

FCC Test Report

Report No.: RFBFPJ-WTW-P20120228

FCC ID: SWX-AF60XR

Test Model: AF60-XR

Received Date: Dec. 08, 2020

Test Date: Dec. 09, 2020 to Jan. 30, 2021

Issued Date: Dec. 07, 2021

Applicant: Ubiquiti Inc.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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Taiwan

Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,
Taiwan

FCC Registration /
Designation Number: 723255 / TW2022 for Test Location



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Release Control Record

Issue No.	Description	Date Issued
RFBFPJ-WTW-P20120228	Original release.	Dec. 07, 2021

1 Certificate of Conformity

Product: airFiber 60 XR

Brand: UBIQUITI

Test Model: AF60-XR

Sample Status: Engineering sample

Applicant: Ubiquiti Inc.

Test Date: Dec. 09, 2020 to Jan. 30, 2021

Standards: 47 CFR FCC Part 15, Subpart C (Section 15.255)
ANSI C63.10: 2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : Vivian Huang , **Date:** Dec. 07, 2021
Vivian Huang / Specialist

Approved by : Clark Lin , **Date:** Dec. 07, 2021
Clark Lin / Technical Manager

2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (Section 15.255)			
FCC Clause	Test Item	Result	Remarks
15.207	AC Power Conducted Emission	Pass	Meet the requirement of limit. Minimum passing margin is -3.91 dB at 0.52109 MHz.
15.255(e)	6dB Bandwidth	-	Reference only.
15.255 (c) & (e)	Output Power	Pass	Meet the requirement of limit.
15.255(d)	Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -4.3 dB at 17963.56 MHz, 17972.97 MHz, 17962.93 MHz.
15.255(f)	Frequency Stability	Pass	Meet the requirement of limit.

Note:

Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) ($\pm$)
Conducted Emissions at mains ports	150kHz ~ 30MHz	1.9 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.1 dB
	30MHz ~ 1GHz	5.4 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	5.0 dB
	18GHz ~ 40GHz	5.3 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	airFiber 60 XR
Brand	UBIQUITI
Test Model	AF60-XR
Status of EUT	Engineering sample
Power Supply Method	48 Vdc from PoE
Modulation Type	$\pi/2$ -BPSK, $\pi/2$ -QPSK, $\pi/2$ -16QAM
Modulation Technology	OFDM
Transfer Rate	4620 Mbps
Operating Frequency	57 ~ 71 GHz
Channel Bandwidth	1080MHz & 2160MHz
Output Power (EIRP)	58.32 GHz: 70.07 dBm 60.48 GHz: 70.12 dBm 62.64 GHz: 70.47 dBm 69.12 GHz: 70.29 dBm
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	PoE Adapter x 1, power cord x1
Data Cable Supplied	NA

Note:

1. The EUT has below radios as following table:

Radio 1	Radio 2	Radio 3
WLAN(5GHz) + BT LE	WiGig (60GHz)	GPS

2. Simultaneously transmission condition.

Condition	Technology	
1	WLAN(5GHz) + BT LE	WiGig (60GHz)

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

3. The EUT must be supplied with a PoE adapter as following table:

Brand	Model No.	Spec.
UBIQUITI	GP-H480-065G	AC Input: 100-240 Vac, 0.75A MAX, 50/60Hz DC Output: 48 Vdc, 0.65A, 31.2W AC Input Cable: Unshielded, 0.6m

4. The antennas type and connector type, please refer to the following table:

Antenna No.	Antenna Net Gain (dBi)	Frequency Range	Antenna Type	Connector Type
WiGig (60GHz)	47	57-71GHz	Dish	None
WLAN(5GHz)	26	5150~5850MHz	Dish	None
BT	2	2.4~2.4835GHz	internal	None

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

6. The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

3.2 Description of Test Modes

11 channels are provided for EUT and support Bandwidth 2160MHz and 1080MHz.

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	58320	7	64800
2	59400	8	65880
3	60480	9	66960
4	61560	10	68040
5	62640	11	69120
6	63720		

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT CONFIGURE MODE	APPLICABLE TO						DESCRIPTION
	PLC	BW	OP	FS	RE < 1G	RE ≥ 1G	
1	√	√	√	√	√	√	Channel BW: 2160MHz
2	√	√	√	√	√	√	Channel BW: 1080MHz

Where **PLC**: Power Line Conducted Emission **BW**: 6dB Bandwidth
OP: Output Power **FS**: Frequency Stability
RE < 1G: Radiated Emission below 1GHz **RE ≥ 1G**: Radiated Emission above 1GHz

Power Line Conducted Emission Test:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
1 to 11	1, 3, 5, 11	OFDM	$\pi/2$ -BPSK	385

6dB Bandwidth Test:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
1 to 11	1, 3, 5, 11	OFDM	$\pi/2$ -BPSK	385

Output Power Measurement:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
1 to 11	1, 3, 5, 11	OFDM	$\pi/2$ -BPSK	385

Frequency Stability Test:

- ☒ Following channel(s) was (were) selected for the final test as listed below.

AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
1 to 11	1	OFDM	$\pi/2$ -BPSK	385

Radiated Emission Test (Below 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
1 to 11	1, 3, 5, 11	OFDM	$\pi/2$ -BPSK	385

Radiated Emission Test (Above 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
1 to 11	1, 3, 5, 11	OFDM	$\pi/2$ -BPSK	385

Test Condition:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
PLC	25 deg. C, 75 %RH	120Vac, 60Hz	Ryan Du
BW	23 deg. C, 62 %RH	120Vac, 60Hz	Spencer Liao
OP	25 deg. C, 66 %RH	120Vac, 60Hz	Spencer Liao
FS	23 deg. C, 62 %RH	120Vac, 60Hz	Spencer Liao
RE<1G	25 deg. C, 69 %RH	120Vac, 60Hz	Ryan Du
RE≥1G	25 deg. C, 69 %RH	120Vac, 60Hz	Ryan Du

3.3 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Laptop	DELL	E5430	HYV4VY1	FCC DoC	Provided by Lab

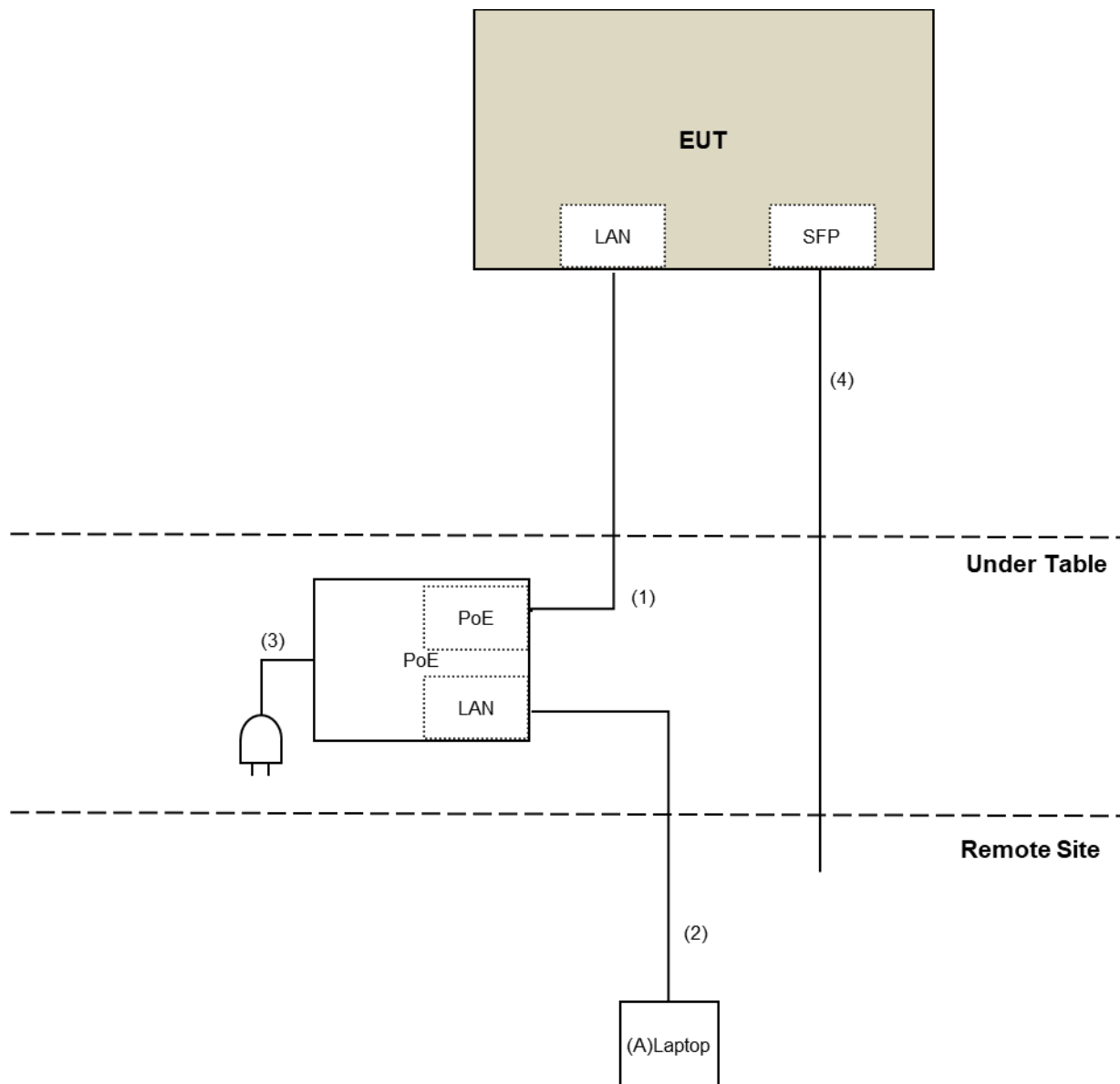
Note:

1. All power cords of the above support units are non-shielded (1.8m).

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ-45 Cable	1	3	No	0	Provided by Lab
2.	RJ-45 Cable	1	20	No	0	Provided by Lab
3.	AC Cable	1	0.6	No	0	Supplied by client
4.	Fiber Cable	1	20	Yes	0	Provided by Lab

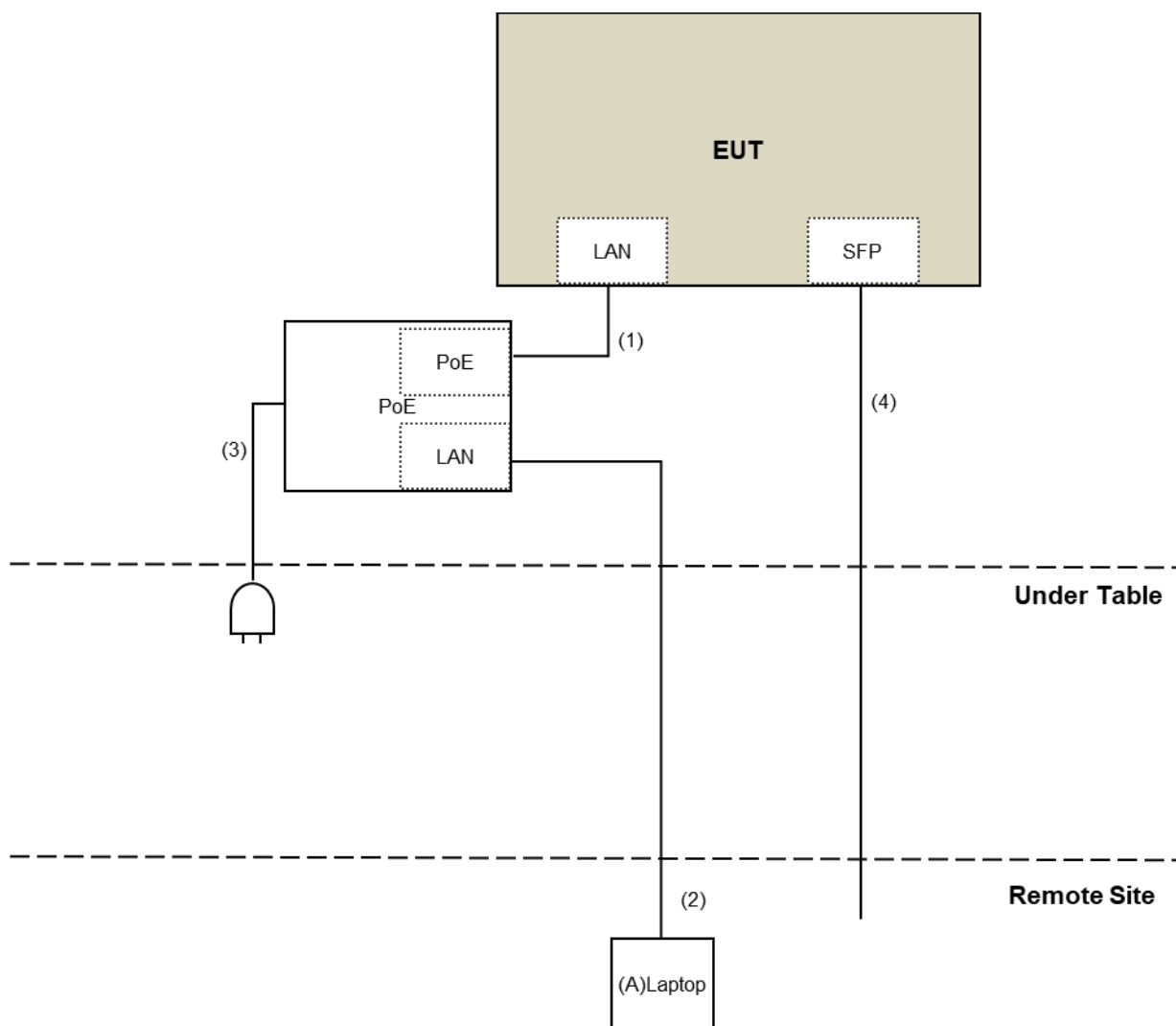
3.3.1 Configuration of System under Test

For Power Line Conducted Emission Test:



For Radiated Emission Test:

:



3.4 General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C (15.255)

ANSI C63.10-2013

All test items have been performed and recorded as per the above standards.

4 Test Types and Results

4.1 Radiated Emission Measurement

4.1.1 Limits of Radiated Emission Measurement

Spurious Emission	
Frequency Range	Limitation
Radiated emissions below 40GHz	Part 15.209
Between 40GHz and 200GHz	90pW/cm ² (at 3 meter)
Note: The levels of the spurious emissions shall not exceed the level of the fundamental emission	

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (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

Note:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.
4. Section 15.205 restricted bands of operation shall compliance with the limits in Section 15.209.

4.1.2 Test Instruments

For Below 40GHz:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Keysight	N9038A	MY54450088	July 06, 2020	July 05, 2021
Pre-Amplifier EMCi	EMC001340	980142	May 25, 2020	May 24, 2021
Loop Antenna Electro-Metrics	EM-6879	264	Feb. 18, 2020	Feb. 17, 2021
RF Cable	NA	LOOPCAB-001	Jan. 08, 2020	Jan. 07, 2021
RF Cable	NA	LOOPCAB-002	Jan. 08, 2020	Jan. 07, 2021
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-05	Apr. 28, 2020	Apr. 27, 2021
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Nov. 05, 2020	Nov. 04, 2021
RF Cable	8D	966-3-1	Mar. 17, 2020	Mar. 16, 2021
RF Cable	8D	966-3-2	Mar. 17, 2020	Mar. 16, 2021
RF Cable	8D	966-3-3	Mar. 17, 2020	Mar. 16, 2021
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-3-01	Sep. 24, 2020	Sep. 23, 2021
Horn_Antenna SCHWARZBECK	BBHA9120-D	9120D-406	Nov. 22, 2020	Nov. 21, 2021
Pre-Amplifier EMCi	EMC12630SE	980384	Jan. 15, 2020	Jan. 14, 2021
RF Cable	EMC104-SM-SM-1500	180504	Apr. 29, 2020	Apr. 28, 2021
RF Cable	EMC104-SM-SM-2000	180601	June 09, 2020	June 08, 2021
RF Cable	EMC104-SM-SM-6000	180602	June 09, 2020	June 08, 2021
Spectrum Analyzer Keysight	N9030A	MY54490679	July 13, 2020	July 12, 2021
Pre-Amplifier EMCi	EMC184045SE	980387	Jan. 15, 2020	Jan. 14, 2021
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 22, 2020	Nov. 21, 2021
RF Cable	EMC102-KM-KM-1200	160924	Jan. 15, 2020	Jan. 14, 2021
RF Cable	EMC-KM-KM-4000	200214	Mar. 11, 2020	Mar. 10, 2021
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 3.
3. Tested Date: Dec. 09 to 10, 2020

For Above 40GHz:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer Keysight	N9030A	MY55330160	Feb. 07, 2020	Feb. 06, 2021
*OXE89 Horn Antenna (33~55GHz) QuinStar	QWH-UCRR00	924200002	Jan. 20, 2020	Jan. 19, 2022
*Conical Horn Antenna (50~75GHz) Keysight	WR15CH-Conical	WR15CH_001	Jan. 20, 2020	Jan. 19, 2022
*Conical Horn Antenna (75~110GHz) Keysight	WR10CH-Conical	WR10CH_001	Jan. 20, 2020	Jan. 19, 2022
*Conical Horn Antenna (110~170GHz) Keysight	WR6.5CH-Conical	WR6.5CH_001	Jan. 20, 2020	Jan. 19, 2022
*Conical Horn Antenna (140~220GHz) Keysight	WR5.1CH-Conical	WR5.1CH_001	Dec. 09, 2019	Dec. 08, 2021
N9029AV15-DC9 - 50-75 GHz VDI Standard Downconverter with 9VDC supply Keysight	SA Extension WR15	SAX 381	CoC	CoC
N9029AV10-DC9 - 75-110 GHz VDI Standard Downconverter with 9VDC supply Keysight	SA Extension WR10	SAX 378	CoC	CoC
N9029AV06-DC9 - 110-170 GHz VDI Standard Downconverter with 9VDC supply Keysight	SA Extension WR6.5	SAX 377	CoC	CoC
*N9029AV05-DC9 - 140-220 GHz VDI Standard Downconverter with 9VDC supply Keysight	SA Extension WR5.1	SAX 375	Dec. 09, 2019	Dec. 08, 2021
Millimeter-Wave Signal Generator Frequency Extension Module (50~75 GHz) Keysight	E8257DV15	SGX 050	CoC	CoC
Millimeter-Wave Signal Generator Frequency Extension Module (75~110 GHz) Keysight	E8257DV10	SGX 069	CoC	CoC
Millimeter-Wave Signal Generator Frequency Extension Module (110~170 GHz) Keysight	E8257DV06-DC9	SGX 223	CoC	CoC
PSG analog signal generator Keysight	E8257D	MY53401987	June 17, 2020	June 16, 2021

*Power Meter VDI	PM5	431V	Dec. 09, 2019	Dec. 08, 2021
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	NA	NA
**Zero-Bias Detector (50~75GHz) Vdi	WR15ZBD	WR15R5 1-30	CoC	CoC
4CH Infiniivision Oscilloscope Keysight	DSOX6004A	MY55190202	July 03, 2020	July 02, 2021

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. *The calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. **The calibration interval of the above test instruments is 36 months and the calibrations are traceable to NML/ROC and NIST/USA.
4. Certificate of Conformance (CoC) which is issued by manufacturer states that the product meets the specification.
5. The test was performed in 966 Chamber No. 3.
6. Tested Date: Jan. 27, 2021

4.1.3 Test Procedures

For Radiated emission below 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

For Radiated emission 30MHz to 40GHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna 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.
- d. 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 and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) and Average detection (AV) at frequency above 1GHz.
3. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated emission above 40GHz

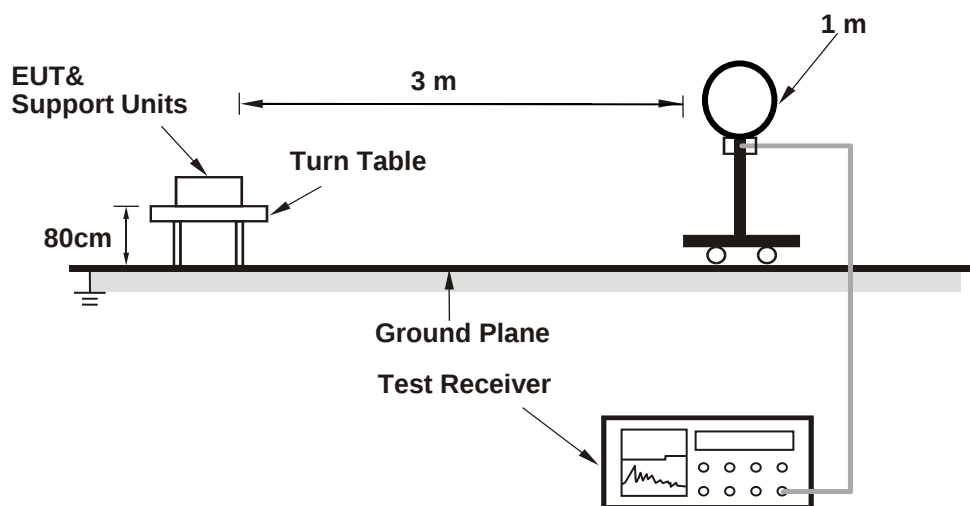
- a. Connect the test antenna covering the appropriate frequency range to a spectrum analyzer via an external mixer to the spectrum analyzer.
- b. Set spectrum analyzer RBW = 1 MHz, VBW = 3 MHz, average detector.
- c. Calculate the distance to the far field boundary and determine the maximum measurement distance.
- d. Perform an exploratory search for emissions and determine the approximate direction at which each observed emission emanates from the EUT.
- e. Exploratory measurements be made at a closer distance than the validated maximum measurement distance.
- f. Perform a final measurement; begin with the test antenna at the approximate position where the maximum level occurred during the exploratory scan.
- g. Slowly scan the test antenna around this position, slowly vary the test antenna polarization by rotating through at least 0° to 180°, and slowly vary the orientation of the test antenna to find the final position, polarization, and orientation at which the maximum level of the emission is observed.
- h. Record the measured reading with the test antenna fixed at this maximized position, polarization, and orientation. Record the measurement distance.
- i. Calculate the maximum field strength of the emission at the measurement distance and the adjusted/corrected power at the output of the test antenna.
- j. Calculate the EIRP from the measured field strength and then convert to the linear.
- k. Calculate the power density at the distance specified by the limit from the field strength at the distance specified by the limit.
- l. Repeat the preceding sequence for every emission observed in the frequency band under investigation.

4.1.4 Deviation from Test Standard

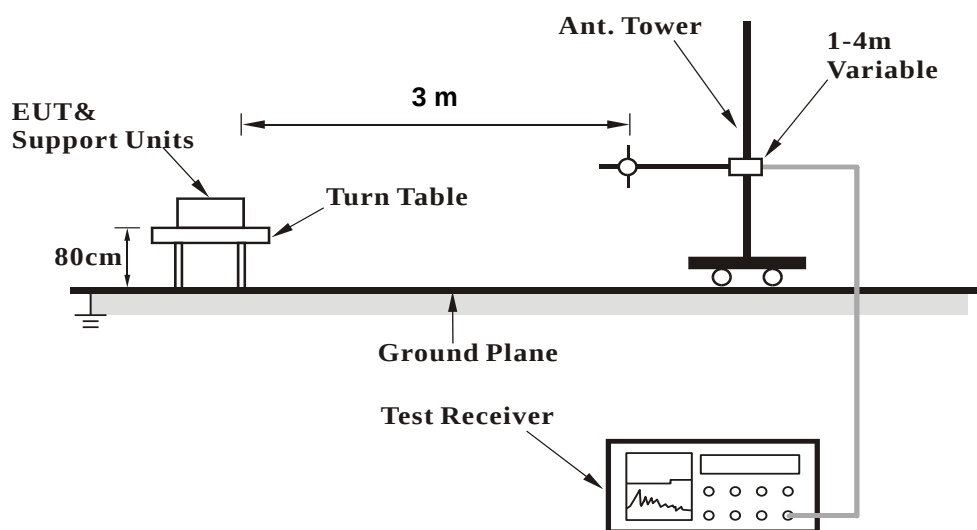
No deviation.

4.1.5 Test Setup

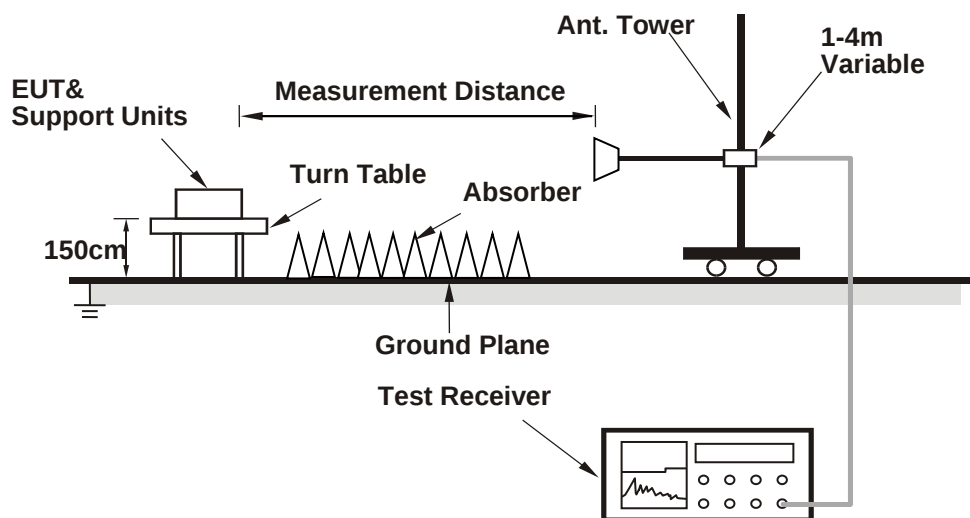
For Radiated emission below 30MHz



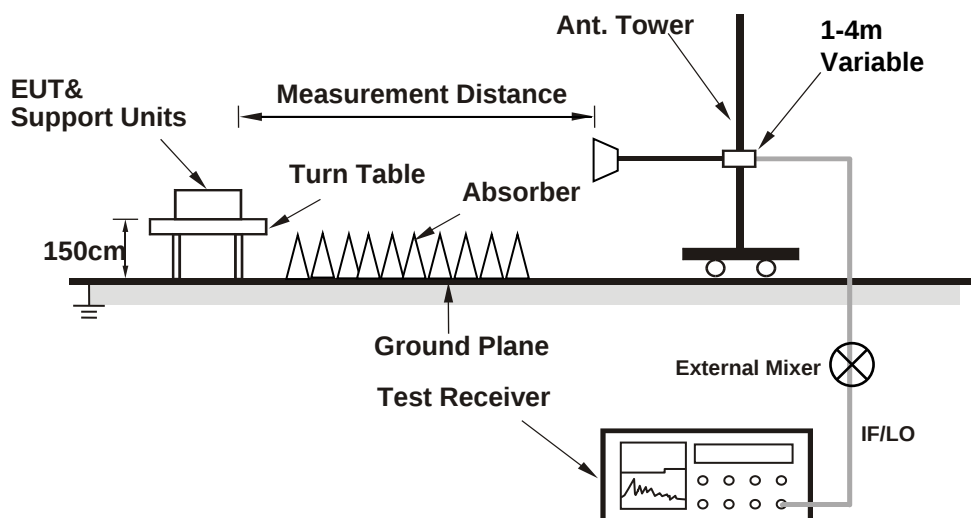
For Radiated emission 30MHz to 1GHz



For Radiated emission 1GHz to 50GHz



For Radiated emission above 50GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT Operating Conditions

- Placed the EUT on the testing table.
- Controlling software (Qualcomm Radio Control Toolkit v4.0-00158) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

4.1.7 Test Results (Mode 1)

Bandwidth 2160MHz

Above 1GHz Data:

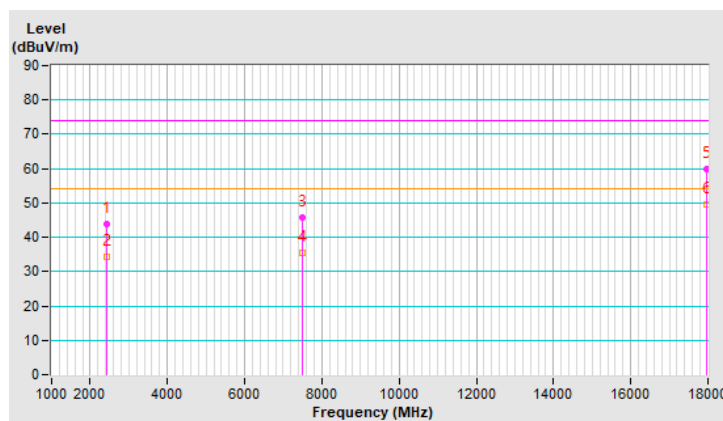
For 1~18 GHz

RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2422.84	43.8 PK	74.0	-30.2	1.44 H	223	45.2	-1.4
2	#2422.84	34.2 AV	54.0	-19.8	1.44 H	223	35.6	-1.4
3	7486.81	45.9 PK	74.0	-28.1	2.52 H	285	36.0	9.9
4	7486.81	35.4 AV	54.0	-18.6	2.52 H	285	25.5	9.9
5	17963.56	59.7 PK	74.0	-14.3	2.94 H	153	36.8	22.9
6	17963.56	49.7 AV	54.0	-4.3	2.94 H	153	26.8	22.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

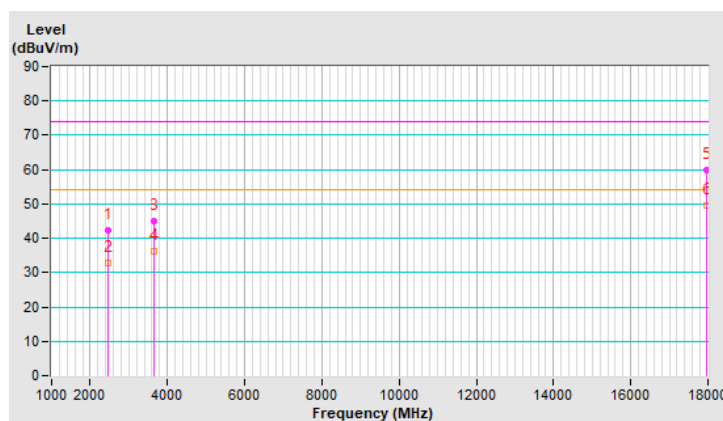


RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2478.75	42.2 PK	74.0	-31.8	2.96 V	81	43.6	-1.4
2	#2478.75	32.7 AV	54.0	-21.3	2.96 V	81	34.1	-1.4
3	3658.72	45.1 PK	74.0	-28.9	1.52 V	154	44.1	1.0
4	3658.72	36.2 AV	54.0	-17.8	1.52 V	154	35.2	1.0
5	17972.97	59.9 PK	74.0	-14.1	1.11 V	249	37.1	22.8
6	17972.97	49.7 AV	54.0	-4.3	1.11 V	249	26.9	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

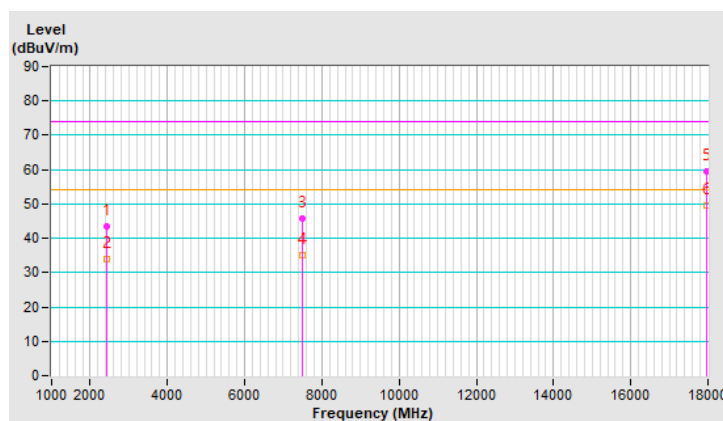


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2422.28	43.6 PK	74.0	-30.4	1.42 H	227	45.0	-1.4
2	#2422.28	34.0 AV	54.0	-20.0	1.42 H	227	35.4	-1.4
3	7484.90	45.7 PK	74.0	-28.3	2.49 H	294	35.8	9.9
4	7484.90	35.2 AV	54.0	-18.8	2.49 H	294	25.3	9.9
5	17961.77	59.5 PK	74.0	-14.5	2.94 H	165	36.7	22.8
6	17961.77	49.5 AV	54.0	-4.5	2.94 H	165	26.7	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

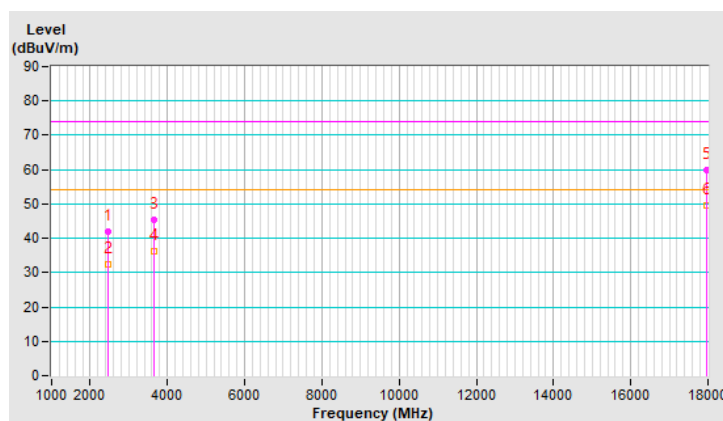


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2476.38	42.0 PK	74.0	-32.0	2.96 V	84	43.4	-1.4
2	#2476.38	32.4 AV	54.0	-21.6	2.96 V	84	33.8	-1.4
3	3656.83	45.2 PK	74.0	-28.8	1.56 V	157	44.2	1.0
4	3656.83	36.1 AV	54.0	-17.9	1.56 V	157	35.1	1.0
5	17970.59	59.9 PK	74.0	-14.1	1.14 V	262	37.1	22.8
6	17970.59	49.5 AV	54.0	-4.5	1.14 V	262	26.7	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

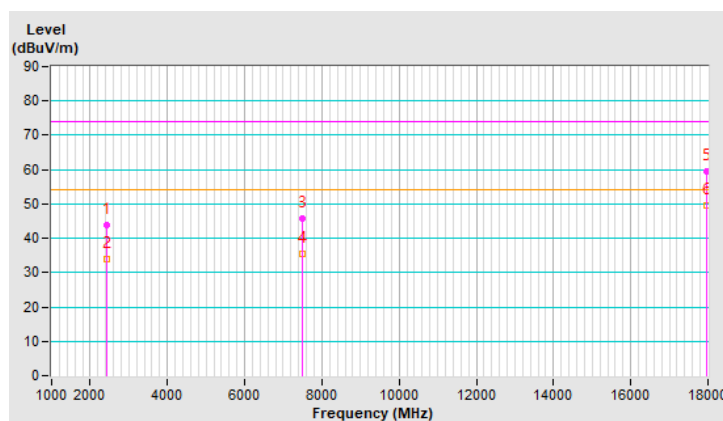


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2421.42	43.7 PK	74.0	-30.3	1.46 H	227	45.1	-1.4
2	#2421.42	33.9 AV	54.0	-20.1	1.46 H	227	35.3	-1.4
3	7484.22	45.9 PK	74.0	-28.1	2.52 H	295	36.0	9.9
4	7484.22	35.3 AV	54.0	-18.7	2.52 H	295	25.4	9.9
5	17961.52	59.6 PK	74.0	-14.4	2.90 H	160	36.8	22.8
6	17961.52	49.5 AV	54.0	-4.5	2.90 H	160	26.7	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

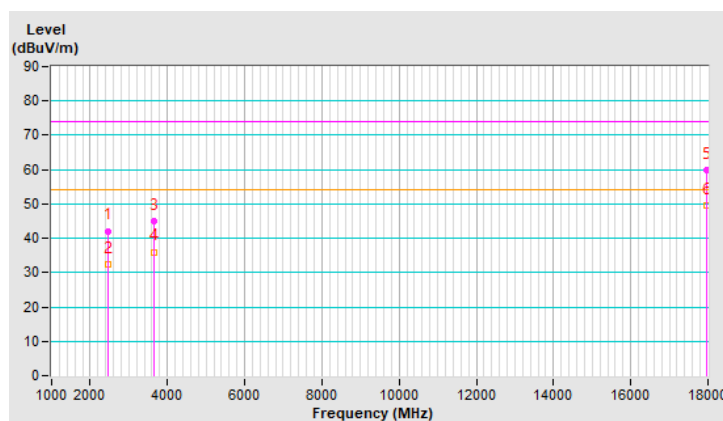


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2478.28	42.1 PK	74.0	-31.9	2.97 V	90	43.5	-1.4
2	#2478.28	32.5 AV	54.0	-21.5	2.97 V	90	33.9	-1.4
3	3658.00	45.1 PK	74.0	-28.9	1.53 V	155	44.1	1.0
4	3658.00	36.0 AV	54.0	-18.0	1.53 V	155	35.0	1.0
5	17970.16	59.8 PK	74.0	-14.2	1.13 V	240	37.0	22.8
6	17970.16	49.6 AV	54.0	-4.4	1.13 V	240	26.8	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

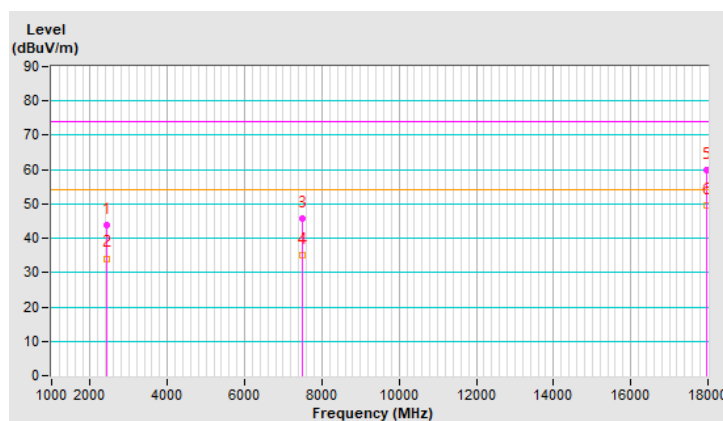


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2419.96	43.8 PK	74.0	-30.2	1.43 H	231	45.2	-1.4
2	#2419.96	34.1 AV	54.0	-19.9	1.43 H	231	35.5	-1.4
3	7486.31	45.8 PK	74.0	-28.2	2.47 H	297	35.9	9.9
4	7486.31	35.2 AV	54.0	-18.8	2.47 H	297	25.3	9.9
5	17962.93	59.9 PK	74.0	-14.1	2.97 H	144	37.1	22.8
6	17962.93	49.7 AV	54.0	-4.3	2.97 H	144	26.9	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

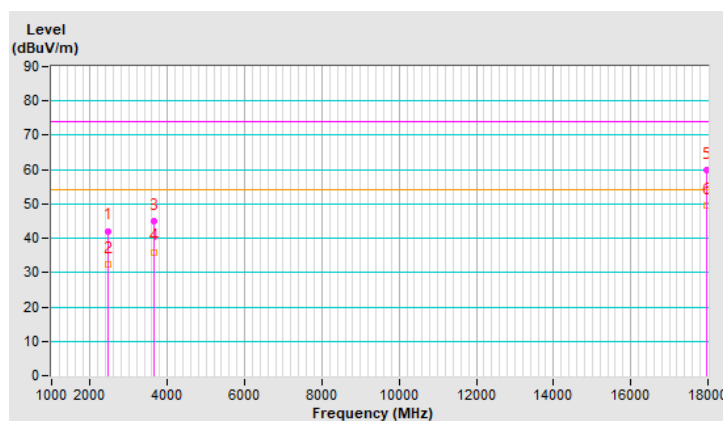


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2476.10	42.1 PK	74.0	-31.9	2.91 V	82	43.5	-1.4
2	#2476.10	32.5 AV	54.0	-21.5	2.91 V	82	33.9	-1.4
3	3656.13	45.1 PK	74.0	-28.9	1.55 V	168	44.1	1.0
4	3656.13	36.0 AV	54.0	-18.0	1.55 V	168	35.0	1.0
5	17970.08	59.8 PK	74.0	-14.2	1.07 V	262	37.0	22.8
6	17970.08	49.5 AV	54.0	-4.5	1.07 V	262	26.7	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.



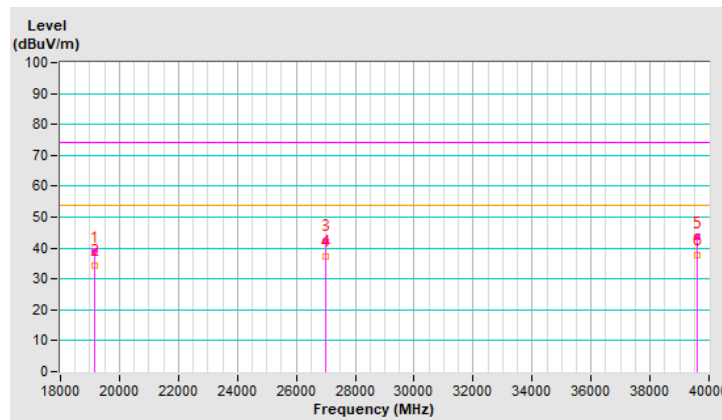
For 18~40 GHz

RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	19179.67	38.8 PK	74.0	-35.2	1.44 H	28	45.5	-6.7
2	19179.67	34.3 AV	54.0	-19.7	1.44 H	28	41.0	-6.7
3	#26980.10	42.5 PK	74.0	-31.5	1.73 H	135	43.5	-1.0
4	#26980.10	37.4 AV	54.0	-16.6	1.73 H	135	38.4	-1.0
5	39612.24	43.5 PK	74.0	-30.5	2.59 H	204	36.7	6.8
6	39612.24	37.8 AV	54.0	-16.2	2.59 H	204	31.0	6.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

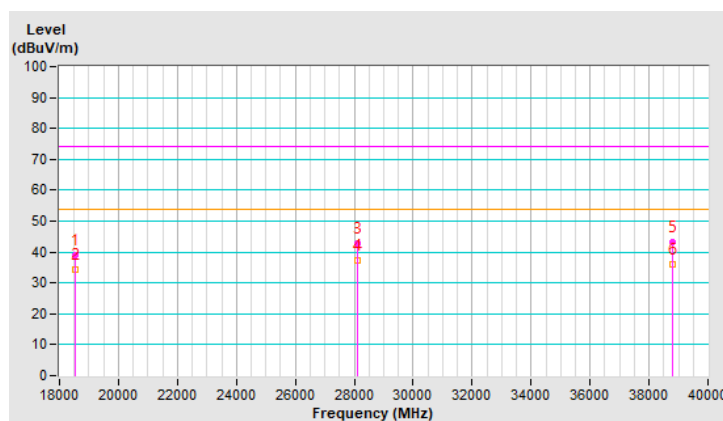


RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	18540.01	39.1 PK	74.0	-34.9	1.51 V	83	46.0	-6.9
2	18540.01	34.5 AV	54.0	-19.5	1.51 V	83	41.4	-6.9
3	#28114.34	43.0 PK	74.0	-31.0	1.84 V	247	45.0	-2.0
4	#28114.34	37.3 AV	54.0	-16.7	1.84 V	247	39.3	-2.0
5	38811.04	43.2 PK	74.0	-30.8	1.99 V	212	38.8	4.4
6	38811.04	36.1 AV	54.0	-17.9	1.99 V	212	31.7	4.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

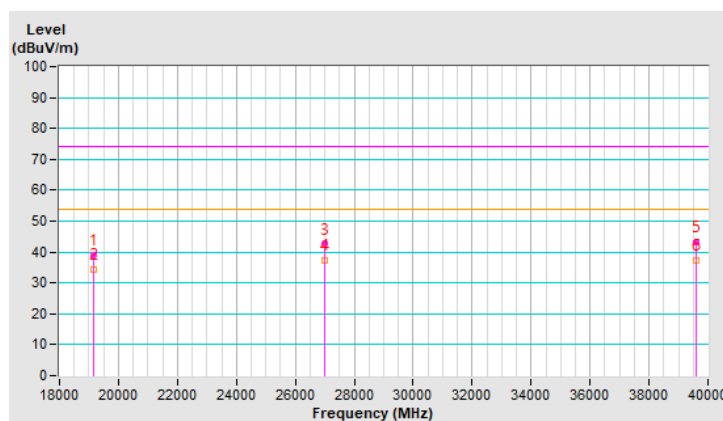


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	19176.75	38.9 PK	74.0	-35.1	1.47 H	12	45.6	-6.7
2	19176.75	34.2 AV	54.0	-19.8	1.47 H	12	40.9	-6.7
3	#26977.86	42.6 PK	74.0	-31.4	1.74 H	121	43.6	-1.0
4	#26977.86	37.3 AV	54.0	-16.7	1.74 H	121	38.3	-1.0
5	39610.94	43.2 PK	74.0	-30.8	2.62 H	214	36.4	6.8
6	39610.94	37.5 AV	54.0	-16.5	2.62 H	214	30.7	6.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

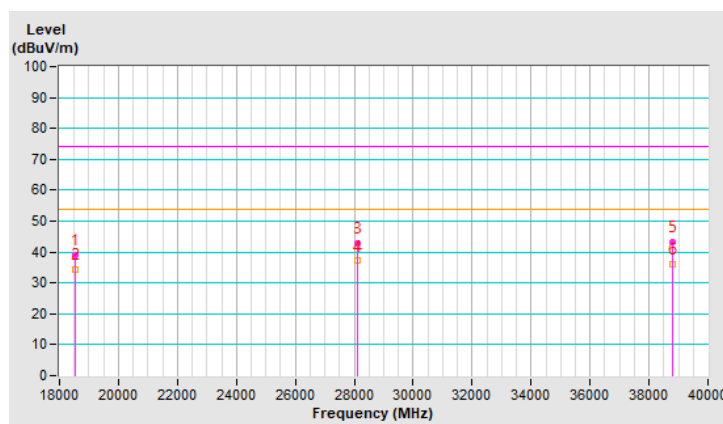


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	18539.43	39.0 PK	74.0	-35.0	1.55 V	83	45.9	-6.9
2	18539.43	34.4 AV	54.0	-19.6	1.55 V	83	41.3	-6.9
3	#28114.20	42.9 PK	74.0	-31.1	1.90 V	251	44.9	-2.0
4	#28114.20	37.1 AV	54.0	-16.9	1.90 V	251	39.1	-2.0
5	38809.66	43.2 PK	74.0	-30.8	1.99 V	211	38.9	4.3
6	38809.66	36.0 AV	54.0	-18.0	1.99 V	211	31.7	4.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

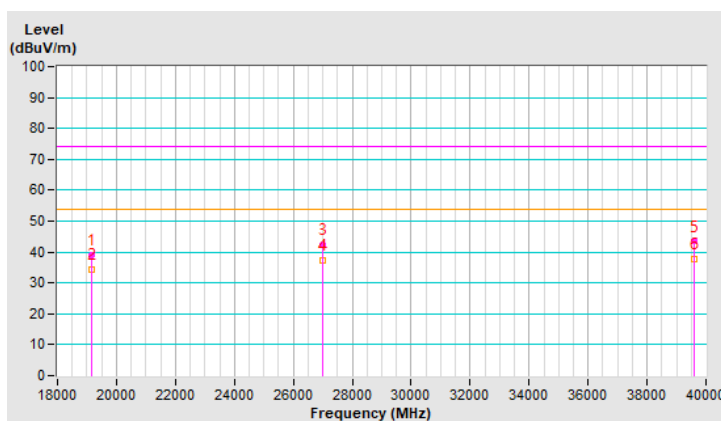


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	19178.89	38.9 PK	74.0	-35.1	1.49 H	13	45.6	-6.7
2	19178.89	34.2 AV	54.0	-19.8	1.49 H	13	40.9	-6.7
3	#26978.47	42.4 PK	74.0	-31.6	1.77 H	149	43.4	-1.0
4	#26978.47	37.3 AV	54.0	-16.7	1.77 H	149	38.3	-1.0
5	39611.13	43.5 PK	74.0	-30.5	2.60 H	203	36.7	6.8
6	39611.13	37.6 AV	54.0	-16.4	2.60 H	203	30.8	6.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

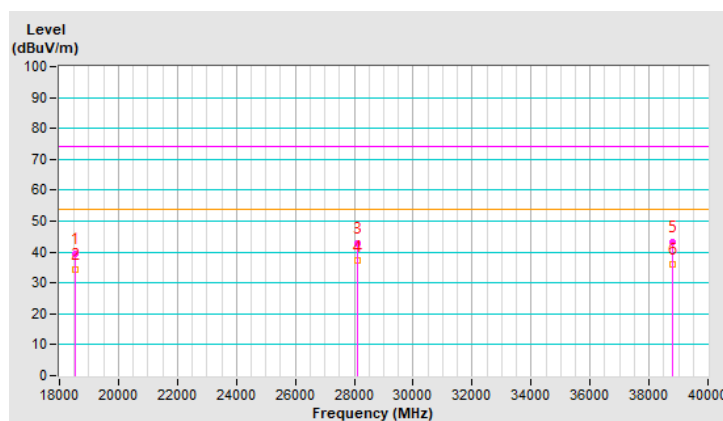


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	18538.09	39.3 PK	74.0	-34.7	1.47 V	78	46.2	-6.9
2	18538.09	34.5 AV	54.0	-19.5	1.47 V	78	41.4	-6.9
3	#28112.08	42.9 PK	74.0	-31.1	1.79 V	245	44.9	-2.0
4	#28112.08	37.1 AV	54.0	-16.9	1.79 V	245	39.1	-2.0
5	38810.53	43.3 PK	74.0	-30.7	1.97 V	205	38.9	4.4
6	38810.53	36.0 AV	54.0	-18.0	1.97 V	205	31.6	4.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

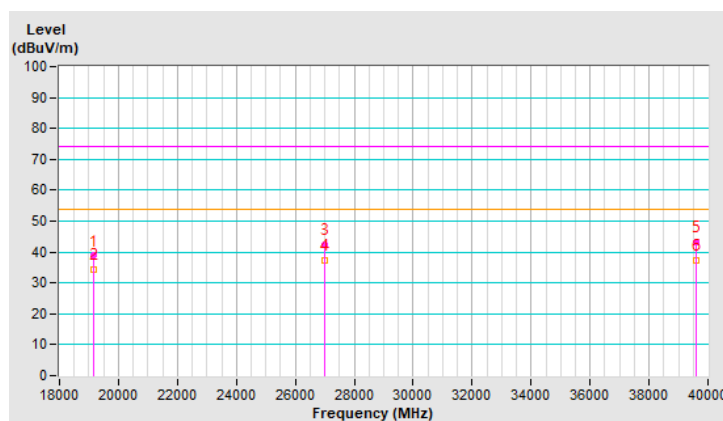


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	19177.35	38.8 PK	74.0	-35.2	1.50 H	30	45.5	-6.7
2	19177.35	34.2 AV	54.0	-19.8	1.50 H	30	40.9	-6.7
3	#26979.64	42.3 PK	74.0	-31.7	1.75 H	144	43.3	-1.0
4	#26979.64	37.2 AV	54.0	-16.8	1.75 H	144	38.2	-1.0
5	39610.53	43.3 PK	74.0	-30.7	2.59 H	195	36.5	6.8
6	39610.53	37.5 AV	54.0	-16.5	2.59 H	195	30.7	6.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

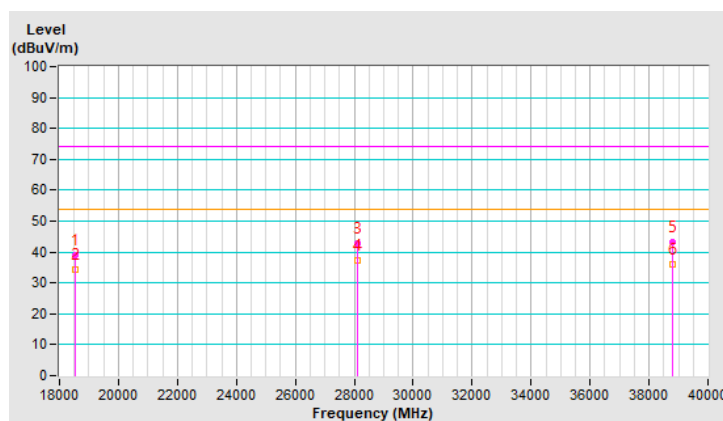


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	18538.85	39.1 PK	74.0	-34.9	1.48 V	99	46.0	-6.9
2	18538.85	34.3 AV	54.0	-19.7	1.48 V	99	41.2	-6.9
3	#28112.45	43.0 PK	74.0	-31.0	1.85 V	258	45.0	-2.0
4	#28112.45	37.2 AV	54.0	-16.8	1.85 V	258	39.2	-2.0
5	38809.44	43.1 PK	74.0	-30.9	1.93 V	226	38.8	4.3
6	38809.44	36.0 AV	54.0	-18.0	1.93 V	226	31.7	4.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.



For above 40 GHz

Channel	CH 1 : 58.32 GHz		
Frequency Range	40GHz ~ 220GHz	Detector Function	Average (AV)

Antenna Polarity : Horizontal							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	42.32	69.33	-25.82	2.31	90.00	-87.69	PASS
2	54.11	74.09	-21.06	6.92	90.00	-83.08	PASS
3	73.91	62.51	-32.64	0.48	90.00	-89.52	PASS
4	102.13	64.74	-30.42	0.80	90.00	-89.20	PASS
5	117.01	77.09	-18.07	13.78	90.00	-76.22	PASS
6	193.84	68.95	-26.21	2.12	90.00	-87.88	PASS
Antenna Polarity : Vertical							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	41.18	69.34	-25.82	2.32	90.00	-87.68	PASS
2	54.04	85.01	-10.15	85.47	90.00	-4.53	PASS
3	73.93	62.53	-32.62	0.48	90.00	-89.52	PASS
4	102.05	65.02	-30.14	0.86	90.00	-89.14	PASS
5	116.30	77.54	-17.61	15.32	90.00	-74.68	PASS
6	192.36	69.10	-26.05	2.19	90.00	-87.81	PASS

Remarks:

1. The measured power level is converted to EIRP using the equation:

Follow ANSI 63.10 section 9.4 Equations to calculate and extrapolate field strength

$$E_{\text{Meas}} \text{ (dB}\mu\text{V/m)} = 126.8 - 20\log(\lambda) + P - G$$

where:

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

P is the power measured at the output of the test antenna, in dBm

λ is the wavelength of the emission under investigation [300/fMHz], in m

G is the gain of the test antenna, in dBi

Follow ANSI 63.10 section 9.5 Equations to calculate EIRP

$$\text{EIRP Level (dBm/MHz)} = E_{\text{Meas}} \text{ (dB}\mu\text{V/m)} + 20 \cdot \log(d_{\text{Meas}}) - 104.7$$

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

d_{Meas} is the measurement distance, in m

Measurements made at 3 meter distance.

2. Power density formula as follows

Follow ANSI 63.10 section 9.6 Equations to calculate power density

$$PD = \text{EIRP}_{\text{Linear}} / 4 \pi d^2$$

PD is the power density at the distance specified by the limit, in W/m²

$EIRP_{Linear}$ is the equivalent isotropically radiated power, in watts

d is the 3m distance.

3. The far-field boundary is given in ANSI 63.10 as:

$$R_{far\ field} = (2 * L^2) / \lambda$$

L is the Largest Antenna Dimension of measurement antenna, including the reflector

λ is the wavelength

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
40	0.03	0.0075	0.240
50	0.03	0.0060	0.300

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
50	0.025	0.0060	0.208
75	0.025	0.0040	0.313

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
75	0.018	0.0040	0.162
110	0.018	0.0027	0.238

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
110	0.012	0.0027	0.106
170	0.012	0.0018	0.163

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
170	0.008	0.0018	0.073
260	0.008	0.0012	0.111

Channel	CH 3 : 60.48 GHz		
Frequency Range	40GHz ~ 220GHz	Detector Function	Average (AV)

Antenna Polarity : Horizontal							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	42.27	78.66	-16.50	19.81	90.00	-70.19	PASS
2	54.41	83.55	-11.61	61.10	90.00	-28.90	PASS
3	73.73	71.97	-23.19	4.24	90.00	-85.76	PASS
4	102.22	74.12	-21.03	6.97	90.00	-83.03	PASS
5	116.97	84.87	-10.28	82.81	90.00	-7.19	PASS
6	193.92	78.31	-16.85	18.26	90.00	-71.74	PASS
Antenna Polarity : Vertical							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	41.53	78.96	-16.20	21.22	90.00	-68.78	PASS
2	54.16	85.07	-10.09	86.66	90.00	-3.34	PASS
3	73.96	72.10	-23.06	4.37	90.00	-85.63	PASS
4	102.10	74.56	-20.60	7.71	90.00	-82.29	PASS
5	115.77	84.69	-10.47	79.37	90.00	-10.63	PASS
6	191.88	78.45	-16.71	18.85	90.00	-71.15	PASS

Remarks:

1. The measured power level is converted to EIRP using the equation:

Follow ANSI 63.10 section 9.4 Equations to calculate and extrapolate field strength

$$E_{Meas} \text{ (dB}\mu\text{V/m)} = 126.8 - 20\log(\lambda) + P - G$$

where:

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

P is the power measured at the output of the test antenna, in dBm

λ is the wavelength of the emission under investigation [300/fMHz], in m

G is the gain of the test antenna, in dBi

Follow ANSI 63.10 section 9.5 Equations to calculate EIRP

$$\text{EIRP Level (dBm/MHz)} = E_{Meas} \text{ (dB}\mu\text{V/m)} + 20 \cdot \log(d_{Meas}) - 104.7$$

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

d_{Meas} is the measurement distance, in m

Measurements made at 3 meter distance.

2. Power density formula as follows

Follow ANSI 63.10 section 9.6 Equations to calculate power density

$$PD = \text{EIRP}_{\text{Linear}} / 4 \pi d^2$$

PD is the power density at the distance specified by the limit, in W/m²

$EIRP_{Linear}$ is the equivalent isotropically radiated power, in watts

d is the 3m distance.

3. The far-field boundary is given in ANSI 63.10 as:

$$R_{far\ field} = (2 * L^2) / \lambda$$

L is the Largest Antenna Dimension of measurement antenna, including the reflector

λ is the wavelength

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
40	0.03	0.0075	0.240
50	0.03	0.0060	0.300

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
50	0.025	0.0060	0.208
75	0.025	0.0040	0.313

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
75	0.018	0.0040	0.162
110	0.018	0.0027	0.238

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
110	0.012	0.0027	0.106
170	0.012	0.0018	0.163

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
170	0.008	0.0018	0.073
260	0.008	0.0012	0.111

Channel	CH 5 : 62.64 GHz		
Frequency Range	40GHz ~ 220GHz	Detector Function	Average (AV)

Antenna Polarity : Horizontal							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	41.91	78.65	-16.51	19.75	90.00	-70.25	PASS
2	54.24	82.96	-12.20	53.28	90.00	-36.72	PASS
3	74.09	72.02	-23.14	4.29	90.00	-85.71	PASS
4	102.25	74.39	-20.76	7.42	90.00	-82.58	PASS
5	116.72	84.08	-11.07	69.04	90.00	-20.96	PASS
6	193.77	78.58	-16.58	19.43	90.00	-70.57	PASS
Antenna Polarity : Vertical							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	41.14	78.99	-16.17	21.37	90.00	-68.63	PASS
2	54.11	85.12	-10.04	87.66	90.00	-2.34	PASS
3	74.29	72.44	-22.72	4.73	90.00	-85.27	PASS
4	101.81	74.68	-20.47	7.93	90.00	-82.07	PASS
5	116.18	84.05	-11.11	68.55	90.00	-21.46	PASS
6	191.75	78.69	-16.47	19.94	90.00	-70.06	PASS

Remarks:

1. The measured power level is converted to EIRP using the equation:

Follow ANSI 63.10 section 9.4 Equations to calculate and extrapolate field strength

$$E_{\text{Meas}} \text{ (dB}\mu\text{V/m)} = 126.8 - 20\log(\lambda) + P - G$$

where:

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

P is the power measured at the output of the test antenna, in dBm

λ is the wavelength of the emission under investigation [300/fMHz], in m

G is the gain of the test antenna, in dBi

Follow ANSI 63.10 section 9.5 Equations to calculate EIRP

$$\text{EIRP Level (dBm/MHz)} = E_{\text{Meas}} \text{ (dB}\mu\text{V/m)} + 20 \cdot \log(d_{\text{Meas}}) - 104.7$$

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

d_{Meas} is the measurement distance, in m

Measurements made at 3 meter distance.

2. Power density formula as follows

Follow ANSI 63.10 section 9.6 Equations to calculate power density

$$PD = \text{EIRP}_{\text{Linear}} / 4 \pi d^2$$

PD is the power density at the distance specified by the limit, in W/m²

$EIRP_{Linear}$ is the equivalent isotropically radiated power, in watts

d is the 3m distance.

3. The far-field boundary is given in ANSI 63.10 as:

$$R_{far\ field} = (2 * L^2) / \lambda$$

L is the Largest Antenna Dimension of measurement antenna, including the reflector

λ is the wavelength

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
40	0.03	0.0075	0.240
50	0.03	0.0060	0.300

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
50	0.025	0.0060	0.208
75	0.025	0.0040	0.313

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
75	0.018	0.0040	0.162
110	0.018	0.0027	0.238

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
110	0.012	0.0027	0.106
170	0.012	0.0018	0.163

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
170	0.008	0.0018	0.073
260	0.008	0.0012	0.111

Channel	CH 11 : 69.12 GHz		
Frequency Range	40GHz ~ 220GHz	Detector Function	Average (AV)

Antenna Polarity : Horizontal							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	42.37	78.72	-16.44	20.09	90.00	-69.91	PASS
2	53.99	83.46	-11.69	59.86	90.00	-30.14	PASS
3	73.69	71.86	-23.29	4.14	90.00	-85.86	PASS
4	102.03	74.26	-20.89	7.20	90.00	-82.80	PASS
5	116.78	84.02	-11.13	68.09	90.00	-21.91	PASS
6	193.92	78.37	-16.79	18.52	90.00	-71.48	PASS
Antenna Polarity : Vertical							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	41.31	78.85	-16.31	20.67	90.00	-69.33	PASS
2	53.90	85.17	-9.99	88.68	90.00	-1.32	PASS
3	74.02	72.35	-22.81	4.63	90.00	-85.37	PASS
4	101.39	74.85	-20.31	8.24	90.00	-81.76	PASS
5	116.31	84.40	-10.76	74.30	90.00	-15.71	PASS
6	191.83	78.60	-16.55	19.55	90.00	-70.45	PASS

Remarks:

1. The measured power level is converted to EIRP using the equation:

Follow ANSI 63.10 section 9.4 Equations to calculate and extrapolate field strength

$$E_{Meas} \text{ (dB}\mu\text{V/m)} = 126.8 - 20\log(\lambda) + P - G$$

where:

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

P is the power measured at the output of the test antenna, in dBm

λ is the wavelength of the emission under investigation [300/fMHz], in m

G is the gain of the test antenna, in dBi

Follow ANSI 63.10 section 9.5 Equations to calculate EIRP

$$\text{EIRP Level (dBm/MHz)} = E_{Meas} \text{ (dB}\mu\text{V/m)} + 20 \cdot \log(d_{Meas}) - 104.7$$

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

d_{Meas} is the measurement distance, in m

Measurements made at 3 meter distance.

2. Power density formula as follows

Follow ANSI 63.10 section 9.6 Equations to calculate power density

$$PD = \text{EIRP}_{\text{Linear}} / 4 \pi d^2$$

PD is the power density at the distance specified by the limit, in W/m²

$EIRP_{Linear}$ is the equivalent isotropically radiated power, in watts

d is the 3m distance.

3. The far-field boundary is given in ANSI 63.10 as:

$$R_{far\ field} = (2 * L^2) / \lambda$$

L is the Largest Antenna Dimension of measurement antenna, including the reflector

λ is the wavelength

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
40	0.03	0.0075	0.240
50	0.03	0.0060	0.300

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
50	0.025	0.0060	0.208
75	0.025	0.0040	0.313

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
75	0.018	0.0040	0.162
110	0.018	0.0027	0.238

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
110	0.012	0.0027	0.106
170	0.012	0.0018	0.163

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
170	0.008	0.0018	0.073
260	0.008	0.0012	0.111

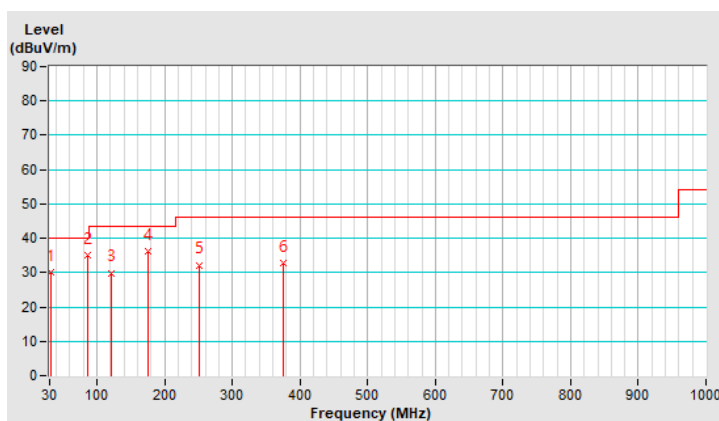
Below 1GHz Data:

RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	32.18	30.2 QP	40.0	-9.8	1.00 H	51	39.0	-8.8
2	86.68	35.0 QP	40.0	-5.0	2.50 H	75	48.1	-13.1
3	121.33	29.9 QP	43.5	-13.6	3.00 H	152	38.8	-8.9
4	176.07	36.1 QP	43.5	-7.4	2.00 H	214	44.2	-8.1
5	250.88	32.2 QP	46.0	-13.8	1.00 H	143	40.2	-8.0
6	375.29	32.7 QP	46.0	-13.3	1.00 H	207	36.4	-3.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

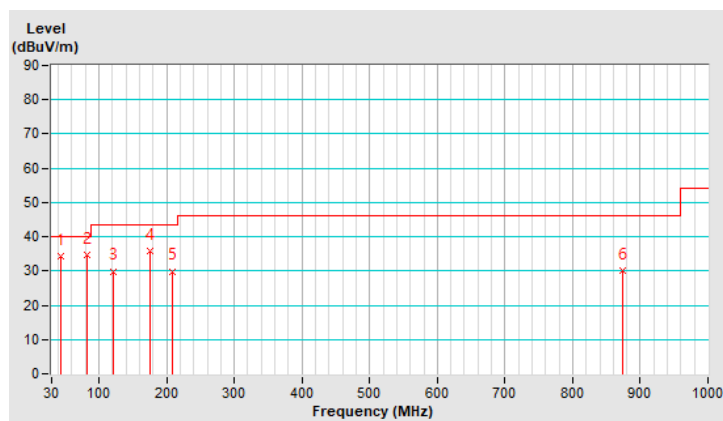


RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	43.77	34.2 QP	40.0	-5.8	1.00 V	235	42.0	-7.8
2	82.10	34.6 QP	40.0	-5.4	1.00 V	103	47.4	-12.8
3	121.16	29.9 QP	43.5	-13.6	2.00 V	159	38.8	-8.9
4	175.51	35.8 QP	43.5	-7.7	1.50 V	95	43.8	-8.0
5	208.10	29.9 QP	43.5	-13.6	1.00 V	196	39.9	-10.0
6	874.79	30.1 QP	46.0	-15.9	1.50 V	286	23.1	7.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

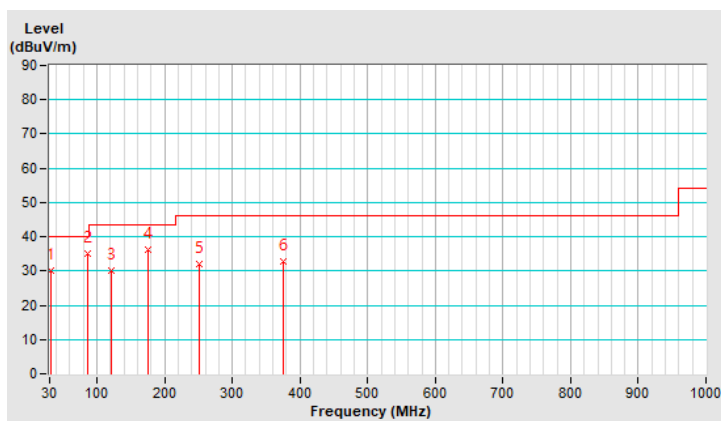


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	32.23	30.2 QP	40.0	-9.8	1.00 H	67	39.0	-8.8
2	86.78	35.0 QP	40.0	-5.0	2.50 H	72	48.1	-13.1
3	121.55	30.1 QP	43.5	-13.4	3.00 H	164	39.1	-9.0
4	176.14	36.2 QP	43.5	-7.3	2.00 H	218	44.3	-8.1
5	250.52	32.1 QP	46.0	-13.9	1.00 H	133	40.1	-8.0
6	375.30	32.7 QP	46.0	-13.3	1.00 H	203	36.4	-3.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

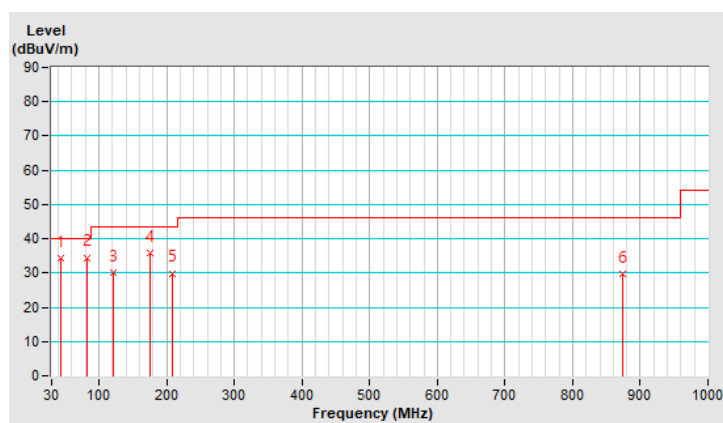


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	43.96	34.3 QP	40.0	-5.7	1.00 V	223	42.1	-7.8
2	82.15	34.5 QP	40.0	-5.5	1.00 V	106	47.3	-12.8
3	121.29	30.1 QP	43.5	-13.4	2.00 V	157	39.0	-8.9
4	175.54	35.9 QP	43.5	-7.6	1.50 V	95	43.9	-8.0
5	208.14	29.9 QP	43.5	-13.6	1.00 V	204	39.9	-10.0
6	874.59	29.8 QP	46.0	-16.2	1.50 V	274	22.8	7.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

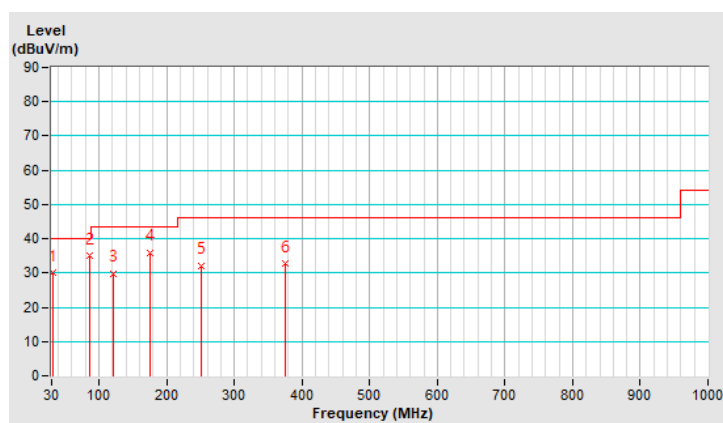


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	32.03	30.2 QP	40.0	-9.8	1.00 H	47	39.0	-8.8
2	86.77	34.9 QP	40.0	-5.1	2.50 H	82	48.0	-13.1
3	121.05	29.9 QP	43.5	-13.6	3.00 H	150	38.8	-8.9
4	175.85	36.0 QP	43.5	-7.5	2.00 H	208	44.0	-8.0
5	250.80	32.2 QP	46.0	-13.8	1.00 H	130	40.2	-8.0
6	375.19	32.8 QP	46.0	-13.2	1.00 H	221	36.5	-3.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

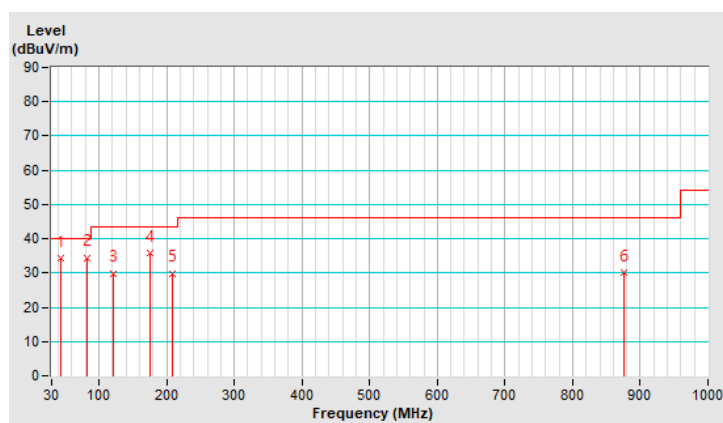


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	43.67	34.2 QP	40.0	-5.8	1.00 V	247	42.0	-7.8
2	82.11	34.5 QP	40.0	-5.5	1.00 V	88	47.3	-12.8
3	121.22	29.9 QP	43.5	-13.6	2.00 V	148	38.8	-8.9
4	175.76	35.9 QP	43.5	-7.6	1.50 V	106	43.9	-8.0
5	208.28	29.9 QP	43.5	-13.6	1.00 V	194	39.9	-10.0
6	874.99	30.2 QP	46.0	-15.8	1.50 V	273	23.2	7.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

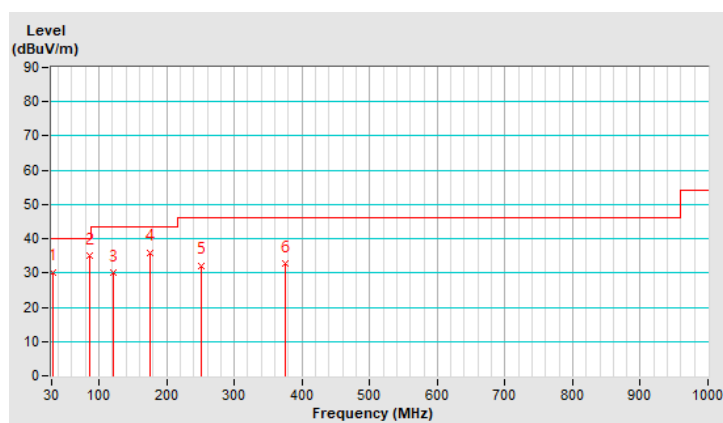


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	32.36	30.3 QP	40.0	-9.7	1.00 H	63	39.1	-8.8
2	86.52	35.1 QP	40.0	-4.9	2.50 H	80	48.2	-13.1
3	121.49	30.1 QP	43.5	-13.4	3.00 H	153	39.1	-9.0
4	176.13	36.0 QP	43.5	-7.5	2.00 H	208	44.1	-8.1
5	250.75	32.2 QP	46.0	-13.8	1.00 H	154	40.2	-8.0
6	375.08	32.7 QP	46.0	-13.3	1.00 H	196	36.4	-3.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

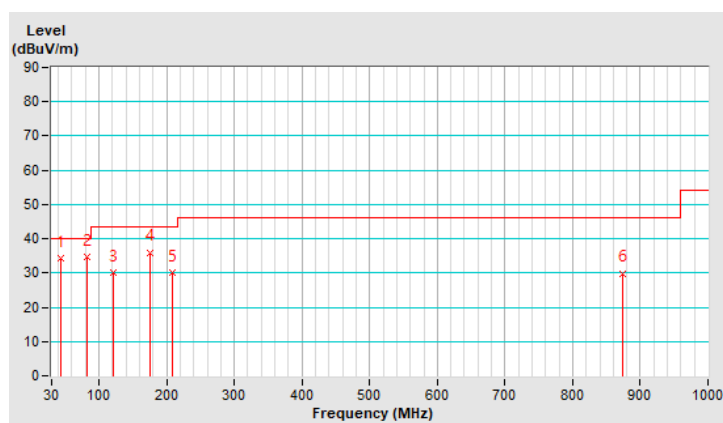


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	44.12	34.4 QP	40.0	-5.6	1.00 V	250	42.2	-7.8
2	82.31	34.6 QP	40.0	-5.4	1.00 V	89	47.4	-12.8
3	121.41	30.1 QP	43.5	-13.4	2.00 V	152	39.1	-9.0
4	175.64	36.0 QP	43.5	-7.5	1.50 V	91	44.0	-8.0
5	208.35	30.0 QP	43.5	-13.5	1.00 V	200	40.0	-10.0
6	874.51	29.9 QP	46.0	-16.1	1.50 V	272	22.9	7.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



4.1.8 Test Results (Mode 2)

Bandwidth 1080MHz

Above 1GHz Data:

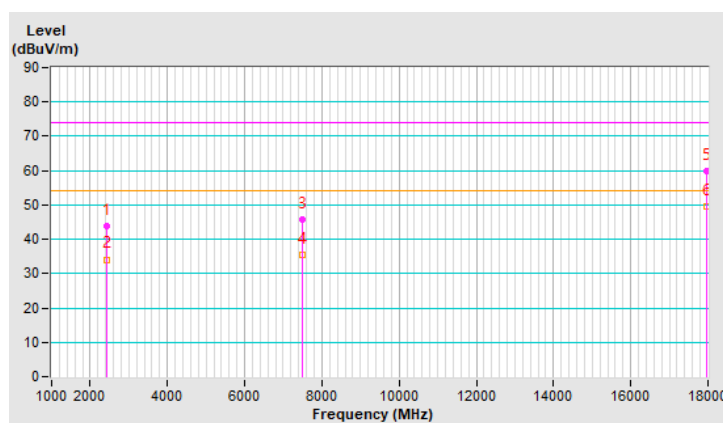
For 1~18 GHz

RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2421.03	43.7 PK	74.0	-30.3	1.43 H	225	45.1	-1.4
2	#2421.03	34.1 AV	54.0	-19.9	1.43 H	225	35.5	-1.4
3	7486.22	45.8 PK	74.0	-28.2	2.53 H	298	35.9	9.9
4	7486.22	35.3 AV	54.0	-18.7	2.53 H	298	25.4	9.9
5	17960.81	59.7 PK	74.0	-14.3	2.97 H	158	36.9	22.8
6	17960.81	49.5 AV	54.0	-4.5	2.97 H	158	26.7	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

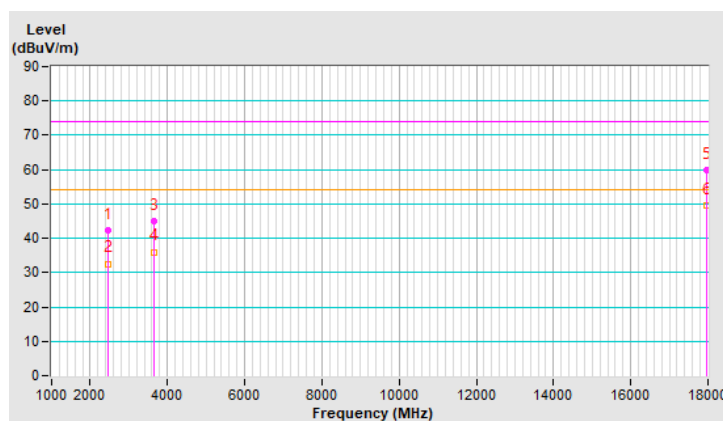


RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2478.16	42.2 PK	74.0	-31.8	2.99 V	97	43.6	-1.4
2	#2478.16	32.6 AV	54.0	-21.4	2.99 V	97	34.0	-1.4
3	3657.08	45.0 PK	74.0	-29.0	1.52 V	138	44.0	1.0
4	3657.08	36.0 AV	54.0	-18.0	1.52 V	138	35.0	1.0
5	17971.01	59.9 PK	74.0	-14.1	1.13 V	234	37.1	22.8
6	17971.01	49.5 AV	54.0	-4.5	1.13 V	234	26.7	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

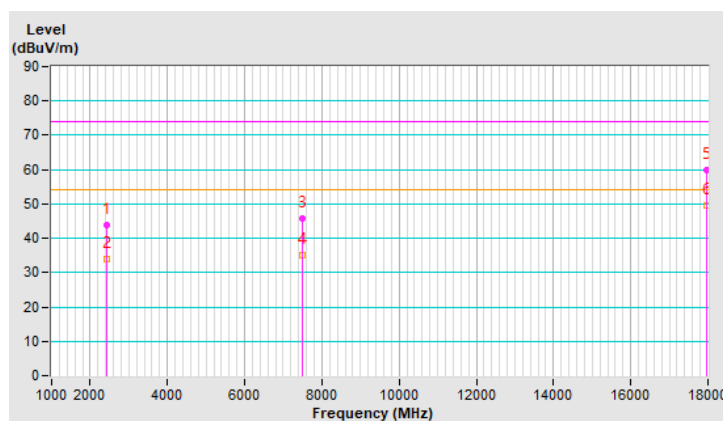


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2420.13	43.7 PK	74.0	-30.3	1.40 H	214	45.1	-1.4
2	#2420.13	34.0 AV	54.0	-20.0	1.40 H	214	35.4	-1.4
3	7485.99	45.7 PK	74.0	-28.3	2.58 H	273	35.8	9.9
4	7485.99	35.2 AV	54.0	-18.8	2.58 H	273	25.3	9.9
5	17960.81	59.7 PK	74.0	-14.3	2.91 H	147	36.9	22.8
6	17960.81	49.6 AV	54.0	-4.4	2.91 H	147	26.8	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

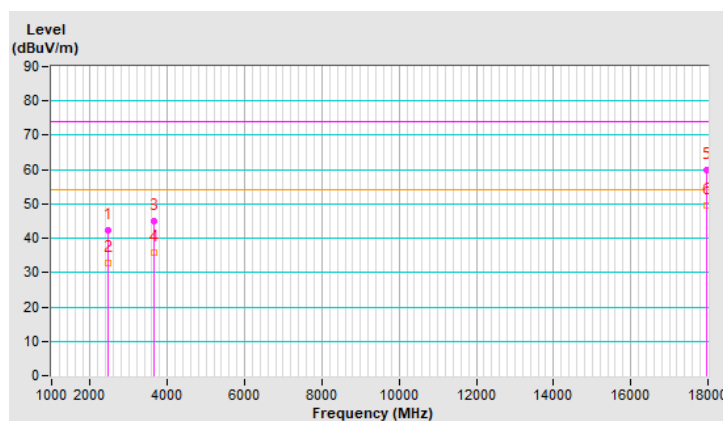


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2476.46	42.3 PK	74.0	-31.7	3.01 V	71	43.7	-1.4
2	#2476.46	32.7 AV	54.0	-21.3	3.01 V	71	34.1	-1.4
3	3656.06	45.0 PK	74.0	-29.0	1.54 V	158	44.0	1.0
4	3656.06	35.9 AV	54.0	-18.1	1.54 V	158	34.9	1.0
5	17971.07	59.8 PK	74.0	-14.2	1.13 V	246	37.0	22.8
6	17971.07	49.6 AV	54.0	-4.4	1.13 V	246	26.8	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

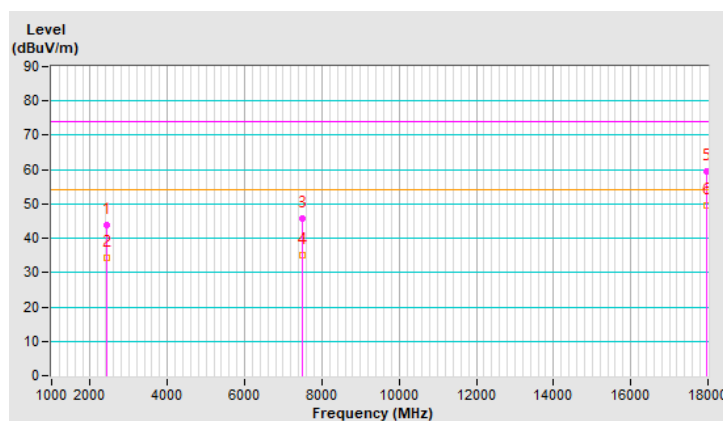


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2421.39	43.9 PK	74.0	-30.1	1.44 H	234	45.3	-1.4
2	#2421.39	34.2 AV	54.0	-19.8	1.44 H	234	35.6	-1.4
3	7484.98	45.6 PK	74.0	-28.4	2.56 H	285	35.7	9.9
4	7484.98	35.1 AV	54.0	-18.9	2.56 H	285	25.2	9.9
5	17961.32	59.6 PK	74.0	-14.4	2.97 H	152	36.8	22.8
6	17961.32	49.4 AV	54.0	-4.6	2.97 H	152	26.6	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

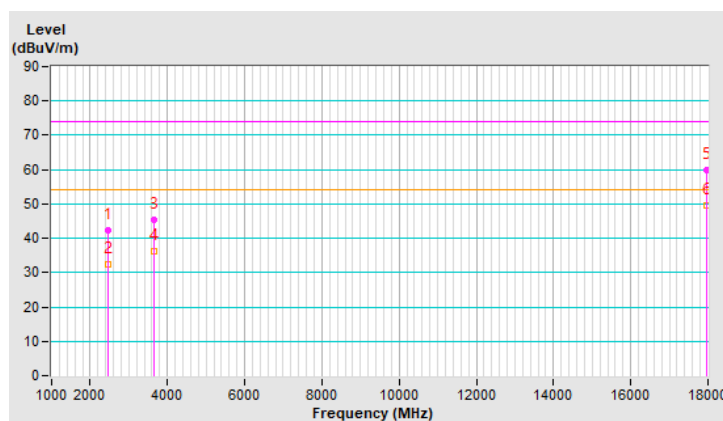


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2478.10	42.2 PK	74.0	-31.8	2.99 V	77	43.6	-1.4
2	#2478.10	32.5 AV	54.0	-21.5	2.99 V	77	33.9	-1.4
3	3657.61	45.2 PK	74.0	-28.8	1.58 V	160	44.2	1.0
4	3657.61	36.2 AV	54.0	-17.8	1.58 V	160	35.2	1.0
5	17970.24	59.8 PK	74.0	-14.2	1.14 V	240	37.0	22.8
6	17970.24	49.4 AV	54.0	-4.6	1.14 V	240	26.6	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

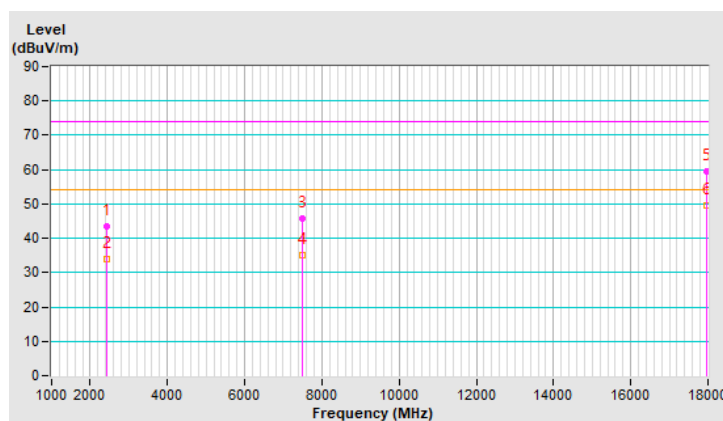


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2422.69	43.6 PK	74.0	-30.4	1.38 H	238	45.0	-1.4
2	#2422.69	34.0 AV	54.0	-20.0	1.38 H	238	35.4	-1.4
3	7486.50	45.8 PK	74.0	-28.2	2.55 H	286	35.9	9.9
4	7486.50	35.2 AV	54.0	-18.8	2.55 H	286	25.3	9.9
5	17963.13	59.6 PK	74.0	-14.4	2.91 H	147	36.8	22.8
6	17963.13	49.5 AV	54.0	-4.5	2.91 H	147	26.7	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

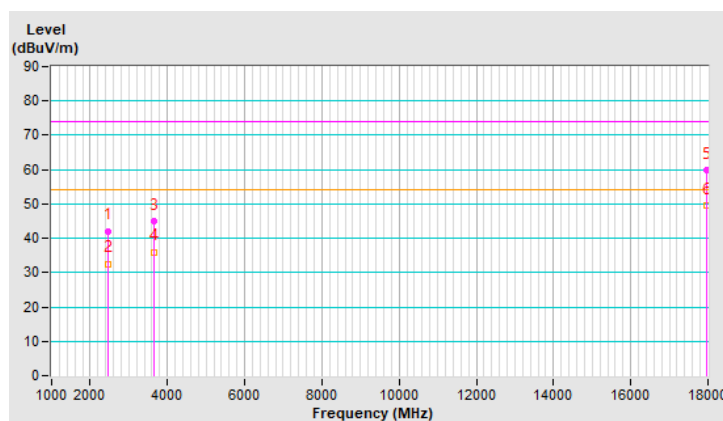


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	1GHz ~ 18GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#2476.81	42.1 PK	74.0	-31.9	2.90 V	94	43.5	-1.4
2	#2476.81	32.6 AV	54.0	-21.4	2.90 V	94	34.0	-1.4
3	3656.56	45.0 PK	74.0	-29.0	1.53 V	150	44.0	1.0
4	3656.56	36.0 AV	54.0	-18.0	1.53 V	150	35.0	1.0
5	17972.76	59.9 PK	74.0	-14.1	1.09 V	259	37.1	22.8
6	17972.76	49.6 AV	54.0	-4.4	1.09 V	259	26.8	22.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.



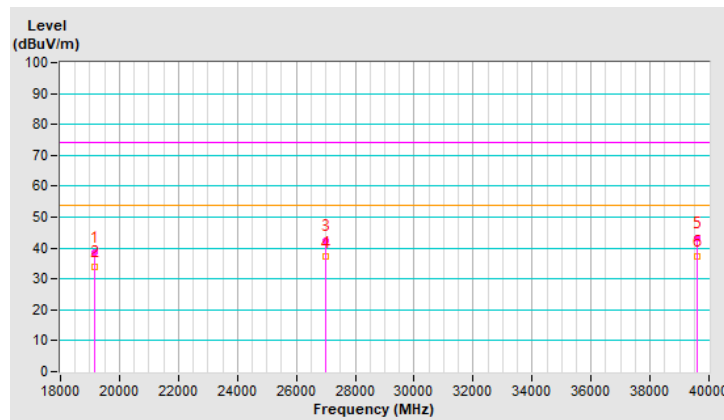
For 18~40 GHz

RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	19178.41	38.7 PK	74.0	-35.3	1.38 H	21	45.4	-6.7
2	19178.41	34.1 AV	54.0	-19.9	1.38 H	21	40.8	-6.7
3	#26979.19	42.4 PK	74.0	-31.6	1.73 H	138	43.4	-1.0
4	#26979.19	37.1 AV	54.0	-16.9	1.73 H	138	38.1	-1.0
5	39611.53	43.3 PK	74.0	-30.7	2.54 H	197	36.5	6.8
6	39611.53	37.5 AV	54.0	-16.5	2.54 H	197	30.7	6.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

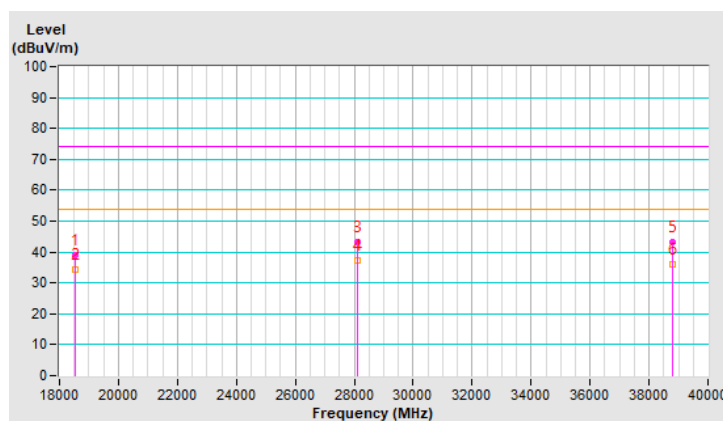


RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	18539.53	39.1 PK	74.0	-34.9	1.51 V	80	46.0	-6.9
2	18539.53	34.4 AV	54.0	-19.6	1.51 V	80	41.3	-6.9
3	#28114.21	43.2 PK	74.0	-30.8	1.79 V	241	45.2	-2.0
4	#28114.21	37.3 AV	54.0	-16.7	1.79 V	241	39.3	-2.0
5	38808.10	43.2 PK	74.0	-30.8	2.00 V	216	38.9	4.3
6	38808.10	36.0 AV	54.0	-18.0	2.00 V	216	31.7	4.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

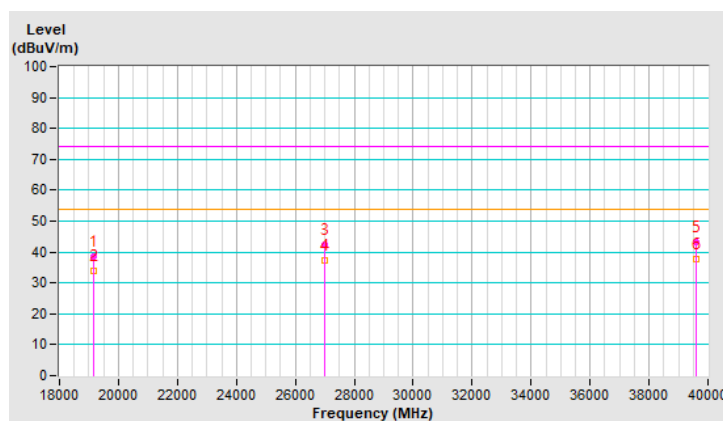


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	19179.04	38.7 PK	74.0	-35.3	1.45 H	19	45.4	-6.7
2	19179.04	34.0 AV	54.0	-20.0	1.45 H	19	40.7	-6.7
3	#26979.24	42.5 PK	74.0	-31.5	1.73 H	137	43.5	-1.0
4	#26979.24	37.3 AV	54.0	-16.7	1.73 H	137	38.3	-1.0
5	39609.50	43.4 PK	74.0	-30.6	2.55 H	220	36.6	6.8
6	39609.50	37.6 AV	54.0	-16.4	2.55 H	220	30.8	6.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

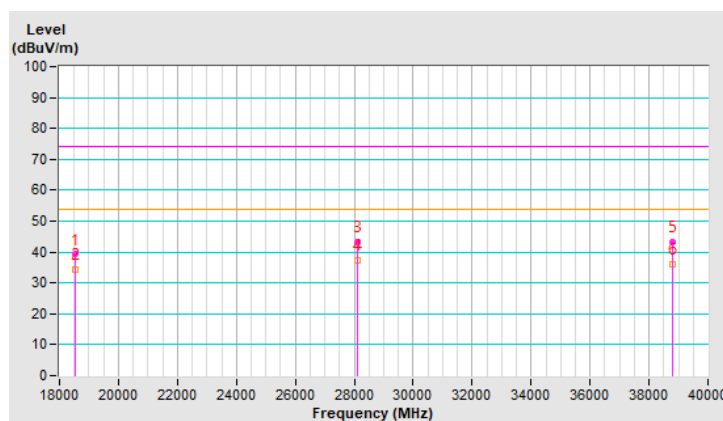


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	18539.46	39.2 PK	74.0	-34.8	1.50 V	70	46.1	-6.9
2	18539.46	34.4 AV	54.0	-19.6	1.50 V	70	41.3	-6.9
3	#28113.98	43.1 PK	74.0	-30.9	1.85 V	254	45.1	-2.0
4	#28113.98	37.2 AV	54.0	-16.8	1.85 V	254	39.2	-2.0
5	38808.68	43.1 PK	74.0	-30.9	1.95 V	222	38.8	4.3
6	38808.68	35.9 AV	54.0	-18.1	1.95 V	222	31.6	4.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

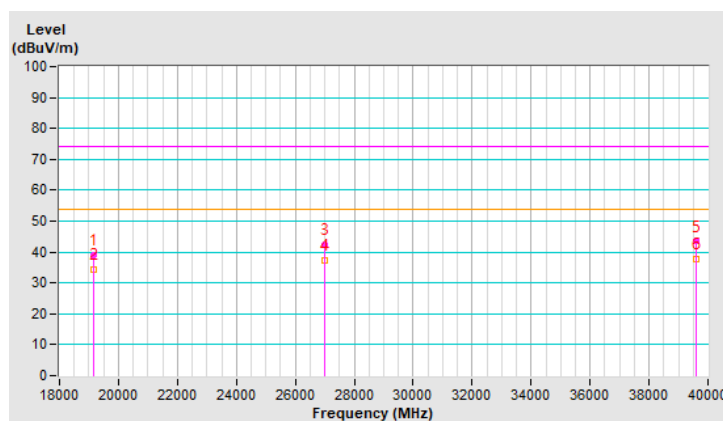


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	19179.53	39.0 PK	74.0	-35.0	1.41 H	24	45.7	-6.7
2	19179.53	34.3 AV	54.0	-19.7	1.41 H	24	41.0	-6.7
3	#26978.52	42.4 PK	74.0	-31.6	1.78 H	137	43.4	-1.0
4	#26978.52	37.2 AV	54.0	-16.8	1.78 H	137	38.2	-1.0
5	39610.28	43.5 PK	74.0	-30.5	2.64 H	198	36.7	6.8
6	39610.28	37.7 AV	54.0	-16.3	2.64 H	198	30.9	6.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

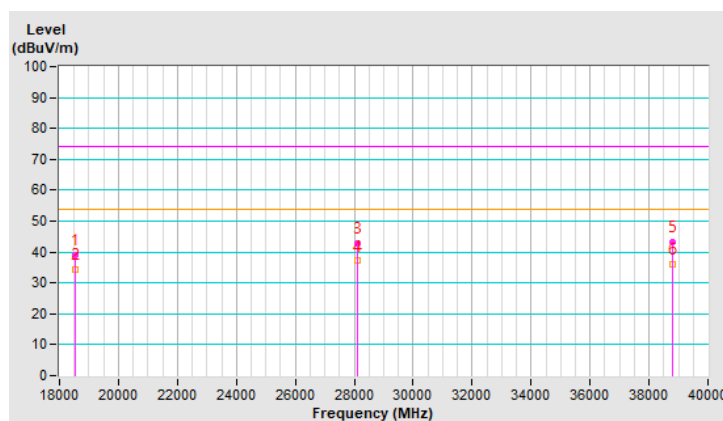


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	18539.18	38.9 PK	74.0	-35.1	1.49 V	76	45.8	-6.9
2	18539.18	34.2 AV	54.0	-19.8	1.49 V	76	41.1	-6.9
3	#28113.12	42.8 PK	74.0	-31.2	1.87 V	254	44.8	-2.0
4	#28113.12	37.1 AV	54.0	-16.9	1.87 V	254	39.1	-2.0
5	38808.63	43.2 PK	74.0	-30.8	2.05 V	209	38.9	4.3
6	38808.63	35.9 AV	54.0	-18.1	2.05 V	209	31.6	4.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

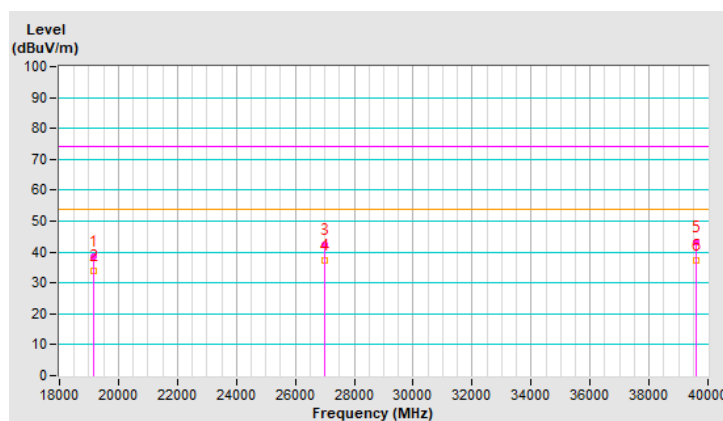


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	19178.84	38.6 PK	74.0	-35.4	1.41 H	26	45.3	-6.7
2	19178.84	34.1 AV	54.0	-19.9	1.41 H	26	40.8	-6.7
3	#26978.87	42.4 PK	74.0	-31.6	1.68 H	125	43.4	-1.0
4	#26978.87	37.2 AV	54.0	-16.8	1.68 H	125	38.2	-1.0
5	39611.79	43.2 PK	74.0	-30.8	2.59 H	218	36.4	6.8
6	39611.79	37.5 AV	54.0	-16.5	2.59 H	218	30.7	6.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.

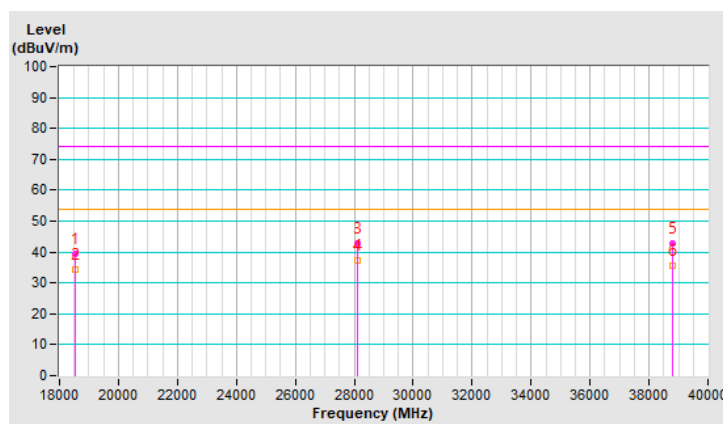


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	18GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	18538.77	39.3 PK	74.0	-34.7	1.45 V	73	46.2	-6.9
2	18538.77	34.5 AV	54.0	-19.5	1.45 V	73	41.4	-6.9
3	#28113.31	42.9 PK	74.0	-31.1	1.84 V	254	44.9	-2.0
4	#28113.31	37.2 AV	54.0	-16.8	1.84 V	254	39.2	-2.0
5	38810.54	43.0 PK	74.0	-31.0	1.95 V	200	38.6	4.4
6	38810.54	35.8 AV	54.0	-18.2	1.95 V	200	31.4	4.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " # ": The radiated frequency is out of the restricted band.



For above 40 GHz

Channel	CH 1 : 58.32 GHz		
Frequency Range	40GHz ~ 220GHz	Detector Function	Average (AV)

Antenna Polarity : Horizontal							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	42.18	69.10	-26.05	2.19	90.00	-87.81	PASS
2	54.52	76.04	-19.11	10.84	90.00	-79.16	PASS
3	73.69	62.46	-32.69	0.48	90.00	-89.52	PASS
4	102.14	64.86	-30.30	0.83	90.00	-89.17	PASS
5	116.79	77.30	-17.86	14.47	90.00	-75.53	PASS
6	193.97	68.88	-26.28	2.08	90.00	-87.92	PASS
Antenna Polarity : Vertical							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	41.28	69.59	-25.57	2.45	90.00	-87.55	PASS
2	54.32	84.97	-10.19	84.68	90.00	-5.32	PASS
3	73.79	62.56	-32.59	0.49	90.00	-89.51	PASS
4	101.98	65.26	-29.90	0.91	90.00	-89.09	PASS
5	116.14	77.62	-17.53	15.60	90.00	-74.40	PASS
6	192.36	69.33	-25.82	2.31	90.00	-87.69	PASS

Remarks:

1. The measured power level is converted to EIRP using the equation:

Follow ANSI 63.10 section 9.4 Equations to calculate and extrapolate field strength

$$E_{Meas} \text{ (dB}\mu\text{V/m)} = 126.8 - 20\log(\lambda) + P - G$$

where:

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

P is the power measured at the output of the test antenna, in dBm

λ is the wavelength of the emission under investigation [300/fMHz], in m

G is the gain of the test antenna, in dBi

Follow ANSI 63.10 section 9.5 Equations to calculate EIRP

$$\text{EIRP Level (dBm/MHz)} = E_{Meas} \text{ (dB}\mu\text{V/m)} + 20 \cdot \log(d_{Meas}) - 104.7$$

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

d_{Meas} is the measurement distance, in m

Measurements made at 3 meter distance.

2. Power density formula as follows

Follow ANSI 63.10 section 9.6 Equations to calculate power density

$$PD = \text{EIRP}_{\text{Linear}} / 4 \pi d^2$$

PD is the power density at the distance specified by the limit, in W/m²

$EIRP_{Linear}$ is the equivalent isotropically radiated power, in watts

d is the 3m distance.

3. The far-field boundary is given in ANSI 63.10 as:

$$R_{far\ field} = (2 * L^2) / \lambda$$

L is the Largest Antenna Dimension of measurement antenna, including the reflector

λ is the wavelength

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
40	0.03	0.0075	0.240
50	0.03	0.0060	0.300

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
50	0.025	0.0060	0.208
75	0.025	0.0040	0.313

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
75	0.018	0.0040	0.162
110	0.018	0.0027	0.238

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
110	0.012	0.0027	0.106
170	0.012	0.0018	0.163

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
170	0.008	0.0018	0.073
260	0.008	0.0012	0.111

Channel	CH 3 : 60.48 GHz		
Frequency Range	40GHz ~ 220GHz	Detector Function	Average (AV)

Antenna Polarity : Horizontal							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	42.27	78.59	-16.57	19.50	90.00	-70.50	PASS
2	54.43	83.64	-11.52	62.38	90.00	-27.62	PASS
3	73.90	71.92	-23.24	4.19	90.00	-85.81	PASS
4	102.22	74.35	-20.80	7.35	90.00	-82.65	PASS
5	116.97	86.62	-8.53	123.90	90.00	33.90	PASS
6	193.92	78.70	-16.46	19.98	90.00	-70.02	PASS
Antenna Polarity : Vertical							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	41.25	78.98	-16.18	21.32	90.00	-68.68	PASS
2	54.63	84.99	-10.17	85.08	90.00	-4.92	PASS
3	73.86	72.38	-22.78	4.66	90.00	-85.34	PASS
4	101.70	74.71	-20.45	7.98	90.00	-82.02	PASS
5	115.78	85.12	-10.04	87.66	90.00	-2.34	PASS
6	192.18	78.47	-16.69	18.94	90.00	-71.06	PASS

Remarks:

1. The measured power level is converted to EIRP using the equation:

Follow ANSI 63.10 section 9.4 Equations to calculate and extrapolate field strength

$$E_{\text{Meas}} \text{ (dB}\mu\text{V/m)} = 126.8 - 20\log(\lambda) + P - G$$

where:

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

P is the power measured at the output of the test antenna, in dBm

λ is the wavelength of the emission under investigation [300/fMHz], in m

G is the gain of the test antenna, in dBi

Follow ANSI 63.10 section 9.5 Equations to calculate EIRP

$$\text{EIRP Level (dBm/MHz)} = E_{\text{Meas}} \text{ (dB}\mu\text{V/m)} + 20 \cdot \log(d_{\text{Meas}}) - 104.7$$

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

d_{Meas} is the measurement distance, in m

Measurements made at 3 meter distance.

2. Power density formula as follows

Follow ANSI 63.10 section 9.6 Equations to calculate power density

$$PD = \text{EIRP}_{\text{Linear}} / 4 \pi d^2$$

PD is the power density at the distance specified by the limit, in W/m²

$EIRP_{Linear}$ is the equivalent isotropically radiated power, in watts

d is the 3m distance.

3. The far-field boundary is given in ANSI 63.10 as:

$$R_{far\ field} = (2 * L^2) / \lambda$$

L is the Largest Antenna Dimension of measurement antenna, including the reflector

λ is the wavelength

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
40	0.03	0.0075	0.240
50	0.03	0.0060	0.300

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
50	0.025	0.0060	0.208
75	0.025	0.0040	0.313

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
75	0.018	0.0040	0.162
110	0.018	0.0027	0.238

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
110	0.012	0.0027	0.106
170	0.012	0.0018	0.163

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
170	0.008	0.0018	0.073
260	0.008	0.0012	0.111

Channel	CH 5 : 62.64 GHz		
Frequency Range	40GHz ~ 220GHz	Detector Function	Average (AV)

Antenna Polarity : Horizontal							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	41.91	78.46	-16.70	18.91	90.00	-71.09	PASS
2	54.02	83.35	-11.81	58.29	90.00	-31.71	PASS
3	73.87	71.74	-23.42	4.02	90.00	-85.98	PASS
4	102.25	74.29	-20.86	7.25	90.00	-82.75	PASS
5	116.72	84.50	-10.65	76.05	90.00	-13.95	PASS
6	193.77	78.67	-16.49	19.84	90.00	-70.16	PASS
Antenna Polarity : Vertical							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	41.07	78.82	-16.34	20.55	90.00	-69.45	PASS
2	53.99	85.05	-10.11	86.26	90.00	-3.74	PASS
3	74.30	72.52	-22.64	4.82	90.00	-85.18	PASS
4	101.94	74.47	-20.68	7.55	90.00	-82.45	PASS
5	116.03	84.48	-10.68	75.68	90.00	-14.32	PASS
6	192.10	78.55	-16.61	19.31	90.00	-70.69	PASS

Remarks:

1. The measured power level is converted to EIRP using the equation:

Follow ANSI 63.10 section 9.4 Equations to calculate and extrapolate field strength

$$E_{Meas} \text{ (dB}\mu\text{V/m)} = 126.8 - 20\log(\lambda) + P - G$$

where:

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

P is the power measured at the output of the test antenna, in dBm

λ is the wavelength of the emission under investigation [300/fMHz], in m

G is the gain of the test antenna, in dBi

Follow ANSI 63.10 section 9.5 Equations to calculate EIRP

$$\text{EIRP Level (dBm/MHz)} = E_{Meas} \text{ (dB}\mu\text{V/m)} + 20 \cdot \log(d_{Meas}) - 104.7$$

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

d_{Meas} is the measurement distance, in m

Measurements made at 3 meter distance.

2. Power density formula as follows

Follow ANSI 63.10 section 9.6 Equations to calculate power density

$$PD = \text{EIRP}_{\text{Linear}} / 4 \pi d^2$$

PD is the power density at the distance specified by the limit, in W/m²

$EIRP_{Linear}$ is the equivalent isotropically radiated power, in watts

d is the 3m distance.

3. The far-field boundary is given in ANSI 63.10 as:

$$R_{far\ field} = (2 * L^2) / \lambda$$

L is the Largest Antenna Dimension of measurement antenna, including the reflector

λ is the wavelength

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
40	0.03	0.0075	0.240
50	0.03	0.0060	0.300

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
50	0.025	0.0060	0.208
75	0.025	0.0040	0.313

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
75	0.018	0.0040	0.162
110	0.018	0.0027	0.238

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
110	0.012	0.0027	0.106
170	0.012	0.0018	0.163

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
170	0.008	0.0018	0.073
260	0.008	0.0012	0.111

Channel	CH 11 : 69.12 GHz		
Frequency Range	40GHz ~ 220GHz	Detector Function	Average (AV)

Antenna Polarity : Horizontal							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	42.37	78.87	-16.29	20.79	90.00	-69.21	PASS
2	54.02	83.27	-11.88	57.30	90.00	-32.70	PASS
3	73.67	71.80	-23.35	4.08	90.00	-85.92	PASS
4	102.03	74.32	-20.83	7.30	90.00	-82.70	PASS
5	116.78	84.02	-11.13	68.09	90.00	-21.91	PASS
6	193.92	78.57	-16.59	19.39	90.00	-70.61	PASS
Antenna Polarity : Vertical							
No.	Frequency (GHz)	E _{Meas} (dBμV/m)	EIRP Level (dBm/MHz)	Power Density (pW/cm ²)	Power Density Limit (pW/cm ²)	Margin (pW/cm ²)	PASS/FAIL
1	41.19	78.77	-16.39	20.30	90.00	-69.70	PASS
2	53.95	85.11	-10.05	87.46	90.00	-2.54	PASS
3	74.21	72.18	-22.98	4.45	90.00	-85.55	PASS
4	101.40	74.57	-20.59	7.72	90.00	-82.28	PASS
5	116.48	84.40	-10.76	74.30	90.00	-15.71	PASS
6	192.05	78.47	-16.68	18.97	90.00	-71.03	PASS

Remarks:

1. The measured power level is converted to EIRP using the equation:

Follow ANSI 63.10 section 9.4 Equations to calculate and extrapolate field strength

$$E_{\text{Meas}} \text{ (dB}\mu\text{V/m)} = 126.8 - 20\log(\lambda) + P - G$$

where:

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

P is the power measured at the output of the test antenna, in dBm

λ is the wavelength of the emission under investigation [300/fMHz], in m

G is the gain of the test antenna, in dBi

Follow ANSI 63.10 section 9.5 Equations to calculate EIRP

$$\text{EIRP Level (dBm/MHz)} = E_{\text{Meas}} \text{ (dB}\mu\text{V/m)} + 20 \cdot \log(d_{\text{Meas}}) - 104.7$$

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

d_{Meas} is the measurement distance, in m

Measurements made at 3 meter distance.

2. Power density formula as follows

Follow ANSI 63.10 section 9.6 Equations to calculate power density

$$PD = \text{EIRP}_{\text{Linear}} / 4 \pi d^2$$

PD is the power density at the distance specified by the limit, in W/m²

$EIRP_{Linear}$ is the equivalent isotropically radiated power, in watts

d is the 3m distance.

3. The far-field boundary is given in ANSI 63.10 as:

$$R_{far\ field} = (2 * L^2) / \lambda$$

L is the Largest Antenna Dimension of measurement antenna, including the reflector

λ is the wavelength

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
40	0.03	0.0075	0.240
50	0.03	0.0060	0.300

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
50	0.025	0.0060	0.208
75	0.025	0.0040	0.313

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
75	0.018	0.0040	0.162
110	0.018	0.0027	0.238

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
110	0.012	0.0027	0.106
170	0.012	0.0018	0.163

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
170	0.008	0.0018	0.073
260	0.008	0.0012	0.111

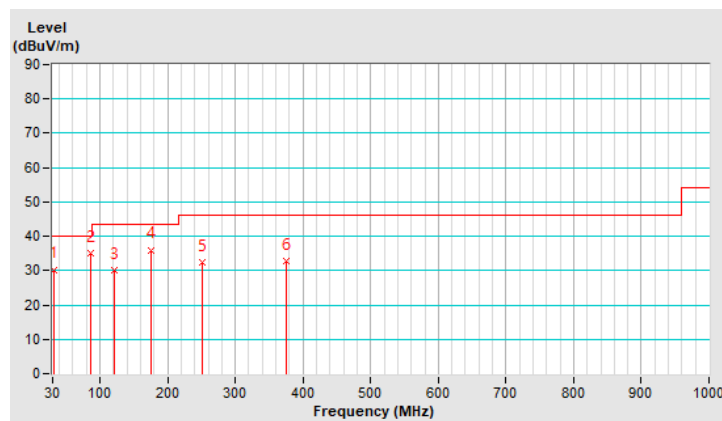
Below 1GHz Data:

RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	32.26	30.3 QP	40.0	-9.7	1.00 H	47	39.1	-8.8
2	86.85	34.9 QP	40.0	-5.1	2.50 H	90	48.0	-13.1
3	121.48	30.0 QP	43.5	-13.5	3.00 H	147	39.0	-9.0
4	176.22	36.0 QP	43.5	-7.5	2.00 H	229	44.1	-8.1
5	250.96	32.3 QP	46.0	-13.7	1.00 H	132	40.3	-8.0
6	375.56	32.9 QP	46.0	-13.1	1.00 H	202	36.6	-3.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

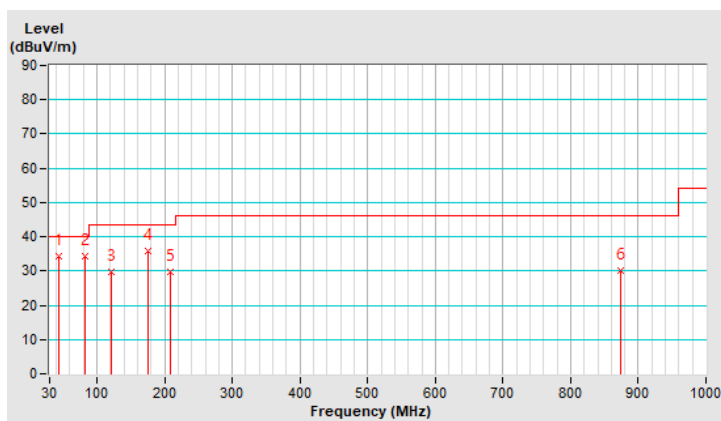


RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	43.76	34.3 QP	40.0	-5.7	1.00 V	241	42.1	-7.8
2	81.61	34.3 QP	40.0	-5.7	1.00 V	109	47.0	-12.7
3	120.85	29.8 QP	43.5	-13.7	2.00 V	160	38.8	-9.0
4	175.57	35.9 QP	43.5	-7.6	1.50 V	106	43.9	-8.0
5	207.95	29.6 QP	43.5	-13.9	1.00 V	207	39.6	-10.0
6	874.53	30.0 QP	46.0	-16.0	1.50 V	293	23.0	7.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

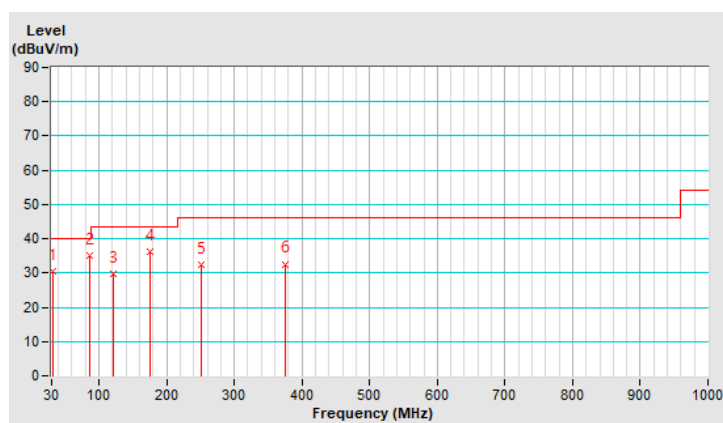


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	32.55	30.4 QP	40.0	-9.6	1.00 H	58	39.3	-8.9
2	86.87	35.2 QP	40.0	-4.8	2.50 H	67	48.3	-13.1
3	120.94	29.8 QP	43.5	-13.7	3.00 H	152	38.7	-8.9
4	176.08	36.2 QP	43.5	-7.3	2.00 H	207	44.3	-8.1
5	250.79	32.3 QP	46.0	-13.7	1.00 H	133	40.3	-8.0
6	375.13	32.6 QP	46.0	-13.4	1.00 H	202	36.3	-3.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

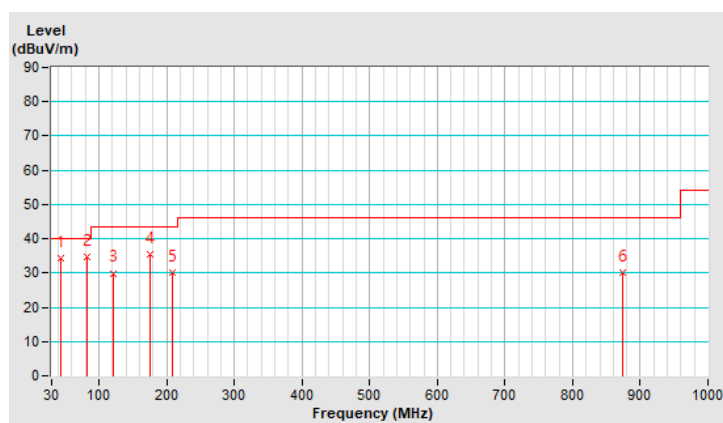


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	43.59	34.3 QP	40.0	-5.7	1.00 V	248	42.1	-7.8
2	81.81	34.6 QP	40.0	-5.4	1.00 V	107	47.3	-12.7
3	120.90	29.9 QP	43.5	-13.6	2.00 V	161	38.9	-9.0
4	175.28	35.6 QP	43.5	-7.9	1.50 V	84	43.6	-8.0
5	208.35	30.1 QP	43.5	-13.4	1.00 V	189	40.1	-10.0
6	874.59	30.0 QP	46.0	-16.0	1.50 V	296	23.0	7.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

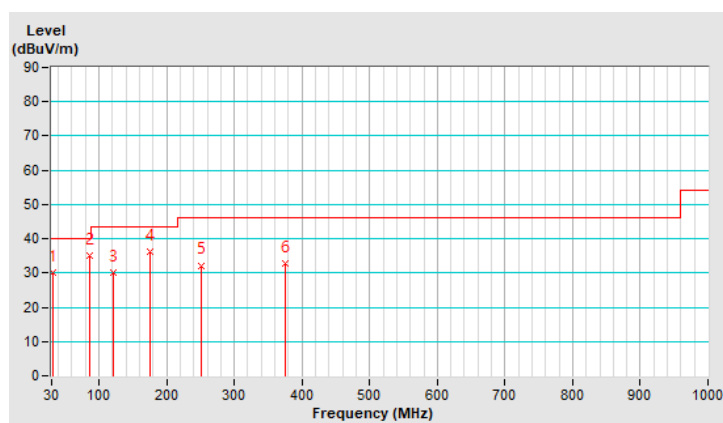


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	32.19	30.2 QP	40.0	-9.8	1.00 H	53	39.0	-8.8
2	86.84	35.2 QP	40.0	-4.8	2.50 H	74	48.3	-13.1
3	121.16	30.0 QP	43.5	-13.5	3.00 H	165	38.9	-8.9
4	176.19	36.2 QP	43.5	-7.3	2.00 H	215	44.3	-8.1
5	250.75	32.2 QP	46.0	-13.8	1.00 H	149	40.2	-8.0
6	375.55	32.7 QP	46.0	-13.3	1.00 H	194	36.4	-3.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

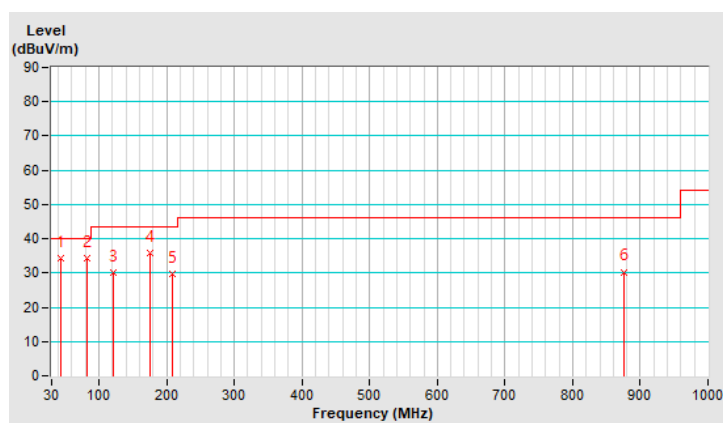


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	43.91	34.3 QP	40.0	-5.7	1.00 V	224	42.1	-7.8
2	81.78	34.4 QP	40.0	-5.6	1.00 V	107	47.1	-12.7
3	121.71	30.2 QP	43.5	-13.3	2.00 V	152	39.2	-9.0
4	175.72	35.9 QP	43.5	-7.6	1.50 V	94	43.9	-8.0
5	207.78	29.8 QP	43.5	-13.7	1.00 V	188	39.8	-10.0
6	874.94	30.3 QP	46.0	-15.7	1.50 V	286	23.3	7.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

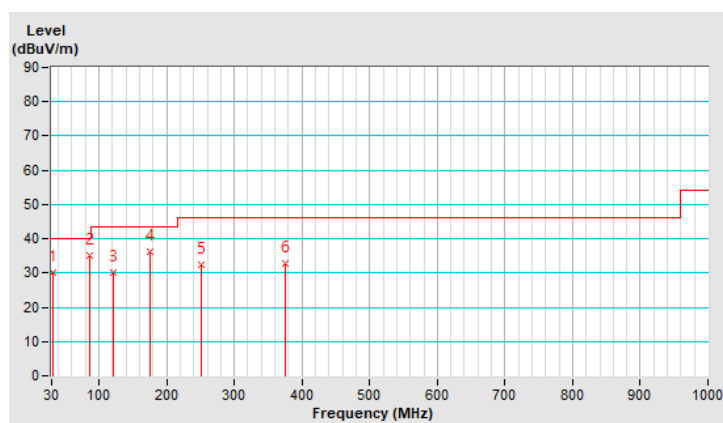


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	32.15	30.2 QP	40.0	-9.8	1.00 H	52	39.0	-8.8
2	86.43	35.0 QP	40.0	-5.0	2.50 H	76	48.2	-13.2
3	121.58	30.0 QP	43.5	-13.5	3.00 H	158	39.0	-9.0
4	176.28	36.1 QP	43.5	-7.4	2.00 H	230	44.2	-8.1
5	251.11	32.3 QP	46.0	-13.7	1.00 H	149	40.3	-8.0
6	375.58	32.9 QP	46.0	-13.1	1.00 H	220	36.6	-3.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

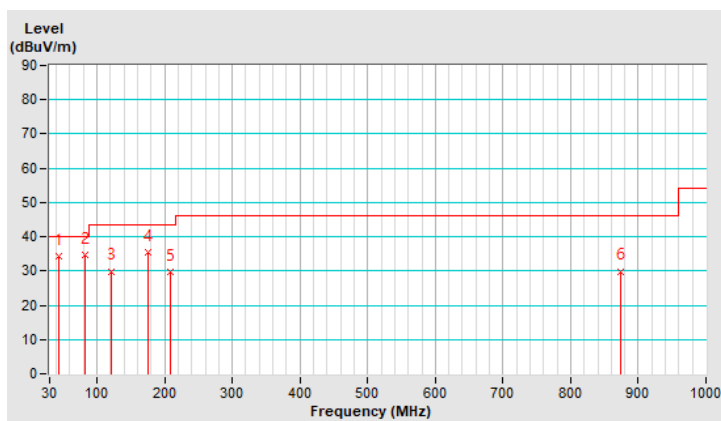


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	43.68	34.4 QP	40.0	-5.6	1.00 V	228	42.2	-7.8
2	82.35	34.8 QP	40.0	-5.2	1.00 V	105	47.6	-12.8
3	121.38	29.9 QP	43.5	-13.6	2.00 V	143	38.8	-8.9
4	175.01	35.6 QP	43.5	-7.9	1.50 V	101	43.6	-8.0
5	208.27	29.8 QP	43.5	-13.7	1.00 V	194	39.8	-10.0
6	874.86	29.9 QP	46.0	-16.1	1.50 V	293	22.9	7.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

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

Note: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2.2 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver R&S	ESCS 30	847124/029	Oct. 20, 2020	Oct. 19, 2021
Line-Impedance Stabilization Network (for EUT) R&S	ESH3-Z5	848773/004	Oct. 27, 2020	Oct. 26, 2021
Line-Impedance Stabilization Network (for Peripheral) R&S	ESH3-Z5	835239/001	Mar. 19, 2020	Mar. 18, 2021
50 ohms Terminator	50	3	Oct. 26, 2020	Oct. 25, 2021
RF Cable	5D-FB	COCCAB-001	Sep. 26, 2020	Sep. 25, 2021
Fixed attenuator EMCI	STI02-2200-10	005	Aug. 29, 2020	Aug. 28, 2021
Software BVADT	BVADT_Cond_ V7.3.7.4	NA	NA	NA

Note:

1. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Conduction 1.
- 3 Tested Date: Dec. 10, 2020

4.2.3 Test Procedures

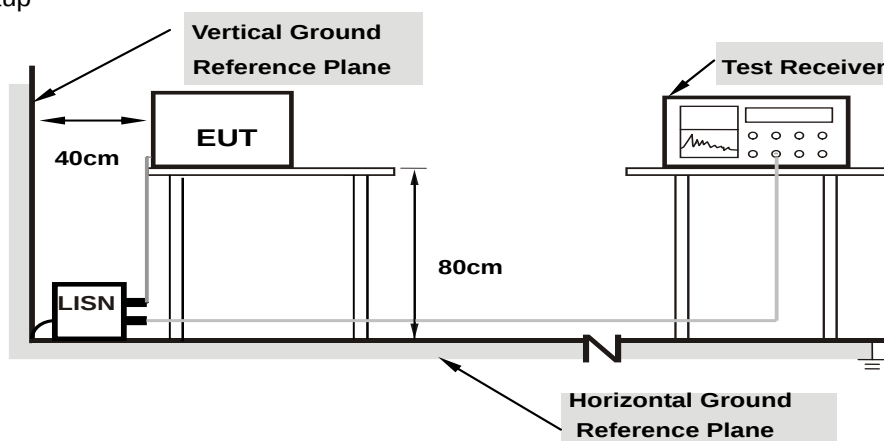
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.6 EUT Operating Conditions

Same as 4.1.6.

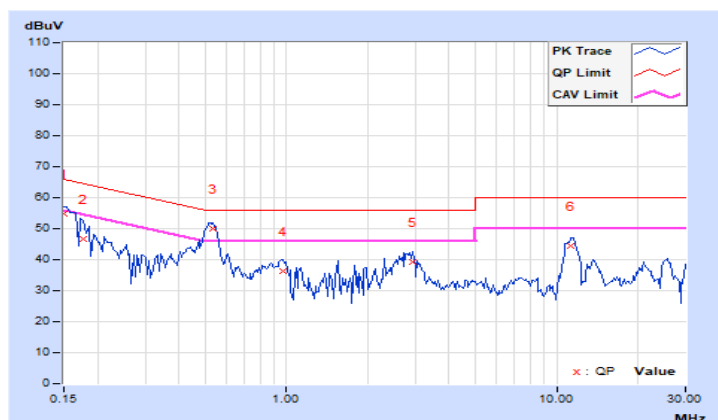
4.2.7 Test Results (Mode 1) For Bandwidth 2160MHz

RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.95	44.77	28.80	54.72	38.75	66.00	56.00	-11.28	-17.25
2	0.17734	9.96	36.80	16.62	46.76	26.58	64.61	54.61	-17.85	-28.03
3	0.53397	10.00	39.95	30.17	49.95	40.17	56.00	46.00	-6.05	-5.83
4	0.97031	10.03	26.32	15.62	36.35	25.65	56.00	46.00	-19.65	-20.35
5	2.94922	10.12	29.08	17.38	39.20	27.50	56.00	46.00	-16.80	-18.50
6	11.33594	10.61	34.00	27.68	44.61	38.29	60.00	50.00	-15.39	-11.71

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

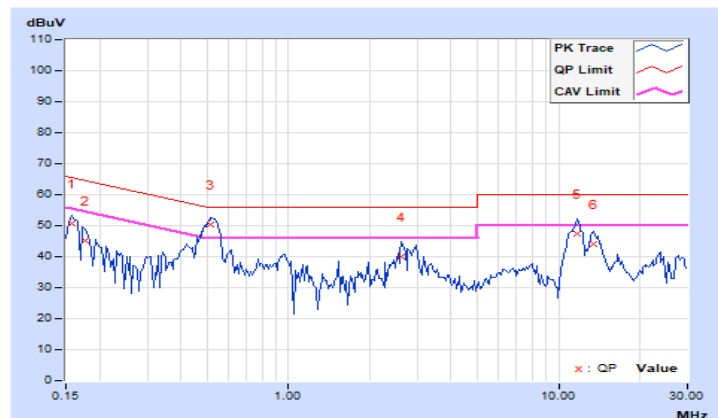


RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	9.92	40.75	25.95	50.67	35.87	65.58	55.58	-14.91	-19.71
2	0.17734	9.94	35.09	15.19	45.03	25.13	64.61	54.61	-19.58	-29.48
3	0.51719	9.97	40.37	30.90	50.34	40.87	56.00	46.00	-5.66	-5.13
4	2.62891	10.07	30.10	18.29	40.17	28.36	56.00	46.00	-15.83	-17.64
5	11.72656	10.49	36.85	30.60	47.34	41.09	60.00	50.00	-12.66	-8.91
6	13.44141	10.56	33.34	26.78	43.90	37.34	60.00	50.00	-16.10	-12.66

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

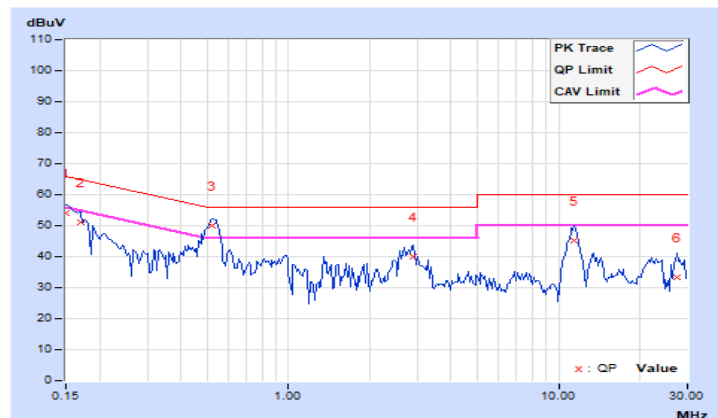


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.95	44.28	28.70	54.23	38.65	66.00	56.00	-11.77	-17.35
2	0.16953	9.96	40.97	22.75	50.93	32.71	64.98	54.98	-14.05	-22.27
3	0.52109	10.00	40.00	30.17	50.00	40.17	56.00	46.00	-6.00	-5.83
4	2.91016	10.12	29.83	17.85	39.95	27.97	56.00	46.00	-16.05	-18.03
5	11.42969	10.62	34.47	28.18	45.09	38.80	60.00	50.00	-14.91	-11.20
6	27.44531	11.26	22.08	15.34	33.34	26.60	60.00	50.00	-26.66	-23.40

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

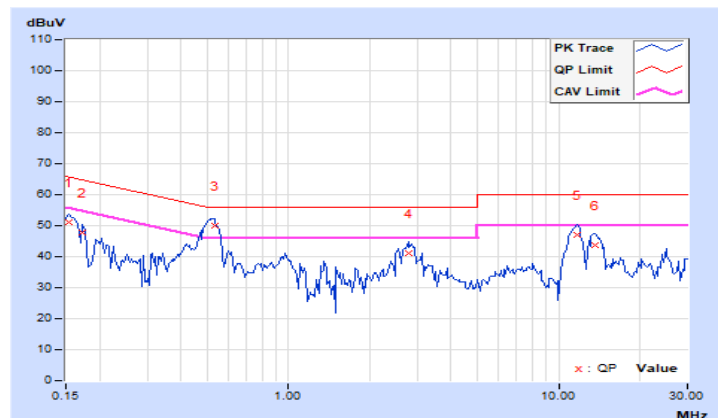


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.92	41.26	25.65	51.18	35.57	65.79	55.79	-14.61	-20.22
2	0.17344	9.93	37.78	20.30	47.71	30.23	64.79	54.79	-17.08	-24.56
3	0.53281	9.97	40.06	29.86	50.03	39.83	56.00	46.00	-5.97	-6.17
4	2.80078	10.07	31.14	18.75	41.21	28.82	56.00	46.00	-14.79	-17.18
5	11.69141	10.49	36.66	30.36	47.15	40.85	60.00	50.00	-12.85	-9.15
6	13.68359	10.58	33.22	27.10	43.80	37.68	60.00	50.00	-16.20	-12.32

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

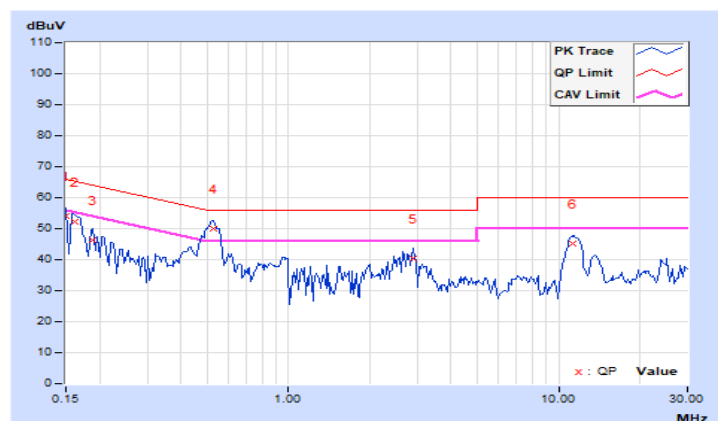


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.95	44.06	28.36	54.01	38.31	66.00	56.00	-11.99	-17.69
2	0.16172	9.95	42.21	26.61	52.16	36.56	65.38	55.38	-13.22	-18.82
3	0.18906	9.97	36.43	20.23	46.40	30.20	64.08	54.08	-17.68	-23.88
4	0.52891	10.00	39.98	29.94	49.98	39.94	56.00	46.00	-6.02	-6.06
5	2.89063	10.11	30.16	18.01	40.27	28.12	56.00	46.00	-15.73	-17.88
6	11.22656	10.60	34.62	28.21	45.22	38.81	60.00	50.00	-14.78	-11.19

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

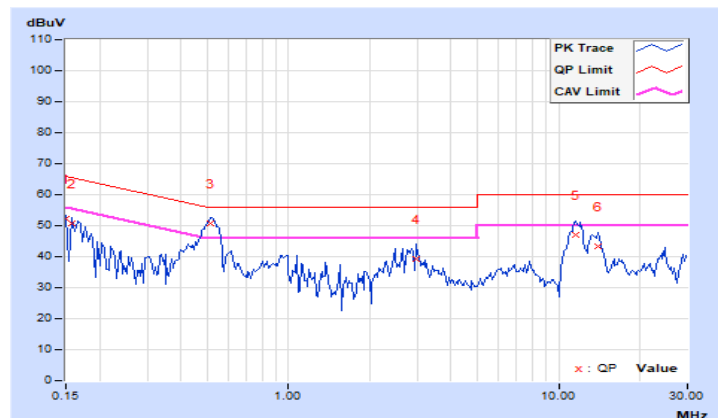


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.92	42.14	25.33	52.06	35.25	66.00	56.00	-13.94	-20.75
2	0.15781	9.92	40.88	26.07	50.80	35.99	65.58	55.58	-14.78	-19.59
3	0.51719	9.97	40.68	31.55	50.65	41.52	56.00	46.00	-5.35	-4.48
4	2.96094	10.08	29.36	18.00	39.44	28.08	56.00	46.00	-16.56	-17.92
5	11.63281	10.48	36.68	30.45	47.16	40.93	60.00	50.00	-12.84	-9.07
6	14.06641	10.59	32.59	26.16	43.18	36.75	60.00	50.00	-16.82	-13.25

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

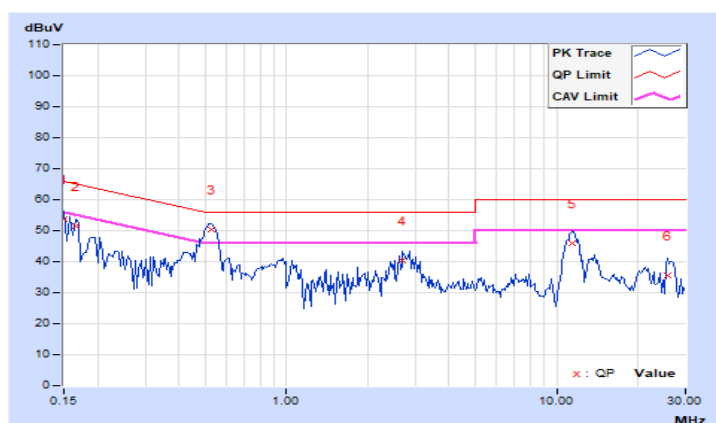


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.95	43.92	27.91	53.87	37.86	66.00	56.00	-12.13	-18.14
2	0.16562	9.96	41.36	25.10	51.32	35.06	65.18	55.18	-13.86	-20.12
3	0.52500	10.00	40.23	30.75	50.23	40.75	56.00	46.00	-5.77	-5.25
4	2.69922	10.10	30.27	18.48	40.37	28.58	56.00	46.00	-15.63	-17.42
5	11.41016	10.61	35.23	28.86	45.84	39.47	60.00	50.00	-14.16	-10.53
6	25.72656	11.24	24.32	16.69	35.56	27.93	60.00	50.00	-24.44	-22.07

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

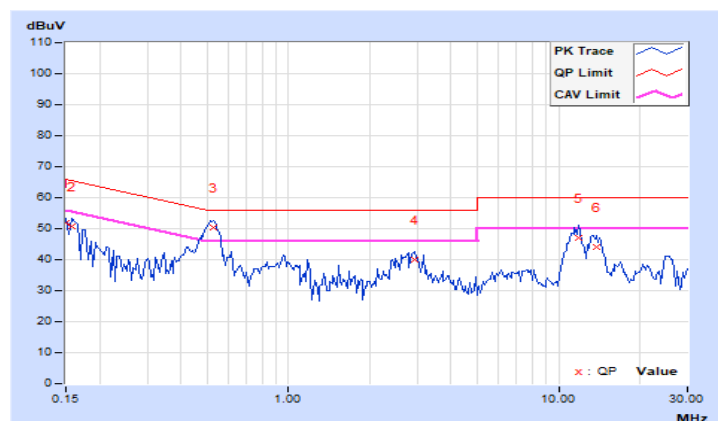


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.92	42.08	24.07	52.00	33.99	66.00	56.00	-14.00	-22.01
2	0.15781	9.92	40.98	26.19	50.90	36.11	65.58	55.58	-14.68	-19.47
3	0.52891	9.97	40.47	31.43	50.44	41.40	56.00	46.00	-5.56	-4.60
4	2.92188	10.08	30.03	18.28	40.11	28.36	56.00	46.00	-15.89	-17.64
5	11.82031	10.49	36.49	30.17	46.98	40.66	60.00	50.00	-13.02	-9.34
6	13.76953	10.58	33.60	27.32	44.18	37.90	60.00	50.00	-15.82	-12.10

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



4.2.8 Test Results (Mode 2)

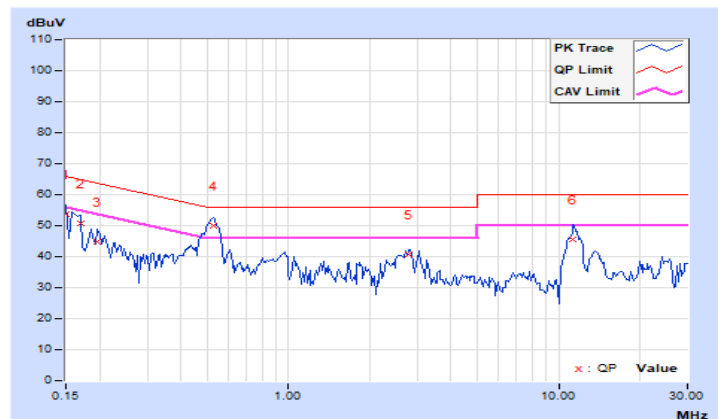
For Bandwidth 1080MHz

RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.95	43.58	27.51	53.53	37.46	66.00	56.00	-12.47	-18.54
2	0.16953	9.96	40.82	23.06	50.78	33.02	64.98	54.98	-14.20	-21.96
3	0.19687	9.97	34.83	19.51	44.80	29.48	63.74	53.74	-18.94	-24.26
4	0.52891	10.00	40.12	30.23	50.12	40.23	56.00	46.00	-5.88	-5.77
5	2.77344	10.11	30.48	18.81	40.59	28.92	56.00	46.00	-15.41	-17.08
6	11.27344	10.61	34.95	28.58	45.56	39.19	60.00	50.00	-14.44	-10.81

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

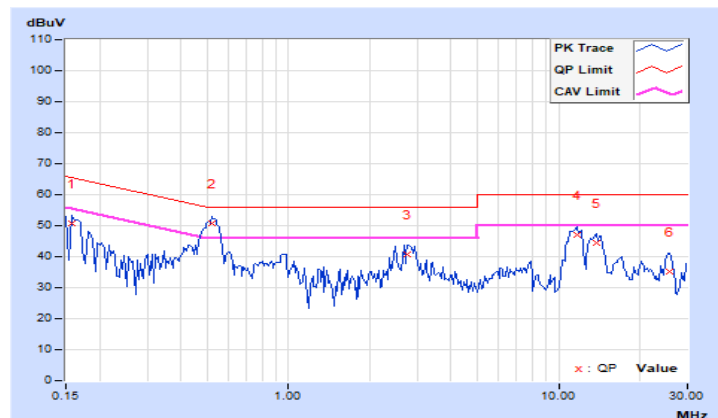


RF Mode	TX 60GHz	Channel	CH 1 : 58.32 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	9.92	41.00	26.03	50.92	35.95	65.58	55.58	-14.66	-19.63
2	0.52109	9.97	40.74	32.12	50.71	42.09	56.00	46.00	-5.29	-3.91
3	2.76953	10.07	30.84	19.03	40.91	29.10	56.00	46.00	-15.09	-16.90
4	11.67578	10.49	36.54	30.36	47.03	40.85	60.00	50.00	-12.97	-9.15
5	13.73828	10.58	33.80	27.52	44.38	38.10	60.00	50.00	-15.62	-11.90
6	25.64453	10.91	24.44	18.49	35.35	29.40	60.00	50.00	-24.65	-20.60

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

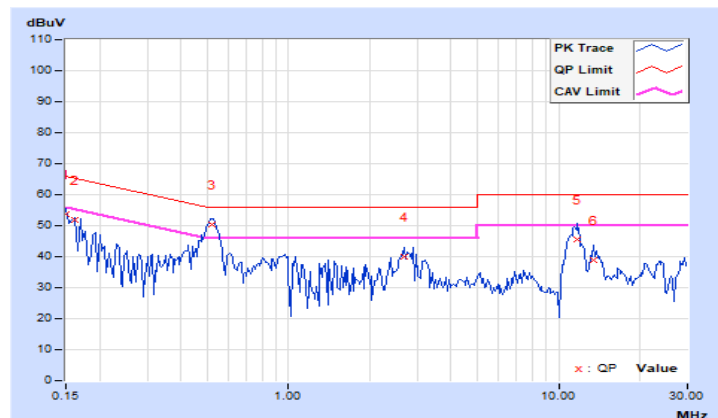


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.95	43.75	28.02	53.70	37.97	66.00	56.00	-12.30	-18.03
2	0.16172	9.95	42.01	26.43	51.96	36.38	65.38	55.38	-13.42	-19.00
3	0.52109	10.00	40.54	31.03	50.54	41.03	56.00	46.00	-5.46	-4.97
4	2.69141	10.10	29.85	18.42	39.95	28.52	56.00	46.00	-16.05	-17.48
5	11.76953	10.64	34.97	28.52	45.61	39.16	60.00	50.00	-14.39	-10.84
6	13.54688	10.74	28.32	21.95	39.06	32.69	60.00	50.00	-20.94	-17.31

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

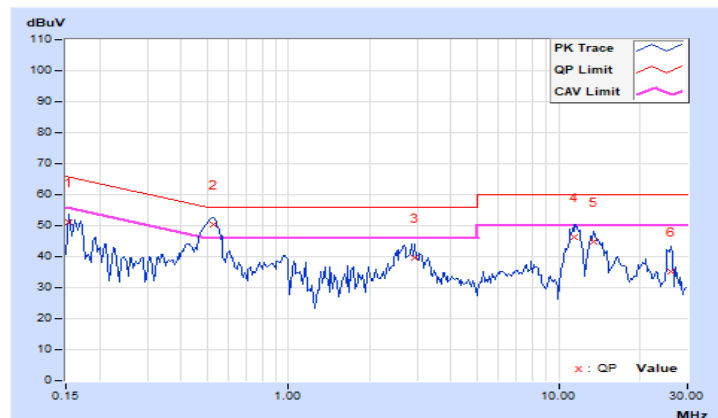


RF Mode	TX 60GHz	Channel	CH 3 : 60.48 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.92	41.28	25.67	51.20	35.59	65.79	55.79	-14.59	-20.20
2	0.52891	9.97	40.35	30.59	50.32	40.56	56.00	46.00	-5.68	-5.44
3	2.94531	10.08	29.41	18.00	39.49	28.08	56.00	46.00	-16.51	-17.92
4	11.35938	10.47	35.80	29.50	46.27	39.97	60.00	50.00	-13.73	-10.03
5	13.50000	10.57	34.09	27.80	44.66	38.37	60.00	50.00	-15.34	-11.63
6	26.16406	10.91	24.45	17.92	35.36	28.83	60.00	50.00	-24.64	-21.17

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

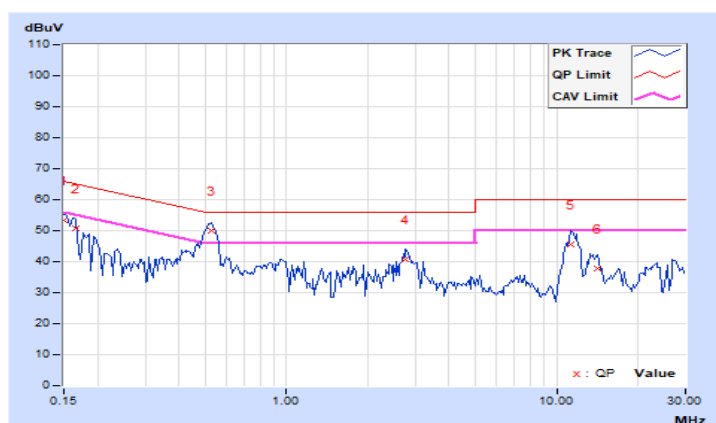


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.95	43.23	26.78	53.18	36.73	66.00	56.00	-12.82	-19.27
2	0.16562	9.96	40.67	24.84	50.63	34.80	65.18	55.18	-14.55	-20.38
3	0.52891	10.00	40.12	30.27	50.12	40.27	56.00	46.00	-5.88	-5.73
4	2.76563	10.11	30.62	18.79	40.73	28.90	56.00	46.00	-15.27	-17.10
5	11.34375	10.61	35.13	28.78	45.74	39.39	60.00	50.00	-14.26	-10.61
6	14.21484	10.78	26.85	20.48	37.63	31.26	60.00	50.00	-22.37	-18.74

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

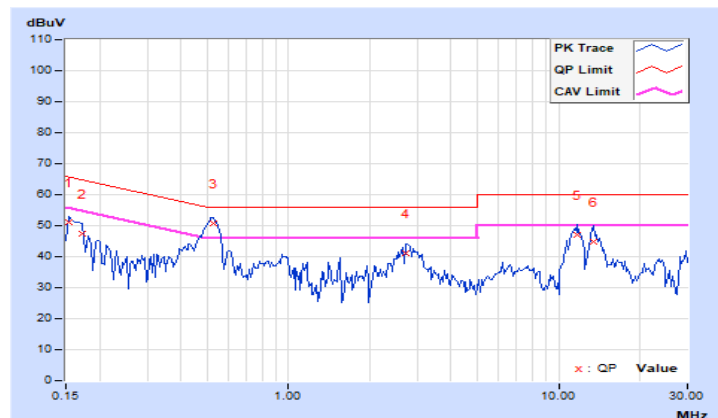


RF Mode	TX 60GHz	Channel	CH 5 : 62.64 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.92	41.12	26.03	51.04	35.95	65.79	55.79	-14.75	-19.84
2	0.17344	9.93	37.35	19.66	47.28	29.59	64.79	54.79	-17.51	-25.20
3	0.52500	9.97	40.59	31.54	50.56	41.51	56.00	46.00	-5.44	-4.49
4	2.73438	10.07	31.06	19.01	41.13	29.08	56.00	46.00	-14.87	-16.92
5	11.78906	10.49	36.50	30.10	46.99	40.59	60.00	50.00	-13.01	-9.41
6	13.46094	10.57	34.21	27.86	44.78	38.43	60.00	50.00	-15.22	-11.57

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

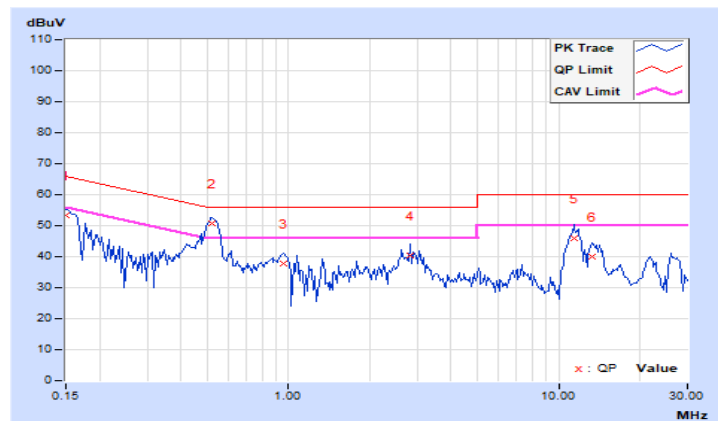


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.95	43.23	26.46	53.18	36.41	66.00	56.00	-12.82	-19.59
2	0.52109	10.00	40.64	31.86	50.64	41.86	56.00	46.00	-5.36	-4.14
3	0.96250	10.03	27.82	16.36	37.85	26.39	56.00	46.00	-18.15	-19.61
4	2.80859	10.11	30.28	18.94	40.39	29.05	56.00	46.00	-15.61	-16.95
5	11.37500	10.61	35.33	28.84	45.94	39.45	60.00	50.00	-14.06	-10.55
6	13.23438	10.72	29.30	22.62	40.02	33.34	60.00	50.00	-19.98	-16.66

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

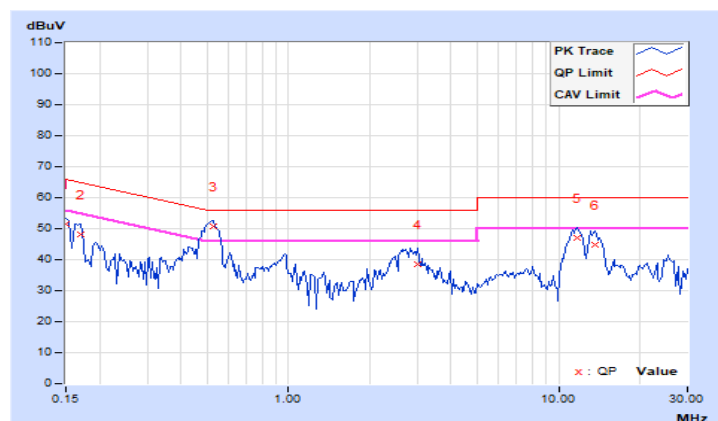


RF Mode	TX 60GHz	Channel	CH 11 : 69.12 GHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.92	41.55	23.42	51.47	33.34	66.00	56.00	-14.53	-22.66
2	0.16953	9.93	38.36	22.73	48.29	32.66	64.98	54.98	-16.69	-22.32
3	0.52500	9.97	40.66	31.63	50.63	41.60	56.00	46.00	-5.37	-4.40
4	3.01563	10.08	28.54	17.24	38.62	27.32	56.00	46.00	-17.38	-18.68
5	11.64844	10.48	36.51	30.21	46.99	40.69	60.00	50.00	-13.01	-9.31
6	13.72656	10.58	34.29	28.00	44.87	38.58	60.00	50.00	-15.13	-11.42

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

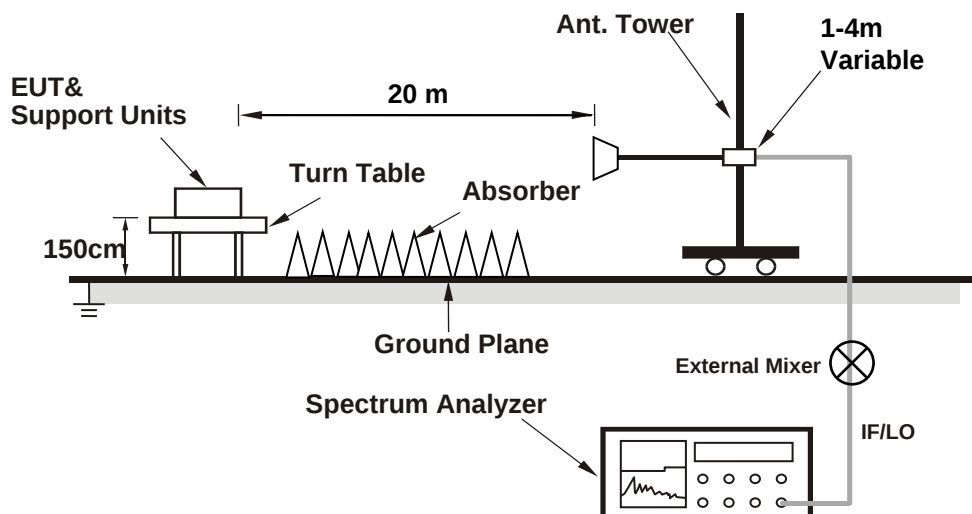


4.3 6dB Bandwidth Measurement

4.3.1 Limits of 6dB Bandwidth Measurement

None: For reporting purposes only.

4.3.2 Test Setup



4.3.3 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer Keysight	N9030A	MY55330160	Feb. 07, 2020	Feb. 06, 2021
*Conical Horn Antenna (50~75GHz) Keysight	WR15CH-Conical	WR15CH_001	Jan. 20, 2020	Jan. 19, 2022
N9029AV15-DC9 - 50-75 GHz VDI Standard Downconverter with 9VDC supply Keysight	SA Extension WR15	SAX 381	CoC	CoC

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. *The calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. Certificate of Conformance (CoC) which is issued by manufacturer states that the product meets the specification.
4. Tested Date: Jan. 30, 2021

4.3.4 Test Procedure

- a. Set resolution bandwidth (RBW) = 100kHz
- b. Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- c. Trace mode = max hold.
- d. Sweep = auto couple.
- e. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

4.3.5 Deviation from Test Standard

No deviation.

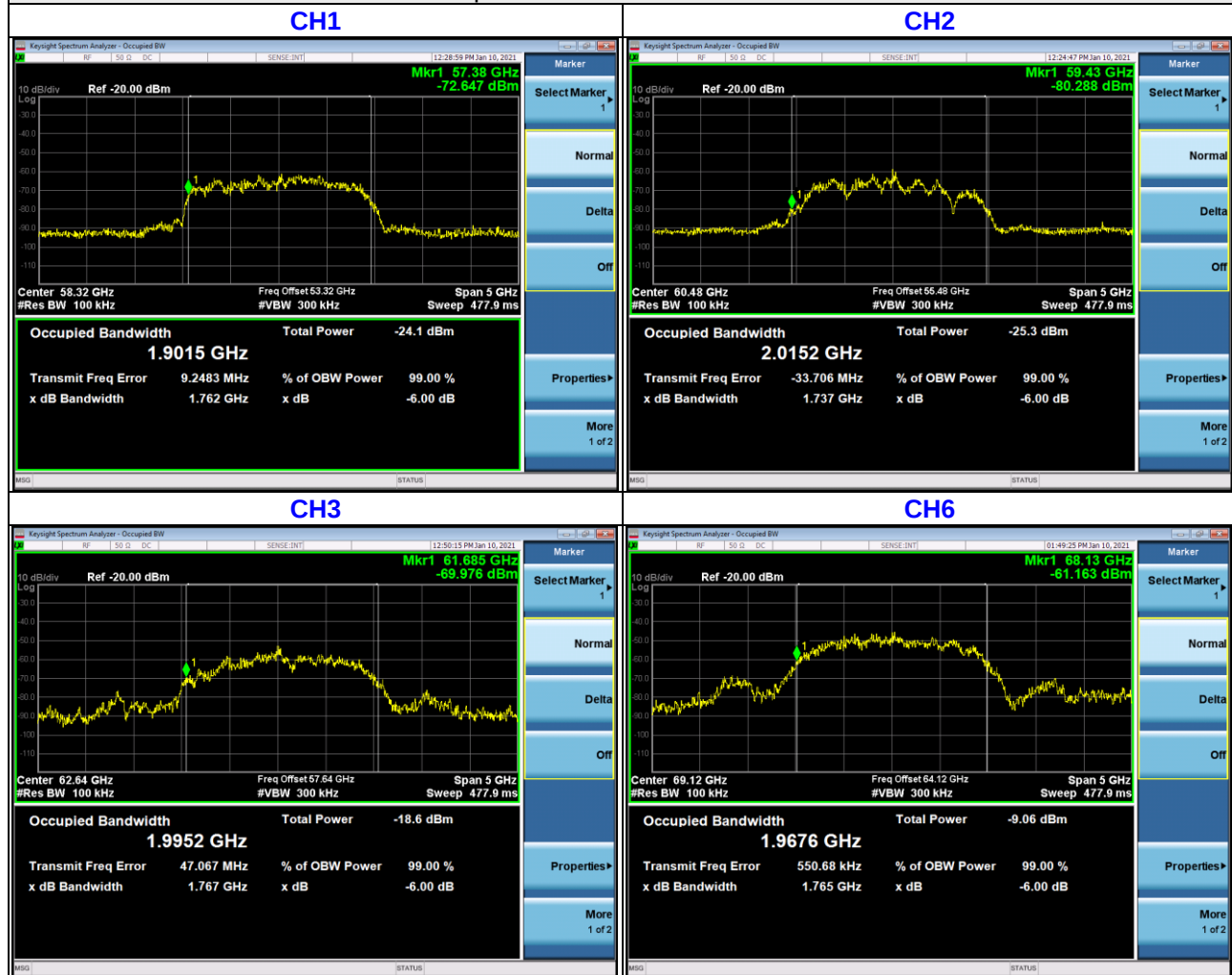
4.3.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 Test Result (Mode 1) For Bandwidth 2160MHz

Channel	Frequency (MHz)	6dB Bandwidth (MHz)
1	58320	1762.00
3	60480	1737.00
5	62640	1767.00
11	69120	1765.00

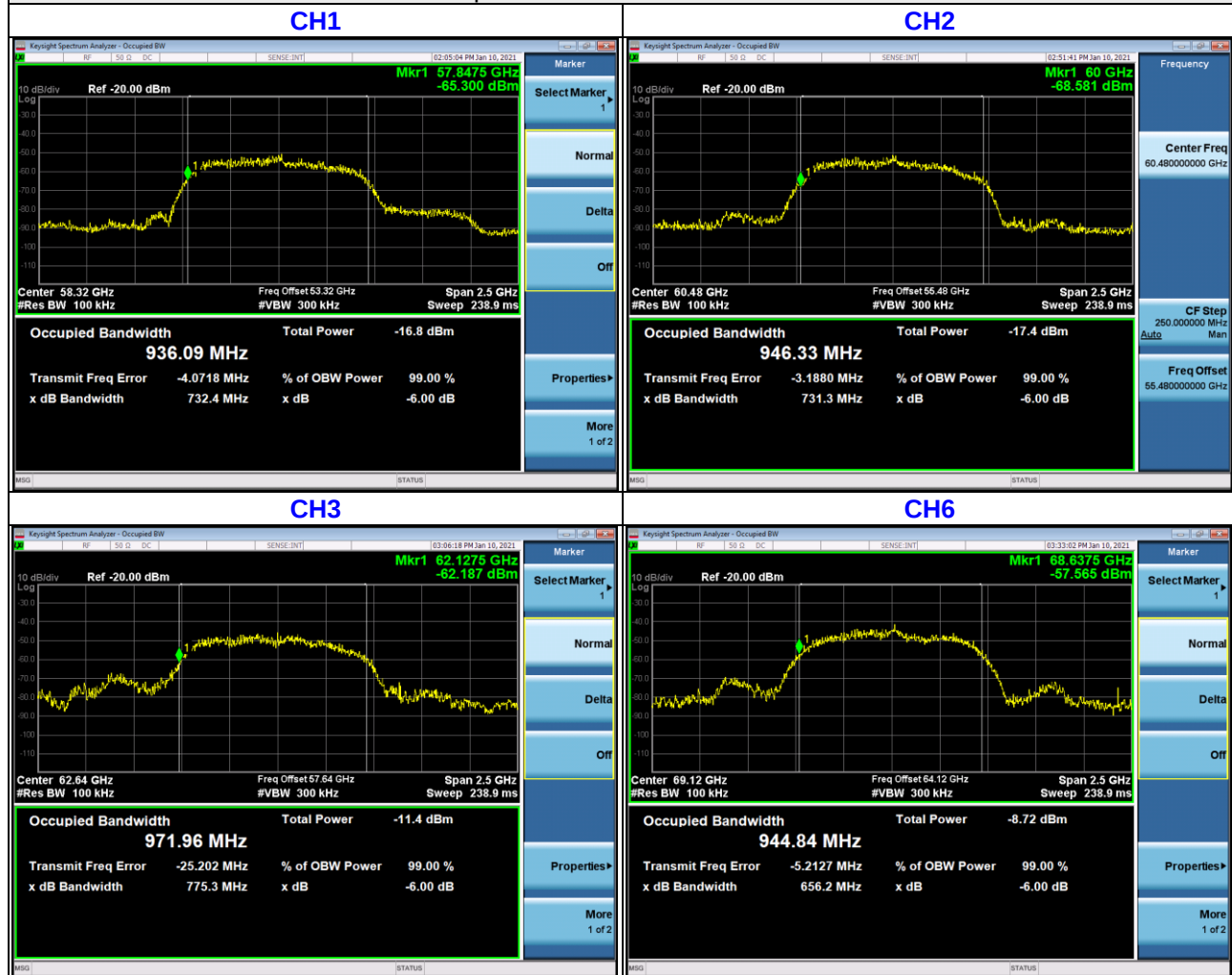
Spectrum Plot of Worst Value



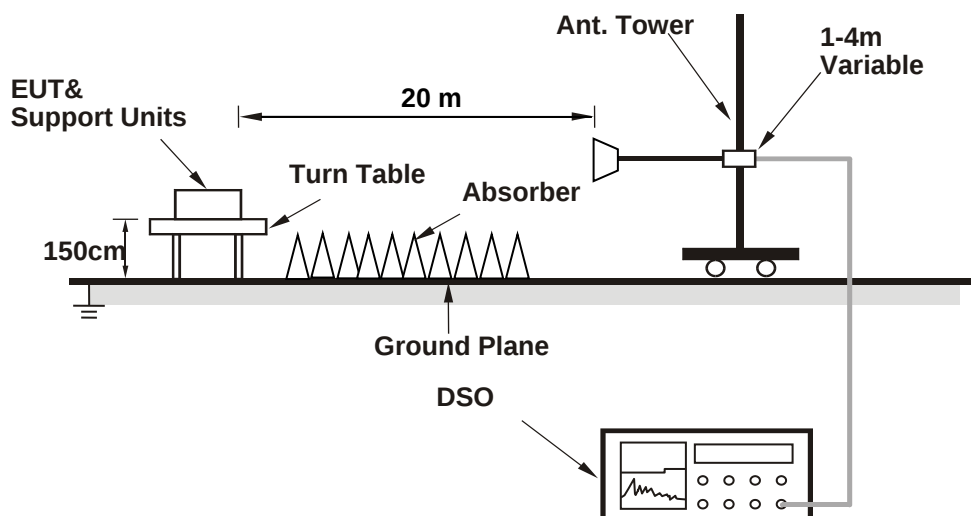
4.3.8 Test Result (Mode 2) For Bandwidth 1080MHz

Channel	Frequency (MHz)	6dB Bandwidth (MHz)
1	58320	732.00
3	60480	731.30
5	62640	775.30
11	69120	656.20

Spectrum Plot of Worst Value



4.4.2 Test Setup



4.4.3 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer Keysight	N9030A	MY55330160	Feb. 07, 2020	Feb. 06, 2021
Zero-Bias Detector (50~75GHz) VDI	WR15ZBD	WR15R5 1-30	CoC	CoC
4CH Infiniivision Oscilloscope Keysight	DSOX6004A	MY55190202	July 03, 2020	July 02, 2021
*Conical Horn Antenna (50~75GHz) Keysight	WR15CH-Conical	WR15CH_001	Jan. 20, 2020	Jan. 19, 2022
N9029AV15-DC9 - 50-75 GHz VDI Standard Downconverter with 9VDC supply Keysight	SA Extension WR15	SAX 381	CoC	CoC
Millimeter-Wave Signal Generator Frequency Extension Module (50~75 GHz) Keysight	E8257DV15	SGX 050	CoC	CoC
PSG analog signal generator Keysight	E8257D	MY53401987	June 17, 2020	June 16, 2021

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. *The calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. Certificate of Conformance (CoC) which is issued by manufacturer states that the product meets the specification.
4. Tested Date: Jan. 27, 2021

4.4.4 Test Procedures

- Place the EUT in a continuous transmission mode.
- For radiated emission measurements, attach a test receive antenna for the fundamental frequency band to the RF input of an RF detector or a downconverter with an RF detector at the output.
- Connect the video output of the detector to the 50 ohm input of the DSO.
- Place the test receive antenna in the main beam of the EUT at a distance which will provide a signal within the operating range of the RF detector.
- Set the sampling rate of the DSO to the required value. Adjust the memory depth, the triggering and the sweep speed to obtain a display which is representative of the signal considering the type of modulation.
- For radiated emission measurements, calculate the distance to the far field boundary of the fundamental emission using following equation

$$R \text{ far field} = (2 * L^2) / \lambda$$

Where:

L is the Largest Antenna Dimension of either the EUT antenna or measurement antenna, including the reflector

λ is the wavelength

Frequency (GHz)	L (m)	Lambda (m)	R (Far Field) (m)
58.32	0.65	0.00514	164.397
60.48	0.65	0.00496	170.363
62.64	0.65	0.00479	176.409
69.12	0.65	0.00434	194.7

Note: Follow ANSI C63.10, when far-field measurements are not practical, and the test laboratory intends to use a distance attenuation factor other than 20 dB/decade of distance.

*Measurements made at 20 meter distance.

- Perform radiated emission measurements to keep maximize the received signal from the EUT in the far field.
- Record the average and peak from the DSO and the measurement distance.
- Disconnect the EUT from the RF input port of the instrumentation system.
- Connect a mm-wave source to the RF input port of the instrumentation system via a waveguide variable attenuator. The mm-wave source is unmodulated.
- Using substitution measurement.
- Measure and note the power.
- For conducted power measurements, calculate the conducted power using following equation

$$P_{\text{cond}} = \text{EIRP} - G_{\text{dBi}}$$

4.4.5 Deviation from Test Standard

No deviation.

4.4.6 EUT Operating Conditions

Same as Item 4.3.6.

4.4.7 Test Results (Mode 1)

For Bandwidth 2160MHz

For Output Power (EIRP)

Channel	Frequency (GHz)	DSO Value (mV)	Power (dBm)	Gain of Test Antenna (dBi)	E _{Meas} (dBμV/m)	EIRP Level (dBm)	EIRP Limit (dBm)	Pass/Fail
1	58.32	1.30	-3.32	20.50	148.75	70.07 PK	77.00	Pass
		0.65	-6.38	20.50	145.69	67.01 AV	74.00	Pass
3	60.48	1.21	-3.59	20.50	148.80	70.12 PK	77.00	Pass
		0.71	-6.45	20.50	145.94	67.26 AV	74.00	Pass
5	62.64	1.30	-2.65	21.40	149.14	70.47 PK	77.00	Pass
		0.81	-5.41	21.40	146.38	67.71 AV	74.00	Pass
11	69.12	1.26	-3.68	21.40	148.97	70.29 PK	77.00	Pass
		0.75	-6.48	21.40	146.17	67.49 AV	74.00	Pass

Note:

1. The measured power level is converted to EIRP using the equation:

Follow ANSI 63.10 section 9.4 Equations to calculate and extrapolate field strength

$$E_{\text{Meas}} (\text{dB}\mu\text{V/m}) = 126.8 - 20\log(\lambda) + P - G$$

where:

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

P is the power measured at the output of the test antenna, in dBm

λ is the wavelength of the emission under investigation [300/fMHz], in m

G is the gain of the test antenna, in dBi

Follow ANSI 63.10 section 9.5 Equations to calculate EIRP

$$\text{EIRP Level (dBm/MHz)} = E_{\text{Meas}} (\text{dB}\mu\text{V/m}) + 20 \cdot \log(d_{\text{Meas}}) - 104.7$$

where:

EIRP is the equivalent isotropically radiated power, in dBm

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

d_{Meas} is the measurement distance, in m

Measurements made at 20 meter distance

2. The far-field boundary is given in ANSI 63.10 as:

$$R_{\text{far field}} = (2 \cdot L^2) / \lambda$$

L is the Largest Antenna Dimension of either the EUT antenna or measurement antenna, including the reflector

λ is the wavelength

For Peak Output Power (Conducted Power)

Channel	Frequency (GHz)	EIRP (dBm)	Max. Gain (dBi)	Conducted Output Power (dBm)	Conducted Output Power (mW)	Conducted Output Power limit (mW)	Pass /Fail
1	58.32	70.07	47	23.07	202.77	500	Pass
3	60.48	70.12	47	23.12	205.12	500	Pass
5	62.64	70.47	47	23.47	222.33	500	Pass
11	69.12	70.29	47	23.29	213.30	500	Pass

4.4.8 Test Results (Mode 2)

For Bandwidth 1080MHz

For Output Power (EIRP)

Channel	Frequency (GHz)	DSO Value (mV)	Power (dBm)	Gain of Test Antenna (dBi)	E _{Meas} (dBμV/m)	EIRP Level (dBm)	EIRP Limit (dBm)	Pass/Fail
1	58.32	1.17	-3.82	20.50	148.25	69.57 PK	77.00	Pass
		0.59	-6.83	20.50	145.24	66.56 AV	74.00	Pass
3	60.48	1.16	-3.96	20.50	148.43	69.75 PK	77.00	Pass
		0.65	-6.79	20.50	145.60	66.92 AV	74.00	Pass
5	62.64	1.26	-2.95	21.40	148.84	70.17 PK	77.00	Pass
		0.75	-5.72	21.40	146.07	67.4 AV	74.00	Pass
11	69.12	1.23	-3.99	21.40	148.66	69.98 PK	77.00	Pass
		0.71	-6.73	21.40	145.92	67.24 AV	74.00	Pass

Note:

1. The measured power level is converted to EIRP using the equation:

Follow ANSI 63.10 section 9.4 Equations to calculate and extrapolate field strength

$$E_{\text{Meas}} (\text{dB}\mu\text{V/m}) = 126.8 - 20\log(\lambda) + P - G$$

where:

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

P is the power measured at the output of the test antenna, in dBm

λ is the wavelength of the emission under investigation [300/fMHz], in m

G is the gain of the test antenna, in dBi

Follow ANSI 63.10 section 9.5 Equations to calculate EIRP

$$\text{EIRP Level (dBm/MHz)} = E_{\text{Meas}} (\text{dB}\mu\text{V/m}) + 20 \cdot \log(d_{\text{Meas}}) - 104.7$$

where:

EIRP is the equivalent isotropically radiated power, in dBm

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

d_{Meas} is the measurement distance, in m

Measurements made at 20 meter distance

2. The far-field boundary is given in ANSI 63.10 as:

$$R_{\text{far field}} = (2 \cdot L^2) / \lambda$$

L is the Largest Antenna Dimension of either the EUT antenna or measurement antenna, including the reflector

λ is the wavelength

For Peak Output Power (Conducted Power)

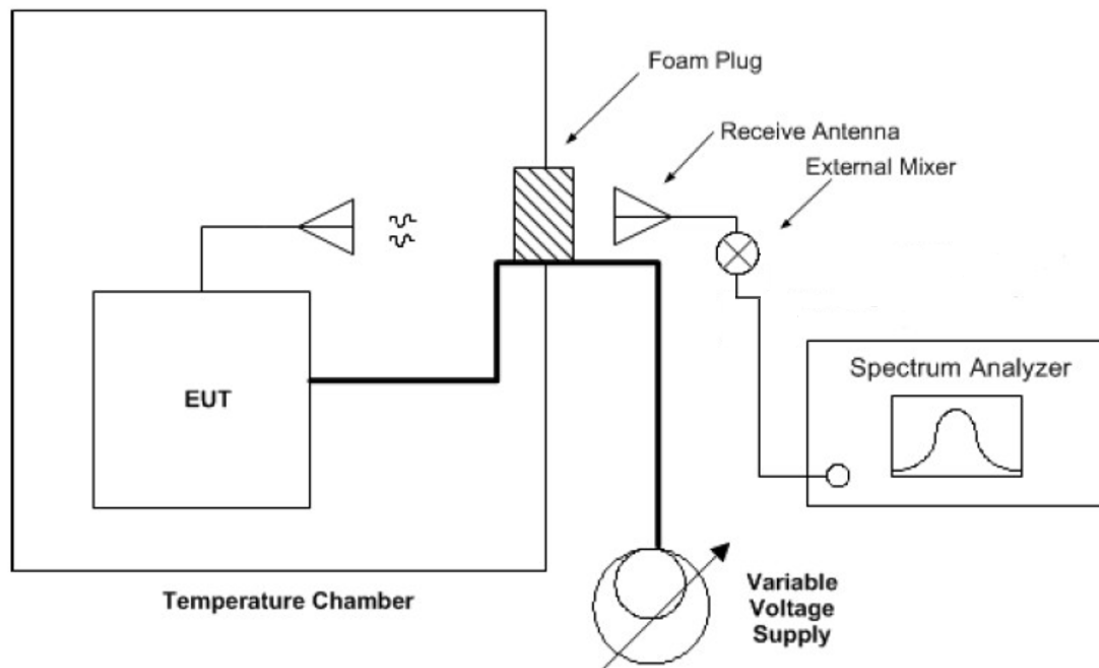
Channel	Frequency (GHz)	EIRP (dBm)	Max. Gain (dBi)	Conducted Output Power (dBm)	Conducted Output Power (mW)	Conducted Output Power limit (mW)	Pass /Fail
1	58.32	69.57	47	22.57	180.72	500	Pass
3	60.48	69.75	47	22.75	188.36	500	Pass
5	62.64	70.17	47	23.17	207.49	500	Pass
11	69.12	69.98	47	22.98	198.61	500	Pass

4.5 Frequency Stability Measurement

4.5.1 Limits of Frequency Stability Measurement

15.255(f) Fundamental emissions must be contained within the frequency bands specified in this section during all conditions of operation.

4.5.2 Test Setup



4.5.3 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
N9029AV15-DC9 - 50-75 GHz VDI Standard Downconverter with 9VDC supply Keysight	SA Extension WR15	SAX 381	CoC	CoC
*Conical Horn Antenna (50~75GHz) Keysight	WR15CH-Conical	WR15CH_001	Jan. 20, 2020	Jan. 19, 2022
Spectrum Analyzer Keysight	N9030A	MY55330160	Feb. 07, 2020	Feb. 06, 2021
DC Power Supply Topward	6603D	795558	NA	NA
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	Jan. 14, 2021	Jan. 13, 2022
True RMS Clamp Meter FLUKE	325	31130711WS	June 06, 2020	June 05, 2021

- NOTE:**
1. The test was performed in Oven room 2.
 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 3. *The calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
 4. Certificate of Conformance (CoC) which is issued by manufacturer states that the product meets the specification.
 5. Tested Date: Jan. 30, 2021

4.5.4 Test Procedure

- a. Arrange EUT and test equipment as above setup configuration.
- b. With the EUT at ambient temperature and voltage source set to the EUT nominal operating voltage (100%), record the spectrum mask of the EUT emission on the spectrum analyzer.
- c. Vary EUT power supply between 85% and 115% of nominal, and record the frequency excursion of the EUT emission mask.
- d. Set the power supply to 100% nominal setting, and raise EUT operating temperature to 55 °C. Record the frequency excursion of the EUT emission mask.
- e. Repeat step d) at each 10 °C increment down to -40 °C

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Condition

Same as Item 4.3.6

4.5.7 Test Results (Mode 1) For Bandwidth 2160MHz

Frequency Stability Versus Temp.													
Operating Frequency: 58320 MHz													
TEMP. (°C)	Power Supply (Vdc)	0 minutes			2 minutes			5 minutes			10 minutes		
		FL(MHz)	FH(MHz)	PASS/ FAIL	FL(MHz)	FH(MHz)	PASS/ FAIL	FL(MHz)	FH(MHz)	PASS/ FAIL	FL(MHz)	FH(MHz)	PASS/ FAIL
55	48	57349.78	59305.57	PASS	57349.76	59305.55	PASS	57349.78	59305.58	PASS	57349.75	59305.59	PASS
50	48	57350.14	59305.46	PASS	57350.12	59305.46	PASS	57350.14	59305.47	PASS	57350.11	59305.47	PASS
40	48	57349.93	59305.79	PASS	57349.90	59305.75	PASS	57349.92	59305.79	PASS	57349.92	59305.76	PASS
30	48	57349.78	59305.36	PASS	57349.79	59305.38	PASS	57349.77	59305.35	PASS	57349.80	59305.35	PASS
20	48	57350.29	59305.41	PASS	57350.28	59305.42	PASS	57350.27	59305.38	PASS	57350.25	59305.40	PASS
10	48	57349.91	59305.31	PASS	57349.92	59305.29	PASS	57349.91	59305.31	PASS	57349.92	59305.27	PASS
0	48	57349.98	59305.65	PASS	57350.02	59305.65	PASS	57349.99	59305.65	PASS	57349.97	59305.66	PASS
-10	48	57350.16	59305.69	PASS	57350.17	59305.67	PASS	57350.15	59305.68	PASS	57350.18	59305.68	PASS
-20	48	57327.77	59240.68	PASS	57327.77	59240.63	PASS	57327.77	59240.67	PASS	57327.81	59240.65	PASS
-30	48	57328.00	59240.90	PASS	57327.97	59240.89	PASS	57327.98	59240.89	PASS	57327.98	59240.91	PASS
-40	48	57328.03	59240.86	PASS	57328.03	59240.86	PASS	57328.03	59240.83	PASS	57328.03	59240.86	PASS

Frequency Stability Versus Voltage													
Operating Frequency: 58320 MHz													
TEMP. (°C)	Power Supply (Vdc)	0 minutes			2 minutes			5 minutes			10 minutes		
		FL(MHz)	FH(MHz)	PASS/ FAIL	FL(MHz)	FH(MHz)	PASS/ FAIL	FL(MHz)	FH(MHz)	PASS/ FAIL	FL(MHz)	FH(MHz)	PASS/ FAIL
20	55.2	57350.28	59305.40	PASS	57350.28	59305.42	PASS	57350.27	59305.38	PASS	57350.25	59305.41	PASS
	48	57350.29	59305.41	PASS	57350.28	59305.42	PASS	57350.27	59305.38	PASS	57350.25	59305.40	PASS
	40.8	57350.28	59305.42	PASS	57350.27	59305.43	PASS	57350.26	59305.37	PASS	57350.25	59305.40	PASS

4.5.8 Test Results (Mode 2) For Bandwidth 1080MHz

Frequency Stability Versus Temp.													
Operating Frequency: 58320 MHz													
TEMP. (°C)	Power Supply (Vdc)	0 minutes			2 minutes			5 minutes			10 minutes		
		FL(MHz)	FH(MHz)	PASS/ FAIL	FL(MHz)	FH(MHz)	PASS/ FAIL	FL(MHz)	FH(MHz)	PASS/ FAIL	FL(MHz)	FH(MHz)	PASS/ FAIL
55	48	57850.14	58788.61	PASS	57850.13	58788.61	PASS	57850.12	58788.58	PASS	57850.15	58788.58	PASS
50	48	57849.90	58788.53	PASS	57849.90	58788.49	PASS	57849.93	58788.54	PASS	57849.89	58788.50	PASS
40	48	57850.10	58788.44	PASS	57850.06	58788.40	PASS	57850.07	58788.42	PASS	57850.11	58788.41	PASS
30	48	57849.99	58788.11	PASS	57850.01	58788.13	PASS	57849.99	58788.11	PASS	57850.00	58788.09	PASS
20	48	57850.18	58788.09	PASS	57850.15	58788.08	PASS	57850.17	58788.08	PASS	57850.18	58788.08	PASS
10	48	57850.05	58788.33	PASS	57850.07	58788.33	PASS	57850.09	58788.32	PASS	57850.04	58788.35	PASS
0	48	57850.07	58788.09	PASS	57850.04	58788.06	PASS	57850.08	58788.07	PASS	57850.08	58788.08	PASS
-10	48	57849.76	58788.17	PASS	57849.75	58788.20	PASS	57849.72	58788.20	PASS	57849.75	58788.20	PASS
-20	48	57327.77	59240.68	PASS	57327.77	59240.63	PASS	57327.77	59240.67	PASS	57327.81	59240.65	PASS
-30	48	57328.00	59240.90	PASS	57327.97	59240.89	PASS	57327.98	59240.89	PASS	57327.98	59240.91	PASS
-40	48	57328.03	59240.86	PASS	57328.03	59240.86	PASS	57328.03	59240.83	PASS	57328.03	59240.86	PASS

Frequency Stability Versus Voltage													
Operating Frequency: 58320 MHz													
TEMP. (°C)	Power Supply (Vdc)	0 minutes			2 minutes			5 minutes			10 minutes		
		FL(MHz)	FH(MHz)	PASS/ FAIL	FL(MHz)	FH(MHz)	PASS/ FAIL	FL(MHz)	FH(MHz)	PASS/ FAIL	FL(MHz)	FH(MHz)	PASS/ FAIL
20	55.2	57850.17	58788.09	PASS	57850.14	58788.09	PASS	57850.16	58788.08	PASS	57850.18	58788.07	PASS
	48	57850.18	58788.09	PASS	57850.15	58788.08	PASS	57850.17	58788.08	PASS	57850.18	58788.08	PASS
	40.8	57850.18	58788.10	PASS	57850.15	58788.07	PASS	57850.17	58788.08	PASS	57850.17	58788.08	PASS

5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Appendix – Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

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