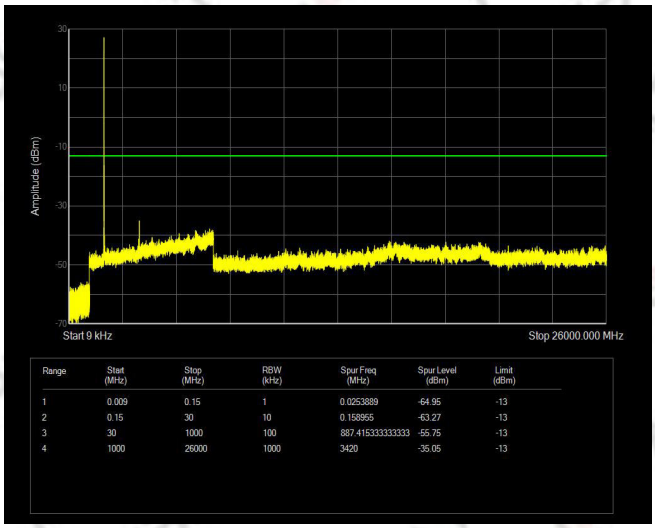
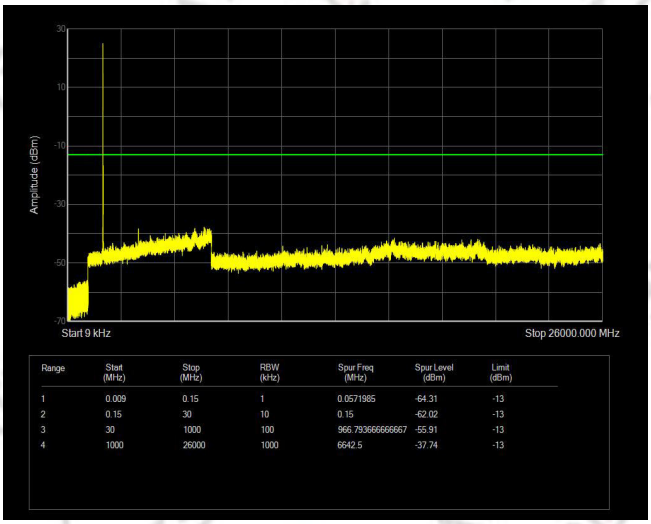


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0253889	-64.95	-13
2	0.15	30	10	0.158955	-63.27	-13
3	30	1000	100	887.415333333333	-55.75	-13
4	1000	26000	1000	3420	-35.05	-13

Band4 QAM16 BW=5MHz Channel=19975

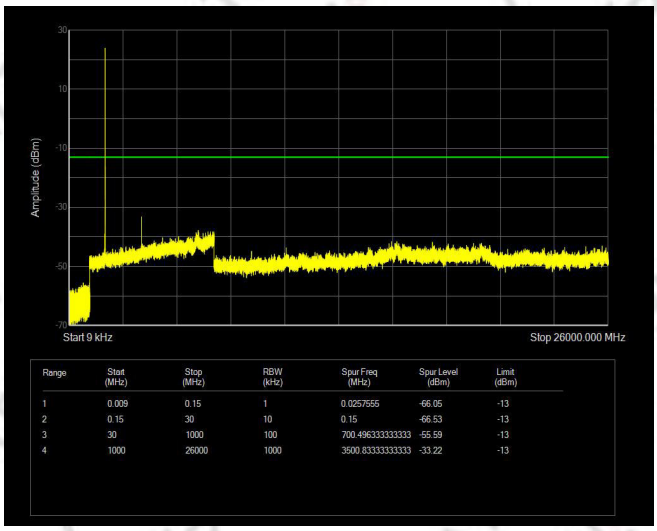
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0571985	-64.31	-13
2	0.15	30	10	0.15	-62.02	-13
3	30	1000	100	966.793666666667	-55.91	-13
4	1000	26000	1000	6642.5	-37.74	-13

Band4 QAM16 BW=5MHz Channel=20175

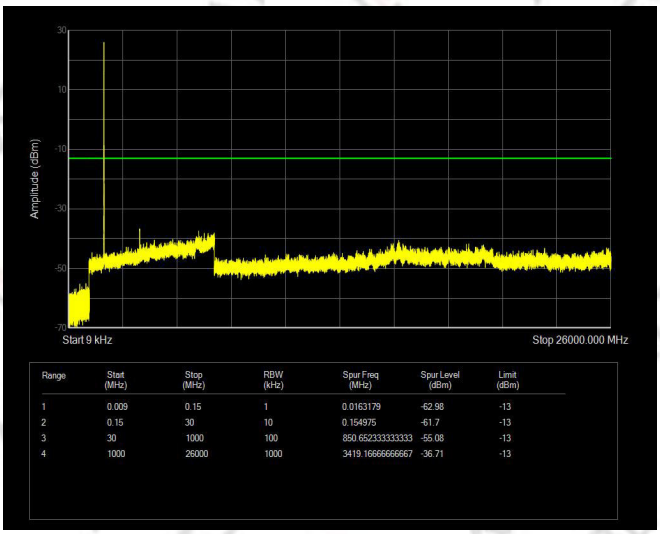
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0257555	-66.05	-13
2	0.15	30	10	0.15	-66.53	-13
3	30	1000	100	700.496333333333	-55.59	-13
4	1000	26000	1000	3500.83333333333	-33.22	-13

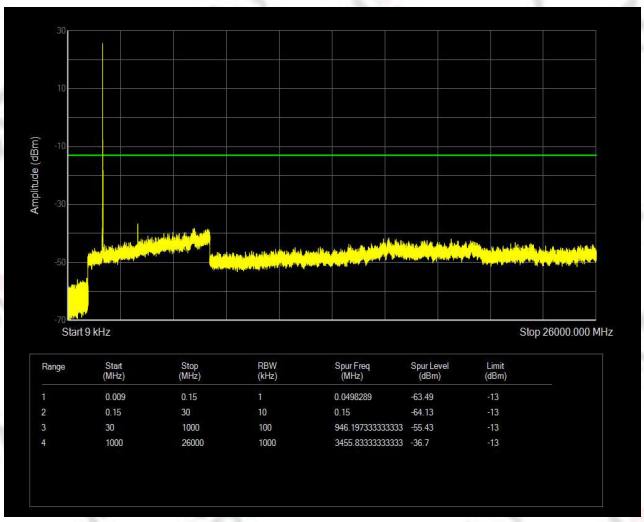
Band4 QAM16 BW=5MHz Channel=20375

RB Size=1 Position=#0 NVNT



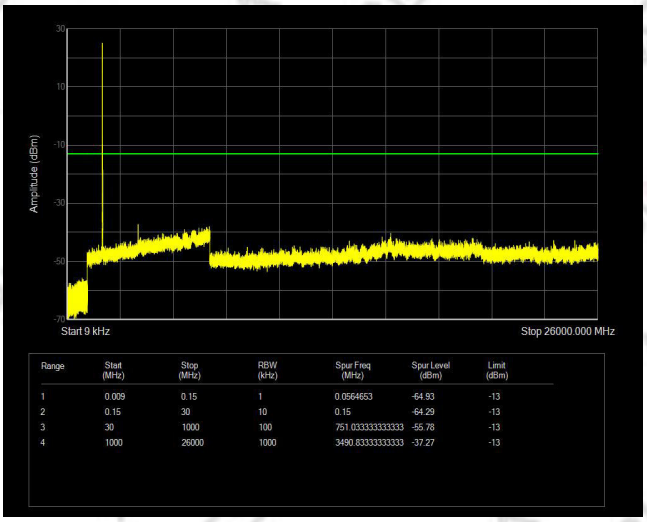
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0163179	-62.98	-13
2	0.15	30	10	0.154975	-61.7	-13
3	30	1000	100	850.652333333333	-55.08	-13
4	1000	26000	1000	3419.16666666667	-36.71	-13

Band4 QAM16 BW=10MHz Channel=20000 RB Size=1 Position=#0 NVNT



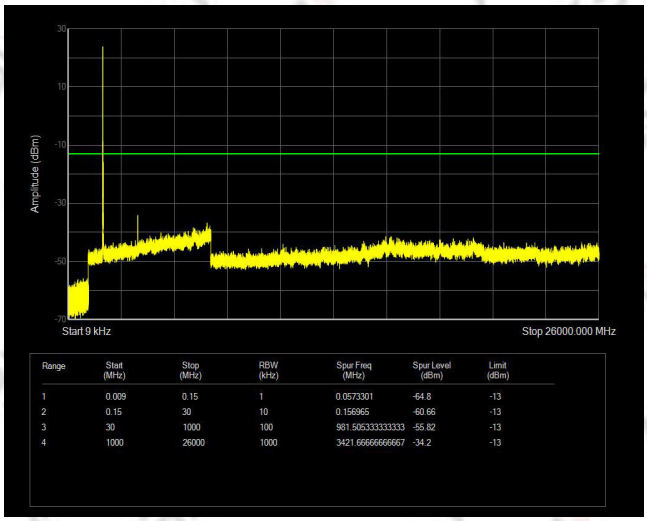
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0498289	-63.49	-13
2	0.15	30	10	0.15	-64.13	-13
3	30	1000	100	946.197333333333	-55.43	-13
4	1000	26000	1000	3455.83333333333	-36.7	-13

Band4 QAM16 BW=10MHz Channel=20175 RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0564653	-64.93	-13
2	0.15	30	10	0.15	-64.29	-13
3	30	1000	100	751.033333333333	-55.78	-13
4	1000	26000	1000	3490.83333333333	-37.27	-13

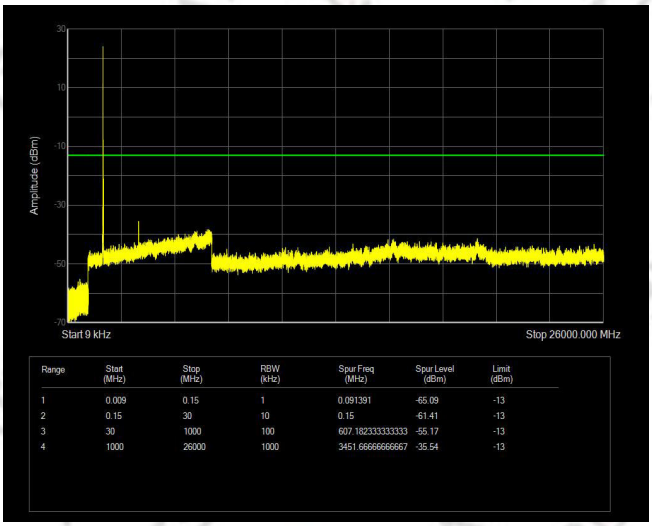
Band4 QAM16 BW=10MHz Channel=20350 RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0573301	-64.8	-13
2	0.15	30	10	0.156965	-60.66	-13
3	30	1000	100	981.505333333333	-55.82	-13
4	1000	26000	1000	3421.66666666667	-34.2	-13

Band4 QAM16 BW=15MHz Channel=20025 RB Size=1 Position=#0

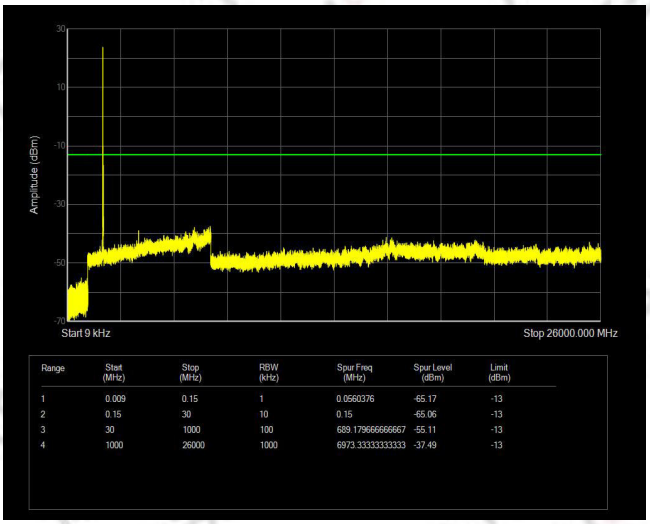
NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.091391	-65.09	-13
2	0.15	30	10	0.15	-61.41	-13
3	30	1000	100	607.182333333333	-55.17	-13
4	1000	26000	1000	3451.66666666667	-35.54	-13

Band4 QAM16 BW=15MHz Channel=20175 RB Size=1 Position=#0

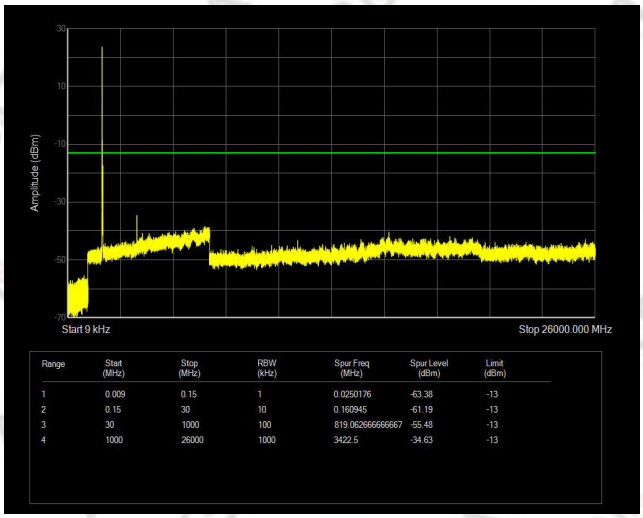
NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0560376	-65.17	-13
2	0.15	30	10	0.15	-65.06	-13
3	30	1000	100	689.179666666667	-55.11	-13
4	1000	26000	1000	6973.33333333333	-37.49	-13

Band4 QAM16 BW=15MHz Channel=20325 RB Size=1 Position=#0

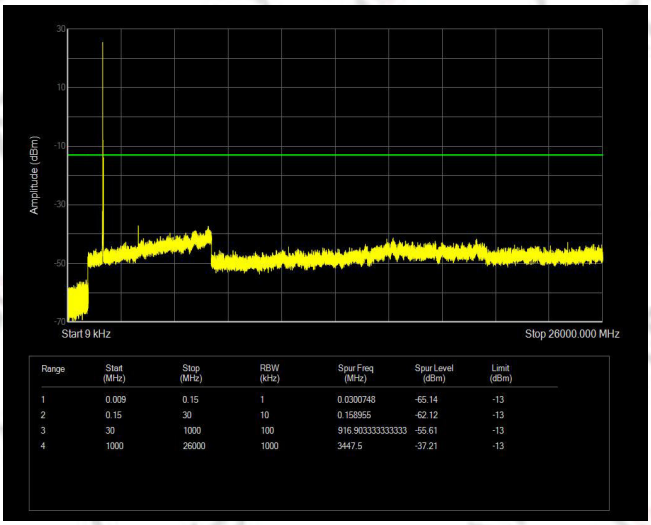
NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0250176	-63.38	-13
2	0.15	30	10	0.160945	-61.19	-13
3	30	1000	100	819.062666666667	-55.48	-13
4	1000	26000	1000	3422.5	-34.63	-13

Band4 QAM16 BW=20MHz Channel=20050 RB Size=1 Position=#0

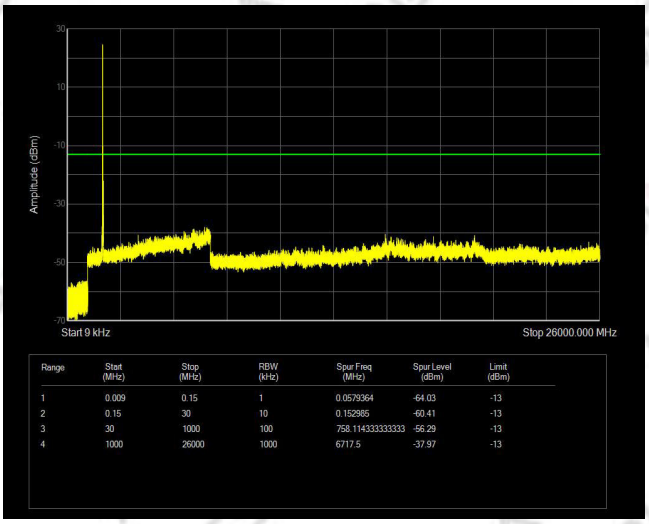
NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0300748	-65.14	-13
2	0.15	30	10	0.158955	-62.12	-13
3	30	1000	100	916.903333333333	-55.61	-13
4	1000	26000	1000	3447.5	-37.21	-13

Band4 QAM16 BW=20MHz Channel=20175 RB Size=1 Position=#0

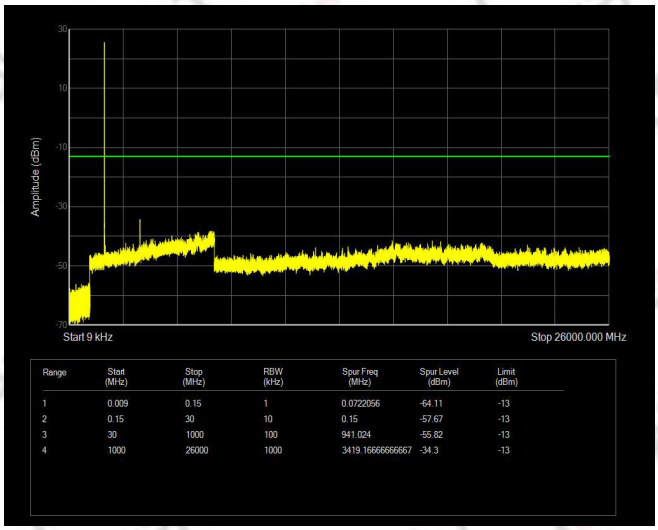
NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0579364	-64.03	-13
2	0.15	30	10	0.152985	-60.41	-13
3	30	1000	100	758.114333333333	-56.29	-13
4	1000	26000	1000	6717.5	-37.97	-13

Band4 QAM16 BW=20MHz Channel=20300 RB Size=1 Position=#0

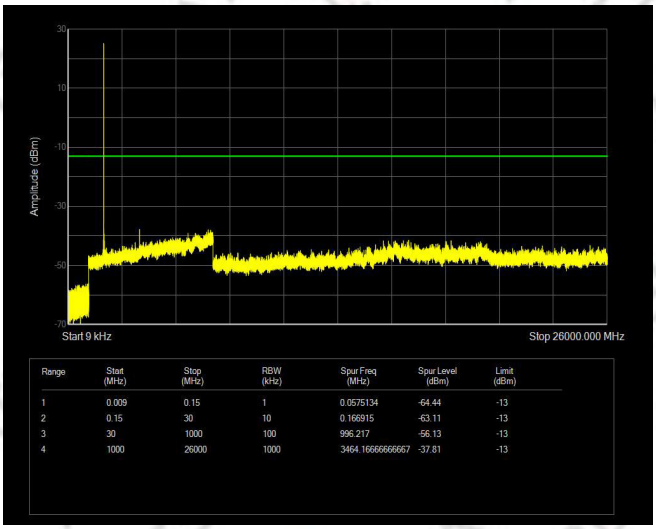
NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0722056	-64.11	-13
2	0.15	30	10	0.15	-57.67	-13
3	30	1000	100	941.024	-55.82	-13
4	1000	26000	1000	3419.16666666667	-34.3	-13

Band4 QPSK BW=1.4MHz Channel=19957

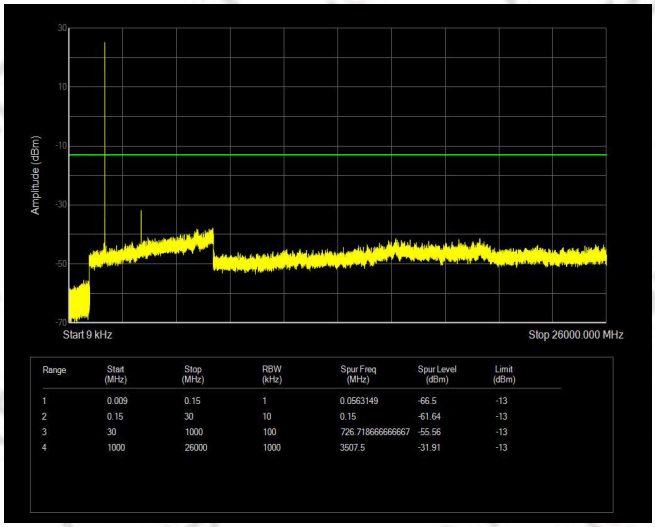
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0575134	-64.44	-13
2	0.15	30	10	0.166915	-63.11	-13
3	30	1000	100	996.217	-56.13	-13
4	1000	26000	1000	3464.16666666667	-37.81	-13

Band4 QPSK BW=1.4MHz Channel=20175

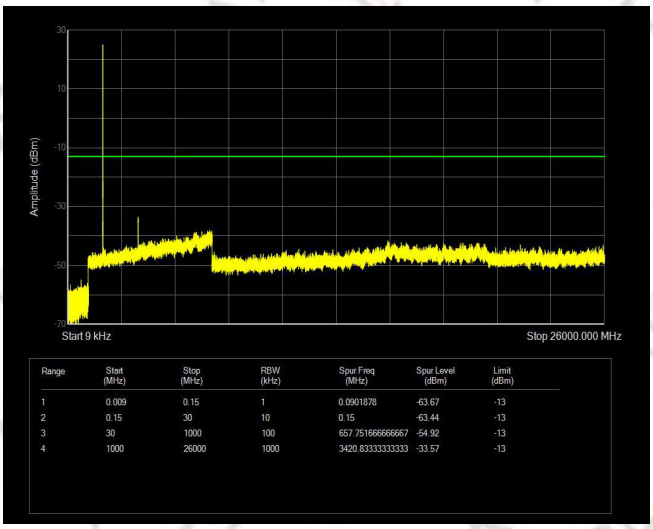
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0563149	-66.5	-13
2	0.15	30	10	0.15	-61.64	-13
3	30	1000	100	726.718666666667	-55.56	-13
4	1000	26000	1000	3507.5	-31.91	-13

Band4 QPSK BW=1.4MHz Channel=20393

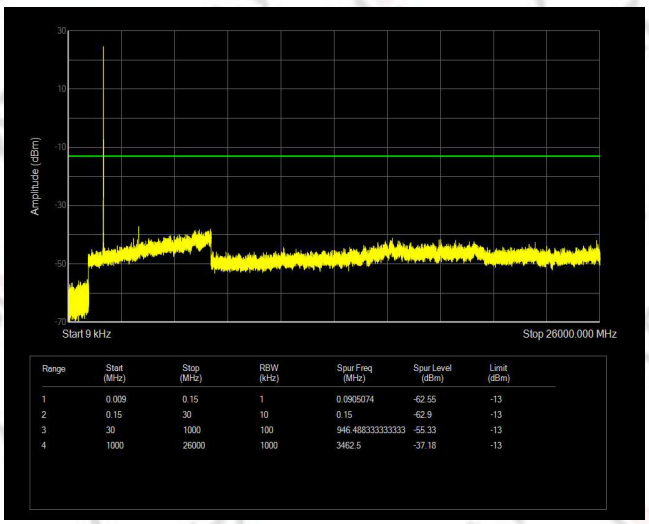
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0901878	-63.67	-13
2	0.15	30	10	0.15	-63.44	-13
3	30	1000	100	657.751666666667	-54.92	-13
4	1000	26000	1000	3420.83333333333	-33.57	-13

Band4 QPSK BW=3MHz Channel=19965

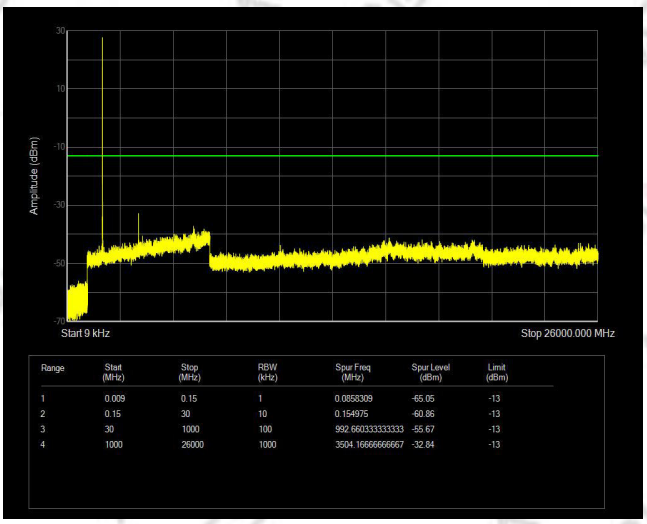
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0905074	-62.55	-13
2	0.15	30	10	0.15	-62.9	-13
3	30	1000	100	946.488333333333	-55.33	-13
4	1000	26000	1000	3462.5	-37.18	-13

Band4 QPSK BW=3MHz Channel=20175

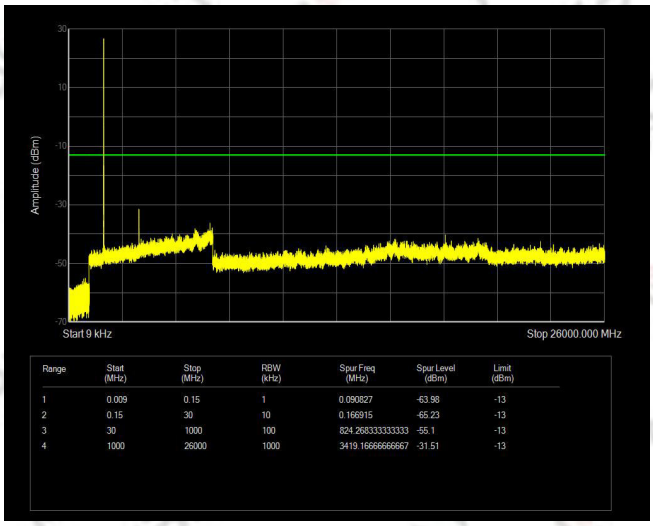
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0858309	-65.05	-13
2	0.15	30	10	0.154975	-60.86	-13
3	30	1000	100	992.660333333333	-55.67	-13
4	1000	26000	1000	3504.16666666667	-32.84	-13

Band4 QPSK BW=3MHz Channel=20385

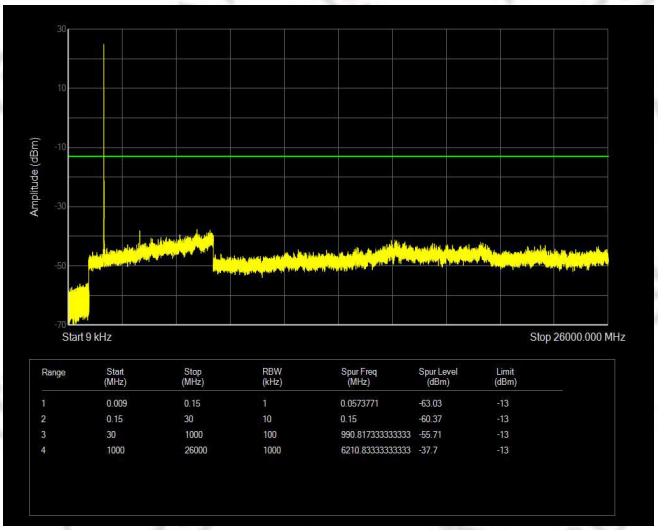
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.090827	-63.98	-13
2	0.15	30	10	0.166915	-65.23	-13
3	30	1000	100	824.266333333333	-55.1	-13
4	1000	26000	1000	3419.16666666667	-31.51	-13

Band4 QPSK BW=5MHz Channel=19975

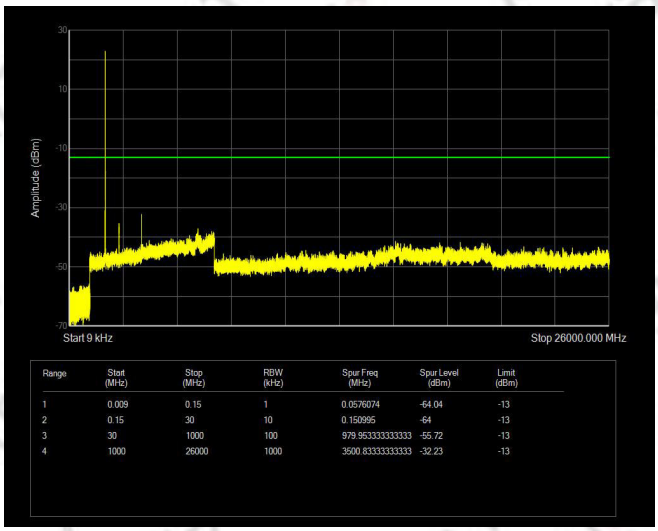
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0573771	-63.03	-13
2	0.15	30	10	0.15	-60.37	-13
3	30	1000	100	990.817333333333	-55.71	-13
4	1000	26000	1000	6210.83333333333	-37.7	-13

Band4 QPSK BW=5MHz Channel=20175

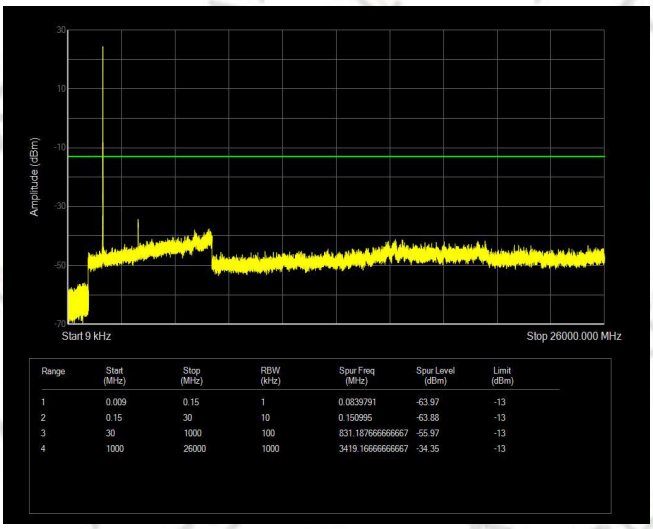
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0576074	-64.04	-13
2	0.15	30	10	0.150995	-64	-13
3	30	1000	100	979.953333333333	-55.72	-13
4	1000	26000	1000	3500.83333333333	-32.23	-13

Band4 QPSK BW=5MHz Channel=20375

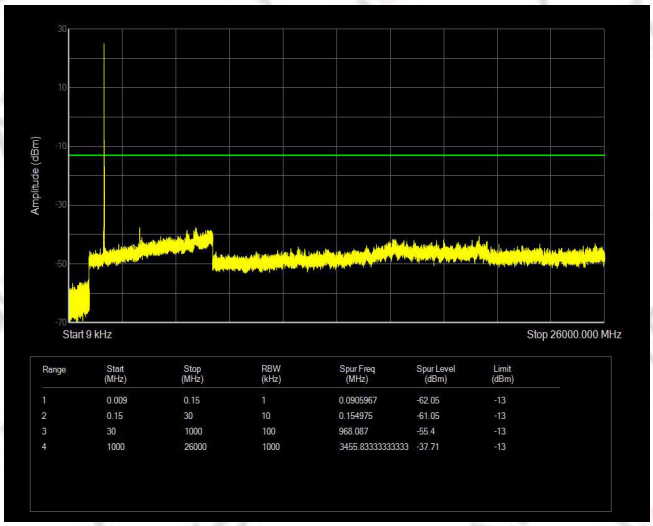
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0839791	-63.97	-13
2	0.15	30	10	0.150995	-63.88	-13
3	30	1000	100	831.187666666667	-55.97	-13
4	1000	26000	1000	3419.16666666667	-34.35	-13

Band4 QPSK BW=10MHz Channel=20000

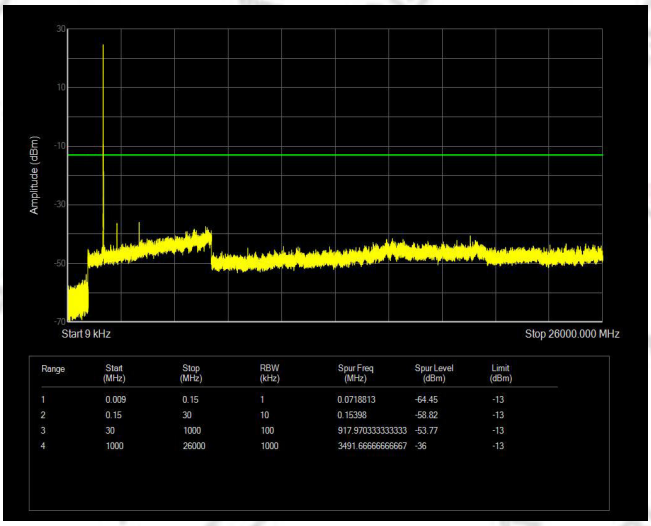
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0905967	-62.05	-13
2	0.15	30	10	0.154975	-61.05	-13
3	30	1000	100	968.087	-55.4	-13
4	1000	26000	1000	3455.83333333333	-37.71	-13

Band4 QPSK BW=10MHz Channel=20175

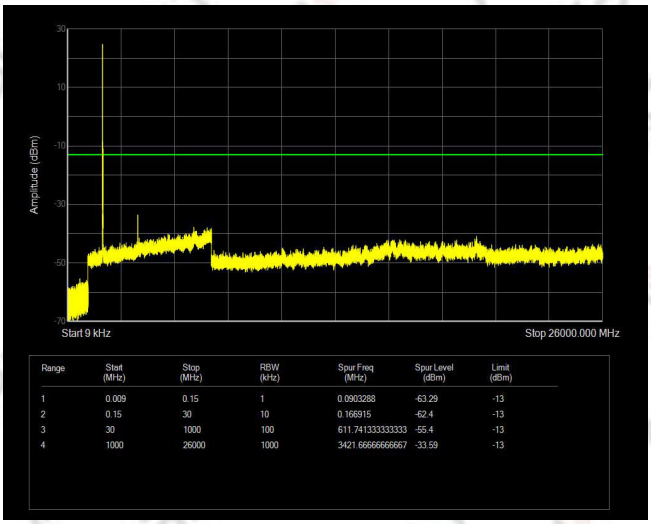
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0718813	-64.45	-13
2	0.15	30	10	0.15398	-58.82	-13
3	30	1000	100	917.970333333333	-53.77	-13
4	1000	26000	1000	3491.66666666667	-36	-13

Band4 QPSK BW=10MHz Channel=20350

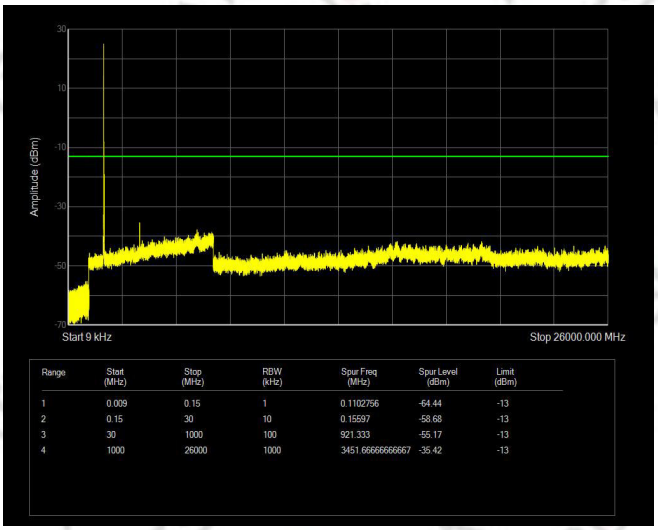
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0903288	-63.29	-13
2	0.15	30	10	0.166915	-62.4	-13
3	30	1000	100	611.741333333333	-55.4	-13
4	1000	26000	1000	3421.66666666667	-33.59	-13

Band4 QPSK BW=15MHz Channel=20025

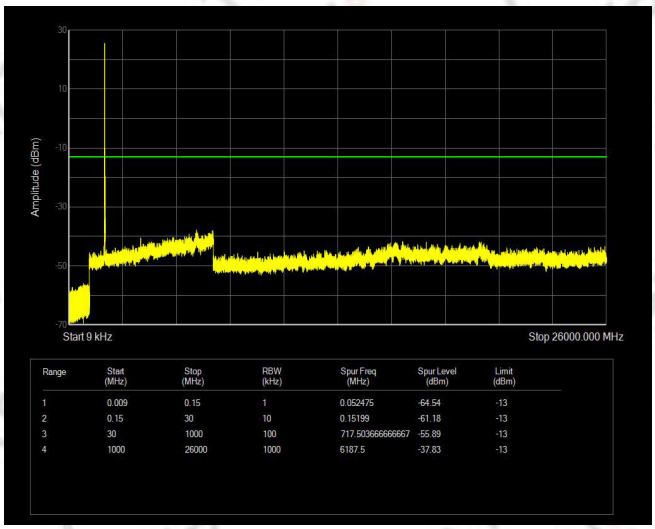
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.1102756	-64.44	-13
2	0.15	30	10	0.15597	-58.68	-13
3	30	1000	100	921.333	-55.17	-13
4	1000	26000	1000	3451.66666666667	-35.42	-13

Band4 QPSK BW=15MHz Channel=20175

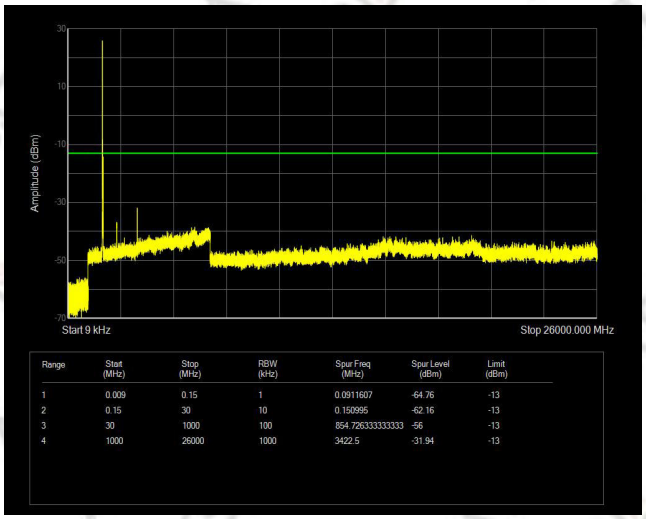
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.052475	-64.54	-13
2	0.15	30	10	0.15199	-61.18	-13
3	30	1000	100	717.503666666667	-55.89	-13
4	1000	26000	1000	6187.5	-37.83	-13

Band4 QPSK BW=15MHz Channel=20325

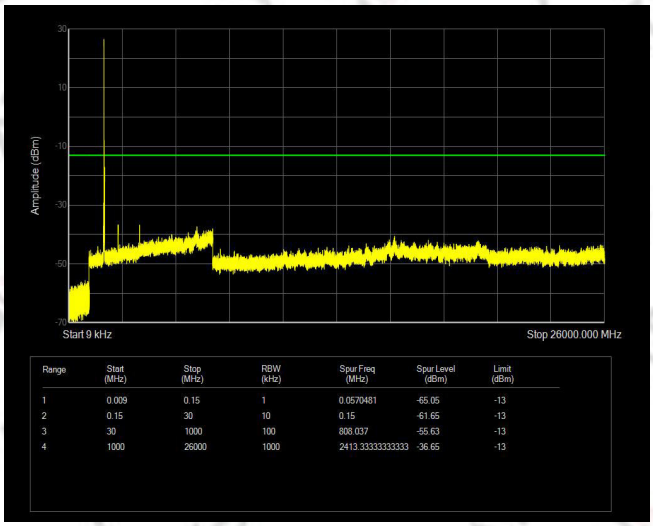
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0911607	-64.76	-13
2	0.15	30	10	0.150995	-62.16	-13
3	30	1000	100	854.726333333333	-56	-13
4	1000	26000	1000	3422.5	-31.94	-13

Band4 QPSK BW=20MHz Channel=20050

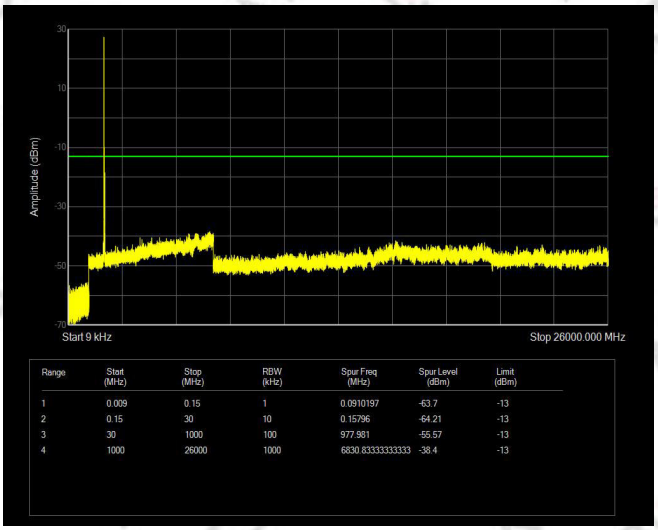
RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0570481	-65.05	-13
2	0.15	30	10	0.15	-61.65	-13
3	30	1000	100	808.037	-55.63	-13
4	1000	26000	1000	2413.33333333333	-36.65	-13

Band4 QPSK BW=20MHz Channel=20175

RB Size=1 Position=#0 NVNT



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0910197	-63.7	-13
2	0.15	30	10	0.15796	-64.21	-13
3	30	1000	100	977.981	-55.57	-13
4	1000	26000	1000	6830.83333333333	-38.4	-13

Band4 QPSK BW=20MHz Channel=20300

RB Size=1 Position=#0 NVNT

LTE Band 5

01 Conducted output power

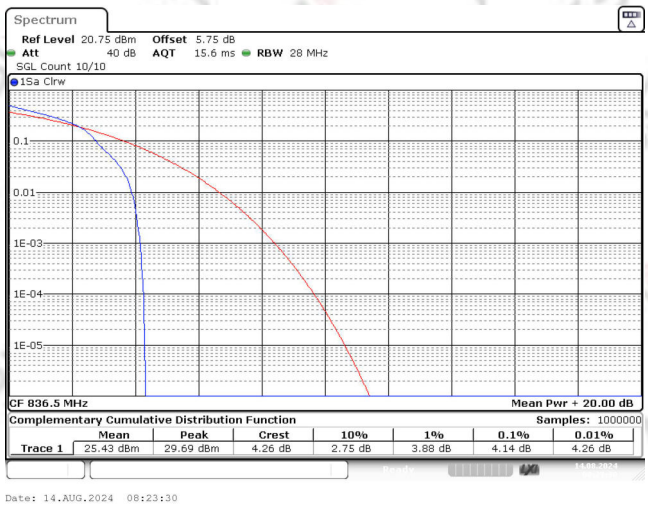
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)	Verdict
Band5	1.4	20407	1	#0	QAM16	21.71	1.1	20.66	37	22.81	37	PASS
Band5	1.4	20525	1	#0	QAM16	21.31	1.1	20.26	37	22.41	37	PASS
Band5	1.4	20643	1	#0	QAM16	21.82	1.1	20.77	37	22.92	37	PASS
Band5	3	20415	1	#0	QAM16	**22.00**	1.1	20.95	37	23.10	37	PASS
Band5	3	20525	1	#0	QAM16	21.66	1.1	20.61	37	22.76	37	PASS
Band5	3	20635	1	#0	QAM16	21.67	1.1	20.62	37	22.77	37	PASS
Band5	5	20425	1	#0	QAM16	21.99	1.1	20.94	37	23.09	37	PASS
Band5	5	20525	1	#0	QAM16	21.68	1.1	20.63	37	22.78	37	PASS
Band5	5	20625	1	#0	QAM16	21.87	1.1	20.82	37	22.97	37	PASS
Band5	10	20450	1	#0	QAM16	**21.96**	1.1	20.91	37	23.06	37	PASS
Band5	10	20525	1	#0	QAM16	21.59	1.1	20.54	37	22.69	37	PASS
Band5	10	20600	1	#0	QAM16	21.36	1.1	20.31	37	22.46	37	PASS
Band5	1.4	20407	1	#0	QPSK	22.51	1.1	21.46	37	23.61	37	PASS
Band5	1.4	20525	1	#0	QPSK	22.45	1.1	21.40	37	23.55	37	PASS
Band5	1.4	20643	1	#0	QPSK	22.73	1.1	21.68	37	23.83	37	PASS
Band5	3	20415	1	#0	QPSK	22.58	1.1	21.53	37	23.68	37	PASS
Band5	3	20525	1	#0	QPSK	22.45	1.1	21.40	37	23.55	37	PASS
Band5	3	20635	1	#0	QPSK	**22.78**	1.1	21.73	37	23.88	37	PASS
Band5	5	20425	1	#0	QPSK	22.49	1.1	21.44	37	23.59	37	PASS
Band5	5	20525	1	#0	QPSK	22.38	1.1	21.33	37	23.48	37	PASS
Band5	5	20625	1	#0	QPSK	22.60	1.1	21.55	37	23.70	37	PASS
Band5	10	20450	1	#0	QPSK	22.59	1.1	21.54	37	23.69	37	PASS
Band5	10	20525	1	#0	QPSK	22.46	1.1	21.41	37	23.56	37	PASS
Band5	10	20600	1	#0	QPSK	**22.61**	1.1	21.56	37	23.71	37	PASS

02 Frequency stability

Condition	Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Result(Hz)	Result (ppm)	Low Limit (ppm)	high Limit (ppm)	Verdict
NVNT	Band5	1.4	20407	6	#0	QAM16	-7.93	-0.010	-2.5	2.5	PASS
NVNT	Band5	1.4	20643	6	#0	QAM16	-0.60	-0.001	-2.5	2.5	PASS
NVNT	Band5	3	20415	15	#0	QAM16	-9.14	-0.011	-2.5	2.5	PASS
NVNT	Band5	3	20635	15	#0	QAM16	-0.43	-0.001	-2.5	2.5	PASS
NVNT	Band5	5	20425	25	#0	QAM16	-2.49	-0.003	-2.5	2.5	PASS
NVNT	Band5	5	20625	25	#0	QAM16	-5.64	-0.007	-2.5	2.5	PASS
NVNT	Band5	10	20450	50	#0	QAM16	-7.70	-0.009	-2.5	2.5	PASS
NVNT	Band5	10	20600	50	#0	QAM16	-4.48	-0.005	-2.5	2.5	PASS
NVNT	Band5	1.4	20407	6	#0	QPSK	-5.46	-0.007	-2.5	2.5	PASS
NVNT	Band5	1.4	20643	6	#0	QPSK	-6.92	-0.008	-2.5	2.5	PASS
NVNT	Band5	3	20415	15	#0	QPSK	-10.64	-0.013	-2.5	2.5	PASS
NVNT	Band5	3	20635	15	#0	QPSK	-1.22	-0.001	-2.5	2.5	PASS
NVNT	Band5	5	20425	25	#0	QPSK	-2.40	-0.003	-2.5	2.5	PASS
NVNT	Band5	5	20625	25	#0	QPSK	-8.01	-0.009	-2.5	2.5	PASS
NVNT	Band5	10	20450	50	#0	QPSK	-6.88	-0.008	-2.5	2.5	PASS
NVNT	Band5	10	20600	50	#0	QPSK	-5.02	-0.006	-2.5	2.5	PASS

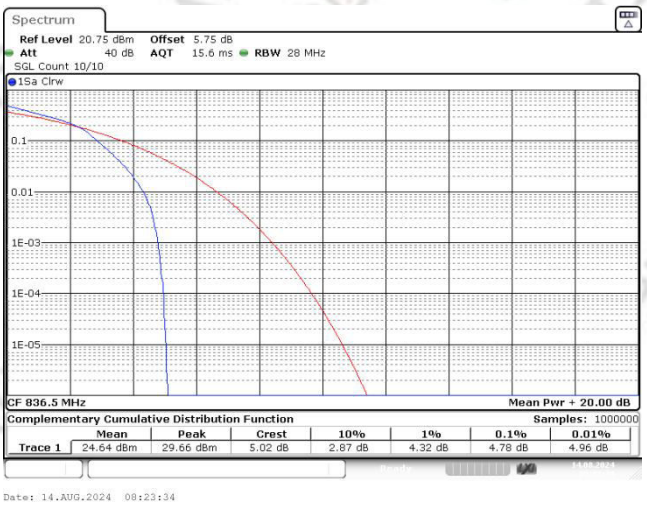
03 Peak-to-Average Ratio

Condition	Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Result (dB)	high Limit (dB)	Verdict
NVNT	Band5	1.4	20525	1	#0	QAM16	4.14	13	PASS
NVNT	Band5	1.4	20525	6	#0	QAM16	4.78	13	PASS
NVNT	Band5	3	20525	1	#0	QAM16	4.20	13	PASS
NVNT	Band5	3	20525	15	#0	QAM16	4.90	13	PASS
NVNT	Band5	5	20525	1	#0	QAM16	4.55	13	PASS
NVNT	Band5	5	20525	25	#0	QAM16	5.07	13	PASS
NVNT	Band5	10	20525	1	#0	QAM16	5.33	13	PASS
NVNT	Band5	10	20525	50	#0	QAM16	5.30	13	PASS
NVNT	Band5	1.4	20525	1	#0	QPSK	3.10	13	PASS
NVNT	Band5	1.4	20525	6	#0	QPSK	3.83	13	PASS
NVNT	Band5	3	20525	1	#0	QPSK	3.39	13	PASS
NVNT	Band5	3	20525	15	#0	QPSK	4.00	13	PASS
NVNT	Band5	5	20525	1	#0	QPSK	3.94	13	PASS
NVNT	Band5	5	20525	25	#0	QPSK	4.17	13	PASS
NVNT	Band5	10	20525	1	#0	QPSK	4.67	13	PASS
NVNT	Band5	10	20525	50	#0	QPSK	4.43	13	PASS



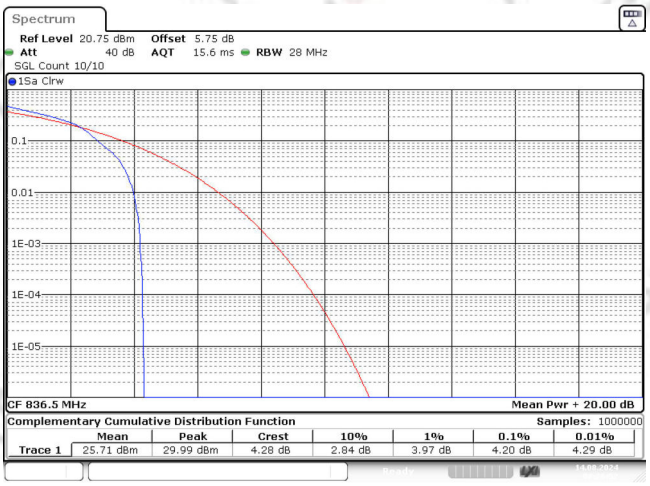
Band5 QAM16 BW=1.4MHz Channel=20525 RB Size=1 Position=#0

NVNT



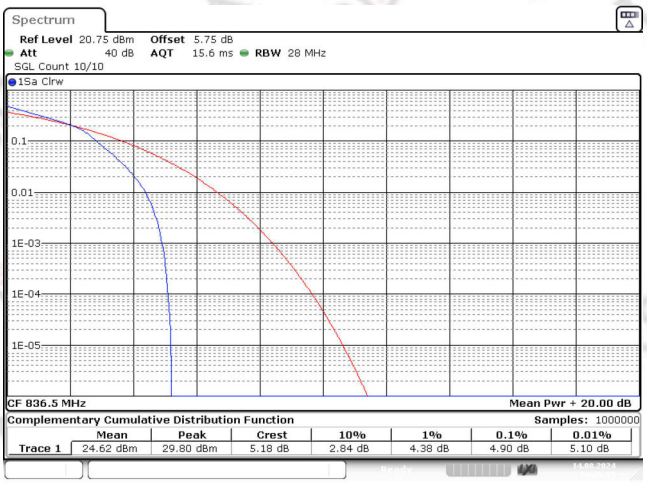
Band5 QAM16 BW=1.4MHz Channel=20525 RB Size=6 Position=#0

NVNT



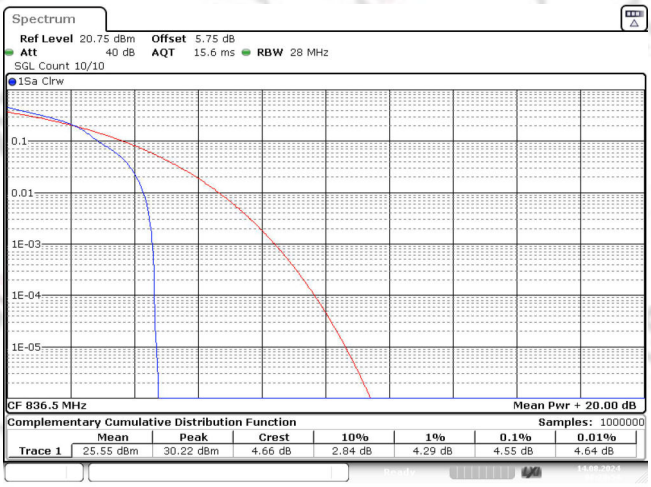
Band5 QAM16 BW=3MHz Channel=20525 RB Size=1 Position=#0

NVNT



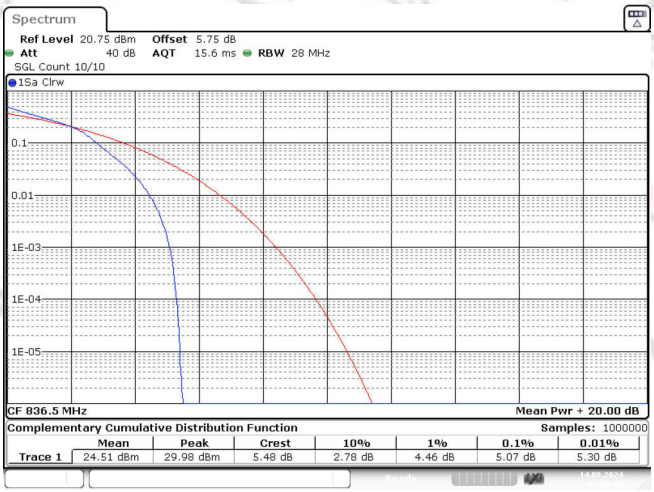
Band5 QAM16 BW=3MHz Channel=20525 RB Size=15 Position=#0

NVNT



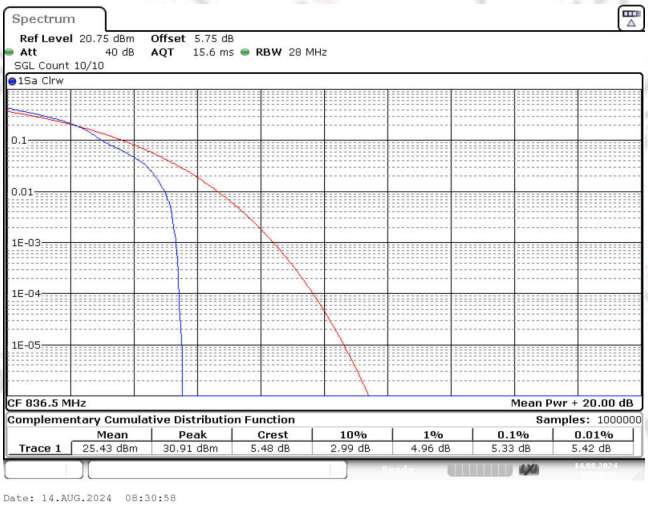
Band5 QAM16 BW=5MHz Channel=20525 RB Size=1 Position=#0

NVNT



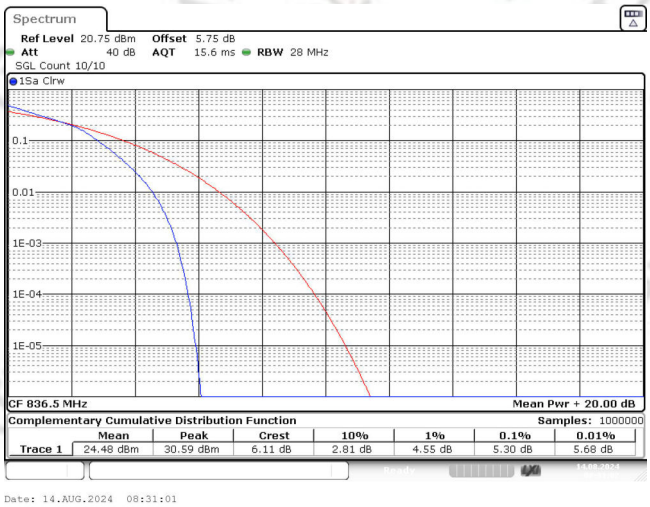
Band5 QAM16 BW=5MHz Channel=20525 RB Size=25 Position=#0

NVNT



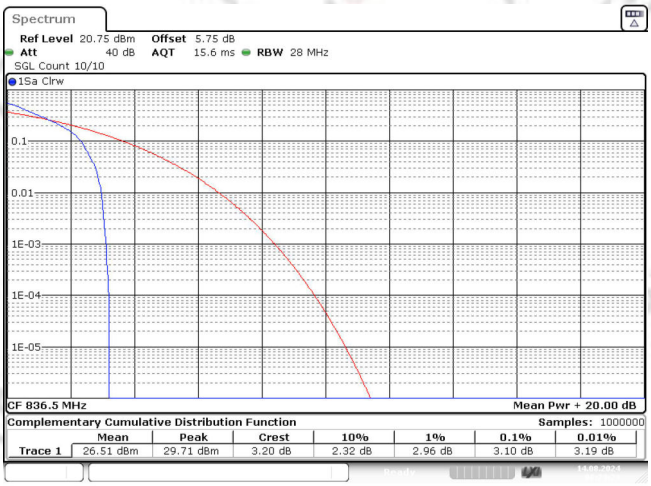
Band5 QAM16 BW=10MHz Channel=20525 RB Size=1 Position=#0

NVNT



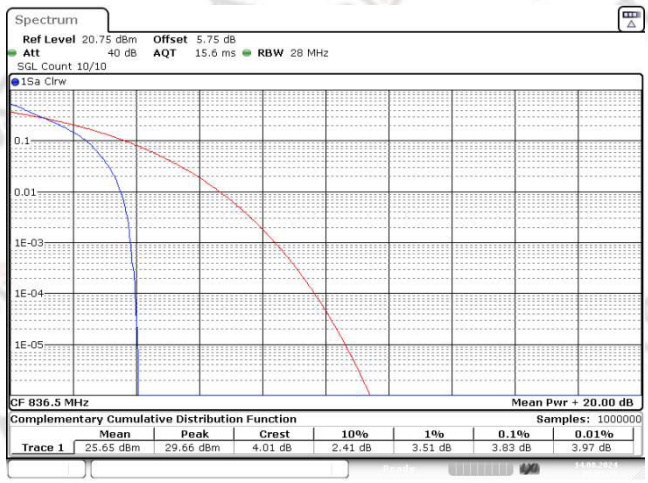
Band5 QAM16 BW=10MHz Channel=20525 RB Size=50 Position=#0

NVNT



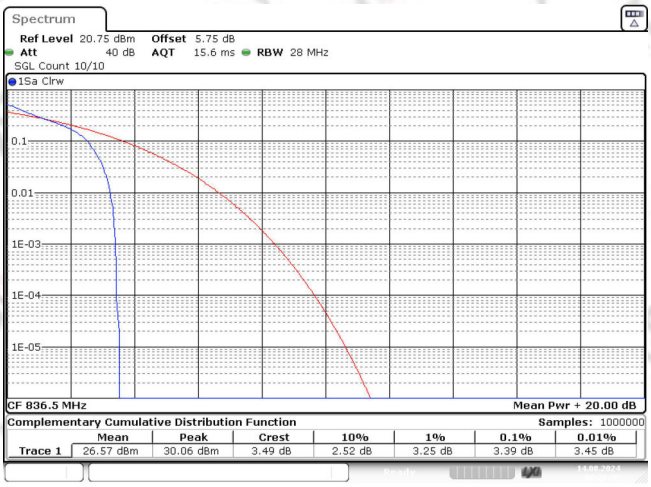
Band5 QPSK BW=1.4MHz Channel=20525 RB Size=1 Position=#0

NVNT



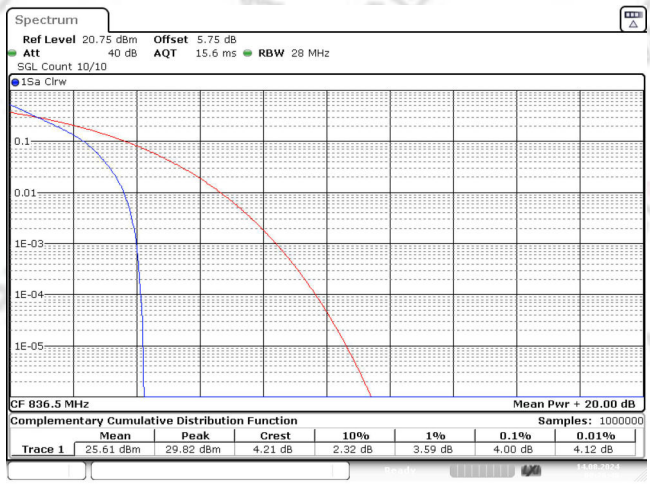
Band5 QPSK BW=1.4MHz Channel=20525 RB Size=6 Position=#0

NVNT



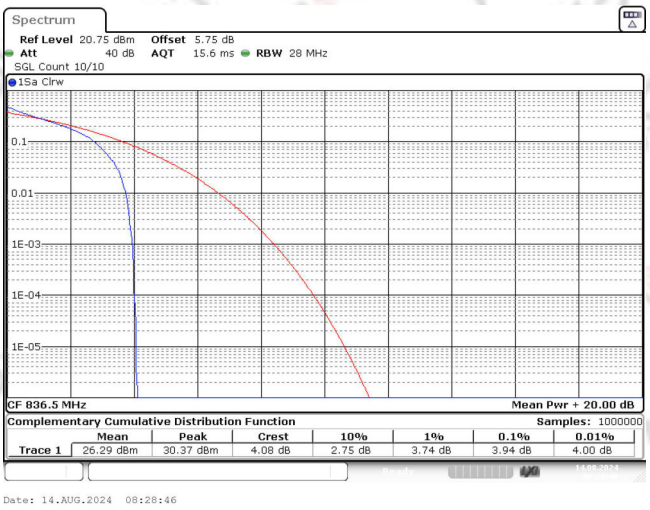
Band5 QPSK BW=3MHz Channel=20525 RB Size=1 Position=#0

NVNT



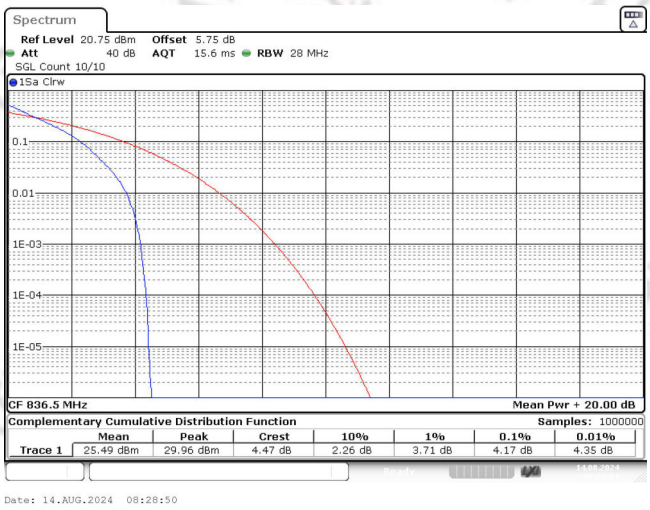
Band5 QPSK BW=3MHz Channel=20525 RB Size=15 Position=#0

NVNT



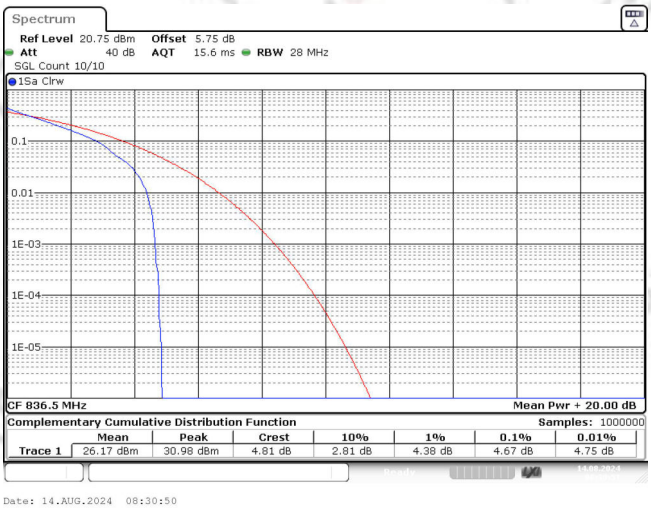
Band5 QPSK BW=5MHz Channel=20525 RB Size=1 Position=#0

NVNT



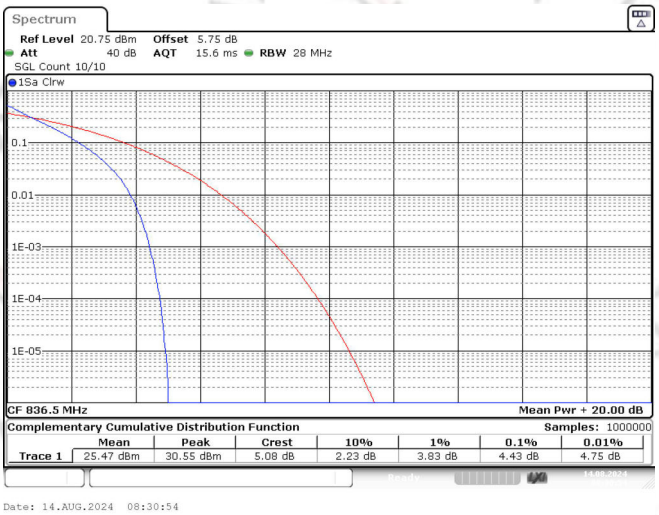
Band5 QPSK BW=5MHz Channel=20525 RB Size=25 Position=#0

NVNT



Band5 QPSK BW=10MHz Channel=20525 RB Size=1 Position=#0

NVNT



Band5 QPSK BW=10MHz Channel=20525 RB Size=50 Position=#0

NVNT