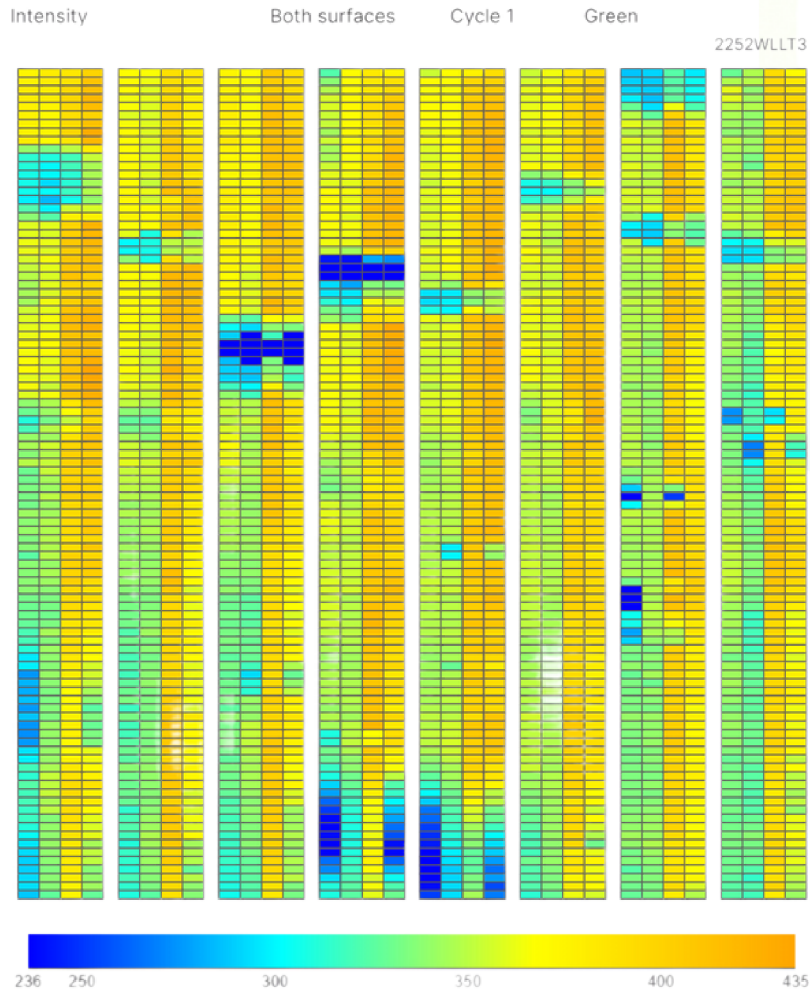


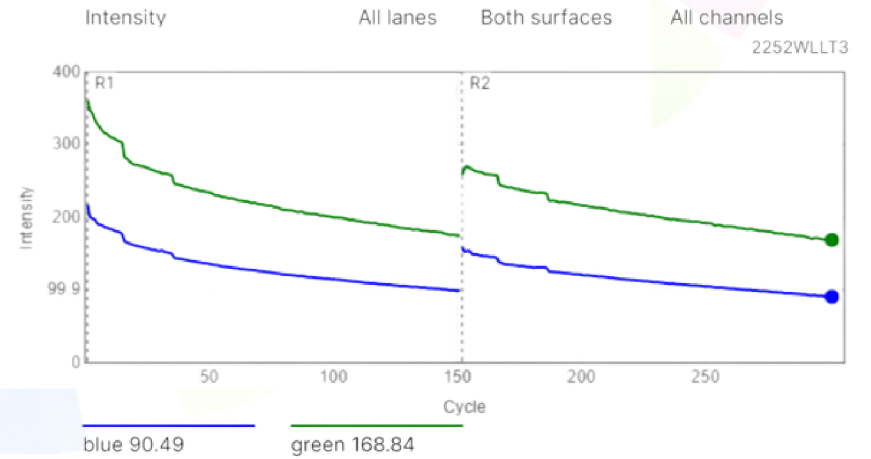


# NovaSeq X Plus Phix Validation Run QC Metrics

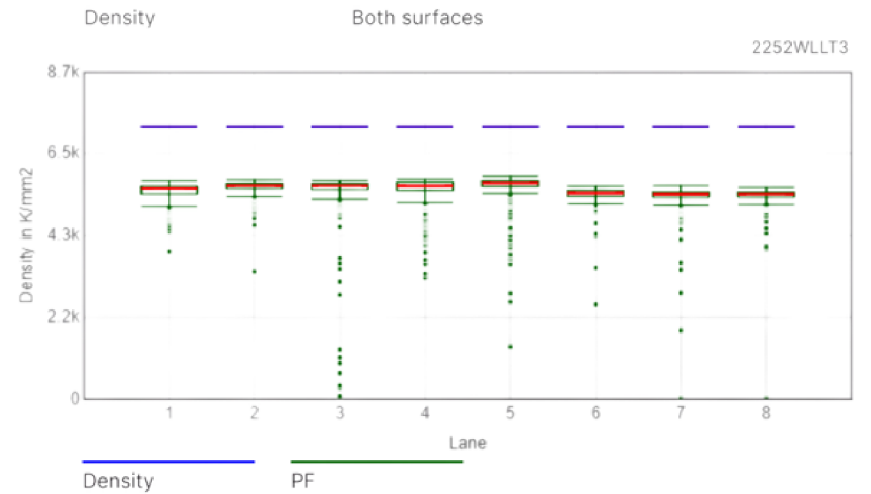
## Flow cell chart



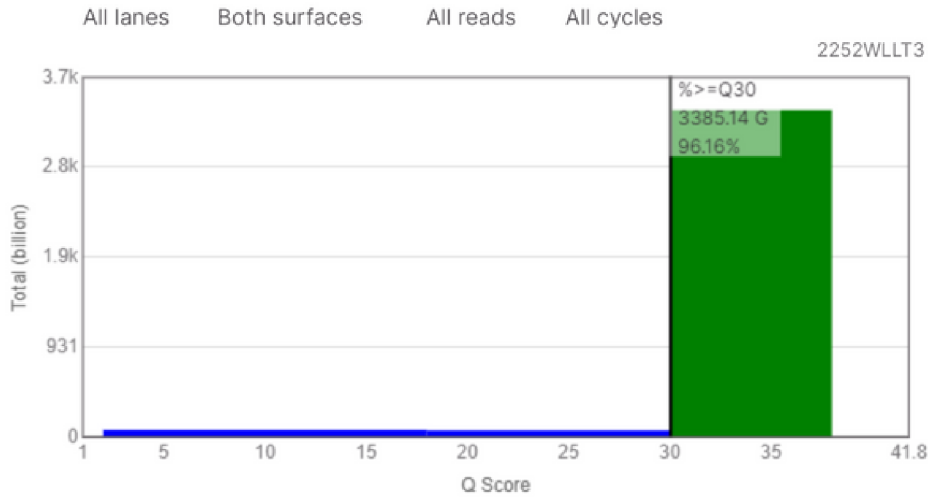
## Data by cycle



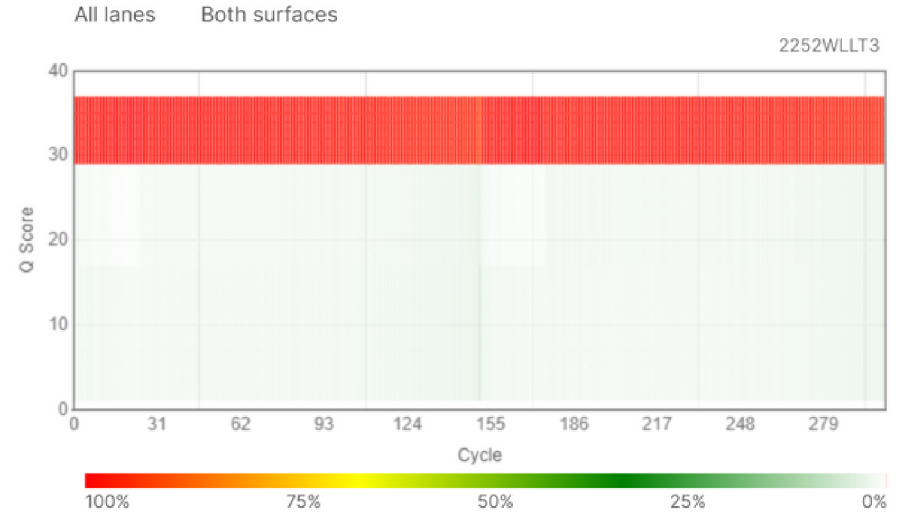
## Data by lane



## QScore distribution



## QScore heatmap



## Run Summary

**Cycle status** Extracted **302** Scored **302** Error rated **0 - 301**

Level	Yield Total (GB)	Projected Yield (GB)	Aligned (%)	Error Rate (%)	Intensity Cycle 1	% Intensity Cycle 1	% >= Q30	% Occupied
Read 1	1,748.7	1,748.7	97.88	0.18	218.36	115.73	96.26	96.91
Read 2	1,748.25	1,748.25	96.21	0.21	159	84.27	96.1	96.91

### Read 1

Lane	Tiles	Density (K/mm2)	% PF	Legacy Phasing / Prephasing Rate	Reads (M)	Reads PF (M)	% >= Q30	Yield (GB)	Cycle Error Rated	Aligned (%)	Error Rate	Error Rate 35 (%)	Error Rate 50 (%)	Error Rate 75 (%)	Error Rate 100 (%)	Intensity Cycle 1	Phasing slope / offset	Prephasing slope / offset
1	392	7,235.24 ± 0	76.09 ± 3.56	0.07 / 0.05	1,950.55	1,484.15	96.38	219.74	0 - 150	99.17 ± 0.17	0.15 ± 0.04	0.07 ± 0.05	0.07 ± 0.04	0.09 ± 0.04	0.11 ± 0.04	222.1 ± 14.12	0.04 / 0.42	0.05 / 0.31
2	392	7,235.24 ± 0	77.75 ± 2.77	0.07 / 0.05	1,950.55	1,516.46	96.56	224.26	0 - 150	99.15 ± 0.2	0.16 ± 0.03	0.08 ± 0.09	0.08 ± 0.06	0.09 ± 0.04	0.11 ± 0.04	230.73 ± 12.18	0.04 / 0.43	0.05 / 0.31
3	392	7,235.24 ± 0	75.08 ± 13.15	0.07 / 0.05	1,950.55	1,464.43	96.5	216.18	0 - 150	93.84 ± 21.78	0.24 ± 0.45	0.09 ± 0.23	0.13 ± 0.4	0.08 ± 0.04	0.11 ± 0.04	219.07 ± 34.45	0.04 / 0.44	0.05 / 0.34
4	392	7,235.24 ± 0	76.53 ± 5.52	0.07 / 0.05	1,950.55	1,492.68	96.28	220.87	0 - 150	98.89 ± 0.98	0.16 ± 0.14	0.08 ± 0.15	0.08 ± 0.14	0.09 ± 0.13	0.11 ± 0.13	216.74 ± 22.48	0.04 / 0.45	0.05 / 0.35
5	392	7,235.24 ± 0	77.34 ± 6.9	0.07 / 0.05	1,950.55	1,508.51	96.53	223.31	0 - 150	98.98 ± 0.5	0.16 ± 0.07	0.06 ± 0.08	0.07 ± 0.07	0.08 ± 0.06	0.1 ± 0.06	219.88 ± 14.34	0.04 / 0.43	0.05 / 0.34
6	392	7,235.24 ± 0	75.16 ± 3.13	0.07 / 0.06	1,950.55	1,466.07	95.99	216.92	0 - 150	98.92 ± 0.55	0.19 ± 0.04	0.08 ± 0.11	0.08 ± 0.08	0.1 ± 0.06	0.13 ± 0.05	220.1 ± 9.83	0.04 / 0.44	0.06 / 0.33
7	392	7,235.24 ± 0	73.7 ± 7.9	0.07 / 0.05	1,950.55	1,437.61	95.84	212.53	0 - 150	95.16 ± 17.77	0.21 ± 0.1	0.13 ± 0.39	0.12 ± 0.27	0.13 ± 0.18	0.15 ± 0.14	210.38 ± 25.13	0.04 / 0.44	0.05 / 0.33
8	392	7,235.24 ± 0	74.52 ± 4.48	0.07 / 0.05	1,950.55	1,453.51	95.96	214.88	0 - 150	98.94 ± 0.35	0.16 ± 0.03	0.05 ± 0.01	0.06 ± 0.01	0.08 ± 0.02	0.11 ± 0.02	207.9 ± 14.77	0.04 / 0.41	0.05 / 0.35

### Read 2

Lane	Tiles	Density (K/mm2)	% PF	Legacy Phasing / Prephasing Rate	Reads (M)	Reads PF (M)	% >= Q30	Yield (GB)	Cycle Error Rated	Aligned (%)	Error Rate	Error Rate 35 (%)	Error Rate 50 (%)	Error Rate 75 (%)	Error Rate 100 (%)	Intensity Cycle 1	Phasing slope / offset	Prephasing slope / offset
1	392	7,235.24 ± 0	76.09 ± 3.56	0.04 / 0.01	1,950.55	1,484.15	96.32	219.7	0 - 150	98.04 ± 0.28	0.18 ± 0.02	0.09 ± 0.02	0.11 ± 0.02	0.14 ± 0.02	0.16 ± 0.02	154.82 ± 15.91	0.04 / 0.47	0.04 / 0.03
2	392	7,235.24 ± 0	77.75 ± 2.77	0.04 / 0.01	1,950.55	1,516.46	96.42	224.28	0 - 150	98.02 ± 0.27	0.19 ± 0.02	0.09 ± 0.05	0.11 ± 0.04	0.14 ± 0.03	0.16 ± 0.02	164.51 ± 16.42	0.05 / 0.49	0.04 / 0.03
3	392	7,235.24 ± 0	75.08 ± 13.15	0.04 / 0.01	1,950.55	1,464.43	96.31	216.03	0 - 150	88.1 ± 29.74	0.2 ± 0.04	0.09 ± 0.06	0.12 ± 0.07	0.15 ± 0.05	0.17 ± 0.04	159.97 ± 26.76	0.04 / 0.48	0.04 / 0.05
4	392	7,235.24 ± 0	76.53 ± 5.52	0.04 / 0.01	1,950.55	1,492.68	96.21	220.82	0 - 150	97.94 ± 0.42	0.2 ± 0.13	0.09 ± 0.08	0.11 ± 0.08	0.15 ± 0.09	0.17 ± 0.1	157.28 ± 17.08	0.04 / 0.51	0.04 / 0.06
5	392	7,235.24 ± 0	77.34 ± 6.9	0.04 / 0.01	1,950.55	1,508.51	96.31	223.3	0 - 150	97.68 ± 1.89	0.22 ± 0.19	0.09 ± 0.08	0.12 ± 0.1	0.15 ± 0.12	0.18 ± 0.15	160.94 ± 11.92	0.05 / 0.49	0.04 / 0.04
6	392	7,235.24 ± 0	75.16 ± 3.13	0.05 / 0.01	1,950.55	1,466.07	95.76	216.87	0 - 150	97.6 ± 0.28	0.22 ± 0.02	0.08 ± 0.02	0.11 ± 0.02	0.15 ± 0.01	0.18 ± 0.01	162.52 ± 11.38	0.05 / 0.5	0.04 / 0.04
7	392	7,235.24 ± 0	73.7 ± 7.9	0.04 / 0.01	1,950.55	1,437.61	95.68	212.49	0 - 150	94.88 ± 15.4	0.21 ± 0.03	0.09 ± 0.02	0.12 ± 0.02	0.15 ± 0.02	0.18 ± 0.03	154.1 ± 16.98	0.05 / 0.48	0.04 / 0.04
8	392	7,235.24 ± 0	74.52 ± 4.48	0.04 / 0.01	1,950.55	1,453.51	95.79	214.76	0 - 150	97.44 ± 0.64	0.2 ± 0.02	0.1 ± 0.03	0.12 ± 0.02	0.15 ± 0.02	0.18 ± 0.02	157.89 ± 11.12	0.04 / 0.46	0.04 / 0.03