4	2712.4	2745.2	2754.4	2742.0	2684.8	2587.8	2465.0
30°	2344.3	2368.0	2394.6	2439.2	2525.8	2575.4	2629.9	2671.0	2648.0	2570.5	2456.0
32.5°	2096.4	2102.2	2141.6	2192.4	2271.7	2367.0	2453.4	2537.0	2564.8	2524.2	2428.6
35°	1704.9	1714.5	1757.2	1807.5	1904.5	2021.0	2150.9	2266.8	2362.5	2400.9	2352.0
37.5°	1391.2	1419.3	1449.4	1503.4	1588.8	1693.7	1828.7	1978.6	2121.2	2216.7	2232.9
40°	1242.6	1260.1	1281.7	1322.9	1395.5	1498.8	1614.8	1786.6	1938.0	2074.9	2119.5
42.5°	1125.4	1135.6	1148.8	1186.1	1241.4	1344.1	1450.0	1601.0	1753.1	1916.7	1991.7
45°	956.4	966.9	989.3	1010.9	1052.8	1124.0	1222.4	1346.7	1499.5	1657.4	1795.5
47.5°	834.4	841.1	854.3	877.6	913.1	960.1	1040.2	1144.0	1285.7	1438.9	1586.1
50°	765.2	770.7	781.2	802.1	829.4	871.2	936.9	1033.9	1144.9	1299.2	1443.7
52.5°	710.4	712.7	720.3	734.6	756.2	791.4	845.3	925.5	1028.7	1166.3	1310.2
55°	625.5	628.3	635.3	645.8	664.6	686.9	728.1	788.2	878.3	997.6	1122.6
57.5°	555.7	557.6	563.5	567.5	583.1	601.3	632.9	675.8	744.1	845.3	956.8
60°	511.0	509.7	516.6	520.1	530.6	545.9	570.4	611.6	670.9	752.6	855.2
62.5°	467.5	465.5	471.4	475.9	482.0	495.1	515.0	547.3	595.5	669.3	758.0
65°	402.1	399.3	402.8	408.4	413.9	421.0	435.7	464.2	502.6	555.7	623.4
67.5°	336.5	339.4	340.0	342.7	346.0	355.5	365.6	385.8	412.8	455.3	512.7
70°	297.4	298.1	300.9	300.9	303.0	311.3	319.7	331.6	358.1	397.3	444.0
72.5°	258.3	261.3	260.1	262.4	263.9	269.4	275.6	286.9	309.5	338.6	378.1
75°	201.1	203.2	203.2	203.9	205.9	208.0	212.9	221.3	237.3	259.0	286.2
77.5°	146.6	146.9	147.8	150.4	150.4	153.7	157.3	164.1	172.0	186.8	203.4
80°	113.1	114.5	113.8	115.2	115.2	118.0	119.4	127.7	131.3	141.0	154.3
82.5°	82.9	84.3	84.2	86.1	87.3	87.9	89.8	93.1	96.6	105.2	110.7
85°	41.9	43.3	41.9	43.3	45.3	46.0	48.2	48.9	51.7	53.7	58.7
87.5°	15.0	16.7	16.7	17.2	18.2	18.7	19.1	18.5	20.6	21.0	23.0
90°	13.7	13.5	13.3	13.1	12.9	12.5	11.9	11.3	10.7	10.1	9.3
92.5°	12.6	12.6	12.5	12.5	12.4	12.1	11.5	10.9	10.3	9.7	8.9
95°	13.2	13.1	13.0	12.9	12.8	12.5	11.9	11.3	10.7	10.1	10.0
97.5°	12.8	12.7	12.6	12.5	12.4	12.3	12.2	12.2	12.1	12.1	23.4
100°	12.8	12.7	12.6	12.5	12.4	13.2	14.9	16.7	18.4	20.1	34.1
102.5°	13.2	13.1	13.1	13.1	13.1	22.4	41.1	59.7	78.4	97.0	98.9
105°	130.5	134.1	137.7	141.4	145.1	146.4	145.5	144.6	143.7	142.8	142.3
107.5°	181.8	181.4	181.0	180.7	180.3	179.9	179.4	178.9	178.4	178.0	177.3
110°	204.1	203.8	203.5	203.2	202.9	202.7	202.5	202.3	202.1	201.9	201.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	226.4	226.1	225.7	225.3	224.9	224.7	224.8	224.8	224.9	224.9	224.6
115°	259.0	259.0	259.0	259.0	259.0	258.9	258.7	258.5	258.3	258.1	258.2
117.5°	292.2	292.3	292.3	292.3	292.4	292.4	292.5	292.5	292.5	292.6	292.4
120°	313.1	313.3	313.5	313.7	313.9	313.9	313.7	313.5	313.3	313.1	313.2
122.5°	333.6	333.8	334.0	334.2	334.4	334.4	334.3	334.2	334.1	334.0	333.8
125°	364.3	364.2	364.1	364.0	363.9	363.7	363.3	363.0	362.7	362.4	362.6
127.5°	391.3	391.4	391.4	391.5	391.6	391.7	391.7	391.8	391.9	391.9	391.5
130°	409.6	409.6	409.6	409.6	409.6	409.6	409.5	409.4	409.3	409.2	408.9
132.5°	426.5	426.6	426.7	426.7	426.8	426.8	426.7	426.6	426.5	426.4	426.0
135°	451.7	451.5	451.3	451.1	450.9	450.7	450.5	450.3	450.1	449.9	449.5
137.5°	473.3	473.4	473.4	473.5	473.5	473.5	473.2	473.0	472.8	472.6	472.1
140°	488.4	488.3	488.2	488.1	488.0	487.8	487.5	487.2	486.9	486.6	486.4
142.5°	500.8	500.8	500.8	500.7	500.7	500.6	500.4	500.1	499.9	499.7	499.6
145°	519.9	519.7	519.5	519.3	519.1	519.0	518.9	518.8	518.7	518.6	518.6
147.5°	535.7	535.6	535.5	535.4	535.3	535.2	535.1	535.1	535.0	534.9	535.0
150°	546.0	545.9	545.8	545.7	545.6	545.5	545.5	545.5	545.5	545.5	545.6
152.5°	554.8	554.8	554.9	555.0	555.0	555.0	554.8	554.6	554.5	554.3	554.5
155°	566.6	566.9	567.2	567.5	567.8	567.7	567.3	566.9	566.5	566.1	566.4
157.5°	576.5	577.0	577.5	578.0	578.6	578.6	578.0	577.5	577.0	576.5	576.8
160°	583.1	583.7	584.3	584.9	585.5	585.5	584.9	584.3	583.7	583.1	583.2
162.5°	588.2	588.9	589.6	590.3	591.0	591.0	590.4	589.8	589.2	588.5	588.7
165°	595.4	596.3	597.2	598.1	599.1	599.2	598.3	597.5	596.7	595.9	595.9
167.5°	600.9	601.9	602.9	603.9	604.9	605.0	604.1	603.2	602.3	601.4	601.5
170°	604.1	605.1	606.1	607.1	608.2	608.3	607.4	606.6	605.8	605.0	604.9
172.5°	605.9	607.0	608.1	609.3	610.4	610.5	609.7	608.8	608.0	607.2	607.1
175°	608.2	609.5	610.7	611.9	613.1	613.3	612.4	611.5	610.6	609.7	609.6
177.5°	609.8	610.7	611.7	612.7	613.6	613.8	613.1	612.5	611.8	611.2	611.0
180°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1739.5	1731.6	1726.1	1721.6	1709.3	1702.0	1696.5	1688.6	1679.7	1670.2	1658.5
5°	1838.2	1814.4	1797.0	1770.5	1745.3	1724.3	1702.7	1683.1	1659.4	1633.7	1614.8
7.5°	1941.9	1906.6	1861.4	1822.1	1778.0	1739.6	1705.3	1670.0	1633.5	1598.0	1565.5
10°	2007.8	1962.5	1912.2	1852.8	1797.0	1747.4	1701.3	1656.7	1613.4	1570.0	1533.1
12.5°	2078.7	2022.2	1947.9	1878.6	1815.9	1749.7	1694.0	1639.3	1587.1	1541.6	1498.4
15°	2173.9	2092.2	2006.4	1913.6	1831.2	1753.7	1677.6	1608.5	1549.8	1489.8	1447.9
17.5°	2232.5	2131.4	2033.3	1936.2	1836.4	1738.8	1656.7	1576.9	1503.5	1443.9	1391.1
20°	2271.0	2170.5	2048.3	1951.3	1832.6	1732.0	1637.1	1548.4	1471.7	1408.2	1353.6
22.5°	2304.5	2188.4	2066.2	1938.4	1820.3	1713.6	1609.7	1520.6	1442.1	1375.1	1322.9
25°	2322.7	2189.3	2056.7	1929.7	1795.5	1669.2	1575.0	1470.3	1386.4	1316.0	1260.1
27.5°	2324.6	2182.0	2031.9	1890.8	1752.4	1634.8	1515.8	1422.2	1335.2	1260.7	1207.1
30°	2318.4	2169.8	2008.5	1855.6	1716.7	1588.9	1485.6	1383.7	1295.1	1221.0	1165.2
32.5°	2299.0	2144.0	1978.3	1816.5	1672.5	1547.6	1441.0	1344.0	1257.6	1184.7	1126.1
35°	2242.4	2089.5	1912.9	1744.6	1597.3	1471.0	1374.6	1276.2	1189.6	1120.4	1064.0
37.5°	2154.0	2015.8	1836.2	1662.1	1517.4	1390.5	1295.1	1206.1	1128.0	1057.8	999.9
40°	2076.9	1955.4	1775.3	1605.7	1449.4	1328.6	1239.2	1157.5	1080.1	1013.7	958.6
42.5°	1988.1	1882.3	1716.2	1536.4	1385.6	1264.4	1177.2	1103.9	1030.9	969.6	914.4
45°	1829.8	1760.0	1603.6	1437.4	1280.4	1165.9	1082.8	1018.5	957.2	897.1	851.0
47.5°	1647.7	1613.1	1481.5	1323.6	1174.6	1061.7	989.7	930.3	876.5	825.6	785.0
50°	1525.4	1508.6	1394.8	1242.6	1100.2	994.1	921.5	870.6	824.5	779.8	741.4
52.5°	1404.7	1404.2	1301.6	1162.3	1030.5	928.3	856.2	808.6	768.6	732.4	697.8
55°	1220.3	1239.9	1159.6	1035.3	917.4	825.2	760.2	717.7	689.7	659.7	633.9
57.5°	1051.0	1083.4	1017.1	907.7	809.3	724.4	667.8	635.8	606.1	587.9	569.2
60°	940.4	971.1	919.5	827.3	734.5	661.9	608.0	579.5	553.6	541.1	527.8
62.5°	842.1	869.5	831.2	745.8	665.2	595.3	550.0	522.5	505.0	491.3	482.5
65°	701.7	724.7	691.9	629.8	560.6	504.7	467.8	446.1	429.4	423.7	413.9
67.5°	567.1	588.1	570.4	517.6	462.1	419.9	390.9	370.1	360.2	355.4	348.4
70°	487.3	508.3	489.4	443.3	400.7	365.2	337.9	326.0	315.6	313.5	303.7
72.5°	419.7	433.9	415.2	379.1	342.6	312.7	291.5	279.1	273.7	269.9	264.6
75°	314.9	327.4	314.9	286.9	261.1	240.1	222.0	217.1	210.9	208.7	205.2
77.5°	222.9	233.7	224.1	206.6	187.3	171.2	161.4	155.1	153.7	150.1	151.8
80°	170.4	177.3	168.2	156.4	141.0	129.9	122.9	119.4	115.2	113.8	116.5
82.5°	122.3	125.4	120.8	112.8	101.4	94.1	89.4	85.3	84.4	84.7	84.7
85°	63.5	62.8	62.1	55.1	51.7	46.8	44.0	43.3	42.6	44.0	45.3
87.5°	22.9	23.3	22.6	20.2	18.3	16.4	15.6	14.8	15.6	16.4	17.2
90°	8.5	7.7	6.8	5.9	4.7	3.6	2.5	1.4	2.5	3.6	4.7
92.5°	8.1	7.3	6.5	6.1	6.0	5.9	5.9	5.8	5.9	5.9	6.0
95°	9.9	9.8	9.7	11.3	14.8	18.3	21.7	25.1	21.7	18.3	14.8
97.5°	34.7	46.2	57.5	62.1	59.9	57.8	55.6	53.4	55.6	57.8	59.9
100°	48.2	62.2	76.2	82.4	80.6	78.8	76.9	75.0	76.9	78.8	80.6
102.5°	100.7	102.5	104.3	104.6	103.2	101.9	100.6	99.3	100.6	101.9	103.2
105°	141.8	141.3	140.8	140.2	139.6	139.0	138.4	137.7	138.4	139.0	139.6
107.5°	176.6	175.9	175.3	174.8	174.5	174.2	173.9	173.6	173.9	174.2	174.5
110°	200.7	200.0	199.3	198.9	198.6	198.3	198.0	197.7	198.0	198.3	198.6





TEST NUMBER: P332805-840

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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	224.3	224.1	223.8	223.4	222.8	222.3	221.7	221.2	221.7	222.3	222.8
115°	258.3	258.4	258.5	258.4	258.1	257.8	257.5	257.2	257.5	257.8	258.1
117.5°	292.1	291.9	291.6	291.3	290.9	290.5	290.1	289.7	290.1	290.5	290.9
120°	313.3	313.4	313.5	313.3	312.9	312.5	312.0	311.6	312.0	312.5	312.9
122.5°	333.7	333.5	333.4	333.2	333.0	332.6	332.4	332.1	332.4	332.6	333.0
125°	362.8	363.0	363.2	363.1	362.7	362.3	361.9	361.5	361.9	362.3	362.7
127.5°	391.0	390.5	390.1	389.8	389.7	389.6	389.5	389.4	389.5	389.6	389.7
130°	408.6	408.3	408.0	407.8	407.7	407.6	407.4	407.3	407.4	407.6	407.7
132.5°	425.6	425.3	424.9	424.5	424.3	424.1	423.9	423.8	423.9	424.1	424.3
135°	449.1	448.7	448.3	448.1	448.2	448.3	448.4	448.5	448.4	448.3	448.2
137.5°	471.7	471.2	470.8	470.6	470.5	470.5	470.4	470.4	470.4	470.5	470.5
140°	486.1	485.8	485.6	485.4	485.2	485.0	484.8	484.6	484.8	485.0	485.2
142.5°	499.5	499.3	499.2	499.0	498.6	498.3	497.9	497.5	497.9	498.3	498.6
145°	518.6	518.6	518.6	518.4	518.1	517.8	517.5	517.2	517.5	517.8	518.1
147.5°	535.1	535.2	535.3	535.1	534.5	533.9	533.4	532.8	533.4	533.9	534.5
150°	545.7	545.8	545.9	545.8	545.4	545.0	544.6	544.2	544.6	545.0	545.4
152.5°	554.7	554.9	555.0	555.0	554.6	554.3	554.0	553.7	554.0	554.3	554.6
155°	566.7	567.0	567.3	567.4	567.3	567.2	567.1	567.0	567.1	567.2	567.3
157.5°	577.1	577.5	577.8	578.0	578.1	578.1	578.2	578.3	578.2	578.1	578.1
160°	583.3	583.4	583.5	583.7	584.0	584.3	584.6	584.9	584.6	584.3	584.0
162.5°	588.8	588.9	589.0	589.3	589.6	590.0	590.4	590.8	590.4	590.0	589.6
165°	595.9	595.9	595.9	596.1	596.6	597.1	597.6	598.1	597.6	597.1	596.6
167.5°	601.5	601.6	601.6	601.9	602.5	603.0	603.5	604.0	603.5	603.0	602.5
170°	604.8	604.7	604.6	604.9	605.5	606.1	606.7	607.3	606.7	606.1	605.5
172.5°	607.0	606.9	606.8	607.1	607.7	608.3	608.9	609.6	608.9	608.3	607.7
175°	609.5	609.4	609.3	609.5	610.1	610.7	611.3	611.9	611.3	610.7	610.1
177.5°	610.9	610.7	610.6	610.8	611.3	611.9	612.5	613.0	612.5	611.9	611.3
180°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9



TEST NUMBER: P332805-840

CATALOG NUMBER: S124DIW-S1020D470U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1652.8	1647.9	1640.6	1630.5	1622.1	1613.3	1611.0	1607.6	1614.4	1608.7	1607.1
5°	1598.7	1584.1	1565.2	1543.6	1531.0	1512.9	1509.3	1502.4	1495.4	1494.7	1487.7
7.5°	1541.4	1519.8	1495.1	1473.1	1452.7	1432.8	1419.9	1417.0	1406.7	1400.7	1393.7
10°	1504.5	1477.9	1449.4	1428.4	1404.6	1383.7	1369.1	1360.7	1353.6	1345.9	1339.0
12.5°	1460.9	1432.7	1409.1	1386.4	1358.3	1342.3	1318.2	1303.6	1302.3	1302.4	1284.2
15°	1410.2	1382.3	1345.9	1313.8	1298.5	1267.8	1254.6	1237.8	1227.3	1216.8	1208.5
17.5°	1352.3	1317.5	1289.2	1252.3	1222.9	1198.5	1181.1	1171.0	1155.3	1140.4	1129.7
20°	1316.0	1279.0	1248.9	1209.8	1177.7	1147.7	1133.1	1119.1	1107.2	1094.7	1082.8
22.5°	1279.1	1240.4	1203.7	1165.7	1135.9	1104.2	1090.0	1071.1	1059.8	1052.8	1040.9
25°	1221.0	1179.1	1137.2	1101.0	1070.3	1042.3	1023.5	1008.8	996.2	990.7	983.0
27.5°	1157.9	1116.3	1075.8	1034.6	999.8	979.5	964.4	953.3	946.1	938.7	935.2
30°	1117.7	1074.4	1031.2	992.7	960.6	940.4	926.5	918.8	913.1	909.7	906.2
32.5°	1076.9	1034.2	988.7	953.6	924.8	906.9	896.3	888.6	885.8	884.5	883.2
35°	1011.6	968.3	926.5	895.0	867.8	860.8	851.7	847.5	846.2	851.0	853.1
37.5°	948.4	908.2	869.6	839.1	821.3	811.1	808.0	808.2	813.1	817.5	822.5
40°	907.6	868.5	832.1	805.7	788.9	782.6	781.2	784.7	790.3	795.2	800.7
42.5°	867.9	829.4	796.4	771.5	759.8	754.1	755.0	758.4	766.3	772.2	780.6
45°	806.4	774.3	742.1	721.9	712.1	713.5	713.5	719.7	727.4	736.5	745.6
47.5°	748.4	716.0	689.6	672.6	667.5	666.3	670.2	678.4	689.4	700.6	713.4
50°	709.3	678.5	655.5	640.2	634.6	636.7	642.3	649.9	663.2	677.2	690.4
52.5°	669.6	641.7	620.4	606.1	602.2	606.0	611.6	623.7	635.3	650.4	666.4
55°	608.0	584.3	567.5	557.1	555.7	557.8	564.1	577.3	594.1	613.0	628.3
57.5°	546.7	526.9	511.6	504.3	505.0	507.0	517.4	533.1	551.0	571.1	590.9
60°	505.4	487.3	474.7	469.2	469.8	474.0	486.6	501.3	523.6	543.1	564.1
62.5°	466.4	450.4	438.4	433.4	432.4	441.6	453.6	468.9	491.2	513.0	535.6
65°	403.5	390.9	381.2	378.4	380.5	387.5	402.8	423.0	441.9	464.9	488.7
67.5°	342.0	331.7	325.1	326.3	328.8	339.1	352.0	369.4	390.8	414.7	438.2
70°	303.0	293.2	287.6	288.3	292.6	305.1	316.3	333.7	356.8	381.2	400.7
72.5°	262.8	256.3	251.4	254.3	258.4	267.1	281.0	298.5	318.8	341.5	362.1
75°	201.8	201.8	198.9	201.1	207.3	215.7	226.2	244.4	264.6	282.8	299.5
77.5°	149.7	148.1	150.0	152.5	156.1	166.0	178.0	191.0	206.2	224.4	238.2
80°	114.5	115.2	118.7	122.9	124.3	132.0	144.5	156.4	168.2	183.6	196.8
82.5°	86.0	86.7	88.6	93.8	95.2	103.5	111.6	123.4	134.2	144.5	155.5
85°	46.8	46.8	50.3	52.3	55.8	61.4	66.3	73.3	83.1	90.1	100.5
87.5°	19.1	19.2	21.6	22.9	24.7	27.7	29.0	35.2	37.6	40.5	45.5
90°	5.9	6.8	7.7	8.5	9.3	10.1	10.7	11.3	11.9	12.5	12.9
92.5°	6.1	6.5	7.3	8.1	8.9	9.7	10.3	10.9	11.5	12.1	12.4
95°	11.3	9.7	9.8	9.9	10.0	10.1	10.7	11.3	11.9	12.5	12.8
97.5°	62.1	57.5	46.2	34.7	23.4	12.1	12.1	12.2	12.2	12.3	12.4
100°	82.4	76.2	62.2	48.2	34.1	20.1	18.4	16.7	14.9	13.2	12.4
102.5°	104.6	104.3	102.5	100.7	98.9	97.0	78.4	59.7	41.1	22.4	13.1
105°	140.2	140.8	141.3	141.8	142.3	142.8	143.7	144.6	145.5	146.4	145.1
107.5°	174.8	175.3	175.9	176.6	177.3	178.0	178.4	178.9	179.4	179.9	180.3
110°	198.9	199.3	200.0	200.7	201.3	201.9	202.1	202.3	202.5	202.7	202.9



TEST NUMBER: P332805-840

CATALOG NUMBER: S124DIW-S1020D470U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	223.4	223.8	224.1	224.3	224.6	224.9	224.9	224.8	224.8	224.7	224.9
115°	258.4	258.5	258.4	258.3	258.2	258.1	258.3	258.5	258.7	258.9	259.0
117.5°	291.3	291.6	291.9	292.1	292.4	292.6	292.5	292.5	292.5	292.4	292.4
120°	313.3	313.5	313.4	313.3	313.2	313.1	313.3	313.5	313.7	313.9	313.9
122.5°	333.2	333.4	333.5	333.7	333.8	334.0	334.1	334.2	334.3	334.4	334.4
125°	363.1	363.2	363.0	362.8	362.6	362.4	362.7	363.0	363.3	363.7	363.9
127.5°	389.8	390.1	390.5	391.0	391.5	391.9	391.9	391.8	391.7	391.7	391.6
130°	407.8	408.0	408.3	408.6	408.9	409.2	409.3	409.4	409.5	409.6	409.6
132.5°	424.5	424.9	425.3	425.6	426.0	426.4	426.5	426.6	426.7	426.8	426.8
135°	448.1	448.3	448.7	449.1	449.5	449.9	450.1	450.3	450.5	450.7	450.9
137.5°	470.6	470.8	471.2	471.7	472.1	472.6	472.8	473.0	473.2	473.5	473.5
140°	485.4	485.6	485.8	486.1	486.4	486.6	486.9	487.2	487.5	487.8	488.0
142.5°	499.0	499.2	499.3	499.5	499.6	499.7	499.9	500.1	500.4	500.6	500.7
145°	518.4	518.6	518.6	518.6	518.6	518.6	518.7	518.8	518.9	519.0	519.1
147.5°	535.1	535.3	535.2	535.1	535.0	534.9	535.0	535.1	535.1	535.2	535.3
150°	545.8	545.9	545.8	545.7	545.6	545.5	545.5	545.5	545.5	545.5	545.6
152.5°	555.0	555.0	554.9	554.7	554.5	554.3	554.5	554.6	554.8	555.0	555.0
155°	567.4	567.3	567.0	566.7	566.4	566.1	566.5	566.9	567.3	567.7	567.8
157.5°	578.0	577.8	577.5	577.1	576.8	576.5	577.0	577.5	578.0	578.6	578.6
160°	583.7	583.5	583.4	583.3	583.2	583.1	583.7	584.3	584.9	585.5	585.5
162.5°	589.3	589.0	588.9	588.8	588.7	588.5	589.2	589.8	590.4	591.0	591.0
165°	596.1	595.9	595.9	595.9	595.9	595.9	596.7	597.5	598.3	599.2	599.1
167.5°	601.9	601.6	601.6	601.5	601.5	601.4	602.3	603.2	604.1	605.0	604.9
170°	604.9	604.6	604.7	604.8	604.9	605.0	605.8	606.6	607.4	608.3	608.2
172.5°	607.1	606.8	606.9	607.0	607.1	607.2	608.0	608.8	609.7	610.5	610.4
175°	609.5	609.3	609.4	609.5	609.6	609.7	610.6	611.5	612.4	613.3	613.1
177.5°	610.8	610.6	610.7	610.9	611.0	611.2	611.8	612.5	613.1	613.8	613.6
180°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9



TEST NUMBER: P332805-840

CATALOG NUMBER: S124DIW-S1020D470U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1606.0	1604.9	1600.9	1600.4	1600.9	1604.9	1606.0	1607.1	1608.7	1614.4	1607.6
5°	1483.5	1480.1	1477.9	1485.6	1477.9	1480.1	1483.5	1487.7	1494.7	1495.4	1502.4
7.5°	1391.2	1388.5	1382.3	1380.4	1382.3	1388.5	1391.2	1393.7	1400.7	1406.7	1417.0
10°	1332.0	1329.2	1323.6	1322.2	1323.6	1329.2	1332.0	1339.0	1345.9	1353.6	1360.7
12.5°	1275.1	1269.5	1268.4	1269.7	1268.4	1269.5	1275.1	1284.2	1302.4	1302.3	1303.6
15°	1199.4	1196.6	1188.9	1191.0	1188.9	1196.6	1199.4	1208.5	1216.8	1227.3	1237.8
17.5°	1124.8	1121.5	1112.2	1120.3	1112.2	1121.5	1124.8	1129.7	1140.4	1155.3	1171.0
20°	1077.9	1072.3	1067.4	1066.7	1067.4	1072.3	1077.9	1082.8	1094.7	1107.2	1119.1
22.5°	1033.2	1028.2	1027.7	1023.2	1027.7	1028.2	1033.2	1040.9	1052.8	1059.8	1071.1
25°	977.3	972.5	971.1	967.7	971.1	972.5	977.3	983.0	990.7	996.2	1008.8
27.5°	934.5	932.1	929.6	930.7	929.6	932.1	934.5	935.2	938.7	946.1	953.3
30°	908.3	907.6	906.2	906.2	906.2	907.6	908.3	906.2	909.7	913.1	918.8
32.5°	886.5	886.4	887.2	887.2	887.2	886.4	886.5	883.2	884.5	885.8	888.6
35°	855.9	858.0	859.4	857.3	859.4	858.0	855.9	853.1	851.0	846.2	847.5
37.5°	828.3	830.3	832.3	834.7	832.3	830.3	828.3	822.5	817.5	813.1	808.2
40°	807.0	811.9	813.3	816.8	813.3	811.9	807.0	800.7	795.2	790.3	784.7
42.5°	786.9	792.3	796.0	796.7	796.0	792.3	786.9	780.6	772.2	766.3	758.4
45°	756.1	761.6	766.6	766.6	766.6	761.6	756.1	745.6	736.5	727.4	719.7
47.5°	724.1	732.2	737.1	738.3	737.1	732.2	724.1	713.4	700.6	689.4	678.4
50°	702.4	712.1	717.0	720.4	717.0	712.1	702.4	690.4	677.2	663.2	649.9
52.5°	681.1	690.8	697.4	699.2	697.4	690.8	681.1	666.4	650.4	635.3	623.7
55°	644.4	658.3	666.0	668.8	666.0	658.3	644.4	628.3	613.0	594.1	577.3
57.5°	609.8	622.6	631.6	633.6	631.6	622.6	609.8	590.9	571.1	551.0	533.1
60°	582.9	596.9	608.0	610.2	608.0	596.9	582.9	564.1	543.1	523.6	501.3
62.5°	555.5	570.1	580.2	585.6	580.2	570.1	555.5	535.6	513.0	491.2	468.9
65°	508.3	522.9	532.7	534.7	532.7	522.9	508.3	488.7	464.9	441.9	423.0
67.5°	456.6	471.2	477.7	481.7	477.7	471.2	456.6	438.2	414.7	390.8	369.4
70°	420.3	432.1	439.1	442.6	439.1	432.1	420.3	400.7	381.2	356.8	333.7
72.5°	378.9	391.3	399.5	400.2	399.5	391.3	378.9	362.1	341.5	318.8	298.5
75°	315.6	326.7	330.9	330.9	330.9	326.7	315.6	299.5	282.8	264.6	244.4
77.5°	249.7	255.5	260.8	262.0	260.8	255.5	249.7	238.2	224.4	206.2	191.0
80°	207.3	210.9	215.0	215.0	215.0	210.9	207.3	196.8	183.6	168.2	156.4
82.5°	163.8	166.7	170.9	170.4	170.9	166.7	163.8	155.5	144.5	134.2	123.4
85°	99.2	105.4	104.7	103.3	104.7	105.4	99.2	100.5	90.1	83.1	73.3
87.5°	47.3	47.9	49.6	50.8	49.6	47.9	47.3	45.5	40.5	37.6	35.2
90°	13.1	13.3	13.5	13.7	13.5	13.3	13.1	12.9	12.5	11.9	11.3
92.5°	12.5	12.5	12.6	12.6	12.6	12.5	12.5	12.4	12.1	11.5	10.9
95°	12.9	13.0	13.1	13.2	13.1	13.0	12.9	12.8	12.5	11.9	11.3
97.5°	12.5	12.6	12.7	12.8	12.7	12.6	12.5	12.4	12.3	12.2	12.2
100°	12.5	12.6	12.7	12.8	12.7	12.6	12.5	12.4	13.2	14.9	16.7
102.5°	13.1	13.1	13.1	13.2	13.1	13.1	13.1	13.1	22.4	41.1	59.7
105°	141.4	137.7	134.1	130.5	134.1	137.7	141.4	145.1	146.4	145.5	144.6
107.5°	180.7	181.0	181.4	181.8	181.4	181.0	180.7	180.3	179.9	179.4	178.9
110°	203.2	203.5	203.8	204.1	203.8	203.5	203.2	202.9	202.7	202.5	202.3



TEST NUMBER: P332805-840

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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	225.3	225.7	226.1	226.4	226.1	225.7	225.3	224.9	224.7	224.8	224.8
115°	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	258.9	258.7	258.5
117.5°	292.3	292.3	292.3	292.2	292.3	292.3	292.3	292.4	292.4	292.5	292.5
120°	313.7	313.5	313.3	313.1	313.3	313.5	313.7	313.9	313.9	313.7	313.5
122.5°	334.2	334.0	333.8	333.6	333.8	334.0	334.2	334.4	334.4	334.3	334.2
125°	364.0	364.1	364.2	364.3	364.2	364.1	364.0	363.9	363.7	363.3	363.0
127.5°	391.5	391.4	391.4	391.3	391.4	391.4	391.5	391.6	391.7	391.7	391.8
130°	409.6	409.6	409.6	409.6	409.6	409.6	409.6	409.6	409.6	409.5	409.4
132.5°	426.7	426.7	426.6	426.5	426.6	426.7	426.7	426.8	426.8	426.7	426.6
135°	451.1	451.3	451.5	451.7	451.5	451.3	451.1	450.9	450.7	450.5	450.3
137.5°	473.5	473.4	473.4	473.3	473.4	473.4	473.5	473.5	473.5	473.2	473.0
140°	488.1	488.2	488.3	488.4	488.3	488.2	488.1	488.0	487.8	487.5	487.2
142.5°	500.7	500.8	500.8	500.8	500.8	500.8	500.7	500.7	500.6	500.4	500.1
145°	519.3	519.5	519.7	519.9	519.7	519.5	519.3	519.1	519.0	518.9	518.8
147.5°	535.4	535.5	535.6	535.7	535.6	535.5	535.4	535.3	535.2	535.1	535.1
150°	545.7	545.8	545.9	546.0	545.9	545.8	545.7	545.6	545.5	545.5	545.5
152.5°	555.0	554.9	554.8	554.8	554.8	554.9	555.0	555.0	555.0	554.8	554.6
155°	567.5	567.2	566.9	566.6	566.9	567.2	567.5	567.8	567.7	567.3	566.9
157.5°	578.0	577.5	577.0	576.5	577.0	577.5	578.0	578.6	578.6	578.0	577.5
160°	584.9	584.3	583.7	583.1	583.7	584.3	584.9	585.5	585.5	584.9	584.3
162.5°	590.3	589.6	588.9	588.2	588.9	589.6	590.3	591.0	591.0	590.4	589.8
165°	598.1	597.2	596.3	595.4	596.3	597.2	598.1	599.1	599.2	598.3	597.5
167.5°	603.9	602.9	601.9	600.9	601.9	602.9	603.9	604.9	605.0	604.1	603.2
170°	607.1	606.1	605.1	604.1	605.1	606.1	607.1	608.2	608.3	607.4	606.6
172.5°	609.3	608.1	607.0	605.9	607.0	608.1	609.3	610.4	610.5	609.7	608.8
175°	611.9	610.7	609.5	608.2	609.5	610.7	611.9	613.1	613.3	612.4	611.5
177.5°	612.7	611.7	610.7	609.8	610.7	611.7	612.7	613.6	613.8	613.1	612.5
180°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9



TEST NUMBER: P332805-840

CATALOG NUMBER: S124DIW-S1020D470U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1611.0	1613.3	1622.1	1630.5	1640.6	1647.9	1652.8	1658.5	1670.2	1679.7	1688.6
5°	1509.3	1512.9	1531.0	1543.6	1565.2	1584.1	1598.7	1614.8	1633.7	1659.4	1683.1
7.5°	1419.9	1432.8	1452.7	1473.1	1495.1	1519.8	1541.4	1565.5	1598.0	1633.5	1670.0
10°	1369.1	1383.7	1404.6	1428.4	1449.4	1477.9	1504.5	1533.1	1570.0	1613.4	1656.7
12.5°	1318.2	1342.3	1358.3	1386.4	1409.1	1432.7	1460.9	1498.4	1541.6	1587.1	1639.3
15°	1254.6	1267.8	1298.5	1313.8	1345.9	1382.3	1410.2	1447.9	1489.8	1549.8	1608.5
17.5°	1181.1	1198.5	1222.9	1252.3	1289.2	1317.5	1352.3	1391.1	1443.9	1503.5	1576.9
20°	1133.1	1147.7	1177.7	1209.8	1248.9	1279.0	1316.0	1353.6	1408.2	1471.7	1548.4
22.5°	1090.0	1104.2	1135.9	1165.7	1203.7	1240.4	1279.1	1322.9	1375.1	1442.1	1520.6
25°	1023.5	1042.3	1070.3	1101.0	1137.2	1179.1	1221.0	1260.1	1316.0	1386.4	1470.3
27.5°	964.4	979.5	999.8	1034.6	1075.8	1116.3	1157.9	1207.1	1260.7	1335.2	1422.2
30°	926.5	940.4	960.6	992.7	1031.2	1074.4	1117.7	1165.2	1221.0	1295.1	1383.7
32.5°	896.3	906.9	924.8	953.6	988.7	1034.2	1076.9	1126.1	1184.7	1257.6	1344.0
35°	851.7	860.8	867.8	895.0	926.5	968.3	1011.6	1064.0	1120.4	1189.6	1276.2
37.5°	808.0	811.1	821.3	839.1	869.6	908.2	948.4	999.9	1057.8	1128.0	1206.1
40°	781.2	782.6	788.9	805.7	832.1	868.5	907.6	958.6	1013.7	1080.1	1157.5
42.5°	755.0	754.1	759.8	771.5	796.4	829.4	867.9	914.4	969.6	1030.9	1103.9
45°	713.5	713.5	712.1	721.9	742.1	774.3	806.4	851.0	897.1	957.2	1018.5
47.5°	670.2	666.3	667.5	672.6	689.6	716.0	748.4	785.0	825.6	876.5	930.3
50°	642.3	636.7	634.6	640.2	655.5	678.5	709.3	741.4	779.8	824.5	870.6
52.5°	611.6	606.0	602.2	606.1	620.4	641.7	669.6	697.8	732.4	768.6	808.6
55°	564.1	557.8	555.7	557.1	567.5	584.3	608.0	633.9	659.7	689.7	717.7
57.5°	517.4	507.0	505.0	504.3	511.6	526.9	546.7	569.2	587.9	606.1	635.8
60°	486.6	474.0	469.8	469.2	474.7	487.3	505.4	527.8	541.1	553.6	579.5
62.5°	453.6	441.6	432.4	433.4	438.4	450.4	466.4	482.5	491.3	505.0	522.5
65°	402.8	387.5	380.5	378.4	381.2	390.9	403.5	413.9	423.7	429.4	446.1
67.5°	352.0	339.1	328.8	326.3	325.1	331.7	342.0	348.4	355.4	360.2	370.1
70°	316.3	305.1	292.6	288.3	287.6	293.2	303.0	303.7	313.5	315.6	326.0
72.5°	281.0	267.1	258.4	254.3	251.4	256.3	262.8	264.6	269.9	273.7	279.1
75°	226.2	215.7	207.3	201.1	198.9	201.8	201.8	205.2	208.7	210.9	217.1
77.5°	178.0	166.0	156.1	152.5	150.0	148.1	149.7	151.8	150.1	153.7	155.1
80°	144.5	132.0	124.3	122.9	118.7	115.2	114.5	116.5	113.8	115.2	119.4
82.5°	111.6	103.5	95.2	93.8	88.6	86.7	86.0	84.7	84.7	84.4	85.3
85°	66.3	61.4	55.8	52.3	50.3	46.8	46.8	45.3	44.0	42.6	43.3
87.5°	29.0	27.7	24.7	22.9	21.6	19.2	19.1	17.2	16.4	15.6	14.8
90°	10.7	10.1	9.3	8.5	7.7	6.8	5.9	4.7	3.6	2.5	1.4
92.5°	10.3	9.7	8.9	8.1	7.3	6.5	6.1	6.0	5.9	5.9	5.8
95°	10.7	10.1	10.0	9.9	9.8	9.7	11.3	14.8	18.3	21.7	25.1
97.5°	12.1	12.1	23.4	34.7	46.2	57.5	62.1	59.9	57.8	55.6	53.4
100°	18.4	20.1	34.1	48.2	62.2	76.2	82.4	80.6	78.8	76.9	75.0
102.5°	78.4	97.0	98.9	100.7	102.5	104.3	104.6	103.2	101.9	100.6	99.3
105°	143.7	142.8	142.3	141.8	141.3	140.8	140.2	139.6	139.0	138.4	137.7
107.5°	178.4	178.0	177.3	176.6	175.9	175.3	174.8	174.5	174.2	173.9	173.6
110°	202.1	201.9	201.3	200.7	200.0	199.3	198.9	198.6	198.3	198.0	197.7



TEST NUMBER: P332805-840

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	224.9	224.9	224.6	224.3	224.1	223.8	223.4	222.8	222.3	221.7	221.2
115°	258.3	258.1	258.2	258.3	258.4	258.5	258.4	258.1	257.8	257.5	257.2
117.5°	292.5	292.6	292.4	292.1	291.9	291.6	291.3	290.9	290.5	290.1	289.7
120°	313.3	313.1	313.2	313.3	313.4	313.5	313.3	312.9	312.5	312.0	311.6
122.5°	334.1	334.0	333.8	333.7	333.5	333.4	333.2	333.0	332.6	332.4	332.1
125°	362.7	362.4	362.6	362.8	363.0	363.2	363.1	362.7	362.3	361.9	361.5
127.5°	391.9	391.9	391.5	391.0	390.5	390.1	389.8	389.7	389.6	389.5	389.4
130°	409.3	409.2	408.9	408.6	408.3	408.0	407.8	407.7	407.6	407.4	407.3
132.5°	426.5	426.4	426.0	425.6	425.3	424.9	424.5	424.3	424.1	423.9	423.8
135°	450.1	449.9	449.5	449.1	448.7	448.3	448.1	448.2	448.3	448.4	448.5
137.5°	472.8	472.6	472.1	471.7	471.2	470.8	470.6	470.5	470.5	470.4	470.4
140°	486.9	486.6	486.4	486.1	485.8	485.6	485.4	485.2	485.0	484.8	484.6
142.5°	499.9	499.7	499.6	499.5	499.3	499.2	499.0	498.6	498.3	497.9	497.5
145°	518.7	518.6	518.6	518.6	518.6	518.6	518.4	518.1	517.8	517.5	517.2
147.5°	535.0	534.9	535.0	535.1	535.2	535.3	535.1	534.5	533.9	533.4	532.8
150°	545.5	545.5	545.6	545.7	545.8	545.9	545.8	545.4	545.0	544.6	544.2
152.5°	554.5	554.3	554.5	554.7	554.9	555.0	555.0	554.6	554.3	554.0	553.7
155°	566.5	566.1	566.4	566.7	567.0	567.3	567.4	567.3	567.2	567.1	567.0
157.5°	577.0	576.5	576.8	577.1	577.5	577.8	578.0	578.1	578.1	578.2	578.3
160°	583.7	583.1	583.2	583.3	583.4	583.5	583.7	584.0	584.3	584.6	584.9
162.5°	589.2	588.5	588.7	588.8	588.9	589.0	589.3	589.6	590.0	590.4	590.8
165°	596.7	595.9	595.9	595.9	595.9	595.9	596.1	596.6	597.1	597.6	598.1
167.5°	602.3	601.4	601.5	601.5	601.6	601.6	601.9	602.5	603.0	603.5	604.0
170°	605.8	605.0	604.9	604.8	604.7	604.6	604.9	605.5	606.1	606.7	607.3
172.5°	608.0	607.2	607.1	607.0	606.9	606.8	607.1	607.7	608.3	608.9	609.6
175°	610.6	609.7	609.6	609.5	609.4	609.3	609.5	610.1	610.7	611.3	611.9
177.5°	611.8	611.2	611.0	610.9	610.7	610.6	610.8	611.3	611.9	612.5	613.0
180°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9



TEST NUMBER: P332805-840

CATALOG NUMBER: S124DIW-S1020D470U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1696.5	1702.0	1709.3	1721.6	1726.1	1731.6	1739.5	1738.9	1741.1	1749.5	1767.4
5°	1702.7	1724.3	1745.3	1770.5	1797.0	1814.4	1838.2	1852.8	1867.4	1886.3	1918.4
7.5°	1705.3	1739.6	1778.0	1822.1	1861.4	1906.6	1941.9	1975.1	2005.2	2045.0	2083.3
10°	1701.3	1747.4	1797.0	1852.8	1912.2	1962.5	2007.8	2059.5	2103.4	2151.6	2194.9
12.5°	1694.0	1749.7	1815.9	1878.6	1947.9	2022.2	2078.7	2130.9	2189.5	2244.9	2311.7
15°	1677.6	1753.7	1831.2	1913.6	2006.4	2092.2	2173.9	2241.7	2304.5	2387.6	2474.9
17.5°	1656.7	1738.8	1836.4	1936.2	2033.3	2131.4	2232.5	2334.3	2413.6	2516.8	2585.1
20°	1637.1	1732.0	1832.6	1951.3	2048.3	2170.5	2271.0	2369.4	2478.3	2581.0	2662.6
22.5°	1609.7	1713.6	1820.3	1938.4	2066.2	2188.4	2304.5	2411.4	2520.2	2631.8	2730.8
25°	1575.0	1669.2	1795.5	1929.7	2056.7	2189.3	2322.7	2456.7	2573.9	2692.0	2784.1
27.5°	1515.8	1634.8	1752.4	1890.8	2031.9	2182.0	2324.6	2465.0	2587.8	2684.8	2742.0
30°	1485.6	1588.9	1716.7	1855.6	2008.5	2169.8	2318.4	2456.0	2570.5	2648.0	2671.0
32.5°	1441.0	1547.6	1672.5	1816.5	1978.3	2144.0	2299.0	2428.6	2524.2	2564.8	2537.0
35°	1374.6	1471.0	1597.3	1744.6	1912.9	2089.5	2242.4	2352.0	2400.9	2362.5	2266.8
37.5°	1295.1	1390.5	1517.4	1662.1	1836.2	2015.8	2154.0	2232.9	2216.7	2121.2	1978.6
40°	1239.2	1328.6	1449.4	1605.7	1775.3	1955.4	2076.9	2119.5	2074.9	1938.0	1786.6
42.5°	1177.2	1264.4	1385.6	1536.4	1716.2	1882.3	1988.1	1991.7	1916.7	1753.1	1601.0
45°	1082.8	1165.9	1280.4	1437.4	1603.6	1760.0	1829.8	1795.5	1657.4	1499.5	1346.7
47.5°	989.7	1061.7	1174.6	1323.6	1481.5	1613.1	1647.7	1586.1	1438.9	1285.7	1144.0
50°	921.5	994.1	1100.2	1242.6	1394.8	1508.6	1525.4	1443.7	1299.2	1144.9	1033.9
52.5°	856.2	928.3	1030.5	1162.3	1301.6	1404.2	1404.7	1310.2	1166.3	1028.7	925.5
55°	760.2	825.2	917.4	1035.3	1159.6	1239.9	1220.3	1122.6	997.6	878.3	788.2
57.5°	667.8	724.4	809.3	907.7	1017.1	1083.4	1051.0	956.8	845.3	744.1	675.8
60°	608.0	661.9	734.5	827.3	919.5	971.1	940.4	855.2	752.6	670.9	611.6
62.5°	550.0	595.3	665.2	745.8	831.2	869.5	842.1	758.0	669.3	595.5	547.3
65°	467.8	504.7	560.6	629.8	691.9	724.7	701.7	623.4	555.7	502.6	464.2
67.5°	390.9	419.9	462.1	517.6	570.4	588.1	567.1	512.7	455.3	412.8	385.8
70°	337.9	365.2	400.7	443.3	489.4	508.3	487.3	444.0	397.3	358.1	331.6
72.5°	291.5	312.7	342.6	379.1	415.2	433.9	419.7	378.1	338.6	309.5	286.9
75°	222.0	240.1	261.1	286.9	314.9	327.4	314.9	286.2	259.0	237.3	221.3
77.5°	161.4	171.2	187.3	206.6	224.1	233.7	222.9	203.4	186.8	172.0	164.1
80°	122.9	129.9	141.0	156.4	168.2	177.3	170.4	154.3	141.0	131.3	127.7
82.5°	89.4	94.1	101.4	112.8	120.8	125.4	122.3	110.7	105.2	96.6	93.1
85°	44.0	46.8	51.7	55.1	62.1	62.8	63.5	58.7	53.7	51.7	48.9
87.5°	15.6	16.4	18.3	20.2	22.6	23.3	22.9	23.0	21.0	20.6	18.5
90°	2.5	3.6	4.7	5.9	6.8	7.7	8.5	9.3	10.1	10.7	11.3
92.5°	5.9	5.9	6.0	6.1	6.5	7.3	8.1	8.9	9.7	10.3	10.9
95°	21.7	18.3	14.8	11.3	9.7	9.8	9.9	10.0	10.1	10.7	11.3
97.5°	55.6	57.8	59.9	62.1	57.5	46.2	34.7	23.4	12.1	12.1	12.2
100°	76.9	78.8	80.6	82.4	76.2	62.2	48.2	34.1	20.1	18.4	16.7
102.5°	100.6	101.9	103.2	104.6	104.3	102.5	100.7	98.9	97.0	78.4	59.7
105°	138.4	139.0	139.6	140.2	140.8	141.3	141.8	142.3	142.8	143.7	144.6
107.5°	173.9	174.2	174.5	174.8	175.3	175.9	176.6	177.3	178.0	178.4	178.9
110°	198.0	198.3	198.6	198.9	199.3	200.0	200.7	201.3	201.9	202.1	202.3





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	221.7	222.3	222.8	223.4	223.8	224.1	224.3	224.6	224.9	224.9	224.8
115°	257.5	257.8	258.1	258.4	258.5	258.4	258.3	258.2	258.1	258.3	258.5
117.5°	290.1	290.5	290.9	291.3	291.6	291.9	292.1	292.4	292.6	292.5	292.5
120°	312.0	312.5	312.9	313.3	313.5	313.4	313.3	313.2	313.1	313.3	313.5
122.5°	332.4	332.6	333.0	333.2	333.4	333.5	333.7	333.8	334.0	334.1	334.2
125°	361.9	362.3	362.7	363.1	363.2	363.0	362.8	362.6	362.4	362.7	363.0
127.5°	389.5	389.6	389.7	389.8	390.1	390.5	391.0	391.5	391.9	391.9	391.8
130°	407.4	407.6	407.7	407.8	408.0	408.3	408.6	408.9	409.2	409.3	409.4
132.5°	423.9	424.1	424.3	424.5	424.9	425.3	425.6	426.0	426.4	426.5	426.6
135°	448.4	448.3	448.2	448.1	448.3	448.7	449.1	449.5	449.9	450.1	450.3
137.5°	470.4	470.5	470.5	470.6	470.8	471.2	471.7	472.1	472.6	472.8	473.0
140°	484.8	485.0	485.2	485.4	485.6	485.8	486.1	486.4	486.6	486.9	487.2
142.5°	497.9	498.3	498.6	499.0	499.2	499.3	499.5	499.6	499.7	499.9	500.1
145°	517.5	517.8	518.1	518.4	518.6	518.6	518.6	518.6	518.6	518.7	518.8
147.5°	533.4	533.9	534.5	535.1	535.3	535.2	535.1	535.0	534.9	535.0	535.1
150°	544.6	545.0	545.4	545.8	545.9	545.8	545.7	545.6	545.5	545.5	545.5
152.5°	554.0	554.3	554.6	555.0	555.0	554.9	554.7	554.5	554.3	554.5	554.6
155°	567.1	567.2	567.3	567.4	567.3	567.0	566.7	566.4	566.1	566.5	566.9
157.5°	578.2	578.1	578.1	578.0	577.8	577.5	577.1	576.8	576.5	577.0	577.5
160°	584.6	584.3	584.0	583.7	583.5	583.4	583.3	583.2	583.1	583.7	584.3
162.5°	590.4	590.0	589.6	589.3	589.0	588.9	588.8	588.7	588.5	589.2	589.8
165°	597.6	597.1	596.6	596.1	595.9	595.9	595.9	595.9	595.9	596.7	597.5
167.5°	603.5	603.0	602.5	601.9	601.6	601.6	601.5	601.5	601.4	602.3	603.2
170°	606.7	606.1	605.5	604.9	604.6	604.7	604.8	604.9	605.0	605.8	606.6
172.5°	608.9	608.3	607.7	607.1	606.8	606.9	607.0	607.1	607.2	608.0	608.8
175°	611.3	610.7	610.1	609.5	609.3	609.4	609.5	609.6	609.7	610.6	611.5
177.5°	612.5	611.9	611.3	610.8	610.6	610.7	610.9	611.0	611.2	611.8	612.5
180°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1776.4	1777.5	1782.4	1786.4	1787.5	1793.1	1793.6
5°	1932.4	1944.3	1967.3	1969.4	1972.9	1991.0	1977.1
7.5°	2115.4	2145.5	2165.6	2183.3	2189.8	2197.7	2196.1
10°	2232.6	2277.2	2299.7	2335.2	2336.6	2345.7	2340.2
12.5°	2350.5	2402.4	2443.2	2449.7	2479.6	2484.2	2492.0
15°	2517.4	2572.6	2629.2	2649.4	2690.6	2700.4	2715.7
17.5°	2674.4	2730.8	2770.5	2822.8	2839.7	2862.4	2846.9
20°	2760.4	2821.9	2872.1	2913.3	2930.7	2943.3	2941.9
22.5°	2812.4	2874.3	2915.1	2946.2	2962.5	2967.9	2967.6
25°	2844.9	2880.4	2893.1	2904.9	2886.8	2880.4	2883.3
27.5°	2754.4	2745.2	2712.4	2669.4	2624.6	2589.2	2569.9
30°	2629.9	2575.4	2525.8	2439.2	2394.6	2368.0	2344.3
32.5°	2453.4	2367.0	2271.7	2192.4	2141.6	2102.2	2096.4
35°	2150.9	2021.0	1904.5	1807.5	1757.2	1714.5	1704.9
37.5°	1828.7	1693.7	1588.8	1503.4	1449.4	1419.3	1391.2
40°	1614.8	1498.8	1395.5	1322.9	1281.7	1260.1	1242.6
42.5°	1450.0	1344.1	1241.4	1186.1	1148.8	1135.6	1125.4
45°	1222.4	1124.0	1052.8	1010.9	989.3	966.9	956.4
47.5°	1040.2	960.1	913.1	877.6	854.3	841.1	834.4
50°	936.9	871.2	829.4	802.1	781.2	770.7	765.2
52.5°	845.3	791.4	756.2	734.6	720.3	712.7	710.4
55°	728.1	686.9	664.6	645.8	635.3	628.3	625.5
57.5°	632.9	601.3	583.1	567.5	563.5	557.6	555.7
60°	570.4	545.9	530.6	520.1	516.6	509.7	511.0
62.5°	515.0	495.1	482.0	475.9	471.4	465.5	467.5
65°	435.7	421.0	413.9	408.4	402.8	399.3	402.1
67.5°	365.6	355.5	346.0	342.7	340.0	339.4	336.5
70°	319.7	311.3	303.0	300.9	300.9	298.1	297.4
72.5°	275.6	269.4	263.9	262.4	260.1	261.3	258.3
75°	212.9	208.0	205.9	203.9	203.2	203.2	201.1
77.5°	157.3	153.7	150.4	150.4	147.8	146.9	146.6
80°	119.4	118.0	115.2	115.2	113.8	114.5	113.1
82.5°	89.8	87.9	87.3	86.1	84.2	84.3	82.9
85°	48.2	46.0	45.3	43.3	41.9	43.3	41.9
87.5°	19.1	18.7	18.2	17.2	16.7	16.7	15.0
90°	11.9	12.5	12.9	13.1	13.3	13.5	13.7
92.5°	11.5	12.1	12.4	12.5	12.5	12.6	12.6
95°	11.9	12.5	12.8	12.9	13.0	13.1	13.2
97.5°	12.2	12.3	12.4	12.5	12.6	12.7	12.8
100°	14.9	13.2	12.4	12.5	12.6	12.7	12.8
102.5°	41.1	22.4	13.1	13.1	13.1	13.1	13.2
105°	145.5	146.4	145.1	141.4	137.7	134.1	130.5
107.5°	179.4	179.9	180.3	180.7	181.0	181.4	181.8
110°	202.5	202.7	202.9	203.2	203.5	203.8	204.1



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	224.8	224.7	224.9	225.3	225.7	226.1	226.4
115°	258.7	258.9	259.0	259.0	259.0	259.0	259.0
117.5°	292.5	292.4	292.4	292.3	292.3	292.3	292.2
120°	313.7	313.9	313.9	313.7	313.5	313.3	313.1
122.5°	334.3	334.4	334.4	334.2	334.0	333.8	333.6
125°	363.3	363.7	363.9	364.0	364.1	364.2	364.3
127.5°	391.7	391.7	391.6	391.5	391.4	391.4	391.3
130°	409.5	409.6	409.6	409.6	409.6	409.6	409.6
132.5°	426.7	426.8	426.8	426.7	426.7	426.6	426.5
135°	450.5	450.7	450.9	451.1	451.3	451.5	451.7
137.5°	473.2	473.5	473.5	473.5	473.4	473.4	473.3
140°	487.5	487.8	488.0	488.1	488.2	488.3	488.4
142.5°	500.4	500.6	500.7	500.7	500.8	500.8	500.8
145°	518.9	519.0	519.1	519.3	519.5	519.7	519.9
147.5°	535.1	535.2	535.3	535.4	535.5	535.6	535.7
150°	545.5	545.5	545.6	545.7	545.8	545.9	546.0
152.5°	554.8	555.0	555.0	555.0	554.9	554.8	554.8
155°	567.3	567.7	567.8	567.5	567.2	566.9	566.6
157.5°	578.0	578.6	578.6	578.0	577.5	577.0	576.5
160°	584.9	585.5	585.5	584.9	584.3	583.7	583.1
162.5°	590.4	591.0	591.0	590.3	589.6	588.9	588.2
165°	598.3	599.2	599.1	598.1	597.2	596.3	595.4
167.5°	604.1	605.0	604.9	603.9	602.9	601.9	600.9
170°	607.4	608.3	608.2	607.1	606.1	605.1	604.1
172.5°	609.7	610.5	610.4	609.3	608.1	607.0	605.9
175°	612.4	613.3	613.1	611.9	610.7	609.5	608.2
177.5°	613.1	613.8	613.6	612.7	611.7	610.7	609.8
180°	611.9	611.9	611.9	611.9	611.9	611.9	611.9

(END OF REPORT)