

Test Report No.50175101 003

Appendix D: Radiated Spurious Emission Data

(File: 50175101 003 Appendix D)

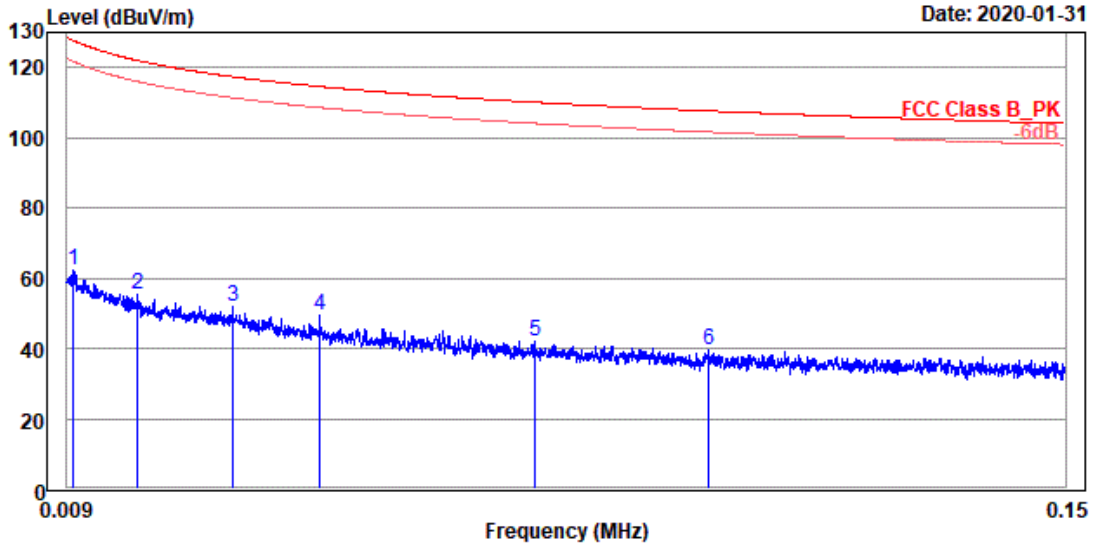
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Spurious Emissions, TX Mode, 9kHz-30MHz (125K)

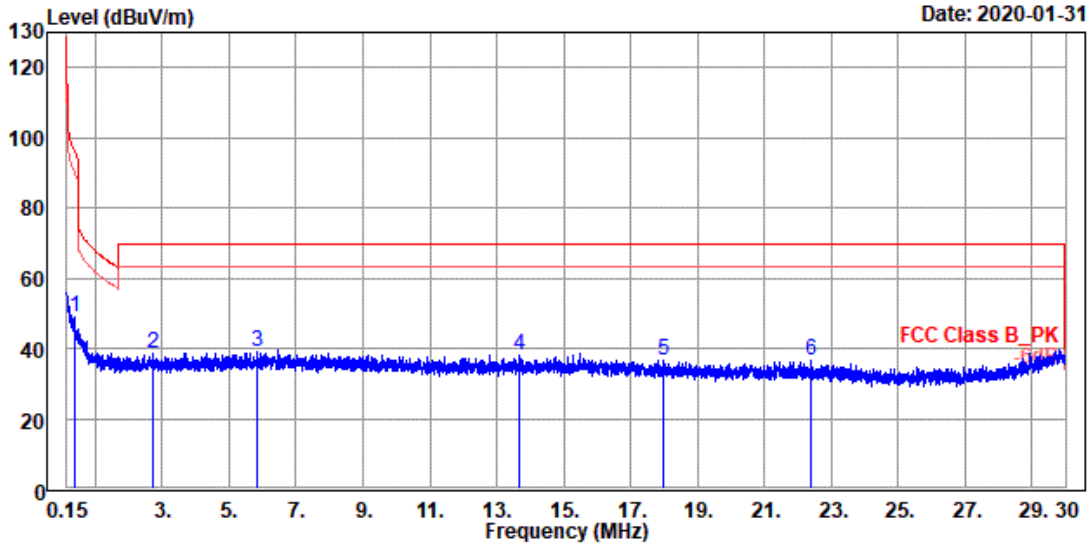


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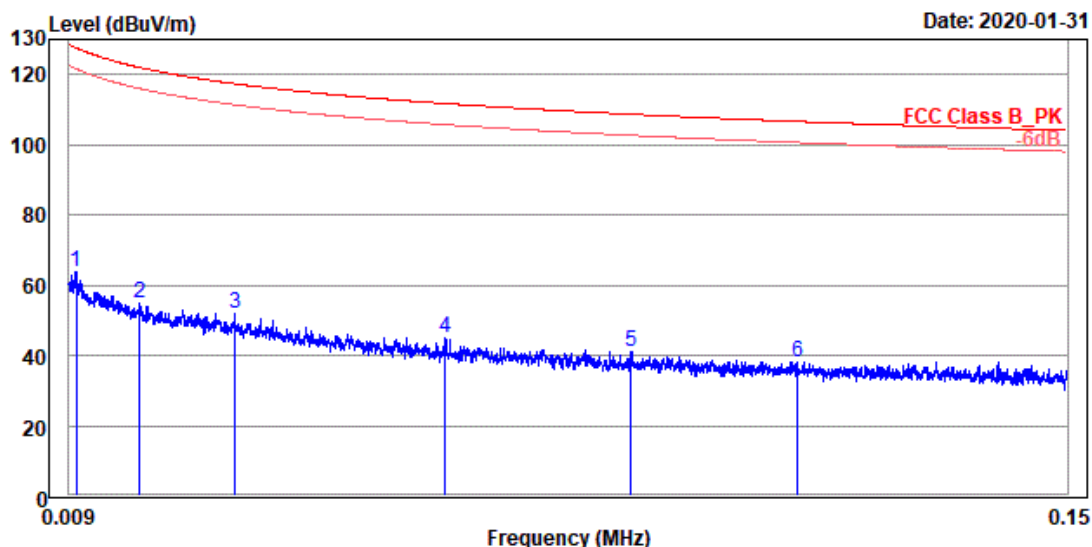
Site : 3m_Semi-Anechoic_Chamber(966_D)
 Condition : FCC Class B_PK vertical
 Test Engineer: key
 Product : SAM R34 Xplained Pro Evaluation Kit
 Model NO : A09-3167
 Test Rating : 5V
 Tmp/Hum : 22.7°C/53.9%
 Mode : TX_902.3MHz_Hybrid Mode(125k)
 Power setting: 20/sf12

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.010	62.05	-16.82	78.87	127.61	-65.56	100	352	QP	vertical
2	0.019	55.47	-17.76	73.23	122.06	-66.59	100	34	QP	vertical
3	0.032	51.67	-18.30	69.97	117.37	-65.70	100	203	QP	vertical
4	0.045	49.56	-16.81	66.37	114.59	-65.03	100	105	QP	vertical
5	0.075	42.09	-19.71	61.80	110.09	-68.00	100	262	QP	vertical
6	0.100	39.60	-19.69	59.29	107.63	-68.03	100	1	QP	vertical



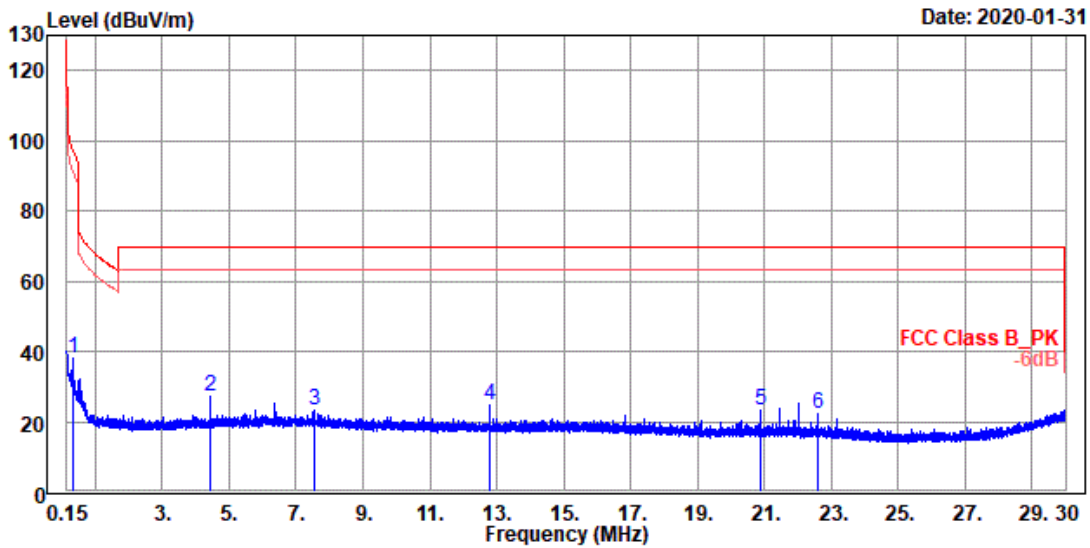
Site : 3m_Semi-Anechoic_Chamber(966_D)
 Condition : FCC Class B_PK vertical
 Test Engineer: kay
 Product : SAM R34 Xplained Pro Evaluation Kit
 Model NO : A09-3167
 Test Rating : 5V
 Tmp/Hum : 22.7°C/53.9%
 Mode : TX_902.3MHz_Hybrid Mode(125k)
 Power setting: 20/sf12

	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	Level	Factor	Line	Limit			
			dBuV	dB/m	dBuV/m	dB	cm	deg	
1	0.371	48.71	-0.26	48.97	96.22	-47.51	100	121 QP	vertical
2	2.738	38.75	0.41	38.34	69.50	-30.75	100	212 QP	vertical
3	5.845	39.21	0.85	38.36	69.50	-30.29	100	180 QP	vertical
4	13.663	38.19	0.65	37.54	69.50	-31.31	100	174 QP	vertical
5	18.000	36.35	-0.49	36.84	69.50	-33.15	100	277 QP	vertical
6	22.403	36.39	0.64	35.75	69.50	-33.11	100	59 QP	vertical



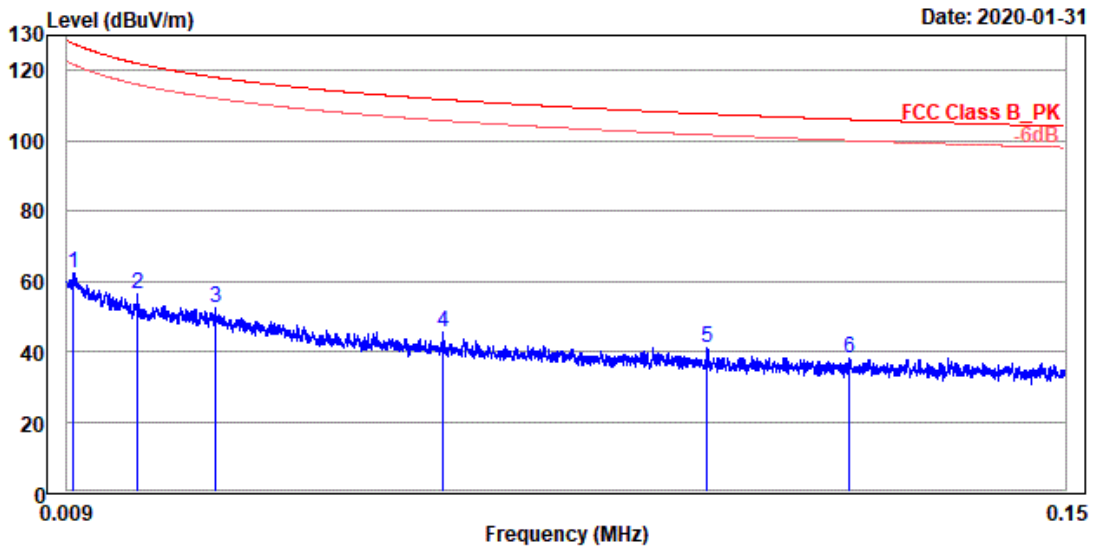
Site : 3m_Semi-Anechoic_Chamber(966_D)
 Condition : FCC Class B_PK vertical
 Test Engineer: kay
 Product : SAM R34 Xplained Pro Evaluation Kit
 Model NO : A09-3167
 Test Rating : 5V
 Tmp/Hum : 22.7°C/53.9%
 Mode : TX_914.9MHz_Hybrid Mode(125k)
 Power setting: 20/sf12

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.010	63.91	-14.94	78.85	127.60	-63.69	100	187	QP	vertical
2	0.019	55.01	-18.22	73.23	122.06	-67.05	100	109	QP	vertical
3	0.032	51.99	-18.00	69.99	117.39	-65.40	100	0	QP	vertical
4	0.062	45.07	-18.30	63.37	111.72	-66.65	100	344	QP	vertical
5	0.088	41.11	-19.46	60.57	108.66	-67.55	100	217	QP	vertical
6	0.112	38.26	-20.30	58.56	106.62	-68.36	100	314	QP	vertical



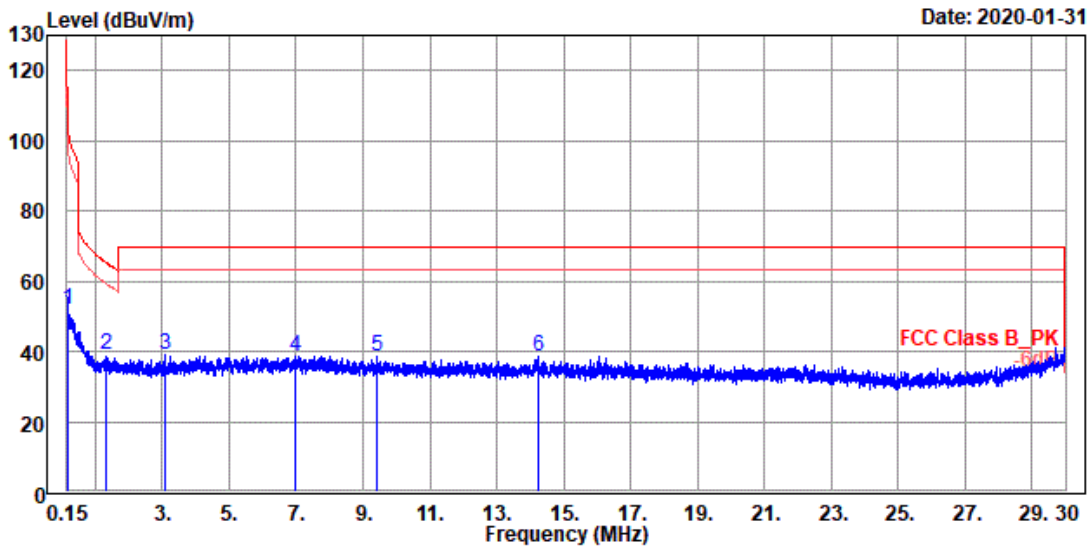
Site : 3m_Semi-Anechoic_Chamber(966_D)
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 Test Engineer: kay
 Product : SAM R34 Xplained Pro Evaluation Kit
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 Test Rating : 5V
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	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.314	37.91	-12.25	50.16	97.66	-59.75	100	45	QP	vertical
2	4.433	27.35	-10.99	38.34	69.50	-42.15	100	0	QP	vertical
3	7.538	23.20	-15.01	38.21	69.50	-46.30	100	42	QP	vertical
4	12.800	24.70	-12.69	37.39	69.50	-44.80	100	132	QP	vertical
5	20.872	23.34	-12.75	36.09	69.50	-46.16	100	233	QP	vertical
6	22.615	22.29	-13.41	35.70	69.50	-47.21	100	288	QP	vertical



Site : 3m_Semi-Anechoic_Chamber(966_D)
 Condition : FCC Class B_PK vertical
 Test Engineer: kay
 Product : SAM R34 Xplained Pro Evaluation Kit
 Model NO : A09-3167
 Test Rating : 5V
 Tmp/Hum : 22.7°C/53.9%
 Mode : TX_927.5MHz_Hybrid Mode(125k)
 Power setting: 20/sf12

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.010	62.40	-16.50	78.90	127.63	-65.23	100	0	QP	vertical
2	0.019	56.21	-17.02	73.23	122.06	-65.85	100	185	QP	vertical
3	0.030	52.29	-18.47	70.76	118.06	-65.77	100	0	QP	vertical
4	0.062	45.31	-18.06	63.37	111.73	-66.42	100	328	QP	vertical
5	0.099	40.88	-18.43	59.31	107.64	-66.76	100	248	QP	vertical
6	0.119	38.03	-20.09	58.12	106.06	-68.03	100	37	QP	vertical



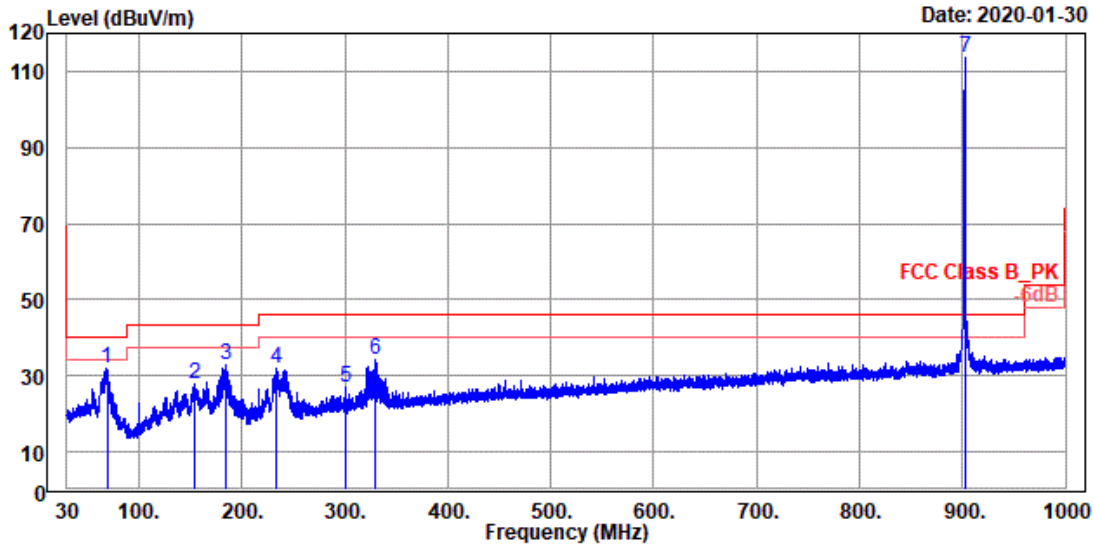
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 Power setting: 20/sf12

	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	Level	Factor	Line	Limit			
			dBuV	dB/m	dBuV/m	dB	cm	deg	
1	0.189	51.90	-2.20	54.10	102.08	-50.18	100	0 QP	vertical
2	1.320	38.80	-0.77	39.57	65.19	-26.39	100	360 QP	vertical
3	3.096	39.04	0.81	38.23	69.50	-30.46	100	37 QP	vertical
4	6.959	38.78	0.41	38.37	69.50	-30.72	100	178 QP	vertical
5	9.409	38.48	0.77	37.71	69.50	-31.02	100	333 QP	vertical
6	14.233	38.38	0.74	37.64	69.50	-31.12	100	181 QP	vertical

Spurious Emissions, TX Mode, 30MHz-1GHz (125K)

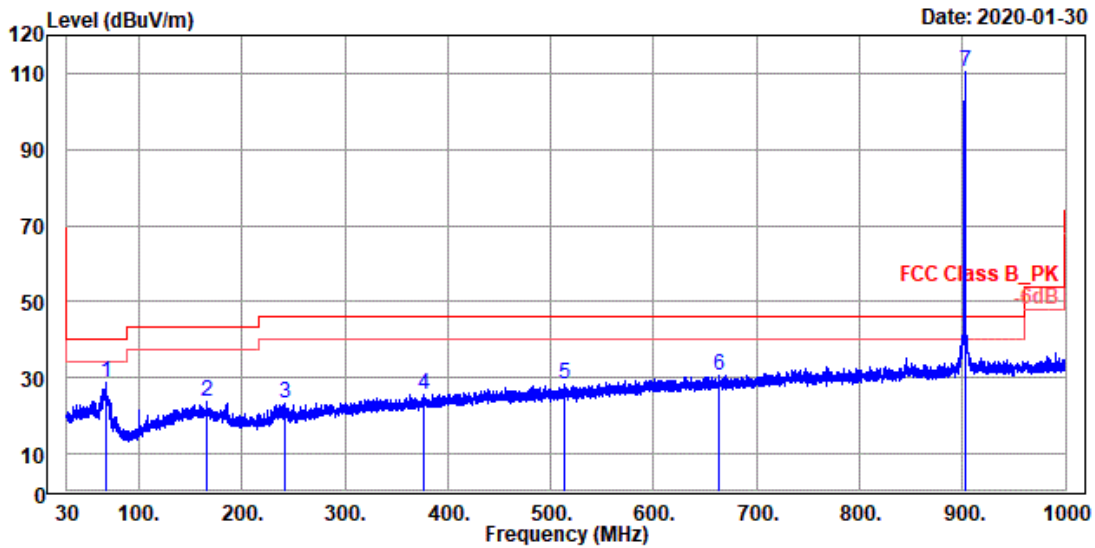


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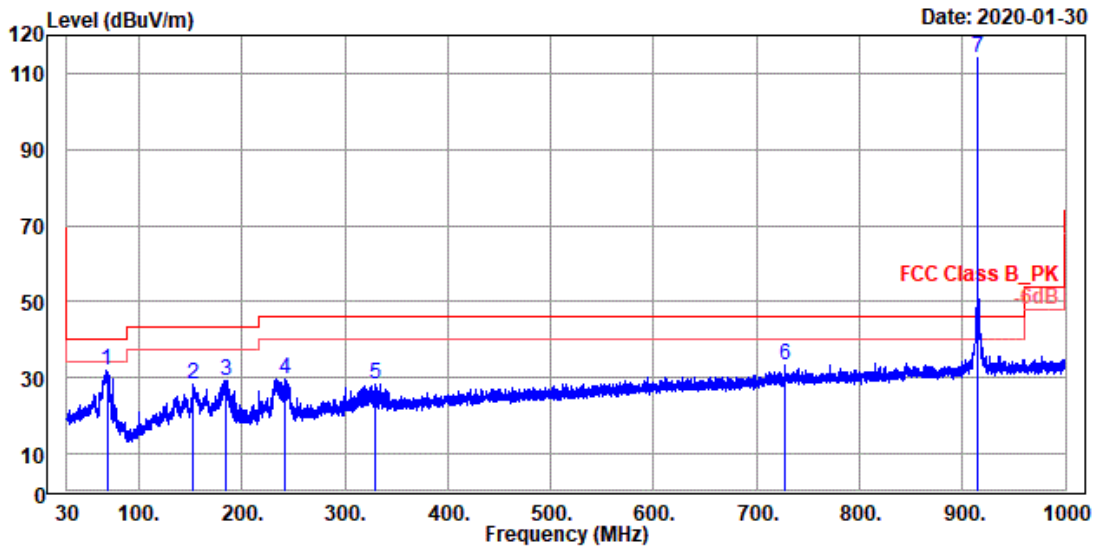
Site : 3m_Semi-Anechoic_Chamber(966_D)
 Condition : FCC Class B_PK horizontal
 Test Engineer: kay
 Product : SAM R34 Xplained Pro Evaluation Kit
 Model NO : A09-3167
 Test Rating : 5V
 Tmp/Hum : 22.7°C/53.9%
 Mode : TX_902.3MHz_Hybrid Mode(125k)
 Power setting: 20/sf12

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	68.800	31.77	39.95	-8.18	40.00	-8.23	400	147	QP	horizontal
2	154.063	27.67	33.88	-6.21	43.50	-15.83	300	327	QP	horizontal
3	184.036	33.02	40.69	-7.67	43.50	-10.48	200	350	QP	horizontal
4	233.312	32.14	39.39	-7.25	46.00	-13.86	100	129	QP	horizontal
5	300.048	26.73	31.58	-4.85	46.00	-19.27	100	148	QP	horizontal
6	329.342	34.08	38.21	-4.13	46.00	-11.92	100	296	QP	horizontal
7 *	902.300	113.40	109.28	4.12	46.00	67.40	100	93	Peak	horizontal



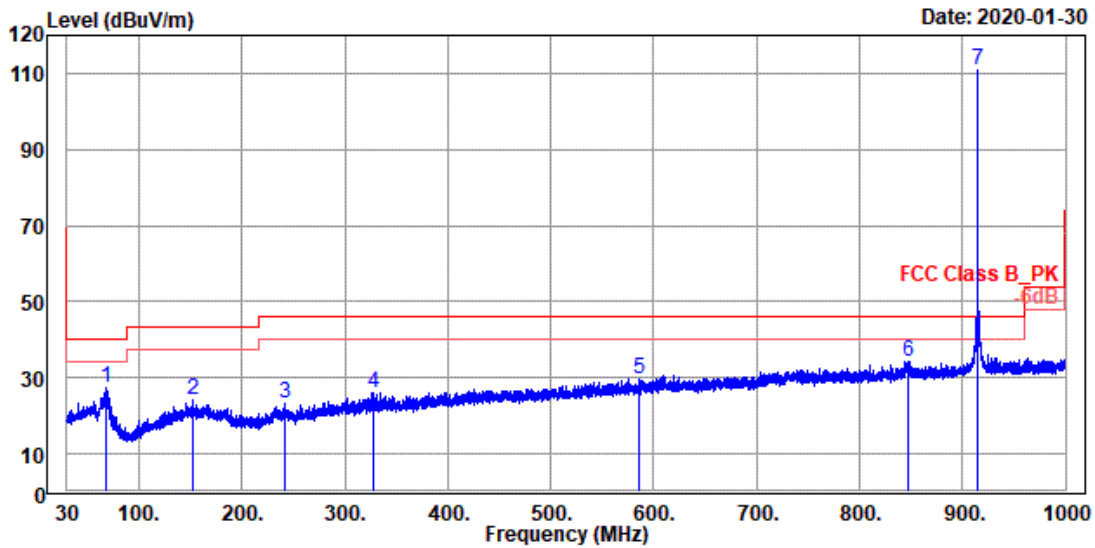
Site : 3m_Semi-Anechoic_Chamber(966_D)
 Condition : FCC Class B_PK vertical
 Test Engineer: kay
 Product : SAM R34 Xplained Pro Evaluation Kit
 Model NO : A09-3167
 Test Rating : 5V
 Tmp/Hum : 22.7°C/53.9%
 Mode : TX_902.3MHz_Hybrid Mode(125k)
 Power setting: 20/sf12

	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg	
1	68.703	28.70	36.87	-8.17	40.00	-11.30	400	92 QP	vertical
2	165.800	23.86	29.78	-5.92	43.50	-19.64	300	64 QP	vertical
3	241.848	23.10	29.90	-6.80	46.00	-22.90	200	98 QP	vertical
4	376.581	25.70	29.25	-3.55	46.00	-20.30	100	218 QP	vertical
5	513.157	28.42	30.05	-1.63	46.00	-17.58	300	358 QP	vertical
6	664.089	30.77	29.96	0.81	46.00	-15.23	100	208 QP	vertical
7 *	902.300	110.45	106.33	4.12	46.00	64.45	100	294 Peak	vertical



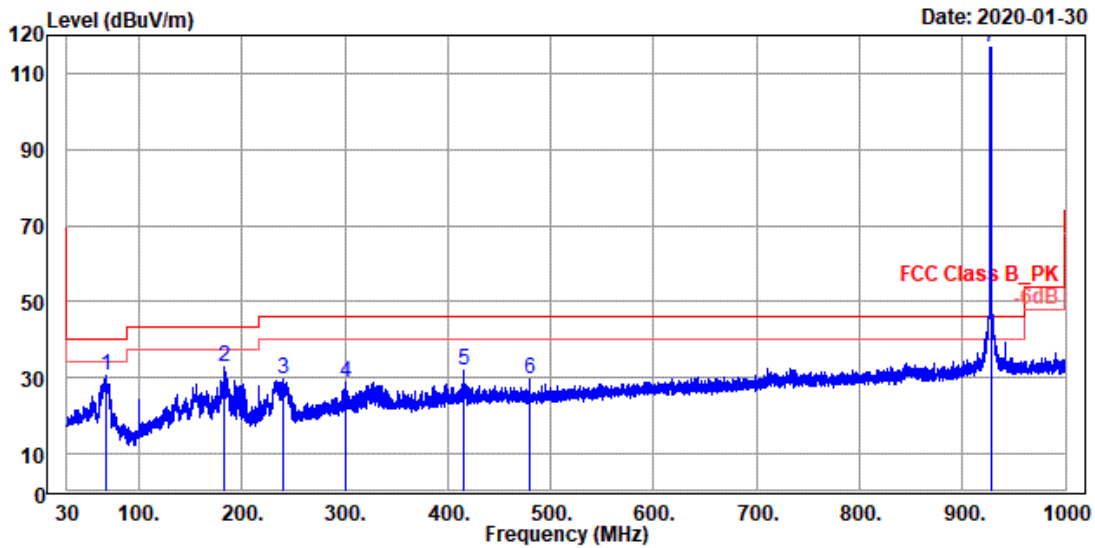
Site : 3m_Semi-Anechoic_Chamber(966_D)
 Condition : FCC Class B_PK horizontal
 Test Engineer: kay
 Product : SAM R34 Xplained Pro Evaluation Kit
 Model NO : A09-3167
 Test Rating : 5V
 Tmp/Hum : 22.7°C/53.9%
 Mode : TX_914.9MHz_Hybrid Mode(125k)
 Power setting: 20/sf12

	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	Level	Factor	Line	Limit			
			dBuV	dB/m	dBuV/m	dB	cm	deg	
1	68.800	32.01	40.19	-8.18	40.00	-7.99	305	360 QP	horizontal
2	152.220	28.25	34.53	-6.28	43.50	-15.25	200	158 QP	horizontal
3	184.812	29.38	37.13	-7.75	43.50	-14.12	200	178 QP	horizontal
4	242.527	29.62	36.40	-6.78	46.00	-16.38	100	138 QP	horizontal
5	330.215	28.34	32.47	-4.13	46.00	-17.66	100	151 QP	horizontal
6	727.624	33.23	31.43	1.80	46.00	-12.77	300	155 QP	horizontal
7 *	914.900	113.97	109.53	4.44	46.00	67.97	100	98 Peak	horizontal



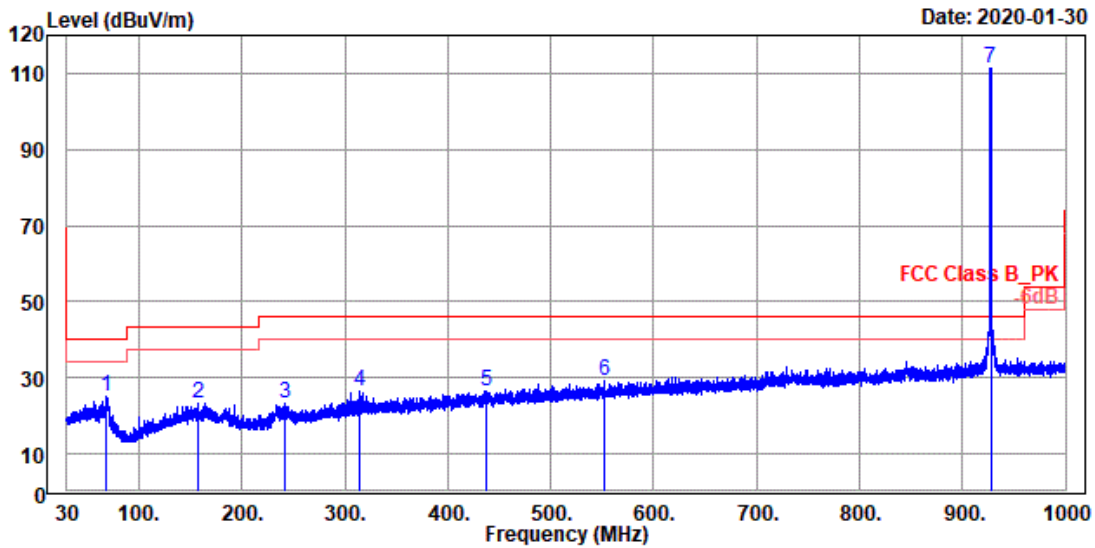
Site : 3m_Semi-Anechoic_Chamber(966_D)
 Condition : FCC Class B_PK vertical
 Test Engineer: kay
 Product : SAM R34 Xplained Pro Evaluation Kit
 Model NO : A09-3167
 Test Rating : 5V
 Tmp/Hum : 22.7°C/53.9%
 Mode : TX_914.9MHz_Hybrid Mode(125k)
 Power setting: 20/sf12

	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	Level	Factor	Line	Limit			
			dBuV	dB/m	dBuV/m	dB	cm	deg	
1	67.345	27.34	35.27	-7.93	40.00	-12.66	300	112 QP	vertical
2	152.705	24.22	30.49	-6.27	43.50	-19.28	200	70 QP	vertical
3	242.236	23.25	30.04	-6.79	46.00	-22.75	200	77 QP	vertical
4	328.275	26.07	30.21	-4.14	46.00	-19.93	300	356 QP	vertical
5	586.489	29.72	29.90	-0.18	46.00	-16.28	400	33 QP	vertical
6	848.098	34.25	30.79	3.46	46.00	-11.75	400	360 QP	vertical
7 *	914.900	111.10	106.66	4.44	46.00	65.10	100	294 Peak	vertical



Site : 3m_Semi-Anechoic_Chamber(966_D)
 Condition : FCC Class B_PK horizontal
 Test Engineer: kay
 Product : SAM R34 Xplained Pro Evaluation Kit
 Model NO : A09-3167
 Test Rating : 5V
 Tmp/Hum : 22.7°C/53.9%
 Mode : TX_927.5MHz_Hybrid Mode(125k)
 Power setting: 20/sf12

	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	Level	Factor	Line	Limit			
			dBuV	dB/m	dBuV/m	dB	cm	deg	
1	67.345	30.55	38.48	-7.93	40.00	-9.45	200	203 QP	horizontal
2	182.775	32.79	40.34	-7.55	43.50	-10.71	200	161 QP	horizontal
3	240.296	29.84	36.69	-6.85	46.00	-16.16	100	159 QP	horizontal
4	300.048	28.62	33.47	-4.85	46.00	-17.38	100	136 QP	horizontal
5	415.963	31.94	34.80	-2.86	46.00	-14.06	100	44 QP	horizontal
6	479.983	29.54	31.67	-2.13	46.00	-16.46	192	360 QP	horizontal
7 *	927.500	116.95	112.27	4.68	46.00	70.95	100	96 Peak	horizontal



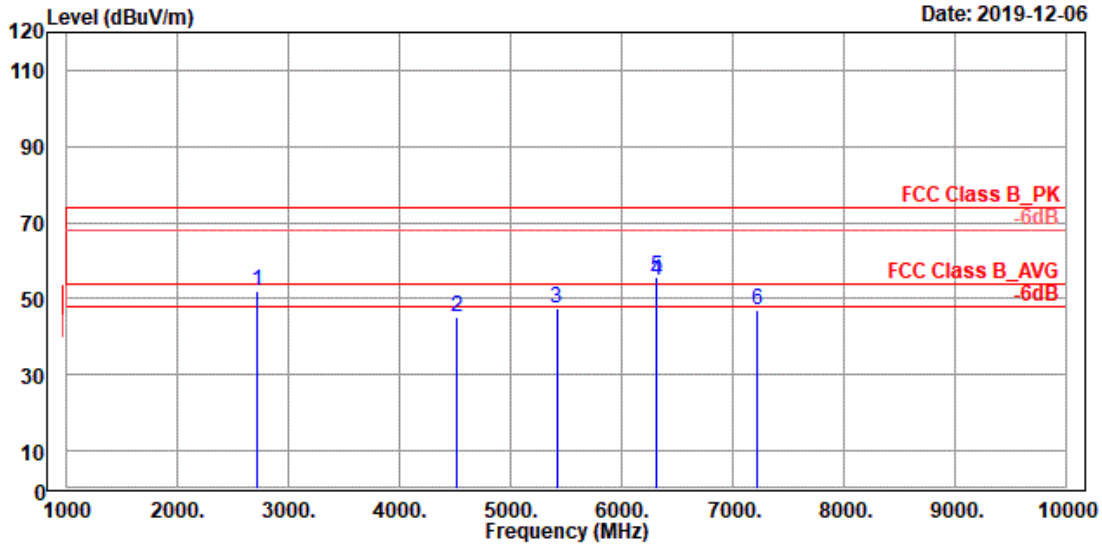
Site : 3m_Semi-Anechoic_Chamber(966_D)
 Condition : FCC Class B_PK vertical
 Test Engineer: kay
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 Power setting: 20/sf12

	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	Level	Factor	Line	Limit			
			dBuV	dB/m	dBuV/m	dB	cm	deg	
1	68.606	25.09	33.24	-8.15	40.00	-14.91	100	101 QP	vertical
2	156.779	23.45	29.58	-6.13	43.50	-20.05	200	235 QP	vertical
3	242.236	23.24	30.03	-6.79	46.00	-22.76	200	108 QP	vertical
4	314.404	26.41	30.97	-4.56	46.00	-19.59	100	42 QP	vertical
5	436.818	26.49	28.89	-2.40	46.00	-19.51	100	8 QP	vertical
6	552.054	29.08	29.98	-0.90	46.00	-16.92	100	28 QP	vertical
7 *	927.500	111.40	106.72	4.68	46.00	65.40	100	295 Peak	vertical

Spurious Emissions, TX Mode, 1GHz-10GHz (125K)



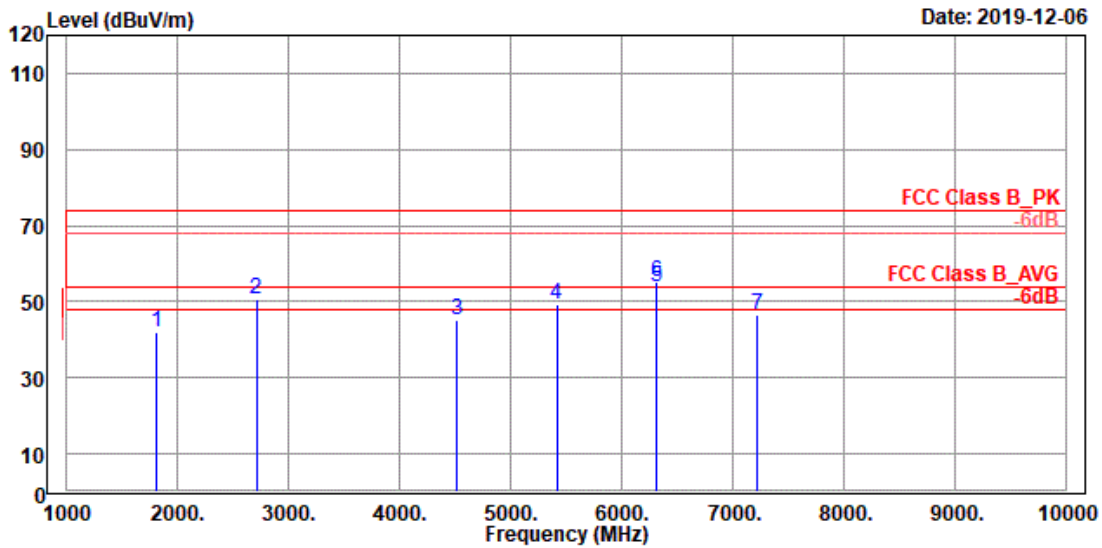
TUV Rheinland Taiwan Ltd.
 No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
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Site : 3m_Semi-Anechoic_Chamber(966_D)
 Condition : FCC Class B_PK horizontal
 Test Engineer: kay
 Product : SAM R34 Xplained Pro Evaluation Kit
 Model NO : A09-3167
 Test Rating : 5V
 Tmp/Hum : 22.7°C/53.9%
 Mode : TX_902.3MHz_Hybrid Mode(125k)
 Power setting: 20/sf12

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2707.000	51.86	65.21	-13.35	74.00	-22.14	100	276	Peak	
2	4512.000	45.25	54.97	-9.72	74.00	-28.75	100	246	Peak	
3	5414.500	47.63	55.90	-8.27	74.00	-26.37	100	51	Peak	
4 *	6316.000	54.76	62.20	-7.44	54.00	0.76	100	266	Average	Non-RB
5	6316.000	55.50	62.94	-7.44	74.00	-18.50	100	266	Peak	Non-RB
6	7218.500	46.80	53.59	-6.79	74.00	-27.20	400	180	Peak	

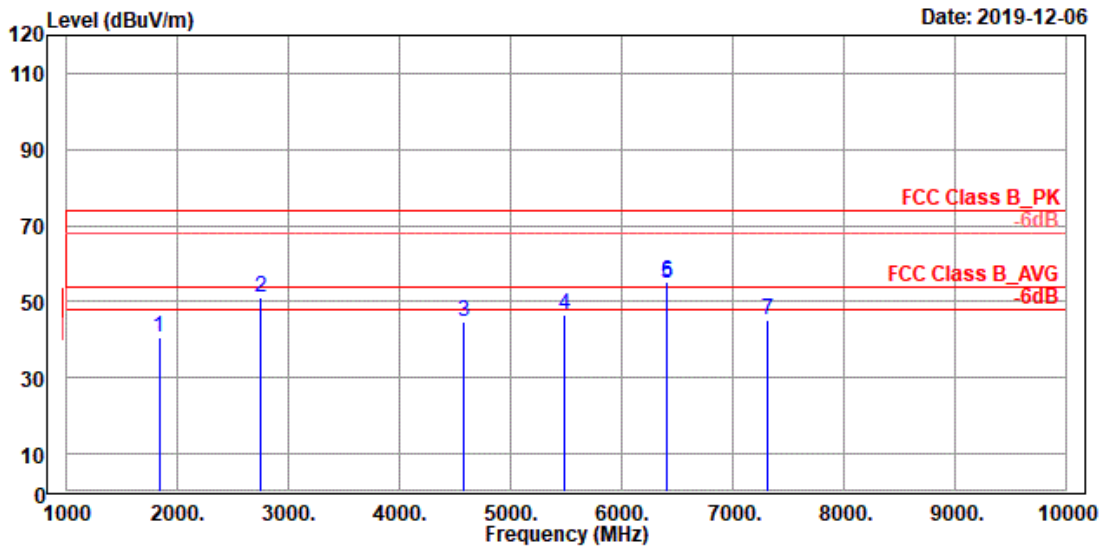
Remark: Non-RB means Non-Restricted Bands.



Site : 3m_Semi-Anechoic_Chamber(966_D)
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	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	1804.500	41.80	58.26	-16.46	74.00	-32.20	100	290	Peak	
2	2706.500	50.45	63.80	-13.35	74.00	-23.55	300	118	Peak	
3	4512.000	45.03	54.75	-9.72	74.00	-28.97	300	276	Peak	
4	5414.000	49.21	57.49	-8.28	74.00	-24.79	100	250	Peak	
5 !	6316.500	53.83	61.27	-7.44	54.00	-0.17	100	220	Average	Non-RB
6	6316.500	55.15	62.59	-7.44	74.00	-18.85	100	220	Peak	Non-RB
7	7219.000	46.58	53.36	-6.78	74.00	-27.42	100	170	Peak	

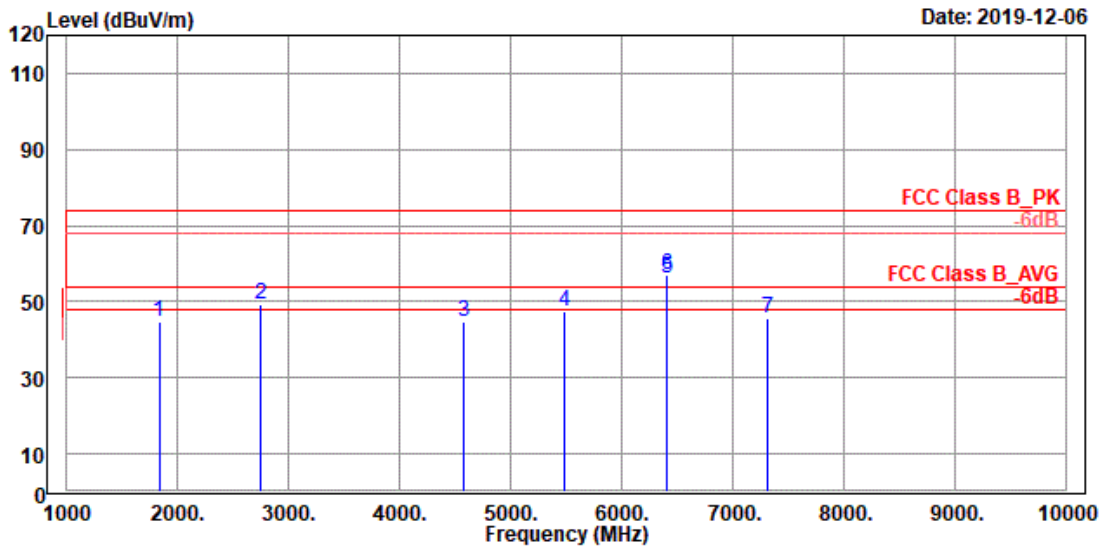
Remark: Non-RB means Non-Restricted Bands.



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	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	1830.000	40.46	56.63	-16.17	74.00	-33.54	300	111	Peak	
2	2745.000	51.23	64.31	-13.08	74.00	-22.77	300	276	Peak	
3	4574.000	44.86	54.59	-9.73	74.00	-29.14	400	158	Peak	
4	5489.500	46.35	54.50	-8.15	74.00	-27.65	400	211	Peak	
5 *	6404.500	54.62	62.02	-7.40	54.00	0.62	100	262	Average	Non-RB
6	6404.500	55.40	62.80	-7.40	74.00	-18.60	100	262	Peak	Non-RB
7	7319.000	45.00	51.70	-6.70	74.00	-29.00	300	14	Peak	

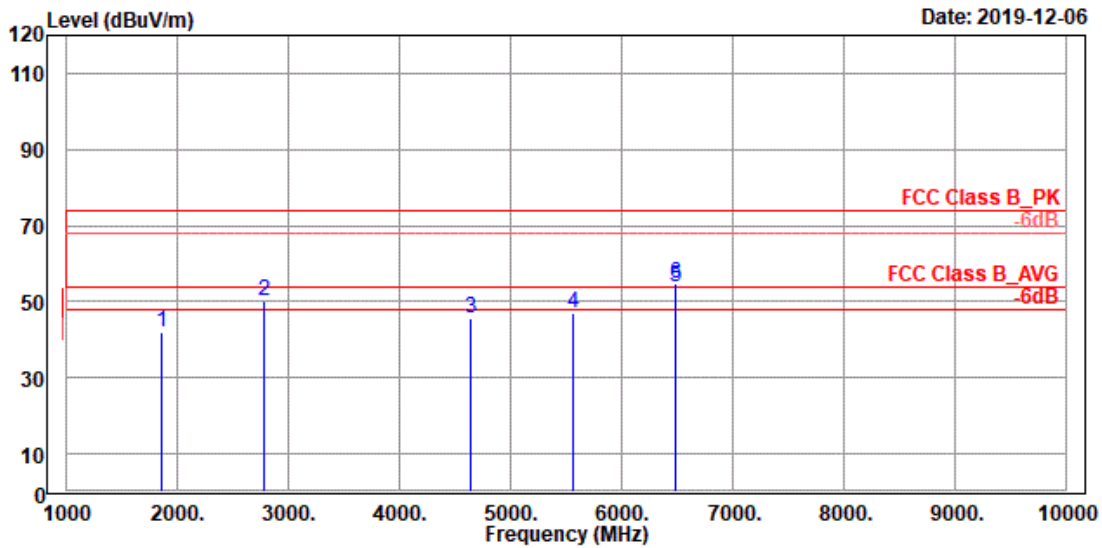
Remark: Non-RB means Non-Restricted Bands.



Site : 3m_Semi-Anechoic_Chamber(966_D)
 Condition : FCC Class B_PK vertical
 Test Engineer: kay
 Product : SAM R34 Xplained Pro Evaluation Kit
 Model NO : A09-3167
 Test Rating : 5V
 Tmp/Hum : 22.7°C/53.9%
 Mode : TX_914.9MHz_Hybrid Mode(125k)
 Power setting: 20/sf12

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	1830.000	44.89	61.06	-16.17	74.00	-29.11	100	286	Peak	
2	2745.000	49.14	62.22	-13.08	74.00	-24.86	228	0	Peak	
3	4575.000	44.71	54.44	-9.73	74.00	-29.29	300	194	Peak	
4	5489.000	47.30	55.45	-8.15	74.00	-26.70	300	274	Peak	
5 *	6404.500	56.29	63.69	-7.40	54.00	2.29	100	98	Average	Non-RB
6	6404.500	56.81	64.21	-7.40	74.00	-17.19	100	98	Peak	Non-RB
7	7319.500	45.67	52.37	-6.70	74.00	-28.33	100	167	Peak	

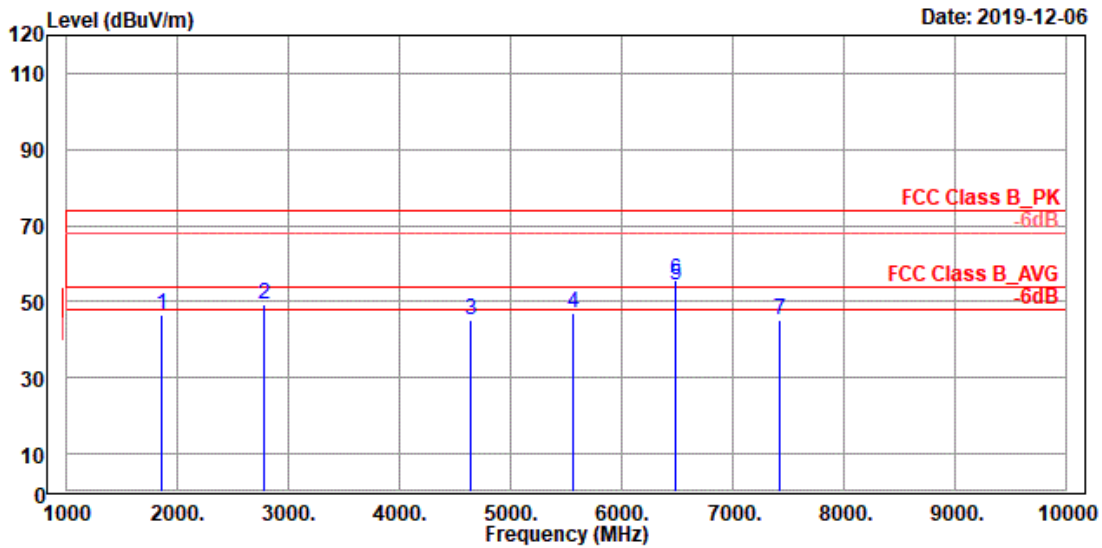
Remark: Non-RB means Non-Restricted Bands.



Site : 3m_Semi-Anechoic_Chamber(966_D)
 Condition : FCC Class B_PK horizontal
 Test Engineer: kay
 Product : SAM R34 Xplained Pro Evaluation Kit
 Model NO : A09-3167
 Test Rating : 5V
 Tmp/Hum : 22.7°C/53.9%
 Mode : TX_927.5MHz_Hybrid Mode(125k)
 Power setting: 20/sf12

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	1855.000	41.85	57.76	-15.91	74.00	-32.15	300	110	Peak	
2	2782.500	49.96	62.97	-13.01	74.00	-24.04	100	279	Peak	
3	4638.000	45.43	55.03	-9.60	74.00	-28.57	100	213	Peak	
4	5565.500	46.83	55.03	-8.20	74.00	-27.17	100	60	Peak	
5 !	6492.500	53.89	61.27	-7.38	54.00	-0.11	100	263	Average	Non-RB
6	6492.500	54.74	62.12	-7.38	74.00	-19.26	100	263	Peak	Non-RB

Remark: Non-RB means Non-Restricted Bands.



Site : 3m_Semi-Anechoic_Chamber(966_D)
 Condition : FCC Class B_PK vertical
 Test Engineer: kay
 Product : SAM R34 Xplained Pro Evaluation Kit
 Model NO : A09-3167
 Test Rating : 5V
 Tmp/Hum : 22.7°C/53.9%
 Mode : TX_927.5MHz_Hybrid Mode(125k)
 Power setting: 20/sf12

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	1855.000	46.67	62.58	-15.91	74.00	-27.33	100	124	Peak	
2	2782.500	49.37	62.38	-13.01	74.00	-24.63	219	0	Peak	
3	4637.500	45.19	54.79	-9.60	74.00	-28.81	300	204	Peak	
4	5565.500	47.10	55.30	-8.20	74.00	-26.90	100	250	Peak	
5 *	6492.500	54.20	61.58	-7.38	54.00	0.20	100	104	Average	Non-RB
6	6492.500	55.48	62.86	-7.38	74.00	-18.52	100	104	Peak	Non-RB
7	7420.000	45.22	51.96	-6.74	74.00	-28.78	100	339	Peak	

Remark: Non-RB means Non-Restricted Bands.