

Appendix A

RF Test Data for BT V4.0(BDR/EDR) (Conducted Measurement)

Product Name: Beatboy

Trade Mark: iDance

Test Model: BBL10E

Environmental Conditions

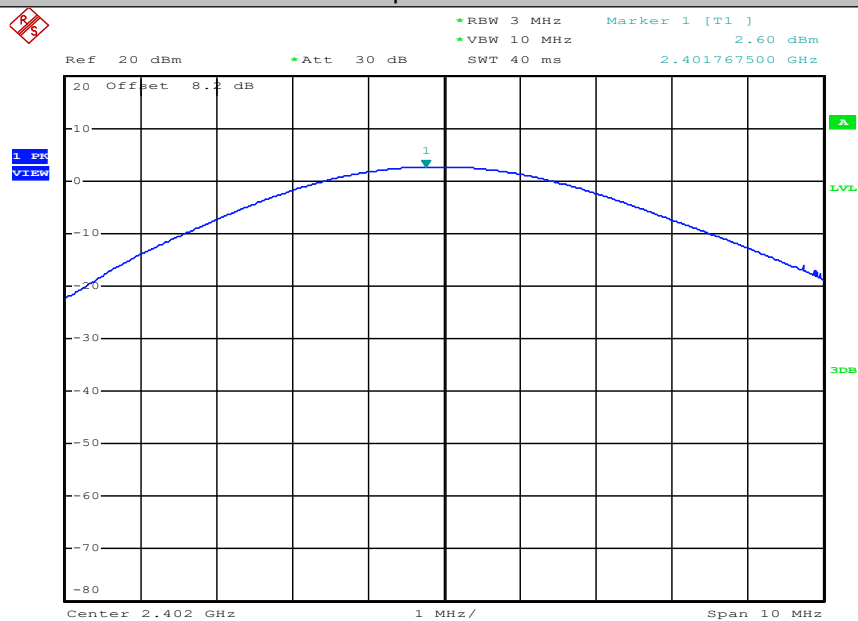
Temperature:	24.6° C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Alisa Huang
Supervised by:	Wang.Chuang

A.1 Maximum Conducted Peak Output Power

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2.600	30	PASS
	MCH	3.120	30	PASS
	HCH	3.120	30	PASS
$\pi/4$ DQPSK	LCH	3.060	21	PASS
	MCH	3.520	21	PASS
	HCH	3.550	21	PASS

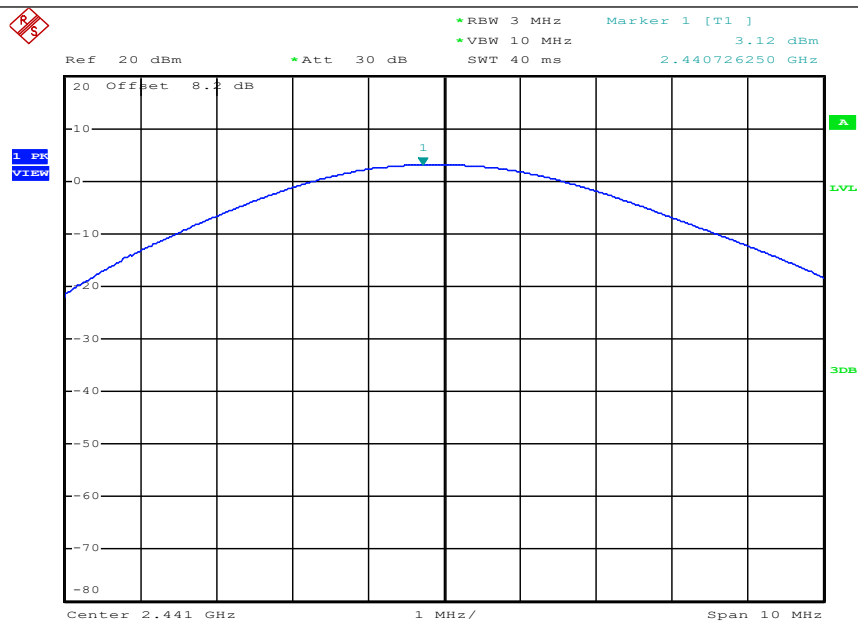
Test Graphs

GFSK/LCH



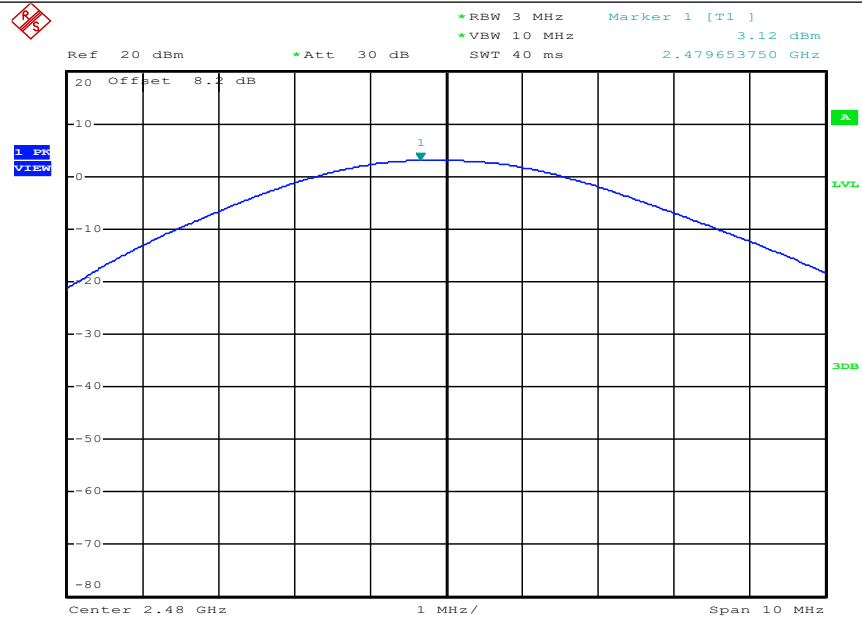
Date: 18.SEP.2019 20:17:20

GFSK/MCH

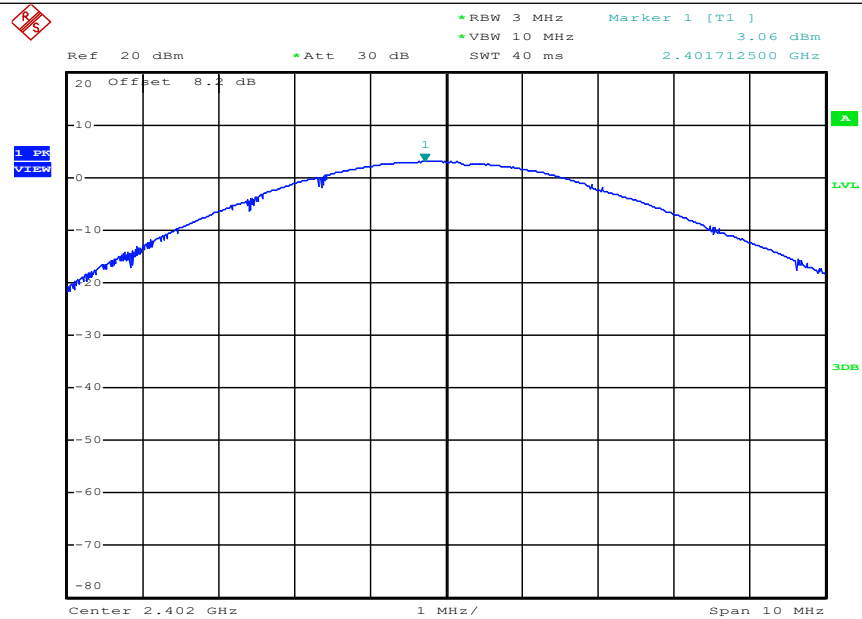


Date: 18.SEP.2019 20:22:44

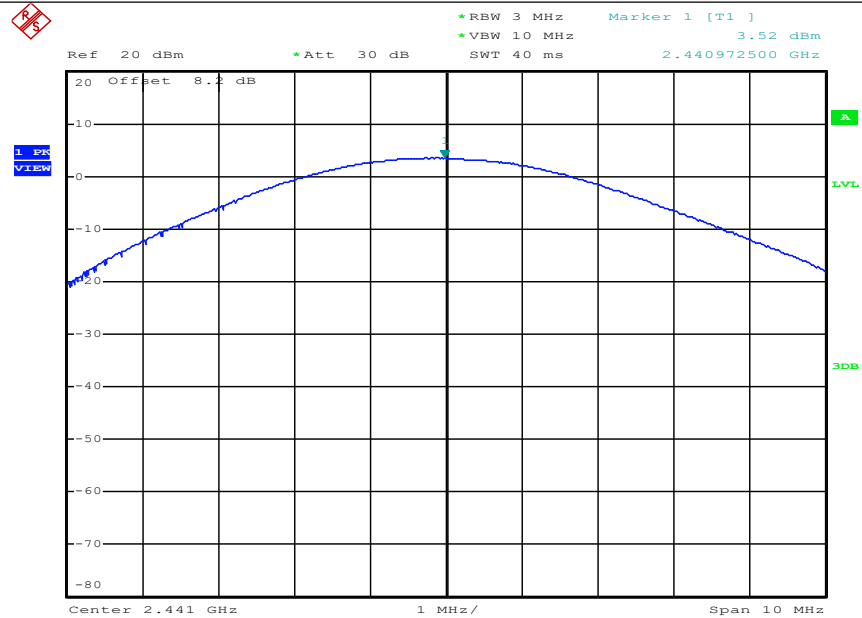
GFSK/HCH



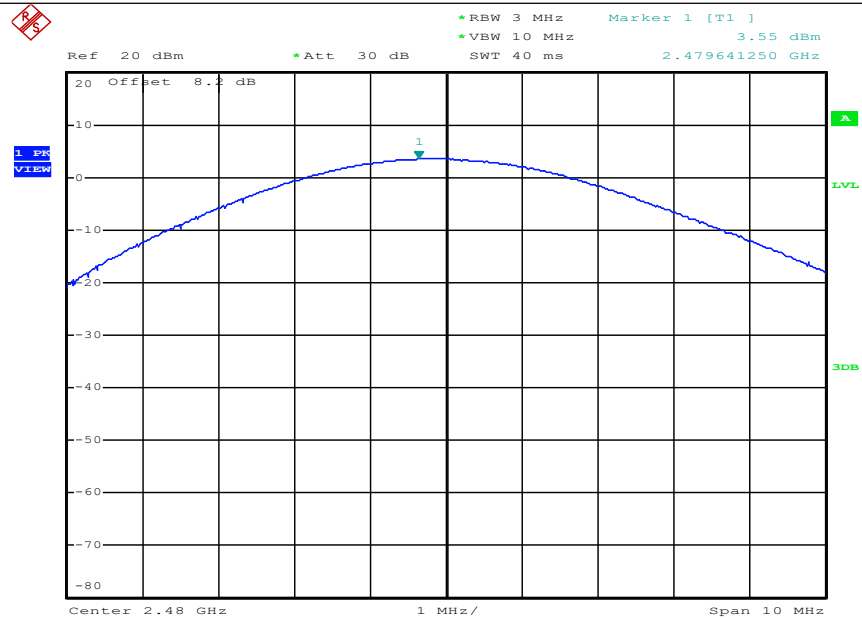
Date: 18.SEP.2019 20:24:45

 $\pi/4$ DQPSK/LCH

Date: 18.SEP.2019 20:27:38

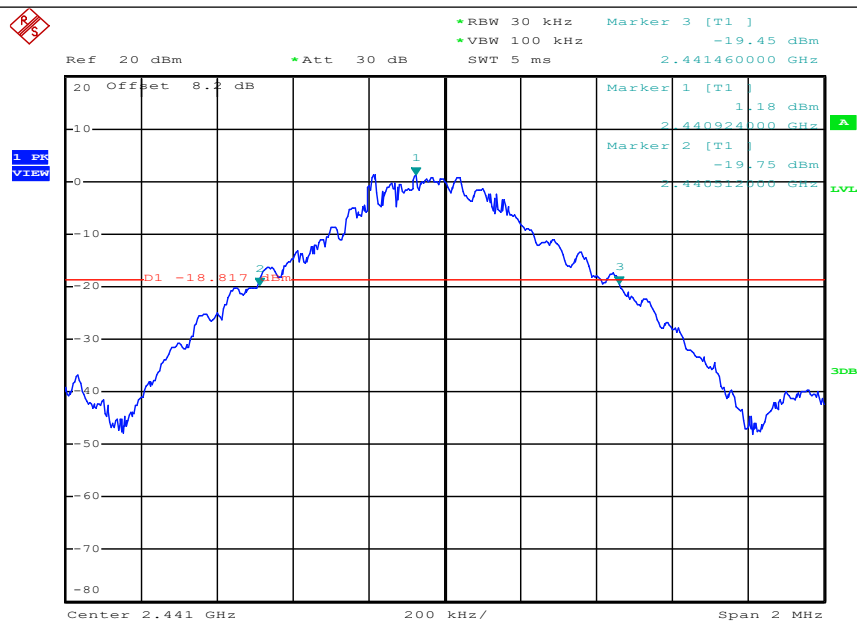
$\pi/4$ DQPSK/MCH

Date: 18.SEP.2019 20:30:28

 $\pi/4$ DQPSK/HCH

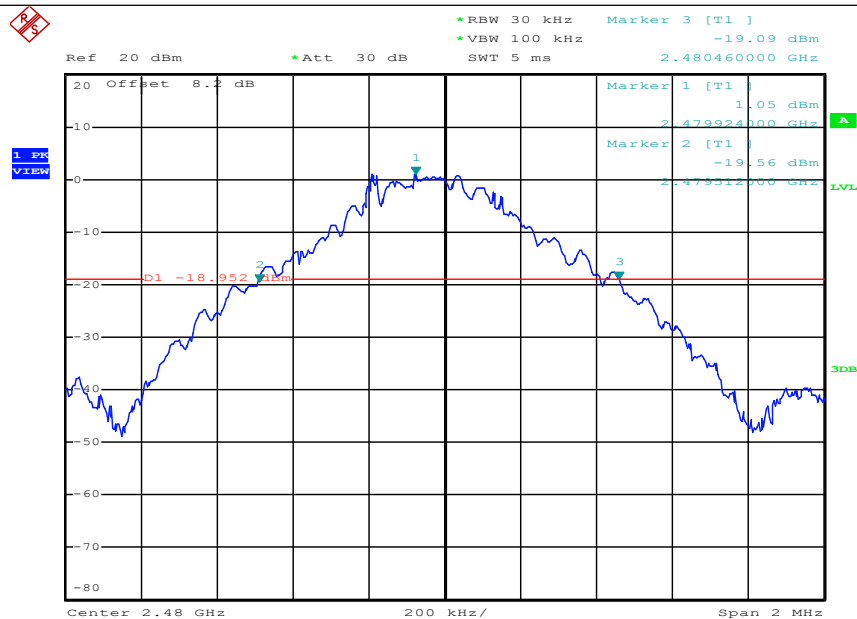
Date: 18.SEP.2019 20:32:57

GFSK/MCH

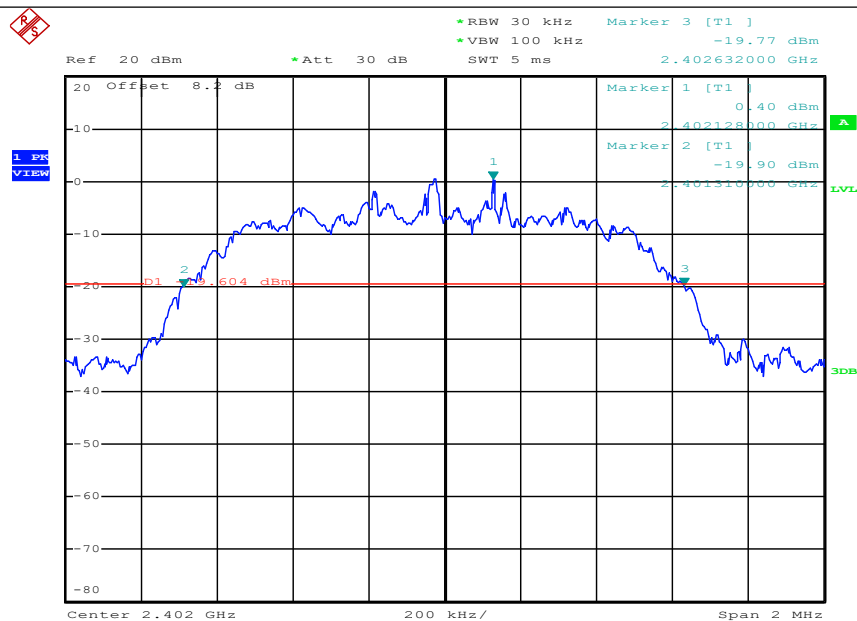


Date: 18.SEP.2019 20:22:08

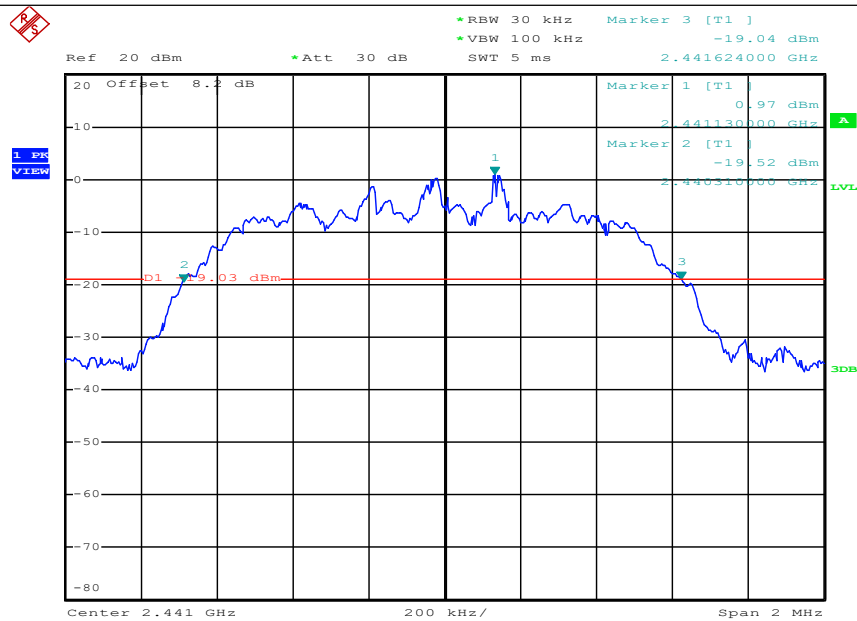
GFSK/HCH



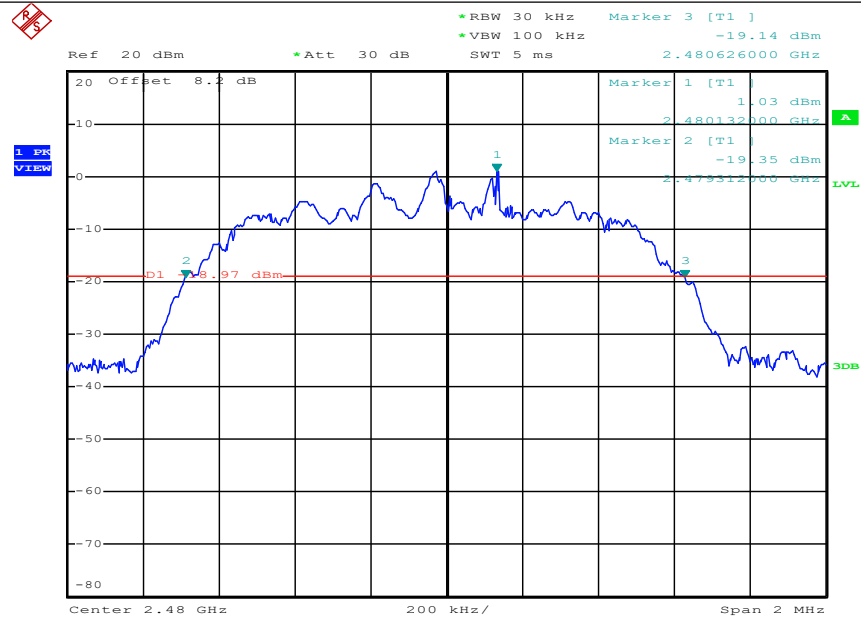
Date: 18.SEP.2019 20:24:09

$\pi/4$ DQPSK/LCH

Date: 18.SEP.2019 20:27:01

 $\pi/4$ DQPSK/MCH

Date: 18.SEP.2019 20:29:51

$\pi/4$ DQPSK/HCH

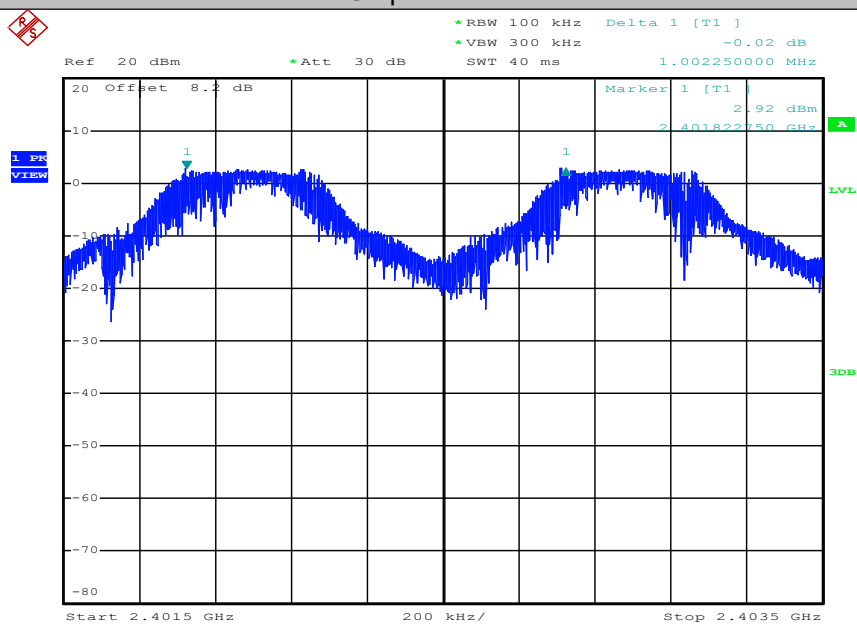
Date: 18.SEP.2019 20:32:21

A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.002	0.632	PASS
	MCH	1.050	0.632	PASS
	HCH	0.880	0.632	PASS
π /4DQPSK	LCH	1.170	0.881	PASS
	MCH	0.972	0.881	PASS
	HCH	0.992	0.881	PASS

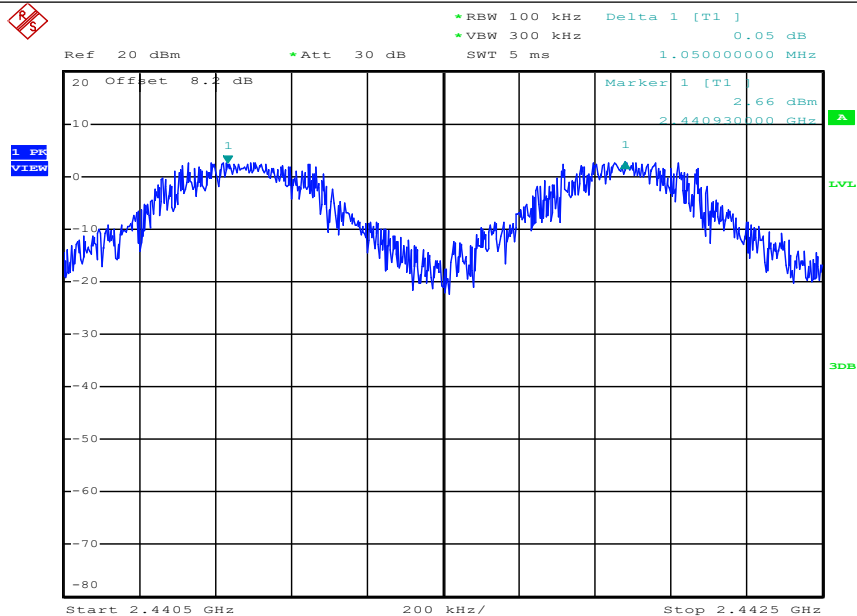
Test Graphs

GFSK/LCH



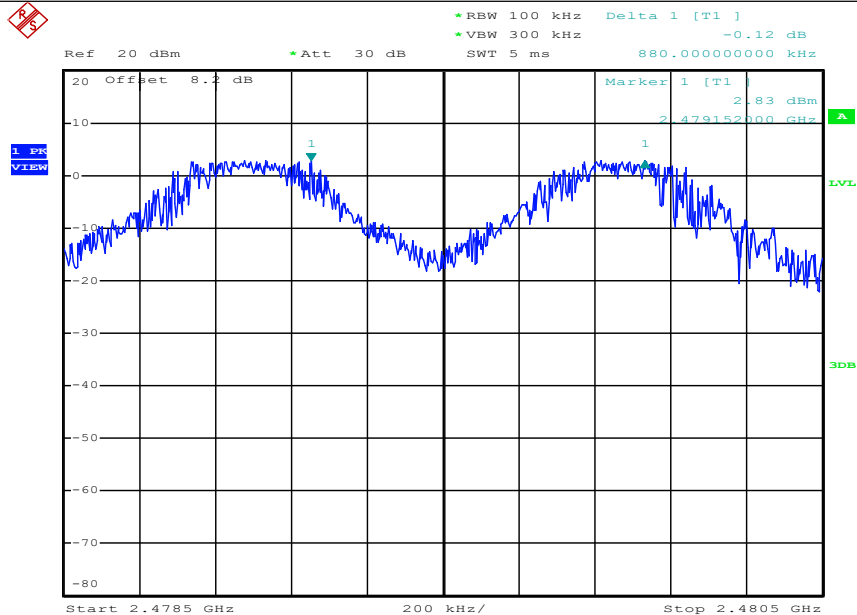
Date: 18.SEP.2019 20:39:23

GFSK/MCH

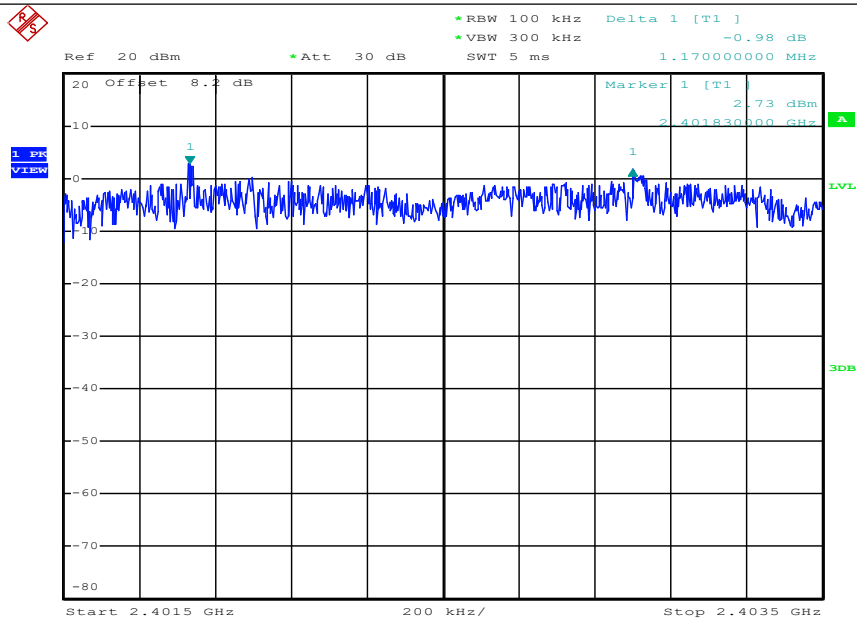


Date: 18.SEP.2019 20:43:23

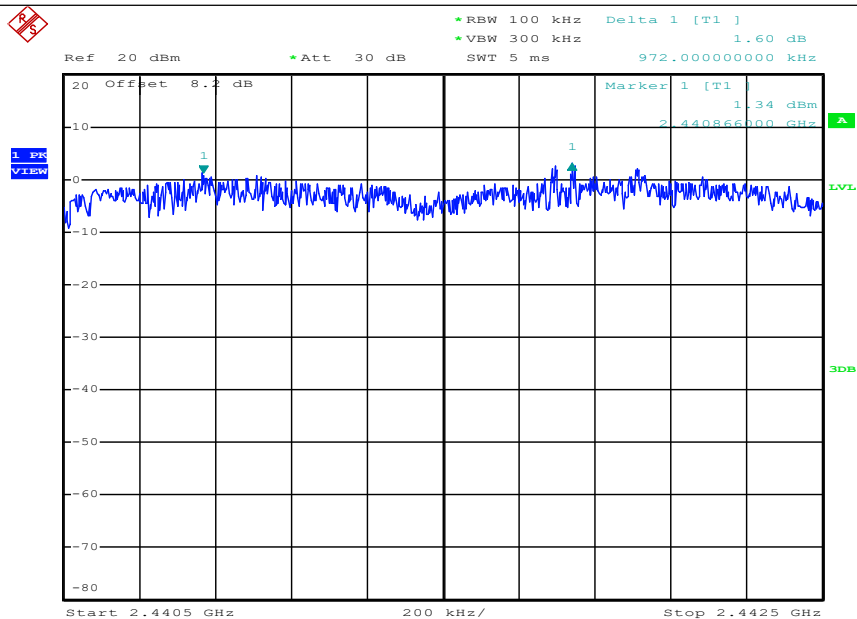
GFSK/HCH



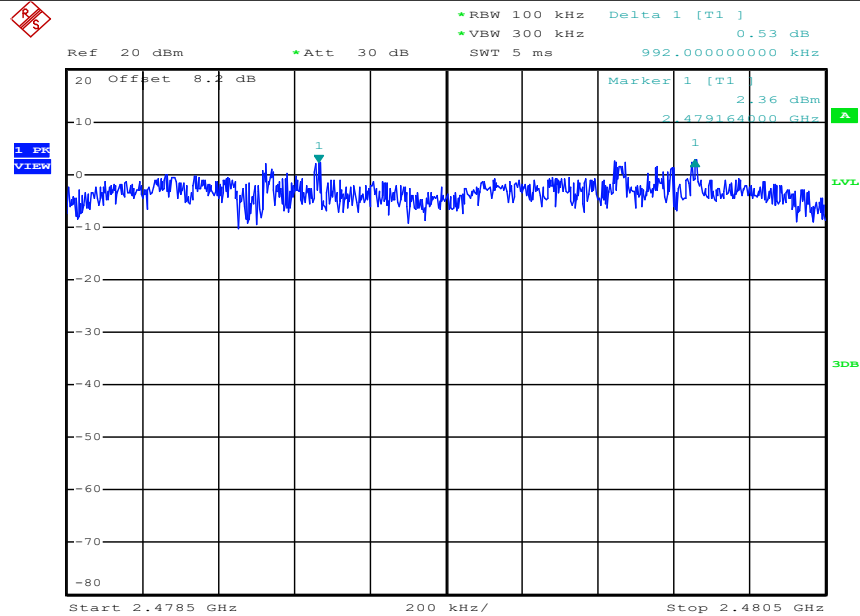
Date: 18.SEP.2019 20:43:58

π /4DQPSK/LCH

Date: 18.SEP.2019 20:49:52

 π /4DQPSK/MCH

Date: 18.SEP.2019 20:54:02

$\pi/4$ DQPSK/HCH

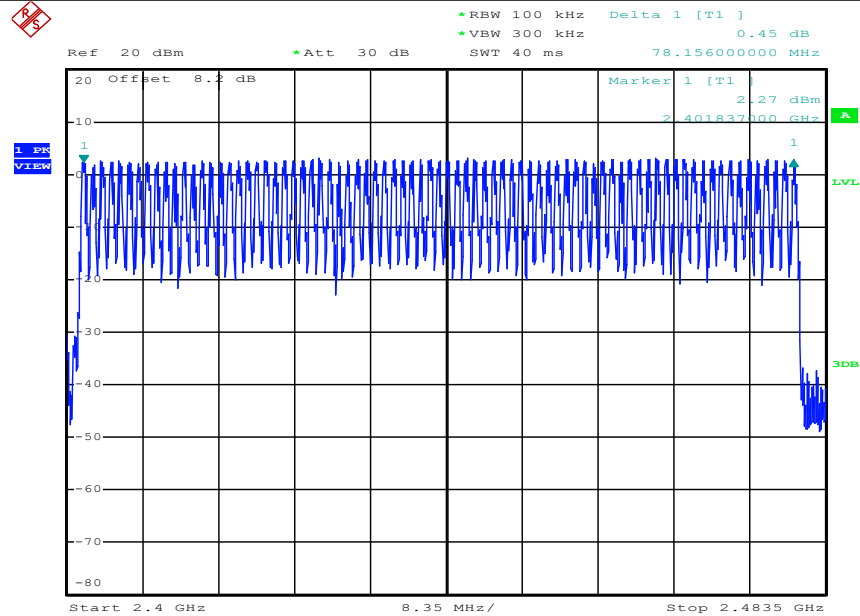
Date: 18.SEP.2019 20:54:48

A.4 Hopping Channel Number

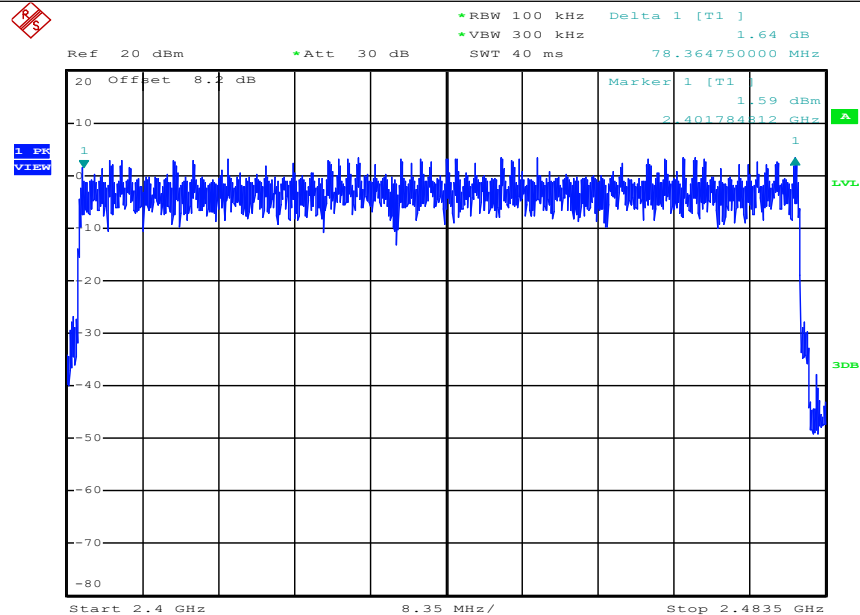
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	≥ 15	PASS
$\pi/4$ DQPSK	Hop	79	≥ 15	PASS
N/A	N/A	N/A	N/A	N/A

Test Graphs

GFSK/Hop



Date: 18.SEP.2019 20:49:09

 $\pi/4$ DQPSK/Hop

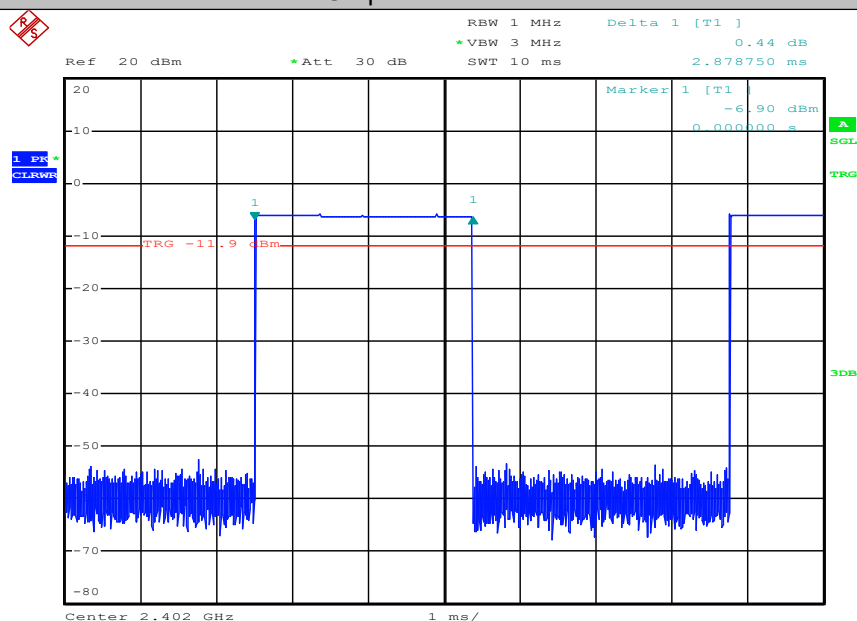
Date: 18.SEP.2019 21:01:02

A.5 Dwell Time

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88	106.7	0.308	0.4	PASS

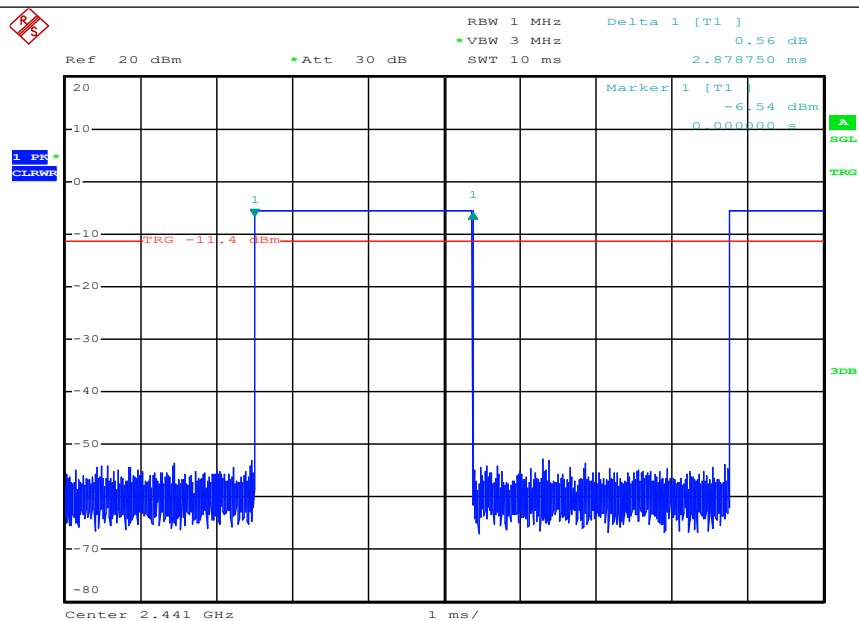
Test Graphs

GFSK_DH5/LCH



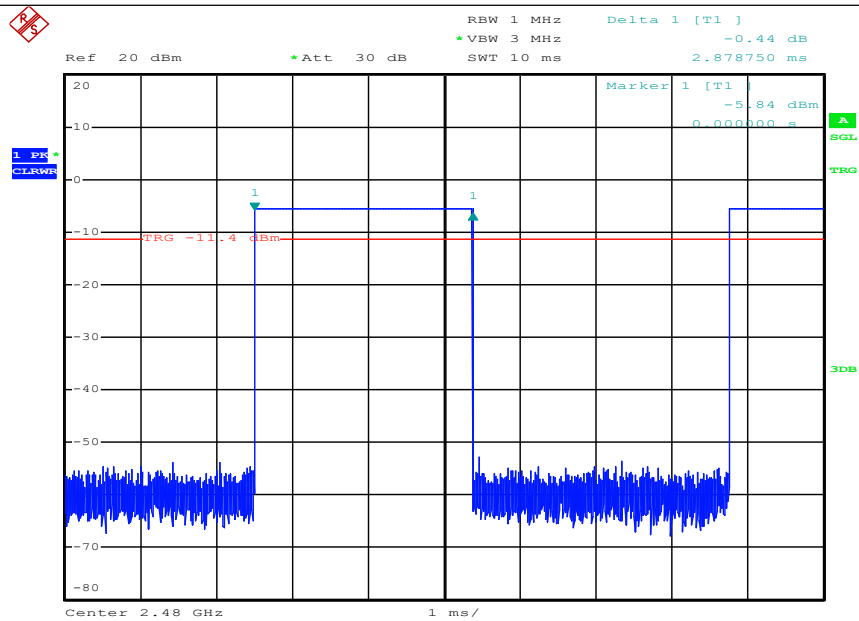
Date: 18.SEP.2019 20:17:06

GFSK_DH5/MCH



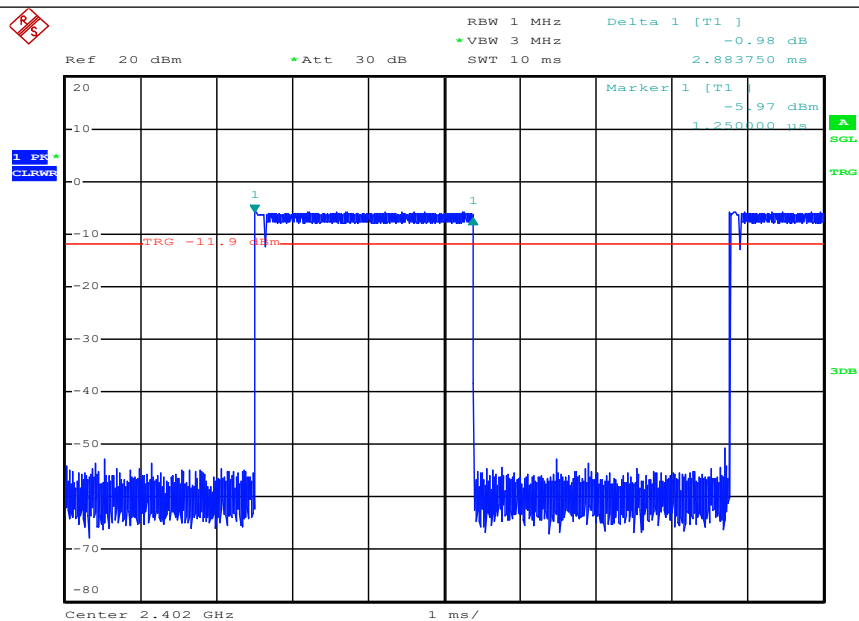
Date: 18.SEP.2019 20:22:29

GFSK_DH5/HCH



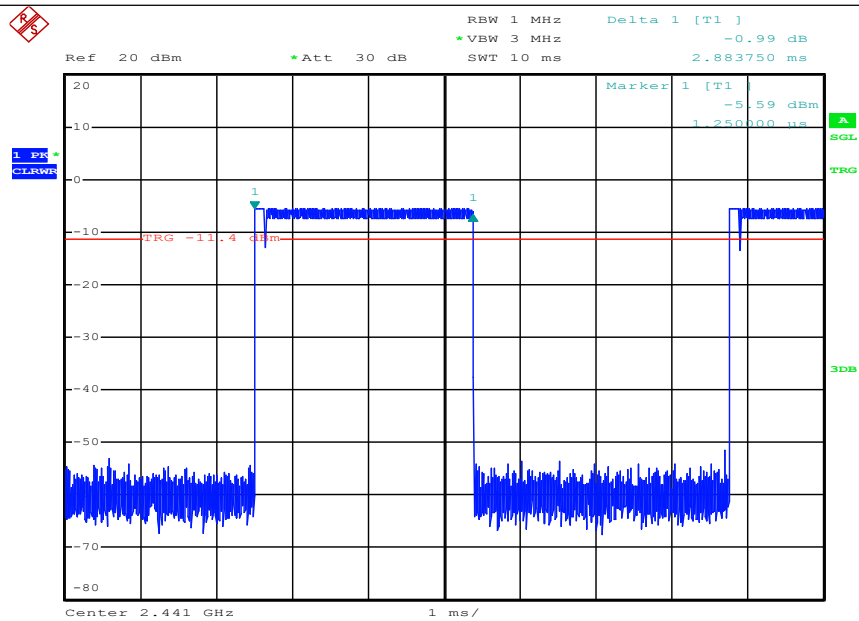
Date: 18.SEP.2019 20:24:30

$\pi/4$ DQPSK
_2DH5/LCH



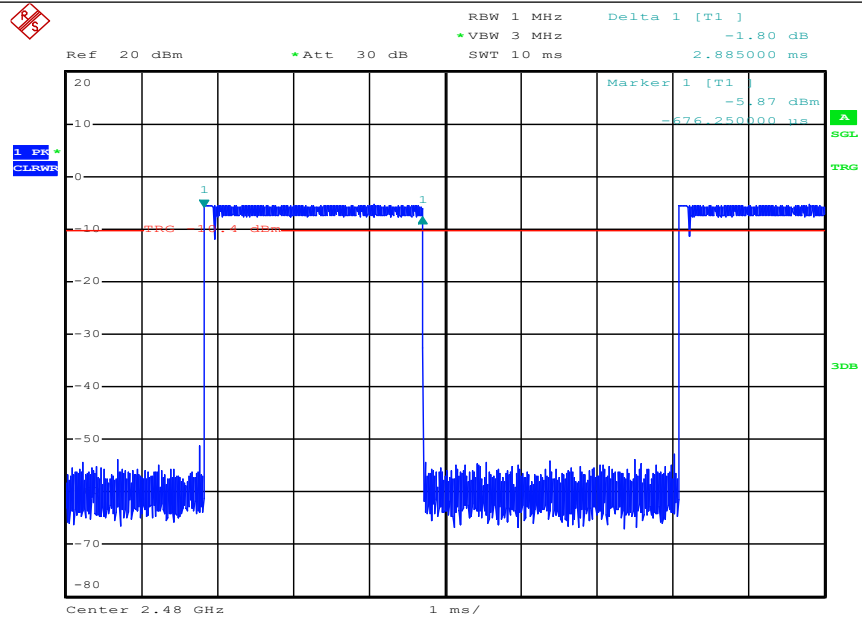
Date: 18.SEP.2019 20:27:23

$\pi/4$ DQPSK
_2DH5/MCH



Date: 18.SEP.2019 20:30:13

$\pi/4$ DQPSK
_2DH5/HCH



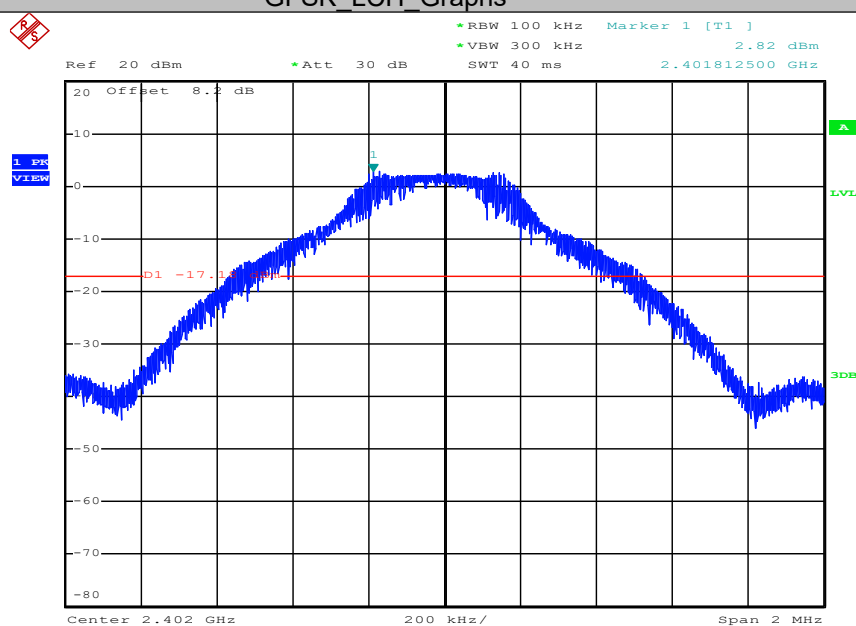
Date: 18.SEP.2019 20:32:41

A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2.82	-32.020	-17.180	PASS
	MCH	3.08	-32.730	-16.920	PASS
	HCH	3.36	-32.420	-16.640	PASS
$\pi/4$ DQPSK	LCH	2.85	-31.250	-17.150	PASS
	MCH	3.27	-22.680	-16.730	PASS
	HCH	-0.81	-32.430	-20.810	PASS

GFSK_LCH_Graphs

Pref

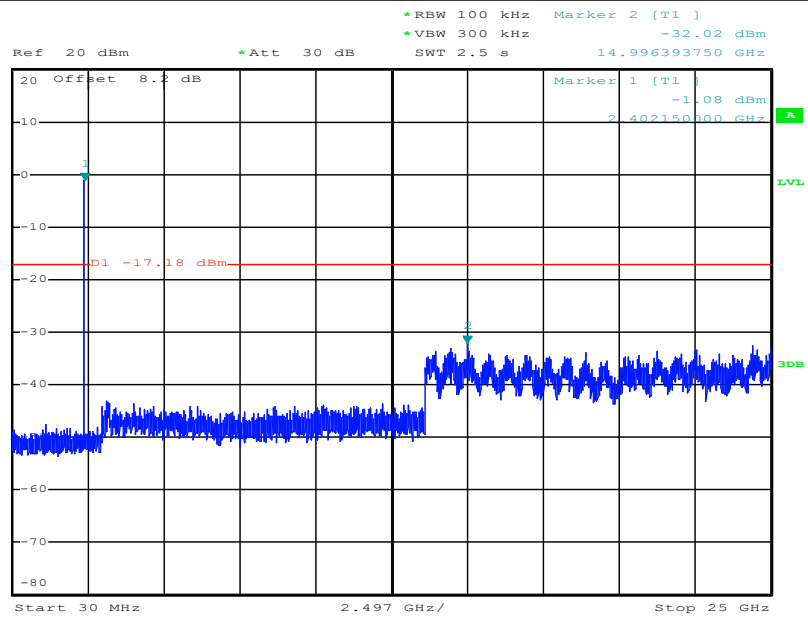


Date: 18.SEP.2019 20:20:05

P_uw



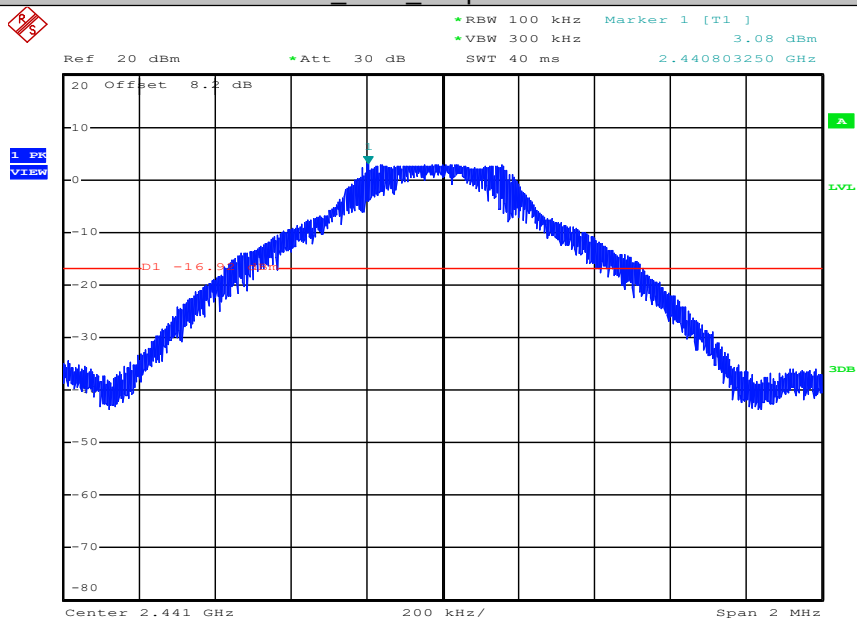
1. PR
VIEW



Date: 18.SEP.2019 20:20:19

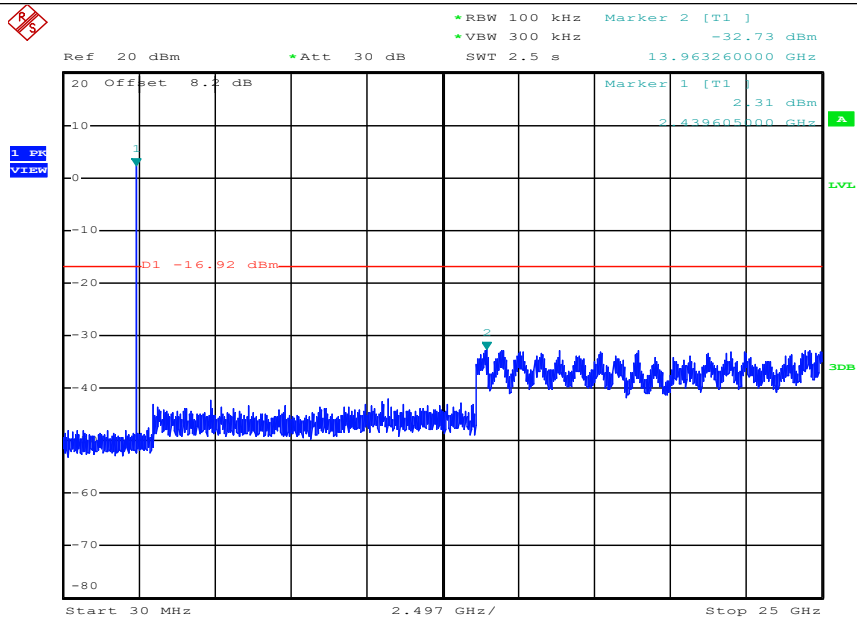
GFSK_MCH_Graphs

Pref



Date: 18.SEP.2019 20:22:57

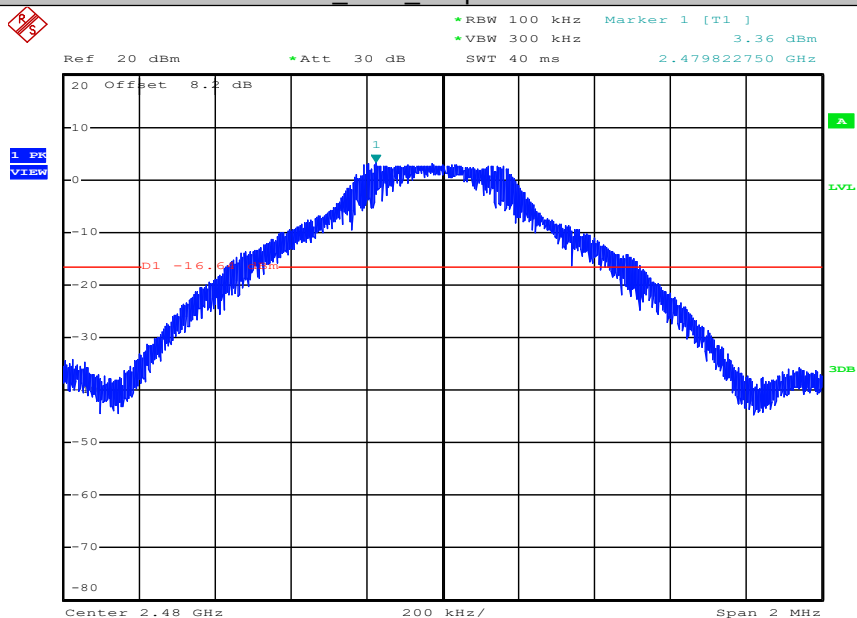
Puw



Date: 18.SEP.2019 20:23:22

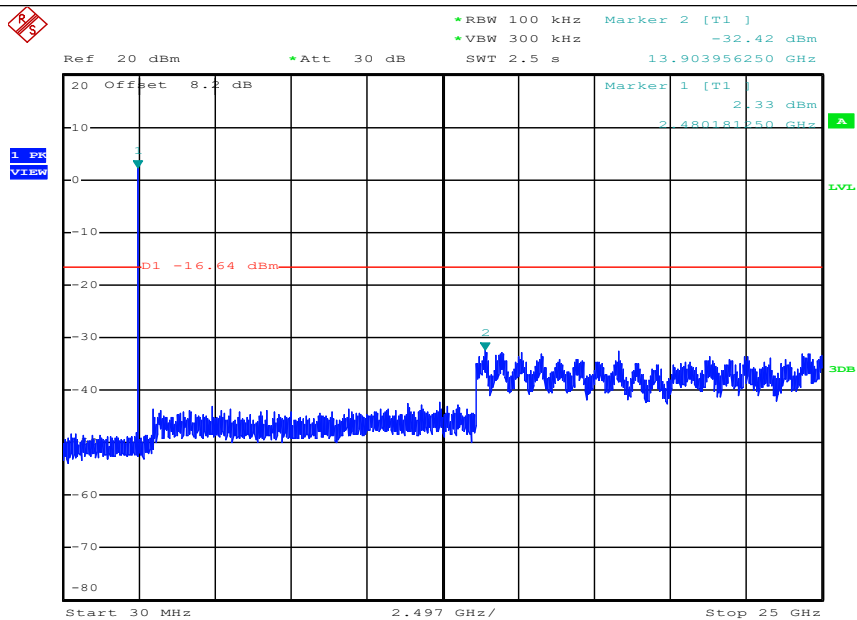
GFSK_HCH_Graphs

Pref



Date: 18.SEP.2019 20:25:15

Puw



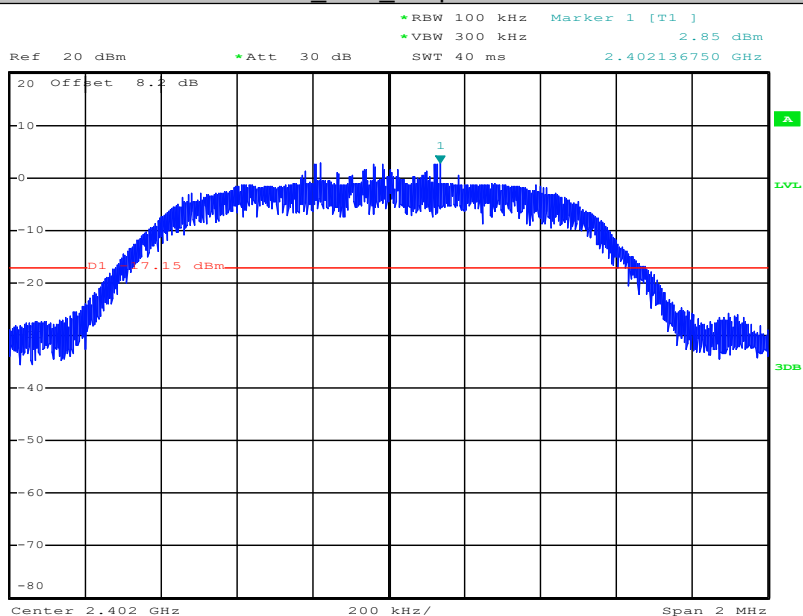
Date: 18.SEP.2019 20:25:35

$\pi/4$ DQPSK_LCH_Graphs

Pref



1 PK
VIEW

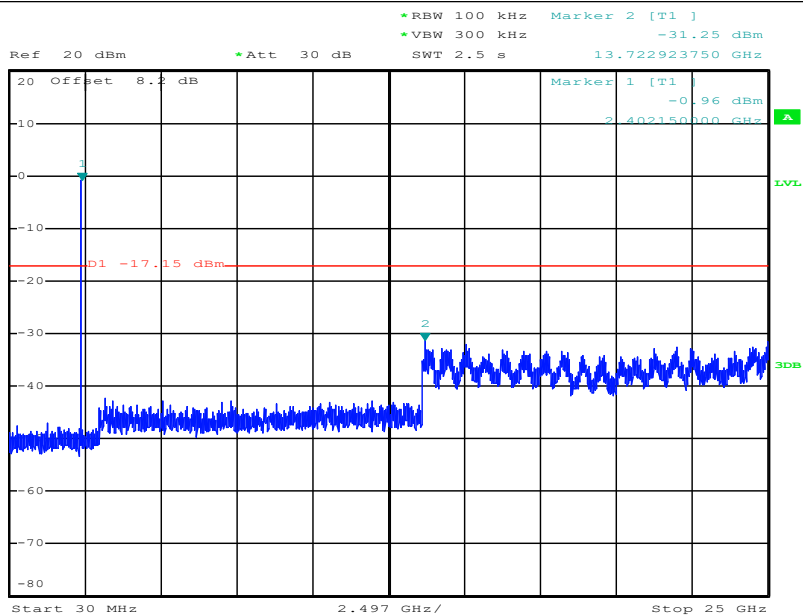


Date: 18.SEP.2019 20:28:08

Puw



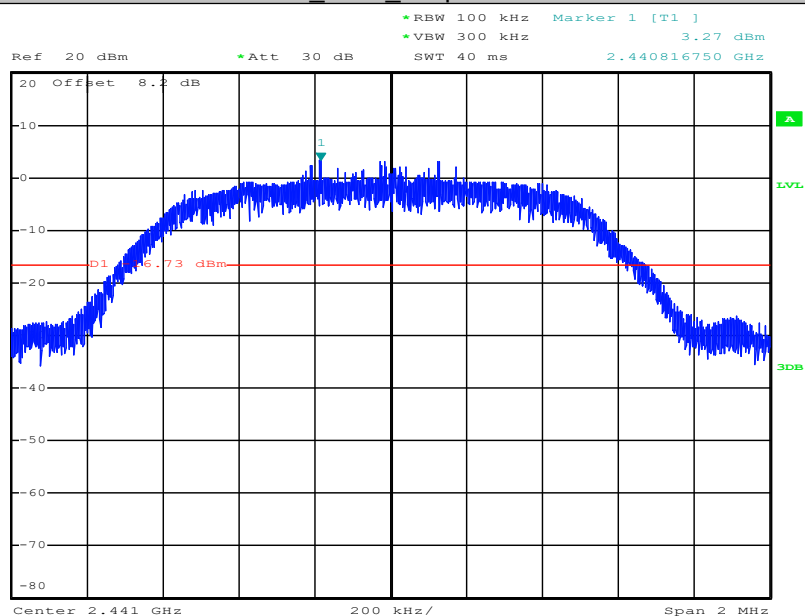
1 PK
VIEW



Date: 18.SEP.2019 20:28:34

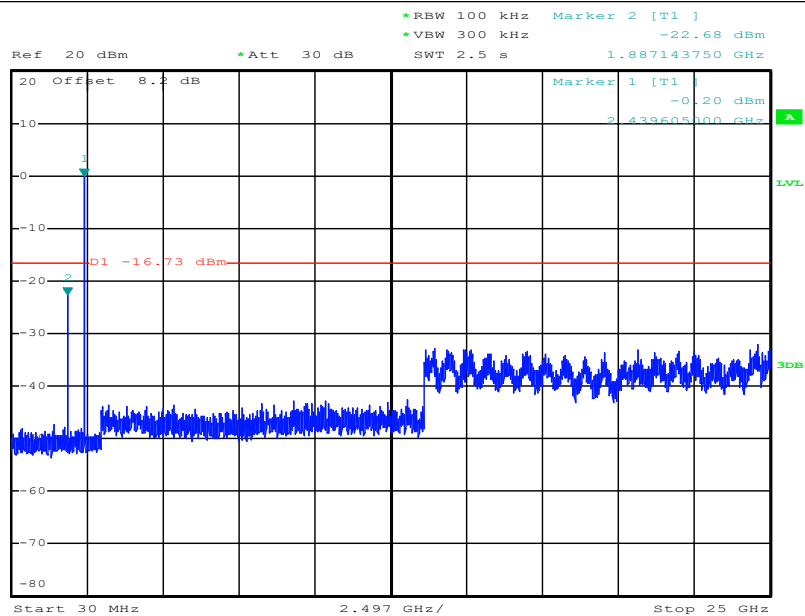
$\pi/4$ DQPSK_MCH_Graphs

Pref

1 PR
VIEW

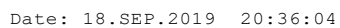
Date: 18.SEP.2019 20:30:41

Puw

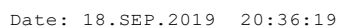
1 PR
VIEW

Date: 18.SEP.2019 20:30:59

Pref



Puw

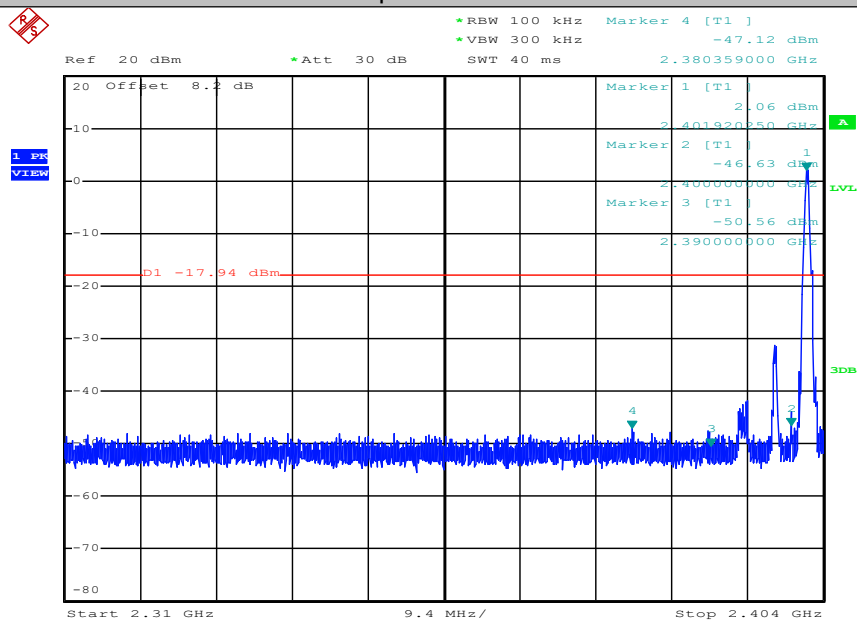


A.7 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	2.060	Off	-47.121	-17.94	PASS
			2.920	On	-45.995	-17.08	PASS
	HCH	2480	2.850	Off	-37.987	-17.15	PASS
			3.430	On	-36.677	-16.57	PASS
$\pi/4$ DQPSK	LCH	2402	2.790	Off	-47.351	-17.21	PASS
			3.220	On	-46.294	-16.78	PASS
	HCH	2480	-4.290	Off	-42.275	-24.29	PASS
			3.350	On	-40.166	-16.65	PASS

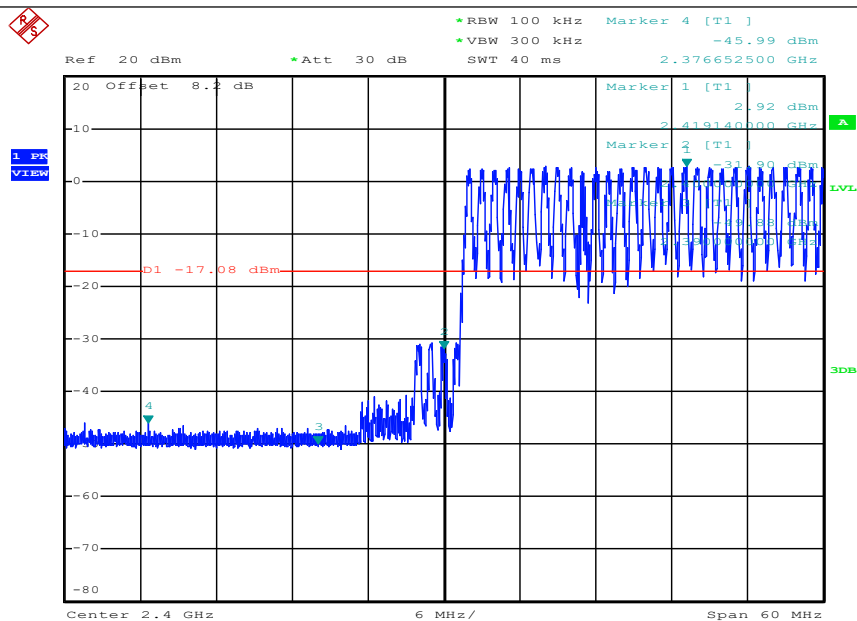
Test Graphs

GFSK/LCH/No Hop



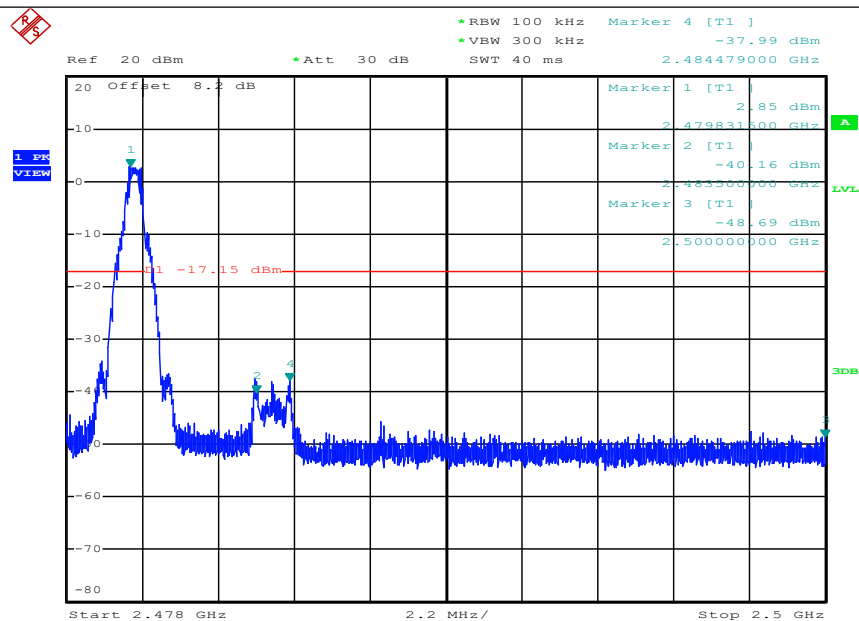
Date: 18.SEP.2019 20:18:14

GFSK/LCH/Hop



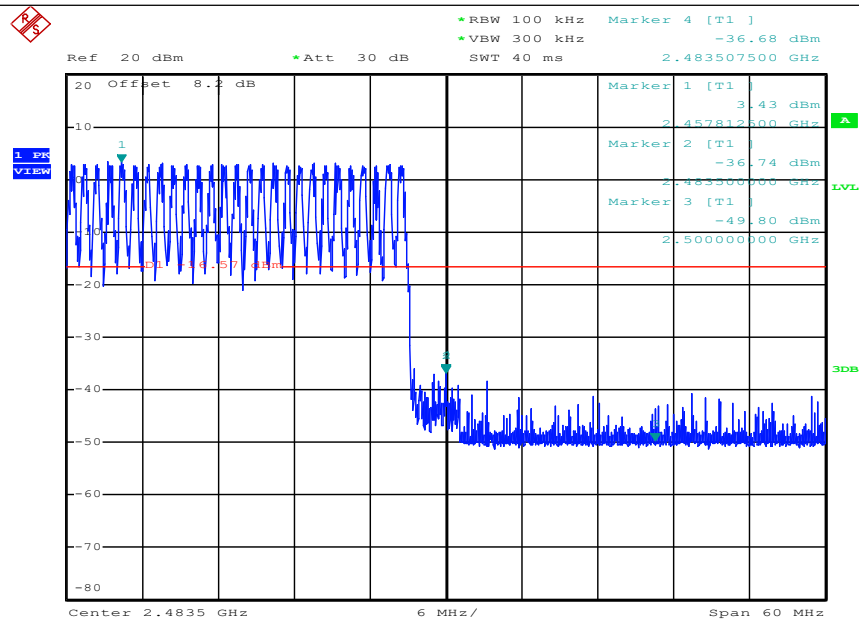
Date: 18.SEP.2019 20:42:54

GFSK/HCH/No Hop



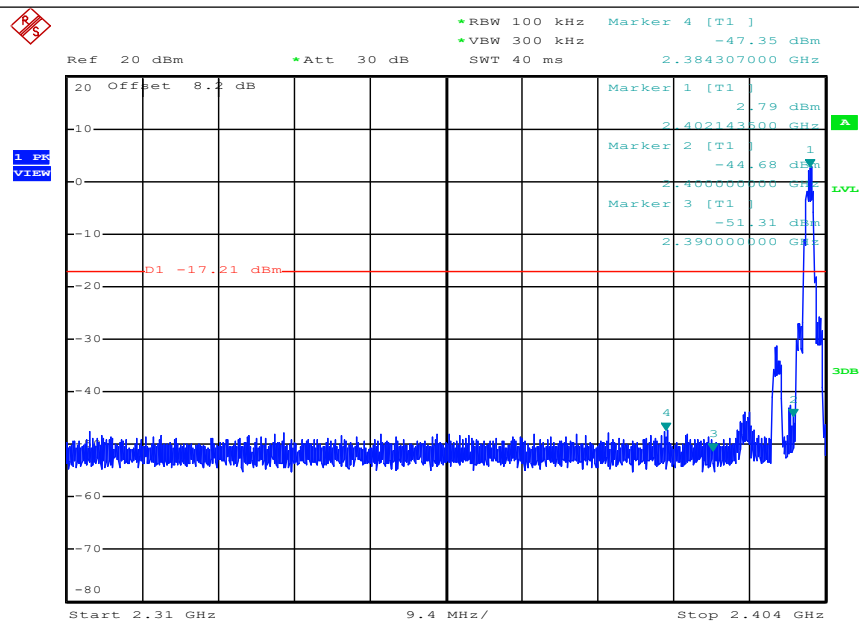
Date: 18.SEP.2019 20:25:02

GFSK/HCH/Hop



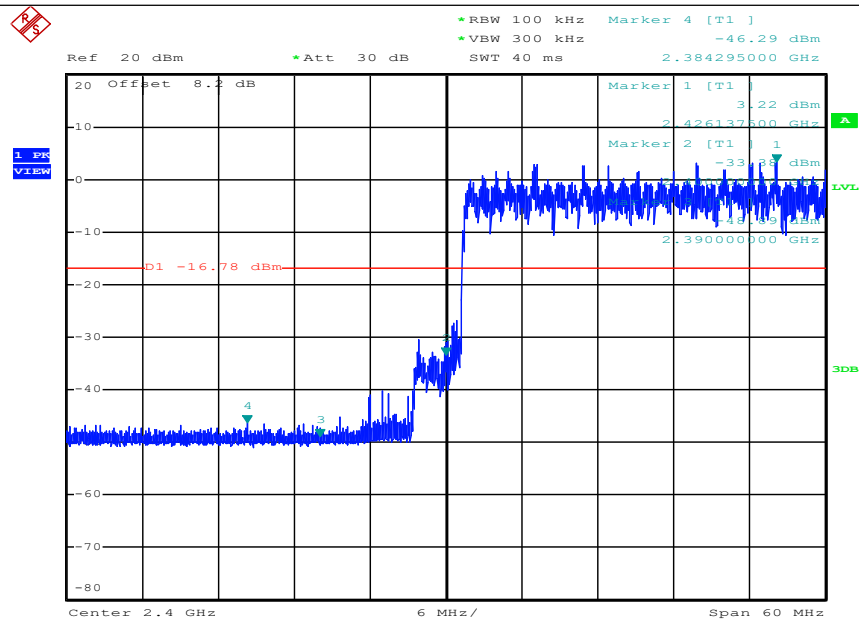
Date: 18.SEP.2019 20:46:37

$\pi/4$ DQPSK/LCH/No
Hop



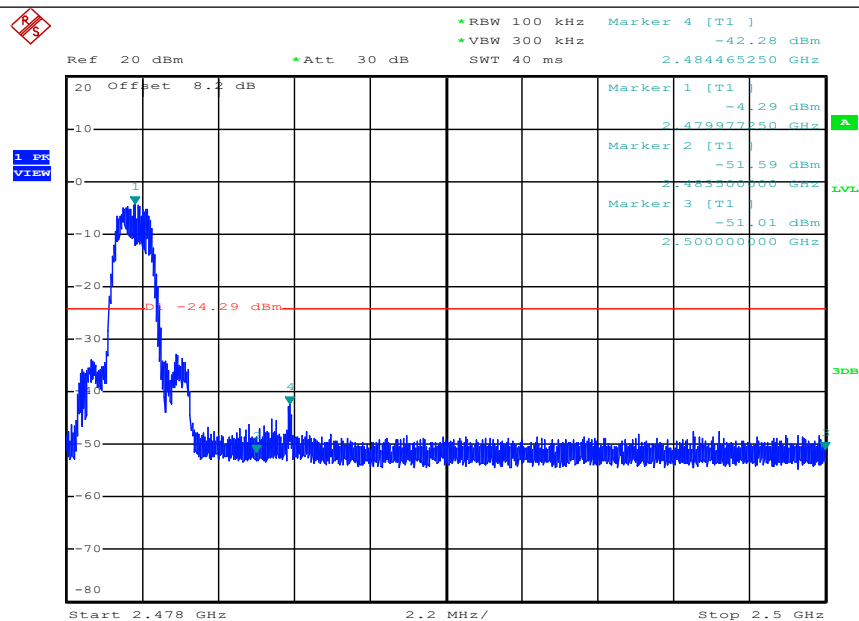
Date: 18.SEP.2019 20:27:55

$\pi/4$ DQPSK/LCH/Hop



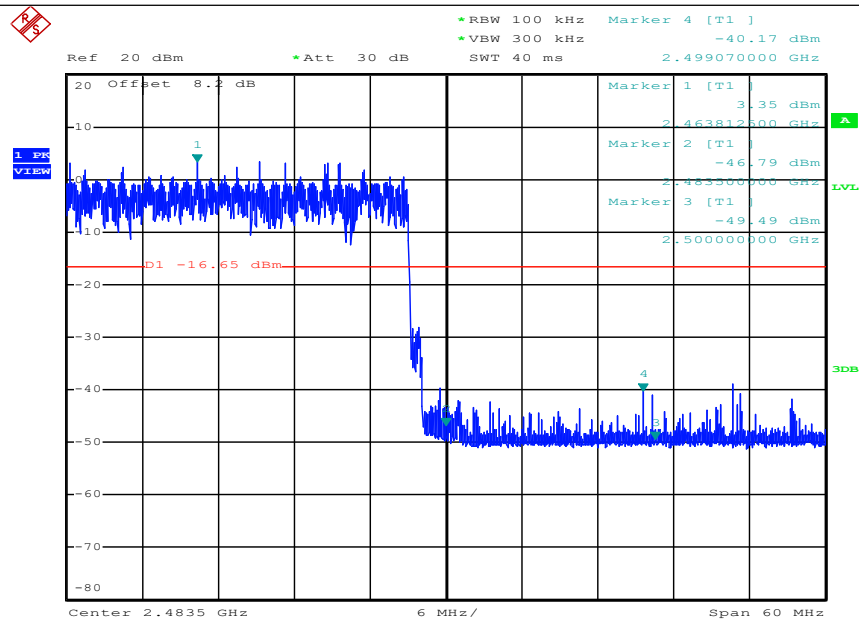
Date: 18.SEP.2019 20:53:27

$\pi/4$ DQPSK/HCH/No
Hop



Date: 18.SEP.2019 20:35:51

$\pi/4$ DQPSK/HCH/Hop

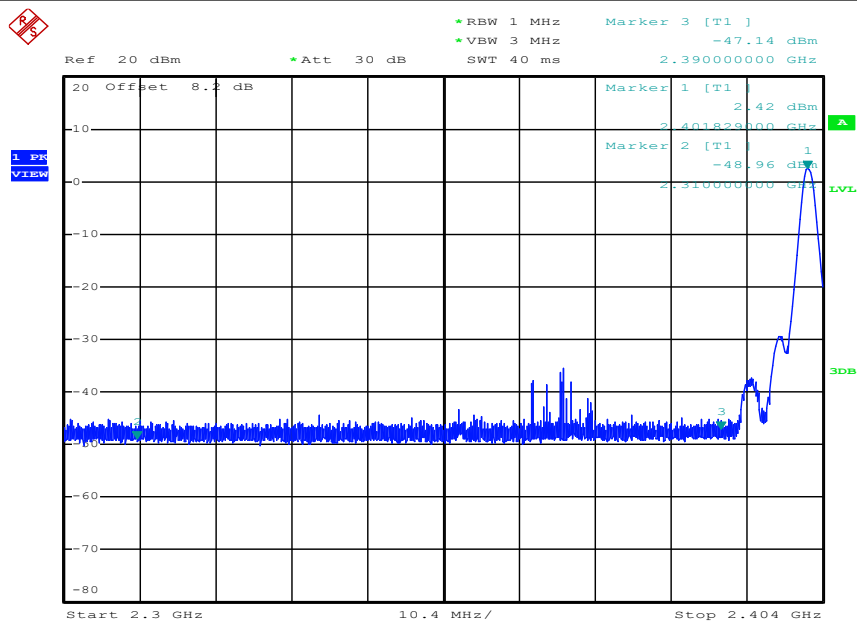


Date: 18.SEP.2019 20:57:19

A.8 Restrict-band band-edge measurements

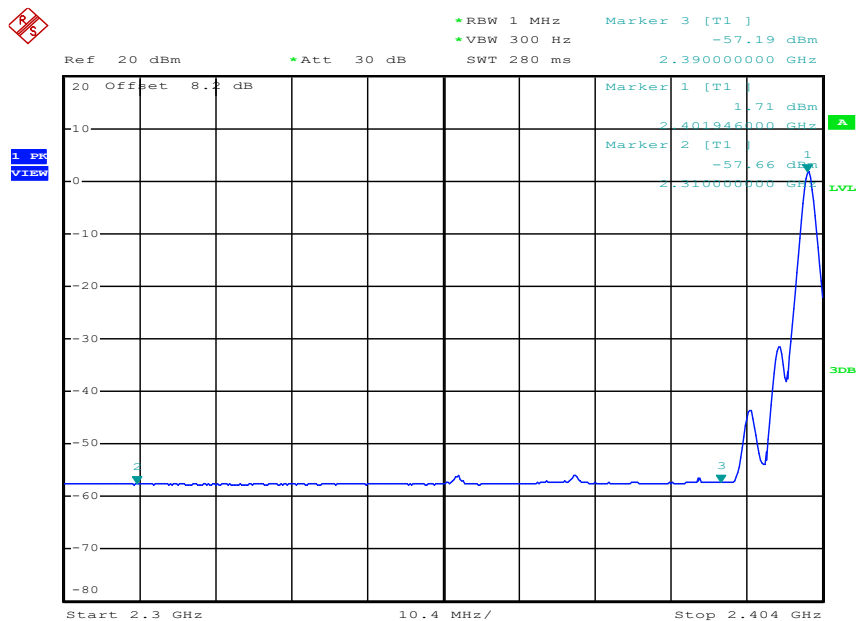
Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-48.96	2.0	0	46.80	PEAK	74	PASS
	Off	2310.0	-57.66	2.0	0	38.10	AV	54	PASS
	Off	2390.0	-47.14	2.0	0	48.62	PEAK	74	PASS
	Off	2390.0	-57.19	2.0	0	38.57	AV	54	PASS
	Off	2483.5	-38.70	2.0	0	57.06	PEAK	74	PASS
	Off	2483.5	-43.44	2.0	0	52.32	AV	54	PASS
	Off	2500.0	-47.55	2.0	0	48.21	PEAK	74	PASS
	Off	2500.0	-57.94	2.0	0	37.82	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-47.61	2.0	0	48.15	PEAK	74	PASS
	Off	2310.0	-57.69	2.0	0	38.07	AV	54	PASS
	Off	2390.0	-48.32	2.0	0	47.44	PEAK	74	PASS
	Off	2390.0	-57.01	2.0	0	38.75	AV	54	PASS
	Off	2483.5	-37.57	2.0	0	58.19	PEAK	74	PASS
	Off	2483.5	-44.26	2.0	0	51.50	AV	54	PASS
	Off	2500.0	-49.05	2.0	0	46.71	PEAK	74	PASS
	Off	2500.0	-57.97	2.0	0	37.79	AV	54	PASS

Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



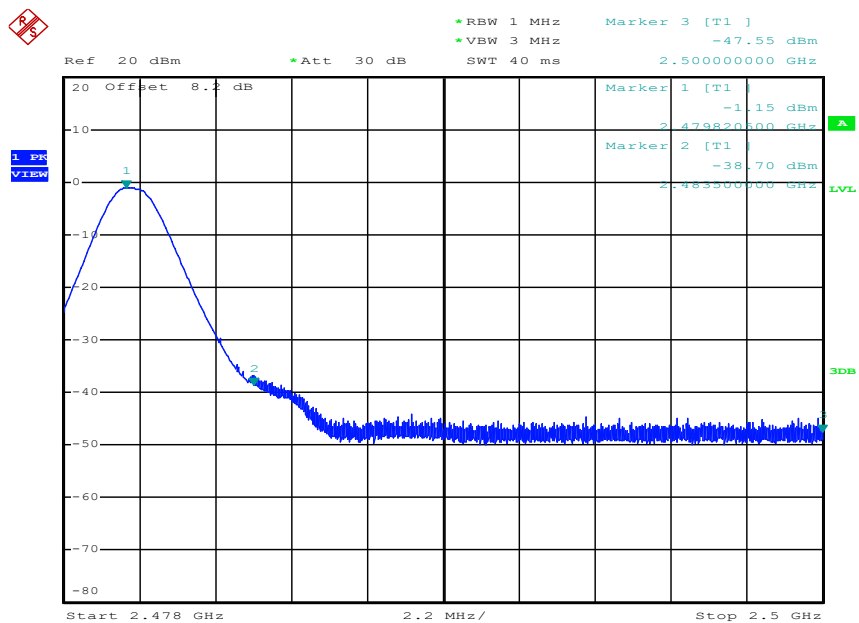
Date: 18.SEP.2019 20:20:38

Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)



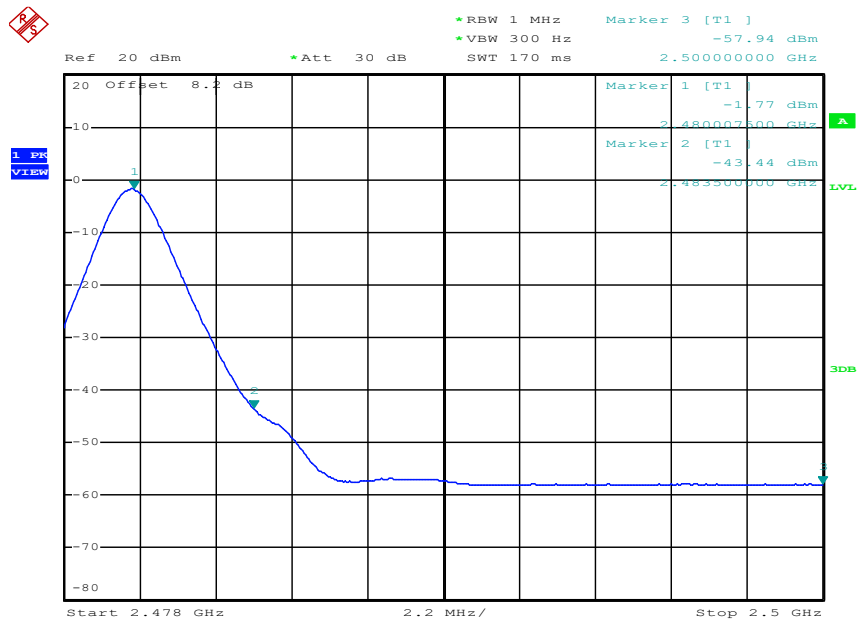
Date: 18.SEP.2019 20:20:51

Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (High Channel)

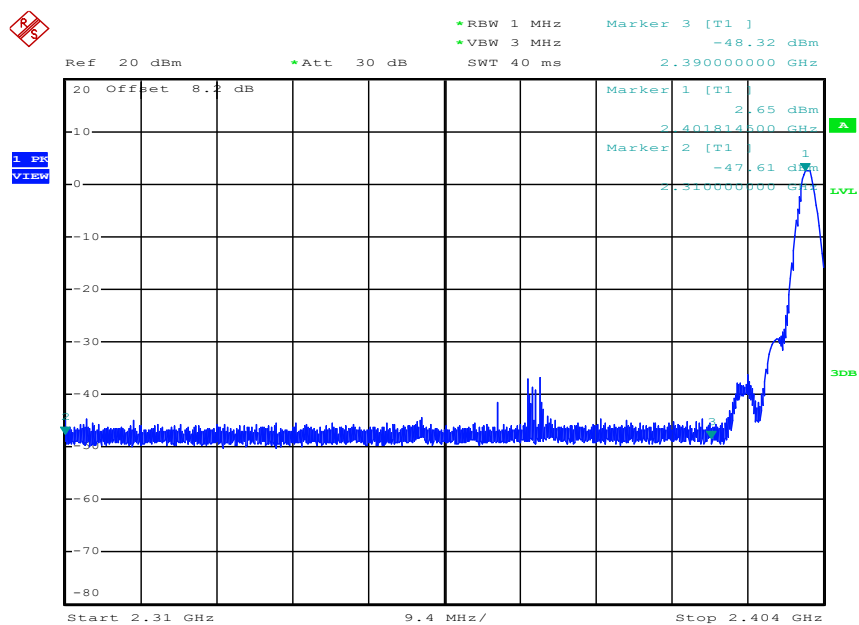


Date: 18.SEP.2019 20:35:11

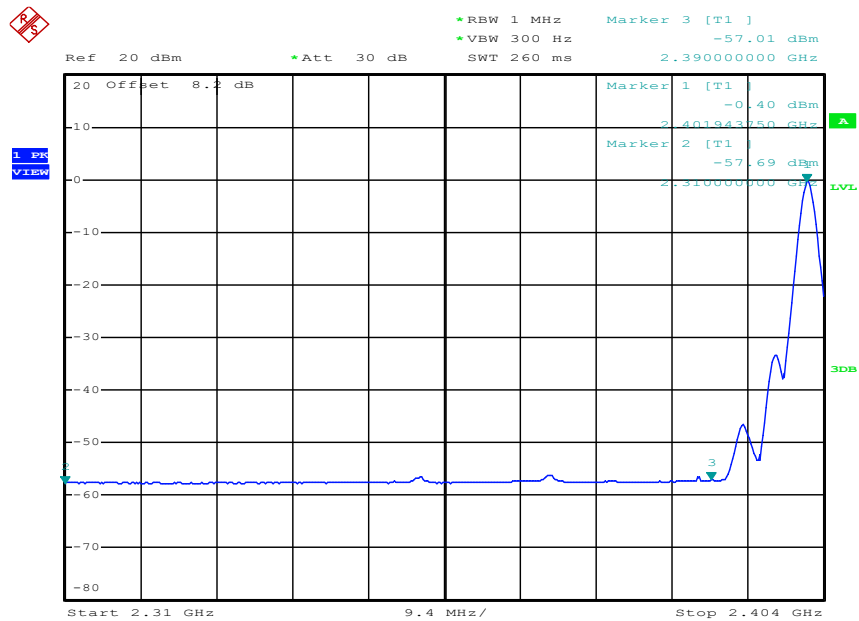
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (High Channel)



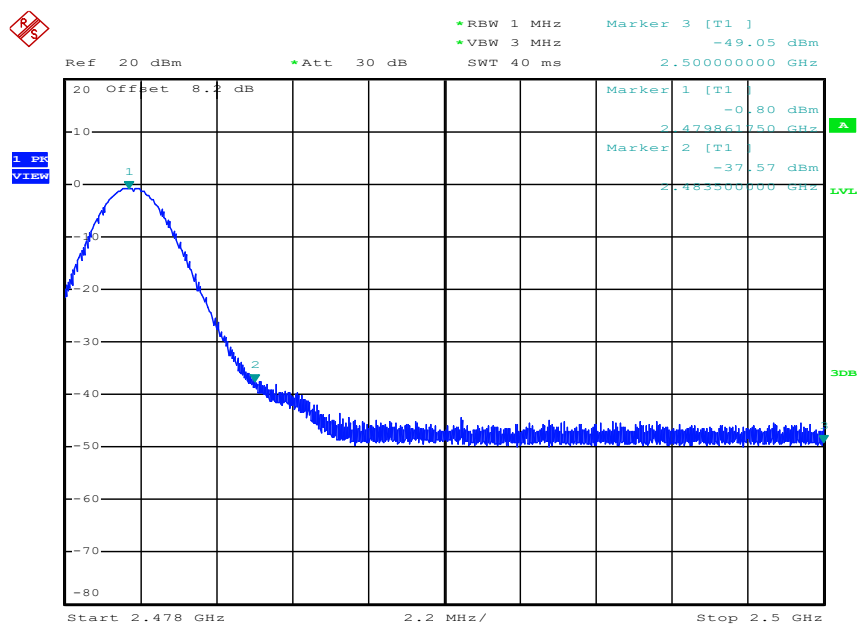
Date: 18.SEP.2019 20:35:25

Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)

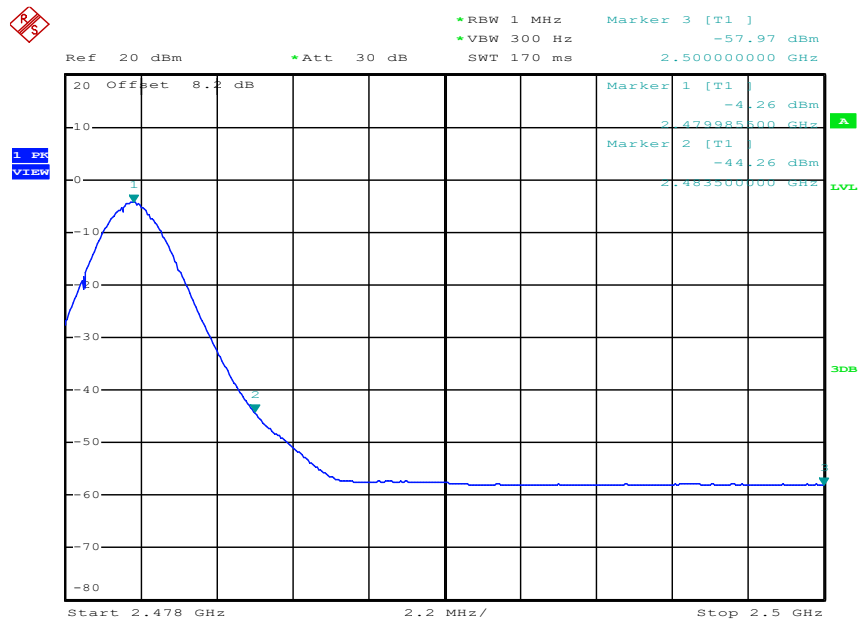
Date: 18.SEP.2019 20:28:53

Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)

Date: 18.SEP.2019 20:29:06

Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (High Channel)

Date: 18.SEP.2019 20:36:38

Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (High Channel)

Date: 18.SEP.2019 20:36:51

