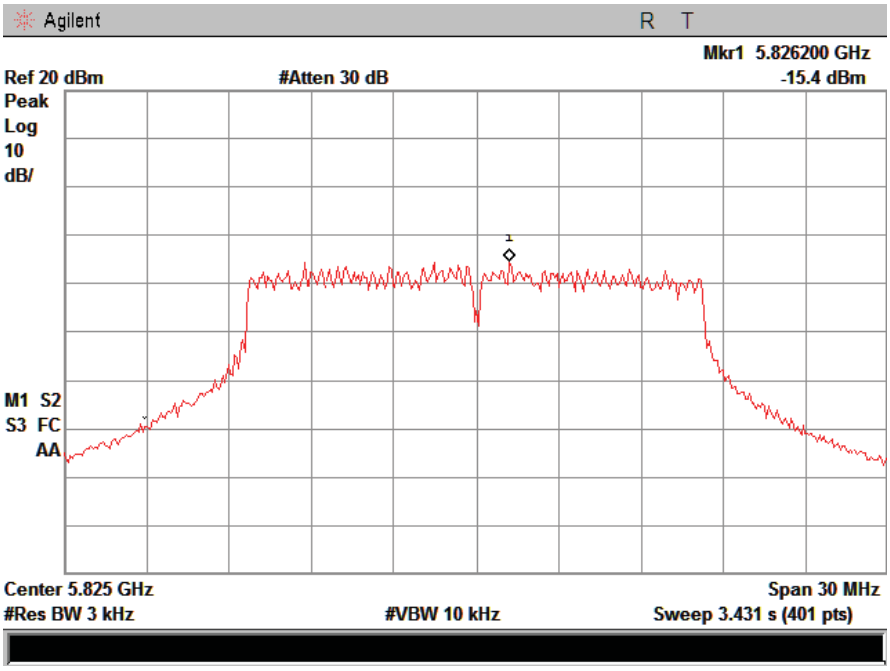
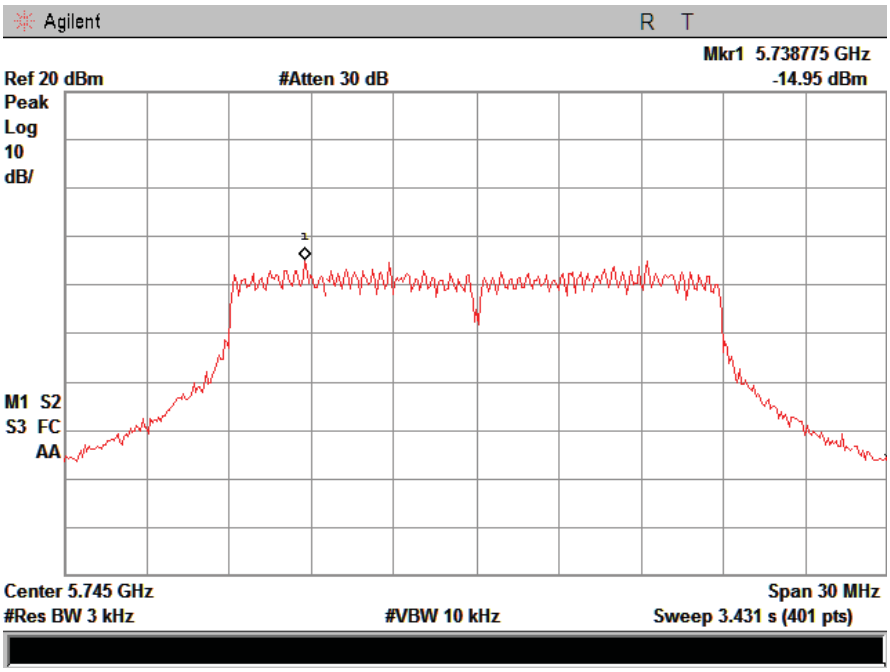
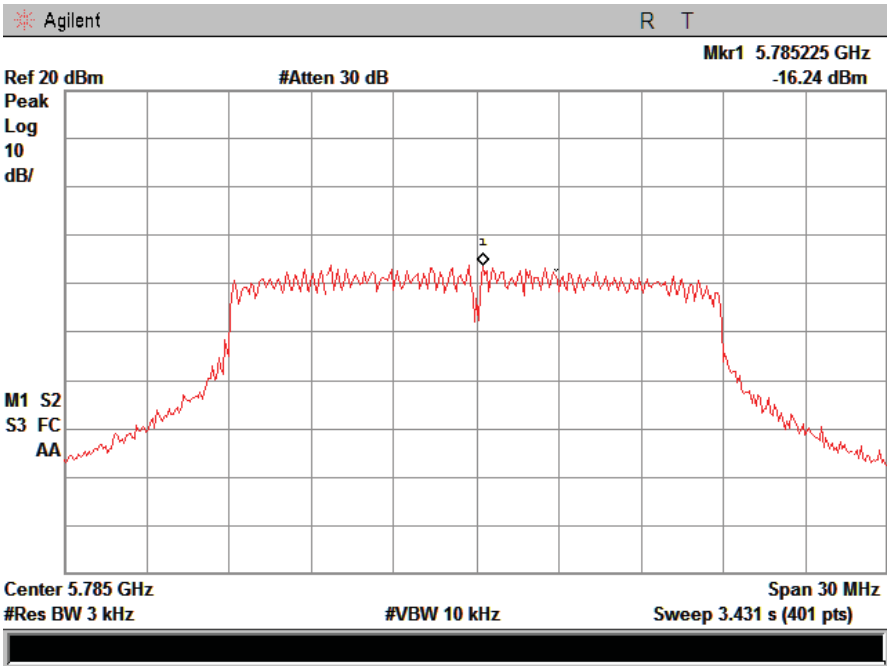
CH Hig:



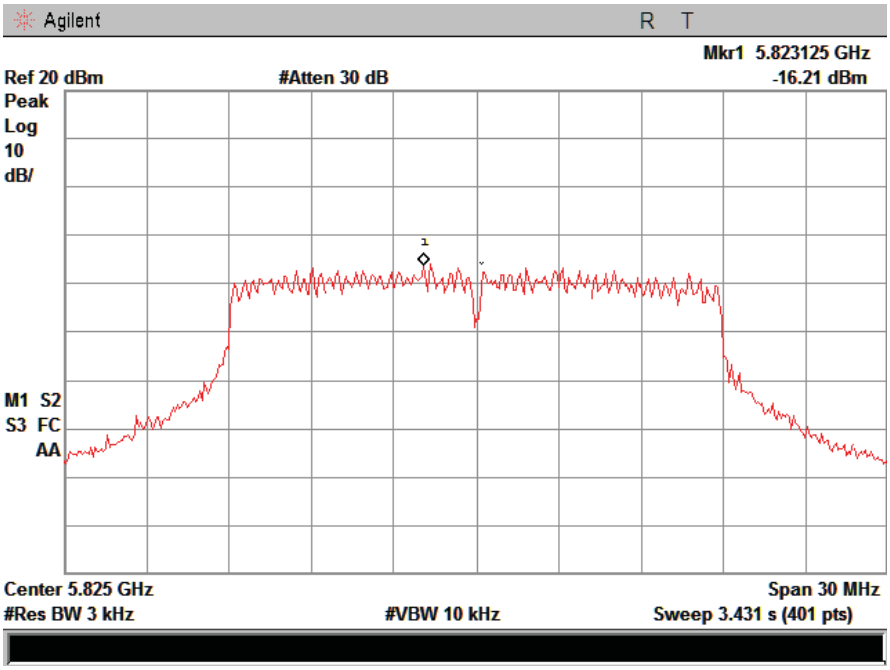
IEEE 802.11n HT20 with 5.8G:
CH Low :



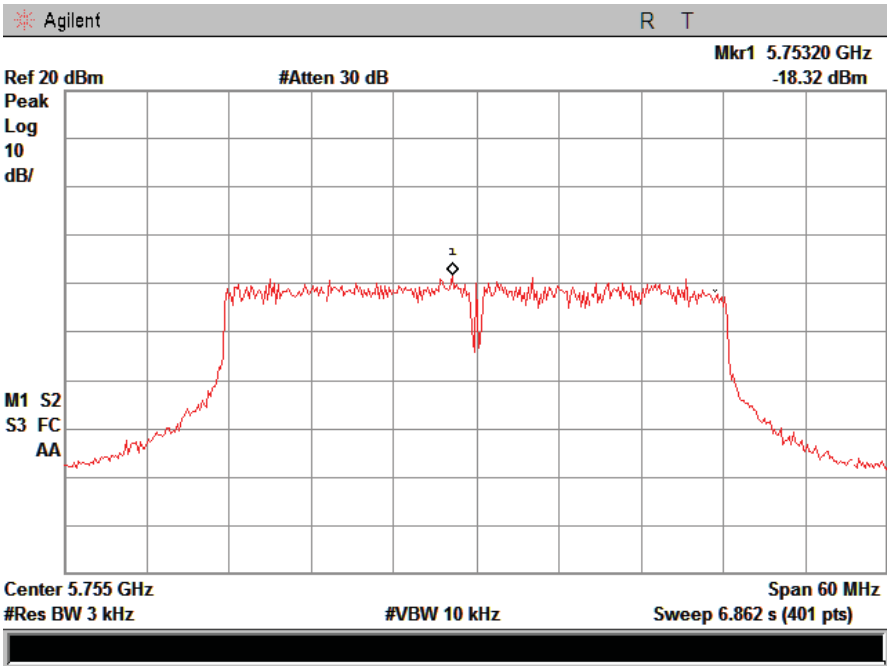
CH Mid:


Agilent
R T
Mkr1 5.785225 GHz
Ref 20 dBm
#Atten 30 dB
-16.24 dBm
Peak
Log
10
dB/
M1 S2
S3 FC
AA
Center 5.785 GHz
Span 30 MHz
#Res BW 3 kHz
#VBW 10 kHz
Sweep 3.431 s (401 pts)

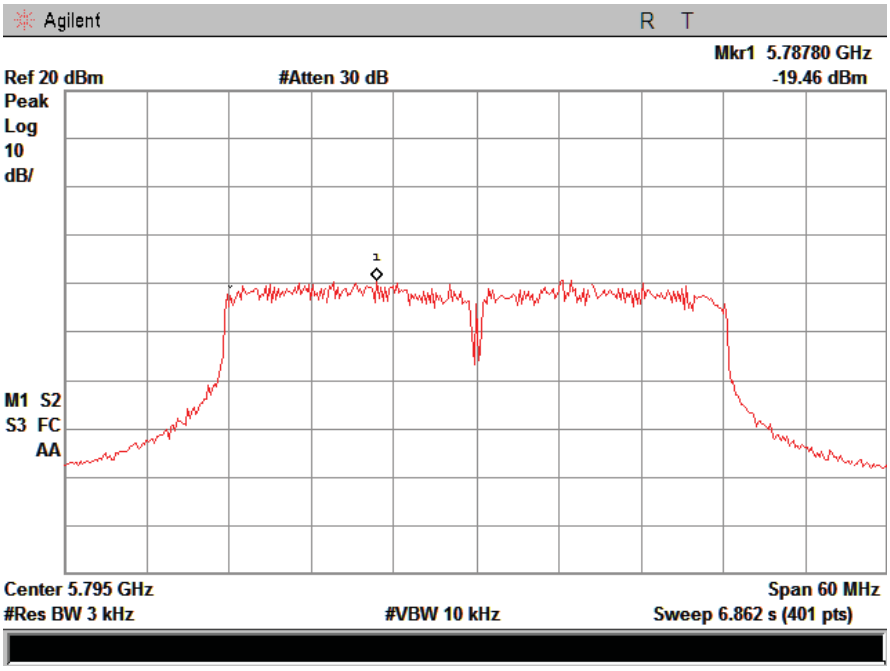
CH Hig:


Agilent
R T
Mkr1 5.823125 GHz
Ref 20 dBm
#Atten 30 dB
-16.21 dBm
Peak
Log
10
dB/
M1 S2
S3 FC
AA
Center 5.825 GHz
Span 30 MHz
#Res BW 3 kHz
#VBW 10 kHz
Sweep 3.431 s (401 pts)

IEEE 802.11n HT40 with 5.8G:
CH Low :



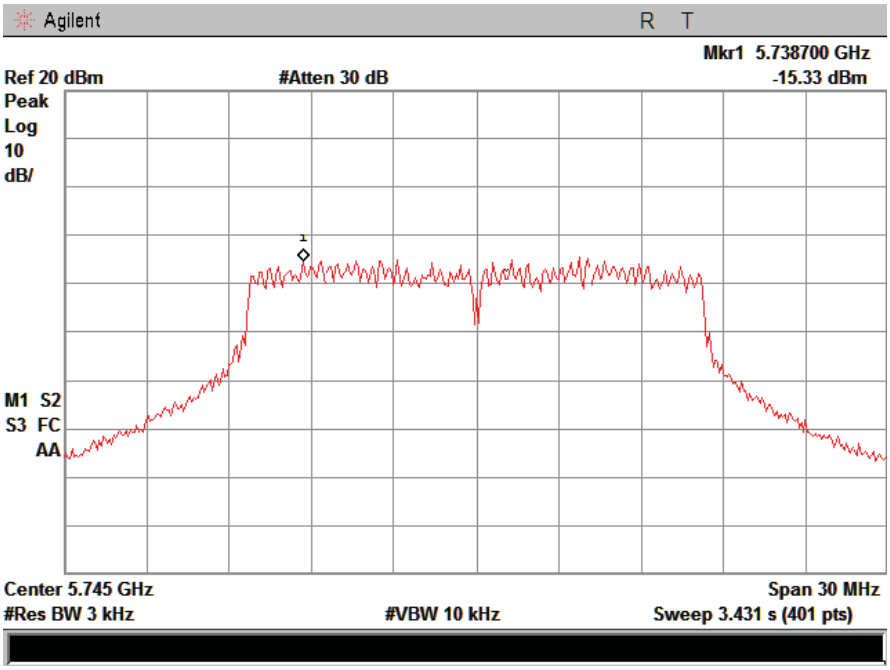
CH Hig:



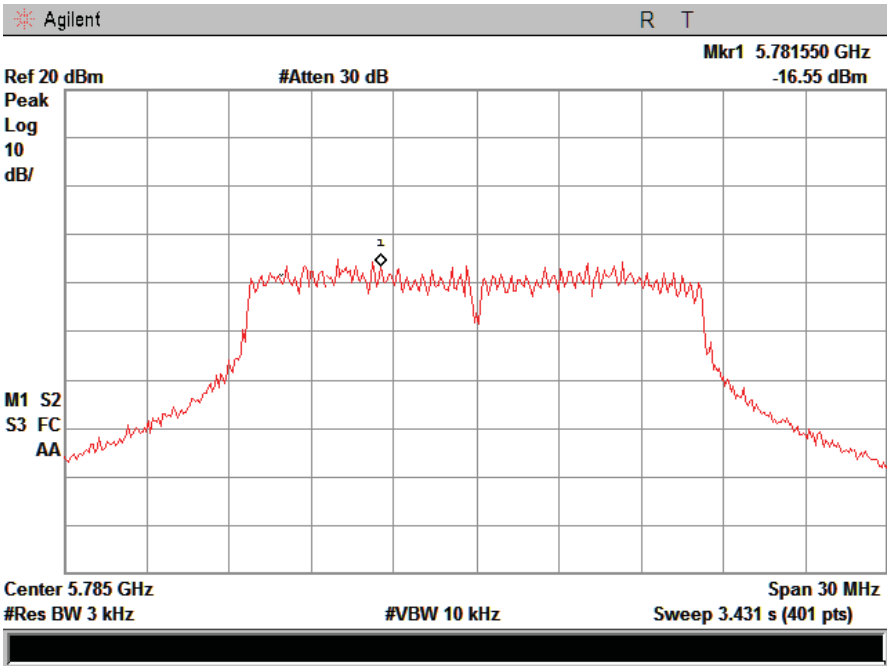
port 2 antenna

IEEE 802.11a with 5.8G:

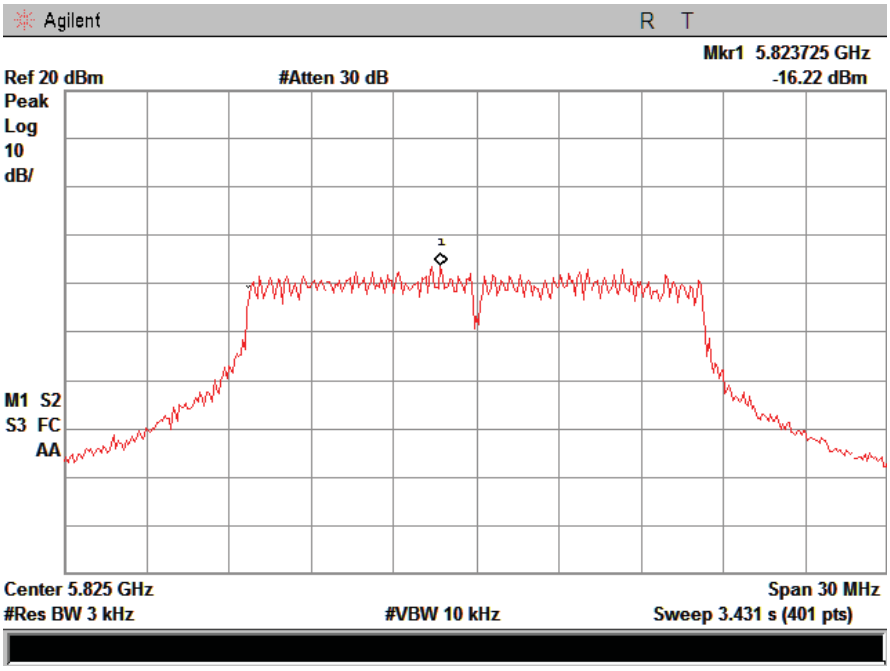
CH Low :



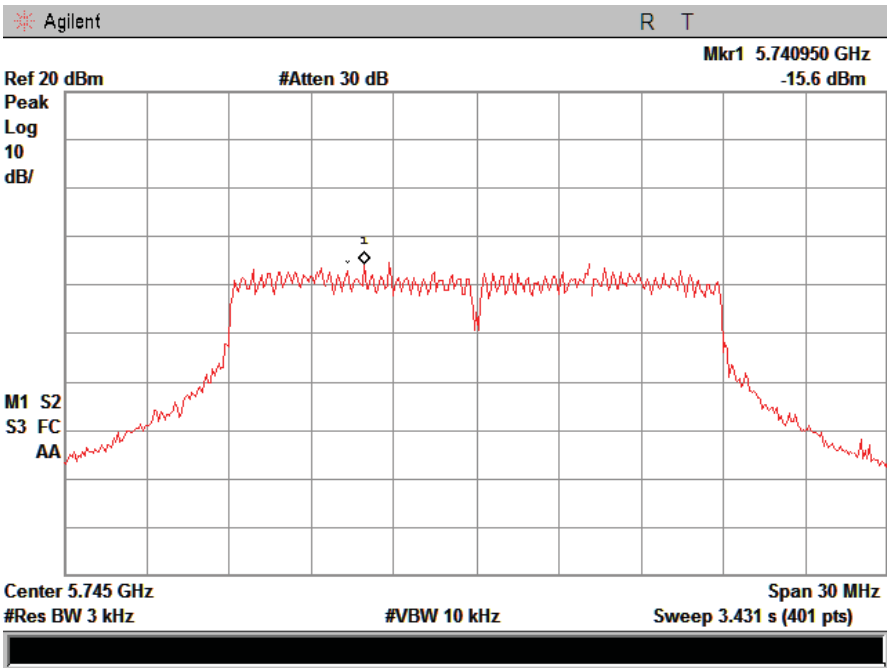
CH Mid:



CH Hig:

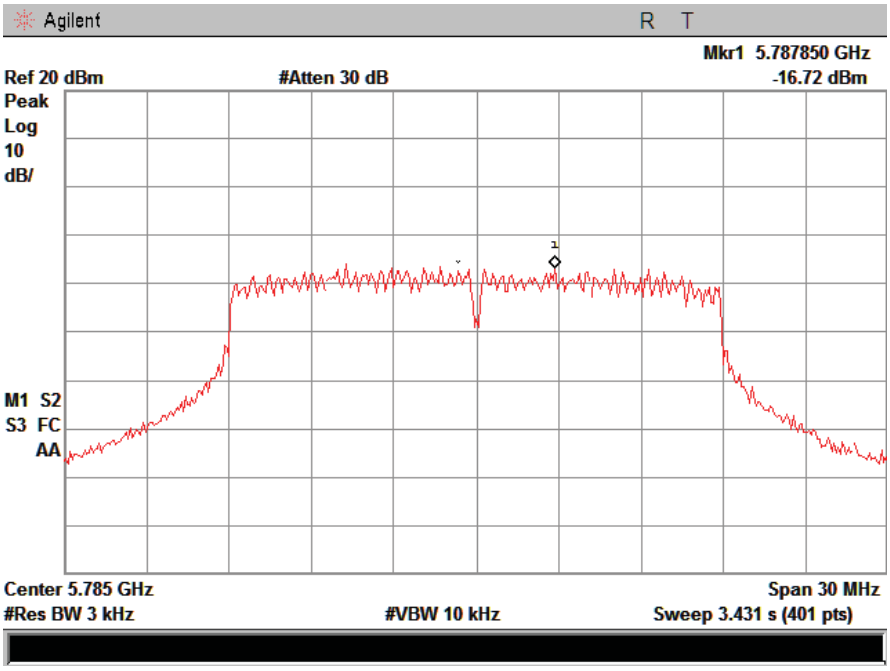


IEEE 802.11n HT20 with 5.8G:
CH Low :

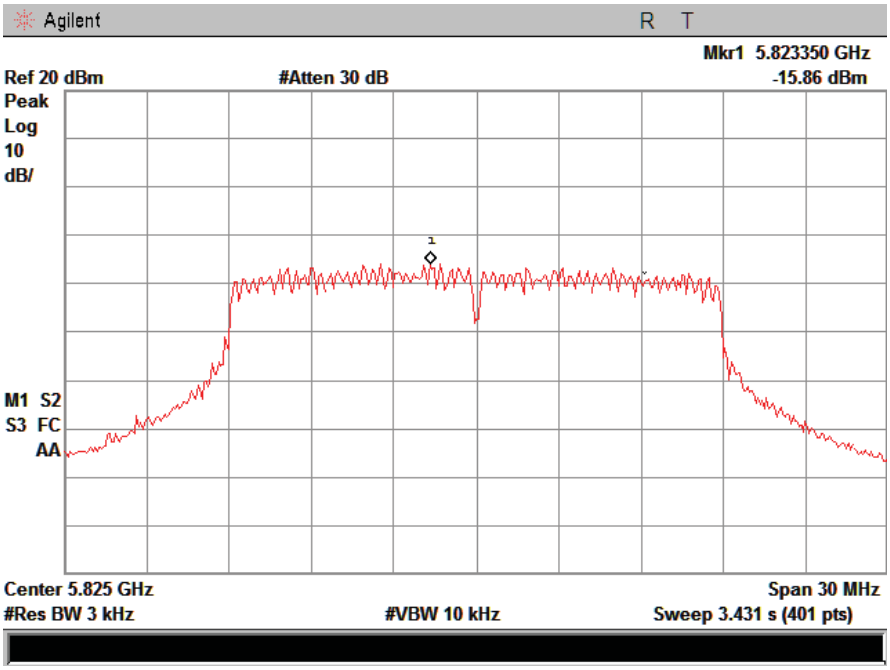


C

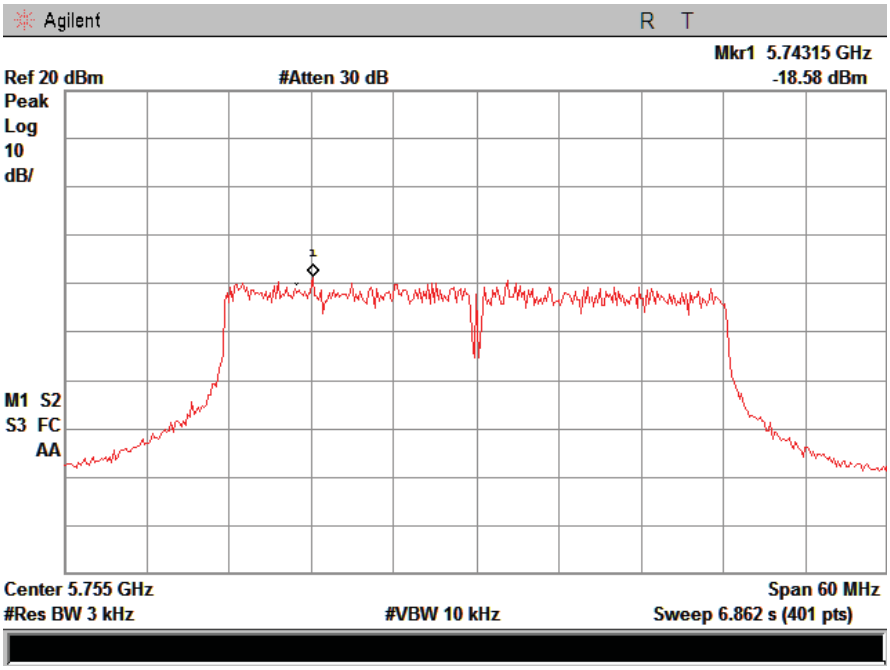
H Mid:


Agilent
R T
Mkr1 5.787850 GHz
Ref 20 dBm
#Atten 30 dB
-16.72 dBm
Peak
Log
10
dB/
M1 S2
S3 FC
AA
Center 5.785 GHz
Span 30 MHz
#Res BW 3 kHz
#VBW 10 kHz
Sweep 3.431 s (401 pts)

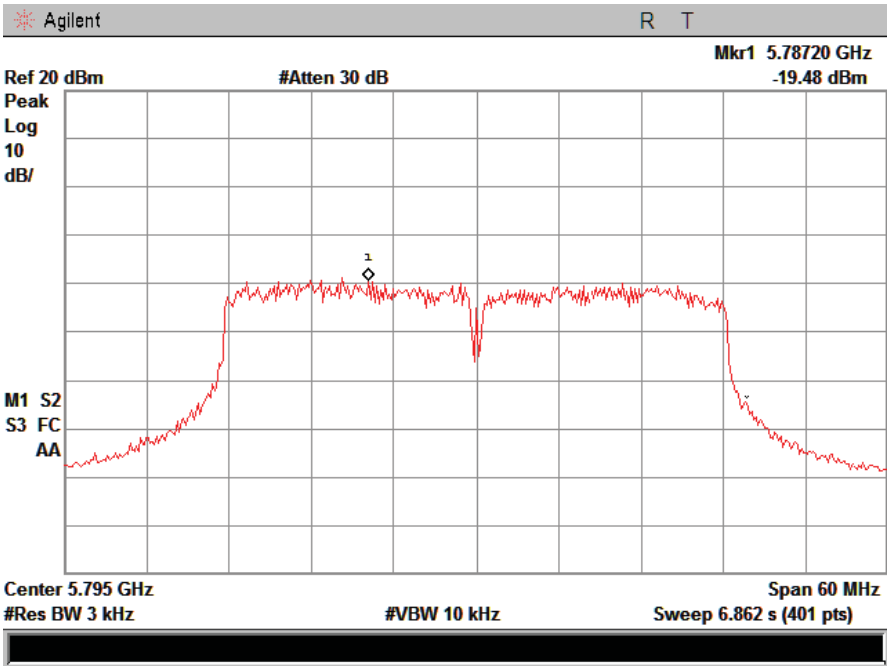
CH Hig:


Agilent
R T
Mkr1 5.823350 GHz
Ref 20 dBm
#Atten 30 dB
-15.86 dBm
Peak
Log
10
dB/
M1 S2
S3 FC
AA
Center 5.825 GHz
Span 30 MHz
#Res BW 3 kHz
#VBW 10 kHz
Sweep 3.431 s (401 pts)

IEEE 802.11n HT40with 5.8G:
CH Low :



CH Hig:



9 Bandwidth

9.1 Test limit

Please refer section15.247

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz.

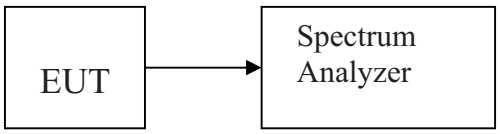
9.2 Method of measurement

Details see the KDB558074 D01 Meas Guidance

a)The bandwidth is measured at an amplitude level reduced 20dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst-case (i.e. the widest) bandwidth.

b) The test receiver set RBW = 1-5 % EBW, VBW≥3RBW, Sweep time set auto, detail see the test plot.

9.3 Test Setup



9.4 Test Results

PASS.

Detailed information please see the following page.

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b:					
Low	2412	9.629	14.2303	0.5	PASS
Mid	2437	10.097	14.1226	0.5	PASS
High	2462	10.067	14.0283	0.5	PASS
IEEE 802.11g:					
Low	2412	15.674	16.5202	0.5	PASS
Mid	2437	15.651	16.5314	0.5	PASS
High	2462	15.797	16.4385	0.5	PASS
IEEE 802.11n/HT20 with 2.4G:					
Low	2412	16.949	17.6907	0.5	PASS
Mid	2437	16.775	17.6074	0.5	PASS
High	2462	16.792	17.5753	0.5	PASS
IEEE 802.11n/HT40 with 2.4G:					
Low	2422	35.258	35.8088	0.5	PASS
Mid	2437	35.300	35.7605	0.5	PASS
High	2452	35.293	35.7209	0.5	PASS
Note: This test with port 0 antenna.					

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b:					
Low	2412	10.056	14.2217	0.5	PASS
Mid	2437	10.075	14.0549	0.5	PASS
High	2462	10.091	14.0264	0.5	PASS
IEEE 802.11g:					
Low	2412	15.849	16.5354	0.5	PASS
Mid	2437	15.331	16.5184	0.5	PASS
High	2462	15.664	16.4636	0.5	PASS
IEEE 802.11n/HT20 with 2.4G:					
Low	2412	17.091	17.6117	0.5	PASS
Mid	2437	16.723	17.6101	0.5	PASS
High	2462	16.780	17.5830	0.5	PASS
IEEE 802.11n/HT40 with 2.4G:					
Low	2422	35.444	35.8130	0.5	PASS
Mid	2437	35.300	35.7667	0.5	PASS
High	2452	35.296	35.7746	0.5	PASS
Note: This test with port 1 antenna.					

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b:					
Low	2412	10.050	14.2212	0.5	PASS
Mid	2437	10.076	14.0450	0.5	PASS
High	2462	10.095	14.0260	0.5	PASS
IEEE 802.11g:					
Low	2412	15.841	16.5355	0.5	PASS
Mid	2437	15.331	16.5185	0.5	PASS
High	2462	15.661	15.4634	0.5	PASS
IEEE 802.11n/HT20 with 2.4G:					
Low	2412	17.043	17.6927	0.5	PASS
Mid	2437	17.021	17.6162	0.5	PASS
High	2462	16.908	17.5811	0.5	PASS
IEEE 802.11n/HT40 with 2.4G:					
Low	2422	35.157	35.7904	0.5	PASS
Mid	2437	35.287	35.7413	0.5	PASS
High	2452	35.296	35.7746	0.5	PASS
Note: This test with port 2 antenna.					

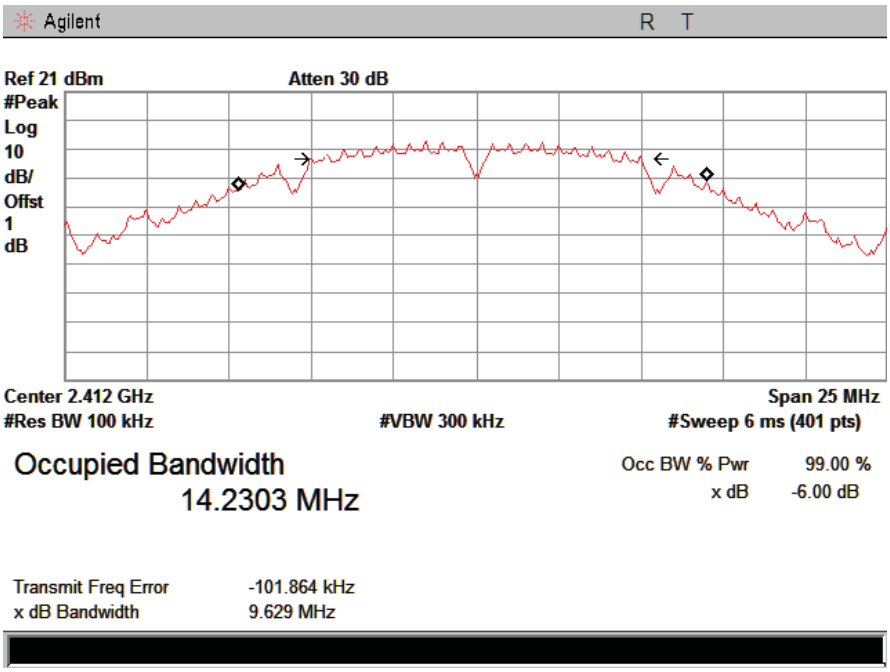
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11a with 5.8G:					
Low	5745	16.3060	17.1800	0.5	PASS
Mid	5785	16.404	16.8959	0.5	PASS
High	5825	16.347	16.8749	0.5	PASS
IEEE 802.11n/HT20 with 5.8G:					
Low	5745	17.524	17.9122	0.5	PASS
Mid	5785	17.351	17.9354	0.5	PASS
High	5825	16.975	17.7881	0.5	PASS
IEEE 802.11n/HT40 with 5.8G:					
Low	5755	35.340	36.0637	0.5	PASS
High	5795	34.903	36.0138	0.5	PASS
Note: This test with port 0 antenna.					

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11a with 5.8G:					
Low	5745	16.294	19.9503	0.5	PASS
Mid	5785	16.358	17.0037	0.5	PASS
High	5825	16.385	16.6506	0.5	PASS
IEEE 802.11n/HT20 with 5.8G:					
Low	5745	17.045	19.0942	0.5	PASS
Mid	5785	16.358	17.0037	0.5	PASS
High	5825	17.380	17.7504	0.5	PASS
IEEE 802.11n/HT40 with 5.8G:					
Low	5755	35.014	36.0361	0.5	PASS

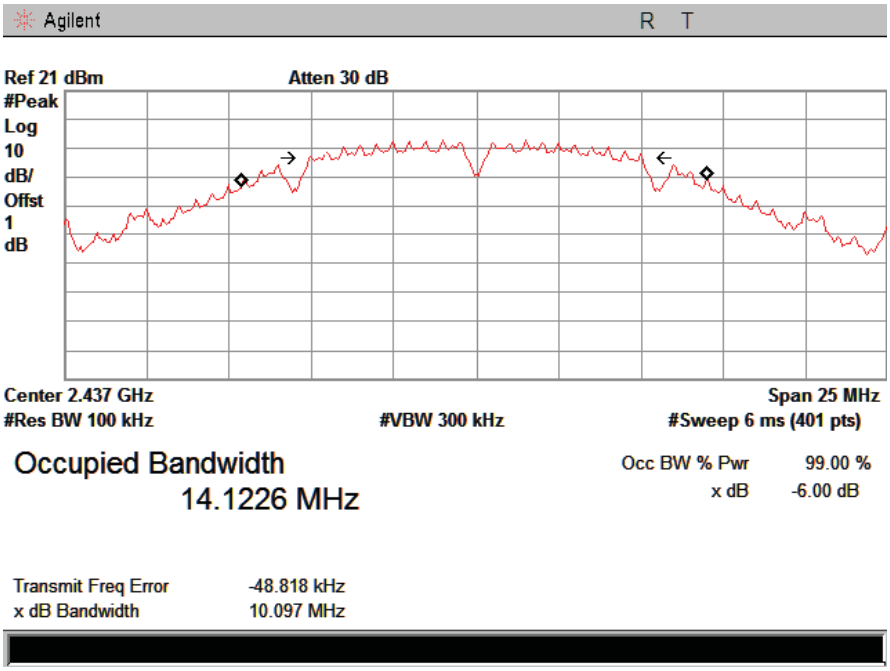
High	5795	34.353	36.1366	0.5	PASS
Note: This test with port 1 antenna.					

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11a with 5.8G:					
Low	5745	16.266	19.9533	0.5	PASS
Mid	5785	16.353	17.7030	0.5	PASS
High	5825	16.855	16.6566	0.5	PASS
IEEE 802.11n/HT20 with 5.8G:					
Low	5745	17.545	19.0922	0.5	PASS
Mid	5785	16.388	17.0030	0.5	PASS
High	5825	17.382	17.7505	0.5	PASS
IEEE 802.11n/HT40 with 5.8G:					
Low	5755	35.414	36.0161	0.5	PASS
High	5795	34.355	36.1333	0.5	PASS
Note: This test with port 2 antenna.					

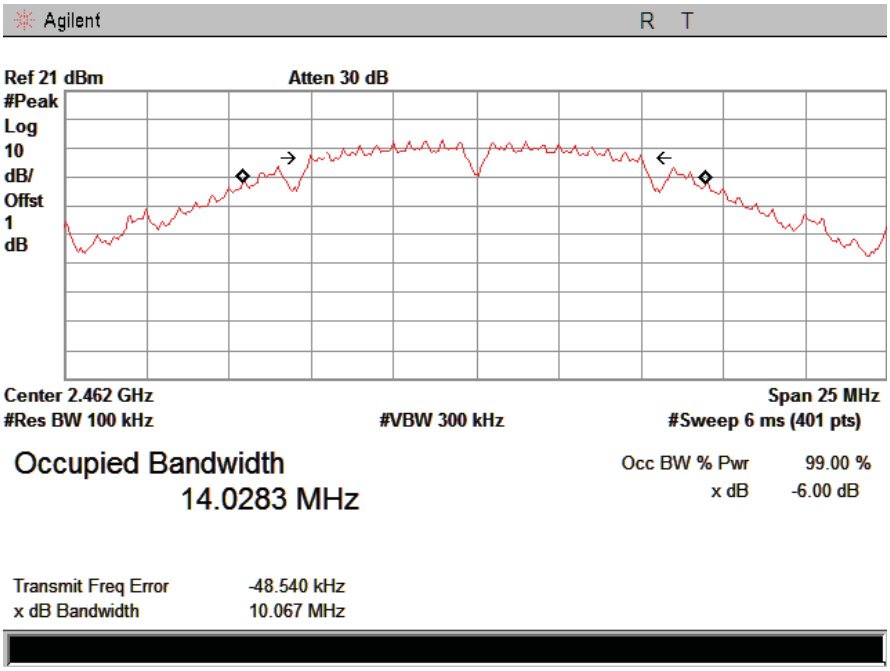
From 1G-25GHz with port 0 antenna
IEEE 802.11b:
CH Low :



CH Mid :

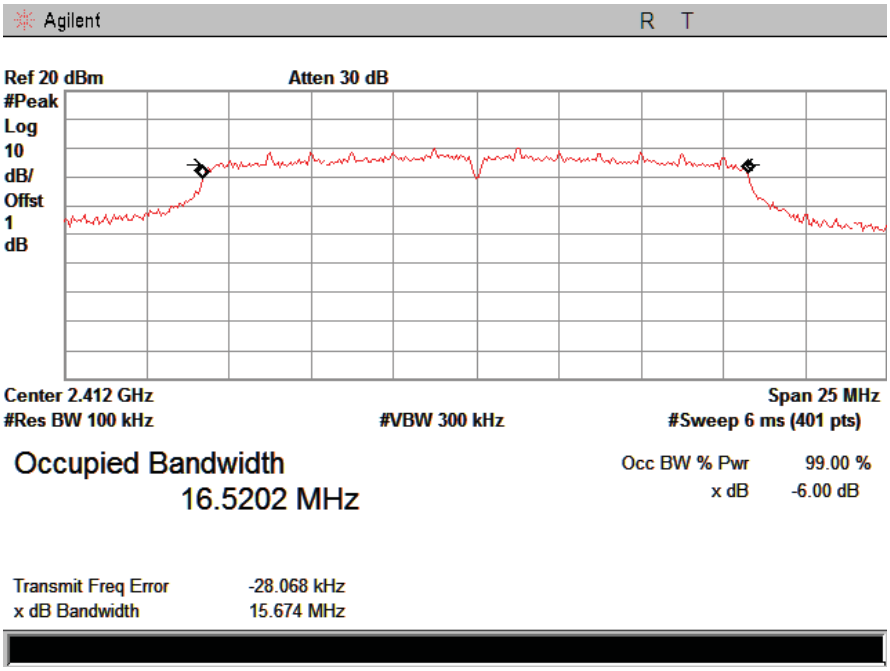


CH High :

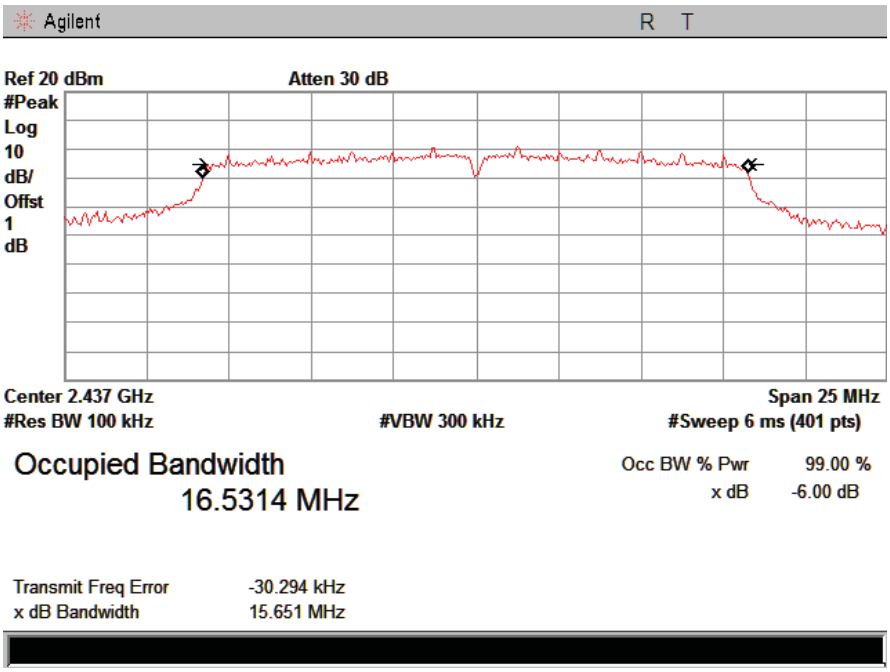


IEEE 802.11g:

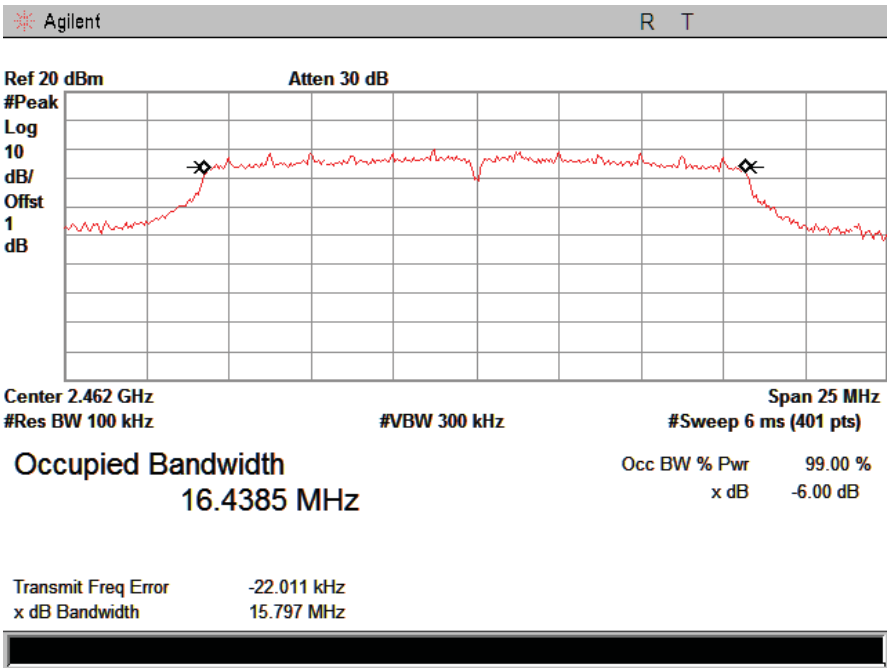
CH Low :



CH Mid :

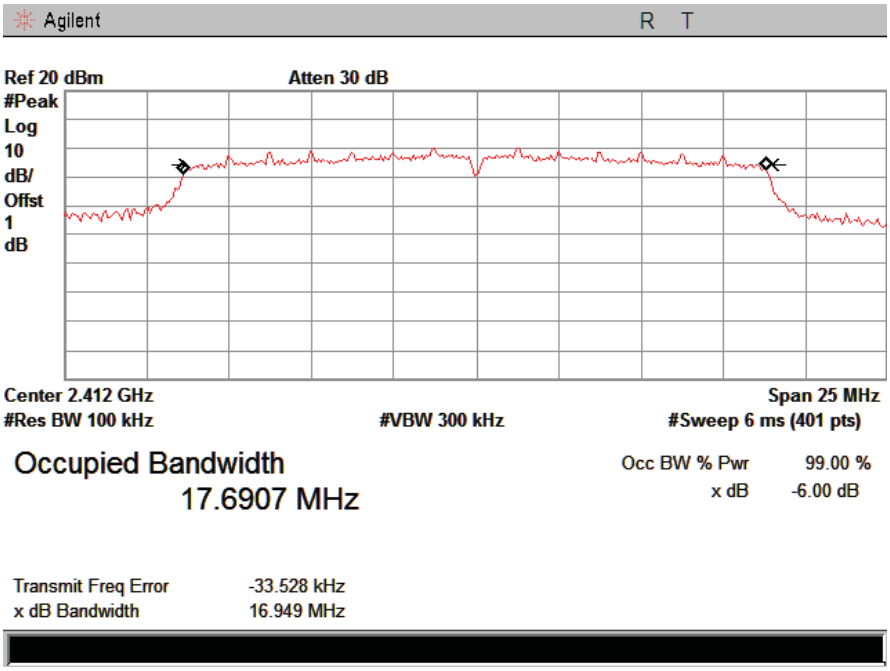


CH High :

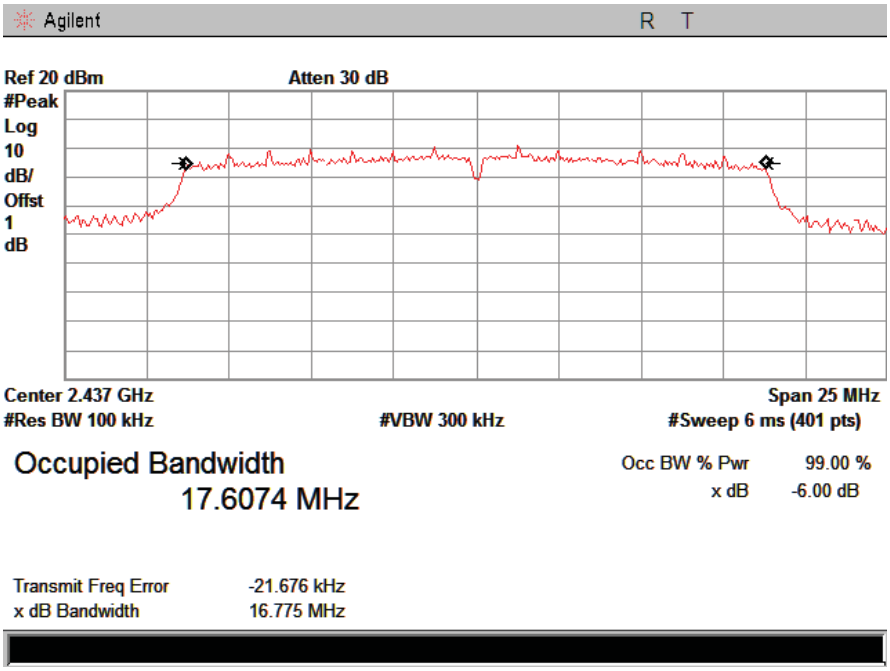


IEEE 802.11n/HT20 with 2.4G:

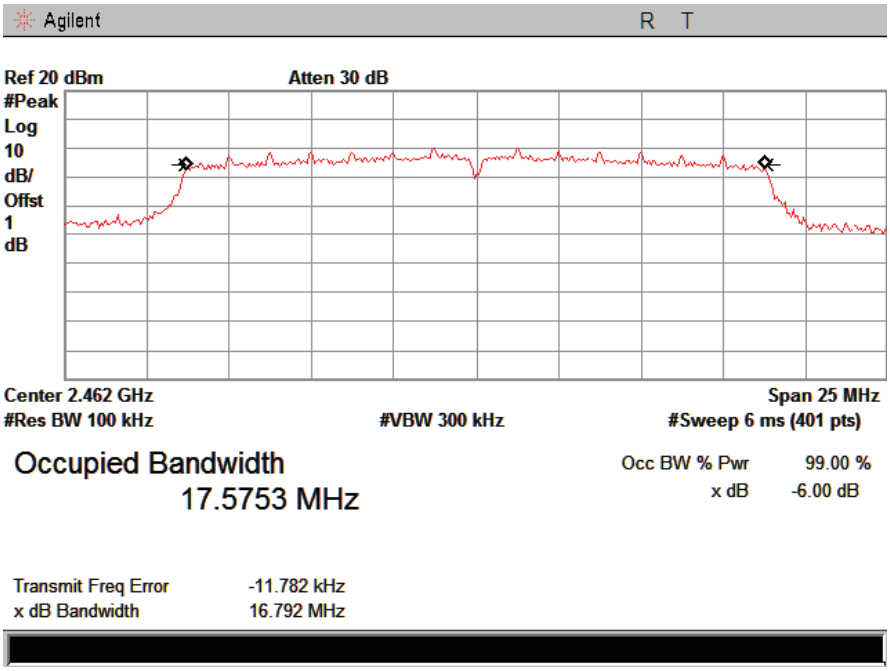
CH Low :



CH Mid :

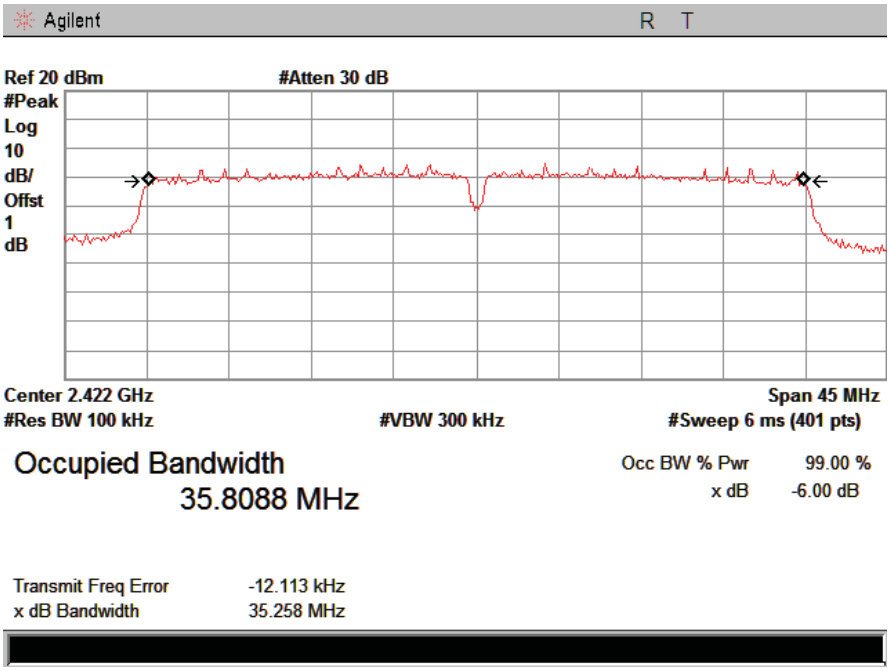


CH High :

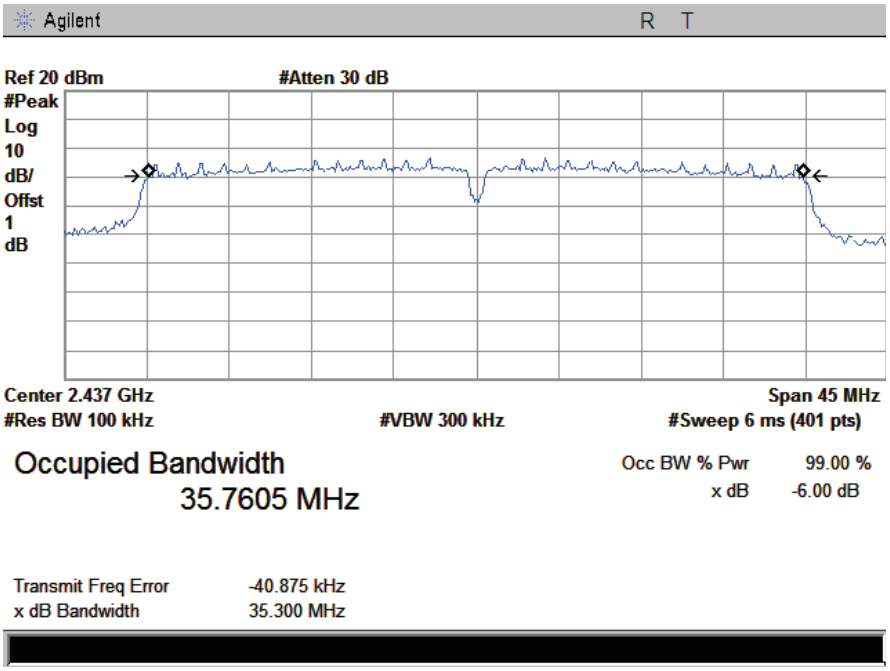


IEEE 802.11n/HT40 with 2.4G:

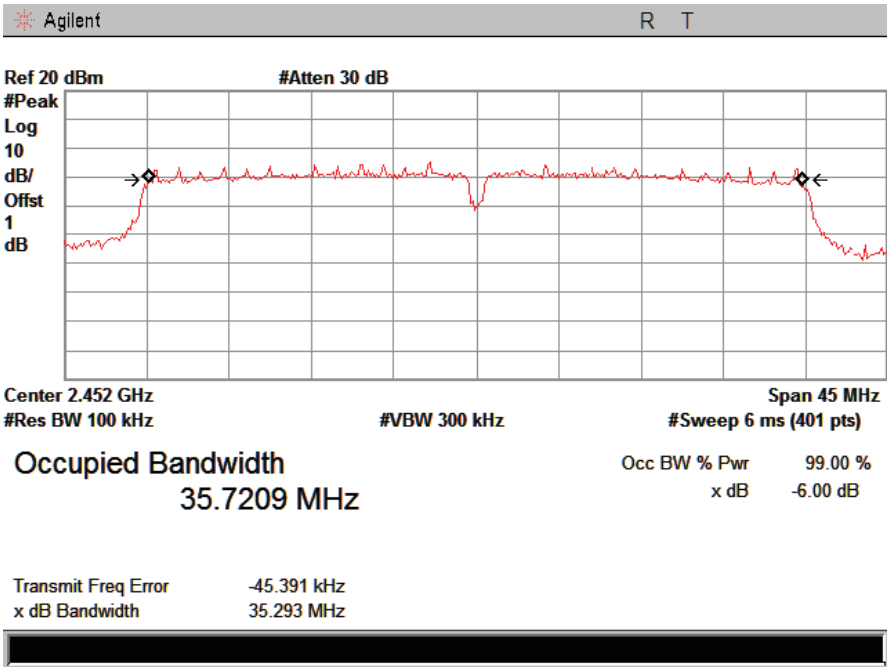
CH Low :



CH Mid :



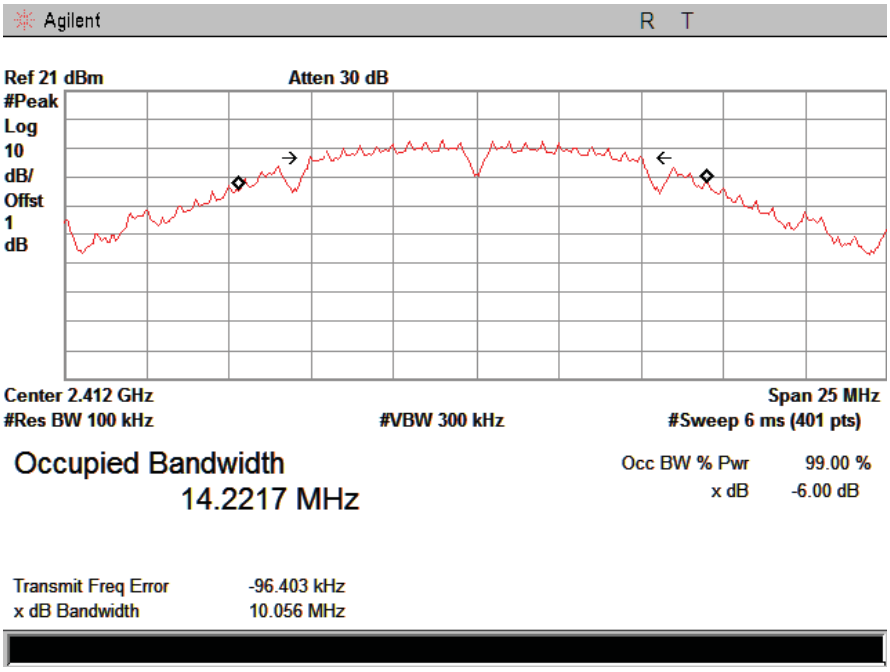
CH High :



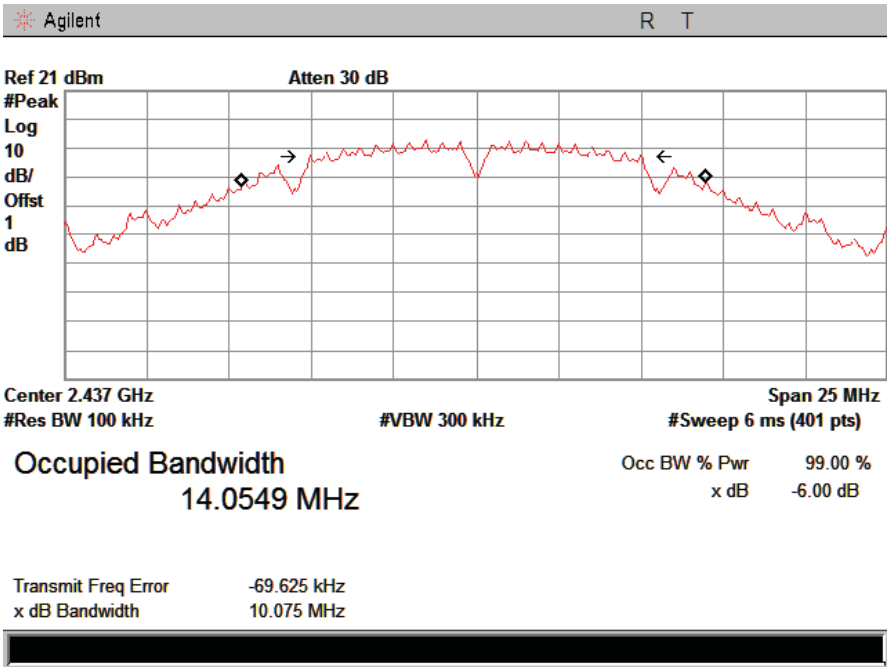
From 1G-25GHz with port 1 antenna

IEEE 802.11b:

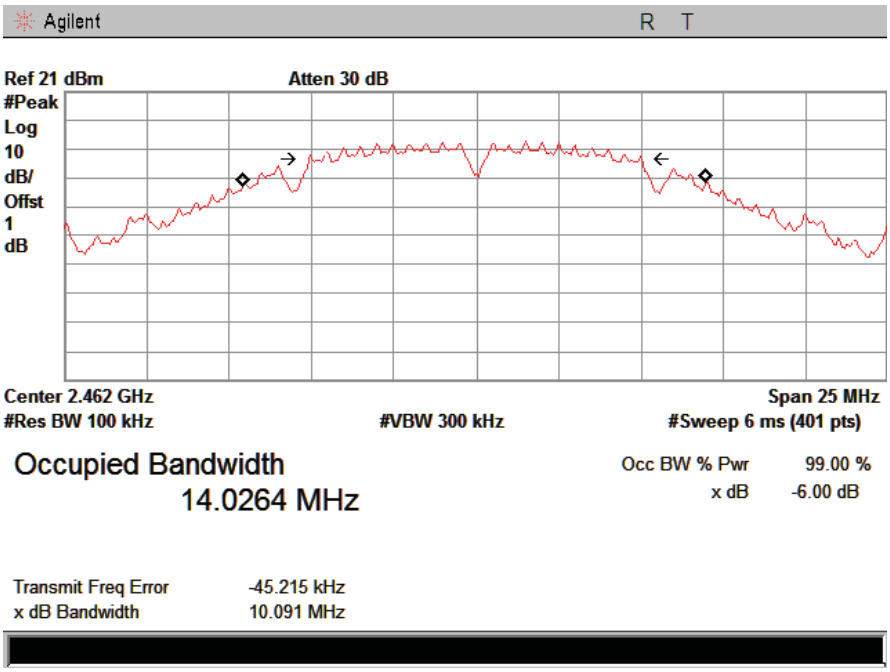
CH Low :



CH Mid :

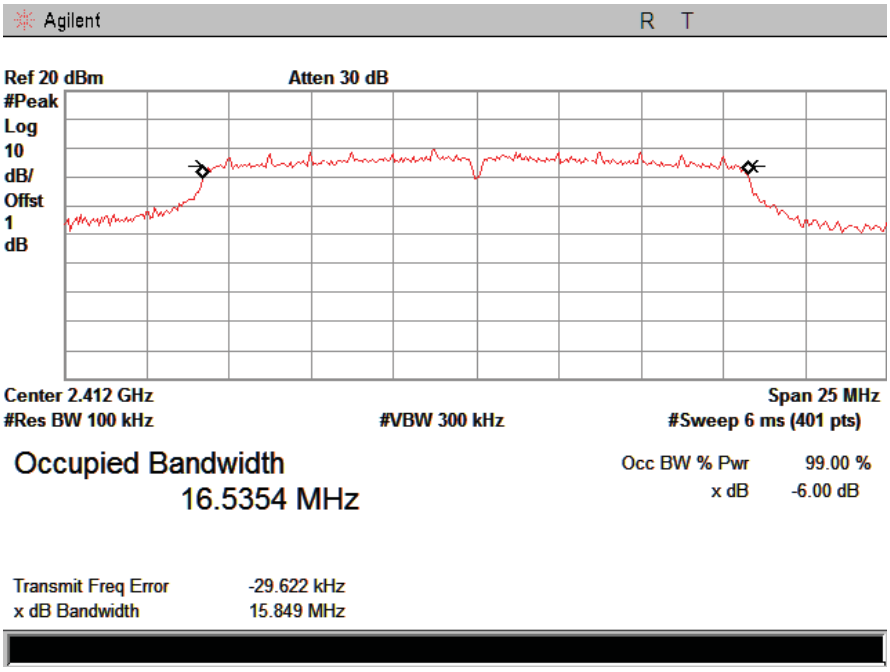


CH High :

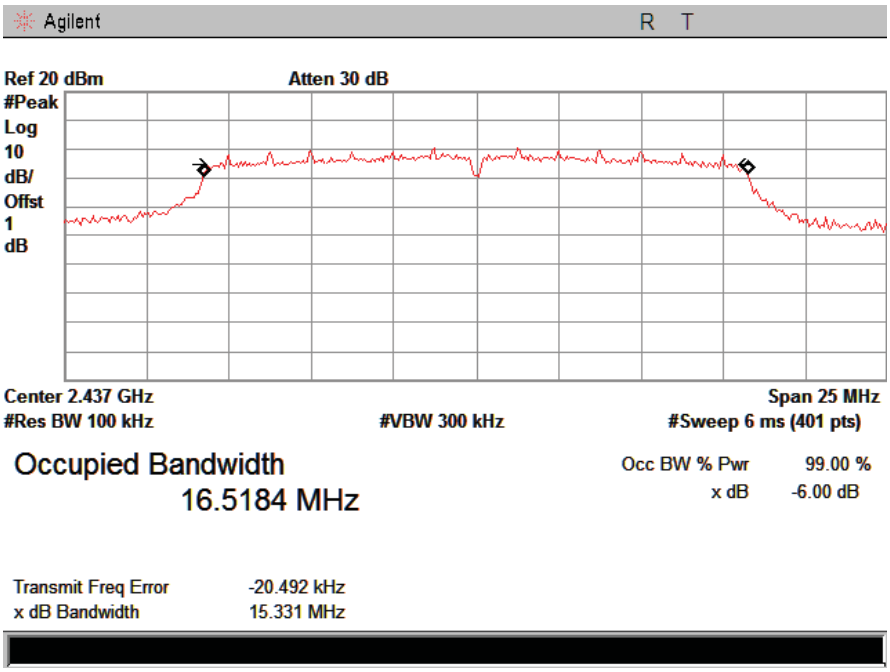


IEEE 802.11g:

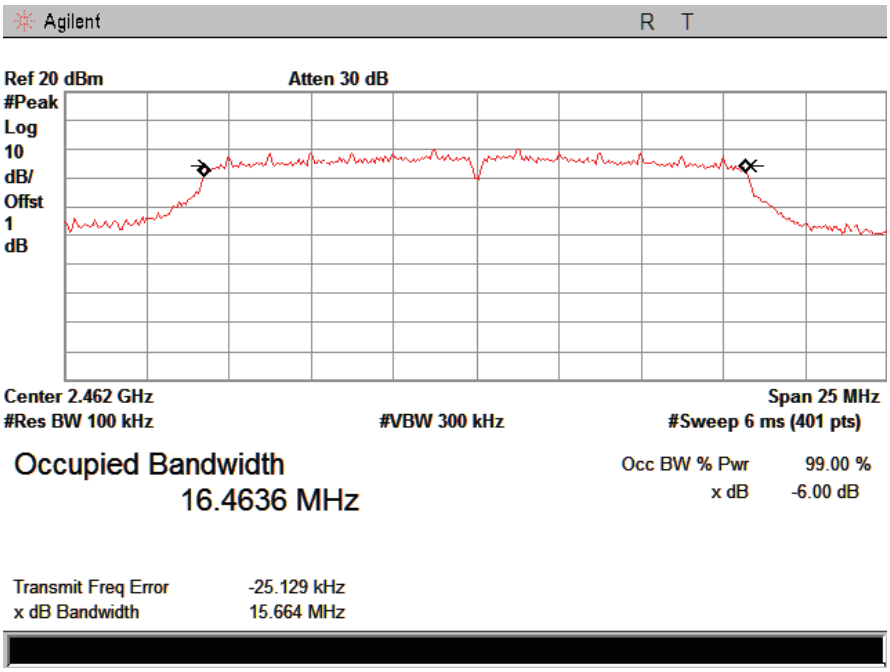
CH Low :



CH Mid :

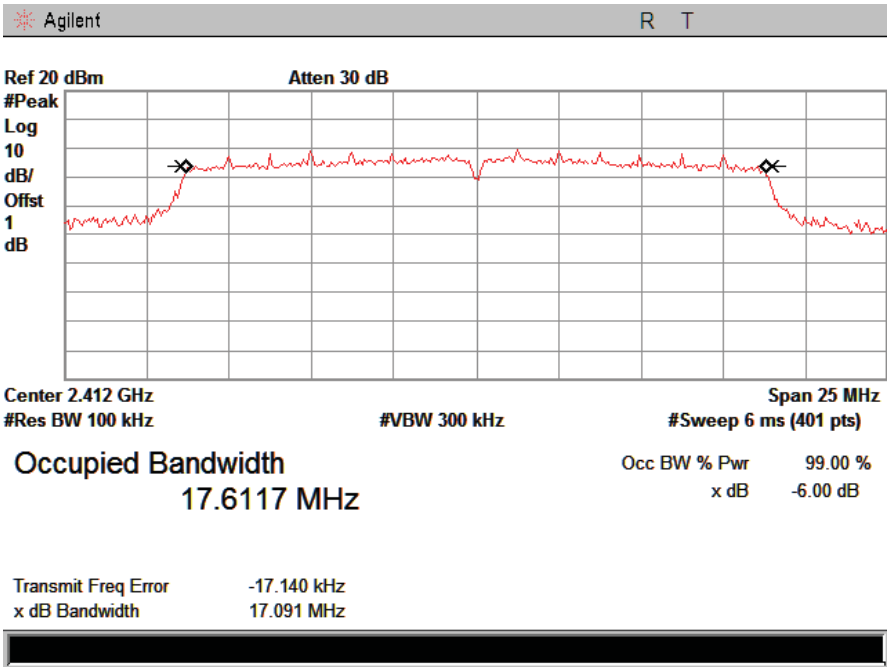


CH High :

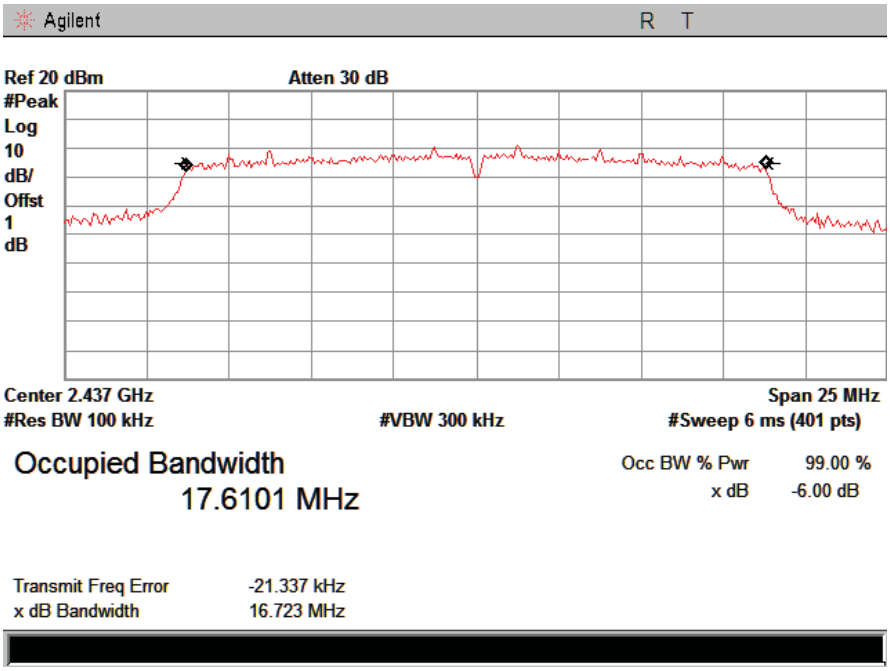


IEEE 802.11n/HT20 with 2.4G:

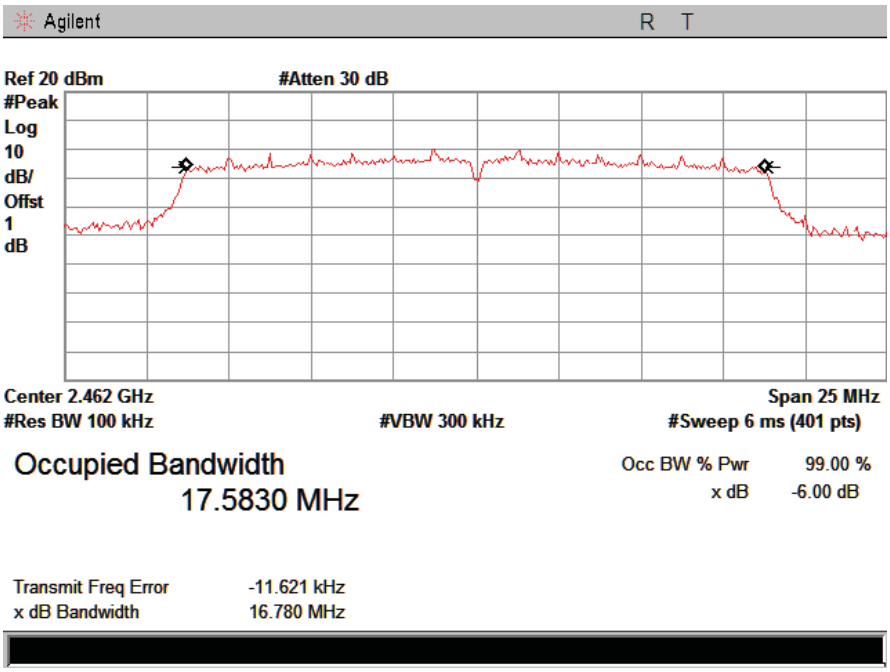
CH Low :



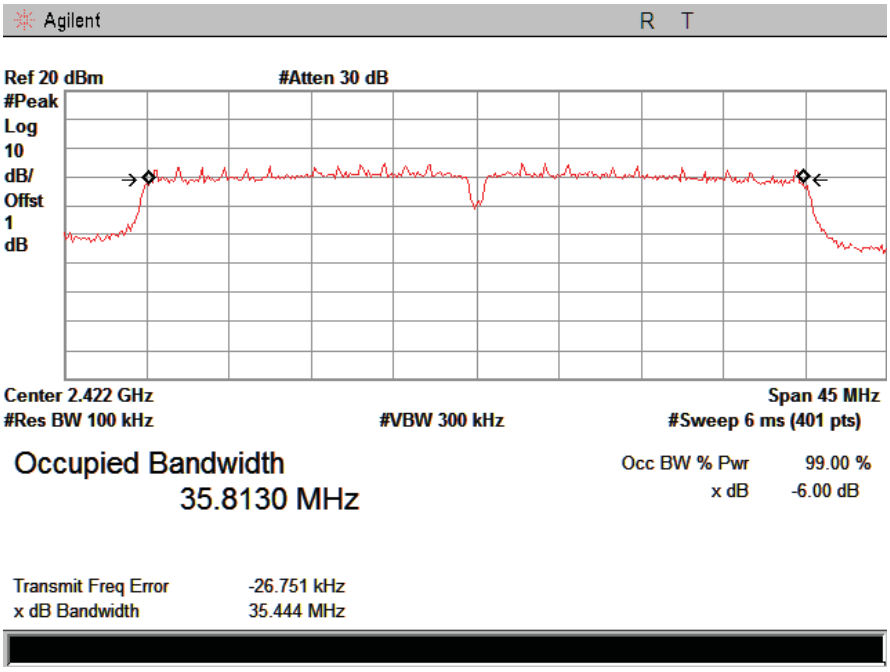
CH Mid :



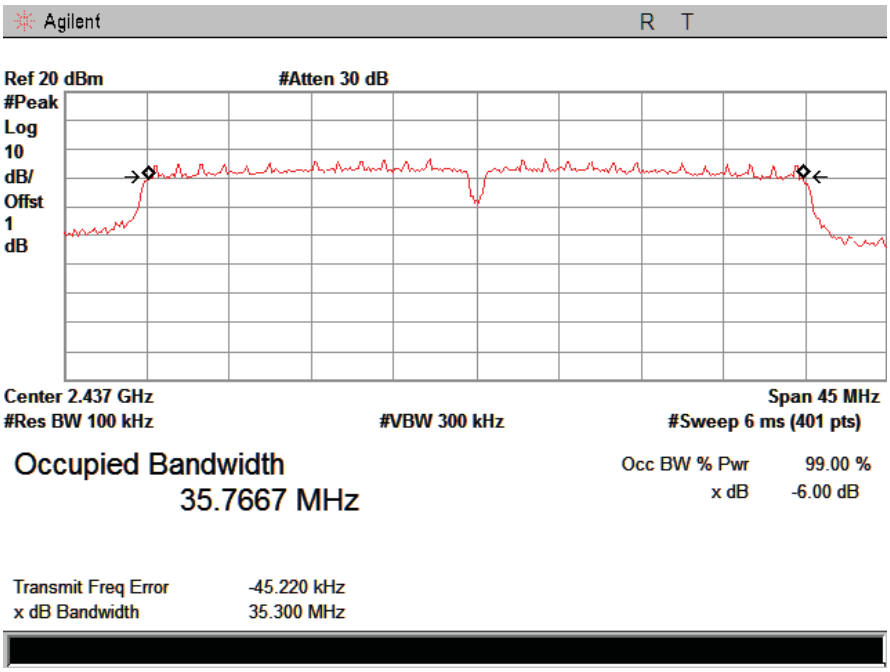
CH High :



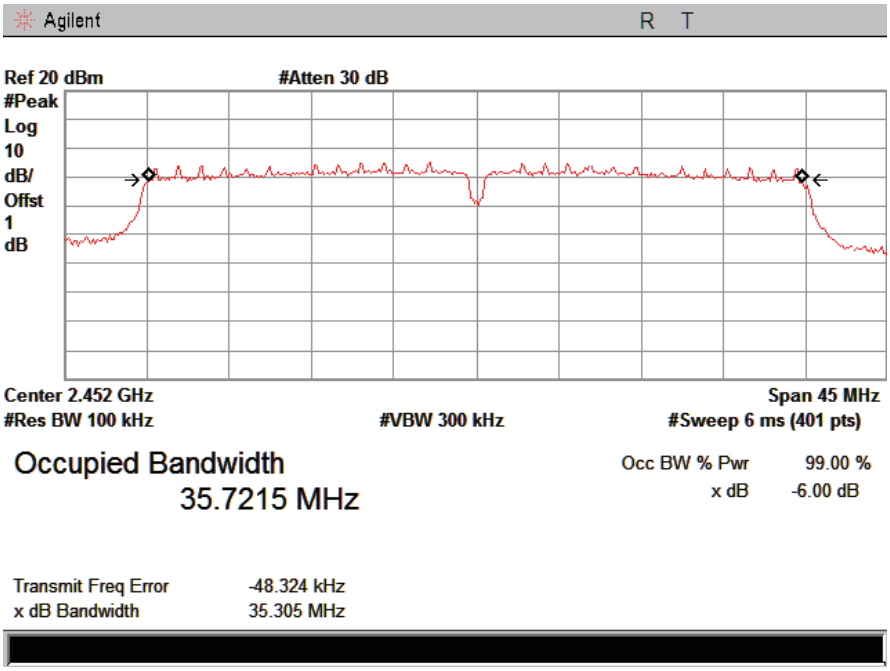
IEEE 802.11n/HT40 with 2.4G:
CH Low :



CH Mid :



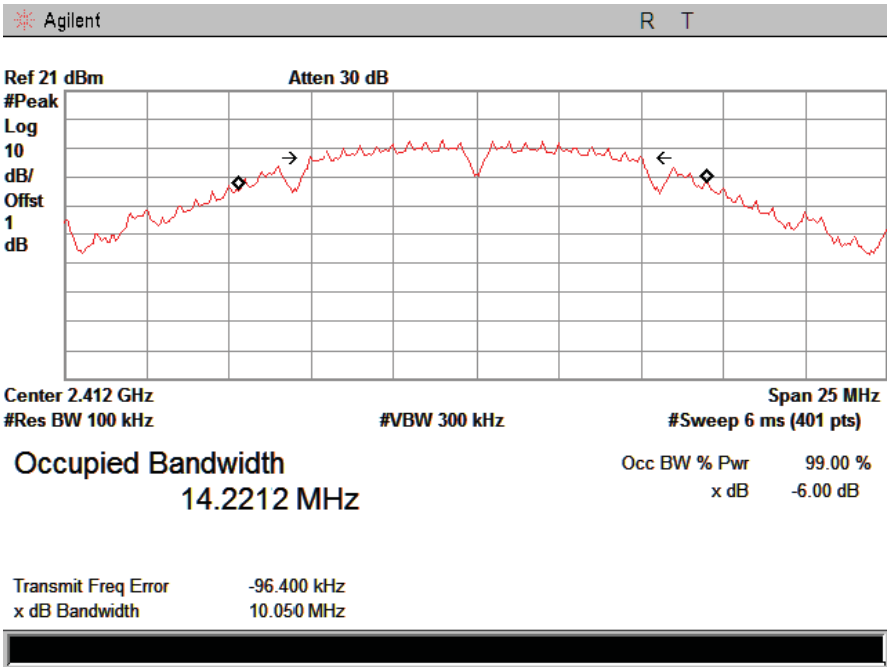
CH High :



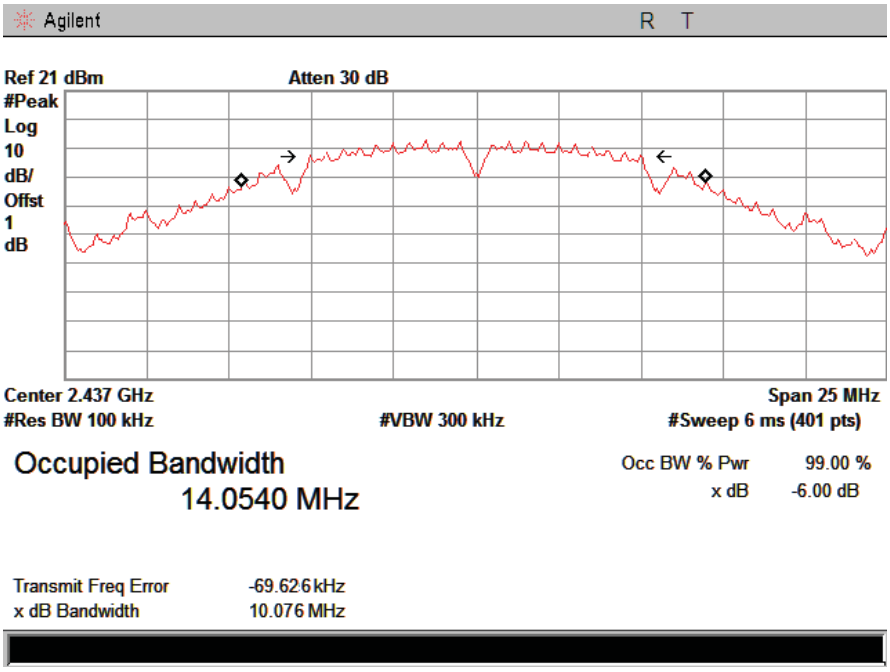
From 1G-25GHz with port 2 antenna

IEEE 802.11b:

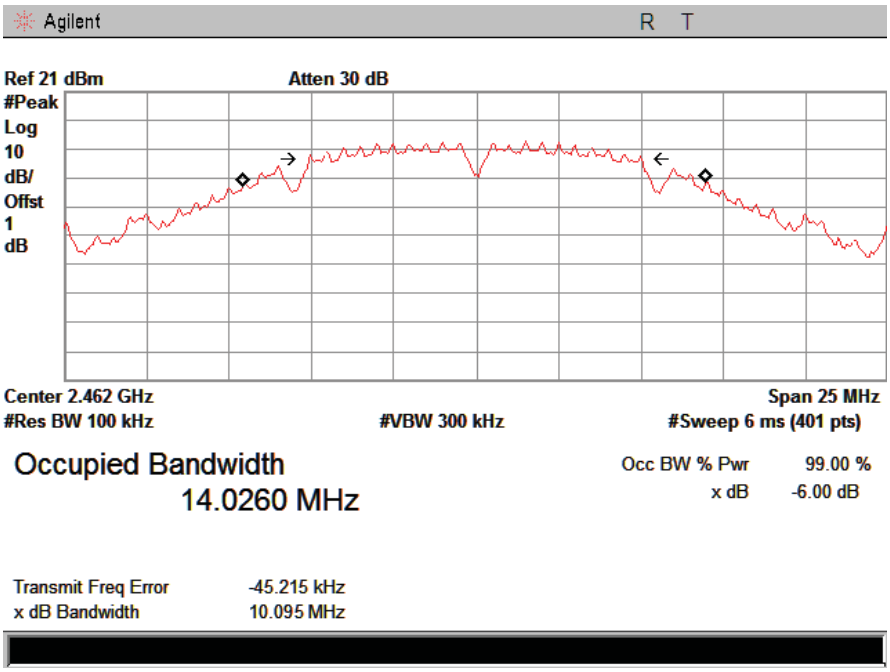
CH Low :



CH Mid :

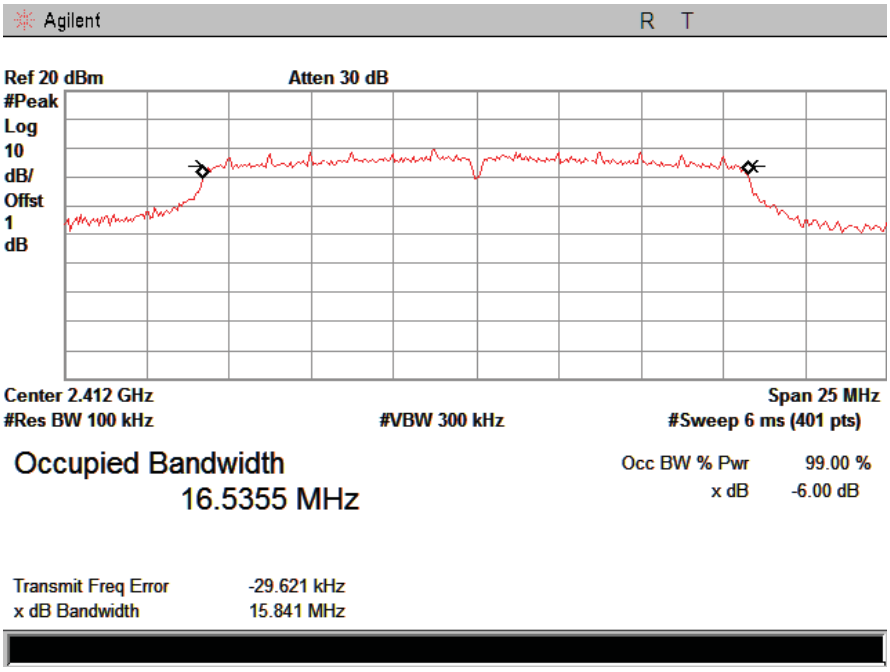


CH High :

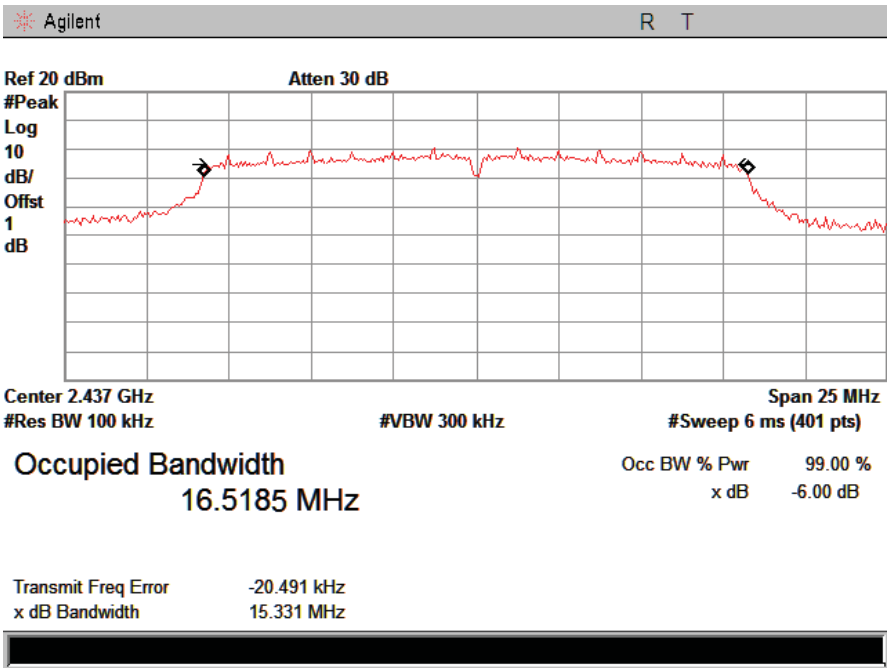


IEEE 802.11g:

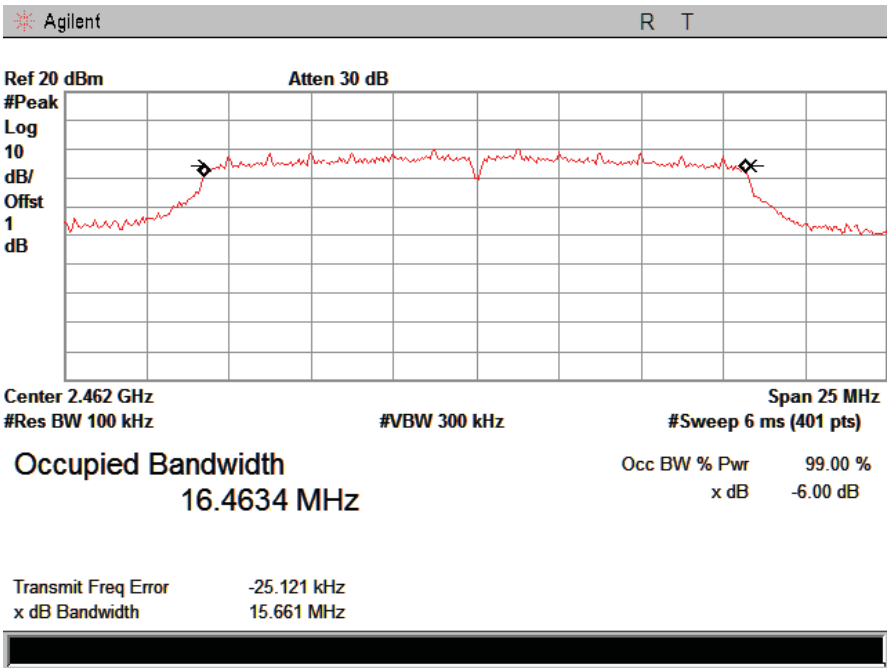
CH Low :



CH Mid :

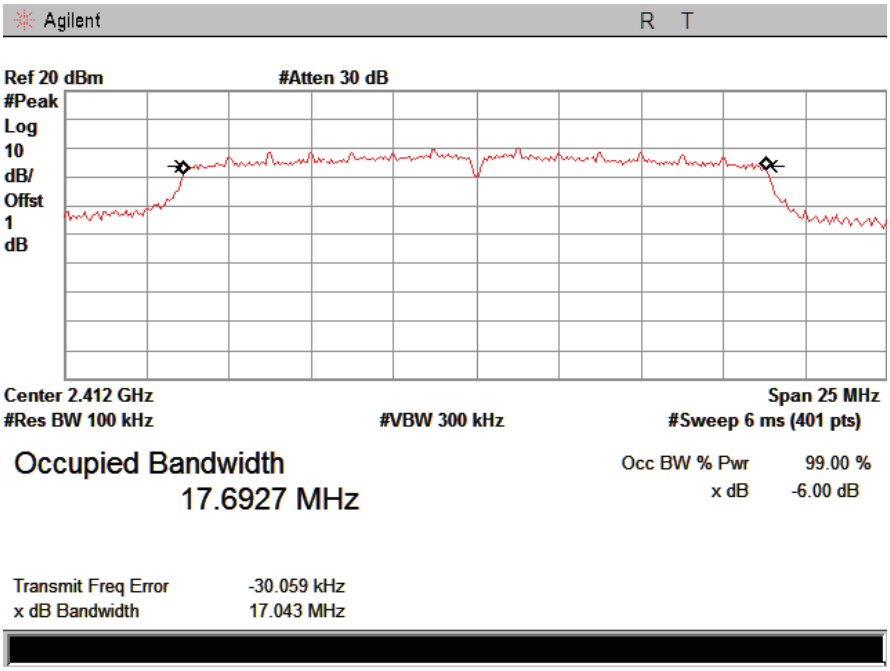


CH High :

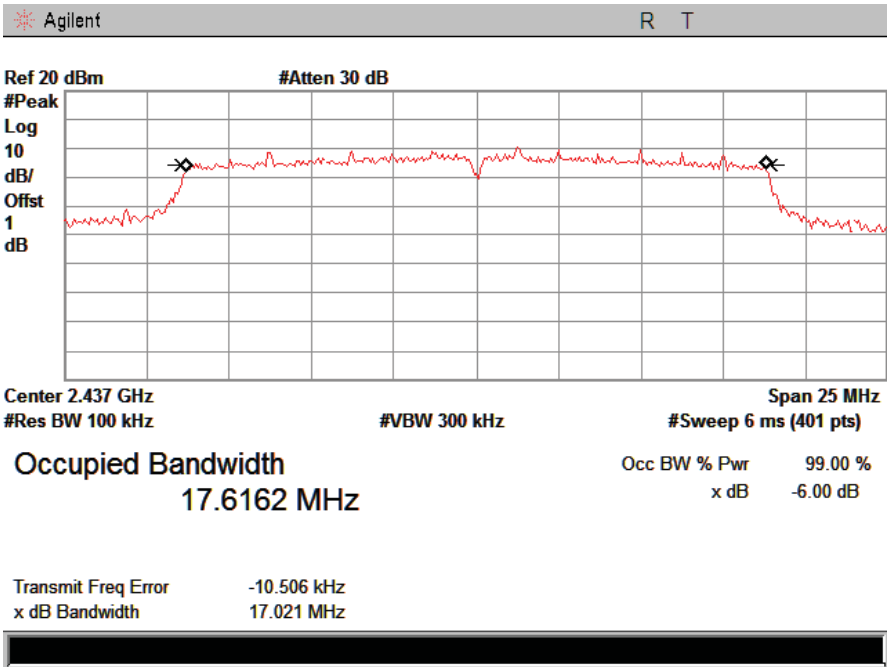


IEEE 802.11n/HT20 with 2.4G:

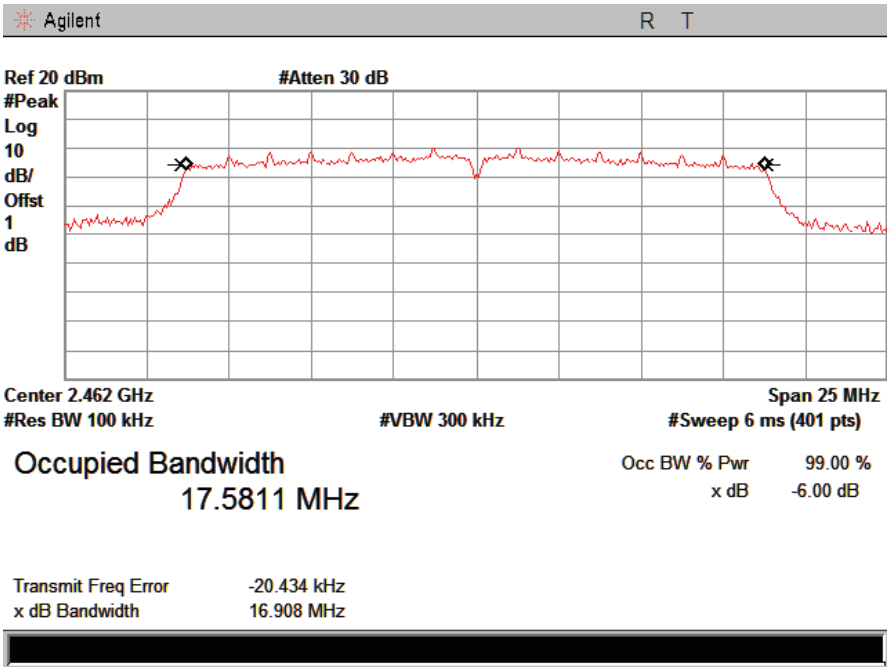
CH Low :



CH Mid :

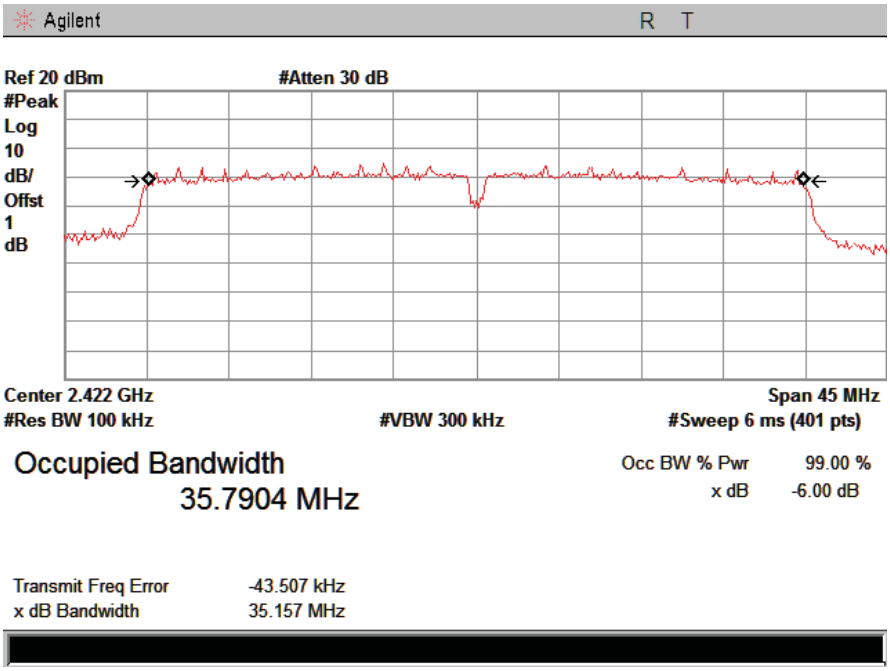


CH High :

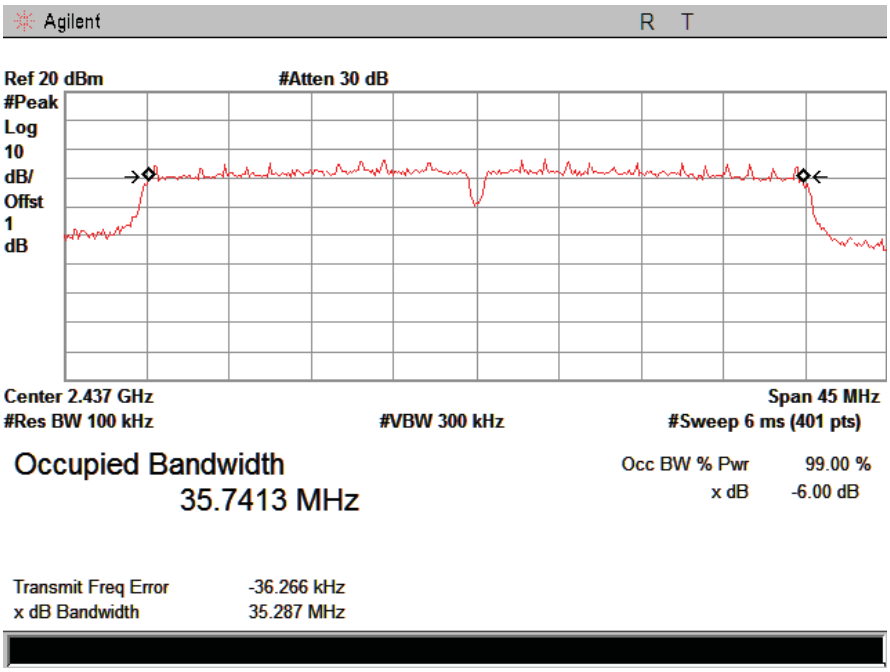


IEEE 802.11n/HT40 with 2.4G:

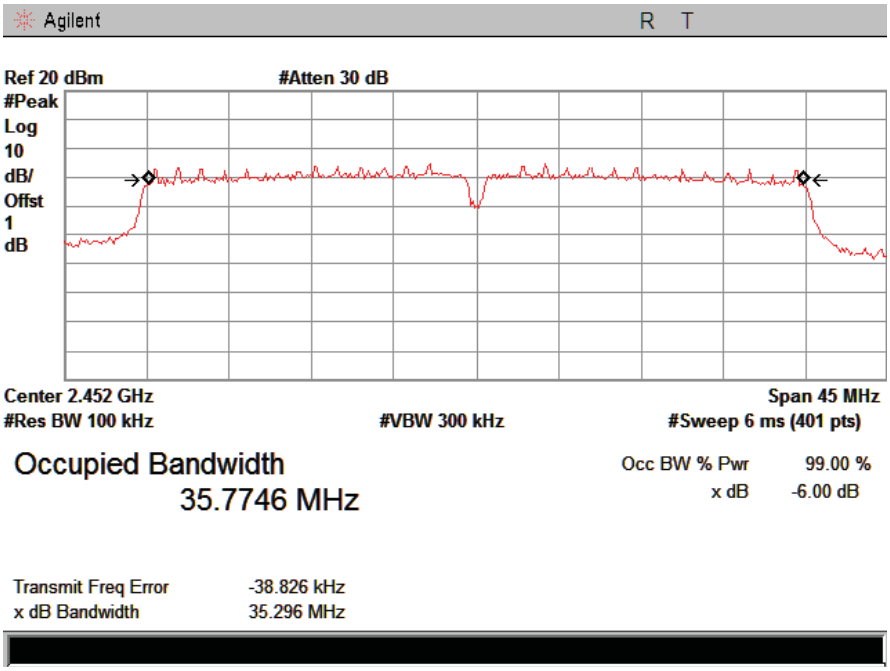
CH Low :



CH Mid :

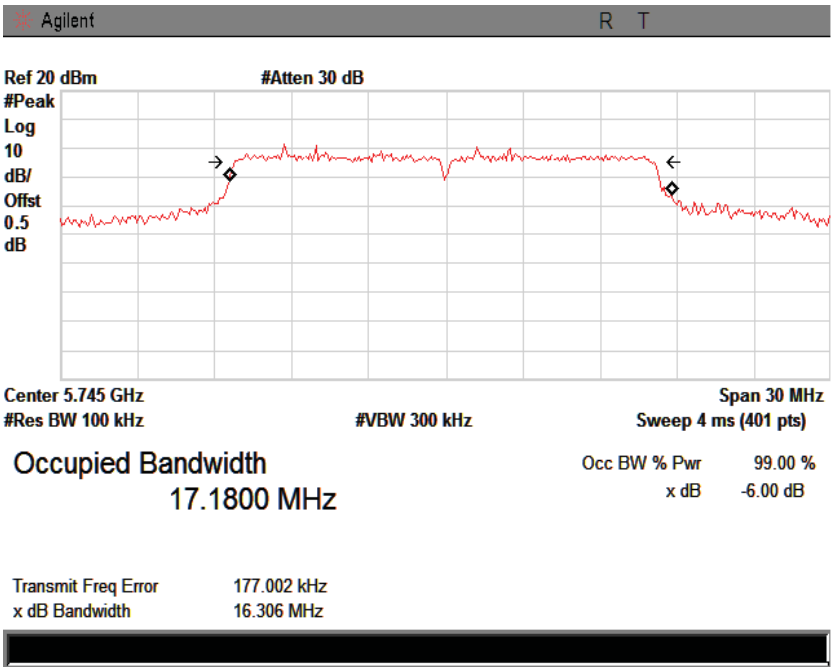


CH High :

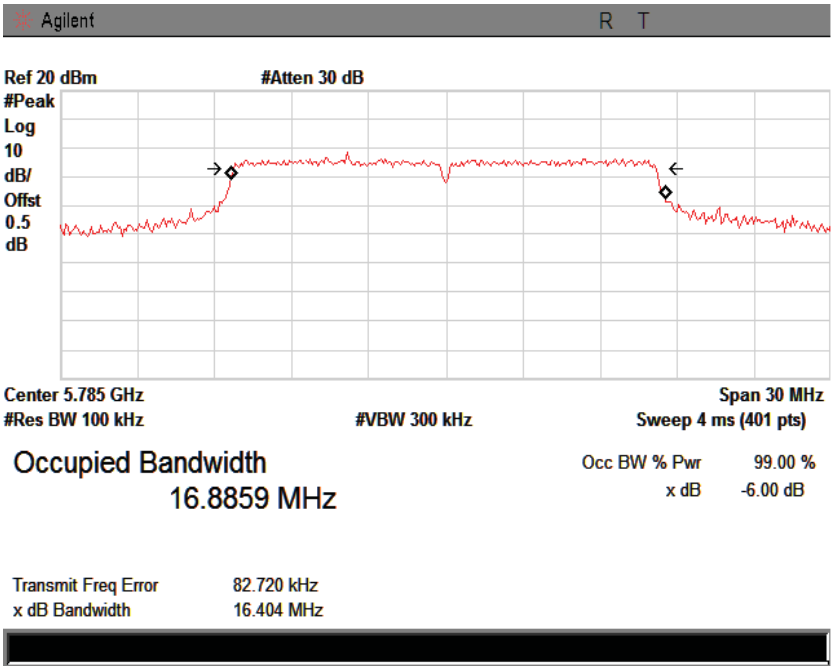


IEEE 802.11a with 5.8G:

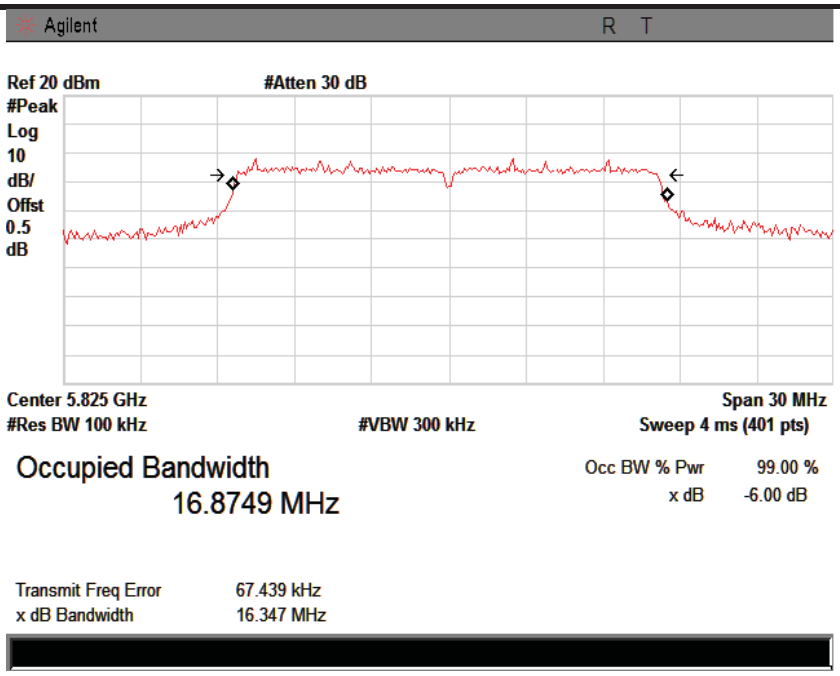
CH Low :



CH Mid :

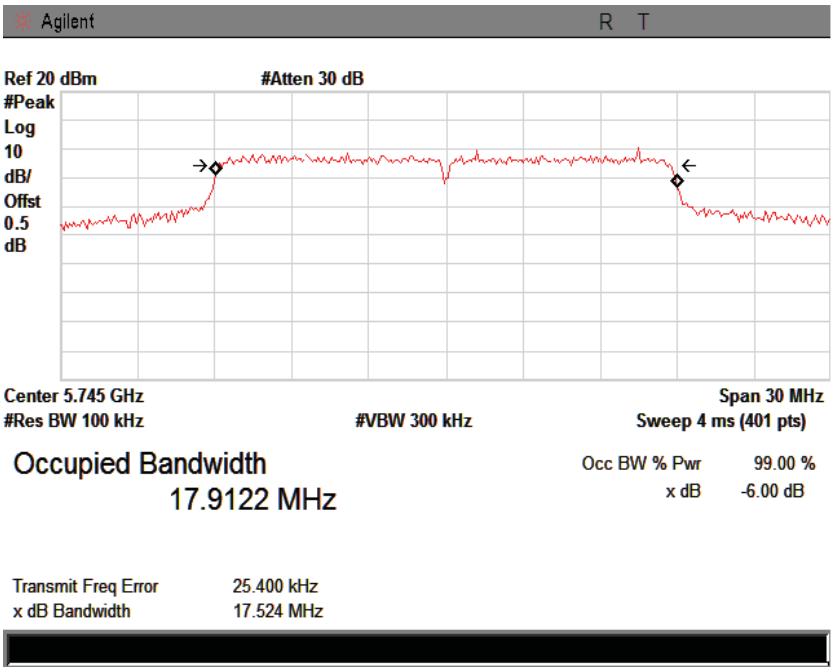


CH High :

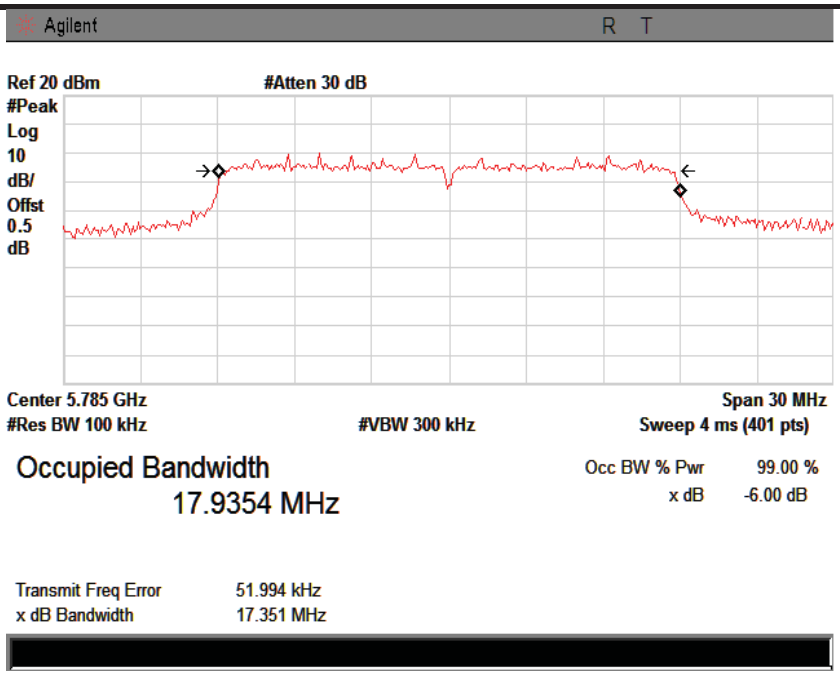


IEEE 802.11n/HT20 with 5.8G:

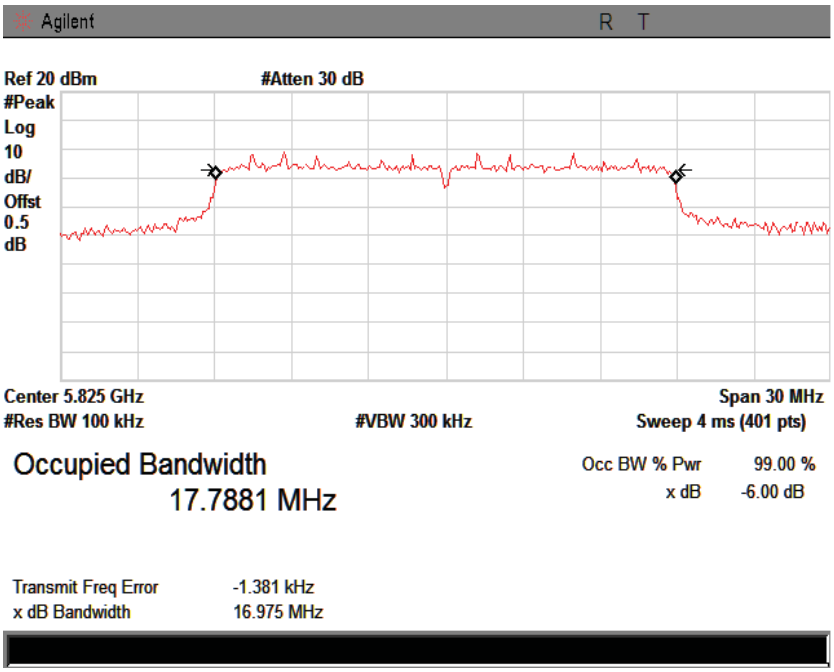
CH Low :



CH Mid :

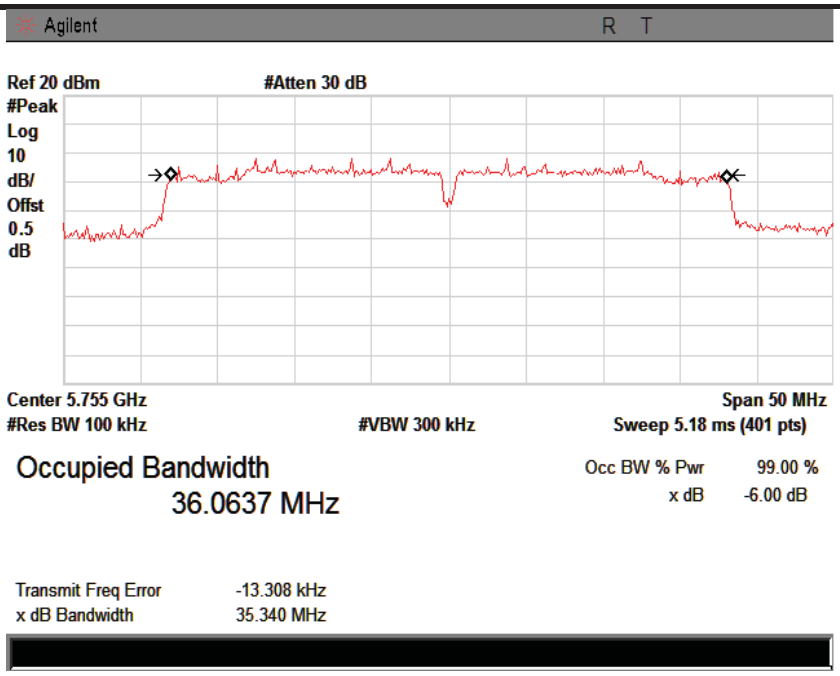


CH High :

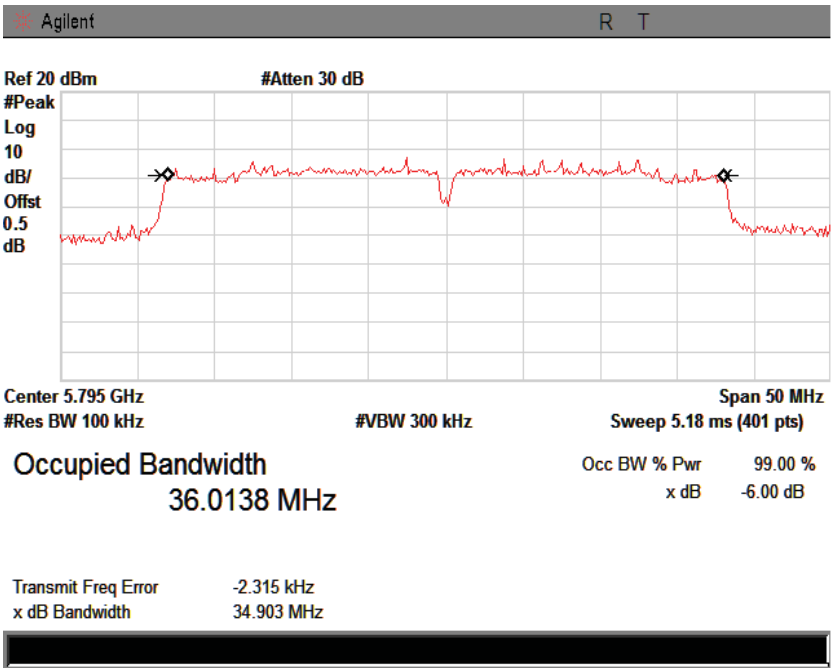


IEEE 802.11n/HT40 with 5.8G:

CH Low :



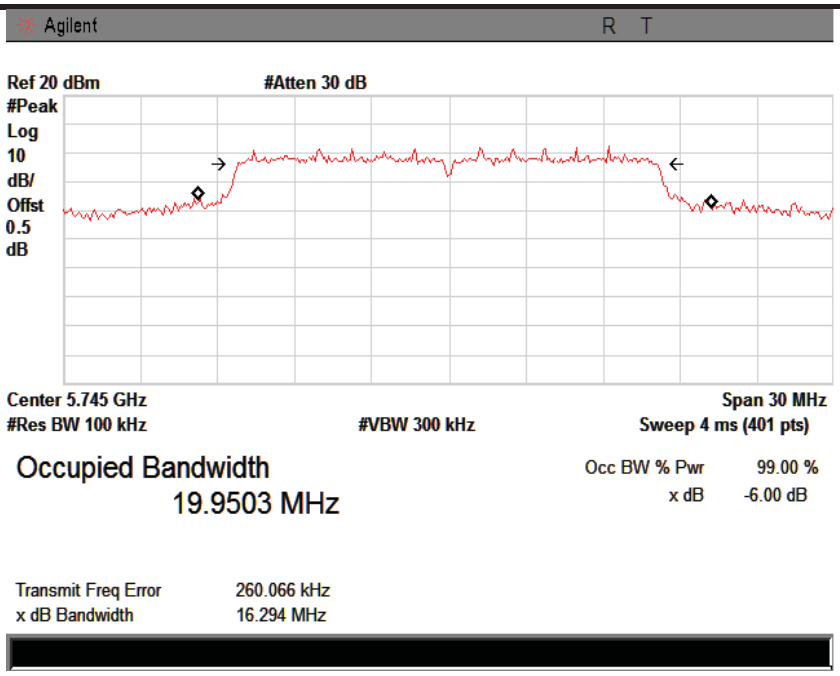
CH High :



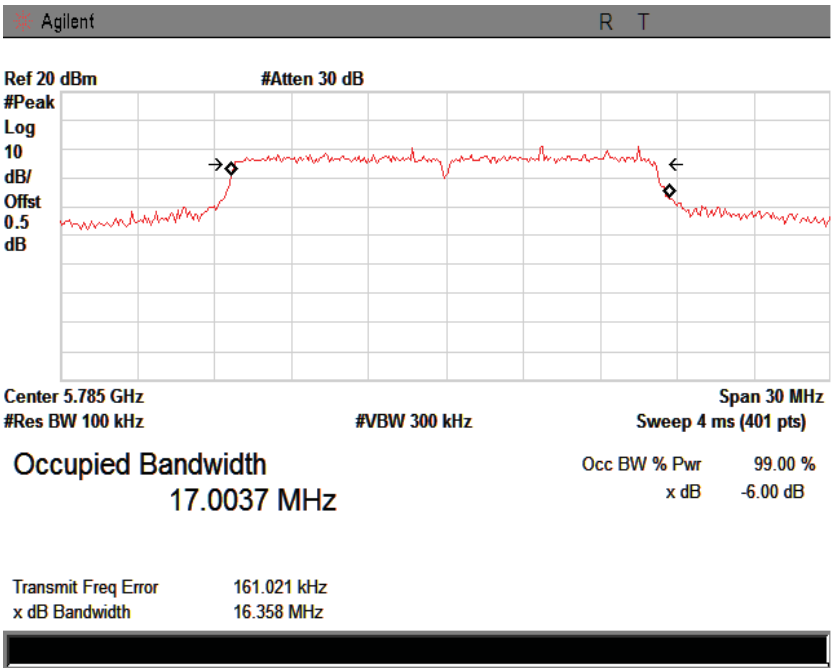
port 1 antenna

IEEE 802.11a with 5.8G:

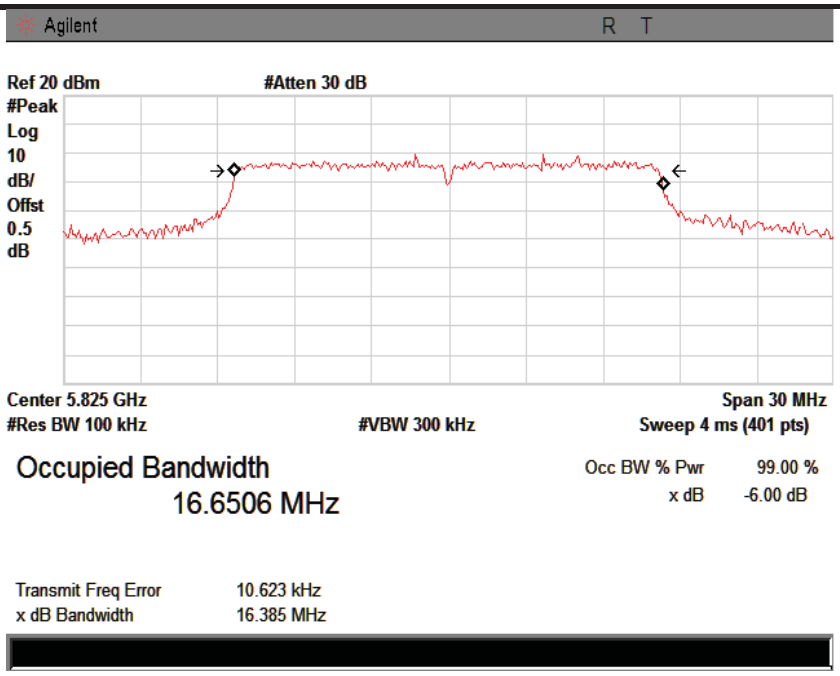
CH Low :



CH Mid :

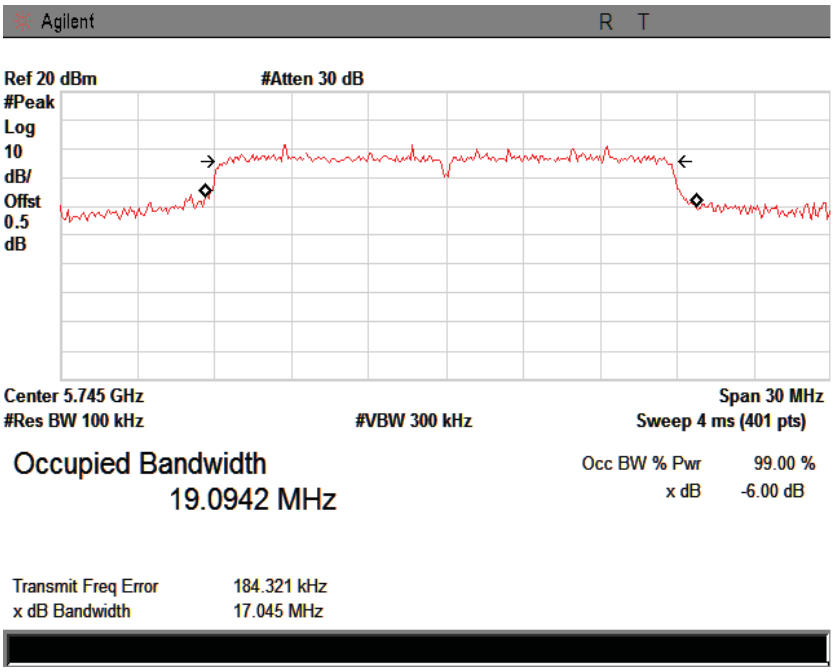


CH High :

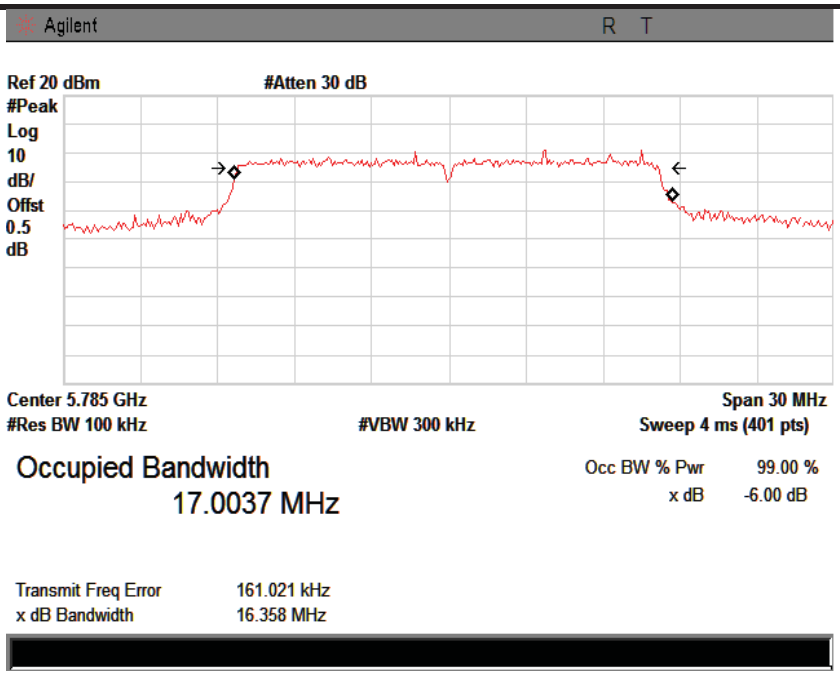


IEEE 802.11n/HT20 with 5.8G:

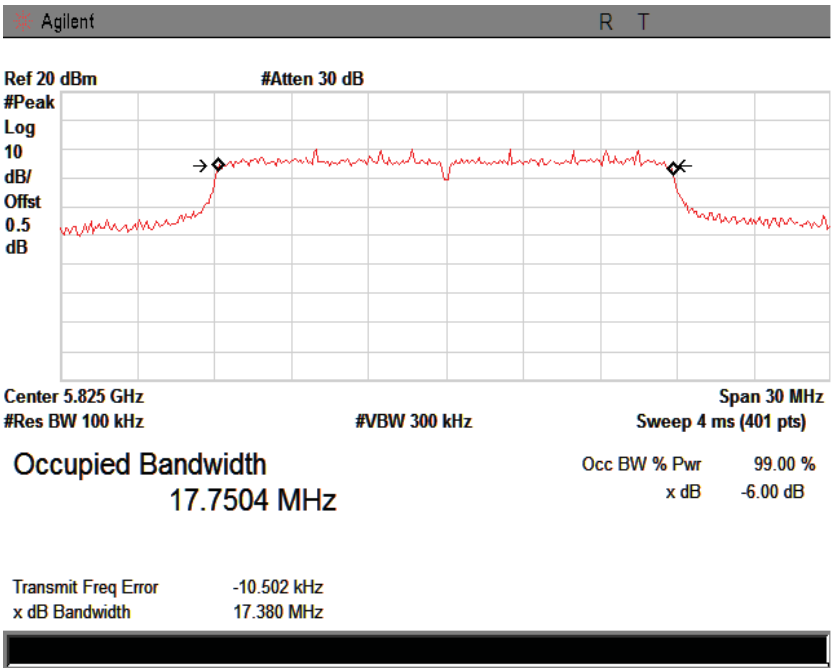
CH Low :



CH Mid :

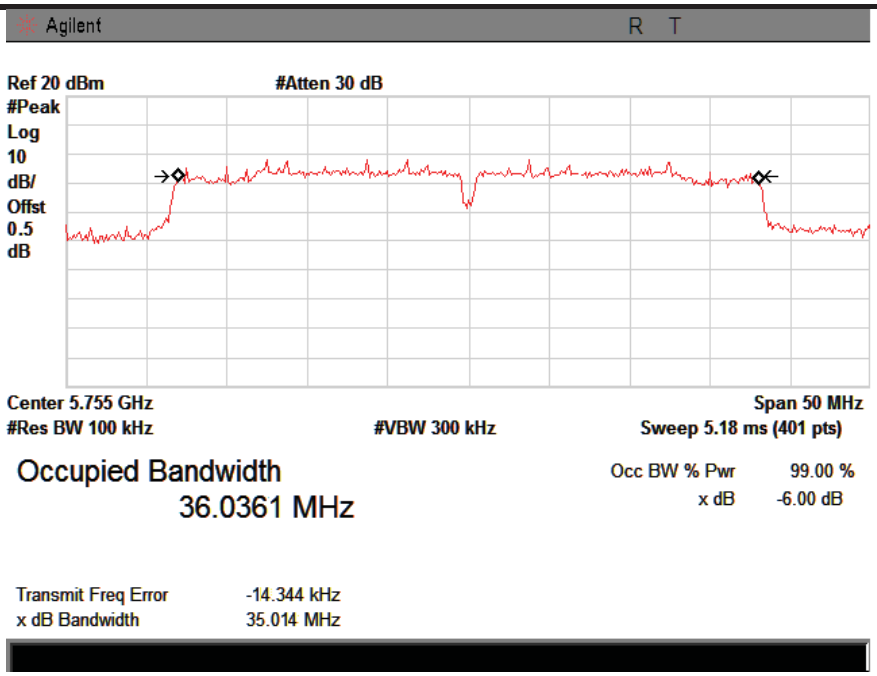


CH High :

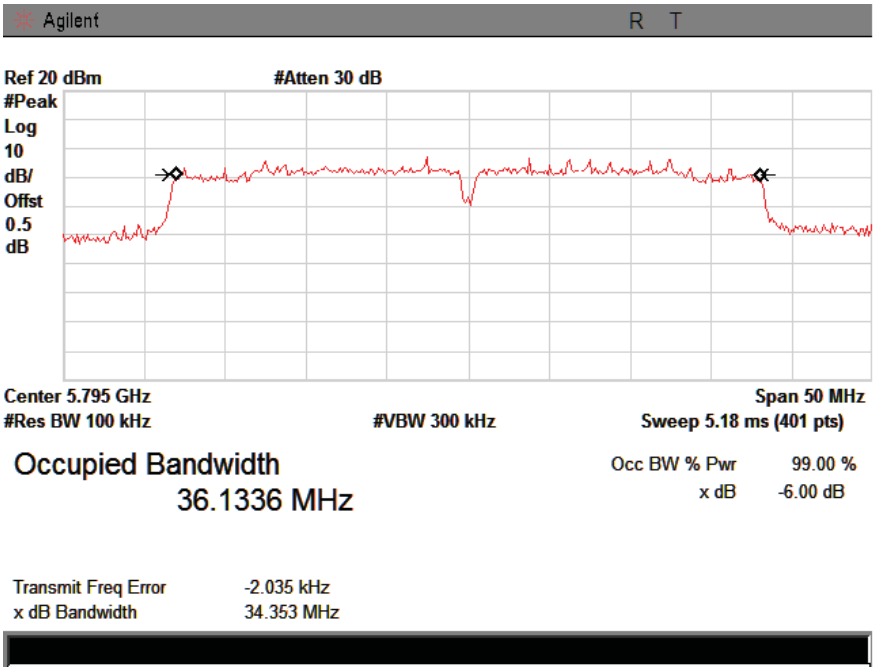


IEEE 802.11n/HT40 with 5.8G:

CH Low :


Agilent
R T
Ref 20 dBm
#Atten 30 dB
#Peak
Log
10
dB/
Offst
0.5
dB
Center 5.755 GHz
Span 50 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 5.18 ms (401 pts)
Occupied Bandwidth
36.0361 MHz
Occ BW % Pwr 99.00 %
x dB -6.00 dB
Transmit Freq Error -14.344 kHz
x dB Bandwidth 35.014 MHz

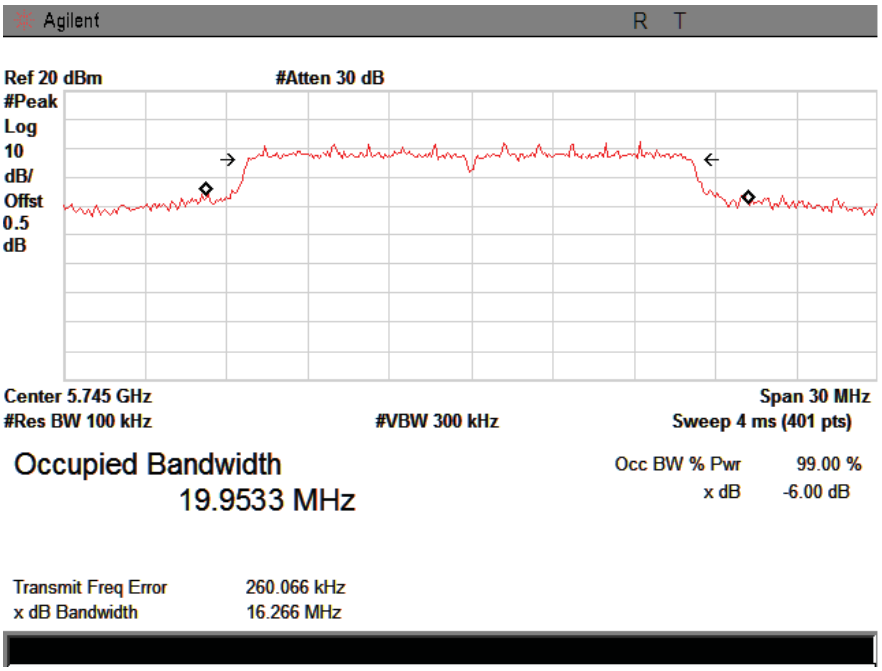
CH High :


Agilent
R T
Ref 20 dBm
#Atten 30 dB
#Peak
Log
10
dB/
Offst
0.5
dB
Center 5.795 GHz
Span 50 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 5.18 ms (401 pts)
Occupied Bandwidth
36.1336 MHz
Occ BW % Pwr 99.00 %
x dB -6.00 dB
Transmit Freq Error -2.035 kHz
x dB Bandwidth 34.353 MHz

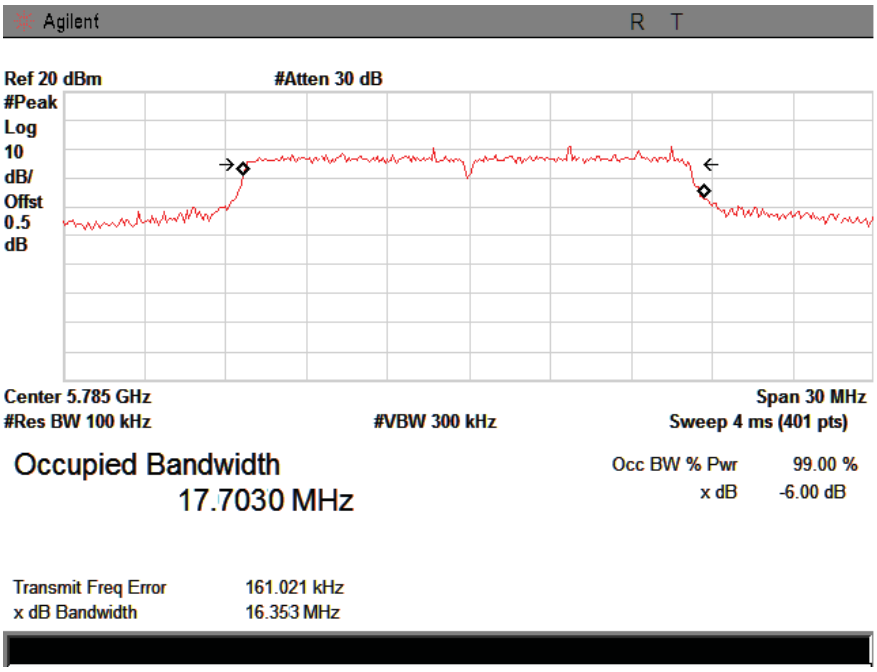
port 2 antenna

IEEE 802.11a with 5.8G:

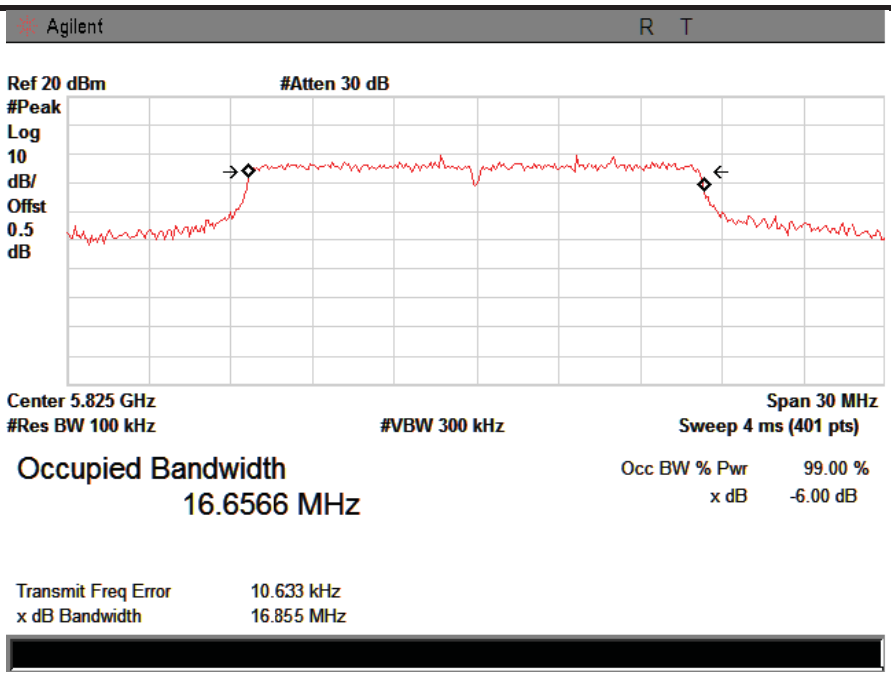
CH Low :



CH Mid :

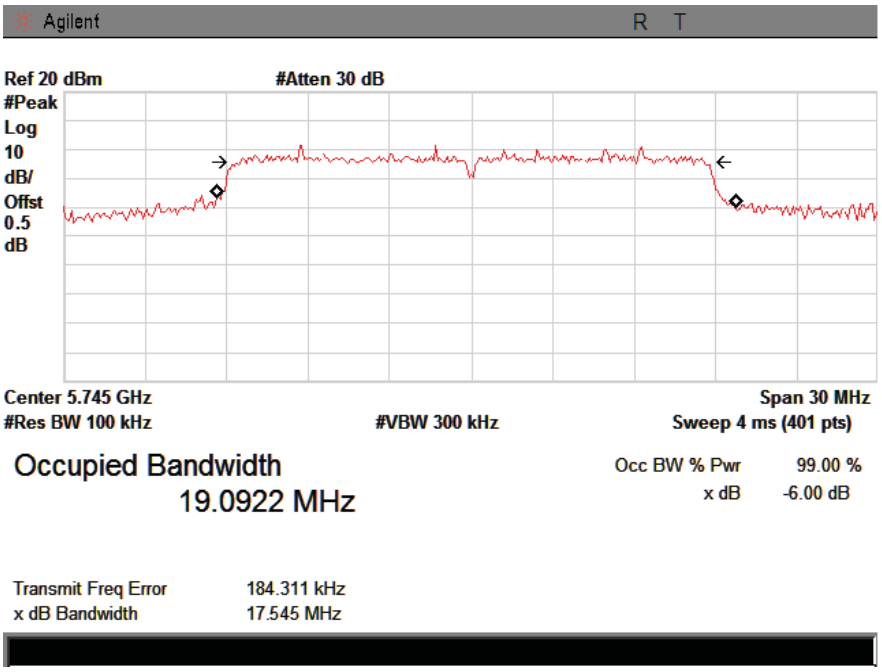


CH High :

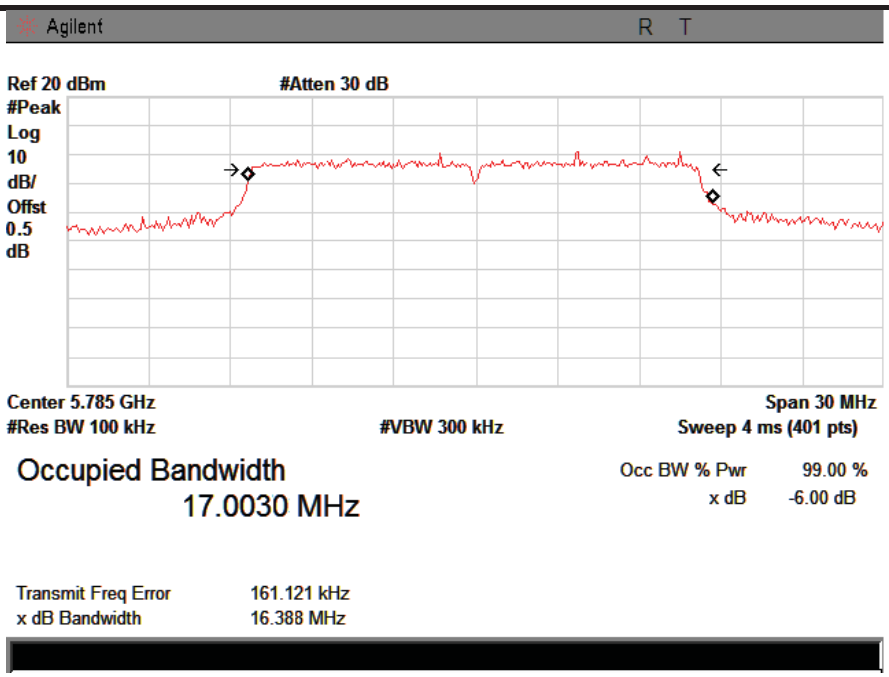


IEEE 802.11n/HT20 with 5.8G:

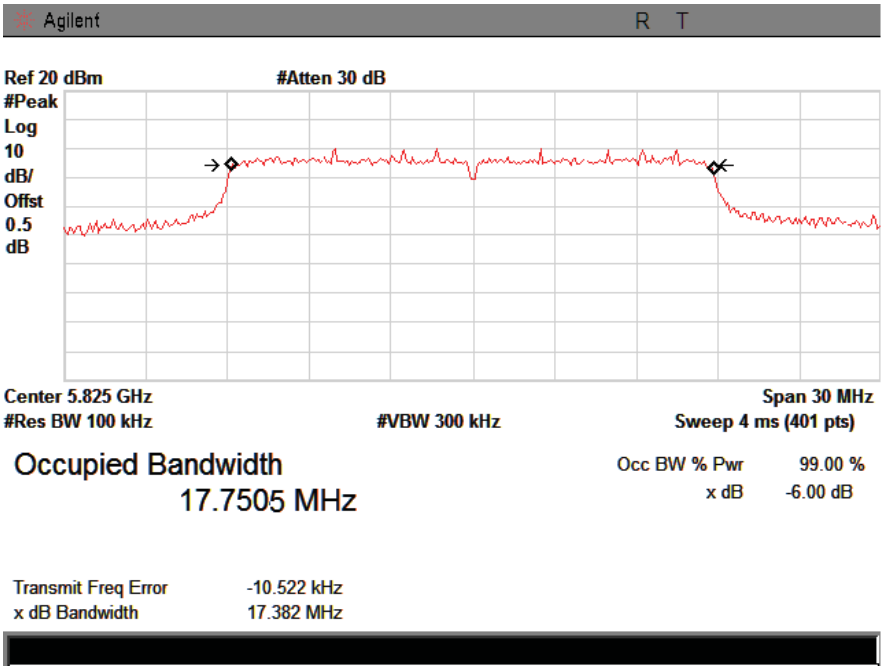
CH Low :



CH Mid :

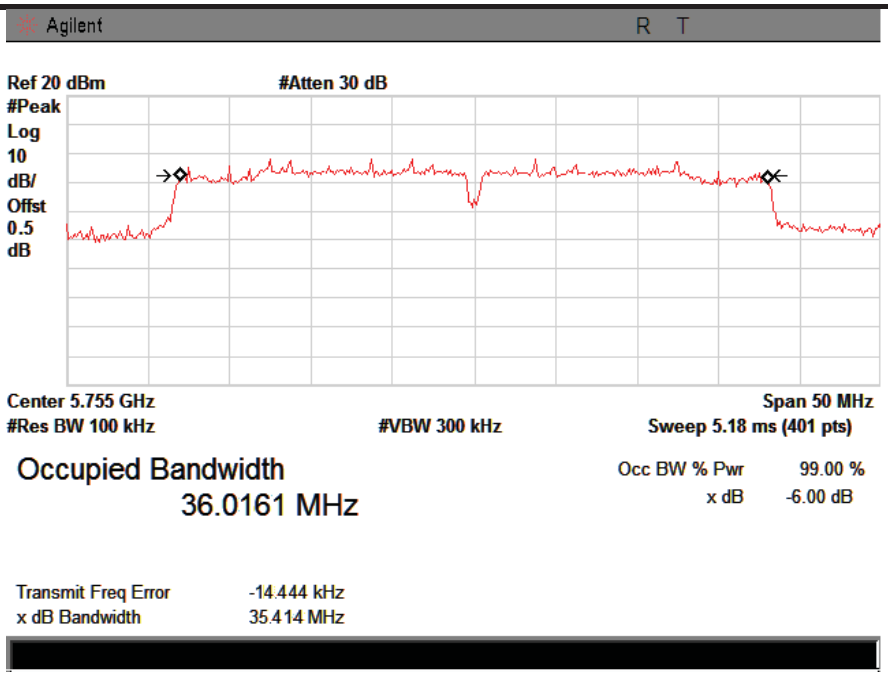


CH High :

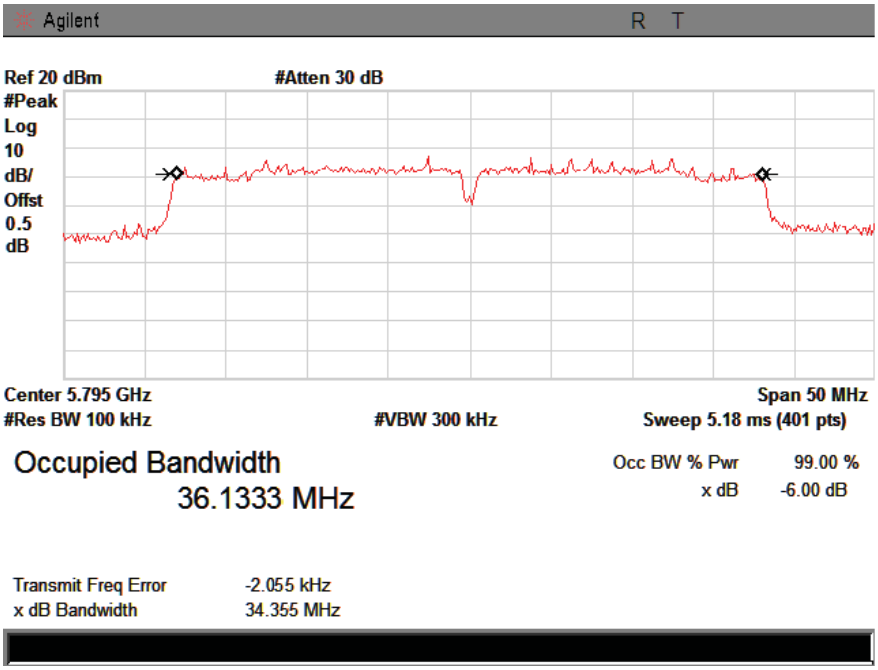


IEEE 802.11n/HT40 with 5.8G:

CH Low :


Agilent
R T
Ref 20 dBm
#Atten 30 dB
#Peak
Log
10
dB/
Offst
0.5
dB
Center 5.755 GHz
Span 50 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 5.18 ms (401 pts)
Occupied Bandwidth
36.0161 MHz
Occ BW % Pwr 99.00 %
x dB -6.00 dB
Transmit Freq Error -14.444 kHz
x dB Bandwidth 35.414 MHz

CH High :


Agilent
R T
Ref 20 dBm
#Atten 30 dB
#Peak
Log
10
dB/
Offst
0.5
dB
Center 5.795 GHz
Span 50 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 5.18 ms (401 pts)
Occupied Bandwidth
36.1333 MHz
Occ BW % Pwr 99.00 %
x dB -6.00 dB
Transmit Freq Error -2.055 kHz
x dB Bandwidth 34.355 MHz

10 Band Edge Check

10.1 Test limit

Please refer section15.247

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz and 5725MHz to 5850MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

10.2 Test Procedure

12.2.1 Put the EUT on a 0.8m high table, power on the EUT. Emissions were scanned and measured rotating the EUT to 360 degrees, Find the maximum Emission

12.2.2 Check the spurious emissions out of band.

12.2.3 RBW,VBW Setting:

For PEAK measurement, RBW=1MHZ, VBW=3MHZ Detector=PEAK.

For AVG measurement, RBW=1MHz, VBW=10Hz, Detector=PEAK.

10.3 Test Setup

MIMO keeping TX mode

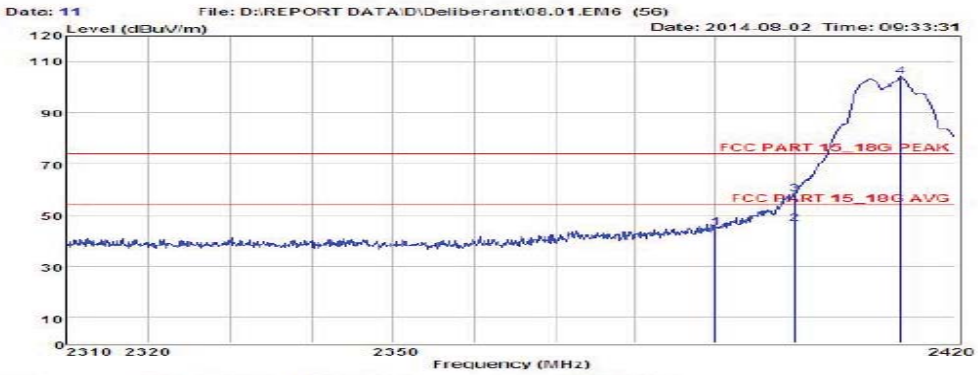
10.4 Test Result

PASS.

Detailed information please see the following page.

IEEE 802.11b:
CH LOW :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



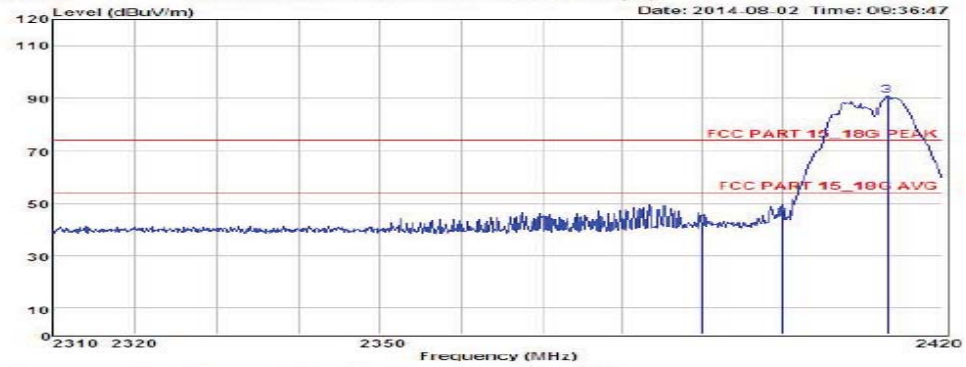
Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11b Low
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	48.44	27.62	34.97	3.92	45.01	74.00	-29.99	Peak
2	2400.00	50.13	27.62	34.97	3.94	46.72	54.00	-7.28	Average
3	2400.00	61.46	27.62	34.97	3.94	58.07	74.00	-15.93	Peak
4	2413.03	107.50	27.61	34.97	3.95	104.09	74.00	30.09	

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com

Date: 12 File: D:\REPORT DATA\D\Deliberant\08.01.EM6 (5G)



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11b Low
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.02	45.29	27.62	34.97	3.92	41.86	74.00	-32.14	Peak
2	2400.00	47.84	27.62	34.97	3.94	44.43	74.00	-29.57	Peak
3	2412.92	94.36	27.61	34.97	3.95	90.95	74.00	16.95	Peak

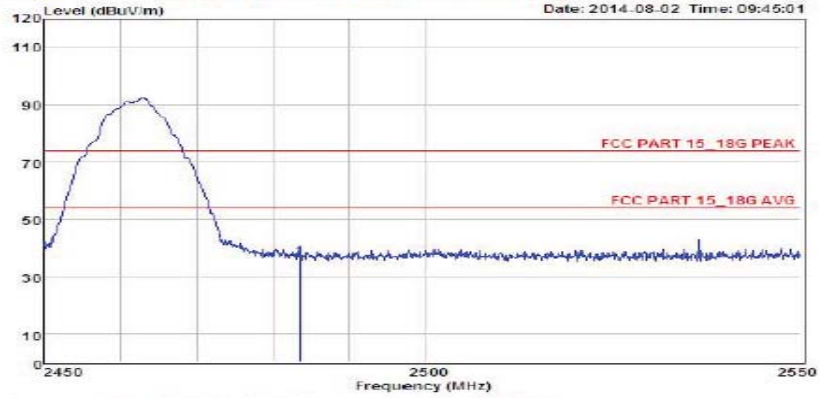
Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH High :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com

Data: 14 File: D:\REPORT DATA\D\Deliberant\08.01.EM6 (38)

Date: 2014-08-02 Time: 09:45:01



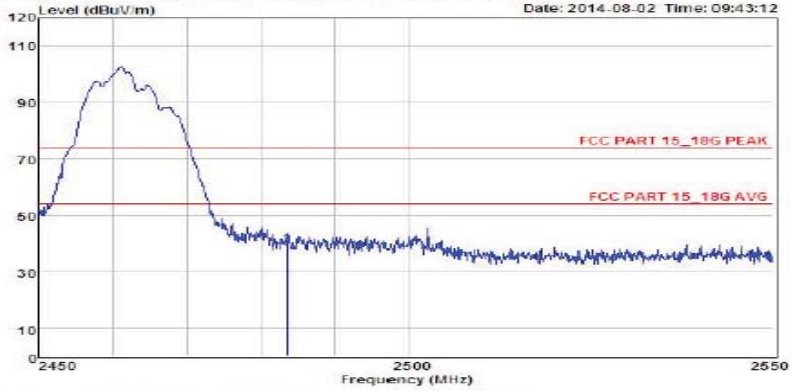
Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11b High
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	40.10	27.59	34.97	4.00	36.72	74.00	-37.28	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com

Data: 13 File: D:\REPORT DATA\D\Deliberant\08.01.EM6 (38)



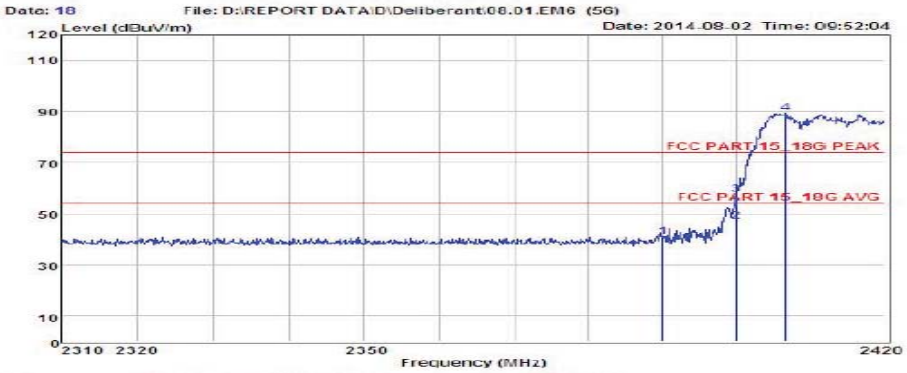
Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11b High
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	42.93	27.59	34.97	4.00	39.55	74.00	-34.45	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

IEEE 802.11g:
CH LOW :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



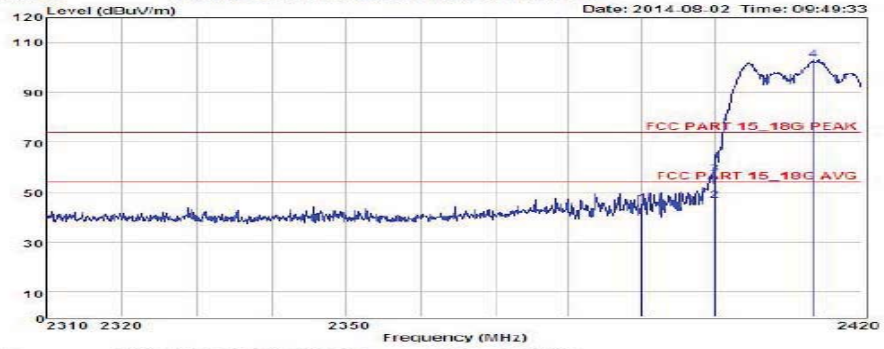
Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11g Low
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	44.38	27.62	34.97	3.92	40.95	74.00	-33.05	Peak
2	2400.00	50.46	27.62	34.97	3.94	47.05	54.00	-6.95	Average
3	2400.00	61.06	27.62	34.97	3.94	57.65	74.00	-16.35	Peak
4	2406.64	92.61	27.61	34.97	3.94	69.39	74.00	15.39	

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736657
Website: http://www.cessz.com Email: Service@cessz.com

Date: 17 File: D:\REPORT DATA\D\Deliberant\08.01.EM6 (56)



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11g Low
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

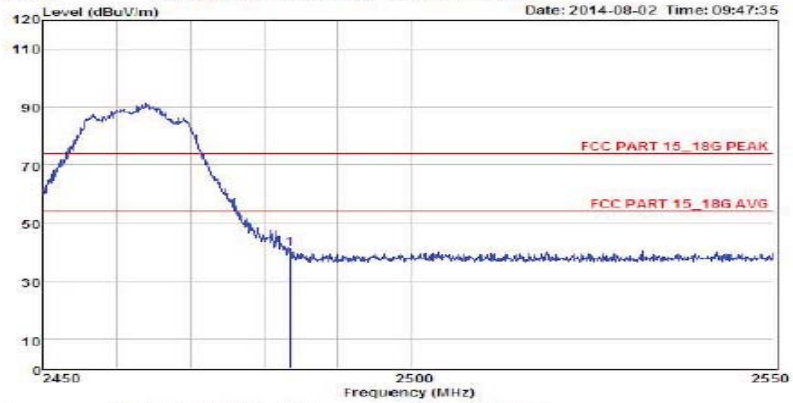
Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	48.91	27.62	34.97	3.92	45.48	74.00	-28.52	Peak
2	2400.00	49.94	27.62	34.97	3.94	46.53	54.00	-7.47	Average
3	2400.00	60.70	27.62	34.97	3.94	57.29	74.00	-16.71	Peak
4	2413.26	106.60	27.61	34.97	3.95	103.19	74.00	29.19	

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH High :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736867
Website: http://www.cessz.com Email: Service@cessz.com

Data: 15 File: D:\REPORT DATA\D\Deliberant\08.01.EMC (38)



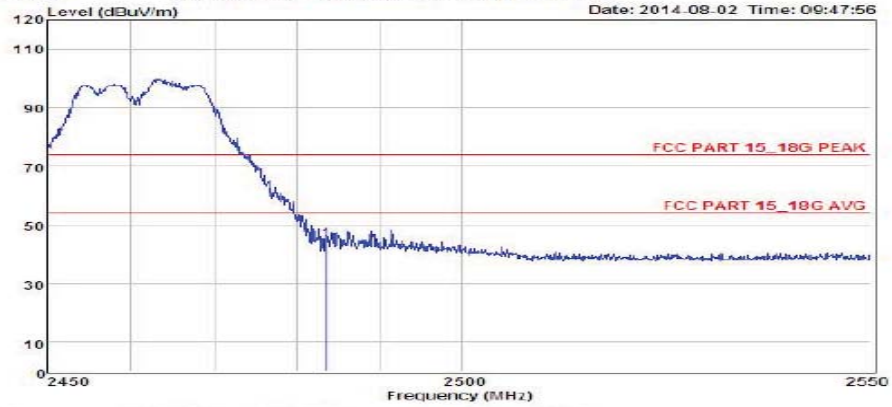
Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11g High
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	44.62	27.59	34.97	4.00	41.24	74.00	-32.76	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com

Date: 16 File: D:\REPORT DATA\D\Deliberant\08.01.EM6 (38)



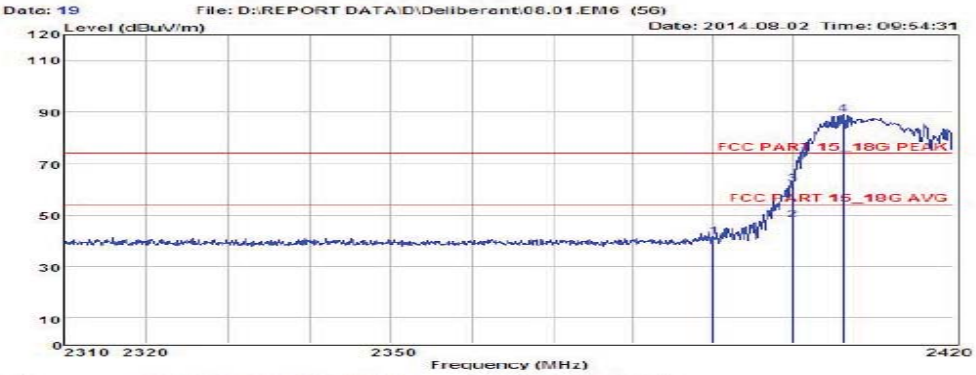
Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11g High
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	46.34	27.59	34.97	4.00	44.96	74.00	-29.04	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

IEEE 802.11n/HT20 with 2.4G:
CH LOW :

Shenzhen Certification Technology Service Co., Ltd
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



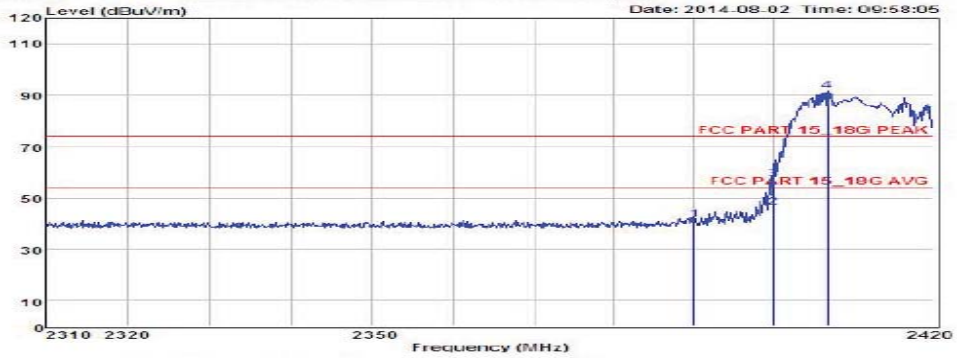
Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11n/HT20 Low
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.02	44.90	27.62	34.97	3.92	41.47	74.00	-32.53	Peak
2	2400.00	51.23	27.62	34.97	3.94	47.82	54.00	-6.18	Average
3	2400.00	65.62	27.62	34.97	3.94	62.21	74.00	-11.79	Peak
4	2406.42	92.46	27.61	34.97	3.94	69.06	74.00	15.06	

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736657
Website: http://www.cessz.com Email: Service@cessz.com

Date: 20 File: D:\REPORT DATA\D\Deliberant\08.01.EM6 (56)



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11n/HT20 Low
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

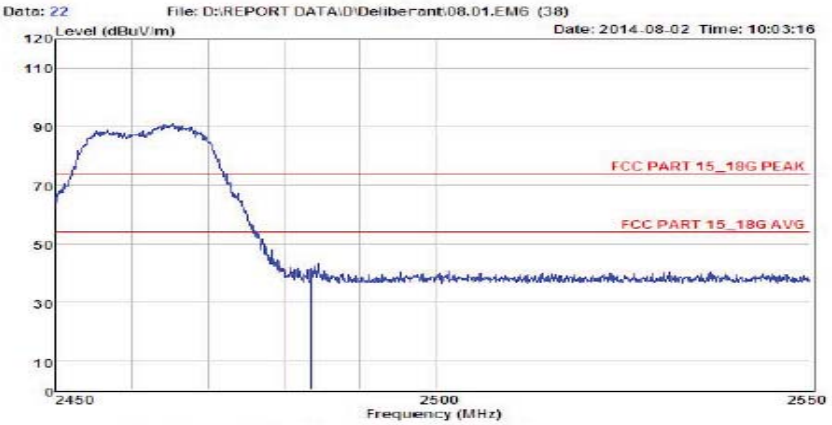
Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	44.94	27.62	34.97	3.92	41.51	74.00	-32.49	Peak
2	2400.00	49.83	27.62	34.97	3.94	46.42	54.00	-7.58	Average
3	2400.00	60.63	27.62	34.97	3.94	57.42	74.00	-16.58	Peak
4	2406.75	95.01	27.61	34.97	3.94	91.59	74.00	17.59	

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH High :

Shenzhen Certification Technology Service Co., Ltd
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com

Data: 22 File: D:\REPORT DATA\D\Deliberant\08.01.EM6 (38)



Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11n/HT20 High
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

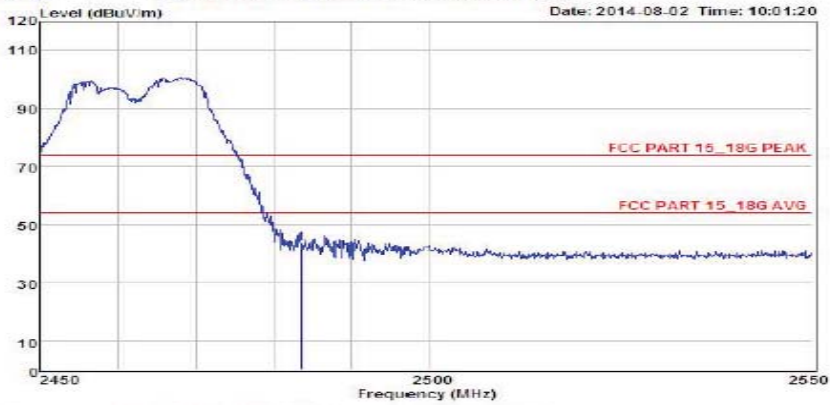
Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	41.05	27.59	34.97	4.00	37.67	74.00	-36.33	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cesaz.com Email: Service@cesaz.com

Data: 21 File: D:\REPORT DATA\D\Deliberant\08.01.EM6 (38)

Date: 2014-08-02 Time: 10:01:20



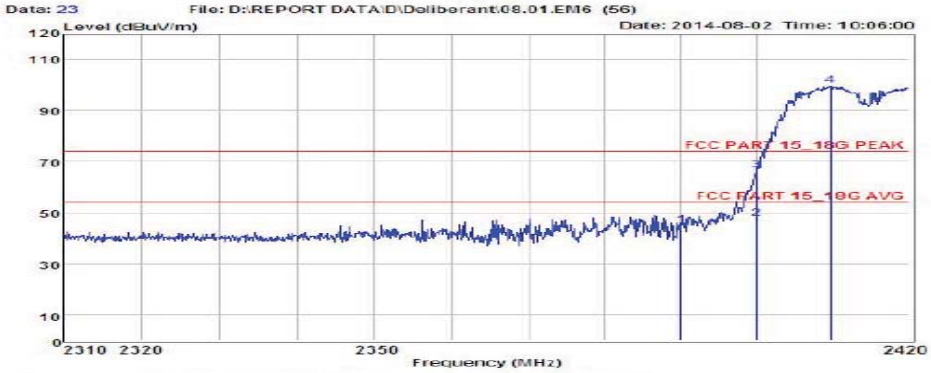
Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11n/HT20 High
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	46.73	27.59	34.97	4.00	43.35	74.00	-30.65	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

IEEE 802.11 n/HT40 with 2.4G::
CH LOW :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736057
Website: http://www.cessz.com Email: Service@cessz.com



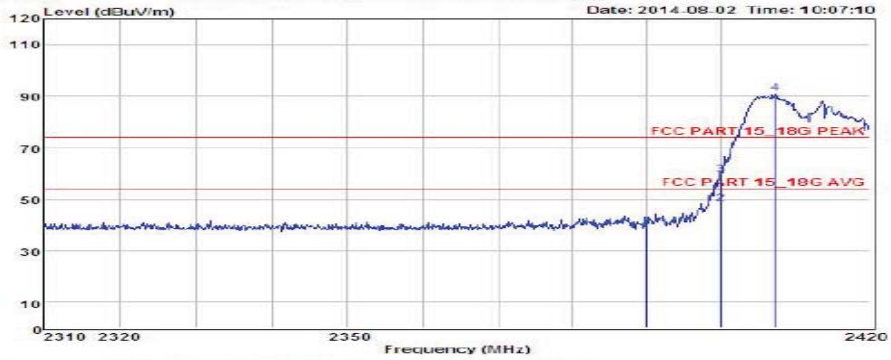
Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11n/HT40 Low
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	48.36	27.62	34.97	3.92	44.93	74.00	-29.07	Peak
2	2400.00	50.95	27.62	34.97	3.94	47.54	54.00	-6.46	Average
3	2400.00	69.95	27.62	34.97	3.94	66.54	74.00	-7.46	Peak
4	2409.76	103.15	27.61	34.97	3.94	99.73	74.00	25.73	

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com

Date: 24 File: D:\REPORT DATA\D\Deliberant\08.01.EM6 (5G)



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11n/H40 Low
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

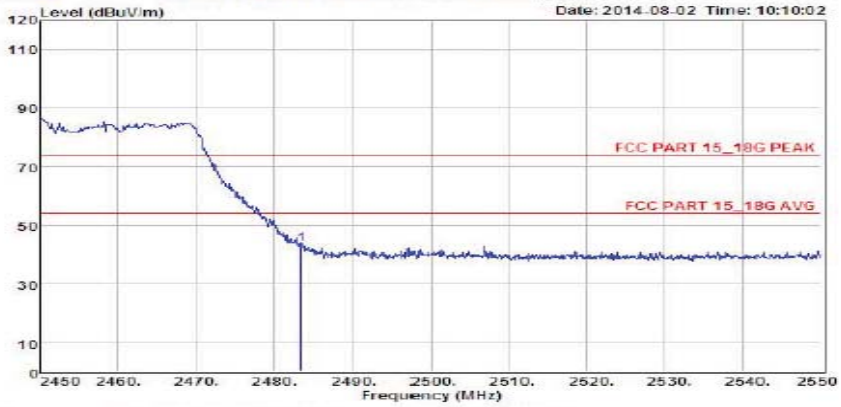
Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2390.00	42.66	27.62	34.97	3.92	39.23	74.00	-34.77	Peak
2	2400.00	51.80	27.62	34.97	3.94	48.39	54.00	-5.61	Average
3	2400.00	63.06	27.62	34.97	3.94	59.67	74.00	-14.33	Peak
4	2407.31	94.52	27.61	34.97	3.94	91.10	74.00	17.10	

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH High :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com

Data: 26 File: D:\REPORT DATA\D\Deliberant\08.01.EM6 (38)



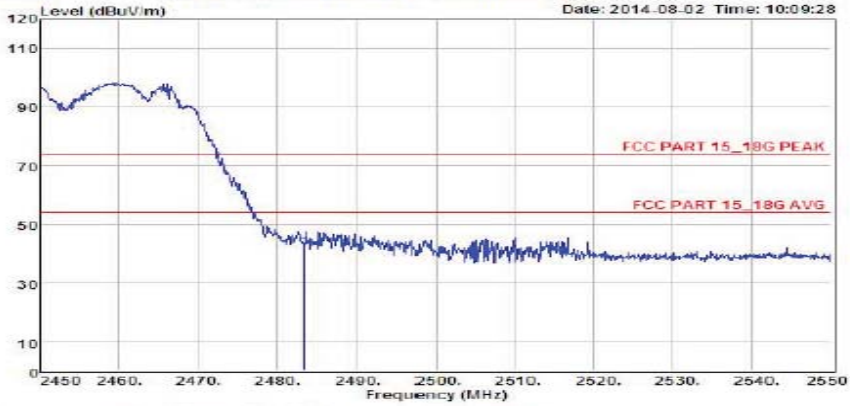
Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11n/HT40 Low
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	46.72	27.59	34.97	4.00	43.34	74.00	-30.66	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com

Data: 25 File: D:\REPORT DATA\D\Deliberant\08.01.EM6 (38)



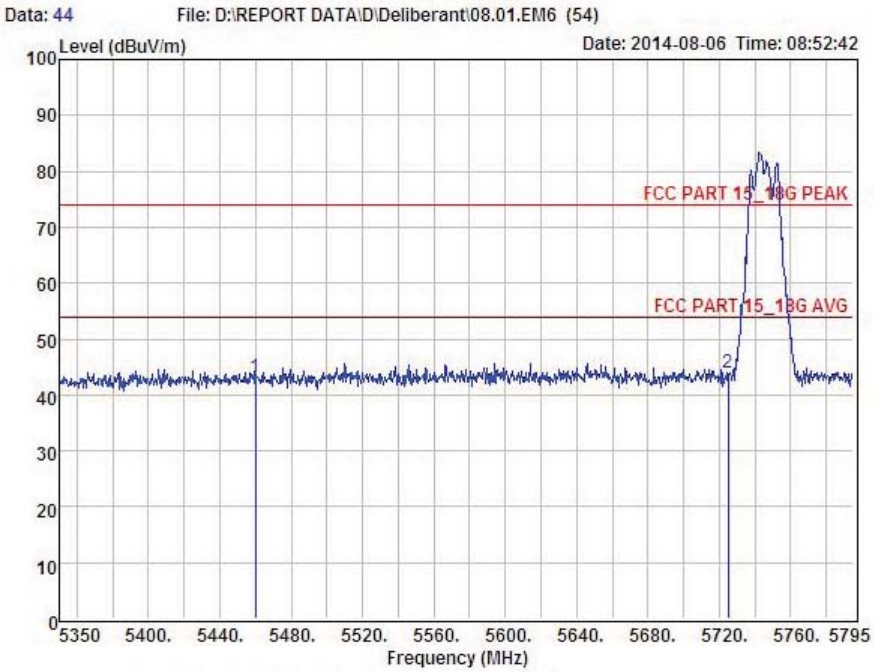
Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : IEEE802.11n/HT40 Low
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	2483.50	45.28	27.59	34.97	4.00	41.90	74.00	-32.10	

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

IEEE 802.11a with 5.8G:
CH LOW :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



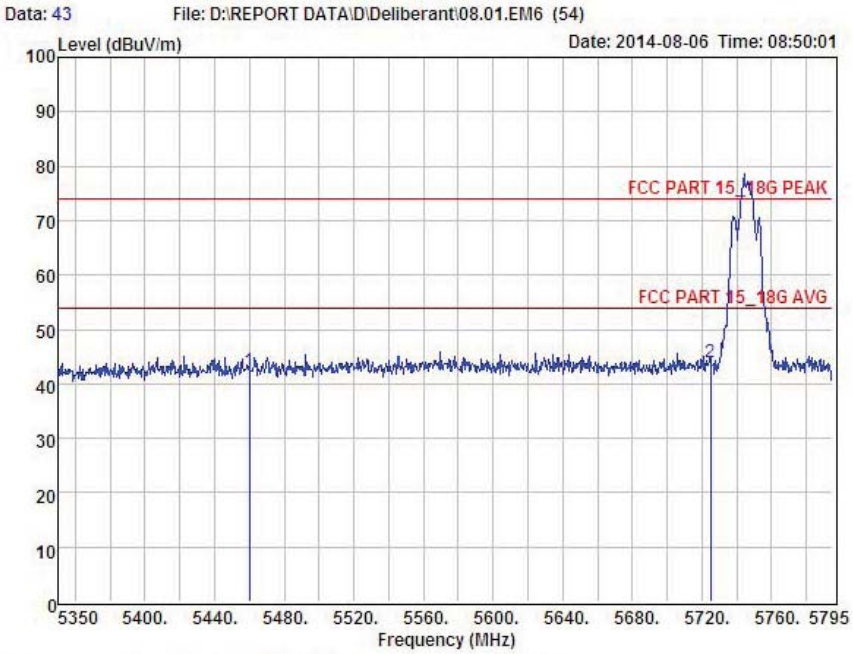
Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : 802.11a Low
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	5460.00	39.01	31.81	33.65	6.11	43.28	74.00	-30.72	Peak
2	5725.00	38.99	32.27	33.58	6.26	43.94	74.00	-30.06	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH Low :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



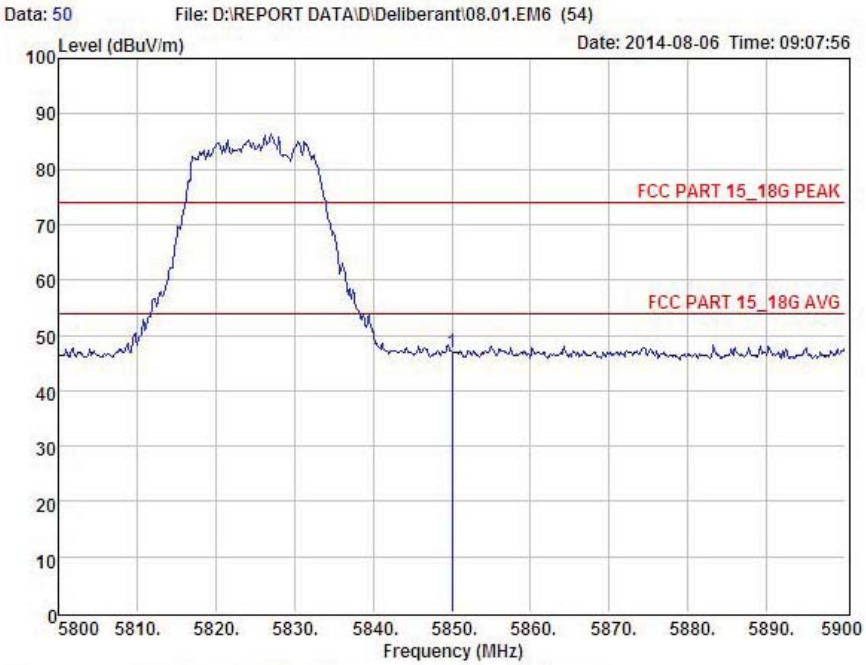

```
Condition      : FCC PART 15_18G PEAK 3m       POL: VERTICAL
EUT            : Broadband Digital Transmission System
Model No       : NFT 2N
Test Mode      : 802.11a Low
Power          : DC 48V
Test Engineer  : Peter
Remark         :
Temp           : 25.2°C
Hum            : 56%
```

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	5460.00	38.01	31.81	33.65	6.11	42.28	74.00	-31.72	Peak
2	5725.00	38.99	32.27	33.58	6.26	43.94	74.00	-30.06	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH HIgh :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



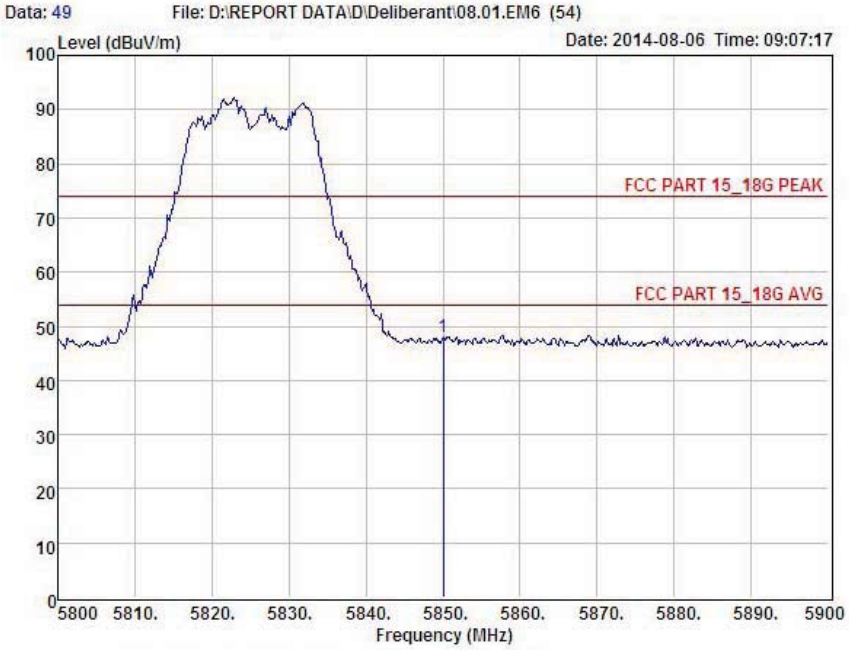

```
Condition      : FCC PART 15_18G PEAK 3m       POL: HORIZONTAL
EUT            : Broadband Digital Transmission System
Model No       : NFT 2N
Test Mode      : 802.11a High
Power          : DC 48V
Test Engineer  : Peter
Remark         :
Temp           : 25.2°C
Hum            : 56%
```

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	5850.00	41.59	32.50	33.64	6.33	46.78	74.00	-27.22	

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH HIgh :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



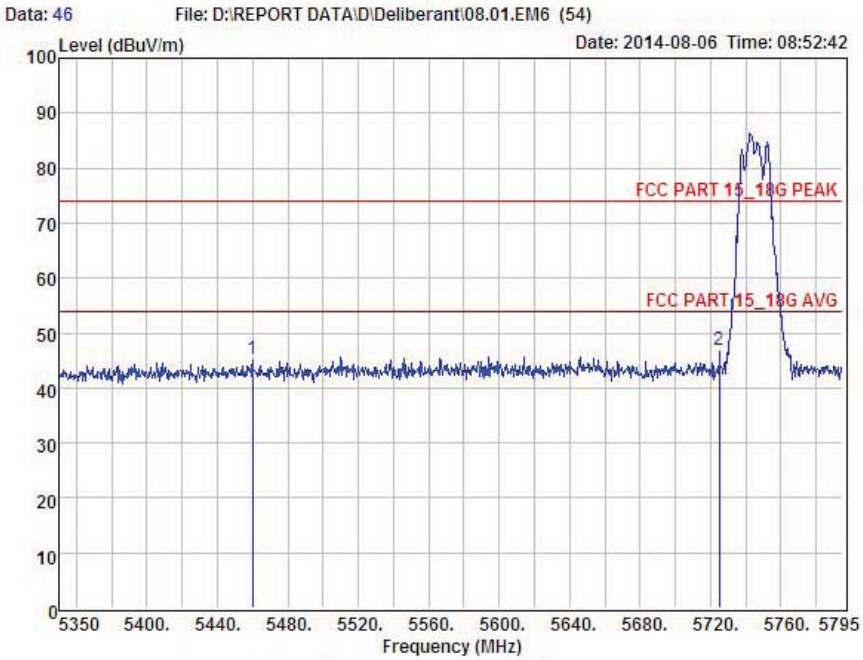
Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : 802.11a High
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	5850.00	42.91	32.50	33.64	6.33	48.10	74.00	-25.90	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

IEEE 802.11n/HT20 with 5.8G:
CH LOW :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



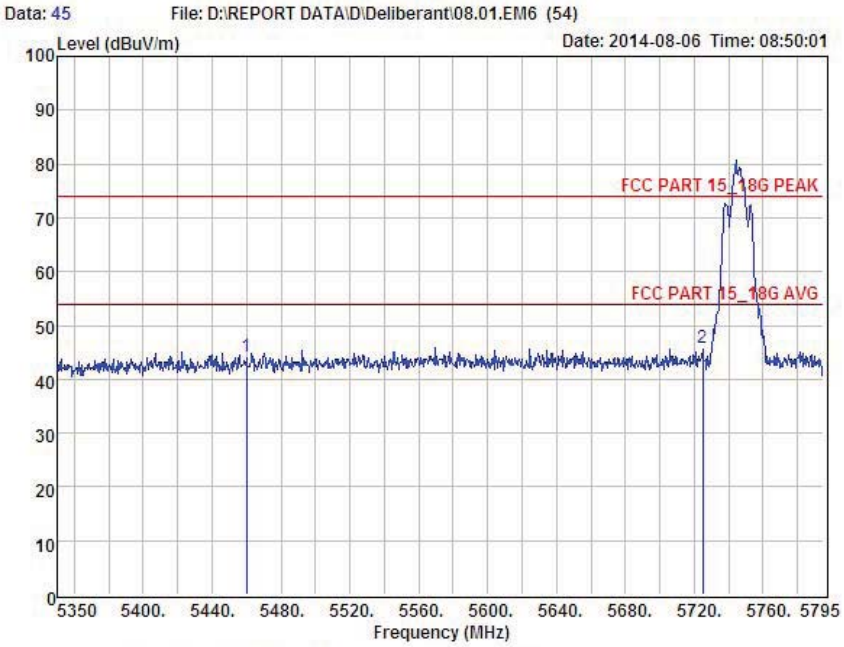
Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : 802.11nHT20 Low
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	5460.00	41.01	31.81	33.65	6.11	45.28	74.00	-28.72	Peak
2	5725.00	41.99	32.27	33.58	6.26	46.94	74.00	-27.06	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH Low :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



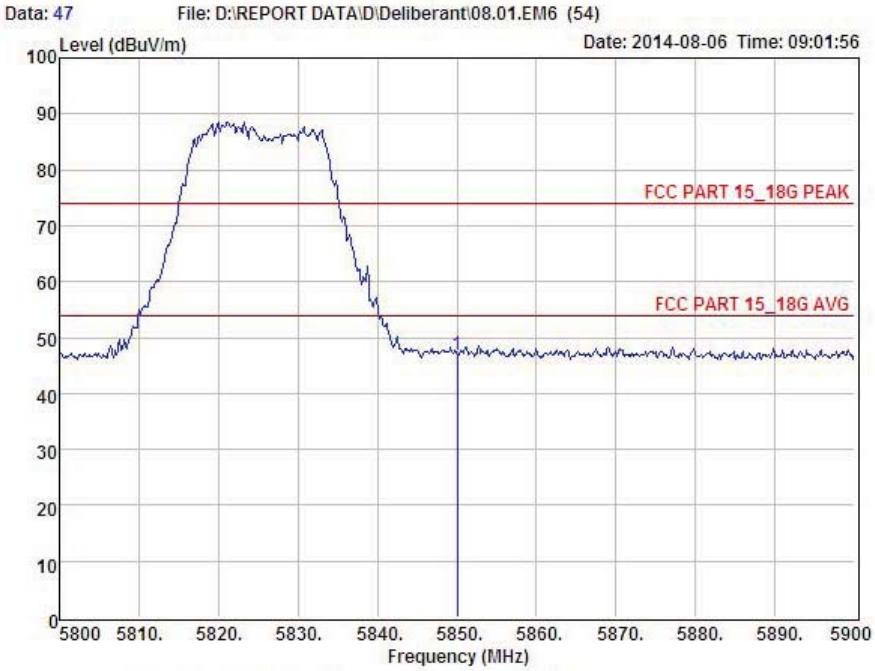
Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : 802.11nHT20 Low
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	5460.00	40.01	31.81	33.65	6.11	44.28	74.00	-29.72	Peak
2	5725.00	40.99	32.27	33.58	6.26	45.94	74.00	-28.06	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH High :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



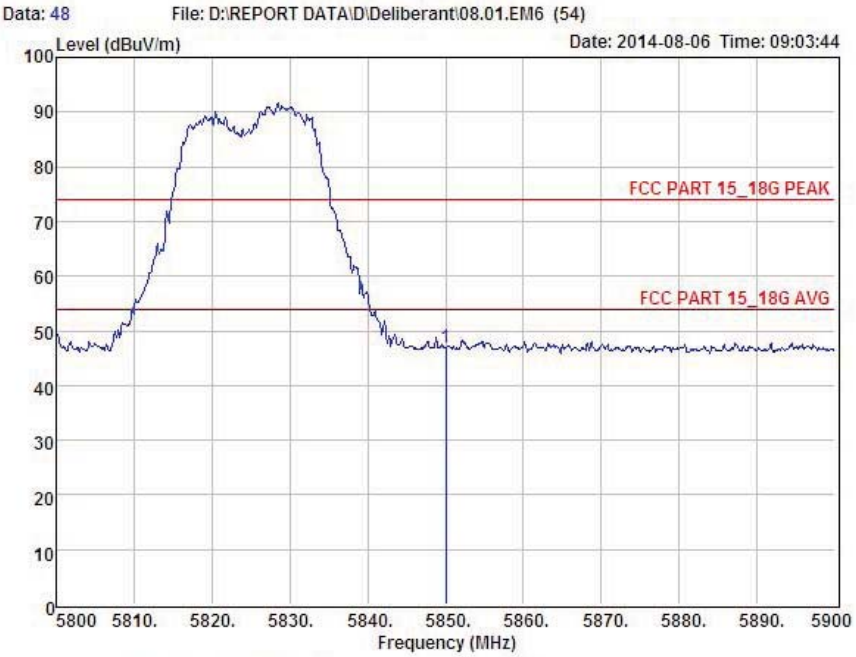
Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : 802.11nHT20 High
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	5850.00	41.75	32.50	33.64	6.33	46.94	74.00	-27.06	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH High :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



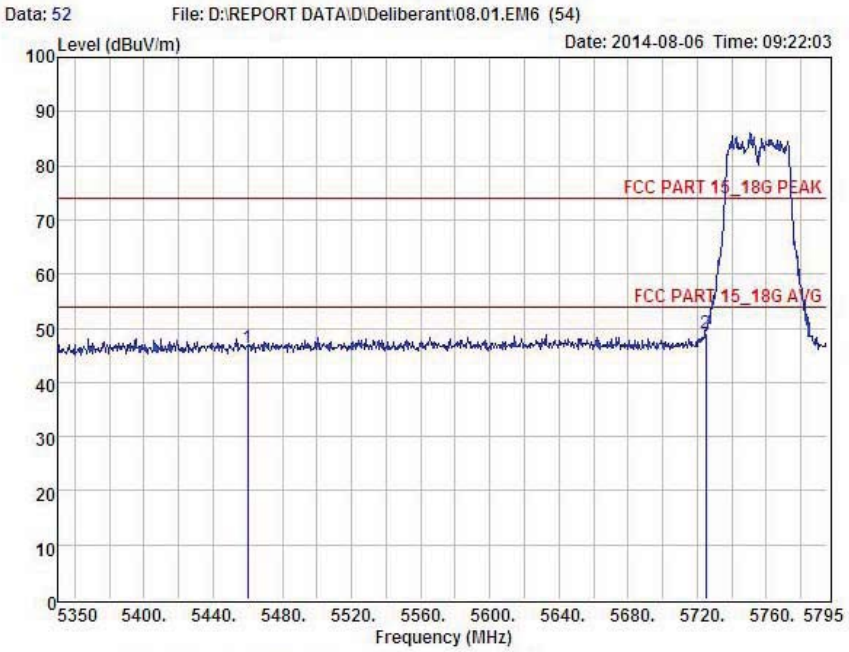

```
Condition      : FCC PART 15_18G PEAK 3m       POL: VERTICAL
EUT            : Broadband Digital Transmission System
Model No       : NFT 2N
Test Mode      : 802.11nHT20 High
Power          : DC 48V
Test Engineer  : Peter
Remark         :
Temp           : 25.2°C
Hum            : 56%
```

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	5850.00	41.82	32.50	33.64	6.33	47.01	74.00	-26.99	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

IEEE 802.11n/HT40 with 5.8G:
CH LOW :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



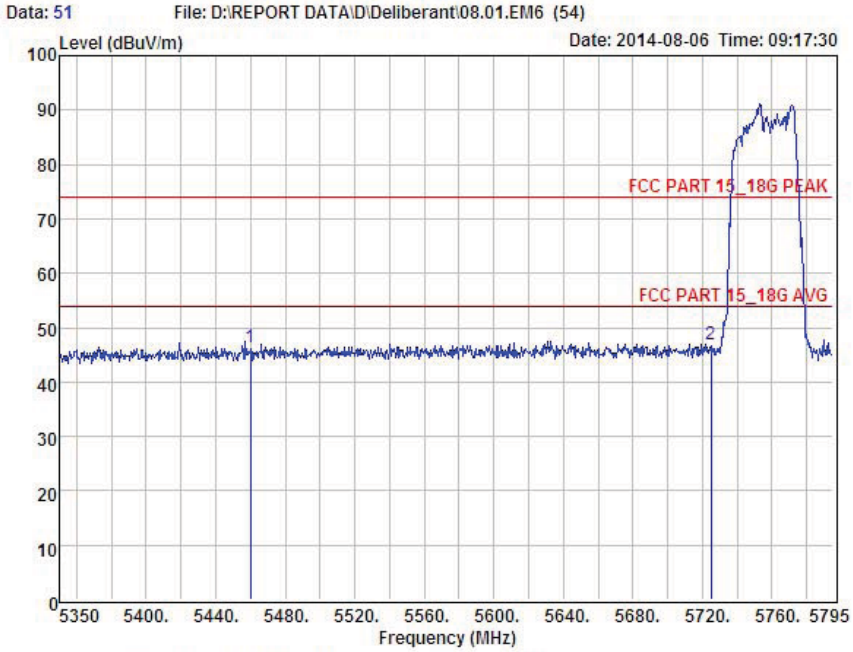
Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : 802.11nHT40 Low
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	5460.00	42.01	31.81	33.65	6.11	46.28	74.00	-27.72	Peak
2	5725.00	43.99	32.27	33.58	6.26	48.94	74.00	-25.06	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH LOW :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



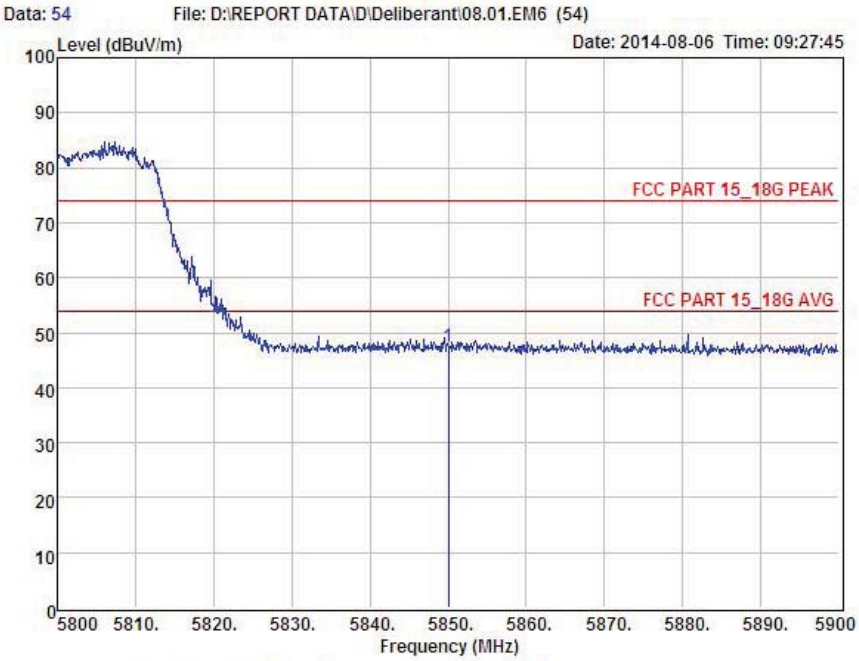
Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : 802.11nHT40 Low
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	5460.00	42.01	31.81	33.65	6.11	46.28	74.00	-27.72	Peak
2	5725.00	41.99	32.27	33.58	6.26	46.94	74.00	-27.06	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH High :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



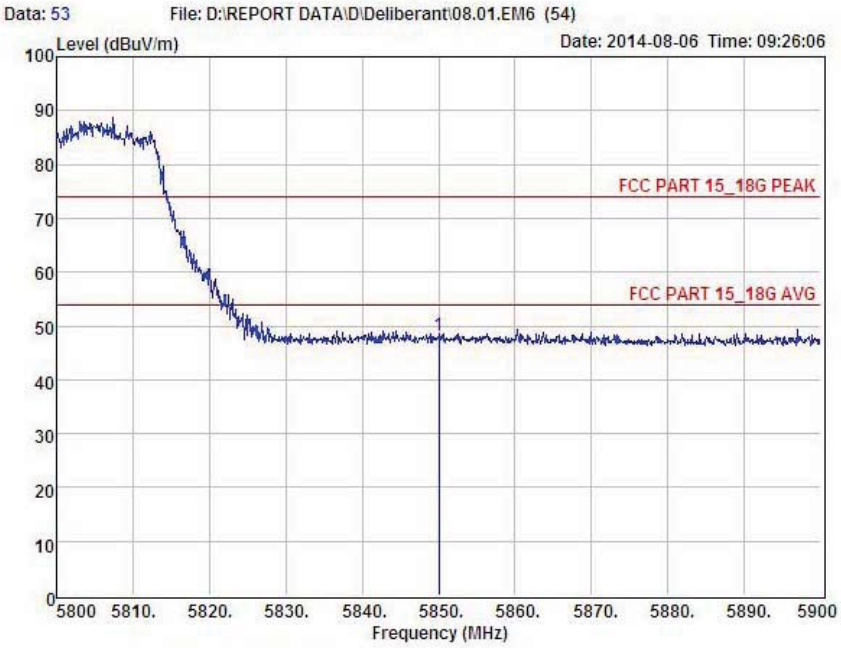

```
Condition      : FCC PART 15_18G PEAK 3m       POL: HORIZONTAL
EUT            : Broadband Digital Transmission System
Model No       : NFT 2N
Test Mode      : 802.11nHT40 High
Power          : DC 48V
Test Engineer  : Peter
Remark         :
Temp           : 25.2°C
Hum            : 56%
```

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	5850.00	42.31	32.50	33.64	6.33	47.50	74.00	-26.50	

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH High :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : Broadband Digital Transmission System
Model No : NFT 2N
Test Mode : 802.11nHT40 High
Power : DC 48V
Test Engineer : Peter
Remark :
Temp : 25.2°C
Hum : 56%

Item	Freq MHz	Read Level dBuV	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	5850.00	42.99	32.50	33.64	6.33	48.18	74.00	-25.82	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

11 Antenna Requirement

11.1 Standard Requirement

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

11.2 Antenna Connected Construction

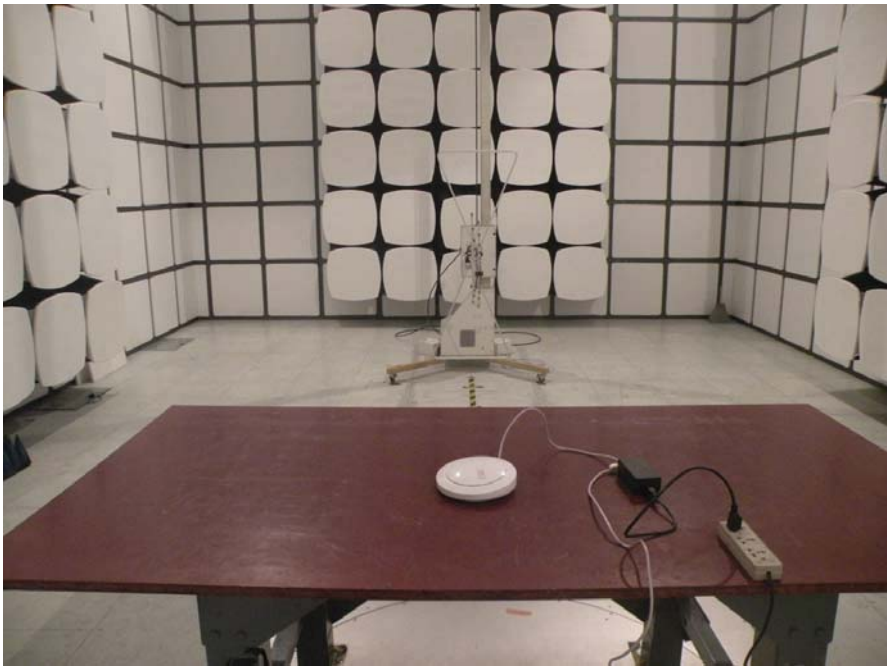
The directional gains of antenna used for transmitting is 7.77 dBi , and the antenna connector is unique connector and no consideration of replacement. Please see EUT photo for details.

11.3 Result

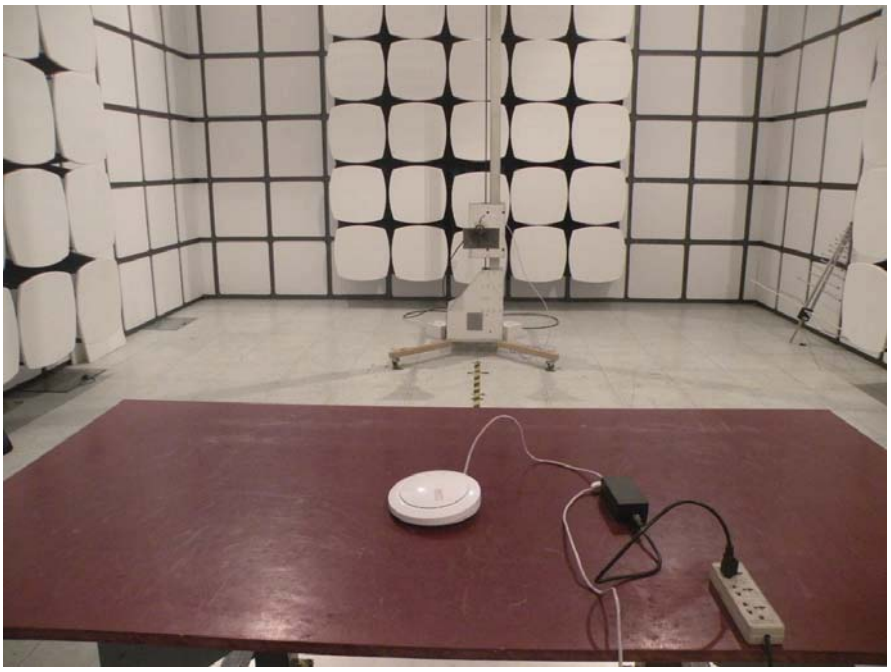
The EUT antenna is Integral Antenna. It comply with the standard requirement.

12 Photographs of Test Setup

Photographs-Radiated Emission Test Setup in Chamber Below 1G

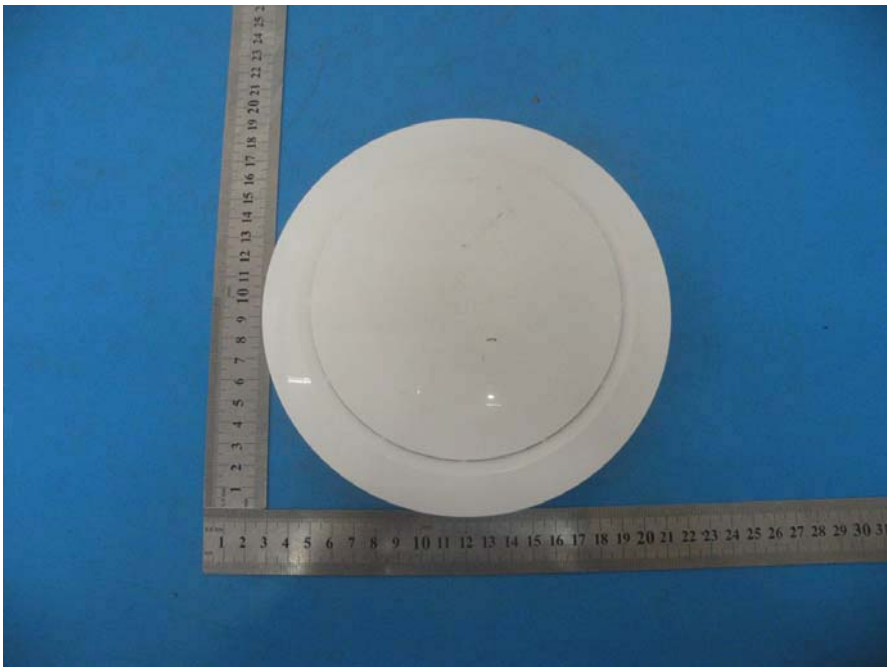


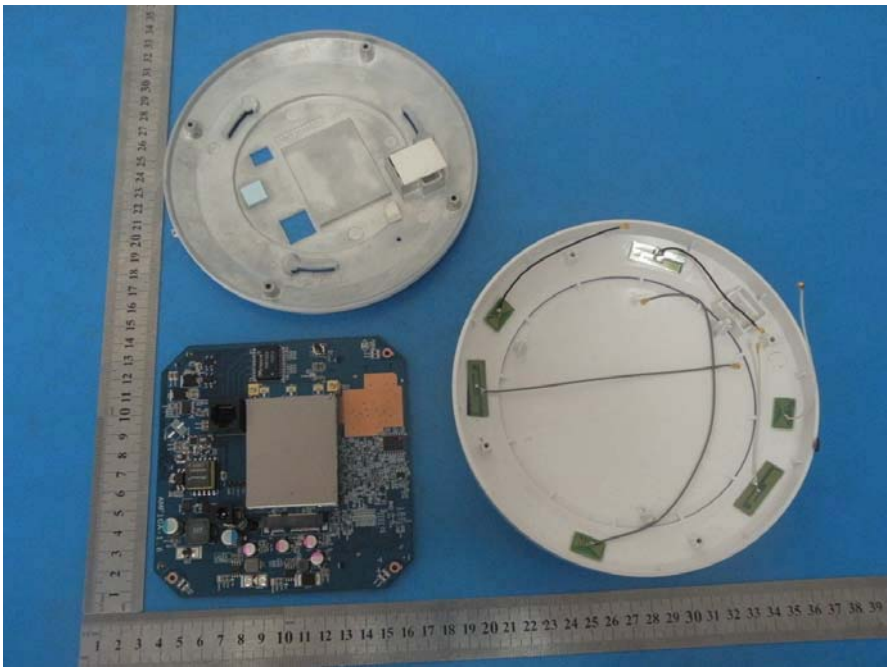
Above 1G

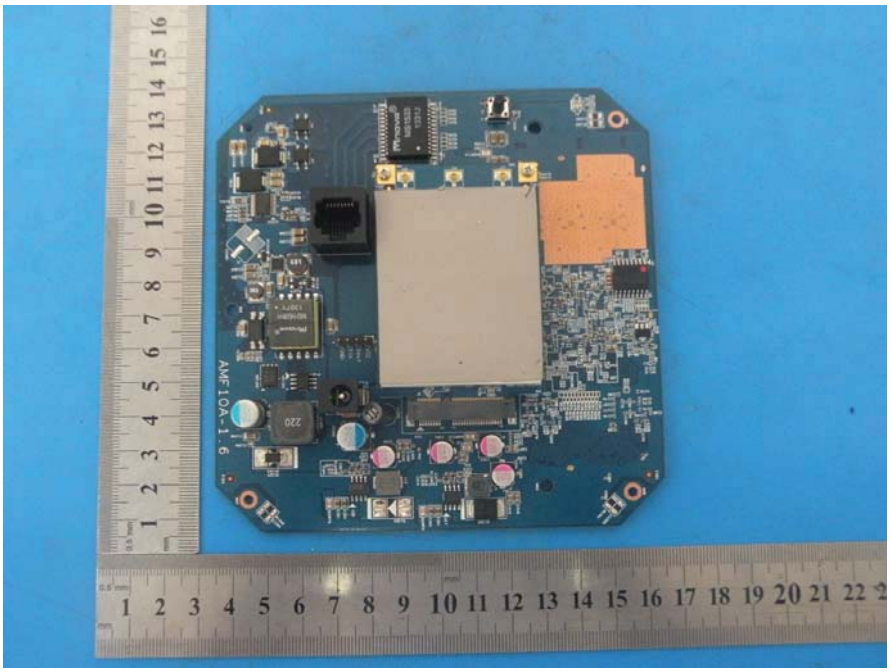


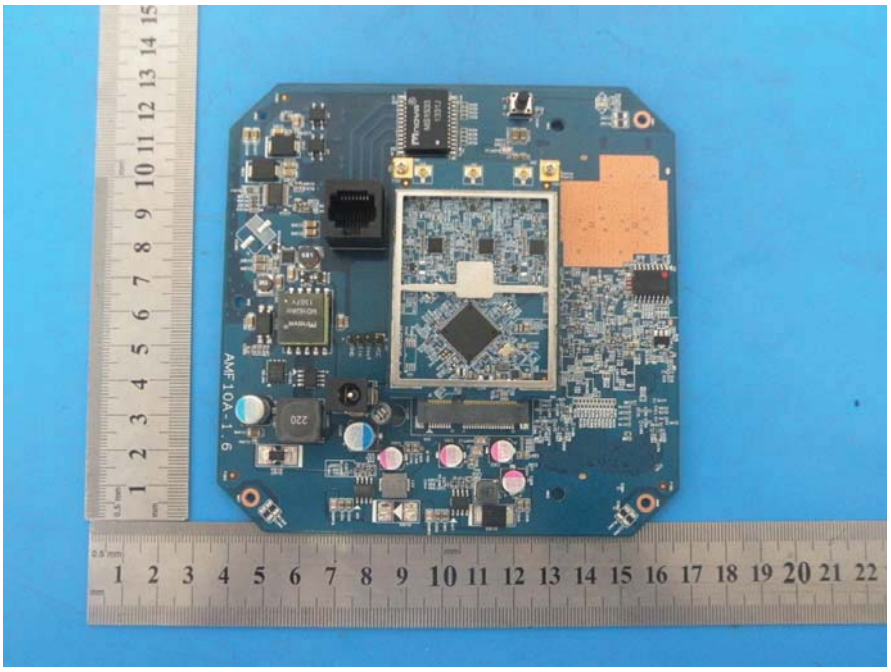
Photographs-Conducted Emission Test Setup

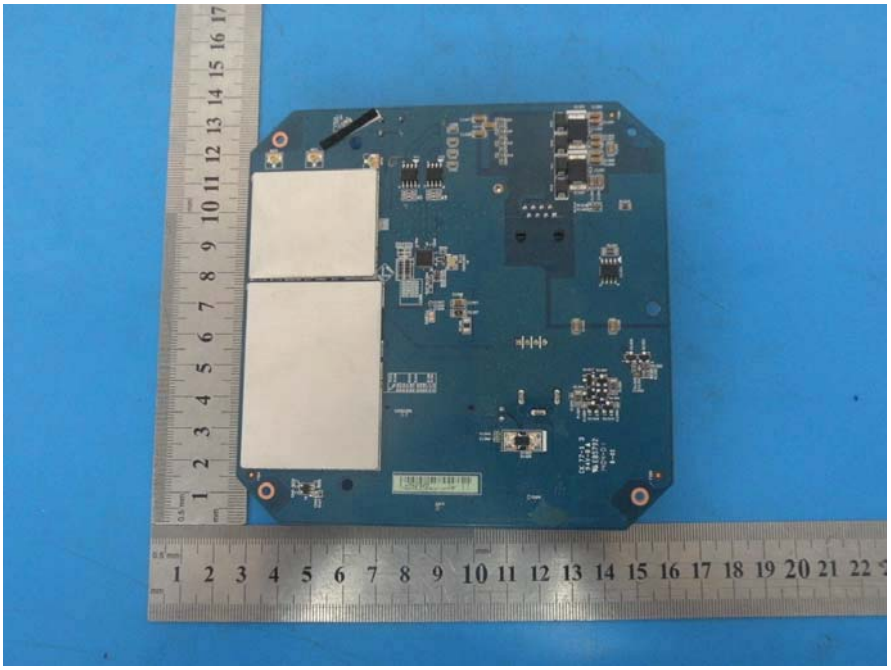
13 Photographs of EUT

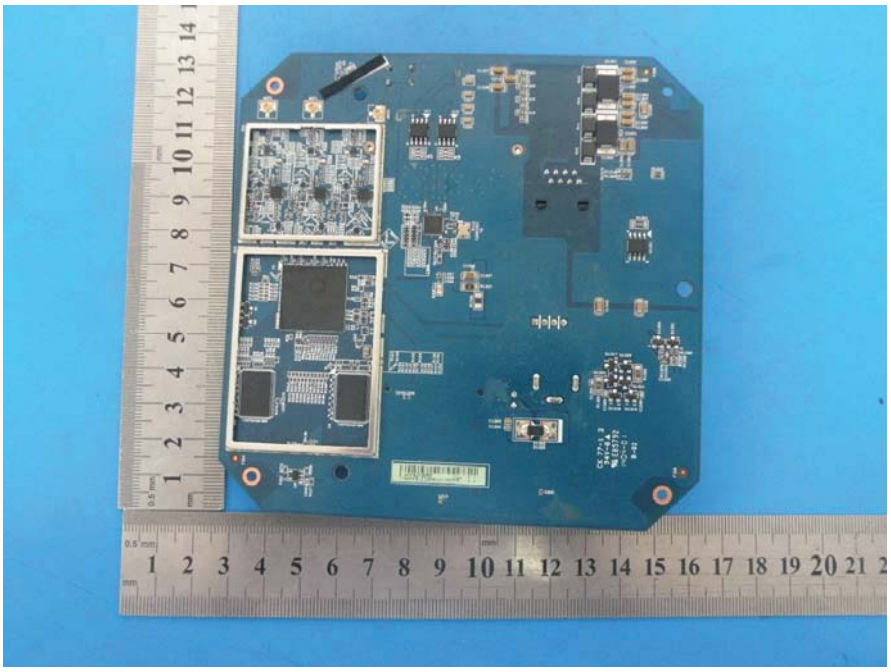




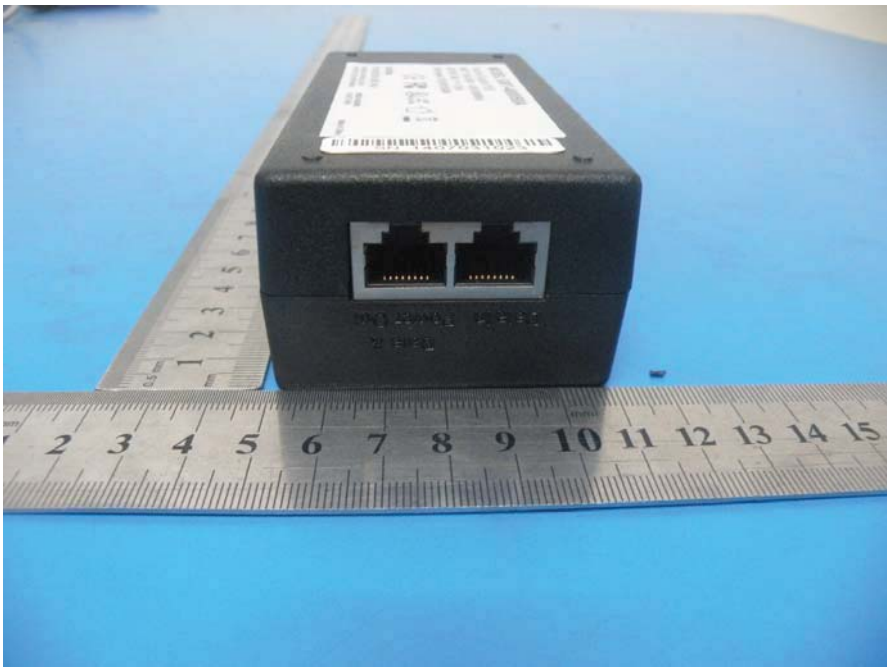



AMF10A-1.6





MODEL:GRT-480050A
Passive Gigabit PSE
INPUT: 100-240V ~ 0.6A 50/60Hz
OUTPUT: 48V ⎓ 0.5A
Data speed: 10/100/1000M
CAUTION:
FOR INDOOR USE ONLY
INTENDED FOR INSTALLATION IN A PROTECTED ENVIRONMENT.
SHOCK HAZARD: DO NOT OPEN
Made in China
SN: 1407031023



---------END OF THE REPORT-------