

Appendix for Test report



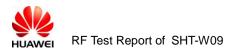
Appendix A: DTS (6 dB) Bandwidth

In this document, the "DTS6dBBW" refers to the measured "DTS (6 dB) Bandwidth" value. In this Appendix, the "fc(DTS6dBBW)" refers to the centre of the measured "DTS6dBBW". The introduction of the "fc(DTS6dBBW)" is due to that other measurements use it as the spectrum analyzer setting.

For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

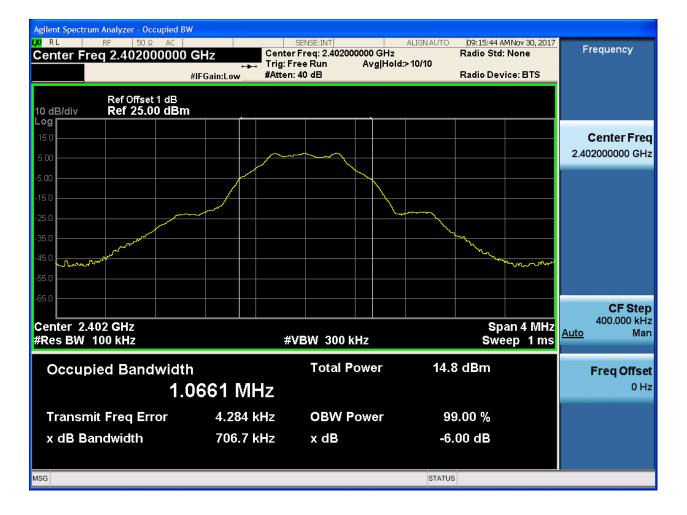
Part I - Test Results

| Test Mode | Test Channel | Test Channel Frequency[MHz] | | Verdict |
|-----------|--------------|-----------------------------|------|---------|
| TM1 _Ch0 | L | 2402 | 0.71 | pass |
| TM1 _Ch19 | М | 2440 | 0.70 | pass |
| TM1 _Ch39 | Н | 2480 | 0.70 | pass |



Part II - Test Plots

2.1 TM1_Ch0_L





2.2 TM1_Ch19_M

| Ref Offset 1 dB | | | ALIGN AUTO D9:20:56 AM Nov 30, 20 Radio Std: None : 10/10 Radio Device: BTS | ¹⁷ Frequency |
|--|------------------------|-------------------|--|--------------------------------|
| 10 dB/div Ref 25.00 dBm 15.0 5.00 -5.00 -15.0 -25.0 | | | | Center Freq 2.440000000 GHz |
| -35.0 -45.0 -55.0 -65.0 Center 2.44 GHz #Res BW 100 kHz | #\/ | /BW 300 kHz | Span 4 Mł Sweep 1 m | CF Step 400.000 kHz |
| Occupied Bandwidth | | Total Power | 15.1 dBm | Freq Offset 0 Hz |
| Transmit Freq Error x dB Bandwidth | 4.361 kHz 700.8 kHz | OBW Power x dB | 99.00 % -6.00 dB | |



2.3 TM1_Ch39_H

| Agilent Spectrum Ana LXI RL RF | 50 Ω | AC | | | | NSE:INT | | | ALIGN AUTO | | AMNov 30, 2017 | Er | equency |
|-----------------------------------|--|---------------|-----------------------|-------------|--------------------------------------|---------|------|-------------------|------------|-----------------------|----------------|------|-------------------------------|
| Center Freq 2 | 2.48000 | | iz Gain:Low | - - | Center F Trig: Free #Atten: 40 | | |) GHz /g Hold: | >10/10 | Radio Std Radio De | | | equency |
| 10 dB/div 🛛 🦷 | tef Offset tef 25.0 | 1 dB 0 dBm | | | | | | | | | | | |
| Log 15.0 | | | | | | | | | | | | | enter Freq |
| -5.00 | | | | | | | - | | | | | 2.40 | |
| -15.0 | | | | | | | | | | | | | |
| -25.0 | سم محمد | | | | | | | | | h. | | | |
| -45.0 | Marana and a start and a start | | | | | | | | | - Ward | Murran Mar | | |
| -55.0 | | | | | | | | | | | | | |
| Center 2.48 G | Hz | | | | | | | | | Sp | an 4 MHz | Auto | CF Step 400.000 kHz Man |
| #Res BW 100 | kHz | | | | #VE | 300 K | ۲Ľ | | | Sw | eep 1 ms | Auto | Wan |
| Occupied | Band | | | | _ | Total P | ow | er | 14.9 | 9 dBm | | I | req Offset |
| | 1.0645 MHz | | | | | | 0 Hz | | | | | | |
| Transmit F | req Err | or | 4.91 | 3 k | Hz | OBW P | ow | er | 99 | 9.00 % | | | |
| x dB Bandy | width | | 697 | .7 k | Hz | x dB | | | -6. | 00 dB | | | |
| MSG | | | | | | | | | STATUS | | | | |
| | | | | | | | | | 314100 | | | | |

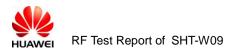


Appendix B: Occupied Bandwidth

For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

Part I - Test Results

| Test Mode | Test Channel | Frequency[MHz] | Occupied Bandwidth [MHz] | Verdict |
|-----------|--------------|----------------|--------------------------|---------|
| TM1 _Ch0 | L | 2402 | 1.04 | pass |
| TM1 _Ch19 | М | 2440 | 1.04 | pass |
| TM1 _Ch39 | Н | 2480 | 1.04 | pass |



Part II - Test Plots

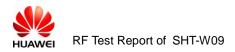
2.1 TM1_Ch0_L





2.2 TM1_Ch19_M

| Agilent Spectrum Analyzer - Occupied B M RL RF 50 Ω AC | | ENSE:INT | ALIGN AUTO 09:21:04 AM Nov 30, 20 | 17 | |
|---|--|--|--|--------------------------------|--|
| Center Freq 2.440000000 | GHz Center Trig: Fro #IFGain:Low #Atten: | | Radio Std: None I: 10/10 Radio Device: BTS | Frequency | |
| Ref Offset 1 dB 10 dB/div Ref 25.00 dBm Log | 1 | | | | |
| 15.0 5.00 | | | | Center Freq 2.440000000 GHz | |
| -5.00 | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | Marine Marin | | | |
| -15.0 | | | M | | |
| -45.0 | | \/` | M A A A A A A A A A A A A A A A A A A A | | |
| -55.0 0 | | | | ** | |
| | | | | CF Step 400.000 kHz | |
| Center 2.44 GHz #Res BW 20 kHz | #V | BW 62 kHz | Span 4 M⊦ Sweep 9.6 m | S Auto Man | |
| Occupied Bandwidt | h | Total Power | 14.6 dBm | Freq Offset | |
| 1.0 | 1.0426 MHz | | | | |
| Transmit Freq Error | 11.149 kHz | OBW Power | 99.00 % | | |
| x dB Bandwidth | 1.261 MHz | x dB | -26.00 dB | | |
| 100 | | | 07471-0 | | |
| MSG | | | STATUS | | |



2.3 TM1_Ch39_H

| Agilent Spectrum Analyzer - Occupied BV | V | | | | |
|--|---------------------------------|----------------|-------------------|--|--------------------------------|
| Image: RL RF 50 Ω AC Center Freq 2.480000000 | GHz C | SENSE:INT | ALIGN AUTO | 09:25:44 AMNov 30, 2017 Radio Std: None | Frequency |
| | rig: Free Run / Atten: 40 dB | vg Hold: 10/10 | Radio Device: BTS | | |
| | #IFGain:Low#/ | ntten. 40 dB | | Hadro Berrice. Bito | |
| Ref Offset 1 dB 10 dB/div Ref 25.00 dBm | | | | | |
| Log 15.0 | | | | | Center Freq |
| 5.00 | | | | | 2.480000000 GHz |
| -5.00 | ^ | mm | | | |
| -15.0 | \sim | ر لمر | | | |
| -25.0 | | | Y | | |
| m | ~~ | | J mark | | |
| -35.0 | | | - ² | \ | |
| -45.0 | | | | V V V V V V V V V V V V V V V V V V V | |
| -55.0 your property and the second | | | | who have be | |
| -65.0 | | | | | CF Step |
| Center 2.48 GHz | | | | Span 4 MHz | 400.000 kHz <u>Auto</u> Man |
| #Res BW 20 kHz | | #VBW 62 kHz | | Sweep 9.6 ms | Auto |
| Occupied Bandwidth | ı | Total Pov | ver 14.4 | 4 dBm | Freq Offset |
| | 0417 MHz | - | | | 0 Hz |
| Transmit Freq Error | 11.672 kHz | Z OBW Pov | ver 9 | 9.00 % | |
| x dB Bandwidth | 1.261 MHz | z x dB | -26 | .00 dB | |
| | | | | | |
| MSG | | | STATUS | 3 | |
| | | | | | |



Appendix C: Duty Cycle

Part I - Test Results

| Test Mode | TX Freq. [MHz] | Duty cycle [%] |
|-----------|----------------|----------------|
| TM1 | CH0,CH19,CH39 | 60.3 |

Part II - Test Plots

2.1 TM1

| | um Analyzer - Swept SA | | | | | | | | |
|------------------|------------------------|-------------|---------------|--------------------|--------------------------|---------------|---------|------------------|-----------------|
| Center E | RF 50 Ω AC | GH7 | SENSE | INT | Ava Tvp | e: Log-Pwr | | MNov 30, 2017 | Frequency |
| Genter P | eq 2.40200000 | PNO: Fast + | Trig: Free R | | | | TYF | | |
| | | IFGain:Low | Atten: 34 dE | j | | | | | Auto Tune |
| | | | | | | | MKr3 1. | 316 ms 37 dBm | |
| 10 dB/div Log | Ref 23.00 dBm | | | | | | 1.0 | 57 ubili | |
| 13.0 | | | | {} ² ── | ♦ ³ · | | | | Center Freq |
| 3.00 | | | | - | <u> </u> | | | | 2.402000000 GHz |
| -7.00 | | | | | | | | | |
| -17.0 | | | | | | | | | |
| -27.0 | | | | | | | | | Start Freq |
| -37.0 | | اسم | | 4 | - April | | | لسع | 2.402000000 GHz |
| -47.0 | 4 //w | www. | | marpha | 4 ^{ray} p | | WH Y | Wint | |
| -57.0 | | | | | | | | | Stop Freq |
| -67.0 | | | | | | | | | 2.402000000 GHz |
| | | | | | | | | | |
| | 102000000 GHz | VDW | | | | Owener 0 | S | pan 0 Hz | CF Step |
| Res BW 8 | | APAA | 8.0 MHz | | | Sweep 2 | | | 8.000000 MHz |
| MKR MODE TR | RC SCL X | 690.7 µs | Y 7.24 dBm | | CTION FI | JNCTION WIDTH | FUNCTIO | ON VALUE | <u>Auto</u> Man |
| 2 N 1 | t | 1.068 ms | 7.28 dBm | | | | | | |
| 3 N 1 4 | t | 1.316 ms | 7.37 dBm | | | | | | Freq Offset |
| 5 | | | | | | | | | 0 Hz |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| MSG | | | | | | STATUS | 3 | | |
| | | | | | | | | | |



Appendix D: Maximum Conducted Average Output Power

Part I - Test Results

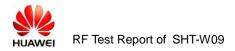
| Test Mode | Test Channel | Frequency[MHz] | Duty Cycle [%] | Power[dBm] | Verdict |
|-----------|--------------|----------------|----------------------|------------|---------|
| TM1 _Ch0 | L | 2402 | 60.3 | 8.09 | pass |
| TM1 _Ch19 | М | 2440 | 60.3 | 8.54 | pass |
| TM1 _Ch39 | Н | 2480 | 60.3 | 8.28 | pass |



Part II - Test Plots

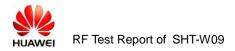
2.1 TM1_Ch0_L

| KI RL | um Analyzer - The du RF 50 Ω / req 2.4020000 | AC | | NSE:INT | ALIGN AUTO | 09:16:11 AM Nov 30, 2017 TRACE 123456 | Frequency |
|-----------------------------------|--|--|---|----------|-----------------|--|--|
| 0 dB/div | Ref Offset 3.2 dl | PNO: Wid IFGain:Lov 3 | | | Mkr1 Band Po | 2.402 000 GHz wer 8.093 dBm | Auto Tune |
| og 20.0 10.0 0.00 | | | | 1 | | | Center Fred 2.402000000 GH: |
| 10.0 20.0 30.0 | | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | | | my program | | Start Fred 2.400000000 GHz |
| 40.0 50.0 60.0 | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | | | | | m | Stop Fred 2.404000000 GHz |
| Res BW | RC SCL | #\ × 2.402 000 GHz | / <mark>BW 62 kHz*</mark> Y -8.991 dl | FUNCTION | Sweep | | CF Step 400.000 kH <u>Auto</u> Mar |
| 2 3 4 5 6 | | | | | | | Freq Offse 0 H: |
| 7 8 9 10 11 12 | | | | | | | |
| SG | | | | | STATUS | | |



2.2 TM1_Ch19_M





2.3 TM1_Ch39_H

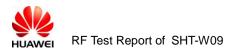
| gilent Spectrum Analyzer - The c | | | | | | |
|---|---|--|--|---------------------------------------|---|---|
| enter Freq 2.480000 | | SENSE:II | #Avg T | ALIGN AUTO ype: RMS Id: 500/500 | 09:26:03 AMNov 30, 2017 TRACE 1 2 3 4 5 6 TYPE A WWWWW DET A A A A A A | Frequency |
| Ref Offset 3.2 o dB/div Ref 30.00 dB | IFGain:Low | Atten: 38 dB | | Mkr1 | 2.480 000 GHz ver 8.283 dBm | Auto Tune |
| 20.0 10.0 0.00 | | 1 | | | | Center Free 2.480000000 GH |
| 10.0 20.0 30.0 | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | for the second s | Month of the second sec | ~~~ | | Start Fre 2.478000000 GH |
| 40.0 50.0 60.0 | | | | | han | Stop Fre 2.482000000 GH |
| tart 2.478000 GHz Res BW 20 kHz | X | 3W 62 kHz* | FUNCTION | | top 2.482000 GHz 12.3 ms (601 pts) FUNCTION VALUE | CF Ste 400.000 kH <u>Auto</u> Ma |
| 1 N 1 f 2 | 2.480 000 GHz | -3.842 dBm | Band Power | 1.053 MHz | 8.283 dBm | Freq Offse 0 H |
| 7 8 8 9 9 0 1 2 | | | | | | |
| G | | | | STATUS | | |



Appendix E: Maximum Power Spectral Density Level

Part I - Test Results

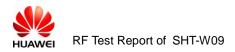
| Test Mode | Test Channel | Frequency[MHz] | Duty Cycle [%] | PD[MHz] | Verdict |
|-----------|--------------|----------------|----------------------|---------|---------|
| TM1 _Ch0 | L | 2402 | 60.3 | -3.76 | pass |
| TM1 _Ch19 | М | 2440 | 60.3 | -3.12 | pass |
| TM1 _Ch39 | Н | 2480 | 60.3 | -3.70 | pass |



Part II - Test Plots

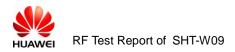
2.1 TM1_Ch0_L



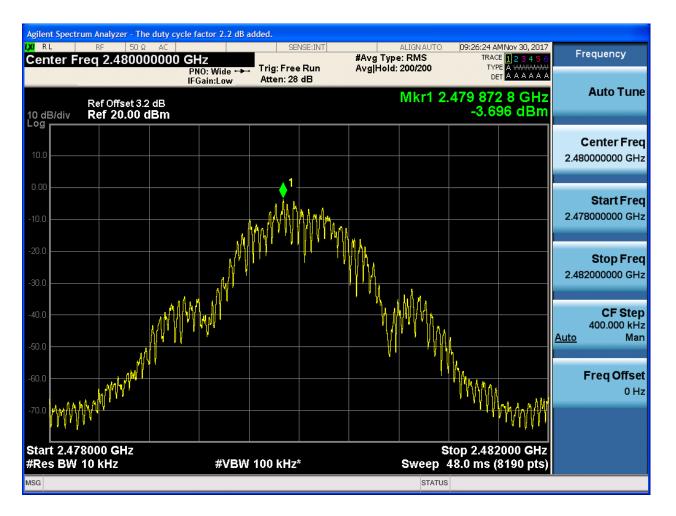


2.2 TM1_Ch19_M





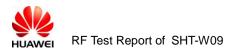
2.3 TM1_Ch39_H



Appendix F: Band Edges Compliance

Part I - Test Results

| Test Mode | Test Channel | Frequency[MHz] | Carrier Power[dBm] | Max.Spurious Level[dBm] | Verdict |
|-----------|-----------------|----------------|-----------------------|----------------------------|---------|
| TM1_Ch0 | L | 2402 | 7.54 | -46.87 | pass |
| TM1_Ch39 | Н | 2480 | 7.60 | -49.21 | pass |



Part II - Test Plots

2.1 TM1_Ch0_L

| LXI RL | rum Analyzer - Sw RF 50 Ω req 2.3925(| AC 00000 G | | T | BE:INT | Avg Type Avg Hold: | ALIGNAUTO | TRAC | MNov 30, 2017 E 1 2 3 4 5 6 E M WWWWW | Frequency |
|-------------------------------------|---|------------|--|------------------------|---|--|------------------|---------------------|--|--|
| 10 dB/div | Ref Offset 1 Ref 30.00 | dB | PNO: Fast ↔ Gain:Low | Atten: 40 o | | | | DE 2 2.400 | 00 GHz 9 dBm | Auto Tune |
| Log 20.0 10.0 0.00 | | | | | | | | ^1 | | Center Freq 2.392500000 GHz |
| -10.0 -20.0 -30.0 | | | | | | | | | | Start Freq 2.380000000 GHz |
| -40.0 -50.0 | ليوسا المسيعين المراسي المسير المسيول | | ngngallana ang ang ang ang ang ang ang ang ang | | , <mark>↓</mark> ₽► ⁰ ↓ ● | ୷ <mark>ᡎᡆᡌᡮᡌᡎ</mark> ᡳᠼᡘᠫᡌᡊ _{ᠣᢃ} ᡪᡘᡁ | alan mapa assort | <u>,</u> | - United and the second | Stop Freq 2.405000000 GHz |
| Start 2.38 #Res BW | 100 kHz | × | | V 300 kHz | FUNC | TION FU | #Sweep | Stop 2.40 100 ms | 1500 GHz (601 pts) N VALUE | CF Step 2.500000 MHz <u>Auto</u> Man |
| 1 N 1 2 N 1 3 4 5 6 7 8 | | | 00 GHz 00 GHz | 7.539 dB -46.869 dB | | | | | | Freq Offset 0 Hz |
| 9 10 11 12 MSG | | | | | | | STATUS | | | |



2.2 TM1_Ch39_H

| Agilent Spectrum Analyzer - Swept SA | | | | | |
|---|-----------------------------|--------------------------------|---------------------------------|--|--------------------------------------|
| X RL RF 50 Ω AC Center Freq 2.483500000 | CH- | SENSE:INT | ALIGN AUTO Avg Type: Log-Pwr | 09:28:50 AMNov 30, 2017 TRACE 1 2 3 4 5 6 | Frequency |
| center Freq 2.485500000 | PNO: Fast +++ IFGain:Low | Trig: Free Run Atten: 40 dB | Avg Hold: 100/100 | | |
| Ref Offset 1 dB 10 dB/div Ref 30.00 dBm | | | Mkr | 2 2.483 50 GHz -49.212 dBm | Auto Tune |
| 20.0 10.0 0.00 | | | | | Center Freq 2.483500000 GHz |
| -10.0 | | | | | Start Freq 2.473500000 GHz |
| -40.0 -50.0 Surgering of the second | | 2 Longender regelender | kulpane | attaa aanaa ahaa ahaa ahaa ahaa ahaa aha | Stop Freq 2.493500000 GHz |
| Start 2.47350 GHz #Res BW 100 kHz | #VBW | 300 kHz | #Sweep | Stop 2.49350 GHz 100 ms (601 pts) | CF Step 2.000000 MHz |
| MKR MODE TRC SCL X | 30 00 GHz | 7.601 dBm | UNCTION FUNCTION WIDTH | FUNCTION VALUE | <u>Auto</u> Man |
| | | -49.212 dBm | | | Freq Offset 0 Hz |
| 7 8 9 10 11 12 | | | | | |
| ISG DAlignment Completed | | | STATUS | | |



Appendix G: Unwanted Emissions into Non-Restricted Frequency

Bands

In this Appendix, the "Pref", which is used as the reference level, refers to the peak power level in any 100 kHz bandwidth within the fundamental emission, the "Puw" referrers to the maximum emission power in 100 kHz band segments outside of the authorized frequency band.

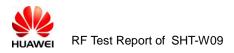
Considering that the higher ratio of RBW to the span for the frequency ranges below 30 MHz makes the results determination be complicated, a narrower RBW other than 100 kHz is used for these ranges. The measured value should add a RBW correction factor (RBWCF) where RBWCF [dB] = $10 \times lg(100 \ [kHz]/narrower RBW \ [kHz])$. As to this Appendix, the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain and used as respective results for each chain, due to the relative-limit requirement.

In the result table, the "< Limit" denotes that "The Puw [dBm] is less than Pref[dBm]-30[dBm],see test plots for detailed".

| Test Mode | Test Channel | Frequency[MHz] | Pref[dBm] | Puw[dBm] | Verdict |
|-----------|--------------|----------------|-----------|--------------------------------------|---------|
| TM1_Ch0 | L | 2402 | 7.54 | <limit< td=""><td>pass</td></limit<> | pass |
| TM1_Ch19 | М | 2440 | 7.88 | <limit< td=""><td>pass</td></limit<> | pass |
| TM1_Ch39 | Н | 2480 | 7.70 | <limit< td=""><td>pass</td></limit<> | pass |

Part I - Test Results

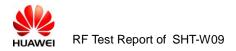


Part II - Test Plots

2.1 TM1_Ch0_L

Pref:

| Agilent Spectrum Analyzer - Swept SA | | ISE:INT | ALIGN AUTO | 09:16:42 AMNov 30, 2017 | |
|--|-------------------------------|---------------------------|------------|---|--|
| Center Freq 2.402000000 | GHz PNO: Wide C Trig: Free | Avg Type Run Avg Hold: | | TRACE 123456 TYPE MWWWWW DET PPPPP | Frequency |
| Ref Offset 1 dB 10 dB/div Ref 20.00 dBm | IFGain:Low Atten: 30 | 90 | Mkr1 2. | 401 993 GHz 7.545 dBm | Auto Tune |
| 10.0 | | 1 | | | Center Freq 2.402000000 GHz |
| -10.0 | | | | | Start Freq 2.400000000 GHz |
| -20.0 | ~ | | | | Stop Freq 2.404000000 GHz |
| -40.0 | | | | | CF Step 400.000 kHz <u>Auto</u> Man |
| 60.0 | | | | [#] \`~ _{100/~1} /`\^\o | Freq Offse 0 Hz |
| -70.0 Start 2.400000 GHz #Res BW 100 kHz | #VBW 300 kHz | | Sto | p 2.404000 GHz | |
| | #VBW JUU KHZ | | Sweep 1 | .00 ms (601 pts) | |



Puw:





| 9 | | Analyzer - Sw | | | | | | | | | | |
|----------------|----------|-----------------------------|-------------------------|------------------------|---|---------|---|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|
| LXI RI | | r⊧ 50Ω 15.0750 | | | SEI | NSE:INT | Ava Type | ALIGNAUTO : Log-Pwr | | MNov 30, 2017 | Fre | quency |
| Cer | | 15.0750 | PI | NO: Fast 🖵 Gain:Low | Trig: Free #Atten: 40 | | Avg Hold: | | TYF | T P P P P P P | | |
| 10 di Log | | ef Offset 1 (ef 20.00 (| | | | | | | Mkr1 - -42.0 | 160 kHz 98 dBm | | Auto Tune |
| 10.0 | | | | | | | | | | | | enter Freq 075000 MHz |
| 0.00 -10.0 | | | | | | | | | | | | Start Freq 150.000 kHz |
| -20.0 -30.0 | | | | | | | | | | -32.46 dBm | 30. | Stop Freq 000000 MHz |
| -40.0 -50.0 | | | | | | | | | | | 2. <u>Auto</u> | CF Step 985000 MHz Man |
| -60.0 | | WYqhyhyhyh | Alfoligen aligne af the | uft ljønet gjalge | pro <mark>, 18 alian state a bla</mark> t | | han an a | in the second second | yde line toler and an | heniselli addan y figli | F | F req Offset 0 Hz |
| -70.0 Star | t 150 kH | 7 | | | | | | | Stop 3 | 0.00 MHz | | |
| | s BW 10 | | | #VBW | 30 kHz | | | Sweep | 285 ms (| 3001 pts) | | |
| MSG | | | | | | | | STATUS | 🚹 DC Cοι | pled | | |



| 9 | t Spectrum Analyzer - | | | | | | | | | |
|--------------------|---|--|-----------------------------------|---------------------------------------|---------|-----------|-----------|--------------------|-----------------------|--|
| LXI RL | . RF 50 ter Freq 1.165 | | Ll-7 | SEN | VSE:INT | | ALIGNAUTO | | MNov 30, 2017 | Frequency |
| Cen | | F | NO: Fast 😱 Gain:Low | Trig: Free #Atten: 40 | | Avg Hold: | | TYF | | |
| 10 dB Log r | Ref Offset 3/div Ref 20.00 | 1 dB 0 dBm | | | | | Mkr | 1 2.233 -46.8 | 32 GHz 37 dBm | Auto Tune |
| 10.0 - | | | | | | | | | | Center Freq 1.165000000 GHz |
| 0.00 - -10.0 - | | | | | | | | | | Start Freq 30.000000 MHz |
| -20.0 -30.0 | | | | | | | | | -22.46 dBm | Stop Freq 2.300000000 GHz |
| -40.0 - -50.0 - | an and fear and the state of the state of the | und ¹¹ States of the second second second | a - 21 Martin State Inc State Co. | त्राधीय किस्त्रार्थ्य क्रान्स्राय क्र | | | | | | CF Step 227.000000 MHz <u>Auto</u> Man |
| -60.0 | ed them has her been been and the barrene | u Mark Lindon dan dagan dan Kolonga Kolong | | , de, (a.), (all, y pier (aradian | | | | | | Freq Offset 0 Hz |
| -70.0 | | | | | | | | | | |
| | t 30 MHz s BW 100 kHz | | #VBW | 300 kHz | | | Sweep | Stop 2 217 ms (| .300 GHz 8001 pts) | |
| MSG | | | | | | | STATUS | 6 | | |

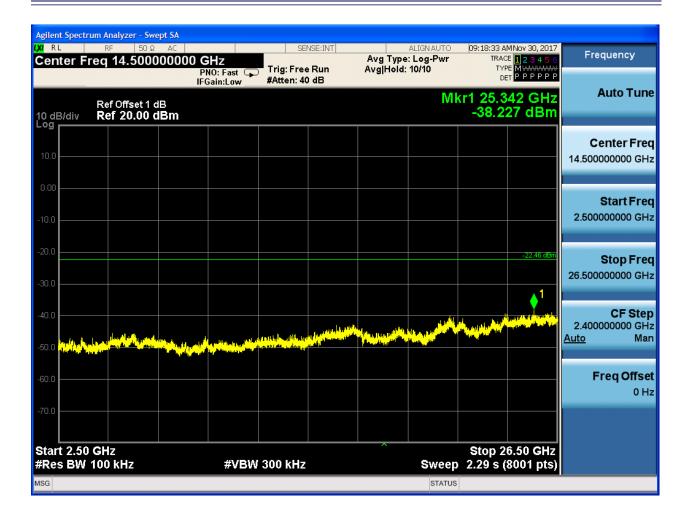


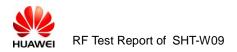
| | um Analyzer - Swep | | | | | | | | | |
|-----------------------|---------------------------------|---------|---------------------|--------------------------|---------------|-------------------------|---------------|--------------------|---|------------------------------|
| Center F | RF 50 Ω req 2.350000 | | 2 | | VSE:INT | Avg Type | | TRAC | MNov 30, 2017 E <mark>1 2 3 4 5 6</mark> | Frequency |
| | | PNC |): Fast 😱 in:Low | Trig: Free #Atten: 40 | | Avg Hold: | >200/200 | TYF | | |
| 10 dB/div Log | Ref Offset 1 dE Ref 20.00 dI | 3 Bm | | | | | MI | (r1 2.39) -46.9 | 9 8 GHz 63 dBm | Auto Tune |
| | | | | | | | | | | Center Freq |
| 10.0 | | | | | | | | | | 2.350000000 GHz |
| 0.00 | | | | | | | | | | |
| -10.0 | | | | | | | | | | Start Freq 2.30000000 GHz |
| -10.0 | | | | | | | | | | |
| -20.0 | | | | | | | | | -22.46 dBm | Stop Freq |
| -30.0 | | | | | | | | | | 2.400000000 GHz |
| 10.0 | | | | | | | | | | CF Step |
| -40.0 | | | | | | | | | 1 | 10.000000 MHz |
| -50.0 Junt ion | Martheought and mary | | kwnatarr-da | and normality and | vhilling with | a ton too and a title a | ละหม่านสาราคม | whatshowlyitym | Barrad Hours Phase | <u>Auto</u> Man |
| -60.0 | | | | | | | | | | Freq Offset |
| | | | | | | | | | | 0 Hz |
| -70.0 | | | | | | | | | | |
| Start 2.30 | 000 CHz | | | | | | | Stop 2.4(| 0000 GHz | |
| #Res BW | | | #VBW | 300 kHz | | | Sweep | 9.60 ms (| 1000 GH2 1001 pts) | |
| MSG | | | | | | | STATU | S | | |



| | rum Analyzer - Swept SA | | | | | |
|------------------|----------------------------------|---|--|---------------------------|--|---|
| LXIRL | RF 50 Ω AC | | NSE:INT | ALIGNAUTO | 09:18:00 AMNov 30, 2017 TRACE 1 2 3 4 5 6 | Frequency |
| Center F | req 2.491750000 | PNO: Fast IFGain:Low #Atten: 40 | Run Av | /g Hold:>200/200 | | |
| 10 dB/div Log | Ref Offset 1 dB Ref 20.00 dBm | | | Mkr1 2.4 | 485 287 5 GHz -47.396 dBm | Auto Tune |
| 10.0 | | | | | | Center Freq 2.491750000 GHz |
| -10.0 | | | | | | Start Freq 2.483500000 GHz |
| -20.0 | | | | | -22.46 dBm | Stop Freq 2.50000000 GHz |
| -40.0 | 1 marty marty of the | una for the start of the second the second the second second second second second second second second second s | welling to the ford of the for | autronally the states all | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | CF Step 1.650000 MHz <u>Auto</u> Man |
| -60.0 | | | | | | Freq Offset 0 Hz |
| | 33500 GHz | | | St | op 2.500000 GHz | |
| #Res BW | 100 kHz | #VBW 300 kHz | | | 1.60 ms (601 pts) | |
| MSG | | | | STATUS | | |



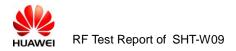




2.2 TM1_Ch19_M

Pref:





Puw:





| | | ım Analyzer - | | | | | | | | | | |
|-----------------------|----------|------------------------|--|-------------------------|-----------------------------------|--|-------------------------------|------------------------|--|--------------------------------|---------------------|-------------------------------|
| LXI R | | | ឆ <u>ណ</u> DC 75000 MHz | | SEI | NSE:INT | Ανα Τισε | ALIGNAUTO : Log-Pwr | | MNov 30, 2017 E 1 2 3 4 5 6 | Freq | uency |
| Cer | | eq 15.07 | F | PNO: Fast 🖵 Gain:Low | Trig: Free #Atten: 40 | | Avg Hold: | | TYP | | | |
| 10 dl Log | B/div | Ref Offset Ref 20.0 | | | | | | | Mkr1 * -41.1 | 160 kHz 49 dBm | A | uto Tune |
| 10.0 | | | | | | | | | | | | n ter Freq 5000 MHz |
| 0.00 -10.0 | | | | | | | | | | | | tart Freq 0.000 kHz |
| -20.0 -30.0 | | | | | | | | | | -32:12 dBm | | top Freq 0000 MHz |
| -40.0 -50.0 | | | | | | | | | | | 2.98 <u>Auto</u> | CF Step 5000 MHz Man |
| -60.0 -70.0 | | | n <mark>alul a</mark> r ministrative lange | haliyo hala talayon a | h <mark>i mananan ang sida</mark> | under an | den filmer for station of the | alt alter for the fort | elen en e | han dagla jilay | Fre | e q Offset 0 Hz |
| Star | rt 150 I | | | | | | | | Stop 3 | 0.00 MHz | | |
| #Re ^{MSG} | s BW ' | 10 kHz | | #VBW | 30 kHz | | | - | 285 ms (| 3001 pts) | | |
| viad | | | | | | | | STATUS | | ipied | | |



| | nt Spectrum Analyzer - Swept S | | | | | |
|----------------|---|---|--|--|--|---|
| LXI R | | | SENSE:INT | ALIGN AUTO Avg Type: Log-Pwr | 09:22:51 AM Nov 30, 2017 TRACE 1 2 3 4 5 6 | Frequency |
| Cer | nter Freq 1.1650000 | PNO: Fast IFGain:Low | Trig: Free Run #Atten: 40 dB | Avg Hold:>50/50 | | |
| 10 di Log | Ref Offset 1 dB B/div Ref 20.00 dBn | n | | Mkr | 1 2.157 56 GHz -47.174 dBm | Auto Tune |
| 10.0 | | | | | | Center Freq 1.165000000 GHz |
| 0.00 -10.0 | | | | | | Start Freq 30.000000 MHz |
| -20.0 -30.0 | | | | | -22:12 dBm | Stop Freq 2.300000000 GHz |
| -40.0 -50.0 | pui are non glopping a ship a la Au Burne a | | مر المراجع المراجع المراجع المراجع المراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والم | and the state of the formal state of the sta | A REAL PROPERTY OF A DESCRIPTION OF A DE | CF Step 227.000000 MHz <u>Auto</u> Man |
| -60.0 | and the state of the second | ing parameters and an | | | | Freq Offset 0 Hz |
| -70.0 | | | | | | |
| | rt 30 MHz s BW 100 kHz | #VBW | 300 kHz | Sweep | Stop 2.300 GHz 217 ms (8001 pts) | |
| MSG | | | | STATUS | | |



| | um Analyzer - Swept | | | | | | | | |
|-----------------------|---------------------------------|---|--------------------------------|------------|-------------------|----------------------------------|-------------------------|------------------------------------|---|
| LXI RL | RF 50 Ω | | SE | NSE:INT | | ALIGNAUTO | | 4Nov 30, 2017 | Frequency |
| Center F | req 2.350000 | 1000 GHZ PNO: Fas IFGain:Lo | | | Avg Hold: | | TYP | 123456 MWWWWW PPPPP PPPPP | |
| 10 dB/div Log | Ref Offset 1 dB Ref 20.00 dE | 3 Bm | | | | Mł | (r1 2.364 -47.39 | 6 GHz 92 dBm | Auto Tune |
| 10.0 | | | | | | | | | Center Freq 2.350000000 GHz |
| -10.0 | | | | | | | | | Start Freq 2.300000000 GHz |
| -20.0 | | | | | | | | -22:12 dBm | Stop Freq 2.400000000 GHz |
| -40.0 | unor-aliananaphananapha | unu and and a second | ษณ _์ เป็นประกันสมุน | AMARA MARA | 1 Ardizatorian | aha ^{l I} mrupi Manauti | nflanjekzhilimetra | Harrow Josef | CF Step 10.000000 MHz <u>Auto</u> Man |
| -60.0 | | | | | | | | | Freq Offset 0 Hz |
| -70.0 | | | | | | | | | |
| Start 2.30 #Res BW | | #\ | /BW 300 kHz | | | Sweep | Stop 2.40 9.60 ms (* | 000 GHz 1001 pts) | |
| MSG | | | | | | STATU | 5 | | |



| | rum Analyzer - Swept SA | | | | | |
|------------------|----------------------------------|---------------------------|---|--|---|---|
| Center F | RF 50Ω AC req 2.491750000 | | Run Avg Ho | ALIGN AUTO pe: Log-Pwr Id:>200/200 | 09:23:12 AMNov 30, 2017 TRACE 1 2 3 4 5 6 TYPE MWWWWWW DET P P P P P P | Frequency |
| 10 dB/div Log | Ref Offset 1 dB Ref 20.00 dBm | IF Galilie Dw an Recht 40 | | Mkr1 2. | 490 100 0 GHz -47.405 dBm | Auto Tune |
| 10.0 | | | | | | Center Freq 2.491750000 GHz |
| -10.0 | | | | | | Start Freq 2.483500000 GHz |
| -20.0 | | | | | -22:12 dBm | Stop Freq 2.500000000 GHz |
| -40.0 | | radio and a standard | Jana Marana M | ᠇ᡙᠼᢁᢦᠰᡘᡟᢔᢤᠵᢧᡟᡄ | Mananthampatinthathathant | CF Step 1.650000 MHz <u>Auto</u> Man |
| -60.0 | | | | | | Freq Offset 0 Hz |
| | 3500 GHz 100 kHz | #VBW 300 kHz | | Sweep | top 2.500000 GHz 1.60 ms (601 pts) | |
| MSG | | | | STATUS | | |



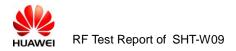
| Agilent Spectrum Ana | | | | | | | |
|---------------------------------|---|------------------|----------------------|-----------|--------|---|---|
| | 50Ω AC 4.500000000 G | | SENSE:INT | Avg Type: | | 09:23:45 AM Nov 30, 2017 TRACE 1 2 3 4 5 6 | |
| | PI | NO: East 🕟 Trig: | Free Run n: 40 dB | Avg Hold: | | | |
| | Offset 1 dB 20.00 dBm | | | | Mk | r1 26.296 GHz -38.310 dBm | |
| 10.0 | | | | | | | Center Freq 14.500000000 GHz |
| -10.0 | | | | | | | Start Freq 2.500000000 GHz |
| -20.0 | | | | | | -22:12 dBm | Stop Freq 26.500000000 GHz |
| -40.0 | and the second of the local days of the | | | | | | CF Step 2.40000000 GHz <u>Auto</u> Man |
| -60.0 | | | | | | | Freq Offset 0 Hz |
| -70.0 | | | | | | | |
| Start 2.50 GHz #Res BW 100 k | | #VBW 300 k | Hz | | Sweep | Stop 26.50 GHz 2.29 s (8001 pts) | |
| MSG | | | | | STATUS | | |



2.3 TM1_Ch39_H

Pref:





Puw:





| 9 | | Analyzer - Sv | | | | | | | | | | |
|----------------|--------------|--------------------------------------|--------------------------|------------------------|--|--------------------------------------|-----------|----------------------------------|-----------------|--|--------------------|------------------------------------|
| LXI RI | | | Ω <u>Λ</u> □⊂ 000 MHz | | SE | NSE:INT | Ava Type | ALIGNAUTO | | MNov 30, 2017 E 1 2 3 4 5 6 | Free | quency |
| Cen | | q 15.075 | Р | NO: Fast 🖵 Gain:Low | Trig: Free #Atten: 40 | | Avg Hold: | | TYP | E MWWWWW T P P P P P P | | |
| 10 dE Log | | Ref Offset 1 Ref 20.00 | | | | | | | Mkr1 1 -41.7 | 150 kHz 17 dBm | | Auto Tune |
| 10.0 | | | | | | | | | | | | e nter Freq 175000 MHz |
| 0.00 -10.0 | | | | | | | | | | | | Start Freq 50.000 kHz |
| -20.0 -30.0 | | | | | | | | | | -32.30 dBm | | Stop Freq 000000 MHz |
| -40.0 -50.0 | | | | | | | | | | | 2.9 <u>Auto</u> | CF Step 85000 MHz Man |
| -60.0 -70.0 | WINLIN (MAY) | h <mark>illing and the states</mark> | han beretaan halinehaa | diller die statiet | waatha ta ay sa ahaa ahaa ahaa ahaa ahaa ahaa ah | e <mark>d</mark> a egye kilkete iger | | h _{al} han dika sarifat | | Alexandra da | Fi | r eq Offset 0 Hz |
| | t 150 ki | | | | | | | | Stop 3 | 0.00 MHz | | |
| | s BW 10 | | | #VBW | 30 kHz | | | Sweep | 285 ms (| 3001 pts) | | |
| MSG | | | | | | | | STATUS | L DC Cou | pled | | |



| | ectrum Analyzer - Swept SA | | | | | | | |
|---------------------|--|--|-----------------------|------------|-------------------------|----------------------|--|--|
| LXI RL Cepter | RF 50 Ω AC Freq 1.165000000 | | NSE:INT | Avg Type: | ALIGNAUTO | TRACI | MNov 30, 2017 | Frequency |
| Center | | PNO: Fast Trig: Free IFGain:Low #Atten: 40 | | Avg Hold:> | | TYP | | |
| 10 dB/div Log | Ref Offset 1 dB Ref 20.00 dBm | | | | Mkr | 1 2.293 | 19 GHz 36 dBm | Auto Tune |
| 10.0 | | | | | | | | Center Freq 1.165000000 GHz |
| -10.0 | | | | | | | | Start Freq 30.000000 MHz |
| -20.0 | | | | | | | -22.30 dBm | Stop Freq 2.30000000 GHz |
| -40.0 | a na tan kang da ji daga si kang da na da da na | روی و بر این می و در و بر | n ter (in ter Winnet) | | isteas täyteksi ole tai | | 1 Himiltonia po vil Himiltoni vila potenti | CF Step 227.000000 MHz <u>Auto</u> Man |
| -60.0 | an a | iyesi a cala di asila di adiki kiyesini ini da ya da di sina a da di da ta | | | | | | Freq Offset 0 Hz |
| -70.0 | | | | | | | | |
| Start 30 #Res Bi |) MHz W 100 kHz | #VBW 300 kHz | | | Sweep | Stop 2. 217 ms (1 | 300 GHz 8001 pts) | |
| MSG | | | | | STATUS | 3 | | |



| | um Analyzer - Swep | | | | | | | | |
|-----------------------|---|-----------------------------------|---|--------------------|------------------------|--------------------|-------------------------|---|---|
| Center Fi | RF 50 Ω req 2.350000 | 0000 GHz | | NSE:INT | Avg Type | | TRACE | 1Nov 30, 2017 1 2 3 4 5 6 MWWWWW | Frequency |
| | | PNO: Fa IFGain:Lo | | | Avg Hold: | >200/200 | DE. | | |
| 10 dB/div Log | Ref Offset 1 di Ref 20.00 di | 3 Bm | | | | Mł | (r1 2.389 -47.03 | 4 GHz 35 dBm | Auto Tune |
| 10.0 | | | | | | | | | Center Freq 2.350000000 GHz |
| 0.00 | | | | | | | | | Start Freq 2.300000000 GHz |
| -20.0 | | | | | | | | -22.30 dBm | Stop Freq 2.400000000 GHz |
| -40.0 | and to be the state of the | Lanst A. m | a 1 - 1- 4A tradiosecuti 1 AAAaa | lases to boundable | | k or mathematic | | 1 | CF Step 10.000000 MHz <u>Auto</u> Man |
| -60.0 | alf, friff, _{for t} e se frift frank, fild f | vergenne er, a al Leu Urbell Jein | a _{rte} r(r-ff ^{**} μ ² ₩km+f1/sd\ [*] [M·1 | an vito lime da un | alender he a maaree di | alaan saadahaa yaa | | and two shifts | Freq Offset 0 Hz |
| -70.0 | | | | | | | | | |
| Start 2.30 #Res BW | | # | VBW 300 kHz | | | Sweep | Stop 2.40 9.60 ms (1 | 000 GHz 001 pts) | |
| MSG | | | | | | STATU | 3 | | |



| Agilent Spectrum Analyzer - Swept SA | | | | |
|--|--|---|---|---|
| | SENSE:1 | NT ALIGNAUTO Avg Type: Log-Pwr | 09:27:52 AM Nov 30, 2017 TRACE 1 2 3 4 5 6 | Frequency |
| Center Freq 2.491750000 | PNO: Fast Trig: Free Ru IFGain:Low #Atten: 40 dB | n Avg Hold:>200/200 | | |
| Ref Offset 1 dB 10 dB/div Ref 20.00 dBm | | Mkr1 2. | 492 080 0 GHz -47.814 dBm | Auto Tune |
| 10.0 | | | | Center Freq 2.491750000 GHz |
| -10.0 | | | | Start Freq 2.483500000 GHz |
| -20.0 | | | -22.30 dBm | Stop Freq 2.50000000 GHz |
| -40.0 -50.0 Horder Marchard | Worker and Walter and a contraction of the second sec | 1 blwwww.yllphawaaphtada.lwaaga.hwyw | marthelian Angela Anartana | CF Step 1.650000 MHz <u>Auto</u> Man |
| -60.0 | | | | Freq Offset 0 Hz |
| Start 2.483500 GHz #Res BW 100 kHz | #VBW 300 kHz | S | top 2.500000 GHz 1.60 ms (601 pts) | |
| MSG | | STATUS | | |





END