

**APPENDIX A – TEST DATA OF CONDUCTED EMISSION**

**LTE Band 13**

**1 RF Power Output**

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	779.5	23205	5	1	0	26.37
QPSK	779.5	23205	5	1	12	26.24
QPSK	779.5	23205	5	1	24	26.04
QPSK	779.5	23205	5	12	0	25.38
QPSK	779.5	23205	5	12	7	25.16
QPSK	779.5	23205	5	12	13	25.24
QPSK	779.5	23205	5	25	0	25.24
QPSK	782	23230	5	1	0	26.54
QPSK	782	23230	5	1	12	26.30
QPSK	782	23230	5	1	24	26.39
QPSK	782	23230	5	12	0	25.13
QPSK	782	23230	5	12	7	25.14
QPSK	782	23230	5	12	13	25.33
QPSK	782	23230	5	25	0	25.00
QPSK	784.5	23255	5	1	0	26.23
QPSK	784.5	23255	5	1	12	26.52
QPSK	784.5	23255	5	1	24	26.50
QPSK	784.5	23255	5	12	0	25.25
QPSK	784.5	23255	5	12	7	25.34
QPSK	784.5	23255	5	12	13	25.41
QPSK	784.5	23255	5	25	0	25.17

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	779.5	23205	5	1	0	25.72
16QAM	779.5	23205	5	1	12	25.58
16QAM	779.5	23205	5	1	24	24.94
16QAM	779.5	23205	5	12	0	24.63
16QAM	779.5	23205	5	12	7	24.32
16QAM	779.5	23205	5	12	13	24.39
16QAM	779.5	23205	5	25	0	24.16
16QAM	782	23230	5	1	0	25.32
16QAM	782	23230	5	1	12	25.25
16QAM	782	23230	5	1	24	25.52
16QAM	782	23230	5	12	0	24.30
16QAM	782	23230	5	12	7	24.07
16QAM	782	23230	5	12	13	24.48
16QAM	782	23230	5	25	0	24.02
16QAM	784.5	23255	5	1	0	25.32
16QAM	784.5	23255	5	1	12	25.57
16QAM	784.5	23255	5	1	24	25.88
16QAM	784.5	23255	5	12	0	24.73
16QAM	784.5	23255	5	12	7	24.62
16QAM	784.5	23255	5	12	13	24.44
16QAM	784.5	23255	5	25	0	24.68
64QAM	779.5	23205	5	1	0	24.62
64QAM	779.5	23205	5	1	12	24.30
64QAM	779.5	23205	5	1	24	24.43
64QAM	779.5	23205	5	12	0	22.96
64QAM	779.5	23205	5	12	7	22.79
64QAM	779.5	23205	5	12	13	22.74
64QAM	779.5	23205	5	25	0	22.90
64QAM	782	23230	5	1	0	24.58
64QAM	782	23230	5	1	12	23.99
64QAM	782	23230	5	1	24	24.58
64QAM	782	23230	5	12	0	22.57
64QAM	782	23230	5	12	7	22.42
64QAM	782	23230	5	12	13	22.95
64QAM	782	23230	5	25	0	22.43
64QAM	784.5	23255	5	1	0	24.31
64QAM	784.5	23255	5	1	12	25.15
64QAM	784.5	23255	5	1	24	25.08
64QAM	784.5	23255	5	12	0	23.11
64QAM	784.5	23255	5	12	7	23.15
64QAM	784.5	23255	5	12	13	23.19
64QAM	784.5	23255	5	25	0	23.01

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	782	23230	10	1	0	26.40
QPSK	782	23230	10	1	25	26.02
QPSK	782	23230	10	1	49	26.48
QPSK	782	23230	10	25	0	25.35
QPSK	782	23230	10	25	12	25.04
QPSK	782	23230	10	25	25	25.31
QPSK	782	23230	10	50	0	25.02
QPSK	782	23230	10	1	0	26.44
QPSK	782	23230	10	1	25	26.09
QPSK	782	23230	10	1	49	26.44
QPSK	782	23230	10	25	0	25.11
QPSK	782	23230	10	25	12	24.93
QPSK	782	23230	10	25	25	25.32
QPSK	782	23230	10	50	0	25.03
QPSK	782	23230	10	1	0	26.32
QPSK	782	23230	10	1	25	25.99
QPSK	782	23230	10	1	49	26.48
QPSK	782	23230	10	25	0	25.29
QPSK	782	23230	10	25	12	25.07
QPSK	782	23230	10	25	25	25.18
QPSK	782	23230	10	50	0	25.05

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	782	23230	10	1	0	25.82
16QAM	782	23230	10	1	25	25.50
16QAM	782	23230	10	1	49	26.09
16QAM	782	23230	10	25	0	24.08
16QAM	782	23230	10	25	12	24.03
16QAM	782	23230	10	25	25	24.48
16QAM	782	23230	10	50	0	24.02
16QAM	782	23230	10	1	0	26.03
16QAM	782	23230	10	1	25	25.43
16QAM	782	23230	10	1	49	25.94
16QAM	782	23230	10	25	0	24.21
16QAM	782	23230	10	25	12	23.99
16QAM	782	23230	10	25	25	24.51
16QAM	782	23230	10	50	0	24.04
16QAM	782	23230	10	1	0	25.76
16QAM	782	23230	10	1	25	25.40
16QAM	782	23230	10	1	49	25.89
16QAM	782	23230	10	25	0	24.35
16QAM	782	23230	10	25	12	24.03
16QAM	782	23230	10	25	25	24.48
16QAM	782	23230	10	50	0	24.00
64QAM	782	23230	10	1	0	24.80
64QAM	782	23230	10	1	25	24.27
64QAM	782	23230	10	1	49	24.72
64QAM	782	23230	10	25	0	22.78
64QAM	782	23230	10	25	12	22.49
64QAM	782	23230	10	25	25	22.98
64QAM	782	23230	10	50	0	22.58
64QAM	782	23230	10	1	0	24.80
64QAM	782	23230	10	1	25	24.31
64QAM	782	23230	10	1	49	24.39
64QAM	782	23230	10	25	0	22.66
64QAM	782	23230	10	25	12	22.64
64QAM	782	23230	10	25	25	22.98
64QAM	782	23230	10	50	0	22.44
64QAM	782	23230	10	1	0	24.73
64QAM	782	23230	10	1	25	24.25
64QAM	782	23230	10	1	49	24.57
64QAM	782	23230	10	25	0	22.77
64QAM	782	23230	10	25	12	22.43
64QAM	782	23230	10	25	25	23.01
64QAM	782	23230	10	50	0	22.63

## 2 Occupied Bandwidth

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)	
13	QPSK	779.5	23205	5	25	0	4.45	Fig.1
13	QPSK	782	23230	5	25	0	4.46	Fig.2
13	QPSK	784.5	23255	5	25	0	4.46	Fig.3
13	QPSK	782	23230	10	50	0	8.92	Fig.4
13	QPSK	782	23230	10	50	0	8.91	Fig.5
13	QPSK	782	23230	10	50	0	8.92	Fig.6

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)	
13	16QAM	779.5	23205	5	25	0	4.46	Fig.7
13	16QAM	782	23230	5	25	0	4.45	Fig.8
13	16QAM	784.5	23255	5	25	0	4.45	Fig.9
13	16QAM	782	23230	10	50	0	8.90	Fig.10
13	16QAM	782	23230	10	50	0	8.90	Fig.11
13	16QAM	782	23230	10	50	0	8.91	Fig.12

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)	
13	64QAM	779.5	23205	5	25	0	4.45	Fig.13
13	64QAM	782	23230	5	25	0	4.45	Fig.14
13	64QAM	784.5	23255	5	25	0	4.46	Fig.15
13	64QAM	782	23230	10	50	0	8.91	Fig.16
13	64QAM	782	23230	10	50	0	8.93	Fig.17
13	64QAM	782	23230	10	50	0	8.93	Fig.18

Test Mode: QPSK

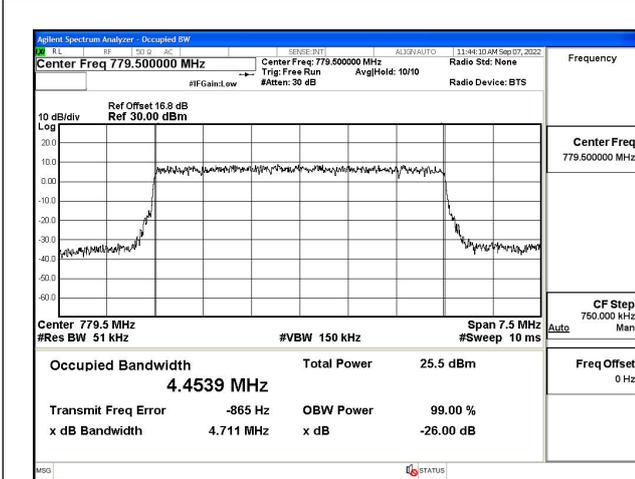


Fig.1

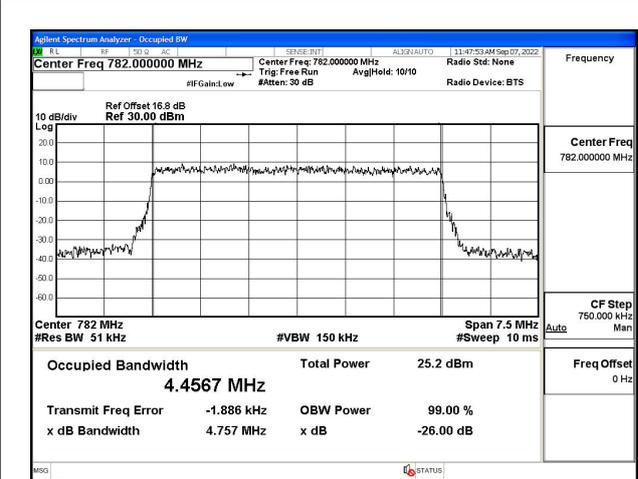


Fig.2

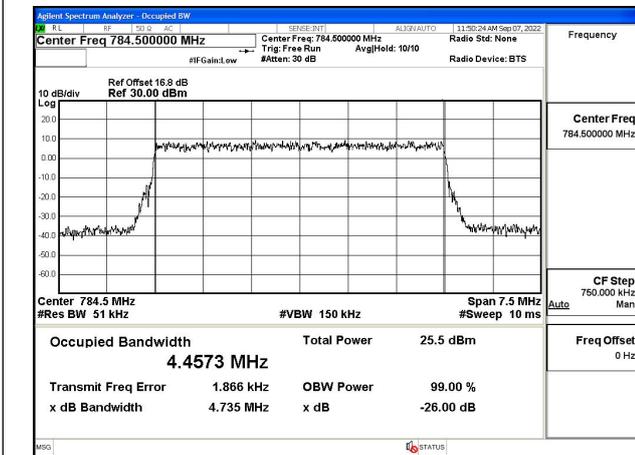


Fig.3

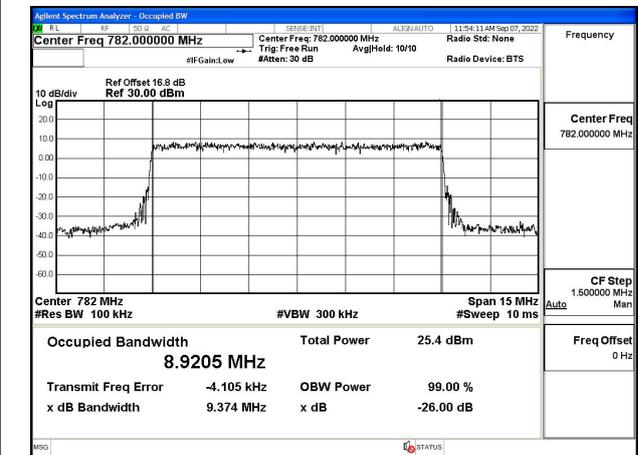


Fig.4

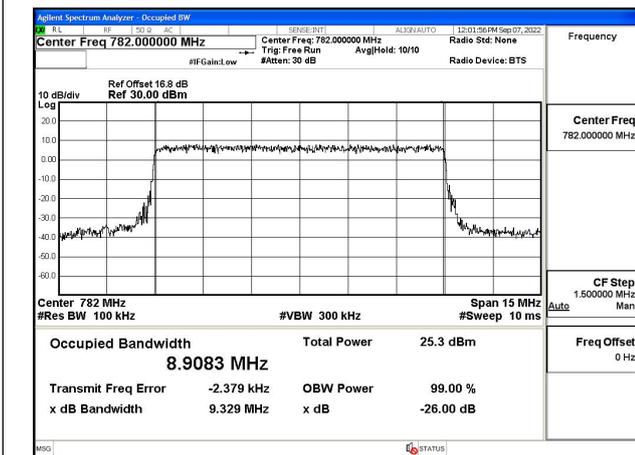


Fig.5

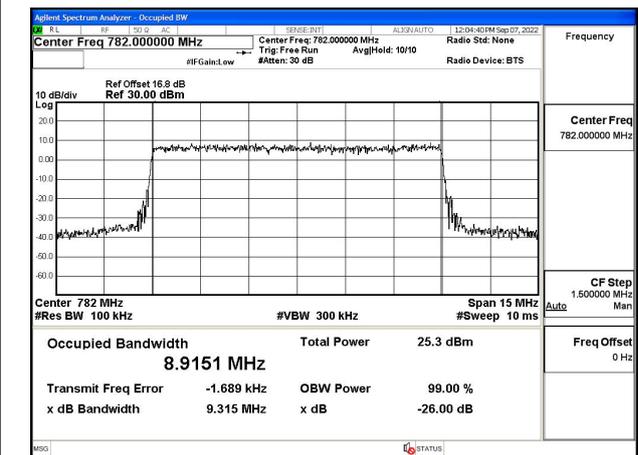


Fig.6

Test Mode: 16QAM

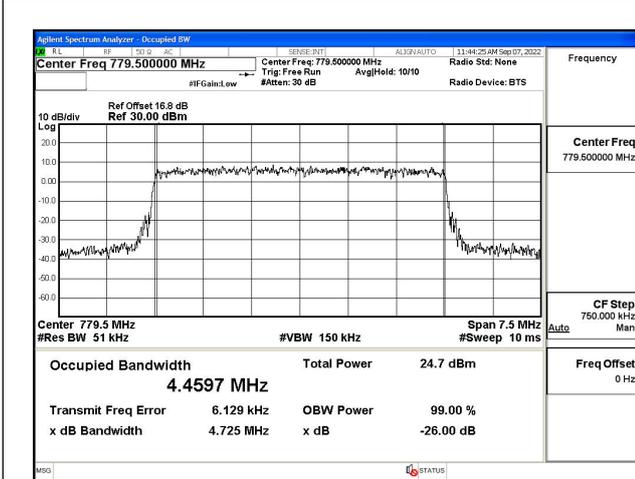


Fig.7

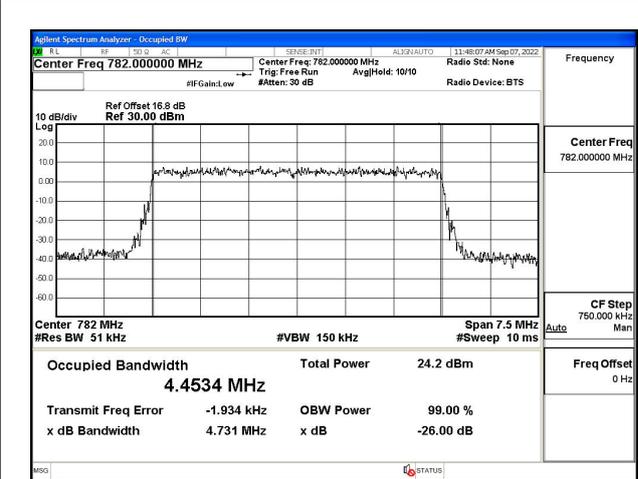


Fig.8

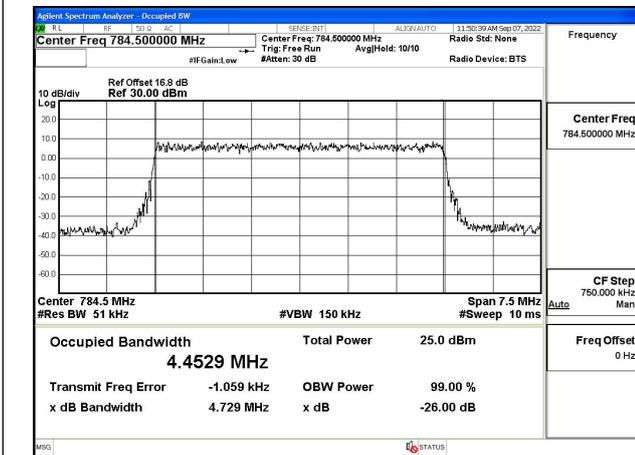


Fig.9

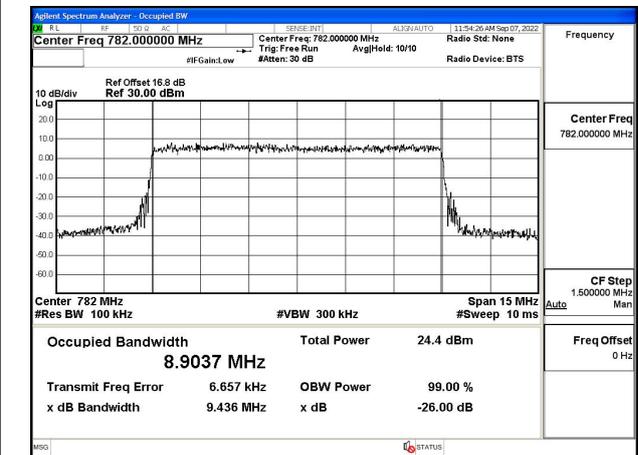


Fig.10

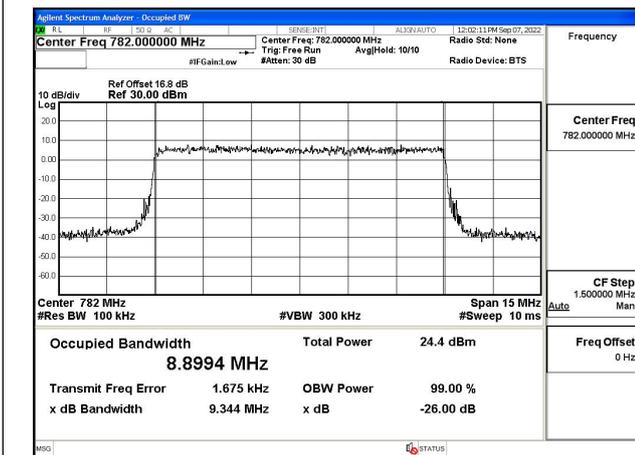


Fig.11

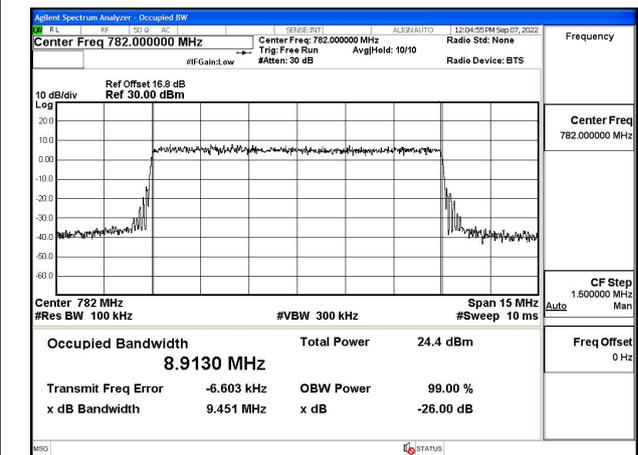


Fig.12

Test Mode: 64QAM

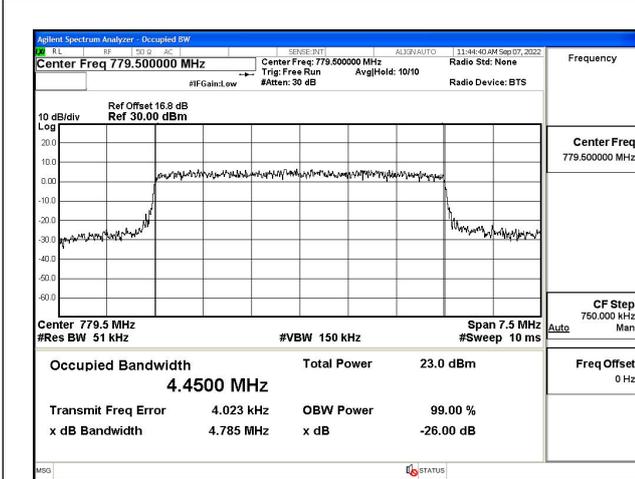


Fig.13

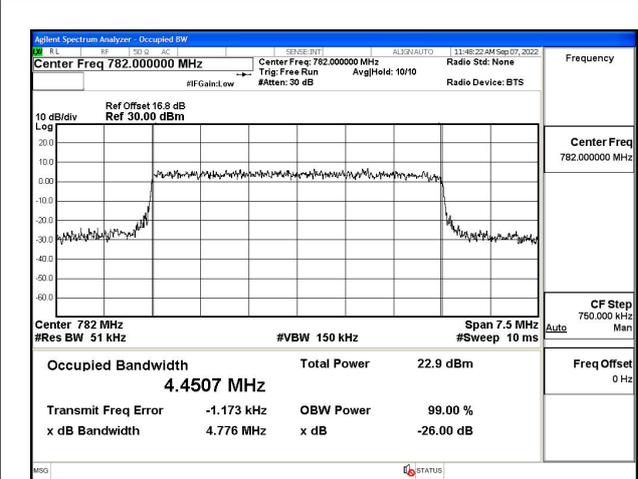


Fig.14

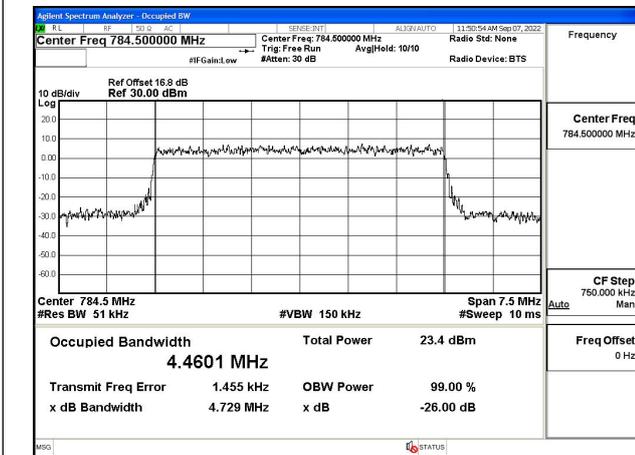


Fig.15

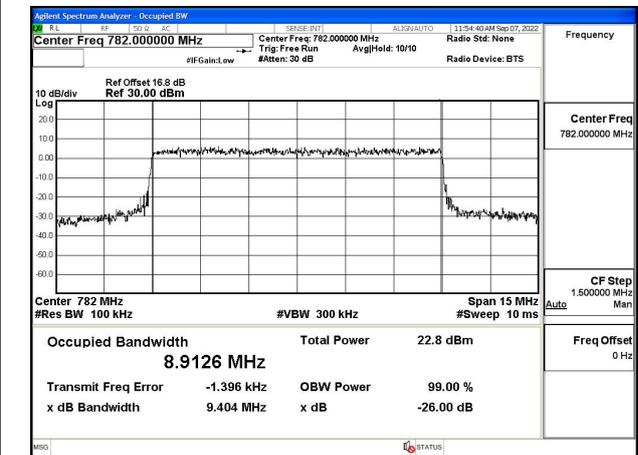


Fig.16

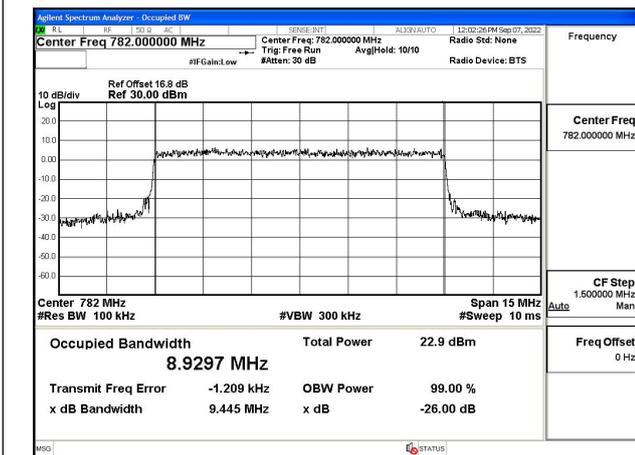


Fig.17

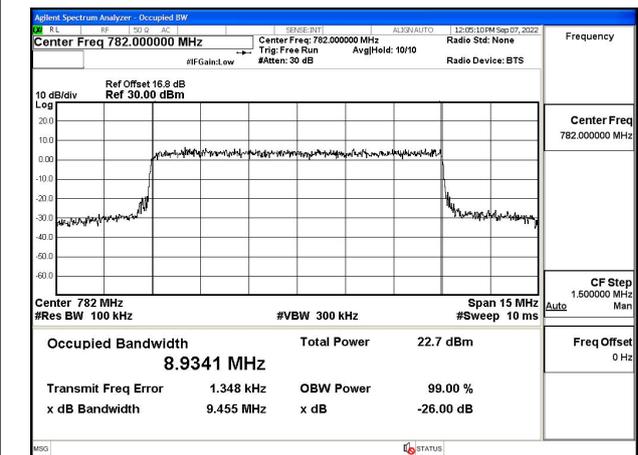


Fig.18

### 3 Emission Bandwidth

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)	
13	QPSK	779.5	23205	5	25	0	4.71	Fig.1
13	QPSK	782	23230	5	25	0	4.76	Fig.2
13	QPSK	784.5	23255	5	25	0	4.73	Fig.3
13	QPSK	782	23230	10	50	0	9.37	Fig.4
13	QPSK	782	23230	10	50	0	9.33	Fig.5
13	QPSK	782	23230	10	50	0	9.31	Fig.6

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)	
13	16QAM	779.5	23205	5	25	0	4.72	Fig.7
13	16QAM	782	23230	5	25	0	4.73	Fig.8
13	16QAM	784.5	23255	5	25	0	4.73	Fig.9
13	16QAM	782	23230	10	50	0	9.44	Fig.10
13	16QAM	782	23230	10	50	0	9.34	Fig.11
13	16QAM	782	23230	10	50	0	9.45	Fig.12

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)	
13	64QAM	779.5	23205	5	25	0	4.78	Fig.13
13	64QAM	782	23230	5	25	0	4.78	Fig.14
13	64QAM	784.5	23255	5	25	0	4.73	Fig.15
13	64QAM	782	23230	10	50	0	9.40	Fig.16
13	64QAM	782	23230	10	50	0	9.44	Fig.17
13	64QAM	782	23230	10	50	0	9.46	Fig.18

Test Mode: QPSK

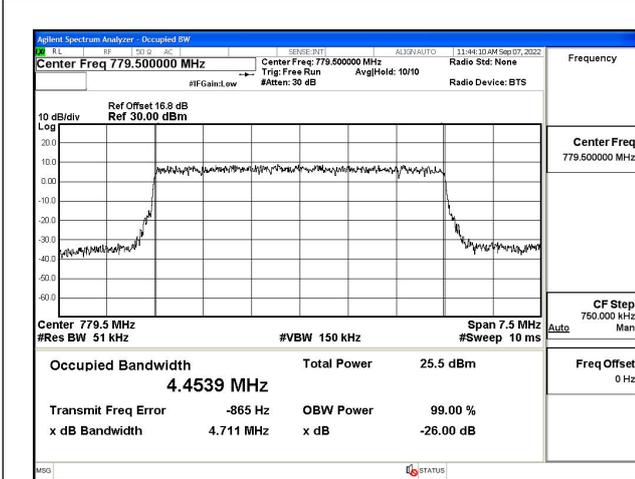


Fig.1

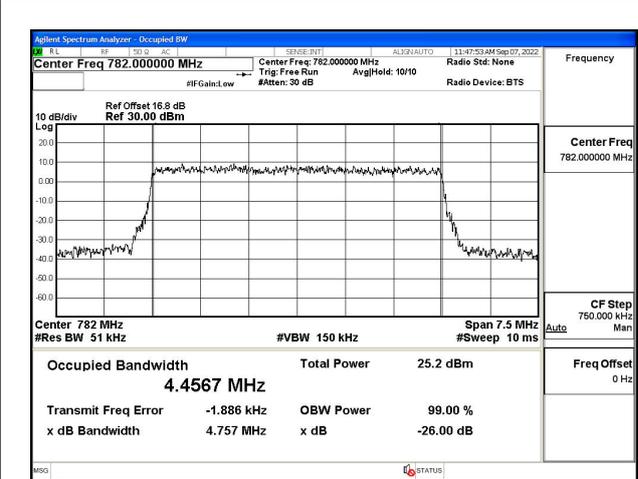


Fig.2

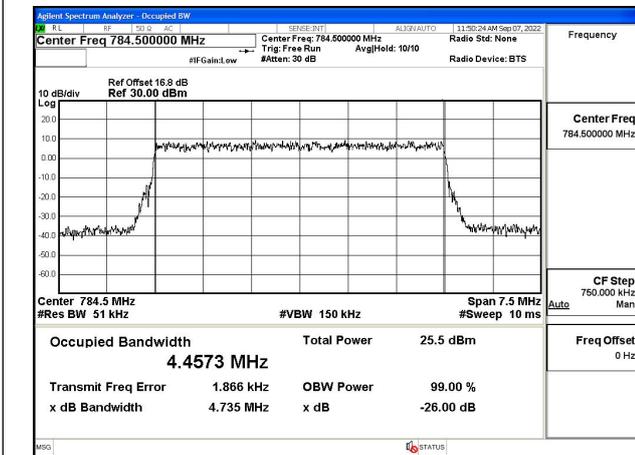


Fig.3

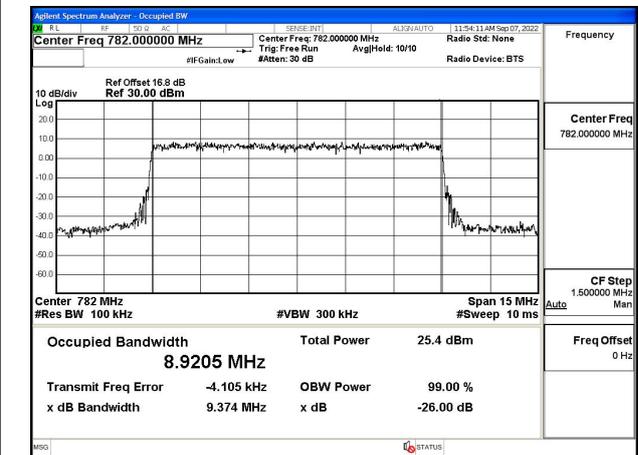


Fig.4

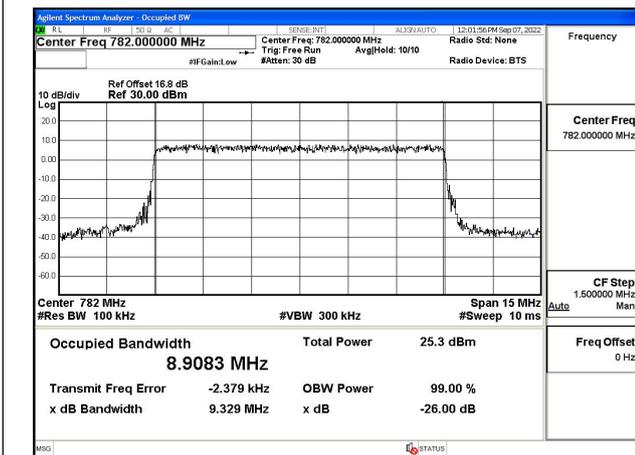


Fig.5

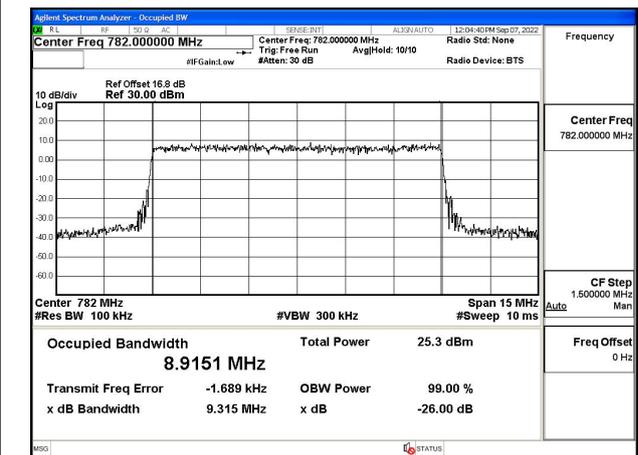


Fig.6

Test Mode: 16QAM

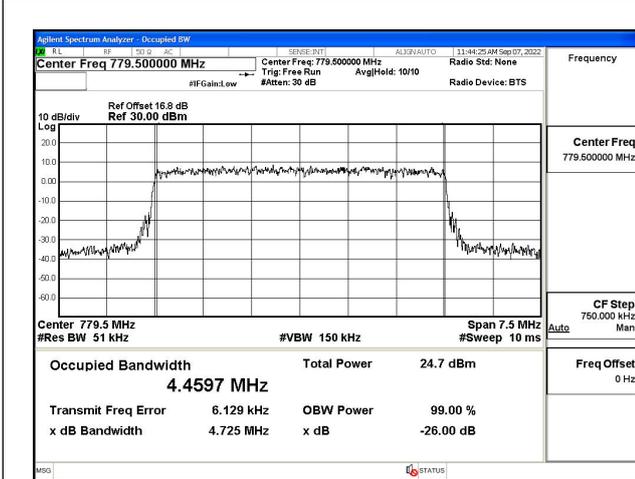


Fig.7

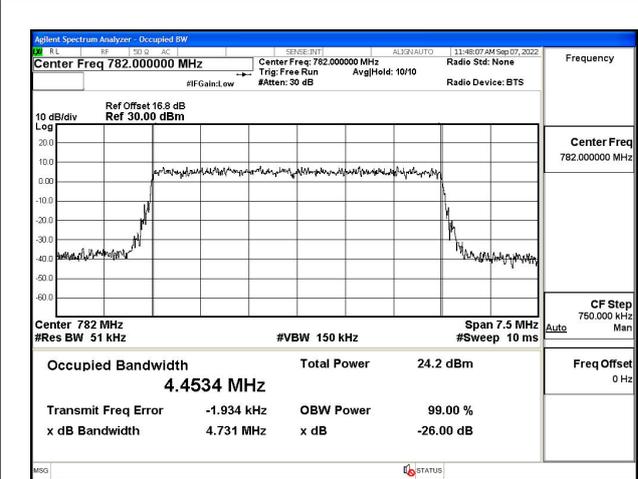


Fig.8

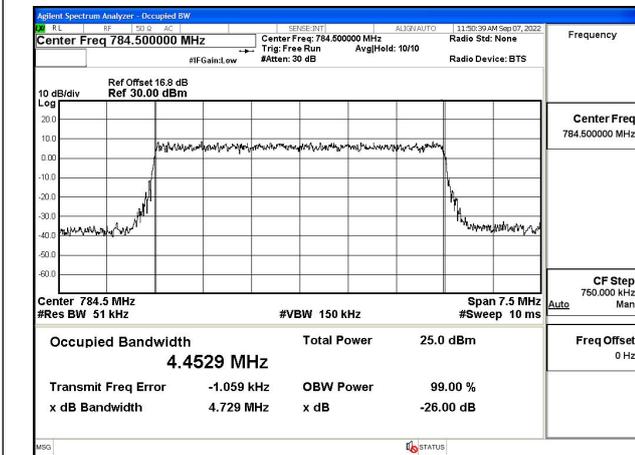


Fig.9

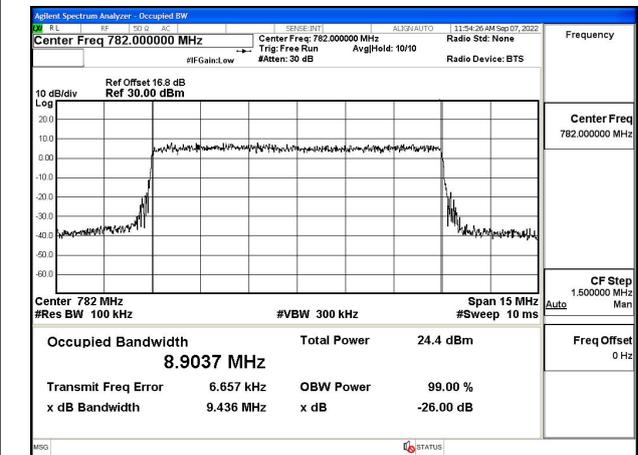


Fig.10

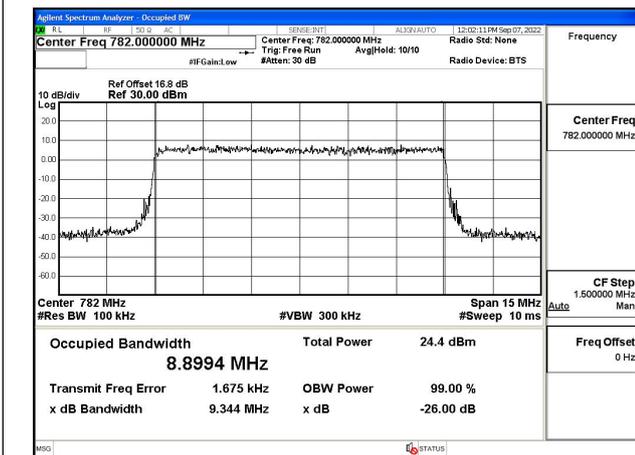


Fig.11

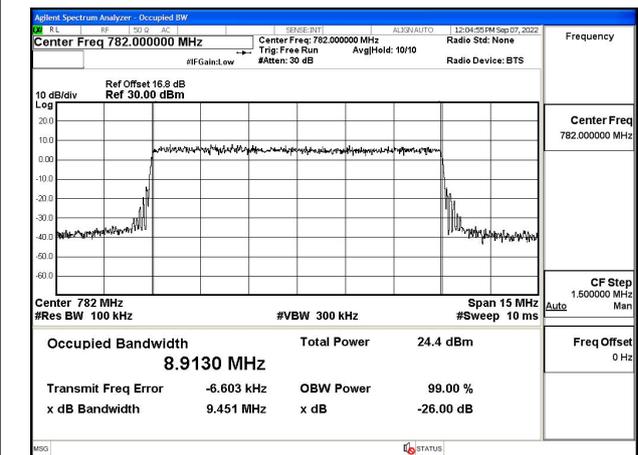


Fig.12

Test Mode: 64QAM

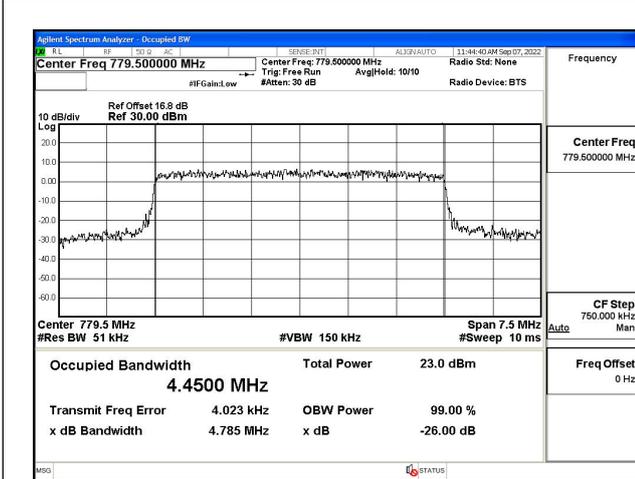


Fig.13

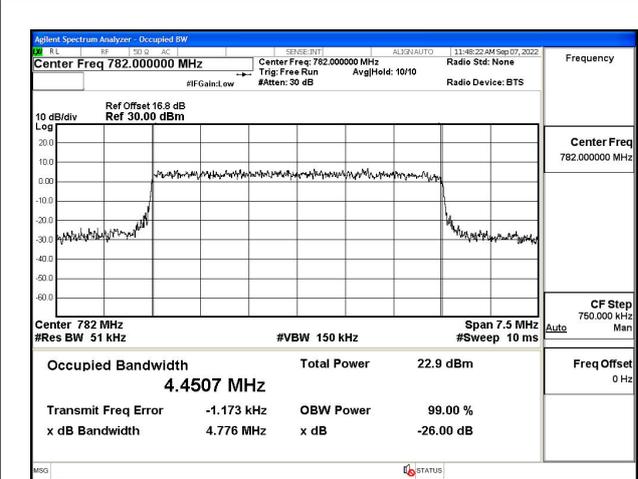


Fig.14

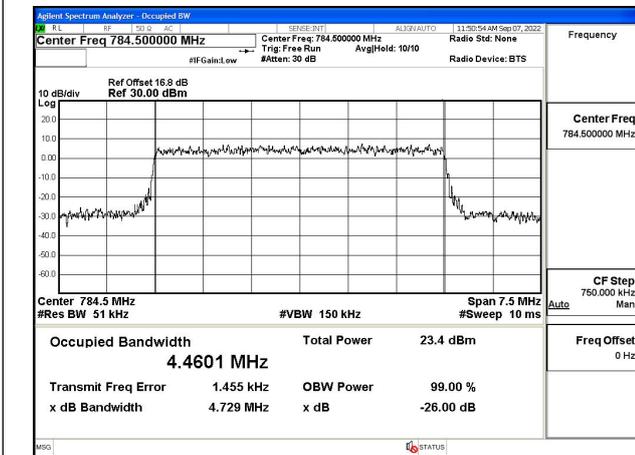


Fig.15

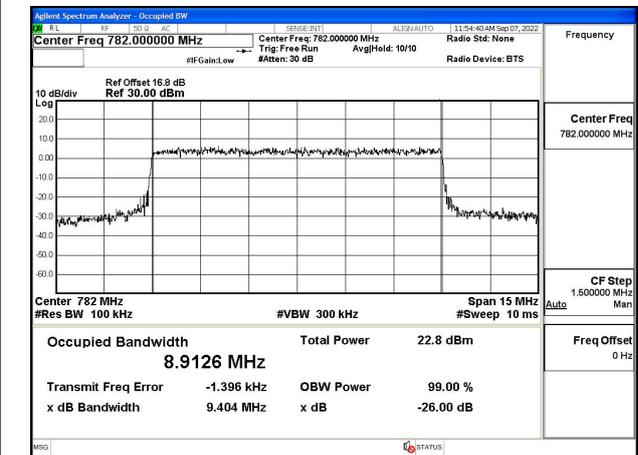


Fig.16

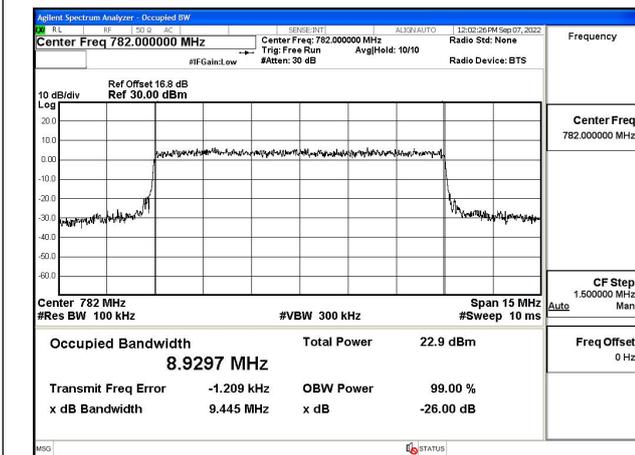


Fig.17

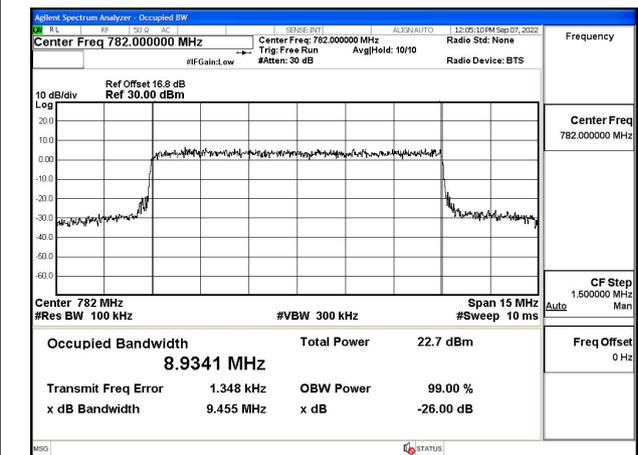


Fig.18

#### 4 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
13	779.5	23205	5	1	24	Fig.1	Fig.2	Fig.3
13	779.5	23205	5	25	0	Fig.4	Fig.5	Fig.6
13	782	23230	5	1	24	Fig.7	Fig.8	Fig.9
13	782	23230	5	25	0	Fig.10	Fig.11	Fig.12
13	784.5	23255	5	1	24	Fig.13	Fig.14	Fig.15
13	784.5	23255	5	25	0	Fig.16	Fig.17	Fig.18
13	782	23230	10	1	49	Fig.19	Fig.20	Fig.21
13	782	23230	10	50	0	Fig.22	Fig.23	Fig.24
13	782	23230	10	1	49	Fig.25	Fig.26	Fig.27
13	782	23230	10	50	0	Fig.28	Fig.29	Fig.30
13	782	23230	10	1	49	Fig.31	Fig.32	Fig.33
13	782	23230	10	50	0	Fig.34	Fig.35	Fig.36

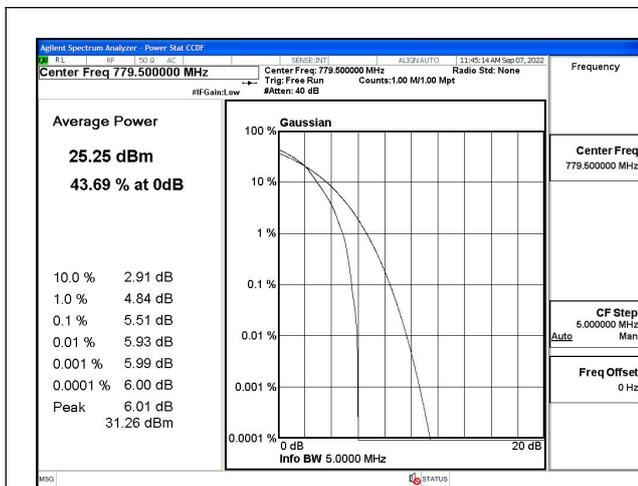


Fig.1

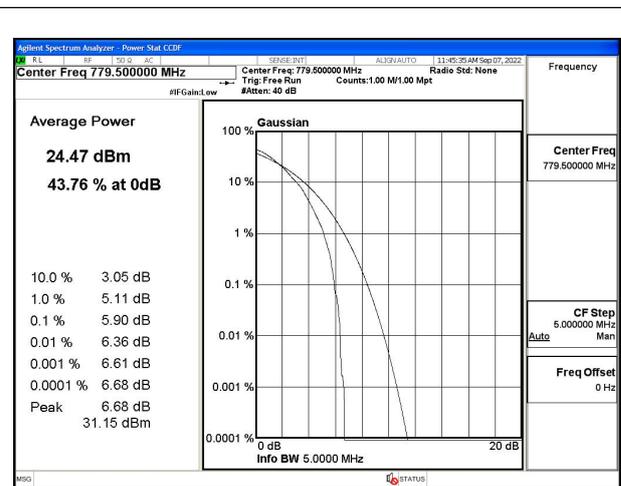


Fig.2

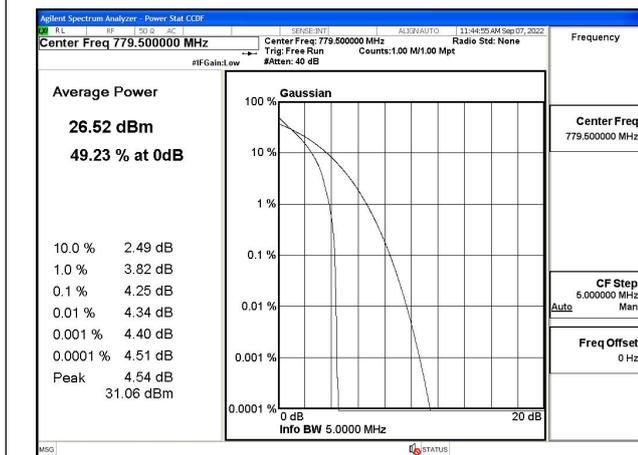


Fig.3

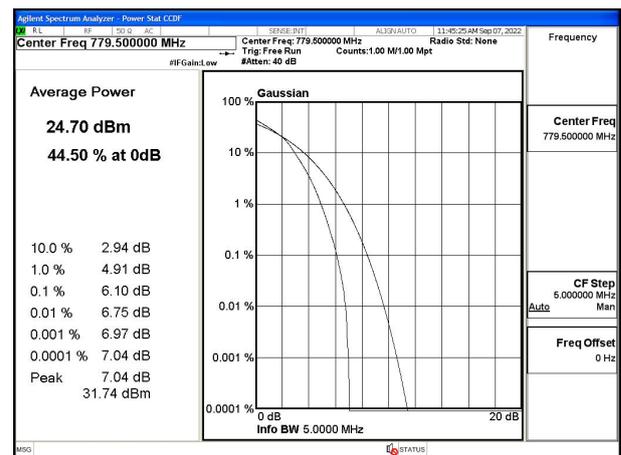


Fig.4