

**LTE Band 41(PC3)**

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		Samsung							
Project #:		4789009800							
Date:		2019-05-31							
Test Engineer:		45585							
Configuration:		EUT / AC Adapter, Y-Position							
Location:		Chamber 1							
Mode:		LTE_QPSK Band 41 Harmonics, 15MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 2503.5MHz</b>									
5007.00	-7.5	V	3.0	43.8	1.0	-50.3	-25.0	-25.3	
7510.50	-12.4	V	3.0	42.5	1.0	-53.9	-25.0	-28.9	
10014.00	4.9	V	3.0	40.6	1.0	-34.7	-25.0	-9.7	
12517.50	-4.7	V	3.0	41.6	1.0	-45.3	-25.0	-20.3	
15021.00	-7.4	V	3.0	43.7	1.0	-50.1	-25.0	-25.1	
5007.00	-7.3	H	3.0	43.8	1.0	-50.1	-25.0	-25.1	
7510.50	-12.9	H	3.0	42.5	1.0	-54.4	-25.0	-29.4	
10014.00	6.2	H	3.0	40.6	1.0	-33.4	-25.0	-8.4	
12517.50	-6.8	H	3.0	41.6	1.0	-47.4	-25.0	-22.4	
15021.00	-8.2	H	3.0	43.7	1.0	-50.8	-25.0	-25.8	
<b>Mid Ch, 2593MHz</b>									
5186.00	-8.6	V	3.0	43.8	1.0	-51.4	-25.0	-26.4	
7779.00	-11.3	V	3.0	42.3	1.0	-52.6	-25.0	-27.6	
10372.00	2.6	V	3.0	40.7	1.0	-37.1	-25.0	-12.1	
12965.00	-5.6	V	3.0	42.0	1.0	-46.6	-25.0	-21.6	
15558.00	-7.0	V	3.0	43.0	1.0	-49.1	-25.0	-24.1	
5186.00	-4.7	H	3.0	43.8	1.0	-47.4	-25.0	-22.4	
7779.00	-10.9	H	3.0	42.3	1.0	-52.2	-25.0	-27.2	
10372.00	5.2	H	3.0	40.7	1.0	-34.5	-25.0	-9.5	
12965.00	-2.0	H	3.0	42.0	1.0	-43.0	-25.0	-18.0	
15558.00	-7.9	H	3.0	43.0	1.0	-49.9	-25.0	-24.9	
<b>High Ch, 2682.5MHz</b>									
5365.00	-7.1	V	3.0	43.7	1.0	-49.8	-25.0	-24.8	
8047.50	-12.5	V	3.0	42.2	1.0	-53.7	-25.0	-28.7	
10730.00	1.7	V	3.0	40.8	1.0	-38.1	-25.0	-13.1	
13412.50	-9.9	V	3.0	42.4	1.0	-51.2	-25.0	-26.2	
16095.00	-6.9	V	3.0	42.4	1.0	-48.3	-25.0	-23.3	
5365.00	-2.8	H	3.0	43.7	1.0	-45.6	-25.0	-20.6	
8047.50	-13.1	H	3.0	42.2	1.0	-54.3	-25.0	-29.3	
10730.00	3.9	H	3.0	40.8	1.0	-35.9	-25.0	-10.9	
13412.50	-9.7	H	3.0	42.4	1.0	-51.1	-25.0	-26.1	
16095.00	-7.3	H	3.0	42.4	1.0	-48.7	-25.0	-23.7	

LTE  
 Band 41  
 15MHz  
 QPSK

**LTE Band 66**

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		Samsung							
Project #:		4789009800							
Date:		2019-05-23							
Test Engineer:		45585							
Configuration:		EUT / AC Adapter, Z-Position							
Location:		Chamber 2							
Mode:		LTE_QPSK Band 66 Harmonics, 20MHz Bandwidth							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1720MHz									
3440.00	-9.2	V	3.0	39.5	1.0	-47.7	-13.0	-34.7	
5160.00	-8.9	V	3.0	39.8	1.0	-47.7	-13.0	-34.7	
6880.00	-4.3	V	3.0	39.7	1.0	-43.0	-13.0	-30.0	
8600.00	-3.9	V	3.0	39.0	1.0	-41.8	-13.0	-28.8	
10320.00	-1.7	V	3.0	38.6	1.0	-39.3	-13.0	-26.3	
3440.00	-9.2	H	3.0	39.5	1.0	-47.7	-13.0	-34.7	
5160.00	-9.2	H	3.0	39.8	1.0	-48.1	-13.0	-35.1	
6880.00	-5.9	H	3.0	39.7	1.0	-44.6	-13.0	-31.6	
8600.00	-4.7	H	3.0	39.0	1.0	-42.7	-13.0	-29.7	
10320.00	-1.5	H	3.0	38.6	1.0	-39.1	-13.0	-26.1	
Mid Ch, 1745MHz									
3490.00	-8.6	V	3.0	39.5	1.0	-47.1	-13.0	-34.1	
5235.00	-8.6	V	3.0	39.8	1.0	-47.4	-13.0	-34.4	
6980.00	-3.9	V	3.0	39.6	1.0	-42.5	-13.0	-29.5	
8725.00	-3.3	V	3.0	38.9	1.0	-41.2	-13.0	-28.2	
10470.00	-1.1	V	3.0	38.6	1.0	-38.6	-13.0	-25.6	
3490.00	-8.7	H	3.0	39.5	1.0	-47.3	-13.0	-34.3	
5235.00	-8.9	H	3.0	39.8	1.0	-47.8	-13.0	-34.8	
6980.00	-5.7	H	3.0	39.6	1.0	-44.4	-13.0	-31.4	
8725.00	-3.5	H	3.0	38.9	1.0	-41.4	-13.0	-28.4	
10470.00	-1.1	H	3.0	38.6	1.0	-38.6	-13.0	-25.6	
High Ch, 1770MHz									
3540.00	-8.4	V	3.0	39.6	1.0	-47.0	-13.0	-34.0	
5310.00	-8.4	V	3.0	39.9	1.0	-47.3	-13.0	-34.3	
7080.00	-2.8	V	3.0	39.6	1.0	-41.4	-13.0	-28.4	
8850.00	-2.6	V	3.0	38.9	1.0	-40.5	-13.0	-27.5	
10620.00	-1.1	V	3.0	38.5	1.0	-38.7	-13.0	-25.7	
3540.00	-8.6	H	3.0	39.6	1.0	-47.1	-13.0	-34.1	
5310.00	-8.6	H	3.0	39.9	1.0	-47.5	-13.0	-34.5	
7080.00	-6.4	H	3.0	39.6	1.0	-45.0	-13.0	-32.0	
8850.00	-2.9	H	3.0	38.9	1.0	-40.7	-13.0	-27.7	
10620.00	-1.1	H	3.0	38.5	1.0	-38.6	-13.0	-25.6	

**LTE Band 17**

LTE Band 17 (Frequency range: 704-716 MHz) is covered by LTE Band 12 (Frequency range: 699-716 MHz) due to overlapping frequency range, same maximum tune-up limit and same channel bandwidth.

**LTE Band 4**

LTE Band 4 (Frequency range: 1710-1755 MHz) is covered by LTE Band 66 (Frequency range: 1710-1780 MHz) due to overlapping frequency range, same maximum tune-up limit and same channel bandwidth.

**LTE Band 2**

LTE Band 2 (Frequency range: 1850-1910 MHz) is covered by LTE Band 25 (Frequency range: 1850-1915 MHz) due to overlapping frequency range, maximum tune-up limit of LTE Band 25 is higher than LTE Band 2 and both LTE Band 25 and LTE Band 2 channel bandwidth are same.