

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 40

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2307.5	38725	5	1	0	22.76
				1	24	22.56
				12	6	22.09
				25	0	22.13
	2310.0	38750		1	0	22.92
				1	24	22.89
				12	6	22.12
				25	0	22.11
	2312.5	38775		1	0	22.98
				1	24	22.95
				12	6	22.08
				25	0	22.12
16QAM	2307.5	38725	5	1	0	22.04
				1	24	22.03
				12	6	21.17
				25	0	21.14
	2310.0	38750		1	0	22.01
				1	24	22.00
				12	6	21.14
				25	0	21.12
	2312.5	38775		1	0	22.08
				1	24	22.06
				12	6	21.18
				25	0	21.15
64QAM	2307.5	38725	5	1	0	22.03
				1	24	22.02
				12	6	21.14
				25	0	21.13
	2310.0	38750		1	0	22.07
				1	24	22.05
				12	6	21.15
				25	0	21.12
	2312.5	38775		1	0	22.07
				1	24	22.04
				12	6	21.11
				25	0	21.08

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2352.5	39175	5	1	0	23.34
				1	24	23.24
				12	6	22.47
				25	0	22.44
	2355.0	39200		1	0	23.28
				1	24	23.24
				12	6	22.47
				25	0	22.38
	2357.5	39225		1	0	23.24
				1	24	23.21
				12	6	22.37
				25	0	22.34
16QAM	2352.5	39175	5	1	0	22.31
				1	24	22.27
				12	6	21.41
				25	0	21.37
	2355.0	39200		1	0	22.28
				1	24	22.25
				12	6	21.37
				25	0	21.34
	2357.5	39225		1	0	22.43
				1	24	22.41
				12	6	21.45
				25	0	21.38
64QAM	2352.5	39175	5	1	0	22.27
				1	24	22.24
				12	6	21.38
				25	0	21.34
	2355.0	39200		1	0	22.34
				1	24	22.31
				12	6	21.28
				25	0	21.24
	2357.5	39225		1	0	22.28
				1	24	22.24
				12	6	21.43
				25	0	21.28

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2310	38750	10	1	0	22.40
				1	49	22.38
				24	12	21.81
				50	0	21.73
16QAM	2310	38750		1	0	21.78
				1	49	21.69
				24	12	20.91
				50	0	20.84
64QAM	2310	38750		1	0	21.67
				1	49	21.54
				24	12	20.84
				50	0	20.73
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2355	39200	10	1	0	22.24
				1	49	22.21
				24	12	22.27
				50	0	22.25
16QAM	2355	39200		1	0	22.24
				1	49	22.21
				24	12	21.45
				50	0	21.37
64QAM	2355	39200		1	0	22.18
				1	49	22.16
				24	12	21.37
				50	0	21.24

2 Occupied Bandwidth

Test result

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
38	2307.5	38725	5	25	0	4.4936	Fig.1	4.4921	Fig.2	4.4864	Fig.3
	2310.0	38750		25	0	4.4880	Fig.4	4.5022	Fig.5	4.4993	Fig.6
	2312.5	38775		25	0	4.4964	Fig.7	4.4932	Fig.8	4.5027	Fig.9
	2352.5	39175	5	25	0	4.4860	Fig.10	4.4961	Fig.11	4.4986	Fig.12
	2355.0	39200		25	0	4.4953	Fig.13	4.4889	Fig.14	4.4920	Fig.15
	2357.5	39225		25	0	4.4928	Fig.16	4.5059	Fig.17	4.5003	Fig.18
	2310.0	38750	10	50	0	8.9555	Fig.19	8.9641	Fig.20	8.9632	Fig.21
	2355.0	39200		50	0	8.9499	Fig.22	8.9613	Fig.23	8.9471	Fig.24

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
38	2307.5	38725	5	25	0	5.426	Fig.1	5.175	Fig.2	5.260	Fig.3
	2310.0	38750		25	0	5.349	Fig.4	5.118	Fig.5	5.176	Fig.6
	2312.5	38775		25	0	5.362	Fig.7	5.346	Fig.8	5.316	Fig.9
	2352.5	39175	5	25	0	5.144	Fig.10	5.388	Fig.11	5.253	Fig.12
	2355.0	39200		25	0	5.454	Fig.13	5.160	Fig.14	5.182	Fig.15
	2357.5	39225		25	0	5.406	Fig.16	5.397	Fig.17	5.393	Fig.18
	2310.0	38750	10	50	0	10.09	Fig.19	10.32	Fig.20	10.29	Fig.21
	2355.0	39200		50	0	10.19	Fig.22	10.35	Fig.23	10.37	Fig.24

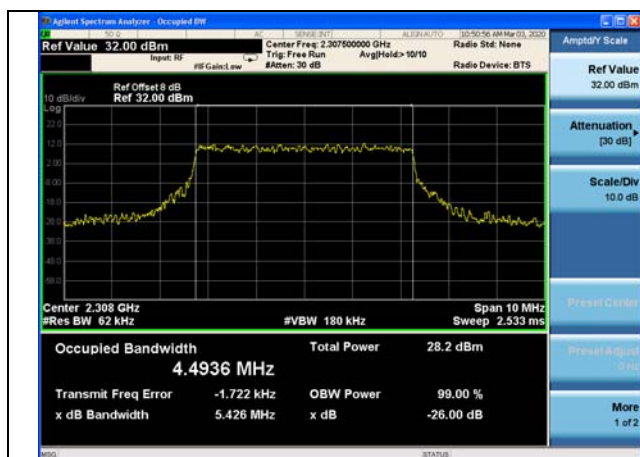


Fig.1

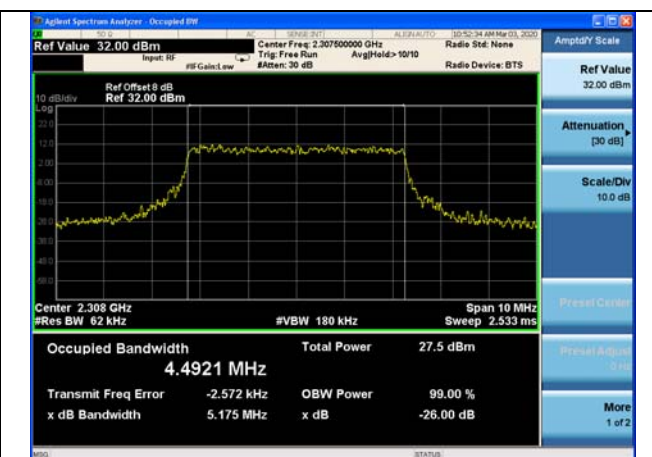


Fig.2

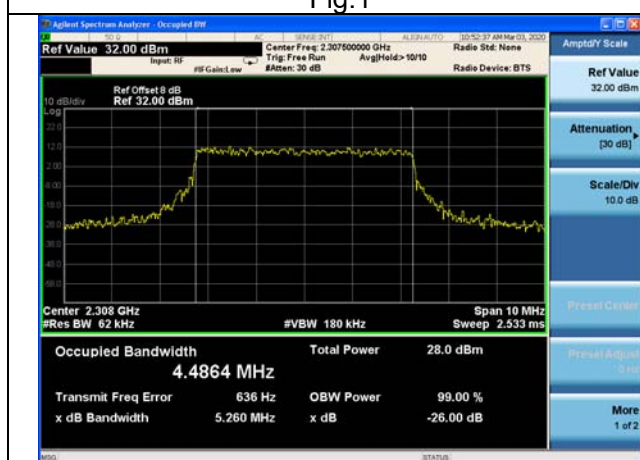


Fig.3

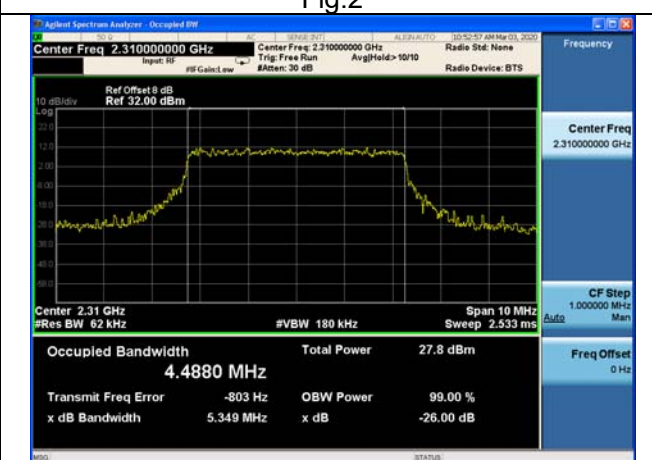


Fig.4

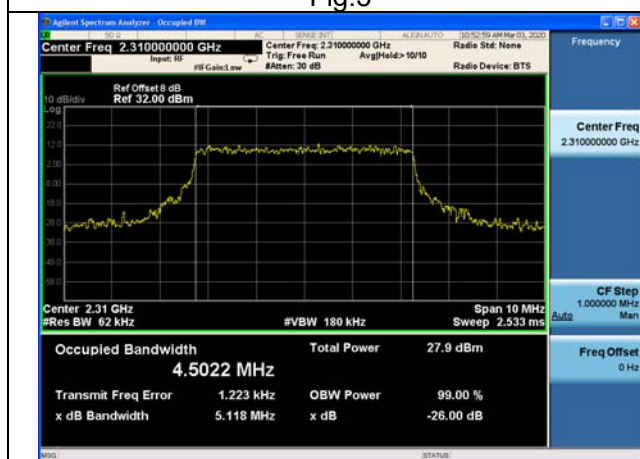


Fig.5

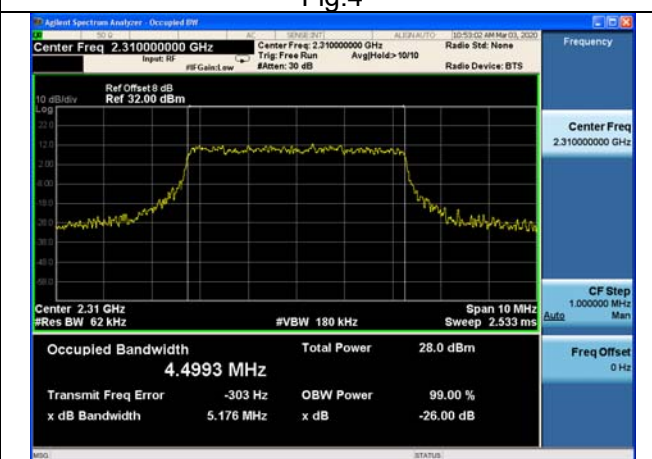


Fig.6

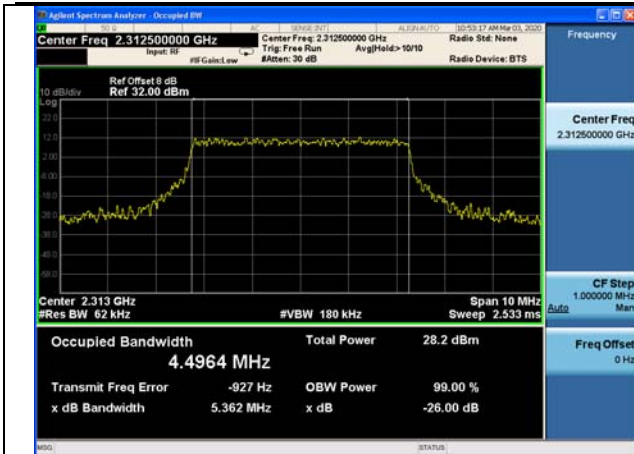


Fig.7

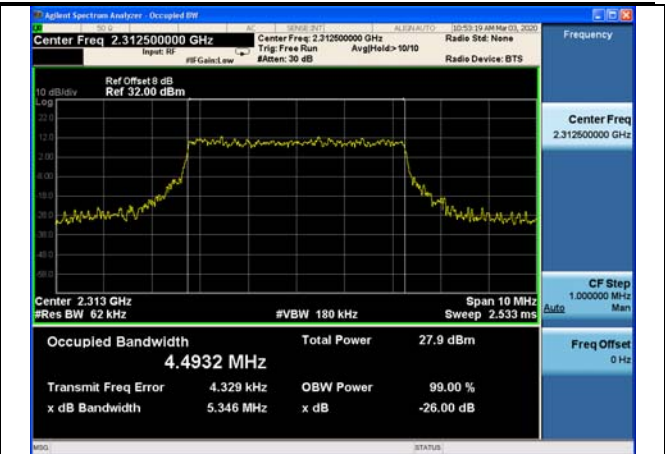


Fig.8

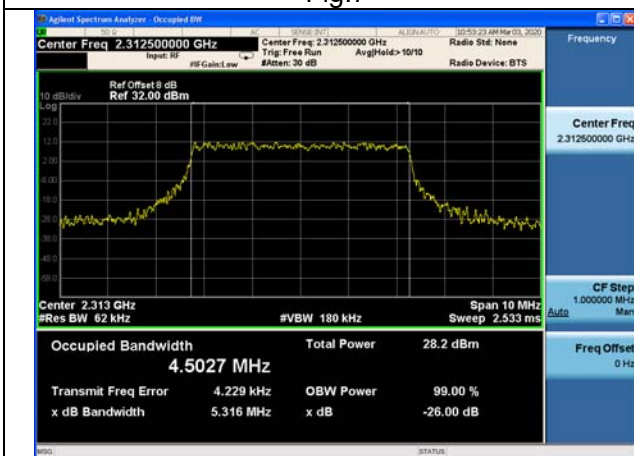


Fig.9

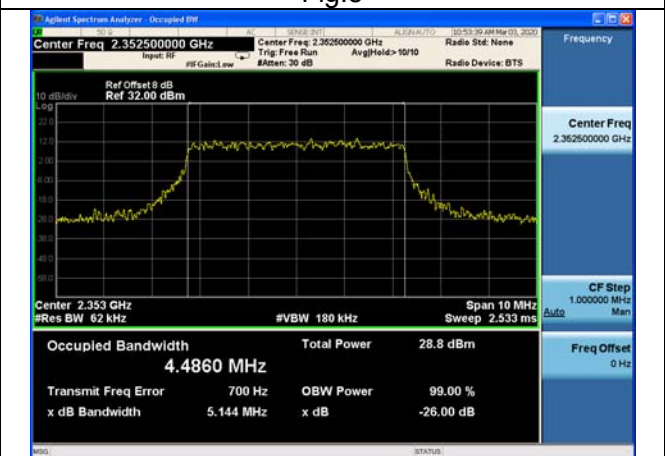


Fig.10

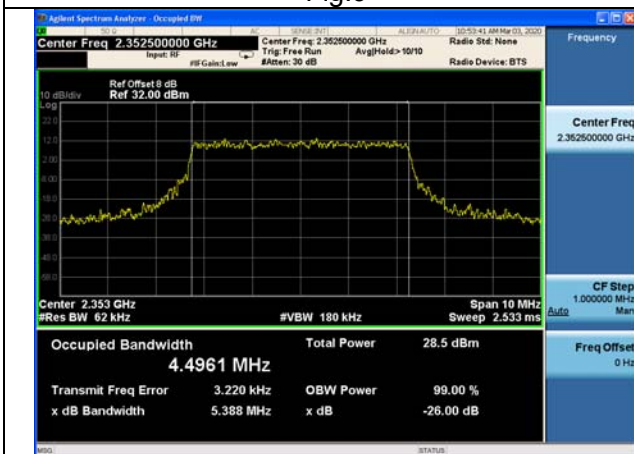


Fig.11

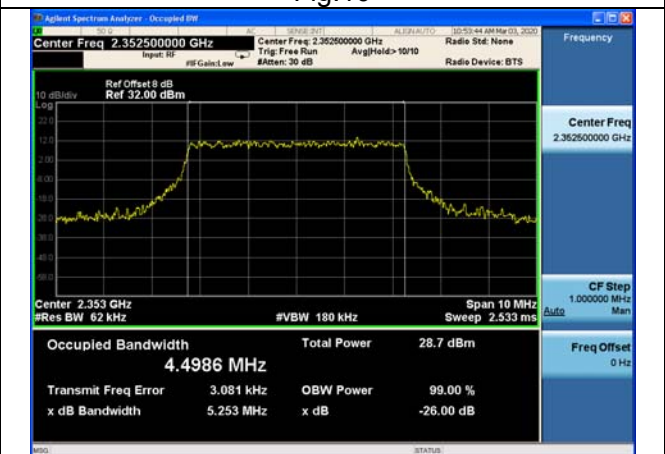


Fig.12

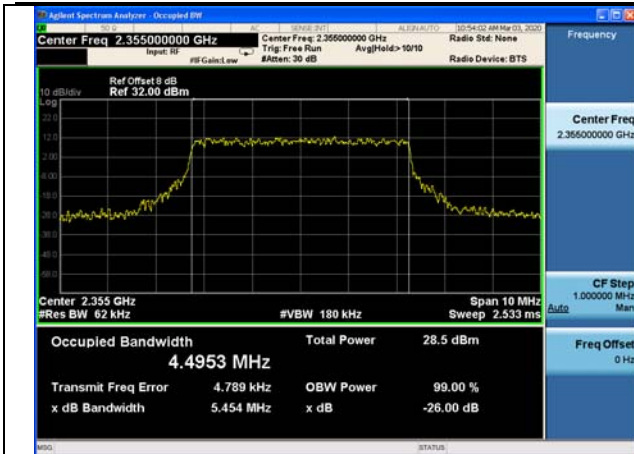


Fig.13

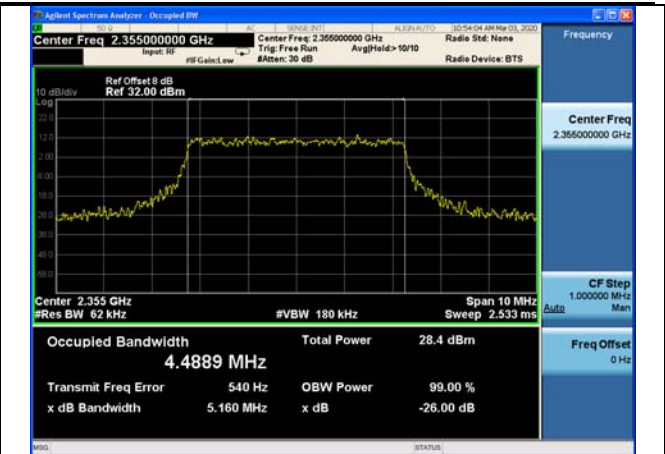


Fig.14

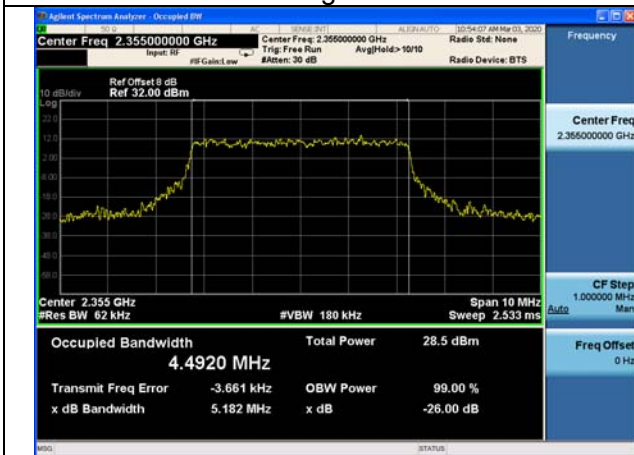


Fig.15



Fig.16

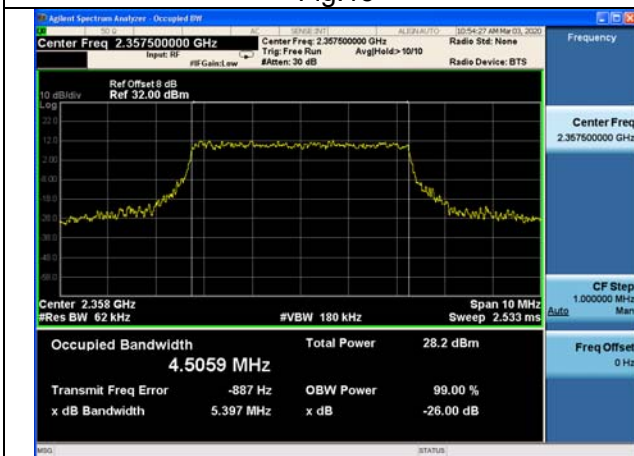


Fig.17

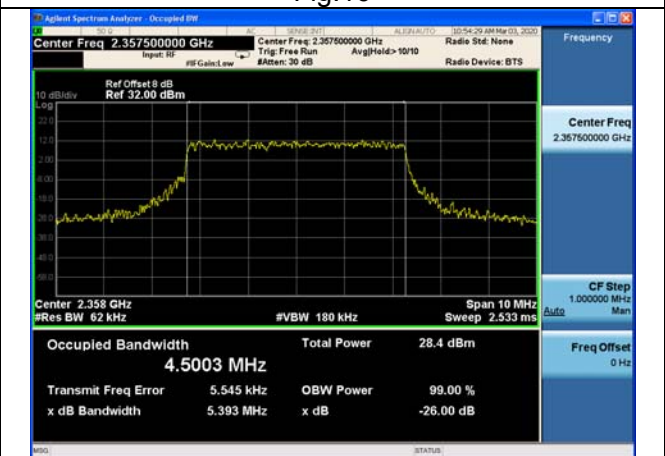


Fig.18

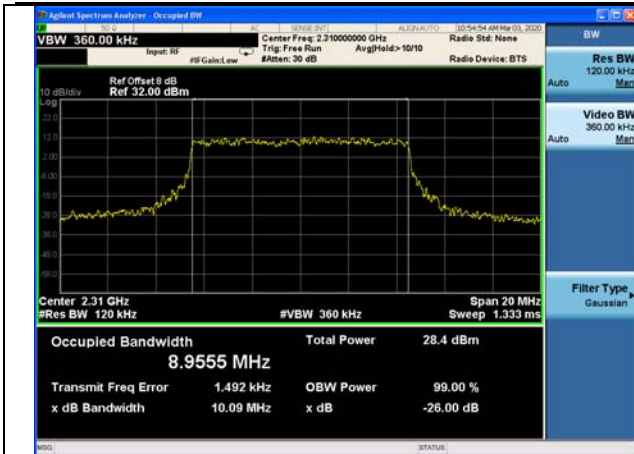


Fig.19

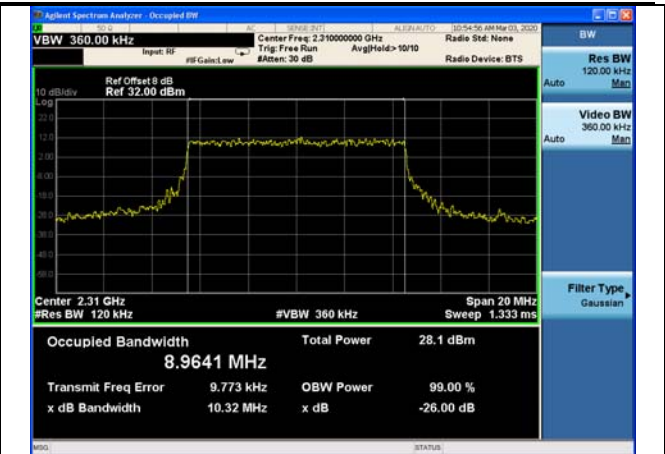


Fig.20

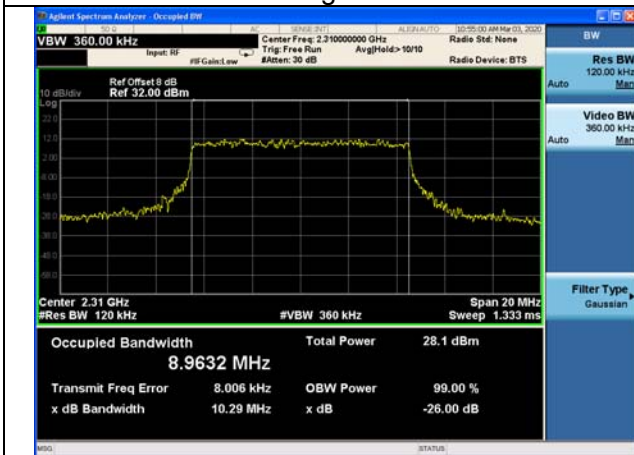


Fig.21



Fig.22

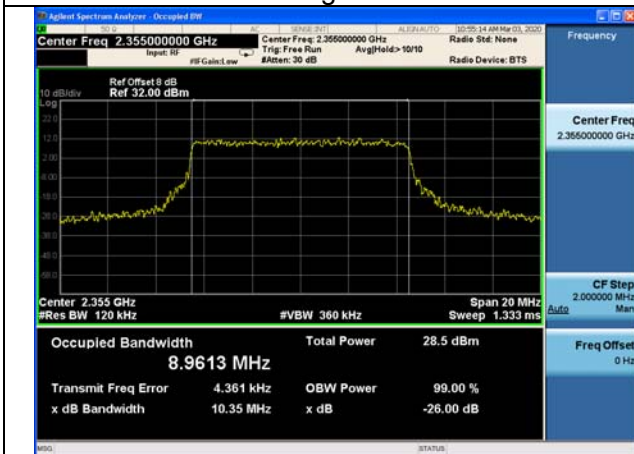


Fig.23

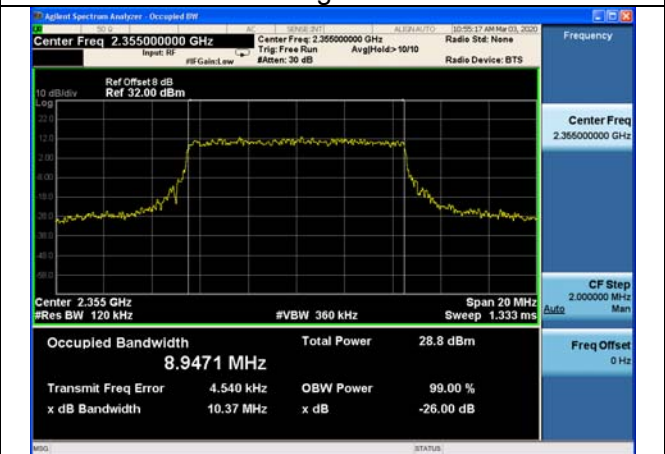


Fig.24

3 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
40	2310.0	38750	5	1	0	Fig.1	Fig.2	Fig.3
			10	1	0	Fig.4	Fig.5	Fig.6
	2355.0	39200	5	1	0	Fig.7	Fig.8	Fig.9
			10	1	0	Fig.10	Fig.11	Fig.12



Fig.1

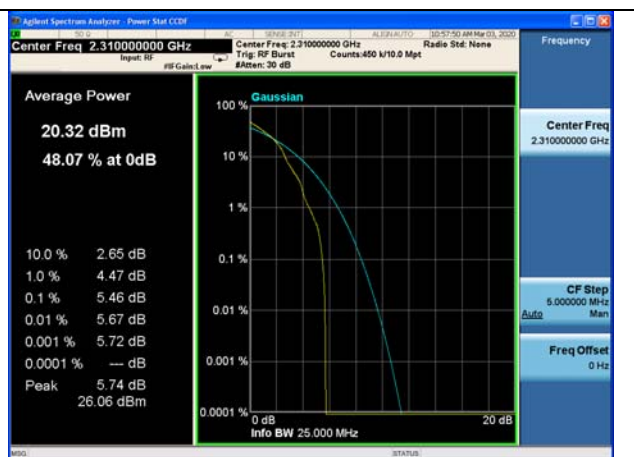


Fig.2



Fig.3



Fig.4



Fig.5



Fig.6



Fig.7



Fig.8



Fig.9



Fig.10

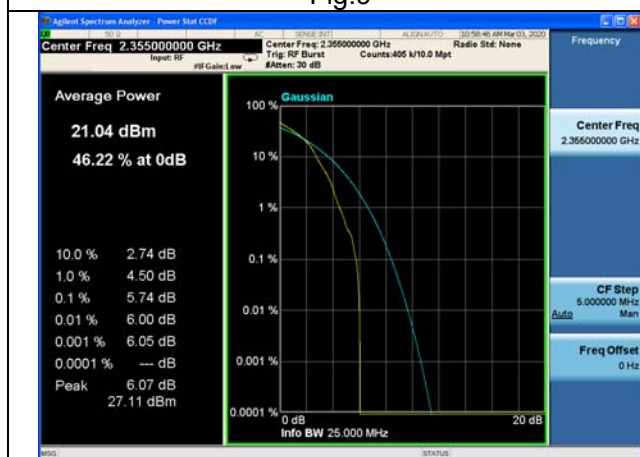


Fig.11



Fig.12

4 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
7	2310.0	38750	10	1	0	Fig.1-2
	2355.0	39200	10	1	0	Fig.3-4

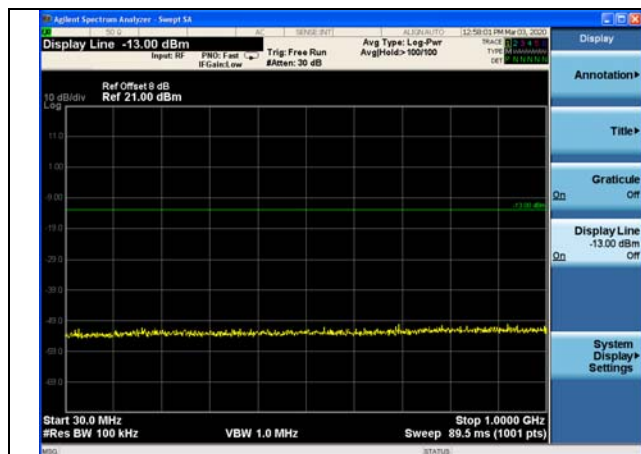


Fig.1



Fig.2

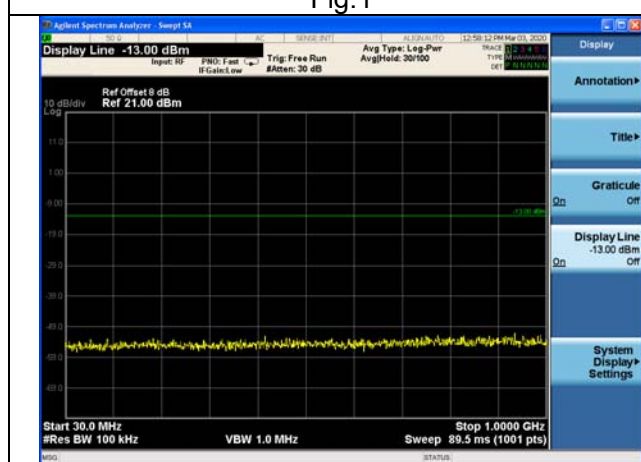


Fig3

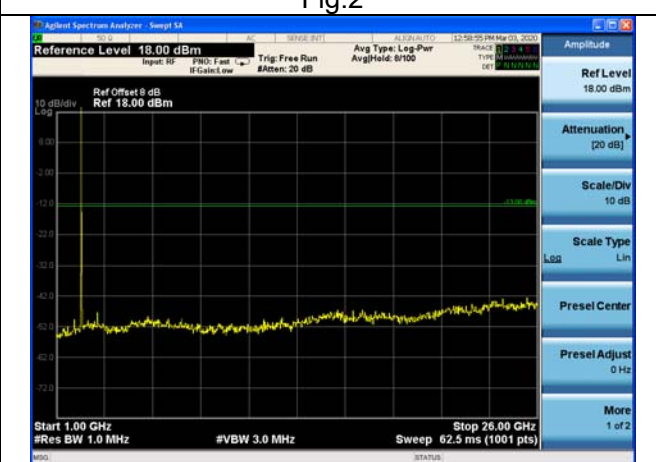


Fig4

5 Band Edges Compliance

Test result

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
7	2307.5	38725	5	1	0	Fig.1
				25	0	Fig.2
	2312.5	38775		1	24	Fig.3
				25	0	Fig.4
	2352.5	39175	5	1	0	Fig.9
				25	0	Fig.10
	2357.5	39225		1	24	Fig.11
				25	0	Fig.12
	2310.0	38750	10	1	0	Fig.5
				50	0	Fig.6
				1	49	Fig.7
				50	0	Fig.8
	2355.0	39200	10	1	0	Fig.13
				50	0	Fig.14
				1	49	Fig.15
				50	0	Fig.16

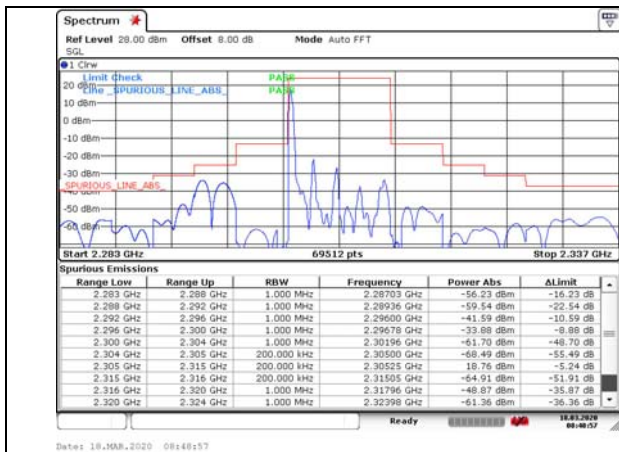


Fig.1

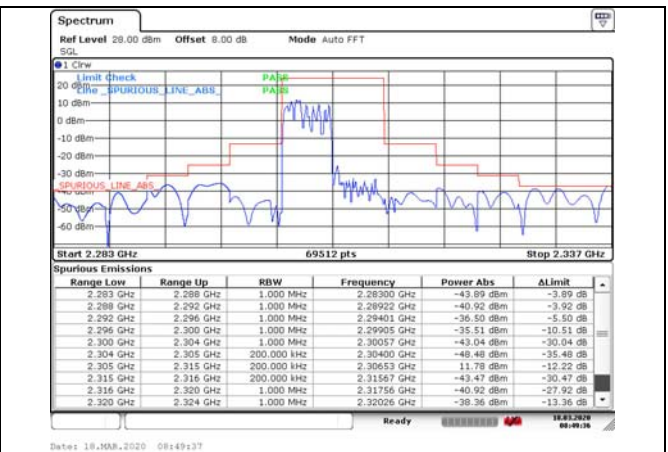


Fig.2

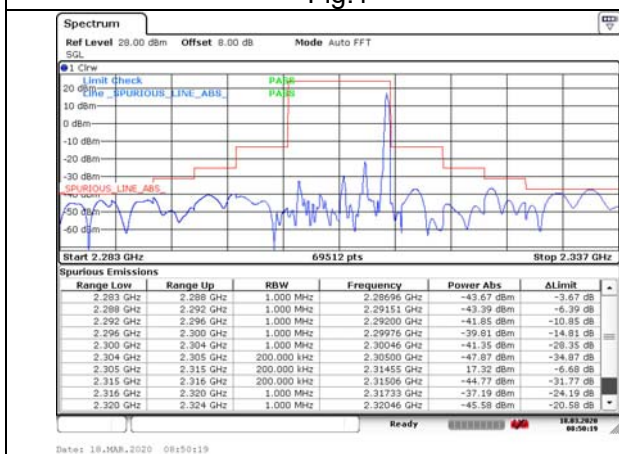


Fig.3

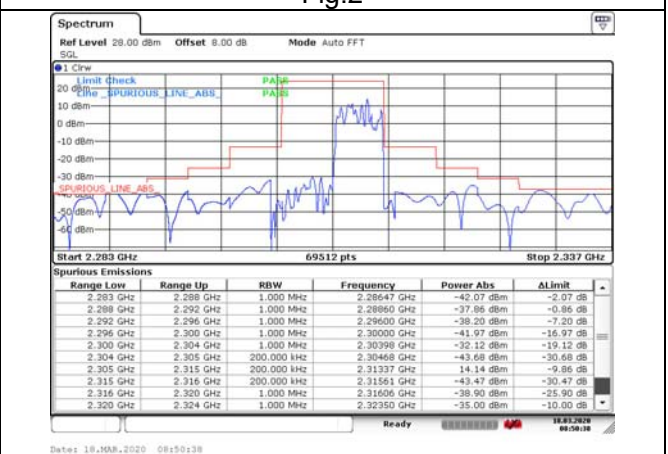


Fig.4

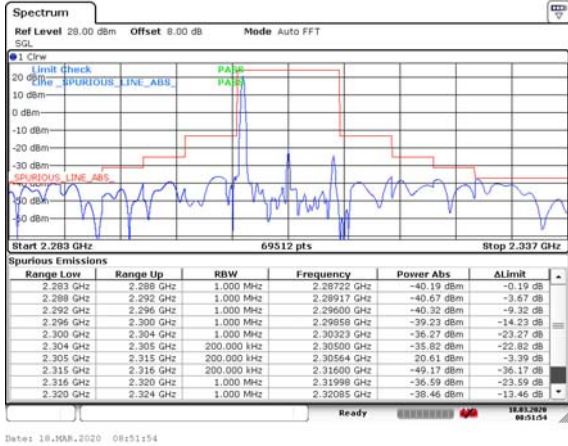


Fig.5

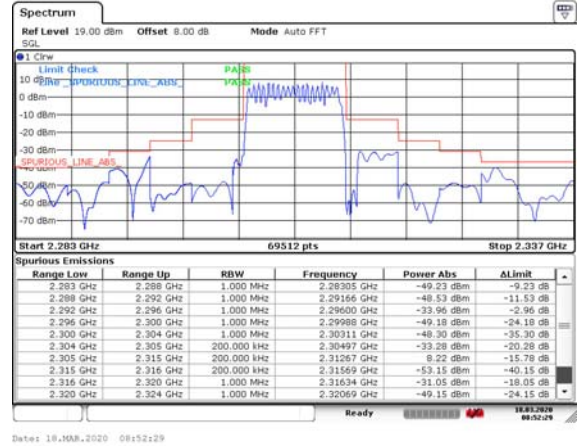


Fig.6

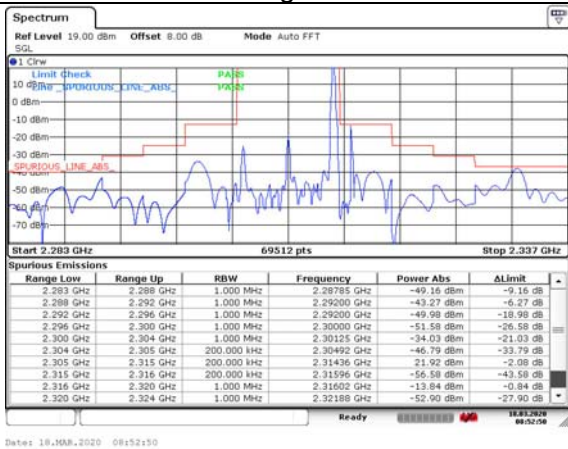


Fig.7

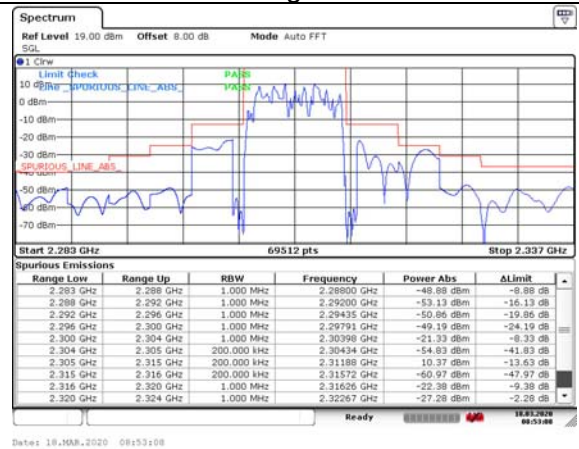


Fig.8

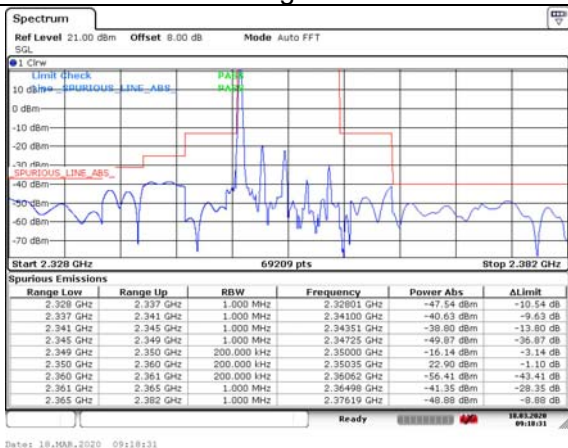


Fig.9

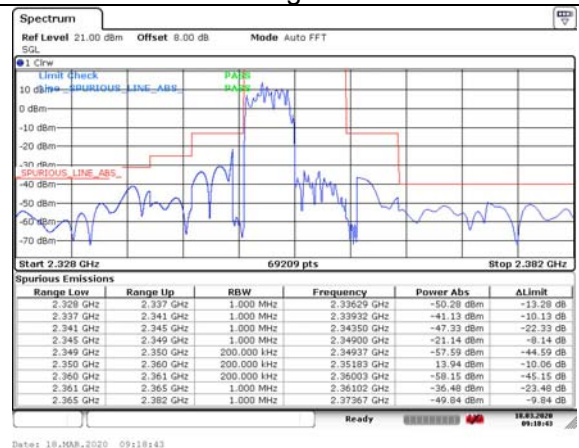


Fig.10

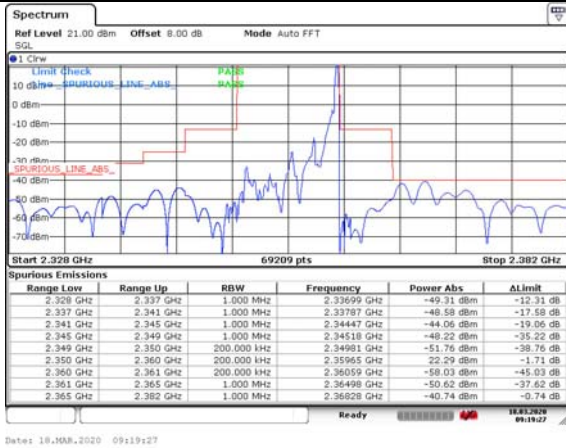


Fig.11

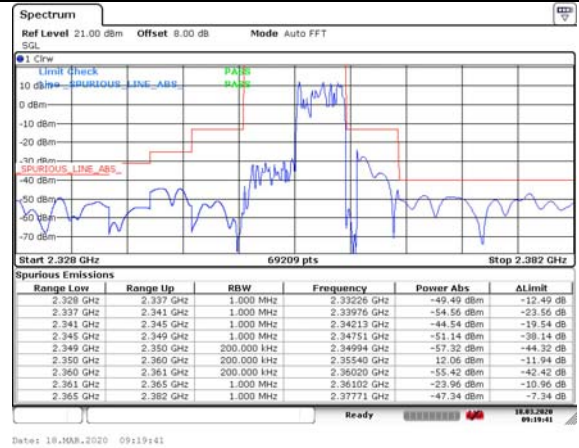


Fig.12

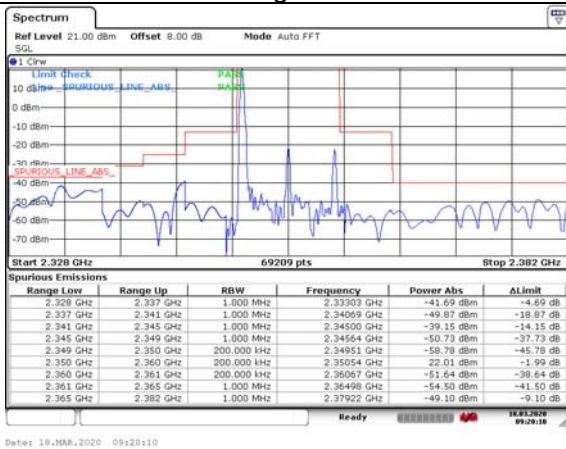


Fig.13

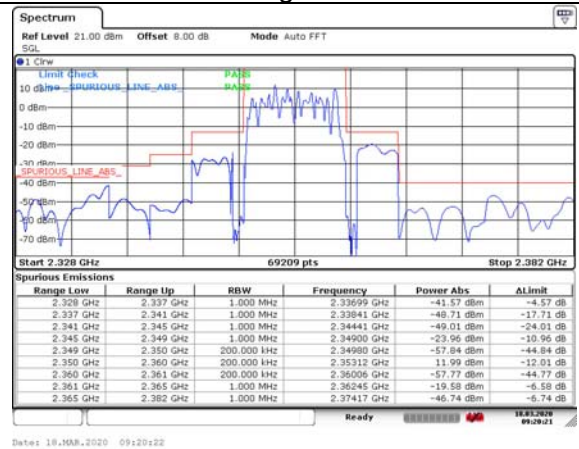


Fig.14

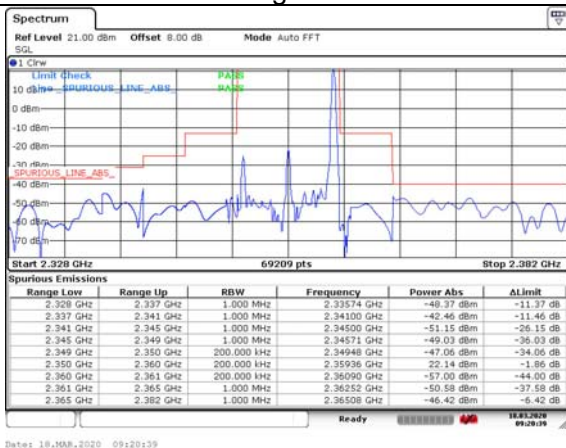


Fig.15

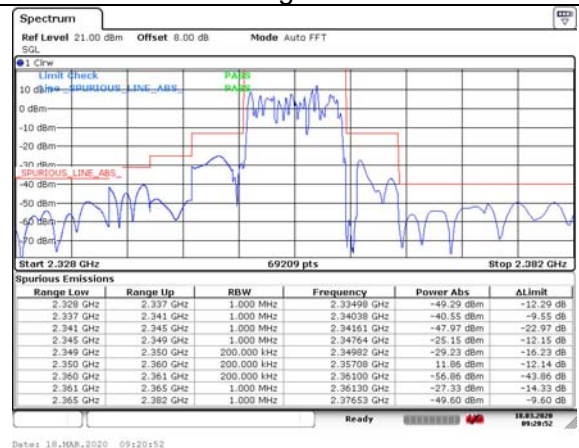


Fig.16

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band40 2305-2325MHz Channel			
		5MHz Low Channel	5MHz Mid Channel	5MHz High Channel	10MHz Mid Channel
-20	NV	0.022	-0.034	0.045	-0.008
-10	NV	0.003	-0.009	0.008	0.021
0	NV	-0.036	0.049	0.017	0.038
+10	NV	0.078	0.062	-0.018	-0.037
+20	NV	0.000	0.000	0.000	0.000
+30	NV	0.042	0.054	-0.022	-0.032
+40	NV	-0.014	0.043	0.026	-0.035
+50	NV	0.034	-0.027	0.016	-0.015
+55	NV	0.002	0.042	-0.048	-0.023
+20	LV	-0.024	-0.041	0.028	0.060
+20	HV	0.004	-0.006	-0.012	0.048

Temperature(°C)	Voltage	Test Result (ppm) Band40 2350-2360MHz			
		5MHz Low Channel	5MHz Mid Channel	5MHz High Channel	10MHz Mid Channel
-20	NV	0.059	0.024	0.047	-0.040
-10	NV	-0.045	-0.017	-0.048	0.062
0	NV	0.083	0.006	0.064	-0.001
+10	NV	0.010	-0.015	0.020	-0.005
+20	NV	0.000	0.000	0.000	0.000
+30	NV	-0.039	-0.043	0.016	0.037
+40	NV	-0.046	-0.026	-0.042	0.040
+50	NV	0.038	0.012	0.037	0.008
+55	NV	-0.035	-0.042	0.045	0.028
+20	LV	0.042	0.030	-0.023	0.061
+20	HV	0.066	-0.041	0.066	-0.064