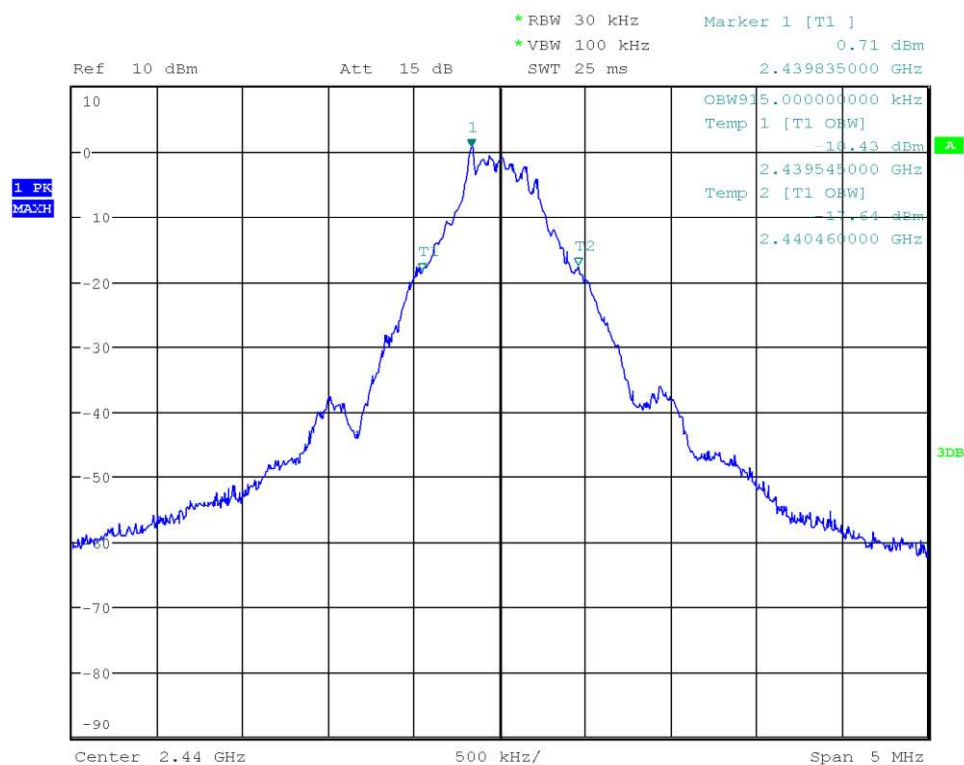


Occupied Bandwidth

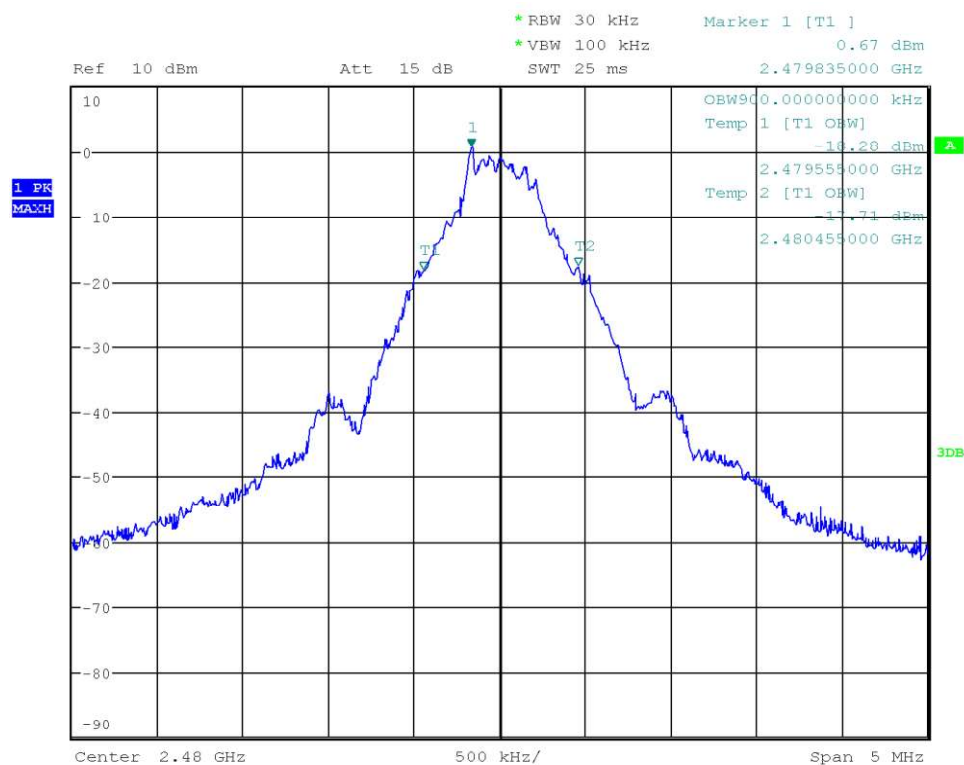
Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 6.9.3
 Operational Mode: Transmit Radio 2, Channel: 38, 2440 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Occupied Bandwidth [MHz]: 0.915



Date: 11.SEP.2024 10:37:09

Occupied Bandwidth

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 6.9.3
 Operational Mode: Transmit Radio 2, Channel: 78, 2480 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Occupied Bandwidth [MHz]: 0.900



Date: 11.SEP.2024 10:38:44

3.2 Test Conditions and Results - 6 dB bandwidth

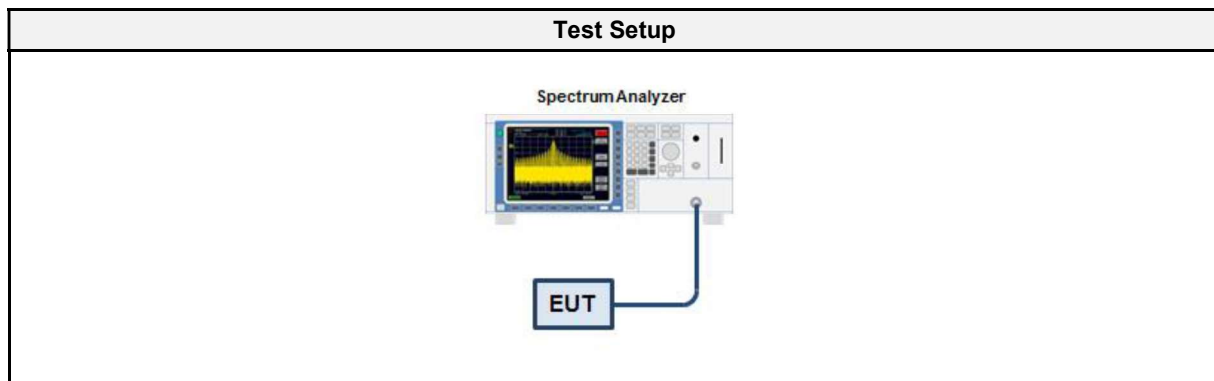
3.2.1 Information

Test Information	
Reference	FCC § 15.247(a)(2); ISSED RSS-247, Issue 3 (section 5.2)
Measurement Method	ANSI C63.10 11.8
Measurement Uncertainty	$\pm 1.26 \%$
Operator	Florian Voigt
Date	2024-09-11

3.2.2 Limits

Limits
$\geq 500\text{kHz}$

3.2.3 Setup



3.2.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyser	R&S	FSU 26	EF01407	2024-07	2025-07
Cable	Gigalane	SMS111B-GL200sC-SMS111B-1M	EF00779 CAABD	2024-04	2025-04

3.2.5 Procedure

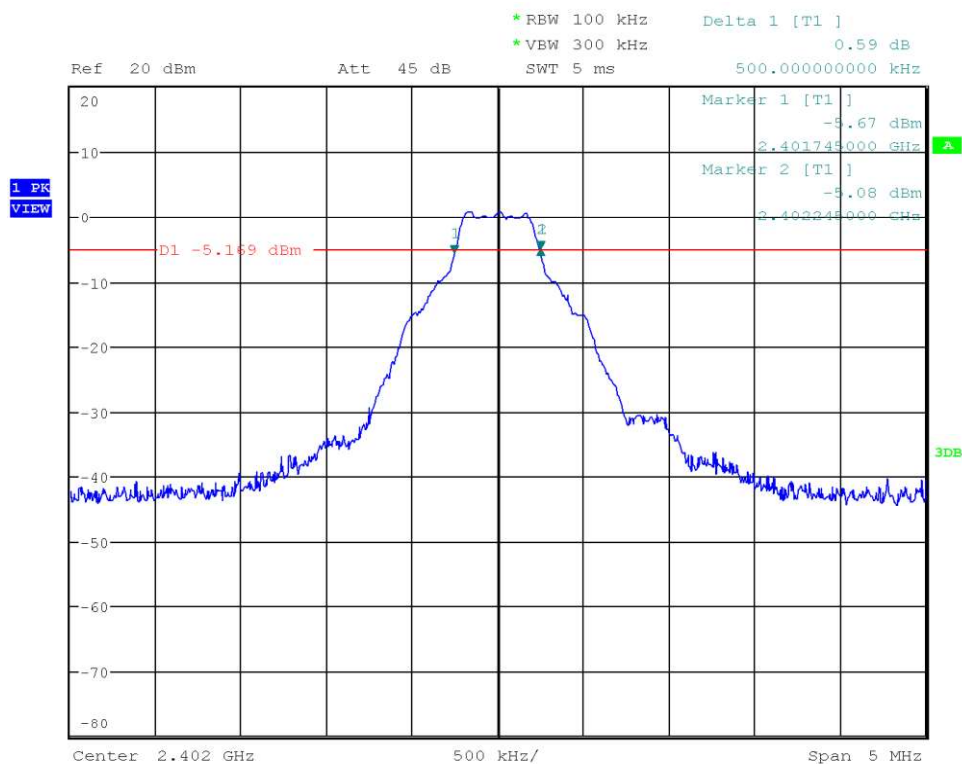
Test Procedure
1. EUT set to test mode 2. Span set to at least twice the emission spectrum 3. Detector set to peak and max hold and RBW is set to 100 kHz 4. Envelope peak value of emission spectrum is selected 5. Marker on envelope of spectrum is set to level of -6 dB to the left of the peak 6. Marker on envelope of spectrum is set to level of -6 dB to the right of the peak 7. 6 dB Bandwidth is determined by marker frequency separation

3.2.6 Results

Test Results				
Mode	Frequency [MHz]	Bandwidth [kHz]	Limit [kHz]	Verdict
Transmit Radio 1	2402	500	500	PASS
Transmit Radio 1	2440	500	500	PASS
Transmit Radio 1	2480	500	500	PASS
Transmit Radio 2	2402	500	500	PASS
Transmit Radio 2	2440	500	500	PASS
Transmit Radio 2	2480	500	500	PASS

DTS (6 dB) Bandwidth

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: Transmit Radio 1, Channel: 0, 2402 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Lower Frequency [MHz]: 2401.745
 Upper Frequency [MHz]: 2402.245
 6 dB Bandwidth [kHz]: 500



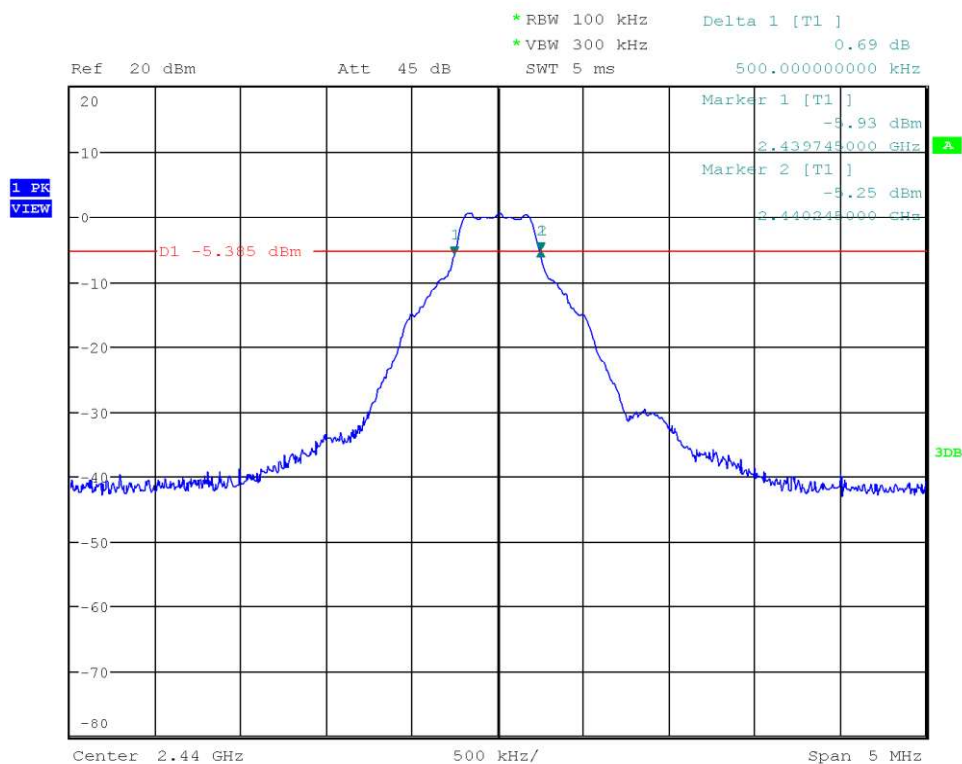
Date: 11.SEP.2024 10:52:19

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

DTS (6 dB) Bandwidth

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: Transmit Radio 1, Channel: 38, 2440 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Lower Frequency [MHz]: 2439.745
 Upper Frequency [MHz]: 2440.245
 6 dB Bandwidth [kHz]: 500



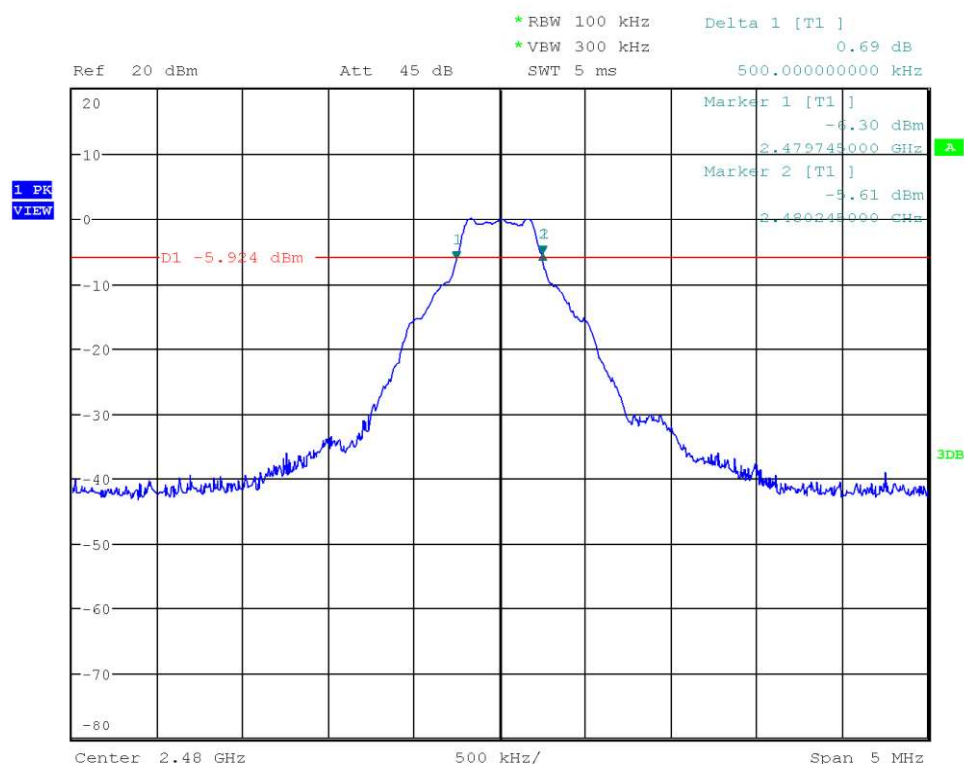
Date: 11.SEP.2024 10:56:18

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

DTS (6 dB) Bandwidth

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: Transmit Radio 1, Channel: 78, 2480 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Lower Frequency [MHz]: 2479.745
 Upper Frequency [MHz]: 2480.245
 6 dB Bandwidth [kHz]: 500



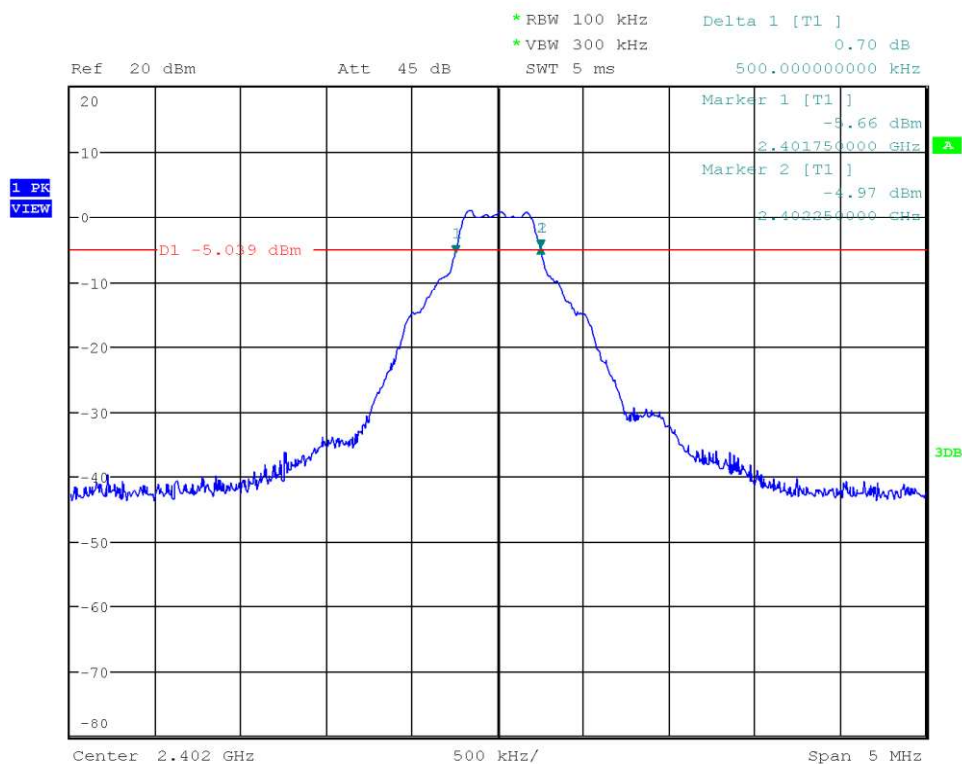
Date: 11.SEP.2024 11:02:40

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

DTS (6 dB) Bandwidth

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: Transmit Radio 2, Channel: 0, 2402 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Lower Frequency [MHz]: 2401.750
 Upper Frequency [MHz]: 2402.250
 6 dB Bandwidth [kHz]: 500



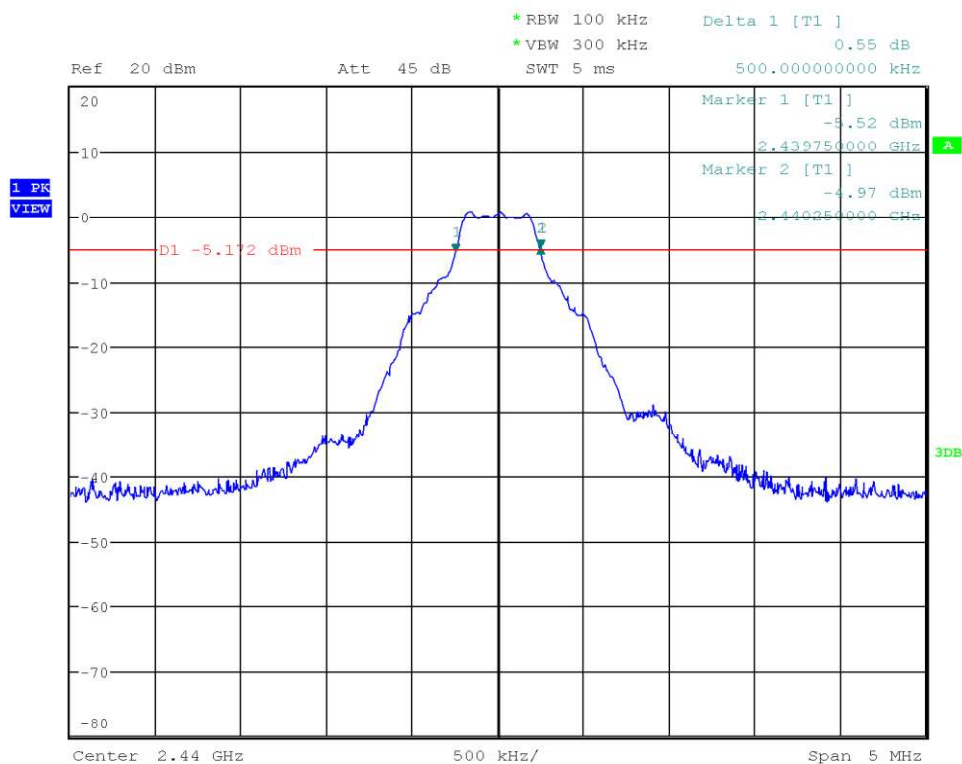
Date: 11.SEP.2024 11:07:08

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

DTS (6 dB) Bandwidth

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: Transmit Radio 2, Channel: 38, 2440 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Lower Frequency [MHz]: 2439.750
 Upper Frequency [MHz]: 2440.250
 6 dB Bandwidth [kHz]: 500



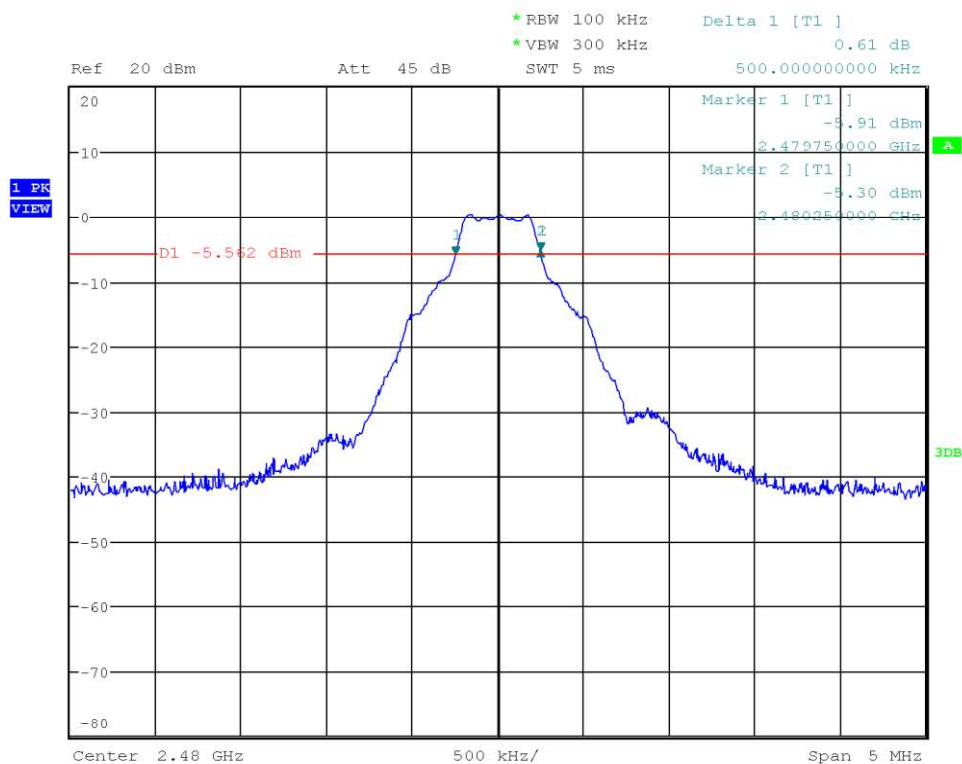
Date: 11.SEP.2024 11:08:24

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

DTS (6 dB) Bandwidth

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: Transmit Radio 2, Channel: 78, 2480 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Lower Frequency [MHz]: 2479.750
 Upper Frequency [MHz]: 2480.250
 6 dB Bandwidth [kHz]: 500



Date: 11.SEP.2024 11:13:12

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

3.3 Test Conditions and Results - Maximum peak conducted output power

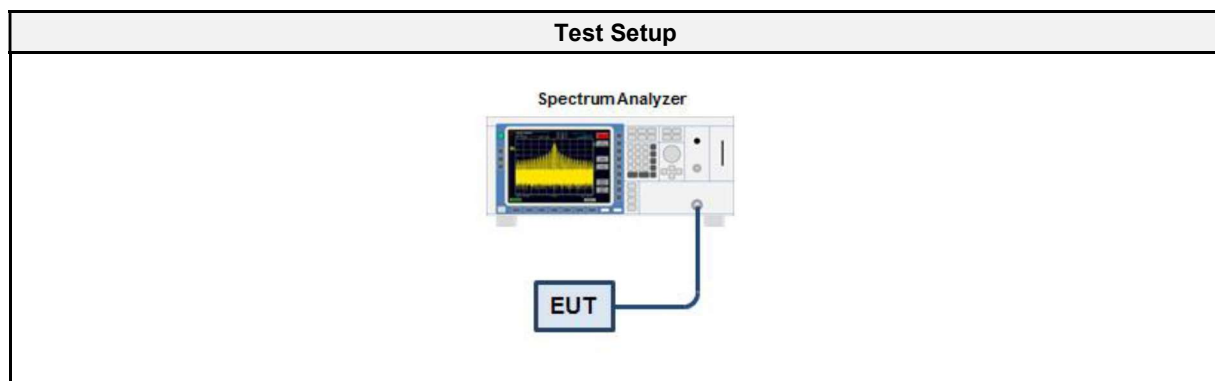
3.3.1 Information

Test Information	
Reference	FCC § 15.247(b); ISSED RSS-247, Issue 3 (section 5.4)
Measurement Method	ANSI C63.10 11.9.1
Measurement Uncertainty	± 2.86 dB
Operator	Florian Voigt
Date	2024-09-11

3.3.2 Limits

Limits
1 W (30 dBm)
The conducted output power limit specified above is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in the table, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.3 Setup



3.3.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyser	R&S	FSU 26	EF01407	2024-07	2025-07
Cable	Huber+Suhner	Sucoflex 102EA	EF00779 CAABR	2024-04	2025-04

3.3.5 Procedure

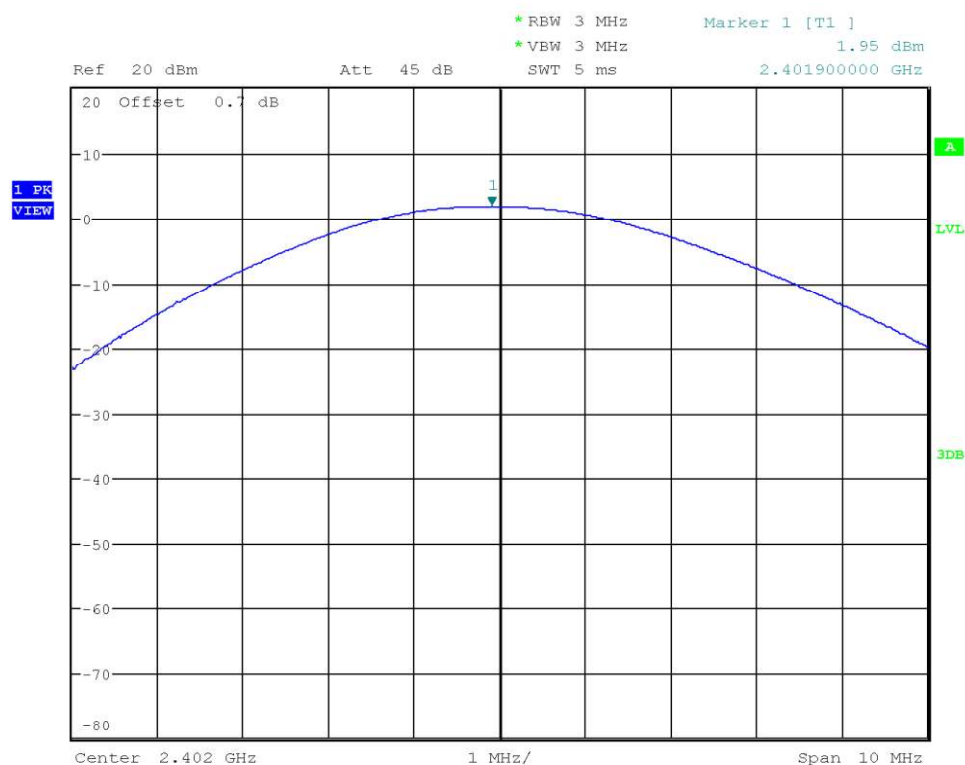
Test Procedure
1. EUT set to test mode (Communication tester is used if needed) 2. Analyzer resolution bandwidth is set ≥ DTS bandwidth 3. Detector set to peak and max hold 4. Sweep time is set to auto 5. After the trace has stabilized a marker is set to peak of envelope

3.3.6 Results

Test Results							
Mode	Channel [MHz]	Power [dBm]	Power [W]	Limit [W]	EIRP [W]	EIRP Limit [W]	Verdict
Transmit Radio 1	2402	1.953	0.0016	1.0	0.0021	4	PASS
Transmit Radio 1	2440	1.677	0.0015	1.0	0.0019	4	PASS
Transmit Radio 1	2480	1.097	0.0013	1.0	0.0017	4	PASS
Transmit Radio 2	2402	2.001	0.0016	1.0	0.0021	4	PASS
Transmit Radio 2	2440	1.830	0.0015	1.0	0.0019	4	PASS
Transmit Radio 2	2480	1.428	0.0014	1.0	0.0018	4	PASS
Comment: Used antenna gain of 1.288 (multiplier). Antenna gain is delogarithmized by $Gain = 10^{\frac{Gain [dB]}{10}} = 10^{\frac{1.1}{10}}$							

Peak Conducted Output Power

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.9.1.1
 Operational Mode: Transmit Radio 1, Channel: 0, 2402 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Peak Power [dBm]: 1.953
 Peak Power [W]: 0.0016



Date: 11.SEP.2024 11:43:24

Peak Conducted Output Power

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.9.1.1
 Operational Mode: Transmit Radio 1, Channel: 38, 2440 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Peak Power [dBm]: 1.677
 Peak Power [W]: 0.0015



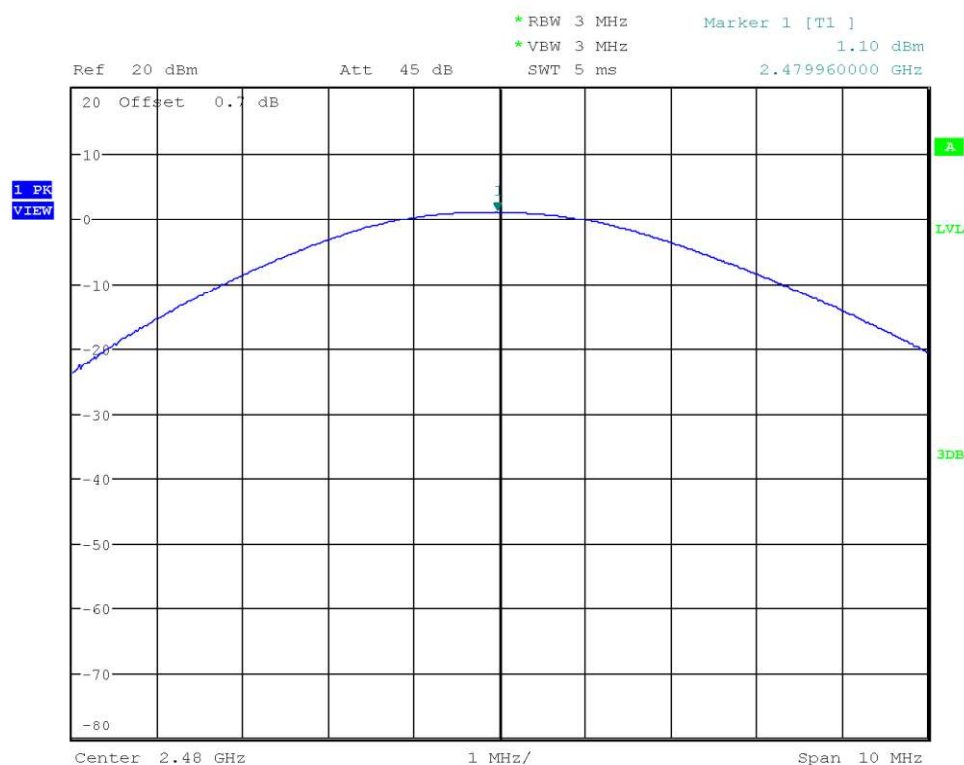
Date: 11.SEP.2024 11:44:13

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Peak Conducted Output Power

Project Number:	G0M-2406-2604
Applicant:	Somnium Space LTD.
Model Description:	Head-Mounted Display / VR headset
Model:	VR1
Test Sample ID:	49299
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.9.1.1
Operational Mode:	Transmit Radio 1, Channel: 78, 2480 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-09-11
Peak Power [dBm]:	1.097
Peak Power [W]:	0.0013



Date: 11.SEP.2024 11:44:53

Peak Conducted Output Power

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.9.1.1
 Operational Mode: Transmit Radio 2, Channel: 0, 2402 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Peak Power [dBm]: 2.001
 Peak Power [W]: 0.0016



Date: 11.SEP.2024 11:46:29

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Peak Conducted Output Power

Project Number:	G0M-2406-2604
Applicant:	Somnium Space LTD.
Model Description:	Head-Mounted Display / VR headset
Model:	VR1
Test Sample ID:	49299
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.9.1.1
Operational Mode:	Transmit Radio 2, Channel: 38, 2440 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-09-11
Peak Power [dBm]:	1.830
Peak Power [W]:	0.0015



Date: 11.SEP.2024 11:47:12

Peak Conducted Output Power

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.9.1.1
 Operational Mode: Transmit Radio 2, Channel: 78, 2480 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Peak Power [dBm]: 1.428
 Peak Power [W]: 0.0014



Date: 11.SEP.2024 11:48:01

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

3.4 Test Conditions and Results - Power spectral density

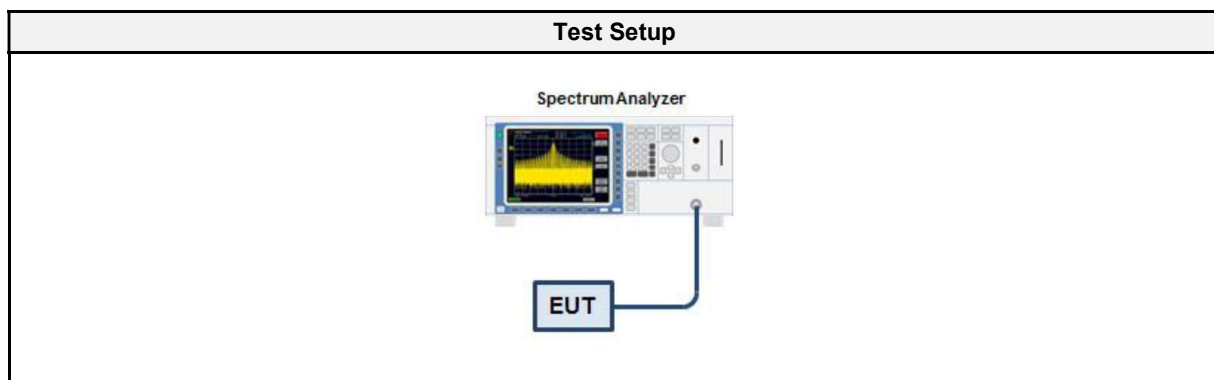
3.4.1 Information

Test Information	
Reference	FCC § 15.247(e); ISSED RSS-247, Issue 3 (section 5.2)
Measurement Method	ANSI C63.10 11.10.2, 14.3.2
Measurement Uncertainty	± 2.86 dB
Operator	Florian Voigt
Date	2024-09-11

3.4.2 Limits

Limits
8 dBm / 3 kHz

3.4.3 Setup



3.4.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyser	R&S	FSU 26	EF01407	2024-07	2025-07
Cable	Huber+Suhner	Sucoflex 102EA	EF00779 CAABR	2024-04	2025-04

3.4.5 Procedure

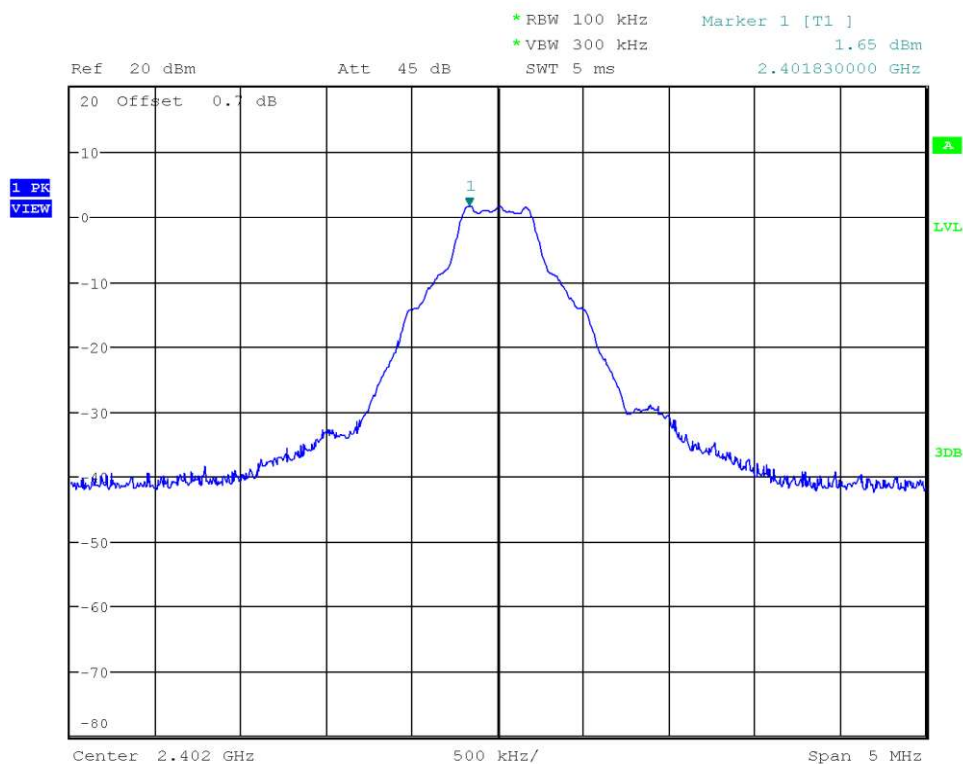
Test Procedure
- EUT set to test mode - The analyzer is set to DTS channel center frequency with a span of 1.5 times the DTS bandwidth - The RBW is set to 100 kHz with VBW $\geq$ RBW and the detector is set to peak with max hold - After the trace has stabilized a marker is set to the envelope maximum - If the power spectral density is above the limit the RBW is reduced (not lower than 3 kHz) and the measurement is repeated - If the EUT has more than one transmit chain the procedure is repeated for each transmit chain

3.4.6 Results

Test Results				
Mode	Channel [MHz]	PSD [dBm/RBW]	Limit [dBm/3kHz]	Verdict
Transmit Radio 1	2402	1.651	8.0	PASS
Transmit Radio 1	2440	1.333	8.0	PASS
Transmit Radio 1	2480	0.761	8.0	PASS
Transmit Radio 2	2402	1.725	8.0	PASS
Transmit Radio 2	2440	1.559	8.0	PASS
Transmit Radio 2	2480	1.095	8.0	PASS
RBW = 100 kHz				

Peak Power Spectral Density

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.10.2
 Operational Mode: Transmit Radio 1, Channel: 0, 2402 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Peak Frequency [MHz]: 2401.830
 Spectral Density [dBm/RBW]: 1.651
 Resolution Bandwidth [kHz]: 100 kHz



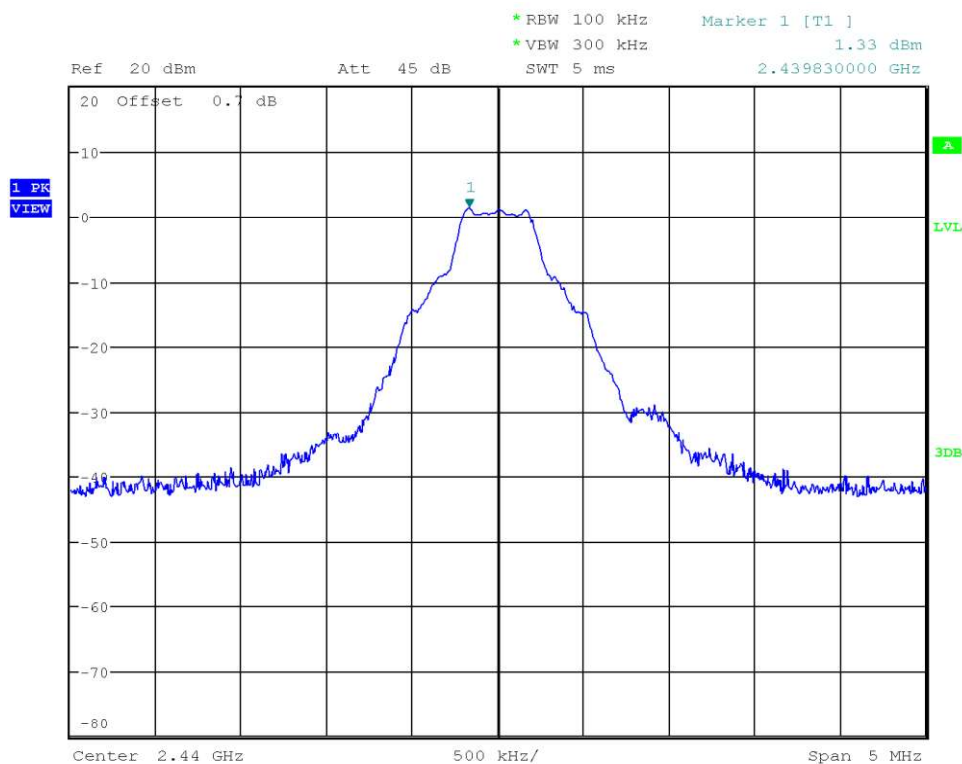
Date: 11.SEP.2024 12:39:21

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Peak Power Spectral Density

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.10.2
 Operational Mode: Transmit Radio 1, Channel: 38, 2440 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Peak Frequency [MHz]: 2439.830
 Spectral Density [dBm/RBW]: 1.333
 Resolution Bandwidth [kHz]: 100 kHz



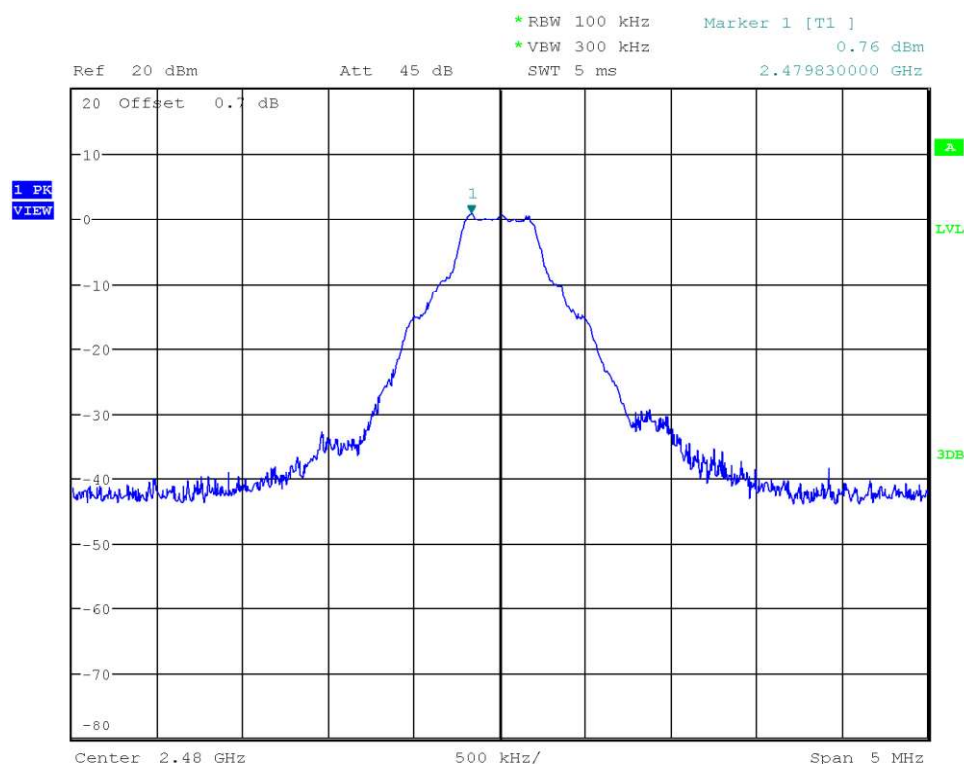
Date: 11.SEP.2024 12:40:22

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Peak Power Spectral Density

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.10.2
 Operational Mode: Transmit Radio 1, Channel: 78, 2480 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Peak Frequency [MHz]: 2479.830
 Spectral Density [dBm/RBW]: 0.761
 Resolution Bandwidth [kHz]: 100 kHz



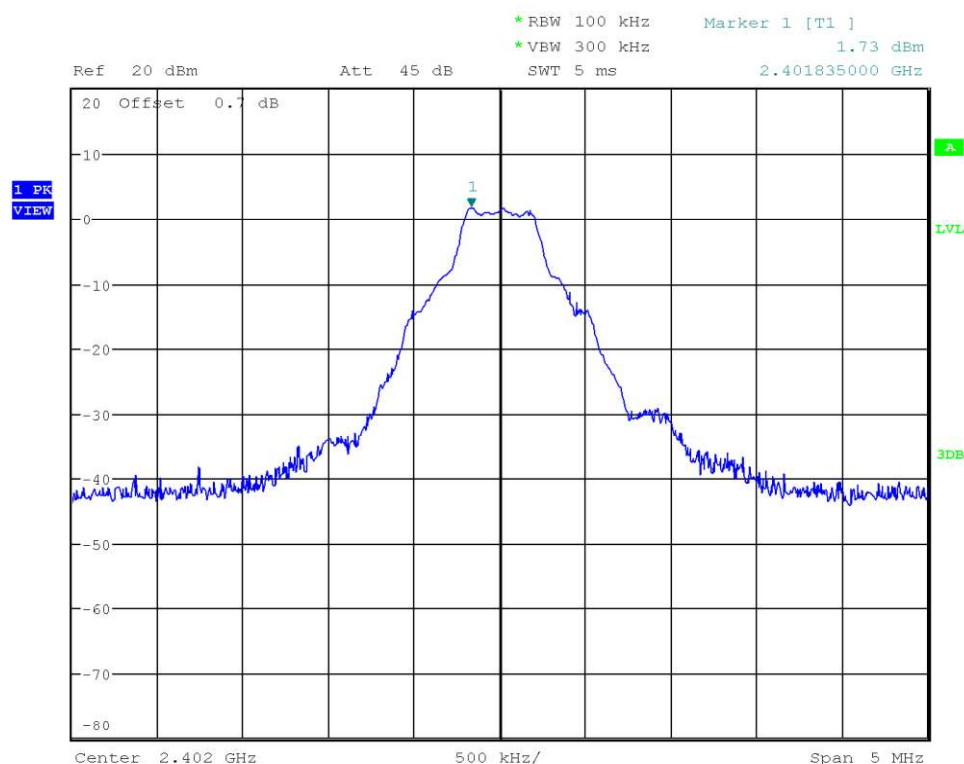
Date: 11.SEP.2024 12:41:36

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Peak Power Spectral Density

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.10.2
 Operational Mode: Transmit Radio 2, Channel: 0, 2402 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Peak Frequency [MHz]: 2401.835
 Spectral Density [dBm/RBW]: 1.725
 Resolution Bandwidth [kHz]: 100 kHz



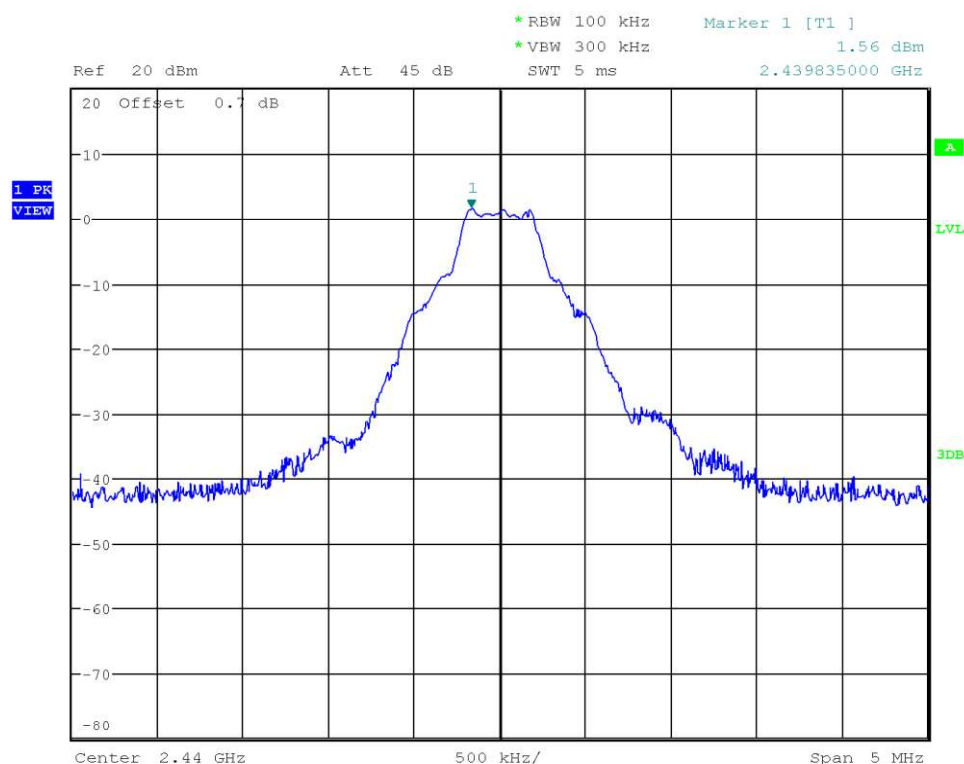
Date: 11.SEP.2024 12:43:21

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Peak Power Spectral Density

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.10.2
 Operational Mode: Transmit Radio 2, Channel: 38, 2440 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Peak Frequency [MHz]: 2439.835
 Spectral Density [dBm/RBW]: 1.559
 Resolution Bandwidth [kHz]: 100 kHz



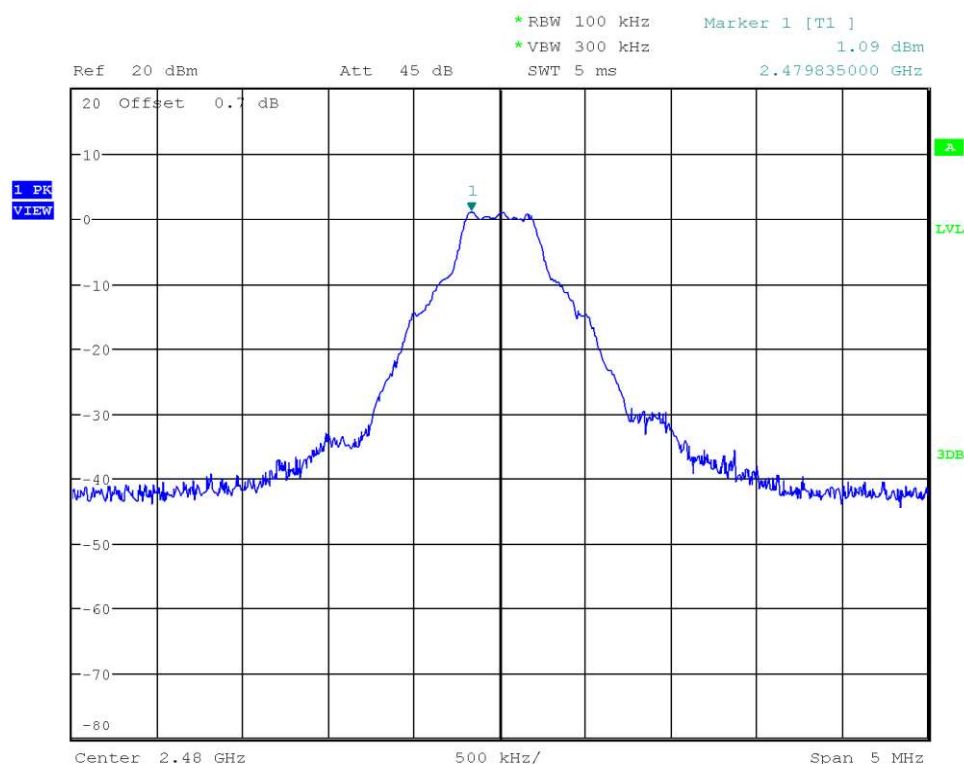
Date: 11.SEP.2024 12:44:01

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Peak Power Spectral Density

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49299
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.10.2
 Operational Mode: Transmit Radio 2, Channel: 78, 2480 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Florian Voigt
 Test Site: Eurofins Product Service GmbH
 Test Date: 2024-09-11
 Peak Frequency [MHz]: 2479.835
 Spectral Density [dBm/RBW]: 1.095
 Resolution Bandwidth [kHz]: 100 kHz



Date: 11.SEP.2024 12:44:47

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

3.5 Test Conditions and Results - AC powerline conducted emissions

3.5.1 Information

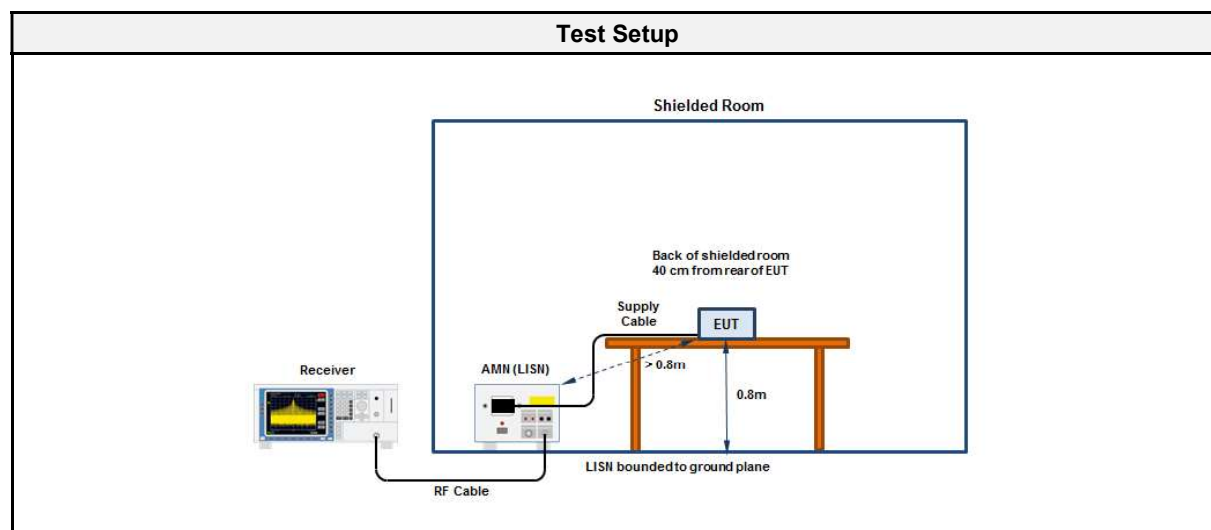
Test Information	
Reference	FCC § 15.207; ISED RSS-247, Issue 3 (section 3.1)
Measurement Method	ANSI C63.10 6.2
Measurement Uncertainty	± 3.82 dB
Operator	Florian Voigt
Date	2024-09-10

3.5.2 Limits

Limits		
Frequency [MHz]	Quasi-Peak [dBμV]	Average [dBμV]
0.15 - 0.5	66 - 56*	56 - 46*
0.5 - 5	56	46
5 - 30	60	50

* Limit decreases linearly with the logarithm of the frequency

3.5.3 Setup



3.5.4 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	Raditeq	RadiMation	2023.2.6

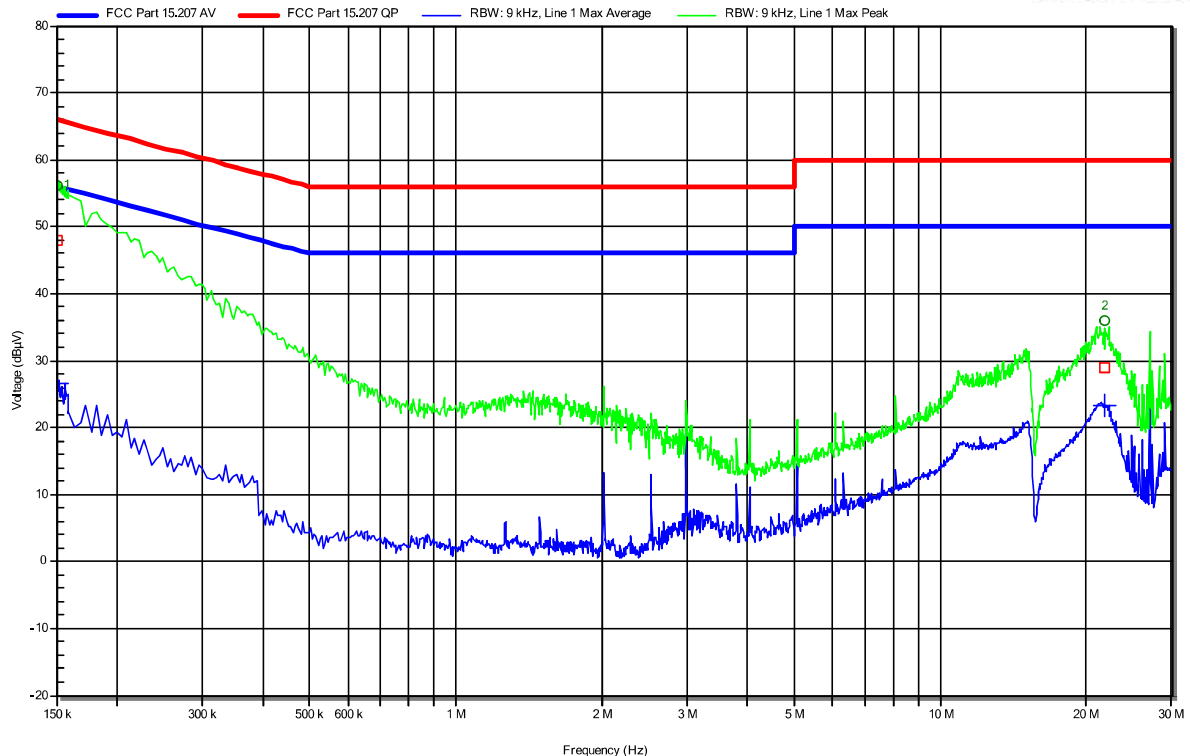
Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI Test Receiver	R&S	ESU26	EF00887	2024-01	2025-01
Pulse Limiter	R&S	ESH3-Z2	EF01222	2023-08	2025-08
LISN	Schwarzbeck	NSLK 8127 RC	EF01592	2024-07	2026-07

Conducted emissions at the mains power port according to FCC 15.247, RSS-247 Issue 3

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49301
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Test Date & Time: 2024-09-10
 Operating Conditions: ambient temperature: 24 °Celsius
 power input: 12 V DC
 AMN: Schwarzbeck NSLK 8127
 Operational Mode: Transmit Radio 1, 2402 MHz; Transmit Radio 2, 2440 MHz
 DUT Configuration:
 Applied to Port: Mains

Index 92

RadiMation



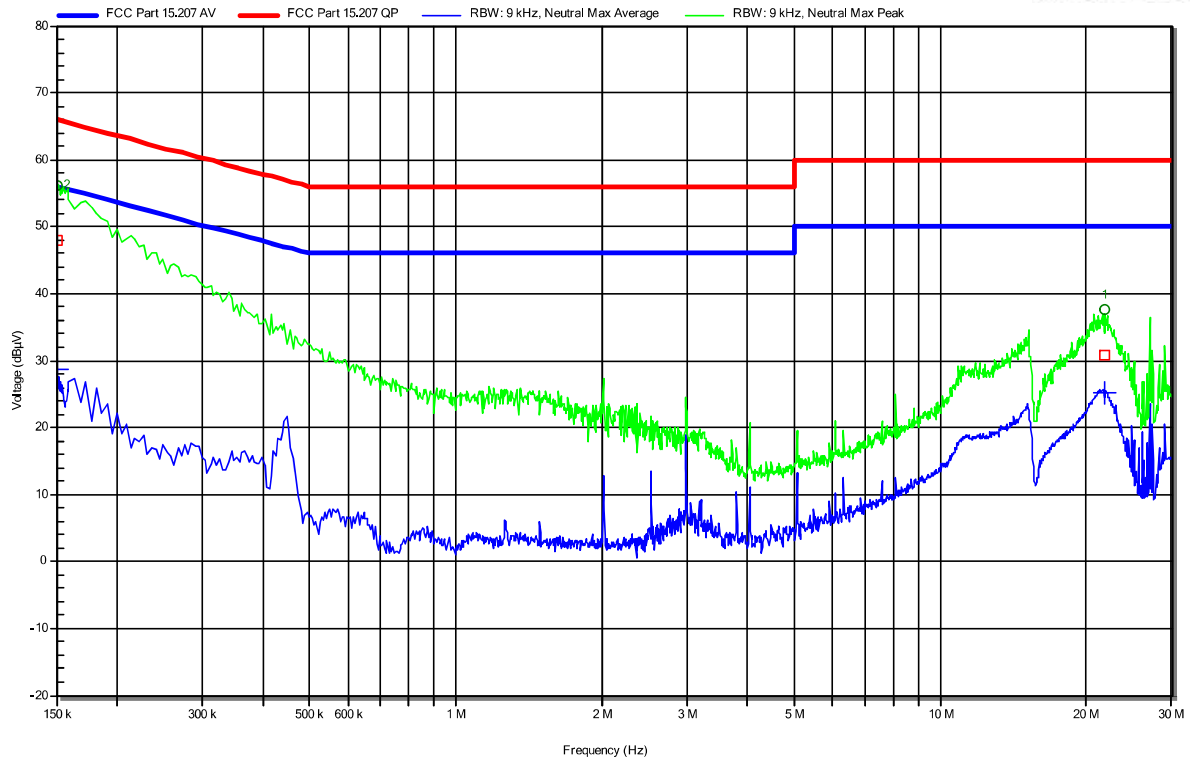
Start Frequency	Stop Frequency	Frequency Step	Measure Time	RBW		
150 kHz	30 MHz	Linear: 4.5 kHz steps	20 ms	9 kHz		
Peak Number	Frequency (MHz)	Quasi-Peak (dBµV)	Quasi-Peak Limit (dBµV)	Quasi-Peak Difference (dB)	Quasi-Peak Status	LISN
1	0.15	47.96	66	-18.04	Pass	Line 1
2	21.75	29.05	60	-30.95	Pass	Line 1
Peak Number	Frequency (MHz)	Average (dBµV)	Average Limit (dBµV)	Average Difference (dB)	Average Status	LISN
1	0.15	26.62	56	-29.38	Pass	Line 1
2	21.75	23.24	50	-26.76	Pass	Line 1

Conducted emissions at the mains power port according to FCC 15.247, RSS-247 Issue 3

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49301
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Test Date & Time: 2024-09-10
 Operating Conditions: ambient temperature: 24 °Celsius
 power input: 12 V DC
 AMN: Schwarzbeck NSLK 8127
 Operational Mode: Transmit Radio 1, 2402 MHz; Transmit Radio 2, 2440 MHz
 DUT Configuration:
 Applied to Port: Mains

Index 93

RadiMation



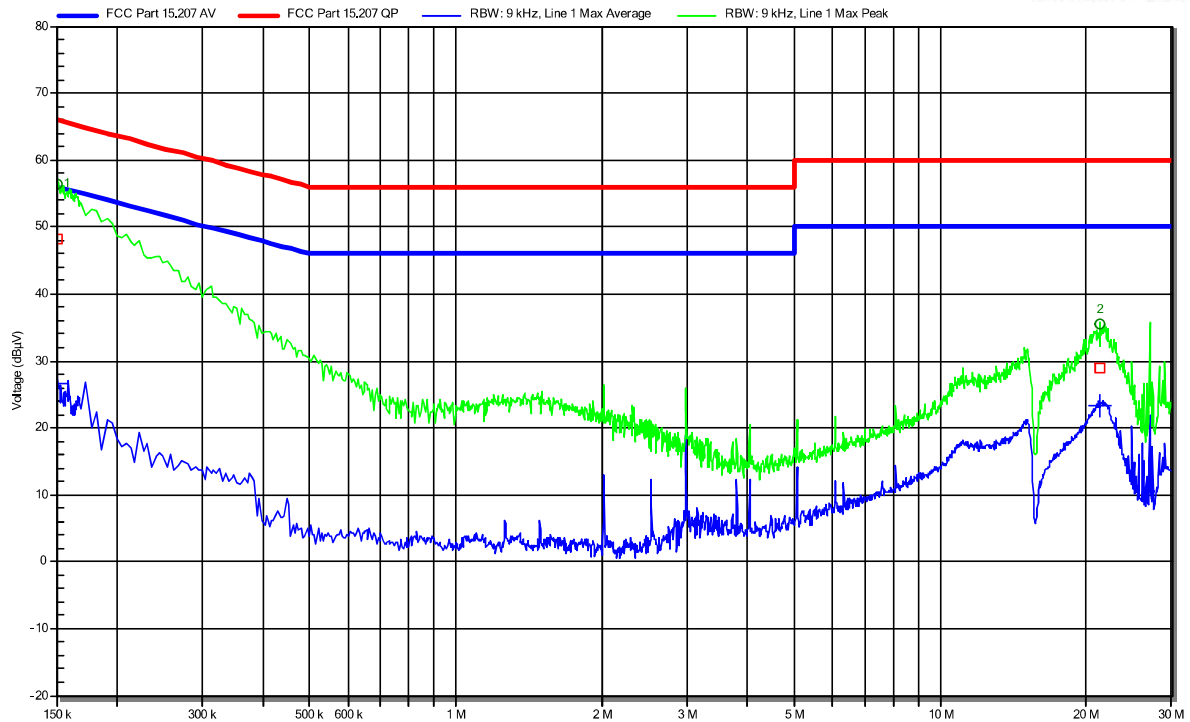
Start Frequency	Stop Frequency	Frequency Step	Measure Time	RBW		
150 kHz	30 MHz	Linear: 4.5 kHz steps	20 ms	9 kHz		
Peak Number	Frequency (MHz)	Quasi-Peak (dBµV)	Quasi-Peak Limit (dBµV)	Quasi-Peak Difference (dB)	Quasi-Peak Status	LISN
1	21.804	30.88	60	-29.12	Pass	Neutral
2	0.15	48	66	-18	Pass	Neutral
Peak Number	Frequency (MHz)	Average (dBµV)	Average Limit (dBµV)	Average Difference (dB)	Average Status	LISN
1	21.804	25.25	50	-24.75	Pass	Neutral
2	0.15	28.69	56	-27.31	Pass	Neutral

Conducted emissions at the mains power port according to FCC 15.247, RSS-247 Issue 3

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49301
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Test Date & Time: 2024-09-10
 Operating Conditions: ambient temperature: 24 °Celsius
 power input: 12 V DC
 AMN: Schwarzbeck NSLK 8127
 Operational Mode: Transmit Radio 1, 2440 MHz; Transmit Radio 2, 2480 MHz
 DUT Configuration:
 Applied to Port: Mains
 Note 1:

Index 94

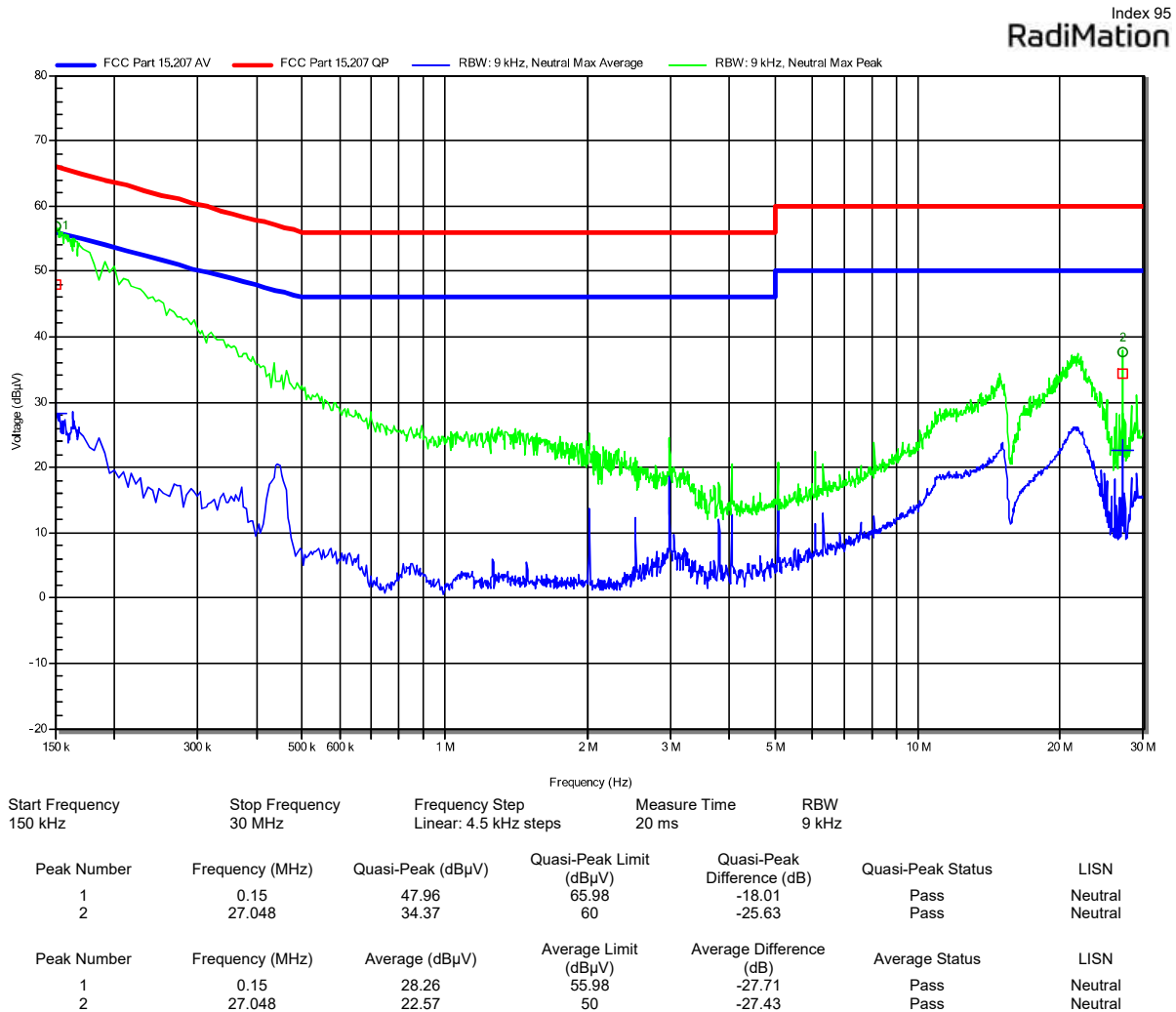
RadiMation



Start Frequency	Stop Frequency	Frequency Step	Measure Time	RBW		
150 kHz	30 MHz	Linear: 4.5 kHz steps	20 ms	9 kHz		
Peak Number	Frequency (MHz)	Quasi-Peak (dBµV)	Quasi-Peak Limit (dBµV)	Quasi-Peak Difference (dB)	Quasi-Peak Status	LISN
1	0.15	48.14	66	-17.86	Pass	Line 1
2	21.287	29.06	60	-30.94	Pass	Line 1
Peak Number	Frequency (MHz)	Average (dBµV)	Average Limit (dBµV)	Average Difference (dB)	Average Status	LISN
1	0.15	26.66	56	-29.34	Pass	Line 1
2	21.287	23.29	50	-26.71	Pass	Line 1

Conducted emissions at the mains power port according to FCC 15.247, RSS-247 Issue 3

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49301
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Test Date & Time: 2024-09-10
 Operating Conditions: ambient temperature: 24 °Celsius
 power input: 12 V DC
 AMN: Schwarzbeck NSLK 8127
 Operational Mode: Transmit Radio 1, 2440 MHz; Transmit Radio 2, 2480 MHz
 DUT Configuration:
 Applied to Port: Mains
 Note 1:

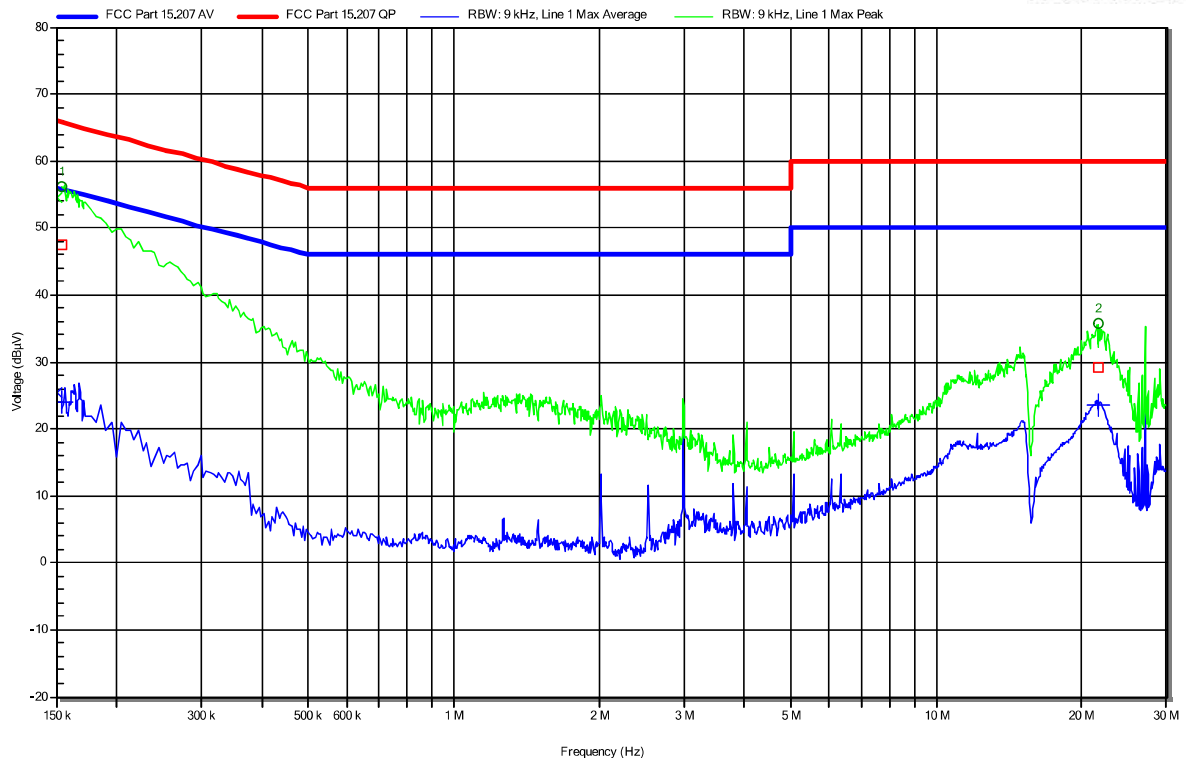


Conducted emissions at the mains power port according to FCC 15.247, RSS-247 Issue 3

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49301
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Test Date & Time: 2024-09-10
 Operating Conditions: ambient temperature: 24 °Celsius
 power input: 12 V DC
 AMN: Schwarzbeck NSLK 8127
 Operational Mode: Transmit Radio 1, 2480 MHz; Transmit Radio 2, 2402 MHz
 DUT Configuration:
 Applied to Port: Mains
 Note 1:

Index 96

RadiMation



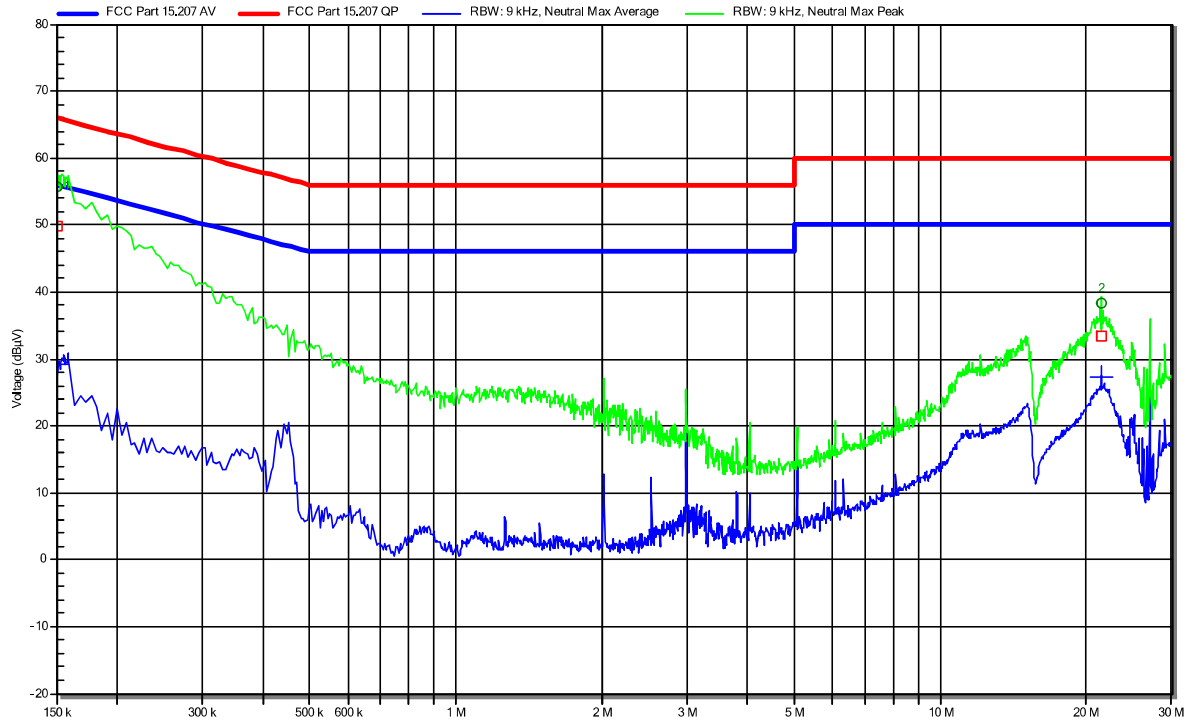
Start Frequency 150 kHz	Stop Frequency 30 MHz	Frequency Step Linear: 4.5 kHz steps	Measure Time 20 ms	RBW 9 kHz		
Peak Number	Frequency (MHz)	Quasi-Peak (dBµV)	Quasi-Peak Limit (dBµV)	Quasi-Peak Difference (dB)	Quasi-Peak Status	LISN
1	0.154	47.1	65.75	-18.66	Pass	Line 1
2	21.656	29.27	60	-30.73	Pass	Line 1
Peak Number	Frequency (MHz)	Average (dBµV)	Average Limit (dBµV)	Average Difference (dB)	Average Status	LISN
1	0.154	23.67	55.75	-32.09	Pass	Line 1
2	21.656	23.46	50	-26.54	Pass	Line 1

Conducted emissions at the mains power port according to FCC 15.247, RSS-247 Issue 3

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49301
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Test Date & Time: 2024-09-10
 Operating Conditions: ambient temperature: 24 °Celsius
 power input: 12 V DC
 AMN: Schwarzbeck NSLK 8127
 Operational Mode: Transmit Radio 1, 2480 MHz; Transmit Radio 2, 2402 MHz
 DUT Configuration:
 Applied to Port: Mains
 Note 1:

Index 97

RadiMation



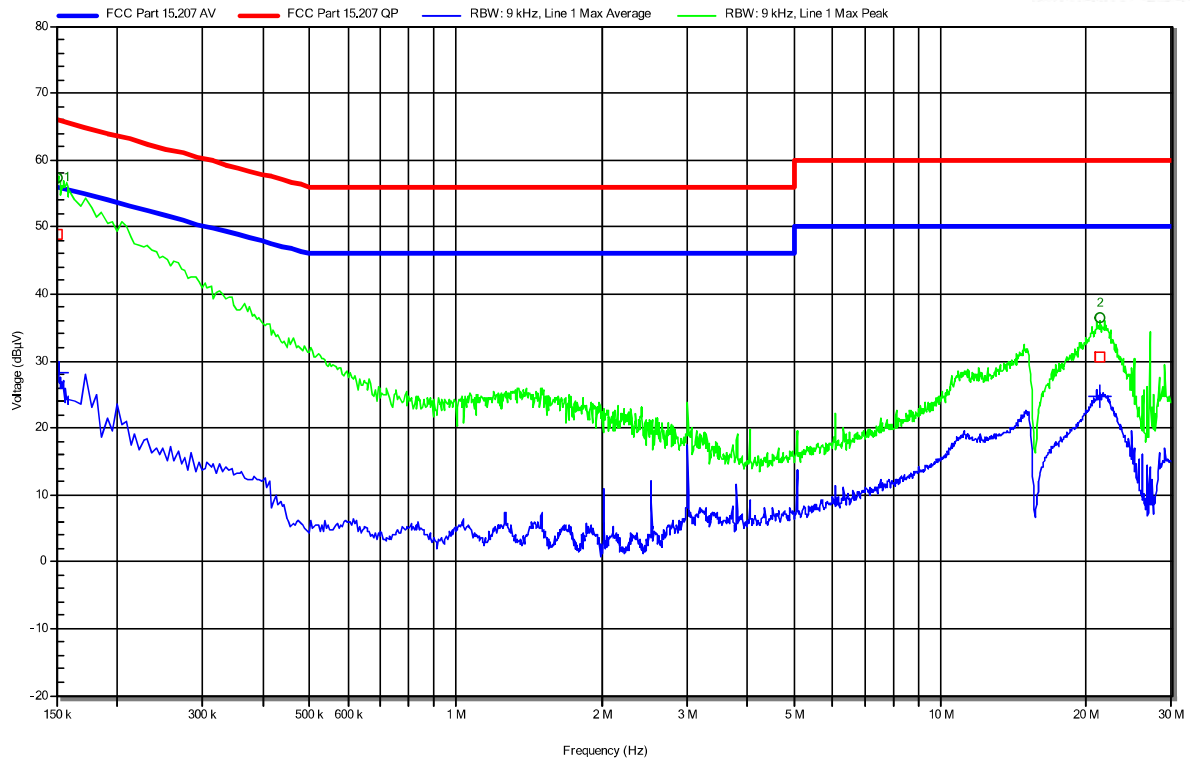
Start Frequency	Stop Frequency	Frequency Step	Measure Time	RBW		
150 kHz	30 MHz	Linear: 4.5 kHz steps	20 ms	9 kHz		
Peak Number	Frequency (MHz)	Quasi-Peak (dBμV)	Quasi-Peak Limit (dBμV)	Quasi-Peak Difference (dB)	Quasi-Peak Status	LISN
1	0.15	49.73	66	-16.27	Pass	Neutral
2	21.44	33.37	60	-26.63	Pass	Neutral
Peak Number	Frequency (MHz)	Average (dBμV)	Average Limit (dBμV)	Average Difference (dB)	Average Status	LISN
1	0.15	29.13	56	-26.87	Pass	Neutral
2	21.44	27.4	50	-22.6	Pass	Neutral

Conducted emissions at the mains power port according to RSS-247 Issue 3

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49301
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Test Date & Time: 2024-09-10
 Operating Conditions: ambient temperature: 24 °Celsius
 power input: 12 V DC
 AMN: Schwarzbeck NSLK 8127
 Operational Mode: Receive Radio 1, 2440 MHz; Receive Radio 2, 2440 MHz
 DUT Configuration:
 Applied to Port: Mains
 Note 1:

Index 98

RadiMation



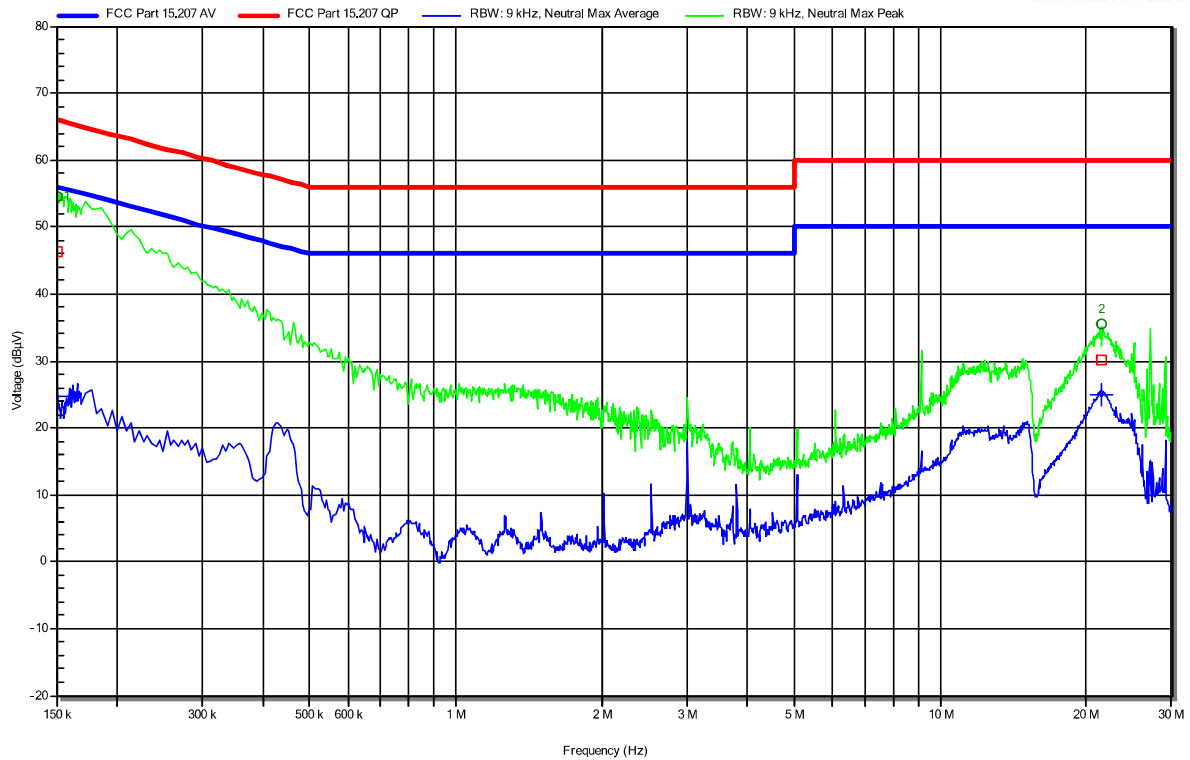
Start Frequency 150 kHz	Stop Frequency 30 MHz	Frequency Step Linear: 4.5 kHz steps	Measure Time 20 ms	RBW 9 kHz		
Peak Number	Frequency (MHz)	Quasi-Peak (dBµV)	Quasi-Peak Limit (dBµV)	Quasi-Peak Difference (dB)	Quasi-Peak Status	LISN
1	0.15	48.89	66	-17.11	Pass	Line 1
2	21.417	30.52	60	-29.48	Pass	Line 1
Peak Number	Frequency (MHz)	Average (dBµV)	Average Limit (dBµV)	Average Difference (dB)	Average Status	LISN
1	0.15	28.29	56	-27.71	Pass	Line 1
2	21.417	24.74	50	-25.26	Pass	Line 1

Conducted emissions at the mains power port according to RSS-247 Issue 3

Project Number: G0M-2406-2604
 Applicant: Somnium Space LTD.
 Model Description: Head-Mounted Display / VR headset
 Model: VR1
 Test Sample ID: 49301
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Test Date & Time: 2024-09-10
 Operating Conditions: ambient temperature: 24 °Celsius
 power input: 12 V DC
 AMN: Schwarzbeck NSLK 8127
 Operational Mode: Receive Radio 1, 2440 MHz; Receive Radio 2, 2440 MHz
 DUT Configuration:
 Applied to Port: Mains
 Note 1:

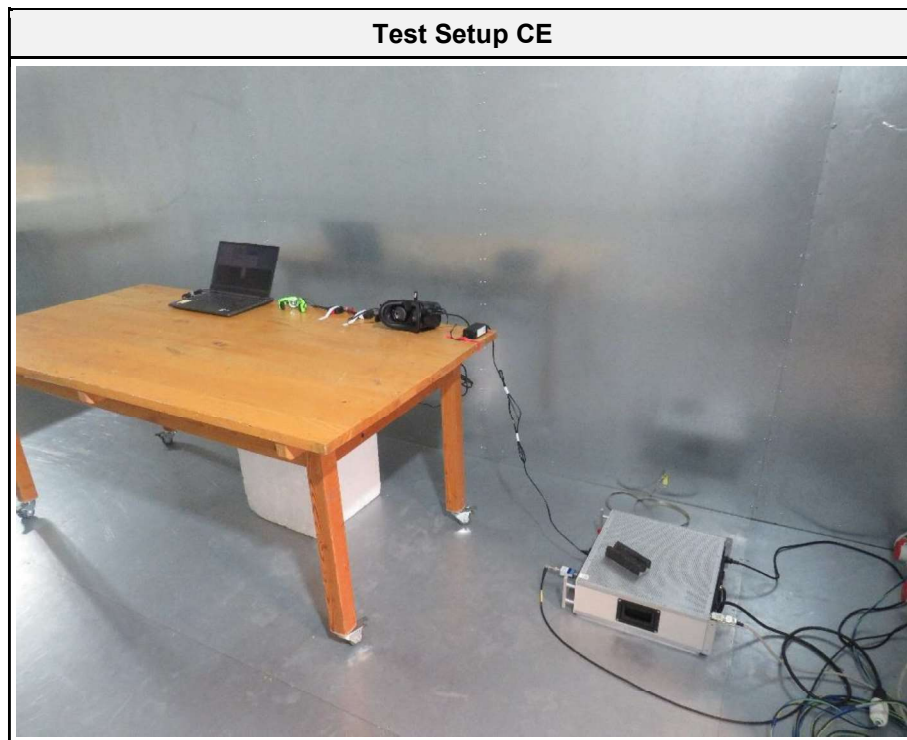
Index 99

RadiMation



Start Frequency	Stop Frequency	Frequency Step	Measure Time	RBW		
150 kHz	30 MHz	Linear: 4.5 kHz steps	20 ms	9 kHz		
Peak Number	Frequency (MHz)	Quasi-Peak (dBµV)	Quasi-Peak Limit (dBµV)	Quasi-Peak Difference (dB)	Quasi-Peak Status	LISN
1	0.15	46.39	66	-19.61	Pass	Neutral
2	21.557	30.21	60	-29.79	Pass	Neutral
Peak Number	Frequency (MHz)	Average (dBµV)	Average Limit (dBµV)	Average Difference (dB)	Average Status	LISN
1	0.15	24.76	56	-31.24	Pass	Neutral
2	21.557	24.98	50	-25.02	Pass	Neutral

3.5.5 Setup Photos



3.6 Test Conditions and Results - Band-edge compliance

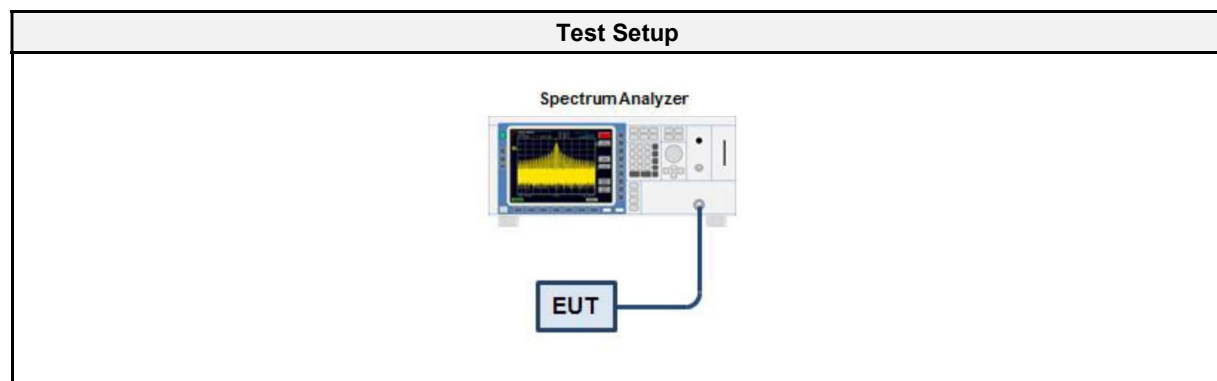
3.6.1 Information

Test Information	
Reference	FCC § 15.247(d); ISED RSS-247, Issue 3 (section 5.5)
Measurement Uncertainty	± 3.64 dB
Measurement Method	ANSI C63.10 11.13
Operator	Florian Voigt
Date	2024-09-11

3.6.2 Limits

Limits	
Power Measurement	Out-of-band attenuation [dB]
Peak	20
RMS	30

3.6.3 Setup



3.6.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyser	R&S	FSU 26	EF01407	2024-07	2025-07
Cable	Huber+Suhner	Sucoflex 102EA	EF00779 CAABR	2024-04	2025-04

3.6.5 Procedure

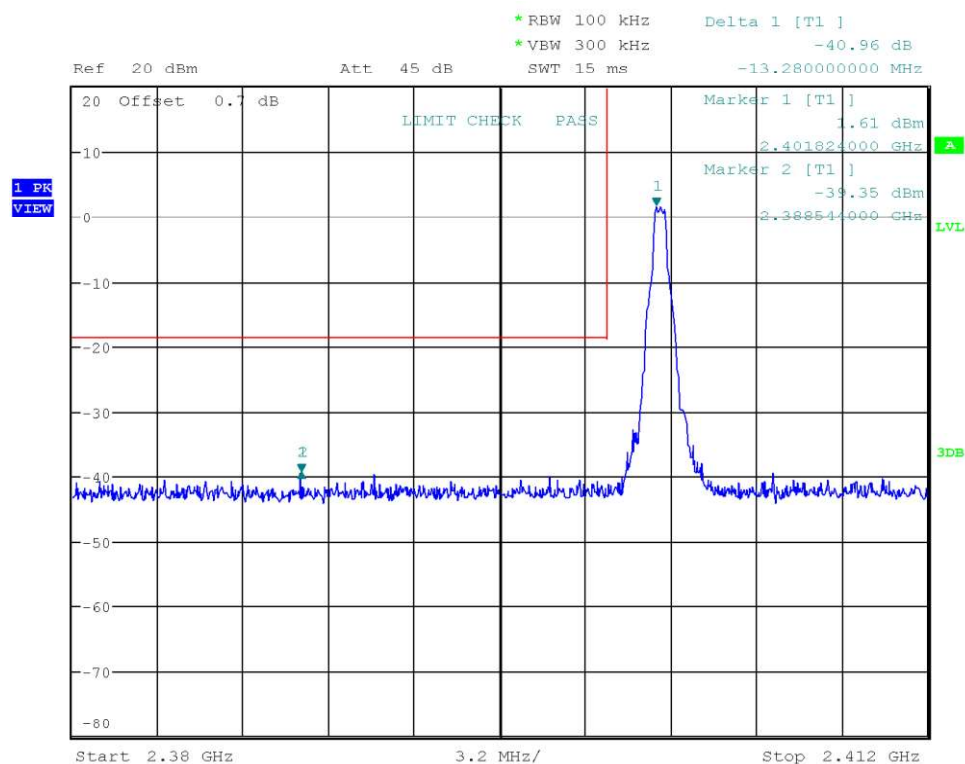
Test Procedure
1. EUT set to test mode (Communication tester is used if needed) 2. Span set around lower band edge and detector is set to peak and max hold 3. Resolution bandwidth is set to 100 kHz 4. Markers are set to peak emission levels within frequency band and outside frequency band 5. Band edge attenuation is determined from level difference

3.6.6 Results

Test Results				
Mode	Channel [MHz]	Out-of-band Attenuation [dB]	Limit [dB]	Verdict
Transmit Radio 1	2402	-40.96	-20	PASS
Transmit Radio 1	2480	-40.03	-20	PASS
Transmit Radio 2	2402	-41.55	-20	PASS
Transmit Radio 2	2480	-39.90	-20	PASS

Emissions in nonrestricted frequency bands at the Band-edge

Project Number:	G0M-2406-2604
Applicant:	Somnium Space LTD.
Model Description:	Head-Mounted Display / VR headset
Model:	VR1
Test Sample ID:	49299
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 7.8.6, 6.10.4
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-09-11
Mode:	Transmit Radio 1
Band-edge	Lower
In-band Frequency [MHz]:	2401.824
Max. in-band Level [dBm/100 kHz]:	1.606
Out-of-band Frequency [MHz]:	2388.544
Max. out-of-band Level [dBm/100 kHz]:	-39.351
Attenuation [dB]:	-40.96



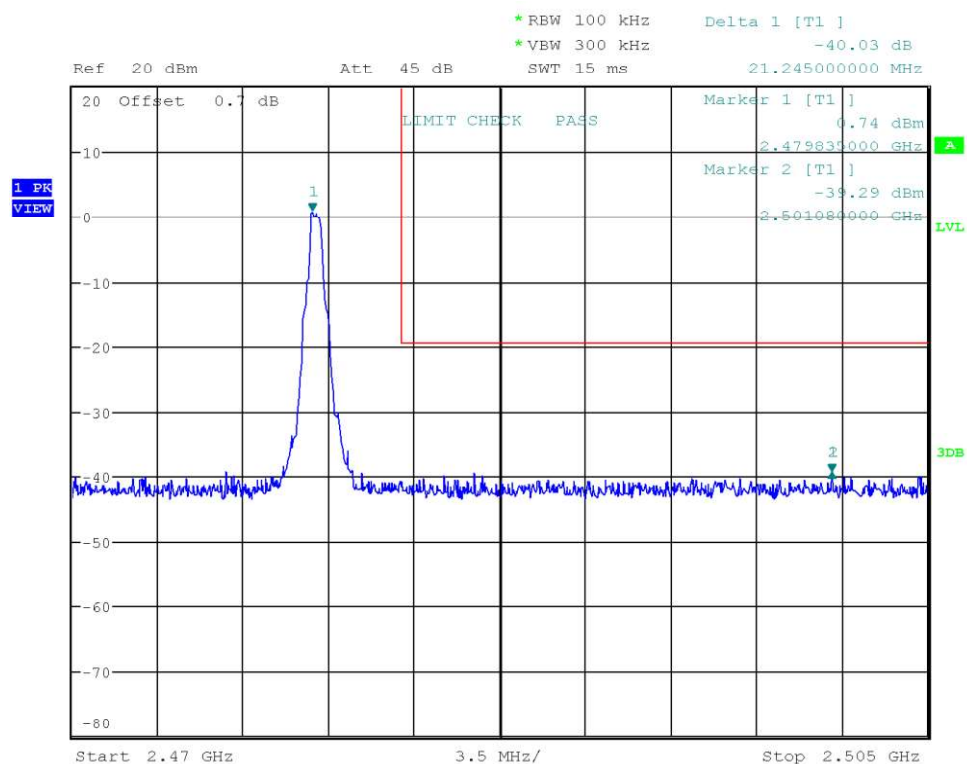
Date: 11.SEP.2024 13:10:13

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

Emissions in nonrestricted frequency bands at the Band-edge

Project Number: G0M-2406-2604
Applicant: Somnium Space LTD.
Model Description: Head-Mounted Display / VR headset
Model: VR1
Test Sample ID: 49299
Reference Standards: FCC 15.247, RSS-247
Reference Method: ANSI C63.10:2013, Section 7.8.6, 6.10.4
Operating Conditions: Tnom/Vnom
Operator: Florian Voigt
Test Site: Eurofins Product Service GmbH
Test Date: 2024-09-11
Mode: Transmit Radio 1
Band-edge: Upper
In-band Frequency [MHz]: 2479.835
Max. in-band Level [dBm/100 kHz]: 0.736
Out-of-band Frequency [MHz]: 2501.08
Max. out-of-band Level [dBm/100 kHz]: -39.29
Attenuation [dB]: -40.03



Date: 11.SEP.2024 13:11:16

Test Report No.: G0M-2406-2604-TFC247DT-V03

Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany