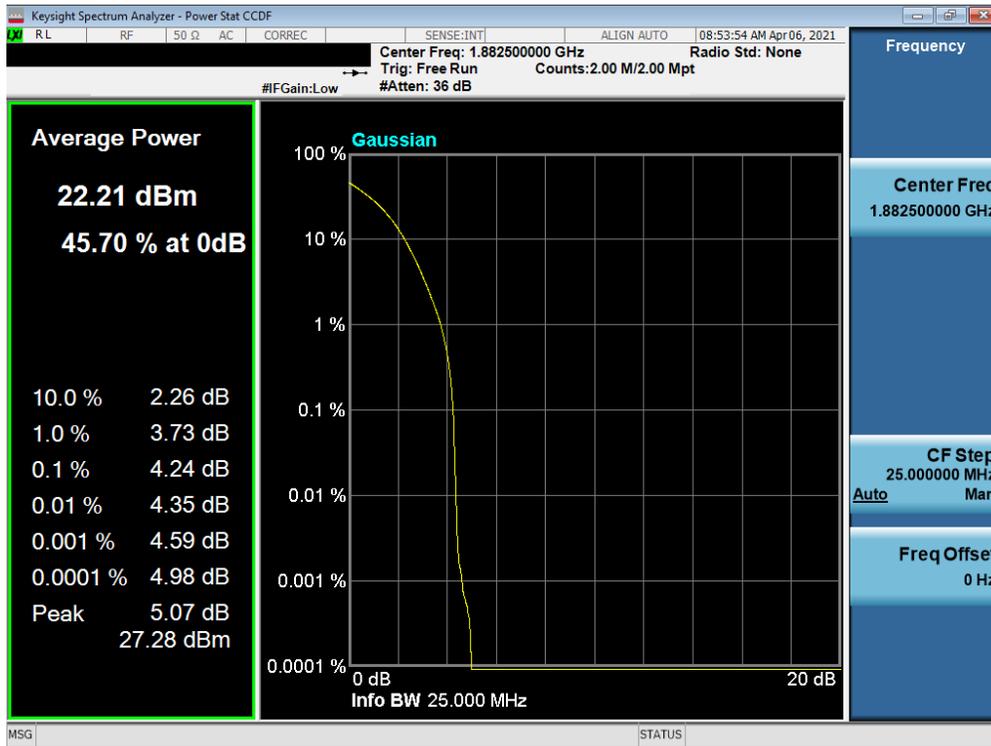
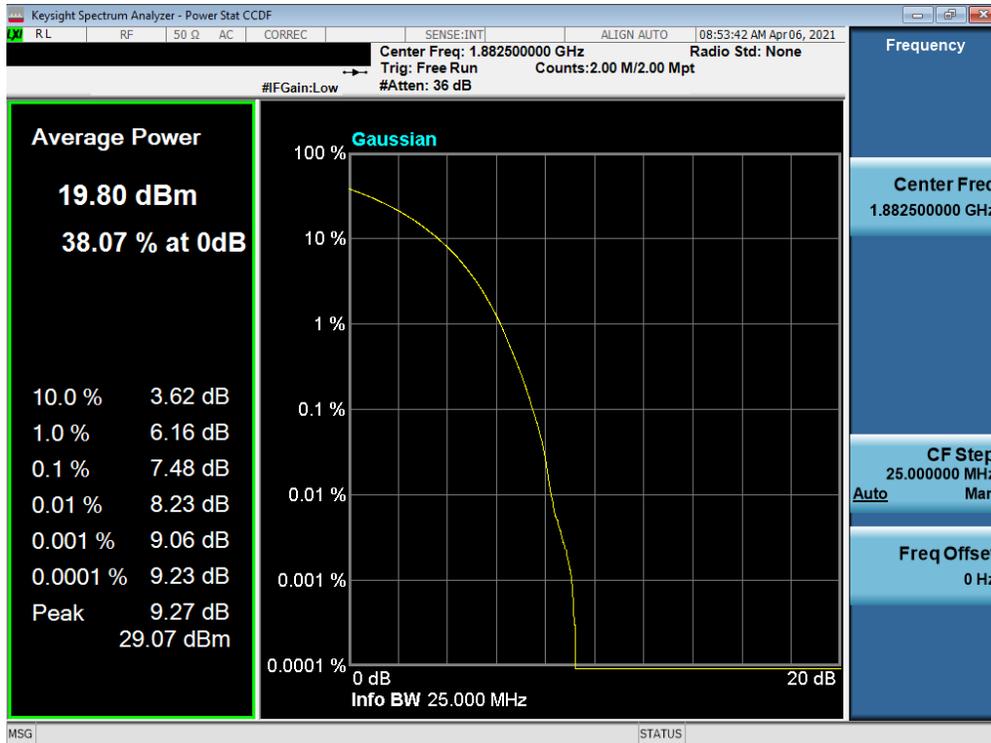


### NR Band n25/2 – Antenna B

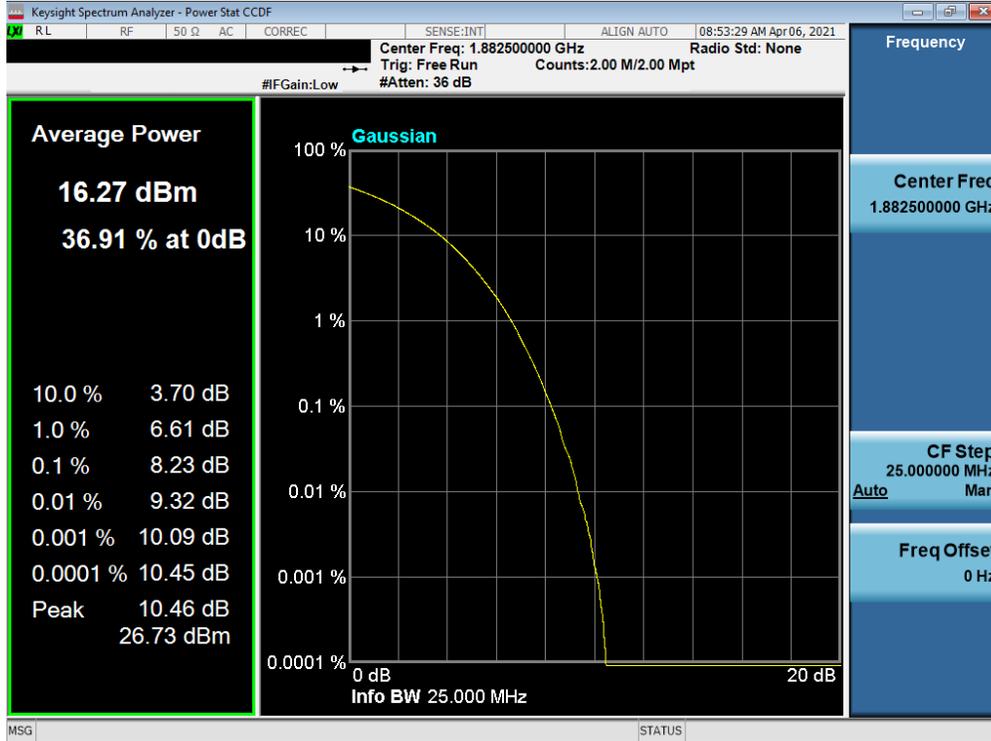


Plot 7-238. PAR Plot (NR Band n25/2 - 40.0MHz DFT-s-OFDM BPSK - Full RB - Antenna B)

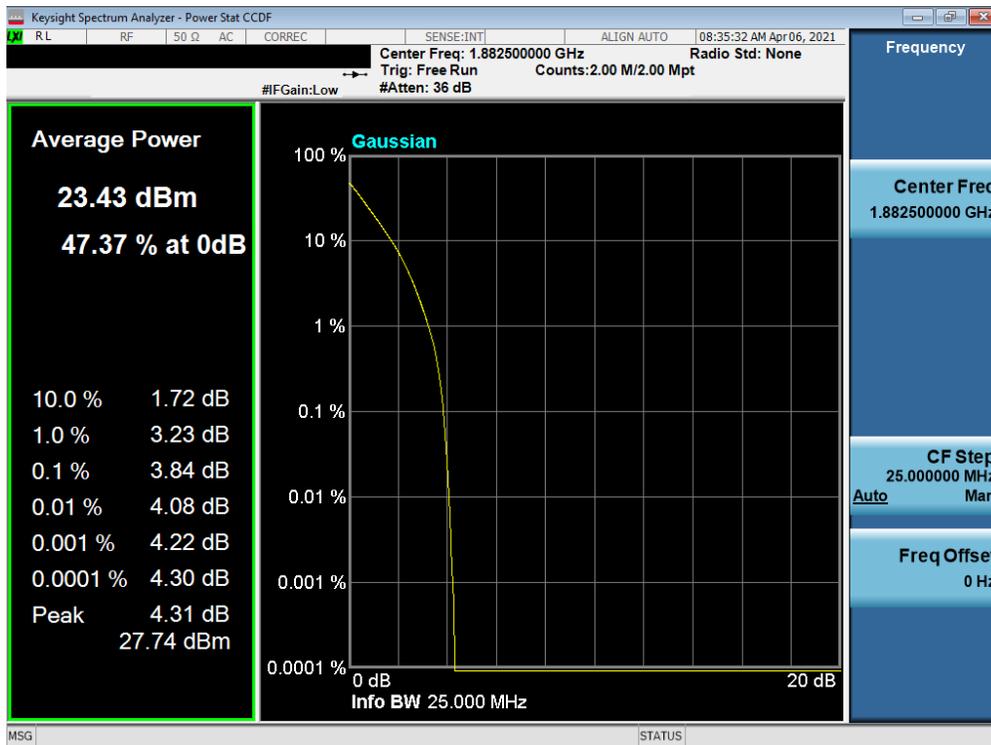


Plot 7-239. PAR Plot (NR Band n25/2 - 40.0MHz CP-OFDM QPSK - Full RB - Antenna B)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 142 of 197

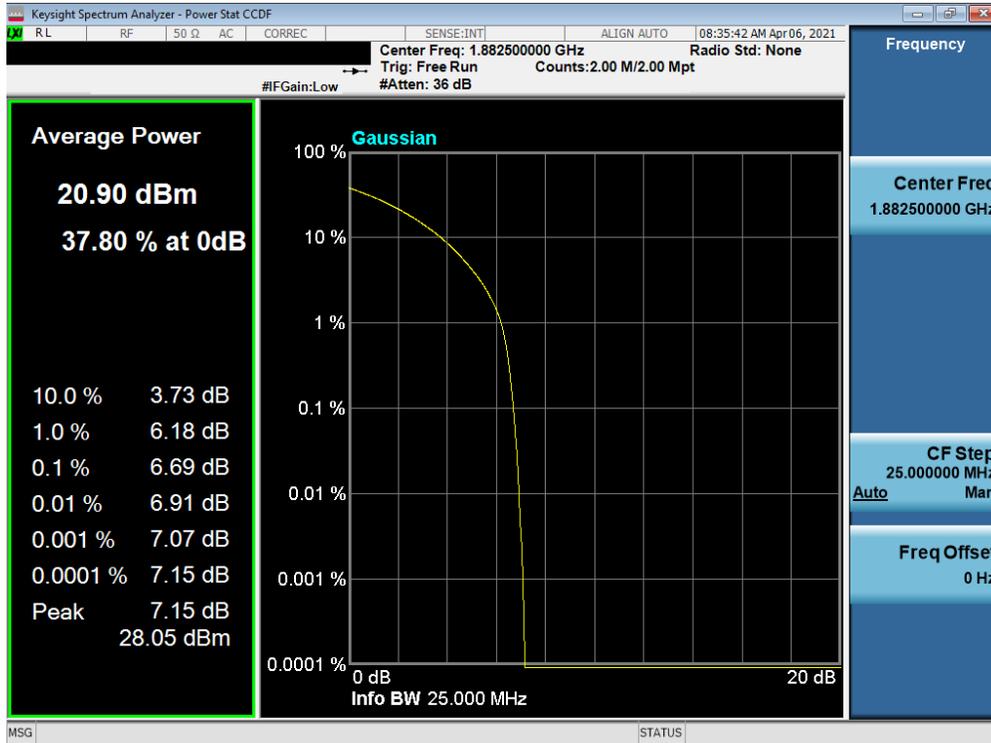


Plot 7-240. PAR Plot (NR Band n25/2 - 40.0MHz CP-OFDM 256-QAM - Full RB - Antenna B)

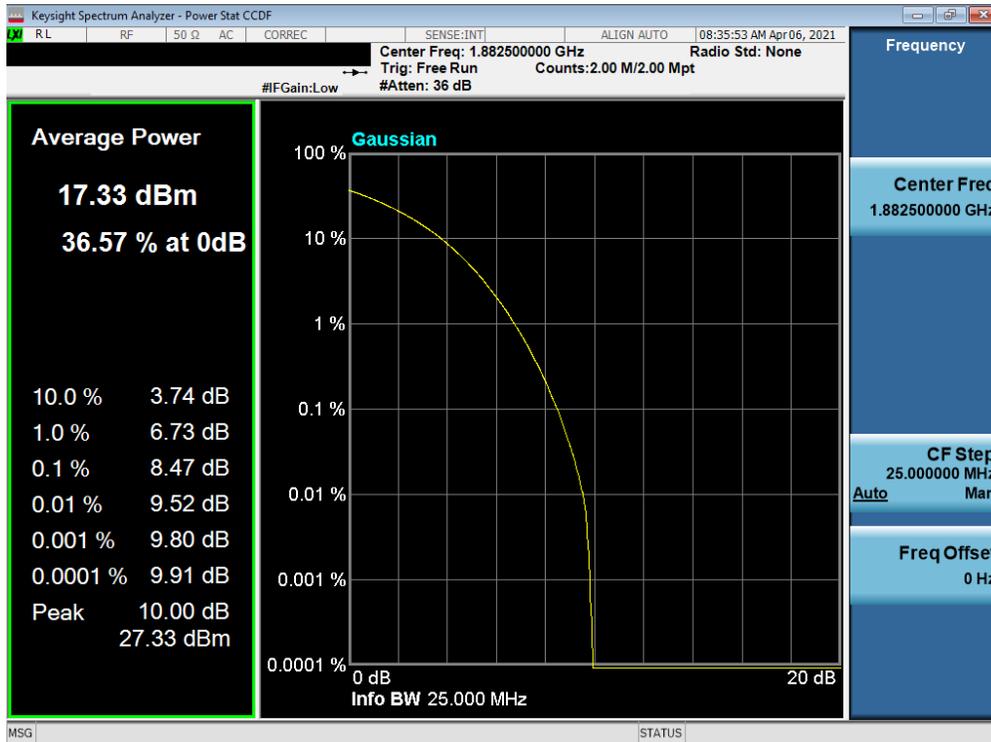


Plot 7-241. PAR Plot (NR Band n25/2 - 30.0MHz DFT-s-OFDM BPSK - Full RB - Antenna B)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 143 of 197

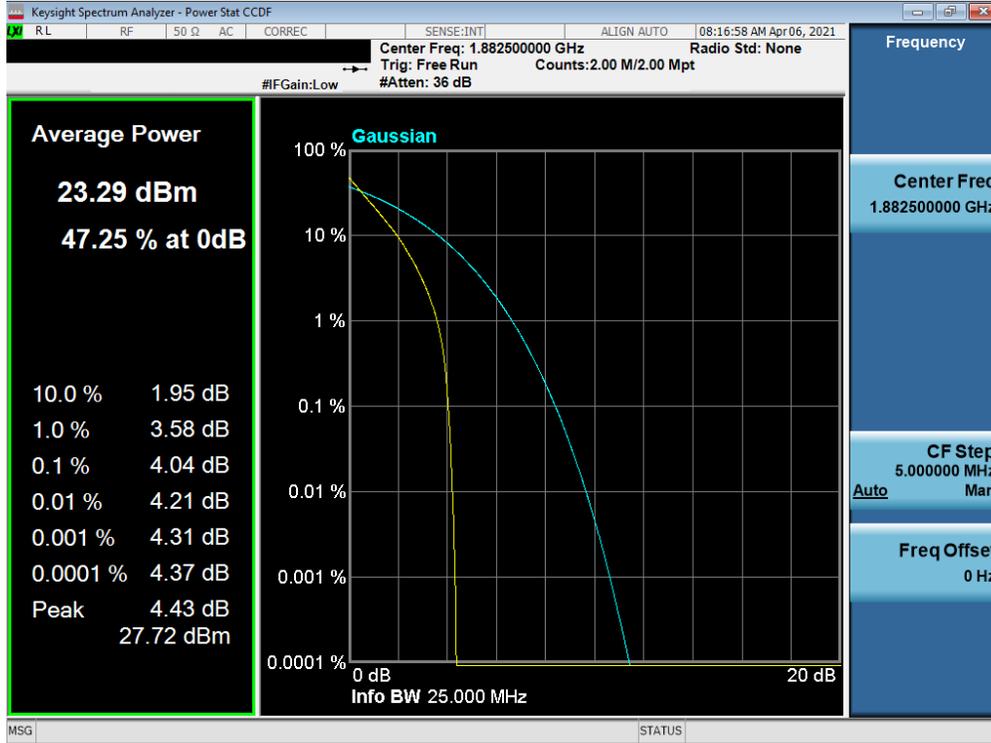


Plot 7-242. PAR Plot (NR Band n25/2 - 30.0MHz CP-OFDM QPSK - Full RB - Antenna B)

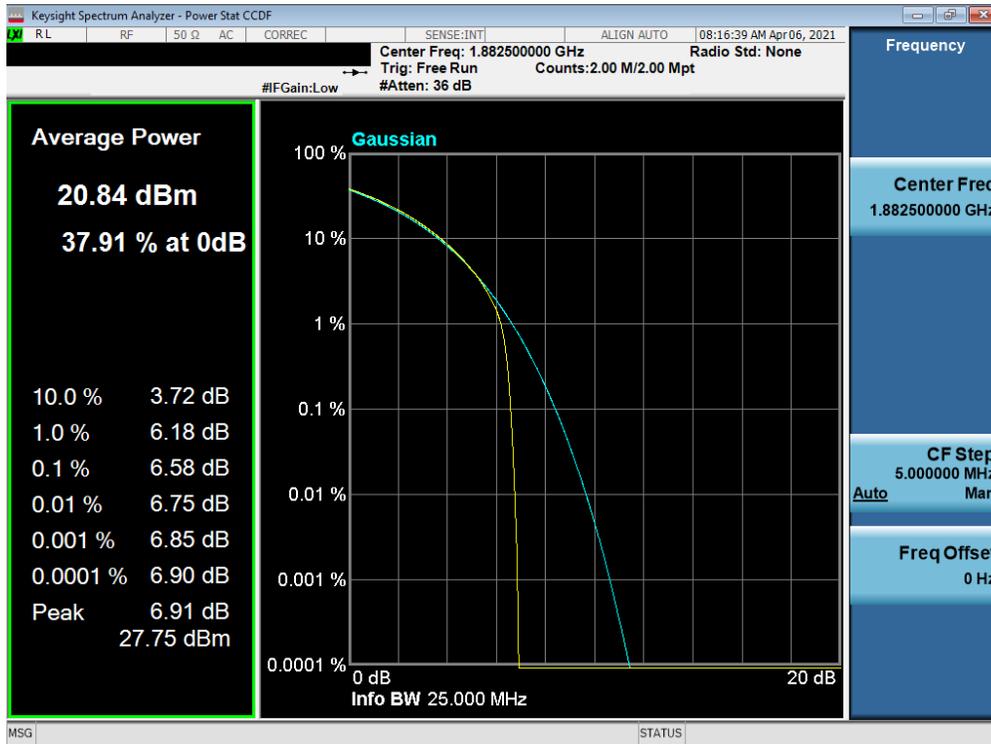


Plot 7-243. PAR Plot (NR Band n25/2 - 30.0MHz CP-OFDM 256-QAM - Full RB - Antenna B)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 144 of 197

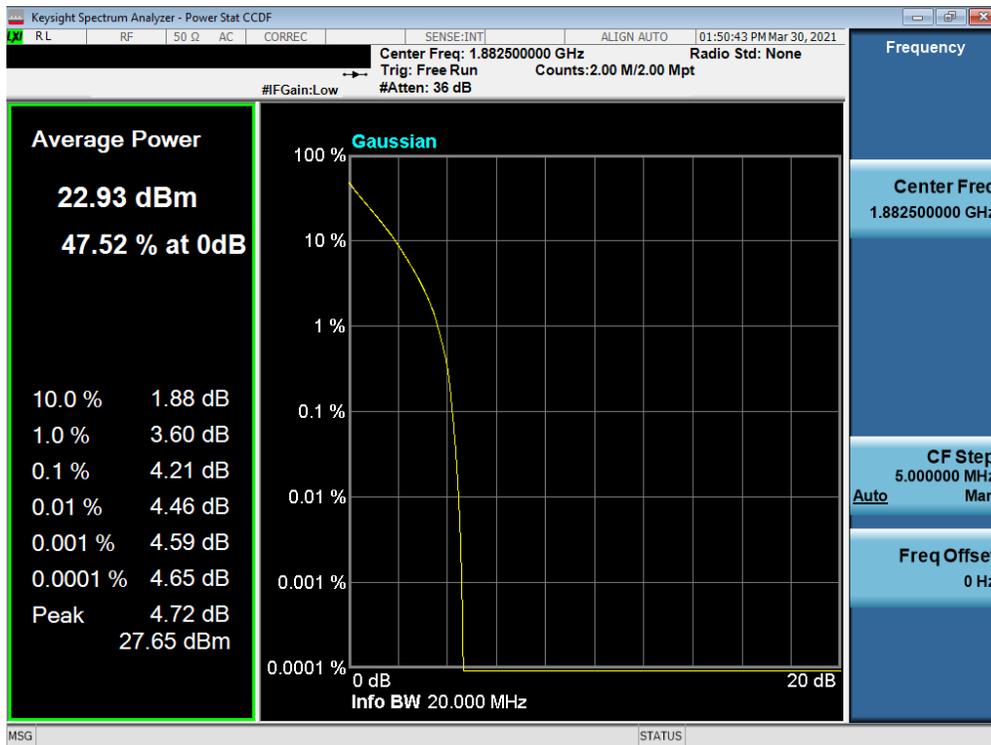
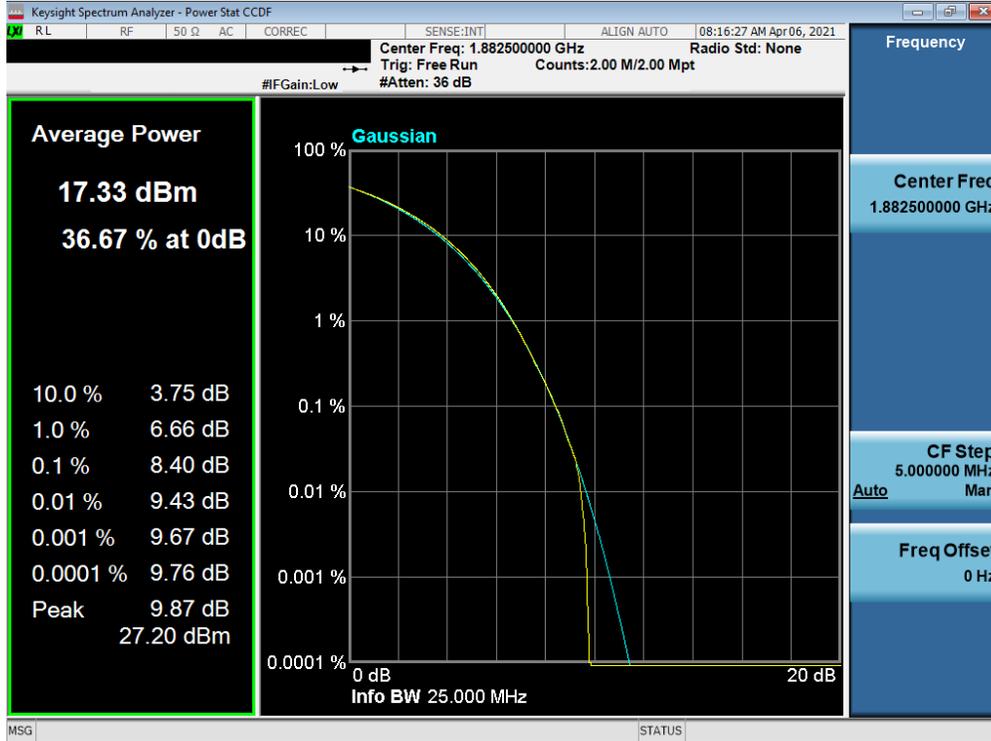


Plot 7-244. PAR Plot (NR Band n25/2 - 25.0MHz DFT-s-OFDM BPSK - Full RB - Antenna B)

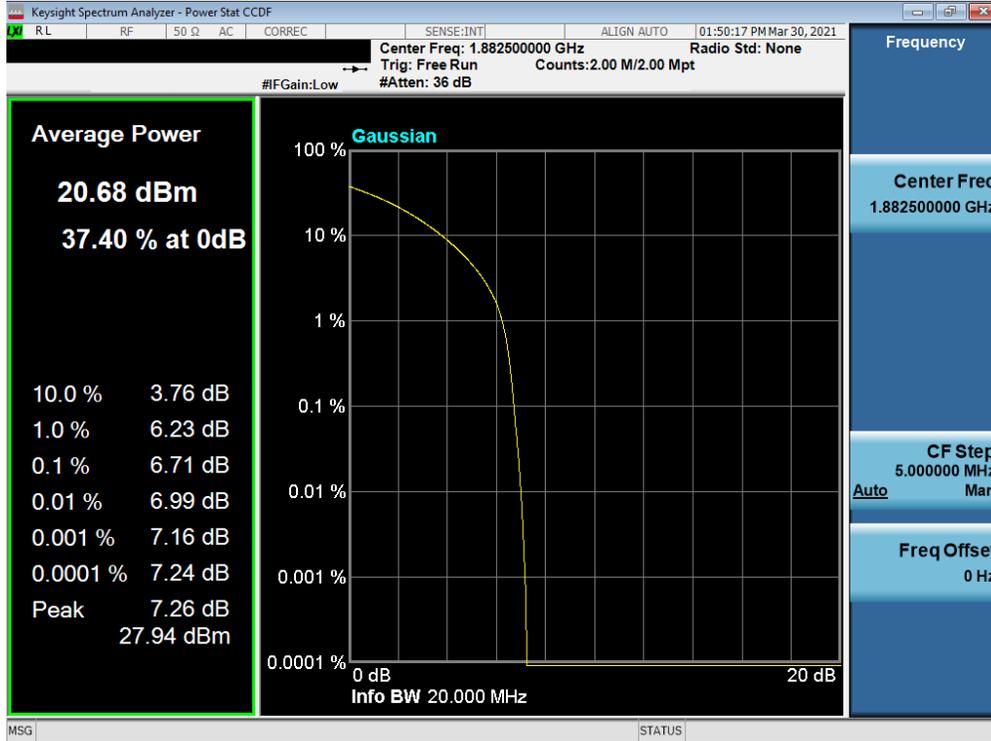


Plot 7-245. PAR Plot (NR Band n25/2 - 25.0MHz CP-OFDM QPSK - Full RB - Antenna B)

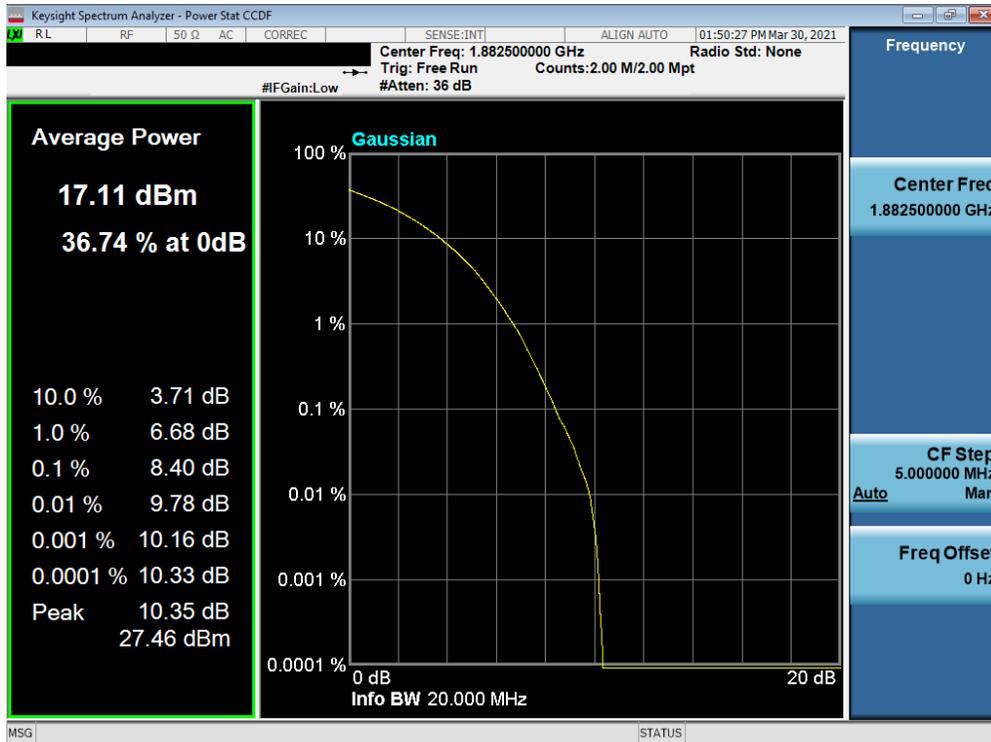
FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 145 of 197



FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 146 of 197

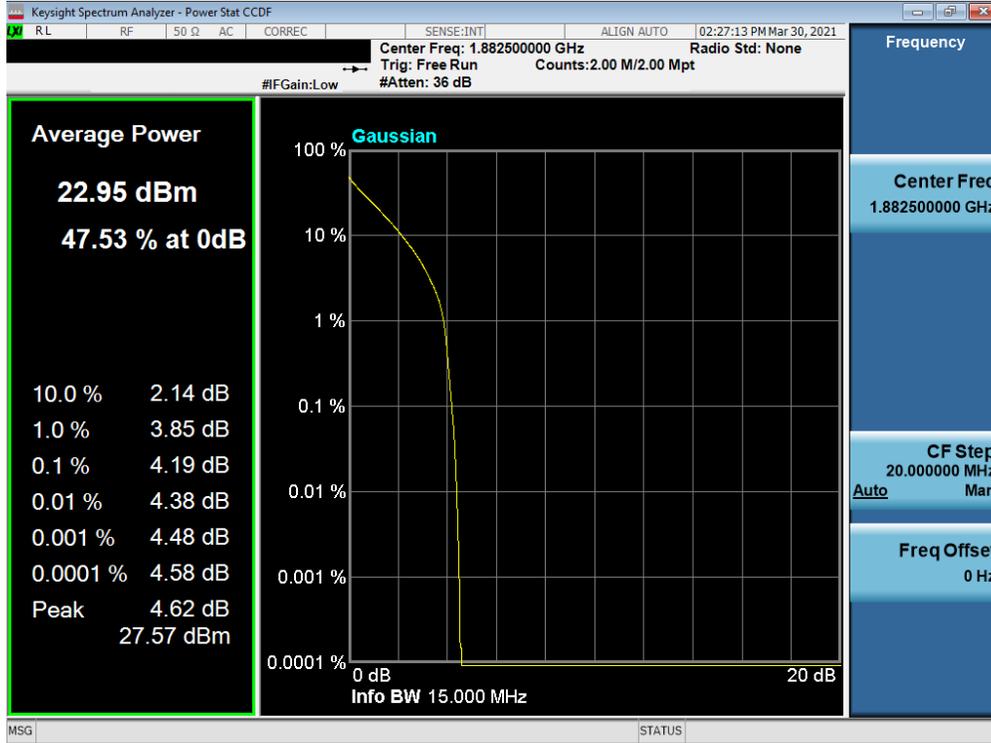


Plot 7-248. PAR Plot (NR Band n25/2 - 20.0MHz CP-OFDM QPSK - Full RB - Antenna B)

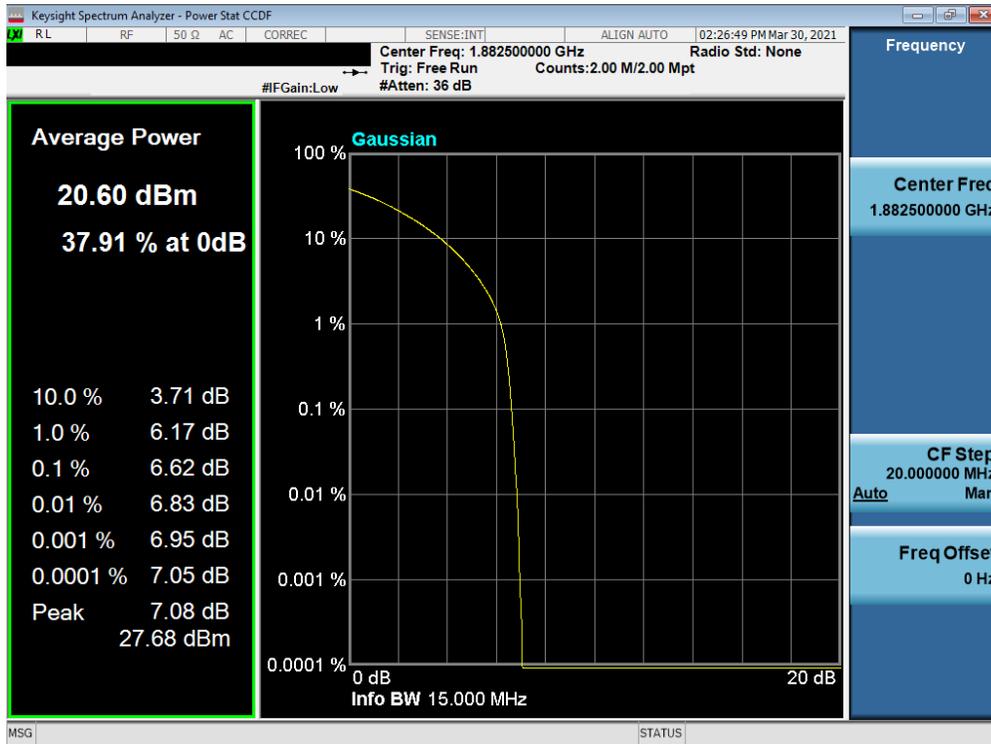


Plot 7-249. PAR Plot (NR Band n25/2 - 20.0MHz CP-OFDM 256-QAM - Full RB - Antenna B)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 147 of 197

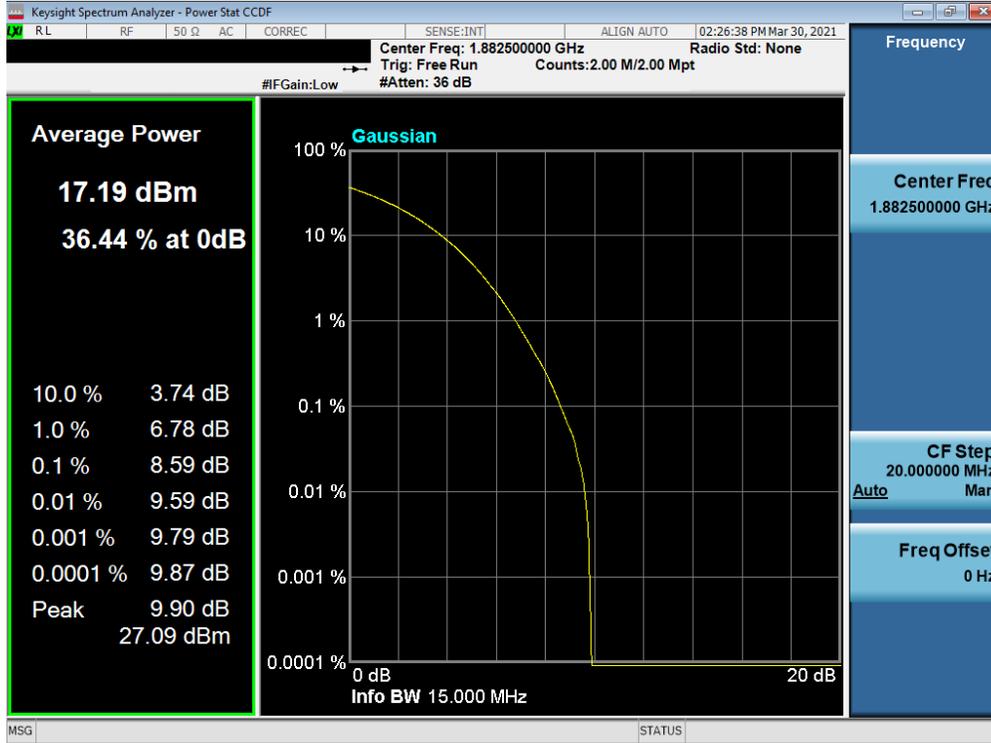


Plot 7-250. PAR Plot (NR Band n25/2 - 15.0MHz DFT-s-OFDM BPSK - Full RB - Antenna B)

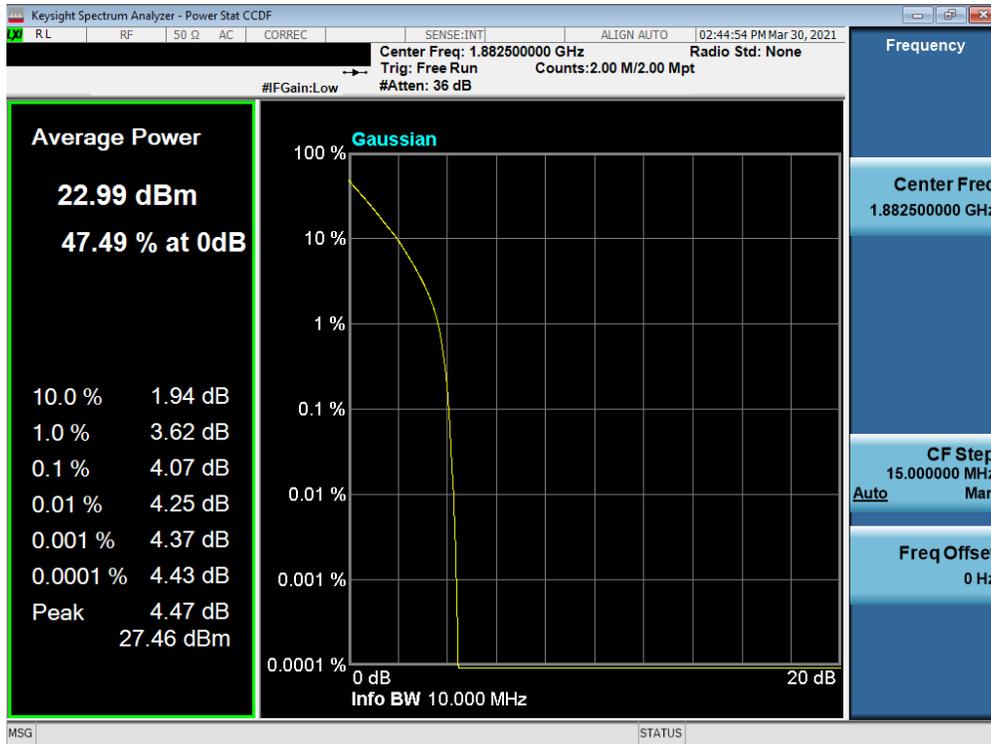


Plot 7-251. PAR Plot (NR Band n25/2 - 15.0MHz CP-OFDM QPSK - Full RB - Antenna B)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 148 of 197

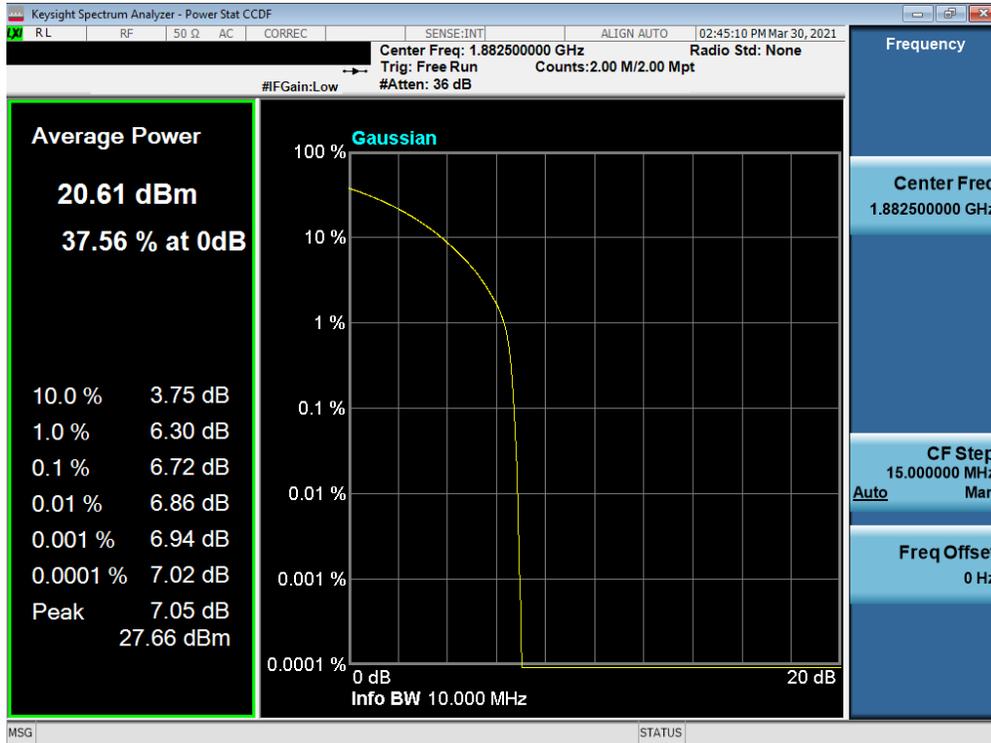


Plot 7-252. PAR Plot (NR Band n25/2 - 15.0MHz CP-OFDM 256-QAM - Full RB - Antenna B)

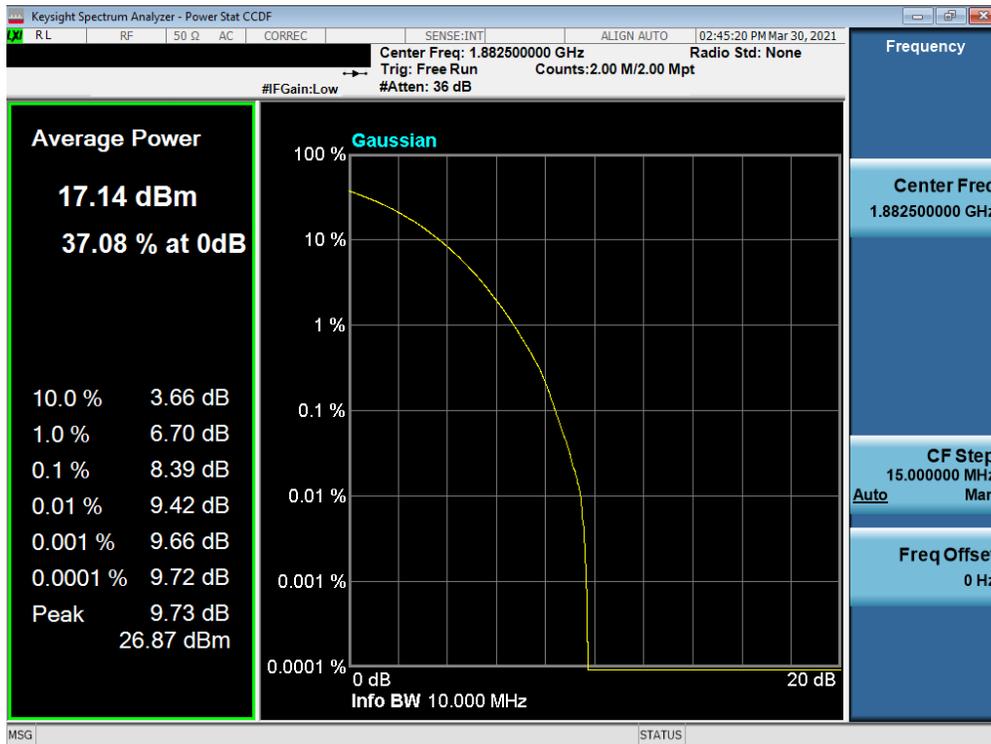


Plot 7-253. PAR Plot (NR Band n25/2 - 10.0MHz DFT-s-OFDM BPSK - Full RB - Antenna B)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 149 of 197

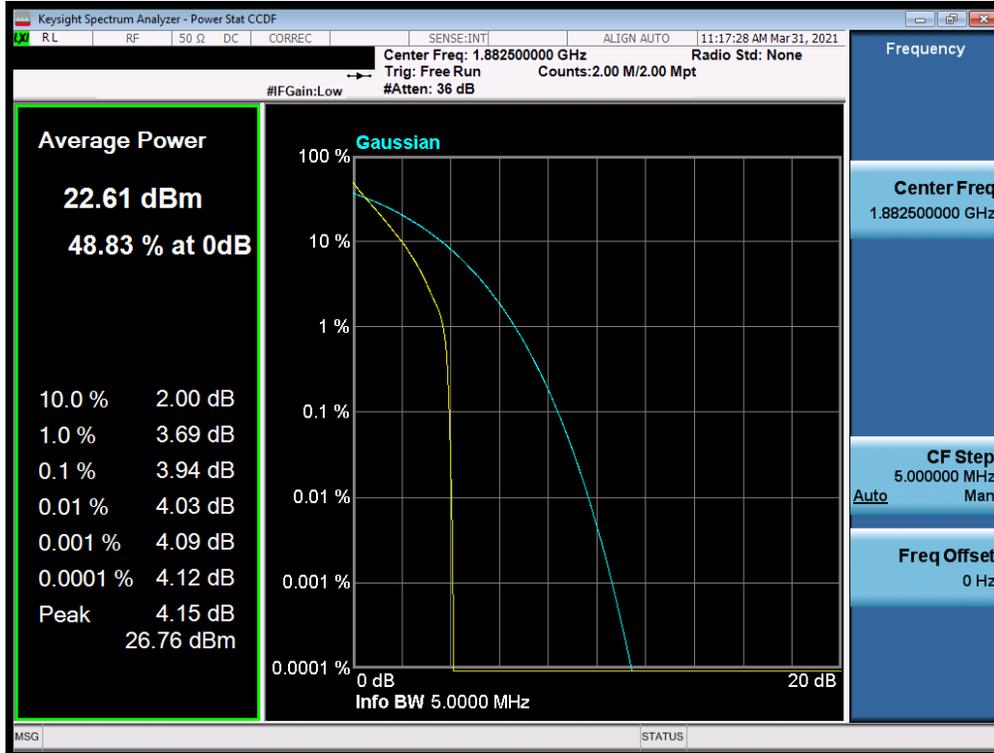


Plot 7-254. PAR Plot (NR Band n25/2 - 10.0MHz CP-OFDM QPSK - Full RB - Antenna B)

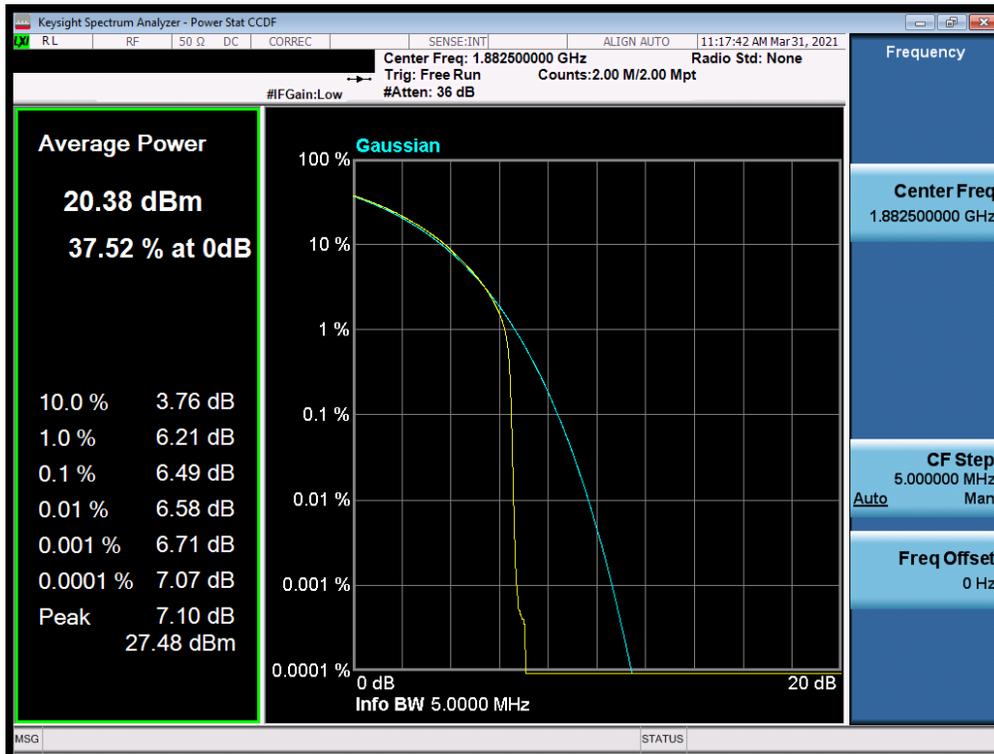


Plot 7-255. PAR Plot (NR Band n25/2 - 10.0MHz CP-OFDM 256-QAM - Full RB - Antenna B)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 150 of 197

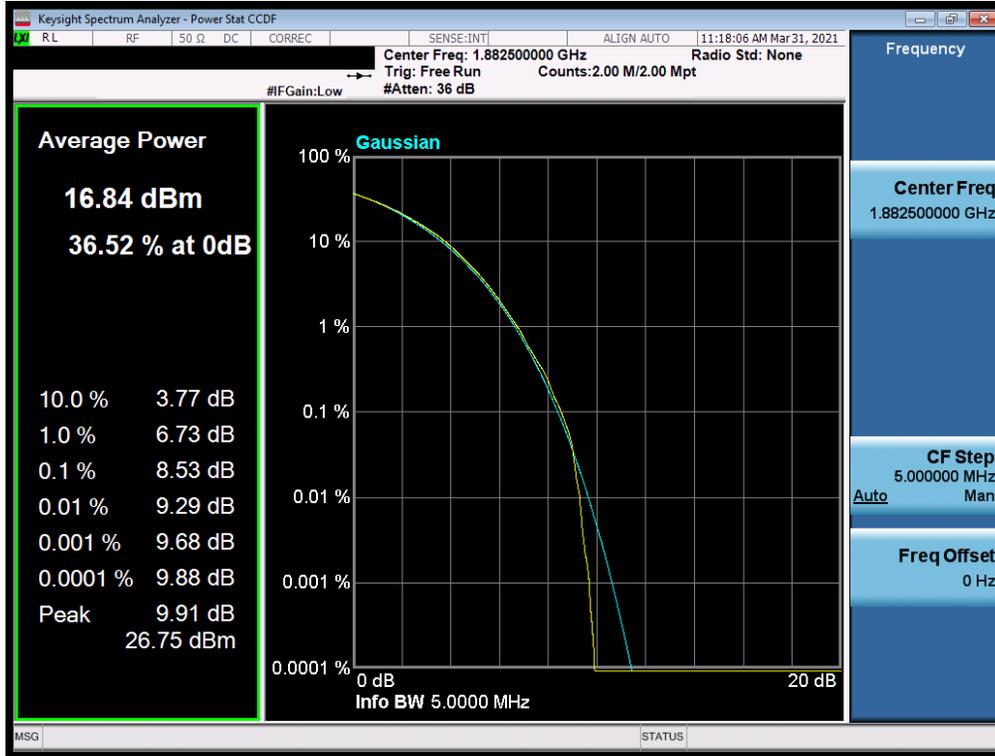


Plot 7-256. PAR Plot (NR Band n25/2 - 5.0MHz DFT-s-OFDM BPSK - Full RB - Antenna B)



Plot 7-257. PAR Plot (NR Band n25/2 - 5.0MHz CP-OFDM QPSK - Full RB - Antenna B)

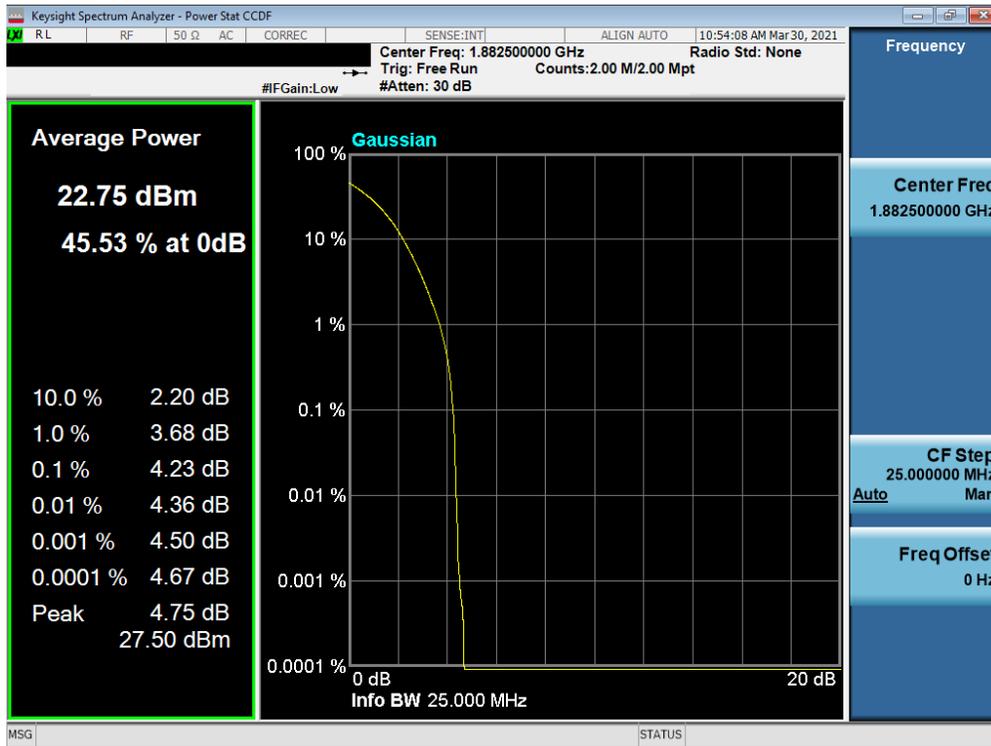
FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	PART 24 MEASUREMENT REPORT	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 151 of 197



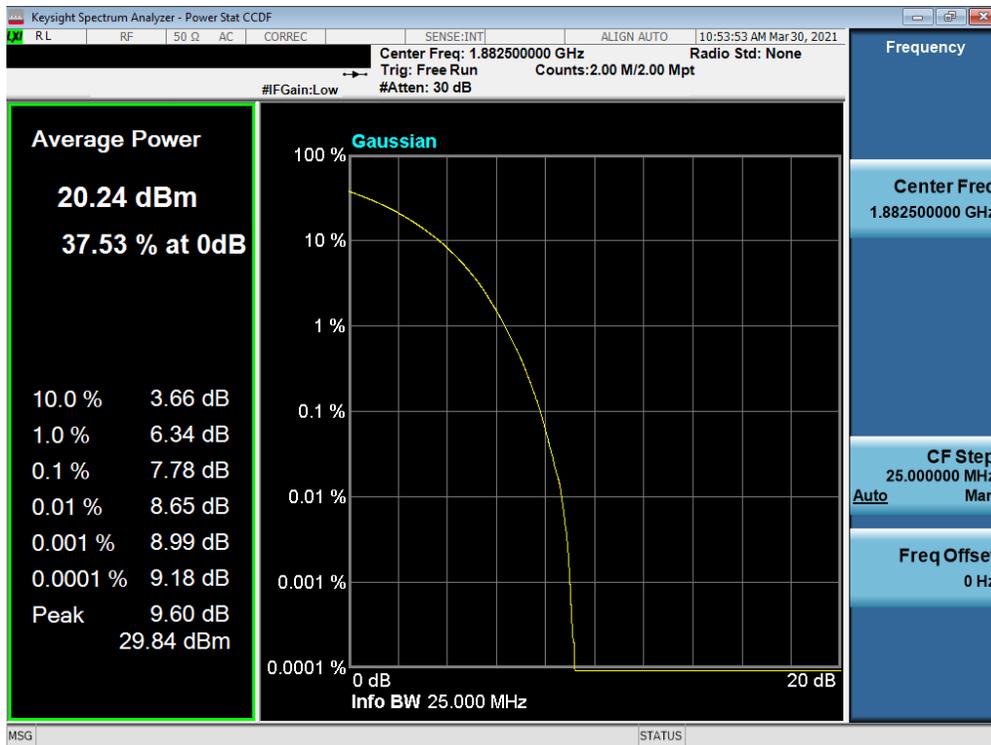
Plot 7-258. PAR Plot (NR Band n25/2 - 5.0MHz CP-OFDM 256-QAM - Full RB - Antenna B)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>		Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 152 of 197

### NR Band n25/2 – Antenna E

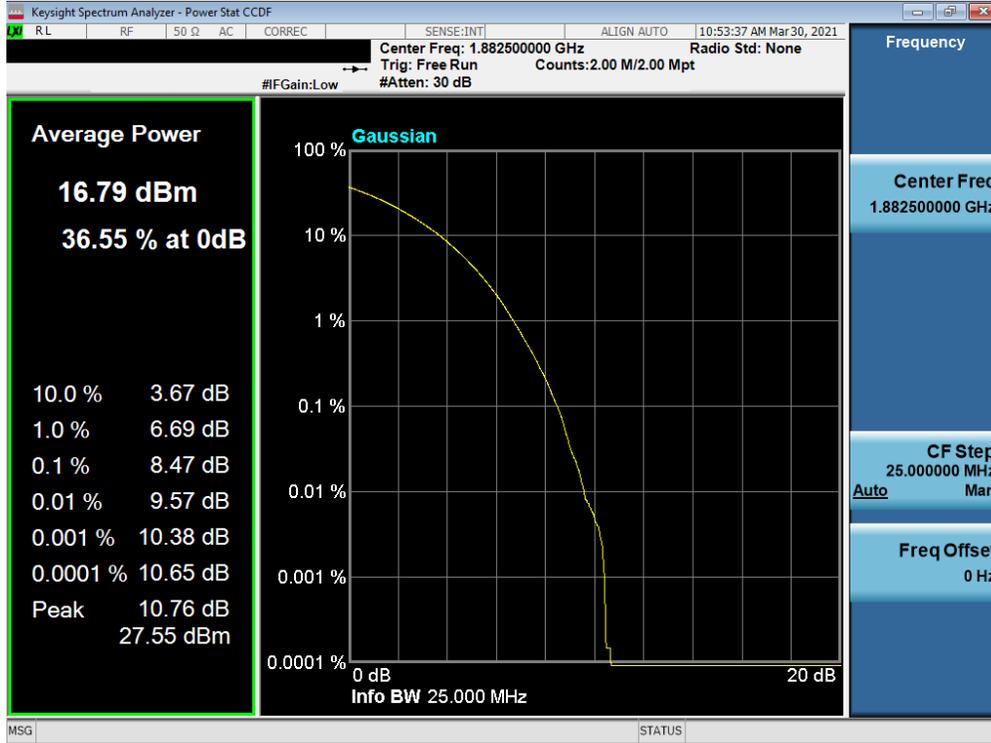


Plot 7-259. PAR Plot (NR Band n25/2 - 40.0MHz DFT-s-OFDM BPSK - Full RB - Antenna E)

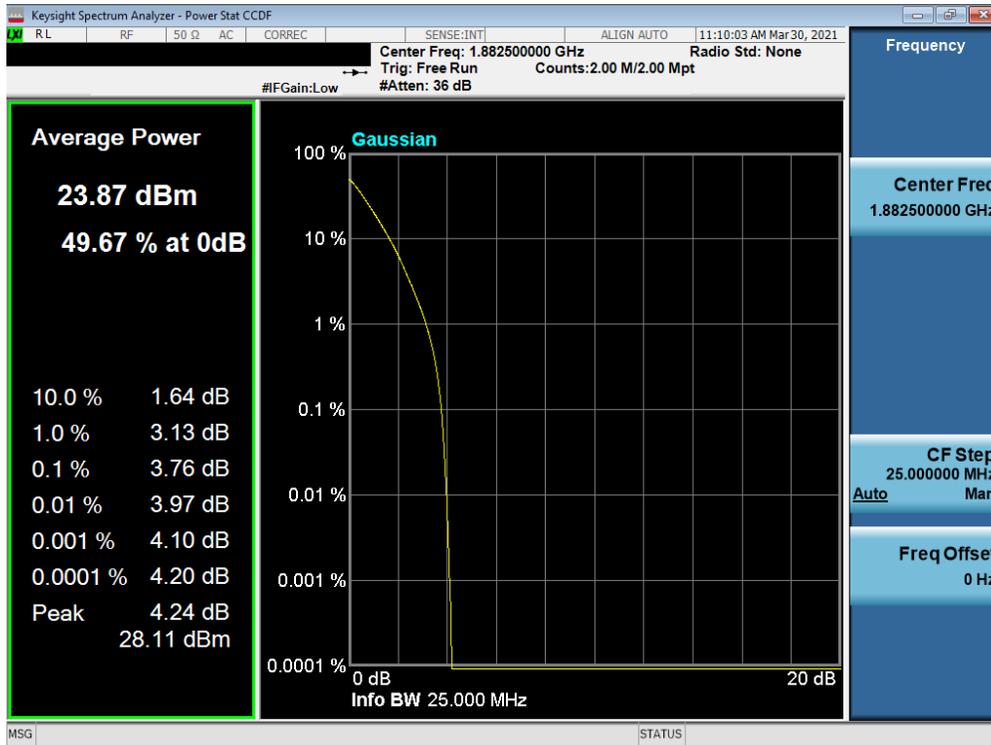


Plot 7-260. PAR Plot (NR Band n25/2 - 40.0MHz CP-OFDM QPSK - Full RB - Antenna E)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 153 of 197

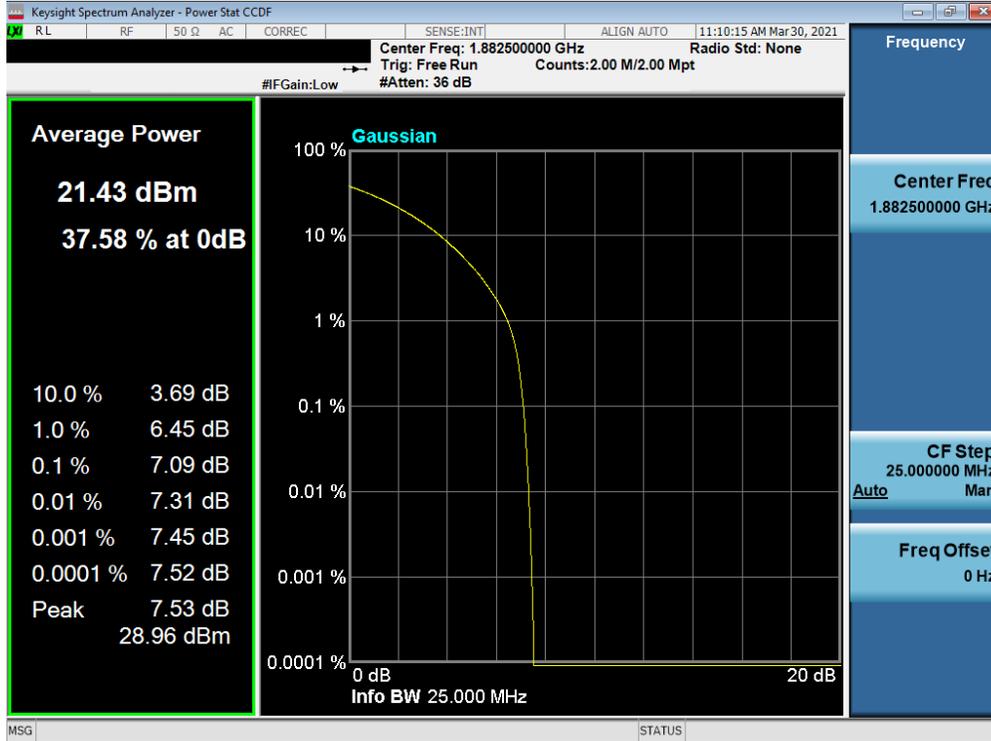


Plot 7-261. PAR Plot (NR Band n25/2 - 40.0MHz CP-OFDM 256-QAM - Full RB - Antenna E)

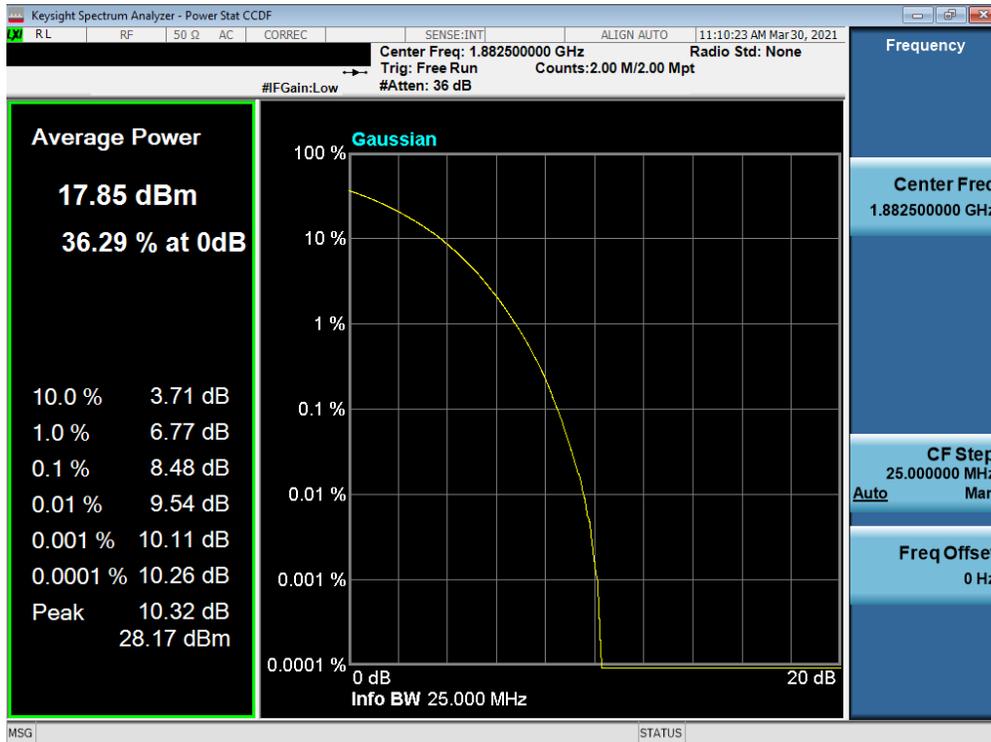


Plot 7-262. PAR Plot (NR Band n25/2 - 30.0MHz DFT-s-OFDM BPSK - Full RB - Antenna E)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 154 of 197

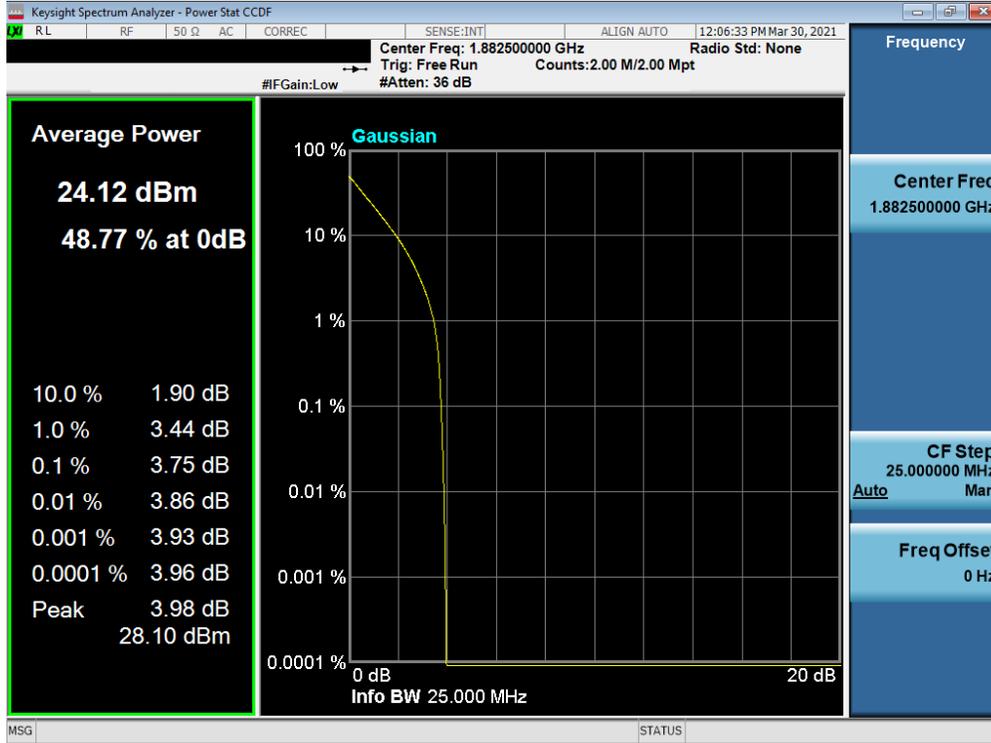


Plot 7-263. PAR Plot (NR Band n25/2 - 30.0MHz CP-OFDM QPSK - Full RB - Antenna E)

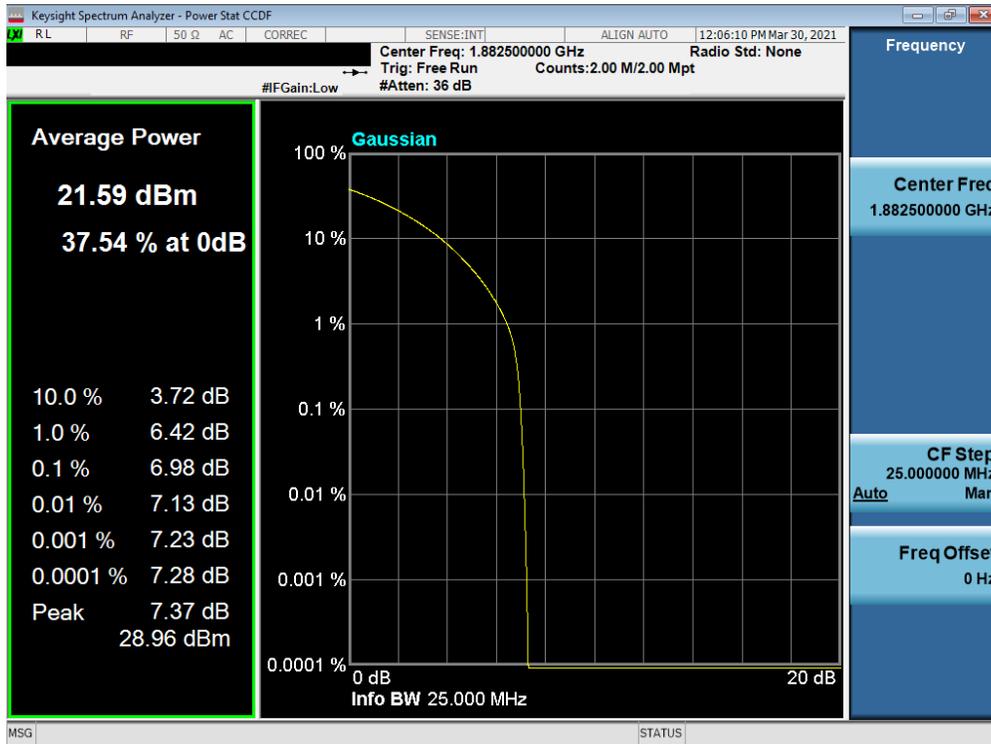


Plot 7-264. PAR Plot (NR Band n25/2 - 30.0MHz CP-OFDM 256-QAM - Full RB - Antenna E)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	PART 24 MEASUREMENT REPORT	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 155 of 197

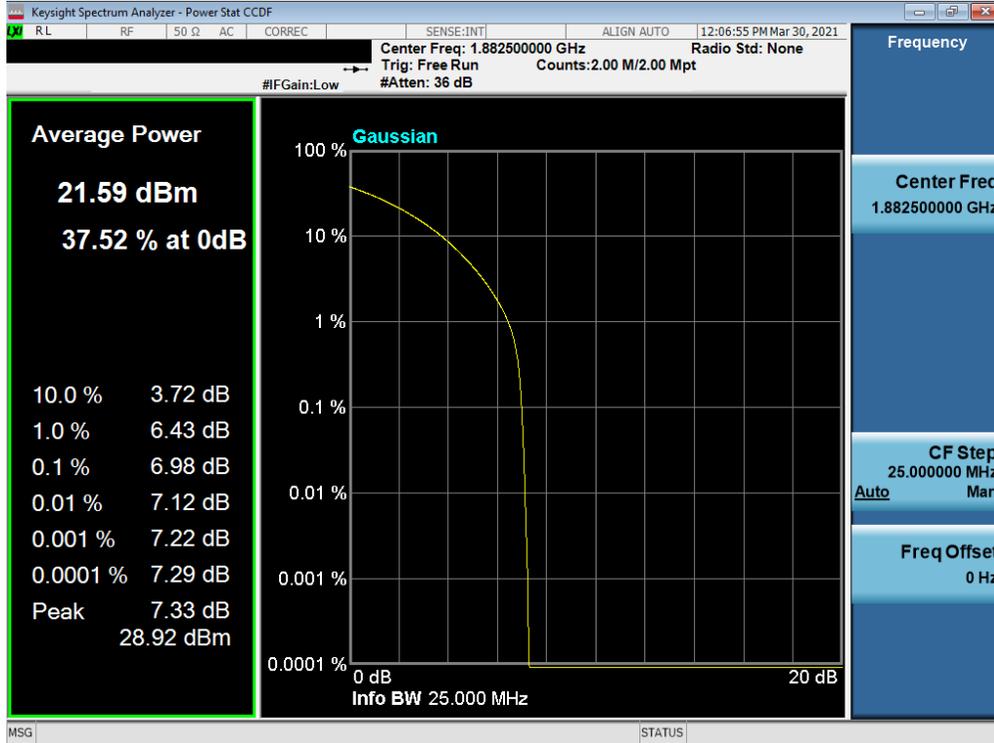


Plot 7-265. PAR Plot (NR Band n25/2 - 25.0MHz DFT-s-OFDM BPSK - Full RB - Antenna E)

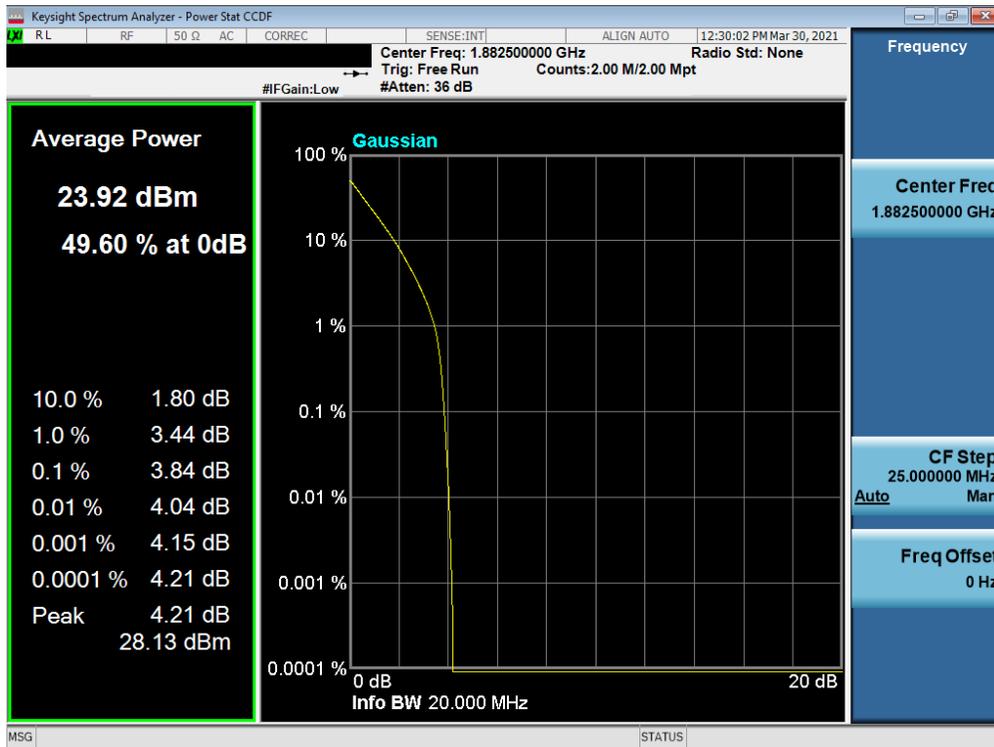


Plot 7-266. PAR Plot (NR Band n25/2 - 25.0MHz CP-OFDM QPSK - Full RB - Antenna E)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 156 of 197

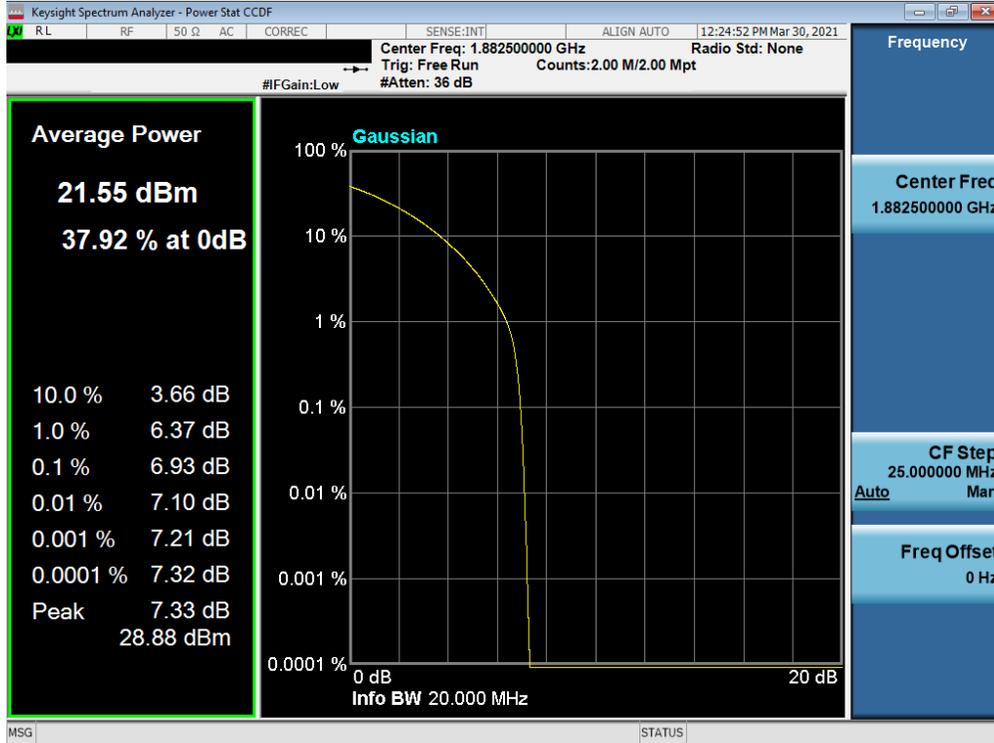


Plot 7-267. PAR Plot (NR Band n25/2 - 25.0MHz CP-OFDM 256-QAM - Full RB - Antenna E)

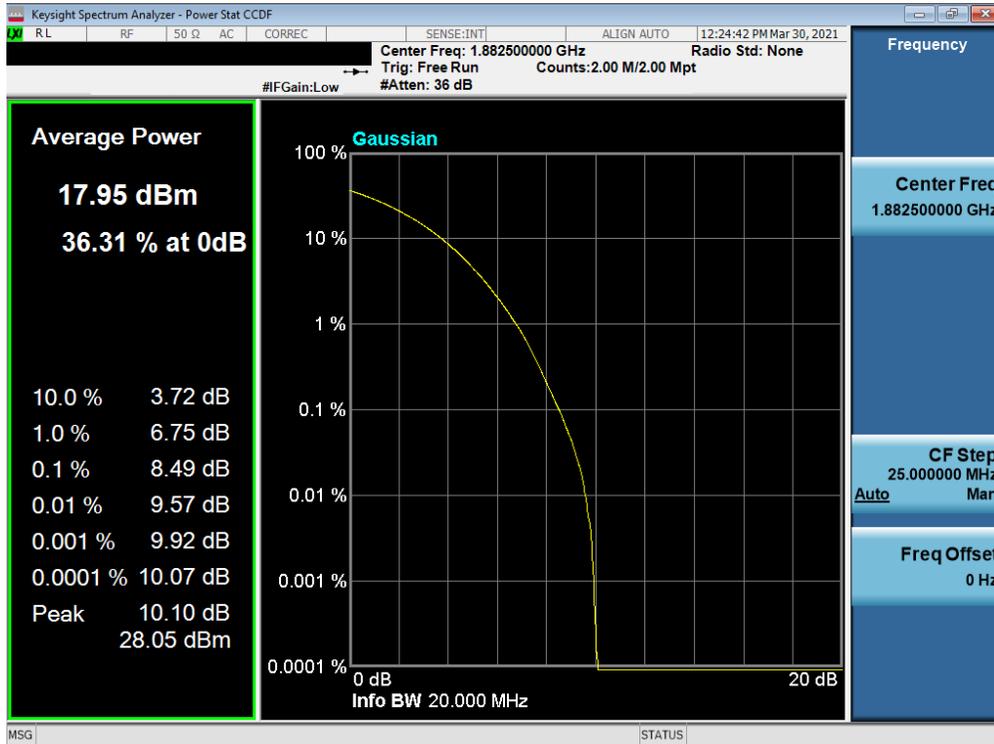


Plot 7-268. PAR Plot (NR Band n25/2 - 20.0MHz DFT-s-OFDM BPSK - Full RB - Antenna E)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	PART 24 MEASUREMENT REPORT	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 157 of 197

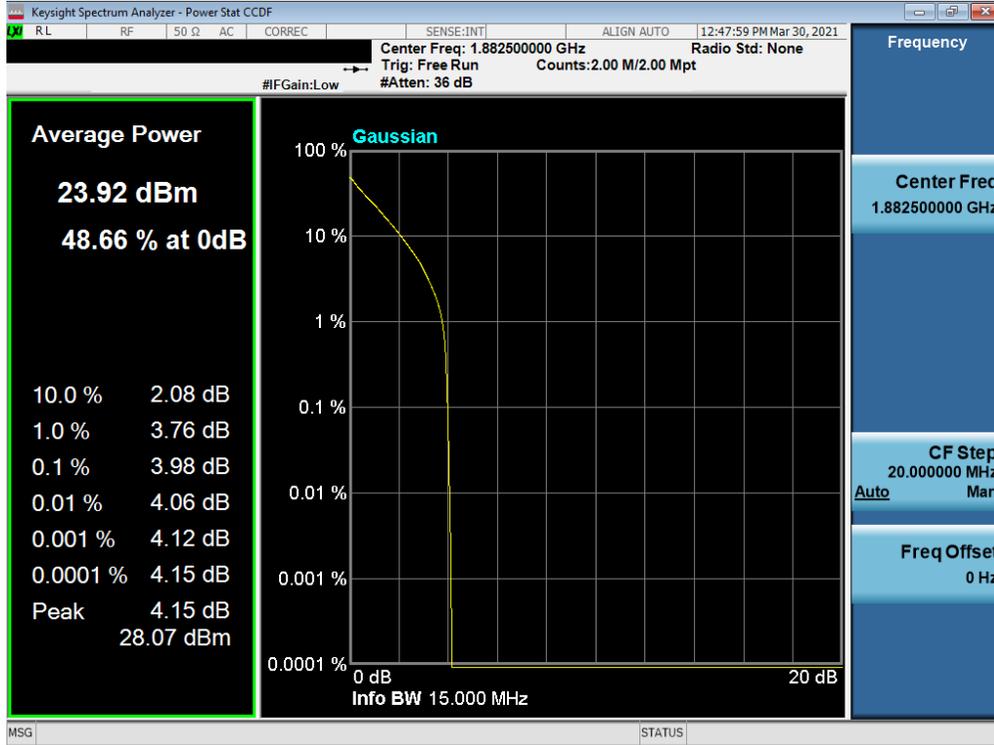


Plot 7-269. PAR Plot (NR Band n25/2 - 20.0MHz CP-OFDM QPSK - Full RB - Antenna E)

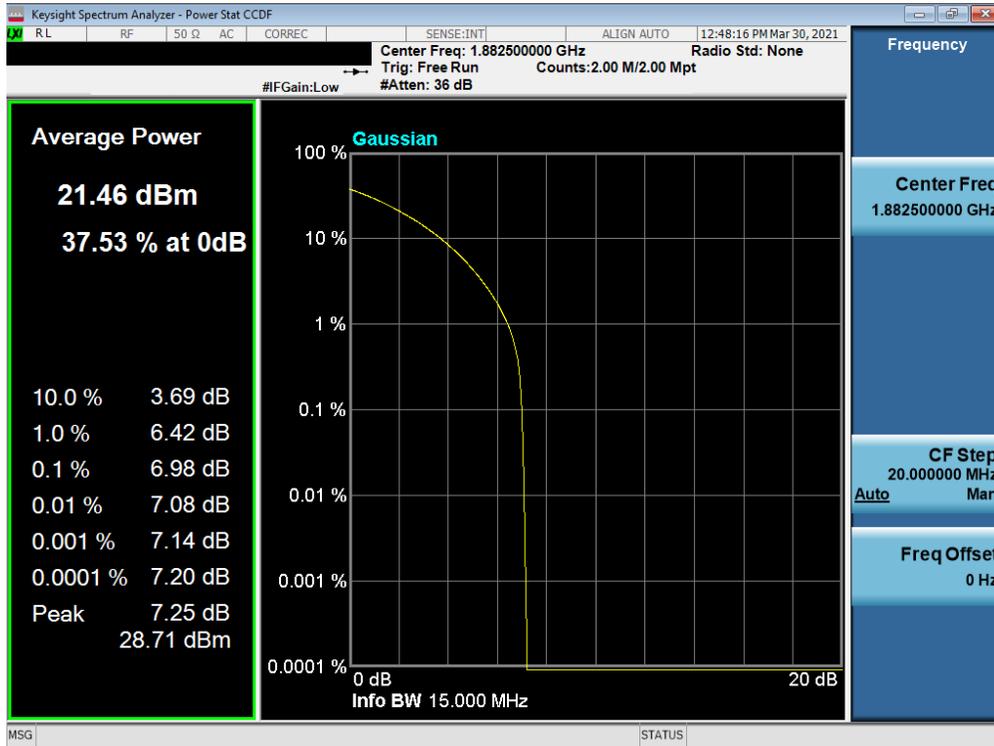


Plot 7-270. PAR Plot (NR Band n25/2 - 20.0MHz CP-OFDM 256-QAM - Full RB - Antenna E)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 158 of 197

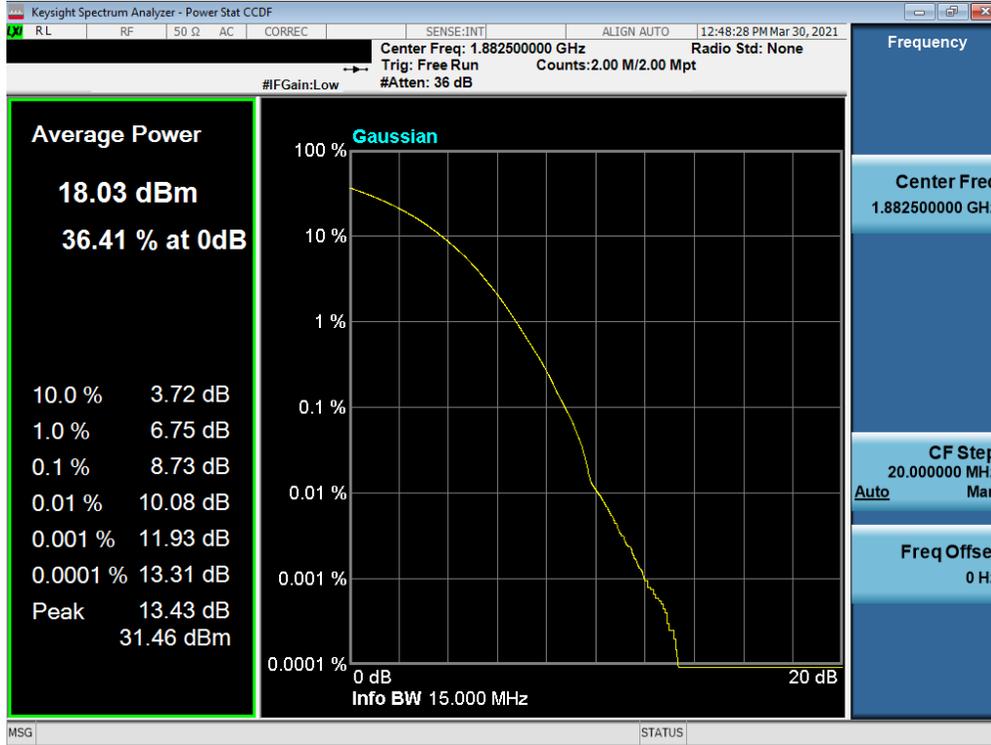


Plot 7-271. PAR Plot (NR Band n25/2 - 15.0MHz DFT-s-OFDM BPSK - Full RB - Antenna E)

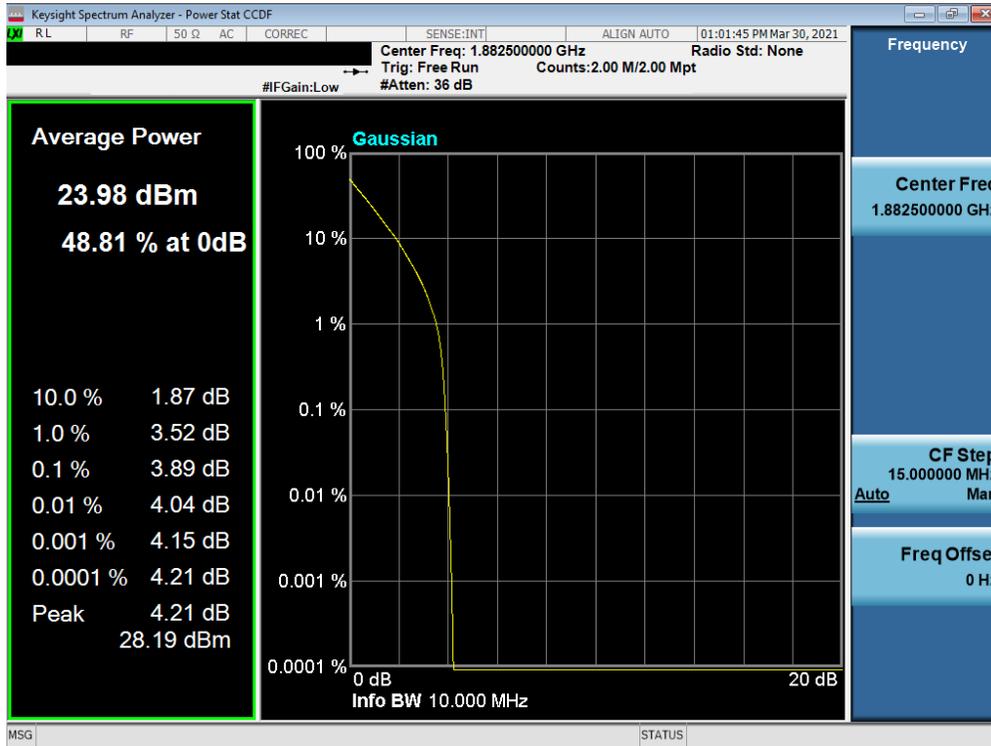


Plot 7-272. PAR Plot (NR Band n25/2 - 15.0MHz CP-OFDM QPSK - Full RB - Antenna E)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 159 of 197

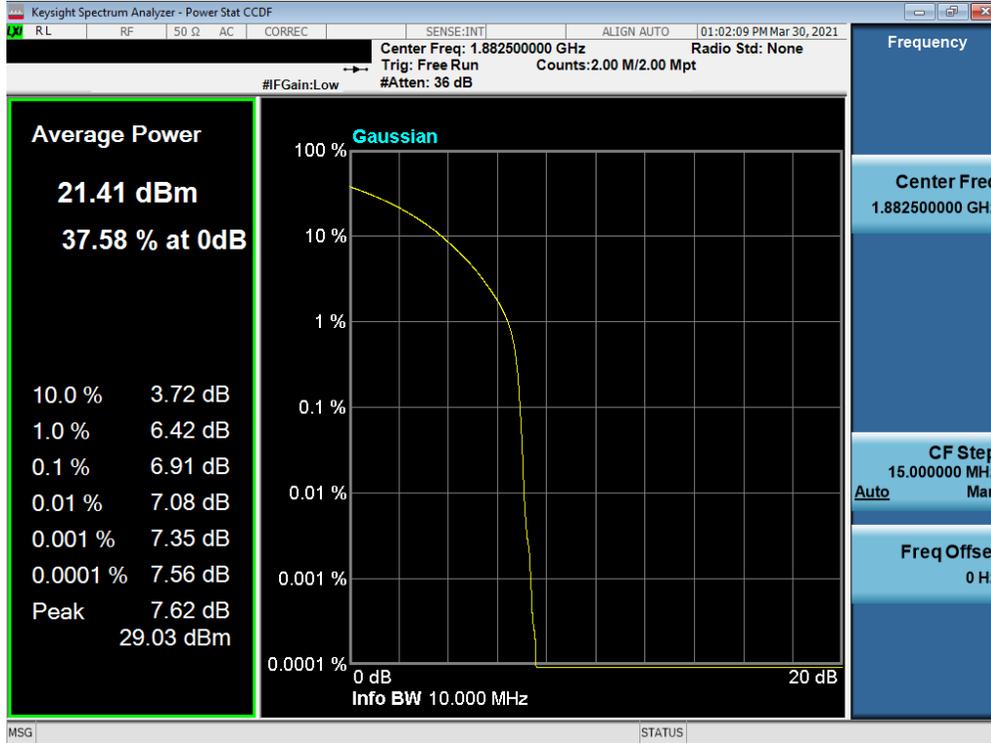


Plot 7-273. PAR Plot (NR Band n25/2 - 15.0MHz CP-OFDM 256-QAM - Full RB - Antenna E)

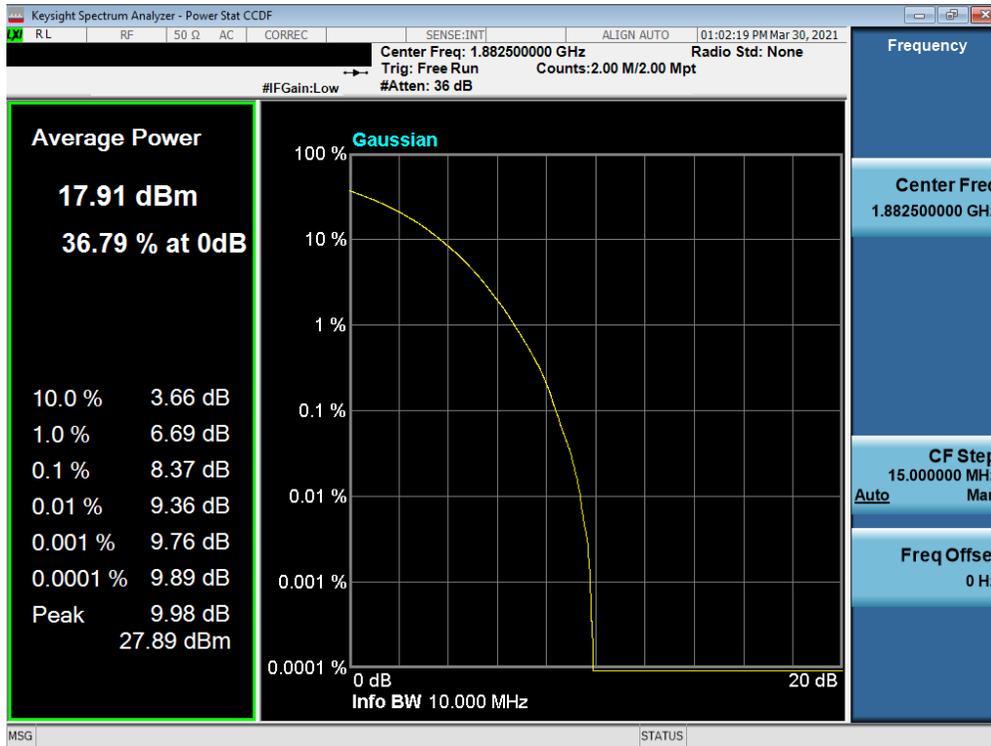


Plot 7-274. PAR Plot (NR Band n25/2 - 10.0MHz DFT-s-OFDM BPSK - Full RB - Antenna E)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 160 of 197

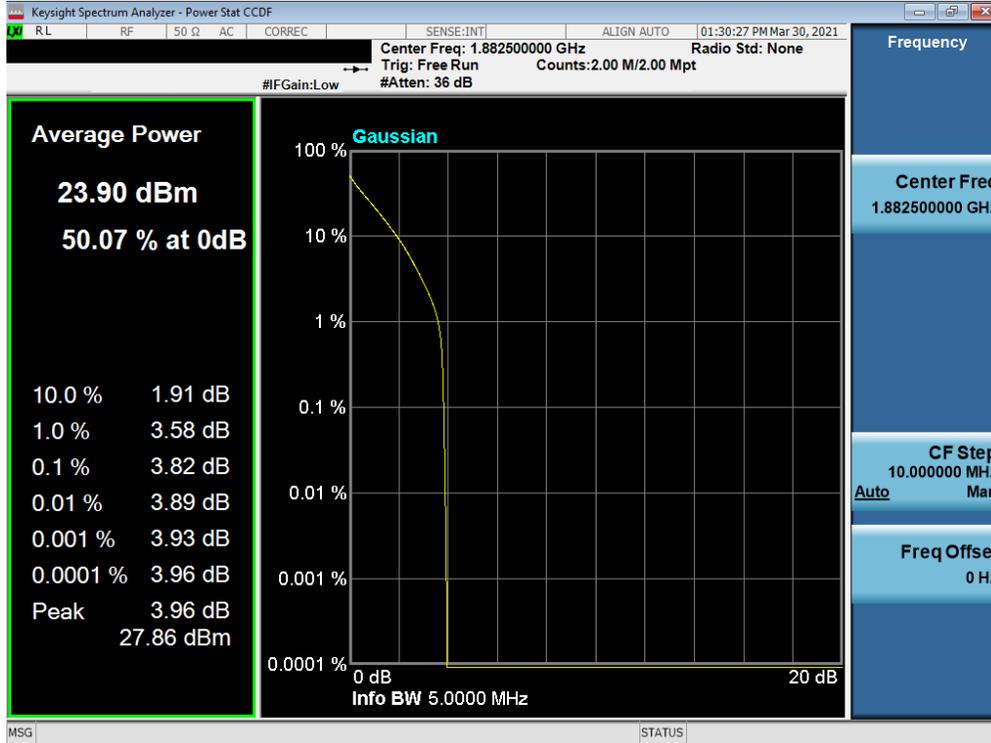


Plot 7-275. PAR Plot (NR Band n25/2 - 10.0MHz CP-OFDM QPSK - Full RB - Antenna E)

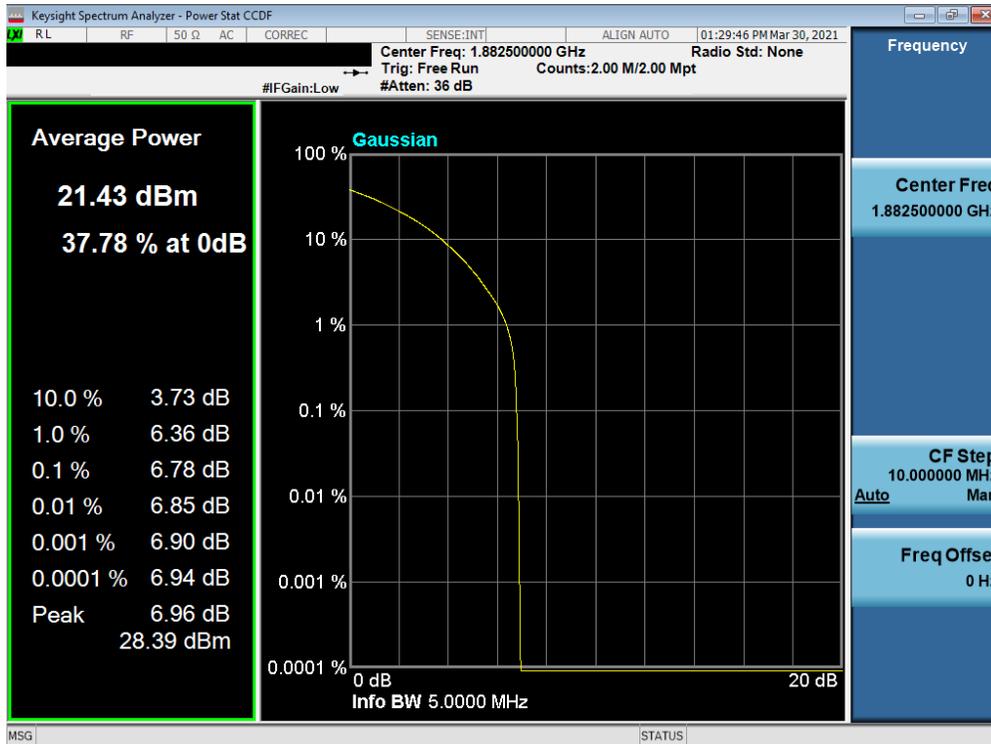


Plot 7-276. PAR Plot (NR Band n25/2 - 10.0MHz CP-OFDM 256-QAM - Full RB - Antenna E)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 161 of 197

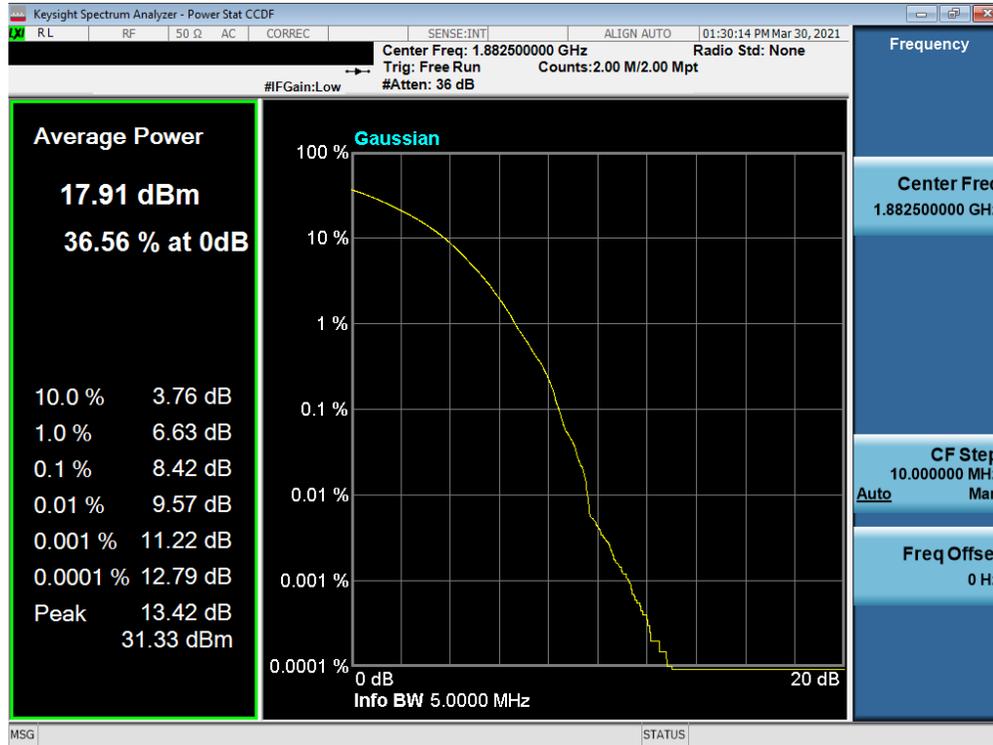


Plot 7-277. PAR Plot (NR Band n25/2 - 5.0MHz DFT-s-OFDM BPSK - Full RB - Antenna E)



Plot 7-278. PAR Plot (NR Band n25/2 - 5.0MHz CP-OFDM QPSK - Full RB - Antenna E)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	PART 24 MEASUREMENT REPORT	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 162 of 197



Plot 7-279. PAR Plot (NR Band n25/2 - 5.0MHz CP-OFDM 256-QAM - Full RB - Antenna E)

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>		Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 163 of 197

## 7.7 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 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

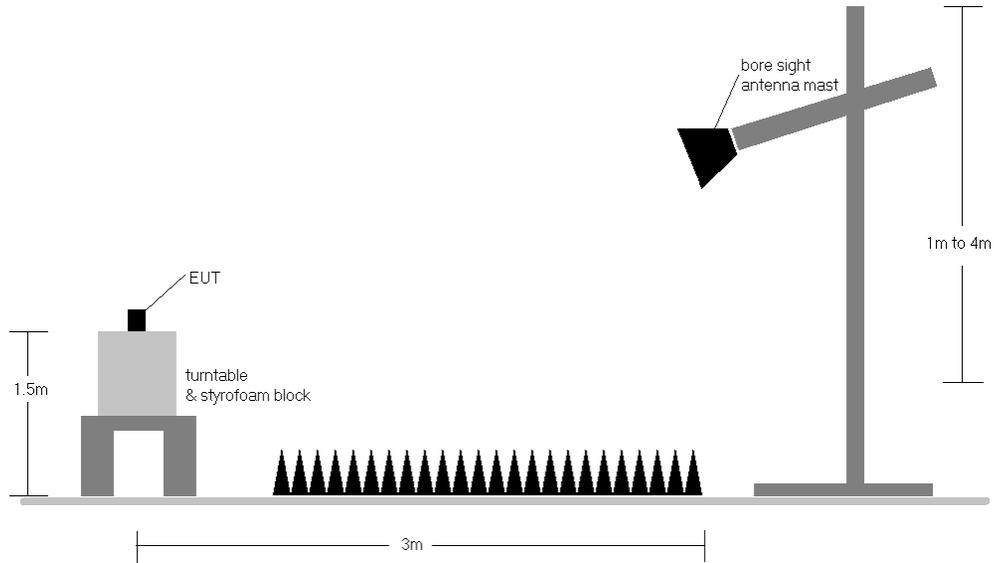
### Test Settings

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 x RBW
4. Span = 1.5 times the OBW
5. No. of sweep points  $\geq$  2 x 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

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**Test Setup**

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



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

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## Test Notes

- 1) This device employs GSM, GPRS, and EDGE capabilities. The EUT was tested under all configurations and the highest powers is reported in GPRS mode while transmitting with one slot active.
- 2) This device employs UMTS technology with WCDMA (AMR/RMC) and HSDPA capabilities. The EUT was tested under all configurations and the highest power is reported in WCDMA mode with HSDPA Inactive at 12.2 kbps RMC and TPC bits all set to "1".
- 3) This device employs CDMA technology. The device was tested under all RC and SO combinations and the worst case is reported with RC3/SO55 with "All Up" power control bits.
- 4) 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.
- 5) This unit was tested with its standard battery.
- 6) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case setup is reported in the tables below.
- 7) For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and 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.

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Frequency [MHz]	Mode	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1850.20	GPRS1900	H	125	39	18.76	9.51	28.27	0.671	33.01	-4.74
1880.00	GPRS1900	H	117	35	19.15	9.93	<b>29.08</b>	<b>0.808</b>	33.01	-3.93
1909.80	GPRS1900	H	104	22	17.23	10.28	27.51	0.564	33.01	-5.50
1880.00	GPRS1900	V	142	262	16.19	9.93	26.12	0.409	33.01	-6.89
1880.00	EDGE1900	H	117	35	14.51	9.93	<b>24.44</b>	0.278	33.01	-8.57
1880.00	Closed	H	262	353	16.72	9.93	26.65	<b>0.462</b>	33.01	-6.36
1880.00	GPRS1900 (WCP)	H	132	239	15.77	9.93	25.70	0.371	33.01	-7.31

**Table 7-3. EIRP Data (GPRS PCS)**

Frequency [MHz]	Mode	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1852.40	WCDMA1900	H	157	139	14.69	9.54	24.23	0.265	33.01	-8.78
1880.00	WCDMA1900	H	111	132	15.25	9.93	<b>25.18</b>	<b>0.329</b>	33.01	-7.83
1907.60	WCDMA1900	H	143	138	13.95	10.26	24.21	0.264	33.01	-8.80
1880.00	WCDMA1900	V	107	274	13.92	9.93	23.85	0.242	33.01	-9.16
1880.00	Closed	H	151	234	11.27	9.93	21.20	<b>0.132</b>	33.01	-11.81
1880.00	WCDMA1900 (WCP)	H	104	132	14.94	9.93	24.87	0.307	33.01	-8.14

**Table 7-4. EIRP Data (WCDMA PCS)**

Frequency [MHz]	Mode	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1851.25	CDMA1900	H	212	149	16.89	9.52	<b>26.41</b>	<b>0.438</b>	33.01	-6.60
1880.00	CDMA1900	H	224	140	16.43	9.93	26.36	0.432	33.01	-6.65
1908.75	CDMA1900	H	221	150	15.92	10.27	26.19	0.416	33.01	-6.82
1851.25	CDMA1900	V	172	278	13.66	9.52	23.18	0.208	33.01	-9.83
1851.25	Closed	H	241	333	14.79	9.52	24.31	<b>0.270</b>	33.01	-8.70
1851.25	CDMA1900 (WCP)	H	155	203	13.23	9.52	22.75	0.188	33.01	-10.26

**Table 7-5. EIRP Data (CDMA PCS)**

FCC ID: A3LSMF926U	 <b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>		Approved by: Technical Manager
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Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
20 MHz	QPSK	1860.0	H	204	156	9.64	1 / 0	13.67	23.31	0.215	33.01	-9.70
		1882.5	H	201	156	9.96	1 / 0	14.10	24.06	0.255	33.01	-8.95
		1905.0	H	102	120	10.24	1 / 0	13.83	<b>24.07</b>	0.255	33.01	-8.94
	16-QAM	1905.0	H	102	120	10.24	1 / 0	13.29	23.53	0.226	33.01	-9.48
	256-QAM	1882.5	H	201	156	9.96	1 / 0	12.00	21.96	0.157	33.01	-11.05
15 MHz	QPSK	1857.5	H	204	156	9.61	1 / 37	13.72	23.33	0.215	33.01	-9.68
		1882.5	H	201	156	9.96	1 / 74	14.17	<b>24.13</b>	0.259	33.01	-8.88
		1907.5	H	102	120	10.26	1 / 74	13.68	23.95	0.248	33.01	-9.06
	16-QAM	1907.5	H	102	120	10.26	1 / 74	13.30	23.56	0.227	33.01	-9.45
	256-QAM	1882.5	H	201	156	9.96	1 / 74	12.21	22.17	0.165	33.01	-10.84
10 MHz	QPSK	1855.0	H	204	156	9.57	1 / 25	13.48	23.06	0.202	33.01	-9.95
		1882.5	H	201	156	9.96	1 / 25	13.94	23.90	0.246	33.01	-9.11
		1910.0	H	102	120	10.28	1 / 25	13.83	<b>24.12</b>	0.258	33.01	-8.90
	16-QAM	1910.0	H	102	120	10.28	1 / 25	13.24	23.52	0.225	33.01	-9.49
	256-QAM	1882.5	H	201	156	9.96	1 / 25	11.93	22.21	0.166	33.01	-10.80
5 MHz	QPSK	1852.5	H	204	156	9.54	1 / 24	13.72	23.26	0.212	33.01	-9.76
		1882.5	H	201	156	9.96	1 / 12	13.94	23.90	0.245	33.01	-9.11
		1912.5	H	102	120	10.30	1 / 24	14.03	<b>24.33</b>	0.271	33.01	-8.68
	16-QAM	1912.5	H	102	120	10.30	1 / 24	13.72	24.03	0.253	33.01	-8.98
	256-QAM	1882.5	H	201	156	9.96	1 / 12	9.10	19.06	0.081	33.01	-13.95
3 MHz	QPSK	1851.5	H	204	156	9.52	1 / 14	13.76	23.29	0.213	33.01	-9.72
		1882.5	H	201	156	9.96	1 / 14	14.10	24.06	0.254	33.01	-8.95
		1913.5	H	102	120	10.31	1 / 7	13.85	<b>24.16</b>	0.261	33.01	-8.85
	16-QAM	1913.5	H	102	120	10.31	1 / 7	13.13	23.44	0.221	33.01	-9.57
	256-QAM	1913.5	H	102	120	10.31	1 / 7	12.18	22.49	0.177	33.01	-10.52
1.4 MHz	QPSK	1850.7	H	204	156	9.51	1 / 5	13.71	23.22	0.210	33.01	-9.79
		1882.5	H	201	156	9.96	1 / 5	13.99	<b>23.96</b>	0.249	33.01	-9.05
		1914.3	H	102	120	10.32	1 / 0	13.62	23.94	0.248	33.01	-9.07
	16-QAM	1914.3	H	102	120	10.32	1 / 0	13.05	23.37	0.217	33.01	-9.64
	256-QAM	1914.3	H	102	120	10.32	1 / 0	12.31	22.63	0.183	33.01	-10.38
5 MHz	Opposite Pol.	1905.0	V	100	274	10.24	1 / 24	11.68	21.92	0.156	33.01	-11.09
	Closed	1905.0	H	100	274	10.24	1 / 24	11.88	22.12	0.163	33.01	-10.89
	WCP	1905.0	V	111	334	10.24	1 / 0	12.51	22.75	0.189	33.01	-10.26

Table 7-6. EIRP Data (LTE Band 25/2)

FCC ID: A3LSMF926U	 PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]	
40 MHz	π/2 BPSK	1870.0	H	106	317	9.79	1 / 214	12.60	22.39	0.173	33.01	-10.62	
		1882.5	H	157	316	9.96	1 / 108	13.31	23.27	0.212	33.01	-9.74	
		1895.0	H	103	310	10.14	1 / 1	11.99	22.13	0.163	33.01	-10.89	
	QPSK	1870.0	H	106	317	9.79	1 / 214	12.56	22.35	0.172	33.01	-10.66	
		1882.5	H	157	316	9.96	1 / 108	13.35	23.31	0.214	33.01	-9.70	
		1895.0	H	103	310	10.14	1 / 1	11.83	21.97	0.157	33.01	-11.05	
		16-QAM	1882.5	H	157	316	9.96	1 / 108	12.79	22.75	0.188	33.01	-10.26
		64-QAM	1882.5	H	157	316	9.96	1 / 108	11.09	21.05	0.127	33.01	-11.96
		256-QAM	1882.5	H	157	316	9.96	1 / 108	9.51	19.47	0.089	33.01	-13.54
30 MHz	π/2 BPSK	1865.0	H	106	317	9.72	1 / 158	12.55	22.27	0.169	33.01	-10.74	
		1882.5	H	157	316	9.96	1 / 158	13.37	23.33	0.215	33.01	-9.68	
		1900.0	H	103	310	10.20	1 / 158	12.32	22.53	0.179	33.01	-10.48	
	QPSK	1865.0	H	106	317	9.72	1 / 158	12.77	22.49	0.177	33.01	-10.52	
		1882.5	H	157	316	9.96	1 / 158	13.37	23.33	0.215	33.01	-9.68	
		1900.0	H	103	310	10.20	1 / 158	11.52	21.73	0.149	33.01	-11.28	
	16-QAM	1882.5	H	157	316	9.96	1 / 158	12.74	22.70	0.186	33.01	-10.31	
	64-QAM	1882.5	H	157	316	9.96	1 / 158	11.10	21.06	0.128	33.01	-11.95	
	256-QAM	1882.5	H	157	316	9.96	1 / 158	9.00	18.96	0.079	33.01	-14.05	
25 MHz	π/2 BPSK	1862.5	H	106	317	9.68	1 / 1	12.76	22.44	0.176	33.01	-10.57	
		1882.5	H	157	316	9.96	1 / 1	13.23	23.19	0.209	33.01	-9.82	
		1902.5	H	103	310	10.22	1 / 1	12.06	22.28	0.169	33.01	-10.73	
	QPSK	1862.5	H	106	317	9.68	1 / 1	12.73	22.41	0.174	33.01	-10.60	
		1882.5	H	157	316	9.96	1 / 1	13.28	23.24	0.211	33.01	-9.77	
		1902.5	H	103	310	10.22	1 / 1	11.45	21.67	0.147	33.01	-11.34	
	16-QAM	1882.5	H	157	316	9.96	1 / 1	12.55	22.51	0.178	33.01	-10.50	
	64-QAM	1882.5	H	157	316	9.96	1 / 1	11.03	20.99	0.126	33.01	-12.02	
	256-QAM	1882.5	H	157	316	9.96	1 / 1	9.61	19.57	0.091	33.01	-13.44	
20 MHz	π/2 BPSK	1860.0	H	106	317	9.64	1 / 1	11.99	21.63	0.146	33.01	-11.38	
		1882.5	H	157	316	9.96	1 / 1	12.77	22.73	0.188	33.01	-10.28	
		1905.0	H	103	310	10.24	1 / 53	11.14	21.38	0.137	33.01	-11.63	
	QPSK	1860.0	H	106	317	9.64	1 / 104	12.38	22.03	0.160	33.01	-10.98	
		1882.5	H	157	316	9.96	1 / 1	12.98	22.94	0.197	33.01	-10.07	
		1905.0	H	103	310	10.24	1 / 53	11.09	21.33	0.136	33.01	-11.68	
	16-QAM	1882.5	H	157	316	9.96	1 / 1	12.39	22.35	0.172	33.01	-10.66	
	64-QAM	1882.5	H	157	316	9.96	1 / 1	10.69	20.66	0.116	33.01	-12.36	
	256-QAM	1882.5	H	157	316	9.96	1 / 1	9.24	19.21	0.083	33.01	-13.80	
15 MHz	π/2 BPSK	1857.5	H	106	317	9.61	1 / 39	12.12	21.73	0.149	33.01	-11.28	
		1882.5	H	157	316	9.96	1 / 1	12.74	22.70	0.186	33.01	-10.31	
		1907.5	H	103	310	10.26	1 / 39	11.34	21.60	0.145	33.01	-11.41	
	QPSK	1857.5	H	106	317	9.61	1 / 39	12.33	21.94	0.156	33.01	-11.07	
		1882.5	H	157	316	9.96	1 / 1	12.84	22.80	0.191	33.01	-10.21	
		1907.5	H	103	310	10.26	1 / 39	11.21	21.48	0.140	33.01	-11.53	
	16-QAM	1882.5	H	157	316	9.96	1 / 1	12.18	22.15	0.164	33.01	-10.86	
	64-QAM	1882.5	H	157	316	9.96	1 / 1	10.28	20.24	0.106	33.01	-12.77	
	256-QAM	1882.5	H	157	316	9.96	1 / 1	9.41	19.37	0.086	33.01	-13.64	
10 MHz	π/2 BPSK	1855.0	H	106	317	9.57	1 / 1	11.76	21.34	0.136	33.01	-11.67	
		1882.5	H	157	316	9.96	1 / 50	12.60	22.57	0.181	33.01	-10.44	
		1910.0	H	103	310	10.28	1 / 26	10.96	21.24	0.133	33.01	-11.77	
	QPSK	1855.0	H	106	317	9.57	1 / 1	12.09	21.67	0.147	33.01	-11.34	
		1882.5	H	157	316	9.96	1 / 50	12.92	22.88	0.194	33.01	-10.13	
		1910.0	H	103	310	10.28	1 / 26	10.66	20.94	0.124	33.01	-12.07	
	16-QAM	1882.5	H	157	316	9.96	1 / 50	12.27	22.23	0.167	33.01	-10.78	
	64-QAM	1882.5	H	157	316	9.96	1 / 50	10.29	20.25	0.106	33.01	-12.76	
	256-QAM	1882.5	H	157	316	9.96	1 / 50	9.57	19.54	0.090	33.01	-13.47	
5 MHz	π/2 BPSK	1852.5	H	106	317	9.54	1 / 23	12.00	21.54	0.142	33.01	-11.47	
		1882.5	H	157	316	9.96	1 / 23	12.07	22.03	0.160	33.01	-10.98	
		1912.5	H	103	310	10.30	1 / 12	11.06	21.36	0.137	33.01	-11.65	
	QPSK	1852.5	H	106	317	9.54	1 / 23	12.06	21.60	0.145	33.01	-11.41	
		1882.5	H	157	316	9.96	1 / 23	12.60	22.56	0.180	33.01	-10.45	
		1912.5	H	103	310	10.30	1 / 12	10.84	21.15	0.130	33.01	-11.86	
	16-QAM	1882.5	H	157	316	9.96	1 / 23	11.58	21.55	0.143	33.01	-11.46	
	64-QAM	1882.5	H	157	316	9.96	1 / 23	10.21	20.17	0.104	33.01	-12.84	
	256-QAM	1882.5	H	157	316	9.96	1 / 23	9.18	19.14	0.082	33.01	-13.87	
30 MHz	QPSK (CP-OFDM)	1882.5	H	157	316	9.96	1 / 158	11.58	21.54	0.143	33.01	-11.47	
	QPSK (Opposite Pol.)	1882.5	V	216	177	9.96	1 / 158	10.20	20.16	0.104	33.01	-12.85	
	QPSK (Closed)	1882.5	H	169	274	9.96	1 / 158	11.38	21.34	0.136	33.01	-11.67	
	QPSK (WCP)	1882.5	V	214	115	9.96	1 / 158	12.10	22.06	0.161	33.01	-10.95	

Table 7-7. EIRP Data (NR Band n25/2 – Antenna B)

FCC ID: A3LSMF926U	 PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
40 MHz	π/2 BPSK	1870.0	H	150	213	9.79	1 / 108	12.24	22.03	0.159	33.01	-10.98
		1882.5	H	140	224	9.96	1 / 108	12.36	22.32	0.171	33.01	-10.69
		1895.0	H	138	232	10.14	1 / 108	13.31	<b>23.45</b>	0.221	33.01	-9.57
	QPSK	1870.0	H	150	213	9.79	1 / 108	12.24	22.03	0.159	33.01	-10.98
		1882.5	H	140	224	9.96	1 / 108	12.35	22.31	0.170	33.01	-10.70
		1895.0	H	138	232	10.14	1 / 108	13.07	23.21	0.209	33.01	-9.81
		16-QAM	1895.0	H	138	232	10.14	1 / 108	12.32	22.46	0.176	33.01
64-QAM	1895.0	H	138	232	10.14	1 / 108	10.49	20.63	0.115	33.01	-12.39	
256-QAM	1895.0	H	138	232	10.14	1 / 108	8.94	19.08	0.081	33.01	-13.94	
30 MHz	π/2 BPSK	1865.0	H	150	213	9.72	1 / 158	12.38	22.10	0.162	33.01	-10.91
		1882.5	H	140	224	9.96	1 / 158	12.49	22.45	0.176	33.01	-10.56
		1900.0	H	138	232	10.20	1 / 1	13.41	<b>23.61</b>	0.230	33.01	-9.40
	QPSK	1865.0	H	150	213	9.72	1 / 158	12.49	22.20	0.166	33.01	-10.81
		1882.5	H	140	224	9.96	1 / 158	12.58	22.54	0.179	33.01	-10.47
		1900.0	H	138	232	10.20	1 / 1	13.20	23.41	0.219	33.01	-9.60
		16-QAM	1900.0	H	138	232	10.20	1 / 1	12.45	22.66	0.184	33.01
64-QAM	1900.0	H	138	232	10.20	1 / 1	10.38	20.59	0.115	33.01	-12.42	
256-QAM	1900.0	H	138	232	10.20	1 / 1	9.32	19.52	0.090	33.01	-13.49	
25 MHz	π/2 BPSK	1862.5	H	150	213	9.68	1 / 1	12.56	22.24	0.167	33.01	-10.77
		1882.5	H	140	224	9.96	1 / 131	12.68	22.64	0.184	33.01	-10.37
		1902.5	H	138	232	10.22	1 / 1	13.37	<b>23.59</b>	0.229	33.01	-9.42
	QPSK	1862.5	H	150	213	9.68	1 / 1	12.36	22.04	0.160	33.01	-10.97
		1882.5	H	140	224	9.96	1 / 131	12.76	22.72	0.187	33.01	-10.29
		1902.5	H	138	232	10.22	1 / 1	13.23	23.45	0.221	33.01	-9.56
		16-QAM	1902.5	H	138	232	10.22	1 / 1	12.23	22.45	0.176	33.01
64-QAM	1902.5	H	138	232	10.22	1 / 1	10.52	20.75	0.119	33.01	-12.26	
256-QAM	1902.5	H	138	232	10.22	1 / 1	9.19	19.41	0.087	33.01	-13.60	
20 MHz	π/2 BPSK	1860.0	H	150	213	9.64	1 / 104	12.27	21.92	0.156	33.01	-11.09
		1882.5	H	140	224	9.96	1 / 1	12.50	22.46	0.176	33.01	-10.55
		1905.0	H	138	232	10.24	1 / 53	13.09	<b>23.34</b>	0.216	33.01	-9.68
	QPSK	1860.0	H	150	213	9.64	1 / 104	12.41	22.06	0.161	33.01	-10.95
		1882.5	H	140	224	9.96	1 / 1	12.66	22.62	0.183	33.01	-10.39
		1905.0	H	138	232	10.24	1 / 1	12.93	23.17	0.207	33.01	-9.84
		16-QAM	1905.0	H	138	232	10.24	1 / 1	11.83	22.07	0.161	33.01
64-QAM	1905.0	H	138	232	10.24	1 / 1	10.61	20.85	0.122	33.01	-12.16	
256-QAM	1905.0	H	138	232	10.24	1 / 1	9.43	19.67	0.093	33.01	-13.34	
15 MHz	π/2 BPSK	1857.5	H	150	213	9.61	1 / 39	12.43	22.04	0.160	33.01	-10.97
		1882.5	H	140	224	9.96	1 / 77	12.39	22.35	0.172	33.01	-10.66
		1907.5	H	138	232	10.26	1 / 1	13.11	<b>23.38</b>	0.218	33.01	-9.63
	QPSK	1857.5	H	150	213	9.61	1 / 39	12.38	21.99	0.158	33.01	-11.02
		1882.5	H	140	224	9.96	1 / 77	12.61	22.57	0.181	33.01	-10.44
		1907.5	H	138	232	10.26	1 / 1	13.05	23.31	0.214	33.01	-9.70
		16-QAM	1907.5	H	138	232	10.26	1 / 1	11.80	22.06	0.161	33.01
64-QAM	1882.5	H	140	224	9.96	1 / 77	10.81	20.77	0.119	33.01	-12.24	
256-QAM	1907.5	H	138	232	10.26	1 / 1	8.92	19.18	0.083	33.01	-13.83	
10 MHz	π/2 BPSK	1855.0	H	150	213	9.57	1 / 1	12.34	21.92	0.156	33.01	-11.09
		1882.5	H	140	224	9.96	1 / 1	12.18	22.14	0.164	33.01	-10.87
		1910.0	H	138	232	10.28	1 / 26	12.99	<b>23.27</b>	0.212	33.01	-9.74
	QPSK	1855.0	H	150	213	9.57	1 / 1	12.31	21.88	0.154	33.01	-11.13
		1882.5	H	140	224	9.96	1 / 1	12.53	22.49	0.177	33.01	-10.52
		1910.0	H	138	232	10.28	1 / 26	12.78	23.06	0.202	33.01	-9.95
		16-QAM	1910.0	H	138	232	10.28	1 / 26	11.66	21.94	0.156	33.01
64-QAM	1855.0	H	150	213	9.57	1 / 1	11.66	21.23	0.133	33.01	-11.78	
256-QAM	1910.0	H	138	232	10.28	1 / 26	8.88	19.16	0.082	33.01	-13.85	
5 MHz	π/2 BPSK	1852.5	H	150	213	9.54	1 / 23	12.31	21.85	0.153	33.01	-11.16
		1882.5	H	140	224	9.96	1 / 23	12.43	22.39	0.173	33.01	-10.62
		1912.5	H	138	232	10.30	1 / 1	13.09	<b>23.39</b>	0.218	33.01	-9.62
	QPSK	1852.5	H	150	213	9.54	1 / 23	12.35	21.88	0.154	33.01	-11.13
		1882.5	H	140	224	9.96	1 / 23	12.63	22.59	0.182	33.01	-10.42
		1912.5	H	138	232	10.30	1 / 1	12.51	22.81	0.191	33.01	-10.20
		16-QAM	1912.5	H	138	232	10.30	1 / 1	11.28	21.58	0.144	33.01
64-QAM	1912.5	H	138	232	10.30	1 / 1	10.69	20.99	0.126	33.01	-12.02	
256-QAM	1912.5	H	138	232	10.30	1 / 1	8.81	19.11	0.082	33.01	-13.90	
40 MHz	QPSK (CP-OFDM)	1895.0	H	232	10	10.14	1 / 108	11.68	21.82	0.152	33.01	-11.20
	QPSK (Opposite Pol.)	1895.0	V	141	222	10.14	1 / 108	11.80	21.94	0.156	33.01	-11.08
	QPSK (Closed)	1895.0	H	232	111	10.14	1 / 108	10.69	20.83	0.121	33.01	-12.19
	QPSK (WCP)	1895.0	V	162	214	10.14	1 / 108	8.68	18.81	0.076	33.01	-14.20

Table 7-8. EIRP Data (NR Band n25/2 – Antenna E)

FCC ID: A3LSMF926U	 PCTEST Proud to be part of element	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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## 7.8 Radiated Spurious Emissions Measurements

### Test Overview

Radiated spurious emissions measurements are performed using the field strength conversion method described in KDB 971168 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using horizontally and vertically 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 peak measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

### Test Procedures Used

KDB 971168 D01 v03r01 – Section 5.8

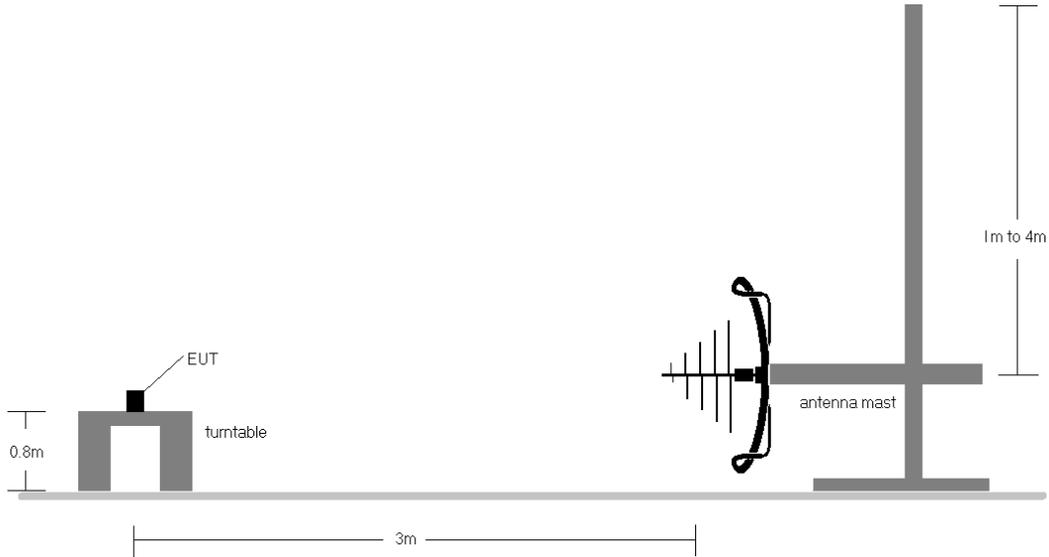
### Test Settings

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

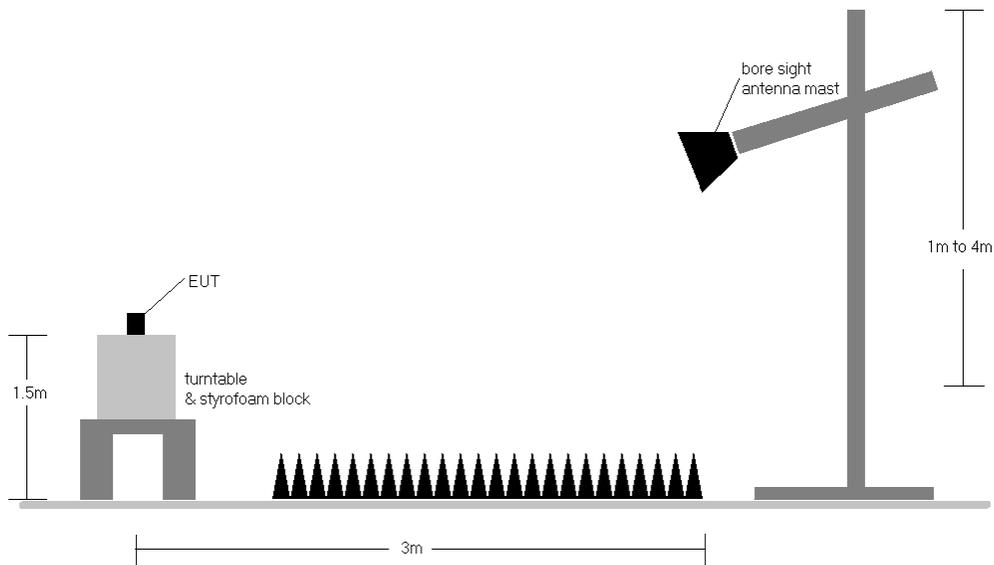
FCC ID: A3LSMF926U	 <b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>		<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1M2104020031-03.A3L	<b>Test Dates:</b> 03/26- 06/07/2021	<b>EUT Type:</b> Portable Handset		Page 171 of 197

**Test Setup**

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



**Figure 7-7. Test Instrument & Measurement Setup < 1GHz**



**Figure 7-8. Test Instrument & Measurement Setup >1 GHz**

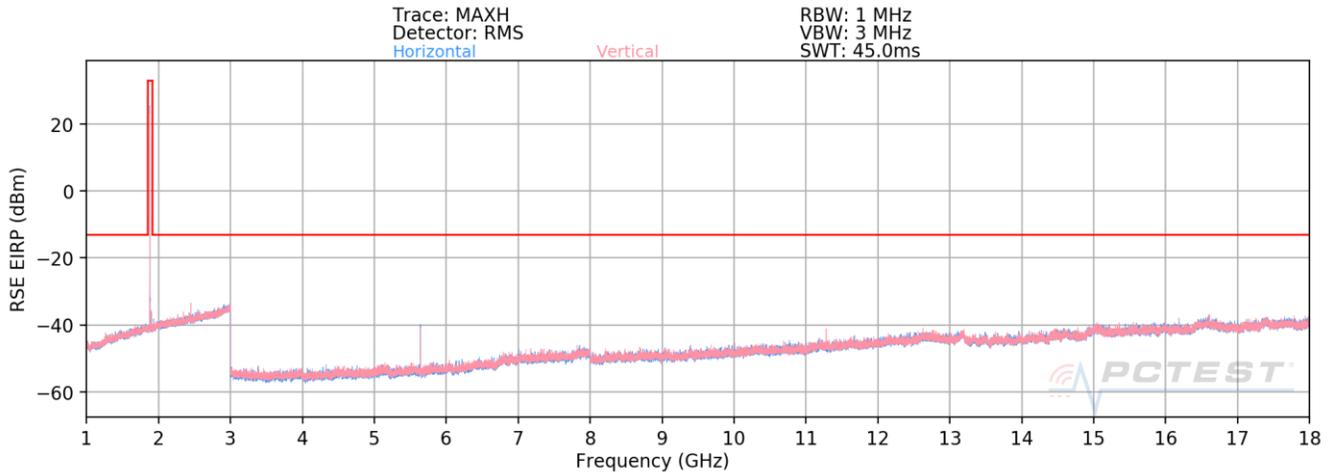
FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>		<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1M2104020031-03.A3L	<b>Test Dates:</b> 03/26- 06/07/2021	<b>EUT Type:</b> Portable Handset	Page 172 of 197	

## Test Notes

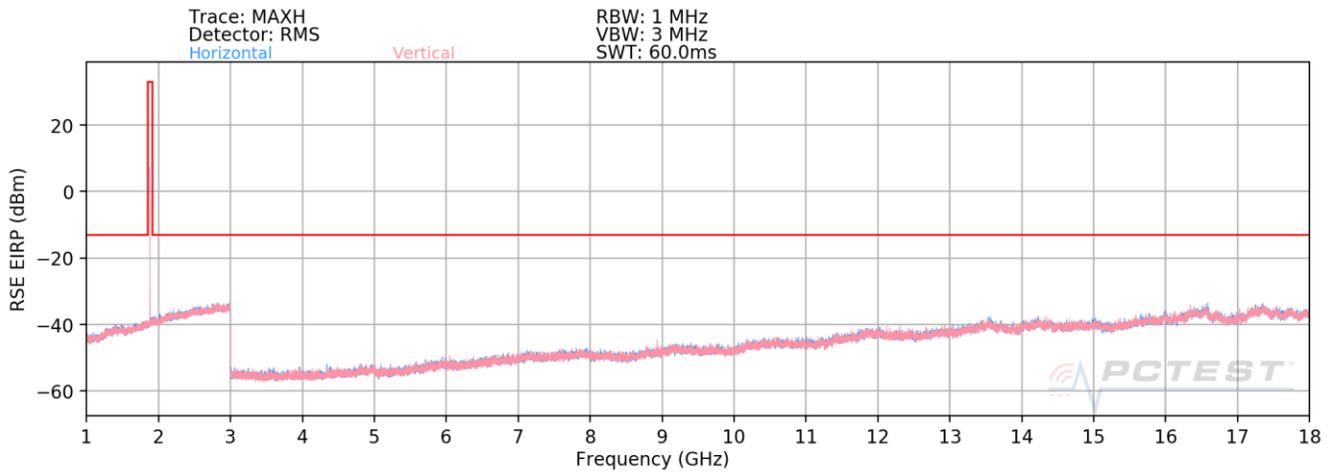
- 1) Field strengths are calculated using the Measurement quantity conversions in KDB 971168 Section 5.8.4.
  - b)  $E(\text{dB}\mu\text{V}/\text{m}) = \text{Measured amplitude level (dBm)} + 107 + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$
  - d)  $\text{EIRP (dBm)} = E(\text{dB}\mu\text{V}/\text{m}) + 20\log D - 104.8$ ; where D is the measurement distance in meters.
- 2) This device employs GSM, GPRS, and EDGE capabilities. The EUT was tested under all configurations and the highest powers is reported in GPRS mode while transmitting with one slot active.
- 3) This device employs UMTS technology with WCDMA (AMR/RMC) and HSDPA capabilities. The EUT was tested under all configurations and the highest power is reported in WCDMA mode with HSDPA Inactive at 12.2 kbps RMC and TPC bits all set to "1".
- 4) For CDMA, this device was tested under all RC and SO combinations and the worst case is reported with RC3/SO55 with "All Up" power control bits.
- 5) 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.
- 6) This unit was tested with its standard battery.
- 7) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case setup is reported in the tables below.
- 8) The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.
- 9) 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.
- 10) The "-" shown in the following RSE tables are used to denote a noise floor measurement.
- 11) For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and 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.
- 12) Spurious emissions shown in this section are measured while operating in EN-DC mode with Sub 6GHz NR carrier as well as an LTE carrier (anchor). Spurious emissions from the NR carrier device, is subject to the rules under which the NR carrier operates. Spurious emission caused by the LTE carrier must meet the requirements of the rules under which the LTE carrier operates.

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## GSM/GPRS PCS



**Plot 7-280. Radiated Spurious Plot (GPRS PCS) – Open**



**Plot 7-281. Radiated Spurious Plot (GPRS PCS) – Closed**

<b>Mode:</b>	GPRS 1 Tx Slot
<b>Channel:</b>	512
<b>Frequency (MHz):</b>	1850.2

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3700.4	H	210	123	-76.03	8.01	38.98	-56.27	-13.00	-43.27
5550.6	H	183	219	-63.64	11.89	55.25	-40.01	-13.00	-27.01
7400.8	H	-	-	-80.59	15.81	42.22	-53.04	-13.00	-40.04
9251.0	H	150	17	-76.42	17.85	48.43	-46.83	-13.00	-33.83
11101.2	H	-	-	-81.18	21.29	47.11	-48.15	-13.00	-35.15
12951.4	H	-	-	-81.39	25.15	50.76	-44.49	-13.00	-31.49

**Table 7-9. Radiated Spurious Data (GPRS PCS – Low Channel)**

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
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Mode:	GPRS 1 Tx Slot
Channel:	661
Frequency (MHz):	1880

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3760.0	H	150	186	-75.48	8.22	39.74	-55.51	-13.00	-42.51
5640.0	H	206	219	-58.58	11.47	59.89	-35.37	-13.00	-22.37
7520.0	H	212	335	-76.62	15.85	46.23	-49.03	-13.00	-36.03
9400.0	H	198	18	-78.83	18.62	46.79	-48.46	-13.00	-35.46
11280.0	H	180	333	-75.22	21.56	53.34	-41.92	-13.00	-28.92
13160.0	H	162	2	-80.72	25.25	51.53	-43.73	-13.00	-30.73
15040.0	H	-	-	-82.55	28.08	52.53	-42.73	-13.00	-29.73
16920.0	H	-	-	-83.20	29.92	53.72	-41.54	-13.00	-28.54

Table 7-10. Radiated Spurious Data (GPRS PCS – Mid Channel)

Mode:	GPRS 1 Tx Slot
Channel:	810
Frequency (MHz):	1909.8

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3819.6	H	232	324	-75.53	8.35	39.82	-55.44	-13.00	-42.44
5729.4	H	191	216	-63.12	12.07	55.95	-39.31	-13.00	-26.31
7639.2	H	-	-	-80.79	16.50	42.71	-52.54	-13.00	-39.54
9549.0	H	187	17	-75.49	18.41	49.92	-45.33	-13.00	-32.33
11458.8	H	-	-	-82.37	21.93	46.56	-48.70	-13.00	-35.70
13368.6	H	-	-	-82.76	25.39	49.63	-45.63	-13.00	-32.63

Table 7-11. Radiated Spurious Data (GPRS PCS – High Channel)

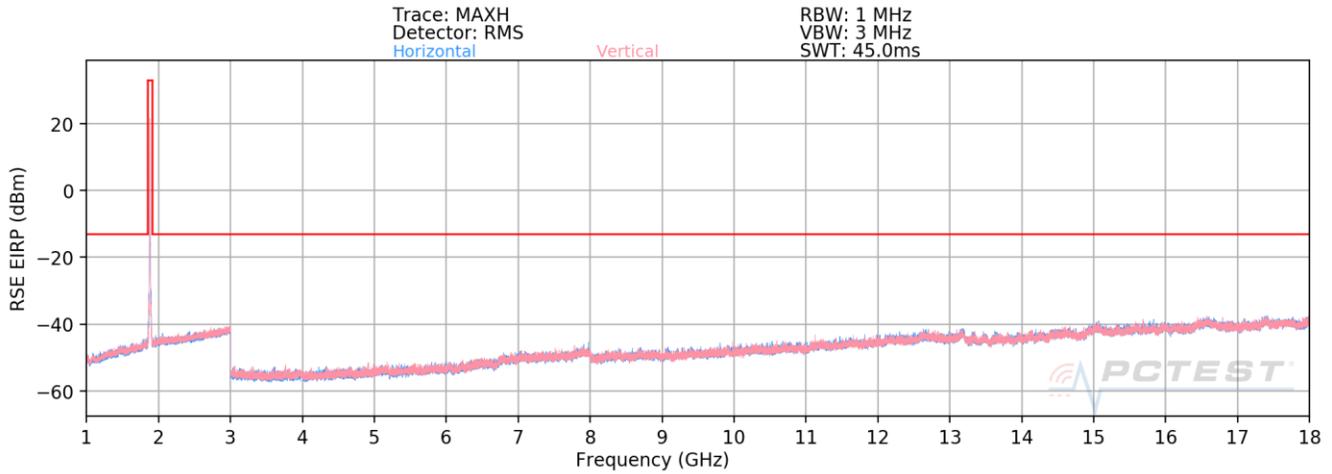
Mode:	GPRS 1 Tx Slot
Channel:	661
Frequency (MHz):	1880
Detector / Trace Mode:	RMS / Max Hold
RBW / VBW:	1MHz / 3MHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3760.0	H	332	221	-69.42	2.86	40.44	-54.82	-13.00	-41.82
5640.0	H	192	23	-58.85	5.65	53.80	-41.46	-13.00	-28.46
7520.0	H	151	6	-75.64	8.87	40.23	-55.03	-13.00	-42.03
9400.0	H	165	281	-73.87	11.83	44.96	-50.30	-13.00	-37.30
11280.0	H	155	327	-74.48	12.67	45.19	-50.06	-13.00	-37.06
13160.0	H	111	25	-78.74	14.23	42.49	-52.77	-13.00	-39.77
15040.0	H	-	-	-79.86	15.61	42.75	-52.50	-13.00	-39.50
16920.0	H	-	-	-80.24	16.35	43.11	-52.15	-13.00	-39.15

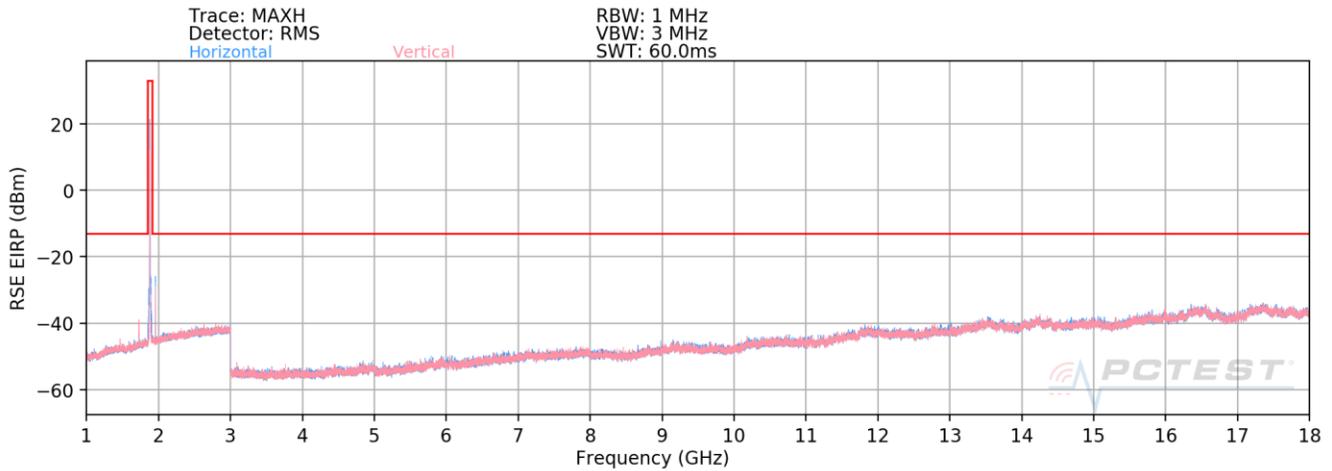
Table 7-12. Radiated Spurious Data (GPRS PCS – Mid Channel) with WCP

FCC ID: A3LSMF926U	 PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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# WCDMA PCS



**Plot 7-282. Radiated Spurious Plot (WCDMA PCS) – Open**



**Plot 7-283. Radiated Spurious Plot (WCDMA PCS) - Closed**

Mode:	WCDMA RMC
Channel:	9262
Frequency (MHz):	1852.4

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3704.8	V	102	101	-75.77	5.21	36.44	-58.82	-13.00	-45.82
5557.2	V	218	291	-77.06	8.68	38.62	-56.63	-13.00	-43.63
7409.6	V	-	-	-80.57	12.69	39.12	-56.13	-13.00	-43.13
9262.0	V	-	-	-81.93	14.17	39.24	-56.02	-13.00	-43.02

**Table 7-13. Radiated Spurious Data (WCDMA PCS – Low Channel)**

FCC ID: A3LSMF926U	 PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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Mode:	WCDMA RMC
Channel:	9400
Frequency (MHz):	1880

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3760.0	V	101	85	-75.07	6.10	38.03	-57.22	-13.00	-44.22
5640.0	V	104	166	-78.80	8.18	36.38	-58.87	-13.00	-45.87
7520.0	V	-	-	-80.62	12.75	39.13	-56.13	-13.00	-43.13
9400.0	V	-	-	-82.14	15.43	40.29	-54.96	-13.00	-41.96

Table 7-14. Radiated Spurious Data (WCDMA PCS – Mid Channel )

Mode:	WCDMA RMC
Channel:	9538
Frequency (MHz):	1907.6

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3815.2	V	102	228	-76.69	6.03	36.34	-58.92	-13.00	-45.92
5722.8	V	198	187	-78.92	8.44	36.52	-58.74	-13.00	-45.74
7630.4	V	-	-	-80.54	12.85	39.31	-55.95	-13.00	-42.95
9538.0	V	-	-	-81.73	14.39	39.66	-55.59	-13.00	-42.59

Table 7-15. Radiated Spurious Data (WCDMA PCS – High Channel )

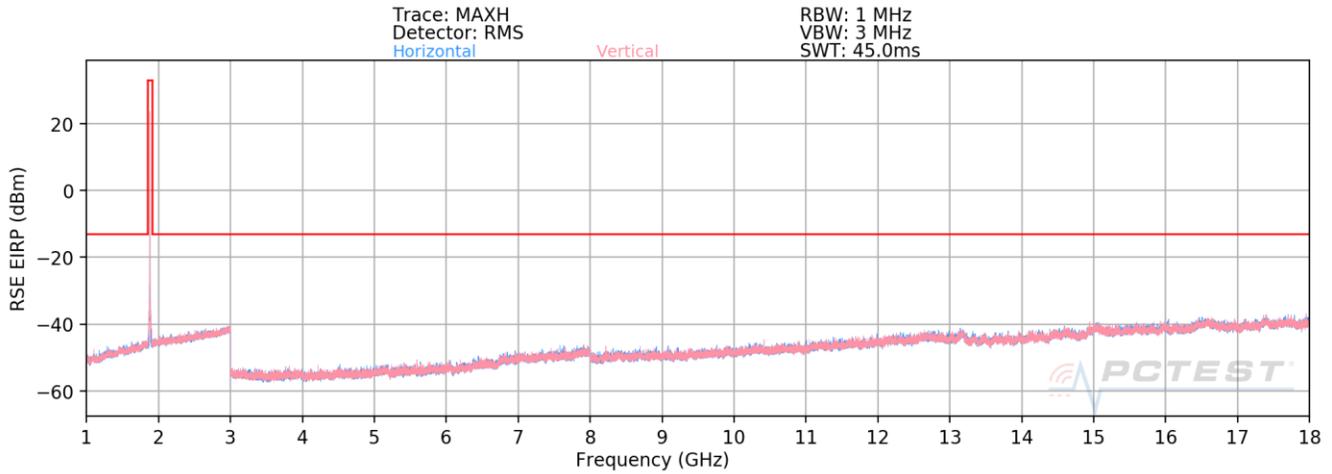
Mode:	WCDMA RMC
Channel:	9400
Frequency (MHz):	1880
Detector / Trace Mode:	RMS / Average
RBW / VBW:	1MHz / 3MHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3760.0	V	-	-	-77.20	2.86	32.66	-62.60	-13.00	-49.60
5640.0	V	-	-	-77.59	5.65	35.06	-60.20	-13.00	-47.20
7520.0	V	-	-	-78.38	8.87	37.49	-57.77	-13.00	-44.77
9400.0	V	-	-	-79.26	11.83	39.57	-55.69	-13.00	-42.69

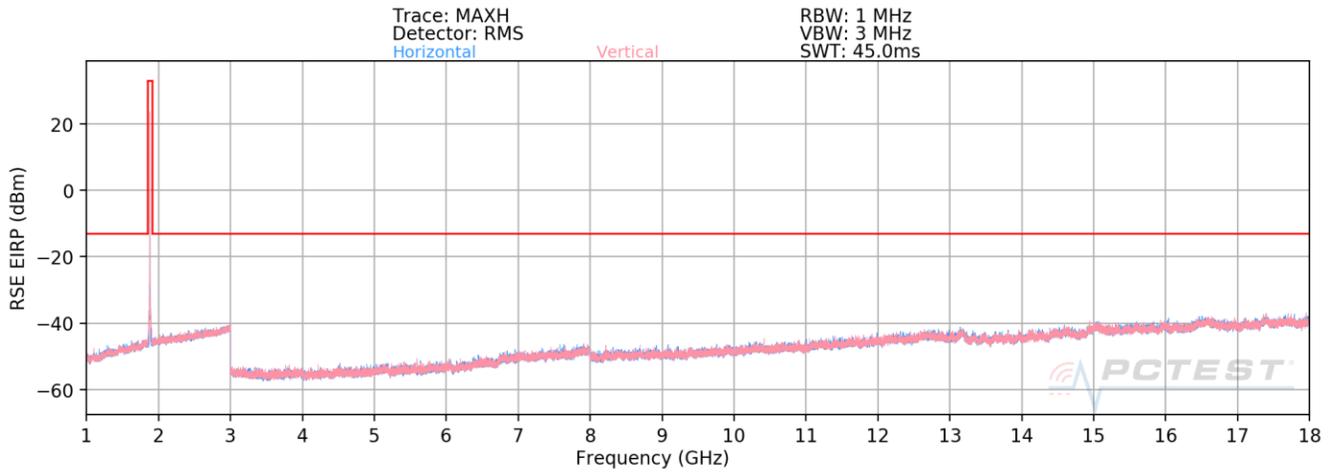
Table 7-16. Radiated Spurious Data (WCDMA PCS – Mid Channel ) with WCP

FCC ID: A3LSMF926U	 PART 24 MEASUREMENT REPORT 	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset
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# CDMA PCS



**Plot 7-284. Radiated Spurious Plot (CDMA PCS) – Open**



**Plot 7-285. Radiated Spurious Plot (CDMA PCS) – Closed**

<b>Mode:</b>	CDMA
<b>Channel:</b>	25
<b>Frequency (MHz):</b>	1851.25

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3702.50	H	246	36	-78.44	5.22	33.78	-61.48	-13.00	-48.48
5553.75	H	209	219	-76.87	8.70	38.83	-56.43	-13.00	-43.43
7405.00	H	-	-	-80.36	12.57	39.21	-56.04	-13.00	-43.04
9256.25	H	-	-	-81.79	14.26	39.47	-55.79	-13.00	-42.79

**Table 7-17. Radiated Spurious Data (CDMA PCS – Low Channel)**

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 178 of 197

Mode:	CDMA
Channel:	600
Frequency (MHz):	1880

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3760.00	H	164	150	-75.69	6.10	37.41	-57.84	-13.00	-44.84
5640.00	H	311	220	-76.61	8.18	38.57	-56.68	-13.00	-43.68
7520.00	H	-	-	-80.49	12.75	39.26	-56.00	-13.00	-43.00
9400.00	H	-	-	-82.11	15.43	40.32	-54.93	-13.00	-41.93

Table 7-18. Radiated Spurious Data (CDMA PCS – Mid Channel)

Mode:	CDMA
Channel:	1175
Frequency (MHz):	1908.75

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3817.50	H	179	150	-77.49	5.99	35.50	-59.76	-13.00	-46.76
5726.25	H	198	215	-76.45	8.51	39.06	-56.20	-13.00	-43.20
7635.00	H	-	-	-80.51	12.83	39.32	-55.94	-13.00	-42.94
9543.75	H	-	-	-81.78	14.52	39.74	-55.52	-13.00	-42.52

Table 7-19. Radiated Spurious Data (CDMA PCS – High Channel)

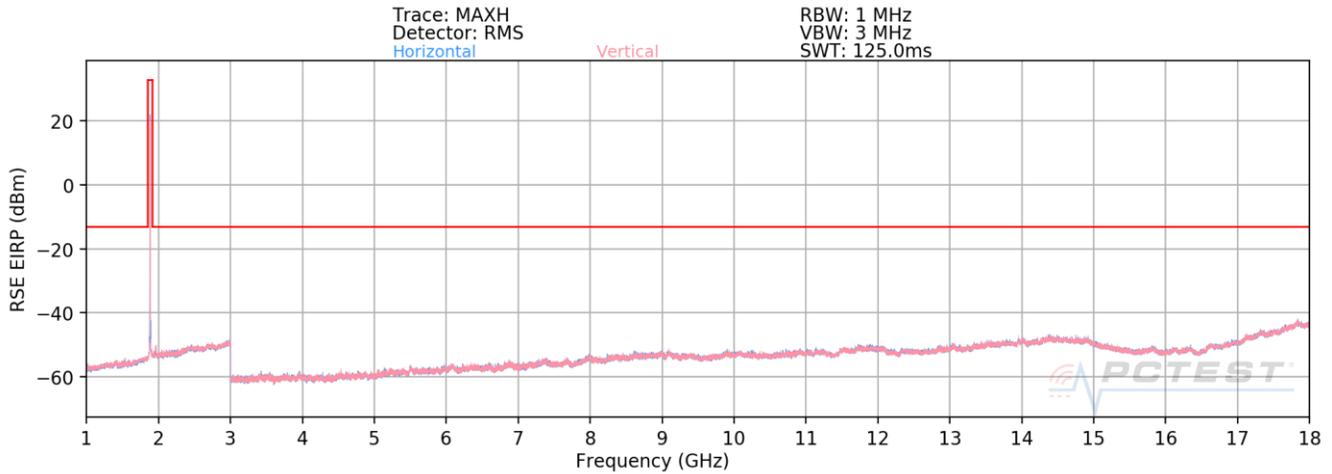
Mode:	CDMA
Channel:	600
Frequency (MHz):	1880
Detector / Trace Mode:	RMS / Average
RBW / VBW:	1MHz / 3MHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3760.0	H	-	-	-77.38	2.86	32.48	-62.78	-13.00	-49.78
5640.0	H	176	30	-74.18	5.65	38.47	-56.79	-13.00	-43.79
7520.0	H	-	-	-78.31	8.87	37.56	-57.70	-13.00	-44.70
9400.0	H	-	-	-79.48	11.83	39.35	-55.91	-13.00	-42.91

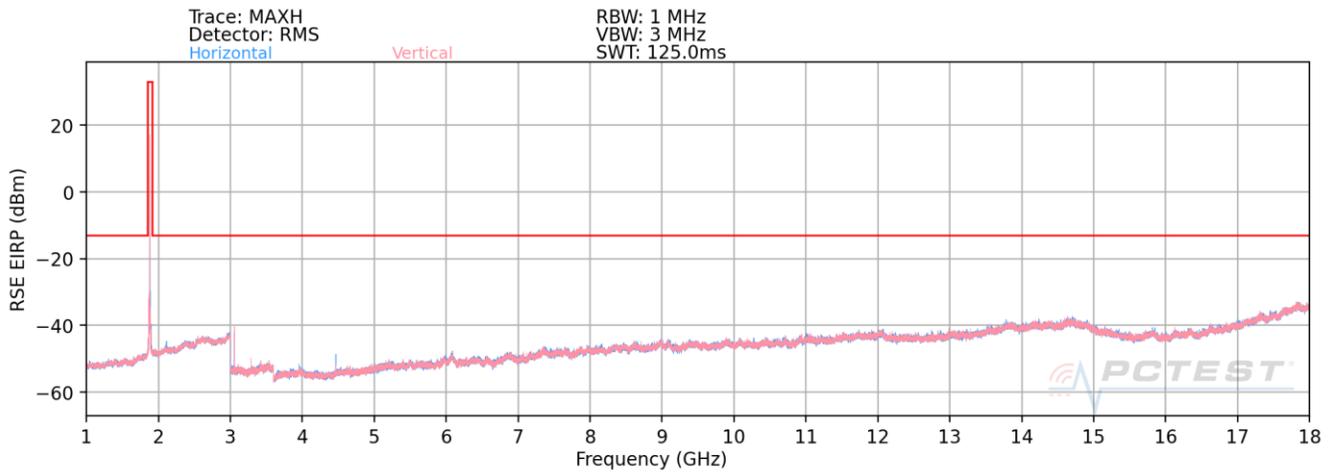
Table 7-20. Radiated Spurious Data (CDMA PCS – Mid Channel) with WCP

FCC ID: A3LSMF926U	 PART 24 MEASUREMENT REPORT 	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset
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## LTE Band 25/2



**Plot 7-286. Radiated Spurious Plot (LTE Band 25/2) – OPEN**



**Plot 7-287. Radiated Spurious Plot (LTE Band 25/2) - CLOSED**

<b>Bandwidth (MHz):</b>	20
<b>Frequency (MHz):</b>	1860.0
<b>RB / Offset:</b>	1 / 50

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3720.0	V	-	-	-78.66	2.44	30.78	-64.47	-13.00	-51.47
5580.0	V	118	282	-76.15	5.41	36.26	-59.00	-13.00	-46.00
7440.0	V	-	-	-79.93	8.71	35.78	-59.47	-13.00	-46.47
9300.0	V	-	-	-80.74	10.96	37.22	-58.04	-13.00	-45.04

**Table 7-21. Radiated Spurious Data (LTE Band 25/2 – Low Channel)**

<b>FCC ID:</b> A3LSMF926U	<b>PART 24 MEASUREMENT REPORT</b>	<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1M2104020031-03.A3L	<b>Test Dates:</b> 03/26- 06/07/2021	<b>EUT Type:</b> Portable Handset
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Bandwidth (MHz):	20
Frequency (MHz):	1882.5
RB / Offset:	1 / 50

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3765.0	V	-	-	-79.04	2.88	30.84	-64.42	-13.00	-51.42
5647.5	V	260	310	-73.60	5.56	38.96	-56.30	-13.00	-43.30
7530.0	V	-	-	-80.33	8.99	35.66	-59.60	-13.00	-46.60
9412.5	V	-	-	-81.38	11.54	37.16	-58.10	-13.00	-45.10

Table 7-22. Radiated Spurious Data (LTE Band 25/2 – Mid Channel)

Bandwidth (MHz):	20
Frequency (MHz):	1905.0
RB / Offset:	1 / 50

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3810.00	V	-	-	-78.45	2.30	30.85	-64.41	-13.00	-51.41
5715.00	V	-	-	-79.46	5.47	33.01	-62.24	-13.00	-49.24
7620.00	V	-	-	-80.14	8.88	35.74	-59.52	-13.00	-46.52

Table 7-23. Radiated Spurious Data (LTE Band 25/2 – High Channel)

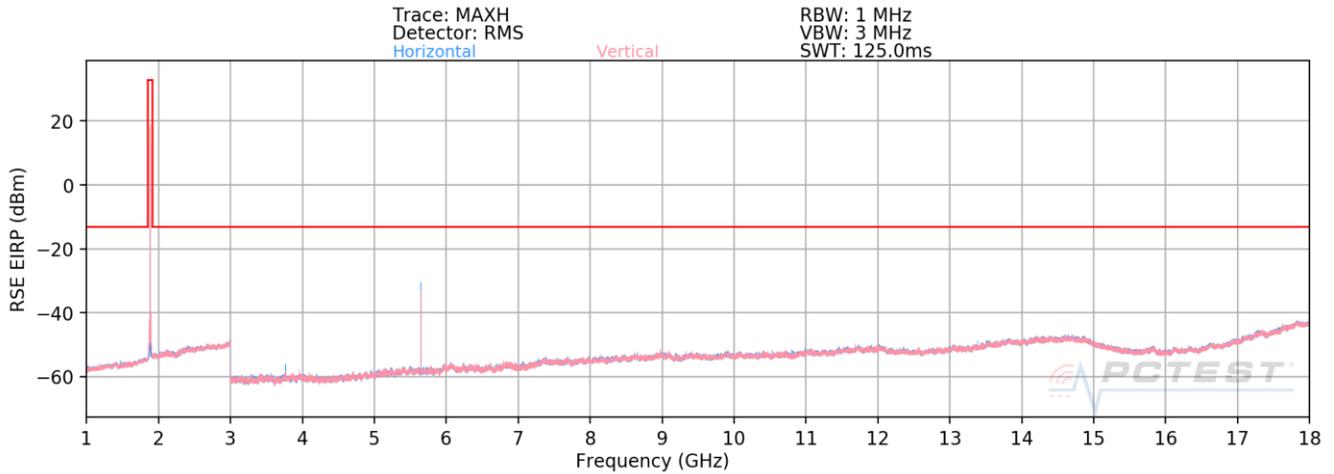
Bandwidth (MHz):	20
Frequency (MHz):	1882.5
RB / Offset:	1 / 50
Detector / Trace Mode:	RMS / Average
RBW / VBW:	1MHz / 3MHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3765.0	V	-	-	-80.12	2.88	29.76	-65.50	-13.00	-52.50
5647.5	V	141	353	-66.07	5.56	46.49	-48.77	-13.00	-35.77
7530.0	V	-	-	-81.00	8.99	34.99	-60.27	-13.00	-47.27

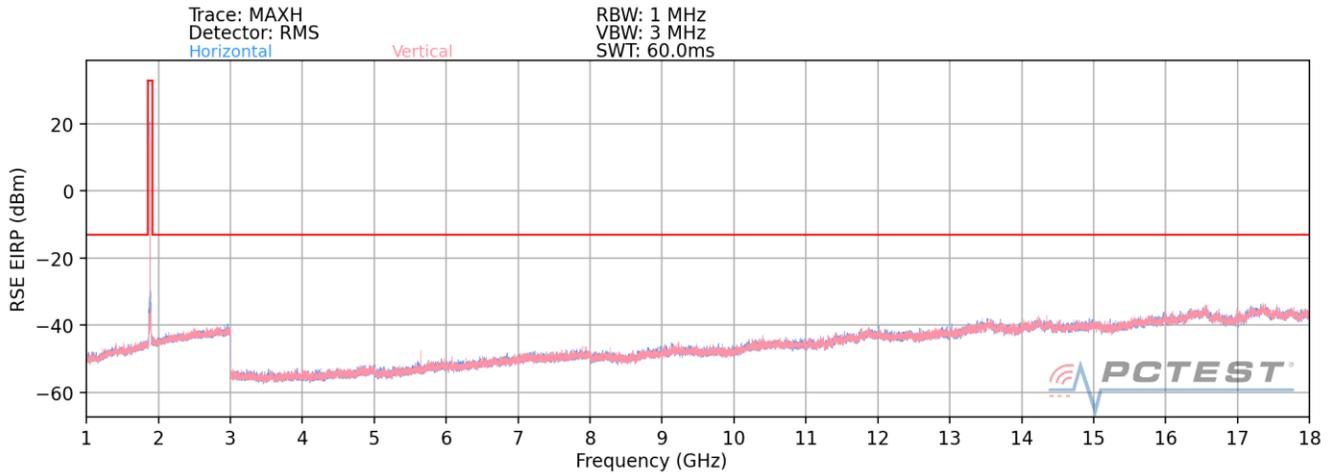
Table 7-24. Radiated Spurious Data (LTE Band 25/2 – Mid Channel) with WCP

FCC ID: A3LSMF926U	 PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset	Page 181 of 197

### NR Band n25/2 – Antenna B



**Plot 7-288. Radiated Spurious Plot (NR Band n25/2 - Antenna B) – OPEN**



**Plot 7-289. Radiated Spurious Plot (NR Band n25/2 - Antenna B) - CLOSED**

Bandwidth (MHz):	40
Frequency (MHz):	1870.0
RB / Offset:	1/108
Mode:	Standalone

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3740.0	H	364	55	-73.08	2.66	36.58	-58.68	-13.00	-45.68
5610.0	H	236	285	-48.59	5.89	64.30	-30.96	-13.00	-17.96
7480.0	H	-	-	-80.26	8.92	35.66	-59.59	-13.00	-46.59
9350.0	H	207	54	-79.12	11.45	39.33	-55.93	-13.00	-42.93
11220.0	H	-	-	-81.73	13.21	38.48	-56.78	-13.00	-43.78
13090.0	H	-	-	-82.03	14.05	39.02	-56.24	-13.00	-43.24

**Table 7-25. Radiated Spurious Data (NR Band n25/2 – Low Channel - Antenna B)**

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 182 of 197

Bandwidth (MHz):	40
Frequency (MHz):	1882.5
RB / Offset:	1 / 108
Mode:	Standalone

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3765.0	H	396	47	-72.40	2.88	37.48	-57.78	-13.00	-44.78
5647.5	H	233	289	-46.71	5.56	65.85	-29.41	-13.00	-16.41
7530.0	H	-	-	-80.40	8.99	35.59	-59.67	-13.00	-46.67
9412.5	H	234	34	-76.34	11.54	42.20	-53.06	-13.00	-40.06
11295.0	H	-	-	-81.81	12.43	37.62	-57.64	-13.00	-44.64
13177.5	H	-	-	-82.05	14.30	39.25	-56.00	-13.00	-43.00

Table 7-26. Radiated Spurious Data (NR Band n25/2 – Mid Channel - Antenna B)

Bandwidth (MHz):	40
Frequency (MHz):	1895.0
RB / Offset:	1 / 108
Mode:	Standalone

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3790.0	H	400	51	-73.30	2.44	36.14	-59.12	-13.00	-46.12
5685.0	H	212	282	-48.89	5.37	63.48	-31.78	-13.00	-18.78
7580.0	H	-	-	-80.42	9.11	35.69	-59.57	-13.00	-46.57
9475.0	H	238	58	-78.00	11.90	40.90	-54.36	-13.00	-41.36
11370.0	H	-	-	-82.08	12.99	37.91	-57.35	-13.00	-44.35
13265.0	H	-	-	-82.32	14.28	38.96	-56.29	-13.00	-43.29

Table 7-27. Radiated Spurious Data (NR Band n25/2 – High Channel - Antenna B)

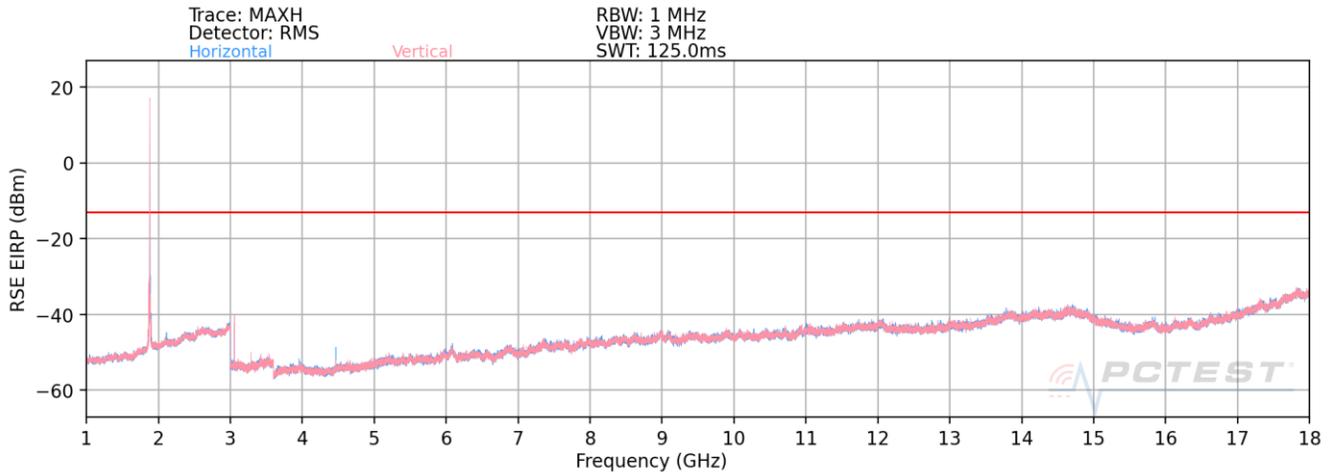
Bandwidth (MHz):	40
Frequency (MHz):	1882.5
RB / Offset:	1 / 108
Anchor Band:	Standalone

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3765.0	H	361	363	-77.59	2.88	32.29	-62.97	-13.00	-49.97
5647.5	H	251	286	-56.11	5.56	56.45	-38.81	-13.00	-25.81
7530.0	H	-	-	-80.55	8.99	35.44	-59.82	-13.00	-46.82
9412.5	H	286	296	-76.39	11.54	42.15	-53.11	-13.00	-40.11
11295.0	H	-	-	-82.31	12.43	37.12	-58.14	-13.00	-45.14
13177.5	H	-	-	-82.36	14.30	38.94	-56.31	-13.00	-43.31

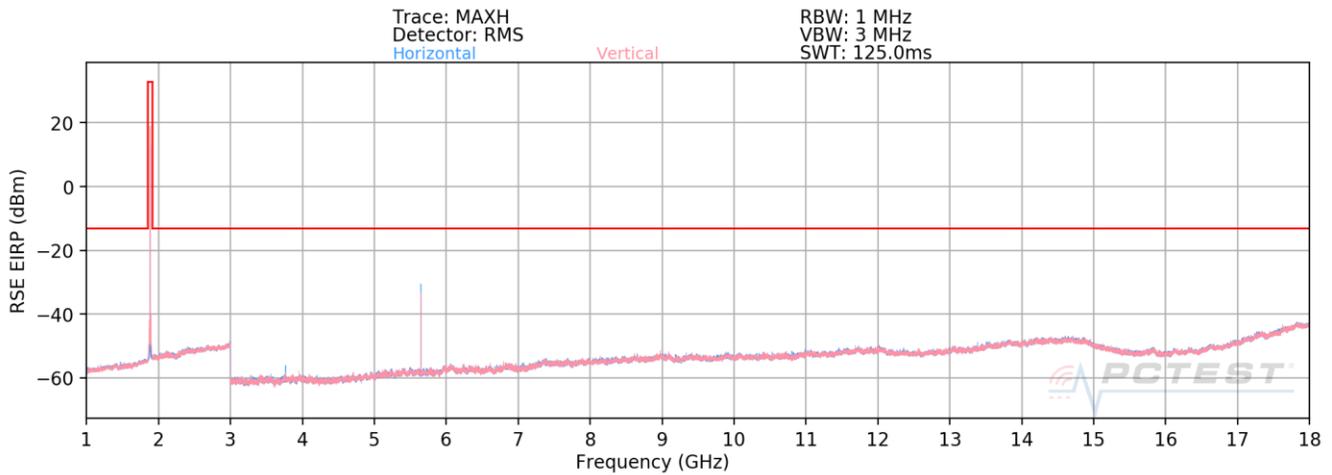
Table 7-28. Radiated Spurious Data (NR Band n25/2 – Mid Channel - Antenna B) with WCP

FCC ID: A3LSMF926U	 PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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### NR Band n25 – B12 – Antenna B



**Plot 7-290. Radiated Spurious Plot (NR Band n25-B12 - Antenna B) – OPEN**



**Plot 7-291. Radiated Spurious Plot (NR Band n25-B12 - Antenna B) - CLOSED**

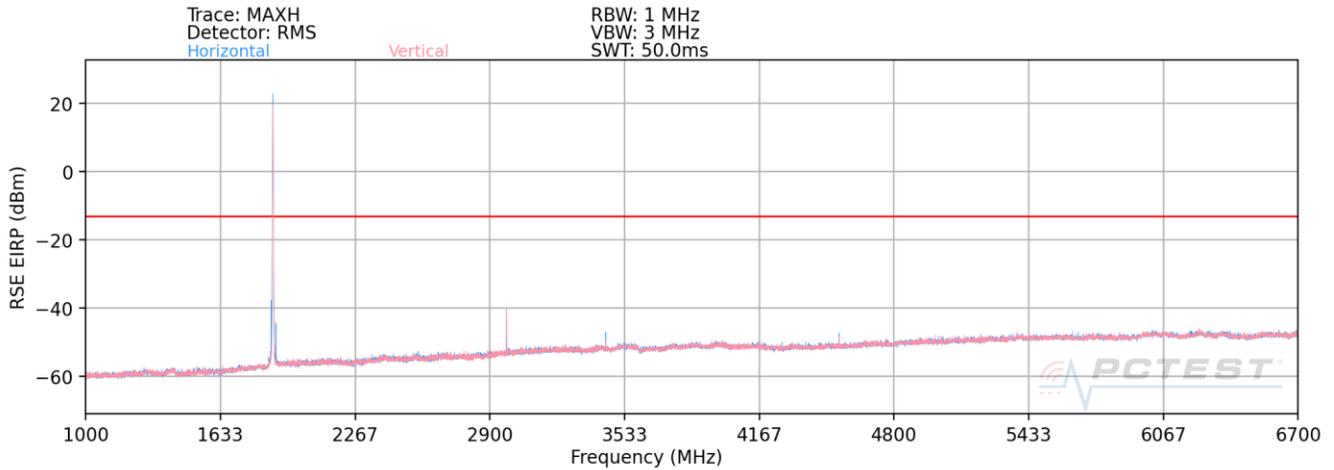
<b>Bandwidth (MHz):</b>	20 / 10
<b>Frequency (MHz):</b>	1882.5 / 704
<b>RB / Offset:</b>	1 / 53 & 1 / 25
<b>Mode:</b>	EN-DC
<b>Anchor Band:</b>	B12

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1653.0	H	-	-	-44.56	4.37	66.81	-28.45	-13.00	-15.45
2831.5	H	-	-	-44.03	8.79	71.76	-23.49	-13.00	-10.49
3061.0	H	-	-	-41.02	9.48	75.46	-19.79	-13.00	-6.79
4010.0	H	-	-	-49.59	12.59	70.00	-25.26	-13.00	-12.26

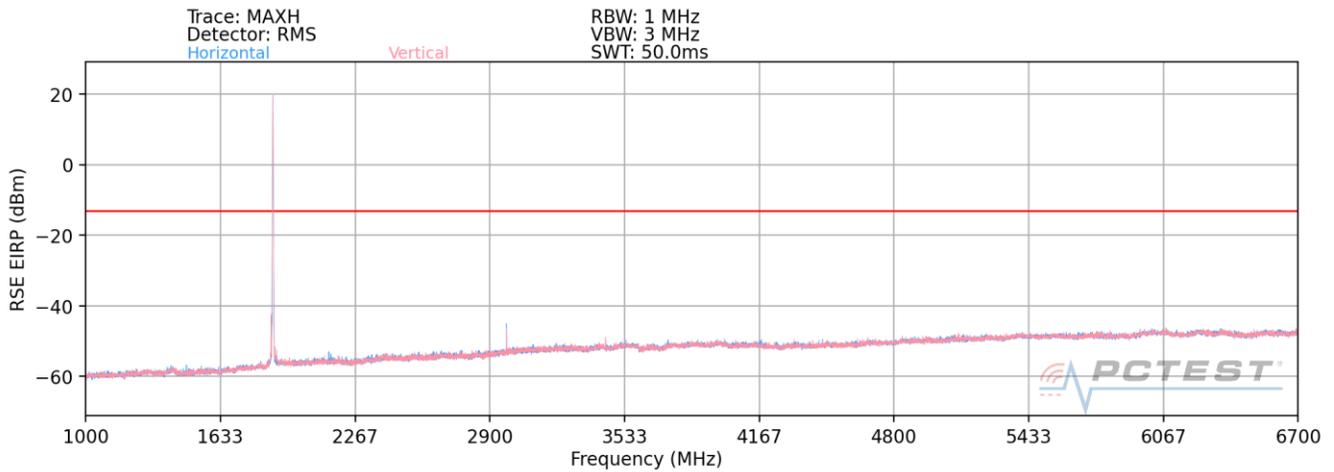
**Table 7-29. Radiated Spurious Data (NR Band n25-B12 –Antenna B)**

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 184 of 197

### NR Band n2 – B13 – Antenna B



**Plot 7-292. Radiated Spurious Plot (NR Band n25-B13 - Antenna B) – OPEN**



**Plot 7-293. Radiated Spurious Plot (NR Band n25-B13 - Antenna B) - CLOSED**

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>		Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset		Page 185 of 197

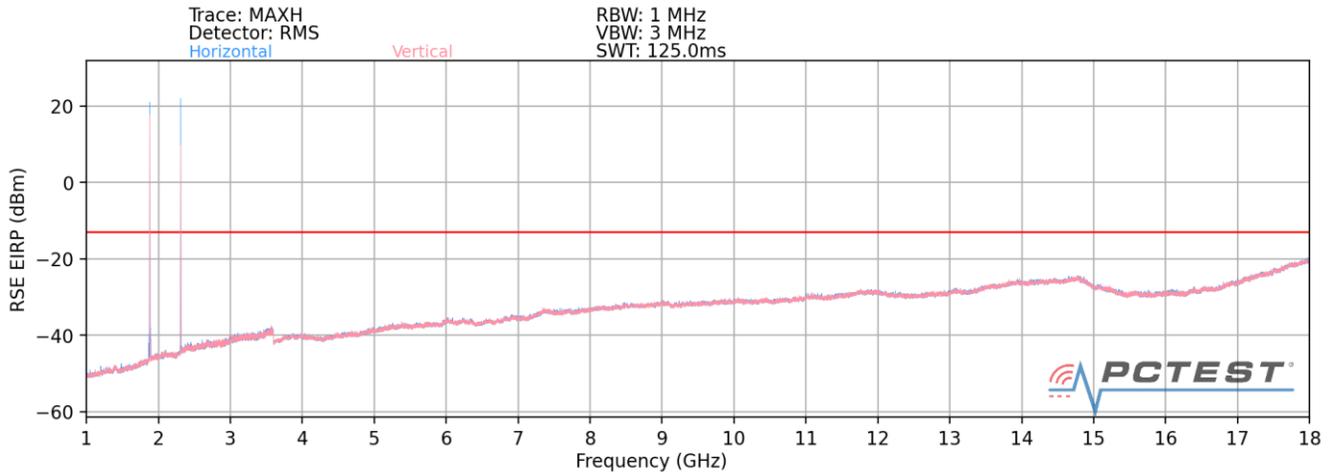
<b>Bandwidth (MHz):</b>	20/10
<b>Frequency (MHz):</b>	1880/782
<b>RB / Offset:</b>	1/53 & 1/25
<b>Mode:</b>	EN-DC
<b>Anchor Band:</b>	LTE Band 13

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1414.0	H	-	-	-76.98	3.16	33.18	-62.08	-13.00	-49.08
2512.0	H	-	-	-77.30	6.65	36.35	-58.91	-13.00	-45.91
2978.0	H	385	124	-59.27	8.71	56.44	-38.82	-13.00	-25.82
3400.0	H	120	127	-69.22	9.92	47.70	-47.55	-13.00	-34.55
4076.0	H	378	126	-77.70	11.67	40.97	-54.29	-13.00	-41.29
4542.2	H	323	41	-68.22	11.92	50.70	-44.56	-13.00	-31.56
5806.0	H	-	-	-79.48	15.05	42.57	-52.69	-13.00	-39.69
9300.0	H	111	325	-76.23	10.96	41.73	-53.53	-13.00	-40.53

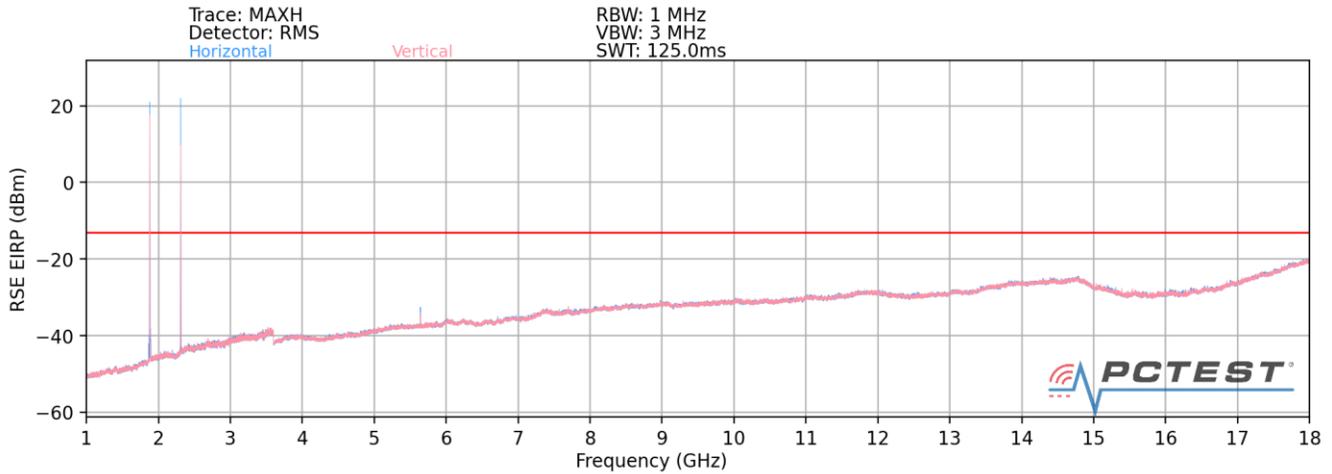
**Table 7-30. Radiated Spurious Data (NR Band n25-B13 –Antenna B)**

<b>FCC ID:</b> A3LSMF926U	 <b>PART 24 MEASUREMENT REPORT</b> 	<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1M2104020031-03.A3L	<b>Test Dates:</b> 03/26- 06/07/2021	<b>EUT Type:</b> Portable Handset
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### NR Band n2 – B30 – Antenna B



**Plot 7-294. Radiated Spurious Plot (NR Band n2-B30 - Antenna B) – OPEN**



**Plot 7-295. Radiated Spurious Plot (NR Band n2-B30 - Antenna B) - CLOSED**

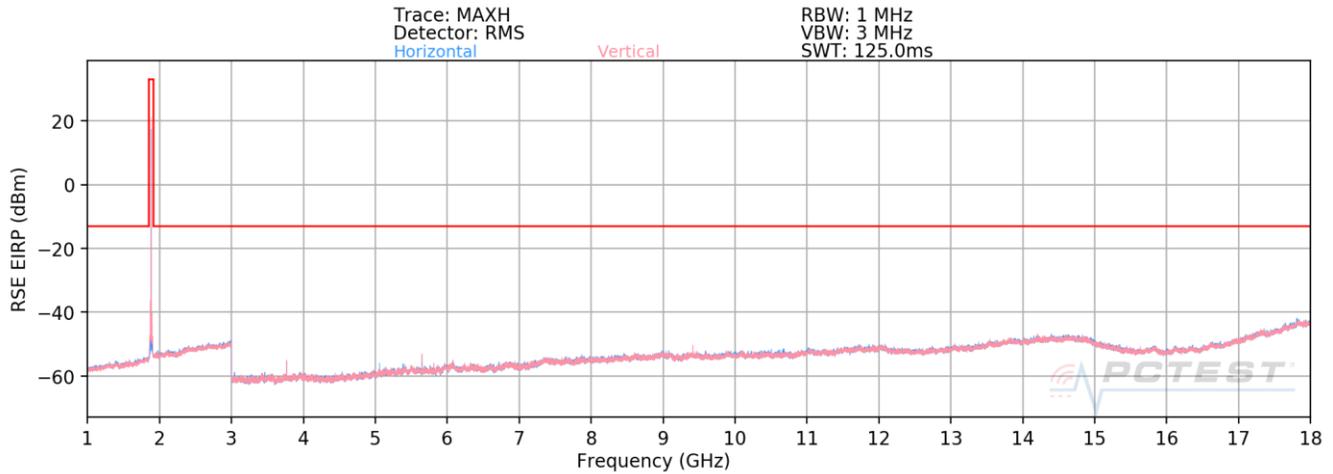
Bandwidth (MHz):	10 / 20
Frequency (MHz):	2310 / 1880
RB / Offset:	1 / 25 & 1 / 53
Mode:	EN-DC
Anchor Band:	B30

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1020.0	V	-	-	-45.37	3.59	65.22	-30.04	-13.00	-17.04
1450.0	V	-	-	-44.83	3.85	66.02	-29.24	-13.00	-16.24
2740.0	V	-	-	-41.37	8.42	74.05	-21.20	-13.00	-8.20
3170.0	V	-	-	-41.15	10.34	76.19	-19.06	-13.00	-6.06

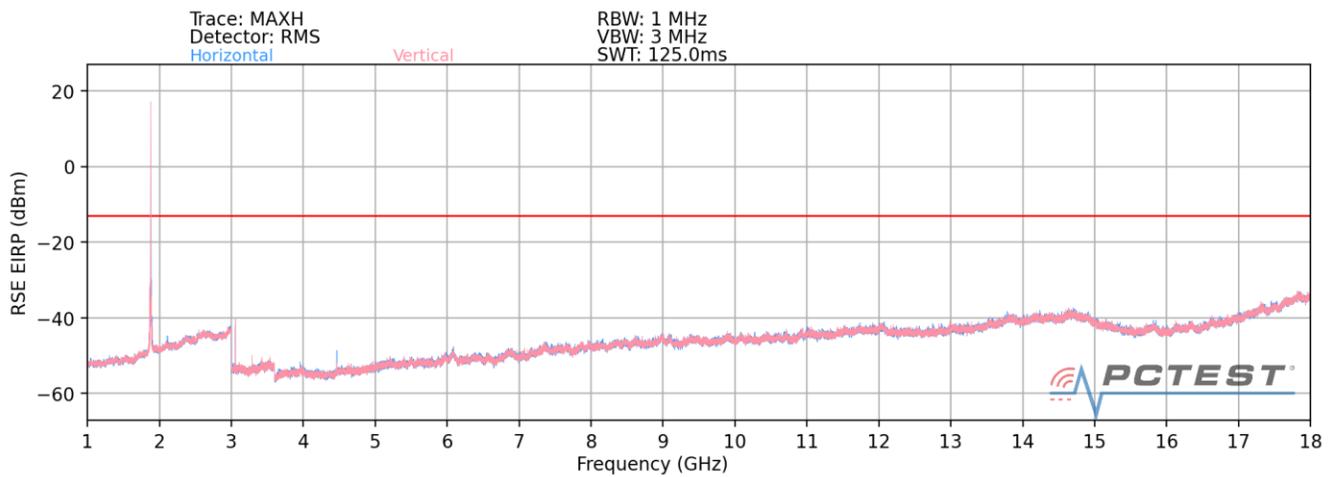
**Table 7-31. Radiated Spurious Data (NR Band n2-B30 –Antenna B)**

FCC ID: A3LSMF926U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset	Page 187 of 197

## NR Band n25/2 – Antenna E



**Plot 7-296. Radiated Spurious Plot (NR Band n25/2 - Antenna B) – OPEN**



**Plot 7-297. Radiated Spurious Plot (NR Band n25/2 - Antenna B) - CLOSED**

Bandwidth (MHz):	20
Frequency (MHz):	1860.0
RB / Offset:	1 / 50
Mode:	SA

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3720.0	H	-	-	-67.54	7.90	47.36	-47.90	-13.00	-34.90
5580.0	H	112	164	-66.11	12.13	53.02	-42.24	-13.00	-29.24
7440.0	H	-	-	-70.89	16.09	52.20	-43.06	-13.00	-30.06
9300.0	H	-	-	-71.56	19.16	54.60	-40.66	-13.00	-27.66

**Table 7-32. Radiated Spurious Data (NR Band n25/2 – Low Channel - Antenna E)**

FCC ID: A3LSMF926U	 PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset	Page 188 of 197

Bandwidth (MHz):	20
Frequency (MHz):	1882.5
RB / Offset:	1 / 50
Mode:	SA

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3765.0	H	-	-	-68.41	8.46	47.05	-48.21	-13.00	-35.21
5647.5	H	106	155	-65.34	11.38	53.04	-42.22	-13.00	-29.22
7530.0	H	-	-	-71.11	16.15	52.04	-43.21	-13.00	-30.21
9412.5	H	-	-	-72.12	19.14	54.02	-41.23	-13.00	-28.23

**Table 7-33. Radiated Spurious Data (NR Band n25/2 – Mid Channel - Antenna E)**

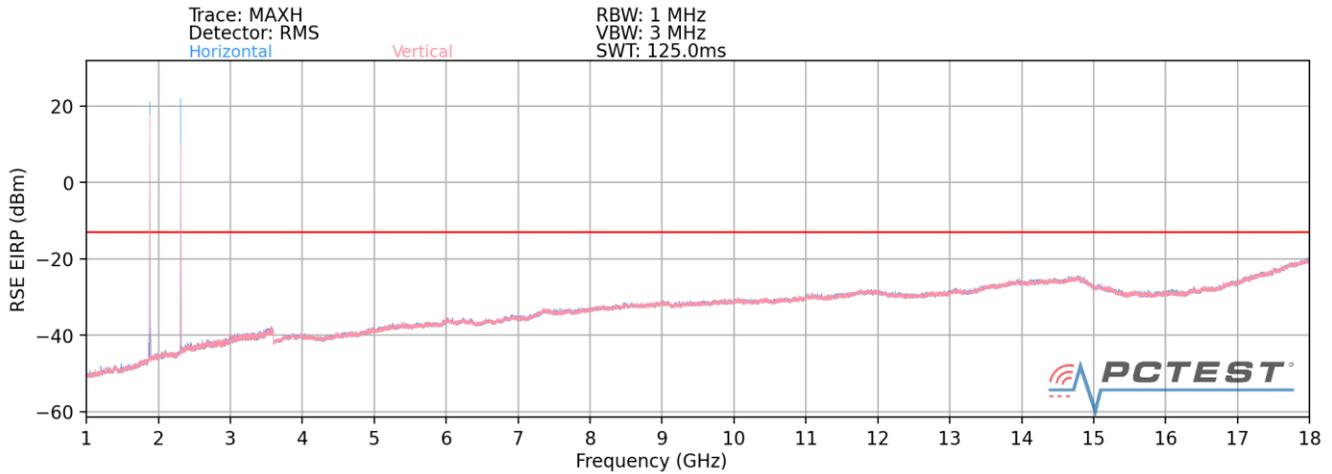
Bandwidth (MHz):	20
Frequency (MHz):	1905.0
RB / Offset:	1 / 50
Mode:	SA

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
3810.0	H	-	-	-67.59	8.72	48.13	-47.12	-13.00	-34.12
5715.0	H	111	163	-66.10	12.06	52.96	-42.30	-13.00	-29.30
7620.0	H	-	-	-70.59	16.57	52.98	-42.27	-13.00	-29.27
9525.0	H	-	-	-71.89	18.61	53.72	-41.54	-13.00	-28.54

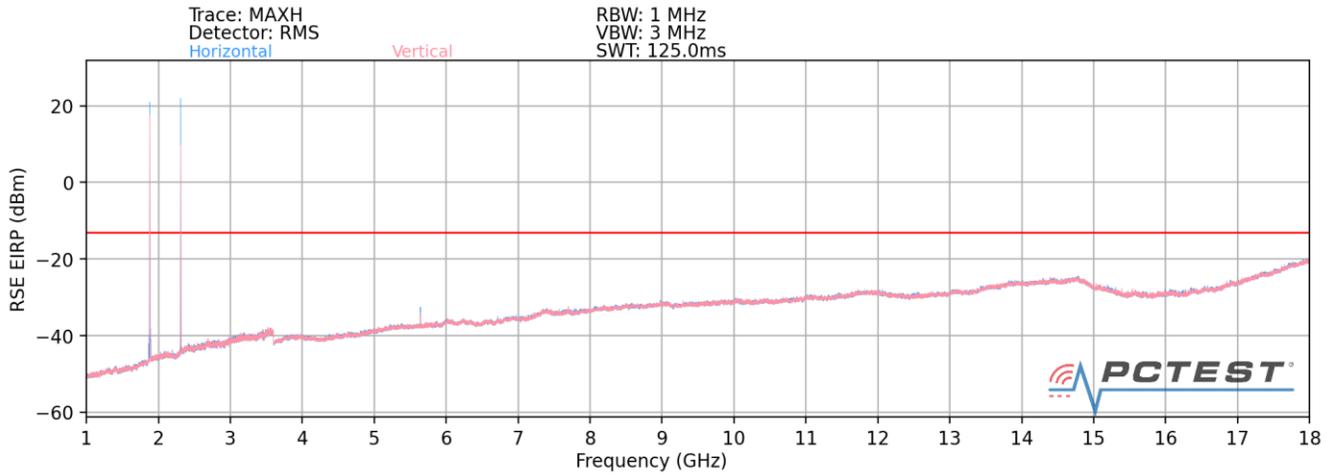
**Table 7-34. Radiated Spurious Data (NR Band n25/2 – High Channel - Antenna E)**

FCC ID: A3LSMF926U	 PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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### NR Band n2 – B48 – Antenna E



**Plot 7-298. Radiated Spurious Plot (NR Band n2-B48 – Antenna E) – OPEN**



**Plot 7-299. Radiated Spurious Plot (NR Band n2-B48 – Antenna E) - CLOSED**

Bandwidth (MHz):	20 / 20
Frequency (MHz):	1880 / 3560
RB / Offset:	1 / 53 & 1 / 50
Mode:	EN-DC
Anchor Band:	B48

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1480.0	H	-	-	-44.36	4.26	66.90	-28.36	-13.00	-15.36
3160.0	H	-	-	-42.04	10.28	75.24	-20.02	-13.00	-7.02
4840.0	H	-	-	-49.20	13.77	71.57	-23.69	-13.00	-10.69
5240.0	H	-	-	-48.97	14.95	72.98	-22.28	-13.00	-9.28

**Table 7-35. Radiated Spurious Data (NR Band n2-B48 –Antenna E)**

FCC ID: A3LSMF926U	 PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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## 7.9 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.

### 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

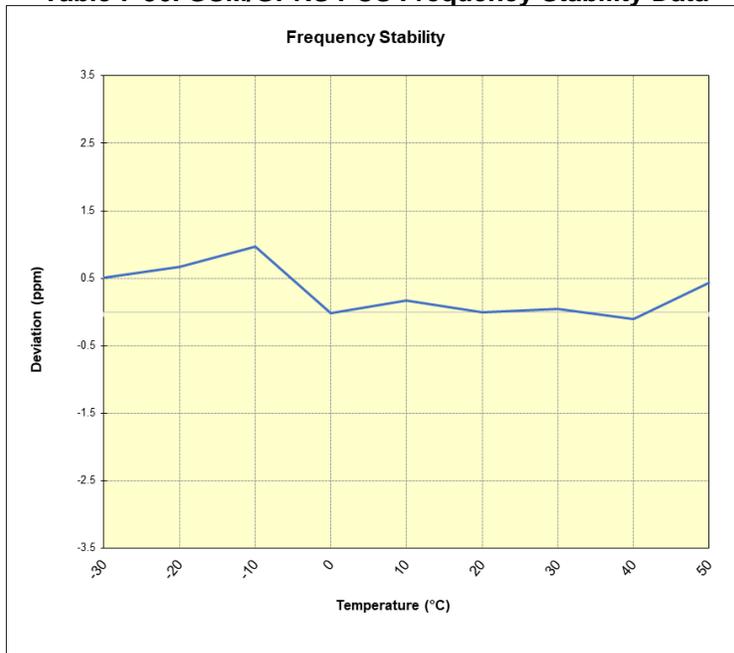
None

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**GSM/GPRS PCS**

<b>GSM/GPRS PCS</b>					
Operating Frequency (Hz):		1,880,000,000			
Ref. Voltage (VDC):		4.36			
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.36	- 30	1,880,001,057	961	0.0000511
		- 20	1,880,001,362	1,267	0.0000674
		- 10	1,880,001,912	1,817	0.0000966
		0	1,880,000,056	-39	-0.0000021
		+ 10	1,880,000,425	330	0.0000176
		+ 20 (Ref)	1,880,000,095	0	0.0000000
		+ 30	1,880,000,195	99	0.0000053
		+ 40	1,879,999,902	-194	-0.0000103
Battery Endpoint	2.36	+ 50	1,880,000,921	825	0.0000439
		+ 20	1,880,000,147	52	0.0000027

**Table 7-36. GSM/GPRS PCS Frequency Stability Data**



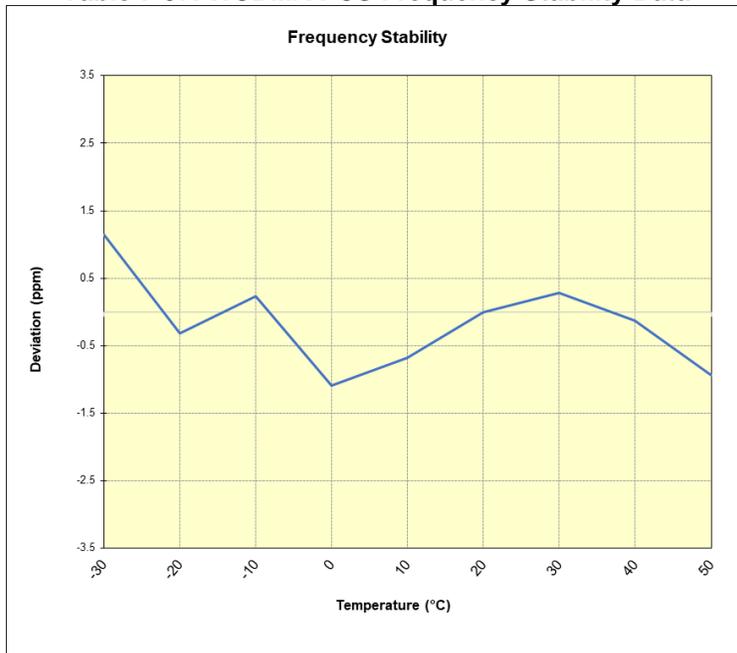
**Plot 7-300. GSM/GPRS PCS Frequency Stability Chart**

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>	<b>SAMSUNG</b>	Approved by: Technical Manager
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**WCDMA PCS**

WCDMA PCS					
Operating Frequency (Hz):		1,880,000,000			
Ref. Voltage (VDC):		4.36			
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.36	- 30	1,879,998,299	2,159	0.0001148
		- 20	1,879,995,538	-603	-0.0000321
		- 10	1,879,996,582	442	0.0000235
		0	1,879,994,092	-2,048	-0.0001089
		+ 10	1,879,994,876	-1,265	-0.0000673
		+ 20 (Ref)	1,879,996,140	0	0.0000000
		+ 30	1,879,996,666	526	0.0000280
		+ 40	1,879,995,900	-240	-0.0000128
		+ 50	1,879,994,376	-1,765	-0.0000939
Battery Endpoint	2.36	+ 20	1,880,000,149	4,009	0.0002132

**Table 7-37. WCDMA PCS Frequency Stability Data**



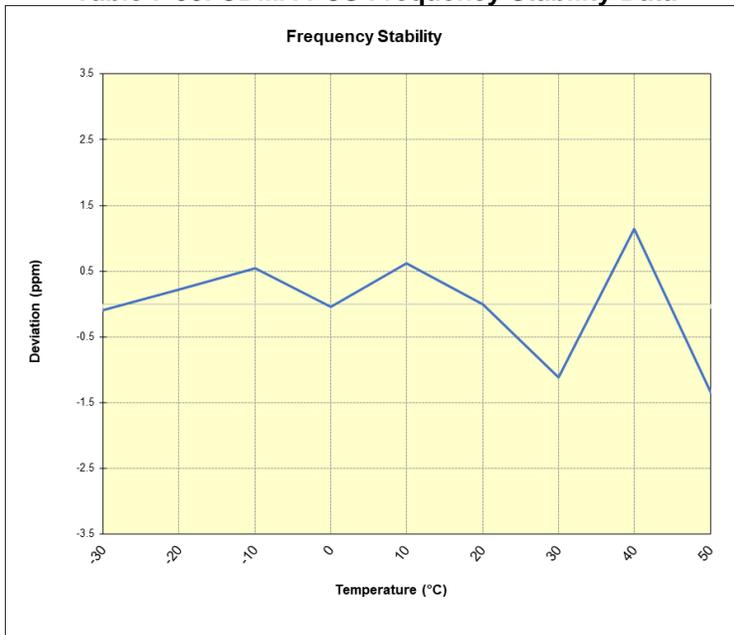
**Plot 7-301. WCDMA PCS Frequency Stability Chart**

FCC ID: A3LSMF926U	<b>PART 24 MEASUREMENT REPORT</b>	Approved by: Technical Manager
Test Report S/N: 1M2104020031-03.A3L	Test Dates: 03/26- 06/07/2021	EUT Type: Portable Handset
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**CDMA PCS**

CDMA PCS					
Operating Frequency (Hz):		1,880,000,000			
Ref. Voltage (VDC):		4.36			
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.36	- 30	1,880,001,021	-173	-0.0000092
		- 20	1,880,001,600	406	0.0000216
		- 10	1,880,002,212	1,018	0.0000542
		0	1,880,001,125	-69	-0.0000036
		+ 10	1,880,002,351	1,157	0.0000616
		+ 20 (Ref)	1,880,001,194	0	0.0000000
		+ 30	1,879,999,105	-2,089	-0.0001111
		+ 40	1,880,003,341	2,148	0.0001142
Battery Endpoint	2.36	+ 50	1,879,998,666	-2,527	-0.0001344
		+ 20	1,880,002,446	1,252	0.0000666

**Table 7-38. CDMA PCS Frequency Stability Data**



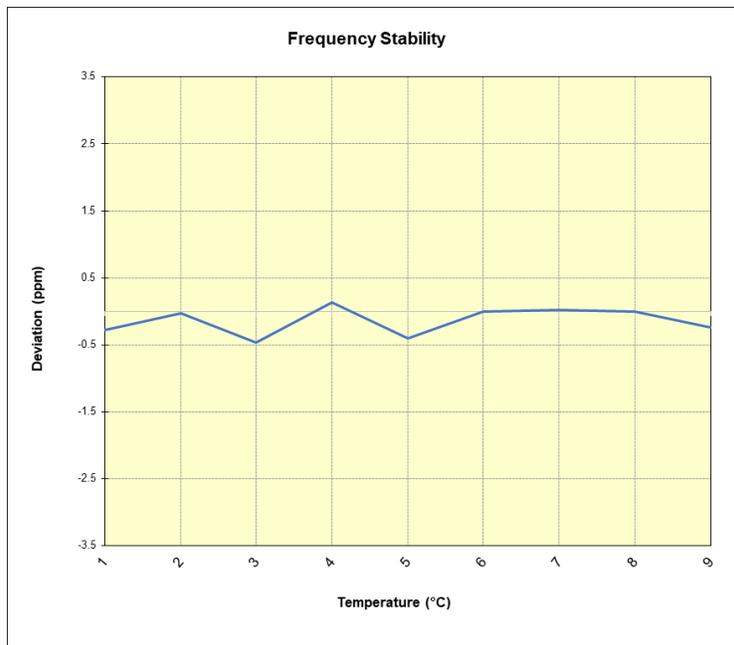
**Plot 7-302. CDMA PCS Frequency Stability Chart**

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>		Approved by: Technical Manager
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## LTE Band 25/2

LTE Band 25/2					
		Operating Frequency (Hz):		1,882,500,000	
		Ref. Voltage (VDC):		4.36	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.36	- 30	1,882,501,399	-524	-0.0000278
		- 20	1,882,501,867	-56	-0.0000030
		- 10	1,882,501,051	-872	-0.0000463
		0	1,882,502,177	254	0.0000135
		+ 10	1,882,501,174	-749	-0.0000398
		+ 20 (Ref)	1,882,501,923	0	0.0000000
		+ 30	1,882,501,974	51	0.0000027
		+ 40	1,882,501,915	-8	-0.0000004
Battery Endpoint	2.36	+ 20	1,882,501,666	-257	-0.0000137

Table 7-39. LTE Band 25/2 Frequency Stability Data



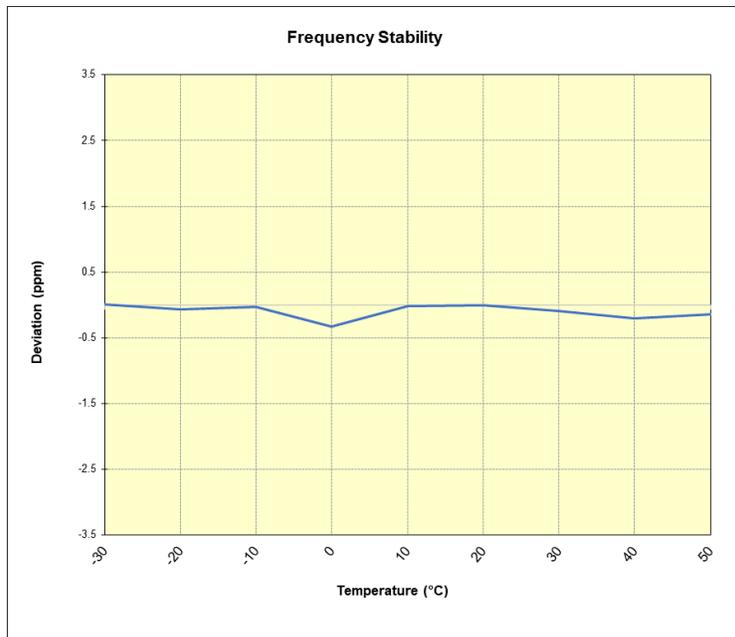
Plot 7-303. LTE Band 25/2 Frequency Stability Chart

FCC ID: A3LSMF926U	 PCTEST Proud to be part of element	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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**NR Band n25/2**

NR Band n25/2					
Operating Frequency (Hz):		1,882,500,000			
Ref. Voltage (VDC):		4.36			
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.36	- 30	1,882,599,942	15	0.000008
		- 20	1,882,599,803	-124	-0.000066
		- 10	1,882,599,879	-48	-0.000025
		0	1,882,599,309	-618	-0.000328
		+ 10	1,882,599,899	-28	-0.000015
		+ 20 (Ref)	1,882,599,927	0	0.000000
		+ 30	1,882,599,761	-166	-0.000088
		+ 40	1,882,599,542	-385	-0.000205
		+ 50	1,882,599,662	-265	-0.000141
Battery Endpoint	2.36	+ 20	1,882,599,499	-428	-0.000227

**Table 7-40. NR Band n25/2 Frequency Stability Data**



**Plot 7-304. NR Band n25/2 Frequency Stability Chart**

FCC ID: A3LSMF926U	<b>PCTEST</b> Proud to be part of element	<b>PART 24 MEASUREMENT REPORT</b>		Approved by: Technical Manager
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## 8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the Samsung **Portable Handset** **FCC ID: A3LSMF926U** complies with all the requirements of Part 24 of the FCC rules.

FCC ID: A3LSMF926U	 <b>PART 24 MEASUREMENT REPORT</b> 		<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1M2104020031-03.A3L	<b>Test Dates:</b> 03/26- 06/07/2021	<b>EUT Type:</b> Portable Handset	Page 197 of 197