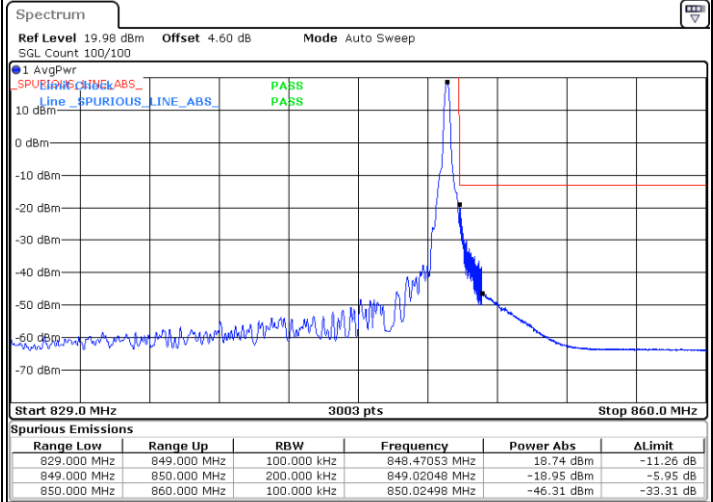
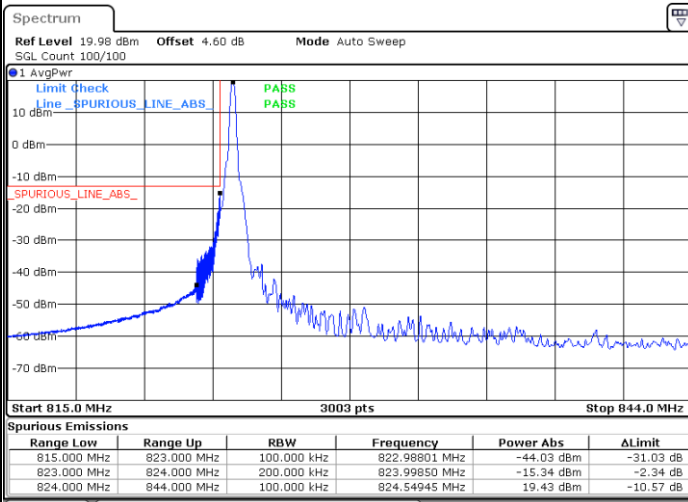




FR1 n5 / 20MHz / DFT-s-OFDM / 16QAM

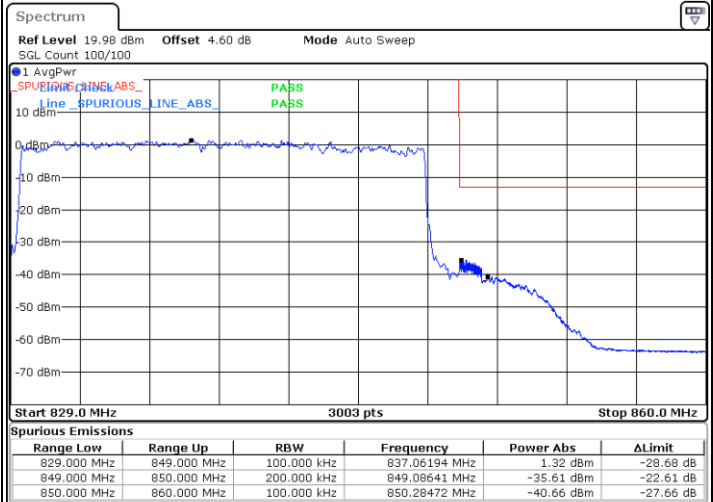
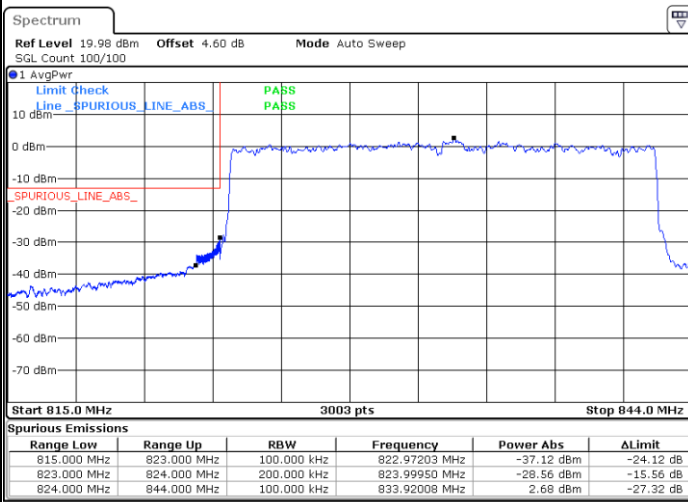
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

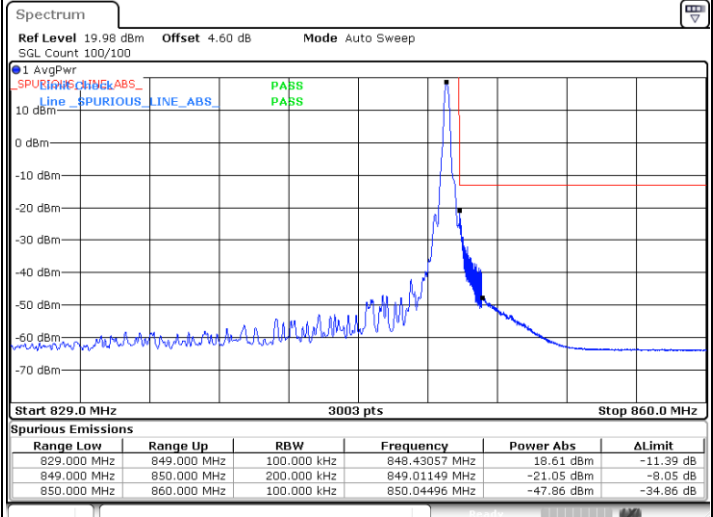
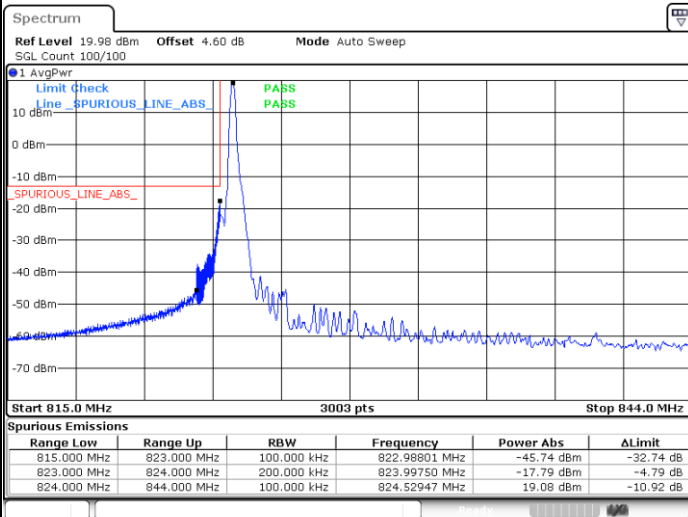




FR1 n5 / 20MHz / DFT-s-OFDM / 64QAM

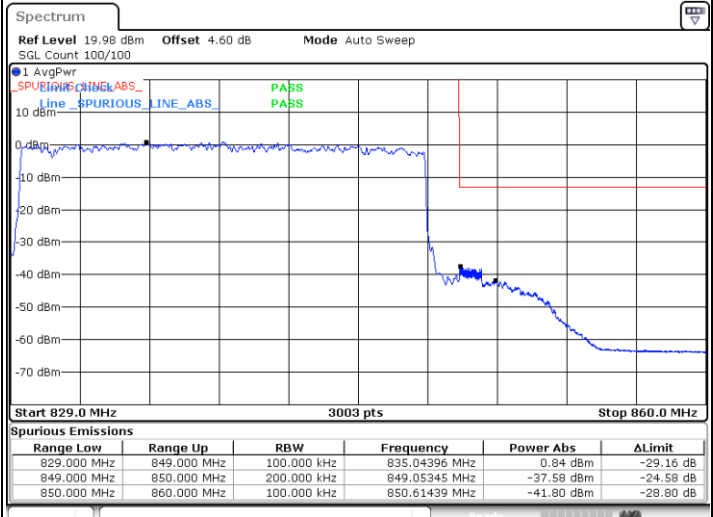
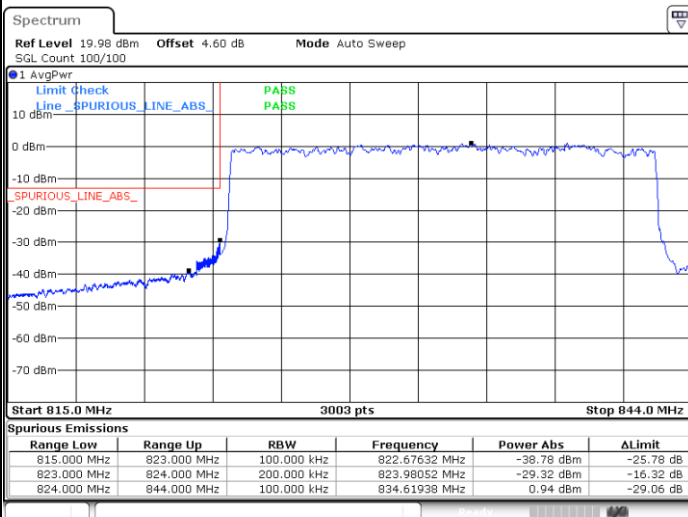
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

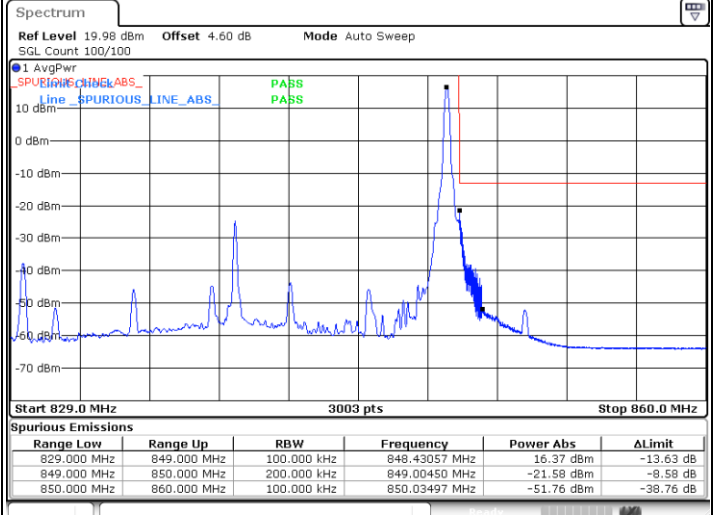
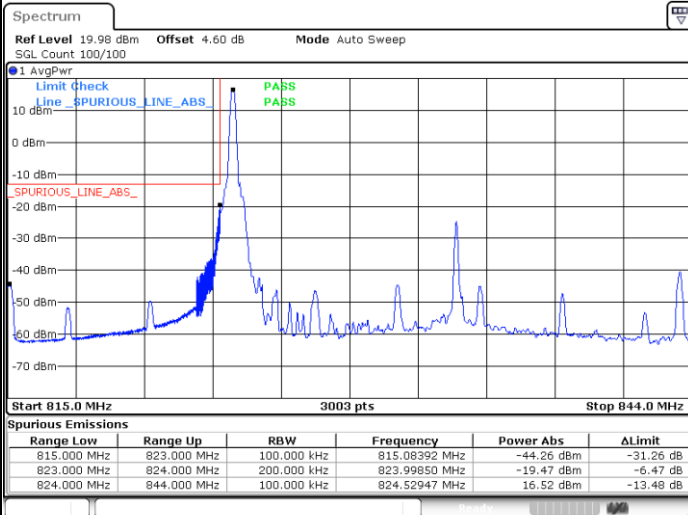




FR1 n5 / 20MHz / DFT-s-OFDM / 256QAM

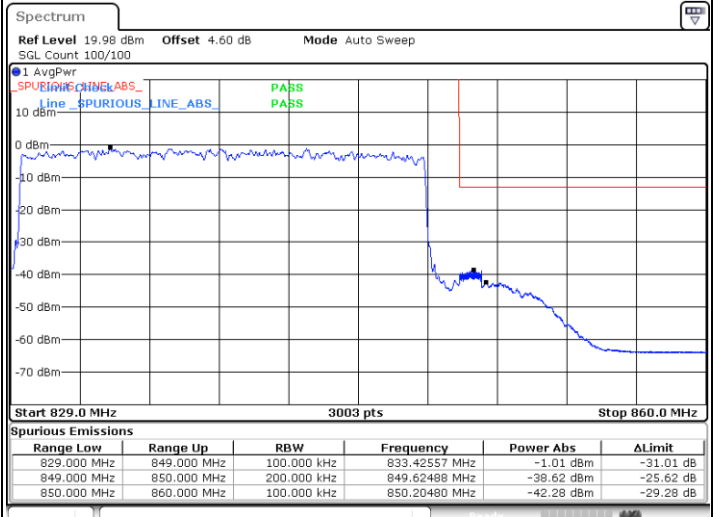
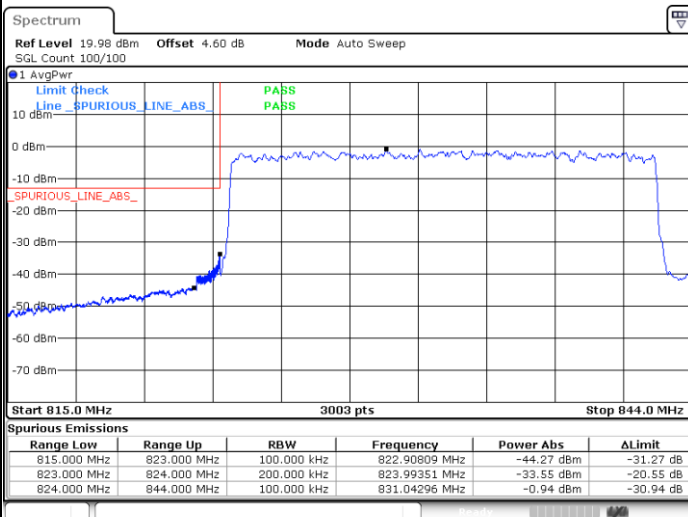
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

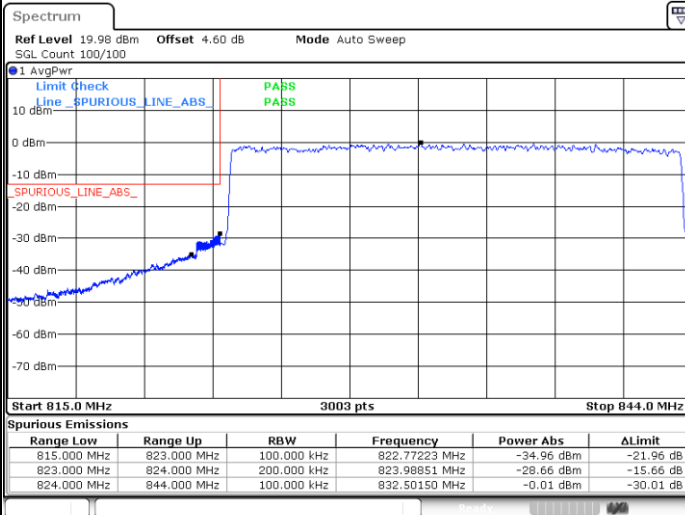




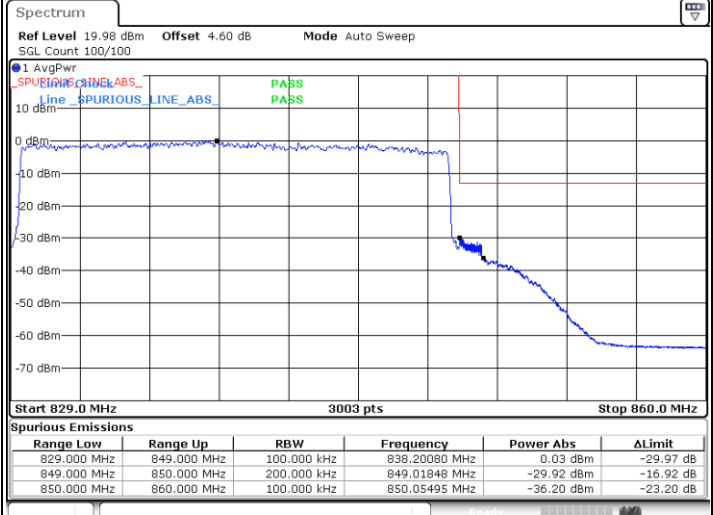
FR1 n5 / 20MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 24.JUN.2020 10:40:48



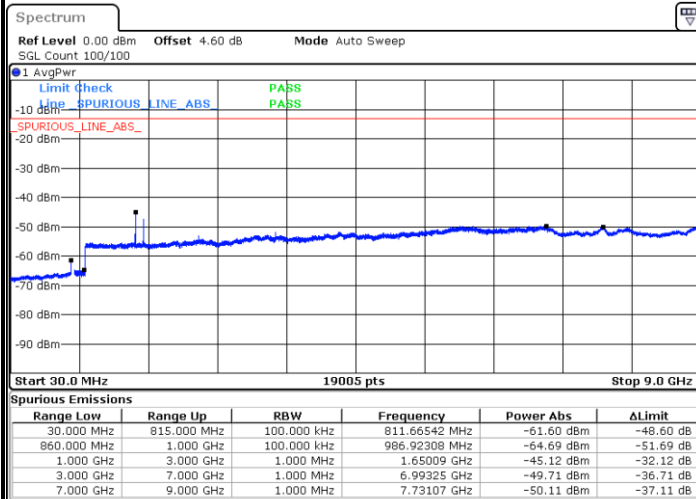
Date: 24.JUN.2020 11:26:02



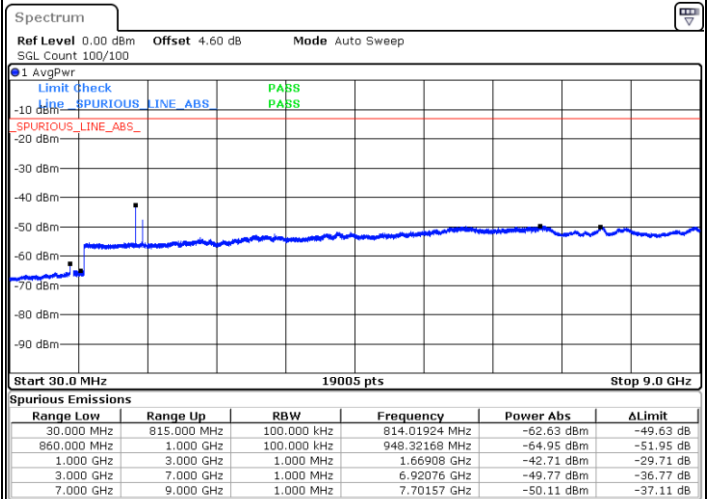
Conducted Spurious Emission

FR1 n5 / 5MHz / DFT-S OFDM / QPSK

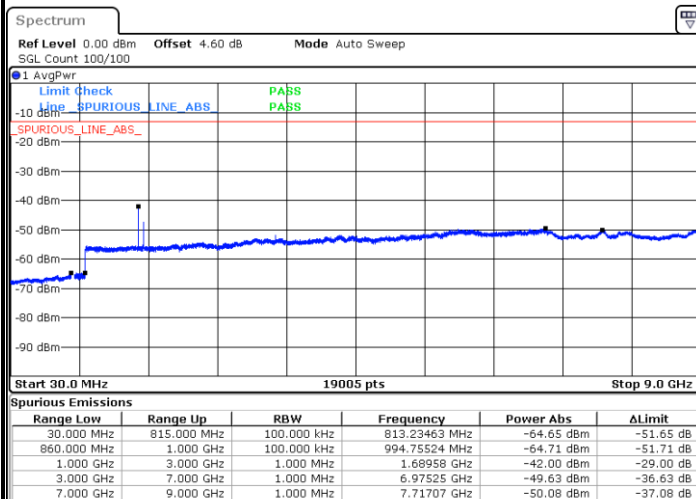
Lowest Channel / 1RB1



Middle Channel / 1RB1



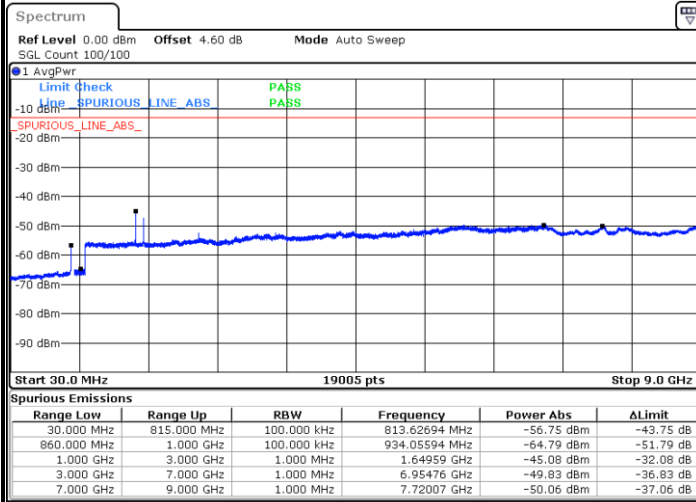
Highest Channel / 1RB1





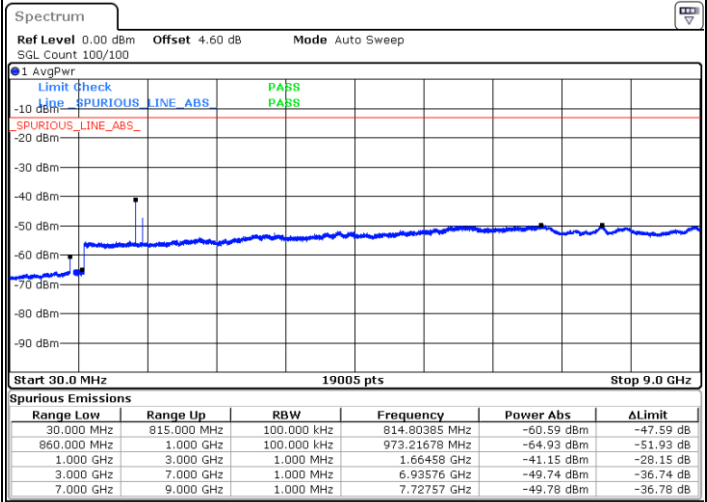
FR1 n5 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



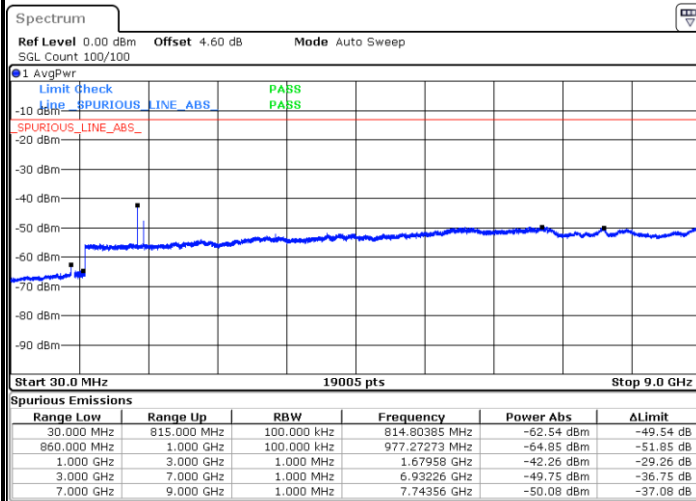
Date: 26.JUN.2020 10:34:15

Middle Channel / 1RB1



Date: 26.JUN.2020 11:19:55

Highest Channel / 1RB1

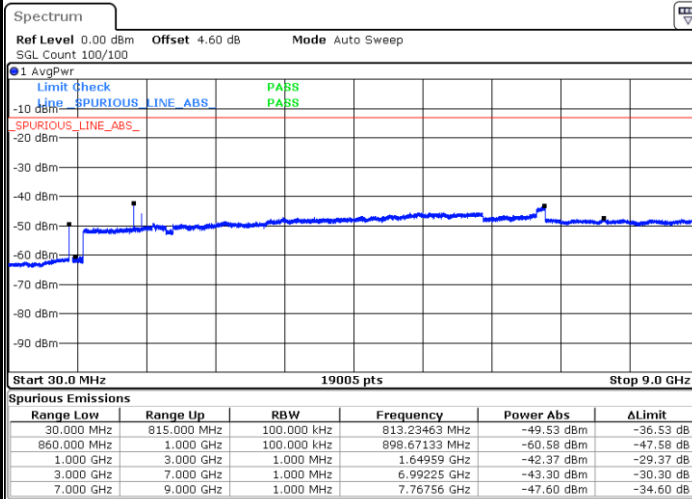


Date: 26.JUN.2020 11:26:36



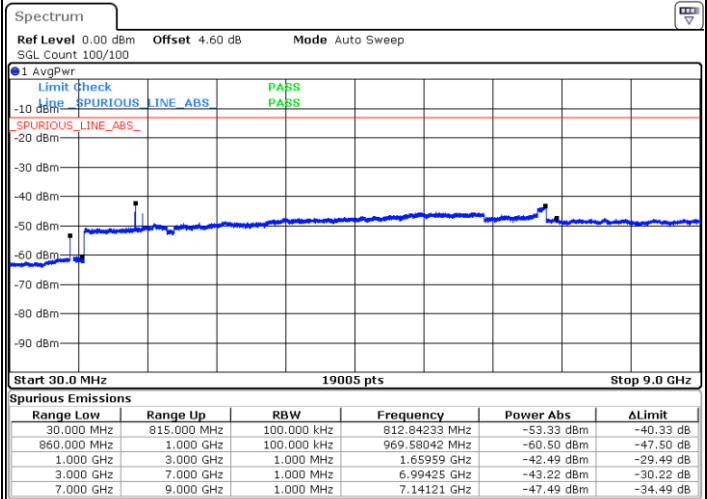
FR1 n5 / 15MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



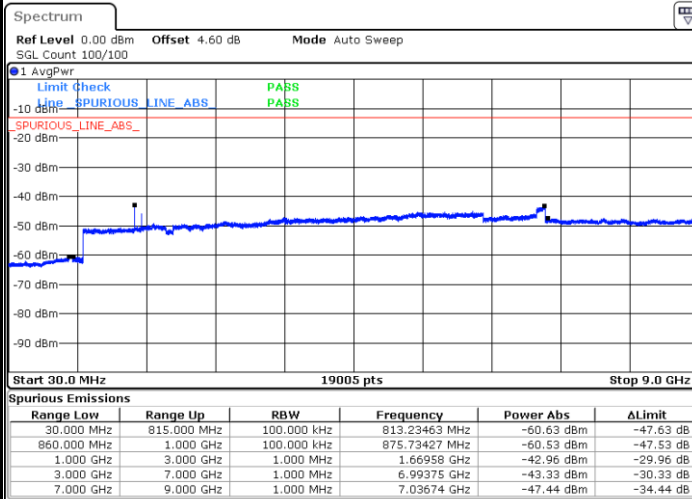
Date: 24.JUN.2020 14:31:23

Middle Channel / 1RB1



Date: 24.JUN.2020 14:37:25

Highest Channel / 1RB1

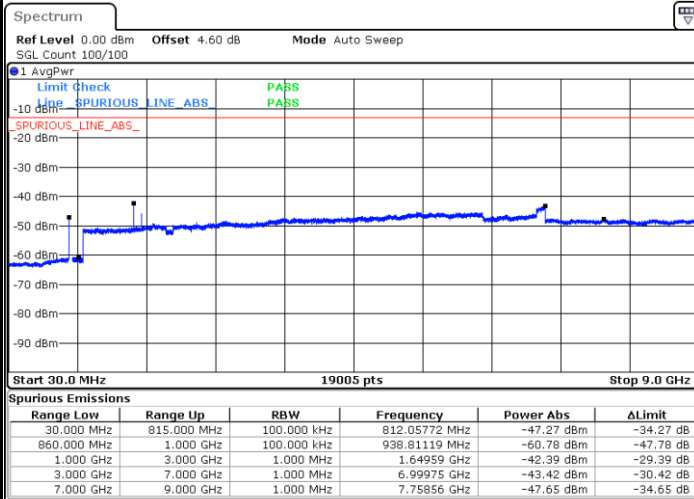


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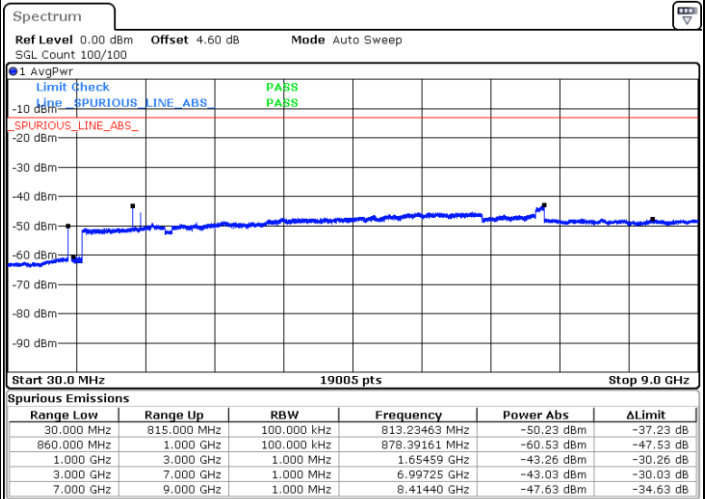
FR1 n5 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



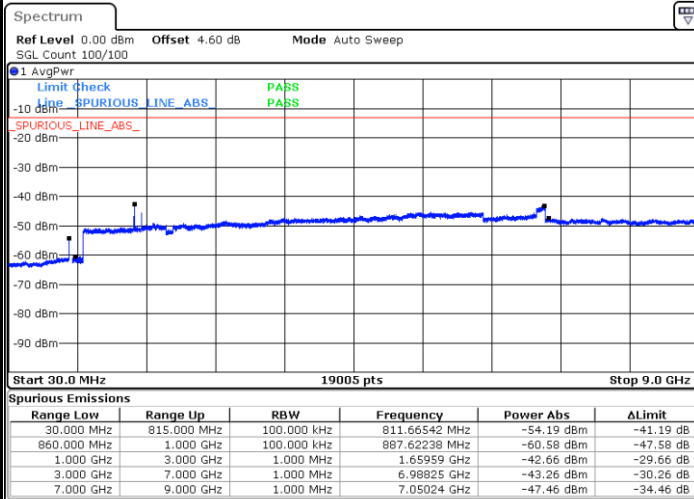
Date: 24.JUN.2020 10:46:06

Middle Channel / 1RB1



Date: 24.JUN.2020 10:52:45

Highest Channel / 1RB1



Date: 24.JUN.2020 10:54:40

Frequency Stability

Test Conditions		FR1 n5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0018	PASS
40	Normal Voltage	0.0014	
30	Normal Voltage	0.0027	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0033	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0059	
20	Normal Voltage	0.0073	
20	Battery End Point	0.0007	

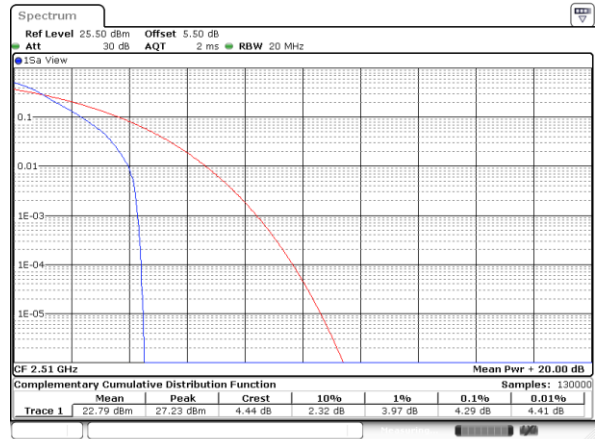
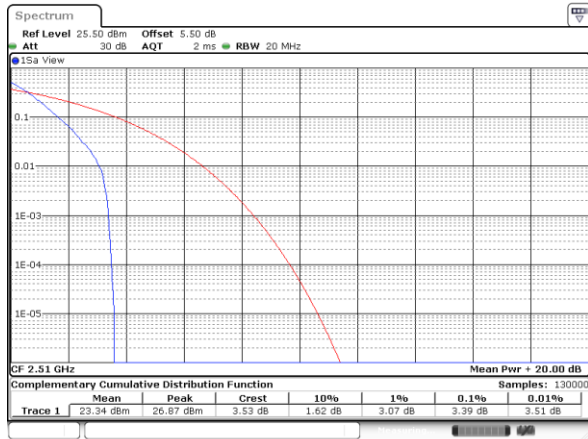
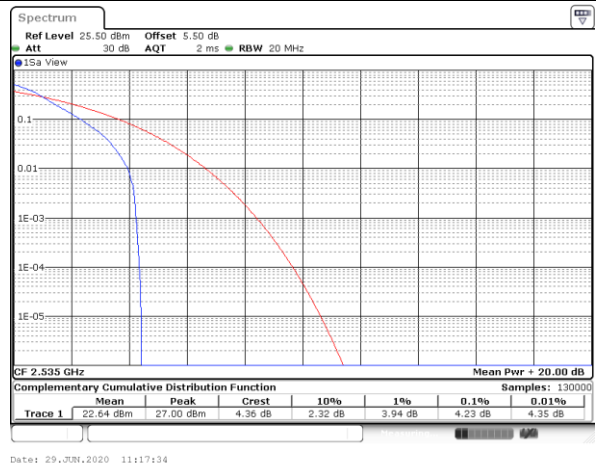
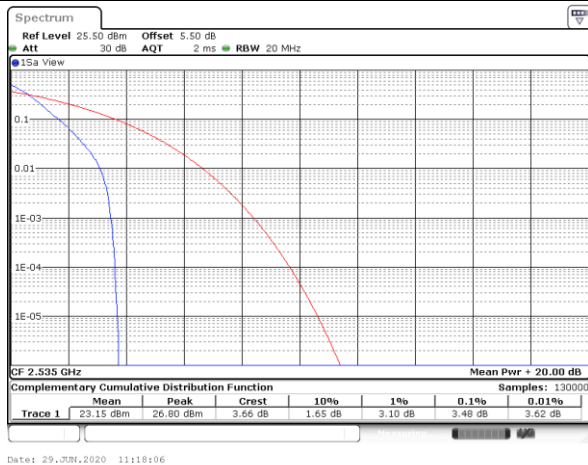
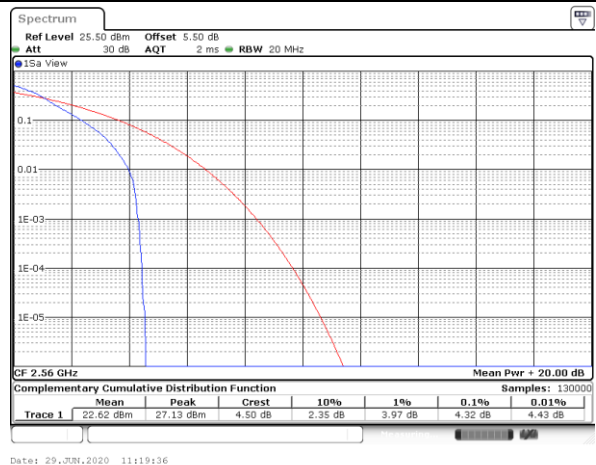
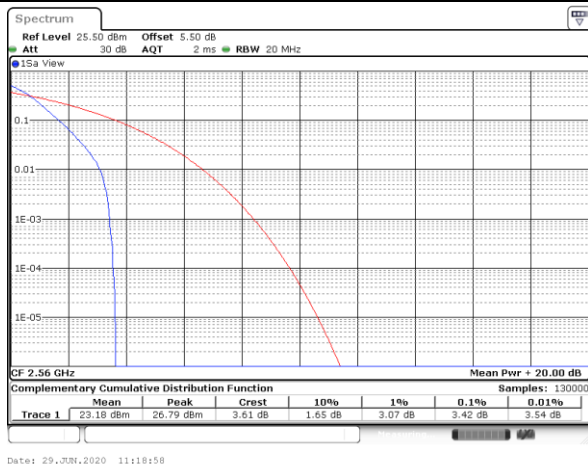
Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.49 V. ; Maximum Voltage =4.45 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

FR1 n7

Peak-to-Average Ratio

Mode	FR1 n7 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Lowest CH	3.39	4.29	5.48	5.88	PASS
Middle CH	3.48	4.23	5.45	5.86	
Highest CH	3.42	4.32	5.45	5.83	
Mode	FR1 n7 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Lowest CH	6.58				PASS
Middle CH	6.58				
Highest CH	6.55				

FR1 n7 / 20MHz / DFT-S OFDM
PI/2 BPSK
QPSK
Lowest Channel / Full RB
Lowest Channel / Full RB

Middle Channel / Full RB
Middle Channel / Full RB

Highest Channel / Full RB
Highest Channel / Full RB


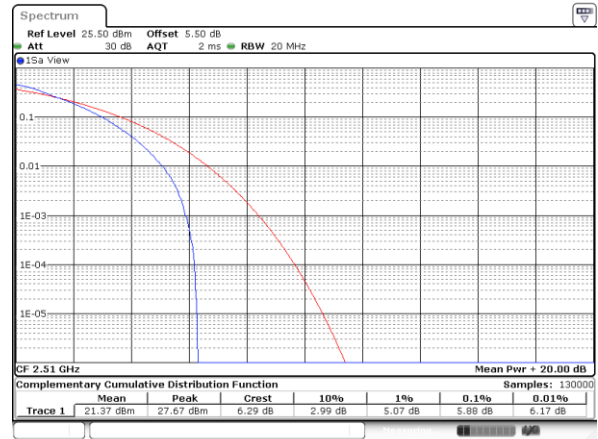
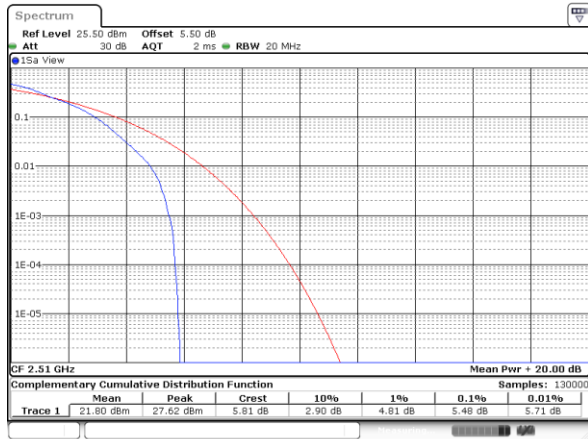
FR1 n7 / 20MHz / DFT-S OFDM

16QAM

64QAM

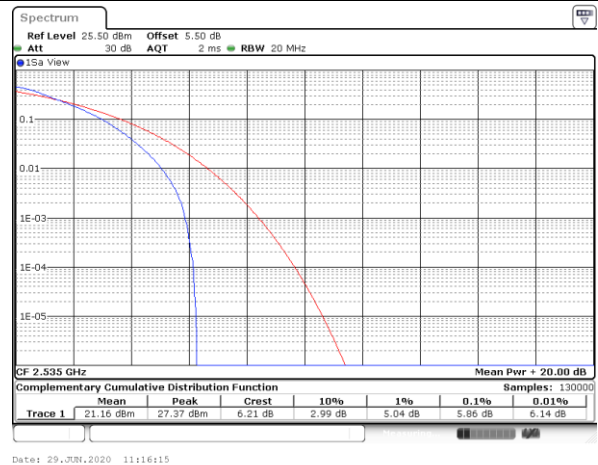
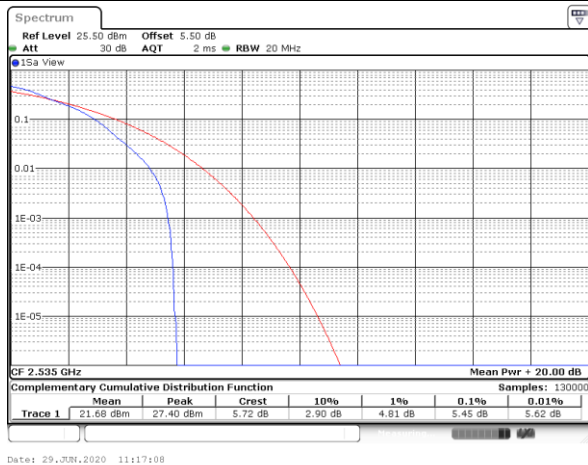
Lowest Channel / Full RB

Lowest Channel / Full RB



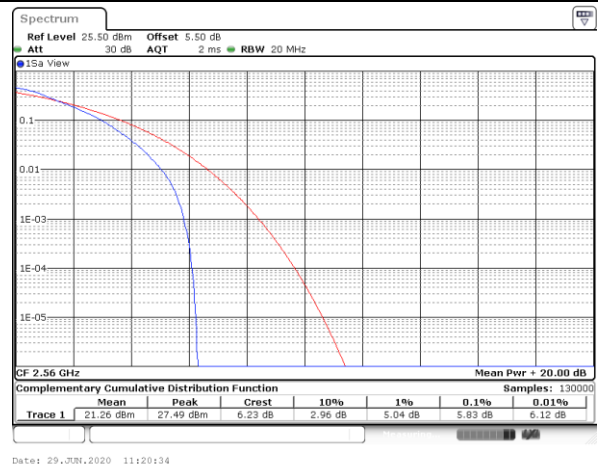
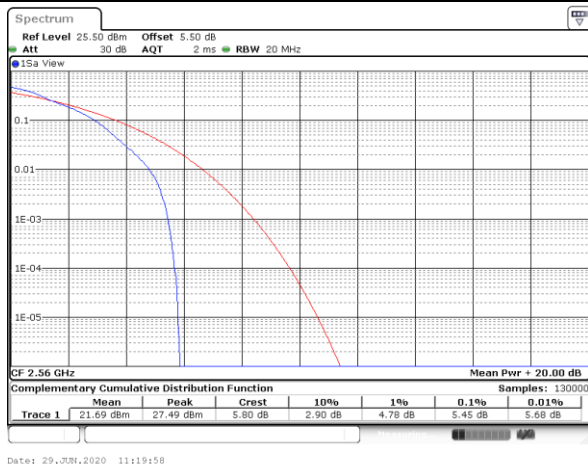
Middle Channel / Full RB

Middle Channel / Full RB



Highest Channel / Full RB

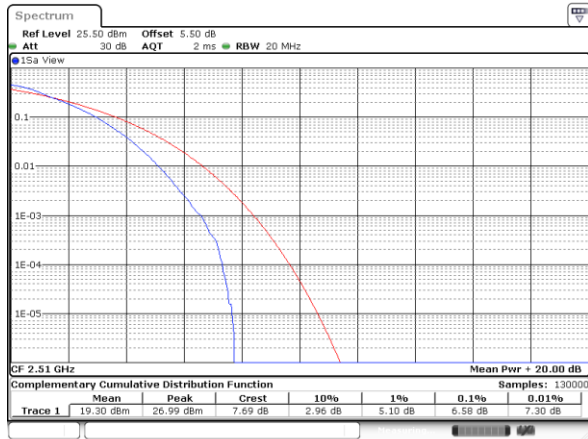
Highest Channel / Full RB



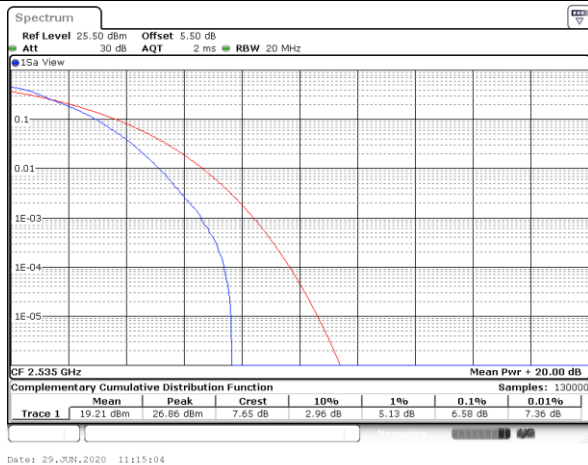
FR1 n7 / 20MHz / DFT-S OFDM

256QAM

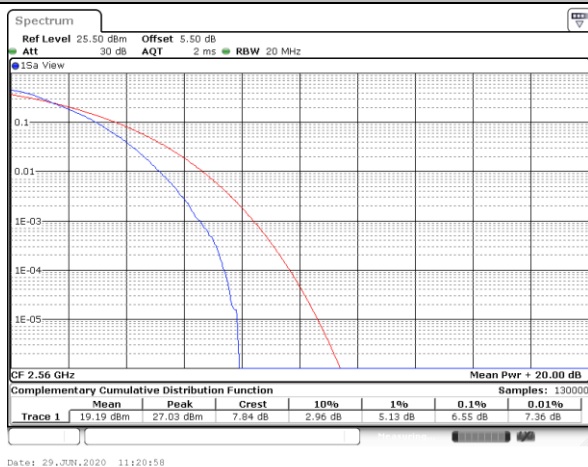
Lowest Channel / Full RB



Middle Channel / Full RB



Highest Channel / Full RB

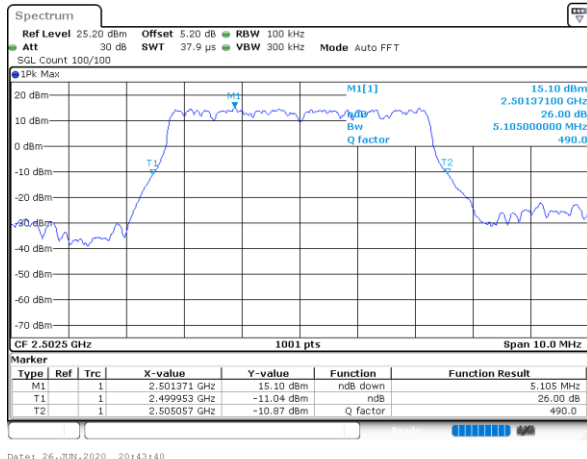
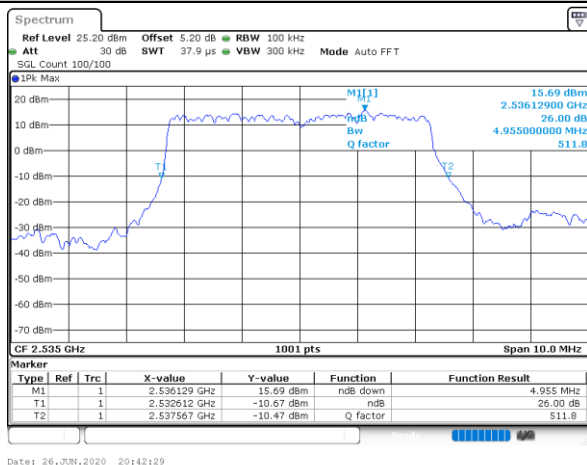
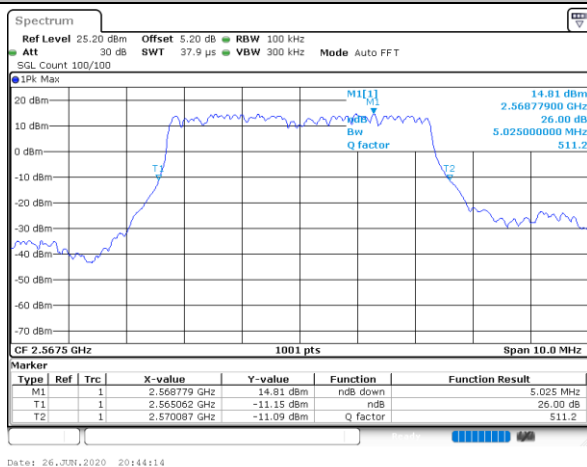


**26dB Bandwidth**

Mode	FR1 n7 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Lowest CH	5.11		9.39		14.18		18.66	
Middle CH	4.96		9.39		14.36		18.78	
Highest CH	5.03		9.47		14.36		18.66	

Mode	FR1 n7 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	5.10	4.98	10.09	10.03	14.81	14.84	19.78	20.14
Middle CH	5.17	5.23	10.03	10.11	14.93	14.81	19.82	19.86
Highest CH	5.00	4.95	10.07	9.79	14.81	15.08	19.74	19.94

Mode	FR1 n7 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Lowest CH	5.27	5.15	9.91	9.63	14.87	14.81	19.70	19.66
Middle CH	5.11	4.88	9.97	9.93	14.81	14.90	19.94	19.86
Highest CH	5.03	5.01	9.87	9.79	14.87	14.84	19.70	19.90

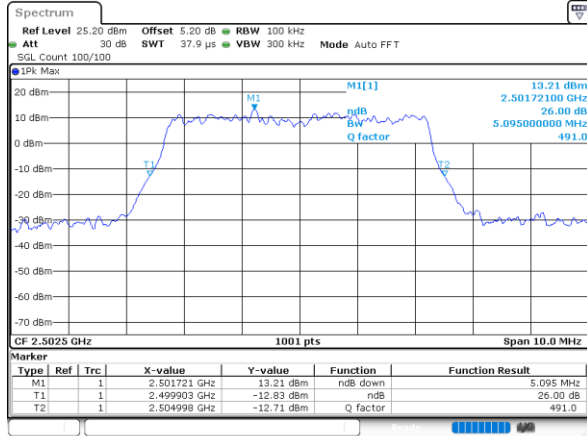
**FR1 n7 / 5MHz / DFT-S OFDM****PI/2 BPSK****Lowest Channel****Middle Channel****Highest Channel**



FR1 n7 / 5MHz / CP OFDM

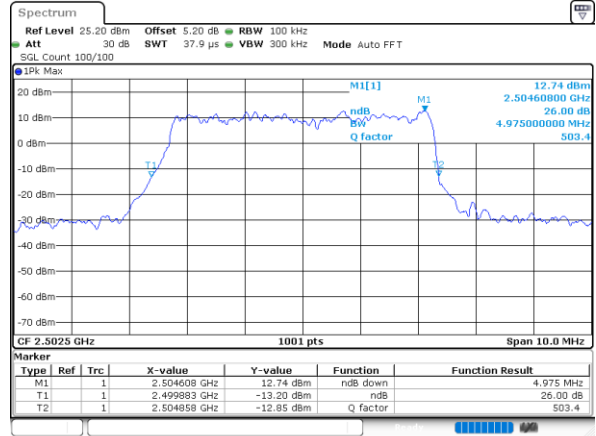
QPSK

Lowest Channel

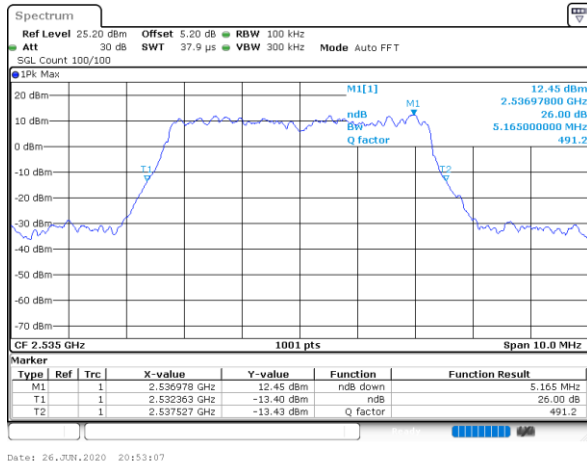


16QAM

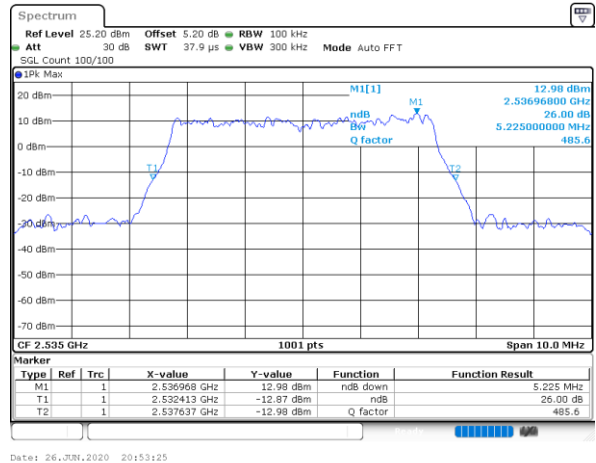
Lowest Channel



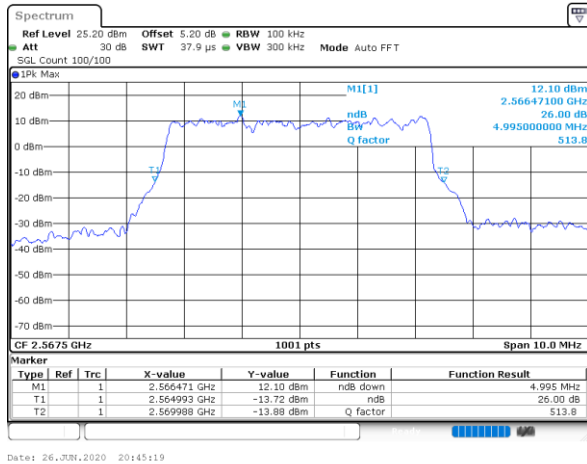
Middle Channel



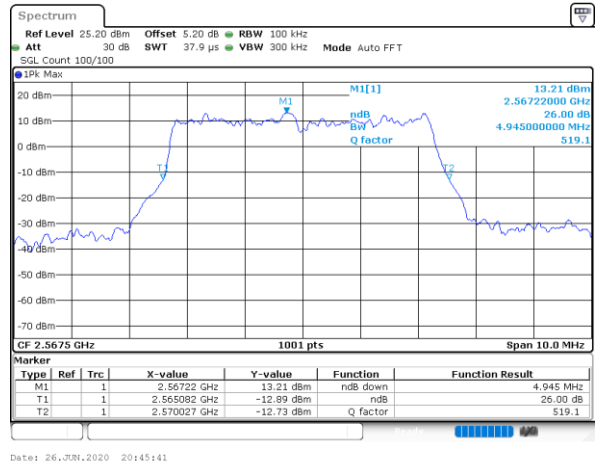
Middle Channel



Highest Channel



Highest Channel

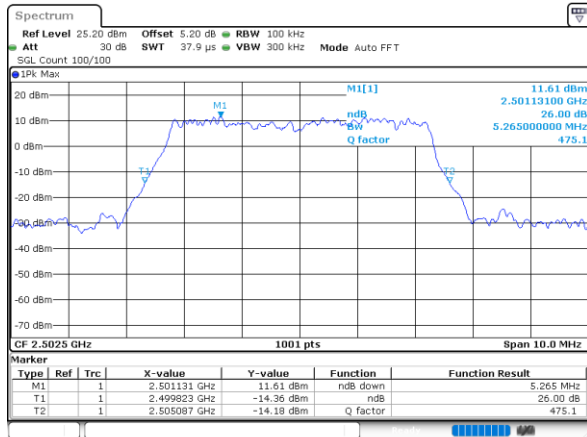




FR1 n7 / 5MHz / CP OFDM

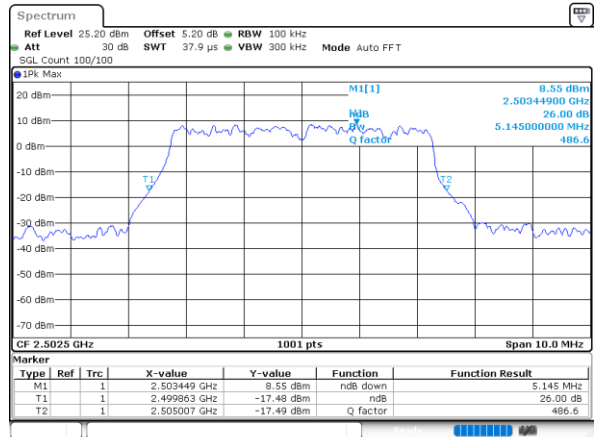
64QAM

Lowest Channel

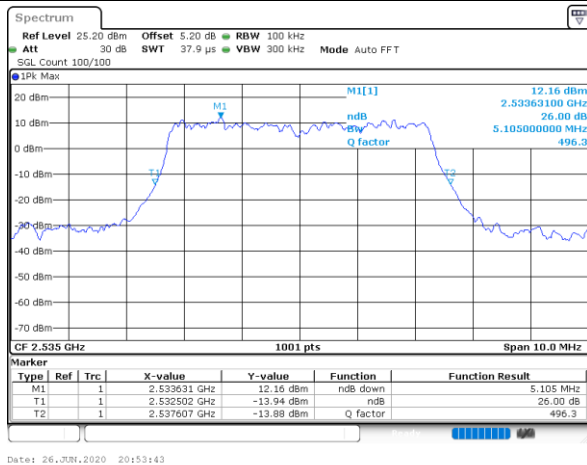


256QAM

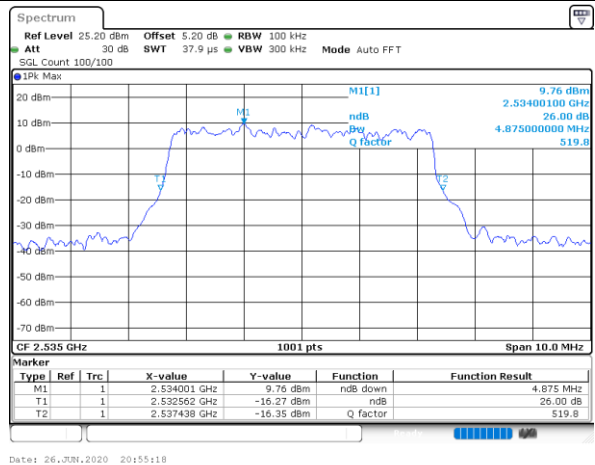
Lowest Channel



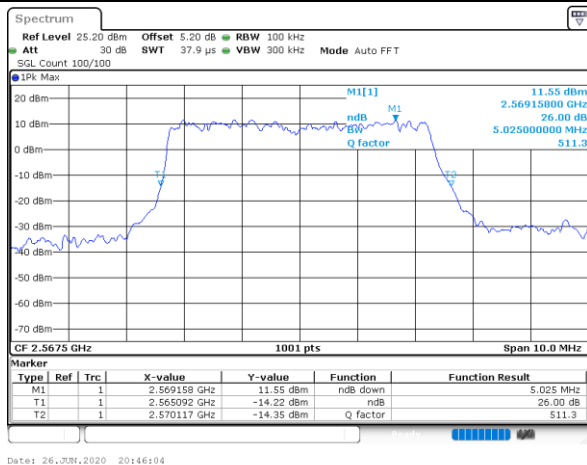
Middle Channel



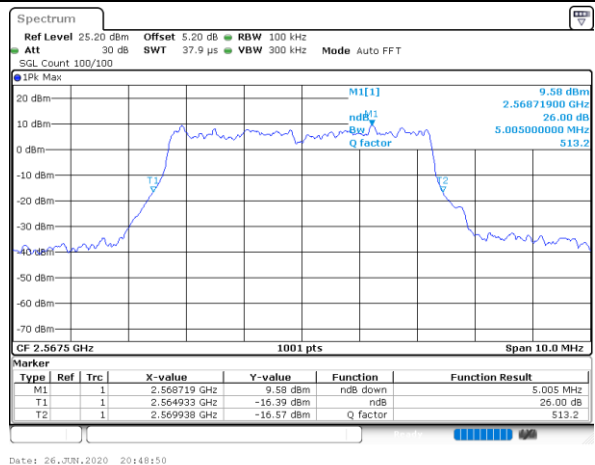
Middle Channel



Highest Channel



Highest Channel

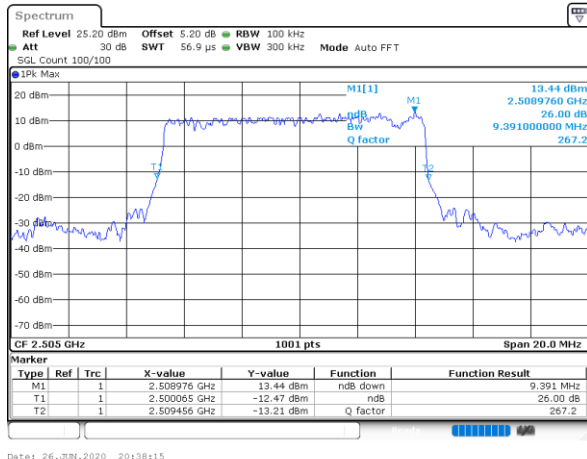




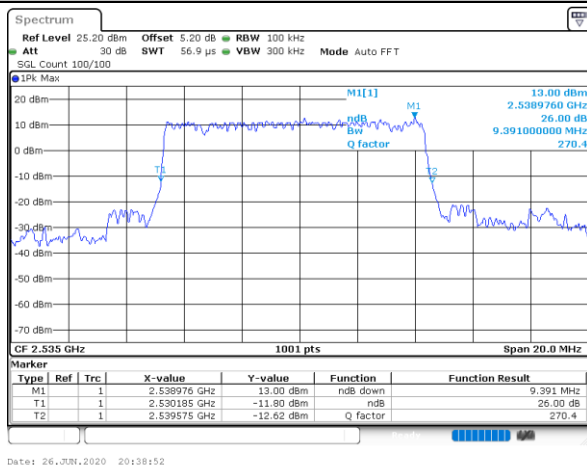
FR1 n7 / 10MHz / DFT-S OFDM

PI/2 BPSK

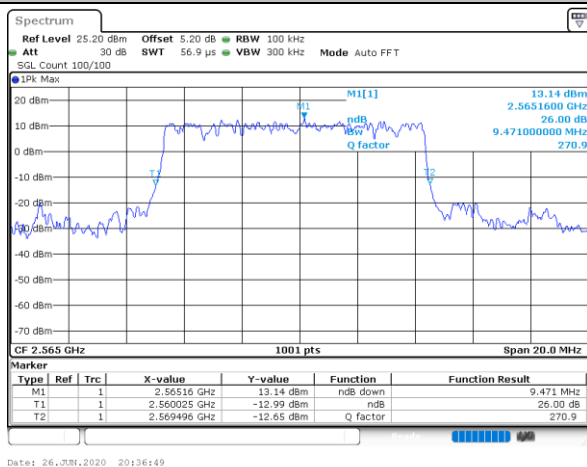
Lowest Channel



Middle Channel



Highest Channel

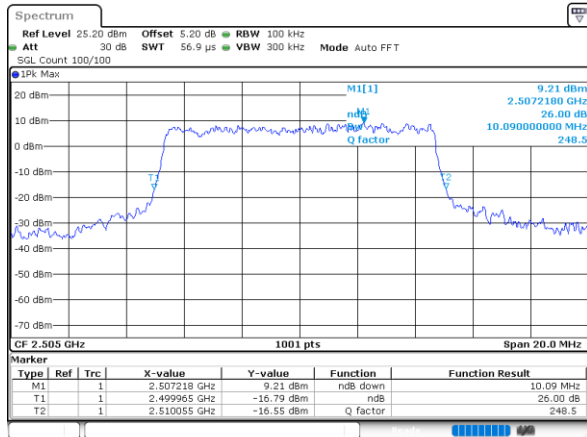




FR1 n7 / 10MHz / CP OFDM

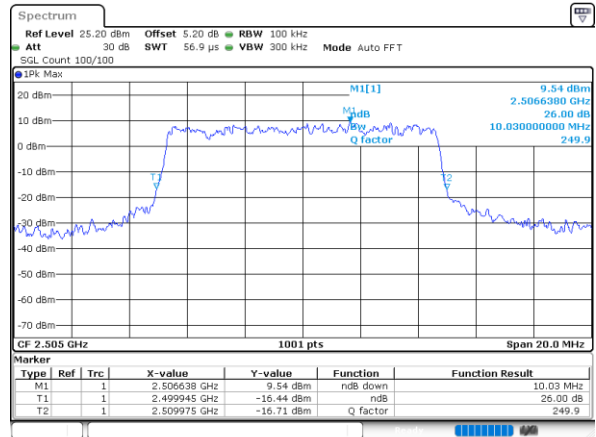
QPSK

Lowest Channel

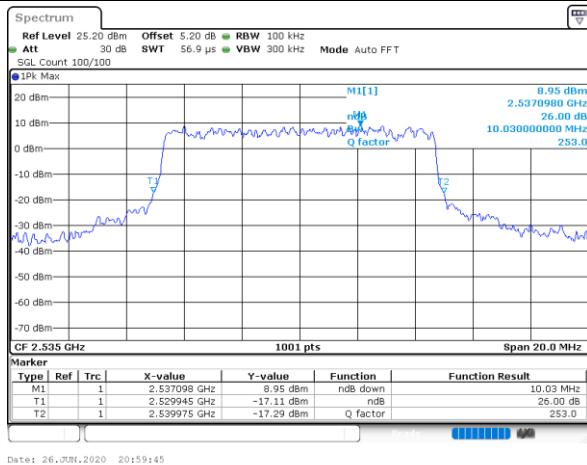


16QAM

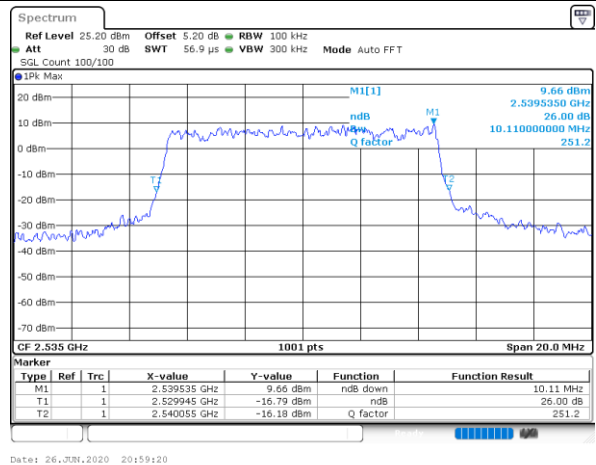
Lowest Channel



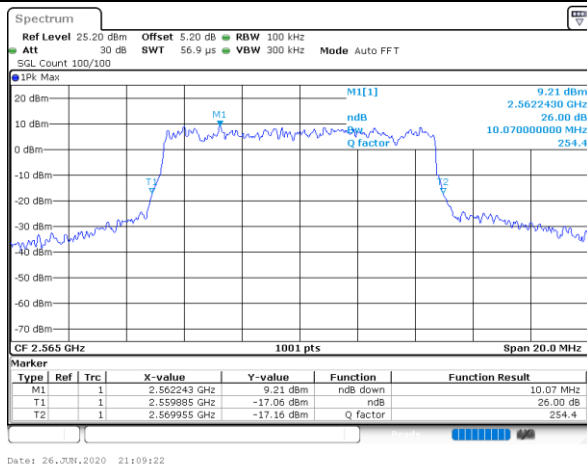
Middle Channel



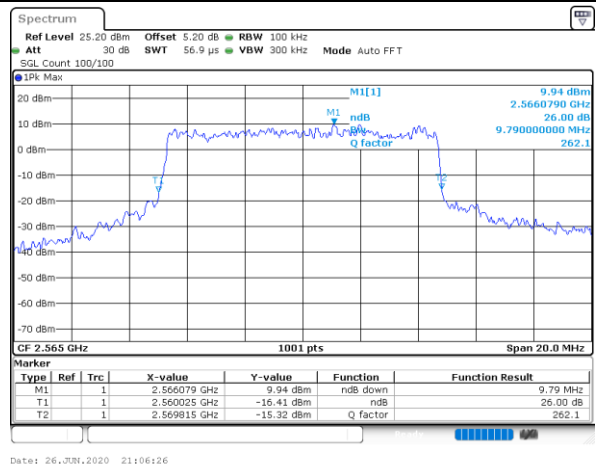
Middle Channel



Highest Channel



Highest Channel

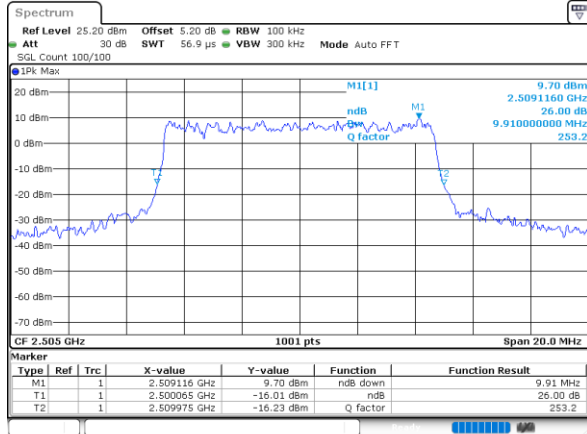




FR1 n7 / 10MHz / CP OFDM

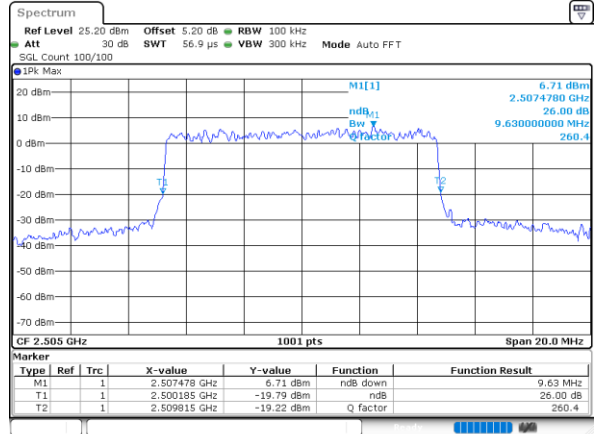
64QAM

Lowest Channel

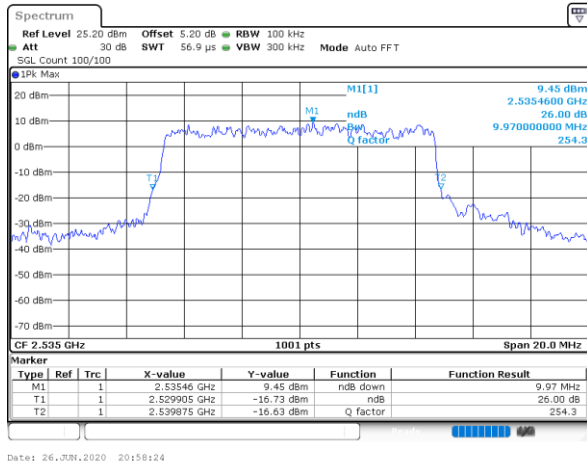


256QAM

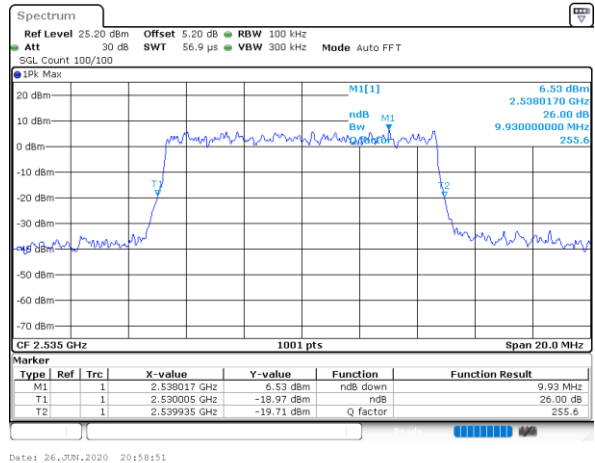
Lowest Channel



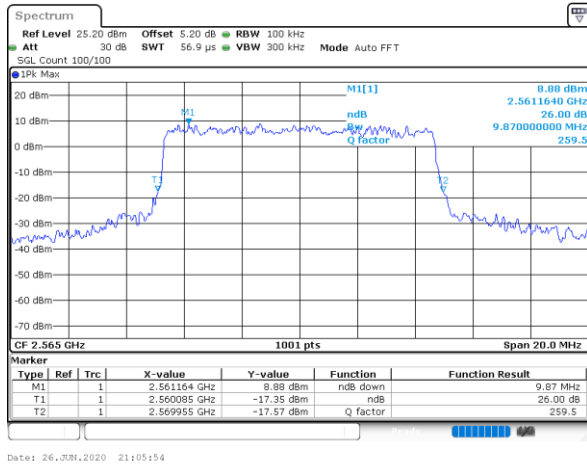
Middle Channel



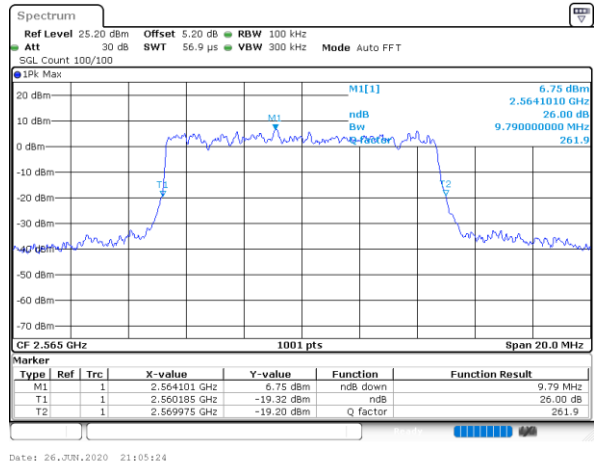
Middle Channel



Highest Channel



Highest Channel

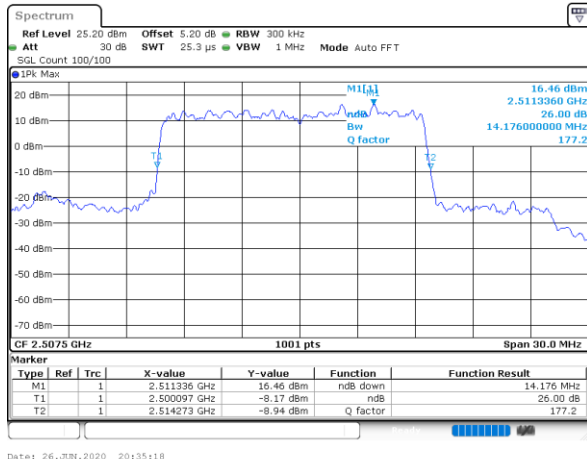




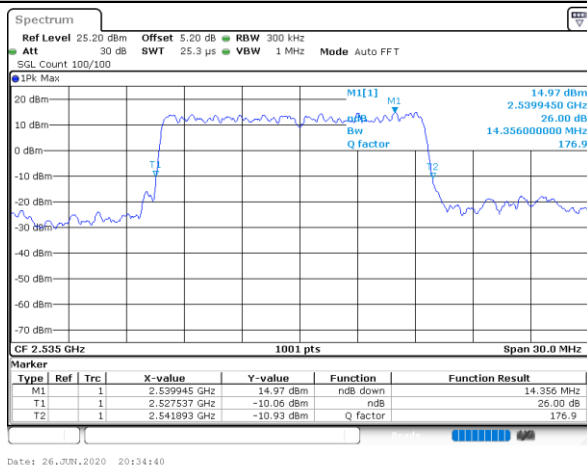
FR1 n7 / 15MHz / DFT-S OFDM

PI/2 BPSK

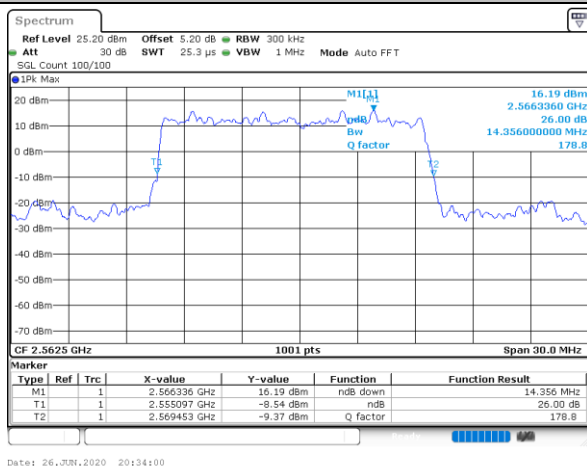
Lowest Channel



Middle Channel



Highest Channel

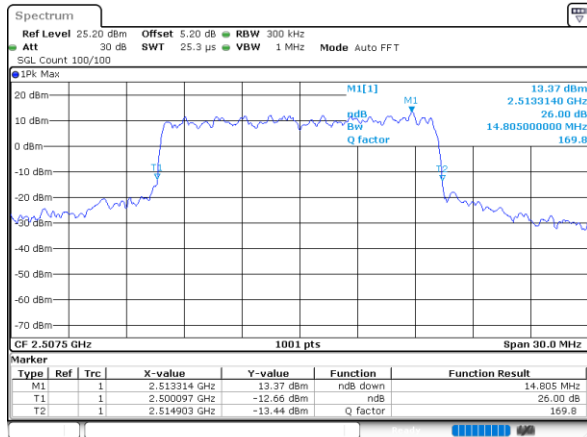




FR1 n7 / 15MHz / CP OFDM

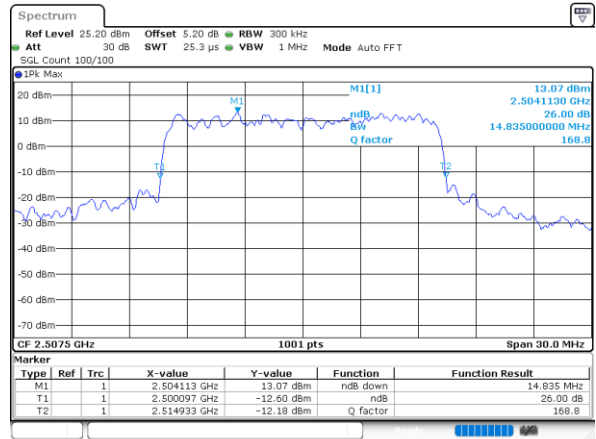
QPSK

Lowest Channel

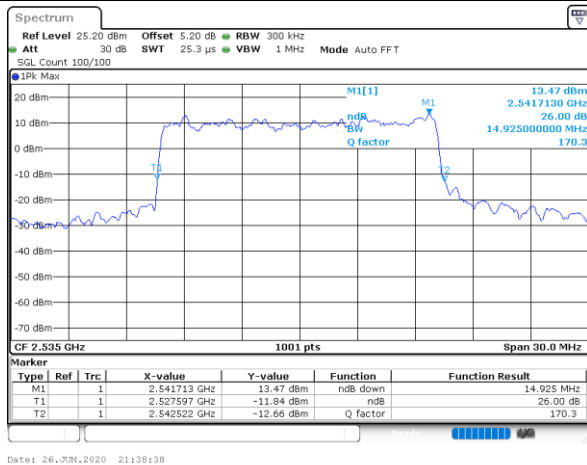


16QAM

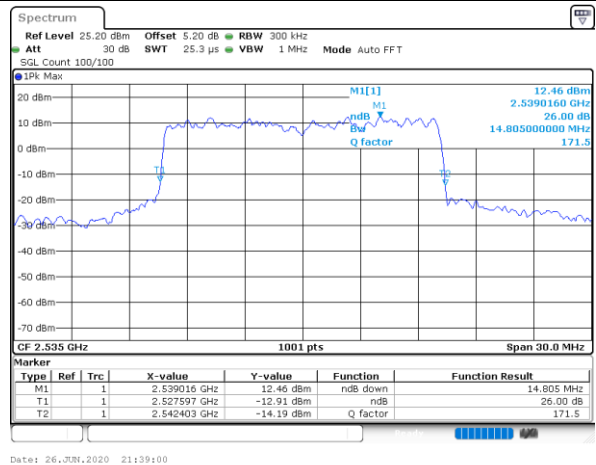
Lowest Channel



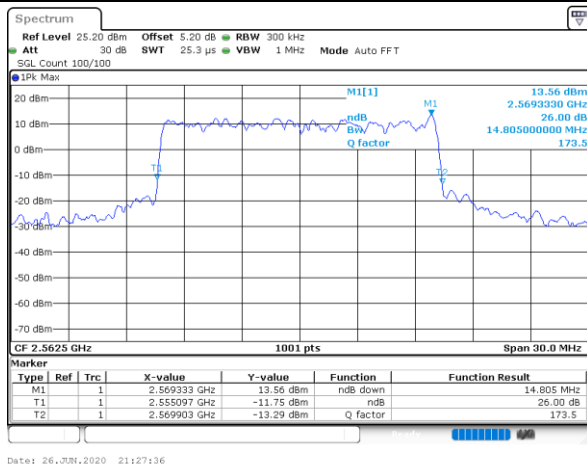
Middle Channel



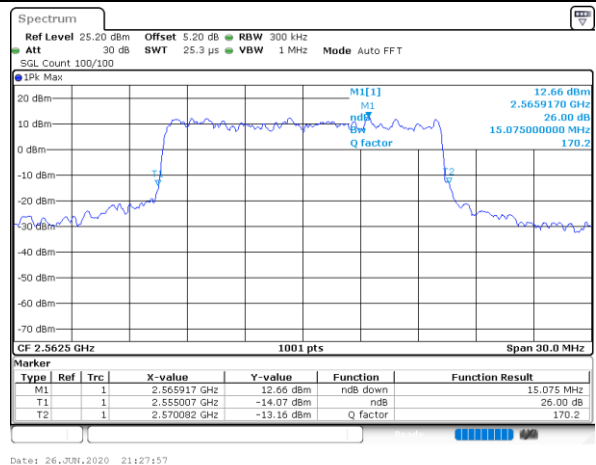
Middle Channel



Highest Channel



Highest Channel

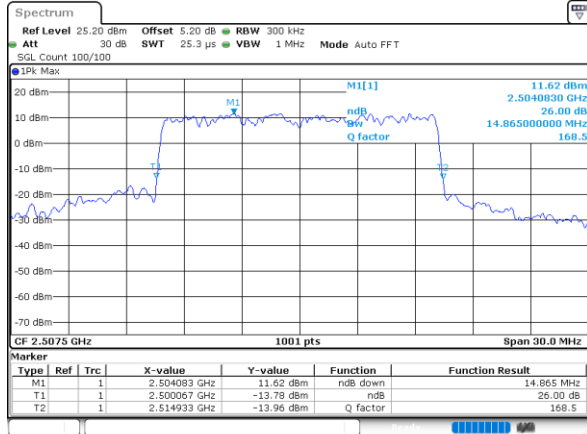




FR1 n7 / 15MHz / CP OFDM

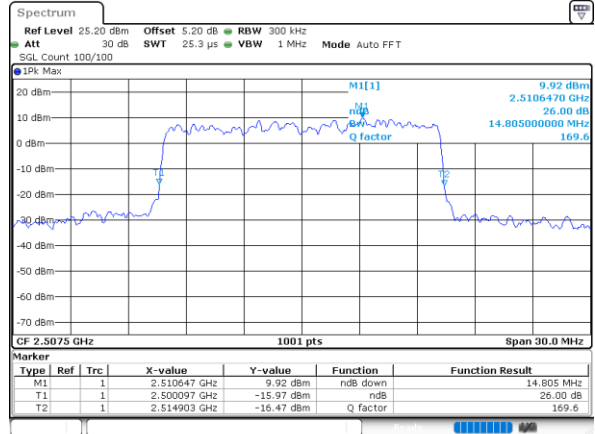
64QAM

Lowest Channel

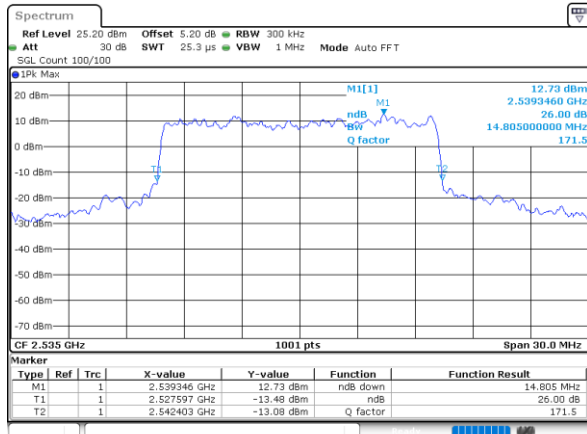


256QAM

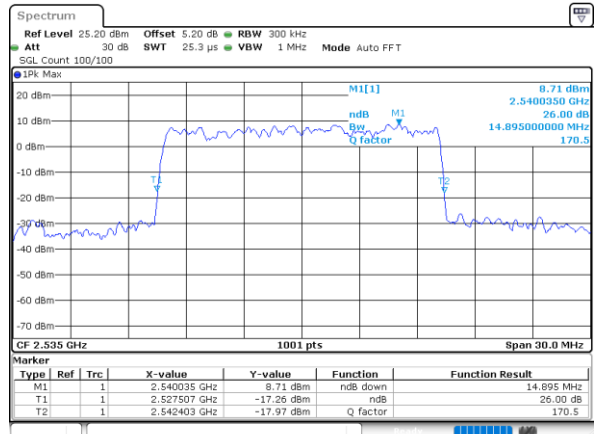
Lowest Channel



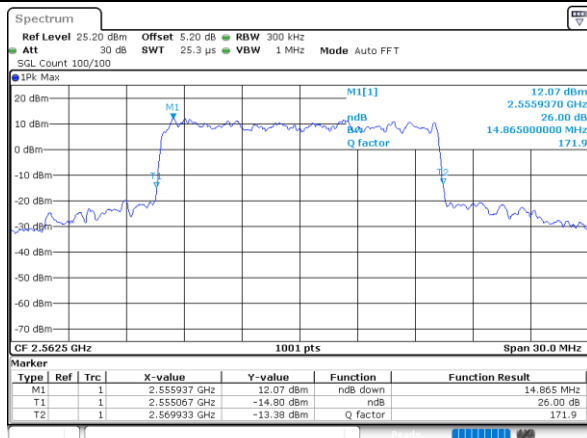
Middle Channel



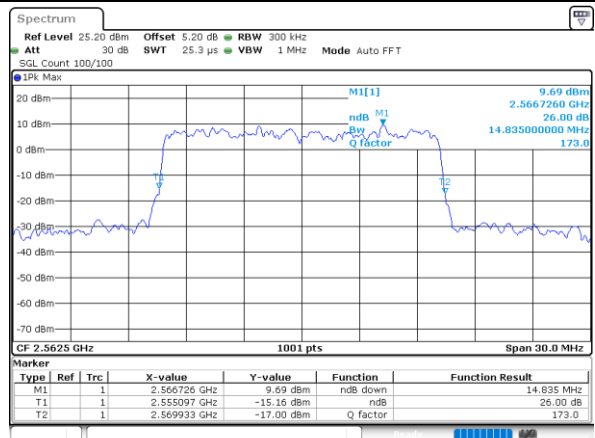
Middle Channel



Highest Channel



Highest Channel

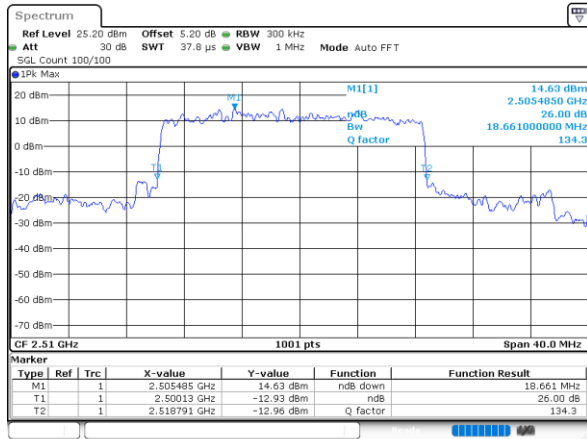




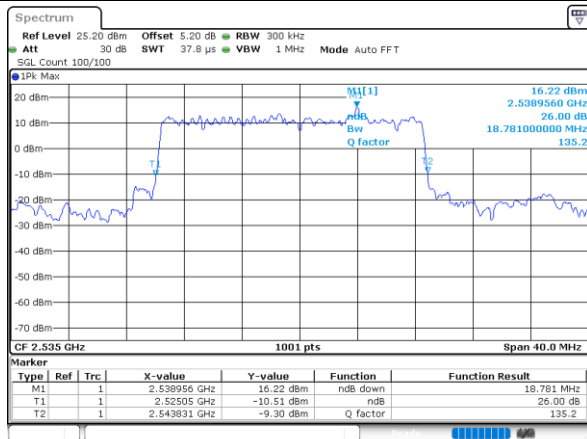
FR1 n7 / 20MHz / DFT-S OFDM

PI/2 BPSK

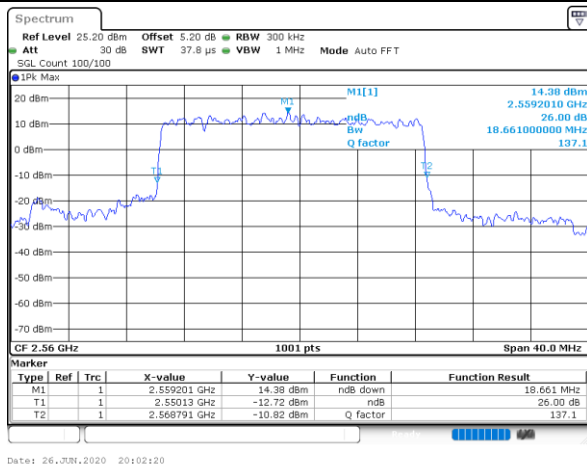
Lowest Channel



Middle Channel



Highest Channel

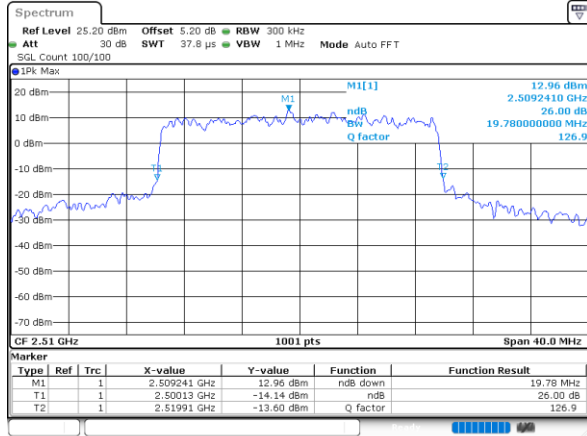




FR1 n7 / 20MHz / CP OFDM

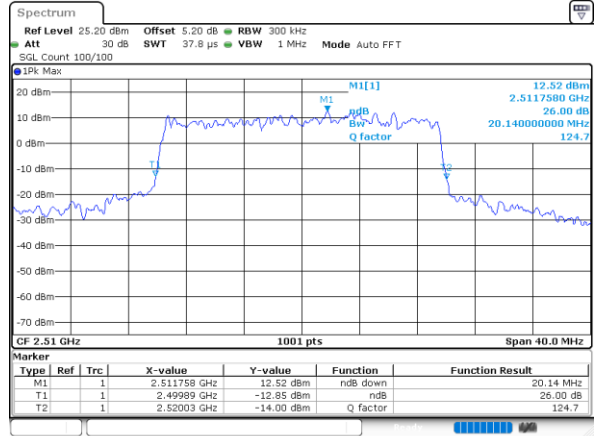
QPSK

Lowest Channel

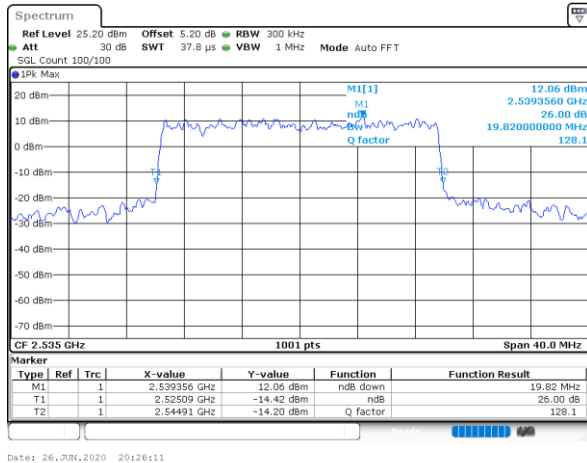


16QAM

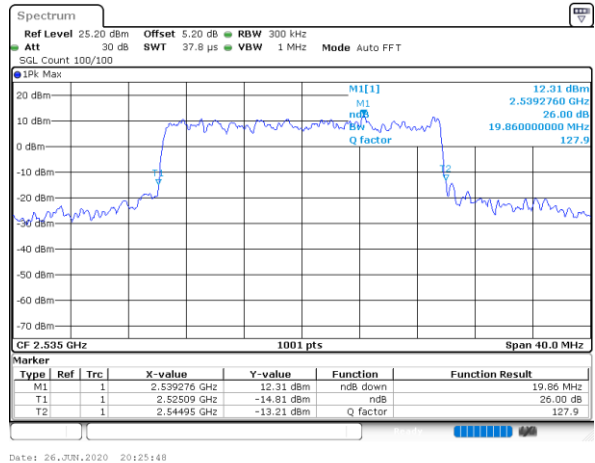
Lowest Channel



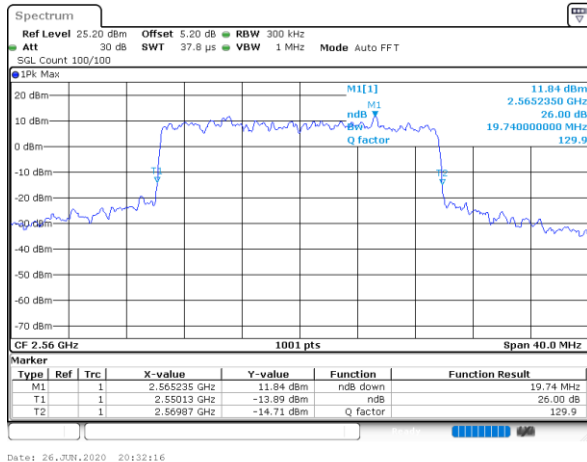
Middle Channel



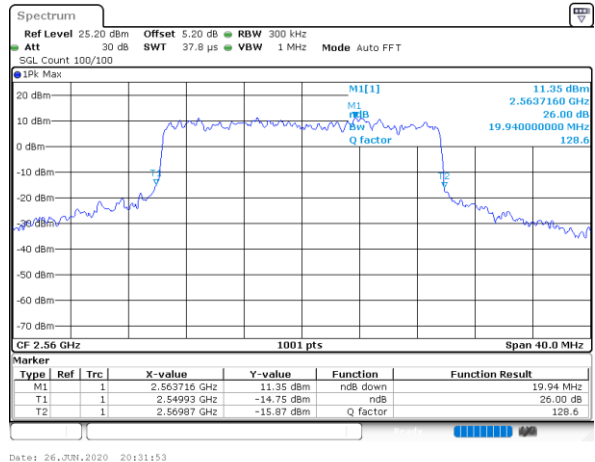
Middle Channel



Highest Channel



Highest Channel

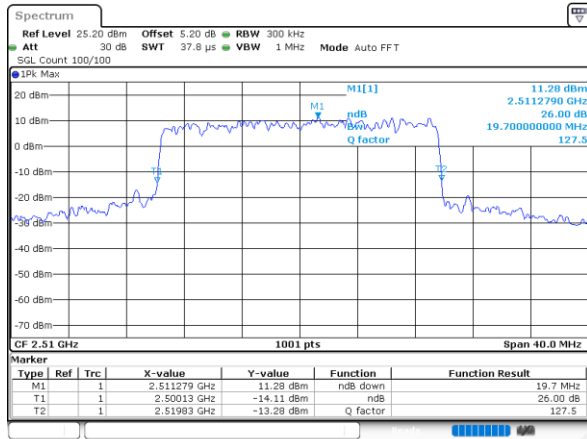




FR1 n7 / 20MHz / CP OFDM

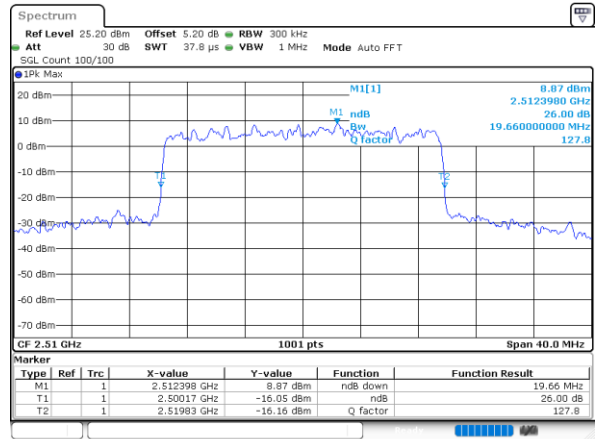
64QAM

Lowest Channel

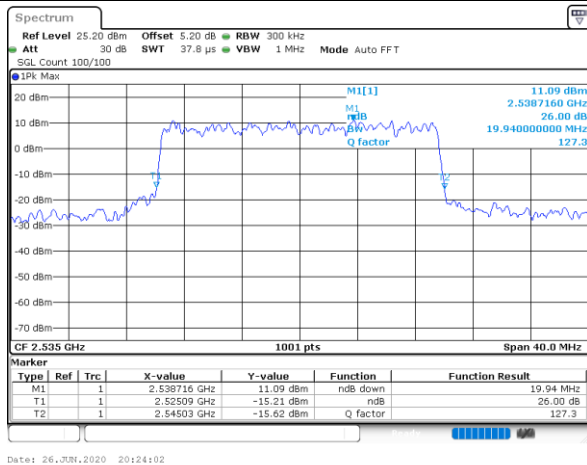


256QAM

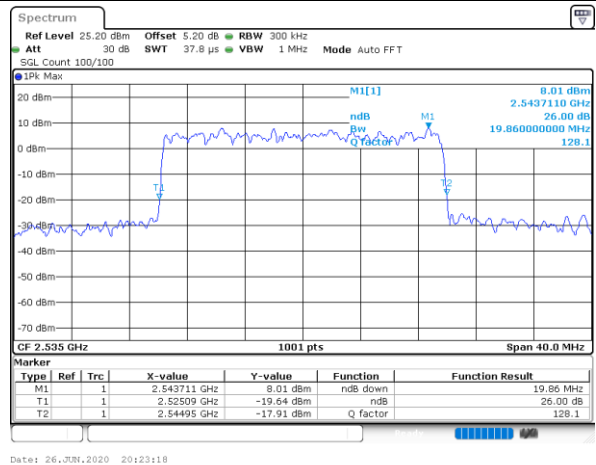
Lowest Channel



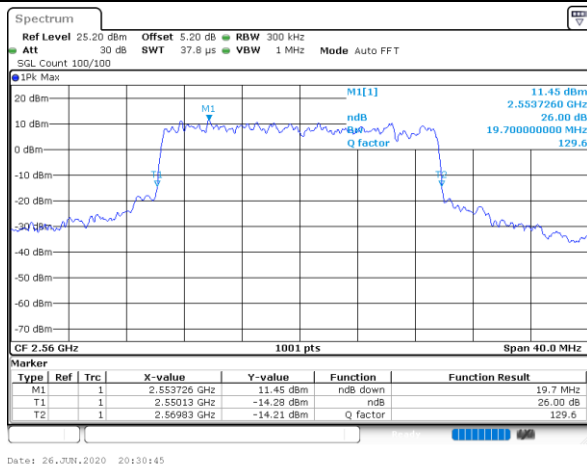
Middle Channel



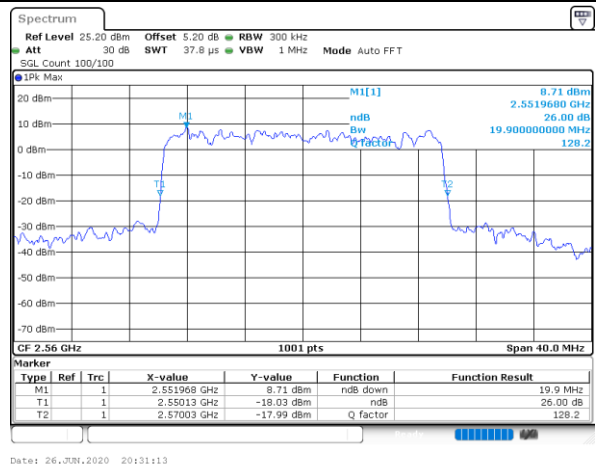
Middle Channel



Highest Channel



Highest Channel



**Occupied Bandwidth**

Mode	FR1 n7 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Lowest CH	4.45		8.85		13.52		17.90	
Middle CH	4.50		8.89		13.55		17.90	
Highest CH	4.48		8.89		13.52		17.90	

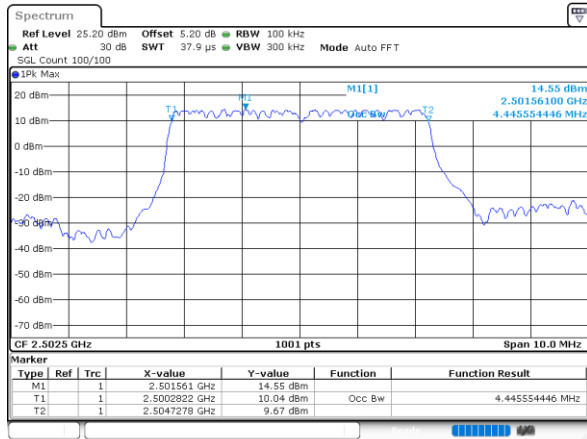
Mode	FR1 n7 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	4.52	4.49	9.27	9.27	14.12	14.09	18.86	18.94
Middle CH	4.55	4.48	9.29	9.27	14.15	14.12	19.02	19.02
Highest CH	4.50	4.50	9.29	9.27	14.09	14.18	18.90	18.90

Mode	FR1 n7 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Lowest CH	4.51	4.51	9.29	9.25	14.15	14.12	18.82	18.86
Middle CH	4.52	4.50	9.23	9.25	14.15	14.18	18.98	19.10
Highest CH	4.51	4.48	9.29	9.27	14.12	14.12	18.98	18.94

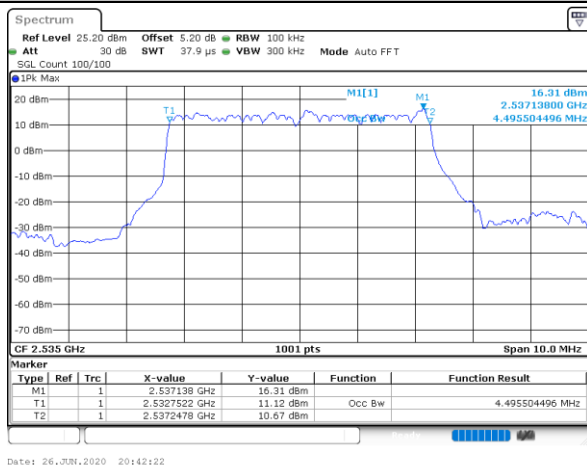
FR1 n7 / 5MHz / DFT-S OFDM

PI/2 BPSK

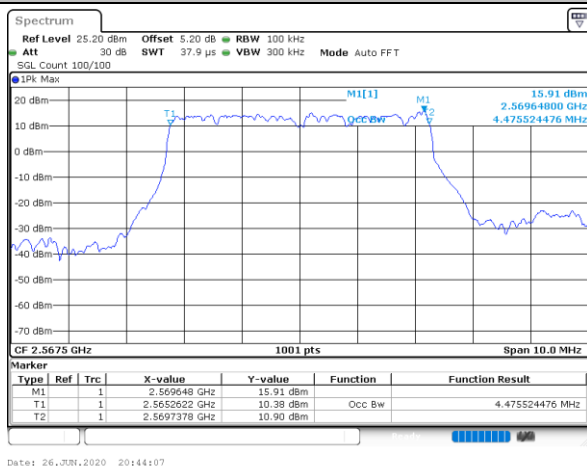
Lowest Channel



Middle Channel



Highest Channel

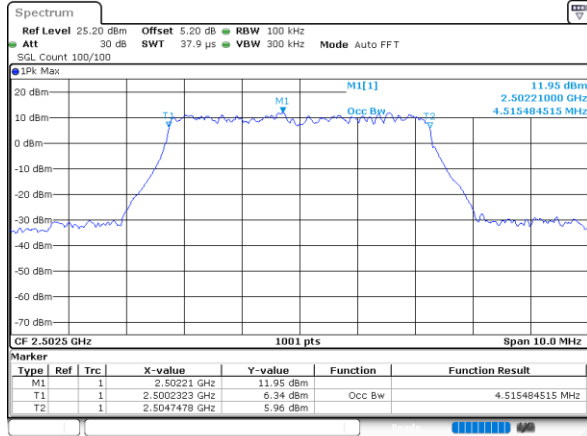




FR1 n7 / 5MHz / CP OFDM

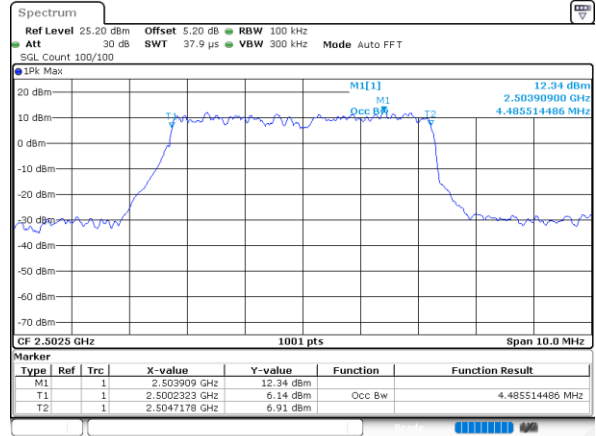
QPSK

Lowest Channel

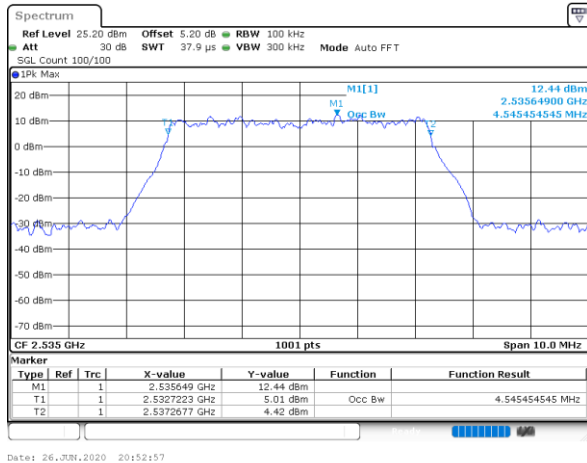


16QAM

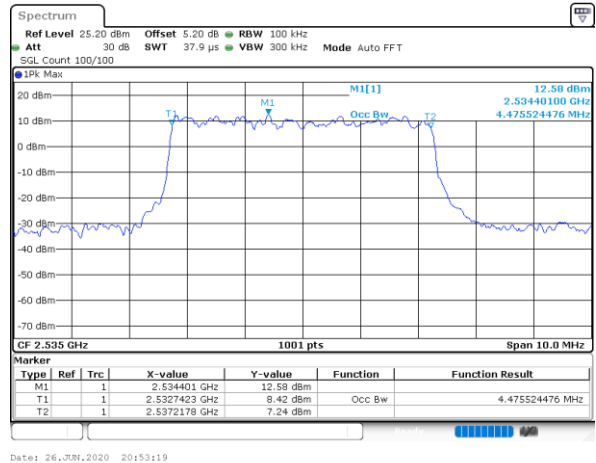
Lowest Channel



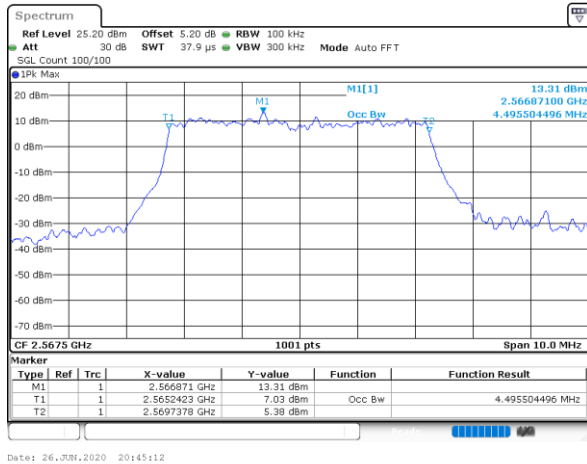
Middle Channel



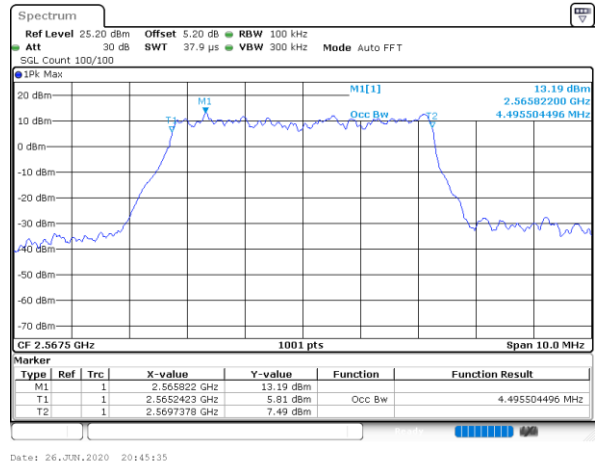
Middle Channel



Highest Channel



Highest Channel

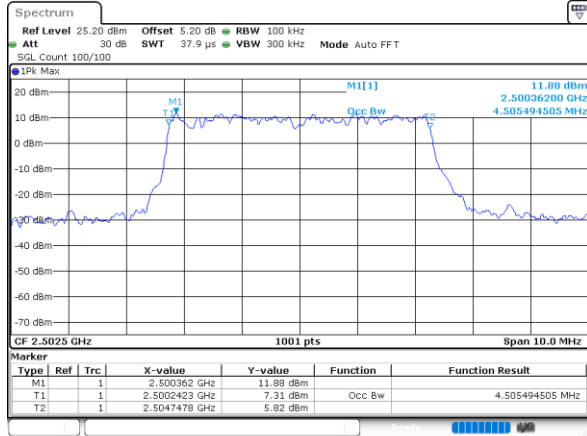




FR1 n7 / 5MHz / CP OFDM

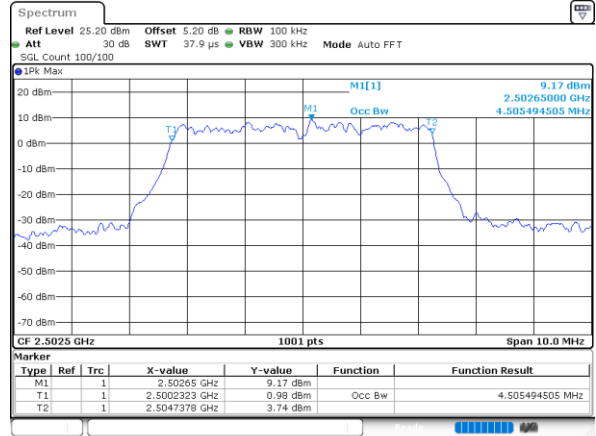
64QAM

Lowest Channel

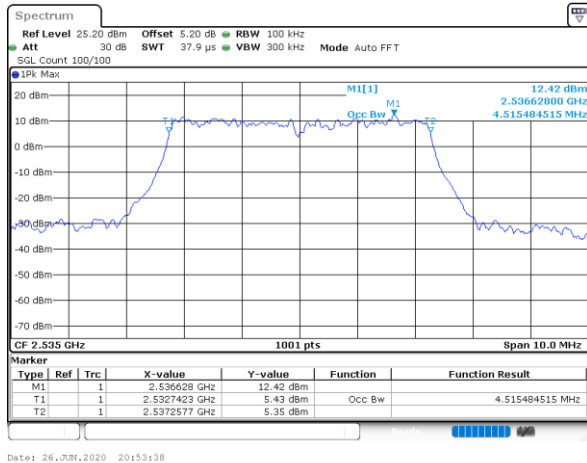


256QAM

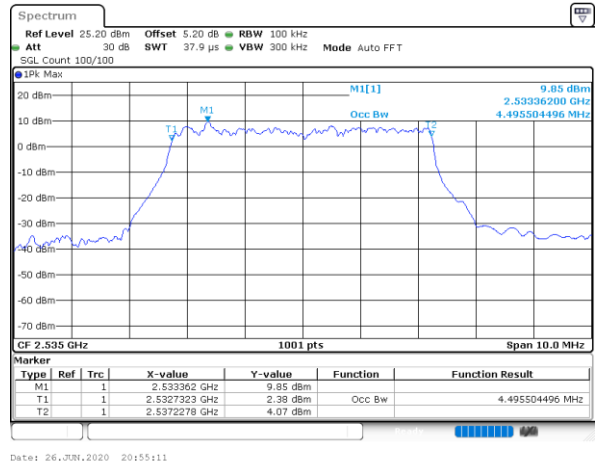
Lowest Channel



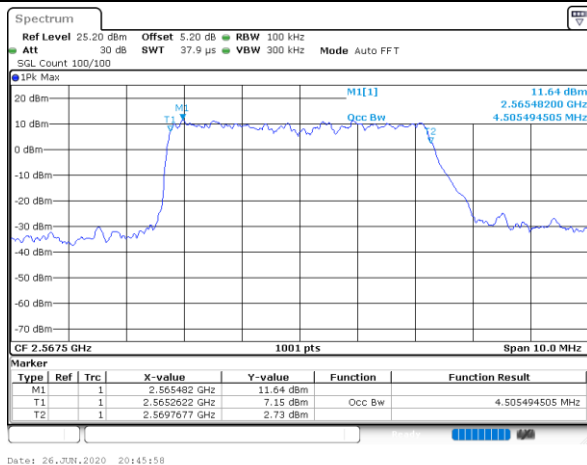
Middle Channel



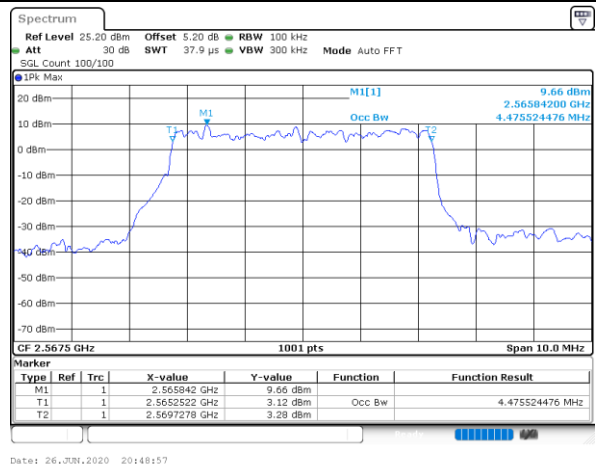
Middle Channel

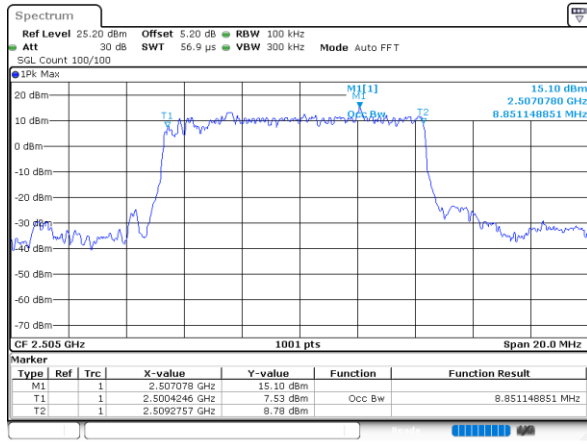
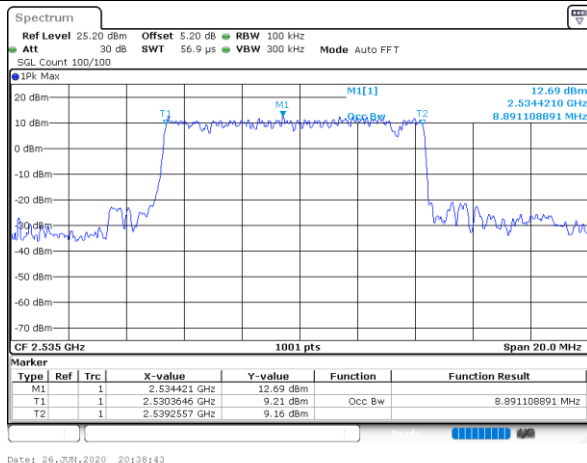


Highest Channel



Highest Channel



**FR1 n7 / 10MHz / DFT-S OFDM****PI/2 BPSK****Lowest Channel****Middle Channel****Highest Channel**