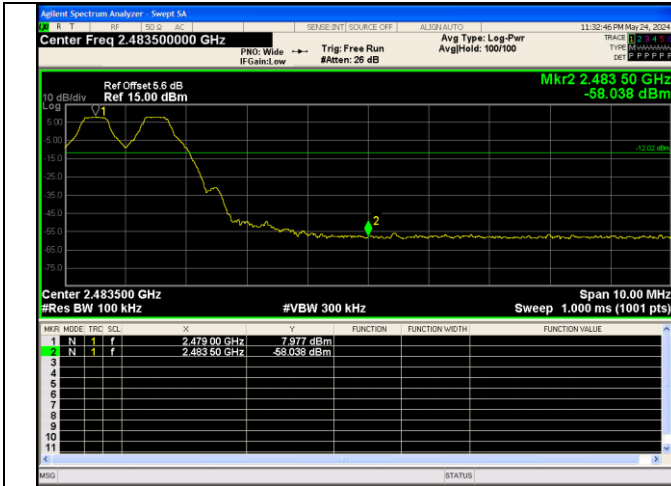
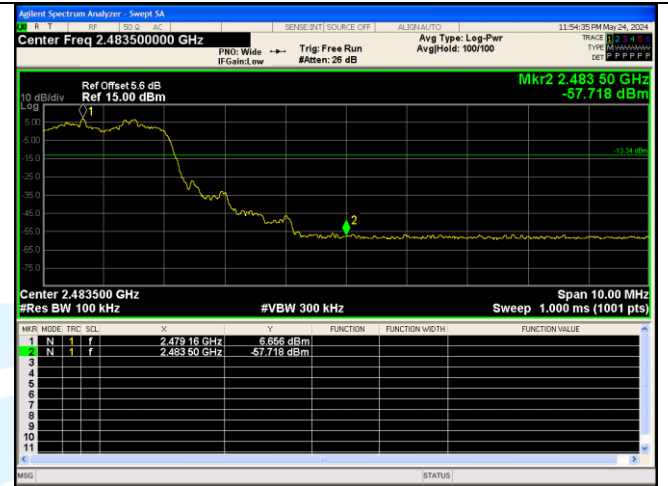
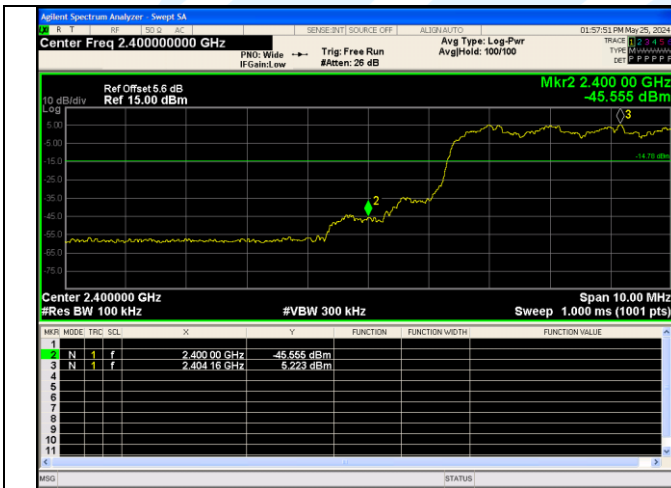




Out Of Band Emission(Right)
GFSK_DH5_Channel Hopping



Out Of Band Emission(Right)
 $\pi/4$ DQPSK_2-DH5_Channel Hopping



Out Of Band Emission(Left)
8DPSK_3-DH5_Channel Hopping



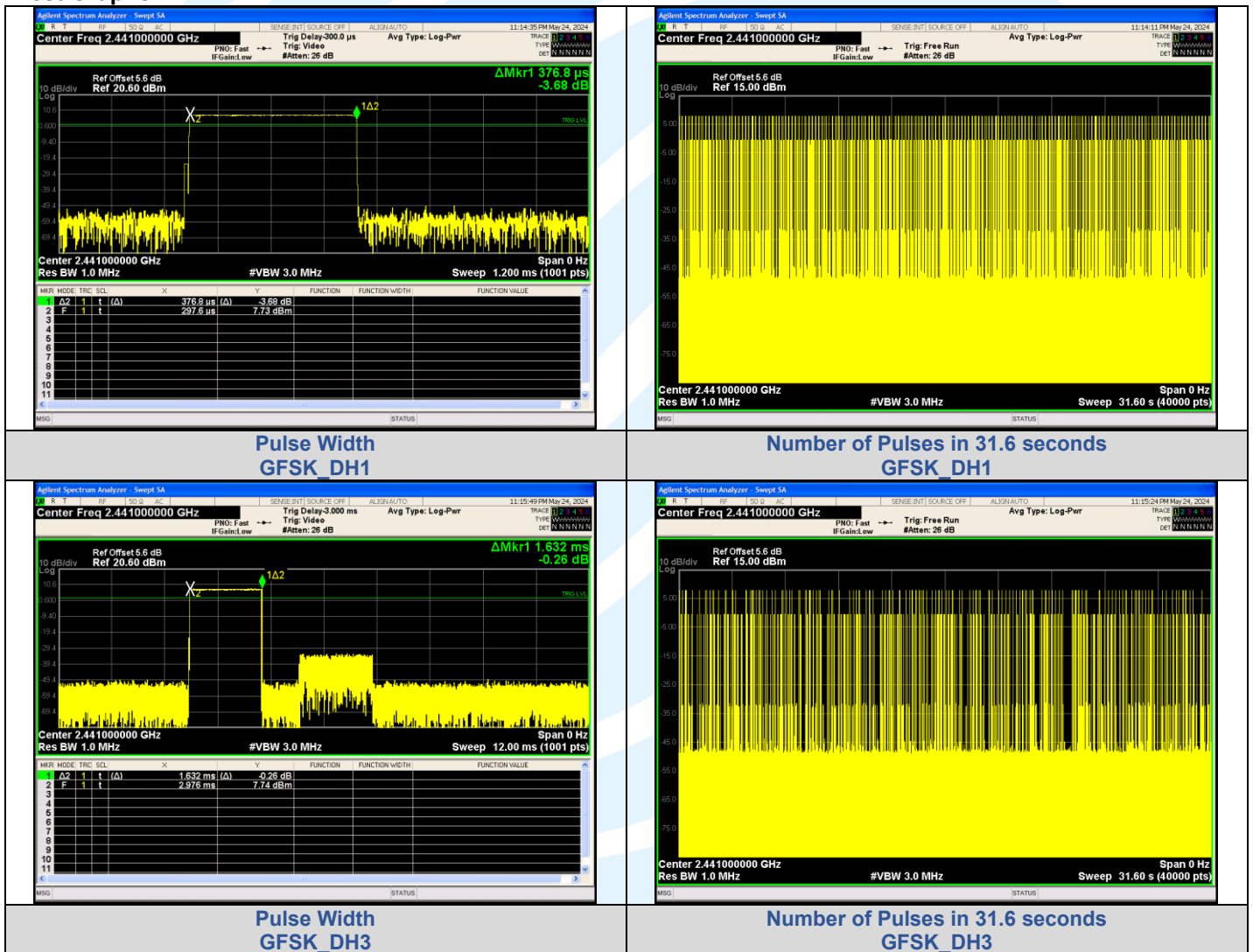
Out Of Band Emission(Right)
8DPSK_3-DH5_Channel Hopping

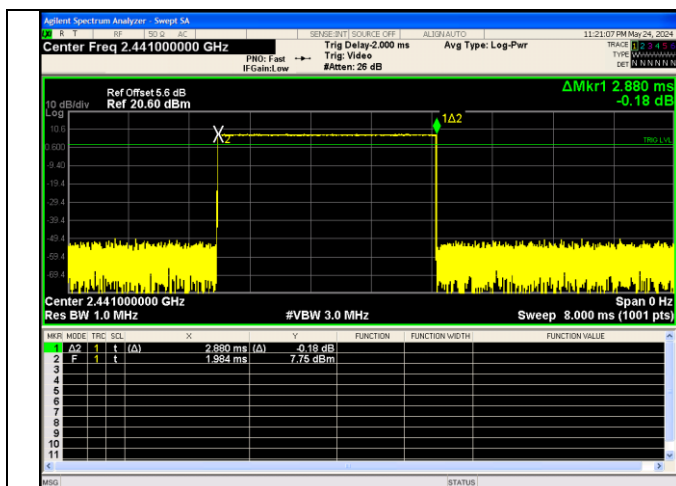
A.5 DWELL TIME

Test Result

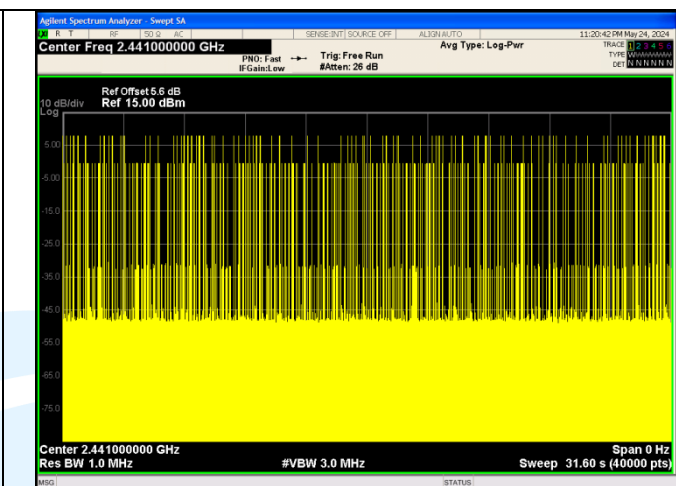
Modulation	Packet	Channel	Pulse Width (ms)	Number of Pulses in 31.6 seconds	Dwell Time (ms)	Limit (ms)	Result
GFSK	DH1	CH39 (2441MHz)	0.3768	317	119.45	< 400	PASS
	DH3		1.632	154	251.33		PASS
	DH5		2.880	110	316.8		PASS
$\pi/4$ DQPSK	2-DH1		0.3876	317	122.87		PASS
	2-DH3		1.632	168	274.18		PASS
	2-DH5		2.880	110	316.8		PASS
8DPSK	3-DH1		0.3864	319	123.26		PASS
	3-DH3		1.632	161	262.75		PASS
	3-DH5		2.880	114	328.32		PASS

Test Graphs

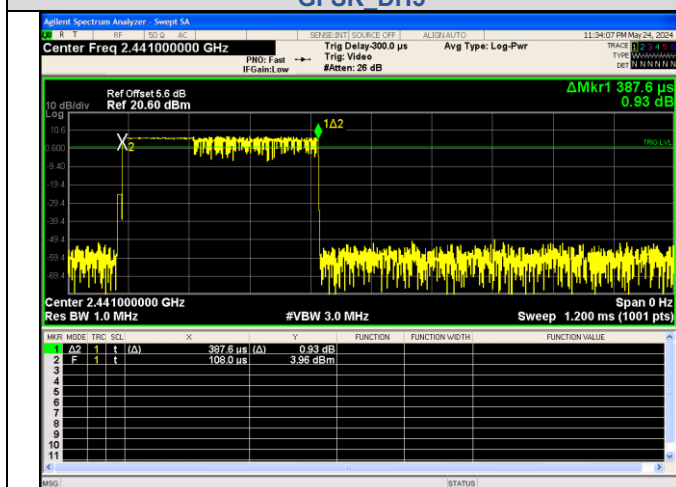




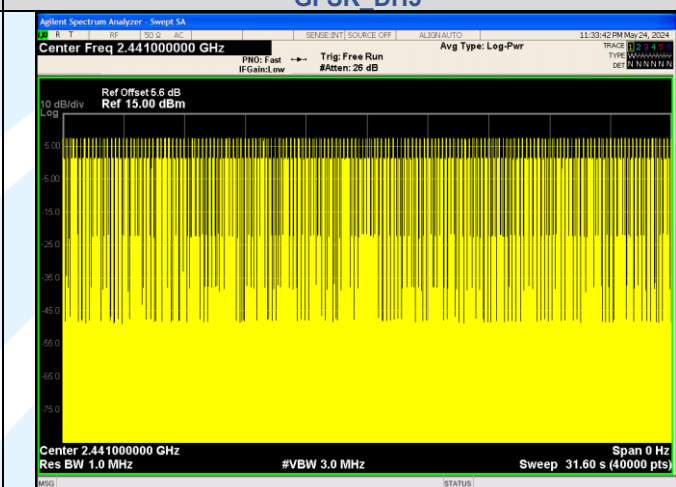
Pulse Width
GFSK DH5



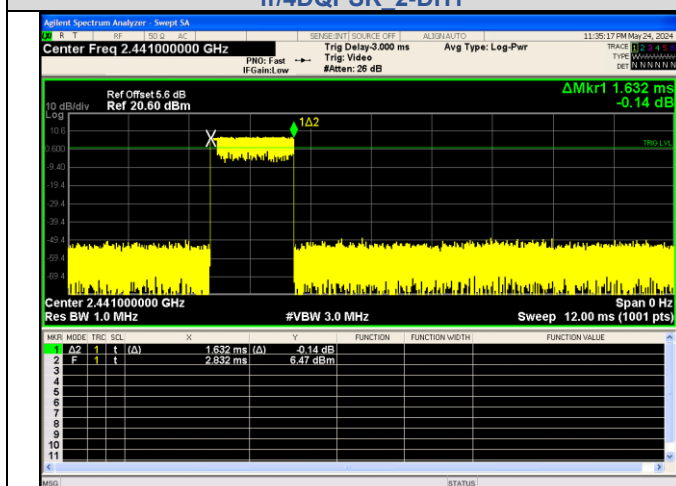
Number of Pulses in 31.6 seconds
GFSK DH5



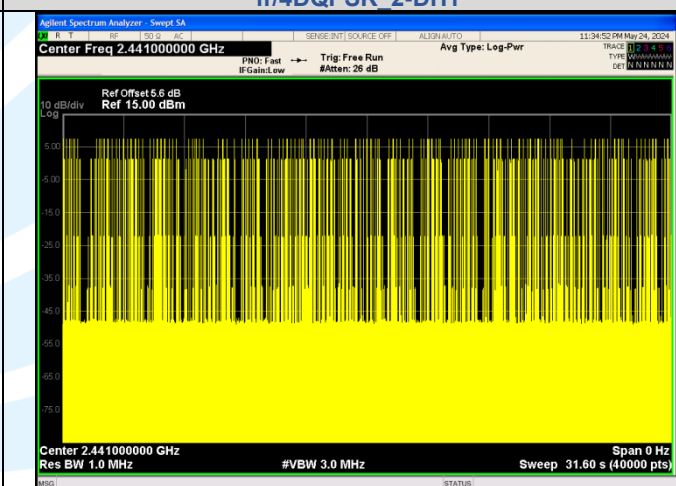
Pulse Width
π/4DQPSK 2-DH1



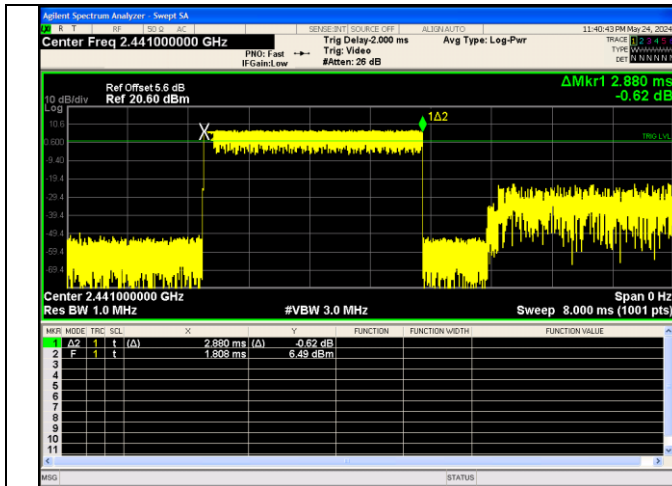
Number of Pulses in 31.6 seconds
π/4DQPSK 2-DH1



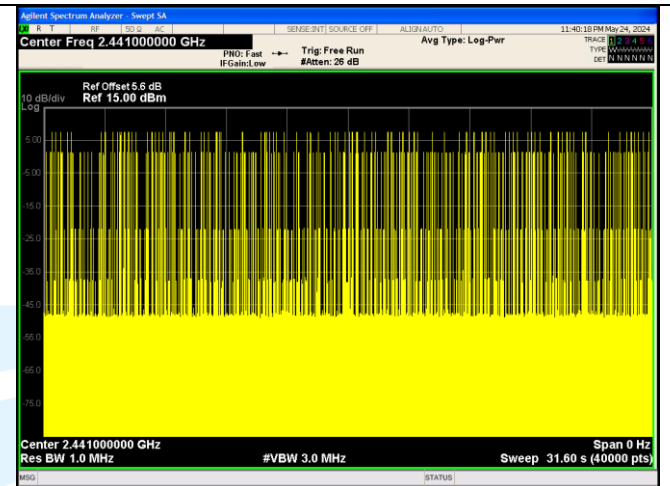
Pulse Width
π/4DQPSK 2-DH3



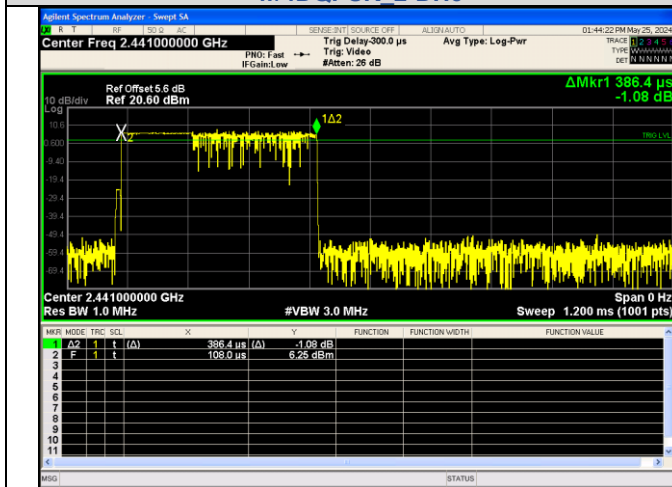
Number of Pulses in 31.6 seconds
π/4DQPSK 2-DH3



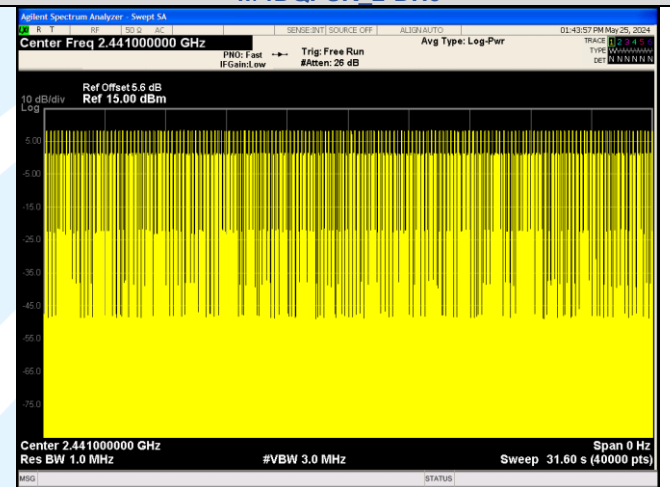
Pulse Width
 $\pi/4$ DQPSK 2-DH5



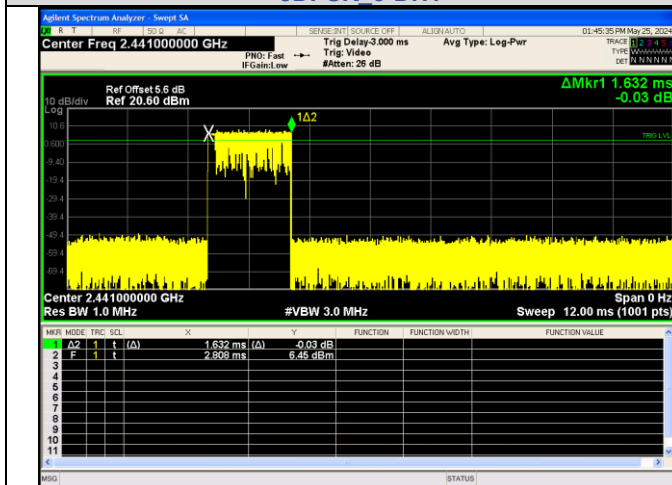
Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK 2-DH5



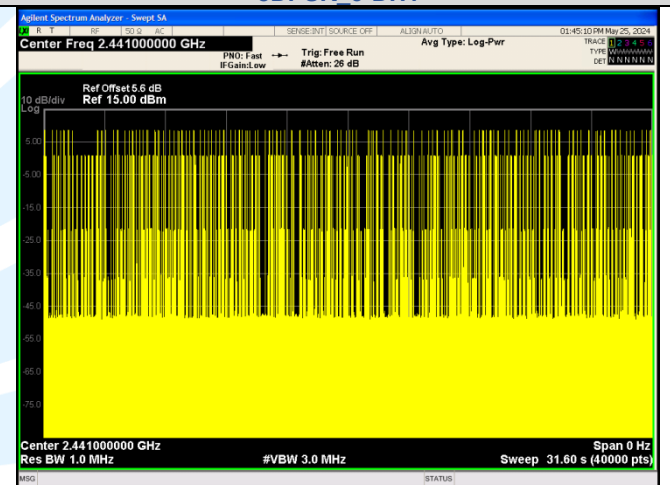
Pulse Width
8DPSK 3-DH1



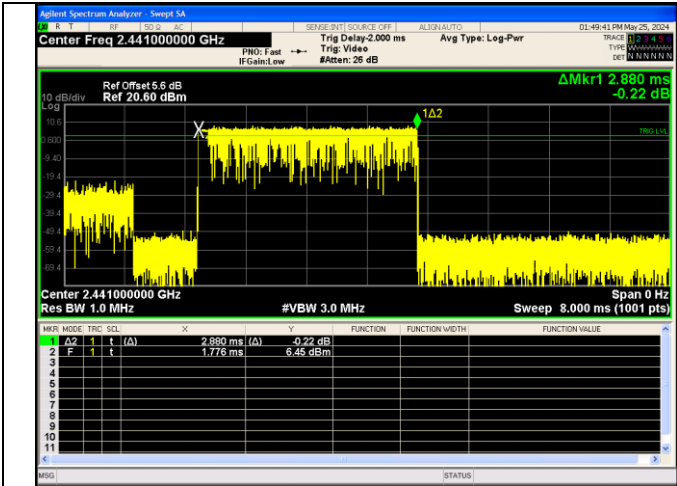
Number of Pulses in 31.6 seconds
8DPSK 3-DH1



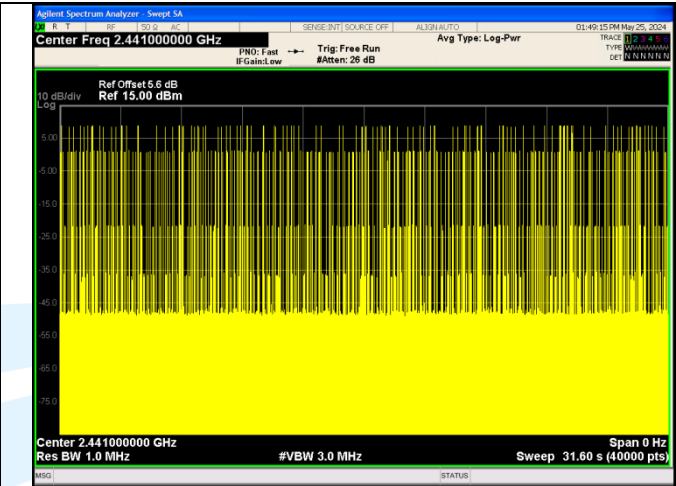
Pulse Width
8DPSK 3-DH3



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

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

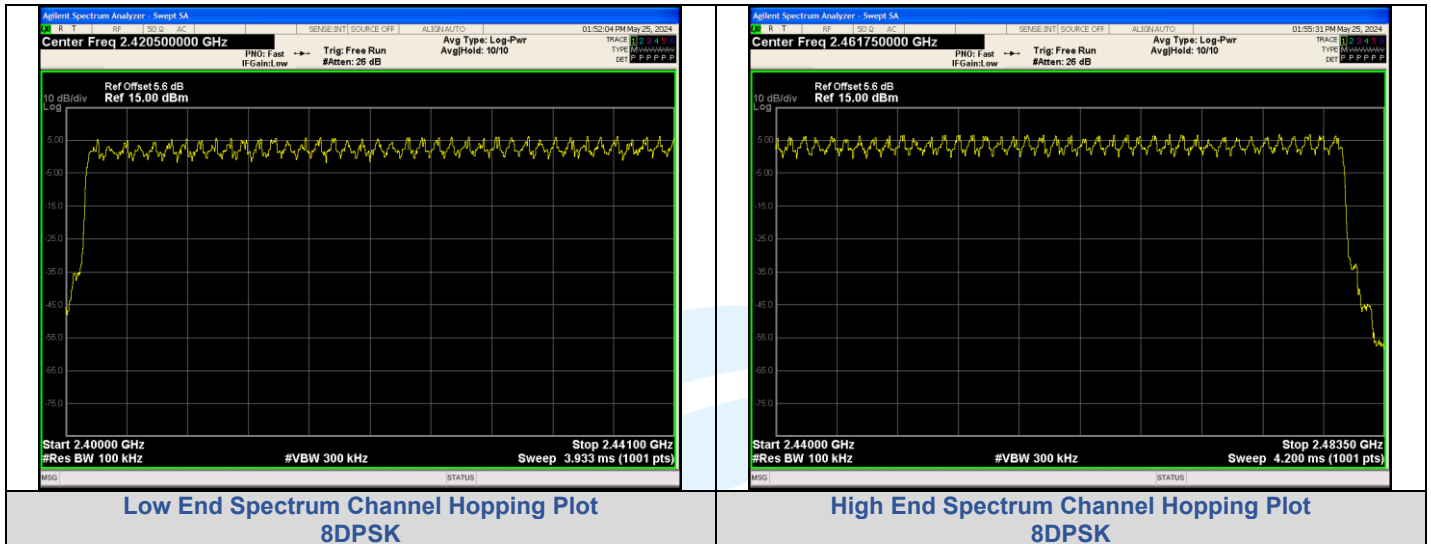
A.6 NUMBER OF HOPPING CHANNEL

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





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

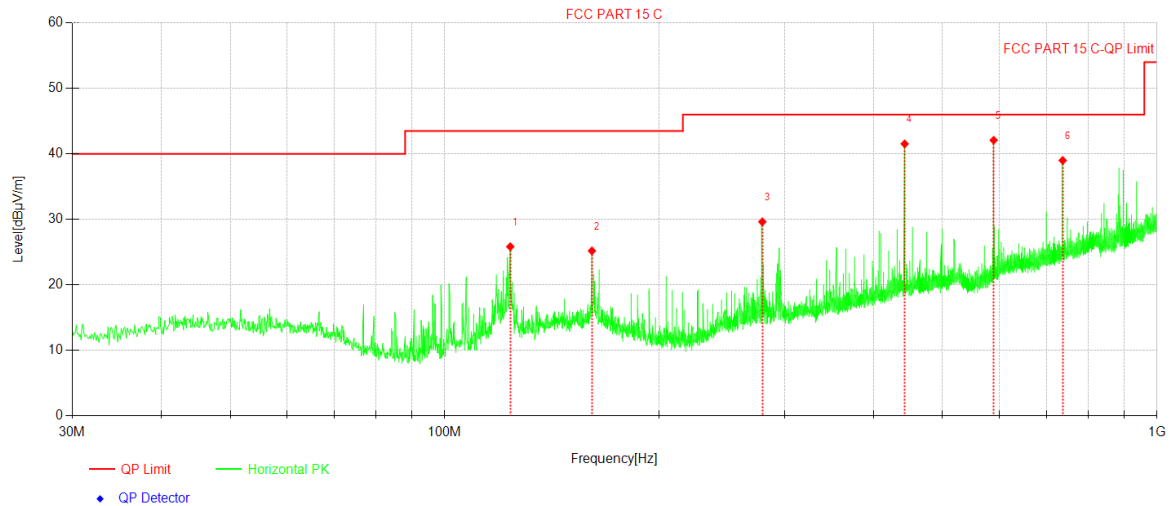
<http://www.uttlab.com>

UTTR-RF-RSS247-V1.1

A.7 RADIATED SPURIOUS EMISSIONS

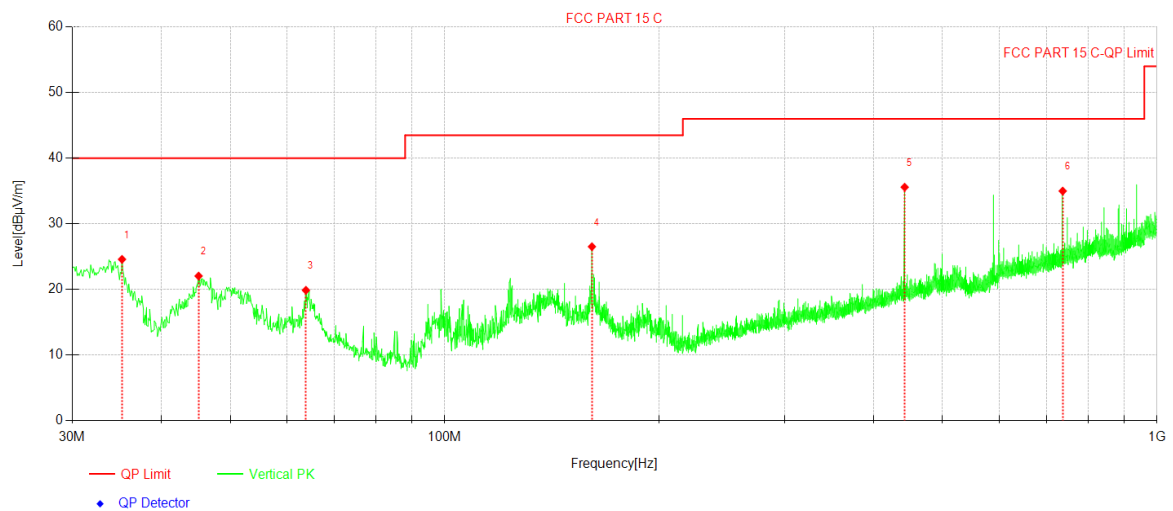
Radiated Emission Test Data (30 MHz ~ 1 GHz):
Worst-Case Configuration(BR+EDR)_Channel 79)

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correction factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	123.6144	35.80	-9.98	25.82	43.50	17.68	Peak
2	160.9631	33.00	-7.81	25.19	43.50	18.31	Peak
3	279.2179	37.18	-7.56	29.62	46.00	16.38	Peak
4	442.388239	44.52	-2.99	41.53	46.00	4.47	Peak
5	589.842984	42.48	-0.39	42.09	46.00	3.91	Peak
6	737.2977	35.95	3.05	39.00	46.00	7.00	Peak

Vertical



No.	Frequency (MHz)	Reading (dBUV)	Correction factor (dB)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	35.2385	33.91	-9.33	24.58	40.00	15.42	Peak
2	45.1335	30.26	-8.23	22.03	40.00	17.97	Peak
3	63.8564	29.06	-9.20	19.86	40.00	20.14	Peak
4	160.9631	34.32	-7.81	26.51	43.50	16.99	Peak
5	442.3882	38.57	-2.99	35.58	46.00	10.42	Peak
6	737.2977	31.94	3.05	34.99	46.00	11.01	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

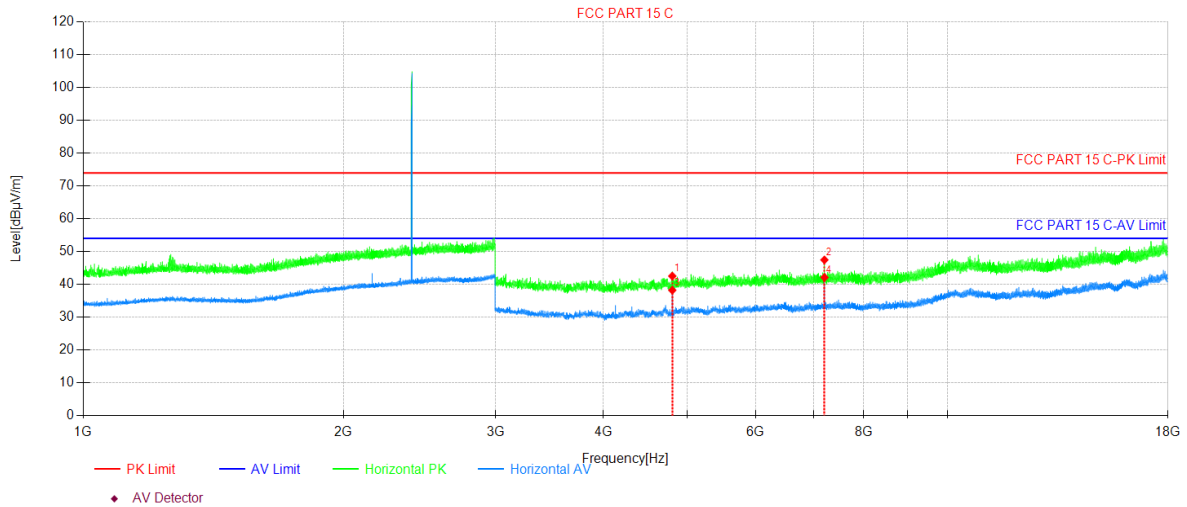
Fax: +86-755-28230886

E-mail: info@uttlab.com

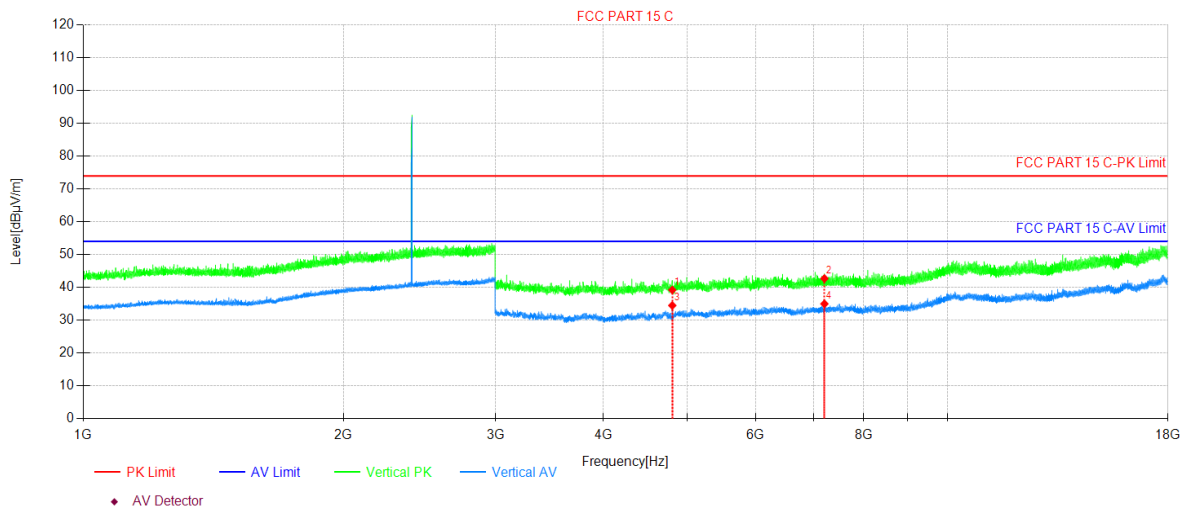
<http://www.uttlab.com>

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	47.13	-4.61	42.52	74.00	31.48	150	0	PK	Horizontal	PASS
2	7206.2103	49.22	-1.76	47.46	74.00	26.54	150	22	PK	Horizontal	PASS
3	4804.5902	42.82	-4.61	38.21	54.00	15.79	150	0	AV	Horizontal	PASS
4	7206.9603	43.86	-1.76	42.10	54.00	11.90	150	1	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	43.80	-4.61	39.19	74.00	34.81	150	118	PK	Vertical	PASS
2	7206.2103	44.46	-1.76	42.70	74.00	31.30	150	177	PK	Vertical	PASS
3	4804.5902	39.08	-4.61	34.47	54.00	19.53	150	134	AV	Vertical	PASS
4	7206.2103	36.73	-1.76	34.97	54.00	19.03	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

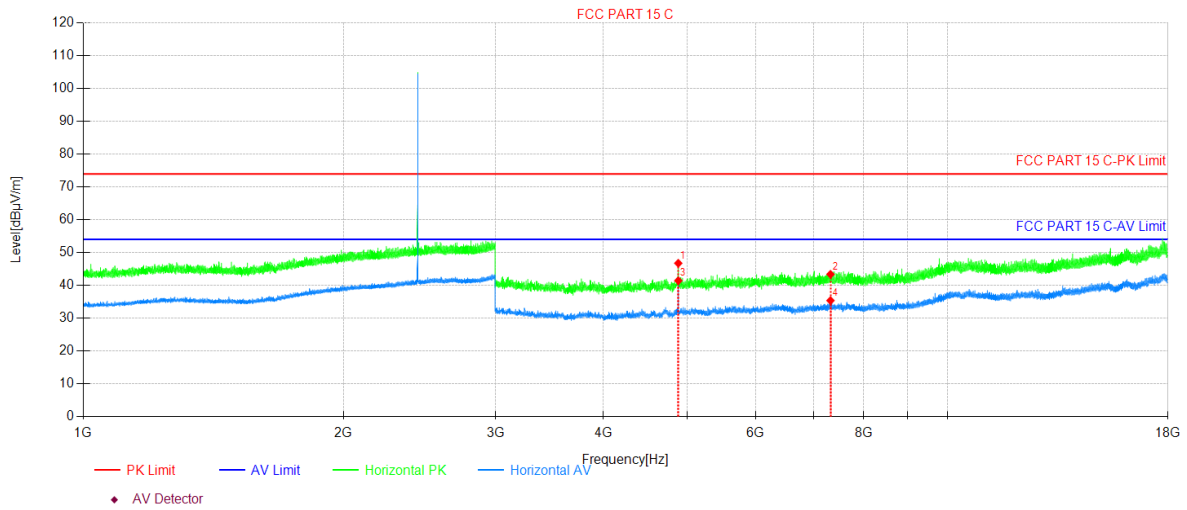
Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-RF-RSS247-V1.1

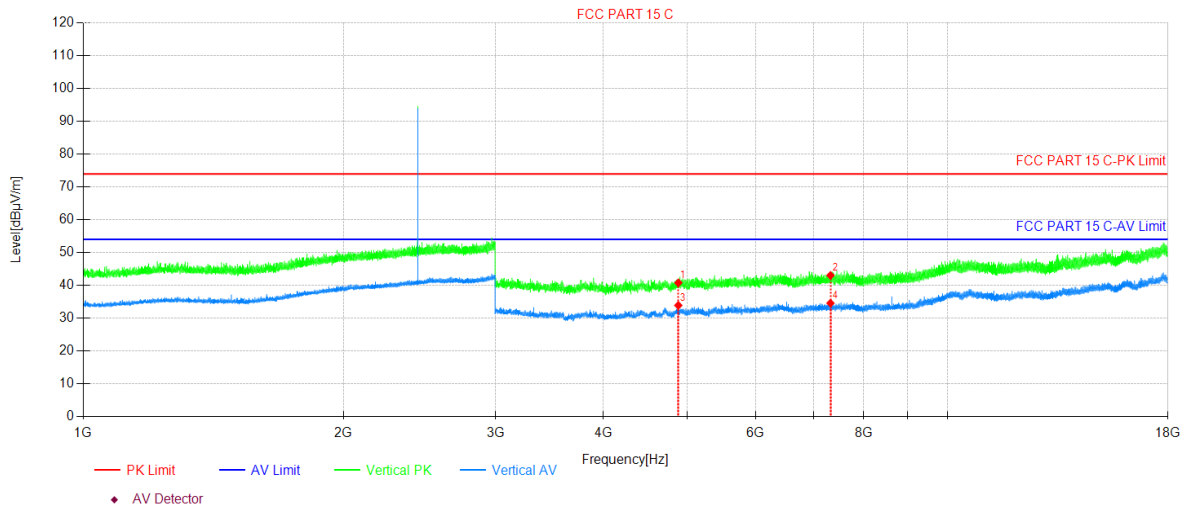
BR+EDR _ Middle Channe: Test Graph



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	4881.8441	51.46	-4.72	46.74	74.00	27.26	150	1	PK	Horizontal	PASS
2	7323.2162	44.86	-1.49	43.37	74.00	30.63	150	137	PK	Horizontal	PASS
3	4882.5941	46.15	-4.72	41.43	54.00	12.57	150	1	AV	Horizontal	PASS
4	7323.2162	36.86	-1.49	35.37	54.00	18.63	150	20	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	45.50	-4.72	40.78	74.00	33.22	150	1	PK	Vertical	PASS
2	7323.2162	44.53	-1.49	43.04	74.00	30.96	150	64	PK	Vertical	PASS
3	4882.5941	38.61	-4.72	33.89	54.00	20.11	150	134	AV	Vertical	PASS
4	7323.2162	36.04	-1.49	34.55	54.00	19.45	150	50	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

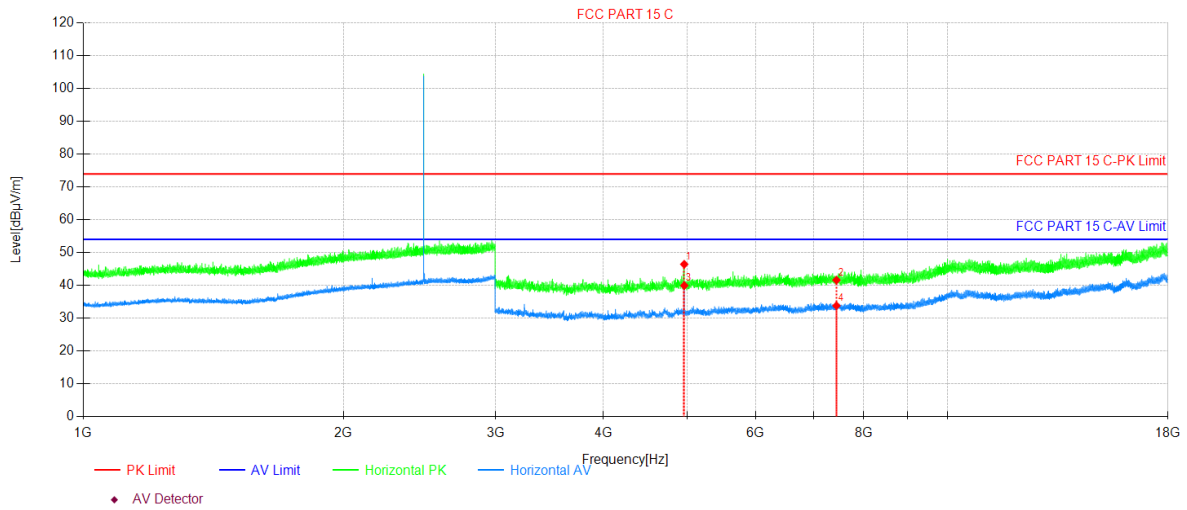
Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-RF-RSS247-V1.1

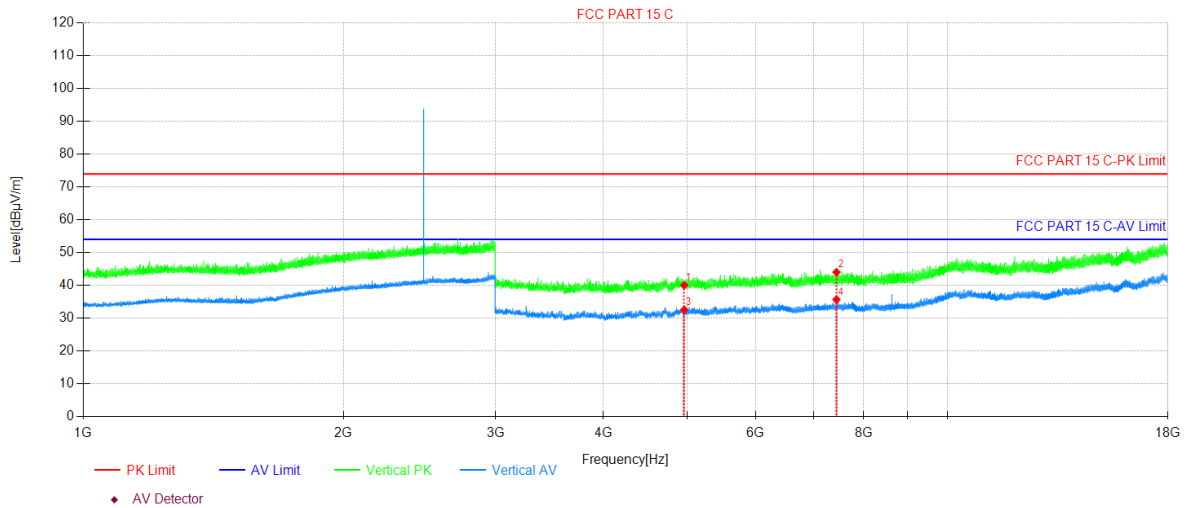
BR+EDR _ Highest Channel Test Graph



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	4959.848	51.29	-4.86	46.43	74.00	27.57	150	2	PK	Horizontal	PASS
2	7440.222	42.93	-1.34	41.59	74.00	32.41	150	40	PK	Horizontal	PASS
3	4960.598	44.79	-4.86	39.93	54.00	14.07	150	2	AV	Horizontal	PASS
4	7440.222	35.12	-1.34	33.78	54.00	20.22	150	68	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	44.91	-4.86	40.05	74.00	33.95	150	65	PK	Vertical	PASS
2	7440.222	45.35	-1.34	44.01	74.00	29.99	150	135	PK	Vertical	PASS
3	4960.598	37.39	-4.86	32.53	54.00	21.47	150	79	AV	Vertical	PASS
4	7440.222	37.02	-1.34	35.68	54.00	18.32	150	151	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

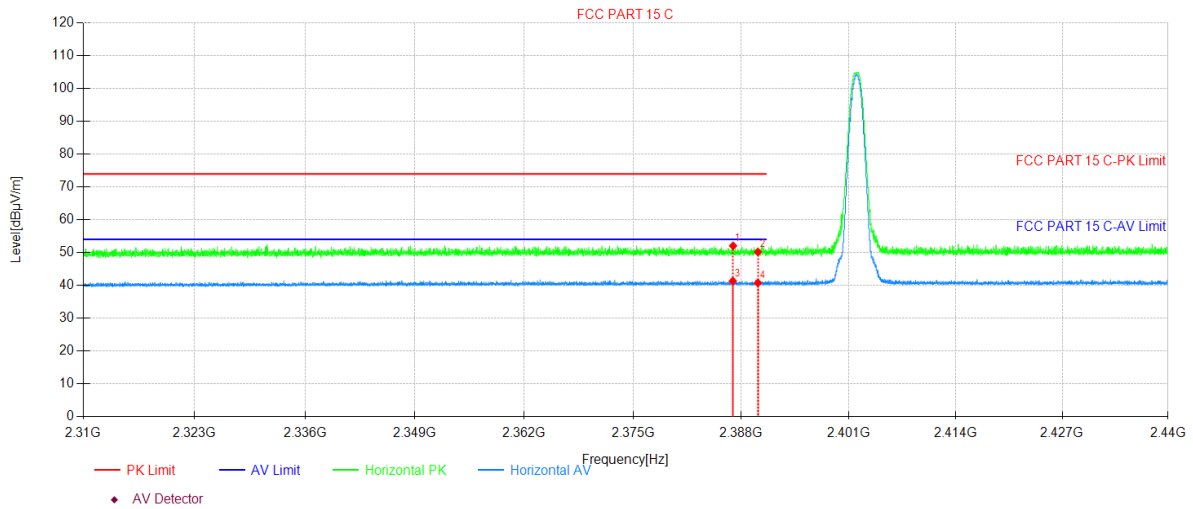
Tel: +86-755-28230888

Fax: +86-755-28230886

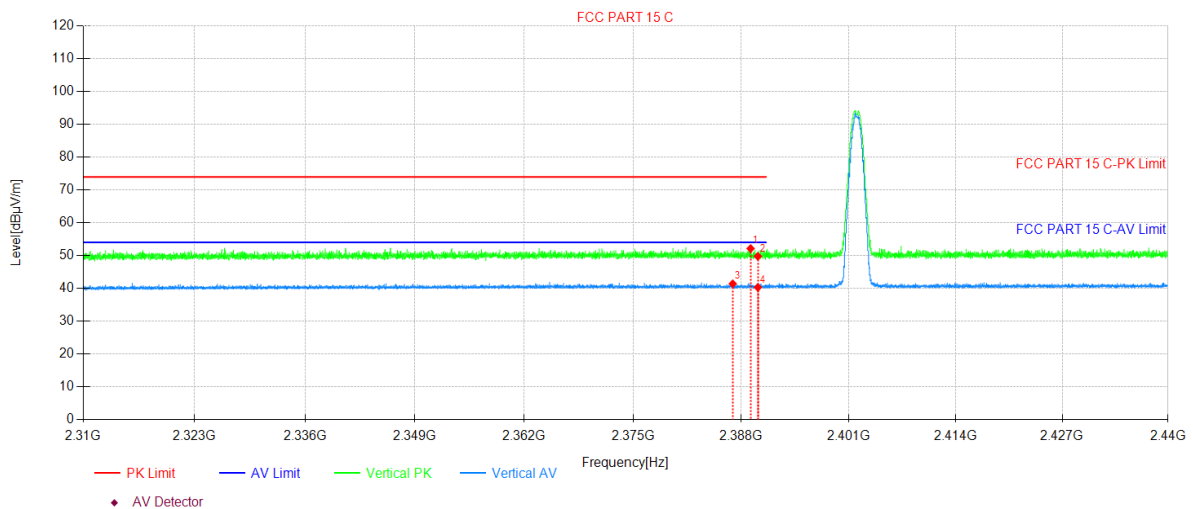
E-mail: info@uttlab.com

<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	2387.0197	52.85	-0.81	52.04	74.00	21.96	150	301	PK	Horizontal	PASS
2	2390.01	50.98	-0.80	50.18	74.00	23.82	150	256	PK	Horizontal	PASS
3	2386.9937	42.12	-0.81	41.31	54.00	12.69	150	147	AV	Horizontal	PASS
4	2390.01	41.56	-0.80	40.76	54.00	13.24	150	278	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	2389.1389	52.94	-0.80	52.14	74.00	21.86	150	61	PK	Vertical	PASS
2	2390.01	50.58	-0.80	49.78	74.00	24.22	150	258	PK	Vertical	PASS
3	2386.9807	42.21	-0.81	41.40	54.00	12.60	150	0	AV	Vertical	PASS
4	2390.01	41.10	-0.80	40.30	54.00	13.70	150	4	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

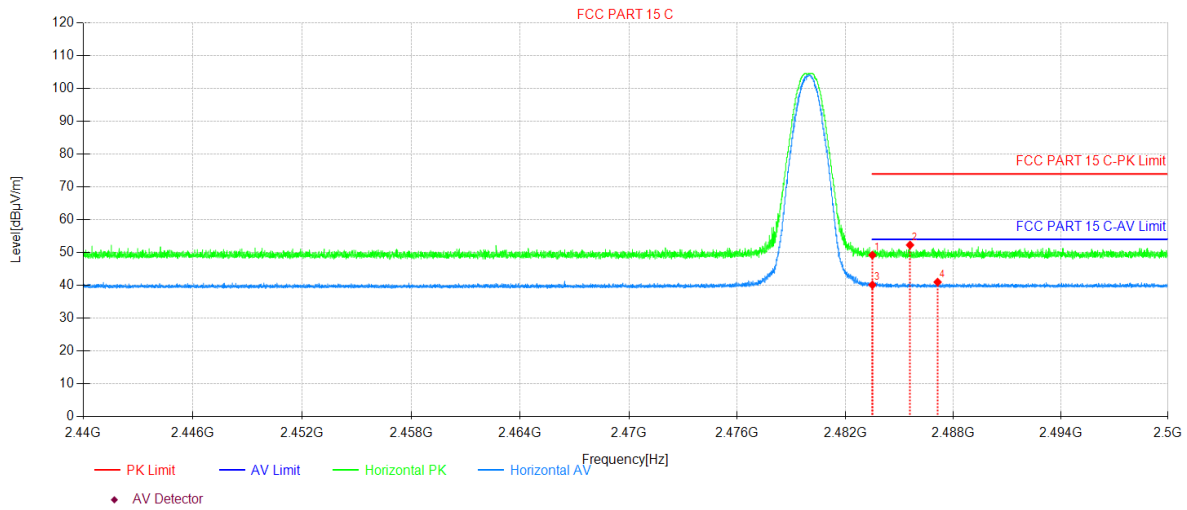
Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

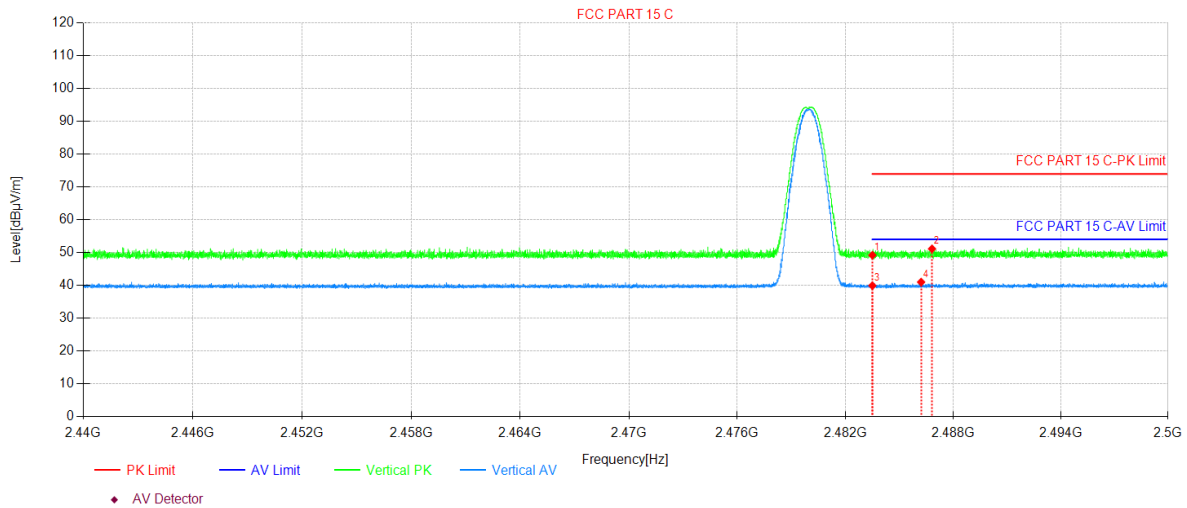
UTTR-RF-RSS247-V1.1

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	49.50	-0.29	49.21	74.00	24.79	150	151	PK	Horizontal	PASS
2	2485.5986	52.57	-0.27	52.30	74.00	21.70	150	360	PK	Horizontal	PASS
3	2483.5044	40.42	-0.29	40.13	54.00	13.87	150	12	AV	Horizontal	PASS
4	2487.1347	41.24	-0.26	40.98	54.00	13.02	150	360	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	49.48	-0.29	49.19	74.00	24.81	150	283	PK	Vertical	PASS
2	2486.8227	51.40	-0.26	51.14	74.00	22.86	150	260	PK	Vertical	PASS
3	2483.5044	40.20	-0.29	39.91	54.00	14.09	150	117	AV	Vertical	PASS
4	2486.2166	41.27	-0.27	41.00	54.00	13.00	150	59	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

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.
