

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: P332181-830

Luminaire Tested: **S123DIW-S1000D460U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332181-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIW-S1000D460U830-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 460 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5503.7 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: Semi-Direct

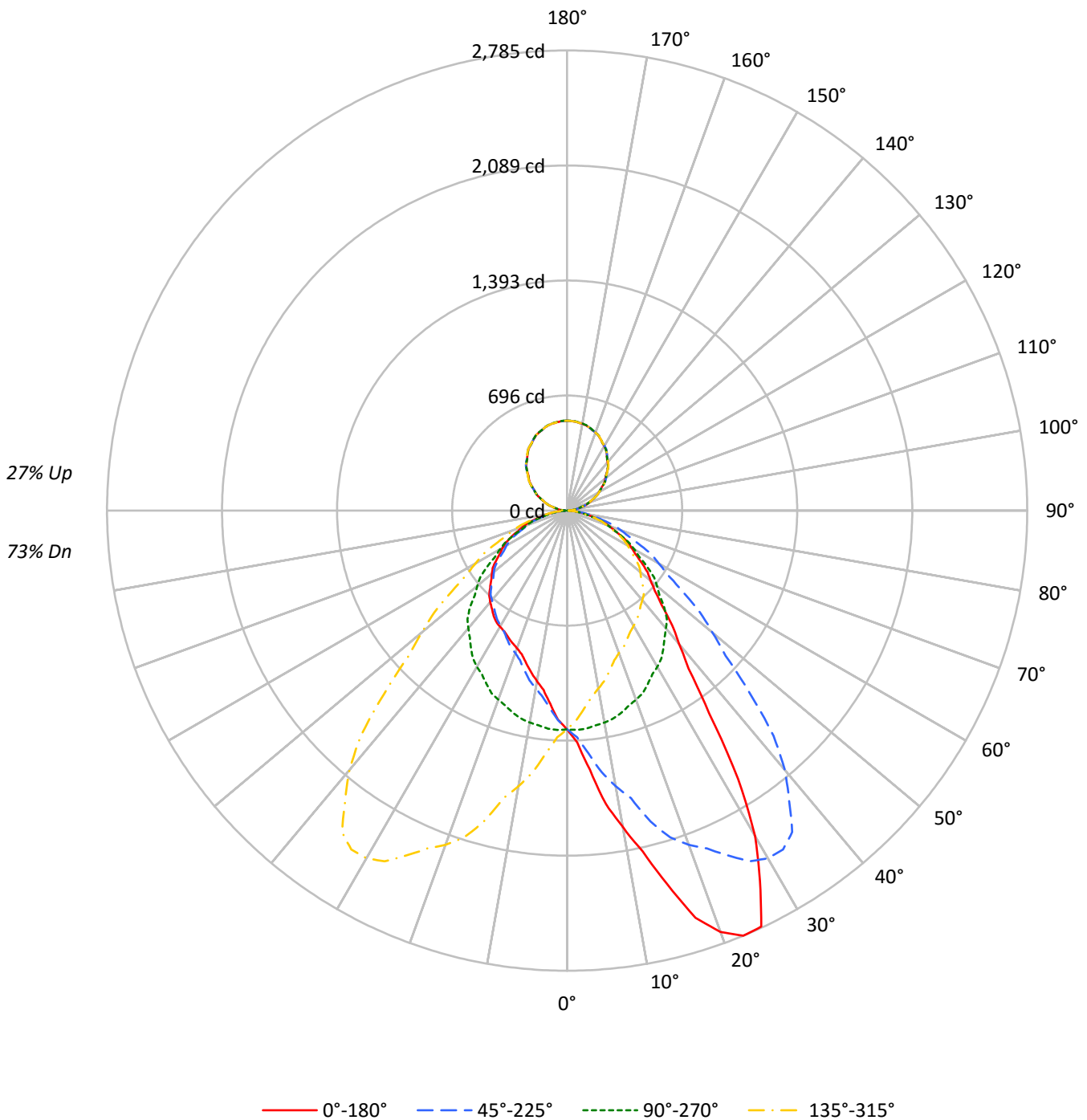
Input Watts (W): 46.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	73																												
1	103	99	95	92	98	94	91	88	85	82	80	76	74	73	69	67	66	62																												
2	94	87	81	75	89	83	77	72	75	70	67	68	64	61	61	58	56	53																												
3	86	77	69	63	82	73	66	61	66	61	57	60	56	52	54	51	48	45																												
4	79	68	60	54	75	65	58	52	59	53	49	54	49	45	49	45	42	39																												
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	44	40	37	34																												
6	67	55	47	41	64	53	45	39	48	42	37	44	39	35	40	36	32	30																												
7	62	50	42	36	59	48	40	35	44	37	33	40	35	31	37	32	29	26																												
8	58	45	37	32	55	44	36	31	40	34	29	37	31	28	34	29	26	24																												
9	54	42	34	29	51	40	33	28	37	31	26	34	29	25	31	27	23	21																												
10	51	38	31	26	48	37	30	25	34	28	24	31	26	23	29	24	21	19																												

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	14249	14249	14249	14249
5°	16993	14311	12682	14311
10°	21270	14238	11455	14238
15°	26088	14123	10664	14123
20°	31078	13945	10153	13945
25°	32999	13726	10041	13726
30°	28285	13569	10092	13569
35°	19671	13341	10198	13341
40°	14816	13078	10166	13078
45°	12301	12683	10036	12683
50°	11020	11879	9945	11879
55°	10303	11012	9822	11012
60°	9664	10107	9722	10107
65°	9085	9212	9411	9212
70°	8519	8195	8960	8195
75°	7627	7178	8218	7178
80°	6676	5883	7073	5883
85°	5224	4273	4755	4273



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.4	2.4
10°-20°	418.2	7.6
20°-30°	701.8	12.8
30°-40°	794.6	14.4
40°-50°	712.6	12.9
50°-60°	575.1	10.4
60°-70°	400.7	7.3
70°-80°	210.6	3.8
80°-90°	53.1	1.0
90°-100°	35.4	0.6
100°-110°	106.0	1.9
110°-120°	180.3	3.3
120°-130°	237.2	4.3
130°-140°	266.6	4.8
140°-150°	262.1	4.8
150°-160°	220.6	4.0
160°-170°	146.9	2.7
170°-180°	51.4	0.9
0°-30°	1250.4	22.7
0°-40°	2045.0	37.2
0°-60°	3332.7	60.6
0°-90°	3997.2	72.6
90°-120°	321.8	5.8
90°-150°	1087.6	19.8
90°-180°	1507.0	27.4
0°-180°	5503.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1324	1324	1324	1324	1324	
5°	1573	1324	1174	1324	1573	163
15°	2341	1267	957	1267	2341	676
25°	2778	1156	845	1156	2778	1219
35°	1497	1015	776	1015	1497	973
45°	808	833	659	833	808	640
55°	549	587	523	587	549	493
65°	357	362	370	362	357	355
75°	183	173	198	173	183	196
85°	42	35	38	35	42	50
90°	13	0	13	0	13	8
95°	33	25	33	25	33	34
105°	102	96	102	96	102	108
115°	182	182	182	182	182	180
125°	263	266	263	266	263	235
135°	344	345	344	345	344	265
145°	418	418	418	418	418	261
155°	478	479	478	479	478	220
165°	520	522	520	522	520	147
175°	540	542	540	542	540	51
180°	544	544	544	544	544	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1404.9	1403.9	1401.3	1403.4	1399.3	1393.6	1393.1	1388.0	1373.1	1372.1	1368.0
5°	1572.7	1567.5	1566.9	1566.3	1557.3	1545.1	1522.0	1520.1	1489.3	1473.9	1455.3
7.5°	1790.0	1792.7	1783.3	1775.1	1747.7	1729.6	1704.8	1673.1	1635.3	1596.9	1571.4
10°	1946.0	1967.2	1940.9	1922.9	1906.2	1874.8	1838.2	1792.7	1747.2	1693.9	1653.5
12.5°	2113.3	2123.6	2118.4	2101.5	2075.6	2027.7	1962.9	1912.8	1870.9	1782.2	1746.3
15°	2341.1	2380.2	2355.2	2297.4	2298.8	2253.2	2168.5	2075.6	2026.2	1948.5	1842.8
17.5°	2583.8	2588.7	2578.0	2529.9	2497.8	2435.2	2357.1	2267.9	2167.9	2074.0	1961.8
20°	2713.1	2709.2	2686.8	2661.7	2606.6	2557.9	2472.6	2373.1	2244.9	2152.5	2030.0
22.5°	2784.9	2778.5	2767.9	2746.9	2701.0	2648.7	2572.1	2463.4	2341.4	2214.1	2072.6
25°	2778.5	2786.8	2788.1	2782.4	2766.4	2734.9	2674.6	2588.0	2466.2	2302.6	2155.1
27.5°	2527.1	2538.9	2573.1	2603.6	2637.5	2672.2	2667.6	2624.6	2534.4	2393.1	2212.8
30°	2275.7	2250.0	2313.5	2393.7	2448.2	2544.4	2598.3	2601.5	2550.8	2429.6	2253.8
32.5°	1926.7	1954.9	1983.0	2081.7	2200.8	2308.9	2416.1	2502.5	2512.3	2431.7	2277.9
35°	1497.0	1532.3	1583.6	1634.9	1763.2	1873.5	2062.1	2226.3	2357.1	2374.5	2280.1
37.5°	1206.4	1223.8	1256.2	1307.7	1391.6	1522.4	1668.3	1875.8	2065.4	2206.4	2212.5
40°	1054.4	1059.6	1096.2	1135.3	1203.2	1311.0	1442.5	1625.9	1852.9	2049.9	2132.0
42.5°	940.6	951.8	967.3	1004.9	1059.0	1140.1	1262.3	1414.0	1622.1	1848.7	2009.3
45°	808.1	821.0	830.6	855.6	894.1	948.6	1034.0	1172.4	1330.9	1565.0	1781.1
47.5°	720.7	721.7	728.9	747.7	773.9	814.8	875.2	964.1	1109.6	1299.5	1521.4
50°	658.1	668.4	670.9	685.6	706.2	736.3	786.4	862.0	981.4	1148.1	1352.1
52.5°	614.0	617.0	624.2	634.9	652.8	676.3	719.6	778.9	872.5	1014.6	1202.2
55°	549.0	549.0	556.1	564.4	574.7	595.9	624.7	668.4	739.5	849.9	1005.0
57.5°	489.0	492.2	497.2	499.7	508.5	522.5	546.6	579.7	632.8	717.7	841.1
60°	448.9	454.8	454.1	459.2	466.9	477.9	498.3	525.3	572.8	640.7	744.7
62.5°	414.1	413.7	413.6	419.7	427.4	437.8	451.2	474.5	514.8	575.0	663.5
65°	356.7	355.3	359.9	363.6	366.3	373.9	384.2	404.7	431.7	476.5	545.2
67.5°	305.6	301.8	304.3	305.6	309.9	315.9	325.6	338.3	359.7	395.8	447.4
70°	270.7	267.5	266.8	268.1	271.9	276.4	283.5	295.7	315.6	344.4	382.3
72.5°	234.8	232.5	232.4	235.3	237.0	240.0	245.0	256.2	271.9	293.6	328.9
75°	183.4	183.4	183.4	184.1	186.0	188.6	192.4	198.2	210.4	225.7	249.5
77.5°	137.5	137.4	136.6	136.5	139.3	140.4	141.4	146.8	153.5	163.9	181.3
80°	107.7	104.5	105.8	107.7	109.1	109.7	111.6	112.9	118.7	124.4	136.6
82.5°	80.0	77.4	77.6	80.6	80.8	81.4	83.4	85.2	87.4	92.7	99.2
85°	42.3	42.3	43.0	43.0	43.6	43.0	44.9	45.5	45.5	48.7	52.6
87.5°	18.0	16.9	17.3	17.8	17.2	17.7	18.2	18.7	19.0	19.5	19.8
90°	12.8	12.6	12.4	12.3	12.1	11.8	11.4	11.0	10.7	10.3	9.0
92.5°	17.2	17.3	17.4	17.6	17.7	17.6	17.3	17.0	16.7	16.4	15.7
95°	33.3	33.3	33.3	33.3	33.3	33.1	32.7	32.3	32.0	31.6	30.8
97.5°	51.3	51.3	51.4	51.4	51.4	51.2	50.8	50.3	49.9	49.5	48.9
100°	64.9	64.8	64.6	64.4	64.2	63.9	63.6	63.3	63.1	62.8	62.3
102.5°	78.9	79.0	79.0	79.1	79.1	79.0	78.7	78.4	78.1	77.9	77.2
105°	101.7	101.5	101.3	101.1	100.9	100.8	100.8	100.8	100.8	100.8	99.9
107.5°	125.4	125.5	125.5	125.6	125.7	125.6	125.4	125.1	124.8	124.5	124.1
110°	141.4	141.6	141.8	141.9	142.1	142.0	141.7	141.3	140.9	140.5	140.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	158.4	158.5	158.5	158.5	158.6	158.4	158.0	157.5	157.0	156.6	156.6
115°	182.0	182.1	182.2	182.3	182.4	182.4	182.3	182.2	182.1	182.0	182.2
117.5°	205.8	206.0	206.3	206.6	206.9	207.0	207.0	207.1	207.1	207.1	207.4
120°	222.5	222.7	222.9	223.1	223.3	223.5	223.6	223.7	223.8	223.9	224.3
122.5°	238.6	238.8	239.1	239.4	239.7	239.9	240.2	240.4	240.6	240.9	241.2
125°	262.7	263.1	263.4	263.8	264.2	264.6	264.9	265.3	265.7	266.1	266.3
127.5°	286.7	287.1	287.6	288.0	288.4	288.9	289.5	290.0	290.5	291.1	291.2
130°	302.4	303.1	303.8	304.4	305.1	305.6	305.9	306.3	306.7	307.1	307.4
132.5°	318.8	319.3	319.8	320.4	320.8	321.3	321.8	322.3	322.7	323.2	323.4
135°	344.3	344.5	344.7	344.9	345.1	345.3	345.7	346.1	346.5	346.9	346.9
137.5°	366.7	367.1	367.5	367.8	368.2	368.5	369.0	369.4	369.8	370.1	369.9
140°	381.4	382.1	382.8	383.4	384.1	384.5	384.6	384.7	384.7	384.8	384.7
142.5°	396.4	397.0	397.5	398.0	398.5	398.8	398.9	399.0	399.1	399.2	399.1
145°	418.2	418.6	419.0	419.3	419.7	419.9	420.0	420.1	420.2	420.3	420.0
147.5°	437.4	438.0	438.6	439.2	439.8	440.1	440.1	440.1	440.1	440.1	439.8
150°	449.8	450.3	450.9	451.5	452.0	452.3	452.3	452.3	452.3	452.3	452.1
152.5°	461.8	462.2	462.7	463.3	463.7	463.9	463.7	463.5	463.4	463.3	463.2
155°	478.0	478.6	479.3	479.9	480.6	480.8	480.4	480.0	479.7	479.3	479.2
157.5°	492.8	493.2	493.8	494.4	494.8	494.9	494.6	494.2	493.7	493.3	493.2
160°	502.3	502.7	503.0	503.4	503.8	503.8	503.3	502.8	502.4	501.9	501.9
162.5°	509.4	510.1	510.7	511.3	511.9	512.0	511.5	511.0	510.6	510.1	510.0
165°	519.8	520.5	521.1	521.8	522.5	522.5	522.0	521.4	520.8	520.3	520.3
167.5°	528.6	529.2	529.8	530.4	530.9	530.9	530.4	529.8	529.2	528.6	528.6
170°	533.1	533.8	534.4	535.1	535.7	535.7	535.1	534.4	533.8	533.1	533.1
172.5°	536.5	537.2	537.8	538.5	539.1	539.1	538.6	538.0	537.4	536.8	536.8
175°	540.4	541.0	541.7	542.3	543.0	543.0	542.4	541.9	541.3	540.7	540.7
177.5°	542.3	542.9	543.5	543.9	544.5	544.5	544.1	543.7	543.2	542.7	542.7
180°	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1364.9	1360.7	1356.7	1349.5	1343.3	1334.6	1332.0	1329.0	1319.7	1311.5	1305.3
5°	1448.2	1432.9	1410.4	1389.9	1373.2	1350.8	1337.9	1324.5	1305.2	1287.9	1273.8
7.5°	1535.5	1505.2	1470.4	1432.6	1397.5	1363.6	1336.2	1311.9	1285.0	1259.4	1239.5
10°	1604.8	1561.1	1512.4	1459.8	1414.9	1371.3	1334.7	1302.7	1268.0	1237.8	1212.9
12.5°	1683.8	1619.1	1551.9	1488.0	1434.9	1374.4	1330.1	1289.3	1250.1	1213.8	1185.7
15°	1777.3	1695.2	1615.7	1527.8	1447.0	1371.3	1318.7	1267.4	1221.8	1184.7	1148.8
17.5°	1862.5	1769.4	1664.6	1557.8	1460.3	1370.6	1296.9	1238.9	1181.9	1136.4	1100.6
20°	1910.7	1804.9	1686.2	1575.3	1467.5	1367.4	1286.7	1217.4	1155.7	1107.7	1067.2
22.5°	1952.3	1828.4	1705.7	1587.1	1467.0	1359.2	1267.6	1196.4	1129.6	1082.5	1039.5
25°	1995.4	1847.2	1724.1	1584.9	1450.9	1339.3	1236.6	1155.7	1089.1	1034.0	989.7
27.5°	2032.3	1846.0	1699.8	1550.1	1425.4	1313.5	1204.0	1117.3	1046.5	986.6	941.7
30°	2056.9	1848.5	1674.7	1526.5	1400.8	1285.3	1178.8	1091.7	1017.3	956.3	914.0
32.5°	2072.4	1846.9	1651.6	1493.6	1361.8	1259.7	1151.7	1061.4	985.0	925.0	884.2
35°	2081.3	1835.7	1611.8	1425.8	1298.8	1199.4	1109.0	1015.3	935.2	879.4	833.2
37.5°	2063.3	1811.9	1565.7	1360.4	1221.3	1123.4	1047.4	967.6	890.9	829.4	789.7
40°	2035.1	1796.6	1529.7	1314.2	1168.0	1073.7	1008.9	930.7	855.0	796.6	759.4
42.5°	1981.2	1765.2	1490.3	1262.9	1112.6	1018.2	958.7	893.2	821.6	766.9	729.6
45°	1849.7	1697.1	1431.0	1185.9	1030.7	933.2	880.6	833.2	768.4	715.1	683.1
47.5°	1667.4	1594.6	1345.3	1104.8	945.3	851.5	796.8	758.7	711.3	668.4	637.5
50°	1540.6	1510.5	1287.2	1049.3	888.3	796.6	744.0	709.4	675.4	632.4	604.2
52.5°	1394.4	1413.0	1219.6	991.8	830.4	740.2	690.7	663.2	632.3	597.0	572.4
55°	1188.5	1255.8	1102.6	895.4	744.0	658.1	611.2	586.8	568.9	542.6	521.4
57.5°	995.7	1081.4	976.1	796.0	659.2	585.0	540.2	513.6	502.1	488.3	471.6
60°	881.3	965.9	885.8	729.2	602.3	531.7	491.9	469.5	458.0	448.4	434.2
62.5°	779.2	864.9	797.5	661.6	546.3	480.9	446.3	424.3	415.4	410.4	398.3
65°	638.9	712.6	667.7	556.1	466.3	408.6	377.1	361.7	353.5	351.5	343.7
67.5°	519.9	576.1	543.4	461.3	390.6	340.7	314.1	301.0	294.5	293.9	288.1
70°	442.0	494.6	469.5	395.1	334.1	295.0	271.9	260.4	256.6	255.9	252.7
72.5°	381.4	418.0	398.1	336.1	289.0	253.4	236.6	224.5	220.1	221.0	218.9
75°	282.2	309.8	298.2	255.2	217.4	194.4	180.2	172.6	168.7	170.6	168.1
77.5°	203.0	220.6	210.1	180.4	157.0	140.3	130.0	125.2	121.8	121.6	120.5
80°	153.3	163.5	157.8	139.8	120.6	106.5	98.1	94.9	93.0	92.4	91.7
82.5°	109.1	117.9	111.1	98.8	85.7	77.2	72.5	68.2	66.8	67.2	66.5
85°	55.1	58.3	55.8	48.1	43.0	39.1	36.6	34.6	33.4	34.0	32.7
87.5°	20.5	20.8	19.0	16.8	15.6	13.8	13.6	12.4	11.6	11.8	11.4
90°	7.8	6.5	5.3	4.2	3.3	2.4	1.4	0.5	1.4	2.4	3.3
92.5°	15.0	14.3	13.6	12.9	12.3	11.6	11.0	10.4	11.0	11.6	12.3
95°	30.1	29.3	28.6	27.9	27.2	26.5	25.8	25.2	25.8	26.5	27.2
97.5°	48.4	47.8	47.2	46.8	46.3	45.7	45.2	44.8	45.2	45.7	46.3
100°	61.8	61.4	60.9	60.3	59.8	59.2	58.6	58.1	58.6	59.2	59.8
102.5°	76.5	76.0	75.3	74.8	74.5	74.2	73.8	73.4	73.8	74.2	74.5
105°	99.1	98.2	97.4	96.9	96.7	96.5	96.3	96.1	96.3	96.5	96.7
107.5°	123.8	123.5	123.1	122.9	122.7	122.6	122.5	122.4	122.5	122.6	122.7
110°	140.2	140.0	139.8	139.6	139.4	139.2	139.0	138.8	139.0	139.2	139.4



TEST NUMBER: P332181-830

CATALOG NUMBER: S123DIW-S1000D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	156.6	156.5	156.5	156.4	156.3	156.2	156.0	155.9	156.0	156.2	156.3
115°	182.4	182.6	182.8	182.7	182.4	182.1	181.8	181.5	181.8	182.1	182.4
117.5°	207.5	207.8	208.0	208.1	207.9	207.7	207.5	207.4	207.5	207.7	207.9
120°	224.8	225.3	225.7	225.6	225.1	224.5	223.9	223.4	223.9	224.5	225.1
122.5°	241.4	241.7	241.9	241.8	241.4	241.0	240.5	240.2	240.5	241.0	241.4
125°	266.5	266.6	266.8	266.8	266.6	266.3	266.0	265.7	266.0	266.3	266.6
127.5°	291.4	291.7	291.9	291.7	291.1	290.5	289.8	289.3	289.8	290.5	291.1
130°	307.6	307.9	308.2	308.0	307.3	306.5	305.8	305.0	305.8	306.5	307.3
132.5°	323.6	323.8	324.0	323.8	323.0	322.3	321.4	320.7	321.4	322.3	323.0
135°	347.0	347.1	347.2	346.9	346.4	345.8	345.3	344.7	345.3	345.8	346.4
137.5°	369.7	369.4	369.2	368.8	368.3	367.9	367.4	366.9	367.4	367.9	368.3
140°	384.7	384.6	384.5	384.2	383.7	383.2	382.8	382.3	382.8	383.2	383.7
142.5°	398.9	398.7	398.5	398.2	397.8	397.3	396.8	396.3	396.8	397.3	397.8
145°	419.7	419.4	419.1	419.0	418.8	418.6	418.4	418.2	418.4	418.6	418.8
147.5°	439.5	439.2	438.9	438.7	438.3	438.0	437.6	437.3	437.6	438.0	438.3
150°	451.9	451.8	451.6	451.4	451.2	451.0	450.8	450.6	450.8	451.0	451.2
152.5°	463.1	462.9	462.8	462.6	462.3	462.1	461.8	461.6	461.8	462.1	462.3
155°	479.1	479.0	478.9	478.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8
157.5°	493.2	493.1	493.0	493.0	493.1	493.3	493.4	493.5	493.4	493.3	493.1
160°	501.9	501.9	501.9	502.0	502.2	502.4	502.6	502.8	502.6	502.4	502.2
162.5°	509.9	509.8	509.8	509.9	510.1	510.4	510.7	511.0	510.7	510.4	510.1
165°	520.3	520.3	520.3	520.4	520.7	520.9	521.2	521.5	521.2	520.9	520.7
167.5°	528.5	528.4	528.3	528.5	528.9	529.2	529.6	530.0	529.6	529.2	528.9
170°	533.1	533.1	533.1	533.3	533.7	534.0	534.4	534.8	534.4	534.0	533.7
172.5°	536.8	536.8	536.8	537.0	537.4	537.8	538.2	538.6	538.2	537.8	537.4
175°	540.7	540.7	540.7	540.9	541.3	541.7	542.1	542.4	542.1	541.7	541.3
177.5°	542.7	542.7	542.7	542.9	543.2	543.5	543.8	544.1	543.8	543.5	543.2
180°	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8



TEST NUMBER: P332181-830

CATALOG NUMBER: S123DIW-S1000D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1301.7	1298.2	1293.1	1285.3	1279.2	1269.4	1269.4	1271.0	1271.0	1270.5	1269.4
5°	1262.3	1252.6	1241.1	1227.7	1213.5	1199.4	1196.8	1191.8	1187.9	1185.2	1182.0
7.5°	1220.6	1203.5	1186.7	1167.8	1150.7	1136.4	1126.5	1118.3	1113.0	1107.4	1103.3
10°	1192.3	1171.2	1151.3	1131.4	1109.6	1092.3	1081.4	1073.7	1067.9	1062.8	1060.3
12.5°	1159.0	1134.7	1112.9	1093.9	1070.1	1052.3	1041.9	1038.3	1031.5	1020.7	1015.0
15°	1110.2	1087.8	1061.5	1032.6	1021.1	999.3	987.1	981.4	977.5	969.1	966.6
17.5°	1068.6	1039.2	1009.7	988.2	966.7	949.0	942.2	935.0	929.9	923.1	921.1
20°	1035.2	1008.9	981.9	958.8	936.4	917.2	911.4	906.3	901.2	898.0	895.4
22.5°	1001.4	975.1	952.7	931.1	907.2	894.6	888.3	882.7	879.1	876.9	874.3
25°	953.8	930.7	905.7	886.4	867.1	858.8	855.0	851.8	849.2	846.0	845.4
27.5°	911.2	886.0	865.7	847.8	834.0	827.0	823.3	821.7	822.3	823.4	824.2
30°	879.4	856.3	839.6	824.2	811.3	804.9	804.3	804.3	806.9	807.5	808.8
32.5°	850.1	831.1	814.5	799.6	789.9	785.4	787.9	787.9	789.9	791.6	793.9
35°	807.5	790.8	778.0	765.2	756.9	758.7	760.1	761.3	764.5	768.4	771.0
37.5°	766.9	752.3	739.0	729.0	725.2	728.6	731.7	734.4	738.1	741.0	743.7
40°	737.6	726.7	713.9	704.9	706.2	708.1	710.7	713.9	717.1	719.0	721.6
42.5°	710.4	699.0	689.3	681.8	683.6	686.1	687.6	689.3	693.0	696.4	698.0
45°	669.0	660.0	651.0	646.5	647.8	649.1	650.4	652.3	655.5	658.1	658.7
47.5°	622.4	616.1	610.1	605.8	607.8	607.3	609.0	613.0	614.1	615.6	619.2
50°	592.7	586.8	579.9	578.5	578.5	578.5	579.2	584.3	584.3	586.8	589.5
52.5°	559.8	556.1	551.6	549.3	548.3	548.3	550.9	553.6	554.6	558.2	560.7
55°	511.2	507.4	503.5	501.5	500.3	501.5	506.7	507.9	511.2	513.1	515.0
57.5°	460.5	457.6	454.5	453.5	453.2	454.9	457.7	461.6	462.3	468.3	471.2
60°	427.2	422.6	420.1	420.1	418.9	424.6	423.3	429.7	431.0	434.9	439.3
62.5°	392.8	386.7	385.7	385.7	387.6	389.2	391.0	393.8	397.2	402.0	405.5
65°	337.3	334.1	338.7	338.0	336.8	340.5	340.5	343.7	347.6	352.1	359.2
67.5°	284.9	283.2	283.6	283.6	285.6	287.8	289.5	292.4	297.0	301.7	306.3
70°	249.5	251.5	248.3	250.8	252.7	253.4	254.7	258.4	263.6	266.8	271.9
72.5°	215.1	215.0	215.4	216.4	218.3	219.5	220.7	225.2	230.7	233.5	237.6
75°	165.5	164.9	166.7	166.7	169.9	171.3	172.6	174.5	179.6	183.4	186.6
77.5°	120.8	121.6	121.2	123.4	122.5	122.7	126.8	128.7	129.2	136.8	138.5
80°	91.0	92.4	93.0	93.7	94.3	93.0	97.5	99.4	99.4	103.9	107.1
82.5°	65.4	66.2	67.9	68.5	68.6	69.9	70.3	71.7	73.2	75.2	79.4
85°	32.7	34.6	35.3	34.6	35.3	34.0	35.9	36.6	37.2	37.2	37.2
87.5°	11.1	11.9	11.6	12.3	12.1	12.8	12.9	12.0	12.1	13.7	11.7
90°	4.2	5.3	6.5	7.8	9.0	10.3	10.7	11.0	11.4	11.8	12.1
92.5°	12.9	13.6	14.3	15.0	15.7	16.4	16.7	17.0	17.3	17.6	17.7
95°	27.9	28.6	29.3	30.1	30.8	31.6	32.0	32.3	32.7	33.1	33.3
97.5°	46.8	47.2	47.8	48.4	48.9	49.5	49.9	50.3	50.8	51.2	51.4
100°	60.3	60.9	61.4	61.8	62.3	62.8	63.1	63.3	63.6	63.9	64.2
102.5°	74.8	75.3	76.0	76.5	77.2	77.9	78.1	78.4	78.7	79.0	79.1
105°	96.9	97.4	98.2	99.1	99.9	100.8	100.8	100.8	100.8	100.8	100.9
107.5°	122.9	123.1	123.5	123.8	124.1	124.5	124.8	125.1	125.4	125.6	125.7
110°	139.6	139.8	140.0	140.2	140.3	140.5	140.9	141.3	141.7	142.0	142.1



TEST NUMBER: P332181-830

CATALOG NUMBER: S123DIW-S1000D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	156.4	156.5	156.5	156.6	156.6	156.6	157.0	157.5	158.0	158.4	158.6
115°	182.7	182.8	182.6	182.4	182.2	182.0	182.1	182.2	182.3	182.4	182.4
117.5°	208.1	208.0	207.8	207.5	207.4	207.1	207.1	207.1	207.0	207.0	206.9
120°	225.6	225.7	225.3	224.8	224.3	223.9	223.8	223.7	223.6	223.5	223.3
122.5°	241.8	241.9	241.7	241.4	241.2	240.9	240.6	240.4	240.2	239.9	239.7
125°	266.8	266.8	266.6	266.5	266.3	266.1	265.7	265.3	264.9	264.6	264.2
127.5°	291.7	291.9	291.7	291.4	291.2	291.1	290.5	290.0	289.5	288.9	288.4
130°	308.0	308.2	307.9	307.6	307.4	307.1	306.7	306.3	305.9	305.6	305.1
132.5°	323.8	324.0	323.8	323.6	323.4	323.2	322.7	322.3	321.8	321.3	320.8
135°	346.9	347.2	347.1	347.0	346.9	346.9	346.5	346.1	345.7	345.3	345.1
137.5°	368.8	369.2	369.4	369.7	369.9	370.1	369.8	369.4	369.0	368.5	368.2
140°	384.2	384.5	384.6	384.7	384.7	384.8	384.7	384.7	384.6	384.5	384.1
142.5°	398.2	398.5	398.7	398.9	399.1	399.2	399.1	399.0	398.9	398.8	398.5
145°	419.0	419.1	419.4	419.7	420.0	420.3	420.2	420.1	420.0	419.9	419.7
147.5°	438.7	438.9	439.2	439.5	439.8	440.1	440.1	440.1	440.1	440.1	439.8
150°	451.4	451.6	451.8	451.9	452.1	452.3	452.3	452.3	452.3	452.3	452.0
152.5°	462.6	462.8	462.9	463.1	463.2	463.3	463.4	463.5	463.7	463.9	463.7
155°	478.8	478.9	479.0	479.1	479.2	479.3	479.7	480.0	480.4	480.8	480.6
157.5°	493.0	493.0	493.1	493.2	493.2	493.3	493.7	494.2	494.6	494.9	494.8
160°	502.0	501.9	501.9	501.9	501.9	501.9	502.4	502.8	503.3	503.8	503.8
162.5°	509.9	509.8	509.8	509.9	510.0	510.1	510.6	511.0	511.5	512.0	511.9
165°	520.4	520.3	520.3	520.3	520.3	520.3	520.8	521.4	522.0	522.5	522.5
167.5°	528.5	528.3	528.4	528.5	528.6	528.6	529.2	529.8	530.4	530.9	530.9
170°	533.3	533.1	533.1	533.1	533.1	533.1	533.8	534.4	535.1	535.7	535.7
172.5°	537.0	536.8	536.8	536.8	536.8	536.8	537.4	538.0	538.6	539.1	539.1
175°	540.9	540.7	540.7	540.7	540.7	540.7	541.3	541.9	542.4	543.0	543.0
177.5°	542.9	542.7	542.7	542.7	542.7	542.7	543.2	543.7	544.1	544.5	544.5
180°	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8



TEST NUMBER: P332181-830

CATALOG NUMBER: S123DIW-S1000D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1265.8	1265.4	1268.9	1266.4	1268.9	1265.4	1265.8	1269.4	1270.5	1271.0	1271.0
5°	1178.3	1180.2	1173.7	1173.7	1173.7	1180.2	1178.3	1182.0	1185.2	1187.9	1191.8
7.5°	1100.2	1097.4	1097.7	1094.2	1097.7	1097.4	1100.2	1103.3	1107.4	1113.0	1118.3
10°	1052.5	1048.7	1047.4	1048.0	1047.4	1048.7	1052.5	1060.3	1062.8	1067.9	1073.7
12.5°	1013.0	1012.3	1003.8	1003.9	1003.8	1012.3	1013.0	1015.0	1020.7	1031.5	1038.3
15°	966.6	954.4	953.1	957.0	953.1	954.4	966.6	966.6	969.1	977.5	981.4
17.5°	920.0	913.6	914.0	912.1	914.0	913.6	920.0	921.1	923.1	929.9	935.0
20°	895.4	891.6	890.9	886.4	890.9	891.6	895.4	895.4	898.0	901.2	906.3
22.5°	872.8	871.6	871.9	867.0	871.9	871.6	872.8	874.3	876.9	879.1	882.7
25°	844.7	847.9	845.4	845.4	845.4	847.9	844.7	845.4	846.0	849.2	851.8
27.5°	825.8	825.6	824.3	824.3	824.3	825.6	825.8	824.2	823.4	822.3	821.7
30°	811.3	810.7	812.0	812.0	812.0	810.7	811.3	808.8	807.5	806.9	804.3
32.5°	797.0	797.9	798.1	798.6	798.1	797.9	797.0	793.9	791.6	789.9	787.9
35°	774.8	775.4	777.4	776.1	777.4	775.4	774.8	771.0	768.4	764.5	761.3
37.5°	744.8	747.7	747.1	748.1	747.1	747.7	744.8	743.7	741.0	738.1	734.4
40°	722.2	724.2	723.5	723.5	723.5	724.2	722.2	721.6	719.0	717.1	713.9
42.5°	699.1	700.5	698.9	697.9	698.9	700.5	699.1	698.0	696.4	693.0	689.3
45°	661.3	660.0	661.9	659.3	661.9	660.0	661.3	658.7	658.1	655.5	652.3
47.5°	619.0	620.2	620.8	622.6	620.8	620.2	619.0	619.2	615.6	614.1	613.0
50°	590.7	594.6	594.6	593.9	594.6	594.6	590.7	589.5	586.8	584.3	584.3
52.5°	563.0	564.8	567.4	567.2	567.4	564.8	563.0	560.7	558.2	554.6	553.6
55°	520.2	521.4	522.7	523.4	522.7	521.4	520.2	515.0	513.1	511.2	507.9
57.5°	475.8	475.2	478.3	479.3	478.3	475.2	475.8	471.2	468.3	462.3	461.6
60°	444.5	444.5	449.6	451.6	449.6	444.5	444.5	439.3	434.9	431.0	429.7
62.5°	411.1	413.2	418.3	415.7	418.3	413.2	411.1	405.5	402.0	397.2	393.8
65°	362.4	367.5	366.8	369.5	366.8	367.5	362.4	359.2	352.1	347.6	343.7
67.5°	311.4	314.6	319.2	319.7	319.2	314.6	311.4	306.3	301.7	297.0	292.4
70°	277.1	280.3	282.9	284.7	282.9	280.3	277.1	271.9	266.8	263.6	258.4
72.5°	243.7	245.4	251.6	248.8	251.6	245.4	243.7	237.6	233.5	230.7	225.2
75°	191.1	195.6	199.4	197.6	199.4	195.6	191.1	186.6	183.4	179.6	174.5
77.5°	141.4	145.8	147.6	146.0	147.6	145.8	141.4	138.5	136.8	129.2	128.7
80°	111.6	110.9	114.8	114.1	114.8	110.9	111.6	107.1	103.9	99.4	99.4
82.5°	81.8	81.2	83.0	83.4	83.0	81.2	81.8	79.4	75.2	73.2	71.7
85°	39.8	41.7	39.1	38.5	39.1	41.7	39.8	37.2	37.2	37.2	36.6
87.5°	11.7	11.7	11.2	10.7	11.2	11.7	11.7	11.7	13.7	12.1	12.0
90°	12.3	12.4	12.6	12.8	12.6	12.4	12.3	12.1	11.8	11.4	11.0
92.5°	17.6	17.4	17.3	17.2	17.3	17.4	17.6	17.7	17.6	17.3	17.0
95°	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.1	32.7	32.3
97.5°	51.4	51.4	51.3	51.3	51.3	51.4	51.4	51.4	51.2	50.8	50.3
100°	64.4	64.6	64.8	64.9	64.8	64.6	64.4	64.2	63.9	63.6	63.3
102.5°	79.1	79.0	79.0	78.9	79.0	79.0	79.1	79.1	79.0	78.7	78.4
105°	101.1	101.3	101.5	101.7	101.5	101.3	101.1	100.9	100.8	100.8	100.8
107.5°	125.6	125.5	125.5	125.4	125.5	125.5	125.6	125.7	125.6	125.4	125.1
110°	141.9	141.8	141.6	141.4	141.6	141.8	141.9	142.1	142.0	141.7	141.3



TEST NUMBER: P332181-830

CATALOG NUMBER: S123DIW-S1000D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	158.5	158.5	158.5	158.4	158.5	158.5	158.5	158.6	158.4	158.0	157.5
115°	182.3	182.2	182.1	182.0	182.1	182.2	182.3	182.4	182.4	182.3	182.2
117.5°	206.6	206.3	206.0	205.8	206.0	206.3	206.6	206.9	207.0	207.0	207.1
120°	223.1	222.9	222.7	222.5	222.7	222.9	223.1	223.3	223.5	223.6	223.7
122.5°	239.4	239.1	238.8	238.6	238.8	239.1	239.4	239.7	239.9	240.2	240.4
125°	263.8	263.4	263.1	262.7	263.1	263.4	263.8	264.2	264.6	264.9	265.3
127.5°	288.0	287.6	287.1	286.7	287.1	287.6	288.0	288.4	288.9	289.5	290.0
130°	304.4	303.8	303.1	302.4	303.1	303.8	304.4	305.1	305.6	305.9	306.3
132.5°	320.4	319.8	319.3	318.8	319.3	319.8	320.4	320.8	321.3	321.8	322.3
135°	344.9	344.7	344.5	344.3	344.5	344.7	344.9	345.1	345.3	345.7	346.1
137.5°	367.8	367.5	367.1	366.7	367.1	367.5	367.8	368.2	368.5	369.0	369.4
140°	383.4	382.8	382.1	381.4	382.1	382.8	383.4	384.1	384.5	384.6	384.7
142.5°	398.0	397.5	397.0	396.4	397.0	397.5	398.0	398.5	398.8	398.9	399.0
145°	419.3	419.0	418.6	418.2	418.6	419.0	419.3	419.7	419.9	420.0	420.1
147.5°	439.2	438.6	438.0	437.4	438.0	438.6	439.2	439.8	440.1	440.1	440.1
150°	451.5	450.9	450.3	449.8	450.3	450.9	451.5	452.0	452.3	452.3	452.3
152.5°	463.3	462.7	462.2	461.8	462.2	462.7	463.3	463.7	463.9	463.7	463.5
155°	479.9	479.3	478.6	478.0	478.6	479.3	479.9	480.6	480.8	480.4	480.0
157.5°	494.4	493.8	493.2	492.8	493.2	493.8	494.4	494.8	494.9	494.6	494.2
160°	503.4	503.0	502.7	502.3	502.7	503.0	503.4	503.8	503.8	503.3	502.8
162.5°	511.3	510.7	510.1	509.4	510.1	510.7	511.3	511.9	512.0	511.5	511.0
165°	521.8	521.1	520.5	519.8	520.5	521.1	521.8	522.5	522.5	522.0	521.4
167.5°	530.4	529.8	529.2	528.6	529.2	529.8	530.4	530.9	530.9	530.4	529.8
170°	535.1	534.4	533.8	533.1	533.8	534.4	535.1	535.7	535.7	535.1	534.4
172.5°	538.5	537.8	537.2	536.5	537.2	537.8	538.5	539.1	539.1	538.6	538.0
175°	542.3	541.7	541.0	540.4	541.0	541.7	542.3	543.0	543.0	542.4	541.9
177.5°	543.9	543.5	542.9	542.3	542.9	543.5	543.9	544.5	544.5	544.1	543.7
180°	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8



TEST NUMBER: P332181-830

CATALOG NUMBER: S123DIW-S1000D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1269.4	1269.4	1279.2	1285.3	1293.1	1298.2	1301.7	1305.3	1311.5	1319.7	1329.0
5°	1196.8	1199.4	1213.5	1227.7	1241.1	1252.6	1262.3	1273.8	1287.9	1305.2	1324.5
7.5°	1126.5	1136.4	1150.7	1167.8	1186.7	1203.5	1220.6	1239.5	1259.4	1285.0	1311.9
10°	1081.4	1092.3	1109.6	1131.4	1151.3	1171.2	1192.3	1212.9	1237.8	1268.0	1302.7
12.5°	1041.9	1052.3	1070.1	1093.9	1112.9	1134.7	1159.0	1185.7	1213.8	1250.1	1289.3
15°	987.1	999.3	1021.1	1032.6	1061.5	1087.8	1110.2	1148.8	1184.7	1221.8	1267.4
17.5°	942.2	949.0	966.7	988.2	1009.7	1039.2	1068.6	1100.6	1136.4	1181.9	1238.9
20°	911.4	917.2	936.4	958.8	981.9	1008.9	1035.2	1067.2	1107.7	1155.7	1217.4
22.5°	888.3	894.6	907.2	931.1	952.7	975.1	1001.4	1039.5	1082.5	1129.6	1196.4
25°	855.0	858.8	867.1	886.4	905.7	930.7	953.8	989.7	1034.0	1089.1	1155.7
27.5°	823.3	827.0	834.0	847.8	865.7	886.0	911.2	941.7	986.6	1046.5	1117.3
30°	804.3	804.9	811.3	824.2	839.6	856.3	879.4	914.0	956.3	1017.3	1091.7
32.5°	787.9	785.4	789.9	799.6	814.5	831.1	850.1	884.2	925.0	985.0	1061.4
35°	760.1	758.7	756.9	765.2	778.0	790.8	807.5	833.2	879.4	935.2	1015.3
37.5°	731.7	728.6	725.2	729.0	739.0	752.3	766.9	789.7	829.4	890.9	967.6
40°	710.7	708.1	706.2	704.9	713.9	726.7	737.6	759.4	796.6	855.0	930.7
42.5°	687.6	686.1	683.6	681.8	689.3	699.0	710.4	729.6	766.9	821.6	893.2
45°	650.4	649.1	647.8	646.5	651.0	660.0	669.0	683.1	715.1	768.4	833.2
47.5°	609.0	607.3	607.8	605.8	610.1	616.1	622.4	637.5	668.4	711.3	758.7
50°	579.2	578.5	578.5	578.5	579.9	586.8	592.7	604.2	632.4	675.4	709.4
52.5°	550.9	548.3	548.3	549.3	551.6	556.1	559.8	572.4	597.0	632.3	663.2
55°	506.7	501.5	500.3	501.5	503.5	507.4	511.2	521.4	542.6	568.9	586.8
57.5°	457.7	454.9	453.2	453.5	454.5	457.6	460.5	471.6	488.3	502.1	513.6
60°	423.3	424.6	418.9	420.1	420.1	422.6	427.2	434.2	448.4	458.0	469.5
62.5°	391.0	389.2	387.6	385.7	385.7	386.7	392.8	398.3	410.4	415.4	424.3
65°	340.5	340.5	336.8	338.0	338.7	334.1	337.3	343.7	351.5	353.5	361.7
67.5°	289.5	287.8	285.6	283.6	283.6	283.2	284.9	288.1	293.9	294.5	301.0
70°	254.7	253.4	252.7	250.8	248.3	251.5	249.5	252.7	255.9	256.6	260.4
72.5°	220.7	219.5	218.3	216.4	215.4	215.0	215.1	218.9	221.0	220.1	224.5
75°	172.6	171.3	169.9	166.7	166.7	164.9	165.5	168.1	170.6	168.7	172.6
77.5°	126.8	122.7	122.5	123.4	121.2	121.6	120.8	120.5	121.6	121.8	125.2
80°	97.5	93.0	94.3	93.7	93.0	92.4	91.0	91.7	92.4	93.0	94.9
82.5°	70.3	69.9	68.6	68.5	67.9	66.2	65.4	66.5	67.2	66.8	68.2
85°	35.9	34.0	35.3	34.6	35.3	34.6	32.7	32.7	34.0	33.4	34.6
87.5°	12.9	12.8	12.1	12.3	11.6	11.9	11.1	11.4	11.8	11.6	12.4
90°	10.7	10.3	9.0	7.8	6.5	5.3	4.2	3.3	2.4	1.4	0.5
92.5°	16.7	16.4	15.7	15.0	14.3	13.6	12.9	12.3	11.6	11.0	10.4
95°	32.0	31.6	30.8	30.1	29.3	28.6	27.9	27.2	26.5	25.8	25.2
97.5°	49.9	49.5	48.9	48.4	47.8	47.2	46.8	46.3	45.7	45.2	44.8
100°	63.1	62.8	62.3	61.8	61.4	60.9	60.3	59.8	59.2	58.6	58.1
102.5°	78.1	77.9	77.2	76.5	76.0	75.3	74.8	74.5	74.2	73.8	73.4
105°	100.8	100.8	99.9	99.1	98.2	97.4	96.9	96.7	96.5	96.3	96.1
107.5°	124.8	124.5	124.1	123.8	123.5	123.1	122.9	122.7	122.6	122.5	122.4
110°	140.9	140.5	140.3	140.2	140.0	139.8	139.6	139.4	139.2	139.0	138.8



TEST NUMBER: P332181-830

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	157.0	156.6	156.6	156.6	156.5	156.5	156.4	156.3	156.2	156.0	155.9
115°	182.1	182.0	182.2	182.4	182.6	182.8	182.7	182.4	182.1	181.8	181.5
117.5°	207.1	207.1	207.4	207.5	207.8	208.0	208.1	207.9	207.7	207.5	207.4
120°	223.8	223.9	224.3	224.8	225.3	225.7	225.6	225.1	224.5	223.9	223.4
122.5°	240.6	240.9	241.2	241.4	241.7	241.9	241.8	241.4	241.0	240.5	240.2
125°	265.7	266.1	266.3	266.5	266.6	266.8	266.8	266.6	266.3	266.0	265.7
127.5°	290.5	291.1	291.2	291.4	291.7	291.9	291.7	291.1	290.5	289.8	289.3
130°	306.7	307.1	307.4	307.6	307.9	308.2	308.0	307.3	306.5	305.8	305.0
132.5°	322.7	323.2	323.4	323.6	323.8	324.0	323.8	323.0	322.3	321.4	320.7
135°	346.5	346.9	346.9	347.0	347.1	347.2	346.9	346.4	345.8	345.3	344.7
137.5°	369.8	370.1	369.9	369.7	369.4	369.2	368.8	368.3	367.9	367.4	366.9
140°	384.7	384.8	384.7	384.7	384.6	384.5	384.2	383.7	383.2	382.8	382.3
142.5°	399.1	399.2	399.1	398.9	398.7	398.5	398.2	397.8	397.3	396.8	396.3
145°	420.2	420.3	420.0	419.7	419.4	419.1	419.0	418.8	418.6	418.4	418.2
147.5°	440.1	440.1	439.8	439.5	439.2	438.9	438.7	438.3	438.0	437.6	437.3
150°	452.3	452.3	452.1	451.9	451.8	451.6	451.4	451.2	451.0	450.8	450.6
152.5°	463.4	463.3	463.2	463.1	462.9	462.8	462.6	462.3	462.1	461.8	461.6
155°	479.7	479.3	479.2	479.1	479.0	478.9	478.8	478.8	478.8	478.8	478.8
157.5°	493.7	493.3	493.2	493.2	493.1	493.0	493.0	493.1	493.3	493.4	493.5
160°	502.4	501.9	501.9	501.9	501.9	501.9	502.0	502.2	502.4	502.6	502.8
162.5°	510.6	510.1	510.0	509.9	509.8	509.8	509.9	510.1	510.4	510.7	511.0
165°	520.8	520.3	520.3	520.3	520.3	520.3	520.4	520.7	520.9	521.2	521.5
167.5°	529.2	528.6	528.6	528.5	528.4	528.3	528.5	528.9	529.2	529.6	530.0
170°	533.8	533.1	533.1	533.1	533.1	533.1	533.3	533.7	534.0	534.4	534.8
172.5°	537.4	536.8	536.8	536.8	536.8	536.8	537.0	537.4	537.8	538.2	538.6
175°	541.3	540.7	540.7	540.7	540.7	540.7	540.9	541.3	541.7	542.1	542.4
177.5°	543.2	542.7	542.7	542.7	542.7	542.7	542.9	543.2	543.5	543.8	544.1
180°	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8



TEST NUMBER: P332181-830

CATALOG NUMBER: S123DIW-S1000D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1332.0	1334.6	1343.3	1349.5	1356.7	1360.7	1364.9	1368.0	1372.1	1373.1	1388.0
5°	1337.9	1350.8	1373.2	1389.9	1410.4	1432.9	1448.2	1455.3	1473.9	1489.3	1520.1
7.5°	1336.2	1363.6	1397.5	1432.6	1470.4	1505.2	1535.5	1571.4	1596.9	1635.3	1673.1
10°	1334.7	1371.3	1414.9	1459.8	1512.4	1561.1	1604.8	1653.5	1693.9	1747.2	1792.7
12.5°	1330.1	1374.4	1434.9	1488.0	1551.9	1619.1	1683.8	1746.3	1782.2	1870.9	1912.8
15°	1318.7	1371.3	1447.0	1527.8	1615.7	1695.2	1777.3	1842.8	1948.5	2026.2	2075.6
17.5°	1296.9	1370.6	1460.3	1557.8	1664.6	1769.4	1862.5	1961.8	2074.0	2167.9	2267.9
20°	1286.7	1367.4	1467.5	1575.3	1686.2	1804.9	1910.7	2030.0	2152.5	2244.9	2373.1
22.5°	1267.6	1359.2	1467.0	1587.1	1705.7	1828.4	1952.3	2072.6	2214.1	2341.4	2463.4
25°	1236.6	1339.3	1450.9	1584.9	1724.1	1847.2	1995.4	2155.1	2302.6	2466.2	2588.0
27.5°	1204.0	1313.5	1425.4	1550.1	1699.8	1846.0	2032.3	2212.8	2393.1	2534.4	2624.6
30°	1178.8	1285.3	1400.8	1526.5	1674.7	1848.5	2056.9	2253.8	2429.6	2550.8	2601.5
32.5°	1151.7	1259.7	1361.8	1493.6	1651.6	1846.9	2072.4	2277.9	2431.7	2512.3	2502.5
35°	1109.0	1199.4	1298.8	1425.8	1611.8	1835.7	2081.3	2280.1	2374.5	2357.1	2226.3
37.5°	1047.4	1123.4	1221.3	1360.4	1565.7	1811.9	2063.3	2212.5	2206.4	2065.4	1875.8
40°	1008.9	1073.7	1168.0	1314.2	1529.7	1796.6	2035.1	2132.0	2049.9	1852.9	1625.9
42.5°	958.7	1018.2	1112.6	1262.9	1490.3	1765.2	1981.2	2009.3	1848.7	1622.1	1414.0
45°	880.6	933.2	1030.7	1185.9	1431.0	1697.1	1849.7	1781.1	1565.0	1330.9	1172.4
47.5°	796.8	851.5	945.3	1104.8	1345.3	1594.6	1667.4	1521.4	1299.5	1109.6	964.1
50°	744.0	796.6	888.3	1049.3	1287.2	1510.5	1540.6	1352.1	1148.1	981.4	862.0
52.5°	690.7	740.2	830.4	991.8	1219.6	1413.0	1394.4	1202.2	1014.6	872.5	778.9
55°	611.2	658.1	744.0	895.4	1102.6	1255.8	1188.5	1005.0	849.9	739.5	668.4
57.5°	540.2	585.0	659.2	796.0	976.1	1081.4	995.7	841.1	717.7	632.8	579.7
60°	491.9	531.7	602.3	729.2	885.8	965.9	881.3	744.7	640.7	572.8	525.3
62.5°	446.3	480.9	546.3	661.6	797.5	864.9	779.2	663.5	575.0	514.8	474.5
65°	377.1	408.6	466.3	556.1	667.7	712.6	638.9	545.2	476.5	431.7	404.7
67.5°	314.1	340.7	390.6	461.3	543.4	576.1	519.9	447.4	395.8	359.7	338.3
70°	271.9	295.0	334.1	395.1	469.5	494.6	442.0	382.3	344.4	315.6	295.7
72.5°	236.6	253.4	289.0	336.1	398.1	418.0	381.4	328.9	293.6	271.9	256.2
75°	180.2	194.4	217.4	255.2	298.2	309.8	282.2	249.5	225.7	210.4	198.2
77.5°	130.0	140.3	157.0	180.4	210.1	220.6	203.0	181.3	163.9	153.5	146.8
80°	98.1	106.5	120.6	139.8	157.8	163.5	153.3	136.6	124.4	118.7	112.9
82.5°	72.5	77.2	85.7	98.8	111.1	117.9	109.1	99.2	92.7	87.4	85.2
85°	36.6	39.1	43.0	48.1	55.8	58.3	55.1	52.6	48.7	45.5	45.5
87.5°	13.6	13.8	15.6	16.8	19.0	20.8	20.5	19.8	19.5	19.0	18.7
90°	1.4	2.4	3.3	4.2	5.3	6.5	7.8	9.0	10.3	10.7	11.0
92.5°	11.0	11.6	12.3	12.9	13.6	14.3	15.0	15.7	16.4	16.7	17.0
95°	25.8	26.5	27.2	27.9	28.6	29.3	30.1	30.8	31.6	32.0	32.3
97.5°	45.2	45.7	46.3	46.8	47.2	47.8	48.4	48.9	49.5	49.9	50.3
100°	58.6	59.2	59.8	60.3	60.9	61.4	61.8	62.3	62.8	63.1	63.3
102.5°	73.8	74.2	74.5	74.8	75.3	76.0	76.5	77.2	77.9	78.1	78.4
105°	96.3	96.5	96.7	96.9	97.4	98.2	99.1	99.9	100.8	100.8	100.8
107.5°	122.5	122.6	122.7	122.9	123.1	123.5	123.8	124.1	124.5	124.8	125.1
110°	139.0	139.2	139.4	139.6	139.8	140.0	140.2	140.3	140.5	140.9	141.3



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	156.0	156.2	156.3	156.4	156.5	156.5	156.6	156.6	156.6	157.0	157.5
115°	181.8	182.1	182.4	182.7	182.8	182.6	182.4	182.2	182.0	182.1	182.2
117.5°	207.5	207.7	207.9	208.1	208.0	207.8	207.5	207.4	207.1	207.1	207.1
120°	223.9	224.5	225.1	225.6	225.7	225.3	224.8	224.3	223.9	223.8	223.7
122.5°	240.5	241.0	241.4	241.8	241.9	241.7	241.4	241.2	240.9	240.6	240.4
125°	266.0	266.3	266.6	266.8	266.8	266.6	266.5	266.3	266.1	265.7	265.3
127.5°	289.8	290.5	291.1	291.7	291.9	291.7	291.4	291.2	291.1	290.5	290.0
130°	305.8	306.5	307.3	308.0	308.2	307.9	307.6	307.4	307.1	306.7	306.3
132.5°	321.4	322.3	323.0	323.8	324.0	323.8	323.6	323.4	323.2	322.7	322.3
135°	345.3	345.8	346.4	346.9	347.2	347.1	347.0	346.9	346.9	346.5	346.1
137.5°	367.4	367.9	368.3	368.8	369.2	369.4	369.7	369.9	370.1	369.8	369.4
140°	382.8	383.2	383.7	384.2	384.5	384.6	384.7	384.7	384.8	384.7	384.7
142.5°	396.8	397.3	397.8	398.2	398.5	398.7	398.9	399.1	399.2	399.1	399.0
145°	418.4	418.6	418.8	419.0	419.1	419.4	419.7	420.0	420.3	420.2	420.1
147.5°	437.6	438.0	438.3	438.7	438.9	439.2	439.5	439.8	440.1	440.1	440.1
150°	450.8	451.0	451.2	451.4	451.6	451.8	451.9	452.1	452.3	452.3	452.3
152.5°	461.8	462.1	462.3	462.6	462.8	462.9	463.1	463.2	463.3	463.4	463.5
155°	478.8	478.8	478.8	478.8	478.9	479.0	479.1	479.2	479.3	479.7	480.0
157.5°	493.4	493.3	493.1	493.0	493.0	493.1	493.2	493.2	493.3	493.7	494.2
160°	502.6	502.4	502.2	502.0	501.9	501.9	501.9	501.9	501.9	502.4	502.8
162.5°	510.7	510.4	510.1	509.9	509.8	509.8	509.9	510.0	510.1	510.6	511.0
165°	521.2	520.9	520.7	520.4	520.3	520.3	520.3	520.3	520.3	520.8	521.4
167.5°	529.6	529.2	528.9	528.5	528.3	528.4	528.5	528.6	528.6	529.2	529.8
170°	534.4	534.0	533.7	533.3	533.1	533.1	533.1	533.1	533.1	533.8	534.4
172.5°	538.2	537.8	537.4	537.0	536.8	536.8	536.8	536.8	536.8	537.4	538.0
175°	542.1	541.7	541.3	540.9	540.7	540.7	540.7	540.7	540.7	541.3	541.9
177.5°	543.8	543.5	543.2	542.9	542.7	542.7	542.7	542.7	542.7	543.2	543.7
180°	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1393.1	1393.6	1399.3	1403.4	1401.3	1403.9	1404.9
5°	1522.0	1545.1	1557.3	1566.3	1566.9	1567.5	1572.7
7.5°	1704.8	1729.6	1747.7	1775.1	1783.3	1792.7	1790.0
10°	1838.2	1874.8	1906.2	1922.9	1940.9	1967.2	1946.0
12.5°	1962.9	2027.7	2075.6	2101.5	2118.4	2123.6	2113.3
15°	2168.5	2253.2	2298.8	2297.4	2355.2	2380.2	2341.1
17.5°	2357.1	2435.2	2497.8	2529.9	2578.0	2588.7	2583.8
20°	2472.6	2557.9	2606.6	2661.7	2686.8	2709.2	2713.1
22.5°	2572.1	2648.7	2701.0	2746.9	2767.9	2778.5	2784.9
25°	2674.6	2734.9	2766.4	2782.4	2788.1	2786.8	2778.5
27.5°	2667.6	2672.2	2637.5	2603.6	2573.1	2538.9	2527.1
30°	2598.3	2544.4	2448.2	2393.7	2313.5	2250.0	2275.7
32.5°	2416.1	2308.9	2200.8	2081.7	1983.0	1954.9	1926.7
35°	2062.1	1873.5	1763.2	1634.9	1583.6	1532.3	1497.0
37.5°	1668.3	1522.4	1391.6	1307.7	1256.2	1223.8	1206.4
40°	1442.5	1311.0	1203.2	1135.3	1096.2	1059.6	1054.4
42.5°	1262.3	1140.1	1059.0	1004.9	967.3	951.8	940.6
45°	1034.0	948.6	894.1	855.6	830.6	821.0	808.1
47.5°	875.2	814.8	773.9	747.7	728.9	721.7	720.7
50°	786.4	736.3	706.2	685.6	670.9	668.4	658.1
52.5°	719.6	676.3	652.8	634.9	624.2	617.0	614.0
55°	624.7	595.9	574.7	564.4	556.1	549.0	549.0
57.5°	546.6	522.5	508.5	499.7	497.2	492.2	489.0
60°	498.3	477.9	466.9	459.2	454.1	454.8	448.9
62.5°	451.2	437.8	427.4	419.7	413.6	413.7	414.1
65°	384.2	373.9	366.3	363.6	359.9	355.3	356.7
67.5°	325.6	315.9	309.9	305.6	304.3	301.8	305.6
70°	283.5	276.4	271.9	268.1	266.8	267.5	270.7
72.5°	245.0	240.0	237.0	235.3	232.4	232.5	234.8
75°	192.4	188.6	186.0	184.1	183.4	183.4	183.4
77.5°	141.4	140.4	139.3	136.5	136.6	137.4	137.5
80°	111.6	109.7	109.1	107.7	105.8	104.5	107.7
82.5°	83.4	81.4	80.8	80.6	77.6	77.4	80.0
85°	44.9	43.0	43.6	43.0	43.0	42.3	42.3
87.5°	18.2	17.7	17.2	17.8	17.3	16.9	18.0
90°	11.4	11.8	12.1	12.3	12.4	12.6	12.8
92.5°	17.3	17.6	17.7	17.6	17.4	17.3	17.2
95°	32.7	33.1	33.3	33.3	33.3	33.3	33.3
97.5°	50.8	51.2	51.4	51.4	51.4	51.3	51.3
100°	63.6	63.9	64.2	64.4	64.6	64.8	64.9
102.5°	78.7	79.0	79.1	79.1	79.0	79.0	78.9
105°	100.8	100.8	100.9	101.1	101.3	101.5	101.7
107.5°	125.4	125.6	125.7	125.6	125.5	125.5	125.4
110°	141.7	142.0	142.1	141.9	141.8	141.6	141.4



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	158.0	158.4	158.6	158.5	158.5	158.5	158.4
115°	182.3	182.4	182.4	182.3	182.2	182.1	182.0
117.5°	207.0	207.0	206.9	206.6	206.3	206.0	205.8
120°	223.6	223.5	223.3	223.1	222.9	222.7	222.5
122.5°	240.2	239.9	239.7	239.4	239.1	238.8	238.6
125°	264.9	264.6	264.2	263.8	263.4	263.1	262.7
127.5°	289.5	288.9	288.4	288.0	287.6	287.1	286.7
130°	305.9	305.6	305.1	304.4	303.8	303.1	302.4
132.5°	321.8	321.3	320.8	320.4	319.8	319.3	318.8
135°	345.7	345.3	345.1	344.9	344.7	344.5	344.3
137.5°	369.0	368.5	368.2	367.8	367.5	367.1	366.7
140°	384.6	384.5	384.1	383.4	382.8	382.1	381.4
142.5°	398.9	398.8	398.5	398.0	397.5	397.0	396.4
145°	420.0	419.9	419.7	419.3	419.0	418.6	418.2
147.5°	440.1	440.1	439.8	439.2	438.6	438.0	437.4
150°	452.3	452.3	452.0	451.5	450.9	450.3	449.8
152.5°	463.7	463.9	463.7	463.3	462.7	462.2	461.8
155°	480.4	480.8	480.6	479.9	479.3	478.6	478.0
157.5°	494.6	494.9	494.8	494.4	493.8	493.2	492.8
160°	503.3	503.8	503.8	503.4	503.0	502.7	502.3
162.5°	511.5	512.0	511.9	511.3	510.7	510.1	509.4
165°	522.0	522.5	522.5	521.8	521.1	520.5	519.8
167.5°	530.4	530.9	530.9	530.4	529.8	529.2	528.6
170°	535.1	535.7	535.7	535.1	534.4	533.8	533.1
172.5°	538.6	539.1	539.1	538.5	537.8	537.2	536.5
175°	542.4	543.0	543.0	542.3	541.7	541.0	540.4
177.5°	544.1	544.5	544.5	543.9	543.5	542.9	542.3
180°	543.8	543.8	543.8	543.8	543.8	543.8	543.8

(END OF REPORT)