



**UNII 7 6525~6875MHz
WIFI 802.11ax HE80 Full (Harmonic @ 3m)**

WIFI	UNII 7 6525~6875MHz Harmonic @ 3m	
ANT	802.11ax HE80 Full CH135 6625MHz	
5+4	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH15-HY Condition : PEAK(UNII)_6E 1m SHF_00993_211130 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH15-HY Condition : PEAK(UNII)_6E 1m SHF_00993_211130 VERTICAL Detector : Peak</p>



UNII 7 6525~6875MHz
 WIFI 802.11ax HE160 Full (Harmonic @ 3m)

WIFI	UNII 7 6525~6875MHz Harmonic @ 3m	
ANT	802.11ax HE160 Full CH143 6665MHz	
5+4	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH15-HY Condition : PEAK(UNII)_6E 1m SHF_00993_211130 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH15-HY Condition : PEAK(UNII)_6E 1m SHF_00993_211130 VERTICAL Detector : Peak</p>



Emission below 1GHz
WIFI 802.11ax HE160 Full (LF)

WIFI	6GHz WIFI	
ANT	802.11ax HE160 Full LF	
5+4	Horizontal	Vertical
QP / Peak	<p>Site : 03CH15-HY Condition : QP 3m BIL06_41912_20220206 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH15-HY Condition : QP 3m BIL06_41912_20220206 VERTICAL Detector : Peak</p>



Appendix F. Radiated Spurious Emission

Test Engineer :	Leo Li and Bigshow Wang	Temperature :	22.1~23.1°C
		Relative Humidity :	55~60%

<Antenna B>

UNII 5 5925~6425MHz
WIFI 802.11ax HE160 Full (Harmonic @ 3m)

WIFI Ant. 5+4	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 15 6025MHz		8033	46.15	-27.85	74	54.29	37.1	12.23	57.47	-	-	P	H
802.11ax HE160 Full CH 15 6025MHz		8033	45.8	-28.2	74	53.94	37.1	12.23	57.47	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



<Antenna C>

UNII 5 5925~6425MHz
WIFI 802.11ax HE160 Full (Harmonic @ 3m)

WIFI Ant. 5+4	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 15 6025MHz		8033	44.09	-29.91	74	52.23	37.1	12.23	57.47	-	-	P	H

Remark

- No other spurious found.
- All results are PASS against Peak and Average limit line.



Note symbol

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	Peak or Average
H/V	Horizontal or Vertical



A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
5+4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE160 CH 15 6025MHz		8033	44.09	-29.91	74	52.23	37.1	12.23	57.47	-	-	P	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Margin (dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 8033MHz:

1. Level(dBμV/m)
 - = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
 - = 37.1(dB/m) + 12.23(dB) + 52.23(dBμV) – 57.47 (dB)
 - = 44.09 (dBμV/m)
2. Margin (dB)
 - = Level(dBμV/m) – Limit Line(dBμV/m)
 - = 44.09(dBμV/m) – 74(dBμV/m)
 - = -29.91(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.



Appendix G. Radiated Spurious Emission Plots

Test Engineer :	Leo Li and Bigshow Wang	Temperature :	22.1~23.1°C
		Relative Humidity :	55~60%

<Antenna B>

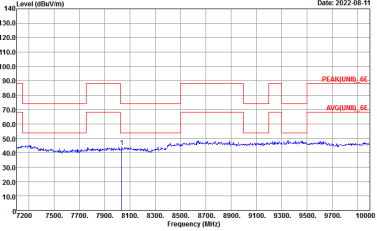
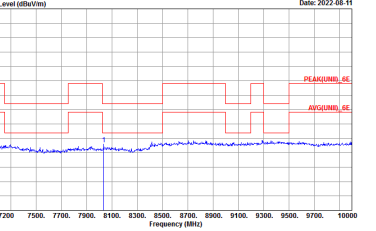
UNII 5 5925~6425MHz
WIFI 802.11ax HE160 Full (Harmonic @ 3m)

WIFI	UNII 5 5925~6425MHz Harmonic @ 3m	
ANT	802.11ax HE160 Full CH15 6025MHz	
5+4	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH15-HY Condition : PEAK[UNII]_6E 3m 91200_02294_220623 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH15-HY Condition : PEAK[UNII]_6E 3m 91200_02294_220623 VERTICAL Detector : Peak</p>



<Antenna C>

UNII 5 5925~6425MHz
WIFI 802.11ax HE160 Full (Harmonic @ 3m)

WIFI	UNII 5 5925~6425MHz Harmonic @ 3m	
ANT	802.11ax HE160 Full CH15 6025MHz	
5+4	Horizontal	Vertical
Peak Avg.	 <p>Site : 03CH15-HY Condition : PEAK[UNII]_6E 3m 91200_02294_220623 HORIZONTAL Detector : Peak</p>	 <p>Site : 03CH15-HY Condition : PEAK[UNII]_6E 3m 91200_02294_220623 VERTICAL Detector : Peak</p>

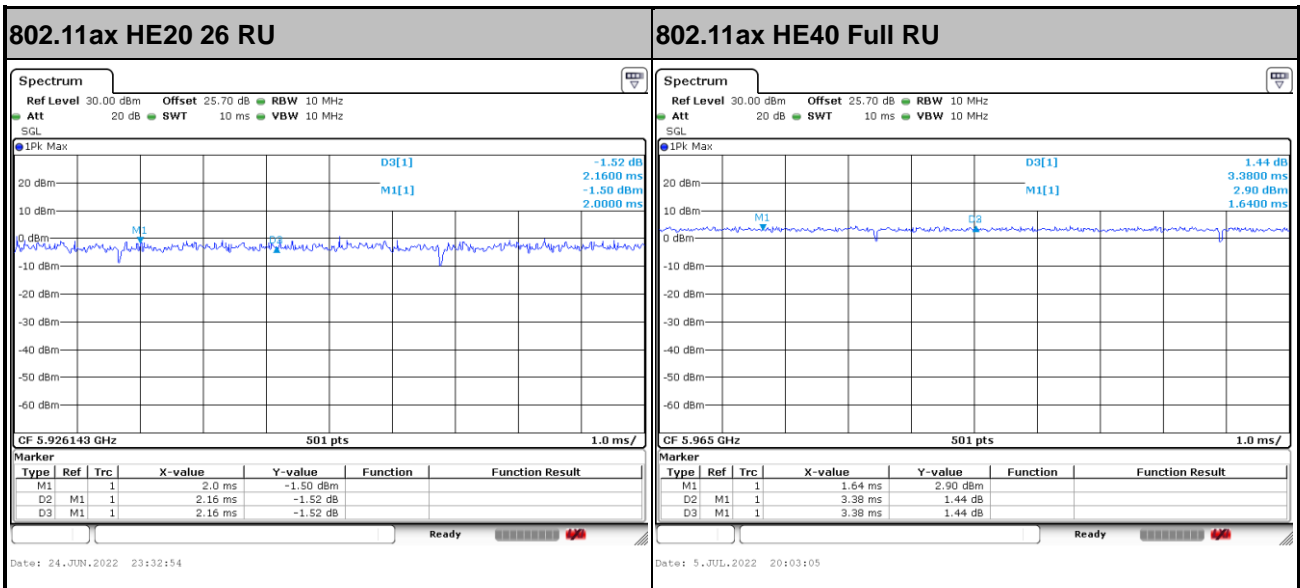
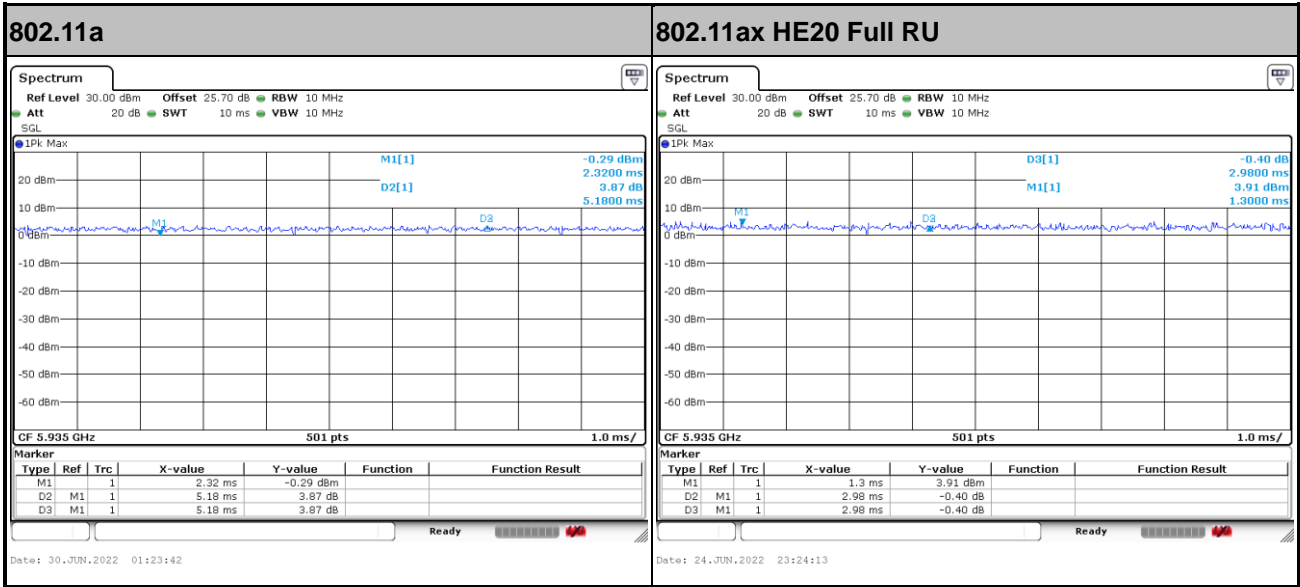


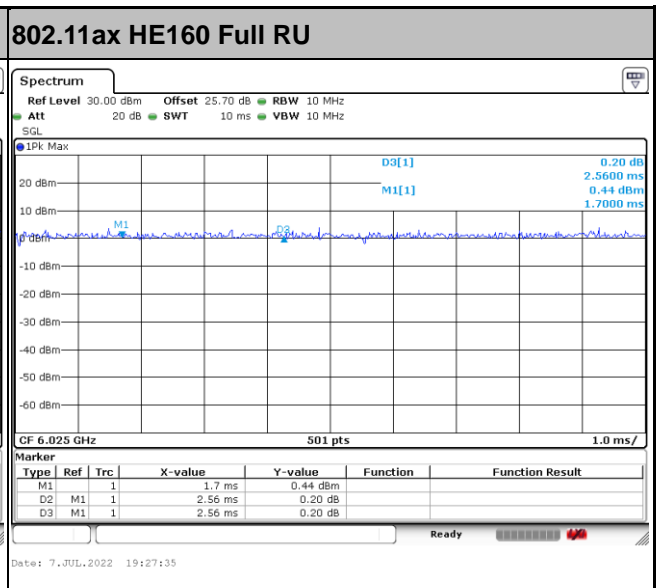
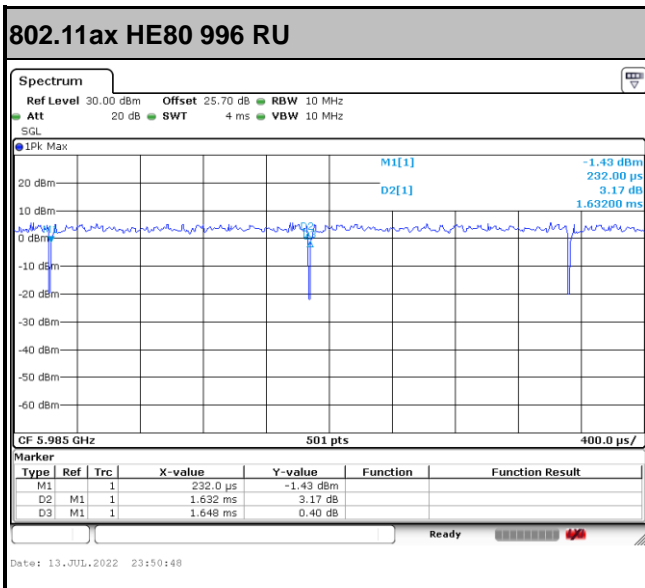
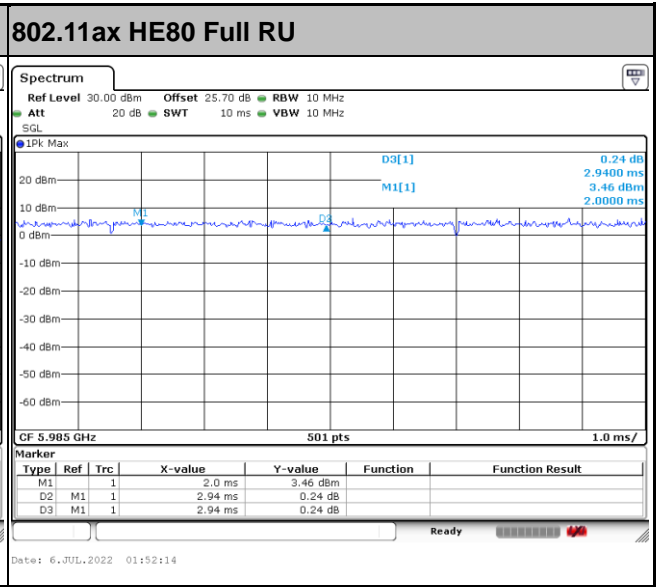
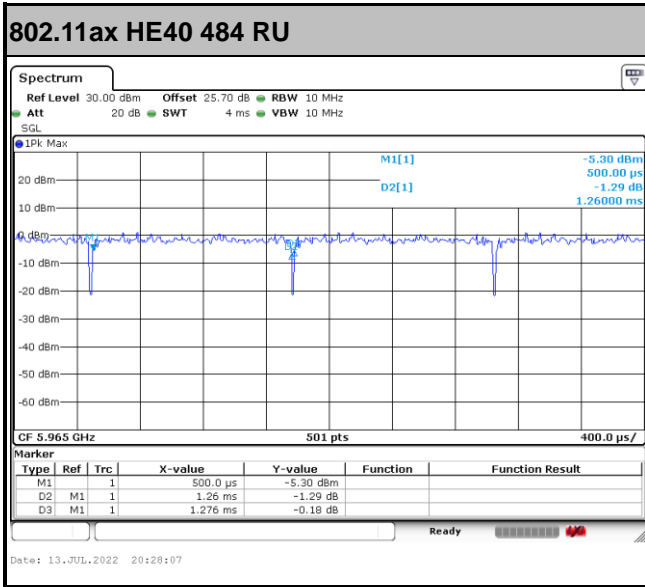
Appendix H. Duty Cycle Plots

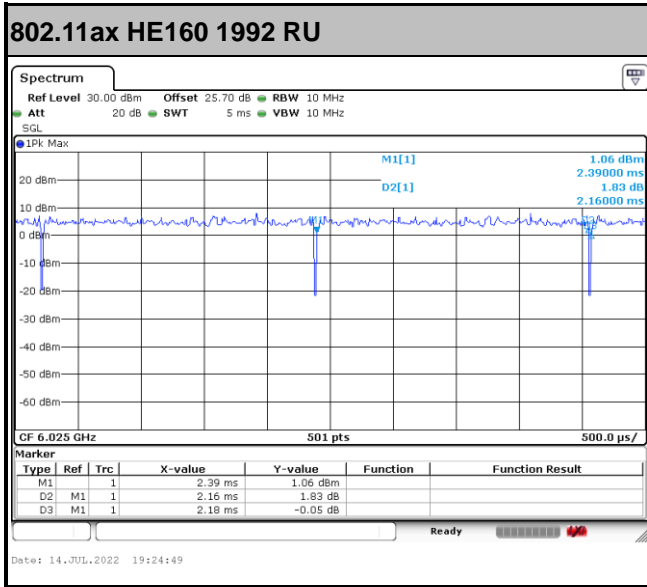
Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
5+4	802.11a for Ant 5	100.00	-	-	10Hz
5+4	802.11a for Ant 4	100.00	-	-	10Hz
5+4	5GHz 802.11ax HE20 Full RU for Ant 5	100.00	-	-	10Hz
5+4	5GHz 802.11ax HE20 Full RU for Ant 4	100.00	-	-	10Hz
5+4	5GHz 802.11ax HE20 26 RU for Ant 5	100.00	-	-	10Hz
5+4	5GHz 802.11ax HE20 26 RU for Ant 4	100.00	-	-	10Hz
5+4	5GHz 802.11ax HE40 Full RU for Ant 5	100.00	-	-	10Hz
5+4	5GHz 802.11ax HE40 Full RU for Ant 4	100.00	-	-	10Hz
5+4	5GHz 802.11ax HE40 484 RU for Ant 5	98.75	-	-	10Hz
5+4	5GHz 802.11ax HE40 484 RU for Ant 4	98.44	-	-	10Hz
5+4	5GHz 802.11ax HE80 Full RU for Ant 5	100.00	-	-	10Hz
5+4	5GHz 802.11ax HE80 Full RU for Ant 4	100.00	-	-	10Hz
5+4	5GHz 802.11ax HE80 996 RU for Ant 5	99.03	-	-	10Hz
5+4	5GHz 802.11ax HE80 996 RU for Ant 4	98.54	-	-	10Hz
5+4	5GHz 802.11ax HE160 Full RU for Ant 5	100.00	-	-	10Hz
5+4	5GHz 802.11ax HE160 Full RU for Ant 4	100.00	-	-	10Hz
5+4	5GHz 802.11ax HE160 1992 RU for Ant 5	99.08	-	-	10Hz
5+4	5GHz 802.11ax HE160 1992 RU for Ant 4	98.62	-	-	10Hz



MIMO <Ant. 5>









MIMO <Ant. 4>

