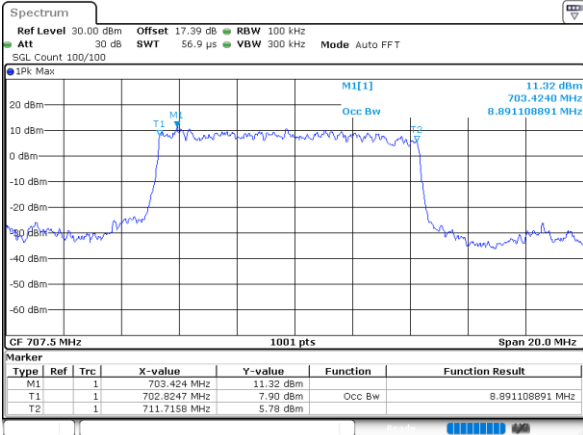




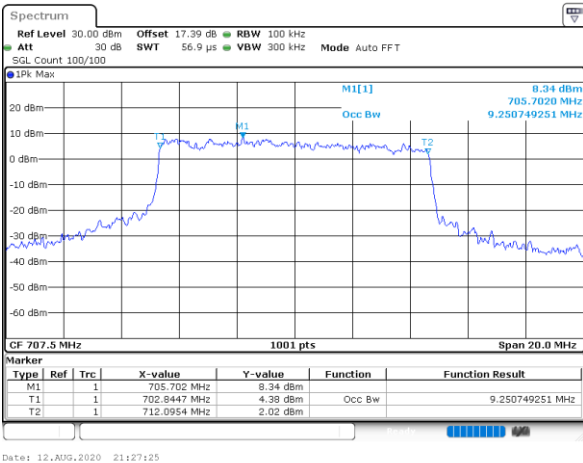
FR1 n12 / 10MHz / DFT-S OFDM / Middle Channel

PI/2 BPSK

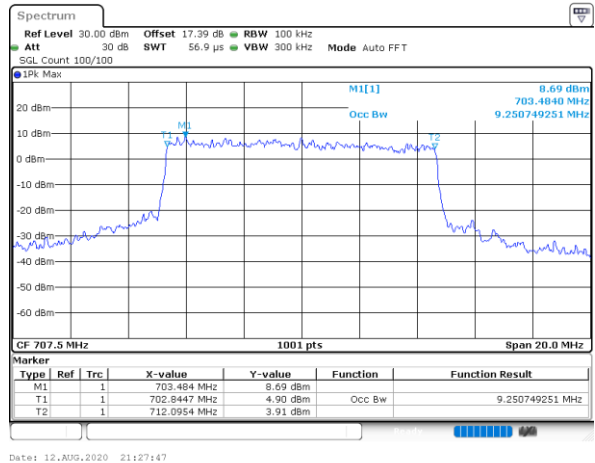


FR1 n12 / 10MHz / CP OFDM

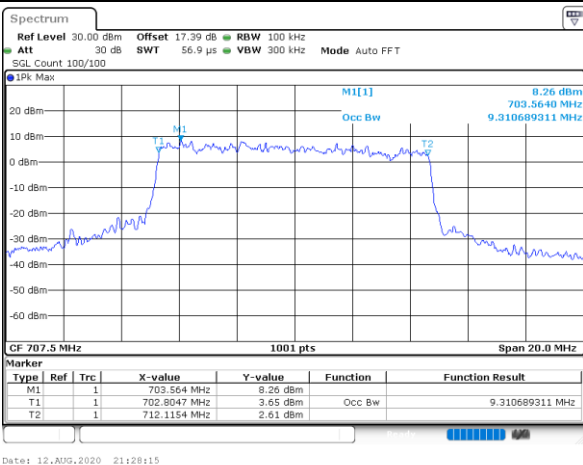
QPSK



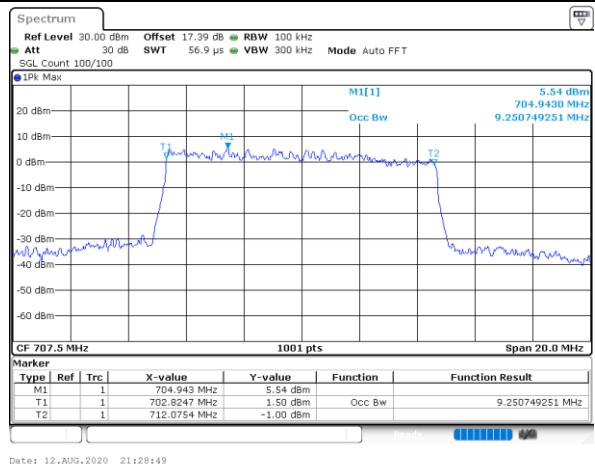
16QAM



64QAM



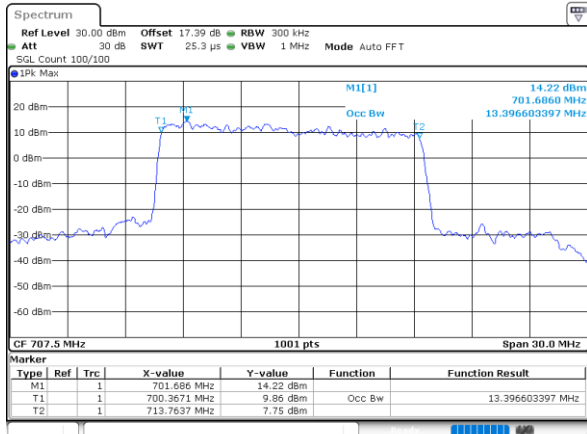
256QAM





FR1 n12 / 15MHz / DFT-S OFDM Middle Channel

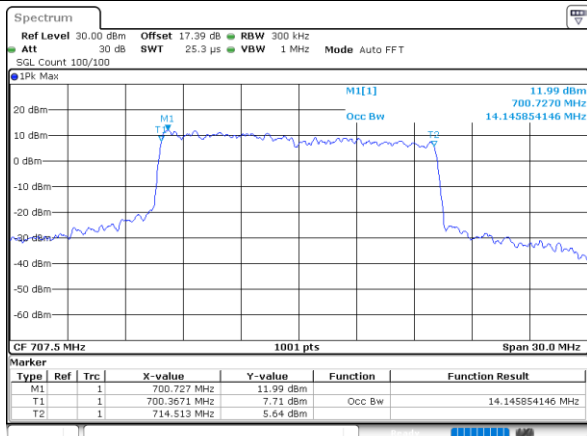
PI/2 BPSK



Date: 12_AUG_2020 21:34:14

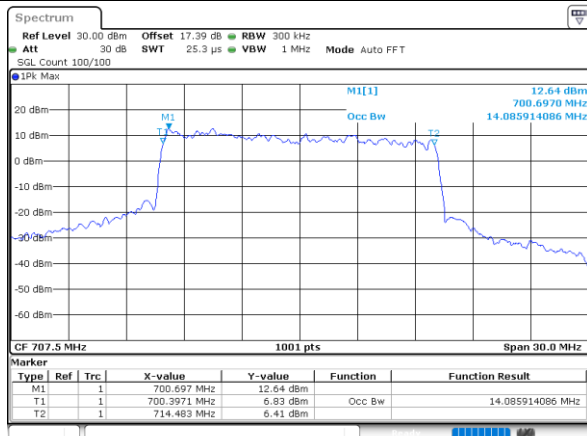
FR1 n12 / 15MHz / CP OFDM

QPSK



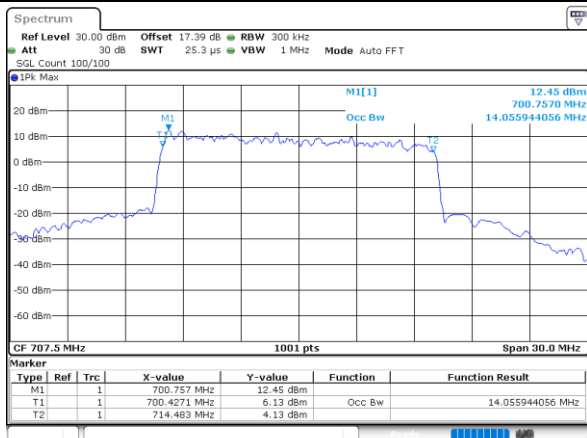
Date: 12_AUG_2020 21:31:31

16QAM



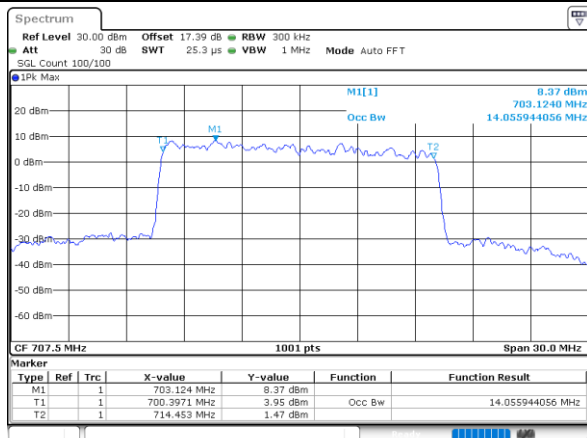
Date: 12_AUG_2020 21:33:57

64QAM



Date: 12_AUG_2020 21:32:29

256QAM



Date: 12_AUG_2020 21:33:01

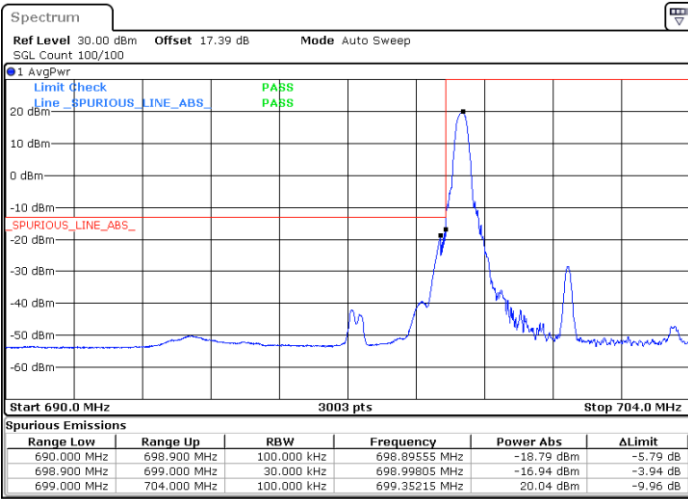


Conducted Band Edge

FR1 n12 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

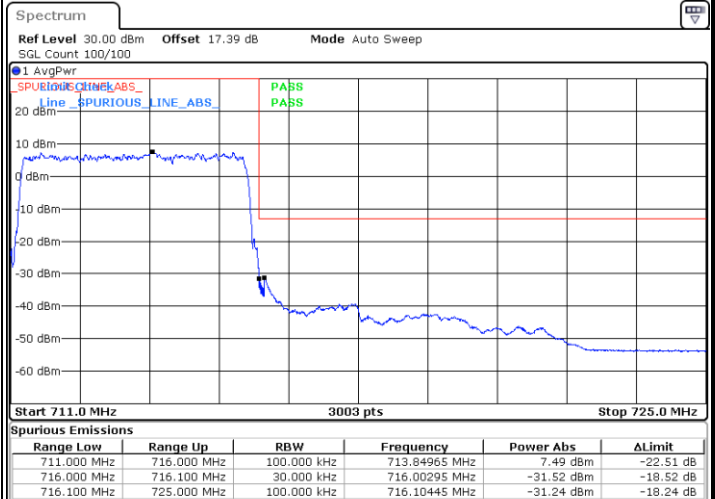
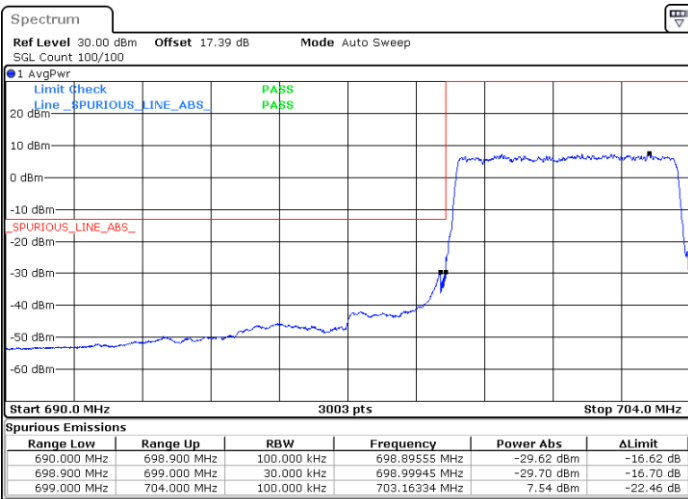


Date: 12.AUG.2020 15:12:40

Date: 12.AUG.2020 16:05:47

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.AUG.2020 15:09:30

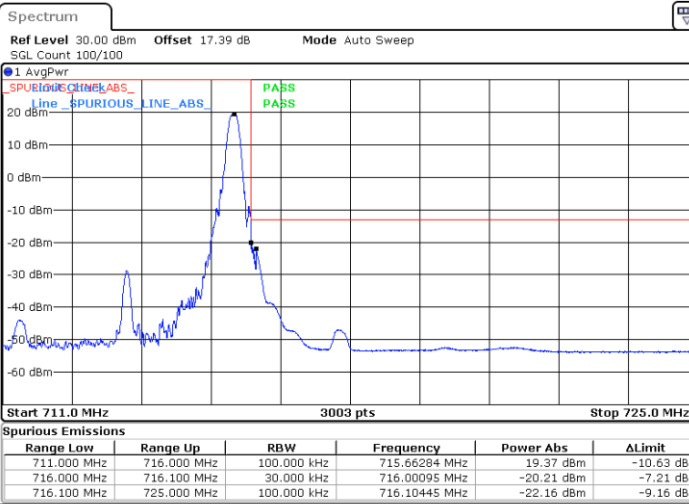
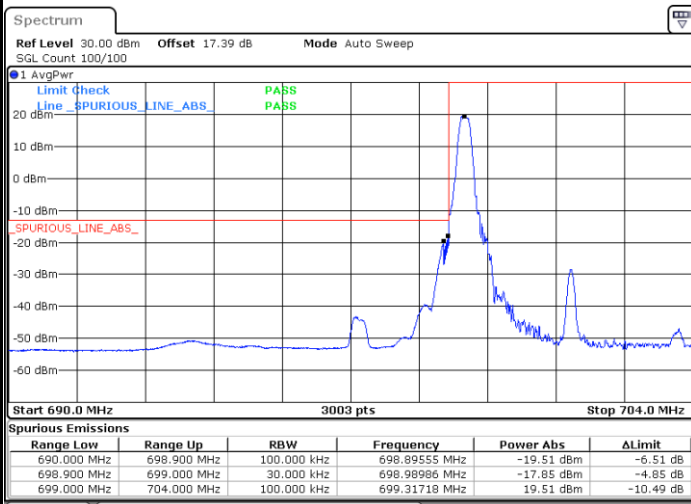
Date: 12.AUG.2020 16:04:28



FR1 n12 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

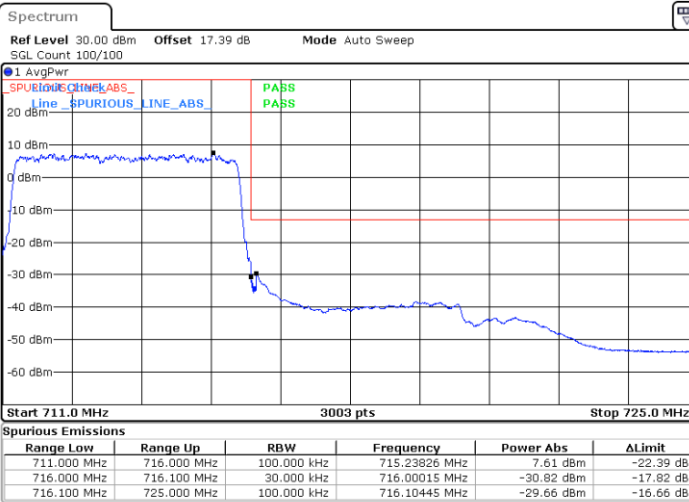
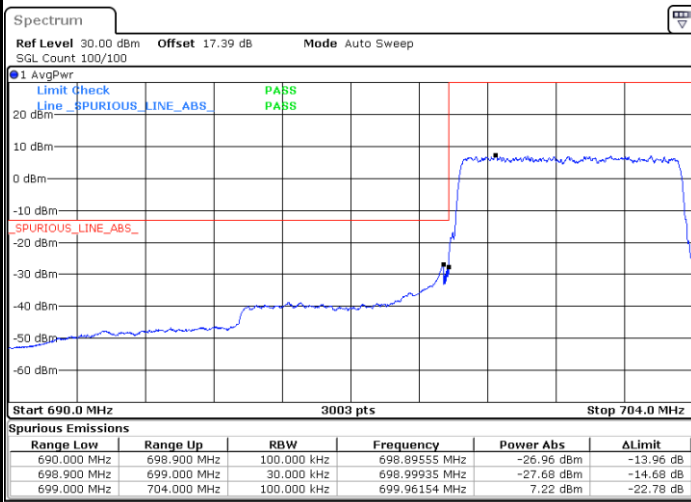


Date: 12.AUG.2020 15:14:13

Date: 12.AUG.2020 16:07:02

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.AUG.2020 15:10:51

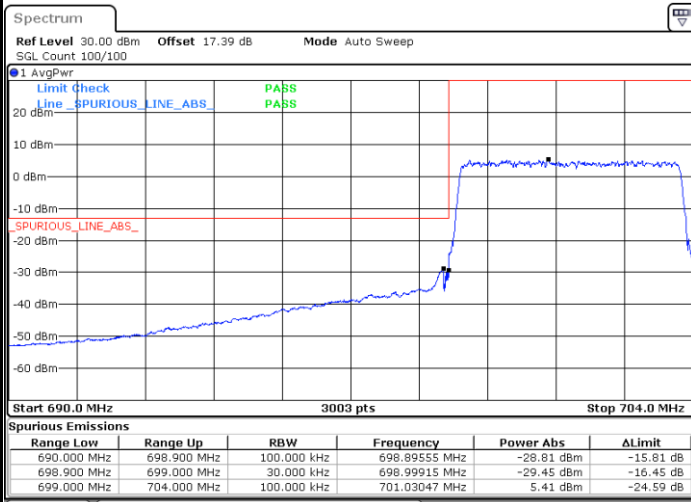
Date: 12.AUG.2020 16:03:33



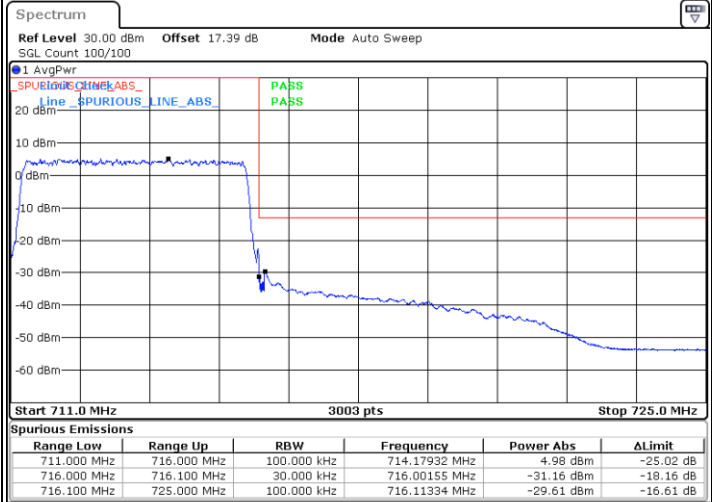
FR1 n12 / 5MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.AUG.2020 15:05:37



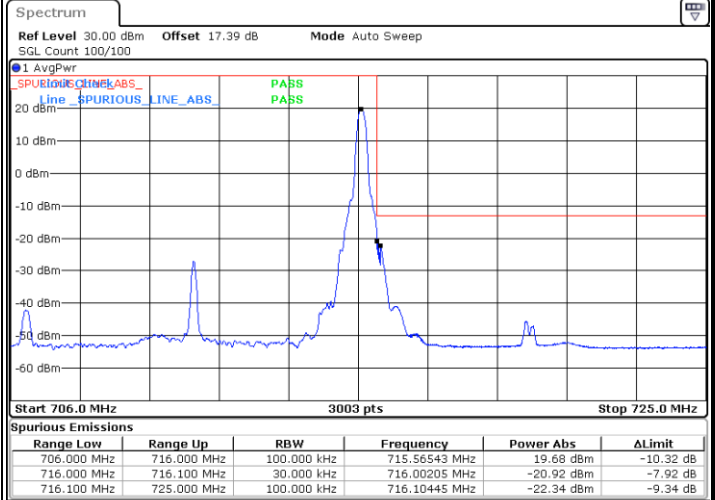
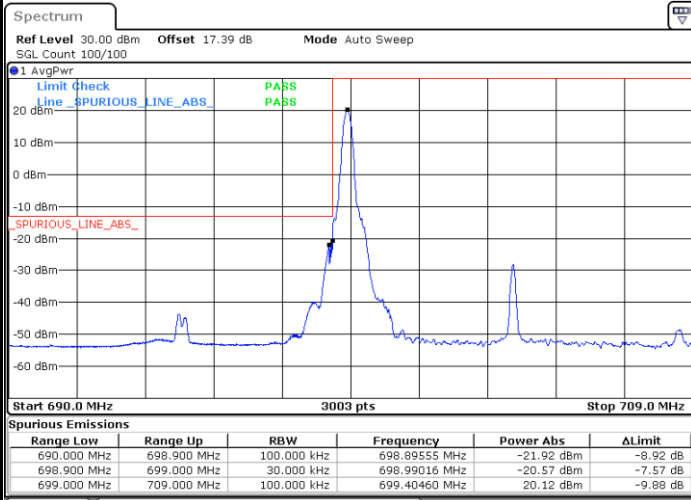
Date: 12.AUG.2020 16:01:51



FR1 n12 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

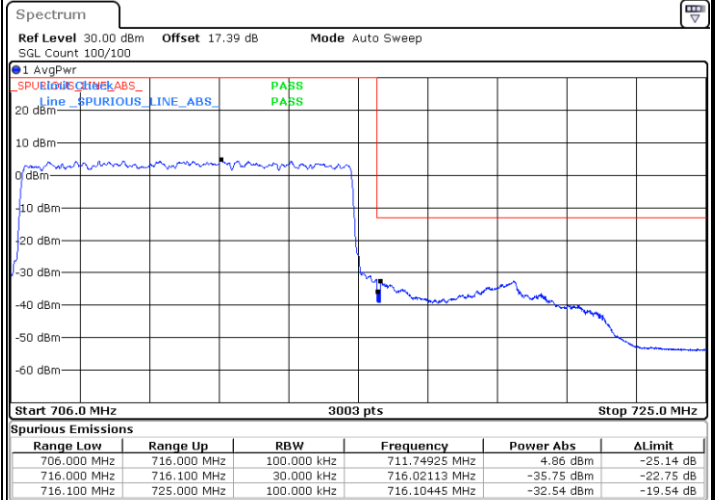
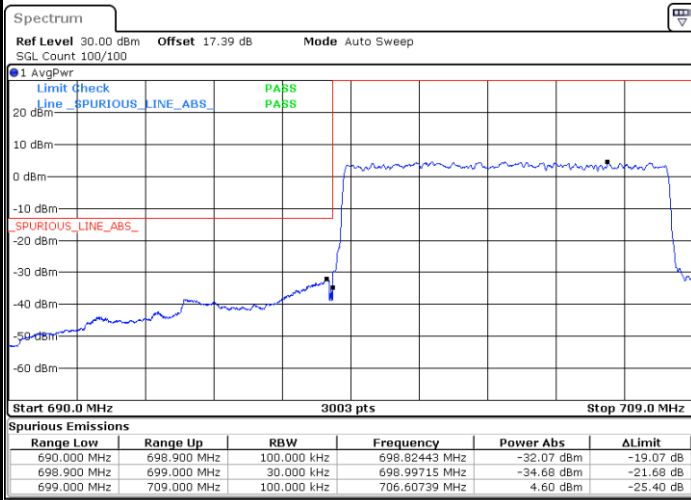


Date: 12.AUG.2020 16:54:16

Date: 12.AUG.2020 17:13:50

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.AUG.2020 16:53:07

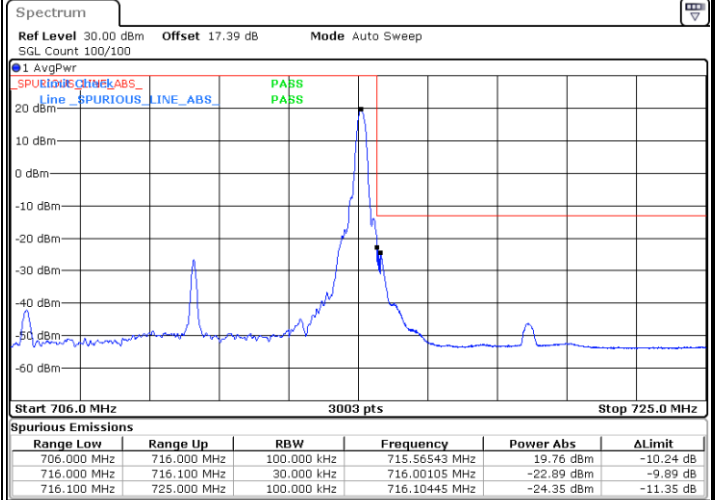
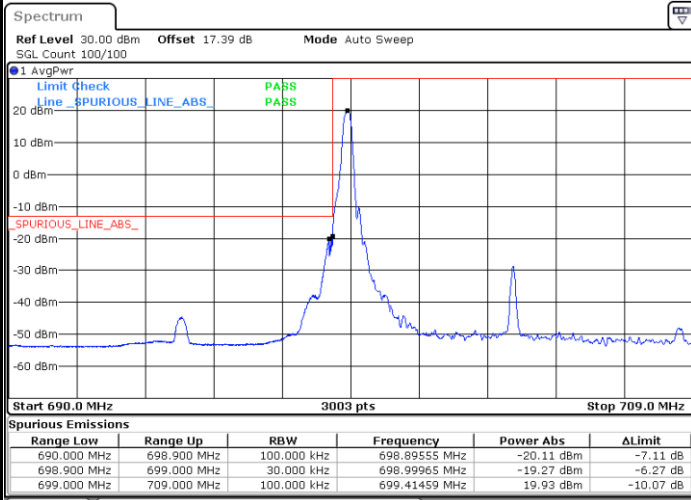
Date: 12.AUG.2020 17:10:13



FR1 n12 / 10MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

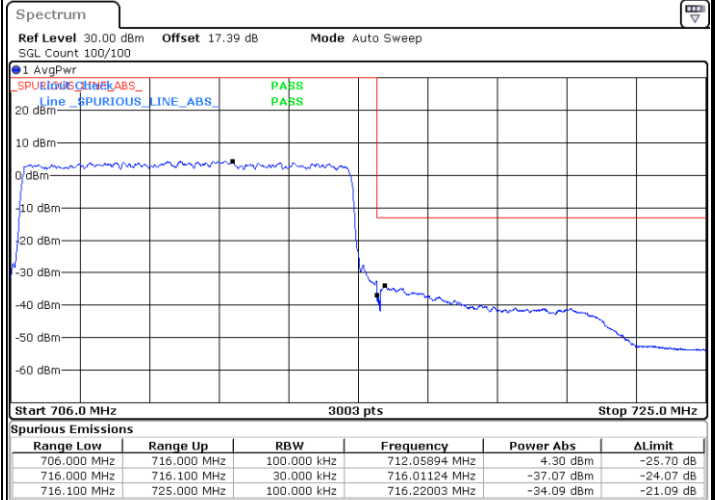
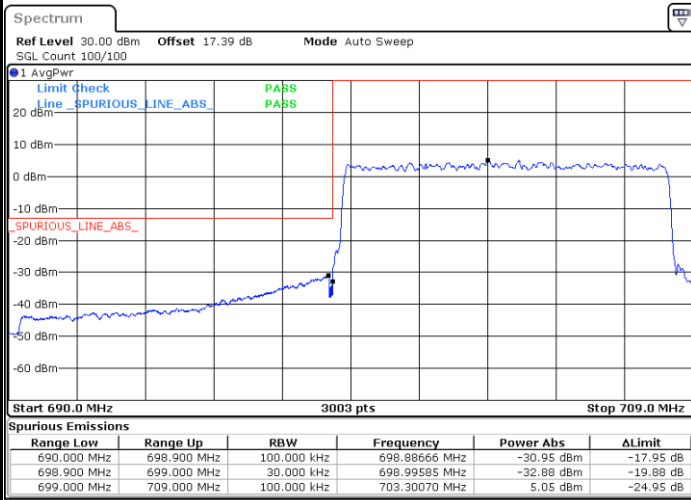


Date: 12.AUG.2020 16:55:23

Date: 12.AUG.2020 17:12:41

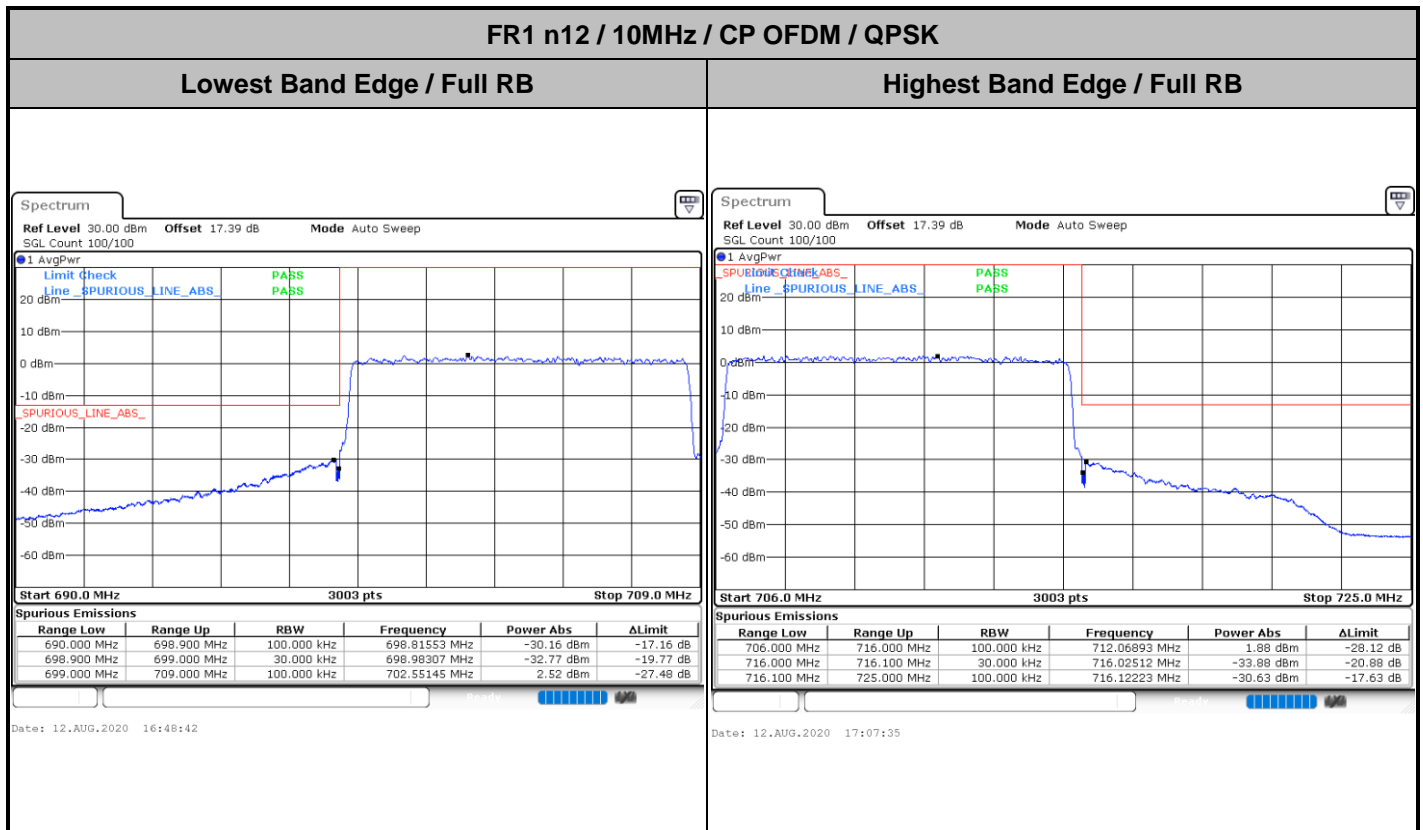
Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.AUG.2020 16:51:33

Date: 12.AUG.2020 17:11:21

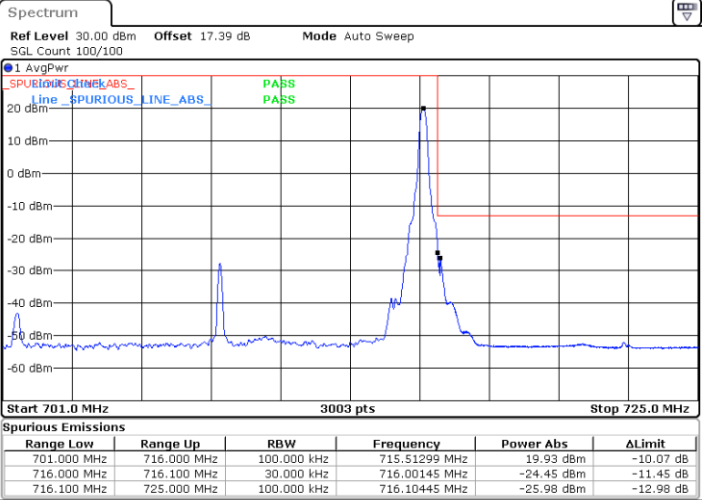
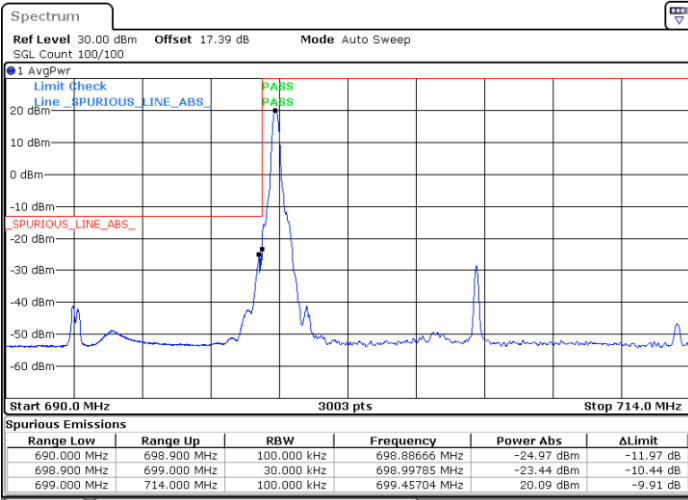




FR1 n12 / 15MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

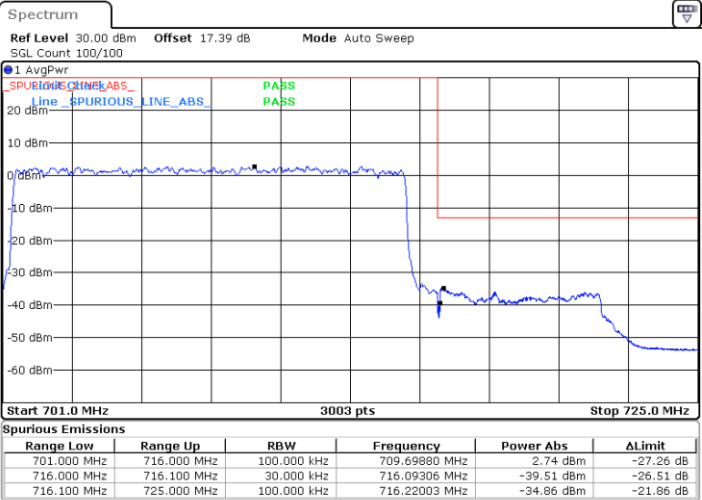
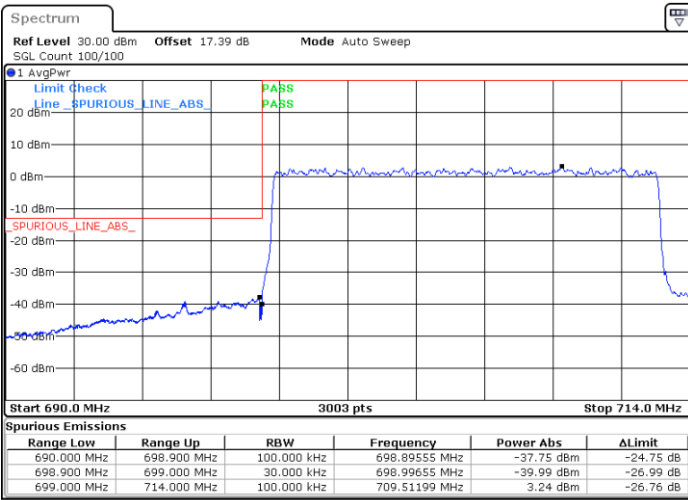


Date: 12.AUG.2020 15:56:50

Date: 12.AUG.2020 17:20:04

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.AUG.2020 15:53:17

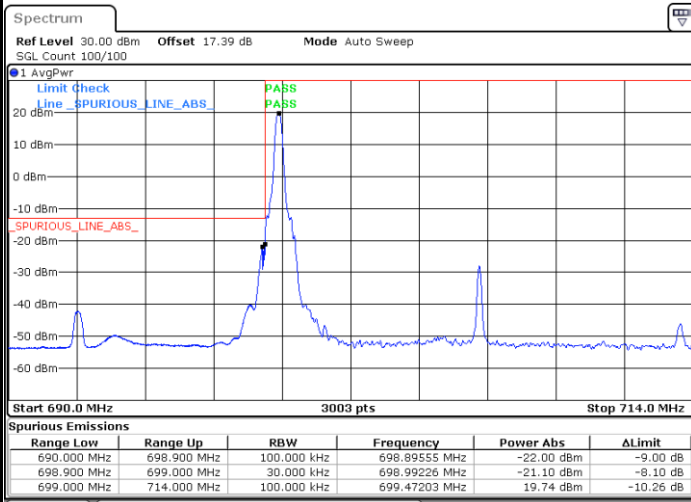
Date: 12.AUG.2020 17:18:51



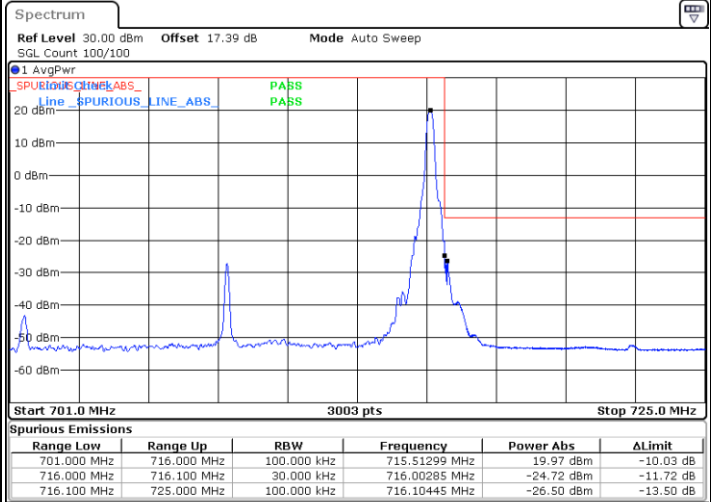
FR1 n12 / 15MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



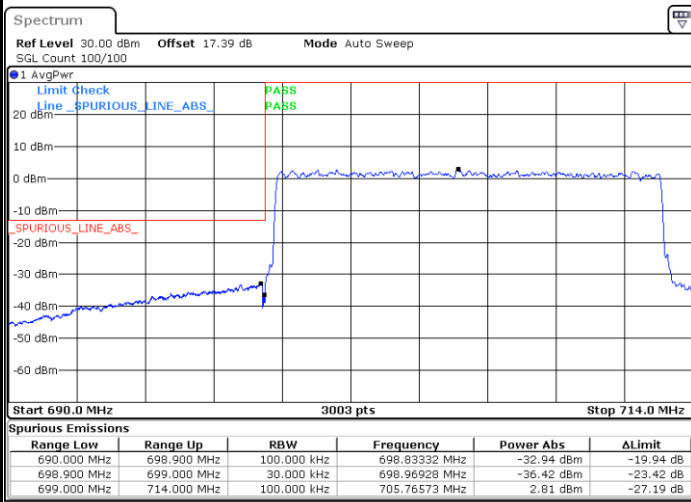
Date: 12.AUG.2020 15:55:50



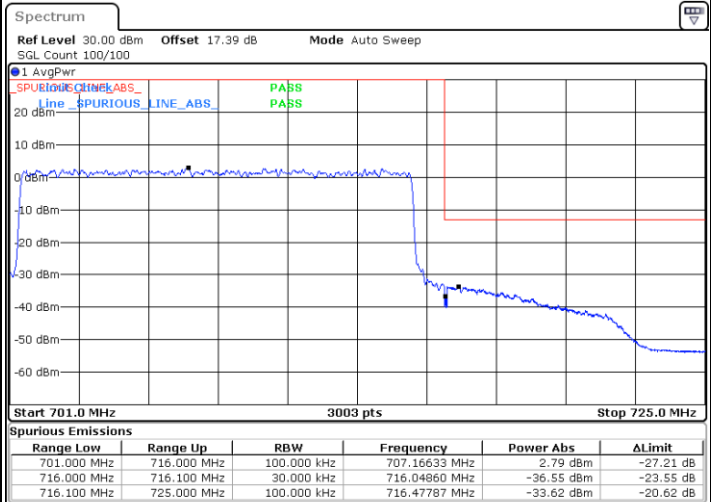
Date: 12.AUG.2020 17:21:07

Lowest Band Edge / Full RB

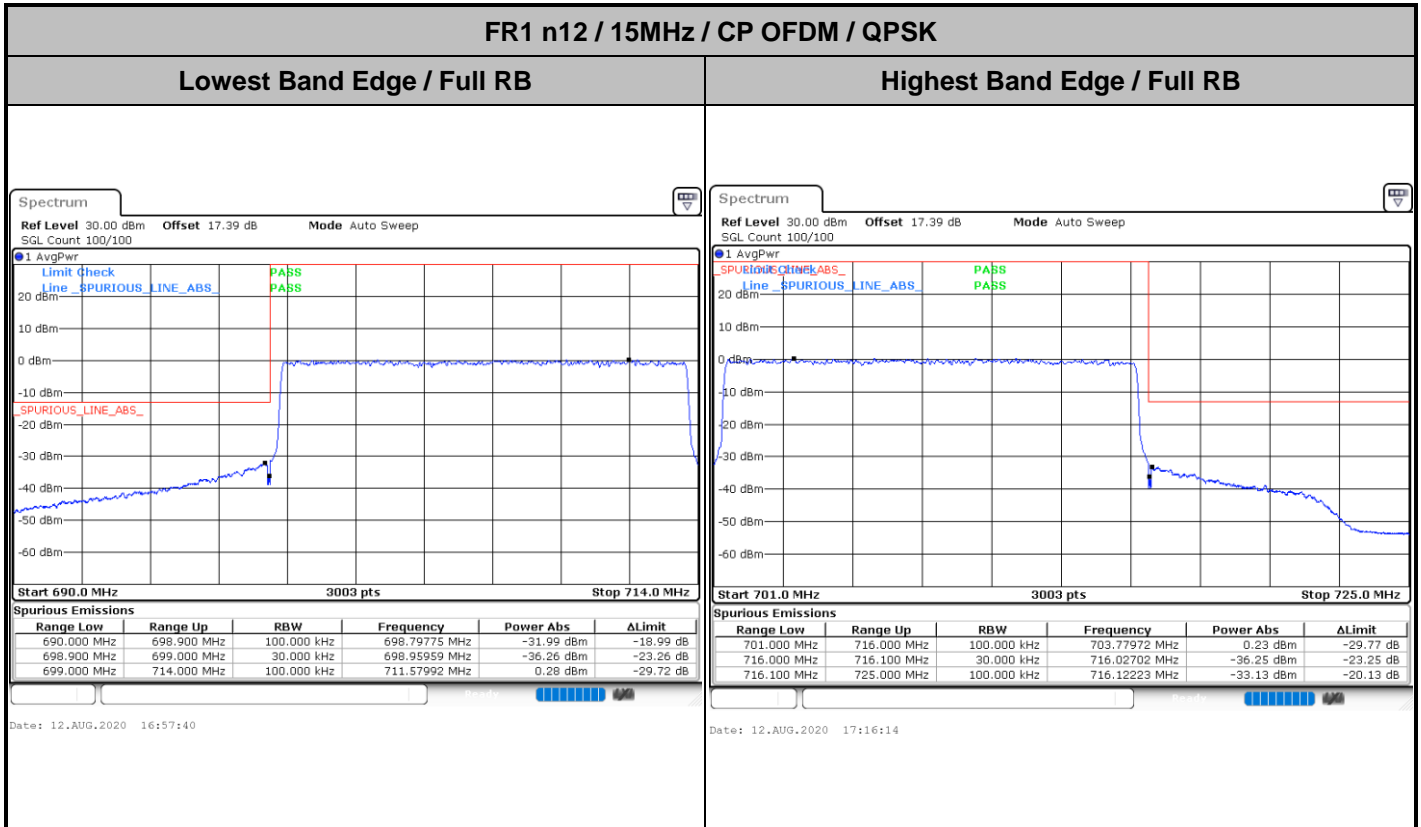
Highest Band Edge / Full RB



Date: 12.AUG.2020 15:54:15



Date: 12.AUG.2020 17:17:33



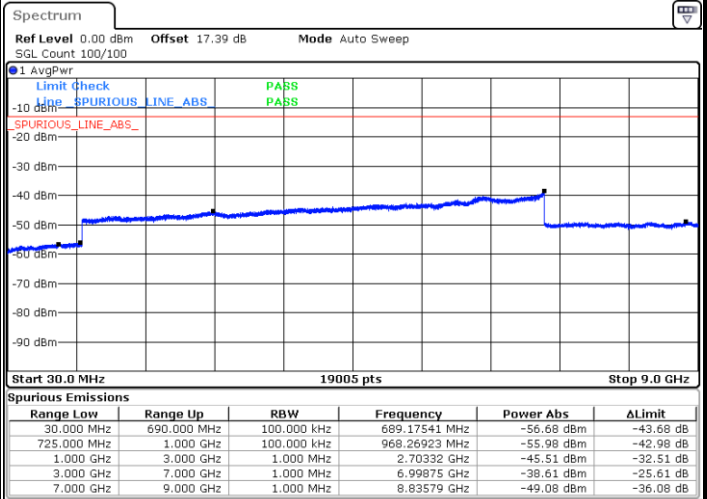
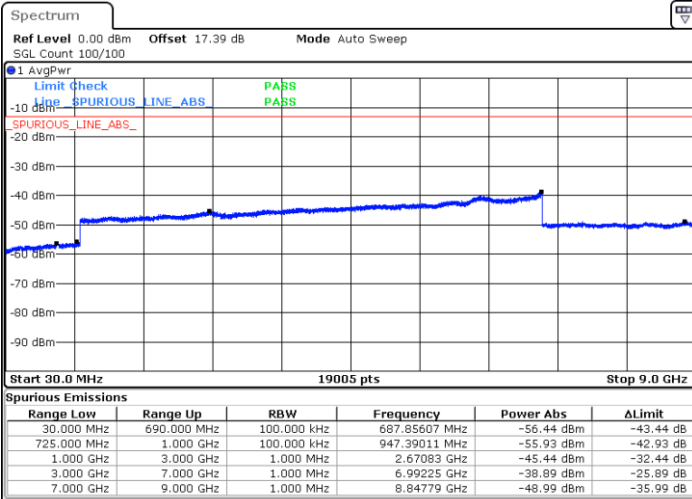


Conducted Spurious Emission

FR1 n12 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

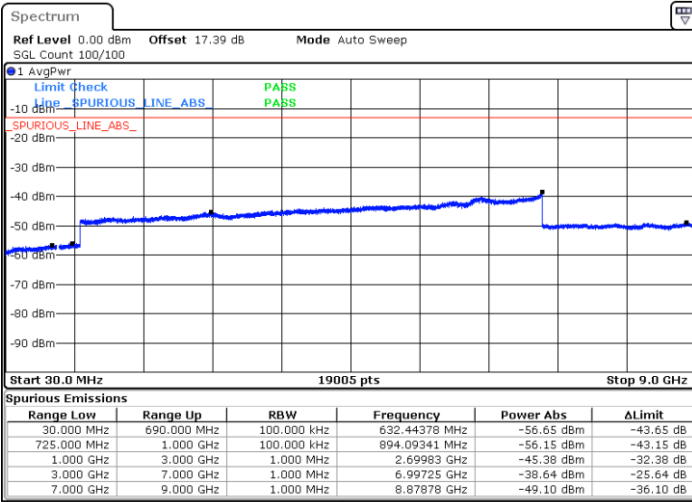
Middle Channel / 1RB1



Date: 13.AUG.2020 11:02:16

Date: 13.AUG.2020 11:06:59

Highest Channel / 1RB1



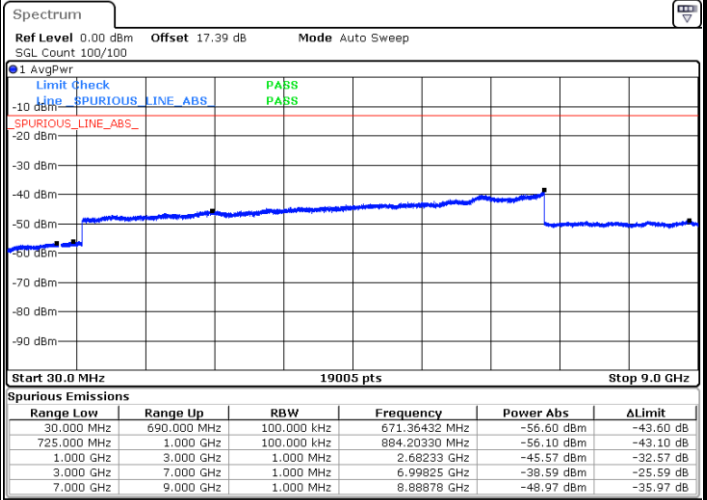
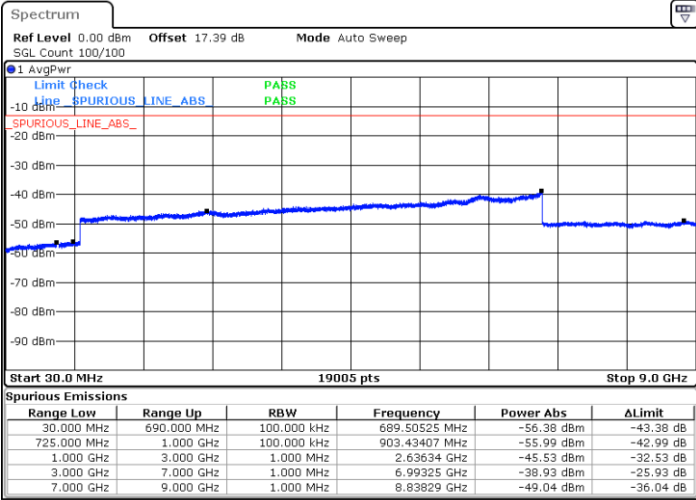
Date: 13.AUG.2020 11:29:31



FR1 n12 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

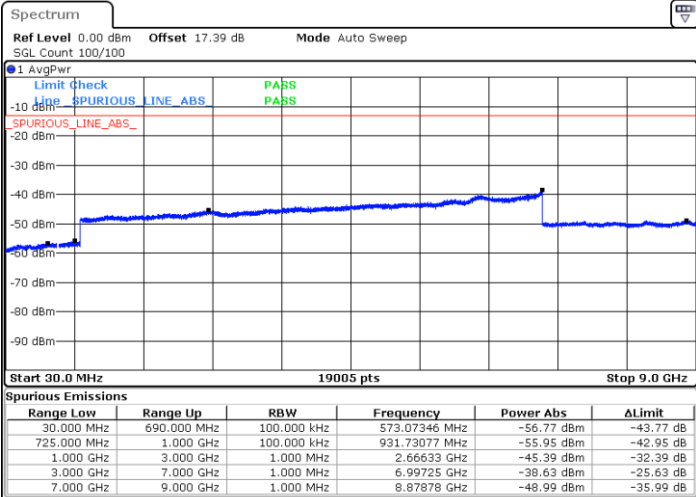
Middle Channel / 1RB1



Date: 13.AUG.2020 10:52:00

Date: 13.AUG.2020 11:11:13

Highest Channel / 1RB1



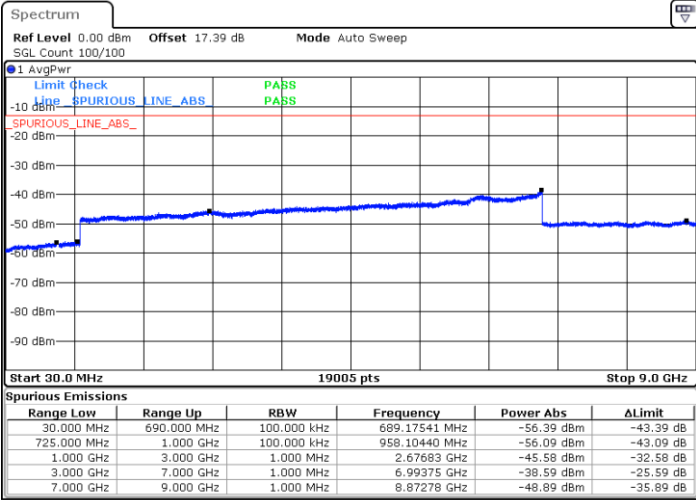
Date: 13.AUG.2020 11:36:50



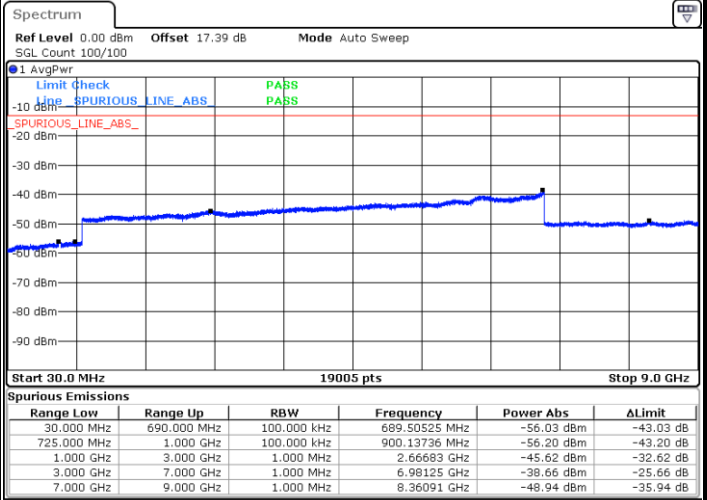
FR1 n12 / 15MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

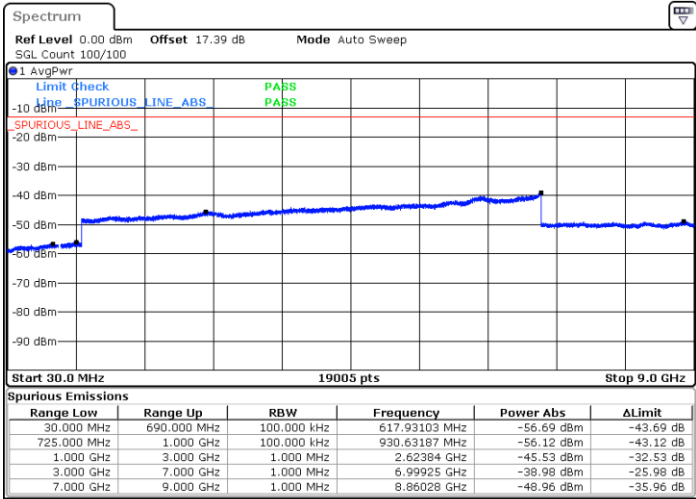


Date: 13.AUG.2020 10:55:52



Date: 13.AUG.2020 11:13:54

Highest Channel / 1RB1



Date: 13.AUG.2020 11:40:05



Frequency Stability

Test Conditions		FR1 n12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0021	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0044	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0003	
20	Battery End Point	0.0011	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.30 V. ; Maximum Voltage =4.25 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



FR1 n66

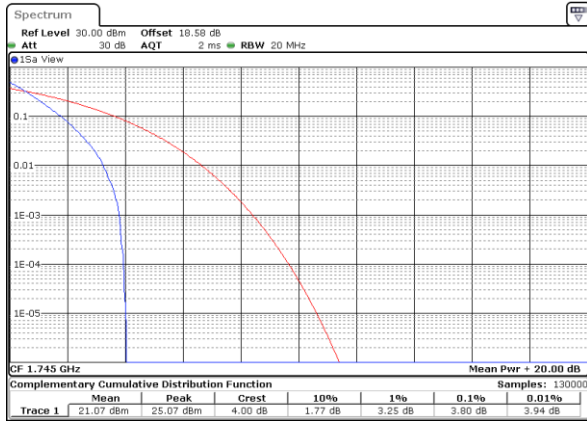
Peak-to-Average Ratio

Mode	FR1 n66 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	3.80	4.43	5.54	6.09	PASS
Mode	FR1 n66 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.67				PASS



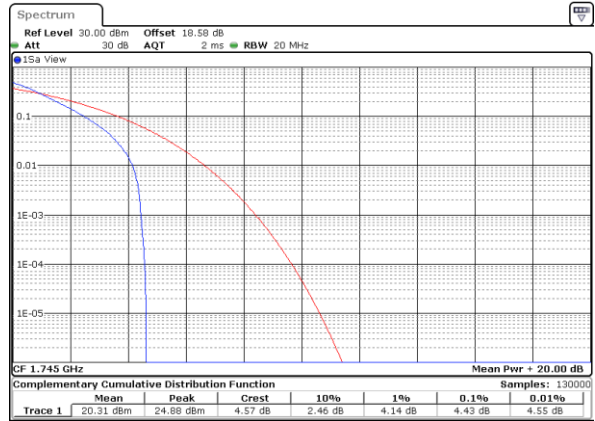
FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



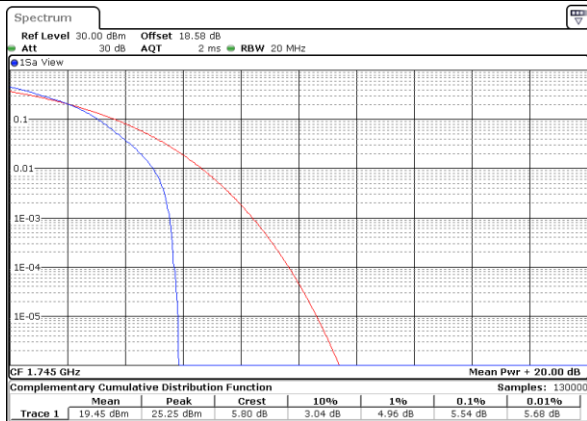
Date: 24.AUG.2020 14:34:03

QPSK



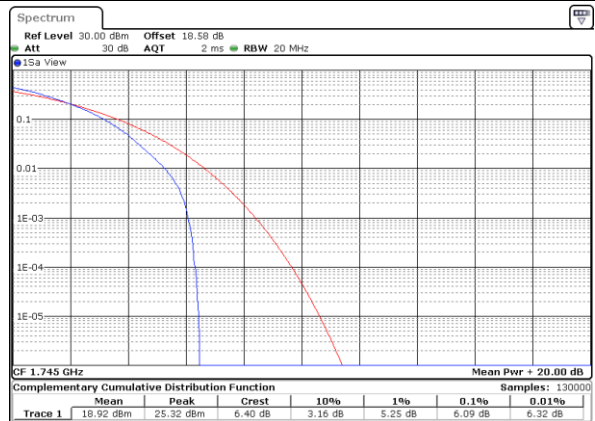
Date: 24.AUG.2020 14:34:45

16QAM



Date: 24.AUG.2020 14:35:15

64QAM



Date: 24.AUG.2020 14:35:43

256QAM



Date: 24.AUG.2020 14:36:08



26dB Bandwidth

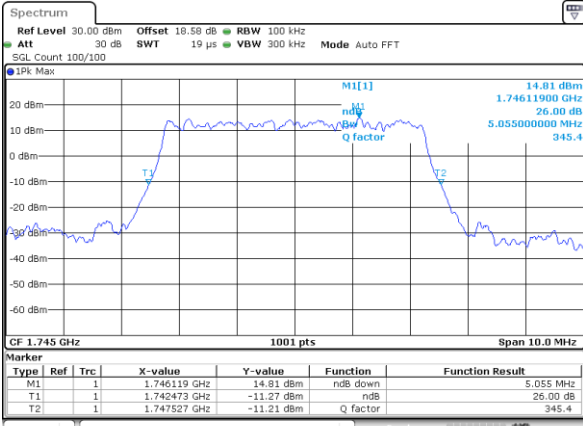
Mode	FR1 n66 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	5.06		9.63		14.21		18.70	

Mode	FR1 n66 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	5.05	4.99	9.87	9.79	14.99	14.99	19.90	19.82
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.97	4.83	9.83	9.77	14.96	14.99	19.82	19.86



FR1 n66 / 5MHz / DFT-S OFDM / Middle Channel

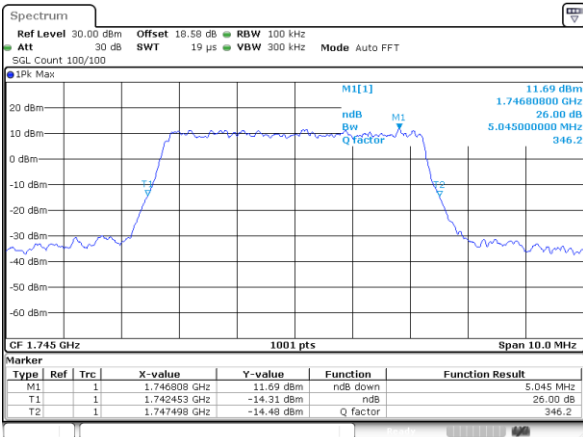
PI/2 BPSK



Date: 24.AUG.2020 14:18:10

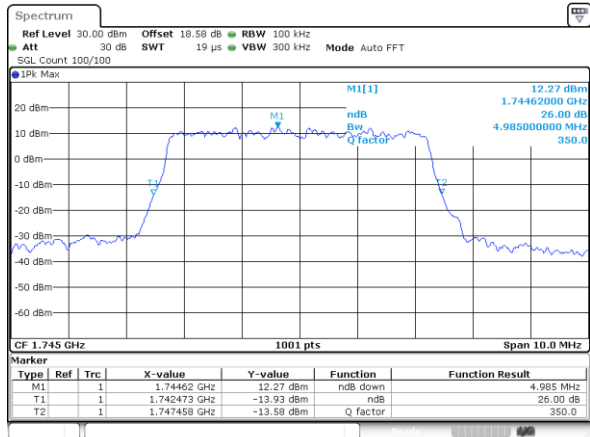
FR1 n66 / 5MHz / CP OFDM / Middle Channel

QPSK



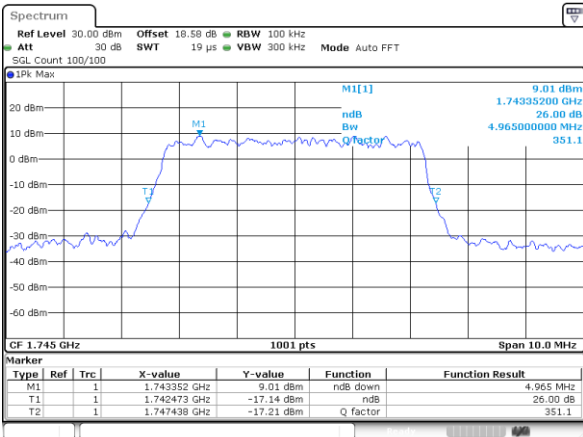
Date: 21.AUG.2020 18:22:13

16QAM



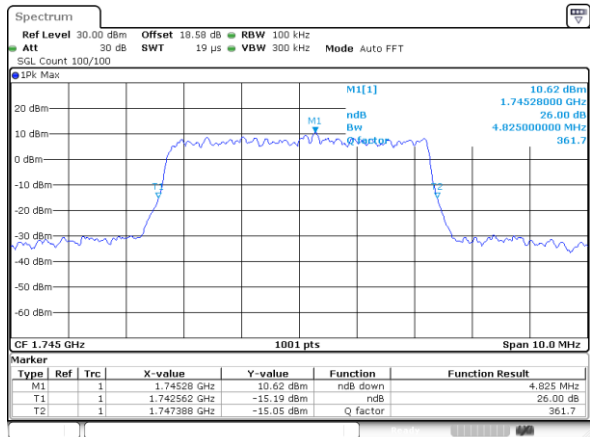
Date: 21.AUG.2020 18:24:41

64QAM



Date: 24.AUG.2020 14:00:39

256QAM

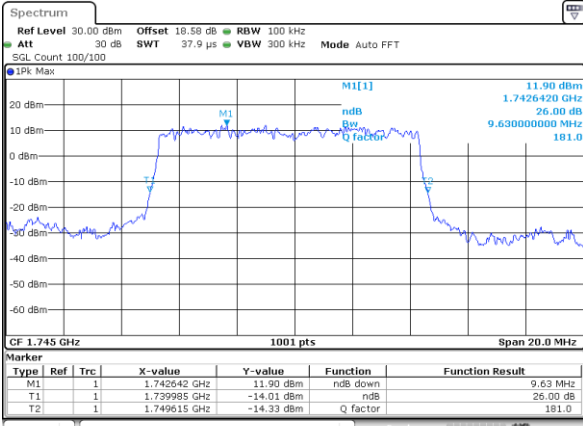


Date: 27.AUG.2020 12:01:45



FR1 n66 / 10MHz / DFT-S OFDM / Middle Channel

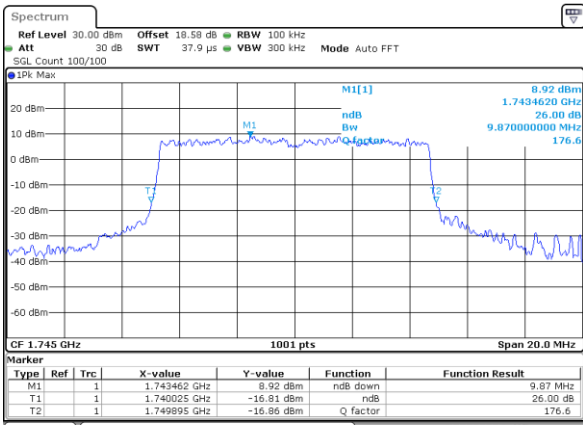
PI/2 BPSK



Date: 24_AUG_2020 14:23:20

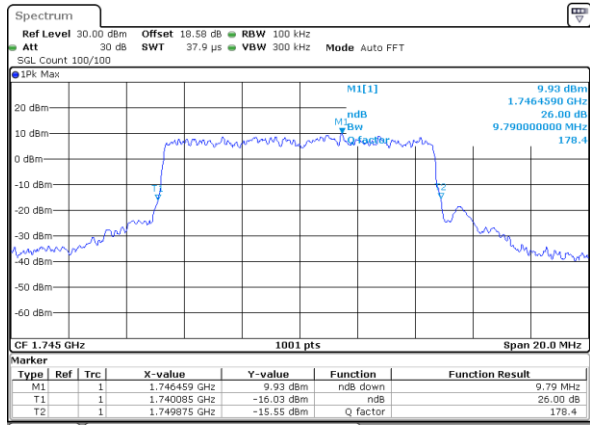
FR1 n66 / 10MHz / CP OFDM / Middle Channel

QPSK



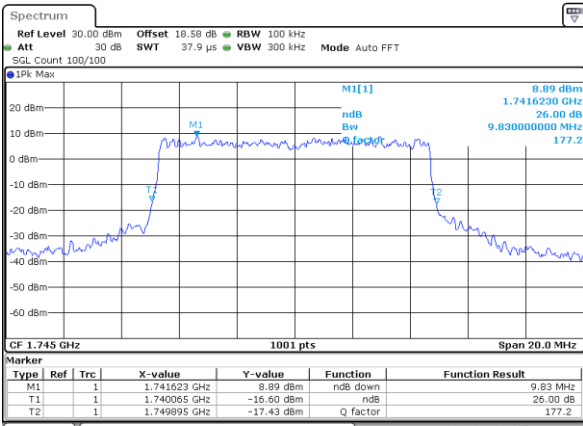
Date: 24_AUG_2020 14:02:06

16QAM



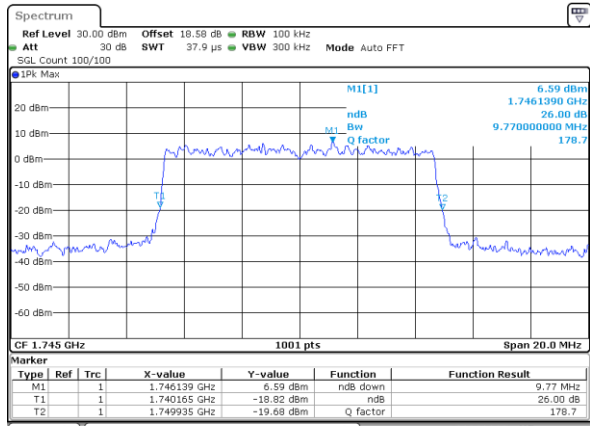
Date: 24_AUG_2020 14:04:53

64QAM



Date: 24_AUG_2020 14:05:44

256QAM

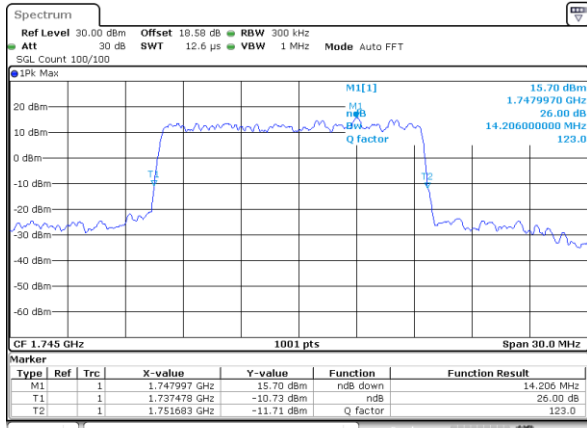


Date: 24_AUG_2020 14:06:21



FR1 n66 / 15MHz / DFT-S OFDM / Middle Channel

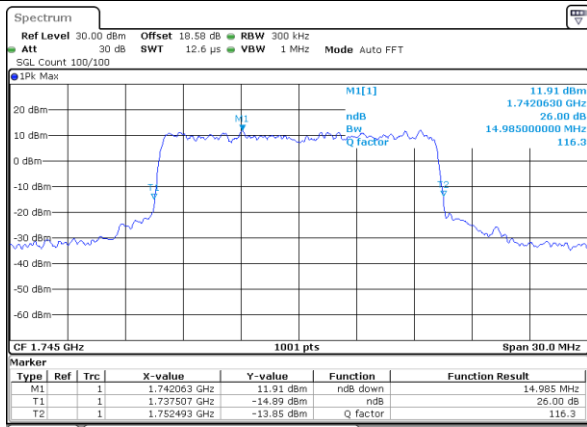
PI/2 BPSK



Date: 24.AUG.2020 14:25:49

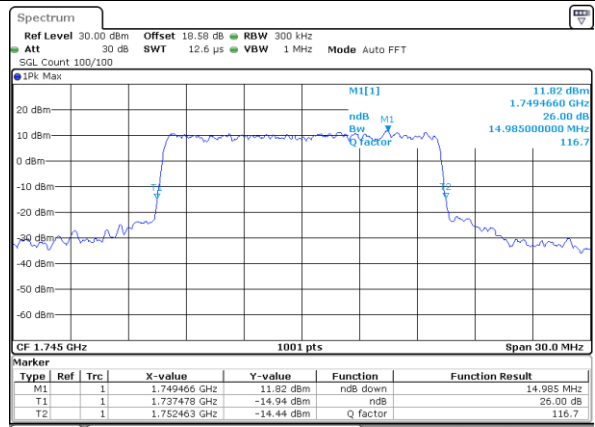
FR1 n66 / 15MHz / CP OFDM / Middle Channel

QPSK



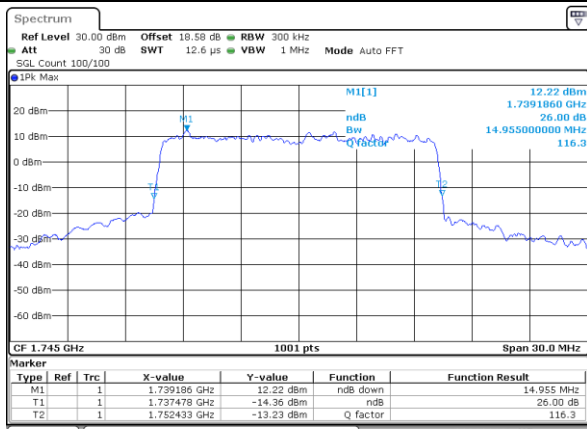
Date: 24.AUG.2020 14:07:50

16QAM



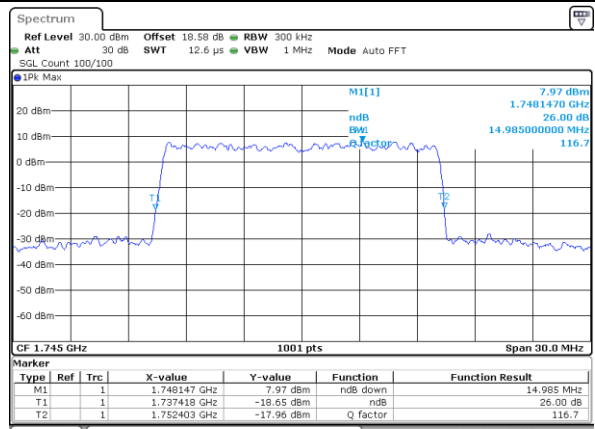
Date: 24.AUG.2020 14:11:08

64QAM



Date: 24.AUG.2020 14:10:56

256QAM

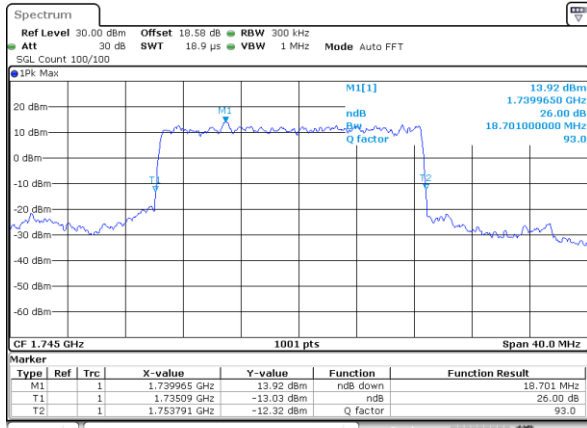


Date: 24.AUG.2020 14:11:42



FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel

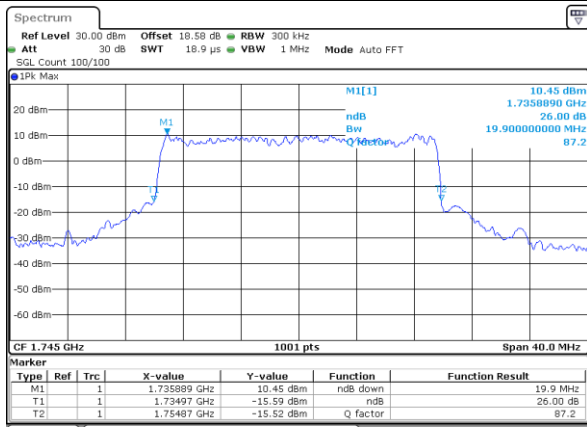
PI/2 BPSK



Date: 24.AUG.2020 14:32:32

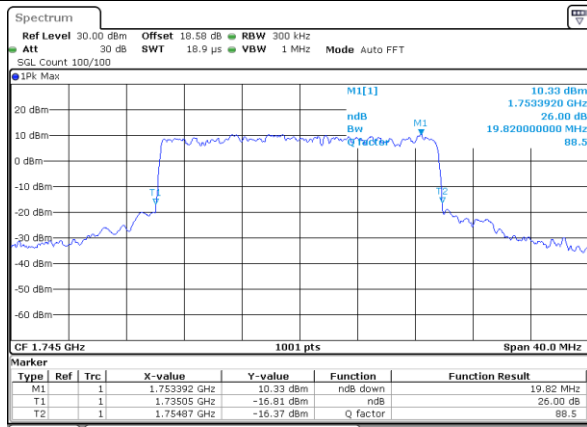
FR1 n66 / 20MHz / CP OFDM

QPSK



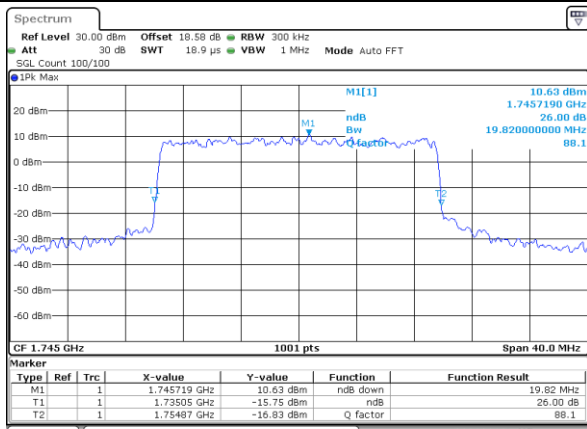
Date: 24.AUG.2020 14:13:31

16QAM



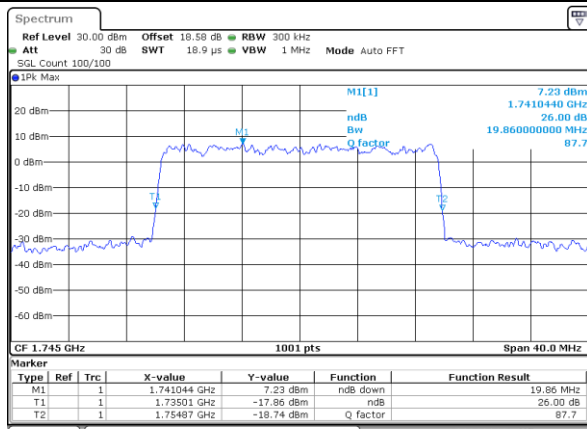
Date: 24.AUG.2020 14:15:28

64QAM



Date: 24.AUG.2020 14:16:13

256QAM



Date: 24.AUG.2020 14:17:00



Occupied Bandwidth

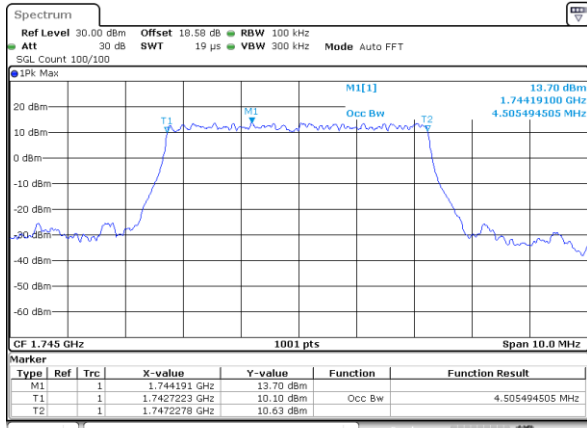
Mode	FR1 n66 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	4.51		8.91		13.46		17.94	

Mode	FR1 n66 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.51	4.50	9.27	9.23	14.15	14.09	18.98	18.90
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.48	4.48	9.27	9.27	14.09	14.12	18.98	18.94



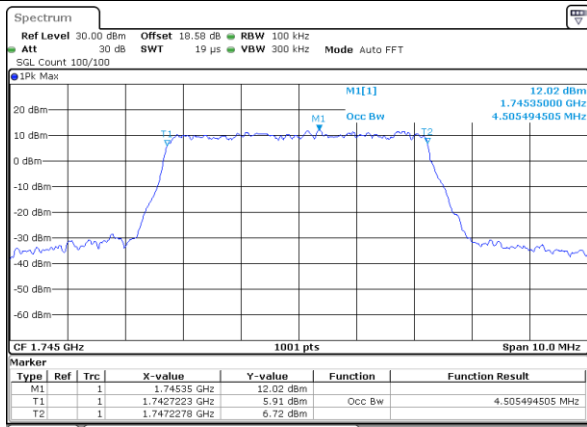
FR1 n66 / 5MHz / DFT-S OFDM / Middle Channel

PI/2 BPSK

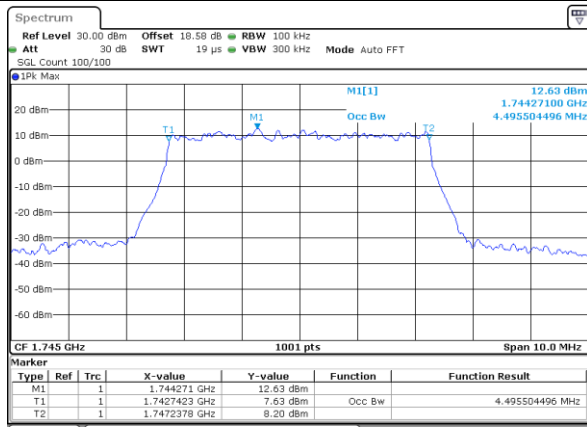


FR1 n66 / 5MHz / CP OFDM

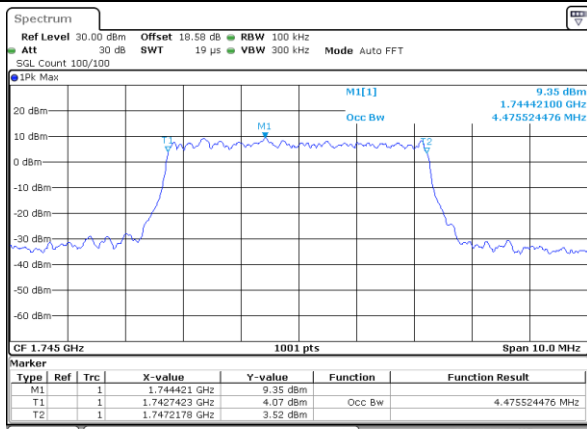
QPSK



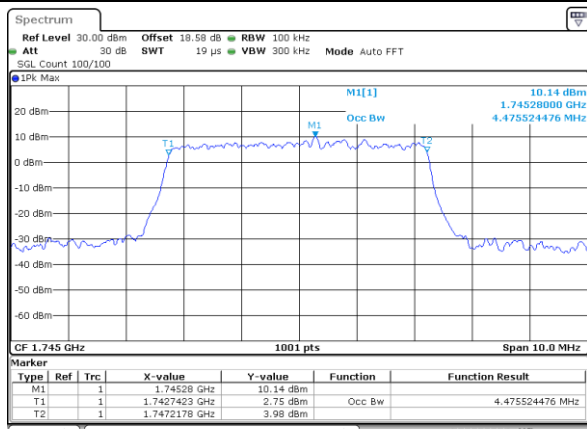
16QAM



64QAM



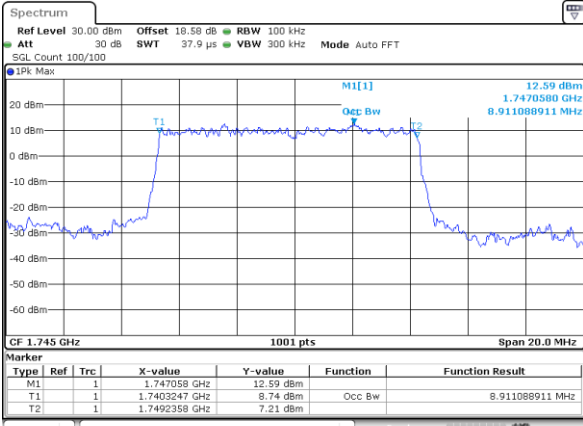
256QAM





FR1 n66 / 10MHz / DFT-S OFDM / Middle Channel

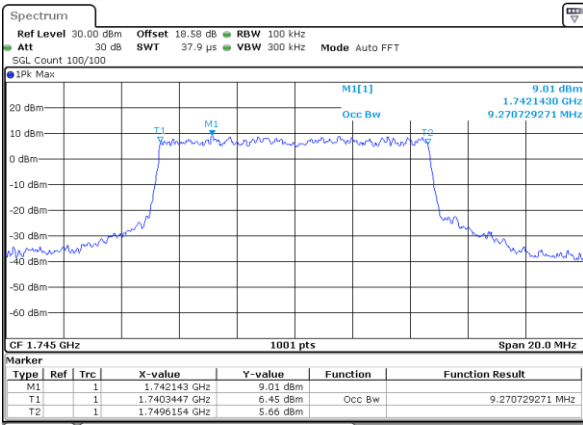
PI/2 BPSK



Date: 24.AUG.2020 14:24:24

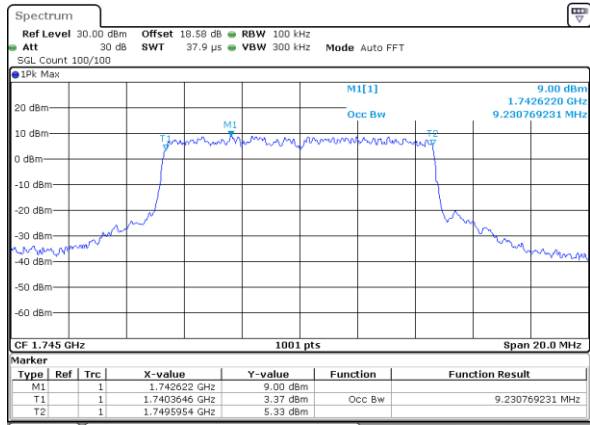
FR1 n66 / 10MHz / CP OFDM

QPSK



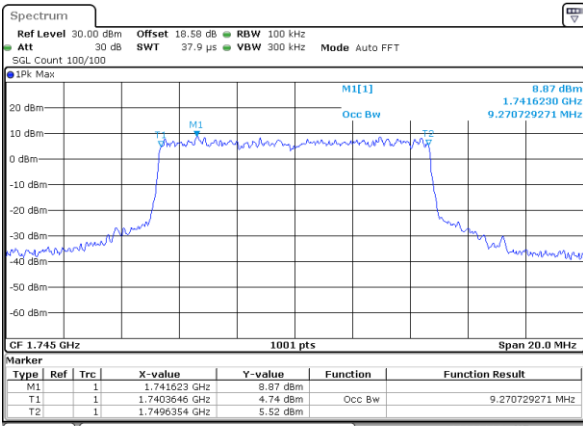
Date: 24.AUG.2020 14:02:28

16QAM



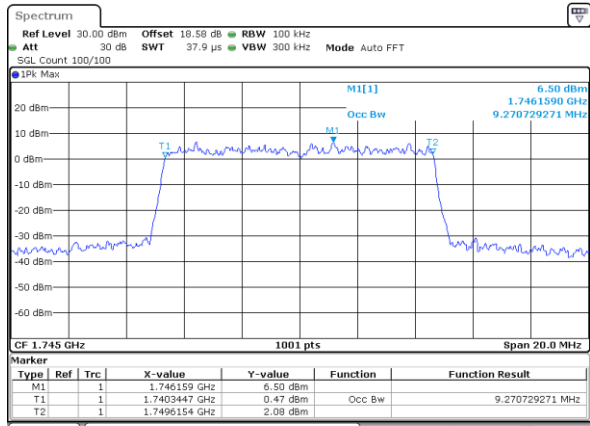
Date: 24.AUG.2020 14:05:12

64QAM



Date: 24.AUG.2020 14:05:57

256QAM

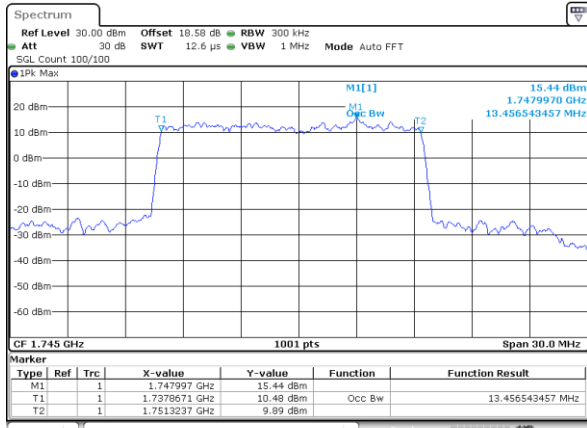


Date: 24.AUG.2020 14:06:34



FR1 n66 / 15MHz / DFT-S OFDM / Middle Channel

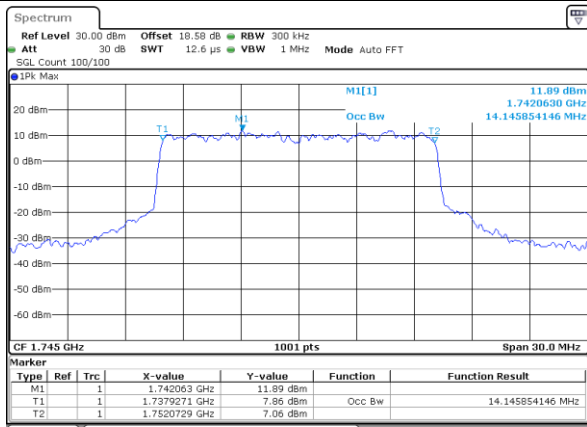
PI/2 BPSK



Date: 24.AUG.2020 14:26:06

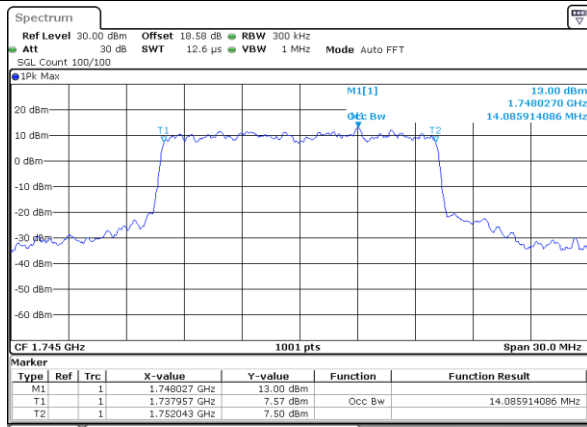
FR1 n66 / 15MHz / CP OFDM

QPSK



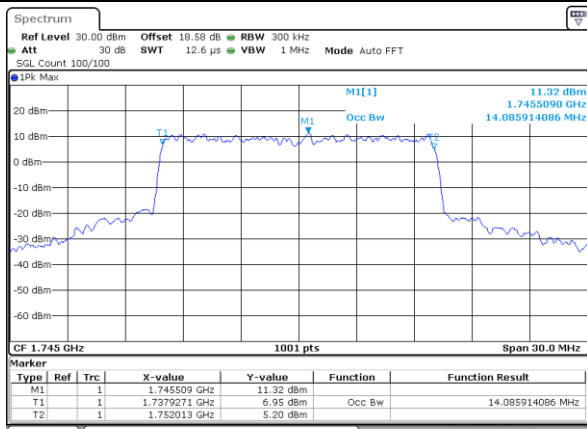
Date: 24.AUG.2020 14:08:06

16QAM



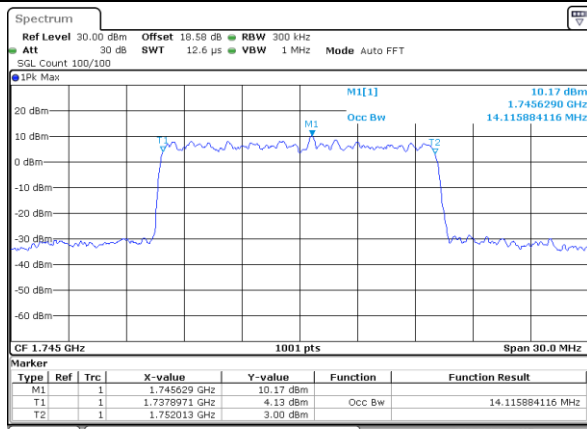
Date: 24.AUG.2020 14:10:20

64QAM



Date: 24.AUG.2020 14:11:10

256QAM

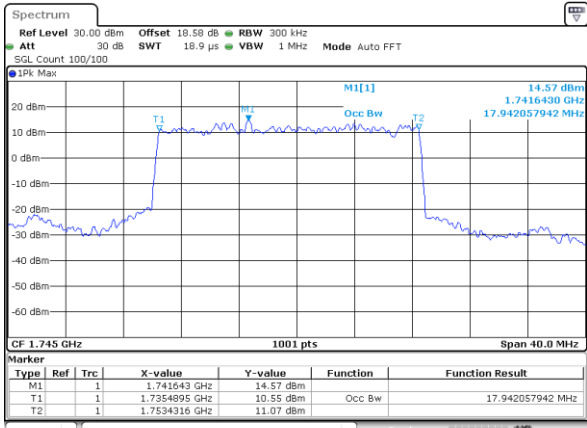


Date: 24.AUG.2020 14:11:53



FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel

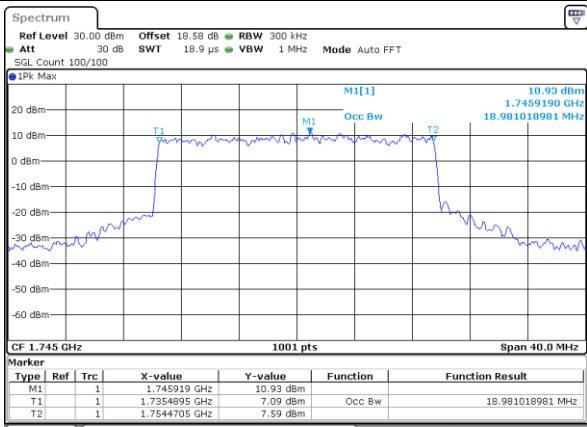
PI/2 BPSK



Date: 24.AUG.2020 14:32:50

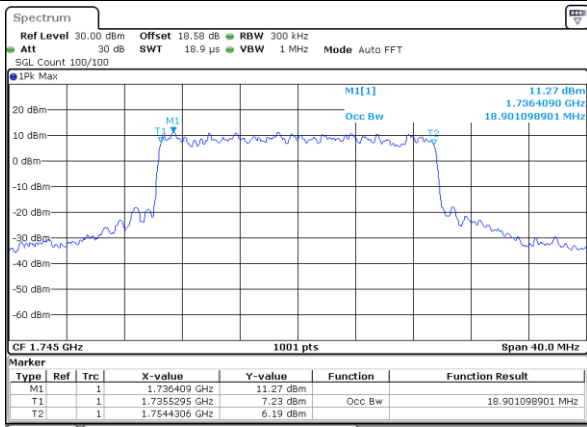
FR1 n66 / 20MHz / CP OFDM

QPSK



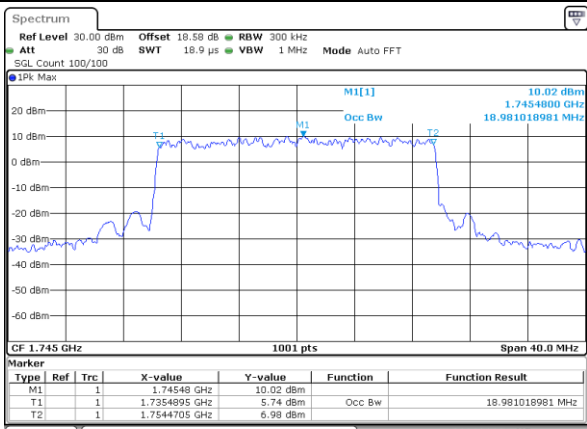
Date: 24.AUG.2020 14:13:42

16QAM



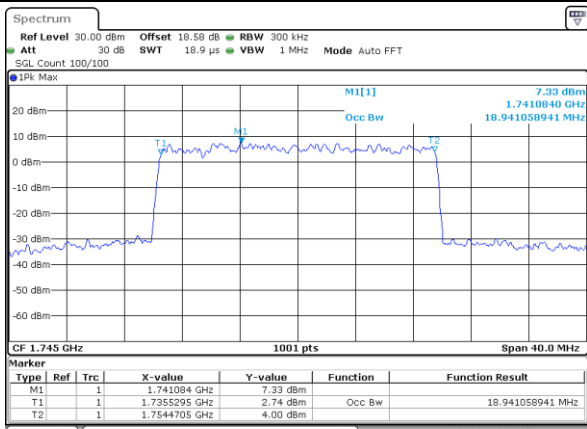
Date: 24.AUG.2020 14:15:42

64QAM



Date: 24.AUG.2020 14:16:29

256QAM



Date: 24.AUG.2020 14:17:14

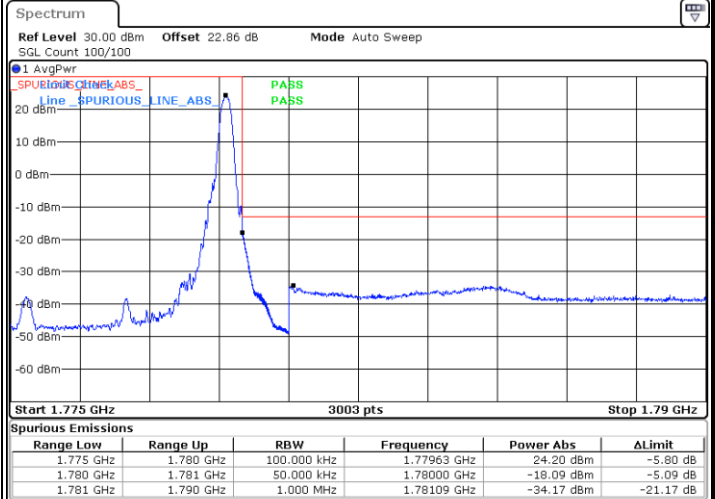
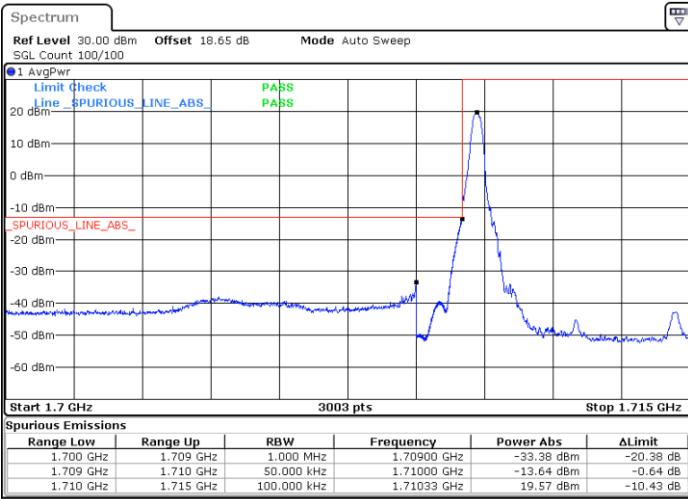


Conducted Band Edge

FR1 n66 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

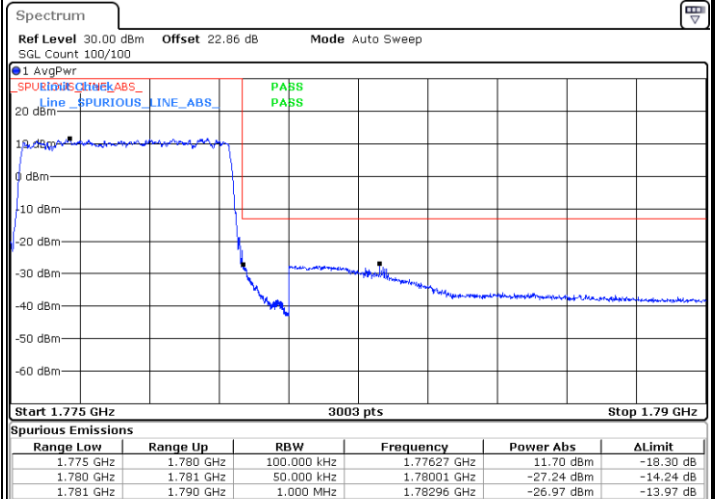
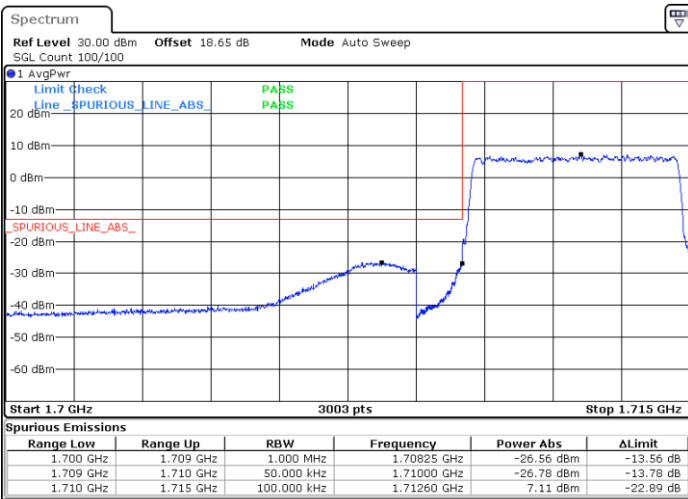


Date: 21.AUG.2020 09:52:59

Date: 21.AUG.2020 16:41:27

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.AUG.2020 09:59:58

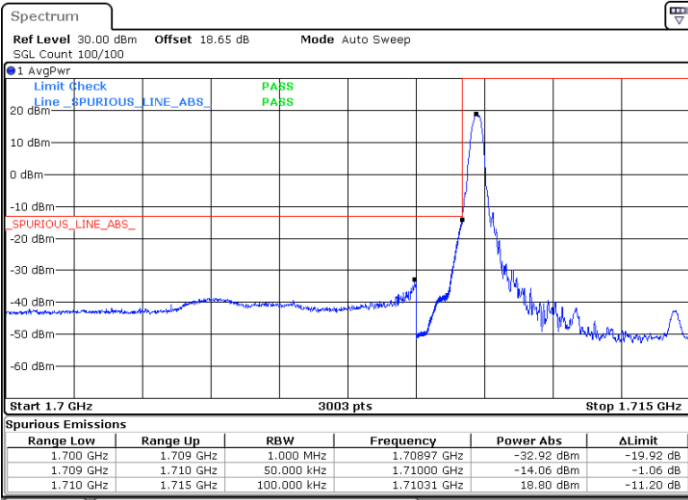
Date: 21.AUG.2020 16:43:54



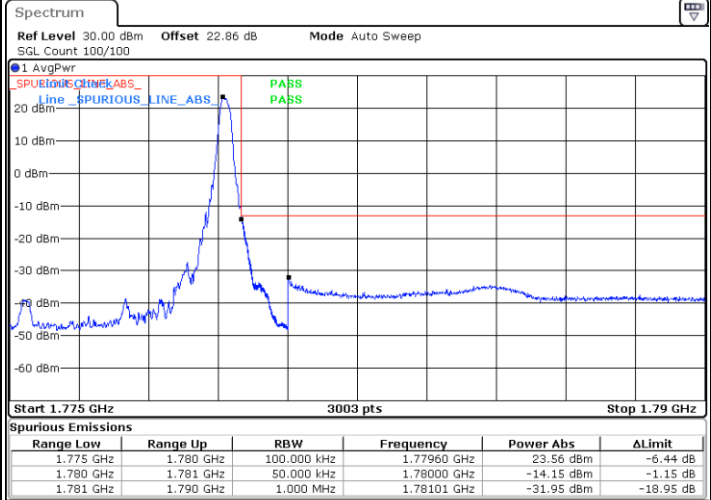
FR1 n66 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



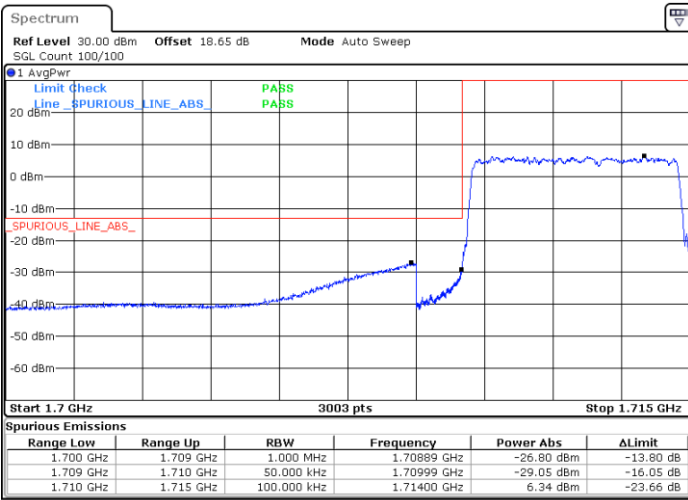
Date: 21.AUG.2020 09:57:55



Date: 21.AUG.2020 16:42:12

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.AUG.2020 09:59:03



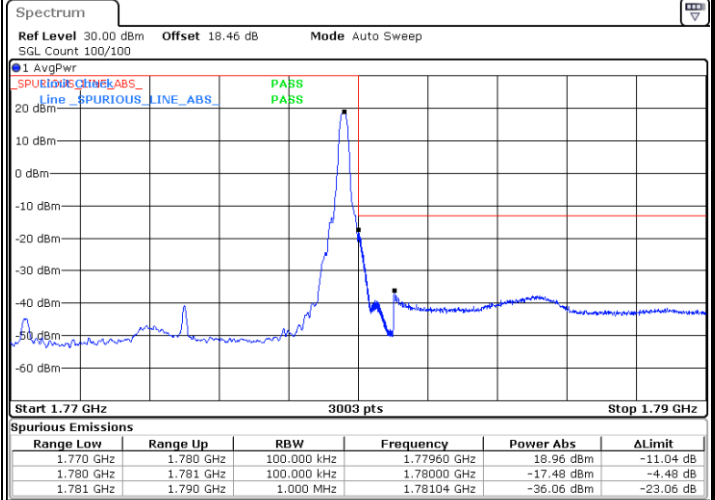
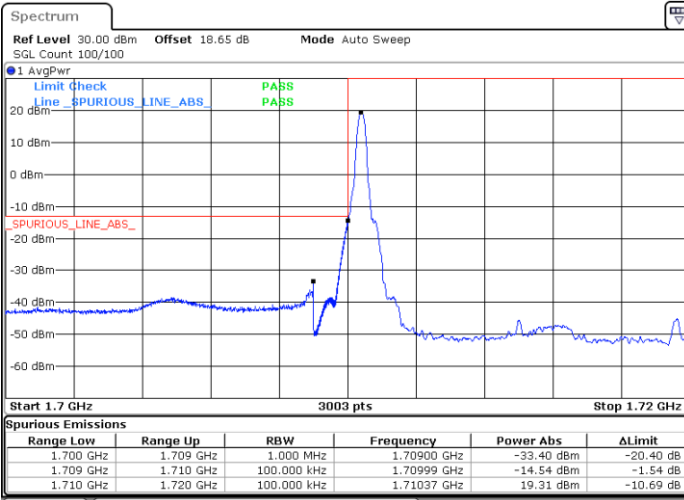
Date: 21.AUG.2020 16:43:05



FR1 n66 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

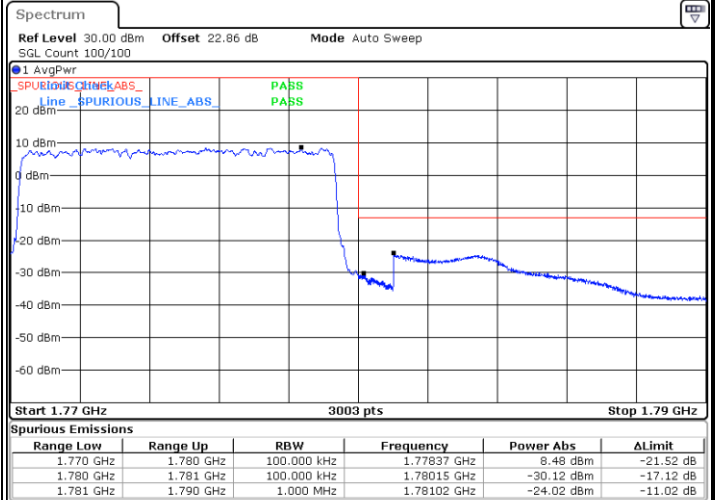
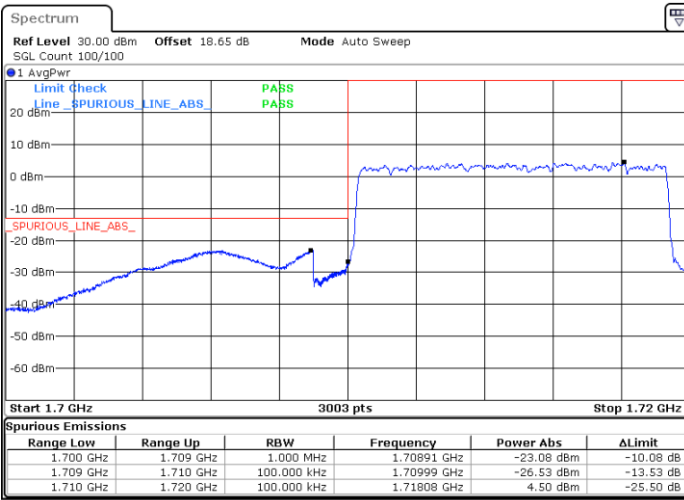


Date: 21.AUG.2020 10:02:22

Date: 24.AUG.2020 09:37:11

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.AUG.2020 10:04:37

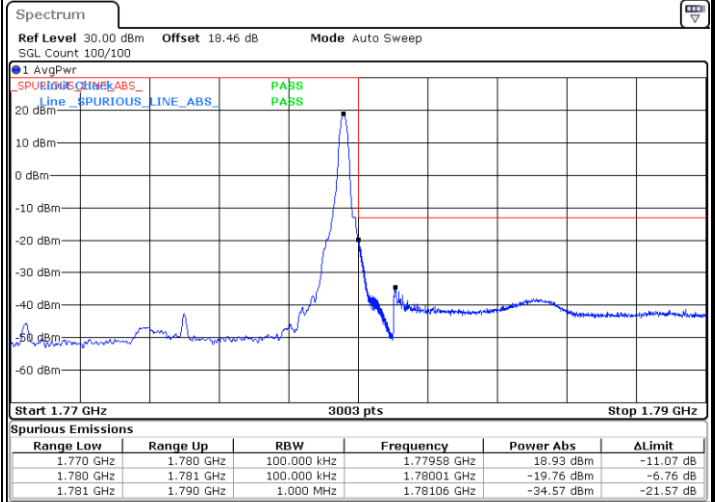
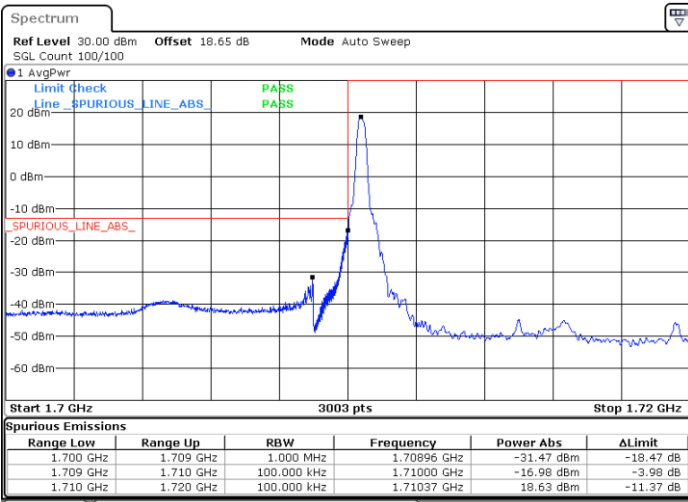
Date: 21.AUG.2020 16:50:45



FR1 n66 / 10MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

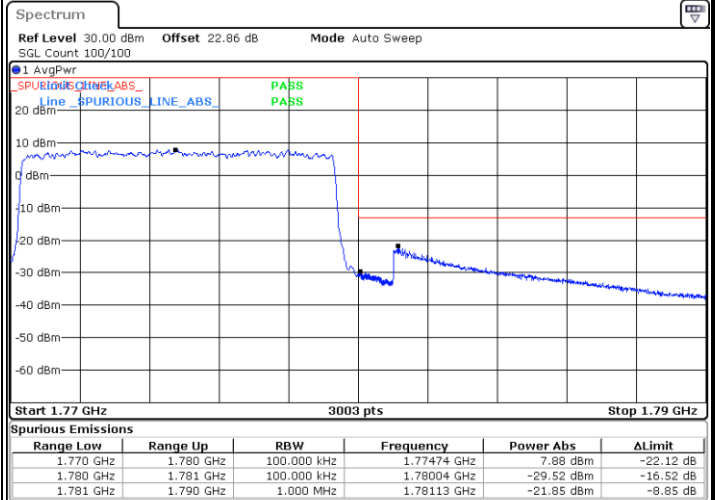
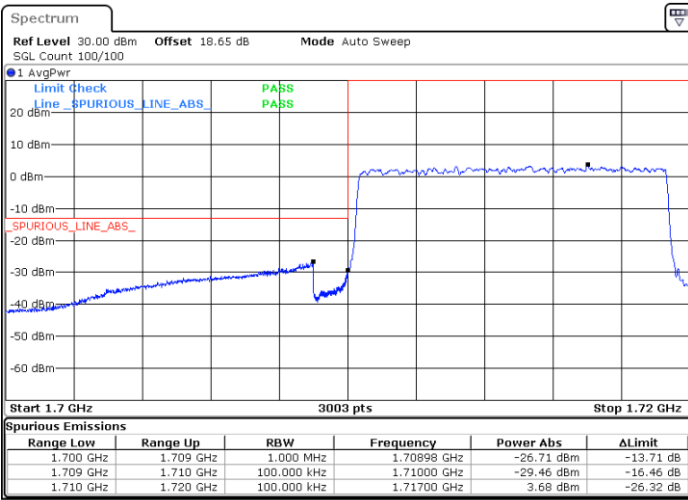


Date: 21.AUG.2020 10:03:05

Date: 24.AUG.2020 09:40:12

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.AUG.2020 10:03:50

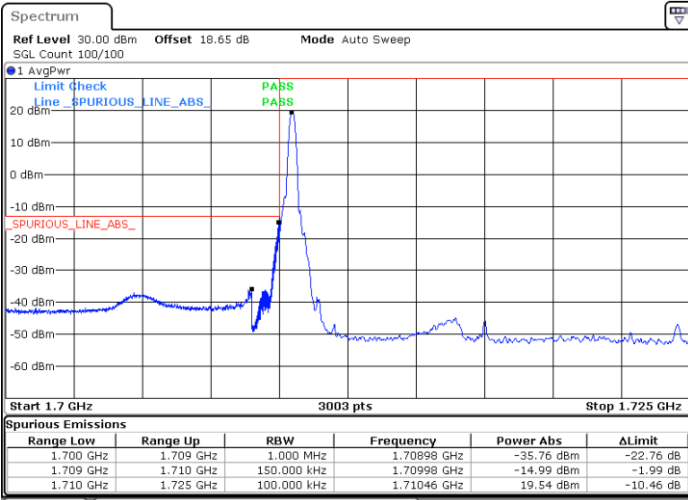
Date: 21.AUG.2020 16:50:05



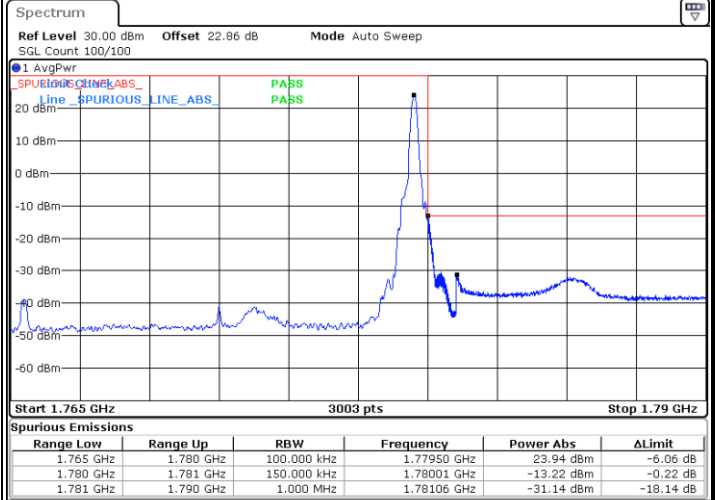
FR1 n66 / 15MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



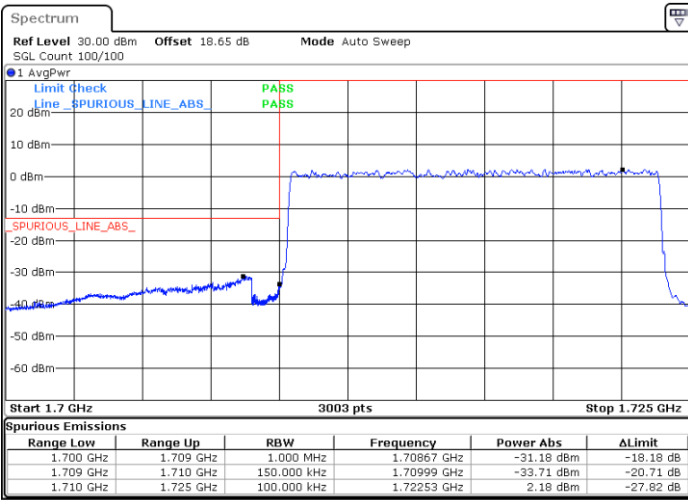
Date: 21.AUG.2020 10:06:19



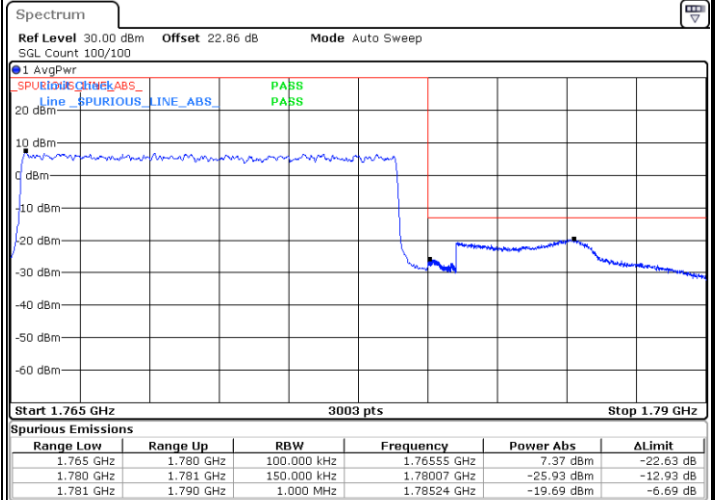
Date: 21.AUG.2020 16:53:08

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.AUG.2020 10:08:41



Date: 21.AUG.2020 16:55:17