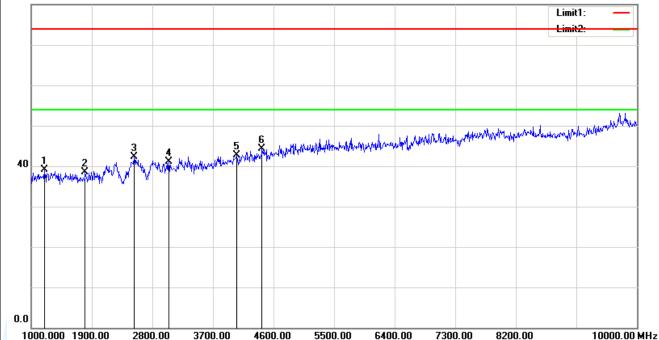


Page 51 of 61

Report No.: 1609060316RFC-1

Mode	802.11n(HT20)	Antenna	Chain 0+1
Channel	6	Ant. Polar.	Vertical
80.0 dBuV/m			
			Limit1: —
			Limit2:



.No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1198.000	46.83	-7.80	39.03	74.00	-34.97	peak
2	1801.000	44.73	-6.26	38.47	74.00	-35.53	peak
3	2530.000	44.58	-2.21	42.37	74.00	-31.63	peak
4	3043.000	42.43	-1.29	41.14	74.00	-32.86	peak
5	4051.000	40.93	1.77	42.70	74.00	-31.30	peak
6*	4429.000	41.14	3.10	44.24	74.00	-29.76	peak



Page 52 of 61 Report No.: 1609060316RFC-1

Mod	e 80	2.11n(HT20)	An	tenna	Chain 0+1		
Chanı		11	Ant.	Polar.			
30.0	dBuV/m					Limit'	
40 1	Harding Street And Street	W. Married Mar	Land of the state	horan hauten den gerinden	Mally from the Control of the Contro	hafter varidate de la company france	ng apaghang ordistrang a
1000.0 No.	000 1900.00 28 Frequency	300.00 3700. Reading	00 4600.00 550 Correct	0.00 6400.00 Result	7300.00 82 Limit	00.00 Margin	10000.00 Remar
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	rtoman
1	1207.000	46.37	-7.76	38.61	74.00	-35.39	peak
2	1810.000	43.64	-6.21	37.43	74.00	-36.57	peak
3	3250.000	42.82	-0.94	41.88	74.00	-32.12	peak
4	4006.000	41.94	1.61	43.55	74.00	-30.45	peak
5	5050.000	39.96	5.07	45.03	74.00	-28.97	peak
6*	6265.000	39.41	6.51	45.92	74.00	-28.08	peak

Page 53 of 61 Report No.: 1609060316RFC-1

Mod	le 80	2.11n(HT20)	Antenna		Chain 0+1			
Chan	nel dBuV/m	11	Ant.	Polar.		Vertical		
	uburriii					Limit ¹		
			5	5 . J. warmanahar	handara han han han handh	the the contraction of the contr	Agger-Apoly-Applicational	
40		y Marsh make of market	skritighter the the sales and the sales and the sales and the sales are the sales and the sales are the sales and the sales are	Albaha				
0.0								
.No.		300.00 3700.0 Reading	00 4600.00 550	0.00 6400.00 Result	7300.00 82 Limit	00.00 Margin	10000.00 MI Remark	
	000 1900.00 28 Frequency (MHz)	Reading (dBuV)				00.00 Margin (dB)		
	Frequency	Reading	Correct	Result	Limit	Margin		
.No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	
. No.	(MHz) 1342.000	Reading (dBuV) 47.29	Correct Factor(dB/m) -7.27	Result (dBuV/m) 40.02	Limit (dBuV/m) 74.00	Margin (dB) -33.98	Remark peak	
. No. 1 2	(MHz) 1342.000 2107.000	(dBuV) 47.29 44.50	Correct Factor(dB/m) -7.27 -4.41	Result (dBuV/m) 40.02 40.09	Limit (dBuV/m) 74.00 74.00	Margin (dB) -33.98 -33.91	Remark peak peak	
.No.	(MHz) 1342.000 2107.000 2584.000	Reading (dBuV) 47.29 44.50 44.91	Correct Factor(dB/m) -7.27 -4.41 -2.11	Result (dBuV/m) 40.02 40.09 42.80	Limit (dBuV/m) 74.00 74.00 74.00	Margin (dB) -33.98 -33.91 -31.20	peak peak peak	

Note:

- 1) Through Pre-scan transmitting mode with all kind of modulation and data rate, find the 1Mbps of rate is the worst case of 802.11b; 6Mbpsof rate is the worst case of 802.11g; MCS 3 of rate is the worst case of 802.11n(HT20), and then Only the worst case is recorded in the report.
- 2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
 - Final Test Level = Receiver Reading Correct Factor
 - Correct Factor = Preamplifier Factor Antenna Factor Cable Factor
- 3) Scan from 9kHz to 25GHz, the disturbance above 10GHz and below 30MHz was very low, the amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 4) Snce peak data above 1GHz are lower the average limit, so the average data are pass, no need for testing.



Page 54 of 61 Report No.: 1609060316RFC-1

5.7 Band Edge Measurements (Radiated)

Test Requirement: 47 CFR Part 15 Subpart C Section 15.205/15.209

Test Method: KDB 558074 D01 v03r05 Section 12.1

Frequency	Limit (dBµV/m @3m)	Remark
30MHz-88MHz	40.0	Quasi-peak Value
88MHz-216MHz	43.5	Quasi-peak Value
216MHz-960MHz	46.0	Quasi-peak Value
960MHz-1GHz	54.0	Quasi-peak Value
Above 1GHz	54.0	Average Value
Above IGHZ	74.0	Peak Value

Test Procedure:

Limit:

Radiated band edge measurements at 2390MHz and 2483MHz were made with the unit transmitting in the low end of the channel range and the high end closest to the restricted bands respectively. The emissions were made on the 966 Semi-Chamber. Use (resolution bandwidth (RBW) = 1 MHz, video bandwidth (VBW) = 3 MHz for peak levels and RBW = 1 MHz and VBW = 10 Hz or 1/T for average levels).

- 1. Use radiated spurious emission test procedure described in 5.6 clause. The transmitter output (antenna port) was connected to the test receiver.
- 2. Set the PK and AV limit line.
- 3. Record the fundamental emission and emissions out of the band-edge.
- 4. Determine band-edge compliance as required.

Test Setup: Refer to section 4.1.2 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Transmitter mode

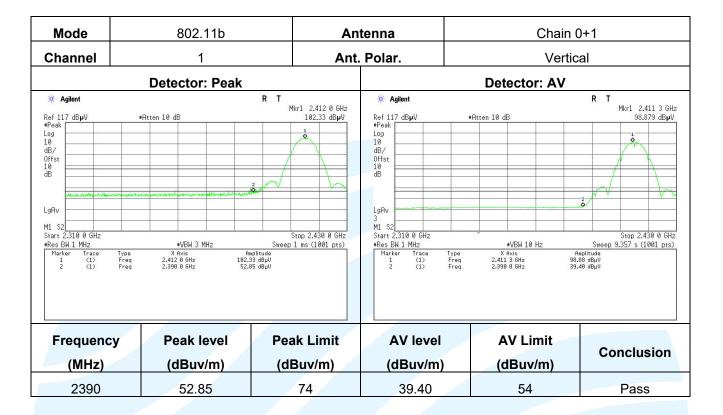
Test Results: Pass

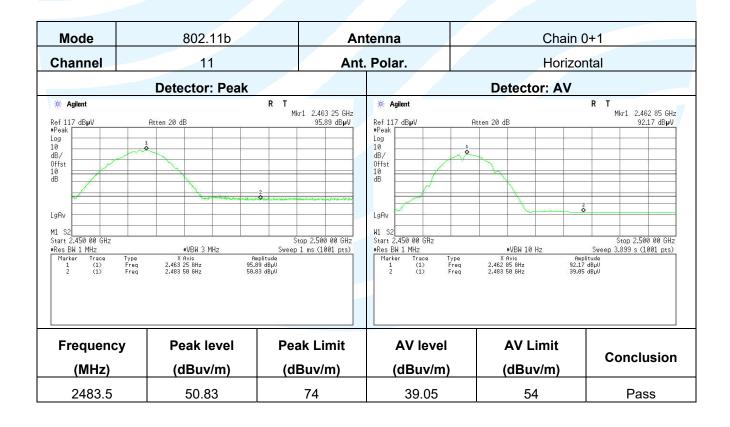
Test Data:

Mode	802.11b	А	ntenna	Chain ()+1		
Channel	1	An	t. Polar.	Horizontal			
	Detector: Peak			Detector: AV			
M1 S2 Start 2.310 0 GHz *Res BH 1 MHz Marker Tace 1 (1)	Freq 2.412 0 GHz 98.	R T Mkr1 2.412 0 GHz 98.05 dBpV Stop 2.430 0 GHz Sweep 1 ms (1001 pts) splitude 85 dBpV d1 dBpV	# Agilent Ref 117 dBµV	2.412 8 GHz 94.61	R T Mkr1 2.412 8 GHz 94.607 dBpV 1 Stop 2.430 0 GHz Sweep 9.357 s (1001 pts) Iltude dBpU dBpU		
Frequency (MHz)	Peak level	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion		
2390	50.01	74	39.01	54	Pass		

Report No.: 1609060316RFC-1



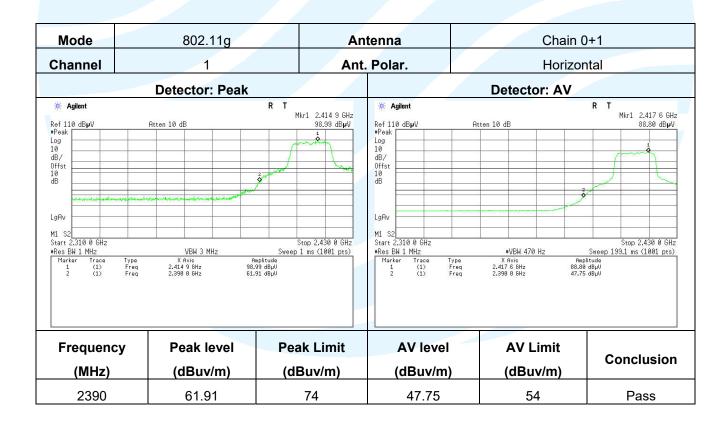






Page 56 of 61 Report No.: 1609060316RFC-1

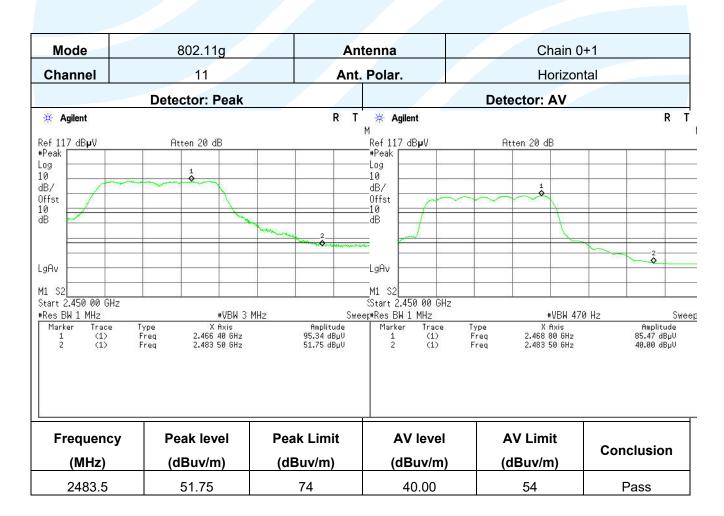
Mode	802.11b	An	tenna	Chain 0+1			
Channel	11	Ant.	Polar.	Vertical			
	Detector: Peak			Detector: AV			
# Agilent Ref 117 dBµV Peak Log 10 dB/ Offst 10 dB LgAv M1 S2 Start 2.450 00 GHz #Res BH 1 MHz Marker Trace 1 2 (1)	Freq 2.463 20 GHz 101.	R T Mkr1 2.463 20 GHz 101.66 dB \(\pu \) Stop 2.500 00 GHz Sweep 1 ms (1001 pts) mplitude 66 dB \(\pu \) 12 dB \(\pu \)	# Agilent Ref 117 dBpV F Peak Log	#VBW 10 Hz X fixis 2.462.88 GHz 2.483.58 GHz 39.18	Stop 2.500 00 GHz Sweep 3.899 s (1001 pts) litude		
Frequenc (MHz)	Peak level	Peak Limit (dBuv/m)	AV level (dBuv/m)	AV Limit (dBuv/m)	Conclusion		
2483.5	53.12	74	39.10	54	Pass		





Page 57 of 61 Report No.: 1609060316RFC-1

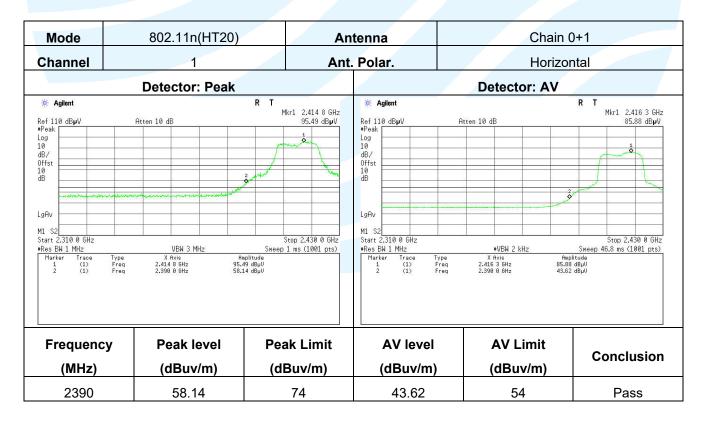
Mode	802.11g	An	tenna	Chain 0+1			
Channel	1	Ant	Polar.	Vertical			
	Detector: Pe	ak	Detector: AV				
Ref 110 dBpV Peak Log 10 dB/ Offst 10 dB LgAv M1 S2 Start 2.310 0 GHz PRes BH 1 MHz Marker Trace 11 2 (1)	#UBW 3 MHz Type X Axis Freq 2.418 1 GHz Freq 2.398 8 GHz	R T Mkr2 2.390 0 GHz 66.67 dBpV Stop 2.430 0 GHz Sweep 1 ms (1001 pts) Amplitude 194.59 dBpV 66.67 dBpV	1 (1)	Freq 2.418 5 GHz 94.5	R T Mkr1 2,418 5 GHz 94.55 dBpV Stop 2,430 0 GHz Sweep 199.1 ms (1001 pts) plitude 5 dBpU 2 dBpU		
Frequenc			AV level		Conclusion		
(MHz)	(dBuv/m)	(dBuv/m)	(dBuv/m) (dBuv/m)			
2390	66.67	74	52.02	54	Pass		





Page 58 of 61 Report No.: 1609060316RFC-1

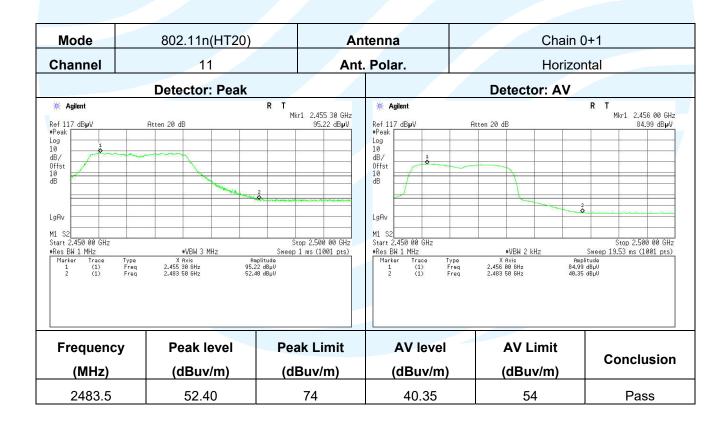
Mode		802.11g	An	tenna			Chain 0	+1		
Channel		11	Ant.	Polar.			Vertica	al		
		Detector: Peak				Detec	ctor: AV			
* Agilent			R T	* Agilen	t					R T
Ref 117 dBpV		Atten 20 dB		Ref 117 df	β μ V	Atte	en 20 dB			
#Peak Log 10 dB/ Offst		1		#Peak		~~	1			
10 dB			We would	=10 == dB						
LgAv M1 S2				LgAv M1 S2					2	2
Start 2.450 00 GF #Res BW 1 MHz	Hz	#VBW 3	MHz Swe	≪Start 2.450 er#Res BW 1			#VBW 470) Hz		Swee
Marker Trace 1 (1) 2 (1)	Fr	oe X Axis	Amplitude 181.78 dBµV 55.32 dBµV	Marker 1 2	Trace T (1) F	ype req req	X fixis 2.468 50 GHz 2.483 50 GHz		Amplitu 91.76 dE 41.52 dE	ide BµV
Frequence (MHz)	Су	Peak level (dBuv/m)	Peak Limit (dBuv/m)		level uv/m)		/ Limit Buv/m)	Con	clusio	n
2483.5		55.32	74	41	1.52		54	F	Pass	





Page 59 of 61 Report No.: 1609060316RFC-1

Mode	802.11n(HT20)	An	tenna	Chain 0+1 Vertical			
Channel	1	Ant	Polar.				
	Detector: Peak			Detector: AV			
# Agilent Ref 110 dBpV #Peak Log 10 dB/ Offst 10 dB LgAv M1 S2 Start 2.310 0 GHz #Res BH 1 MHz Marker Trace 1 (1) 2 (1)	Freq 2.417 6 GHz 102	R T Mkr1 2.417 6 GHz 102.92 dBpV Stop 2.430 0 GHz Sweep 1 ms (1001 pts) Sweep 1 dBpU Sweep 1 dBpU 27 dBpU	# Agilent Ref 110 dBpV #Peak Log 10 10 dB/ Offst 10 dB LgAv M1 S2 Start 2.310 0 GHz #Res BH 1 MHz Marker Trace Type 1 (1) Freq 2 (1) Freq	*VBH 2 kHz X Axis Ans 92.17 2.398 8 6Hz 48.38	R T Mkr1 2.417 9 GHz 92.17 dBpV Stop 2.430 0 GHz Sweep 46.8 ms (1001 pts) Illude dBpU By The stop 2.430 0 GHz Sweep 46.8 ms (1001 pts)		
Frequency	y Peak level	Peak Limit	AV level	AV Limit	Conclusion		
(MHz)	(dBuv/m)	(dBuv/m)	(dBuv/m)	(dBuv/m)			
2390	64.27	74	48.30	54	Pass		





Page 60 of 61 Report No.: 1609060316RFC-1

Mode	802.11n(HT20)	An	tenna	Chain 0+1			
Channel	11	Ant.	Polar.	Vertical			
	Detector: Peak		Detector: AV				
# Agilent Ref 117 dBµV Peak Log 10 dB/ Offst 10 dB L9Av M1 \$2 Start 2.450 00 GHz PRes BH 1 MHz Marker Trace 1 (1) 2 (1)	Freq 2.467 95 GHz 100.	R T Mkr1 2.467 95 GHz 100.75 dBpV 2 Stop 2.500 00 GHz Sweep 1 ms (1001 pts) splitude 75 dBpV	# Agilent Ref 117 dBpV Peak	2.467 60 GHz 90.94	R T Mkr1 2.467 60 GHz 90.94 dBpV Stop 2.500 00 GHz Sweep 19.53 ms (1001 pts)		
Frequence (MHz)		Peak Limit	AV level	AV Limit	Conclusion		
2483.5	(dBuv/m) 53.54	(dBuv/m) 74	(dBuv/m) 41.95	(dBuv/m)	Pass		

Note:

- 1) Through Pre-scan transmitting mode with all kind of modulation and data rate, find the 1Mbps of rate is the worst case of 802.11b; 6Mbpsof rate is the worst case of 802.11g; MCS3 of rate is the worst case of 802.11n(HT20), and then Only the worst case is recorded in the report.
- 2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading - Correct Factor

Correct Factor = Preamplifier Factor - Antenna Factor - Cable Factor



Page 61 of 61 Report No.: 1609060316RFC-1

APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

See test photographs attached in Appendix 1 for the actual connections between Product and support equipment.

APPENDIX 2 PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS

Refer to Appendix 2 for EUT external and internal photographs.

*** End of Report ***

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