

# FCC Radio Test Report

# FCC ID: 2BCGWTX10UBNANO

Report No. Equipment Model Name Brand Name Applicant Address	::	BTL-FCCP-2-2403G134 AX900 Nano Wi-Fi6 Bluetooth USB Adapter Archer TX10UB Nano tp-link TP-LINK CORPORATION PTE. LTD. 7 Temasek Boulevard #29-03 Suntec Tower One, Singapore 038987
Radio Function	:	Bluetooth Low Energy
FCC Rule Part(s) Measurement Procedure(s)		FCC CFR Title 47, Part 15, Subpart C (15.247) ANSI C63.10-2013
Date of Receipt Date of Test Issued Date		2024/5/23 2024/5/29 ~ 2024/6/21 2024/8/8

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

Poken blump

Prepared by

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### Declaration

**BTL** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

**BTL**'s reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** assumes no responsibility for the data provided by the Customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by **BTL**.

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**BTL**'s laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

**BTL** is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

### Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.



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# **REVISION HISTORY**

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-2-2403G134	R00	Original Report.	2024/7/11	Invalid
BTL-FCCP-2-2403G134	R01	Added the power of S2 and S8.	2024/8/8	Valid

### 1 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

Standard(s) Section	Description	Test Result	Judgement	Remark
15.207	AC Power Line Conducted Emissions	APPENDIX A	Pass	
15.205 15.209 15.247(d)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	Pass	
15.247(a)(2)	Bandwidth	APPENDIX E	Pass	
15.247(b)(3)	Output Power	APPENDIX F	Pass	
15.247(e)	Power Spectral Density	APPENDIX G	Pass	
15.247(d)	Antenna conducted Spurious Emission	APPENDIX H	Pass	
15.203	Antenna Requirement		Pass	

NOTE:

"N/A" denotes test is not applicable in this Test Report.
 The report format version is TP.1.1.1.



### 1.1 TEST FACILITY

The test locations stated below are under the TAF Accreditation Number 0659. The test location(s) used to collect the test data in this report are: No. 72, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan (FCC DN: TW0659)

⊠ C06 ⊠ CB21

### 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k = 2, providing a level of confidence of approximately 95 %.

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U (dB)
C06	CISPR	150 kHz ~ 30 MHz	2.4498

### B. Radiated emissions test :

Test Site	Measurement Frequency Range	U (dB)
	0.03 GHz ~ 0.2 GHz	4.17
	0.2 GHz ~ 1 GHz	4.72
CB21	1 GHz ~ 6 GHz	5.20
CB21	6 GHz ~ 18 GHz	5.50
	18 GHz ~ 26 GHz	3.69
	26 GHz ~ 40 GHz	4.23

### C. Conducted test :

Test Item	U (dB)
Occupied Bandwidth	0.53
Output power	0.37
Power Spectral Density	0.66
Conducted Spurious emissions	0.54
Conducted Band edges	0.53

### NOTE:

Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

### **1.3 TEST ENVIRONMENT CONDITIONS**

Test Item	Environment Condition	Test Voltage	Tested by
AC Power Line Conducted Emissions	25°C, 45%	DC 5V	Ken Lu
Radiated emissions below 1 GHz	Refer to data	DC 5V	Ken Lu
Radiated emissions above 1 GHz	Refer to data	DC 5V	Ken Lu
Bandwidth	24°C, 60%	DC 5V	Cai Hu
Output Power	24°C, 60%	DC 5V	Cai Hu
Power Spectral Density	24°C, 60%	DC 5V	Cai Hu
Antenna conducted Spurious Emission	24°C, 60%	DC 5V	Cai Hu

# 2 GENERAL INFORMATION

### 2.1 DESCRIPTION OF EUT

Equipment	AX900 Nano Wi-Fi6 Bluetooth USB Adapter
Model Name	Archer TX10UB Nano
Brand Name	tp-link
Model Difference	N/A
Hardware Version	1.0
Software Version	1.0
Power Source	Supplied from Notebook.
Power Rating	DC 5V
Operation Band	2400 MHz ~ 2483.5 MHz
Operation Frequency	2402 MHz ~ 2480 MHz
Modulation Technology	GFSK
Transfer Rate	1 Mbps / 2 Mbps / 500 kbps / 125 kbps
	1 Mbps: 10.96 dBm (0.0125 W)
Output Power Max.	2 Mbps: 7.74 dBm (0.0059 W)
Output Fower Max.	500 kbps(S2): 10.84 dBm (0.0121 W)
	125 kbps(S8): 10.51 dBm (0.0112 W)
Test Software Version	RTL8851B_USB_MP_Package_ALPHA_v2.0.29
Test Model	Archer TX10UB Nano
Sample Status	Final shipment prototype
EUT Modification(s)	N/A

### NOTE:

(1) The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

### (2) Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	20	2442
01	2404	21	2444
02	2406	22	2446
03	2408	23	2448
04	2410	24	2450
05	2412	25	2452
06	2414	26	2454
07	2416	27	2456
08	2418	28	2458
09	2420	29	2460
10	2422	30	2462
11	2424	31	2464
12	2426	32	2466
13	2428	33	2468
14	2430	34	2470
15	2432	35	2472
16	2434	36	2474
17	2436	37	2476
18	2438	38	2478
19	2440	39	2480



(3) Table for Filed Antenna:

Antenna	Manufacturer	P/N	Antenna Type	Connector	Gain (dBi)		
1	TP-LINK CORPORATION PTE. LTD.	6035500184	Dipole	N/A	0.5		

(4) The above Antenna information are derived from the antenna data sheet provided by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

### 2.2 TEST MODES

Test Items	Test mode	Channel	Note
AC power line conducted emissions	Normal/Idle	-	-
Transmitter Radiated Emissions (below 1GHz)	1 Mbps	00	-
Transmitter Radiated Emissions	2 Mbps / 1 Mbps	00/39	Bandedge
(above 1GHz)	2 Mbps / 1 Mbps	00/19/39	Harmonic
Bandwidth	2 Mbps / 1 Mbps	00/19/39	-
Output Power	2 Mbps / 1 Mbps / 500 kbps / 125 kbps	00/19/39	-
Power Spectral Density	2 Mbps / 1 Mbps	00/19/39	-
Antenna conducted Spurious Emission	2 Mbps / 1 Mbps	00/19/39	-

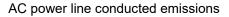
NOTE:

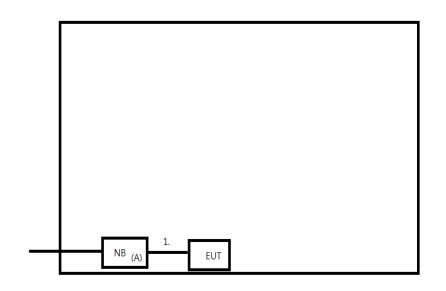
- (1) The measurements for Output Power were tested, the worst cases were 1Mbps and 2Mbps, only worst case were documented for other test items.
- (2) For radiated emission band edge test, both Vertical and Horizontal are evaluated, but only the worst case (Vertical) is recorded.
- (3) All X, Y and Z axes are evaluated, but only the worst case (X axis) is recorded.
- (4) For radiated emission below 1 GHz test, the 1 Mbps channel 00 is found to be the worst case and recorded.



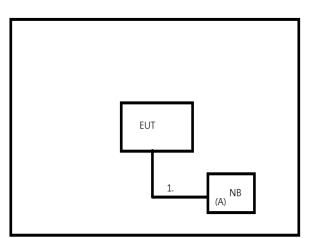
### 2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 2.4.





Radiated Emissions



### 2.4 SUPPORT UNITS

11							
	Item	Equipment	Brand	Model No.		Series No.	Remarks
	Α	NB	Lenovo	ThinkBook 14 G4	IAP	MP28KHAH	Furnished by test lab.
	Item	Shielded	Ferrite Core	Length		Cable Type	Remarks
	1	Yes	No	1m	U	SB to USB Cable	Furnished by test lab.



## 3 AC POWER LINE CONDUCTED EMISSIONS TEST

### 3.1 LIMIT

Frequency	Limit (dBµV)		
(MHz)	Quasi-peak	Average	
0.15 - 0.5	66 - 56 *	56 - 46 *	
0.50 - 5.0	56	46	
5.0 - 30.0	60	50	

NOTE:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
- (3) The test result calculated as following:
  - Measurement Value = Reading Level + Correct Factor
  - Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor (if use)
  - Margin Level = Measurement Value Limit Value

Calculation example:

Reading Level (dBµV)		Correct Factor (dB)		Measurement Value (dBµV)
38.22	+	3.45	Ш	41.67

Measurement Value (dBµV)		Limit Value (dBµV)		Margin Level (dB)
41.67	-	60	=	-18.33

The following table is the setting of the receiver.

Receiver Parameter	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 KHz

### 3.2 TEST PROCEDURE

- a. The EUT was placed 0.8 m above the horizontal ground plane with the EUT being connected to the power mains through a line impedance stabilization network (LISN).
  - All other support equipment were powered from an additional LISN(s).
  - The LISN provides 50 Ohm/50uH of impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle to keep the cable above 40 cm.
- c. Excess I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable will be terminated, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. The LISN is spaced at least 80 cm from the nearest part of the EUT chassis.
- e. For the actual test configuration, please refer to the related Item EUT TEST PHOTO.

### NOTE:

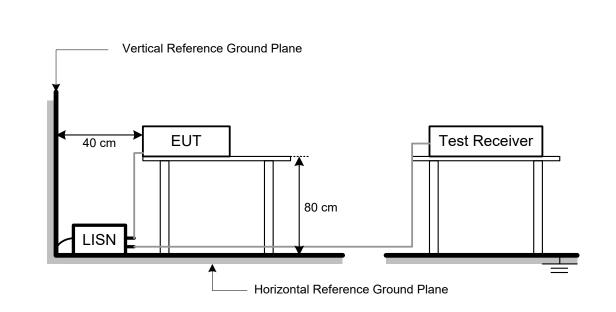
- In the results, each reading is marked as Peak, QP or AVG per the detector used. BW=9 kHz (6 dB Bandwidth)
- (2) All readings are Peak unless otherwise stated QP or AVG in column of Note. Both the QP and the AVG readings must be less than the limit for compliance.

### 3.3 DEVIATION FROM TEST STANDARD

No deviation.



### 3.4 TEST SETUP



### 3.5 TEST RESULT

Please refer to the APPENDIX A.



# 4 RADIATED EMISSIONS TEST

### 4.1 LIMIT

In case the emission fall within the restricted band specified on 15.205, then the 15.209 limit in the table below has to be followed.

### LIMITS OF RADIATED EMISSIONS MEASUREMENT (9 kHz to 1000 MHz)

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
960~1000	500	3

### LIMITS OF RADIATED EMISSIONS MEASUREMENT (Above 1000 MHz)

Frequency (MHz)	Radiated I (dBu	Measurement Distance	
	Peak	Average	(meters)
Above 1000	74	54	3

NOTE:

(1) The limit for radiated test was performed according to FCC CFR Title 47, Part 15, Subpart C.

- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).
- (4) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)

Margin Level = Measurement Value - Limit Value

Calculation example:

Reading Level		Correct Factor		Measurement Value
(dBuV)		(dB)		(dBuV/m)
41.91	+	-8.36	Ш	33.55

Measurement Value		Limit Value		Margin Level
(dBuV/m)		(dBuV/m)		(dB)
33.55	-	43.50	Ш	-9.95

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW	1MHz / 3MHz for Peak,
(Emission in restricted band)	1MHz / 1/T for Average

Spectrum Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9KHz~90KHz for PK/AVG detector
Start ~ Stop Frequency	90KHz~110KHz for QP detector
Start ~ Stop Frequency	110KHz~490KHz for PK/AVG detector
Start ~ Stop Frequency	490KHz~30MHz for QP detector
Start ~ Stop Frequency	30MHz~1000MHz for QP detector





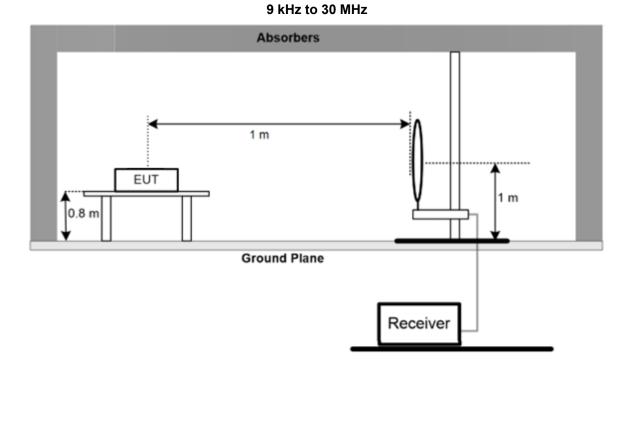
### 4.2 TEST PROCEDURE

- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation (below 1GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5 m, the height of the test C. antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- The receiver system was set to peak and average detect function and specified bandwidth with maximum e. hold mode when the test frequency is above 1GHz.
- The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the f. measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- For the actual test configuration, please refer to the related Item EUT TEST PHOTO. i.

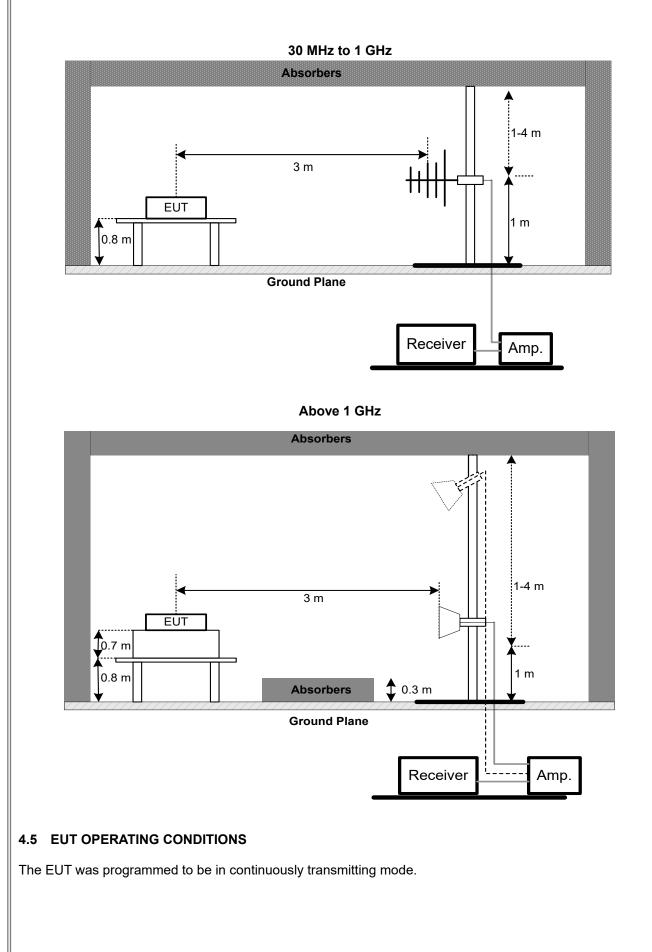
### 4.3 DEVIATION FROM TEST STANDARD

No deviation.

### 4.4 TEST SETUP









### 4.6 TEST RESULT – BELOW 30 MHZ

Please refer to the APPENDIX B.

### 4.7 TEST RESULT – 30 MHZ TO 1 GHZ

Please refer to the APPENDIX C.

### 4.8 TEST RESULT – ABOVE 1 GHZ

Please refer to the APPENDIX D.

### NOTE:

(1) No limit: This is fundamental signal, the judgment is not applicable. For fundamental signal judgment was referred to Peak output test.



### 5 BANDWIDTH TEST

### 5.1 APPLIED PROCEDURES / LIMIT

Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS

### 5.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 100KHz, VBW=300KHz, Sweep time = 2.5 ms.

### 5.3 DEVIATION FROM STANDARD

No deviation.

### 5.4 TEST SETUP



### 5.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 unless otherwise a special operating condition is specified in the follows during the testing.

### 5.6 TEST RESULTS

Please refer to the APPENDIX E.



### 6 OUTPUT POWER TEST

### 6.1 APPLIED PROCEDURES / LIMIT

Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Maximum Output Power	1 watt or 30dBm	2400-2483.5	PASS

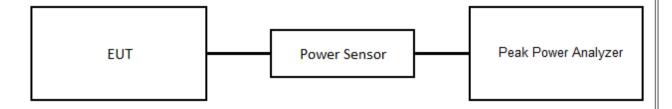
### 6.2 TEST PROCEDURE

- a. The EUT was directly connected to the peak power analyzer and antenna output port as show in the block diagram below,
- b. The maximum peak conducted output power was performed in accordance with FCC KDB 558074 D01 15.247 Meas Guidance.

### 6.3 DEVIATION FROM STANDARD

No deviation.

### 6.4 TEST SETUP



### 6.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 unless otherwise a special operating condition is specified in the follows during the testing.

### 6.6 TEST RESULTS

Please refer to the APPENDIX F.



## 7 POWER SPECTRAL DENSITY TEST

### 7.1 APPLIED PROCEDURES / LIMIT

Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e)	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

### 7.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW=3KHz, VBW=10 KHz, Sweep time = auto.

### 7.3 DEVIATION FROM STANDARD

No deviation.

### 7.4 TEST SETUP



### 7.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 unless otherwise a special operating condition is specified in the follows during the testing.

### 7.6 TEST RESULTS

Please refer to the APPENDIX G.



# 8 ANTENNA CONDUCTED SPURIOUS EMISSION

### 8.1 APPLIED PROCEDURES / LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced 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, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits.

### 8.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 100KHz, VBW=300KHz, Sweep time = 10 ms.

### 8.3 DEVIATION FROM STANDARD

No deviation.

### 8.4 TEST SETUP



### 8.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 unless otherwise a special operating condition is specified in the follows during the testing.

### 8.6 TEST RESULTS

Please refer to the APPENDIX H.



# 9 LIST OF MEASURING EQUIPMENTS

	AC Power Line Conducted Emissions											
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until						
1	Two-Line V-Network	R&S	ENV216	101051	2023/7/21	2024/7/20						
2	Test Cable	EMCI	EMCRG58-BM-B M-9000	210501	2023/12/11	2024/12/10						
3	EXA Spectrum Analyzer	keysight	N9038A	MY54130009	2023/6/26	2024/6/25						
4	Measurement Software	Aeasurement Earad		N/A	N/A	N/A						

			Radiated Emission	ons		
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Broad-Band Horn Antenna	RFSPIN	DRH18-E	210109A18E	2024/1/10	2025/1/9
2	Pre-Amplifier	EMCI	EMC051845SE	980779	2023/12/11	2024/12/10
3	Test Cable	EMCI	EMC105-SM-SM- 1000	210119	2023/12/11	2024/12/10
4	Test Cable	EMCI	EMC105-SM-SM- 3000	210118	2023/12/11	2024/12/10
5	Test Cable	EMCI	EMC105-SM-SM- 7000	210117	2023/12/11	2024/12/10
6	EXA Spectrum Analyzer	keysight	N9010A	MY56480554	2023/9/12	2024/9/11
7	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	01207	2023/12/18	2024/12/17
8	EMI Test Receiver	Keysight	N9038A	MY54130009	2023/6/26	2024/6/25
9	Pre-Amplifier	EMCI	EMC001330-202 01222	980807	2023/12/11	2024/12/10
10	Test Cable	EMCI	EMC-8D-NM-NM -5000	150106	2023/12/11	2024/12/10
11	Test Cable	EMCI	EMC-CFD-400-N M-NM-8000	200348	2023/12/11	2024/12/10
12	Measurement Software	Farad	EZ_EMC (Ver. NB-03A1-01)	N/A	N/A	N/A

	Bandwidth											
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until						
1	Spectrum Analyzer	R&S	FSP 30	100854	2023/6/26	2024/6/25						
2	30dbAttenuator	INMET	00800AK010-30	02	2024/4/19	2025/4/18						
3	BTL-Conducred Test	N/A	1247788684	N/A	N/A	N/A						

	Output Power											
Item	Kind of Equipment	Manufacturer	Manufacturer Type No. Serial No.		Calibrated Date	Calibrated Until						
1	Spectrum Analyzer	R&S	FSP 30	100854	2023/6/26	2024/6/25						
2	30dbAttenuator	INMET	00800AK010-30	02	2024/4/19	2025/4/18						
3	BTL-Conducred N/A		1247788684	N/A	N/A	N/A						



	Power Spectral Density											
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until						
1	Spectrum Analyzer	R&S	FSP 30	100854	2023/6/26	2024/6/25						
2	30dbAttenuator	INMET	00800AK010-30	02	2024/4/19	2025/4/18						
3	BTL-Conducred Test	N/A	1247788684	N/A	N/A	N/A						

	Antenna conducted Spurious Emission											
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until						
1	Spectrum Analyzer	R&S	FSP 30	100854	2023/6/26	2024/6/25						
2	30dbAttenuator	INMET	00800AK010-30	02	2024/4/19	2025/4/18						
3	BTL-Conducred Test	N/A	1247788684	N/A	N/A	N/A						

Remark: "N/A" denotes no model name, no serial no. or no calibration specified. All calibration period of equipment list is one year.



# **10 EUT TEST PHOTO**

Please refer to document Appendix No.: TP-2403G134-1 (APPENDIX-TEST PHOTOS).

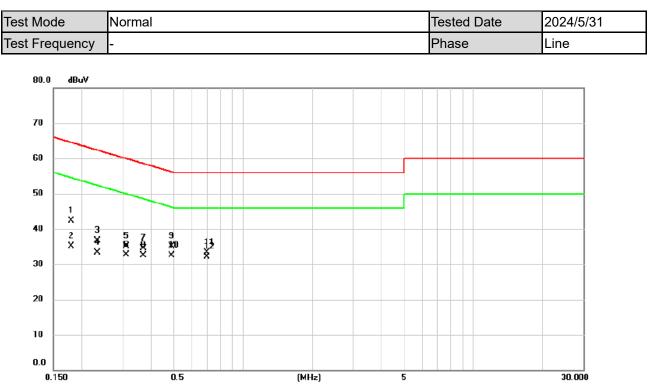
# 11 EUT PHOTOS

Please refer to document Appendix No.: EP-2403G134-1 (APPENDIX-EUT PHOTOS).

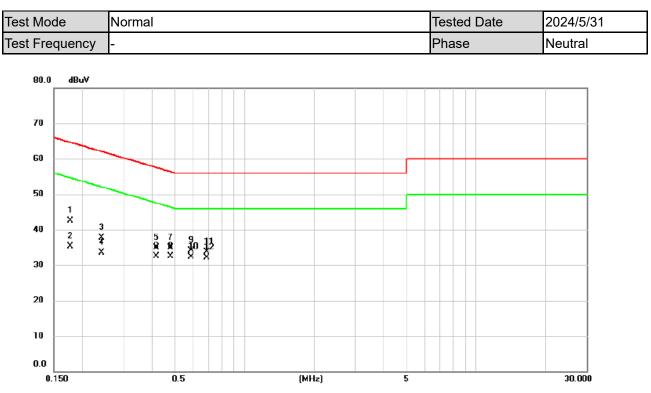


# APPENDIX A AC POWER LINE CONDUCTED EMISSIONS

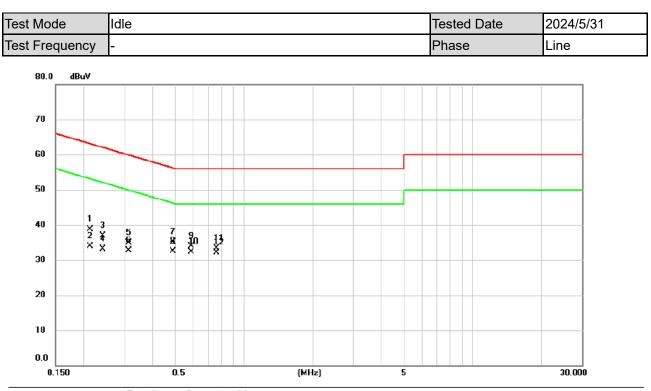




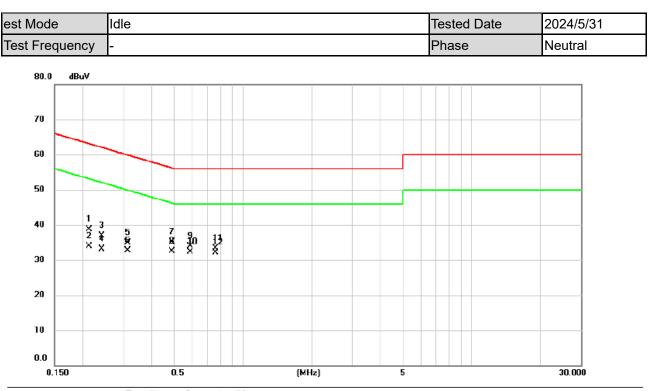
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1790	32.61	9.64	42.25	64.53	-22.28	QP	
2	0.1790	25.52	9.64	35.16	54.53	-19.37	AVG	
3	0.2330	27.11	9.64	36.75	62.34	-25.59	QP	
4	0.2330	23.61	9.64	33.25	52.34	-19.09	AVG	
5	0.3106	25.45	9.65	35.10	59.95	-24.85	QP	
6	0.3106	23.07	9.65	32.72	49.95	-17.23	AVG	
7	0.3684	24.82	9.65	34.47	58.54	-24.07	QP	
8	0.3684	22.84	9.65	32.49	48.54	-16.05	AVG	
9	0.4895	25.44	9.66	35.10	56.18	-21.08	QP	
10 *	0.4895	22.90	9.66	32.56	46.18	-13.62	AVG	
11	0.6980	23.64	9.68	33.32	56.00	-22.68	QP	
12	0.6980	22.50	9.68	32.18	46.00	-13.82	AVG	
-								



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1768	32.90	9.63	42.53	64.63	-22.10	QP	
2	0.1768	25.63	9.63	35.26	54.63	-19.37	AVG	
3	0.2413	28.11	9.63	37.74	62.05	-24.31	QP	
4	0.2413	23.86	9.63	33.49	52.05	-18.56	AVG	
5	0.4167	25.19	9.63	34.82	57.51	-22.69	QP	
6	0.4167	22.88	9.63	32.51	47.51	-15.00	AVG	
7	0.4790	25.26	9.64	34.90	56.36	-21.46	QP	
8	0.4790	22.94	9.64	32.58	46.36	-13.78	AVG	
9	0.5900	24.46	9.65	34.11	56.00	-21.89	QP	
10 *	0.5900	22.59	9.65	32.24	46.00	-13.76	AVG	
11	0.6890	23.95	9.66	33.61	56.00	-22.39	QP	
12	0.6890	22.54	9.66	32.20	46.00	-13.80	AVG	
12	0.6890	22.54	9.66	32.20	40.00	-13.80	AVG	



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2123	29.06	9.64	38.70	63.11	-24.41	QP	
2		0.2123	24.22	9.64	33.86	53.11	-19.25	AVG	
3		0.2424	27.25	9.64	36.89	62.01	-25.12	QP	
4		0.2424	23.56	9.64	33.20	52.01	-18.81	AVG	
5		0.3144	25.27	9.65	34.92	59.85	-24.93	QP	
6		0.3144	22.99	9.65	32.64	49.85	-17.21	AVG	
7		0.4900	25.43	9.66	35.09	56.17	-21.08	QP	
8	*	0.4900	22.93	9.66	32.59	46.17	-13.58	AVG	
9		0.5900	24.16	9.67	33.83	56.00	-22.17	QP	
10		0.5900	22.56	9.67	32.23	46.00	-13.77	AVG	
11		0.7610	23.62	9.68	33.30	56.00	-22.70	QP	
12		0.7610	22.51	9.68	32.19	46.00	-13.81	AVG	



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2123	29.06	9.64	38.70	63.11	-24.41	QP	
2		0.2123	24.22	9.64	33.86	53.11	-19.25	AVG	
3		0.2424	27.25	9.64	36.89	62.01	-25.12	QP	
4		0.2424	23.56	9.64	33.20	52.01	-18.81	AVG	
5		0.3144	25.27	9.65	34.92	59.85	-24.93	QP	
6		0.3144	22.99	9.65	32.64	49.85	-17.21	AVG	
7		0.4900	25.43	9.66	35.09	56.17	-21.08	QP	
8	*	0.4900	22.93	9.66	32.59	46.17	-13.58	AVG	
9		0.5900	24.16	9.67	33.83	56.00	-22.17	QP	
10		0.5900	22.56	9.67	32.23	46.00	-13.77	AVG	
11		0.7610	23.62	9.68	33.30	56.00	-22.70	QP	
12		0.7610	22.51	9.68	32.19	46.00	-13.81	AVG	





# APPENDIX B RADIATED EMISSIONS - 9 KHZ TO 30 MHZ

	st Mo				1 Mbps)			Fest Da			/6/20		
					2MHz		Polarization				Vertical		
Test Frequency           Temp           120.0         dBuV/m           110         0           90         00           70         60           50         50				2	5°C			Hum	i.		65	5%	
	120.0	dBu∀/m										_	
	110												
	100												
	90												
	80											_	
	70	$\lfloor$											
	60	N											
	50												
	40											_	
	30	1	23	4 5 × ×	6							_	
	20	1×	² ×	^ ^	6 X							_	
	10											_	
	0.0												
	0.0	09 3.01		9.01	12.01	15.00	) 18.0	)0 2		24.00	30.00	MHz	
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	a Table Degree			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment		
1		2.5282	29.97	-4.37	25.60	69.54	-43.94	peak					
2		4.7776	29.85	-5.64	24.21	69.54	-45.33	peak					
3		5.8572	30.24	-4.35	25.89	69.54	-43.65	peak					
4	*	7.5367	31.26	-3.78	27.48	69.54	-42.06	peak					
5		8.3165	30.99	-3.89	27.10	69.54	-42.44	peak					
6		9.6061	29.46	-4.13	25.33	69.54	-44.21	peak					

т	est Mode		BL	E (1 Mbps)	Test Date				2024/6/20				
	t Frequence	CV.	2402MHz				Polarization				Vertical		
Temp				25°C	Hum.				65%				
400									•				
120.	0 dBuV/m										7		
110											_		
100											_		
90													
80											_		
70											_		
60											_		
50											_		
40	1 X										_		
30	Ž	3	4 ×	5 6							_		
20		×	×	5 6 X X							_		
10											_		
0.0													
0.	.009 3.01	6.01	9.01	12.01	15.00	) 18.0	)0 21	.00	24.00	30.00	MHz		
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree				
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment			
1 *	1.2086	42.46	-1.42	41.04	65.96	-24.92	peak						
2	2.4682	35.45	-4.29	31.16	69.54	-38.38	peak						
3	5.8872	30.33	-4.31	26.02	69.54	-43.52	peak						
4	8.1965	30.43	-3.85	26.58	69.54	-42.96	peak						
5	9.3962	29.90	-4.12	25.78	69.54	-43.76	peak						

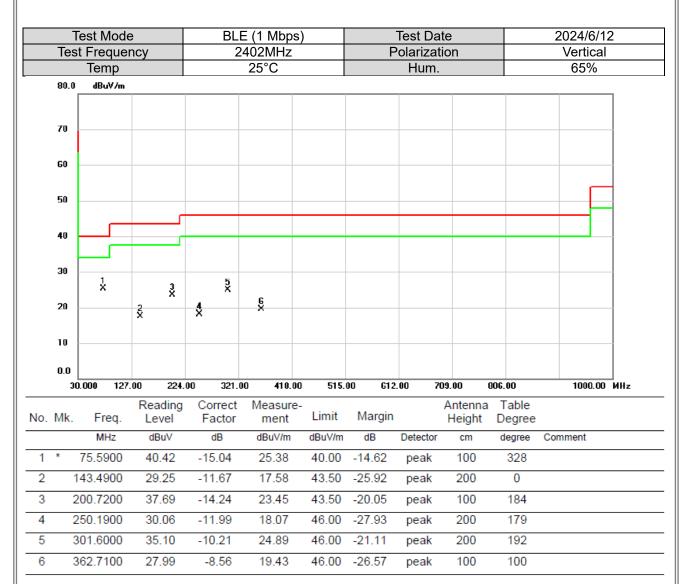
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.





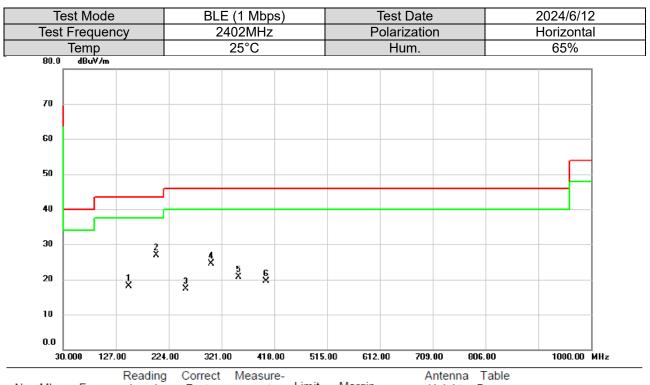
# APPENDIX C RADIATED EMISSIONS - 30 MHZ TO 1 GHZ





- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.





No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		151.2500	29.27	-11.11	18.16	43.50	-25.34	peak	200	214	
2	*	201.6900	41.23	-14.23	27.00	43.50	-16.50	peak	100	165	
3		256.0100	29.14	-11.82	17.32	46.00	-28.68	peak	100	224	
4		301.6000	34.71	-10.21	24.50	46.00	-21.50	peak	100	214	
5		352.0400	29.51	-8.86	20.65	46.00	-25.35	peak	100	192	
6		402.4800	26.86	-7.41	19.45	46.00	-26.55	peak	200	72	

- Measurement Value = Reading Level + Correct Factor.
   Margin Level = Measurement Value Limit Value.



# APPENDIX D RADIATED EMISSIONS - ABOVE 1 GHZ

		Test Mode			E (1 Mbps	<u>\</u>	-	Fest Dat	10		2024/6/11	
		st Frequer		 24	Polarization				Vertical			
	Temp			Ζ-		Hum.			65%			
	120				25°C			i idiiii			0070	
	110											
	100	ı										
	90											
	80											
	70					4 ×						
	60											
	50											
	40					1 anna	l				5	
	30	any designed	enversions to survive	and and a star and a star and a star of the		2	Theodolahanashadan	lanna taran da ar	landelaningadaat nadalah	mmpuspensetty	hannen annen Annen Annen Annen B	
	20					x					×	
	10											
	0.0	2302.000 2322	2.00 2342	.00 2362.	00 2382.	00 2402	.00 2422	2.00 2	442.00 2	462.00	2502.00	MH-2
No.			Reading Level	Correct Factor	Measure		Margin	L.UU L	Antenna Height	Table Degree	2002.00	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1		2385.200	37.88	-6.13	31.75	74.00	-42.25	peak				
2		2385.200	24.99	-6.13	18.86	54.00	-35.14	AVG				
3		2402.200	87.77	-6.09	81.68	74.00	7.68	peak			No Limit	
4		2402.200	71.96	-6.09	65.87	54.00	11.87	AVG			No Limit	
5 6		2492.200 2492.200	37.82 24.45	-5.90 -5.90	31.92 18.55		-42.08 -35.45	peak AVG				

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

		Test Mode			E (1 Mbps	)		lest Dat			2024/6/11	
	Te	st Frequen	су	24	480MHz		P	olarizati	on		Vertical	
	1.04				25°C			Hum.			65%	
	120	0.0 dBuV/m										
	110	0										
	100	D										
	90					3						
	80					Í	1					
	70					4 ×						
	60											
	50											
	40					[]	5					
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	20	2 X					x					
	10											
	0.0											
		2380.000 2400	.00 2420	.00 2440	.00 2460.	00 2490	.00 250	0.00 29	520.00 2	2540.00	2580.00 MI	lz
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure ment	e- Limit	Margin		Antenna Height	Table Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1		2387.000	37.63	-6.13	31.50	74.00	-42.50	peak				
2		2387.000	24.32	-6.13	18.19	54.00	-35.81	AVG				
3	Х	2479.800	90.56	-5.92	84.64	74.00	10.64	peak			No Limit	
4	*	2479.800	74.19	-5.92	68.27	54.00	14.27	AVG			No Limit	
		2479.800 2483.800 2483.800	74.19 40.37 27.99	-5.92 -5.92	68.27 34.45 22.07	74.00	14.27 -39.55 -31.93	AVG peak			No Limit	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



										-		
		est Mode			(2 Mbps	)		est Dat			2024/6/11	
	Test	Frequenc	;y		02MHz		Po	larizatio	on		Vertical	
_		Temp			25°C			Hum.			65%	
	120.	0 dBuV/m										1
	110											
	100											
	90											
	80											
	70											
	60											
	50											
	40					1					5	
	30	have have been to be a second	nation-constrained	harmharmannah	radiologialaciaticantelian		"warden alger	habbertoninab	he,	adam Awar	for the second s	1
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	10											
	0.0 2	302.000 2322	.00 2342	.00 2362	.00 2382	2.00 2402	2.00 242	2.00 2	2442.00 2	2462.00	2502.00	MHz
No.	Mk.	Freq.	Reading Level	Correct Factor	Measur ment	e- Limit	Margin		Antenna Height	Table Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1	1	2384.400	38.66	-6.13	32.53	74.00	-41.47	peak				
2		2384.400	26.17	-6.13	20.04	54.00	-33.96	AVG				
3		2402.000	88.33	-6.09	82.24	74.00	8.24	peak			No Limit	
4		2402.000	86.65	-6.09	80.56	54.00	26.56	AVG			No Limit	
5		2486.200	38.26	-5.91	32.35	74.00	-41.65	peak				
6		2486.200	26.17	-5.91	20.26	54.00	-33.74	AVG				

- Measurement Value = Reading Level + Correct Factor.
   Margin Level = Measurement Value Limit Value.

		est Mode			(2 Mbps)			est Dat			2024/6/11	
	Test	Frequence	;y		80MHz		Po	olarizati	on		Vertical	
		Temp		4	25°C			Hum.			65%	
	120	.0 dBu∀/m										1
	110											
	100											
	90					2						-
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	40	1 Xulandahiya					\$					ĺ
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	20 10	×										1
	0.0											1
		2380.000 240	0.00 2420	.00 2440.	00 2460.0	0 2480	.00 250	0.00 2	520.00 2	2540.00	2590.00	J MHz
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	-	degree	Comment	
1		2383.000	38.16	-6.13	32.03	74.00	-41.97	peak				
2		2383.000	26.14	-6.13	20.01	54.00	-33.99	AVG				
3	Х	2479.600	87.56	-5.92	81.64	74.00	7.64	peak			No Limit	
		2479.600	85.82	-5.92	79.90	54.00	25.90	AVG			No Limit	
4	*	2479.000	00.02	-0.02	13.50	34.00	25.90	AVG			NO LINIC	

54.00 -30.43

AVG

**REMARKS**:

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2483.200

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SLL

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

29.49

-5.92

23.57

т.	Test Mode			(1 Mbps)			lest Da			2024/6/1	1
IE	est Frequer Temp	icy		02MHz 25°C		P	olarizat Hum.			Vertical 65%	
1	20.0 dBuV/m			25 0			num.			05%	
•											7
1	10										
1	00										-
9	0										-
9	0										-
7	'0										1
6	60										-
5	50										1
4	10										-
З	10										
2	20	1 X									-
1	0	Z X									-
0	0.0										
	1000.000 359	50.00 61.00	.00 8650.	00 11200	.00 1375	0.00 163	00.00	18850.00	21400.00	26500.0	0 MHz
No. M	lk. Freq.	Reading Level	Correct Factor	Measure ment	- Limit	Margin		Antenna Height	Table Degree		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	-	degree	Comment	
1	4804.000	31.72	-8.62	23.10	74.00	-50.90	peak				
2 *	4804.000	19.15	-8.62	10.53	54.00	-43.47	AVG				

Measurement Value = Reading Level + Correct Factor.
 Margin Level = Measurement Value - Limit Value.

	est Mode Frequenc	CV		(1 Mbps) 02MHz			lest Dat olarizati			2024/6/11 Horizontal
	Temp			25°C			Hum.			65%
120.	0 dBuV/m									
110										
100										
90										
80										
70										
60										
50										
40										
30										
20		1 X								
10		2								
0.0		×								
	000.000 3550	). OO 6100.	.00 8650.	00 11200	).00 1375(	0.00 163	300.00 1	8850.00	21400.00	26500.00
		Reading	Correct		-	Manaia			a Table	
o. Mk.	-	Level	Factor	ment	Limit	Margin			Degree	
4	MHz 4804.000	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
		31.29	-8.62	22.67		-51.33	peak			
2 '	4804.000	18.76	-8.62	10.14	54.00	-43.86	AVG			
MARK		alue = Re	ading Lev	vel + Corr e - Limit \	ect Fact	or.				

Test Frequenc           120.0         dBuV/m           110         0           90         0           1000.000         3550.           MHz         1           4880.000         2           1         4880.000		0.00 9650				,			Vertical 65%
120.0 dBuV/m 110 100 90 80 70 60 50 40 30 20 10 0.0 1000.000 3550. 0. Mk. Freq. MHz 1 4880.000	2 X 0.00 6100 Reading Level dBuV	Correct Factor	0.00 11200 Measure ment	-					
110 100 90 80 70 60 50 40 30 20 10 0.0 1000.000 3550. 0. Mk. Freq. MHz 1 4880.000	2 X 0.00 6100 Reading Level dBuV	Correct Factor	Measure ment	-		,			
100 90 80 70 60 50 40 30 20 10 0.0 1000.000 3550. 0. Mk. Freq. MHz 1 4880.000	2 X 0.00 6100 Reading Level dBuV	Correct Factor	Measure ment	-		,			
90 90 90 90 90 90 90 90 90 90	2 X 0.00 6100 Reading Level dBuV	Correct Factor	Measure ment	-		,			26500.00
90 90 90 90 90 90 90 90 90 90	2 X 0.00 6100 Reading Level dBuV	Correct Factor	Measure ment	-		,			26500.00
80 70 60 50 40 30 20 10 0.0 1000.000 3550. 1000.000 3550. 1001.000 3550.	2 X 0.00 6100 Reading Level dBuV	Correct Factor	Measure ment	-		,			26500.00
70 60 50 40 30 20 10 0.0 1000.000 3550. IO. Mk. Freq. MHz 1 4880.000	2 X 0.00 6100 Reading Level dBuV	Correct Factor	Measure ment	-		,			26500.00
60 50 40 30 20 10 0.0 1000.000 3550. Io. Mk. Freq. MHz 1 4880.000	2 X 0.00 6100 Reading Level dBuV	Correct Factor	Measure ment	-		,			26500.00
50 40 30 20 10 0.0 1000.000 3550. Io. Mk. Freq. MHz 1 4880.000	2 X 0.00 6100 Reading Level dBuV	Correct Factor	Measure ment	-		,			26500.00
40 30 20 10 0.0 1000.000 3550. 1000.000 3550. 1000.000 3550. MHz 1 4880.000	2 X 0.00 6100 Reading Level dBuV	Correct Factor	Measure ment	-		,			26500.00
30 20 10 0.0 1000.000 3550. lo. Mk. Freq. MHz 1 4880.000	2 X 0.00 6100 Reading Level dBuV	Correct Factor	Measure ment	-		,			26500.00
20 10 0.0 1000.000 3550. 1000.000 3550. 100. Mk. Freq. MHz 1 4880.000	2 X 0.00 6100 Reading Level dBuV	Correct Factor	Measure ment	-		,			26500.00
20 10 0.0 1000.000 3550. 1000.000 3550. 100. Mk. Freq. MHz 1 4880.000	2 X 0.00 6100 Reading Level dBuV	Correct Factor	Measure ment	-		,			26500.00
10 0.0 1000.000 3550. lo. Mk. Freq. MHz 1 4880.000	2 X 0.00 6100 Reading Level dBuV	Correct Factor	Measure ment	-		,			26500.00
0.0 1000.000 3550. lo. Mk. Freq. MHz 1 4880.000	0.00 6100 Reading Level dBuV	Correct Factor	Measure ment	-		,			26500.00
1000.000 3550. lo. Mk. Freq. MHz 1 4880.000	Reading Level dBuV	Correct Factor	Measure ment	-		,			26500.00
lo. Mk. Freq. MHz 1 4880.000	Level dBuV	Factor	ment	- Limit	Margin		Antonna	Table	
MHz 1 4880.000	dBuV			Current					
1 4880.000		00	dBuV/m	dBuV/m	dB	Detector	Height cm	Degree degree	Comment
		-8.43	22.03		-51.97	peak		aogroo	
2 4000.000	21.21	-8.43	12.78		-41.22	AVG			
MARKS: Measurement Va	′alue = R	eading Le	evel + Corr	rect Fact	tor.				



		est Mode t Frequenc	NV		1 Mbps) 0MHz			est Date		-	2024/6/11 Horizontal	
	103	Temp	, y		5°C			Hum.	511		65%	
	12	1.0 dBuV/m			00			Tidili.			0070	
	110	,										
	10											
	90											
	80											
	70											1
	60											
	50											
	40											
	30		1 X									1
	20 10		2 X									1
	0.0		×									1
		1000.000 3550	). OO 61 00.	00 8650.0	0 11200.0	00 1375	0.00 163	00.00 1	8850.00 2	21400.00	26500.00	MHz
lo.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1		4880.000	31.55	-8.43	23.12	74.00	-50.88	peak				
2	*	4880.000	18.75	-8.43	10.32	54.00	-43.68	AVG				

Measurement Value = Reading Level + Correct Factor.
 Margin Level = Measurement Value - Limit Value.

10	Test Mode est Frequence	C)/		(1 Mbps) 80MHz			lest Dat Darizati			2024/6/ <sup>·</sup> Vertica	
IE	Temp	зу		25°C		F	Hum.	on		65%	I
1	20.0 dBuV/m			20 0			Tium.			0070	
	10										
	00										
9	0										_
8	0										_
7	0										-
6	0										_
5	i0										
4	0										-
	:0	1 X									
	:0	2 X									
	0	×									
-	1000.000 3550	0.00 6100.	.00 8650.	.00 11200.0	00 1375	0.00 163	00.00 1	8850.00	21400.00	26500.	00 MHz
lo. N	lk. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height			
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	
1	4960.000	31.02	-8.23	22.79		-51.21	peak				
2 *	4960.000	20.17	-8.23	11.94	54.00	-42.06	AVG				

- Measurement Value = Reading Level + Correct Factor.
   Margin Level = Measurement Value Limit Value.

	st Mode Frequenc	by and the second se	24	(1 Mbps) 80MHz			est Dat			2024/6/11 Horizonta
	Temp			25°C			Hum.			65%
120.0	dBuV/m									
110										
100										
90										
80										
70										
60 -										
50 -										
40										
30		1 X								
20										
10 -		2 X								
0.0										
100	0.000 3550					0.00 163	00.00 1		1400.00	26500.00
lo. Mk.	Freq.	Reading Level	Factor	ment	Limit	Margin		Antenna Height	Degree	
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
	960.000	31.74	-8.23	23.51	74.00		peak			
2 * 49	960.000	19.12	-8.23	10.89	54.00	-43.11	AVG			

	STERALION			(2 Mbps)			Test Da			2024/6/11
11	st Frequend Temp		24	<u>402MHz</u> 25°C		Р	olariza Hum			Vertical 65%
	10.0 dBuV/m			20 0			nun	•		0070
10	0									
	0									
90	ı									
80										
70										
60										
50							_			
40										
30		1 X								
20	ı									
10		x x								
0.										
	1000.000 3550	.00 6100.	00 8650	.00 11200.	00 1375	0.00 163	00.00	18850.00	21400.00	26500.00 MH
No. MI	Erca	Reading	Correct		Limit	Margin			na Table	
10. IVI	k. Freq. MHz	Level dBuV	Factor dB	ment dBuV/m	dBuV/m	dB	Detecto		t Degree	Comment
1	4774.000	36.91	-8.70	28.21		ав -45.79		r cm	degree	Comment
1	4774.000	22.77	-8.70	14.07		-45.79	peak AVG			



	Test Mode st Frequenc	cy	24	(2 Mbps 02MHz	)		lest Date			2024 Horiz	ontal
	Temp			25°C			Hum.			65	%
12	20.0 dBu∀/m			î			1		1		
11	10										
10											
90	)										
80	)										
70	)										
60	,										
50											
4(											
30	)	1 X									
20	)	2 X									
10	)	x									
0.											
	1000.000 355					0.00 163			21400.00	265	500.00 MHz
lo. M	-	Reading Level	Correct Factor	ment	Limit	Margin		Antenna Height	Table Degree		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment	t
1	4804.000	31.76	-8.62	23.14		-50.86	peak				
2 *	4804.000	20.59	-8.62	11.97	54.00	-42.03	AVG				

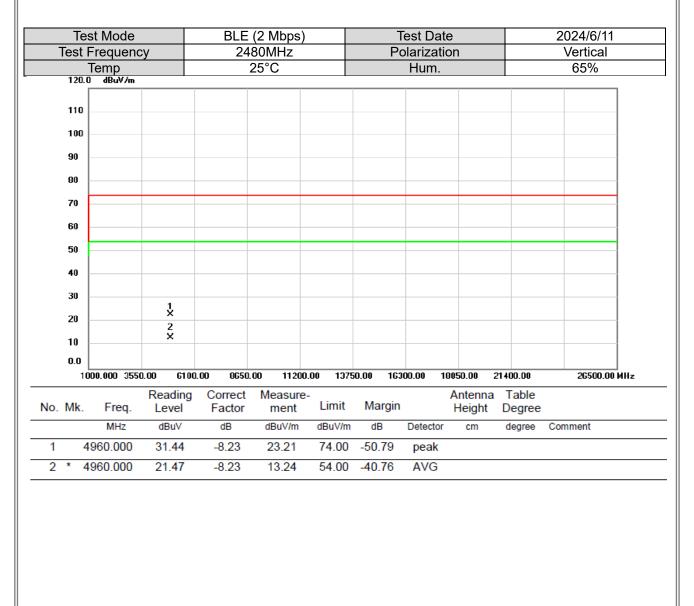
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

		est Mode Frequenc Temp	.у	244	(2 Mbps) 40MHz 25°C			est Date larizatio Hum.			2024/6/11 Vertical 65%
	12	.0 dBuV/m									
	110										
	10										
	90										
	80										
	70										
	60										
	50										
	40										
	30										
	20		1 2								
	10		× ×								
	0.0										
		1000.000 3550					0.00 163	00.00 1		21400.00 Table	26500.00 MHz
lo.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Height		
		MHz	dBuV	dB	dBuV/m	dBuV/m		Detector	cm	degree	Comment
1	*	4880.000	30.12	-8.43	21.69		-52.31	peak			
2	<b>^</b>	4880.000	22.19	-8.43	13.76	54.00	-40.24	AVG			
Me	ARK easu	S: urement Va n Level = N	alue = Rea <i>I</i> easurem	ading Lev ent Value	el + Corre - Limit Va	ct Facto	Dr.				



Temp         25°C         Hum.         65%           120.0         #6wV/m         65%         65%           110		Test Mode			(2 Mbps)			Test Dat		_	2024/6/11
1200       #BvV/m         110	Test Frequency		су		440MHz Polarization		Horizontal				
100       90 <t< th=""><th>12</th><th>0.0 dBuV/m</th><th></th><th></th><th>25 0</th><th></th><th></th><th>num.</th><th></th><th></th><th>03%</th></t<>	12	0.0 dBuV/m			25 0			num.			03%
100       90 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>											
90       90 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>											
00       00 <td< td=""><td>10</td><td>0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	10	0									
Zu       Ju       Ju <td< td=""><td>90</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	90										
60	80										
50       40       30       1	70										
40       30       4	60										
40       30       1											
30       1											
20       1											
20       2			1×								
0.0         1000.000         3550.00         6100.00         9650.00         11200.00         13750.00         16300.00         19950.00         21400.00         26500.00         MHz           Io. Mk.         Freq.         Level         Factor         ment         Limit         Margin         Antenna         Table           MHz         dBuV         dB         dBuV/m         dBuV/m         dB         Detector         cm         degree         Comment           1         4880.000         32.43         -8.43         24.00         74.00         -50.00         peak         2         *         4880.000         19.35         -8.43         10.92         54.00         -43.08         AVG         State											
ID00.000         3550.00         E100.00         8650.00         11200.00         13750.00         16300.00         18850.00         21400.00         26500.00         MHz           Io         Mk.         Freq.         Level         Factor         ment         Limit         Margin         Antenna         Table           MHz         dBuV         dB         dBuV/m         dBuV/m         dB         Detector         cm         degree         Comment           1         4880.000         32.43         -8.43         24.00         74.00         -50.00         peak         2         *         4880.000         19.35         -8.43         10.92         54.00         -43.08         AVG         State         State <td< td=""><td></td><td></td><td>×</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>			×								
Reading Io. Mk.       Correct Level       Measure- Factor       Limit ment       Margin       Antenna Height       Table Degree         MHz       dBuV       dB       dBuV/m       dB       Detector       cm       degree       Comment         1       4880.000       32.43       -8.43       24.00       74.00       -50.00       peak         2       *       4880.000       19.35       -8.43       10.92       54.00       -43.08       AVG			1 00 6100	00 8650	00 11200	00 1375	0 00 163	00.00 19	B850.00 2	1400.00	26500.00
Io.         Mk.         Freq.         Level         Factor         ment         Limit         Margin         Height         Degree           MHz         dBuV         dB         dBuV/m         dBuV/m         dB         Detector         cm         degree         Comment           1         4880.000         32.43         -8.43         24.00         74.00         -50.00         peak           2         *         4880.000         19.35         -8.43         10.92         54.00         -43.08         AVG		1000.000 000									2000.00
1       4880.000       32.43       -8.43       24.00       74.00       -50.00       peak         2       *       4880.000       19.35       -8.43       10.92       54.00       -43.08       AVG	o. Mi	-	Level	Factor	ment	Limit				Degree	
2 * 4880.000 19.35 -8.43 10.92 54.00 -43.08 AVG MARKS: Measurement Value = Reading Level + Correct Factor.									cm	degree	Comment
MARKS: Measurement Value = Reading Level + Correct Factor.											
Measurement Value = Reading Level + Correct Factor.	2 ^	4880.000	19.35	-8.43	10.92	54.00	-43.08	AVG			
Maryin Level - Measurement value - Limit value.											

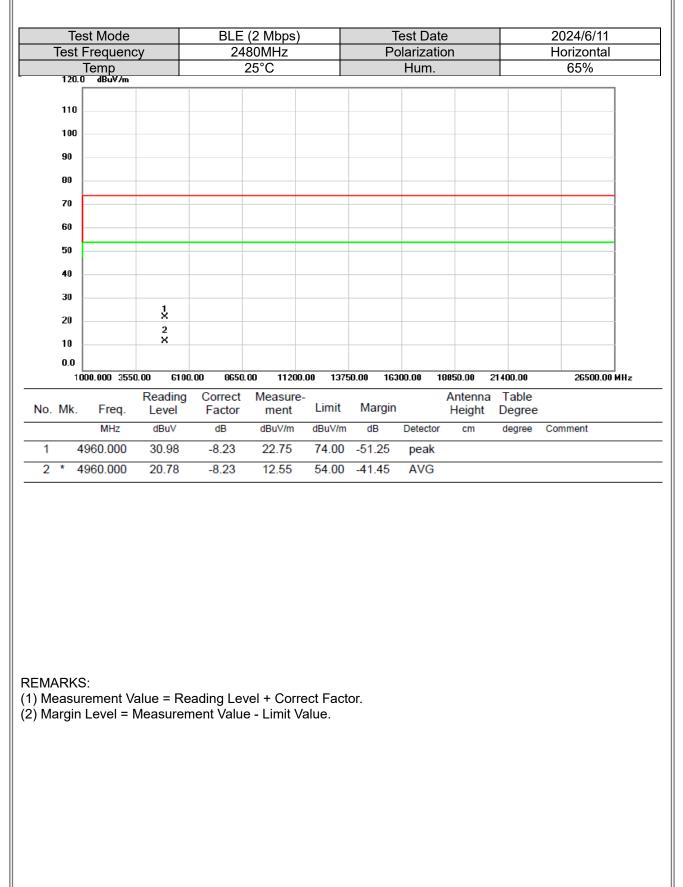




(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.



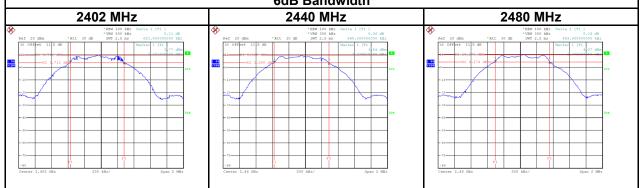


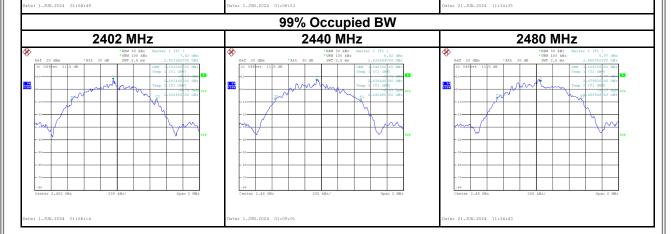


**BIL** 



Test Mode: BLE (1 Mbps)						
6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result			
0.654	1.032	500	Pass			
6.680	1.040	500	Pass			
0.660	1.028	500	Pass			
6dB Bandwidth						
	6dB Bandwidth (MHz) 0.654 6.680	6dB Bandwidth (MHz)         99% Occupied BW (MHz)           0.654         1.032           6.680         1.040	6dB Bandwidth (MHz)         99% Occupied BW (MHz)         Min. Limit (kHz)           0.654         1.032         500           6.680         1.040         500           0.660         1.028         500			







te: 1.JUN.2024 01:16:58

te: 1.JUN.2024 01:16:20

2402 MHz

Mm

\*RBW 30 kHz \*VBW 100 kH ٤

V

te: 1.JUN.2024 01:18:48

γ

ate: 1.JUN.2024 01:18:56

1 JUN 2024

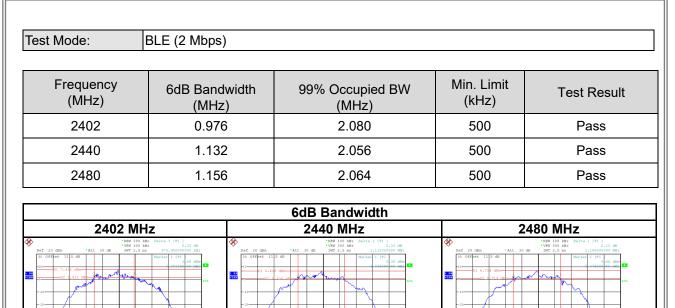
e: 1.JUN.2024 01:20:48

2480 MHz

~

V

٨IJ



99% Occupied BW

m~

V

2440 MHz

M



**BIL** 



Test Mode :	Test Mode : BLE (1 Mbps)				2024/5/30
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2402	10.96	0.0125	30.00	1.0000	Pass
2440	10.77	0.0119	30.00	1.0000	Pass
2480	10.46	0.0111	30.00	1.0000	Pass

Т	est Mode :	BLE (2 Mbps)	Tested Date	2024/5/30

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2402	7.74	0.0059	30.00	1.0000	Pass
2440	7.45	0.0056	30.00	1.0000	Pass
2480	6.96	0.0050	30.00	1.0000	Pass

Test Mode :	BLE (500 kbps)	Tested Date	2024/6/21

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2402	10.80	0.0120	30.00	1.0000	Pass
2440	10.84	0.0121	30.00	1.0000	Pass
2480	10.41	0.0110	30.00	1.0000	Pass

T 4 N A I .		
Test Mode :	BLE (125 kbps)	
TCSLINDUC .		

Tested Date 2024/6/21

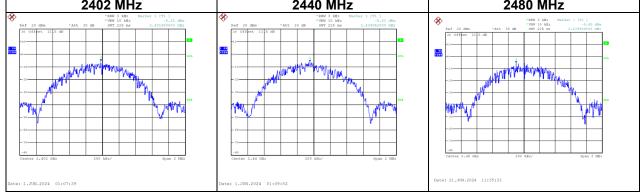
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2402	10.51	0.0112	30.00	1.0000	Pass
2440	10.34	0.0108	30.00	1.0000	Pass
2480	10.12	0.0103	30.00	1.0000	Pass



## APPENDIX G POWER SPECTRAL DENSITY TEST



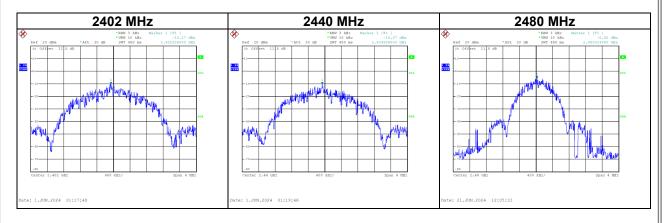
Test Mode : BLE (1 Mbps)					
Frequency (MHz)	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Test Result		
2402	-5.31	8	Pass		
2440	-5.83	8	Pass		
2480	-5.45	8	Pass		
2402 MHz	2440	MHz	2480 MHz		



ſ		
	Test Mode :	BLE

(2 Mbps)

Frequency (MHz)	Power Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Test Result
2402	-10.17	8	Pass
2440	-10.07	8	Pass
2480	-5.50	8	Pass





## APPENDIX H ANTENNA CONDUCTED SPURIOUS EMISSION



