

**LTE Band 26**

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		Samsung							
Project #:		4788805413							
Date:		2019-01-09							
Test Engineer:		45585							
Configuration:		EUT / AC Adapter / Earphone, Y-Position							
Location:		Chamber 2							
Mode:		LTE_QPSK Band 26 Harmonics, 1.4MHz 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, 814.7MHz									
1629.40	-13.7	V	3.0	38.2	1.0	-50.9	-13.0	-37.9	
2444.10	-12.7	V	3.0	38.8	1.0	-50.5	-13.0	-37.5	
3258.80	-10.5	V	3.0	39.4	1.0	-48.9	-13.0	-35.9	
4073.50	-10.8	V	3.0	39.8	1.0	-49.6	-13.0	-36.6	
4888.20	-9.1	V	3.0	39.8	1.0	-47.8	-13.0	-34.8	
1629.40	-12.1	H	3.0	38.2	1.0	-49.3	-13.0	-36.3	
2444.10	-13.2	H	3.0	38.8	1.0	-51.0	-13.0	-38.0	
3258.80	-10.7	H	3.0	39.4	1.0	-49.2	-13.0	-36.2	
4073.50	-11.0	H	3.0	39.8	1.0	-49.8	-13.0	-36.8	
4888.20	-9.6	H	3.0	39.8	1.0	-48.4	-13.0	-35.4	
Mid Ch, 831.5MHz									
1663.00	-11.1	V	3.0	38.2	1.0	-48.3	-13.0	-35.3	
2494.50	-12.7	V	3.0	38.8	1.0	-50.5	-13.0	-37.5	
3326.00	-9.9	V	3.0	39.4	1.0	-48.3	-13.0	-35.3	
4157.50	-10.2	V	3.0	39.8	1.0	-49.0	-13.0	-36.0	
4989.00	-9.1	V	3.0	39.8	1.0	-47.9	-13.0	-34.9	
1663.00	-9.5	H	3.0	38.2	1.0	-46.8	-13.0	-33.8	
2494.50	-13.2	H	3.0	38.8	1.0	-51.0	-13.0	-38.0	
3326.00	-10.1	H	3.0	39.4	1.0	-48.6	-13.0	-35.6	
4157.50	-10.6	H	3.0	39.8	1.0	-49.4	-13.0	-36.4	
4989.00	-9.6	H	3.0	39.8	1.0	-48.4	-13.0	-35.4	
High Ch, 848.3MHz									
1696.60	-10.6	V	3.0	38.2	1.0	-47.8	-13.0	-34.8	
2544.90	-12.3	V	3.0	38.9	1.0	-50.2	-13.0	-37.2	
3393.20	-9.4	V	3.0	39.5	1.0	-47.9	-13.0	-34.9	
4241.50	-10.2	V	3.0	39.8	1.0	-49.0	-13.0	-36.0	
5089.80	-8.9	V	3.0	39.8	1.0	-47.7	-13.0	-34.7	
1696.60	-9.9	H	3.0	38.2	1.0	-47.2	-13.0	-34.2	
2544.90	-11.2	H	3.0	38.9	1.0	-49.1	-13.0	-36.1	
3393.20	-9.6	H	3.0	39.5	1.0	-48.1	-13.0	-35.1	
4241.50	-10.4	H	3.0	39.8	1.0	-49.2	-13.0	-36.2	
5089.80	-9.4	H	3.0	39.8	1.0	-48.2	-13.0	-35.2	

LTE  
 Band 26  
 1.4MHz  
 QPSK

**LTE Band 41**

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement											
LTE Band 41 10MHz QPSK		Company: Samsung Project #: 4788805451 Date: 2019-01-22 Test Engineer: 47989 Configuration: EUT / AC Adapter / Earphone, Y-Position Location: Chamber 1 Mode: LTE_QPSK Band 41 Harmonics, 10MHz 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, 2501MHz									
		5002.00	-2.5	V	3.0	43.8	1.0	-45.2	-25.0	-20.2	
		7503.00	10.0	V	3.0	42.5	1.0	-31.4	-25.0	-6.4	
		10004.00	-1.7	V	3.0	40.6	1.0	-41.2	-25.0	-16.2	
		5002.00	0.0	H	3.0	43.8	1.0	-42.8	-25.0	-17.8	
		7503.00	6.7	H	3.0	42.5	1.0	-34.8	-25.0	-9.8	
		10004.00	-6.1	H	3.0	40.6	1.0	-45.7	-25.0	-20.7	
		Mid Ch, 2593MHz									
5186.00	-2.6	V	3.0	43.8	1.0	-45.4	-25.0	-20.4			
7779.00	6.4	V	3.0	42.3	1.0	-34.9	-25.0	-9.9			
10372.00	-0.5	V	3.0	40.7	1.0	-40.1	-25.0	-15.1			
5186.00	0.9	H	3.0	43.8	1.0	-41.9	-25.0	-16.9			
7779.00	3.9	H	3.0	42.3	1.0	-37.4	-25.0	-12.4			
10372.00	-0.8	H	3.0	40.7	1.0	-40.4	-25.0	-15.4			
High Ch, 2685MHz											
5370.00	-3.0	V	3.0	43.7	1.0	-45.8	-25.0	-20.8			
8055.00	8.3	V	3.0	42.2	1.0	-32.9	-25.0	-7.9			
10740.00	-2.1	V	3.0	40.8	1.0	-41.9	-25.0	-16.9			
5370.00	1.0	H	3.0	43.7	1.0	-41.8	-25.0	-16.8			
8055.00	7.8	H	3.0	42.2	1.0	-33.4	-25.0	-8.4			
10740.00	-1.2	H	3.0	40.8	1.0	-41.0	-25.0	-16.0			

**LTE Band 66**

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement										
Company:		Samsung								
Project #:		4788805413								
Date:		2019-01-11								
Test Engineer:		47989								
Configuration:		EUT / AC Adapter / Earphone, Y-Position								
Location:		Chamber 1								
Mode:		LTE_QPSK Band 66 Harmonics, 3MHz 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, 1711.5MHz										
3423.00	-4.6	V	3.0	43.7	1.0	-47.2	-13.0	-34.2		
5134.50	-9.1	V	3.0	43.8	1.0	-51.9	-13.0	-38.9		
6846.00	-6.1	V	3.0	42.9	1.0	-47.9	-13.0	-34.9		
3423.00	-1.5	H	3.0	43.7	1.0	-44.2	-13.0	-31.2		
5134.50	-8.9	H	3.0	43.8	1.0	-51.7	-13.0	-38.7		
6846.00	-6.2	H	3.0	42.9	1.0	-48.1	-13.0	-35.1		
Mid Ch, 1745MHz										
3490.00	-6.4	V	3.0	43.7	1.0	-49.1	-13.0	-36.1		
5235.00	-8.9	V	3.0	43.8	1.0	-51.7	-13.0	-38.7		
6980.00	-5.4	V	3.0	42.7	1.0	-47.2	-13.0	-34.2		
3490.00	-3.7	H	3.0	43.7	1.0	-46.4	-13.0	-33.4		
5235.00	-8.5	H	3.0	43.8	1.0	-51.2	-13.0	-38.2		
6980.00	-5.5	H	3.0	42.7	1.0	-47.2	-13.0	-34.2		
High Ch, 1778.5MHz										
3557.00	-7.5	V	3.0	43.7	1.0	-50.2	-13.0	-37.2		
5335.50	-8.1	V	3.0	43.7	1.0	-50.8	-13.0	-37.8		
7114.00	-5.1	V	3.0	42.7	1.0	-46.7	-13.0	-33.7		
3557.00	-7.0	H	3.0	43.7	1.0	-49.7	-13.0	-36.7		
5335.50	-8.4	H	3.0	43.7	1.0	-51.2	-13.0	-38.2		
7114.00	-5.5	H	3.0	42.7	1.0	-47.2	-13.0	-34.2		

**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.