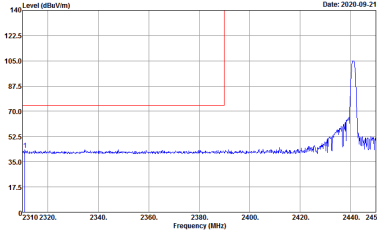
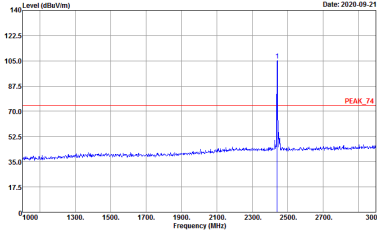
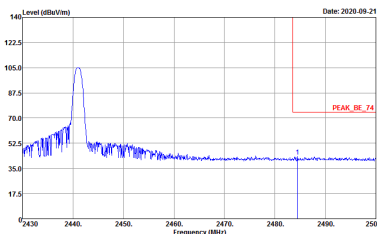
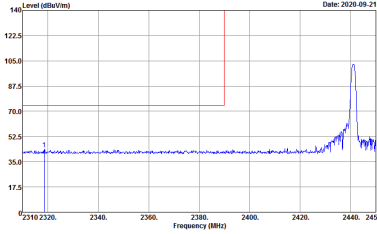
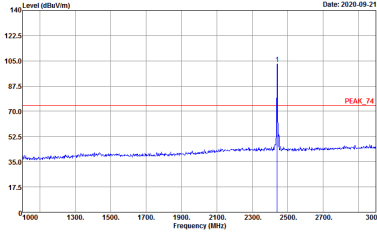
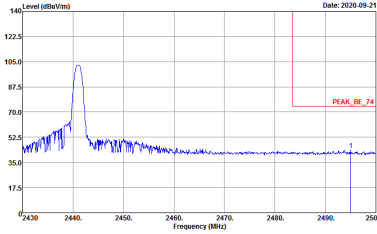


BT		2.4GHz 2400~2483.5MHz Band Edge @ 3m	
		BT CH39 2441MHz	
	Horizontal	Fundamental	
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 91200-HF HORIZONTAL Detector : Peak Project : 040941-01	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 91200-HF HORIZONTAL Detector : Peak Project : 040941-01	
	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 91200-HF HORIZONTAL Detector : Peak Project : 040941-01	Left blank	

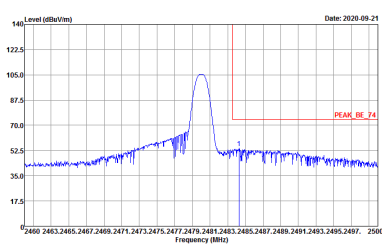
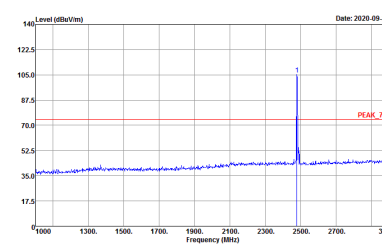


BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BT CH39 2441MHz	
	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 91200-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 040941-01	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 91200-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 040941-01
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 91200-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 040941-01	Left blank

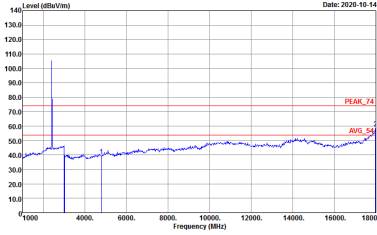
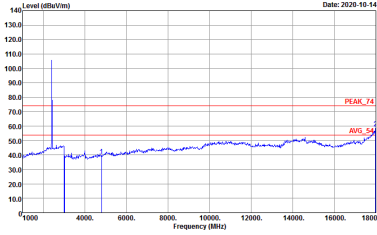


BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BT CH78 2480MHz	
	Horizontal	Fundamental
Peak	Level (dBuV/m) Date: 2020-09-21 Frequency (MHz) Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 91200-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 040941-01	Level (dBuV/m) Date: 2020-09-21 Frequency (MHz) Site : 03CH11-HY Condition : PEAK_74 3m HORN 91200-HF HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 040941-01

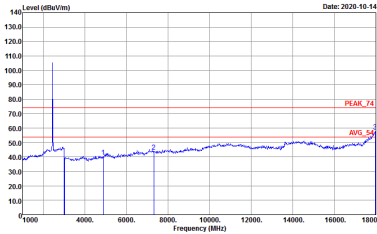
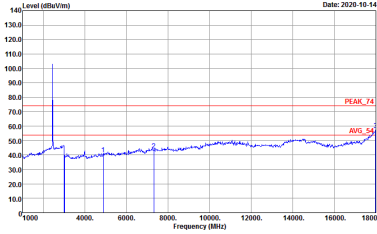


BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BT CH78 2480MHz	
	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m HORN 91200-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 040941-01	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 91200-HF VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 040941-01

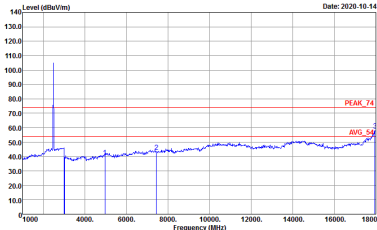
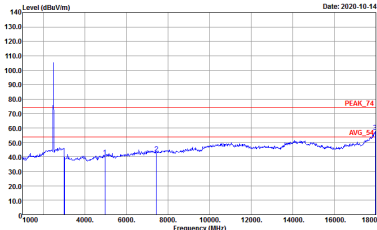
2.4GHz 2400~2483.5MHz
BT (Harmonic @ 3m)

BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
	BT CH00 2402MHz	
	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 040941-01	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 040941-01

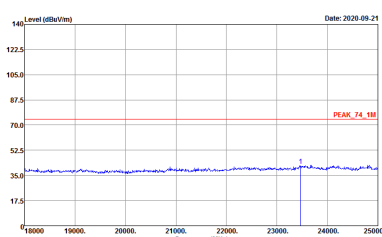
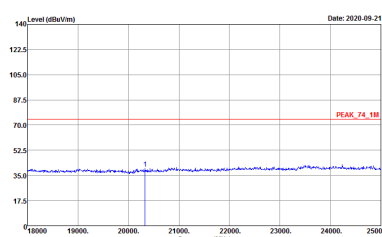


BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
	BT CH39 2441MHz	
	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 91200-HF HORIZONTAL Detector : Peak Project : 040941-01	 Site : 03CH11-HY Condition : PEAK_74 3m HORN 91200-HF VERTICAL Detector : Peak Project : 040941-01

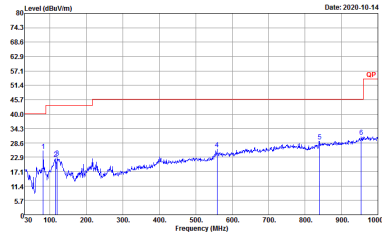
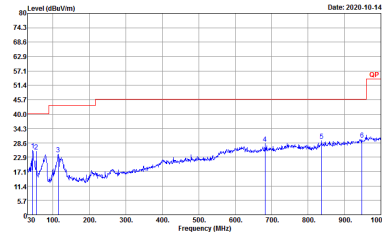


BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
	BT CH78 2480MHz	
	Horizontal	Vertical
Peak Avg.	 Site : 09CH11-HY Condition : PEAK_74 3m HORN 9120D-HF HORIZONTAL Detector : Peak Project : 040941-01	 Site : 09CH11-HY Condition : PEAK_74 3m HORN 9120D-HF VERTICAL Detector : Peak Project : 040941-01

Emission above 18GHz
2.4GHz BT (SHF)

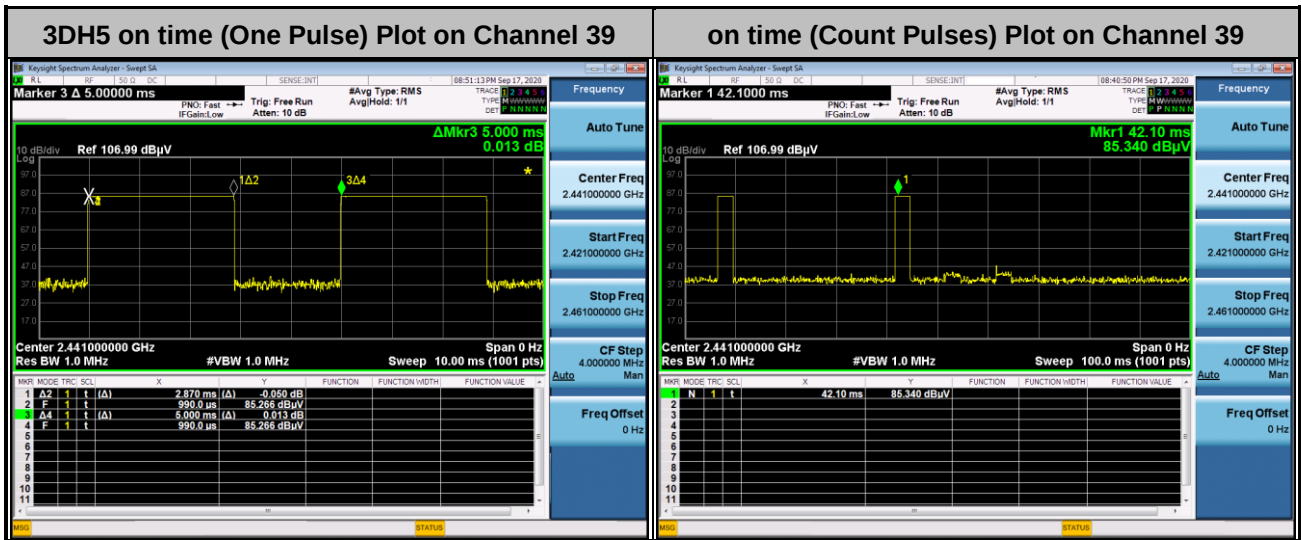
BT	2.4GHz 2400~2483.5MHz	
ANT	BT SHF	
2	Horizontal	Vertical
QP / Peak	 Site : 03CH11-HY Condition : PEAK_74_1M 1m SHF HORN BBH49170576 HORIZONTAL Detector : Peak Project : 040941-01	 Site : 03CH11-HY Condition : PEAK_74_1M 1m SHF HORN BBH49170576 VERTICAL Detector : Peak Project : 040941-01

Emission below 1GHz
2.4GHz BT (LF)

BT	2.4GHz 2400~2483.5MHz	
ANT	BT LF	
2	Horizontal	Vertical
QP / Peak	 Site : 03CH11-HY Condition : QP 3m BIL06_15_41912 HORIZONTAL Detector : Peak Project : 040941-01	 Site : 03CH11-HY Condition : QP 3m BIL06_15_41912 VERTICAL Detector : Peak Project : 040941-01



Appendix E. Duty Cycle Plots



Note:

1. Worst case Duty cycle = on time/100 milliseconds = $2 * 2.87 / 100 = 5.74 \%$
2. Worst case Duty cycle correction factor = $20 * \log(\text{Duty cycle}) = -24.82 \text{ dB}$
3. **3DH5** has the highest duty cycle worst case and is reported.

Duty Cycle Correction Factor Consideration for AFH mode:

Bluetooth normal hopping rate is 1600Hz and reduced to 800Hz in AFH mode; due to the reduced number of hopping frequencies, with the same packet configuration the dwell time in each channel frequency within 100msec period is longer in AFH mode than normal mode.

In AFH mode, the minimum hopping frequencies are 20, to get the longest dwell time DH5 packet is observed; the period to have DH5 packet completing one hopping sequence is

$$2.87 \text{ ms} \times 20 \text{ channels} = 57.4 \text{ ms}$$

There cannot be 2 complete hopping sequences within 100ms period, considering the random hopping behavior, maximum 2 hops can be possibly observed within the period. $[100 \text{ ms} / 57.4 \text{ ms}] = 2 \text{ hops}$

Thus, the maximum possible ON time:

$$2.87 \text{ ms} \times 2 = 5.74 \text{ ms}$$

Worst case Duty Cycle Correction factor, which is derived from the maximum possible ON time,

$$20 \times \log(5.74 \text{ ms}/100 \text{ ms}) = -24.82 \text{ dB}$$

—————THE END—————