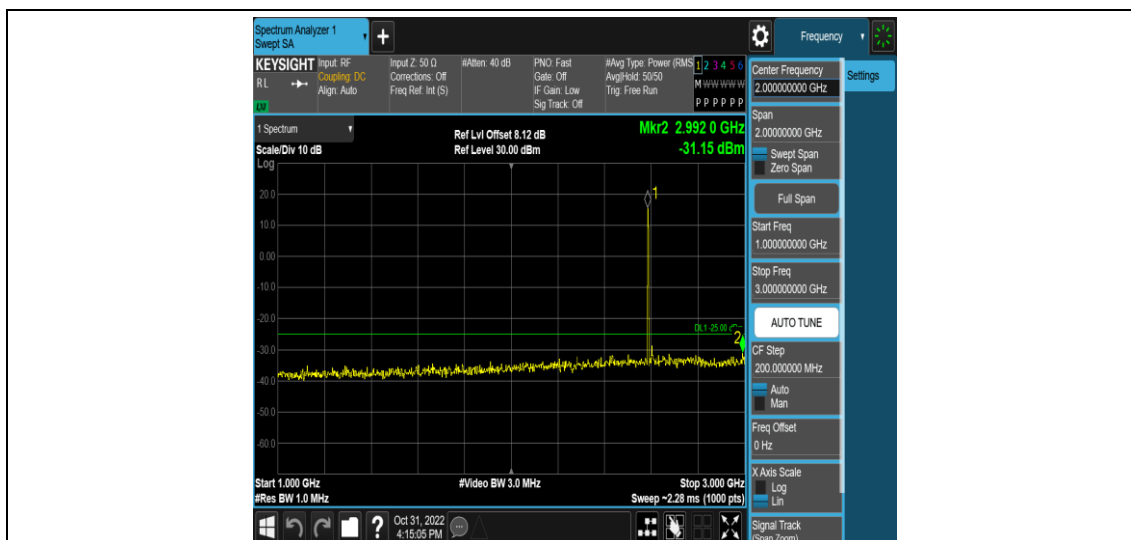
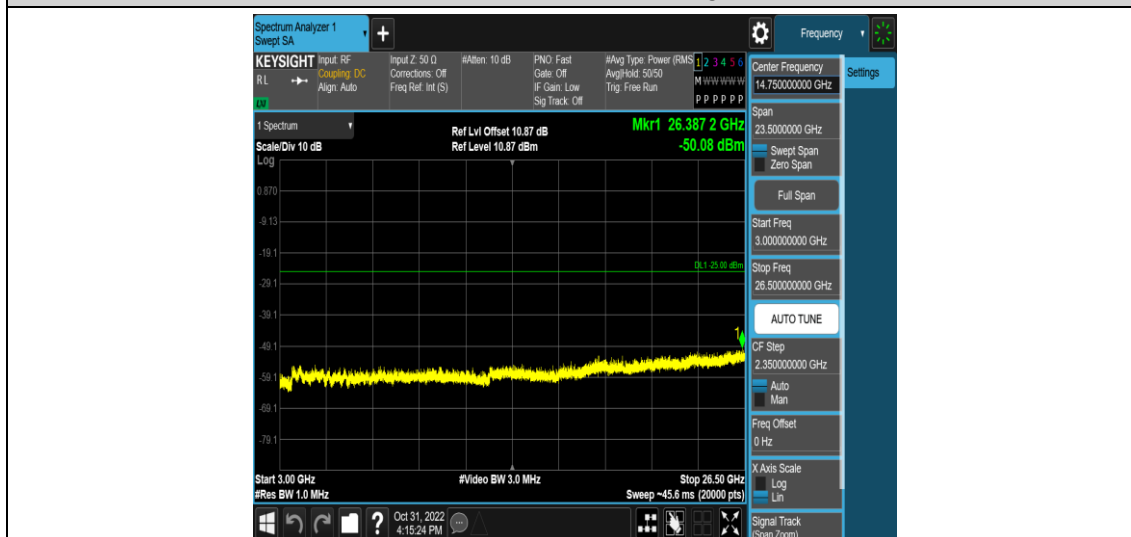




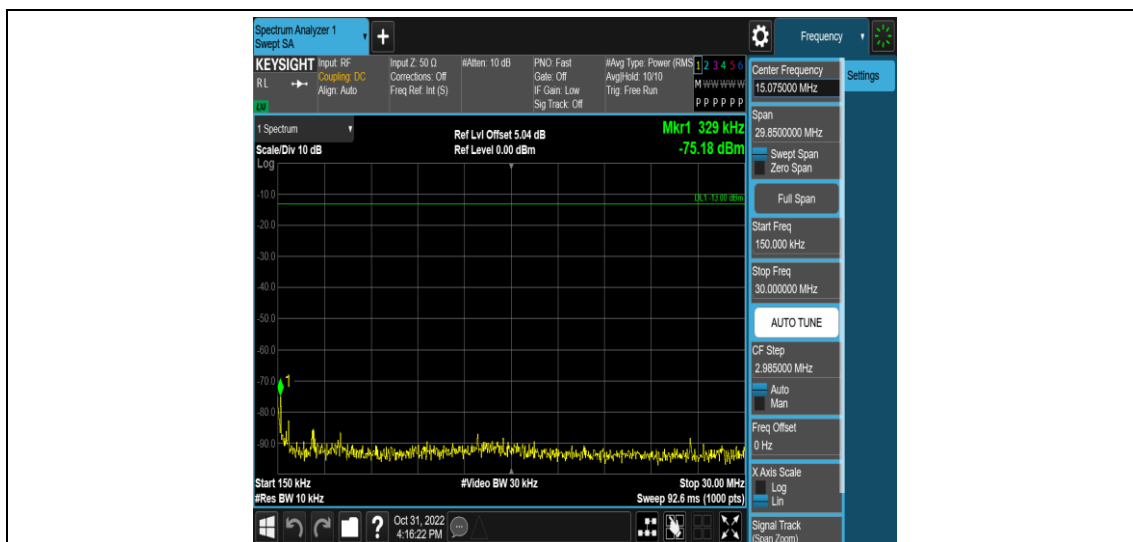
Band38-20MHz-16QAM-38000-1RB#0-Range5:3000~26500MHz



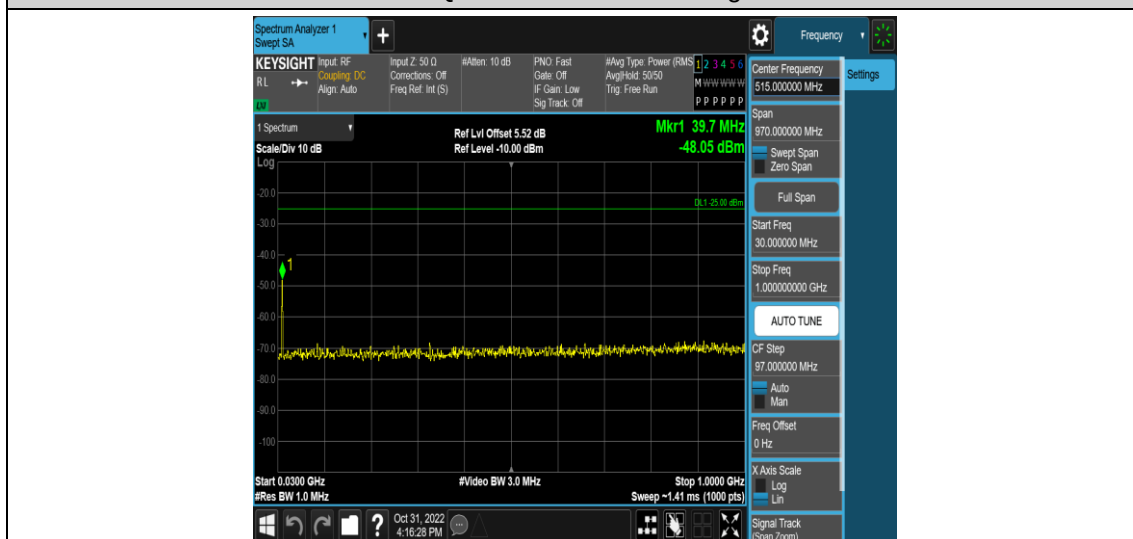
Band38-20MHz-16QAM-38150-1RB#0-Range1:0.009~0.15MHz



Band38-20MHz-16QAM-38150-1RB#0-Range2:0.15~30MHz



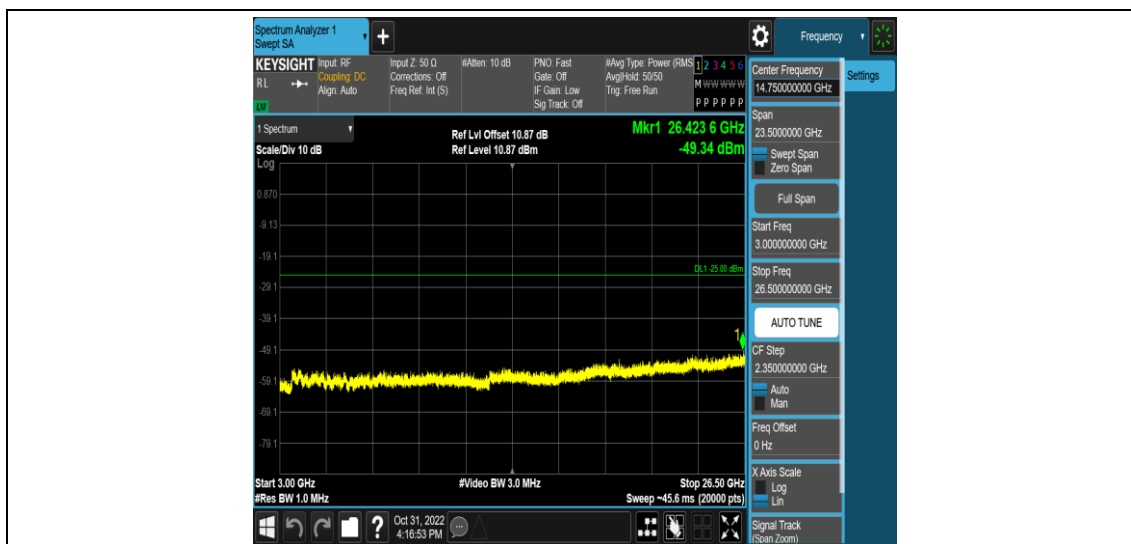
Band38-20MHz-16QAM-38150-1RB#0-Range3:30~1000MHz



Band38-20MHz-16QAM-38150-1RB#0-Range4:1000~3000MHz



Band38-20MHz-16QAM-38150-1RB#0-Range5:3000~26500MHz



Appendix F: Frequency Stability

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	VL	NT	44.63	0.017349	±2.5	PASS
Band38	5MHz	QPSK	37775	25RB#0	VN	NT	45.95	0.017862	±2.5	PASS
Band38	5MHz	QPSK	37775	25RB#0	VH	NT	44.88	0.017446	±2.5	PASS
Band38	5MHz	QPSK	38000	25RB#0	VL	NT	11.56	0.004455	±2.5	PASS
Band38	5MHz	QPSK	38000	25RB#0	VN	NT	15.49	0.005969	±2.5	PASS
Band38	5MHz	QPSK	38000	25RB#0	VH	NT	12.50	0.004817	±2.5	PASS
Band38	5MHz	QPSK	38225	25RB#0	VL	NT	45.18	0.017261	±2.5	PASS
Band38	5MHz	QPSK	38225	25RB#0	VN	NT	41.91	0.016011	±2.5	PASS
Band38	5MHz	QPSK	38225	25RB#0	VH	NT	41.84	0.015985	±2.5	PASS
Band38	5MHz	16QAM	37775	25RB#0	VL	NT	52.21	0.020295	±2.5	PASS
Band38	5MHz	16QAM	37775	25RB#0	VN	NT	54.25	0.021088	±2.5	PASS
Band38	5MHz	16QAM	37775	25RB#0	VH	NT	-1301.62	-0.505975	±2.5	PASS
Band38	5MHz	16QAM	38000	25RB#0	VL	NT	9.61	0.003703	±2.5	PASS
Band38	5MHz	16QAM	38000	25RB#0	VN	NT	11.43	0.004405	±2.5	PASS
Band38	5MHz	16QAM	38000	25RB#0	VH	NT	11.47	0.004420	±2.5	PASS
Band38	5MHz	16QAM	38225	25RB#0	VL	NT	48.15	0.018395	±2.5	PASS
Band38	5MHz	16QAM	38225	25RB#0	VN	NT	51.11	0.019526	±2.5	PASS

Band3 8	5MHz	16QAM	38225	25RB#0	VH	NT	52.71	0.020138	±2.5	PASS
Band3 8	10MHz	QPSK	37800	50RB#0	VL	NT	4.88	0.001895	±2.5	PASS
Band3 8	10MHz	QPSK	37800	50RB#0	VN	NT	-7.88	-0.003060	±2.5	PASS
Band3 8	10MHz	QPSK	37800	50RB#0	VH	NT	-5.82	-0.002260	±2.5	PASS
Band3 8	10MHz	QPSK	38000	50RB#0	VL	NT	-9.87	-0.003803	±2.5	PASS
Band3 8	10MHz	QPSK	38000	50RB#0	VN	NT	9.66	0.003723	±2.5	PASS
Band3 8	10MHz	QPSK	38000	50RB#0	VH	NT	-7.40	-0.002852	±2.5	PASS
Band3 8	10MHz	QPSK	38200	50RB#0	VL	NT	-14.61	-0.005587	±2.5	PASS
Band3 8	10MHz	QPSK	38200	50RB#0	VN	NT	21.07	0.008057	±2.5	PASS
Band3 8	10MHz	QPSK	38200	50RB#0	VH	NT	-7.62	-0.002914	±2.5	PASS
Band3 8	10MHz	16QAM	37800	50RB#0	VL	NT	2.83	0.001099	±2.5	PASS
Band3 8	10MHz	16QAM	37800	50RB#0	VN	NT	-7.72	-0.002998	±2.5	PASS
Band3 8	10MHz	16QAM	37800	50RB#0	VH	NT	-5.89	-0.002287	±2.5	PASS
Band3 8	10MHz	16QAM	38000	50RB#0	VL	NT	-15.54	-0.005988	±2.5	PASS
Band3 8	10MHz	16QAM	38000	50RB#0	VN	NT	-8.37	-0.003225	±2.5	PASS
Band3 8	10MHz	16QAM	38000	50RB#0	VH	NT	-13.70	-0.005279	±2.5	PASS
Band3 8	10MHz	16QAM	38200	50RB#0	VL	NT	-13.52	-0.005170	±2.5	PASS
Band3 8	10MHz	16QAM	38200	50RB#0	VN	NT	-10.31	-0.003943	±2.5	PASS
Band3 8	10MHz	16QAM	38200	50RB#0	VH	NT	-5.55	-0.002122	±2.5	PASS
Band3 8	15MHz	QPSK	37825	75RB#0	VL	NT	-5.82	-0.002258	±2.5	PASS
Band3 8	15MHz	QPSK	37825	75RB#0	VN	NT	3.85	0.001494	±2.5	PASS

Band3 8	15MHz	QPSK	37825	75RB#0	VH	NT	5.74	0.002227	±2.5	PASS
Band3 8	15MHz	QPSK	38000	75RB#0	VL	NT	-8.91	-0.003434	±2.5	PASS
Band3 8	15MHz	QPSK	38000	75RB#0	VN	NT	12.10	0.004663	±2.5	PASS
Band3 8	15MHz	QPSK	38000	75RB#0	VH	NT	-9.63	-0.003711	±2.5	PASS
Band3 8	15MHz	QPSK	38175	75RB#0	VL	NT	-10.99	-0.004207	±2.5	PASS
Band3 8	15MHz	QPSK	38175	75RB#0	VN	NT	6.64	0.002542	±2.5	PASS
Band3 8	15MHz	QPSK	38175	75RB#0	VH	NT	-9.33	-0.003571	±2.5	PASS
Band3 8	15MHz	16QAM	37825	75RB#0	VL	NT	-8.80	-0.003414	±2.5	PASS
Band3 8	15MHz	16QAM	37825	75RB#0	VN	NT	-9.58	-0.003717	±2.5	PASS
Band3 8	15MHz	16QAM	37825	75RB#0	VH	NT	-8.40	-0.003259	±2.5	PASS
Band3 8	15MHz	16QAM	38000	75RB#0	VL	NT	4.81	0.001854	±2.5	PASS
Band3 8	15MHz	16QAM	38000	75RB#0	VN	NT	-5.25	-0.002023	±2.5	PASS
Band3 8	15MHz	16QAM	38000	75RB#0	VH	NT	-8.25	-0.003179	±2.5	PASS
Band3 8	15MHz	16QAM	38175	75RB#0	VL	NT	-11.19	-0.004283	±2.5	PASS
Band3 8	15MHz	16QAM	38175	75RB#0	VN	NT	-4.48	-0.001715	±2.5	PASS
Band3 8	15MHz	16QAM	38175	75RB#0	VH	NT	-9.26	-0.003544	±2.5	PASS
Band3 8	20MHz	QPSK	37850	100RB#0	VL	NT	-6.44	-0.002496	±2.5	PASS
Band3 8	20MHz	QPSK	37850	100RB#0	VN	NT	-9.71	-0.003764	±2.5	PASS
Band3 8	20MHz	QPSK	37850	100RB#0	VH	NT	-3.63	-0.001407	±2.5	PASS
Band3 8	20MHz	QPSK	38000	100RB#0	VL	NT	-5.71	-0.002200	±2.5	PASS
Band3 8	20MHz	QPSK	38000	100RB#0	VN	NT	6.11	0.002355	±2.5	PASS

Band3 8	20MHz	QPSK	38000	100RB#0	VH	NT	-12.15	-0.004682	±2.5	PASS
Band3 8	20MHz	QPSK	38150	100RB#0	VL	NT	-9.96	-0.003816	±2.5	PASS
Band3 8	20MHz	QPSK	38150	100RB#0	VN	NT	8.00	0.003065	±2.5	PASS
Band3 8	20MHz	QPSK	38150	100RB#0	VH	NT	-13.58	-0.005203	±2.5	PASS
Band3 8	20MHz	16QAM	37850	100RB#0	VL	NT	-7.11	-0.002756	±2.5	PASS
Band3 8	20MHz	16QAM	37850	100RB#0	VN	NT	-4.08	-0.001581	±2.5	PASS
Band3 8	20MHz	16QAM	37850	100RB#0	VH	NT	-7.45	-0.002888	±2.5	PASS
Band3 8	20MHz	16QAM	38000	100RB#0	VL	NT	-12.13	-0.004674	±2.5	PASS
Band3 8	20MHz	16QAM	38000	100RB#0	VN	NT	-10.39	-0.004004	±2.5	PASS
Band3 8	20MHz	16QAM	38000	100RB#0	VH	NT	-13.72	-0.005287	±2.5	PASS
Band3 8	20MHz	16QAM	38150	100RB#0	VL	NT	-13.53	-0.005184	±2.5	PASS
Band3 8	20MHz	16QAM	38150	100RB#0	VN	NT	-12.46	-0.004774	±2.5	PASS
Band3 8	20MHz	16QAM	38150	100RB#0	VH	NT	-10.89	-0.004172	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configuration	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band3 8	5MHz	QPSK	37775	25RB#0	NV	-30	50.41	0.019596	±2.5	PASS
Band3 8	5MHz	QPSK	37775	25RB#0	NV	-20	49.54	0.019258	±2.5	PASS
Band3 8	5MHz	QPSK	37775	25RB#0	NV	0	47.91	0.018624	±2.5	PASS
Band3 8	5MHz	QPSK	37775	25RB#0	NV	10	48.98	0.019040	±2.5	PASS
Band3 8	5MHz	QPSK	37775	25RB#0	NV	20	50.81	0.019751	±2.5	PASS
Band3 8	5MHz	QPSK	38000	25RB#0	NV	-30	14.25	0.005491	±2.5	PASS

Band3 8	5MHz	QPSK	38000	25RB#0	NV	-20	13.90	0.005356	±2.5	PASS
Band3 8	5MHz	QPSK	38000	25RB#0	NV	0	17.34	0.006682	±2.5	PASS
Band3 8	5MHz	QPSK	38000	25RB#0	NV	10	13.45	0.005183	±2.5	PASS
Band3 8	5MHz	QPSK	38000	25RB#0	NV	20	9.50	0.003661	±2.5	PASS
Band3 8	5MHz	QPSK	38225	25RB#0	NV	-30	45.45	0.017364	±2.5	PASS
Band3 8	5MHz	QPSK	38225	25RB#0	NV	-20	47.92	0.018308	±2.5	PASS
Band3 8	5MHz	QPSK	38225	25RB#0	NV	0	45.36	0.017330	±2.5	PASS
Band3 8	5MHz	QPSK	38225	25RB#0	NV	10	48.45	0.018510	±2.5	PASS
Band3 8	5MHz	QPSK	38225	25RB#0	NV	20	45.22	0.017276	±2.5	PASS
Band3 8	5MHz	16QAM	37775	25RB#0	NV	-30	-1296.33	-0.503918	±2.5	PASS
Band3 8	5MHz	16QAM	37775	25RB#0	NV	-20	-1299.62	-0.505197	±2.5	PASS
Band3 8	5MHz	16QAM	37775	25RB#0	NV	0	566.53	0.220225	±2.5	PASS
Band3 8	5MHz	16QAM	37775	25RB#0	NV	10	570.85	0.221905	±2.5	PASS
Band3 8	5MHz	16QAM	37775	25RB#0	NV	20	571.60	0.222196	±2.5	PASS
Band3 8	5MHz	16QAM	38000	25RB#0	NV	-30	8.23	0.003171	±2.5	PASS
Band3 8	5MHz	16QAM	38000	25RB#0	NV	-20	9.86	0.003800	±2.5	PASS
Band3 8	5MHz	16QAM	38000	25RB#0	NV	0	10.33	0.003981	±2.5	PASS
Band3 8	5MHz	16QAM	38000	25RB#0	NV	10	14.49	0.005584	±2.5	PASS
Band3 8	5MHz	16QAM	38000	25RB#0	NV	20	13.70	0.005279	±2.5	PASS
Band3 8	5MHz	16QAM	38225	25RB#0	NV	-30	51.26	0.019584	±2.5	PASS
Band3 8	5MHz	16QAM	38225	25RB#0	NV	-20	52.79	0.020168	±2.5	PASS

Band3 8	5MHz	16QAM	38225	25RB#0	NV	0	54.39	0.020779	±2.5	PASS
Band3 8	5MHz	16QAM	38225	25RB#0	NV	10	54.89	0.020970	±2.5	PASS
Band3 8	5MHz	16QAM	38225	25RB#0	NV	20	47.15	0.018013	±2.5	PASS
Band3 8	10MHz	QPSK	37800	50RB#0	NV	-30	-6.81	-0.002645	±2.5	PASS
Band3 8	10MHz	QPSK	37800	50RB#0	NV	-20	-7.47	-0.002901	±2.5	PASS
Band3 8	10MHz	QPSK	37800	50RB#0	NV	0	-5.39	-0.002093	±2.5	PASS
Band3 8	10MHz	QPSK	37800	50RB#0	NV	10	-6.74	-0.002617	±2.5	PASS
Band3 8	10MHz	QPSK	37800	50RB#0	NV	20	-6.45	-0.002505	±2.5	PASS
Band3 8	10MHz	QPSK	38000	50RB#0	NV	-30	-8.30	-0.003198	±2.5	PASS
Band3 8	10MHz	QPSK	38000	50RB#0	NV	-20	-14.29	-0.005507	±2.5	PASS
Band3 8	10MHz	QPSK	38000	50RB#0	NV	0	-12.79	-0.004929	±2.5	PASS
Band3 8	10MHz	QPSK	38000	50RB#0	NV	10	-10.09	-0.003888	±2.5	PASS
Band3 8	10MHz	QPSK	38000	50RB#0	NV	20	-12.39	-0.004775	±2.5	PASS
Band3 8	10MHz	QPSK	38200	50RB#0	NV	-30	-7.25	-0.002772	±2.5	PASS
Band3 8	10MHz	QPSK	38200	50RB#0	NV	-20	-6.85	-0.002620	±2.5	PASS
Band3 8	10MHz	QPSK	38200	50RB#0	NV	0	-11.74	-0.004489	±2.5	PASS
Band3 8	10MHz	QPSK	38200	50RB#0	NV	10	-10.87	-0.004157	±2.5	PASS
Band3 8	10MHz	QPSK	38200	50RB#0	NV	20	-5.15	-0.001969	±2.5	PASS
Band3 8	10MHz	16QAM	37800	50RB#0	NV	-30	-4.75	-0.001845	±2.5	PASS
Band3 8	10MHz	16QAM	37800	50RB#0	NV	-20	-3.25	-0.001262	±2.5	PASS
Band3 8	10MHz	16QAM	37800	50RB#0	NV	0	3.48	0.001351	±2.5	PASS

Band3 8	10MHz	16QAM	37800	50RB#0	NV	10	-6.18	-0.002400	±2.5	PASS
Band3 8	10MHz	16QAM	37800	50RB#0	NV	20	-4.63	-0.001798	±2.5	PASS
Band3 8	10MHz	16QAM	38000	50RB#0	NV	-30	-12.95	-0.004990	±2.5	PASS
Band3 8	10MHz	16QAM	38000	50RB#0	NV	-20	-9.07	-0.003495	±2.5	PASS
Band3 8	10MHz	16QAM	38000	50RB#0	NV	0	-8.68	-0.003345	±2.5	PASS
Band3 8	10MHz	16QAM	38000	50RB#0	NV	10	-11.36	-0.004378	±2.5	PASS
Band3 8	10MHz	16QAM	38000	50RB#0	NV	20	-14.92	-0.005750	±2.5	PASS
Band3 8	10MHz	16QAM	38200	50RB#0	NV	-30	-4.08	-0.001560	±2.5	PASS
Band3 8	10MHz	16QAM	38200	50RB#0	NV	-20	-11.56	-0.004421	±2.5	PASS
Band3 8	10MHz	16QAM	38200	50RB#0	NV	0	-7.40	-0.002830	±2.5	PASS
Band3 8	10MHz	16QAM	38200	50RB#0	NV	10	-4.19	-0.001602	±2.5	PASS
Band3 8	10MHz	16QAM	38200	50RB#0	NV	20	-12.04	-0.004604	±2.5	PASS
Band3 8	15MHz	QPSK	37825	75RB#0	NV	-30	-5.06	-0.001963	±2.5	PASS
Band3 8	15MHz	QPSK	37825	75RB#0	NV	-20	-3.48	-0.001350	±2.5	PASS
Band3 8	15MHz	QPSK	37825	75RB#0	NV	0	-3.45	-0.001339	±2.5	PASS
Band3 8	15MHz	QPSK	37825	75RB#0	NV	10	-7.35	-0.002852	±2.5	PASS
Band3 8	15MHz	QPSK	37825	75RB#0	NV	20	-6.62	-0.002568	±2.5	PASS
Band3 8	15MHz	QPSK	38000	75RB#0	NV	-30	-5.76	-0.002220	±2.5	PASS
Band3 8	15MHz	QPSK	38000	75RB#0	NV	-20	-6.44	-0.002482	±2.5	PASS
Band3 8	15MHz	QPSK	38000	75RB#0	NV	0	-4.73	-0.001823	±2.5	PASS
Band3 8	15MHz	QPSK	38000	75RB#0	NV	10	-2.53	-0.000975	±2.5	PASS

Band3 8	15MHz	QPSK	38000	75RB#0	NV	20	-4.26	-0.001642	±2.5	PASS
Band3 8	15MHz	QPSK	38175	75RB#0	NV	-30	-9.64	-0.003690	±2.5	PASS
Band3 8	15MHz	QPSK	38175	75RB#0	NV	-20	3.86	0.001478	±2.5	PASS
Band3 8	15MHz	QPSK	38175	75RB#0	NV	0	-8.90	-0.003407	±2.5	PASS
Band3 8	15MHz	QPSK	38175	75RB#0	NV	10	-6.12	-0.002343	±2.5	PASS
Band3 8	15MHz	QPSK	38175	75RB#0	NV	20	-2.59	-0.000991	±2.5	PASS
Band3 8	15MHz	16QAM	37825	75RB#0	NV	-30	-6.25	-0.002425	±2.5	PASS
Band3 8	15MHz	16QAM	37825	75RB#0	NV	-20	-7.37	-0.002859	±2.5	PASS
Band3 8	15MHz	16QAM	37825	75RB#0	NV	0	-7.04	-0.002731	±2.5	PASS
Band3 8	15MHz	16QAM	37825	75RB#0	NV	10	-6.79	-0.002634	±2.5	PASS
Band3 8	15MHz	16QAM	37825	75RB#0	NV	20	-5.74	-0.002227	±2.5	PASS
Band3 8	15MHz	16QAM	38000	75RB#0	NV	-30	4.81	0.001854	±2.5	PASS
Band3 8	15MHz	16QAM	38000	75RB#0	NV	-20	-3.16	-0.001218	±2.5	PASS
Band3 8	15MHz	16QAM	38000	75RB#0	NV	0	4.46	0.001719	±2.5	PASS
Band3 8	15MHz	16QAM	38000	75RB#0	NV	10	-5.52	-0.002127	±2.5	PASS
Band3 8	15MHz	16QAM	38000	75RB#0	NV	20	-5.76	-0.002220	±2.5	PASS
Band3 8	15MHz	16QAM	38175	75RB#0	NV	-30	-7.74	-0.002963	±2.5	PASS
Band3 8	15MHz	16QAM	38175	75RB#0	NV	-20	-10.11	-0.003870	±2.5	PASS
Band3 8	15MHz	16QAM	38175	75RB#0	NV	0	-7.71	-0.002951	±2.5	PASS
Band3 8	15MHz	16QAM	38175	75RB#0	NV	10	-7.80	-0.002986	±2.5	PASS
Band3 8	15MHz	16QAM	38175	75RB#0	NV	20	-6.38	-0.002442	±2.5	PASS

Band3 8	20MHz	QPSK	37850	100RB#0	NV	-30	-3.66	-0.001419	±2.5	PASS
Band3 8	20MHz	QPSK	37850	100RB#0	NV	-20	2.59	0.001004	±2.5	PASS
Band3 8	20MHz	QPSK	37850	100RB#0	NV	0	2.33	0.000903	±2.5	PASS
Band3 8	20MHz	QPSK	37850	100RB#0	NV	10	-10.31	-0.003996	±2.5	PASS
Band3 8	20MHz	QPSK	37850	100RB#0	NV	20	-6.05	-0.002345	±2.5	PASS
Band3 8	20MHz	QPSK	38000	100RB#0	NV	-30	-12.97	-0.004998	±2.5	PASS
Band3 8	20MHz	QPSK	38000	100RB#0	NV	-20	-9.56	-0.003684	±2.5	PASS
Band3 8	20MHz	QPSK	38000	100RB#0	NV	0	-8.68	-0.003345	±2.5	PASS
Band3 8	20MHz	QPSK	38000	100RB#0	NV	10	-10.61	-0.004089	±2.5	PASS
Band3 8	20MHz	QPSK	38000	100RB#0	NV	20	-8.88	-0.003422	±2.5	PASS
Band3 8	20MHz	QPSK	38150	100RB#0	NV	-30	-11.16	-0.004276	±2.5	PASS
Band3 8	20MHz	QPSK	38150	100RB#0	NV	-20	-10.39	-0.003981	±2.5	PASS
Band3 8	20MHz	QPSK	38150	100RB#0	NV	0	-11.66	-0.004467	±2.5	PASS
Band3 8	20MHz	QPSK	38150	100RB#0	NV	10	-13.23	-0.005069	±2.5	PASS
Band3 8	20MHz	QPSK	38150	100RB#0	NV	20	-8.41	-0.003222	±2.5	PASS
Band3 8	20MHz	16QAM	37850	100RB#0	NV	-30	-7.21	-0.002795	±2.5	PASS
Band3 8	20MHz	16QAM	37850	100RB#0	NV	-20	-2.59	-0.001004	±2.5	PASS
Band3 8	20MHz	16QAM	37850	100RB#0	NV	0	-9.37	-0.003632	±2.5	PASS
Band3 8	20MHz	16QAM	37850	100RB#0	NV	10	-2.42	-0.000938	±2.5	PASS
Band3 8	20MHz	16QAM	37850	100RB#0	NV	20	4.53	0.001756	±2.5	PASS
Band3 8	20MHz	16QAM	38000	100RB#0	NV	-30	-10.90	-0.004200	±2.5	PASS

Band3 8	20MHz	16QAM	38000	100RB#0	NV	-20	-11.82	-0.004555	±2.5	PASS
Band3 8	20MHz	16QAM	38000	100RB#0	NV	0	-9.30	-0.003584	±2.5	PASS
Band3 8	20MHz	16QAM	38000	100RB#0	NV	10	-13.55	-0.005222	±2.5	PASS
Band3 8	20MHz	16QAM	38000	100RB#0	NV	20	-7.45	-0.002871	±2.5	PASS
Band3 8	20MHz	16QAM	38150	100RB#0	NV	-30	-12.30	-0.004713	±2.5	PASS
Band3 8	20MHz	16QAM	38150	100RB#0	NV	-20	-11.64	-0.004460	±2.5	PASS
Band3 8	20MHz	16QAM	38150	100RB#0	NV	0	-8.54	-0.003272	±2.5	PASS
Band3 8	20MHz	16QAM	38150	100RB#0	NV	10	-8.81	-0.003375	±2.5	PASS
Band3 8	20MHz	16QAM	38150	100RB#0	NV	20	-10.50	-0.004023	±2.5	PASS