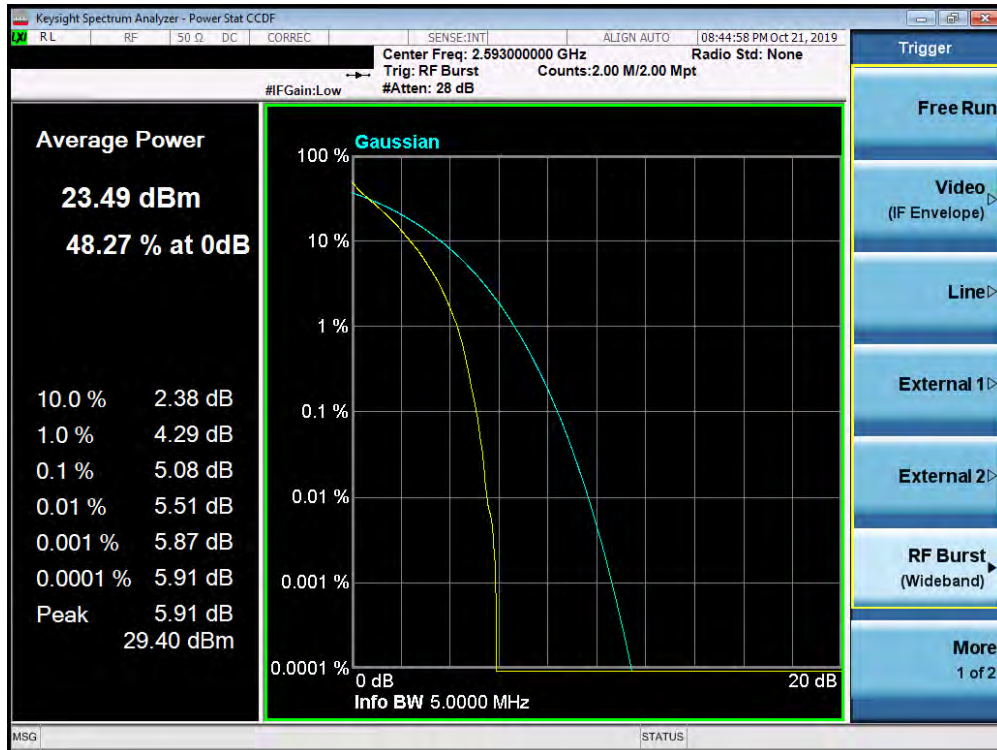
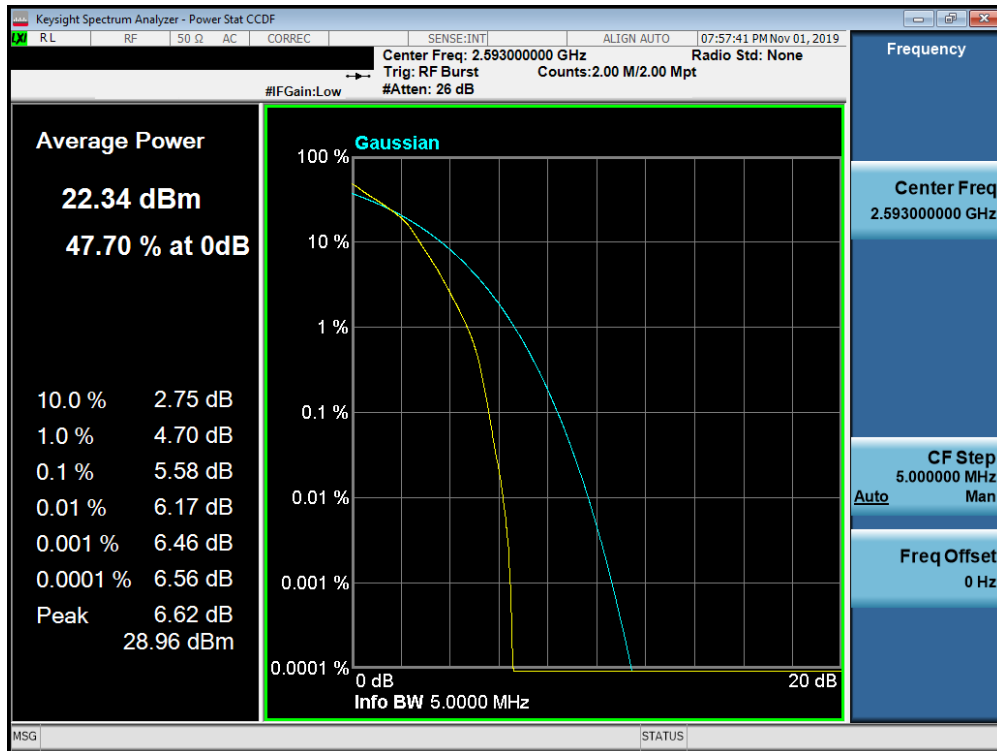


### Band 41 PC3

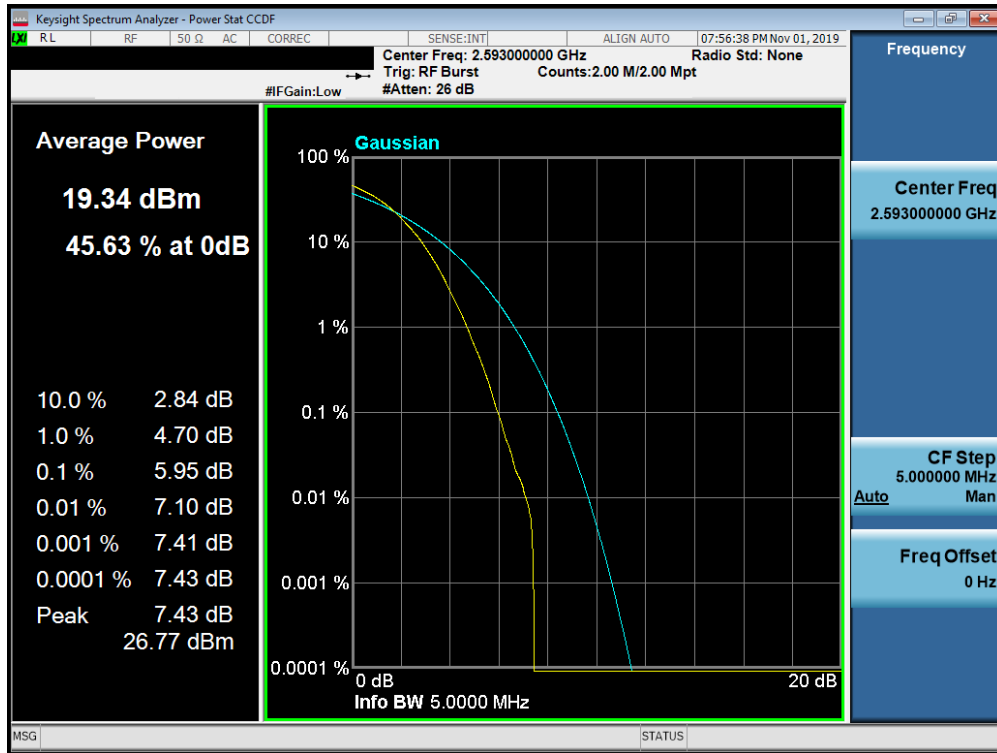
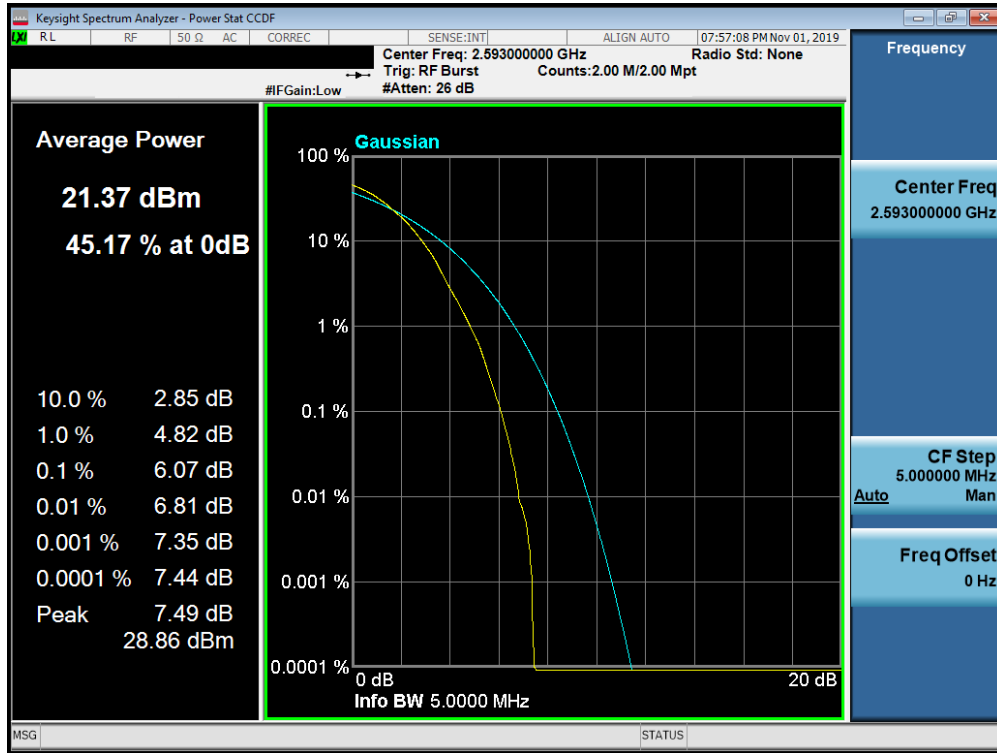


Plot 7-478. PAR Plot (Band 41 PC3 – 5.0MHz QPSK - Full RB Configuration)

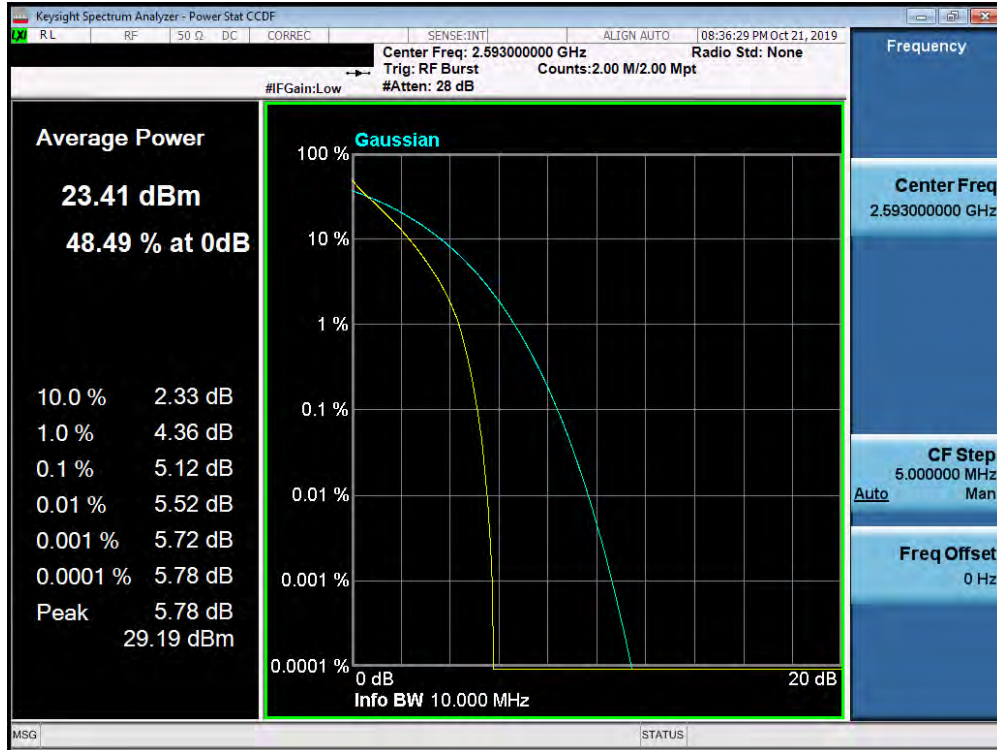


Plot 7-479. PAR Plot (Band 41 PC3 – 5.0MHz 16-QAM - Full RB Configuration)

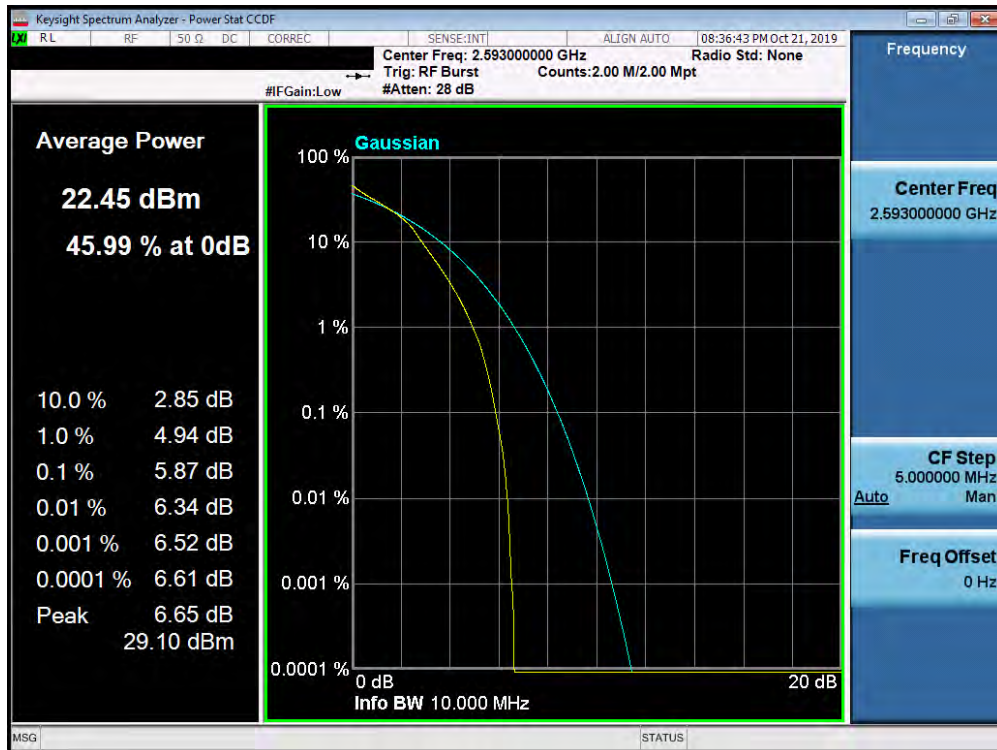
FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 265 of 434



FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 266 of 434

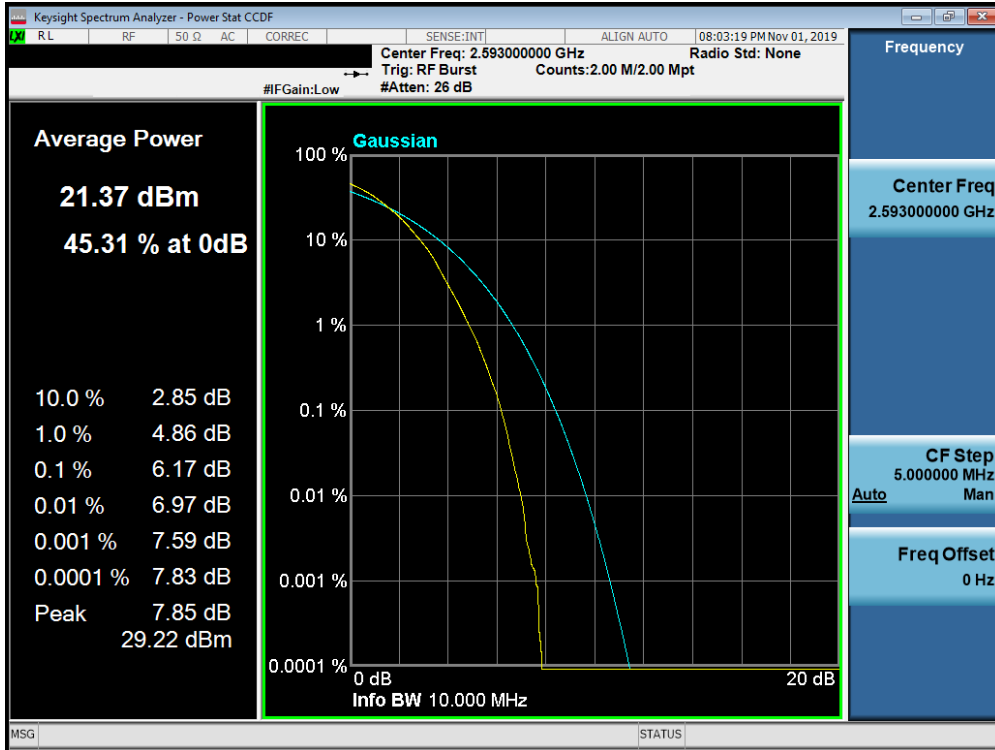


Plot 7-482. PAR Plot (Band 41 PC3 – 10.0MHz QPSK - Full RB Configuration)

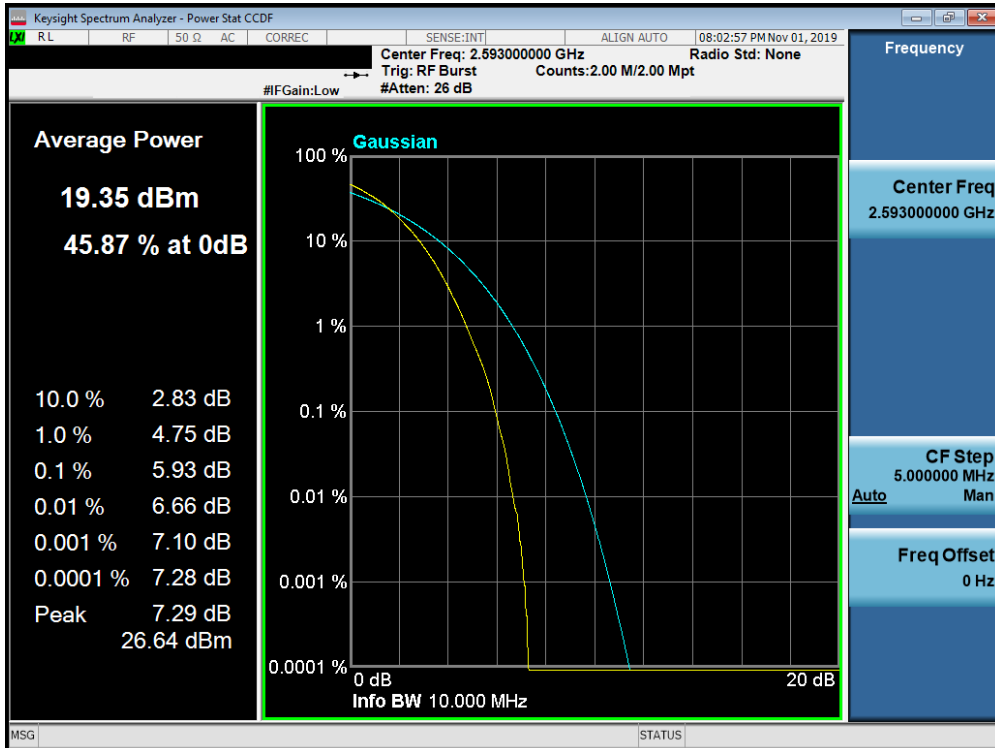


Plot 7-483. PAR Plot (Band 41 PC3 – 10.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 267 of 434

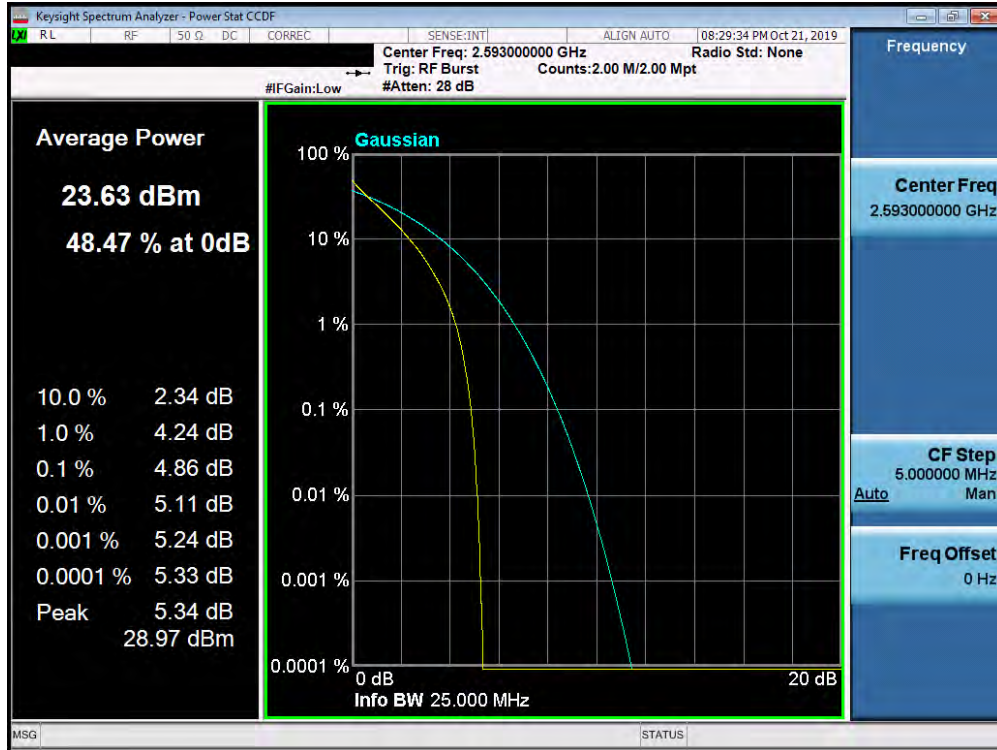


Plot 7-484. PAR Plot (Band 41 PC3 – 10.0MHz 64-QAM - Full RB Configuration)

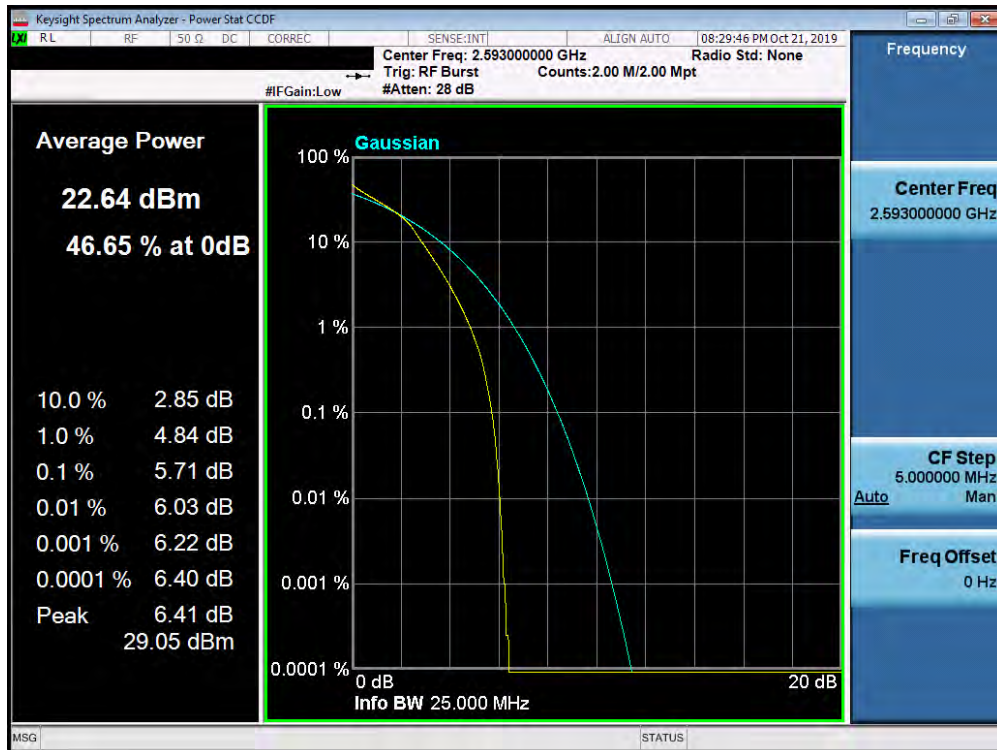


Plot 7-485. PAR Plot (Band 41 PC3 – 10.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 268 of 434

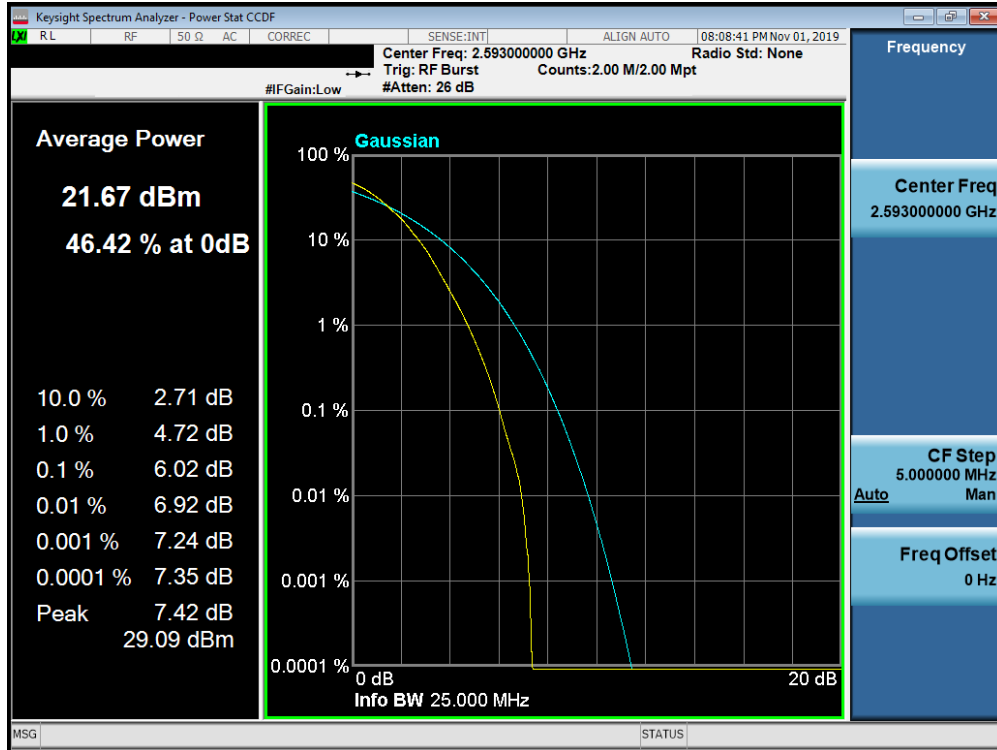


Plot 7-486. PAR Plot (Band 41 PC3 – 15.0MHz QPSK - Full RB Configuration)

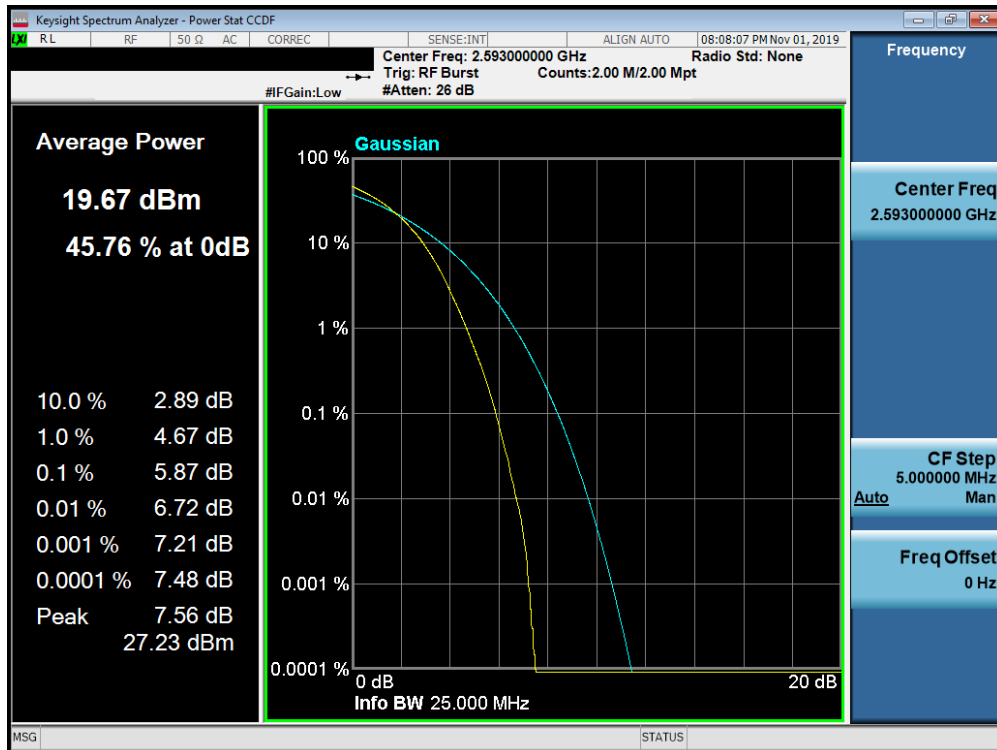


Plot 7-487. PAR Plot (Band 41 PC3 – 15.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 269 of 434

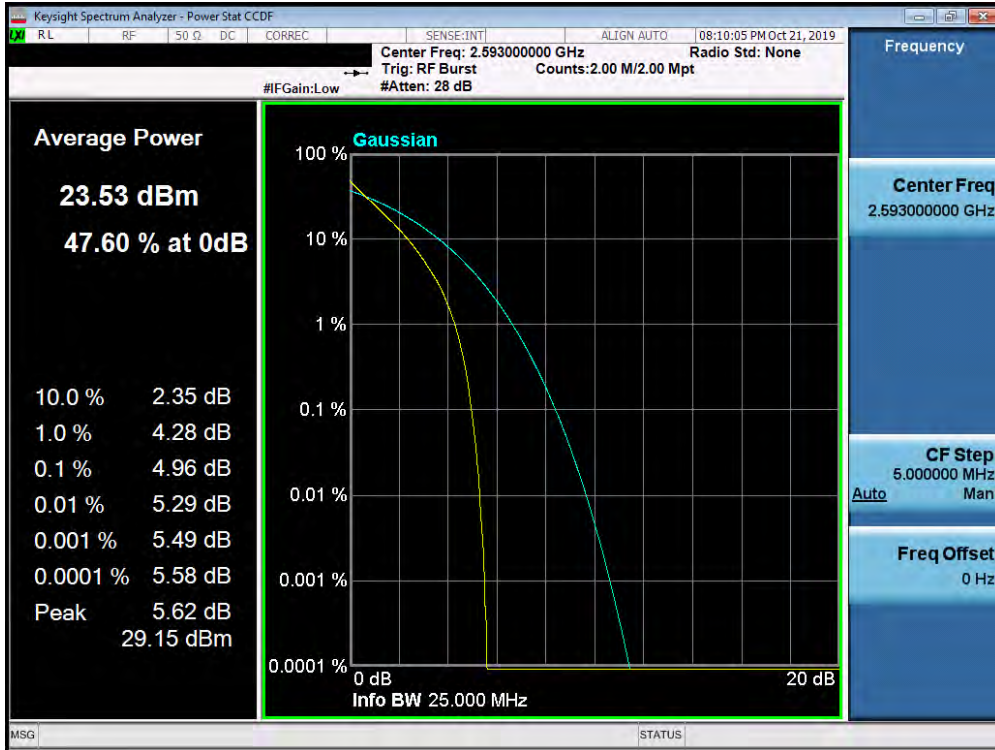


Plot 7-488. PAR Plot (Band 41 PC3 – 15.0MHz 64-QAM - Full RB Configuration)

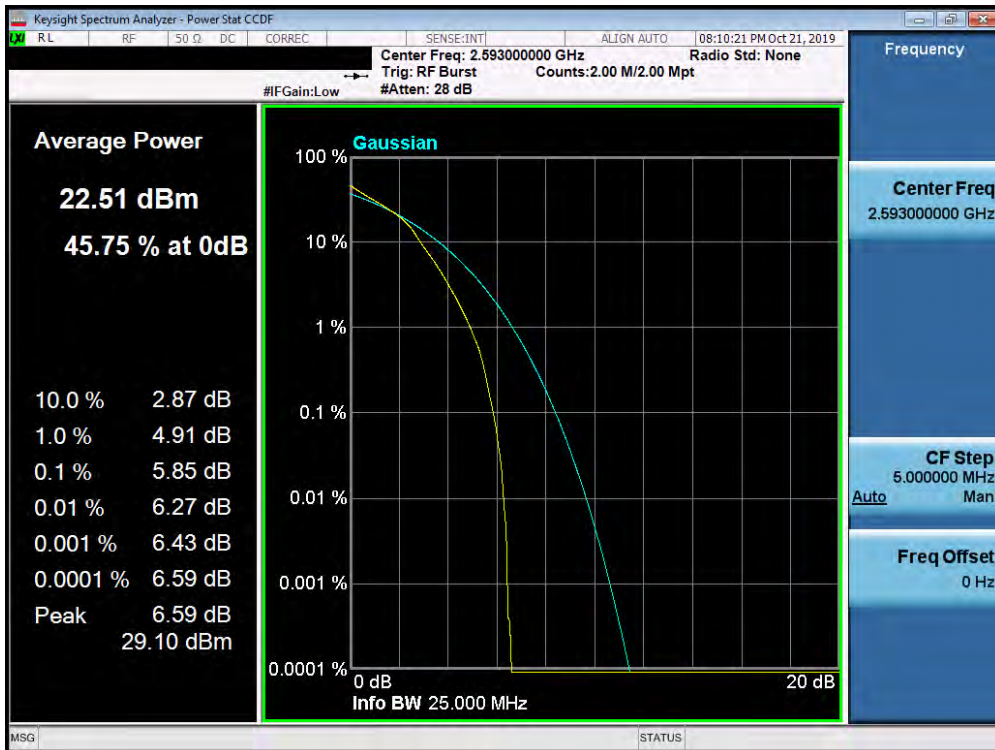


Plot 7-489. PAR Plot (Band 41 PC3 – 15.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 270 of 434

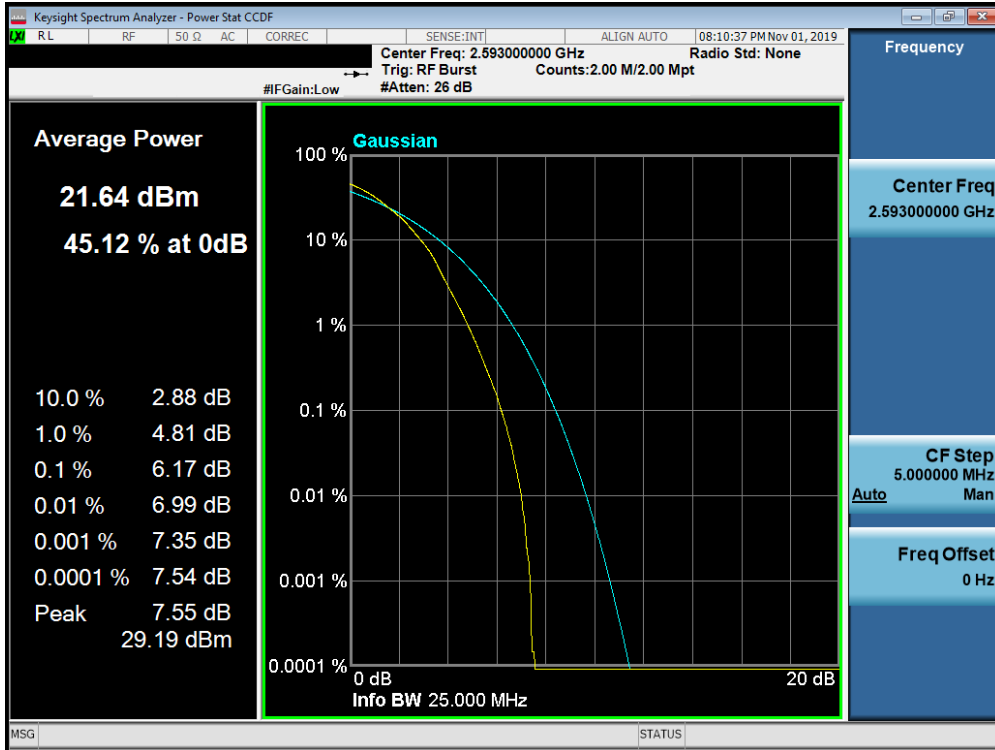


Plot 7-490. PAR Plot (Band 41 PC3 – 20.0MHz QPSK - Full RB Configuration)

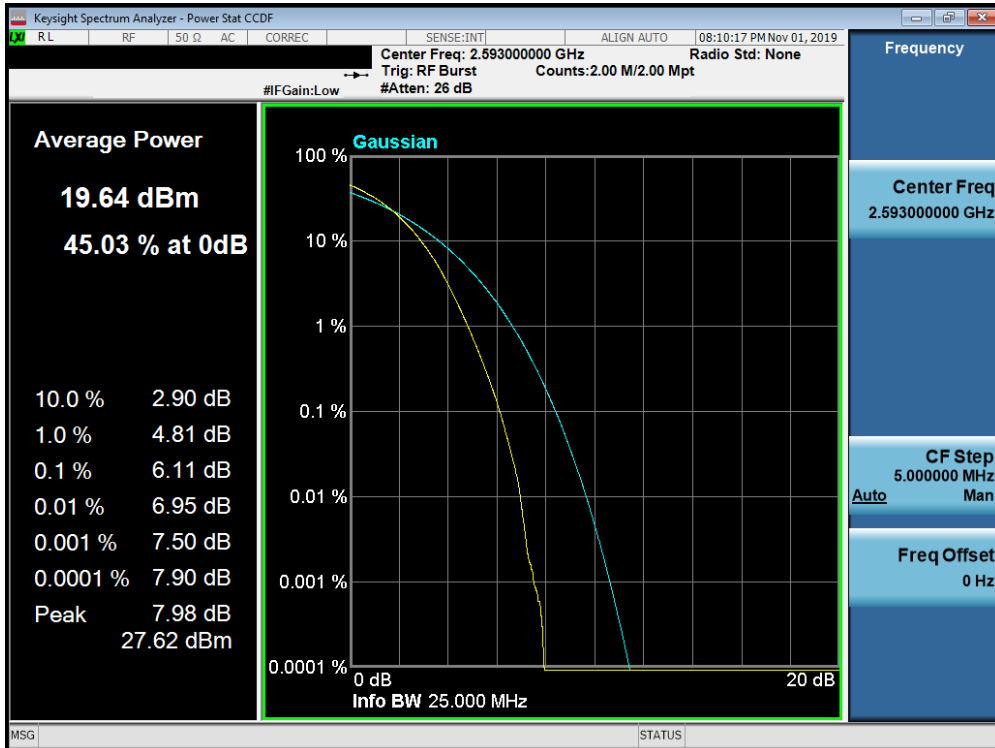


Plot 7-491. PAR Plot (Band 41 PC3 – 20.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 271 of 434



Plot 7-492. PAR Plot (Band 41 PC3 – 20.0MHz 64-QAM - Full RB Configuration)



Plot 7-493. PAR Plot (Band 41 PC3 – 20.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 272 of 434



## 7.6 Radiated Power (ERP/EIRP)

### Test Overview

Effective Radiated Power (ERP) and Equivalent Isotropic Radiated Power (EIRP) measurements are performed using the substitution method described in ANSI/TIA-603-E-2016 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically and horizontally polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

### Test Procedures Used

KDB 971168 D01 v03r01 – Section 5.2.1

ANSI/TIA-603-E-2016 – Section 2.2.17

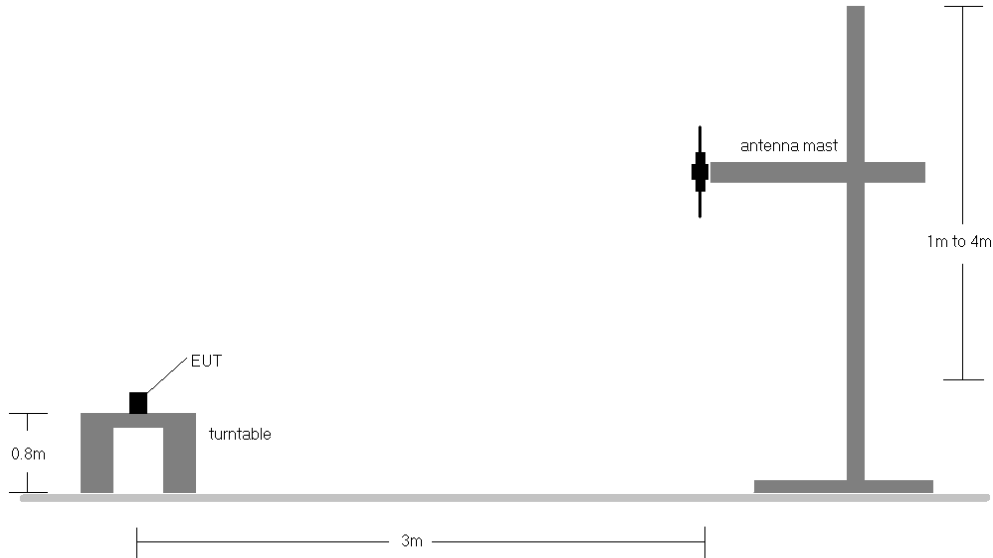
### Test Settings

1. Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation. For signals with burst transmission, the signal analyzer's "time domain power" measurement capability is used
2. RBW = 1 – 5% of the expected OBW, not to exceed 1MHz
3. VBW  $\geq 3 \times$  RBW
4. Span = 1.5 times the OBW
5. No. of sweep points  $\geq 2 \times$  span / RBW
6. Detector = RMS
7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto". Trigger is set to enable triggering only on full power bursts with the sweep time set less than or equal to the transmission burst duration
8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation. For signals with burst transmission, the "gating" function was enabled to ensure that measurements are performed during times in which the transmitter is operating at its maximum power
9. Trace mode = trace averaging (RMS) over 100 sweeps
10. The trace was allowed to stabilize

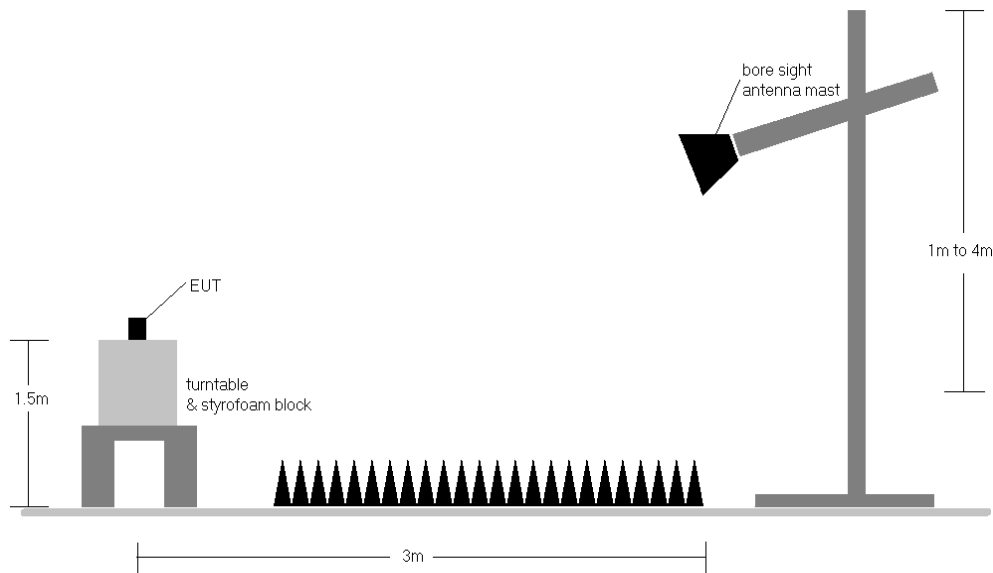
FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 273 of 434

**Test Setup**

The EUT and measurement equipment were set up as shown in the diagram below.



**Figure 7-5. Radiated Test Setup <1GHz**



**Figure 7-6. Radiated Test Setup >1GHz**

**Test Notes**

- 1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.
- 2) This unit was tested with its standard battery.

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 274 of 434

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
665.50	5	QPSK	H	175	283	1 / 24	15.02	2.90	15.77	0.038	34.77	-19.00
680.50	5	QPSK	H	175	280	1 / 24	16.11	3.20	<b>17.16</b>	0.052	34.77	-17.61
695.50	5	QPSK	H	173	282	1 / 24	15.36	3.30	16.51	0.045	34.77	-18.26
680.50	5	16-QAM	H	175	280	1 / 24	15.29	3.20	<b>16.34</b>	0.043	34.77	-18.43
680.50	5	64-QAM	H	175	280	1 / 24	13.74	3.20	<b>14.79</b>	0.030	34.77	-19.98
680.50	5	256-QAM	H	175	280	1 / 24	12.87	3.20	13.92	0.025	34.77	-20.85
668.00	10	QPSK	H	171	282	1 / 49	15.34	2.90	16.09	0.041	34.77	-18.68
680.50	10	QPSK	H	175	280	1 / 49	15.94	3.20	16.99	0.050	34.77	-17.78
693.00	10	QPSK	H	173	281	1 / 49	15.91	3.30	<b>17.06</b>	0.051	34.77	-17.71
680.50	10	16-QAM	H	175	280	1 / 49	15.60	3.20	<b>16.65</b>	0.046	34.77	-18.12
680.50	10	64-QAM	H	175	280	1 / 49	14.34	3.20	<b>15.39</b>	0.035	34.77	-19.38
680.50	10	256-QAM	H	175	280	1 / 49	11.72	3.20	<b>12.77</b>	<b>0.019</b>	34.77	-22.00
670.50	15	QPSK	H	172	277	1 / 74	15.44	3.00	16.29	0.043	34.77	-18.48
680.50	15	QPSK	H	172	275	1 / 74	16.16	3.20	<b>17.21</b>	<b>0.053</b>	34.77	-17.56
690.50	15	QPSK	H	172	278	1 / 74	15.79	3.30	16.94	0.049	34.77	-17.83
680.50	15	16-QAM	H	172	275	1 / 74	15.43	3.20	<b>16.48</b>	0.044	34.77	-18.29
680.50	15	64-QAM	H	172	275	1 / 74	14.20	3.20	<b>15.25</b>	0.033	34.77	-19.52
680.50	15	256-QAM	H	172	275	1 / 74	11.33	3.20	<b>12.38</b>	<b>0.017</b>	34.77	-22.39
673.00	20	QPSK	H	177	277	1 / 99	15.53	3.10	16.48	0.044	34.77	-18.29
680.50	20	QPSK	H	172	279	1 / 99	14.89	3.20	15.94	0.039	34.77	-18.83
688.00	20	QPSK	H	174	279	1 / 99	15.62	3.30	<b>16.77</b>	0.048	34.77	-18.00
688.00	20	16-QAM	H	174	279	1 / 99	14.84	3.30	<b>15.99</b>	0.040	34.77	-18.78
673.00	20	64-QAM	H	177	277	1 / 99	13.76	3.10	<b>14.71</b>	0.030	34.77	-20.06
688.00	20	256-QAM	H	174	279	1 / 99	10.74	3.30	<b>11.89</b>	<b>0.015</b>	34.77	-22.88
680.50	15	QPSK	V	155	155	1 / 74	12.55	3.20	13.60	0.023	34.77	-21.17
680.50	15 (WCP)	QPSK	H	172	281	1 / 74	12.12	3.20	13.17	0.021	34.77	-21.60

Table 7-3. ERP Data (Band 71)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 275 of 434	

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
699.70	1.4	QPSK	V	166	329	1 / 5	15.19	4.50	17.54	0.057	34.77	-17.23	19.69	0.093	36.99	-17.30
707.50	1.4	QPSK	V	172	303	1 / 5	15.51	4.60	<b>17.96</b>	0.063	34.77	-16.81	<b>20.11</b>	0.103	36.99	-16.88
715.30	1.4	QPSK	V	101	211	1 / 0	14.45	4.63	16.93	0.049	34.77	-17.84	19.08	0.081	36.99	-17.91
707.50	1.4	16-QAM	V	172	303	1 / 5	14.72	4.60	<b>17.17</b>	0.052	34.77	-17.60	<b>19.32</b>	0.086	36.99	-17.67
707.50	1.4	64-QAM	V	172	303	1 / 0	13.56	4.60	<b>16.01</b>	0.040	34.77	-18.76	<b>18.16</b>	0.065	36.99	-18.83
707.50	1.4	256-QAM	V	172	303	1 / 0	10.59	4.60	<b>13.04</b>	<b>0.020</b>	34.77	-21.73	<b>15.19</b>	<b>0.033</b>	36.99	-21.80
700.50	3	QPSK	V	185	235	1 / 0	15.55	4.55	<b>17.95</b>	0.062	34.77	-16.82	<b>20.10</b>	0.102	36.99	-16.89
707.50	3	QPSK	V	195	248	1 / 14	15.49	4.60	17.94	0.062	34.77	-16.83	20.09	0.102	36.99	-16.90
714.50	3	QPSK	V	100	246	1 / 0	14.44	4.60	16.89	0.049	34.77	-17.88	19.04	0.080	36.99	-17.95
707.50	3	16-QAM	V	195	248	1 / 0	15.07	4.60	<b>17.52</b>	0.056	34.77	-17.25	<b>19.67</b>	0.093	36.99	-17.32
707.50	3	64-QAM	V	195	248	1 / 0	13.91	4.60	<b>16.36</b>	0.043	34.77	-18.41	<b>18.51</b>	0.071	36.99	-18.48
707.50	3	256-QAM	V	195	248	1 / 0	11.09	4.60	<b>13.54</b>	<b>0.023</b>	34.77	-21.23	<b>15.69</b>	<b>0.037</b>	36.99	-21.30
701.50	5	QPSK	V	179	254	1 / 24	15.53	4.60	17.98	0.063	34.77	-16.79	20.13	0.103	36.99	-16.86
707.50	5	QPSK	V	187	296	1 / 0	15.83	4.60	<b>18.28</b>	<b>0.067</b>	34.77	-16.49	<b>20.43</b>	<b>0.110</b>	36.99	-16.56
713.50	5	QPSK	V	183	249	1 / 0	14.78	4.60	17.23	0.053	34.77	-17.54	19.38	0.087	36.99	-17.61
707.50	5	16-QAM	V	187	296	1 / 0	15.15	4.60	<b>17.60</b>	0.058	34.77	-17.17	<b>19.75</b>	0.094	36.99	-17.24
707.50	5	64-QAM	V	187	296	1 / 0	14.26	4.60	<b>16.71</b>	0.047	34.77	-18.06	<b>18.86</b>	0.077	36.99	-18.13
707.50	5	256-QAM	V	187	296	1 / 0	11.20	4.60	<b>13.65</b>	<b>0.023</b>	34.77	-21.12	<b>15.80</b>	<b>0.038</b>	36.99	-21.19
704.00	10	QPSK	V	101	285	1 / 49	13.19	4.50	15.54	0.036	34.77	-19.23	17.69	0.059	36.99	-19.30
707.50	10	QPSK	V	100	286	1 / 49	14.39	4.60	<b>16.84</b>	0.048	34.77	-17.93	<b>18.99</b>	0.079	36.99	-18.00
711.00	10	QPSK	V	101	271	1 / 49	14.32	4.60	16.77	0.048	34.77	-18.00	18.92	0.078	36.99	-18.07
711.00	10	16-QAM	V	101	271	1 / 49	13.69	4.60	<b>16.14</b>	0.041	34.77	-18.63	<b>18.29</b>	0.067	36.99	-18.70
707.50	10	64-QAM	V	100	286	1 / 49	12.64	4.60	<b>15.09</b>	0.032	34.77	-19.68	<b>17.24</b>	0.053	36.99	-19.75
711.00	10	256-QAM	V	101	271	1 / 49	10.14	4.60	<b>12.59</b>	<b>0.018</b>	34.77	-22.18	<b>14.74</b>	<b>0.030</b>	36.99	-22.25
707.50	5	QPSK	H	137	331	1 / 0	14.36	3.65	15.86	0.039	34.77	-18.91	18.01	0.063	36.99	-18.98
707.50	5 (WCP)	QPSK	V	176	298	1 / 0	12.73	4.60	15.18	0.033	34.77	-19.59	17.33	0.054	36.99	-19.66

Table 7-4. ERP Data (Band 12)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 276 of 434	

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
779.50	5	QPSK	H	102	290	1 / 24	14.34	5.80	17.99	0.063	34.77	-16.78	20.14	0.103	36.99	-16.85
782.00	5	QPSK	H	101	290	1 / 24	14.40	5.80	<b>18.05</b>	0.064	34.77	-16.72	<b>20.20</b>	0.105	36.99	-16.79
784.50	5	QPSK	H	101	290	1 / 0	14.20	5.90	17.95	0.062	34.77	-16.82	20.10	0.102	36.99	-16.89
782.00	5	16-QAM	H	101	290	1 / 24	14.04	5.80	<b>17.69</b>	0.059	34.77	-17.08	<b>19.84</b>	0.096	36.99	-17.15
782.00	5	64-QAM	H	101	290	1 / 24	11.74	5.80	<b>15.39</b>	0.035	34.77	-19.38	<b>17.54</b>	0.057	36.99	-19.45
782.00	5	256-QAM	H	101	290	1 / 24	11.03	5.80	<b>14.68</b>	<b>0.029</b>	34.77	-20.09	<b>16.83</b>	<b>0.048</b>	36.99	-20.16
782.00	10	QPSK	H	100	290	1 / 49	15.11	5.80	<b>18.76</b>	<b>0.075</b>	34.77	-16.01	<b>20.91</b>	<b>0.123</b>	36.99	-16.08
782.00	10	16-QAM	H	100	290	1 / 49	14.24	5.80	<b>17.89</b>	0.062	34.77	-16.88	<b>20.04</b>	0.101	36.99	-16.95
782.00	10	64-QAM	H	100	290	1 / 49	13.51	5.80	<b>17.16</b>	0.052	34.77	-17.61	<b>19.31</b>	0.085	36.99	-17.68
782.00	10	256-QAM	H	100	290	1 / 49	11.37	5.80	<b>15.02</b>	<b>0.032</b>	34.77	-19.75	<b>17.17</b>	<b>0.052</b>	36.99	-19.82
782.00	10	QPSK	V	161	245	1 / 49	14.61	5.80	18.26	0.067	34.77	-16.51	20.41	0.110	36.99	-16.58
782.00	10 (WCP)	QPSK	H	227	264	1 / 49	14.21	5.80	17.86	0.061	34.77	-16.91	20.01	0.100	36.99	-16.98

**Table 7-5. ERP Data (Band 13)**

FCC ID: A3LSMG986W		<b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Quality Manager
<b>Test Report S/N:</b> 1M1911010179-03.A3L	<b>Test Dates:</b> 10/11/19 – 01/09/20	<b>EUT Type:</b> Portable Handset	Page 277 of 434	

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
824.70	1.4	QPSK	H	145	291	1 / 0	12.81	6.70	17.36	0.054	38.45	-21.09	19.51	0.089	40.61	-21.10
836.50	1.4	QPSK	H	145	291	1 / 0	13.57	6.70	<b>18.12</b>	0.065	38.45	-20.33	<b>20.27</b>	0.106	40.61	-20.34
848.30	1.4	QPSK	H	141	290	1 / 5	13.38	6.70	17.93	0.062	38.45	-20.52	20.08	0.102	40.61	-20.53
848.30	1.4	16-QAM	H	141	290	1 / 5	13.06	6.70	<b>17.61</b>	0.058	38.45	-20.84	<b>19.76</b>	0.095	40.61	-20.85
848.30	1.4	64-QAM	H	141	290	1 / 5	12.29	6.70	<b>16.84</b>	0.048	38.45	-21.61	<b>18.99</b>	0.079	40.61	-21.62
848.30	1.4	256-QAM	H	141	290	1 / 5	9.16	6.70	<b>13.71</b>	<b>0.023</b>	38.45	-24.74	<b>15.86</b>	<b>0.039</b>	40.61	-24.75
825.50	3	QPSK	H	143	295	1 / 0	12.94	6.70	17.49	0.056	38.45	-20.96	19.64	0.092	40.61	-20.97
836.50	3	QPSK	H	143	291	1 / 0	13.66	6.70	<b>18.21</b>	0.066	38.45	-20.24	<b>20.36</b>	0.109	40.61	-20.25
847.50	3	QPSK	H	140	295	1 / 14	13.33	6.65	17.83	0.061	38.45	-20.62	19.98	0.100	40.61	-20.63
847.50	3	16-QAM	H	140	295	1 / 14	12.92	6.65	<b>17.42</b>	0.055	38.45	-21.03	<b>19.57</b>	0.091	40.61	-21.04
847.50	3	64-QAM	H	140	295	1 / 14	11.97	6.65	<b>16.47</b>	0.044	38.45	-21.98	<b>18.62</b>	0.073	40.61	-21.99
825.50	3	256-QAM	H	143	295	1 / 0	9.71	6.70	<b>14.26</b>	<b>0.027</b>	38.45	-24.19	<b>16.41</b>	<b>0.044</b>	40.61	-24.20
826.50	5	QPSK	H	140	292	1 / 0	13.05	6.70	17.60	0.058	38.45	-20.85	19.75	0.094	40.61	-20.86
836.50	5	QPSK	H	141	291	1 / 0	13.78	6.70	<b>18.33</b>	0.068	38.45	-20.12	<b>20.48</b>	0.112	40.61	-20.13
846.50	5	QPSK	H	136	291	1 / 24	13.37	6.60	17.82	0.061	38.45	-20.63	19.97	0.099	40.61	-20.64
836.50	5	16-QAM	H	141	291	1 / 24	12.78	6.70	<b>17.33</b>	0.054	38.45	-21.12	<b>19.48</b>	0.089	40.61	-21.13
846.50	5	64-QAM	H	136	291	1 / 24	11.84	6.60	<b>16.29</b>	0.043	38.45	-22.16	<b>18.44</b>	0.070	40.61	-22.17
826.50	5	256-QAM	H	140	292	1 / 0	10.31	6.70	<b>14.86</b>	<b>0.031</b>	38.45	-23.59	<b>17.01</b>	<b>0.050</b>	40.61	-23.60
829.00	10	QPSK	H	137	291	1 / 0	13.16	6.70	17.71	0.059	38.45	-20.74	19.86	0.097	40.61	-20.75
836.50	10	QPSK	H	142	286	1 / 0	13.83	6.70	<b>18.38</b>	<b>0.069</b>	38.45	-20.07	<b>20.53</b>	<b>0.113</b>	40.61	-20.08
844.00	10	QPSK	H	135	285	1 / 49	13.42	6.60	17.87	0.061	38.45	-20.58	20.02	0.100	40.61	-20.59
836.50	10	16-QAM	H	142	286	1 / 0	12.93	6.70	<b>17.48</b>	0.056	38.45	-20.97	<b>19.63</b>	0.092	40.61	-20.98
836.50	10	64-QAM	H	142	286	1 / 0	12.05	6.70	<b>16.60</b>	0.046	38.45	-21.85	<b>18.75</b>	0.075	40.61	-21.86
829.00	10	256-QAM	H	137	291	1 / 0	10.63	6.70	<b>15.18</b>	<b>0.033</b>	38.45	-23.27	<b>17.33</b>	<b>0.054</b>	40.61	-23.28
836.50	10	QPSK	V	326	185	1 / 0	11.65	6.70	16.20	0.042	38.45	-22.25	18.35	0.068	40.61	-22.26
836.50	10 (WCP)	QPSK	H	201	259	1 / 0	12.48	6.70	17.03	0.050	38.45	-21.42	19.18	0.083	40.61	-21.43

Table 7-6. ERP Data (Band 5)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 278 of 434	

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1710.70	1.4	QPSK	H	154	210	1 / 0	9.41	9.44	18.85	0.077	30.00	-11.15
1745.00	1.4	QPSK	H	140	215	1 / 0	14.01	9.23	<b>23.24</b>	0.211	30.00	-6.76
1779.30	1.4	QPSK	H	133	211	1 / 0	9.04	9.26	18.30	0.068	30.00	-11.70
1779.30	1.4	16-QAM	H	133	211	1 / 0	12.69	9.26	<b>21.95</b>	0.157	30.00	-8.05
1779.30	1.4	64-QAM	H	133	211	1 / 5	11.09	9.26	<b>20.35</b>	0.108	30.00	-9.65
1710.70	1.4	256-QAM	H	154	210	1 / 0	9.13	9.44	<b>18.57</b>	<b>0.072</b>	30.00	-11.43
1711.50	3	QPSK	H	155	208	1 / 0	11.71	9.44	21.15	0.130	30.00	-8.85
1745.00	3	QPSK	H	140	215	1 / 0	13.93	9.23	<b>23.16</b>	0.207	30.00	-6.84
1778.50	3	QPSK	H	133	208	1 / 0	11.12	9.26	20.37	0.109	30.00	-9.63
1745.00	3	16-QAM	H	140	215	1 / 14	13.75	9.23	<b>22.98</b>	0.199	30.00	-7.02
1711.50	3	64-QAM	H	155	208	1 / 0	8.55	9.44	<b>17.99</b>	0.063	30.00	-12.01
1711.50	3	256-QAM	H	155	208	1 / 0	6.98	9.44	<b>16.42</b>	<b>0.044</b>	30.00	-13.58
1712.50	5	QPSK	H	155	210	1 / 0	12.86	9.43	22.29	0.170	30.00	-7.71
1745.00	5	QPSK	H	155	210	1 / 0	13.90	9.23	<b>23.13</b>	0.206	30.00	-6.87
1777.50	5	QPSK	H	124	211	1 / 0	12.30	9.26	21.56	0.143	30.00	-8.44
1745.00	5	16-QAM	H	155	210	1 / 24	13.29	9.23	<b>22.52</b>	0.179	30.00	-7.48
1712.50	5	64-QAM	H	155	210	1 / 0	10.16	9.43	<b>19.59</b>	0.091	30.00	-10.41
1712.50	5	256-QAM	H	155	210	1 / 0	8.48	9.43	<b>17.91</b>	<b>0.062</b>	30.00	-12.09
1715.00	10	QPSK	H	155	210	1 / 0	13.58	9.42	<b>22.99</b>	0.199	30.00	-7.01
1745.00	10	QPSK	H	140	215	1 / 0	13.72	9.23	22.95	0.197	30.00	-7.05
1775.00	10	QPSK	H	124	211	1 / 0	12.87	9.25	22.12	0.163	30.00	-7.88
1745.00	10	16-QAM	H	140	215	1 / 49	12.70	9.23	<b>21.93</b>	0.156	30.00	-8.07
1715.00	10	64-QAM	H	155	210	1 / 0	11.00	9.42	<b>20.41</b>	0.110	30.00	-9.59
1715.00	10	256-QAM	H	155	210	1 / 0	8.85	9.42	<b>18.26</b>	<b>0.067</b>	30.00	-11.74
1717.50	15	QPSK	H	155	210	1 / 0	13.78	9.40	<b>23.18</b>	0.208	30.00	-6.82
1745.00	15	QPSK	H	138	208	1 / 0	13.65	9.23	22.88	0.194	30.00	-7.12
1772.50	15	QPSK	H	124	207	1 / 0	13.06	9.25	22.31	0.170	30.00	-7.69
1745.00	15	16-QAM	H	138	208	1 / 0	13.42	9.23	<b>22.65</b>	0.184	30.00	-7.35
1717.50	15	64-QAM	H	155	210	1 / 0	11.41	9.40	<b>20.81</b>	0.121	30.00	-9.19
1717.50	15	256-QAM	H	155	210	1 / 0	9.28	9.40	<b>18.68</b>	<b>0.074</b>	30.00	-11.32
1720.00	20	QPSK	H	150	208	1 / 0	14.09	9.38	<b>23.47</b>	<b>0.223</b>	30.00	-6.53
1745.00	20	QPSK	H	138	208	1 / 0	13.82	9.23	23.05	0.202	30.00	-6.95
1770.00	20	QPSK	H	124	206	1 / 0	13.42	9.24	22.66	0.185	30.00	-7.34
1745.00	20	16-QAM	H	138	208	1 / 0	13.32	9.23	<b>22.55</b>	0.180	30.00	-7.45
1720.00	20	64-QAM	H	150	208	1 / 0	11.79	9.38	<b>21.17</b>	0.131	30.00	-8.83
1720.00	20	256-QAM	H	150	208	1 / 0	9.58	9.38	<b>18.96</b>	<b>0.079</b>	30.00	-11.04
1720.00	20	QPSK	V	155	333	1 / 0	12.99	9.38	22.37	0.173	30.00	-7.63
1720.00	20 (WCP)	QPSK	H	176	308	1 / 0	13.53	9.38	22.91	0.196	30.00	-7.09

Table 7-7. EIRP Data (Band 66/4)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 279 of 434	

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1850.70	1.4	QPSK	H	123	351	1 / 5	14.08	9.48	23.56	0.227	33.01	-9.45
1882.50	1.4	QPSK	H	153	356	1 / 0	13.72	9.94	<b>23.66</b>	0.232	33.01	-9.36
1914.30	1.4	QPSK	H	115	355	1 / 0	13.33	10.29	23.62	0.230	33.01	-9.39
1882.50	1.4	16-QAM	H	153	356	1 / 5	13.50	9.94	<b>23.44</b>	0.221	33.01	-9.58
1882.50	1.4	64-QAM	H	153	356	1 / 5	12.53	9.94	<b>22.47</b>	0.176	33.01	-10.55
1914.30	1.4	256-QAM	H	115	355	6 / 0	9.02	10.29	<b>19.31</b>	<b>0.085</b>	33.01	-13.70
1851.50	3	QPSK	H	126	358	1 / 14	14.19	9.50	23.69	0.234	33.01	-9.32
1882.50	3	QPSK	H	155	359	1 / 0	13.77	9.94	<b>23.71</b>	0.235	33.01	-9.31
1913.50	3	QPSK	H	117	350	1 / 0	13.41	10.29	23.70	0.234	33.01	-9.32
1882.50	3	16-QAM	H	155	359	1 / 14	13.46	9.94	<b>23.40</b>	0.219	33.01	-9.62
1882.50	3	64-QAM	H	155	359	1 / 0	12.06	9.94	<b>22.00</b>	0.158	33.01	-11.02
1882.50	3	256-QAM	H	155	359	15 / 0	9.28	9.94	<b>19.22</b>	<b>0.083</b>	33.01	-13.80
1852.50	5	QPSK	H	127	358	1 / 0	13.57	9.51	23.08	0.203	33.01	-9.93
1882.50	5	QPSK	H	153	336	1 / 24	13.44	9.94	<b>23.38</b>	0.218	33.01	-9.64
1912.50	5	QPSK	H	115	172	1 / 0	12.37	10.28	22.65	0.184	33.01	-10.36
1882.50	5	16-QAM	H	153	336	1 / 24	12.97	9.94	<b>22.91</b>	0.195	33.01	-10.11
1882.50	5	64-QAM	H	153	336	1 / 24	11.92	9.94	<b>21.86</b>	0.153	33.01	-11.16
1882.50	5	256-QAM	H	153	336	1 / 24	8.72	9.94	<b>18.66</b>	<b>0.073</b>	33.01	-14.36
1855.00	10	QPSK	H	216	354	1 / 0	13.75	9.55	<b>23.30</b>	0.214	33.01	-9.71
1882.50	10	QPSK	H	158	356	1 / 0	13.21	9.94	23.15	0.206	33.01	-9.87
1910.00	10	QPSK	H	189	354	1 / 49	12.59	10.26	22.85	0.193	33.01	-10.16
1882.50	10	16-QAM	H	158	356	1 / 0	12.70	9.94	<b>22.64</b>	0.183	33.01	-10.38
1882.50	10	64-QAM	H	158	356	1 / 0	11.28	9.94	<b>21.22</b>	0.132	33.01	-11.80
1855.00	10	256-QAM	H	216	354	1 / 0	9.19	9.55	<b>18.74</b>	<b>0.075</b>	33.01	-14.27
1857.50	15	QPSK	H	124	356	1 / 0	14.19	9.58	<b>23.77</b>	<b>0.238</b>	33.01	-9.24
1882.50	15	QPSK	H	150	356	1 / 74	13.78	9.94	23.72	0.235	33.01	-9.30
1907.50	15	QPSK	H	293	353	1 / 74	12.64	10.24	22.88	0.194	33.01	-10.13
1857.50	15	16-QAM	H	124	356	1 / 0	13.68	9.58	<b>23.26</b>	0.212	33.01	-9.75
1857.50	15	64-QAM	H	124	356	1 / 74	12.40	9.58	<b>21.98</b>	0.158	33.01	-11.03
1857.50	15	256-QAM	H	124	356	1 / 74	9.52	9.58	<b>19.10</b>	<b>0.081</b>	33.01	-13.91
1860.00	20	QPSK	H	110	349	1 / 99	13.52	9.62	<b>23.14</b>	0.206	33.01	-9.87
1882.50	20	QPSK	H	100	353	1 / 0	12.94	9.94	22.88	0.194	33.01	-10.14
1905.00	20	QPSK	H	102	349	1 / 0	12.05	10.22	22.27	0.169	33.01	-10.74
1860.00	20	16-QAM	H	110	349	1 / 99	13.36	9.62	<b>22.98</b>	0.198	33.01	-10.03
1860.00	20	64-QAM	H	110	349	1 / 99	11.81	9.62	<b>21.43</b>	0.139	33.01	-11.58
1860.00	20	256-QAM	H	110	349	1 / 99	9.69	9.62	<b>19.31</b>	<b>0.085</b>	33.01	-13.70
1857.50	15	QPSK	V	106	312	1 / 0	13.33	9.58	22.91	0.195	33.01	-10.10
1857.50	15 (WCP)	QPSK	H	151	222	1 / 0	11.92	9.58	21.50	0.141	33.01	-11.51

Table 7-8. EIRP Data (Band 25/2)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 280 of 434	



Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
2307.50	5	QPSK	H	152	194	1 / 24	12.70	10.31	23.01	0.200	23.98	-0.97
2312.50	5	QPSK	H	147	191	1 / 24	12.81	10.31	<b>23.12</b>	0.205	23.98	-0.86
2312.50	5	16-QAM	H	147	191	1 / 24	11.72	10.31	<b>22.03</b>	0.160	23.98	-1.95
2312.50	5	64-QAM	H	147	191	1 / 24	10.63	10.31	<b>20.94</b>	0.124	23.98	-3.04
2312.50	5	256-QAM	H	147	191	1 / 24	7.44	10.31	<b>17.75</b>	<b>0.060</b>	23.98	-6.23
2310.00	10	QPSK	H	153	188	1 / 49	12.87	10.31	<b>23.18</b>	<b>0.208</b>	23.98	-0.80
2310.00	10	16-QAM	H	153	188	1 / 49	11.70	10.31	22.01	0.159	23.98	-1.97
2310.00	10	64-QAM	H	153	188	1 / 49	10.44	10.31	20.75	0.119	23.98	-3.23
2310.00	10	256-QAM	H	153	188	1 / 49	7.16	10.31	<b>17.47</b>	<b>0.056</b>	23.98	-6.51
2310.00	10	QPSK	V	188	307	1 / 49	12.67	10.23	22.90	0.195	23.98	-1.08
2310.00	10 (WCP)	QPSK	H	107	173	1 / 49	12.40	10.31	22.71	0.187	23.98	-1.27

**Table 7-9. EIRP Data (Band 30)**

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 281 of 434	

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
2502.50	5	QPSK	H	112	215	1 / 0	12.36	9.43	21.79	0.151	33.01	-11.22
2535.00	5	QPSK	H	151	211	1 / 24	12.46	9.39	<b>21.85</b>	0.153	33.01	-11.16
2567.50	5	QPSK	H	120	215	1 / 24	11.99	9.45	21.44	0.139	33.01	-11.57
2535.00	5	16-QAM	H	151	211	1 / 0	12.22	9.39	<b>21.61</b>	0.145	33.01	-11.40
2502.50	5	64-QAM	H	112	215	1 / 24	10.44	9.43	<b>19.87</b>	0.097	33.01	-13.14
2567.50	5	256-QAM	H	120	215	1 / 24	7.00	9.45	<b>16.45</b>	<b>0.044</b>	33.01	-16.56
2505.00	10	QPSK	H	112	211	1 / 0	12.53	9.43	21.95	0.157	33.01	-11.06
2535.00	10	QPSK	H	151	210	1 / 49	12.58	9.39	21.97	0.158	33.01	-11.04
2565.00	10	QPSK	H	115	220	1 / 0	12.61	9.44	<b>22.05</b>	0.160	33.01	-10.96
2565.00	10	16-QAM	H	115	220	1 / 0	12.10	9.44	<b>21.54</b>	0.143	33.01	-11.47
2535.00	10	64-QAM	H	151	210	1 / 49	10.68	9.39	<b>20.07</b>	0.102	33.01	-12.94
2565.00	10	256-QAM	H	115	220	1 / 49	7.79	9.44	<b>17.23</b>	<b>0.053</b>	33.01	-15.78
2507.50	15	QPSK	H	119	211	1 / 0	12.47	9.42	21.89	0.155	33.01	-11.12
2535.00	15	QPSK	H	151	202	1 / 74	12.59	9.39	21.98	0.158	33.01	-11.03
2562.50	15	QPSK	H	120	220	1 / 0	12.63	9.43	<b>22.06</b>	0.161	33.01	-10.95
2535.00	15	16-QAM	H	151	202	1 / 74	12.44	9.39	<b>21.83</b>	0.153	33.01	-11.18
2535.00	15	64-QAM	H	151	202	1 / 74	10.92	9.39	<b>20.31</b>	0.108	33.01	-12.70
2535.00	15	256-QAM	H	151	202	1 / 74	8.18	9.39	<b>17.57</b>	<b>0.057</b>	33.01	-15.44
2510.00	20	QPSK	H	118	210	1 / 0	12.52	9.42	21.94	0.156	33.01	-11.07
2535.00	20	QPSK	H	151	200	1 / 99	12.76	9.39	<b>22.15</b>	<b>0.164</b>	33.01	-10.86
2560.00	20	QPSK	H	116	224	1 / 0	12.59	9.42	22.01	0.159	33.01	-11.00
2535.00	20	16-QAM	H	151	200	1 / 99	12.23	9.39	<b>21.62</b>	0.145	33.01	-11.39
2535.00	20	64-QAM	H	151	200	1 / 99	11.21	9.39	<b>20.60</b>	0.115	33.01	-12.41
2535.00	20	256-QAM	H	151	200	1 / 99	8.62	9.39	<b>18.01</b>	<b>0.063</b>	33.01	-15.00
2535.00	20	QPSK	V	130	349	1 / 99	12.13	9.39	21.52	0.142	33.01	-11.49
2535.00	20 (WCP)	QPSK	H	155	245	1 / 99	11.71	9.39	21.10	0.129	33.01	-11.91

**Table 7-10. EIRP Data (Band 7)**

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 282 of 434	

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
2498.50	5	QPSK	H	158	200	1 / 0	11.61	9.43	21.04	0.127	33.01	-11.97
2593.00	5	QPSK	H	155	230	1 / 0	13.46	9.55	<b>23.01</b>	0.200	33.01	-10.00
2687.50	5	QPSK	H	112	230	1 / 0	8.21	9.82	18.03	0.063	33.01	-14.98
2498.50	5	16-QAM	H	158	200	1 / 0	12.94	9.43	<b>22.37</b>	0.173	33.01	-10.64
2498.50	5	64-QAM	H	158	200	1 / 0	9.93	9.43	<b>19.36</b>	0.086	33.01	-13.65
2498.50	5	256-QAM	H	158	200	1 / 0	6.96	9.43	<b>16.39</b>	<b>0.044</b>	33.01	-16.62
2501.00	10	QPSK	H	158	199	1 / 0	12.27	9.43	21.70	0.148	33.01	-11.31
2593.00	10	QPSK	H	155	246	1 / 0	13.25	9.55	<b>22.80</b>	0.191	33.01	-10.21
2685.00	10	QPSK	H	110	225	1 / 0	11.32	9.82	21.15	0.130	33.01	-11.86
2501.00	10	16-QAM	H	158	199	1 / 0	12.34	9.43	<b>21.77</b>	0.150	33.01	-11.24
2501.00	10	64-QAM	H	158	199	1 / 0	10.13	9.43	<b>19.56</b>	0.090	33.01	-13.45
2501.00	10	256-QAM	H	158	199	1 / 0	8.05	9.43	<b>17.48</b>	<b>0.056</b>	33.01	-15.53
2503.50	15	QPSK	H	158	198	1 / 0	12.63	9.43	22.06	0.161	33.01	-10.95
2593.00	15	QPSK	H	152	246	1 / 0	12.63	9.55	22.18	0.165	33.01	-10.83
2682.50	15	QPSK	H	108	222	1 / 0	13.22	9.83	<b>23.05</b>	0.202	33.01	-9.96
2503.50	15	16-QAM	H	158	198	1 / 0	12.12	9.43	<b>21.55</b>	0.143	33.01	-11.46
2682.50	15	64-QAM	H	108	222	1 / 0	10.69	9.83	<b>20.52</b>	0.113	33.01	-12.49
2503.50	15	256-QAM	H	158	198	1 / 0	8.59	9.43	<b>18.02</b>	<b>0.063</b>	33.01	-14.99
2506.00	20	QPSK	H	158	198	1 / 0	12.81	9.42	22.23	0.167	33.01	-10.78
2593.00	20	QPSK	H	152	246	1 / 0	12.81	9.55	22.36	0.172	33.01	-10.65
2680.00	20	QPSK	H	108	222	1 / 0	13.89	9.83	<b>23.72</b>	<b>0.236</b>	33.01	-9.29
2680.00	20	16-QAM	H	108	222	1 / 0	13.09	9.83	<b>22.92</b>	0.196	33.01	-10.09
2680.00	20	64-QAM	H	108	222	1 / 0	11.62	9.83	<b>21.45</b>	0.140	33.01	-11.56
2680.00	20	256-QAM	H	108	222	100 / 0	8.96	9.83	<b>18.79</b>	<b>0.076</b>	33.01	-14.22
2680.00	20	QPSK	V	184	205	1 / 0	12.04	9.83	21.87	0.154	33.01	-11.14
2680.00	20 (WCP)	QPSK	H	252	45	1 / 0	12.13	9.83	21.96	0.157	33.01	-11.05

Table 7-11. EIRP Data (Band 41 – PC3)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 283 of 434	

## 7.7 Radiated Spurious Emissions Measurements

### Test Overview

Radiated spurious emissions measurements are performed using the substitution method described in ANSI/TIA-603-E-2016 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically and horizontally polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas.

### Test Procedures Used

KDB 971168 D01 v03r01 – Section 5.8

ANSI/TIA-603-E-2016 – Section 2.2.12

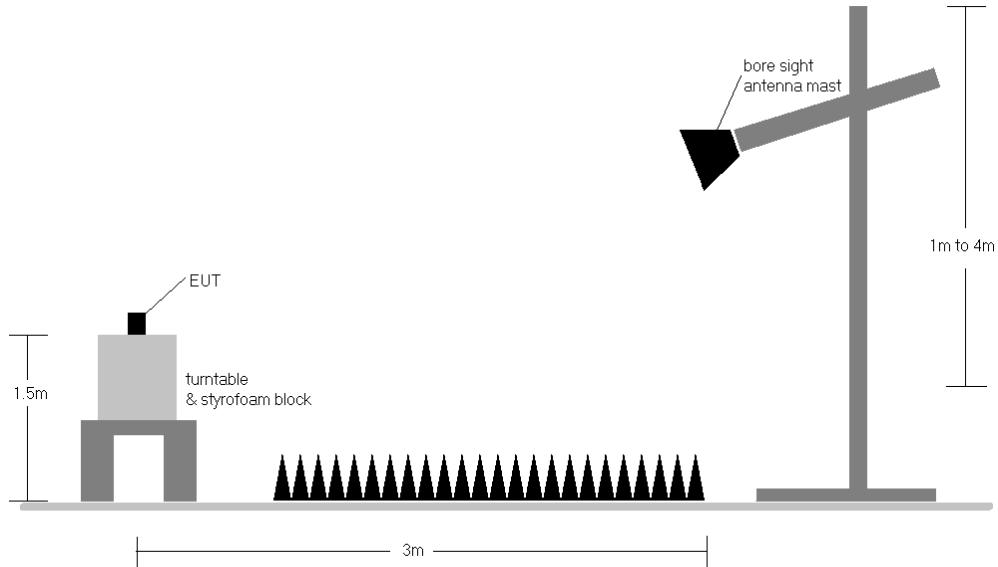
### Test Settings

1. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
2. VBW  $\geq 3 \times$  RBW
3. Span = 1.5 times the OBW
4. No. of sweep points  $\geq 2 \times$  span / RBW
5. Detector = RMS
6. Trace mode = Average (Max Hold for pulsed emissions)
7. The trace was allowed to stabilize

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 284 of 434

**Test Setup**

The EUT and measurement equipment were set up as shown in the diagram below.



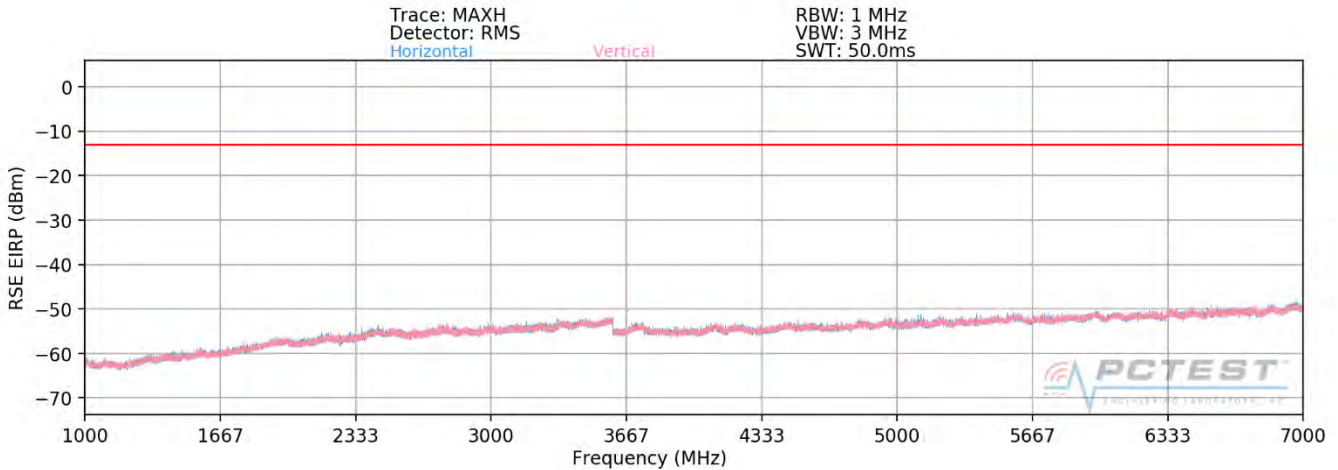
**Figure 7-7. Test Instrument & Measurement Setup**

**Test Notes**

- 1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.
- 2) This unit was tested with its standard battery.
- 3) The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.
- 4) Emissions below 18GHz were measured at a 3 meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
- 5) The "-" shown in the following RSE tables are used to denote a noise floor measurement.

<b>FCC ID:</b> A3LSMG986W		<b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Quality Manager
<b>Test Report S/N:</b> 1M1911010179-03.A3L	<b>Test Dates:</b> 10/11/19 – 01/09/20	<b>EUT Type:</b> Portable Handset		Page 285 of 434

### Band 71



**Plot 7-494. Radiated Spurious Plot above 1GHz (Band 71)**

OPERATING FREQUENCY: 670.50 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 15.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1341.00	V	169	351	-72.38	8.77	-63.62	-50.6
2011.50	V	177	179	-70.96	10.28	-60.68	-47.7
2682.00	V	385	310	-68.55	9.83	-58.72	-45.7
3352.50	V	-	-	-65.63	7.30	-58.33	-45.3
4023.00	V	-	-	-66.70	7.35	-59.35	-46.4

**Table 7-12. Radiated Spurious Data (Band 71 – Low Channel)**

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 286 of 434	



OPERATING FREQUENCY: 680.50 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 15.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1361.00	V	168	233	-70.83	8.61	-62.22	-49.2
2041.50	V	385	243	-67.18	10.04	-57.15	-44.1
2722.00	V	-	-	-69.61	9.58	-60.04	-47.0
3402.50	V	-	-	-66.24	7.33	-58.91	-45.9

Table 7-13. Radiated Spurious Data (Band 71 – Mid Channel)

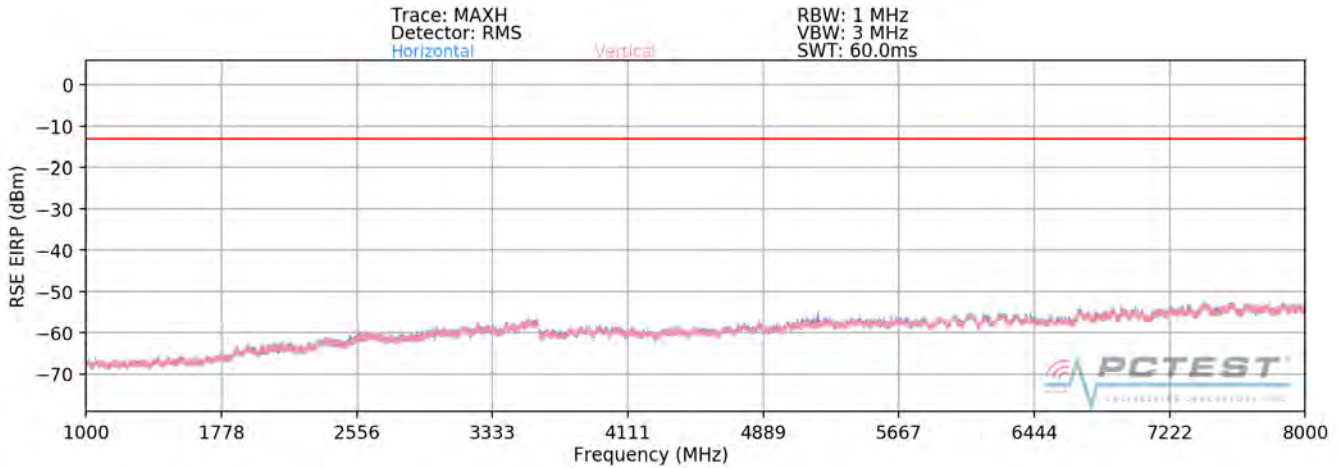
OPERATING FREQUENCY: 690.50 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 15.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1381.00	V	207	123	-72.43	8.35	-64.08	-51.1
2071.50	V	280	187	-66.65	9.82	-56.83	-43.8
2762.00	V	-	-	-69.12	9.25	-59.87	-46.9
3452.50	V	-	-	-66.17	7.55	-58.62	-45.6

Table 7-14. Radiated Spurious Data (Band 71 – High Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 287 of 434	

### Band 12



**Plot 7-495. Radiated Spurious Plot above 1GHz (Band 12)**

OPERATING FREQUENCY: 701.50 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 5.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1403.00	V	161	282	-37.90	8.12	-29.77	-16.8
2104.50	V	133	249	-37.02	9.62	-27.40	-14.4
2806.00	V	-	-	-39.48	9.09	-30.39	-17.4
3507.50	V	-	-	-37.34	7.44	-29.90	-16.9

**Table 7-15. Radiated Spurious Data (Band 12 – Low Channel)**

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 288 of 434	





OPERATING FREQUENCY: 707.50 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 5.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1415.00	V	150	293	-38.89	8.22	-30.67	-17.7
2122.50	V	125	278	-37.38	9.59	-27.80	-14.8
2830.00	V	-	-	-39.42	9.10	-30.32	-17.3
3537.50	V	-	-	-37.24	7.26	-29.98	-17.0

Table 7-16. Radiated Spurious Data (Band 12 – Mid Channel)

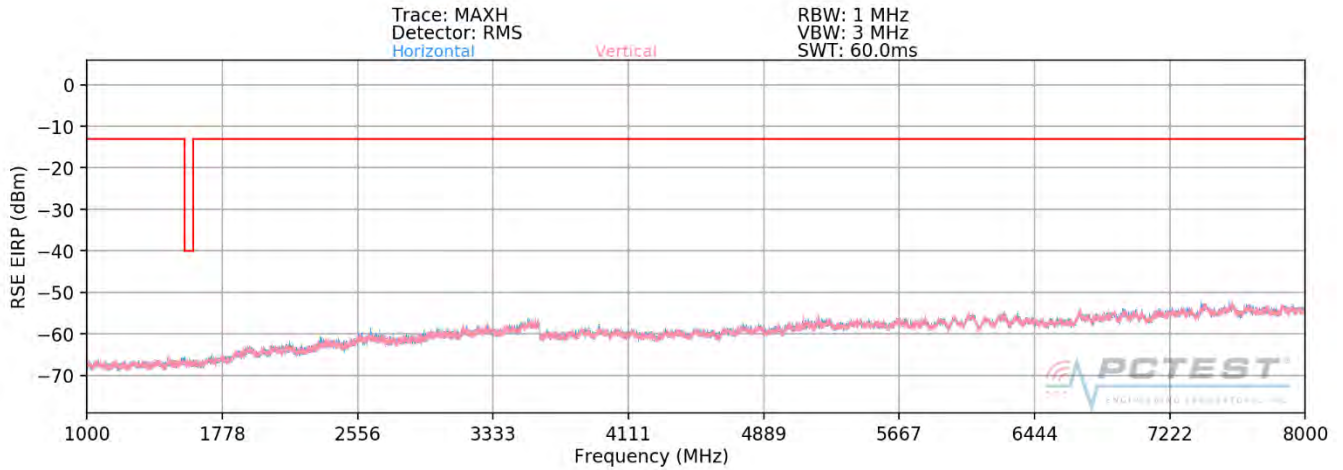
OPERATING FREQUENCY: 713.50 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 5.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1427.00	V	398	282	-41.96	8.31	-33.65	-20.7
2140.50	V	183	279	-36.80	9.56	-27.25	-14.2
2854.00	V	-	-	-39.47	9.12	-30.35	-17.4
3567.50	V	-	-	-37.14	7.10	-30.04	-17.0

Table 7-17. Radiated Spurious Data (Band 12 – High Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 289 of 434	

### Band 13



**Plot 7-496. Radiated Spurious Plot above 1GHz (Band 13)**

OPERATING FREQUENCY: 782.00 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 10.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
2346.00	V	137	113	-69.09	9.43	-59.66	-46.7
3128.00	V	-	-	-74.60	9.34	-65.26	-52.3
3910.00	V	-	-	-73.62	9.37	-64.25	-51.2

**Table 7-18. Radiated Spurious Data (Band 13 – Mid Channel)**

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 290 of 434	



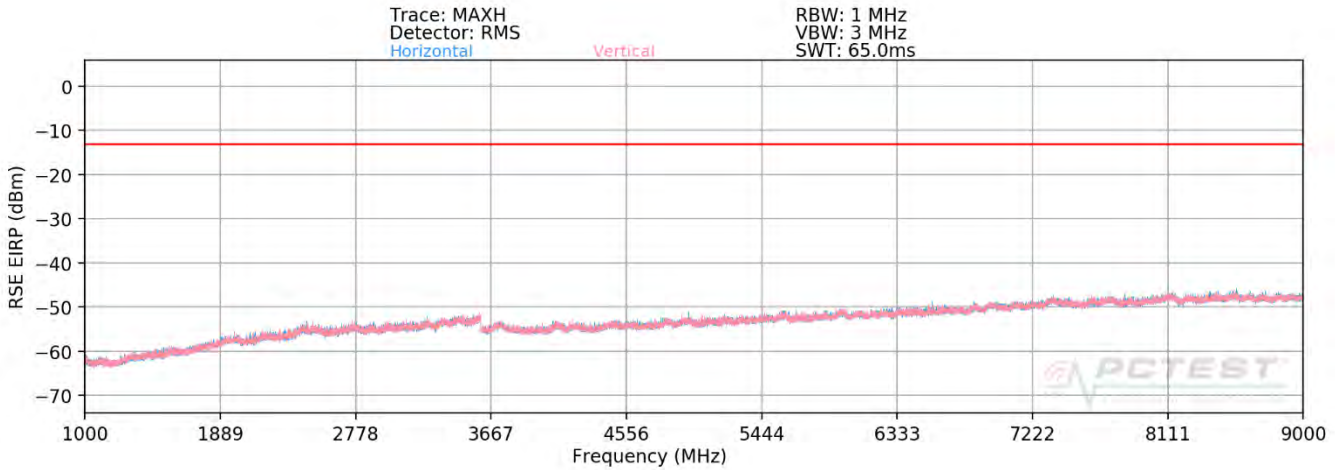
MODULATION SIGNAL: QPSK  
 BANDWIDTH: 10.00 MHz  
 DISTANCE: 3 meters  
 NARROWBAND EMISSION LIMIT: -50 dBm  
 WIDEBAND EMISSION LIMIT: -40 dBm/MHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1564.00	V	136	310	-78.29	8.53	-69.76	-29.8

Table 7-19. Radiated Spurious Data (Band 13 – 1559-1610MHz Band)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset			Page 291 of 434

### Band 5



**Plot 7-497. Radiated Spurious Plot above 1GHz (Band 5)**

OPERATING FREQUENCY: 829.00 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 10.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1658.00	V	368	176	-75.10	9.55	-65.54	-52.5
2487.00	V	114	92	-69.91	9.45	-60.46	-47.5
3316.00	V	-	-	-69.19	7.44	-61.75	-48.7
4145.00	V	-	-	-70.06	8.05	-62.01	-49.0

**Table 7-20. Radiated Spurious Data (Band 5 – Low Channel)**

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 292 of 434	



OPERATING FREQUENCY: 836.50 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 10.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1673.00	V	241	8	-74.39	9.54	-64.85	-51.9
2509.50	V	108	80	-69.85	9.42	-60.43	-47.4
3346.00	V	-	-	-68.08	7.32	-60.77	-47.8
4182.50	V	-	-	-69.30	8.16	-61.14	-48.1

Table 7-21. Radiated Spurious Data (Band 5 – Mid Channel)

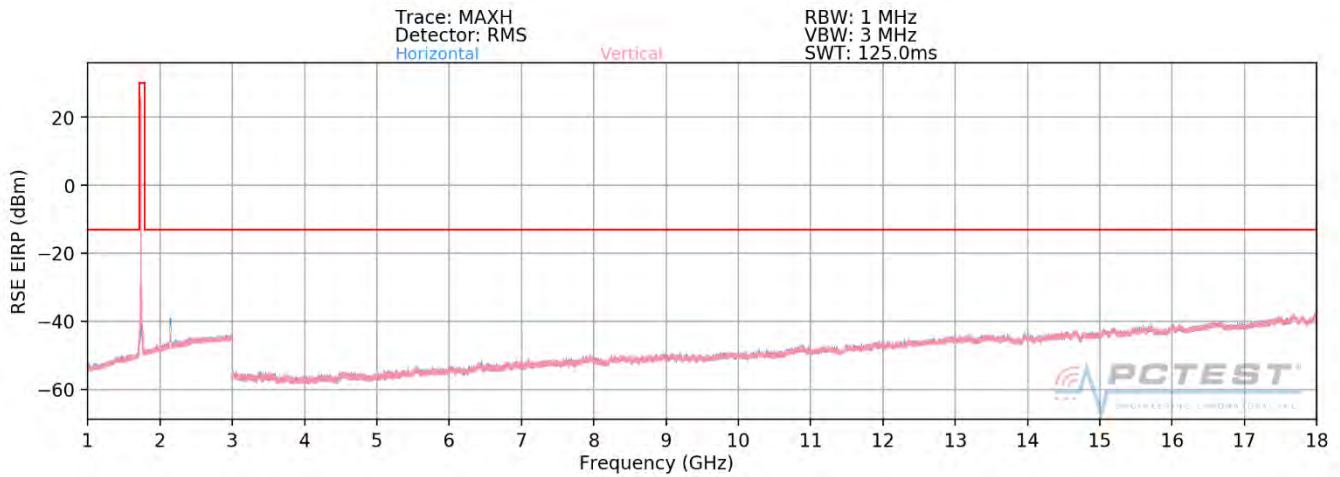
OPERATING FREQUENCY: 844.00 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 10.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1688.00	V	185	155	-73.16	9.52	-63.64	-50.6
2532.00	V	138	113	-67.82	9.40	-58.42	-45.4
3376.00	V	-	-	-68.50	7.31	-61.19	-48.2
4220.00	V	-	-	-68.89	8.34	-60.56	-47.6

Table 7-22. Radiated Spurious Data (Band 5 – High Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 293 of 434	

### Band 66/4



**Plot 7-498. Radiated Spurious Plot above 1GHz (Band 66/4)**

OPERATING FREQUENCY: 1720.00 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 20.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3440.00	H	-	-	-66.60	7.51	-59.09	-46.1
5160.00	H	-	-	-68.87	11.10	-57.77	-44.8

**Table 7-23. Radiated Spurious Data (Band 66/4 – Low Channel)**

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 294 of 434	

OPERATING FREQUENCY: 1745.00 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 20.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3490.00	H	-	-	-66.49	7.50	-58.99	-46.0
5235.00	H	-	-	-69.57	11.26	-58.31	-45.3

Table 7-24. Radiated Spurious Data (Band 66/4 – Mid Channel)

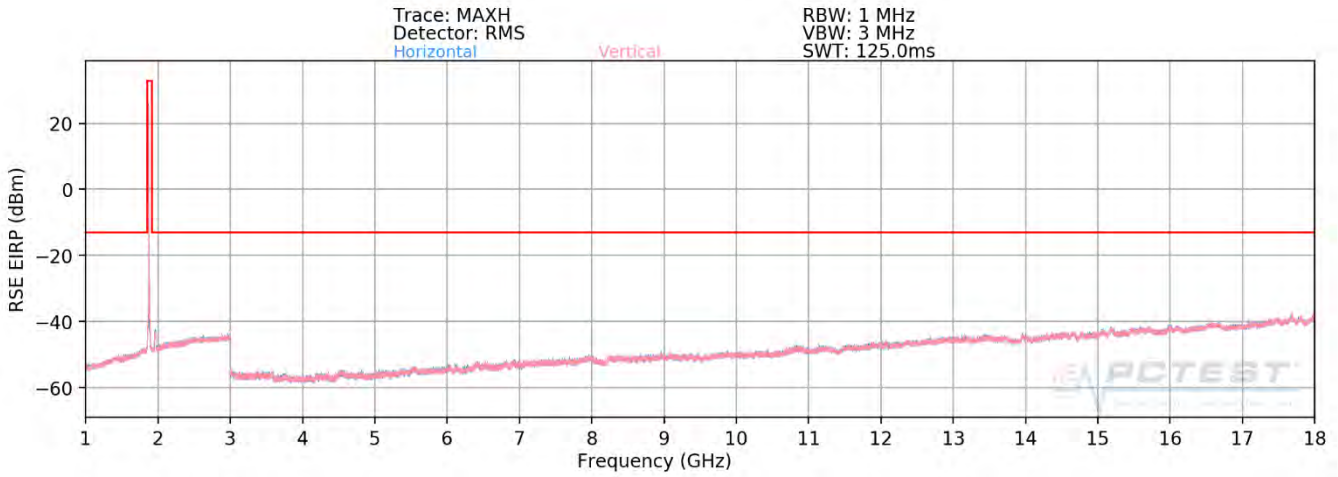
OPERATING FREQUENCY: 1770.00 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 20.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3540.00	H	-	-	-66.32	7.24	-59.07	-46.1
5310.00	H	-	-	-69.83	11.51	-58.32	-45.3

Table 7-25. Radiated Spurious Data (Band 66/4 – High Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 295 of 434	

**Band 25/2**



**Plot 7-499. Radiated Spurious Plot above 1GHz (Band 25/2)**

OPERATING FREQUENCY: 1860.00 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 20.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3720.00	H	-	-	-72.67	9.51	-63.17	-50.2
5580.00	H	-	-	-72.48	10.99	-61.50	-48.5

**Table 7-26. Radiated Spurious Data (Band 25/2 – Low Channel)**

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 296 of 434	



OPERATING FREQUENCY: 1882.50 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 20.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3765.00	H	-	-	-73.14	9.36	-63.78	-50.8
5647.50	H	-	-	-71.91	11.19	-60.71	-47.7

**Table 7-27. Radiated Spurious Data (Band 25/2 – Mid Channel)**

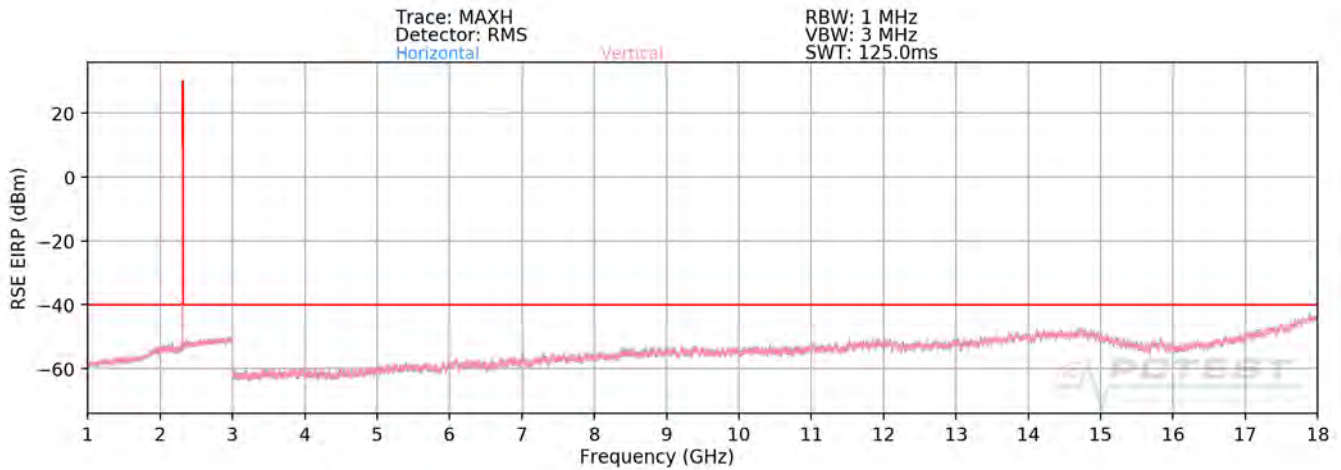
OPERATING FREQUENCY: 1905.00 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 20.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3810.00	H	-	-	-72.74	9.29	-63.44	-50.4
5715.00	H	-	-	-72.50	11.35	-61.15	-48.1

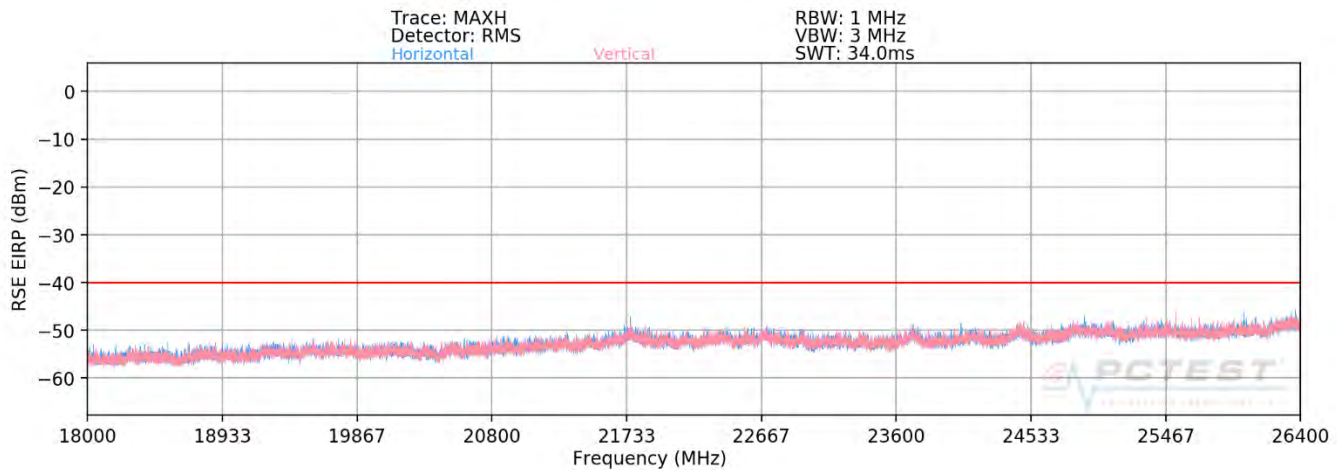
**Table 7-28. Radiated Spurious Data (Band 25/2 – High Channel)**

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 297 of 434	

### Band 30



**Plot 7-500. Radiated Spurious Plot 1GHz - 18GHz (Band 30)**



**Plot 7-501. Radiated Spurious Plot 18GHz - 26.5GHz (Band 30)**

<b>FCC ID:</b> A3LSMG986W	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>		 <b>Approved by:</b> Quality Manager
<b>Test Report S/N:</b> 1M1911010179-03.A3L	<b>Test Dates:</b> 10/11/19 - 01/09/20	<b>EUT Type:</b> Portable Handset	Page 298 of 434



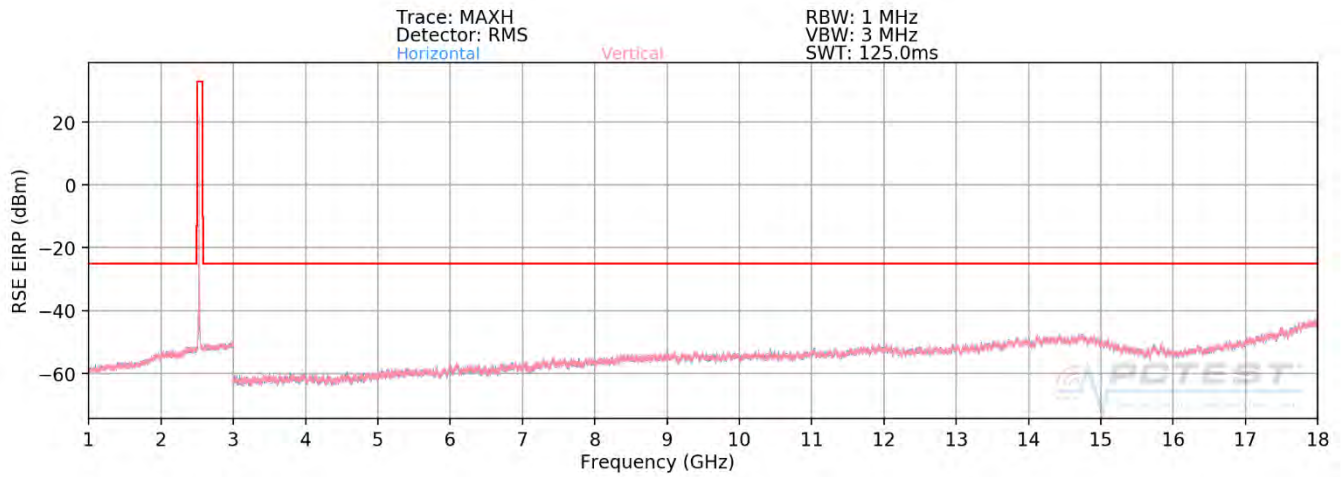
OPERATING FREQUENCY: 2310.00 MHz  
MODULATION SIGNAL: QPSK  
BANDWIDTH: 10.0 MHz  
DISTANCE: 3 meters  
LIMIT: -40 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
4620.00	H	119	114	-73.46	10.92	-62.54	-22.5
6930.00	H	-	-	-71.93	11.74	-60.19	-20.2
9240.00	H	118	107	-68.24	11.62	-56.62	-16.6
11550.00	H	250	281	-66.25	12.72	-53.53	-13.5
13860.00	H	-	-	-62.78	11.99	-50.78	-10.8
16170.00	H	-	-	-70.23	16.59	-53.63	-13.6

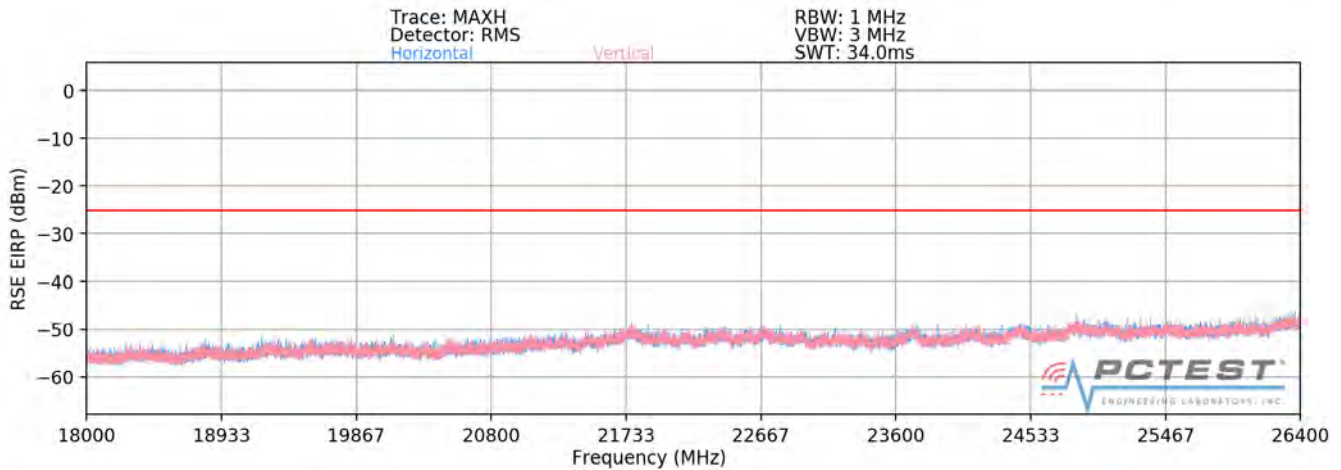
Table 7-29. Radiated Spurious Data (Band 30 – Mid Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 299 of 434

# Band 7



**Plot 7-502. Radiated Spurious Plot 1GHz - 18GHz (Band 7)**



**Plot 7-503. Radiated Spurious Plot 18GHz - 26.5GHz (Band 7)**

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 - 01/09/20	EUT Type: Portable Handset		Page 300 of 434



OPERATING FREQUENCY: 2510.00 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 20.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5020.00	H	108	188	-66.12	10.80	-55.32	-30.3
7530.00	H	-	-	-65.87	12.56	-53.32	-28.3
10040.00	H	-	-	-61.08	9.75	-51.33	-26.3

Table 7-30. Radiated Spurious Data (Band 7 – Low Channel)

OPERATING FREQUENCY: 2535.00 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 20.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5070.00	H	124	194	-67.09	10.92	-56.17	-31.2
7605.00	H	-	-	-65.42	12.40	-53.02	-28.0
10140.00	H	-	-	-60.89	9.84	-51.05	-26.0

Table 7-31. Radiated Spurious Data (Band 7 – Mid Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 301 of 434	



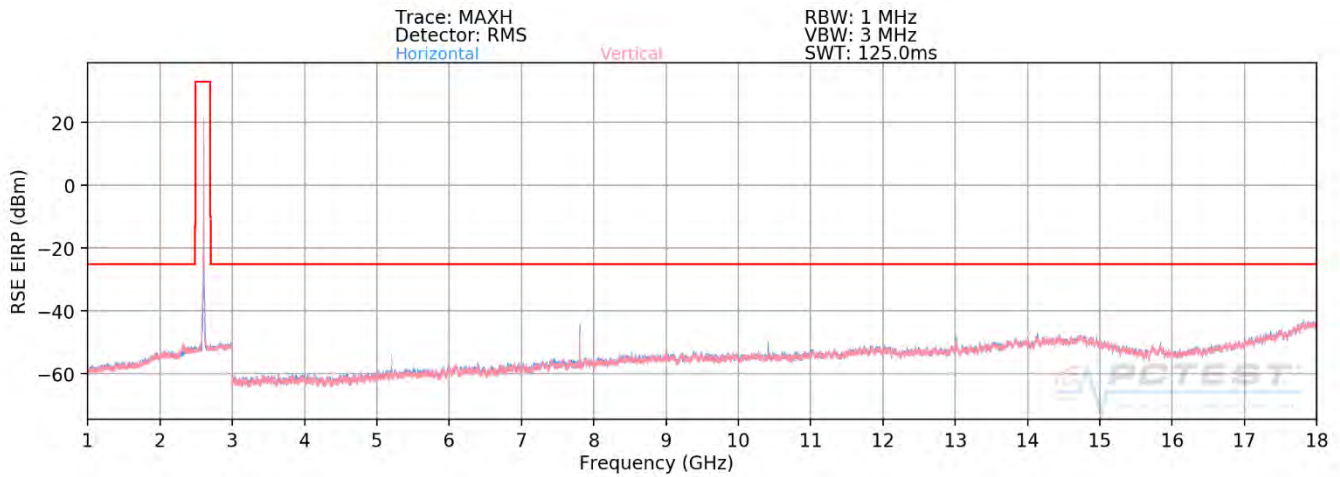
OPERATING FREQUENCY: 2560.00 MHz  
MODULATION SIGNAL: QPSK  
BANDWIDTH: 20.0 MHz  
DISTANCE: 3 meters  
LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5120.00	H	128	185	-66.82	10.99	-55.83	-30.8
7680.00	H	-	-	-65.85	12.35	-53.51	-28.5
10240.00	H	-	-	-60.50	9.65	-50.84	-25.8

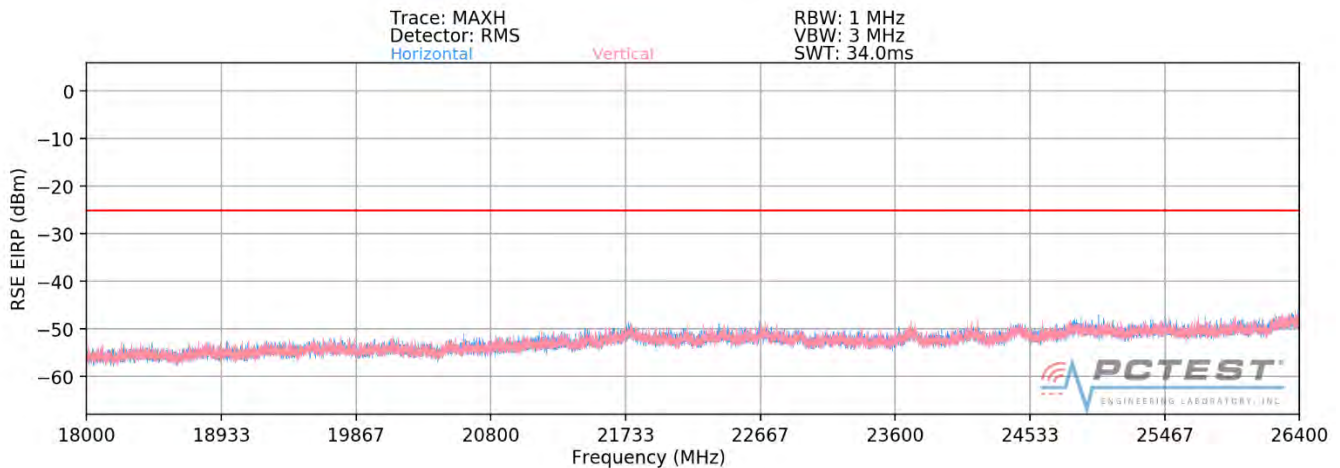
Table 7-32. Radiated Spurious Data (Band 7 – High Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 302 of 434

# Band 41



**Plot 7-504. Radiated Spurious Plot 1GHz - 18GHz (Band 41)**



**Plot 7-505. Radiated Spurious Plot 18GHz - 26.5GHz (Band 41)**

<b>FCC ID:</b> A3LSMG986W		<b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Quality Manager
<b>Test Report S/N:</b> 1M1911010179-03.A3L	<b>Test Dates:</b> 10/11/19 - 01/09/20	<b>EUT Type:</b> Portable Handset	Page 303 of 434	



OPERATING FREQUENCY: 2506.00 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 20.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5012.00	V	395	280	-62.31	8.56	-53.75	-28.8
7518.00	V	286	194	-51.67	8.49	-43.18	-18.2
10024.00	V	264	39	-59.76	9.85	-49.91	-24.9
12530.00	V	105	81	-55.97	9.07	-46.90	-21.9
15036.00	V	-	-	-54.57	8.77	-45.80	-20.8
17542.00	V	-	-	-49.66	7.64	-42.02	-17.0

Table 7-33. Radiated Spurious Data (Band 41 – Low Channel)

OPERATING FREQUENCY: 2593.00 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 20.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5186.00	V	114	290	-61.00	11.14	-49.87	-24.9
7779.00	V	110	197	-48.17	12.33	-35.84	-10.8
10372.00	V	108	15	-52.33	9.62	-42.70	-17.7
12965.00	V	100	1	-48.36	8.99	-39.37	-14.4
15558.00	V	-	-	-53.42	8.32	-45.11	-20.1

Table 7-34. Radiated Spurious Data (Band 41 – Mid Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 304 of 434	





OPERATING FREQUENCY: 2680.00 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 20.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5360.00	V	261	284	-67.99	11.49	-56.50	-31.5
8040.00	V	130	209	-51.64	12.03	-39.61	-14.6
10720.00	V	108	12	-49.70	9.32	-40.38	-15.4
13400.00	V	166	284	-53.73	8.77	-44.96	-20.0
16080.00	V	-	-	-52.82	8.00	-44.82	-19.8

Table 7-35. Radiated Spurious Data (Band 41 – High Channel)

OPERATING FREQUENCY: 2680.00 MHz  
 MODULATION SIGNAL: QPSK  
 BANDWIDTH: 20.0 MHz  
 DISTANCE: 3 meters  
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5360.00	V	152	63	-59.48	8.99	-50.48	-25.5
8040.00	V	-	-	-57.13	9.35	-47.77	-22.8
10720.00	V	-	-	-54.25	9.39	-44.85	-19.9

Table 7-36. Radiated Spurious Data with WCP (Band 41 – PC2 High Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 305 of 434	

## 7.8 Frequency Stability / Temperature Variation

### Test Overview and Limit

Frequency stability testing is performed in accordance with the guidelines of ANSI/TIA-603-E-2016. The frequency stability of the transmitter is measured by:

- a.) **Temperature:** The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.
- b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

***For Part 22, the frequency stability of the transmitter shall be maintained within  $\pm 0.00025\%$  ( $\pm 2.5$  ppm) of the center frequency. For Part 24, Part 27, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.***

### Test Procedure Used

ANSI/TIA-603-E-2016

### Test Settings

1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).
2. The equipment is turned on in a “standby” condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

### Test Setup

The EUT was connected via an RF cable to a spectrum analyzer with the EUT placed inside an environmental chamber.

### Test Notes

None

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 306 of 434	

## Band 71 Frequency Stability Measurements

OPERATING FREQUENCY: 680,500,000 Hz  
 REFERENCE VOLTAGE: 4.19 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	680,499,802	-198	-0.0000291
100 %		- 20	680,500,061	61	0.0000090
100 %		- 10	680,500,205	205	0.0000301
100 %		0	680,499,976	-24	-0.0000035
100 %		+ 10	680,500,098	98	0.0000144
100 %		+ 20	680,499,751	-249	-0.0000366
100 %		+ 30	680,500,383	383	0.0000563
100 %		+ 40	680,500,327	327	0.0000481
100 %		+ 50	680,499,881	-119	-0.0000175
BATT. ENDPOINT		3.79	+ 20	680,499,803	-197

**Table 7-37. Frequency Stability Data (Band 71)**

**Note:**

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 307 of 434	

## Band 71 Frequency Stability Measurements

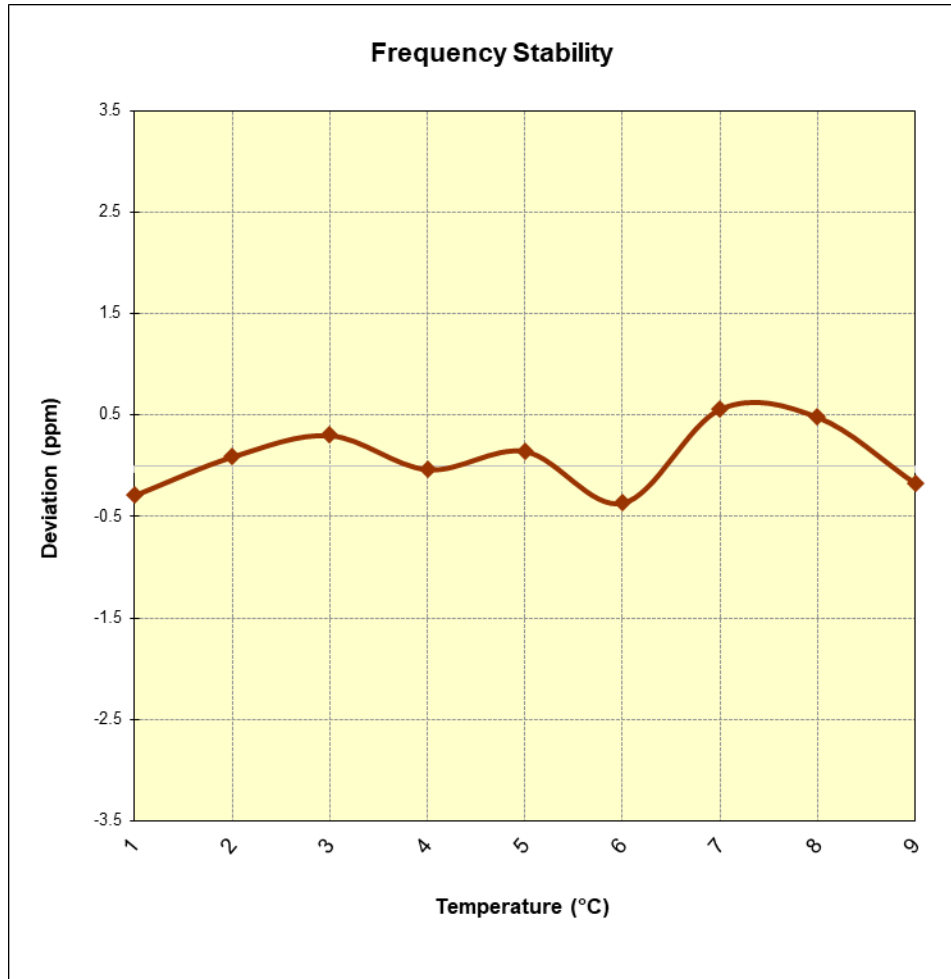


Figure 7-8. Frequency Stability Graph (Band 71)

<b>FCC ID:</b> A3LSMG986W		<b>MEASUREMENT REPORT (CERTIFICATION)</b>	 <b>Approved by:</b> Quality Manager
<b>Test Report S/N:</b> 1M1911010179-03.A3L	<b>Test Dates:</b> 10/11/19 – 01/09/20	<b>EUT Type:</b> Portable Handset	Page 308 of 434

## Band 12 Frequency Stability Measurements

OPERATING FREQUENCY: 707,500,000 Hz  
 REFERENCE VOLTAGE: 4.19 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	707,499,838	-162	-0.0000229
100 %		- 20	707,500,253	253	0.0000358
100 %		- 10	707,499,929	-71	-0.0000100
100 %		0	707,499,756	-244	-0.0000345
100 %		+ 10	707,499,988	-12	-0.0000017
100 %		+ 20	707,499,886	-114	-0.0000161
100 %		+ 30	707,500,237	237	0.0000335
100 %		+ 40	707,500,029	29	0.0000041
100 %		+ 50	707,500,079	79	0.0000112
BATT. ENDPOINT		3.79	+ 20	707,500,076	76

**Table 7-38. Frequency Stability Data (Band 12)**

**Note:**

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 309 of 434	

## Band 12 Frequency Stability Measurements

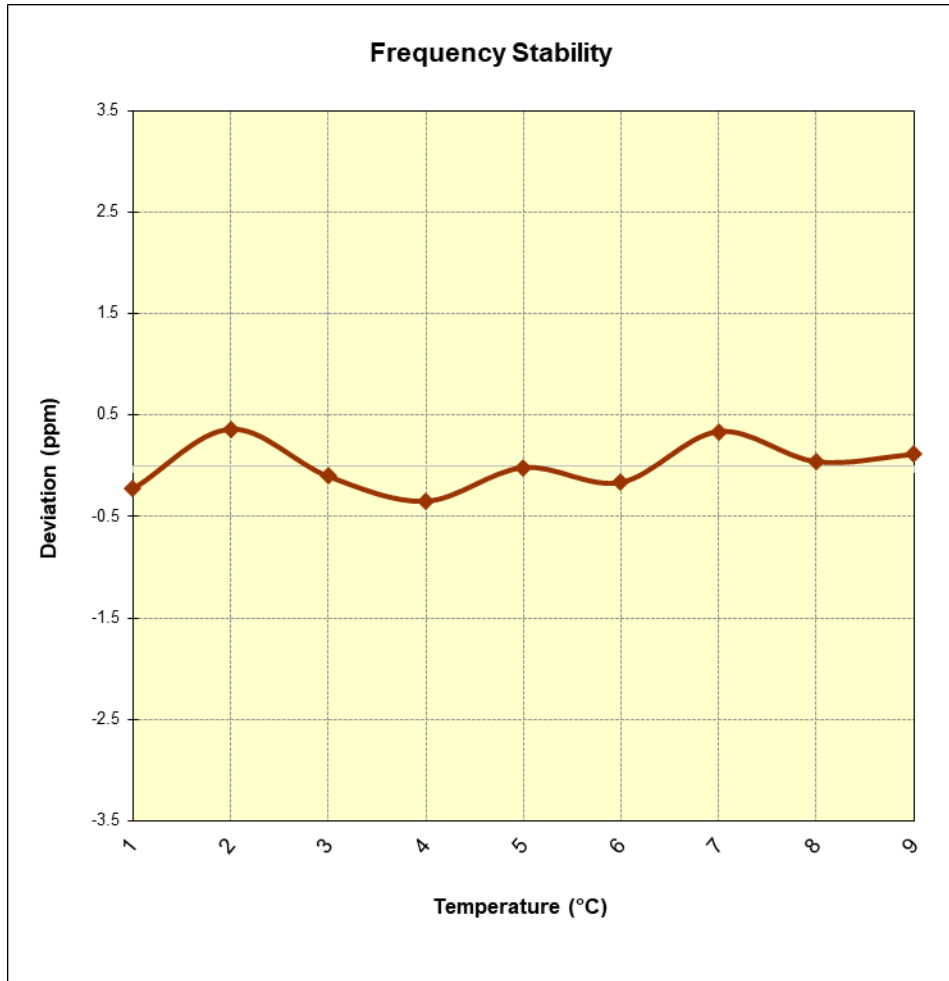


Figure 7-9. Frequency Stability Graph (Band 12)

<b>FCC ID:</b> A3LSMG986W		<b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Quality Manager
<b>Test Report S/N:</b> 1M1911010179-03.A3L	<b>Test Dates:</b> 10/11/19 – 01/09/20	<b>EUT Type:</b> Portable Handset	Page 310 of 434	

## Band 13 Frequency Stability Measurements

OPERATING FREQUENCY: 782,000,000 Hz  
 REFERENCE VOLTAGE: 4.19 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	782,000,117	117	0.0000150
100 %		- 20	781,999,879	-121	-0.0000155
100 %		- 10	782,000,260	260	0.0000332
100 %		0	782,000,066	66	0.0000084
100 %		+ 10	781,999,933	-67	-0.0000086
100 %		+ 20	781,999,891	-109	-0.0000139
100 %		+ 30	782,000,186	186	0.0000238
100 %		+ 40	782,000,194	194	0.0000248
100 %		+ 50	782,000,221	221	0.0000283
BATT. ENDPOINT		3.79	+ 20	781,999,844	-156

**Table 7-39. Frequency Stability Data (Band 13)**

**Note:**

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 311 of 434

### Band 13 Frequency Stability Measurements

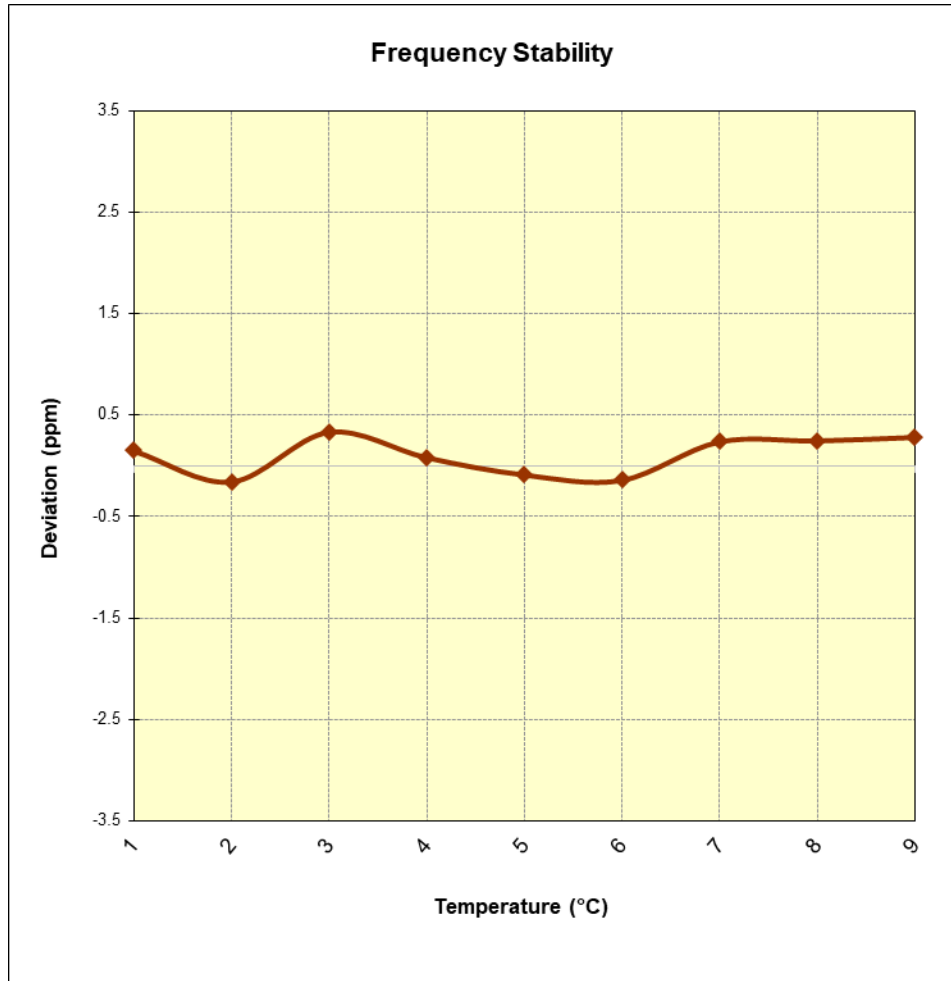


Figure 7-10. Frequency Stability Graph (Band 13)

<b>FCC ID:</b> A3LSMG986W		<b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Quality Manager
<b>Test Report S/N:</b> 1M1911010179-03.A3L	<b>Test Dates:</b> 10/11/19 – 01/09/20	<b>EUT Type:</b> Portable Handset	Page 312 of 434	



## Band 5 Frequency Stability Measurements

OPERATING FREQUENCY: 831,500,000 Hz

REFERENCE VOLTAGE: 4.19 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	831,499,835	-165	-0.0000198
100 %		- 20	831,499,589	-411	-0.0000494
100 %		- 10	831,499,919	-81	-0.0000097
100 %		0	831,499,997	-3	-0.0000004
100 %		+ 10	831,500,237	237	0.0000285
100 %		+ 20	831,500,168	168	0.0000202
100 %		+ 30	831,500,013	13	0.0000016
100 %		+ 40	831,499,727	-273	-0.0000328
100 %		+ 50	831,500,012	12	0.0000014
BATT. ENDPOINT		3.79	+ 20	831,499,915	-85

**Table 7-40. Frequency Stability Data (Band 5)**

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 313 of 434	

## Band 5 Frequency Stability Measurements

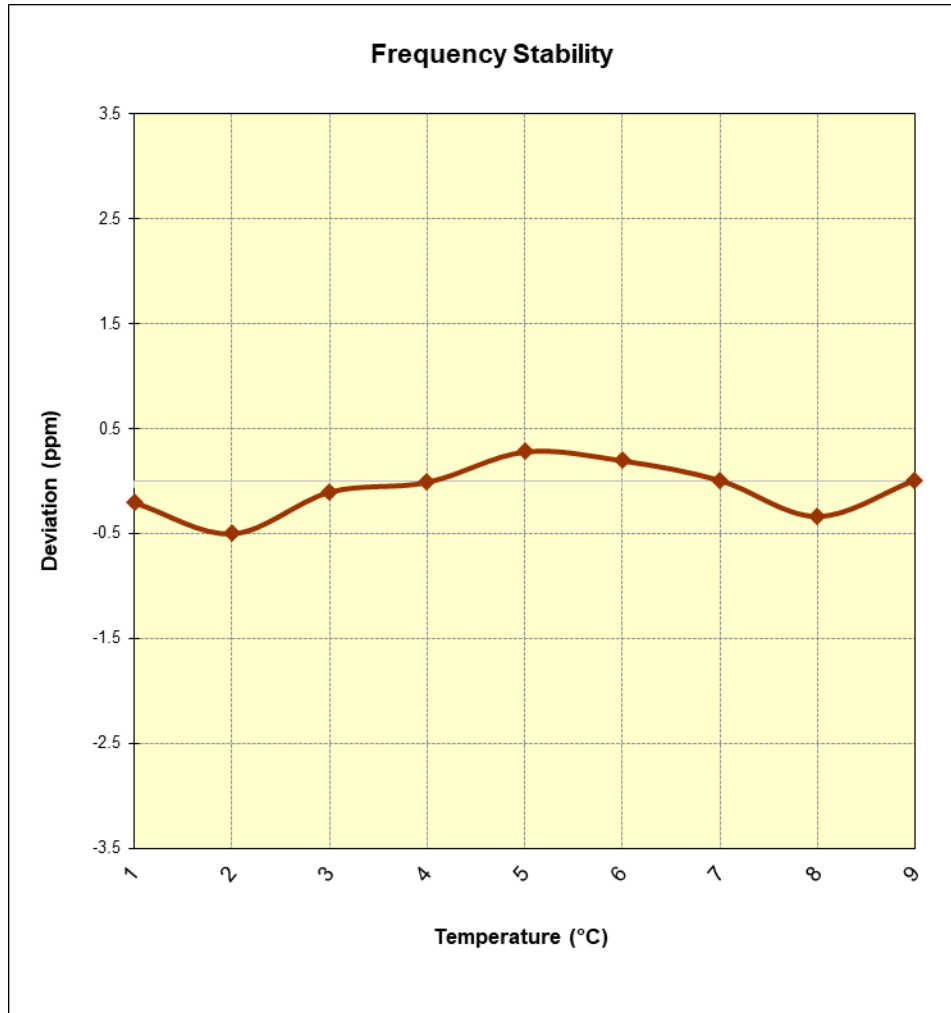


Figure 7-11. Frequency Stability Graph (Band 5)

<b>FCC ID:</b> A3LSMG986W		<b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Quality Manager
<b>Test Report S/N:</b> 1M1911010179-03.A3L	<b>Test Dates:</b> 10/11/19 – 01/09/20	<b>EUT Type:</b> Portable Handset	Page 314 of 434	

## Band 66/4 Frequency Stability Measurements

OPERATING FREQUENCY: 1,745,000,000 Hz  
 REFERENCE VOLTAGE: 4.19 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	1,745,000,285	285	0.0000163
100 %		- 20	1,745,000,085	85	0.0000049
100 %		- 10	1,744,999,829	-171	-0.0000098
100 %		0	1,745,000,156	156	0.0000089
100 %		+ 10	1,745,000,121	121	0.0000069
100 %		+ 20	1,744,999,903	-97	-0.0000056
100 %		+ 30	1,745,000,023	23	0.0000013
100 %		+ 40	1,744,999,855	-145	-0.0000083
100 %		+ 50	1,744,999,934	-66	-0.0000038
BATT. ENDPOINT	3.79	+ 20	1,745,000,001	1	0.0000001

**Table 7-41. Frequency Stability Data (Band 66/4)**

**Note:**

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 315 of 434	

## Band 66/4 Frequency Stability Measurements

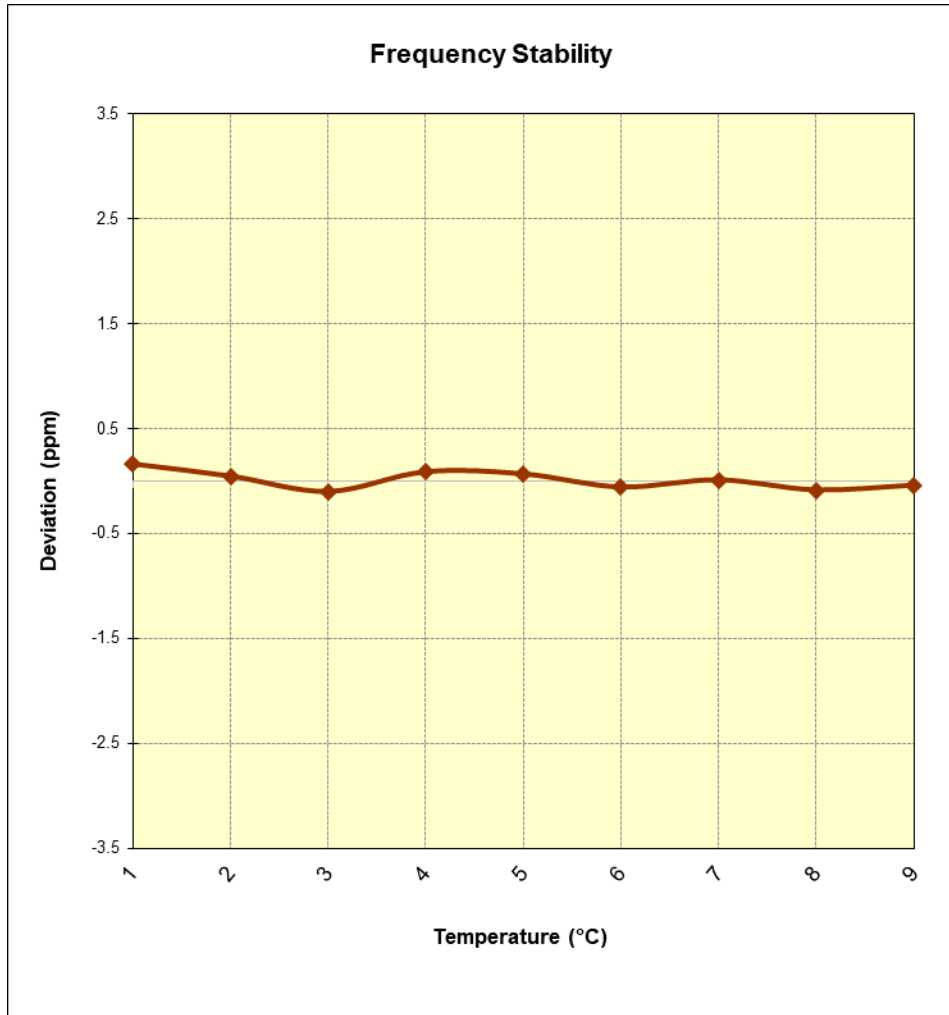


Figure 7-12. Frequency Stability Graph (Band 66/4)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 316 of 434	

## Band 25/2 Frequency Stability Measurements

OPERATING FREQUENCY: 1,882,500,000 Hz

REFERENCE VOLTAGE: 4.19 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	1,882,500,224	224	0.0000119
100 %		- 20	1,882,499,985	-15	-0.0000008
100 %		- 10	1,882,500,121	121	0.0000064
100 %		0	1,882,500,214	214	0.0000114
100 %		+ 10	1,882,499,914	-86	-0.0000046
100 %		+ 20	1,882,500,029	29	0.0000015
100 %		+ 30	1,882,500,011	11	0.0000006
100 %		+ 40	1,882,500,299	299	0.0000159
100 %		+ 50	1,882,499,827	-173	-0.0000092
BATT. ENDPOINT		3.79	+ 20	1,882,500,183	183

Table 7-42. Frequency Stability Data (Band 25/2)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 317 of 434	

## Band 25/2 Frequency Stability Measurements

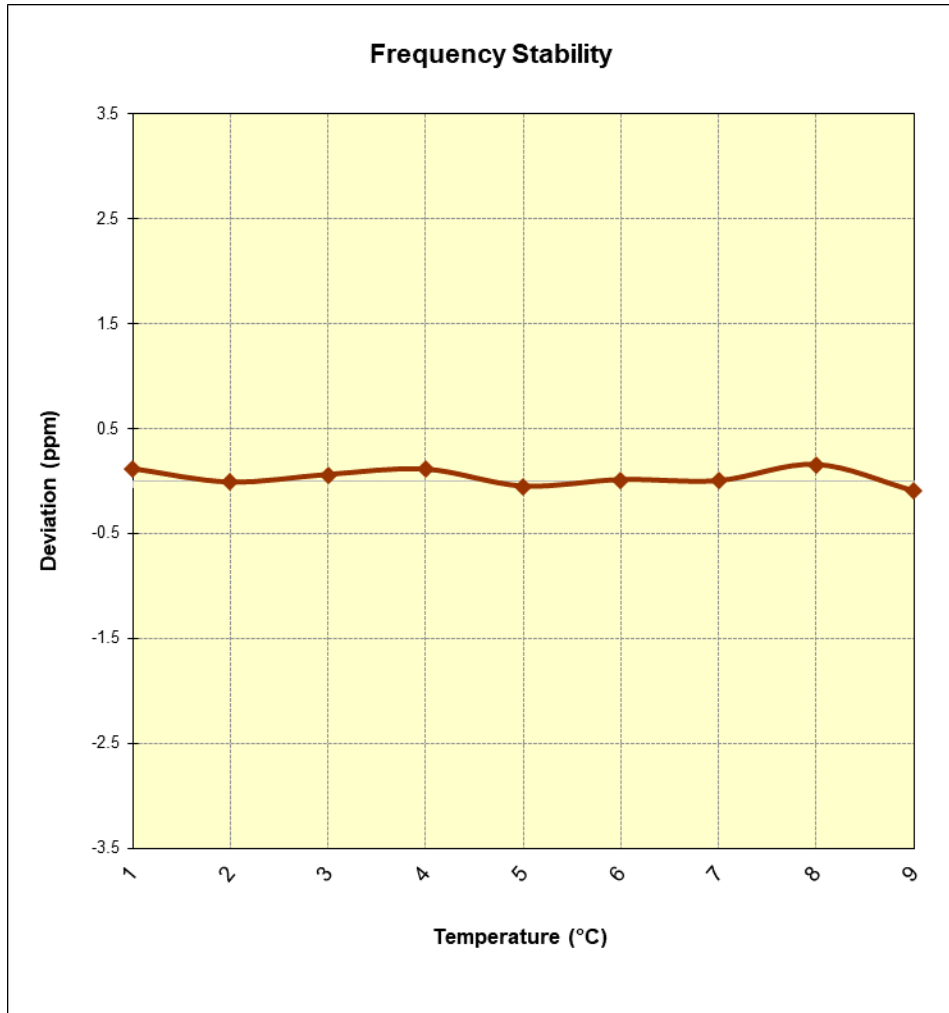


Figure 7-13. Frequency Stability Graph (Band 25/2)

<b>FCC ID:</b> A3LSMG986W		<b>MEASUREMENT REPORT (CERTIFICATION)</b>	<b>Approved by:</b> Quality Manager
<b>Test Report S/N:</b> 1M1911010179-03.A3L	<b>Test Dates:</b> 10/11/19 – 01/09/20	<b>EUT Type:</b> Portable Handset	Page 318 of 434

## Band 30 Frequency Stability Measurements

OPERATING FREQUENCY: 2,310,000,000 Hz

REFERENCE VOLTAGE: 4.19 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	2,310,000,028	28	0.0000012
100 %		- 20	2,310,000,005	5	0.0000002
100 %		- 10	2,310,000,011	11	0.0000005
100 %		0	2,309,999,894	-106	-0.0000046
100 %		+ 10	2,309,999,603	-397	-0.0000172
100 %		+ 20	2,309,999,942	-58	-0.0000025
100 %		+ 30	2,309,999,930	-70	-0.0000030
100 %		+ 40	2,309,999,800	-200	-0.0000087
100 %		+ 50	2,309,999,685	-315	-0.0000136
BATT. ENDPOINT	3.79	+ 20	2,309,999,669	-331	-0.0000143

**Table 7-43. Frequency Stability Data (Band 30)**

**Note:**

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 319 of 434	

## Band 30 Frequency Stability Measurements

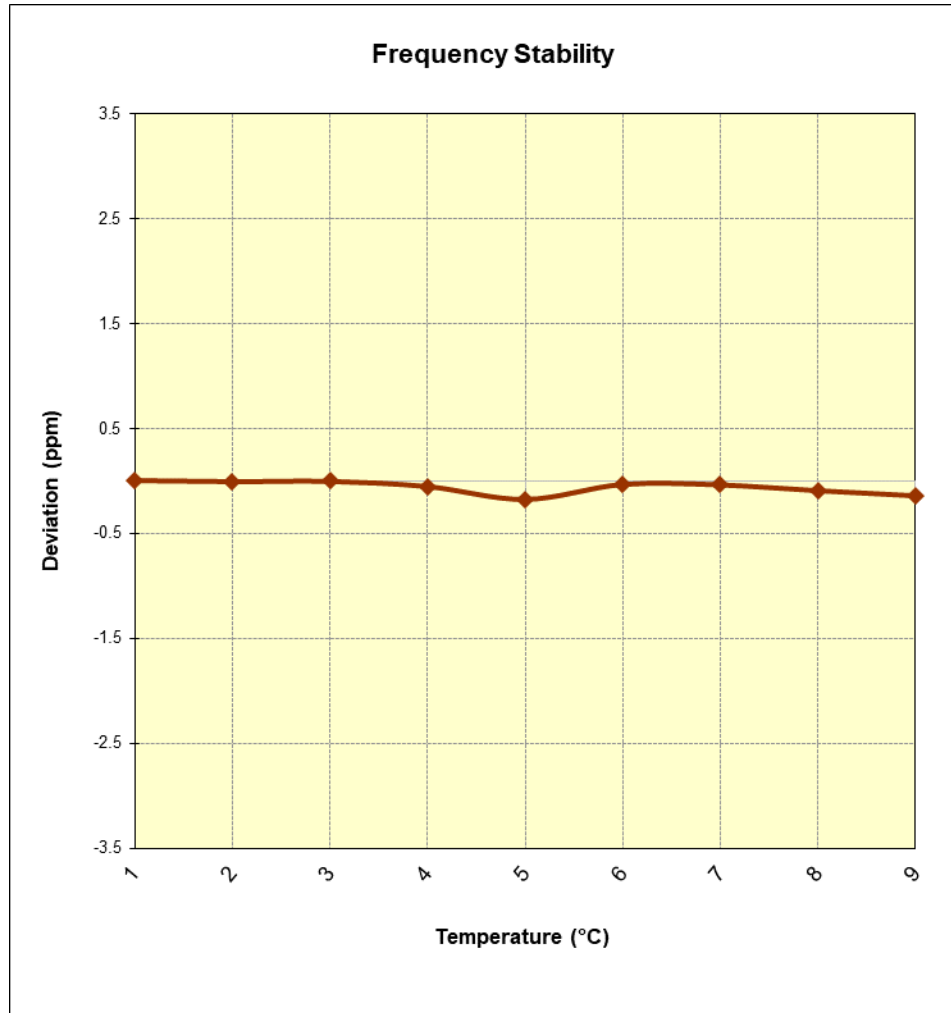


Figure 7-14. Frequency Stability Graph (Band 30)

<b>FCC ID:</b> A3LSMG986W		<b>MEASUREMENT REPORT (CERTIFICATION)</b>	 <b>Approved by:</b> Quality Manager
<b>Test Report S/N:</b> 1M1911010179-03.A3L	<b>Test Dates:</b> 10/11/19 – 01/09/20	<b>EUT Type:</b> Portable Handset	Page 320 of 434



## Band 7 Frequency Stability Measurements

OPERATING FREQUENCY: 2,535,000,000 Hz

REFERENCE VOLTAGE: 4.19 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	2,535,000,305	305	0.0000120
100 %		- 20	2,535,000,032	32	0.0000013
100 %		- 10	2,534,999,691	-309	-0.0000122
100 %		0	2,535,000,315	315	0.0000124
100 %		+ 10	2,535,000,008	8	0.0000003
100 %		+ 20	2,534,999,846	-154	-0.0000061
100 %		+ 30	2,534,999,923	-77	-0.0000030
100 %		+ 40	2,535,000,042	42	0.0000017
100 %		+ 50	2,534,999,896	-104	-0.0000041
BATT. ENDPOINT	3.79	+ 20	2,534,999,957	-43	-0.0000017

**Table 7-44. Frequency Stability Data (Band 7)**

**Note:**

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 321 of 434	

## Band 7 Frequency Stability Measurements

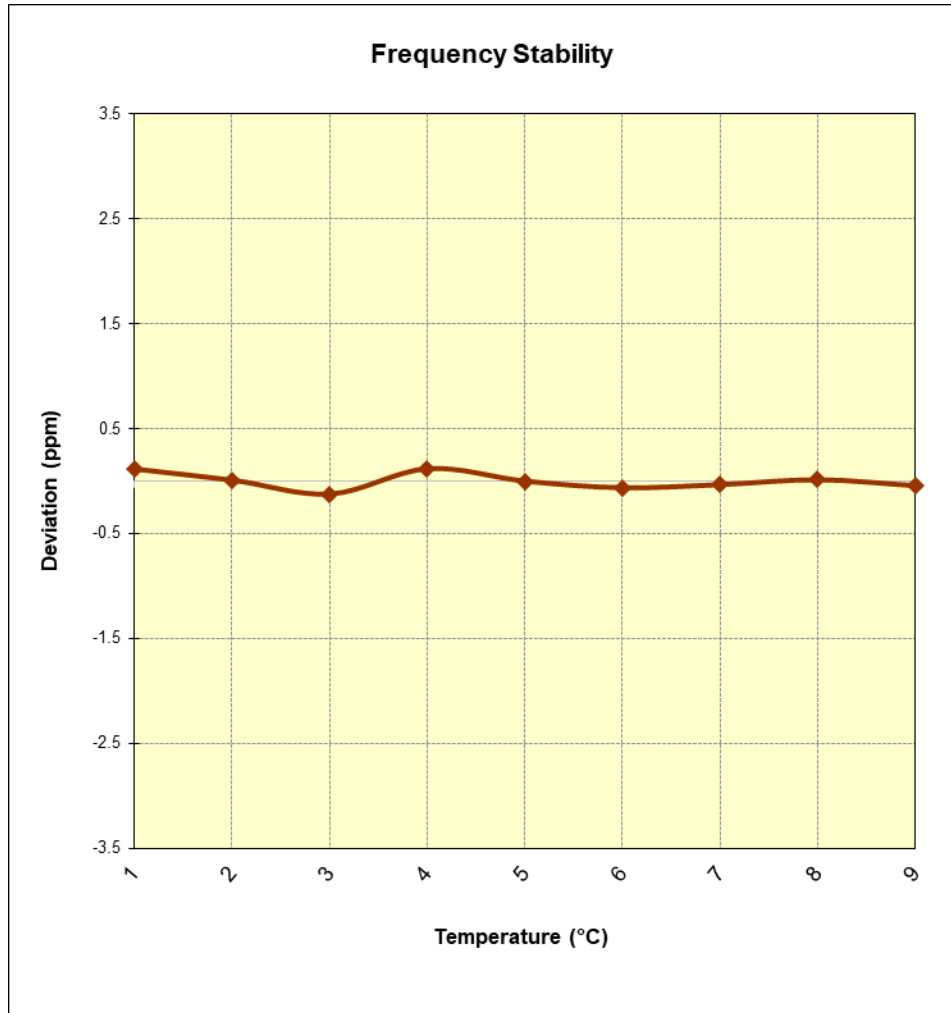


Figure 7-15. Frequency Stability Graph (Band 7)

<b>FCC ID:</b> A3LSMG986W		<b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Quality Manager
<b>Test Report S/N:</b> 1M1911010179-03.A3L	<b>Test Dates:</b> 10/11/19 – 01/09/20	<b>EUT Type:</b> Portable Handset	Page 322 of 434	

## Band 41 Frequency Stability Measurements

OPERATING FREQUENCY: 2,593,000,000 Hz  
 REFERENCE VOLTAGE: 4.19 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	2,593,000,112	112	0.0000043
100 %		- 20	2,592,999,885	-115	-0.0000044
100 %		- 10	2,592,999,832	-168	-0.0000065
100 %		0	2,593,000,031	31	0.0000012
100 %		+ 10	2,592,999,792	-208	-0.0000080
100 %		+ 20	2,592,999,944	-56	-0.0000022
100 %		+ 30	2,592,999,872	-128	-0.0000049
100 %		+ 40	2,592,999,830	-170	-0.0000066
100 %		+ 50	2,592,999,882	-118	-0.0000046
BATT. ENDPOINT	3.79	+ 20	2,593,000,236	236	0.0000091

**Table 7-45. Frequency Stability Data (Band 41)**

**Note:**

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset	Page 323 of 434	

### Band 41 Frequency Stability Measurements

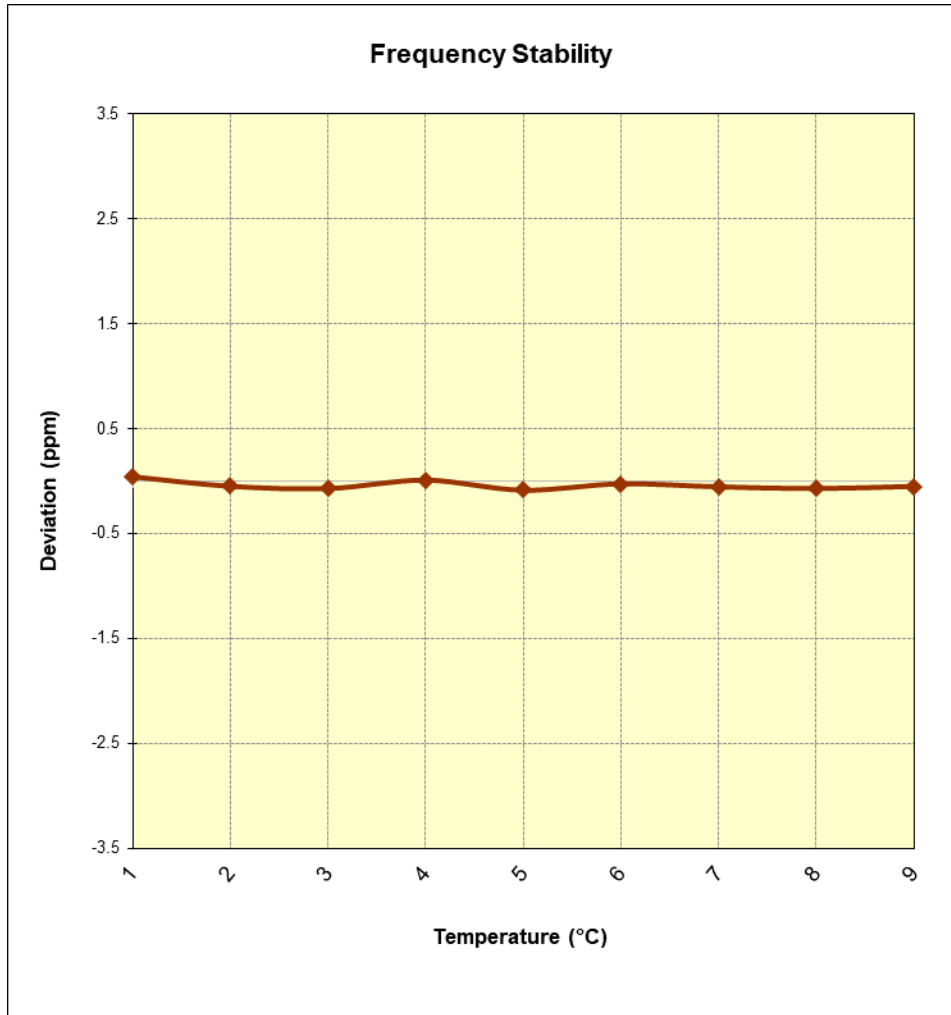


Figure 7-16. Frequency Stability Graph (Band 41)

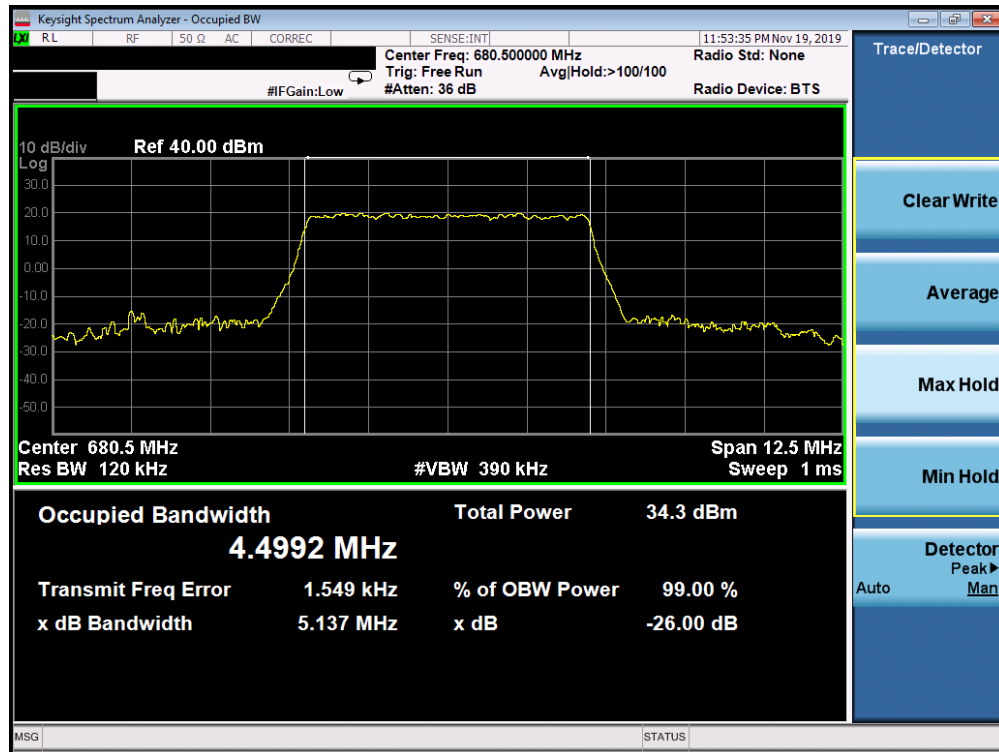
<b>FCC ID:</b> A3LSMG986W		<b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Quality Manager
<b>Test Report S/N:</b> 1M1911010179-03.A3L	<b>Test Dates:</b> 10/11/19 – 01/09/20	<b>EUT Type:</b> Portable Handset	Page 324 of 434	

## 7.9 Sub 6GHz NR / EN-DC Test Results

### Occupied Bandwidth

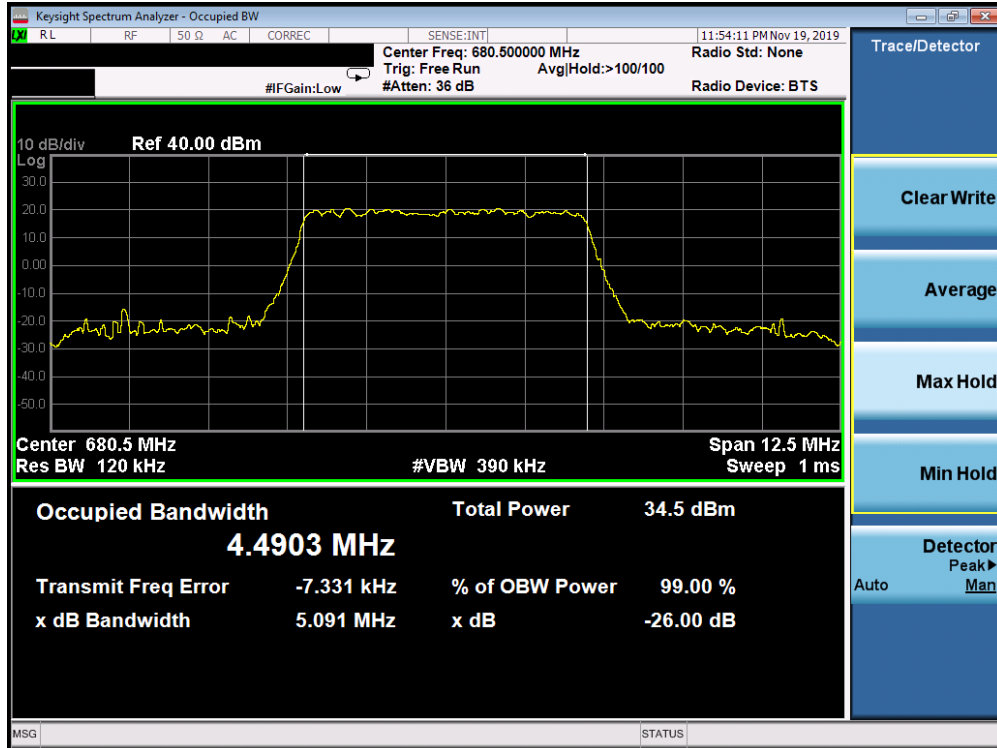
All SCS's and Waveforms (CP-OFDM vs DFT-s OFDM) were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

#### NR Band n71

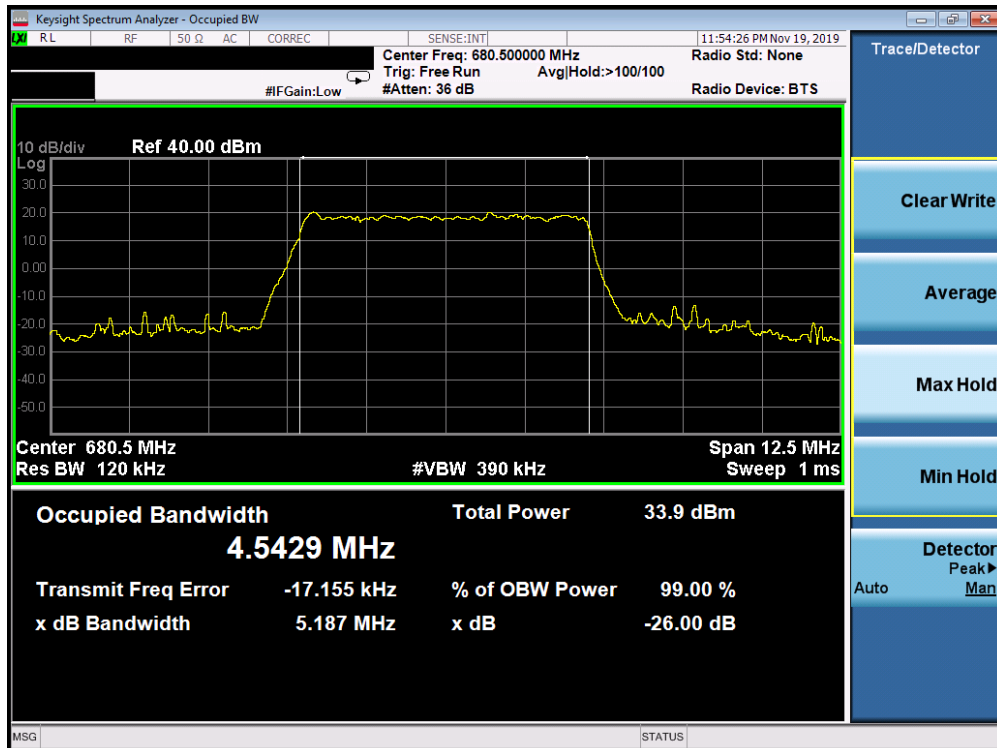


Plot 7-506. Occupied Bandwidth Plot (n71 5MHz QPSK-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 325 of 434

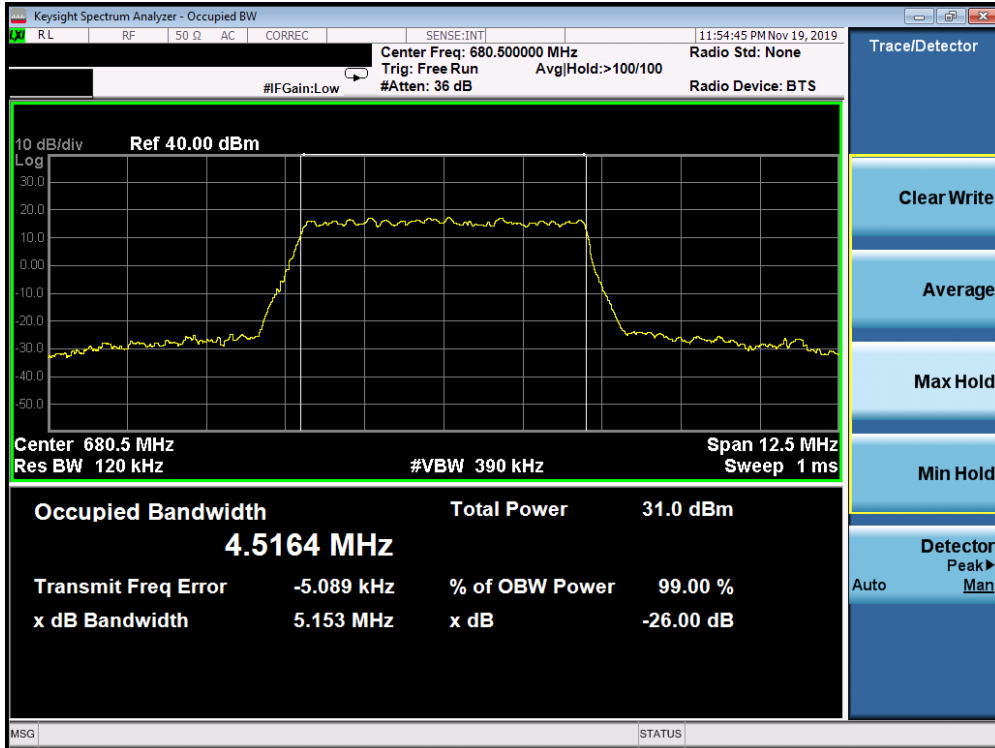


Plot 7-507. Occupied Bandwidth Plot (n71 5MHz 16QAM-CP-OFDM - Full RB Configuration)

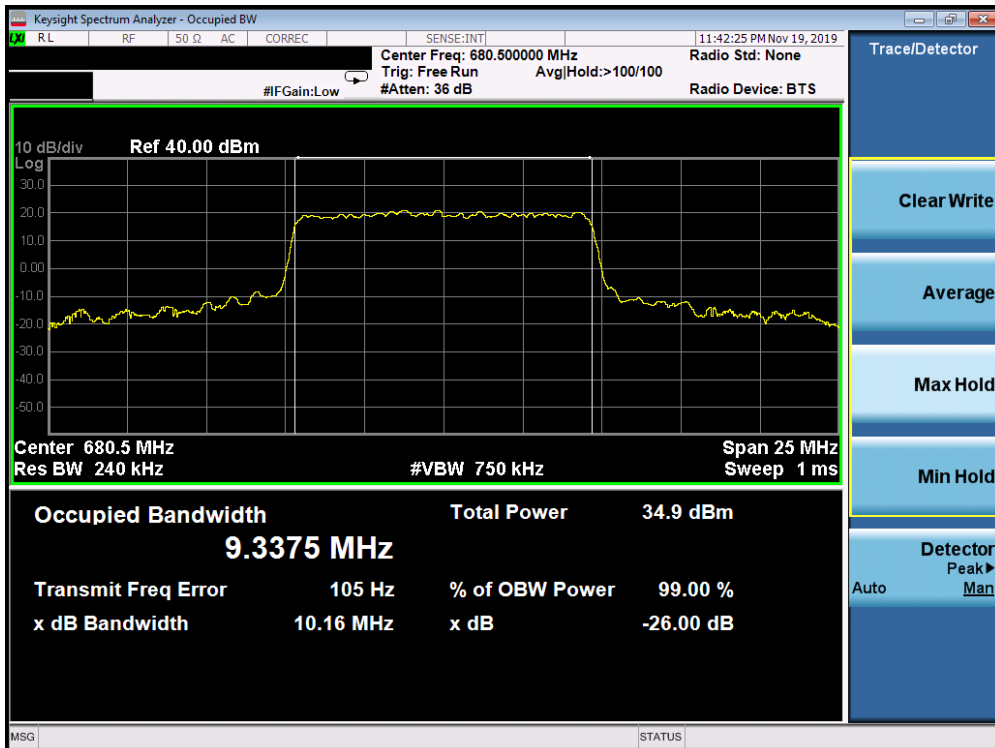


Plot 7-508. Occupied Bandwidth Plot (n71 5MHz 64QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 326 of 434

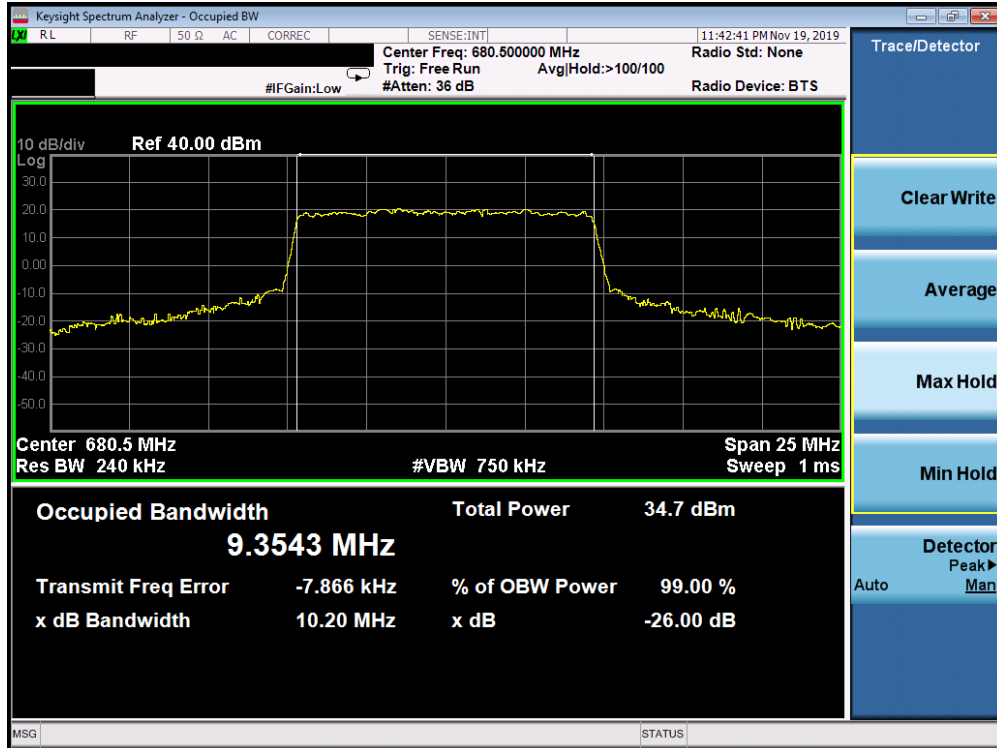


Plot 7-509. Occupied Bandwidth Plot (n71 5MHz 256QAM-CP-OFDM - Full RB Configuration)

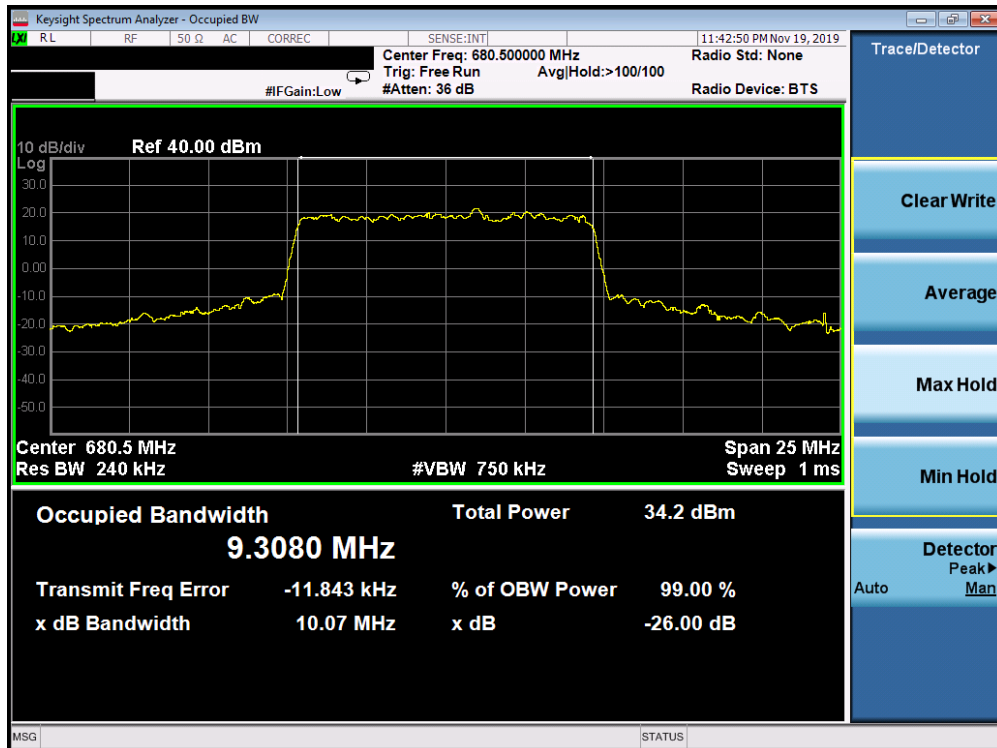


Plot 7-510. Occupied Bandwidth Plot (n71 10MHz QPSK-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 - 01/09/20	EUT Type: Portable Handset		Page 327 of 434



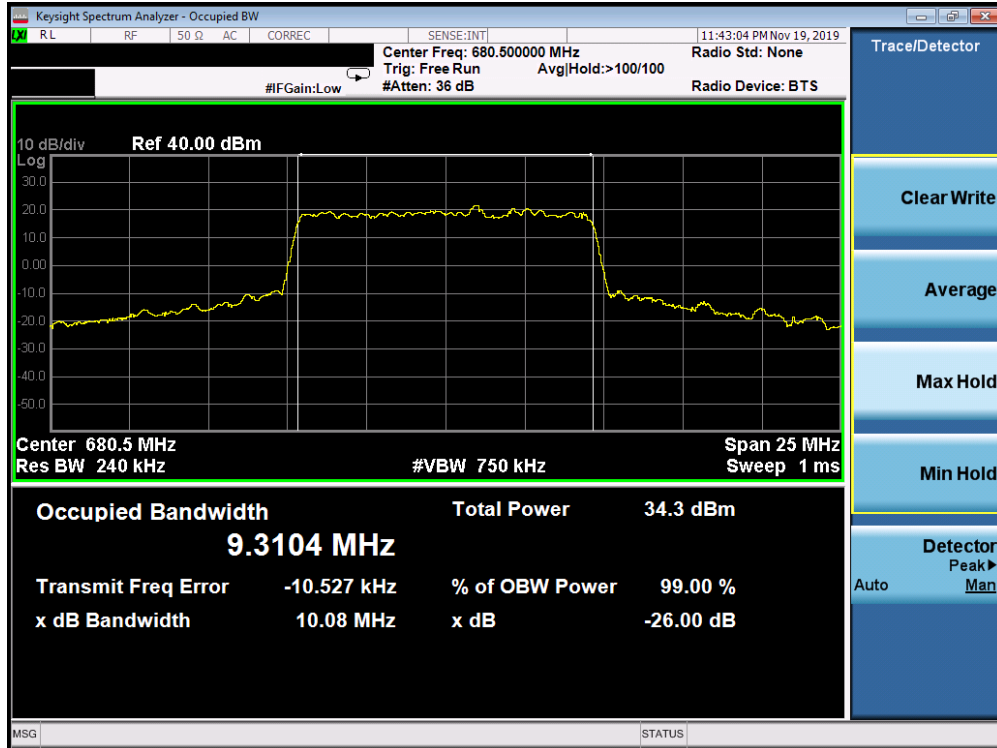
Plot 7-511. Occupied Bandwidth Plot (n71 10MHz 16QAM-CP-OFDM - Full RB Configuration)



Plot 7-512. Occupied Bandwidth Plot (n71 10MHz 64QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 328 of 434



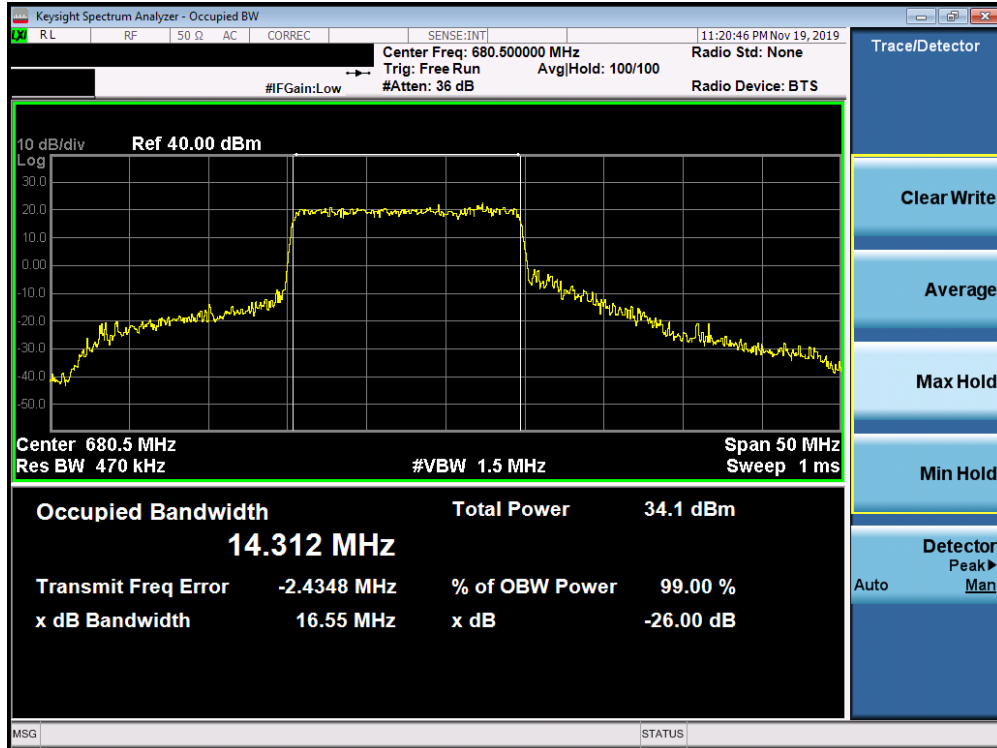


Plot 7-513. Occupied Bandwidth Plot (n71 10MHz 256QAM-CP-OFDM - Full RB Configuration)

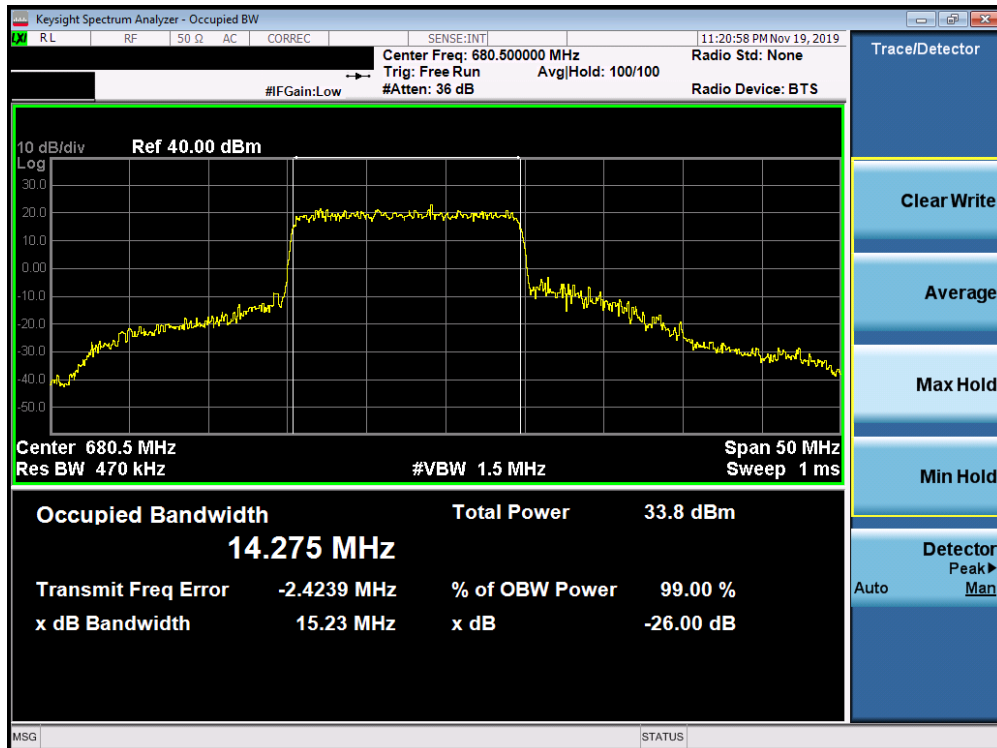


Plot 7-514. Occupied Bandwidth Plot (n71 15MHz QPSK-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 329 of 434

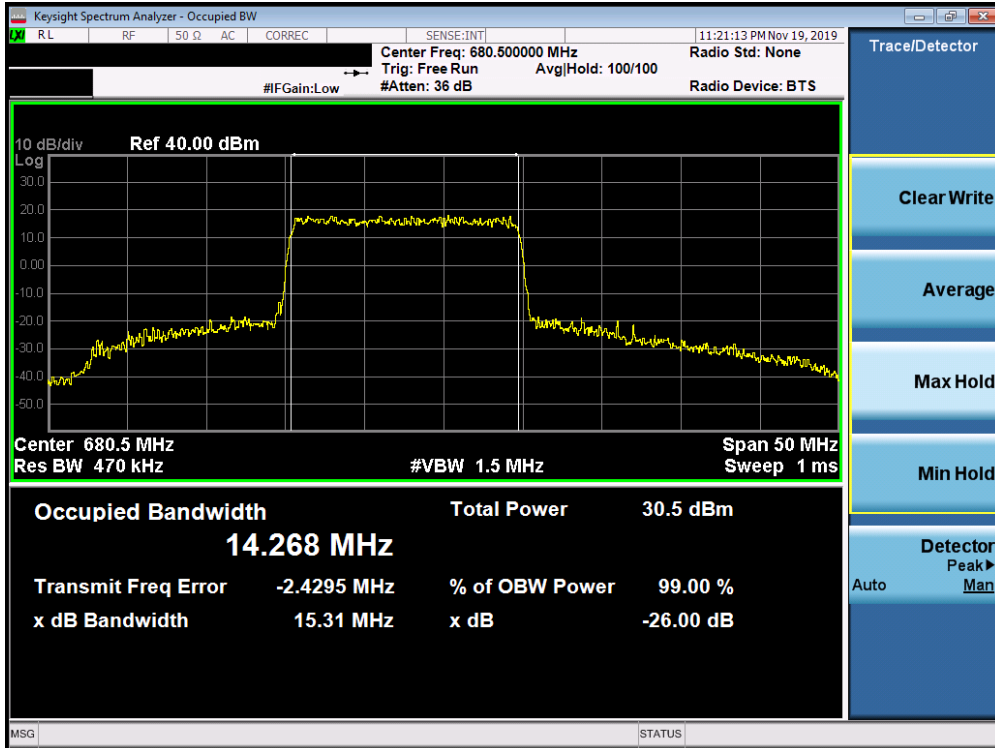


Plot 7-515. Occupied Bandwidth Plot (n71 15MHz 16QAM-CP-OFDM - Full RB Configuration)

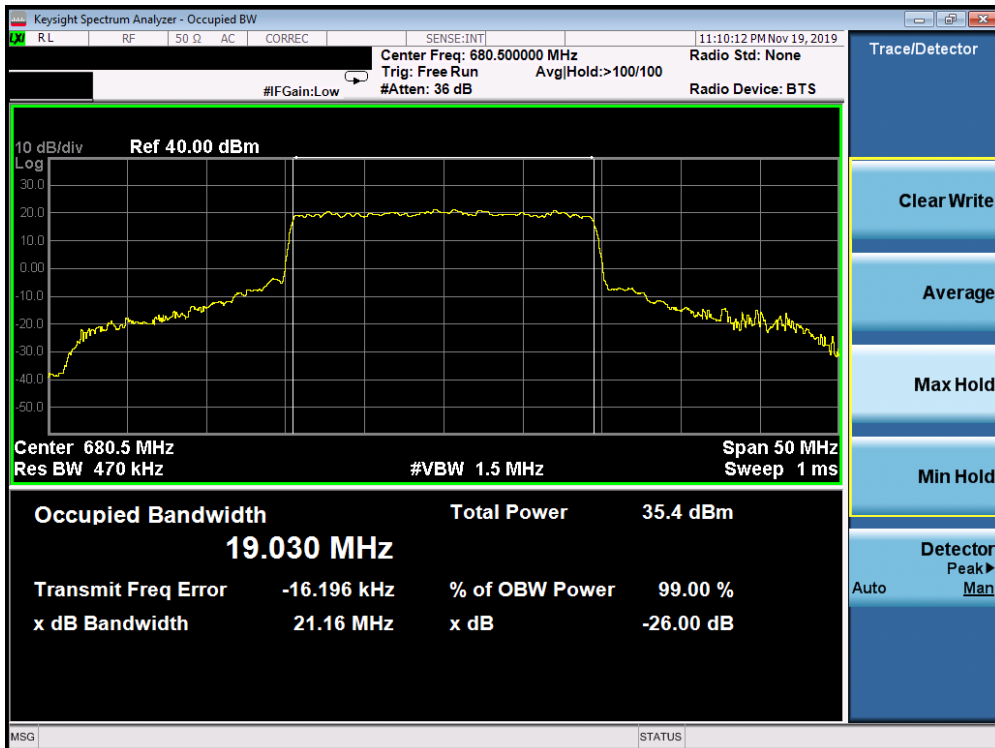


Plot 7-516. Occupied Bandwidth Plot (n71 15MHz 64QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 330 of 434

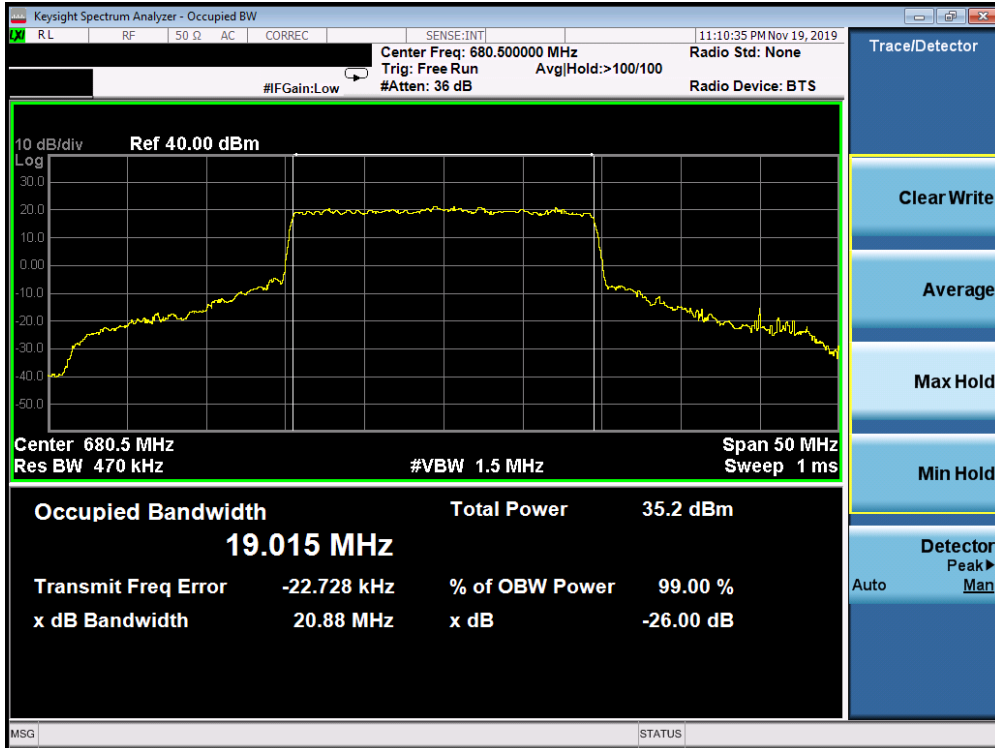


Plot 7-517. Occupied Bandwidth Plot (n71 15MHz 256QAM-CP-OFDM - Full RB Configuration)

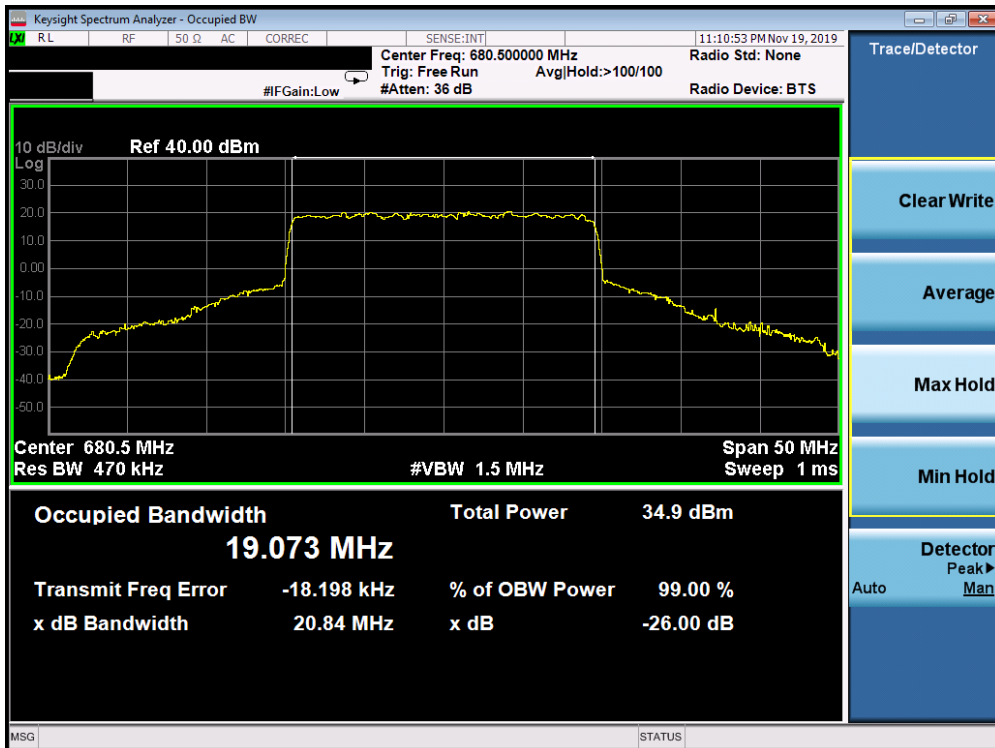


Plot 7-518. Occupied Bandwidth Plot (n71 20MHz QPSK-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 - 01/09/20	EUT Type: Portable Handset		Page 331 of 434

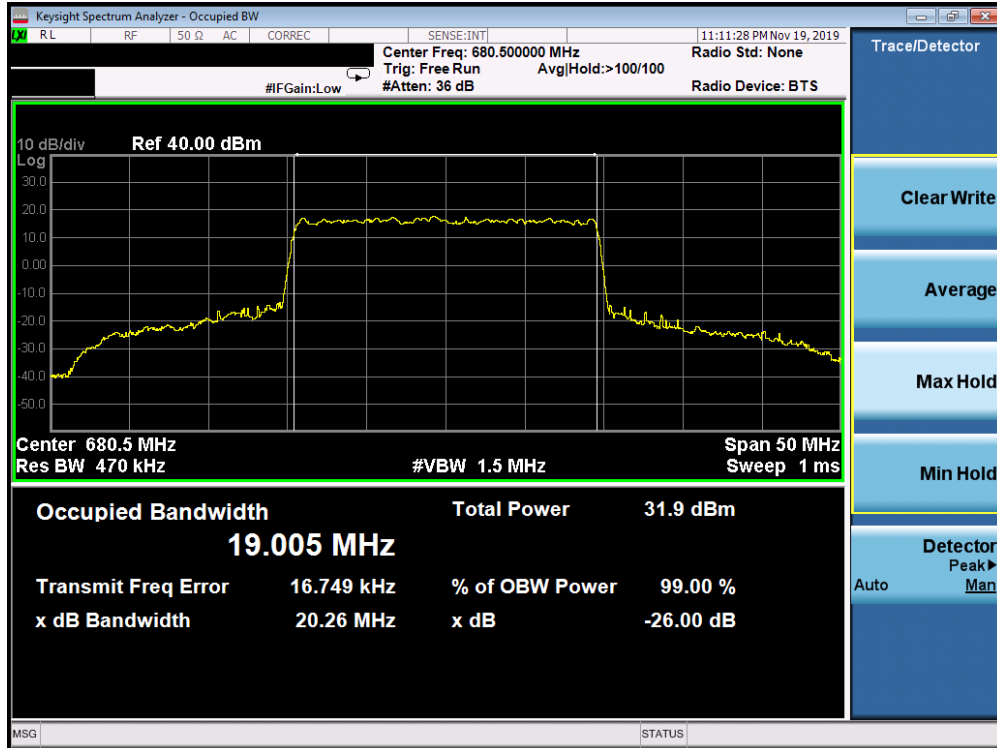


Plot 7-519. Occupied Bandwidth Plot (n71 20MHz 16QAM-CP-OFDM - Full RB Configuration)



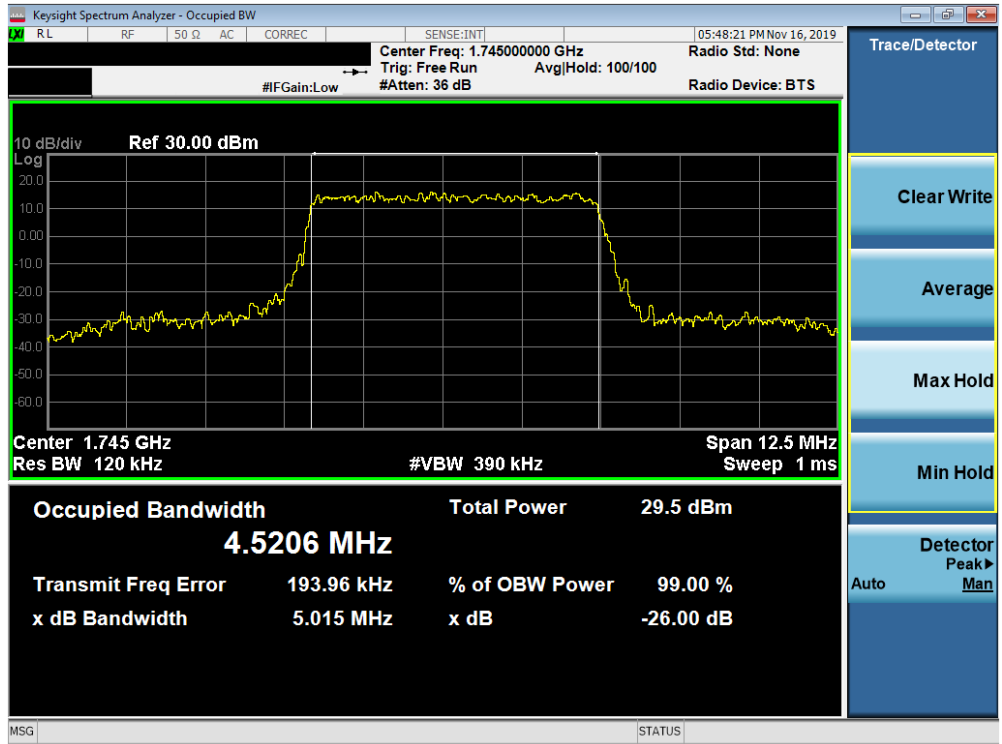
Plot 7-520. Occupied Bandwidth Plot (n71 20MHz 64QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 332 of 434

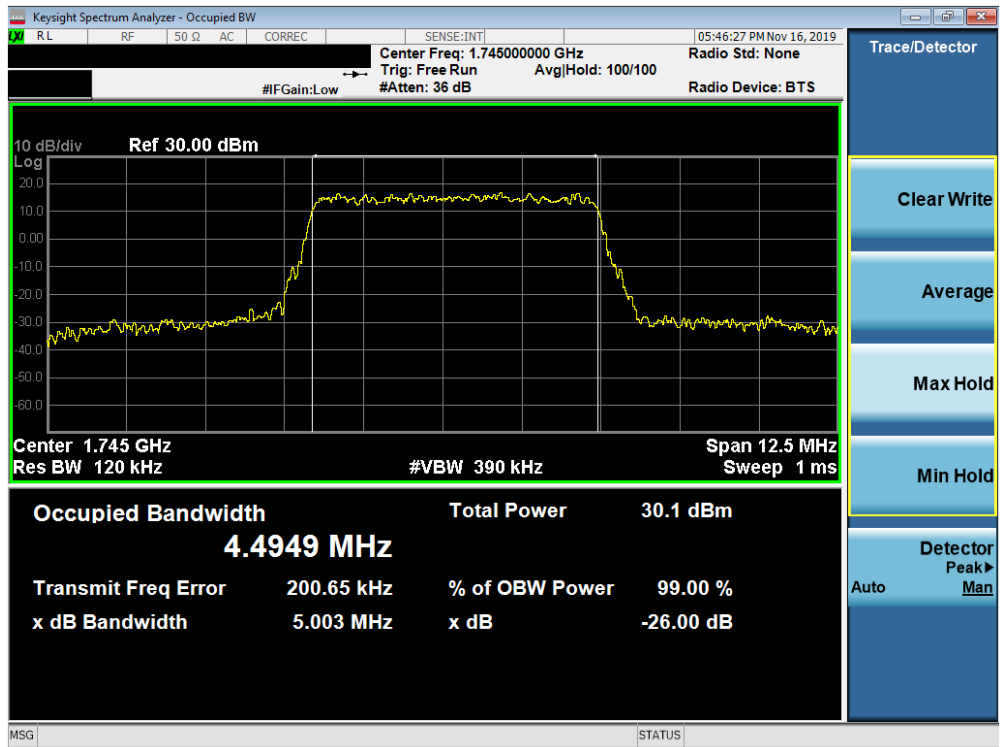


Plot 7-521. Occupied Bandwidth Plot (n71 20MHz 256QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 333 of 434

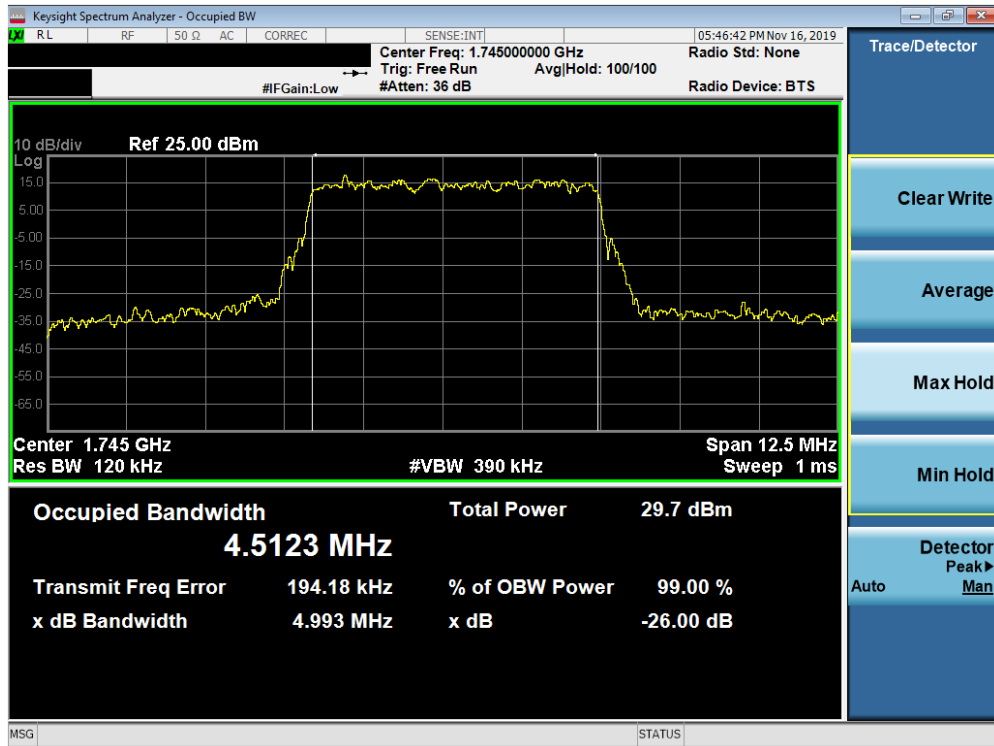


Plot 7-522. Occupied Bandwidth Plot (n66 5MHz QPSK-CP-OFDM - Full RB Configuration)

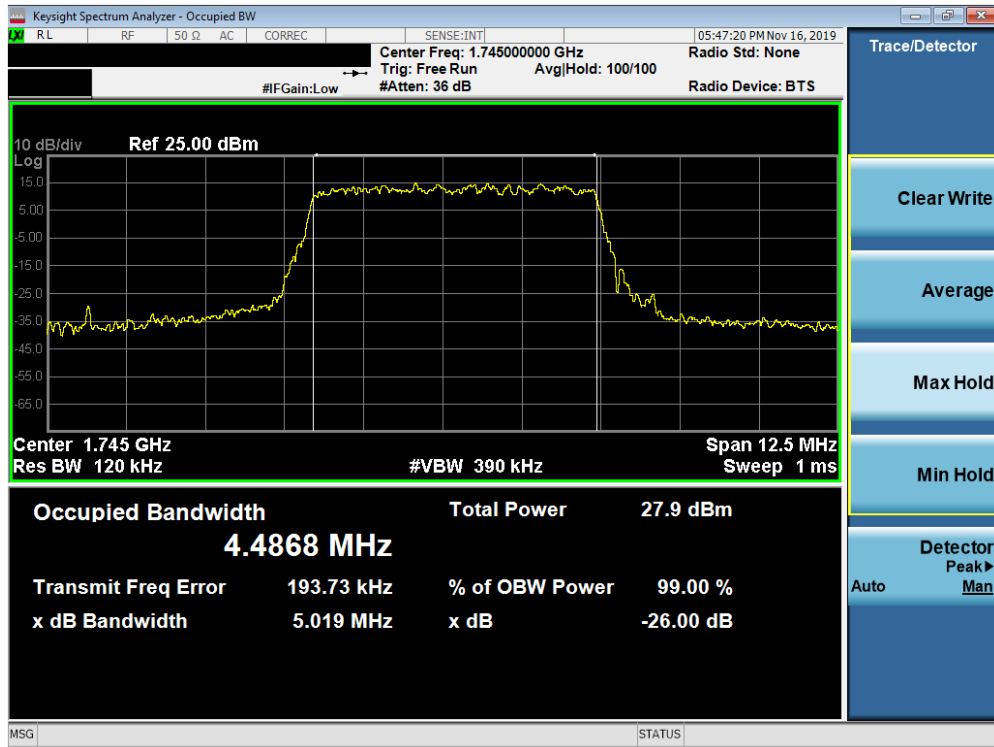


Plot 7-523. Occupied Bandwidth Plot (n66 5MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 334 of 434

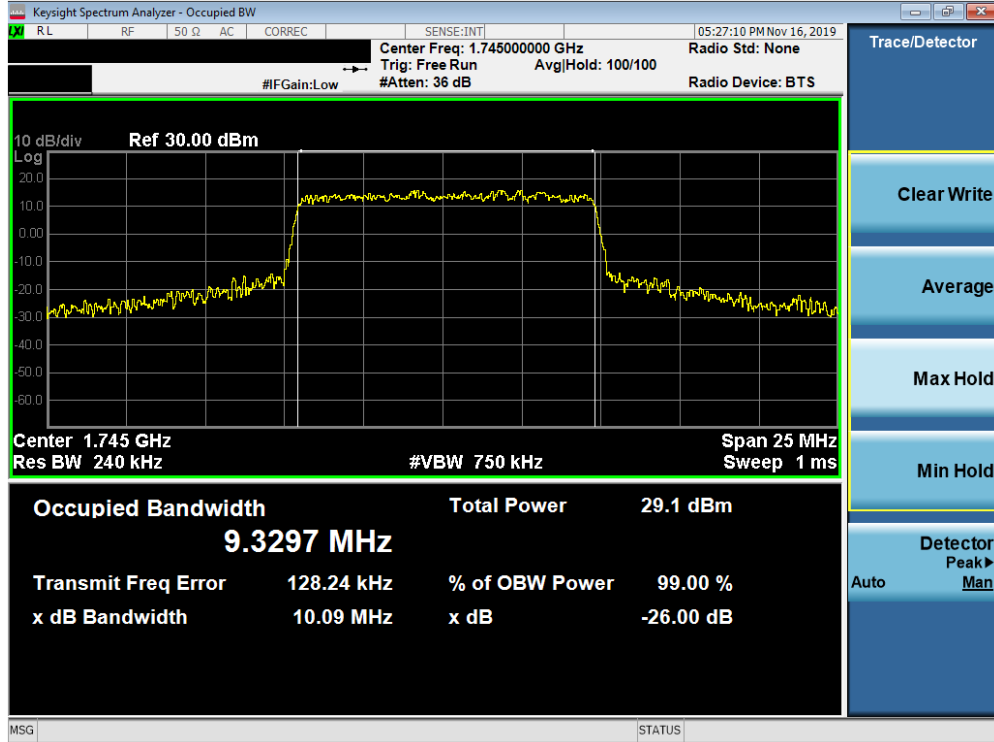


Plot 7-524. Occupied Bandwidth Plot (n66 5MHz 64QAM-CP-OFDM- Full RB Configuration)

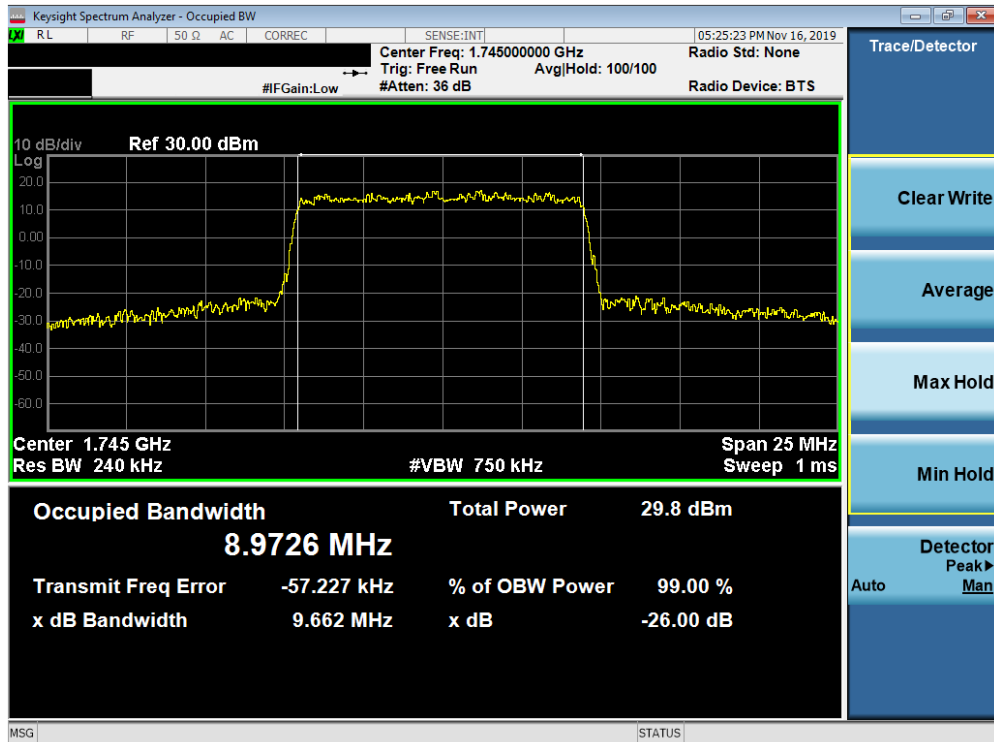


Plot 7-525. Occupied Bandwidth Plot (n66 5MHz 256QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 - 01/09/20	EUT Type: Portable Handset		Page 335 of 434



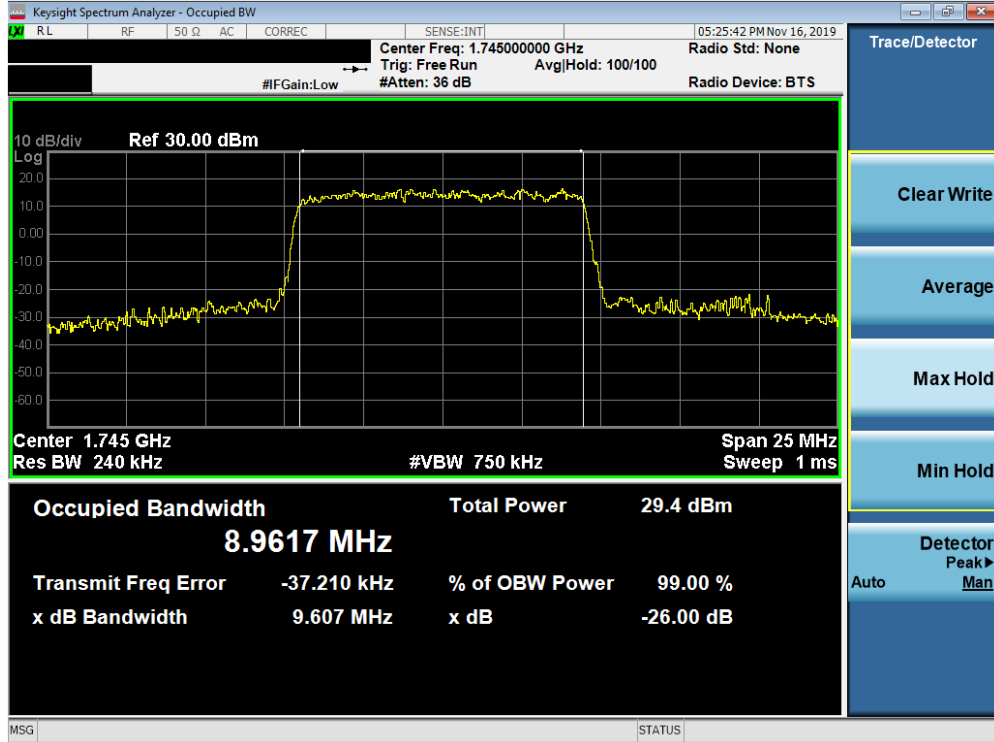
Plot 7-526. Occupied Bandwidth Plot (n66 10MHz QPSK-CP-OFDM - Full RB Configuration)



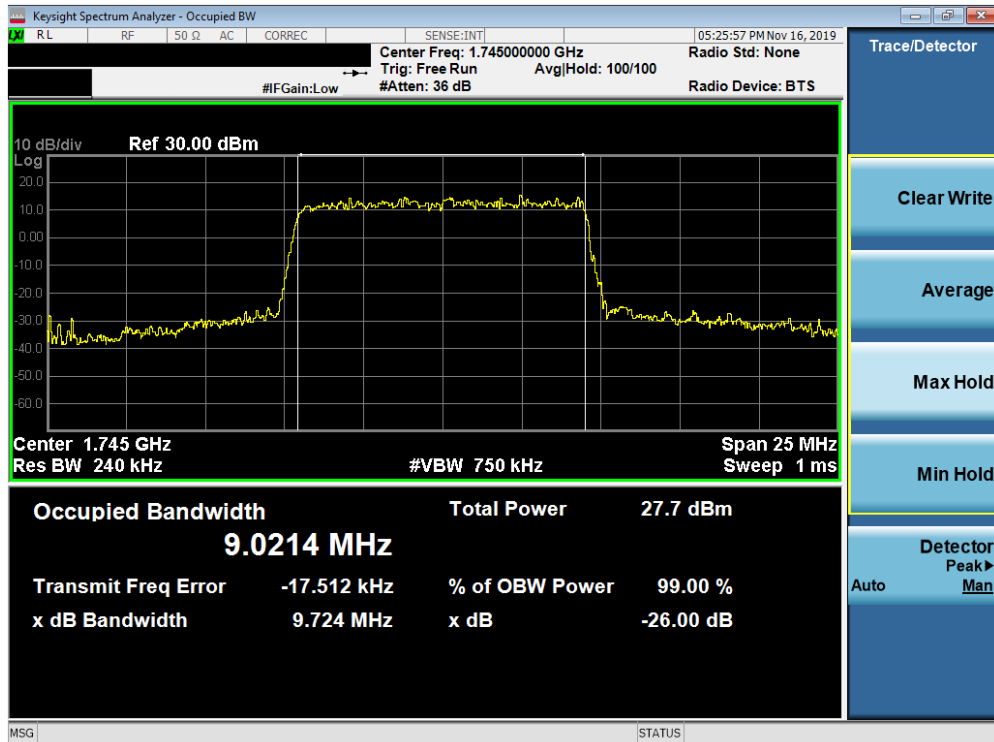
Plot 7-527. Occupied Bandwidth Plot (n66 10MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 336 of 434



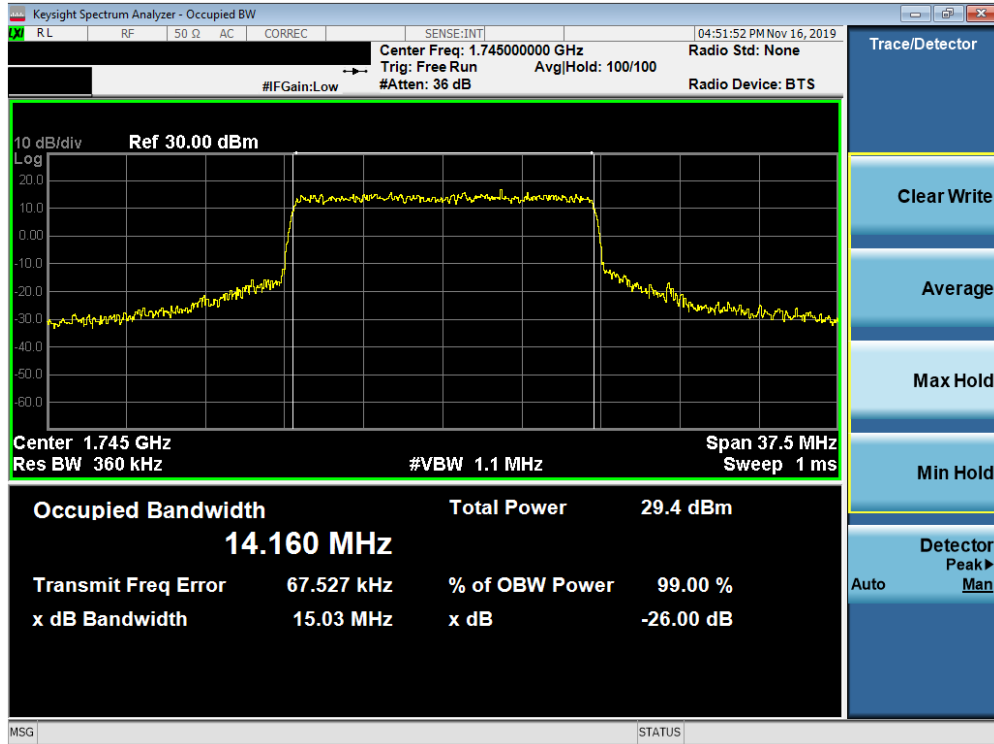


Plot 7-528. Occupied Bandwidth Plot (n66 10MHz 64QAM-CP-OFDM- Full RB Configuration)

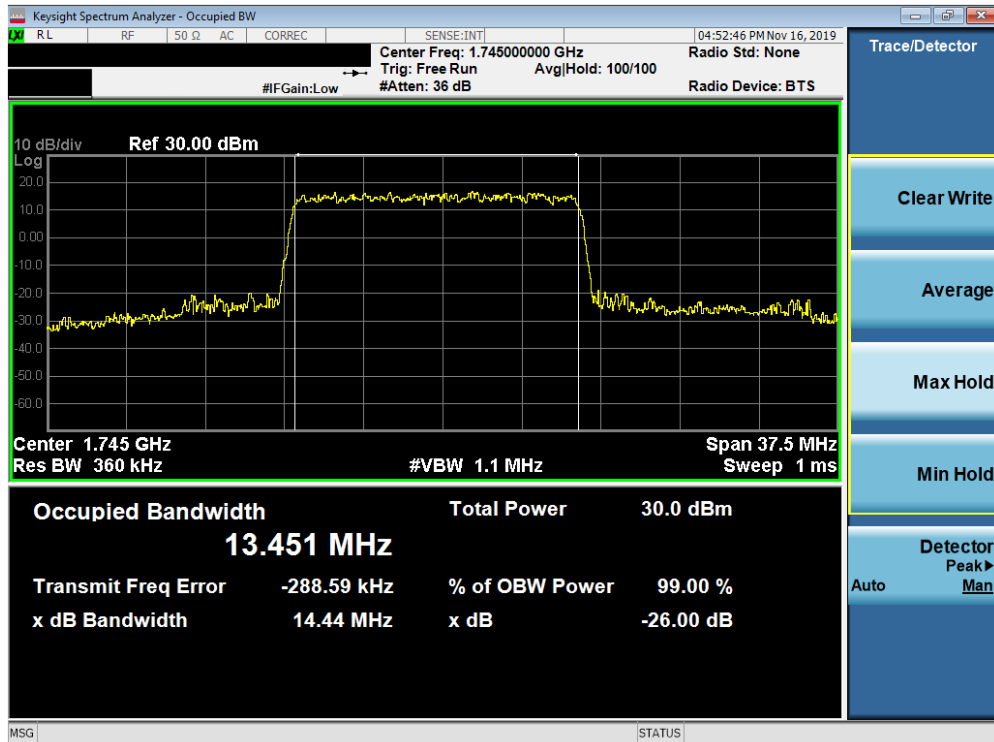


Plot 7-529. Occupied Bandwidth Plot (n66 10MHz 256QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 - 01/09/20	EUT Type: Portable Handset		Page 337 of 434

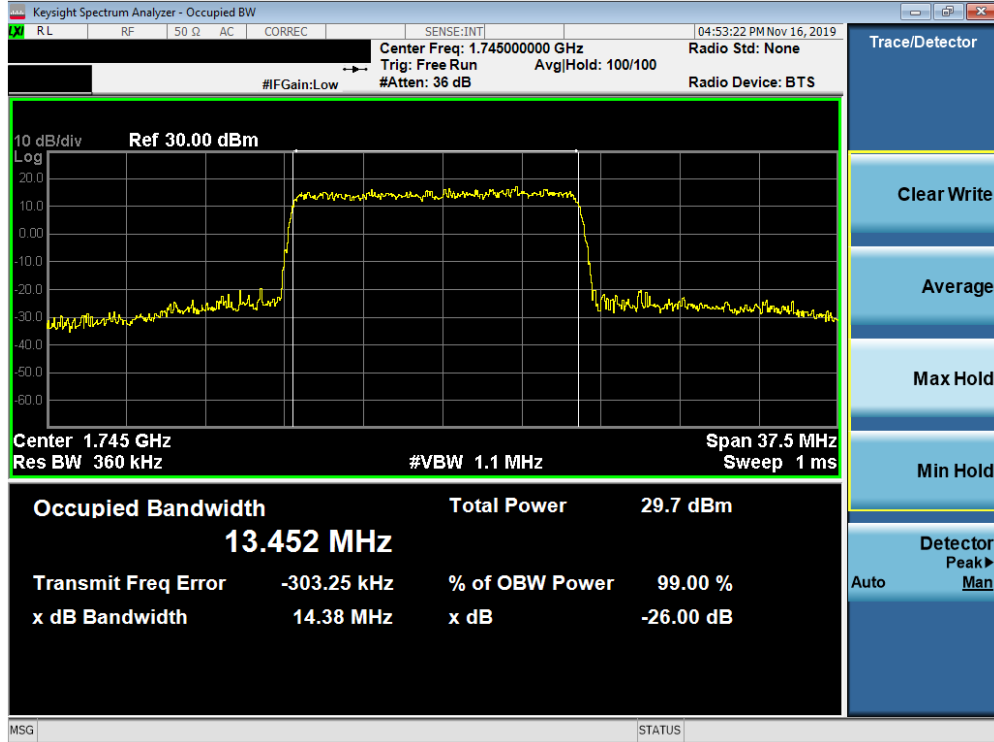


Plot 7-530. Occupied Bandwidth Plot (n66 15MHz QPSK-CP-OFDM - Full RB Configuration)

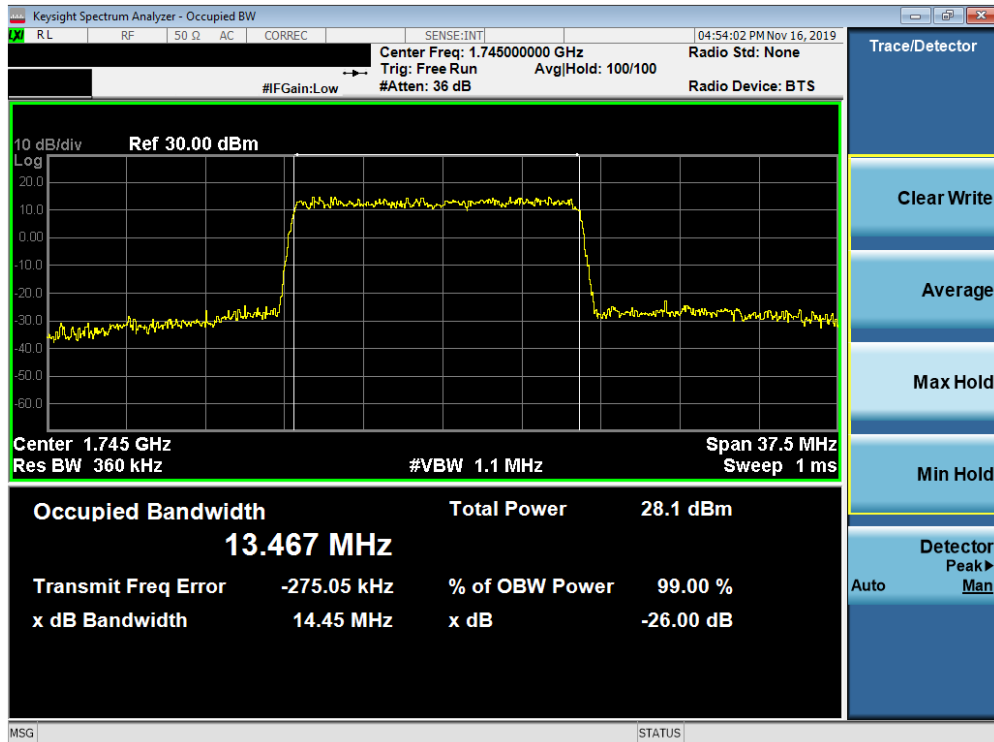


Plot 7-531. Occupied Bandwidth Plot (n66 15MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 - 01/09/20	EUT Type: Portable Handset		Page 338 of 434

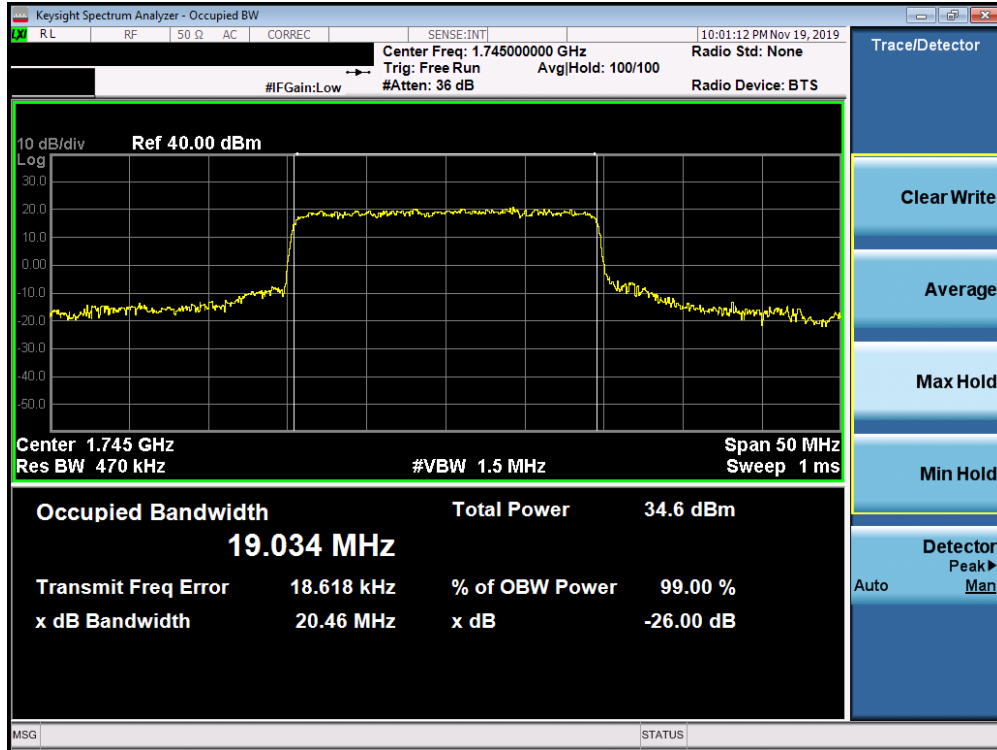


Plot 7-532. Occupied Bandwidth Plot (n66 15MHz 64QAM-CP-OFDM- Full RB Configuration)

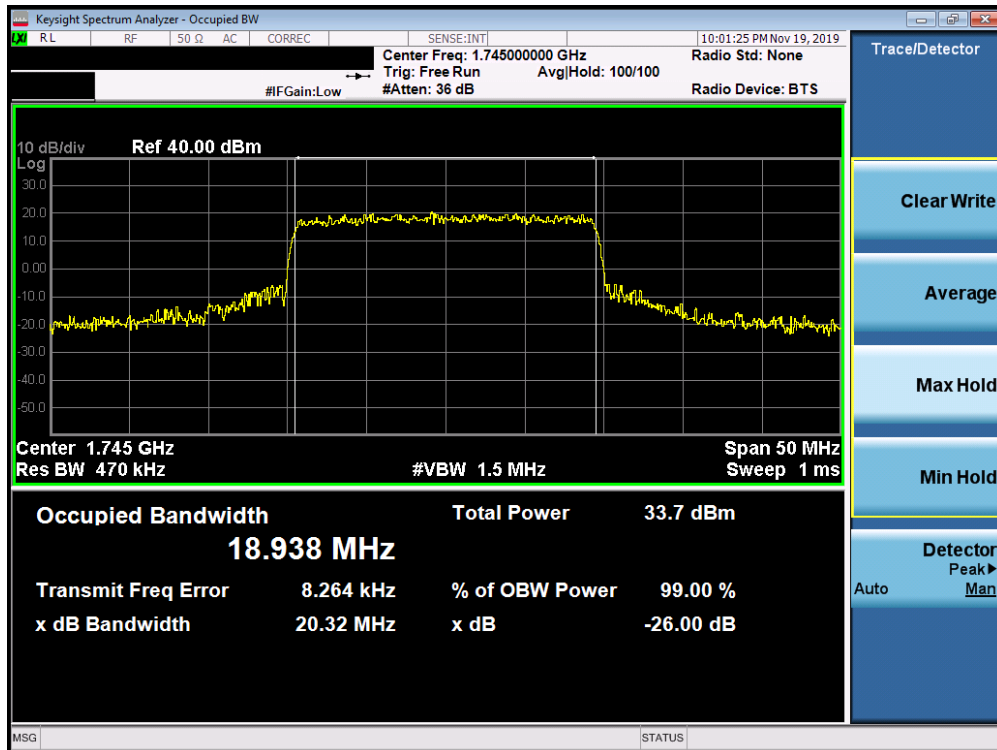


Plot 7-533. Occupied Bandwidth Plot (n66 15MHz 256QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 - 01/09/20	EUT Type: Portable Handset		Page 339 of 434

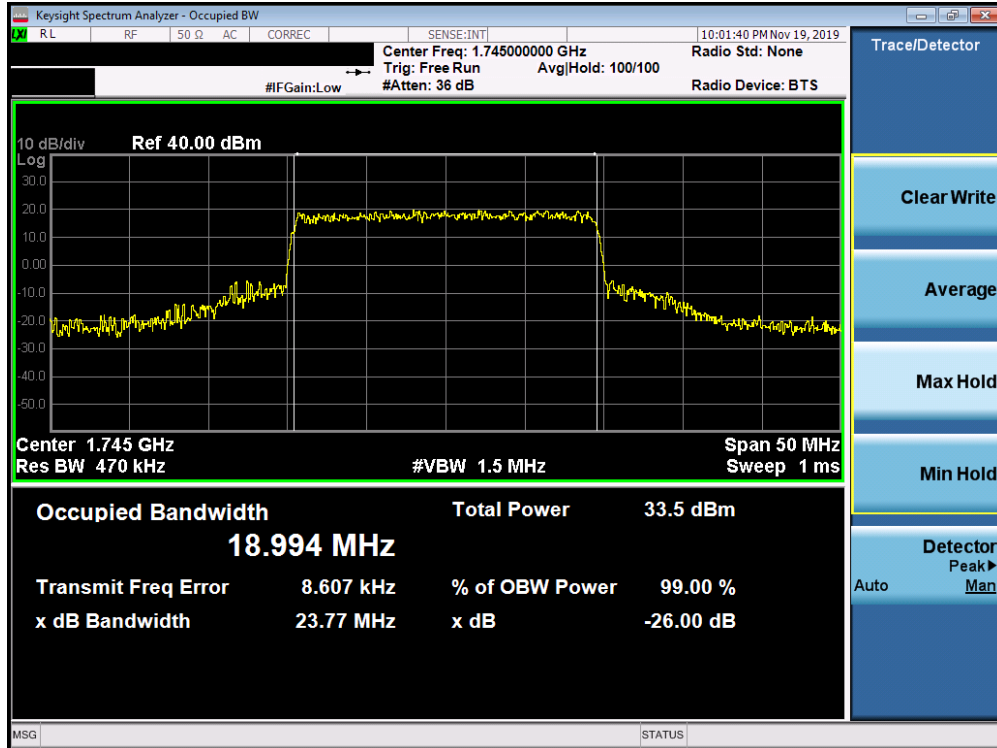


Plot 7-534. Occupied Bandwidth Plot (n66 20MHz QPSK-CP-OFDM - Full RB Configuration)

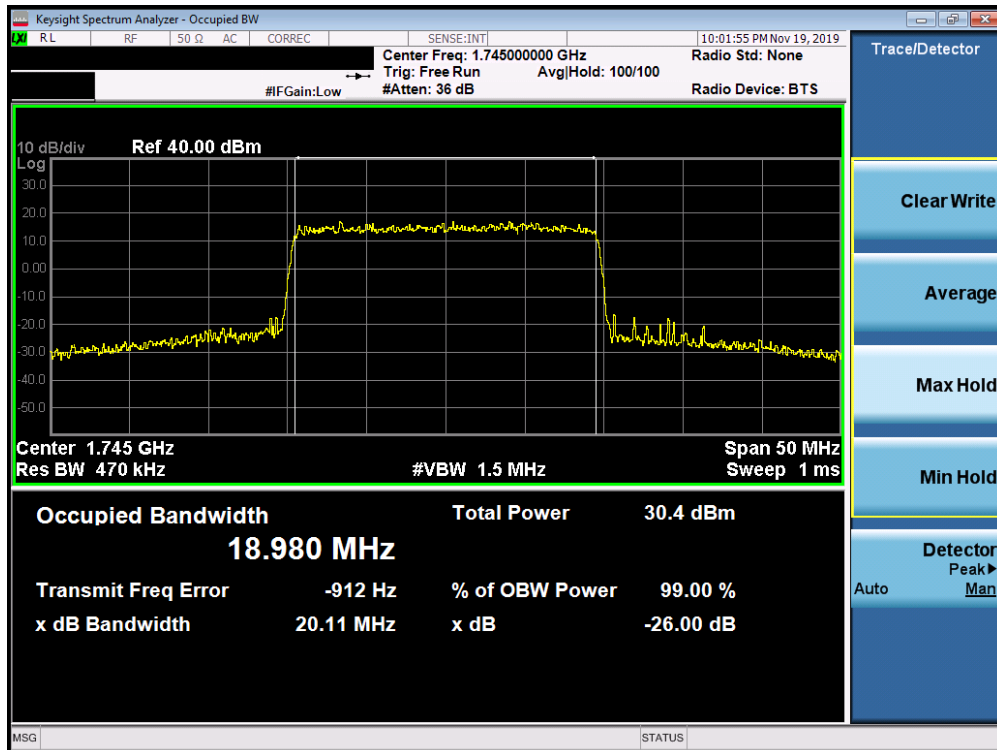


Plot 7-535. Occupied Bandwidth Plot (n66 20MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 340 of 434

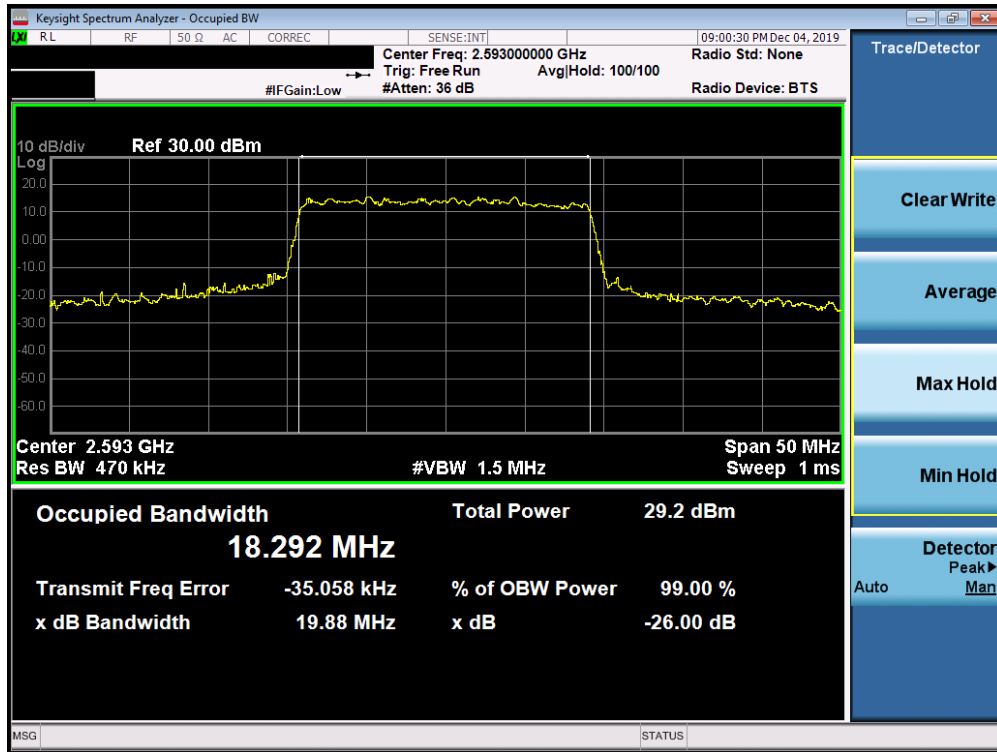


Plot 7-536. Occupied Bandwidth Plot (n66 20MHz 64QAM-CP-OFDM- Full RB Configuration)

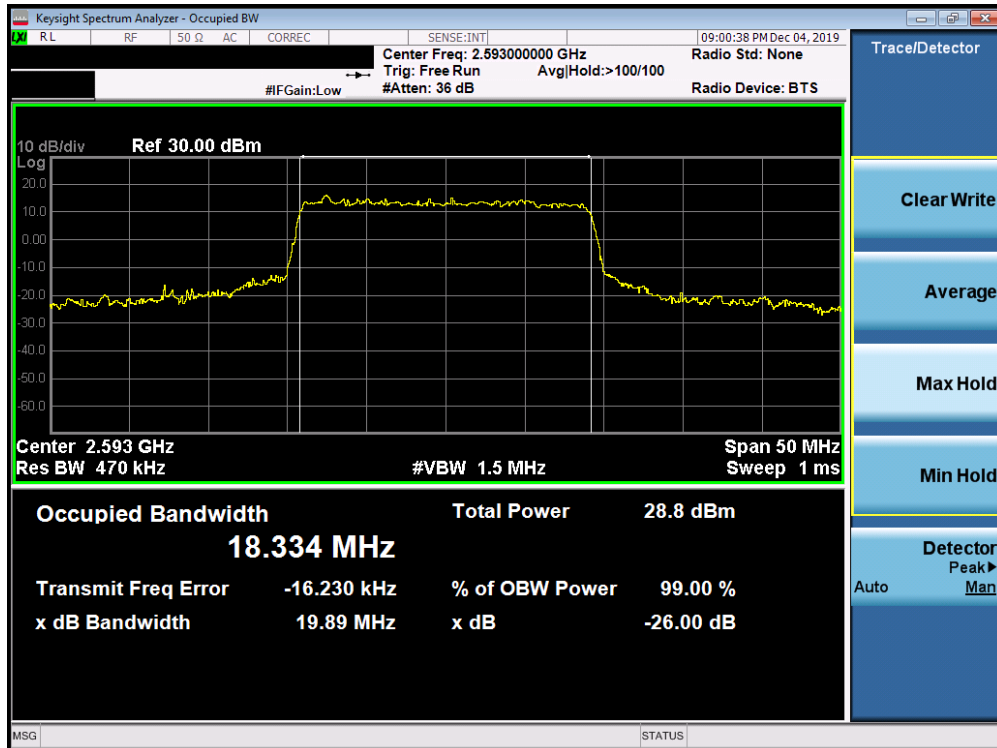


Plot 7-537. Occupied Bandwidth Plot (n66 20MHz 256QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 341 of 434

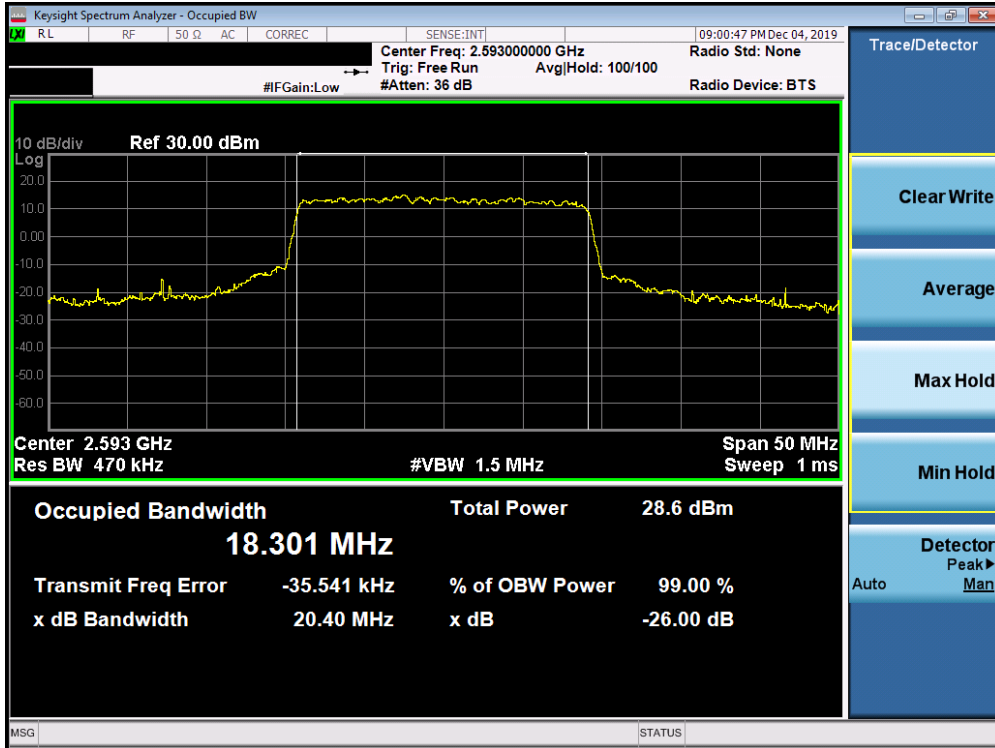


Plot 7-538. Occupied Bandwidth Plot (n41 20MHz QPSK-CP-OFDM - Full RB Configuration)

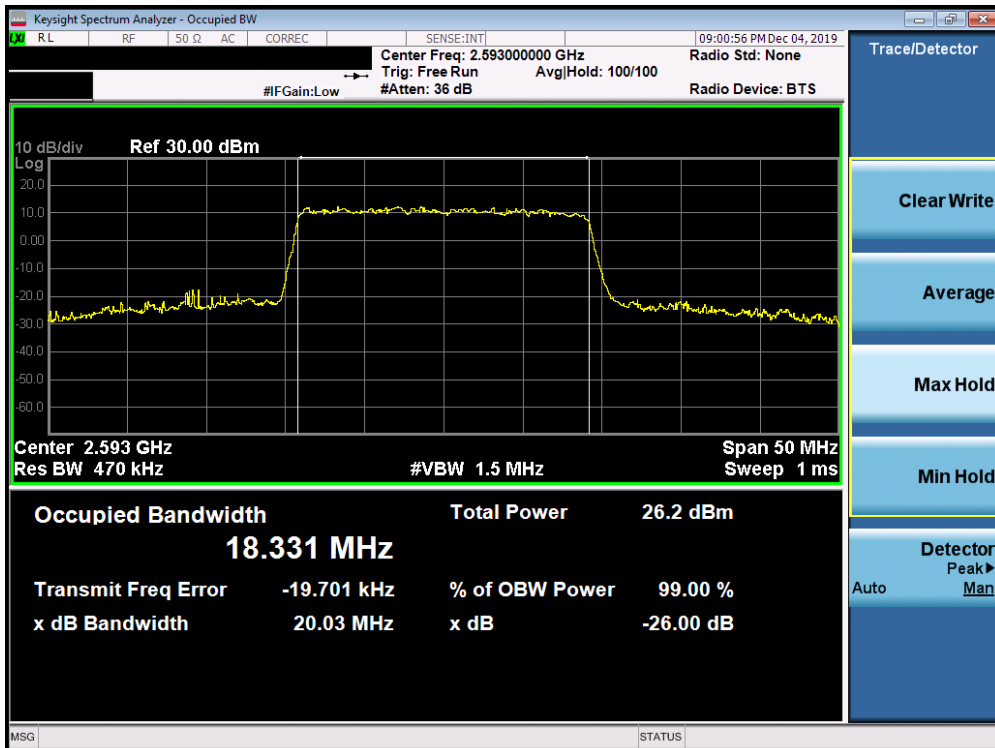


Plot 7-539. Occupied Bandwidth Plot (n41 20MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 - 01/09/20	EUT Type: Portable Handset		Page 342 of 434

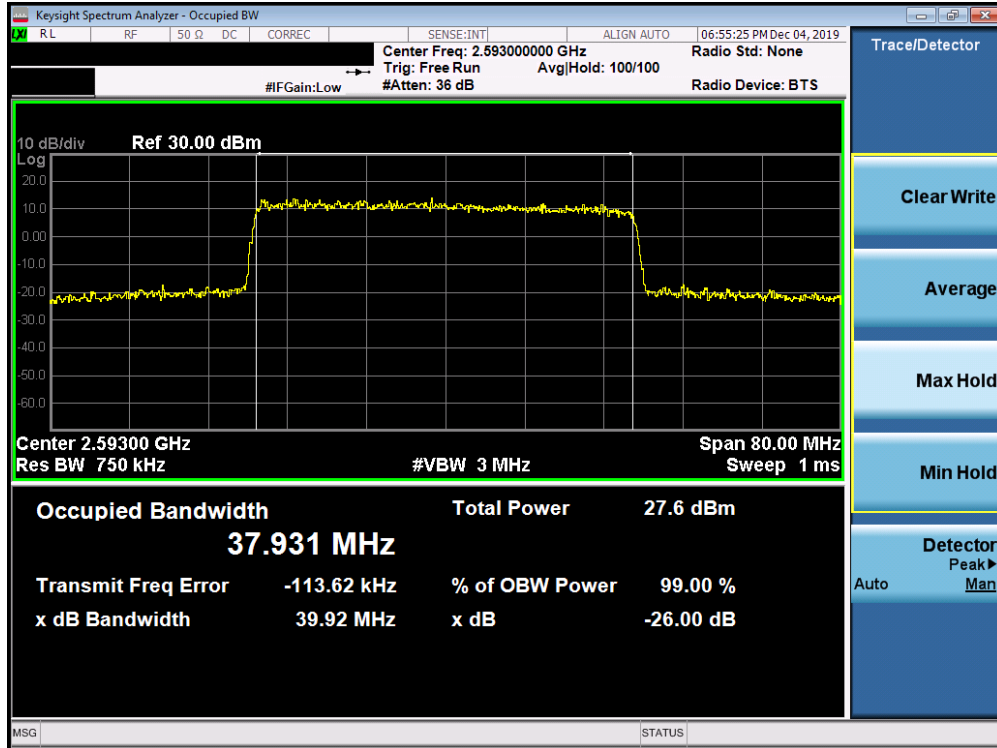


Plot 7-540. Occupied Bandwidth Plot (n41 20MHz 64QAM-CP-OFDM- Full RB Configuration)

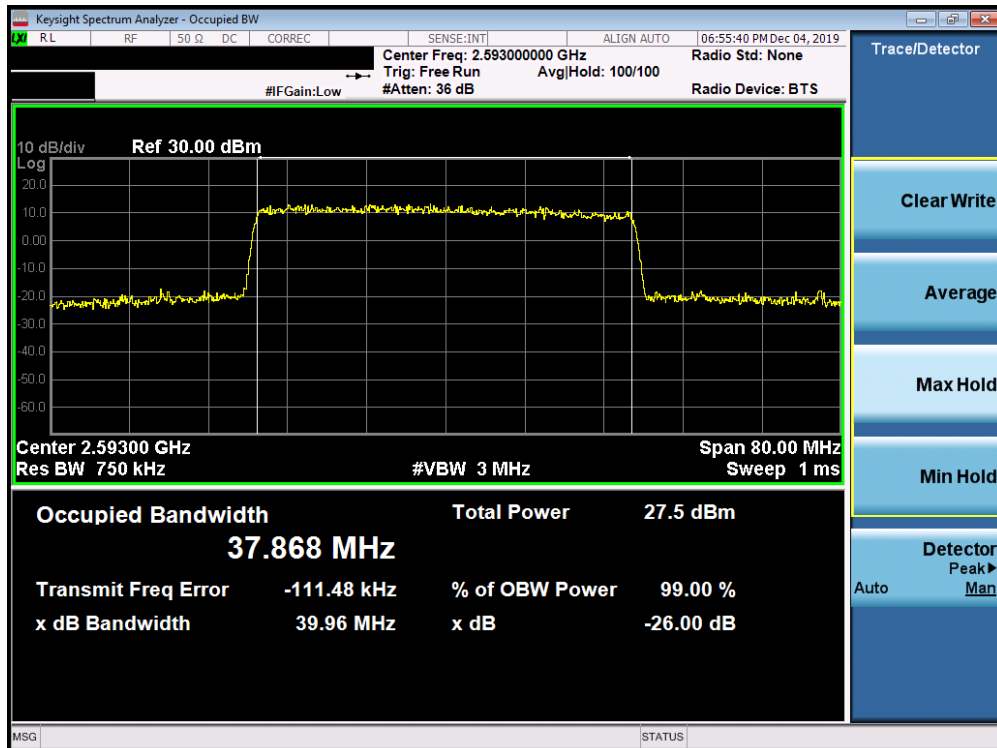


Plot 7-541. Occupied Bandwidth Plot (n41 20MHz 256QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 - 01/09/20	EUT Type: Portable Handset		Page 343 of 434



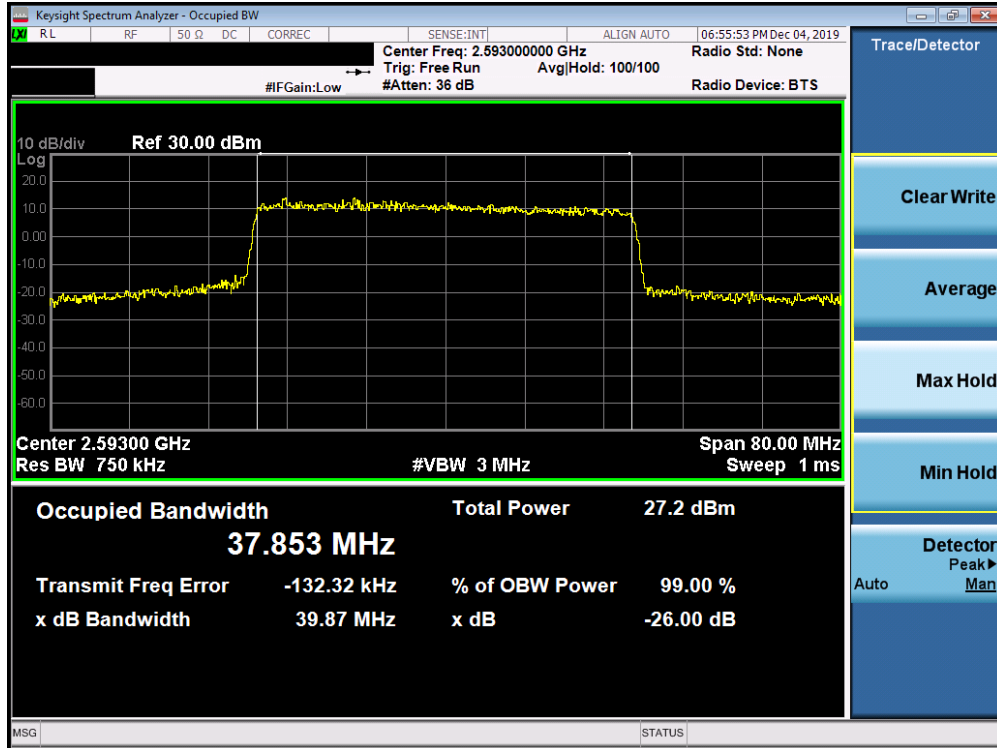
Plot 7-542. Occupied Bandwidth Plot (n41 40MHz QPSK-CP-OFDM - Full RB Configuration)



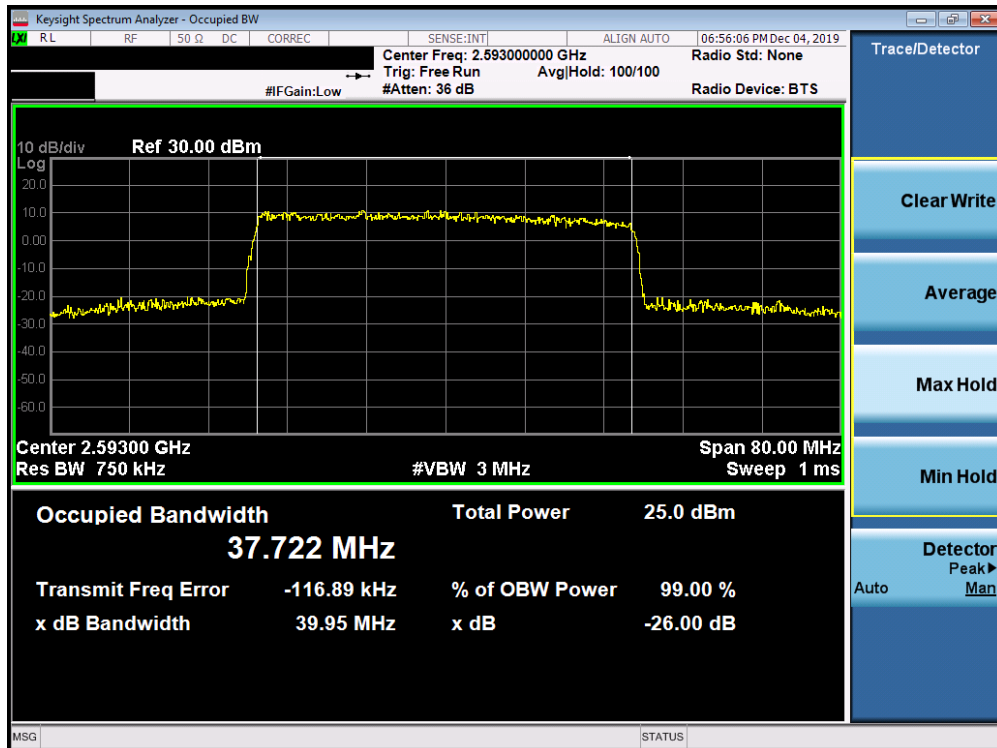
Plot 7-543. Occupied Bandwidth Plot (n41 40MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 344 of 434



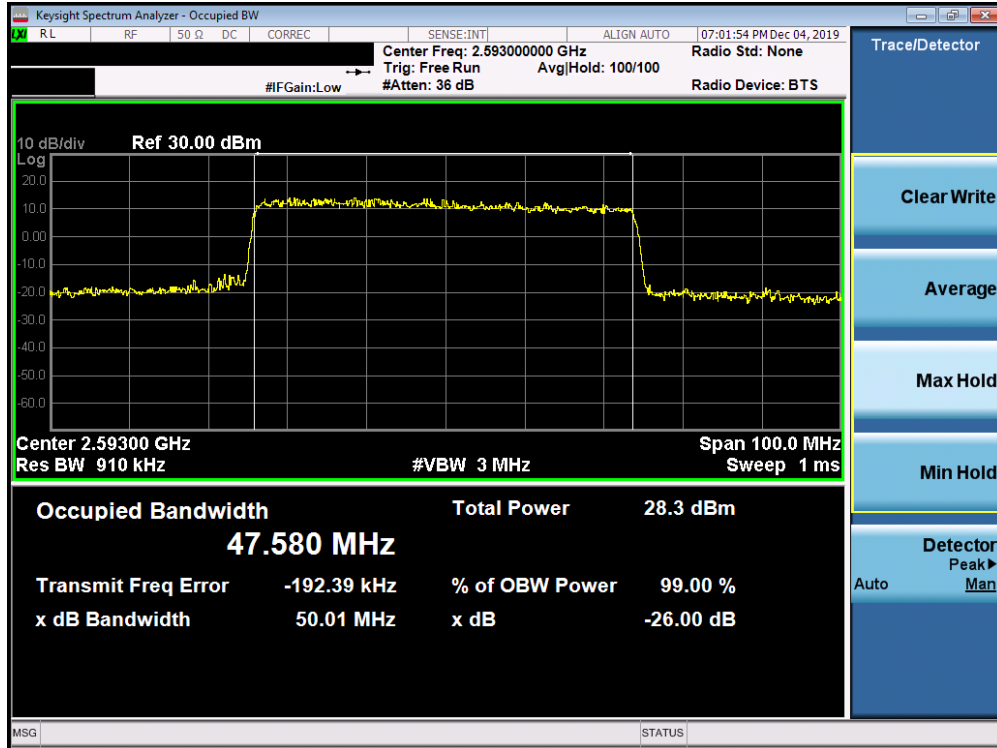


Plot 7-544. Occupied Bandwidth Plot (n41 40MHz 64QAM-CP-OFDM- Full RB Configuration)

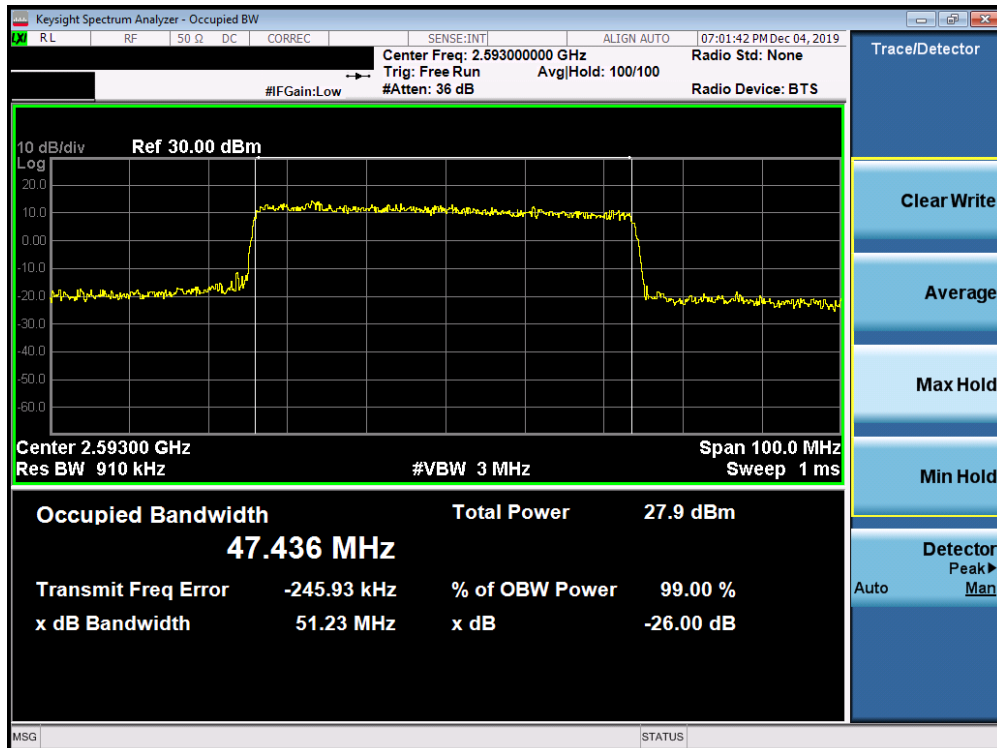


Plot 7-545. Occupied Bandwidth Plot (n41 40MHz 256QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 345 of 434

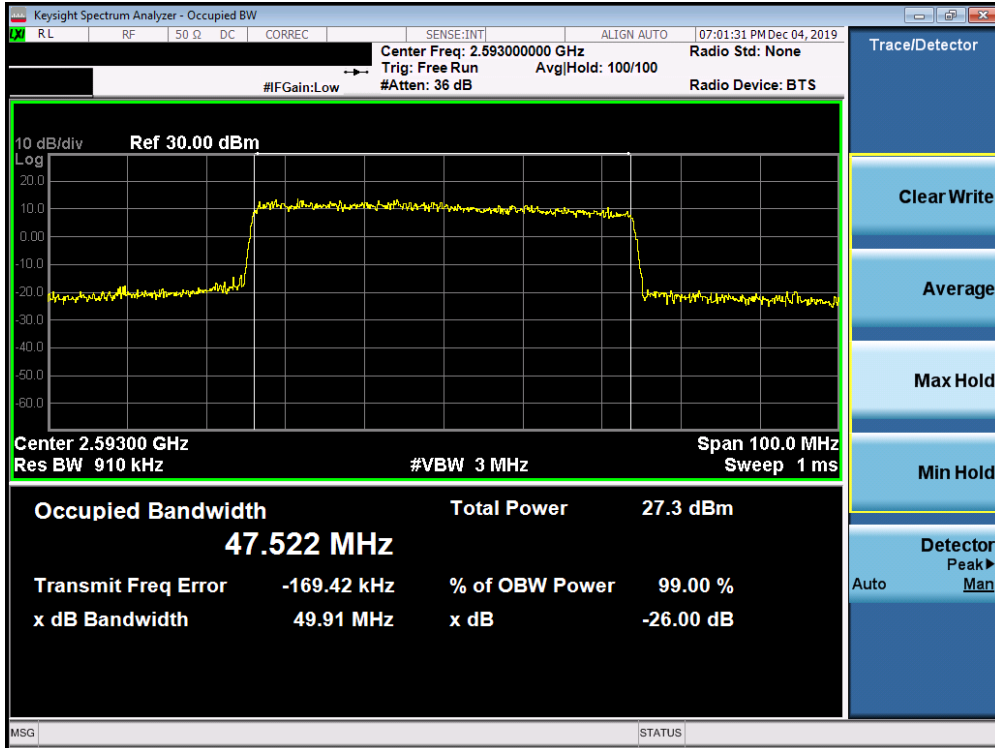


Plot 7-546. Occupied Bandwidth Plot (n41 50MHz QPSK-CP-OFDM - Full RB Configuration)

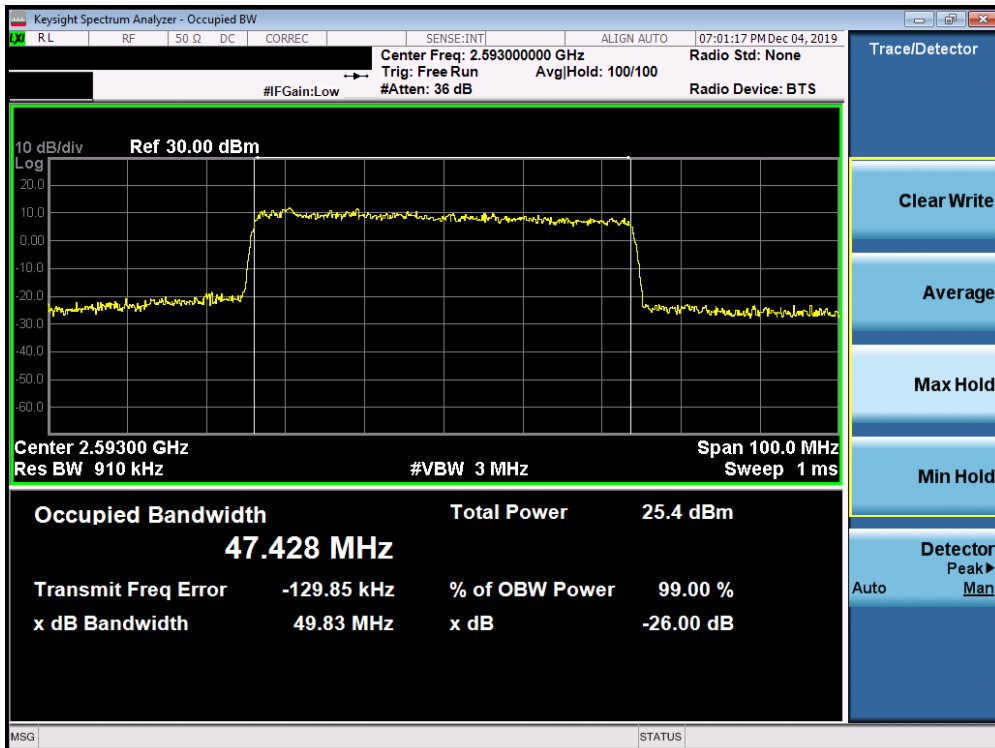


Plot 7-547. Occupied Bandwidth Plot (n41 50MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 346 of 434

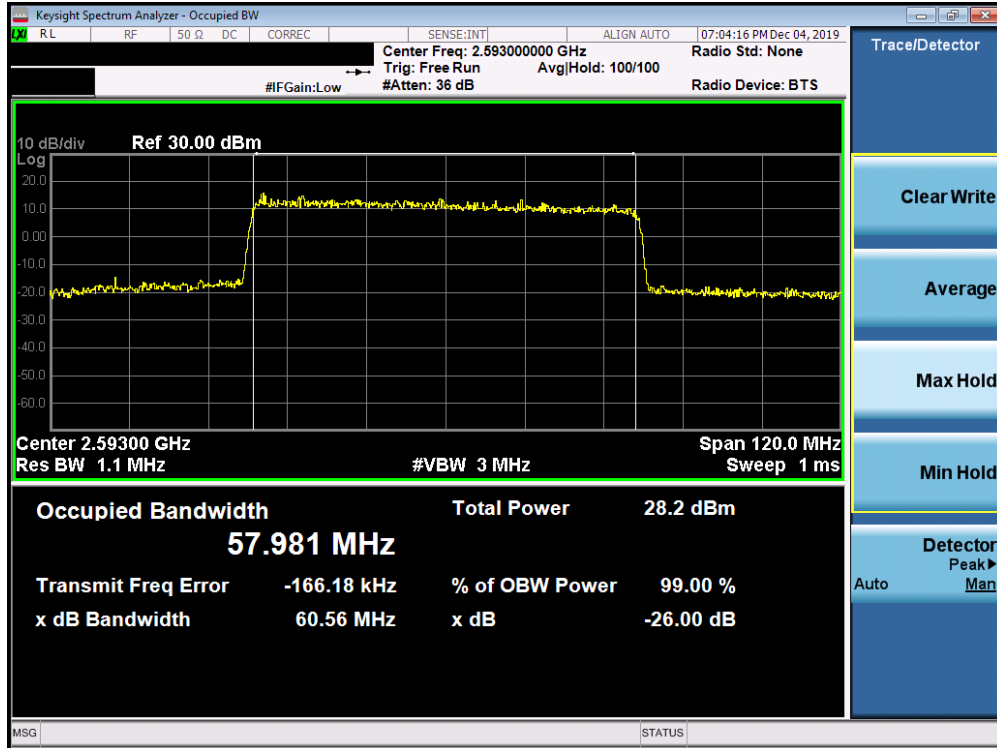


Plot 7-548. Occupied Bandwidth Plot (n41 50MHz 64QAM-CP-OFDM- Full RB Configuration)

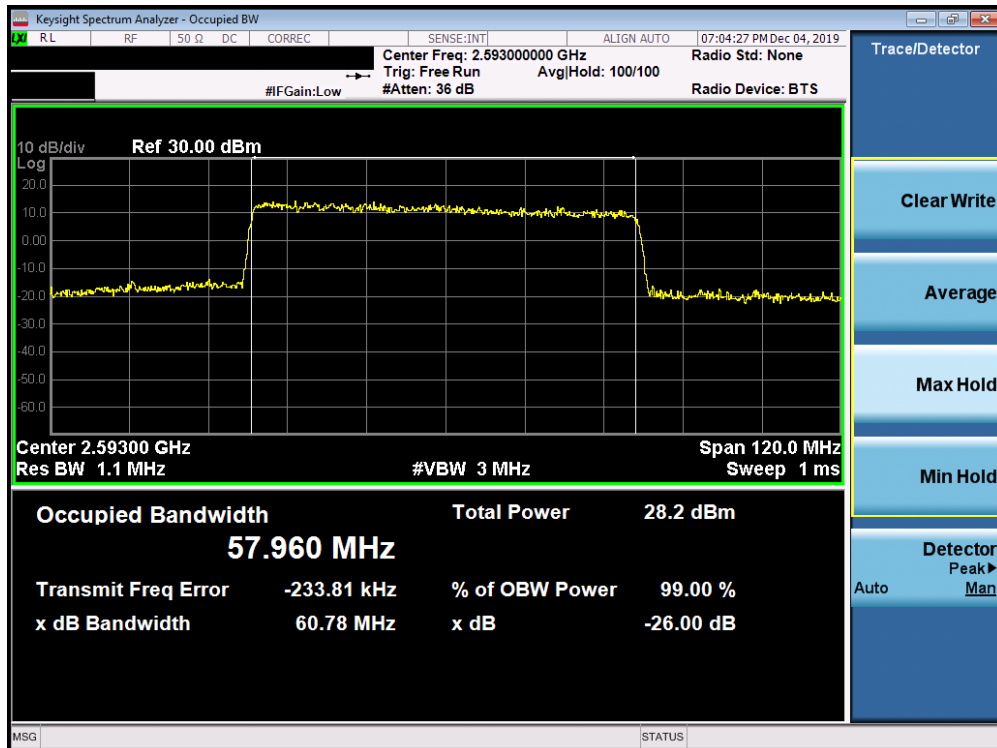


Plot 7-549. Occupied Bandwidth Plot (n41 50MHz 256QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 347 of 434

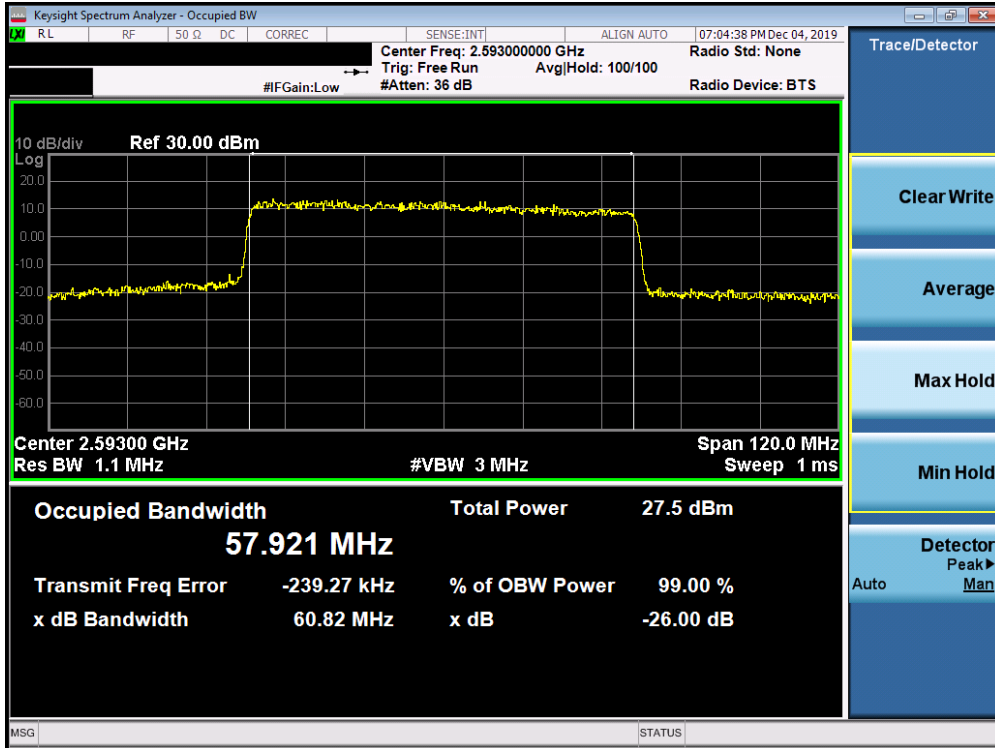


Plot 7-550. Occupied Bandwidth Plot (n41 60MHz QPSK-CP-OFDM - Full RB Configuration)

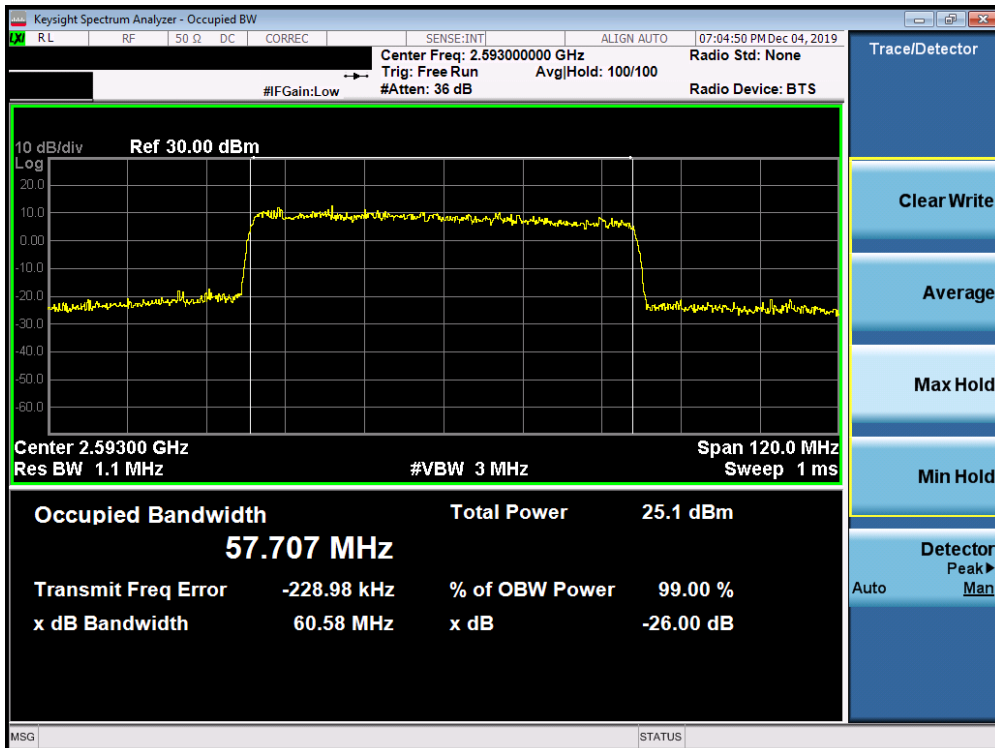


Plot 7-551. Occupied Bandwidth Plot (n41 60MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 348 of 434

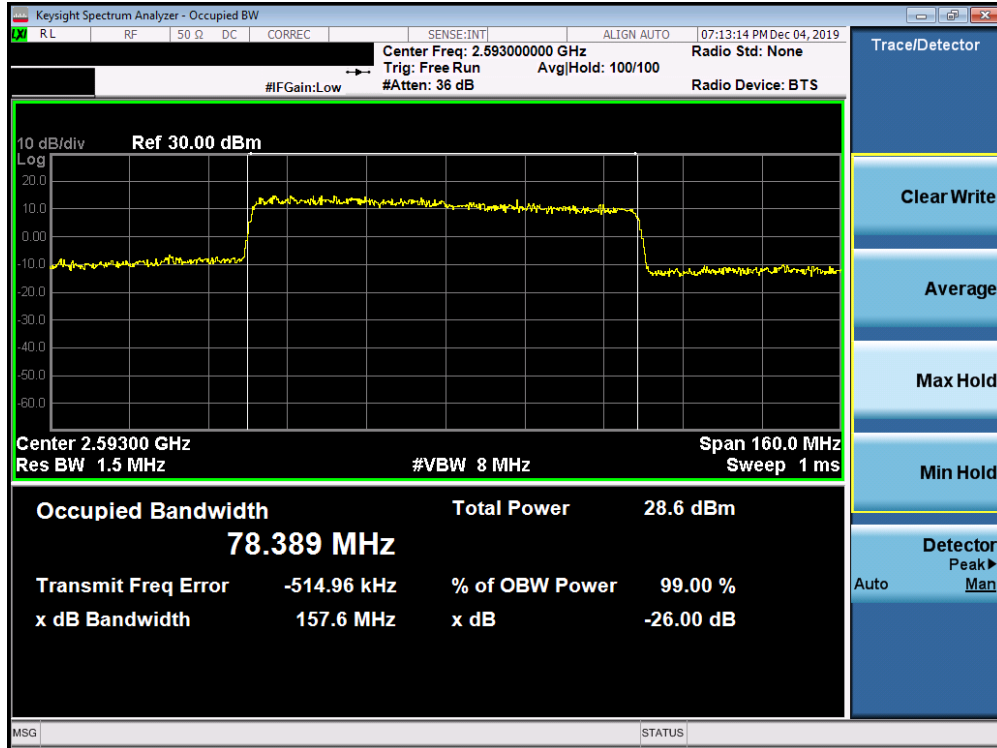


Plot 7-552. Occupied Bandwidth Plot (n41 60MHz 64QAM-CP-OFDM- Full RB Configuration)

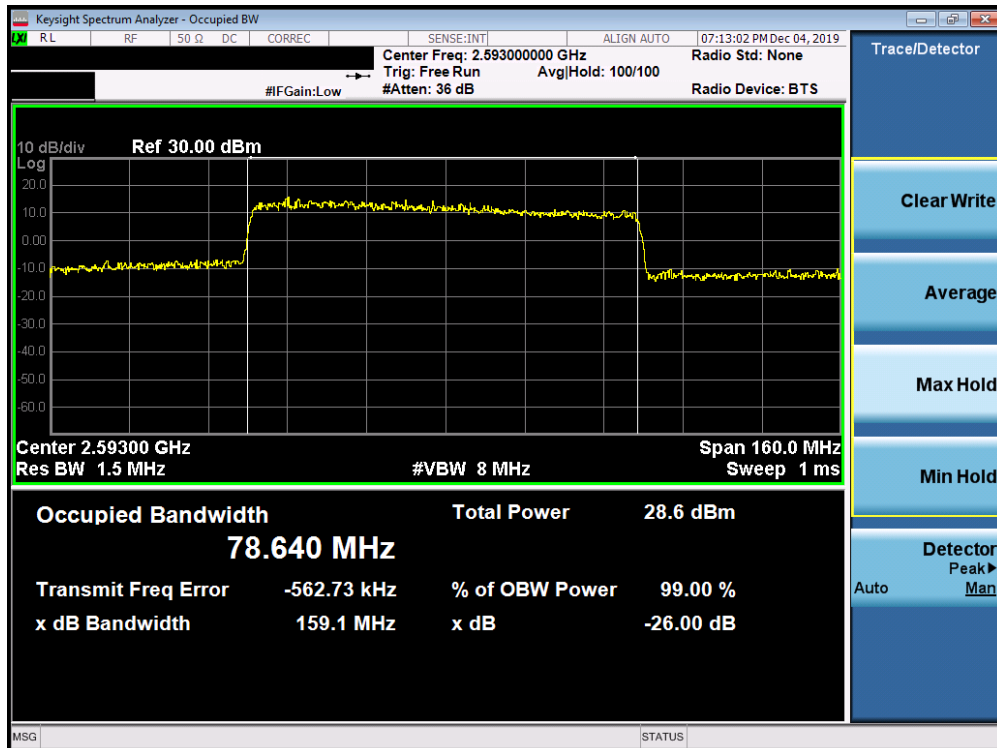


Plot 7-553. Occupied Bandwidth Plot (n41 60MHz 256QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 349 of 434

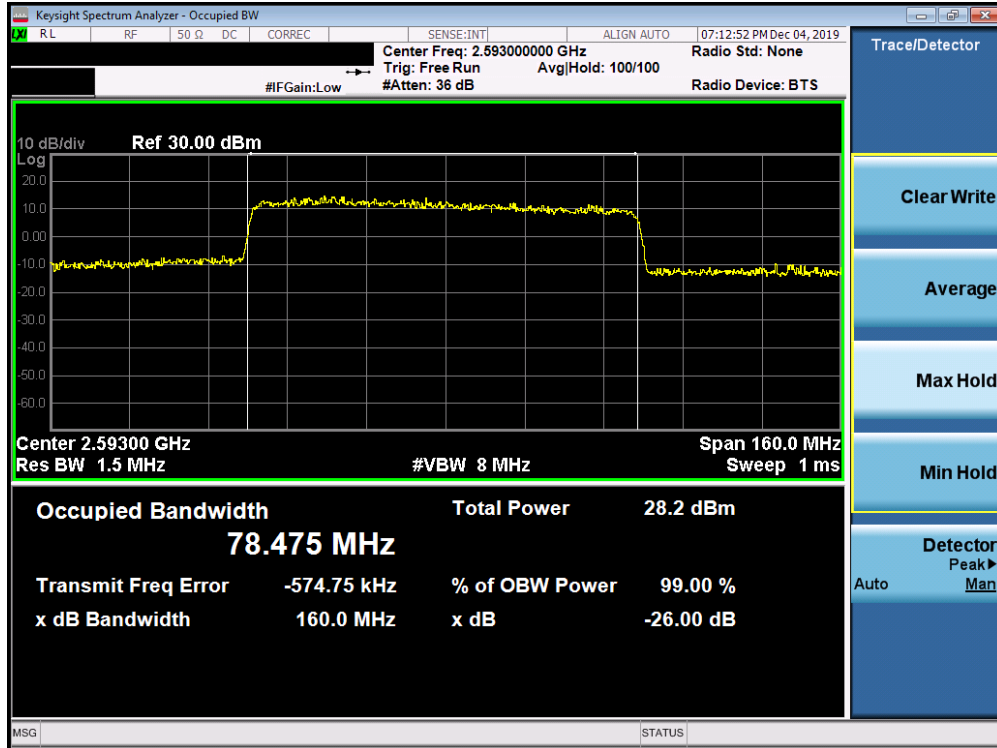


Plot 7-554. Occupied Bandwidth Plot (n41 80MHz QPSK-CP-OFDM - Full RB Configuration)

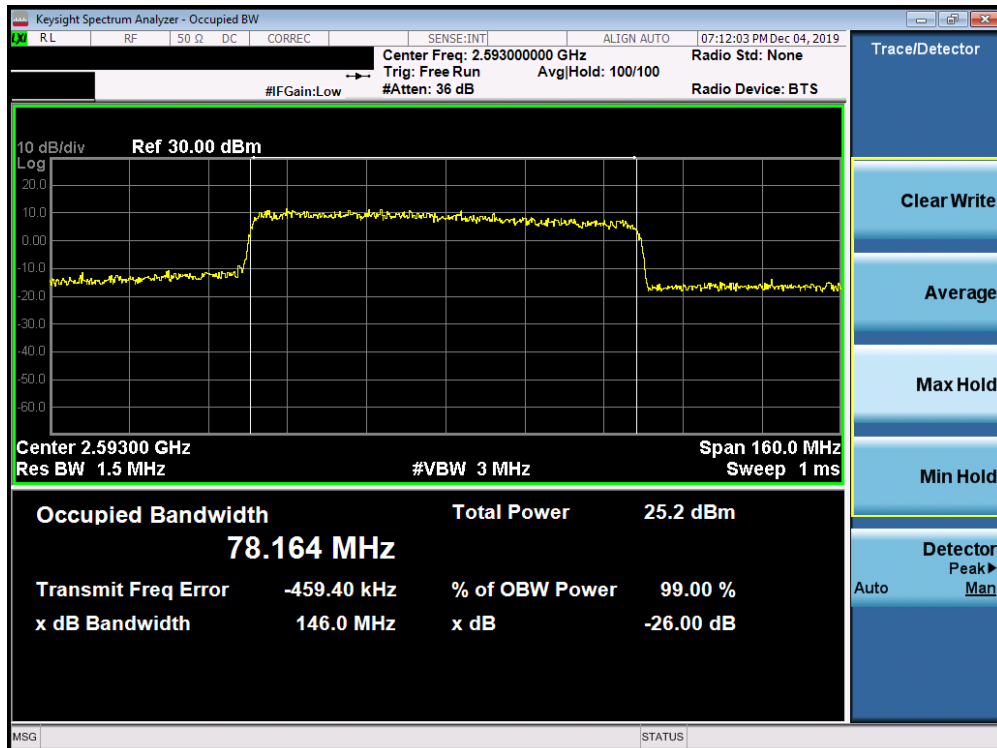


Plot 7-555. Occupied Bandwidth Plot (n41 80MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 350 of 434

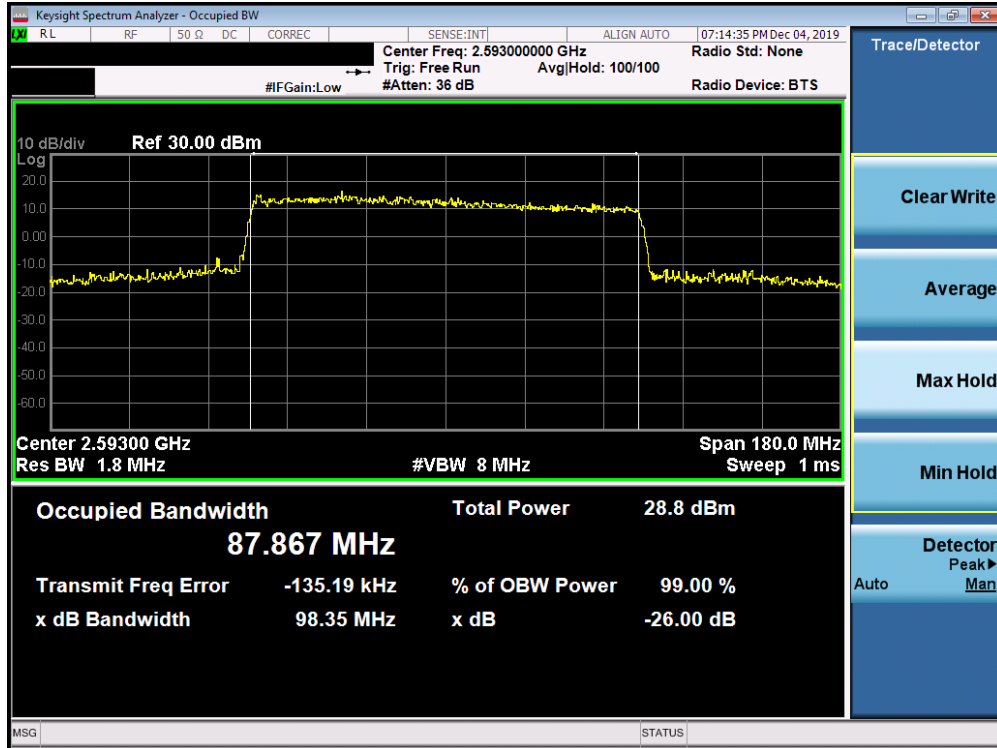


Plot 7-556. Occupied Bandwidth Plot (n41 80MHz 64QAM-CP-OFDM- Full RB Configuration)

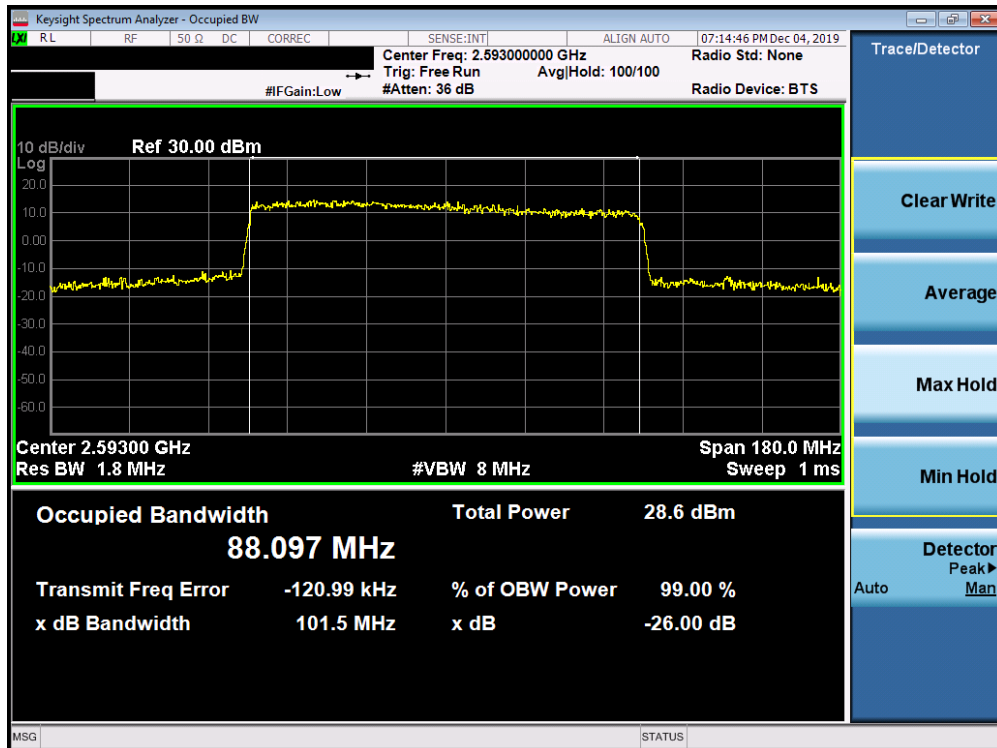


Plot 7-557. Occupied Bandwidth Plot (n41 80MHz 256QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 - 01/09/20	EUT Type: Portable Handset		Page 351 of 434



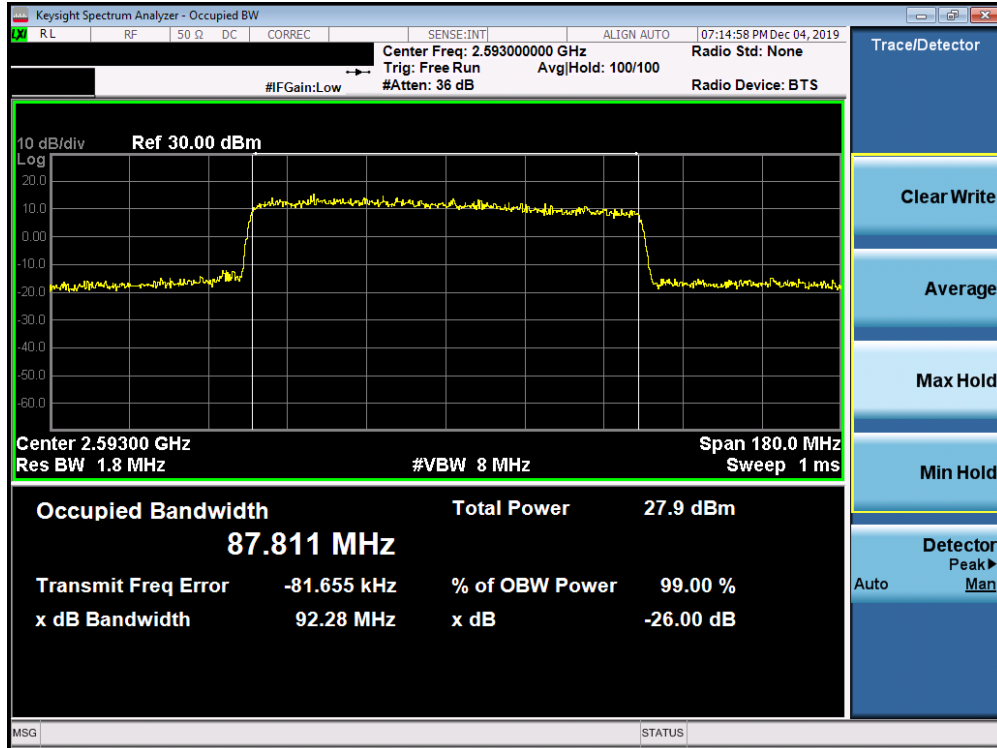
Plot 7-558. Occupied Bandwidth Plot (n41 90MHz QPSK-CP-OFDM - Full RB Configuration)



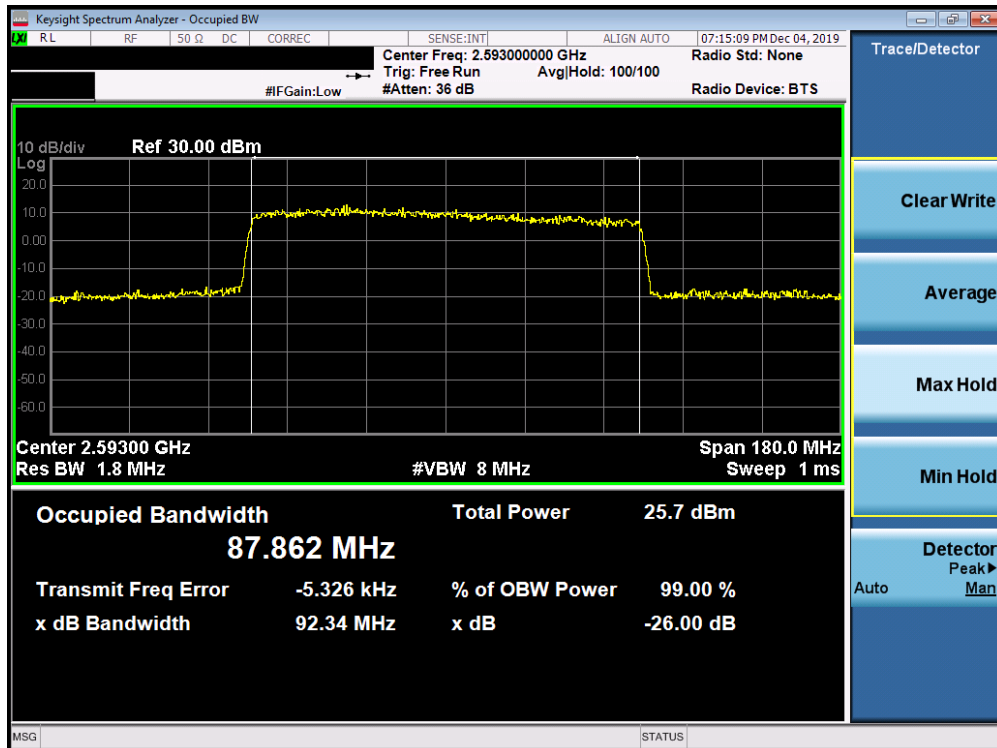
Plot 7-559. Occupied Bandwidth Plot (n41 90MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 - 01/09/20	EUT Type: Portable Handset		Page 352 of 434



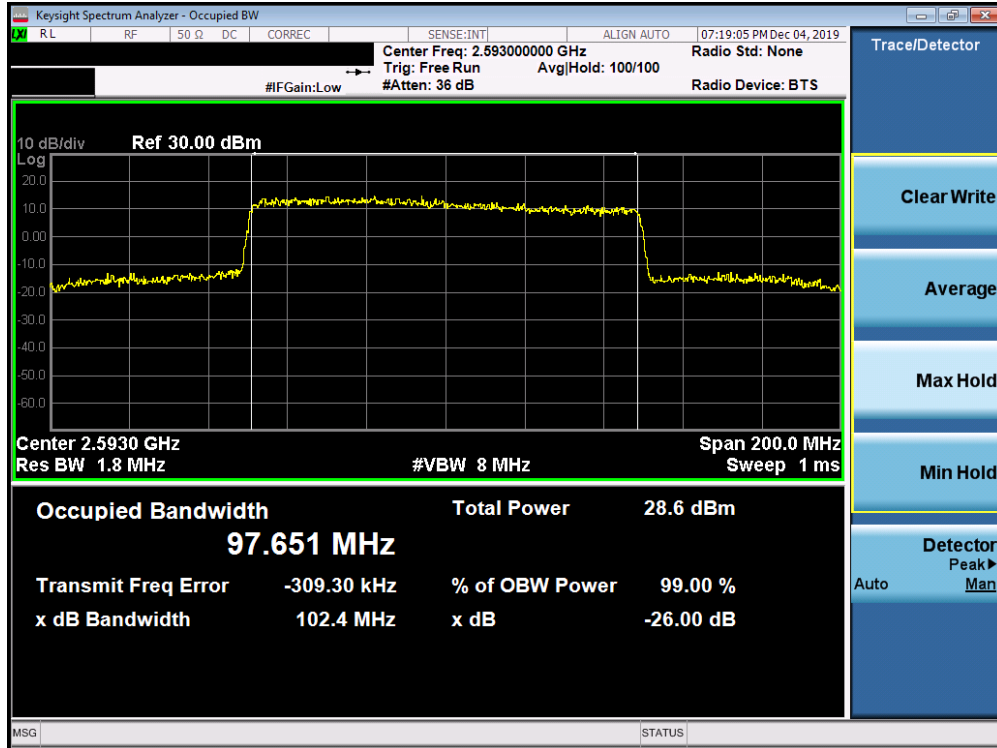


Plot 7-560. Occupied Bandwidth Plot (n41 90MHz 64QAM-CP-OFDM- Full RB Configuration)

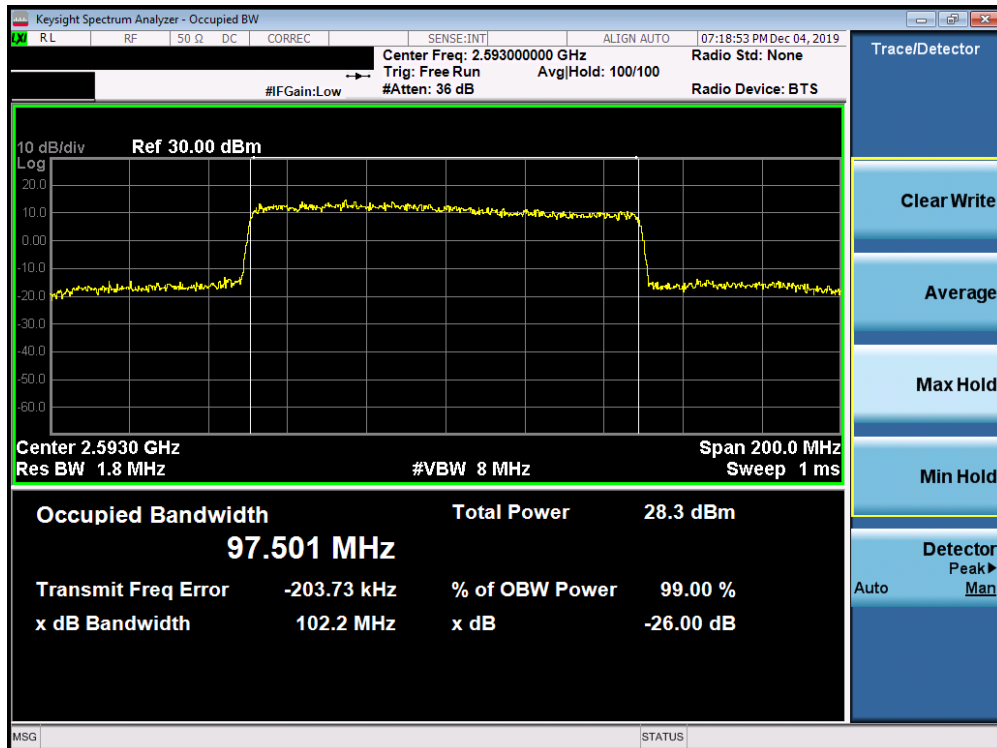


Plot 7-561. Occupied Bandwidth Plot (n41 90MHz 256QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 353 of 434

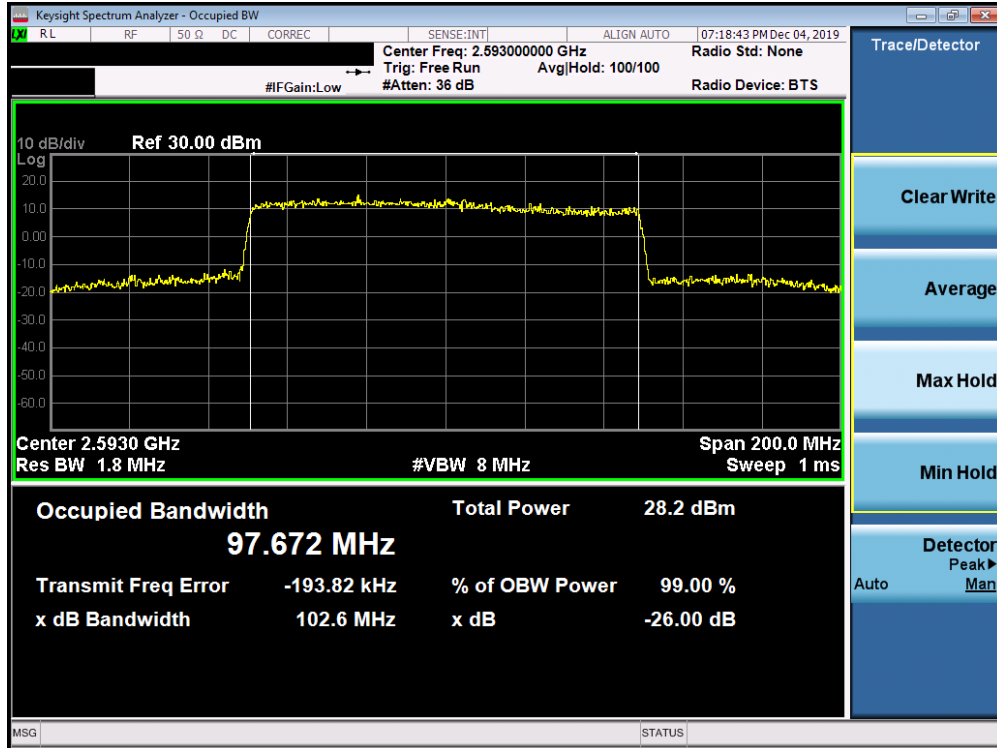


Plot 7-562. Occupied Bandwidth Plot (n41 100MHz QPSK-CP-OFDM - Full RB Configuration)

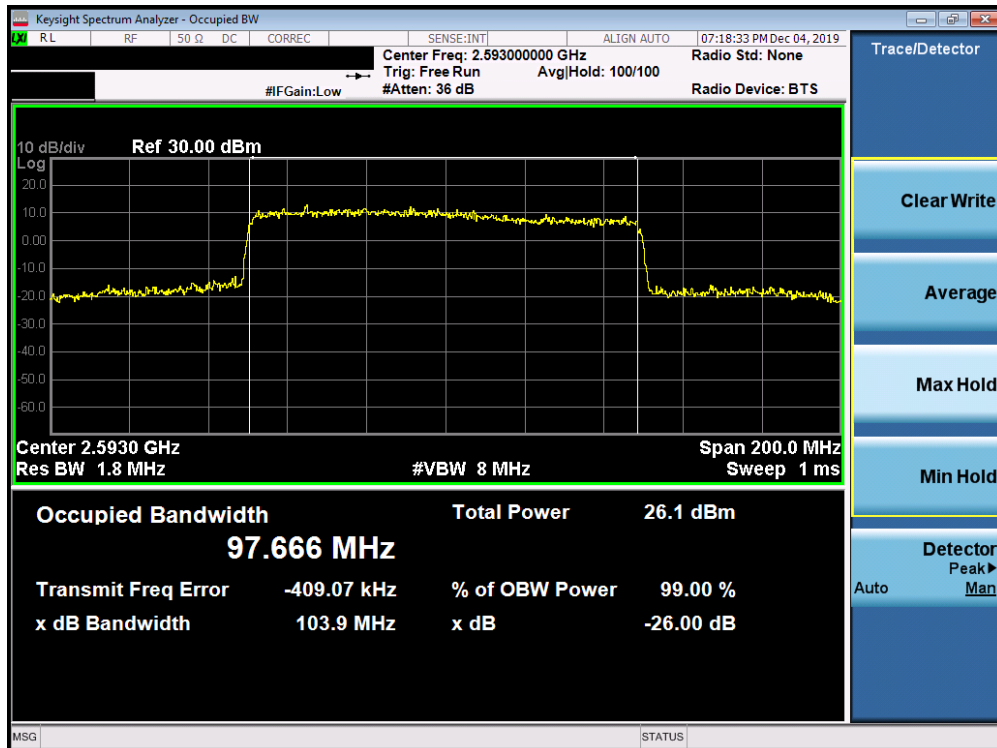


Plot 7-563. Occupied Bandwidth Plot (n41 100MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 354 of 434



Plot 7-564. Occupied Bandwidth Plot (n41 100MHz 64QAM-CP-OFDM- Full RB Configuration)



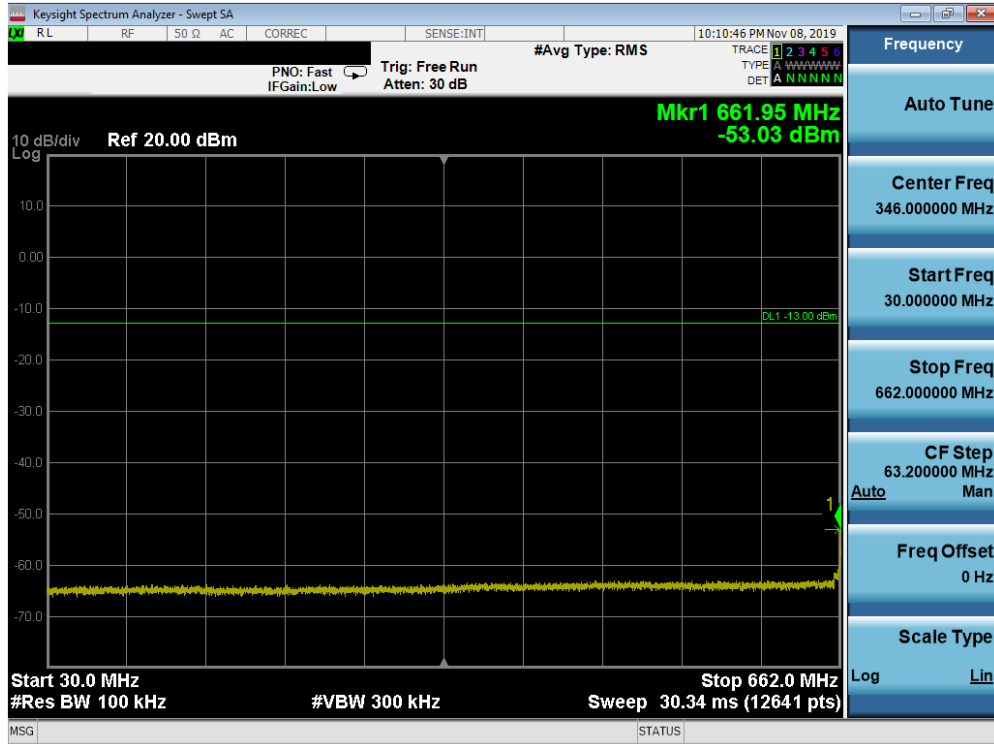
Plot 7-565. Occupied Bandwidth Plot (n41 100MHz 256QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 355 of 434

## Spurious and Harmonic Emissions at the Antenna Terminal

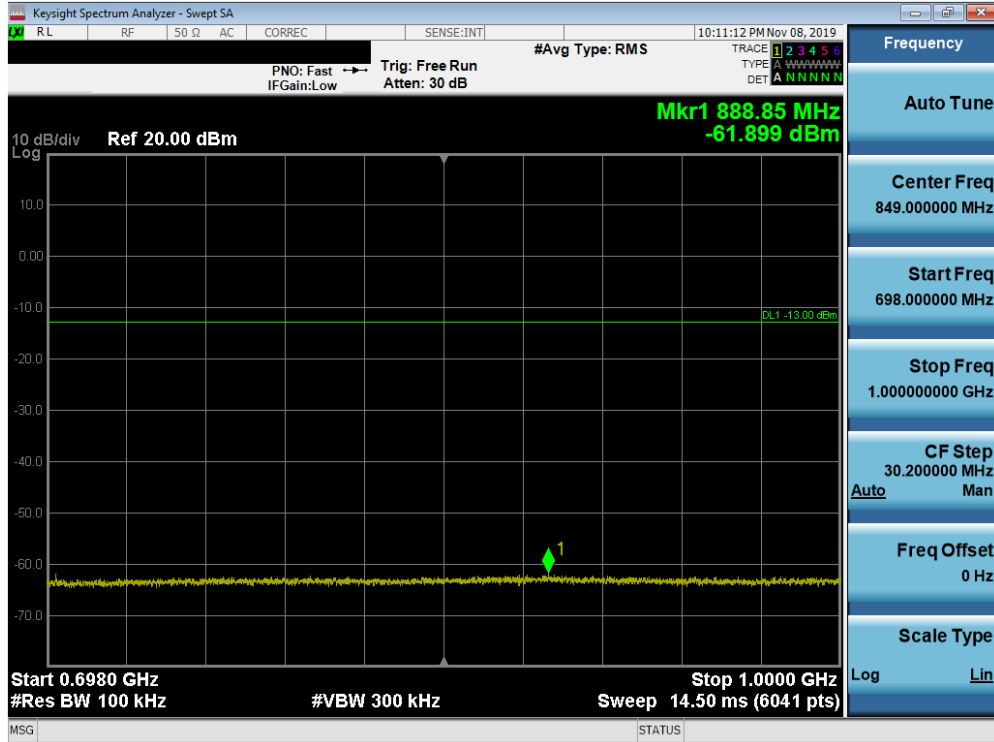
All SCS's and Waveforms (CP-OFDM vs DFT-s OFDM) were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

### NR Band n71

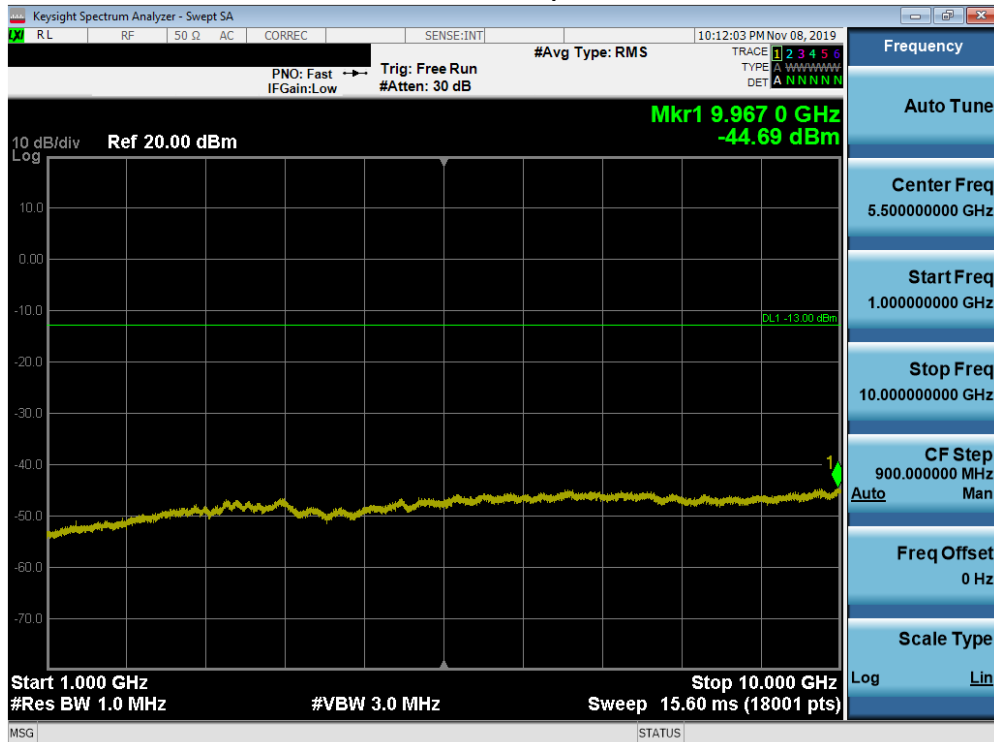


Plot 7-566. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 356 of 434

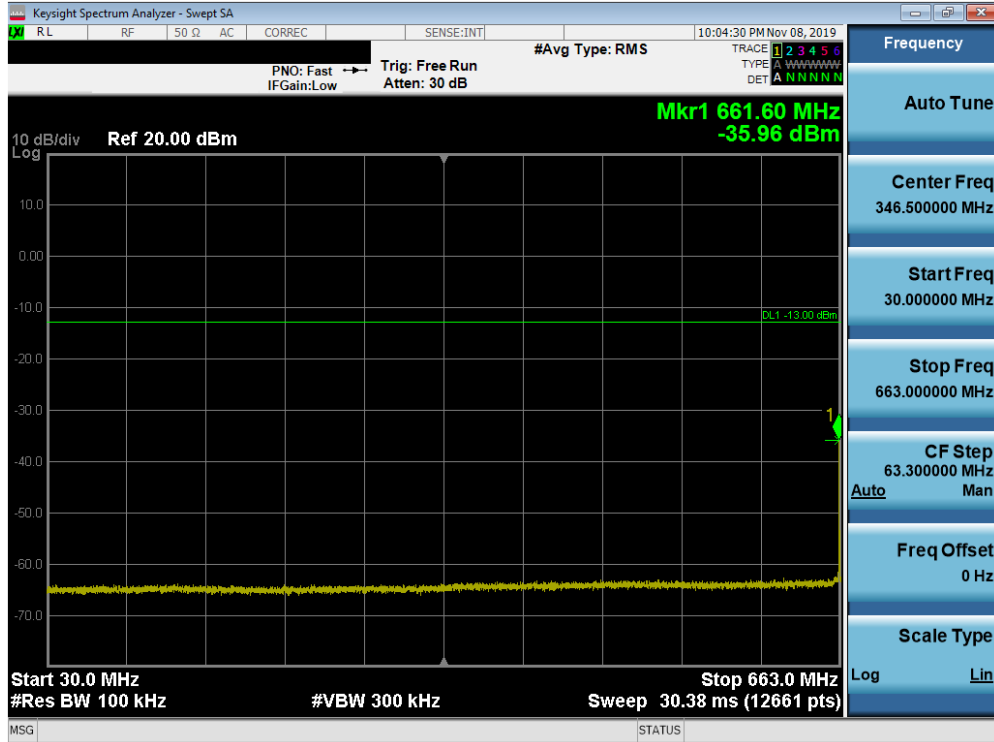


Plot 7-567. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

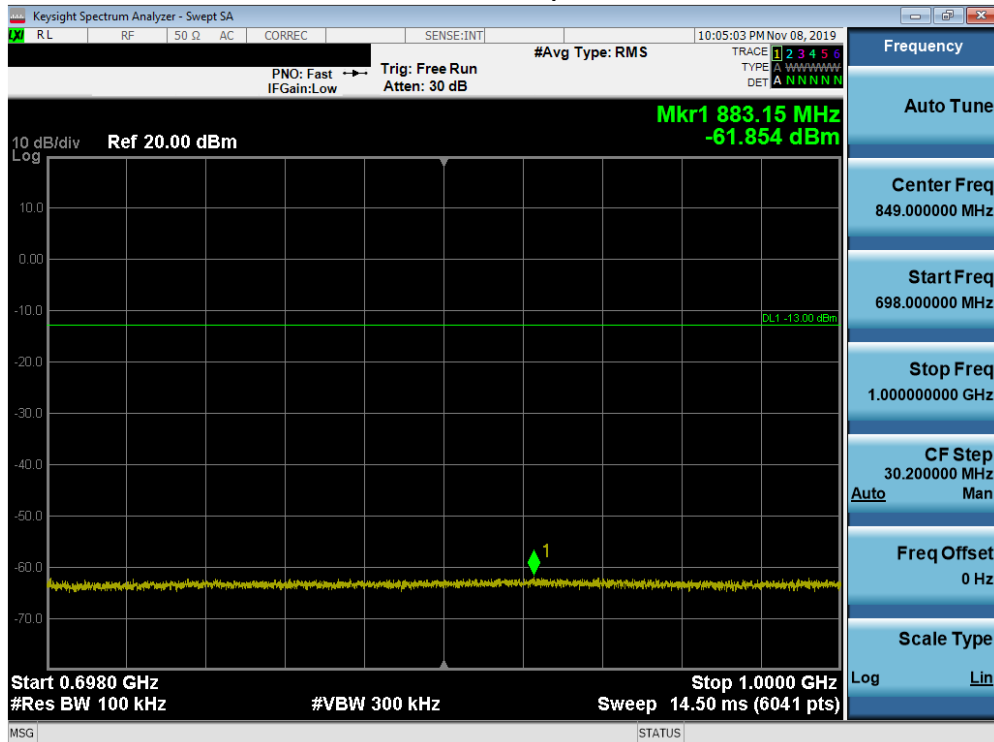


Plot 7-568. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 - 01/09/20	EUT Type: Portable Handset		Page 357 of 434

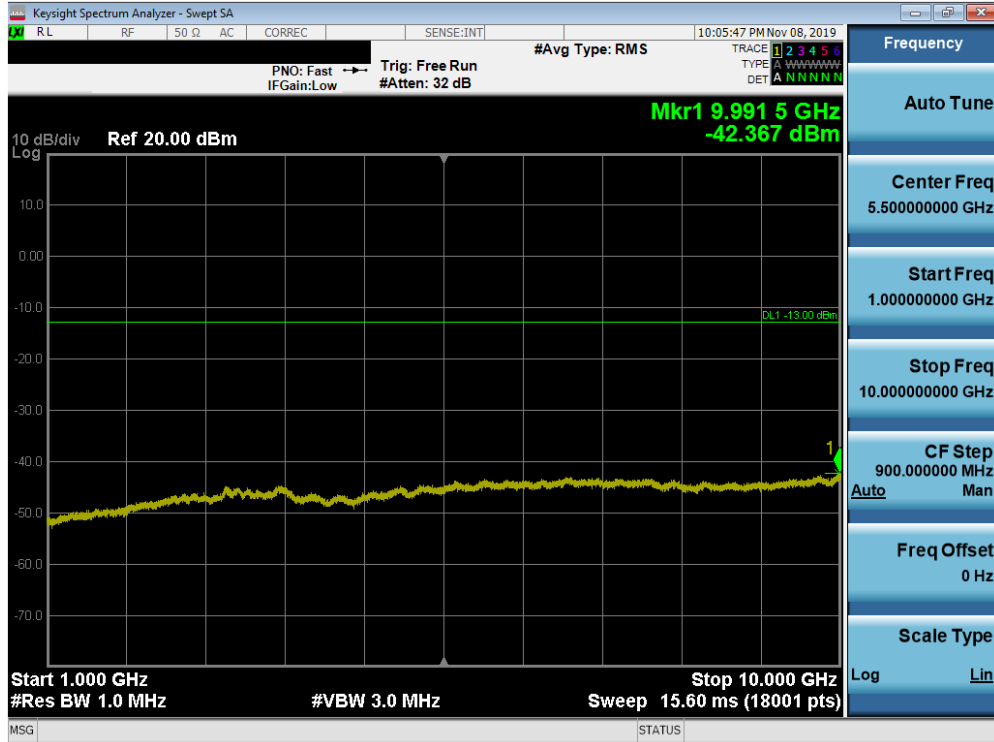


Plot 7-569. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

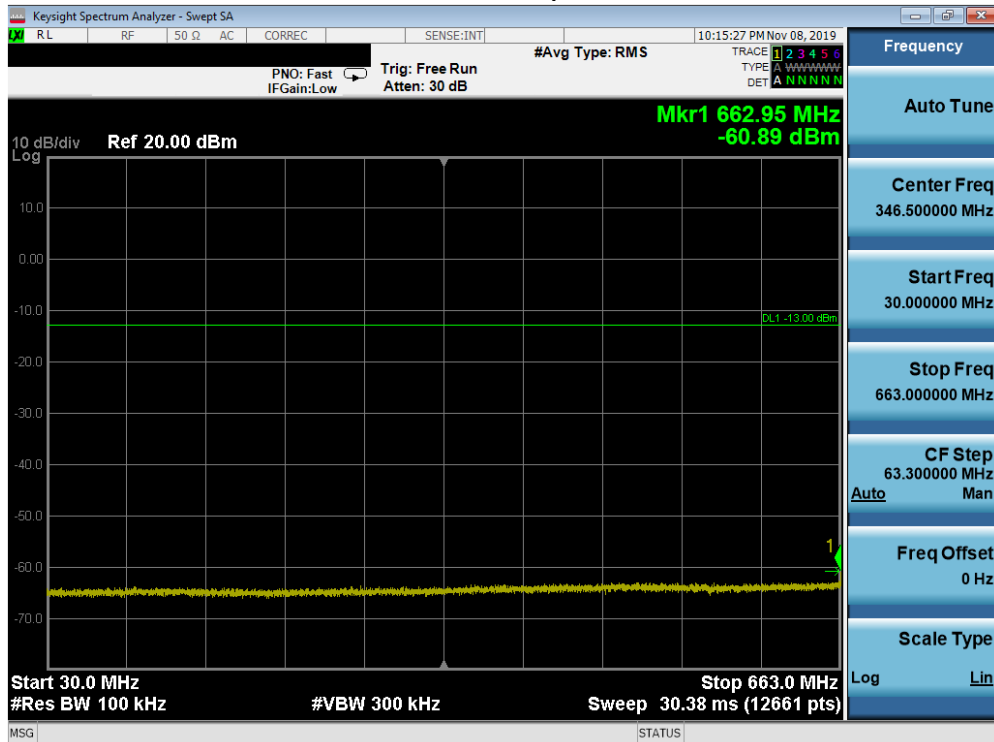


Plot 7-570. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 358 of 434

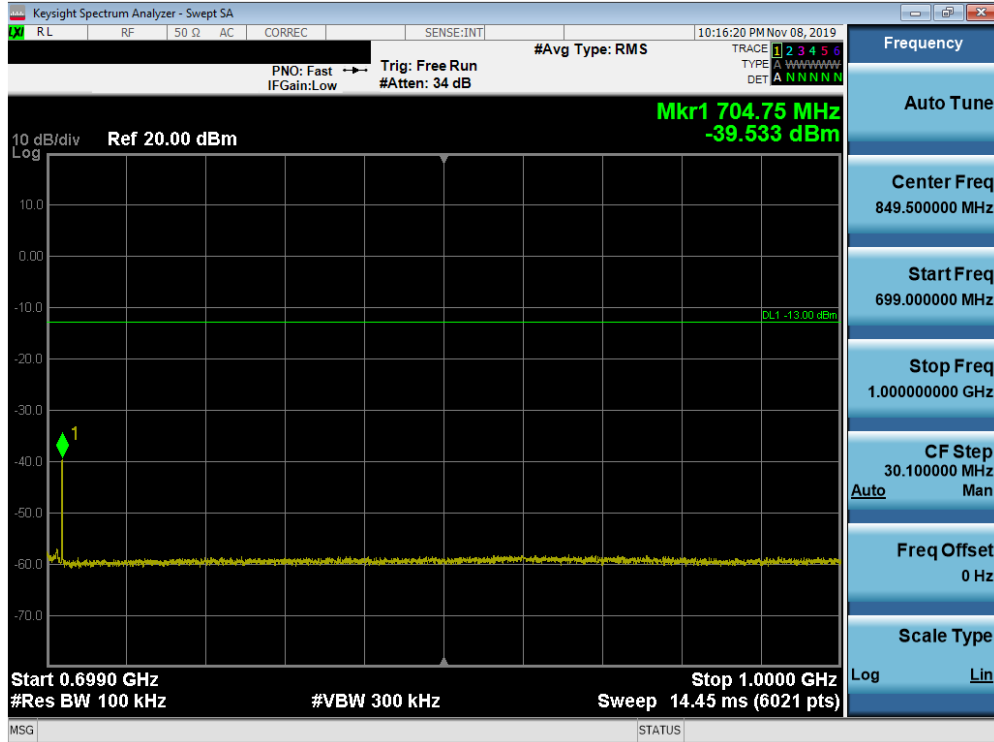


Plot 7-571. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

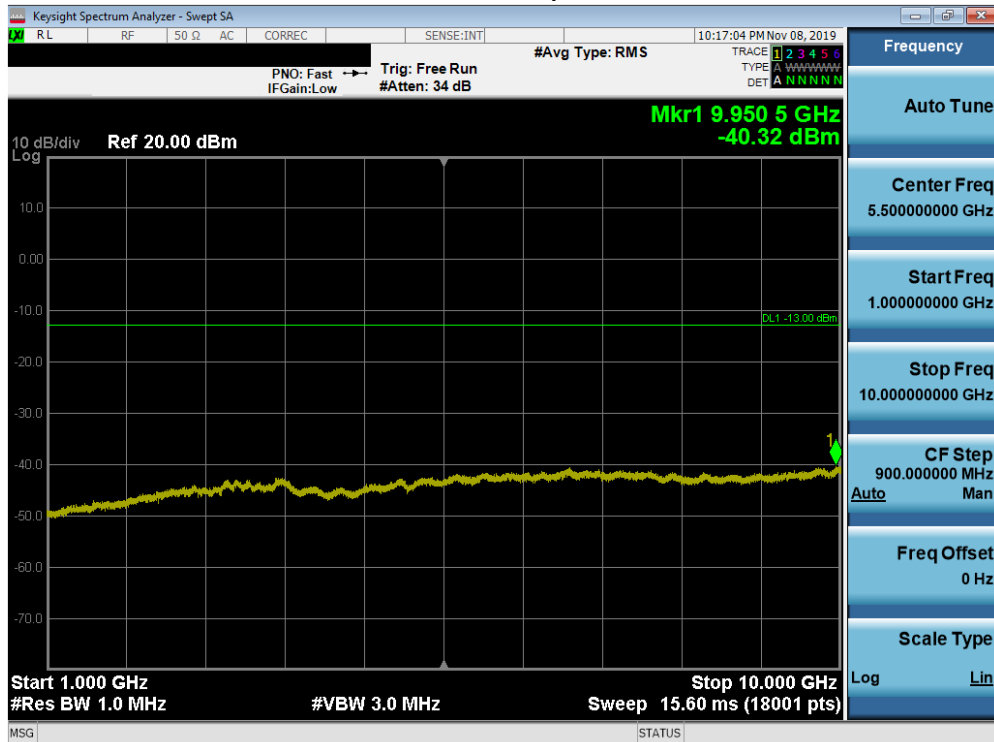


Plot 7-572. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 - 01/09/20	EUT Type: Portable Handset		Page 359 of 434



Plot 7-573. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

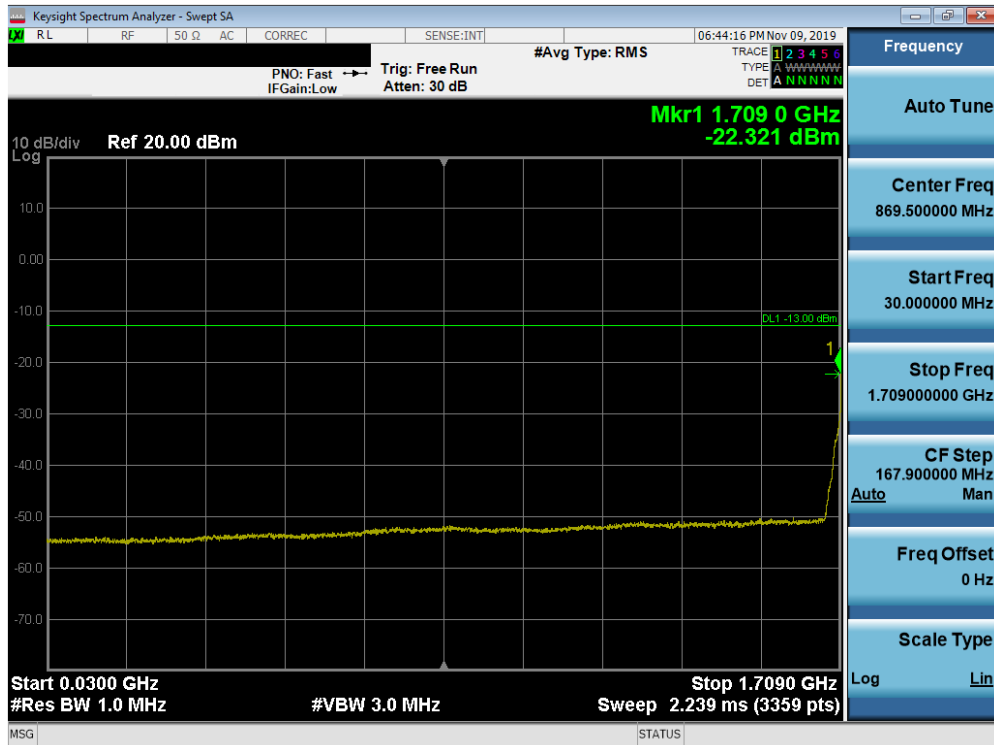


Plot 7-574. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

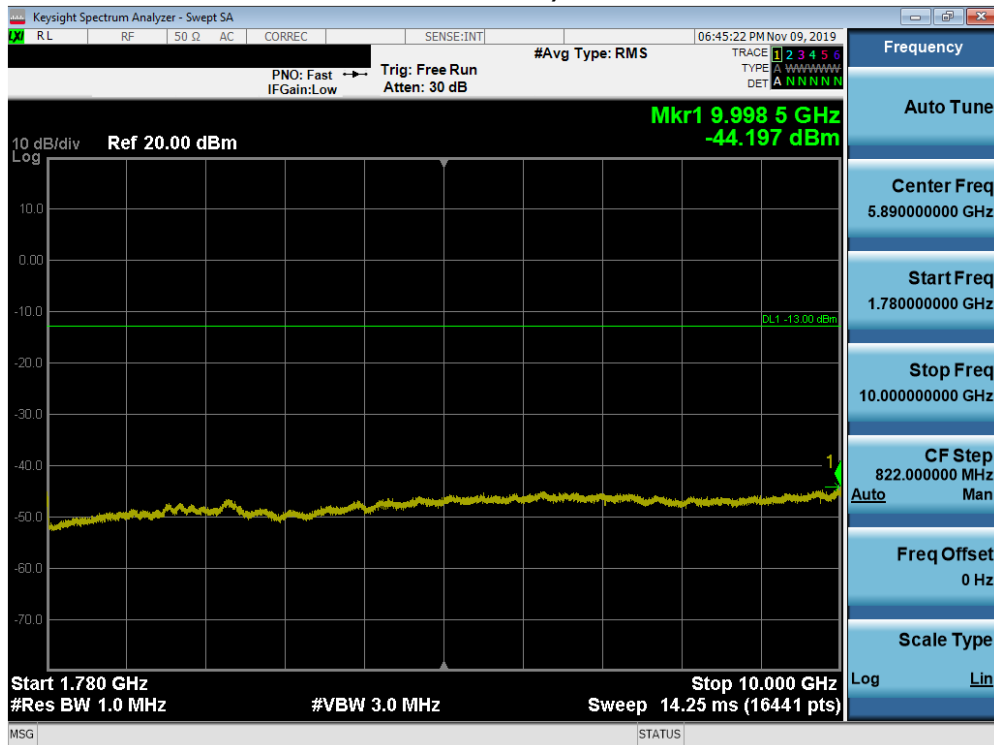
FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 360 of 434



### NR Band n66



Plot 7-575. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

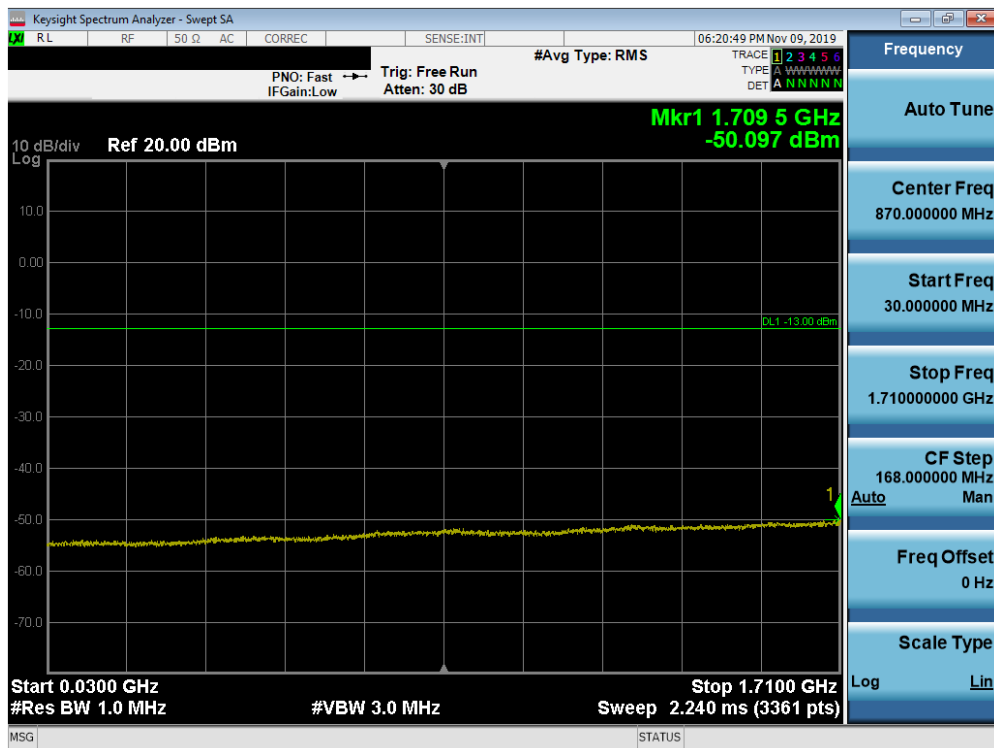


Plot 7-576. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 361 of 434

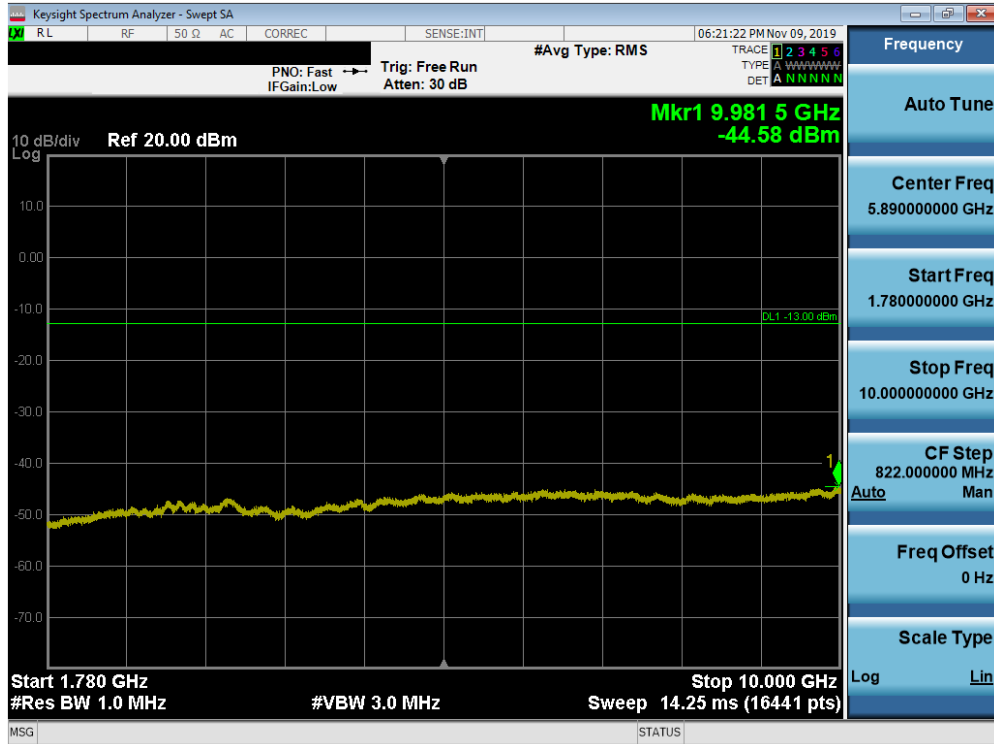


Plot 7-577. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

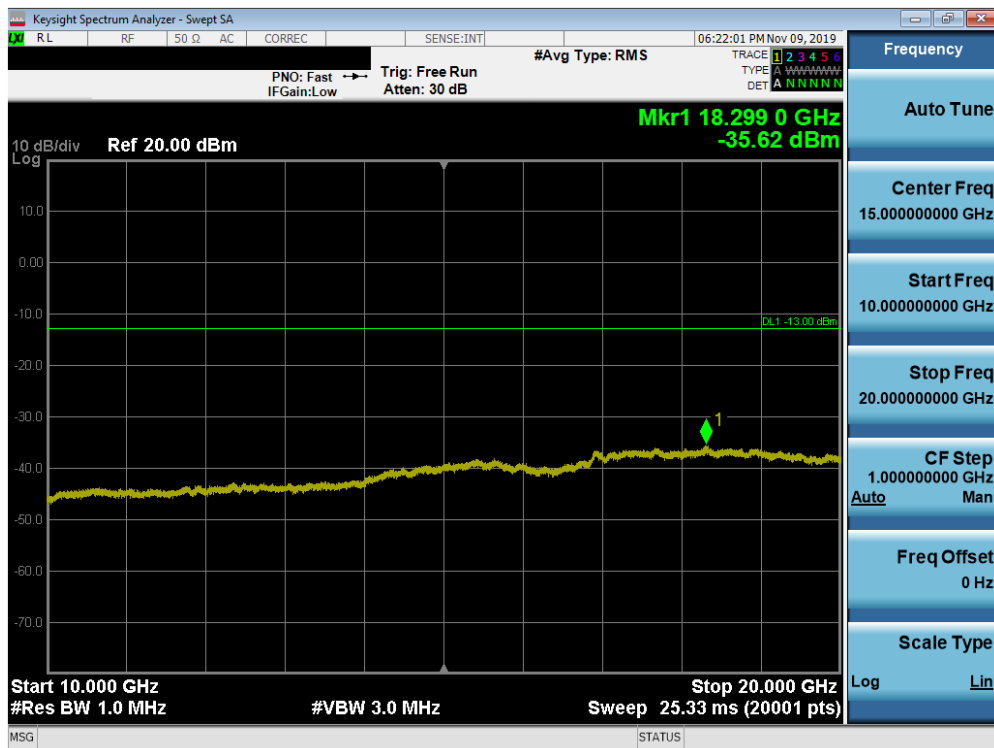


Plot 7-578. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 362 of 434



Plot 7-579. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)



Plot 7-580. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMG986W		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911010179-03.A3L	Test Dates: 10/11/19 – 01/09/20	EUT Type: Portable Handset		Page 363 of 434