

Applicant	: KONKA GROUP CO., LTD.
Address	: 15-24F, Konka R&D Building, No. 28 Keji South 12th Road, Science and Technology Park, Yuehai Subdistrict, Nanshan District, Shenzhen , Guangdong, China
Product Name	: 32" HD SMART TV
Brand Mark	: KONKA/RCA
Model	: KDL32VE684UN
Series model	: KVL32VE684UN,KDL32VE684UN,KVL32VE684UN Pro,KDL32VE684UN Pro,32684PRO,A1HT3200SB
Report Number	: BLA-EMC-202509-A3704
FCC ID	: 2AQX732VE684UN00
Date of Receipt	: Sept. 11, 2025
Date of Test	: Sept. 11, 2025 to Sept. 27, 2025
Test Standard	: 47 CFR Part 15, Subpart E 15.407
Test Result	: Pass

Compiled by: *charlie* Review by: *Xavier* Approved by: *Joe Zheng*
Issued Date: Sept. 22, 2025



Address: Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District,
Shenzhen, Guangdong Province, China



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Table of Contents

1 General information	6
1.1 General information	6
1.2 General description of EUT	6
2 Test summary	8
3 Test Configuration	9
3.1 Test mode	9
3.2 Operation frequency and test channel	9
3.3 Auxiliary equipment	10
3.4 Test environment	10
4 Laboratory information	10
4.1 Laboratory and accreditations	10
4.2 Measurement uncertainty	11
5 Test equipment	12
6 Test result	14
6.1 Antenna requirement	14
6.2 Conducted emissions at AC power line (150 kHz-30 MHz)	15
6.3 Frequency Stability	19
6.4 Maximum conducted output Power	20
6.5 Peak power spectrum density	21
6.6 Minimum 6dB bandwidth (5.725-5.85 GHz band)	22
6.7 26dB Emission bandwidth	23
6.8 99% Bandwidth	24
6.9 Duty Cycle	25
6.10 Conducted Band Edges Measurement	26
6.11 Conducted spurious emissions	28
6.12 Radiated emissions	30
6.13 Radiated emissions which fall in the restricted bands	47
7 Appendix A	58
7.1 Frequency Stability	58
7.2 Maximum Conducted Output Power	64

7.3 -26dB Bandwidth	95
7.4 Occupied Channel Bandwidth	110
7.5 Maximum Power Spectral Density Level	140
7.6 Band Edge	171
7.7 Conducted RF Spurious Emission	214
7.8 -6dB Bandwidth	244
Appendix B: photographs of test setup	259
Appendix C: photographs of EUT	260

Revise Record

Version No.	Date	Description
01	Sept. 27, 2025	Original

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1 General information

1.1 General information

Applicant	KONKA GROUP CO., LTD.
Address	15-24F, Konka R&D Building, No. 28 Keji South 12th Road, Science and Technology Park, Yuehai Subdistrict, Nanshan District, Shenzhen , Guangdong, China
Manufacturer	KONKA GROUP CO., LTD.
Address	15-24F, Konka R&D Building, No. 28 Keji South 12th Road, Science and Technology Park, Yuehai Subdistrict, Nanshan District, Shenzhen , Guangdong, China
Factory ¹	Dongguan Konka Electronic Co.,Ltd
Address	Konka Road, Fenggang Town Dongguan City Guangdong China
Factory ²	AMTEC ELECTRONICS CORPORATION
Address	Plot A, Number 10A, Street 1, Hiep Phuoc Industrial Park, Hiep Phuoc Commune, Ho Chi Minh City

1.2 General description of EUT

Product name	32" HD SMART TV
Model no.	KDL32VE684UN
Series model	KVL32VE684UN, KDL32VE684UN, KVL32VE684UN Pro, KDL32VE684UN Pro, 32684PRO, A1HT3200SB
Differences of Series model	Their appearances, electrical circuit design, layout, components used and internal wiring are identical. And only difference is the model and trademark.
Operation Frequency	Band1: 5180MHz~5240MHz;Band4:5745MHz~5825MHz
Channel numbers	Band 1: 802.11a/802.11n(HT20)/802.11ac(HT20): 4, 802.11n(HT40)/802.11ac(HT40):2, 802.11ac(HT80): 1 Band 4: 802.11a/802.11(HT20)/802.11ac(HT20): 5, 802.11n(HT40)/802.11ac(HT40): 2, 802.11ac(HT80): 1
Channel Spacing	802.11a/n/ac(HT20): 20MHz, 802.11n/ac(HT40): 40MHz, 802.11ac(HT80): 80MHz
Modulation Type	IEEE 802.11a: OFDM (BPSK, QPSK, 16QAM, 64QAM) IEEE 802.11n(HT20/HT40): OFDM (BPSK, QPSK, 16QAM, 64QAM) IEEE for 802.11ac(VHT20/VHT40/VHT80): OFDM(BPSK, QPSK, 16QAM, 64QAM,256QAM)
Transmit Data Rate	IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps IEEE 802.11n HT20(2X2): up to 72.2 Mbps, HT40(2X2): up to 150 Mbps IEEE 802.11ac VHT20(2X2): up to 86.7 Mbps, VHT40(2X2): up to 200

	Mbps, VHT80(2X2): up to 433.3 Mbps
Antenna Type	FPC antenna
Antenna gain	Antenna 0: 3dBi (Provided by customer) Antenna 1: 3dBi (Provided by customer)
Function	☒ SISO ☒ 2x2 MIMO ☐ TPC
Power supply or adapter information	AC 100~240V
Hardware version	N/A
Software version	N/A
Engineer sample no.	BLA-EMC-202509-A37

Note: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

2 Test summary

No.	Test item	FCC standard	Test Method (Clause)	Result
1	Antenna Requirement	§15.203	N/A	Pass
2	Conducted Emissions at AC Power Line (150kHz-30MHz)	§15.207	ANSI C63.10-2020+Cor.1-2023 Clause 6.2	Pass
3	Frequency Stability	§15.407 (g)	ANSI C63.10-2020+Cor.1-2023 Clause 6.8	Pass
4	Maximum Conducted output power	§15.407 (a)	KDB 789033 D02 II E	Pass
5	Transmitter Power Control	§15.407 (h)(1)	KDB 789033 D02 II E	N/A
6	Peak Power spectrum density	§15.407 (a)	KDB 789033 D02 II F	Pass
7	Minimum 6 dB bandwidth (5.725-5.85 GHz band)	§15.407 (e)	KDB 789033 D02 II C 2	Pass
8	26dB Emission bandwidth	§15.407 (a)	KDB 789033 D02 II C 1	Pass
9	99% Bandwidth	N/A	KDB 789033 II D	Pass
10	Duty Cycle	KDB 789033 D02 II B 1	KDB 789033 II B 1	Pass
11	Conducted Band Edges Measurement	§15.407 (b)(4)	ANSI C63.10-2020+Cor.1-2023 Clause 11.13	Pass
12	Conducted spurious emissions	§15.407(b)	ANSI C63.10-2020+Cor.1-2023 Clause 11.11	Pass
13	Radiated Emissions which fall in the restricted bands	§15.209 §15.407(b)	KDB 789033 D02 II G	Pass
14	Radiated Emissions	§15.209 §15.407(b)	KDB 789033 D02 II G	Pass
15	DFS: Channel Closing Transmission Time	§15.407((h)(2)	KDB 905462 D02 Clause 7.8.3	N/A
16	DFS: Non-occupancy period	§15.407((h)(2)	KDB 905462 D02 Clause 7.8.3	N/A

N/A: Not Applicable

3 Test Configuration

3.1 Test mode

Test Mode ^{Note 1}	Description
TX	Keep the EUT in continuously transmitting mode with modulation. (Duty cycle>98%)
RX	Keep the EUT in receiving mode
TX Low channel	Keep the EUT in continuously transmitting mode in low channel
TX middle channel	Keep the EUT in continuously transmitting mode in middle channel
TX high channel	Keep the EUT in continuously transmitting mode in high channel

Note 1: The EUT was configured to measure its highest possible emission and/or immunity level. The test modes were adapted according to the operation manual for use; the EUT was operated in the engineering mode Note 2 to fix the TX or Rx frequency that was for the purpose of the measurements.

Note 2: Special software is used. The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

Note 3: When test RE and RSE, 802.11a is in SISO mode (ANT 1 and 2 all have been tested, only report worse case); and 802.11n/20/n40/ac20/ac40/ac80 is in MIMO mode.

3.2 Operation frequency and test channel

802.11a/n/ac

Bandwidth Band	20(MHz)		40(MHz)		80(MHz)	
	Channel number	frequency (MHz)	Channel number	frequency (MHz)	Channel number	frequency(M Hz)
U-NII-1	36	5180	38	5190	42	5210
	40	5200				
	44	5220	46	5230		
	48	5240				
U-NII-3	149	5745	151	5755	155	5775
	153	5765				
	157	5785	159	5795		
	161	5805				
	165	5825	--	--	--	--

3.3 Auxiliary equipment

Device Type	Manufacturer	Model Name	Serial No.	Remark
PC	lenovo	E46OC	N/A	From lab (No.BLA-ZC-BS-2022005)

Note:“--” mean no any auxiliary device during testing.

3.4 Test environment

Temperature	Normal	25°C
	Low Extreme	-20°C
	High Extreme	+50°C
Voltage	Normal	AC 120V
	Low Extreme	AC 102V
	High Extreme	AC 138V

4 Laboratory information

4.1 Laboratory and accreditations

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

Company name:	BlueAsia of Technical Services(Shenzhen) Co., Ltd.
Address:	Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province, China
CNAS accredited No.:	L9788
A2LA Cert. No.:	5071.01
FCC Designation No.:	CN1252
ISED CAB identifier No.:	CN0028
Telephone:	+86-755-28682673
FAX:	+86-755-28682673

4.2 Measurement uncertainty

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=1.96$.

Parameter	Expanded Uncertainty
Radiated Emission(9kHz-30MHz)	$\pm 4.34\text{dB}$
Radiated Emission(30Mz-1000MHz)	$\pm 4.24\text{dB}$
Radiated Emission(1GHz-18GHz)	$\pm 4.68\text{dB}$
AC Power Line Conducted Emission(150kHz-30MHz)	$\pm 3.45\text{dB}$
Occupied Channel Bandwidth	$\pm 5\%$
RF output power, conducted	$\pm 1.5\text{dB}$
Power Spectral Density, conducted	$\pm 3.0\text{dB}$
Unwanted Emissions, conducted	$\pm 3.0\text{dB}$
Temperature	$\pm 3\text{ }^{\circ}\text{C}$
Supply voltages	$\pm 3\%$
Time	$\pm 5\%$

5 Test equipment

Radiated Spurious Emissions (Below 1GHz)

Equipment	Name	Model	Manufacture	S/N	Cal. Date	Due. Date
BLA-EMC-002-01	Anechoic chamber	9*6*6 chamber	SKET	N/A	2024/3/27	2027/3/26
BLA-EMC-002-02	Control room	966 control room	SKET	N/A	2024/3/27	2027/3/26
BLA-EMC-009	EMI receiver	ESR7	R&S	101199	2025/08/05	2026/08/04
BLA-EMC-043	Loop antenna	FMZB1519B	Schwarzbeck	00102	2024/06/29	2026/06/28
BLA-EMC-065	Broadband antenna	VULB9168	Schwarzbeck	01065P	2024/06/29	2026/06/27
BLA-XC-01	Coaxial Cable	N/A	BlueAsia	V01	N/A	N/A
BLA-XC-02	Coaxial Cable	N/A	BlueAsia	V02	N/A	N/A

Radiated Spurious Emissions (Above 1GHz)

Equipment	Name	Model	Manufacture	S/N	Cal. Date	Due. Date
BLA-EMC-001-01	Anechoic chamber	9*6*6 chamber	SKET	N/A	2023/11/16	2026/11/15
BLA-EMC-001-02	Control Room	966 control room	SKET	N/A	2023/11/16	2025/11/15
BLA-EMC-008	Spectrum	FSP40	R&S	100817	2025/08/05	2026/08/04
BLA-EMC-012	Broadband antenna	VULB9168	Schwarzbeck	00836 P:00227	2022/10/12	2025/10/11
BLA-EMC-013	Horn Antenna	BBHA9120D	Schwarzbeck	01892	2024/06/29	2026/06/28
BLA-EMC-014	Amplifier	PA_000318G-45	SKET	PA201804 3003	2025/08/05	2026/08/04
BLA-EMC-046	Filter bank	2.4G/5G Filter bank	SKET	N/A	2025/06/09	2026/06/08
BLA-EMC-061	Receiver	ESPI7	R&S	101477	2025/06/09	2026/06/08
BLA-EMC-066	Amplifier	LNPA_30M01 G-30	SKET	SK202106 0801	2025/06/09	2026/06/08
BLA-EMC-086	Amplifier	LNPA_18G40 G-50dB	SKET	SK202207 1301	2025/06/09	2026/06/08
BLA-EMC-087	Horn Antenna	BBHA 9170	Schwarzbeck	1106	2024/06/29	2026/06/28
BLA-XC-03	Coaxial Cable	N/A	BlueAsia	V03	N/A	N/A
BLA-XC-04	Coaxial Cable	N/A	BlueAsia	V04	N/A	N/A

Conducted emissions at AC power line (150 kHz-30 MHz)

Equipment	Name	Model	Manufacture	S/N	Cal. Date	Due. Date
BLA-EMC-003-001	Shield room	8*3*3	SKET	N/A	2023/11/16	2025/11/15
BLA-EMC-009	EMI receiver	ESR7	R&S	101199	2025/08/05	2026/08/04
BLA-EMC-011	LISN	ENV216	R&S	101372	2025/08/05	2026/08/04
BLA-EMC-033	Impedance transformer	DC-2GHz	DFXP	N/A	2025/06/09	2026/06/08
BLA-EMC-041	LISN	AT166-2	ATTEN	AKK1806000003	2025/08/05	2026/08/04
BLA-EMC-045	Impedance stable network	ISNT8-cat 6	TESEQ	53580	2025/08/05	2026/08/04
BLA-EMC-095	Single-channel vehicle artificial power network	NNBM 8124	Schwarzbeck	01045	2025/06/09	2026/06/08
BLA-EMC-096	Single-channel vehicle artificial power network	NNBM 8124	Schwarzbeck	01075	2025/06/09	2026/06/08
BLA-XC-05	Coaxial Cable	N/A	BlueAsia	V05	N/A	N/A

RF conducted

Equipment	Name	Model	Manufacture	S/N	Cal. Date	Due. Date
BLA-EMC-003-003	Shield room	5*3*3	SKET	N/A	2023/11/16	2025/11/15
BLA-EMC-016	Signal Generator	N5182A	Agilent	MY52420567	2025/06/09	2026/06/08
BLA-EMC-038	Spectrum	N9020A	Agilent	MY49100060	2025/08/05	2026/08/04
BLA-EMC-042	Power sensor	RPR3006 W	DARE	14I00889SN042	2025/08/05	2026/08/04
BLA-EMC-044	Radio communication tester	CMW500	R&S	132429	2025/08/05	2026/08/04
BLA-EMC-064	Signal Generator	N5182B	KEYSIGHT	MY58108892	2025/06/09	2026/06/08
BLA-EMC-079	Spectrum	N9020A	Agilent	MY54420161	2025/08/05	2026/08/04
BLA-EMC-088	Audio Analyzer	ATS-1	Audio Precision	ATS141094	2025/06/09	2026/06/08
BLA-EMC-100	Digital Radio Tester	RWC2010	Redwoodcomm	RWC20102490304	2025/06/09	2026/06/08

Test Software Record

Software No.	Software Name	Manufacture	Software version	Test site
BLA-EMC-S001	EZ-EMC	EZ	EEMC-3A1+	RE
BLA-EMC-S002	EZ-EMC	EZ	EEMC-3A1+	RE
BLA-EMC-S003	EZ-EMC	EZ	EEMC-3A1+	CE
BLA-EMC-S010	MTS 8310	MW	2.0.0.0	RF

6 Test result

6.1 Antenna requirement

Test Standard	47 CFR Part 15, Subpart C 15.203
Test Method	N/A

6.1.1 Requirement

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of a so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT antenna:

The antenna is FPC antenna. The best case gain of the antenna is WIFI ANT 0: 3dBi; WIFI ANT 1: 3dBi

6.2 Conducted emissions at AC power line (150 kHz-30 MHz)

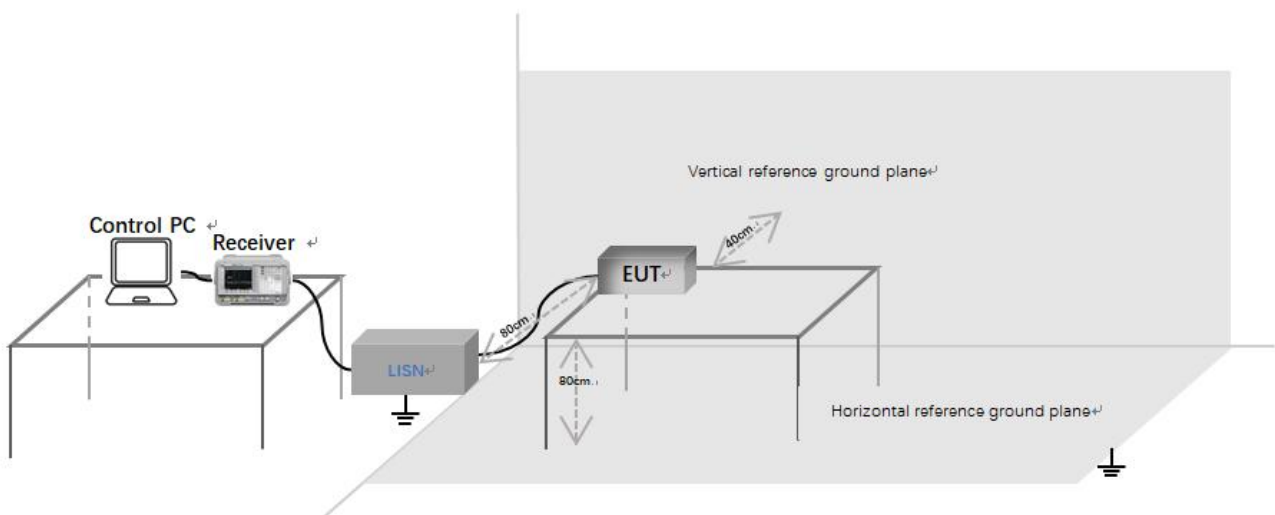
Test Standard	47 CFR Part 15, Subpart C 15.207
Test Method	ANSI C63.10-2020+Cor.1-2023 Clause 6.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.2.1 Limit

Frequency of emission(MHz)	Conducted limit(dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

6.2.2 Test setup



Description of test setup connection:

- Connect the control PC to the receiver through a USB to GPIB cable;
- The receiver is connected to the LISN through a coaxial line;
- Connect the power port of LISN to the EUT.

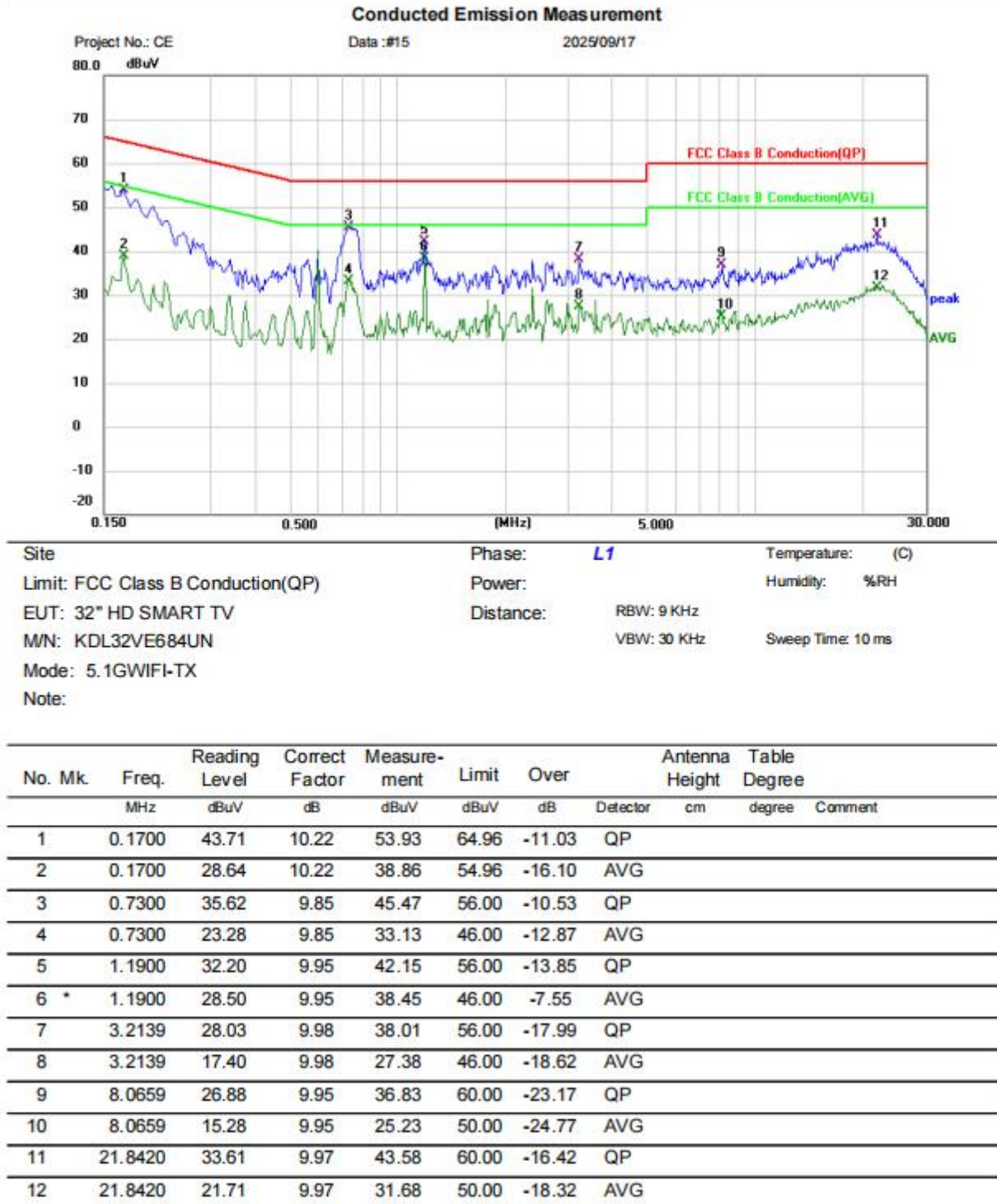
6.2.3 Procedure

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50H + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

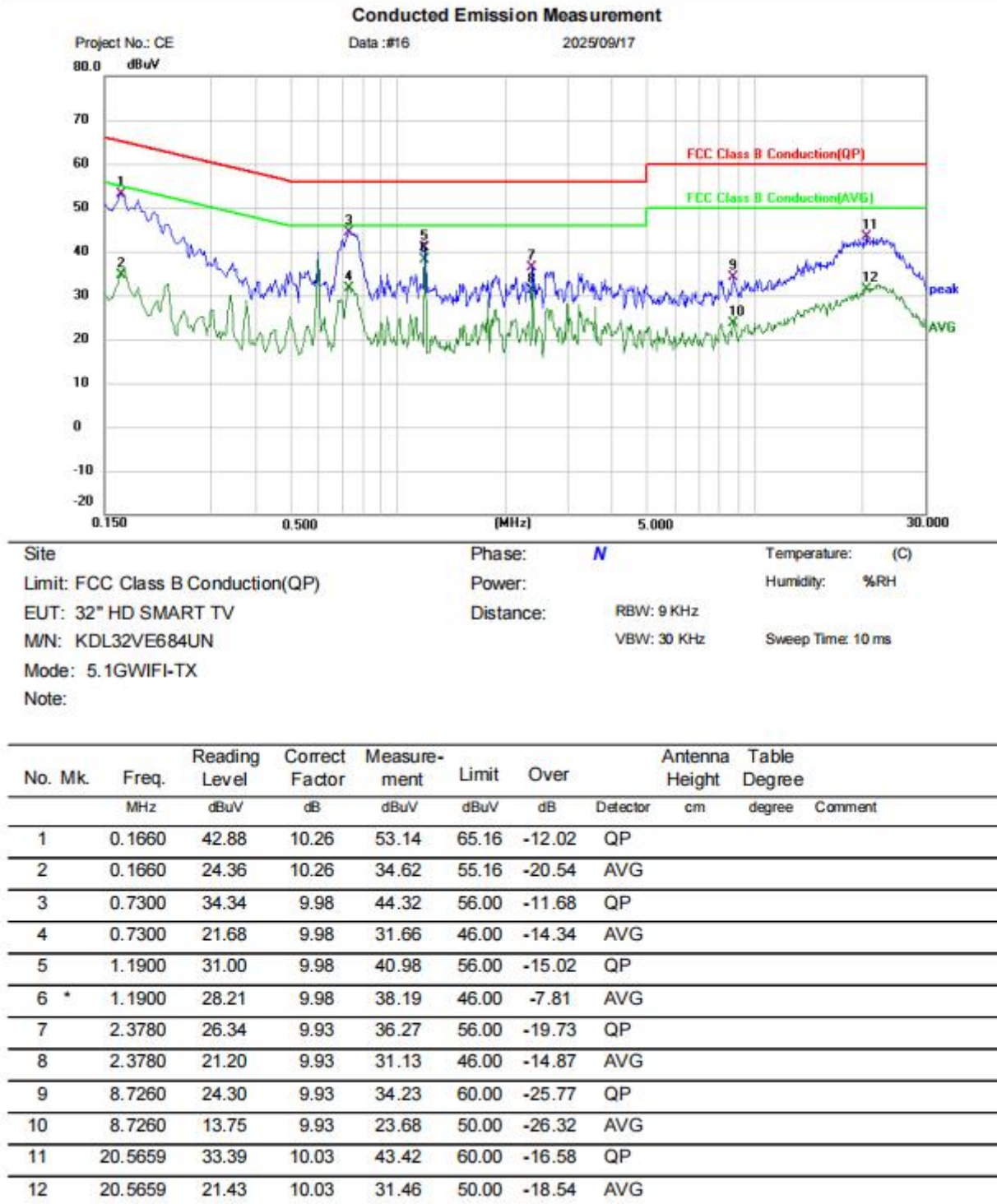
LISN=Read Level+ Cable Loss+ LISN Factor

6.2.4 Test data

[Test mode: TX]; [Line: Line];[Power:AC120V/60Hz]


Test Result: Pass

[Test mode: TX]; [Line: Neutral];[Power:AC120V/60Hz]


Test Result: Pass

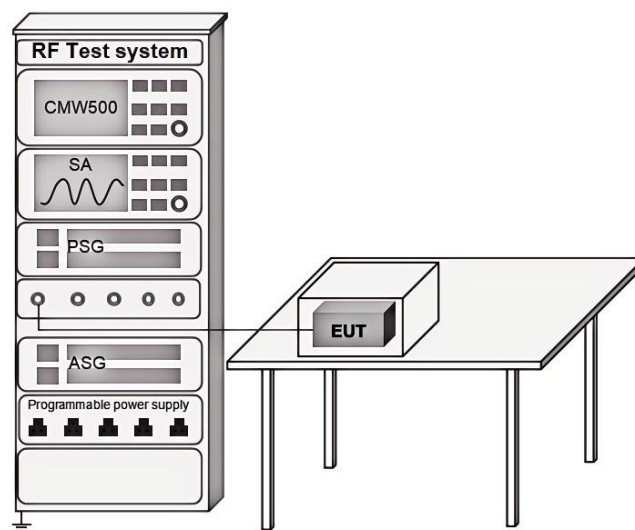
6.3 Frequency Stability

Test Standard	47 CFR Part 15, Subpart E 15.407(g)
Test Method	ANSI C63.10-2020+Cor.1-2023 Clause 6.8
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.3.1 Limit

The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

6.3.2 Test setup



6.3.3 Test data

Pass: Please refer to appendix A for details

6.4 Maximum conducted output Power

Test Standard	47 CFR Part 15, Subpart E 15.407 (a)
Test Method	KDB 789033 D02 II E
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

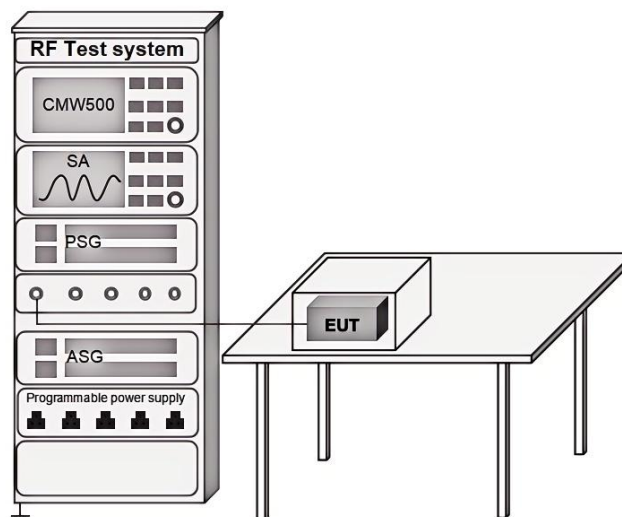
6.4.1 Limit

Frequency band(MHz)	Limit
5150-5250	$\leq 1\text{W}(30\text{dBm})$ for master device
	$\leq 250\text{mW}(24\text{dBm})$ for client device
5250-5350	$\leq 250\text{mW}(24\text{dBm})$ for client device or $11\text{dBm}+10\log B^*$
5470-5725	$\leq 250\text{mW}(24\text{dBm})$ for client device or $11\text{dBm}+10\log B^*$
5725-5850	$\leq 1\text{W}(30\text{dBm})$

Remark:* Where B is the 26dB emission bandwidth in MHz.

The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

6.4.2 Test setup



6.4.3 Test data

Pass: Please refer to appendix A for details

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Report version : V1.3

6.5 Peak power spectrum density

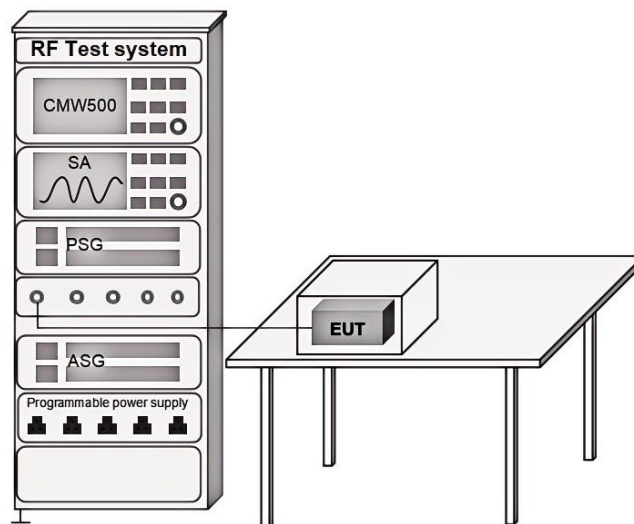
Test Standard	47 CFR Part 15, Subpart E 15.407 (a)
Test Method	KDB 789033 D02 II F
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.5.1 Limit

Frequency band(MHz)	Limit
5150-5250	≤17dBm in 1MHz for master device
	≤11dBm in 1MHz for client device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
5725-5850	≤30dBm in 500 kHz

Remark: The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.

6.5.2 Test setup



6.5.3 Test data

Pass: Please refer to appendix A for details

BlueAsia of Technical Services (Shenzhen) Co., Ltd.

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Report version: V1.3

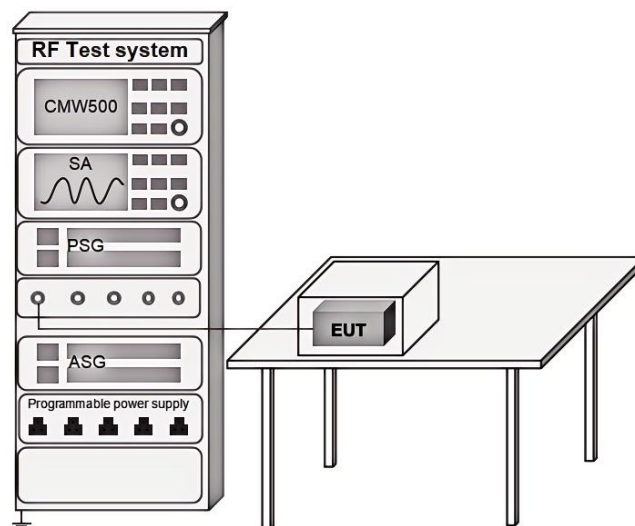
6.6 Minimum 6dB bandwidth (5.725-5.85 GHz band)

Test Standard	47 CFR Part 15, Subpart E 15.407 (e)
Test Method	KDB 789033 D02 II C 2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.6.1 Limit

≥500 kHz

6.6.2 Test setup



6.6.3 Test data

Pass: Please refer to appendix A for details

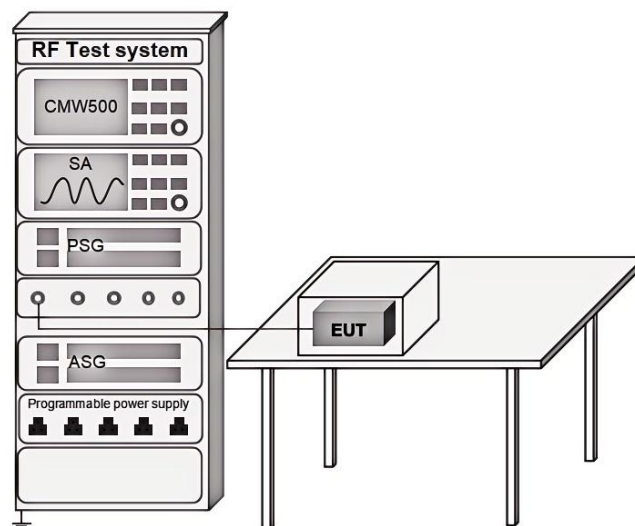
6.7 26dB Emission bandwidth

Test Standard	47 CFR Part 15, Subpart E 15.407 (a)
Test Method	KDB 789033 D02 II C 1
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.7.1 Limit

N/A

6.7.2 Test setup



6.7.3 Test data

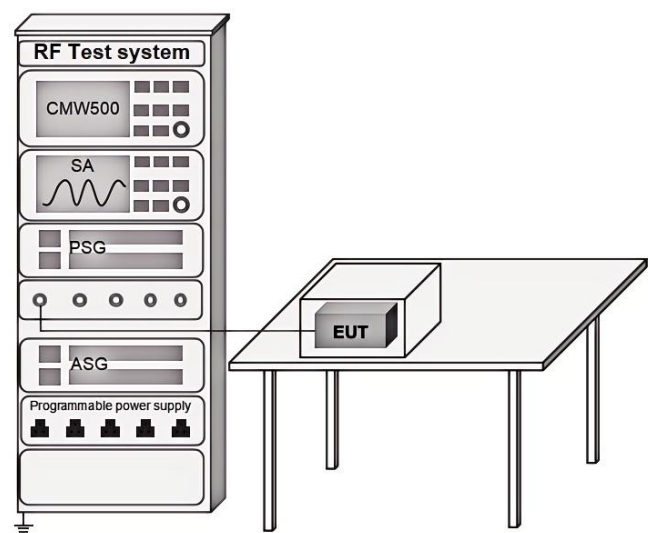
Pass: Please refer to appendix A for details

6.8 99% Bandwidth

Test Standard	N/A
Test Method	KDB 789033 II D
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.8.1 Limit

6.8.2 Test setup



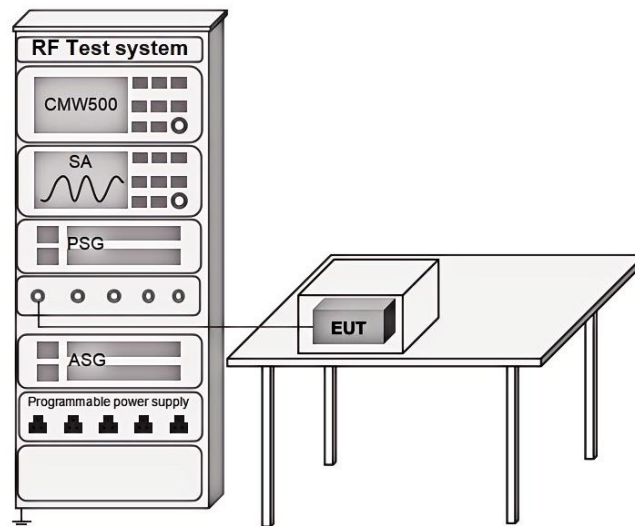
6.8.3 Test data

Pass: Please refer to appendix A for details

6.9 Duty Cycle

Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	KDB 789033 II B 1
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.9.1 Test setup



6.9.2 Test data

Pass: Please refer to appendix A for details

6.10 Conducted Band Edges Measurement

Test Standard	47 CFR Part 15, Subpart C 15.407(b)(4)
Test Method	ANSI C63.10-2020+Cor.1-2023 Clause 11.13
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.10.1 Limit

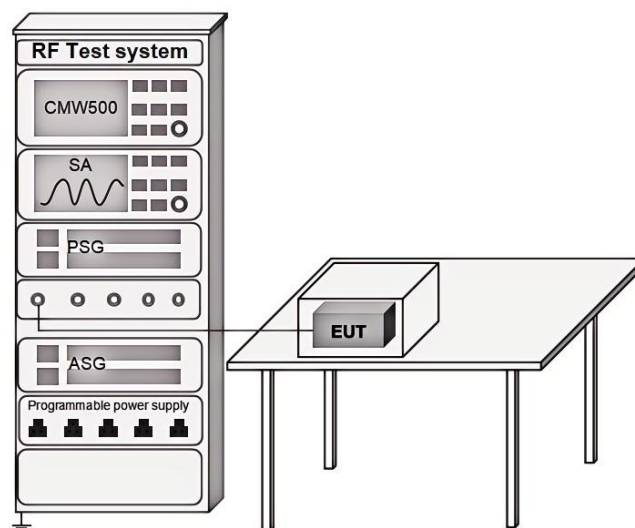
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20dB.

Attenuation below the general limits specified in §15.209(a) is not required.

In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

6.10.2 Test setup



6.10.3 Test data

Pass: Please refer to appendix A for details

BlueAsia

6.11 Conducted spurious emissions

Test Standard	47 CFR Part 15, Subpart C 15.407
Test Method	ANSI C63.10-2020+Cor.1-2023 Clause 11.11
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.11.1 Limit

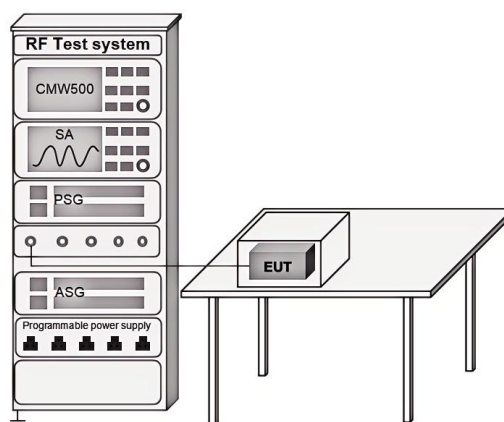
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20dB.

Attenuation below the general limits specified in §15.209(a) is not required.

In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

6.11.2 Test setup



6.11.3 Test data

Pass: Please refer to appendix A for details

BlueAsia

6.12 Radiated emissions

Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	KDB 789033 D02 II G
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

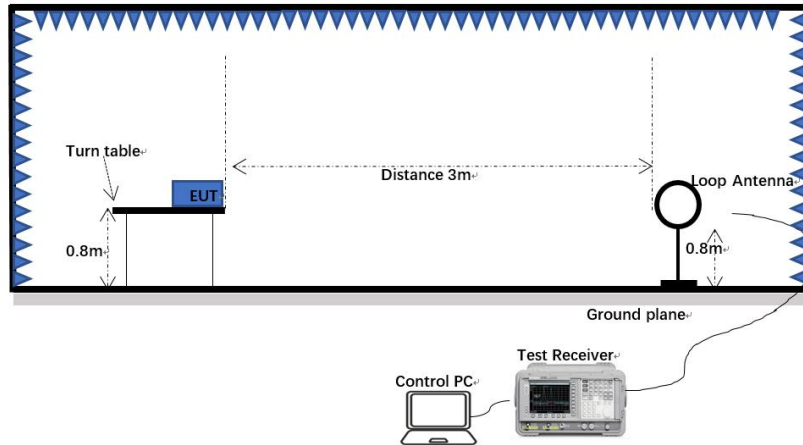
6.12.1 Limit

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

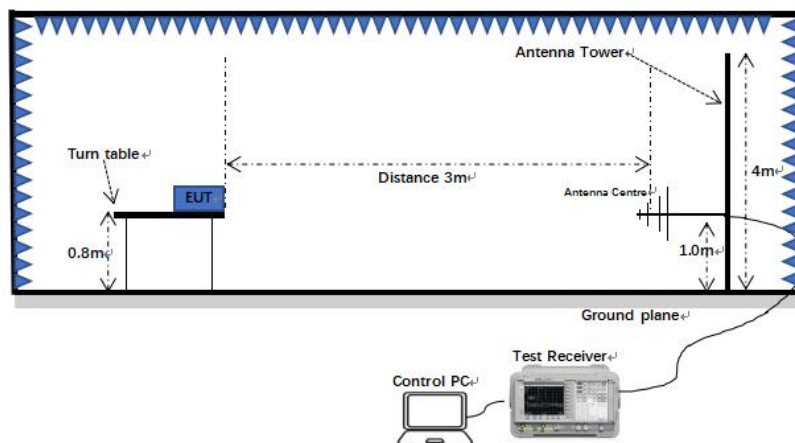
Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field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

6.12.2 Test setup

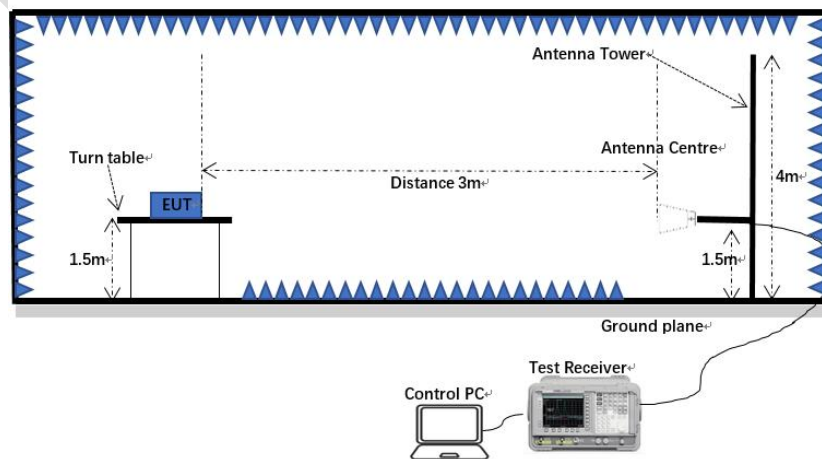
Below 1GHz:



30MHz-1GHz:



Above 1GHz:



6.12.3 Procedure

- a) For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b) For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c) The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d) The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g) If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h) Test the EUT in the lowest channel, the middle channel, the highest channel.
- i) The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j) Repeat above procedures until all frequencies measured was complete.

Note 1: Scan from 9 kHz to 40GHz, the disturbance above 12.75GHz and below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported. Fundamental frequency is blocked by filter, and only spurious emission is shown.

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

Note 3: The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

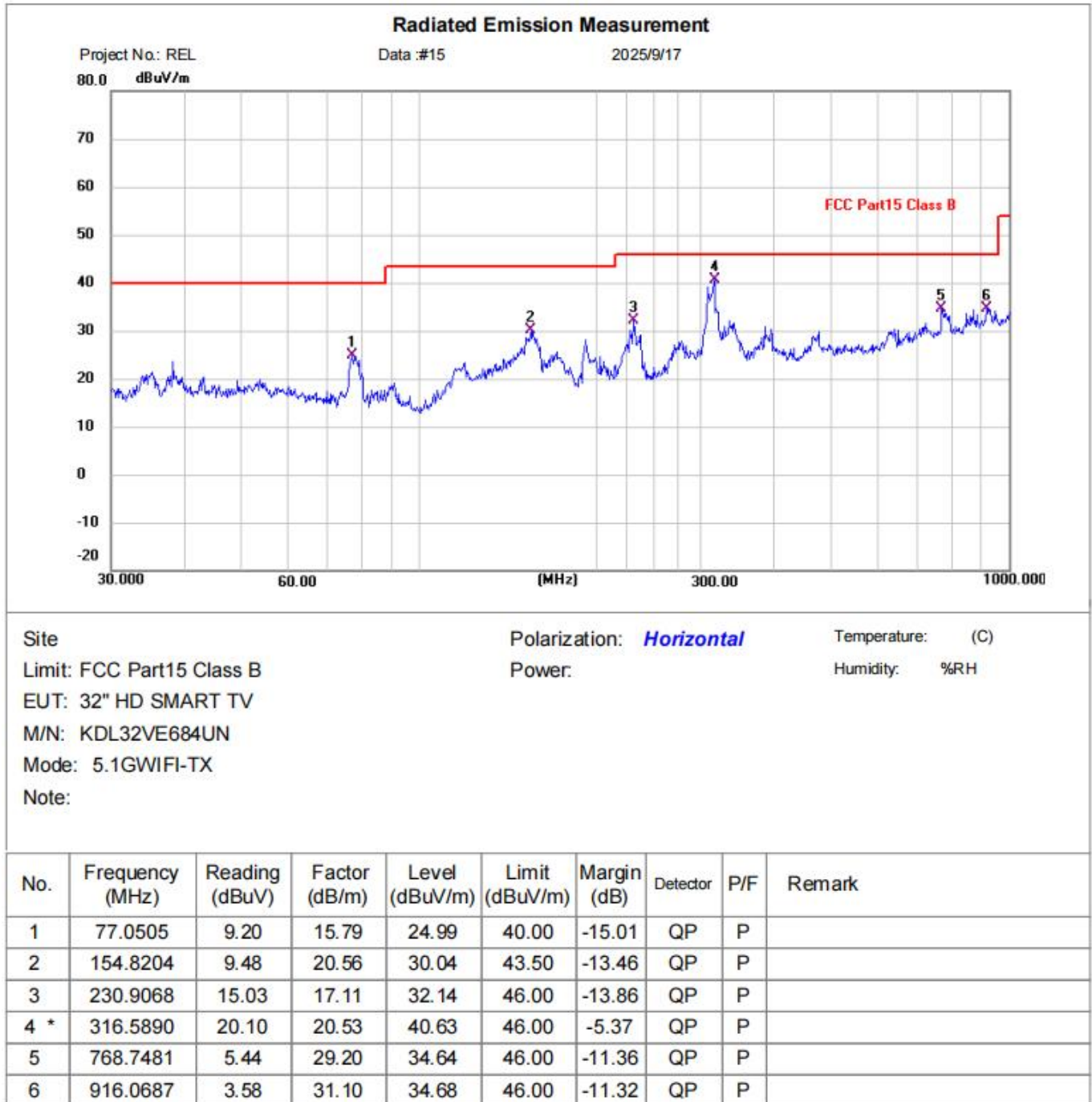
$$\text{Level (dBuV)} = \text{Reading (dBuV)} + \text{Factor (dB/m)}$$

6.12.4 Test data

Below 1GHz:

Remark: During the test, pre-scan the (Band1-4)802.11a/n(HT20/40)/ac(VHT20/40/80) mode, and found the 802.11a mode which it is worse case, only the worse case lowest channel of 6Mbps for 802.11a was recorded in the report.

[Test mode: TX mode]; [Polarity: Horizontal]



Test Result: Pass

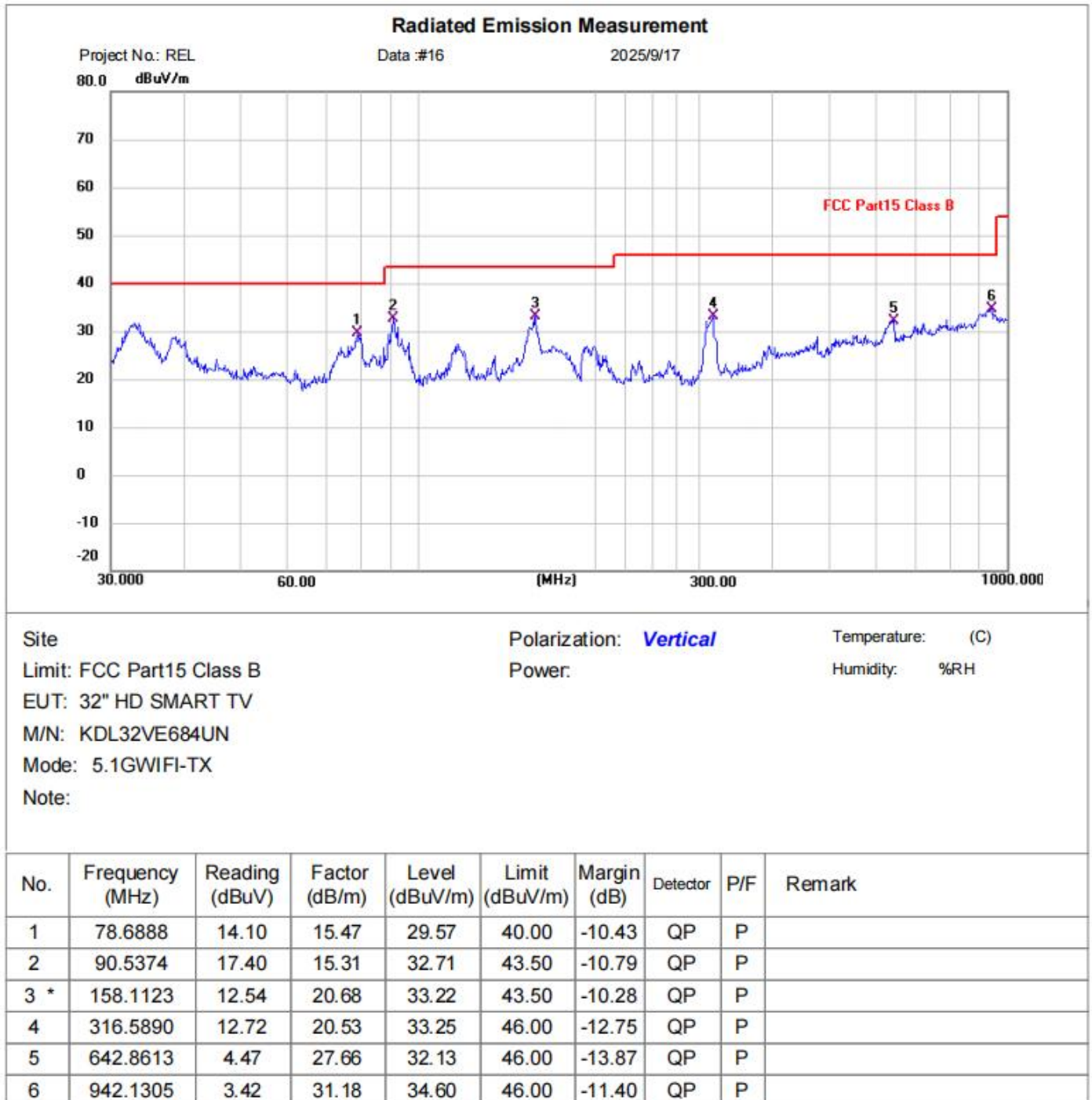
BlueAsia of Technical Services (Shenzhen) Co., Ltd.

Tel: +86-755-23059481

Email: marketing@cblueasia.com www.cblueasia.com

Report version : V1.3

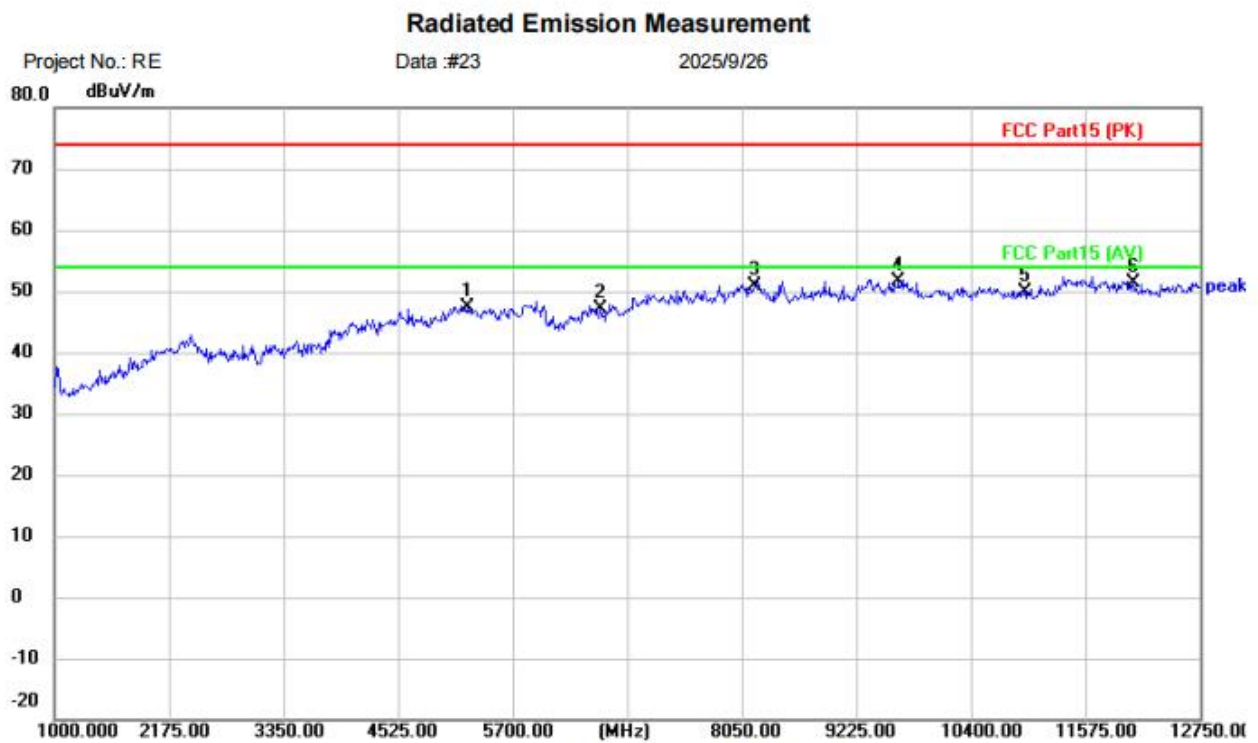
[Test mode: TX mode]; [Polarity: Vertical]


Test Result: Pass

Above 1GHz:

Remark: During the test, pre-scan the (Band1-4)802.11a/n(HT20/40)/ac(VHT20/40/80) mode, and found the 802.11a mode which it is worse case, only the worse case 6Mbps for 802.11a was recorded in the report.

[Test mode:Band1 TX low channel]; [Polarity: Horizontal]



Site: Polarization: **Horizontal** Temperature: (C)
Limit: FCC Part15 (PK) Power: Humidity: %RH
EUT: 32" HD SMART TV
M/N: KDL32VE684UN
Mode: 5.1GWIFI-5180
Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5230.000	39.84	7.45	47.29	74.00	-26.71	peak	
2		6604.750	38.57	8.57	47.14	74.00	-26.86	peak	
3		8179.250	39.32	11.50	50.82	74.00	-23.18	peak	
4	*	9659.750	38.14	13.52	51.66	74.00	-22.34	peak	
5		10952.25	36.83	13.09	49.92	74.00	-24.08	peak	
6		12068.50	37.51	13.94	51.45	74.00	-22.55	peak	

Test Result: Pass

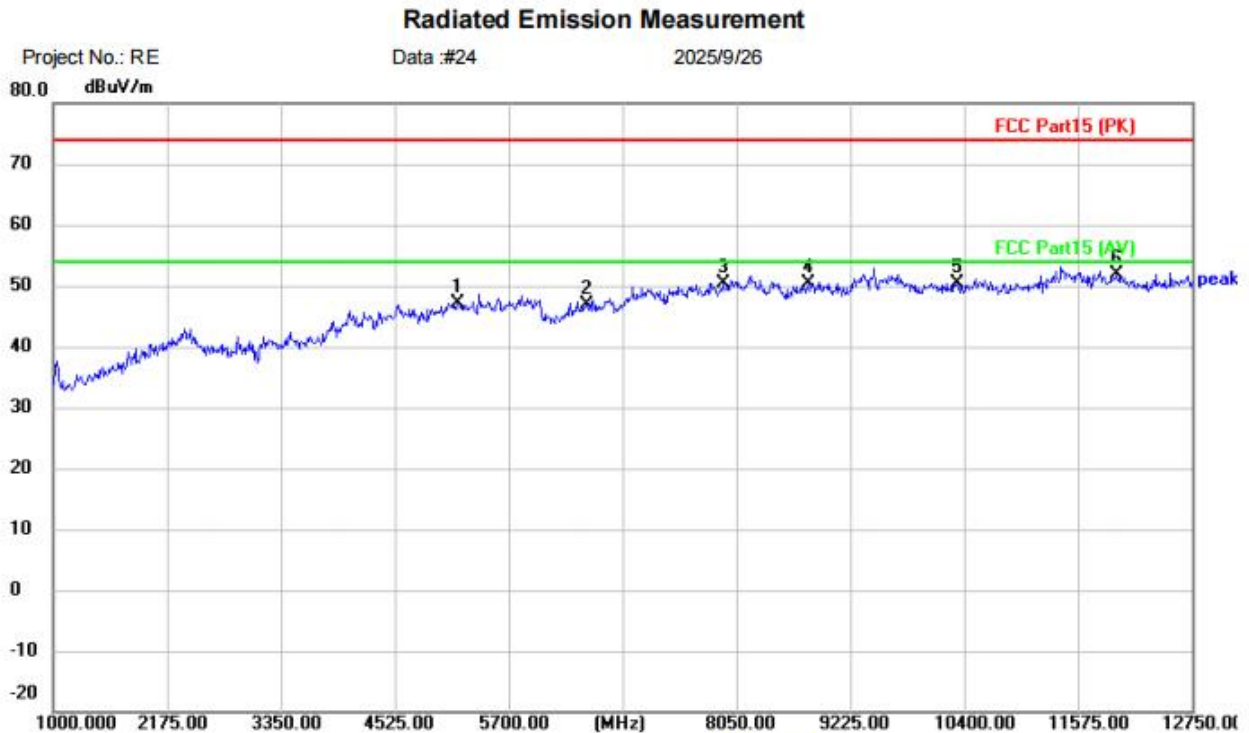
BlueAsia of Technical Services (Shenzhen) Co., Ltd.

Tel: +86-755-23059481

Email: marketing@cblueasia.com www.cblueasia.com

Report version : V1.3

[Test mode:Band1 TX low channel]; [Polarity: Vertical]



Site: Polarization: **Vertical** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: 32" HD SMART TV

M/N: KDL32VE684UN

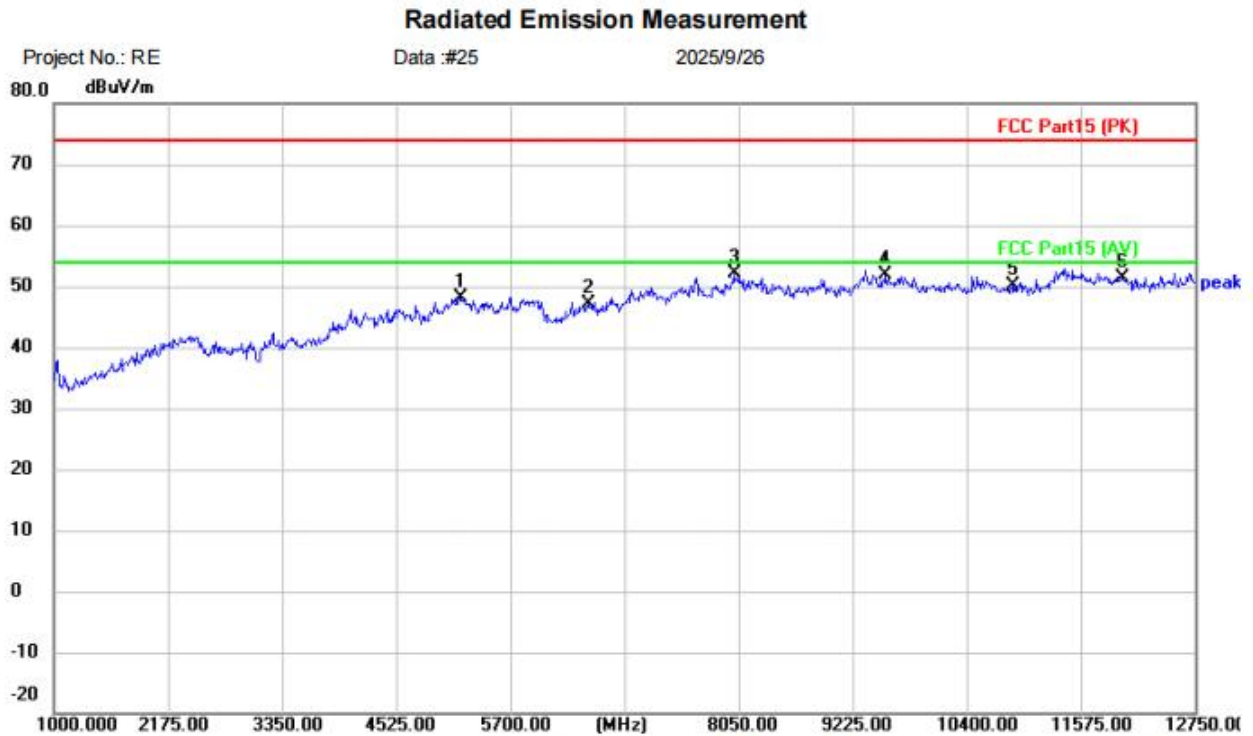
Mode: 5.1GWIFI-5180

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5171.250	39.36	7.84	47.20	74.00	-26.80	peak	
2		6510.750	38.42	8.47	46.89	74.00	-27.11	peak	
3		7909.000	39.01	11.29	50.30	74.00	-23.70	peak	
4		8790.250	38.10	12.20	50.30	74.00	-23.70	peak	
5		10329.50	36.76	13.55	50.31	74.00	-23.69	peak	
6	*	11974.50	37.70	14.09	51.79	74.00	-22.21	peak	

Test Result: Pass

[Test mode:Band1 TX middle channel]; [Polarity: Horizontal]

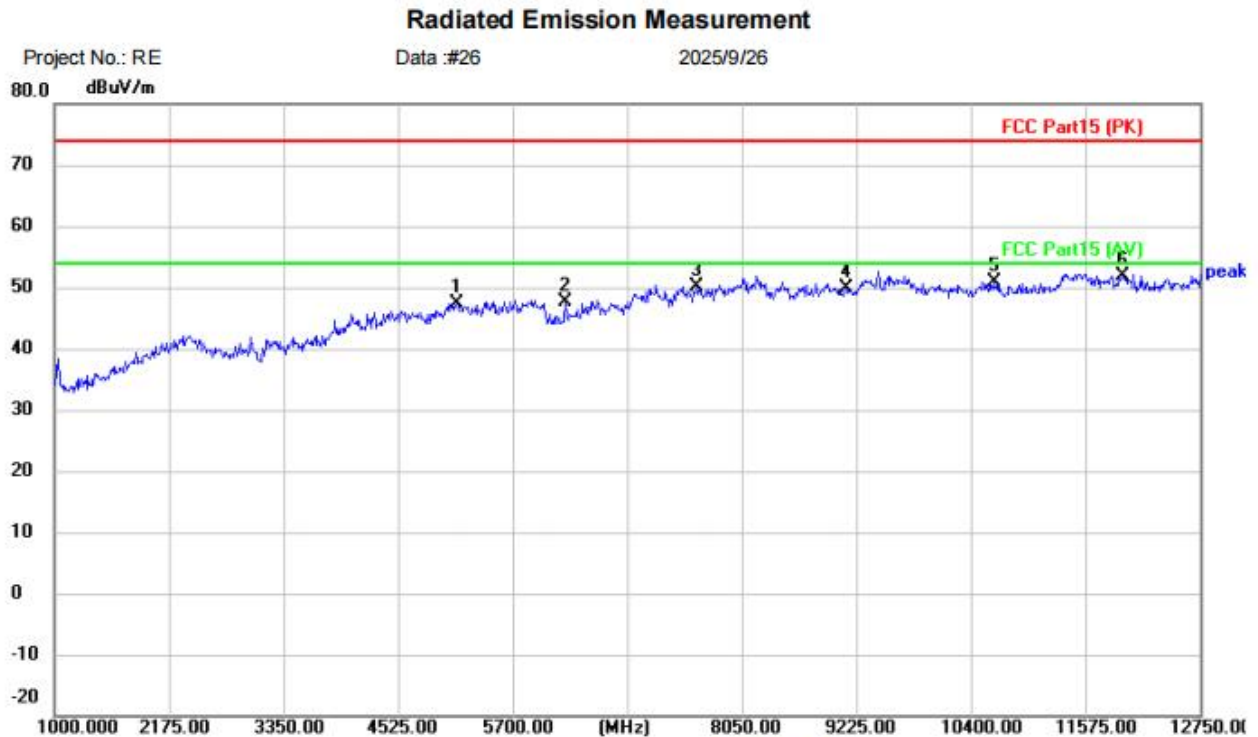


Site	Polarization: Horizontal	Temperature: (C)
Limit: FCC Part15 (PK)	Power:	Humidity: %RH
EUT: 32" HD SMART TV		
M/N: KDL32VE684UN		
Mode: 5.1GWIFI-5240		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5194.750	40.44	7.59	48.03	74.00	-25.97	peak	
2		6499.000	38.70	8.46	47.16	74.00	-26.84	peak	
3	*	8003.000	40.44	11.61	52.05	74.00	-21.95	peak	
4		9565.750	38.75	13.12	51.87	74.00	-22.13	peak	
5		10881.75	37.06	13.19	50.25	74.00	-23.75	peak	
6		11998.00	37.22	14.26	51.48	74.00	-22.52	peak	

Test Result: Pass

[Test mode:Band1 TX middle channel]; [Polarity: Vertical]

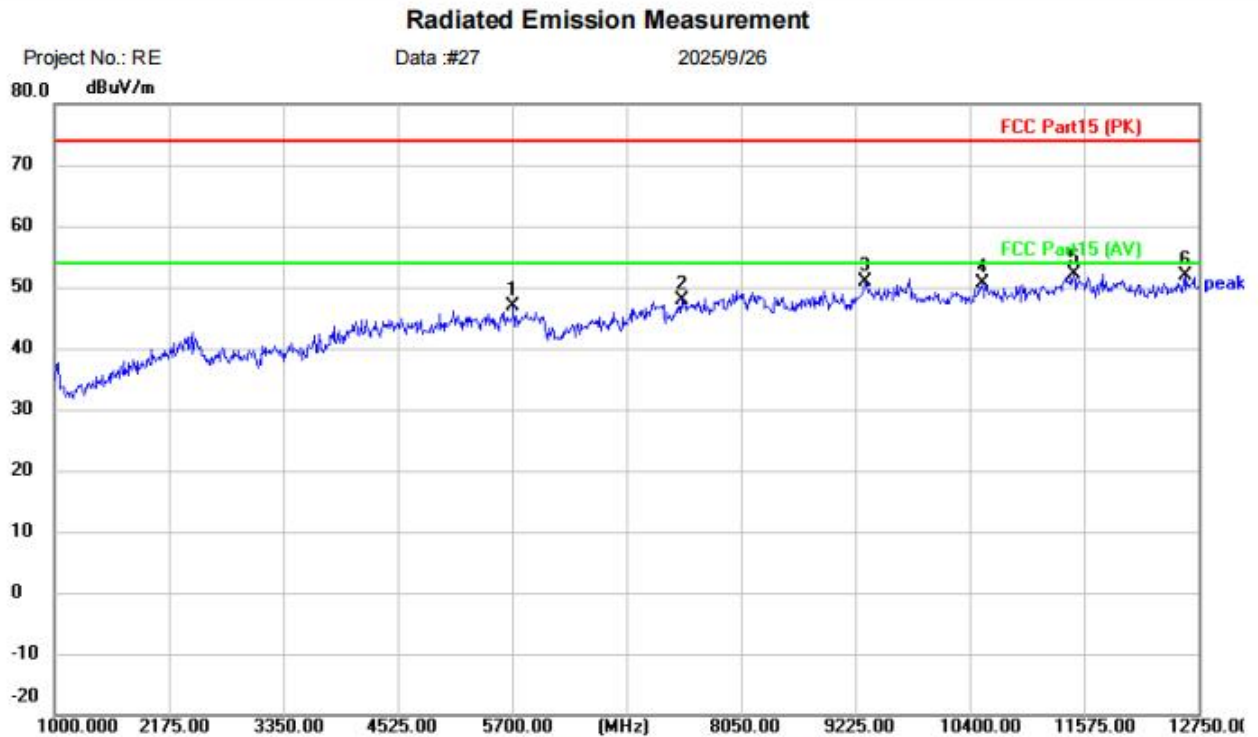


Site	Polarization: Vertical	Temperature: (C)
Limit: FCC Part15 (PK)	Power:	Humidity: %RH
EUT: 32" HD SMART TV		
M/N: KDL32VE684UN		
Mode: 5.1GWIFI-5240		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5124.250	39.06	8.20	47.26	74.00	-26.74	peak	
2		6240.500	40.59	6.98	47.57	74.00	-26.43	peak	
3		7591.750	39.59	10.66	50.25	74.00	-23.75	peak	
4		9119.250	37.46	12.34	49.80	74.00	-24.20	peak	
5		10635.00	37.56	13.32	50.88	74.00	-23.12	peak	
6	*	11951.00	37.99	13.93	51.92	74.00	-22.08	peak	

Test Result: Pass

[Test mode:Band1 TX High channel]; [Polarity: Horizontal]



Site Polarization: **Horizontal** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: 32" HD SMART TV

M/N: KDL32VE684UN

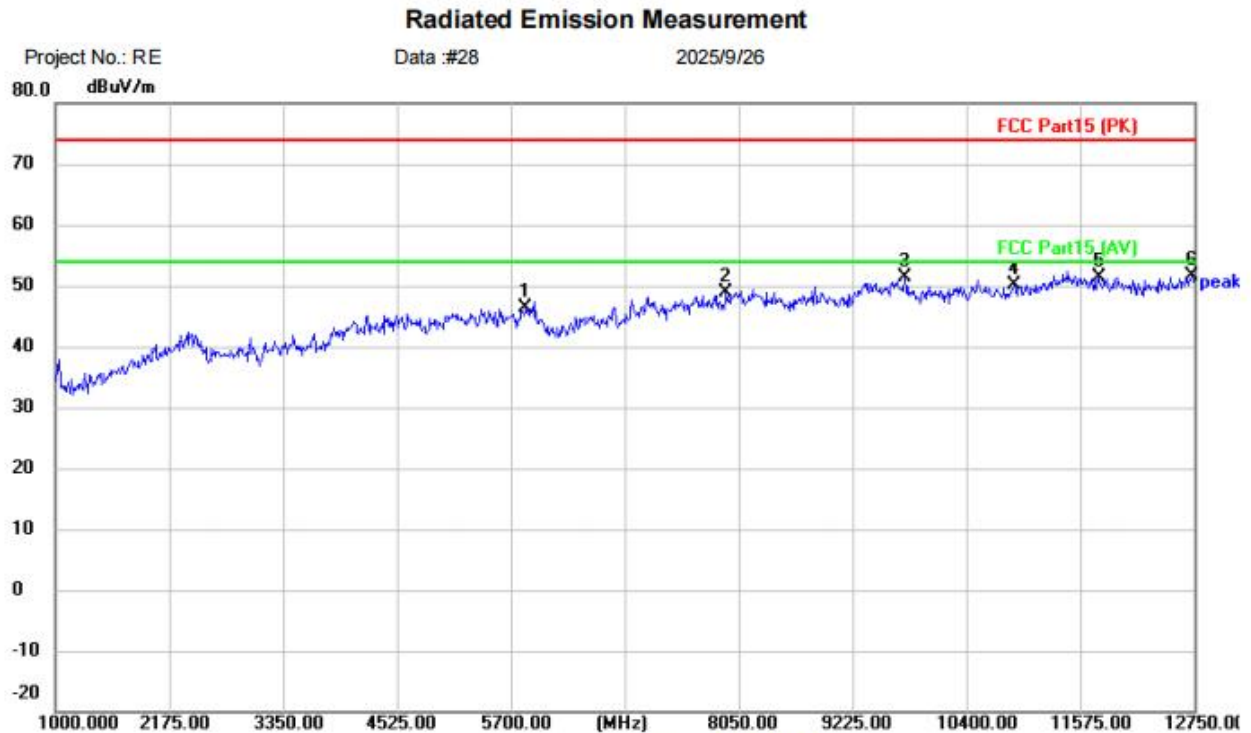
Mode: 5.1GWIFI-5200

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5711.750	39.21	7.71	46.92	74.00	-27.08	peak	
2		7439.000	38.30	9.69	47.99	74.00	-26.01	peak	
3		9319.000	38.33	12.57	50.90	74.00	-23.10	peak	
4		10529.25	36.86	13.84	50.70	74.00	-23.30	peak	
5	*	11469.25	37.23	14.97	52.20	74.00	-21.80	peak	
6		12609.00	37.94	13.84	51.78	74.00	-22.22	peak	

Test Result: Pass

[Test mode:Band1 TX High channel]; [Polarity: Vertical]



Site: Polarization: **Vertical** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: 32" HD SMART TV

M/N: KDL32VE684UN

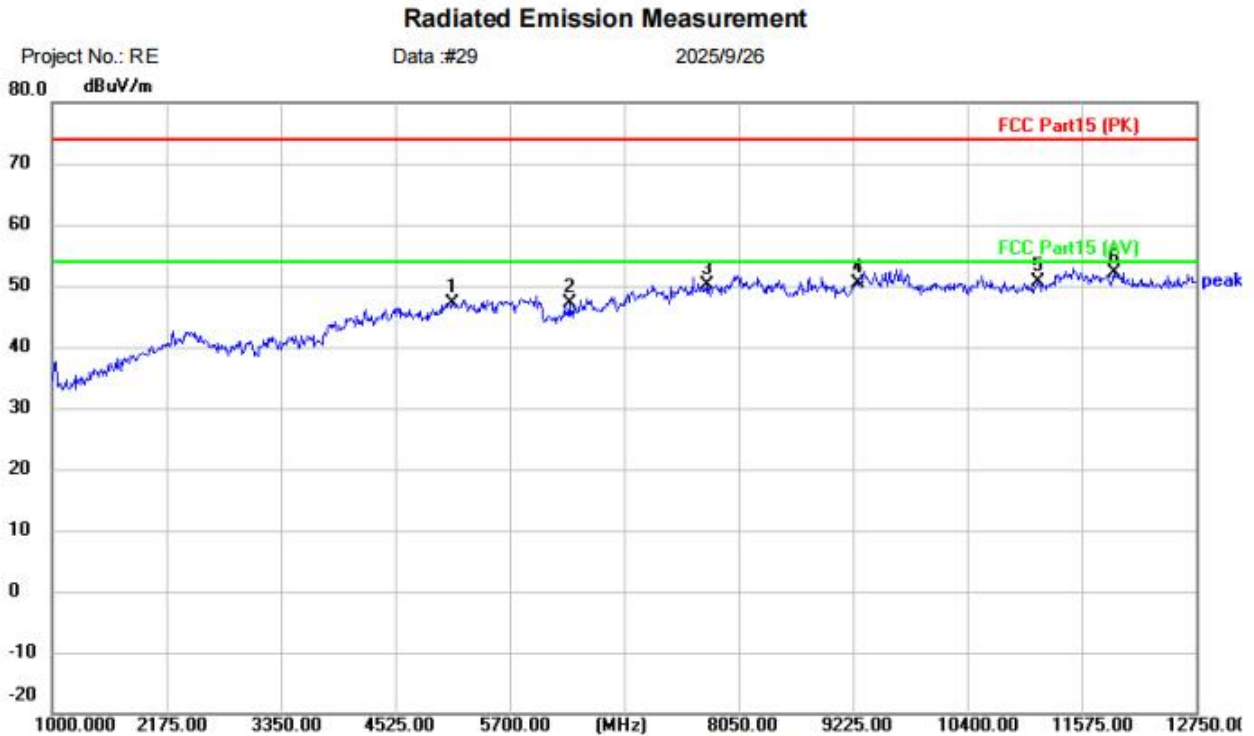
Mode: 5.1GWIFI-5200

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5852.750	38.52	7.82	46.34	74.00	-27.66	peak	
2		7920.750	38.68	10.11	48.79	74.00	-25.21	peak	
3		9765.500	38.20	13.30	51.50	74.00	-22.50	peak	
4		10893.50	36.56	13.68	50.24	74.00	-23.76	peak	
5		11763.00	37.85	13.58	51.43	74.00	-22.57	peak	
6	*	12726.50	36.82	14.76	51.58	74.00	-22.42	peak	

Test Result: Pass

[Test mode:Band4 TX low channel]; [Polarity: Horizontal]



Site Polarization: **Horizontal** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: 32" HD SMART TV

M/N: KDL32VE684UN

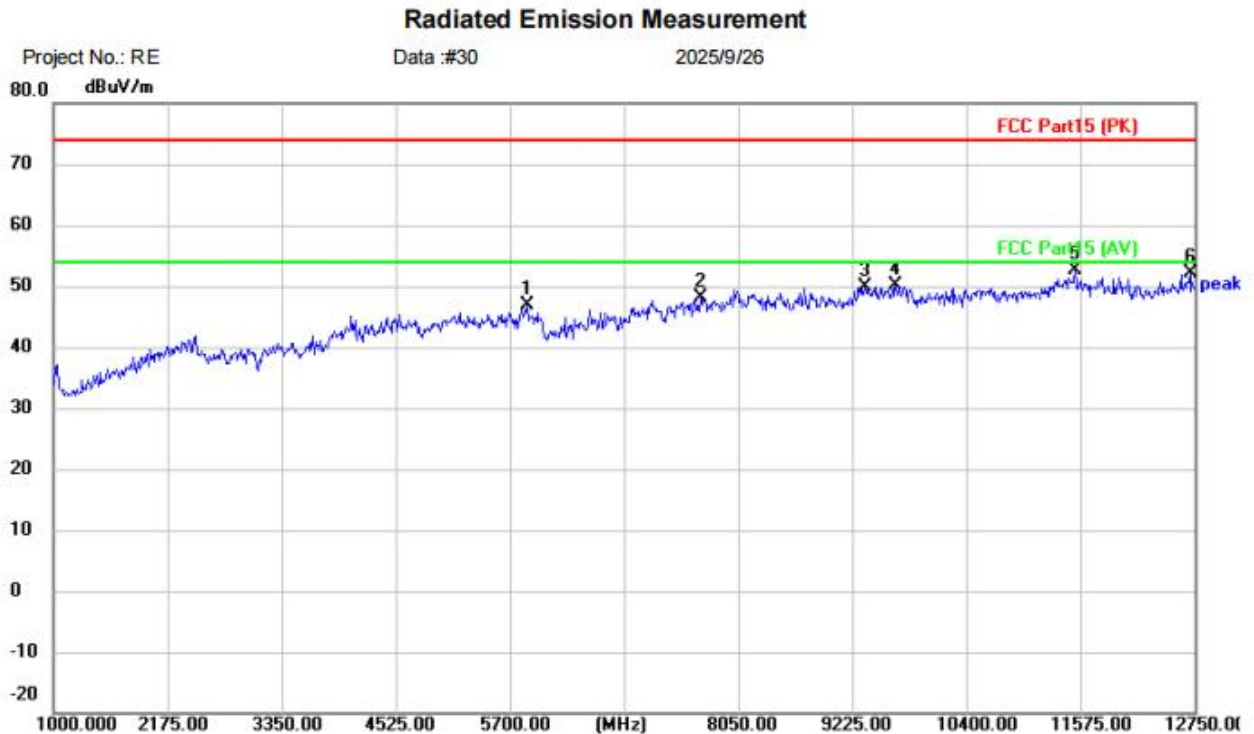
Mode: 5.8GWIFI-5745

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		5112.500	38.96	8.26	47.22	74.00	-26.78	peak	
2		6311.000	39.68	7.40	47.08	74.00	-26.92	peak	
3		7732.750	39.72	10.30	50.02	74.00	-23.98	peak	
4		9283.750	37.22	13.07	50.29	74.00	-23.71	peak	
5		11128.50	37.28	13.26	50.54	74.00	-23.46	peak	
6	*	11904.00	38.55	13.60	52.15	74.00	-21.85	peak	

Test Result: Pass

[Test mode:Band4 TX low channel]; [Polarity: Vertical]



Site: Polarization: **Vertical** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: 32" HD SMART TV

M/N: KDL32VE684UN

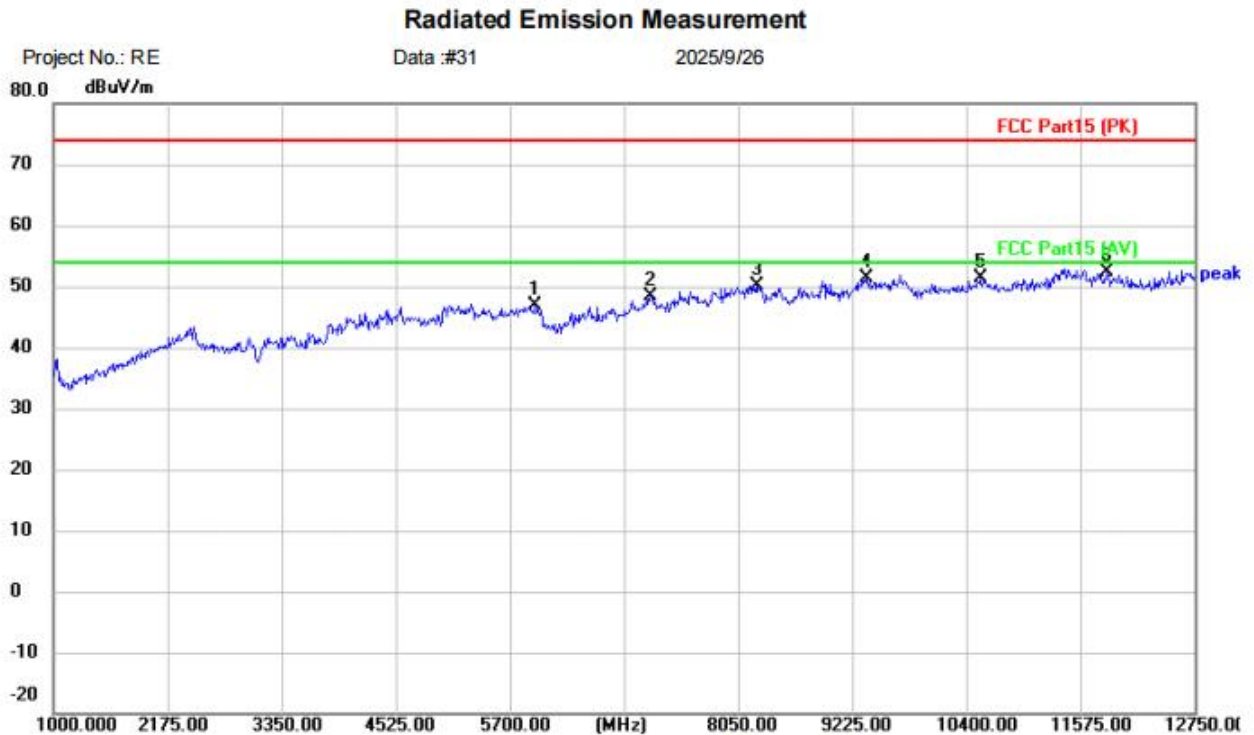
Mode: 5.8GWIFI-5745

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5876.250	39.02	7.92	46.94	74.00	-27.06	peak	
2		7662.250	38.84	9.21	48.05	74.00	-25.95	peak	
3		9354.250	37.11	12.71	49.82	74.00	-24.18	peak	
4		9671.500	37.09	13.02	50.11	74.00	-23.89	peak	
5	*	11516.25	37.52	15.11	52.63	74.00	-21.37	peak	
6		12703.00	37.45	14.79	52.24	74.00	-21.76	peak	

Test Result: Pass

[Test mode:Band4 TX middle channel]; [Polarity: Horizontal]

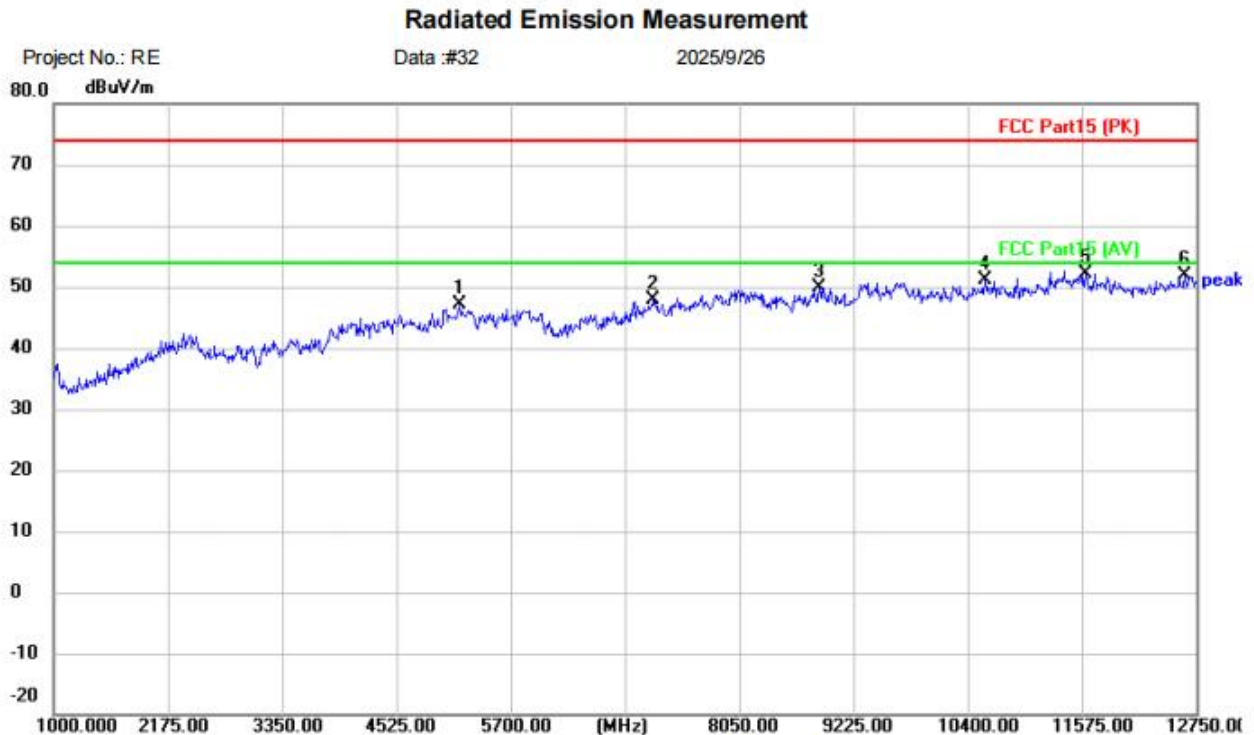


Site Polarization: **Horizontal** Temperature: (C)
Limit: FCC Part15 (PK) Power: Humidity: %RH
EUT: 32" HD SMART TV
M/N: KDL32VE684UN
Mode: 5.8GWIFI-5785
Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5958.500	38.86	7.95	46.81	74.00	-27.19	peak	
2		7145.250	39.21	9.23	48.44	74.00	-25.56	peak	
3		8238.000	39.89	10.20	50.09	74.00	-23.91	peak	
4		9377.750	39.00	12.39	51.39	74.00	-22.61	peak	
5		10541.00	37.48	13.83	51.31	74.00	-22.69	peak	
6	*	11845.25	38.70	13.57	52.27	74.00	-21.73	peak	

Test Result: Pass

[Test mode:Band4 TX middle channel]; [Polarity: Vertical]



Site Polarization: **Vertical** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: 32" HD SMART TV

M/N: KDL32VE684UN

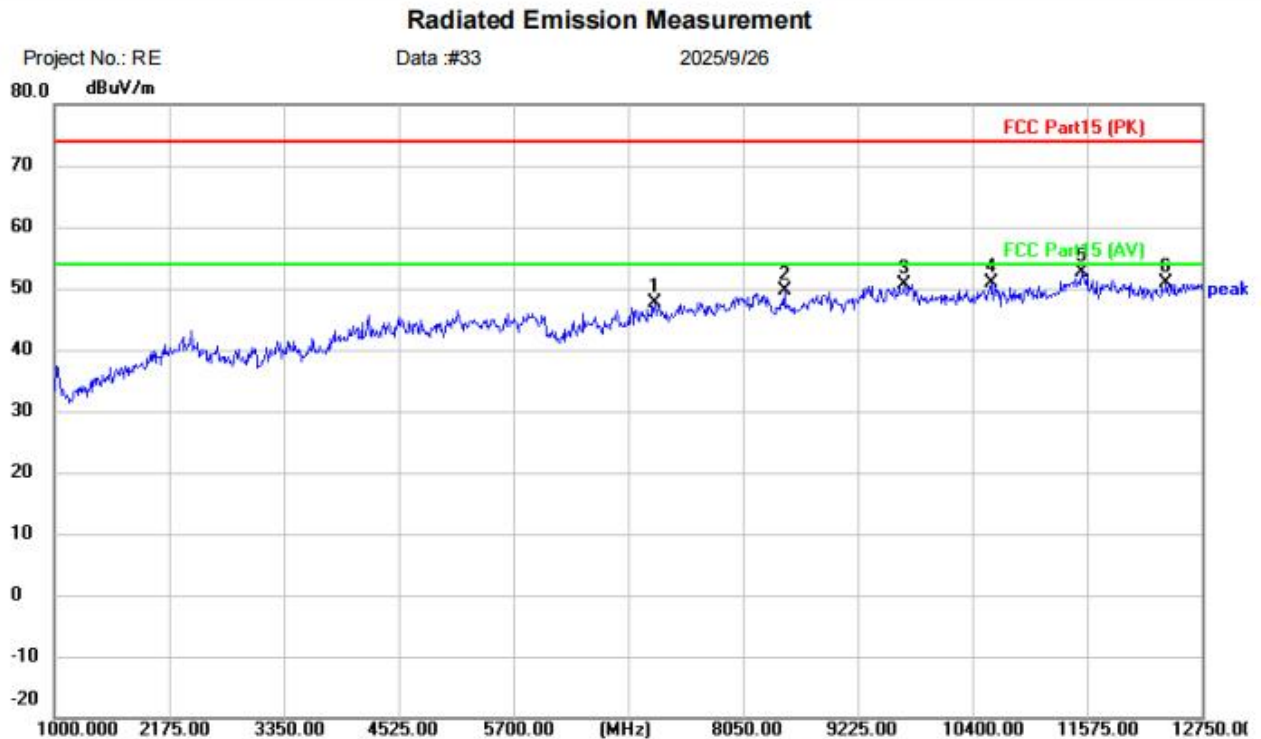
Mode: 5.8GWIFI-5785

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5171.250	40.14	6.89	47.03	74.00	-26.97	peak	
2		7168.750	38.82	9.16	47.98	74.00	-26.02	peak	
3		8872.500	38.56	11.37	49.93	74.00	-24.07	peak	
4		10576.25	37.43	13.80	51.23	74.00	-22.77	peak	
5	*	11610.25	37.42	14.83	52.25	74.00	-21.75	peak	
6		12632.50	37.84	14.09	51.93	74.00	-22.07	peak	

Test Result: Pass

[Test mode:Band4 TX High channel]; [Polarity: Horizontal]



Site: Polarization: **Horizontal** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: 32" HD SMART TV

M/N: KDL32VE684UN

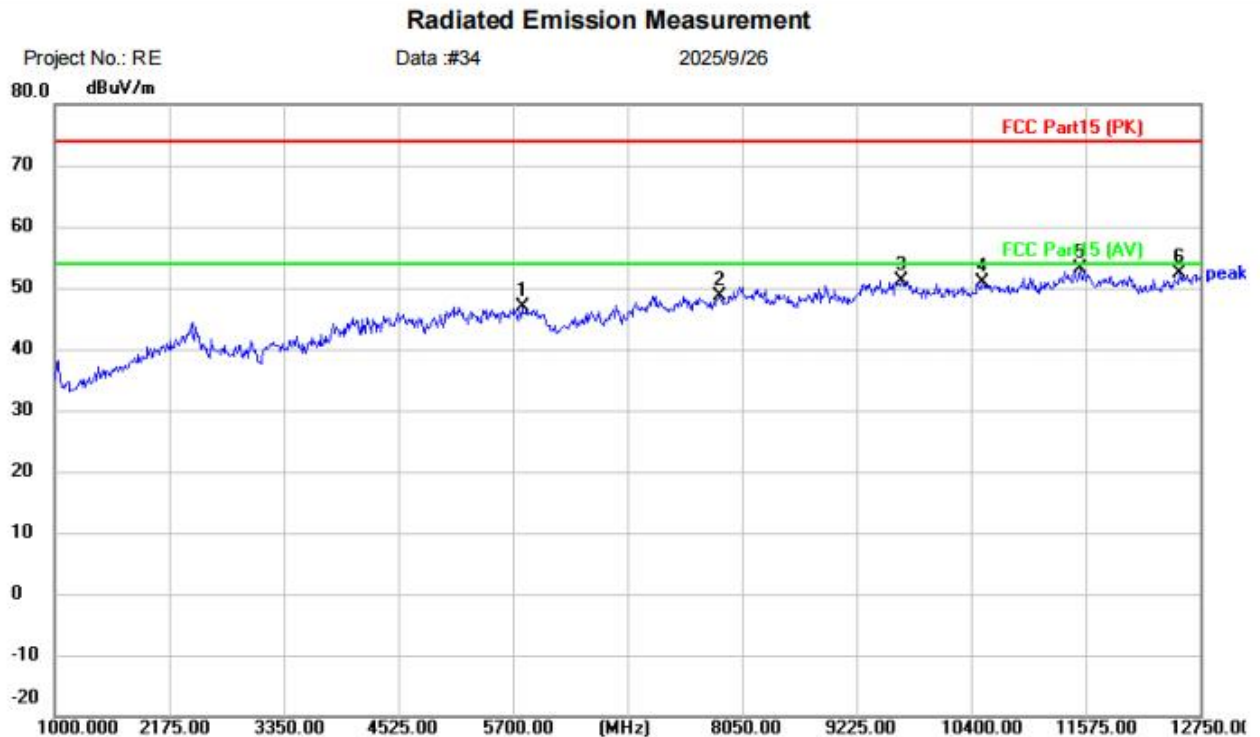
Mode: 5.8GWIFI-5825

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		7145.250	38.29	9.23	47.52	74.00	-26.48	peak	
2		8473.000	39.17	10.48	49.65	74.00	-24.35	peak	
3		9695.000	37.72	13.02	50.74	74.00	-23.26	peak	
4		10588.00	37.00	13.80	50.80	74.00	-23.20	peak	
5	*	11516.25	37.49	15.11	52.60	74.00	-21.40	peak	
6		12385.75	37.74	13.21	50.95	74.00	-23.05	peak	

Test Result: Pass

[Test mode:Band4 TX High channel]; [Polarity: Vertical]



Site Polarization: **Vertical** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: 32" HD SMART TV

M/N: KDL32VE684UN

Mode: 5.8GWIFI-5825

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5794.000	39.01	7.86	46.87	74.00	-27.13	peak	
2		7826.750	39.16	9.46	48.62	74.00	-25.38	peak	
3		9683.250	38.19	13.02	51.21	74.00	-22.79	peak	
4		10517.50	37.07	13.84	50.91	74.00	-23.09	peak	
5	*	11516.25	38.14	15.11	53.25	74.00	-20.75	peak	
6		12538.50	38.68	13.61	52.29	74.00	-21.71	peak	

Test Result: Pass

6.13 Radiated emissions which fall in the restricted bands

Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	KDB 789033 D02 II G
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

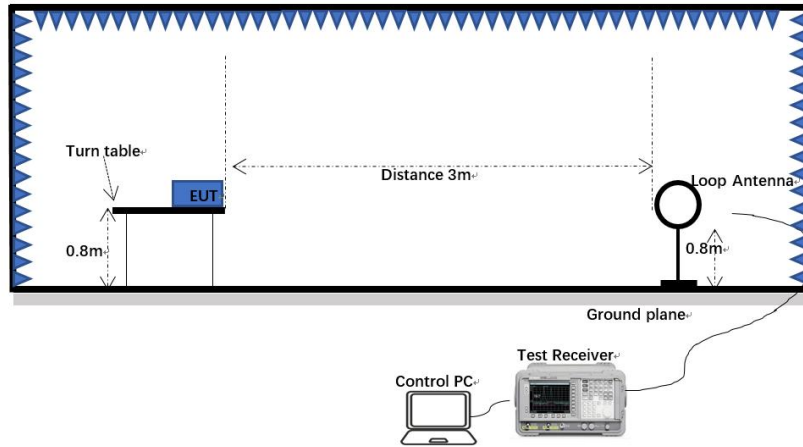
6.13.1 Limit

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

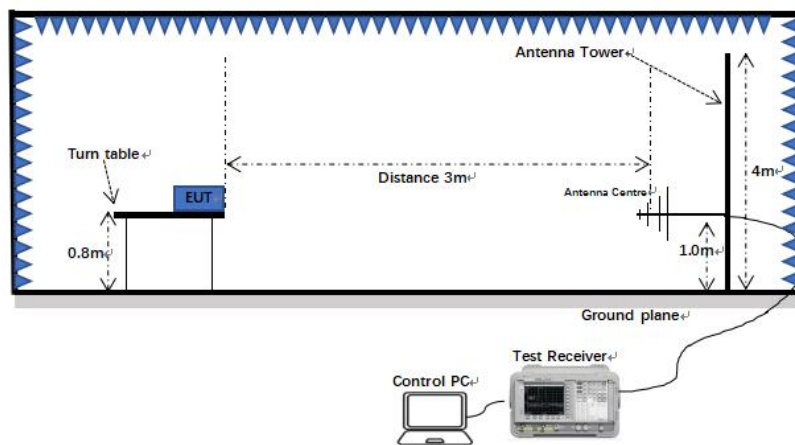
Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field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

6.13.2 Test setup

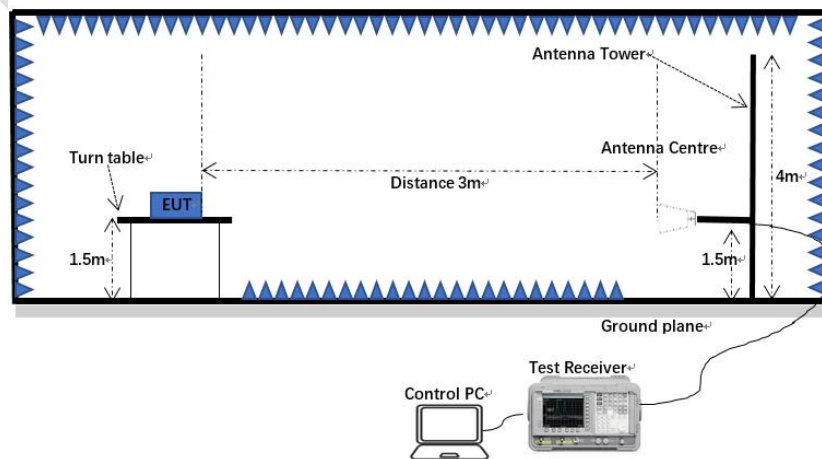
Below 1GHz:



30MHz-1GHz:



Above 1GHz:



6.13.3 Procedure

- a) For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b) For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c) The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d) The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g) If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h) Test the EUT in the lowest channel, the middle channel, the highest channel.
- i) The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j) Repeat above procedures until all frequencies measured was complete.

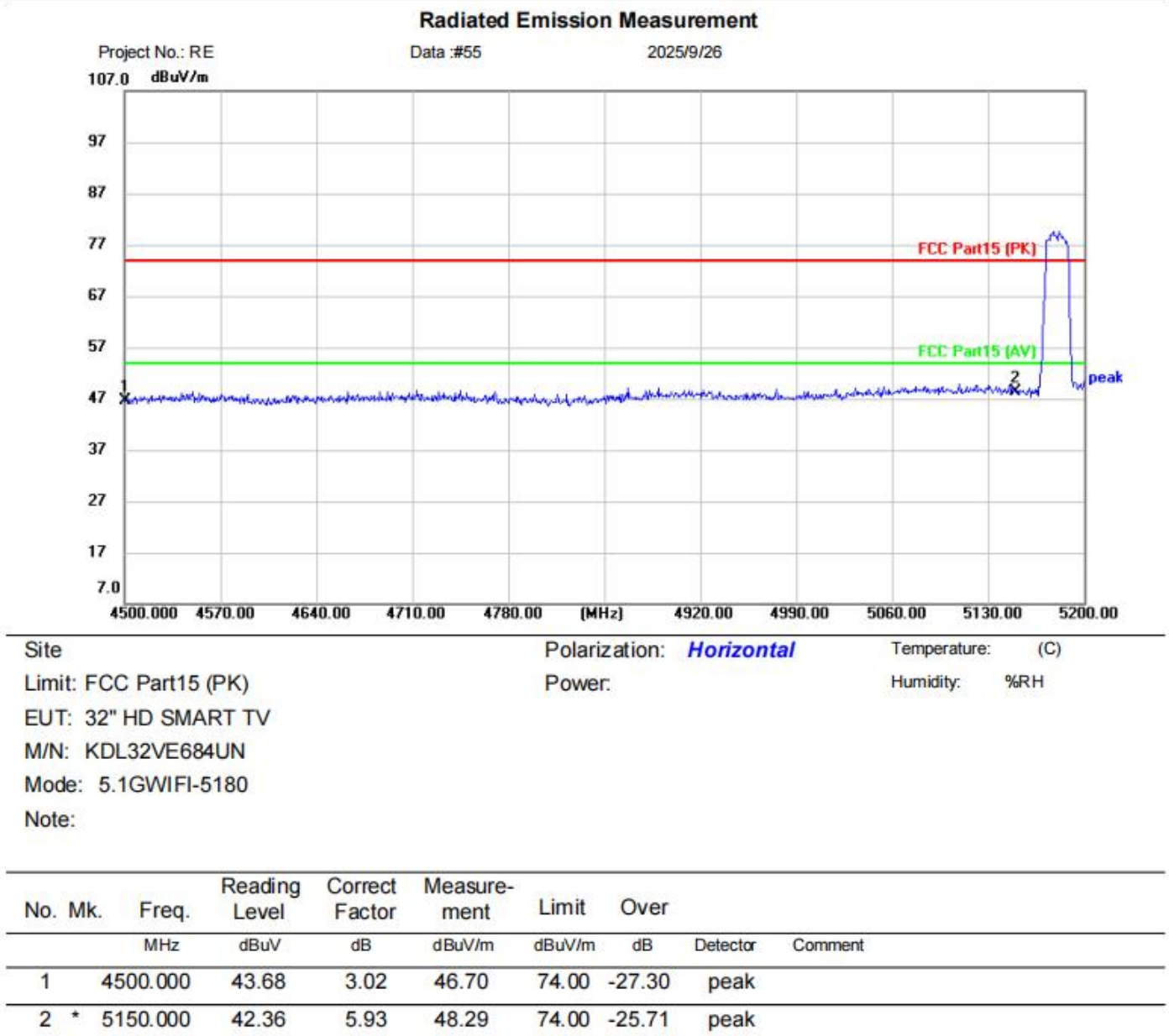
Note 1: Level (dBuV) = Reading (dBuV) + Factor (dB/m)

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

6.13.4 Test data

Remark: During the test, pre-scan the 802.11a/n/ac mode, and found the 802.11a mode which it is worse case.

[Test mode:Band1 TX low channel]; [Polarity: Horizontal]



Test Result: Pass

[Test mode:Band1 TX low channel]; [Polarity: Vertical]

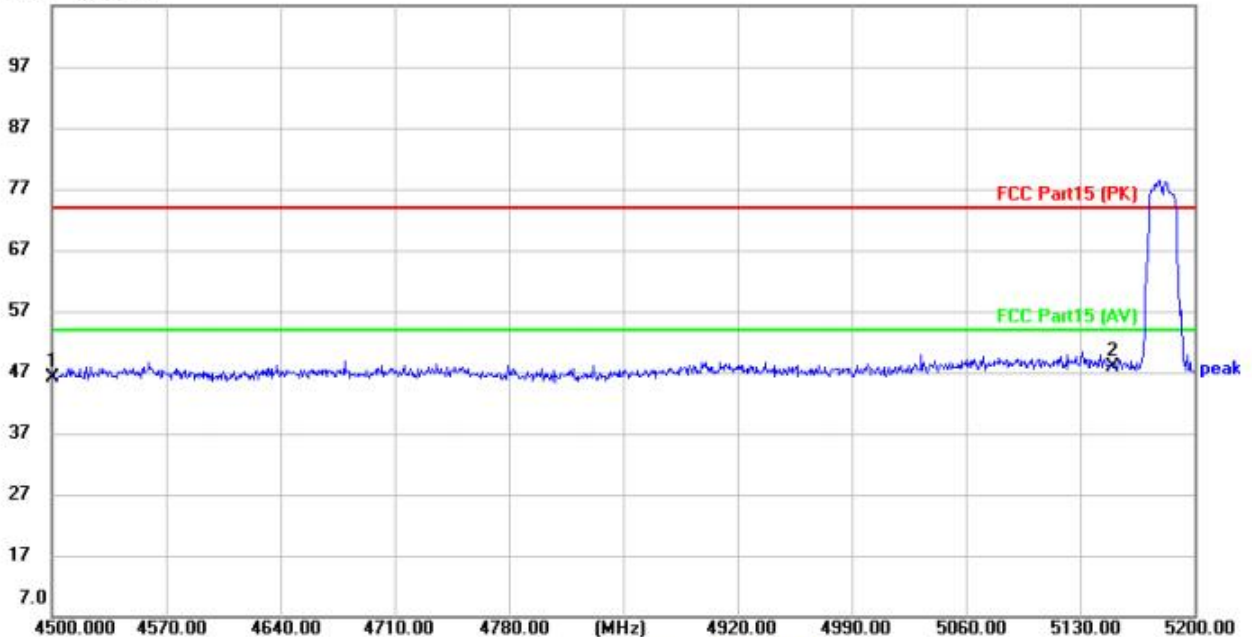
Radiated Emission Measurement

Project No.: RE

Data :#56

2025/9/26

107.0 dBuV/m



Site

Polarization: **Vertical**

Temperature: (C)

Limit: FCC Part15 (PK)

Power:

Humidity: %RH

EUT: 32" HD SMART TV

M/N: KDL32VE684UN

Mode: 5.1GWIFI-5180

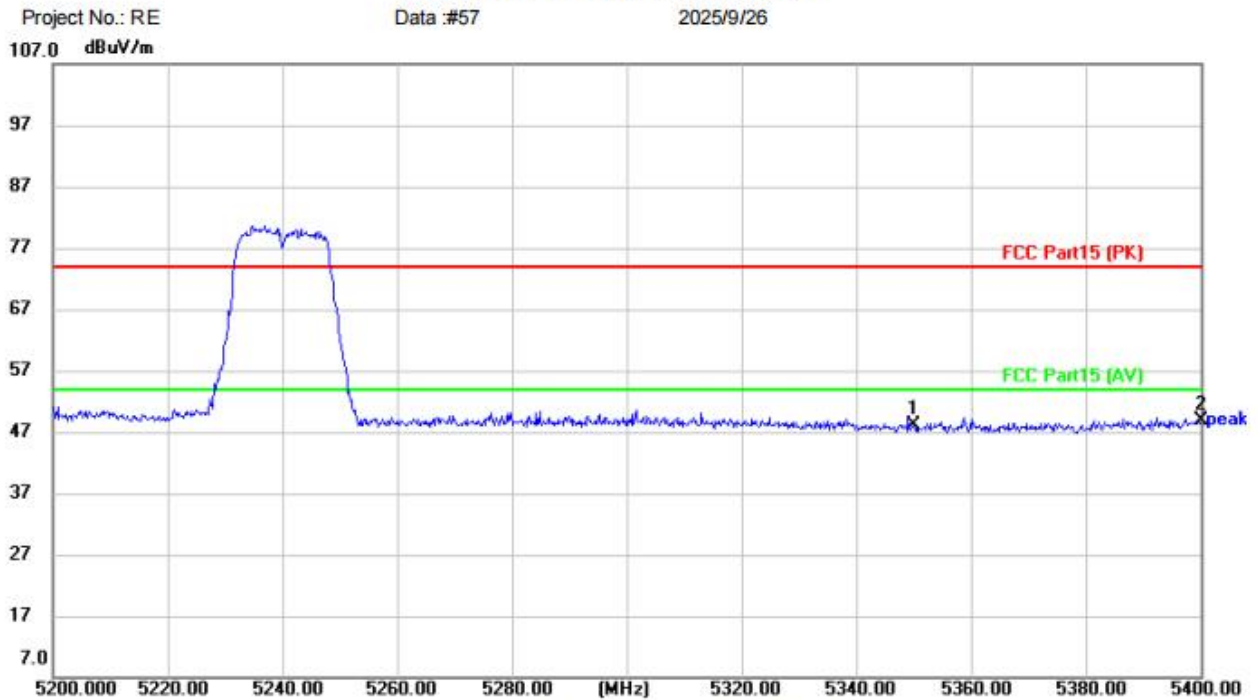
Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4500.000	43.20	3.02	46.22	74.00	-27.78	peak	
2	*	5150.000	41.95	5.93	47.88	74.00	-26.12	peak	

Test Result: Pass

[Test mode:Band1 TX High channel]; [Polarity: Horizontal]

Radiated Emission Measurement



Site Polarization: **Horizontal** Temperature: (C)
Limit: FCC Part15 (PK) Power: Humidity: %RH
EUT: 32" HD SMART TV
M/N: KDL32VE684UN
Mode: 5.1GWIFI-5240
Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5350.000	42.81	5.21	48.02	74.00	-25.98	peak	
2	*	5400.000	42.87	5.93	48.80	74.00	-25.20	peak	

Test Result: Pass

[Test mode:Band1 TX High channel]; [Polarity: Vertical]

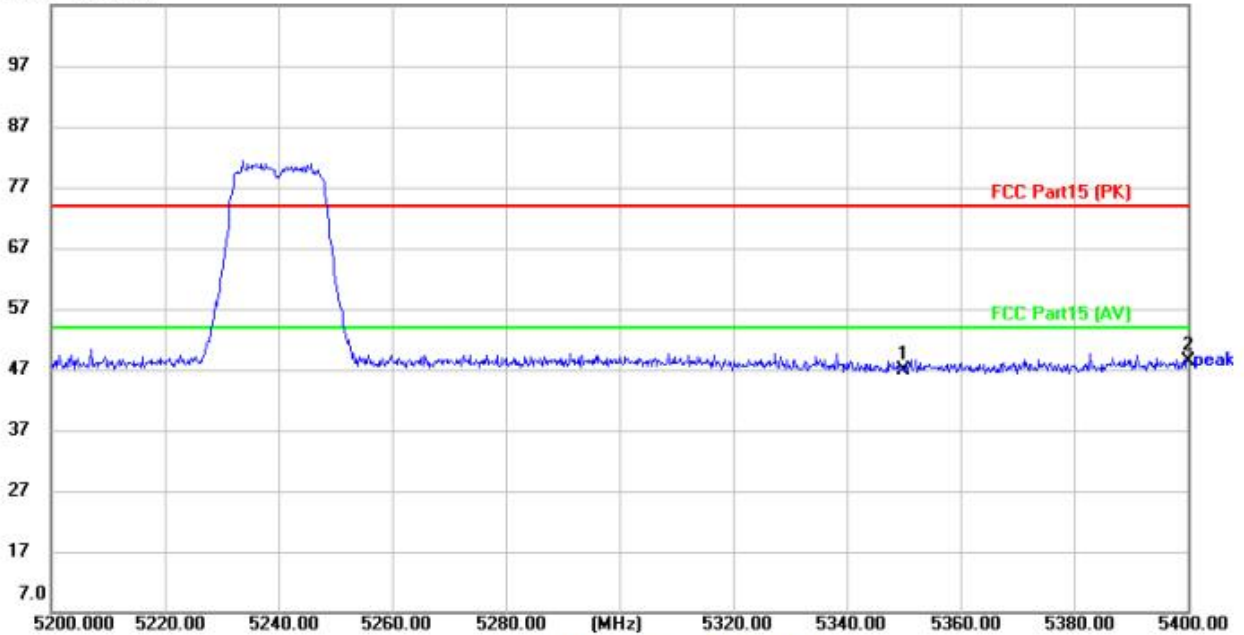
Radiated Emission Measurement

Project No.: RE

Data :#58

2025/9/26

107.0 dBuV/m



Site

Polarization: **Vertical**

Temperature: (C)

Limit: FCC Part15 (PK)

Power:

Humidity: %RH

EUT: 32" HD SMART TV

M/N: KDL32VE684UN

Mode: 5.1GWIFI-5240

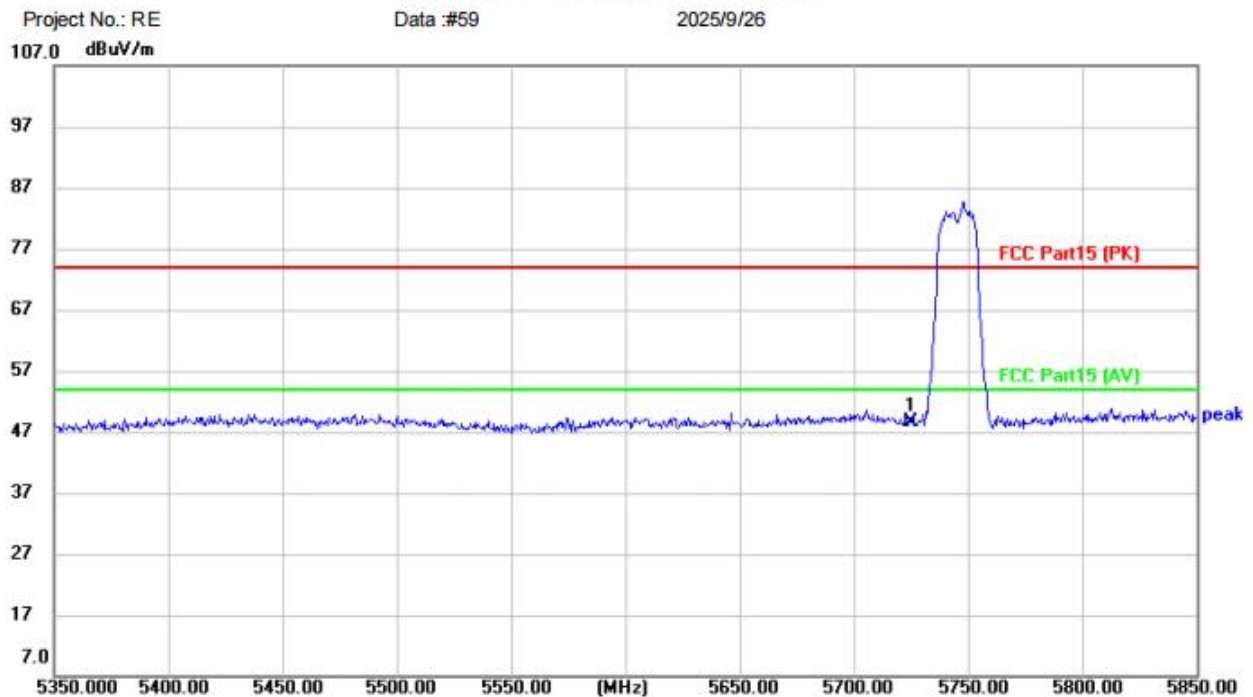
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5350.000	41.67	5.21	46.88	74.00	-27.12	peak	
2	*	5400.000	42.57	5.93	48.50	74.00	-25.50	peak	

Test Result: Pass

[Test mode:Band4 TX low channel]; [Polarity: Horizontal]

Radiated Emission Measurement



Site Polarization: **Horizontal** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: 32" HD SMART TV

M/N: KDL32VE684UN

Mode: 5.8GWIFI-5745

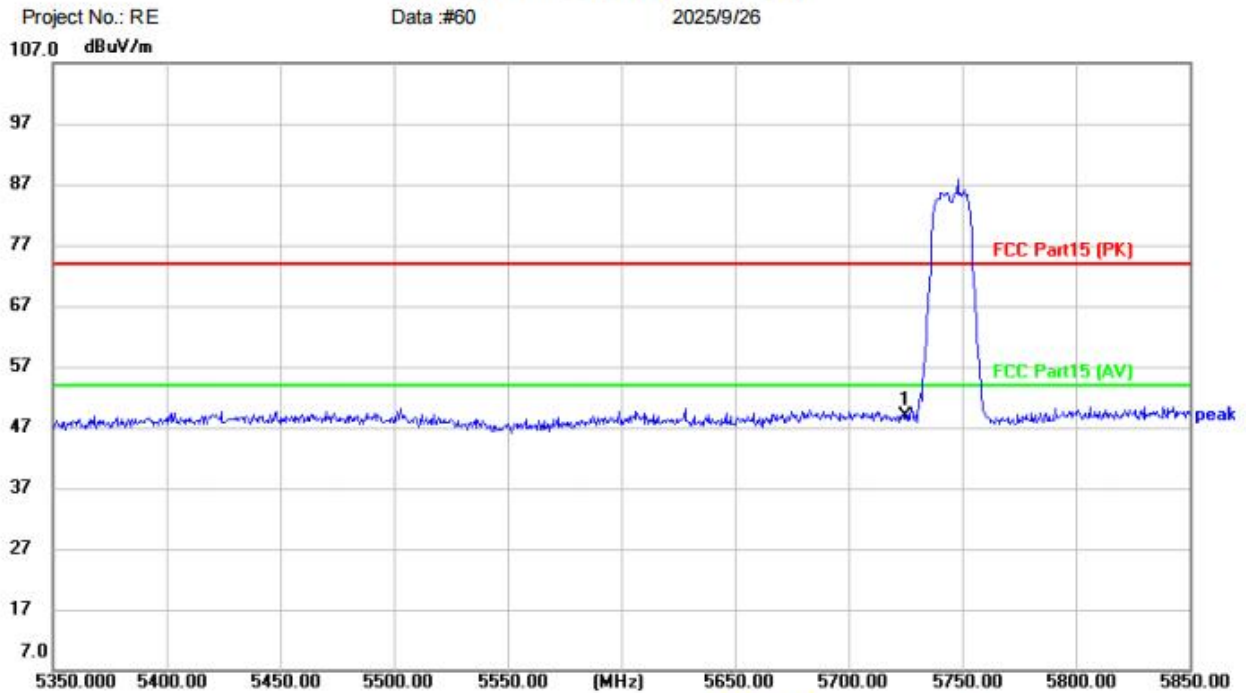
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5725.000	42.33	6.36	48.69	74.00	-25.31	peak	

Test Result: Pass

[Test mode:Band4 TX low channel]; [Polarity: Vertical]

Radiated Emission Measurement



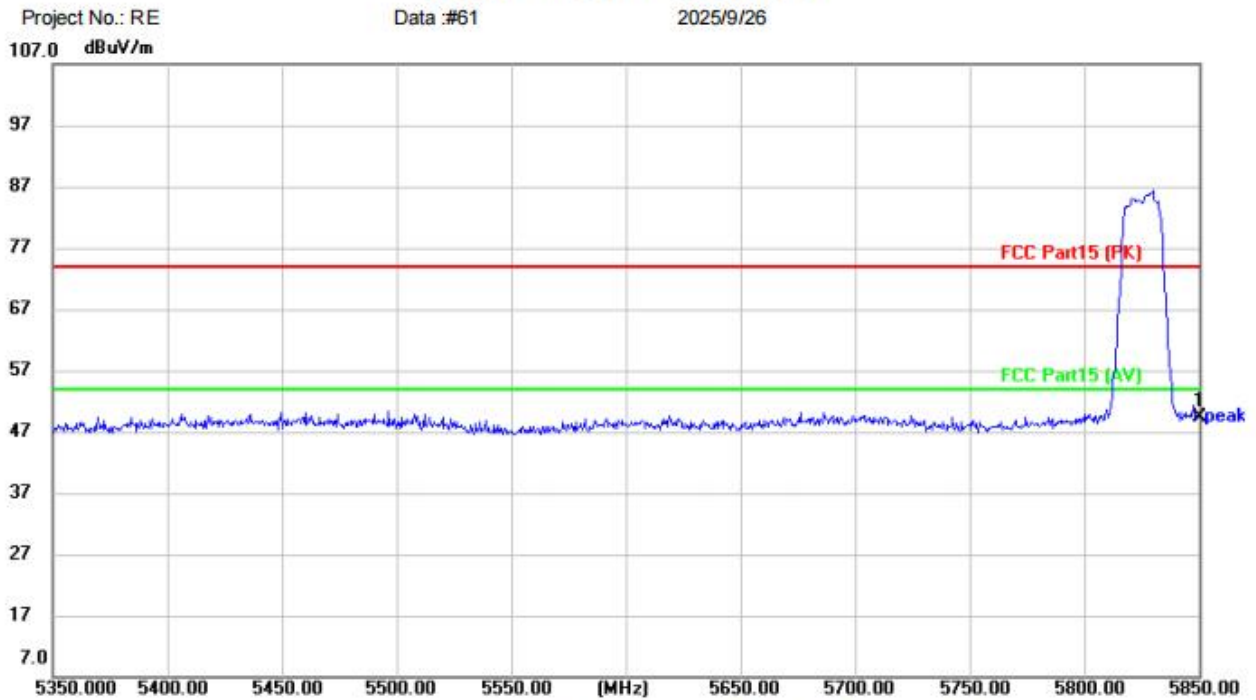
Site Polarization: **Vertical** Temperature: (C)
 Limit: FCC Part15 (PK) Power: Humidity: %RH
 EUT: 32" HD SMART TV
 M/N: KDL32VE684UN
 Mode: 5.8GWIFI-5745
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5725.000	42.54	6.36	48.90	74.00	-25.10	peak	

Test Result: Pass

[Test mode:Band4 TX High channel]; [Polarity: Horizontal]

Radiated Emission Measurement



Site Polarization: **Horizontal** Temperature: (C)
 Limit: FCC Part15 (PK) Power: Humidity: %RH
 EUT: 32" HD SMART TV
 M/N: KDL32VE684UN
 Mode: 5.8GWIFI-5825
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5850.000	42.56	6.76	49.32	74.00	-24.68	peak	

Test Result: Pass

[Test mode:Band4 TX High channel]; [Polarity: Vertical]

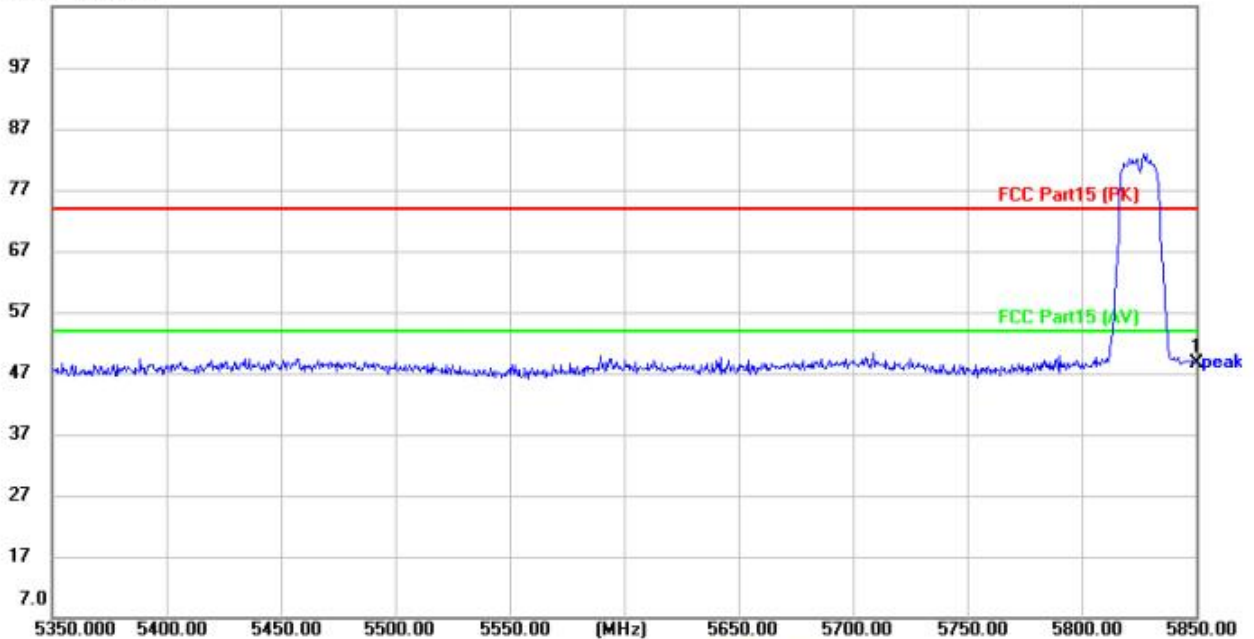
Radiated Emission Measurement

Project No.: RE

Data :#62

2025/9/26

107.0 dBuV/m



Site

Polarization: **Vertical**

Temperature: (C)

Limit: FCC Part15 (PK)

Power:

Humidity: %RH

EUT: 32" HD SMART TV

M/N: KDL32VE684UN

Mode: 5.8GWIFI-5825

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5850.000	41.95	6.76	48.71	74.00	-25.29	peak	

Test Result: Pass

7 Appendix A

7.1 Frequency Stability

Voltage vs. Frequency Stability

Test frequency		Test conditions		Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Max. Deviation (ppm)	Limit (ppm)	Verdict
Band	Frequency	Temp(°C)	Voltage(AC /60Hz)						
Band 1	(20MHz)Lowest channel=5180MHz	20	138	Ant1	5180.0225	22500	4.34	25	Pass
			120	Ant1	5180.0085	8500	1.64	25	Pass
			102	Ant1	5180.0415	41500	8.01	25	Pass
Band 1	(40MHz)Lowest channel=5190MHz	20	138	Ant1	5190.0215	21500	4.14	25	Pass
			120	Ant1	5190.02	20000	3.85	25	Pass
			102	Ant1	5190.02	20000	3.85	25	Pass
Band 1	(80MHz)Lowest channel=5210MHz	20	138	Ant1	5210.0065	6500	1.25	25	Pass
			120	Ant1	5210.0335	33500	6.43	25	Pass
			102	Ant1	5210.0375	37500	7.20	25	Pass
Band 4	(20MHz)Lowest channel=5475MHz	20	138	Ant1	5475.0025	2500	0.46	25	Pass
			120	Ant1	5475.0345	34500	6.30	25	Pass
			102	Ant1	5475.033	33000	6.03	25	Pass
Band 4	(40MHz)Lowest channel=5755MHz	20	138	Ant1	5755.0385	38500	6.69	25	Pass
			120	Ant1	5755.0325	32500	5.65	25	Pass
			102	Ant1	5755.007	7000	1.22	25	Pass
Band 4	(80MHz)Lowest channel=5775MHz	20	138	Ant1	5775.032	32000	5.54	25	Pass
			120	Ant1	5775.042	42000	7.27	25	Pass
			102	Ant1	5775.0305	30500	5.28	25	Pass
Band 1	(20MHz)Lowest channel=5180MHz	20	138	Ant2	5180.033	33000	6.37	25	Pass
			120	Ant2	5180.0175	17500	3.38	25	Pass
			102	Ant2	5180.0255	25500	4.92	25	Pass
Band 1	(40MHz)Lowest channel=5190MHz	20	138	Ant2	5190.0335	33500	6.45	25	Pass
			120	Ant2	5190.008	8000	1.54	25	Pass
			102	Ant2	5190.0365	36500	7.03	25	Pass
Band 1	(80MHz)Lowest	20	138	Ant2	5210.039	39000	7.49	25	Pass

	channel=5210MHz		120	Ant2	5210.0355	35500	6.81	25	Pass
			102	Ant2	5210.0195	19500	3.74	25	Pass
Band 4	(20MHz)Lowest channel=5475MHz	20	138	Ant2	5475.0415	41500	7.58	25	Pass
			120	Ant2	5475.0365	36500	6.67	25	Pass
			102	Ant2	5475.034	34000	6.21	25	Pass
Band 4	(40MHz)Lowest channel=5755MHz	20	138	Ant2	5755.032	32000	5.56	25	Pass
			120	Ant2	5755.0385	38500	6.69	25	Pass
			102	Ant2	5755.032	32000	5.56	25	Pass
Band 4	(80MHz)Lowest channel=5775MHz	20	138	Ant2	5775.031	31000	5.37	25	Pass
			120	Ant2	5775.0495	49500	8.57	25	Pass
			102	Ant2	5775.047	47000	8.14	25	Pass
Band 1	(20MHz)Lowest channel=5180MHz	20	138	Sum	5180.006	6000	1.16	25	Pass
			120	Sum	5180.0345	34500	6.66	25	Pass
			102	Sum	5180.0335	33500	6.47	25	Pass
Band 1	(40MHz)Lowest channel=5190MHz	20	138	Sum	5190.0025	2500	0.48	25	Pass
			120	Sum	5190.0495	49500	9.54	25	Pass
			102	Sum	5190.0375	37500	7.23	25	Pass
Band 1	(80MHz)Lowest channel=5210MHz	20	138	Sum	5210.008	8000	1.54	25	Pass
			120	Sum	5210.038	38000	7.29	25	Pass
			102	Sum	5210.029	29000	5.57	25	Pass
Band 4	(20MHz)Lowest channel=5475MHz	20	138	Sum	5475.04	40000	7.31	25	Pass
			120	Sum	5475.023	23000	4.20	25	Pass
			102	Sum	5475.031	31000	5.66	25	Pass
Band 4	(40MHz)Lowest channel=5755MHz	20	138	Sum	5755.0475	47500	8.25	25	Pass
			120	Sum	5755.0275	27500	4.78	25	Pass
			102	Sum	5755.0195	19500	3.39	25	Pass
Band 4	(80MHz)Lowest channel=5775MHz	20	138	Sum	5775.025	25000	4.33	25	Pass
			120	Sum	5775.0155	15500	2.68	25	Pass
			102	Sum	5775.0085	8500	1.47	25	Pass

Temperature vs. Frequency Stability

Test frequency		Test conditions		Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Max. Deviation (ppm)	Limit (ppm)	Verdict
Band	Frequency	Voltage(AC /60Hz)	Temp(°C)						
Band 1	(20MHz)Lowest channel=5180MHz	120	-20	Ant1	5180.033	33000	6.37	25	Pass
			-10	Ant1	5180.028	28000	5.41	25	Pass
			0	Ant1	5180.024	24000	4.63	25	Pass
			10	Ant1	5180.0355	35500	6.85	25	Pass
			20	Ant1	5180.009	9000	1.74	25	Pass
			30	Ant1	5180.029	29000	5.60	25	Pass
			40	Ant1	5180.048	48000	9.27	25	Pass
			50	Ant1	5180.0395	39500	7.63	25	Pass
Band 1	(40MHz)Lowest channel=5190MHz	120	-20	Ant1	5190.0195	19500	3.76	25	Pass
			-10	Ant1	5190.0075	7500	1.45	25	Pass
			0	Ant1	5190.026	26000	5.01	25	Pass
			10	Ant1	5190.031	31000	5.97	25	Pass
			20	Ant1	5190.0445	44500	8.57	25	Pass
			30	Ant1	5190.0245	24500	4.72	25	Pass
			40	Ant1	5190.007	7000	1.35	25	Pass
			50	Ant1	5190.002	2000	0.39	25	Pass
Band 1	(80MHz)Lowest channel=5210MHz	120	-20	Ant1	5210.037	37000	7.10	25	Pass
			-10	Ant1	5210.0215	21500	4.13	25	Pass
			0	Ant1	5210.0405	40500	7.77	25	Pass
			10	Ant1	5210.0115	11500	2.21	25	Pass
			20	Ant1	5210.012	12000	2.30	25	Pass
			30	Ant1	5210.003	3000	0.58	25	Pass
			40	Ant1	5210.037	37000	7.10	25	Pass
			50	Ant1	5210.046	46000	8.83	25	Pass
Band 4	(20MHz)Lowest channel=5475MHz	120	-20	Ant1	5475.0225	22500	4.11	25	Pass
			-10	Ant1	5475.0245	24500	4.47	25	Pass
			0	Ant1	5475.0325	32500	5.94	25	Pass
			10	Ant1	5475.041	41000	7.49	25	Pass
			20	Ant1	5475.012	12000	2.19	25	Pass
			30	Ant1	5475.0415	41500	7.58	25	Pass
			40	Ant1	5475.0455	45500	8.31	25	Pass
			50	Ant1	5475.02	20000	3.65	25	Pass
Band 4	(40MHz)Lowest channel=5755MHz	120	-20	Ant1	5755.0105	10500	1.82	25	Pass
			-10	Ant1	5755.037	37000	6.43	25	Pass
			0	Ant1	5755.0145	14500	2.52	25	Pass
			10	Ant1	5755.041	41000	7.12	25	Pass
			20	Ant1	5755.0335	33500	5.82	25	Pass
			30	Ant1	5755.022	22000	3.82	25	Pass
			40	Ant1	5755.037	37000	6.43	25	Pass

			50	Ant1	5755.0265	26500	4.60	25	Pass
Band 4	(80MHz)Lowest channel=5775MH z	120	-20	Ant1	5775.032	32000	5.54	25	Pass
			-10	Ant1	5775.0135	13500	2.34	25	Pass
			0	Ant1	5775.0035	3500	0.61	25	Pass
			10	Ant1	5775.045	45000	7.79	25	Pass
			20	Ant1	5775.017	17000	2.94	25	Pass
			30	Ant1	5775.0265	26500	4.59	25	Pass
			40	Ant1	5775.0345	34500	5.97	25	Pass
			50	Ant1	5775.0265	26500	4.59	25	Pass
Band 1	(20MHz)Lowest channel=5180MH z	120	-20	Ant2	5180.048	48000	9.27	25	Pass
			-10	Ant2	5180.0115	11500	2.22	25	Pass
			0	Ant2	5180.048	48000	9.27	25	Pass
			10	Ant2	5180.0005	500	0.10	25	Pass
			20	Ant2	5180.03	30000	5.79	25	Pass
			30	Ant2	5180.0295	29500	5.69	25	Pass
			40	Ant2	5180.044	44000	8.49	25	Pass
			50	Ant2	5180.0095	9500	1.83	25	Pass
Band 1	(40MHz)Lowest channel=5190MH z	120	-20	Ant2	5190.009	9000	1.73	25	Pass
			-10	Ant2	5190.045	45000	8.67	25	Pass
			0	Ant2	5190.0495	49500	9.54	25	Pass
			10	Ant2	5190.0135	13500	2.60	25	Pass
			20	Ant2	5190.027	27000	5.20	25	Pass
			30	Ant2	5190.02	20000	3.85	25	Pass
			40	Ant2	5190.0375	37500	7.23	25	Pass
			50	Ant2	5190.0175	17500	3.37	25	Pass
Band 1	(80MHz)Lowest channel=5210MH z	120	-20	Ant2	5210.0285	28500	5.47	25	Pass
			-10	Ant2	5210.0355	35500	6.81	25	Pass
			0	Ant2	5210.0155	15500	2.98	25	Pass
			10	Ant2	5210.0455	45500	8.73	25	Pass
			20	Ant2	5210.046	46000	8.83	25	Pass
			30	Ant2	5210.0445	44500	8.54	25	Pass
			40	Ant2	5210.05	50000	9.60	25	Pass
			50	Ant2	5210.027	27000	5.18	25	Pass
Band 4	(20MHz)Lowest channel=5475MH z	120	-20	Ant2	5475.0065	6500	1.19	25	Pass
			-10	Ant2	5475.0145	14500	2.65	25	Pass
			0	Ant2	5475.0015	1500	0.27	25	Pass
			10	Ant2	5475.003	3000	0.55	25	Pass
			20	Ant2	5475.0295	29500	5.39	25	Pass
			30	Ant2	5475.0485	48500	8.86	25	Pass
			40	Ant2	5475.013	13000	2.37	25	Pass
			50	Ant2	5475.0195	19500	3.56	25	Pass
Band 4	(40MHz)Lowest channel=5755MH z	120	-20	Ant2	5755.0145	14500	2.52	25	Pass
			-10	Ant2	5755.01	10000	1.74	25	Pass
			0	Ant2	5755.0155	15500	2.69	25	Pass
			10	Ant2	5755.027	27000	4.69	25	Pass
			20	Ant2	5755.005	5000	0.87	25	Pass
			30	Ant2	5755.013	13000	2.26	25	Pass

			40	Ant2	5755.04	40000	6.95	25	Pass
			50	Ant2	5755.014	14000	2.43	25	Pass
Band 4	(80MHz)Lowest channel=5775MH z	120	-20	Ant2	5775.044	44000	7.62	25	Pass
			-10	Ant2	5775.035	35000	6.06	25	Pass
			0	Ant2	5775.0175	17500	3.03	25	Pass
			10	Ant2	5775.047	47000	8.14	25	Pass
			20	Ant2	5775.006	6000	1.04	25	Pass
			30	Ant2	5775.037	37000	6.41	25	Pass
			40	Ant2	5775.0175	17500	3.03	25	Pass
			50	Ant2	5775.0185	18500	3.20	25	Pass
Band 1	(20MHz)Lowest channel=5180MH z	120	-20	Sum	5180.032	32000	6.18	25	Pass
			-10	Sum	5180.022	22000	4.25	25	Pass
			0	Sum	5180.0195	19500	3.76	25	Pass
			10	Sum	5180.0475	47500	9.17	25	Pass
			20	Sum	5180.003	3000	0.58	25	Pass
			30	Sum	5180.012	12000	2.32	25	Pass
			40	Sum	5180.023	23000	4.44	25	Pass
			50	Sum	5180.0435	43500	8.40	25	Pass
Band 1	(40MHz)Lowest channel=5190MH z	120	-20	Sum	5190.034	34000	6.55	25	Pass
			-10	Sum	5190.0375	37500	7.23	25	Pass
			0	Sum	5190.048	48000	9.25	25	Pass
			10	Sum	5190.033	33000	6.36	25	Pass
			20	Sum	5190.044	44000	8.48	25	Pass
			30	Sum	5190.0475	47500	9.15	25	Pass
			40	Sum	5190.026	26000	5.01	25	Pass
			50	Sum	5190.0445	44500	8.57	25	Pass
Band 1	(80MHz)Lowest channel=5210MH z	120	-20	Sum	5210.001	1000	0.19	25	Pass
			-10	Sum	5210.043	43000	8.25	25	Pass
			0	Sum	5210.032	32000	6.14	25	Pass
			10	Sum	5210.044	44000	8.45	25	Pass
			20	Sum	5210.028	28000	5.37	25	Pass
			30	Sum	5210.017	17000	3.26	25	Pass
			40	Sum	5210.049	49000	9.40	25	Pass
			50	Sum	5210.0475	47500	9.12	25	Pass
Band 4	(20MHz)Lowest channel=5475MH z	120	-20	Sum	5475.03	30000	5.48	25	Pass
			-10	Sum	5475.042	42000	7.67	25	Pass
			0	Sum	5475.038	38000	6.94	25	Pass
			10	Sum	5475.0425	42500	7.76	25	Pass

			20	Sum	5475.021	21000	3.84	25	Pass
			30	Sum	5475.003	3000	0.55	25	Pass
			40	Sum	5475.03	30000	5.48	25	Pass
			50	Sum	5475.012	12000	2.19	25	Pass
Band 4	(40MHz)Lowest channel=5755MH z	120	-20	Sum	5755.043	43000	7.47	25	Pass
			-10	Sum	5755.004	4000	0.70	25	Pass
			0	Sum	5755.0205	20500	3.56	25	Pass
			10	Sum	5755.016	16000	2.78	25	Pass
			20	Sum	5755.048	48000	8.34	25	Pass
			30	Sum	5755.039	39000	6.78	25	Pass
			40	Sum	5755.018	18000	3.13	25	Pass
			50	Sum	5755.03	30000	5.21	25	Pass
Band 4	(80MHz)Lowest channel=5775MH z	120	-20	Sum	5775.0165	16500	2.86	25	Pass
			-10	Sum	5775.0035	3500	0.61	25	Pass
			0	Sum	5775.0455	45500	7.88	25	Pass
			10	Sum	5775.004	4000	0.69	25	Pass
			20	Sum	5775.014	14000	2.42	25	Pass
			30	Sum	5775.0365	36500	6.32	25	Pass
			40	Sum	5775.025	25000	4.33	25	Pass
			50	Sum	5775.0165	16500	2.86	25	Pass

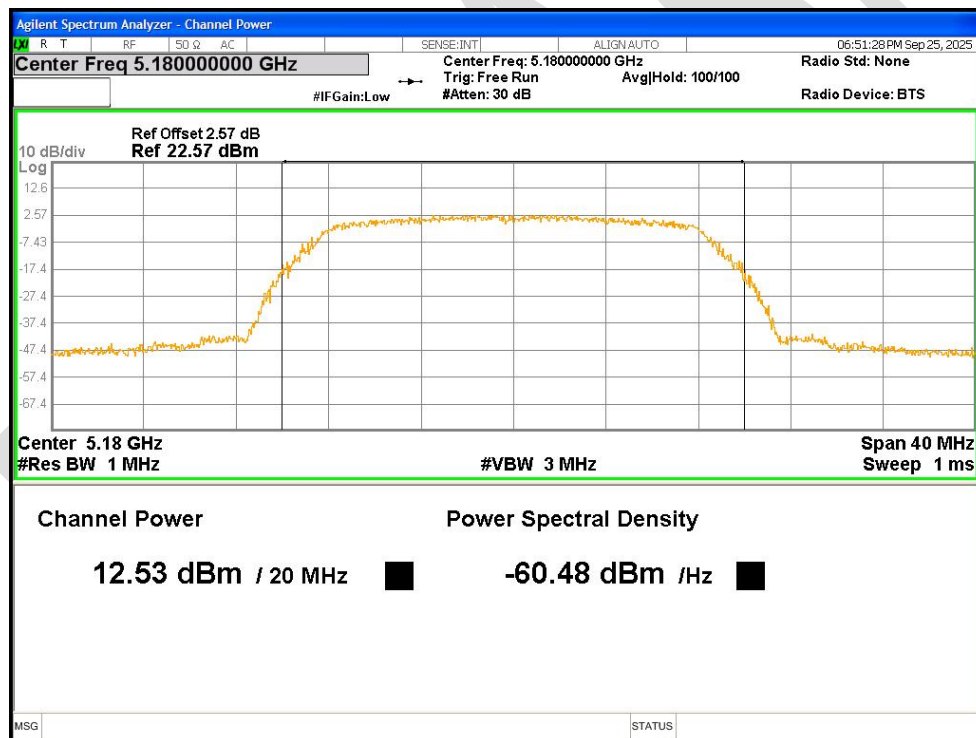
7.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	12.53	24	Pass
NVNT	a	5200	Ant1	12.901	24	Pass
NVNT	a	5240	Ant1	13.406	24	Pass
NVNT	a	5180	Ant2	12.585	24	Pass
NVNT	a	5200	Ant2	12.685	24	Pass
NVNT	a	5240	Ant2	12.86	24	Pass
NVNT	a	5745	Ant1	12.882	30	Pass
NVNT	a	5785	Ant1	13.036	30	Pass
NVNT	a	5825	Ant1	13.419	30	Pass
NVNT	a	5745	Ant2	13.044	30	Pass
NVNT	a	5785	Ant2	12.679	30	Pass
NVNT	a	5825	Ant2	13.179	30	Pass
NVNT	n20	5180	Ant1	10.427	24	Pass
NVNT	n20	5180	Ant2	10.461	24	Pass
NVNT	n20	5180	Sum	13.454	24	Pass
NVNT	n20	5200	Ant1	10.253	24	Pass
NVNT	n20	5200	Ant2	10.775	24	Pass
NVNT	n20	5200	Sum	13.532	24	Pass
NVNT	n20	5240	Ant1	10.625	24	Pass
NVNT	n20	5240	Ant2	10.741	24	Pass
NVNT	n20	5240	Sum	13.694	24	Pass
NVNT	n20	5745	Ant1	10.466	30	Pass
NVNT	n20	5745	Ant2	10.919	30	Pass
NVNT	n20	5745	Sum	13.709	30	Pass
NVNT	n20	5785	Ant1	10.194	30	Pass
NVNT	n20	5785	Ant2	10.55	30	Pass
NVNT	n20	5785	Sum	13.386	30	Pass
NVNT	n20	5825	Ant1	10.708	30	Pass
NVNT	n20	5825	Ant2	11.107	30	Pass
NVNT	n20	5825	Sum	13.922	30	Pass
NVNT	n40	5190	Ant1	10.345	24	Pass
NVNT	n40	5190	Ant2	10.798	24	Pass

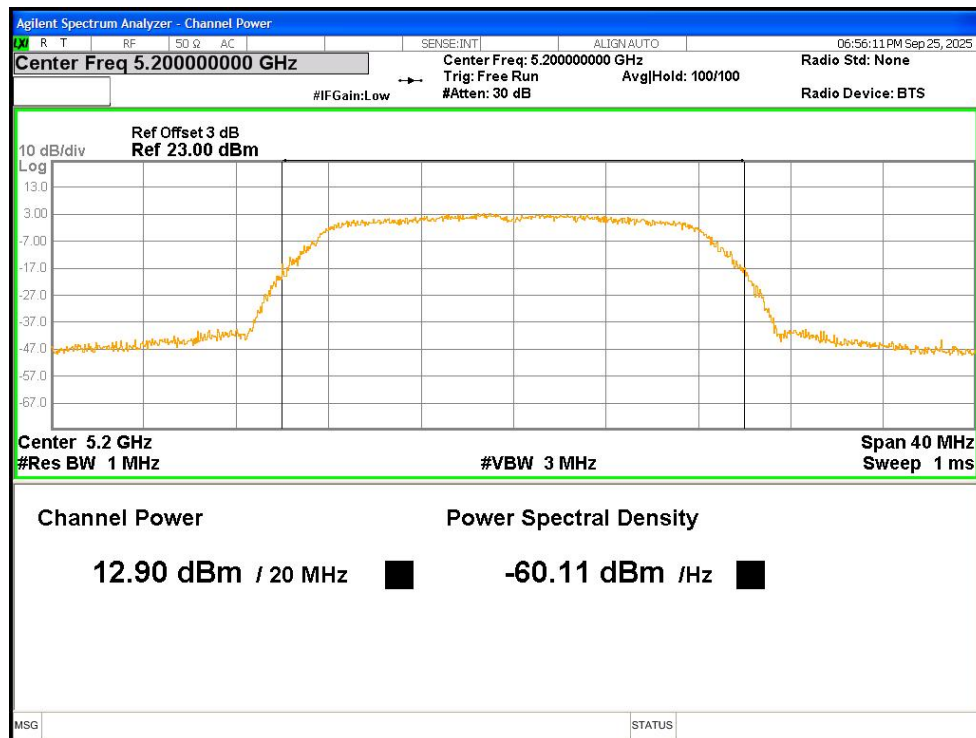
NVNT	n40	5190	Sum	13.588	24	Pass
NVNT	n40	5230	Ant1	10.936	24	Pass
NVNT	n40	5230	Ant2	11.016	24	Pass
NVNT	n40	5230	Sum	13.986	24	Pass
NVNT	n40	5755	Ant1	10.731	30	Pass
NVNT	n40	5755	Ant2	11.09	30	Pass
NVNT	n40	5755	Sum	13.925	30	Pass
NVNT	n40	5795	Ant1	10.233	30	Pass
NVNT	n40	5795	Ant2	10.525	30	Pass
NVNT	n40	5795	Sum	13.392	30	Pass
NVNT	ac20	5180	Ant1	10.214	24	Pass
NVNT	ac20	5180	Ant2	10.386	24	Pass
NVNT	ac20	5180	Sum	13.311	24	Pass
NVNT	ac20	5200	Ant1	10.17	24	Pass
NVNT	ac20	5200	Ant2	10.614	24	Pass
NVNT	ac20	5200	Sum	13.408	24	Pass
NVNT	ac20	5240	Ant1	10.465	24	Pass
NVNT	ac20	5240	Ant2	10.709	24	Pass
NVNT	ac20	5240	Sum	13.599	24	Pass
NVNT	ac20	5745	Ant1	10.37	30	Pass
NVNT	ac20	5745	Ant2	10.841	30	Pass
NVNT	ac20	5745	Sum	13.622	30	Pass
NVNT	ac20	5785	Ant1	10.229	30	Pass
NVNT	ac20	5785	Ant2	10.623	30	Pass
NVNT	ac20	5785	Sum	13.441	30	Pass
NVNT	ac20	5825	Ant1	10.826	30	Pass
NVNT	ac20	5825	Ant2	11.082	30	Pass
NVNT	ac20	5825	Sum	13.966	30	Pass
NVNT	ac40	5190	Ant1	10.5	24	Pass
NVNT	ac40	5190	Ant2	10.843	24	Pass
NVNT	ac40	5190	Sum	13.685	24	Pass
NVNT	ac40	5230	Ant1	10.818	24	Pass
NVNT	ac40	5230	Ant2	10.833	24	Pass
NVNT	ac40	5230	Sum	13.836	24	Pass
NVNT	ac40	5755	Ant1	10.548	30	Pass

NVNT	ac40	5755	Ant2	10.974	30	Pass
NVNT	ac40	5755	Sum	13.777	30	Pass
NVNT	ac40	5795	Ant1	10.455	30	Pass
NVNT	ac40	5795	Ant2	10.615	30	Pass
NVNT	ac40	5795	Sum	13.546	30	Pass
NVNT	ac80	5210	Ant1	11.839	24	Pass
NVNT	ac80	5210	Ant2	12.015	24	Pass
NVNT	ac80	5210	Sum	14.938	24	Pass
NVNT	ac80	5775	Ant1	11.909	30	Pass
NVNT	ac80	5775	Ant2	12.179	30	Pass
NVNT	ac80	5775	Sum	15.056	30	Pass

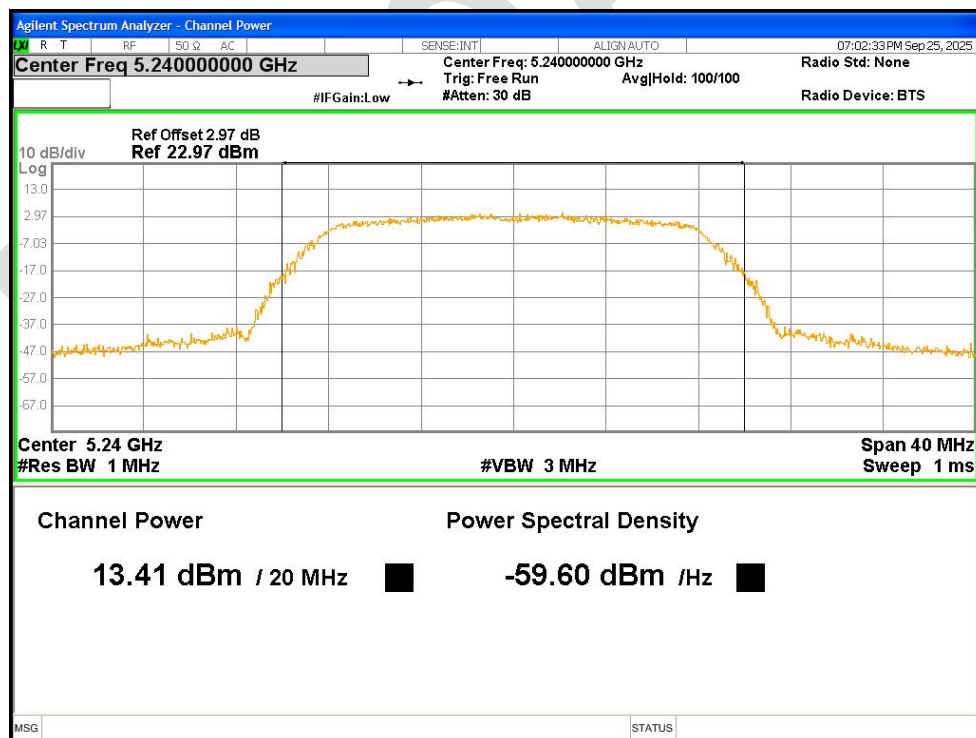
Power NVNT a 5180MHz Ant1



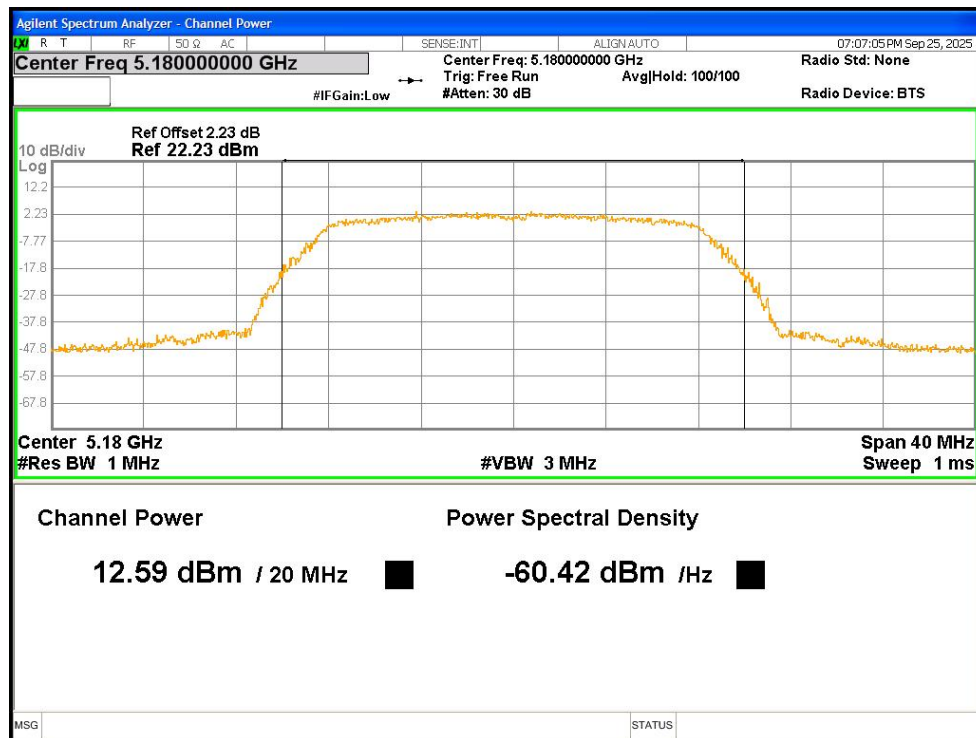
Power NVNT a 5200MHz Ant1



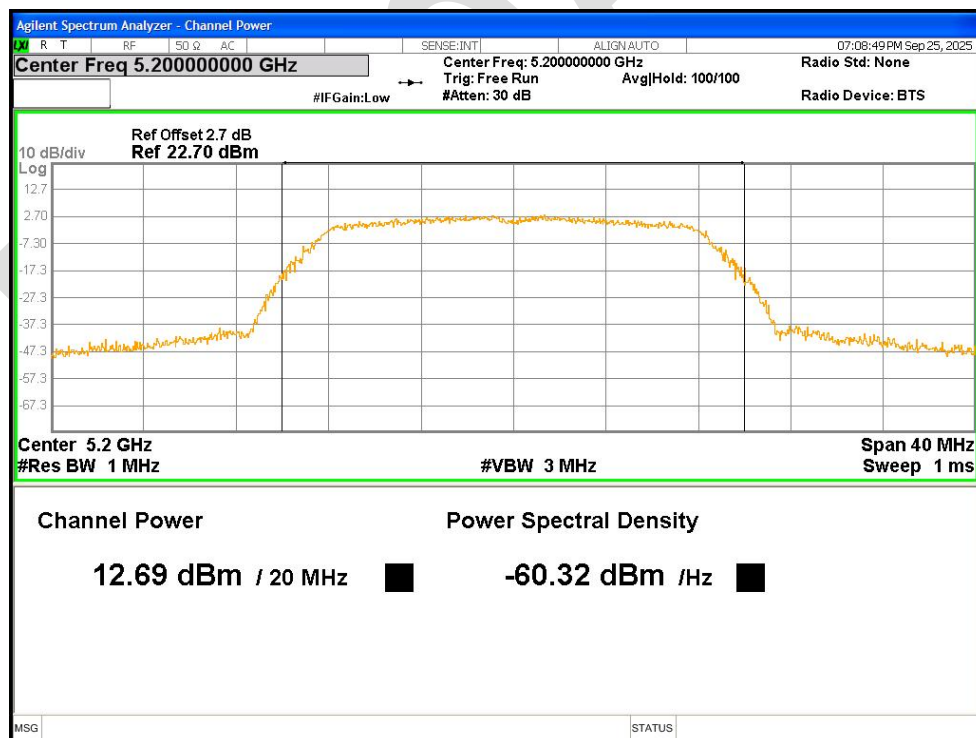
Power NVNT a 5240MHz Ant1



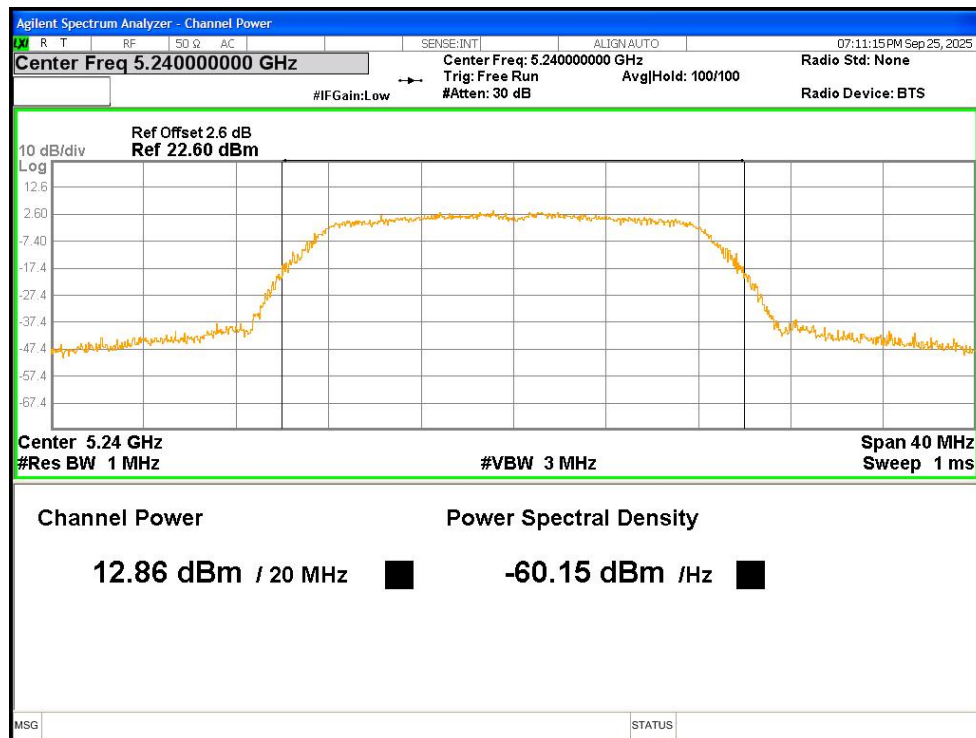
Power NVNT a 5180MHz Ant2



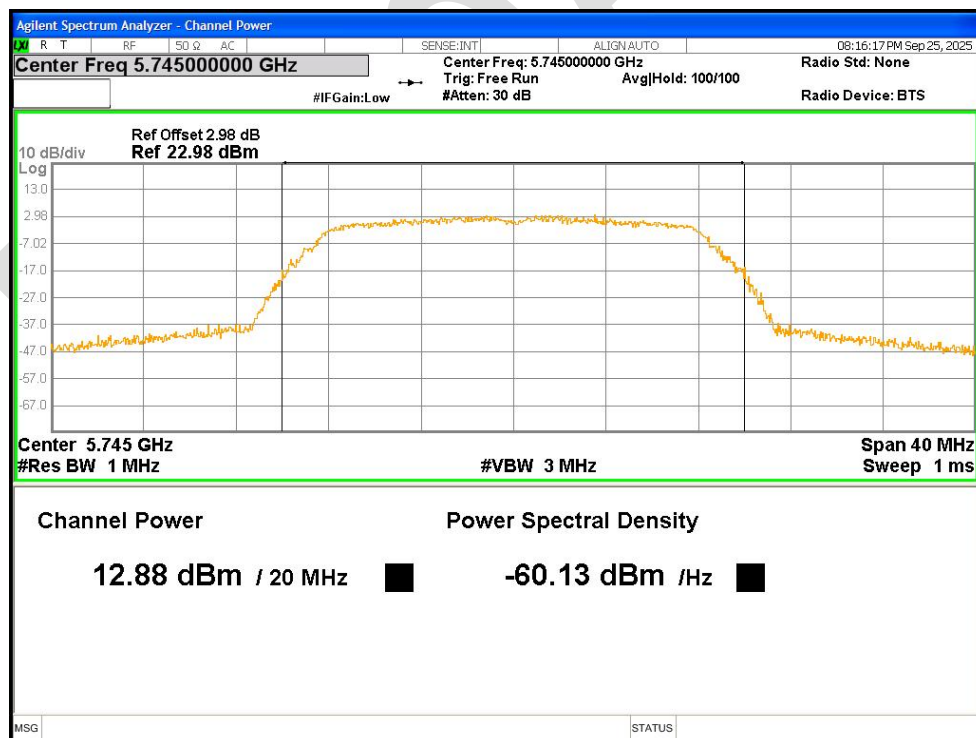
Power NVNT a 5200MHz Ant2



Power NVNT a 5240MHz Ant2



Power NVNT a 5745MHz Ant1



Power NVNT a 5785MHz Ant1