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TEST REPORT

Application No.:	KSCR2305000775AT
FCC ID:	SS3-RD241608RB
IC:	11805A-RD241608RB
Applicant:	SZ DJI TECHNOLOGY CO., LTD.
Address of Applicant:	Lobby of T2, DJI Sky City, No. 53 Xianyuan Road, Xili Community, Xili Street, Nanshan District, Shenzhen, China.
Manufacturer:	SZ DJI TECHNOLOGY CO., LTD.
Address of Manufacturer:	Lobby of T2, DJI Sky City, No. 53 Xianyuan Road, Xili Community, Xili Street, Nanshan District, Shenzhen, China.
Factory:	DJI Baiwang Technology Company Ltd.
Address of Factory:	Room 101, Building 12, Baiwangxin Industrial Park, 1002 Songbai Road, Sunshine Community, Xili Street, Nanshan District, Shenzhen
Equipment Under Test (EU	Т):
EUT Name:	Rear Phased Array Radar
Model No.:	RD241608RB
Trade Mark:	DJI
Standard(s) :	47 CFR Part 15, Subpart C 15.249
	RSS-210 Issue 10 Amendment (April 2020)
	RSS-Gen Issue5 Amendment 2 (February 2021)
Date of Receipt:	2023-05-06
Date of Test:	2023-05-08 to 2023-05-19
Date of Issue:	2023-05-26
Test Result:	Pass*

* In the configuration tested, the EUT complied with the standards specified above.

Enin fri

Eric Lin Laboratory Manager



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	Revision Record					
Version	Description	Date	Remark			
00	Original	2023-05-26	/			

Authorized for issue by:			
	Paun Lin		
	Pawn Liu/Project Engineer	-	
	Enie fri		
	Eric Lin/Reviewer	-	



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2 Test Summary

Radio Spectrum Technical Requirement					
Item	FCC Requirement	IC Requirement	Method	Result	
Antenna Requirement	47 CFR Part 15, Subpart C 15.249	RSS-Gen Clause 6.8	N/A	Pass	

N/A: Not applicable

Radio Spectrum Matter Part				
Item	FCC Requirement	IC Requirement	Method	Result
20dB Emission bandwidth	47 CFR Part 15, Subpart C 15.249	RSS-210 Issue 10 Amendment (April 2020) Annex B 10	ANSI C63.10 (2013) Section 6.9	Pass
Filed strength of fundamental	47 CFR Part 15, Subpart C 15.249	RSS-210 Issue 10 Amendment (April 2020) Annex B 10	ANSI C63.10 (2013) Section 6.6	Pass
Radiation Spurious Emission	47 CFR Part 15, Subpart C 15.249	RSS-210 Issue 10 Amendment (April 2020) Annex B 10	ANSI C63.10 (2013) Section 6.6	Pass
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.249	RSS-210 Issue 10 Amendment (April 2020) Annex B 10	ANSI C63.10 (2013) Section 6.10	Pass
99% Bandwidth	N/A	RSS-Gen Section 6.7	RSS-Gen Section 6.7	Pass



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4 General Information

4.1 Details of E.U.T.

Power supply:	DC 15V
Test voltage:	DC 15V
Operation Frequency Range:	24.05GHz to 24.25GHz
Channel Number:	1
Modulation:	FMCW
Antenna type:	Linear Antenna
Antenna Gain:	10dBi (Provided by the manufacturer)
SN:	63LDL34001685L
Firmware Version:	V00.00.00.01

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Notebook	LENOVO	K27	EB24537645
Receiver	DJI	/	/

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4 x 10 ⁻⁸
2	Occupied Bandwidth	3%
3	RF Radiated Power	5.2dB (Below 1GHz)
3	RF Radiated Fower	5.9dB (Above 1GHz)
		4.2dB (Below 30MHz)
4	Radiated Spurious Emission Test	4.5dB (30MHz-1GHz)
4		5.1dB (1GHz-18GHz)
		5.4dB (Above 18GHz)
5	Temperature Test	1°C
6	Humidity Test	3%
7	Supply Voltages	1.5%
8	Time	3%

Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.





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4.4 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China. Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

1.SGS is not responsible for wrong test results due to incorrect information (e.g. max. clock frequency, highest internal frequency, antenna gain, cable loss, etc.) is provided by the applicant. (if applicable).

2.SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (if applicable).

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• A2LA

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

• FCC

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

• ISED

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 2324E

• VCCI

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None





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5 Equipment List

ltem	Equipment	Manufacturer	Model	Serial Number	Cal Date	Cal. Due Date
RF R	adiated Test					
1	Spectrum Analyzer	R&S	FSV40	101493	10/11/2022	10/10/2023
2	Signal Generator	Agilent	E8257C	MY43321570	10/17/2022	10/16/2023
3	Loop Antenna	Schwarzbeck	HXYZ9170	9170-108	02/20/2023	02/19/2024
4	Bilog Antenna	TESEQ	CBL 6112D	35403	06/21/2021	06/20/2023
5	Bilog Antenna	SCHWARZBECK	VULB9160	9160-3342	04/13/2023	04/12/2024
6	Horn-antenna(1-18GHz)	Schwarzbeck	BBHA9120D	267	10/25/2022	10/24/2024
7	Horn-antenna(1-18GHz)	ETS-LINDGREN	3117	00143290	02/21/2023	02/20/2025
8	Horn Antenna(18-40GHz)	Schwarzbeck	BBHA9170	BBHA9170171	02/21/2023	02/20/2024
9	Horn-antenna(40-60GHz)	REBES	SAZ-2410-19-S1	06299-01	N/A	N/A
10	Horn-antenna(50-75GHz)	REBES	SAZ-2410-15-S1	01731-01	N/A	N/A
11	Horn-antenna(75-110GHz)	REBES	SAZ-2410-10-S1	01773-09	N/A	N/A
12	Horn-antenna(110-170GHz)	REBES	SAZ-2410-06-S1	01776-05	N/A	N/A
13	Horn-antenna(140-220GHz)	REBES	SAZ-2410-05-S1	01759-04	N/A	N/A
14	Horn-antenna(220-325GHz)	REBES	SAR-2309-03-S2	06300-01	N/A	N/A
15	Extended waveguide(40-60GHz)	REBES	SWG-19025-FB	06303-01	N/A	N/A
16	Extended waveguide(50-75GHz)	REBES	SWG-15025-FB	01525-09	N/A	N/A
17	Extended waveguide(75-110GHz)	REBES	SWG-10025-FB	01509-01	N/A	N/A
18	Extended waveguide(110-170GHz)	REBES	SWG-06025-FB	06302-01	N/A	N/A
19	Extended waveguide(140-220GHz)	REBES	SWG-05025-FB	06304-01	N/A	N/A
20	Extended waveguide(220-325GHz)	REBES	SWG-03025-FB	06301-01	N/A	N/A
21	Harmonic mixer(110-170GHz)	REBES	STH-06SF-S1	06110-01	N/A	N/A
22	Harmonic mixer(40-60GHz)	REBES	STH-19SF-S1	06937-01	N/A	N/A
23	Waveguide Harmonic Mixer(50-75GHz)	KEYSIGHT	M1970V	MY51390966	N/A	N/A
24	Waveguide Harmonic Mixer(50-75GHz) cable	Silverline	SLU18-SMSM-01.00M	99612	N/A	N/A
25	Waveguide Harmonic Mixer(75-110GHz)	KEYSIGHT	M1970W	MY51430883	N/A	N/A
26	Waveguide Harmonic Mixer(75-110GHz) cable	Silverline	SLU18-SMSM-01.00M	94202	N/A	N/A
27	Pre-Amplifier(30MHz~18GHz)	LNA	/	/	04/13/2023	04/12/2024
28	Amplifier(18~40GHz)	COM-POWER	PAM-840A	461332	10/17/2022	10/16/2023
29	Low Pass Filter	MICRO-TRONICS	VLFX-950	RV142900829	N.C.R	N.C.R
30	High Pass Filter	Mini-Circuits	VHF-1200	15542	N.C.R	N.C.R
31	RE test cable	/	RE01-RE04	/	04/13/2023	04/12/2024
32	PXA Spectrum Analyzer	KEYSIGHT	N9010A	MY56480443	01/30/2023	01/29/2024
33	Vector Signal Generator	R&S	SMW200A	110074	10/11/2022	10/10/2023
34	Software	Farad	EZ-EMC	CCS-03A1	N/A	N/A



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6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203; RSS-Gen Section 6.8

6.1.2 Conclusion

Standard Requirement:

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. The use of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is Linear Antenna and no consideration of replacement.

Antenna location: Refer to EUT Photos.



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Radio Spectrum Matter Test Results 7

7.1 20dB Bandwidth

Test Requirement

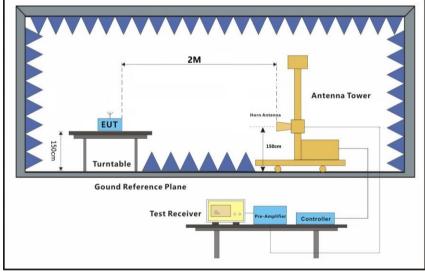
47 CFR Part 15, Subpart C 15.215& RSS-210 Issue 10 Amendment (April 2020) Annex B 10 ANSI C63.10 (2013) Section 6.9

Test Method: 7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Atmospheric Pressure: 1002 mbar Humidity: 50 % RH Test Mode: a: TX mode _ Keep the EUT in continuously transmitting mode.

7.1.2 Test Setup Diagram



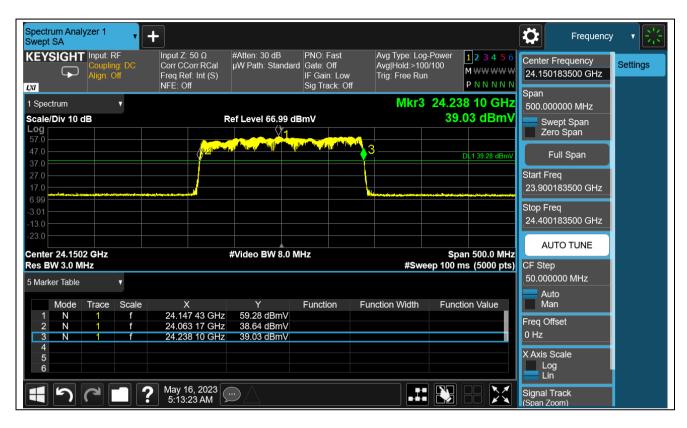
7.1.3 Measurement Procedure and Data

- 1) Place the EUT on the table and set it in the transmitting mode
- 2) SA set RBW=1%~5% OBW, VBW=3RBW and Detector=Peak
- Measure and record the result of 20dB bandwidth 3)





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Low Frequency (GHz)	Limit (GHz)	High Frequency (GHz)	Limit (GHz)	20db Bandwidth(MHz)	Result
24.06317	24.00	24.23810	24.25	174.93	Pass

Remark:

Center Frequency(GHz)= (High Frequency(GHz)+ Low Frequency(GHz))/2=24.151(GHz)

20db Bandwidth(MHz)= (High Frequency(GHz)- Low Frequency(GHz)*1000=174.93(MHz)



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7.2 99% Bandwidth

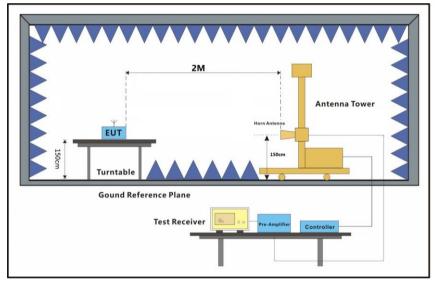
Test Requirement	RSS-Gen Section 6.7
Test Method:	RSS-Gen Section 6.7

7.2.1 E.U.T. Operation

Operating Environment:

Temperature:22 °CHumidity:50 % RHAtmospheric Pressure:1002 mbarTest Mode:a: TX mode _ Keep the EUT in continuously transmitting mode.

7.2.2 Test Setup Diagram

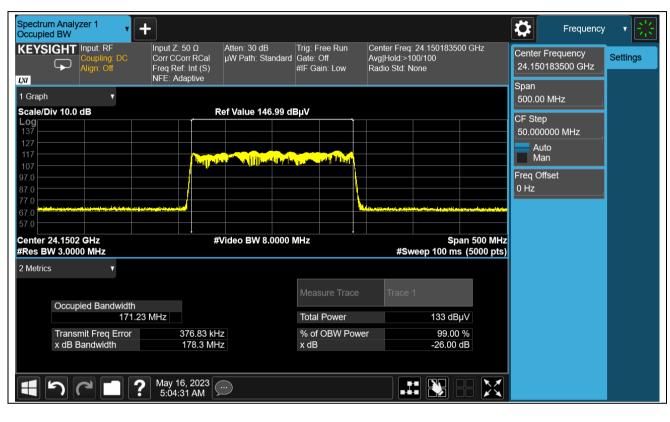


7.2.3 Measurement Procedure and Data





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99%OB(MHz)	Result
171.23	Pass



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7.3 Filed Strength of Fundamental and Radiation Spurious Emission

Test Requirement	47 CFR Part 15, Subpart C 15.249(a); RSS-210 Issue 10 Amendment (April 2020) Annex B 10
Test Method:	ANSI C63.10 (2013) Section 6.6
Limit:	

(1) The field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental frequency (MHz)	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
2400-2483.5	50	500
5725-5875	50	500
24000-24250	250	2500

* Field strength limits are specified at a distance of 3 meters.

Fundamental Limit Conversion								
Average (mV/m) at 3M Average (dBuV/m) at 3M Average (dBuV/m) at 3M Peak (dBuV/m) at 2M 2M 2M								
250	107.9588	111.48	131.48					
* (Limit = 107.9588 + 20LOG(3/	* (Limit = 107.9588 + 20LOG(3/2) = 111.48 dBuV/m)							

Harmonic Limit Conversion						
Average (uV/m) at 3M Average (dBuV/m) at 3M Average (dBuV/m) at 2M 2M 2M						
2500	67.9588	71.48	91.48			

*(Limit=67.9588+20LOG(3/2)=71.48 dBuV/m)

(2) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits (follow the table), whichever is the lesser attenuation.

Below 30MHz

Frequency	Field Strength (µA/m)	Magnetic field strength (H-Field) (μA/m)	Measurement Distance (metres)
9-490 kHz	2,400/F (F in kHz)	2,400/F (F in kHz)	300
490-1,705 kHz	24,000/F (F in kHz)	24,000/F (F in kHz)	30
1.705-30 MHz	30	N/A	30

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Frequency (MHz)	Field Strength microvolts/m at 3 metres (watts, e.i.r.p.)				
	Transmitters Receivers				
30-88	100 (3 nW)	100 (3 nW)			
88-216	150 (6.8 nW)	150 (6.8 nW)			
216-960	200 (12 nW)	200 (12 nW)			
Above 960	500 (75 nW)	500 (75 nW)			

Frequency	Field Strength microvolts/m at specific distance				
	Peak AVG				
18-40GHz	77.48dBuV/m@2m	57.48dBuV/m@2m			
Above 40GHz	77.48dBuV/m @2m	57.48dBuV/m @2m			



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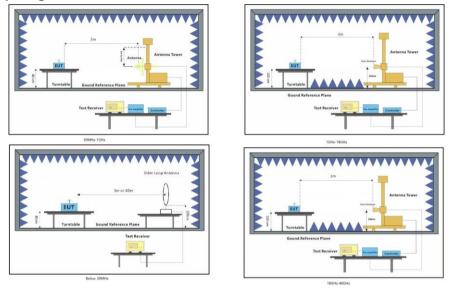
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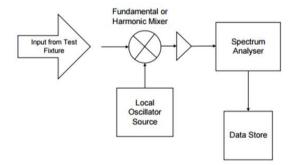
7.3.1 E.U.T. Operation

Operating Environment:

Temperature:22 °CHumidity:50 % RHAtmospheric Pressure:1002 mbarTest Mode:a: TX mode _ Keep the EUT in continuously transmitting mode.

7.3.2 Test Setup Diagram





Above 40GHz





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7.3.3 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. For 1-18GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. For 18-40GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 2 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. For above 40GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 2 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation

d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

j. Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.



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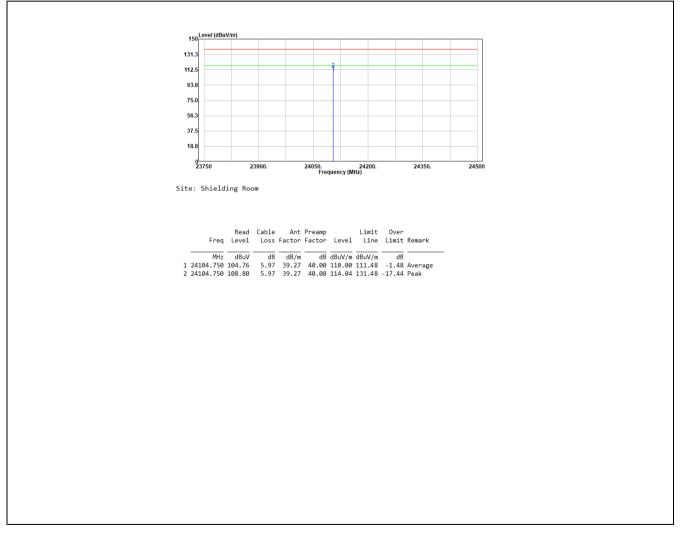


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Filed Strength of Fundamental

Frequency (GHz)	Polarity	dBuV/m@2m	dBuV/m@3m	Limit(@2m)	Limit(@3m)	Result	Remark
24.15	Horizontal	114.04	110.52	131.48	127.96	Pass	Peak
24.15	Horizontal	110.00	106.48	111.48	107.96	Pass	AVG
24.15	Vertical	113.33	109.81	131.48	127.96	Pass	Peak
24.15	Vertical	109.84	106.32	111.48	107.96	Pass	AVG

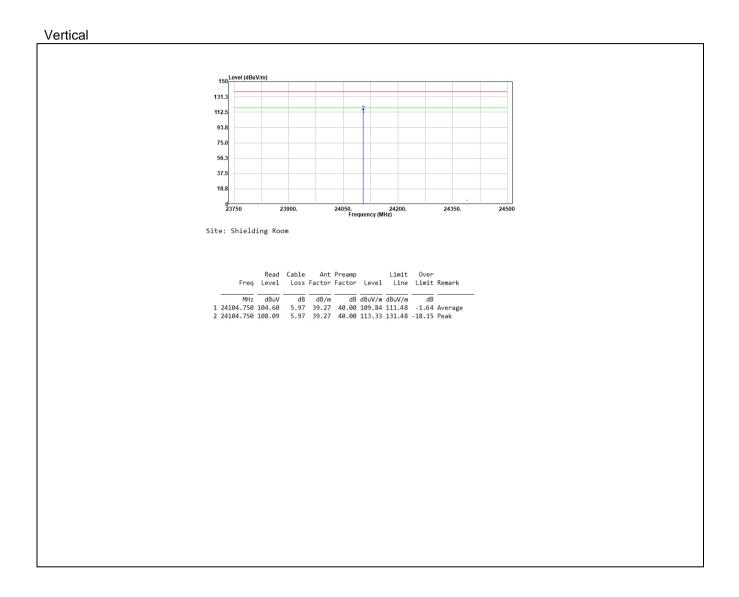
Horizontal







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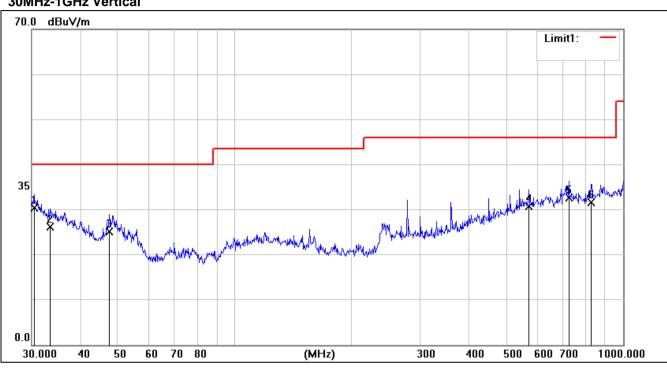


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Radiation Spurious Emission 30MHz-1GHz Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	30.4238	5.15	25.27	30.42	40.00	-9.58	101	0	QP
2	33.4449	1.19	25.02	26.21	40.00	-13.79	100	86	QP
3	47.4918	6.27	18.76	25.03	40.00	-14.97	200	234	QP
4	572.6144	3.60	27.14	30.74	46.00	-15.26	100	344	QP
5	724.2611	4.70	27.92	32.62	46.00	-13.38	200	92	QP
6	827.4934	3.21	28.34	31.55	46.00	-14.45	100	164	QP

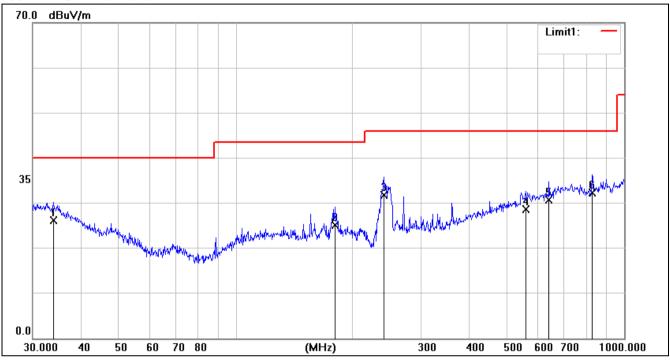


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30MHz-1GHz Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	33.9174	1.29	24.96	26.25	40.00	-13.75	200	289	QP
2	180.0165	8.41	16.66	25.07	43.50	-18.43	100	220	QP
3	240.8304	12.94	18.81	31.75	46.00	-14.25	100	324	QP
4	558.7302	1.33	27.35	28.68	46.00	-17.32	100	64	QP
5	640.6110	2.93	27.85	30.78	46.00	-15.22	100	272	QP
6	827.4934	3.96	28.34	32.30	46.00	-13.70	100	294	QP



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100.0	dBuV/m																		_
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) 10.0002700).00	4400).00	610	0.00	7800	0.00	9500	.00	112	00.00	129	00.00	1460)0.00		18000	.00MHz

1-18GHz Vertical

No.	Frequency	Reading	Reading Correct		Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4983.000	59.25	-10.68	48.57	74.00	-25.43	peak
2	11035.000	48.10	1.92	50.02	74.00	-23.98	peak
3	16034.000	47.76	3.43	51.19	74.00	-22.81	peak



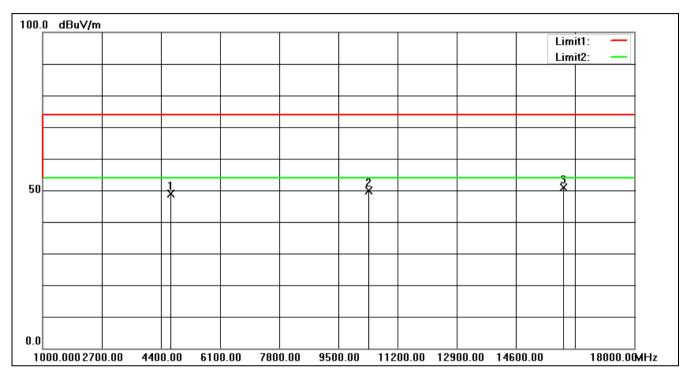
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1-18GHz Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4683.000	60.65	-11.70	48.95	74.00	-25.05	peak
2	10364.000	48.57	1.26	49.83	74.00	-24.17	peak
3	15967.000	47.52	3.27	50.79	74.00	-23.21	peak



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120.0 dBuV/m Limit1: Limit2: 60 ł ž t 0.0 18000.00@0200.00 40000.00MHz 22400.00 24600.00 26800.00 29000.00 31200.00 33400.00 35600.00

18-40GHz Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	21638.000	40.03	12.76	52.79	77.48	-24.69	peak
2	29736.000	41.45	13.19	54.64	77.48	-22.84	peak
3	36412.000	35.51	21.32	56.83	77.48	-20.65	peak



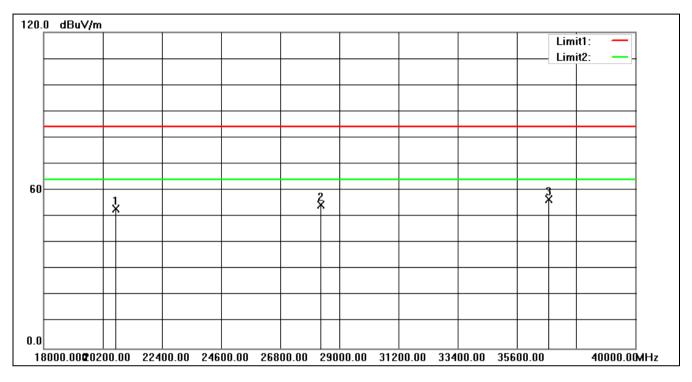
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18-40GHz Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	20694.000	40.29	12.62	52.91	77.48	-24.57	peak
2	28316.000	41.35	12.96	54.31	77.48	-23.17	peak
3	36792.000	33.21	23.28	56.49	77.48	-20.99	peak



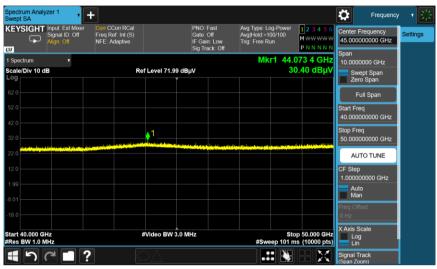
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40-50GHz Vertical



40-50GHz Horizontal

Spectrum Swept SA	Analyzer 1	F					🛟 Frequ	uency v 🚉
KEYSI	GHT Input: Ext Mixer Signal ID: Off Align: Off	Corr CCorr RCal Freq Ref: Int (S) NFE: Adaptive	Gate IF Ga	: Fast : Off in: Low irack: Off	Avg Type: Log-Power Avg[Hold:>100/100 Trig: Free Run	123456 MWWWWW PNNNNN	Center Frequency 45.000000000 G Span	Settings
1 Spectru Scale/Di		Re	Ref Level 71.99 dBµV		Mkr1 44.031 4 GHz 30.54 dBµV			
Log							Swept Span Zero Span	
62.0 52.0							Full Span Start Freg	
42.0							Start Freq 40.000000000 G	Hz
32.0			1				Stop Freq 50.000000000 G	Hz
22.0				iall ship ha dah			AUTO TUNE	
12.0							CF Step 1.000000000 GH	
1.99							Auto Man	
-8.01							Freq Offset	
-18.0							0 Hz X Axis Scale	
Start 40. #Res BW	000 GHz / 1.0 MHz		#Video BW 3.0 MHz		Sto #Sweep 101 m	op 50.000 GHz ns (10000 pts)	Log	
	っ (Signal Track (Span Zoom)	
requency	Distanc	e Pe	ak Value	A	V Limit	Polar	ization	Result
(GHz)	(M)	(0	dBuv/m)	(d	Buv/m)			
44.0734	2		30.40	ę	57.48		V	PASS
44.0314	2		30.54	Ę	57.48		Н	PASS



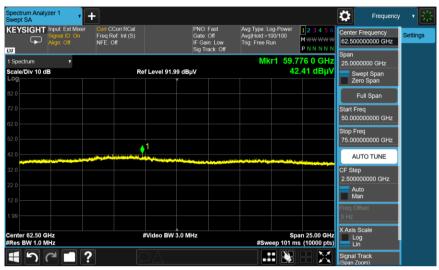
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50-75GHz Vertical



50-75GHz Horizontal

Spectrum Swept SA	Analyzer 1	·					Frequ	uency V
	Signal ID: On	Corr CCorr RCal Freq Ref: Int (S) NFE: Off			Avg Type: Log-Power Avg Hold:>100/100 Trig: Free Run	123456 MWWWWW PNNNNN	Center Frequency 62.500000000 G Span	
1 Spectru Scale/Di Log		Ref Lo	evel 91.99 dBµV			.235 9 GHz 42.00 dBµV	25.0000000 GHz Swept Span Zero Span	
82 0 72 0 52 0 42 0 32 0 22 0		1					Full Span Start Freq 50.000000000 G Stop Freq 75.00000000 G AUTO TUNE CF Step 2.500000000 GH	Hz
12 0 1 99 Center 6 #Res BW	1.0 MHz	#Vio	leo BW 3.0 MHz		#Sweep 101	Span 25.00 GHz ms (10000 pts)	Auto Man Freq Offset 0 Hz X Axis Scale Log Lin	
	つ (~ - ?	D,	Δ				Signal Track (Span Zoom)	
Frequency (GHz)	Distance (M)		k Value 8uv/m)		V Limit Buv/m)	Polar	ization	Result
59.7760	2	4	2.41	Į	57.48		V	PASS
59.2359	2	4	2.00	Ę	57.48		Н	PASS



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75-110GHz Vertical



75-110GHz Horizontal

Swept S/		•						Ç	Frequency	· 👬
KEYSI	GHT Input: Ext Mixer Signal ID: On Align: Off	Corr CCorr RCal Freq Ref: Int (S) NFE: Off			Avg Type: Lo Avg Hold:>10 Trig: Free Ru	0/100	123456 MWWWWW PNNNNN		equency 0000 GHz	Settings
1 Spectru Scale/Di Log		Ref Le	vel 101.99 dBµV		Mk		.332 GHz .68 dBµV	Span 35.00000 Swep Zeros	t Span	
92.0								Full Start Freq	Span	
72.0 62.0								Stop Freq	0000 GHz 00000 GHz	
52.0 42.0		Name of the state of the second s	-Million Association	م ەنىن ئەلىس	a di sa	•1 ⊷,≉i,siss	*****	AUTC CF Step 3.500000	0 TUNE	
32.0								Auto Man Freq Offse 0 Hz	et	
Center 9 #Res BV	2.50 GHz V 1.0 MHz	#Vid	eo BW 3.0 MHz		#Swe		an 35.00 GHz s (10000 pts)	X Axis Sca Log Lin	ile	
	า 🦳 🗌 ?		Δ					Signal Tra (Span Zoon	ck 1)	
equency (GHz)	Distance (M)		k Value uv/m)		V Limi Buv/m	-	Polar	izatic	n	Result
04.406	2	4	3.72	ļ	57.48			V		PASS
03.332	2	4	3.68	į	57.48			Н		PASS



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7.4 Radiated Emissions which fall in the restricted bands

Test Requirement

47 CFR Part 15, Subpart C 15.205 & 15.209; RSS-210 Issue 10 Amendment (April 2020) Annex B 10 ANSI C63.10 (2013) Section 6.10.5

Test Method: Limit:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

Remark: For measurement distance 2m, the filed strength doesn't exceed 57.48 dBuV/m



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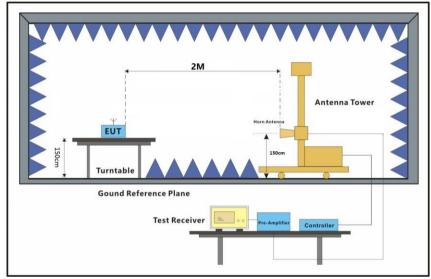
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7.4.1 E.U.T. Operation

Operating Environment:

Temperature:	22 °C	Humidity:	50 % RH	Atmospheric Pressure:	1002	mbar
Test Mode:	a: TX moo	de _ Keep the	e EUT in contin	uously transmitting mode.		

7.4.2 Test Setup Diagram





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7.4.3 Measurement Procedure and Data

- 1) The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 2 meter fullyanechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- 2) The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 3) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- 4) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- 5) If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- 6) The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- 7) Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.



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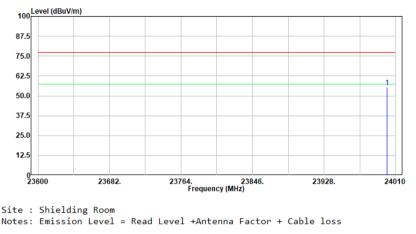
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Polarization:Horizontal; Modulation: FMCW; (Left)

1



Freq		Ant Factor	Level	Limit Line		Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		-

11112	ubuv	ub/m	ubuv/iii	ubuv/m	ub
24000.000	30.80	39.23	55.38	77.48	-22.10 Peak



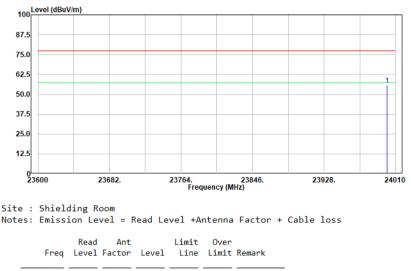
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Polarization:Vertical; Modulation: FMCW;(Left)



MHz dBuV dB/m dBuV/m dBuV/m dB 1 24000.000 31.11 39.23 55.69 77.48 -21.79 Peak



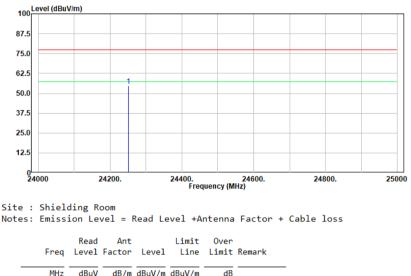
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Polarization:Horizontal; Modulation: FMCW; (Right)



 MHz
 dBuV
 dB/m
 dBuV/m
 dBuV/m
 dB

 1
 24250.000
 30.50
 39.33
 54.84
 77.48
 -22.64
 Peak



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Polarization:Vertical; Modulation: FMCW;(Right)



	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	24250.000	31.25	39.33	55.59	77.48	-21.89	Peak	



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8 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2305000775AT

9 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for KSCR2305000775AT

- End of the Report -



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