

Test Report No.50144188 001

Appendix D: Radiated and Mains Spurious Emission Data

(File: 50144188AppendixD)

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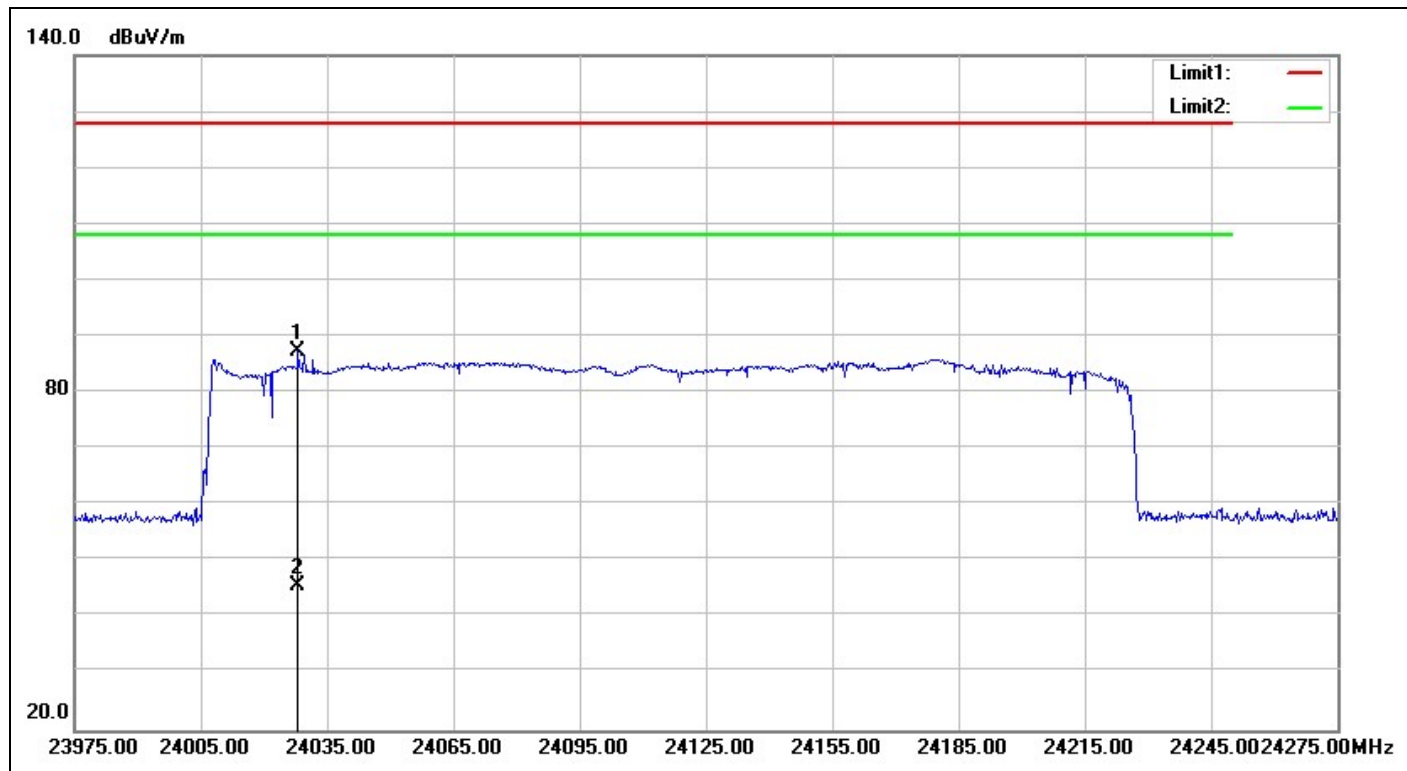
Fundamental Field Strength



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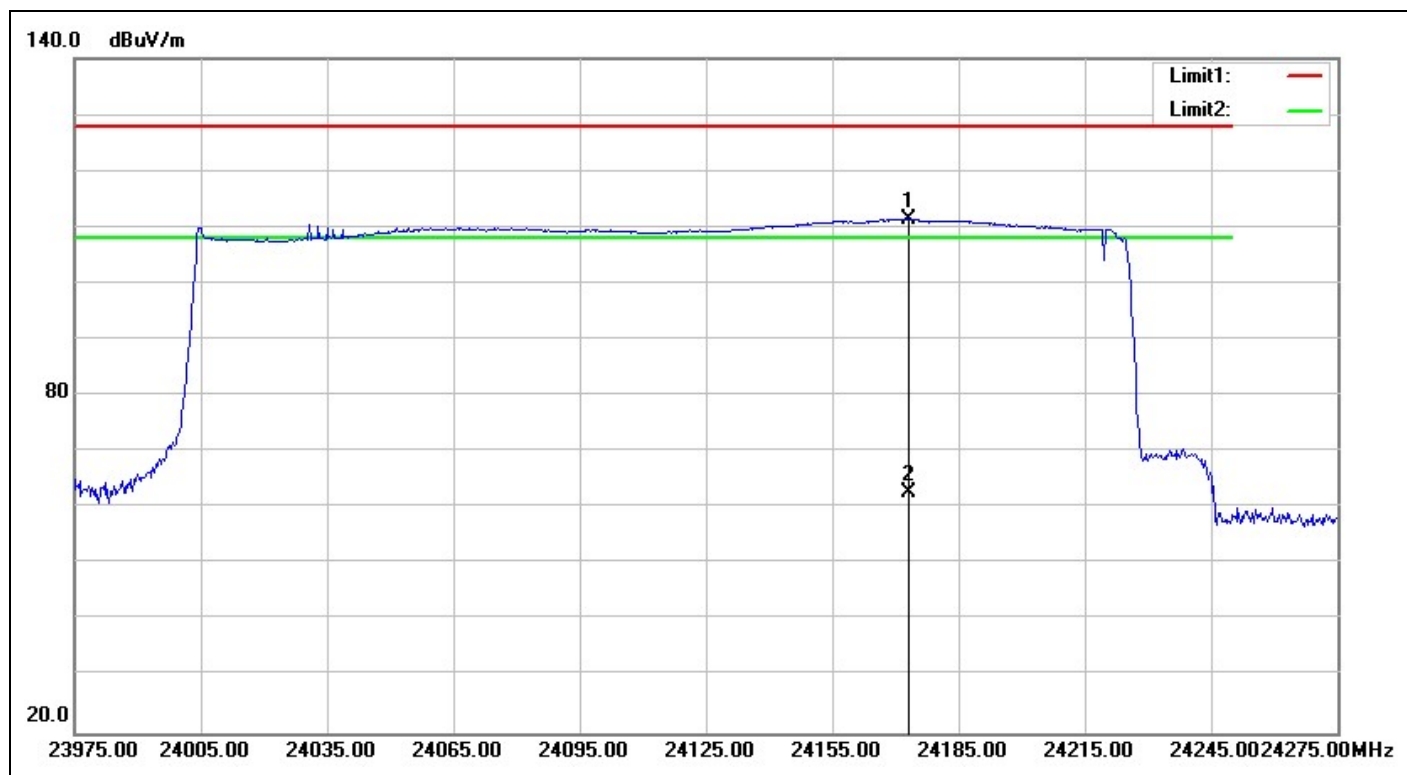
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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Service No.:	114076790	Test Distance:	3m
Test Standard:	NCC_3.10.2_TX_PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/3 20:13:08
Applicant:	CUBTEK	Test Rating:	DC 12V
Product:	24GHz BSD Radar	Temp.(°C)/Hum.(%):	23(°C)/60%
Model No.:	VS-91A002	Test Engineer:	Curry Chen
Test Mode:	Fundamental		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	24028.100	32.96	54.26	87.22	128.00	-40.78	peak		0	
2	24028.100	32.96	12.63	45.59	108.00	-62.41	AVG		0	

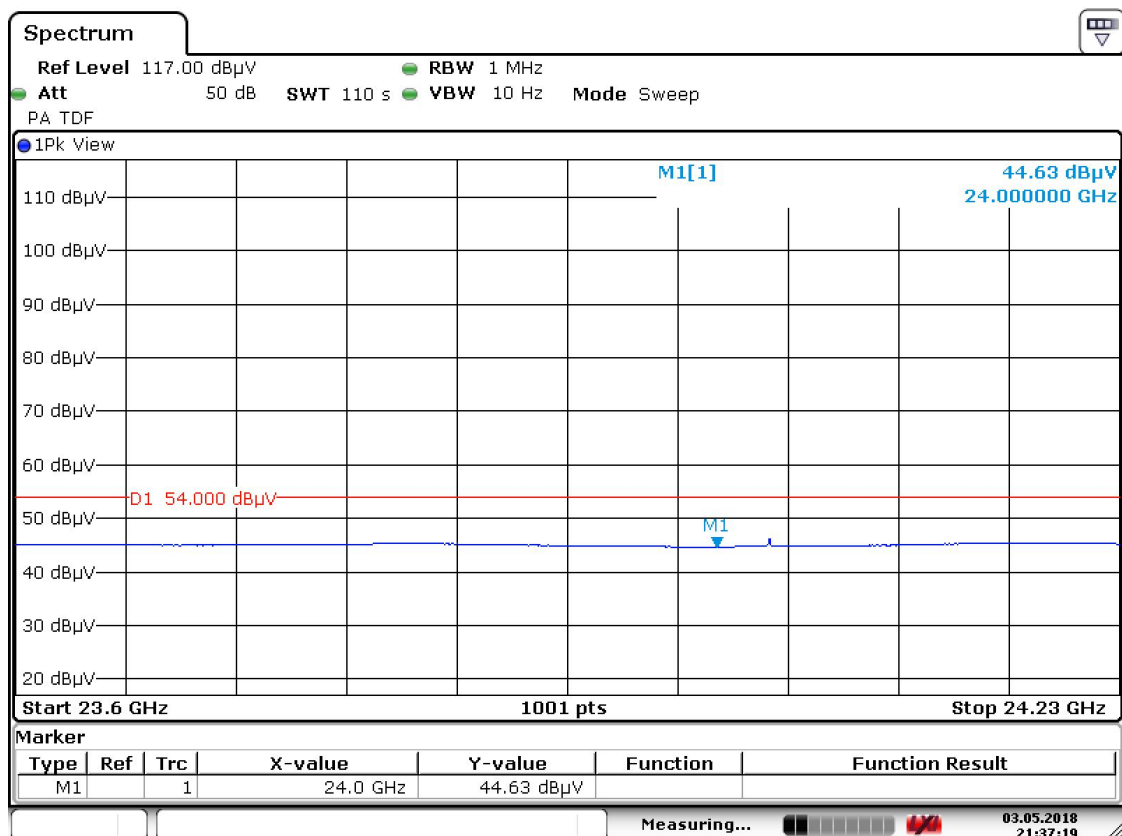


Service No.:	114076790	Test Distance:	3m
Test Standard:	NCC_3.10.2_TX_PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/3 20:17:20
Applicant:	CUBTEK	Test Rating:	DC 12V
Product:	24GHz BSD Radar	Temp.(°C)/Hum.(%):	23(°C)/60%
Model No.:	VS-91A002	Test Engineer:	Curry Chen
Test Mode:	Fundamental		
Remark:			

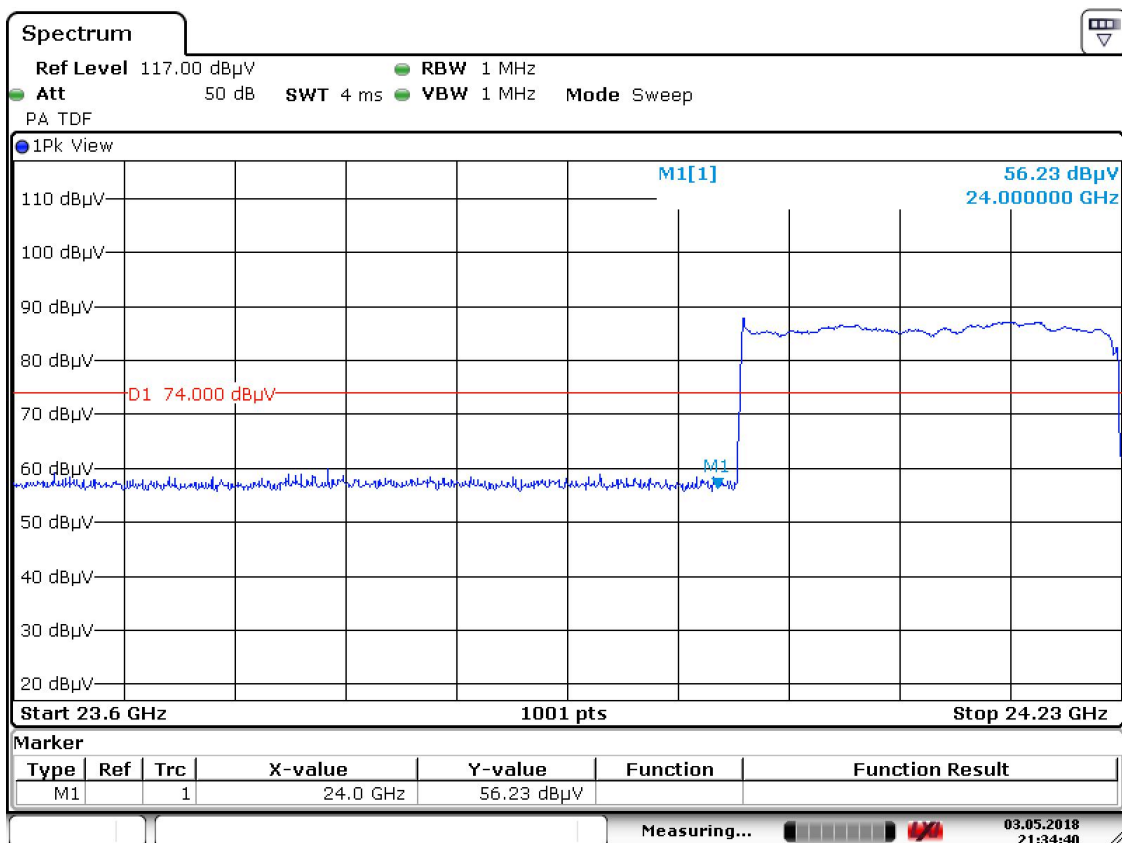
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1	24173.000	33.04	78.35	111.39	128.00	-16.61	peak			
2	24173.000	33.04	29.74	62.78	108.00	-45.22	AVG			

Radiated Emissions, Bandedge

24.125GHz (Hor)

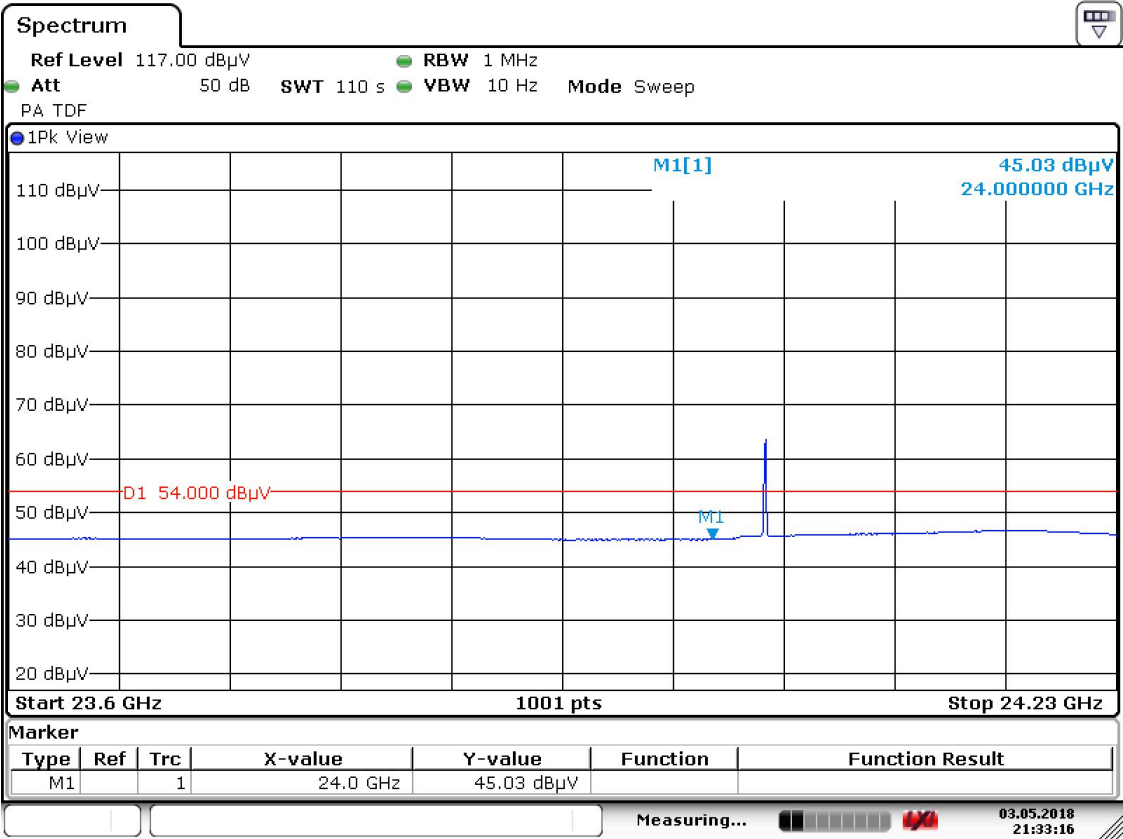


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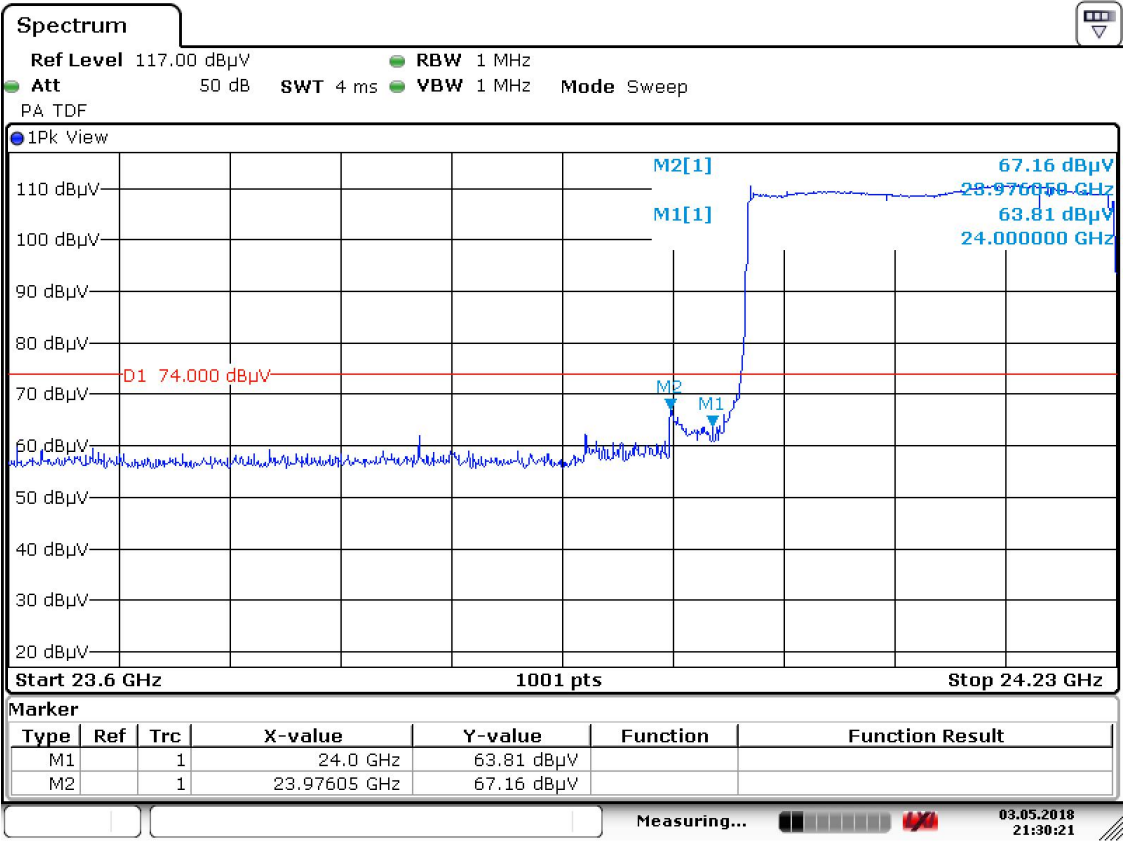


Date: 3.MAY.2018 21:34:41

24.125GHz (Ver)



Date: 3.MAY.2018 21:33:16



Date: 3.MAY.2018 21:30:21

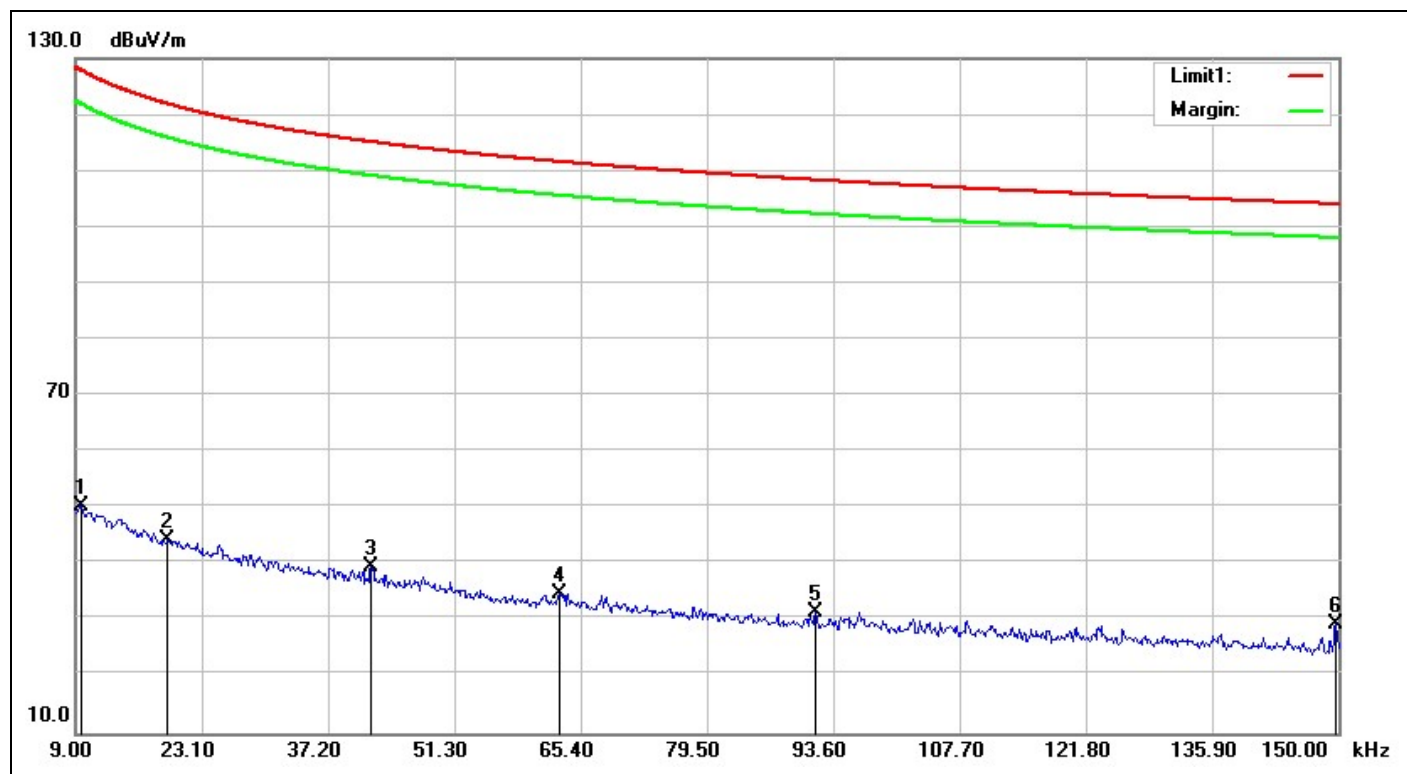
Spurious Emissions, TX Mode, 9k-1G



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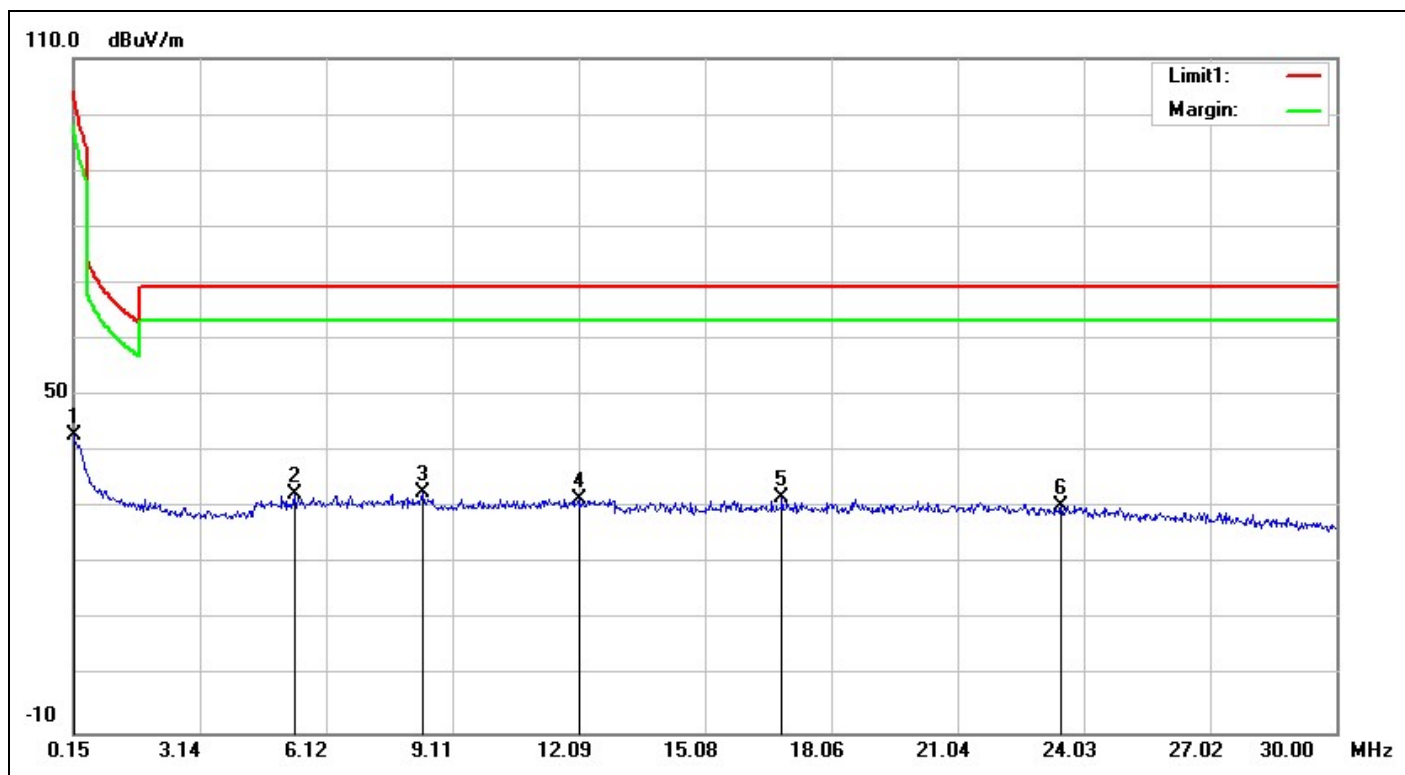
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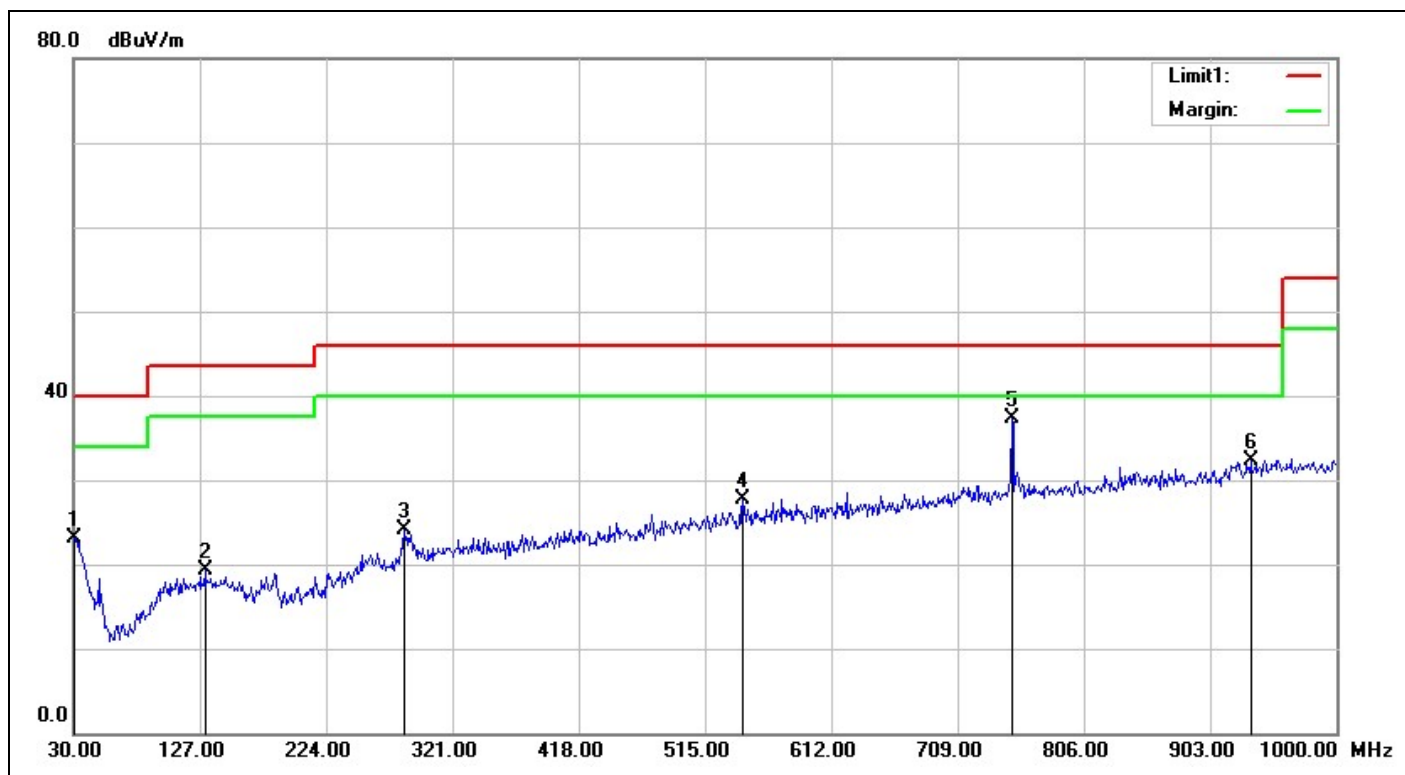
Service No.:	11407679	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2018/5/3 21:58:39
Applicant:	CUBTEK	Test Rating:	DC 12V
Product:	24GHz BSD Radar	Temp.(°C)/Hum.(%)	23(°C)/60%
Model No.:	VS-91A002	Test Engineer:	Curry Chen
Test Mode:	TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0095	19.73	30.73	50.46	128.03	-77.57	QP	100	200	
2	0.0192	20.02	24.32	44.34	121.92	-77.58	QP	100	217	
3	0.0419	19.71	19.76	39.47	115.15	-75.68	QP	100	325	
4	0.0630	19.35	15.49	34.84	111.61	-76.77	QP	100	312	
5	0.0916	19.18	12.23	31.41	108.36	-76.95	QP	100	335	
6	0.1497	19.08	10.20	29.28	104.09	-74.81	QP	100	46	



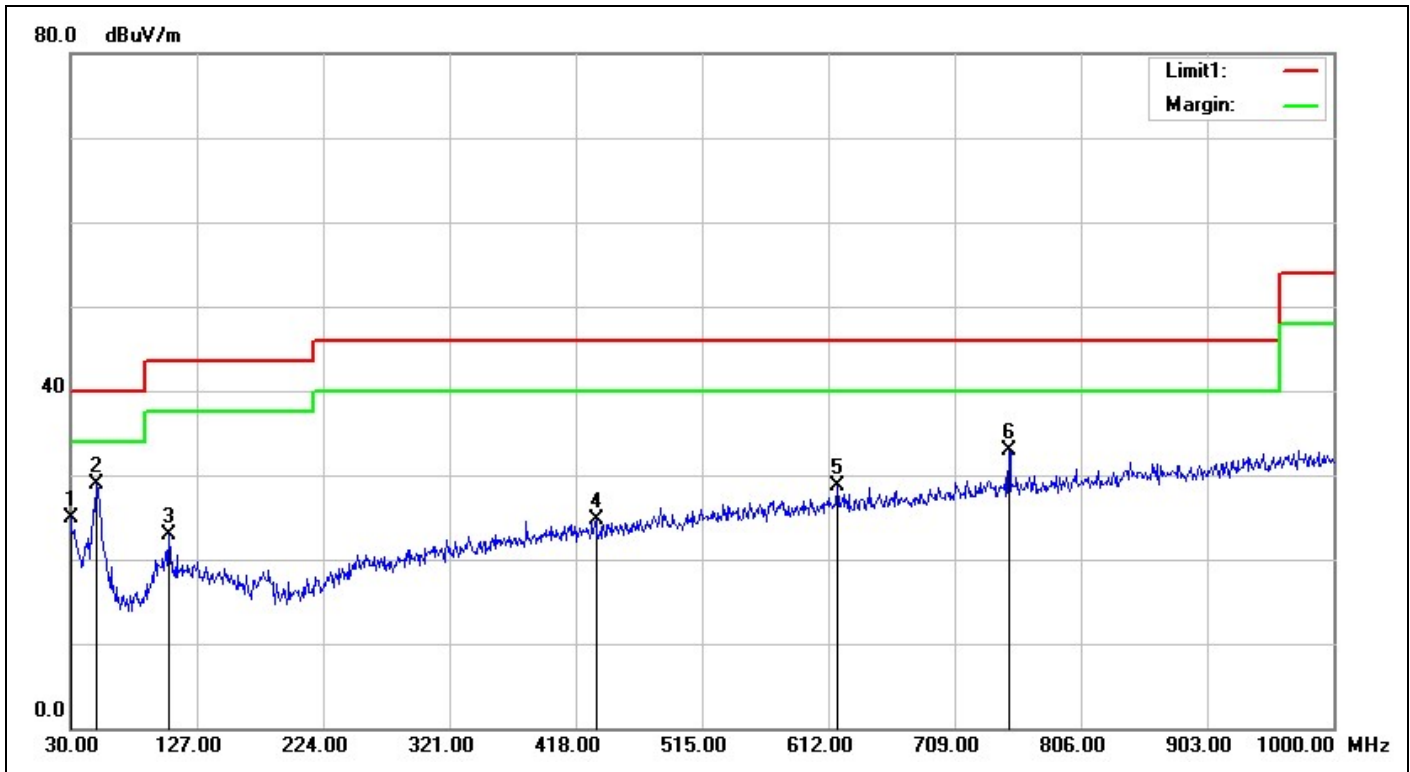
Service No.:	114076790	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2018/5/3 22:01:22
Applicant:	CUBTEK	Test Rating:	DC 12V
Product:	24GHz BSD Radar	Temp.(°C)/Hum.(%):	23(°C)/60%
Model No.:	VS-91A002	Test Engineer:	Curry Chen
Test Mode:	TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.1500	19.08	23.93	43.01	104.08	-61.07	QP	100	234	
2	5.3737	19.79	12.56	32.35	69.50	-37.15	QP	100	230	
3	8.3886	20.07	12.61	32.68	69.50	-36.82	QP	100	22	
4	12.0900	20.59	11.10	31.69	69.50	-37.81	QP	100	244	
5	16.8958	21.43	10.47	31.90	69.50	-37.60	QP	100	158	
6	23.4927	22.22	8.16	30.38	69.50	-39.12	QP	100	72	



Service No.:	114076790	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/3 21:35:23
Applicant:	CUBTEK	Test Rating:	DC 12V
Product:	24GHz BSD Radar	Temp.(°C)/Hum.(%)	23(°C)/60%
Model No.:	VS-91A002	Test Engineer:	Curry Chen
Test Mode:	TX		
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	-0.25	23.45	23.20	40.00	-16.80	QP	100	197	
2	130.8800	-7.16	26.52	19.36	43.50	-24.14	QP	100	197	
3	284.1400	-5.00	29.02	24.02	46.00	-21.98	QP	100	233	
4	544.1000	-0.53	28.32	27.79	46.00	-18.21	QP	100	319	
5	750.7100	2.38	34.98	37.36	46.00	-8.64	QP	100	170	
6	934.0400	5.04	27.22	32.26	46.00	-13.74	QP	100	279	



Service No.:	114076790	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/3 21:36:16
Applicant:	CUBTEK	Test Rating:	DC 12V
Product:	24GHz BSD Radar	Temp.(°C)/Hum.(%)	23(°C)/60%
Model No.:	VS-91A002	Test Engineer:	Curry Chen
Test Mode:	TX		
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	-0.25	25.06	24.81	40.00	-15.19	QP	100	252	
2	49.4000	-11.05	39.99	28.94	40.00	-11.06	QP	100	311	
3	105.6600	-8.77	31.63	22.86	43.50	-20.64	QP	100	292	
4	433.5200	-2.08	26.81	24.73	46.00	-21.27	QP	100	58	
5	618.7900	0.24	28.54	28.78	46.00	-17.22	QP	100	236	
6	750.7100	2.38	30.55	32.93	46.00	-13.07	QP	100	205	

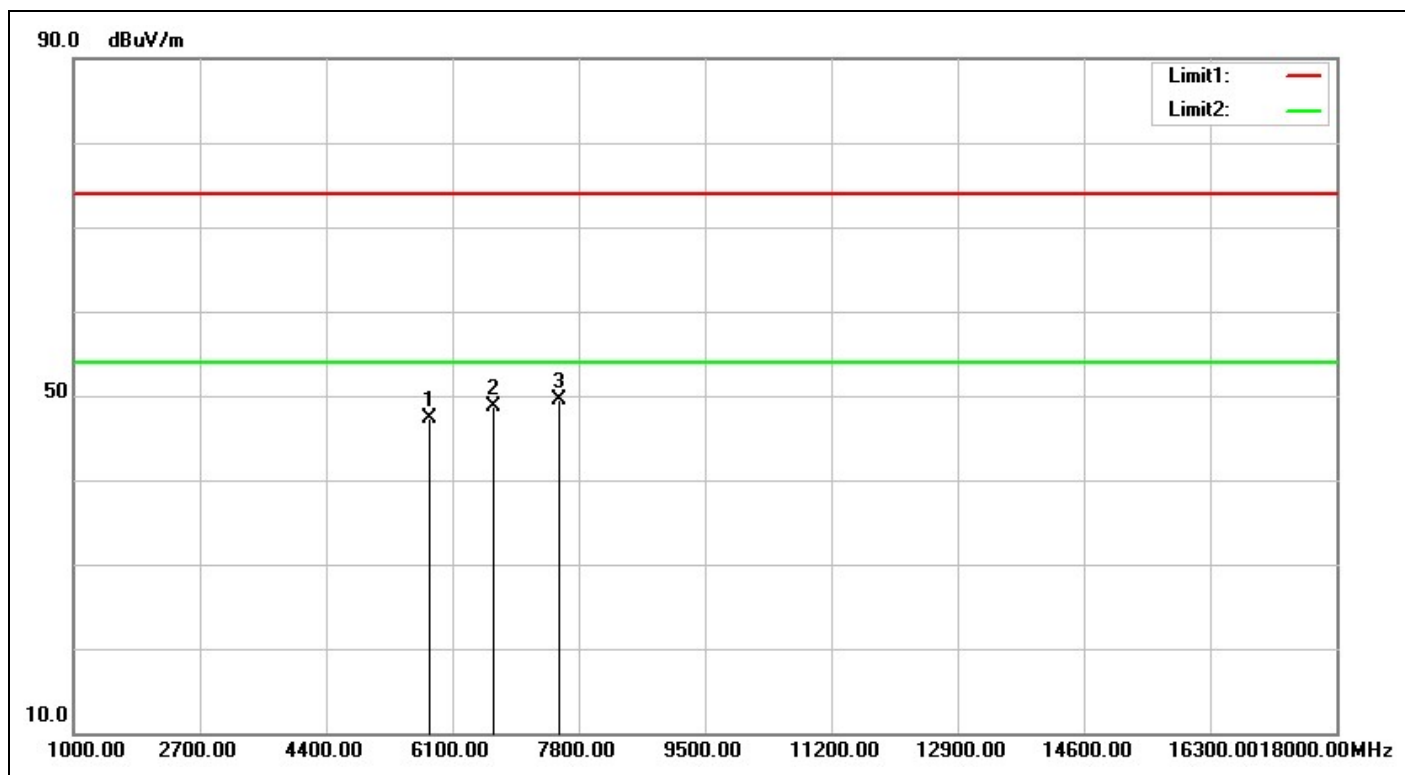
Spurious Emissions, TX Mode, 1-18G



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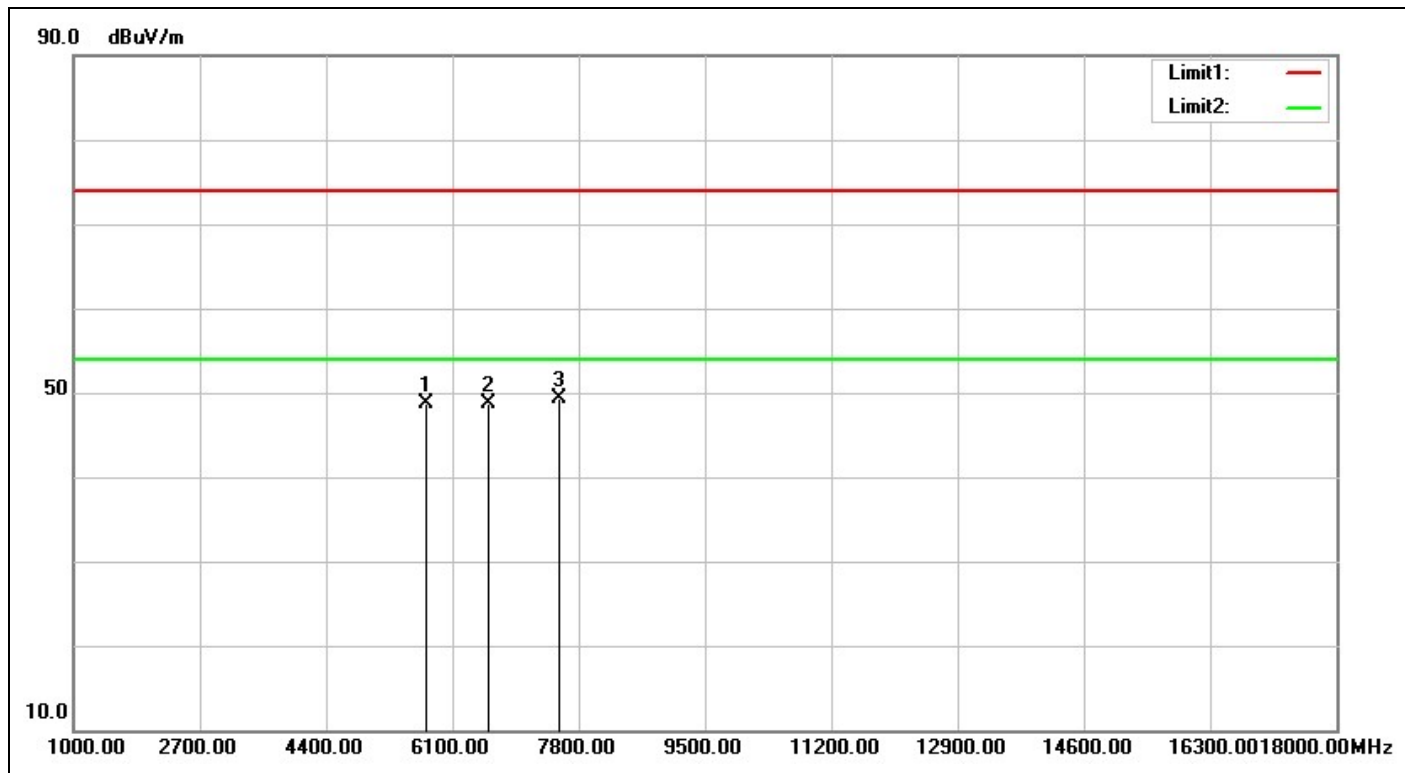
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Service No.:	114076790	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/3 21:22:45
Applicant:	CUBTEK	Test Rating:	DC 12V
Product:	24GHz BSD Radar	Temp.(°C)/Hum.(%):	23(°C)/60%
Model No.:	VS-91A002	Test Engineer:	Curry Chen
Test Mode:	TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	5794.000	1.03	46.25	47.28	74.00	-26.72	peak	100	10	
2	6644.000	4.15	44.53	48.68	74.00	-25.32	peak	100	160	
3	7528.000	4.94	44.56	49.50	74.00	-24.50	peak	100	4	



Service No.:	114076790	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/3 21:23:38
Applicant:	CUBTEK	Test Rating:	DC 12V
Product:	24GHz BSD Radar	Temp.(°C)/Hum.(%)	23(°C)/60%
Model No.:	VS-91A002	Test Engineer:	Curry Chen
Test Mode:	TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	5743.000	0.72	48.04	48.76	74.00	-25.24	peak	100	247	
2	6576.000	4.23	44.56	48.79	74.00	-25.21	peak	100	210	
3	7528.000	4.94	44.45	49.39	74.00	-24.61	peak	100	46	

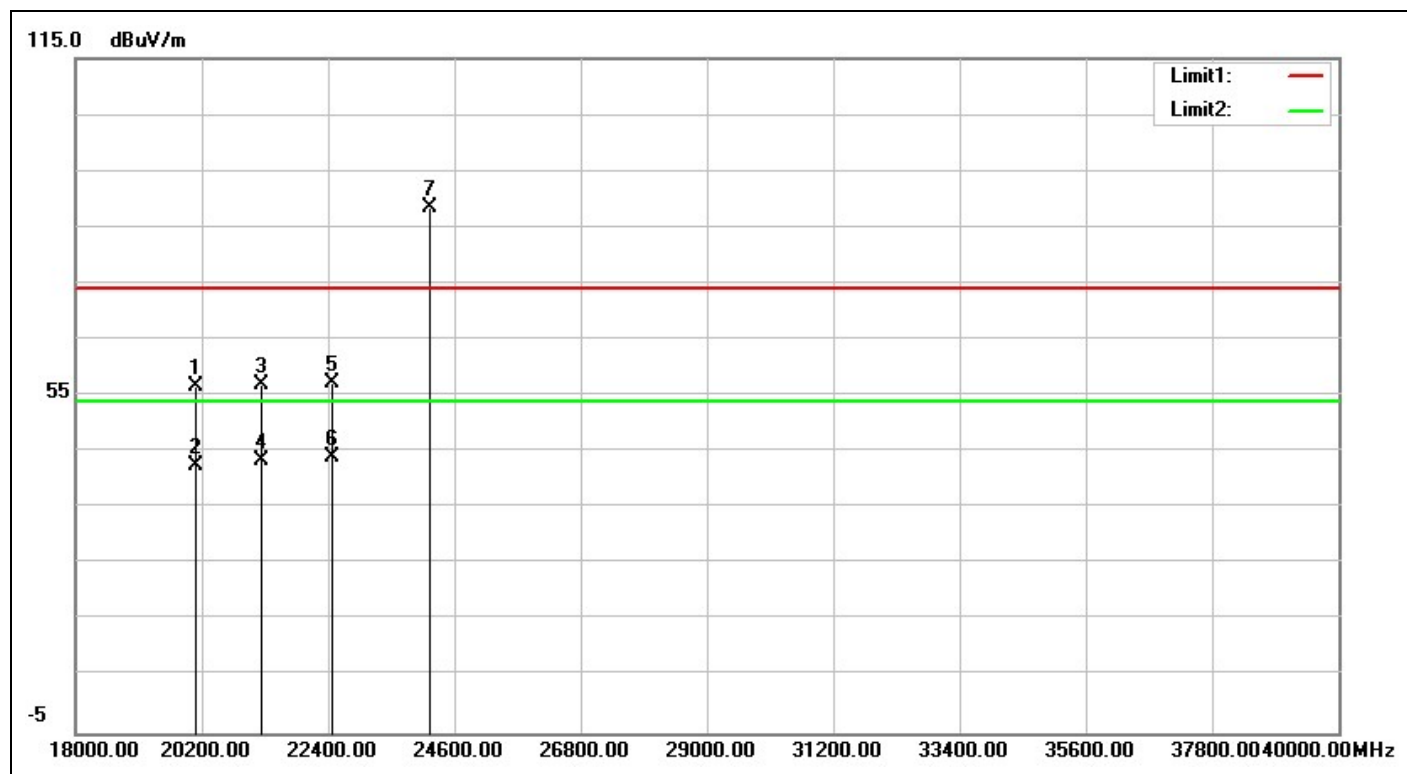
Spurious Emissions, TX Mode, 18-40G



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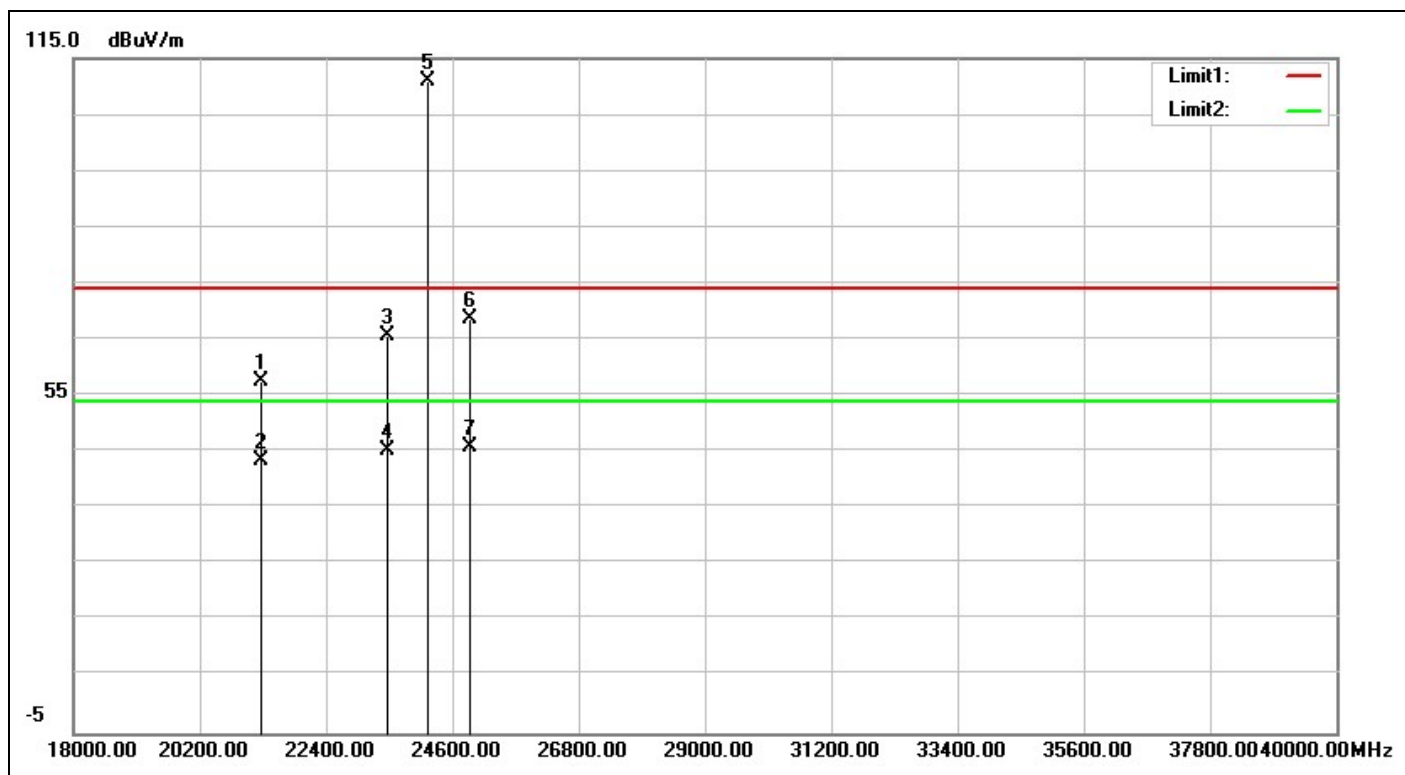
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Service No.:	114076790	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/3 21:01:29
Applicant:	CUBTEK	Test Rating:	DC 12V
Product:	24GHz BSD Radar	Temp.(°C)/Hum.(%)	23(°C)/60%
Model No.:	VS-91A002	Test Engineer:	Curry Chen
Test Mode:	TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20090.000	31.25	25.34	56.59	74.00	-17.41	peak	100	0	
2	20090.000	31.25	11.28	42.53	54.00	-11.47	AVG	100	0	
3	21234.000	32.65	24.26	56.91	74.00	-17.09	peak	100	358	
4	21234.000	32.65	10.74	43.39	54.00	-10.61	AVG	100	358	
5	22466.000	32.63	24.75	57.38	74.00	-16.62	peak	100	300	
6	22466.000	32.63	11.36	43.99	54.00	-10.01	AVG	100	300	
7	24160.000	33.02	55.30	88.32	74.00	14.32	peak	100	349	Fundamental



Service No.:	114076790	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/3 21:02:21
Applicant:	CUBTEK	Test Rating:	DC 12V
Product:	24GHz BSD Radar	Temp.(°C)/Hum.(%):	23(°C)/60%
Model No.:	VS-91A002	Test Engineer:	Curry Chen
Test Mode:	TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	21278.000	32.69	24.97	57.66	74.00	-16.34	peak	100	183	
2	21278.000	32.69	10.67	43.36	54.00	-10.64	AVG	100	183	
3	23456.000	33.23	32.28	65.51	74.00	-8.49	peak	100	15	
4	23456.000	33.23	12.07	45.30	54.00	-8.70	AVG	100	15	
5	24160.000	33.02	78.00	111.02	74.00	37.02	peak	100	347	Fundamental
6	24908.000	33.43	35.20	68.63	74.00	-5.37	peak	100	347	
7	24908.000	33.43	12.54	45.97	54.00	-8.03	AVG	100	347	

Spurious Emissions, TX Mode, 40-100G

