

Produkte
Products

Prüfbericht - Nr.:		19660362 001		Seite 1 von 40	
<i>Test Report No.:</i>		<i>Page 1 of 40</i>			
Auftraggeber: <i>Client:</i>		American Megatrends India Private Limited Kumaran Nagar, Semmanchery, Off. Old Mahabalipuram Road Chennai-600119, India			
Gegenstand der Prüfung: <i>Test item:</i>		B.O.L.T Spirometer			
Bezeichnung: <i>Identification:</i>	VA08	Serien-Nr.: <i>Serial No.</i>	Engineering Sample		
Wareneingangs-Nr.: <i>Receipt No.:</i>	1803293443	Eingangsdatum: <i>Date of receipt:</i>	05.02.2018		
Prüfort: <i>Testing location:</i>		Refer Page 5 of 40 for Test site details			
Prüfgrundlage: <i>Test specification:</i>		FCC Part 15 Subpart C 15.247 ANSI C63.10-2013			
Prüfergebnis: <i>Test Result:</i>		Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). <i>The test items passed the test specification(s).</i>			
Prüflaboratorium: <i>Testing Laboratory:</i>		TÜV Rheinland (India) Pvt. Ltd. 82/A, 3rd Main, West Wing, Electronic City Phase 1 Hosur Road, Bangalore – 560 100. India FCC Test Site Registration no.: 496599			
geprüft / tested by:		kontrolliert / reviewed by:			
08.02.2018	Girish Kumar G Engineer	16.02.2018	Saibaba Siddapur Assistant Manager		
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>
Sonstiges / Other Aspects:		FCC ID : 2AFV6-AMI-SPIRO-02			
Abkürzungen:		Abbreviations:			
P(ass) = entspricht Prüfgrundlage		P(ass) = passed			
F(ail) = entspricht nicht Prüfgrundlage		F(ail) = failed			
N/A = nicht anwendbar		N/A = not applicable			
N/T = nicht getestet		N/T = not tested			
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i>					

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TEST SUMMARY

Section	Test item	Result	Remarks
15.247 (b) (3)	Maximum Peak Conducted Output Power	Pass	-
15.247 (a) (2)	6 dB / DTS Bandwidth	Pass	
15.247 (e)	Maximum Power Spectral Density		
15.247 (d)	Emissions in non – restricted band	Pass	
15.247 (a)(1)	Conducted Spurious Emissions	Pass	
15.247 (d) / (15.209 & 15.205)	Restricted bands of Emissions and Restricted Bands of Operation.	PASS	
15.207	Conducted emission on A.C power lines	Pass	

DOCUMENT HISTORY:

Version	Remarks
1.0	Issued for FCC Part 15 Subpart C 15.247

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1 GENERAL REMARKS

Complimentary Materials

All attachments are integral part of this test report. This applies especially to the following appendix:

APPENDIX 1: TEST SETUP PHOTOS

APPENDIX 2: EUT EXTERNAL PHOTOS

APPENDIX 3: EUT INTERNAL PHOTOS

APPENDIX 4: FCC LABEL AND LABEL LOCATION

APPENDIX 5: BLOCK DIAGRAM

APPENDIX 6: SPECIFICATION OF EUT

APPENDIX 7: SCHEMATIC DIAGRAM

APPENDIX 8: BILL OF MATERIAL

APPENDIX 9: USER MANUAL

APPENDIX 10: SAR EXCLUSION CALCULATION

2 TEST SITES

Testing Facilities

TUV Rheinland (India) Private Limited
 108 , Beside ISBR Business School,
 Electronic city Phase I
 Bangalore - 560 100.

List of Test and Measurement Instruments

Table 1: List of test and measurement instruments

Equipment	Manufacturer	Model Name	Serial Number	Calibration Due Date	Periodicity	Used for Test Items
Spectrum Analyser	Agilent Technologies	E4407B	US41192772	13.02.2018	Yearly	Antenna - Port Measurements
EMI Test Receiver	Rohde & Schwarz	ESU 40	100288	24-10-2018	Yearly	Radiated Spurious Emission
Active loop antenna	Frankonia	LAX-10	LAX-10-800	13-04-2018	Yearly	
Biconical Antenna	Schwarzbeck mess-elektronik	VHBB-9124 / BBA-9106	9124-656	09-01-19	Yearly	
Log-Periodic Antenna	Schwarzbeck mess-elektronik	VUSLP-9111B	9111B-111	16-01-19	Yearly	
Broadband Horn Antenna	Frankonia	HAX-18	HAX18-802	16-03-2018	Yearly	
Emission Horn Antenna	ETS Lindgren	116706	00107323	22-06-2018	Yearly	
Semi Anechoic Chamber	Frankonia	-	-	-	-	
EMI Test Receiver	Rohde & Schwarz	ESR7	101133	13.02.2019	Yearly	Conducted Emission on AC Power Lines
Two Line V-Network (LISN)	Rohde & Schwarz	ENV216	100022	05.09.2018	Yearly	

3 GENERAL PRODUCT INFORMATION

Product Function and Intended Use

B.O.L.T Spirometer Device is intended to test lung function and perform spirometry testing for the people of all ages, excluding infants and neonates. The device must be used by a physician, respiratory therapist or by a patient under the instructions of a physician. The device is powered by 5V DC through a USB micro connector and also has internal battery for power backup. AMI Spirometer is intended to test lung function and can make spirometry testing to the people of all ages, excluding infants and neonates.

Ratings and System Details

Table 2: Ratings and System Details

Operating Frequency Range	2400 MHz – 2483.5 MHz
Radio Protocol	Bluetooth Low Energy
Verified RF Power	-0.663 dBm
Channel Spacing	2 MHz
Modulation	GFSK
Number of antennas	1
Antenna type and gain	Chip antenna & 0.5 dBi
Supply Voltage to Product	5VDC from Power adaptor
Environmental conditions	Storage Condition: 10°C to 55°C Operational conditions : 16°C to 35°C

Measurement Uncertainty:

Table 3: Measurement Uncertainty

Parameter	Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±1.5 dB
Power Spectral Density, conducted	±3 dB
Unwanted Emissions, conducted	±3 dB
All emissions, radiated	±6 dB
Temperature	±3 °C
Supply Voltages	±3 %
Time	±5 %

TEST SET-UP AND OPERATION MODE

Principle of Configuration Selection

Transmission was enabled with highest possible duty cycle transmission on low, mid and high channel.

Test Operation and Test Software

Testing software was used to enable the continuous transmission on low/mid/high channels on the EUT for the tests in this report.

Special Accessories and Auxiliary Equipment

- None

Countermeasures to achieve EMC Compliance

- None

Test modes – data rates and modulations

For Radiated spurious emissions, the tests were performed for all data rates and only worst case results are reported in this report.

List of frequencies

Table 4: List of Center Frequencies

Frequency Band (MHz)	Channel No.	Channel Frequency (MHz)
2400 – 2483.5 (2MHz Bandwidth) BT LE	0	2402
	1	2404
	2	2406
	3	2408
	:	:
	:	:
	18	2438
	19	2440
	20	2437
	:	:
	:	:
	36	2474
	37	2476
	38	2478
	39	2480

4 TEST METHODOLOGY

Radiated Emission Test

The radiated emission measurement was performed according to the procedures in ANSI C63.10-2013. The equipment under test (EUT) was placed at the middle of the 80 cm high turntable for below 1 GHz & 1.5 m height for above 1 GHz measurement, and the EUT is 3 meters far from the measuring antenna. The turntable was rotated 360° for obtaining the maximum emission. The height of the measuring antennas was scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations. Repeat the measurement steps until the maximum emissions were obtained. The measurement above 1000 MHz was performed by horn antenna, The measurement below 30 MHz was performed by loop antenna, Measurement from 30 MHz to 200 MHz was performed by Baloon and Biconical Antenna, and measurement from 200 MHz to 1 GHz was performed by Log-Periodic Antenna.

The EUT was rotated around the X-, Y-, and Z-Axis and the results from worst case axis are recorded.

4.1.1 Test Setup Configuration

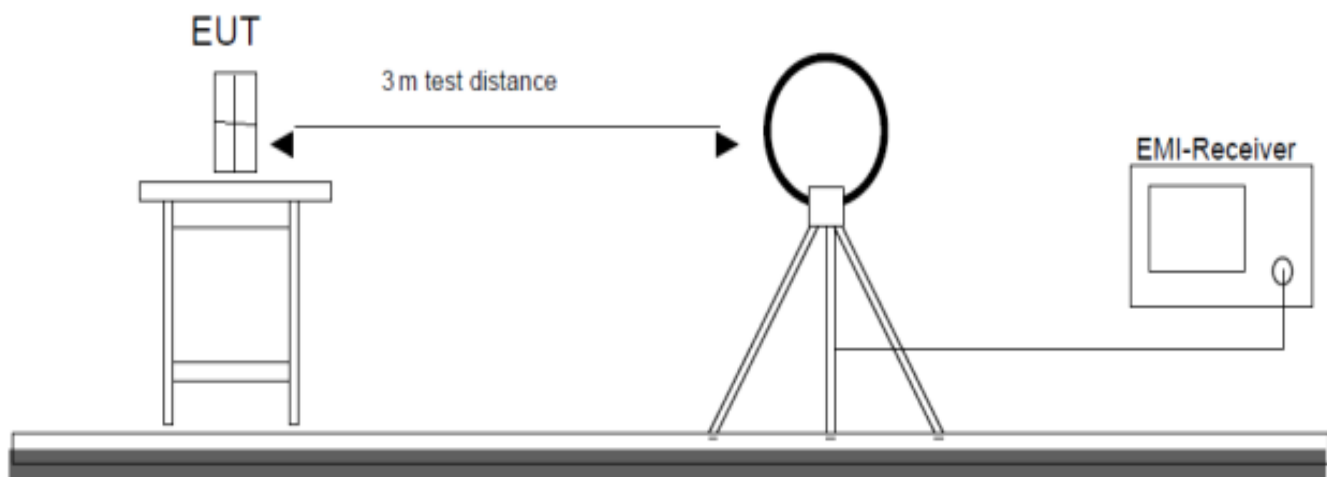


Figure 1: Frequency Range 9 kHz- 30 MHz

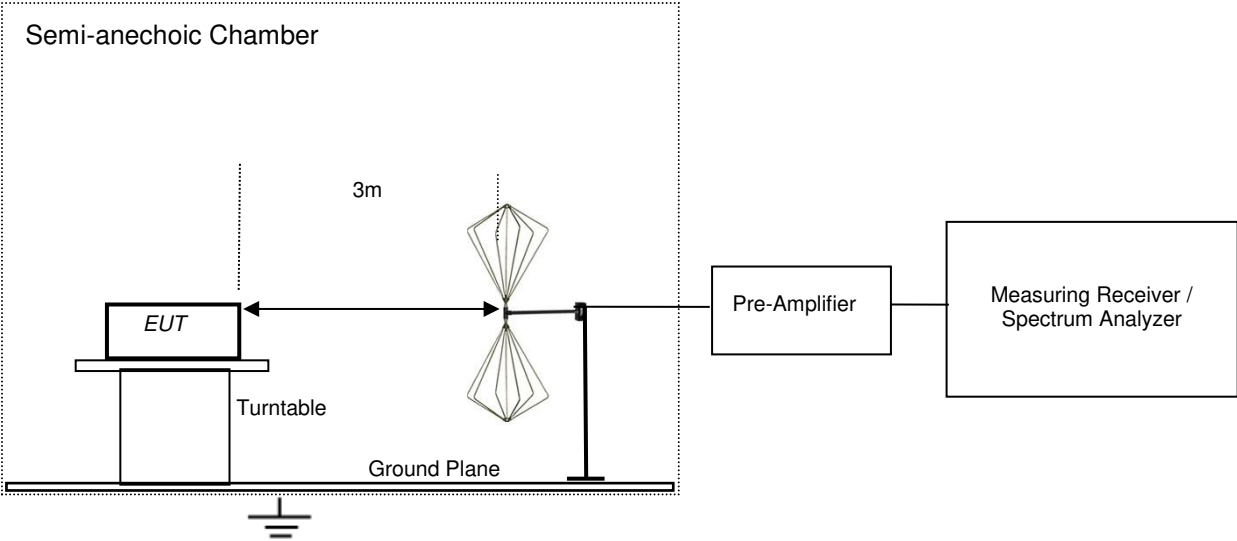


Figure 2: Frequency Range 30 MHz – 200 MHz

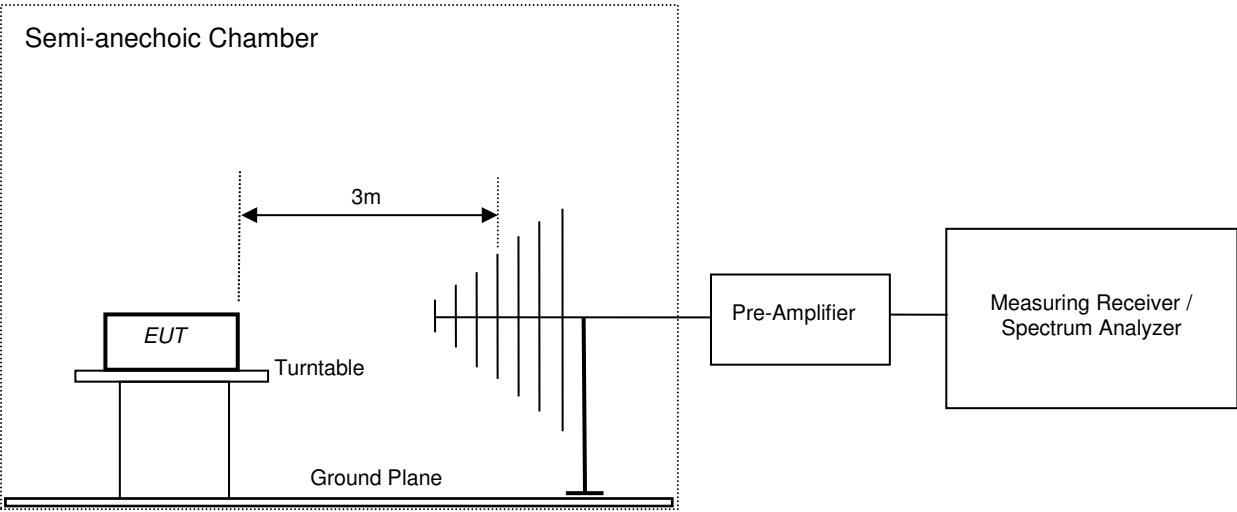


Figure 3: Frequency Range 200 MHz - 1GHz

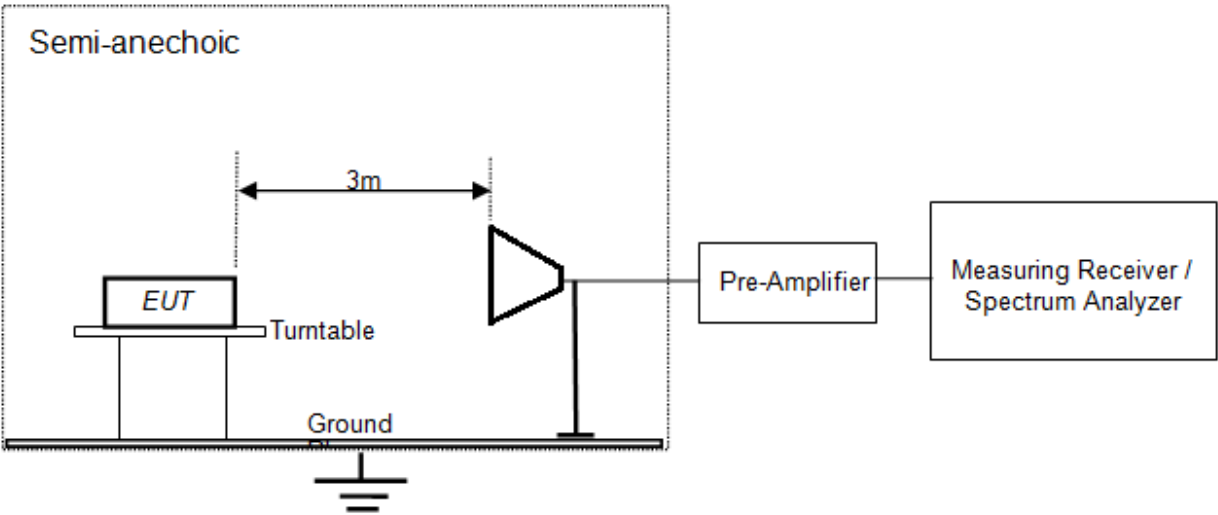


Figure 4: Frequency Range above 1 GHz

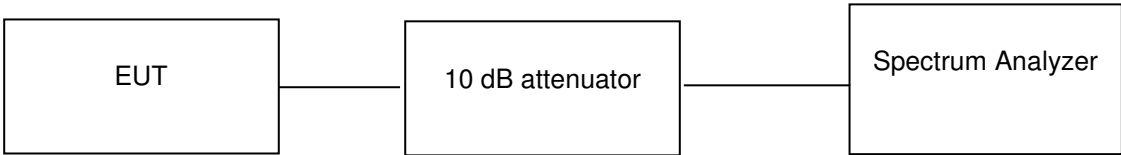
5 TEST RESULTS

Maximum Peak Conducted Output Power

Result

Pass

Test Specification	FCC part 15 Subpart C 15.247 (b)(3)
Measurement Bandwidth	1 MHz
Detector	Peak
Requirement	≤ 1 W (30 dBm)



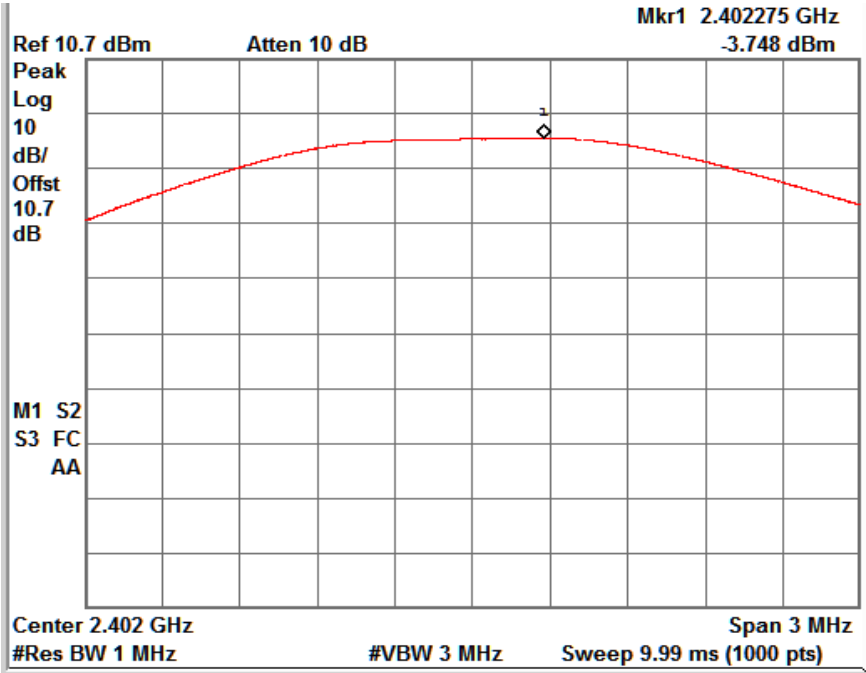
Test results:

Note: Measurements were made as per section 9.1.1 in KDB 558074 D01 DTS Meas Guidance v04.

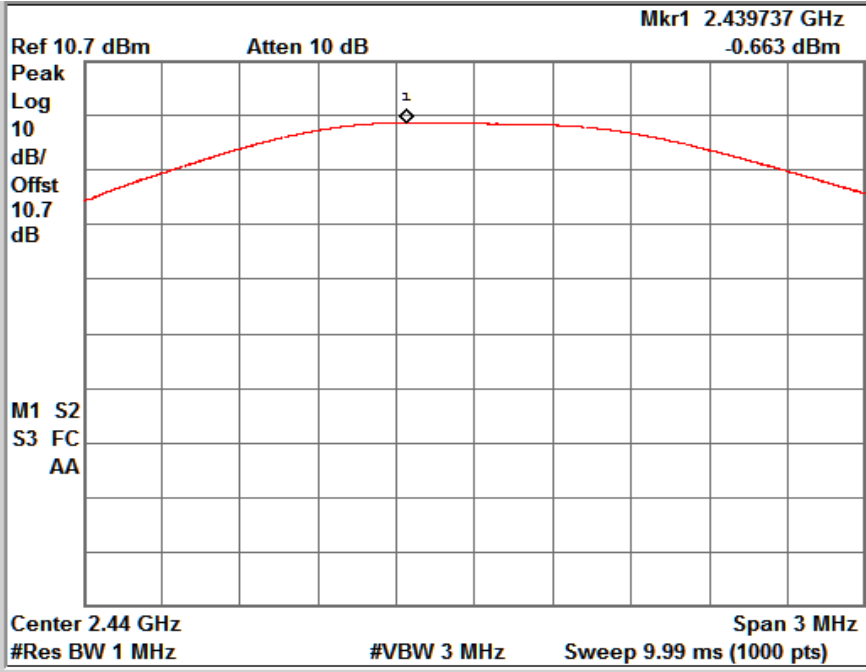
10 dB attenuator + 0.7 Cable loss = 10.7 dB offset is considered in below result

Table 5: Maximum peak conducted output power verified Test Results

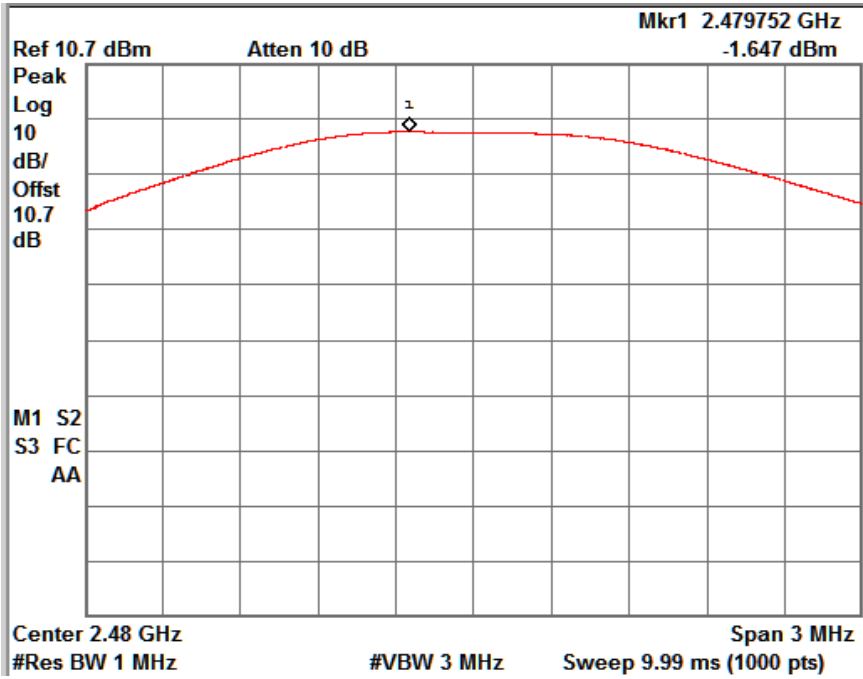
Channel Frequency (MHz)	Output power (dBm)	Limit (dBm)
2402	-3.748	30
2440	-0.663	30
2480	-1.647	30



Channel low – 2402 MHz



Channel mid – 2440 MHz



Channel high – 2480 MHz

Maximum Power Spectral Density

Result

Pass

Test Specification

FCC Part 15 Subpart C Section 15.247 (e)

Detector Function

Peak

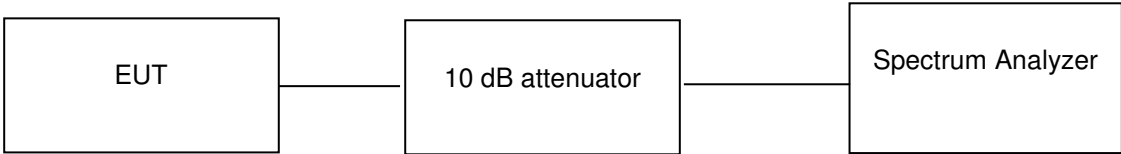
Port of testing

Antenna port

Requirement

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm.

Test Method:



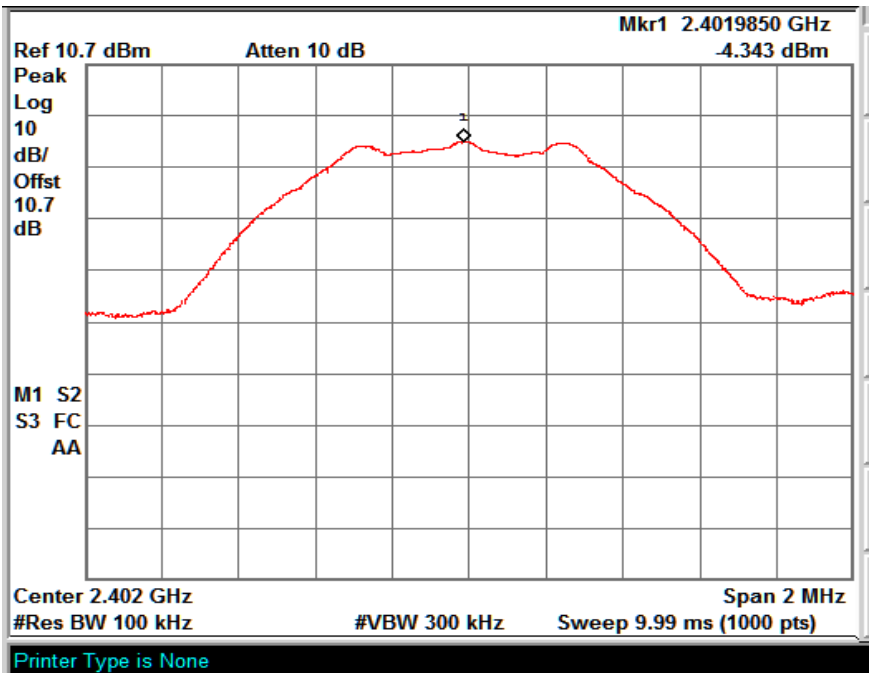
Test results:

Note: Measurements were made as per section 10.2 in KDB 558074 D01 DTS Meas Guidance v04.

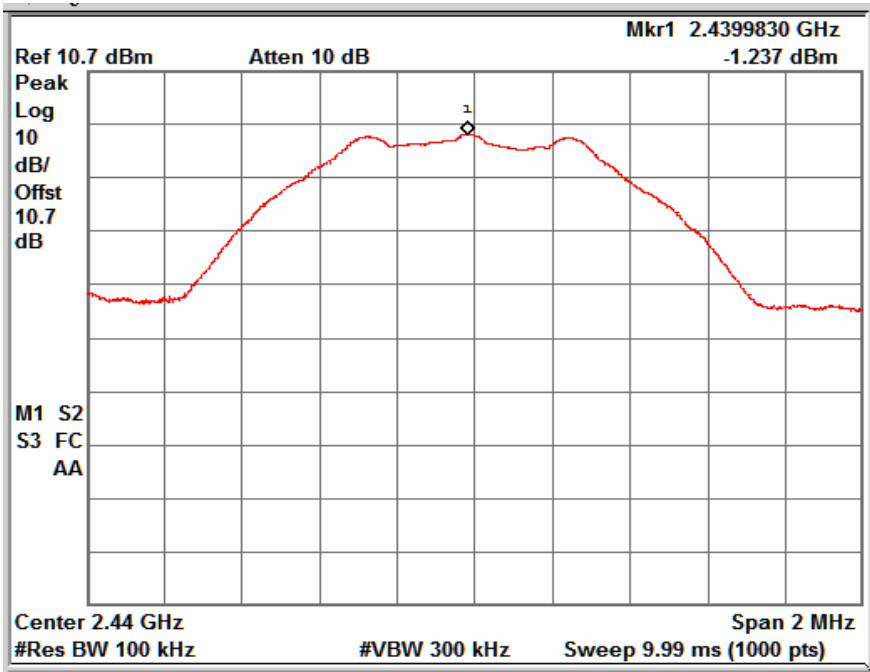
10 dB attenuator + 0.7 Cable loss = 10.7 dB offset is considered in below result

Table 6 : Maximum power spectral density verified Test Results

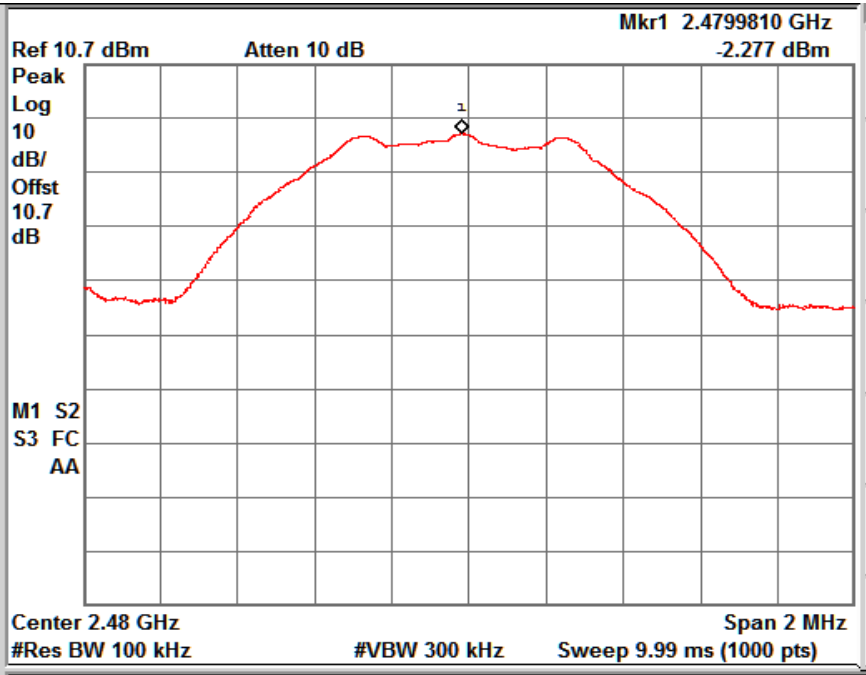
Channel Frequency (MHz)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
2402.00	-4.343	8.00	-12.430
2440.00	-1.237	8.00	-9.237
2480.00	-2.277	8.00	-10.277



Channel low – 2402 MHz



Channel mid – 2440 MHz



Channel high – 2480 MHz

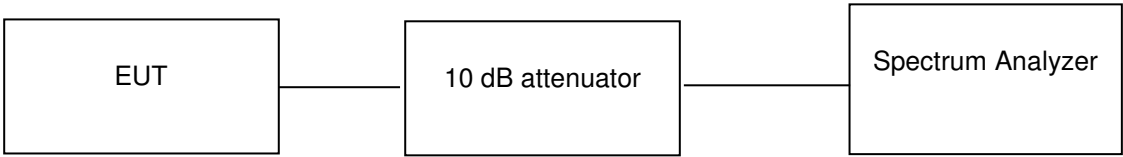
DTS Bandwidth

Result

Pass

Test Specification FCC part 15 Subpart C Section 15.247 (a)(2)
Detector Peak
Port of testing Antenna Port
Requirement The minimum 6 dB bandwidth shall be at least 500 kHz.

Test Method:

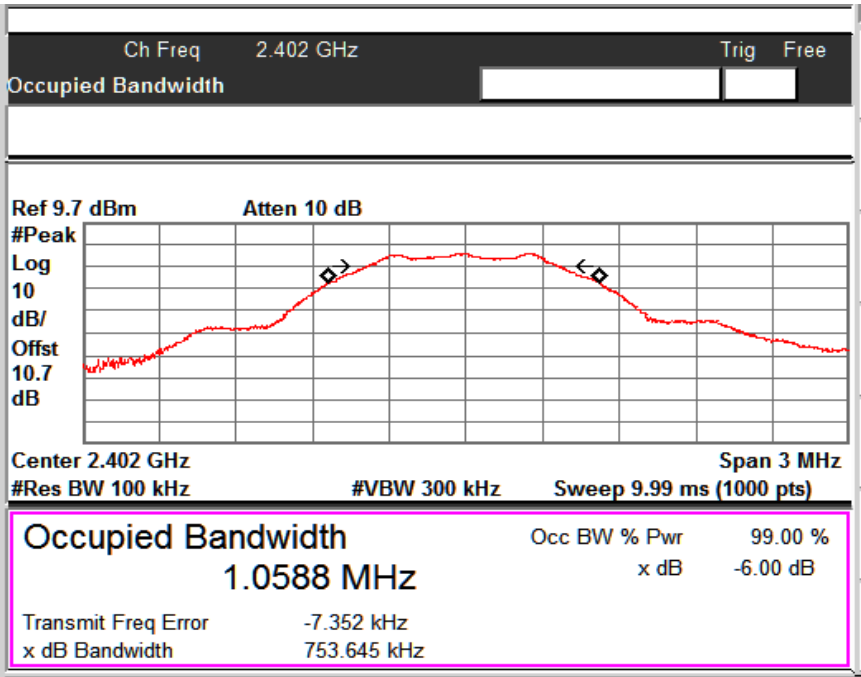


Test results:

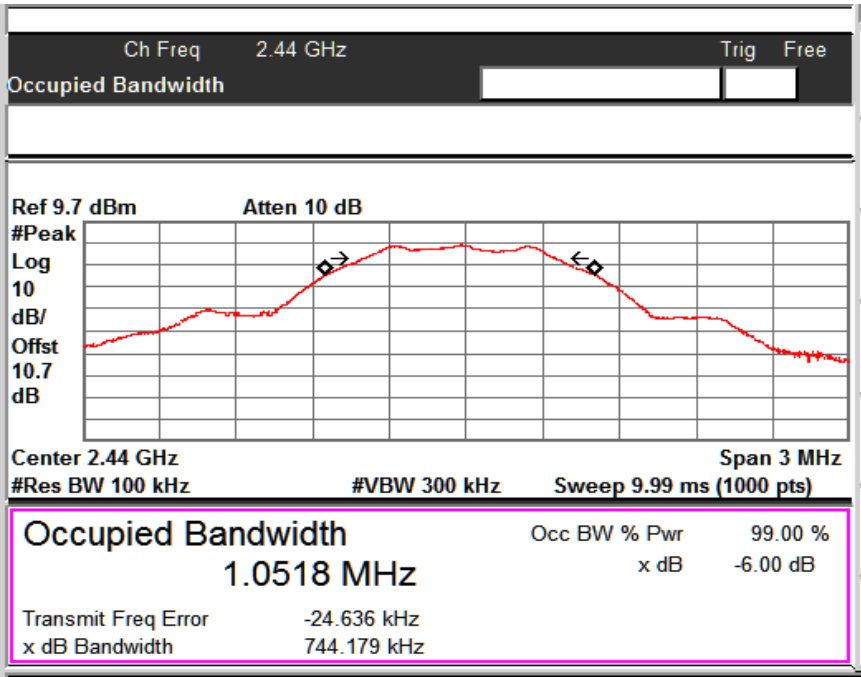
Note: Measurements were made as per section 8.1, 8.2 in KDB 558074 D01 DTS Meas Guidance v04.
10 dB attenuator + 0.7 Cable loss = 10.7 dB offset is considered in below result

Table 7 : DTS Bandwidth verified Test Results

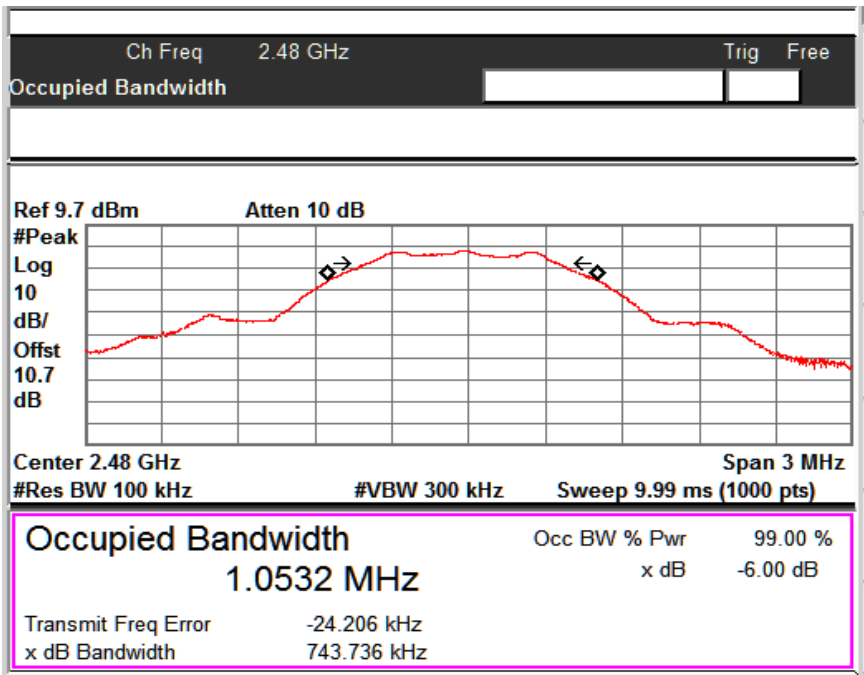
Channel Frequency (MHz)	6 dB Bandwidth (kHz)	99% OBW (MHz)
2402.00	753.645	1.0588
2440.00	744.179	1.0518
2480.00	743.736	1.0532



Channel low – 2402 MHz



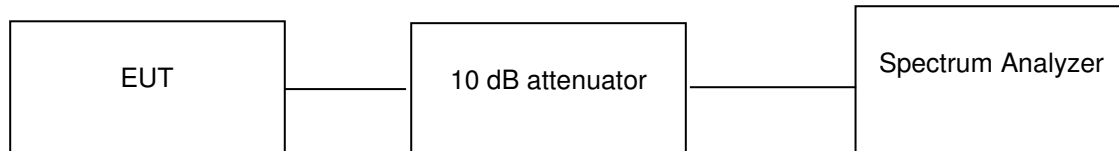
Channel mid – 2440 MHz



Channel high – 2480 MHz

Emissions in non-restricted frequency bands**Result****Pass**

Test Specification	FCC Part 15 Subpart C Section 15.247 (d)
Detector Function	Peak
Port of testing	Antenna port
Requirement	In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

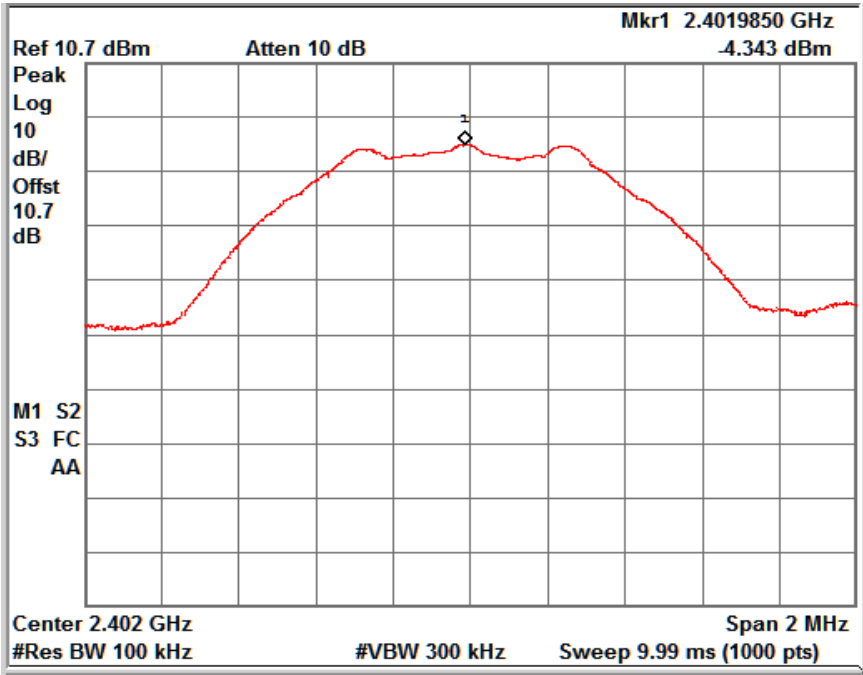
Test Method:**Test results:**

Note: Measurements were made as per section 11.2, 11.3 in KDB 558074 D01 DTS Meas Guidance v04.

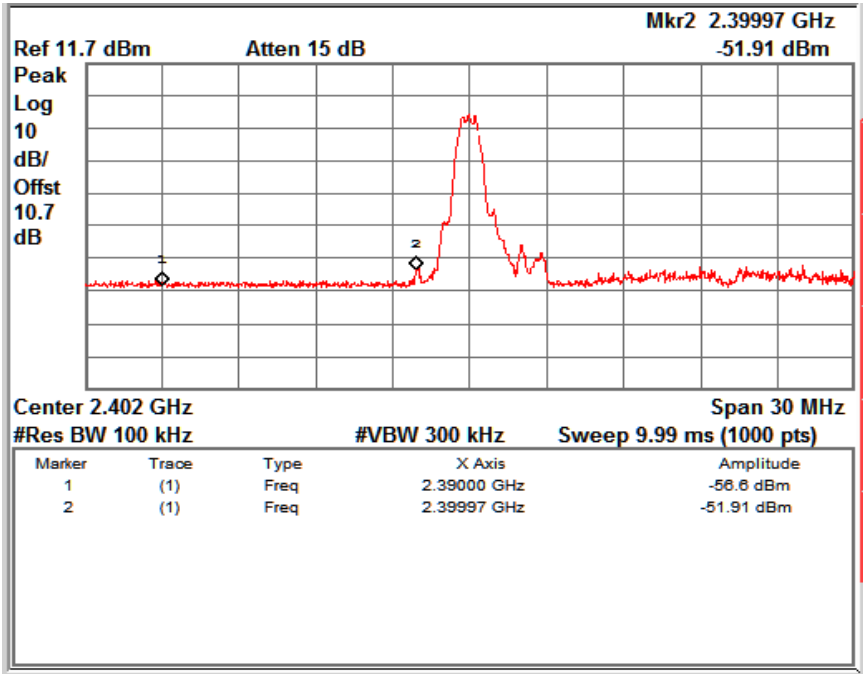
10 dB attenuator + 0.7 Cable loss = 10.7 dB offset is considered in below result

Table 8 : Verified Test Results of Emissions in non-restricted frequency bands

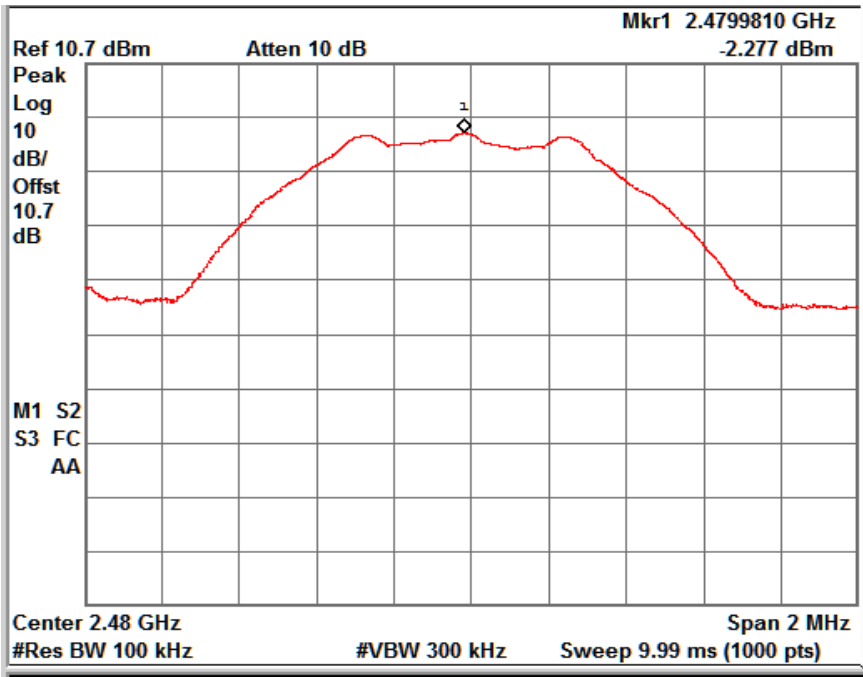
Channel Frequency (MHz)	Value at Band Edge		Reference PSD Value B (dBm)	Band Edge Value A~B (dB)	Limit (dB)
	Frequency (MHz)	Value A (dBm)			
2402	2400	-51.91	-4.343	-47.567	-20.00
2480	2483.50	-56.9	-2.277	-54.623	-20.00



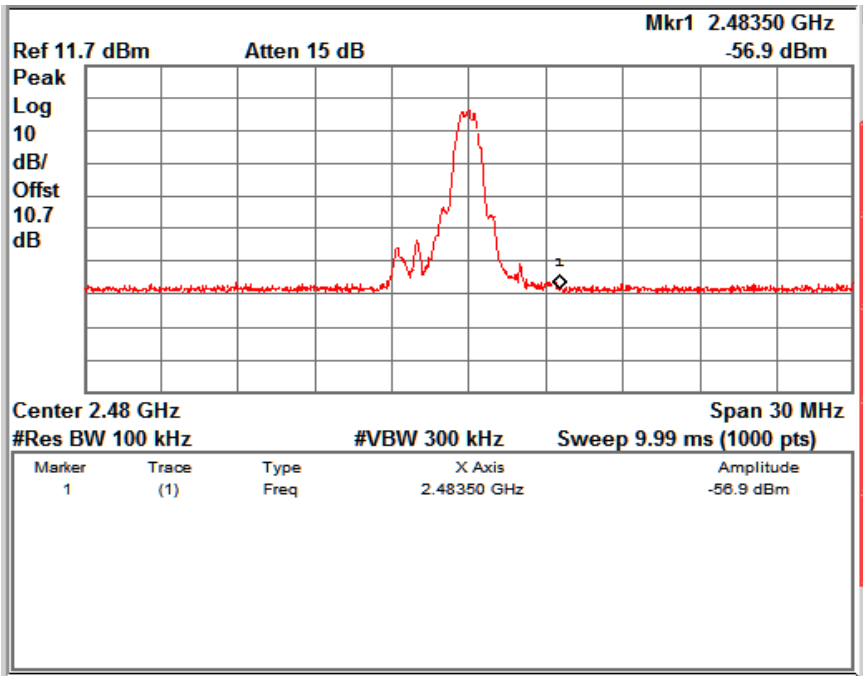
Reference Level Plot - Channel low 2402 MHz



Channel low - 2402 MHz



Reference Level Plot - Channel high – 2480 MHz



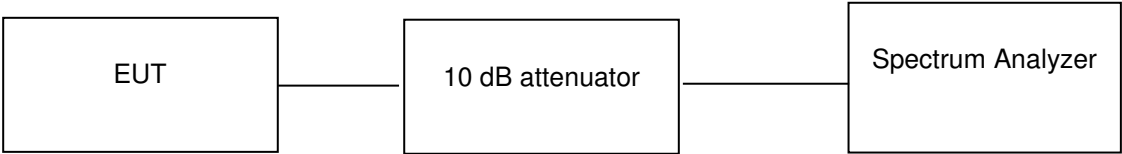
Channel high - 2480 MHz

Conducted Spurious Emission

Result

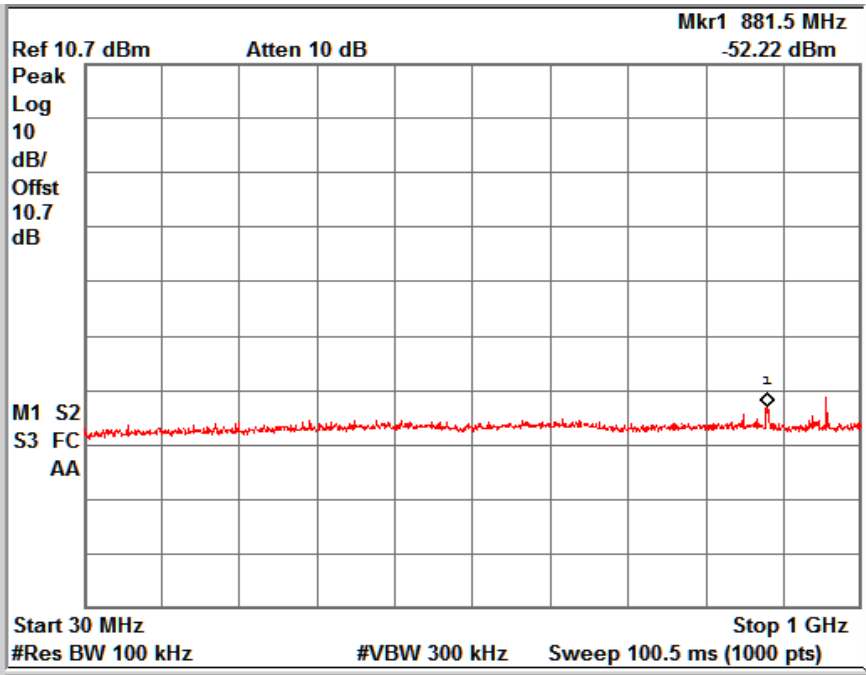
Pass

Test Method:

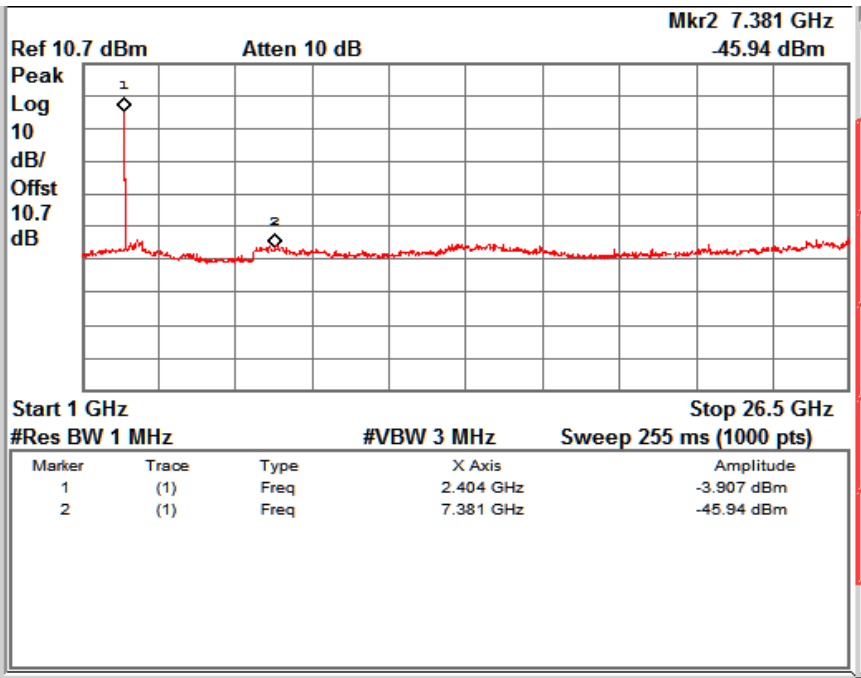


10 dB attenuator + 0.7 Cable loss = 10.7 dB offset is considered in below result

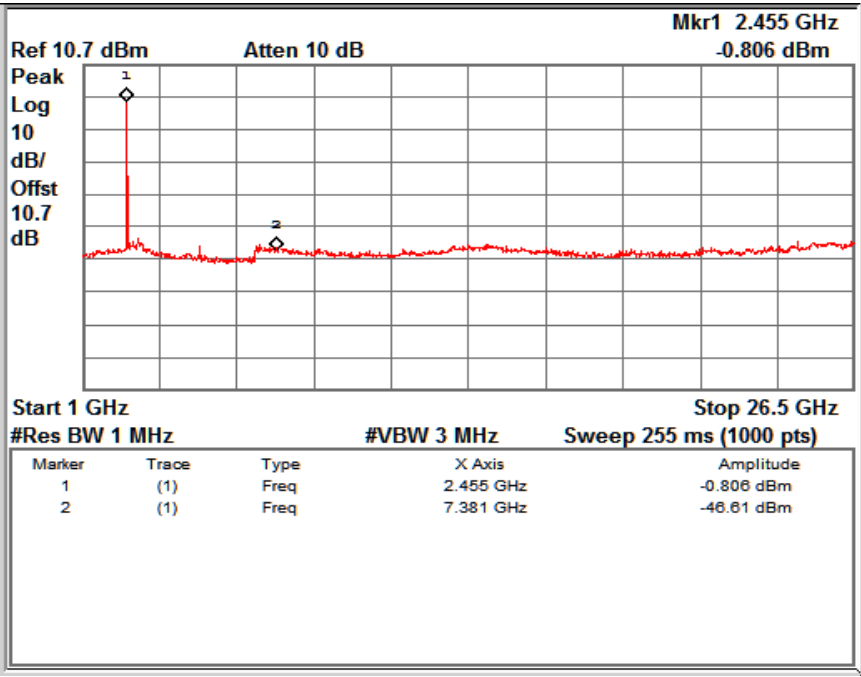
Test results:



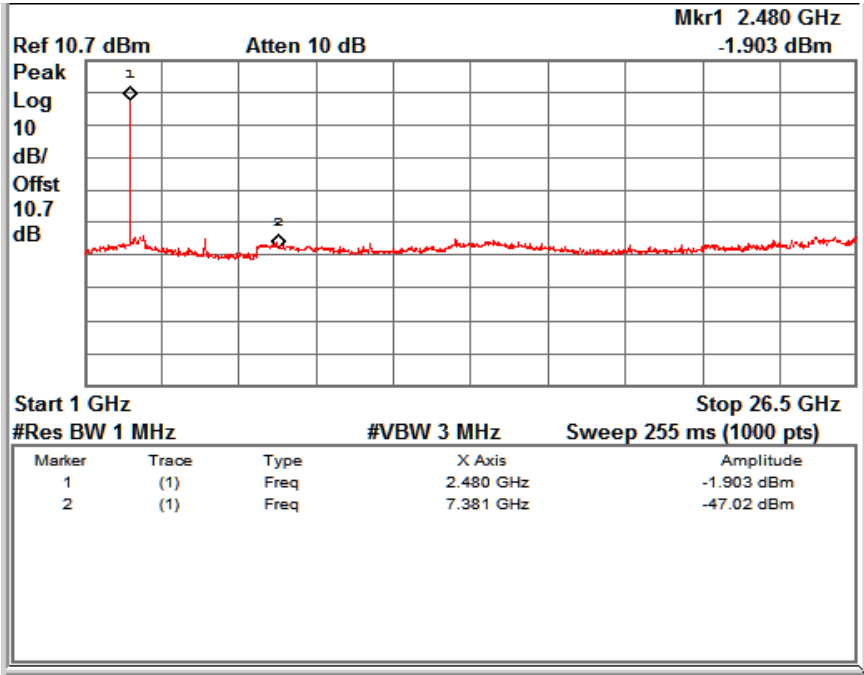
30MHz to 1GHz Spurious Emissions



Channel Frequency 2402 MHz



Channel Frequency 2440 MHz



Channel Frequency 2480 MHz

Restricted bands of Emissions & Restricted Bands of Operation**Result****Pass**

Test Specification	FCC part 15 Subpart C Section 15.247 (d) / (15.209 & 15.205)
Test Method	ANSI C 63.10 - 2013
Measurement Location	Semi Anechoic Chamber
Measuring Distance	3 m
Detector	QP for frequency below 1 GHz, average for frequency above 1 GHz
Requirement	As per the limits mentioned in the below table

Table 9: Transmitter limits for Radiated emission of Section 15.209

Frequency (MHz)	Field strength (μV/m)	Field strength (dBμV/m)	Distance of Measurement (m)
0.009 – 0.490	2400/F(kHz)	48.50 – 13.80	300*
0.490 – 1.705	24000/F(kHz)	33.80 – 23.00	30*
1.705 -30	30	29.54	30*
30-88	100	40.0	3
88-216	150	43.5	3
216-960	200	46.0	3
Above 960	500	54.0	3

Remark: * The limit shows in the table above of frequency range 0.009 – 0.490, 0.490 – 1.705 MHz and 1.705-30MHz is at 300 meter, 30 meter and 30 meter range respectively, which corresponds to 128.51 – 93.80, 73.80 – 62.96 and 69.54 dBμV/m at 3m range by extrapolation calculation and the measurement of loop antenna.

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz Radiated emission limits in these three bands are based on measurements employing an average detector.

Test Conditions:

5 VDC from Power adaptor

Environmental conditions:

Temperature: +24.5 °C RH: 61.9 %

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Test results:

No emissions found in frequency 9 kHz to 30 MHz

Test results for frequencies in the range 30 MHz - 1 GHz**Adapter 1 with Battery 1 combination**

Polarization	Frequency (MHz)	Measured value (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
V	148.825	25.00	43.5	-18.5
H	923.467	29.00	46	-17

Adapter 1 with Battery 2 combination

Polarization	Frequency (MHz)	Measured value (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
V	149.019	23.57	43.5	-19.93
	536.922	27.70	46	-18.3
	591.63	27.70	46	-18.3
H	590.854	26.57	46	-19.43
	898.635	31.34	46	-14.66

Adapter 2 with Battery 1 combination

Polarization	Frequency (MHz)	Measured value (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
V	149.601	27.60	43.5	-15.9
	536.825	27.05	46	-18.95
H	205.958	31.68	43.5	-11.82
	590.563	26.27	46	-19.73

Adapter 2 with Battery 2 combination

Polarization	Frequency (MHz)	Measured value (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
V	85.581	27.18	40	-12.82
	148.34	27.99	43.5	-15.51
H	206.443	32.47	43.5	-11.03
	591.242	26.06	46	-19.94

Test results for frequencies in the range 1 GHz - 26.5 GHz**Table 10 : Restricted bands of emission verified Test Results**

Channel	Polarization	Frequency (MHz)	Measure Emission Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Low	V	2390(Pk)	37.73	74	-36.27
		2390(Av)	26.55	54	-27.45
		2402(Pk)	78.53	*	-
		2402(Av)	73.53	*	-
		4804(Pk)	59.07	74	-14.93
		4804(Av)	49.56	54	-4.44
	H	2390(Pk)	37.72	74	-36.28
		2390(Av)	26.47	54	-27.53
		2402(Pk)	75.83	*	-
		2402(Av)	71.99	*	-
		4804(Pk)	58.74	74	-15.26
		4804(Av)	49.2	54	-4.8
Mid	V	2440(Pk)	78.11	*	-
		2440(Av)	73.37	*	-
		4880(Pk)	62.84	74	-11.16
		4880(Av)	53.7	54	-0.3
	H	2440(Pk)	76.97	*	-
		2440(Av)	73.21	*	-
		4880(Pk)	60.71	74	-13.29
		4880(Av)	51.08	54	-2.92
High	V	2483.5(Pk)	38.22	74	-35.78
		2483.5(Av)	26.37	54	-27.63
		2480(Pk)	80.09	*	-
		2480(Av)	76.41	*	-
		4960(Pk)	61.23	74	-12.77
		4960(Av)	51.53	54	-2.47
	H	2483.5(Pk)	37.81	74	-36.19
		2483.5(Av)	26.41	54	-27.59
		2480(Pk)	80.52	*	-
		2480(Av)	76.74	*	-
		4960(Pk)	61.55	74	-12.45
		4960(Av)	52.72	54	-1.28

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Conducted Emission Test on A.C. Power Line**Result****Pass**

Test Specification : FCC Part 15 Section 15.207
Test Method : ANSI C63.10-2013
Testing Location : Screened room
Measurement Bandwidth : 9kHz
Frequency Range : 150kHz – 30MHz
Supply Voltage : 120VAC,60Hz

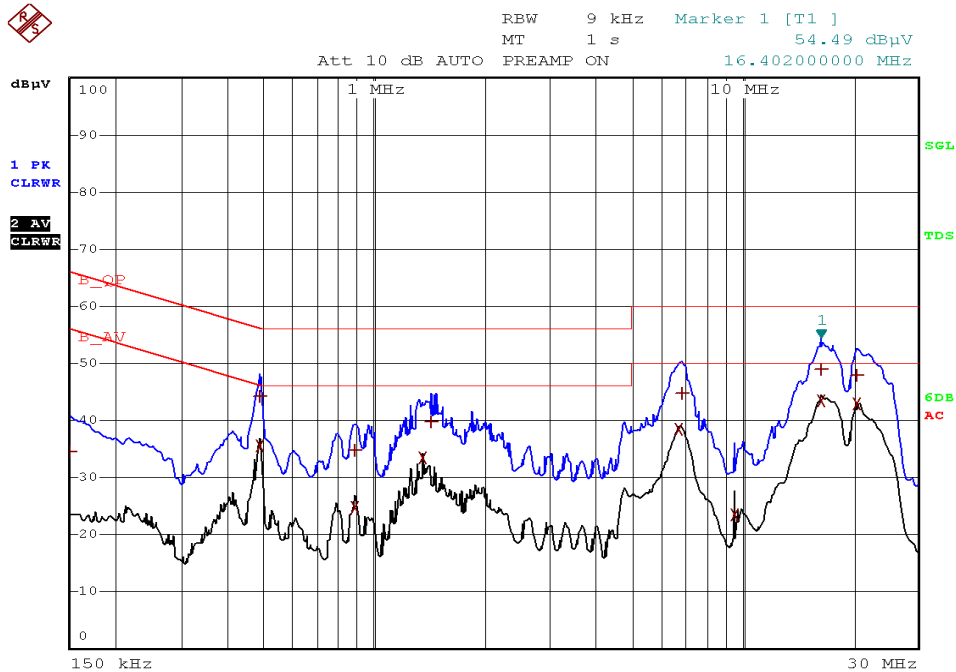
Limit of section 15.207

Frequency of emission (MHz)	QP Limit (dBµV)	AV Limit (dBµV/m)
0.15 – 0.5	66 – 56*	56 – 46*
0.5 – 5	56	46
5 – 30	60	50

* Decreases with the logarithm of the frequency

Test Result: LINE Graphs and Tables

110v AC , 60Hz - Adapter 1 with Battery 1 combination

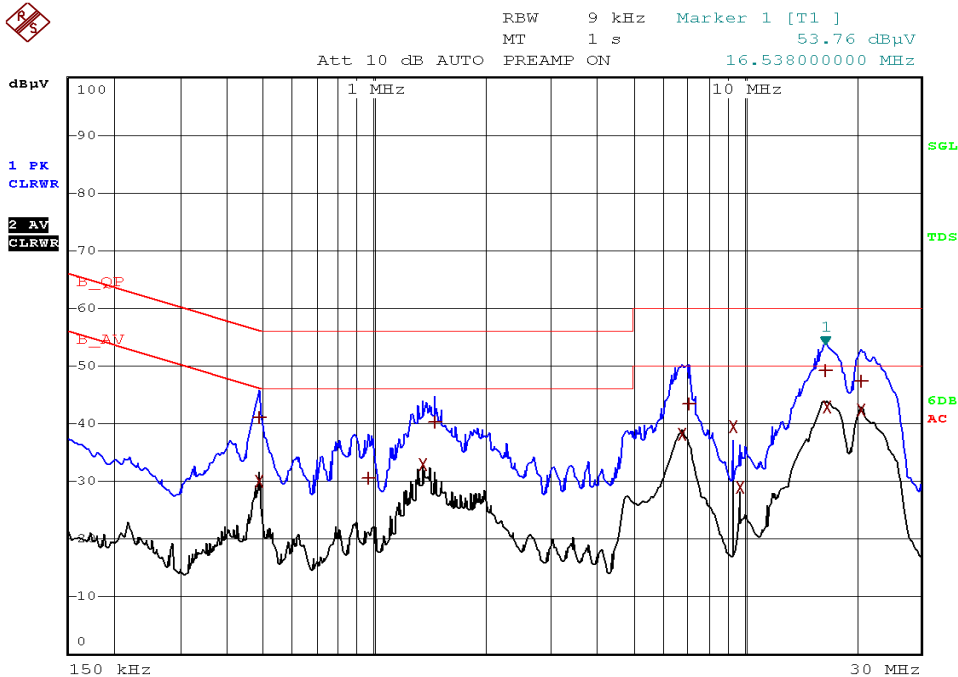


Line Graph

Detector	Frequency	Level	Limit	Margin
		(dBμV)	(dBμV)	(dB)
Quasi Peak	150 kHz	34.61	66	31.39
Quasi Peak	490 kHz	44.22	55.92	11.7
Quasi Peak	886 kHz	34.78	56	21.22
Quasi Peak	1.422 MHz	39.76	56	16.24
Quasi Peak	6.91 MHz	44.82	60	15.18
Quasi Peak	16.402 MHz	48.96	60	11.04
Quasi Peak	20.574 MHz	47.81	60	12.19
Average	490 kHz	35.64	45.92	10.28
Average	882 kHz	24.72	46	21.28
Average	1.362 MHz	33.41	46	12.59
Average	6.726 MHz	38.49	50	11.51
Average	9.574 MHz	23.46	50	26.54
Average	16.33 MHz	43.56	50	6.44
Average	20.558 MHz	42.93	50	7.07

Line Table

110v AC , 60Hz - Adapter 1 with Battery 2 combination



Line Graph

Detector	Frequency	Level	Limit	Margin
		(dBμV)	(dBμV)	(dB)
Quasi Peak	486 kHz	40.99	55.99	15
Quasi Peak	966 kHz	30.66	56	25.34
Quasi Peak	1.462 MHz	40.3	56	15.7
Quasi Peak	7.062 MHz	43.49	60	16.51
Quasi Peak	16.538 MHz	49.13	60	10.87
Quasi Peak	20.806 MHz	47.24	60	12.76
Average	486 kHz	30.01	45.99	15.98
Average	1.362 MHz	32.95	46	13.05
Average	6.79 MHz	38.25	50	11.75
Average	9.382 MHz	39.62	50	10.38
Average	9.722 MHz	28.9	50	21.1
Average	16.742 MHz	42.98	50	7.02
Average	20.694 MHz	42.49	50	7.51

Line Table

110v AC , 60Hz - Adapter 2 with Battery 1 combination



Line Graph

Detector	Frequency	Level	Limit	Margin
		(dBµV)	(dBµV)	(dB)
Quasi Peak	150 kHz	41.97	66	24.03
Quasi Peak	582 kHz	30.47	56	25.53
Quasi Peak	1.362 MHz	40.57	56	15.43
Quasi Peak	6.898 MHz	44.86	60	15.14
Quasi Peak	16.406 MHz	47.8	60	12.2
Quasi Peak	20.526 MHz	46.39	60	13.61
Average	154 kHz	27.66	55.77	28.11
Average	1.362 MHz	33.2	46	12.8
Average	6.75 MHz	38.26	50	11.74
Average	9.742 MHz	28.61	50	21.39
Average	16.538 MHz	43.07	50	6.93
Average	20.902 MHz	41.92	50	8.08

Line Table

110v AC , 60Hz - Adapter 2 with Battery 2 combination



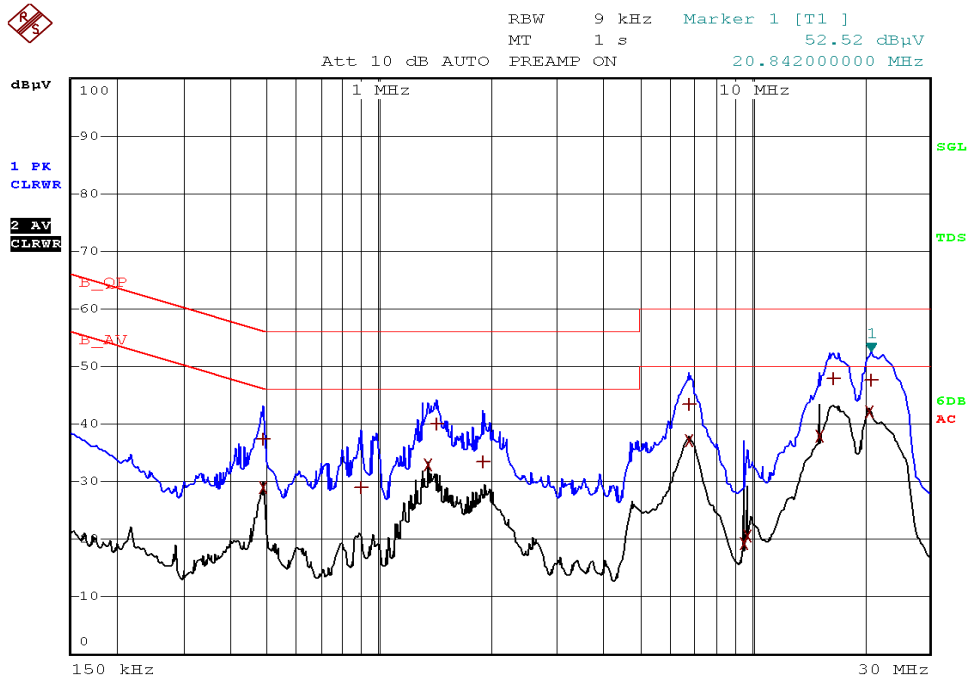
Line Graph

Detector	Frequency	Level	Limit	Margin
		(dBµV)	(dBµV)	(dB)
Quasi Peak	178 kHz	38.1	64.54	26.44
Quasi Peak	606 kHz	30.16	56	25.84
Quasi Peak	1.462 MHz	40.33	56	15.67
Quasi Peak	6.754 MHz	44.14	60	15.86
Quasi Peak	6.762 MHz	38.16	60	21.84
Quasi Peak	9.722 MHz	37.2	60	22.8
Quasi Peak	16.538 MHz	48.49	60	11.51
Quasi Peak	20.906 MHz	47.04	60	12.96
Average	150 kHz	26.04	56	29.96
Average	1.362 MHz	33.03	46	12.97
Average	9.382 MHz	14.94	50	35.06
Average	9.722 MHz	33.64	50	16.36
Average	16.402 MHz	42.31	50	7.69
Average	20.554 MHz	41.07	50	8.93

Line Table

NEUTRAL Graphs and Tables

110v AC , 60Hz - Adapter 1 with Battery 1 combination

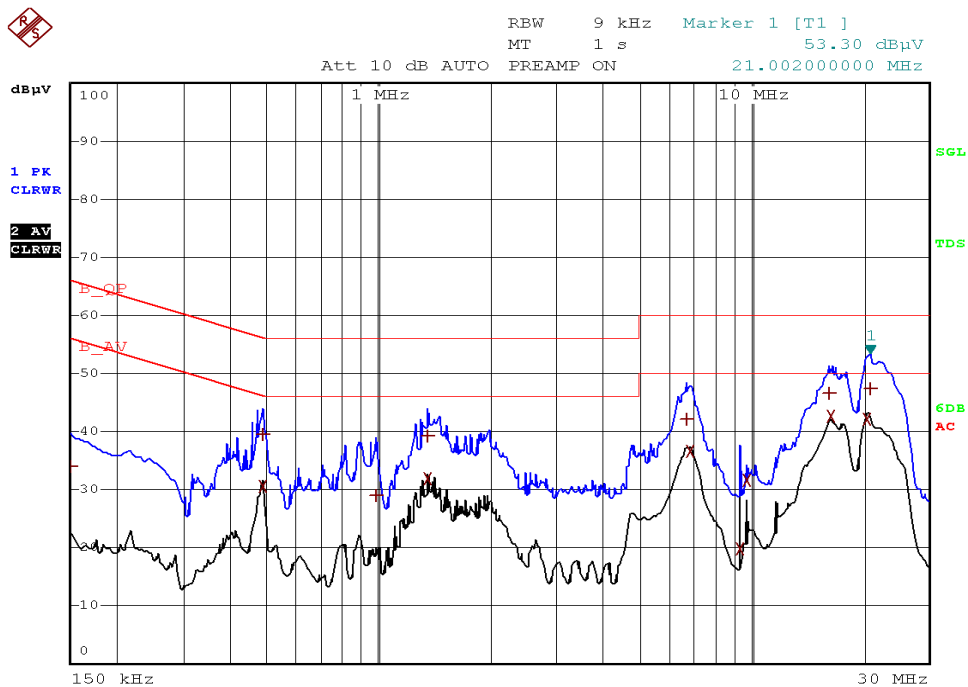


Neutral Graph

Detector	Frequency	Level	Limit	Margin
		(dBμV)	(dBμV)	(dB)
Quasi Peak	490 kHz	37.38	55.92	18.54
Quasi Peak	898 kHz	29.02	56	26.98
Quasi Peak	1.422 MHz	40	56	16
Quasi Peak	1.894 MHz	33.5	56	22.5
Quasi Peak	6.798 MHz	43.45	60	16.55
Quasi Peak	16.534 MHz	47.8	60	12.2
Quasi Peak	20.842 MHz	47.53	60	12.47
Average	490 kHz	28.88	45.92	17.04
Average	1.362 MHz	32.97	46	13.03
Average	6.782 MHz	37.14	50	12.86
Average	9.542 MHz	19.33	50	30.67
Average	9.742 MHz	20.65	50	29.35
Average	15.182 MHz	37.8	50	12.2
Average	20.71 MHz	42.11	50	7.89

Neutral Table

110v AC , 60Hz - Adapter 1 with Battery 2 combination

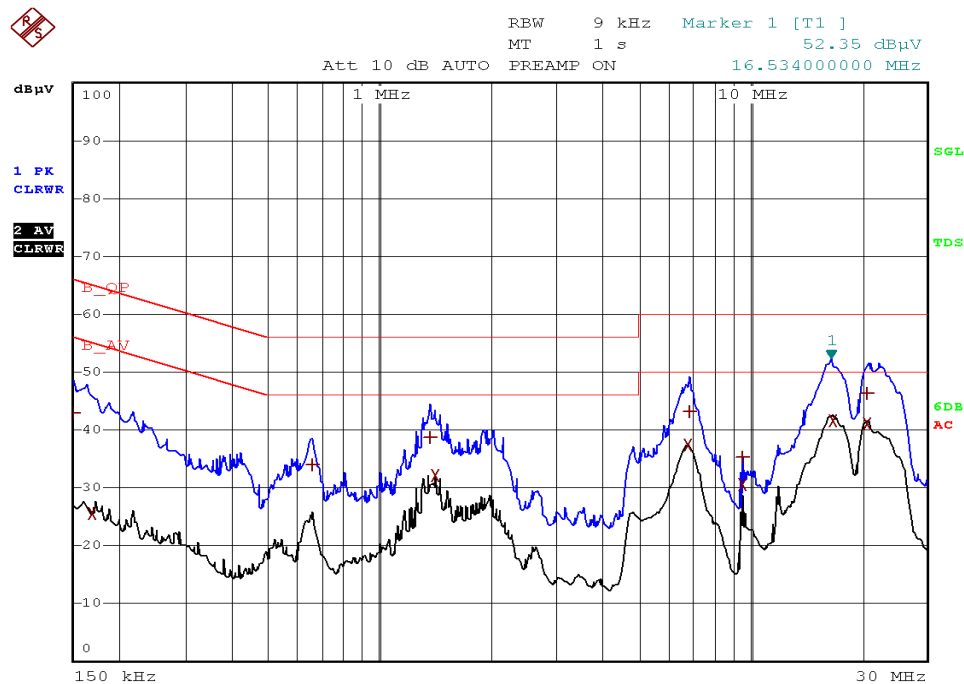


Neutral Graph

Detector	Frequency	Level	Limit	Margin
		(dBµV)	(dBµV)	(dB)
Quasi Peak	150 kHz	33.88	66	32.12
Quasi Peak	490 kHz	39.51	55.92	16.41
Quasi Peak	982 MHz	28.94	56	27.06
Quasi Peak	1.358 MHz	39.26	56	16.74
Quasi Peak	6.734 MHz	42.2	60	17.8
Quasi Peak	16.194 MHz	46.68	60	13.32
Quasi Peak	21.002 MHz	47.32	60	12.68
Average	490 kHz	30.57	45.92	15.35
Average	1.358 MHz	31.87	46	14.13
Average	6.898 MHz	36.5	50	13.5
Average	9.382 MHz	19.86	50	30.14
Average	9.722 MHz	31.7	50	18.3
Average	16.466 MHz	42.6	50	7.4
Average	20.486 MHz	42.23	50	7.77

Neutral Tab

110v AC , 60Hz - Adapter 2 with Battery 1 combination



Neutral Graph

Detector	Frequency	Level	Limit	Margin
		(dBµV)	(dBµV)	(dB)
Quasi Peak	150 kHz	42.85	66	23.15
Quasi Peak	654 kHz	33.9	56	22.1
Quasi Peak	1.374 MHz	38.76	56	17.24
Quasi Peak	6.862 MHz	43.14	60	16.86
Quasi Peak	9.574 MHz	35.17	60	24.83
Quasi Peak	20.782 MHz	46.27	60	13.73
Average	170 kHz	25.7	54.93	29.23
Average	1.418 MHz	32.04	46	13.96
Average	6.806 MHz	37.28	50	12.72
Average	9.574 MHz	30.68	50	19.32
Average	16.674 MHz	41.59	50	8.41
Average	20.758 MHz	41.16	50	8.84

Neutral Table

110v AC , 60Hz - Adapter 2 with Battery 2 combination



Neutral Graph

Detector	Frequency	Level	Limit	Margin
		(dBµV)	(dBµV)	(dB)
Quasi Peak	154 kHz	38.96	65.77	26.81
Quasi Peak	670 kHz	32.05	56	23.95
Quasi Peak	1.462 MHz	39.76	56	16.24
Quasi Peak	6.902 MHz	41.89	60	18.11
Quasi Peak	9.718 MHz	34.02	60	25.98
Quasi Peak	20.754 MHz	46.91	60	13.09
Average	170 kHz	23.11	54.93	31.82
Average	658 kHz	21.79	46	24.21
Average	1.362 MHz	32.47	46	13.53
Average	6.878 MHz	36.55	50	13.45
Average	9.722 MHz	34.04	50	15.96
Average	16.882 MHz	41.1	50	8.9
Average	20.482 MHz	41.27	50	8.73

Neutral Table

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