



LTE Band 12 (GT - LC = -3.90 dB) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	23017	23095	23173	23025	23095	23165	23035	23095	23155
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	699.7	707.5	715.3	700.5	707.5	714.5	701.5	707.5	713.5
(MHz)									
Conducted Power (dBm)	23.82	23.85	23.76	23.80	23.82	23.86	23.83	23.85	23.84
Conducted Power (Watts)	0.2410	0.2427	0.2377	0.2399	0.2410	0.2432	0.2415	0.2427	0.2421
ERP(dBm)	17.77	17.80	17.71	17.75	17.77	17.81	17.78	17.80	17.79
ERP(Watts)	0.0598	0.0603	0.0590	0.0596	0.0598	0.0604	0.0600	0.0603	0.0601

LTE Band 12 (GT - LC = -3.90 dB) QPSK			
Bandwidth	10M		
Channel	23060	23095	23130
	(Low)	(Mid)	(High)
Frequency	704	707.5	711
(MHz)			
Conducted Power (dBm)	23.90	23.87	23.82
Conducted Power (Watts)	0.2455	0.2438	0.2410
ERP(dBm)	17.85	17.82	17.77
ERP(Watts)	0.0610	0.0605	0.0598



LTE Band 12 (GT - LC = -3.90 dB) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	23017	23095	23173	23025	23095	23165	23035	23095	23155
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	699.7	707.5	715.3	700.5	707.5	714.5	701.5	707.5	713.5
Conducted Power (dBm)	23.14	23.16	23.10	23.20	23.23	23.17	23.17	23.20	23.15
Conducted Power (Watts)	0.2061	0.2070	0.2042	0.2089	0.2104	0.2075	0.2075	0.2089	0.2065
ERP(dBm)	17.09	17.11	17.05	17.15	17.18	17.12	17.12	17.15	17.10
ERP(Watts)	0.0512	0.0514	0.0507	0.0519	0.0522	0.0515	0.0515	0.0519	0.0513

LTE Band 12 (GT - LC = -3.90 dB) 16QAM			
Bandwidth	10M		
Channel	23060	23095	23130
	(Low)	(Mid)	(High)
Frequency (MHz)	704	707.5	711
Conducted Power (dBm)	23.27	23.24	23.16
Conducted Power (Watts)	0.2123	0.2109	0.2070
ERP(dBm)	17.22	17.19	17.11
ERP(Watts)	0.0527	0.0524	0.0514



LTE Band 12 (GT - LC = -3.90 dB) 64QAM									
Bandwidth	1.4M			3M			5M		
Channel	23017	23095	23173	23025	23095	23165	23035	23095	23155
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	699.7	707.5	715.3	700.5	707.5	714.5	701.5	707.5	713.5
Conducted Power (dBm)	21.84	22.07	21.99	22.03	22.13	22.09	22.10	22.13	22.01
Conducted Power (Watts)	0.1528	0.1611	0.1581	0.1596	0.1633	0.1618	0.1622	0.1633	0.1589
ERP(dBm)	15.79	16.02	15.94	15.98	16.08	16.04	16.05	16.08	15.96
ERP(Watts)	0.0379	0.0400	0.0393	0.0396	0.0406	0.0402	0.0403	0.0406	0.0394

LTE Band 12 (GT - LC = -3.90 dB) 64QAM			
Bandwidth	10M		
Channel	23060	23095	23130
	(Low)	(Mid)	(High)
Frequency (MHz)	704	707.5	711
Conducted Power (dBm)	22.18	22.12	22.12
Conducted Power (Watts)	0.1652	0.1629	0.1629
ERP(dBm)	16.13	16.07	16.07
ERP(Watts)	0.0410	0.0405	0.0405



LTE Band 41 (GT - LC = -4.10 dB) QPSK									
Bandwidth	5M			10M			15M		
Channel	39675	40620	41565	39700	40620	41540	39725	40620	41515
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	2498.5	2593	2687.5	2501	2593	2685	2503.5	2593	2682.5
(MHz)									
Conducted Power (dBm)	23.19	23.43	23.24	23.14	23.38	23.28	23.15	23.48	23.29
Conducted Power (Watts)	0.2084	0.2203	0.2109	0.2061	0.2178	0.2128	0.2065	0.2228	0.2133
EIRP(dBm)	19.09	19.33	19.14	19.04	19.28	19.18	19.05	19.38	19.19
EIRP(Watts)	0.0811	0.0857	0.0820	0.0802	0.0847	0.0828	0.0804	0.0867	0.0830

LTE Band 41 (GT - LC = -4.10 dB) QPSK			
Bandwidth	20M		
Channel	39750	40620	41490
	(Low)	(Mid)	(High)
Frequency	2506	2593	2680
(MHz)			
Conducted Power (dBm)	23.18	23.46	23.34
Conducted Power (Watts)	0.2080	0.2218	0.2158
EIRP(dBm)	19.08	19.36	19.24
EIRP(Watts)	0.0809	0.0863	0.0839



LTE Band 41 (GT - LC = -4.10 dB) 16QAM									
Bandwidth	5M			10M			15M		
Channel	39675	40620	41565	39700	40620	41540	39725	40620	41515
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	2498.5	2593	2687.5	2501	2593	2685	2503.5	2593	2682.5
(MHz)									
Conducted Power (dBm)	22.34	22.63	22.53	22.39	22.62	22.35	22.30	22.62	22.41
Conducted Power (Watts)	0.1714	0.1832	0.1791	0.1734	0.1828	0.1718	0.1698	0.1828	0.1742
EIRP(dBm)	18.24	18.53	18.43	18.29	18.52	18.25	18.20	18.52	18.31
EIRP(Watts)	0.0667	0.0713	0.0697	0.0675	0.0711	0.0668	0.0661	0.0711	0.0678

LTE Band 41 (GT - LC = -4.10 dB) 16QAM			
Bandwidth	20M		
Channel	39750	40620	41490
	(Low)	(Mid)	(High)
Frequency	2506	2593	2680
(MHz)			
Conducted Power (dBm)	22.33	22.56	22.42
Conducted Power (Watts)	0.1710	0.1803	0.1746
EIRP(dBm)	18.23	18.46	18.32
EIRP(Watts)	0.0665	0.0701	0.0679

LTE Band 41 (GT - LC = -4.10 dB) 64QAM									
Bandwidth	5M			10M			15M		
Channel	39675	40620	41565	39700	40620	41540	39725	40620	41515
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	2498.5	2593	2687.5	2501	2593	2685	2503.5	2593	2682.5
(MHz)									
Conducted Power (dBm)	21.19	21.36	21.13	21.22	21.39	21.12	21.11	21.33	21.08
Conducted Power (Watts)	0.1315	0.1368	0.1297	0.1324	0.1377	0.1294	0.1291	0.1358	0.1282
EIRP(dBm)	17.09	17.26	17.03	17.12	17.29	17.02	17.01	17.23	16.98
EIRP(Watts)	0.0512	0.0532	0.0505	0.0515	0.0536	0.0504	0.0502	0.0528	0.0499

LTE Band 41 (GT - LC = -4.10 dB) 64QAM			
Bandwidth	20M		
Channel	39750	40620	41490
	(Low)	(Mid)	(High)
Frequency	2506	2593	2680
(MHz)			
Conducted Power (dBm)	21.03	21.25	21.00
Conducted Power (Watts)	0.1268	0.1334	0.1259
EIRP(dBm)	16.93	17.15	16.90
EIRP(Watts)	0.0493	0.0519	0.0490

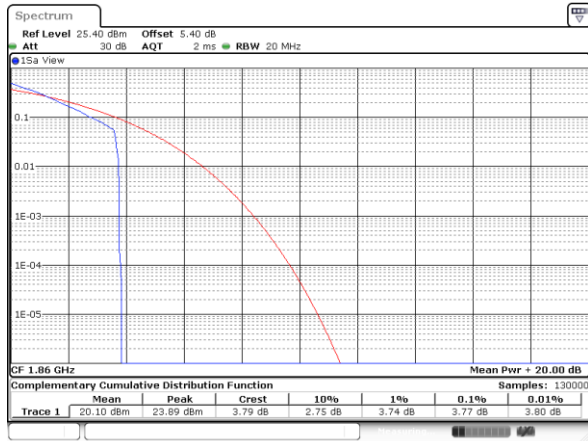
**Peak-to-Average Ratio**

Mode	LTE Band 2 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.77	5.16	5.28	6.06	PASS
Middle CH	3.65	5.07	5.45	6.00	
Highest CH	3.80	5.19	5.57	6.09	
Mode	LTE Band 2 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.70	6.46	-	-	PASS
Middle CH	6.72	6.58	-	-	
Highest CH	7.28	6.58	-	-	

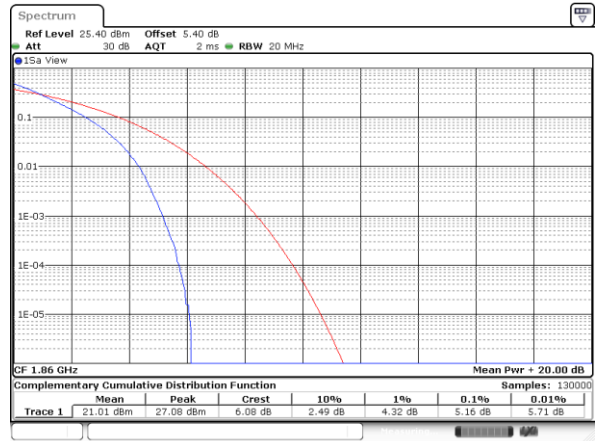


LTE Band 2 / 20MHz / QPSK

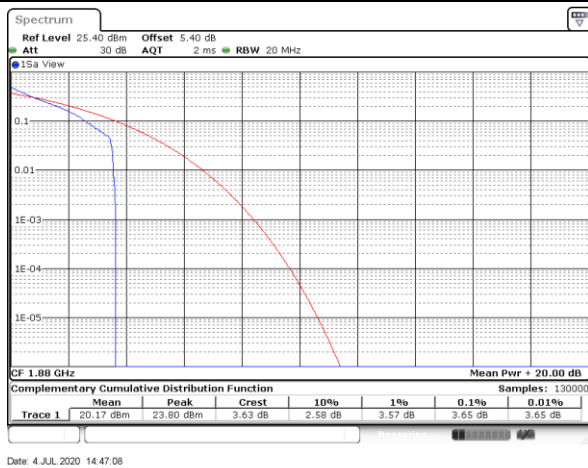
Lowest Channel / 1RB



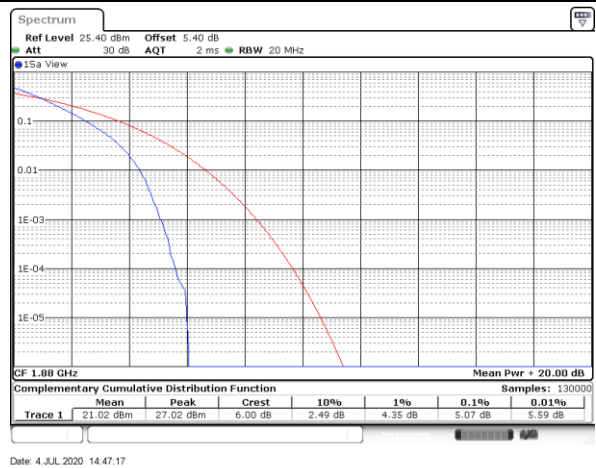
Lowest Channel / Full RB



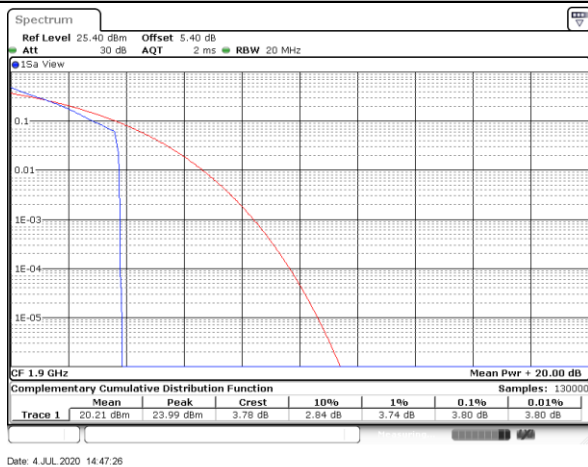
Middle Channel / 1RB



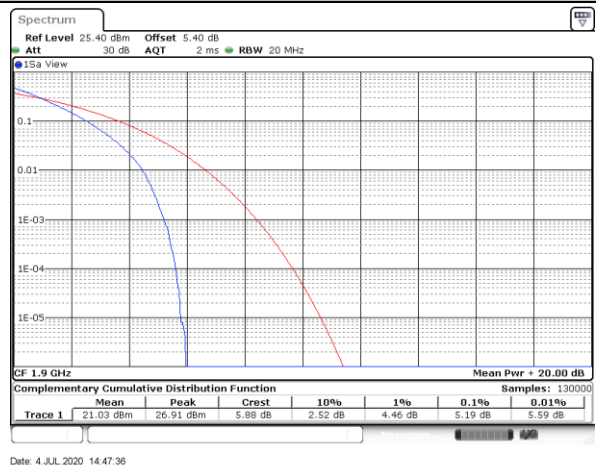
Middle Channel / Full RB



Highest Channel / 1RB



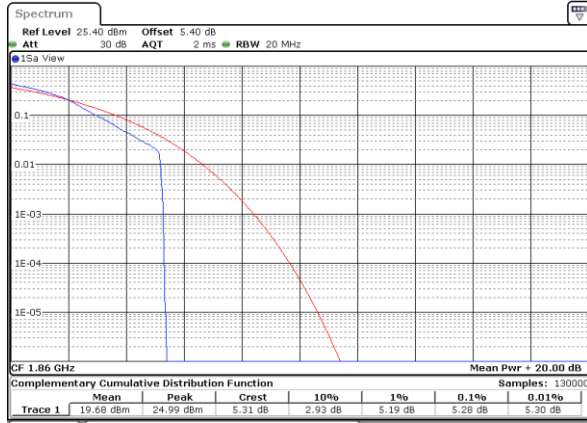
Highest Channel / Full RB





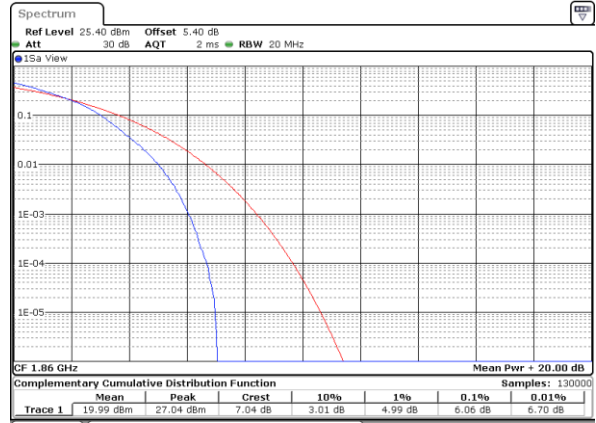
LTE Band 2 / 20MHz / 16QAM

Lowest Channel / 1RB



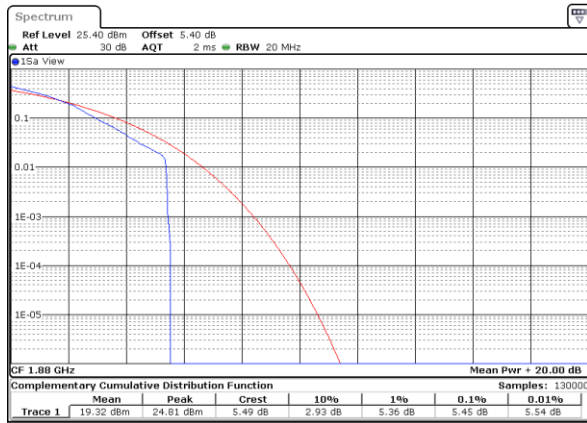
Date: 4 JUL 2020 14:47:45

Lowest Channel / Full RB



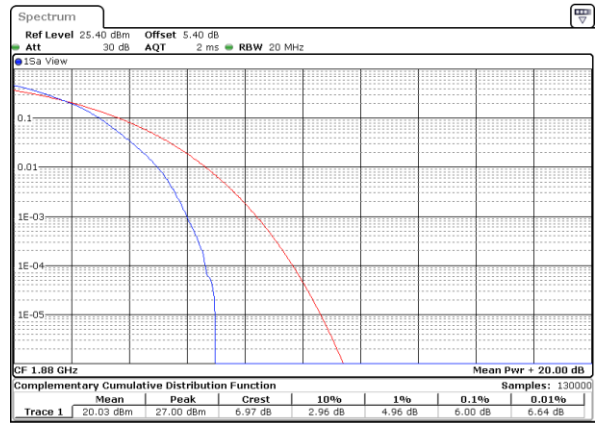
Date: 4 JUL 2020 14:47:54

Middle Channel / 1RB



Date: 4 JUL 2020 14:48:03

Middle Channel / Full RB



Date: 4 JUL 2020 14:48:12

Highest Channel / 1RB



Date: 4 JUL 2020 14:48:21

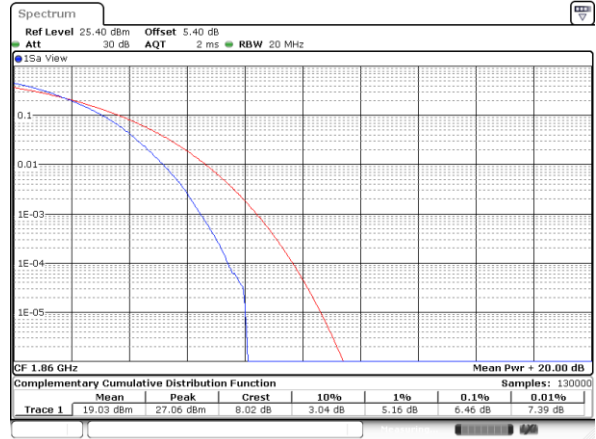
Highest Channel / Full RB



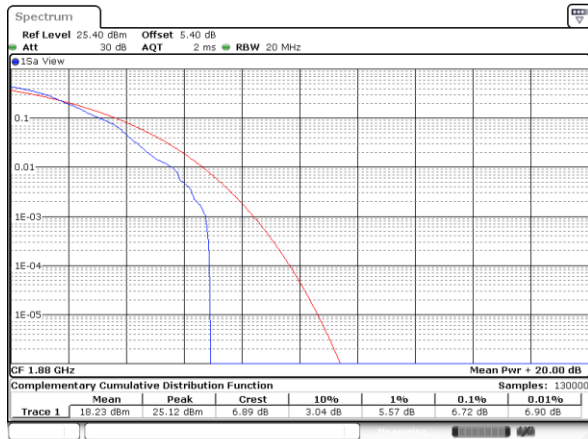
Date: 4 JUL 2020 14:48:31

LTE Band 2 / 20MHz / 64QAM
Lowest Channel / 1RB

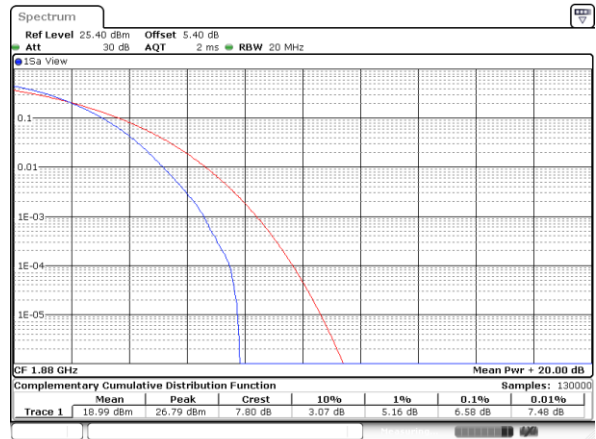

Date: 4 JUL 2020 14:48:40

Lowest Channel / Full RB


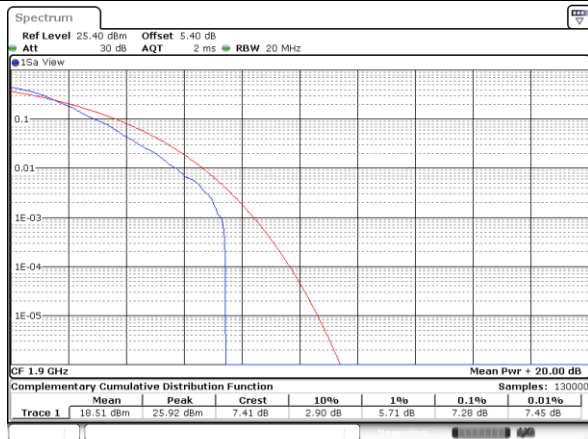
Date: 4 JUL 2020 14:48:49

Middle Channel / 1RB


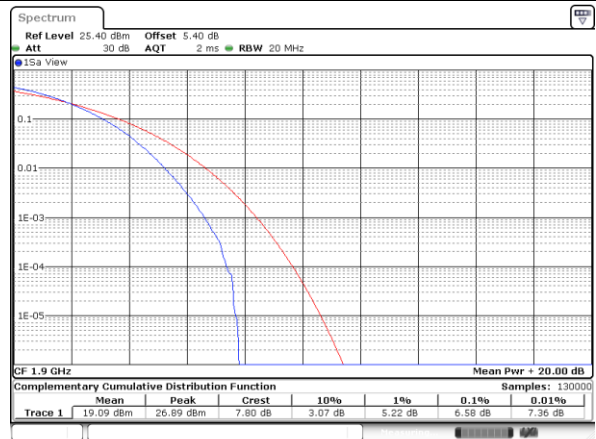
Date: 4 JUL 2020 14:48:58

Middle Channel / Full RB


Date: 4 JUL 2020 14:49:07

Highest Channel / 1RB


Date: 4 JUL 2020 14:49:16

Highest Channel / Full RB


Date: 4 JUL 2020 14:49:25

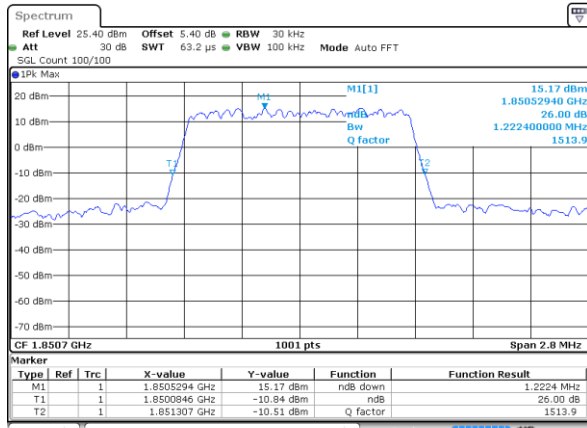
**26dB Bandwidth**

Mode	LTE Band 2 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.22	1.22	3.05	3.06	4.88	4.86	9.83	9.83	14.36	14.42	20.14	19.98
Middle CH	1.23	1.21	3.05	3.07	4.86	4.88	9.77	9.63	14.30	14.42	20.18	20.18
Highest CH	1.23	1.24	2.99	3.03	4.92	4.92	9.65	9.71	14.48	14.48	20.22	20.10
Mode	LTE Band 2 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.22	-	3.00	-	4.94	-	9.77	-	14.33	-	20.18	-
Middle CH	1.22	-	3.01	-	4.95	-	9.71	-	14.45	-	20.06	-
Highest CH	1.23	-	3.00	-	4.88	-	9.83	-	14.27	-	20.14	-

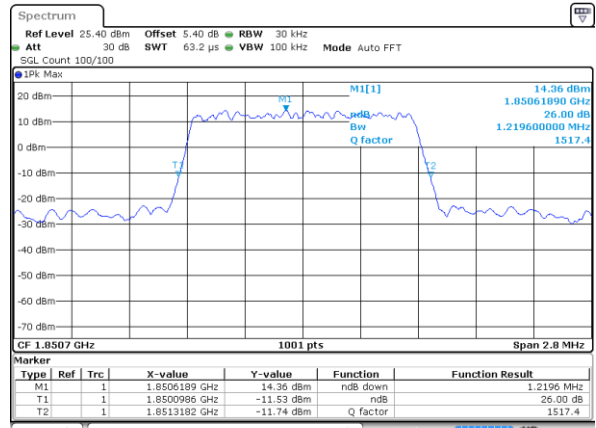


LTE Band 2

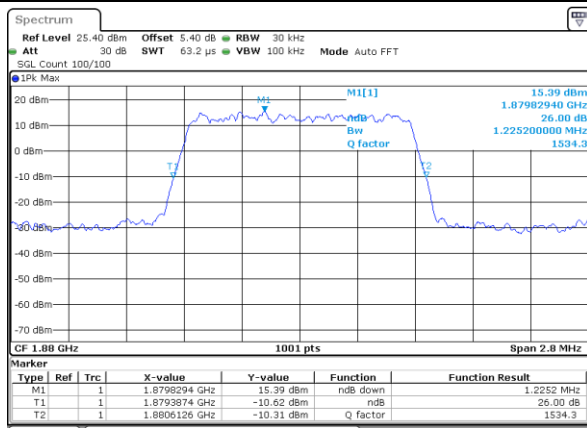
Lowest Channel / 1.4MHz / QPSK



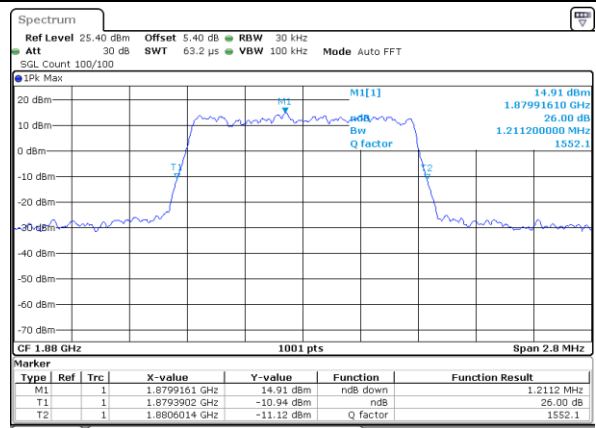
Lowest Channel / 1.4MHz / 16QAM



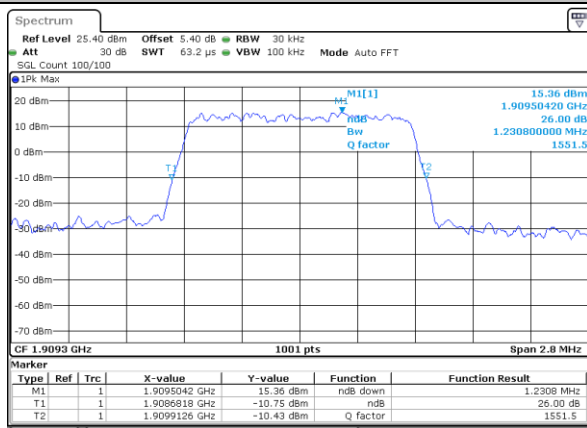
Middle Channel / 1.4MHz / QPSK



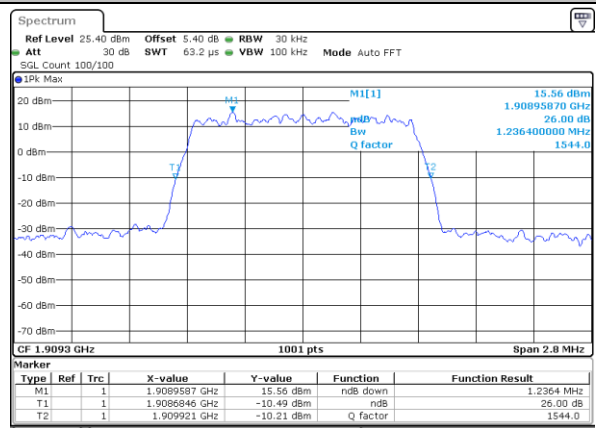
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



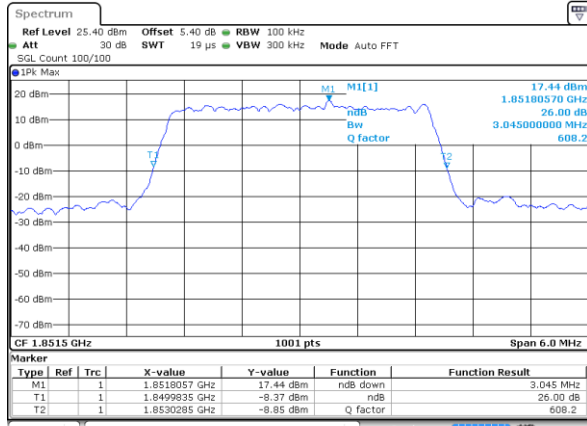
Highest Channel / 1.4MHz / 16QAM



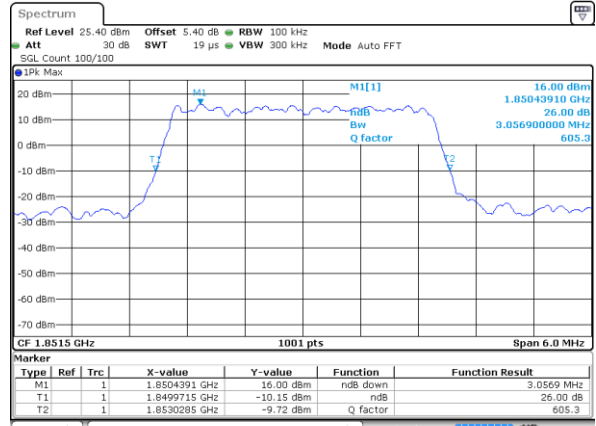


LTE Band 2

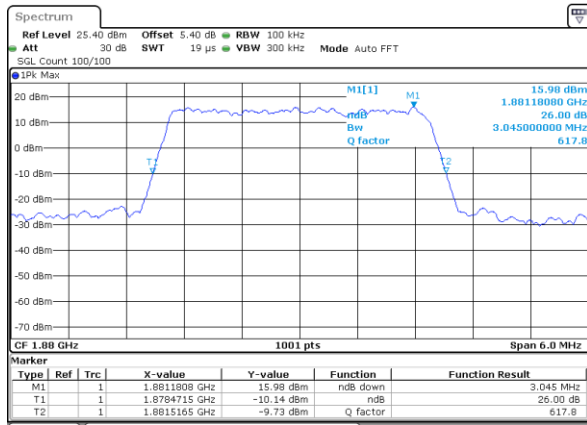
Lowest Channel / 3MHz / QPSK



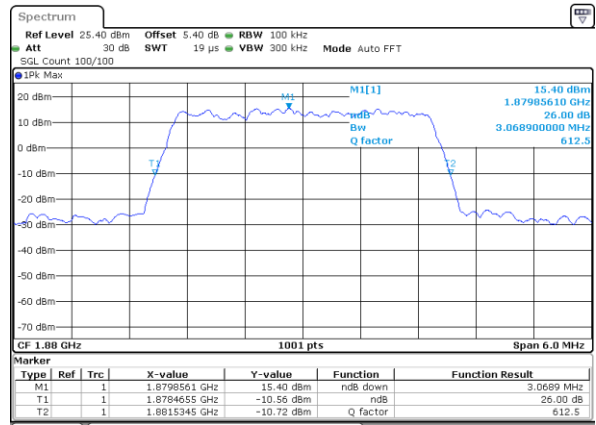
Lowest Channel / 3MHz / 16QAM



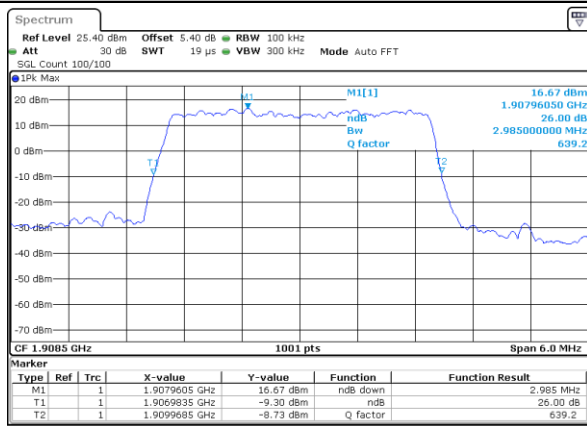
Middle Channel / 3MHz / QPSK



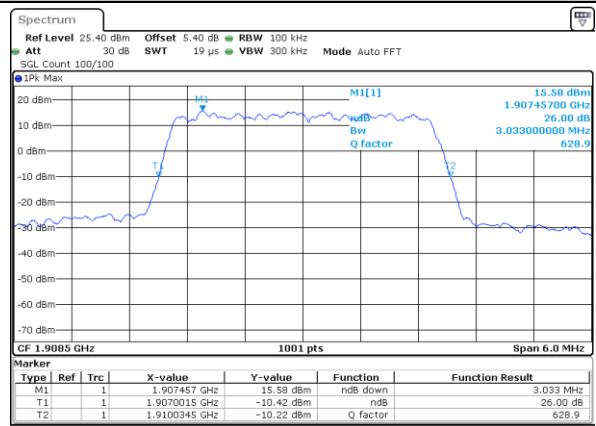
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



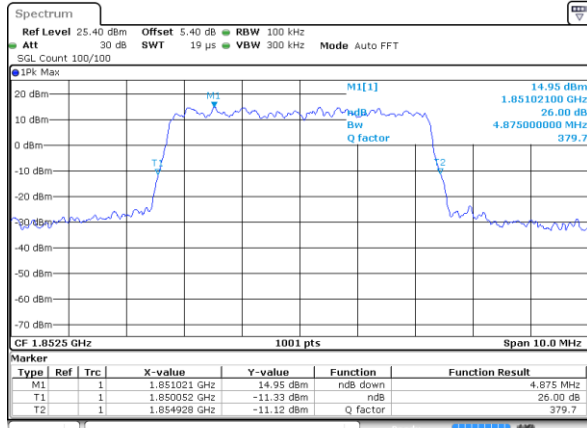
Highest Channel / 3MHz / 16QAM





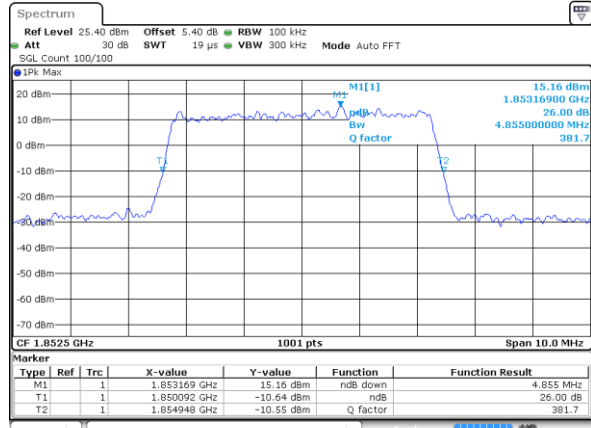
LTE Band 2

Lowest Channel / 5MHz / QPSK



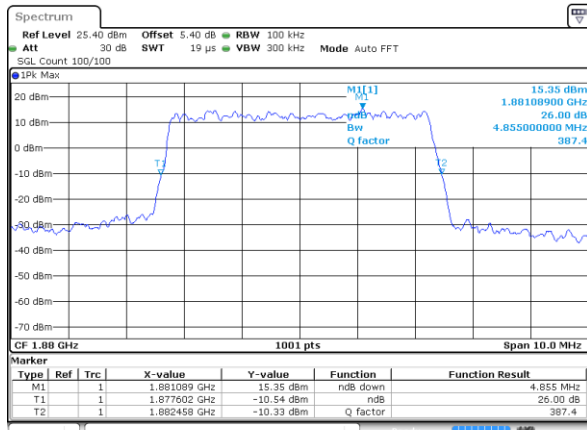
Date: 4 JUL 2020 12:30:49

Lowest Channel / 5MHz / 16QAM



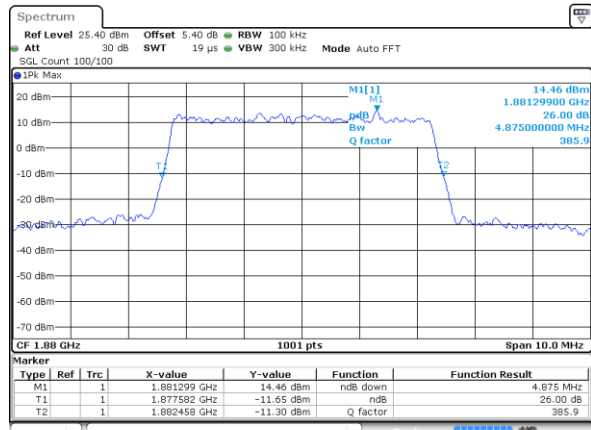
Date: 4 JUL 2020 12:30:59

Middle Channel / 5MHz / QPSK



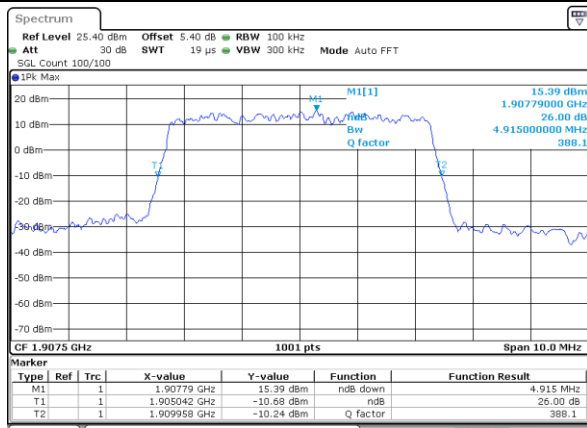
Date: 4 JUL 2020 12:37:48

Middle Channel / 5MHz / 16QAM



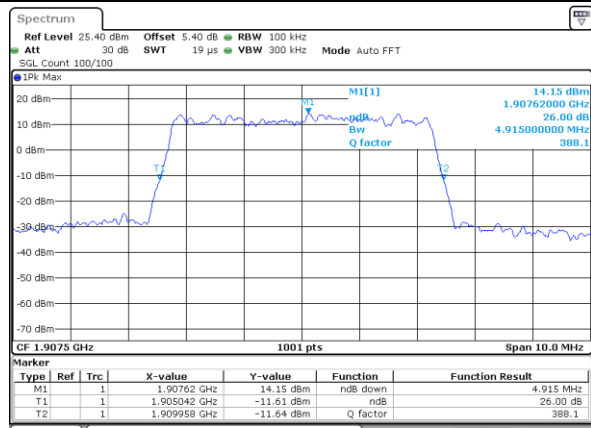
Date: 4 JUL 2020 12:37:58

Highest Channel / 5MHz / QPSK



Date: 4 JUL 2020 12:40:18

Highest Channel / 5MHz / 16QAM

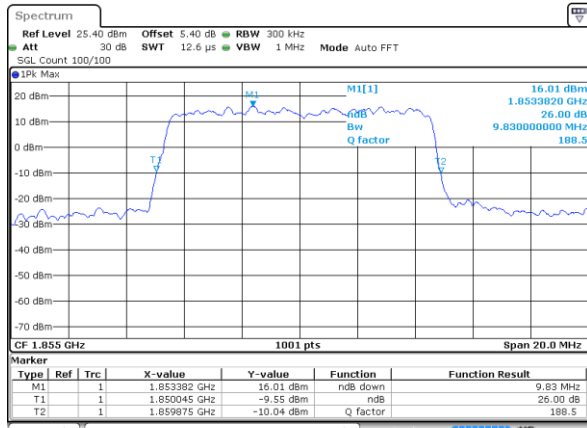


Date: 4 JUL 2020 12:40:28



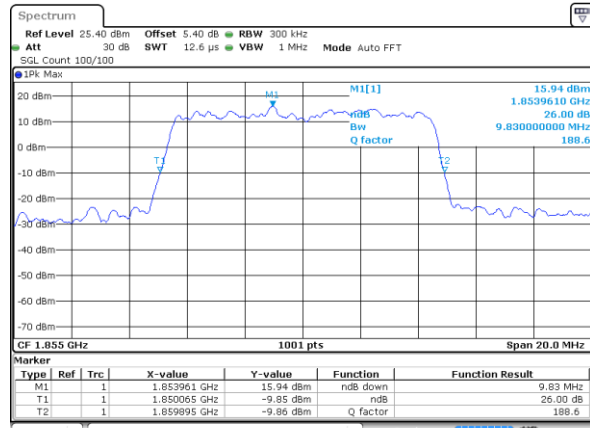
LTE Band 2

Lowest Channel / 10MHz / QPSK



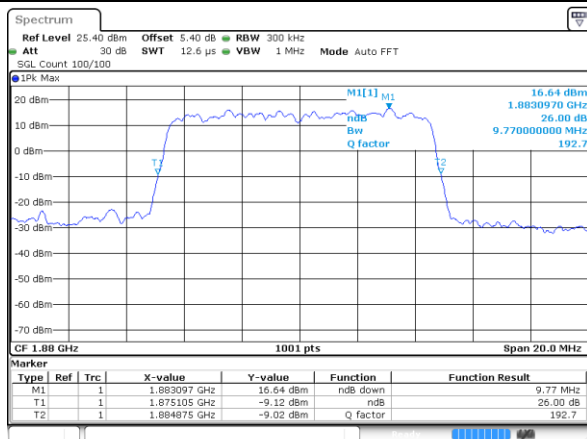
Date: 4 JUL 2020 13:04:10

Lowest Channel / 10MHz / 16QAM



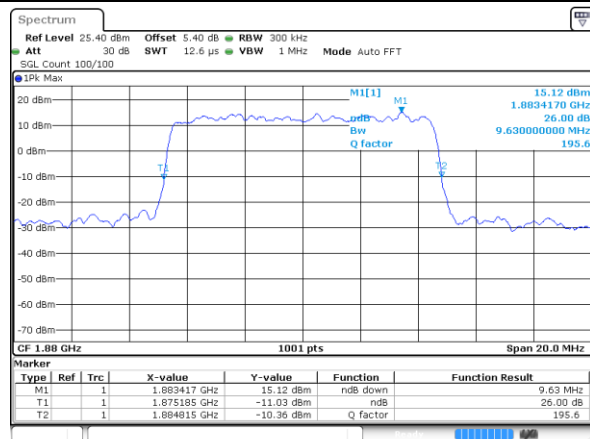
Date: 4 JUL 2020 13:04:19

Middle Channel / 10MHz / QPSK



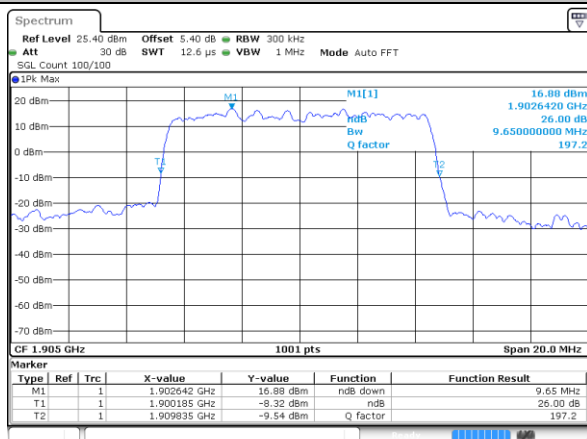
Date: 4 JUL 2020 13:11:09

Middle Channel / 10MHz / 16QAM



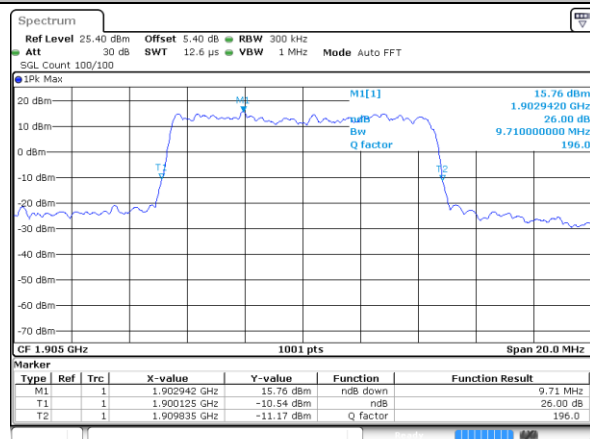
Date: 4 JUL 2020 13:11:19

Highest Channel / 10MHz / QPSK



Date: 4 JUL 2020 13:13:38

Highest Channel / 10MHz / 16QAM

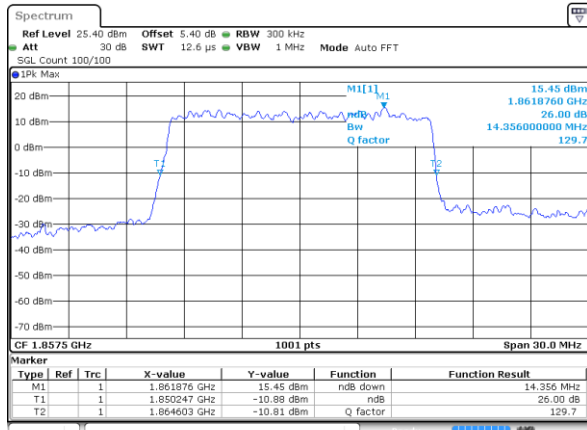


Date: 4 JUL 2020 13:13:48



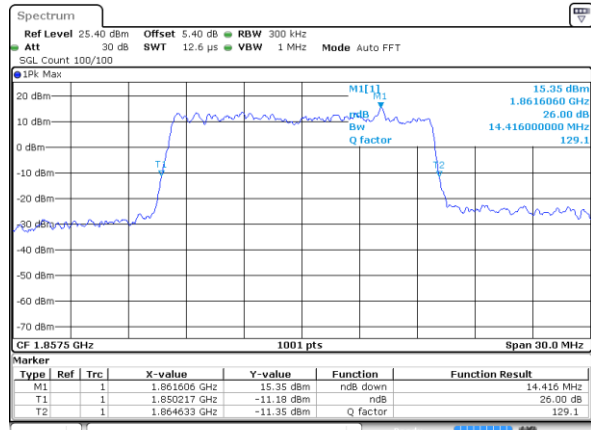
LTE Band 2

Lowest Channel / 15MHz / QPSK



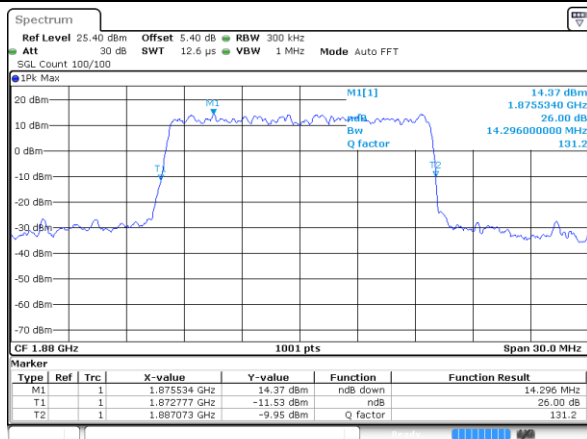
Date: 4 JUL 2020 13:20:37

Lowest Channel / 15MHz / 16QAM



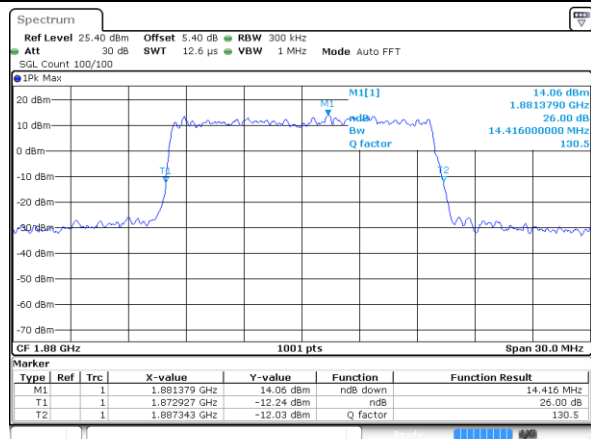
Date: 4 JUL 2020 13:20:47

Middle Channel / 15MHz / QPSK



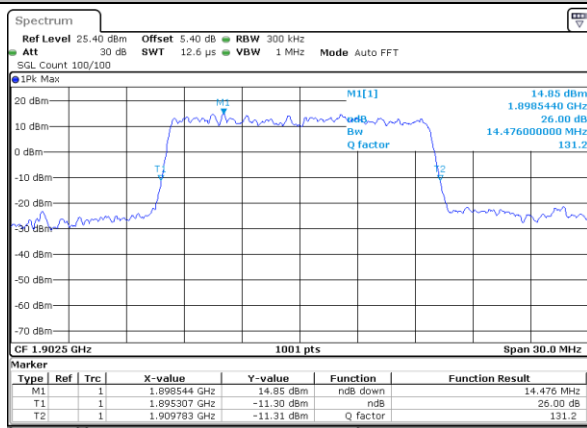
Date: 4 JUL 2020 13:27:37

Middle Channel / 15MHz / 16QAM



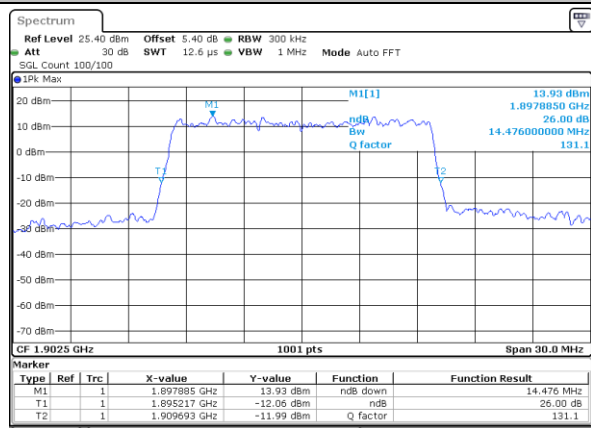
Date: 4 JUL 2020 13:27:47

Highest Channel / 15MHz / QPSK



Date: 4 JUL 2020 13:30:06

Highest Channel / 15MHz / 16QAM

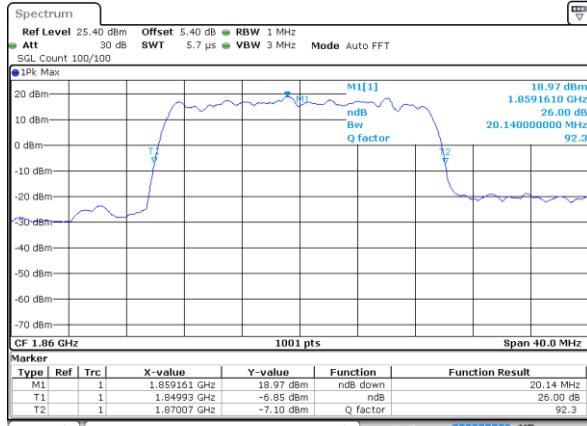


Date: 4 JUL 2020 13:30:16

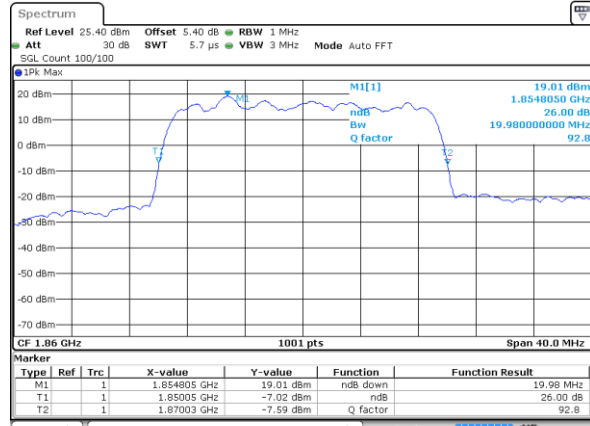


LTE Band 2

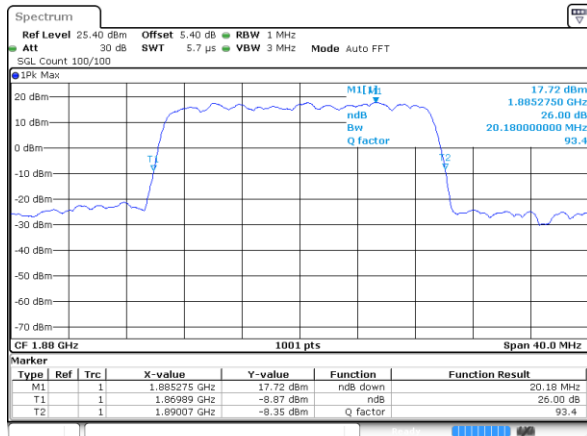
Lowest Channel / 20MHz / QPSK



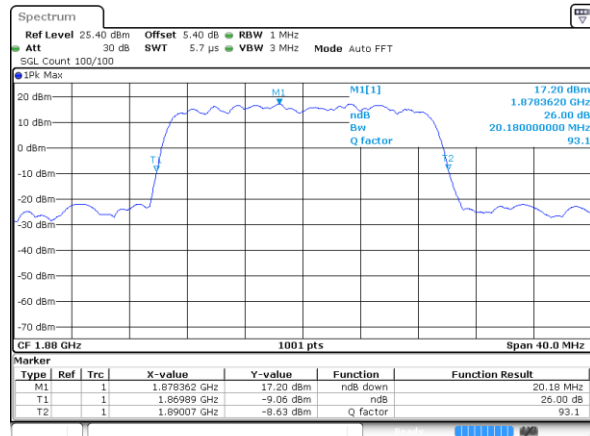
Lowest Channel / 20MHz / 16QAM



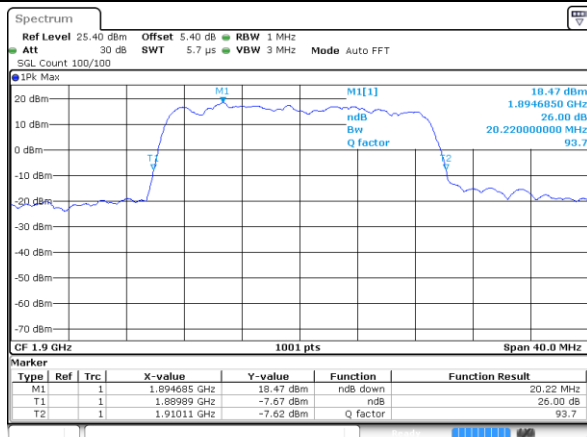
Middle Channel / 20MHz / QPSK



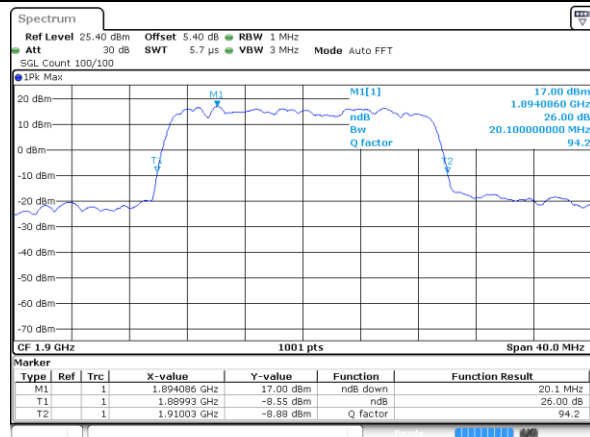
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



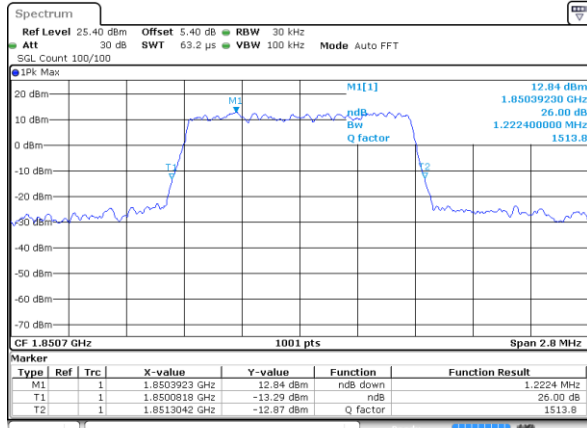
Highest Channel / 20MHz / 16QAM





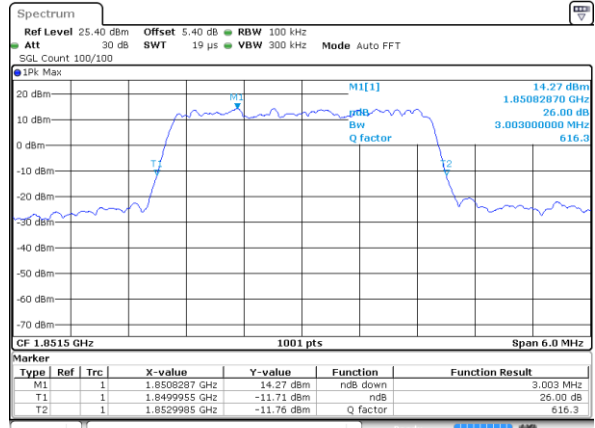
LTE Band 2

Lowest Channel / 1.4MHz / 64QAM



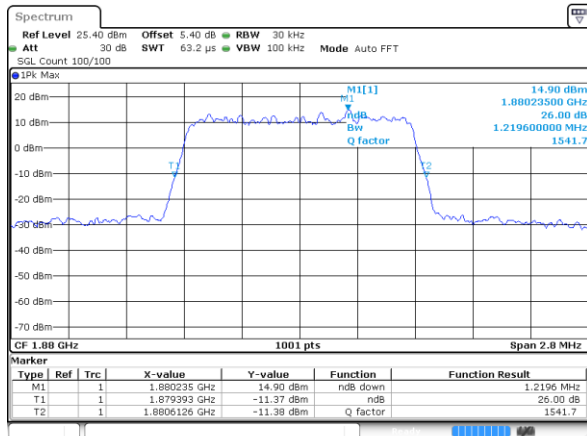
Date: 4 JUL 2020 13:56:22

Lowest Channel / 3MHz / 64QAM



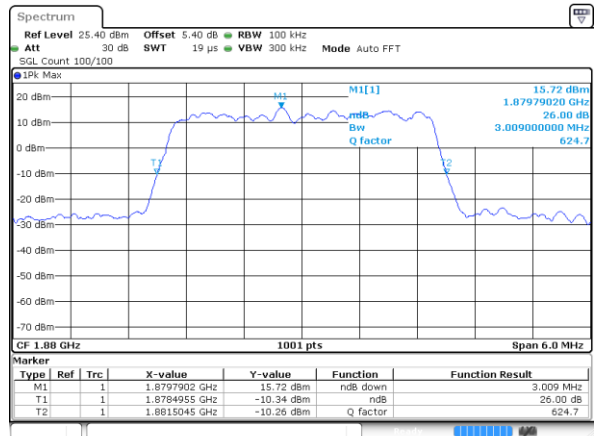
Date: 4 JUL 2020 13:56:52

Middle Channel / 1.4MHz / 64QAM



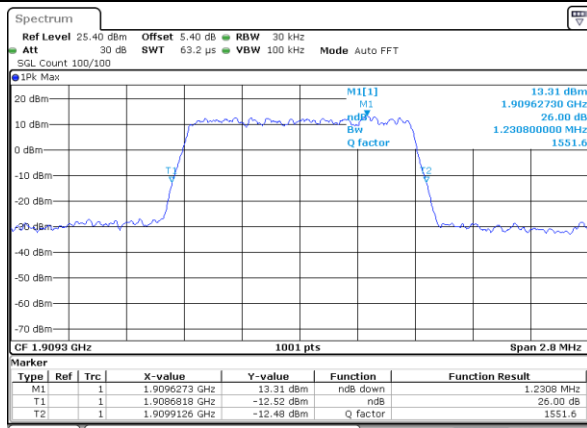
Date: 4 JUL 2020 13:56:32

Middle Channel / 3MHz / 64QAM



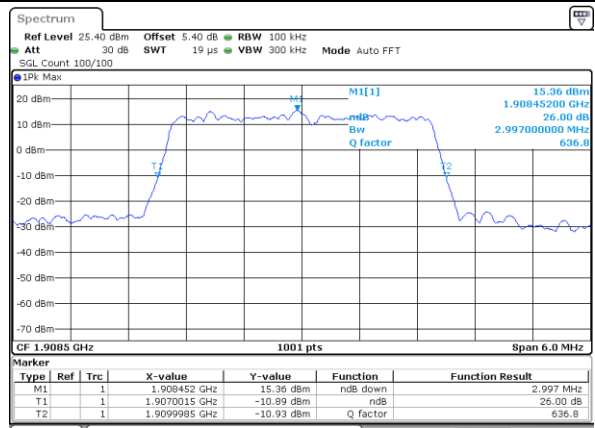
Date: 4 JUL 2020 13:57:02

Highest Channel / 1.4MHz / 64QAM



Date: 4 JUL 2020 13:56:42

Highest Channel / 3MHz / 64QAM

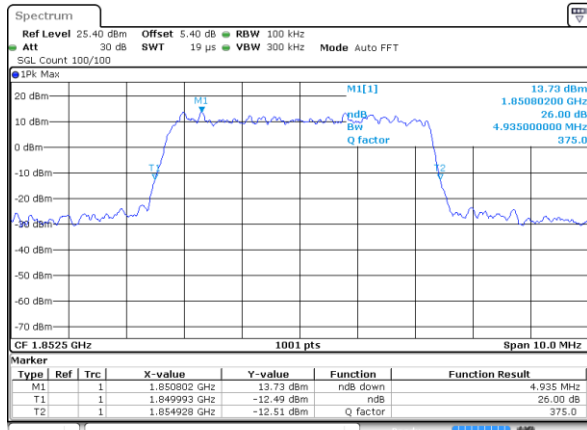


Date: 4 JUL 2020 13:57:12



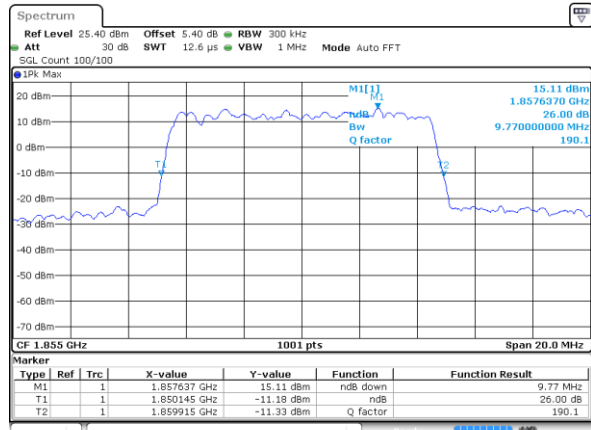
LTE Band 2

Lowest Channel / 5MHz / 64QAM



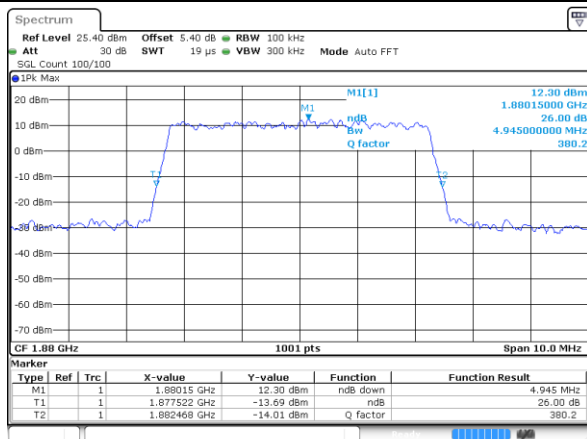
Date: 4 JUL 2020 13:57:22

Lowest Channel / 10MHz / 64QAM



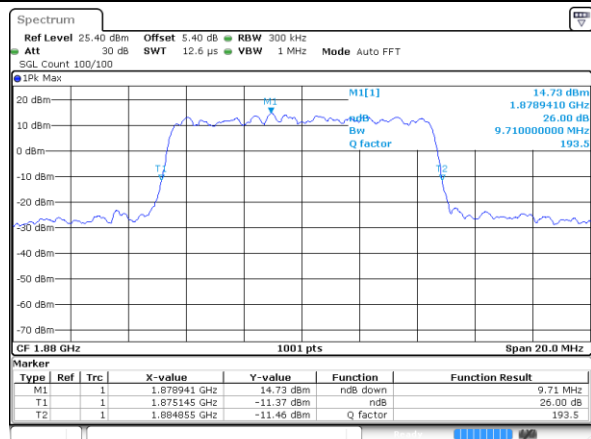
Date: 4 JUL 2020 13:57:52

Middle Channel / 5MHz / 64QAM



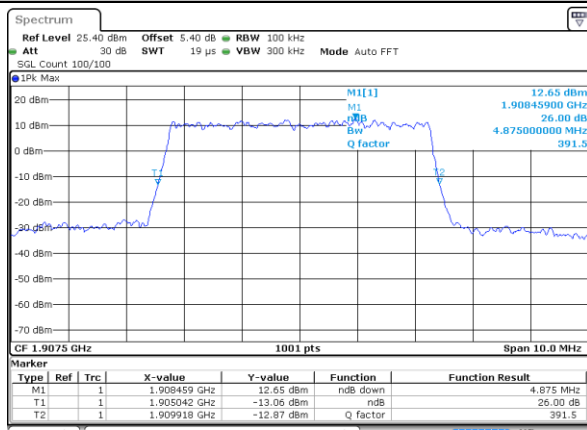
Date: 4 JUL 2020 13:57:32

Middle Channel / 10MHz / 64QAM



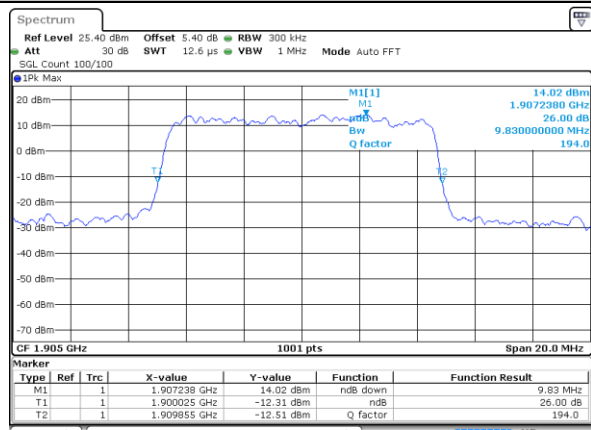
Date: 4 JUL 2020 13:58:02

Highest Channel / 5MHz / 64QAM



Date: 4 JUL 2020 13:57:41

Highest Channel / 10MHz / 64QAM

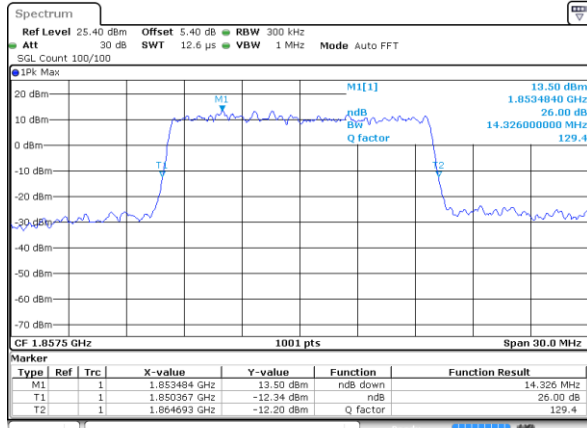


Date: 4 JUL 2020 13:58:12

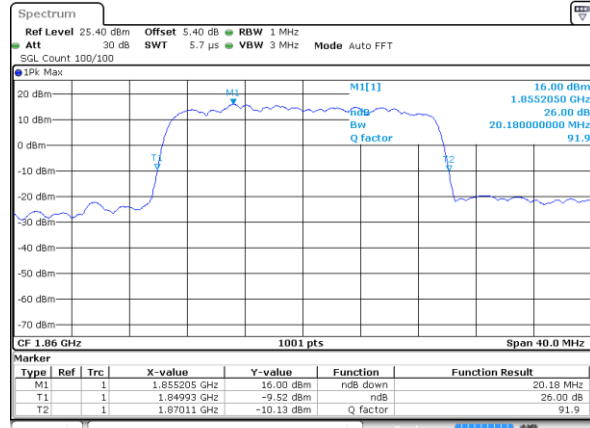


LTE Band 2

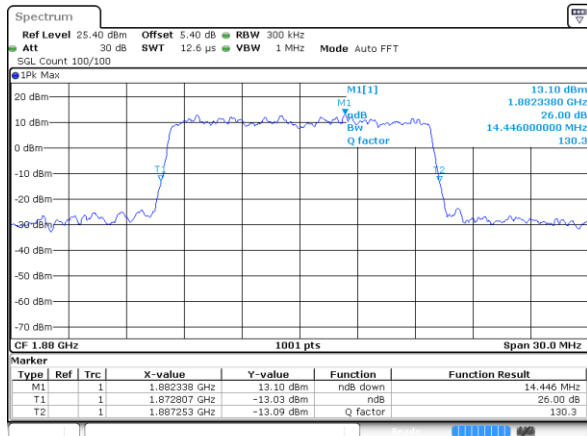
Lowest Channel / 15MHz / 64QAM



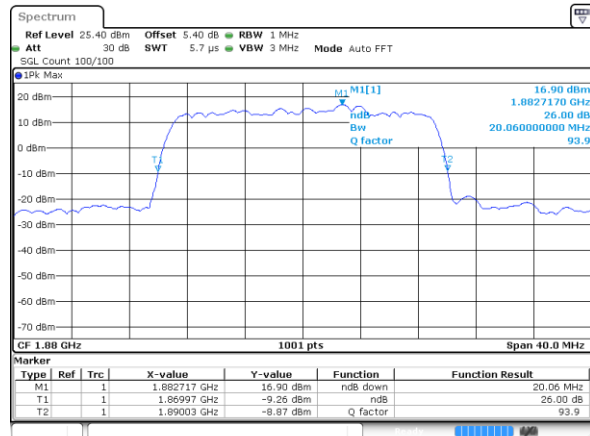
Lowest Channel / 20MHz / 64QAM



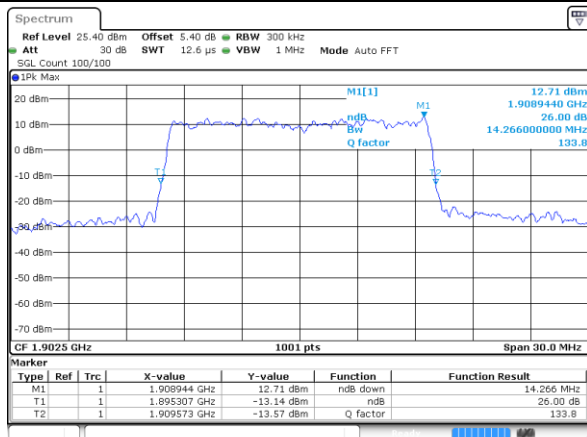
Middle Channel / 15MHz / 64QAM



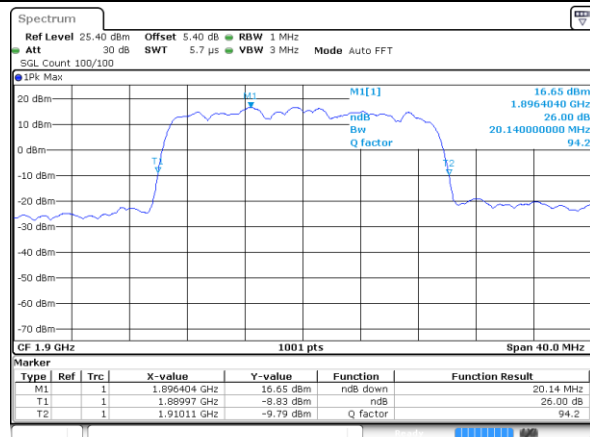
Middle Channel / 20MHz / 64QAM



Highest Channel / 15MHz / 64QAM



Highest Channel / 20MHz / 64QAM



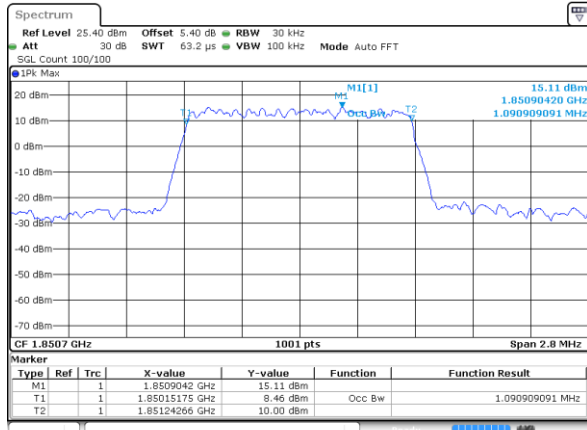
**Occupied Bandwidth**

Mode	LTE Band 2 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.09	2.72	2.72	4.48	4.50	8.99	8.97	13.46	13.46	18.18	18.46
Middle CH	1.10	1.10	2.74	2.72	4.50	4.48	8.97	9.03	13.49	13.46	18.30	18.26
Highest CH	1.09	1.09	2.73	2.73	4.48	4.48	8.97	8.99	13.46	13.40	18.46	18.26
Mode	LTE Band 2 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09	-	2.72	-	4.49	-	8.95	-	13.43	-	18.30	-
Middle CH	1.09	-	2.70	-	4.50	-	9.07	-	13.43	-	18.38	-
Highest CH	1.09	-	2.73	-	4.49	-	9.01	-	13.46	-	18.34	-

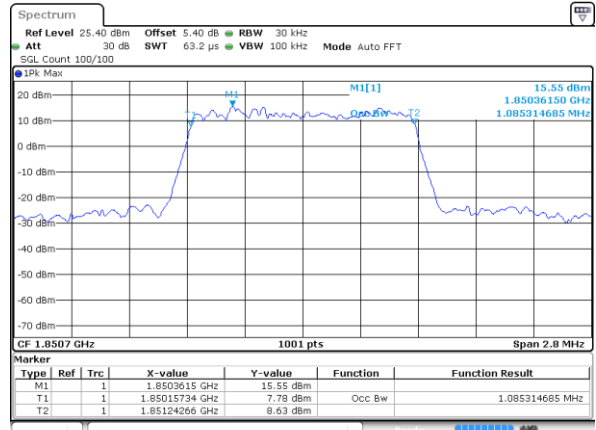


LTE Band 2

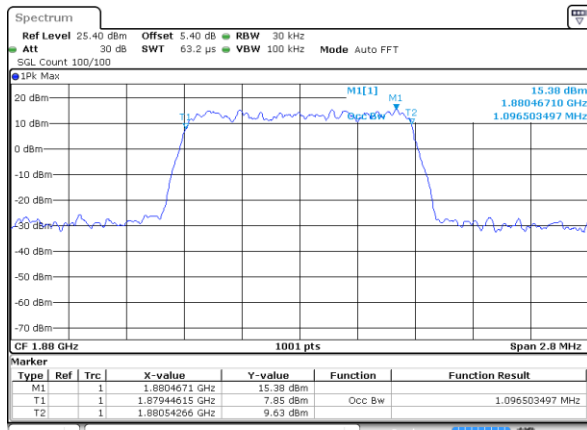
Lowest Channel / 1.4MHz / QPSK



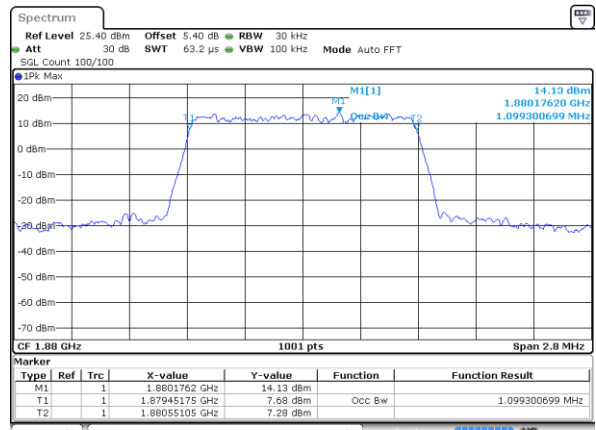
Lowest Channel / 1.4MHz / 16QAM



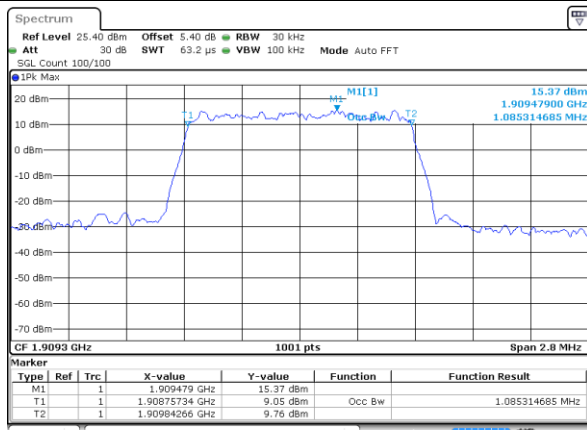
Middle Channel / 1.4MHz / QPSK



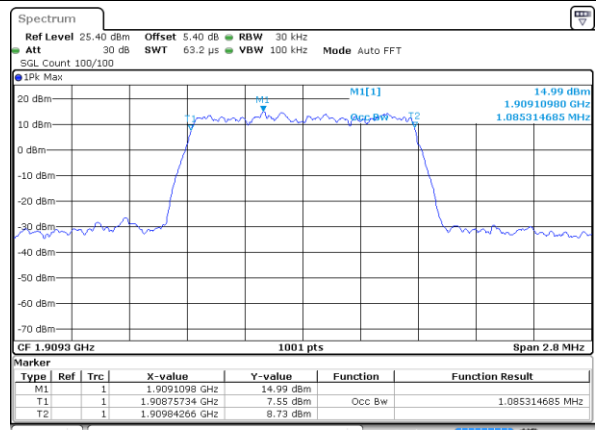
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



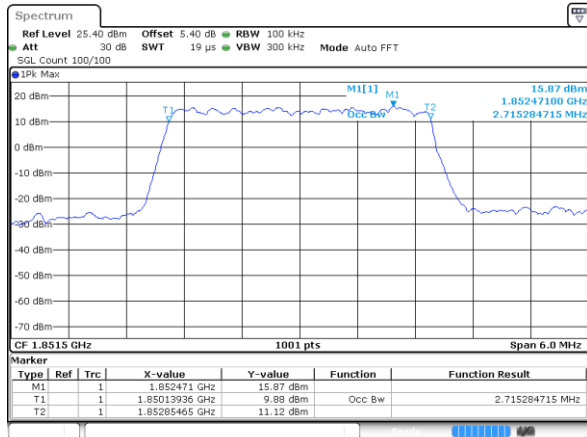
Highest Channel / 1.4MHz / 16QAM





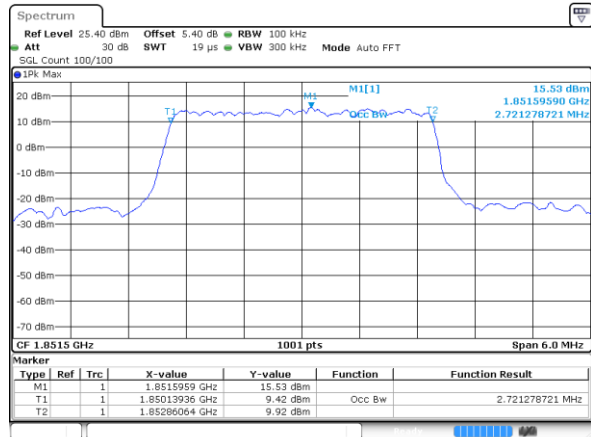
LTE Band 2

Lowest Channel / 3MHz / QPSK



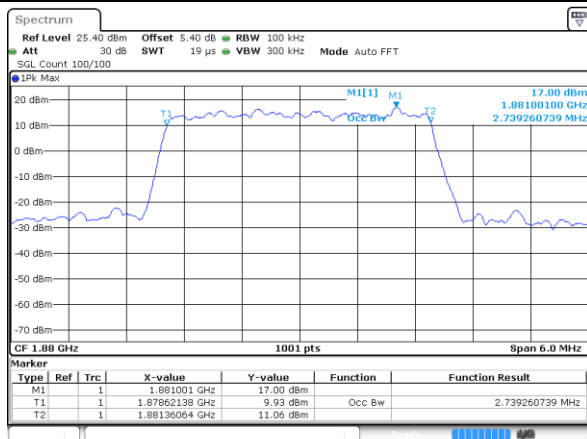
Date: 4 JUL 2020 12:14:01

Lowest Channel / 3MHz / 16QAM



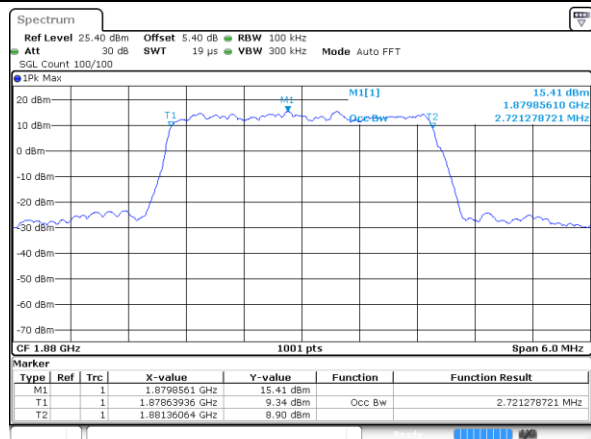
Date: 4 JUL 2020 12:14:11

Middle Channel / 3MHz / QPSK



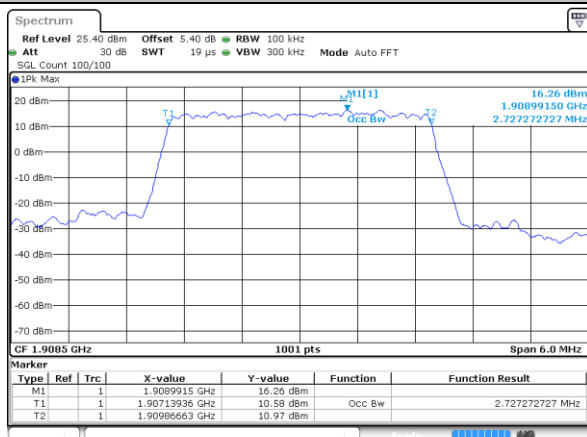
Date: 4 JUL 2020 12:21:01

Middle Channel / 3MHz / 16QAM



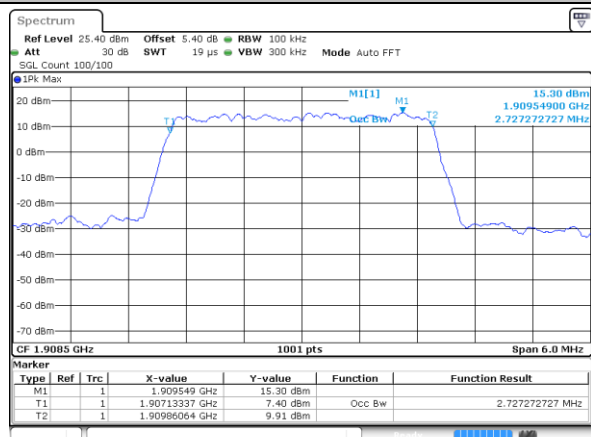
Date: 4 JUL 2020 12:21:11

Highest Channel / 3MHz / QPSK



Date: 4 JUL 2020 12:23:30

Highest Channel / 3MHz / 16QAM

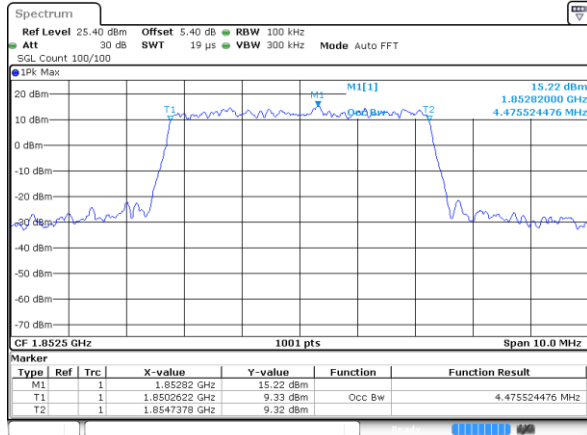


Date: 4 JUL 2020 12:23:40

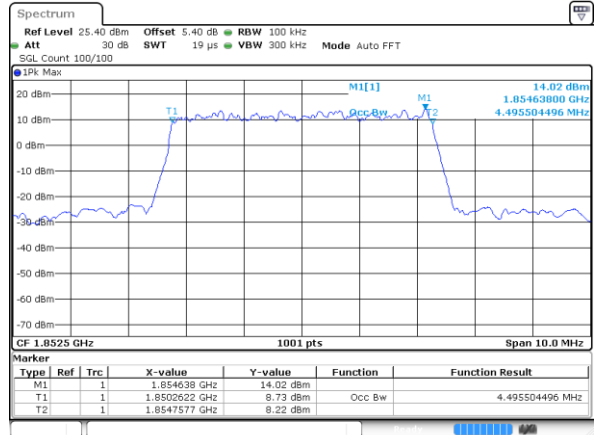


LTE Band 2

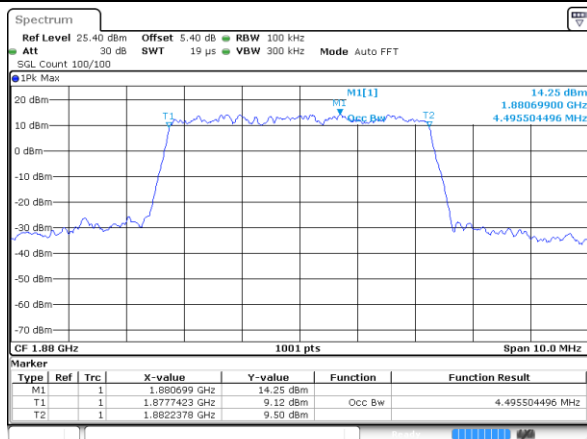
Lowest Channel / 5MHz / QPSK



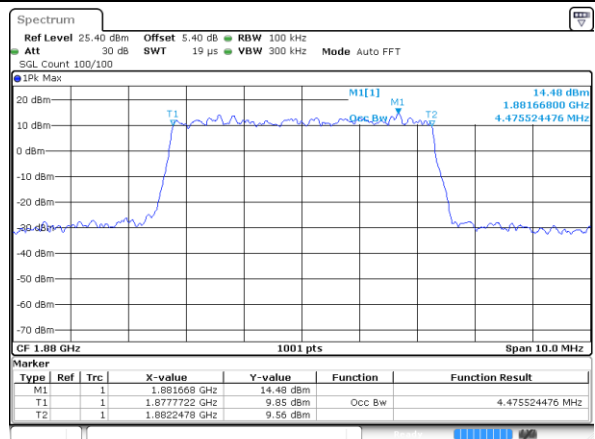
Lowest Channel / 5MHz / 16QAM



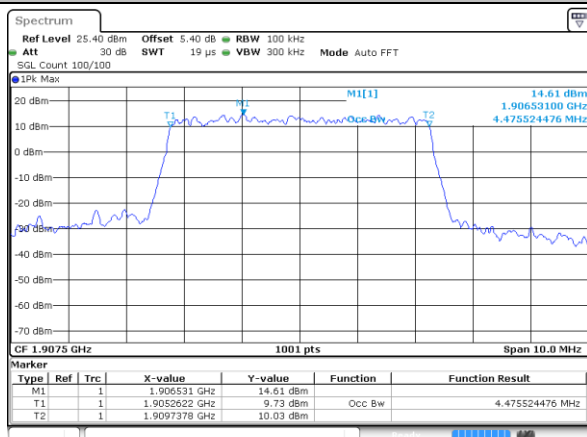
Middle Channel / 5MHz / QPSK



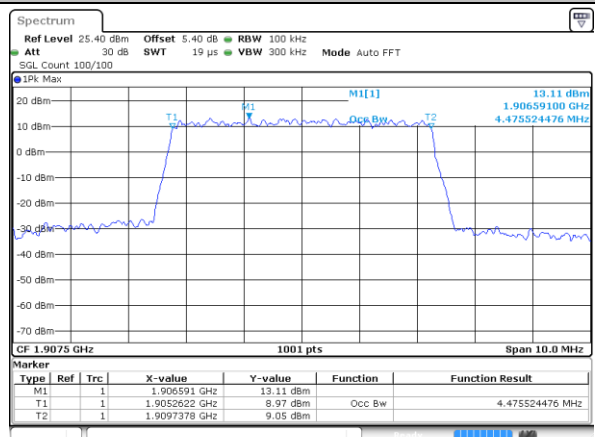
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



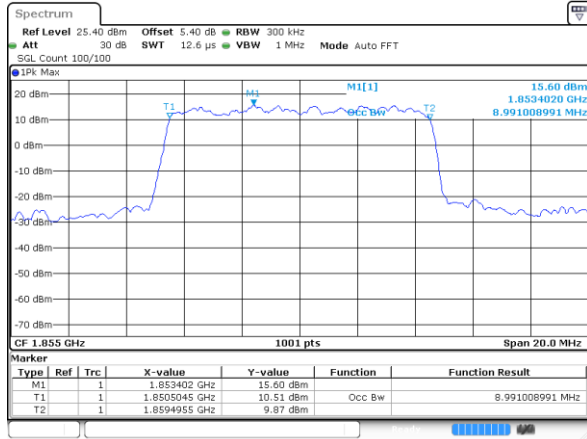
Highest Channel / 5MHz / 16QAM





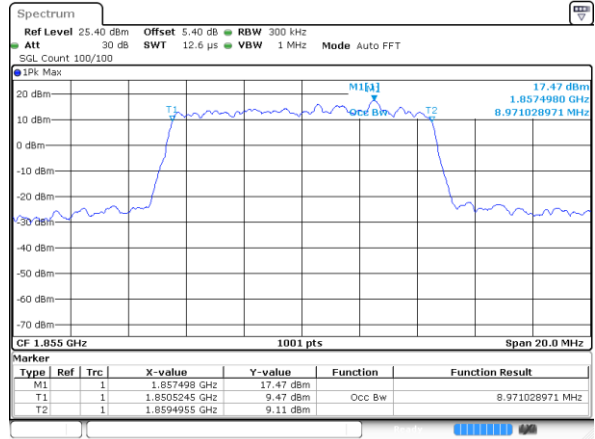
LTE Band 2

Lowest Channel / 10MHz / QPSK



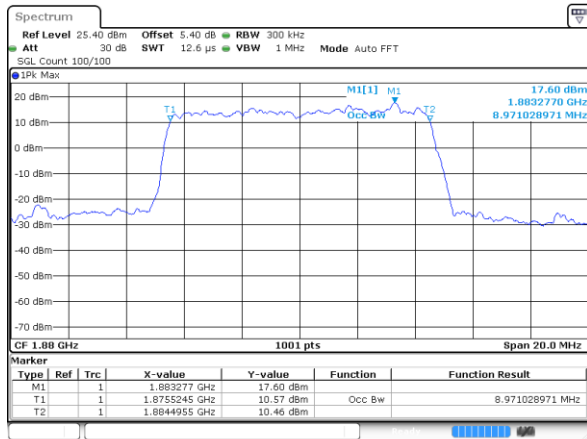
Date: 4 JUL 2020 13:03:50

Lowest Channel / 10MHz / 16QAM



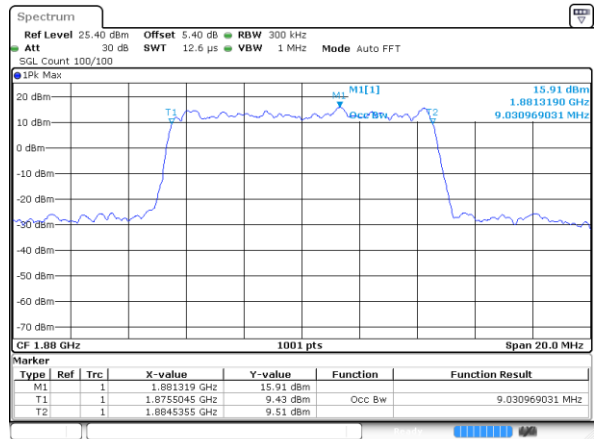
Date: 4 JUL 2020 13:04:00

Middle Channel / 10MHz / QPSK



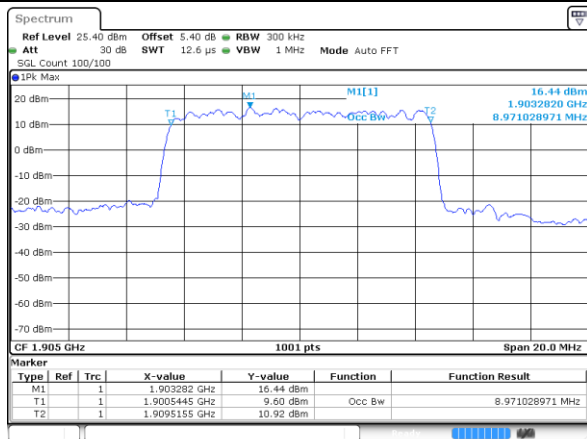
Date: 4 JUL 2020 13:10:49

Middle Channel / 10MHz / 16QAM



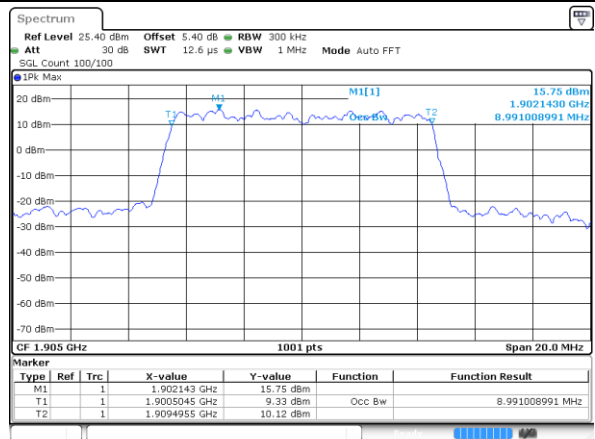
Date: 4 JUL 2020 13:10:59

Highest Channel / 10MHz / QPSK



Date: 4 JUL 2020 13:13:18

Highest Channel / 10MHz / 16QAM

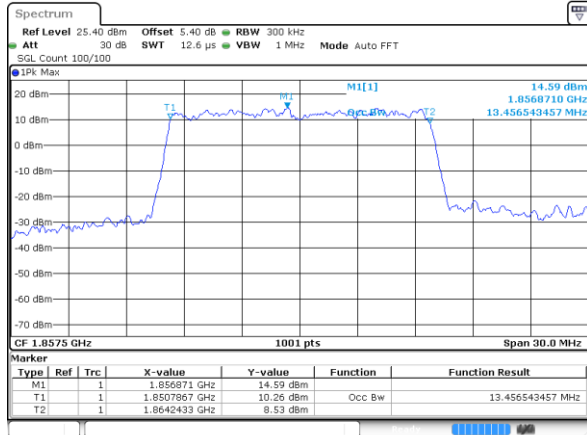


Date: 4 JUL 2020 13:13:28



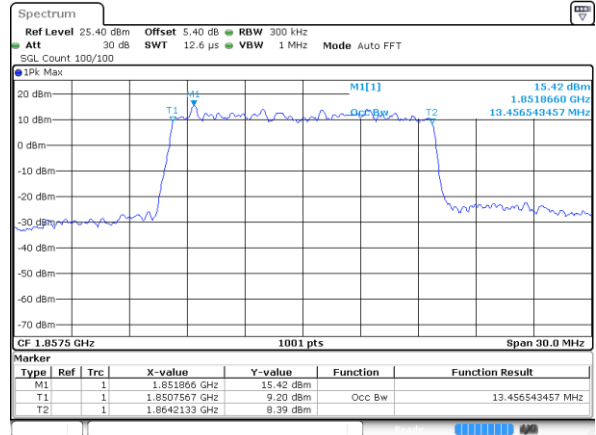
LTE Band 2

Lowest Channel / 15MHz / QPSK



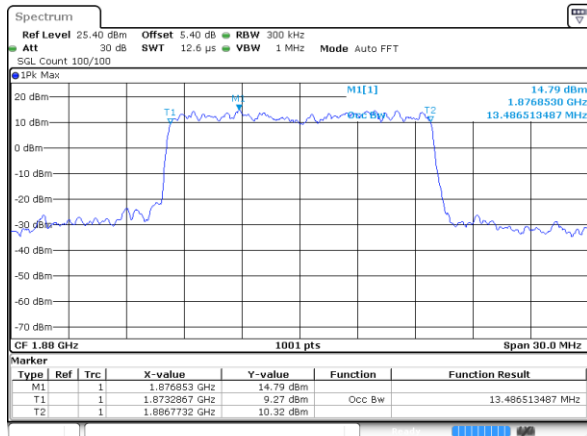
Date: 4 JUL 2020 13:20:17

Lowest Channel / 15MHz / 16QAM



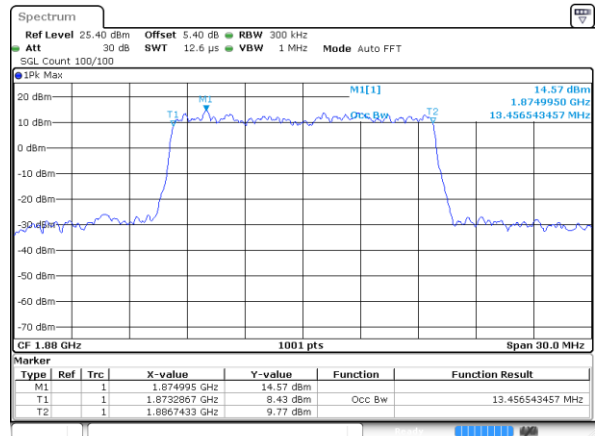
Date: 4 JUL 2020 13:20:27

Middle Channel / 15MHz / QPSK



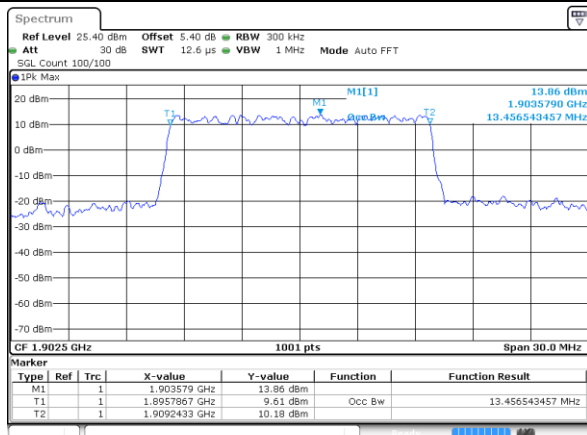
Date: 4 JUL 2020 13:27:17

Middle Channel / 15MHz / 16QAM



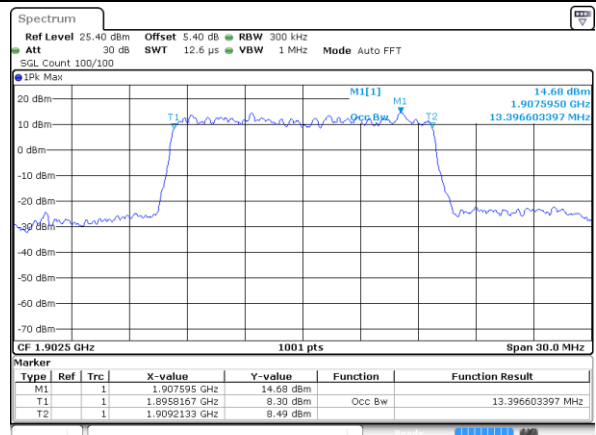
Date: 4 JUL 2020 13:27:27

Highest Channel / 15MHz / QPSK



Date: 4 JUL 2020 13:29:46

Highest Channel / 15MHz / 16QAM

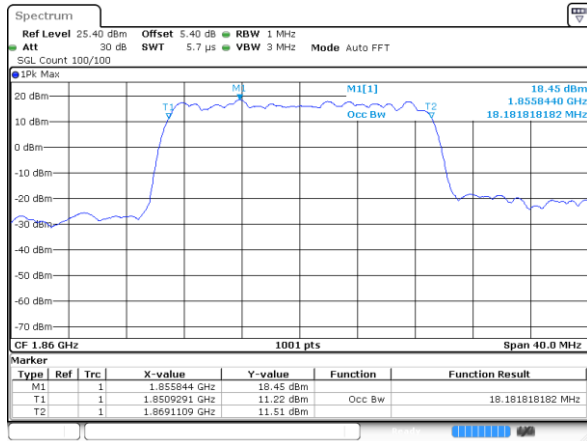


Date: 4 JUL 2020 13:29:56



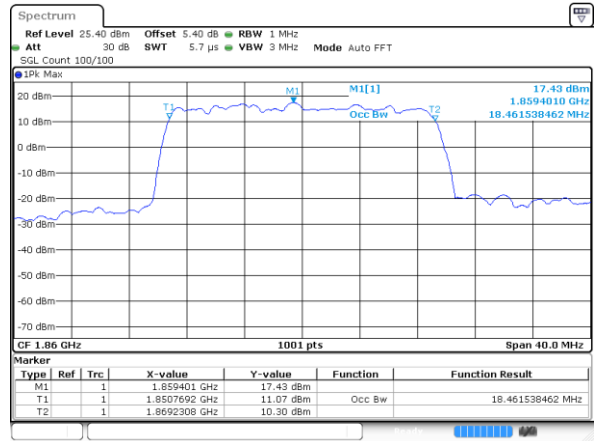
LTE Band 2

Lowest Channel / 20MHz / QPSK



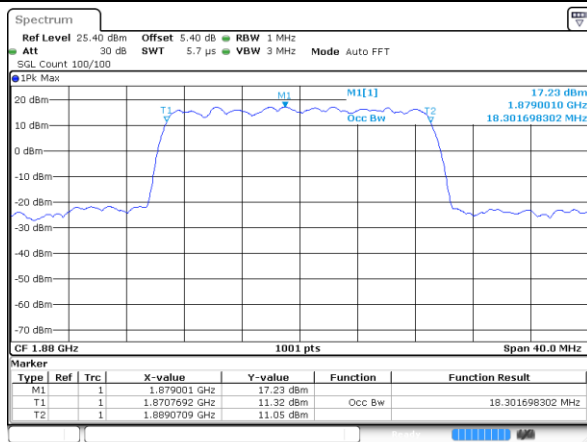
Date: 4 JUL 2020 13:36:45

Lowest Channel / 20MHz / 16QAM



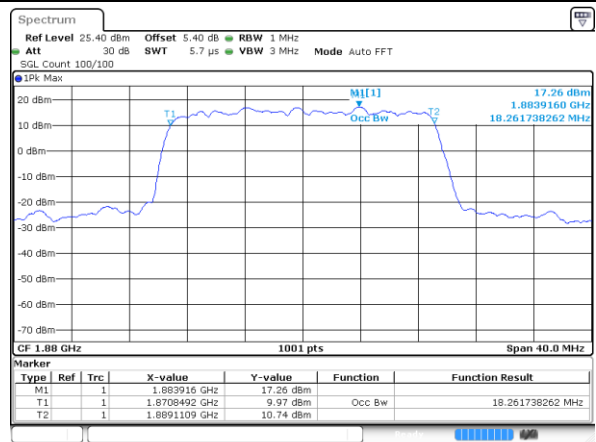
Date: 4 JUL 2020 13:37:00

Middle Channel / 20MHz / QPSK



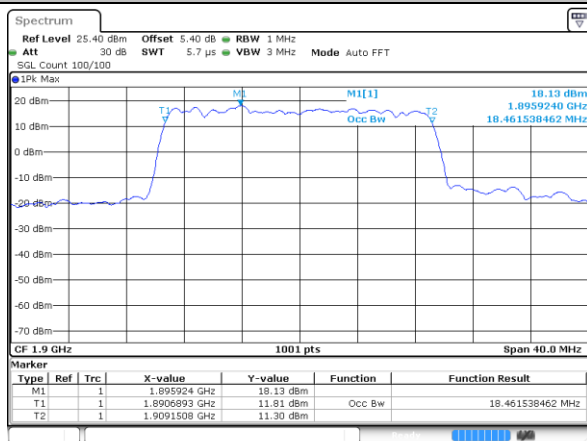
Date: 4 JUL 2020 13:43:53

Middle Channel / 20MHz / 16QAM



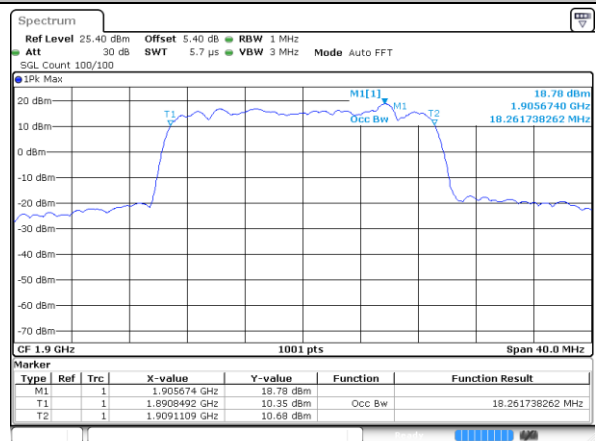
Date: 4 JUL 2020 13:44:03

Highest Channel / 20MHz / QPSK



Date: 4 JUL 2020 13:46:22

Highest Channel / 20MHz / 16QAM



Date: 4 JUL 2020 13:46:32