

Test Report No.50075139 001

Appendix D: Radiated Spurious Emission Data

(File: 50075139AppendixD)

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Radiated Emissions, Fundamental

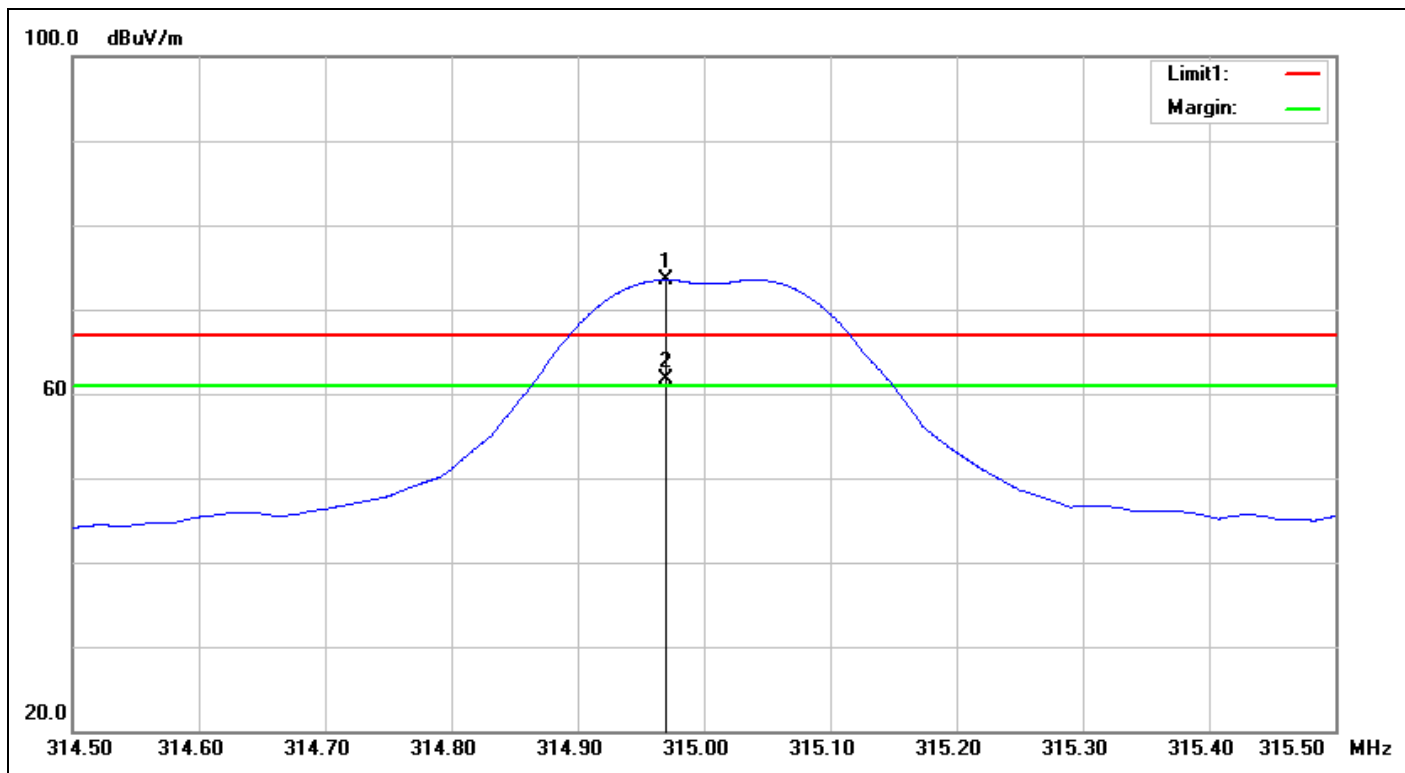
Radiated Emissions, Fundamental



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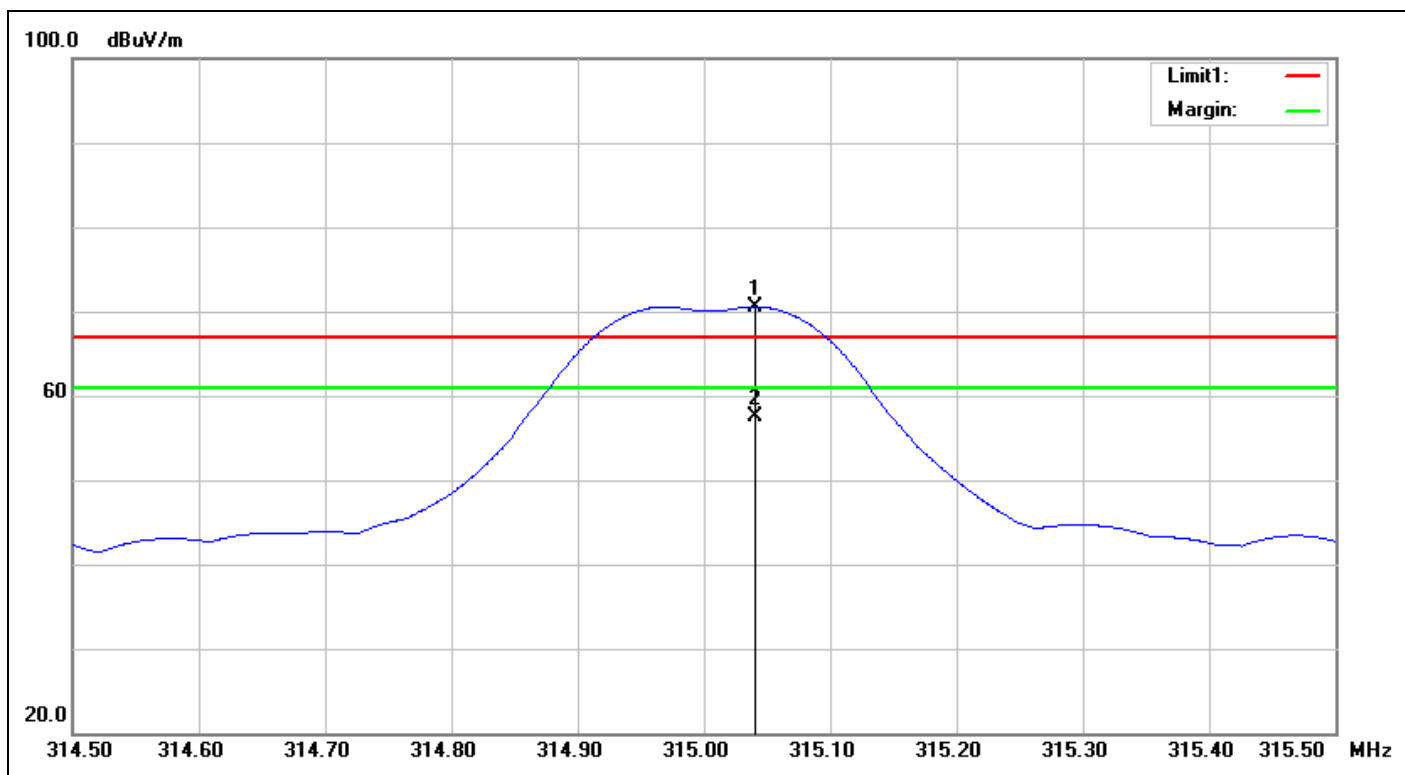
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Service No.:	114061337(DF-UNISENSOR)-FCC	Test Distance:	3m
Test Standard:	FCC 15.231_field strength_3m(dBuV/m)	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/3/8 22:02:08
Applicant:	CUB	Test Rating:	DC 3V
Product:	Dual frequency programmable universal TPMS	Temp.(°C)/Hum.(%):	19.1(°C)/54%
Model No.:	DF-Unisensor	Test Engineer:	George Yang
Test Mode:	315 FSK		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	314.9700	-4.17	77.69	73.52	87.66	-14.14	peak			
2	314.9700	-4.17	65.87	61.70	67.66	-5.96	AVG			



Service No.:	114061337(DF-UNISENSOR)-FCC	Test Distance:	3m
Test Standard:	FCC 15.231_field strength_3m(dBuV/m)	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/3/8 22:01:07
Applicant:	CUB	Test Rating:	DC 3V
Product:	Dual frequency programmable universal TPMS	Temp.(°C)/Hum.(%):	19.1(°C)/54%
Model No.:	DF-Unisensor	Test Engineer:	George Yang
Test Mode:	315 FSK		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	315.0400	-4.17	74.73	70.56	87.66	-17.1	peak			
2	315.0400	-4.17	61.77	57.60	67.66	-10.06	AVG			

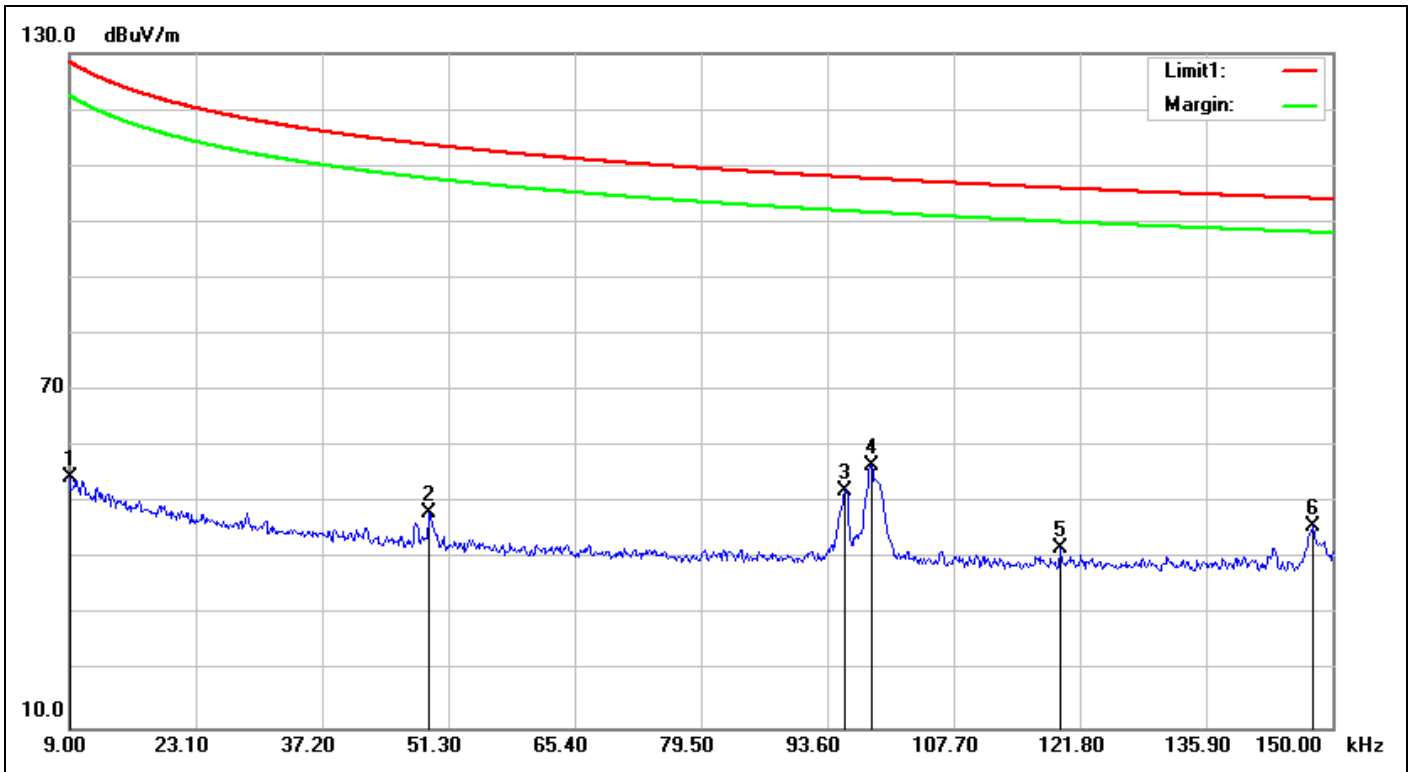
Spurious Emissions, TX Mode, 9K-30M



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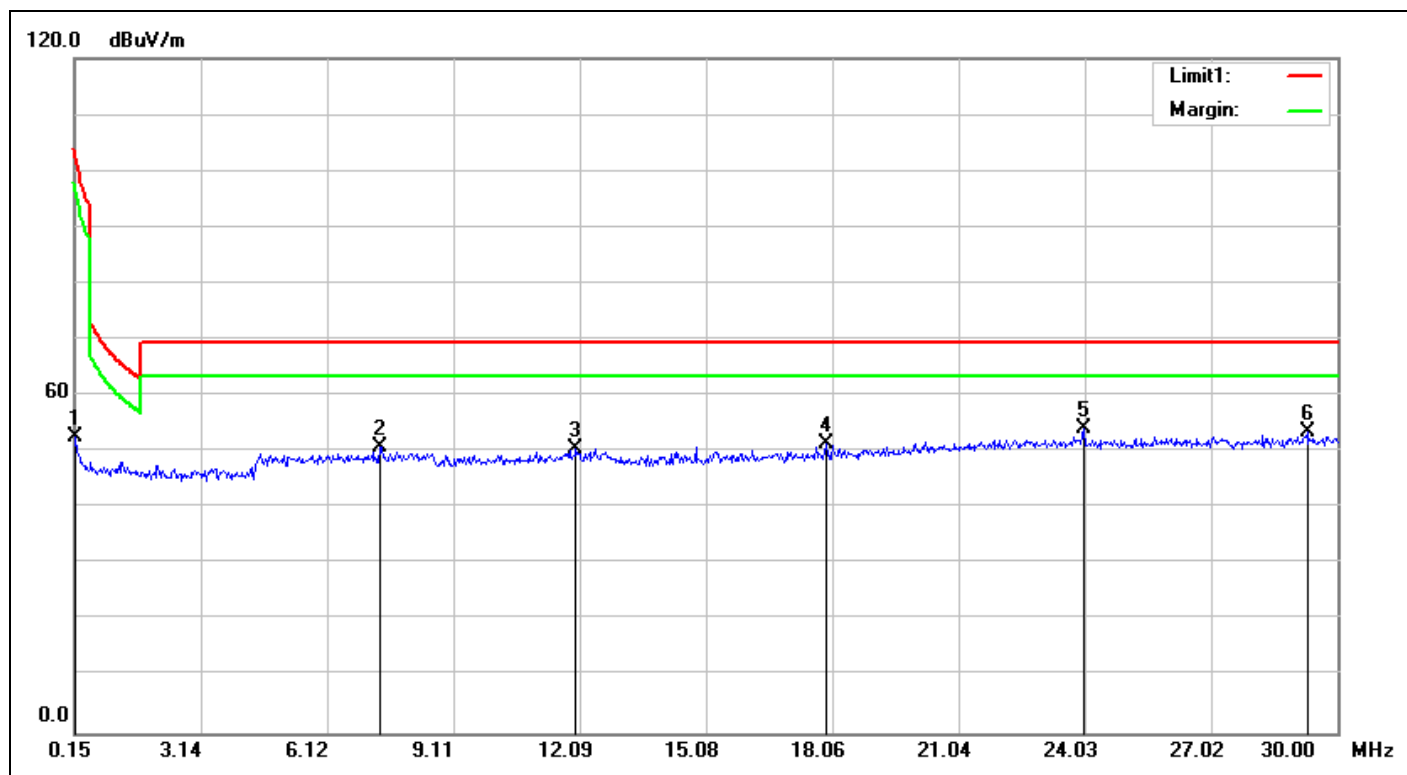
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Service No.:	114061337(DF-UNISENSOR)-FCC	Test Distance:	3m
Test Standard:	FCC 15.209_9k-30M_3m(dBuV/m)	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2017/3/8 22:29:41
Applicant:	CUB	Test Rating:	DC 3V
Product:	Dual frequency programmable universal TPMS	Temp.(°C)/Hum.(%):	19.1(°C)/54%
Model No.:	DF-Unisensor	Test Engineer:	George Yang
Test Mode:	315 FSK		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0090	19.60	34.83	54.43	128.42	-73.99	QP	100	67	
2	0.0492	19.26	28.88	48.14	113.71	-65.57	QP	100	290	
3	0.0956	18.88	33.30	52.18	107.95	-55.77	QP	100	9	
4	0.0985	18.85	37.92	56.77	107.70	-50.93	QP	100	117	
5	0.1197	18.82	23.06	41.88	106.01	-64.13	QP	100	360	
6	0.1479	18.80	27.10	45.90	104.17	-58.27	QP	100	179	



Service No.:	114061337(DF-UNISENSOR)-FCC	Test Distance:	3m
Test Standard:	FCC 15.209_9k-30M_3m(dBuV/m)	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2017/3/8 22:31:33
Applicant:	CUB	Test Rating:	DC 3V
Product:	Dual frequency programmable universal TPMS	Temp.(°C)/Hum.(%):	19.1(°C)/54%
Model No.:	DF-Unisensor	Test Engineer:	George Yang
Test Mode:	315 FSK		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.1799	18.77	33.95	52.72	102.48	-49.76	QP	100	235	
2	7.3737	19.98	30.77	50.75	69.54	-18.79	QP	100	86	
3	12.0004	20.62	30.03	50.65	69.54	-18.89	QP	100	56	
4	17.9108	21.31	30.06	51.37	69.54	-18.17	QP	100	102	
5	24.0002	21.84	32.32	54.16	69.54	-15.38	QP	100	211	
6	29.2836	22.23	31.38	53.61	69.54	-15.93	QP	100	43	

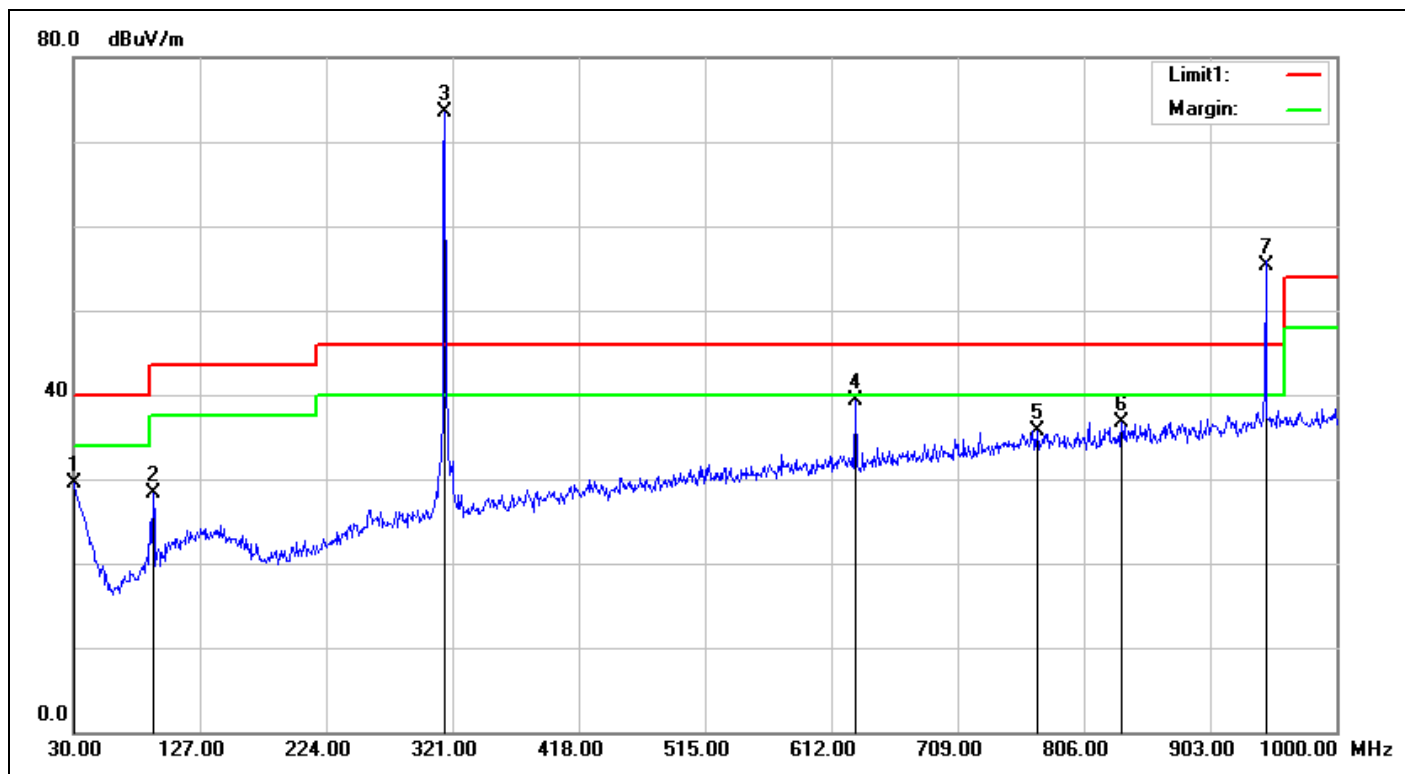
Spurious Emissions, TX Mode, 30M-1G



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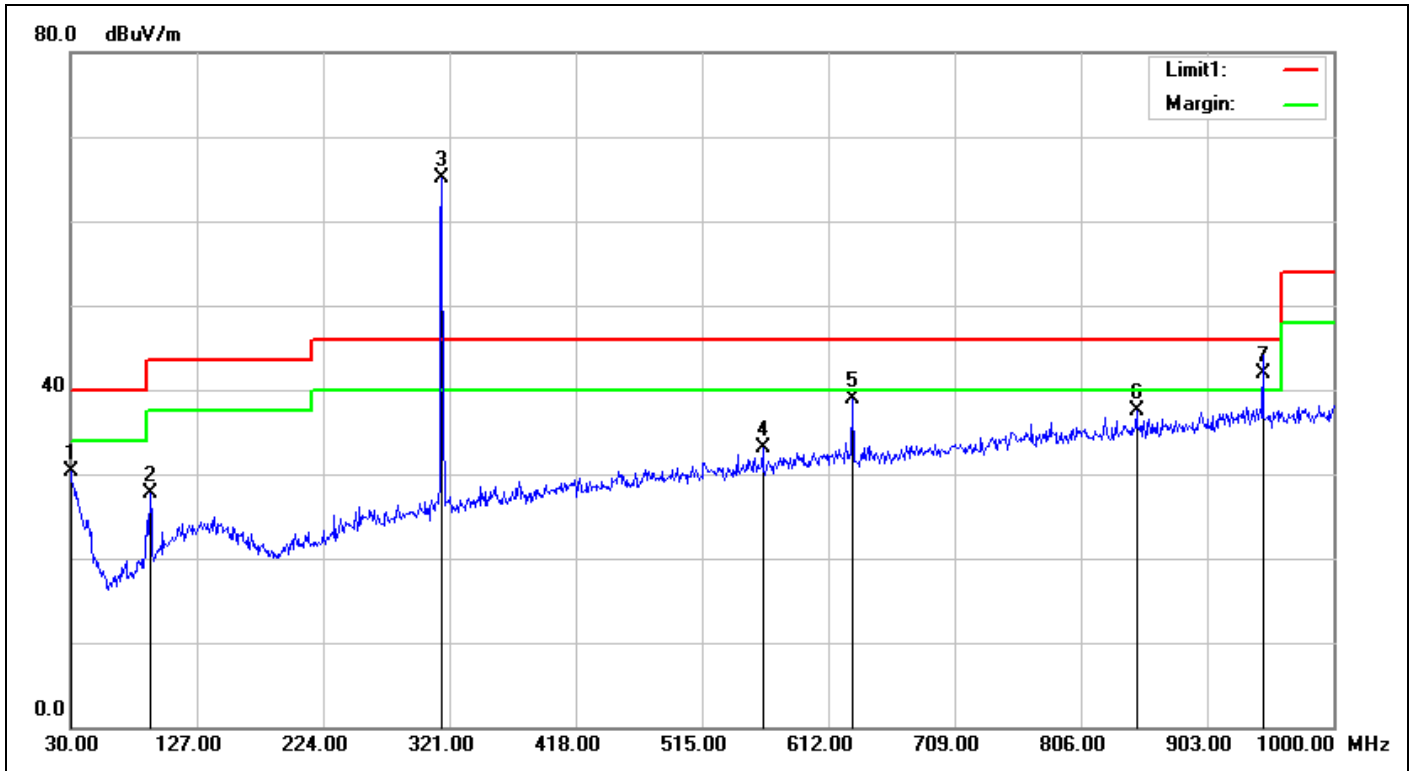
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Service No.:	114061337(DF-UNISENSOR)-FCC	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/3/8 22:07:25
Applicant:	CUB	Test Rating:	DC 3V
Product:	Dual frequency programmable universal TPMS	Temp.(°C)/Hum.(%):	19.1(°C)/54%
Model No.:	DF-Unisensor	Test Engineer:	George Yang
Test Mode:	315 FSK		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	30.0000	-0.07	29.64	29.57	40.00	-10.43	QP	100	85	
2	91.1099	-10.70	39.07	28.37	43.50	-15.13	QP	100	0	
3	315.0000	-4.17	77.74	73.57	46.00	27.57	QP	100	201	fundamental
4	630.4299	0.33	38.96	39.29	46.00	-6.71	QP	100	174	
5	770.1100	2.54	33.24	35.78	46.00	-10.22	QP	100	141	
6	835.1000	3.43	33.25	36.68	46.00	-9.32	QP	100	1	
7	945.0000	5.27	50.03	55.30	46.00	9.30	peak	100	160	
7	945.0000	5.27	50.03	35.65	46.00	-10.35	AVG	100	160	

Remark: Duty Factor= -19.65,thus , the average result would be 35.65dBuV/m.



Service No.:	114061337(DF-UNISENSOR)-FCC	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/3/8 22:08:28
Applicant:	CUB	Test Rating:	DC 3V
Product:	Dual frequency programmable universal TPMS	Temp.(°C)/Hum.(%):	19.1(°C)/54%
Model No.:	DF-Unisensor	Test Engineer:	George Yang
Test Mode:	315 FSK		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	30.0000	-0.07	30.40	30.33	40.00	-9.67	QP	100	41	
2	91.1100	-10.70	38.42	27.72	43.50	-15.78	QP	100	359	
3	315.0000	-4.17	69.24	65.07	46.00	19.07	QP	100	153	fundamental
4	561.5600	-0.60	33.65	33.05	46.00	-12.95	QP	100	297	
5	630.4300	0.33	38.57	38.90	46.00	-7.10	QP	100	270	
6	848.6800	3.66	33.77	37.43	46.00	-8.57	QP	100	35	
7	945.0000	5.27	36.73	42.00	46.00	-4.00	QP	100	57	

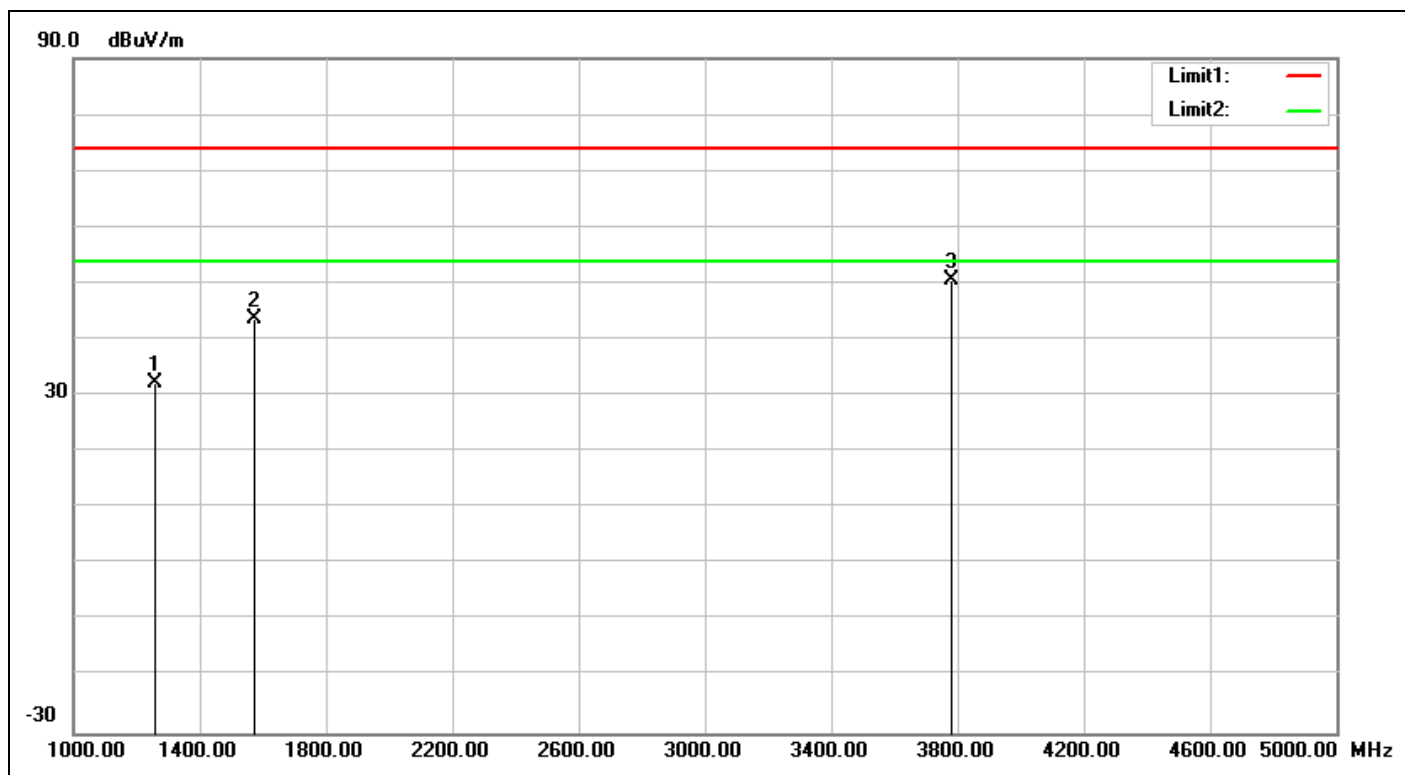
Spurious Emissions, TX Mode, 1-4G



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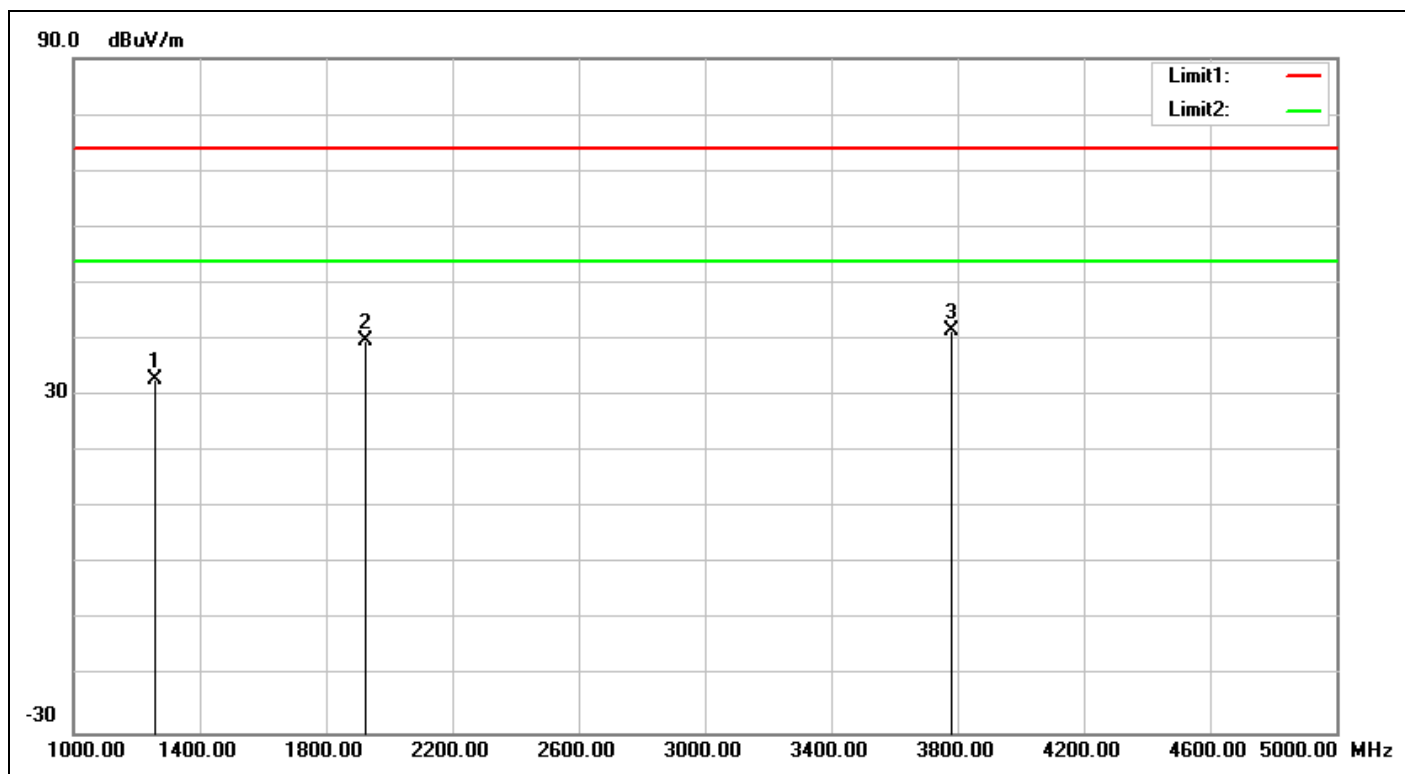
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Service No.:	114061337(DF-UNISENSOR)-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/3/8 22:45:30
Applicant:	CUB	Test Rating:	DC 3V
Product:	Dual frequency programmable universal TPMS	Temp.(°C)/Hum.(%):	19.1(°C)/54%
Model No.:	DF-Unisensor	Test Engineer:	George Yang
Test Mode:	315 FSK		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	1260.000	-13.63	46.03	32.40	74.00	-41.60	peak			
2	1575.000	-13.97	57.49	43.52	74.00	-30.48	peak	100	349	
3	3780.000	-11.08	61.69	50.61	74.00	-23.39	peak	100	136	



Service No.:	114061337(DF-UNISENSOR)-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/3/8 22:46:34
Applicant:	CUB	Test Rating:	DC 3V
Product:	Dual frequency programmable universal TPMS	Temp.(°C)/Hum.(%):	19.1(°C)/54%
Model No.:	DF-Unisensor	Test Engineer:	George Yang
Test Mode:	315 FSK		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	1260.000	-13.63	46.62	32.99	74.00	-41.01	peak			
2	1924.000	-12.04	51.69	39.65	74.00	-34.35	peak	100	194	
3	3780.000	-11.08	52.51	41.43	74.00	-32.57	peak	100	210	