

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: P332211-830

Luminaire Tested: **S123DIW-S1165D460U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332211-830
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-S1165D460U830-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 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: 6122.8 lumens
Efficiency: N/A
Efficacy: 116.8 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

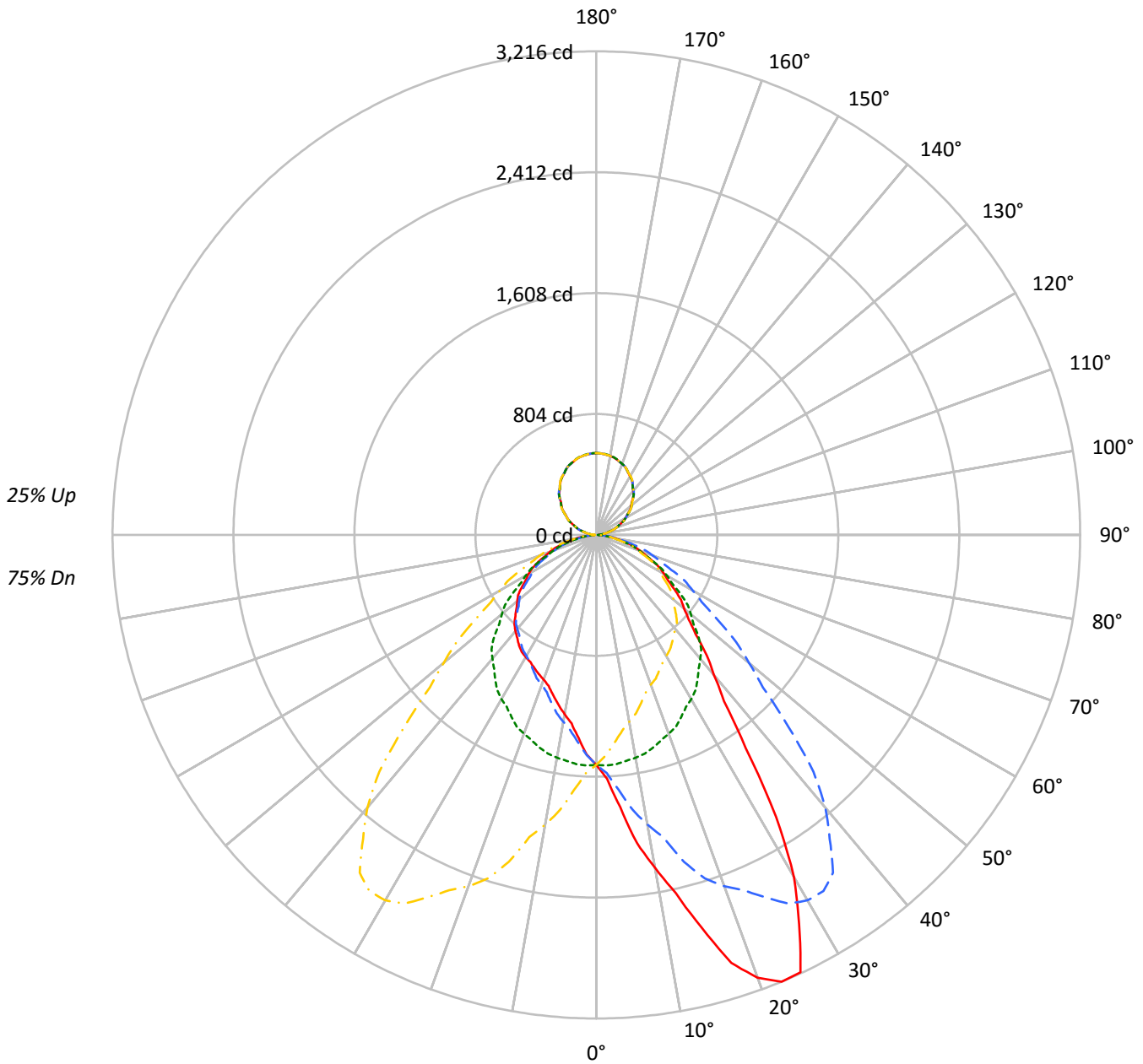
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270° - · - 135°-315°



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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	0		
RCR																										
0	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79	75					75			
1	104	100	96	92	99	95	92	88	86	84	81	78	76	74	71	69	68	64					64			
2	95	87	81	76	90	83	78	73	76	72	68	69	66	63	63	60	58	55					55			
3	87	77	70	64	82	74	67	62	67	62	58	62	57	54	56	53	50	47					47			
4	80	69	61	54	76	66	58	53	60	54	49	55	50	46	50	46	43	40					40			
5	73	61	53	47	70	59	51	46	54	48	43	50	44	40	45	41	38	35					35			
6	68	55	47	41	64	53	46	40	49	43	38	45	40	36	41	37	33	31					31			
7	63	50	42	36	60	48	41	35	45	38	33	41	36	32	38	33	30	27					27			
8	58	46	38	32	56	44	37	31	41	34	30	38	32	28	35	30	27	25					25			
9	55	42	34	29	52	40	33	28	37	31	27	35	29	25	32	28	24	22					22			
10	51	39	31	26	49	37	30	26	35	29	24	32	27	23	30	25	22	20					20			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	16457	16457	16457	16457
5°	19626	16528	14647	16528
10°	24565	16444	13230	16444
15°	30130	16312	12316	16312
20°	35892	16105	11726	16105
25°	38112	15853	11595	15853
30°	32666	15669	11656	15669
35°	22718	15408	11779	15408
40°	17113	15104	11741	15104
45°	14209	14647	11592	14647
50°	12728	13720	11488	13720
55°	11898	12720	11344	12720
60°	11162	11672	11227	11672
65°	10491	10641	10868	10641
70°	9838	9467	10351	9467
75°	8813	8289	9491	8289
80°	7711	6794	8176	6794
85°	6039	4940	5496	4940



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.6	2.5
10°-20°	482.9	7.9
20°-30°	810.5	13.2
30°-40°	917.8	15.0
40°-50°	823.0	13.4
50°-60°	664.2	10.8
60°-70°	462.8	7.6
70°-80°	243.3	4.0
80°-90°	61.1	1.0
90°-100°	35.4	0.6
100°-110°	106.0	1.7
110°-120°	180.3	2.9
120°-130°	237.2	3.9
130°-140°	266.6	4.4
140°-150°	262.1	4.3
150°-160°	220.6	3.6
160°-170°	146.9	2.4
170°-180°	51.4	0.8
0°-30°	1444.1	23.6
0°-40°	2361.9	38.6
0°-60°	3849.1	62.9
0°-90°	4616.2	75.4
90°-120°	321.8	5.3
90°-150°	1087.6	17.8
90°-180°	1507.0	24.6
0°-180°	6122.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1529	1529	1529	1529	1529	
5°	1816	1530	1356	1530	1816	188
15°	2704	1464	1105	1464	2704	781
25°	3209	1335	976	1335	3209	1407
35°	1729	1173	896	1173	1729	1123
45°	933	962	762	962	933	739
55°	634	678	604	678	634	569
65°	412	418	427	418	412	410
75°	212	199	228	199	212	227
85°	49	40	44	40	49	58
90°	13	0	13	0	13	9
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°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1622.6	1621.4	1618.4	1620.8	1616.1	1609.5	1608.9	1603.0	1585.8	1584.6	1579.9
5°	1816.4	1810.4	1809.7	1808.9	1798.6	1784.5	1757.8	1755.6	1720.0	1702.2	1680.8
7.5°	2067.3	2070.4	2059.6	2050.1	2018.5	1997.5	1969.0	1932.4	1888.7	1844.4	1814.9
10°	2247.5	2271.9	2241.6	2220.8	2201.6	2165.2	2123.1	2070.4	2017.8	1956.3	1909.7
12.5°	2440.7	2452.7	2446.6	2427.0	2397.1	2341.8	2267.0	2209.1	2160.7	2058.3	2016.9
15°	2703.8	2749.0	2720.1	2653.4	2654.9	2602.3	2504.5	2397.1	2340.1	2250.4	2128.3
17.5°	2984.1	2989.7	2977.4	2921.9	2884.8	2812.5	2722.3	2619.3	2503.8	2395.4	2265.7
20°	3133.4	3129.0	3103.0	3074.2	3010.5	2954.2	2855.6	2740.8	2592.7	2486.1	2344.5
22.5°	3216.4	3209.0	3196.7	3172.5	3119.5	3059.0	2970.6	2845.2	2704.1	2557.1	2393.7
25°	3209.0	3218.6	3220.1	3213.4	3194.9	3158.6	3089.0	2989.0	2848.3	2659.4	2489.0
27.5°	2918.6	2932.2	2971.8	3006.9	3046.2	3086.2	3080.8	3031.2	2927.1	2763.9	2555.6
30°	2628.2	2598.6	2671.9	2764.6	2827.5	2938.6	3000.9	3004.5	2946.0	2806.0	2603.0
32.5°	2225.2	2257.9	2290.3	2404.2	2541.8	2666.6	2790.5	2890.2	2901.6	2808.4	2630.9
35°	1728.9	1769.7	1828.9	1888.2	2036.4	2163.8	2381.5	2571.2	2722.3	2742.3	2633.4
37.5°	1393.3	1413.3	1450.9	1510.2	1607.1	1758.3	1926.7	2166.4	2385.4	2548.3	2555.3
40°	1217.9	1223.7	1265.9	1311.2	1389.7	1514.1	1665.9	1877.8	2140.0	2367.5	2462.3
42.5°	1086.3	1099.3	1117.2	1160.6	1223.1	1316.8	1458.0	1633.0	1873.4	2135.1	2320.6
45°	933.4	948.2	959.3	988.2	1032.6	1095.6	1194.1	1354.2	1537.1	1807.4	2057.1
47.5°	832.4	833.5	841.8	863.6	893.8	941.0	1010.7	1113.5	1281.5	1500.8	1757.1
50°	760.1	771.8	774.9	791.8	815.6	850.4	908.1	995.6	1133.4	1326.0	1561.5
52.5°	709.1	712.7	721.0	733.2	753.9	781.1	831.1	899.6	1007.8	1171.9	1388.5
55°	634.0	634.0	642.2	651.9	663.7	688.2	721.5	771.8	854.1	981.5	1160.7
57.5°	564.8	568.4	574.2	577.2	587.3	603.4	631.3	669.5	730.8	828.9	971.5
60°	518.5	525.2	524.4	530.4	539.3	551.9	575.6	606.7	661.5	740.0	860.1
62.5°	478.2	477.8	477.7	484.7	493.6	505.7	521.0	548.0	594.6	664.2	766.4
65°	411.9	410.4	415.6	420.0	423.0	431.9	443.7	467.4	498.5	550.4	629.6
67.5°	352.9	348.6	351.4	352.9	358.0	364.9	376.0	390.7	415.4	457.0	516.8
70°	312.6	308.9	308.1	309.6	314.1	319.2	327.4	341.5	364.5	397.8	441.5
72.5°	271.1	268.6	268.4	271.7	273.8	277.2	283.0	295.9	314.1	339.1	379.8
75°	211.9	211.9	211.9	212.6	214.8	217.8	222.3	228.8	243.0	260.7	288.1
77.5°	158.8	158.6	157.8	157.6	160.9	162.2	163.2	169.5	177.3	189.4	209.3
80°	124.4	120.7	122.2	124.4	125.9	126.7	128.9	130.4	137.0	143.7	157.8
82.5°	92.5	89.4	89.6	93.0	93.3	94.1	96.3	98.4	100.9	107.0	114.5
85°	48.9	48.9	49.7	49.7	50.3	49.7	51.8	52.6	52.6	56.3	60.7
87.5°	20.4	19.1	19.7	20.3	19.6	20.2	20.6	21.2	21.7	22.2	22.5
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°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1576.3	1571.6	1566.9	1558.6	1551.4	1541.3	1538.4	1534.8	1524.2	1514.8	1507.6
5°	1672.6	1654.8	1628.9	1605.2	1586.0	1560.1	1545.2	1529.7	1507.4	1487.4	1471.1
7.5°	1773.4	1738.4	1698.1	1654.5	1614.0	1574.9	1543.3	1515.1	1484.0	1454.5	1431.6
10°	1853.4	1803.0	1746.7	1686.0	1634.1	1583.8	1541.5	1504.5	1464.5	1429.6	1400.8
12.5°	1944.7	1870.0	1792.3	1718.5	1657.3	1587.3	1536.2	1489.1	1443.8	1401.8	1369.4
15°	2052.7	1957.8	1866.0	1764.5	1671.1	1583.8	1523.1	1463.8	1411.2	1368.2	1326.7
17.5°	2151.1	2043.6	1922.6	1799.1	1686.6	1582.9	1497.8	1430.9	1365.1	1312.5	1271.1
20°	2206.8	2084.5	1947.5	1819.3	1694.9	1579.3	1486.0	1406.0	1334.8	1279.3	1232.7
22.5°	2254.8	2111.8	1970.0	1833.0	1694.3	1569.8	1464.1	1381.7	1304.7	1250.3	1200.6
25°	2304.5	2133.4	1991.2	1830.4	1675.7	1546.7	1428.2	1334.8	1257.8	1194.1	1143.0
27.5°	2347.2	2131.9	1963.1	1790.3	1646.2	1517.1	1390.5	1290.4	1208.6	1139.4	1087.6
30°	2375.6	2134.9	1934.1	1763.0	1617.9	1484.5	1361.5	1260.7	1174.9	1104.5	1055.6
32.5°	2393.4	2133.1	1907.4	1725.1	1572.8	1454.8	1330.1	1225.8	1137.6	1068.4	1021.2
35°	2403.8	2120.1	1861.5	1646.7	1500.1	1385.3	1280.8	1172.6	1080.1	1015.6	962.2
37.5°	2383.0	2092.6	1808.2	1571.1	1410.6	1297.5	1209.7	1117.5	1028.9	958.0	912.0
40°	2350.4	2074.9	1766.7	1517.9	1349.0	1240.0	1165.3	1074.9	987.4	920.0	877.0
42.5°	2288.2	2038.7	1721.1	1458.6	1285.0	1176.0	1107.1	1031.6	949.0	885.6	842.7
45°	2136.4	1960.0	1652.7	1369.7	1190.4	1077.8	1017.1	962.2	887.4	826.0	788.9
47.5°	1925.7	1841.7	1553.7	1275.9	1091.7	983.4	920.3	876.2	821.5	771.8	736.3
50°	1779.3	1744.5	1486.7	1211.9	1026.0	920.0	859.3	819.3	780.0	730.4	697.8
52.5°	1610.4	1631.9	1408.5	1145.5	959.0	854.9	797.7	765.9	730.3	689.5	661.1
55°	1372.6	1450.4	1273.4	1034.1	859.3	760.1	706.0	677.8	657.0	626.7	602.3
57.5°	1150.0	1249.0	1127.3	919.3	761.4	675.7	623.9	593.2	579.9	564.0	544.8
60°	1017.9	1115.6	1023.0	842.3	695.6	614.1	568.2	542.2	528.9	517.8	501.5
62.5°	899.8	998.8	921.1	764.0	630.9	555.4	515.4	490.1	479.8	473.9	460.1
65°	737.8	823.0	771.1	642.2	538.6	471.8	435.5	417.8	408.1	406.0	397.1
67.5°	600.5	665.3	627.5	532.7	451.1	393.5	362.7	347.6	340.2	339.4	332.7
70°	510.4	571.1	542.2	456.3	386.0	340.7	314.1	300.8	296.3	295.6	291.9
72.5°	440.5	482.9	459.9	388.1	333.8	292.8	273.1	259.3	254.2	255.2	252.8
75°	325.9	357.8	344.5	294.8	251.1	224.4	208.1	199.3	194.8	197.1	194.1
77.5°	234.5	254.7	242.7	208.3	181.3	162.1	150.1	144.6	140.6	140.4	139.1
80°	177.0	188.9	182.2	161.5	139.3	123.0	113.3	109.6	107.4	106.7	105.9
82.5°	126.1	136.2	128.3	114.0	99.0	89.2	83.7	78.8	77.2	77.7	76.9
85°	63.7	67.4	64.5	55.5	49.7	45.1	42.2	40.0	38.5	39.3	37.8
87.5°	23.5	23.8	21.8	19.2	17.8	15.8	15.6	14.3	13.3	13.5	13.1
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: P332211-830

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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: P332211-830

CATALOG NUMBER: S123DIW-S1165D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1503.4	1499.3	1493.4	1484.5	1477.3	1466.1	1466.1	1467.9	1467.9	1467.4	1466.1
5°	1457.8	1446.7	1433.4	1417.9	1401.6	1385.3	1382.2	1376.3	1371.9	1368.9	1365.3
7.5°	1409.7	1390.0	1370.6	1348.8	1328.9	1312.5	1301.1	1291.6	1285.5	1279.0	1274.2
10°	1377.1	1352.6	1329.6	1306.7	1281.5	1261.5	1249.0	1240.0	1233.4	1227.5	1224.5
12.5°	1338.6	1310.6	1285.3	1263.5	1235.9	1215.3	1203.3	1199.1	1191.3	1178.8	1172.3
15°	1282.2	1256.3	1226.0	1192.6	1179.3	1154.1	1140.0	1133.4	1128.9	1119.3	1116.3
17.5°	1234.1	1200.1	1166.1	1141.2	1116.4	1096.0	1088.2	1079.9	1073.9	1066.1	1063.8
20°	1195.6	1165.3	1134.1	1107.5	1081.5	1059.3	1052.6	1046.7	1040.8	1037.1	1034.1
22.5°	1156.5	1126.1	1100.3	1075.4	1047.7	1033.2	1026.0	1019.5	1015.3	1012.8	1009.8
25°	1101.5	1074.9	1045.9	1023.7	1001.5	991.8	987.4	983.7	980.8	977.0	976.3
27.5°	1052.3	1023.3	999.8	979.1	963.2	955.2	950.8	949.0	949.7	951.0	951.9
30°	1015.6	988.9	969.7	951.9	937.1	929.6	928.9	928.9	931.9	932.6	934.1
32.5°	981.8	959.9	940.7	923.4	912.2	907.1	909.9	909.9	912.3	914.3	916.9
35°	932.6	913.3	898.5	883.7	874.1	876.3	877.8	879.3	883.0	887.4	890.4
37.5°	885.6	868.9	853.5	842.0	837.5	841.5	845.1	848.2	852.4	855.9	858.8
40°	851.9	839.2	824.4	814.1	815.6	817.8	820.8	824.4	828.2	830.4	833.4
42.5°	820.5	807.3	796.1	787.4	789.5	792.3	794.1	796.1	800.3	804.4	806.1
45°	772.6	762.2	751.9	746.7	748.2	749.7	751.1	753.4	757.1	760.1	760.7
47.5°	718.9	711.6	704.6	699.6	701.9	701.3	703.3	708.0	709.2	711.0	715.1
50°	684.5	677.8	669.7	668.2	668.2	668.2	668.9	674.9	674.9	677.8	680.8
52.5°	646.6	642.2	637.1	634.4	633.2	633.2	636.3	639.3	640.5	644.6	647.6
55°	590.4	586.0	581.5	579.3	577.8	579.3	585.2	586.6	590.4	592.6	594.8
57.5°	531.9	528.5	524.9	523.7	523.4	525.4	528.6	533.0	534.0	540.7	544.1
60°	493.3	488.1	485.2	485.2	483.7	490.4	488.9	496.3	497.8	502.3	507.5
62.5°	453.6	446.7	445.5	445.5	447.6	449.5	451.6	454.9	458.6	464.3	468.3
65°	389.6	386.0	391.2	390.4	388.9	393.3	393.3	397.1	401.5	406.7	414.8
67.5°	329.0	327.2	327.5	327.5	329.8	332.3	334.4	337.6	343.0	348.5	353.8
70°	288.1	290.4	286.7	289.6	291.9	292.6	294.1	298.5	304.4	308.1	314.1
72.5°	248.5	248.3	248.7	250.0	252.1	253.4	255.0	260.0	266.6	269.7	274.4
75°	191.1	190.4	192.6	192.6	196.3	197.7	199.3	201.5	207.5	211.9	215.6
77.5°	139.6	140.4	140.0	142.5	141.5	141.8	146.4	148.6	149.2	158.0	159.9
80°	105.2	106.7	107.4	108.1	108.9	107.4	112.6	114.8	114.8	120.0	123.7
82.5°	75.6	76.4	78.4	79.1	79.3	80.8	81.2	82.8	84.6	86.8	91.7
85°	37.8	40.0	40.7	40.0	40.7	39.3	41.5	42.2	43.0	43.0	43.0
87.5°	12.7	13.5	13.2	14.0	13.7	14.5	14.6	13.5	13.6	15.4	13.1
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: P332211-830

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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: P332211-830

CATALOG NUMBER: S123DIW-S1165D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1462.0	1461.4	1465.6	1462.5	1465.6	1461.4	1462.0	1466.1	1467.4	1467.9	1467.9
5°	1360.7	1363.0	1355.6	1355.6	1355.6	1363.0	1360.7	1365.3	1368.9	1371.9	1376.3
7.5°	1270.7	1267.4	1267.7	1263.8	1267.7	1267.4	1270.7	1274.2	1279.0	1285.5	1291.6
10°	1215.6	1211.2	1209.7	1210.4	1209.7	1211.2	1215.6	1224.5	1227.5	1233.4	1240.0
12.5°	1170.0	1169.0	1159.3	1159.4	1159.3	1169.0	1170.0	1172.3	1178.8	1191.3	1199.1
15°	1116.3	1102.3	1100.8	1105.2	1100.8	1102.3	1116.3	1116.3	1119.3	1128.9	1133.4
17.5°	1062.5	1055.2	1055.6	1053.4	1055.6	1055.2	1062.5	1063.8	1066.1	1073.9	1079.9
20°	1034.1	1029.6	1028.9	1023.7	1028.9	1029.6	1034.1	1034.1	1037.1	1040.8	1046.7
22.5°	1008.0	1006.5	1007.0	1001.3	1007.0	1006.5	1008.0	1009.8	1012.8	1015.3	1019.5
25°	975.6	979.3	976.3	976.3	976.3	979.3	975.6	976.3	977.0	980.8	983.7
27.5°	953.7	953.5	952.1	952.1	952.1	953.5	953.7	951.9	951.0	949.7	949.0
30°	937.1	936.3	937.8	937.8	937.8	936.3	937.1	934.1	932.6	931.9	928.9
32.5°	920.5	921.5	921.8	922.4	921.8	921.5	920.5	916.9	914.3	912.3	909.9
35°	894.8	895.6	897.8	896.4	897.8	895.6	894.8	890.4	887.4	883.0	879.3
37.5°	860.2	863.6	862.8	864.0	862.8	863.6	860.2	858.8	855.9	852.4	848.2
40°	834.1	836.3	835.6	835.6	835.6	836.3	834.1	833.4	830.4	828.2	824.4
42.5°	807.5	809.1	807.1	806.0	807.1	809.1	807.5	806.1	804.4	800.3	796.1
45°	763.7	762.2	764.5	761.5	764.5	762.2	763.7	760.7	760.1	757.1	753.4
47.5°	714.8	716.3	716.9	719.2	716.9	716.3	714.8	715.1	711.0	709.2	708.0
50°	682.2	686.6	686.6	686.0	686.6	686.6	682.2	680.8	677.8	674.9	674.9
52.5°	650.3	652.3	655.3	655.2	655.3	652.3	650.3	647.6	644.6	640.5	639.3
55°	600.8	602.3	603.7	604.5	603.7	602.3	600.8	594.8	592.6	590.4	586.6
57.5°	549.5	548.9	552.4	553.5	552.4	548.9	549.5	544.1	540.7	534.0	533.0
60°	513.3	513.3	519.2	521.5	519.2	513.3	513.3	507.5	502.3	497.8	496.3
62.5°	474.9	477.2	483.1	480.0	483.1	477.2	474.9	468.3	464.3	458.6	454.9
65°	418.5	424.4	423.7	426.7	423.7	424.4	418.5	414.8	406.7	401.5	397.1
67.5°	359.7	363.4	368.7	369.2	368.7	363.4	359.7	353.8	348.5	343.0	337.6
70°	320.0	323.7	326.7	328.9	326.7	323.7	320.0	314.1	308.1	304.4	298.5
72.5°	281.5	283.4	290.5	287.4	290.5	283.4	281.5	274.4	269.7	266.6	260.0
75°	220.7	225.9	230.4	228.2	230.4	225.9	220.7	215.6	211.9	207.5	201.5
77.5°	163.2	168.4	170.5	168.6	170.5	168.4	163.2	159.9	158.0	149.2	148.6
80°	128.9	128.2	132.6	131.9	132.6	128.2	128.9	123.7	120.0	114.8	114.8
82.5°	94.5	93.8	95.9	96.3	95.9	93.8	94.5	91.7	86.8	84.6	82.8
85°	45.9	48.2	45.1	44.5	45.1	48.2	45.9	43.0	43.0	43.0	42.2
87.5°	13.1	13.2	12.6	12.1	12.6	13.2	13.1	13.1	15.4	13.6	13.5
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



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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: P332211-830

CATALOG NUMBER: S123DIW-S1165D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1466.1	1466.1	1477.3	1484.5	1493.4	1499.3	1503.4	1507.6	1514.8	1524.2	1534.8
5°	1382.2	1385.3	1401.6	1417.9	1433.4	1446.7	1457.8	1471.1	1487.4	1507.4	1529.7
7.5°	1301.1	1312.5	1328.9	1348.8	1370.6	1390.0	1409.7	1431.6	1454.5	1484.0	1515.1
10°	1249.0	1261.5	1281.5	1306.7	1329.6	1352.6	1377.1	1400.8	1429.6	1464.5	1504.5
12.5°	1203.3	1215.3	1235.9	1263.5	1285.3	1310.6	1338.6	1369.4	1401.8	1443.8	1489.1
15°	1140.0	1154.1	1179.3	1192.6	1226.0	1256.3	1282.2	1326.7	1368.2	1411.2	1463.8
17.5°	1088.2	1096.0	1116.4	1141.2	1166.1	1200.1	1234.1	1271.1	1312.5	1365.1	1430.9
20°	1052.6	1059.3	1081.5	1107.5	1134.1	1165.3	1195.6	1232.7	1279.3	1334.8	1406.0
22.5°	1026.0	1033.2	1047.7	1075.4	1100.3	1126.1	1156.5	1200.6	1250.3	1304.7	1381.7
25°	987.4	991.8	1001.5	1023.7	1045.9	1074.9	1101.5	1143.0	1194.1	1257.8	1334.8
27.5°	950.8	955.2	963.2	979.1	999.8	1023.3	1052.3	1087.6	1139.4	1208.6	1290.4
30°	928.9	929.6	937.1	951.9	969.7	988.9	1015.6	1055.6	1104.5	1174.9	1260.7
32.5°	909.9	907.1	912.2	923.4	940.7	959.9	981.8	1021.2	1068.4	1137.6	1225.8
35°	877.8	876.3	874.1	883.7	898.5	913.3	932.6	962.2	1015.6	1080.1	1172.6
37.5°	845.1	841.5	837.5	842.0	853.5	868.9	885.6	912.0	958.0	1028.9	1117.5
40°	820.8	817.8	815.6	814.1	824.4	839.2	851.9	877.0	920.0	987.4	1074.9
42.5°	794.1	792.3	789.5	787.4	796.1	807.3	820.5	842.7	885.6	949.0	1031.6
45°	751.1	749.7	748.2	746.7	751.9	762.2	772.6	788.9	826.0	887.4	962.2
47.5°	703.3	701.3	701.9	699.6	704.6	711.6	718.9	736.3	771.8	821.5	876.2
50°	668.9	668.2	668.2	668.2	669.7	677.8	684.5	697.8	730.4	780.0	819.3
52.5°	636.3	633.2	633.2	634.4	637.1	642.2	646.6	661.1	689.5	730.3	765.9
55°	585.2	579.3	577.8	579.3	581.5	586.0	590.4	602.3	626.7	657.0	677.8
57.5°	528.6	525.4	523.4	523.7	524.9	528.5	531.9	544.8	564.0	579.9	593.2
60°	488.9	490.4	483.7	485.2	485.2	488.1	493.3	501.5	517.8	528.9	542.2
62.5°	451.6	449.5	447.6	445.5	445.5	446.7	453.6	460.1	473.9	479.8	490.1
65°	393.3	393.3	388.9	390.4	391.2	386.0	389.6	397.1	406.0	408.1	417.8
67.5°	334.4	332.3	329.8	327.5	327.5	327.2	329.0	332.7	339.4	340.2	347.6
70°	294.1	292.6	291.9	289.6	286.7	290.4	288.1	291.9	295.6	296.3	300.8
72.5°	255.0	253.4	252.1	250.0	248.7	248.3	248.5	252.8	255.2	254.2	259.3
75°	199.3	197.7	196.3	192.6	192.6	190.4	191.1	194.1	197.1	194.8	199.3
77.5°	146.4	141.8	141.5	142.5	140.0	140.4	139.6	139.1	140.4	140.6	144.6
80°	112.6	107.4	108.9	108.1	107.4	106.7	105.2	105.9	106.7	107.4	109.6
82.5°	81.2	80.8	79.3	79.1	78.4	76.4	75.6	76.9	77.7	77.2	78.8
85°	41.5	39.3	40.7	40.0	40.7	40.0	37.8	37.8	39.3	38.5	40.0
87.5°	14.6	14.5	13.7	14.0	13.2	13.5	12.7	13.1	13.5	13.3	14.3
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



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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: P332211-830

CATALOG NUMBER: S123DIW-S1165D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1538.4	1541.3	1551.4	1558.6	1566.9	1571.6	1576.3	1579.9	1584.6	1585.8	1603.0
5°	1545.2	1560.1	1586.0	1605.2	1628.9	1654.8	1672.6	1680.8	1702.2	1720.0	1755.6
7.5°	1543.3	1574.9	1614.0	1654.5	1698.1	1738.4	1773.4	1814.9	1844.4	1888.7	1932.4
10°	1541.5	1583.8	1634.1	1686.0	1746.7	1803.0	1853.4	1909.7	1956.3	2017.8	2070.4
12.5°	1536.2	1587.3	1657.3	1718.5	1792.3	1870.0	1944.7	2016.9	2058.3	2160.7	2209.1
15°	1523.1	1583.8	1671.1	1764.5	1866.0	1957.8	2052.7	2128.3	2250.4	2340.1	2397.1
17.5°	1497.8	1582.9	1686.6	1799.1	1922.6	2043.6	2151.1	2265.7	2395.4	2503.8	2619.3
20°	1486.0	1579.3	1694.9	1819.3	1947.5	2084.5	2206.8	2344.5	2486.1	2592.7	2740.8
22.5°	1464.1	1569.8	1694.3	1833.0	1970.0	2111.8	2254.8	2393.7	2557.1	2704.1	2845.2
25°	1428.2	1546.7	1675.7	1830.4	1991.2	2133.4	2304.5	2489.0	2659.4	2848.3	2989.0
27.5°	1390.5	1517.1	1646.2	1790.3	1963.1	2131.9	2347.2	2555.6	2763.9	2927.1	3031.2
30°	1361.5	1484.5	1617.9	1763.0	1934.1	2134.9	2375.6	2603.0	2806.0	2946.0	3004.5
32.5°	1330.1	1454.8	1572.8	1725.1	1907.4	2133.1	2393.4	2630.9	2808.4	2901.6	2890.2
35°	1280.8	1385.3	1500.1	1646.7	1861.5	2120.1	2403.8	2633.4	2742.3	2722.3	2571.2
37.5°	1209.7	1297.5	1410.6	1571.1	1808.2	2092.6	2383.0	2555.3	2548.3	2385.4	2166.4
40°	1165.3	1240.0	1349.0	1517.9	1766.7	2074.9	2350.4	2462.3	2367.5	2140.0	1877.8
42.5°	1107.1	1176.0	1285.0	1458.6	1721.1	2038.7	2288.2	2320.6	2135.1	1873.4	1633.0
45°	1017.1	1077.8	1190.4	1369.7	1652.7	1960.0	2136.4	2057.1	1807.4	1537.1	1354.2
47.5°	920.3	983.4	1091.7	1275.9	1553.7	1841.7	1925.7	1757.1	1500.8	1281.5	1113.5
50°	859.3	920.0	1026.0	1211.9	1486.7	1744.5	1779.3	1561.5	1326.0	1133.4	995.6
52.5°	797.7	854.9	959.0	1145.5	1408.5	1631.9	1610.4	1388.5	1171.9	1007.8	899.6
55°	706.0	760.1	859.3	1034.1	1273.4	1450.4	1372.6	1160.7	981.5	854.1	771.8
57.5°	623.9	675.7	761.4	919.3	1127.3	1249.0	1150.0	971.5	828.9	730.8	669.5
60°	568.2	614.1	695.6	842.3	1023.0	1115.6	1017.9	860.1	740.0	661.5	606.7
62.5°	515.4	555.4	630.9	764.0	921.1	998.8	899.8	766.4	664.2	594.6	548.0
65°	435.5	471.8	538.6	642.2	771.1	823.0	737.8	629.6	550.4	498.5	467.4
67.5°	362.7	393.5	451.1	532.7	627.5	665.3	600.5	516.8	457.0	415.4	390.7
70°	314.1	340.7	386.0	456.3	542.2	571.1	510.4	441.5	397.8	364.5	341.5
72.5°	273.1	292.8	333.8	388.1	459.9	482.9	440.5	379.8	339.1	314.1	295.9
75°	208.1	224.4	251.1	294.8	344.5	357.8	325.9	288.1	260.7	243.0	228.8
77.5°	150.1	162.1	181.3	208.3	242.7	254.7	234.5	209.3	189.4	177.3	169.5
80°	113.3	123.0	139.3	161.5	182.2	188.9	177.0	157.8	143.7	137.0	130.4
82.5°	83.7	89.2	99.0	114.0	128.3	136.2	126.1	114.5	107.0	100.9	98.4
85°	42.2	45.1	49.7	55.5	64.5	67.4	63.7	60.7	56.3	52.6	52.6
87.5°	15.6	15.8	17.8	19.2	21.8	23.8	23.5	22.5	22.2	21.7	21.2
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°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1608.9	1609.5	1616.1	1620.8	1618.4	1621.4	1622.6
5°	1757.8	1784.5	1798.6	1808.9	1809.7	1810.4	1816.4
7.5°	1969.0	1997.5	2018.5	2050.1	2059.6	2070.4	2067.3
10°	2123.1	2165.2	2201.6	2220.8	2241.6	2271.9	2247.5
12.5°	2267.0	2341.8	2397.1	2427.0	2446.6	2452.7	2440.7
15°	2504.5	2602.3	2654.9	2653.4	2720.1	2749.0	2703.8
17.5°	2722.3	2812.5	2884.8	2921.9	2977.4	2989.7	2984.1
20°	2855.6	2954.2	3010.5	3074.2	3103.0	3129.0	3133.4
22.5°	2970.6	3059.0	3119.5	3172.5	3196.7	3209.0	3216.4
25°	3089.0	3158.6	3194.9	3213.4	3220.1	3218.6	3209.0
27.5°	3080.8	3086.2	3046.2	3006.9	2971.8	2932.2	2918.6
30°	3000.9	2938.6	2827.5	2764.6	2671.9	2598.6	2628.2
32.5°	2790.5	2666.6	2541.8	2404.2	2290.3	2257.9	2225.2
35°	2381.5	2163.8	2036.4	1888.2	1828.9	1769.7	1728.9
37.5°	1926.7	1758.3	1607.1	1510.2	1450.9	1413.3	1393.3
40°	1665.9	1514.1	1389.7	1311.2	1265.9	1223.7	1217.9
42.5°	1458.0	1316.8	1223.1	1160.6	1117.2	1099.3	1086.3
45°	1194.1	1095.6	1032.6	988.2	959.3	948.2	933.4
47.5°	1010.7	941.0	893.8	863.6	841.8	833.5	832.4
50°	908.1	850.4	815.6	791.8	774.9	771.8	760.1
52.5°	831.1	781.1	753.9	733.2	721.0	712.7	709.1
55°	721.5	688.2	663.7	651.9	642.2	634.0	634.0
57.5°	631.3	603.4	587.3	577.2	574.2	568.4	564.8
60°	575.6	551.9	539.3	530.4	524.4	525.2	518.5
62.5°	521.0	505.7	493.6	484.7	477.7	477.8	478.2
65°	443.7	431.9	423.0	420.0	415.6	410.4	411.9
67.5°	376.0	364.9	358.0	352.9	351.4	348.6	352.9
70°	327.4	319.2	314.1	309.6	308.1	308.9	312.6
72.5°	283.0	277.2	273.8	271.7	268.4	268.6	271.1
75°	222.3	217.8	214.8	212.6	211.9	211.9	211.9
77.5°	163.2	162.2	160.9	157.6	157.8	158.6	158.8
80°	128.9	126.7	125.9	124.4	122.2	120.7	124.4
82.5°	96.3	94.1	93.3	93.0	89.6	89.4	92.5
85°	51.8	49.7	50.3	49.7	49.7	48.9	48.9
87.5°	20.6	20.2	19.6	20.3	19.7	19.1	20.4
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)