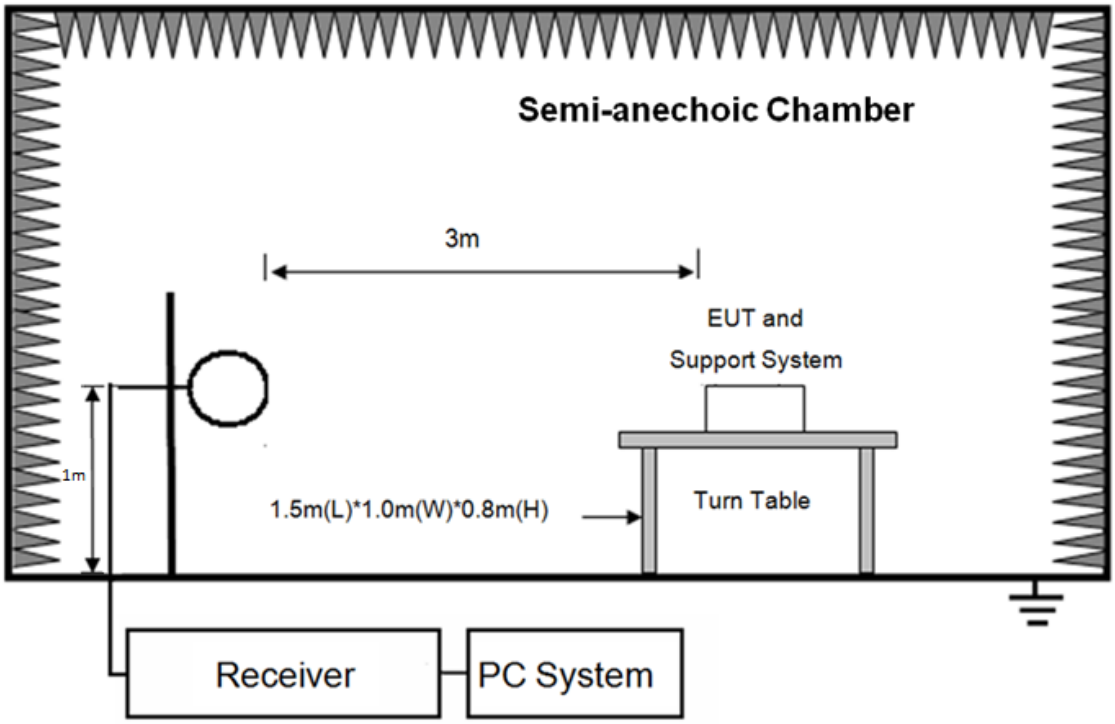
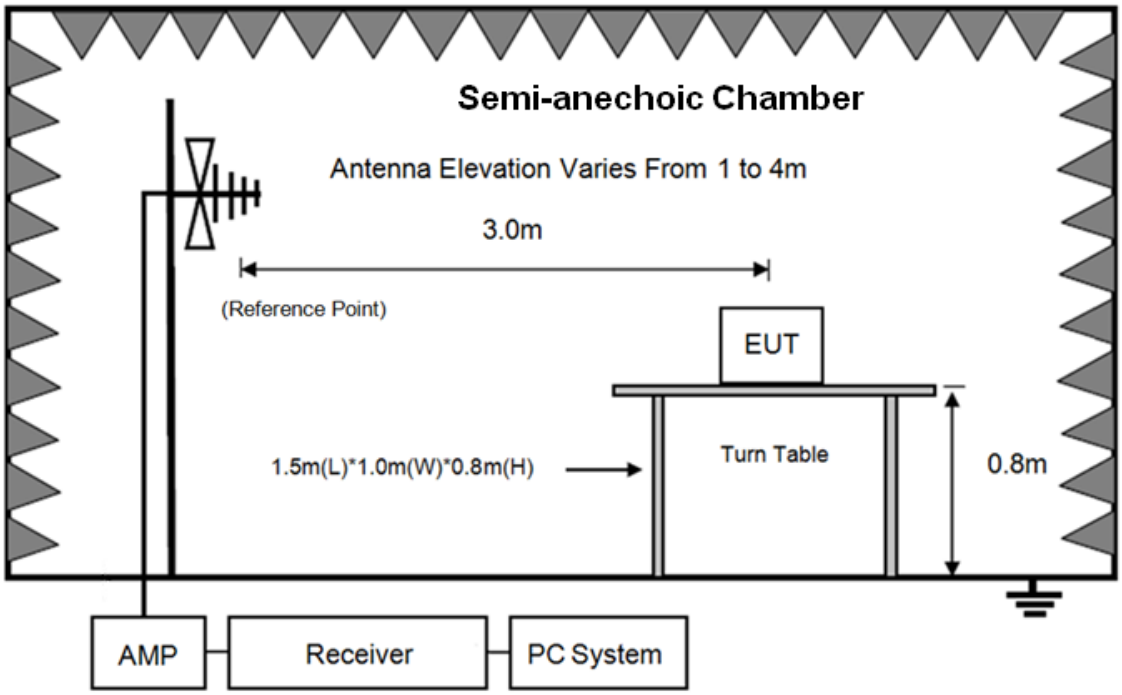
8. Radiated Spurious Emissions

8.1. Block diagram of test setup

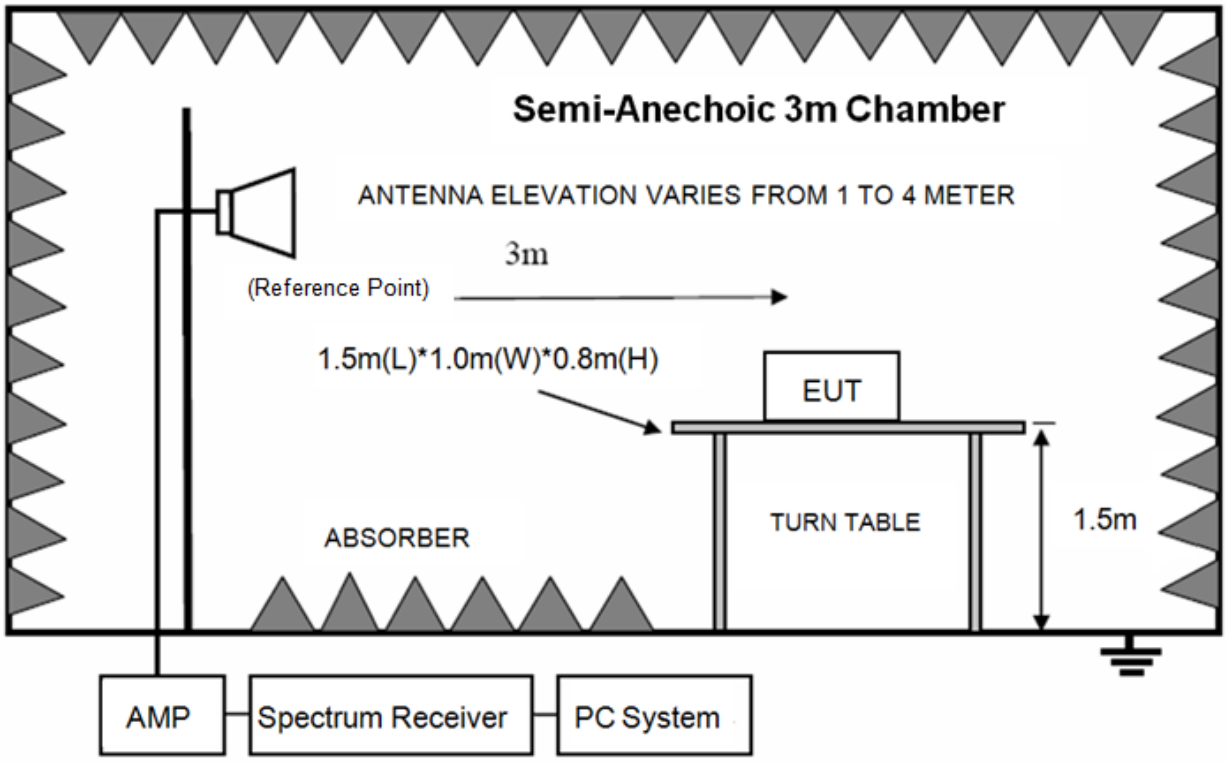
In 3 m Anechoic Chamber, test setup diagram for 9 kHz - 30 MHz:



In 3 m Anechoic Chamber, test setup diagram for 30 MHz – 1 GHz:



In 3 m Anechoic Chamber, test setup diagram for frequency above 1 GHz:



Note: For harmonic emissions test an appropriate high pass filter was inserted in the input port of AMP.

8.2. Limit

(1) FCC 15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.1772&4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.2072&4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

[1]Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

[2]Above 38.6

(2) RSS-GEN Restricted frequency band*

MHz	MHz	MHz	GHz
0.090-0.110	12.57675-12.57725	399.9-410	7.25-7.75
0.495-0.505	13.36-13.41	608-614	8.025-8.5
2.1735-2.1905	16.42-16.423	960-1427	9.0-9.2
3.020-3.026	16.69475-16.69525	1435-1626.5	9.3-9.5
4.125-4.128	16.80425-16.80475	1645.5-1646.5	10.6-12.7
4.17725-4.17775	25.5-25.67	1660-1710	13.25-13.4
4.20725-4.20775	37.5-38.25	1718.8-1722.2	14.47-14.5
5.677-5.683	73-74.6	2200-2300	15.35-16.2
6.215-6.218	74.8-75.2	2310-2390	17.7-21.4
6.26775-6.26825	108-138	2483.5-2500	22.01-23.12
6.31175-6.31225	149.9-150.05	2655-2900	23.6-24.0
8.291-8.294	156.52475-156.52525	3260-3267	31.2-31.8
8.362-8.366	156.7-156.9	3332-3339	36.43-36.5
8.37625-8.38675	162.0125-167.17	3345.8-3358	Above 38.6
8.41425-8.41475	167.72-173.2	3500-4400	
12.29-12.293	240-285	4.5-5.15	
12.51975-12.52025	322-335.4	5.35-5.46	

* Certain frequency bands listed in table 7 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

(3) FCC 15.209 & RSS-GEN Limit.

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
0.009 ~ 0.490	300	2400/F(kHz)	67.6-20log(F)
0.490 ~ 1.705	30	24000/F(kHz)	87.6-20log(F)
1.705 ~ 30.0	30	30	29.54
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

Note: (1) The emission limits shown in the above table are based on measurements employing a CISPR QP detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000MHz. Radiated emissions limits in these three bands are based on measurements employing an average detector.

(2) At frequencies below 30MHz, measurement may be performed at a distance closer than that specified, and the limit at closer measurement distance can be extrapolated by below formula:

$$Limit_{3m}(dBuV/m) = Limit_{30m}(dBuV/m) + 40Log(30m/3m)$$

(4) Limit for this EUT
All the emissions appearing within 15.205 & RSS-GEN restricted frequency bands shall not exceed the limits shown in 15.209 & RSS-GEN, all the other emissions shall be at least 20dB below the fundamental emissions or comply with 15.209 & RSS-GEN limits.

8.3. Test procedure

(1) EUT height should be 0.8 m for below 1 GHz at a semi-anechoic chamber while EUT height should be 1.5 m for above 1 GHz at full chamber or semi-anechoic chamber ground with absorbers.

(2) The antenna used as below table.

Test frequency range	Test antenna used	Measuring distance
9 kHz-30 MHz	Active Loop antenna	3 m
30 MHz-1 GHz	Trilog Broadband Antenna	10 m
1 GHz-18 GHz	Double Ridged Horn Antenna(1GHz-18GHz)	3 m
18 GHz-40 GHz	Horn Antenna(18GHz-40GHz)	3 m

According ANSI C63.10:2020 clause 6.4.4.2 and 6,5.3, for measurements below 30 MHz, the loop antenna was positioned with its plane vertical from the EUT and rotated about its vertical axis for maximum response at each azimuth position around the EUT. And the loop antenna also be positioned with its plane horizontal at the specified distance from the EUT. The center of the loop is 1 m above the ground. for measurement above 30 MHz, the Trilog Broadband Antenna was located 10 m, Horn Antenna was located 3 m from EUT, Measurements were made with the antenna positioned in both the horizontal and vertical planes of Polarization, and the measurement antenna was varied from 1 m to 4 m. in height above the reference ground plane to obtain the maximum signal strength.

(3) Below pre-scan procedure was first performed in order to find prominent frequency spectrum radiated emissions from 9 kHz to 25 GHz:

(a) Scanning the peak frequency spectrum with the antenna specified in step (3), and the EUT was rotated 360 degrees, the antenna height was varied from 1 m to 4 m (Except loop antenna, it’s fixed 1m above ground.)

(b) Change work frequency or channel of device if practicable.

(c) Change modulation type of device if practicable.

(d) Change power supply range from 85% to 115% of the rated supply voltage

(e) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions.

Spectrum frequency from 9 kHz to 25 GHz (tenth harmonic of fundamental frequency) was

investigated, and no any obvious emission were detected from 18GHz to 25GHz, so below final test was performed with frequency range from 9kHz to 18GHz.

(4) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1 m and 4 m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed according to ANSI C63.10 2020 on Radiated Emission test.

(5) The emissions from 9 kHz to 1 GHz were measured based on CISPR QP detector except for the frequency bands 9-90 kHz, 110-490 kHz, for emissions from 9 kHz-90 kHz,110 kHz-490 kHz and above 1 GHz were measured based on average detector, for emissions above 1 GHz, peak emissions also be measured and need comply with Peak limit.

(6) The emissions from 9 kHz to 1 GHz, QP or average values were measured with EMI receiver with below RBW

Frequency band	RBW
9 kHz-150 kHz	200 Hz
150 kHz-30 MHz	9 kHz
30 MHz-1 GHz	120 kHz

(7) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1 MHz, VBW is set at 3 MHz for Peak measure; According ANSI C63.10:2020 clause 4.1.4.2.2 procedure for Average measure.

(8) X axis, Y axis, Z axis are tested, and worse setup X axis is reported.

8.4. Test result

Pass. (See below detailed test result)

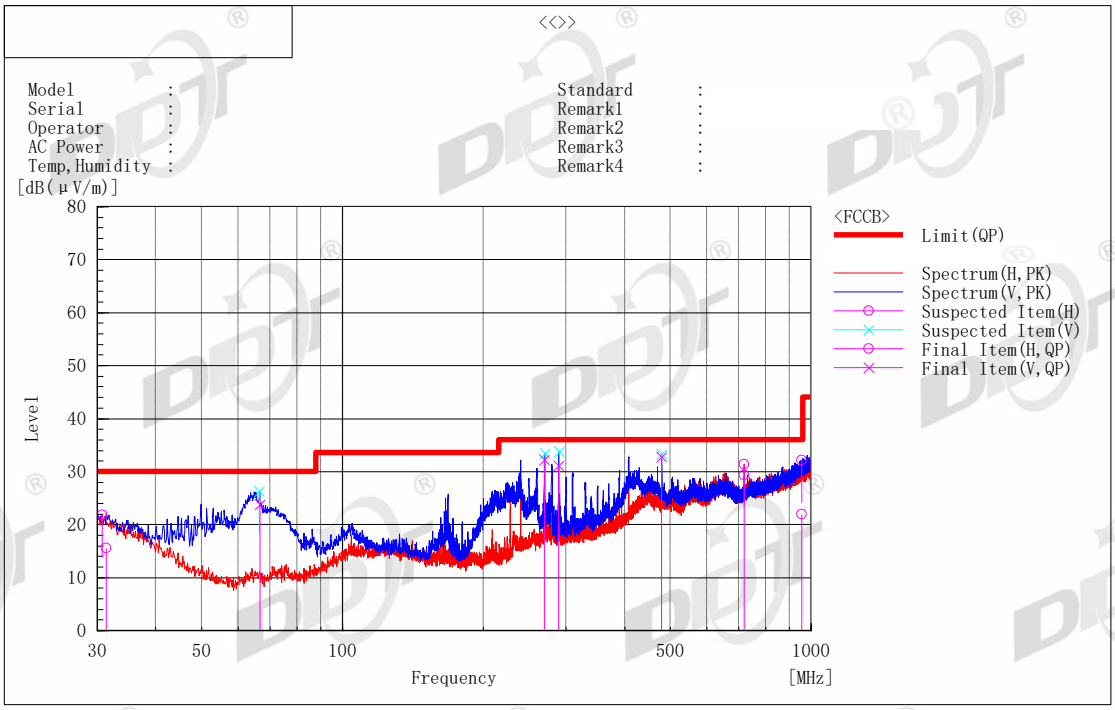
All the emissions except fundamental emission from 9 kHz to 25 GHz were comply with 15.209 limit.

Note1: According exploratory test no any obvious emission was detected from 9 kHz to 30 MHz and 18 GHz to 25 GHz, so the final test was performed with frequency range from 30 MHz to 18 GHz and recorded in below.

Note2: For emissions below 1 GHz, according exploratory explorer test, when change Tx mode and channel, have no distinct influence on emissions level, so for emissions below 1 GHz, the final test was only performed with EUT working in transmission mode.

Note3: Scan with all modes, the worst case was recorded in this report.

Radiated Emission test (below 1GHz)



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(μV)]	c.f [dB(1/m)]	Result QP [dB(μV/m)]	Limit QP [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]	System	Remark
1	31.298	H	21.3	-5.7	15.6	30.0	14.4	313.0	281.8	1	
2	720.032	H	28.2	1.2	29.4	36.0	6.6	387.0	189.4	1	
3	955.831	H	16.8	5.2	22.0	36.0	14.0	379.0	16.4	1	
4	66.587	V	41.0	-17.1	23.9	30.0	6.1	286.0	20.7	2	
5	269.952	V	40.7	-8.4	32.3	36.0	3.7	131.0	265.6	2	
6	289.559	V	39.0	-7.9	31.1	36.0	4.9	123.0	42.2	2	
7	480.018	V	34.9	-2.1	32.8	36.0	3.2	117.0	320.9	2	

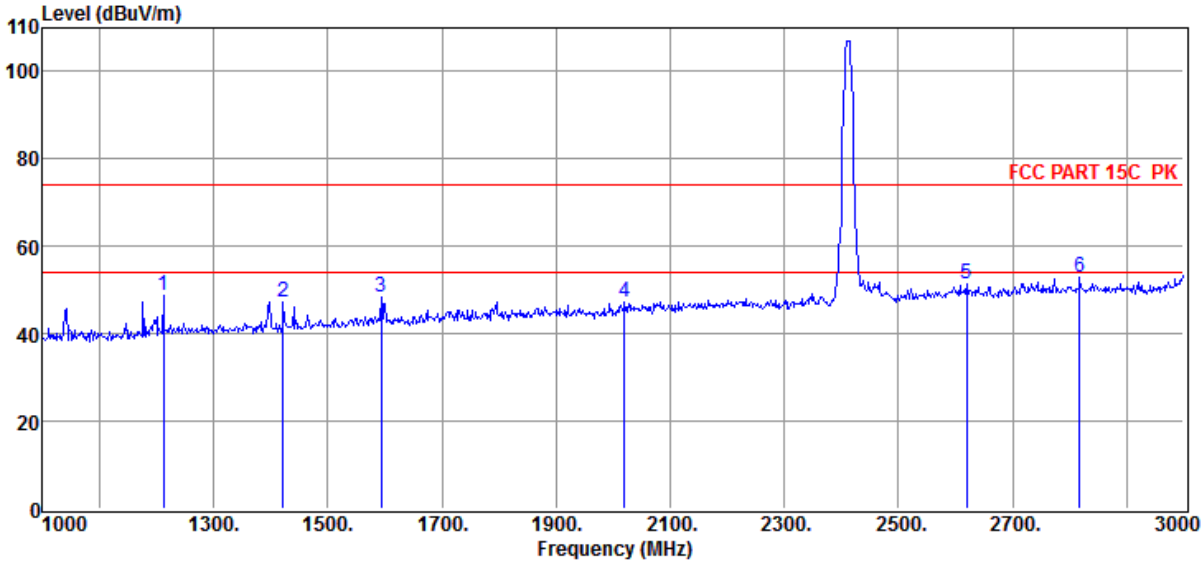
Note) Receiving antenna polarization: Horizontal and/or Vertical
Test Distance: 10 m, Antenna Height: 1 m to 4 m
Level QP (Quasi-Peak) = Reading QP + Factor (Antenna Factor + Cable Loss - Amp. Gain)
Margin QP (Quasi-Peak) = Limit – Level QP

Radiated Emission test (1GHz -3GHz)

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11B ANT1 1M 2412MHz		

Data: 1



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1212.00	53.85	28.80	-33.97	48.68	74.00	-25.32	Peak	HORIZONTAL
2	1422.00	51.10	29.72	-33.55	47.27	74.00	-26.73	Peak	HORIZONTAL
3	1594.00	50.57	30.98	-33.28	48.27	74.00	-25.73	Peak	HORIZONTAL
4	2020.00	46.56	33.08	-32.48	47.16	74.00	-26.84	Peak	HORIZONTAL
5	2620.00	45.56	36.84	-31.17	51.23	74.00	-22.77	Peak	HORIZONTAL
6	2818.00	46.29	37.44	-30.95	52.78	74.00	-21.22	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

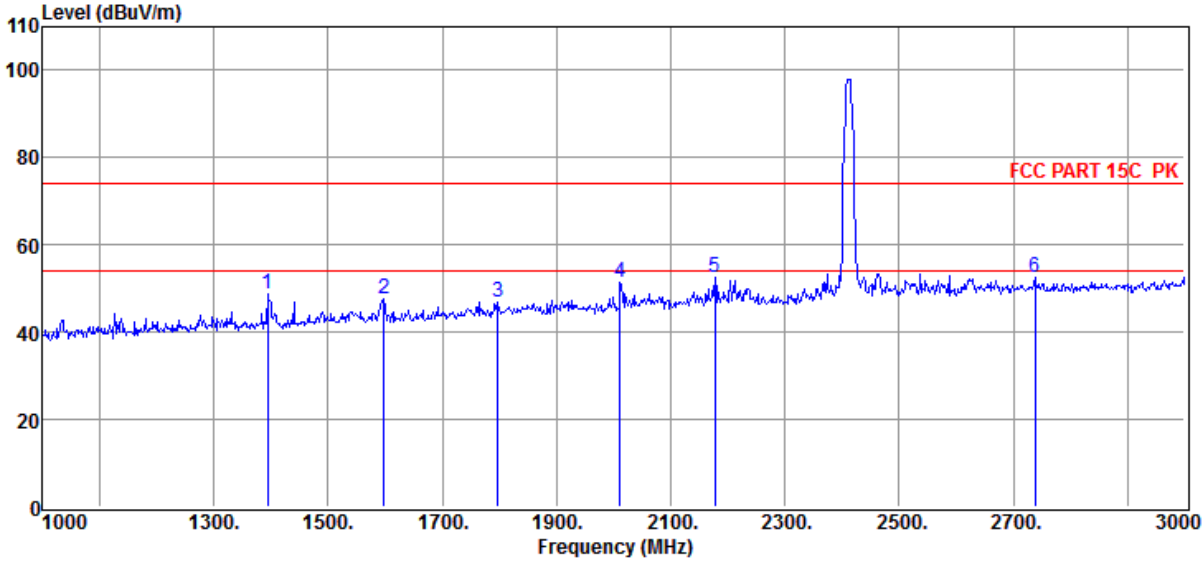
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT1 1M 2412MHz

Data: 2



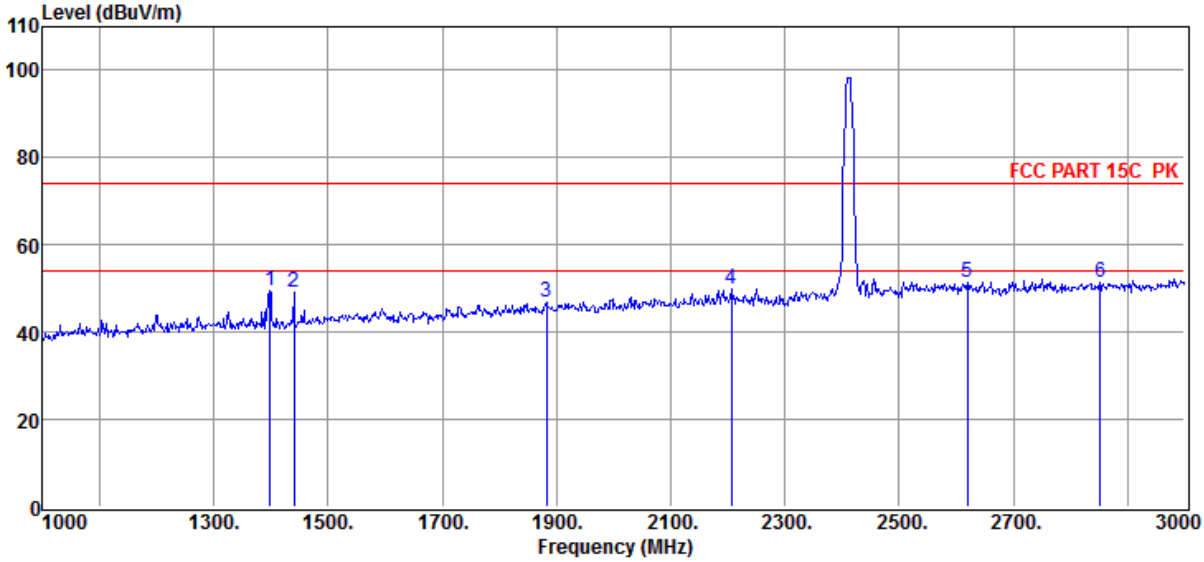
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1394.00	52.94	29.48	-33.61	48.81	74.00	-25.19	Peak	VERTICAL
2	1598.00	49.76	30.99	-33.28	47.47	74.00	-26.53	Peak	VERTICAL
3	1798.00	48.14	31.69	-32.83	47.00	74.00	-27.00	Peak	VERTICAL
4	2012.00	50.93	32.97	-32.51	51.39	74.00	-22.61	Peak	VERTICAL
5	2178.00	50.68	33.92	-32.08	52.52	74.00	-21.48	Peak	VERTICAL
6	2738.00	46.09	37.26	-30.78	52.57	74.00	-21.43	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11B ANT2 1M 2412MHz		

Data: 3



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1398.00	53.57	29.49	-33.60	49.46	74.00	-24.54	Peak	VERTICAL
2	1440.00	52.71	29.90	-33.50	49.11	74.00	-24.89	Peak	VERTICAL
3	1882.00	46.94	32.46	-32.62	46.78	74.00	-27.22	Peak	VERTICAL
4	2206.00	47.37	34.38	-32.01	49.74	74.00	-24.26	Peak	VERTICAL
5	2620.00	45.74	36.84	-31.17	51.41	74.00	-22.59	Peak	VERTICAL
6	2852.00	44.71	37.69	-30.97	51.43	74.00	-22.57	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

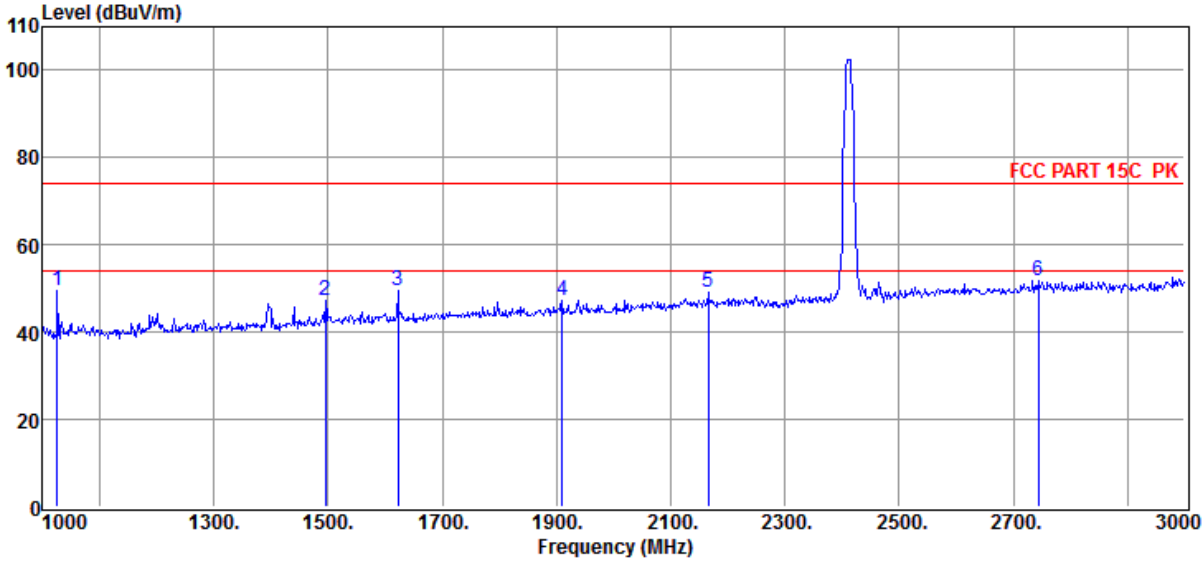
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT2 1M 2412MHz

Data: 4



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1026.00	56.56	27.16	-34.36	49.36	74.00	-24.64	Peak	HORIZONTAL
2	1496.00	50.35	30.46	-33.45	47.36	74.00	-26.64	Peak	HORIZONTAL
3	1622.00	51.91	30.87	-33.18	49.60	74.00	-24.40	Peak	HORIZONTAL
4	1910.00	47.39	32.62	-32.62	47.39	74.00	-26.61	Peak	HORIZONTAL
5	2166.00	47.57	33.65	-32.11	49.11	74.00	-24.89	Peak	HORIZONTAL
6	2744.00	45.41	37.33	-30.77	51.97	74.00	-22.03	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

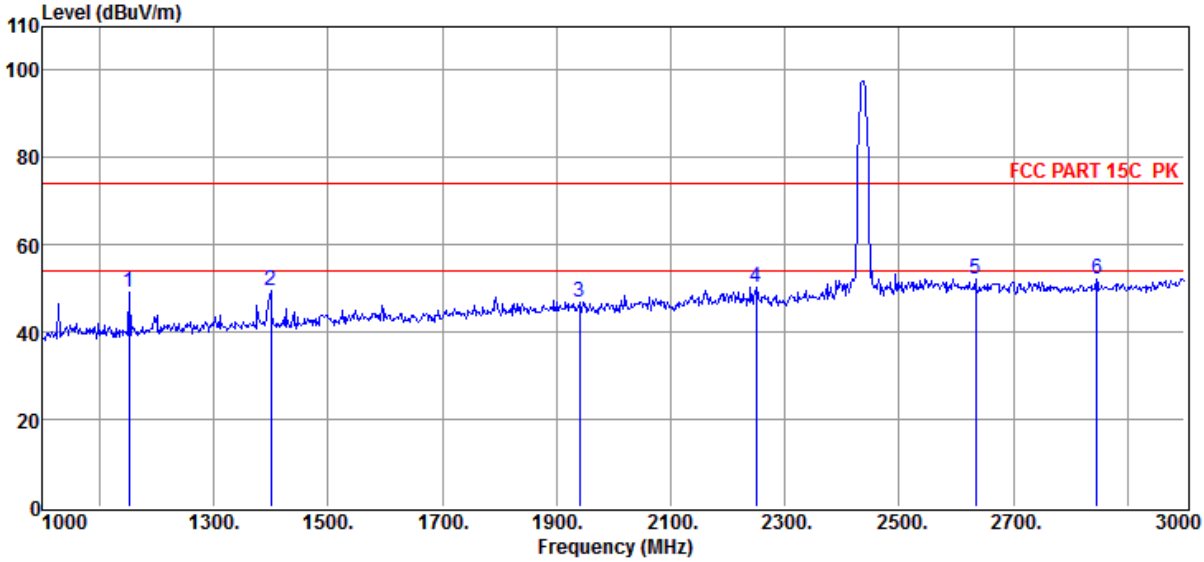
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT1 1M 2437MHz

Data: 5



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1152.00	55.34	27.84	-34.12	49.06	74.00	-24.94	Peak	VERTICAL
2	1400.00	53.50	29.50	-33.60	49.40	74.00	-24.60	Peak	VERTICAL
3	1940.00	46.61	32.68	-32.45	46.84	74.00	-27.16	Peak	VERTICAL
4	2250.00	47.89	34.20	-31.83	50.26	74.00	-23.74	Peak	VERTICAL
5	2634.00	46.82	36.73	-31.23	52.32	74.00	-21.68	Peak	VERTICAL
6	2846.00	45.63	37.67	-30.98	52.32	74.00	-21.68	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

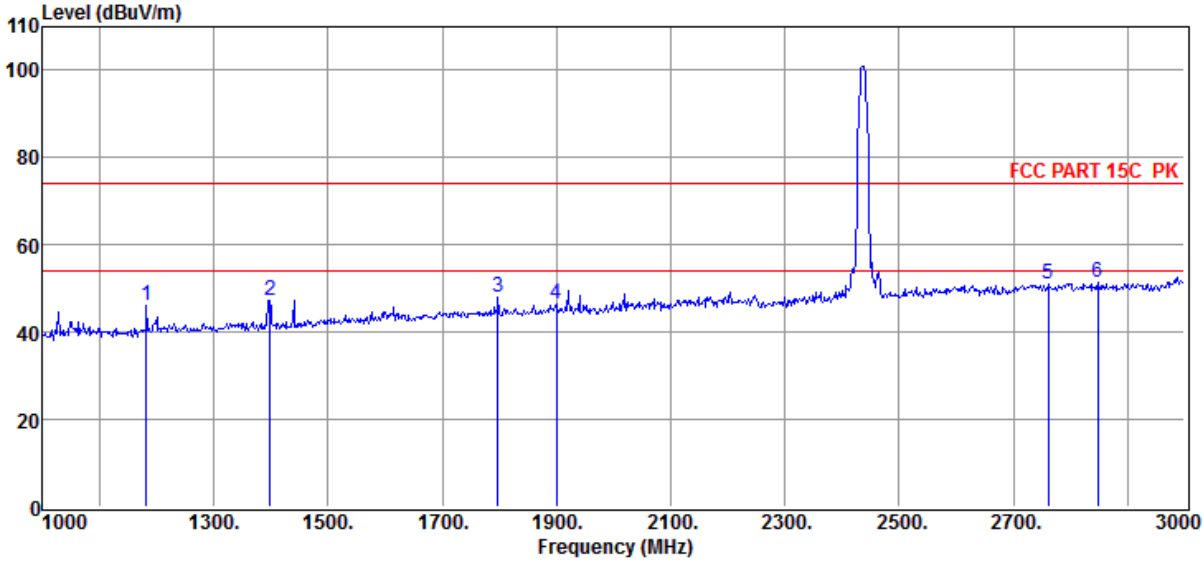
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT1 1M 2437MHz

Data: 6



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1182.00	51.86	28.38	-34.06	46.18	74.00	-27.82	Peak	HORIZONTAL
2	1398.00	51.51	29.49	-33.60	47.40	74.00	-26.60	Peak	HORIZONTAL
3	1798.00	48.97	31.69	-32.83	47.83	74.00	-26.17	Peak	HORIZONTAL
4	1900.00	46.42	32.60	-32.67	46.35	74.00	-27.65	Peak	HORIZONTAL
5	2762.00	44.42	37.38	-30.79	51.01	74.00	-22.99	Peak	HORIZONTAL
6	2848.00	44.67	37.68	-30.99	51.36	74.00	-22.64	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

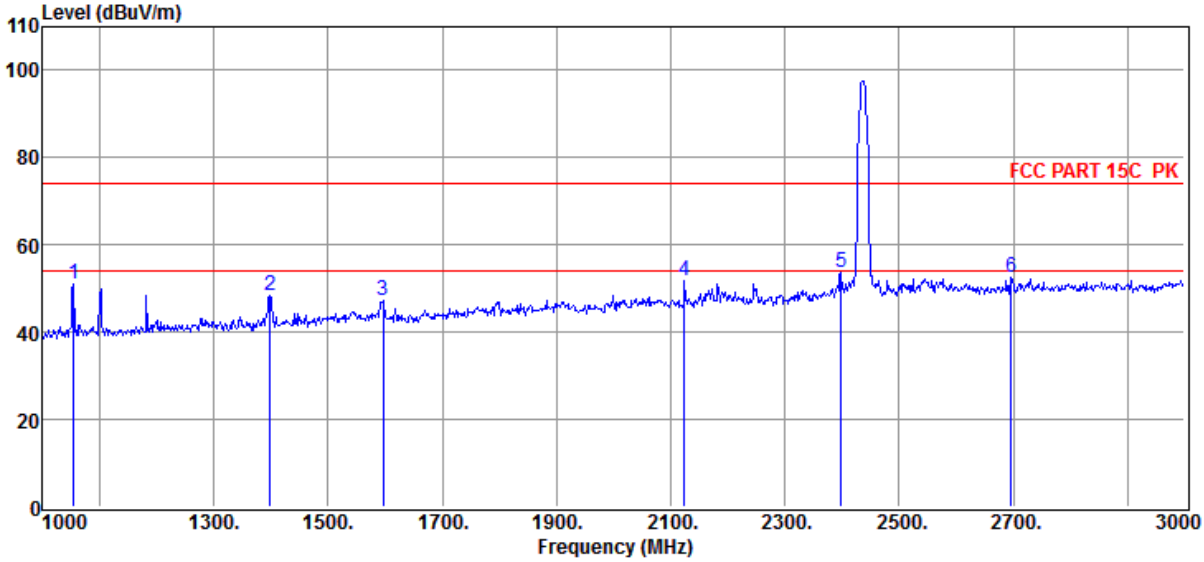
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT2 1M 2437MHz

Data: 7



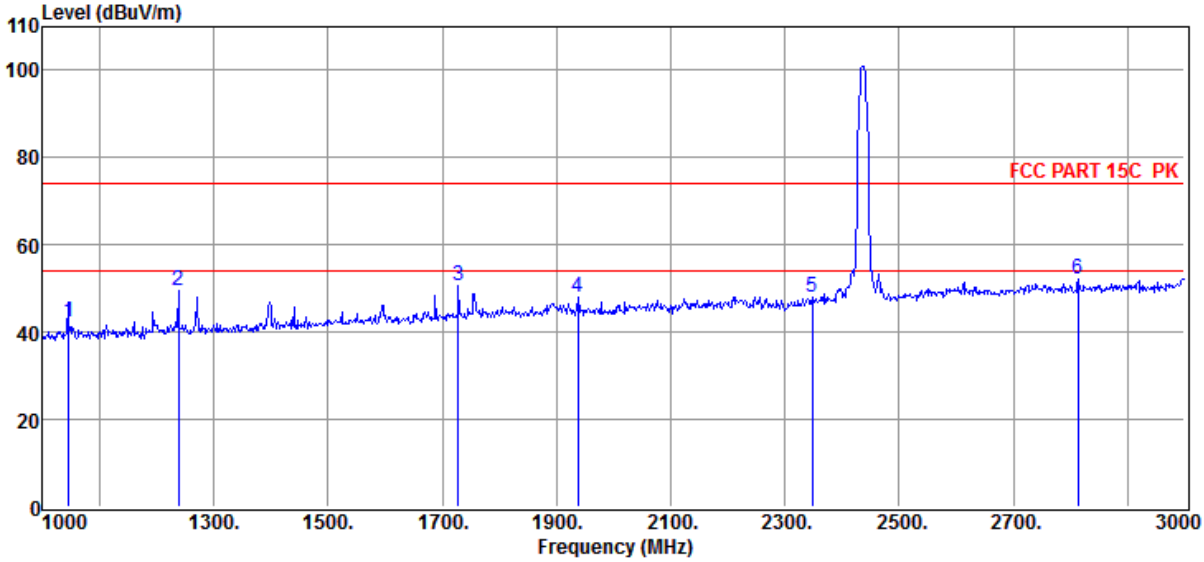
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1054.00	57.75	27.41	-34.31	50.85	74.00	-23.15	Peak	VERTICAL
2	1398.00	52.32	29.49	-33.60	48.21	74.00	-25.79	Peak	VERTICAL
3	1596.00	49.63	30.98	-33.28	47.33	74.00	-26.67	Peak	VERTICAL
4	2124.00	50.95	33.09	-32.29	51.75	74.00	-22.25	Peak	VERTICAL
5	2398.00	50.32	35.08	-31.76	53.64	74.00	-20.36	Peak	VERTICAL
6	2696.00	46.62	36.78	-30.92	52.48	74.00	-21.52	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11B ANT2 1M 2437MHz		

Data: 8



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1046.00	49.13	27.36	-34.33	42.16	74.00	-31.84	Peak	HORIZONTAL
2	1238.00	54.35	29.00	-33.87	49.48	74.00	-24.52	Peak	HORIZONTAL
3	1728.00	52.44	31.27	-32.95	50.76	74.00	-23.24	Peak	HORIZONTAL
4	1938.00	47.86	32.68	-32.46	48.08	74.00	-25.92	Peak	HORIZONTAL
5	2348.00	45.05	34.57	-31.43	48.19	74.00	-25.81	Peak	HORIZONTAL
6	2814.00	45.66	37.41	-30.94	52.13	74.00	-21.87	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

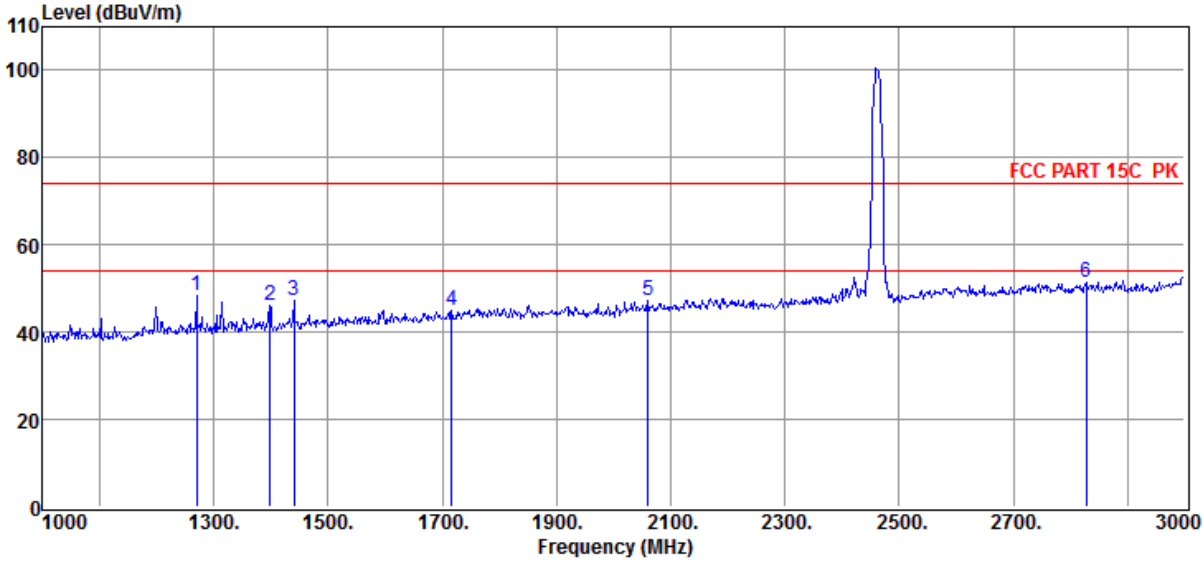
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT1 1M 2462MHz

Data: 9



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1270.00	53.24	29.10	-33.81	48.53	74.00	-25.47	Peak	HORIZONTAL
2	1398.00	50.17	29.49	-33.60	46.06	74.00	-27.94	Peak	HORIZONTAL
3	1440.00	50.90	29.90	-33.50	47.30	74.00	-26.70	Peak	HORIZONTAL
4	1716.00	46.61	31.20	-33.00	44.81	74.00	-29.19	Peak	HORIZONTAL
5	2060.00	46.24	33.38	-32.35	47.27	74.00	-26.73	Peak	HORIZONTAL
6	2828.00	44.98	37.52	-30.96	51.54	74.00	-22.46	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

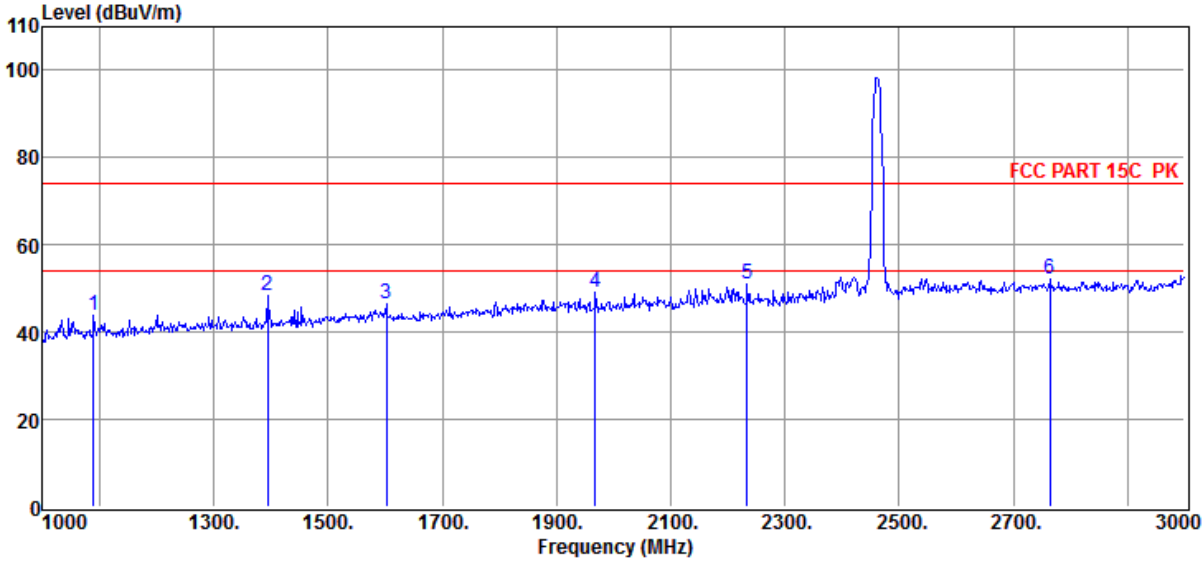
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT1 1M 2462MHz

Data: 10



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1090.00	50.54	27.48	-34.26	43.76	74.00	-30.24	Peak	VERTICAL
2	1394.00	52.46	29.48	-33.61	48.33	74.00	-25.67	Peak	VERTICAL
3	1602.00	48.68	30.99	-33.27	46.40	74.00	-27.60	Peak	VERTICAL
4	1968.00	48.79	32.74	-32.46	49.07	74.00	-24.93	Peak	VERTICAL
5	2234.00	48.67	34.26	-31.89	51.04	74.00	-22.96	Peak	VERTICAL
6	2764.00	45.60	37.37	-30.80	52.17	74.00	-21.83	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

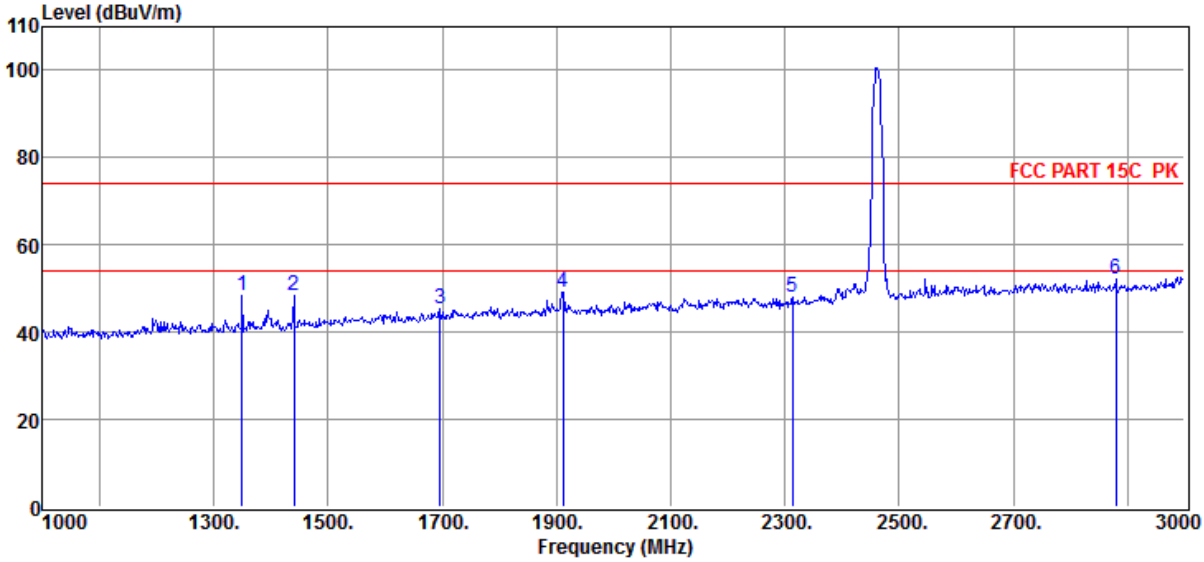
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT2 1M 2462MHz

Data: 11



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1350.00	52.60	29.30	-33.66	48.24	74.00	-25.76	Peak	HORIZONTAL
2	1440.00	51.88	29.90	-33.50	48.28	74.00	-25.72	Peak	HORIZONTAL
3	1696.00	47.48	31.07	-33.08	45.47	74.00	-28.53	Peak	HORIZONTAL
4	1912.00	49.11	32.62	-32.61	49.12	74.00	-24.88	Peak	HORIZONTAL
5	2314.00	45.87	34.10	-31.83	48.14	74.00	-25.86	Peak	HORIZONTAL
6	2880.00	45.23	37.58	-30.70	52.11	74.00	-21.89	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

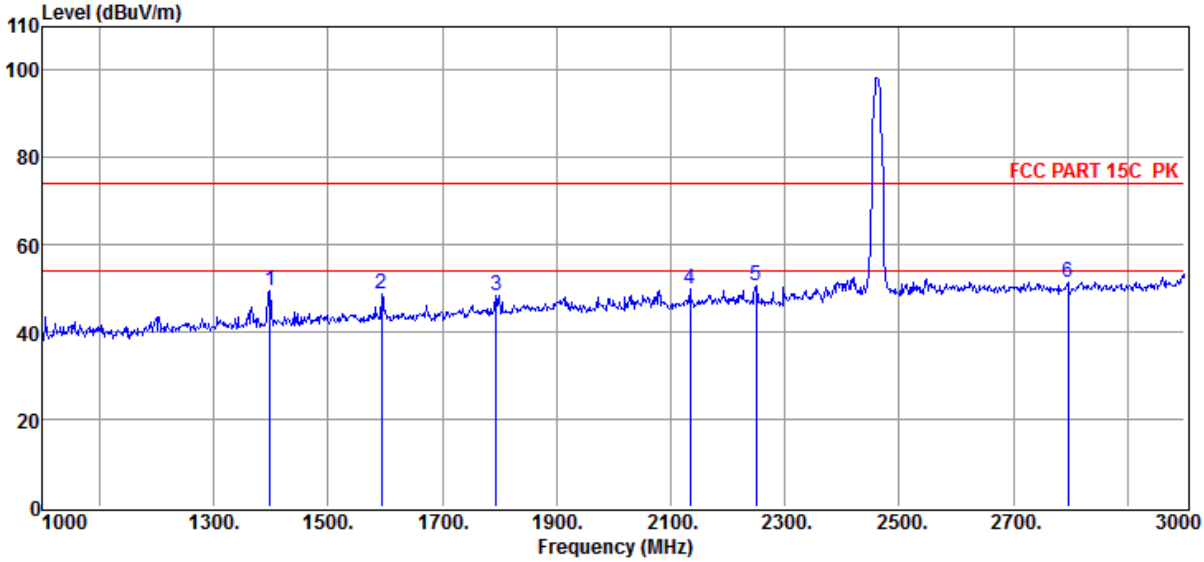
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT2 1M 2462MHz

Data: 12



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1398.00	53.71	29.49	-33.60	49.60	74.00	-24.40	Peak	VERTICAL
2	1594.00	51.12	30.98	-33.28	48.82	74.00	-25.18	Peak	VERTICAL
3	1794.00	49.55	31.66	-32.83	48.38	74.00	-25.62	Peak	VERTICAL
4	2134.00	48.98	33.17	-32.23	49.92	74.00	-24.08	Peak	VERTICAL
5	2250.00	48.24	34.20	-31.83	50.61	74.00	-23.39	Peak	VERTICAL
6	2796.00	45.18	37.31	-30.91	51.58	74.00	-22.42	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

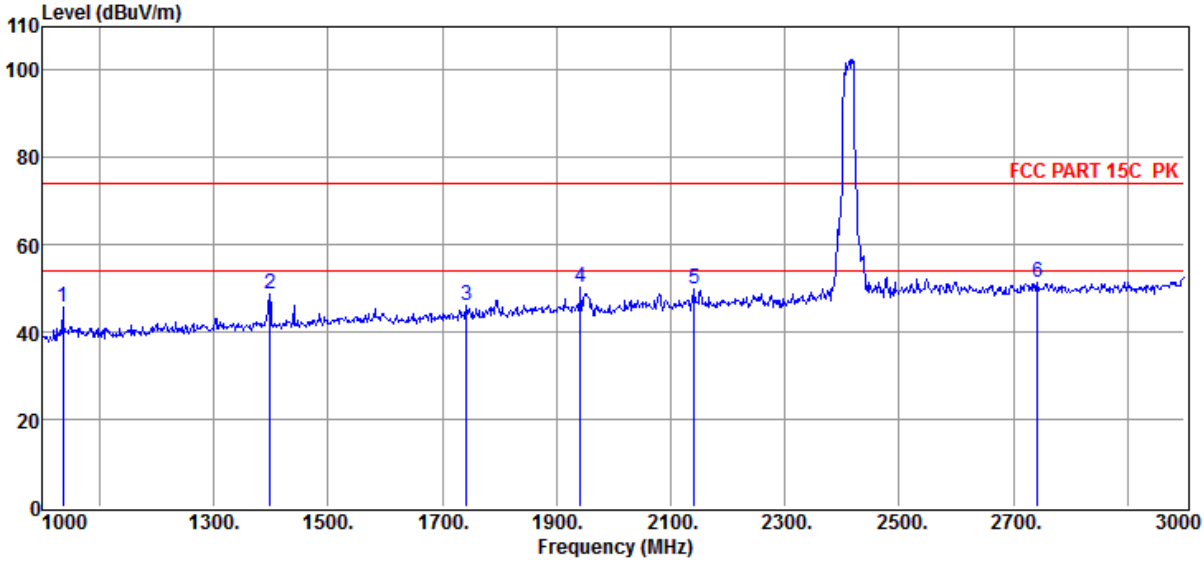
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT1 6M 2412MHz

Data: 37



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1036.00	52.95	27.26	-34.35	45.86	74.00	-28.14	Peak	VERTICAL
2	1398.00	53.00	29.49	-33.60	48.89	74.00	-25.11	Peak	VERTICAL
3	1742.00	47.74	31.35	-32.88	46.21	74.00	-27.79	Peak	VERTICAL
4	1942.00	50.21	32.68	-32.44	50.45	74.00	-23.55	Peak	VERTICAL
5	2142.00	48.92	33.24	-32.19	49.97	74.00	-24.03	Peak	VERTICAL
6	2742.00	44.87	37.30	-30.77	51.40	74.00	-22.60	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

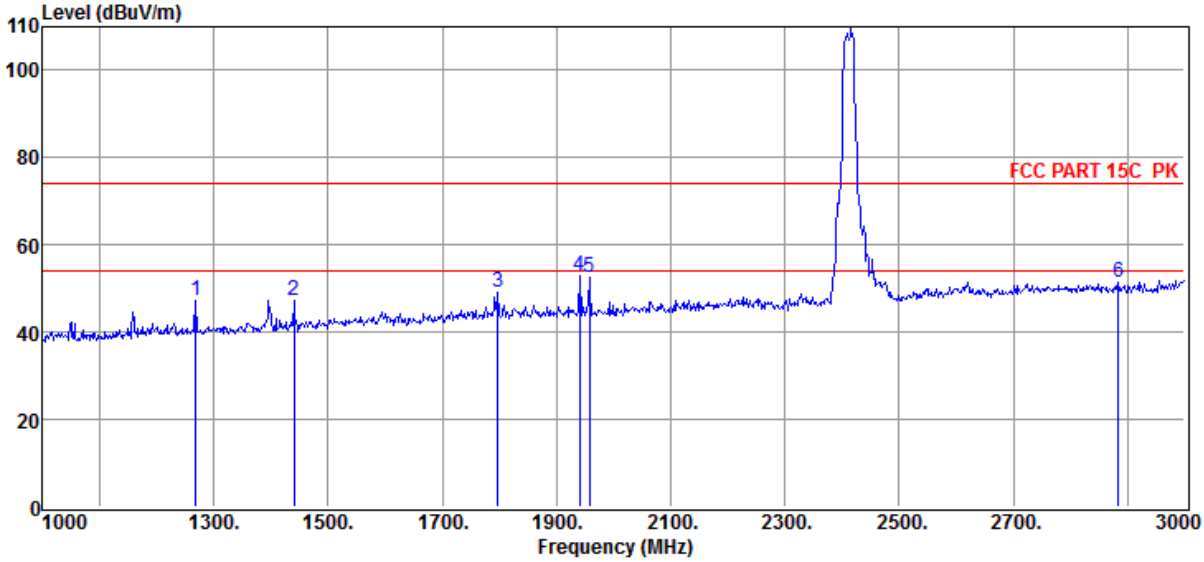
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT1 6M 2412MHz

Data: 38



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1268.00	52.01	29.10	-33.81	47.30	74.00	-26.70	Peak	HORIZONTAL
2	1440.00	50.83	29.90	-33.50	47.23	74.00	-26.77	Peak	HORIZONTAL
3	1798.00	50.39	31.69	-32.83	49.25	74.00	-24.75	Peak	HORIZONTAL
4	1940.00	52.72	32.68	-32.45	52.95	74.00	-21.05	Peak	HORIZONTAL
5	1958.00	52.33	32.72	-32.43	52.62	74.00	-21.38	Peak	HORIZONTAL
6	2884.00	44.38	37.56	-30.66	51.28	74.00	-22.72	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

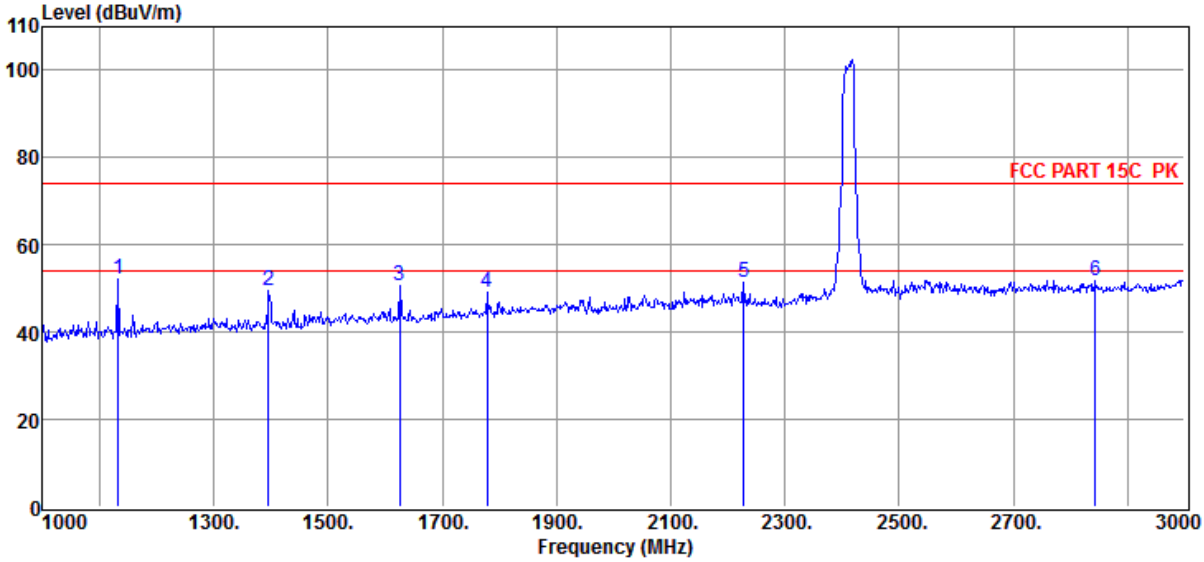
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT2 6M 2412MHz

Data: 39



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1132.00	58.74	27.69	-34.17	52.26	74.00	-21.74	Peak	VERTICAL
2	1396.00	53.78	29.48	-33.60	49.66	74.00	-24.34	Peak	VERTICAL
3	1626.00	52.88	30.84	-33.16	50.56	74.00	-23.44	Peak	VERTICAL
4	1778.00	50.51	31.57	-32.83	49.25	74.00	-24.75	Peak	VERTICAL
5	2228.00	49.08	34.29	-31.92	51.45	74.00	-22.55	Peak	VERTICAL
6	2844.00	45.13	37.65	-30.98	51.80	74.00	-22.20	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

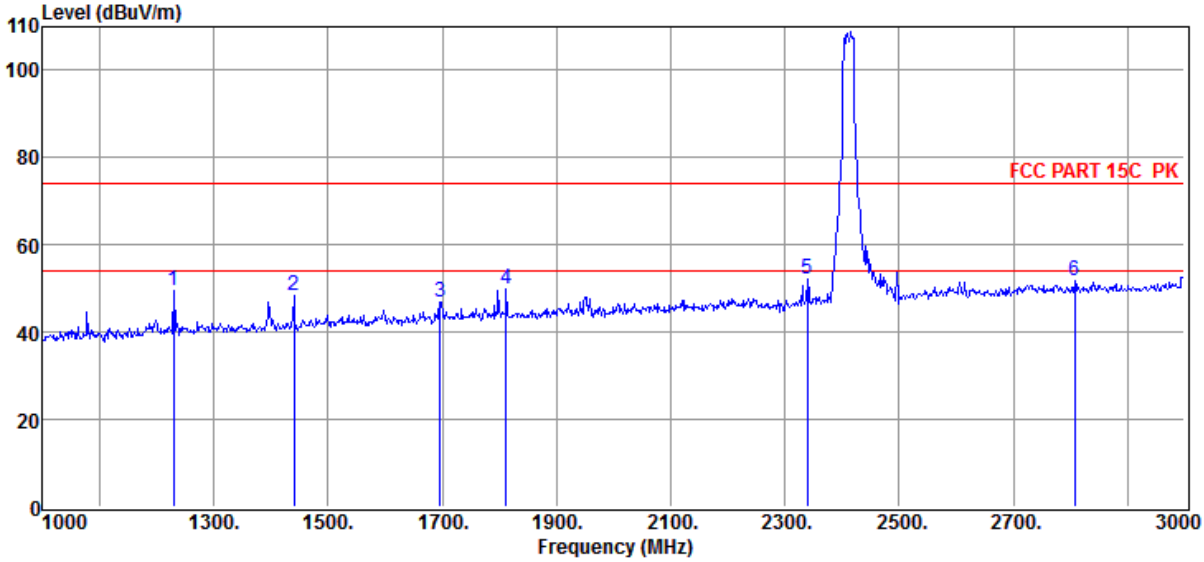
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT2 6M 2412MHz

Data: 40



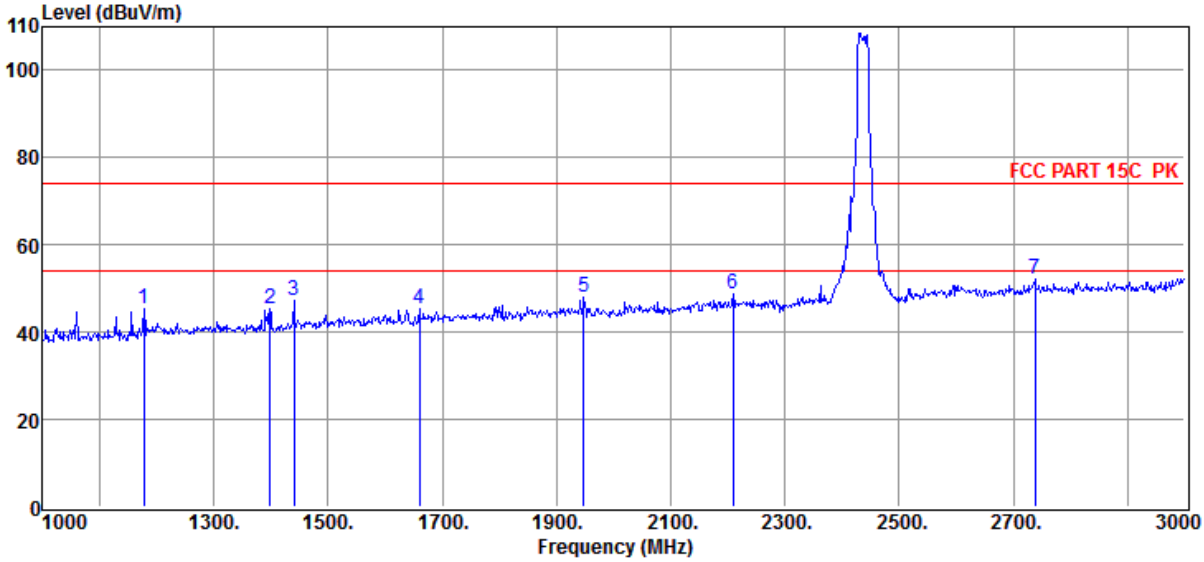
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1230.00	54.37	28.94	-33.90	49.41	74.00	-24.59	Peak	HORIZONTAL
2	1440.00	52.10	29.90	-33.50	48.50	74.00	-25.50	Peak	HORIZONTAL
3	1696.00	49.06	31.07	-33.08	47.05	74.00	-26.95	Peak	HORIZONTAL
4	1812.00	50.82	31.82	-32.76	49.88	74.00	-24.12	Peak	HORIZONTAL
5	2340.00	49.30	34.46	-31.53	52.23	74.00	-21.77	Peak	HORIZONTAL
6	2808.00	45.34	37.36	-30.93	51.77	74.00	-22.23	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11G ANT1 6M 2437MHz		

Data: 41



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1178.00	51.04	28.30	-34.06	45.28	74.00	-28.72	Peak	HORIZONTAL
2	1398.00	49.53	29.49	-33.60	45.42	74.00	-28.58	Peak	HORIZONTAL
3	1440.00	50.90	29.90	-33.50	47.30	74.00	-26.70	Peak	HORIZONTAL
4	1660.00	47.64	30.78	-33.06	45.36	74.00	-28.64	Peak	HORIZONTAL
5	1948.00	47.80	32.70	-32.41	48.09	74.00	-25.91	Peak	HORIZONTAL
6	2210.00	46.39	34.36	-31.99	48.76	74.00	-25.24	Peak	HORIZONTAL
7	2738.00	45.50	37.26	-30.78	51.98	74.00	-22.02	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

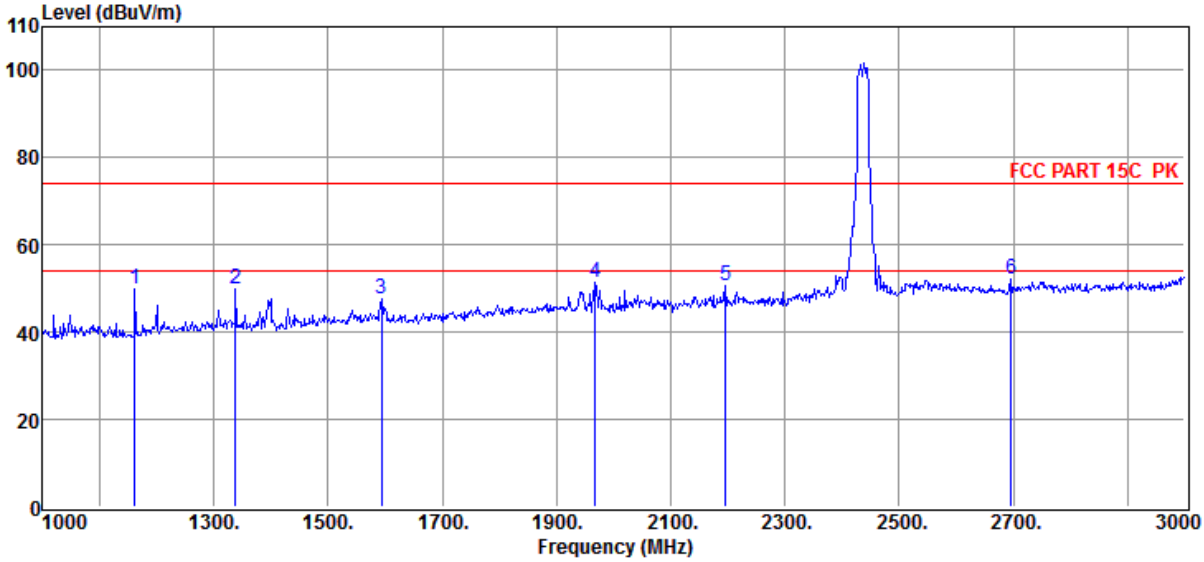
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT1 6M 2437MHz

Data: 42



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1162.00	56.01	28.02	-34.10	49.93	74.00	-24.07	Peak	VERTICAL
2	1338.00	54.32	29.25	-33.69	49.88	74.00	-24.12	Peak	VERTICAL
3	1594.00	49.88	30.98	-33.28	47.58	74.00	-26.42	Peak	VERTICAL
4	1968.00	51.24	32.74	-32.46	51.52	74.00	-22.48	Peak	VERTICAL
5	2196.00	48.43	34.31	-32.04	50.70	74.00	-23.30	Peak	VERTICAL
6	2696.00	46.12	36.78	-30.92	51.98	74.00	-22.02	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

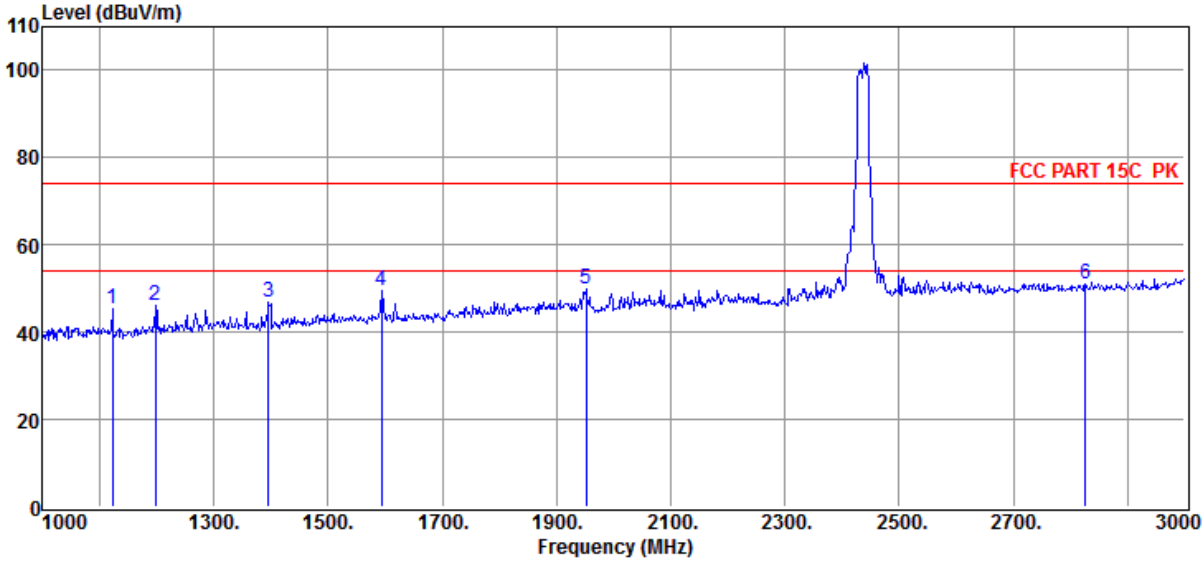
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT2 6M 2437MHz

Data: 43



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1122.00	52.07	27.63	-34.19	45.51	74.00	-28.49	Peak	VERTICAL
2	1198.00	51.50	28.66	-34.02	46.14	74.00	-27.86	Peak	VERTICAL
3	1396.00	51.12	29.48	-33.60	47.00	74.00	-27.00	Peak	VERTICAL
4	1594.00	51.69	30.98	-33.28	49.39	74.00	-24.61	Peak	VERTICAL
5	1952.00	49.49	32.70	-32.41	49.78	74.00	-24.22	Peak	VERTICAL
6	2826.00	44.31	37.51	-30.96	50.86	74.00	-23.14	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

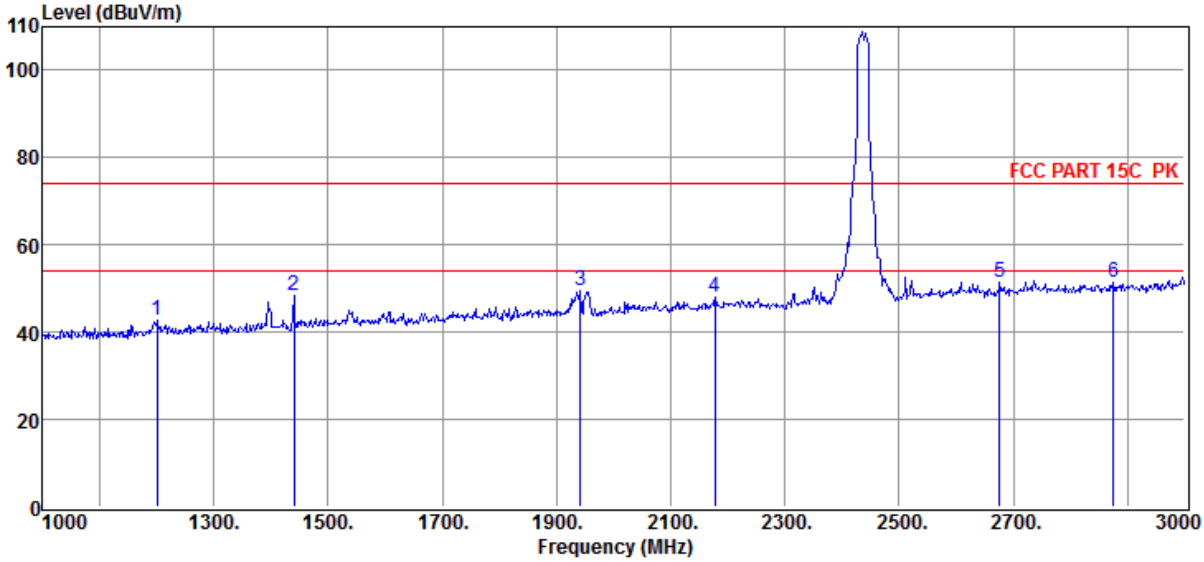
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT2 6M 2437MHz

Data: 44



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1200.00	48.14	28.70	-34.02	42.82	74.00	-31.18	Peak	HORIZONTAL
2	1440.00	51.82	29.90	-33.50	48.22	74.00	-25.78	Peak	HORIZONTAL
3	1942.00	49.28	32.68	-32.44	49.52	74.00	-24.48	Peak	HORIZONTAL
4	2178.00	46.05	33.92	-32.08	47.89	74.00	-26.11	Peak	HORIZONTAL
5	2676.00	45.65	36.70	-31.09	51.26	74.00	-22.74	Peak	HORIZONTAL
6	2876.00	44.44	37.60	-30.74	51.30	74.00	-22.70	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

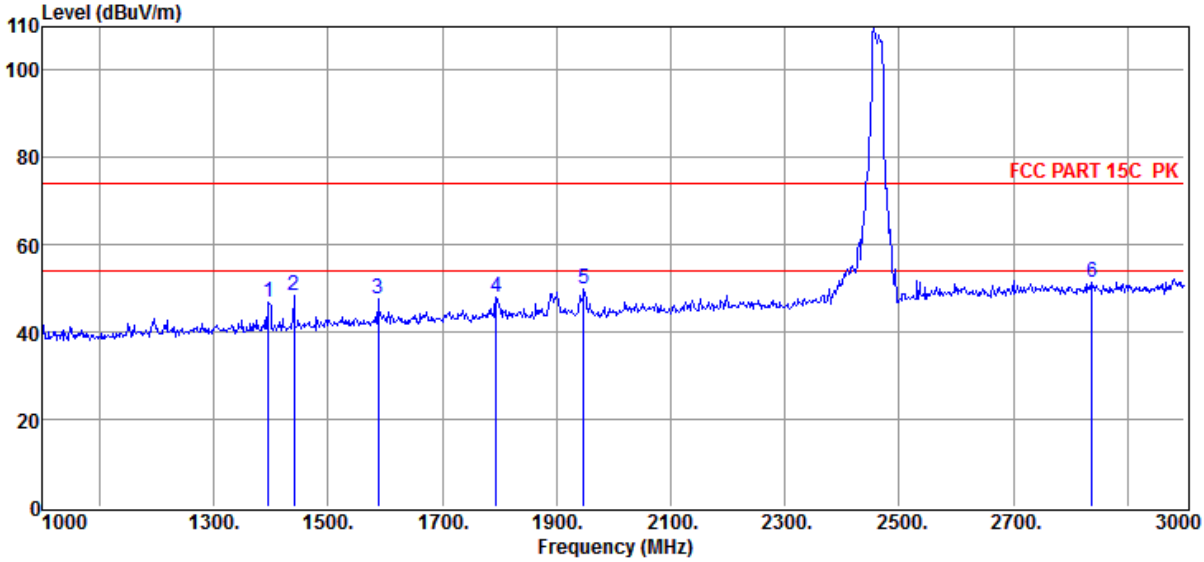
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT1 6M 2462MHz

Data: 45



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1396.00	51.09	29.48	-33.60	46.97	74.00	-27.03	Peak	HORIZONTAL
2	1440.00	52.08	29.90	-33.50	48.48	74.00	-25.52	Peak	HORIZONTAL
3	1588.00	50.12	30.95	-33.28	47.79	74.00	-26.21	Peak	HORIZONTAL
4	1794.00	49.02	31.66	-32.83	47.85	74.00	-26.15	Peak	HORIZONTAL
5	1948.00	49.56	32.70	-32.41	49.85	74.00	-24.15	Peak	HORIZONTAL
6	2838.00	44.85	37.60	-30.97	51.48	74.00	-22.52	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

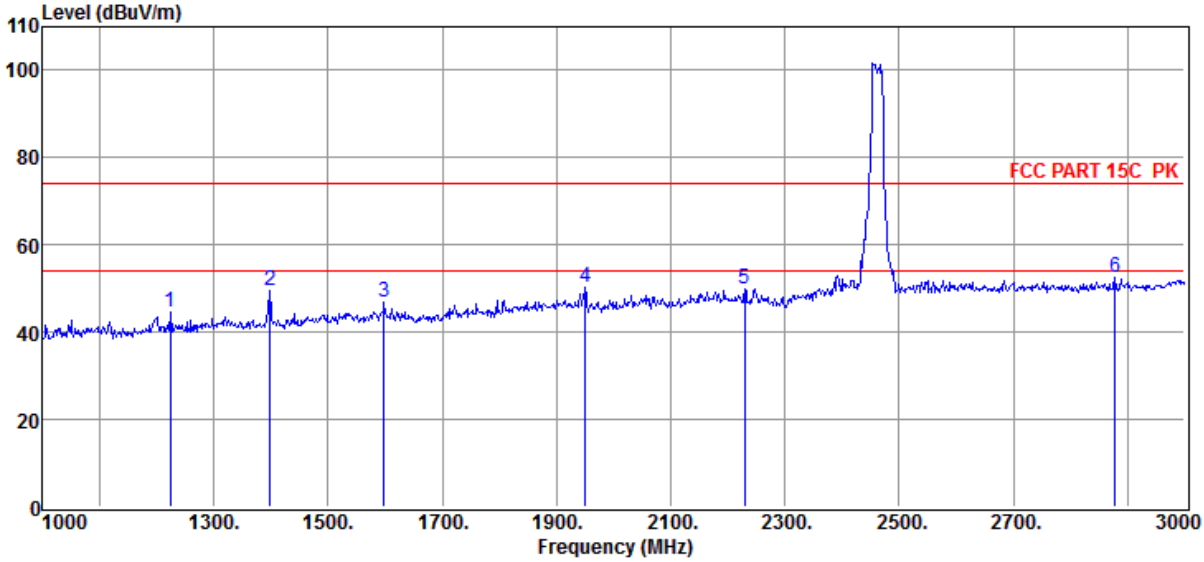
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT1 6M 2462MHz

Data: 46



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1224.00	49.59	28.89	-33.92	44.56	74.00	-29.44	Peak	VERTICAL
2	1398.00	53.67	29.49	-33.60	49.56	74.00	-24.44	Peak	VERTICAL
3	1598.00	48.99	30.99	-33.28	46.70	74.00	-27.30	Peak	VERTICAL
4	1950.00	49.90	32.70	-32.40	50.20	74.00	-23.80	Peak	VERTICAL
5	2230.00	47.41	34.28	-31.91	49.78	74.00	-24.22	Peak	VERTICAL
6	2878.00	45.85	37.59	-30.72	52.72	74.00	-21.28	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

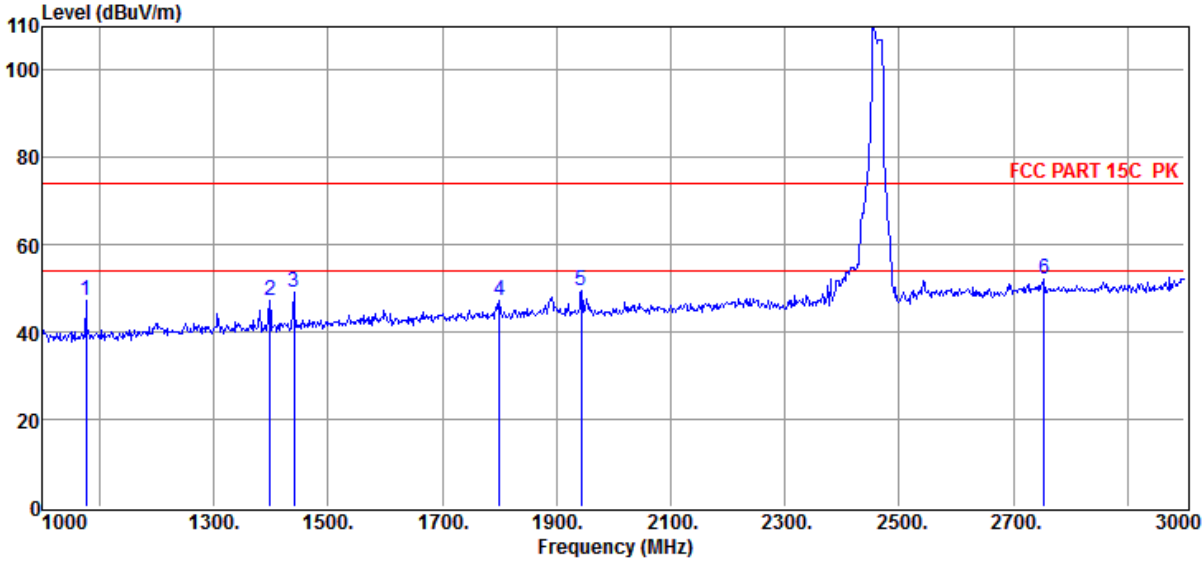
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT2 6M 2462MHz

Data: 47



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1076.00	53.96	27.45	-34.28	47.13	74.00	-26.87	Peak	HORIZONTAL
2	1398.00	51.26	29.49	-33.60	47.15	74.00	-26.85	Peak	HORIZONTAL
3	1440.00	52.69	29.90	-33.50	49.09	74.00	-24.91	Peak	HORIZONTAL
4	1800.00	48.28	31.70	-32.83	47.15	74.00	-26.85	Peak	HORIZONTAL
5	1944.00	49.13	32.69	-32.43	49.39	74.00	-24.61	Peak	HORIZONTAL
6	2754.00	45.46	37.39	-30.76	52.09	74.00	-21.91	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

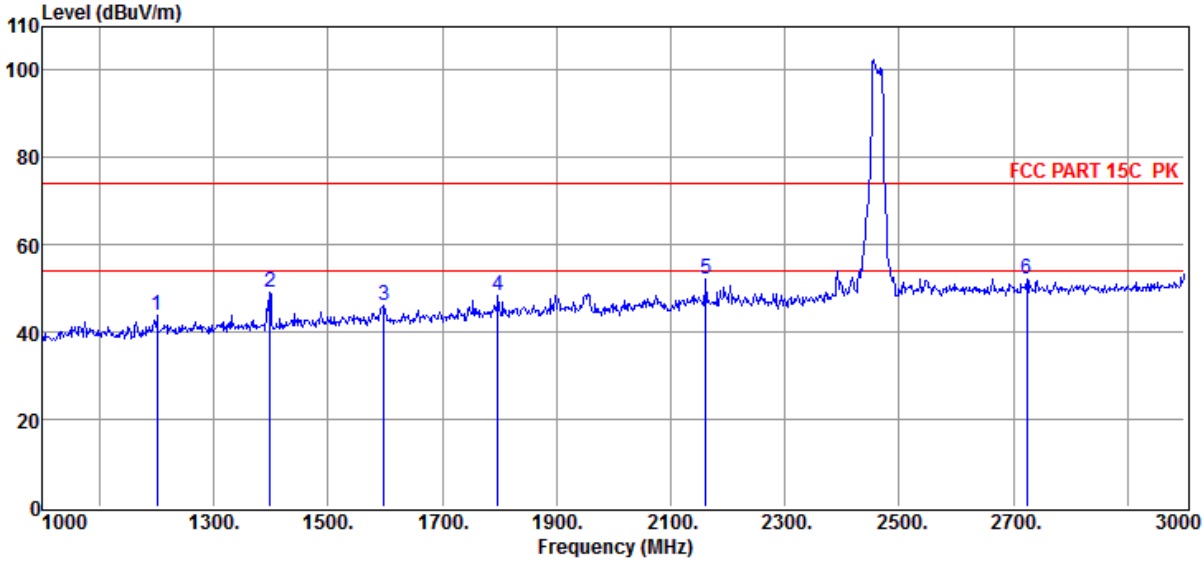
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT2 6M 2462MHz

Data: 48



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1200.00	49.14	28.70	-34.02	43.82	74.00	-30.18	Peak	VERTICAL
2	1398.00	53.21	29.49	-33.60	49.10	74.00	-24.90	Peak	VERTICAL
3	1598.00	48.37	30.99	-33.28	46.08	74.00	-27.92	Peak	VERTICAL
4	1798.00	49.50	31.69	-32.83	48.36	74.00	-25.64	Peak	VERTICAL
5	2162.00	50.66	33.56	-32.12	52.10	74.00	-21.90	Peak	VERTICAL
6	2724.00	45.75	37.09	-30.82	52.02	74.00	-21.98	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

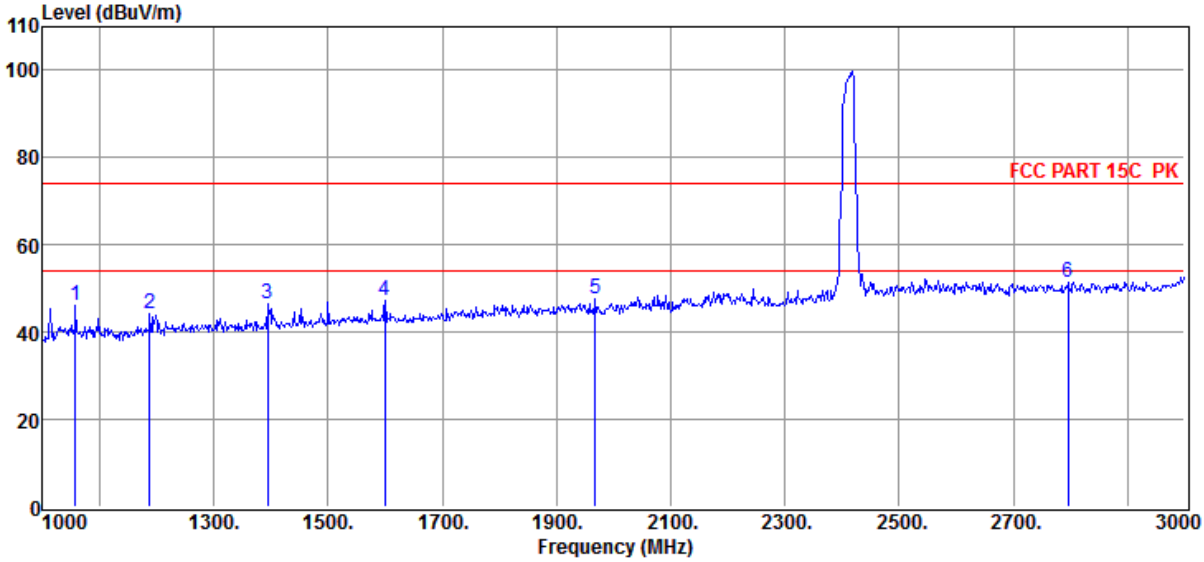
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N20 ANT1+ANT2 MCS0 2412MHz

Data: 49



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1058.00	52.98	27.42	-34.31	46.09	74.00	-27.91	Peak	VERTICAL
2	1188.00	49.70	28.48	-34.04	44.14	74.00	-29.86	Peak	VERTICAL
3	1394.00	50.71	29.48	-33.61	46.58	74.00	-27.42	Peak	VERTICAL
4	1600.00	49.38	31.00	-33.28	47.10	74.00	-26.90	Peak	VERTICAL
5	1968.00	47.35	32.74	-32.46	47.63	74.00	-26.37	Peak	VERTICAL
6	2796.00	45.11	37.31	-30.91	51.51	74.00	-22.49	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

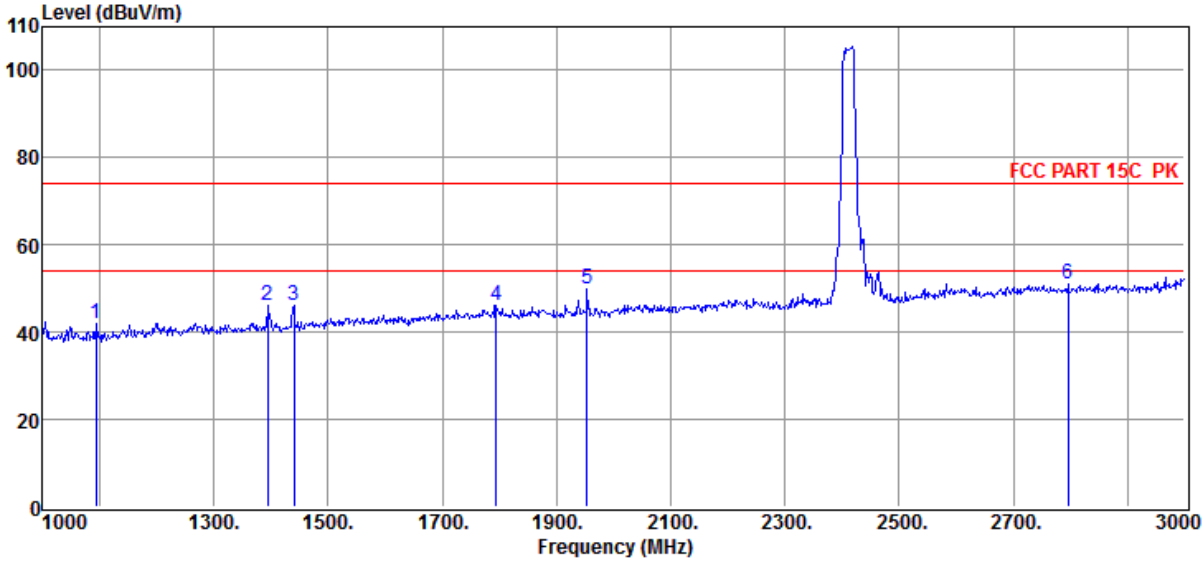
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N20 ANT1+ANT2 MCS0 2412MHz

Data: 50



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1094.00	48.72	27.49	-34.26	41.95	74.00	-32.05	Peak	HORIZONTAL
2	1394.00	50.17	29.48	-33.61	46.04	74.00	-27.96	Peak	HORIZONTAL
3	1440.00	49.64	29.90	-33.50	46.04	74.00	-27.96	Peak	HORIZONTAL
4	1794.00	47.44	31.66	-32.83	46.27	74.00	-27.73	Peak	HORIZONTAL
5	1954.00	49.48	32.71	-32.41	49.78	74.00	-24.22	Peak	HORIZONTAL
6	2796.00	44.66	37.31	-30.91	51.06	74.00	-22.94	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

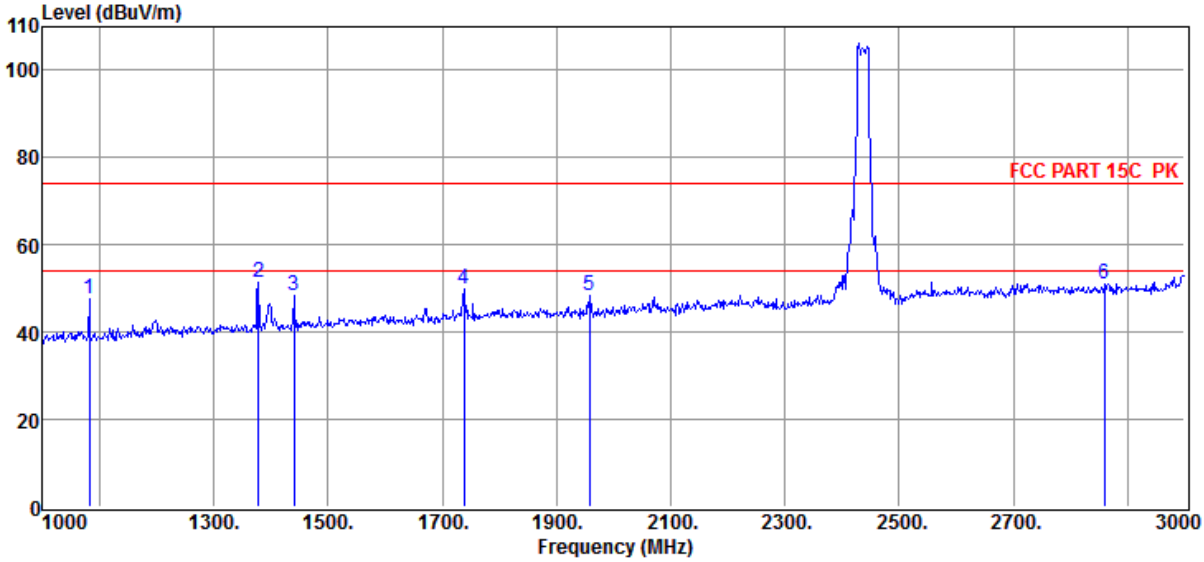
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N20 ANT1+ANT2 MCS0 2437MHz

Data: 51



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1082.00	54.59	27.46	-34.28	47.77	74.00	-26.23	Peak	HORIZONTAL
2	1378.00	55.50	29.41	-33.63	51.28	74.00	-22.72	Peak	HORIZONTAL
3	1440.00	51.84	29.90	-33.50	48.24	74.00	-25.76	Peak	HORIZONTAL
4	1738.00	51.53	31.33	-32.90	49.96	74.00	-24.04	Peak	HORIZONTAL
5	1958.00	48.00	32.72	-32.43	48.29	74.00	-25.71	Peak	HORIZONTAL
6	2860.00	44.43	37.66	-30.89	51.20	74.00	-22.80	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

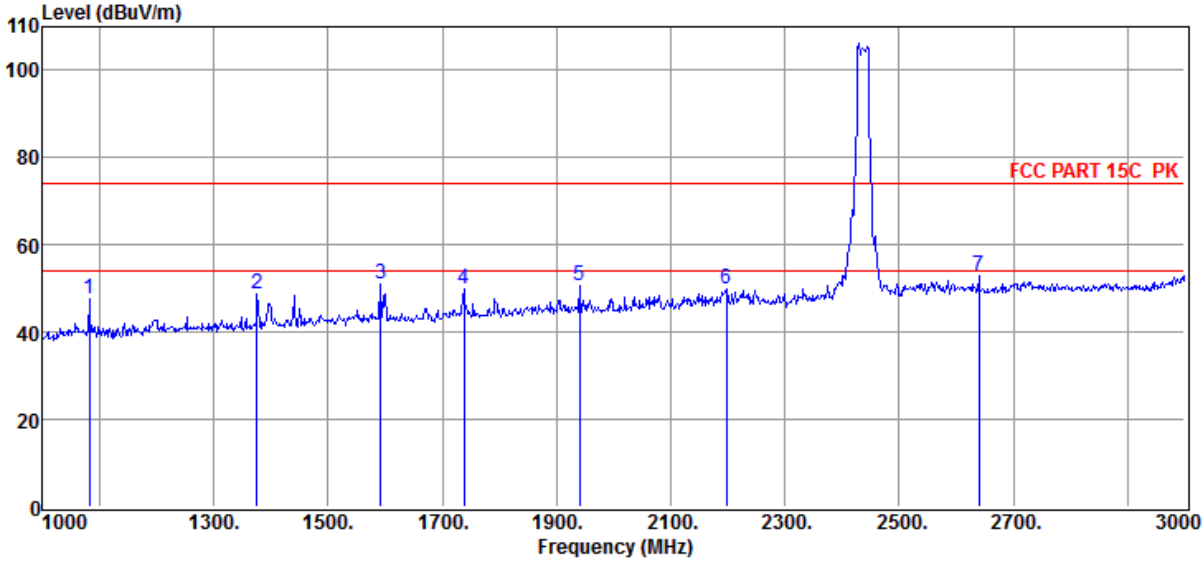
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N20 ANT1+ANT2 MCS0 2437MHz

Data: 52



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1082.00	54.59	27.46	-34.28	47.77	74.00	-26.23	Peak	VERTICAL
2	1376.00	53.02	29.40	-33.63	48.79	74.00	-25.21	Peak	VERTICAL
3	1592.00	53.27	30.97	-33.28	50.96	74.00	-23.04	Peak	VERTICAL
4	1738.00	51.53	31.33	-32.90	49.96	74.00	-24.04	Peak	VERTICAL
5	1940.00	50.34	32.68	-32.45	50.57	74.00	-23.43	Peak	VERTICAL
6	2198.00	47.60	34.36	-32.03	49.93	74.00	-24.07	Peak	VERTICAL
7	2640.00	47.46	36.68	-31.26	52.88	74.00	-21.12	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

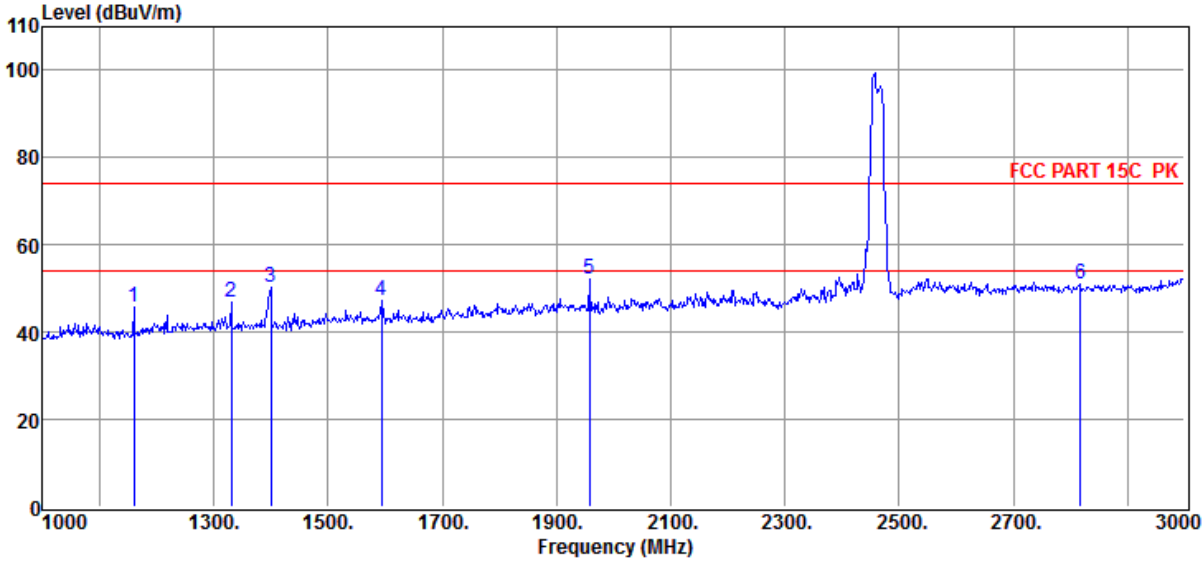
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N20 ANT1+ANT2 MCS0 2462MHz

Data: 53



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1160.00	51.75	27.98	-34.10	45.63	74.00	-28.37	Peak	VERTICAL
2	1330.00	51.34	29.22	-33.71	46.85	74.00	-27.15	Peak	VERTICAL
3	1400.00	54.55	29.50	-33.60	50.45	74.00	-23.55	Peak	VERTICAL
4	1594.00	49.51	30.98	-33.28	47.21	74.00	-26.79	Peak	VERTICAL
5	1958.00	51.85	32.72	-32.43	52.14	74.00	-21.86	Peak	VERTICAL
6	2818.00	44.38	37.44	-30.95	50.87	74.00	-23.13	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

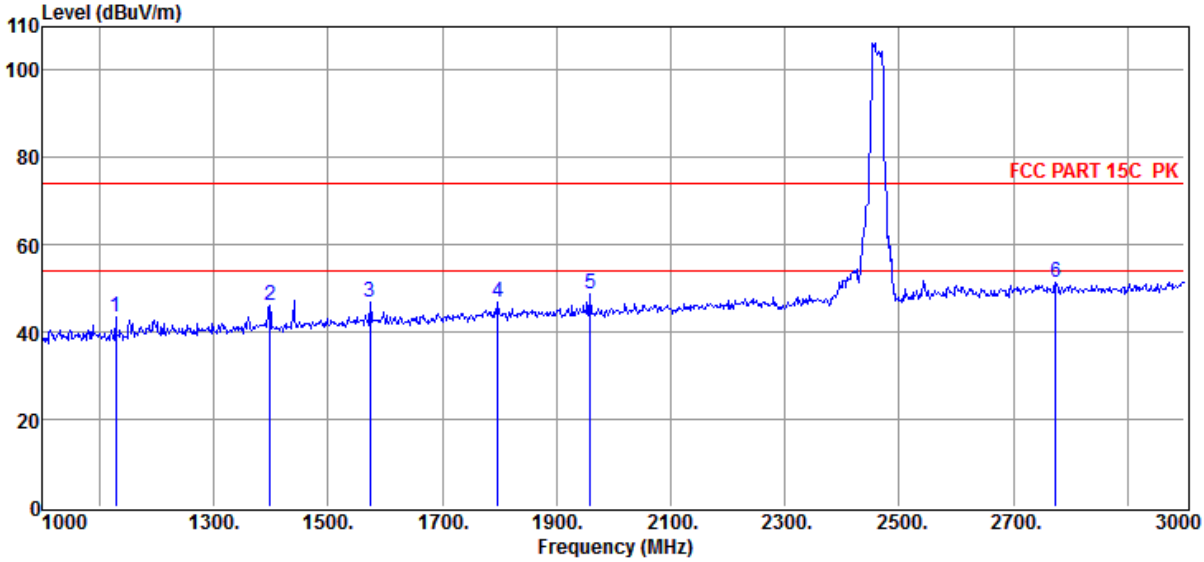
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N20 ANT1+ANT2 MCS0 2462MHz

Data: 54



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1128.00	49.98	27.67	-34.18	43.47	74.00	-30.53	Peak	HORIZONTAL
2	1398.00	50.39	29.49	-33.60	46.28	74.00	-27.72	Peak	HORIZONTAL
3	1574.00	49.10	30.90	-33.27	46.73	74.00	-27.27	Peak	HORIZONTAL
4	1798.00	47.98	31.69	-32.83	46.84	74.00	-27.16	Peak	HORIZONTAL
5	1960.00	48.34	32.72	-32.43	48.63	74.00	-25.37	Peak	HORIZONTAL
6	2774.00	45.00	37.35	-30.83	51.52	74.00	-22.48	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

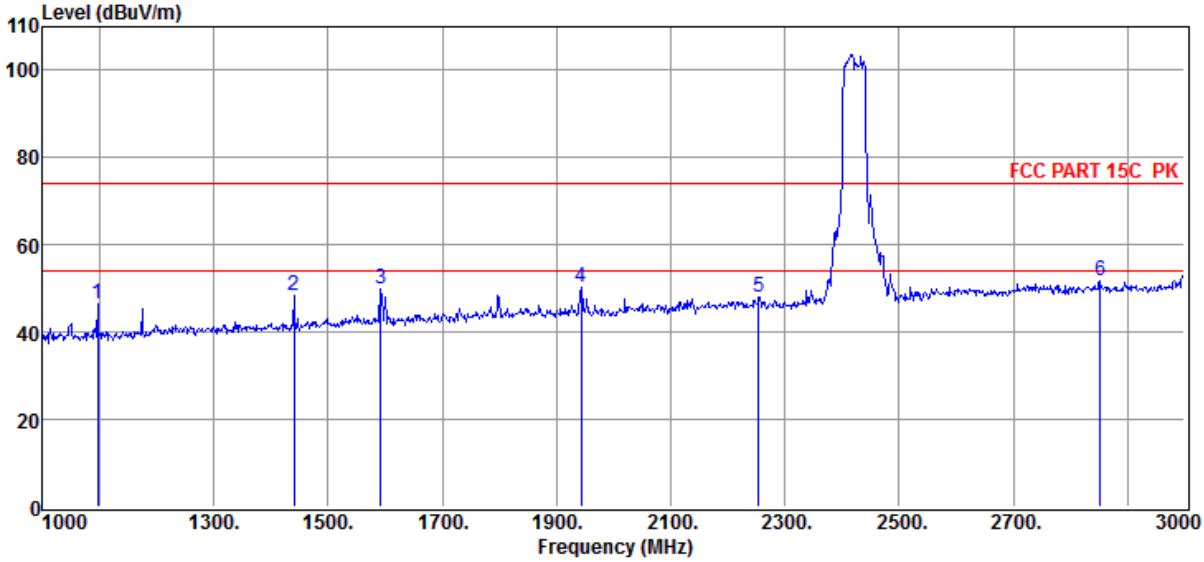
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N40 ANT1+ANT2 MCS0 2422MHz

Data: 55



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1096.00	53.31	27.49	-34.26	46.54	74.00	-27.46	Peak	HORIZONTAL
2	1440.00	52.03	29.90	-33.50	48.43	74.00	-25.57	Peak	HORIZONTAL
3	1592.00	52.29	30.97	-33.28	49.98	74.00	-24.02	Peak	HORIZONTAL
4	1944.00	49.87	32.69	-32.43	50.13	74.00	-23.87	Peak	HORIZONTAL
5	2254.00	45.67	34.18	-31.84	48.01	74.00	-25.99	Peak	HORIZONTAL
6	2852.00	45.26	37.69	-30.97	51.98	74.00	-22.02	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

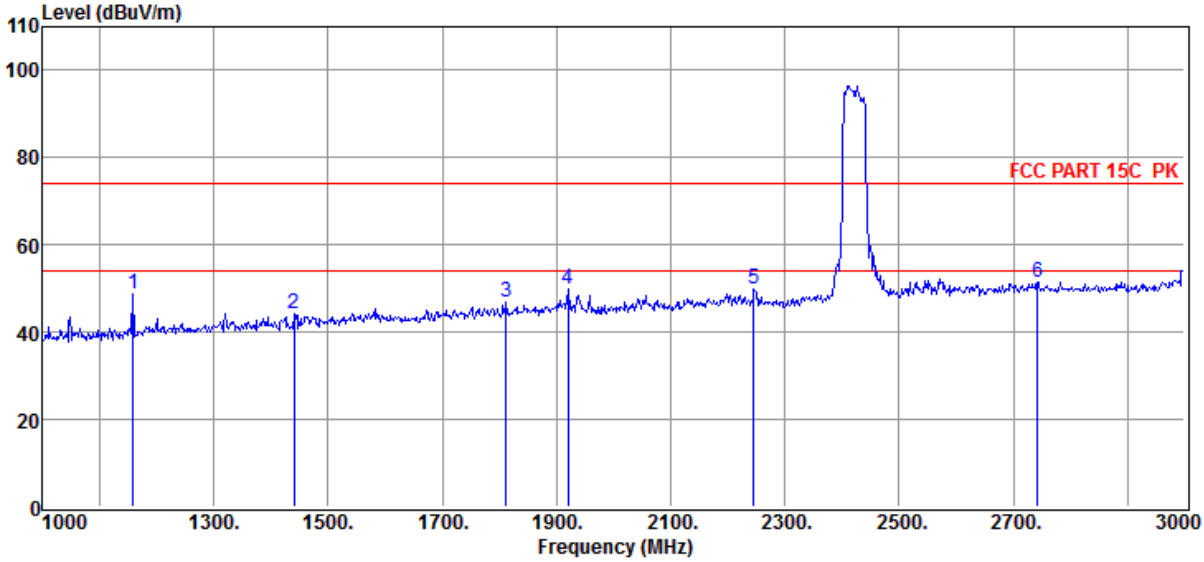
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N40 ANT1+ANT2 MCS0 2422MHz

Data: 56



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1158.00	55.02	27.94	-34.10	48.86	74.00	-25.14	Peak	VERTICAL
2	1440.00	47.80	29.90	-33.50	44.20	74.00	-29.80	Peak	VERTICAL
3	1812.00	47.82	31.82	-32.76	46.88	74.00	-27.12	Peak	VERTICAL
4	1920.00	49.85	32.64	-32.56	49.93	74.00	-24.07	Peak	VERTICAL
5	2246.00	47.62	34.22	-31.85	49.99	74.00	-24.01	Peak	VERTICAL
6	2742.00	44.97	37.30	-30.77	51.50	74.00	-22.50	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

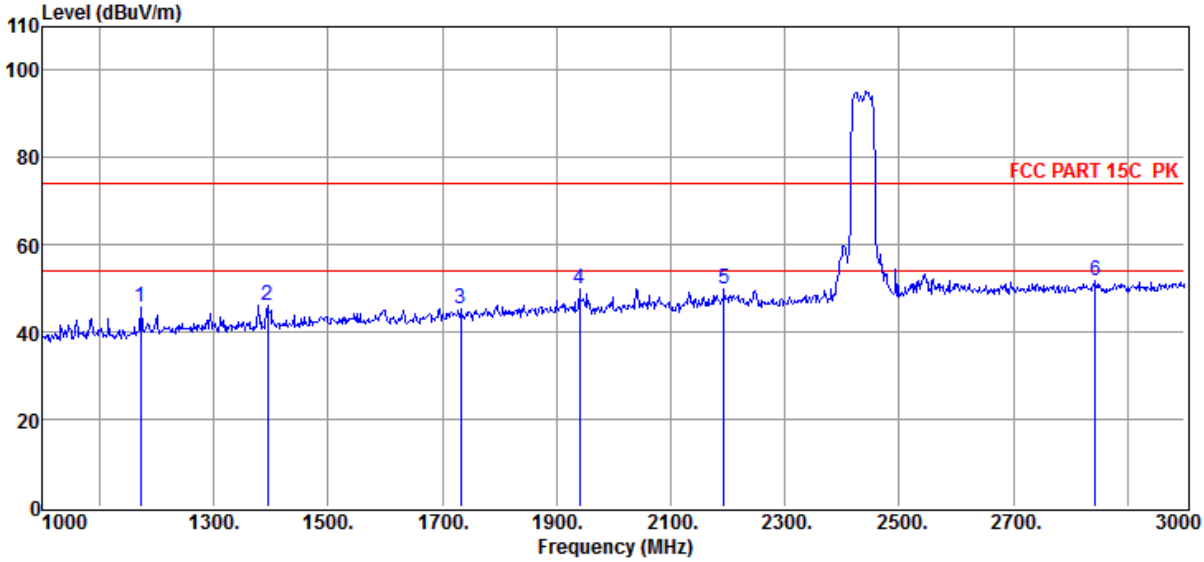
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N40 ANT1+ANT2 MCS0 2437MHz

Data: 57



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1172.00	51.51	28.20	-34.08	45.63	74.00	-28.37	Peak	VERTICAL
2	1394.00	50.38	29.48	-33.61	46.25	74.00	-27.75	Peak	VERTICAL
3	1732.00	47.13	31.29	-32.93	45.49	74.00	-28.51	Peak	VERTICAL
4	1940.00	49.52	32.68	-32.45	49.75	74.00	-24.25	Peak	VERTICAL
5	2194.00	47.71	34.27	-32.04	49.94	74.00	-24.06	Peak	VERTICAL
6	2844.00	45.05	37.65	-30.98	51.72	74.00	-22.28	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

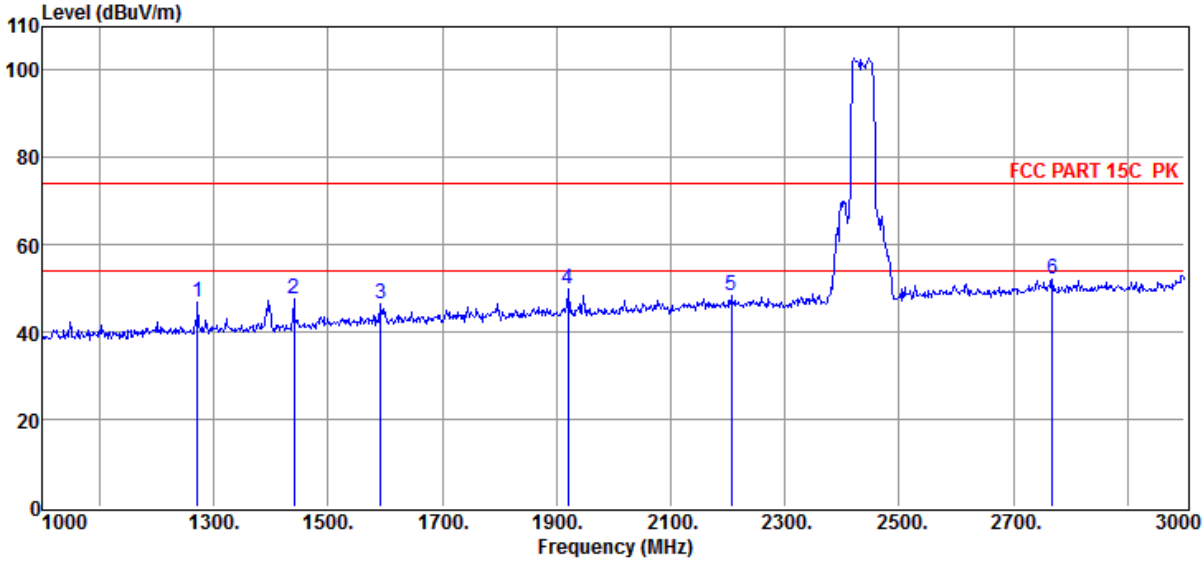
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N40 ANT1+ANT2 MCS0 2437MHz

Data: 58



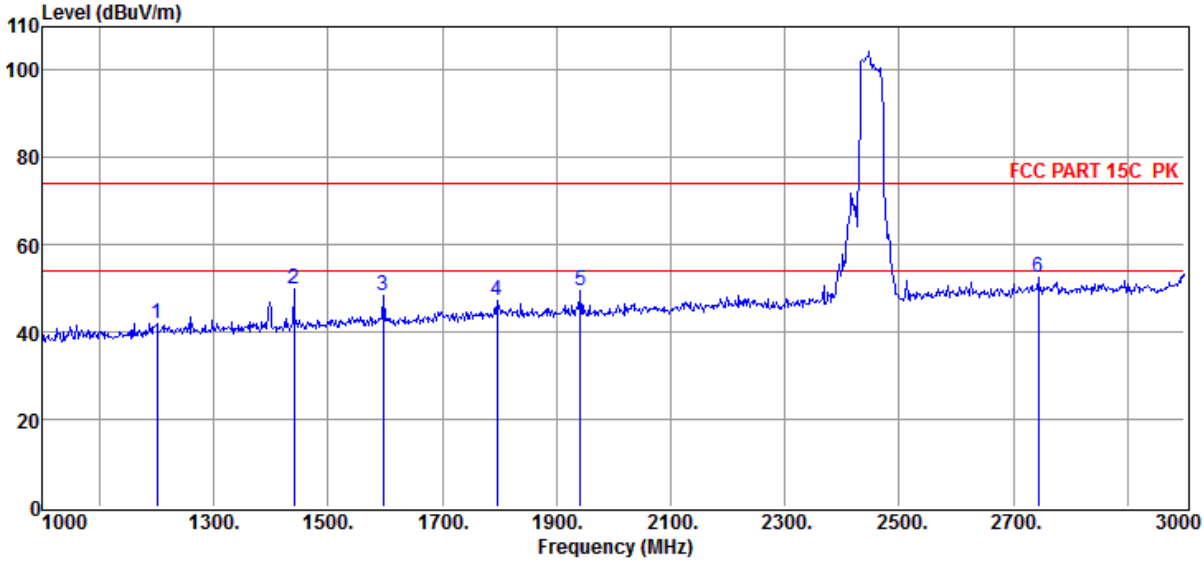
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1272.00	51.76	29.10	-33.81	47.05	74.00	-26.95	Peak	HORIZONTAL
2	1440.00	51.06	29.90	-33.50	47.46	74.00	-26.54	Peak	HORIZONTAL
3	1592.00	48.93	30.97	-33.28	46.62	74.00	-27.38	Peak	HORIZONTAL
4	1920.00	49.86	32.64	-32.56	49.94	74.00	-24.06	Peak	HORIZONTAL
5	2206.00	45.93	34.38	-32.01	48.30	74.00	-25.70	Peak	HORIZONTAL
6	2768.00	45.46	37.36	-30.81	52.01	74.00	-21.99	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11N40 ANT1+ANT2 MCS0 2452MHz		

Data: 59



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1200.00	47.40	28.70	-34.02	42.08	74.00	-31.92	Peak	HORIZONTAL
2	1440.00	53.40	29.90	-33.50	49.80	74.00	-24.20	Peak	HORIZONTAL
3	1596.00	50.62	30.98	-33.28	48.32	74.00	-25.68	Peak	HORIZONTAL
4	1796.00	48.58	31.68	-32.83	47.43	74.00	-26.57	Peak	HORIZONTAL
5	1942.00	49.11	32.68	-32.44	49.35	74.00	-24.65	Peak	HORIZONTAL
6	2744.00	45.98	37.33	-30.77	52.54	74.00	-21.46	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

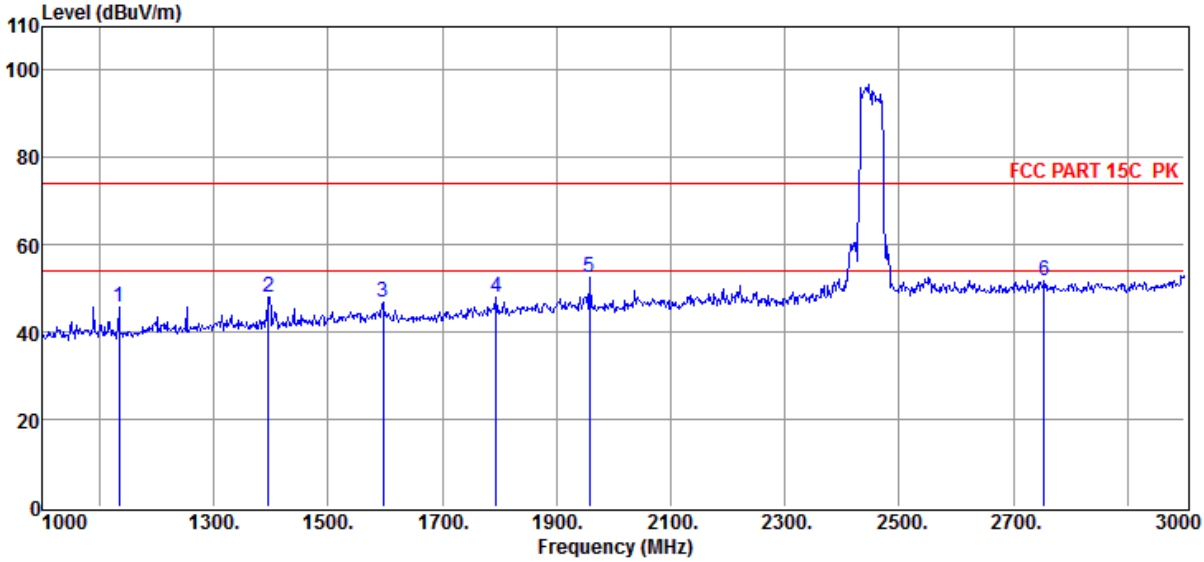
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N40 ANT1+ANT2 MCS0 2452MHz

Data: 60



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	1134.00	52.36	27.70	-34.16	45.90	74.00	-28.10	Peak	VERTICAL
2	1396.00	52.22	29.48	-33.60	48.10	74.00	-25.90	Peak	VERTICAL
3	1596.00	49.17	30.98	-33.28	46.87	74.00	-27.13	Peak	VERTICAL
4	1794.00	49.18	31.66	-32.83	48.01	74.00	-25.99	Peak	VERTICAL
5	1958.00	52.35	32.72	-32.43	52.64	74.00	-21.36	Peak	VERTICAL
6	2754.00	45.20	37.39	-30.76	51.83	74.00	-22.17	Peak	VERTICAL

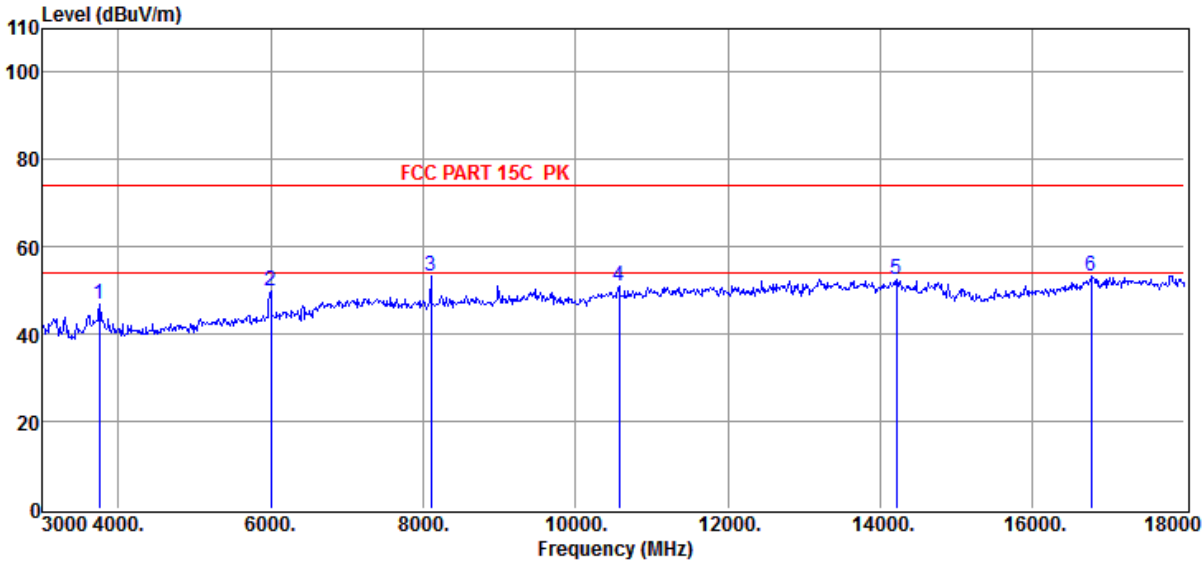
Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission test (3GHz -18GHz)

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11B ANT1 1M 2412MHz		

Data: 61



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3750.00	48.51	31.00	-32.47	47.04	74.00	-26.96	Peak	VERTICAL
2	6000.00	46.50	35.30	-31.80	50.00	74.00	-24.00	Peak	VERTICAL
3	8100.00	47.63	37.08	-31.38	53.33	74.00	-20.67	Peak	VERTICAL
4	10575.00	41.87	38.53	-29.43	50.97	74.00	-23.03	Peak	VERTICAL
5	14220.00	38.70	41.09	-27.27	52.52	74.00	-21.48	Peak	VERTICAL
6	16770.00	38.28	41.10	-26.02	53.36	74.00	-20.64	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

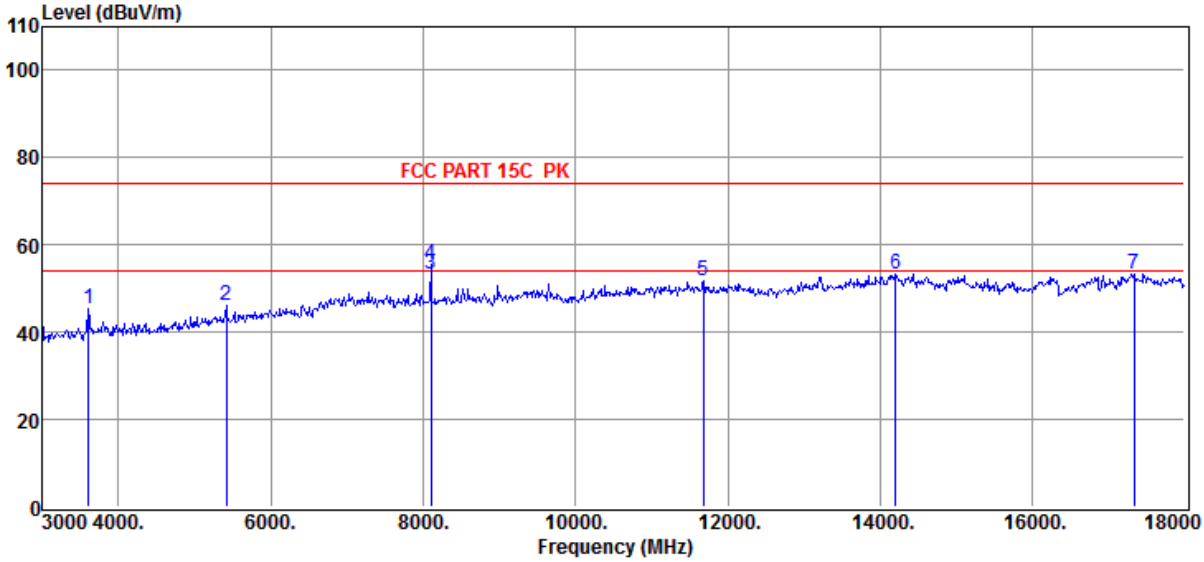
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT1 1M 2412MHz

Data: 62



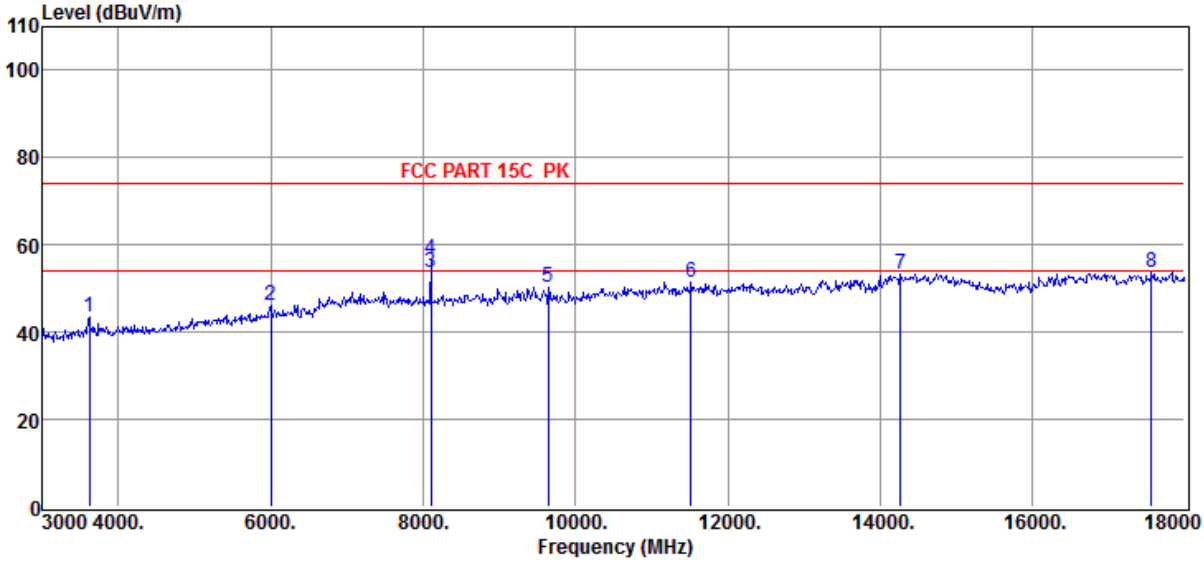
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3600.00	46.74	30.64	-32.08	45.30	74.00	-28.70	Peak	HORIZONTAL
2	5415.00	43.94	33.65	-31.57	46.02	74.00	-27.98	Peak	HORIZONTAL
3	8100.00	47.53	37.08	-31.38	53.23	54.00	-0.77	Average	HORIZONTAL
4	8100.00	49.83	37.08	-31.38	55.53	74.00	-18.47	Peak	HORIZONTAL
5	11685.00	41.64	38.66	-28.63	51.67	74.00	-22.33	Peak	HORIZONTAL
6	14205.00	39.17	41.11	-27.10	53.18	74.00	-20.82	Peak	HORIZONTAL
7	17340.00	37.57	42.68	-26.94	53.31	74.00	-20.69	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11B ANT2 1M 2412MHz		

Data: 63



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	44.62	30.68	-31.98	43.32	74.00	-30.68	Peak	HORIZONTAL
2	6000.00	42.78	35.30	-31.80	46.28	74.00	-27.72	Peak	HORIZONTAL
3	8100.00	48.04	37.08	-31.38	53.74	54.00	-0.26	Average	HORIZONTAL
4	8100.00	50.89	37.08	-31.38	56.59	74.00	-17.41	Peak	HORIZONTAL
5	9645.00	42.15	38.09	-30.01	50.23	74.00	-23.77	Peak	HORIZONTAL
6	11520.00	41.29	38.70	-28.61	51.38	74.00	-22.62	Peak	HORIZONTAL
7	14265.00	39.97	41.03	-27.75	53.25	74.00	-20.75	Peak	HORIZONTAL
8	17565.00	38.32	42.81	-27.33	53.80	74.00	-20.20	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

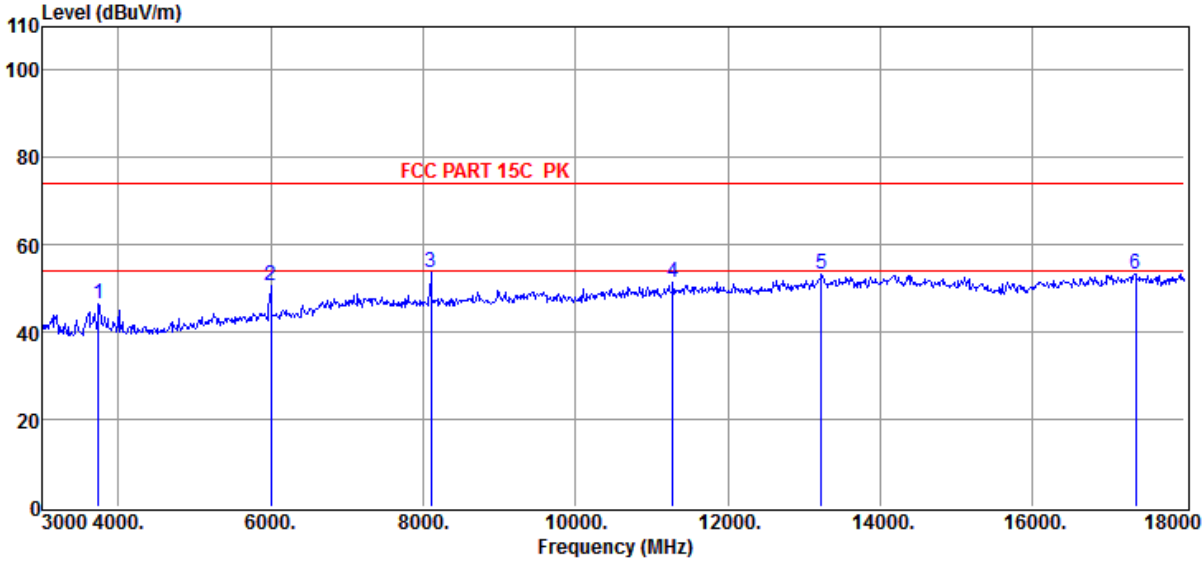
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT2 1M 2412MHz

Data: 64



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3735.00	47.76	30.96	-32.41	46.31	74.00	-27.69	Peak	VERTICAL
2	6000.00	47.00	35.30	-31.80	50.50	74.00	-23.50	Peak	VERTICAL
3	8100.00	47.87	37.08	-31.38	53.57	74.00	-20.43	Peak	VERTICAL
4	11280.00	41.15	38.70	-28.55	51.30	74.00	-22.70	Peak	VERTICAL
5	13230.00	42.82	39.91	-29.47	53.26	74.00	-20.74	Peak	VERTICAL
6	17355.00	37.51	42.70	-27.00	53.21	74.00	-20.79	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

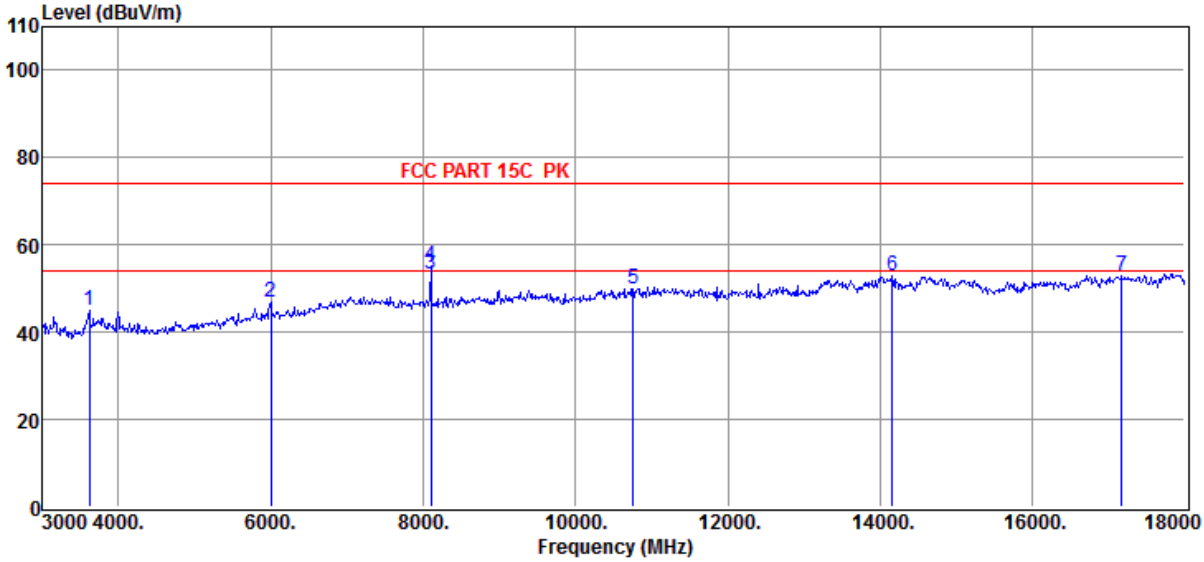
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT1 1M 2437MHz

Data: 65



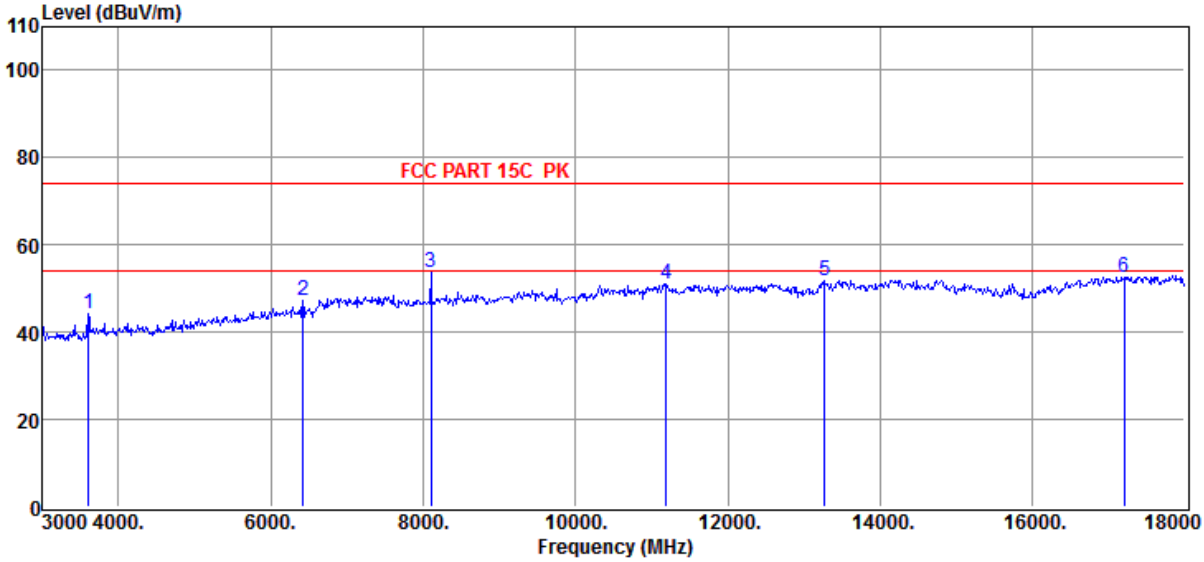
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	46.30	30.68	-31.98	45.00	74.00	-29.00	Peak	VERTICAL
2	6000.00	43.50	35.30	-31.80	47.00	74.00	-27.00	Peak	VERTICAL
3	8100.00	47.52	37.08	-31.38	53.22	54.00	-0.78	Average	VERTICAL
4	8100.00	49.65	37.08	-31.38	55.35	74.00	-18.65	Peak	VERTICAL
5	10755.00	40.59	38.60	-29.20	49.99	74.00	-24.01	Peak	VERTICAL
6	14160.00	39.27	41.18	-27.51	52.94	74.00	-21.06	Peak	VERTICAL
7	17175.00	37.52	42.44	-26.89	53.07	74.00	-20.93	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11B ANT1 1M 2437MHz		

Data: 66



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3600.00	45.53	30.64	-32.08	44.09	74.00	-29.91	Peak	HORIZONTAL
2	6420.00	43.15	35.72	-31.75	47.12	74.00	-26.88	Peak	HORIZONTAL
3	8100.00	47.86	37.08	-31.38	53.56	74.00	-20.44	Peak	HORIZONTAL
4	11190.00	40.63	38.70	-28.34	50.99	74.00	-23.01	Peak	HORIZONTAL
5	13275.00	41.13	40.00	-29.24	51.89	74.00	-22.11	Peak	HORIZONTAL
6	17205.00	37.10	42.49	-26.92	52.67	74.00	-21.33	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

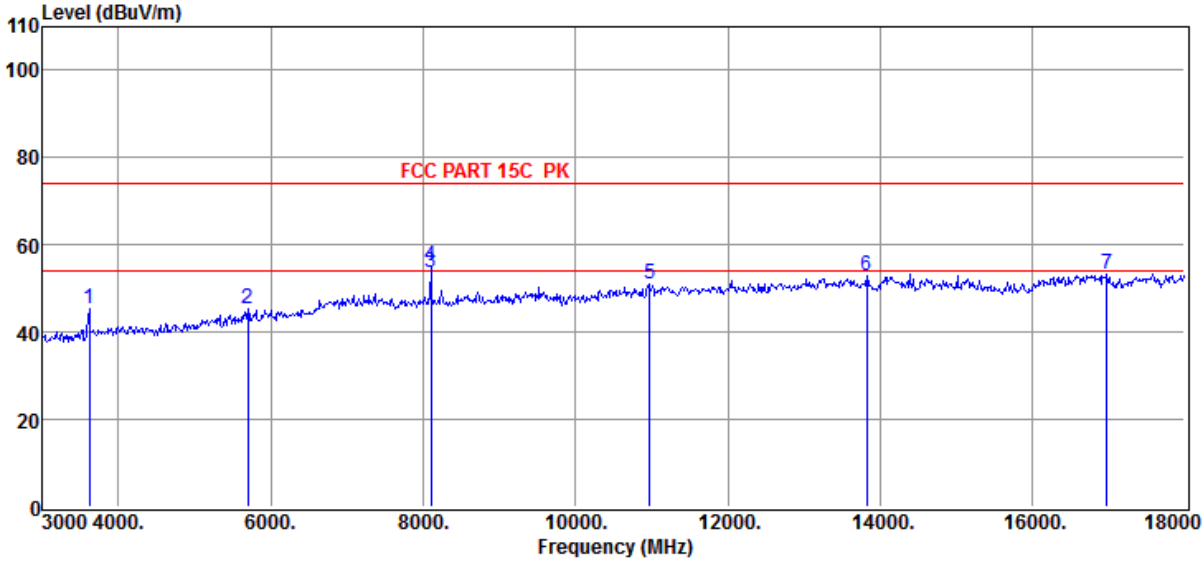
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT2 1M 2437MHz

Data: 67



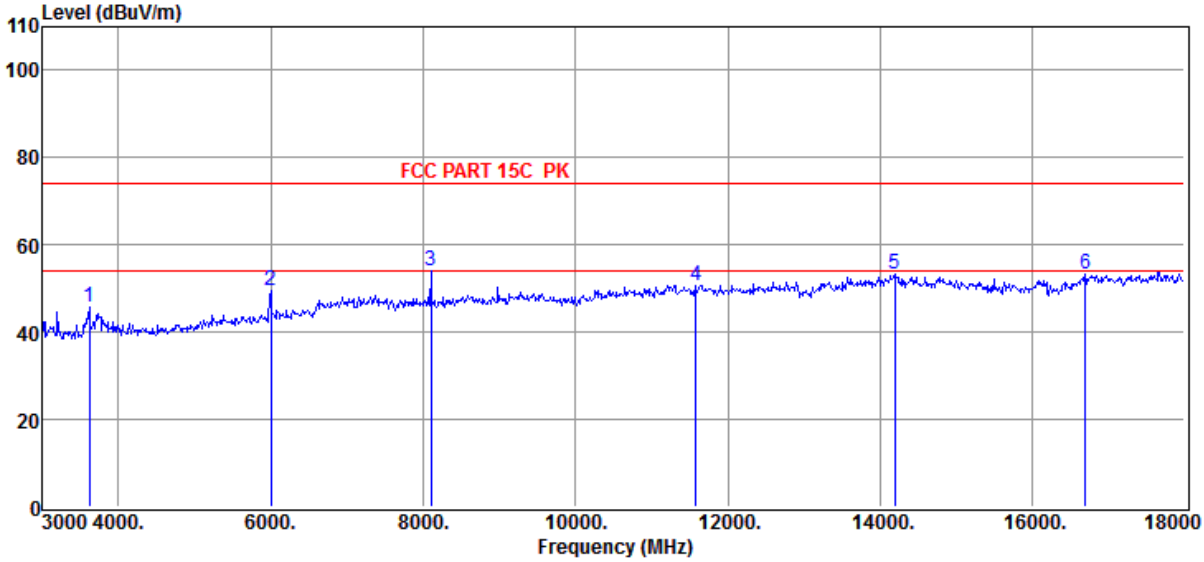
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	46.59	30.68	-31.98	45.29	74.00	-28.71	Peak	HORIZONTAL
2	5700.00	42.37	34.40	-31.48	45.29	74.00	-28.71	Peak	HORIZONTAL
3	8100.00	48.01	37.08	-31.38	53.71	54.00	-0.29	Average	HORIZONTAL
4	8100.00	49.54	37.08	-31.38	55.24	74.00	-18.76	Peak	HORIZONTAL
5	10980.00	41.32	38.69	-28.91	51.10	74.00	-22.90	Peak	HORIZONTAL
6	13830.00	40.89	41.06	-28.88	53.07	74.00	-20.93	Peak	HORIZONTAL
7	16980.00	37.18	42.10	-26.07	53.21	74.00	-20.79	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11B ANT2 1M 2437MHz		

Data: 68



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	47.22	30.68	-31.98	45.92	74.00	-28.08	Peak	VERTICAL
2	6000.00	46.17	35.30	-31.80	49.67	74.00	-24.33	Peak	VERTICAL
3	8100.00	48.22	37.08	-31.38	53.92	74.00	-20.08	Peak	VERTICAL
4	11580.00	40.75	38.68	-28.62	50.81	74.00	-23.19	Peak	VERTICAL
5	14190.00	39.33	41.13	-27.16	53.30	74.00	-20.70	Peak	VERTICAL
6	16695.00	38.91	40.74	-26.54	53.11	74.00	-20.89	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

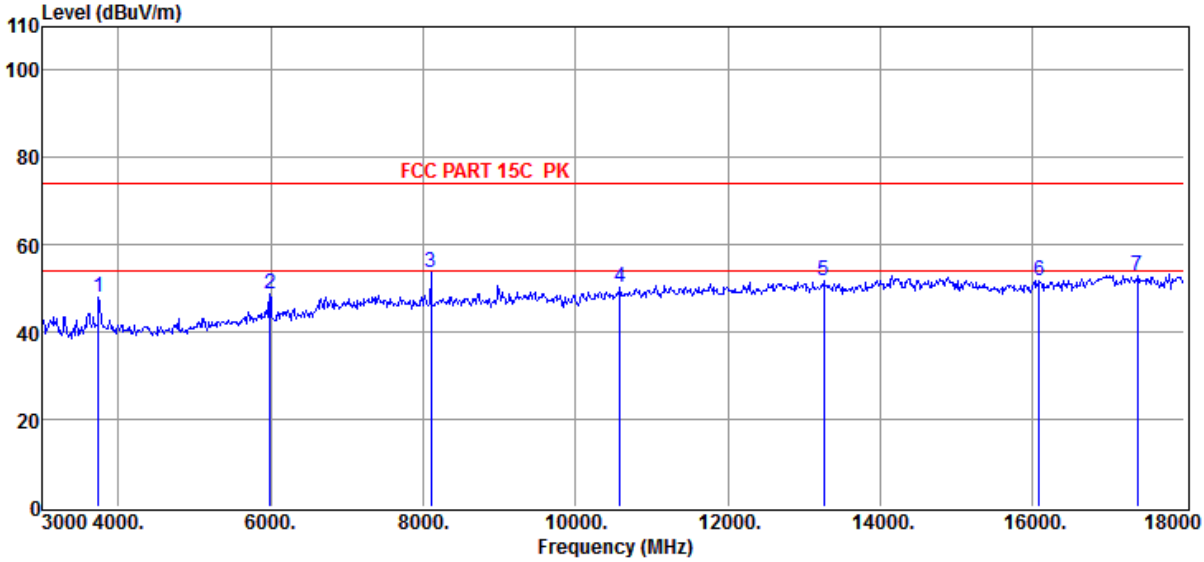
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT1 1M 2462MHz

Data: 69



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3735.00	49.32	30.96	-32.41	47.87	74.00	-26.13	Peak	VERTICAL
2	5985.00	45.32	35.26	-31.86	48.72	74.00	-25.28	Peak	VERTICAL
3	8100.00	47.84	37.08	-31.38	53.54	74.00	-20.46	Peak	VERTICAL
4	10590.00	41.19	38.54	-29.40	50.33	74.00	-23.67	Peak	VERTICAL
5	13260.00	40.97	39.97	-29.31	51.63	74.00	-22.37	Peak	VERTICAL
6	16095.00	40.09	38.75	-27.19	51.65	74.00	-22.35	Peak	VERTICAL
7	17385.00	37.28	42.74	-27.11	52.91	74.00	-21.09	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

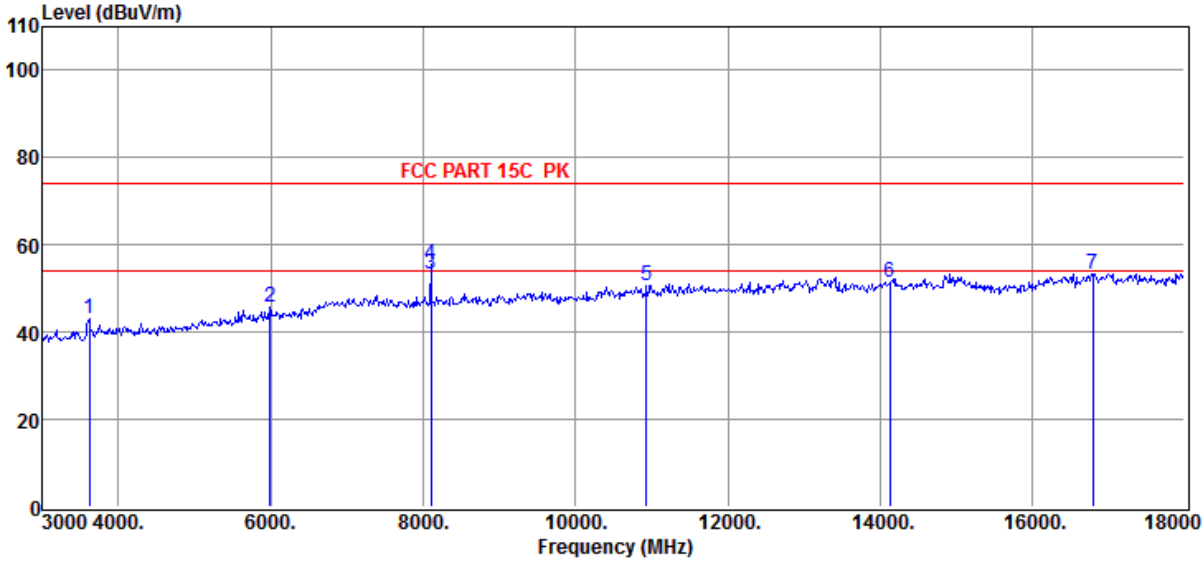
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT1 1M 2462MHz

Data: 70



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	44.33	30.68	-31.98	43.03	74.00	-30.97	Peak	HORIZONTAL
2	5985.00	42.16	35.26	-31.86	45.56	74.00	-28.44	Peak	HORIZONTAL
3	8100.00	47.71	37.08	-31.38	53.41	54.00	-0.59	Average	HORIZONTAL
4	8100.00	49.97	37.08	-31.38	55.67	74.00	-18.33	Peak	HORIZONTAL
5	10935.00	41.06	38.67	-29.05	50.68	74.00	-23.32	Peak	HORIZONTAL
6	14130.00	37.93	41.22	-27.85	51.30	74.00	-22.70	Peak	HORIZONTAL
7	16800.00	37.87	41.24	-25.80	53.31	74.00	-20.69	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

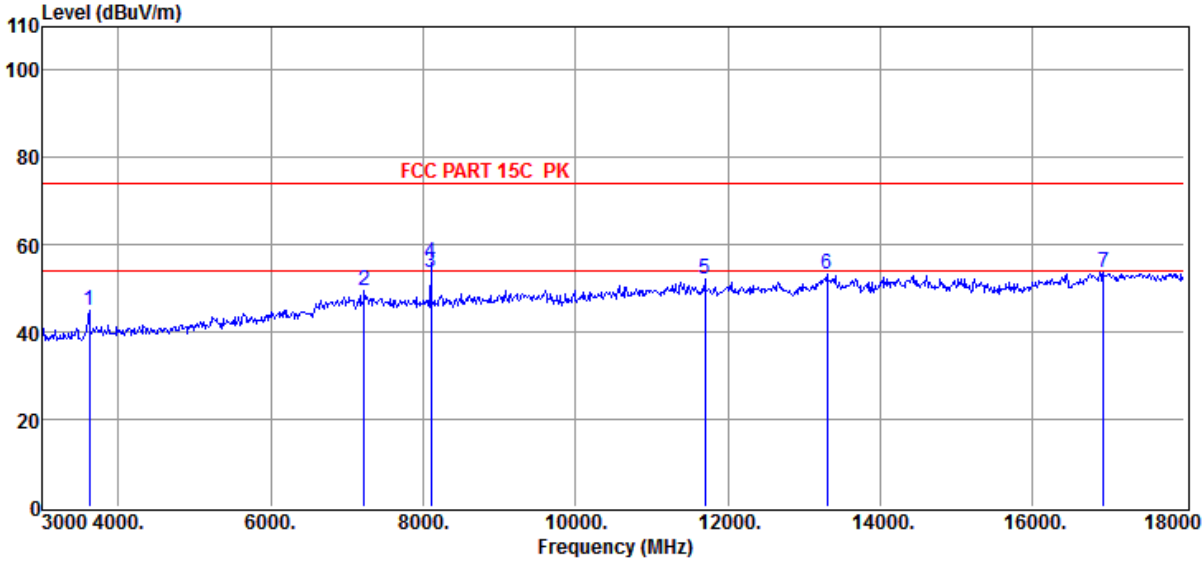
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT2 1M 2462MHz

Data: 71



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	46.33	30.68	-31.98	45.03	74.00	-28.97	Peak	HORIZONTAL
2	7230.00	43.29	36.97	-30.87	49.39	74.00	-24.61	Peak	HORIZONTAL
3	8100.00	48.11	37.08	-31.38	53.81	54.00	-0.19	Average	HORIZONTAL
4	8100.00	50.31	37.08	-31.38	56.01	74.00	-17.99	Peak	HORIZONTAL
5	11700.00	41.97	38.66	-28.63	52.00	74.00	-22.00	Peak	HORIZONTAL
6	13305.00	42.27	40.05	-29.13	53.19	74.00	-20.81	Peak	HORIZONTAL
7	16935.00	38.27	41.89	-26.50	53.66	74.00	-20.34	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

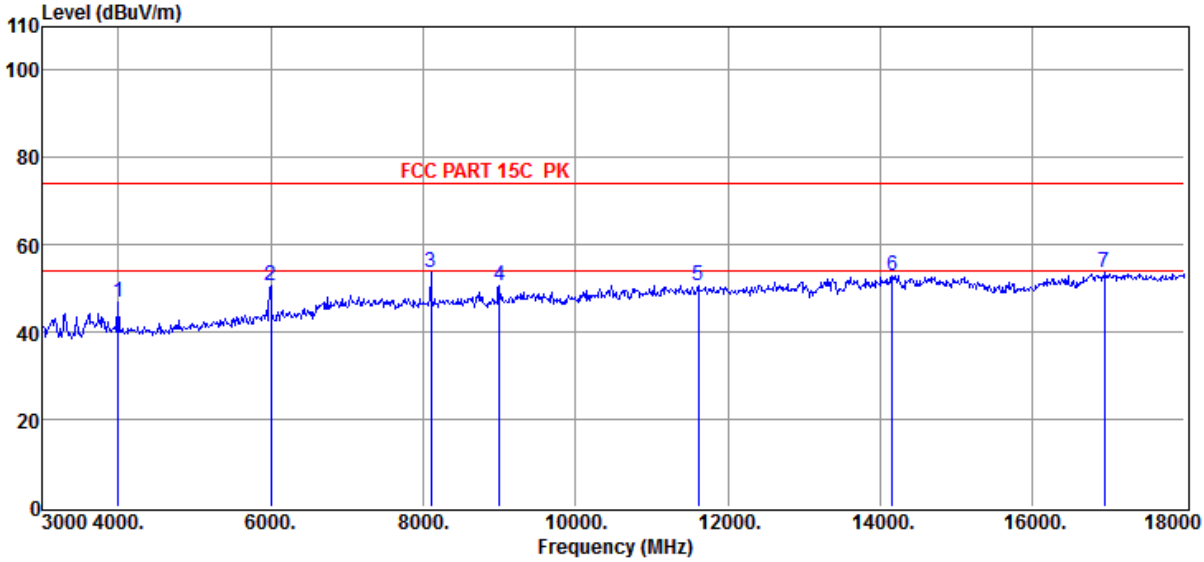
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT2 1M 2462MHz

Data: 72



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3990.00	47.53	31.58	-32.11	47.00	74.00	-27.00	Peak	VERTICAL
2	6000.00	47.00	35.30	-31.80	50.50	74.00	-23.50	Peak	VERTICAL
3	8100.00	47.89	37.08	-31.38	53.59	74.00	-20.41	Peak	VERTICAL
4	9000.00	43.36	37.70	-30.52	50.54	74.00	-23.46	Peak	VERTICAL
5	11610.00	40.67	38.68	-28.62	50.73	74.00	-23.27	Peak	VERTICAL
6	14160.00	39.39	41.18	-27.51	53.06	74.00	-20.94	Peak	VERTICAL
7	16950.00	38.04	41.96	-26.36	53.64	74.00	-20.36	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

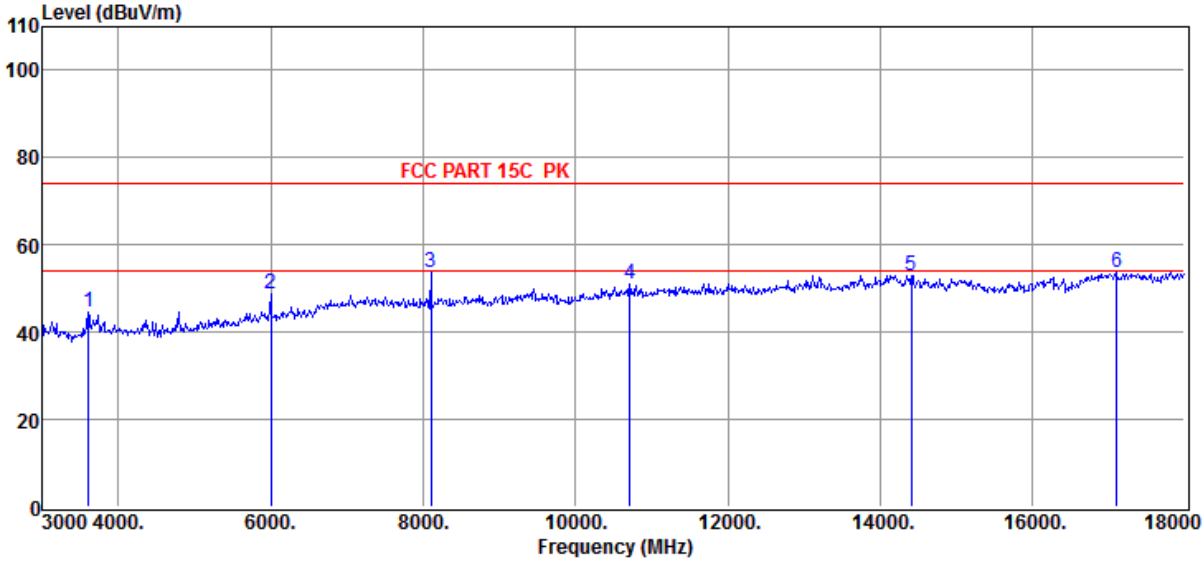
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT1 6M 2412MHz

Data: 73



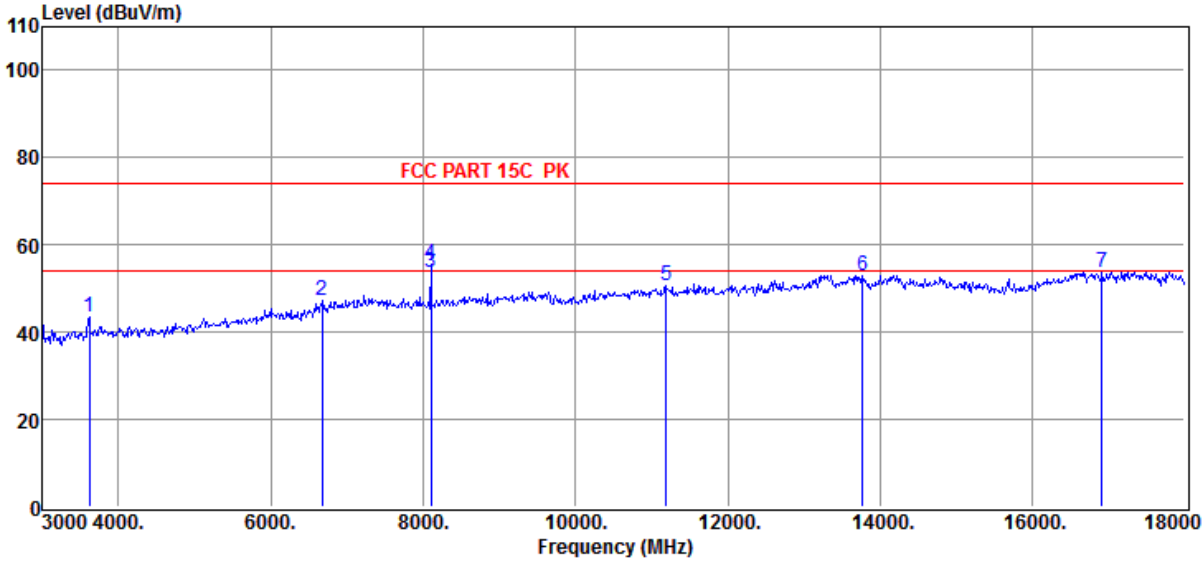
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3600.00	46.13	30.64	-32.08	44.69	74.00	-29.31	Peak	VERTICAL
2	6000.00	45.13	35.30	-31.80	48.63	74.00	-25.37	Peak	VERTICAL
3	8100.00	48.10	37.08	-31.38	53.80	74.00	-20.20	Peak	VERTICAL
4	10710.00	41.94	38.58	-29.43	51.09	74.00	-22.91	Peak	VERTICAL
5	14415.00	39.41	40.82	-27.14	53.09	74.00	-20.91	Peak	VERTICAL
6	17115.00	38.04	42.36	-26.80	53.60	74.00	-20.40	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11G ANT1 6M 2412MHz		

Data: 74



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	44.74	30.68	-31.98	43.44	74.00	-30.56	Peak	HORIZONTAL
2	6675.00	42.44	36.08	-31.33	47.19	74.00	-26.81	Peak	HORIZONTAL
3	8100.00	48.06	37.08	-31.38	53.76	54.00	-0.24	Average	HORIZONTAL
4	8100.00	49.88	37.08	-31.38	55.58	74.00	-18.42	Peak	HORIZONTAL
5	11190.00	40.41	38.70	-28.34	50.77	74.00	-23.23	Peak	HORIZONTAL
6	13770.00	40.91	40.94	-28.96	52.89	74.00	-21.11	Peak	HORIZONTAL
7	16920.00	38.53	41.82	-26.65	53.70	74.00	-20.30	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

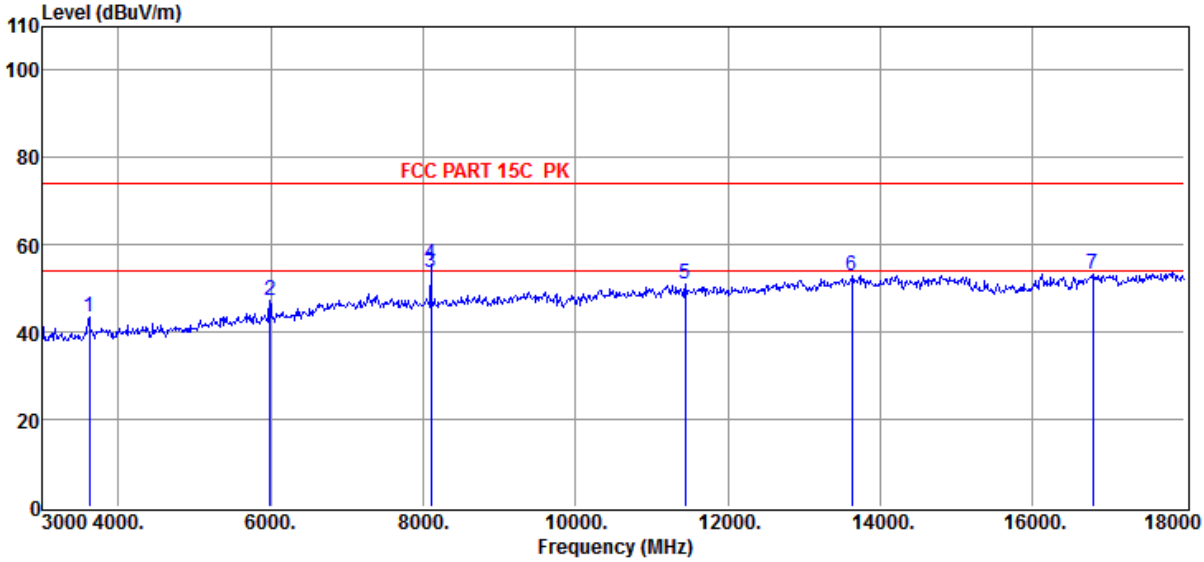
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT2 6M 2412MHz

Data: 75



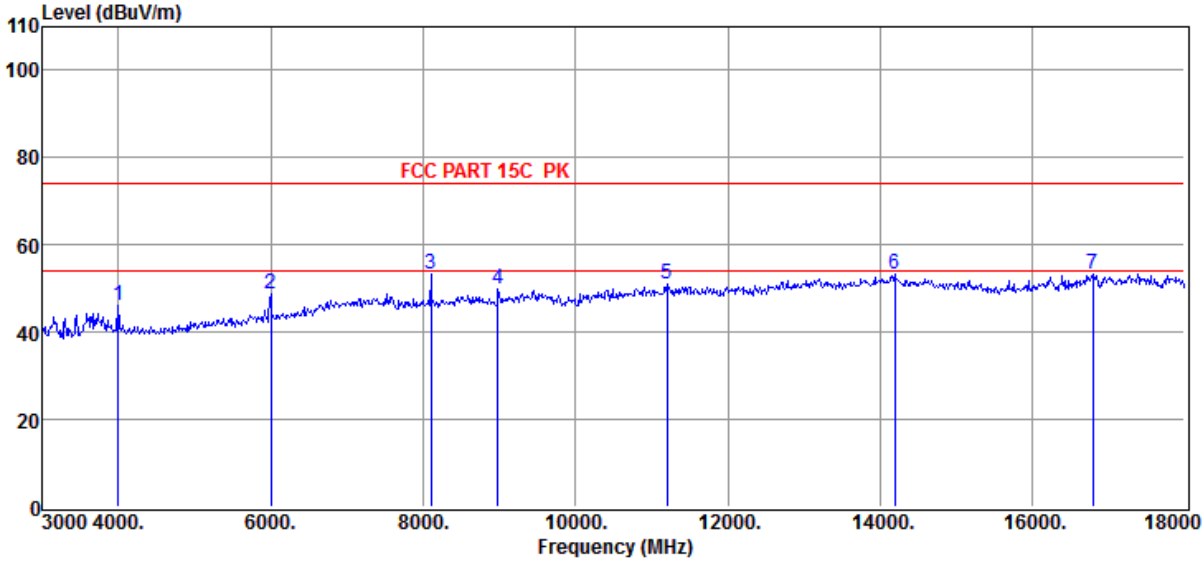
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	44.77	30.68	-31.98	43.47	74.00	-30.53	Peak	HORIZONTAL
2	5985.00	43.82	35.26	-31.86	47.22	74.00	-26.78	Peak	HORIZONTAL
3	8100.00	47.86	37.08	-31.38	53.56	54.00	-0.44	Average	HORIZONTAL
4	8100.00	50.05	37.08	-31.38	55.75	74.00	-18.25	Peak	HORIZONTAL
5	11445.00	40.92	38.70	-28.63	50.99	74.00	-23.01	Peak	HORIZONTAL
6	13635.00	41.44	40.67	-29.06	53.05	74.00	-20.95	Peak	HORIZONTAL
7	16800.00	37.80	41.24	-25.80	53.24	74.00	-20.76	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11G ANT2 6M 2412MHz		

Data: 76



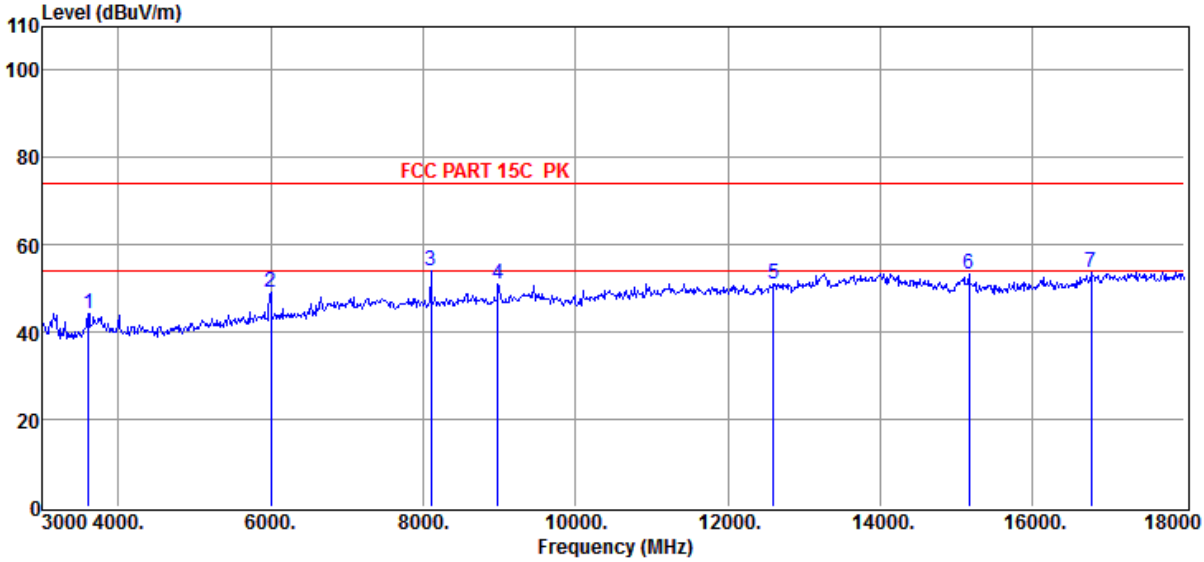
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3990.00	46.63	31.58	-32.11	46.10	74.00	-27.90	Peak	VERTICAL
2	6000.00	45.20	35.30	-31.80	48.70	74.00	-25.30	Peak	VERTICAL
3	8100.00	47.62	37.08	-31.38	53.32	74.00	-20.68	Peak	VERTICAL
4	8985.00	43.01	37.69	-30.62	50.08	74.00	-23.92	Peak	VERTICAL
5	11205.00	40.47	38.70	-28.32	50.85	74.00	-23.15	Peak	VERTICAL
6	14190.00	39.17	41.13	-27.16	53.14	74.00	-20.86	Peak	VERTICAL
7	16800.00	37.74	41.24	-25.80	53.18	74.00	-20.82	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11G ANT1 6M 2437MHz		

Data: 77



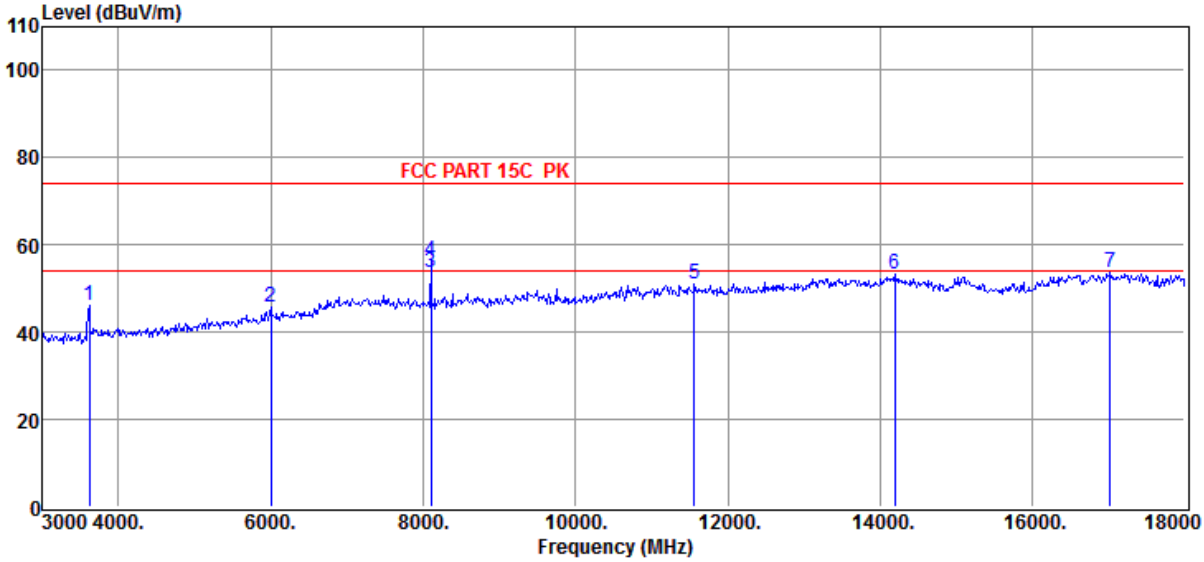
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3600.00	45.75	30.64	-32.08	44.31	74.00	-29.69	Peak	VERTICAL
2	6000.00	45.58	35.30	-31.80	49.08	74.00	-24.92	Peak	VERTICAL
3	8100.00	48.20	37.08	-31.38	53.90	74.00	-20.10	Peak	VERTICAL
4	8985.00	43.84	37.69	-30.62	50.91	74.00	-23.09	Peak	VERTICAL
5	12600.00	41.39	38.78	-28.96	51.21	74.00	-22.79	Peak	VERTICAL
6	15165.00	41.72	38.74	-27.25	53.21	74.00	-20.79	Peak	VERTICAL
7	16770.00	38.49	41.10	-26.02	53.57	74.00	-20.43	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11G ANT1 6M 2437MHz		

Data: 78



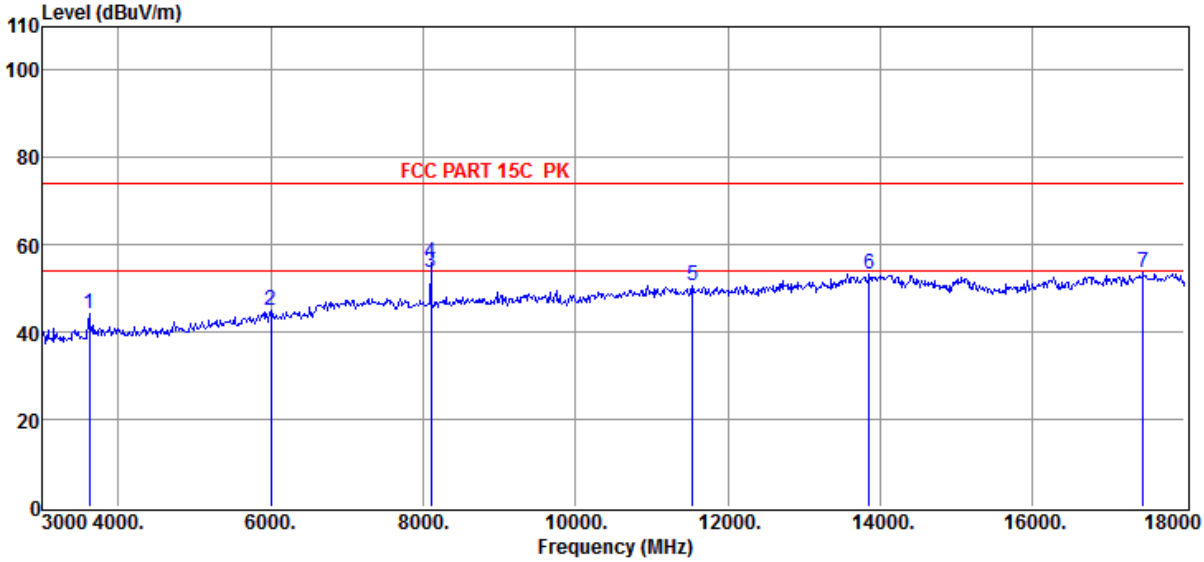
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	47.25	30.68	-31.98	45.95	74.00	-28.05	Peak	HORIZONTAL
2	6000.00	42.21	35.30	-31.80	45.71	74.00	-28.29	Peak	HORIZONTAL
3	8100.00	48.03	37.08	-31.38	53.73	54.00	-0.27	Average	HORIZONTAL
4	8100.00	50.60	37.08	-31.38	56.30	74.00	-17.70	Peak	HORIZONTAL
5	11565.00	40.89	38.69	-28.62	50.96	74.00	-23.04	Peak	HORIZONTAL
6	14190.00	39.15	41.13	-27.16	53.12	74.00	-20.88	Peak	HORIZONTAL
7	17025.00	37.44	42.24	-26.10	53.58	74.00	-20.42	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11G ANT2 6M 2437MHz		

Data: 79



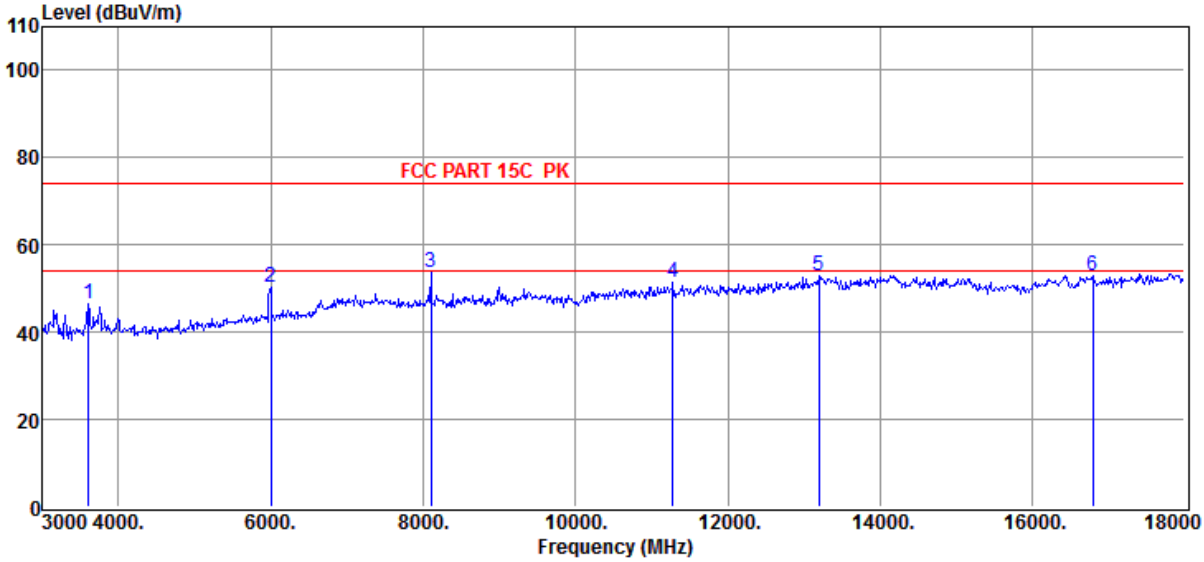
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	45.38	30.68	-31.98	44.08	74.00	-29.92	Peak	HORIZONTAL
2	6000.00	41.64	35.30	-31.80	45.14	74.00	-28.86	Peak	HORIZONTAL
3	8100.00	47.85	37.08	-31.38	53.55	54.00	-0.45	Average	HORIZONTAL
4	8100.00	50.11	37.08	-31.38	55.81	74.00	-18.19	Peak	HORIZONTAL
5	11535.00	40.50	38.69	-28.61	50.58	74.00	-23.42	Peak	HORIZONTAL
6	13860.00	41.02	41.12	-28.77	53.37	74.00	-20.63	Peak	HORIZONTAL
7	17460.00	38.02	42.84	-27.25	53.61	74.00	-20.39	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11G ANT2 6M 2437MHz		

Data: 80



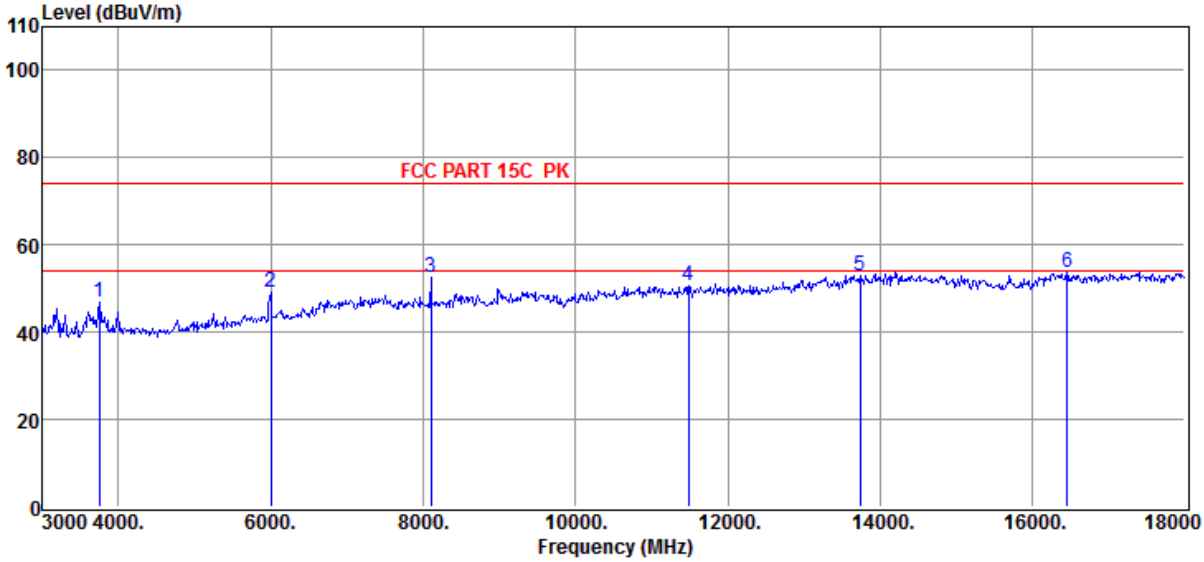
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3600.00	47.93	30.64	-32.08	46.49	74.00	-27.51	Peak	VERTICAL
2	6000.00	46.88	35.30	-31.80	50.38	74.00	-23.62	Peak	VERTICAL
3	8100.00	48.06	37.08	-31.38	53.76	74.00	-20.24	Peak	VERTICAL
4	11280.00	41.25	38.70	-28.55	51.40	74.00	-22.60	Peak	VERTICAL
5	13200.00	42.80	39.86	-29.62	53.04	74.00	-20.96	Peak	VERTICAL
6	16800.00	37.65	41.24	-25.80	53.09	74.00	-20.91	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11G ANT1 6M 2462MHz		

Data: 81



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3750.00	48.39	31.00	-32.47	46.92	74.00	-27.08	Peak	VERTICAL
2	6000.00	45.64	35.30	-31.80	49.14	74.00	-24.86	Peak	VERTICAL
3	8100.00	46.95	37.08	-31.38	52.65	74.00	-21.35	Peak	VERTICAL
4	11490.00	40.54	38.70	-28.61	50.63	74.00	-23.37	Peak	VERTICAL
5	13740.00	40.93	40.88	-28.94	52.87	74.00	-21.13	Peak	VERTICAL
6	16455.00	40.74	39.68	-26.93	53.49	74.00	-20.51	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

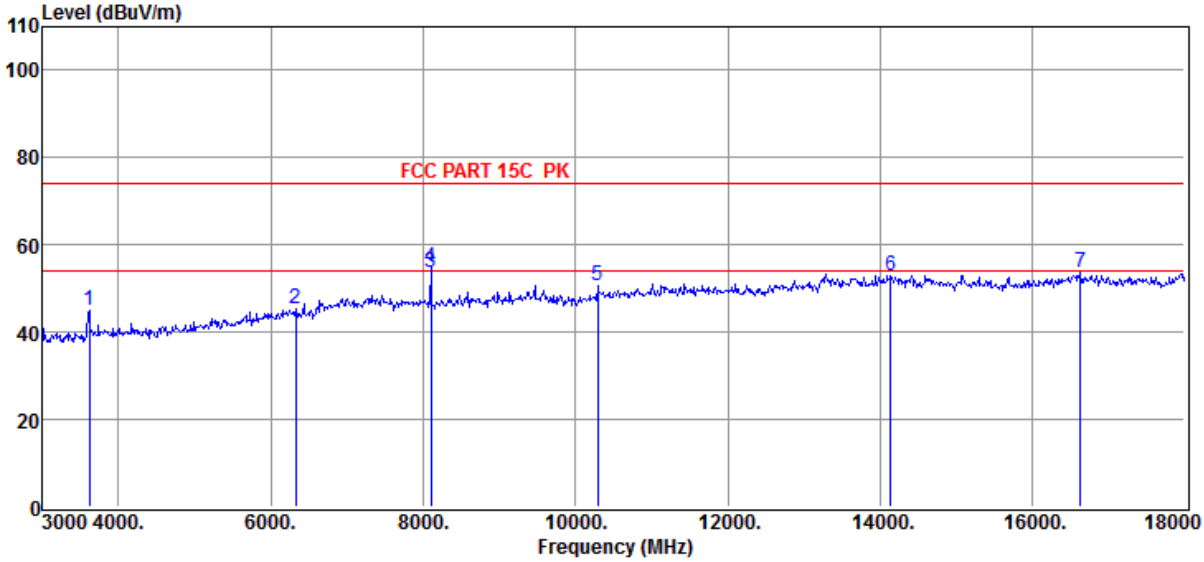
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT1 6M 2462MHz

Data: 82



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	46.19	30.68	-31.98	44.89	74.00	-29.11	Peak	HORIZONTAL
2	6330.00	41.51	35.63	-31.85	45.29	74.00	-28.71	Peak	HORIZONTAL
3	8100.00	47.87	37.08	-31.38	53.57	54.00	-0.43	Average	HORIZONTAL
4	8100.00	49.17	37.08	-31.38	54.87	74.00	-19.13	Peak	HORIZONTAL
5	10290.00	41.90	38.42	-29.85	50.47	74.00	-23.53	Peak	HORIZONTAL
6	14145.00	39.48	41.20	-27.68	53.00	74.00	-21.00	Peak	HORIZONTAL
7	16635.00	39.67	40.45	-26.37	53.75	74.00	-20.25	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

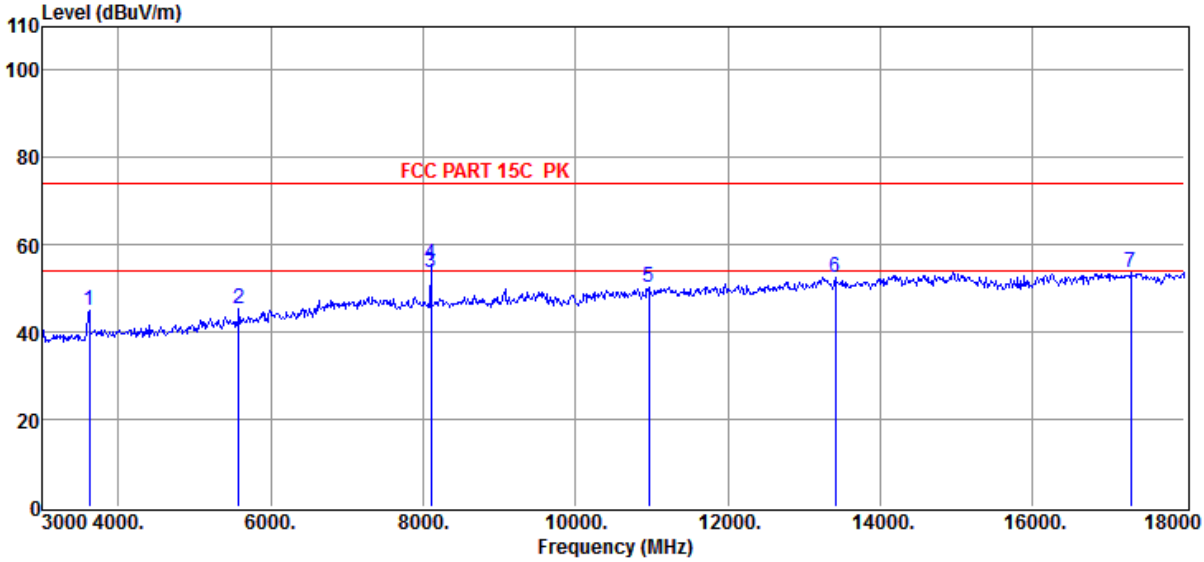
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT2 6M 2462MHz

Data: 83



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	46.44	30.68	-31.98	45.14	74.00	-28.86	Peak	HORIZONTAL
2	5580.00	43.37	34.04	-31.87	45.54	74.00	-28.46	Peak	HORIZONTAL
3	8100.00	48.08	37.08	-31.38	53.78	54.00	-0.22	Average	HORIZONTAL
4	8100.00	50.03	37.08	-31.38	55.73	74.00	-18.27	Peak	HORIZONTAL
5	10965.00	40.55	38.69	-28.95	50.29	74.00	-23.71	Peak	HORIZONTAL
6	13410.00	41.54	40.24	-29.39	52.39	74.00	-21.61	Peak	HORIZONTAL
7	17295.00	37.87	42.61	-26.80	53.68	74.00	-20.32	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

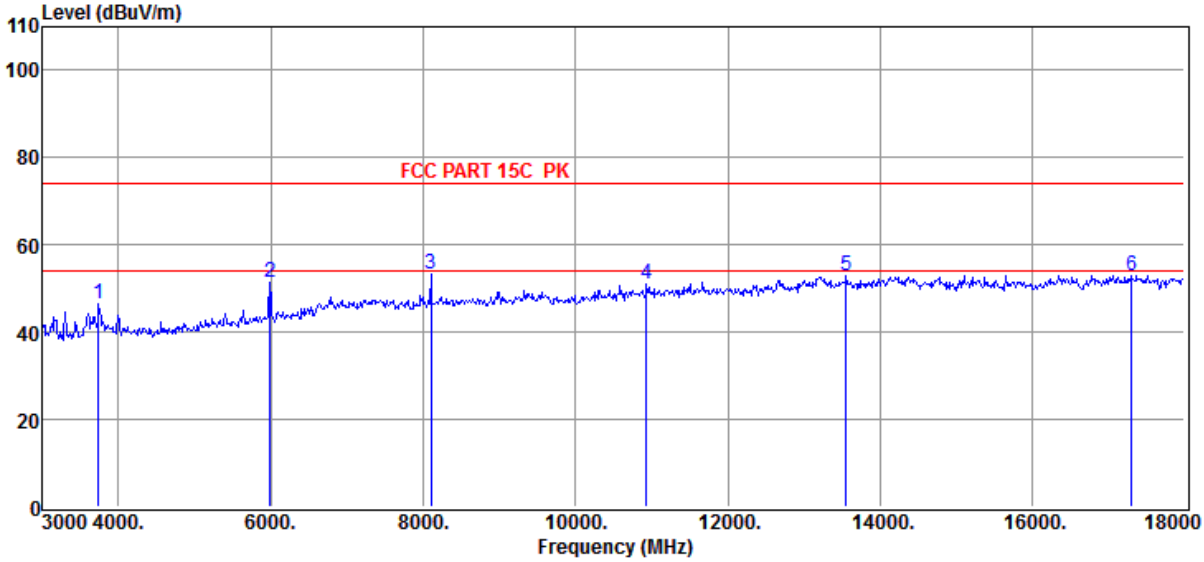
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT2 6M 2462MHz

Data: 84



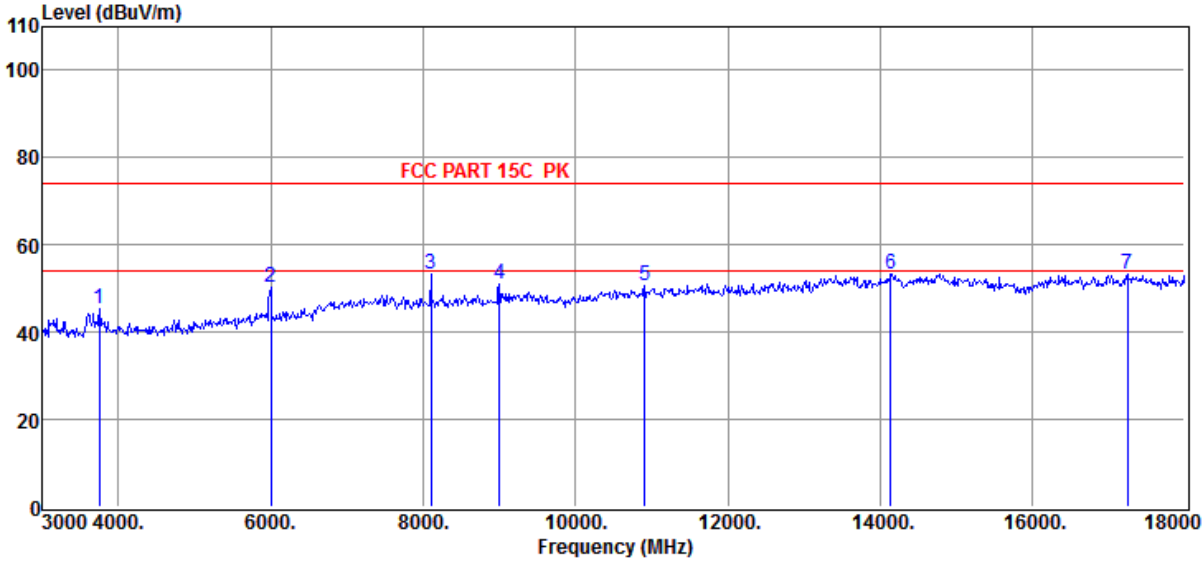
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3735.00	47.97	30.96	-32.41	46.52	74.00	-27.48	Peak	VERTICAL
2	5985.00	48.04	35.26	-31.86	51.44	74.00	-22.56	Peak	VERTICAL
3	8100.00	47.71	37.08	-31.38	53.41	74.00	-20.59	Peak	VERTICAL
4	10935.00	41.32	38.67	-29.05	50.94	74.00	-23.06	Peak	VERTICAL
5	13560.00	41.35	40.52	-29.11	52.76	74.00	-21.24	Peak	VERTICAL
6	17310.00	37.13	42.63	-26.83	52.93	74.00	-21.07	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11N20 ANT1+ANT2 MCS0 2412MHz		

Data: 85



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3750.00	46.88	31.00	-32.47	45.41	74.00	-28.59	Peak	VERTICAL
2	6000.00	46.91	35.30	-31.80	50.41	74.00	-23.59	Peak	VERTICAL
3	8100.00	47.65	37.08	-31.38	53.35	74.00	-20.65	Peak	VERTICAL
4	9000.00	43.88	37.70	-30.52	51.06	74.00	-22.94	Peak	VERTICAL
5	10905.00	41.30	38.66	-29.14	50.82	74.00	-23.18	Peak	VERTICAL
6	14145.00	39.76	41.20	-27.68	53.28	74.00	-20.72	Peak	VERTICAL
7	17250.00	37.66	42.55	-26.86	53.35	74.00	-20.65	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

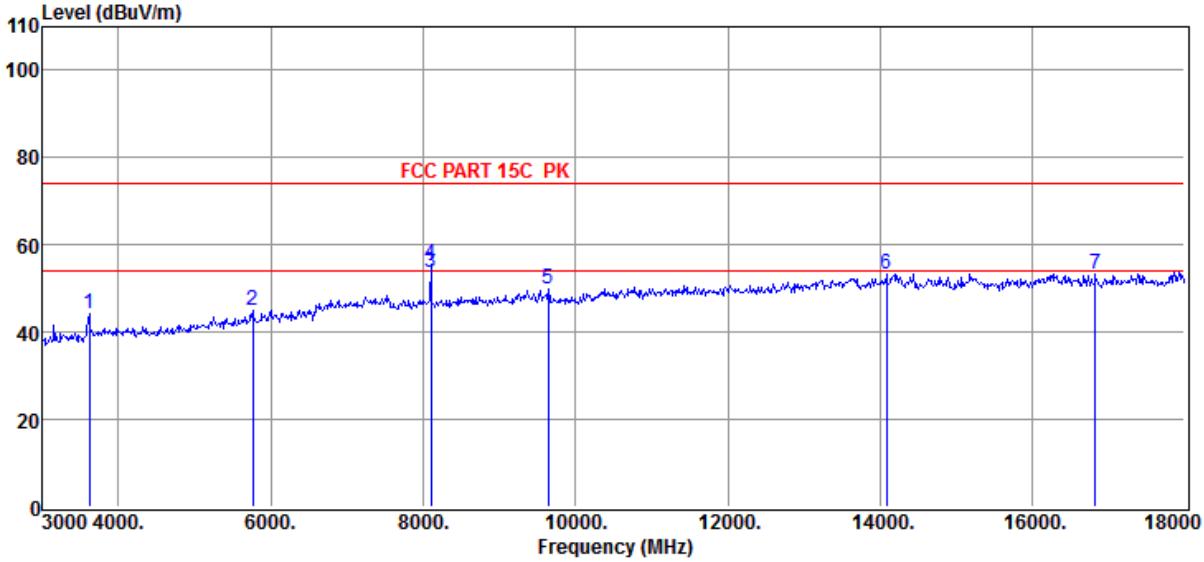
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N20 ANT1+ANT2 MCS0 2412MHz

Data: 86



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	45.60	30.68	-31.98	44.30	74.00	-29.70	Peak	HORIZONTAL
2	5760.00	42.32	34.58	-31.93	44.97	74.00	-29.03	Peak	HORIZONTAL
3	8100.00	48.01	37.08	-31.38	53.71	54.00	-0.29	Average	HORIZONTAL
4	8100.00	49.91	37.08	-31.38	55.61	74.00	-18.39	Peak	HORIZONTAL
5	9645.00	41.65	38.09	-30.01	49.73	74.00	-24.27	Peak	HORIZONTAL
6	14085.00	40.24	41.28	-28.22	53.30	74.00	-20.70	Peak	HORIZONTAL
7	16830.00	37.93	41.38	-26.11	53.20	74.00	-20.80	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

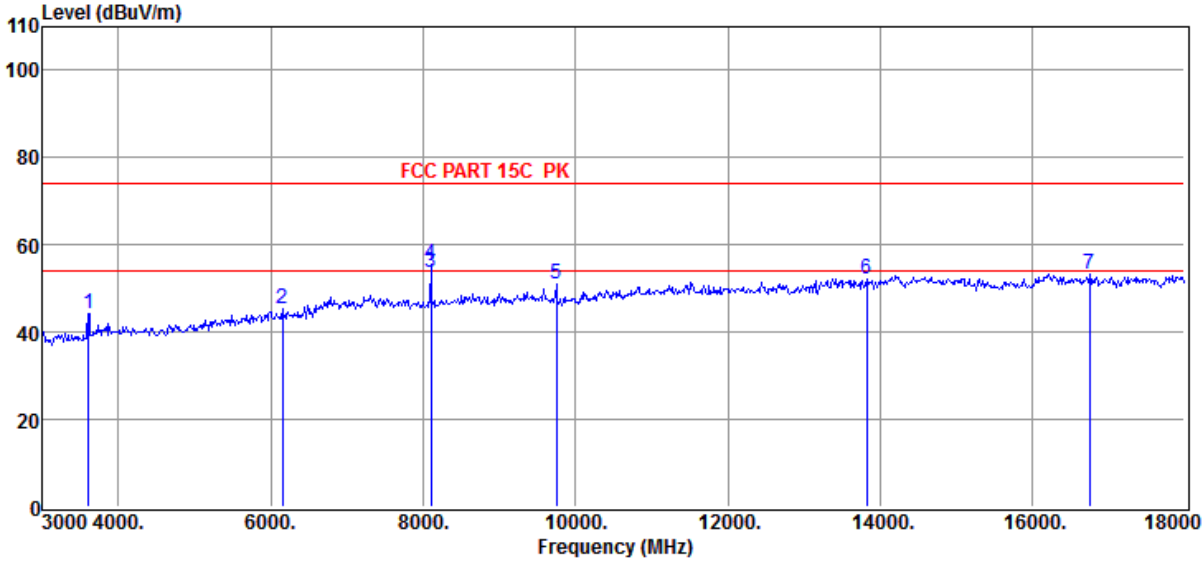
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N20 ANT1+ANT2 MCS0 2437MHz

Data: 87



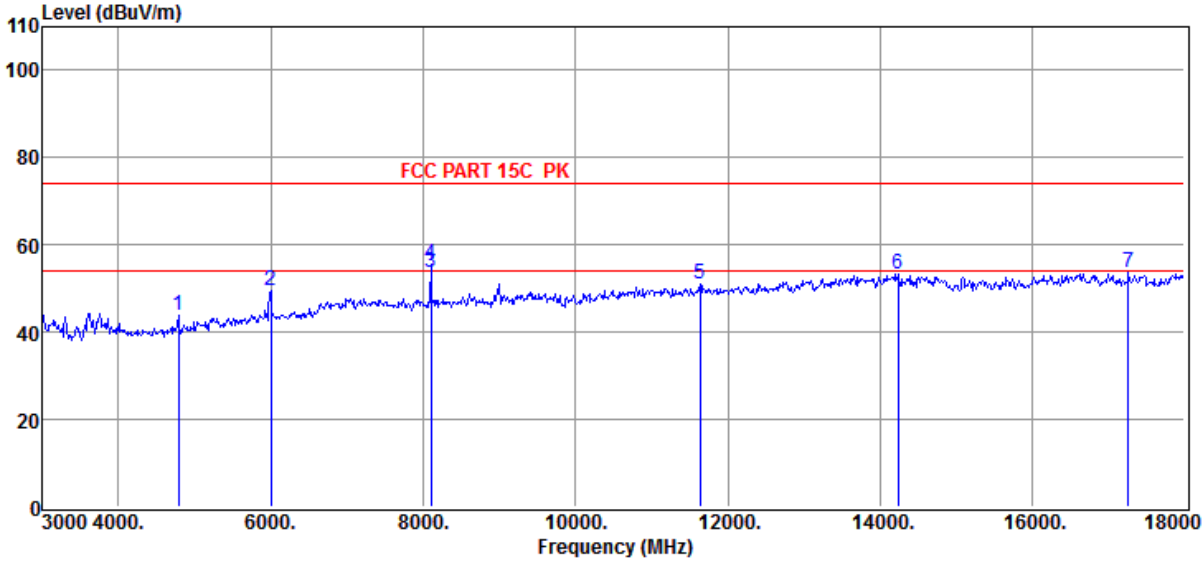
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3600.00	45.55	30.64	-32.08	44.11	74.00	-29.89	Peak	HORIZONTAL
2	6150.00	41.71	35.45	-31.86	45.30	74.00	-28.70	Peak	HORIZONTAL
3	8100.00	47.98	37.08	-31.38	53.68	54.00	-0.32	Average	HORIZONTAL
4	8100.00	49.97	37.08	-31.38	55.67	74.00	-18.33	Peak	HORIZONTAL
5	9750.00	42.98	38.15	-30.06	51.07	74.00	-22.93	Peak	HORIZONTAL
6	13830.00	40.15	41.06	-28.88	52.33	74.00	-21.67	Peak	HORIZONTAL
7	16755.00	38.42	41.02	-26.14	53.30	74.00	-20.70	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11N20 ANT1+ANT2 MCS0 2437MHz		

Data: 88



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	4785.00	42.97	32.47	-31.66	43.78	74.00	-30.22	Peak	VERTICAL
2	6000.00	46.06	35.30	-31.80	49.56	74.00	-24.44	Peak	VERTICAL
3	8100.00	47.94	37.08	-31.38	53.64	54.00	-0.36	Average	VERTICAL
4	8100.00	49.73	37.08	-31.38	55.43	74.00	-18.57	Peak	VERTICAL
5	11640.00	41.12	38.67	-28.62	51.17	74.00	-22.83	Peak	VERTICAL
6	14235.00	39.64	41.07	-27.43	53.28	74.00	-20.72	Peak	VERTICAL
7	17265.00	37.88	42.57	-26.84	53.61	74.00	-20.39	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

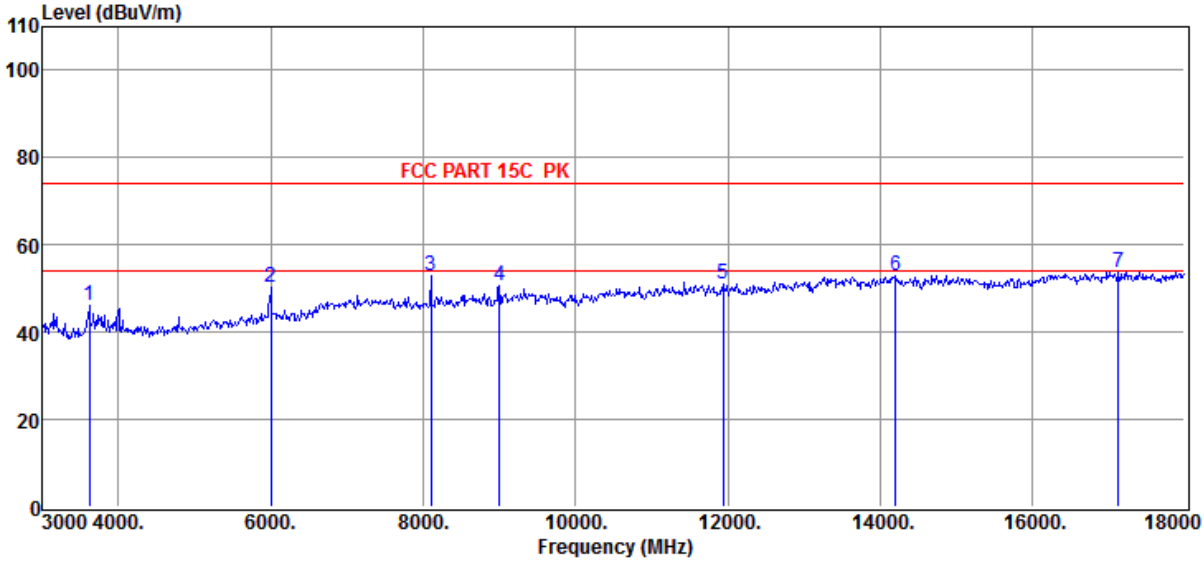
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N20 ANT1+ANT2 MCS0 2462MHz

Data: 89



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	47.29	30.68	-31.98	45.99	74.00	-28.01	Peak	VERTICAL
2	6000.00	46.89	35.30	-31.80	50.39	74.00	-23.61	Peak	VERTICAL
3	8100.00	47.23	37.08	-31.38	52.93	74.00	-21.07	Peak	VERTICAL
4	9000.00	43.59	37.70	-30.52	50.77	74.00	-23.23	Peak	VERTICAL
5	11940.00	41.22	38.61	-28.68	51.15	74.00	-22.85	Peak	VERTICAL
6	14205.00	38.93	41.11	-27.10	52.94	74.00	-21.06	Peak	VERTICAL
7	17130.00	38.06	42.38	-26.83	53.61	74.00	-20.39	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

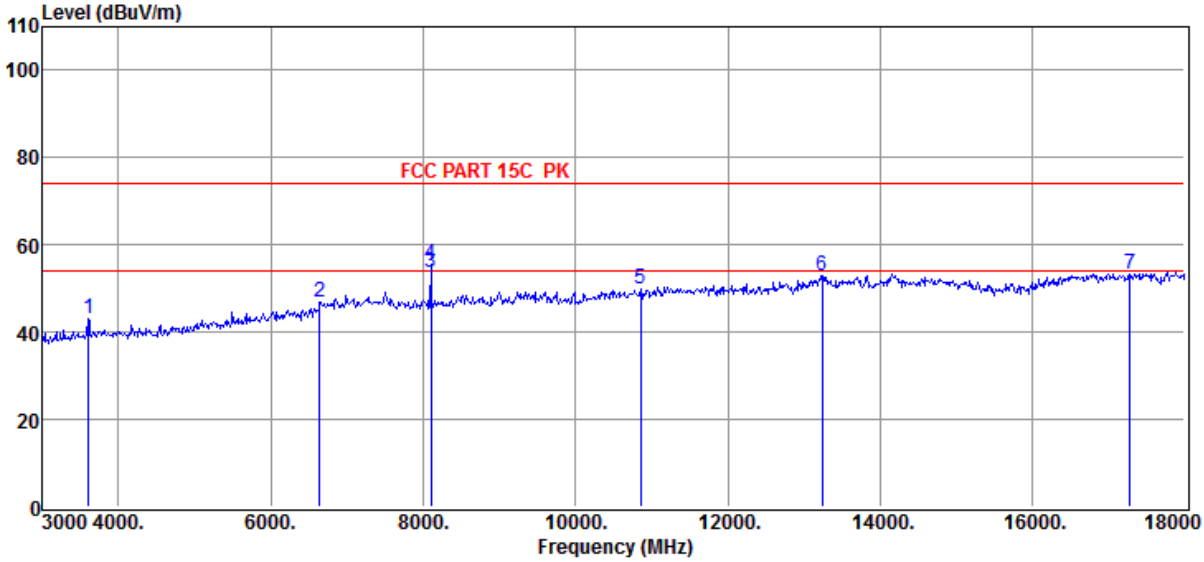
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N20 ANT1+ANT2 MCS0 2462MHz

Data: 90



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3600.00	44.43	30.64	-32.08	42.99	74.00	-31.01	Peak	HORIZONTAL
2	6645.00	42.04	36.03	-31.17	46.90	74.00	-27.10	Peak	HORIZONTAL
3	8100.00	47.93	37.08	-31.38	53.63	54.00	-0.37	Average	HORIZONTAL
4	8100.00	49.89	37.08	-31.38	55.59	74.00	-18.41	Peak	HORIZONTAL
5	10860.00	40.30	38.64	-29.08	49.86	74.00	-24.14	Peak	HORIZONTAL
6	13245.00	42.52	39.94	-29.39	53.07	74.00	-20.93	Peak	HORIZONTAL
7	17280.00	37.71	42.59	-26.82	53.48	74.00	-20.52	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

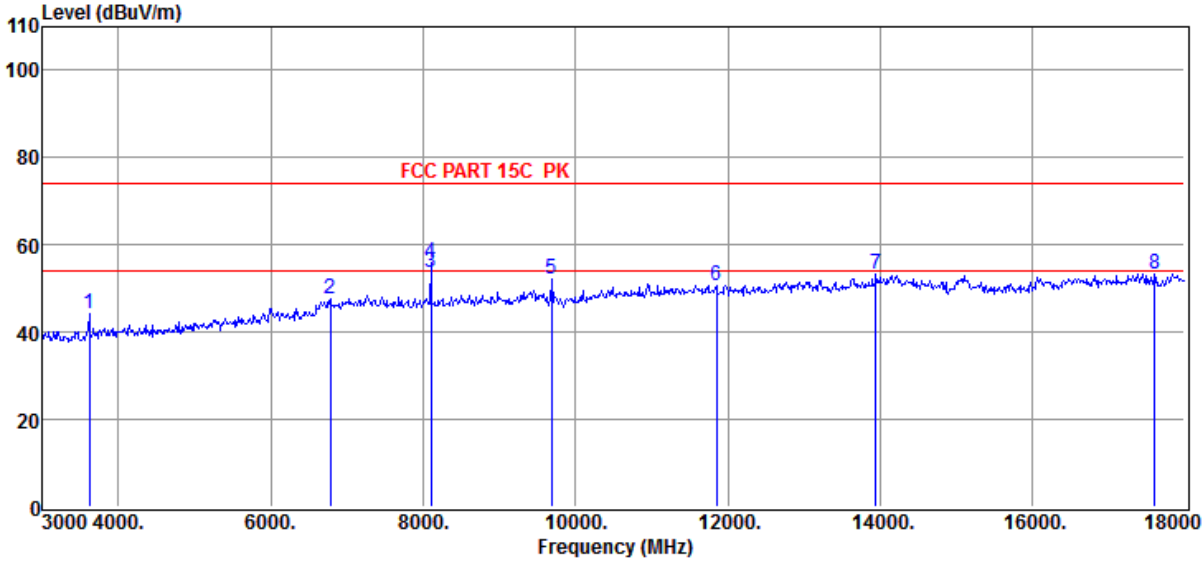
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N40 ANT1+ANT2 MCS0 2422MHz

Data: 91



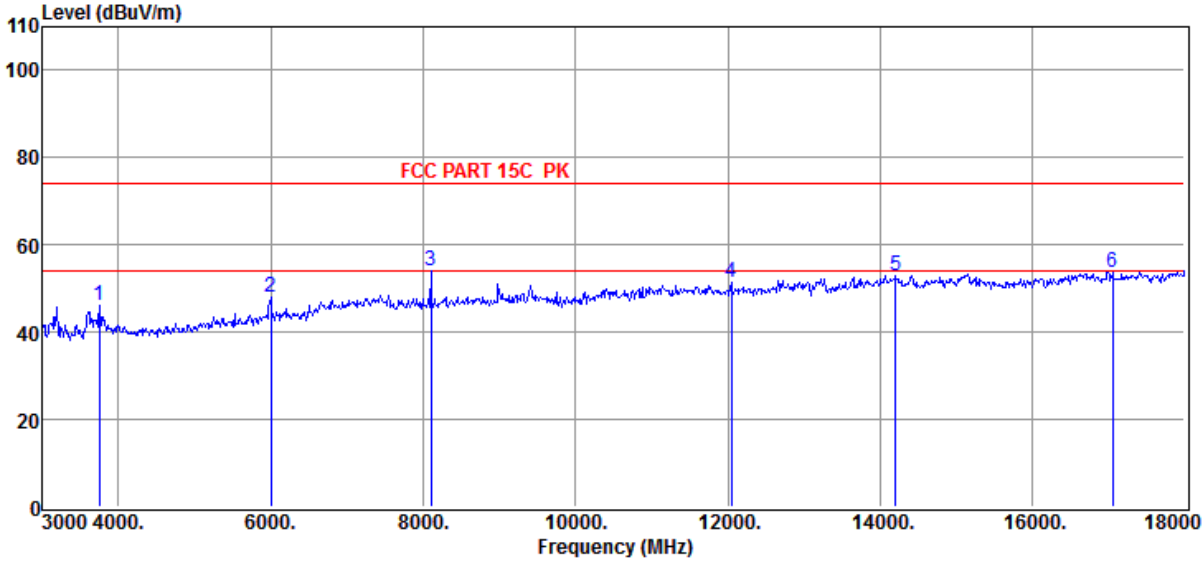
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	45.68	30.68	-31.98	44.38	74.00	-29.62	Peak	HORIZONTAL
2	6780.00	42.36	36.25	-31.16	47.45	74.00	-26.55	Peak	HORIZONTAL
3	8100.00	48.07	37.08	-31.38	53.77	54.00	-0.23	Average	HORIZONTAL
4	8100.00	50.18	37.08	-31.38	55.88	74.00	-18.12	Peak	HORIZONTAL
5	9690.00	43.97	38.11	-30.04	52.04	74.00	-21.96	Peak	HORIZONTAL
6	11850.00	40.67	38.63	-28.62	50.68	74.00	-23.32	Peak	HORIZONTAL
7	13950.00	40.62	41.30	-28.51	53.41	74.00	-20.59	Peak	HORIZONTAL
8	17610.00	38.12	42.75	-27.39	53.48	74.00	-20.52	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11N40 ANT1+ANT2 MCS0 2422MHz		

Data: 92



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3750.00	47.41	31.00	-32.47	45.94	74.00	-28.06	Peak	VERTICAL
2	6000.00	44.68	35.30	-31.80	48.18	74.00	-25.82	Peak	VERTICAL
3	8100.00	48.26	37.08	-31.38	53.96	74.00	-20.04	Peak	VERTICAL
4	12045.00	41.50	38.60	-28.76	51.34	74.00	-22.66	Peak	VERTICAL
5	14205.00	38.95	41.11	-27.10	52.96	74.00	-21.04	Peak	VERTICAL
6	17055.00	37.86	42.28	-26.38	53.76	74.00	-20.24	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

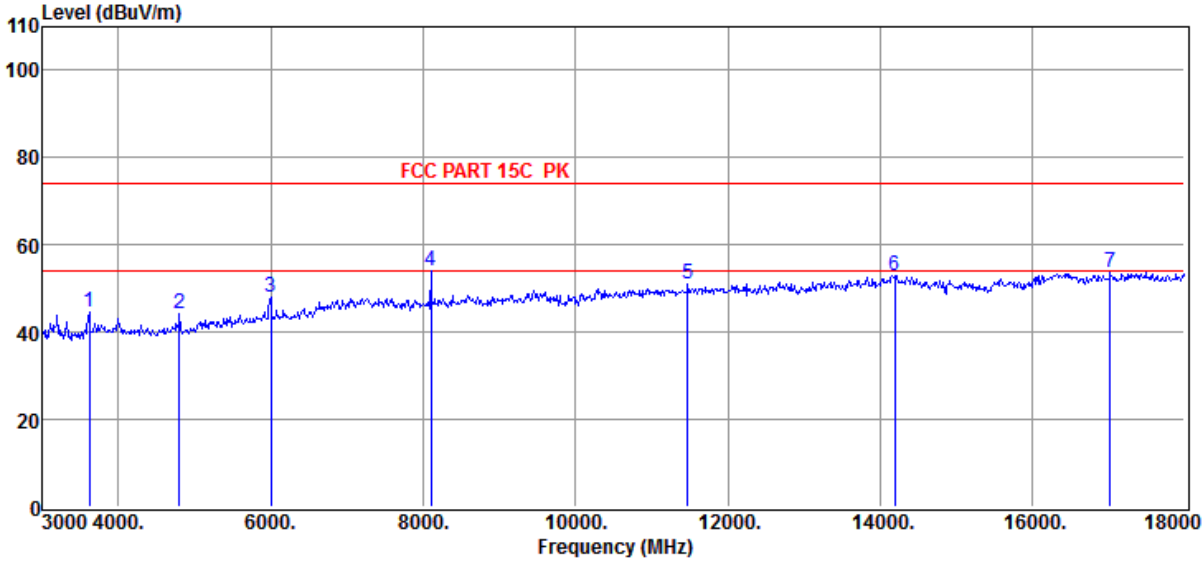
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N40 ANT1+ANT2 MCS0 2437MHz

Data: 93



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	45.96	30.68	-31.98	44.66	74.00	-29.34	Peak	VERTICAL
2	4800.00	43.39	32.50	-31.73	44.16	74.00	-29.84	Peak	VERTICAL
3	6000.00	44.39	35.30	-31.80	47.89	74.00	-26.11	Peak	VERTICAL
4	8100.00	48.27	37.08	-31.38	53.97	74.00	-20.03	Peak	VERTICAL
5	11475.00	40.76	38.70	-28.62	50.84	74.00	-23.16	Peak	VERTICAL
6	14190.00	39.13	41.13	-27.16	53.10	74.00	-20.90	Peak	VERTICAL
7	17025.00	37.36	42.24	-26.10	53.50	74.00	-20.50	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

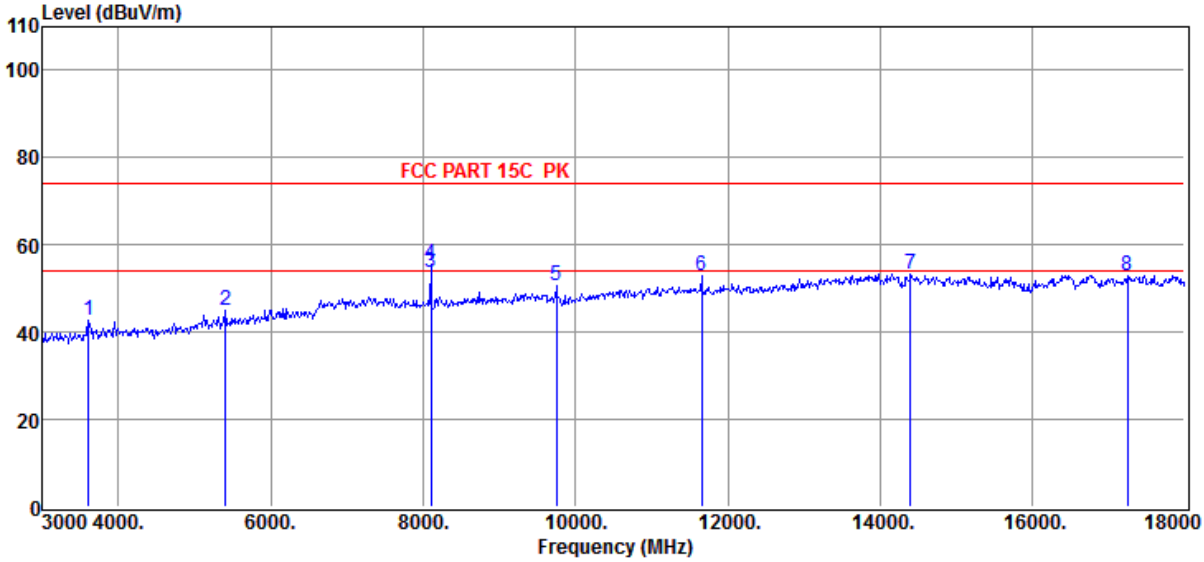
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N40 ANT1+ANT2 MCS0 2437MHz

Data: 94



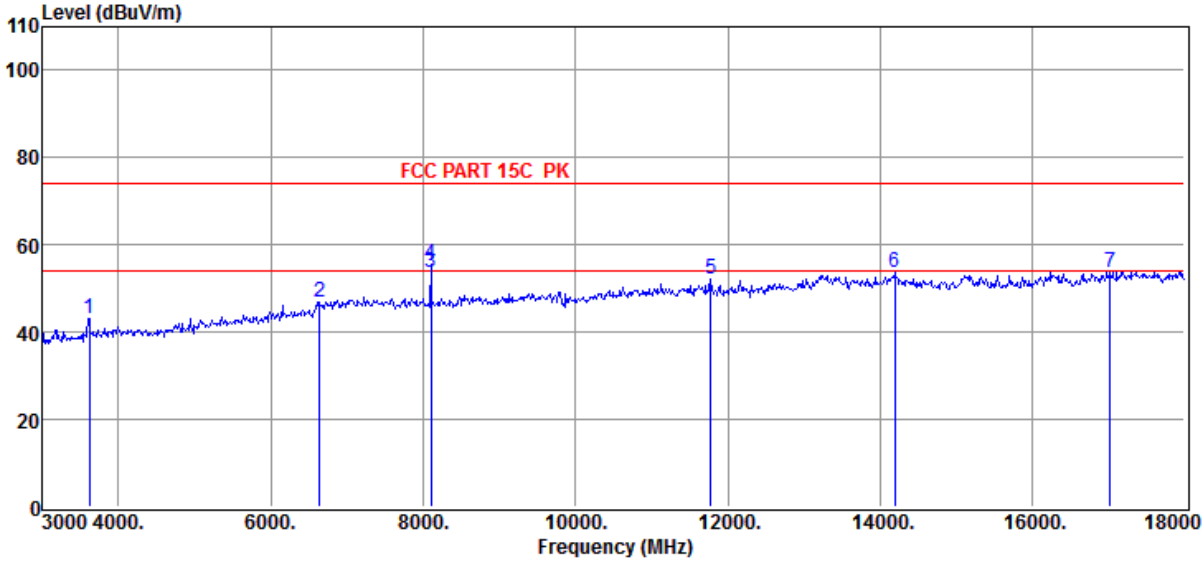
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3600.00	44.17	30.64	-32.08	42.73	74.00	-31.27	Peak	HORIZONTAL
2	5400.00	43.14	33.62	-31.61	45.15	74.00	-28.85	Peak	HORIZONTAL
3	8100.00	47.96	37.08	-31.38	53.66	54.00	-0.34	Average	HORIZONTAL
4	8100.00	49.74	37.08	-31.38	55.44	74.00	-18.56	Peak	HORIZONTAL
5	9750.00	42.48	38.15	-30.06	50.57	74.00	-23.43	Peak	HORIZONTAL
6	11655.00	42.72	38.67	-28.63	52.76	74.00	-21.24	Peak	HORIZONTAL
7	14400.00	39.47	40.84	-27.01	53.30	74.00	-20.70	Peak	HORIZONTAL
8	17250.00	37.25	42.55	-26.86	52.94	74.00	-21.06	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11N40 ANT1+ANT2 MCS0 2452MHz		

Data: 95



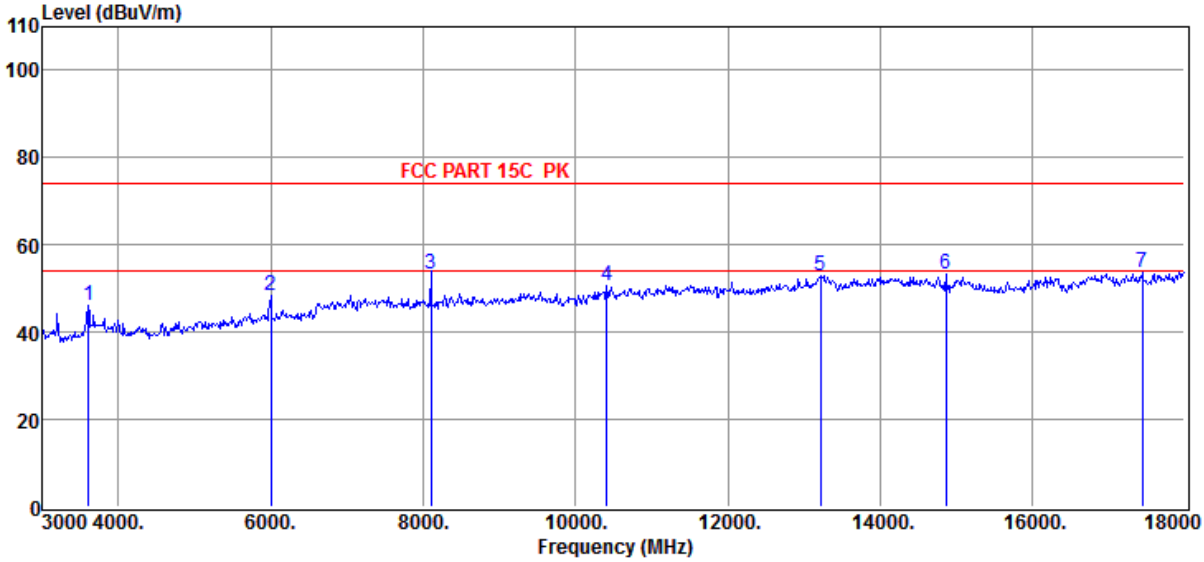
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3615.00	44.52	30.68	-31.98	43.22	74.00	-30.78	Peak	HORIZONTAL
2	6645.00	42.01	36.03	-31.17	46.87	74.00	-27.13	Peak	HORIZONTAL
3	8100.00	48.03	37.08	-31.38	53.73	54.00	-0.27	Average	HORIZONTAL
4	8100.00	49.76	37.08	-31.38	55.46	74.00	-18.54	Peak	HORIZONTAL
5	11775.00	41.99	38.65	-28.62	52.02	74.00	-21.98	Peak	HORIZONTAL
6	14190.00	39.72	41.13	-27.16	53.69	74.00	-20.31	Peak	HORIZONTAL
7	17025.00	37.57	42.24	-26.10	53.71	74.00	-20.29	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11N40 ANT1+ANT2 MCS0 2452MHz		

Data: 96



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3600.00	47.41	30.64	-32.08	45.97	74.00	-28.03	Peak	VERTICAL
2	6000.00	44.71	35.30	-31.80	48.21	74.00	-25.79	Peak	VERTICAL
3	8100.00	47.45	37.08	-31.38	53.15	74.00	-20.85	Peak	VERTICAL
4	10410.00	41.98	38.46	-29.62	50.82	74.00	-23.18	Peak	VERTICAL
5	13215.00	42.58	39.89	-29.54	52.93	74.00	-21.07	Peak	VERTICAL
6	14865.00	40.94	39.46	-27.11	53.29	74.00	-20.71	Peak	VERTICAL
7	17445.00	38.17	42.82	-27.23	53.76	74.00	-20.24	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

9. RF Conducted Spurious Emissions

9.1. Block diagram of test setup

Same as section 4.1

9.2. Limits

In any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

9.3. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

(2) Establish a reference level by using the following procedure:

Center frequency	Test frequency
RBW:	100 kHz
VBW:	300 kHz
Span	Wide enough to capture the peak level of the in-band emission
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

(3) Allow the trace to stabilize, use the peak marker function to determine the maximum peak power level to establish the reference level.

(4) Set the spectrum analyzer as follows:

RBW:	100 kHz
VBW:	300 kHz
Span	Encompass frequency range to be measured
Number of measurement points	≥span/RBW
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

(5) Allow the trace to stabilize, use the peak marker function to determine the maximum amplitude of all unwanted emissions outside of the authorized frequency band

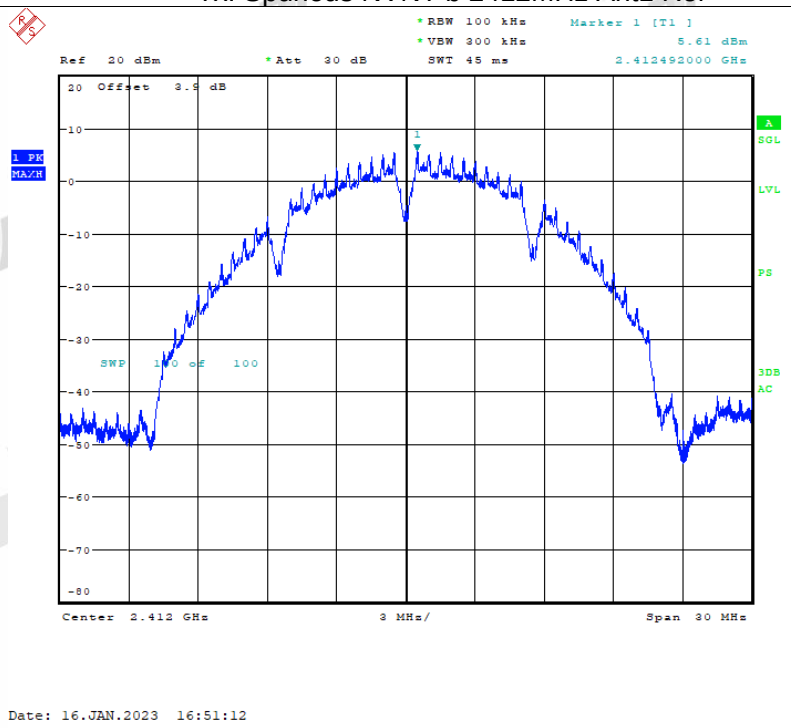
9.4. Test result

EUT Set Mode	CH or Frequency	Ant1 Result (dBm)	EUT Set Mode	CH or Frequency	Ant1 Result Result (dBm)
11b	CH1	Pass	11n HT 20	CH1	Pass
	CH6	Pass		CH6	Pass
	CH11	Pass		CH11	Pass
11g	CH1	Pass	11n HT 40	CH3	Pass
	CH6	Pass		CH6	Pass
	CH11	Pass		CH9	Pass

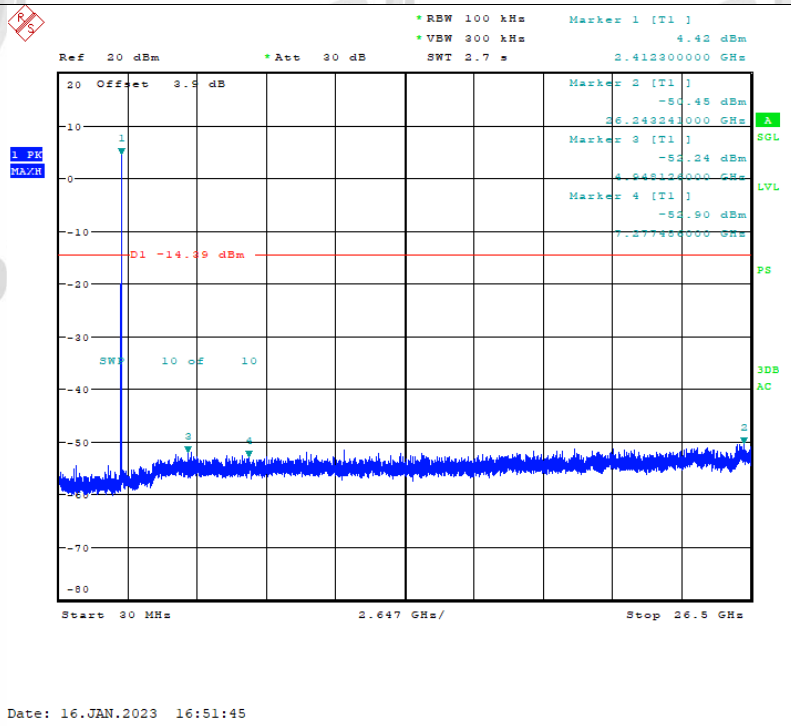
9.5. Original test data

Test Graphs

Tx. Spurious NVNT b 2412MHz Ant1 Ref



Tx. Spurious NVNT b 2412MHz Ant1 Emission



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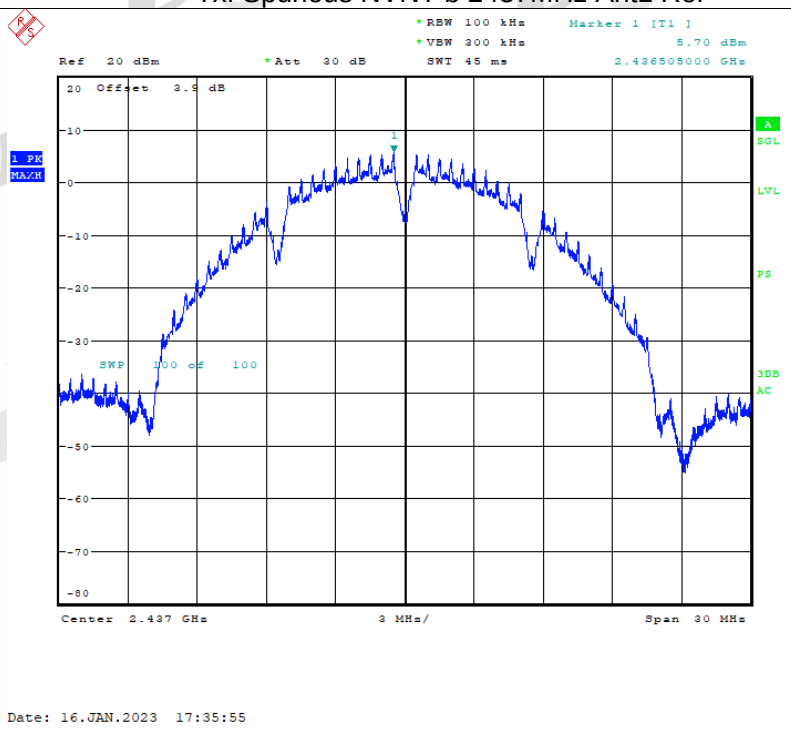

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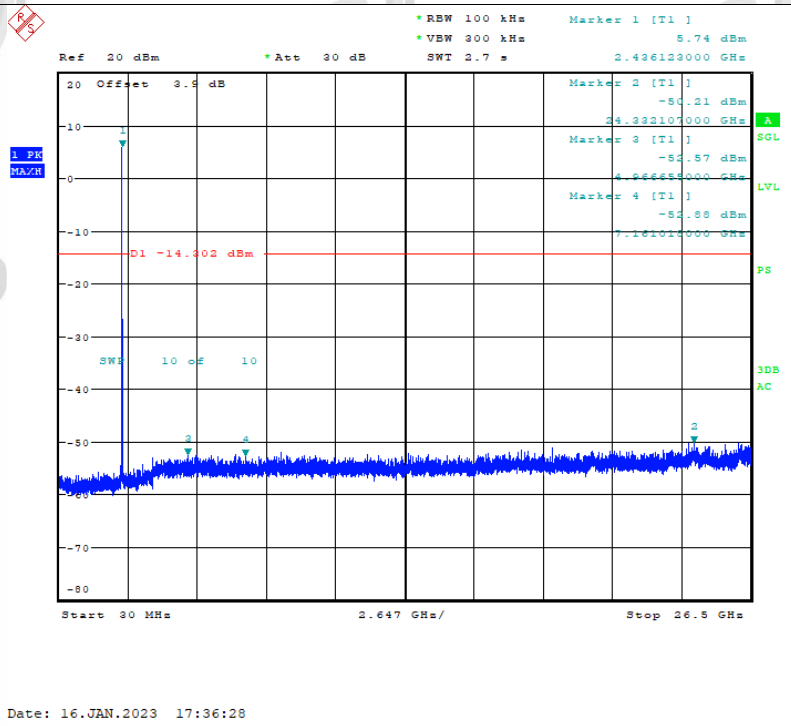

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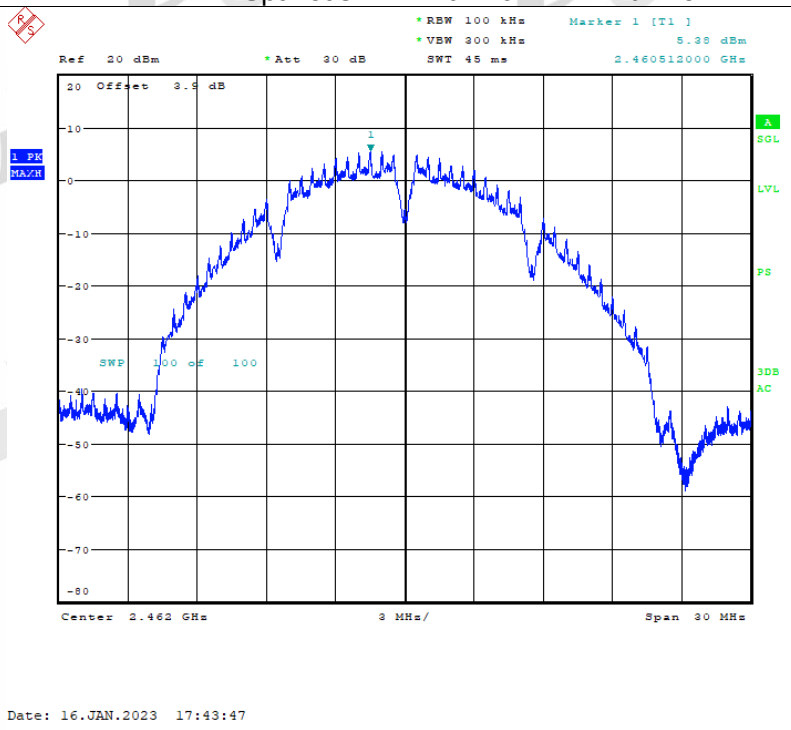

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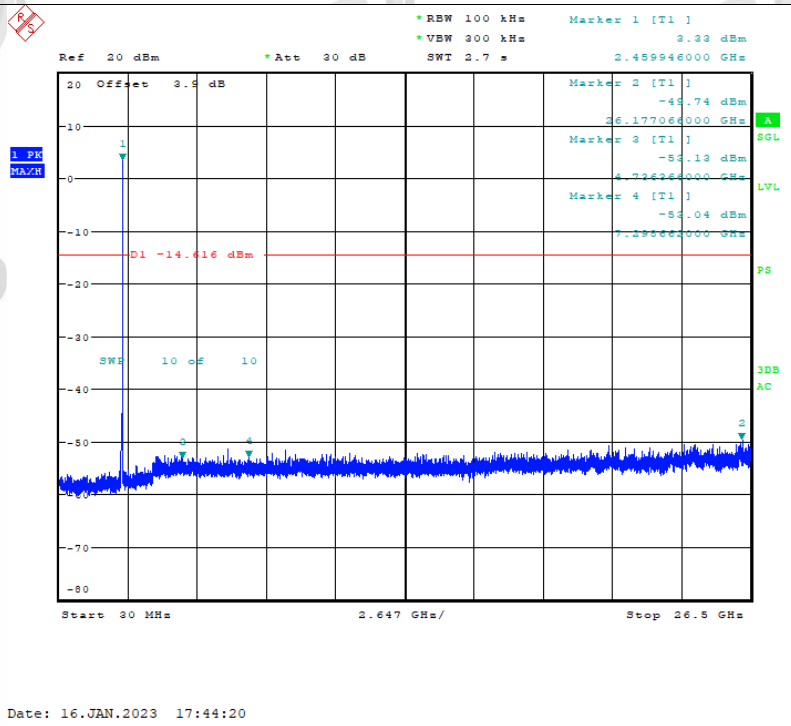

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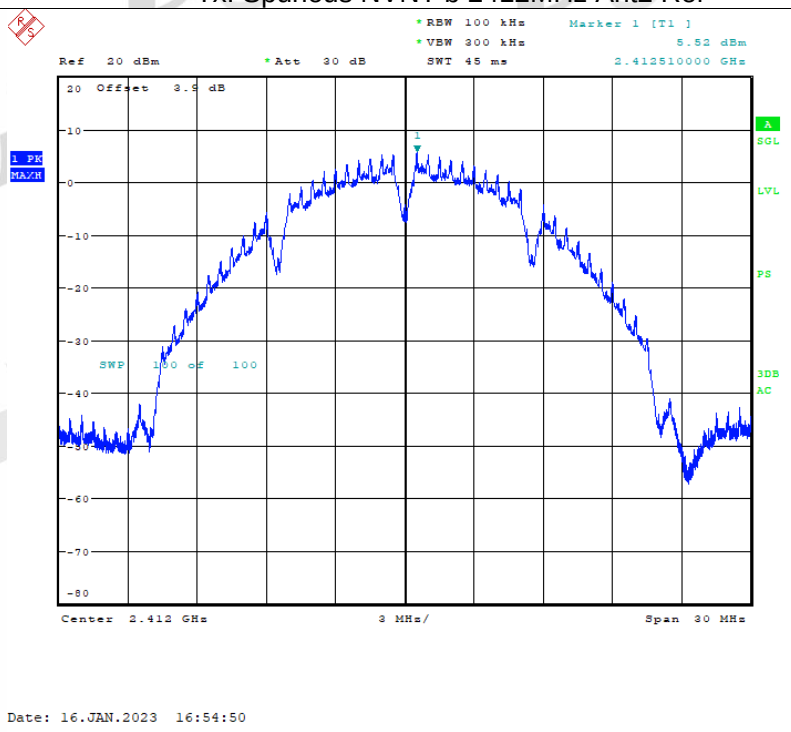

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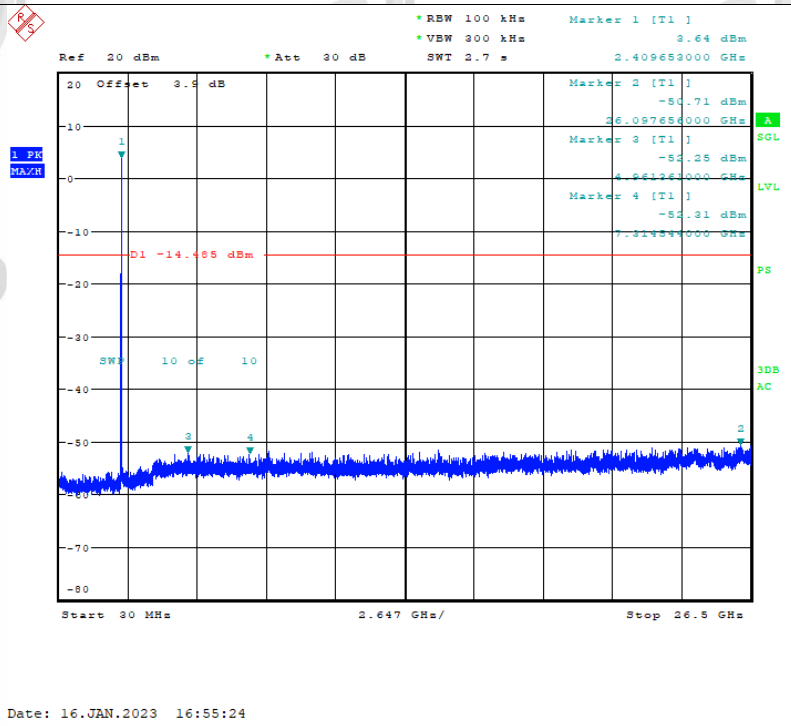

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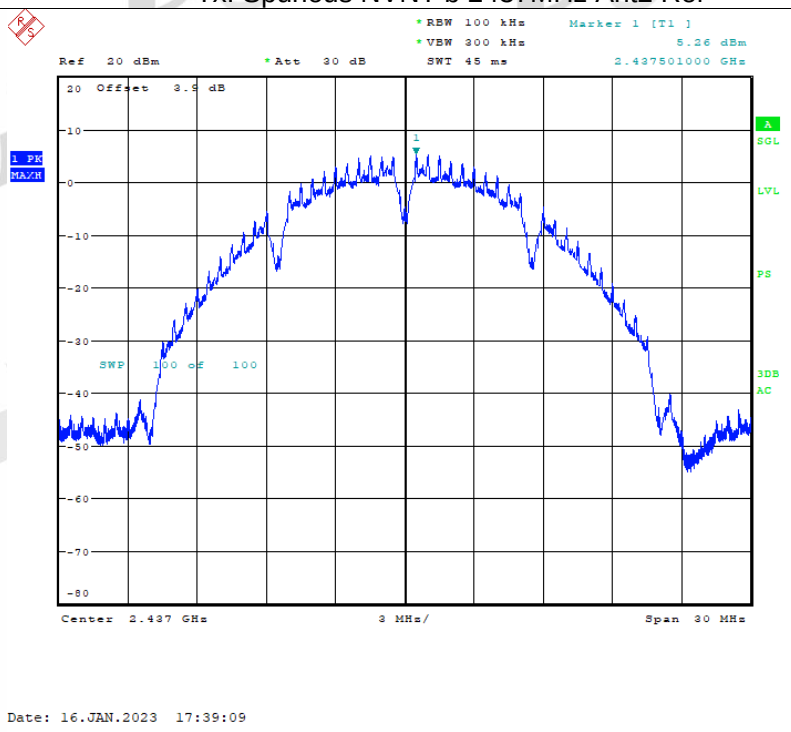

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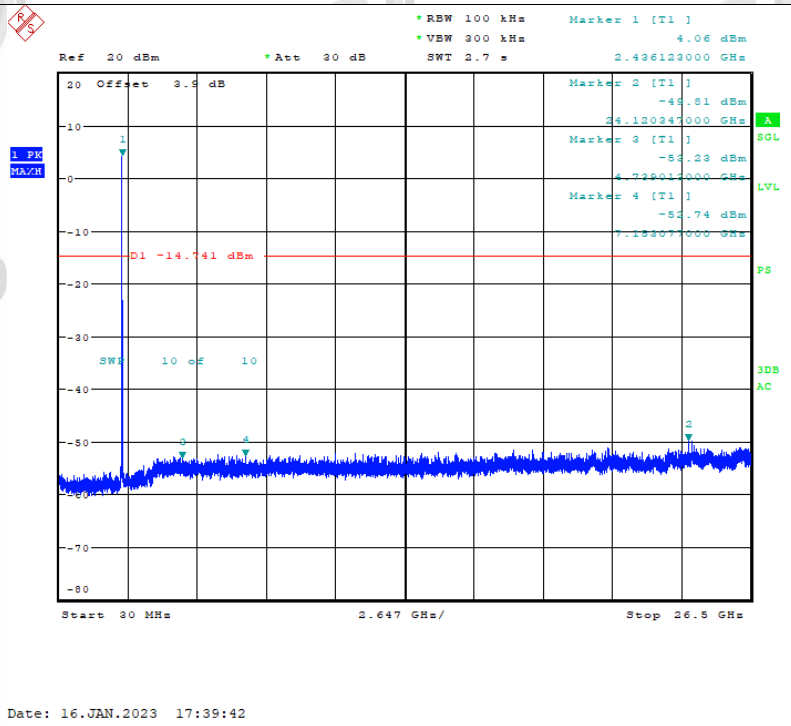

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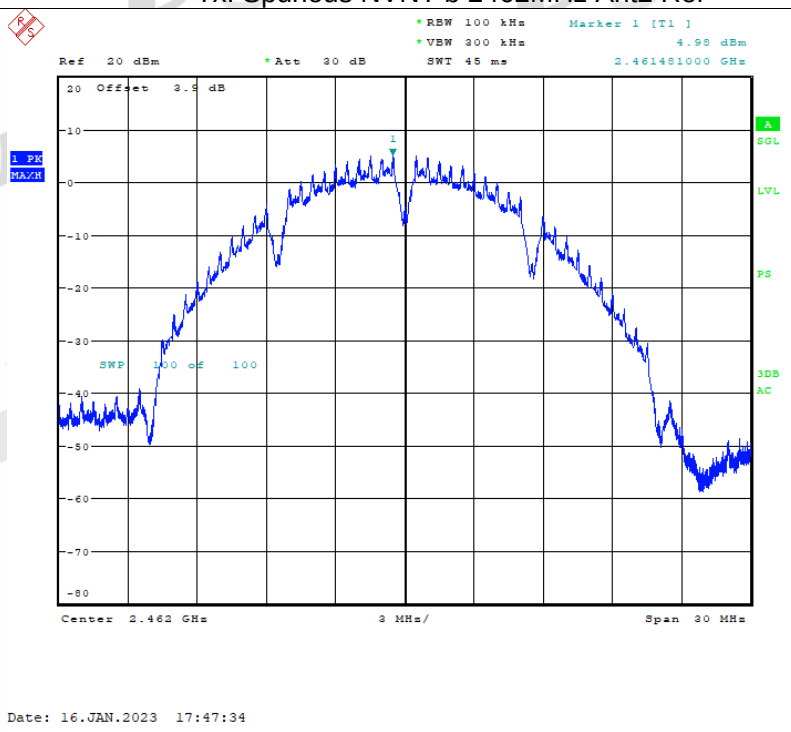

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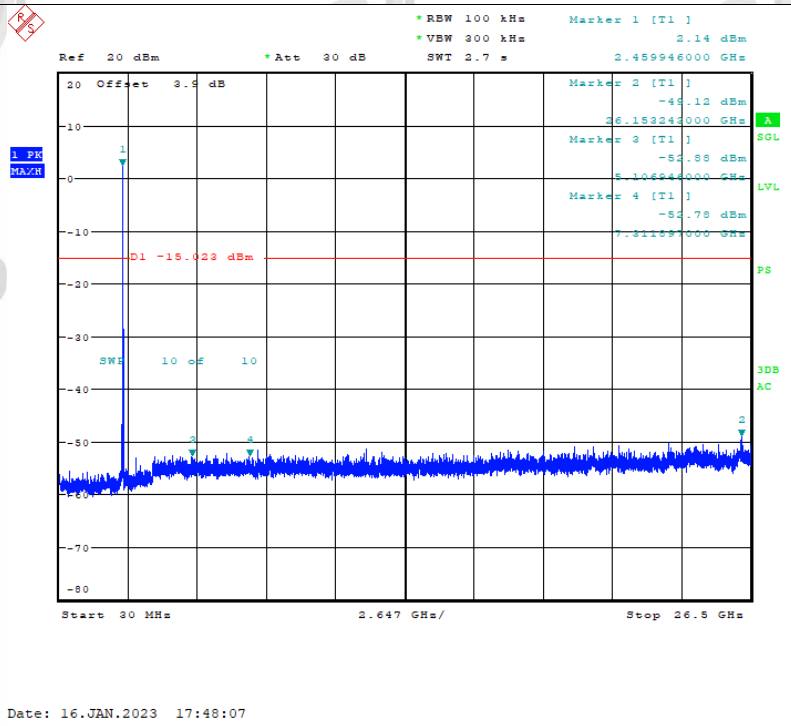

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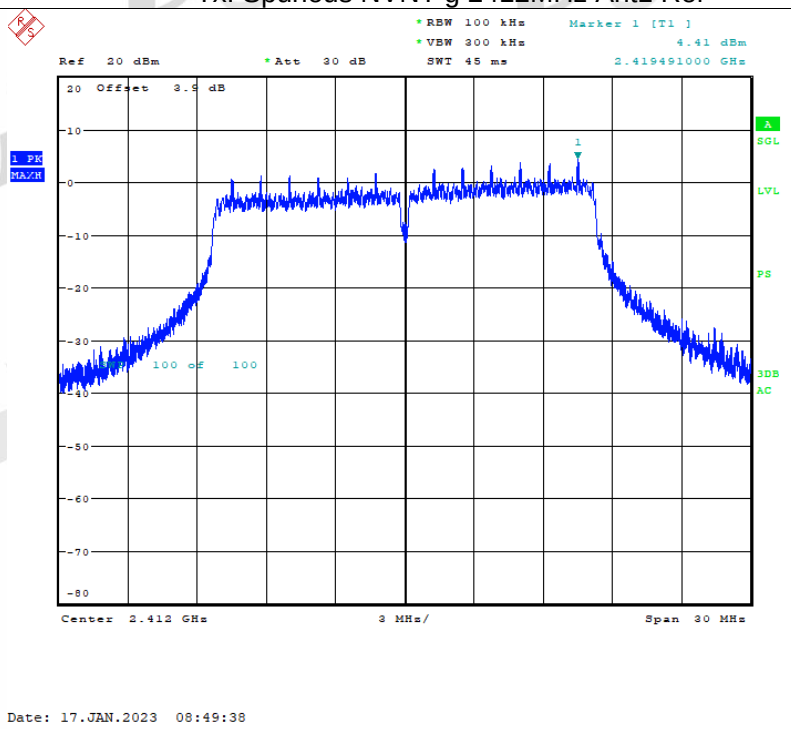

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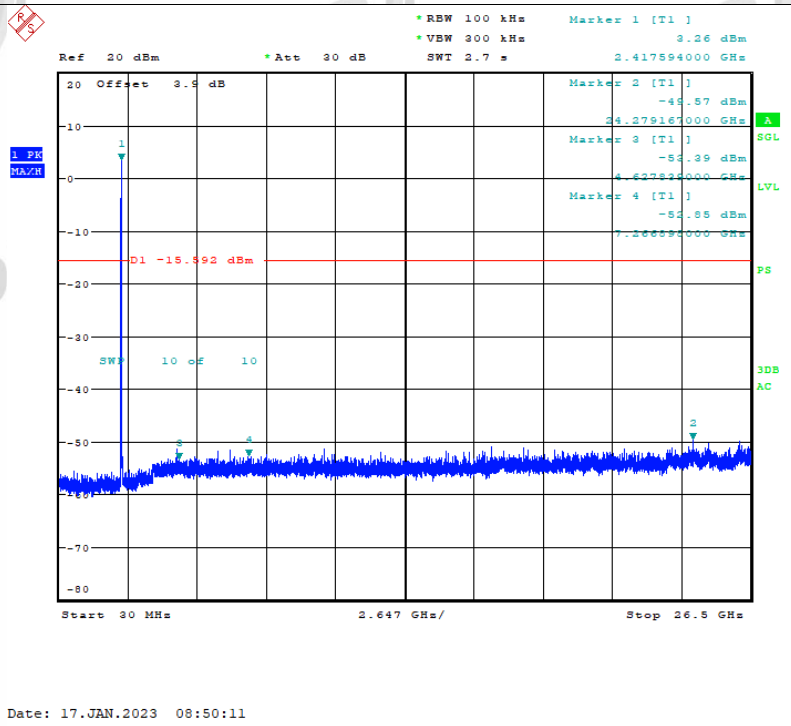

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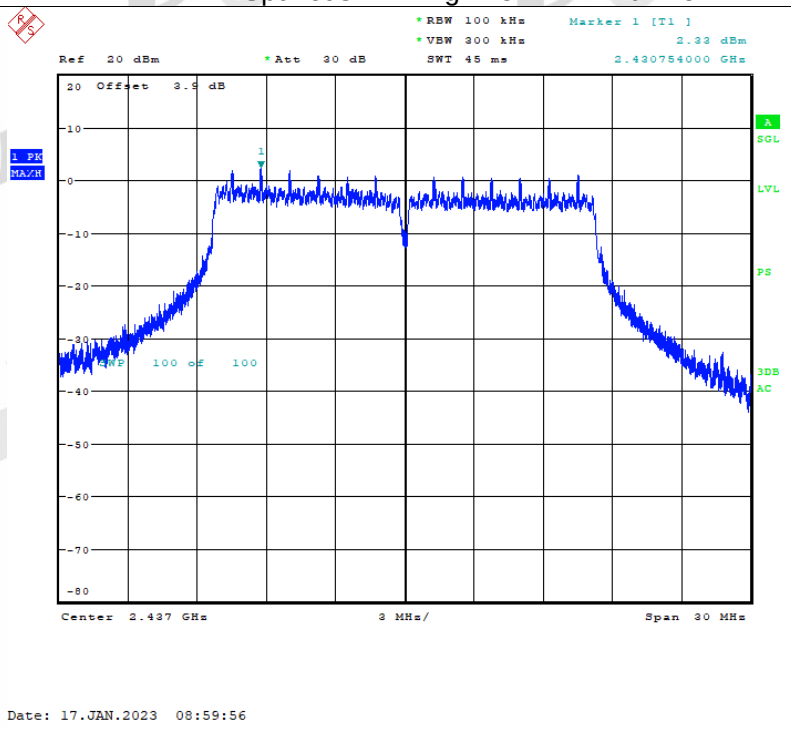

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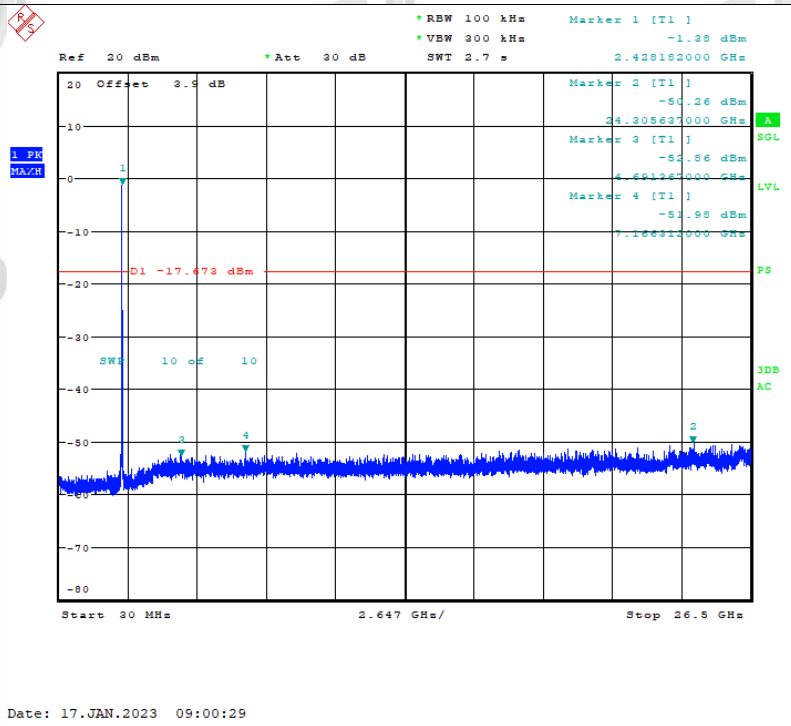

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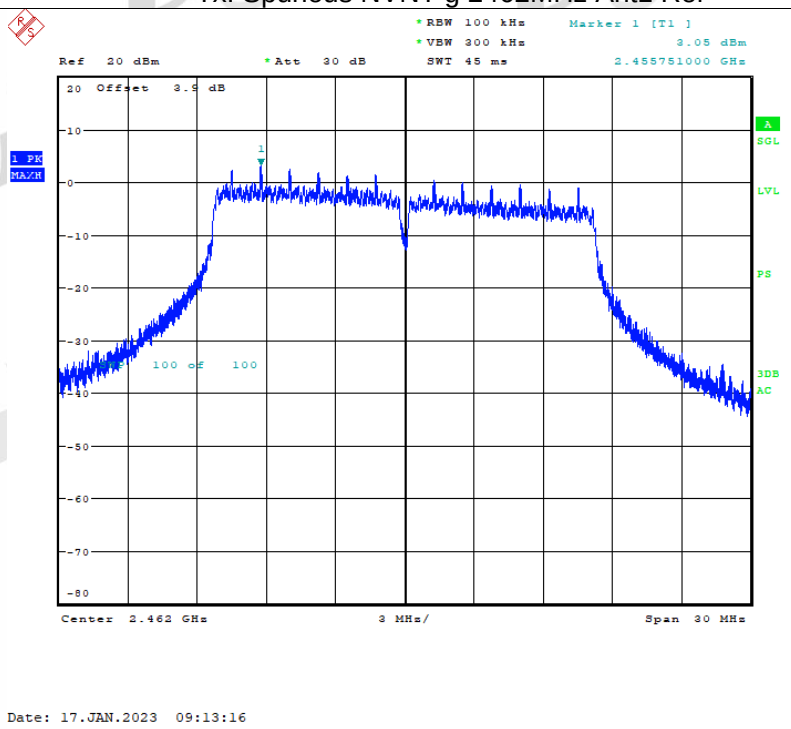

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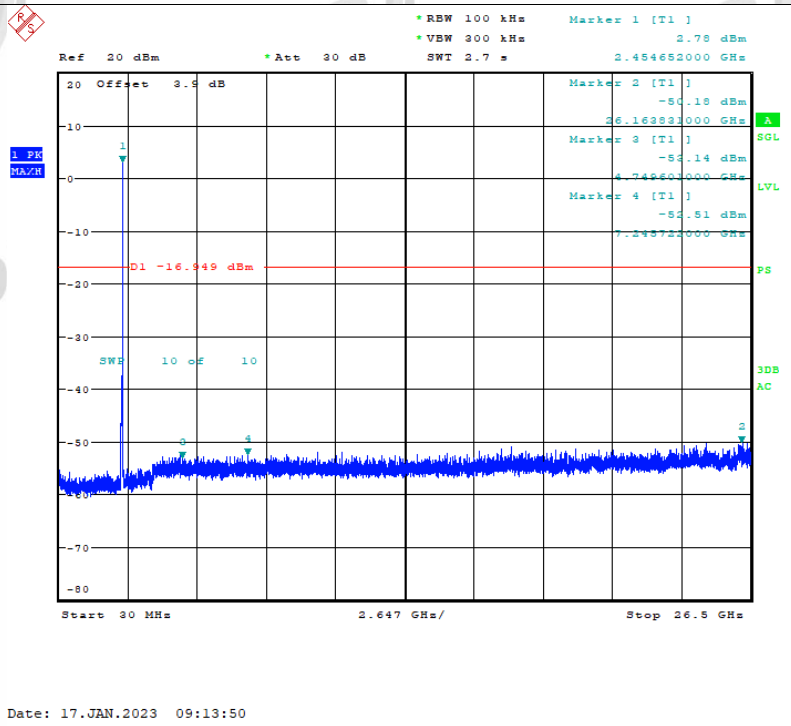

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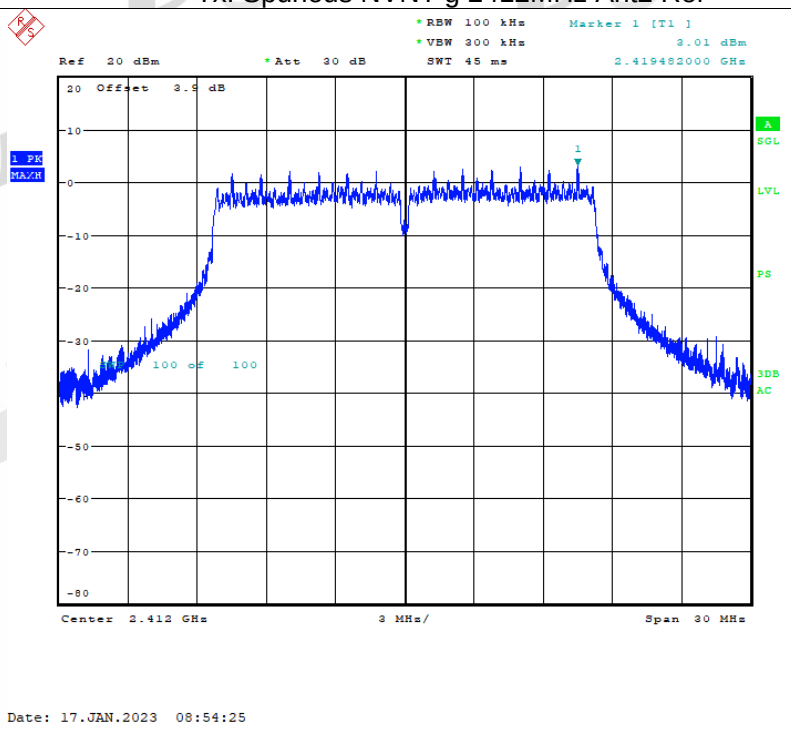

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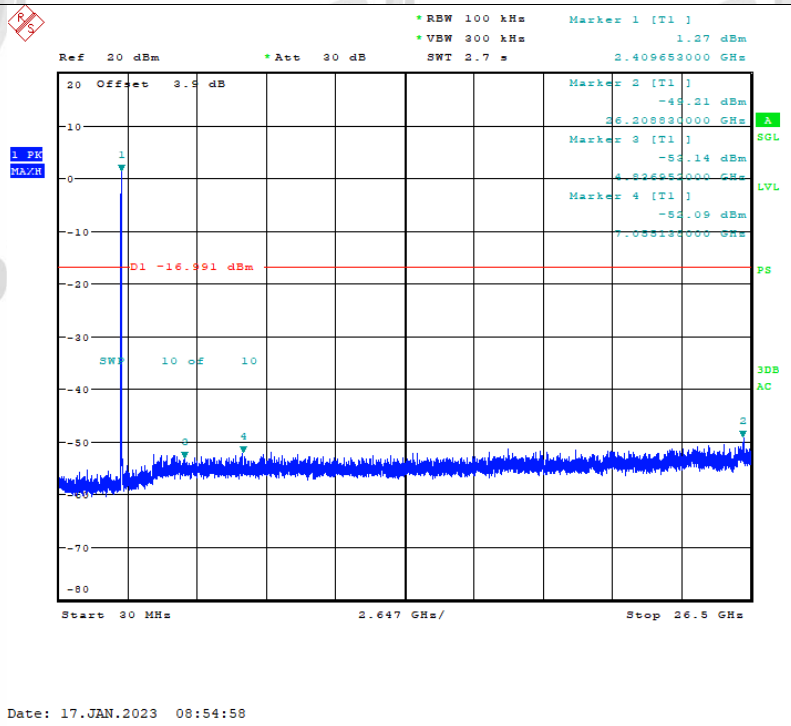

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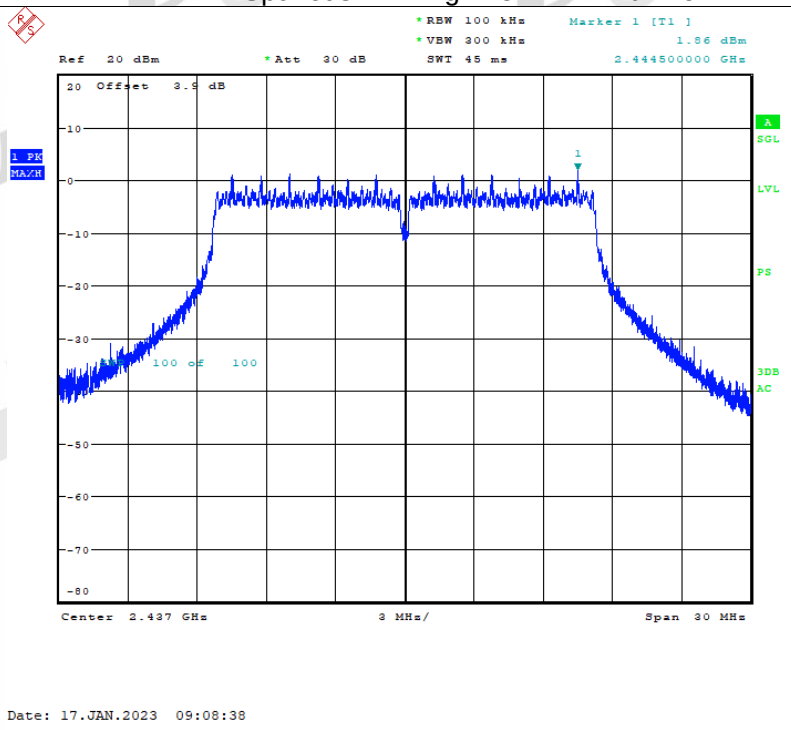

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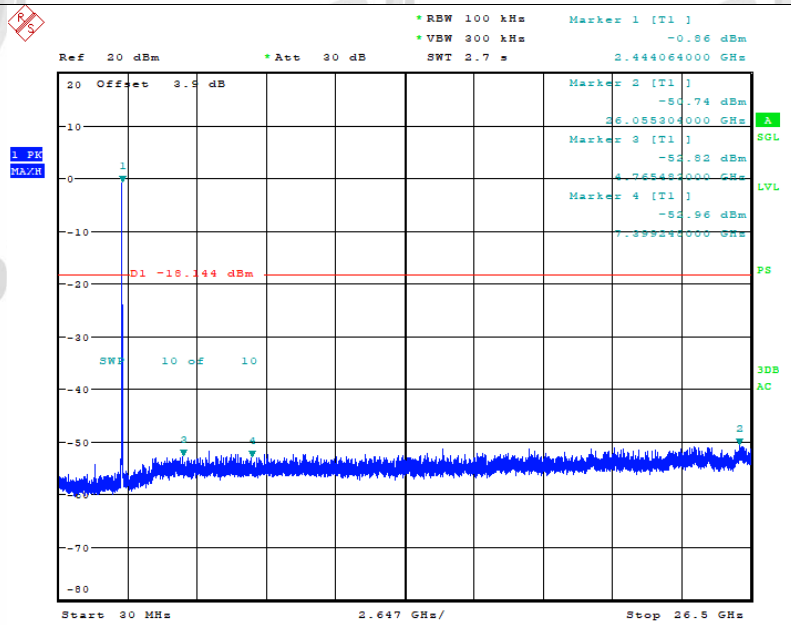

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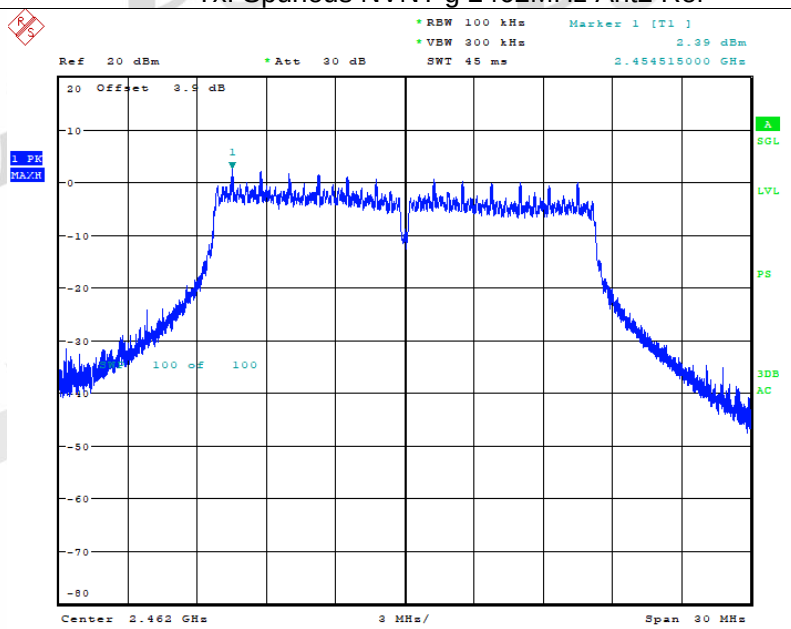

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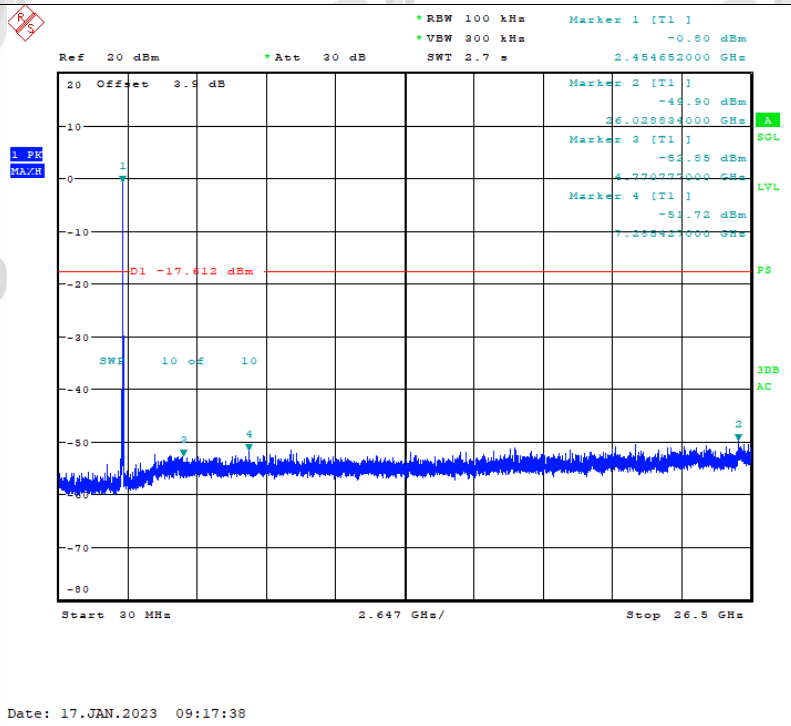

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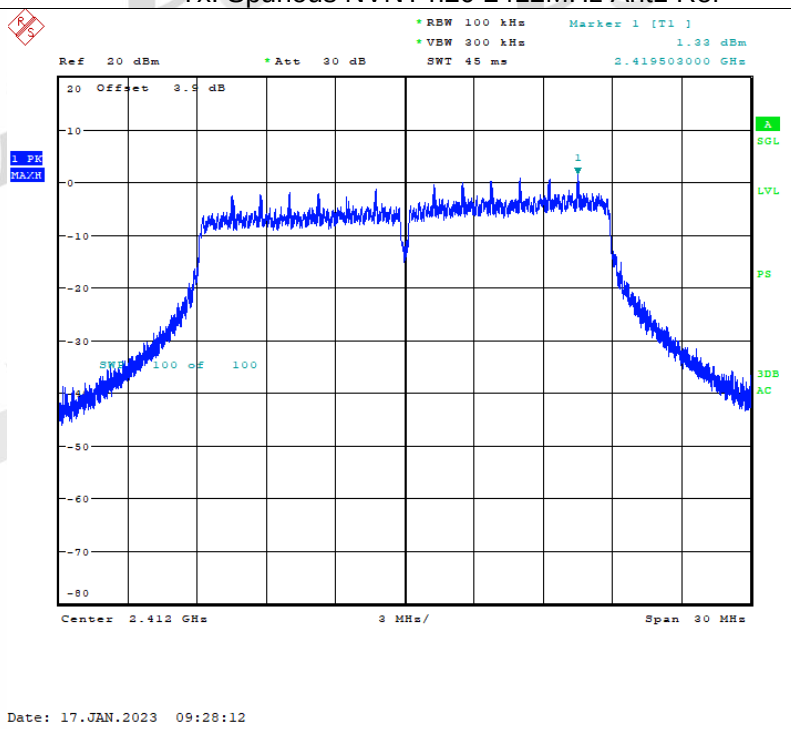

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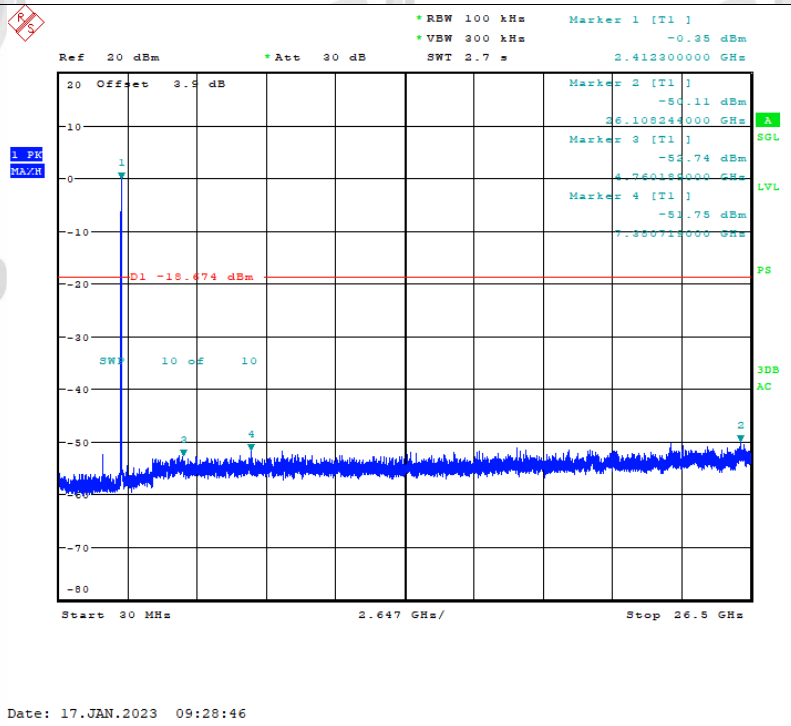

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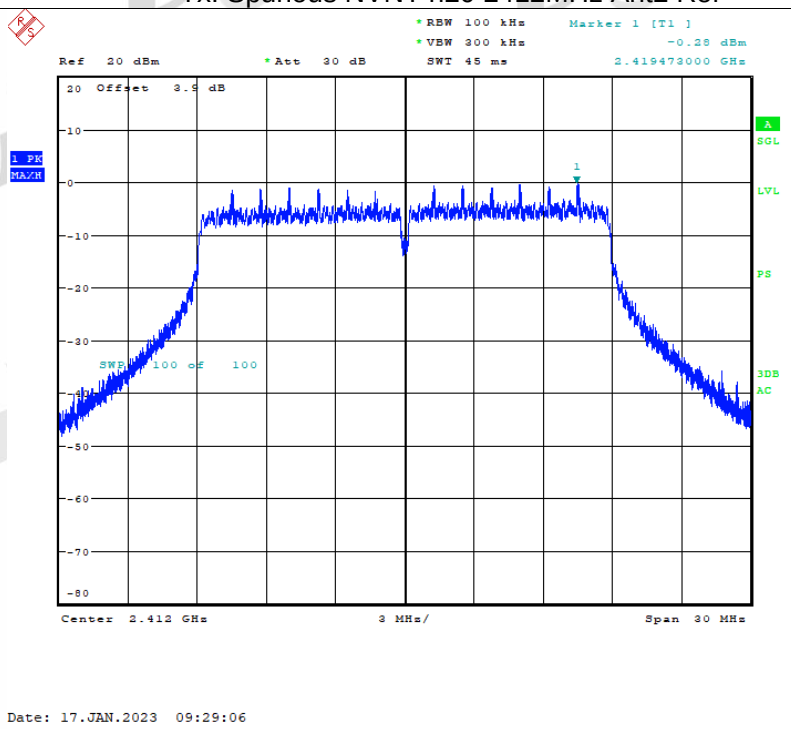

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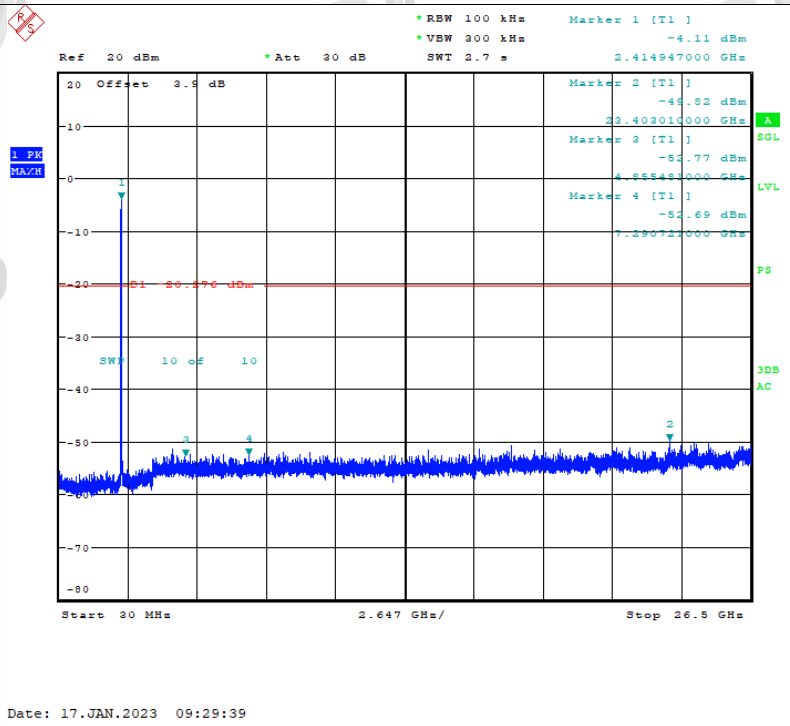

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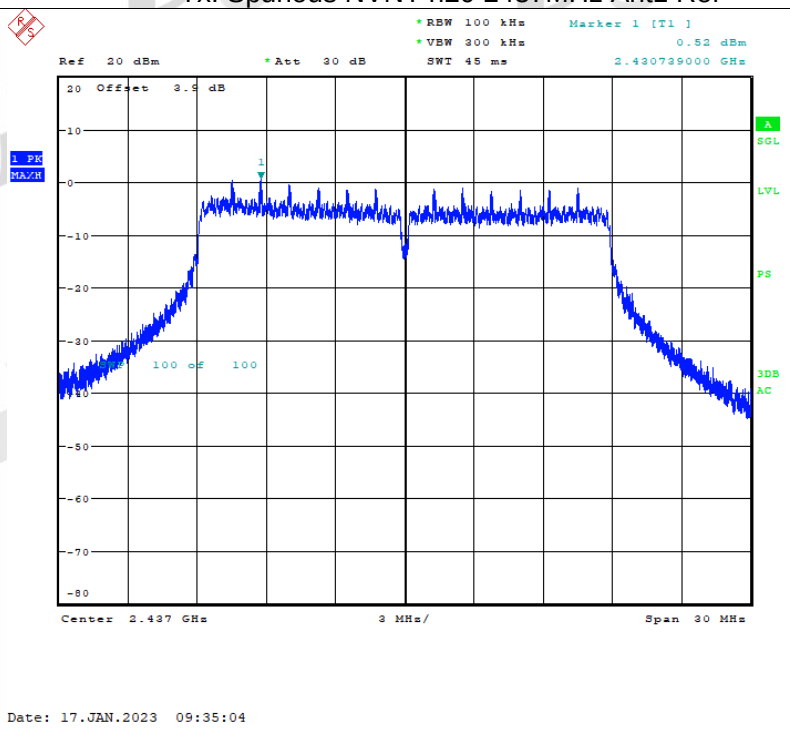

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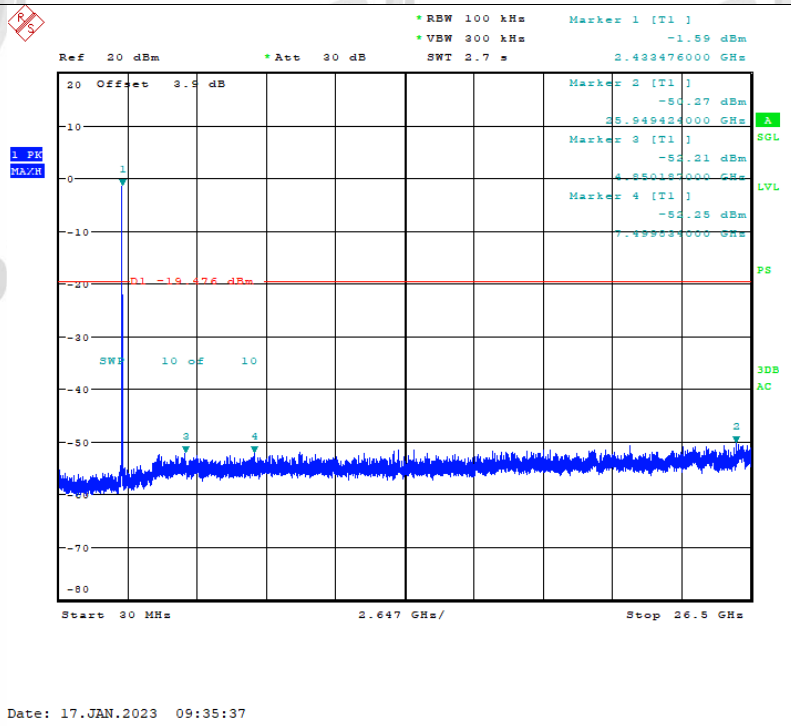

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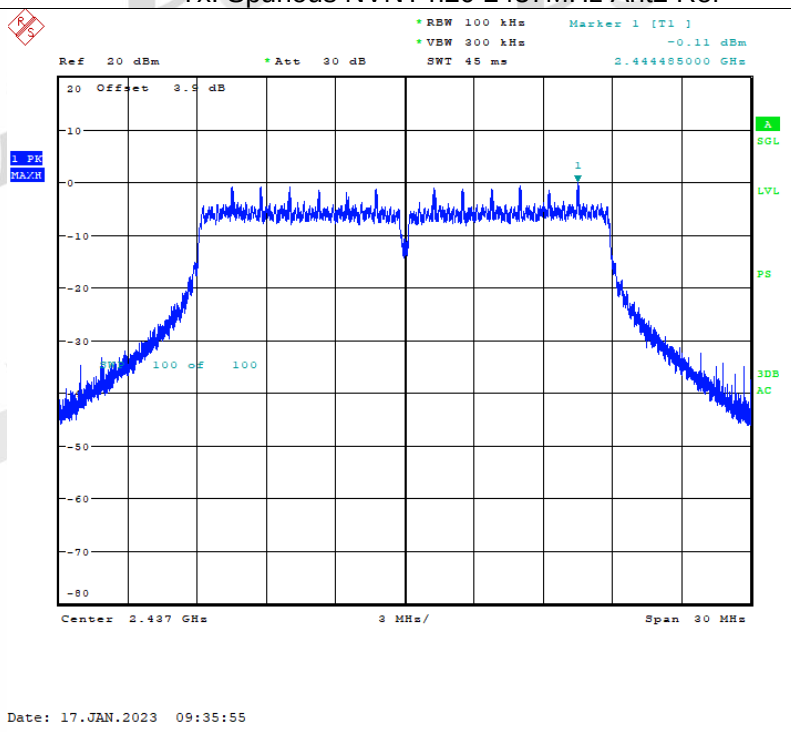

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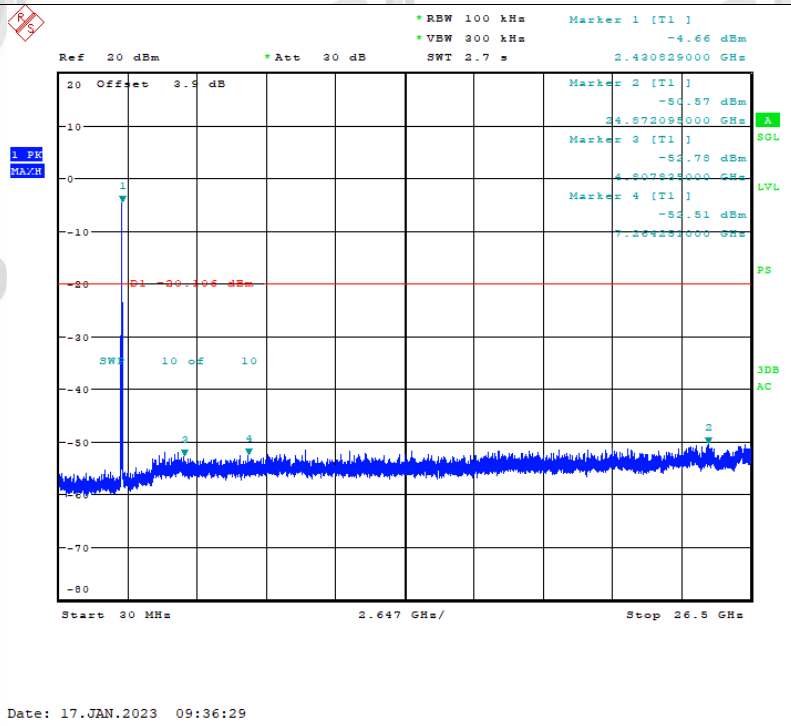

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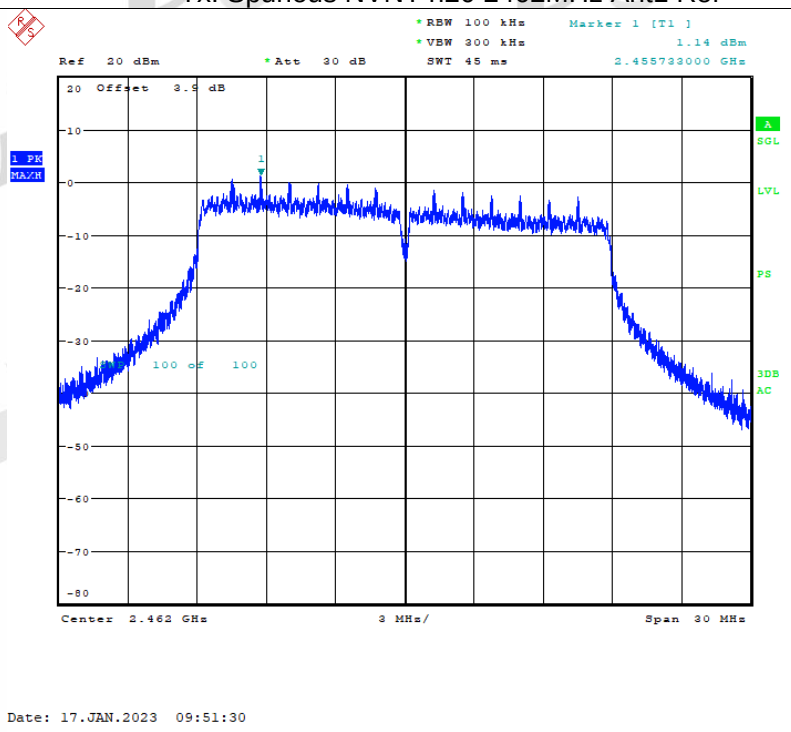

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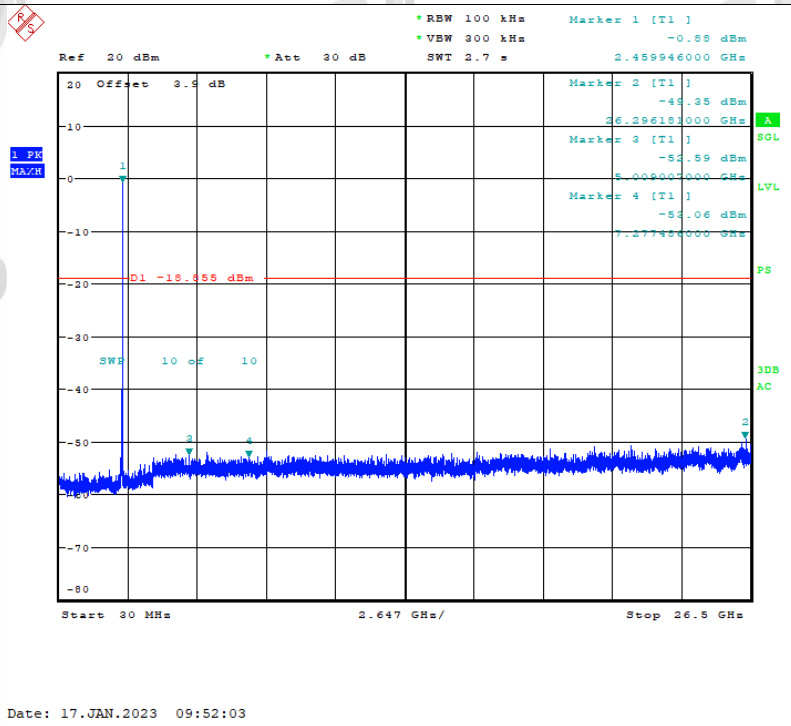

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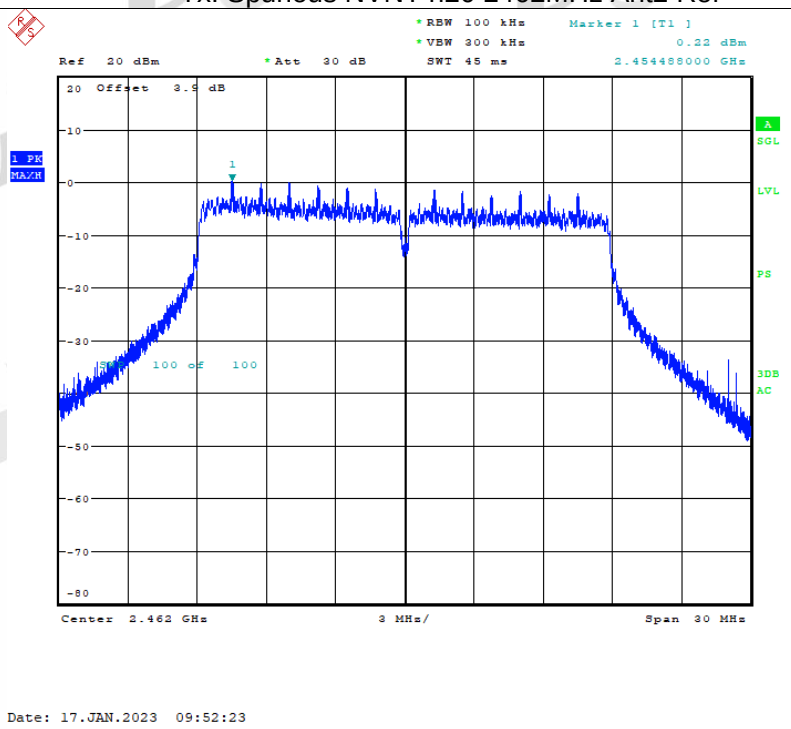

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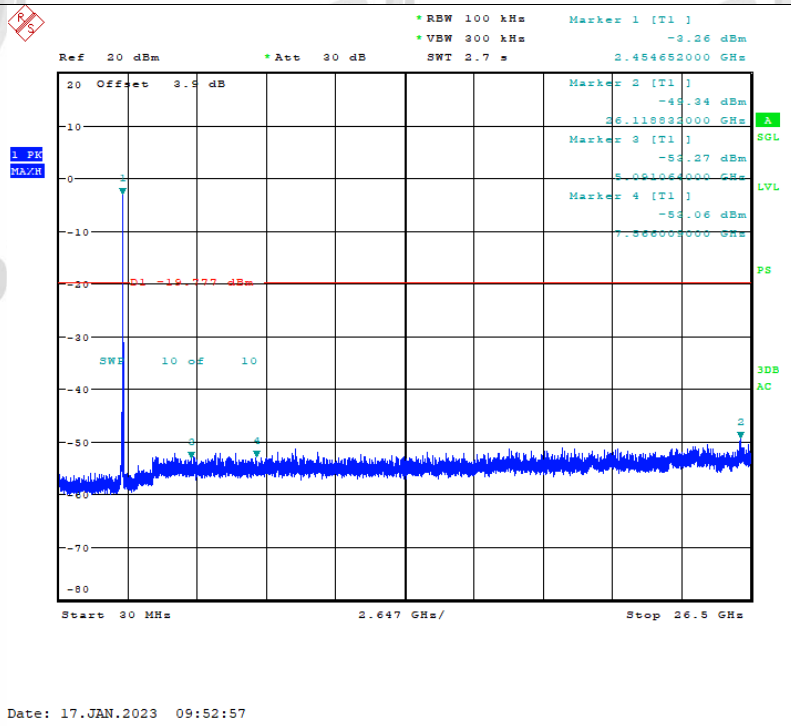

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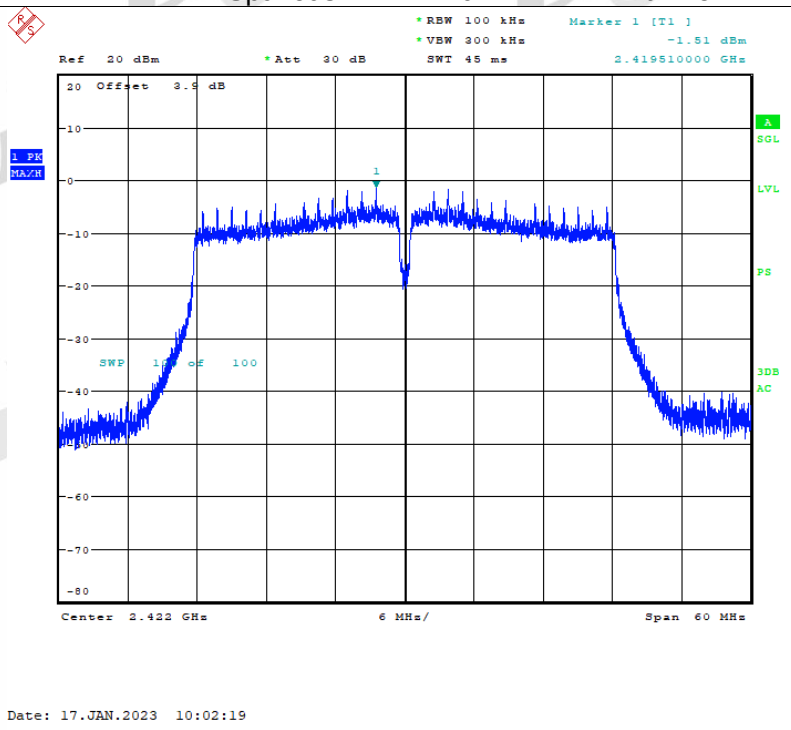
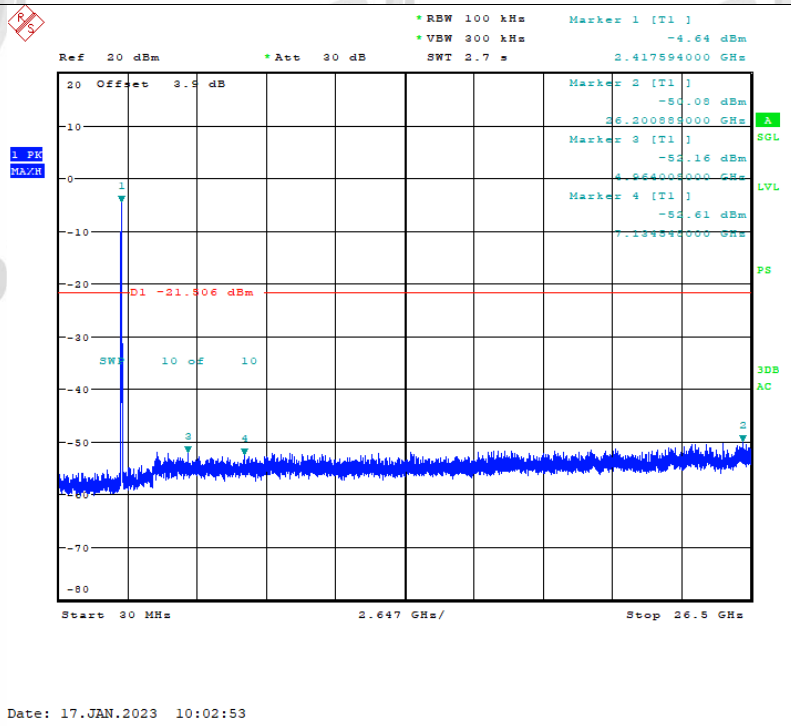


Tx. Spurious NVNT n40 2422MHz Ant1 Emission



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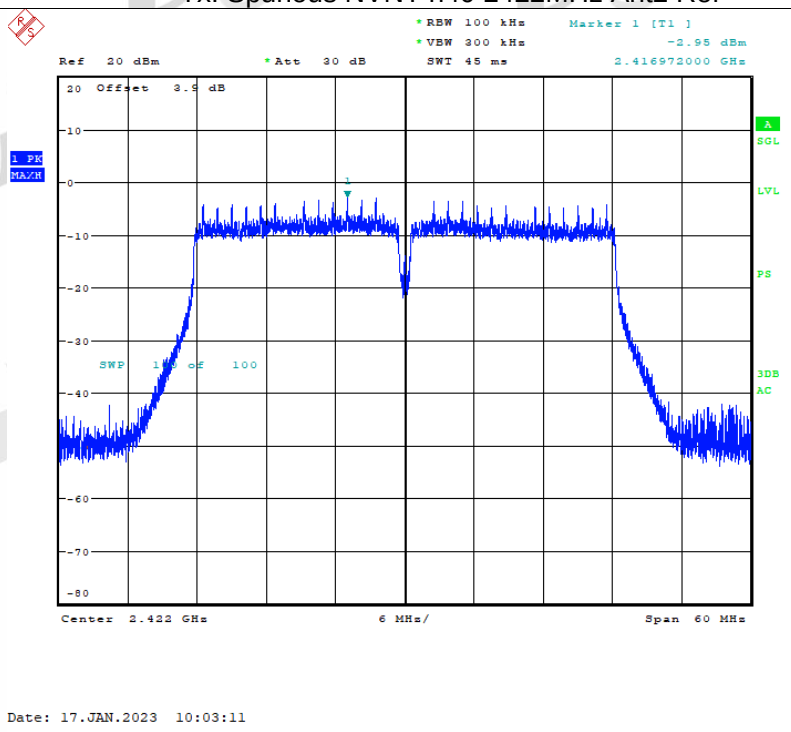

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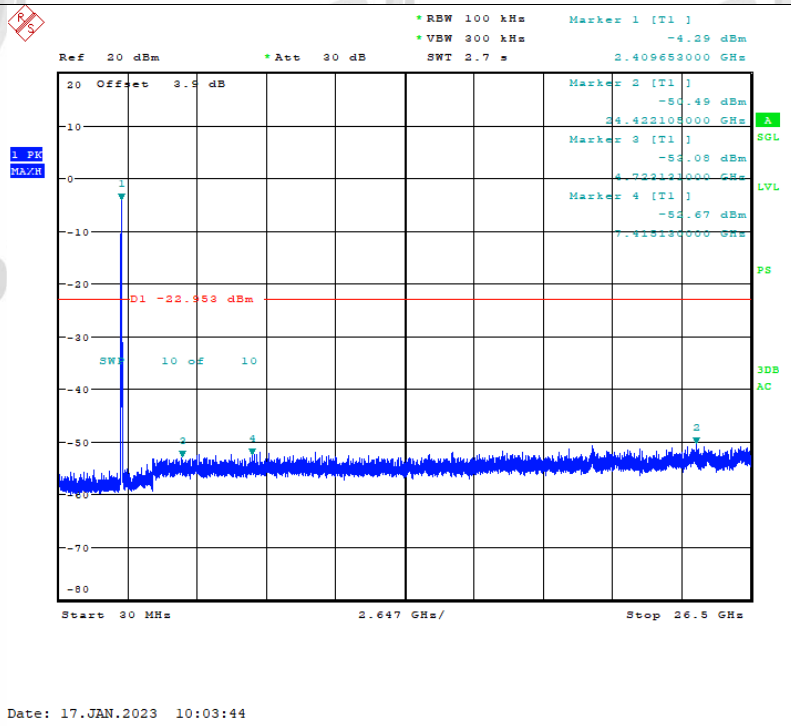

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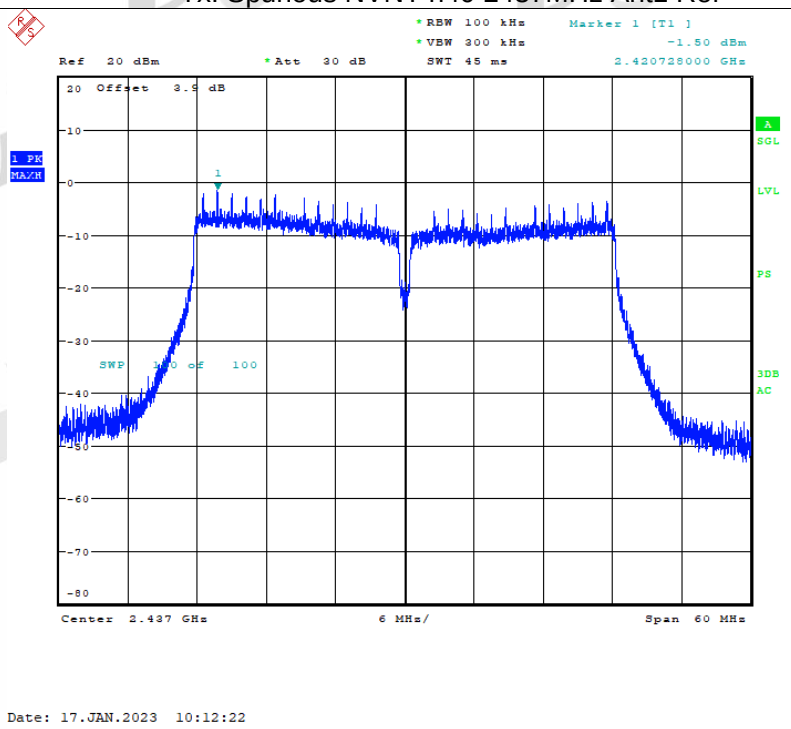

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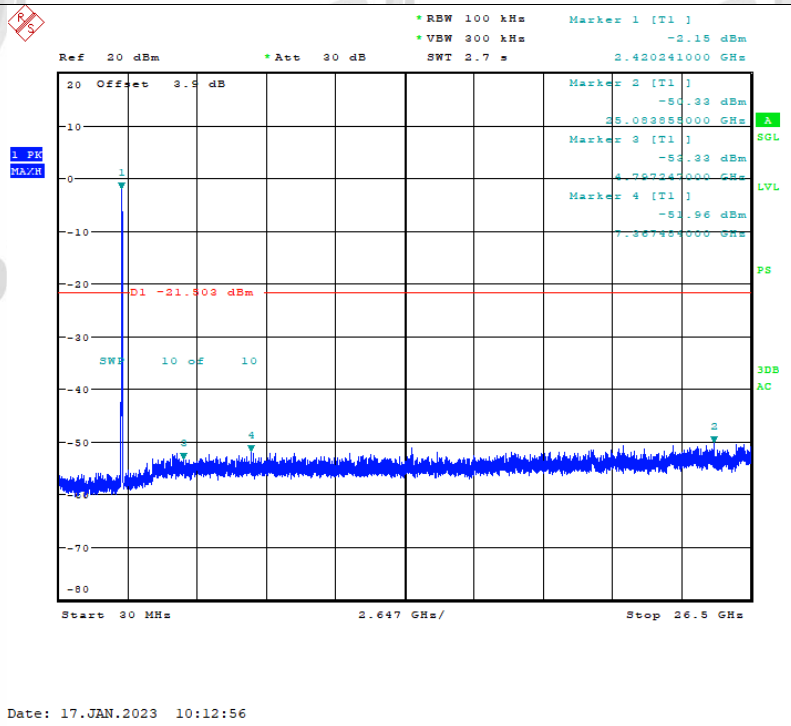

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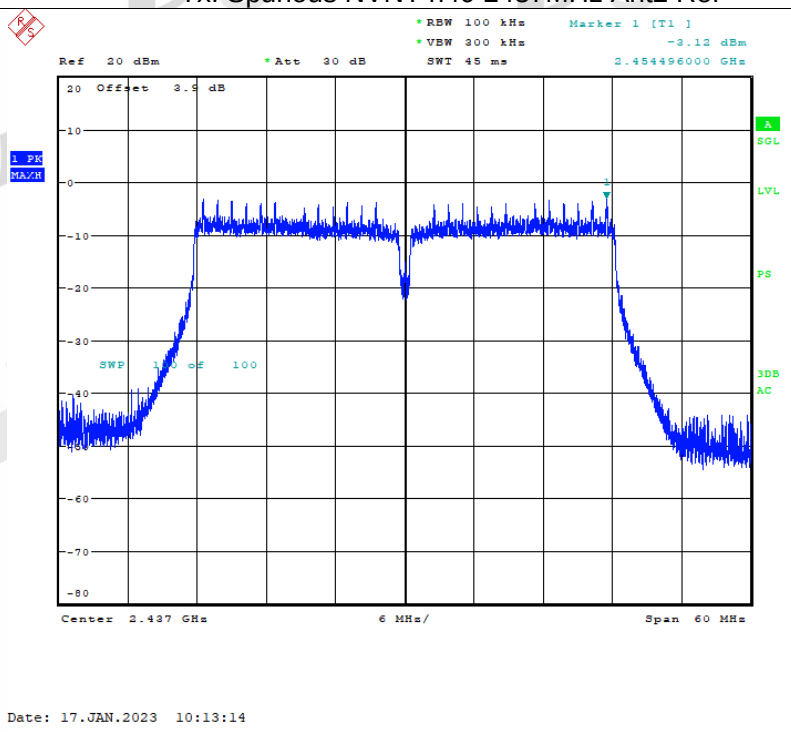

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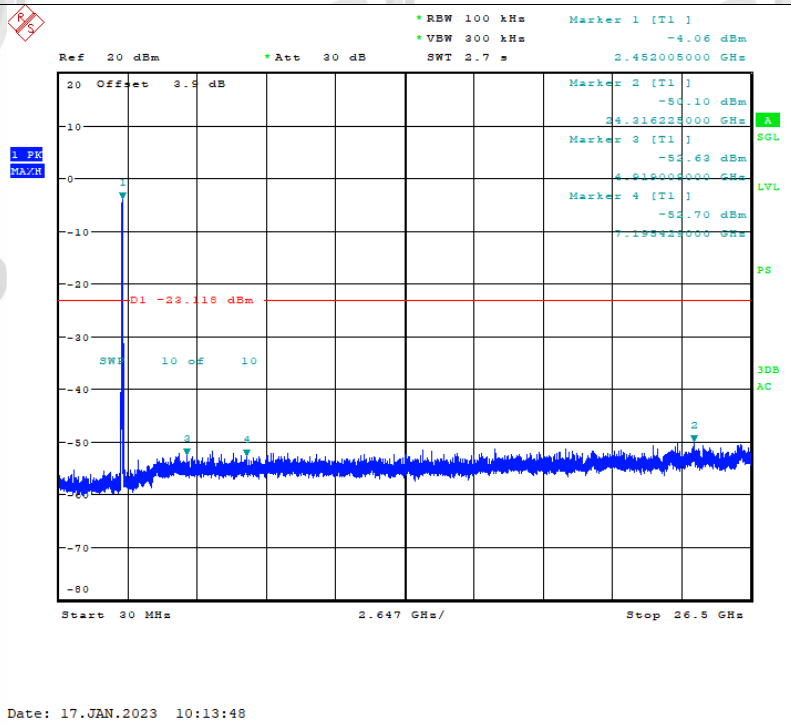

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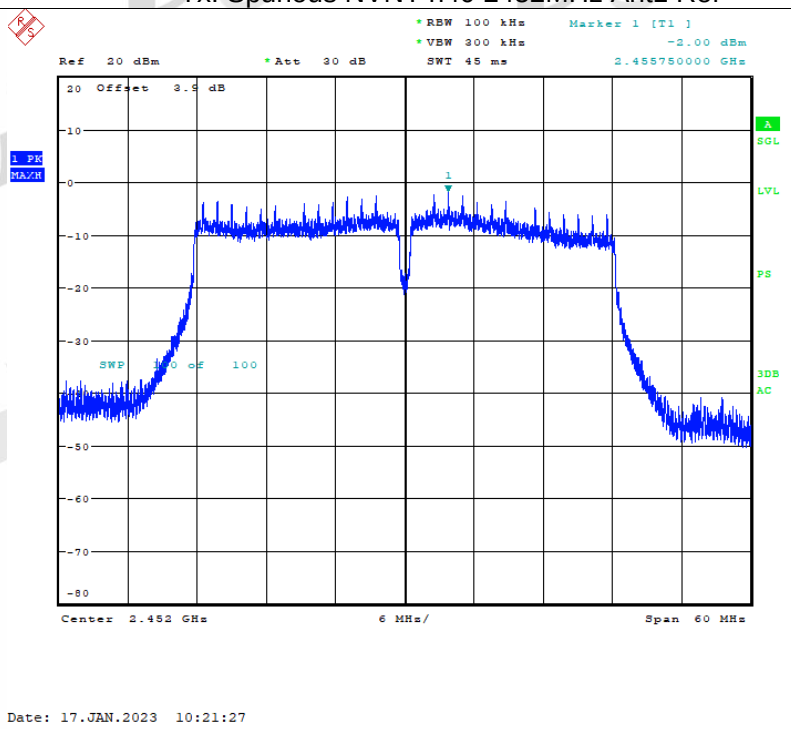
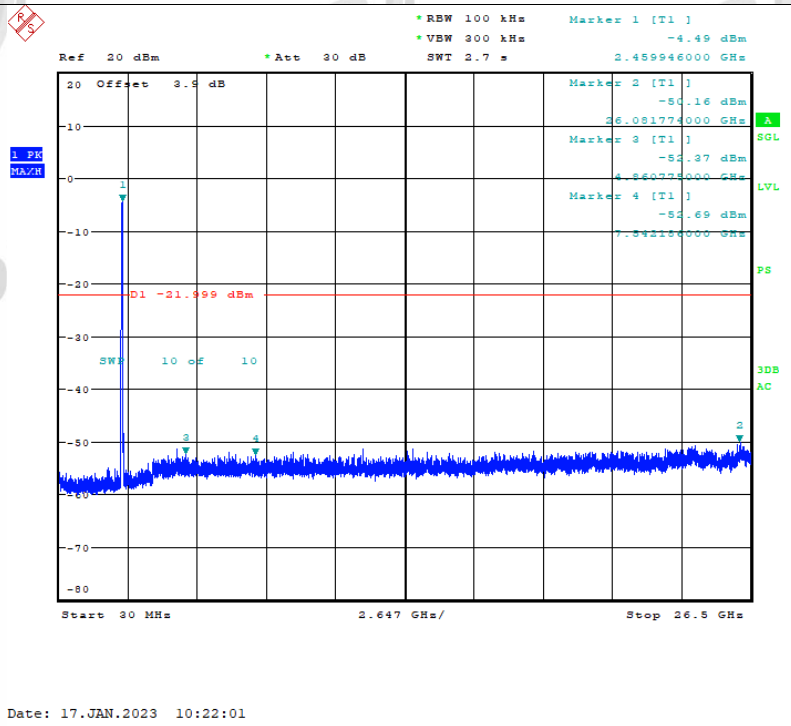


Tx. Spurious NVNT n40 2452MHz Ant1 Emission



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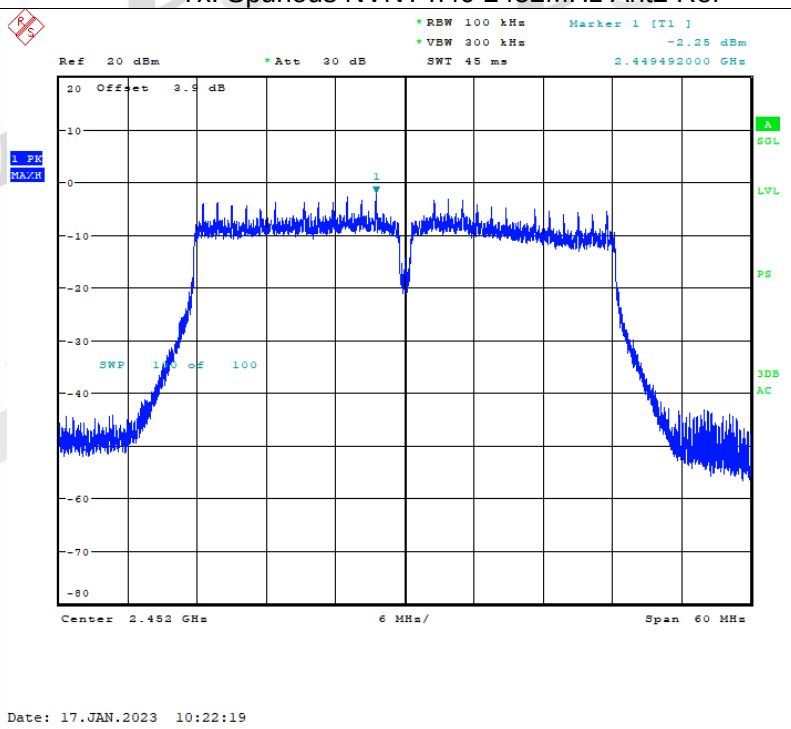
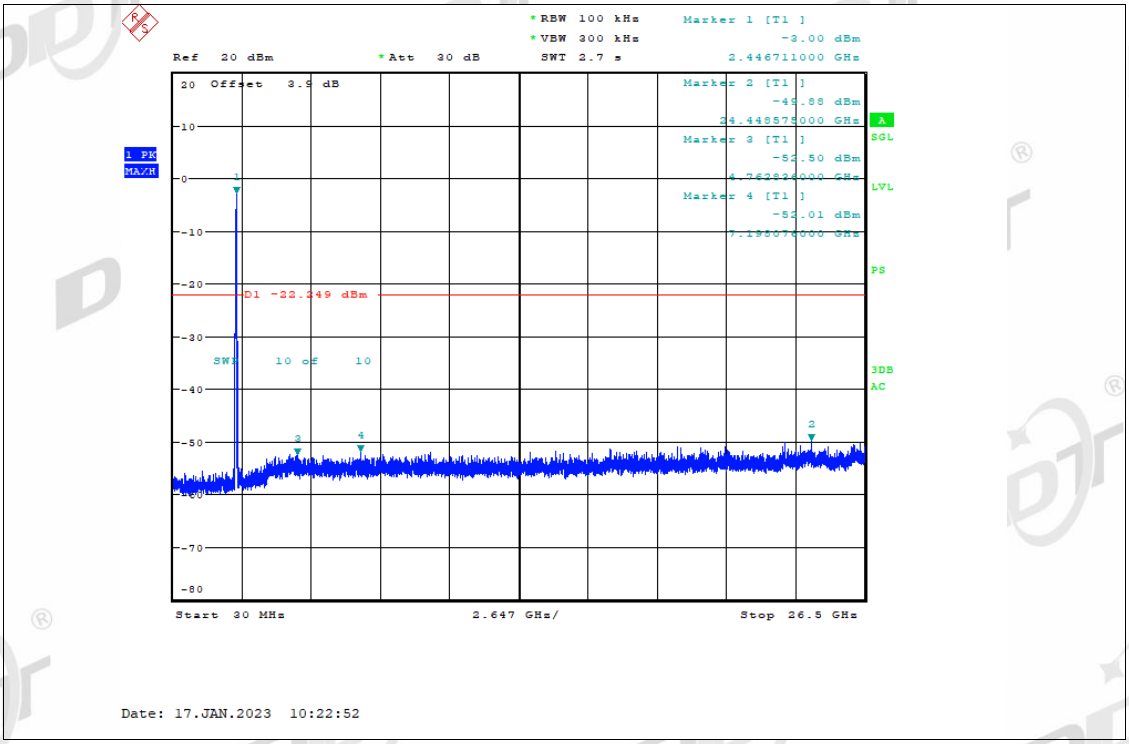
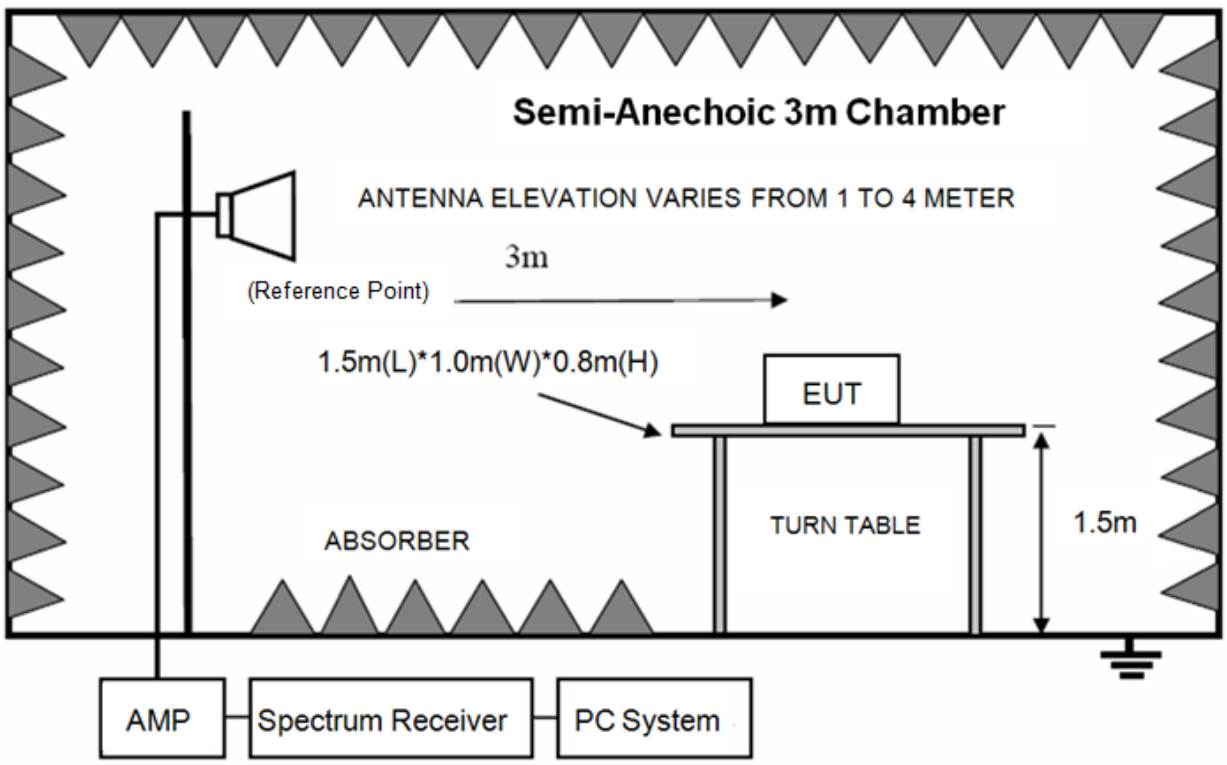


Tx. Spurious NVNT n40 2452MHz Ant2 Emission


RBW 100 kHz
VBW 300 kHz
SWT 2.7 s
Marker 1 [T1]
-3.00 dBm
2.446711000 GHz
Ref 20 dBm
Att 30 dB
20 Offset 3.9 dB
Marker 2 [T1]
-45.88 dBm
24.448575000 GHz
Marker 3 [T1]
-52.50 dBm
4.762826000 GHz
Marker 4 [T1]
-52.01 dBm
7.195076000 GHz
1 PK
MAXH
A
SGL
LVL
PS
3DB
AC
D1 -22.249 dBm
SWP 10 of 10
Start 30 MHz
2.647 GHz/
Stop 26.5 GHz
Date: 17.JAN.2023 10:22:52

10. Radiated Band Edge Compliance

10.1. Block diagram of test setup



10.2. Limit

All restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400 MHz to 2483.5 MHz shall be at least 20dB below the fundamental emissions or comply with RSS-Gen Issue 3 clause 7.2.5 (Same as FCC 15.209) limits.

10.3. Test procedure

Same with clause 8.3 except change investigated frequency range.

Remark: All restriction band have been tested, and shown in report.

10.4. Test result

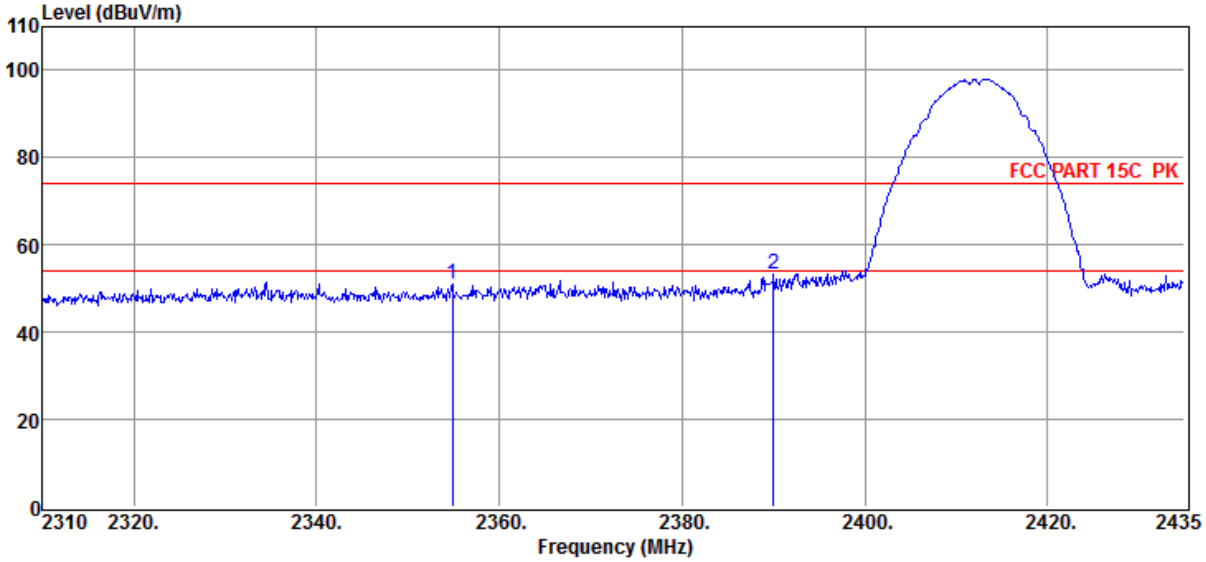
Pass. (See below detailed test result)

Note: All modes were test and the worst case was record in this report.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11B ANT1 1M 2412MHz		

Data: 13



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2354.88	47.65	34.65	-31.45	50.85	74.00	-23.15	Peak	VERTICAL
2	2390.00	49.83	35.00	-31.70	53.13	74.00	-20.87	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

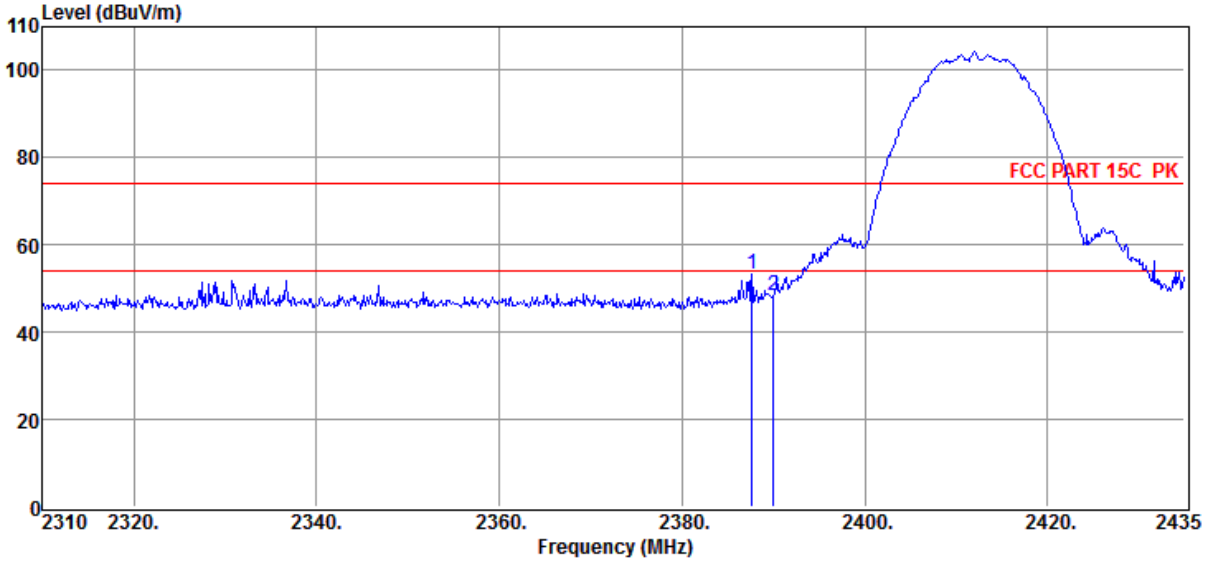
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT1 1M 2412MHz

Data: 14



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2387.63	50.00	34.98	-31.68	53.30	74.00	-20.70	Peak	HORIZONTAL
2	2390.00	45.06	35.00	-31.70	48.36	74.00	-25.64	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

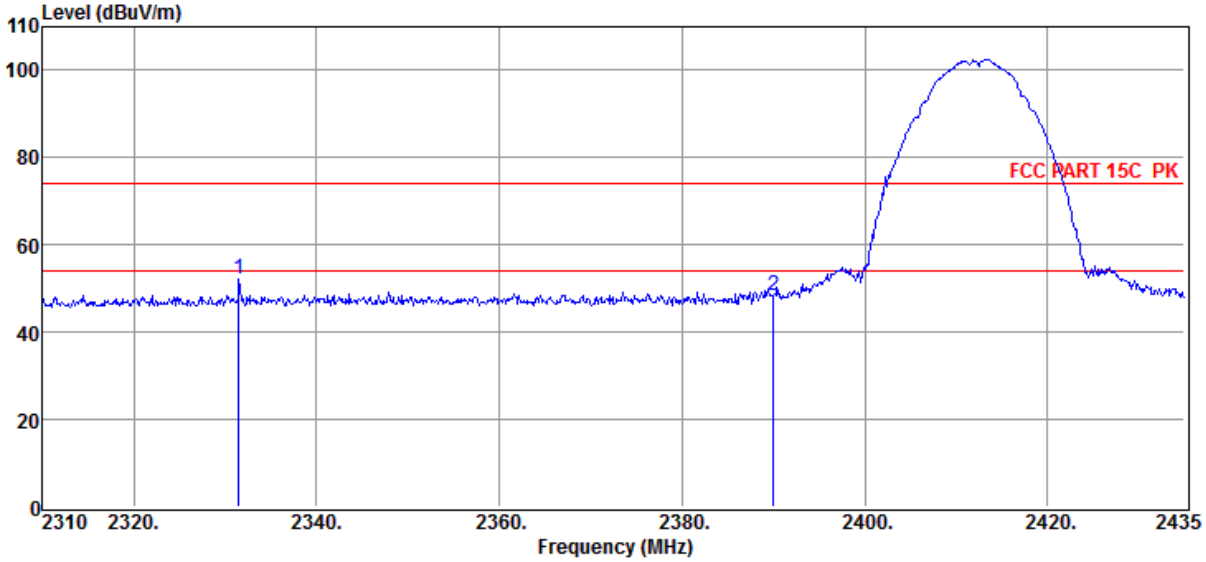
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11B ANT2 1M 2412MHz

Data: 15



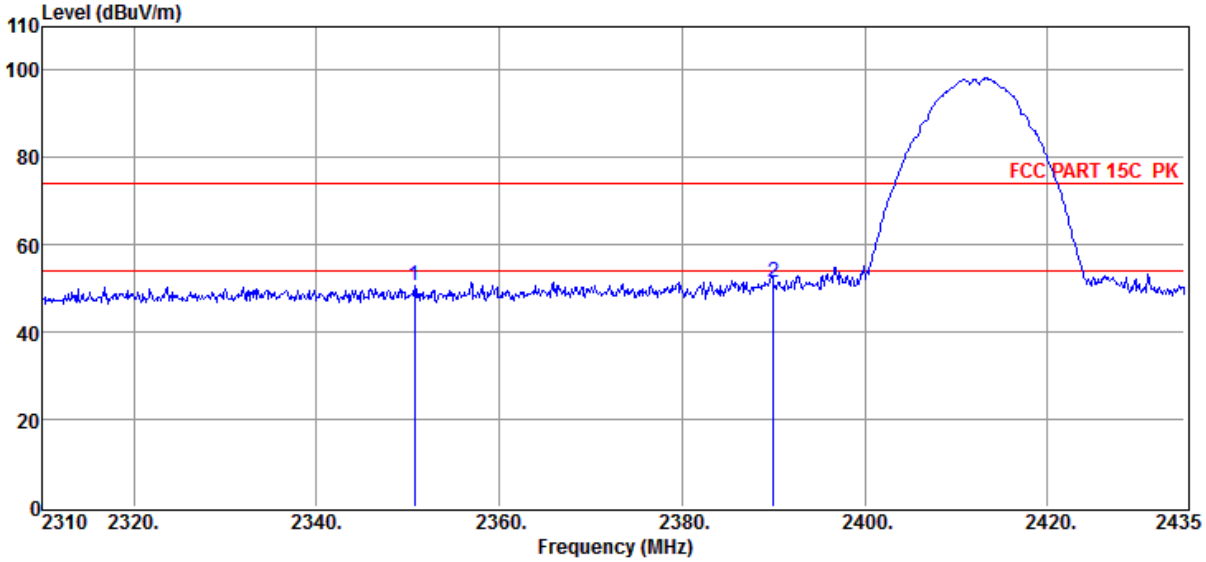
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2331.50	49.48	34.34	-31.63	52.19	74.00	-21.81	Peak	HORIZONTAL
2	2390.00	45.10	35.00	-31.70	48.40	74.00	-25.60	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11B ANT2 1M 2412MHz		

Data: 16



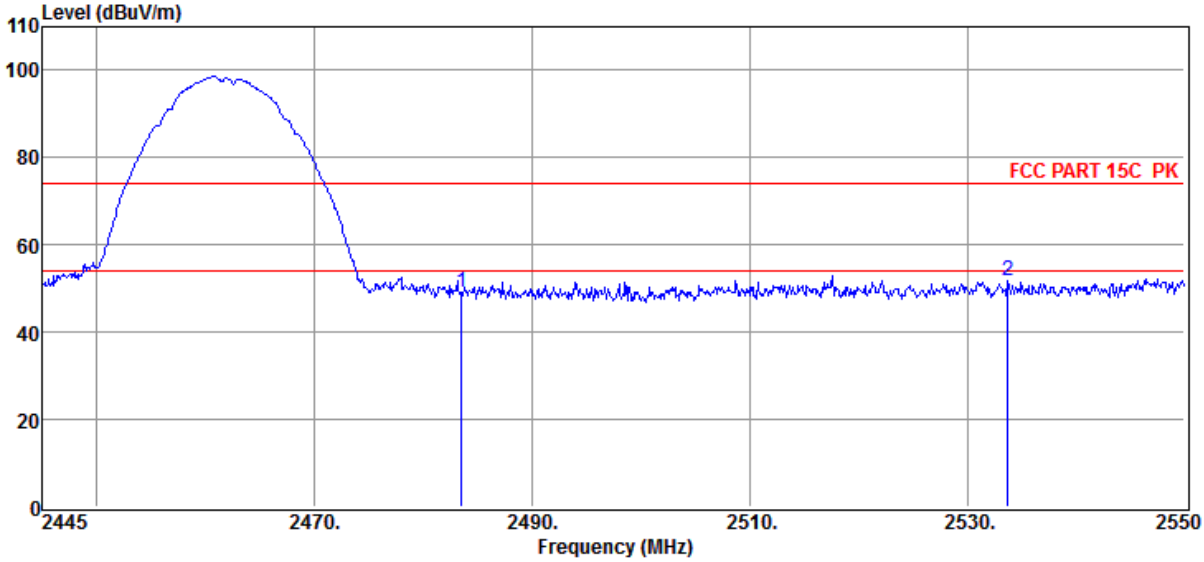
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2350.75	47.47	34.61	-31.42	50.66	74.00	-23.34	Peak	VERTICAL
2	2390.00	48.01	35.00	-31.70	51.31	74.00	-22.69	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11B ANT1 1M 2462MHz		

Data: 17



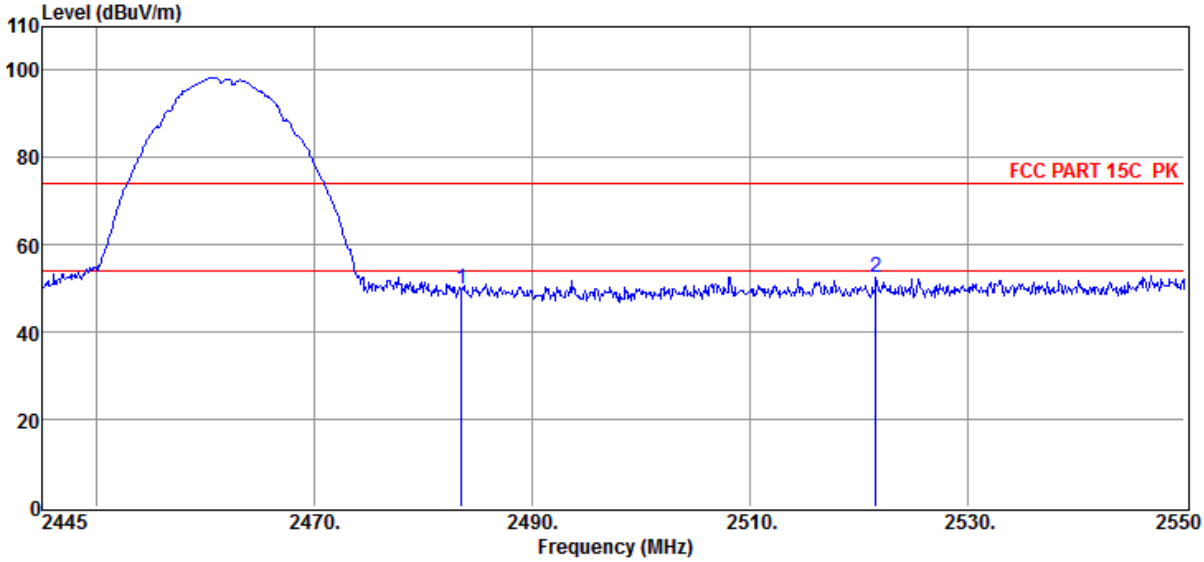
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.54	45.54	35.10	-31.58	49.06	74.00	-24.94	Peak	VERTICAL
2	2533.73	47.37	35.74	-31.32	51.79	74.00	-22.21	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11B ANT2 1M 2462MHz		

Data: 18



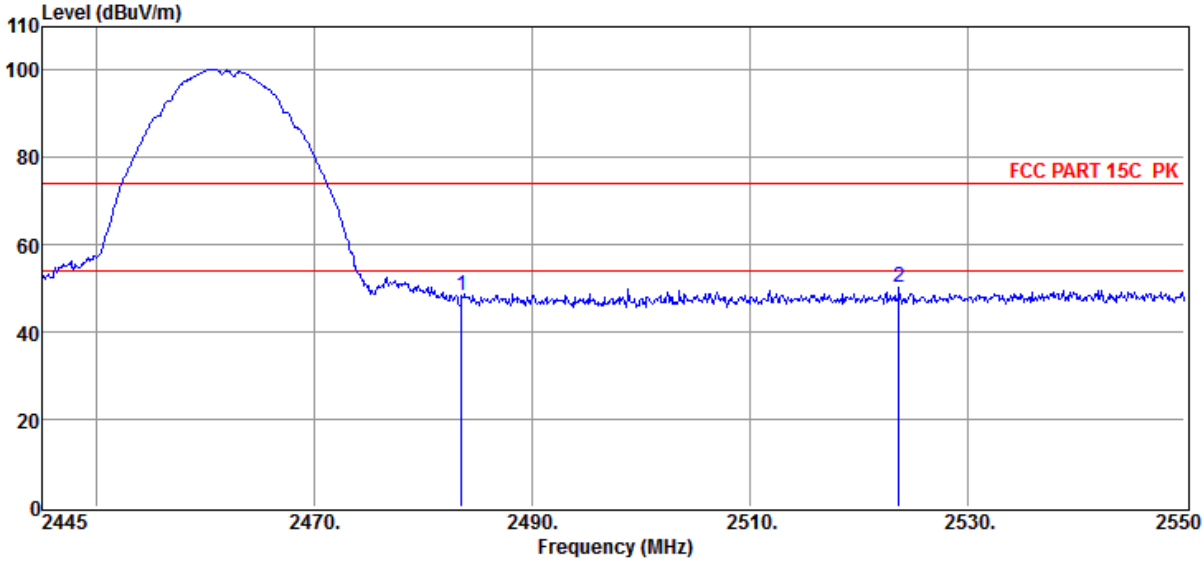
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.54	46.22	35.10	-31.58	49.74	74.00	-24.26	Peak	VERTICAL
2	2521.65	48.43	35.55	-31.41	52.57	74.00	-21.43	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11B ANT2 1M 2462MHz		

Data: 19



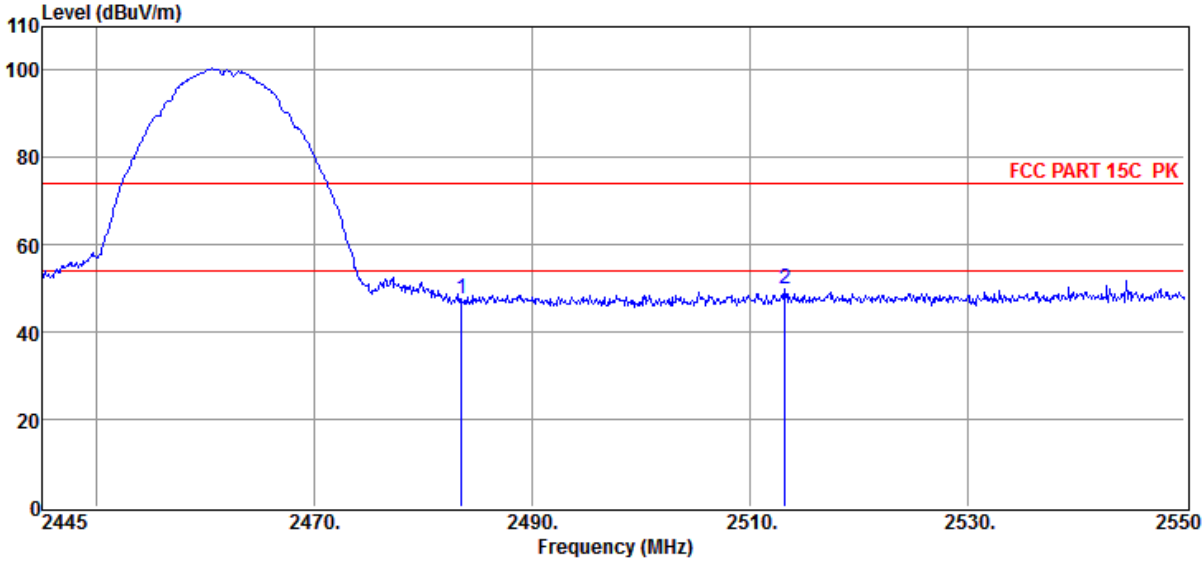
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.54	44.70	35.10	-31.58	48.22	74.00	-25.78	Peak	HORIZONTAL
2	2523.75	45.93	35.58	-31.39	50.12	74.00	-23.88	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11B ANT1 1M 2462MHz		

Data: 20



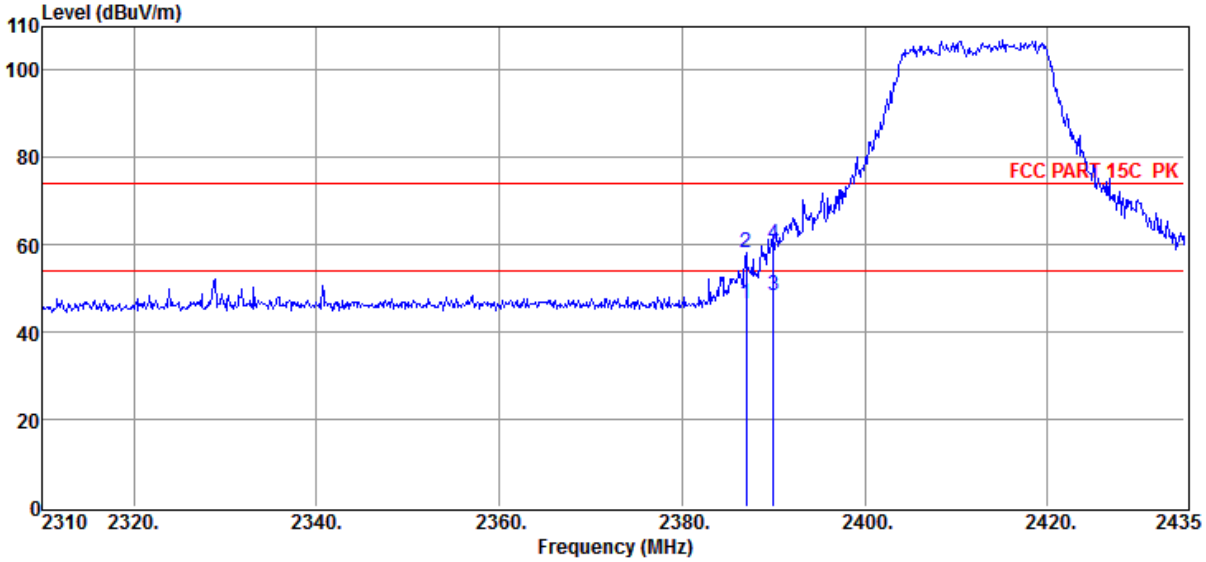
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.54	43.96	35.10	-31.58	47.48	74.00	-26.52	Peak	HORIZONTAL
2	2513.25	45.98	35.41	-31.47	49.92	74.00	-24.08	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11G ANT1 6M 2412MHz		

Data: 21



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2387.00	43.33	34.97	-31.68	46.62	54.00	-7.38	Average	HORIZONTAL
2	2387.00	54.87	34.97	-31.68	58.16	74.00	-15.84	Peak	HORIZONTAL
3	2390.00	45.26	35.00	-31.70	48.56	54.00	-5.44	Average	HORIZONTAL
4	2390.00	56.85	35.00	-31.70	60.15	74.00	-13.85	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

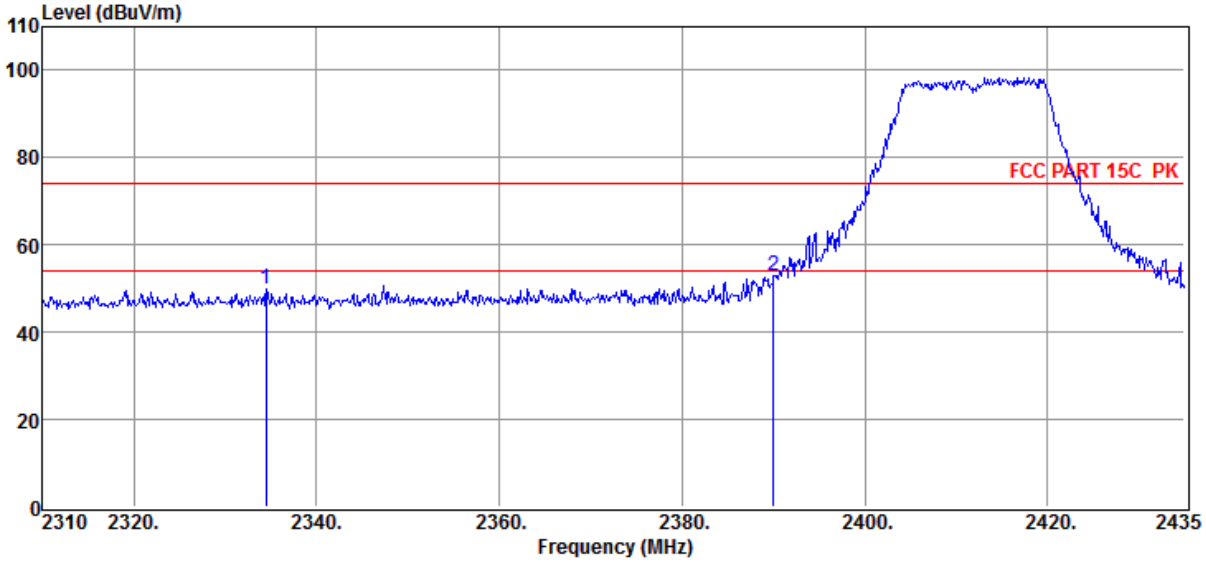
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT1 6M 2412MHz

Data: 22



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2334.50	47.14	34.38	-31.59	49.93	74.00	-24.07	Peak	VERTICAL
2	2390.00	49.53	35.00	-31.70	52.83	74.00	-21.17	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

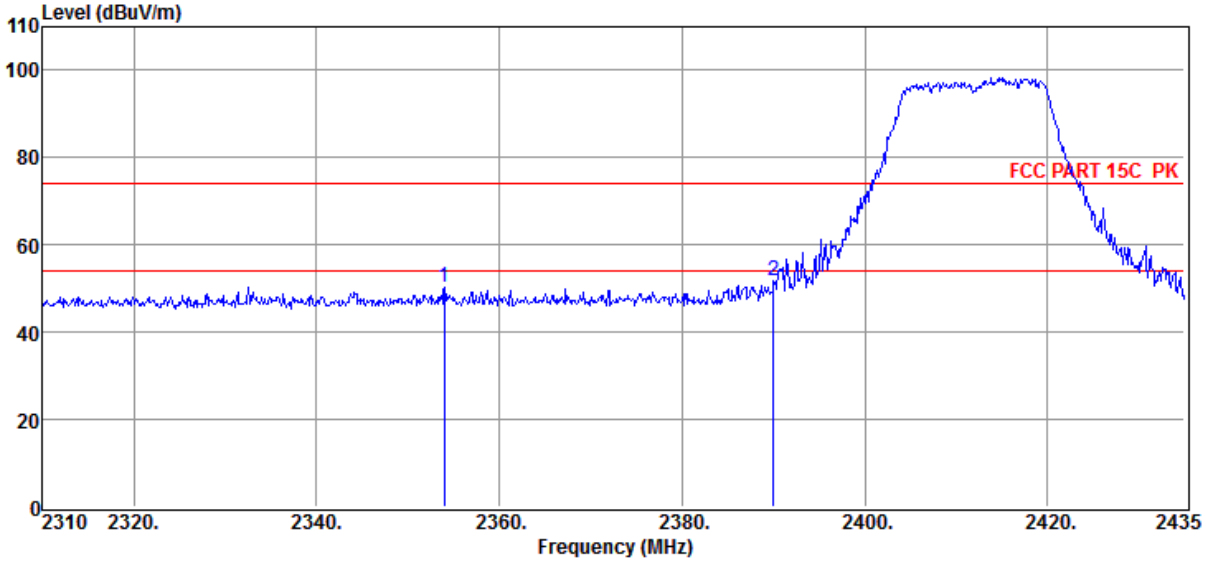
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT2 6M 2412MHz

Data: 23



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2354.00	46.97	34.64	-31.44	50.17	74.00	-23.83	Peak	VERTICAL
2	2390.00	48.50	35.00	-31.70	51.80	74.00	-22.20	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

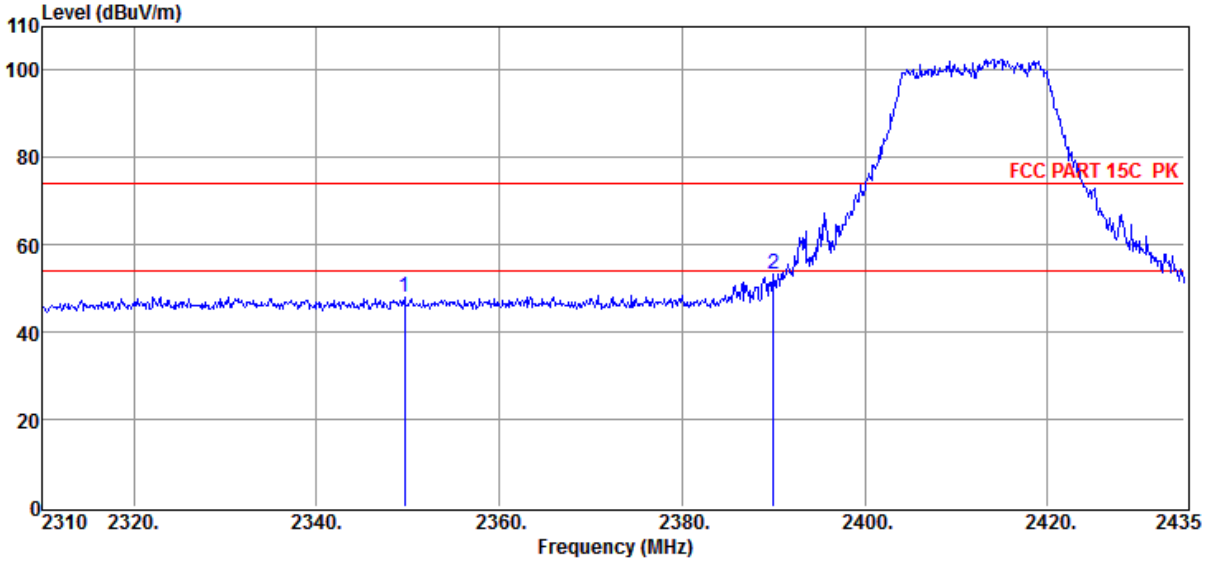
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT2 6M 2412MHz

Data: 24



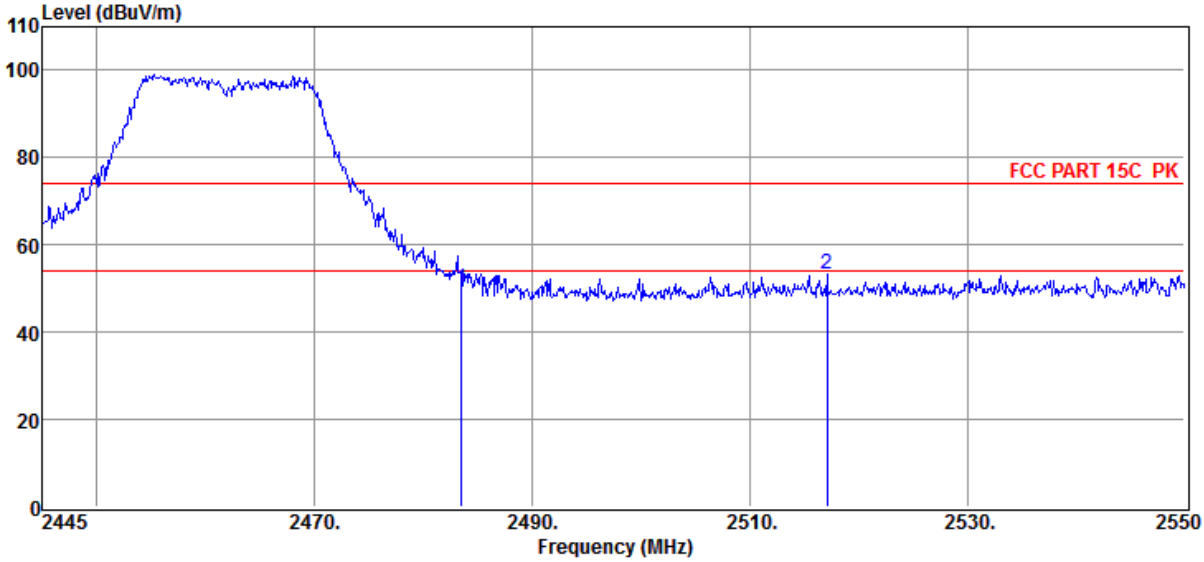
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2349.63	44.89	34.59	-31.41	48.07	74.00	-25.93	Peak	HORIZONTAL
2	2390.00	49.99	35.00	-31.70	53.29	74.00	-20.71	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11G ANT1 6M 2462MHz		

Data: 25



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	46.57	35.10	-31.58	50.09	74.00	-23.91	Peak	VERTICAL
2	2517.14	49.21	35.47	-31.44	53.24	74.00	-20.76	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

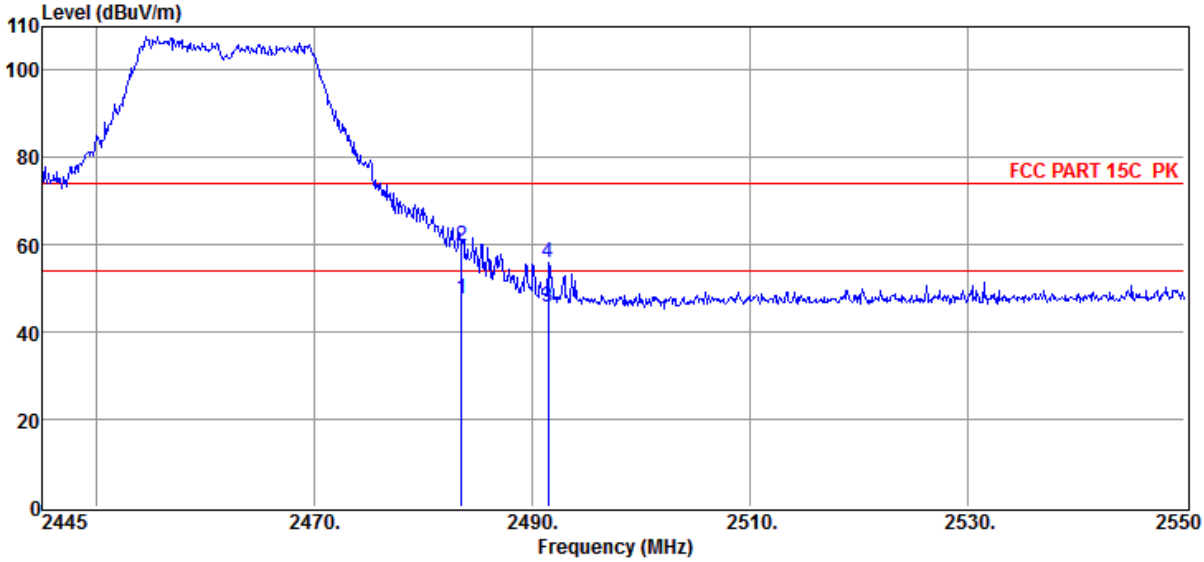
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT1 6M 2462MHz

Data: 26



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	43.92	35.10	-31.58	47.44	54.00	-6.56	Average	HORIZONTAL
2	2483.50	56.38	35.10	-31.58	59.90	74.00	-14.10	Peak	HORIZONTAL
3	2491.52	42.15	35.15	-31.57	45.73	54.00	-8.27	Average	HORIZONTAL
4	2491.52	52.45	35.15	-31.57	56.03	74.00	-17.97	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

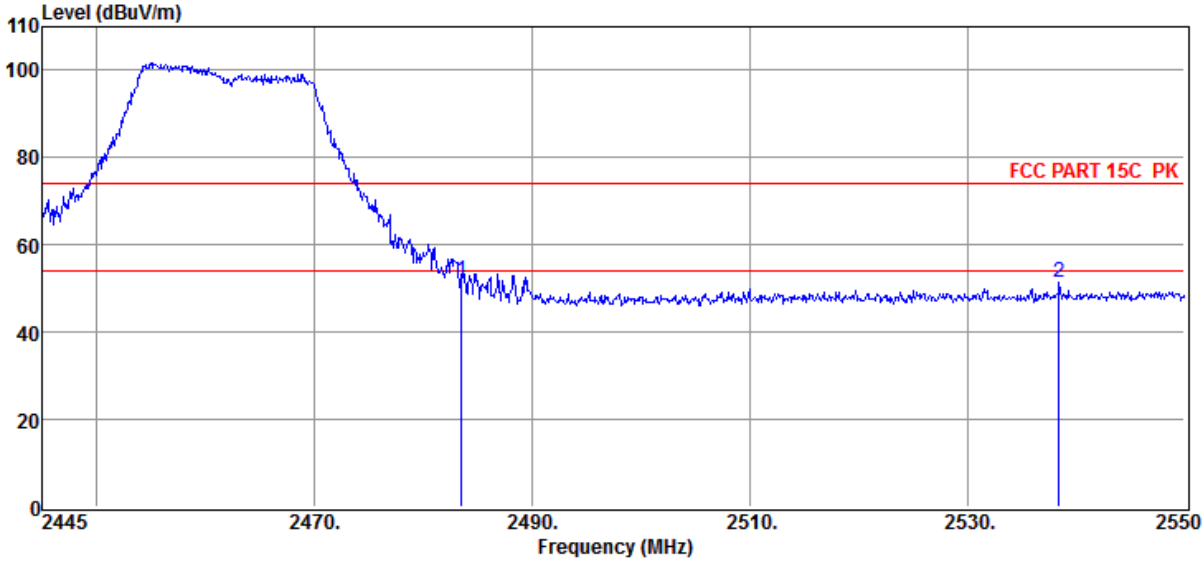
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11G ANT2 6M 2462MHz

Data: 27



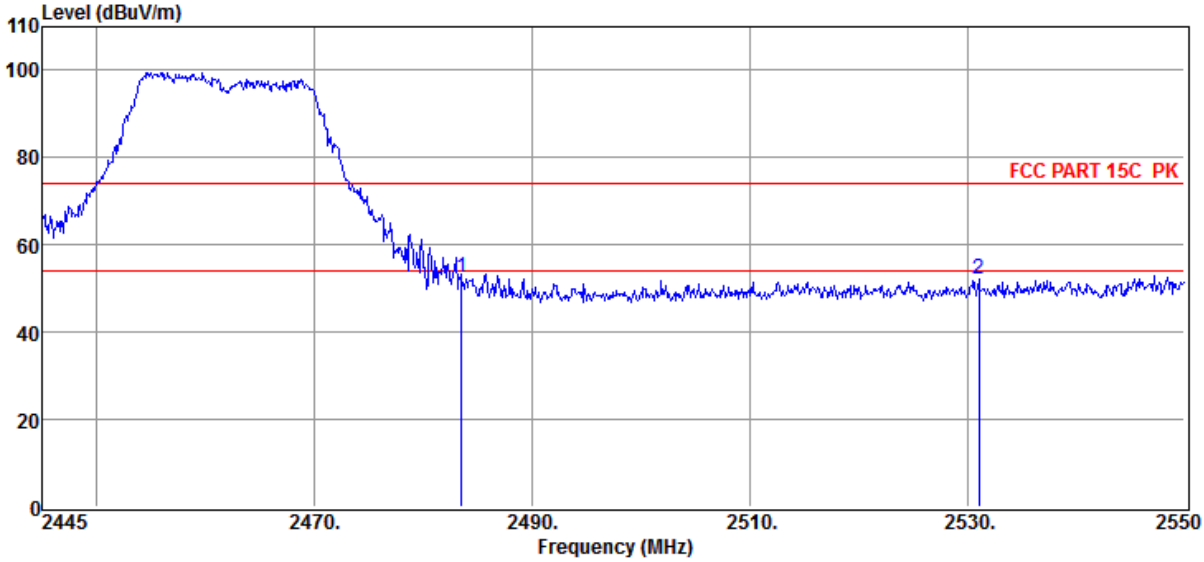
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	48.42	35.10	-31.58	51.94	74.00	-22.06	Peak	HORIZONTAL
2	2538.45	46.90	35.82	-31.29	51.43	74.00	-22.57	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11G ANT2 6M 2462MHz		

Data: 28



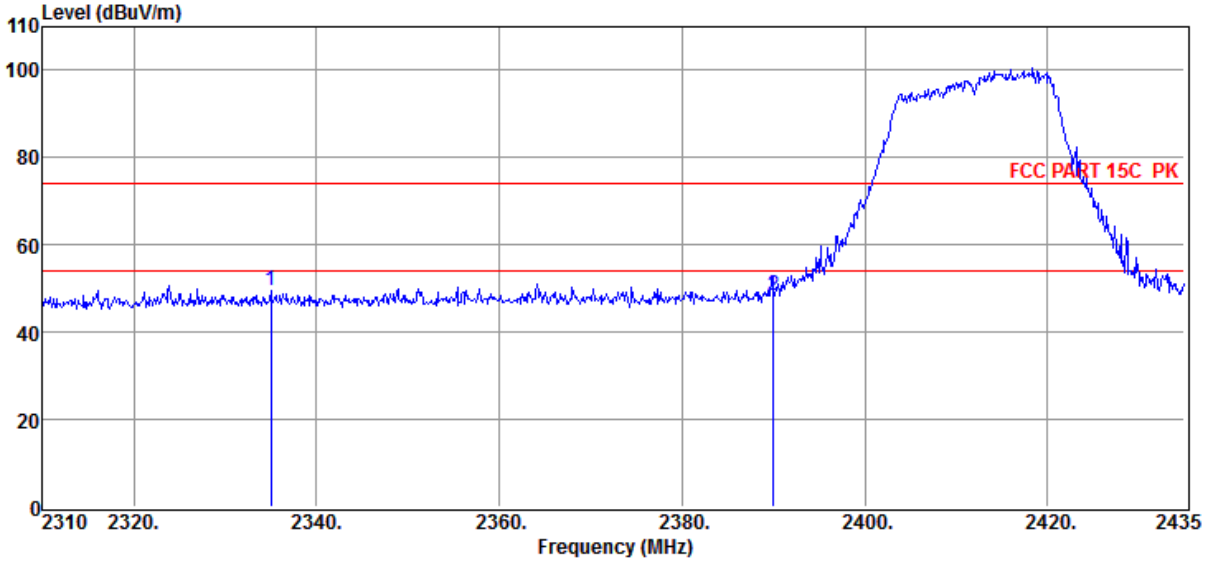
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	48.97	35.10	-31.58	52.49	74.00	-21.51	Peak	VERTICAL
2	2531.10	47.69	35.70	-31.34	52.05	74.00	-21.95	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11N20 ANT1+ANT2 MCS0 2412MHz		

Data: 29



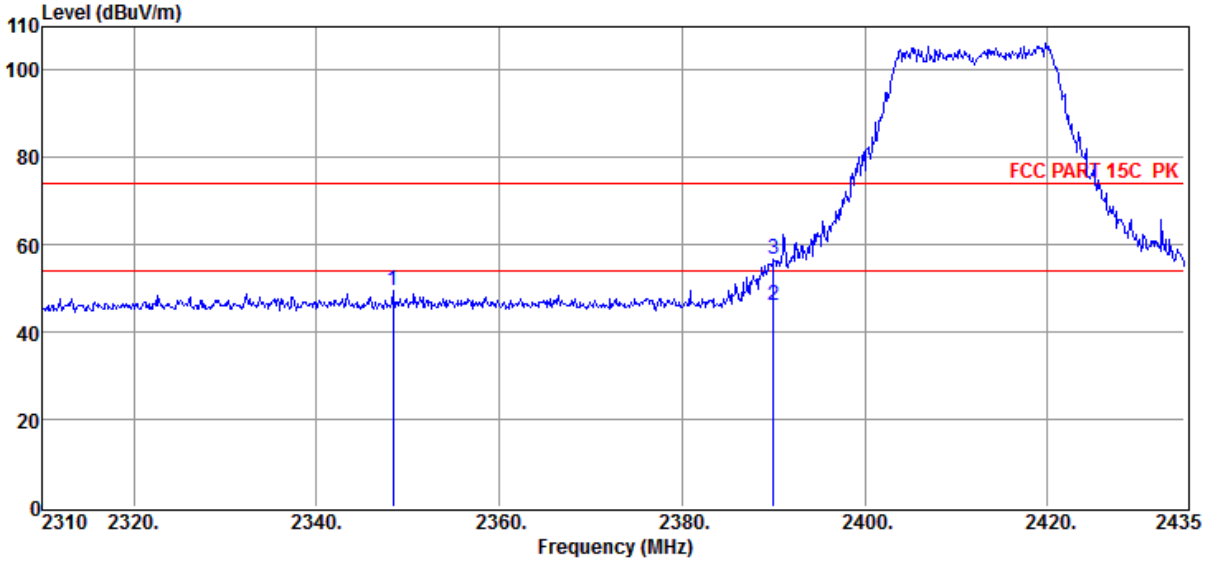
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2335.00	46.79	34.39	-31.59	49.59	74.00	-24.41	Peak	VERTICAL
2	2390.00	45.17	35.00	-31.70	48.47	74.00	-25.53	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11N20 ANT1+ANT2 MCS0 2412MHz		

Data: 30



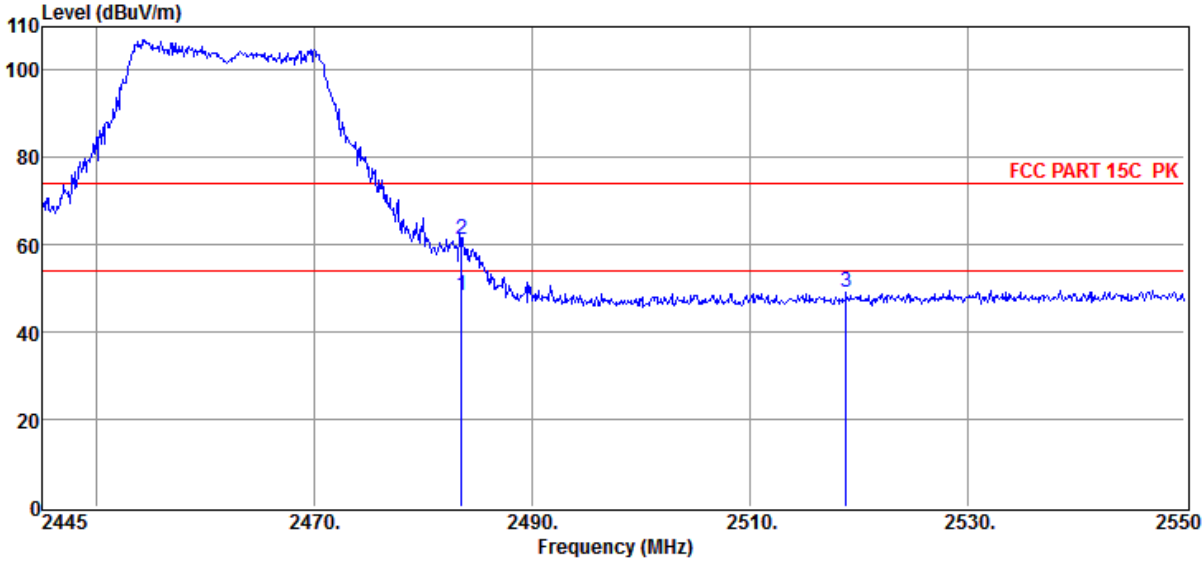
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2348.38	46.21	34.58	-31.43	49.36	74.00	-24.64	Peak	HORIZONTAL
2	2390.00	42.70	35.00	-31.70	46.00	54.00	-8.00	Average	HORIZONTAL
3	2390.00	53.36	35.00	-31.70	56.66	74.00	-17.34	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11N20 ANT1+ANT2 MCS0 2462MHz		

Data: 31



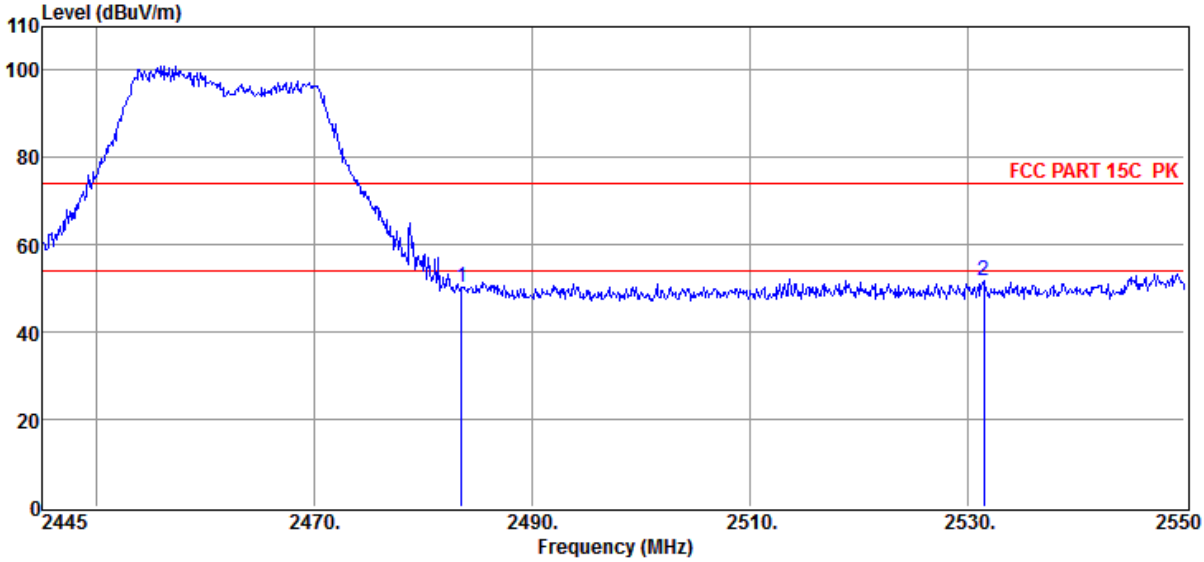
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	44.71	35.10	-31.58	48.23	54.00	-5.77	Average	HORIZONTAL
2	2483.50	57.53	35.10	-31.58	61.05	74.00	-12.95	Peak	HORIZONTAL
3	2518.92	45.12	35.50	-31.43	49.19	74.00	-24.81	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11N20 ANT1+ANT2 MCS0 2462MHz		

Data: 32



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	46.60	35.10	-31.58	50.12	74.00	-23.88	Peak	VERTICAL
2	2531.52	47.50	35.70	-31.34	51.86	74.00	-22.14	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

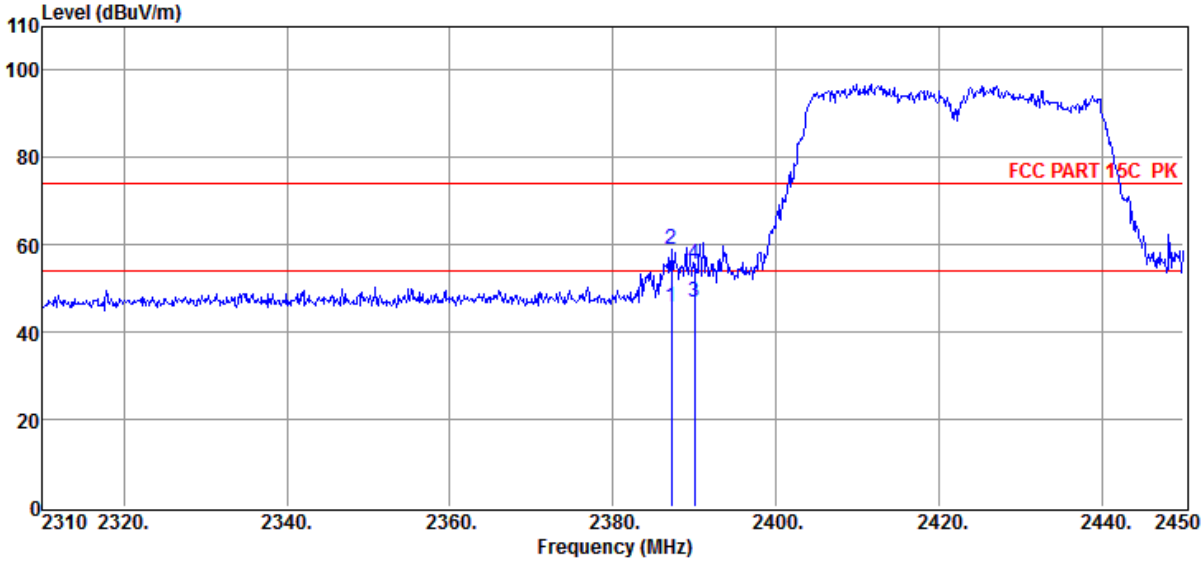
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N40 ANT1+ANT2 MCS0 2422MHz

Data: 33



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2387.14	42.51	34.97	-31.68	45.80	54.00	-8.20	Average	VERTICAL
2	2387.14	55.61	34.97	-31.68	58.90	74.00	-15.10	Peak	VERTICAL
3	2390.00	43.68	35.00	-31.70	46.98	54.00	-7.02	Average	VERTICAL
4	2390.00	52.43	35.00	-31.70	55.73	74.00	-18.27	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

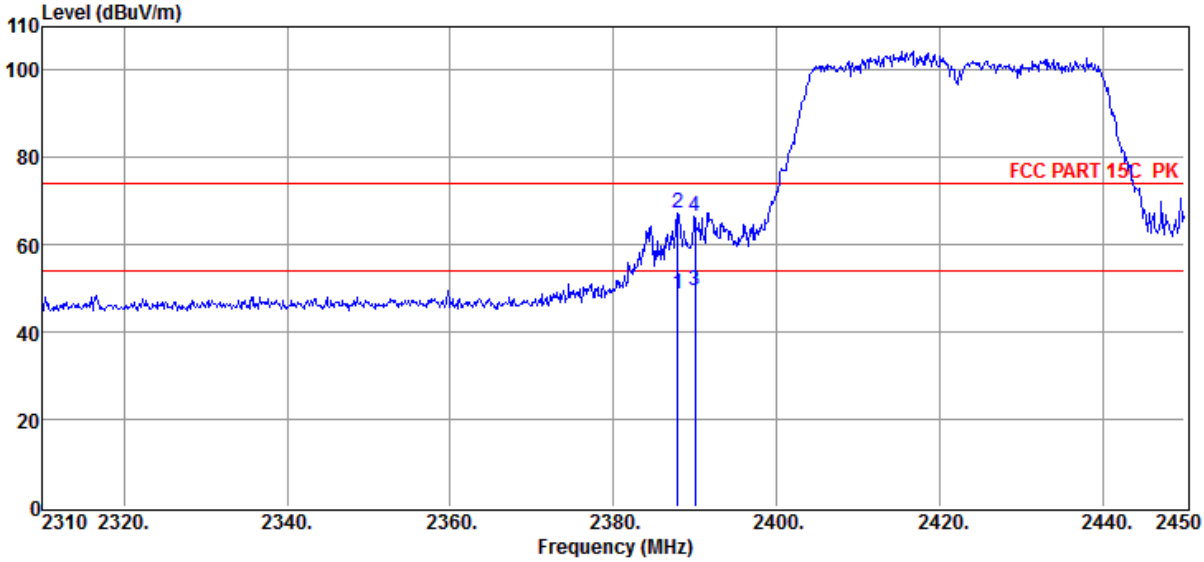
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N40 ANT1+ANT2 MCS0 2422MHz

Data: 34



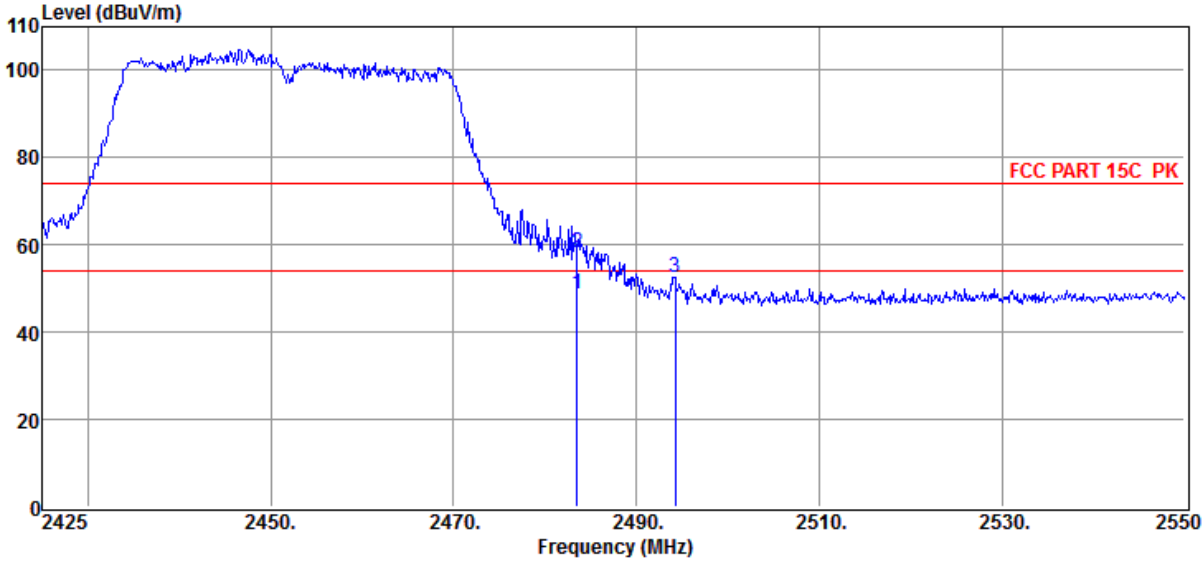
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2387.84	45.28	34.98	-31.68	48.58	54.00	-5.42	Average	HORIZONTAL
2	2387.84	64.11	34.98	-31.68	67.41	74.00	-6.59	Peak	HORIZONTAL
3	2390.00	46.39	35.00	-31.70	49.69	54.00	-4.31	Average	HORIZONTAL
4	2390.00	63.18	35.00	-31.70	66.48	74.00	-7.52	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site	: 10m Chamber		
Test Date	: 02-24-2023	**Tested By**	: Sunny
EUT	: AI Delivery Robot	**Model Number**	: OS-R-DR02
Power Supply	: Battery	**Test Mode**	: Tx mode
Memo	: 11N40 ANT1+ANT2 MCS0 2452MHz		

Data: 35



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	45.36	35.10	-31.58	48.88	54.00	-5.12	Average	HORIZONTAL
2	2483.50	54.71	35.10	-31.58	58.23	74.00	-15.77	Peak	HORIZONTAL
3	2494.25	48.93	35.17	-31.57	52.53	74.00	-21.47	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

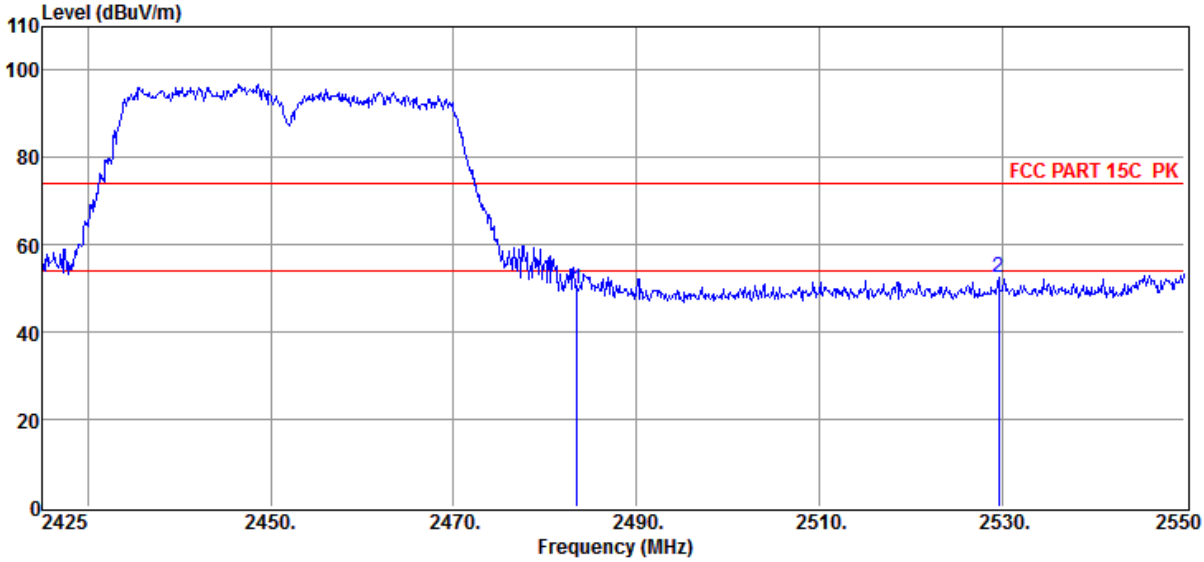
Test Date : 02-24-2023 **Tested By** : Sunny

EUT : AI Delivery Robot **Model Number** : OS-R-DR02

Power Supply : Battery **Test Mode** : Tx mode

Memo : 11N40 ANT1+ANT2 MCS0 2452MHz

Data: 36

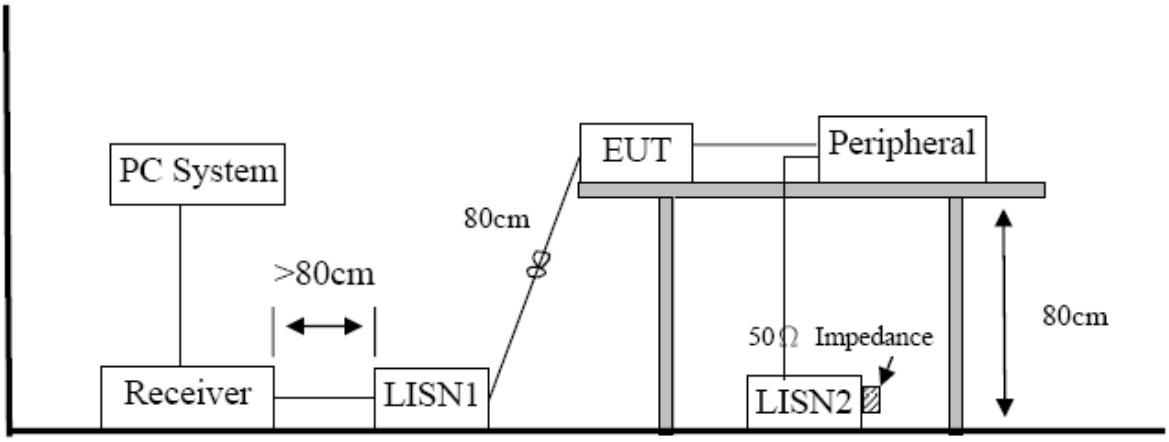


Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	46.49	35.10	-31.58	50.01	74.00	-23.99	Peak	VERTICAL
2	2529.63	48.04	35.67	-31.35	52.36	74.00	-21.64	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Margin = Result Level - Limit.

11. Power Line Conducted Emission

11.1. Block diagram of test setup



11.2. Power Line Conducted Emission Limits (Class B)

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

Note 1: * Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

11.3. Test procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

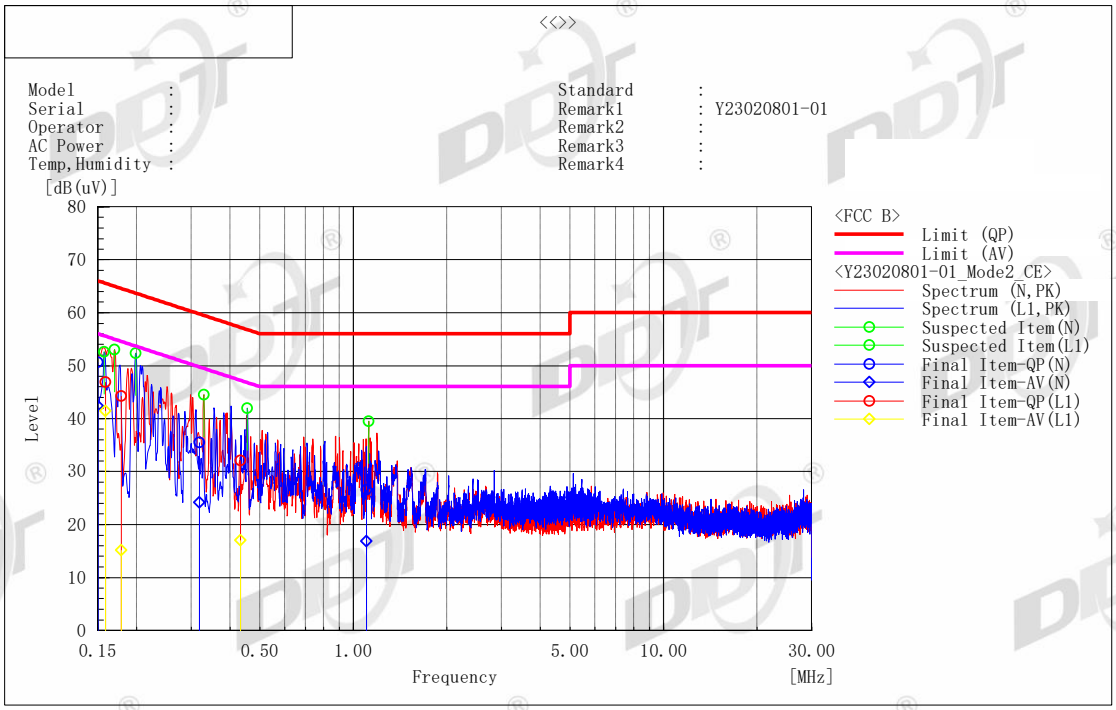
The bandwidth of test receiver is set at 9 kHz.

11.4. Test result

Pass. (See below detailed test result)

Note1: All emissions not reported below are too low against the prescribed limits.
Note2: Pre-test AC conducted emission at all mode, only the worst case was recorded in this report.

Test Data:



Final Result

--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]	Remark
1	0.1502	40.9	32.7	9.7	50.6	42.4	66.0	56.0	15.4	13.6	
2	0.31847	25.8	14.5	9.7	35.5	24.2	59.7	49.7	24.2	25.5	
3	1.10251	16.8	7.2	9.7	26.5	16.9	56.0	46.0	29.5	29.1	

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]	Remark
1	0.17838	34.5	5.3	9.8	44.3	15.1	64.6	54.6	20.3	39.5	
2	0.43215	22.3	7.3	9.8	32.1	17.1	57.2	47.2	25.1	30.1	
3	0.15906	37.1	31.6	9.8	46.9	41.4	65.5	55.5	18.6	14.1	

Note1) Level (Quasi-Peak and/or C/Average) = Meter Reading + Factor

Note2) Line = Polarity of input power (Live or Neutral)

N : Abbreviation of Neutral Polarity, L1 : Abbreviation of Live Polarity,

Note3) Factor = LISN Insertion Loss + Cable Loss

Note4) Margin = Limit – Level (Quasi-Peak and/or C/Average)

Note5) C/Average : Abbreviation of CISPR Average

12. Antenna Requirements

12.1. 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.

12.2. Result

The device support 2T2R MIMO, the antennas both used for this product are dedicated FPC antennas and other than that furnished by the responsible party shall be used with the device, maximum antenna gain is 3.77 dBi for antenna 1, 3.68 dBi for antenna 2.