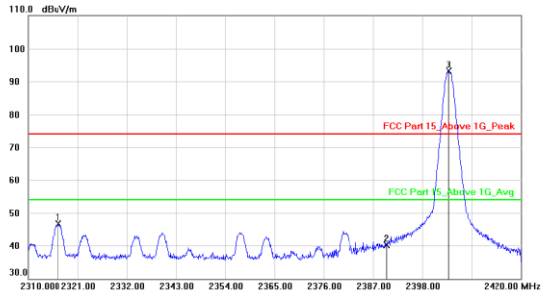
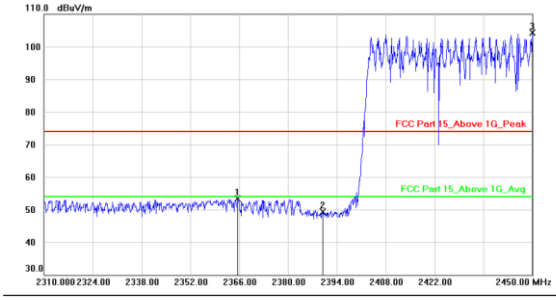
Test Mode: GFSK-Low (2404MHz)

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		cm	degree	
1		2316.765	62.54	-15.75	46.79	74.00	-27.21	peak			
2		2390.000	55.95	-15.77	40.18	74.00	-33.82	peak			
3	*	2403.968	108.82	-15.77	93.05	74.00	19.05	peak			

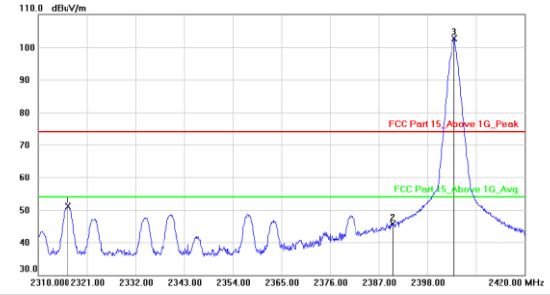
hopping-off



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		cm	degree	
1		2365.650	69.01	-15.77	53.24	74.00	-20.76	peak			
2		2390.000	65.07	-15.77	49.30	74.00	-24.70	peak			
3	*	2450.000	119.97	-15.73	104.24	74.00	30.24	peak			

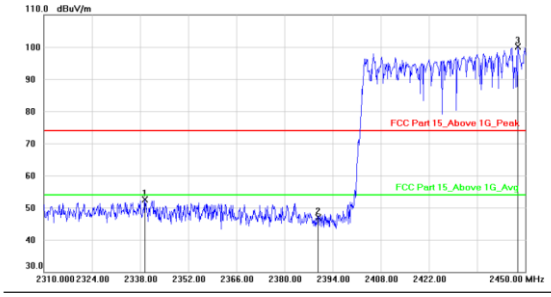
hopping-on

Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		cm	degree	
1		2316.682	66.86	-15.75	51.11	74.00	-22.89	peak			
2		2390.000	61.48	-15.77	45.71	74.00	-28.29	peak			
3	*	2404.050	118.54	-15.77	102.77	74.00	28.77	peak			

hopping-off

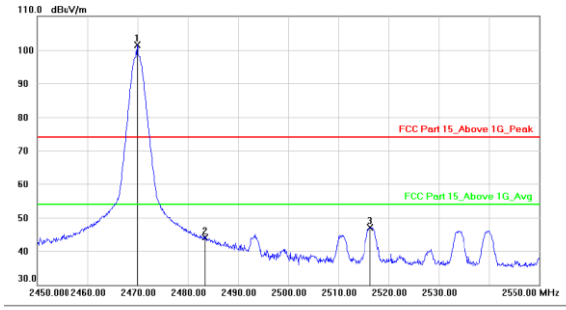


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		cm	degree	
1		2339.505	68.17	-15.76	52.41	74.00	-21.59	peak			
2		2390.000	62.64	-15.77	46.87	74.00	-27.13	peak			
3	*	2447.988	115.80	-15.73	100.07	74.00	26.07	peak			

hopping-on

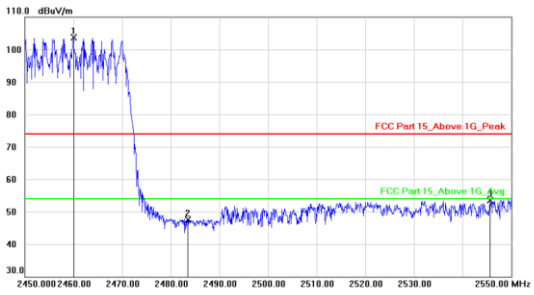
Test Mode: GFSK-High (2470MHz)

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	2469.963	117.16	-15.71	101.45	74.00	27.45	peak			
2		2483.500	59.80	-15.68	44.12	74.00	-29.88	peak			
3		2516.387	62.73	-15.62	47.11	74.00	-26.89	peak			

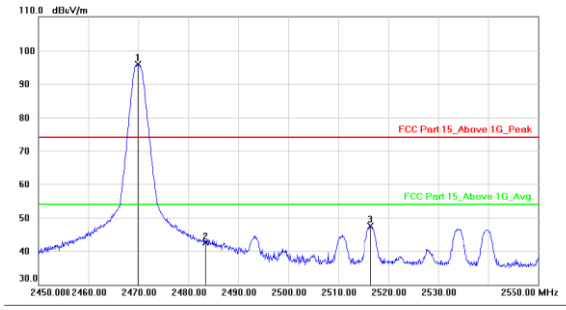
hopping-off



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	2460.012	119.48	-15.71	103.77	74.00	29.77	peak			
2		2483.500	63.13	-15.68	47.45	74.00	-26.55	peak			
3		2545.738	69.07	-15.52	53.55	74.00	-20.45	peak			

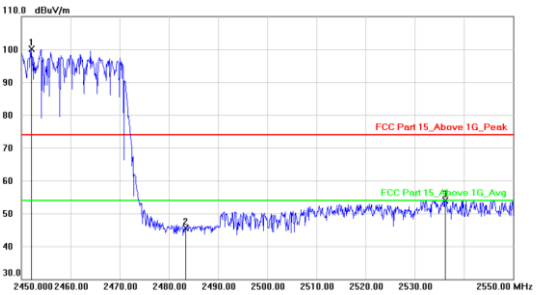
hopping-on

Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	2469.912	111.70	-15.71	95.99	74.00	21.99	peak			
2		2483.500	58.19	-15.68	42.51	74.00	-31.49	peak			
3		2516.575	63.10	-15.62	47.48	74.00	-26.52	peak			

hopping-off

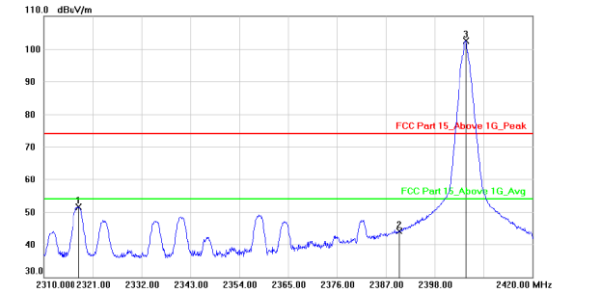


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	2452.000	115.76	-15.72	100.04	74.00	26.04	peak			
2		2483.500	61.16	-15.68	45.48	74.00	-28.52	peak			
3		2536.213	69.55	-15.56	53.99	74.00	-20.01	peak			

hopping-on

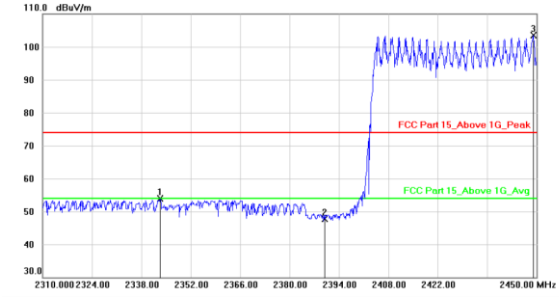
Test Mode: GFSK-Low (2405MHz)

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2317.838	67.21	-15.75	51.46	74.00	-22.54	peak			
2		2390.000	59.78	-15.77	44.01	74.00	-29.99	peak			
3	*	2405.054	118.32	-15.77	102.55	74.00	28.55	peak			

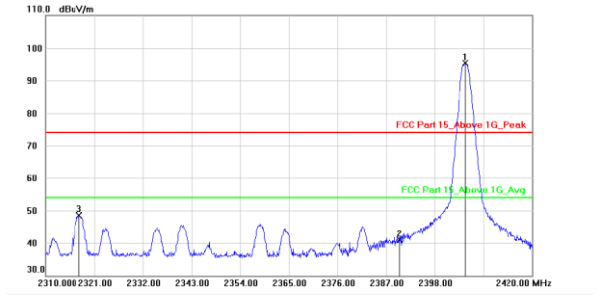
hopping-off



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2343.425	69.75	-15.76	53.99	74.00	-20.01	peak			
2		2390.000	63.53	-15.77	47.76	74.00	-26.24	peak			
3	*	2449.160	119.29	-15.73	103.56	74.00	29.56	peak			

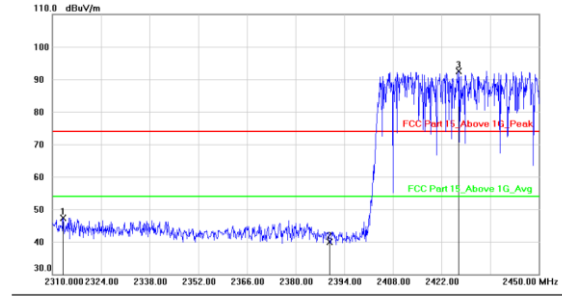
hopping-on

Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	2405.026	111.04	-15.77	95.27	74.00	21.27	peak			
2		2390.000	56.59	-15.77	40.82	74.00	-33.18	peak			
3		2317.604	64.26	-15.75	48.51	74.00	-25.49	peak			

hopping-off

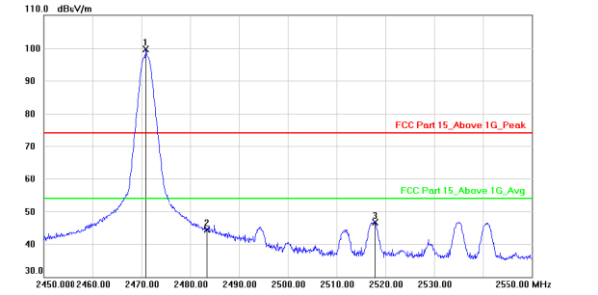


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2313.168	63.05	-15.75	47.30	74.00	-26.70	peak			
2		2390.000	55.73	-15.77	39.96	74.00	-34.04	peak			
3	*	2426.952	108.21	-15.75	92.46	74.00	18.46	peak			

hopping-on

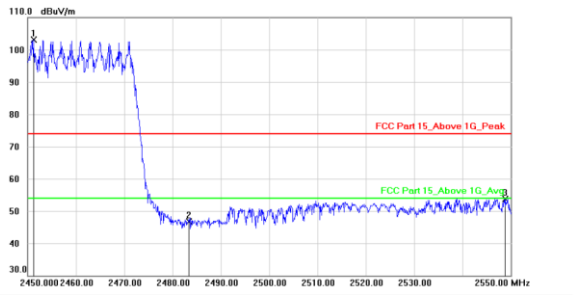
Test Mode: GFSK-High (2471MHz)

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree Comment
1	*	2470.950	115.45	-15.70	99.75	74.00	25.75	peak		
2		2483.500	60.09	-15.68	44.41	74.00	-29.59	peak		
3		2517.900	62.30	-15.61	46.69	74.00	-27.31	peak		

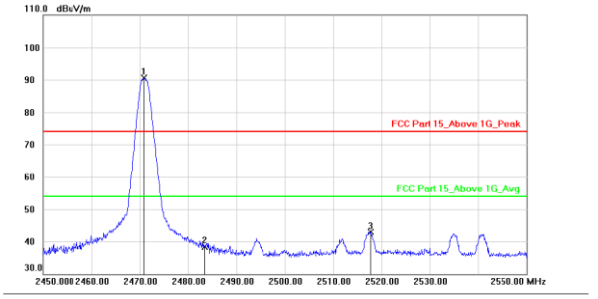
hopping-off



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree Comment
1	*	2451.200	118.91	-15.72	103.19	74.00	29.19	peak		
2		2483.500	62.34	-15.68	46.66	74.00	-27.34	peak		
3		2548.938	69.32	-15.52	53.80	74.00	-20.20	peak		

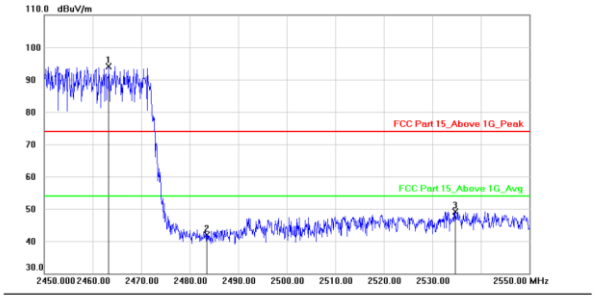
hopping-on

Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree Comment
1	*	2470.925	106.20	-15.70	90.50	74.00	16.50	peak		
2		2483.500	54.06	-15.68	38.38	74.00	-35.62	peak		
3		2517.850	58.56	-15.61	42.95	74.00	-31.05	peak		

hopping-off

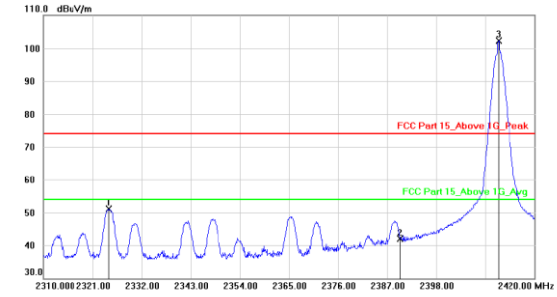


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree Comment
1	*	2463.300	109.86	-15.72	94.14	74.00	20.14	peak		
2		2483.500	57.63	-15.68	41.95	74.00	-32.05	peak		
3		2534.725	64.75	-15.56	49.19	74.00	-24.81	peak		

hopping-on

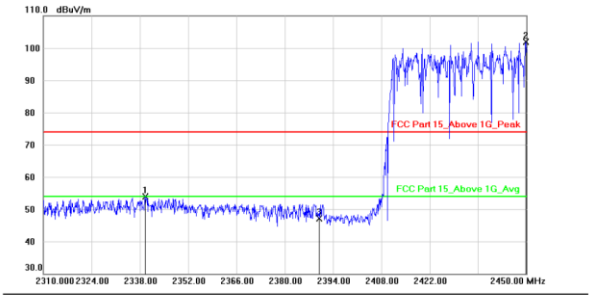
Test Mode: GFSK-Low (2412MHz)

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree Comment
1		2324.589	66.94	-15.75	51.19	74.00	-22.81	peak		
2		2390.000	57.67	-15.77	41.90	74.00	-32.10	peak		
3	*	2412.025	117.99	-15.76	102.23	74.00	28.23	peak		

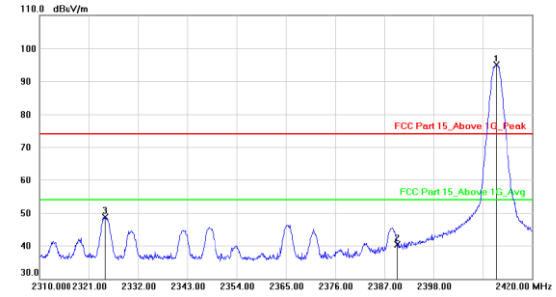
hopping-off



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree Comment
1		2339.610	69.66	-15.76	53.90	74.00	-20.10	peak		
2	*	2449.965	117.71	-15.73	101.98	74.00	27.98	peak		
3		2390.000	62.89	-15.77	47.12	74.00	-26.88	peak		

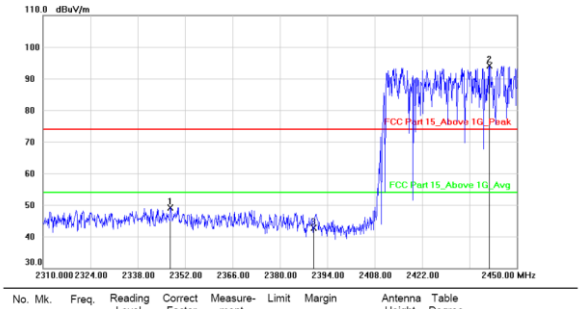
hopping-on

Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree Comment
1	*	2411.997	110.72	-15.76	94.96	74.00	20.96	peak		
2		2390.000	56.14	-15.77	40.37	74.00	-33.63	peak		
3		2324.534	64.51	-15.75	48.76	74.00	-25.24	peak		

hopping-off

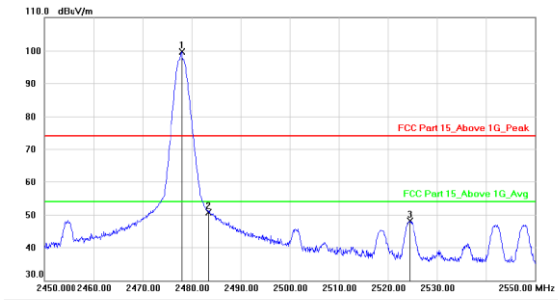


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree Comment
1		2347.765	64.93	-15.77	49.16	74.00	-24.84	peak		
2	*	2441.968	109.79	-15.74	94.05	74.00	20.05	peak		
3		2390.000	58.52	-15.77	42.75	74.00	-31.25	peak		

hopping-on

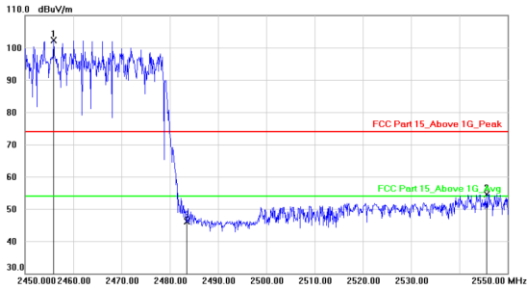
Test Mode: GFSK-High (2478MHz)

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	2478.063	115.38	-15.69	99.69	74.00	25.69	peak			
2		2483.500	66.35	-15.68	50.67	74.00	-23.33	peak			
3		2524.463	63.62	-15.59	48.03	74.00	-25.97	peak			

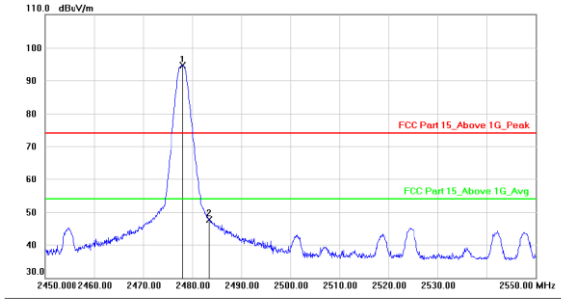
hopping-off



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	2455.975	118.07	-15.72	102.35	74.00	28.35	peak			
2		2545.713	70.12	-15.52	54.60	74.00	-19.40	peak			
3		2483.500	61.87	-15.68	46.19	74.00	-27.81	peak			

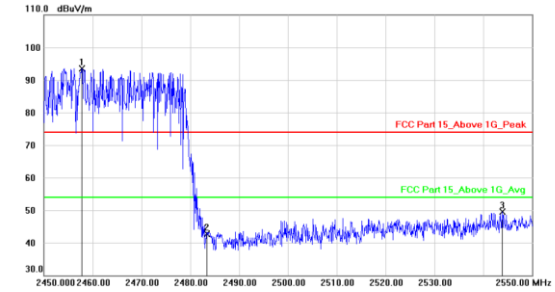
hopping-on

Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	2478.037	110.12	-15.69	94.43	74.00	20.43	peak			
2		2483.500	63.47	-15.68	47.79	74.00	-26.21	peak			

hopping-off

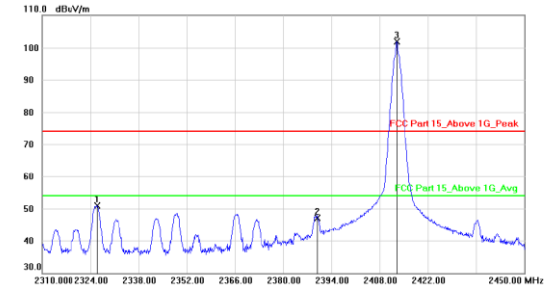


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	2457.875	109.30	-15.71	93.59	74.00	19.59	peak			
2		2483.500	58.41	-15.68	42.73	74.00	-31.27	peak			
3		2543.950	65.00	-15.53	49.47	74.00	-24.53	peak			

hopping-on

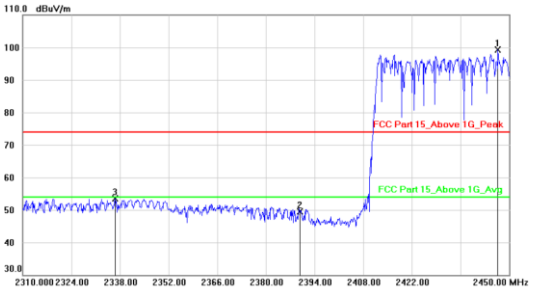
Test Mode: GFSK-Low (2413MHz)

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2325.960	66.60	-15.76	50.84	74.00	-23.16	peak			
2		2390.000	62.88	-15.77	47.11	74.00	-26.89	peak			
3	*	2412.918	117.77	-15.77	102.00	74.00	28.00	peak			

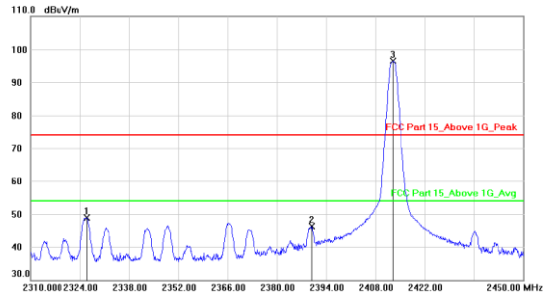
hopping-off



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	2446.867	115.07	-15.73	99.34	74.00	25.34	peak			
2		2390.000	65.30	-15.77	49.53	74.00	-24.47	peak			
3		2336.635	69.24	-15.77	53.47	74.00	-20.53	peak			

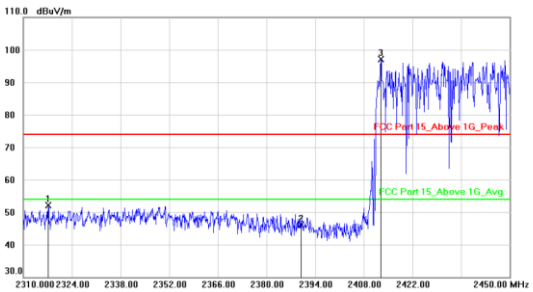
hopping-on

Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2326.065	64.60	-15.76	48.84	74.00	-25.16	peak			
2		2390.000	62.08	-15.77	46.31	74.00	-27.69	peak			
3	*	2413.023	112.30	-15.77	96.53	74.00	22.53	peak			

hopping-off

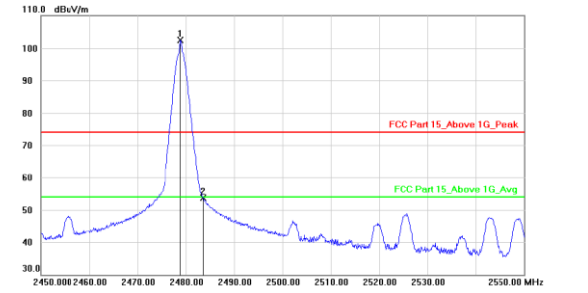


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2317.227	67.80	-15.75	52.05	74.00	-21.95	peak			
2		2390.000	61.78	-15.77	46.01	74.00	-27.99	peak			
3	*	2413.023	112.80	-15.77	97.03	74.00	23.03	peak			

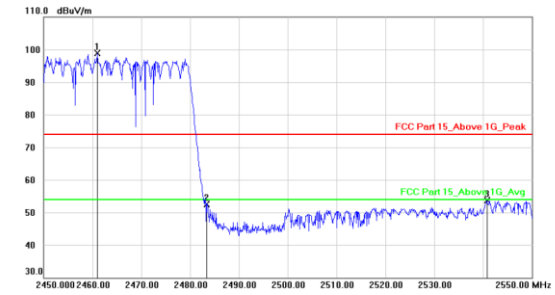
hopping-on

Test Mode: GFSK-High (2479MHz)

Polarization: Vertical



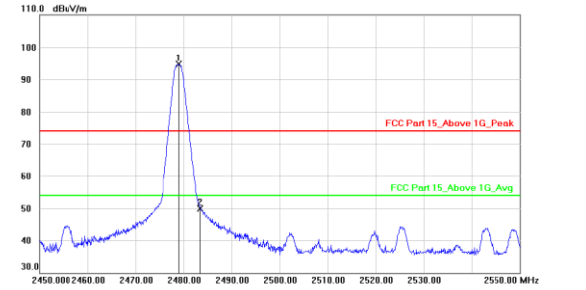
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree Comment
1	*	2478.988	118.20	-15.69	102.51	74.00	28.51	peak		
2		2483.500	69.35	-15.68	53.67	74.00	-20.33	peak		



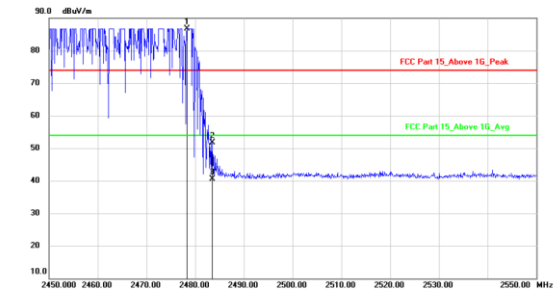
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree Comment
1	*	2461.050	114.65	-15.71	98.94	74.00	24.94	peak		
2		2483.500	68.11	-15.68	52.43	74.00	-21.57	peak		
3		2540.875	69.20	-15.54	53.66	74.00	-20.34	peak		

hopping-off hopping-on

Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree Comment
1	*	2479.012	110.47	-15.69	94.78	74.00	20.78	peak		
2		2483.500	65.49	-15.68	49.81	74.00	-24.19	peak		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree Comment
1	*	2478.300	90.01	-3.39	86.62	74.00	12.62	peak		
2		2483.500	54.99	-3.38	51.61	74.00	-22.39	peak		
3		2483.500	43.90	-3.38	40.52	54.00	-13.48	AVG		

hopping-off hopping-on

Note: 1. *:Maximum data; x:Over limit; !:over margin.

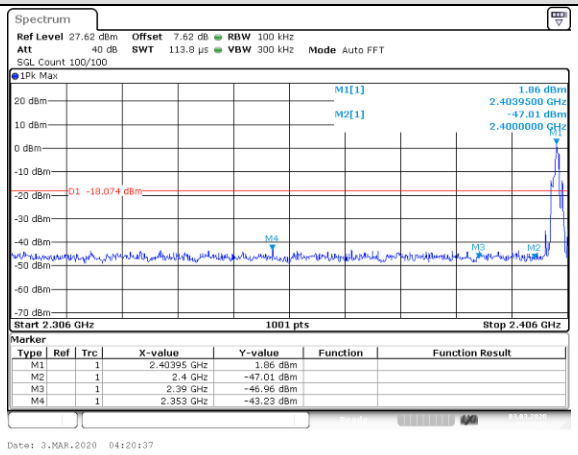
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

Conducted Method

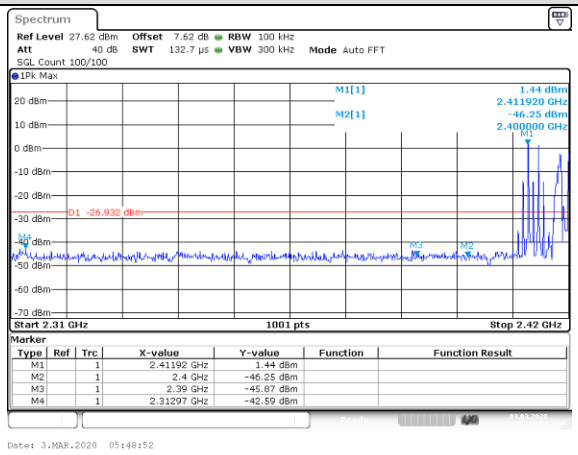
GFSK Mode:

2404-2470 MHz：

Test channel:	Lowest channel

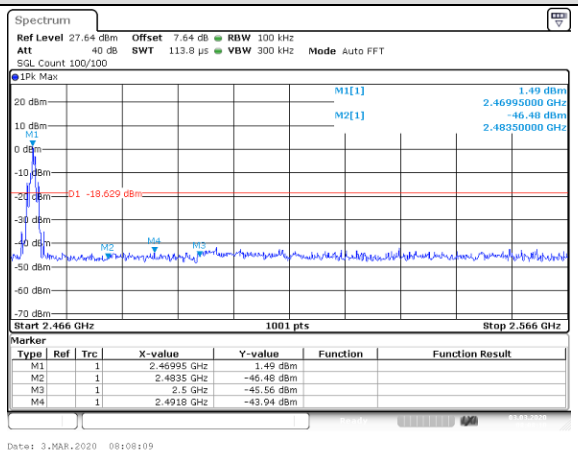


Hopping-off mode

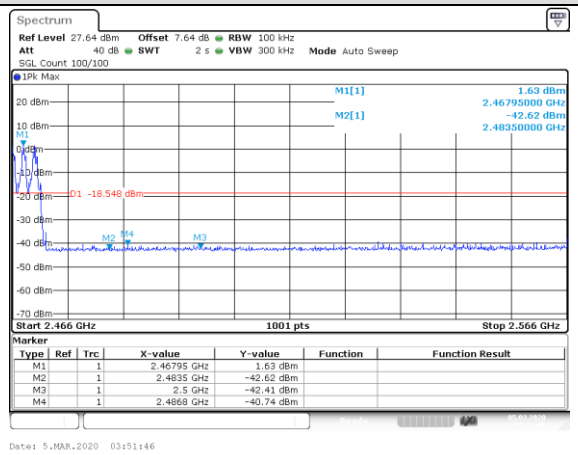


Hopping-on mode

Test channel:	Highest channel



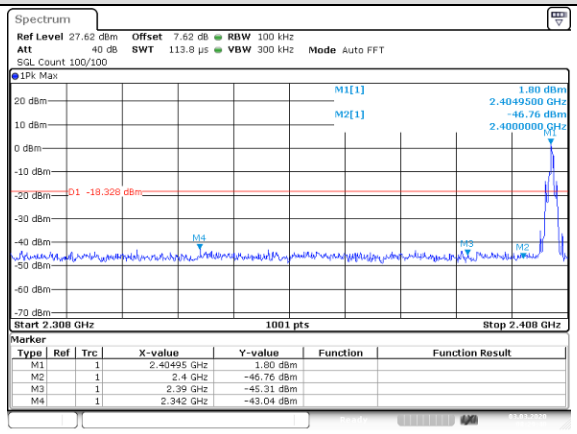
Hopping-off mode



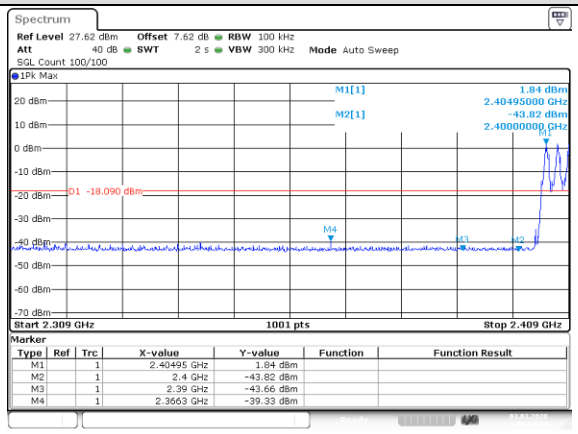
Hopping-on mode

2405-2471 MHz：

Test channel:	Lowest channel

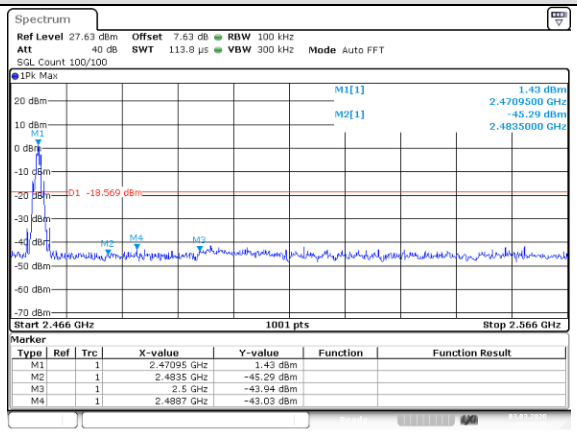


Hopping-off mode

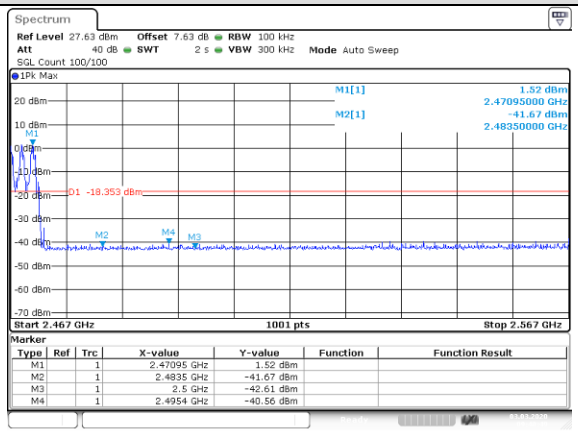


Hopping-on mode

Test channel:	Highest channel



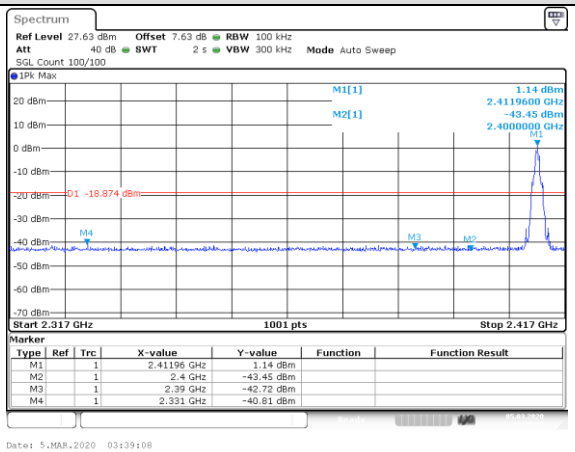
Hopping-off mode



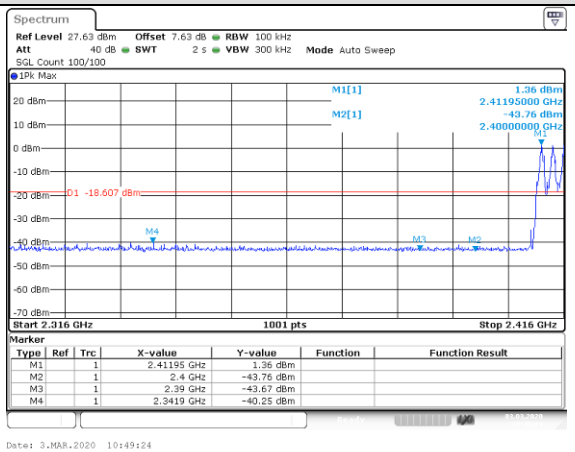
Hopping-on mode

2412-2478 MHz：

Test channel:	Lowest channel

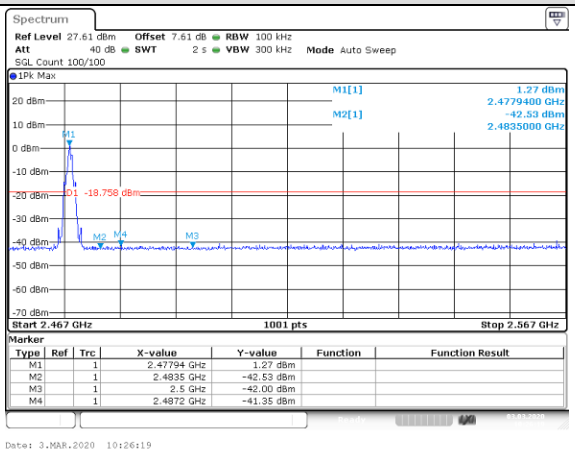


Hopping-off mode

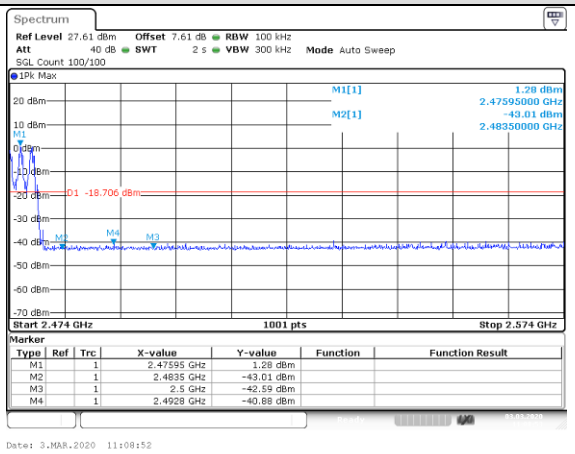


Hopping-on mode

Test channel:	Highest channel



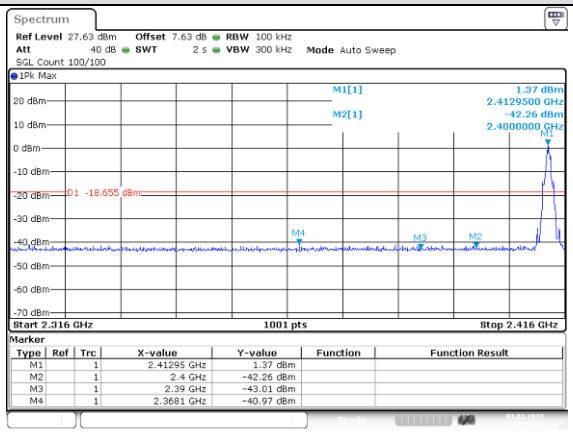
Hopping-off mode



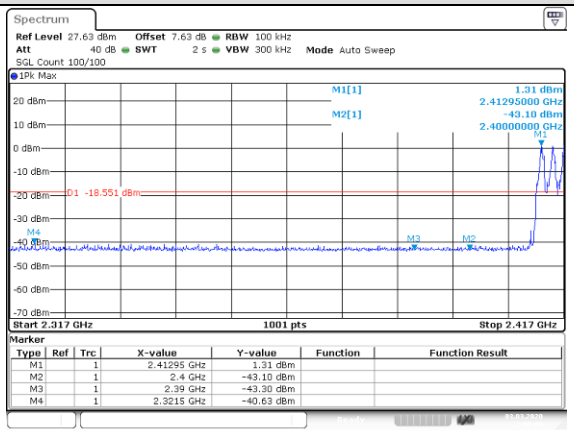
Hopping-on mode

2413-2479 MHz：

Test channel:	Lowest channel

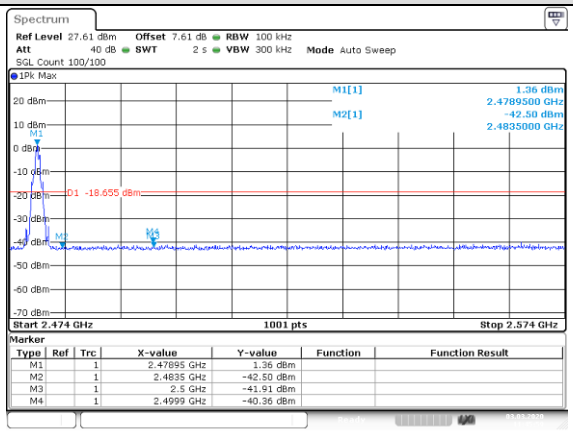


Hopping-off mode

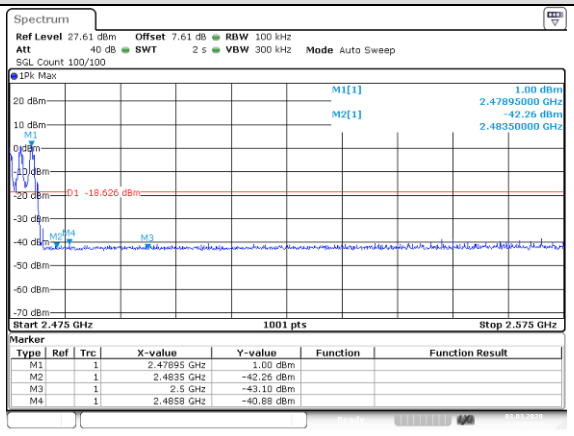


Hopping-on mode

Test channel:	Highest channel



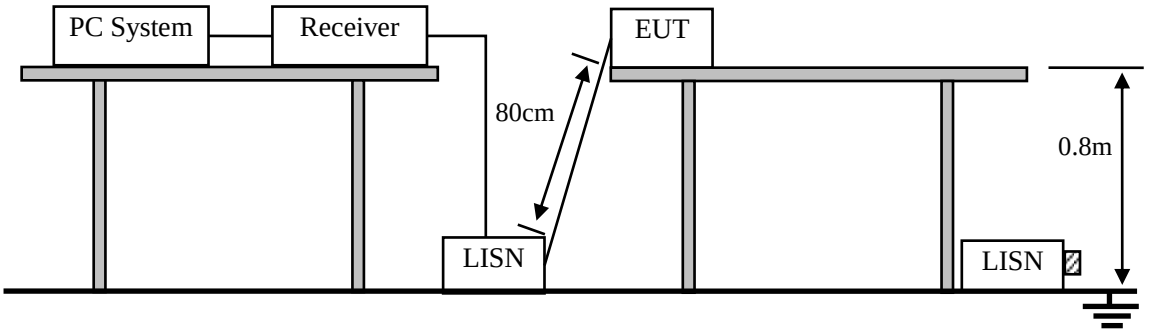
Hopping-off mode



Hopping-on mode

10. POWER LINE CONDUCTED EMISSIONS

10.1. Block Diagram of Test Setup



:50Ω Terminator

10.2. Limit

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

10.3. Test Procedure

(1) The EUT was placed on a non-metallic table, 80cm above the ground plane.
(2) Setup the EUT and simulator as shown in 10.1
(3) The EUT Power connected to the power mains through a power adapter and a line impedance stabilization network (L.I.S.N1). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N2), this provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10 :2013on conducted Emission test.
(4) The bandwidth of test receiver is set at 10KHz.
(5) The frequency range from 150 KHz to 30MHz is checked.

10.4. Test Result

PASS. (See below detailed test data)

Note: If peak Result comply with AV limit, QP and AV Result is deemed to comply with AV limit

Antenna Requirements

10.5.Limit

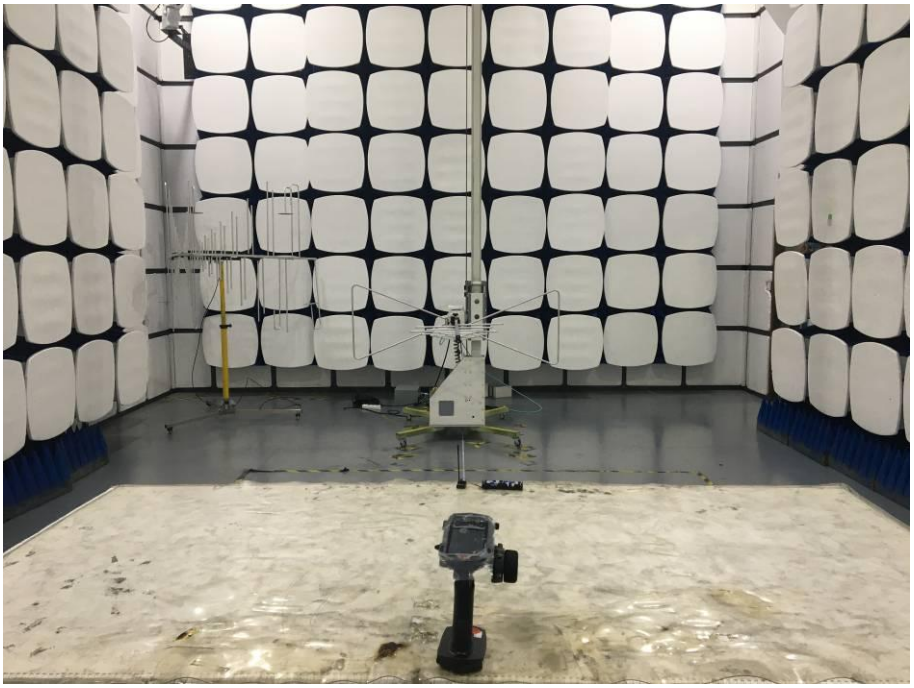
For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

10.6.Result

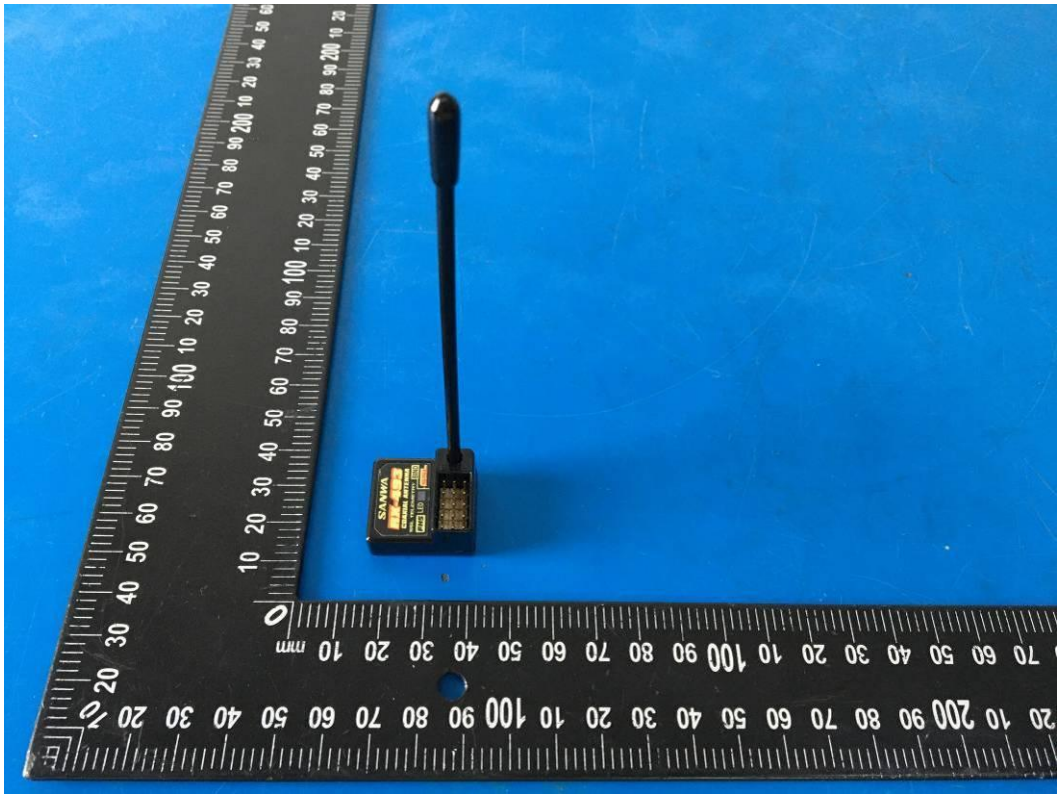
Not applicable for equipment operated with AA battery power supply.

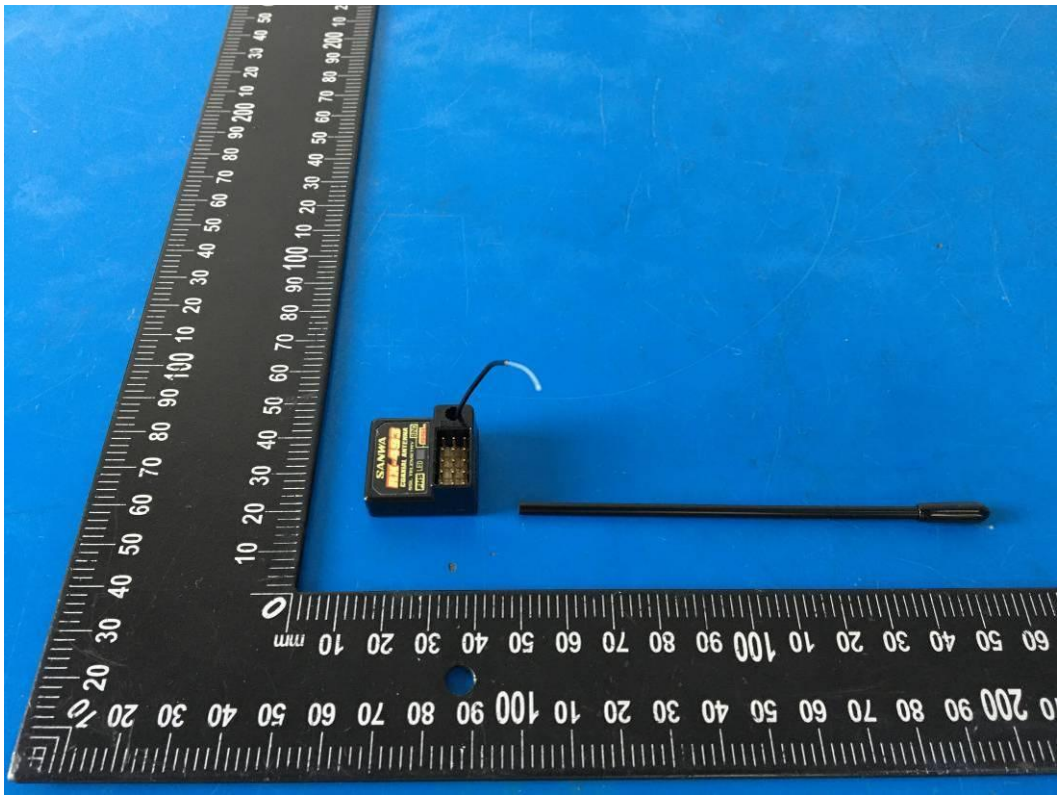
11. TEST SETUP PHOTO

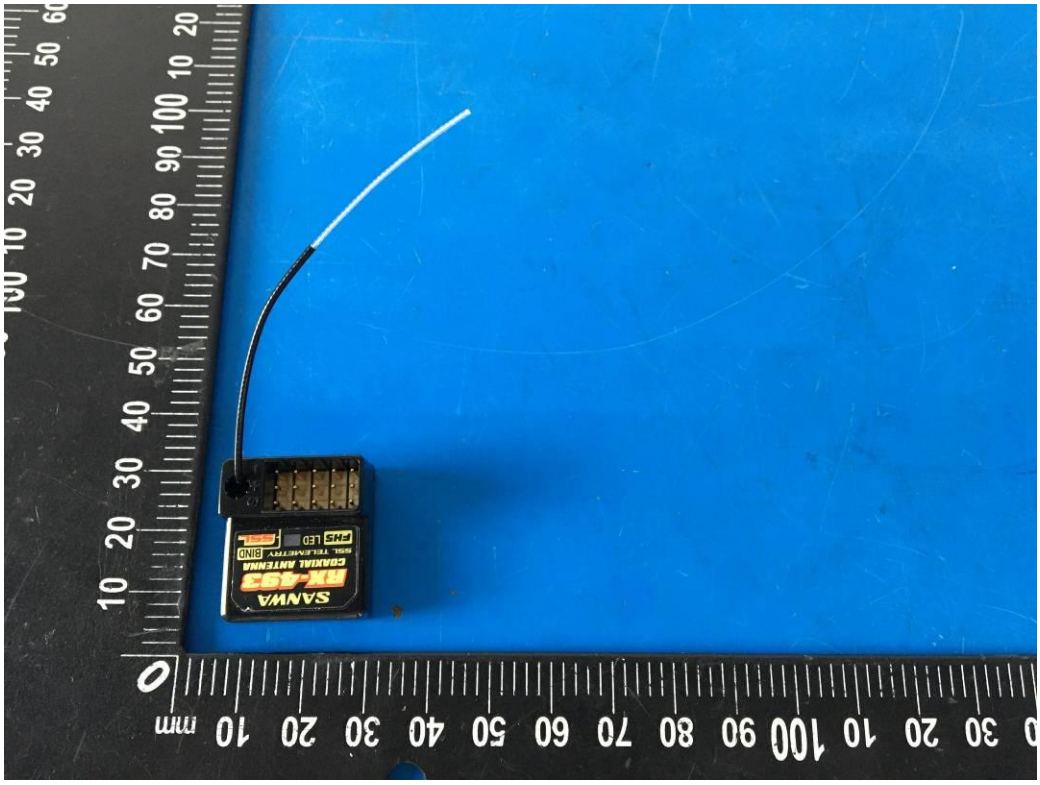
11.1. Photos of Radiated emission

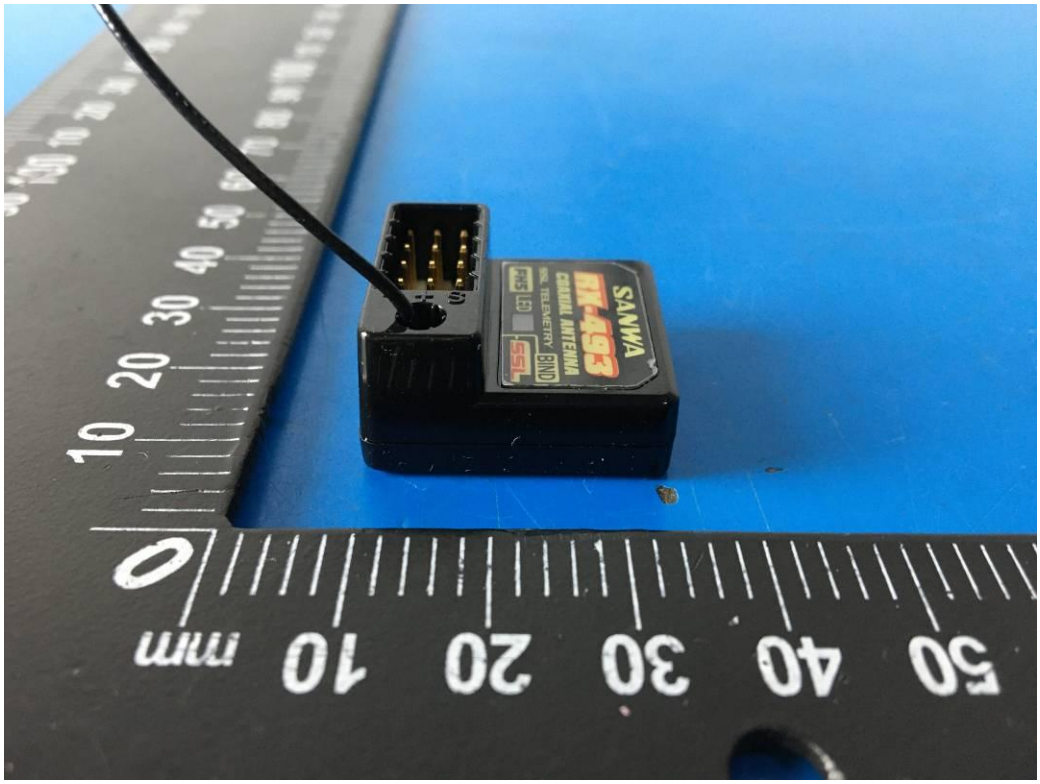


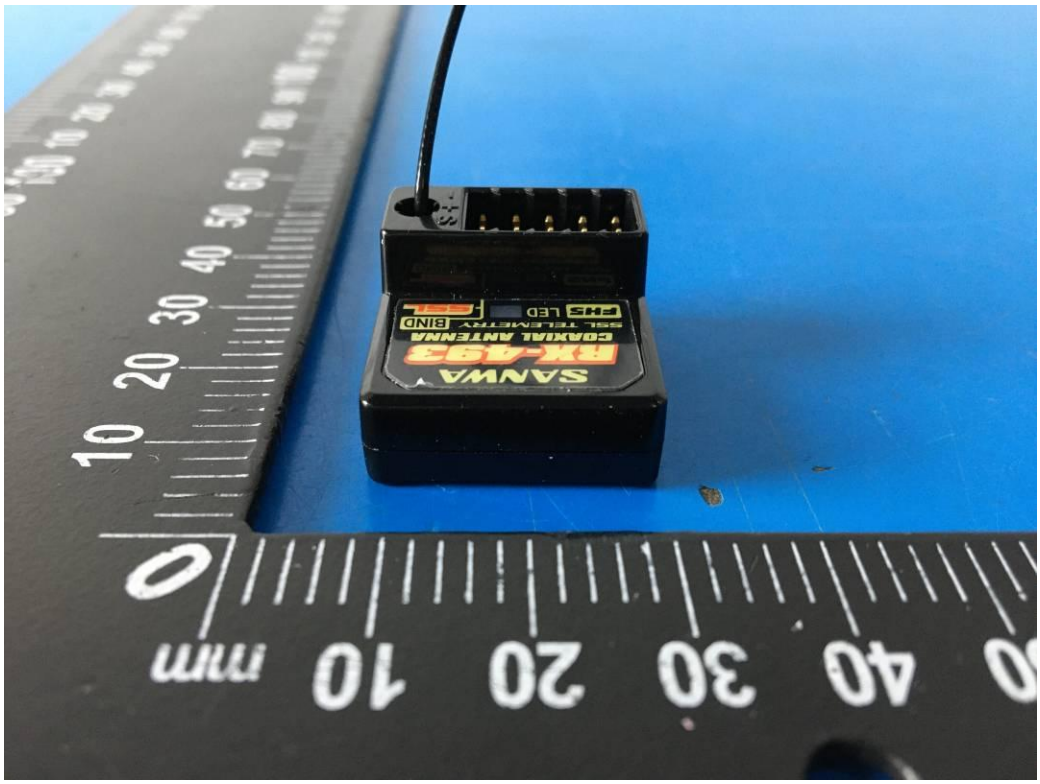
12. PHOTOS OF THE EUT

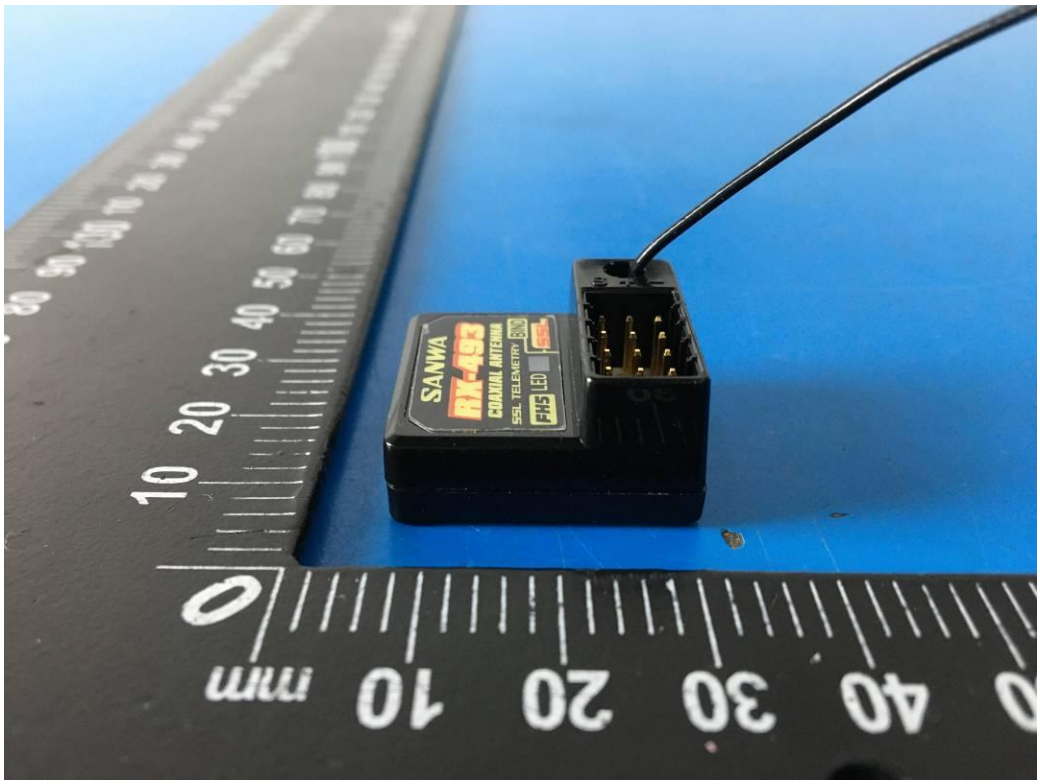


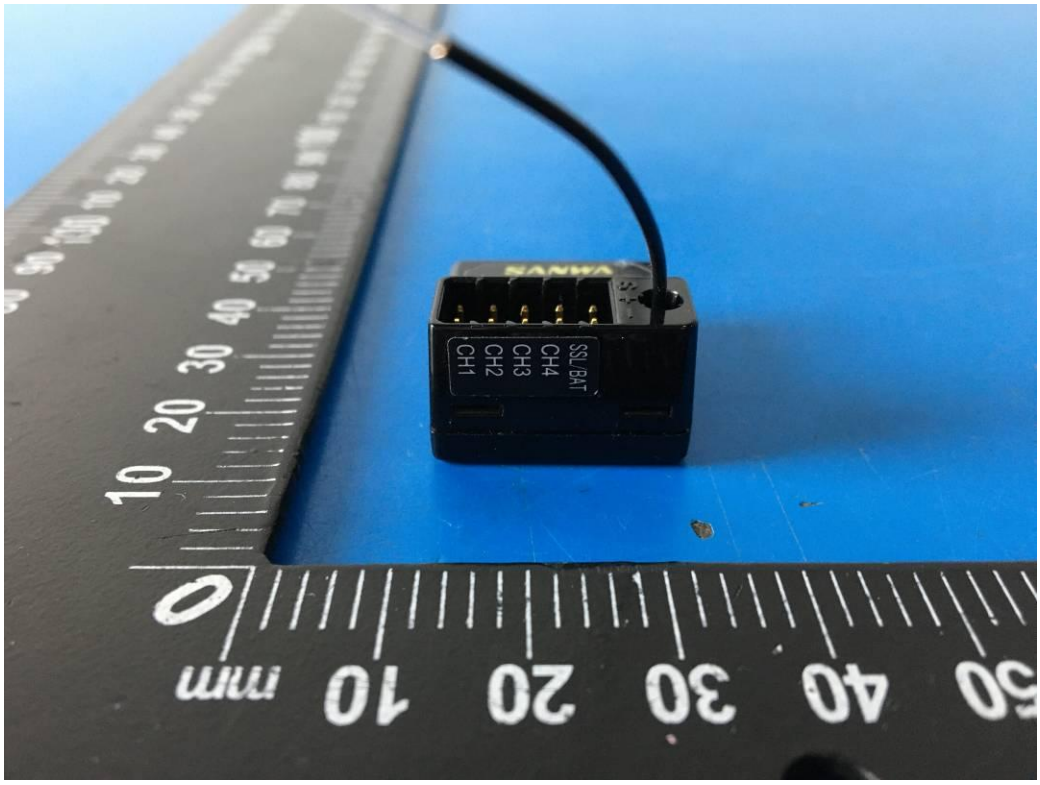


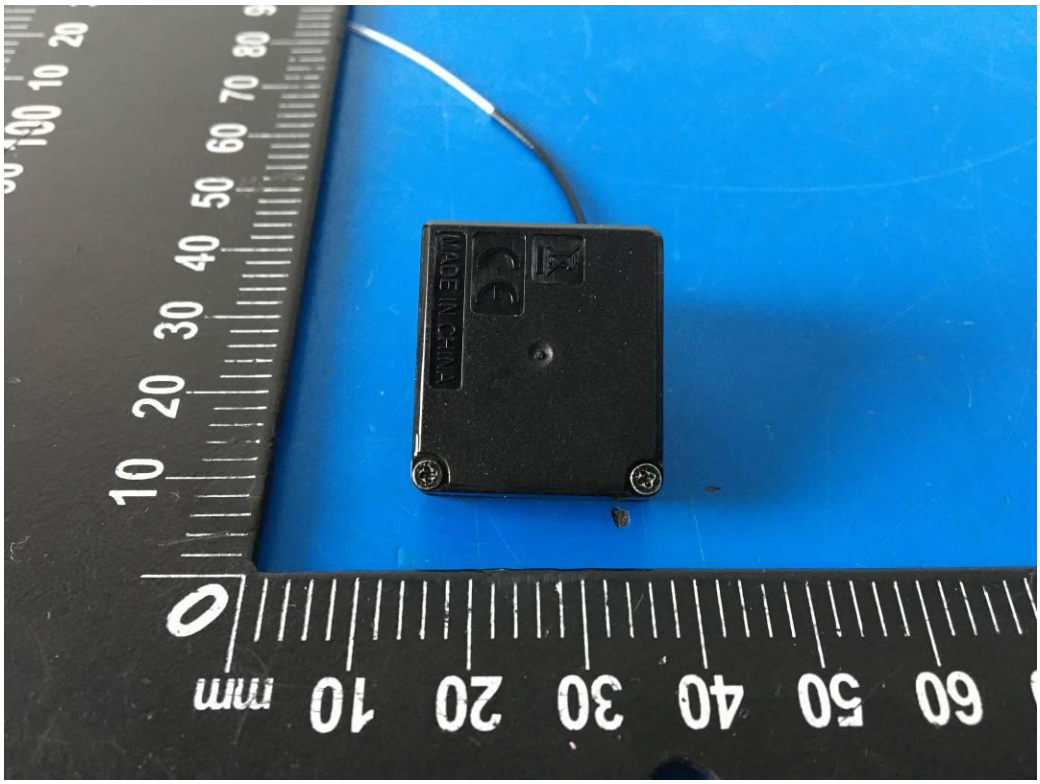

SANWA
RX-493
COAXIAL ANTENNA
BIND
FHS
LED
SSL

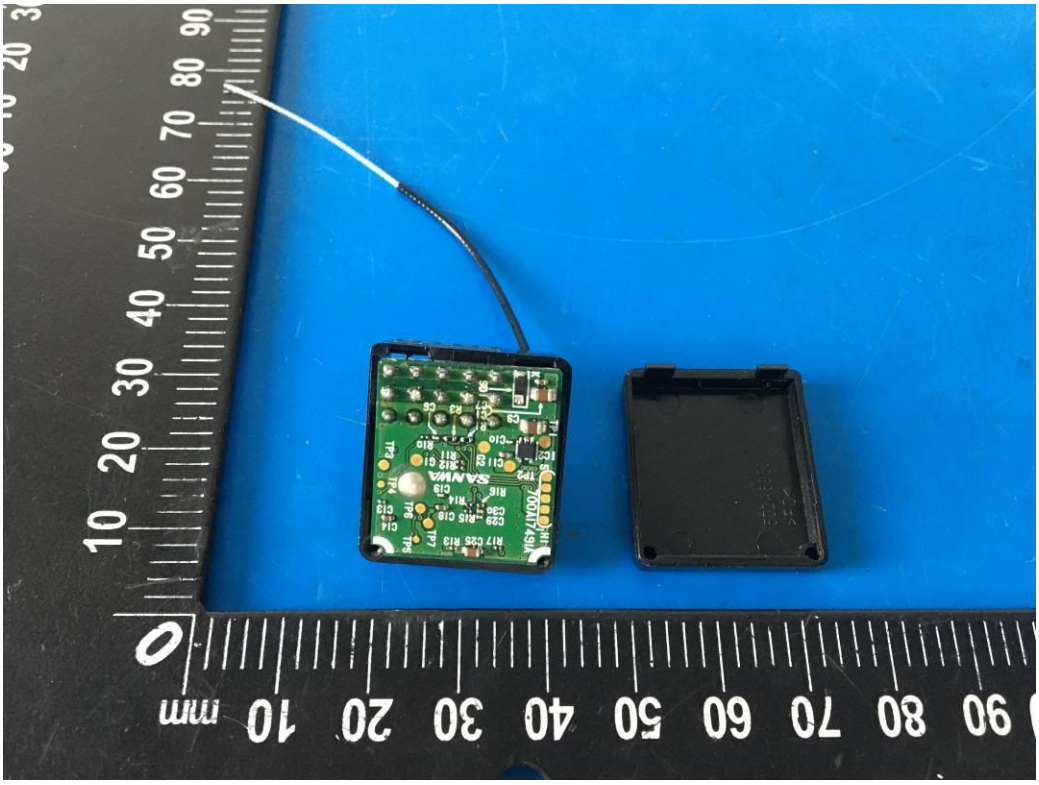

SANWA
RX-493
COAXIAL ANTENNA
BIND
FHS
LED
SSL

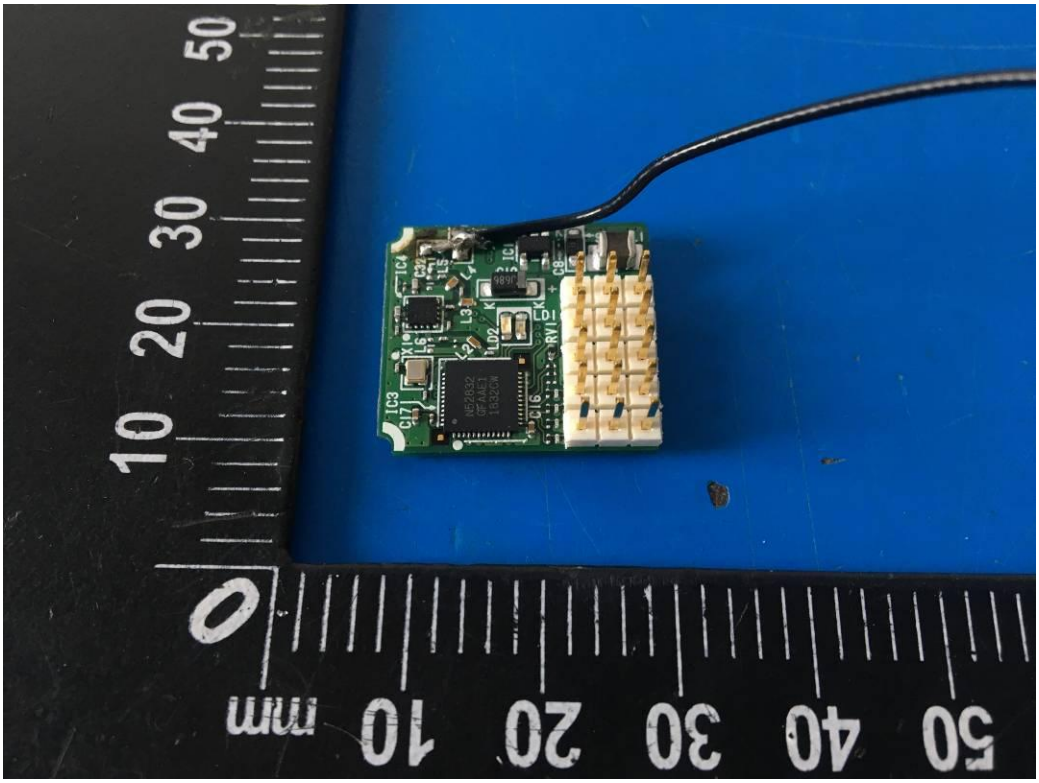

SANWA
RX-493
COAXIAL ANTENNA
SSL TELEMETRY
BIND
FHSS
LED

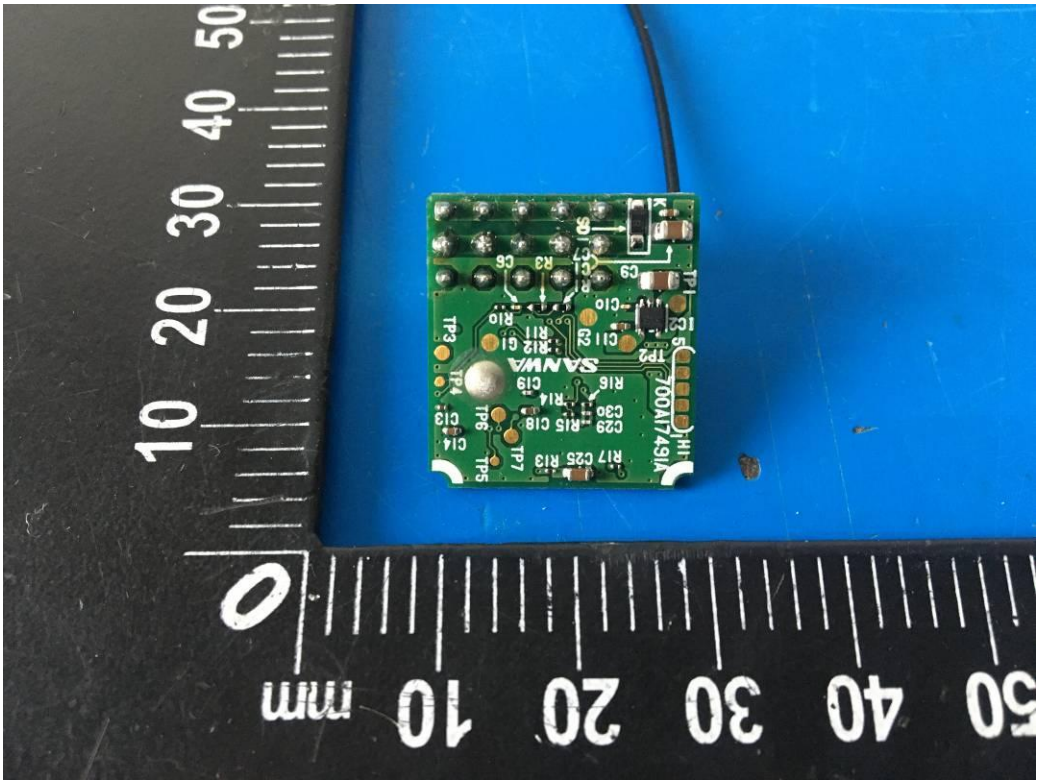

SANWA
RX-493
COAXIAL ANTENNA
SSL TELEMETRY
BIND
FHSS
LED


SANWA
CH1
CH2
CH3
CH4
SSL/BAT


MADE IN CHINA







----END OF REPORT----