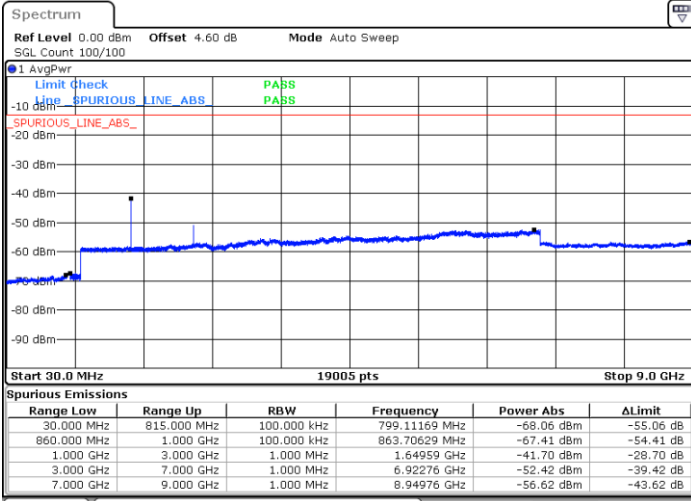




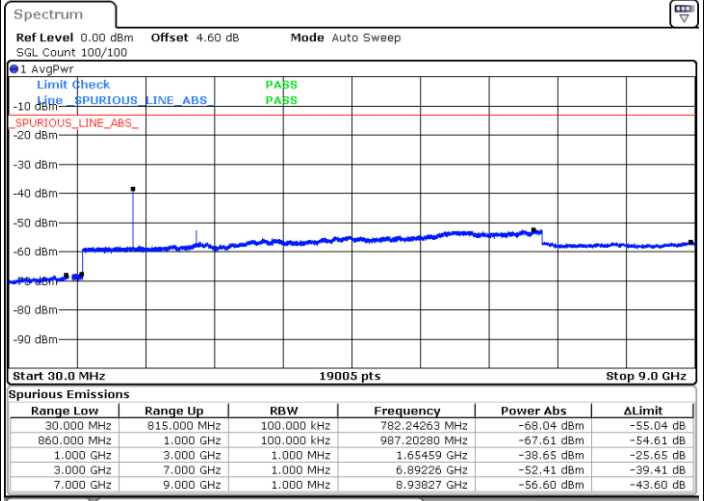
FR1 n5 / 20MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

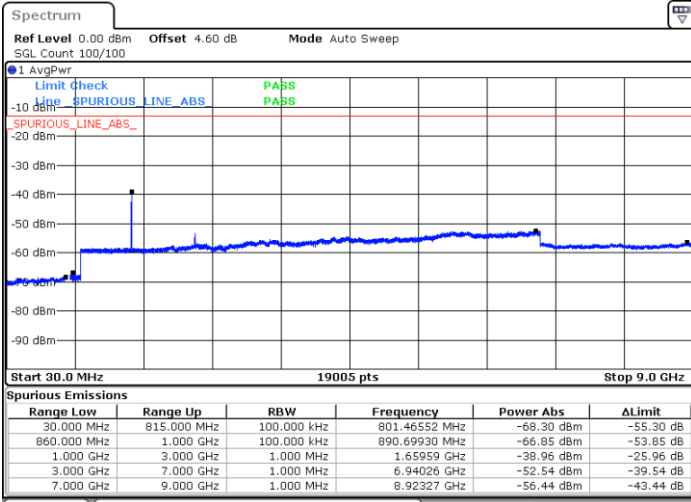


Date: 14. JUN. 2022 00:33:54



Date: 14. JUN. 2022 00:27:19

Highest Channel / 1RB1



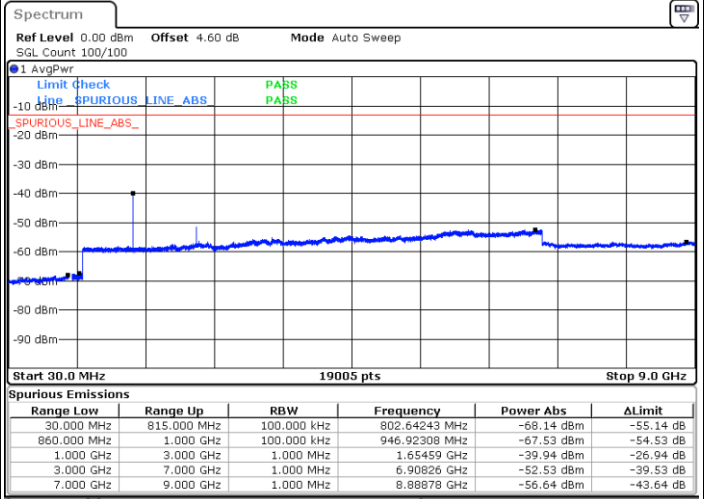
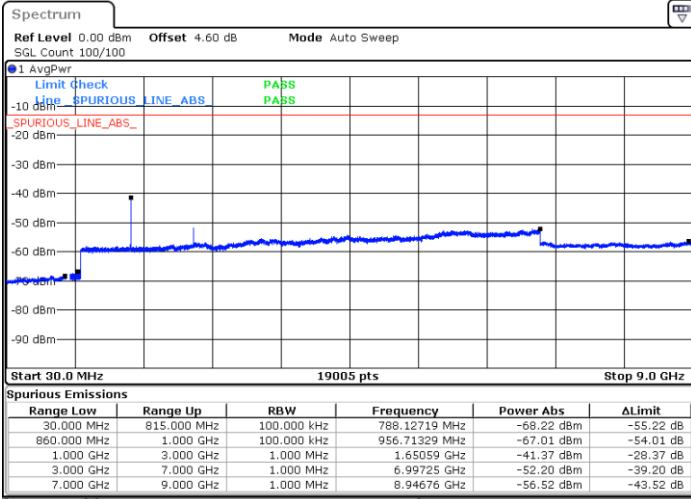
Date: 14. JUN. 2022 00:44:20



FR1 n5 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

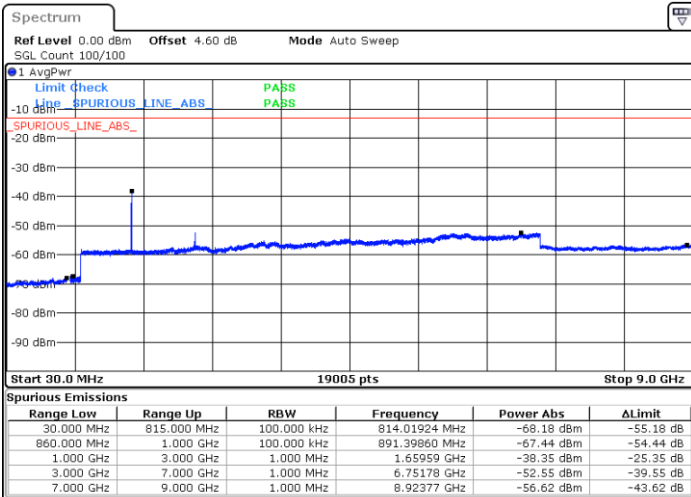
Middle Channel / 1RB1



Date: 14. JUN. 2022 00:38:03

Date: 14. JUN. 2022 00:29:03

Highest Channel / 1RB1



Date: 14. JUN. 2022 00:44:58



Frequency Stability

Test Conditions		FR1 n5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0032	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0025	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0026	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0015	
-20	Normal Voltage	0.0017	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0035	
20	Normal Voltage	0.0012	
20	Battery End Point	0.0016	

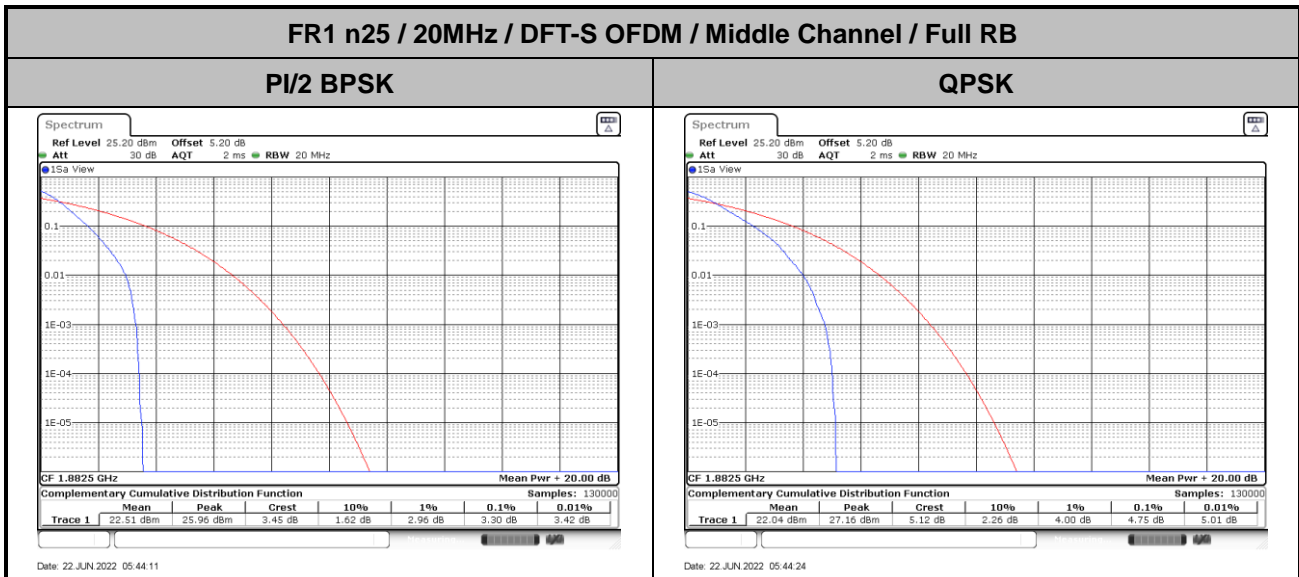
Note: Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.55 V. ; Maximum Voltage =4.45 V.



FR1 12A_n25

Peak-to-Average Ratio

Mode	FR1 n25 / 20MHz / DFT-S OFDM		
Mod.	PI/2 BPSK	QPSK	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	3.30	4.75	PASS





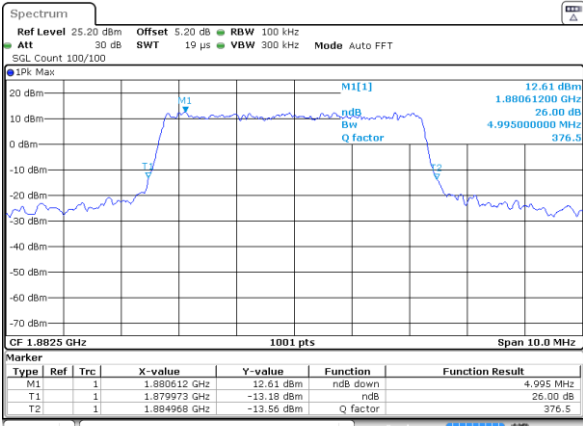
26dB Bandwidth

Mode	FR1 n25 : 26dBW (MHz) / DFT OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	5.00	5.01	10.19	10.03	14.99	14.93	21.26	21.14
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.92	4.88	10.11	10.15	14.93	15.05	21.46	21.26



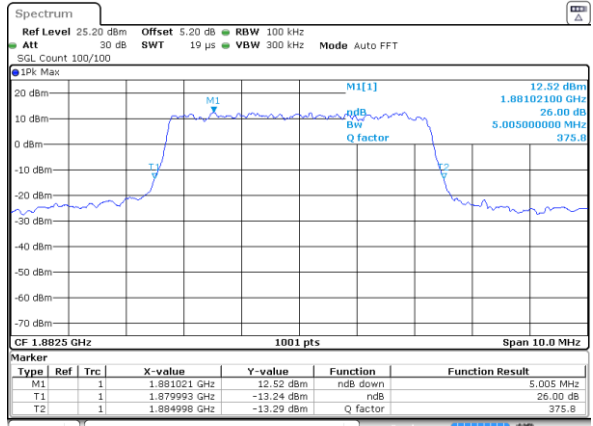
FR1 n25 / 5MHz / CP OFDM / Middle Channel / Full RB

QPSK



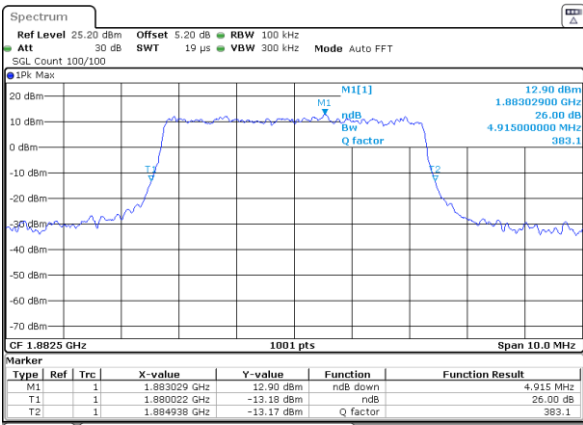
Date: 22 JUN 2022 05:00:49

16QAM



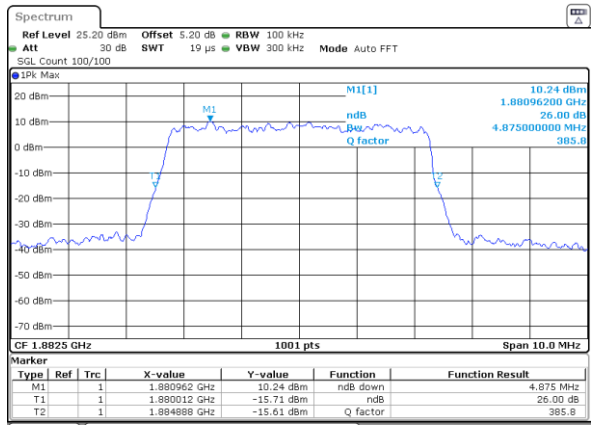
Date: 22 JUN 2022 05:01:15

64QAM



Date: 22 JUN 2022 05:01:53

256QAM

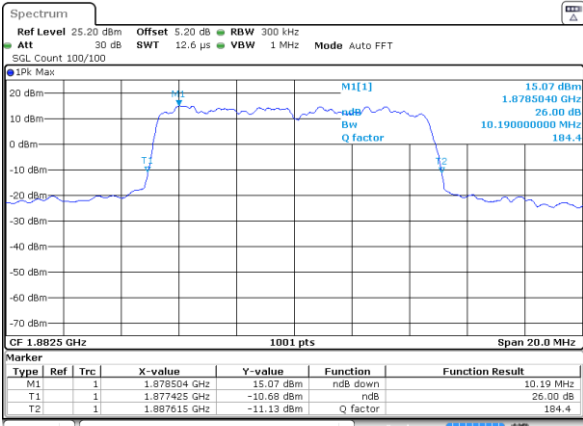


Date: 22 JUN 2022 05:02:21



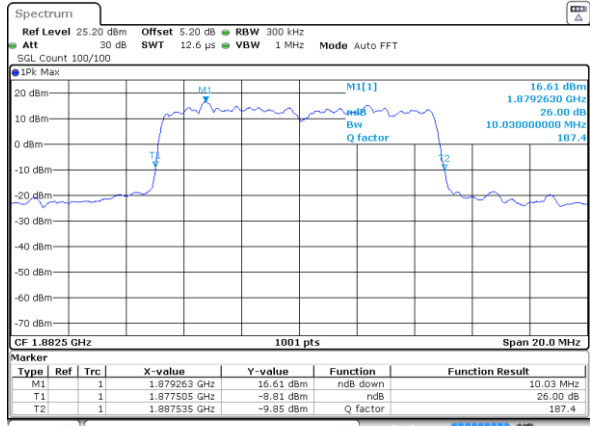
FR1 n25 / 10MHz / CP OFDM / Middle Channel / Full RB

QPSK



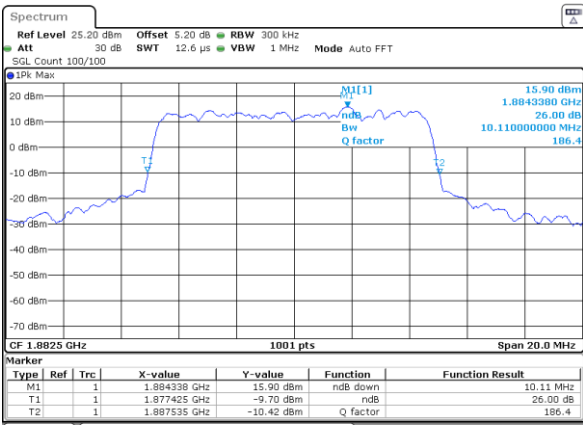
Date: 22 JUN 2022 05:25:59

16QAM



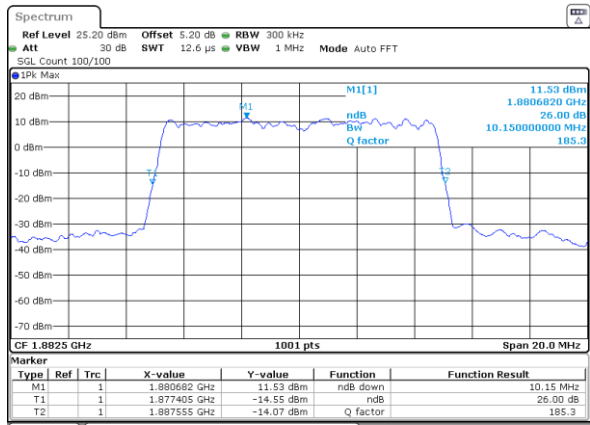
Date: 22 JUN 2022 05:26:17

64QAM



Date: 22 JUN 2022 05:26:37

256QAM

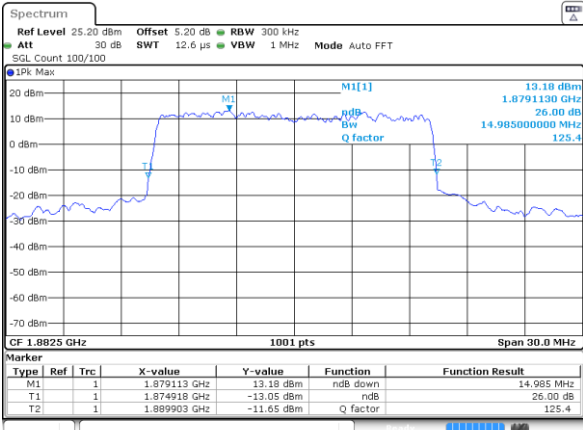


Date: 22 JUN 2022 05:26:53



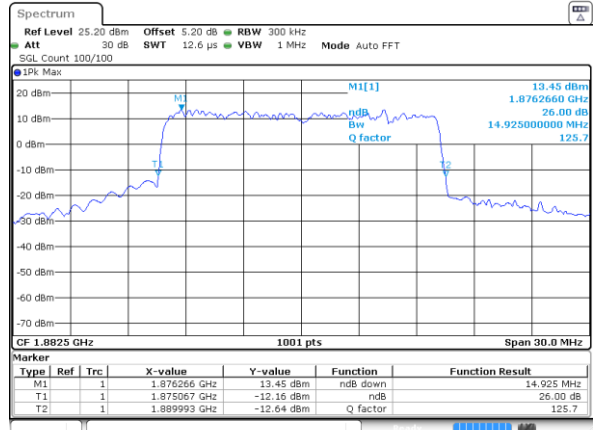
FR1 n25 / 15MHz / CP OFDM / Middle Channel / Full RB

QPSK



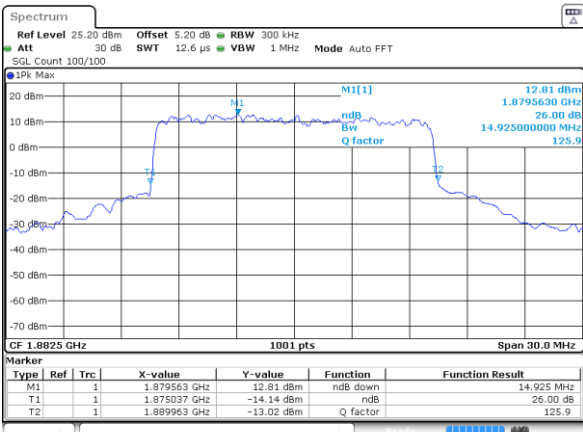
Date: 22 JUN 2022 05:33:41

16QAM



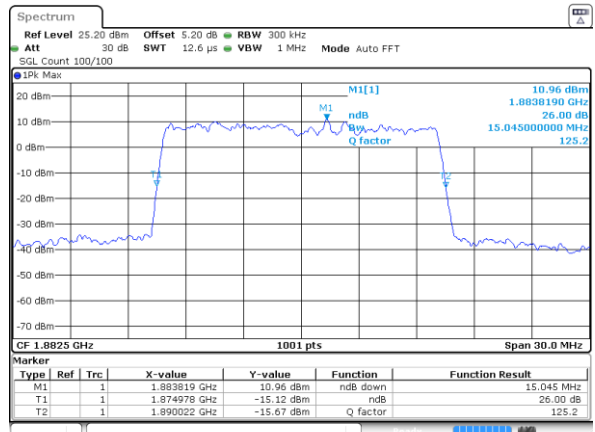
Date: 22 JUN 2022 05:34:19

64QAM



Date: 22 JUN 2022 05:34:42

256QAM

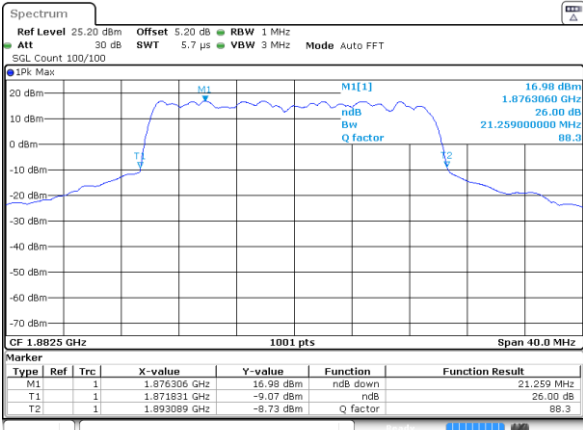


Date: 22 JUN 2022 05:35:07



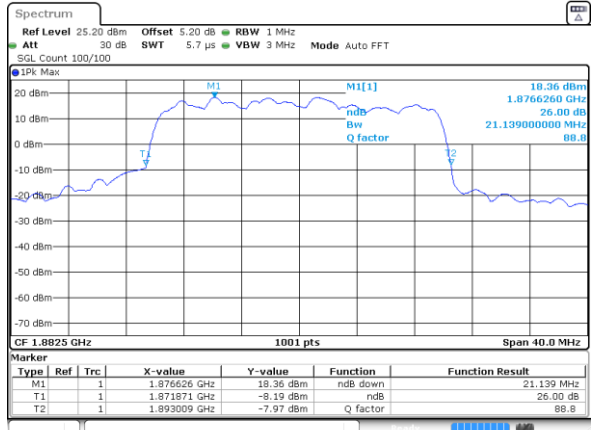
FR1 n25 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

QPSK



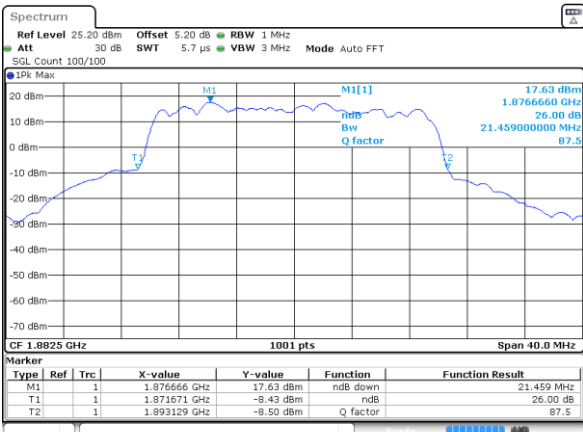
Date: 22 JUN 2022 05:42:11

16QAM



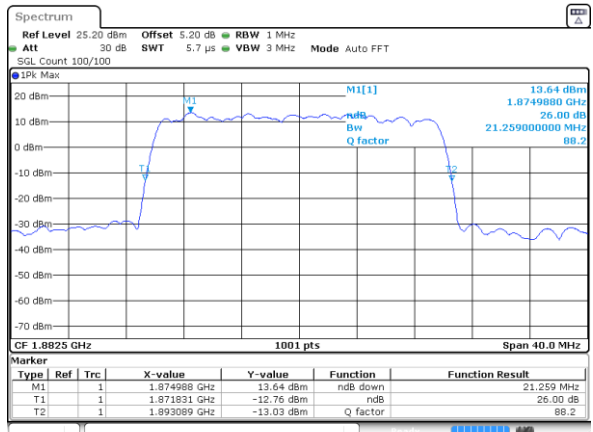
Date: 22 JUN 2022 05:42:38

64QAM



Date: 22 JUN 2022 05:43:04

256QAM

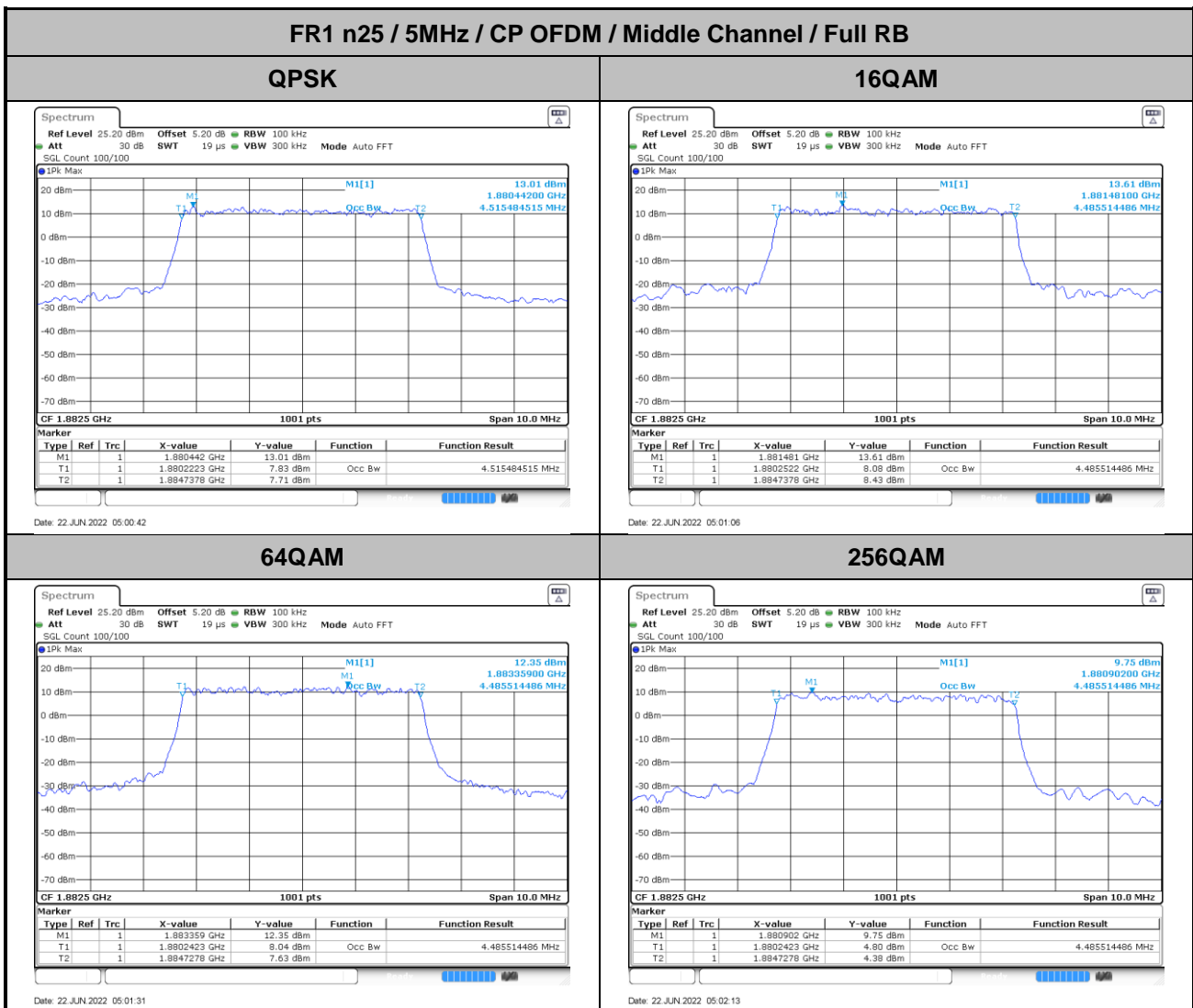


Date: 22 JUN 2022 05:43:29



Occupied Bandwidth

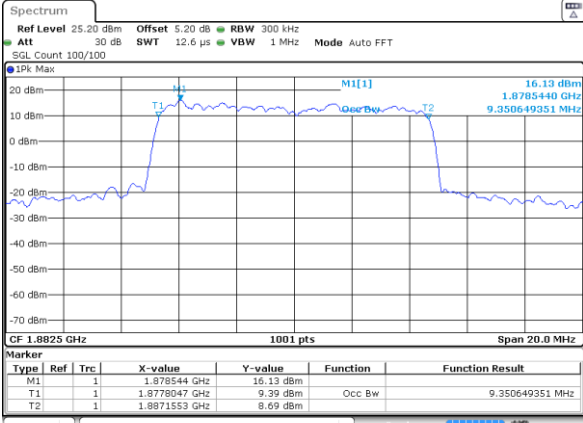
Mode	FR1 n25 : OBW (MHz) / DFT OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.52	4.49	9.35	9.39	14.12	14.12	19.38	19.50
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.49	4.49	9.37	9.37	14.12	14.15	19.38	19.30





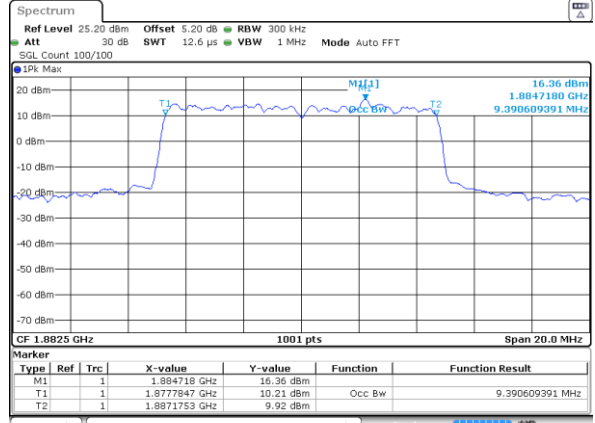
FR1 n25 / 10MHz / CP OFDM / Middle Channel / Full RB

QPSK



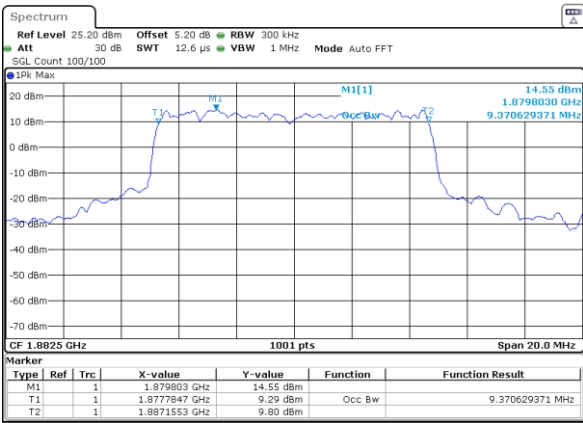
Date: 22 JUN 2022 05:25:49

16QAM



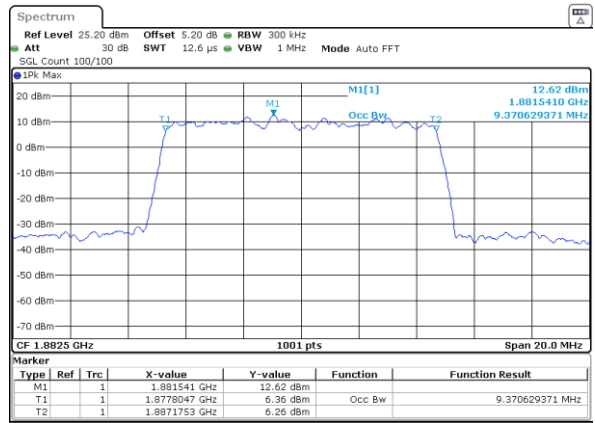
Date: 22 JUN 2022 05:26:10

64QAM



Date: 22 JUN 2022 05:26:29

256QAM

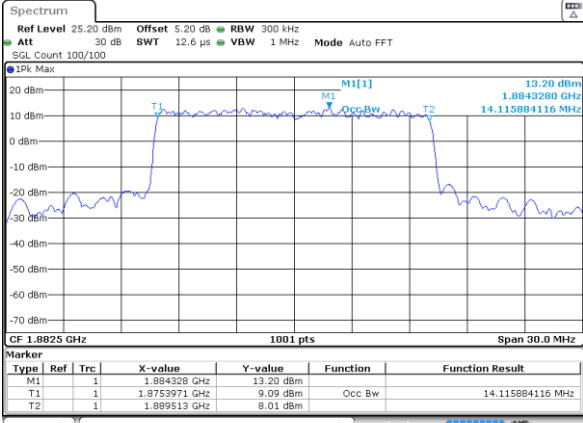


Date: 22 JUN 2022 05:27:00



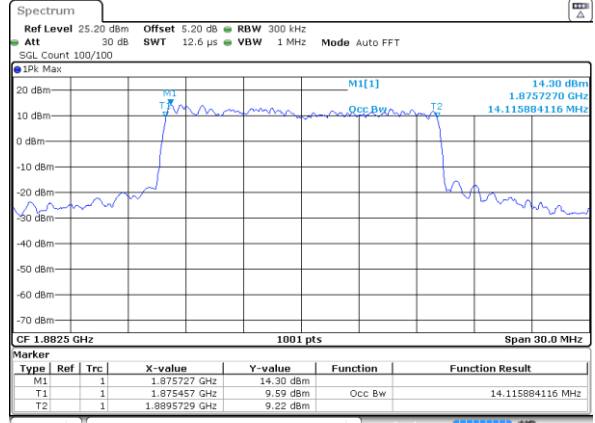
FR1 n25 / 15MHz / CP OFDM / Middle Channel / Full RB

QPSK



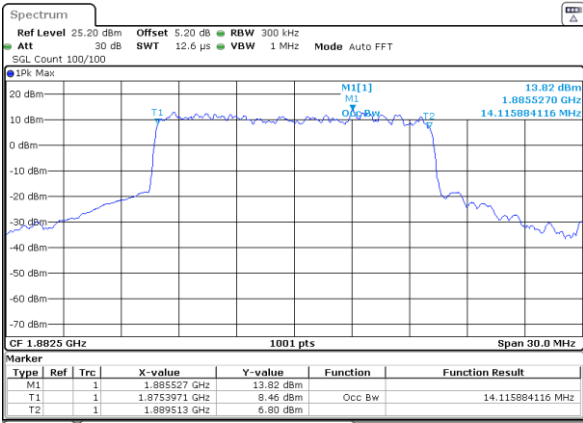
Date: 22 JUN 2022 05:33:31

16QAM



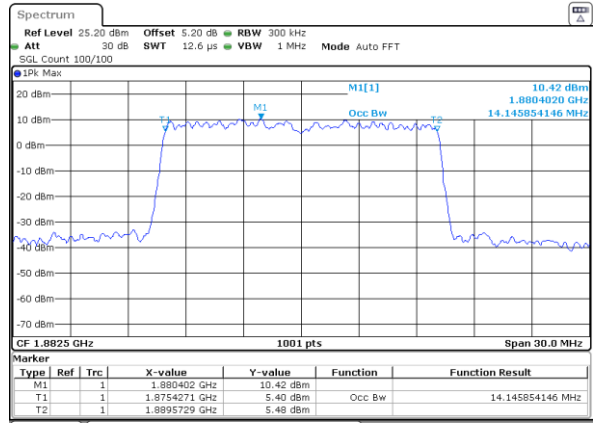
Date: 22 JUN 2022 05:34:05

64QAM



Date: 22 JUN 2022 05:34:33

256QAM

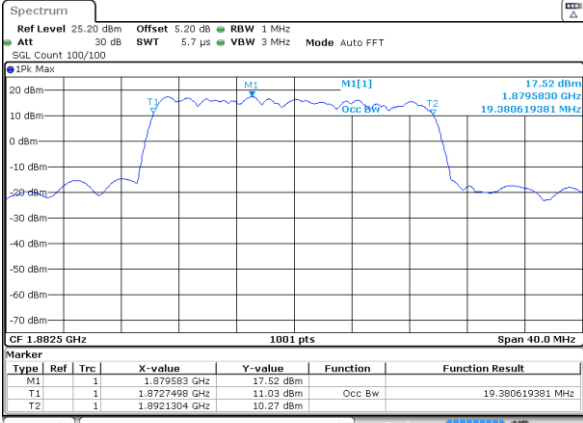


Date: 22 JUN 2022 05:34:54



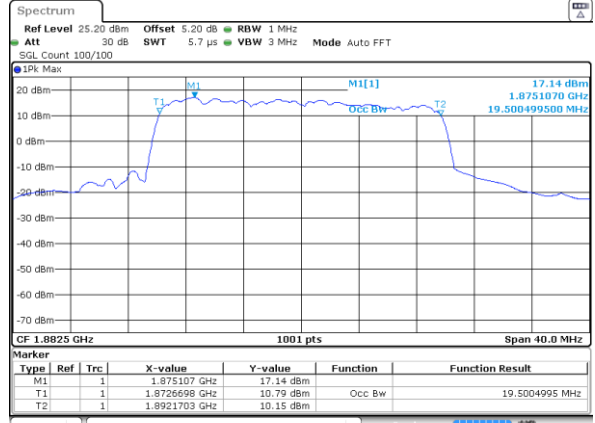
FR1 n25 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

QPSK



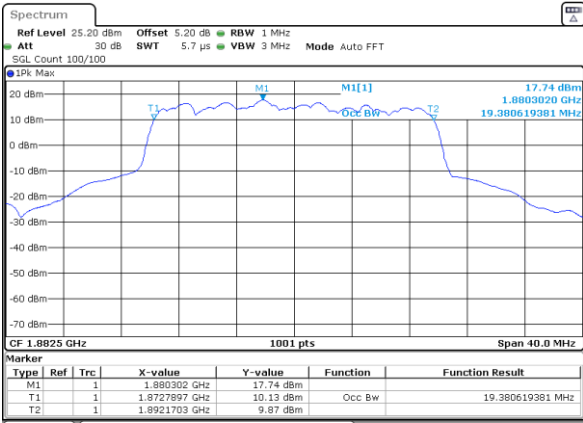
Date: 22 JUN 2022 05:41:51

16QAM



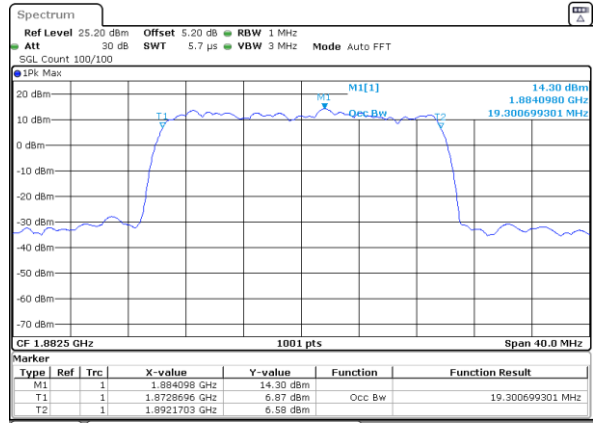
Date: 22 JUN 2022 05:42:25

64QAM



Date: 22 JUN 2022 05:42:54

256QAM



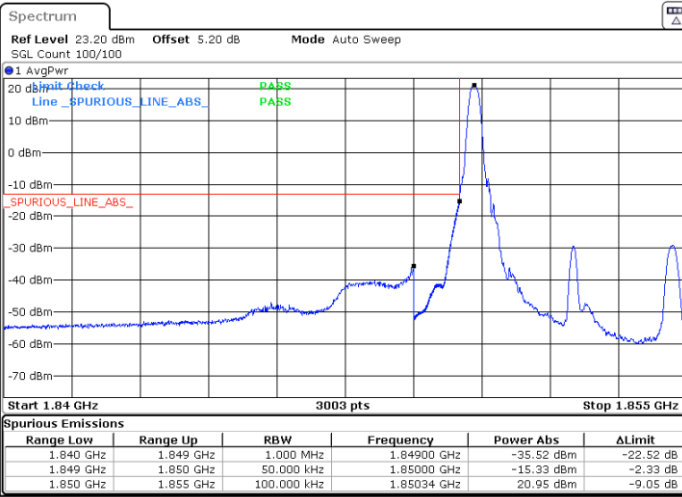
Date: 22 JUN 2022 05:43:20



Conducted Band Edge

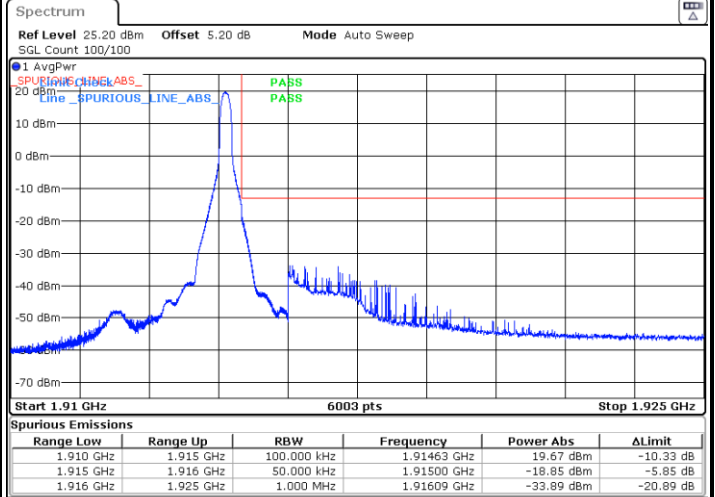
FR1 n25 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0



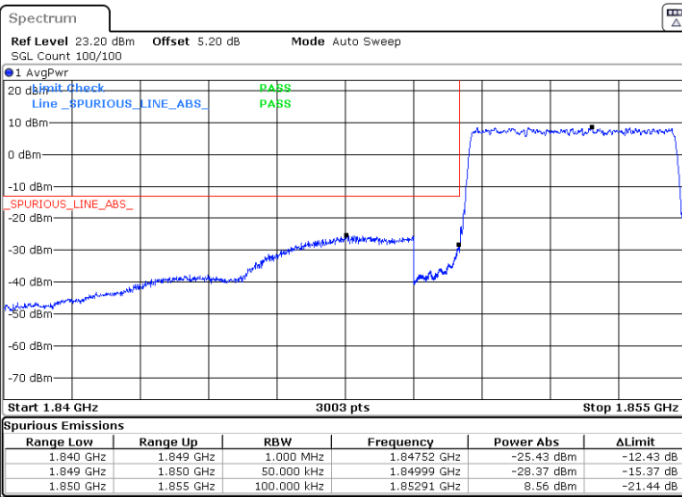
Date: 22 JUN 2022 04:56:17

Highest Band Edge / 1RBmax



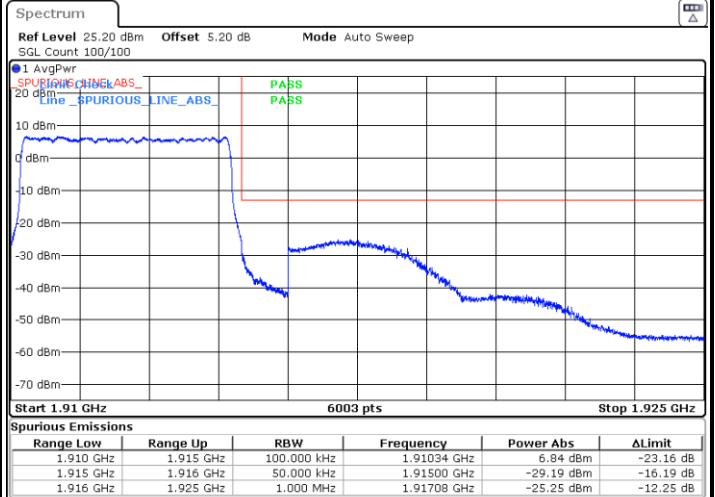
Date: 22 JUN 2022 05:09:14

Lowest Band Edge / Full RB



Date: 22 JUN 2022 04:56:45

Highest Band Edge / Full RB



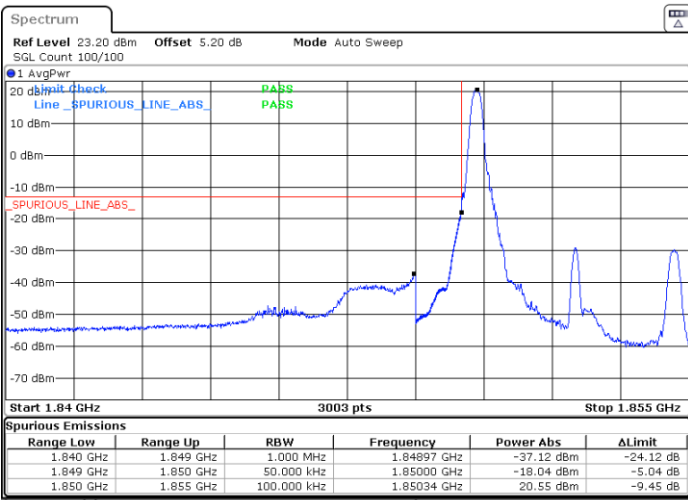
Date: 22 JUN 2022 05:06:48



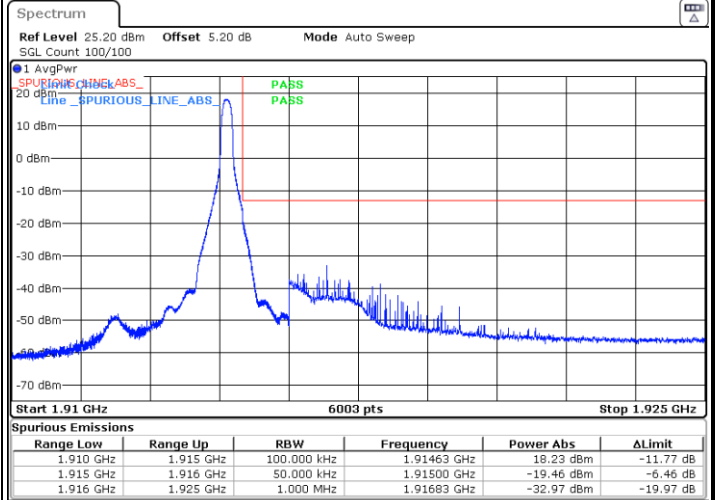
FR1 n25 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



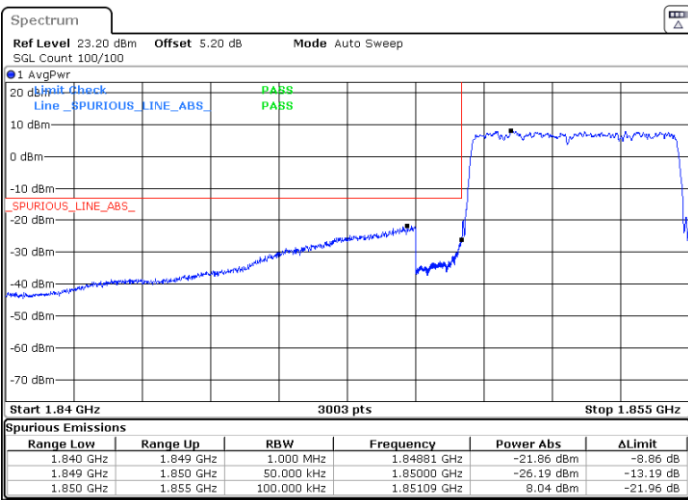
Date: 22 JUN 2022 04:55:54



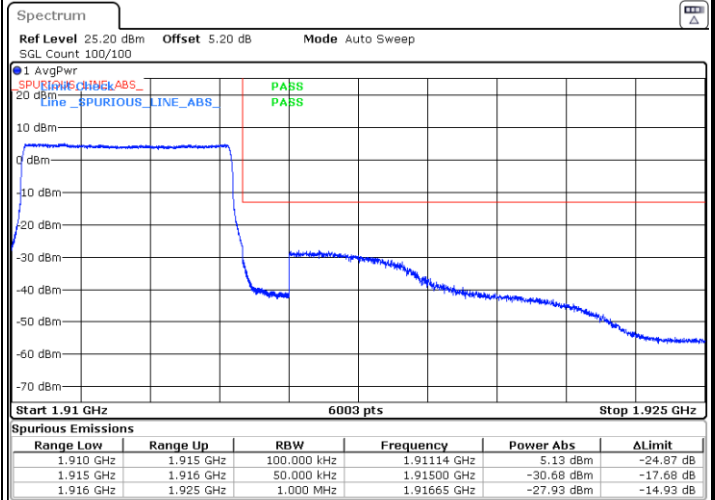
Date: 22 JUN 2022 05:08:40

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 22 JUN 2022 04:57:08



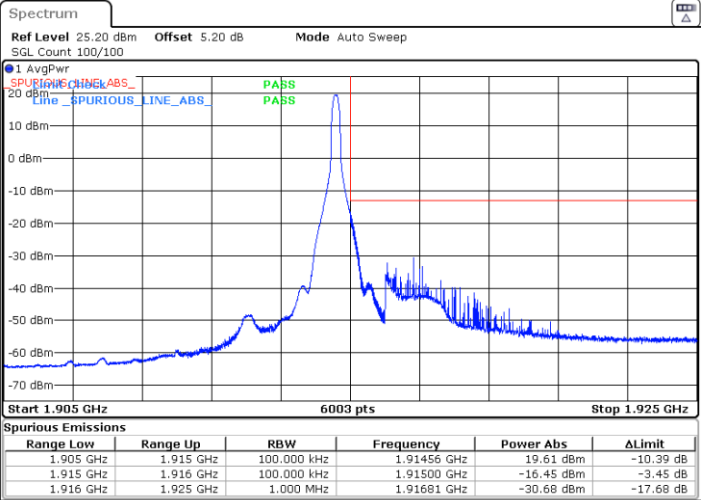
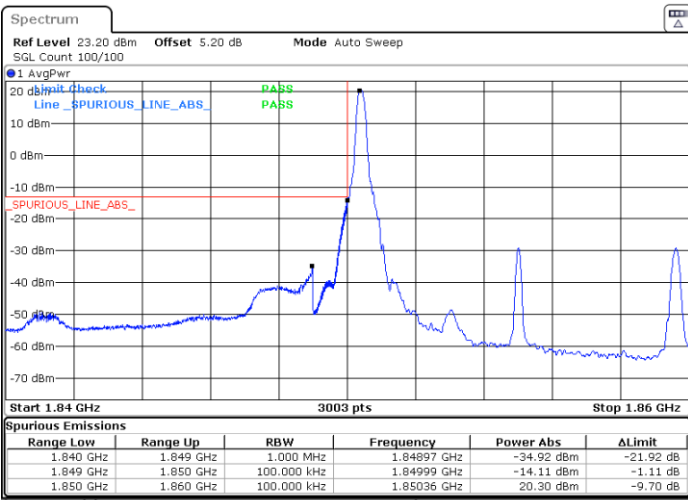
Date: 22 JUN 2022 05:07:21



FR1 n25 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

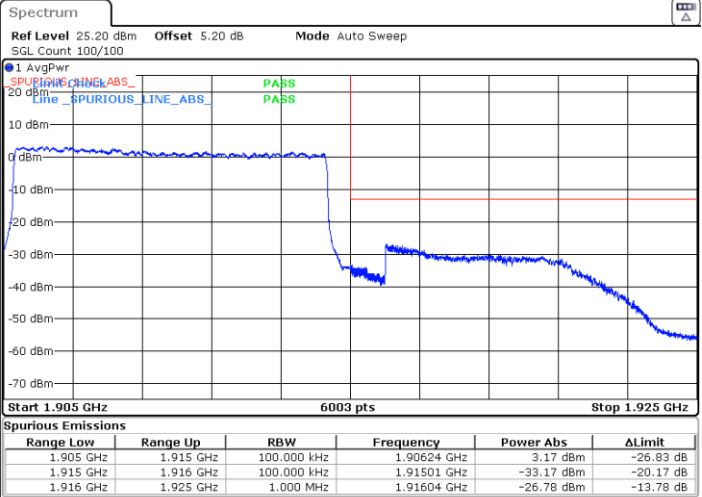
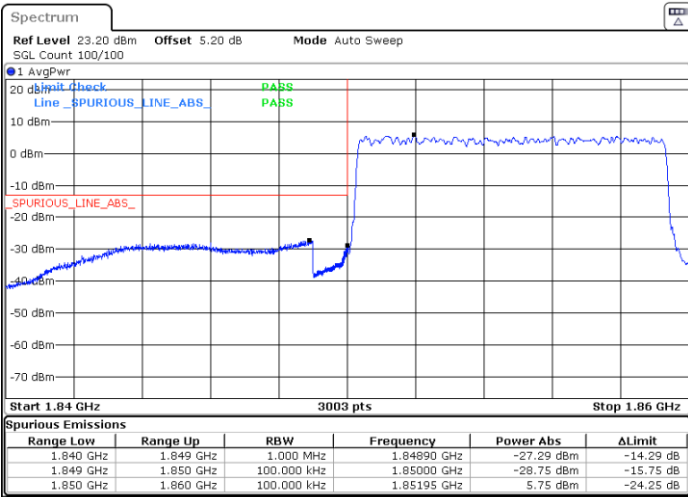


Date: 22 JUN 2022 05:12:42

Date: 22 JUN 2022 05:30:16

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 22 JUN 2022 05:13:42

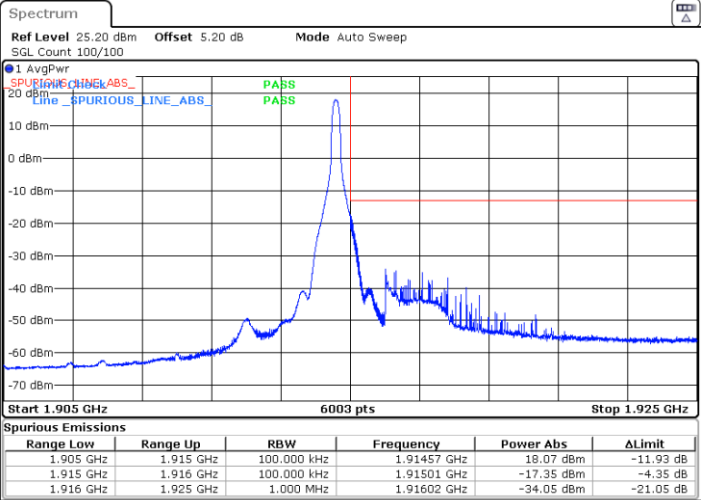
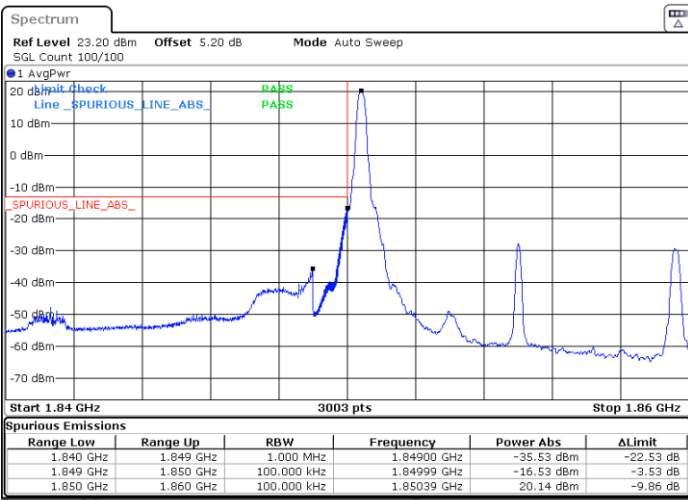
Date: 22 JUN 2022 05:28:18



FR1 n25 / 10MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

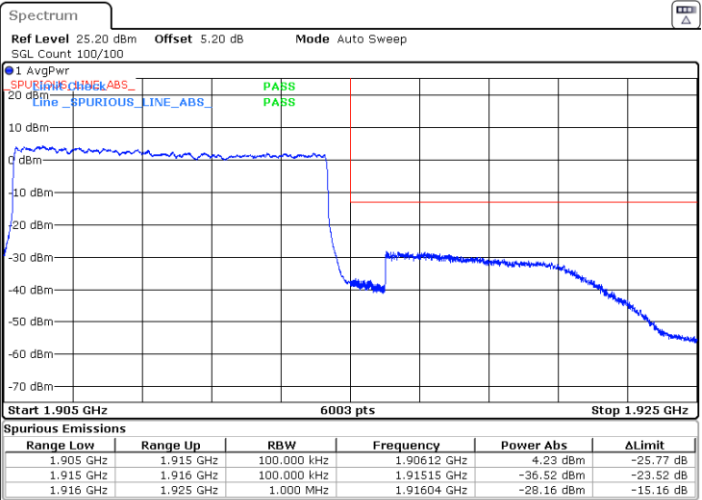
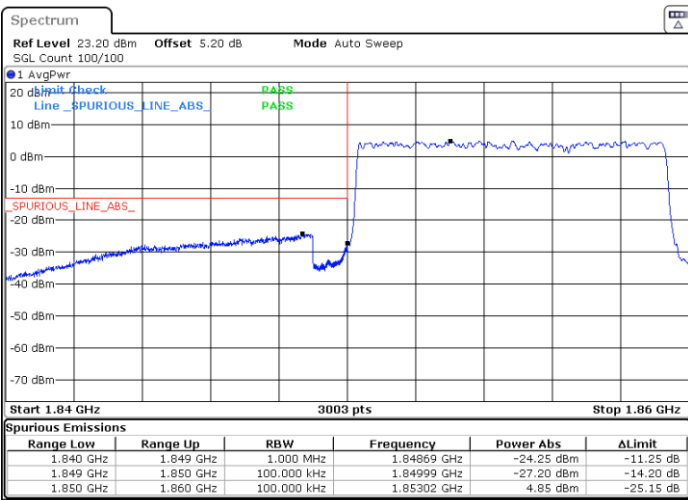


Date: 22 JUN 2022 05:13:04

Date: 22 JUN 2022 05:29:39

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 22 JUN 2022 05:13:25

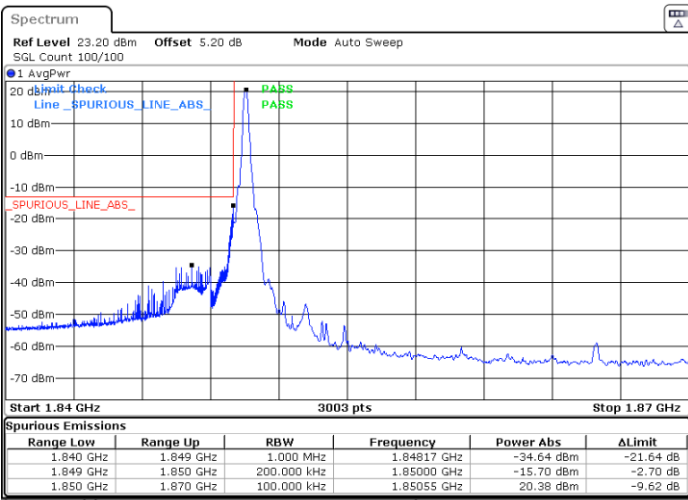
Date: 22 JUN 2022 05:28:54



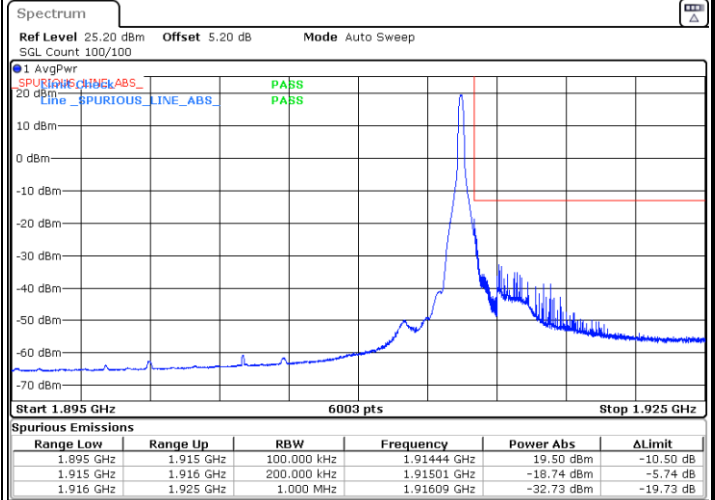
FR1 n25 / 20MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



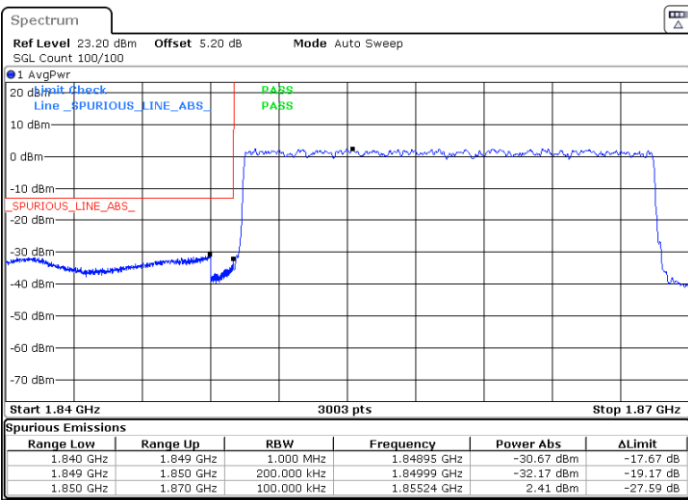
Date: 22 JUN 2022 05:36:04



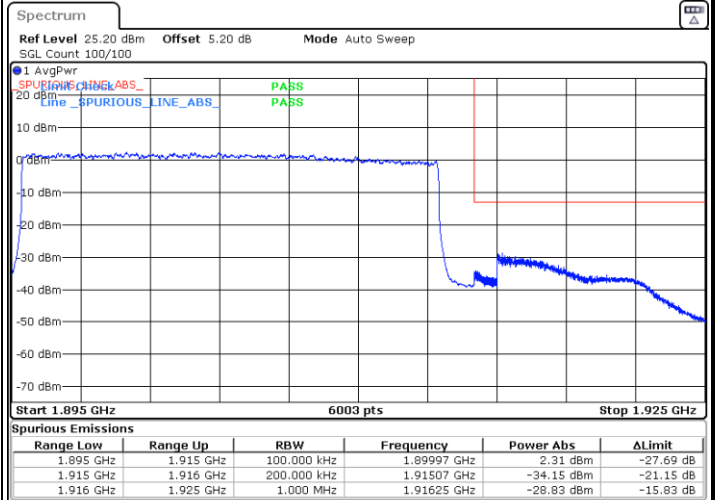
Date: 22 JUN 2022 05:48:31

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 22 JUN 2022 05:36:55



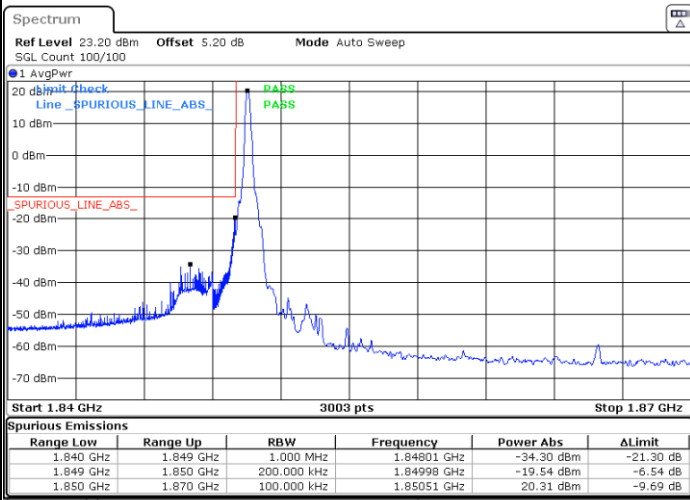
Date: 22 JUN 2022 05:47:24



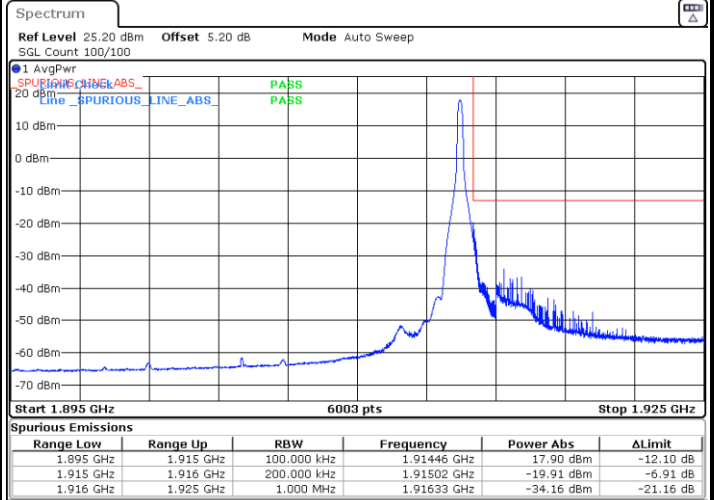
FR1 n25 / 20MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



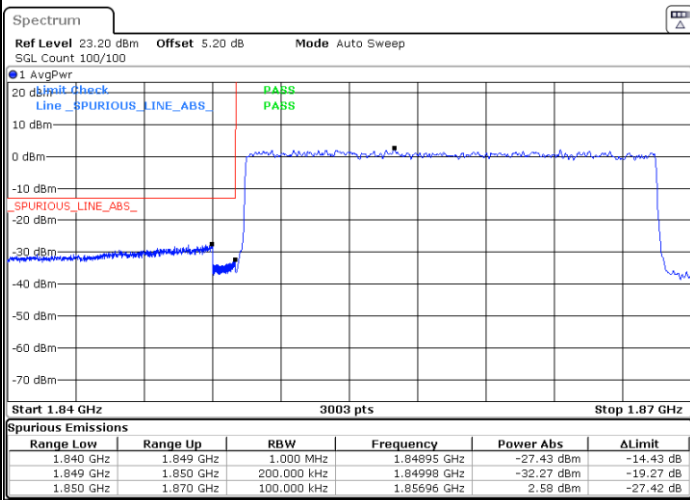
Date: 22 JUN 2022 05:36:19



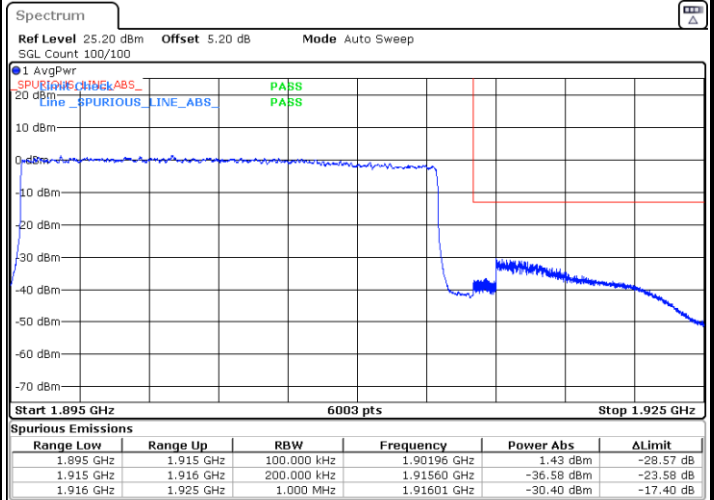
Date: 22 JUN 2022 05:49:35

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 22 JUN 2022 05:36:39



Date: 22 JUN 2022 05:46:25

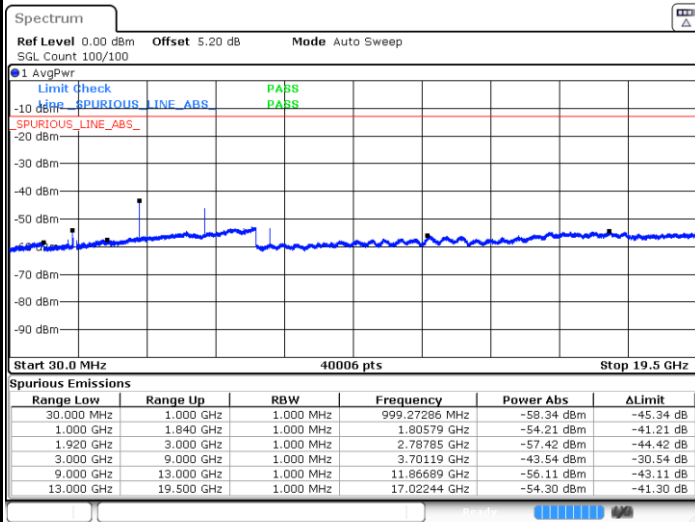


Conducted Spurious Emission

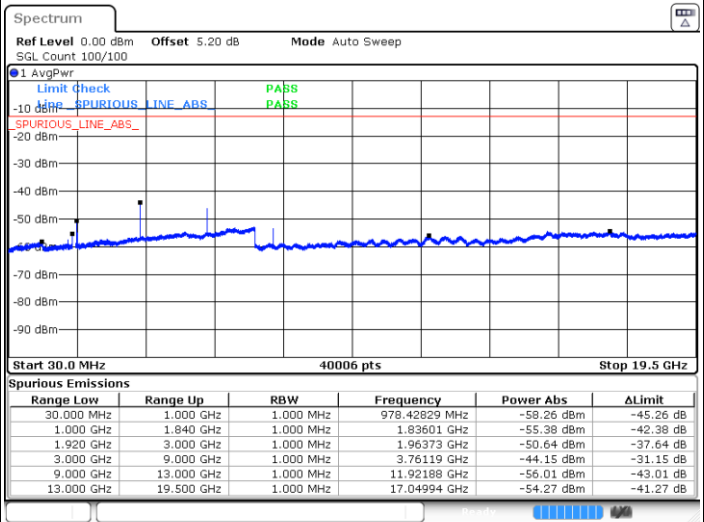
FR1 n25 / 5MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

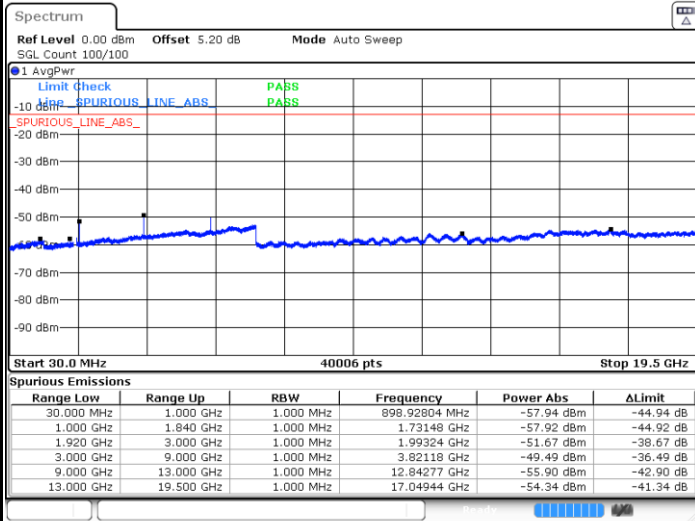


Date: 22 JUN 2022 04:58:43



Date: 22 JUN 2022 04:59:37

Highest Channel / 1RB1



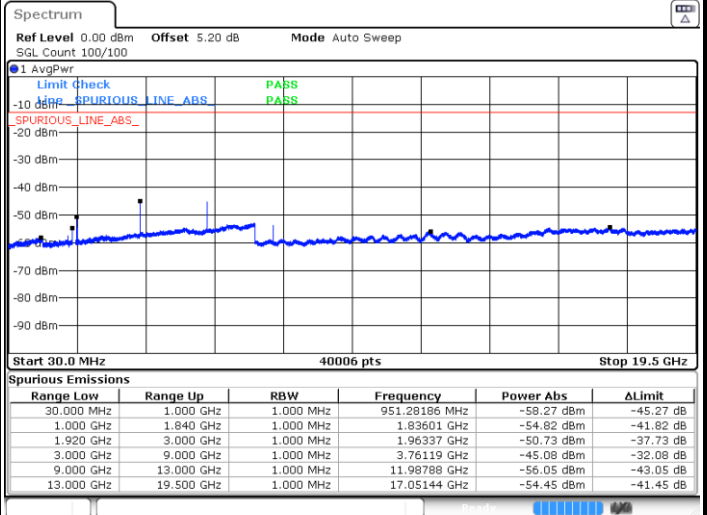
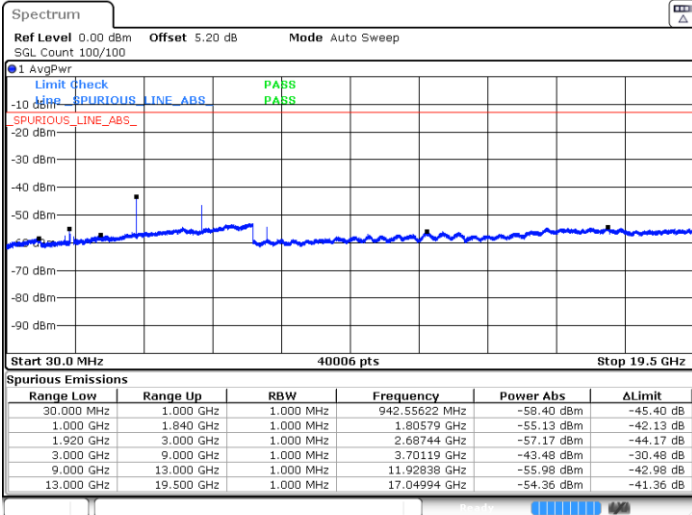
Date: 22 JUN 2022 05:10:07



FR1 n25 / 2MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

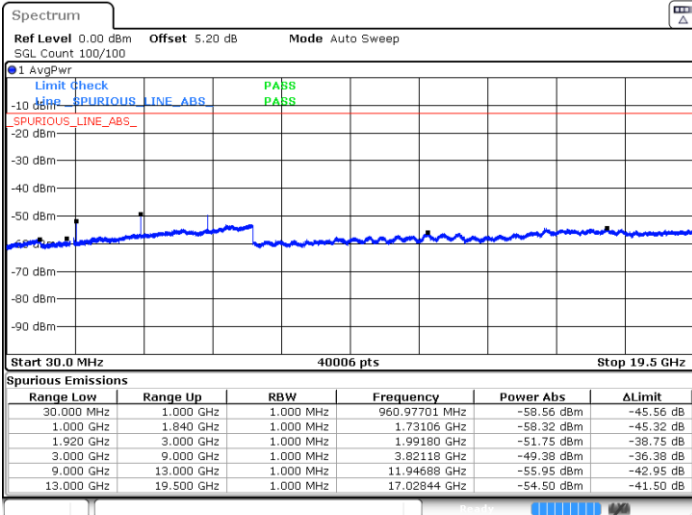
Middle Channel / 1RB1



Date: 22 JUN 2022 04:57:59

Date: 22 JUN 2022 05:00:17

Highest Channel / 1RB1



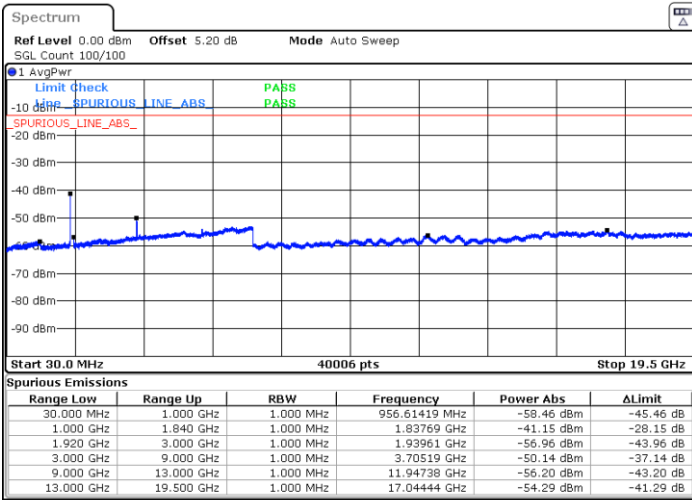
Date: 22 JUN 2022 05:11:47



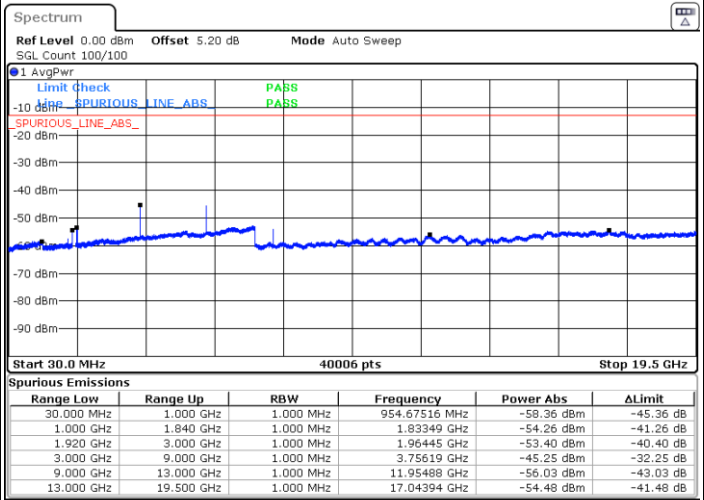
FR1 n25 / 10MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

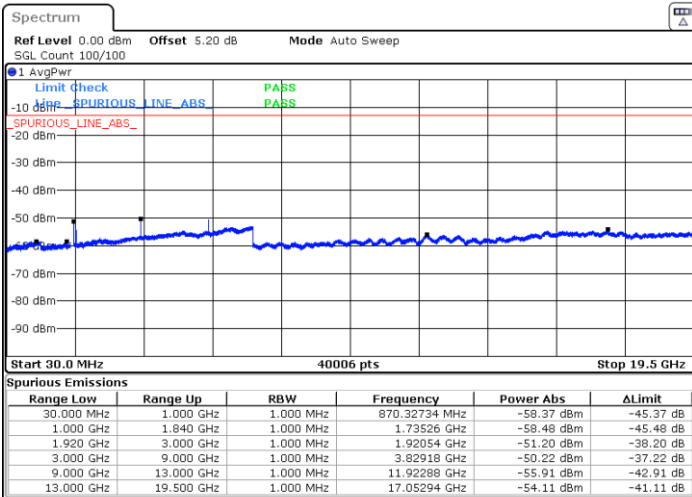


Date: 22 JUN 2022 05:14:22



Date: 22 JUN 2022 05:25:18

Highest Channel / 1RB1



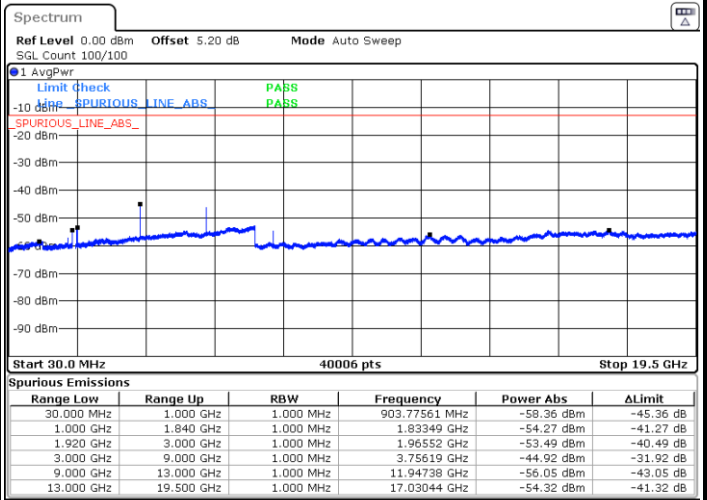
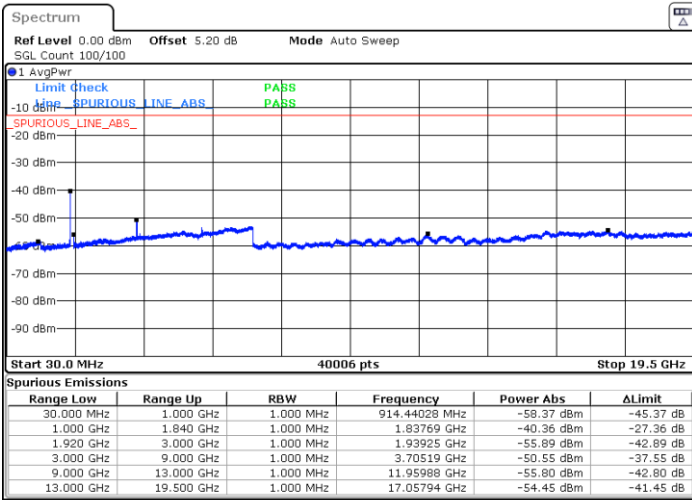
Date: 22 JUN 2022 05:30:58



FR1 n25 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

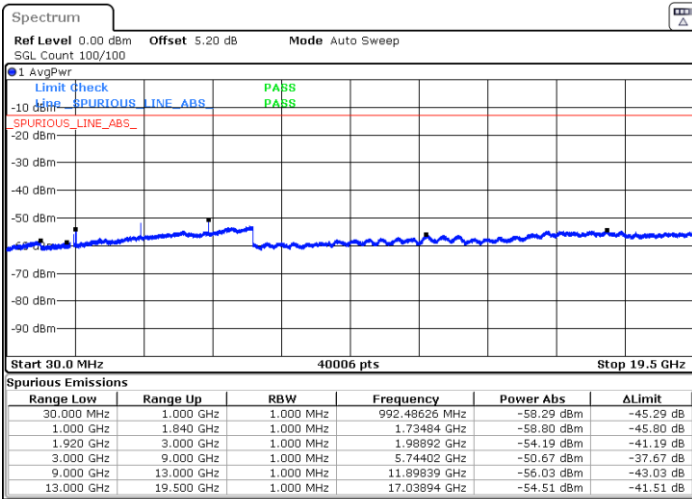
Middle Channel / 1RB1



Date: 22 JUN 2022 05:15:09

Date: 22 JUN 2022 05:16:07

Highest Channel / 1RB1



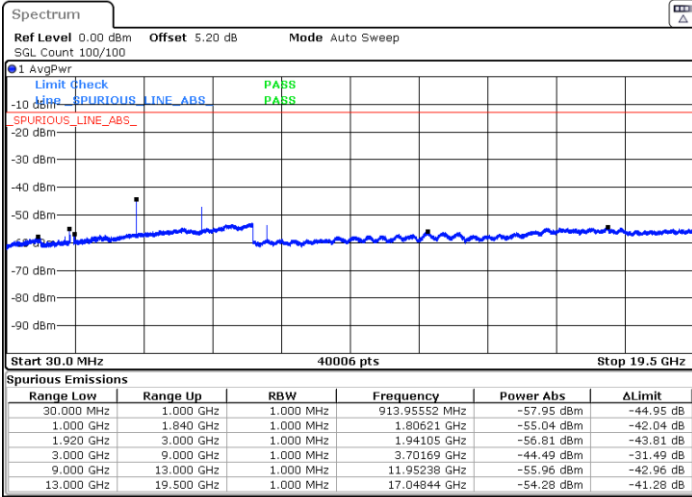
Date: 22 JUN 2022 05:32:20



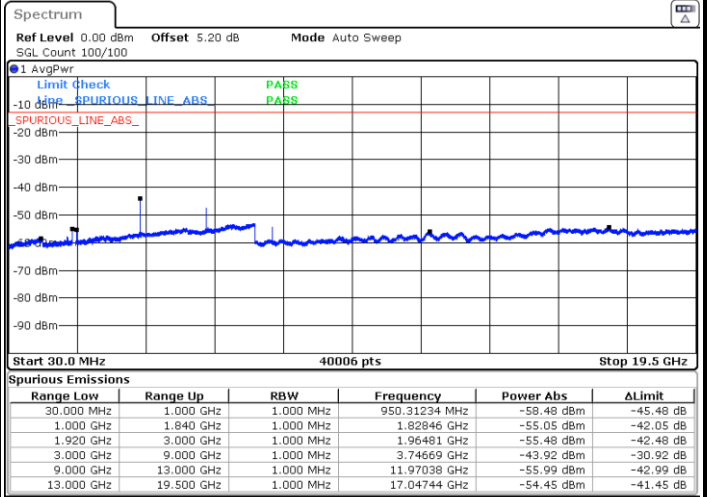
FR1 n25 / 20MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

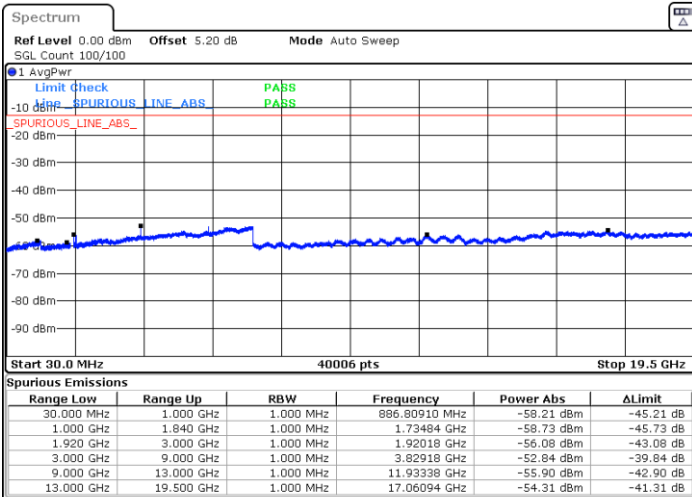


Date: 22 JUN 2022 05:38:01



Date: 22 JUN 2022 05:41:05

Highest Channel / 1RB1



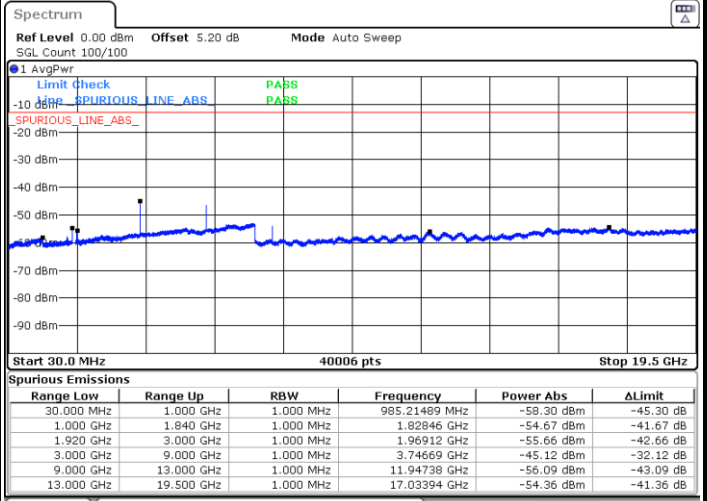
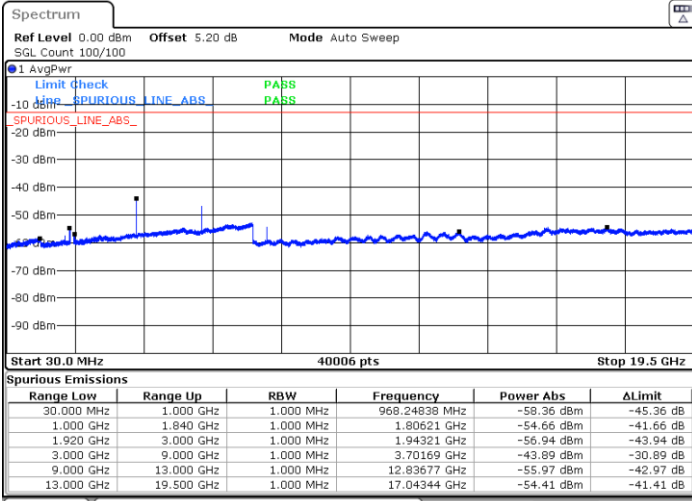
Date: 22 JUN 2022 05:50:24



FR1 n25 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

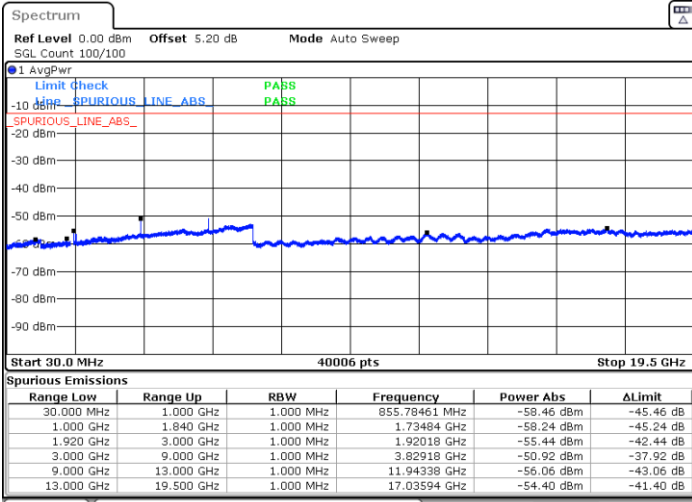
Middle Channel / 1RB1



Date: 22 JUN 2022 05:39:16

Date: 22 JUN 2022 05:40:16

Highest Channel / 1RB1



Date: 22 JUN 2022 05:51:40



Frequency Stability

Test Conditions		FR1 n25 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
20	Normal Voltage	0.0008	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0033	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0022	
0	Normal Voltage	0.0015	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0021	
-30	Normal Voltage	0.0026	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0028	
20	Battery End Point	0.0016	

Note:

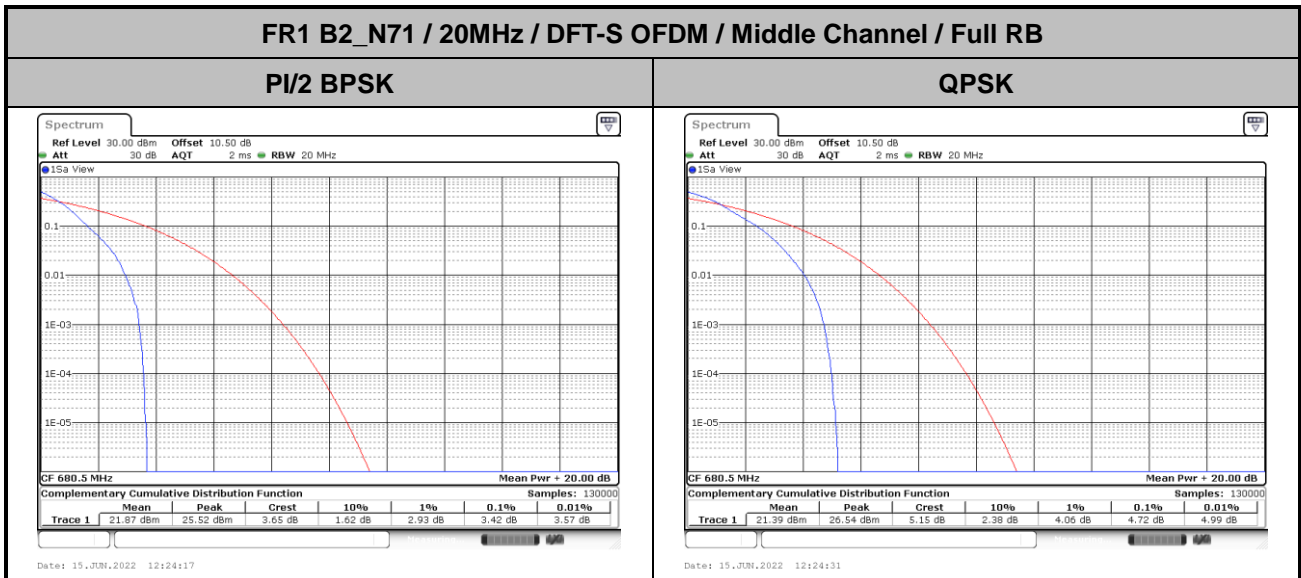
1. Normal Voltage =3.87V. ; Battery End Point (BEP) =3. 55V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



FR1 ENDC 2A_N71

Peak-to-Average Ratio

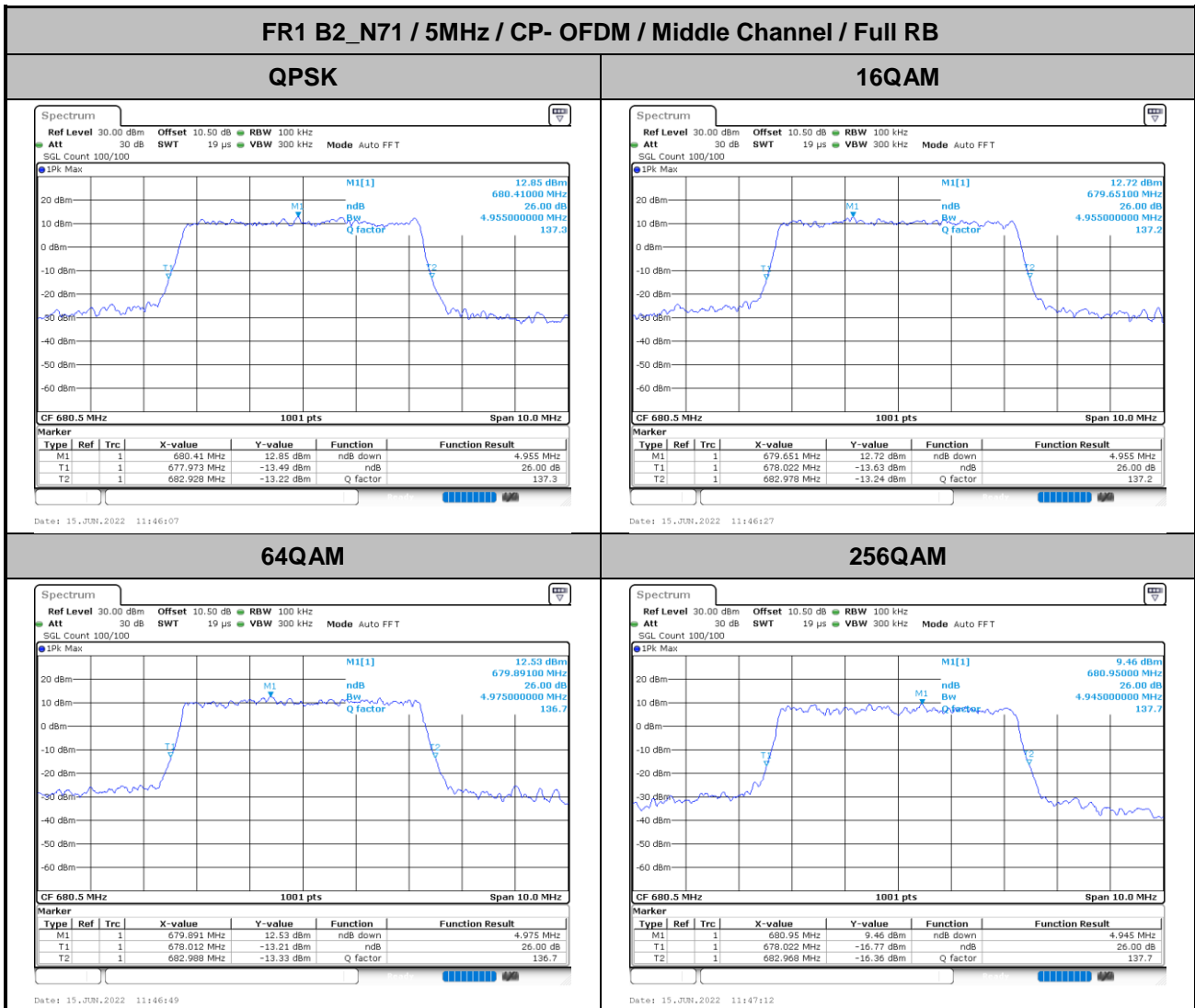
Mode	FR1 B2_N71 / 20MHz / DFT-S OFDM		
Mod.	PI/2 BPSK	QPSK	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	3.42	4.72	PASS





26dB Bandwidth

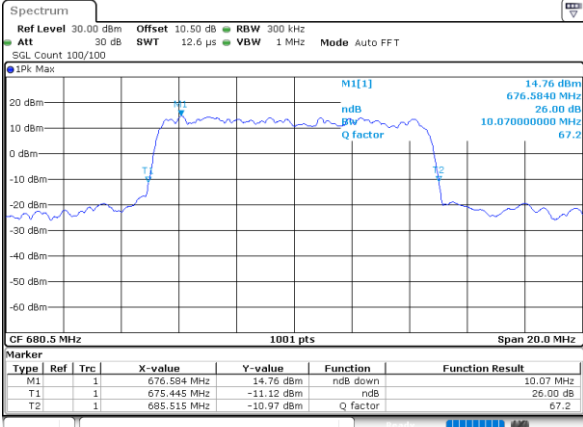
Mode	FR1 B2_N71 : 26dBW (MHz) / CP OFDM							
	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.96	4.96	10.07	10.11	14.93	14.96	21.14	21.14
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.98	4.95	10.27	9.99	14.90	14.96	21.26	21.34





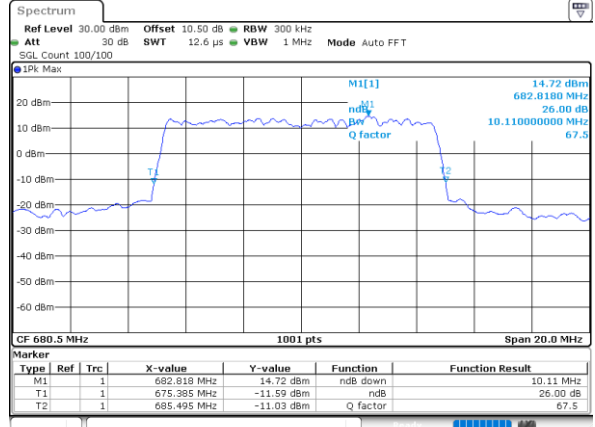
FR1 B2_N71 / 10MHz / CP-S OFDM / Middle Channel / Full RB

QPSK



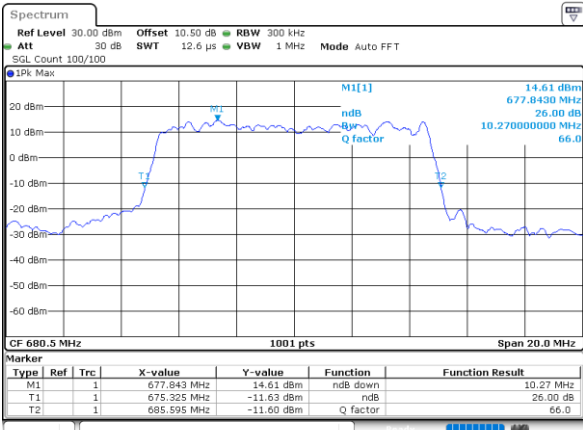
Date: 15 JUN 2022 11:58:59

16QAM



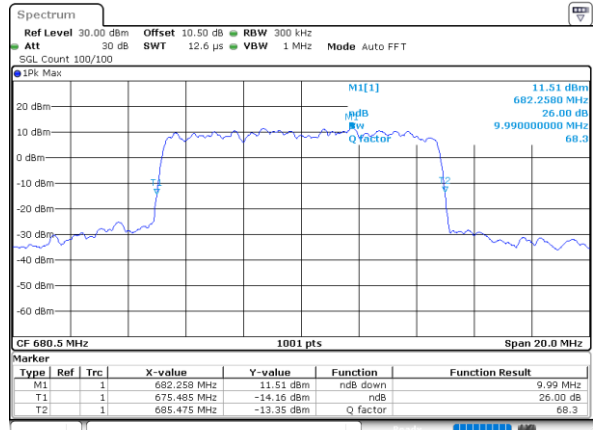
Date: 15 JUN 2022 11:59:41

64QAM



Date: 15 JUN 2022 12:00:33

256QAM

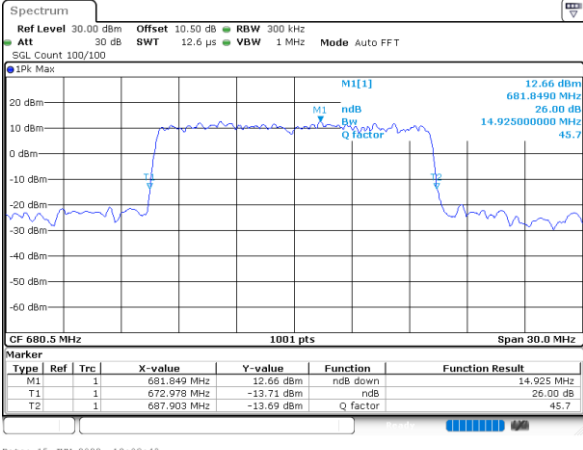


Date: 15 JUN 2022 12:01:02



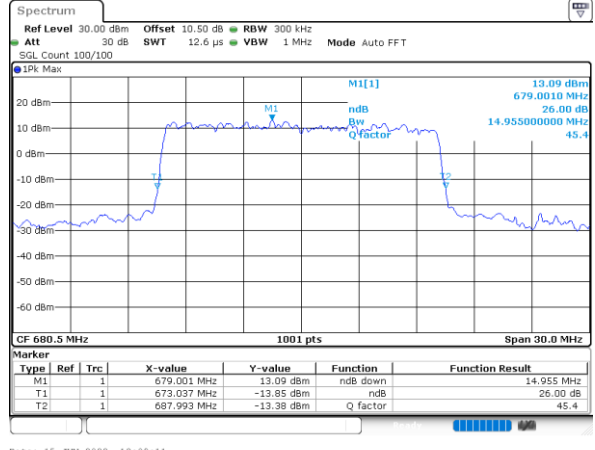
FR1 B2_N71 / 15MHz / CP-S OFDM / Middle Channel / Full RB

QPSK



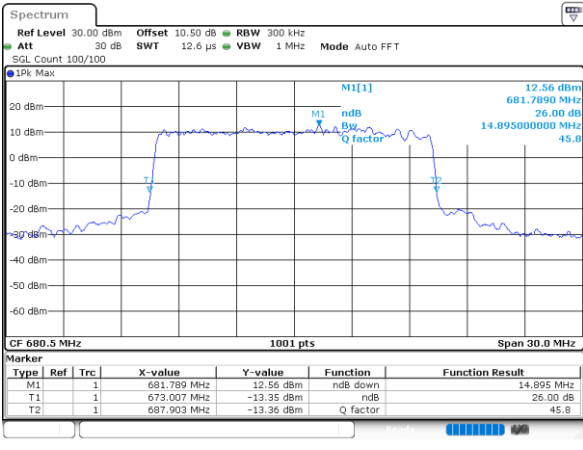
Date: 15 JUN 2022 12:08:43

16QAM



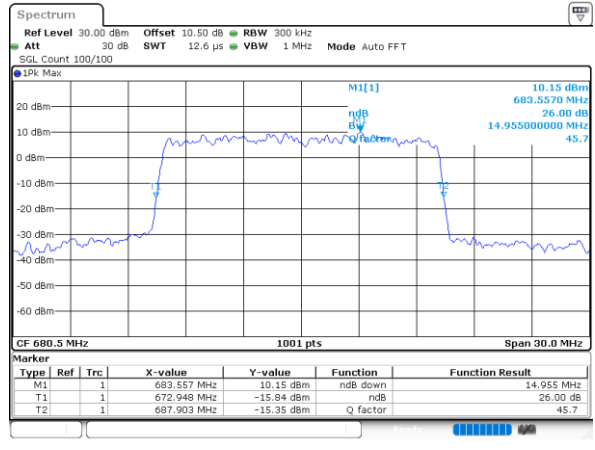
Date: 15 JUN 2022 12:09:11

64QAM



Date: 15 JUN 2022 12:09:43

256QAM

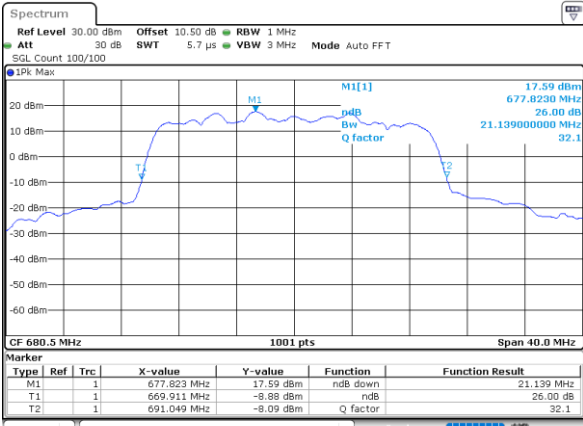


Date: 15 JUN 2022 12:10:09



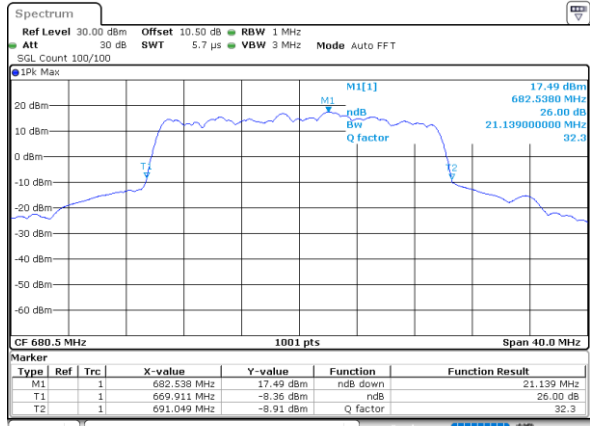
FR1 B2_N71 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

QPSK



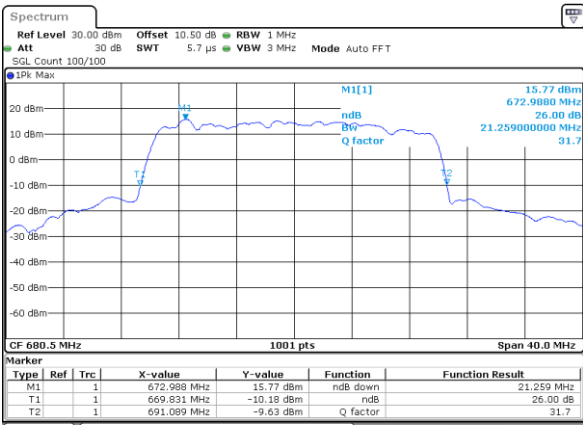
Date: 15 JUN 2022 12:15:16

16QAM



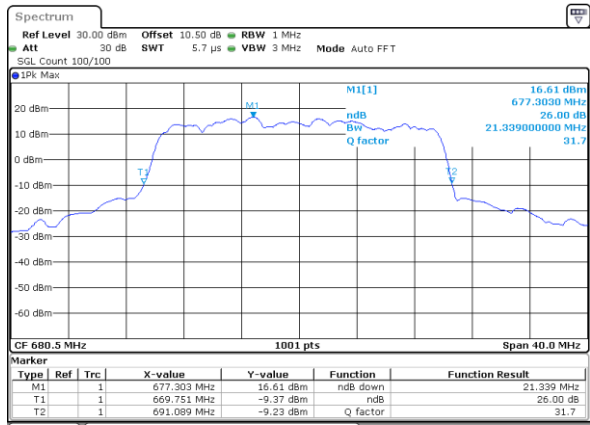
Date: 15 JUN 2022 12:15:46

64QAM



Date: 15 JUN 2022 12:18:08

256QAM



Date: 15 JUN 2022 12:18:25



Occupied Bandwidth

Mode	FR1 B2_N71 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.47	4.49	9.33	9.33	14.09	14.09	19.18	19.22
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.48	4.49	9.33	9.41	14.09	14.15	19.22	19.42

