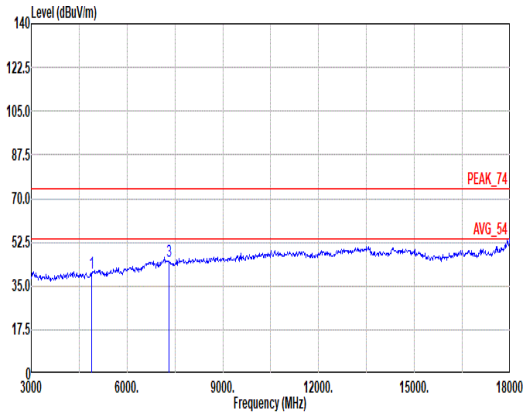
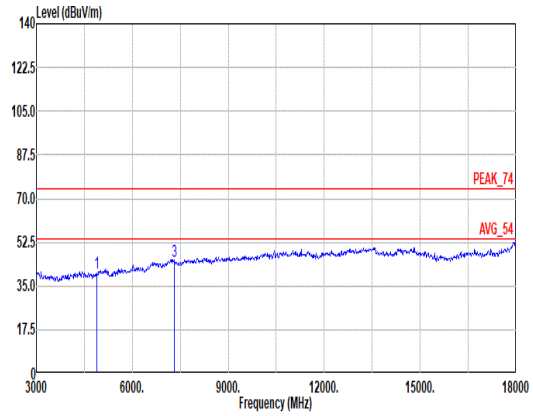
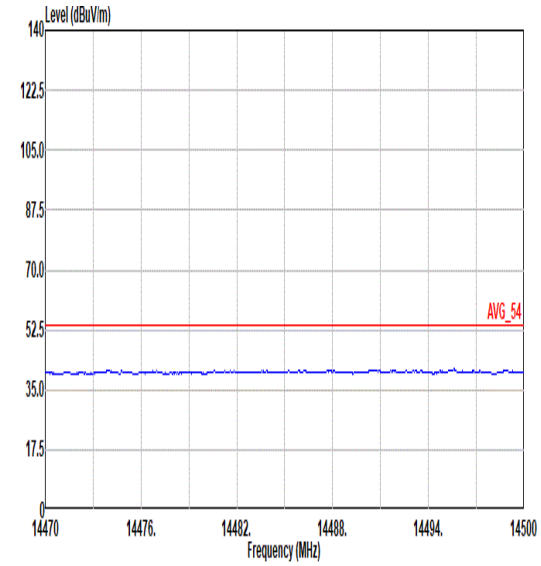
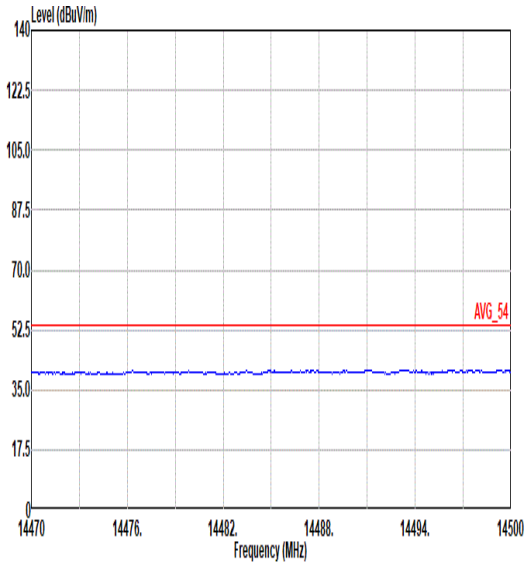
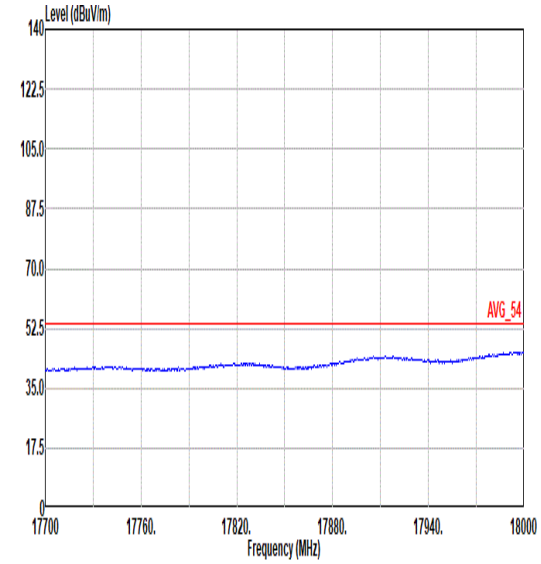
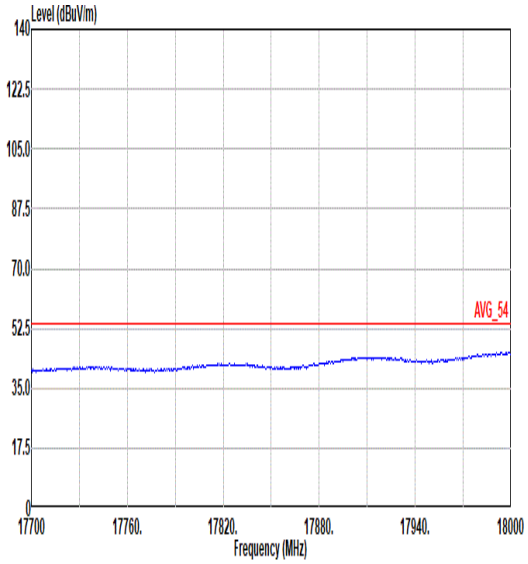
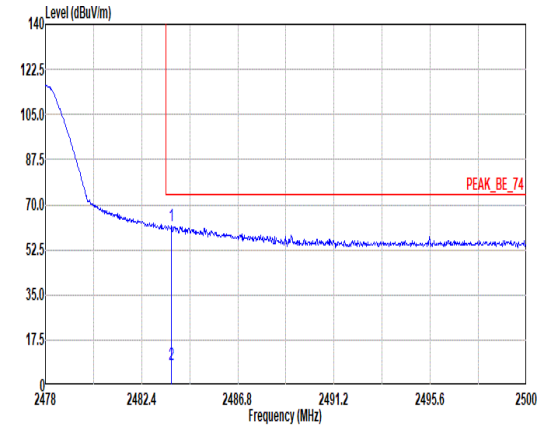
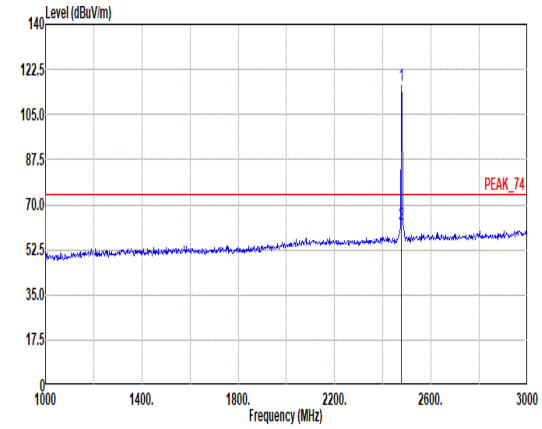
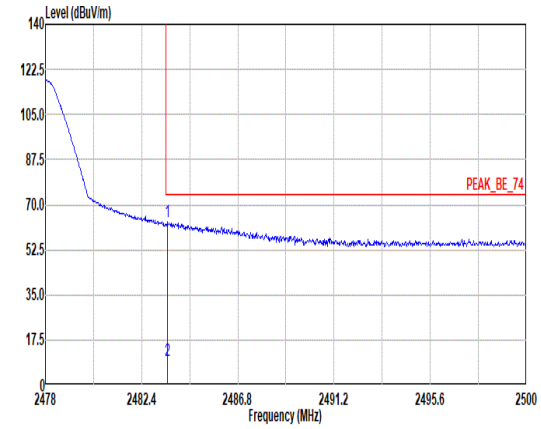
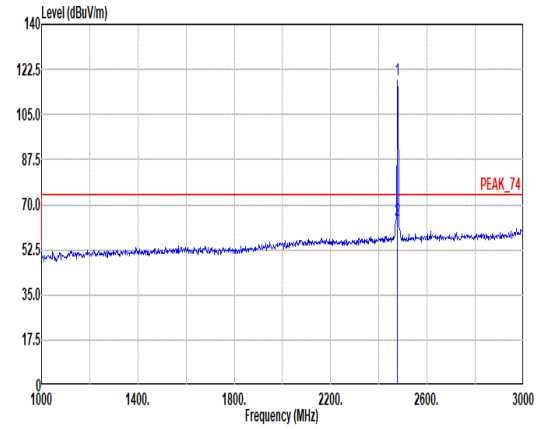
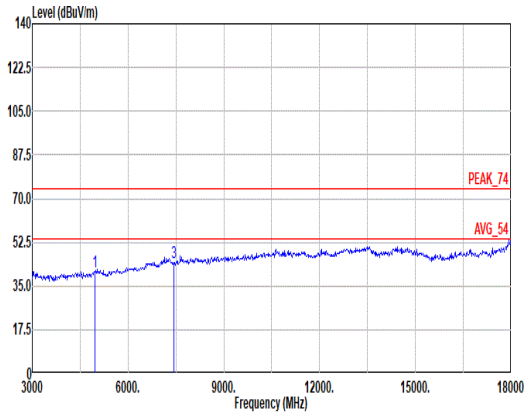
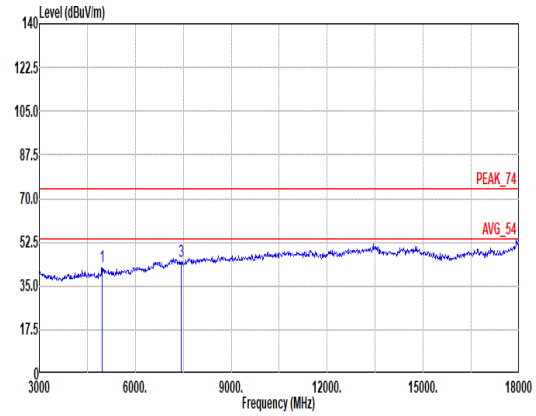
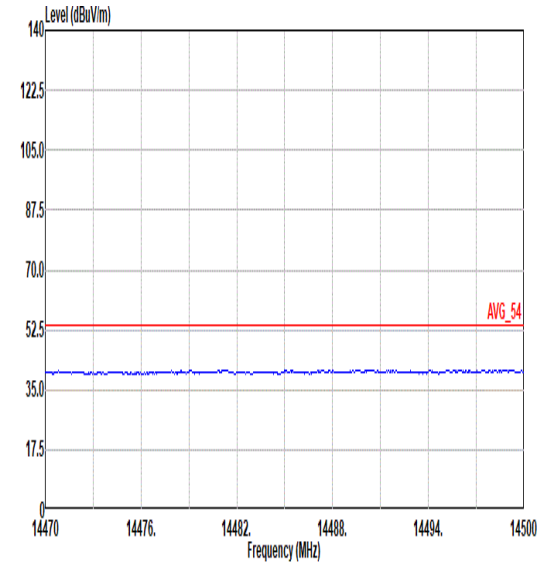
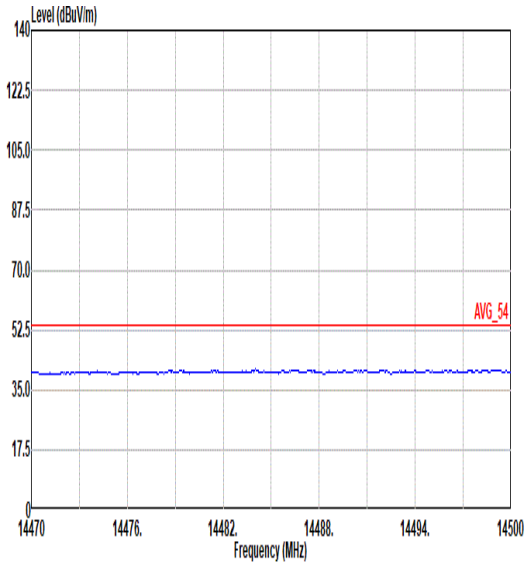
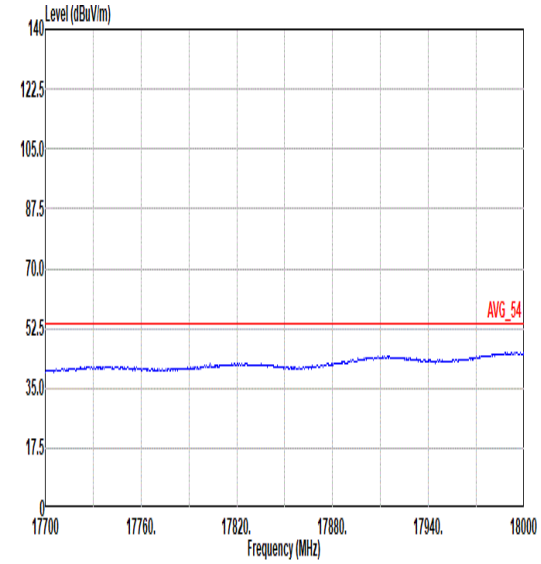
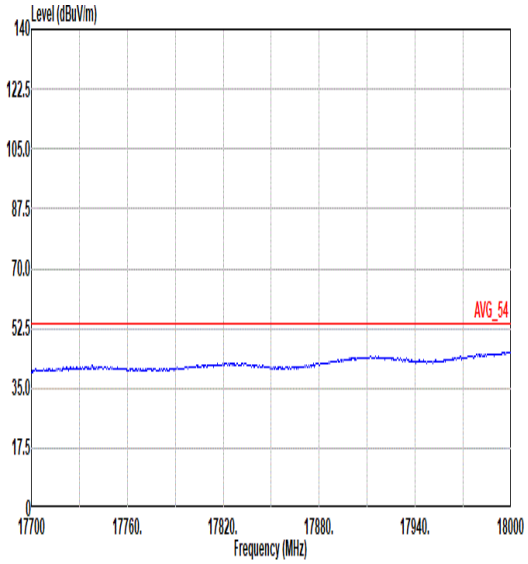
Mode	5	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH38_2440MHz	
ANT	3	
Pol.	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4880.00 40.36 74.00 -33.64 62.44 32.62 10.88 66.02 0.44 -- -- PEAK 2 4880.00 -13.62 54.00 -67.62 -- -- -- -- -- -- -- AVERAGE 3 7320.00 45.00 74.00 -29.00 59.88 36.78 13.36 65.46 0.44 -- -- PEAK 4 7320.00 -8.98 54.00 -62.98 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4880.00 40.00 74.00 -34.00 62.08 32.62 10.88 66.02 0.44 -- -- PEAK 2 4880.00 -13.98 54.00 -67.98 -- -- -- -- -- -- -- AVERAGE 3 7320.00 45.05 74.00 -28.95 59.93 36.78 13.36 65.46 0.44 -- -- PEAK 4 7320.00 -8.93 54.00 -62.93 -- -- -- -- -- -- -- AVERAGE

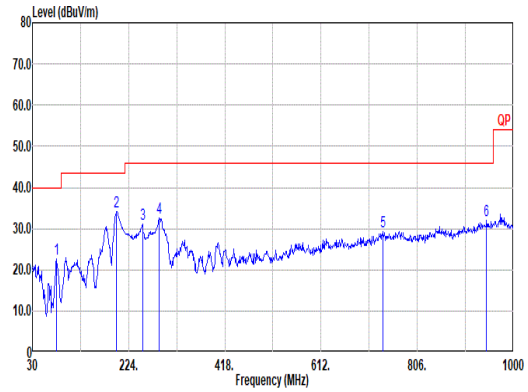
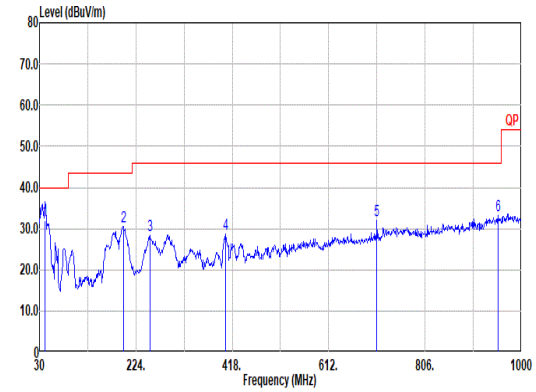
Mode	5	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH38_2440MHz	
ANT	3	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL
17.7G ~18G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL

Mode	6	
	Band Edge	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	3	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2483.76 61.95 74.00 -12.05 46.57 27.70 7.64 29.88 9.92 196 218 PEAK 2 2483.76 7.97 54.00 -46.03 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2478.00 116.11 ------ ------ 100.75 27.68 7.65 29.89 9.92 196 218 PEAK 2 2478.00 62.13 ------ ------ -- -- -- -- -- -- -- AVERAGE

Mode	6	
	Band Edge	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	3	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2483.57 63.47 74.00 -10.53 48.09 27.70 7.64 29.88 9.92 100 278 PEAK 2 2483.57 9.49 54.00 -44.51 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2478.00 118.16 ------ ------ 102.80 27.68 7.65 29.89 9.92 100 278 PEAK 2 2478.00 64.18 ------ ------ -- -- -- -- -- -- -- AVERAGE

Mode	6	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	3	
Pol.	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4956.00 40.94 74.00 -33.06 62.28 33.01 11.08 65.88 0.45 -- -- PEAK 2 4956.00 -13.04 54.00 -67.04 -- -- -- -- -- -- -- AVERAGE 3 7434.00 44.42 74.00 -29.58 59.68 36.33 13.47 65.46 0.40 -- -- PEAK 4 7434.00 -9.56 54.00 -63.56 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4956.00 42.84 74.00 -31.16 64.18 33.01 11.08 65.88 0.45 380 190 PEAK 2 4956.00 -11.14 54.00 -65.14 -- -- -- -- -- -- -- AVERAGE 3 7434.00 44.71 74.00 -29.29 59.97 36.33 13.47 65.46 0.40 -- -- PEAK 4 7434.00 -9.27 54.00 -63.27 -- -- -- -- -- -- -- AVERAGE

Mode	6	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	3	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL
17.7G ~18G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL

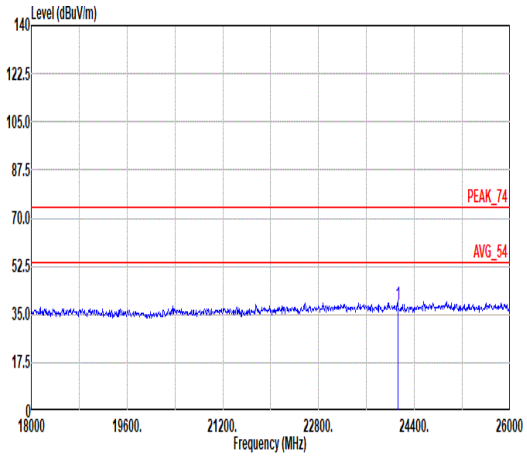
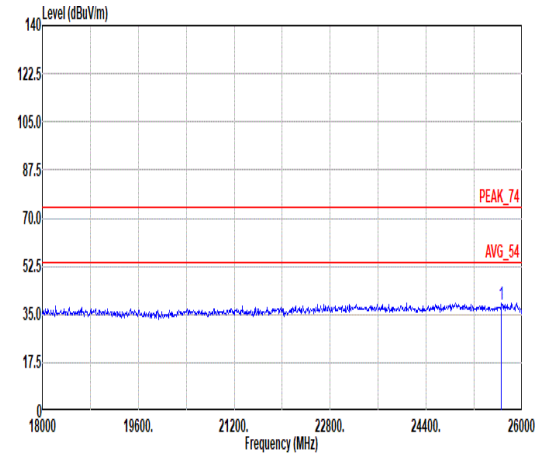
Mode	13	
	LF	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	3	
Pol.	Horizontal	Vertical
QP/ Peak		

Site : 03CH16-HY
Condition: QP 3m CBL6111D&00802N1D01N-06 _47020 & 06 HORIZONTAL

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	78.50	22.53	40.00	-17.47	40.47	13.31	1.15	32.40	0.00	--	--	Peak
2	199.75	34.24	43.50	-9.26	49.67	14.99	1.97	32.39	0.00	--	--	Peak
3	252.13	31.05	46.00	-14.95	42.47	18.75	2.25	32.42	0.00	--	--	Peak
4	286.08	32.51	46.00	-13.49	43.47	19.02	2.43	32.41	0.00	--	--	Peak
5	737.13	29.37	46.00	-16.63	29.92	27.96	4.06	32.57	0.00	--	--	Peak
6	945.68	31.85	46.00	-14.15	28.25	30.62	4.54	31.56	0.00	--	--	Peak

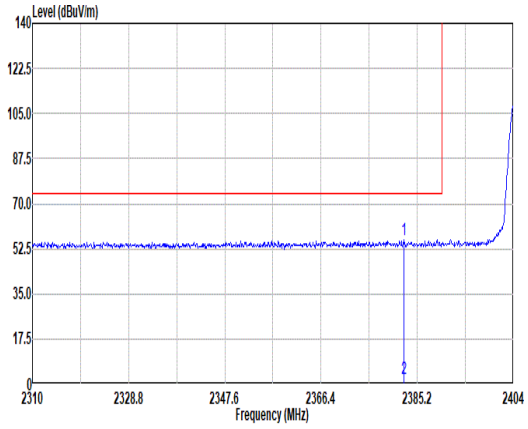
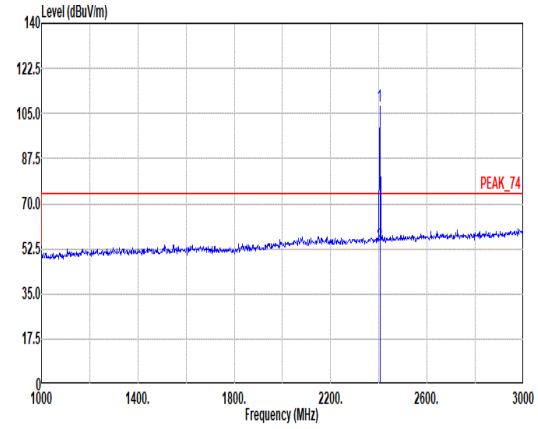
Site : 03CH16-HY
Condition: QP 3m CBL6111D&00802N1D01N-06 _47020 & 06 VERTICAL

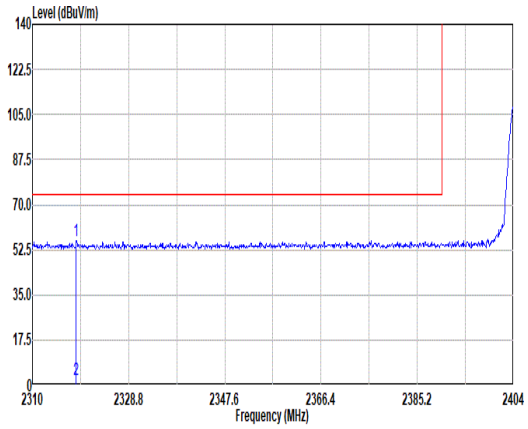
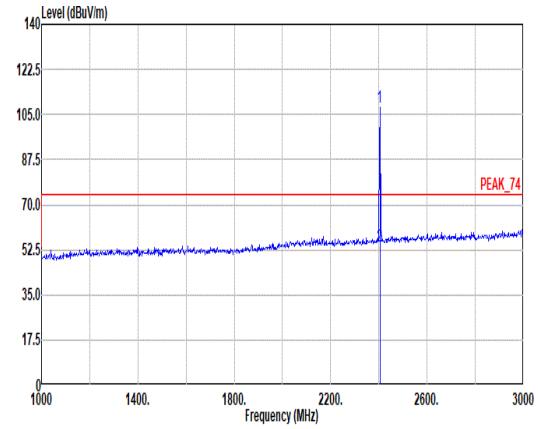
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	41.64	31.96	40.00	-8.04	45.01	18.57	0.85	32.47	0.00	100	327	QP
2	198.78	30.59	43.50	-12.91	46.09	14.93	1.96	32.39	0.00	--	--	Peak
3	252.13	28.34	46.00	-17.66	39.76	18.75	2.25	32.42	0.00	--	--	Peak
4	404.42	28.58	46.00	-17.42	36.09	21.99	3.01	32.51	0.00	--	--	Peak
5	709.00	31.95	46.00	-14.05	34.00	26.68	3.99	32.72	0.00	--	--	Peak
6	952.47	33.28	46.00	-12.72	29.45	30.77	4.56	31.50	0.00	--	--	Peak

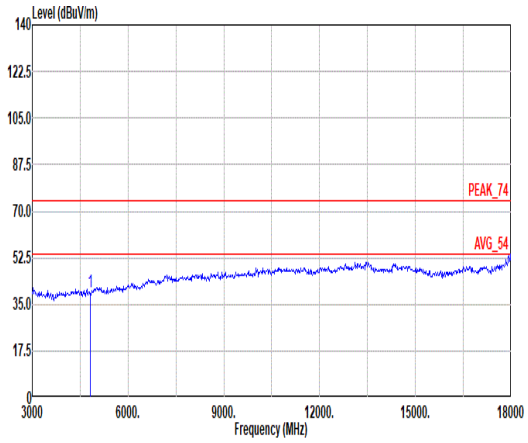
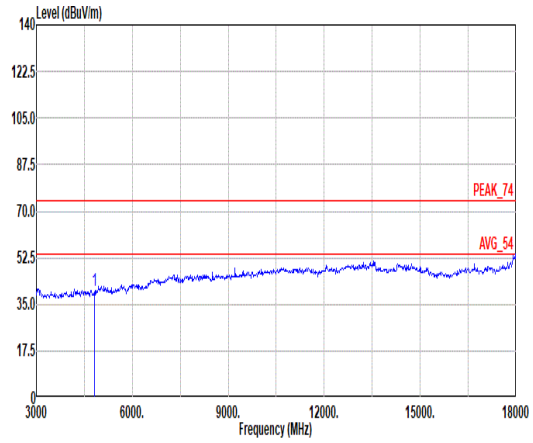
Mode	14	
	SHF	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	3	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH16-HY Condition: PEAK_74 1m SHF_00993_231124 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 24124.74 38.75 74.00 -35.25 56.39 38.75 6.95 53.80 -9.54 -- -- PEAK	 Site : 03CH16-HY Condition: PEAK_74 1m SHF_00993_231124 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 25653.64 38.53 74.00 -35.47 55.27 38.99 7.11 53.30 -9.54 -- -- PEAK

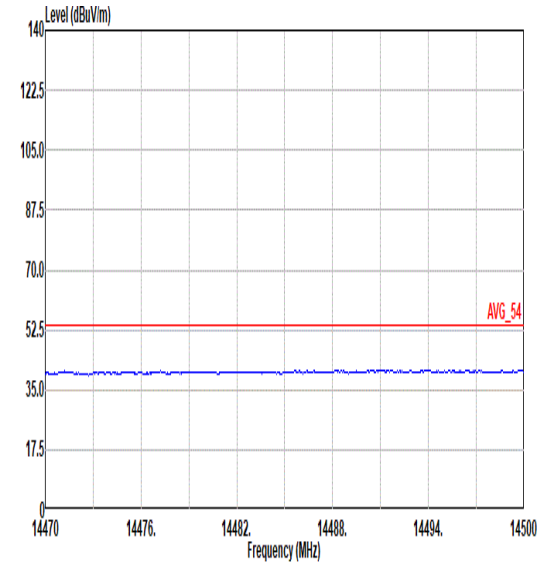
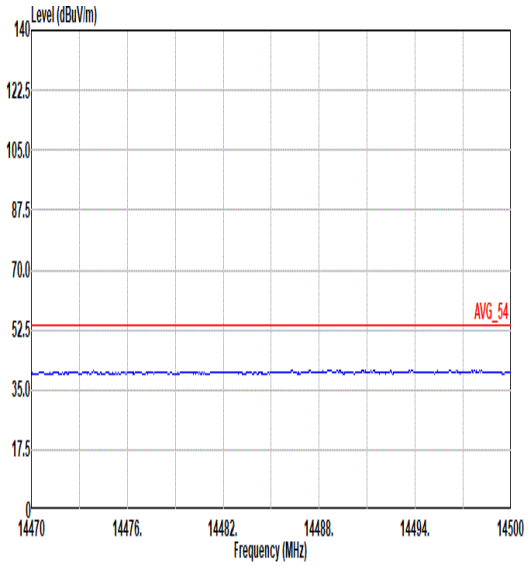
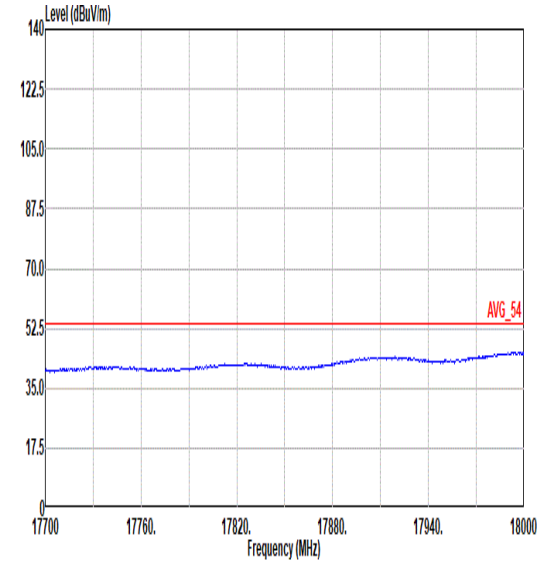
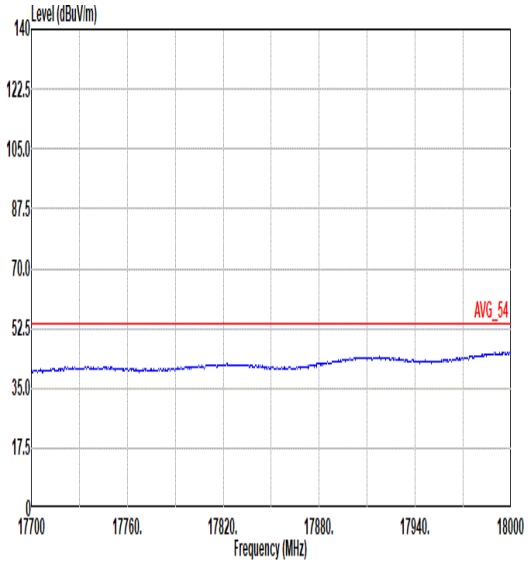
<Ant. 4>

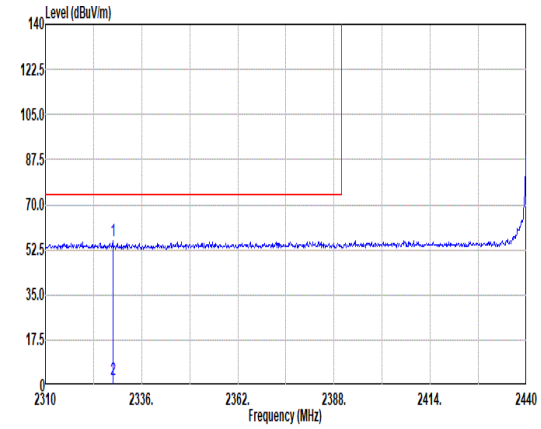
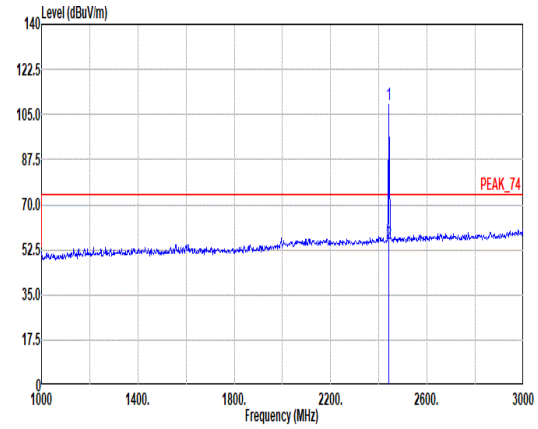
<1Mbps>

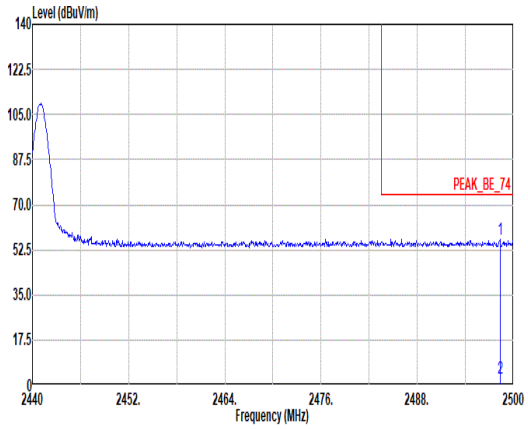
Mode	7	
	Band Edge	
	2400-2483.5_Bluetooth-LE_ASK _CH02_2404MHz	
ANT	4	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2382.66 56.06 74.00 -17.94 41.15 27.23 7.68 29.92 9.92 312 309 PEAK 2 2382.66 2.08 54.00 -51.92 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2404.00 107.73 ------ ------ 92.61 27.40 7.71 29.91 9.92 312 309 PEAK 2 2404.00 53.75 ------ ------ -- -- -- -- -- -- -- AVERAGE

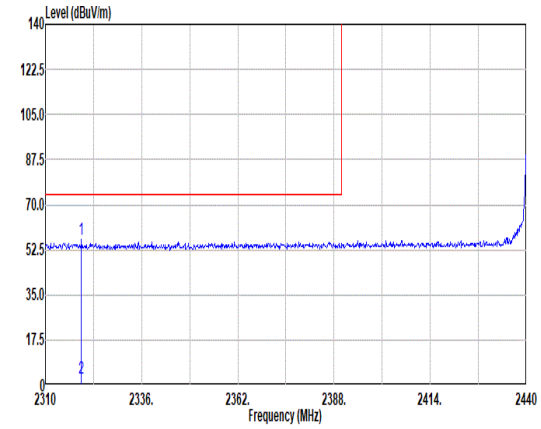
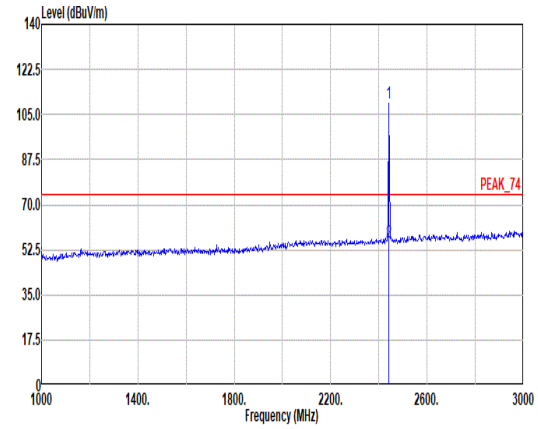
Mode	7	
	Band Edge	
	2400-2483.5_Bluetooth-LE_ASK _CH02_2404MHz	
ANT	4	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2318.55 55.99 74.00 -18.01 41.33 27.10 7.57 29.93 9.92 302 270 PEAK 2 2318.55 2.01 54.00 -51.99 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2404.00 107.71 ------ ------ 92.59 27.40 7.71 29.91 9.92 302 270 PEAK 2 2404.00 53.73 ------ ------ -- -- -- -- -- -- -- AVERAGE

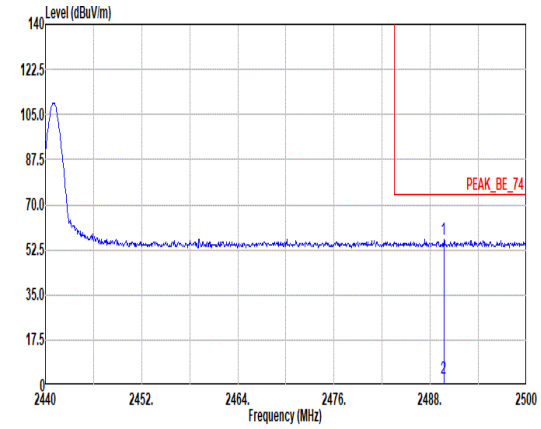
Mode	7	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH02_2404MHz	
ANT	4	
Pol.	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4808.00 39.40 74.00 -34.60 62.10 32.33 10.69 66.16 0.44 -- -- PEAK 2 4808.00 -14.58 54.00 -68.58 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4808.00 40.18 74.00 -33.82 62.88 32.33 10.69 66.16 0.44 -- -- PEAK 2 4808.00 -13.80 54.00 -67.80 -- -- -- -- -- -- -- AVERAGE

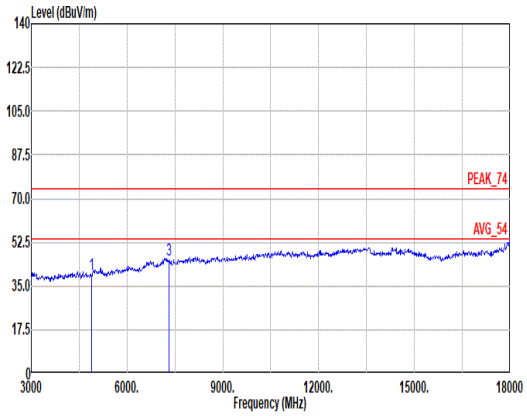
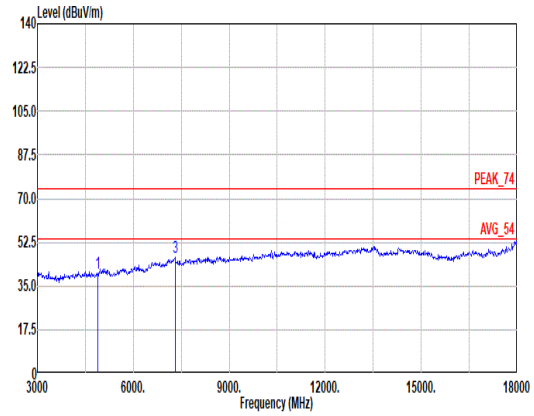
Mode	7	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH02_2404MHz	
ANT	4	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL
17.7G ~18G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL

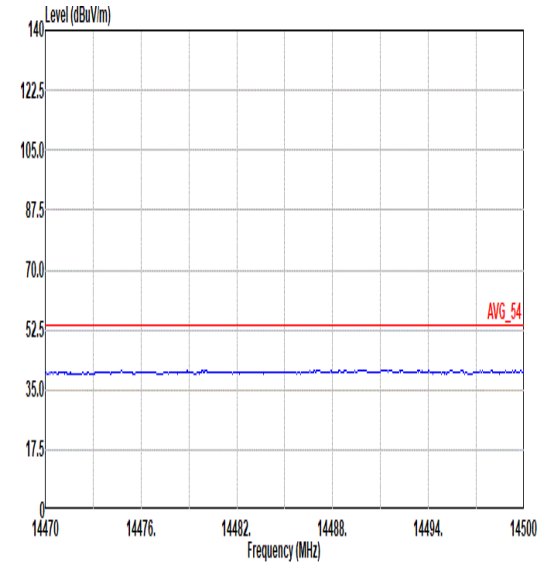
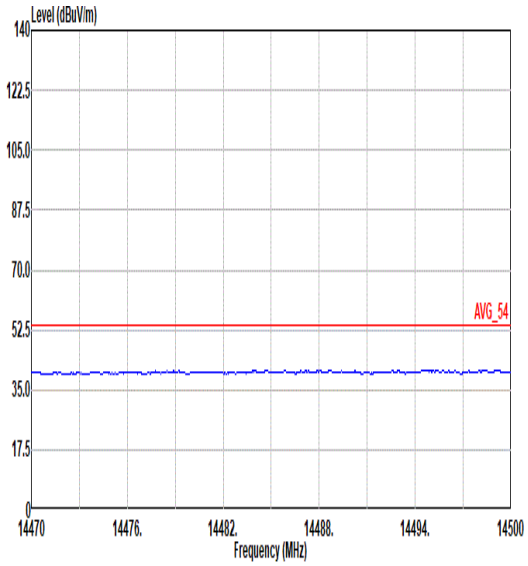
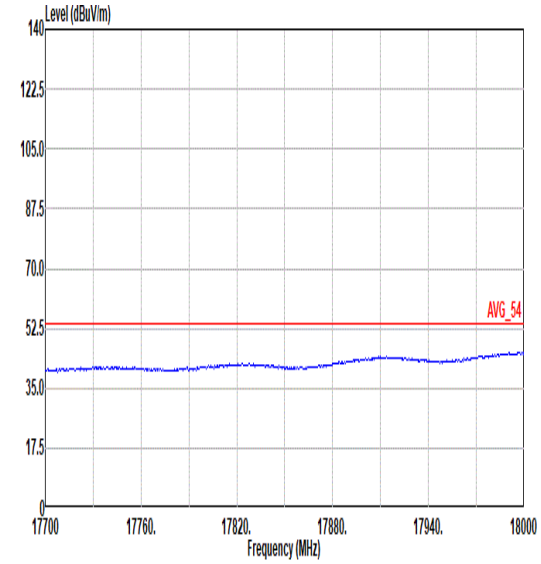
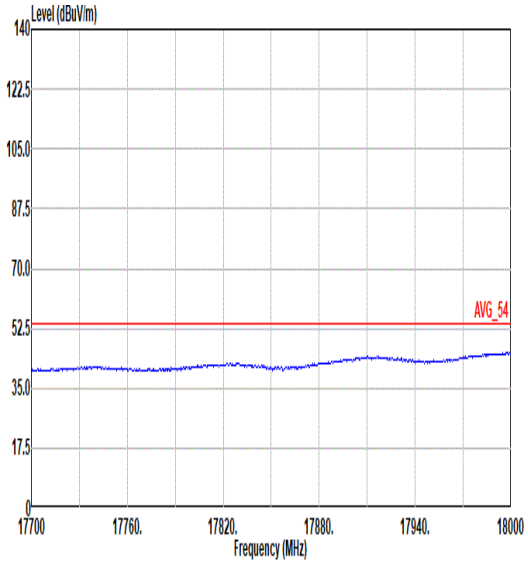
Mode	8	
	Band Edge - L	
	2400-2483.5_Bluetooth-LE_ASK _CH38_2440MHz	
ANT	4	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2328.20 56.10 74.00 -17.90 41.43 27.10 7.58 29.93 9.92 307 309 PEAK 2 2328.20 2.12 54.00 -51.88 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2440.00 109.09 ------ ------ 93.79 27.60 7.68 29.90 9.92 307 309 PEAK 2 2440.00 55.11 ------ ------ -- -- -- -- -- -- -- AVERAGE

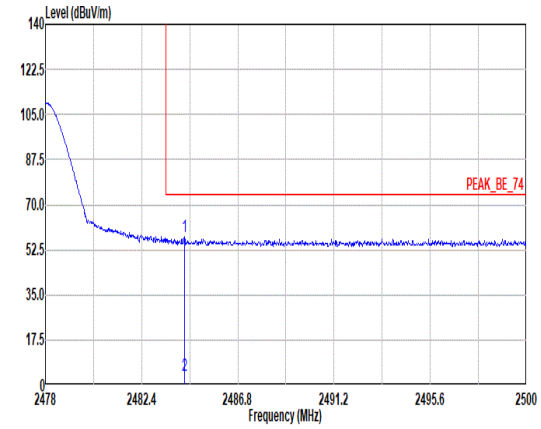
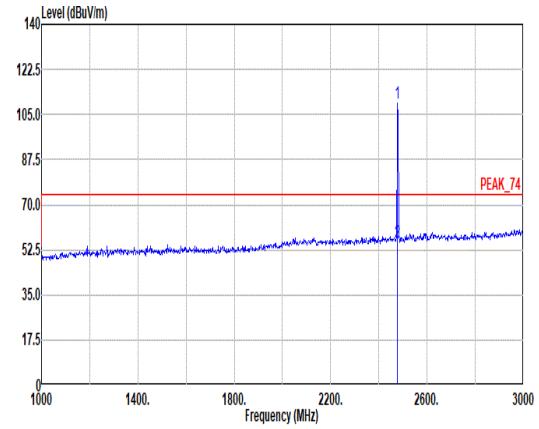
Mode	8	
	Band Edge - R	
	2400-2483.5_Bluetooth-LE_ASK _CH38_2440MHz	
ANT	4	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2498.32 56.67 74.00 -17.33 41.30 27.70 7.63 29.88 9.92 307 309 PEAK 2 2498.32 2.69 54.00 -51.31 -- -- -- -- -- -- -- AVERAGE	Blank

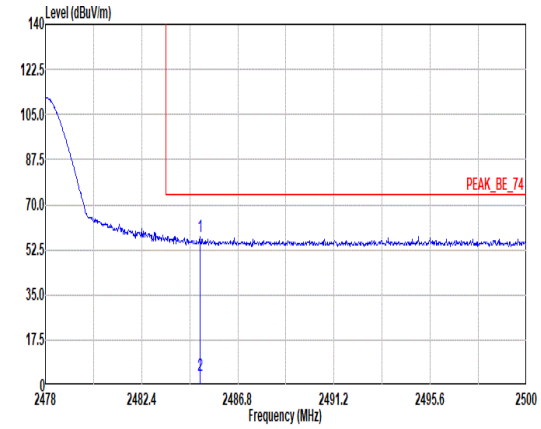
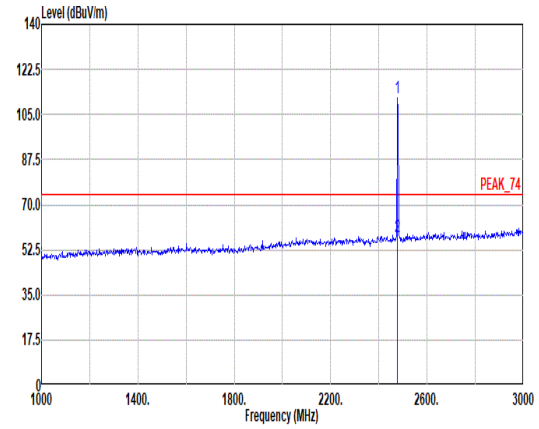
Mode	8	
	Band Edge - L	
	2400-2483.5_Bluetooth-LE_ASK _CH38_2440MHz	
ANT	4	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2319.75 56.41 74.00 -17.59 41.75 27.10 7.57 29.93 9.92 174 277 PEAK 2 2319.75 2.43 54.00 -51.57 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2440.00 109.33 ------ ------ 94.03 27.60 7.68 29.90 9.92 174 277 PEAK 2 2440.00 55.35 ------ ------ -- -- -- -- -- -- -- AVERAGE

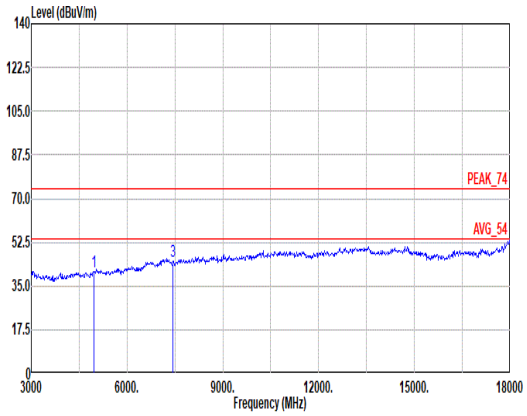
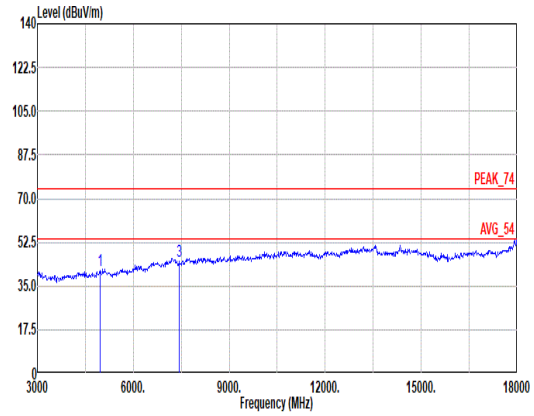
Mode	8	
	Band Edge - R	
	2400-2483.5_Bluetooth-LE_ASK _CH38_2440MHz	
ANT	4	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2489.68 56.72 74.00 -17.28 41.34 27.70 7.64 29.88 9.92 174 277 PEAK 2 2489.68 2.74 54.00 -51.26 -- -- -- -- -- -- -- AVERAGE	Blank

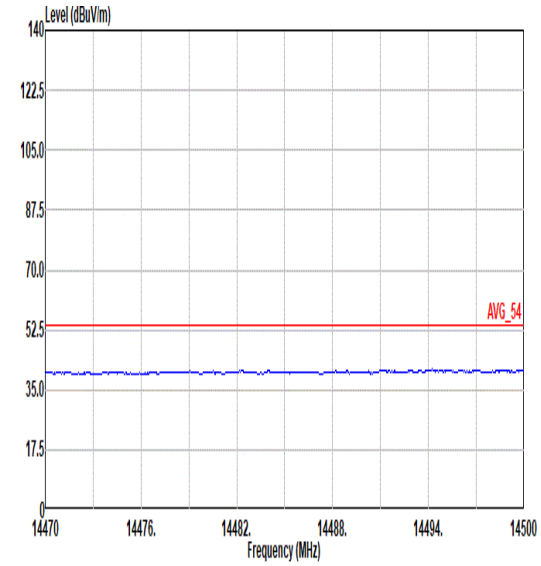
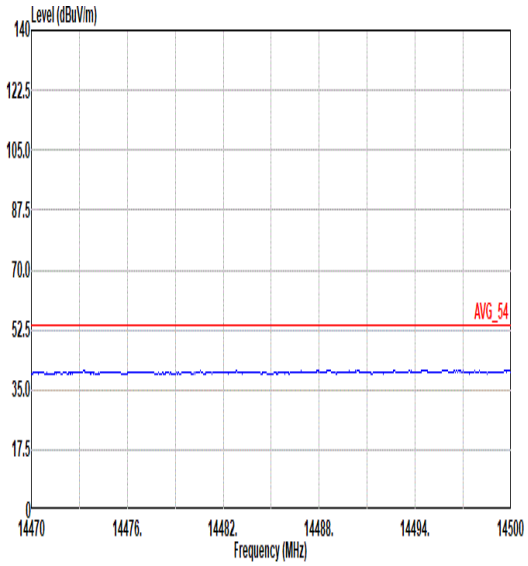
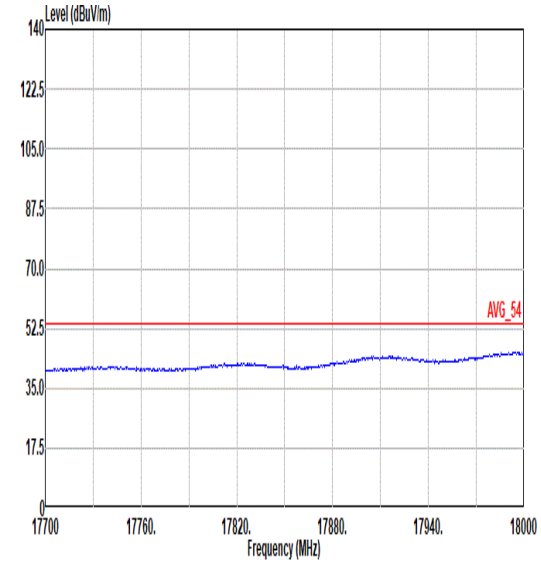
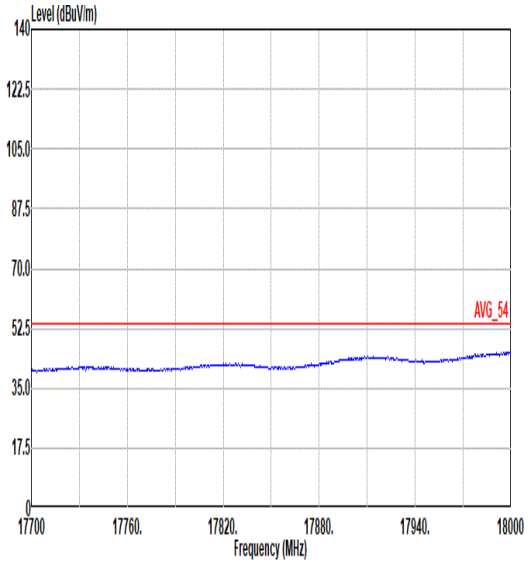
Mode	8	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH38_2440MHz	
ANT	4	
Pol.	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4880.00 39.55 74.00 -34.45 61.63 32.62 10.88 66.02 0.44 -- -- PEAK 2 4880.00 -14.43 54.00 -68.43 -- -- -- -- -- -- -- AVERAGE 3 7320.00 45.50 74.00 -28.50 60.38 36.78 13.36 65.46 0.44 -- -- PEAK 4 7320.00 -8.48 54.00 -62.48 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4880.00 40.41 74.00 -33.59 62.49 32.62 10.88 66.02 0.44 -- -- PEAK 2 4880.00 -13.57 54.00 -67.57 -- -- -- -- -- -- -- AVERAGE 3 7320.00 46.25 74.00 -27.75 61.13 36.78 13.36 65.46 0.44 -- -- PEAK 4 7320.00 -7.73 54.00 -61.73 -- -- -- -- -- -- -- AVERAGE

Mode	8	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH38_2440MHz	
ANT	4	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL
17.7G ~18G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL

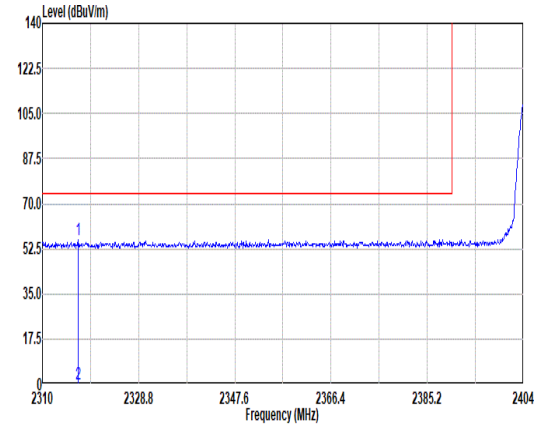
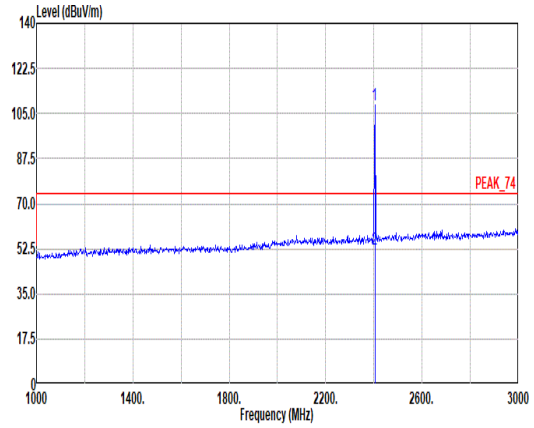
Mode	9	
	Band Edge	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	4	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2484.36 57.46 74.00 -16.54 42.08 27.70 7.64 29.88 9.92 266 304 PEAK 2 2484.36 3.48 54.00 -50.52 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2478.00 109.38 ------ ------ 94.02 27.68 7.65 29.89 9.92 266 304 PEAK 2 2478.00 55.40 ------ ------ -- -- -- -- -- -- -- AVERAGE

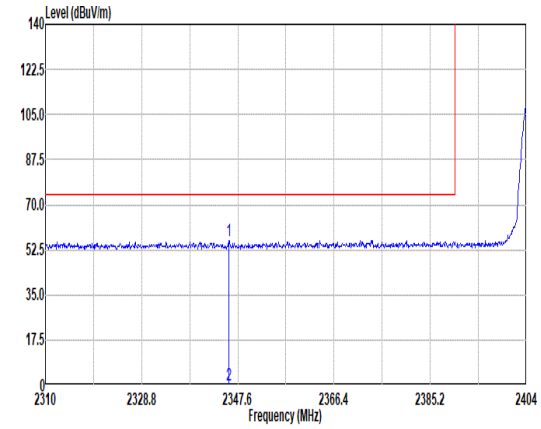
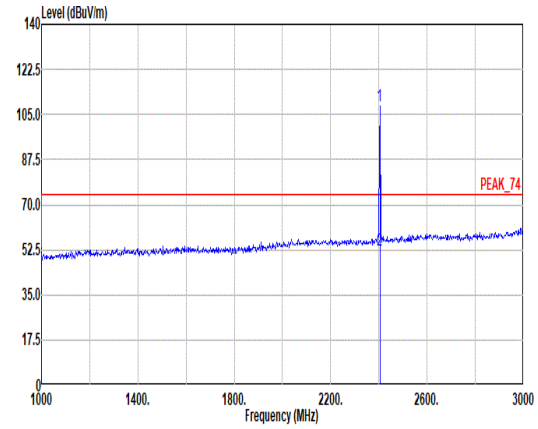
Mode	9	
	Band Edge	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	4	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2485.06 57.82 74.00 -16.18 42.44 27.70 7.64 29.88 9.92 155 277 PEAK 2 2485.06 3.84 54.00 -50.16 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2478.00 111.41 ------ ------ 96.05 27.68 7.65 29.89 9.92 155 277 PEAK 2 2478.00 57.43 ------ ------ -- -- -- -- -- -- -- AVERAGE

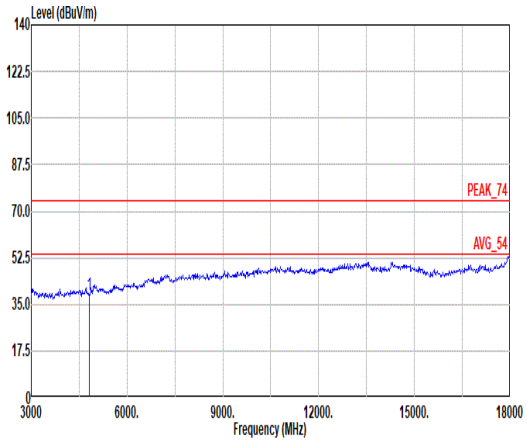
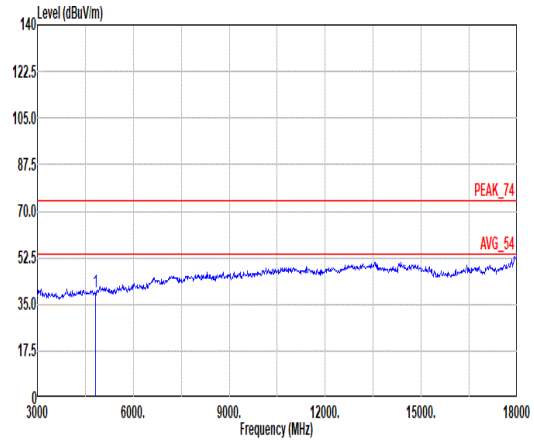
Mode	9	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	4	
Pol.	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4956.00 40.81 74.00 -33.19 62.15 33.01 11.08 65.88 0.45 -- -- PEAK 2 4956.00 -13.17 54.00 -67.17 -- -- -- -- -- -- -- AVERAGE 3 7434.00 44.68 74.00 -29.32 59.94 36.33 13.47 65.46 0.40 -- -- PEAK 4 7434.00 -9.30 54.00 -63.30 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4956.00 41.00 74.00 -33.00 62.34 33.01 11.08 65.88 0.45 -- -- PEAK 2 4956.00 -12.98 54.00 -66.98 -- -- -- -- -- -- -- AVERAGE 3 7434.00 44.79 74.00 -29.21 60.05 36.33 13.47 65.46 0.40 -- -- PEAK 4 7434.00 -9.19 54.00 -63.19 -- -- -- -- -- -- -- AVERAGE

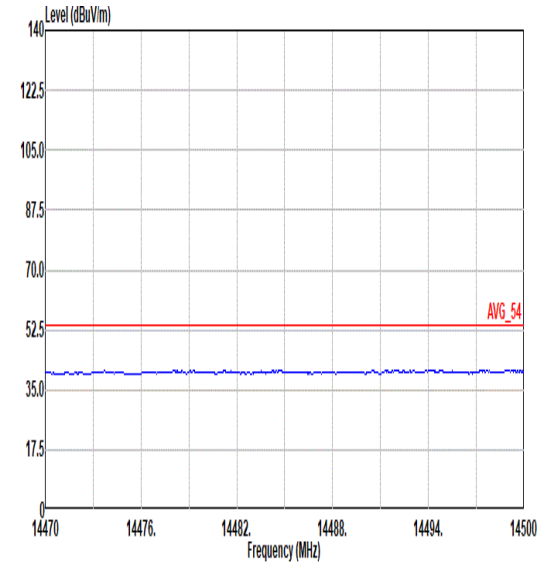
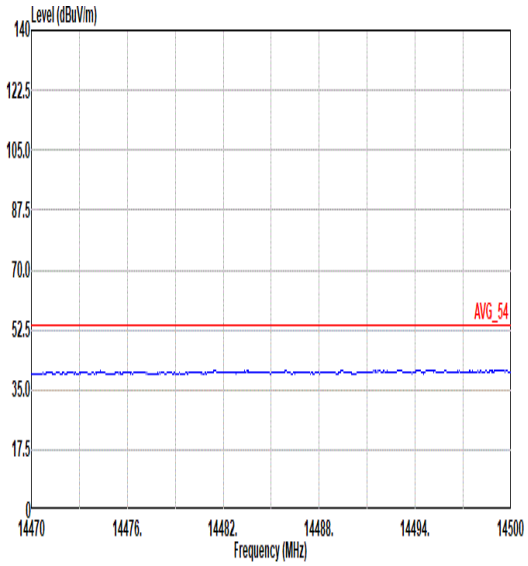
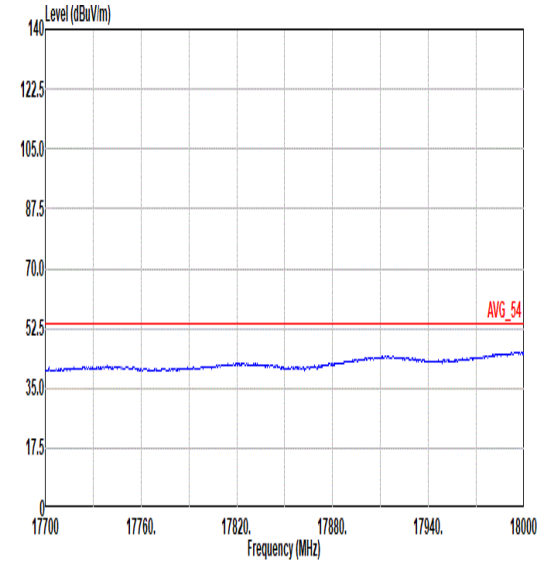
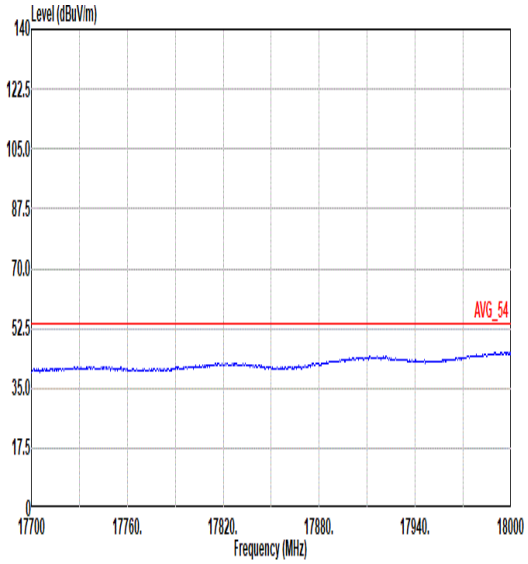
Mode	9	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	4	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL
17.7G ~18G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL

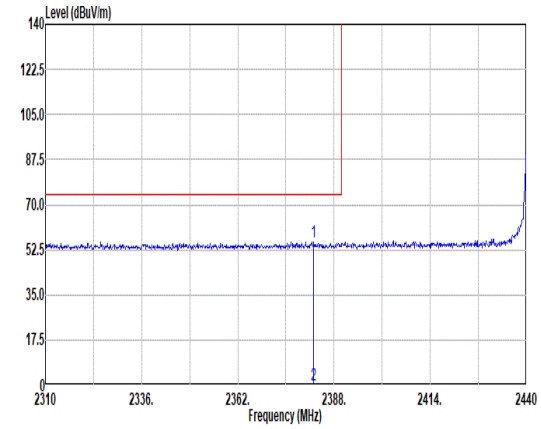
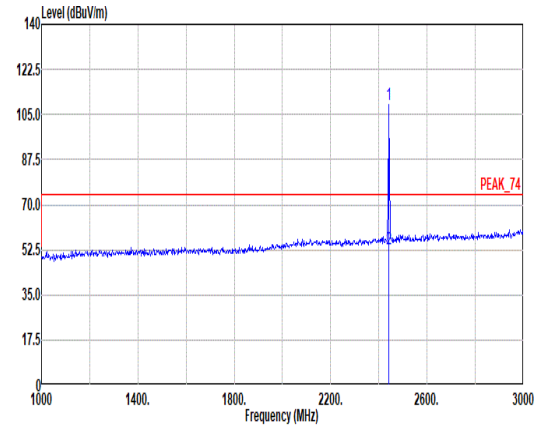
<2Mbps>

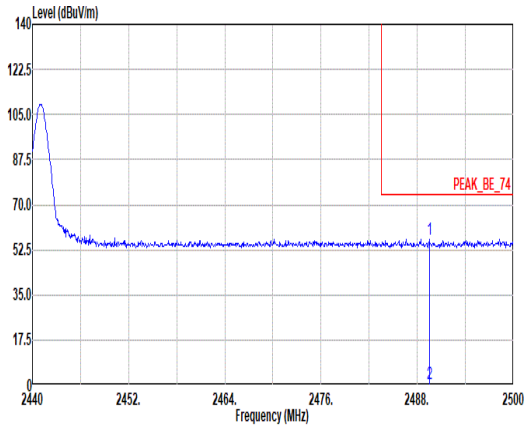
Mode	10	
	Band Edge	
	2400-2483.5_Bluetooth-LE_ASK _CH02_2404MHz	
ANT	4	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2316.96 55.99 74.00 -18.01 41.34 27.10 7.56 29.93 9.92 311 221 PEAK 2 2316.96 0.07 54.00 -53.93 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2404.00 108.35 ------ ------ 93.23 27.40 7.71 29.91 9.92 311 221 PEAK 2 2404.00 52.43 ------ ------ -- -- -- -- -- -- -- AVERAGE

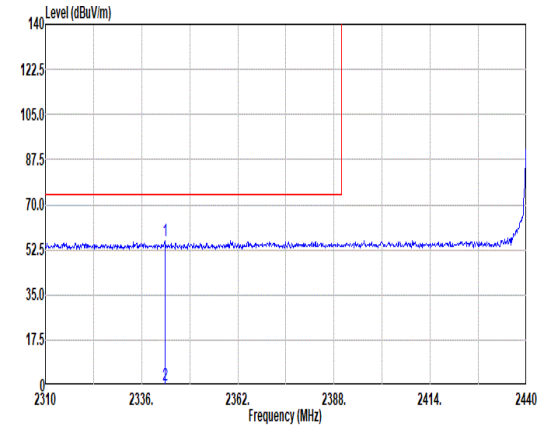
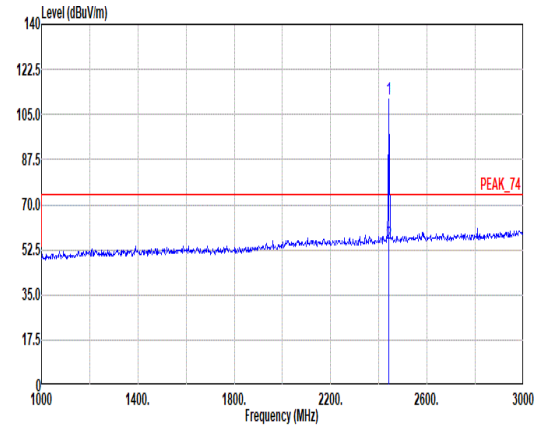
Mode	10	
	Band Edge	
	2400-2483.5_Bluetooth-LE_ASK _CH02_2404MHz	
ANT	4	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2345.91 56.09 74.00 -17.91 41.38 27.10 7.62 29.93 9.92 272 274 PEAK 2 2345.91 0.17 54.00 -53.83 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2404.00 108.28 ------ ------ 93.16 27.40 7.71 29.91 9.92 272 274 PEAK 2 2404.00 52.36 ------ ------ -- -- -- -- -- -- -- AVERAGE

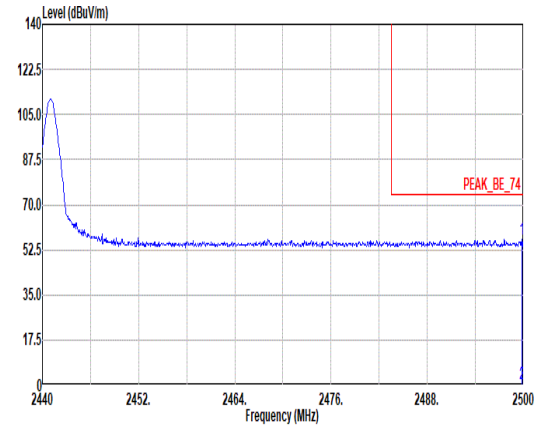
Mode	10	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH02_2404MHz	
ANT	4	
Pol.	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4808.00 38.70 74.00 -35.30 61.40 32.33 10.69 66.16 0.44 -- -- PEAK 2 4808.00 -17.22 54.00 -71.22 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4808.00 39.42 74.00 -34.58 62.12 32.33 10.69 66.16 0.44 -- -- PEAK 2 4808.00 -16.50 54.00 -70.50 -- -- -- -- -- -- -- AVERAGE

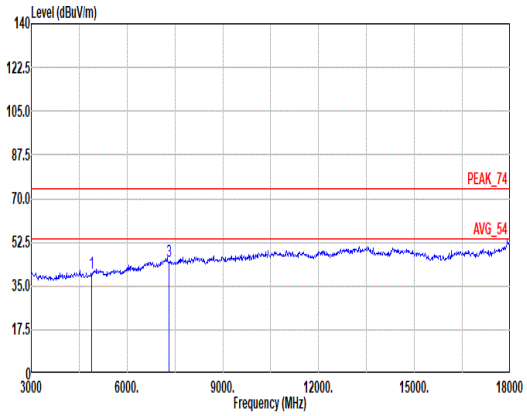
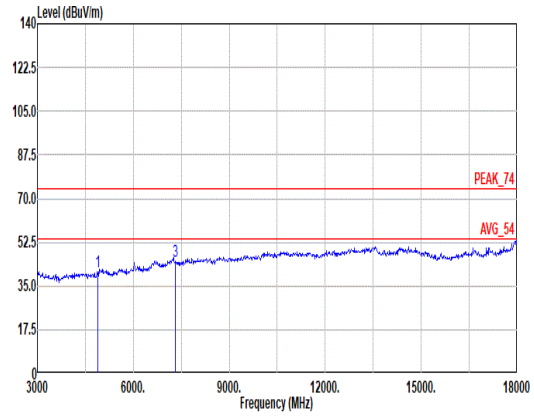
Mode	10	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH02_2404MHz	
ANT	4	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL
17.7G ~18G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL

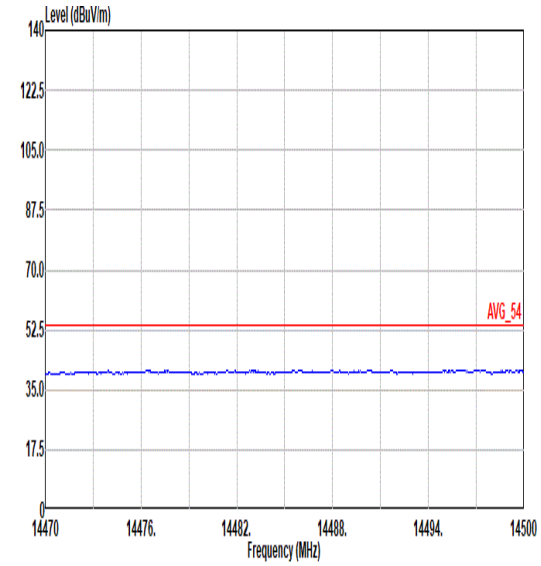
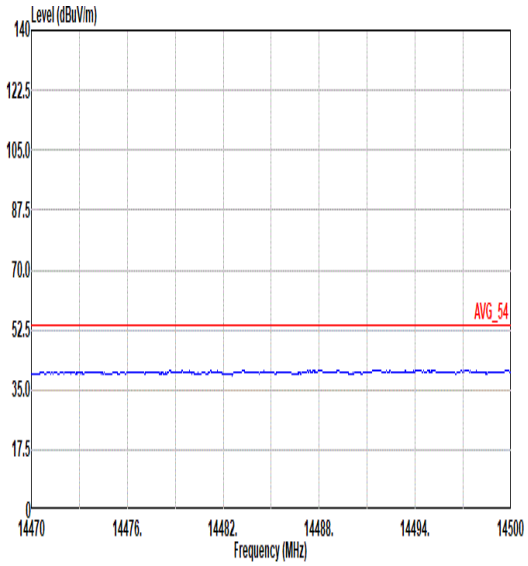
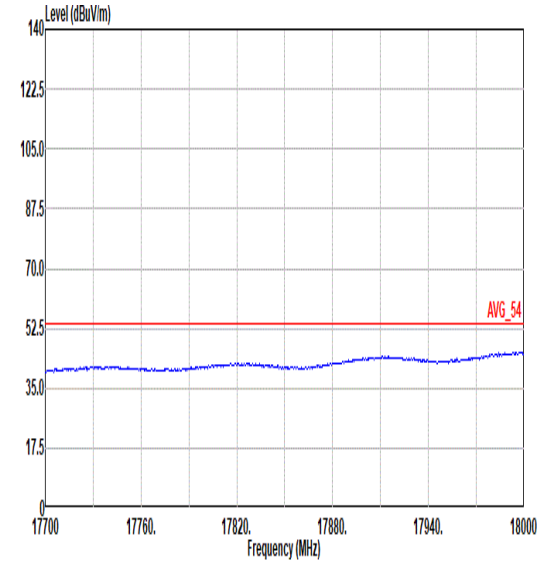
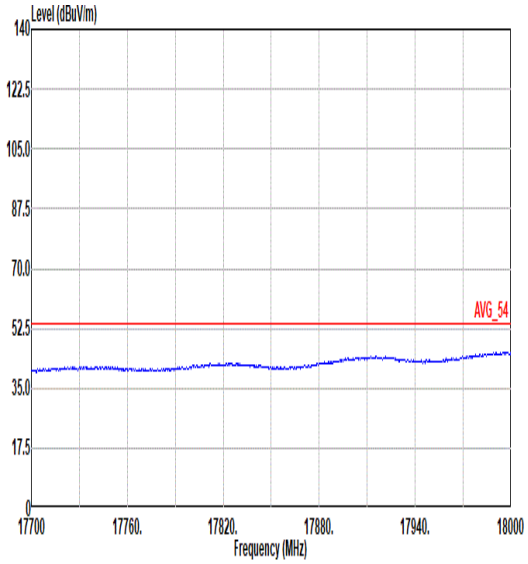
Mode	11	
	Band Edge - L	
	2400-2483.5_Bluetooth-LE_ASK _CH38_2440MHz	
ANT	4	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2382.41 55.67 74.00 -18.33 40.77 27.22 7.68 29.92 9.92 305 224 PEAK 2 2382.41 -0.25 54.00 -54.25 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2440.00 108.93 ------ ------ 93.63 27.60 7.68 29.90 9.92 305 224 PEAK 2 2440.00 53.01 ------ ------ -- -- -- -- -- -- -- AVERAGE

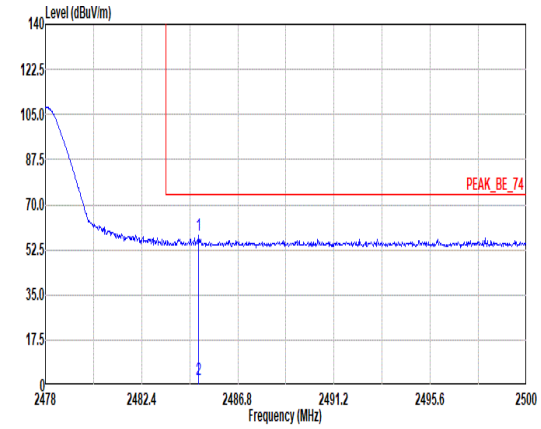
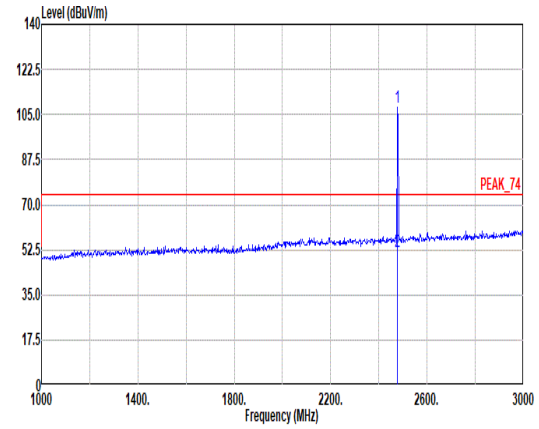
Mode	11	
	Band Edge - R	
	2400-2483.5_Bluetooth-LE_ASK _CH38_2440MHz	
ANT	4	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2489.50 56.53 74.00 -17.47 41.15 27.70 7.64 29.88 9.92 305 224 PEAK 2 2489.50 0.61 54.00 -53.39 -- -- -- -- -- -- -- AVERAGE	Blank

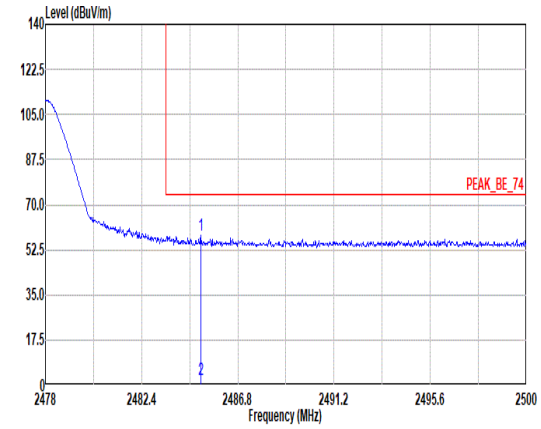
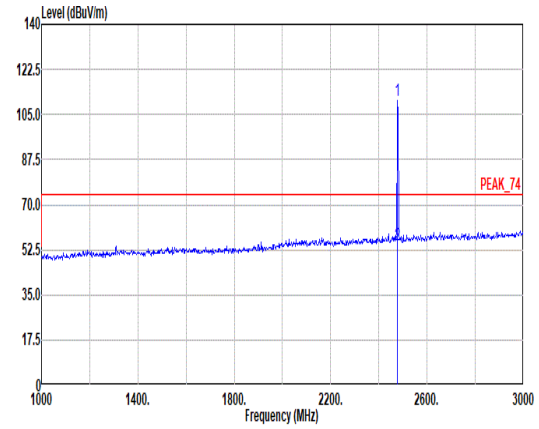
Mode	11	
	Band Edge - L	
	2400-2483.5_Bluetooth-LE_ASK _CH38_2440MHz	
ANT	4	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2342.37 56.05 74.00 -17.95 41.35 27.10 7.61 29.93 9.92 330 275 PEAK 2 2342.37 0.13 54.00 -53.87 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Limit Read Ant Cable Preamp Aux APos TPos Freq Level Line Margin Level Factor Loss Factor Factor Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2440.00 110.73 ------ ------ 95.43 27.60 7.68 29.90 9.92 330 275 PEAK 2 2440.00 54.81 ------ ------ -- -- -- -- -- -- -- AVERAGE

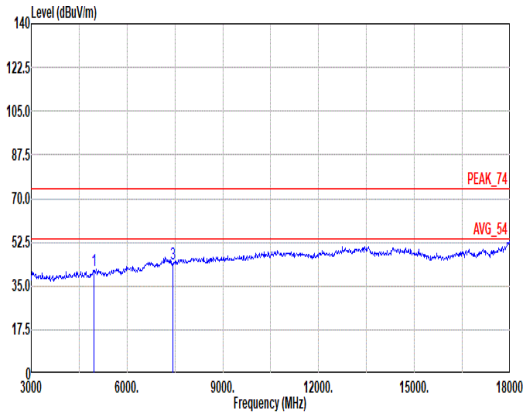
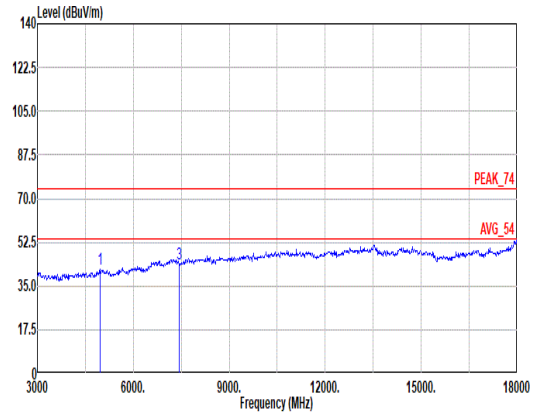
Mode	11	
	Band Edge - R	
	2400-2483.5_Bluetooth-LE_ASK _CH38_2440MHz	
ANT	4	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2499.82 56.51 74.00 -17.49 41.14 27.70 7.63 29.88 9.92 330 275 PEAK 2 2499.82 0.59 54.00 -53.41 -- -- -- -- -- -- -- AVERAGE	Blank

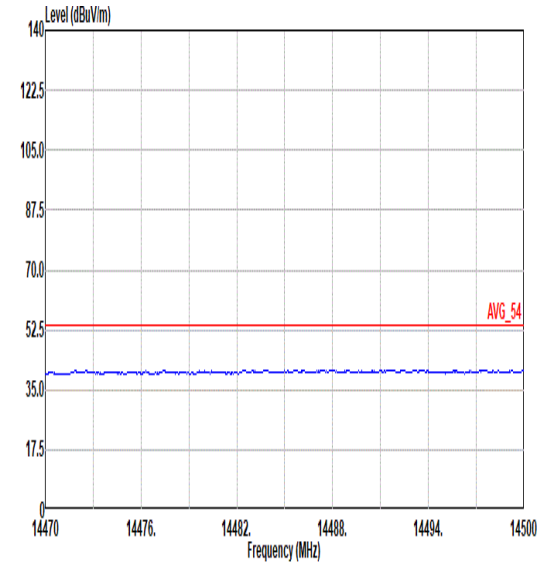
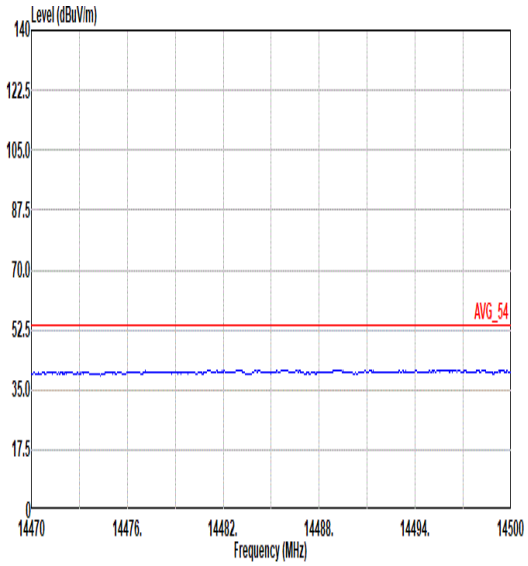
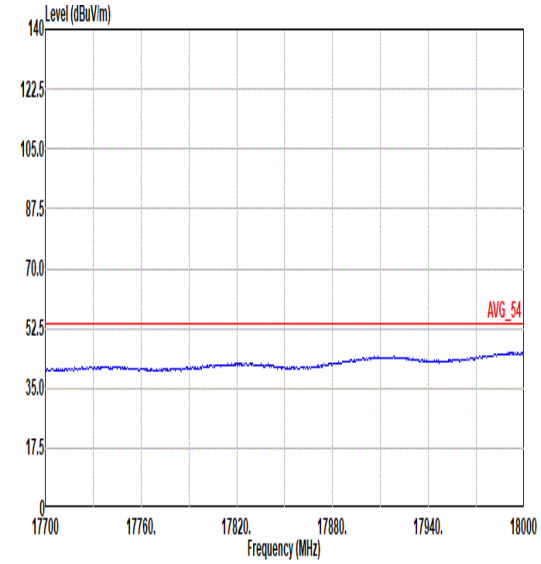
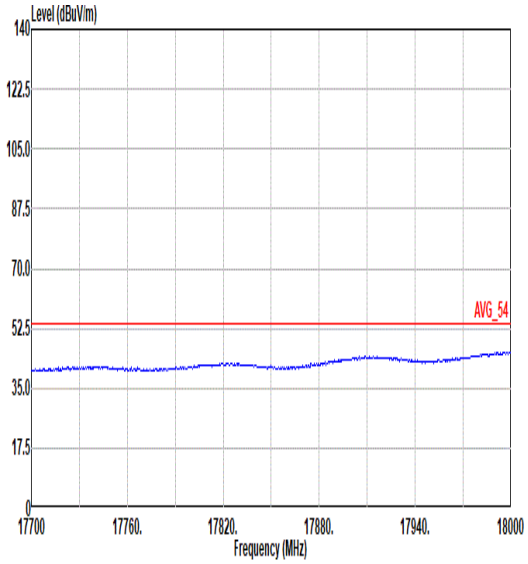
Mode	11	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH38_2440MHz	
ANT	4	
Pol.	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4880.00 40.41 74.00 -33.59 62.49 32.62 10.88 66.02 0.44 -- -- PEAK 2 4880.00 -15.51 54.00 -69.51 -- -- -- -- -- -- -- AVERAGE 3 7320.00 44.74 74.00 -29.26 59.62 36.78 13.36 65.46 0.44 -- -- PEAK 4 7320.00 -11.18 54.00 -65.18 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4880.00 40.46 74.00 -33.54 62.54 32.62 10.88 66.02 0.44 -- -- PEAK 2 4880.00 -15.46 54.00 -69.46 -- -- -- -- -- -- -- AVERAGE 3 7320.00 45.01 74.00 -28.99 59.89 36.78 13.36 65.46 0.44 -- -- PEAK 4 7320.00 -10.91 54.00 -64.91 -- -- -- -- -- -- -- AVERAGE

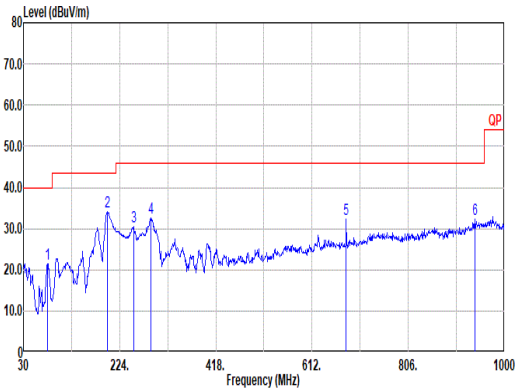
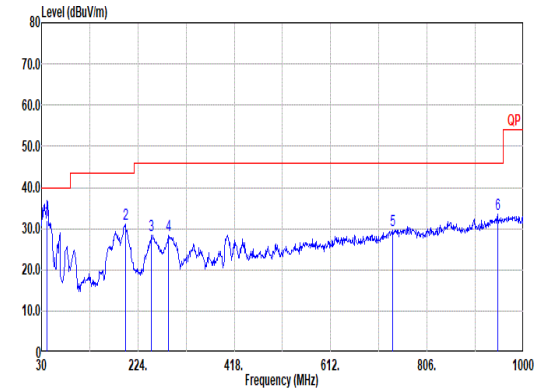
Mode	11	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH38_2440MHz	
ANT	4	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL
17.7G ~18G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL

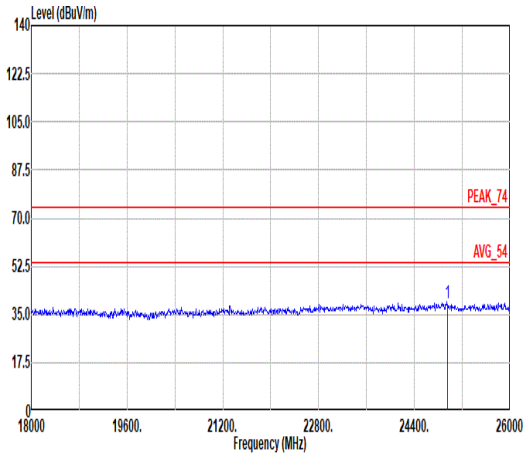
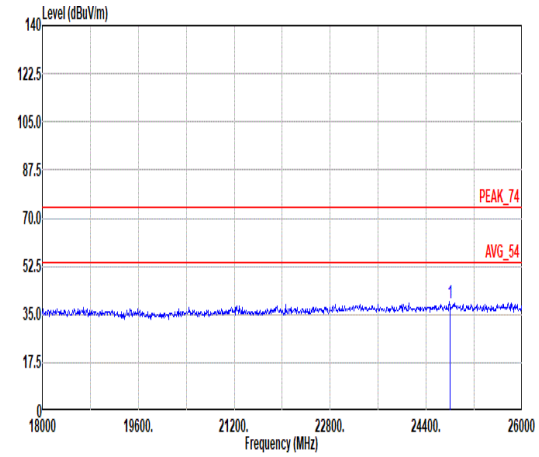
Mode	12	
	Band Edge	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	4	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2485.02 58.01 74.00 -15.99 42.63 27.70 7.64 29.88 9.92 294 335 PEAK 2 2485.02 2.09 54.00 -51.91 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2478.00 107.86 ------ ------ 92.50 27.68 7.65 29.89 9.92 294 335 PEAK 2 2478.00 51.94 ------ ------ -- -- -- -- -- -- -- AVERAGE

Mode	12	
	Band Edge	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	4	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH16-HY Condition: PEAK_BE_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2485.11 57.89 74.00 -16.11 42.51 27.70 7.64 29.88 9.92 194 274 PEAK 2 2485.11 1.97 54.00 -52.03 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2478.00 110.44 ------ ------ 95.08 27.68 7.65 29.89 9.92 194 274 PEAK 2 2478.00 54.52 ------ ------ -- -- -- -- -- -- -- AVERAGE

Mode	12	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	4	
Pol.	Horizontal	Vertical
Peak Avg.	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4956.00 41.24 74.00 -32.76 62.58 33.01 11.08 65.88 0.45 -- -- PEAK 2 4956.00 -14.68 54.00 -68.68 -- -- -- -- -- -- -- AVERAGE 3 7434.00 43.98 74.00 -30.02 59.24 36.33 13.47 65.46 0.40 -- -- PEAK 4 7434.00 -11.94 54.00 -65.94 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH16-HY Condition: PEAK_74 3m 9120D-1522_240328 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4956.00 41.49 74.00 -32.51 62.83 33.01 11.08 65.88 0.45 -- -- PEAK 2 4956.00 -14.43 54.00 -68.43 -- -- -- -- -- -- -- AVERAGE 3 7434.00 43.91 74.00 -30.09 59.17 36.33 13.47 65.46 0.40 -- -- PEAK 4 7434.00 -12.01 54.00 -66.01 -- -- -- -- -- -- -- AVERAGE

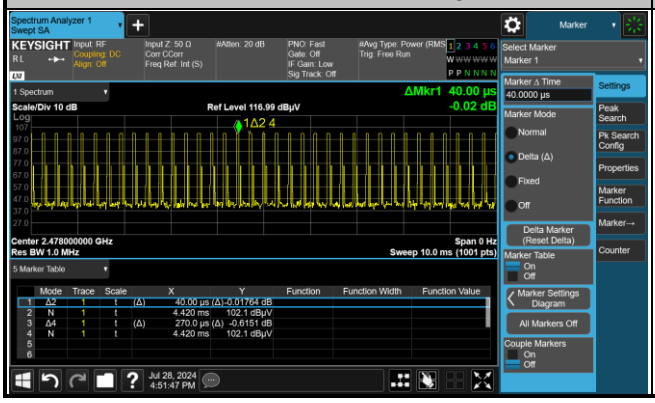
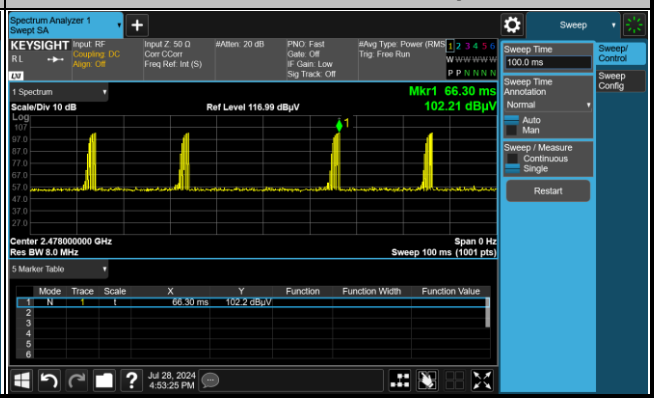
Mode	12	
	Harmonic	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	4	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL
17.7G ~18G Avg.	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 HORIZONTAL	 Site : 03CH16-HY Condition: AVG_54 3m 9120D-1522_240328 VERTICAL

Mode	15	
	LF	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	4	
Pol.	Horizontal	Vertical
QP/ Peak	 Site : 03CH16-HY Condition: QP 3m CBL6111D&00802N1D01N-06 _47020 & 06 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 78.50 21.54 40.00 -18.46 39.48 13.31 1.15 32.40 0.00 -- -- Peak 2 199.75 34.13 43.50 -9.37 49.56 14.99 1.97 32.39 0.00 -- -- Peak 3 252.13 30.59 46.00 -15.41 42.01 18.75 2.25 32.42 0.00 -- -- Peak 4 287.05 32.47 46.00 -13.53 43.39 19.05 2.44 32.41 0.00 -- -- Peak 5 680.87 32.30 46.00 -13.70 34.67 26.45 3.88 32.70 0.00 -- -- Peak 6 939.86 32.21 46.00 -13.79 28.90 30.39 4.52 31.60 0.00 -- -- Peak	 Site : 03CH16-HY Condition: QP 3m CBL6111D&00802N1D01N-06 _47020 & 06 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 41.64 32.05 40.00 -7.95 45.10 18.57 0.85 32.47 0.00 100 329 QP 2 198.78 31.05 43.50 -12.45 46.55 14.93 1.96 32.39 0.00 -- -- Peak 3 251.16 28.45 46.00 -17.55 39.99 18.63 2.25 32.42 0.00 -- -- Peak 4 285.11 28.31 46.00 -17.69 39.30 18.99 2.43 32.41 0.00 -- -- Peak 5 737.13 29.70 46.00 -16.30 30.25 27.96 4.06 32.57 0.00 -- -- Peak 6 947.62 33.54 46.00 -12.46 29.81 30.73 4.54 31.54 0.00 -- -- Peak

Mode	16	
	SHF	
	2400-2483.5_Bluetooth-LE_ASK _CH76_2478MHz	
ANT	4	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH16-HY Condition: PEAK_74 1m SHF_00993_231124 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 24952.97 39.16 74.00 -34.84 55.62 39.29 7.11 53.32 -9.54 -- -- PEAK	 Site : 03CH16-HY Condition: PEAK_74 1m SHF_00993_231124 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 24795.16 38.98 74.00 -35.02 55.59 39.19 7.12 53.38 -9.54 -- -- PEAK

Appendix D. Duty Cycle Plots

<Ant. 3>

Bluetooth - LE for 1Mbps	Bluetooth - LE for 1Mbps
	

Note:

1. Worst case Duty cycle = on time/100 milliseconds = 4 * 0.040 / 100 = 0.16%
2. Worst case Duty cycle correction factor = 20*log(Duty cycle) = -55.92 dB

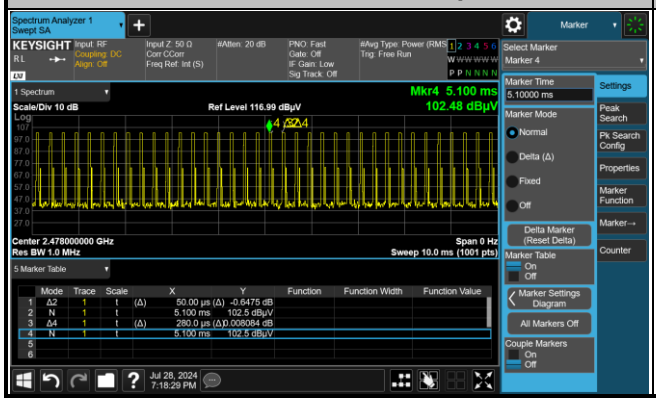
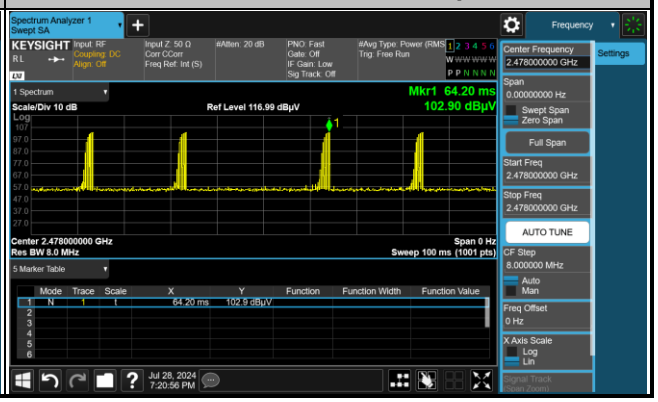
Duty Cycle Correction Factor Consideration for AFH mode:

The maximum possible ON time:

0.040 ms x 4 =0.16ms

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

20 x log(0.16 ms/100 ms) = -55.92 dB

Bluetooth - LE for 2Mbps	Bluetooth - LE for 2Mbps
	

Note:

1. Worst case Duty cycle = on time/100 milliseconds = 4 * 0.050 / 100 = 0.20%
2. Worst case Duty cycle correction factor = 20*log(Duty cycle) = -53.98 dB

Duty Cycle Correction Factor Consideration for AFH mode:

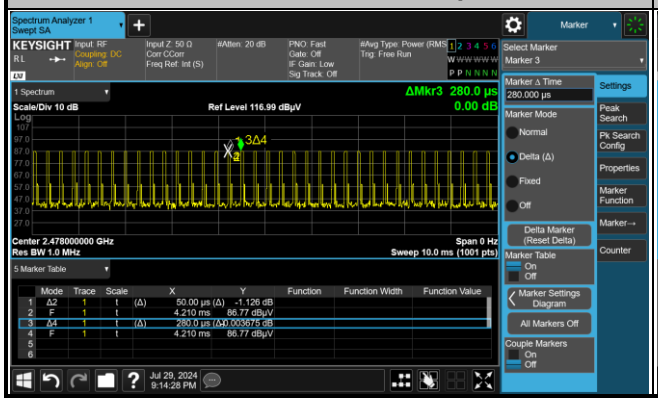
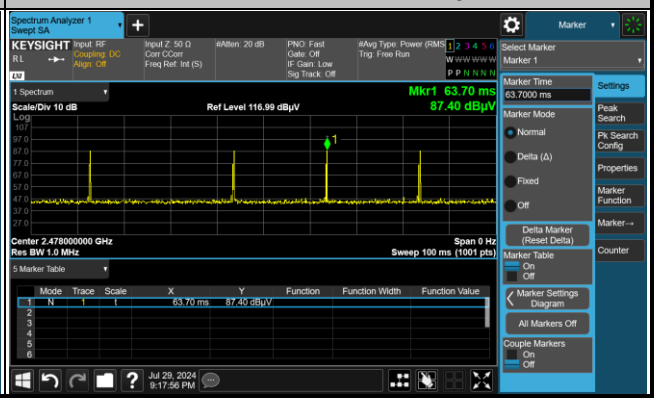
The maximum possible ON time:

0.040 ms x 5 = 0.2 ms

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

20 x log(0.2 ms/100 ms) = -53.98 dB

<Ant. 4>

Bluetooth - LE for 1Mbps	Bluetooth - LE for 1Mbps
	

Note:

1. Worst case Duty cycle = on time/100 milliseconds = 4 * 0.050 / 100 =0.20 %
2. Worst case Duty cycle correction factor = 20*log(Duty cycle) = -53.98 dB

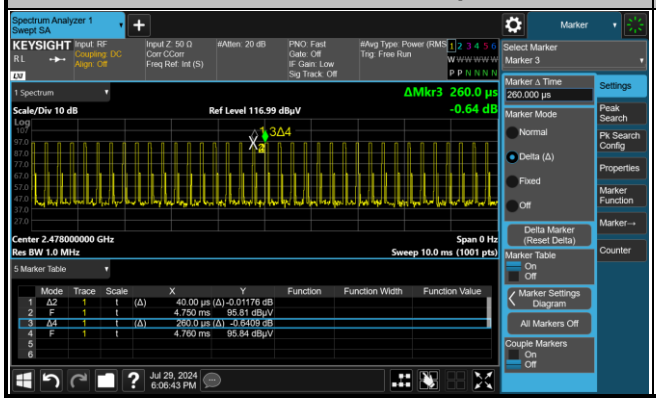
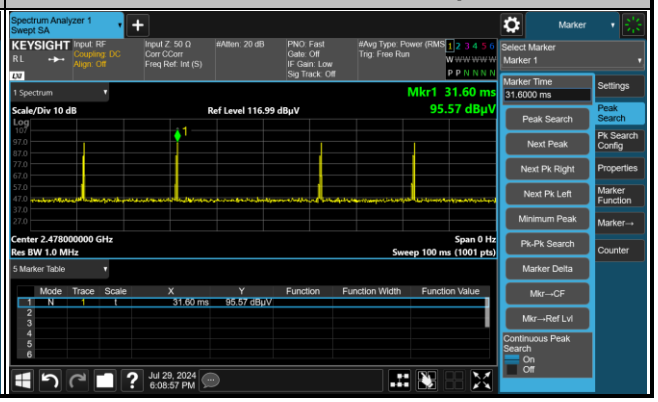
Duty Cycle Correction Factor Consideration for AFH mode:

The maximum possible ON time:

0.040 ms x 5 = 0.2 ms

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

20 x log(0.2 ms/100 ms) = -53.98 dB

Bluetooth - LE for 2Mbps	Bluetooth - LE for 2Mbps
	

Note:

1. Worst case Duty cycle = on time/100 milliseconds = 4 * 0.040 / 100 = 0.16%
2. Worst case Duty cycle correction factor = 20*log(Duty cycle) = -55.92 dB

Duty Cycle Correction Factor Consideration for AFH mode:

The maximum possible ON time:

0.040 ms x 4 = 0.16 ms

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

20 x log(0.16 ms/100 ms) = -55.92 dB

Appendix E. Spot Check Evaluation on GTF7P, G3Y12

Conducted power test and radiated spurious emission test configurations were selected from the worst cases identified in the reference model and tested to demonstrate the test data from reference model remains representative for the variant model.

The deviation between the spot check and the referenced values is within 3dB, therefore data referencing is justified according to the guidance in the ECR inquiry

Test Item	Mode	A4RGXQ96 Reference Worst Result	A4RGTF7P Variant Check Result	Difference (dB)
Conducted Power (dBm)	WWAN GPRS 850 Class 8 CH128	32.60	32.32	0.28
	WWAN GPRS 1900 Class 8 CH512	29.28	29.21	0.07
	WWAN WCDMA Band V RMC 12.2K CH4182	24.77	24.62	0.15
	WWAN LTE Band 5 10MHz 1RB0 QPSK Mid	24.72	24.71	0.01
	WWAN LTE Band 7 20MHz 1RB0 QPSK Mid	24.45	24.33	0.12
	WWAN LTE Band 12 10MHz 1RB0 QPSK Mid	24.66	24.66	0.00
	WWAN LTE Band 26 (90S) 5MHz 1RB0 QPSK High	24.70	24.65	0.05
	WWAN LTE Band 41 HPUE 15MHz 1RB37 QPSK Mid	26.43	26.36	0.07
	WWAN NR n5 10MHz 1RB1 QPSK Low	25.18	25.02	0.16
	WWAN NR n7 25MHz 1RB1 QPSK High	24.83	24.58	0.25
	WWAN NR n12 15MHz 36RB18 BPSK Low	24.88	24.84	0.04
	WWAN NR n26 5MHz 1RB23 QPSK Low	25.19	24.92	0.27
	WWAN NR n41 HPUE 100MHz 1RB1 QPSK Low	27.15	26.96	0.19
	WWAN NR n77 HPUE 50MHz 1RB1 QPSK Low	27.20	26.93	0.27

Test Item	Mode	ANT	A4RGXQ96 Reference Worst Result	A4RGTF7P Variant Check Result	Difference (dB)
Conducted Power (dBm)	BT (BR 1Mbps CH39)	4	20.69	20.59	0.10
	BLE / BT EDR (BLE 2Mbps CH19)	4	20.20	20.16	0.04
	BLE CS GFSK_DTS (2Mbps CH38)	4	20.50	20.30	0.20
	BLE CS ASK_FHSS (2Mbps CH38)	4	20.29	20.12	0.17
	WiFi 2.4GHz (HE20 CH06 Full RU)	4+3	23.98	23.85	0.13
	WiFi 5GHz (11a CH169)	4+3	22.55	22.29	0.26
	WiFi 6GHz (11a CH049)	4+3	21.69	21.60	0.09

Test Item	Mode	ANT	A4RGXQ96 Reference Worst Result	A4RGTF7P Variant Check Result	Difference (dB)
Field Strength (dBuV/m)	NFC 13.56MHz	-	25.45	23.86	1.59
Radiated Spurious Emission (dBuV/m)	NFC 13.56MHz	-	-3.19	-3.27	0.08
Radiated Spurious Emission (dBm)	WWAN GSM 850 CH189	0	-18.90	-21.23	2.33
	WWAN GSM 1900 CH512	2	-20.77	-22.79	2.02
	WWAN WCDMA Band V CH4132	0	-41.92	-43.94	2.02
	WWAN LTE Band 26 10MHz 1RB0 QPSK High	0	-32.45	-32.71	0.26
	WWAN LTE Band 7 10MHz 1RB0 QPSK High	0	-21.91	-23.47	1.56
	WWAN LTE Band 12 10MHz 1RB0 QPSK Low	1	-32.20	-33.22	1.02
	WWAN LTE Band 26 (90S) 15MHz 1RB0 QPSK Mid	0	-20.42	-22.30	1.88
	WWAN LTE Band 41 HPUE 10MHz 1RB0 QPSK Low	0	-10.25	-11.23	0.98
	WWAN NR n26 20MHz 1RB1 BPSK High	1	-29.65	-31.05	1.40
	WWAN NR n7 20MHz 1RB1 BPSK Low	0	-21.64	-21.87	0.23
	WWAN NR n12 10MHz 1RB1 BPSK Low	1	-35.23	-36.03	0.80
	WWAN NR n26 (90S) 15MHz 1RB1 BPSK Mid	1	-31.65	-33.29	1.64
	WWAN NR n41 20MHz 1RB1 BPSK Mid	2	-12.22	-14.37	2.15
	WWAN NR n77 HPUE (27Q) 20MHz 1RB1 BPSK Low	6	-20.74	-22.69	1.95
		2	-37.09	-39.98	2.89

Test Item	Mode	ANT	A4RGXQ96 Reference Worst Result	A4RGTF7P Variant Check Result	Difference (dB)
Radiated Spurious Emission (dBuV/m)	BT (BR 1Mbps CH78)	4	-16.58	-19.44	2.86
	BLE / BT EDR (BLE 1Mbps CH39)	4	-4.11	-6.08	1.97
	BLE CS GFSK_DTS (2Mbps CH76)	3	-1.95	-2.16	0.21
	BLE CS ASK_FHSS (2Mbps CH76)	3	-10.53	-11.69	1.16
	WiFi 2.4GHz (HE20 CH12 Full RU)	4+3	-1.58	-2.78	1.20
	WiFi 5GHz (HE20 CH136 Full RU)	4+3	-1.52	-2.24	0.72
	WiFi 6GHz (11a CH001)	4+3	-1.89	-2.39	0.50

Note: BLE CS means BLE Channel Sounding.

Reference detail Section

Rule Part	Equipment Class	Wireless Technology	Rule Part & Frequency Band	Reference FCC ID (Parent)	Type Grant/ Permissive Change	Reference Exhibit	Full report referenced	FCC ID Filling (Variant)
15C	DSS	BLE CS ASK	§15.247 2.4GHz	A4RGXQ96	Original Grant	GXQ96_FCC Part 15C BLE CS ASK	Y	A4RGTF7P

Note: BLE CS means BLE Channel Sounding

List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LOOP Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 12, 2023	Aug. 08, 2024~ Aug. 12, 2024	Sep. 11, 2024	Radiation (03CH21-HY)
Bilog Antenna	TESEQ & WOKEN	CBL 6111D & 00802N1D-06	63303 & 001	30MHz~1GHz	Oct. 15, 2023	Aug. 08, 2024~ Aug. 12, 2024	Oct. 14, 2024	Radiation (03CH21-HY)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00227880	1GHz~18GHz	Oct. 04, 2023	Aug. 08, 2024~ Aug. 12, 2024	Oct. 03, 2024	Radiation (03CH21-HY)
Double Ridged Guide Horn Antenna	RFSPIN	DRH18-E	LE2C03A18EN	1GHz~18GHz	Jul. 11, 2024	Aug. 08, 2024~ Aug. 12, 2024	Jul. 10, 2025	Radiation (03CH21-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	1223	18GHz~40GHz	Jun. 24, 2024	Aug. 08, 2024~ Aug. 12, 2024	Jun. 23, 2025	Radiation (03CH21-HY)
Amplifier	SONOMA	310N	421580	30MHz~1GHz	Jul. 14, 2024	Aug. 08, 2024~ Aug. 12, 2024	Jul. 13, 2025	Radiation (03CH21-HY)
Amplifier	EMEC	EM01G18GA	060876	1GHz~18GHz	Sep. 28, 2023	Aug. 08, 2024~ Aug. 12, 2024	Sep. 27, 2024	Radiation (03CH21-HY)
Preamplifier	EMEC	EM18G40G	060871	18GHz~40GHz	Aug. 30, 2023	Aug. 08, 2024~ Aug. 12, 2024	Aug. 29, 2024	Radiation (03CH21-HY)
Spectrum Analyzer	Keysight	N9010B	MY62170358	10Hz~44GHz	Aug. 28, 2023	Aug. 08, 2024~ Aug. 12, 2024	Aug. 27, 2024	Radiation (03CH21-HY)
Signal Generator	Rohde & Schwarz	SMW200A	111391	N/A	Jan. 23, 2024	Aug. 08, 2024~ Aug. 12, 2024	Jan. 22, 2025	Radiation (03CH21-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9K~30M	Mar. 06, 2024	Aug. 08, 2024~ Aug. 12, 2024	Mar. 05, 2025	Radiation (03CH21-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804397/2,804612/2,804614/2	30MHz~40GHz	Oct. 24, 2023	Aug. 08, 2024~ Aug. 12, 2024	Oct. 23, 2024	Radiation (03CH21-HY)
Hygrometer	TECPEL	DTM-303A	TP211568	N/A	Oct. 30, 2023	Aug. 08, 2024~ Aug. 12, 2024	Oct. 29, 2024	Radiation (03CH21-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Aug. 08, 2024~ Aug. 12, 2024	N/A	Radiation (03CH21-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Aug. 08, 2024~ Aug. 12, 2024	N/A	Radiation (03CH21-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Aug. 08, 2024~ Aug. 12, 2024	N/A	Radiation (03CH21-HY)
Software	Audix	E3 6.2009-8-24	RK-002349	N/A	N/A	Aug. 08, 2024~ Aug. 12, 2024	N/A	Radiation (03CH21-HY)
DC Power Supply	GW Instek	GPE2323	GET910884	0V~64V ;0A~6A	Nov. 16, 2023	Jul. 31, 2024~ Aug. 03, 2024	Nov. 15, 2024	Conducted (TH03-HY)
Signal Analyzer	Rohde & Schwarz	FSV3044	101049	10Hz~44GHz	Sep. 26, 2023	Jul. 31, 2024~ Aug. 03, 2024	Sep. 25, 2024	Conducted (TH03-HY)
Temperature Chamber	ESPEC	SU-241	92003713	-30℃ ~95℃	May 14, 2024	Jul. 31, 2024~ Aug. 03, 2024	May 13, 2025	Conducted (TH03-HY)
Hygrometer	TECPEL	DTM-303B	TP200886	NA	Mar. 14, 2024	Jul. 31, 2024~ Aug. 03, 2024	Mar. 13, 2025	Conducted (TH03-HY)
Base Station (Measure)	Anritsu	MT8000A	6262148275	FR1	Oct. 24, 2023	Jul. 31, 2024~ Aug. 03, 2024	Oct. 23, 2024	Conducted (TH03-HY)
Coupler	MVE	MVE-4816-10	A400024	N/A	Jun. 27, 2024	Jul. 31, 2024~ Aug. 03, 2024	Jun. 26, 2025	Conducted (TH03-HY)
Software 1	Sporton	FCC 5GNR_FSV3044_20231106	N/A	Conducted Test Item	N/A	Jul. 31, 2024~ Aug. 03, 2024	N/A	Conducted (TH03-HY)

——THE END——