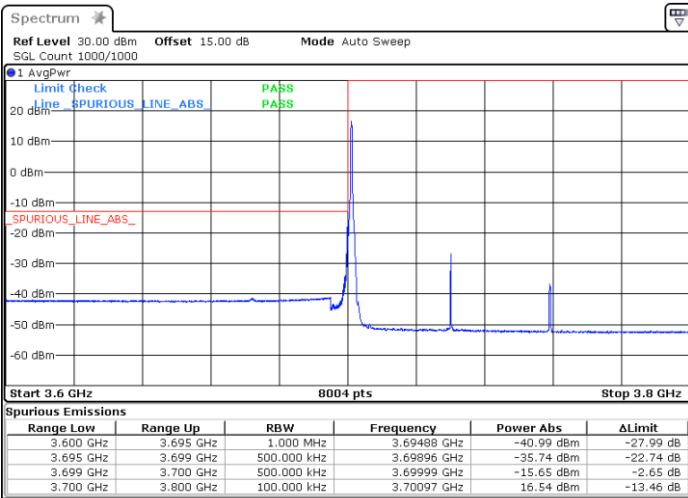




FR1 UL-MIMO n77 / 60MHz / CP-OFDM QPSK (Ant5)

Lowest Band Edge / 1 RB

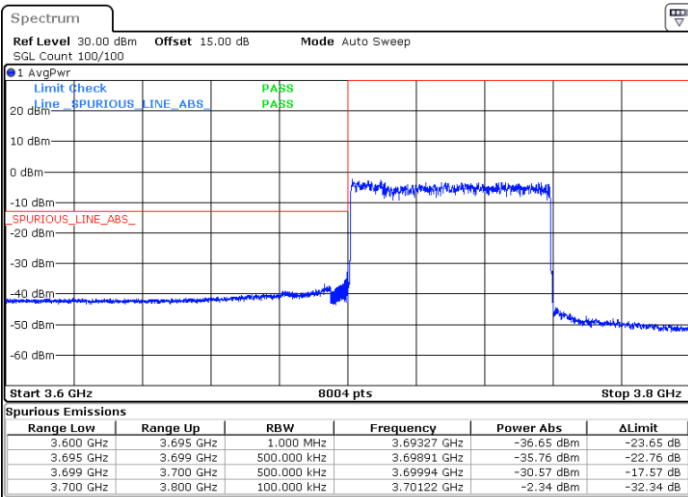
Channel Power < -13dBm Pass



Date: 22 JUN 2021 22:41:14

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



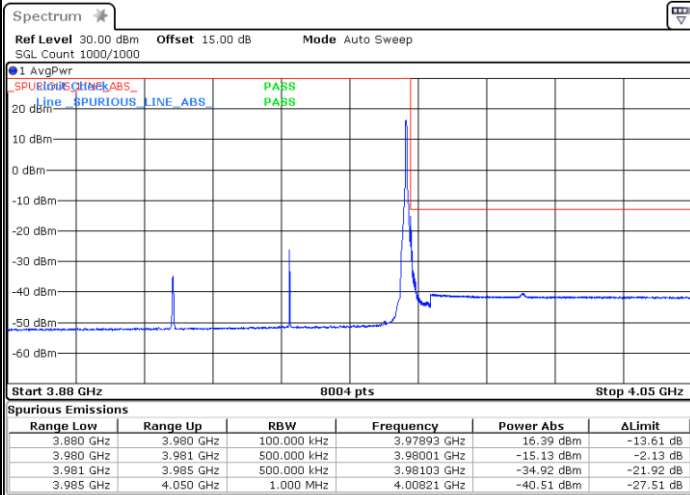
Date: 22 JUN 2021 22:39:04



FR1 UL-MIMO n77 / 60MHz / CP-OFDM QPSK (Ant5)

Highest Band Edge / 1 RB

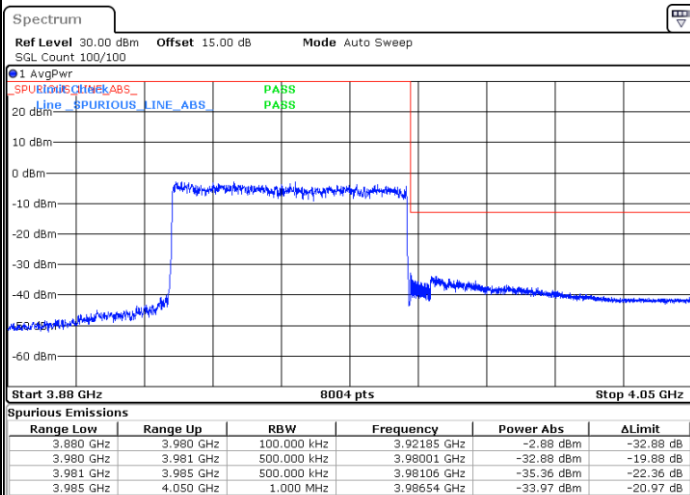
Channel Power < -13dBm Pass



Date: 22 JUN 2021 22:43:39

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



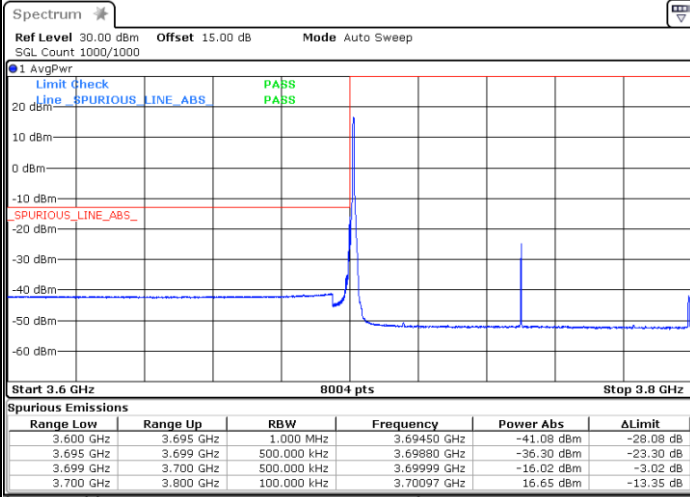
Date: 22 JUN 2021 22:45:06



FR1 UL-MIMO n77 / 100MHz / CP-OFDM QPSK (Ant3)

Lowest Band Edge / 1 RB

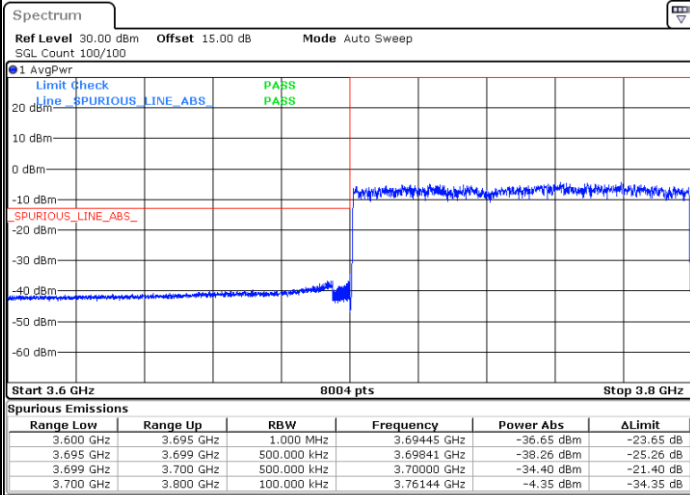
Channel Power < -13dBm Pass



Date: 22 JUN 2021 19:42:18

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



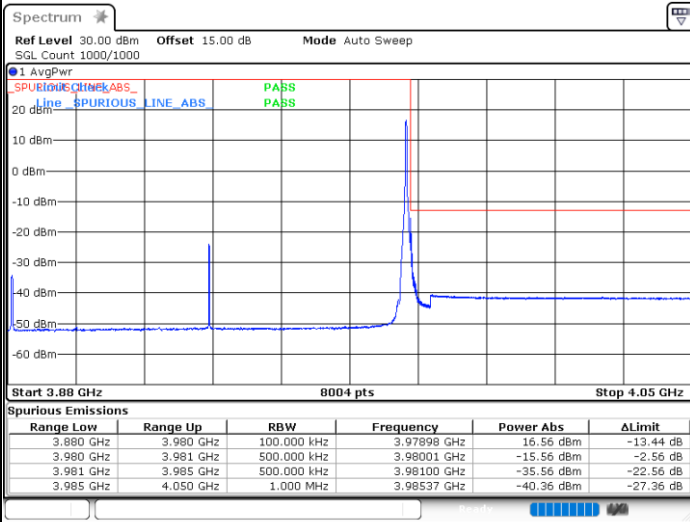
Date: 22 JUN 2021 19:41:30



FR1 UL-MIMO n77 / 100MHz / CP-OFDM QPSK (Ant3)

Highest Band Edge / 1 RB

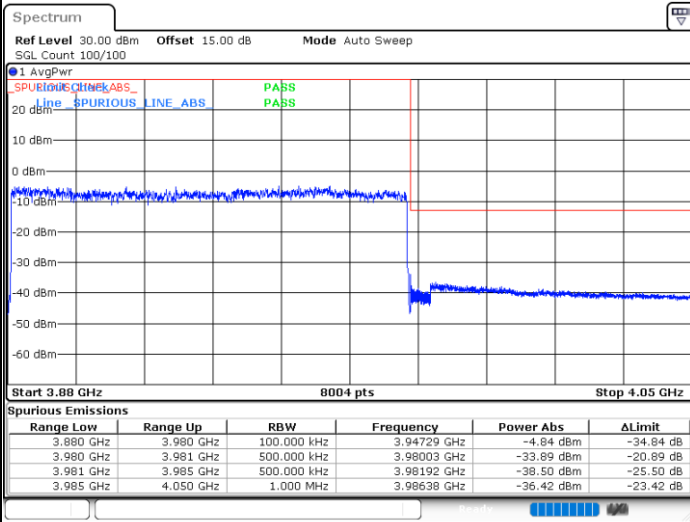
Channel Power < -13dBm Pass



Date: 22 JUN 2021 19:45:50

Highest Band Edge / Full RB

Channel Power < -13dBm Pass



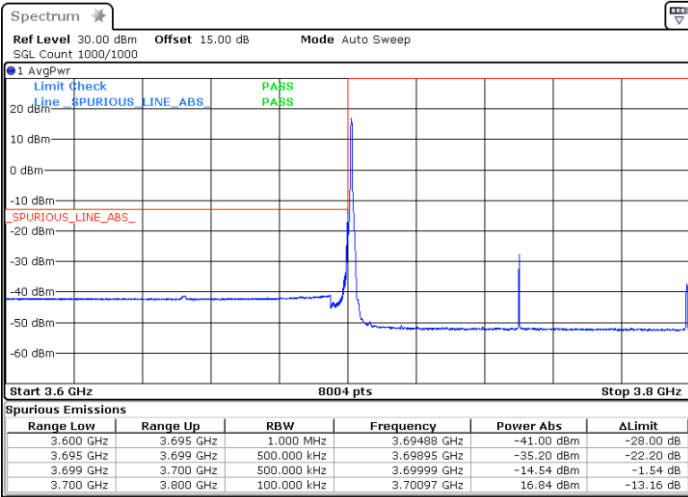
Date: 22 JUN 2021 19:46:15



FR1 UL-MIMO n77 / 100MHz / CP-OFDM QPSK (Ant5)

Lowest Band Edge / 1 RB

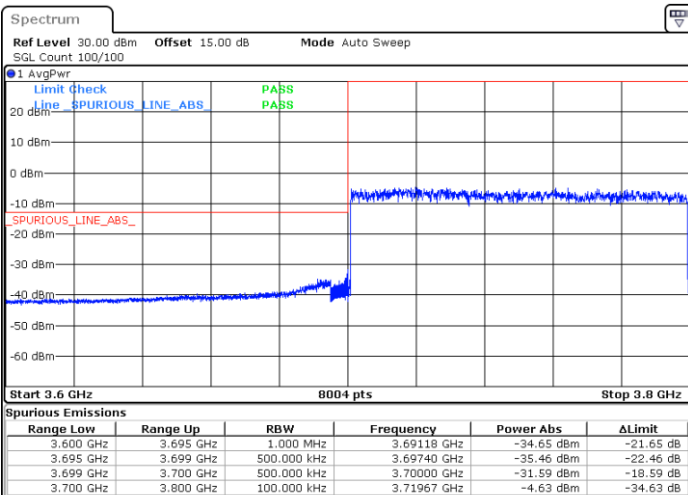
Channel Power < -13dBm Pass



Date: 22 JUN 2021 22:34:51

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



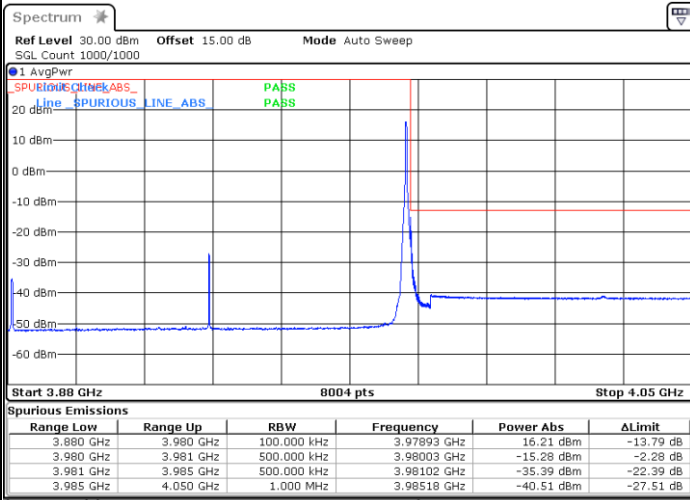
Date: 22 JUN 2021 22:33:06



FR1 UL-MIMO n77 / 100MHz / CP-OFDM QPSK (Ant3)

Lowest Band Edge / 1 RB

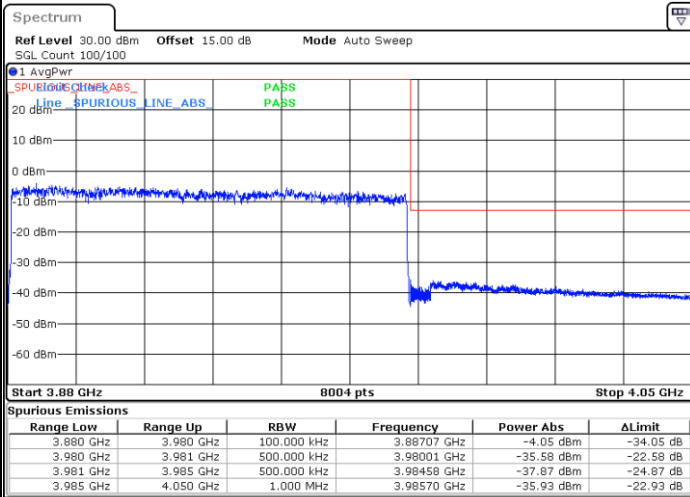
Channel Power < -13dBm Pass



Date: 22 JUN 2021 22:31:38

Lowest Band Edge / Full RB

Channel Power < -13dBm Pass



Date: 22 JUN 2021 22:32:01

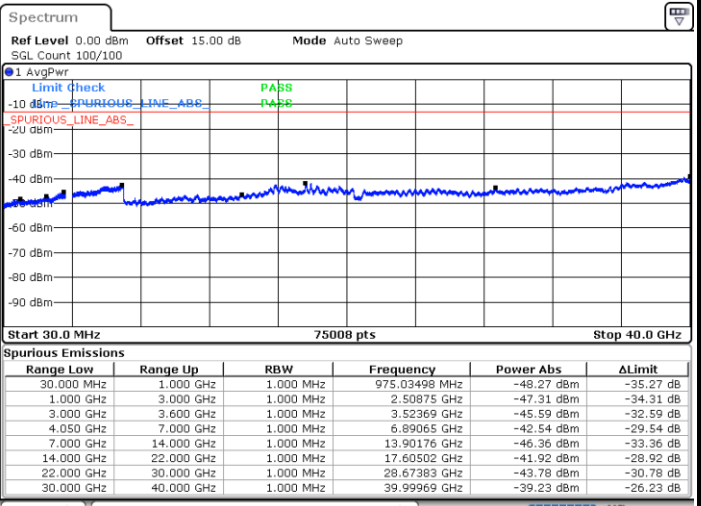
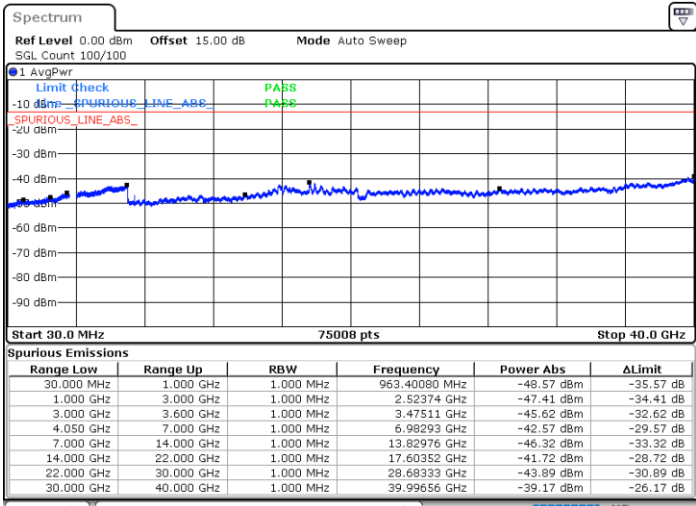


Conducted Spurious Emission

FR1 UL-MIMO n77 / 20MHz / CP-OFDM QPSK (ANT3)

Lowest Channel / 1RB

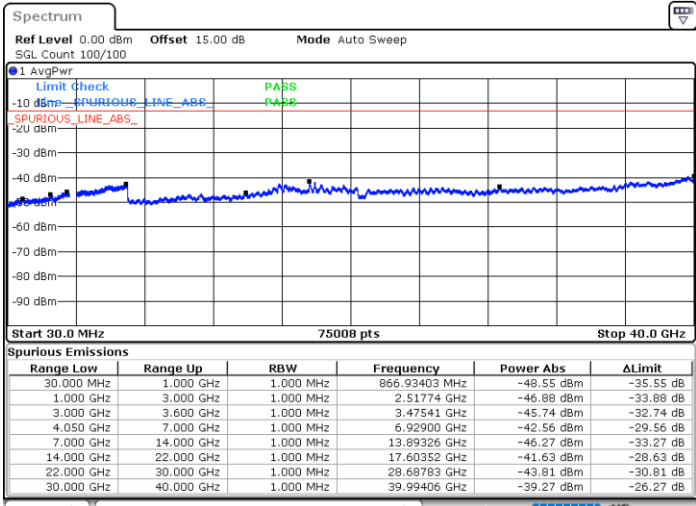
Middle Channel / 1RB



Date: 22 JUN 2021 21:04:39

Date: 22 JUN 2021 21:19:53

Highest Channel / 1RB



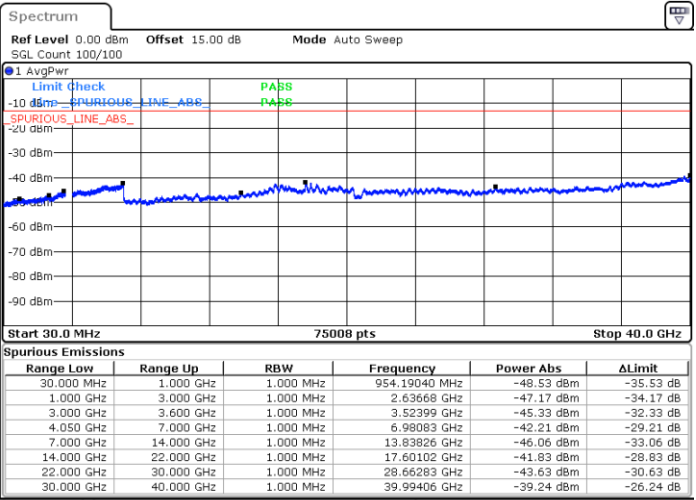
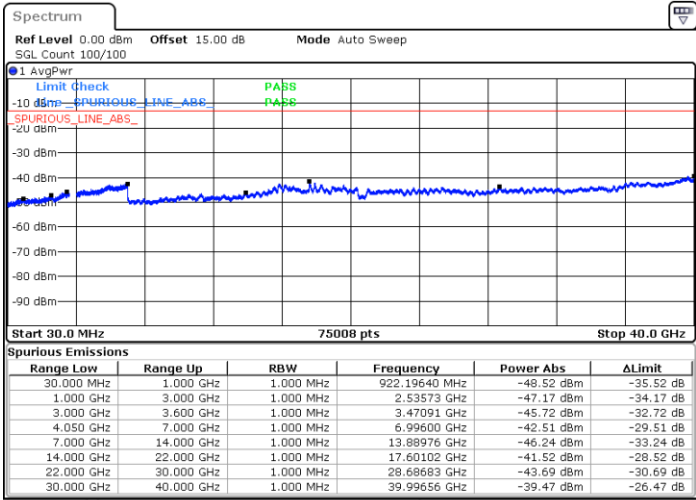
Date: 22 JUN 2021 21:06:58



FR1 UL-MIMO n77 / 20MHz / CP-OFDM QPSK (Ant5)

Lowest Channel / 1RB

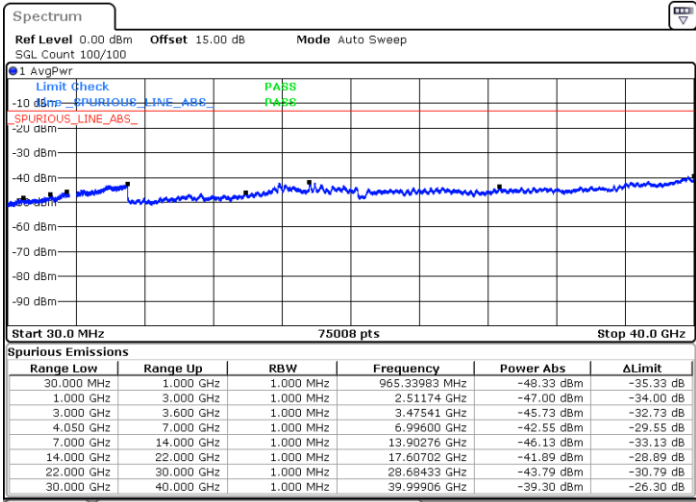
Middle Channel / 1RB



Date: 22 JUN 2021 21:51:40

Date: 22 JUN 2021 21:41:15

Highest Channel / 1RB



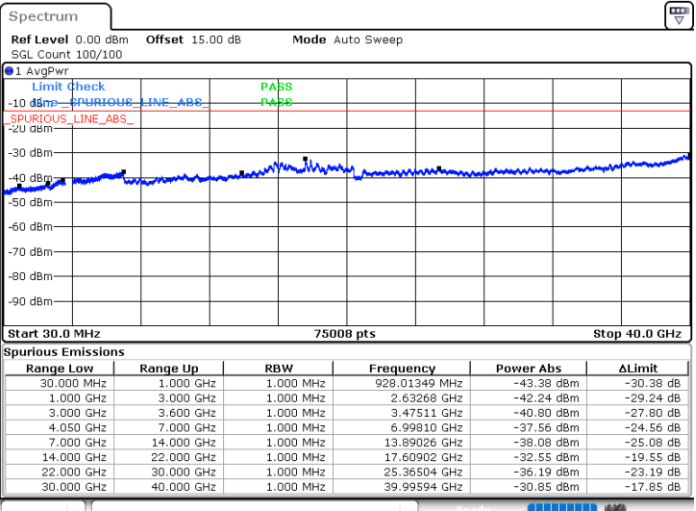
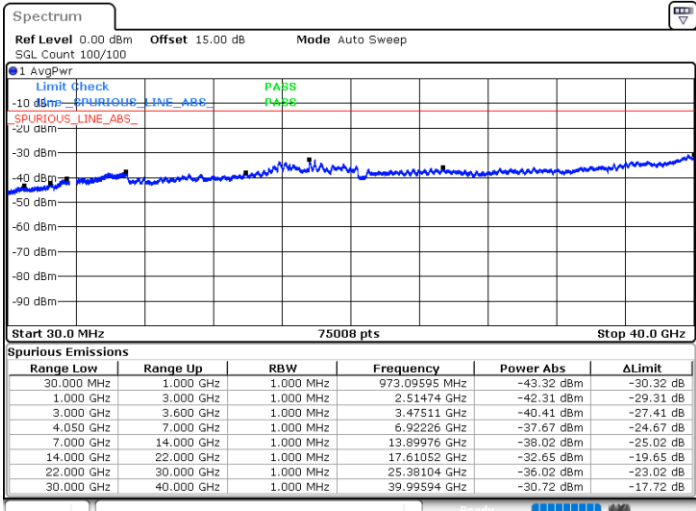
Date: 22 JUN 2021 21:58:10



FR1 UL-MIMO n77 / 60MHz / CP-OFDM QPSK (ANT3)

Lowest Channel / 1RB

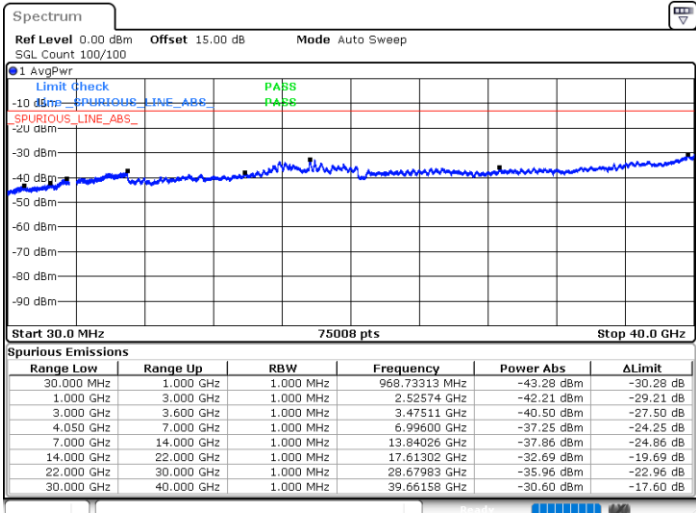
Middle Channel / 1RB



Date: 22 JUN 2021 20:08:26

Date: 22 JUN 2021 20:14:51

Highest Channel / 1RB



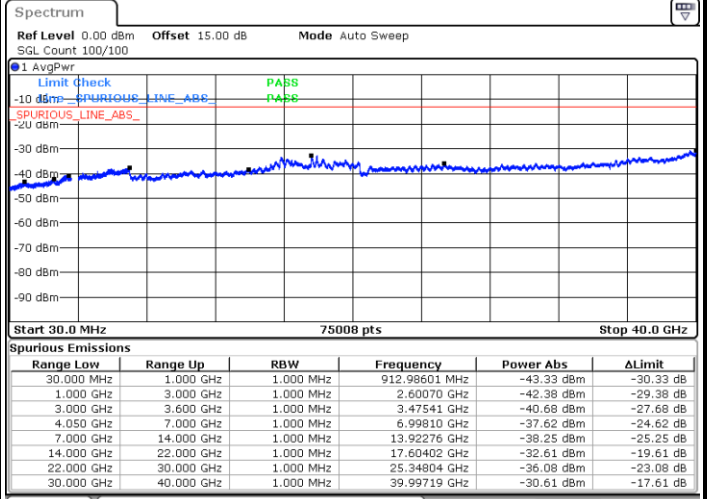
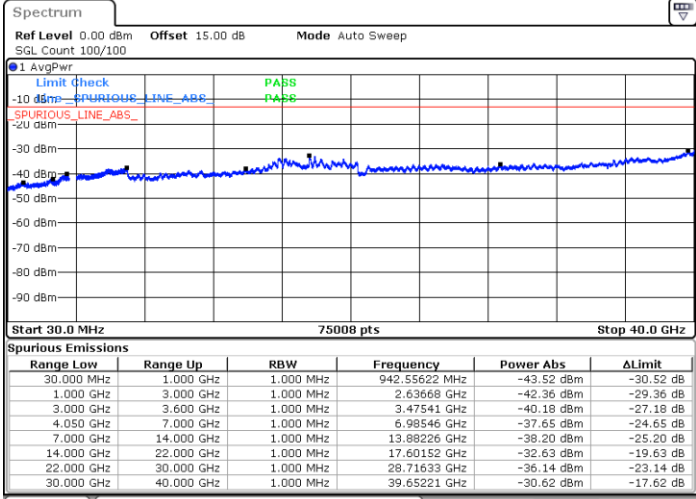
Date: 22 JUN 2021 20:16:41



FR1 UL-MIMO n77 / 60MHz / CP-OFDM QPSK (Ant5)

Lowest Channel / 1RB

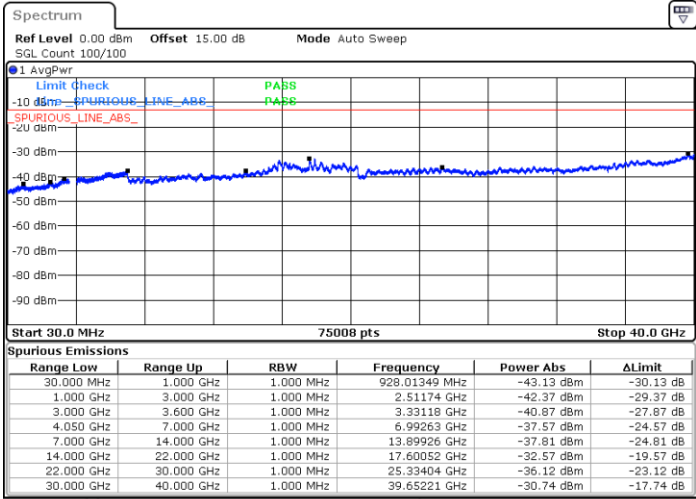
Middle Channel / 1RB



Date: 22 JUN 2021 22:04:25

Date: 22 JUN 2021 22:02:50

Highest Channel / 1RB



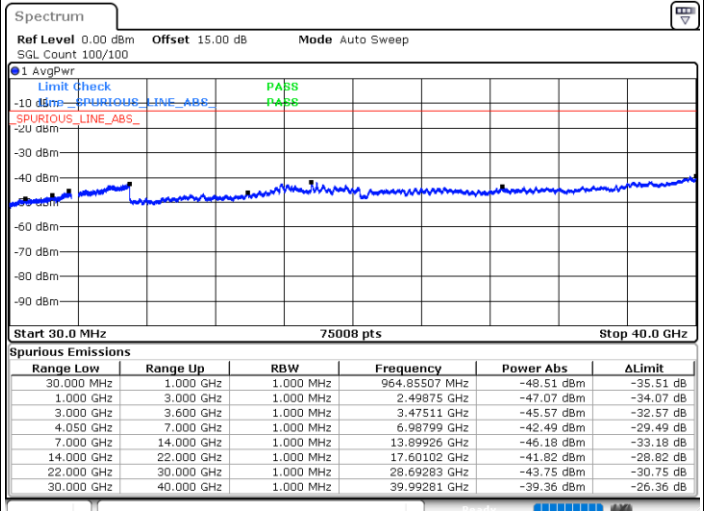
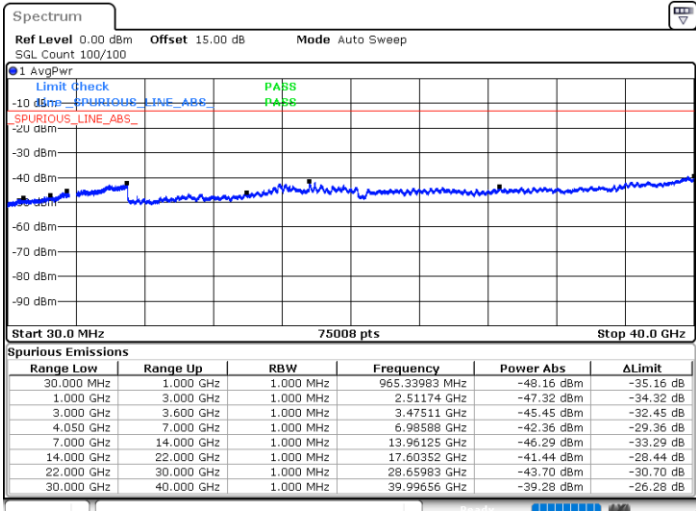
Date: 22 JUN 2021 22:10:10



FR1 UL-MIMO n77 / 100MHz / CP-OFDM QPSK (Ant3)

Lowest Channel / 1RB

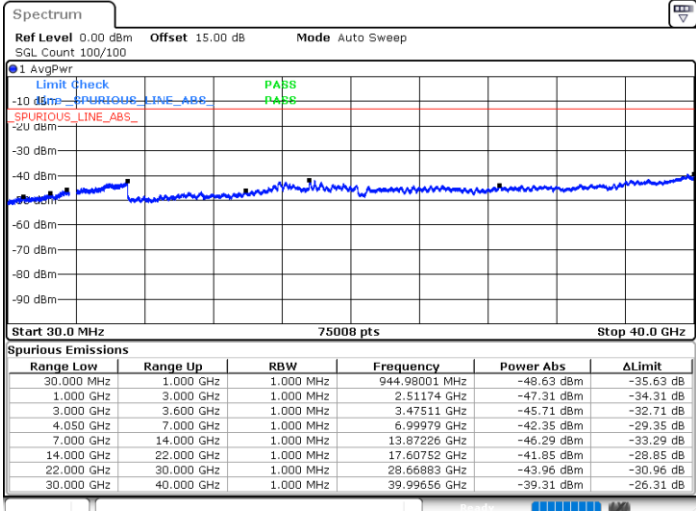
Middle Channel / 1RB



Date: 22 JUN 2021 20:06:51

Date: 22 JUN 2021 20:01:50

Highest Channel / 1RB



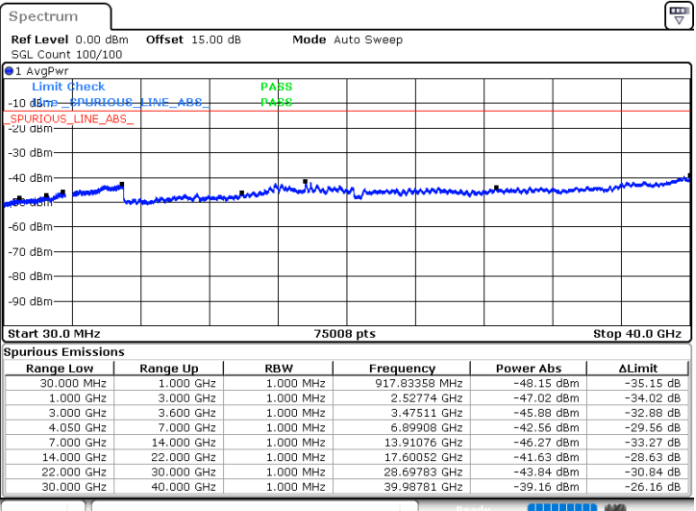
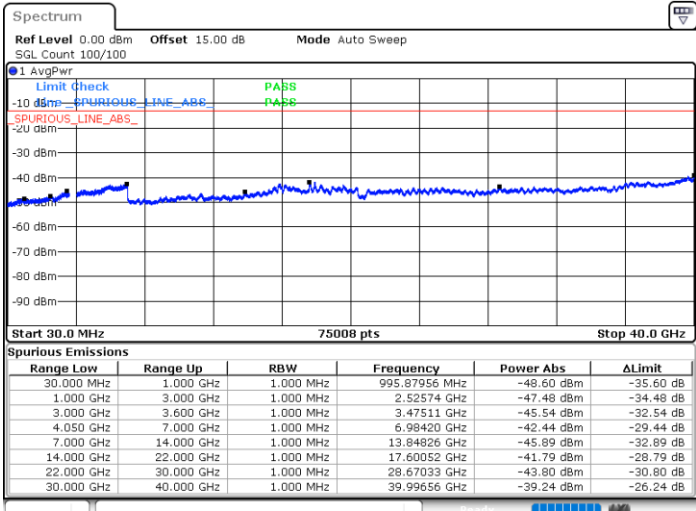
Date: 22 JUN 2021 20:00:34



FR1 UL-MIMO n77 / 100MHz / CP-OFDM QPSK (Ant5)

Lowest Channel / 1RB

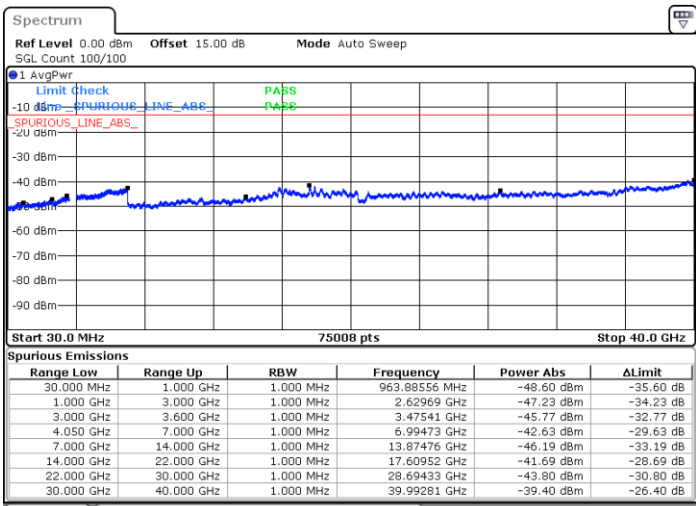
Middle Channel / 1RB



Date: 22 JUN 2021 22:19:21

Date: 22 JUN 2021 22:12:03

Highest Channel / 1RB



Date: 22 JUN 2021 22:22:32



Frequency Stability

Test Conditions		NR UL-MIMO n77 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Within Band
		Deviation (ppm)	Result
50	Normal Voltage	0.0095	PASS
40	Normal Voltage	0.0071	
30	Normal Voltage	0.0037	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0058	
-10	Normal Voltage	0.0090	
-20	Normal Voltage	0.0081	
-30	Normal Voltage	0.0038	
20	Maximum Voltage	0.0059	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0033	

Note:

- 1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.
- 2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Transmitter Conducted Output Power And ERP/EIRP, UL MIMO

Gain=0.23dB

NR	SCS	Bandwidth	Arfcn	Freq	Modulation	RB	Ant3	Ant5	Conducted	EIRP	EIRP
Band	(kHz)	(MHz)		(MHz)					Power(dBm)	(dBm)	(W)
77	30	20	647334	3710.01	CP-OFDM QPSK	25@12	20.51	20.27	23.40	23.63	0.2308
77	30	20	647334	3710.01	CP-OFDM QPSK	1@1	20.51	20.05	23.30	23.53	0.2253
77	30	20	647334	3710.01	CP-OFDM QPSK	1@49	20.54	20.32	23.44	23.67	0.2329
77	30	20	647334	3710.01	CP-OFDM 16 QAM	25@12	19.96	19.72	22.85	23.08	0.2033
77	30	20	647334	3710.01	CP-OFDM 16 QAM	1@1	20.11	19.63	22.89	23.12	0.2050
77	30	20	647334	3710.01	CP-OFDM 16 QAM	1@49	20.15	19.74	22.96	23.19	0.2085
77	30	20	647334	3710.01	CP-OFDM 64 QAM	25@12	18.53	18.28	21.42	21.65	0.1461
77	30	20	647334	3710.01	CP-OFDM 64 QAM	1@1	18.54	18.23	21.40	21.63	0.1455
77	30	20	647334	3710.01	CP-OFDM 64 QAM	1@49	18.35	18.52	21.45	21.68	0.1471
77	30	20	647334	3710.01	CP-OFDM 256 QAM	25@12	14.92	14.79	17.87	18.10	0.0645
77	30	20	647334	3710.01	CP-OFDM 256 QAM	1@1	15.15	14.75	17.96	18.20	0.0660
77	30	20	647334	3710.01	CP-OFDM 256 QAM	1@49	14.77	14.88	17.84	18.07	0.0641
77	30	20	656000	3840	CP-OFDM QPSK	25@12	20.16	20.27	23.23	23.46	0.2216
77	30	20	656000	3840	CP-OFDM QPSK	1@1	20.6	20.12	23.38	23.61	0.2295
77	30	20	656000	3840	CP-OFDM	1@49	20.27	20.22	23.26	23.49	0.2231



QPSK											
77	30	20	656000	3840	CP-OFDM 16 QAM	25@12	20.08	19.98	23.04	23.27	0.2124
77	30	20	656000	3840	CP-OFDM 16 QAM	1@1	20.06	19.95	23.02	23.25	0.2112
77	30	20	656000	3840	CP-OFDM 16 QAM	1@49	20.05	20.07	23.07	23.30	0.2138
77	30	20	656000	3840	CP-OFDM 64 QAM	25@12	18.51	18.29	21.41	21.64	0.1459
77	30	20	656000	3840	CP-OFDM 64 QAM	1@1	18.34	18.52	21.44	21.67	0.1469
77	30	20	656000	3840	CP-OFDM 64 QAM	1@49	18.33	18.23	21.29	21.52	0.1419
77	30	20	656000	3840	CP-OFDM 256 QAM	25@12	14.83	15.05	17.95	18.18	0.0658
77	30	20	656000	3840	CP-OFDM 256 QAM	1@1	14.69	14.89	17.80	18.03	0.0636
77	30	20	656000	3840	CP-OFDM 256 QAM	1@49	14.98	14.96	17.98	18.21	0.0662
77	30	20	664666	3969.99	CP-OFDM QPSK	25@12	20.21	20.2	23.22	23.45	0.2211
77	30	20	664666	3969.99	CP-OFDM QPSK	1@1	20.33	20.46	23.41	23.64	0.2310
77	30	20	664666	3969.99	CP-OFDM QPSK	1@49	20.59	20.37	23.49	23.72	0.2356
77	30	20	664666	3969.99	CP-OFDM 16 QAM	25@12	20.07	20.03	23.06	23.29	0.2133
77	30	20	664666	3969.99	CP-OFDM 16 QAM	1@1	20.03	20.05	23.05	23.28	0.2128
77	30	20	664666	3969.99	CP-OFDM 16 QAM	1@49	20.1	20	23.06	23.29	0.2133
77	30	20	664666	3969.99	CP-OFDM 64 QAM	25@12	18.44	18.57	21.52	21.75	0.1495
77	30	20	664666	3969.99	CP-OFDM 64 QAM	1@1	18.4	18.5	21.46	21.69	0.1476



77	30	20	664666	3969.99	CP-OFDM 64 QAM	1@49	18.58	18.43	21.52	21.75	0.1495
77	30	20	664666	3969.99	CP-OFDM 256 QAM	25@12	15.14	15.1	18.13	18.36	0.0686
77	30	20	664666	3969.99	CP-OFDM 256 QAM	1@1	14.99	14.82	17.92	18.15	0.0653
77	30	20	664666	3969.99	CP-OFDM 256 QAM	1@49	15.16	14.82	18.00	18.23	0.0666
77	30	30	647668	3715.02	CP-OFDM QPSK	36@18	20.24	20.35	23.31	23.54	0.2257
77	30	30	647668	3715.02	CP-OFDM QPSK	1@1	20.33	20.35	23.35	23.58	0.2281
77	30	30	647668	3715.02	CP-OFDM QPSK	1@76	20.24	20.29	23.28	23.51	0.2242
77	30	30	647668	3715.02	CP-OFDM 16 QAM	36@18	20.02	20.07	23.06	23.29	0.2131
77	30	30	647668	3715.02	CP-OFDM 16 QAM	1@1	20.06	20.15	23.12	23.35	0.2161
77	30	30	647668	3715.02	CP-OFDM 16 QAM	1@76	19.96	20.15	23.07	23.30	0.2136
77	30	30	647668	3715.02	CP-OFDM 64 QAM	36@18	18.35	18.27	21.32	21.55	0.1429
77	30	30	647668	3715.02	CP-OFDM 64 QAM	1@1	18.5	18.32	21.42	21.65	0.1463
77	30	30	647668	3715.02	CP-OFDM 64 QAM	1@76	18.31	18.52	21.43	21.66	0.1464
77	30	30	647668	3715.02	CP-OFDM 256 QAM	36@18	15.14	14.86	18.01	18.24	0.0667
77	30	30	647668	3715.02	CP-OFDM 256 QAM	1@1	15.02	15.06	18.05	18.28	0.0673
77	30	30	647668	3715.02	CP-OFDM 256 QAM	1@76	14.76	14.98	17.88	18.11	0.0647
77	30	30	656000	3840	CP-OFDM QPSK	36@18	20.18	20.4	23.30	23.53	0.2255
77	30	30	656000	3840	CP-OFDM QPSK	1@1	20.43	20.35	23.40	23.63	0.2307



77	30	30	656000	3840	CP-OFDM QPSK	1@76	20.45	20.16	23.32	23.55	0.2264
77	30	30	656000	3840	CP-OFDM 16 QAM	36@18	20	20.08	23.05	23.28	0.2129
77	30	30	656000	3840	CP-OFDM 16 QAM	1@1	20.16	20.01	23.10	23.33	0.2151
77	30	30	656000	3840	CP-OFDM 16 QAM	1@76	20.19	20.02	23.12	23.35	0.2161
77	30	30	656000	3840	CP-OFDM 64 QAM	36@18	18.54	18.49	21.53	21.76	0.1498
77	30	30	656000	3840	CP-OFDM 64 QAM	1@1	18.49	18.22	21.37	21.60	0.1445
77	30	30	656000	3840	CP-OFDM 64 QAM	1@76	18.58	18.28	21.44	21.67	0.1470
77	30	30	656000	3840	CP-OFDM 256 QAM	36@18	14.9	14.78	17.85	18.08	0.0643
77	30	30	656000	3840	CP-OFDM 256 QAM	1@1	14.78	14.94	17.87	18.10	0.0646
77	30	30	656000	3840	CP-OFDM 256 QAM	1@76	15.07	14.84	17.97	18.20	0.0660
77	30	30	664332	3964.98	CP-OFDM QPSK	36@18	20.28	20.36	23.33	23.56	0.2270
77	30	30	664332	3964.98	CP-OFDM QPSK	1@1	20.2	20.17	23.20	23.43	0.2201
77	30	30	664332	3964.98	CP-OFDM QPSK	1@76	20.12	20.58	23.37	23.60	0.2289
77	30	30	664332	3964.98	CP-OFDM 16 QAM	36@18	20.05	20.2	23.14	23.37	0.2171
77	30	30	664332	3964.98	CP-OFDM 16 QAM	1@1	20.04	20.13	23.10	23.33	0.2151
77	30	30	664332	3964.98	CP-OFDM 16 QAM	1@76	20.2	19.93	23.08	23.31	0.2142
77	30	30	664332	3964.98	CP-OFDM 64 QAM	36@18	18.49	18.31	21.41	21.64	0.1459
77	30	30	664332	3964.98	CP-OFDM 64 QAM	1@1	18.35	18.25	21.31	21.54	0.1426



77	30	30	664332	3964.98	CP-OFDM 64 QAM	1@76	18.38	18.28	21.34	21.57	0.1436
77	30	30	664332	3964.98	CP-OFDM 256 QAM	36@18	15.12	14.78	17.96	18.19	0.0660
77	30	30	664332	3964.98	CP-OFDM 256 QAM	1@1	15.13	14.75	17.95	18.18	0.0658
77	30	30	664332	3964.98	CP-OFDM 256 QAM	1@76	15.09	14.68	17.90	18.13	0.0650
77	30	40	648000	3720	CP-OFDM QPSK	50@25	20.2	20.57	23.40	23.63	0.2307
77	30	40	648000	3720	CP-OFDM QPSK	1@1	20.45	20.53	23.50	23.73	0.2361
77	30	40	648000	3720	CP-OFDM QPSK	1@104	20.55	20.21	23.39	23.62	0.2304
77	30	40	648000	3720	CP-OFDM 16 QAM	50@25	19.99	19.94	22.98	23.21	0.2092
77	30	40	648000	3720	CP-OFDM 16 QAM	1@1	19.99	20.08	23.05	23.28	0.2126
77	30	40	648000	3720	CP-OFDM 16 QAM	1@104	20.14	19.95	23.06	23.29	0.2131
77	30	40	648000	3720	CP-OFDM 64 QAM	50@25	18.45	18.27	21.37	21.60	0.1446
77	30	40	648000	3720	CP-OFDM 64 QAM	1@1	18.29	18.48	21.40	21.63	0.1454
77	30	40	648000	3720	CP-OFDM 64 QAM	1@104	18.38	18.22	21.31	21.54	0.1426
77	30	40	648000	3720	CP-OFDM 256 QAM	50@25	14.82	14.96	17.90	18.13	0.0650
77	30	40	648000	3720	CP-OFDM 256 QAM	1@1	15.07	14.74	17.92	18.15	0.0653
77	30	40	648000	3720	CP-OFDM 256 QAM	1@104	14.8	15.2	18.01	18.25	0.0668
77	30	40	656000	3840	CP-OFDM QPSK	50@25	20.58	20.15	23.38	23.61	0.2297
77	30	40	656000	3840	CP-OFDM QPSK	1@1	20.15	20.33	23.25	23.48	0.2229



77	30	40	656000	3840	CP-OFDM QPSK	1@104	20.47	20.24	23.37	23.60	0.2289
77	30	40	656000	3840	CP-OFDM 16 QAM	50@25	20.03	19.93	22.99	23.22	0.2099
77	30	40	656000	3840	CP-OFDM 16 QAM	1@1	20.2	19.97	23.10	23.33	0.2151
77	30	40	656000	3840	CP-OFDM 16 QAM	1@104	20.17	20.18	23.19	23.42	0.2196
77	30	40	656000	3840	CP-OFDM 64 QAM	50@25	18.33	18.46	21.41	21.64	0.1458
77	30	40	656000	3840	CP-OFDM 64 QAM	1@1	18.58	18.37	21.49	21.72	0.1485
77	30	40	656000	3840	CP-OFDM 64 QAM	1@104	18.52	18.26	21.40	21.63	0.1456
77	30	40	656000	3840	CP-OFDM 256 QAM	50@25	14.76	14.72	17.75	17.98	0.0628
77	30	40	656000	3840	CP-OFDM 256 QAM	1@1	14.92	15.18	18.06	18.29	0.0675
77	30	40	656000	3840	CP-OFDM 256 QAM	1@104	15.14	14.89	18.03	18.26	0.0669
77	30	40	664000	3960	CP-OFDM QPSK	50@25	20.55	20.14	23.36	23.59	0.2286
77	30	40	664000	3960	CP-OFDM QPSK	1@1	20.29	20.52	23.42	23.65	0.2316
77	30	40	664000	3960	CP-OFDM QPSK	1@104	20.15	20.14	23.16	23.39	0.2181
77	30	40	664000	3960	CP-OFDM 16 QAM	50@25	20.09	19.97	23.04	23.27	0.2124
77	30	40	664000	3960	CP-OFDM 16 QAM	1@1	20.08	19.96	23.03	23.26	0.2119
77	30	40	664000	3960	CP-OFDM 16 QAM	1@104	20.04	20.07	23.07	23.30	0.2136
77	30	40	664000	3960	CP-OFDM 64 QAM	50@25	18.33	18.42	21.39	21.62	0.1451
77	30	40	664000	3960	CP-OFDM 64 QAM	1@1	18.53	18.54	21.55	21.78	0.1505



77	30	40	664000	3960	CP-OFDM 64 QAM	1@104	18.37	18.42	21.41	21.64	0.1457
77	30	40	664000	3960	CP-OFDM 256 QAM	50@25	14.99	15.07	18.04	18.27	0.0672
77	30	40	664000	3960	CP-OFDM 256 QAM	1@1	15.01	14.93	17.98	18.21	0.0662
77	30	40	664000	3960	CP-OFDM 256 QAM	1@104	14.74	14.94	17.85	18.08	0.0643
77	30	50	648334	3725.01	CP-OFDM QPSK	64@32	20.26	20.32	23.30	23.53	0.2255
77	30	50	648334	3725.01	CP-OFDM QPSK	1@1	20.34	20.49	23.43	23.66	0.2321
77	30	50	648334	3725.01	CP-OFDM QPSK	1@131	20.35	20.25	23.31	23.54	0.2260
77	30	50	648334	3725.01	CP-OFDM 16 QAM	64@32	20.13	20.03	23.09	23.32	0.2148
77	30	50	648334	3725.01	CP-OFDM 16 QAM	1@1	20.16	20.17	23.18	23.41	0.2191
77	30	50	648334	3725.01	CP-OFDM 16 QAM	1@131	20.16	20.05	23.12	23.35	0.2161
77	30	50	648334	3725.01	CP-OFDM 64 QAM	64@32	18.6	18.43	21.53	21.76	0.1498
77	30	50	648334	3725.01	CP-OFDM 64 QAM	1@1	18.47	18.44	21.47	21.70	0.1478
77	30	50	648334	3725.01	CP-OFDM 64 QAM	1@131	18.44	18.56	21.51	21.74	0.1493
77	30	50	648334	3725.01	CP-OFDM 256 QAM	64@32	15.17	14.96	18.08	18.31	0.0677
77	30	50	648334	3725.01	CP-OFDM 256 QAM	1@1	14.85	14.75	17.81	18.04	0.0637
77	30	50	648334	3725.01	CP-OFDM 256 QAM	1@131	15.2	14.76	18.00	18.23	0.0665
77	30	50	656000	3840	CP-OFDM QPSK	64@32	20.23	20.38	23.32	23.55	0.2263
77	30	50	656000	3840	CP-OFDM QPSK	1@1	20.37	20.49	23.44	23.67	0.2329



77	30	50	656000	3840	CP-OFDM QPSK	1@131	20.55	20.29	23.43	23.66	0.2324
77	30	50	656000	3840	CP-OFDM 16 QAM	64@32	20.04	20.16	23.11	23.34	0.2158
77	30	50	656000	3840	CP-OFDM 16 QAM	1@1	19.94	19.98	22.97	23.20	0.2090
77	30	50	656000	3840	CP-OFDM 16 QAM	1@131	19.94	20.15	23.06	23.29	0.2132
77	30	50	656000	3840	CP-OFDM 64 QAM	64@32	18.37	18.51	21.45	21.68	0.1473
77	30	50	656000	3840	CP-OFDM 64 QAM	1@1	18.48	18.21	21.36	21.59	0.1441
77	30	50	656000	3840	CP-OFDM 64 QAM	1@131	18.5	18.52	21.52	21.75	0.1496
77	30	50	656000	3840	CP-OFDM 256 QAM	64@32	15.14	15	18.08	18.31	0.0678
77	30	50	656000	3840	CP-OFDM 256 QAM	1@1	14.92	15.09	18.02	18.25	0.0668
77	30	50	656000	3840	CP-OFDM 256 QAM	1@131	14.76	14.73	17.76	17.99	0.0629
77	30	50	663666	3954.99	CP-OFDM QPSK	64@32	20.23	20.49	23.37	23.60	0.2292
77	30	50	663666	3954.99	CP-OFDM QPSK	1@1	20.5	20.44	23.48	23.71	0.2350
77	30	50	663666	3954.99	CP-OFDM QPSK	1@131	20.25	20.3	23.29	23.52	0.2247
77	30	50	663666	3954.99	CP-OFDM 16 QAM	64@32	20.19	20.09	23.15	23.38	0.2178
77	30	50	663666	3954.99	CP-OFDM 16 QAM	1@1	20.19	20.13	23.17	23.40	0.2188
77	30	50	663666	3954.99	CP-OFDM 16 QAM	1@131	20.05	20.19	23.13	23.36	0.2168
77	30	50	663666	3954.99	CP-OFDM 64 QAM	64@32	18.53	18.34	21.45	21.68	0.1471
77	30	50	663666	3954.99	CP-OFDM 64 QAM	1@1	18.38	18.35	21.38	21.61	0.1447



77	30	50	663666	3954.99	CP-OFDM 64 QAM	1@131	18.51	18.38	21.46	21.69	0.1474
77	30	50	663666	3954.99	CP-OFDM 256 QAM	64@32	14.81	15.02	17.93	18.16	0.0654
77	30	50	663666	3954.99	CP-OFDM 256 QAM	1@1	14.75	15.13	17.95	18.18	0.0658
77	30	50	663666	3954.99	CP-OFDM 256 QAM	1@131	14.89	14.7	17.81	18.04	0.0636
77	30	60	648668	3730.02	CP-OFDM QPSK	81@40	20.33	20.45	23.40	23.63	0.2307
77	30	60	648668	3730.02	CP-OFDM QPSK	1@1	20.12	20.25	23.20	23.43	0.2201
77	30	60	648668	3730.02	CP-OFDM QPSK	1@160	20.2	20.38	23.30	23.53	0.2255
77	30	60	648668	3730.02	CP-OFDM 16 QAM	81@40	20	20.12	23.07	23.30	0.2138
77	30	60	648668	3730.02	CP-OFDM 16 QAM	1@1	19.96	19.96	22.97	23.20	0.2090
77	30	60	648668	3730.02	CP-OFDM 16 QAM	1@160	19.99	20.16	23.09	23.32	0.2146
77	30	60	648668	3730.02	CP-OFDM 64 QAM	81@40	18.26	18.42	21.35	21.58	0.1439
77	30	60	648668	3730.02	CP-OFDM 64 QAM	1@1	18.26	18.3	21.29	21.52	0.1419
77	30	60	648668	3730.02	CP-OFDM 64 QAM	1@160	18.41	18.2	21.32	21.55	0.1428
77	30	60	648668	3730.02	CP-OFDM 256 QAM	81@40	14.68	14.97	17.84	18.07	0.0641
77	30	60	648668	3730.02	CP-OFDM 256 QAM	1@1	14.71	14.99	17.86	18.09	0.0645
77	30	60	648668	3730.02	CP-OFDM 256 QAM	1@160	14.7	14.67	17.70	17.93	0.0620
77	30	60	656000	3840	CP-OFDM QPSK	81@40	20.34	20.13	23.25	23.48	0.2227
77	30	60	656000	3840	CP-OFDM QPSK	1@1	20.3	20.39	23.36	23.59	0.2283



77	30	60	656000	3840	CP-OFDM QPSK	1@160	20.25	20.3	23.29	23.52	0.2247
77	30	60	656000	3840	CP-OFDM 16 QAM	81@40	20.13	20.02	23.09	23.32	0.2146
77	30	60	656000	3840	CP-OFDM 16 QAM	1@1	19.99	19.93	22.97	23.20	0.2090
77	30	60	656000	3840	CP-OFDM 16 QAM	1@160	20.17	20.13	23.16	23.39	0.2183
77	30	60	656000	3840	CP-OFDM 64 QAM	81@40	18.33	18.43	21.39	21.62	0.1452
77	30	60	656000	3840	CP-OFDM 64 QAM	1@1	18.22	18.44	21.34	21.57	0.1436
77	30	60	656000	3840	CP-OFDM 64 QAM	1@160	18.23	18.38	21.32	21.55	0.1428
77	30	60	656000	3840	CP-OFDM 256 QAM	81@40	14.82	14.7	17.77	18.00	0.0631
77	30	60	656000	3840	CP-OFDM 256 QAM	1@1	15.14	14.87	18.02	18.25	0.0668
77	30	60	656000	3840	CP-OFDM 256 QAM	1@160	14.8	14.83	17.83	18.06	0.0639
77	30	60	663332	3949.98	CP-OFDM QPSK	81@40	20.47	20.22	23.36	23.59	0.2284
77	30	60	663332	3949.98	CP-OFDM QPSK	1@1	20.42	20.36	23.40	23.63	0.2307
77	30	60	663332	3949.98	CP-OFDM QPSK	1@160	20.53	20.46	23.51	23.74	0.2364
77	30	60	663332	3949.98	CP-OFDM 16 QAM	81@40	20.16	20.15	23.17	23.40	0.2186
77	30	60	663332	3949.98	CP-OFDM 16 QAM	1@1	20.01	20.2	23.12	23.35	0.2161
77	30	60	663332	3949.98	CP-OFDM 16 QAM	1@160	20.12	20.16	23.15	23.38	0.2178
77	30	60	663332	3949.98	CP-OFDM 64 QAM	81@40	18.52	18.49	21.52	21.75	0.1495
77	30	60	663332	3949.98	CP-OFDM 64 QAM	1@1	18.34	18.59	21.48	21.71	0.1482



77	30	60	663332	3949.98	CP-OFDM 64 QAM	1@160	18.39	18.36	21.39	21.62	0.1451
77	30	60	663332	3949.98	CP-OFDM 256 QAM	81@40	15.1	14.8	17.96	18.19	0.0660
77	30	60	663332	3949.98	CP-OFDM 256 QAM	1@1	15.19	14.96	18.09	18.32	0.0679
77	30	60	663332	3949.98	CP-OFDM 256 QAM	1@160	14.68	14.81	17.76	17.99	0.0629
77	30	70	649000	3735	CP-OFDM QPSK	90@45	20.25	20.21	23.24	23.47	0.2224
77	30	70	649000	3735	CP-OFDM QPSK	1@1	20.45	20.53	23.50	23.73	0.2361
77	30	70	649000	3735	CP-OFDM QPSK	1@187	20.53	20.52	23.54	23.77	0.2380
77	30	70	649000	3735	CP-OFDM 16 QAM	90@45	19.93	20.18	23.07	23.30	0.2137
77	30	70	649000	3735	CP-OFDM 16 QAM	1@1	20.03	20.04	23.05	23.28	0.2126
77	30	70	649000	3735	CP-OFDM 16 QAM	1@187	20.11	20	23.07	23.30	0.2136
77	30	70	649000	3735	CP-OFDM 64 QAM	90@45	18.58	18.47	21.54	21.77	0.1502
77	30	70	649000	3735	CP-OFDM 64 QAM	1@1	18.3	18.35	21.34	21.57	0.1434
77	30	70	649000	3735	CP-OFDM 64 QAM	1@187	18.27	18.29	21.29	21.52	0.1419
77	30	70	649000	3735	CP-OFDM 256 QAM	90@45	14.69	14.69	17.70	17.93	0.0621
77	30	70	649000	3735	CP-OFDM 256 QAM	1@1	14.7	14.94	17.83	18.06	0.0640
77	30	70	649000	3735	CP-OFDM 256 QAM	1@187	14.72	15.04	17.89	18.12	0.0649
77	30	70	656000	3840	CP-OFDM QPSK	90@45	20.51	20.38	23.46	23.69	0.2337
77	30	70	656000	3840	CP-OFDM QPSK	1@1	20.54	20.34	23.45	23.68	0.2334



77	30	70	656000	3840	CP-OFDM QPSK	1@187	20.3	20.33	23.33	23.56	0.2268
77	30	70	656000	3840	CP-OFDM 16 QAM	90@45	20.05	20.16	23.12	23.35	0.2161
77	30	70	656000	3840	CP-OFDM 16 QAM	1@1	20.16	20.05	23.12	23.35	0.2161
77	30	70	656000	3840	CP-OFDM 16 QAM	1@187	20.01	20.03	23.03	23.26	0.2119
77	30	70	656000	3840	CP-OFDM 64 QAM	90@45	18.53	18.5	21.53	21.76	0.1498
77	30	70	656000	3840	CP-OFDM 64 QAM	1@1	18.26	18.38	21.33	21.56	0.1433
77	30	70	656000	3840	CP-OFDM 64 QAM	1@187	18.36	18.47	21.43	21.66	0.1464
77	30	70	656000	3840	CP-OFDM 256 QAM	90@45	14.96	15.08	18.03	18.26	0.0670
77	30	70	656000	3840	CP-OFDM 256 QAM	1@1	15.2	15	18.11	18.34	0.0683
77	30	70	656000	3840	CP-OFDM 256 QAM	1@187	14.99	14.85	17.93	18.16	0.0655
77	30	70	663000	3945	CP-OFDM QPSK	90@45	20.41	20.2	23.32	23.55	0.2263
77	30	70	663000	3945	CP-OFDM QPSK	1@1	20.48	20.28	23.39	23.62	0.2302
77	30	70	663000	3945	CP-OFDM QPSK	1@187	20.15	20.33	23.25	23.48	0.2229
77	30	70	663000	3945	CP-OFDM 16 QAM	90@45	20.19	20.1	23.16	23.39	0.2181
77	30	70	663000	3945	CP-OFDM 16 QAM	1@1	20.2	20.16	23.19	23.42	0.2198
77	30	70	663000	3945	CP-OFDM 16 QAM	1@187	20.13	19.95	23.05	23.28	0.2129
77	30	70	663000	3945	CP-OFDM 64 QAM	90@45	18.36	18.58	21.48	21.71	0.1483
77	30	70	663000	3945	CP-OFDM 64 QAM	1@1	18.48	18.26	21.38	21.61	0.1449



77	30	70	663000	3945	CP-OFDM 64 QAM	1@187	18.5	18.23	21.38	21.61	0.1448
77	30	70	663000	3945	CP-OFDM 256 QAM	90@45	14.66	14.98	17.83	18.06	0.0640
77	30	70	663000	3945	CP-OFDM 256 QAM	1@1	14.7	14.88	17.80	18.03	0.0636
77	30	70	663000	3945	CP-OFDM 256 QAM	1@187	14.67	15.15	17.93	18.16	0.0654
77	30	80	649334	3740.01	CP-OFDM QPSK	108@54	20.33	20.33	23.34	23.57	0.2275
77	30	80	649334	3740.01	CP-OFDM QPSK	1@1	20.38	20.58	23.49	23.72	0.2356
77	30	80	649334	3740.01	CP-OFDM QPSK	1@215	20.56	20.4	23.49	23.72	0.2356
77	30	80	649334	3740.01	CP-OFDM 16 QAM	108@54	20.11	19.99	23.06	23.29	0.2134
77	30	80	649334	3740.01	CP-OFDM 16 QAM	1@1	20.19	20.01	23.11	23.34	0.2159
77	30	80	649334	3740.01	CP-OFDM 16 QAM	1@215	20.01	20.15	23.09	23.32	0.2148
77	30	80	649334	3740.01	CP-OFDM 64 QAM	108@54	18.27	18.21	21.25	21.48	0.1406
77	30	80	649334	3740.01	CP-OFDM 64 QAM	1@1	18.56	18.42	21.50	21.73	0.1490
77	30	80	649334	3740.01	CP-OFDM 64 QAM	1@215	18.45	18.54	21.51	21.74	0.1491
77	30	80	649334	3740.01	CP-OFDM 256 QAM	108@54	14.97	15.14	18.07	18.30	0.0676
77	30	80	649334	3740.01	CP-OFDM 256 QAM	1@1	14.87	15.01	17.95	18.18	0.0658
77	30	80	649334	3740.01	CP-OFDM 256 QAM	1@215	15.17	15.01	18.10	18.33	0.0681
77	30	80	656000	3840	CP-OFDM QPSK	108@54	20.56	20.28	23.43	23.66	0.2324
77	30	80	656000	3840	CP-OFDM QPSK	1@1	20.57	20.5	23.55	23.78	0.2385



77	30	80	656000	3840	CP-OFDM QPSK	1@215	20.42	20.4	23.42	23.65	0.2318
77	30	80	656000	3840	CP-OFDM 16 QAM	108@54	20.04	20.03	23.05	23.28	0.2126
77	30	80	656000	3840	CP-OFDM 16 QAM	1@1	20.03	19.98	23.02	23.25	0.2111
77	30	80	656000	3840	CP-OFDM 16 QAM	1@215	20.07	20.06	23.08	23.31	0.2141
77	30	80	656000	3840	CP-OFDM 64 QAM	108@54	18.43	18.5	21.48	21.71	0.1481
77	30	80	656000	3840	CP-OFDM 64 QAM	1@1	18.41	18.22	21.33	21.56	0.1431
77	30	80	656000	3840	CP-OFDM 64 QAM	1@215	18.56	18.4	21.49	21.72	0.1486
77	30	80	656000	3840	CP-OFDM 256 QAM	108@54	14.85	14.91	17.89	18.12	0.0649
77	30	80	656000	3840	CP-OFDM 256 QAM	1@1	14.8	15.16	17.99	18.22	0.0664
77	30	80	656000	3840	CP-OFDM 256 QAM	1@215	15.06	15.07	18.08	18.31	0.0677
77	30	80	662666	3939.99	CP-OFDM QPSK	108@54	20.29	20.15	23.23	23.46	0.2219
77	30	80	662666	3939.99	CP-OFDM QPSK	1@1	20.3	20.42	23.37	23.60	0.2291
77	30	80	662666	3939.99	CP-OFDM QPSK	1@215	20.48	20.5	23.50	23.73	0.2361
77	30	80	662666	3939.99	CP-OFDM 16 QAM	108@54	20.15	20.14	23.16	23.39	0.2181
77	30	80	662666	3939.99	CP-OFDM 16 QAM	1@1	19.93	19.99	22.97	23.20	0.2090
77	30	80	662666	3939.99	CP-OFDM 16 QAM	1@215	20.05	20.01	23.04	23.27	0.2124
77	30	80	662666	3939.99	CP-OFDM 64 QAM	108@54	18.49	18.28	21.40	21.63	0.1454
77	30	80	662666	3939.99	CP-OFDM 64 QAM	1@1	18.57	18.33	21.46	21.69	0.1476



77	30	80	662666	3939.99	CP-OFDM 64 QAM	1@215	18.57	18.39	21.49	21.72	0.1486
77	30	80	662666	3939.99	CP-OFDM 256 QAM	108@54	14.83	14.7	17.78	18.01	0.0632
77	30	80	662666	3939.99	CP-OFDM 256 QAM	1@1	14.76	15.19	17.99	18.22	0.0664
77	30	80	662666	3939.99	CP-OFDM 256 QAM	1@215	15.07	15	18.05	18.28	0.0672
77	30	90	649668	3745.02	CP-OFDM QPSK	120@60	20.18	20.27	23.24	23.47	0.2221
77	30	90	649668	3745.02	CP-OFDM QPSK	1@1	20.41	20.47	23.45	23.68	0.2334
77	30	90	649668	3745.02	CP-OFDM QPSK	1@243	20.56	20.51	23.55	23.78	0.2385
77	30	90	649668	3745.02	CP-OFDM 16 QAM	120@60	20.11	20.08	23.11	23.34	0.2156
77	30	90	649668	3745.02	CP-OFDM 16 QAM	1@1	20.14	20.09	23.13	23.36	0.2166
77	30	90	649668	3745.02	CP-OFDM 16 QAM	1@243	20.01	19.95	22.99	23.22	0.2099
77	30	90	649668	3745.02	CP-OFDM 64 QAM	120@60	18.52	18.45	21.50	21.73	0.1488
77	30	90	649668	3745.02	CP-OFDM 64 QAM	1@1	18.55	18.57	21.57	21.80	0.1514
77	30	90	649668	3745.02	CP-OFDM 64 QAM	1@243	18.29	18.24	21.28	21.51	0.1414
77	30	90	649668	3745.02	CP-OFDM 256 QAM	120@60	14.97	14.99	17.99	18.22	0.0664
77	30	90	649668	3745.02	CP-OFDM 256 QAM	1@1	14.84	14.95	17.91	18.14	0.0651
77	30	90	649668	3745.02	CP-OFDM 256 QAM	1@243	14.96	14.97	17.98	18.21	0.0662
77	30	90	656000	3840	CP-OFDM QPSK	120@60	20.51	20.5	23.52	23.75	0.2369
77	30	90	656000	3840	CP-OFDM QPSK	1@1	20.21	20.37	23.30	23.53	0.2255



77	30	90	656000	3840	CP-OFDM QPSK	1@243	20.52	20.26	23.40	23.63	0.2308
77	30	90	656000	3840	CP-OFDM 16 QAM	120@60	20.15	20.07	23.12	23.35	0.2163
77	30	90	656000	3840	CP-OFDM 16 QAM	1@1	20.1	20.12	23.12	23.35	0.2163
77	30	90	656000	3840	CP-OFDM 16 QAM	1@243	20.16	19.96	23.07	23.30	0.2139
77	30	90	656000	3840	CP-OFDM 64 QAM	120@60	18.2	18.53	21.38	21.61	0.1448
77	30	90	656000	3840	CP-OFDM 64 QAM	1@1	18.59	18.44	21.53	21.76	0.1498
77	30	90	656000	3840	CP-OFDM 64 QAM	1@243	18.31	18.47	21.40	21.63	0.1456
77	30	90	656000	3840	CP-OFDM 256 QAM	120@60	15.09	14.88	18.00	18.23	0.0665
77	30	90	656000	3840	CP-OFDM 256 QAM	1@1	15.1	15.05	18.09	18.32	0.0679
77	30	90	656000	3840	CP-OFDM 256 QAM	1@243	15.01	15.06	18.05	18.28	0.0672
77	30	90	662332	3934.98	CP-OFDM QPSK	120@60	20.52	20.44	23.49	23.72	0.2355
77	30	90	662332	3934.98	CP-OFDM QPSK	1@1	20.43	20.12	23.29	23.52	0.2248
77	30	90	662332	3934.98	CP-OFDM QPSK	1@243	20.53	20.37	23.46	23.69	0.2340
77	30	90	662332	3934.98	CP-OFDM 16 QAM	120@60	20.13	19.94	23.05	23.28	0.2126
77	30	90	662332	3934.98	CP-OFDM 16 QAM	1@1	19.96	20	22.99	23.22	0.2099
77	30	90	662332	3934.98	CP-OFDM 16 QAM	1@243	20.14	20.1	23.13	23.36	0.2168
77	30	90	662332	3934.98	CP-OFDM 64 QAM	120@60	18.54	18.23	21.40	21.63	0.1455
77	30	90	662332	3934.98	CP-OFDM 64 QAM	1@1	18.52	18.33	21.44	21.67	0.1468



77	30	90	662332	3934.98	CP-OFDM 64 QAM	1@243	18.5	18.22	21.37	21.60	0.1446
77	30	90	662332	3934.98	CP-OFDM 256 QAM	120@60	14.85	14.98	17.93	18.16	0.0654
77	30	90	662332	3934.98	CP-OFDM 256 QAM	1@1	14.68	14.89	17.80	18.03	0.0635
77	30	90	662332	3934.98	CP-OFDM 256 QAM	1@243	14.94	14.72	17.84	18.07	0.0642
77	30	100	650000	3750	CP-OFDM QPSK	135@67	20.57	20.17	23.38	23.62	0.2299
77	30	100	650000	3750	CP-OFDM QPSK	1@1	20.26	20.19	23.24	23.47	0.2221
77	30	100	650000	3750	CP-OFDM QPSK	1@271	20.56	20.54	23.56	23.79	0.2394
77	30	100	650000	3750	CP-OFDM 16 QAM	135@67	20.08	20.01	23.06	23.29	0.2131
77	30	100	650000	3750	CP-OFDM 16 QAM	1@1	20.02	20.05	23.05	23.28	0.2126
77	30	100	650000	3750	CP-OFDM 16 QAM	1@271	20.17	19.94	23.07	23.30	0.2137
77	30	100	650000	3750	CP-OFDM 64 QAM	135@67	18.51	18.24	21.39	21.62	0.1451
77	30	100	650000	3750	CP-OFDM 64 QAM	1@1	18.33	18.57	21.46	21.69	0.1476
77	30	100	650000	3750	CP-OFDM 64 QAM	1@271	18.28	18.31	21.31	21.54	0.1424
77	30	100	650000	3750	CP-OFDM 256 QAM	135@67	15.13	15.04	18.10	18.33	0.0680
77	30	100	650000	3750	CP-OFDM 256 QAM	1@1	14.67	15.04	17.87	18.10	0.0646
77	30	100	650000	3750	CP-OFDM 256 QAM	1@271	15.06	14.67	17.88	18.11	0.0647
77	30	100	656000	3840	CP-OFDM QPSK	135@67	20.54	20.58	23.57	23.80	0.2399
77	30	100	656000	3840	CP-OFDM QPSK	1@1	20.58	20.24	23.42	23.65	0.2319



77	30	100	656000	3840	CP-OFDM QPSK	1@271	20.36	20.59	23.49	23.72	0.2353
77	30	100	656000	3840	CP-OFDM 16 QAM	135@67	20.13	19.97	23.06	23.29	0.2134
77	30	100	656000	3840	CP-OFDM 16 QAM	1@1	19.97	19.96	22.98	23.21	0.2092
77	30	100	656000	3840	CP-OFDM 16 QAM	1@271	20.19	20.1	23.16	23.39	0.2181
77	30	100	656000	3840	CP-OFDM 64 QAM	135@67	18.53	18.47	21.51	21.74	0.1493
77	30	100	656000	3840	CP-OFDM 64 QAM	1@1	18.37	18.47	21.43	21.66	0.1466
77	30	100	656000	3840	CP-OFDM 64 QAM	1@271	18.54	18.41	21.49	21.72	0.1485
77	30	100	656000	3840	CP-OFDM 256 QAM	135@67	14.95	14.7	17.84	18.07	0.0641
77	30	100	656000	3840	CP-OFDM 256 QAM	1@1	15.2	15.1	18.16	18.39	0.0690
77	30	100	656000	3840	CP-OFDM 256 QAM	1@271	14.69	14.99	17.85	18.08	0.0643
77	30	100	662000	3930	CP-OFDM QPSK	135@67	20.12	20.45	23.30	23.53	0.2254
77	30	100	662000	3930	CP-OFDM QPSK	1@1	20.34	20.53	23.45	23.68	0.2332
77	30	100	662000	3930	CP-OFDM QPSK	1@271	20.21	20.21	23.22	23.45	0.2213
77	30	100	662000	3930	CP-OFDM 16 QAM	135@67	20.04	20.06	23.06	23.29	0.2133
77	30	100	662000	3930	CP-OFDM 16 QAM	1@1	19.94	20.08	23.02	23.25	0.2114
77	30	100	662000	3930	CP-OFDM 16 QAM	1@271	19.95	19.98	22.98	23.21	0.2092
77	30	100	662000	3930	CP-OFDM 64 QAM	135@67	18.33	18.56	21.46	21.69	0.1475
77	30	100	662000	3930	CP-OFDM 64 QAM	1@1	18.38	18.55	21.48	21.71	0.1481



77	30	100	662000	3930	CP-OFDM 64 QAM	1@271	18.38	18.53	21.47	21.70	0.1478
77	30	100	662000	3930	CP-OFDM 256 QAM	135@67	14.67	14.87	17.78	18.01	0.0633
77	30	100	662000	3930	CP-OFDM 256 QAM	1@1	14.97	15.14	18.07	18.30	0.0676
77	30	100	662000	3930	CP-OFDM 256 QAM	1@271	15.15	14.66	17.92	18.15	0.0654



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

SA Mode:

n2 SA / NR 20MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3741.5	-57.31	-13	-44.31	-74.00	-64.06	5.85	12.60	H
	5612.25	-58.37	-13	-45.37	-78.08	-64.17	7.30	13.10	H
	7483	-54.60	-13	-41.60	-79.34	-57.75	8.35	11.50	H
	3741.5	-55.22	-13	-42.22	-71.83	-61.97	5.85	12.60	V
	5612.25	-59.21	-13	-46.21	-79.11	-65.01	7.30	13.10	V
	7483	-54.40	-13	-41.40	-79.13	-57.55	8.35	11.50	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

n5 SA / NR 20MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1654.5	-65.15	-13	-52.15	-73.81	-68.40	4.00	9.40	H
	2481.75	-63.23	-13	-50.23	-76.12	-66.80	4.88	10.60	H
	3309	-61.62	-13	-48.62	-76.34	-66.55	5.52	12.60	H
	1654.5	-66.04	-13	-53.04	-74.44	-69.29	4.00	9.40	V
	2481.75	-62.50	-13	-49.50	-75.36	-66.07	4.88	10.60	V
	3309	-62.01	-13	-49.01	-76.51	-66.94	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

n66 SA / NR 40MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3541.84	-54.61	-13	-41.61	-70.69	-61.46	5.65	12.50	H
	5177.76	-59.73	-13	-46.73	-79.17	-65.40	7.13	12.80	H
	6903.68	-55.89	-13	-42.89	-79.46	-59.29	8.40	11.80	H
	3541.84	-56.88	-13	-43.88	-72.85	-63.73	5.65	12.50	V
	5177.76	-59.68	-13	-46.68	-79.41	-65.35	7.13	12.80	V
	6903.68	-55.38	-13	-42.38	-79.43	-58.78	8.40	11.80	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



N77 SA / NR 100MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7582.90	-46.05	-13	-33.05	-70.58	-51.61	7.16	12.72	H
	11374.35	-47.57	-13	-34.57	-79.28	-50.87	8.33	11.63	H
	15165.80	-44.06	-13	-31.06	-79.13	-45.66	10.50	12.10	H
	7582.90	-49.18	-13	-36.18	-73.67	-54.74	7.16	12.72	V
	11374.35	-47.92	-13	-34.92	-79.36	-51.22	8.33	11.63	V
	15165.80	-44.72	-13	-31.72	-79.14	-46.32	10.50	12.10	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

N77 ULMIMO SA / NR 100MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7582.90	-54.26	-13	-41.26	-78.79	-59.82	7.16	12.72	H
	11374.35	-47.07	-13	-34.07	-78.78	-50.37	8.33	11.63	H
	15165.80	-43.51	-13	-30.51	-78.58	-45.11	10.50	12.10	H
	7582.90	-54.13	-13	-41.13	-78.62	-59.69	7.16	12.72	V
	11374.35	-47.32	-13	-34.32	-78.76	-50.62	8.33	11.63	V
	15165.80	-44.14	-13	-31.14	-78.56	-45.74	10.50	12.10	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



NSA Mode:

EN-DC 5A_n2A / LTE 10MHz + NR 20MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n2 Middle	3741.50	-59.98	-13	-46.98	-76.67	-65.54	7.14	12.70	H
	5612.25	-52.92	-13	-39.92	-72.63	-56.22	8.30	11.60	H
	7483.00	-53.92	-13	-40.92	-78.66	-55.44	10.48	12.00	H
	3741.50	-60.84	-13	-47.84	-77.45	-66.40	7.14	12.70	V
	5612.25	-50.81	-13	-37.81	-70.71	-54.11	8.30	11.60	V
	7483.00	-54.28	-13	-41.28	-79.01	-55.80	10.48	12.00	V
LTE Band5 Middle	1664.18	-64.62	-13	-51.62	-73.29	-67.87	4.00	9.40	H
	2496.27	-62.71	-13	-49.71	-75.56	-66.28	4.88	10.60	H
	3328.36	-62.16	-13	-49.16	-76.71	-67.09	5.52	12.60	H
	1664.18	-65.78	-13	-52.78	-74.05	-69.03	4.00	9.40	V
	2496.27	-62.92	-13	-49.92	-75.73	-66.49	4.88	10.60	V
	3328.36	-62.40	-13	-49.40	-76.71	-67.33	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC 2A_n5A / LTE 20MHz + NR 20MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n5 Middle	1654.5	-62.12	-13	-49.12	-70.78	-65.37	4.00	9.40	H
	2481.75	-57.59	-13	-44.59	-70.48	-61.16	4.88	10.60	H
	3309	-61.74	-13	-48.74	-76.46	-66.67	5.52	12.60	H
	1654.5	-61.96	-13	-48.96	-70.36	-65.21	4.00	9.40	V
	2481.75	-59.23	-13	-46.23	-72.09	-62.80	4.88	10.60	V
	3309	-61.77	-13	-48.77	-76.27	-66.70	5.52	12.60	V
LTE Band4 Middle	3742.18	-61.17	-13	-48.17	-77.86	-66.73	7.14	12.70	H
	5613.27	-59.54	-13	-46.54	-79.25	-62.84	8.30	11.60	H
	7484.36	-54.38	-13	-41.38	-79.12	-55.90	10.48	12.00	H
	3742.18	-60.37	-13	-47.37	-76.98	-65.93	7.14	12.70	V
	5613.27	-59.55	-13	-46.55	-79.45	-62.85	8.30	11.60	V
	7484.36	-54.50	-13	-41.50	-79.23	-56.02	10.48	12.00	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



EN-DC_13A_n66A / LTE 10MHz + NR 40MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n66 Middle	3451.84	-52.13	-13	-39.13	-67.37	-58.98	5.65	12.50	H
	5177.76	-48.86	-13	-35.86	-68.30	-54.53	7.13	12.80	H
	6903.68	-55.61	-13	-42.61	-79.18	-59.01	8.40	11.80	H
	3451.84	-52.02	-13	-39.02	-67.3	-58.87	5.65	12.50	V
	5177.76	-53.12	-13	-40.12	-72.85	-58.79	7.13	12.80	V
	6903.68	-55.18	-13	-42.18	-79.23	-58.58	8.40	11.80	V
LTE Band13 Middle	1555	-64.80	-13	-51.80	-73.52	-68.05	4.00	9.40	H
	2332.5	-61.87	-13	-48.87	-75.20	-65.44	4.88	10.60	H
	3110	-60.90	-13	-47.90	-76.21	-65.83	5.52	12.60	H
	1555	-64.14	-13	-51.14	-72.94	-67.39	4.00	9.40	V
	2332.5	-61.97	-13	-48.97	-75.30	-65.54	4.88	10.60	V
	3110	-60.83	-13	-47.83	-76.20	-65.76	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_2A_n77A / LTE 20MHz + NR 100MHz / QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n77 Middle	7582.90	-54.02	-13	-41.02	-78.55	-57.32	8.30	11.60	H
	11374.35	-47.05	-13	-34.05	-78.76	-48.57	10.48	12.00	H
	15165.80	-44.13	-13	-31.13	-79.20	-45.83	11.80	13.50	H
	7582.90	-54.03	-13	-41.03	-78.52	-57.33	8.30	11.60	V
	11374.35	-47.30	-13	-34.30	-78.74	-48.82	10.48	12.00	V
	15165.80	-44.87	-13	-31.87	-79.29	-46.57	11.80	13.50	V
LTE Band2 Middle	3742.18	-59.99	-13	-46.99	-76.68	-66.84	5.65	12.50	H
	5613.27	-58.23	-13	-45.23	-77.94	-63.90	7.13	12.80	H
	7484.36	-54.04	-13	-41.04	-78.78	-57.44	8.40	11.80	H
	3742.18	-60.24	-13	-47.24	-76.85	-67.09	5.65	12.50	V
	5613.27	-58.63	-13	-45.63	-78.53	-64.30	7.13	12.80	V
	7484.36	-53.73	-13	-40.73	-78.46	-57.13	8.40	11.80	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



Appendix D. Reference Report

Please refer to Sporton report number FG151701-01D & FG151701-01E which are issued separately.