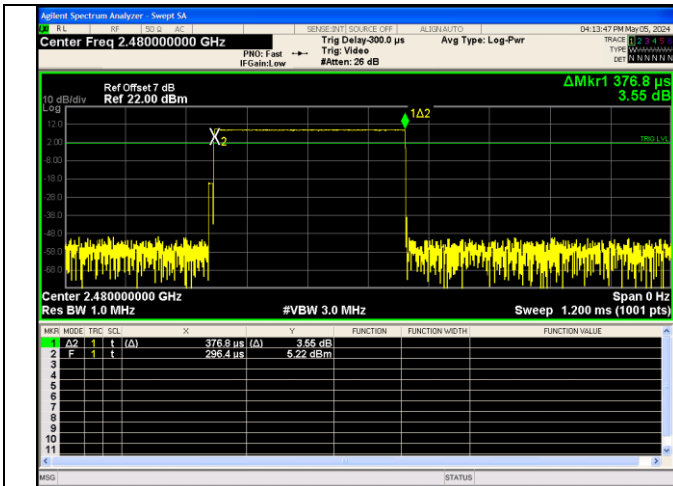
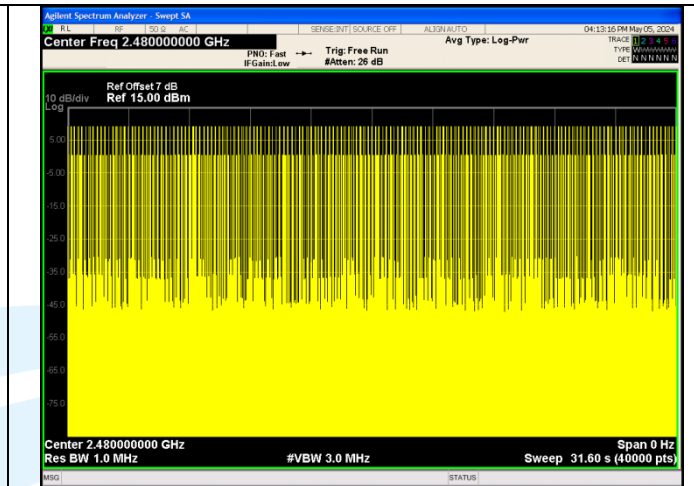
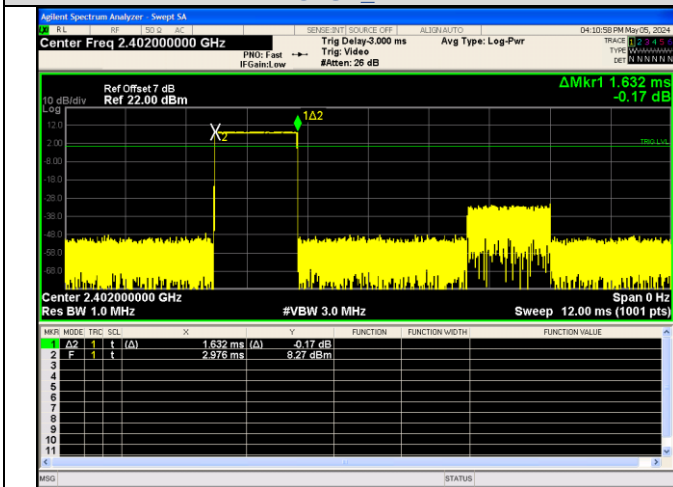




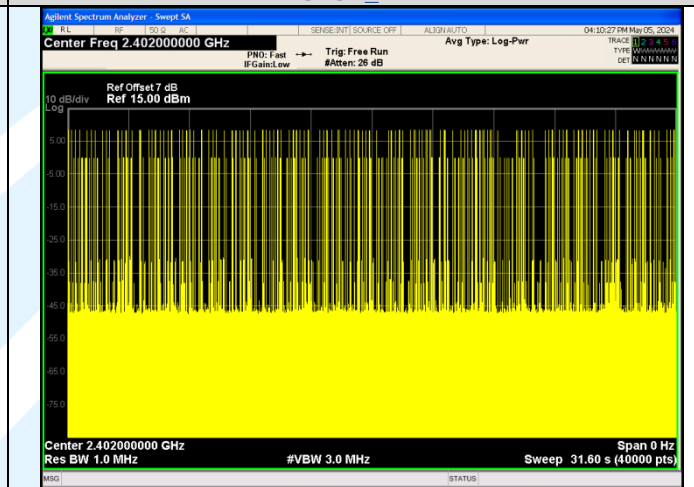
Pulse Width
GFSK_DH1



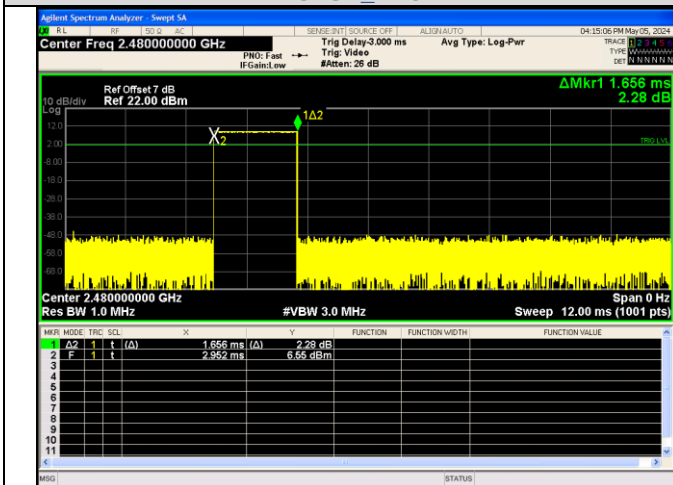
Number of Pulses in 31.6 seconds
GFSK_DH1



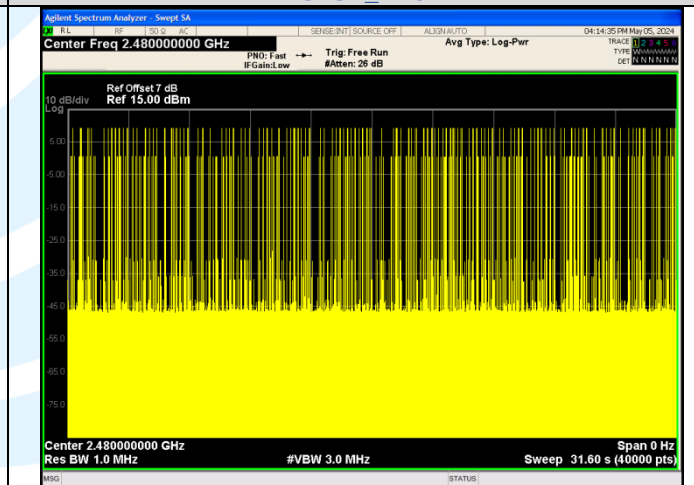
Pulse Width
GFSK_DH3



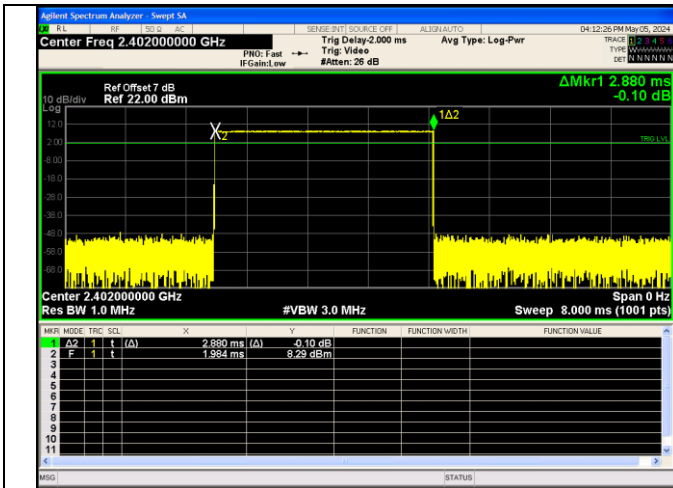
Number of Pulses in 31.6 seconds
GFSK_DH3



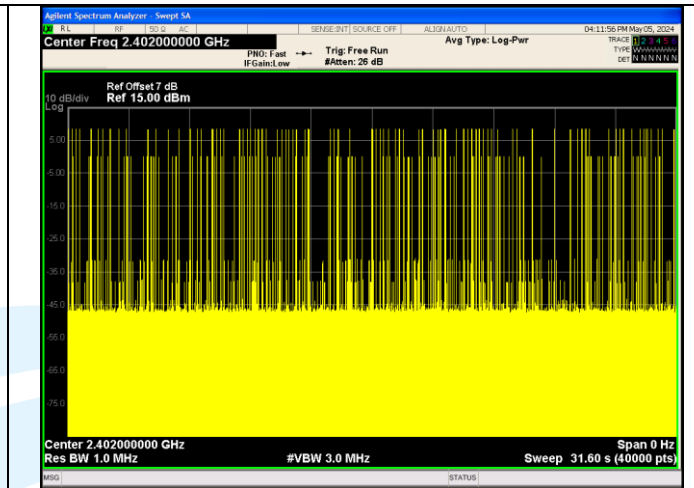
Pulse Width
GFSK_DH3



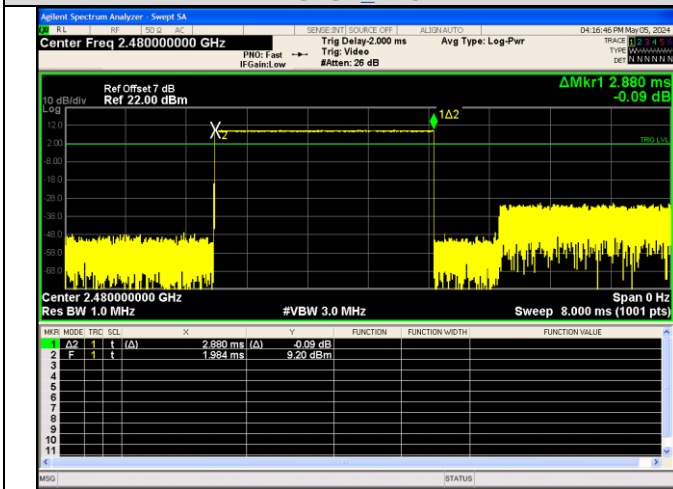
Number of Pulses in 31.6 seconds
GFSK_DH3



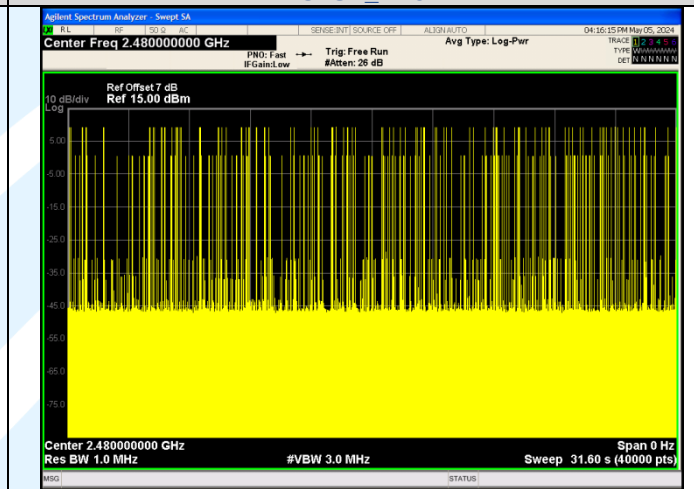
Pulse Width
GFSK_DH5



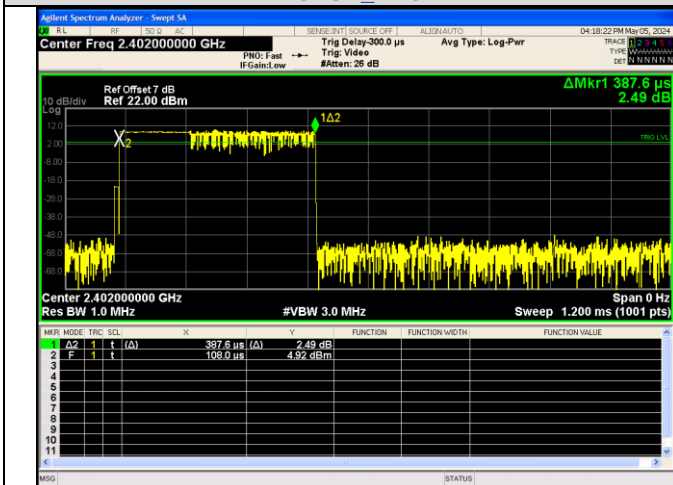
Number of Pulses in 31.6 seconds
GFSK_DH5



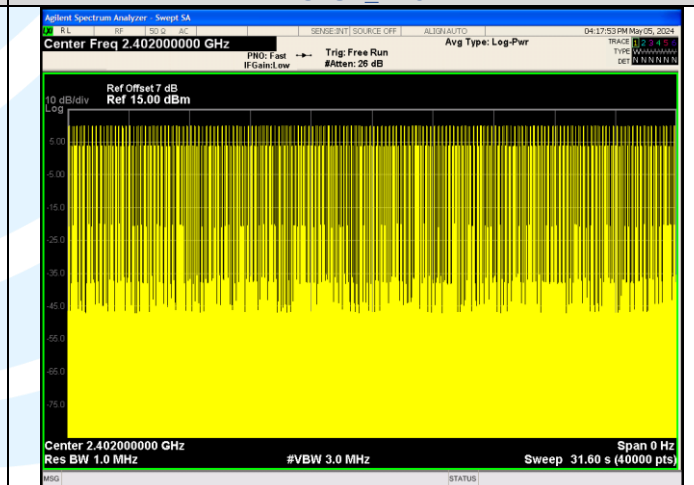
Pulse Width
GFSK_DH5



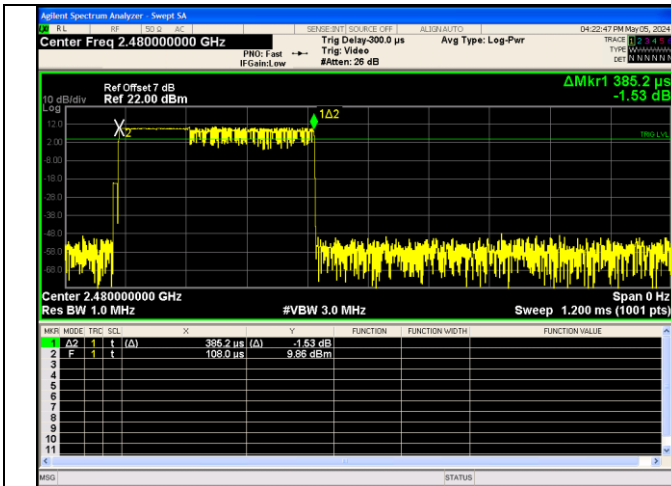
Number of Pulses in 31.6 seconds
GFSK_DH5



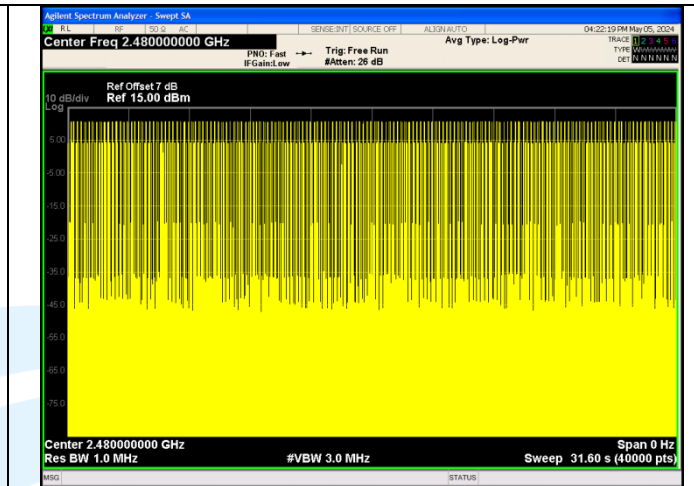
Pulse Width
 $\pi/4$ DQPSK_2-DH1



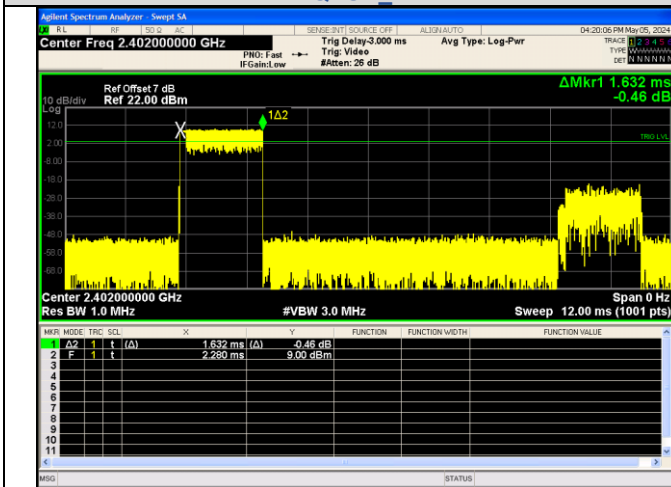
Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK_2-DH1



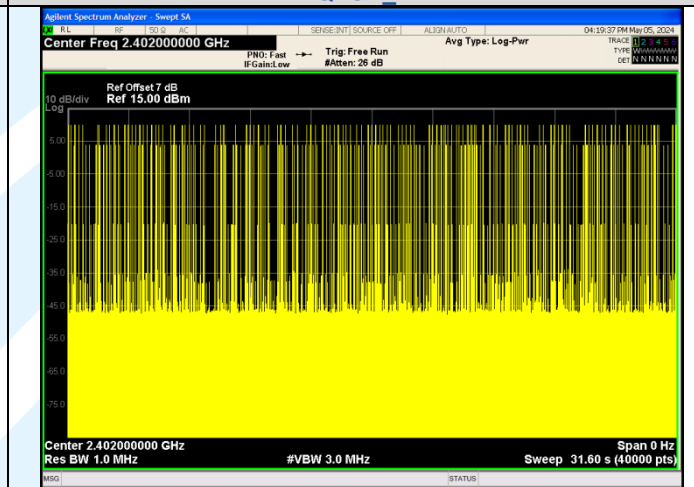
Pulse Width
 $\pi/4$ DQPSK_2-DH1



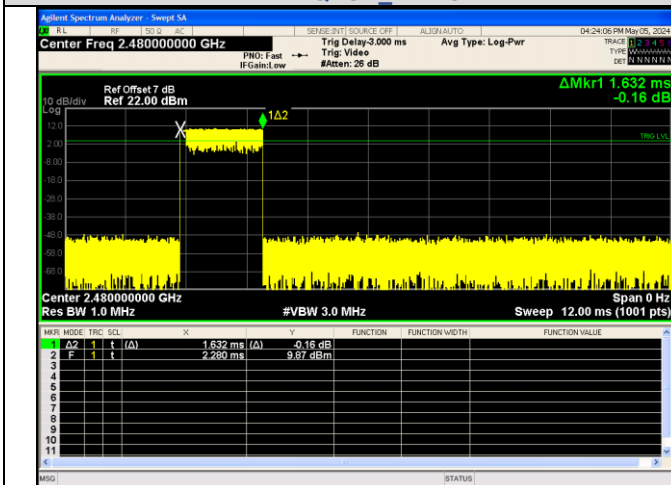
Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK_2-DH1



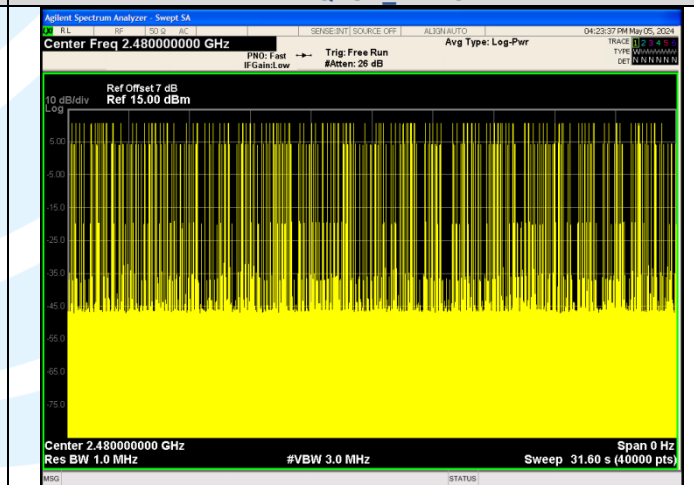
Pulse Width
 $\pi/4$ DQPSK_2-DH3



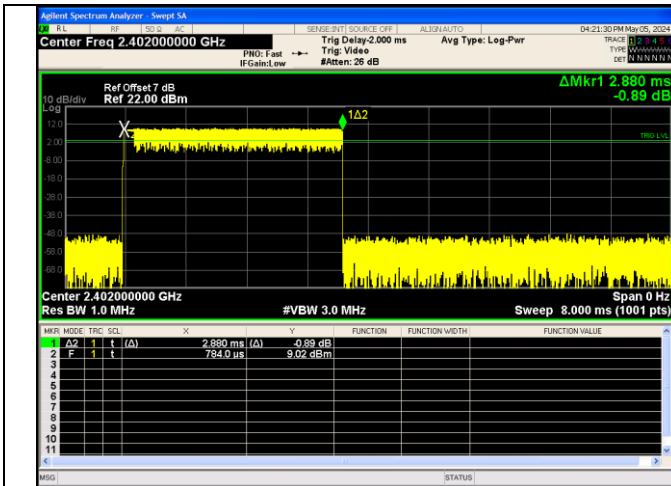
Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK_2-DH3



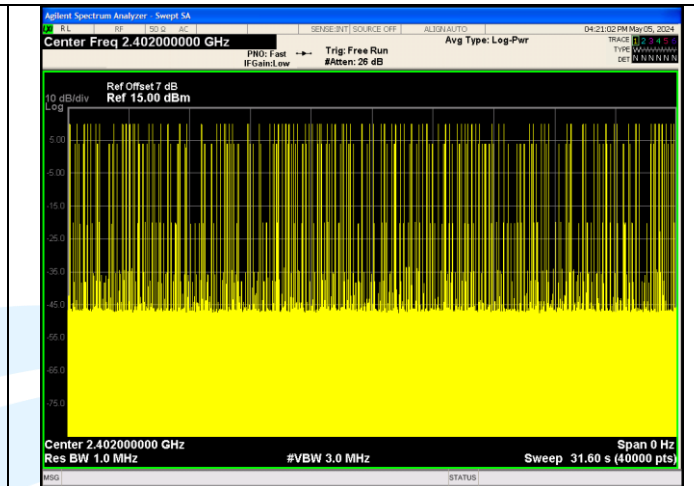
Pulse Width
 $\pi/4$ DQPSK_2-DH3



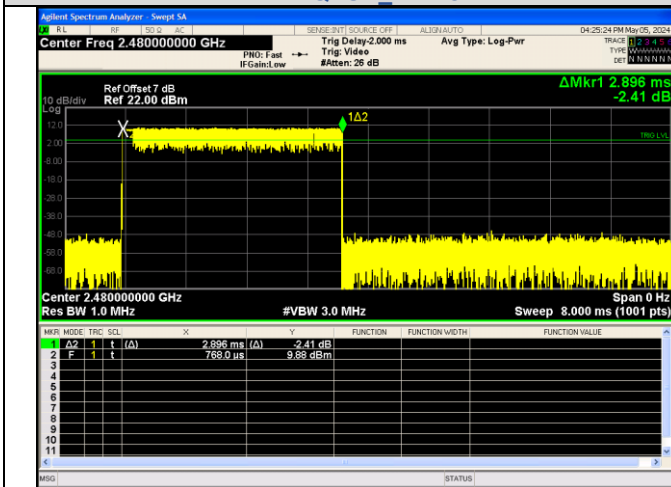
Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK_2-DH3



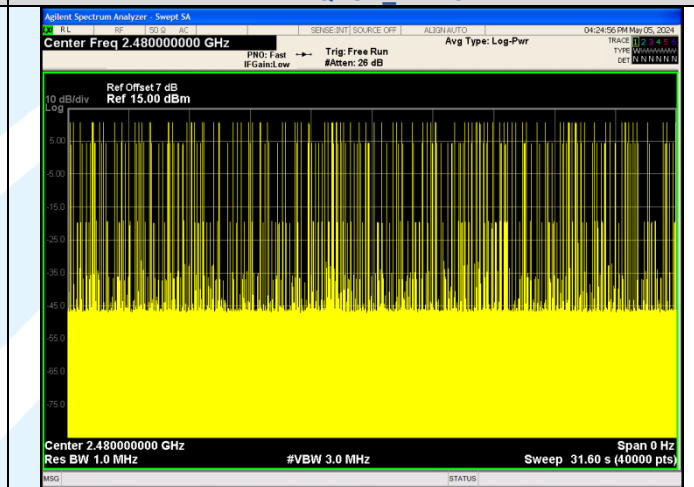
Pulse Width
 $\pi/4$ DQPSK_2-DH5



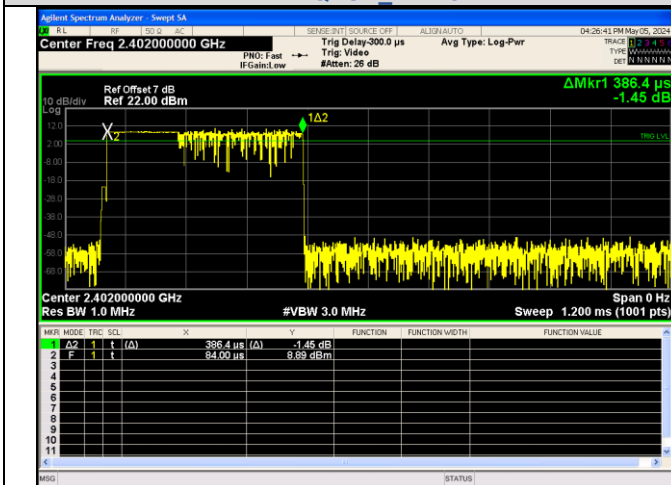
Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK_2-DH5



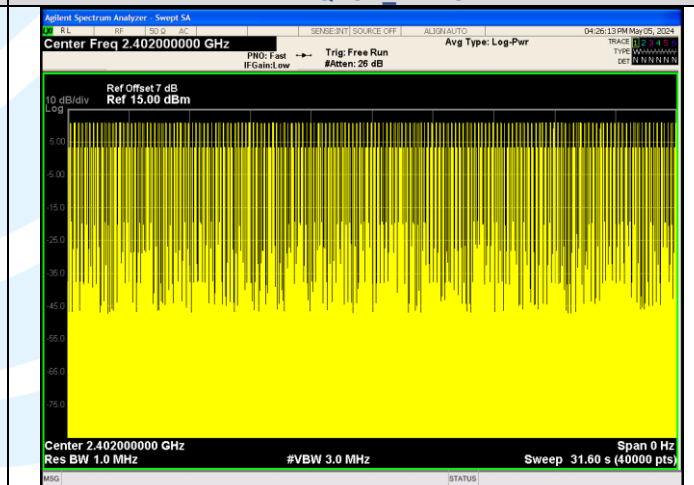
Pulse Width
 $\pi/4$ DQPSK_2-DH5



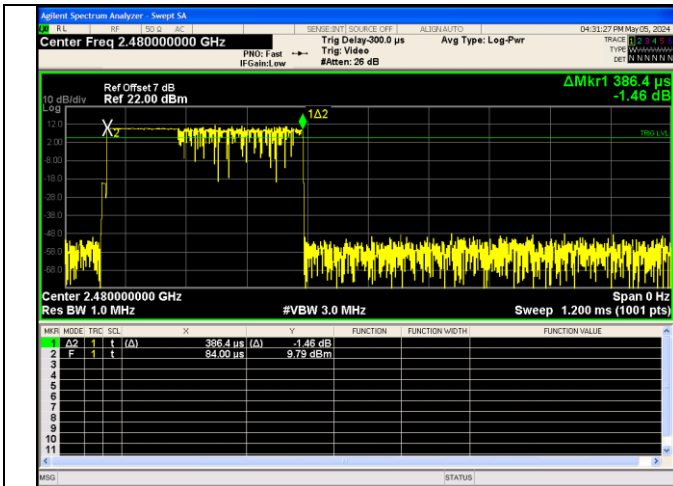
Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK_2-DH5



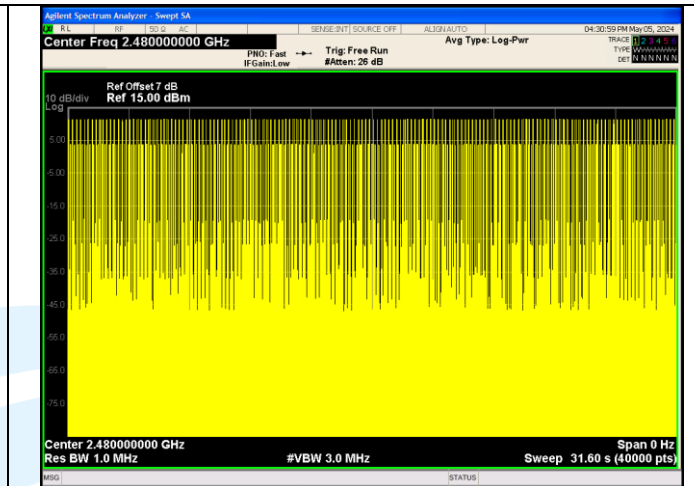
Pulse Width
8DPSK_3-DH1



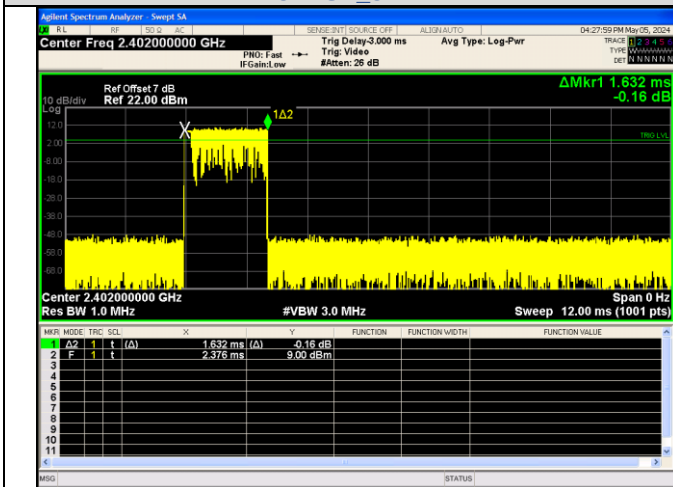
Number of Pulses in 31.6 seconds
8DPSK_3-DH1



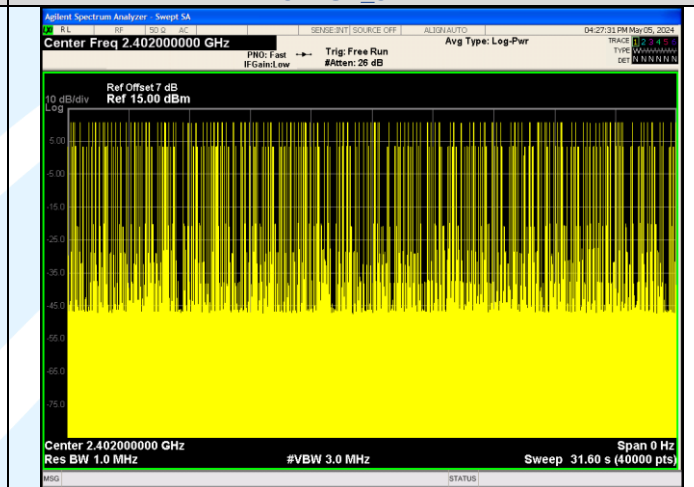
Pulse Width
8DPSK_3-DH1



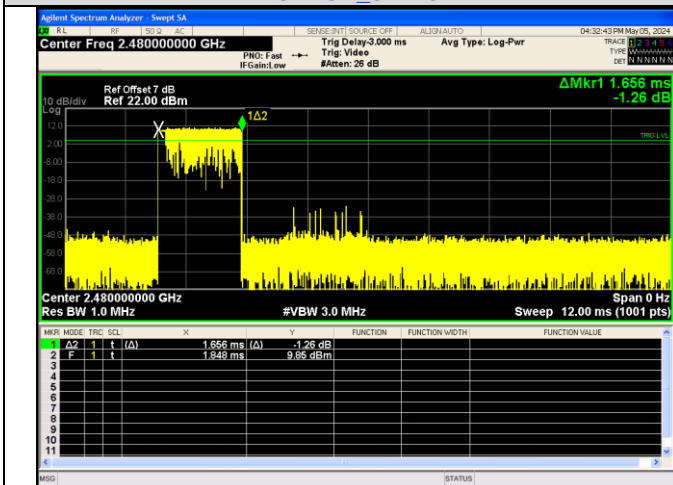
Number of Pulses in 31.6 seconds
8DPSK_3-DH1



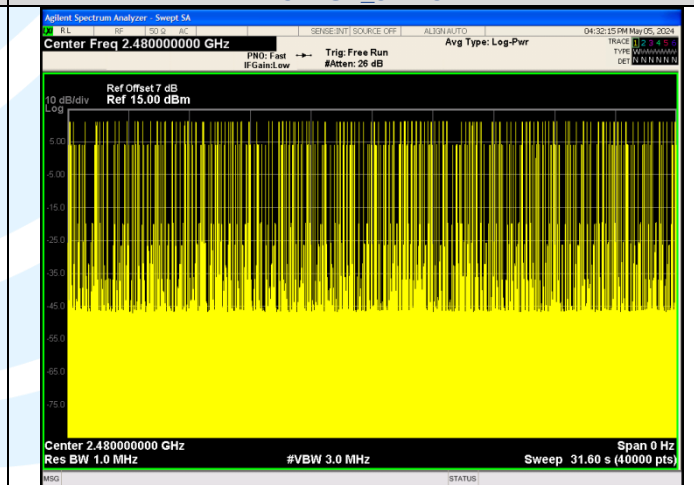
Pulse Width
8DPSK_3-DH3



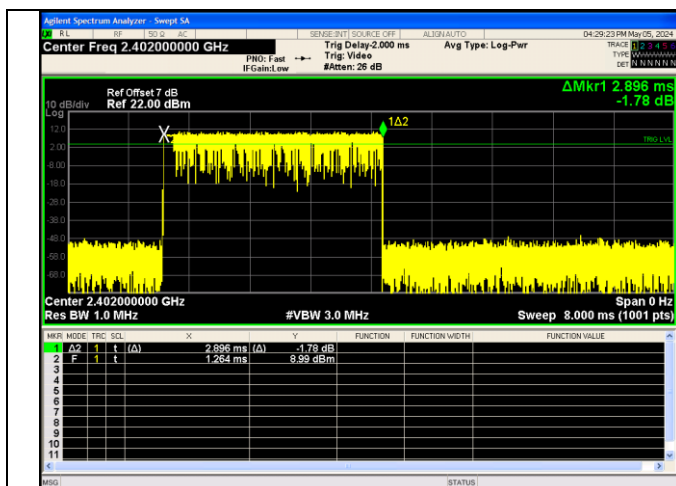
Number of Pulses in 31.6 seconds
8DPSK_3-DH3



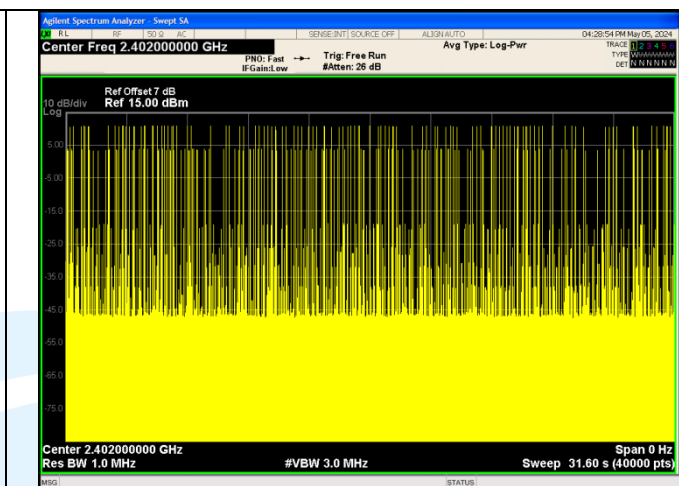
Pulse Width
8DPSK_3-DH3



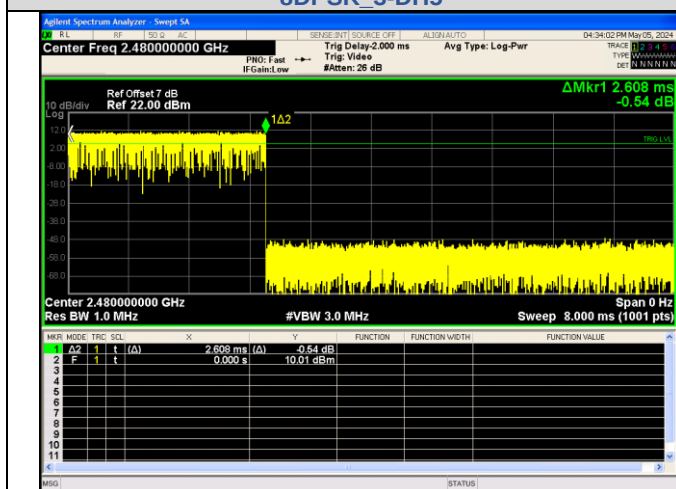
Number of Pulses in 31.6 seconds
8DPSK_3-DH3



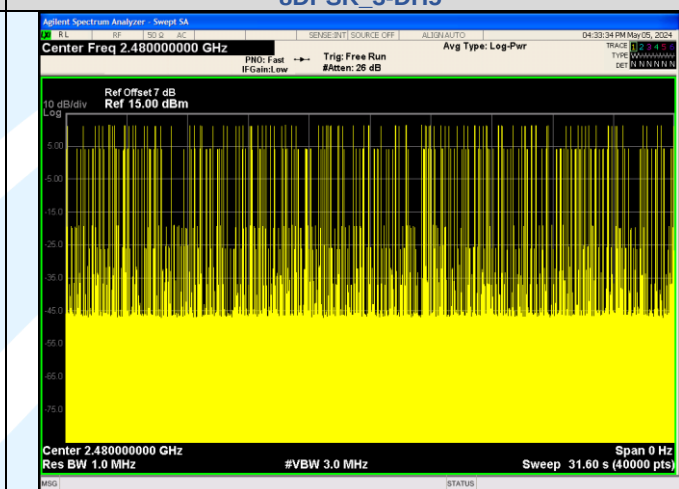
Pulse Width
8DPSK_3-DH5



Number of Pulses in 31.6 seconds
8DPSK_3-DH5



Pulse Width
8DPSK_3-DH5



Number of Pulses in 31.6 seconds
8DPSK_3-DH5

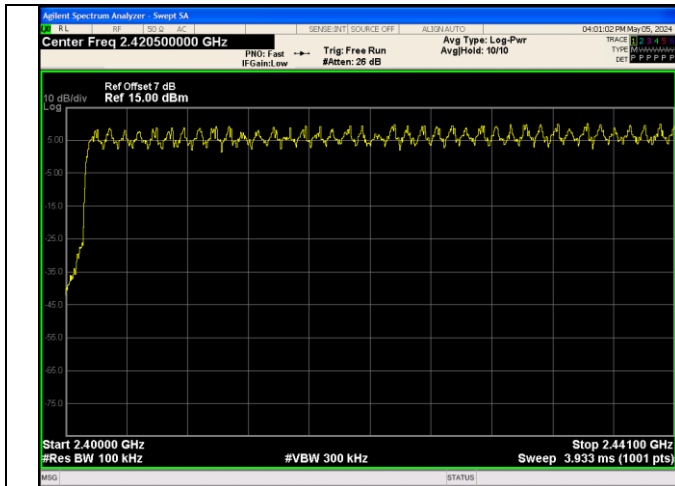
A.6 NUMBER OF HOPPING CHANNEL

Test Result

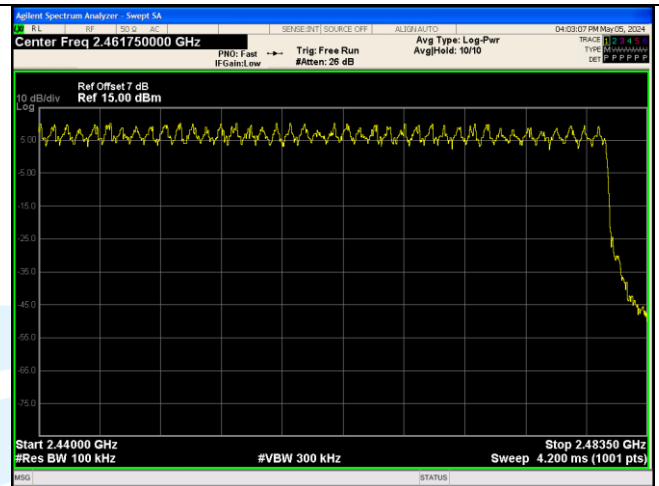
Modulation	Packet	Number of Hopping Channel	Limit	Result
GFSK	DH5	79	15	PASS
$\pi/4$ DQPSK	2-DH5	79	15	PASS
8DPSK	3-DH5	79	15	PASS

Test Graphs





Low End Spectrum Channel Hopping Plot
8DPSK



High End Spectrum Channel Hopping Plot
8DPSK

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-RF-RSS247-V1.1

A.7 RADIATED SPURIOUS EMISSIONS

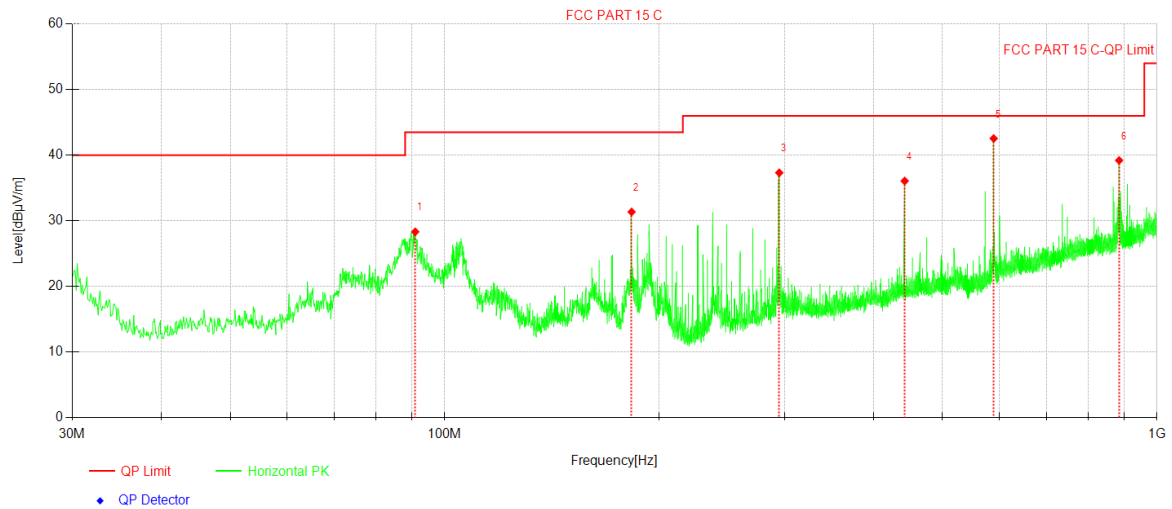
Radiated Emission Test Data (9 KHz ~ 30 MHz):

The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

Radiated Emission Test Data (30 MHz ~ 1 GHz):

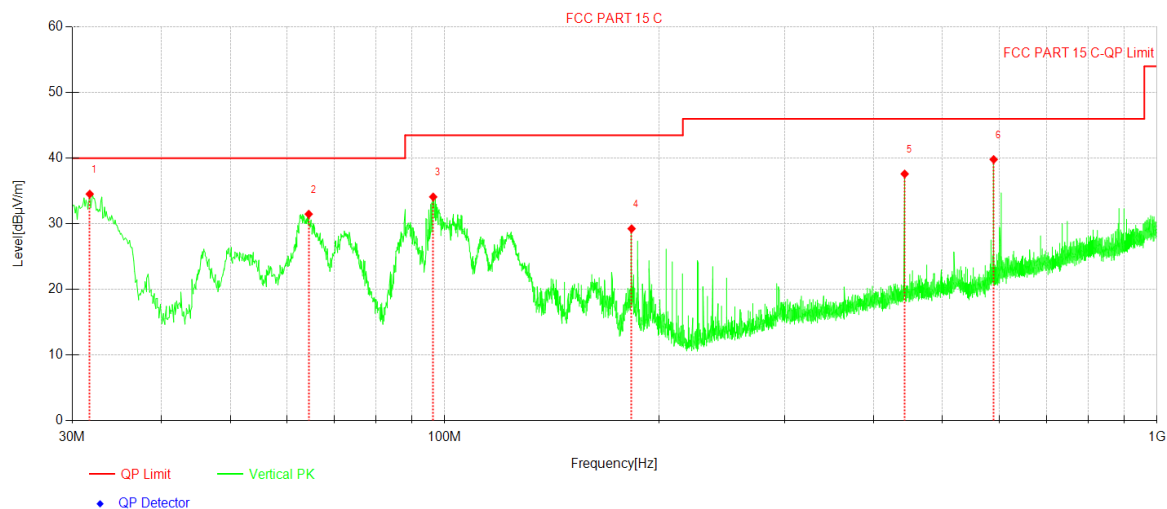
Worst-Case Configuration(BR+EDR)_Channel 0)

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correction factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	90.922092	42.12	-13.80	28.32	43.50	15.18	Peak
2	182.984298	41.06	-9.71	31.35	43.50	12.15	Peak
3	294.933493	44.44	-7.12	37.32	46.00	8.68	Peak
4	442.388239	39.06	-2.99	36.07	46.00	9.93	Peak
5	589.842984	42.94	-0.39	42.55	46.00	3.45	Peak
6	884.752475	34.53	4.67	39.20	46.00	6.80	Peak

Vertical



No.	Frequency (MHz)	Reading (dBUV)	Correction factor (dB)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	31.746175	44.32	-9.78	34.54	40.00	5.46	Peak
2	64.438444	40.73	-9.26	31.47	40.00	8.53	Peak
3	96.354636	47.27	-13.17	34.10	43.50	9.40	Peak
4	182.984298	38.96	-9.71	29.25	43.50	14.25	Peak
5	442.388239	40.59	-2.99	37.60	46.00	8.40	Peak
6	589.842984	40.20	-0.39	39.81	46.00	6.19	Peak

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

Tel: +86-755-28230888

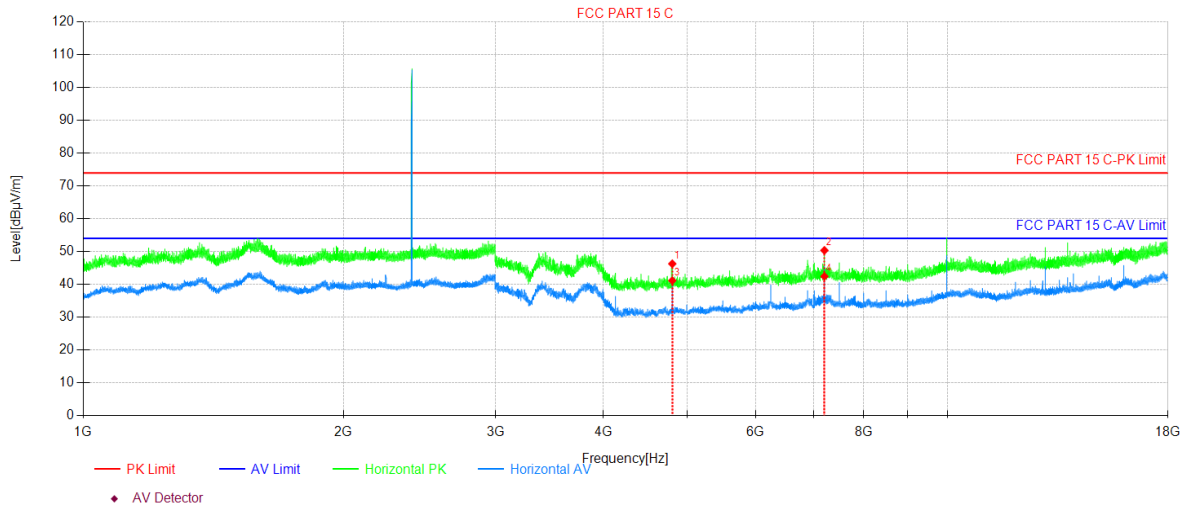
Fax: +86-755-28230886

E-mail: info@uttlab.com

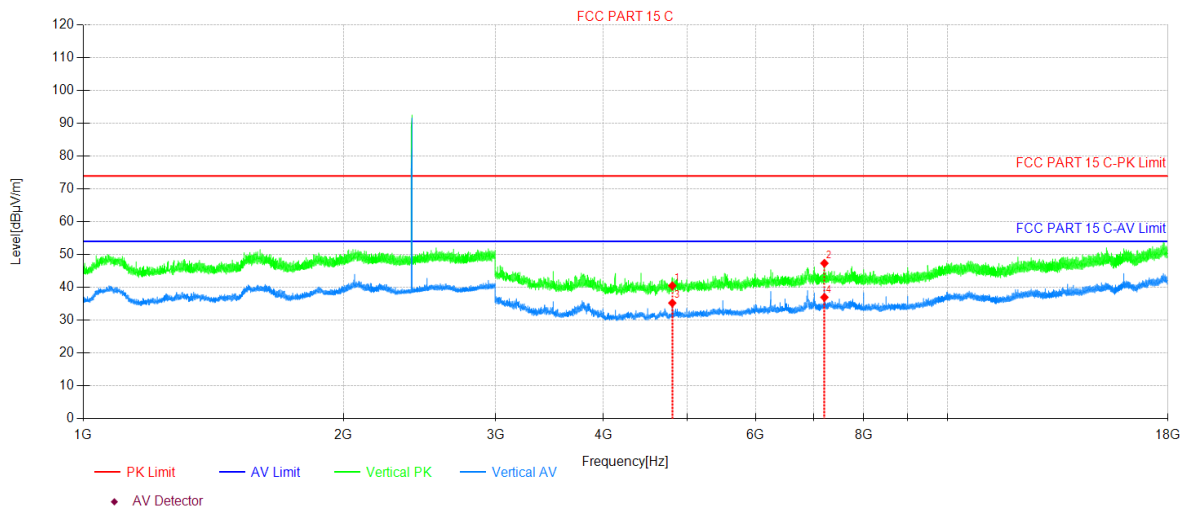
<http://www.uttlab.com>

UTTR-RF-RSS247-V1.1

Radiated Emission Test Data (Above 1GHz):
BR+EDR _ Lowest Channel:
Test Graph

**Data List**

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Verdict
1	4804.5902	50.88	-4.61	46.27	74.00	27.73	150	58	PK	Horizontal	PASS
2	7206.2103	52.12	-1.76	50.36	74.00	23.64	150	15	PK	Horizontal	PASS
3	4804.5902	45.77	-4.61	41.16	54.00	12.84	150	3	AV	Horizontal	PASS
4	7206.2103	44.18	-1.76	42.42	54.00	11.58	150	3	AV	Horizontal	PASS

Test Graph**Data List**

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Verdict
1	4804.5902	45.11	-4.61	40.50	74.00	33.50	150	15	PK	Vertical	PASS
2	7206.2103	49.11	-1.76	47.35	74.00	26.65	150	86	PK	Vertical	PASS
3	4804.5902	39.83	-4.61	35.22	54.00	18.78	150	86	AV	Vertical	PASS
4	7206.2103	38.72	-1.76	36.96	54.00	17.04	150	140	AV	Vertical	PASS

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

Tel: +86-755-28230888

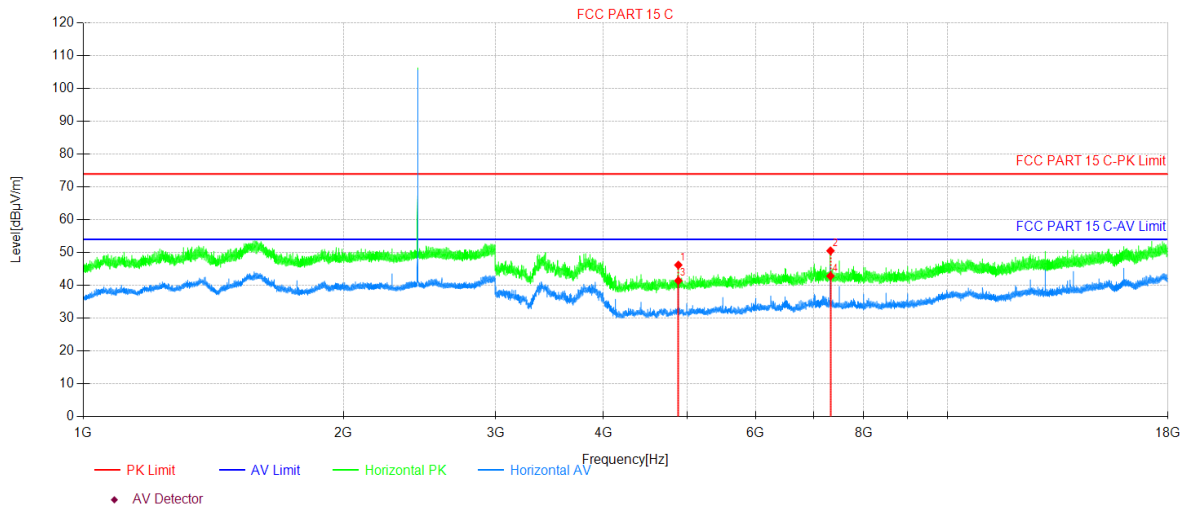
Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-RF-RSS247-V1.1

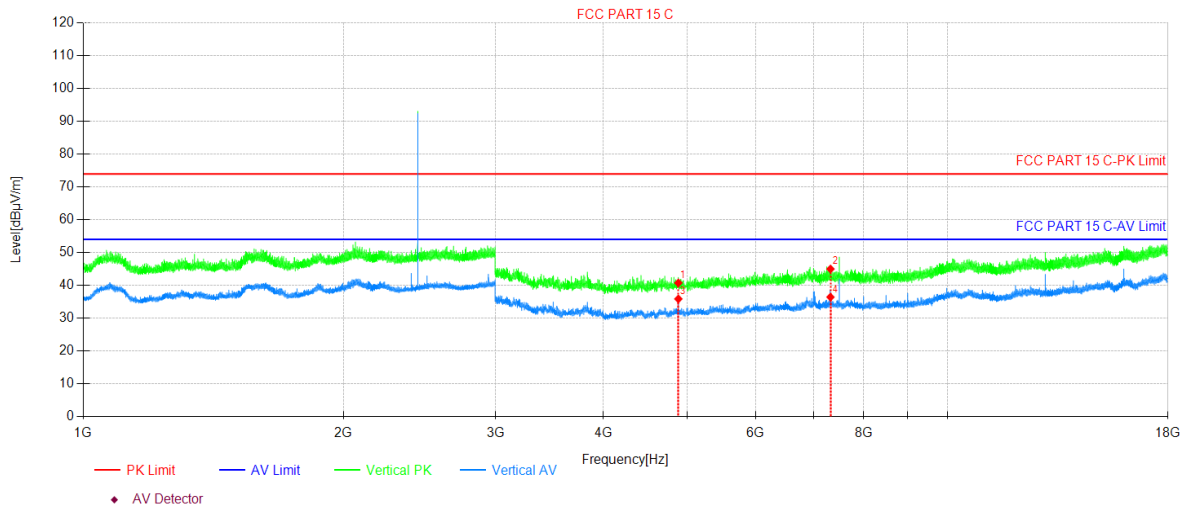
BR+EDR _ Middle Channe: Test Graph



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detect or	Polarity	Verdict
1	4882.5941	50.92	-4.72	46.20	74.00	27.80	150	15	PK	Horizontal	PASS
2	7323.2162	52.02	-1.49	50.53	74.00	23.47	150	30	PK	Horizontal	PASS
3	4882.5941	46.14	-4.72	41.42	54.00	12.58	150	3	AV	Horizontal	PASS
4	7323.2162	44.34	-1.49	42.85	54.00	11.15	150	30	AV	Horizontal	PASS

Test Graph



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detect or	Polarity	Verdict
1	4882.5941	45.47	-4.72	40.75	74.00	33.25	150	172	PK	Vertical	PASS
2	7323.2162	46.47	-1.49	44.98	74.00	29.02	150	157	PK	Vertical	PASS
3	4882.5941	40.58	-4.72	35.86	54.00	18.14	150	72	AV	Vertical	PASS
4	7323.2162	37.90	-1.49	36.41	54.00	17.59	150	86	AV	Vertical	PASS

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

Tel: +86-755-28230888

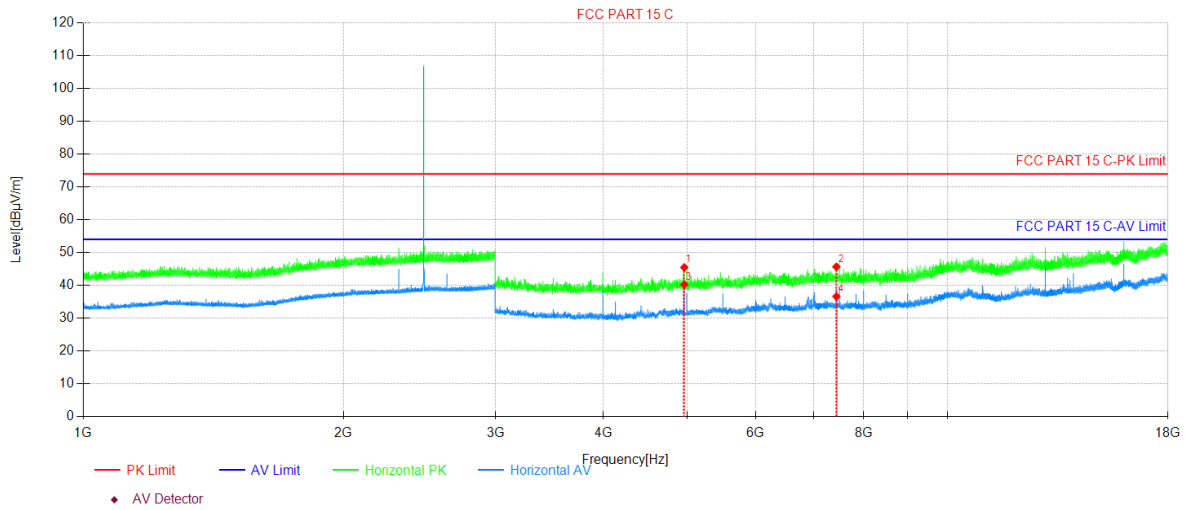
Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-RF-RSS247-V1.1

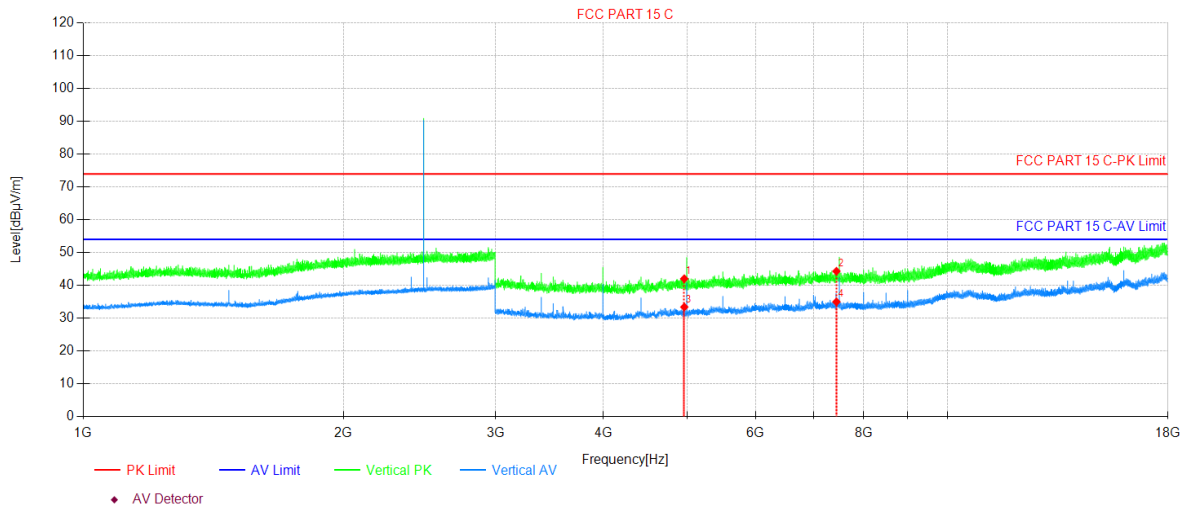
BR+EDR _ Highest Channel Test Graph



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Verdict
1	4960.598	50.33	-4.86	45.47	74.00	28.53	150	27	PK	Horizontal	PASS
2	7440.222	47.00	-1.34	45.66	74.00	28.34	150	0	PK	Horizontal	PASS
3	4960.598	45.14	-4.86	40.28	54.00	13.72	150	0	AV	Horizontal	PASS
4	7440.222	37.95	-1.34	36.61	54.00	17.39	150	3	AV	Horizontal	PASS

Test Graph



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Verdict
1	4960.598	46.88	-4.86	42.02	74.00	31.98	150	65	PK	Vertical	PASS
2	7440.222	45.64	-1.34	44.30	74.00	29.70	150	0	PK	Vertical	PASS
3	4960.598	38.25	-4.86	33.39	54.00	20.61	150	20	AV	Vertical	PASS
4	7440.222	36.31	-1.34	34.97	54.00	19.03	150	106	AV	Vertical	PASS

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

Tel: +86-755-28230888

Fax: +86-755-28230886

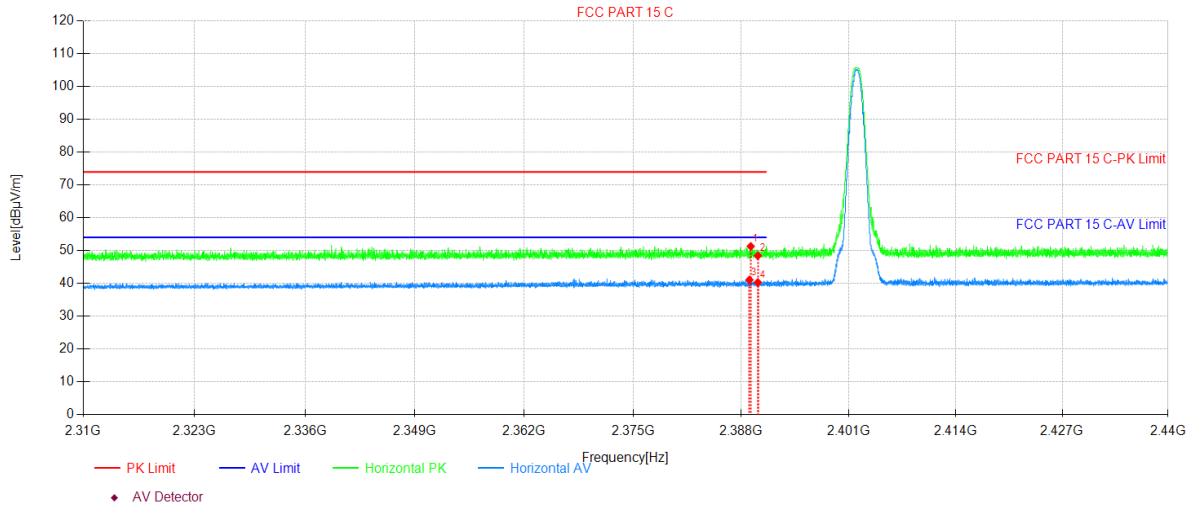
E-mail: info@uttlab.com

<http://www.uttlab.com>

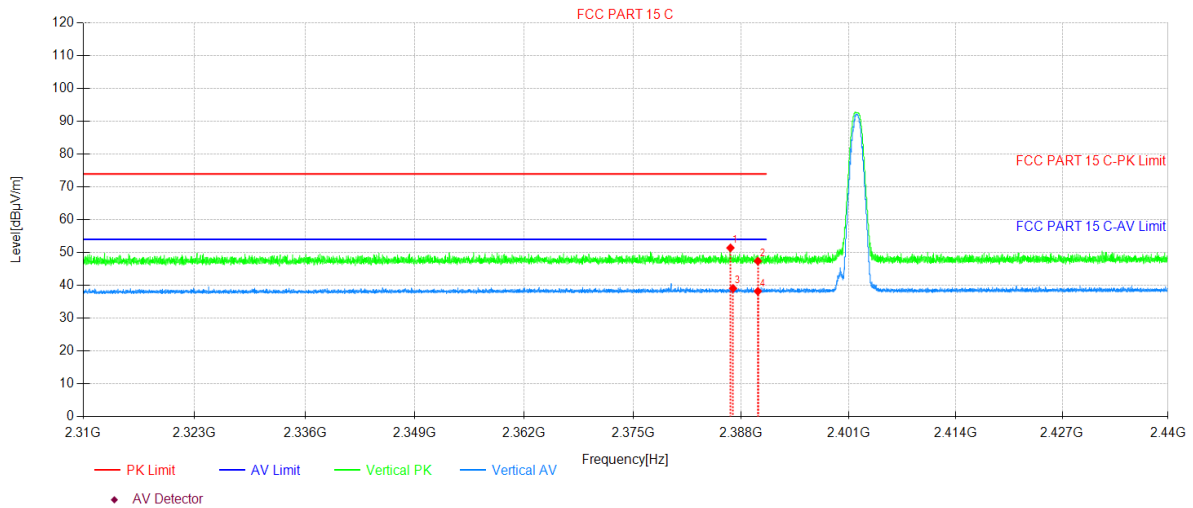
UTTR-RF-RSS247-V1.1

A.8 BAND EDGE MEASUREMENTS (RADIATED)

BR+EDR _ Lowest Channel:

Test Graph**Data List**

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Verdict
1	2389.1519	52.08	-0.80	51.28	74.00	22.72	150	171	PK	Horizontal	PASS
2	2390.01	49.23	-0.80	48.43	74.00	25.57	150	180	PK	Horizontal	PASS
3	2388.9959	41.85	-0.80	41.05	54.00	12.95	150	161	AV	Horizontal	PASS
4	2390.01	41.09	-0.80	40.29	54.00	13.71	150	161	AV	Horizontal	PASS

Test Graph**Data List**

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Verdict
1	2386.7077	52.24	-0.81	51.43	74.00	22.57	150	96	PK	Vertical	PASS
2	2390.01	48.18	-0.80	47.38	74.00	26.62	150	0	PK	Vertical	PASS
3	2387.0197	39.89	-0.81	39.08	54.00	14.92	150	0	AV	Vertical	PASS
4	2390.01	39.00	-0.80	38.20	54.00	15.80	150	177	AV	Vertical	PASS

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

Tel: +86-755-28230888

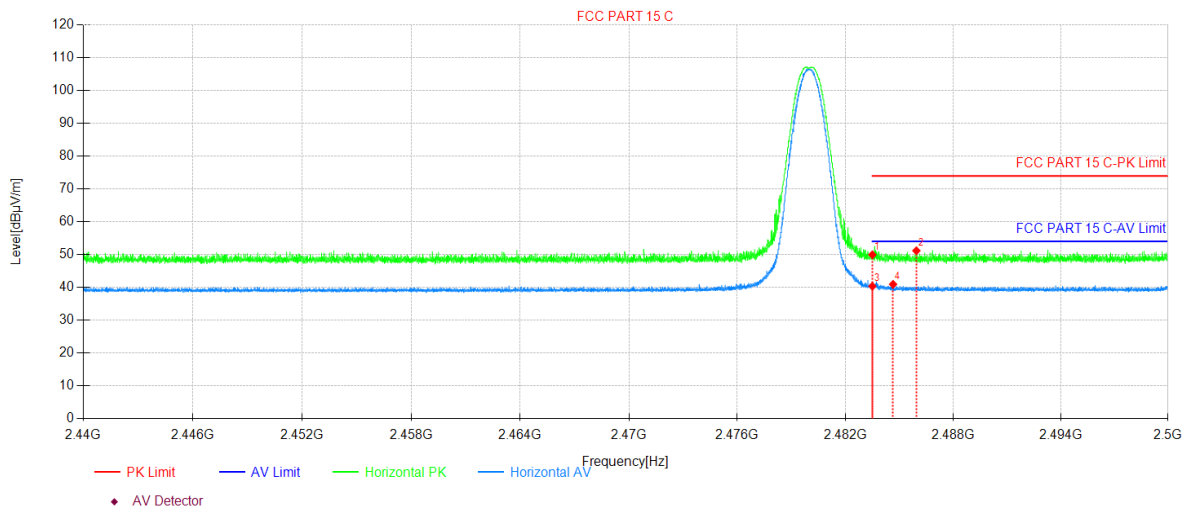
Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-RF-RSS247-V1.1

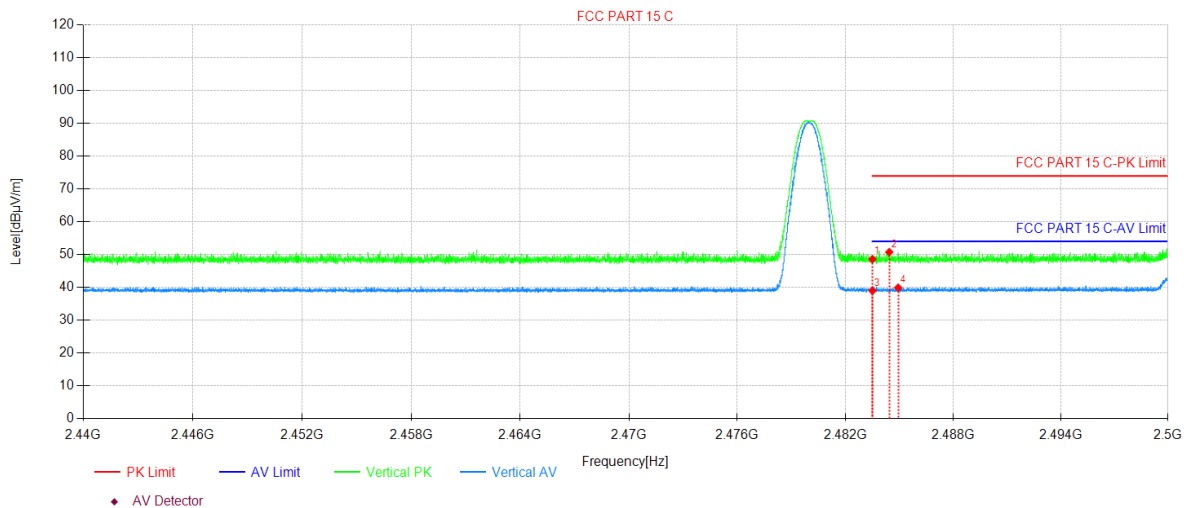
BR+EDR _ Highest Channel Test Graph



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detect or	Polarity	Verdict
1	2483.5044	50.24	-0.29	49.95	74.00	24.05	150	3	PK	Horizontal	PASS
2	2485.9526	51.44	-0.27	51.17	74.00	22.83	150	0	PK	Horizontal	PASS
3	2483.5044	40.62	-0.29	40.33	54.00	13.67	150	20	AV	Horizontal	PASS
4	2484.6565	41.20	-0.27	40.93	54.00	13.07	150	10	AV	Horizontal	PASS

Test Graph



Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detect or	Polarity	Verdict
1	2483.5044	48.88	-0.29	48.59	74.00	25.41	150	56	PK	Vertical	PASS
2	2484.4404	51.02	-0.28	50.74	74.00	23.26	150	0	PK	Vertical	PASS
3	2483.5044	39.28	-0.29	38.99	54.00	15.01	150	17	AV	Vertical	PASS
4	2484.9385	40.14	-0.27	39.87	54.00	14.13	150	17	AV	Vertical	PASS

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-RF-RSS247-V1.1

Remark:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Limit - Result
4. For Radiated Emission above 18GHz, there was not any unwanted emission detected.
5. The testing of Radiated Emissions was performed in Dongguan DN Testing Co., Ltd.



APPENDIX 1 PHOTOS OF TEST SETUP

See test photos attached in Appendix 1 for the actual connections between Product and support equipment.

APPENDIX 2 PHOTOS OF EUT CONSTRUCTIONAL DETAILS

Refer to Appendix 2 for EUT external and internal photos.

*** End of Report ***

The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of UnionTrust, this report can't be reproduced except in full.
