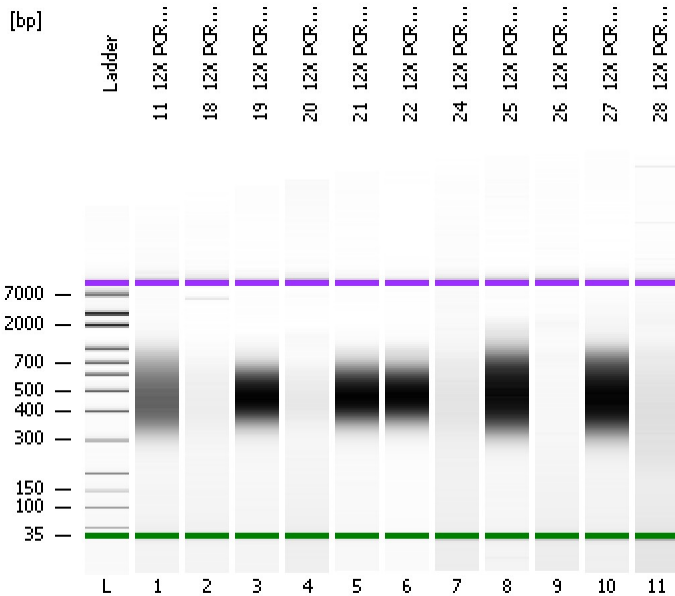


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
Modified: 4/24/2019 4:27:22 PM

Electrophoresis File Run Summary



Instrument Information:

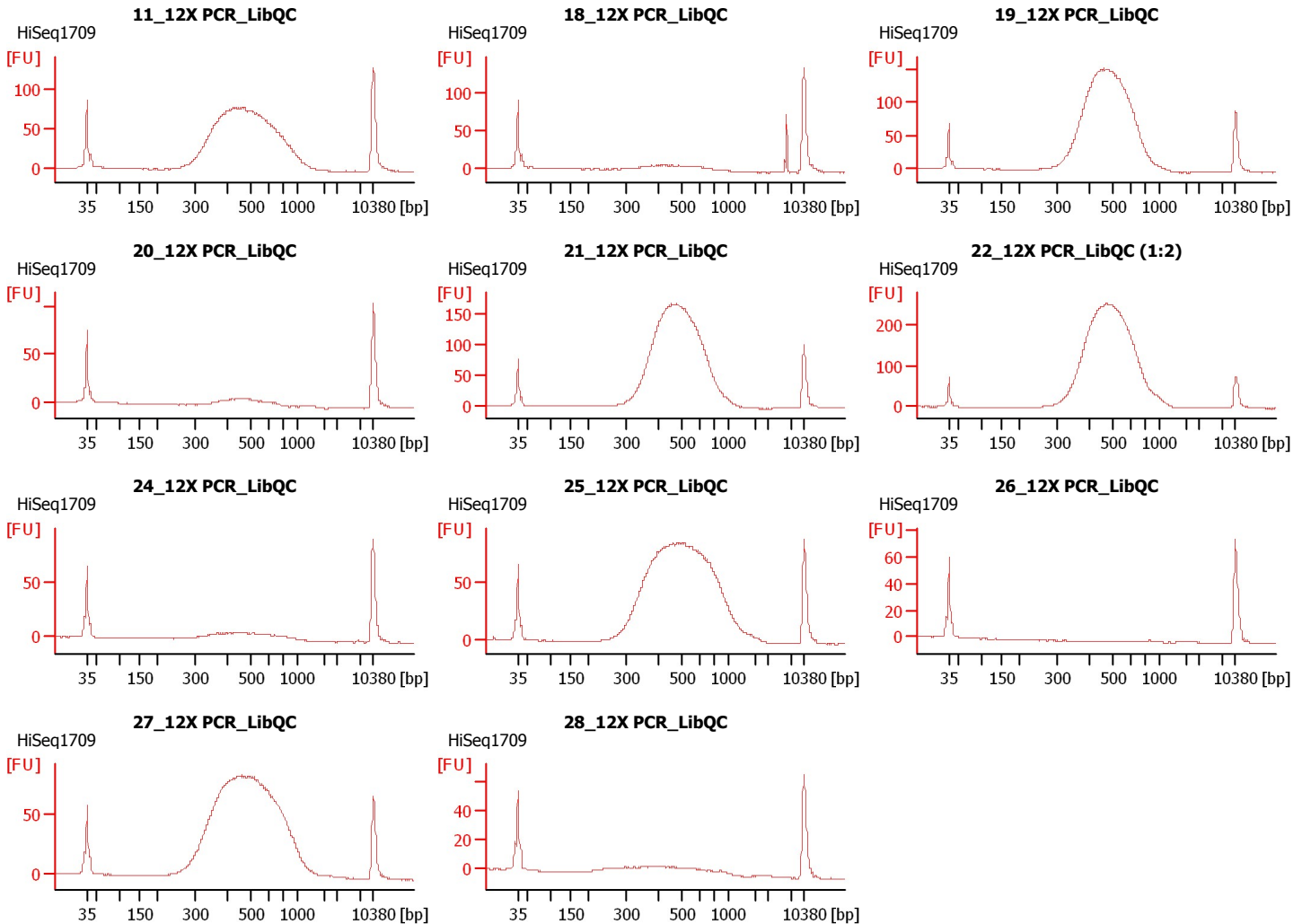
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy
Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

Chip Information:

Chip Lot #:
Reagent Kit Lot #:
Chip Comments:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
 Modified: 4/24/2019 4:27:22 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
11_12X PCR_LibQC	HiSeq1709	<input type="checkbox"/>	✓			
18_12X PCR_LibQC	HiSeq1709	<input type="checkbox"/>	✓			
19_12X PCR_LibQC	HiSeq1709	<input type="checkbox"/>	✓			
20_12X PCR_LibQC	HiSeq1709	<input type="checkbox"/>	✓			
21_12X PCR_LibQC	HiSeq1709	<input type="checkbox"/>	✓			
22_12X PCR_LibQC (1:2)	HiSeq1709	<input type="checkbox"/>	✓			
24_12X PCR_LibQC	HiSeq1709	<input type="checkbox"/>	✓			
25_12X PCR_LibQC	HiSeq1709	<input type="checkbox"/>	✓			
26_12X PCR_LibQC	HiSeq1709	<input type="checkbox"/>	✓			
27_12X PCR_LibQC	HiSeq1709	<input type="checkbox"/>	✓			
28_12X PCR_LibQC	HiSeq1709	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
Modified: 4/24/2019 4:27:22 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12
Minimum Visible Range [s] : 32
Maximum Visible Range [s] : 138
Start Analysis Time Range [s] : 33
End Analysis Time Range [s] : 137.5
Ladder Concentration [pg/μl] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/μl] : 125
Upper Marker Concentration [pg/μl] : 75
Used Upper Marker for Quantitation
Standard Curve Fit is Point to Point
Show Data Aligned to Lower and Upper Marker

Integrator Settings

Integration Start Time [s] : 33.05
Integration End Time [s] : 137
Slope Threshold : 0.8
Height Threshold [FU] : 5
Area Threshold : 0.1
Width Threshold [s] : 0.6
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

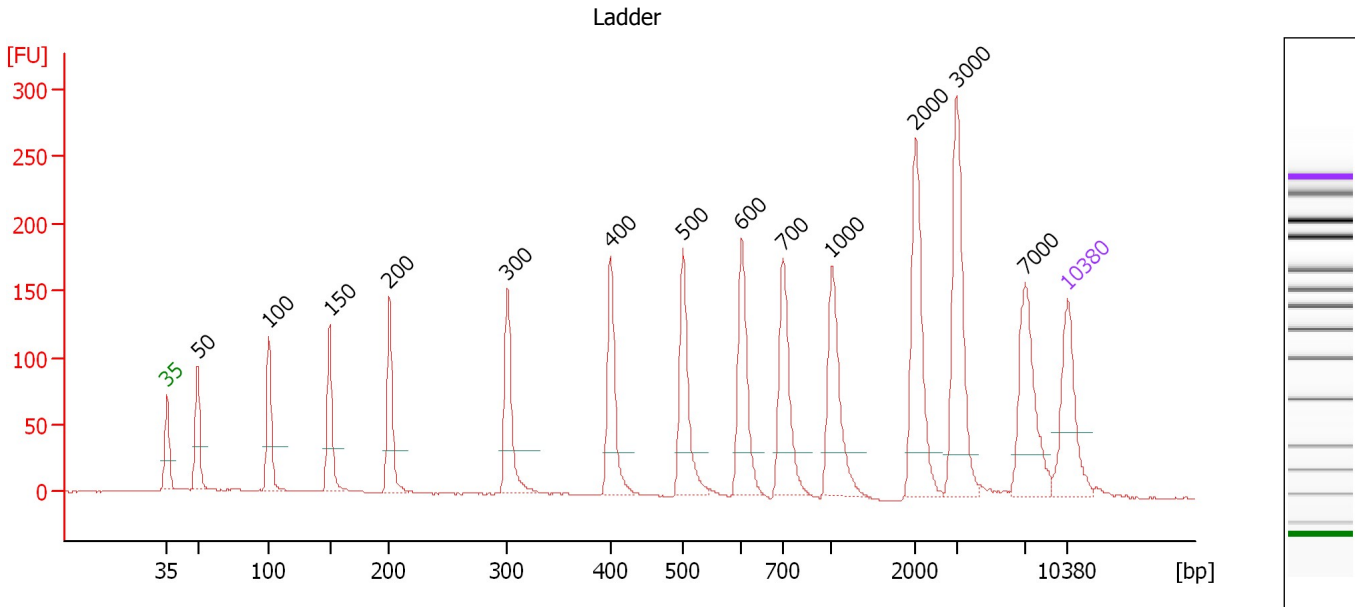
Ladder

Ladder Peak	Size	Area
1	35	160
2	50	210
3	100	208
4	150	221
5	200	242
6	300	270
7	400	305
8	500	306
9	600	336
10	700	321
11	1000	366
12	2000	413
13	3000	411
14	7000	400
15	10380	214

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
 Modified: 4/24/2019 4:27:22 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.4

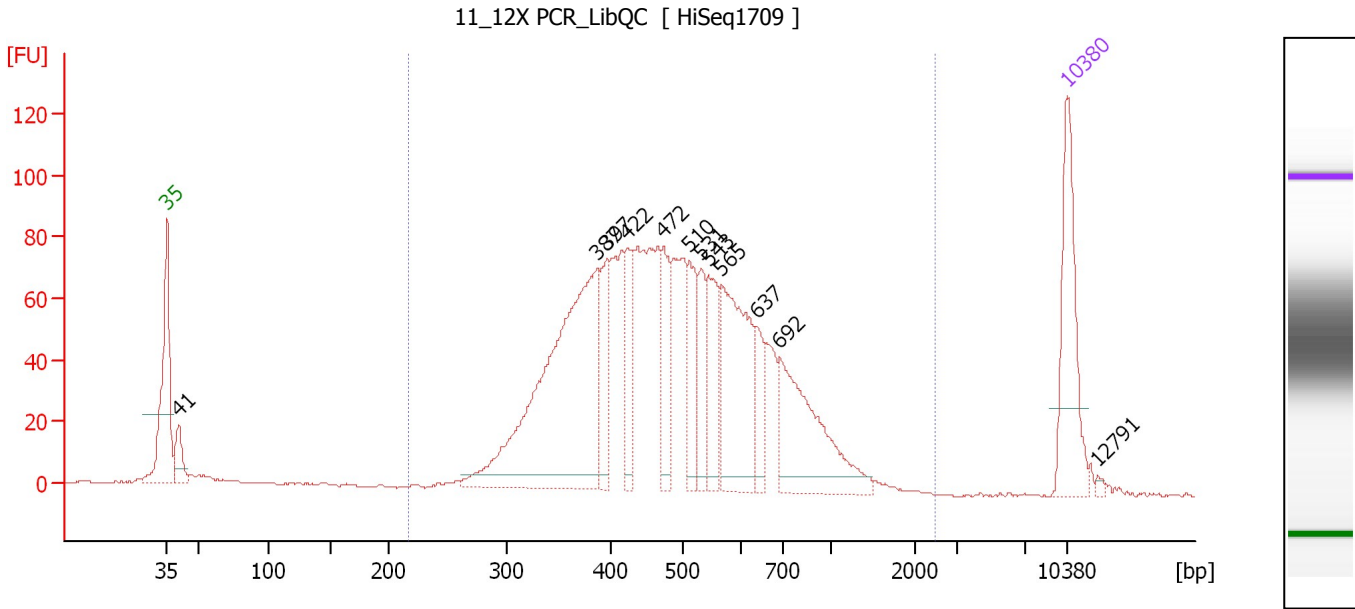
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.40
3	100	150.00	2,272.7	Ladder Peak	50.91
4	150	150.00	1,515.2	Ladder Peak	55.66
5	200	150.00	1,136.4	Ladder Peak	60.31
6	300	150.00	757.6	Ladder Peak	69.47
7	400	150.00	568.2	Ladder Peak	77.52
8	500	150.00	454.5	Ladder Peak	83.13
9	600	150.00	378.8	Ladder Peak	87.68
10	700	150.00	324.7	Ladder Peak	90.90
11	1,000	150.00	227.3	Ladder Peak	94.68
12	2,000	150.00	113.6	Ladder Peak	101.21
13	3,000	150.00	75.8	Ladder Peak	104.37
14	7,000	150.00	32.5	Ladder Peak	109.69
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
 Modified: 4/24/2019 4:27:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 11_12X PCR_LibQC

Number of peaks found: 12 Corr. Area 1: 1,847.1
 Noise: 0.4

Peak table for sample 1 : 11_12X PCR_LibQC

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	41	33.23	1,242.2		43.88
3	387	347.78	1,361.5		76.48
4	397	57.16	218.3		77.26
5	422	55.83	200.6		78.74
6	472	56.37	181.1		81.54
7	510	51.44	152.7		83.60
8	531	45.56	130.0		84.54
9	543	57.69	161.1		85.08
10	565	133.09	356.6		86.11
11	637	36.00	85.7		88.86
12	692	123.30	270.1		90.63
13	10,380	75.00	10.9	Upper Marker	113.00
14	12,791	0.00	0.0		115.36

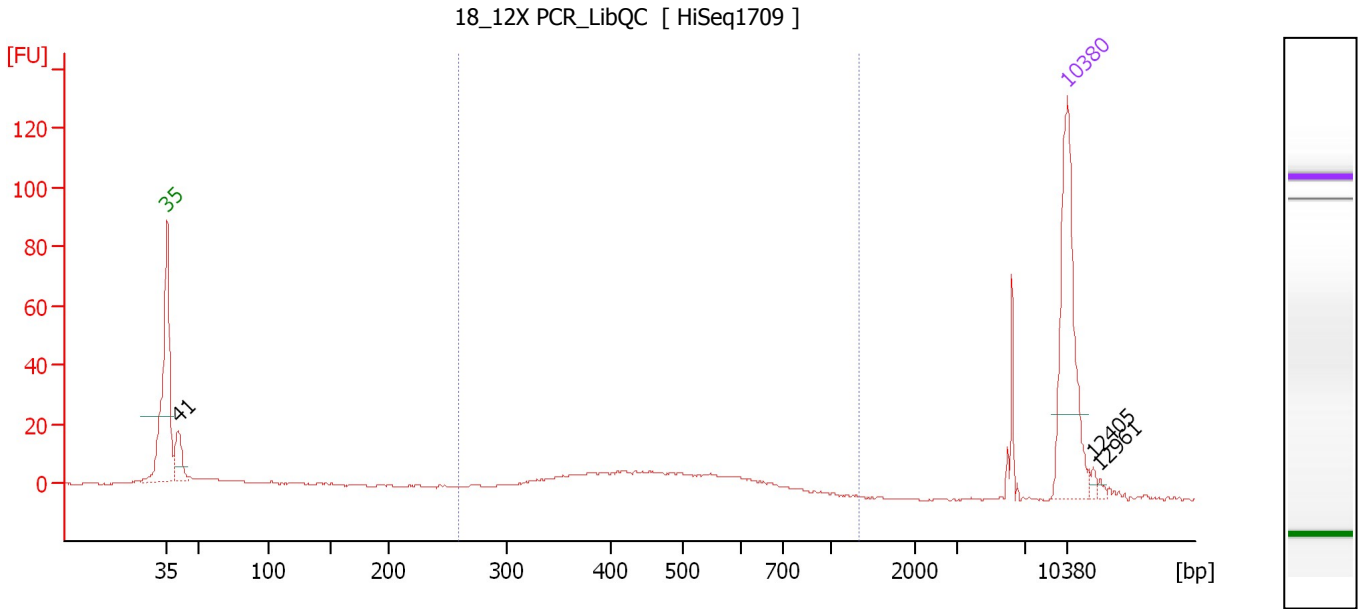
Region table for sample 1 : 11_12X PCR_LibQC

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
216	2,498	517	1,363.60	1,847.1	4,545.0	95	37.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
 Modified: 4/24/2019 4:27:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 18_12X PCR_LibQC

Number of peaks found: 3 Corr. Area 1: 140.2
 Noise: 0.4

Peak table for sample 2 : 18_12X PCR_LibQC

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	41	27.88	1,041.0		43.89
3	10,380	75.00	10.9	Upper Marker	113.00
4	12,405	0.00	0.0		114.98
5	12,961	0.00	0.0		115.53

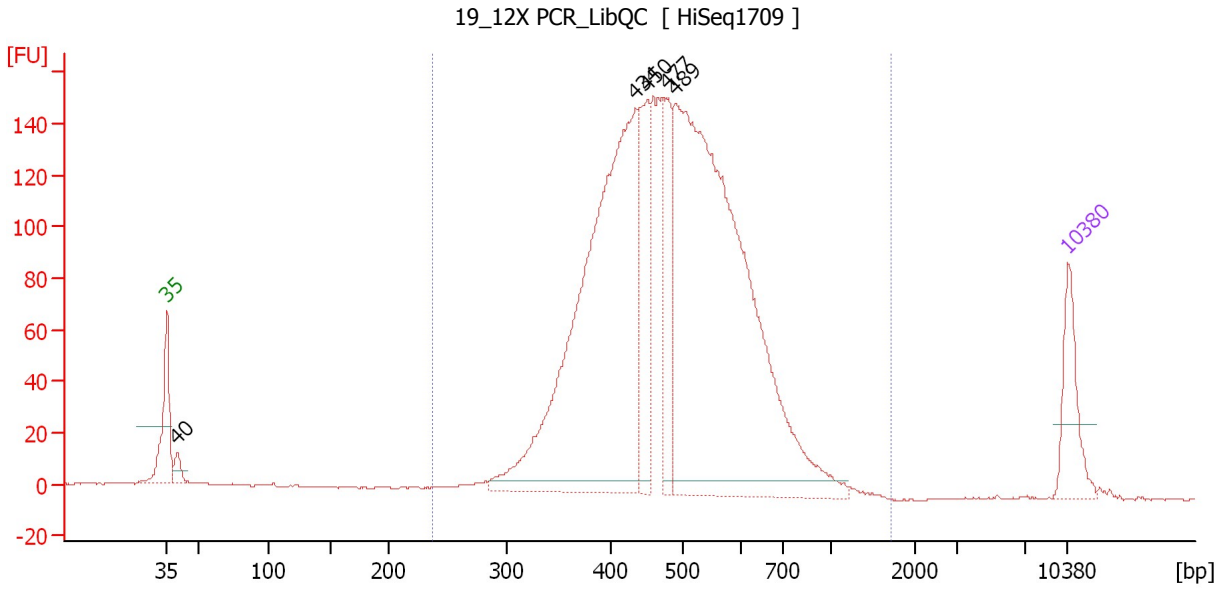
Region table for sample 2 : 18_12X PCR_LibQC

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
259	1,321	467	102.10	140.2	358.9	55	24.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
 Modified: 4/24/2019 4:27:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 19_12X PCR_LibQC

Number of peaks found: 5 Corr. Area 1: 2,581.0
 Noise: 0.3

Peak table for sample 3 : 19_12X PCR_LibQC

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	40	24.49	926.6		43.81
3	434	964.84	3,366.9		79.44
4	450	167.64	564.0		80.35
5	477	136.67	433.8		81.86
6	489	1,235.39	3,827.3		82.52
7	10,380	75.00	10.9	Upper Marker	113.00

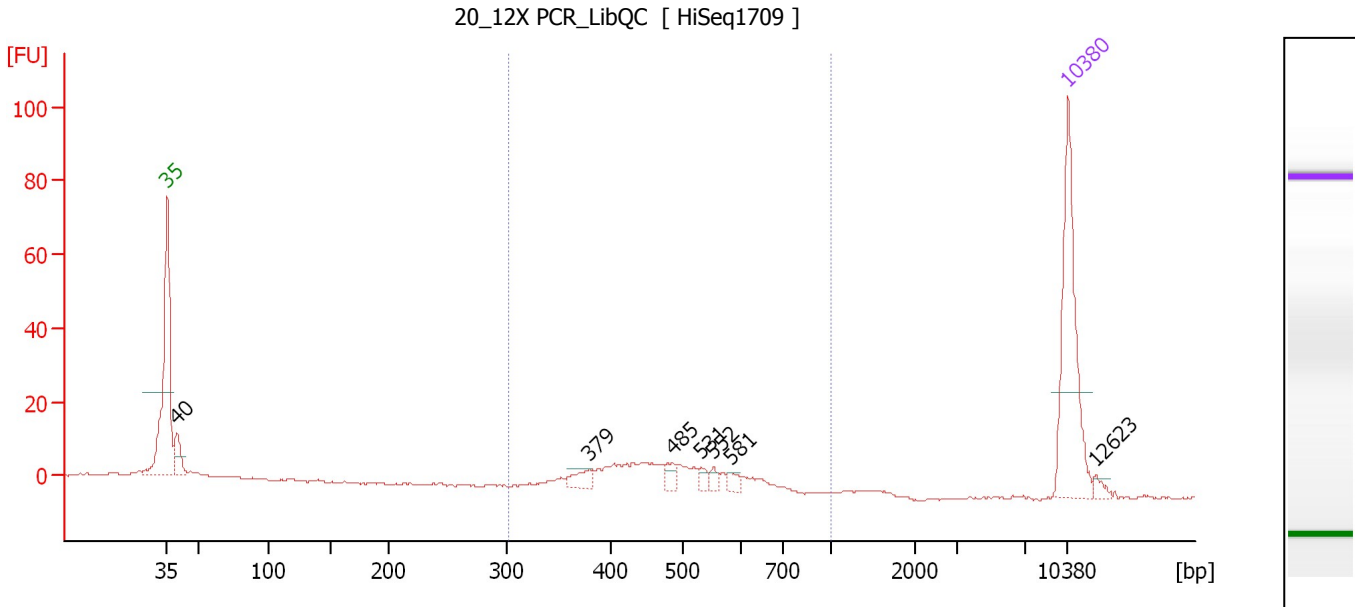
Region table for sample 3 : 19_12X PCR_LibQC

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
237	1,703	489	2,623.01	2,581.0	8,596.0	99	21.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
 Modified: 4/24/2019 4:27:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 20_12X PCR_LibQC

Number of peaks found: 7 Corr. Area 1: 67.9
 Noise: 0.2

Peak table for sample 4 : 20_12X PCR_LibQC

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	40	20.98	792.5		43.82
3	379	10.20	40.8		75.83
4	485	7.47	23.4		82.26
5	531	5.15	14.7		84.56
6	552	4.28	11.8		85.48
7	581	5.29	13.8		86.81
8	10,380	75.00	10.9	Upper Marker	113.00
9	12,623	0.00	0.0		115.20

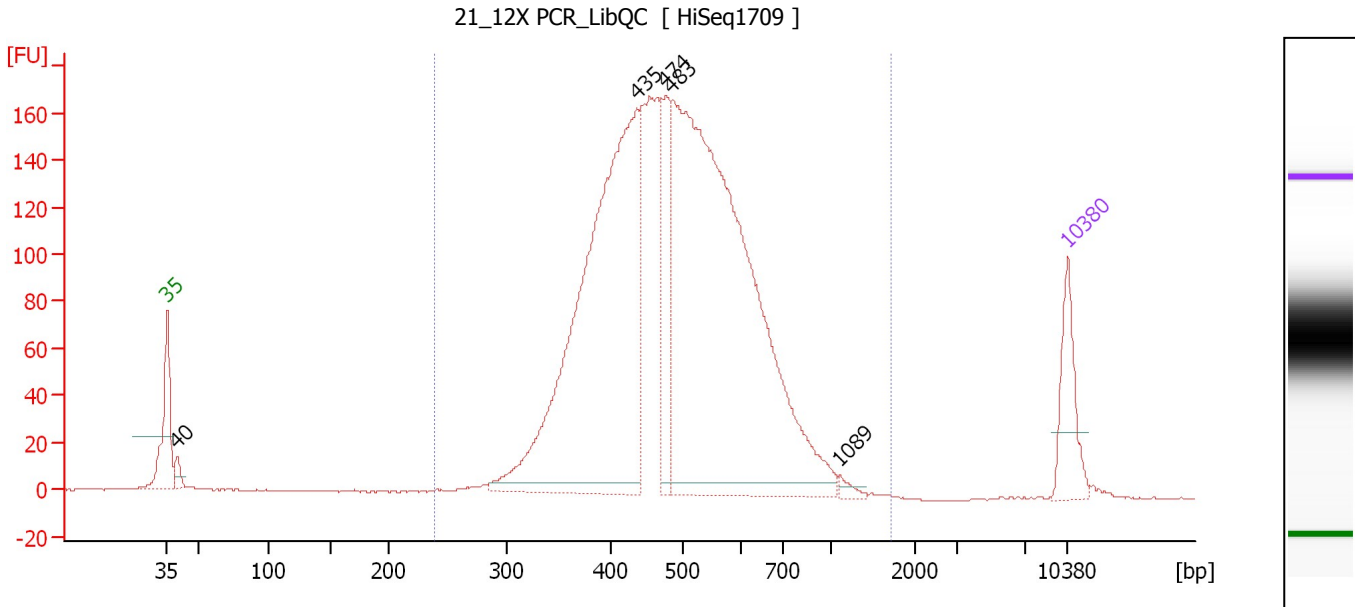
Region table for sample 4 : 20_12X PCR_LibQC

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
301	1,000	470	63.51	67.9	210.5	70	14.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
 Modified: 4/24/2019 4:27:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 21_12X PCR_LibQC

Number of peaks found: 5 Corr. Area 1: 2,924.0
 Noise: 0.3

Peak table for sample 5 : 21_12X PCR_LibQC

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	40	23.85	905.9		43.78
3	435	1,018.27	3,543.2		79.51
4	474	136.28	435.3		81.69
5	483	1,397.56	4,386.7		82.16
6	1,089	9.77	13.6		95.27
7	10,380	75.00	10.9	Upper Marker	113.00

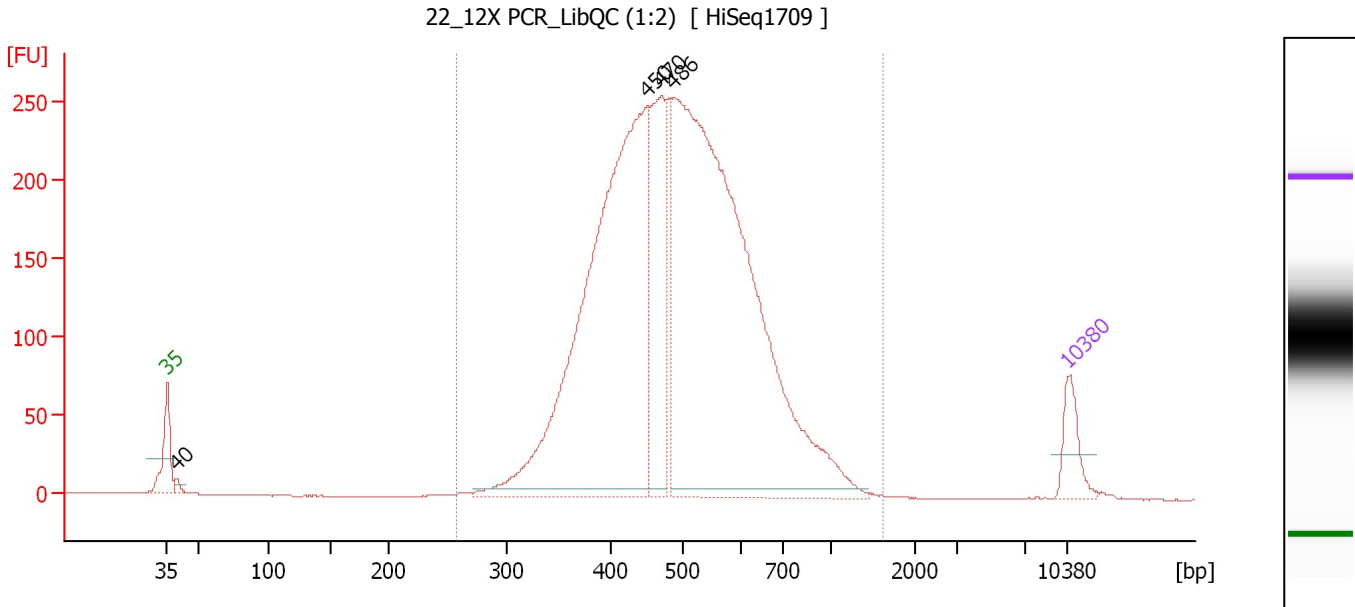
Region table for sample 5 : 21_12X PCR_LibQC

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
237	1,696	498	2,817.34	2,924.0	9,153.1	99	23.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
 Modified: 4/24/2019 4:27:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 22_12X PCR_LibQC (1:2)

Number of peaks found: 4 Corr. Area 1: 4,307.1
 Noise: 0.4

Peak table for sample 6 : 22_12X PCR_LibQC (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	40	19.11	729.9		43.75
3	450	1,863.33	6,269.2		80.34
4	470	477.00	1,536.8		81.46
5	486	2,415.92	7,525.4		82.37
6	10,380	75.00	10.9	Upper Marker	113.00

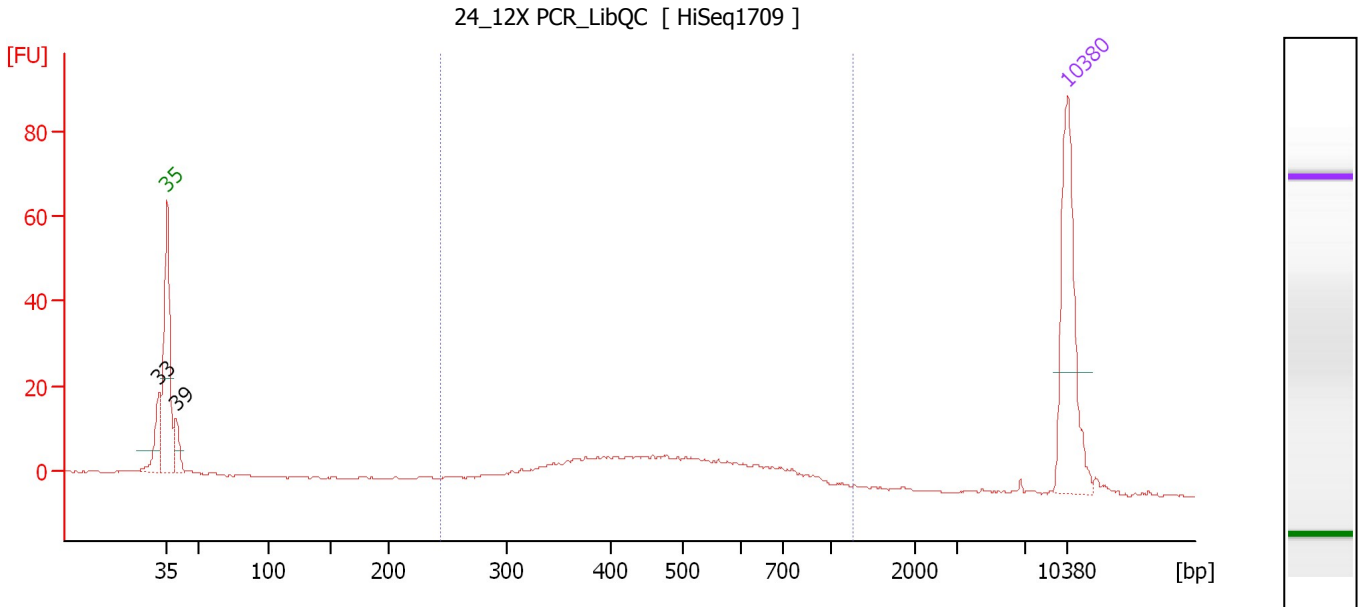
Region table for sample 6 : 22_12X PCR_LibQC (1:2)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
257	1,621	505	4,743.75	4,307.1	15,225.2	99	25.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
 Modified: 4/24/2019 4:27:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 24_12X PCR_LibQC

Number of peaks found: 2 Corr. Area 1: 146.9
 Noise: 0.3

Peak table for sample 7 : 24_12X PCR_LibQC

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.41
2	35	125.00	5,411.3	Lower Marker	43.00
3	39	22.87	880.5		43.70
4	10,380	75.00	10.9	Upper Marker	113.00

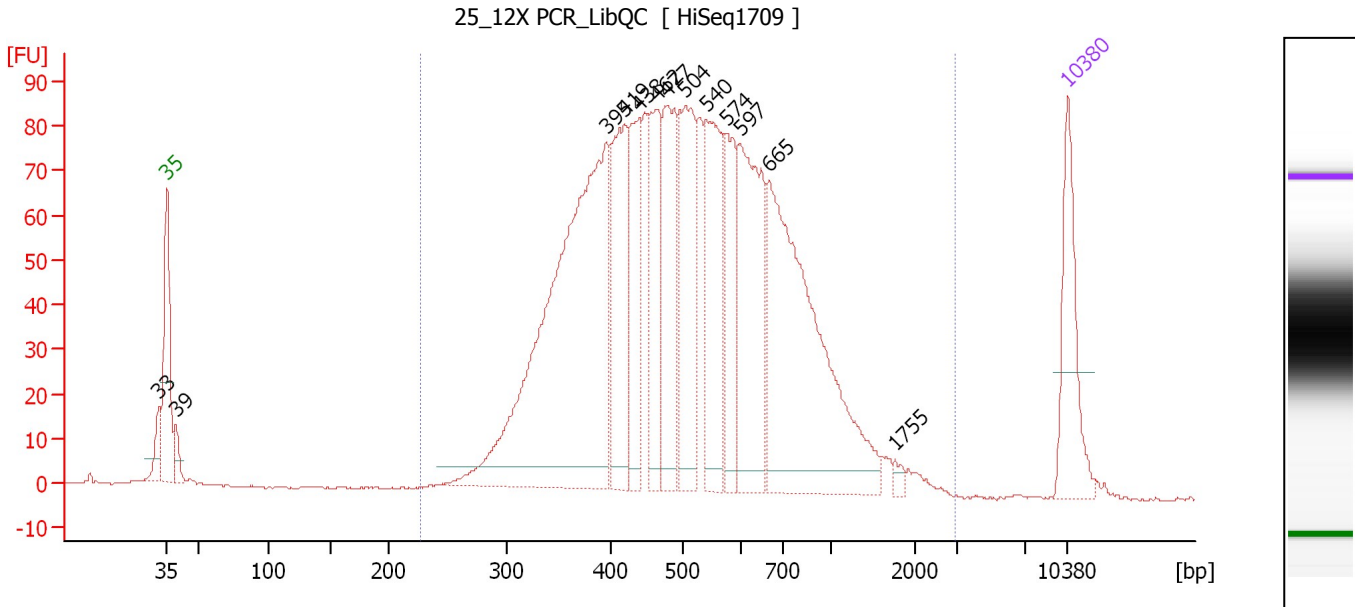
Region table for sample 7 : 24_12X PCR_LibQC

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
243	1,255	498	157.89	146.9	536.9	75	30.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
 Modified: 4/24/2019 4:27:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 25_12X PCR_LibQC

Number of peaks found: 13 Corr. Area 1: 2,072.2
 Noise: 0.3

Peak table for sample 8 : 25_12X PCR_LibQC

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.41
2	35	125.00	5,411.3	Lower Marker	43.00
3	39	23.58	906.8		43.70
4	395	592.02	2,269.6		77.14
5	419	154.22	557.5		78.59
6	438	100.14	346.1		79.67
7	462	120.01	393.2		81.02
8	477	144.86	460.2		81.83
9	504	159.84	480.9		83.29
10	540	145.74	408.7		84.97
11	574	92.79	245.1		86.48
12	597	195.64	496.3		87.56
13	665	371.55	846.5		89.77
14	1,755	5.78	5.0		99.60
15	10,380	75.00	10.9	Upper Marker	113.00

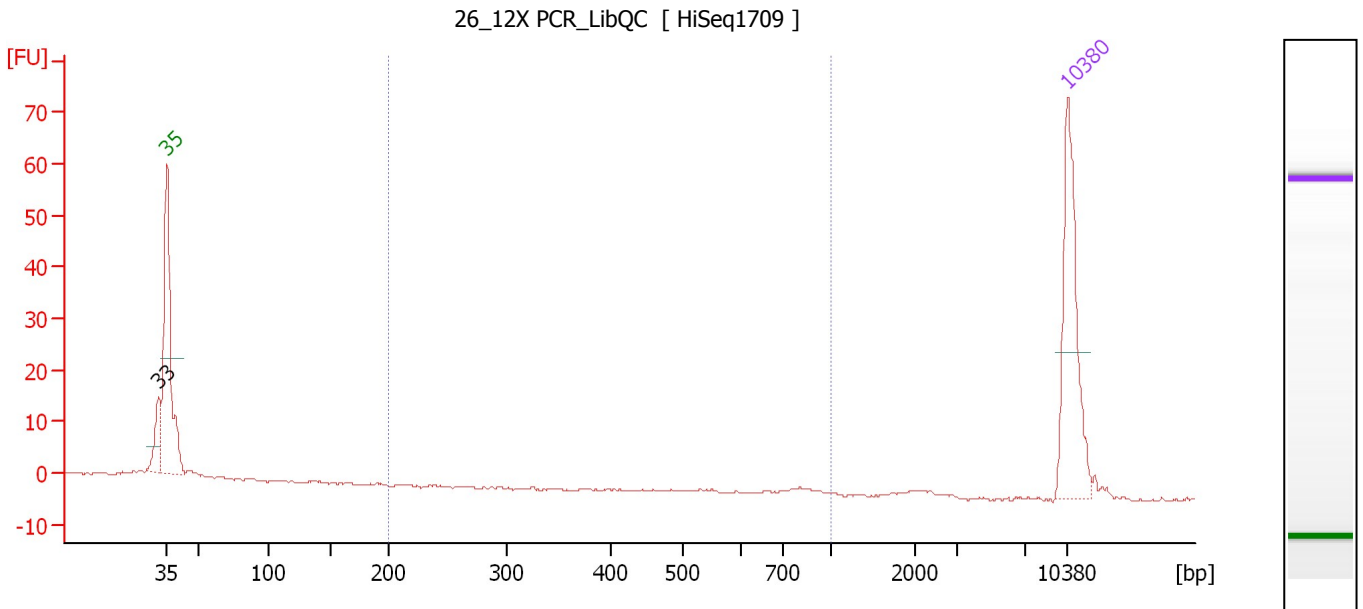
Region table for sample 8 : 25_12X PCR_LibQC

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
227	2,963	556	2,299.33	2,072.2	7,346.2	98	44.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
 Modified: 4/24/2019 4:27:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 26_12X PCR_LibQC

Number of peaks found: 1 Corr. Area 1: 0.0
 Noise: 0.2

Peak table for sample 9 : 26_12X PCR_LibQC

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.35
2	35	125.00	5,411.3	Lower Marker	43.00
3	10,380	75.00	10.9	Upper Marker	113.00

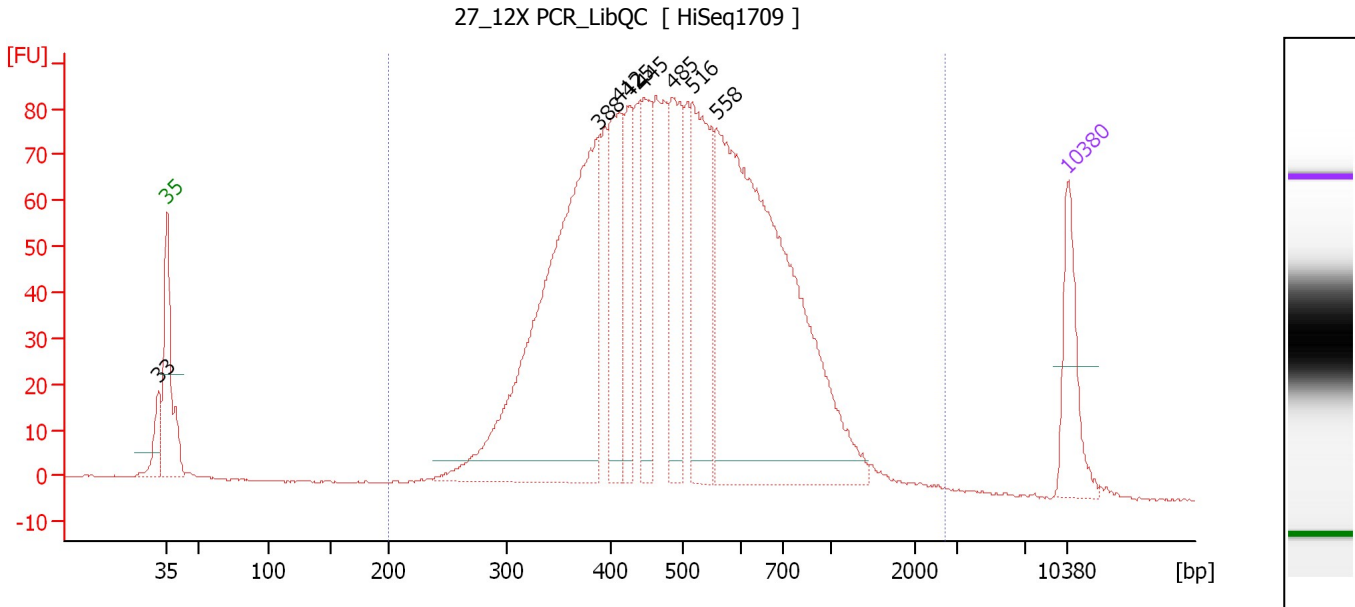
Region table for sample 9 : 26_12X PCR_LibQC

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	804	0.02	0.0	0.0	0	0.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
 Modified: 4/24/2019 4:27:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 27_12X PCR_LibQC

Number of peaks found: 8 Corr. Area 1: 1,985.3
 Noise: 0.3

Peak table for sample 10 : 27_12X PCR_LibQC

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.34
2	35	125.00	5,411.3	Lower Marker	43.00
3	388	711.73	2,779.9		76.55
4	412	165.43	608.4		78.19
5	425	103.72	370.0		78.90
6	445	136.73	465.3		80.06
7	485	171.00	533.9		82.30
8	516	231.09	679.2		83.84
9	558	810.13	2,201.1		85.76
10	10,380	75.00	10.9	Upper Marker	113.00

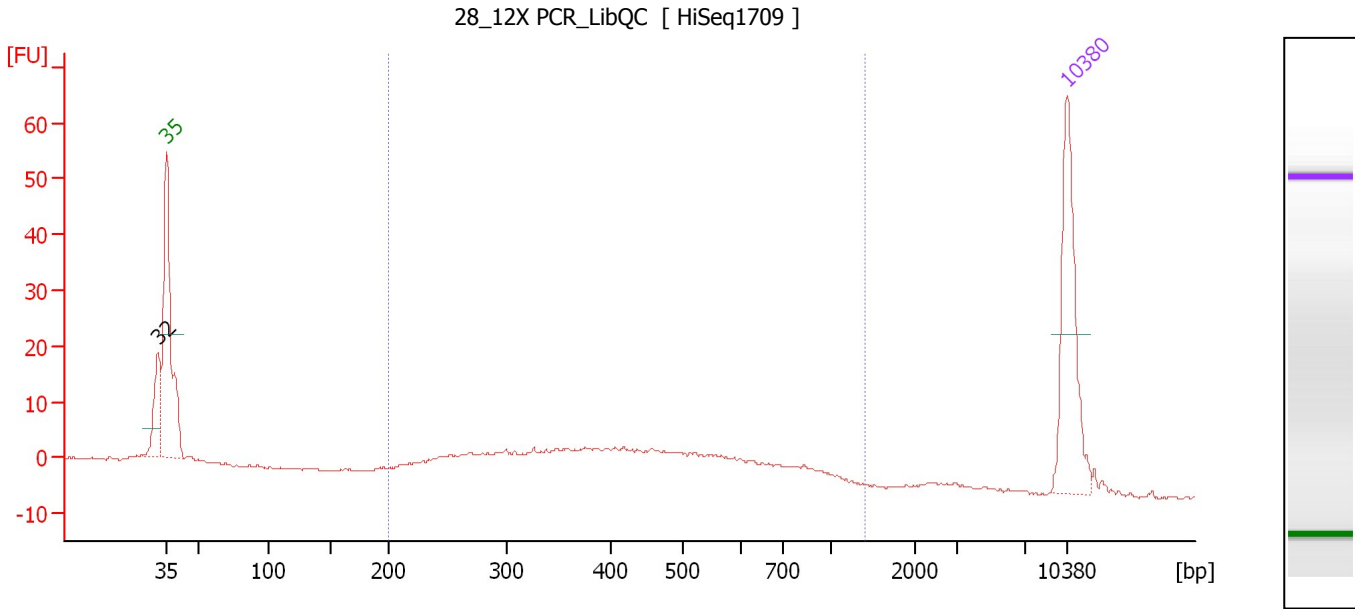
Region table for sample 10 : 27_12X PCR_LibQC

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	2,743	523	2,823.48	1,985.3	9,339.7	98	38.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
 Modified: 4/24/2019 4:27:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 28_12X PCR_LibQC

Number of peaks found: 1 Corr. Area 1: 134.4
 Noise: 0.2

Peak table for sample 11 : 28_12X PCR_LibQC

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.28
2	35	125.00	5,411.3	Lower Marker	43.00
3	10,380	75.00	10.9	Upper Marker	113.00

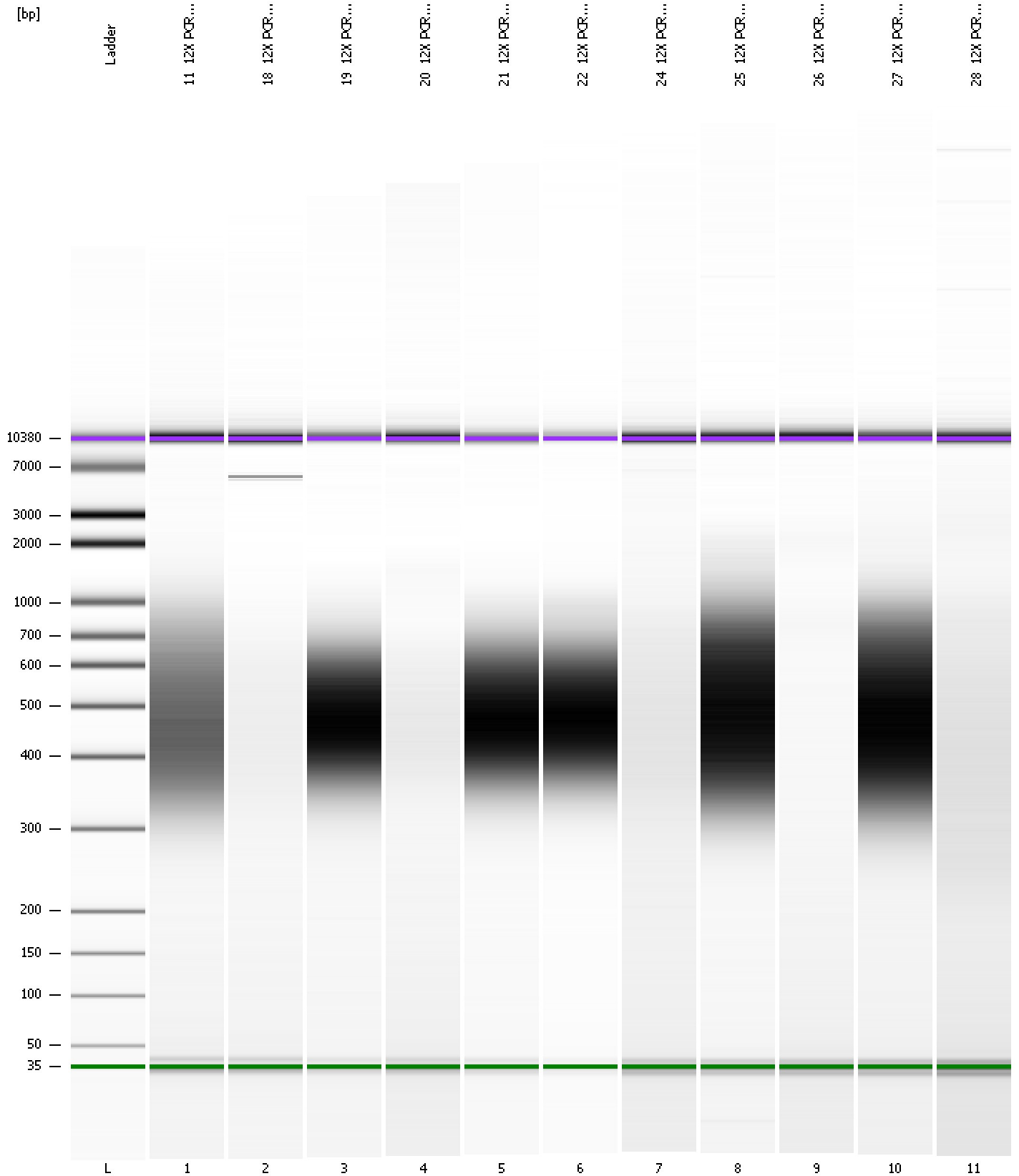
Region table for sample 11 : 28_12X PCR_LibQC

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,406	450	194.20	134.4	771.4	80	36.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
Modified: 4/24/2019 4:27:22 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad

Created: 4/24/2019 2:05:42 PM
 Modified: 4/24/2019 4:27:22 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		4/24/2019 2:46:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2019-04-24\2019-04-24_001.xad)		Instrument	Run		4/24/2019 2:05:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		4/24/2019 2:05:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/24/2019 2:05:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/24/2019 2:05:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		4/24/2019 2:05:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/24/2019 2:05:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/24/2019 2:05:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1