

DFS PORTION of FCC 47 CFR PART 15 SUBPART E

TEST REPORT

FOR

GSM/WCDMA/LTE/5G Phone with BT, DTS/UNII a/b/g/n/ac/ax, GPS, WPT & NFC

FCC ID: PY7-43624K

REPORT NUMBER: R14777408-D1

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Prepared for SONY CORPORATION 1-7-1 KONAN MINATO-KU TOKYO, 108-0075, JAPAN

Prepared by UL LLC 12 Laboratory Dr. Research Triangle Park, NC 27709 U.S.A. TEL: (919) 549-1400



Revision History

Rev.	lssue Date	Revisions	Revised By	
V1	2023-07-17	Initial Issue	Samuel Bryson	

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1. ATTESTATION OF TEST RESULTS

- **COMPANY NAME:** Sony Corporation 1-7-1 Konan Minato-ku Tokyo, 108-0075, Japan
- GSM/WCDMA/LTE/5G Phone with BT, DTS/UNII a/b/g/n/ac/ax, EUT DESCRIPTION: GPS, WPT & NFC
- SERIAL NUMBER: QV77003WHT

DATE TESTED: 2023-07-05

APPLICABLE STANDARDS				
STANDARD	TEST RESULTS			
DFS Portion of CFR 47 Part 15 Subpart E	Complies			

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, any agency of the Federal Government, or any agency of the U.S. government.

Approved & Released For UL LLC By:

ma flory

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Prepared By:

Samuel Bryson Laboratory Technician CONSUMER TECHNOLOGY DIVISION **UL LLC**

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with the DFS portion of FCC CFR 47 Part 2, FCC CFR 47 Part 15, FCC KDB 789033, KDB 905462 D02 and D03.

3. SUMMARY OF TEST RESULTS

Requirement Description	Result	Remarks
DFS Portion of FCC 47 CFR PART 15 SUBPART E	Complies	

4. REFERENCE DOCUMENTS

Measurements of transmitter parameters as referenced in this report and all other manufacturer's declarations relevant to the RF test requirements are documented in UL LLC report number R14777340-E5.

This report contains data provided by the customer which can impact the validity of results. UL LLC is only responsible for the validity of results after the integration of the data provided by the customer.

Below is a list of the data provided by the customer:

1. Antenna gain and type (see section 7.1.6)

5. FACILITIES AND ACCREDITATION

UL LLC is accredited by A2LA, certification # 0751.06, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration	
	Building: 12 Laboratory Dr RTP, NC 27709, U.S.A	US0067	2180C	005074	
\boxtimes	Building: 2800 Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A	030007	27265	825374	

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6. DECISION RULES AND MEASUREMENT UNCERTAINTY

6.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

6.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement).

7. DYNAMIC FREQUENCY SELECTION

7.1. OVERVIEW

7.1.1. LIMITS

FCC

§15.407 (h), FCC KDB 905462 D02 "COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION" and KDB 905462 D03 "U-NII CLIENT DEVICES WITHOUT RADAR DETECTION CAPABILITY".

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Table 1: Applicability of DFS requirements prior to use of a channel

Requirement	Operational Mode			
	Master	Client (without radar detection)	Client (with radar detection)	
Non-Occupancy Period	Yes	Not required	Yes	
DFS Detection Threshold	Yes	Not required	Yes	
Channel Availability Check Time	Yes	Not required	Not required	
U-NII Detection Bandwidth	Yes	Not required	Yes	

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode			
	Master	Client	Client	
		(without DFS)	(with DFS)	
DFS Detection Threshold	Yes	Not required	Yes	
Channel Closing Transmission Time	Yes	Yes	Yes	
Channel Move Time	Yes	Yes	Yes	
U-NII Detection Bandwidth	Yes	Not required	Yes	

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar DFS	Client (without DFS)			
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required			
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link			
All other tests	Any single BW mode	Not required			
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in all 20 MHz channel blocks and a null frequency between the bonded 20 MHz channel blocks.					

Table 3: Interference Threshold values, Master or Client incorporating In-Service Monitorina

Maximum Transmit Power	Value				
	(see notes)				
E.I.R.P. ≥ 200 mill watt	-64 dBm				
E.I.R.P. < 200 mill watt and	-62 dBm				
power spectral density < 10 dBm/MHz					
E.I.R.P. < 200 mill watt that do not meet power spectral	-64 dBm				
density requirement					
Note 1: This is the level at the input of the receiver assuming	a 0 dBi receive antenna				
Note 2: Throughout these test procedures an additional 1 dB					
amplitude of the test transmission waveforms to account for w	ariations in measurement				
equipment. This will ensure that the test signal is at or above	the detection threshold level to				
trigger a DFS response.					
Note 3: E.I.R.P. is based on the highest antenna gain. For N	/IMO devices refer to KDB				
publication 662911 D01.					

Table 4: DFS Response requirement values

Table 4. Di o Response requirement values	
Parameter	Value
Non-occupancy period	30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds (See Note 1)
Channel Closing Transmission Time	200 milliseconds + approx. 60 milliseconds over remaining 10 second period. (See Notes 1 and 2)
U-NII Detection Bandwidth	Minimum 100% of the U- NII 99% transmission power bandwidth. (See Note 3)

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

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Table 5 – Short Pulse Radar Test Waveforms

Radar	Pulse	PRI	Pulses	Minimum	Minimum		
	Width		1 01565		Trials		
Туре		(usec)		Percentage	Thais		
	(usec)			of Successful			
		4.400	10	Detection	0 N 1		
0	1	1428	18	See Note 1	See Note		
					1		
1	1	Test A: 15 unique		60%	30		
		PRI values randomly					
		selected from the list	Roundup:				
		of 23 PRI values in	{(1/360) x (19 x 10 ⁶ /PRI _{usec})}				
		table 5a					
		Test B: 15 unique					
		PRI values randomly					
		selected within the					
		range of 518-3066					
		usec. With a					
		minimum increment					
		of 1 usec, excluding					
		PRI values selected					
		in Test A					
	4.5		00.00	000/			
2	1-5	150-230	23-29	60%	30		
3	6-10	200-500	16-18	60%	30		
4	11-20	200-500	12-16	60%	30		
		Aggregate (Radar T	ypes 1-4)	80%	120		
Note 1	: Short P	ulse Radar Type 0 shou	ld be used for the Detection Bar	ndwidth test, Ch	annel		
		Channel Closing Time to					

Table 6 – Long Pulse Radar Test Signal

Radar	Pulse	Chirp	PRI	Pulses	Number	Minimum	Minimum
Waveform	Width	Width	(µsec)	per	of	Percentage	Trials
Туре	(µsec)	(MHz)	,	Burst	Bursts	of Successful	
	,	· · ·				Detection	
5	50-100	5-20	1000-	1-3	8-20	80%	30
			2000				

Table 7 – Frequency Hopping Radar Test Signal

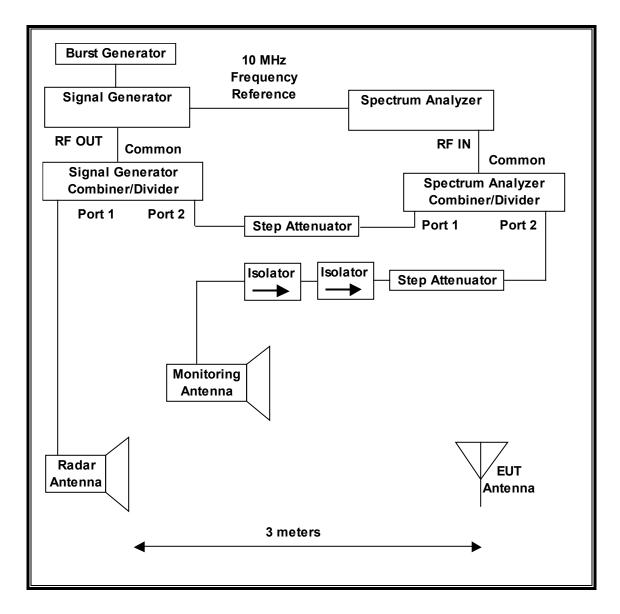
Radar	Pulse	PRI	Pulses	Hopping	Hopping	Minimum	Minimum
Waveform	Width	(µsec)	per	Rate	Sequence	Percentage of	Trials
Туре	(µsec)		Нор	(kHz)	Length	Successful	
				. ,	(msec)	Detection	
6	1	333	9	0.333	300	70%	30

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7.1.2. TEST AND MEASUREMENT SYSTEM

RADIATED METHOD SYSTEM BLOCK DIAGRAM



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SYSTEM OVERVIEW

The short pulse and long pulse signal generating system utilizes the NTIA software. The Vector Signal Generator has been validated by the NTIA. The hopping signal generating system utilizes the CCS simulated hopping method and system, which has been validated by the DoD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

The short pulse types 1, 2, 3 and 4, and the long pulse type 5 parameters are randomized at run-time.

The hopping type 6 pulse parameters are fixed while the hopping sequence is based on the August 2005 NTIA Hopping Frequency List. The initial starting point randomized at run-time and each subsequent starting point is incremented by 475. Each frequency in the 100-length segment is compared to the boundaries of the EUT Detection Bandwidth and the software creates a hopping burst pattern in accordance with Section 7.4.1.3 Method #2 Simulated Frequency Hopping Radar Waveform Generating Subsystem of KDB 905462 D02. The frequency of the signal generator is incremented in 1 MHz steps from F_L to F_H for each successive trial. This incremental sequence is repeated as required to generate a minimum of 30 total trials and to maintain a uniform frequency distribution over the entire Detection Bandwidth.

The signal monitoring equipment consists of a spectrum analyzer. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection and max hold.

SYSTEM CALIBRATION

A 50-ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to a horn antenna via a coaxial cable, with the reference level offset set to (horn antenna gain – coaxial cable loss). The signal generator is set to CW mode. The amplitude of the signal generator is adjusted to yield a level of –64 dBm as measured on the spectrum analyzer.

Without changing any of the instrument settings, the spectrum analyzer is reconnected to the Common port of the Spectrum Analyzer Combiner/Divider. The Reference Level Offset of the spectrum analyzer is adjusted so that the displayed amplitude of the signal is –64 dBm.

The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of –64 dBm and the spectrum analyzer will still indicate the level as received by the Master Device.

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ADJUSTMENT OF DISPLAYED TRAFFIC LEVEL

A link is established between the Master and Slave and the distance between the units is adjusted as needed to provide a suitable received level at the Master and Slave devices. Traffic that meets or exceed the minimum loading requirement is streamed from the Master device to the Slave Device. The monitoring antenna is adjusted so that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold.

TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST						
Description	Manufacturer	Model	ID No.	Cal Due		
Spectrum Analyzer, PXA, 3Hz to 8.4GHz	Keysight	N9030A	89232	2023-07-14		
Signal Generator, MXG X-Series RF Vector	Keysight	N5182B	215042	2024-01-25		
Frequency Extender	Keysight	N5182BX	215272	2024-01-13		
	Advanced	250-441EM-				
2.5-7.5 GHz Horn Antenna	Technical	NF/CAL	89408	2024-05-15		
	Materials INC.	INF/CAL				

Note: An MXG series Signal Generator and separate external Frequency Extender module are shown in the preceding test system block diagram as a stand-alone Signal Generator.

7.1.3. TEST AND MEASUREMENT SOFTWARE

The following test and measurement software was utilized for the tests documented in this report:

TEST SOFTWARE LIST					
Name Version Test / Function					
Aggregate Time-PXA	3.1	Channel Loading and Aggregate Closing Time			
PXA Read	3.1	Signal Generator Screen Capture			
SGXProject.exe	1.7	Radar Waveform Generation and Download			

7.1.4. TEST ROOM ENVIRONMENT

The test room temperature and humidity shall be maintained within normal temperature of 15~35 °C and normal humidity 20~75% (relative humidity).

ENVIRONMENT CONDITION

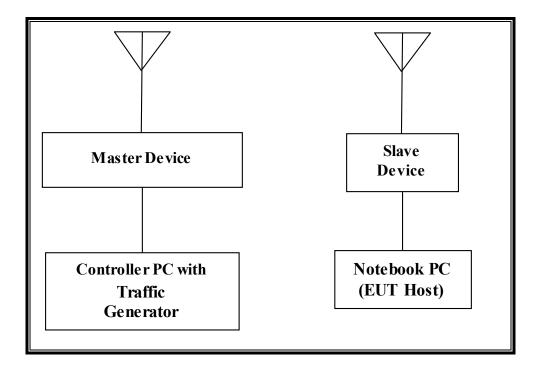
Parameter	Value
Temperature	21.9 – 22.6 °C
Humidity	51 – 52 %

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7.1.5. SETUP OF EUT

RADIATED METHOD EUT TEST SETUP



SUPPORT EQUIPMENT

The following support equipment was utilized for the tests documented in this report:

PERIPHERAL SUPPORT EQUIPMENT LIST						
Description	Manufacturer	Model	Serial Number	FCC ID		
Master Device	ASUS	GT-AXE11000	M9IG0X400839JKM	MSQ-		
				RTAXJF00		
Master Device Power Supply	Ac Bel	ADDD011 LPS	ADD01117AG21340344	N/A		
			0A			
Controller Laptop	HP	14-dk1003dx	5CGO16B4XM	TX2-		
				RTL8821CE		
Laptop Power Supply	HP	TPN-CA14	N/A	N/A		

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7.1.6. DESCRIPTION OF EUT

For FCC the EUT operates over the 5250-5350 MHz and 5470-5725 MHz ranges.

The EUT is a Slave Device without Radar Detection.

The manufacturer has declared that the highest power level within these bands is 19.95 dBm EIRP in the 5250-5350 MHz band and 19.94 dBm EIRP in the 5470-5725 MHz band.

The manufacturer has declared that the highest gain antenna assembly utilized with the EUT has a gain of -0.97 dBi in the 5250-5350 MHz band and -0.24 dBi in the 5470-5725 MHz band. The manufacturer has declared that the lowest gain antenna assembly utilized with the EUT has a gain of -5.7 dBi in the 5250-5350 MHz band and -4.69 dBi in the 5470-5725 MHz band.

Two identical antennas are utilized to meet the diversity and MIMO operational requirements.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is -64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is -64 + 1 = -63 dBm.

The EUT uses two transmitter/receiver chains, each connected to an antenna to perform radiated tests.

WLAN traffic that meets or exceeds the minimum required loading was generated by transferring a data stream from the Master Device to the Slave Device using iPerf version 2.0.5 software package.

TPC is not required since the maximum EIRP is less than 500 mW (27 dBm).

The EUT utilizes the 802.11ax architecture. Four nominal channel bandwidths are implemented: 20 MHz, 40 MHz, 80 MHz and 160 MHz.

Channel puncturing is not supported by the EUT.

TDLS (Tunneled Direct Link Setup) mode is not supported by the EUT.

The software installed in the EUT is: Build Number 5.34 Magic iPerf 3.1

The software installed in the access point is v 3.0.0.4.386_42489.

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UNIFORM CHANNEL SPREADING

This is requirement not applicable to Slave Devices.

OVERVIEW OF MASTER DEVICE WITH RESPECT TO §15.407 (h) REQUIREMENTS

The Master Device is an Asus Access Point, FCC ID: MSQ-RTAXJF00. The minimum antenna gain for the Master Device is 3.8 dBi.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore, the required interference threshold level is -64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is -64 + 1 = -63 dBm.

The calibrated radiated DFS Detection Threshold level is set to –64 dBm. The tested level is lower than the required level hence it provides a margin to the limit.

The software installed in the access point is 3.0.0.4.386.42489.

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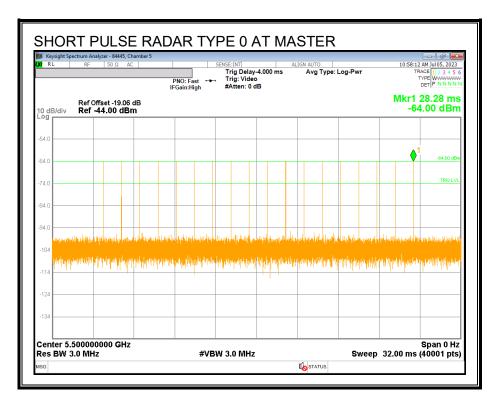
7.2. RESULTS FOR 20 MHz BANDWIDTH

7.2.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5500 MHz.

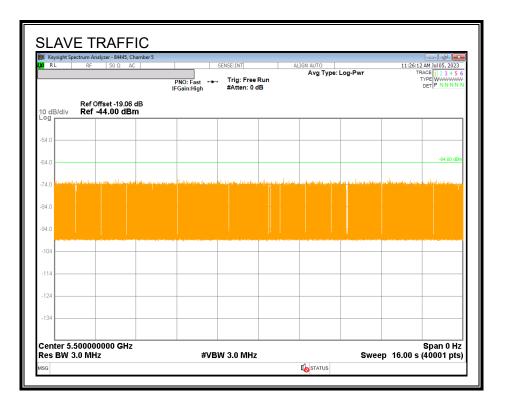
7.2.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



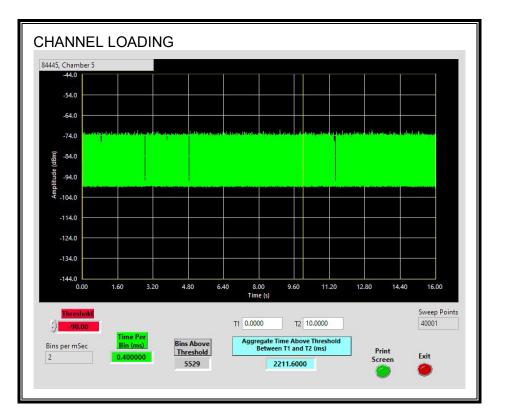
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TRAFFIC



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CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 22.12%

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7.2.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

7.2.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time = (Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

Channel Move Time	Limit
(sec)	(sec)
0.0748	10

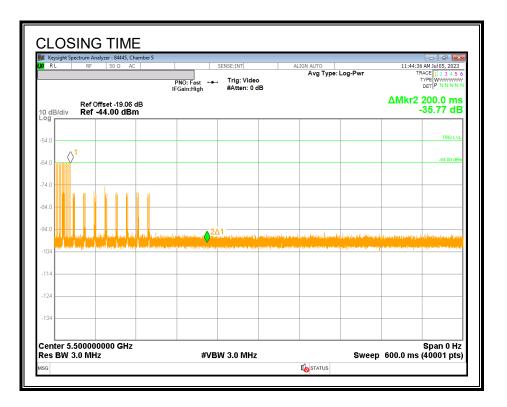
Aggregate Channel Closing Transmission Time	Limit
(msec)	(msec)
0	60

MOVE TIME

sight Spectrum Analyzer - 8444 RF 50 Ω	5, Chamber 5 AC	SENSE:II	uT I	ALIGN AUTO		12:15:	45 PM Jul 05, 202
- Kr 30 sz		ast 🛶 Trig	: Free Run ten: 0 dB		be: Log-Pwr		TRACE 1 2 3 4 TYPE WWWW DET P N N N
Ref Offset -19 B/div Ref -44.00 (74.80 m -11.78 d
1							
2Δ1							-64.00 d
	to the Alberta dama taken a labor				un de la complete de		
ter 5.500000000 G BW 3.0 MHz	Hz	#VBW 3.0	MHz		Swe	ep 16.00 s	Span 0 H 6 (40001 pt
NODE TRC SCL	× 1.624 s	Y -64.18 dBm	FUNCTION	FUNCTION WIDTH		FUNCTION VALUE	
Δ1 1 t (Δ)	74.80 ms (Δ)	-11.78 dB					

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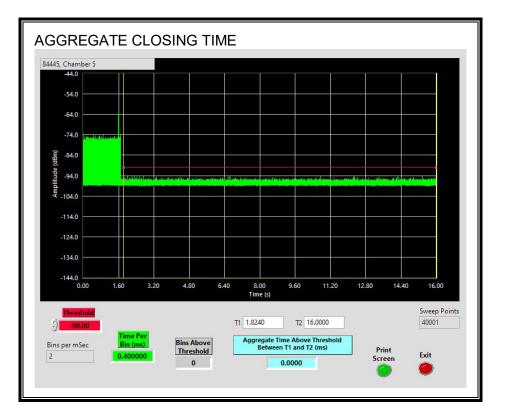
CHANNEL CLOSING TIME



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AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



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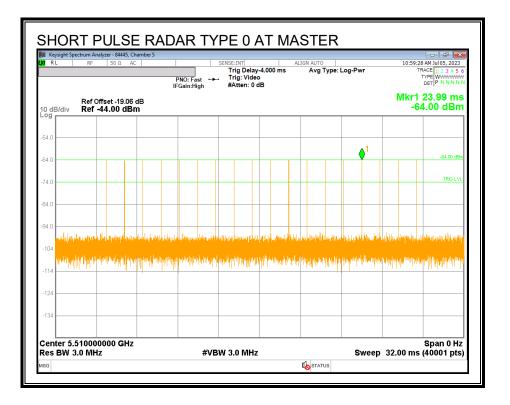
7.3. RESULTS FOR 40 MHz BANDWIDTH

7.3.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5510 MHz.

7.3.2. RADAR WAVEFORM AND TRAFFIC

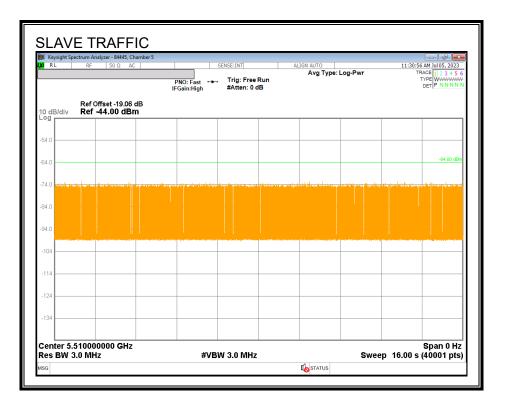
RADAR WAVEFORM



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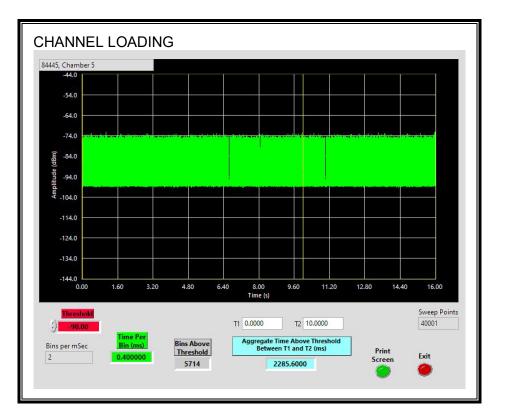
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TRAFFIC



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CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 22.86%

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7.3.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

7.3.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time = (Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

<u>RESULTS</u>

Channel Move Time	Limit
(se c)	(sec)
0.0628	10

Aggregate Channel Closing Transmission Time	Limit
(msec)	(msec)
0	60

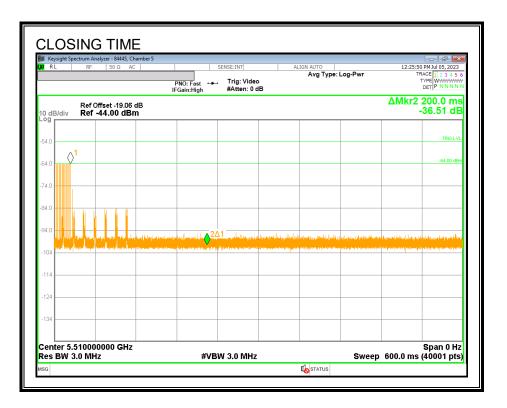
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MOVE TIME

Keysight Spectrum Analyzer - 84						
RL RF 50 \$	PN		ig: Free Run Atten: 0 dB	ALIGN AUTO Avg Type	e: Log-Pwr	12:31:29 PM Jul 05, 2023 TRACE 1 2 3 4 5 TYPE WWWWW DET P N N N N
Ref Offset -1 dB/div Ref -44.00						ΔMkr2 62.80 ms -21.58 dB
4.0						
4.0						-64.00 dBm
4.0						
4.0						
104		te i deterre por e for e	la tente de la			
14						
24						
134						
enter 5.51000000 (es BW 3.0 MHz	GHz	#VBW 3.	0 MHz		Sweep	Span 0 Hz 16.00 s (40001 pts)
KR MODE TRC SCL 1 N 1 t	x 1.555 s	Y -64.23 dBm	FUNCTION	FUNCTION WIDTH	FUN	CTION VALUE
2 Δ1 1 t (Δ) 3	62.80 ms (2	Δ) -21.58 dB				
4 5						
6						
8						
9						

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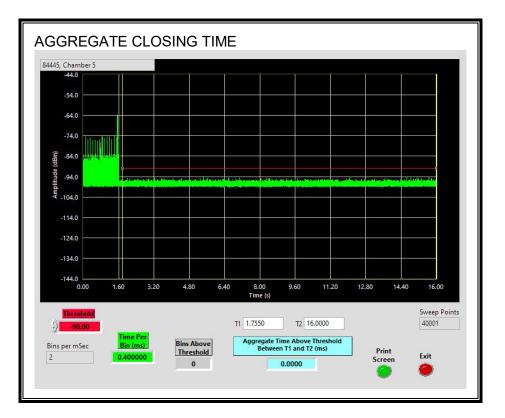
CHANNEL CLOSING TIME



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AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



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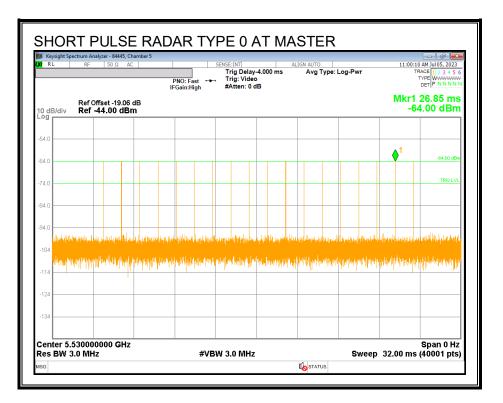
7.4. RESULTS FOR 80 MHz BANDWIDTH

7.4.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5530 MHz.

7.4.2. RADAR WAVEFORM AND TRAFFIC

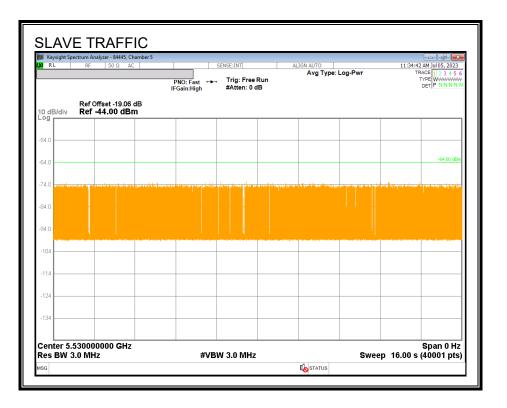
RADAR WAVEFORM



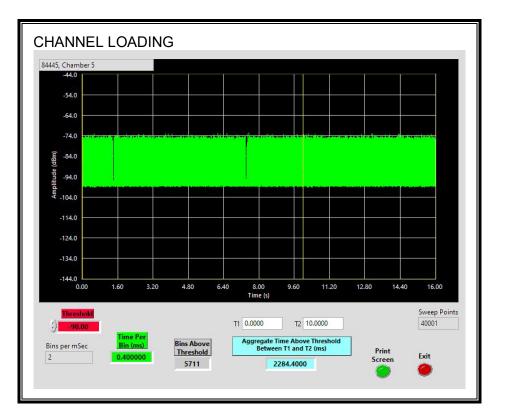
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TRAFFIC



CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 22.84%

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7.4.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

7.4.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time = (Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

<u>RESULTS</u>

Channel Move Time	Limit
(sec)	(sec)
0.1028	10

Aggregate Channel Closing Transmission Time	Limit
(msec)	(msec)
0	60

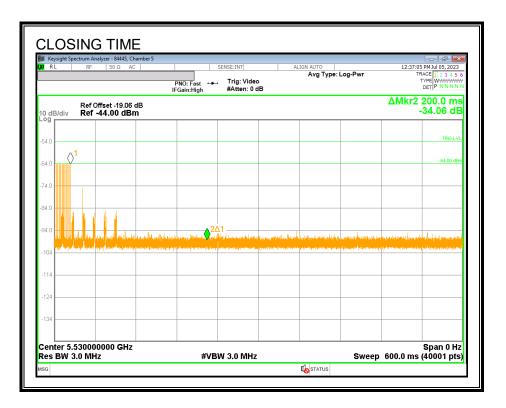
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MOVE TIME

rsight Spectrum Analyzer - 84445, C 		orner v			1	12.41.4	
- RF 50 Ω A	C PNO: F IFGain:I		g: Free Run ten: 0 dB	ALIGN AUTO Avg Typ	e: Log-Pwr		8 PM Jul 05, 20 RACE 1 2 3 4 TYPE WWWW DET P N N N
Ref Offset -19.06 B/div Ref -44.00 dB							102.8 m -22.02 d
01							-64.00 c
24 I							
A na st in it is in a star star star star star star star st				and the second of the second of			
ter 5.530000000 GHz BW 3.0 MHz	2	#VBW 3.0	MHz		Swe	ep 16.00 s	Span 0 H (40001 pt
MODE TRC SCL N 1 t	x 1.606 s	Y -64.31 dBm	FUNCTION	FUNCTION WIDTH		FUNCTION VALUE	
Δ1 1 t (Δ)	102.8 ms (Δ)	-22.02 dB					

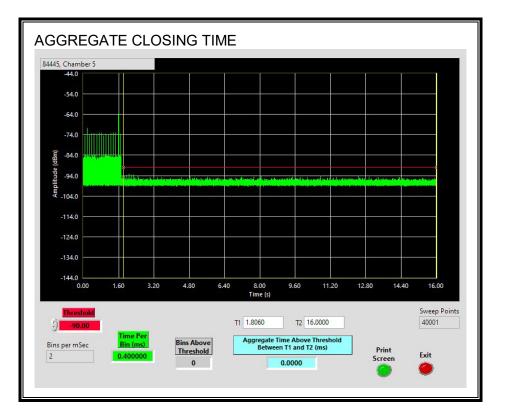
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CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



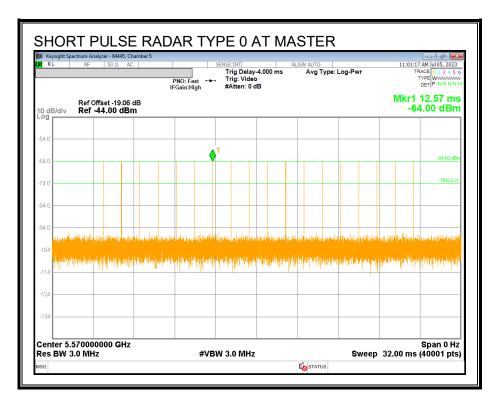
7.5. RESULTS FOR 160 MHz BANDWIDTH

7.5.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5570 MHz.

7.5.2. RADAR WAVEFORM AND TRAFFIC

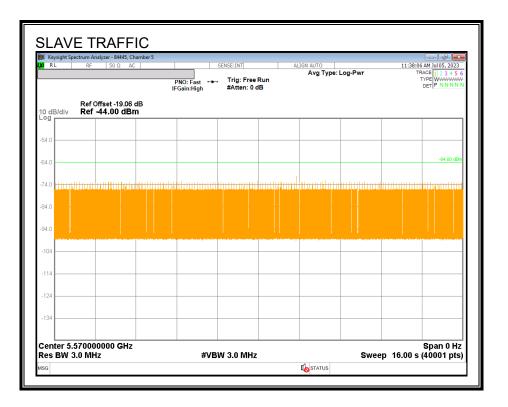
RADAR WAVEFORM



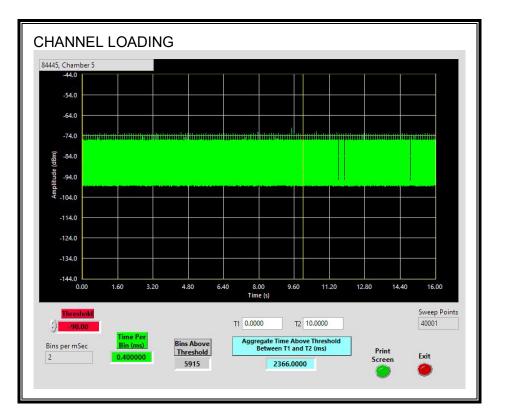
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TRAFFIC



CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 23.66%

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7.5.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

7.5.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time = (Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

<u>RESULTS</u>

Channel Move Time	Limit
(sec)	(sec)
0.1032	10

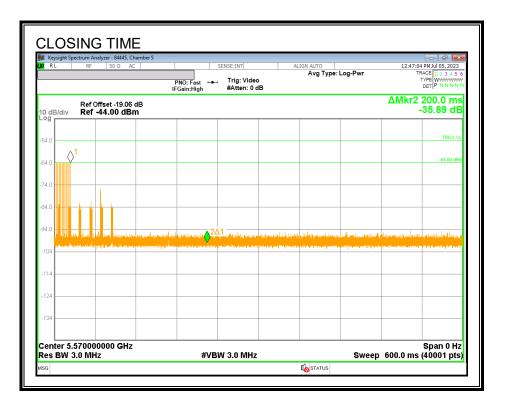
Aggregate Channel Closing Transmission Time	Limit
(msec)	(msec)
0	60

MOVE TIME

ysight Spectrum Analyzer - 84445, L RF 50 Ω	AC	SENSE:I	NT	ALIGN AUTO			3 PM Jul 05, 202
	PNO: I IFGain:		g: Free Run ten: 0 dB	Avg Typ	e: Log-Pwr	T	RACE 1 2 3 4 TYPE WWWW DET P N N N
Ref Offset -19.0 B/div Ref -44.00 d							103.2 m -18.34 d
1							
Y							-64.00 d
	ten bei ersten bereiteten diem bille der siene tem	the second structure of the state	and a second		to bill a language of the second section of	an hur, and al alm had	
ter 5.570000000 GH BW 3.0 MHz	lz	#VBW 3.0	MHz		Swe	ep 16.00 s	Span 0 H (40001 pt
MODE TRC SCL	x	Y	FUNCTION	FUNCTION WIDTH		FUNCTION VALUE	
N 1 t Δ1 1 t (Δ)	1.658 s 103.2 ms (Δ)	-64.13 dBm -18.34 dB					

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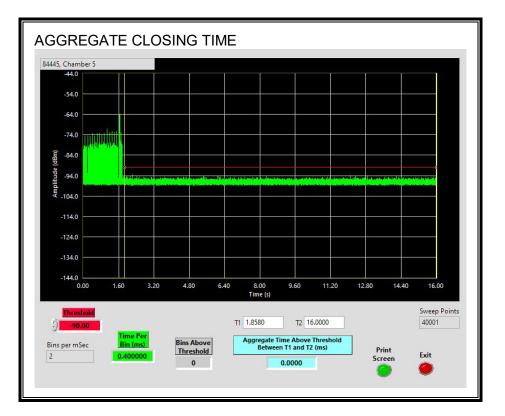
CHANNEL CLOSING TIME



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AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



7.5.5. NON-OCCUPANCY PERIOD

RESULTS

No EUT transmissions were observed on the test channel during the 30-minute observation time.

Keysight Spectrum Analyzer - 84445, Chamber : RL RF 50 Ω AC	5 SENSE:INT	ALIGN AUTO	01:30:42 PM Jul 05, 2023
	PNO: Fast ↔→ Trig: Free Run IFGain:High #Atten: 0 dB	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 0 TYPE W
Ref Offset -19.06 dB 0 dB/div Ref -44.00 dBm			ΔMkr2 1.800 ks -31.23 dE
64.0 1			-64.00 dBr
74.0			
84.0			
			_2∆1
94.0			
-104			
-114			
-124			
-134			
Center 5.570000000 GHz Res BW 3.0 MHz	#VBW 3.0 MHz	0	Span 0 Hz 2.000 ks (40001 pts

8. SETUP PHOTOS

Please refer to R14777408-EP5 for setup photos

END OF TEST REPORT

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