FCC CERTIFICATION TEST REPORT

Applicant	:	HANSHOW PTE. LTD.
Address	:	138 ROBINSON ROAD #02-33 OXLEY TOWER SINGAPORE(068906)
Equipment under Test	:	electronic shelf label
Model No.	:	Nebular Ultra-266Q-N D2
Trade Mark	:	N/A
FCC ID	:	2BPF3-NU2-266Q
Manufacturer	:	HANSHOW PTE. LTD.
Address	:	138 ROBINSON ROAD #02-33 OXLEY TOWER SINGAPORE(068906)
Report No.	:	LS-R26090711-5F02
Issue Date	:	Oct. 10, 2026

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Table of Contents

Test report declares....4
1. Summary of Test Results....6
2. General Test Information....7
2.0. Description of EUT....7
2.1. Accessories of EUT....7
2.2. Assistant equipment used for test....7
2.3. Block diagram of EUT configuration for test....8
2.4. Test environment conditions....8
2.5. Deviations of test standard....8
2.6. Test laboratory....8
2.7. Measurement uncertainty....9
3. Equipment Used During Test....10
4. 6 dB Bandwidth and 99% Bandwidth....12
4.0. Block diagram of test setup....12
4.1. Limits....12
4.2. Test procedure....12
4.3. Test result....12
5. Maximum Peak Output Power....13
5.0. Block diagram of test setup....13
5.1. Limits....13
5.2. Test procedure....13
5.3. Test result....13
6. Power Spectral Density....14
6.0. Block diagram of test setup....14
6.1. Limits....14
6.2. Test procedure....14
6.3. Test result....14
7. Band Edge Compliance (Conducted Method)....15
7.0. Block diagram of test setup....15
7.1. Limits....15
7.2. Test procedure....15
7.3. Test result....16
8. Radiated Emission....17
8.0. Block diagram of test setup....17
8.1. Limit....18
8.2. Test Procedure....19
8.3. Test result....21
9. RF Conducted Spurious Emissions....50
9.0. Block diagram of test setup....50
9.1. Limits....50
9.2. Test procedure....50
9.3. Test result....50
10. Emissions in Restricted Frequency Bands....51
10.0. Block diagram of test setup....51
10.1. Limit....51
10.2. Test Procedure....51
10.3. Test result....51

11.0. Block diagram of test setup....60
11.1. Power line conducted emission limits....60
11.2. Test procedure....60
11.3. Test result....61
12. Antenna Requirements....62
12.1. Limit....62
12.2. Result....62
13. Test Setup Photograph....63
14. Photos of the EUT....63

Test Report Declare

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Test Standard Used:
FCC Rules and Regulations Part 15 Subpart C.
Test Procedure Used:
ANSI C63.10-2020+Cor.1-2023+C63.10a-2024+Errata to C63.10a-2024

We Declare:
The equipment described above is tested and assessed by LabSure Testing Services (Tianjin) Co., Ltd. and in the configuration assessed the equipment complied with the standards specified above. The tested and assessed results are contained in this test report and LabSure Testing Services (Tianjin) Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these assessments.
After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above standards.

Report No:	LS-R26090711-5F02		
Date of Receipt:	Sep. 09, 2026	**Date of Test:**	Sep. 09, 2026 – Sep. 30, 2026

Prepared By:	***Reviewed by:***	***Authorized by:***
Sunny Zhang	Ethan Bao	Aaron Zhang
Sunny Zhang/Engineer	***Ethan Bao/Engineer***	***Aaron Zhang/Manager***

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of LabSure Testing Services (Tianjin) Co., Ltd.

Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	Oct. 10, 2026	

1. Summary of Test Results

The EUT have been tested according to the applicable standards as referenced below.		
Description of Test Item	**Standard**	**Verdict**
6 dB Bandwidth and 99% Bandwidth	FCC Part 15: 15.247 ANSI C63.10:2020	Pass
Peak Output Power	FCC Part 15: 15.247 ANSI C63.10:2020	Pass
Power Spectral Density	FCC Part 15:15.247 ANSI C63.10:2020	Pass
Band Edge Compliance (conducted method)	FCC Part 15: 15.209 FCC Part 15: 15.247 ANSI C63.10: 2020	Pass
Radiation Emission	FCC Part 15: 15.247 ANSI C63.10:2013	Pass
RF Conducted Spurious Emissions	FCC Part 15: 15.209 FCC Part 15: 15.247 ANSI C63.10: 2020	Pass
Emission in Restricted Frequency Bands	FCC Part 15: 15.209 FCC Part 15: 15.247 ANSI C63.10: 2020	Pass
Power Line Conducted Emission	FCC Part 15: 15.207 ANSI C63.10: 2020	N/A
Antenna Requirement	FCC Part 15: 15.203	Pass
N/A is an abbreviation for Not Applicable.		

2. General Test Information

2.0. Description of EUT

Eut* Name	:	electronic shelf label
Model Number	:	Nebular Ultra-266Q-N D2
EUT Function Description	:	Please reference user manual of this device
Power Supply	:	DC 3V by battery
Radio Specification	:	Bluetooth (LE)
Operation Frequency	:	2402 MHz - 2480 MHz
Modulation	:	GFSK
Data Rate	:	1Mbps, 2Mbps
Antenna Type	:	PCB antenna, maximum PK gain: -1.2 dBi

Note: EUT is the ab. of equipment under test.

Channel information					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	14	2430	28	2458
1	2404	15	2432	29	2460
2	2406	16	2434	30	2462
3	2408	17	2436	31	2464
4	2410	18	2438	32	2466
5	2412	19	2440	33	2468
6	2414	20	2442	34	2470
7	2416	21	2444	35	2472
8	2418	22	2446	36	2474
9	2420	23	2448	37	2476
10	2422	24	2450	38	2478
11	2424	25	2452	39	2480
12	2426	26	2454		
13	2428	27	2456		

2.1. Accessories of EUT

Description of Accessories	Manufacturer	Model number	Description	Remark
Charging case	Baidu	N/A	N/A	N/A

2.2. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	Other
Notebook	Lenovo Beijing Co. Ltd.	N/A	N/A	ThinkPad

2.3. Block diagram of EUT configuration for test

EUT

Test software: RF_Test.EXE
The test software was used to control EUT work in Continuous Tx mode, and select test channel, wireless mode as below table:

Tested mode, channel, information			
Mode	Setting Tx Power	Channel	Frequency (MHz)
BLE (1M, 2M)	0	CH0	2402
	0	CH19	2440
	0	CH39	2480

2.4. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature range:	21-25 ℃
Humidity range:	40-75%
Pressure range:	86-106 kPa

2.5. Deviations of test standard

No deviation.

2.6. Test laboratory

LabSure Testing Services (Tianjin) Co., Ltd.
Address: Building D-1, No. 19, Weisi Road, Microelectronics Industrial Park Development Area, Tianjin, China.
Tel: +86-22-58038033, www.lab-sure.com, E-mail: labsure@lab-sure.com
A2LA (American Association for Laboratory Accreditation) Number: 7735.01
CNAS (China National Accreditation Service for Conformity Assessment) CODE: L13402
FCC Designation Number: CN1464; FCC Test Firm Registration Number: 991964
ISED (Innovation, Science and Economic Development Canada) Company Number: 27768
Conformity Assessment Body Identifier: CN0125
VCCI Facility Registration Number: C-20089, T-20093, R-20125, G-20122

2.7. Measurement uncertainty

Test Item	Uncertainty
Bandwidth	0.14%
Peak Output Power (Conducted) (Spectrum Analyzer)	0.12 dB (10 MHz ≤ f < 3.6 GHz);
	0.32 dB (3.6 GHz ≤ f < 8 GHz)
Peak Output Power (Conducted) (Power Sensor)	0.51 dB
Power Spectral Density	0.12 dB (10 MHz ≤ f < 3.6 GHz);
	0.32 dB (3.6 GHz ≤ f < 8 GHz)
Frequencies Stability	6.7×10^{-8} (Antenna couple method)
	3.4×10^{-8} (Conducted method)
Conducted Spurious Emissions	0.12 dB (10 MHz ≤ f < 3.6 GHz);
	0.32 dB (3.6 GHz ≤ f < 8 GHz)
	0.52 dB (8 GHz ≤ f < 22 GHz)
Uncertainty for Radio Frequency (RBW < 20 kHz)	3×10^{-7}
Temperature	±2℃
Humidity	±1%
Uncertainty for Radiation Emission Test (30 MHz - 1 GHz)	2.72 dB (Antenna Polarize: V)
	2.72 dB (Antenna Polarize: H)
Uncertainty for Radiation Emission Test (1 GHz - 40 GHz)	2.74 dB (1 - 6 GHz)
	2.72 dB (6 GHz - 18 GHz)
	3.54 dB (18 GHz - 26 GHz)
	4.30 dB (26 GHz - 40 GHz)
Uncertainty for Power Line Conduction Emission Test	3.40 dB (150 kHz - 30 MHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

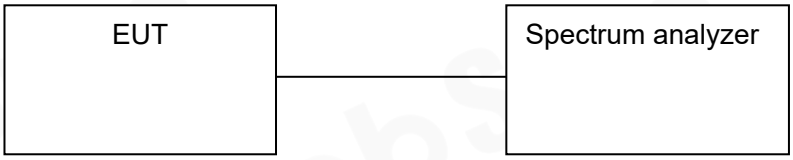
3. Equipment Used During Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
☒**RF Connected Test**					
Spectrum Analyzer	R&S	FSV40-N	101642	2026/06/09	1 Year
Vector Signal Generator	R&S	SMCV100B	103781	2026/06/09	1 Year
Wideband Radio Communication Tester	R&S	CMW 500	167141	2026/06/09	1 Year
RF Control Unit	Tonscend	JS0806-2	24A80620795	2026/06/09	1 Year
MXG Vector Signal Generator	Keysight	N5182B	MY57301463	2026/02/11	1 Year
PXA Signal Analyzer	Keysight	N9010A	MY53281492	2026/02/11	1 Year
Power Sensor	Keysight	U2021XA	MY59150007	2026/02/11	1 Year
DC Power Supply	Chroma	62012P-80-60	62012PD00544	2026/01/13	1 Year
Test Software	Tonscend	JS1120-3	3.6.21	N/A	N/A
☒**Radiated Emission -10m EMI Chamber**					
Broadband Horn Antenna	TESEQ	BHA 9118	31754	2025/09/29	2 Year
BroadBand Horn Antenna	Com-Power	AHA-840	10100024	2025/09/29	2 Year
Active Loop Antenna	R&S	HFH2-Z2	100269	2026/08/24	2 Year
Amplifier	CMO-MW	DPA8 1000 1800	09211739	2026/02/17	1 Year
EMI Test Receiver	R&S	ESCI	101024	2026/02/11	1 Year
EMI Test Receiver	R&S	ESCI	101030	2026/02/11	1 Year
EMI Test Receiver	R&S	ESU26	100244	2026/02/17	1 Year
EXA Signal Analyzer	Keysight	N9010A	MY53281492	2026/02/11	1 Year
Bilog Antenna	TESEQ	CBL6112D	29068	2024/10/10	2 Year
Bilog Antenna	TESEQ	CBL6112D	29069	2024/10/10	2 Year
Amplifier	Sonoma	310N	300913	2026/02/11	1 Year
Amplifier	Sonoma	310N	334532	2026/02/11	1 Year
Ant Mast	Innco	MA4000	N/A	N/A	N/A
Ant Mast	Innco	MA4000	N/A	N/A	N/A
Mast Controller	Innco	CO2000	N/A	N/A	N/A
Mast Controller	Innco	CO2000	N/A	N/A	N/A
RF Selector 4CH	TOYO	NS4904N	Selector1	N/A	N/A
RF Selector 4CH	TOYO	NS4904N	Selector2	N/A	N/A
Test software	TOYO	EP5/RSE	Ver 1.9.1	N/A	N/A
Test software	Audix	E3	V 6.11111b	N/A	N/A
☐**Radiated Emission -3m EMI Chamber**					
Broadband Horn Antenna	TESEQ	BHA 9118	31754	2025/09/29	2 Year
BroadBand Horn Antenna	Com-Power	AHA-840	10100024	2025/09/29	2 Year
Active Loop Antenna	R&S	HFH2-Z2	100269	2026/08/24	2 Year
Amplifier	CMO-MW	DPA8 1000 1800	09211739	2026/02/17	1 Year
EMI Test Receiver	R&S	ESCI	101397	2026/02/11	1 Year
EMI Test Receiver	R&S	ESU26	100244	2026/02/17	1 Year
EXA Signal Analyzer	Keysight	N9010A	MY53281492	2026/02/11	1 Year

Bilog Antenna	TESEQ	CBL6112D	29067	2025/06/17	2 Year
Amplifier	Sonoma	310N	334533	2026/02/11	1 Year
Ant Mast	Innco	MA4000	N/A	N/A	N/A
Mast Controller	Innco	CO2000	N/A	N/A	N/A
RF Selector 4CH	TOYO	NS4904N	Selector1	N/A	N/A
Test software	TOYO	EP5/RE	Ver 5.7.10	N/A	N/A
Test software	Audix	E3	V 6.11111b	N/A	N/A
☐**Power Line Conducted Emissions Test**					
Test Receiver	R&S	ESCI	101375	2026/02/11	1 Year
LISN	R&S	ENV216	101123	2026/02/11	1 Year
Test software	TOYO	EP5/CE	V 5.4.40	N/A	N/A

4. 6 dB Bandwidth and 99% Bandwidth

4.0. Block diagram of test setup



4.1. Limits

For direct sequence systems, the minimum 6 dB bandwidth shall be at least 500 kHz

4.2. Test procedure

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

(2) 99% Bandwidth set the spectrum analyzer as follows:

RBW:	in the range of 1% to 5% of the OBW
VBW:	≥ [3 × RBW]
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

(3) 6 dB Bandwidth set the spectrum analyzer as follows:

RBW:	in the range of 1% to 5% of the OBW but not less than 100 kHz
VBW:	≥ [3 × RBW]
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

(4) Allow the trace to stabilize, measure the 6 dB and 99% bandwidth of signal.

4.3. Test result

Pass
Please find the detailed data in APPENDIXES-BLE-FCC.

5. Maximum Peak Output Power

5.0. Block diagram of test setup

Same with 4.1

5.1. Limits

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. If transmitting antennas of directional gain greater than 6dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.2. Test procedure

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

(2) Set the spectrum analyzer as follows:

RBW:	≥DTS bandwidth
VBW:	≥3 x RBW
Span	≥3 x RBW
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

(3) Allow the trace to stabilize, Use the instrument's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges measure out the PK output power.

5.3. Test result

Pass
Please find the detailed data in APPENDIXES-BLE-FCC.

6. Power Spectral Density

6.0. Block diagram of test setup

Same with 4.1

6.1. Limits

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

6.2. Test procedure

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

(2) Set the spectrum analyzer as follows:

Center frequency	DTS Channel center frequency
RBW:	3 kHz ≤ RBW ≤ 100 kHz
VBW:	≥ 3*RBW
Span	1.5 times the DTS bandwidth
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

(3) Allow the trace to stabilize, use the peak marker function to determine the maximum amplitude level within the RBW.

(4) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

6.3. Test result

Pass
Please find the detailed data in APPENDIXES-BLE-FCC.

7. Band Edge Compliance (Conducted Method)

7.0. Block diagram of test setup

Same with 4.1

7.1. Limits

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

7.2. Test procedure

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

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

Center frequency	DTS Channel center frequency
RBW:	100 kHz
VBW:	300 kHz
Span	1.5 times the DTS bandwidth
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

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

(4) Set the spectrum analyzer as follows:

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

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

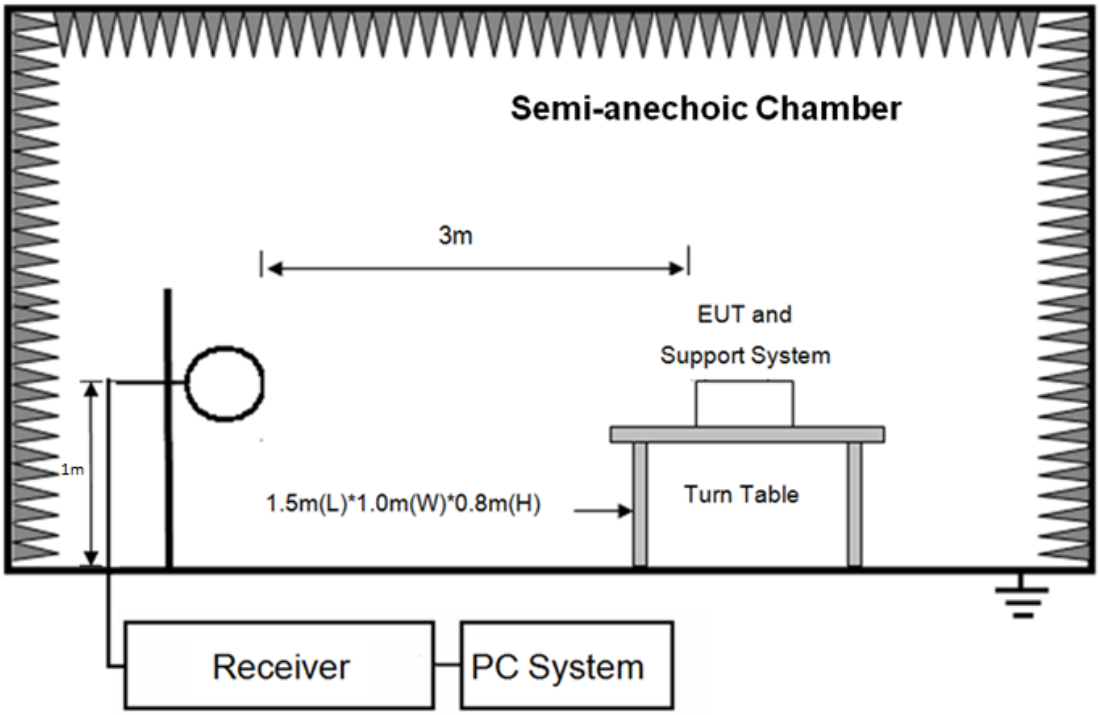
7.3. Test result

Pass
Please find the detailed data in APPENDIXES-BLE-FCC.

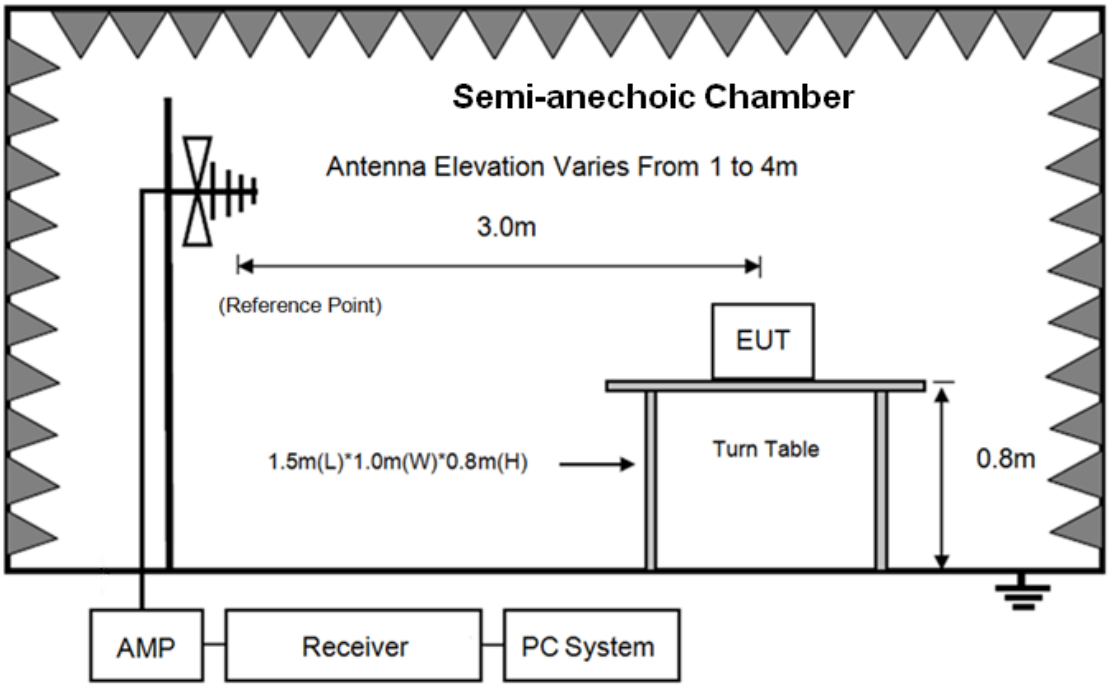
8. Radiated Emission

8.0. Block diagram of test setup

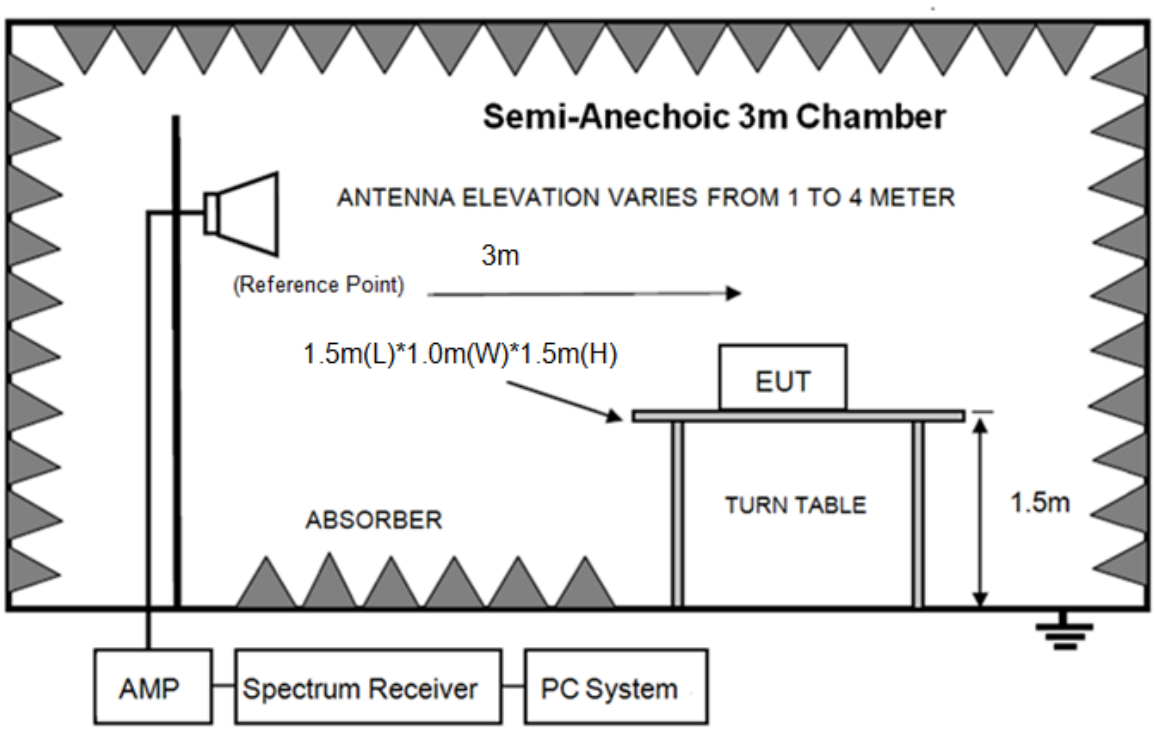
In 3 m Anechoic Chamber, test setup diagram for 9 kHz - 30 MHz:



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



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



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

8.1. Limit

(1) FCC 15.205 Restricted frequency band

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

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

[2]Above 38.6

(2) FCC 15.209.

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

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

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

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

(3) Limit for this EUT

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions or comply with 15.209 limits.

8.2. Test Procedure

(1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber for below 1 G and 150 cm above the ground plane inside a semi-anechoic chamber for above 1 G.

(2) Test antenna was located 3 m from the EUT on an adjustable mast, and the antenna used as below table.

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

According ANSI C63.10:2013 clause 6.4.4.2 and 6,5.3, for measurements below 30 MHz, the loop antenna was positioned with its plane vertical from the EUT and rotated about its vertical axis for maximum response at each azimuth position around the EUT. And the loop antenna also is positioned with its plane horizontal at the specified distance from the EUT. The center of the loop is 1 m above the ground. For measurement above 30 MHz, the Trilog Broadband Antenna or Horn Antenna was located 3 m from EUT, Measurements were made with the antenna positioned

in both the horizontal and vertical planes of Polarization, and the measurement antenna was varied from 1 m to 4 m. in height above the reference ground plane to obtain the maximum signal strength.

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

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

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

(c) Change modulation type of device if practicable.

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

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

Spectrum frequency from 9 kHz to 25 GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 9 kHz to 30 MHz and 18 GHz to 25 GHz, so below final test was performed with frequency range from 30 MHz to 18 GHz.

(4) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1 m and 4 m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed according to ANSI C63.10:2013 on Radiated Emission test.

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

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

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

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

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

8.3. Test result

Pass. (See below detailed test result)

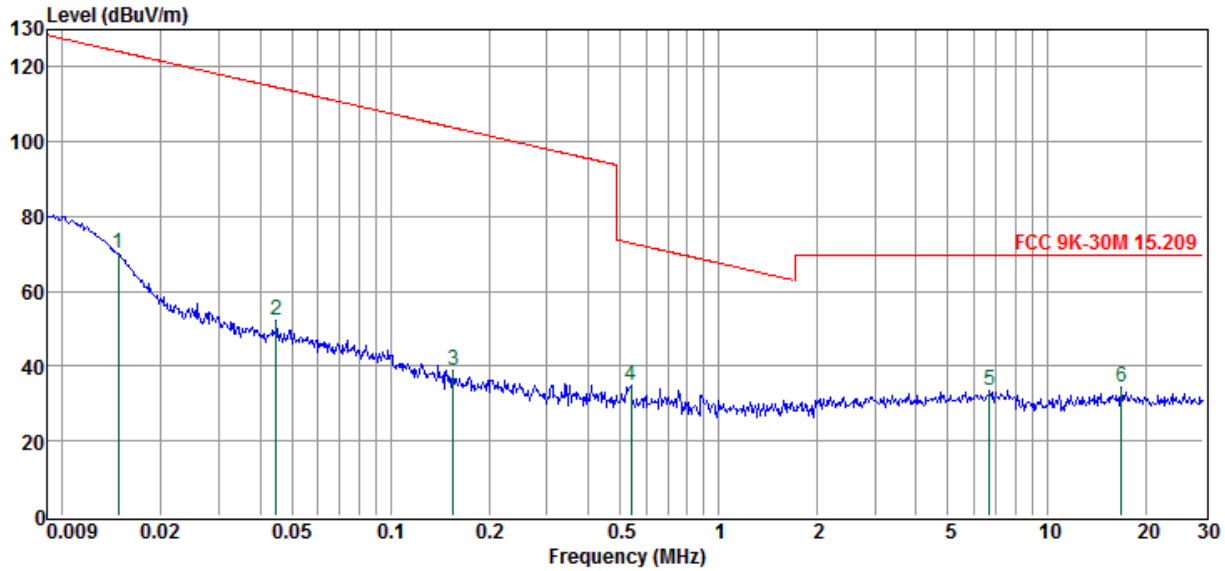
All the emissions except fundamental emission from 9 kHz to 25 GHz were comply with 15.209 limits.
Note1: For emissions below 1 GHz and above 18 GHz, according exploratory explorer test, when change Tx mode and channel, have no distinct influence on emissions level, so for emissions below 1 GHz, the final test was only performed with EUT working in BLE 1M 2402MHz transmission mode.
Note 2: Scan with all modes, the worst case was recorded in this report.
Note3: For emissions above 1 GHz. If peak results comply with AV limit, AV Result is deemed to comply with AV limit.

Radiated Emission test (9K – 30MHz)

Radiated Emission Test Result

Test Site	: DDT 10m Chamber		
Test Date	: 09-17-2026	**Tested By**	: Sunny
EUT	: electronic shelf label	**Model Number**	: Nebular Ultra-266Q-N D2
Power Supply	: Battery	**Test Mode**	: TX mode
Memo	: BLE 1M 2402MHz		

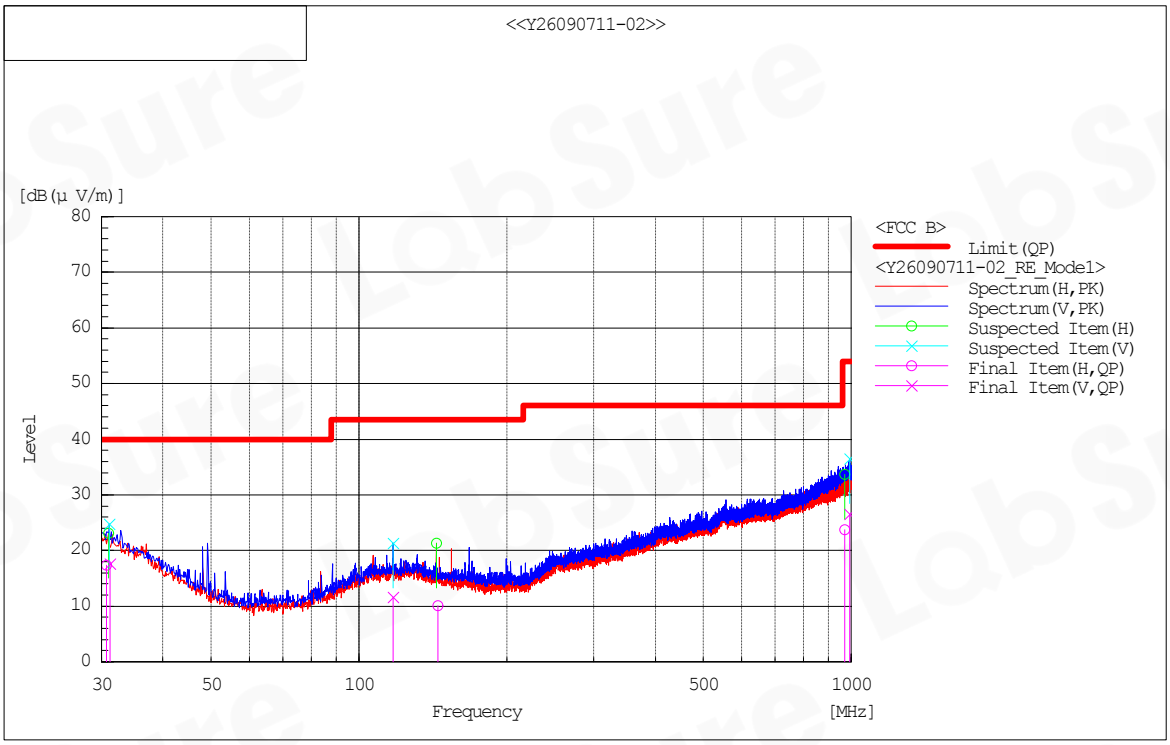
Data: 45



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	0.015	50.40	19.71	0.02	70.13	124.22	-54.09	Peak	HORIZONTAL
2	0.045	32.37	19.71	0.03	52.11	114.57	-62.46	Peak	HORIZONTAL
3	0.155	19.25	19.64	0.04	38.93	103.78	-64.85	Peak	HORIZONTAL
4	0.541	15.16	19.73	0.05	34.94	72.93	-37.99	Peak	HORIZONTAL
5	6.689	13.33	20.00	0.18	33.51	69.54	-36.03	Peak	HORIZONTAL
6	16.865	14.25	20.06	0.26	34.57	69.54	-34.97	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
3. Test setup: 9k-150kHz, RBW: 300Hz; 150k-30Mhz, RBW: 10kHz, Sweep time: auto.

Radiated Emission test (30M - 1 GHz)



Final Result

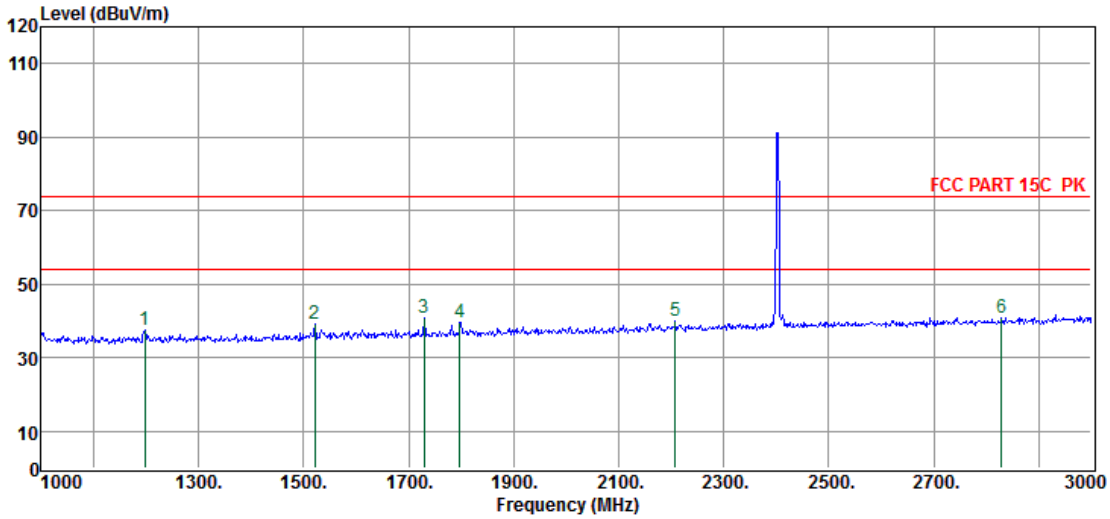
No.	Frequency [MHz]	(P)	Reading QP [dB(µ V)]	c.f [dB(1/m)]	Result QP [dB(µ V/m)]	Limit QP [dB(µ V/m)]	Margin QP [dB]	Height [cm]	Angle [°]	System
1	30.729	H	22.2	-4.9	17.3	40.0	22.7	395.0	235.0	1
2	144.592	H	21.0	-11.0	10.0	43.5	33.5	199.0	331.5	1
3	971.082	H	17.1	6.6	23.7	54.0	30.3	102.0	271.5	1
4	31.248	V	22.2	-4.5	17.7	40.0	22.3	298.0	112.1	2
5	117.373	V	21.1	-9.5	11.6	43.5	31.9	291.0	353.5	2
6	992.900	V	17.5	9.0	26.5	54.0	27.5	228.0	243.0	2

Radiated Emission test (1GHz to 18G)

Radiated Emission Test Result

Test Site	: DDT 10m Chamber		
Test Date	: 09-17-2026	**Tested By**	: Sunny
EUT	: electronic shelf label	**Model Number**	: Nebular Ultra-266Q-N D2
Power Supply	: Battery	**Test Mode**	: TX mode
Memo	: BLE1M 2402MHz		

Data: 149



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1198.000	64.34	27.40	55.06	0.90	37.58	74.00	-36.42	Peak	HORIZONTAL
2	1522.000	65.43	28.11	55.48	0.97	39.03	74.00	-34.97	Peak	HORIZONTAL
3	1730.000	66.36	29.10	55.75	1.03	40.74	74.00	-33.26	Peak	HORIZONTAL
4	1798.000	65.06	29.43	55.84	1.14	39.79	74.00	-34.21	Peak	HORIZONTAL
5	2208.000	63.56	31.02	56.10	1.34	39.82	74.00	-34.18	Peak	HORIZONTAL
6	2830.000	62.81	32.76	56.10	1.53	41.00	74.00	-33.00	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

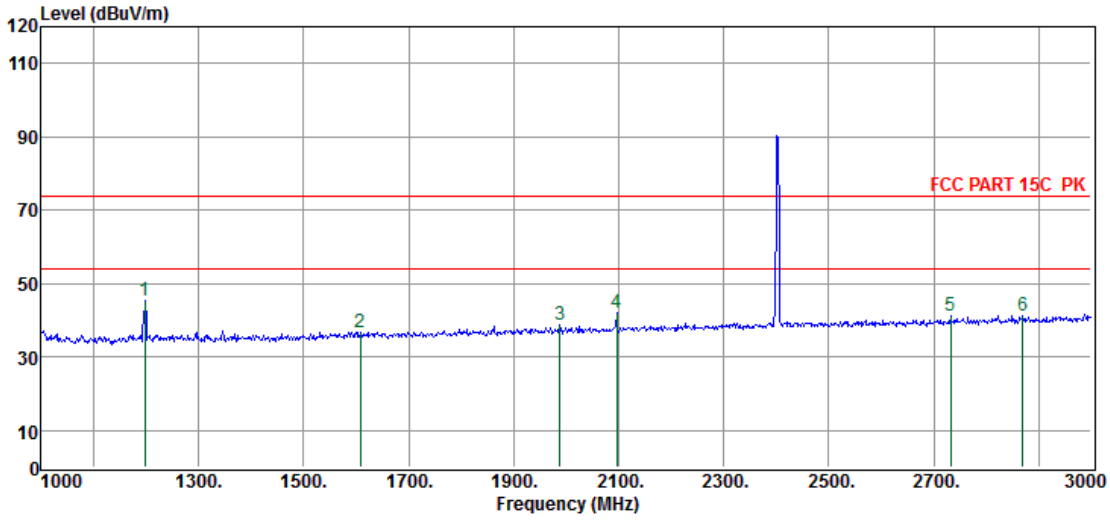
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE1M 2402MHz

Data: 150



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1198.000	71.93	27.40	55.06	0.90	45.17	74.00	-28.83	Peak	VERTICAL
2	1608.000	62.92	28.52	55.59	1.02	36.87	74.00	-37.13	Peak	VERTICAL
3	1988.000	63.19	30.34	56.08	1.19	38.64	74.00	-35.36	Peak	VERTICAL
4	2096.000	66.09	30.69	56.10	1.18	41.86	74.00	-32.14	Peak	VERTICAL
5	2732.000	63.18	32.50	56.10	1.48	41.06	74.00	-32.94	Peak	VERTICAL
6	2870.000	63.01	32.86	56.10	1.54	41.31	74.00	-32.69	Peak	VERTICAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

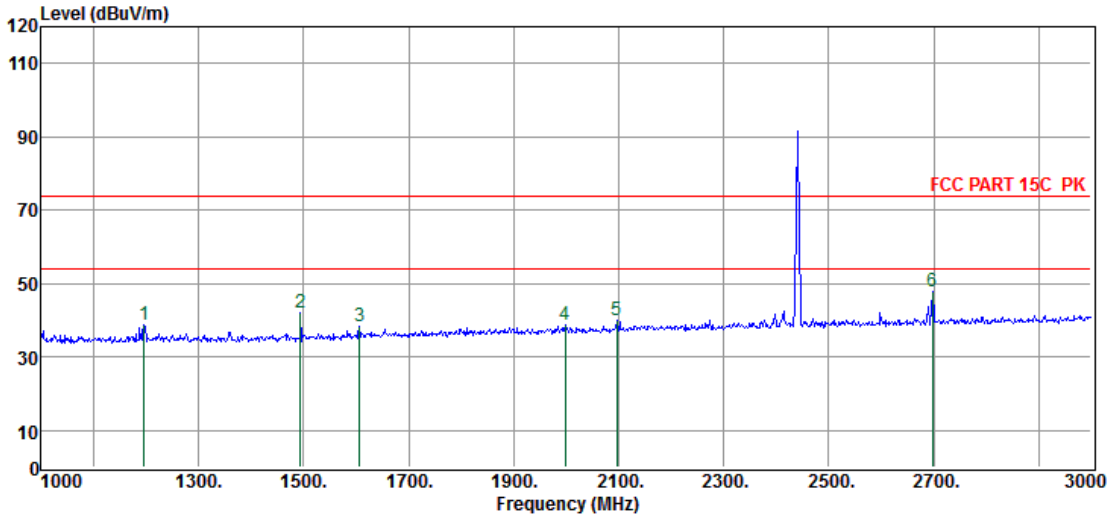
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE1M 2440MHz

Data: 151



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1196.000	65.54	27.39	55.05	0.90	38.78	74.00	-35.22	Peak	HORIZONTAL
2	1494.000	68.36	27.99	55.44	0.95	41.86	74.00	-32.14	Peak	HORIZONTAL
3	1606.000	64.34	28.51	55.59	1.01	38.27	74.00	-35.73	Peak	HORIZONTAL
4	1998.000	63.09	30.39	56.10	1.20	38.58	74.00	-35.42	Peak	HORIZONTAL
5	2096.000	64.06	30.69	56.10	1.18	39.83	74.00	-34.17	Peak	HORIZONTAL
6	2698.000	70.03	32.41	56.10	1.44	47.78	74.00	-26.22	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

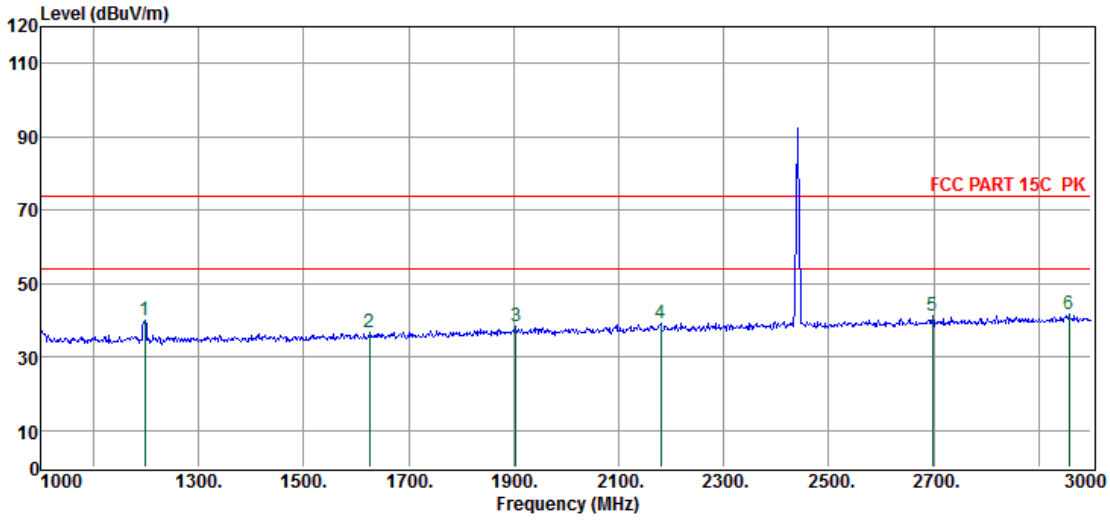
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE1M 2440MHz

Data: 152



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1198.000	66.95	27.40	55.06	0.90	40.19	74.00	-33.81	Peak	VERTICAL
2	1626.000	62.54	28.60	55.61	1.03	36.56	74.00	-37.44	Peak	VERTICAL
3	1904.000	63.14	29.94	55.98	1.09	38.19	74.00	-35.81	Peak	VERTICAL
4	2180.000	63.17	30.94	56.10	1.34	39.35	74.00	-34.65	Peak	VERTICAL
5	2698.000	63.48	32.41	56.10	1.44	41.23	74.00	-32.77	Peak	VERTICAL
6	2958.000	62.97	33.09	56.10	1.58	41.54	74.00	-32.46	Peak	VERTICAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

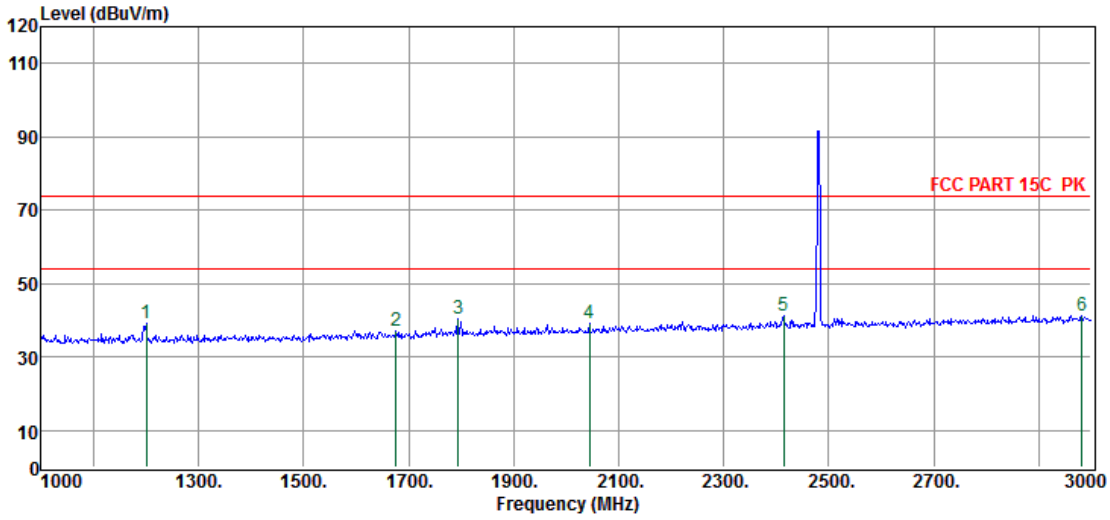
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE1M 2480MHz

Data: 155



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1200.000	65.79	27.40	55.06	0.90	39.03	74.00	-34.97	Peak	HORIZONTAL
2	1676.000	62.91	28.84	55.68	1.03	37.10	74.00	-36.90	Peak	HORIZONTAL
3	1794.000	65.57	29.41	55.83	1.13	40.28	74.00	-33.72	Peak	HORIZONTAL
4	2044.000	63.41	30.53	56.10	1.15	38.99	74.00	-35.01	Peak	HORIZONTAL
5	2414.000	64.16	31.64	56.10	1.42	41.12	74.00	-32.88	Peak	HORIZONTAL
6	2982.000	62.82	33.15	56.10	1.56	41.43	74.00	-32.57	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

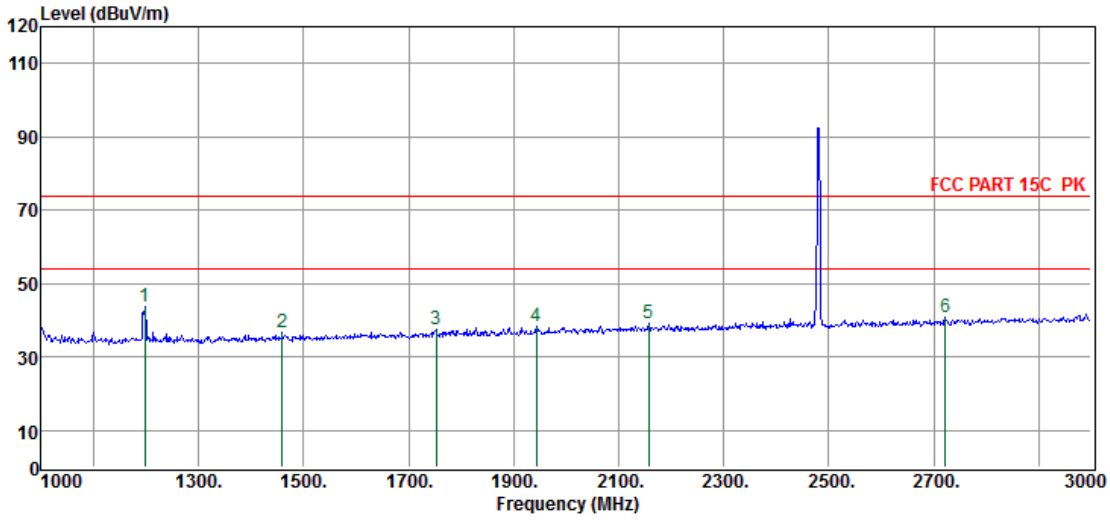
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE1M 2480MHz

Data: 156



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1198.000	70.40	27.40	55.06	0.90	43.64	74.00	-30.36	Peak	VERTICAL
2	1460.000	63.07	27.92	55.40	0.97	36.56	74.00	-37.44	Peak	VERTICAL
3	1752.000	62.90	29.21	55.78	1.05	37.38	74.00	-36.62	Peak	VERTICAL
4	1944.000	62.94	30.13	56.03	1.13	38.17	74.00	-35.83	Peak	VERTICAL
5	2158.000	62.96	30.87	56.10	1.35	39.08	74.00	-34.92	Peak	VERTICAL
6	2722.000	62.86	32.48	56.10	1.47	40.71	74.00	-33.29	Peak	VERTICAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

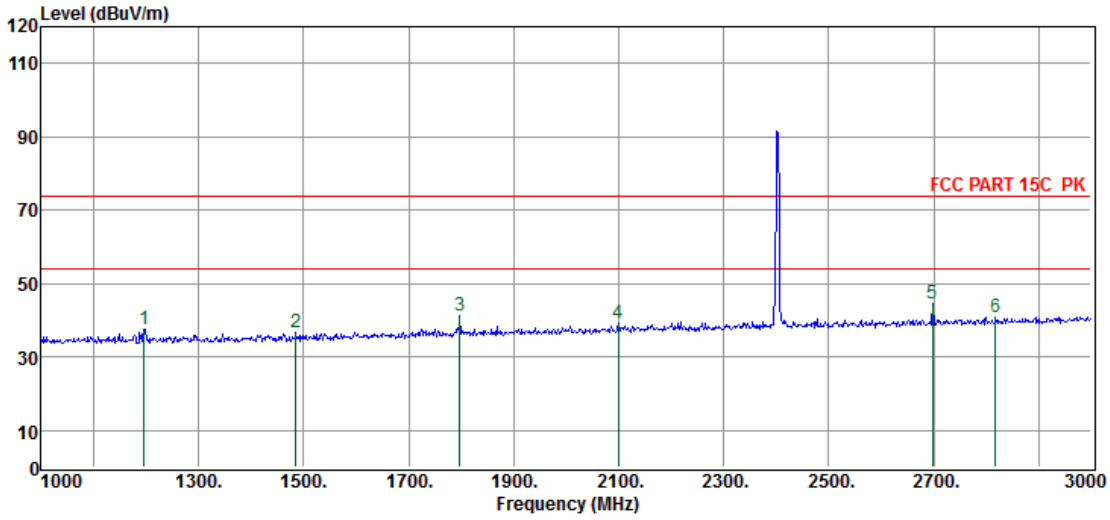
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2402MHz

Data: 159



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1196.000	64.27	27.39	55.05	0.90	37.51	74.00	-36.49	Peak	HORIZONTAL
2	1486.000	63.25	27.97	55.43	0.96	36.75	74.00	-37.25	Peak	HORIZONTAL
3	1798.000	66.33	29.43	55.84	1.14	41.06	74.00	-32.94	Peak	HORIZONTAL
4	2100.000	63.43	30.70	56.10	1.18	39.21	74.00	-34.79	Peak	HORIZONTAL
5	2698.000	66.84	32.41	56.10	1.44	44.59	74.00	-29.41	Peak	HORIZONTAL
6	2818.000	62.77	32.73	56.10	1.54	40.94	74.00	-33.06	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

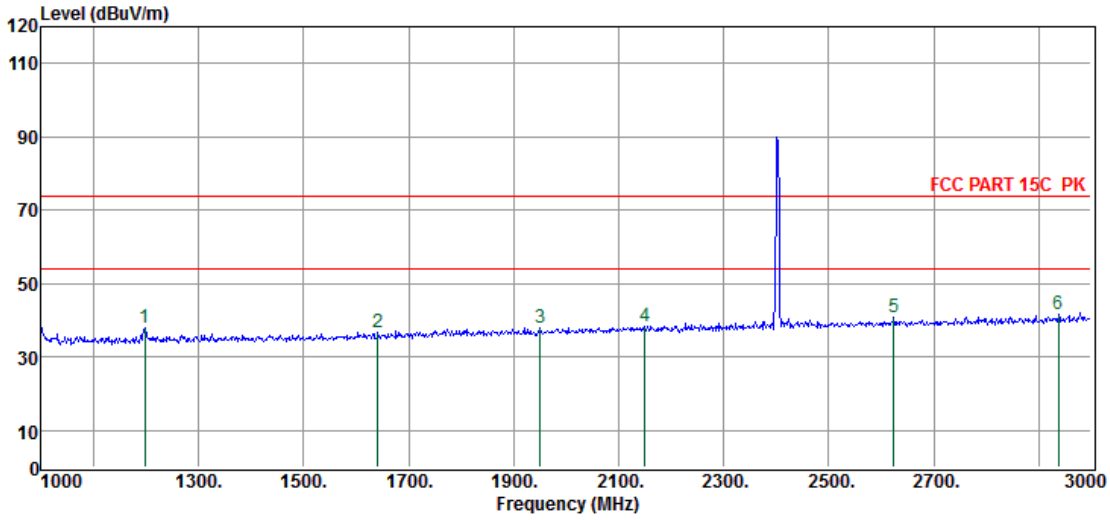
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2402MHz

Data: 160



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1198.000	64.83	27.40	55.06	0.90	38.07	74.00	-35.93	Peak	VERTICAL
2	1642.000	62.61	28.68	55.63	1.04	36.70	74.00	-37.30	Peak	VERTICAL
3	1950.000	62.65	30.16	56.03	1.14	37.92	74.00	-36.08	Peak	VERTICAL
4	2150.000	62.38	30.85	56.10	1.35	38.48	74.00	-35.52	Peak	VERTICAL
5	2624.000	63.17	32.22	56.10	1.46	40.75	74.00	-33.25	Peak	VERTICAL
6	2938.000	63.25	33.04	56.10	1.58	41.77	74.00	-32.23	Peak	VERTICAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

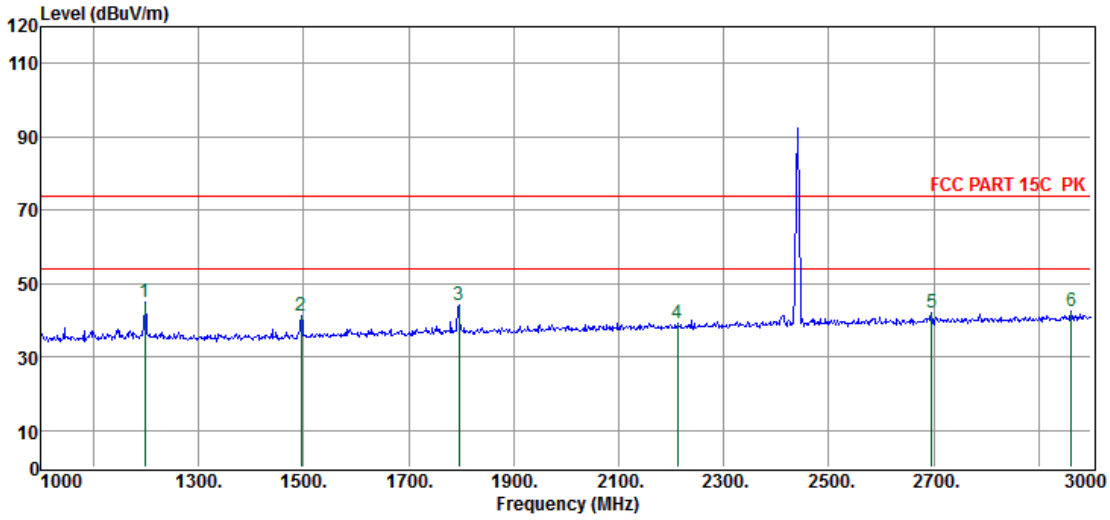
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2440MHz

Data: 161



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1198.000	71.88	27.40	55.06	0.90	45.12	74.00	-28.88	Peak	HORIZONTAL
2	1496.000	67.56	27.99	55.44	0.95	41.06	74.00	-32.94	Peak	HORIZONTAL
3	1796.000	69.60	29.42	55.83	1.13	44.32	74.00	-29.68	Peak	HORIZONTAL
4	2212.000	62.97	31.04	56.10	1.33	39.24	74.00	-34.76	Peak	HORIZONTAL
5	2696.000	64.13	32.41	56.10	1.44	41.88	74.00	-32.12	Peak	HORIZONTAL
6	2962.000	63.74	33.10	56.10	1.58	42.32	74.00	-31.68	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

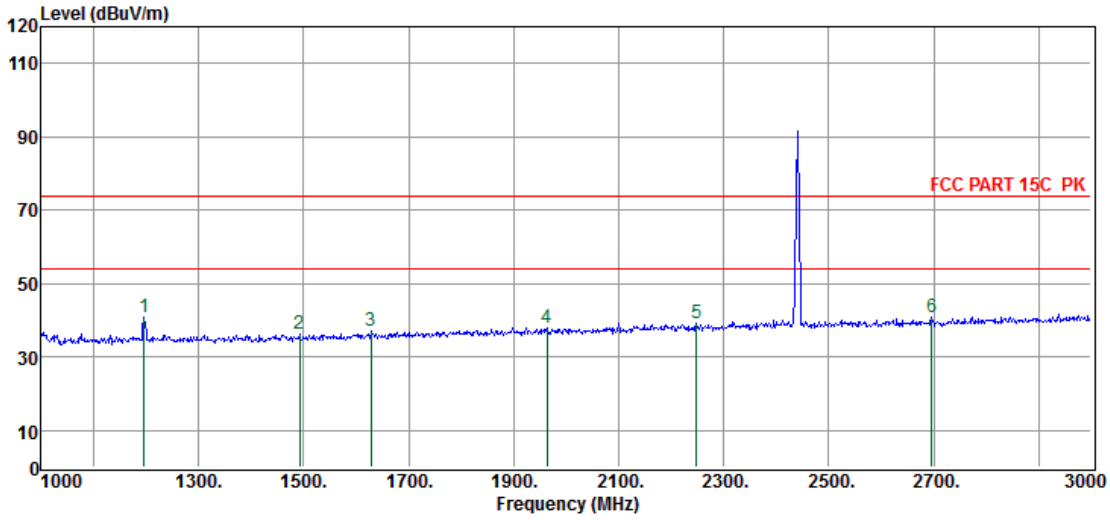
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2440MHz

Data: 162



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1196.000	67.42	27.39	55.05	0.90	40.66	74.00	-33.34	Peak	VERTICAL
2	1492.000	62.83	27.98	55.44	0.95	36.32	74.00	-37.68	Peak	VERTICAL
3	1628.000	63.06	28.61	55.62	1.03	37.08	74.00	-36.92	Peak	VERTICAL
4	1964.000	62.69	30.23	56.05	1.16	38.03	74.00	-35.97	Peak	VERTICAL
5	2248.000	62.82	31.14	56.10	1.31	39.17	74.00	-34.83	Peak	VERTICAL
6	2696.000	62.88	32.41	56.10	1.44	40.63	74.00	-33.37	Peak	VERTICAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

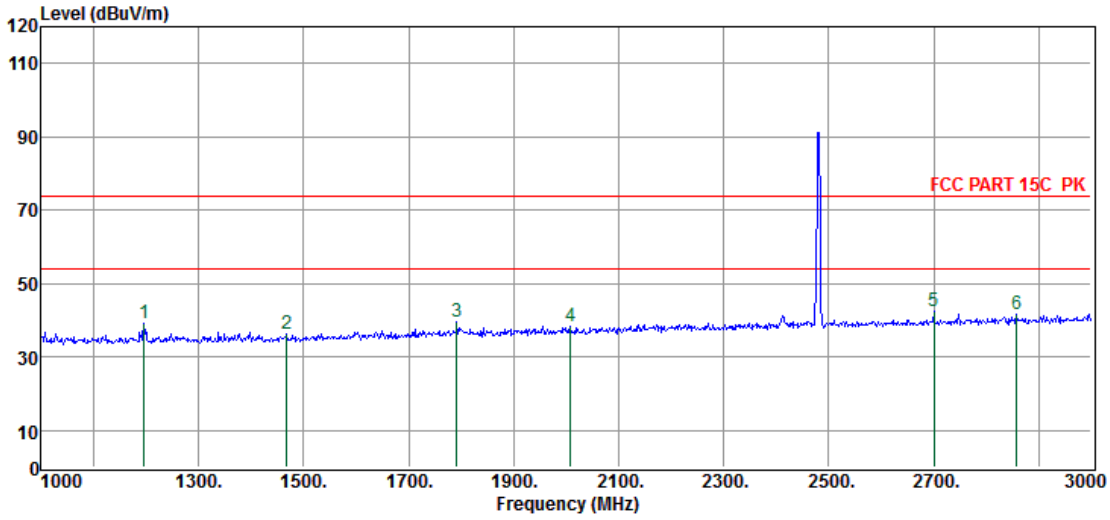
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2480MHz

Data: 165



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1196.000	65.81	27.39	55.05	0.90	39.05	74.00	-34.95	Peak	HORIZONTAL
2	1468.000	62.65	27.94	55.41	0.96	36.14	74.00	-37.86	Peak	HORIZONTAL
3	1792.000	64.79	29.40	55.83	1.13	39.49	74.00	-34.51	Peak	HORIZONTAL
4	2008.000	62.76	30.42	56.10	1.19	38.27	74.00	-35.73	Peak	HORIZONTAL
5	2700.000	64.67	32.42	56.10	1.44	42.43	74.00	-31.57	Peak	HORIZONTAL
6	2858.000	63.24	32.83	56.10	1.53	41.50	74.00	-32.50	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

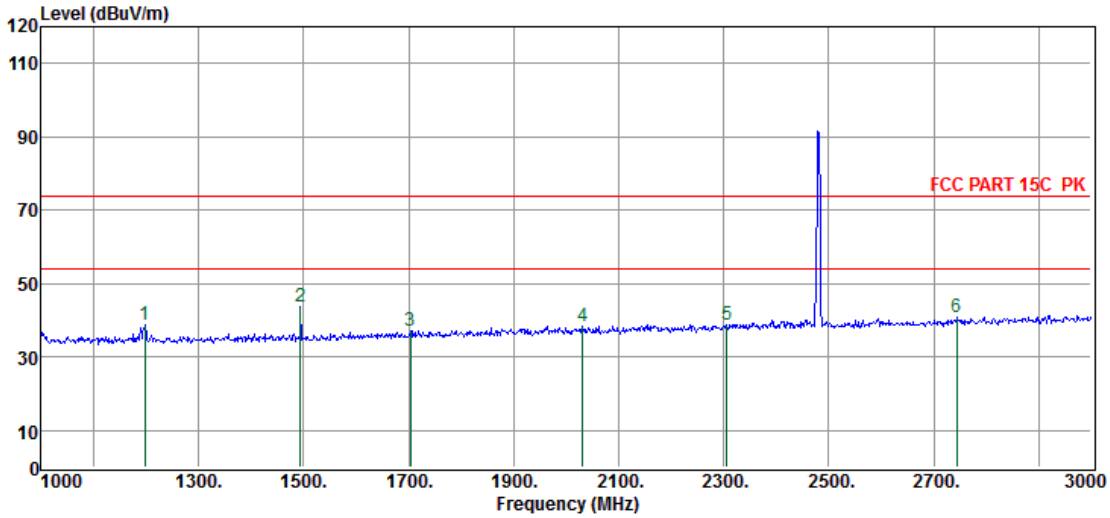
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2480MHz

Data: 166



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1198.000	65.48	27.40	55.06	0.90	38.72	74.00	-35.28	Peak	VERTICAL
2	1494.000	70.11	27.99	55.44	0.95	43.61	74.00	-30.39	Peak	VERTICAL
3	1704.000	62.93	28.98	55.72	1.01	37.20	74.00	-36.80	Peak	VERTICAL
4	2032.000	62.83	30.50	56.10	1.16	38.39	74.00	-35.61	Peak	VERTICAL
5	2306.000	62.17	31.32	56.10	1.34	38.73	74.00	-35.27	Peak	VERTICAL
6	2744.000	62.88	32.53	56.10	1.50	40.81	74.00	-33.19	Peak	VERTICAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

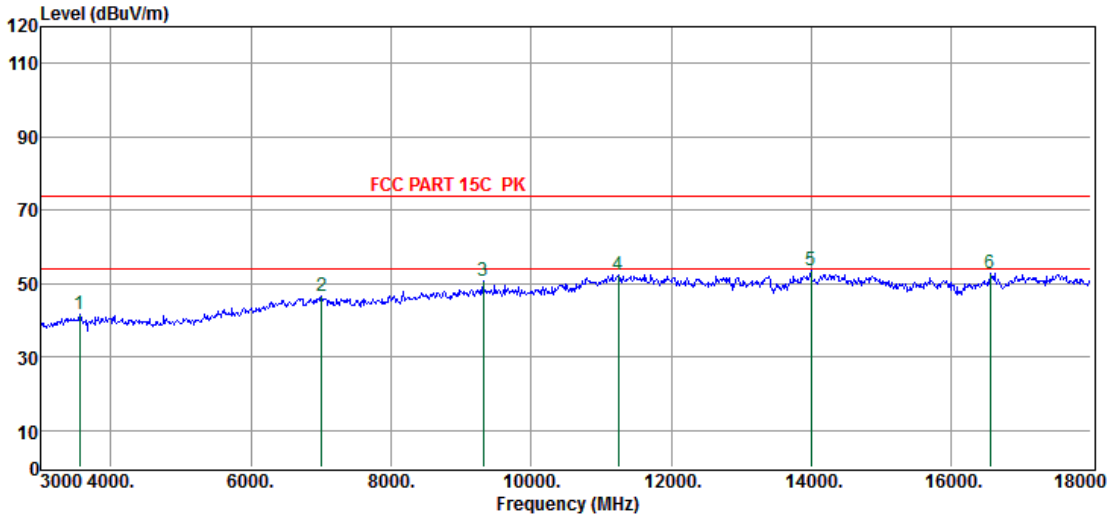
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE1M 2402MHz

Data: 167



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	3555.000	61.23	34.32	55.93	1.84	41.46	74.00	-32.54	Peak	HORIZONTAL
2	7005.000	58.95	38.51	53.80	2.75	46.41	74.00	-27.59	Peak	HORIZONTAL
3	9315.000	60.00	41.41	54.30	3.48	50.59	74.00	-23.41	Peak	HORIZONTAL
4	11250.000	59.00	42.20	53.53	4.76	52.43	74.00	-21.57	Peak	HORIZONTAL
5	13995.000	57.86	45.39	54.20	4.40	53.45	74.00	-20.55	Peak	HORIZONTAL
6	16560.000	58.53	43.06	53.26	4.50	52.83	74.00	-21.17	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

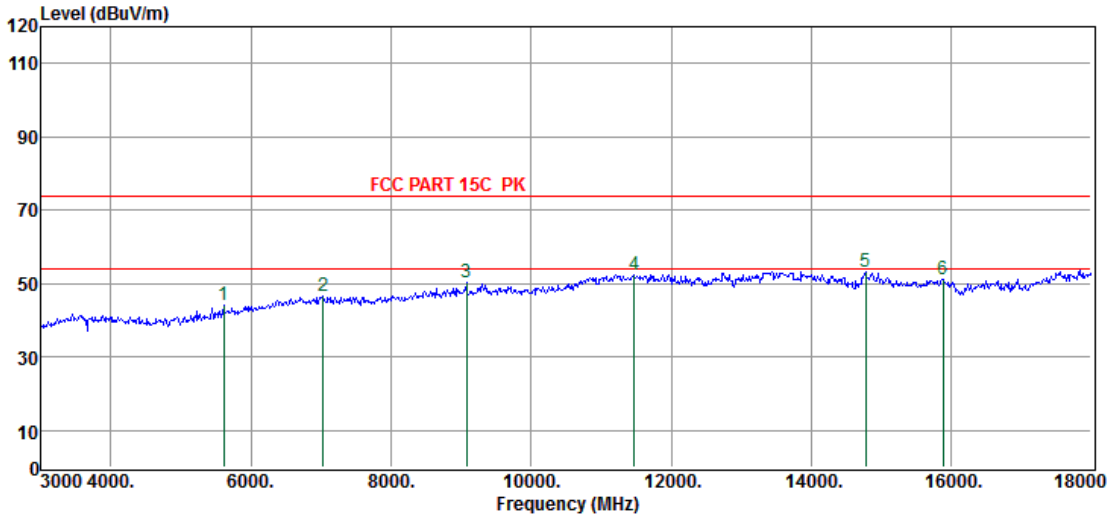
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE1M 2402MHz

Data: 168



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5610.000	59.28	37.12	54.41	2.18	44.17	74.00	-29.83	Peak	VERTICAL
2	7035.000	58.95	38.58	53.81	2.67	46.39	74.00	-27.61	Peak	VERTICAL
3	9075.000	60.12	41.17	54.30	3.18	50.17	74.00	-23.83	Peak	VERTICAL
4	11475.000	58.91	42.47	53.73	4.90	52.55	74.00	-21.45	Peak	VERTICAL
5	14775.000	60.01	43.26	54.20	4.21	53.28	74.00	-20.72	Peak	VERTICAL
6	15885.000	58.84	41.22	53.32	4.49	51.23	74.00	-22.77	Peak	VERTICAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

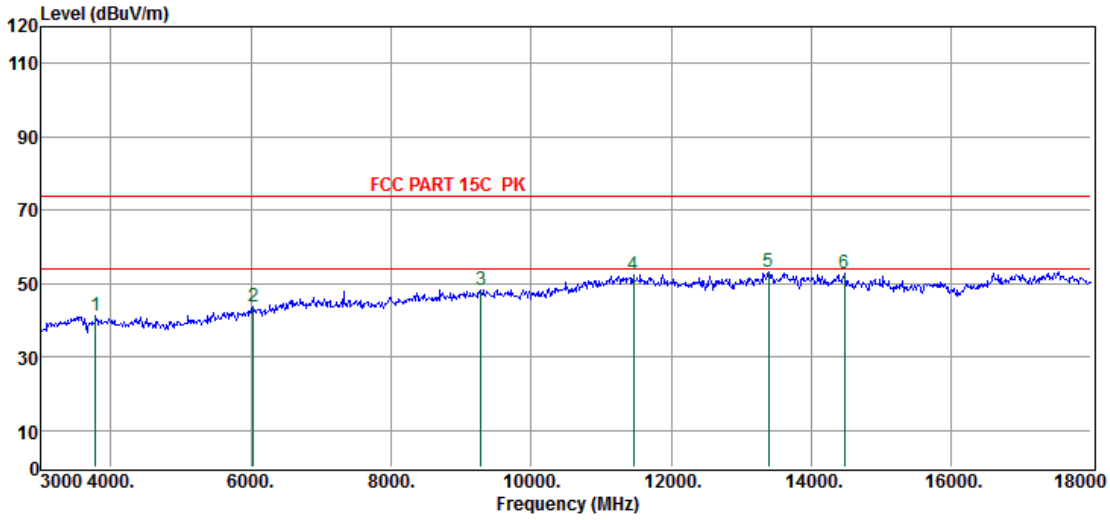
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE1M 2440MHz

Data: 169



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3780.000	60.69	34.82	55.87	1.71	41.35	74.00	-32.65	Peak	HORIZONTAL
2	6030.000	58.21	37.21	54.09	2.36	43.69	74.00	-30.31	Peak	HORIZONTAL
3	9285.000	57.85	41.38	54.30	3.43	48.36	74.00	-25.64	Peak	HORIZONTAL
4	11460.000	58.62	42.45	53.71	4.91	52.27	74.00	-21.73	Peak	HORIZONTAL
5	13395.000	58.85	44.51	54.62	4.37	53.11	74.00	-20.89	Peak	HORIZONTAL
6	14475.000	58.33	44.35	54.20	4.36	52.84	74.00	-21.16	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

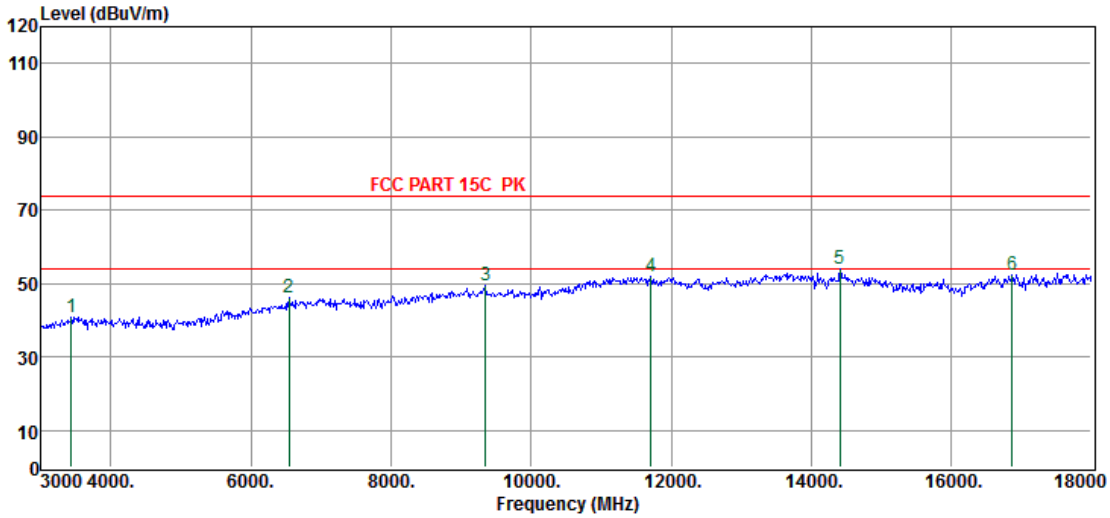
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE1M 2440MHz

Data: 170



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	3435.000	61.19	34.07	55.97	1.62	40.91	74.00	-33.09	Peak	VERTICAL
2	6540.000	60.13	37.40	53.94	2.49	46.08	74.00	-27.92	Peak	VERTICAL
3	9345.000	59.01	41.44	54.30	3.33	49.48	74.00	-24.52	Peak	VERTICAL
4	11715.000	58.45	42.59	53.94	4.66	51.76	74.00	-22.24	Peak	VERTICAL
5	14415.000	59.43	44.49	54.20	4.31	54.03	74.00	-19.97	Peak	VERTICAL
6	16875.000	56.84	44.45	53.29	4.50	52.50	74.00	-21.50	Peak	VERTICAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

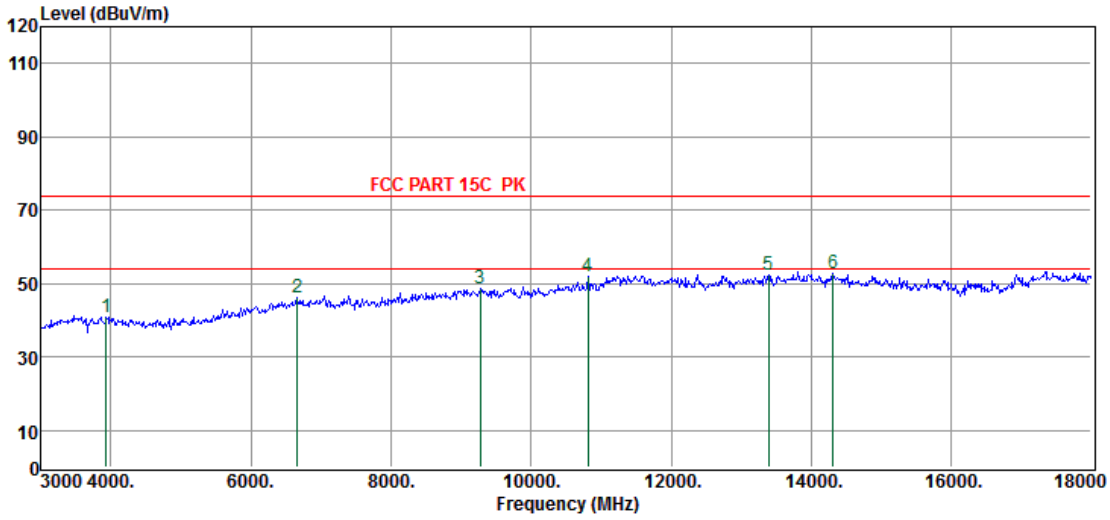
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE1M 2480MHz

Data: 171



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	3930.000	59.73	35.15	55.82	1.69	40.75	74.00	-33.25	Peak	HORIZONTAL
2	6660.000	59.92	37.68	53.90	2.59	46.29	74.00	-27.71	Peak	HORIZONTAL
3	9270.000	58.26	41.37	54.30	3.32	48.65	74.00	-25.35	Peak	HORIZONTAL
4	10815.000	59.29	41.79	53.49	4.52	52.11	74.00	-21.89	Peak	HORIZONTAL
5	13395.000	58.31	44.51	54.62	4.37	52.57	74.00	-21.43	Peak	HORIZONTAL
6	14310.000	57.83	44.72	54.20	4.25	52.60	74.00	-21.40	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

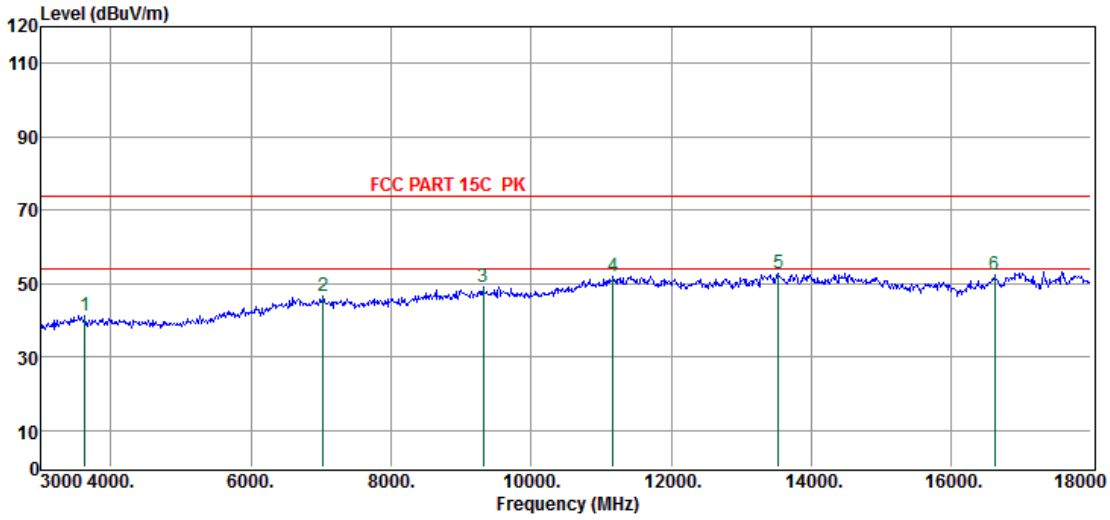
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE1M 2480MHz

Data: 172



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	3630.000	60.89	34.49	55.91	1.84	41.31	74.00	-32.69	Peak	VERTICAL
2	7035.000	59.19	38.58	53.81	2.67	46.63	74.00	-27.37	Peak	VERTICAL
3	9315.000	58.35	41.41	54.30	3.48	48.94	74.00	-25.06	Peak	VERTICAL
4	11175.000	58.66	42.11	53.46	4.66	51.97	74.00	-22.03	Peak	VERTICAL
5	13530.000	58.25	44.74	54.53	4.14	52.60	74.00	-21.40	Peak	VERTICAL
6	16620.000	57.98	43.33	53.26	4.50	52.55	74.00	-21.45	Peak	VERTICAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

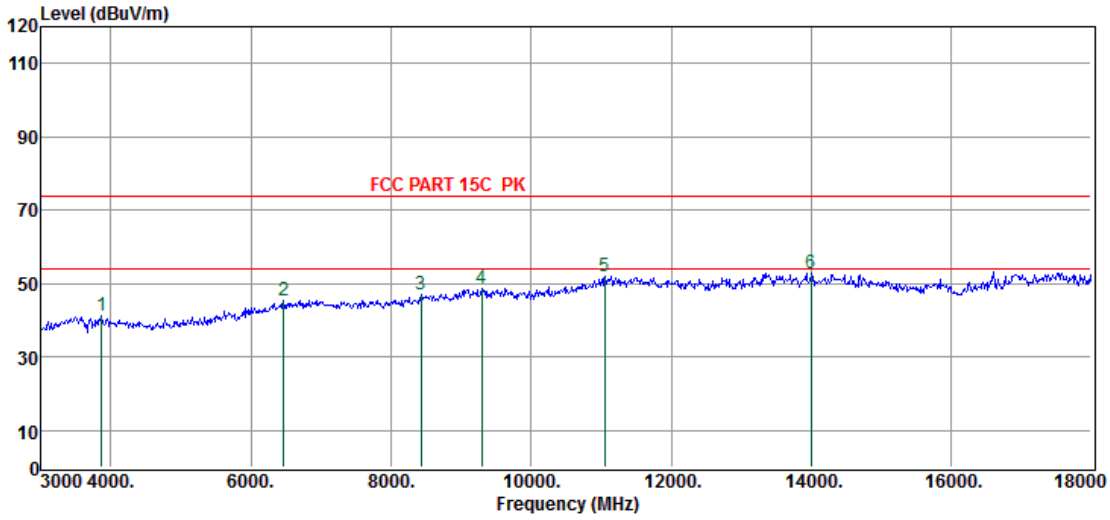
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2402MHz

Data: 173



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3870.000	60.33	35.01	55.84	1.67	41.17	74.00	-32.83	Peak	HORIZONTAL
2	6465.000	59.45	37.29	53.96	2.48	45.26	74.00	-28.74	Peak	HORIZONTAL
3	8430.000	57.54	40.73	54.19	3.04	47.12	74.00	-26.88	Peak	HORIZONTAL
4	9300.000	58.14	41.40	54.30	3.55	48.79	74.00	-25.21	Peak	HORIZONTAL
5	11055.000	58.90	41.97	53.35	4.47	51.99	74.00	-22.01	Peak	HORIZONTAL
6	13995.000	57.36	45.39	54.20	4.40	52.95	74.00	-21.05	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

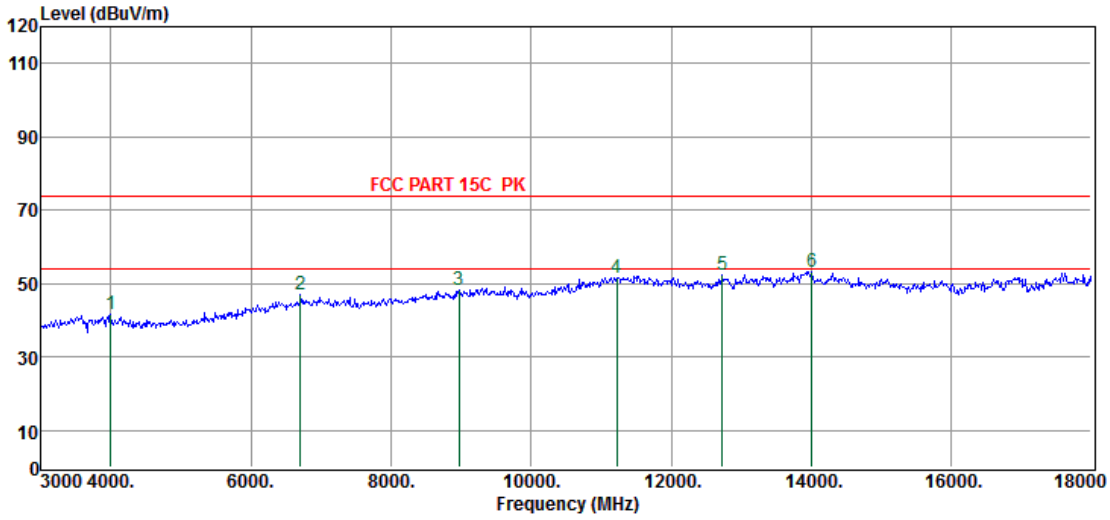
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2402MHz

Data: 174



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	3990.000	60.47	35.28	55.80	1.81	41.76	74.00	-32.24	Peak	VERTICAL
2	6705.000	60.29	37.79	53.89	2.63	46.82	74.00	-27.18	Peak	VERTICAL
3	8970.000	58.43	41.08	54.29	3.15	48.37	74.00	-25.63	Peak	VERTICAL
4	11220.000	58.20	42.16	53.50	4.72	51.58	74.00	-22.42	Peak	VERTICAL
5	12735.000	59.12	43.32	54.71	4.66	52.39	74.00	-21.61	Peak	VERTICAL
6	14010.000	57.77	45.38	54.20	4.39	53.34	74.00	-20.66	Peak	VERTICAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

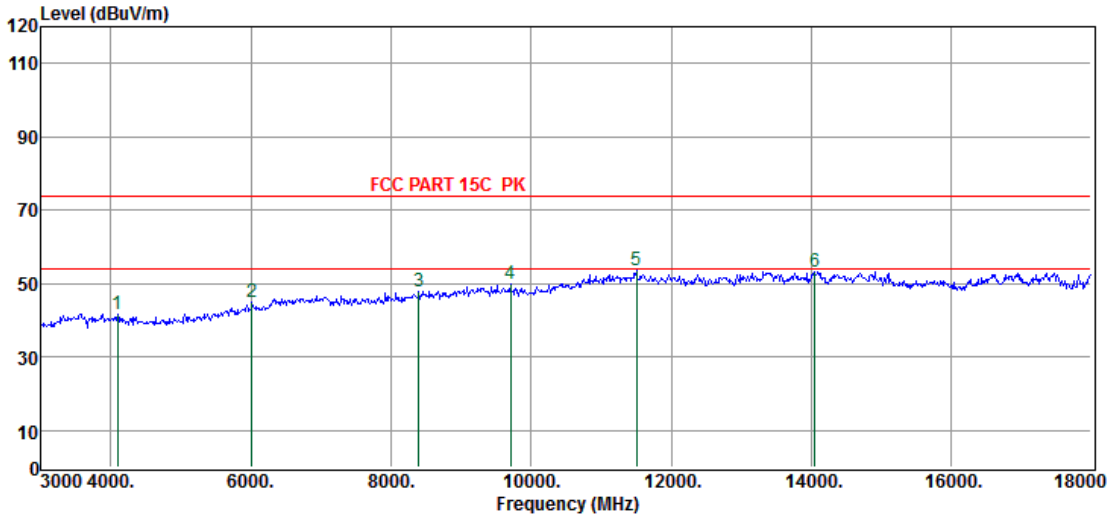
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2440MHz

Data: 175



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	4095.000	60.45	35.30	55.71	1.80	41.84	74.00	-32.16	Peak	HORIZONTAL
2	6015.000	59.64	37.20	54.10	2.34	45.08	74.00	-28.92	Peak	HORIZONTAL
3	8400.000	58.44	40.70	54.18	3.01	47.97	74.00	-26.03	Peak	HORIZONTAL
4	9705.000	59.11	41.60	54.30	3.51	49.92	74.00	-24.08	Peak	HORIZONTAL
5	11505.000	59.82	42.50	53.75	4.88	53.45	74.00	-20.55	Peak	HORIZONTAL
6	14055.000	57.68	45.28	54.20	4.34	53.10	74.00	-20.90	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

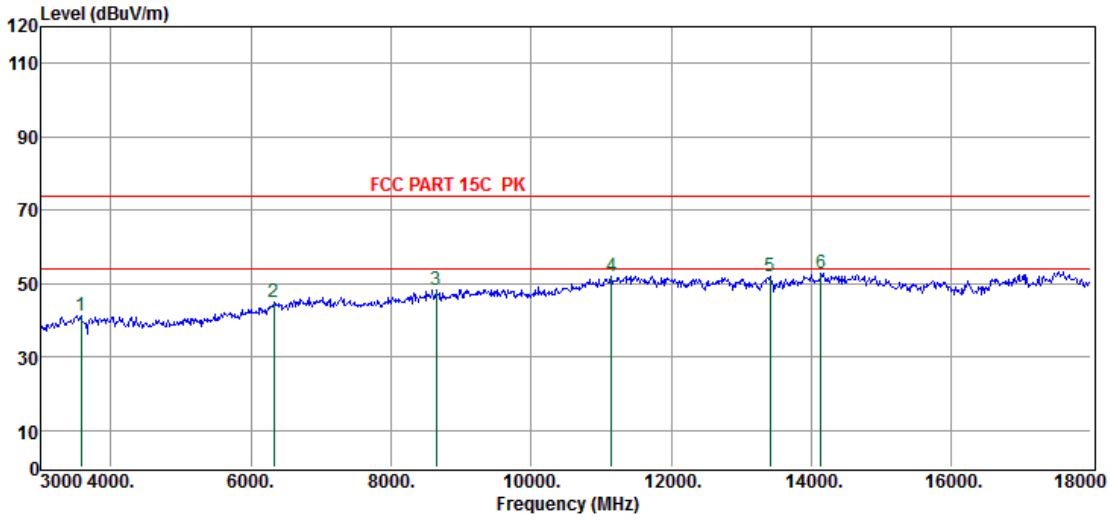
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2440MHz

Data: 176



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	3570.000	61.06	34.35	55.93	1.88	41.36	74.00	-32.64	Peak	VERTICAL
2	6330.000	59.08	37.27	54.00	2.42	44.77	74.00	-29.23	Peak	VERTICAL
3	8640.000	58.63	40.88	54.23	2.91	48.19	74.00	-25.81	Peak	VERTICAL
4	11145.000	58.83	42.07	53.43	4.61	52.08	74.00	-21.92	Peak	VERTICAL
5	13410.000	57.81	44.54	54.61	4.35	52.09	74.00	-21.91	Peak	VERTICAL
6	14145.000	57.74	45.08	54.20	4.24	52.86	74.00	-21.14	Peak	VERTICAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

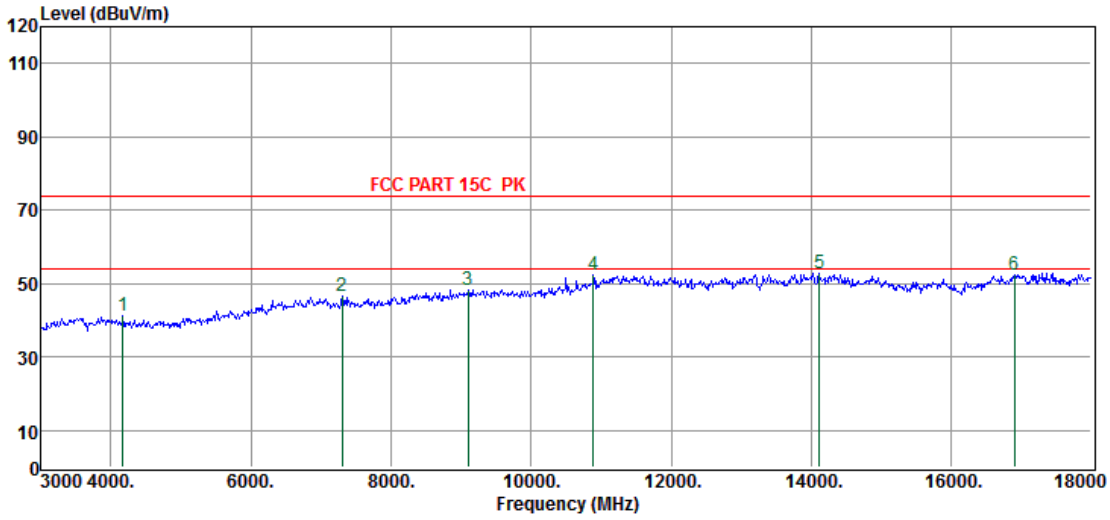
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2480MHz

Data: 177



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	4170.000	59.60	35.30	55.65	1.79	41.04	74.00	-32.96	Peak	HORIZONTAL
2	7305.000	58.61	39.17	53.89	2.79	46.68	74.00	-27.32	Peak	HORIZONTAL
3	9105.000	58.29	41.20	54.30	3.17	48.36	74.00	-25.64	Peak	HORIZONTAL
4	10890.000	59.32	41.83	53.41	4.46	52.20	74.00	-21.80	Peak	HORIZONTAL
5	14115.000	57.52	45.15	54.20	4.27	52.74	74.00	-21.26	Peak	HORIZONTAL
6	16905.000	56.79	44.58	53.29	4.48	52.56	74.00	-21.44	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

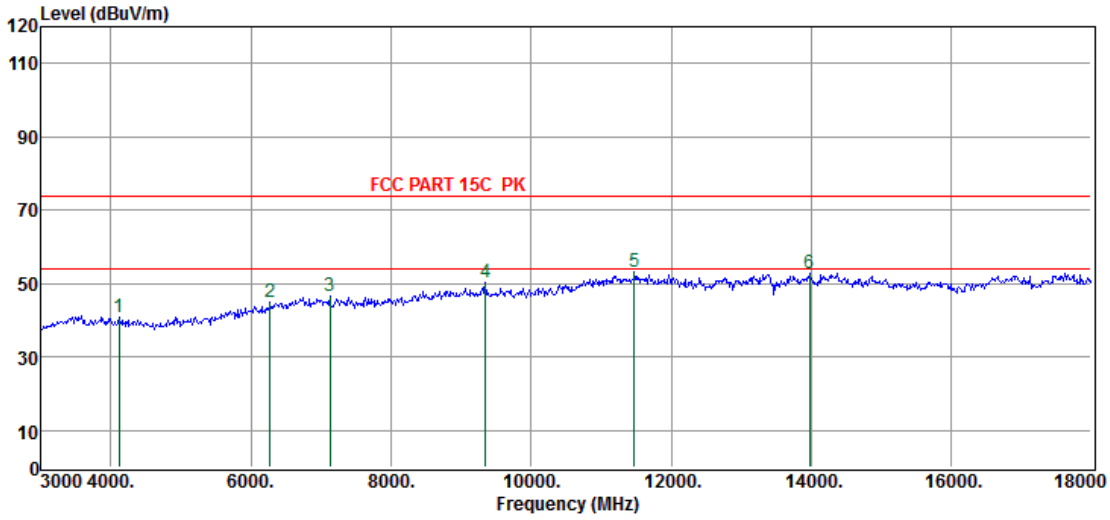
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2480MHz

Data: 178



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	4110.000	59.61	35.30	55.70	1.80	41.01	74.00	-32.99	Peak	VERTICAL
2	6270.000	59.22	37.25	54.02	2.36	44.81	74.00	-29.19	Peak	VERTICAL
3	7125.000	58.96	38.78	53.84	2.53	46.43	74.00	-27.57	Peak	VERTICAL
4	9345.000	59.71	41.44	54.30	3.33	50.18	74.00	-23.82	Peak	VERTICAL
5	11475.000	59.62	42.47	53.73	4.90	53.26	74.00	-20.74	Peak	VERTICAL
6	13980.000	57.35	45.37	54.21	4.38	52.89	74.00	-21.11	Peak	VERTICAL

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

Radiated Emission test (18G – 26.5GHz)

Radiated Emission Test Result

Test Site : DDT 10m Chamber

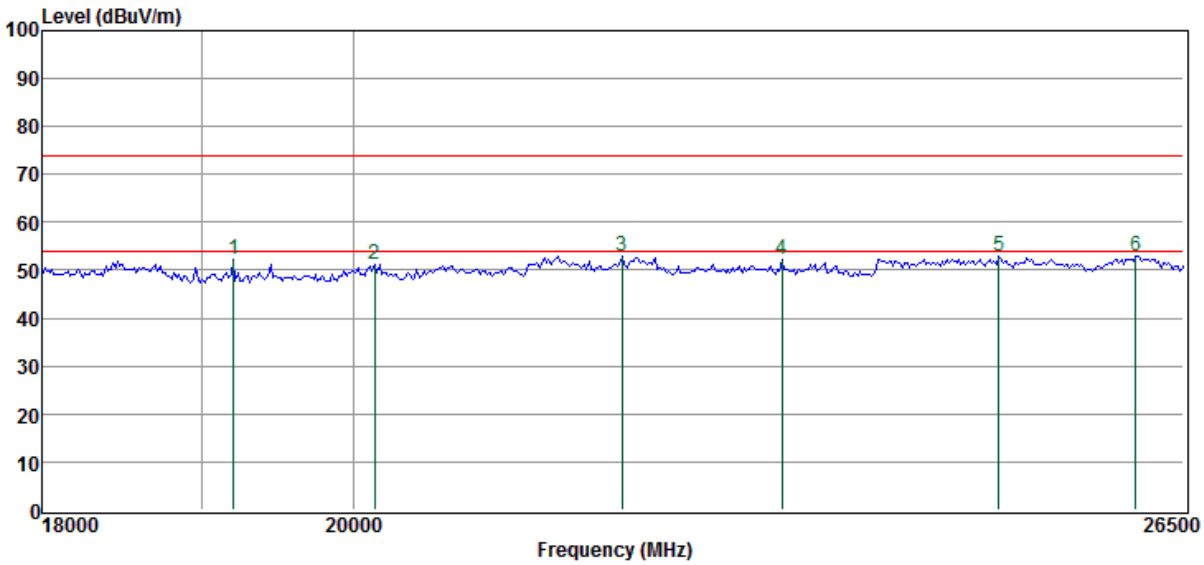
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266WQ-N D2

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

Memo : BLE 1M 2402MHz

Data: 116



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	19202.70	7.75	36.12	8.33	52.20	74.00	-21.80	Peak	HORIZONTAL
2	20145.11	6.16	36.42	8.68	51.26	74.00	-22.74	Peak	HORIZONTAL
3	21906.96	7.27	36.71	8.93	52.91	74.00	-21.09	Peak	HORIZONTAL
4	23129.37	6.74	36.65	8.69	52.08	74.00	-21.92	Peak	HORIZONTAL
5	24892.48	7.32	36.31	9.42	53.05	74.00	-20.95	Peak	HORIZONTAL
6	26072.45	6.76	36.21	9.86	52.83	74.00	-21.17	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

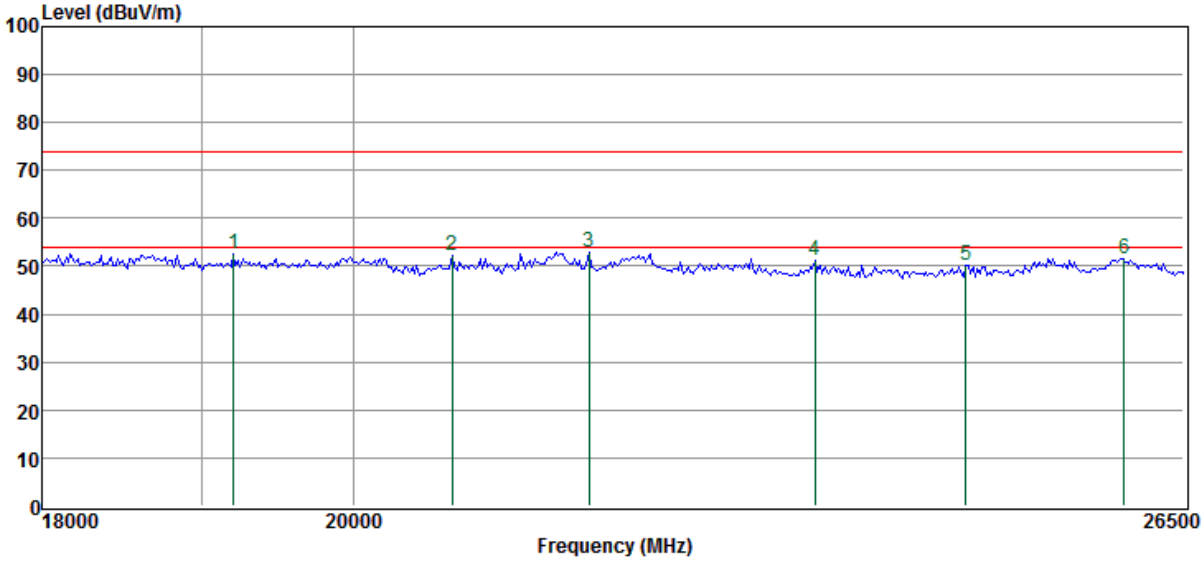
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266WQ-N D2

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

Memo : BLE 1M 2402MHz

Data: 117



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	19202.70	8.28	36.12	8.33	52.73	74.00	-21.27	Peak	VERTICAL
2	20683.00	7.31	36.66	8.22	52.19	74.00	-21.81	Peak	VERTICAL
3	21663.43	7.81	36.46	8.81	53.08	74.00	-20.92	Peak	VERTICAL
4	23389.38	5.98	36.54	8.77	51.29	74.00	-22.71	Peak	VERTICAL
5	24615.76	4.58	36.09	9.57	50.24	74.00	-23.76	Peak	VERTICAL
6	25968.57	5.56	36.21	9.87	51.64	74.00	-22.36	Peak	VERTICAL

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

9. RF Conducted Spurious Emissions

9.0. Block diagram of test setup

Same as section 4.1

9.1. Limits

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

9.2. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.
(2) Establish a reference level by using the following procedure:

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

(3) Allow the trace to stabilize, use the peak marker function to determine the maximum peak power level to establish the reference level.
(4) Set the spectrum analyzer as follows:

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

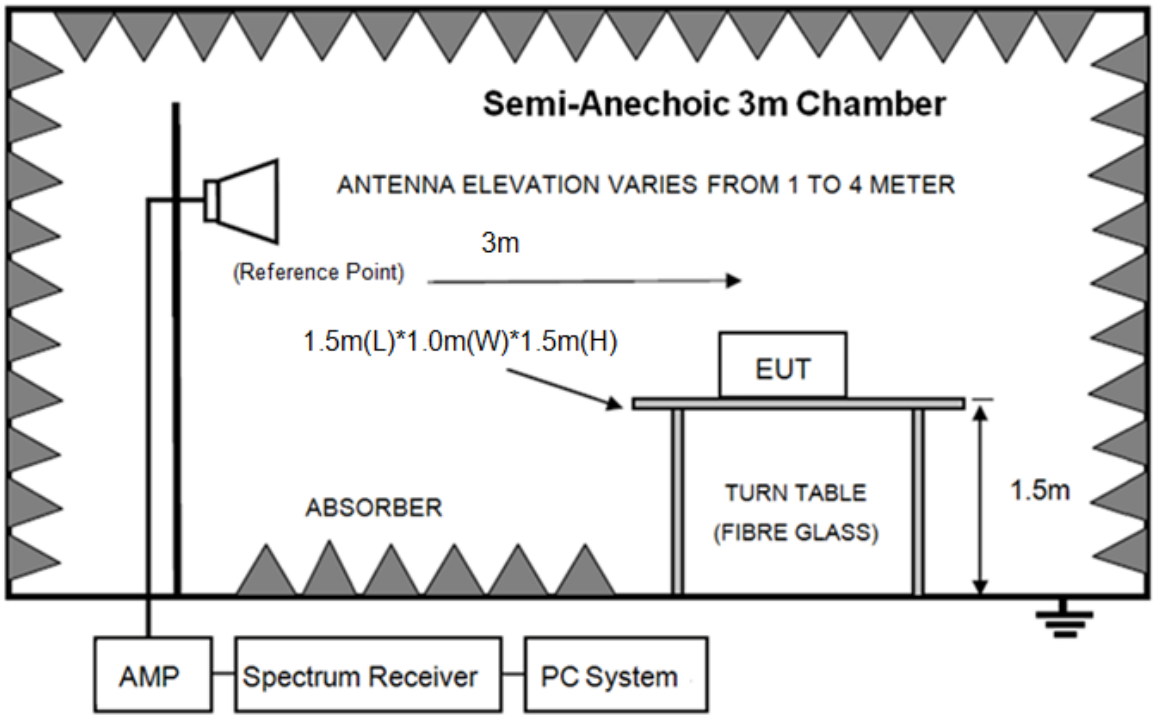
(5) Allow the trace to stabilize, use the peak marker function to determine the maximum amplitude of all unwanted emissions outside of the authorized frequency band

9.3. Test result

Pass
Please find the detailed data in APPENDIXES-BLE-FCC.

10. Emissions in Restricted Frequency Bands

10.0. Block diagram of test setup



10.1. Limit

All restriction band should comply with 15.209, other emission should be at least 20 dB below the fundamental.

10.2. Test Procedure

Same with clause 8.3 except change investigated frequency range.

Remark: All restriction band have been tested, and only the worst case is shown in report.

10.3. Test result

Pass. (See below detailed test result)
Note: Scan with all side, the worst case is left side recorded in this report.

Radiated Emission Test Result

Test Site : DDT 10m Chamber

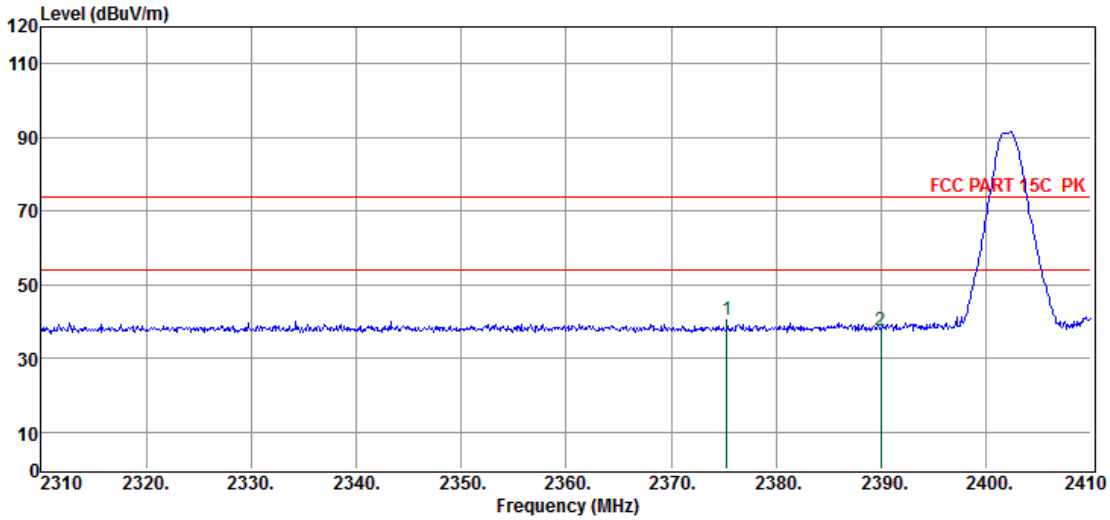
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE1M 2402MHz

Data: 147



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2375.300	63.38	31.53	56.10	1.40	40.21	74.00	-33.79	Peak	HORIZONTAL
2	2390.000	60.63	31.57	56.10	1.41	37.51	74.00	-36.49	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

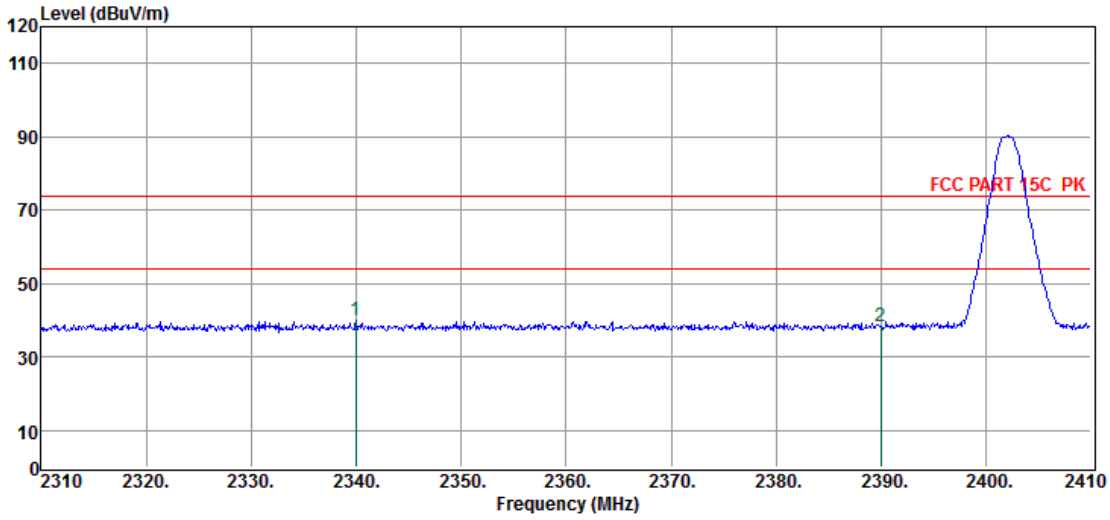
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE1M 2402MHz

Data: 148



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2340.000	63.25	31.42	56.10	1.38	39.95	74.00	-34.05	Peak	VERTICAL
2	2390.000	61.28	31.57	56.10	1.41	38.16	74.00	-35.84	Peak	VERTICAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

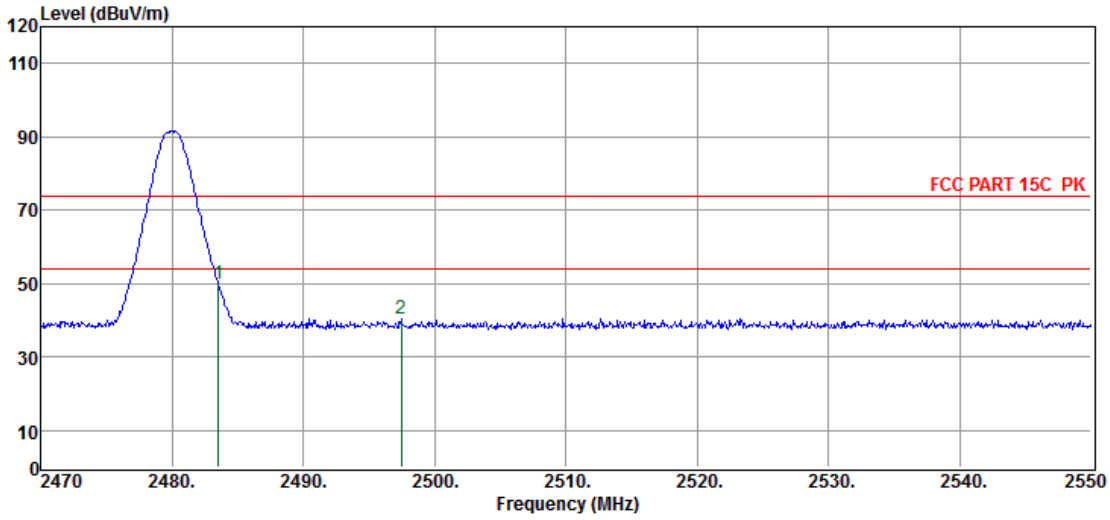
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE1M 2480MHz

Data: 153



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2483.500	72.54	31.85	56.10	1.44	49.73	74.00	-24.27	Peak	HORIZONTAL
2	2497.440	63.23	31.89	56.10	1.45	40.47	74.00	-33.53	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

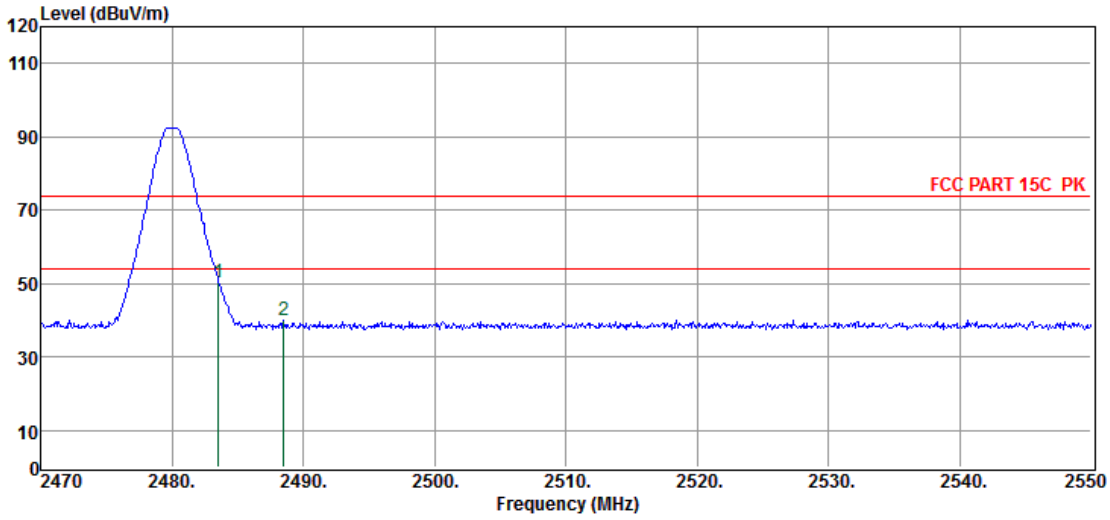
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE1M 2480MHz

Data: 154



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.500	73.14	31.85	56.10	1.44	50.33	74.00	-23.67	Peak	VERTICAL
2	2488.480	62.60	31.87	56.10	1.45	39.82	74.00	-34.18	Peak	VERTICAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

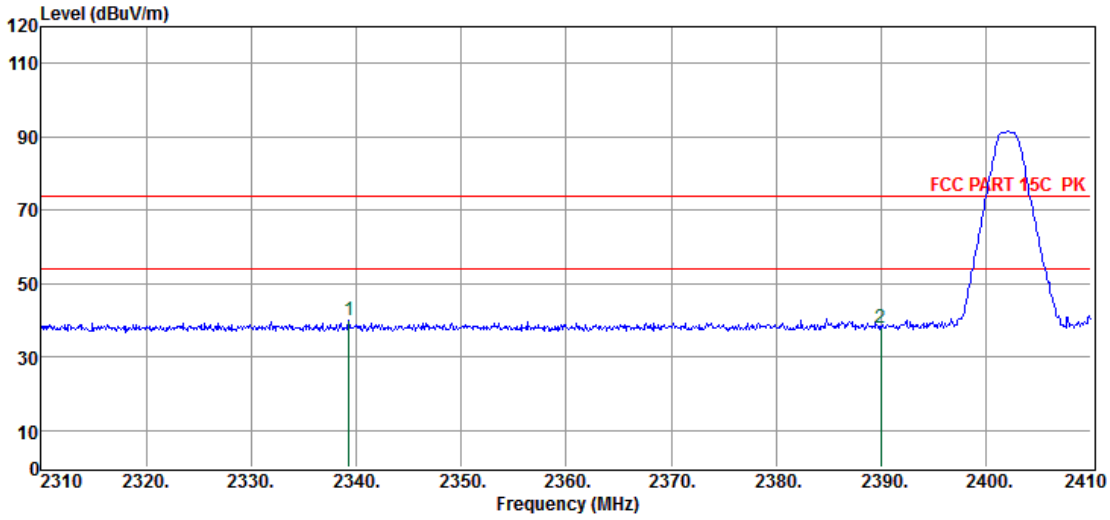
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2402MHz

Data: 157



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2339.300	63.32	31.42	56.10	1.38	40.02	74.00	-33.98	Peak	HORIZONTAL
2	2390.000	61.22	31.57	56.10	1.41	38.10	74.00	-35.90	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

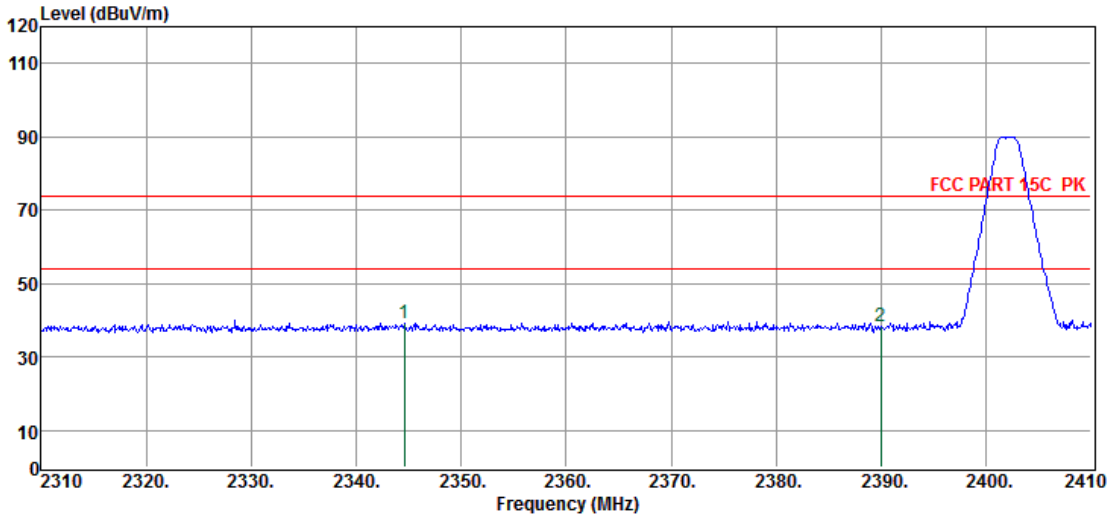
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2402MHz

Data: 158



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2344.600	62.54	31.43	56.10	1.38	39.25	74.00	-34.75	Peak	VERTICAL
2	2390.000	61.60	31.57	56.10	1.41	38.48	74.00	-35.52	Peak	VERTICAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

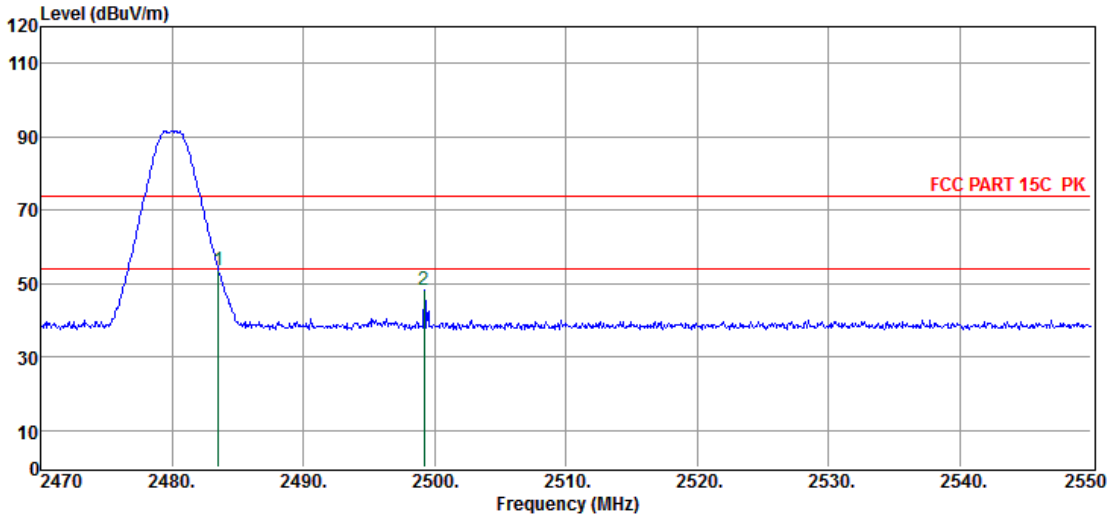
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2480MHz

Data: 163



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.500	76.39	31.85	56.10	1.44	53.58	74.00	-20.42	Peak	HORIZONTAL
2	2499.200	70.81	31.90	56.10	1.45	48.06	74.00	-25.94	Peak	HORIZONTAL

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

Radiated Emission Test Result

Test Site : DDT 10m Chamber

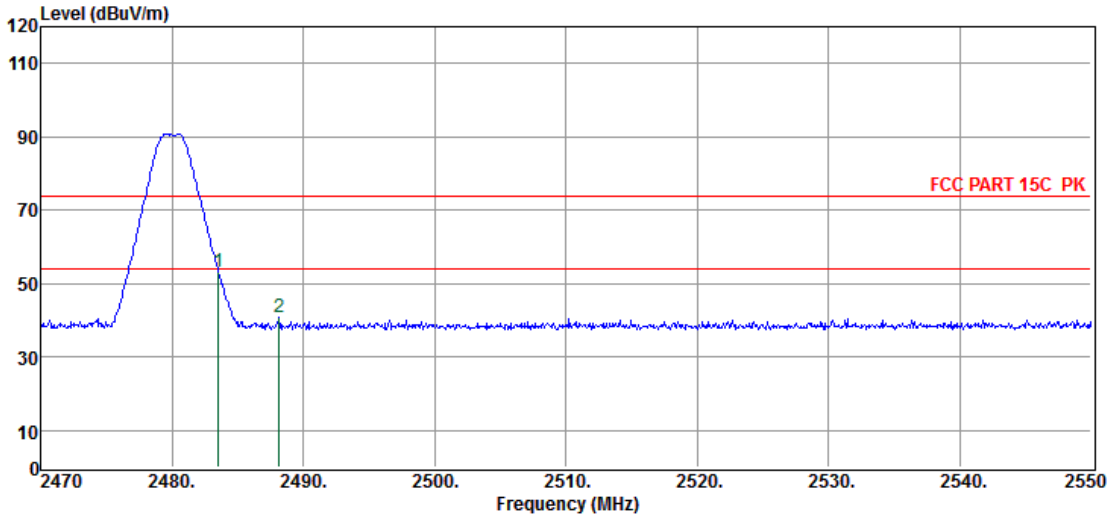
Test Date : 09-17-2026 **Tested By** : Sunny

EUT : electronic shelf label **Model Number** : Nebular Ultra-266Q-N D2

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

Memo : BLE2M 2480MHz

Data: 164

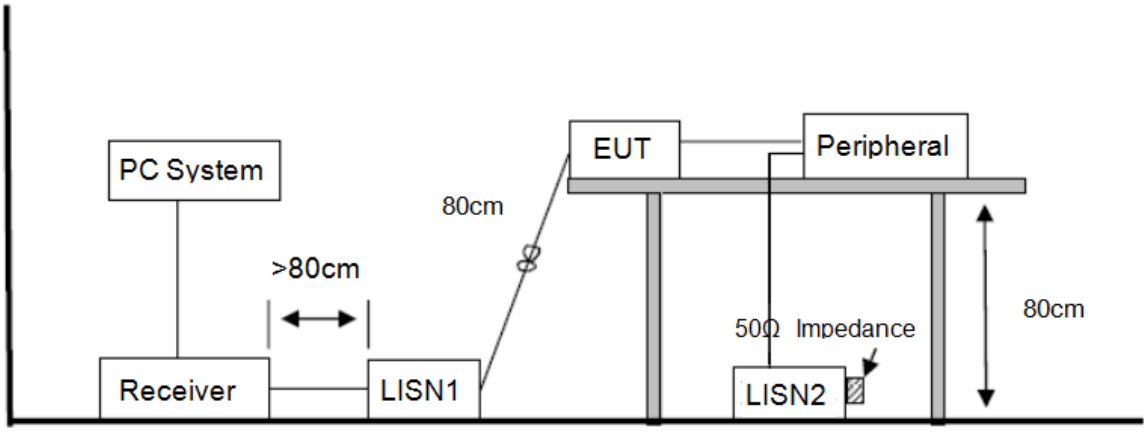


Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.500	75.92	31.85	56.10	1.44	53.11	74.00	-20.89	Peak	VERTICAL
2	2488.160	63.46	31.86	56.10	1.45	40.67	74.00	-33.33	Peak	VERTICAL

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

11. Power Line Conducted Emission

11.0. Block diagram of test setup



11.1. Power line conducted emission limits

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

Note 1: * Decreasing linearly with logarithm of frequency.

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

11.2. Test procedure

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

Configuration EUT to simulate typical usage as described in clause 2.4 and test equipment as described in clause 10.2 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.

All support equipment power received from a second LISN.

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

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

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

The test mode(s) described in clause 2.4 were scanned during the preliminary test.

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

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

EUT and support equipment were set up on the test bench as per the configuration with highest

emission level in the preliminary test.
A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.
Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.
The test data of the worst-case condition(s) was recorded.
The bandwidth of test receiver is set at 9 kHz.

11.3. Test result

No Applicable.

12. Antenna Requirements

12.0. Limit

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

12.1. Result

The antenna used for this product is PCB antenna and no antenna other than that furnished by the responsible party shall be used with the device.

13. Test Setup Photograph

Please find the detailed in APPENDIXES-Test Setup-FCC.

14. Photos of the EUT

Please find the photos of EUT in APPENDIXES-Photos.

END OF REPORT