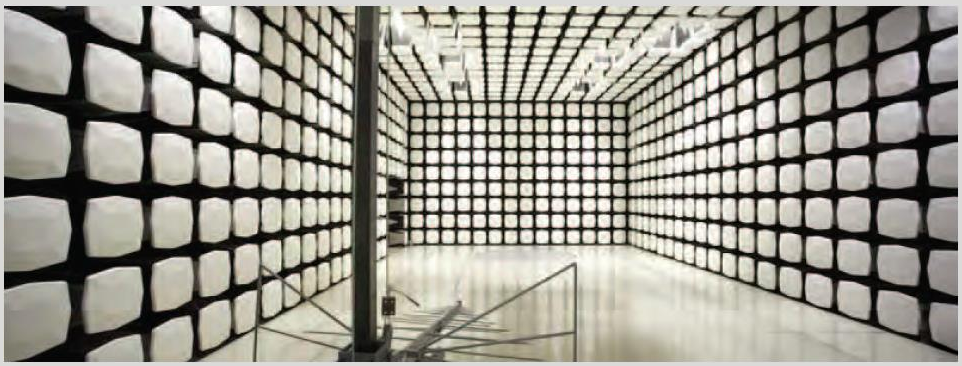
Abbott Laboratories

GLP12190 AccessPoint Center
GLP12193 AccessPoint Right
GLP12195 AccessPoint Left

FCC 15.225:2022

13.56 MHz Radio

Report: ABBO0083 Rev. 4, Issue Date: August 9, 2022



CERT #3310.03

CERTIFICATE OF TEST

Last Date of Test: June 2, 2022
Abbott Laboratories
EUT: GLP12190 AccessPoint Center
GLP12193 AccessPoint Right
GLP12195 AccessPoint Left

Radio Equipment Testing

Standards

Specification	Method
FCC 15.207:2022	ANSI C63.10:2013
FCC 15.225:2022	

Results

Method Clause	Test Description	Applied	Results	Comments
6.2	Powerline Conducted Emissions	Yes	Pass	
6.4	Field Strength of Fundamental	Yes	Pass	
6.4	Field Strength of Spurious Emissions (Less Than 30 MHz)	Yes	Pass	
6.5	Field Strength of Spurious Emissions (Greater Than 30 MHz)	Yes	Pass	
6.8	Frequency Stability	Yes	Pass	
6.9	Occupied Bandwidth	Yes	Pass	

Deviations From Test Standards

None

Approved By:

Adam Bruno, Operations Manager

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.

REVISION HISTORY

Revision Number	Description	Date (yyyy-mm-dd)	Page Number
01	Changed Powerline CE spec from Class A to FCC 15.209	2021-09-02	16 and 18
02	Listed GLP 12193 as the EUT	2021-09-23	1
	Corrected dates	2021-09-23	9 and 15
	Revised comment regarding emissions being greater than 20 dB and fixed graph scaling	2021-09-23	22 and 23
	Corrected EUT name	2021-09-23	22
	Corrected serial number	2021-09-23	26
03	Updated test dates	2022-06-06	2, 9, 15
	Updated data	2022-06-06	17-53
04	Updated standard on cover page to year 2022.	2022-08-09	1
	Updated block diagram.	2022-08-09	7-9
	Added note to describe the differences between model variants.	2022-08-09	10
	Updated Power Settings and Antennas page.	2022-08-09	11
	Updated configuration reference in Powerline Conducted Emissions.	2022-08-09	17-41
	Updated test description and comments in Occupied Bandwidth.	2022-08-09	63
	In Frequency Stability noted that EUT was transmitting with an unmodulated carrier.	2022-08-09	55

ACCREDITATIONS AND AUTHORIZATIONS

element
2021.09.01

United States

FCC - Designated by the FCC as a Telecommunications Certification Body (TCB). Certification chambers, Open Area Test Sites, and conducted measurement facilities are listed with the FCC.

A2LA - Each laboratory is accredited by A2LA to ISO / IEC 17025, and as a product certifier to ISO / IEC 17065 which allows Element to certify transmitters to FCC and IC specifications.

Canada

ISED - Recognized by Innovation, Science and Economic Development Canada as a Certification Body (CB) and as a CAB for the acceptance of test data.

European Union

European Commission – Recognized as an EU Notified Body validated for the EMCD and RED Directives.

United Kingdom

BEIS – Recognized by the UK as an Approved Body under the UK Radio Equipment and UK EMC Regulations.

Australia/New Zealand

ACMA - Recognized by ACMA as a CAB for the acceptance of test data.

Korea

MSIT / RRA - Recognized by KCC's RRA as a CAB for the acceptance of test data.

Japan

VCCI - Associate Member of the VCCI. Conducted and radiated measurement facilities are registered.

Taiwan

BSMI – Recognized by BSMI as a CAB for the acceptance of test data.

NCC - Recognized by NCC as a CAB for the acceptance of test data.

Singapore

IDA – Recognized by IDA as a CAB for the acceptance of test data.

Israel

MOC – Recognized by MOC as a CAB for the acceptance of test data.

Hong Kong

OFCA – Recognized by OFCA as a CAB for the acceptance of test data.

Vietnam

MIC – Recognized by MIC as a CAB for the acceptance of test data.

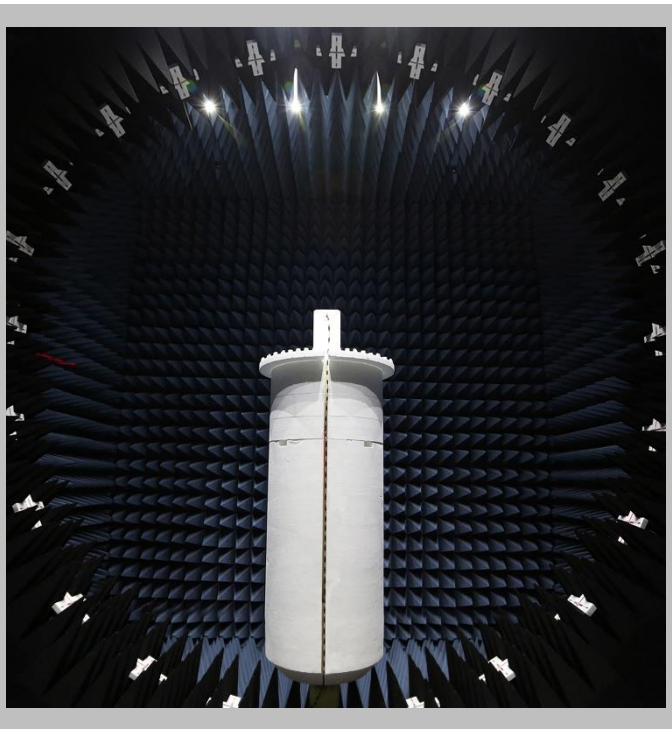
SCOPE

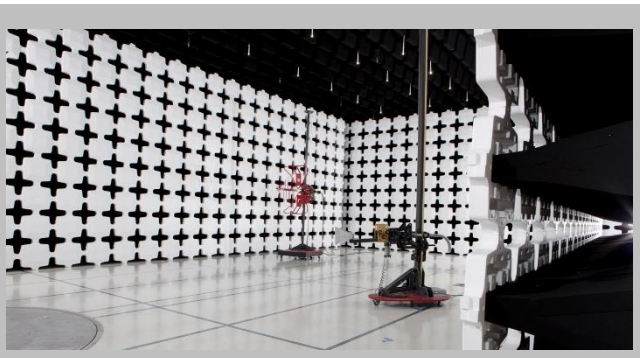
For details on the Scopes of our Accreditations, please visit:

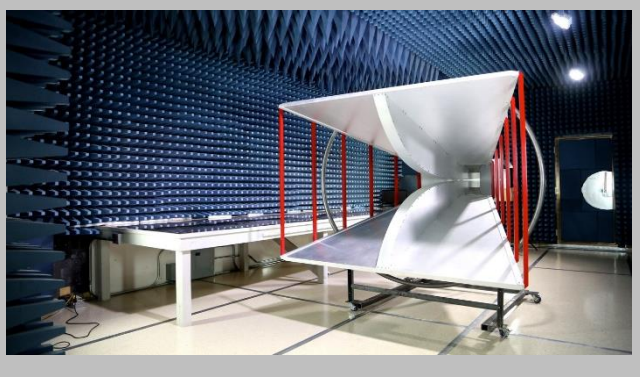
California Minnesota Oregon Texas Washington

FACILITIES

California	Minnesota	Oregon	Texas	Washington
Labs OC01-17 41 Tesla Irvine, CA 92618 (949) 861-8918	Labs MN01-11 9349 W Broadway Ave. Brooklyn Park, MN 55445 (612)-638-5136	Labs EV01-12 6775 NE Evergreen Pkwy #400 Hillsboro, OR 97124 (503) 844-4066	Labs TX01-09 3801 E Plano Pkwy Plano, TX 75074 (469) 304-5255	Labs NC01-05 19201 120th Ave NE Bothell, WA 98011 (425)984-6600
A2LA				
Lab Code: 3310.04	Lab Code: 3310.05	Lab Code: 3310.02	Lab Code: 3310.03	Lab Code: 3310.06
Innovation, Science and Economic Development Canada				
2834B-1, 2834B-3	2834E-1, 2834E-3	2834D-1	2834G-1	2834F-1
BSMI				
SL2-IN-E-1154R	SL2-IN-E-1152R	SL2-IN-E-1017	SL2-IN-E-1158R	SL2-IN-E-1153R
VCCI				
A-0029	A-0109	A-0108	A-0201	A-0110
Recognized Phase I CAB for ISED, ACMA, BSMI, IDA, KCC/RRA, MIC, MOC, NCC, OFCA				
US0158	US0175	US0017	US0191	US0157







MEASUREMENT UNCERTAINTY

element
TMU.2015.07.10

Measurement Uncertainty

When a measurement is made, the result will be different from the true or theoretically correct value. The difference is the result of tolerances in the measurement system that cannot be completely eliminated. To the extent that technology allows us, it has been our aim to minimize this error. Measurement uncertainty is a statistical expression of measurement error qualified by a probability distribution.

A measurement uncertainty estimation has been performed for each test per our internal quality document QM205.4.6. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) can be found in the table below. A lab specific value may also be found in the applicable test description section. Our measurement data meets or exceeds the measurement uncertainty requirements of the applicable specification; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for estimating measurement uncertainty are based upon ETSI TR 100 028 (or CISPR 16-4-2 as applicable), and are available upon request.

The following table represents the Measurement Uncertainty (MU) budgets for each of the tests that may be contained in this report.

Test	+ MU	- MU
Frequency Accuracy	0.0007%	-0.0007%
Amplitude Accuracy (dB)	1.2 dB	-1.2 dB
Conducted Power (dB)	1.2 dB	-1.2 dB
Radiated Power via Substitution (dB)	0.7 dB	-0.7 dB
Temperature (degrees C)	0.7°C	-0.7°C
Humidity (% RH)	2.5% RH	-2.5% RH
Voltage (AC)	1.0%	-1.0%
Voltage (DC)	0.7%	-0.7%
Field Strength (dB)	5.1 dB	-5.1 dB
AC Powerline Conducted Emissions (dB)	3.1 dB	-3.1 dB

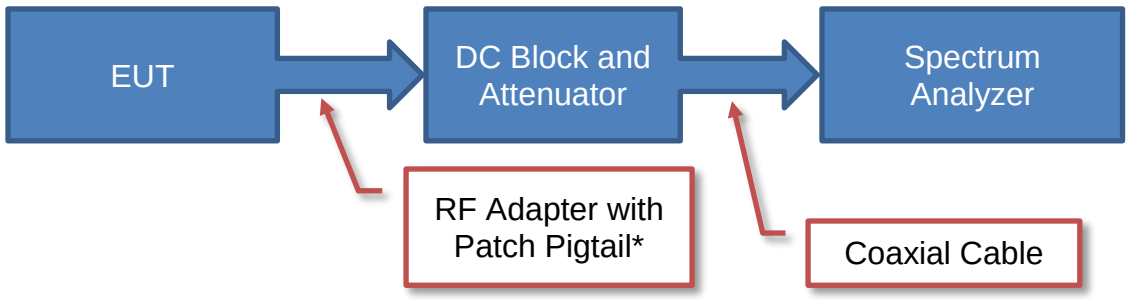
TEST SETUP BLOCK DIAGRAMS

Measurement Bandwidths

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 - 0.15	1.0	0.2	0.2
0.15 - 30.0	10.0	9.0	9.0
30.0 - 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

Unless otherwise stated, measurements were made using the bandwidths and detectors specified. No video filter was used.

Antenna Port Conducted Measurements

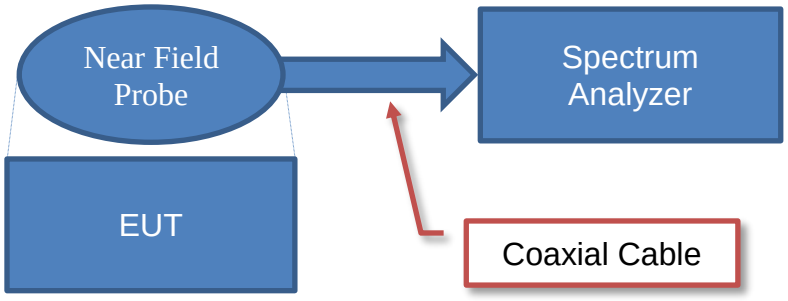


Sample Calculation (logarithmic units)

Measured Value		Measured Level		Reference Level Offset
71.2	=	42.6	+	28.6

*Patch pigtail connector used during measurements and accounted for in reference level offset.

Near Field Test Fixture Measurements

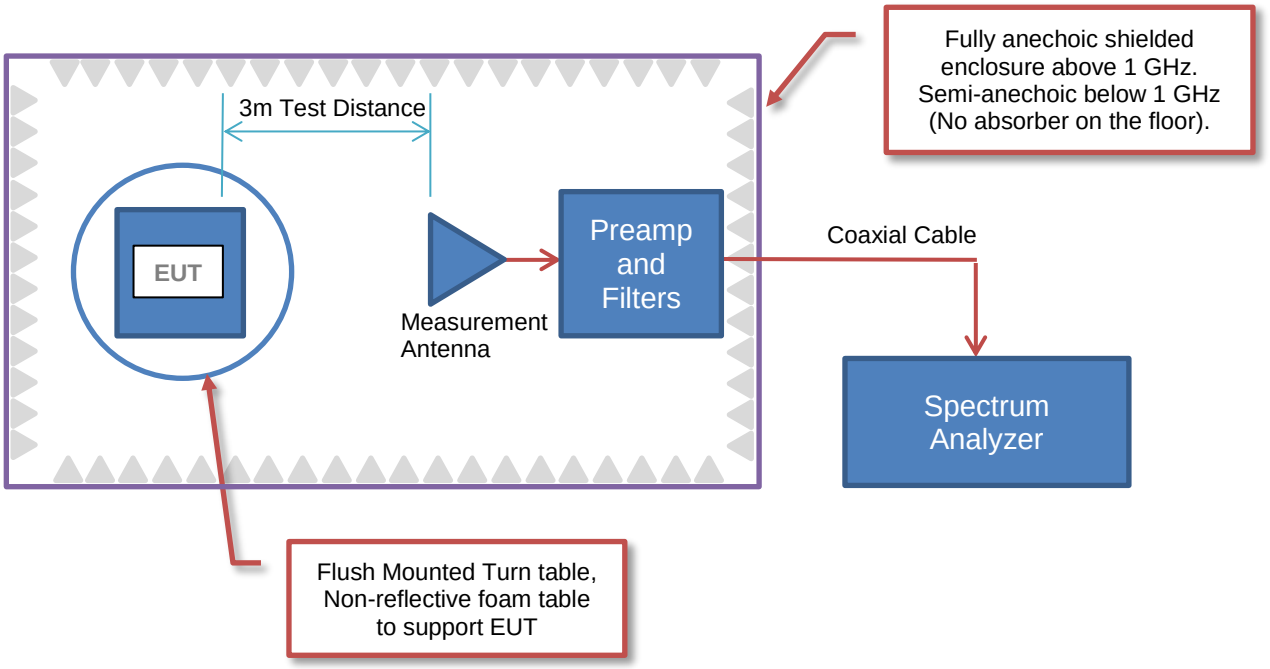


Sample Calculation (logarithmic units)

Measured Value		Measured Level		Reference Level Offset
71.2	=	42.6	+	28.6

TEST SETUP BLOCK DIAGRAMS

Emissions Measurements



Sample Calculation (logarithmic units)

Radiated Emissions:

Measured Level (Amplitude)		Factor: Antenna Factor		Factor: Cable Factor		Factor: Amplifier Gain		Distance Adjustment Factor		External Attenuation		Field Strength
42.6	+	28.6	+	3.1	-	40.8	+	0.0	+	0.0	=	**33.5**

Conducted Emissions:

Measured Level (Amplitude)		Factor: Transducer Factor		Factor: Cable Factor		External Attenuation		Adjusted Level
26.7	+	0.3	+	0.1	+	20.0	=	**47.1**

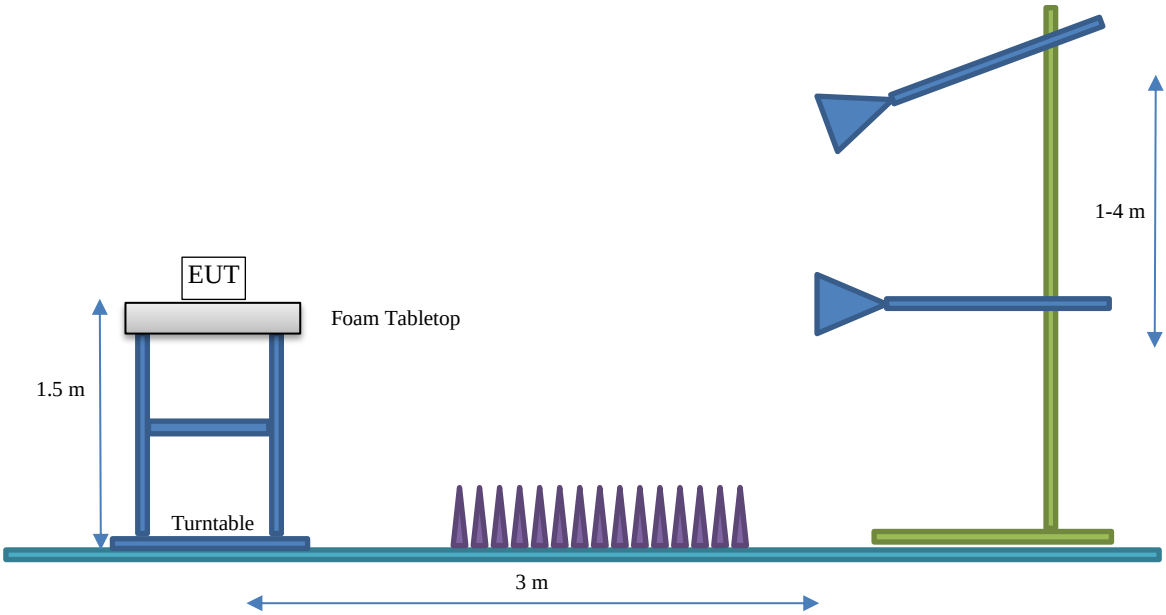
Radiated Power (ERP/EIRP) – Substitution Method:

Measured Level into Substitution Antenna (Amplitude dBm)		Substitution Antenna Factor (dBi)		EIRP to ERP (if applicable)		Measured power (dBm ERP/EIRP)
10.0	+	6.0	-	2.15	=	**13.9/16.0**

TEST SETUP BLOCK DIAGRAMS

Bore Sighting (>1GHz)

The diameter of the illumination area is the dimension of the line tangent to the EUT formed by 3 dB beamwidth of the measurement antenna at the measurement distance. At a 3 meter test distance, the diameter of the illumination area was 3.8 meters at 1 GHz and greater than 2.1 meters up to 6 GHz. Above 1 GHz, when required by the measurement standard, the antenna is pointed for both azimuth and elevation to maintain the receive antenna within the cone of radiation from the EUT. The specified measurement detectors were used for comparison of the emissions to the peak and average specification limits.



PRODUCT DESCRIPTION

Client and Equipment Under Test (EUT) Information

Company Name:	Abbott Laboratories
Address:	1921 Hurd Drive
City, State, Zip:	Irving, TX 75038
Test Requested By:	Don Mendell
EUT:	GLP12190 AccessPoint Center, GLP12193 AccessPoint Right, GLP12195 AccessPoint Left
First Date of Test:	July 24, 2021
Last Date of Test:	June 2, 2022
Receipt Date of Samples:	June 10, 2021
Equipment Design Stage:	Production
Equipment Condition:	No Damage
Purchase Authorization:	Verified

Information Provided by the Party Requesting the Test

Functional Description of the EUT:
Access Point (center-GLP12190, right-GLP12193 and left-GLP12195) – secures CARs and samples in place, allowing for secure sample processing. This contains one RFID reader per access point to determine the ID and battery state of the CAR (which contains a passive tag). Note: All 3 variants share the same PCB boards: 20008971 Access Point IO (with reader) and 20008841 Dual AccessPoint CPU (without reader). The difference being that each variant is mounted in a slightly different plastic enclosure to enable variation in installation.

Testing Objective:
To demonstrate compliance to FCC Part 15.225 specifications.

POWER SETTINGS AND ANTENNAS

The power settings, antenna gain value(s) and cable loss (if applicable) used for the testing contained in this report were provided by the customer and will affect the validity of the results. Element assumes no responsibility for the accuracy of this information.

ANTENNA INFORMATION

Type	Provided by:	Dimensions
Embedded Inductive Loop	GLP Systems	51mm x 35mm

POWER SETTING

Radio	Modulation	Protocol	Data Rate	Frequency	Power Setting (mW)
RFID	OOK	ISO 13693	26.48 kbps	13.56 MHz	200

*Power is set internally through product firmware at the default maximum.

CONFIGURATIONS

Configuration ABBO0083- 6

Software/Firmware Running during test	
Description	**Version**
Firmware	TrackEmvTest_ap_wp_Version_0.0_46817.bin

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
AccessPoint Left Track Radio	GLP Systems	GLP12195 (PCB:20008971)	ENG02-AP

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Track Filter	GLP Systems	GLP12689 (LN06U35-04)	0001000
Power Strip	GLP Systems	GLP12015	None
24V Power Supply	GLP Systems	GLP12010	0001098
Power Board	GLP Systems	GLP12014	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Power Cable	Yes	1.1m	No	AC Mains	Track Filter
AC Power Cable	Yes	1.0m	No	Track Filter	Power Strip
AC Power Cable	No	1.0m	No	Power Strip	24V Power Supply
DC Power Cable	No	0.8m	No	24V Power Supply	Power Board
DC Power Cable	No	0.6m	Yes	Power Board	AccessPoint

CONFIGURATIONS

Configuration ABBO0083- 7

Software/Firmware Running during test	
Description	**Version**
Firmware	TrackEmvTest_ap_wp_Version_0.0_46817.bin

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
AccessPoint Right Track Radio	GLP Systems	GLP12193 (PCB:20008971)	ENG03-AP

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Track Filter	GLP Systems	GLP12689 (LN06U35-04)	0001000
Power Strip	GLP Systems	GLP12015	None
24V Power Supply	GLP Systems	GLP12010	0001098
Power Board	GLP Systems	GLP12014	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Power Cable	Yes	1.1m	No	AC Mains	Track Filter
AC Power Cable	Yes	1.0m	No	Track Filter	Power Strip
AC Power Cable	No	1.0m	No	Power Strip	24V Power Supply
DC Power Cable	No	0.8m	No	24V Power Supply	Power Board
DC Power Cable	No	0.6m	Yes	Power Board	AccessPoint

CONFIGURATIONS

Configuration ABBO0083- 8

Software/Firmware Running during test	
Description	**Version**
Firmware	TrackEmvTest_ap_wp_Version_0.0_46817.bin

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
AccessPoint Center Track Radio	GLP Systems	GLP12190 (PCB:20008971)	ENG04-AP

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Track Filter	GLP Systems	GLP12689 (LN06U35-04)	0001000
Power Strip	GLP Systems	GLP12015	None
24V Power Supply	GLP Systems	GLP12010	0001098
Power Board	GLP Systems	GLP12014	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Power Cable	Yes	1.1m	No	AC Mains	Track Filter
AC Power Cable	Yes	1.0m	No	Track Filter	Power Strip
AC Power Cable	No	1.0m	No	Power Strip	24V Power Supply
DC Power Cable	No	0.8m	No	24V Power Supply	Power Board
DC Power Cable	No	0.6m	Yes	Power Board	AccessPoint

CONFIGURATIONS

Configuration ABBO0083- 9

Software/Firmware Running during test	
Description	**Version**
Firmware	TrackEmvTest_ap_wp_Version_0.0_46817.bin

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
AccessPoint Radio	GLP Systems	PCB:20008971	ENG05-AP

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Track Filter	GLP Systems	GLP12689 (LN06U35-04)	0001000
Power Strip	GLP Systems	GLP12015	None
24V Power Supply	GLP Systems	GLP12010	0001098
Power Board	GLP Systems	GLP12014	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Power Cable	Yes	1.1m	No	AC Mains	Track Filter
AC Power Cable	Yes	1.0m	No	Track Filter	Power Strip
AC Power Cable	No	1.0m	No	Power Strip	24V Power Supply
DC Power Cable	No	0.8m	No	24V Power Supply	Power Board
DC Power Cable	No	0.6m	Yes	Power Board	AccessPoint

MODIFICATIONS

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	2021-07-24	Frequency Stability	Tested as delivered to test station.	None	EUT remained at Element following the test.
2	2021-07-29	Occupied Bandwidth	Tested as delivered to test station.	None	EUT remained at Element following the test.
3	2022-05-31	Field Strength of Fundamental	Tested as delivered to test station.	None	Scheduled testing was completed.
4	2022-06-01	Field Strength of Spurious Emissions (Greater Than 30 MHz)	Tested as delivered to test station.	None	EUT remained at Element following the test.
5	2022-06-01	Field Strength of Spurious Emissions (Less Than 30 MHz)	Tested as delivered to test station.	None	EUT remained at Element following the test.
6	2022-06-02	Powerline Conducted Emissions	Tested as delivered to test station.	None	Scheduled testing was completed.

AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

TEST DESCRIPTION

The EUT will be powered either directly or indirectly from the AC power line. Therefore, conducted emissions measurements were made on the AC input of the EUT, or on the AC input of the device used to power the EUT.

The EUT was transmitting at its maximum data rate. For each mode, the spectrum was scanned from 150 kHz to 30 MHz. The test setup and procedures were in accordance with ANSI C63.10.

In the event that the operating frequency of 13.56 MHz is causing the product to fail the FCC 15.207 limits, the following guidance can be used:

FCC KDB 174176 D01 AC Conducted FAQ v01r01, June 3, 2015 Section Q5:

> For a device with a permanent or detachable antenna operating at or below 30 MHz, the FCC will accept measurements performed with a suitable dummy load in lieu of the antenna under the following conditions:
>
> (1) perform the AC power-line conducted tests with the antenna connected to determine compliance with Section 15.207 limits outside the transmitter's fundamental emission band;
>
> (2) For a permanent antenna, remove the antenna and terminate the RF output with a dummy load or network which simulates the antenna in the fundamental frequency band.
>
> All measurements must be performed as specified in clause 6.2 of ANSI C63.10-2013.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Receiver	Gauss Instruments	TDEMI 30M	ARL	2022-03-28	2023-03-28
Receiver	Rohde & Schwarz	ESCI	ARF	2021-09-16	2022-09-16
Cable - Conducted Cable Assembly	Northwest EMC	TXA, HFC, TQU	TXAA	2022-01-24	2023-01-24
LISN	Solar Electronics	9252-50-R-24-BNC	LJK	2021-08-06	2022-08-06
Power Source/Analyzer	Hewlett Packard	6841A	THC	NCR	NCR

MEASUREMENT UNCERTAINTY

Description		
Expanded k=2	3.1 dB	-3.1 dB

CONFIGURATIONS INVESTIGATED

ABBO0083-6
ABBO0083-7
ABBO0083-8

MODES INVESTIGATED

Transmitting RFID 13.56 MHz

AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

EUT:	GLP12190 AccessPoint Center	Work Order:	ABBO0083
Serial Number:	ENG04-AP	Date:	2022-06-01
Customer:	Abbott Laboratories	Temperature:	23.2°C
Attendees:	None	Relative Humidity:	52.9%
Customer Project:	None	Bar. Pressure (PMSL):	1017 mb
Tested By:	Mark Baytan	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0083-8

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2022	ANSI C63.10:2013

TEST PARAMETERS

Run #:	2	Line:	High Line	Add. Ext. Attenuation (dB):	0

COMMENTS

None

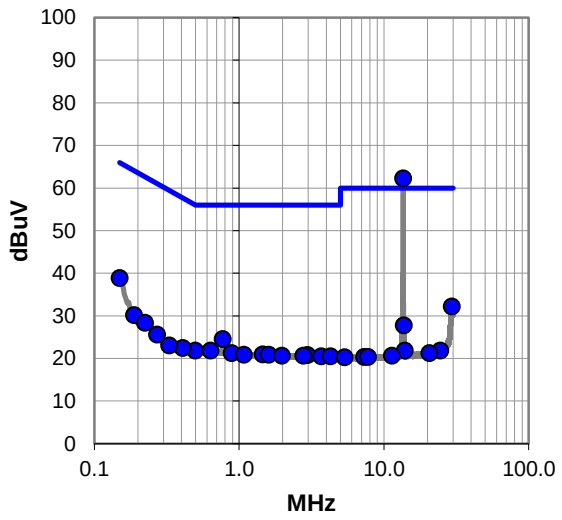
EUT OPERATING MODES

Transmitting RFID 13.56 MHz

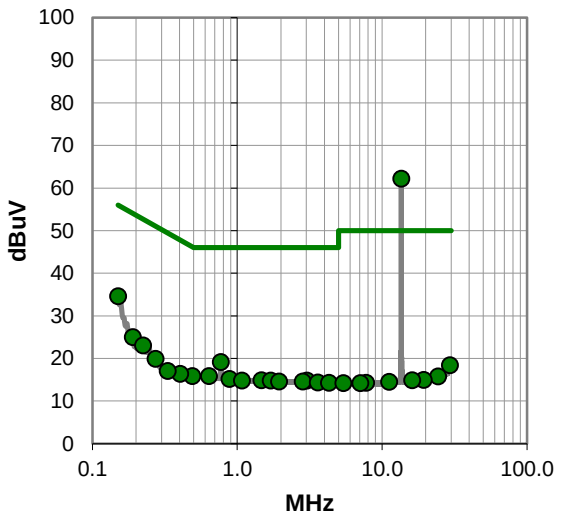
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

RESULTS - Run #2

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	41.4	20.9	62.3	60.0	2.3
0.150	18.3	20.6	38.9	66.0	-27.1
29.395	9.6	22.6	32.2	60.0	-27.8
0.769	4.4	20.2	24.6	56.0	-31.4
13.719	6.9	20.9	27.8	60.0	-32.2
0.188	9.6	20.6	30.2	64.1	-33.9
0.498	1.7	20.2	21.9	56.0	-34.1
0.635	1.7	20.2	21.9	56.0	-34.1
0.223	7.8	20.6	28.4	62.7	-34.3
0.890	1.1	20.2	21.3	56.0	-34.7
1.453	0.8	20.2	21.0	56.0	-35.0
1.076	0.9	20.0	20.9	56.0	-35.1
1.603	0.7	20.2	20.9	56.0	-35.1
0.408	2.2	20.3	22.5	57.7	-35.2
2.973	0.6	20.2	20.8	56.0	-35.2
1.972	0.5	20.2	20.7	56.0	-35.3
2.779	0.5	20.2	20.7	56.0	-35.3
0.272	5.1	20.5	25.6	61.1	-35.5
3.702	0.3	20.2	20.5	56.0	-35.5
4.288	0.3	20.2	20.5	56.0	-35.5
0.330	2.8	20.3	23.1	59.5	-36.4
13.931	1.0	20.9	21.9	60.0	-38.1
24.470	-0.1	22.0	21.9	60.0	-38.1
20.640	-0.1	21.4	21.3	60.0	-38.7
11.380	0.0	20.7	20.7	60.0	-39.3

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	41.3	20.9	62.2	50.0	12.2
0.150	14.0	20.6	34.6	56.0	-21.4
0.769	-1.0	20.2	19.2	46.0	-26.8
0.190	4.4	20.6	25.0	54.1	-29.1
0.223	2.5	20.6	23.1	52.7	-29.6
0.637	-4.3	20.2	15.9	46.0	-30.1
0.490	-4.3	20.2	15.9	46.2	-30.3
0.884	-5.0	20.2	15.2	46.0	-30.8
1.467	-5.3	20.2	14.9	46.0	-31.1
1.076	-5.2	20.0	14.8	46.0	-31.2
1.703	-5.4	20.2	14.8	46.0	-31.2
3.028	-5.4	20.2	14.8	46.0	-31.2
0.272	-0.6	20.5	19.9	51.1	-31.2
0.403	-3.9	20.3	16.4	47.8	-31.4
1.944	-5.6	20.2	14.6	46.0	-31.4
2.835	-5.6	20.2	14.6	46.0	-31.4
3.597	-5.8	20.2	14.4	46.0	-31.6
29.357	-4.2	22.6	18.4	50.0	-31.6
4.305	-5.9	20.2	14.3	46.0	-31.7
0.330	-3.2	20.3	17.1	49.5	-32.4
24.400	-6.2	22.0	15.8	50.0	-34.2
19.398	-6.3	21.3	15.0	50.0	-35.0
16.169	-6.3	21.2	14.9	50.0	-35.1
11.157	-6.2	20.7	14.5	50.0	-35.5
7.764	-6.1	20.4	14.3	50.0	-35.7

CONCLUSION

Evaluation

Tested By

AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

EUT:	GLP12190 AccessPoint Center	Work Order:	ABBO0083
Serial Number:	ENG04-AP	Date:	2022-06-01
Customer:	Abbott Laboratories	Temperature:	21.8°C
Attendees:	None	Relative Humidity:	55.4%
Customer Project:	None	Bar. Pressure (PMSL):	1016 mb
Tested By:	Mark Baytan	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0083-8

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2022	ANSI C63.10:2013

TEST PARAMETERS

Run #:	3	Line:	Neutral	Add. Ext. Attenuation (dB):	0

COMMENTS

None

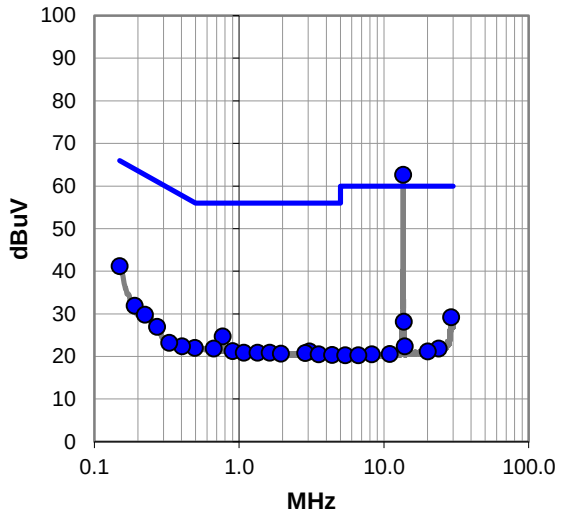
EUT OPERATING MODES

Transmitting RFID 13.56 MHz

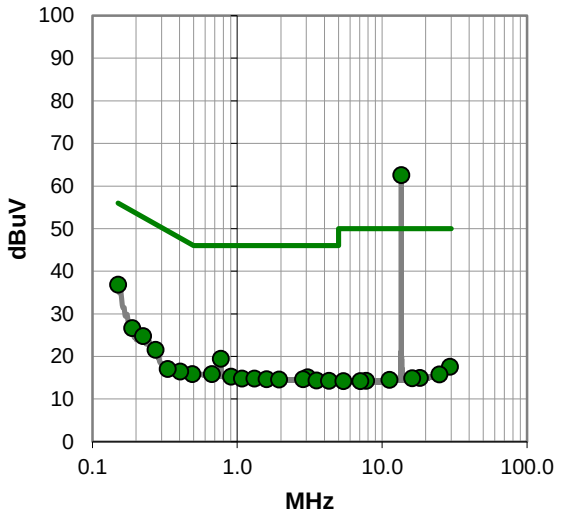
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

RESULTS - Run #3

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	41.8	20.9	62.7	60.0	2.7
0.150	20.6	20.6	41.2	66.0	-24.8
29.183	6.6	22.6	29.2	60.0	-30.8
0.769	4.5	20.2	24.7	56.0	-31.3
13.719	7.3	20.9	28.2	60.0	-31.8
0.190	11.3	20.6	31.9	64.1	-32.2
0.223	9.2	20.6	29.8	62.7	-32.9
0.272	6.5	20.5	27.0	61.1	-34.1
0.495	1.8	20.2	22.0	56.1	-34.1
0.667	1.7	20.2	21.9	56.0	-34.1
0.904	1.1	20.2	21.3	56.0	-34.7
3.052	1.0	20.2	21.2	56.0	-34.8
1.076	0.9	20.0	20.9	56.0	-35.1
1.343	0.8	20.1	20.9	56.0	-35.1
1.627	0.7	20.2	20.9	56.0	-35.1
2.857	0.6	20.2	20.8	56.0	-35.2
1.944	0.5	20.2	20.7	56.0	-35.3
0.403	2.1	20.3	22.4	57.8	-35.4
3.553	0.3	20.2	20.5	56.0	-35.5
4.389	0.2	20.2	20.4	56.0	-35.6
0.330	2.9	20.3	23.2	59.5	-36.3
13.931	1.5	20.9	22.4	60.0	-37.6
23.885	0.0	21.9	21.9	60.0	-38.1
20.141	-0.2	21.4	21.2	60.0	-38.8
10.974	0.0	20.6	20.6	60.0	-39.4

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	41.7	20.9	62.6	50.0	12.6
0.150	16.3	20.6	36.9	56.0	-19.1
0.769	-0.7	20.2	19.5	46.0	-26.5
0.188	6.1	20.6	26.7	54.1	-27.4
0.223	4.2	20.6	24.8	52.7	-27.9
0.272	1.1	20.5	21.6	51.1	-29.5
0.667	-4.3	20.2	15.9	46.0	-30.1
0.490	-4.3	20.2	15.9	46.2	-30.3
0.905	-4.9	20.2	15.3	46.0	-30.7
3.049	-5.1	20.2	15.1	46.0	-30.9
1.076	-5.2	20.0	14.8	46.0	-31.2
1.311	-5.3	20.1	14.8	46.0	-31.2
0.403	-3.8	20.3	16.5	47.8	-31.3
1.596	-5.5	20.2	14.7	46.0	-31.3
2.845	-5.5	20.2	14.7	46.0	-31.3
1.943	-5.6	20.2	14.6	46.0	-31.4
3.516	-5.8	20.2	14.4	46.0	-31.6
4.291	-5.9	20.2	14.3	46.0	-31.7
0.330	-3.2	20.3	17.1	49.5	-32.4
29.354	-5.0	22.6	17.6	50.0	-32.4
24.891	-6.2	22.0	15.8	50.0	-34.2
18.237	-6.3	21.3	15.0	50.0	-35.0
16.156	-6.3	21.2	14.9	50.0	-35.1
11.218	-6.2	20.7	14.5	50.0	-35.5
7.753	-6.1	20.4	14.3	50.0	-35.7

CONCLUSION

Evaluation

Tested By

AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

EUT:	GLP12190 AccessPoint Center	Work Order:	ABBO0083
Serial Number:	ENG04-AP	Date:	2022-06-02
Customer:	Abbott Laboratories	Temperature:	21.7°C
Attendees:	None	Relative Humidity:	51.2%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Mark Baytan	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0083-8

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2022	ANSI C63.10:2013

TEST PARAMETERS

Run #:	8	Line:	High Line	Add. Ext. Attenuation (dB):	0

COMMENTS

Antenna removed from PCB and replaced with matching load.

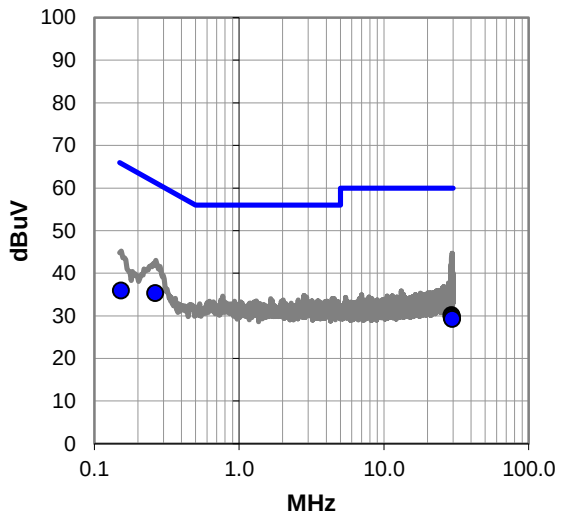
EUT OPERATING MODES

Transmitting RFID 13.56 MHz

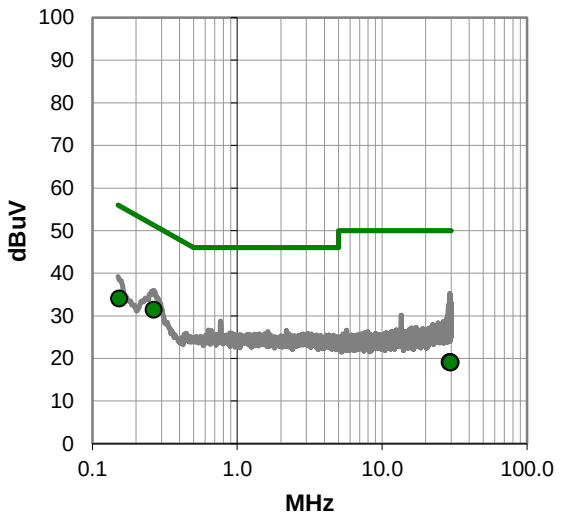
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

RESULTS - Run #8

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.264	14.9	20.5	35.4	61.3	-25.9
29.303	7.6	22.6	30.2	60.0	-29.8
0.153	15.4	20.6	36.0	65.9	-29.9
29.460	7.4	22.5	29.9	60.0	-30.1
29.494	7.2	22.5	29.7	60.0	-30.3
29.645	6.8	22.5	29.3	60.0	-30.7

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.264	11.0	20.5	31.5	51.3	-19.8
0.153	13.5	20.6	34.1	55.9	-21.8
29.303	-3.4	22.6	19.2	50.0	-30.8
29.460	-3.3	22.5	19.2	50.0	-30.8
29.645	-3.4	22.5	19.1	50.0	-30.9
29.494	-3.4	22.5	19.1	50.0	-30.9

CONCLUSION

Pass

Tested By

AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

EUT:	GLP12190 AccessPoint Center	Work Order:	ABBO0083
Serial Number:	ENG04-AP	Date:	2022-06-02
Customer:	Abbott Laboratories	Temperature:	21.7°C
Attendees:	None	Relative Humidity:	51.2%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Mark Baytan	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0083-8

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2022	ANSI C63.10:2013

TEST PARAMETERS

Run #:	9	Line:	Neutral	Add. Ext. Attenuation (dB):	0

COMMENTS

Antenna removed from PCB and replaced with matching load.

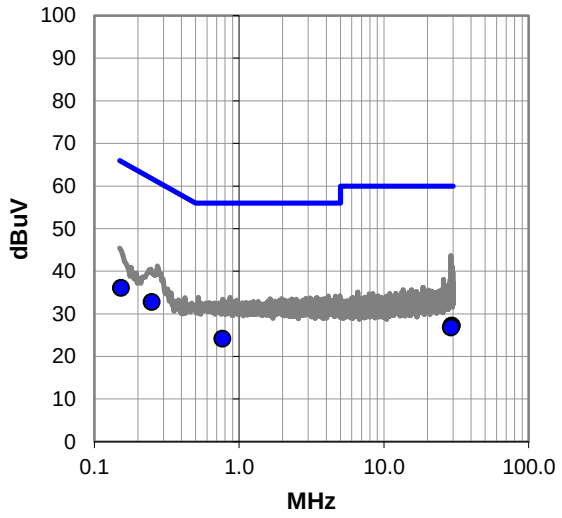
EUT OPERATING MODES

Transmitting RFID 13.56 MHz

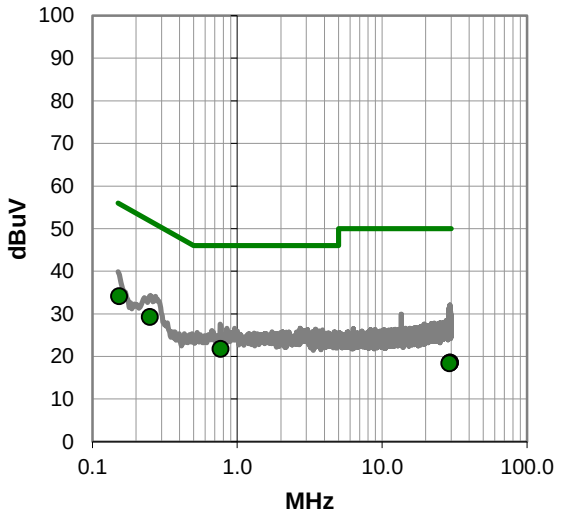
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

RESULTS - Run #9

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.248	12.2	20.6	32.8	61.8	-29.0
0.153	15.5	20.6	36.1	65.8	-29.7
0.767	4.0	20.2	24.2	56.0	-31.8
29.404	4.8	22.5	27.3	60.0	-32.7
29.331	4.6	22.6	27.2	60.0	-32.8
29.062	4.2	22.6	26.8	60.0	-33.2

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.153	13.6	20.6	34.2	55.8	-21.6
0.248	8.7	20.6	29.3	51.8	-22.5
0.767	1.6	20.2	21.8	46.0	-24.2
29.404	-3.9	22.5	18.6	50.0	-31.4
29.331	-4.0	22.6	18.6	50.0	-31.4
29.062	-4.2	22.6	18.4	50.0	-31.6

CONCLUSION

Pass

Tested By

AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

EUT:	GLP12193 AccessPoint Right	Work Order:	ABBO0083
Serial Number:	ENG03-AP	Date:	2022-06-01
Customer:	Abbott Laboratories	Temperature:	21.8°C
Attendees:	None	Relative Humidity:	55.4%
Customer Project:	None	Bar. Pressure (PMSL):	1016 mb
Tested By:	Mark Baytan	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0083-7

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2022	ANSI C63.10:2013

TEST PARAMETERS

Run #:	4	Line:	Neutral	Add. Ext. Attenuation (dB):	0

COMMENTS

None

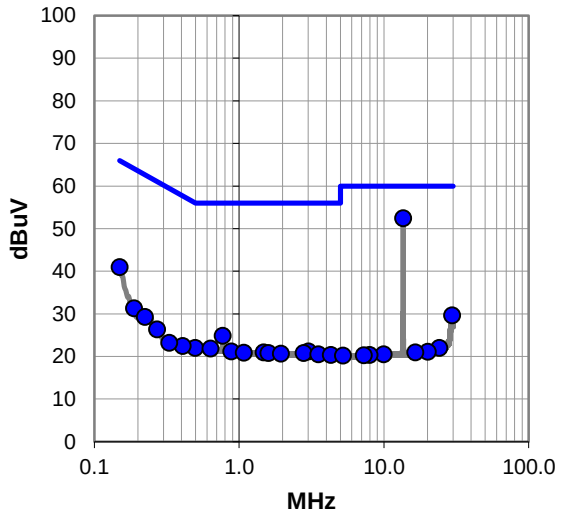
EUT OPERATING MODES

Transmitting RFID 13.56 MHz

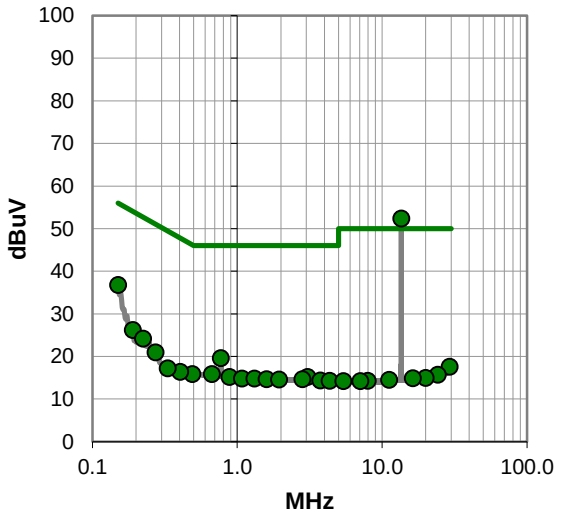
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

RESULTS - Run #4

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	31.6	20.9	52.5	60.0	-7.5
0.150	20.4	20.6	41.0	66.0	-25.0
29.528	7.2	22.5	29.7	60.0	-30.3
0.769	4.7	20.2	24.9	56.0	-31.1
0.188	10.7	20.6	31.3	64.1	-32.8
0.223	8.7	20.6	29.3	62.7	-33.4
0.496	1.8	20.2	22.0	56.1	-34.1
0.635	1.7	20.2	21.9	56.0	-34.1
0.272	5.9	20.5	26.4	61.1	-34.7
0.885	1.0	20.2	21.2	56.0	-34.8
3.017	1.0	20.2	21.2	56.0	-34.8
1.476	0.8	20.2	21.0	56.0	-35.0
1.076	0.9	20.0	20.9	56.0	-35.1
0.408	2.2	20.3	22.5	57.7	-35.2
1.598	0.6	20.2	20.8	56.0	-35.2
2.791	0.6	20.2	20.8	56.0	-35.2
1.949	0.5	20.2	20.7	56.0	-35.3
3.528	0.3	20.2	20.5	56.0	-35.5
4.294	0.2	20.2	20.4	56.0	-35.6
0.330	2.9	20.3	23.2	59.5	-36.3
24.082	0.1	21.9	22.0	60.0	-38.0
20.077	-0.3	21.4	21.1	60.0	-38.9
16.452	-0.2	21.2	21.0	60.0	-39.0
9.943	0.0	20.5	20.5	60.0	-39.5
7.971	0.0	20.4	20.4	60.0	-39.6

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	31.5	20.9	52.4	50.0	2.4
0.150	16.2	20.6	36.8	56.0	-19.2
0.769	-0.6	20.2	19.6	46.0	-26.4
0.190	5.6	20.6	26.2	54.1	-27.9
0.223	3.6	20.6	24.2	52.7	-28.5
0.272	0.5	20.5	21.0	51.1	-30.1
0.669	-4.3	20.2	15.9	46.0	-30.1
0.490	-4.3	20.2	15.9	46.2	-30.3
0.884	-5.0	20.2	15.2	46.0	-30.8
3.049	-5.0	20.2	15.2	46.0	-30.8
1.076	-5.2	20.0	14.8	46.0	-31.2
1.311	-5.3	20.1	14.8	46.0	-31.2
1.596	-5.5	20.2	14.7	46.0	-31.3
2.820	-5.5	20.2	14.7	46.0	-31.3
0.403	-3.9	20.3	16.4	47.8	-31.4
1.943	-5.6	20.2	14.6	46.0	-31.4
3.743	-5.8	20.2	14.4	46.0	-31.6
4.341	-5.9	20.2	14.3	46.0	-31.7
0.330	-3.1	20.3	17.2	49.5	-32.3
29.261	-5.0	22.6	17.6	50.0	-32.4
24.188	-6.3	22.0	15.7	50.0	-34.3
19.960	-6.4	21.4	15.0	50.0	-35.0
16.275	-6.3	21.2	14.9	50.0	-35.1
11.195	-6.2	20.7	14.5	50.0	-35.5
7.936	-6.1	20.4	14.3	50.0	-35.7

CONCLUSION

Evaluation

Tested By

AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

EUT:	GLP12193 AccessPoint Right	Work Order:	ABBO0083
Serial Number:	ENG03-AP	Date:	2022-06-01
Customer:	Abbott Laboratories	Temperature:	21.8°C
Attendees:	None	Relative Humidity:	55.4%
Customer Project:	None	Bar. Pressure (PMSL):	1016 mb
Tested By:	Mark Baytan	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0083-7

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2022	ANSI C63.10:2013

TEST PARAMETERS

Run #:	5	Line:	High Line	Add. Ext. Attenuation (dB):	0

COMMENTS

None

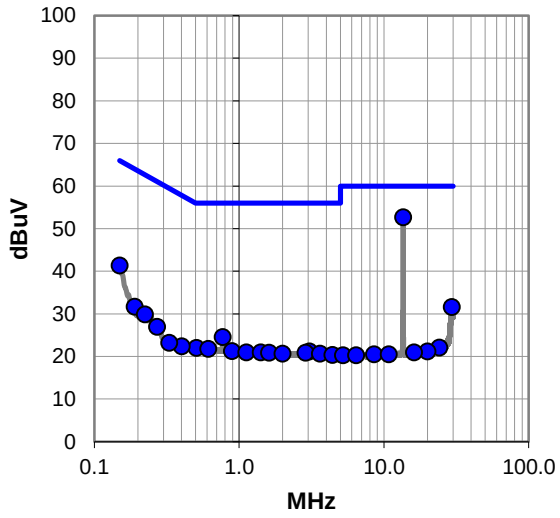
EUT OPERATING MODES

Transmitting RFID 13.56 MHz

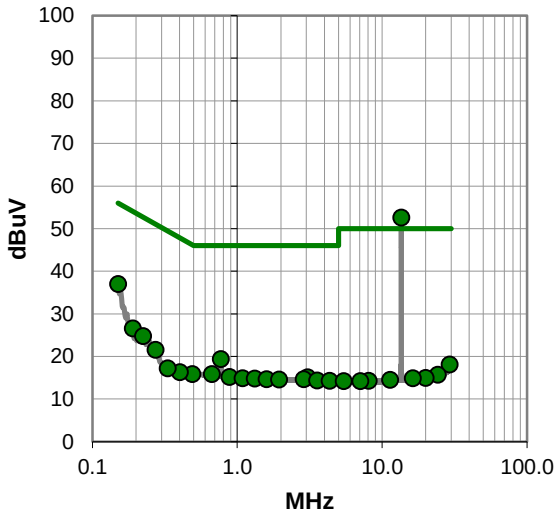
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

RESULTS - Run #5

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.559	31.8	20.9	52.7	60.0	-7.3
0.150	20.8	20.6	41.4	66.0	-24.6
29.430	9.1	22.5	31.6	60.0	-28.4
0.769	4.4	20.2	24.6	56.0	-31.4
0.190	11.1	20.6	31.7	64.1	-32.4
0.223	9.3	20.6	29.9	62.7	-32.8
0.507	1.8	20.2	22.0	56.0	-34.0
0.272	6.5	20.5	27.0	61.1	-34.1
0.614	1.6	20.2	21.8	56.0	-34.2
0.892	1.1	20.2	21.3	56.0	-34.7
3.052	1.0	20.2	21.2	56.0	-34.8
1.120	1.0	20.0	21.0	56.0	-35.0
1.412	0.8	20.2	21.0	56.0	-35.0
1.613	0.7	20.2	20.9	56.0	-35.1
2.878	0.7	20.2	20.9	56.0	-35.1
1.999	0.5	20.2	20.7	56.0	-35.3
3.620	0.5	20.2	20.7	56.0	-35.3
0.402	2.1	20.3	22.4	57.8	-35.4
4.422	0.2	20.2	20.4	56.0	-35.6
0.330	2.9	20.3	23.2	59.5	-36.3
24.107	0.2	21.9	22.1	60.0	-37.9
19.985	-0.2	21.4	21.2	60.0	-38.8
16.143	-0.2	21.2	21.0	60.0	-39.0
8.554	0.1	20.4	20.5	60.0	-39.5
10.788	-0.1	20.6	20.5	60.0	-39.5

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.559	31.7	20.9	52.6	50.0	2.6
0.150	16.4	20.6	37.0	56.0	-19.0
0.769	-0.8	20.2	19.4	46.0	-26.6
0.190	6.0	20.6	26.6	54.1	-27.5
0.223	4.2	20.6	24.8	52.7	-27.9
0.272	1.1	20.5	21.6	51.1	-29.5
0.667	-4.3	20.2	15.9	46.0	-30.1
0.490	-4.3	20.2	15.9	46.2	-30.3
0.884	-5.0	20.2	15.2	46.0	-30.8
3.049	-5.1	20.2	15.1	46.0	-30.9
1.088	-5.1	20.0	14.9	46.0	-31.1
1.319	-5.3	20.1	14.8	46.0	-31.2
1.596	-5.5	20.2	14.7	46.0	-31.3
2.867	-5.5	20.2	14.7	46.0	-31.3
1.944	-5.6	20.2	14.6	46.0	-31.4
0.402	-4.0	20.3	16.3	47.8	-31.5
3.560	-5.8	20.2	14.4	46.0	-31.6
4.347	-5.9	20.2	14.3	46.0	-31.7
29.239	-4.5	22.6	18.1	50.0	-31.9
0.330	-3.1	20.3	17.2	49.5	-32.3
24.175	-6.3	22.0	15.7	50.0	-34.3
19.943	-6.4	21.4	15.0	50.0	-35.0
16.266	-6.3	21.2	14.9	50.0	-35.1
11.327	-6.2	20.7	14.5	50.0	-35.5
8.078	-6.1	20.4	14.3	50.0	-35.7

CONCLUSION

Evaluation

Tested By

AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

EUT:	GLP12193 AccessPoint Right	Work Order:	ABBO0083
Serial Number:	ENG03-AP	Date:	2022-06-02
Customer:	Abbott Laboratories	Temperature:	21.7°C
Attendees:	None	Relative Humidity:	51.2%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Mark Baytan	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0083-7

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2022	ANSI C63.10:2013

TEST PARAMETERS

Run #:	10	Line:	Neutral	Add. Ext. Attenuation (dB):	0

COMMENTS

Antenna removed from PCB and replaced with matching load.

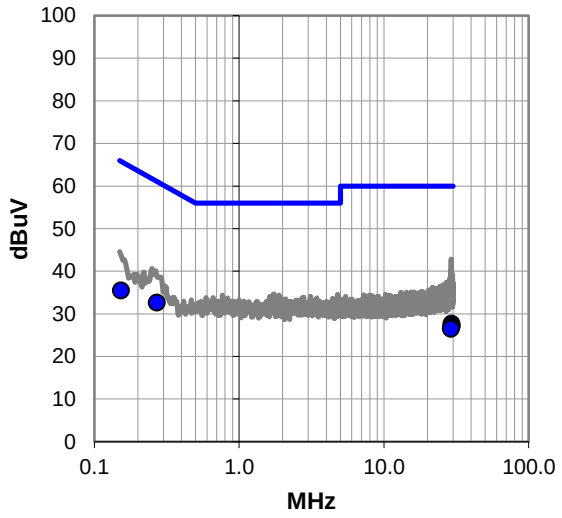
EUT OPERATING MODES

Transmitting RFID 13.56 MHz

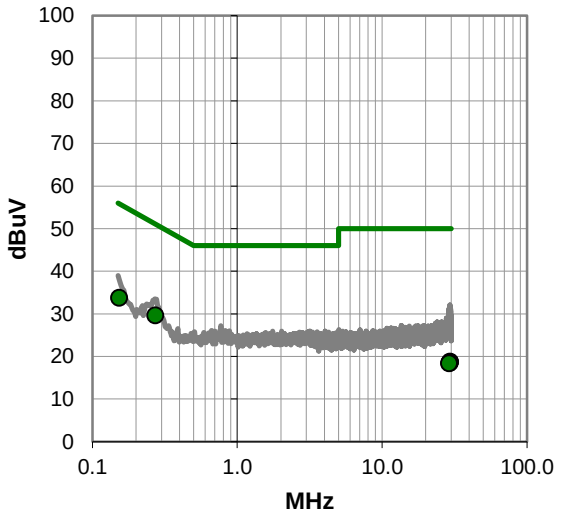
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

RESULTS - Run #10

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.271	12.2	20.5	32.7	61.1	-28.4
0.153	14.9	20.6	35.5	65.8	-30.3
29.349	5.1	22.6	27.7	60.0	-32.3
29.368	4.6	22.6	27.2	60.0	-32.8
29.186	4.4	22.6	27.0	60.0	-33.0
28.957	3.9	22.6	26.5	60.0	-33.5

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.271	9.2	20.5	29.7	51.1	-21.4
0.153	13.2	20.6	33.8	55.8	-22.0
29.368	-3.8	22.6	18.8	50.0	-31.2
29.349	-3.9	22.6	18.7	50.0	-31.3
29.186	-4.1	22.6	18.5	50.0	-31.5
28.957	-4.2	22.6	18.4	50.0	-31.6

CONCLUSION

Pass

Tested By

AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

EUT:	GLP12193 AccessPoint Right	Work Order:	ABBO0083
Serial Number:	ENG03-AP	Date:	2022-06-02
Customer:	Abbott Laboratories	Temperature:	21.7°C
Attendees:	None	Relative Humidity:	51.2%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Mark Baytan	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0083-7

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2022	ANSI C63.10:2013

TEST PARAMETERS

Run #:	11	Line:	High Line	Add. Ext. Attenuation (dB):	0

COMMENTS

Antenna removed from PCB and replaced with matching load.

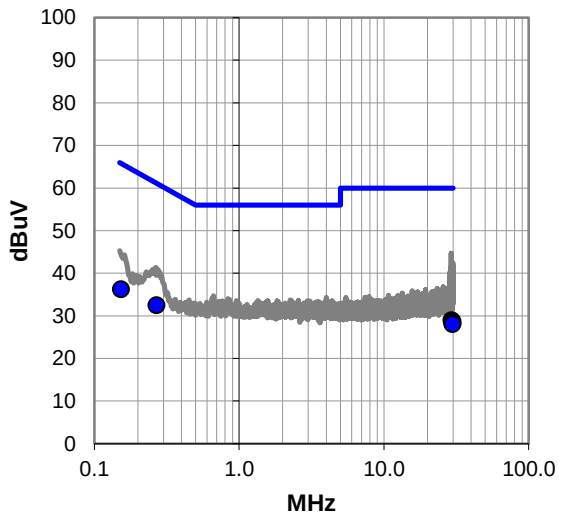
EUT OPERATING MODES

Transmitting RFID 13.56 MHz

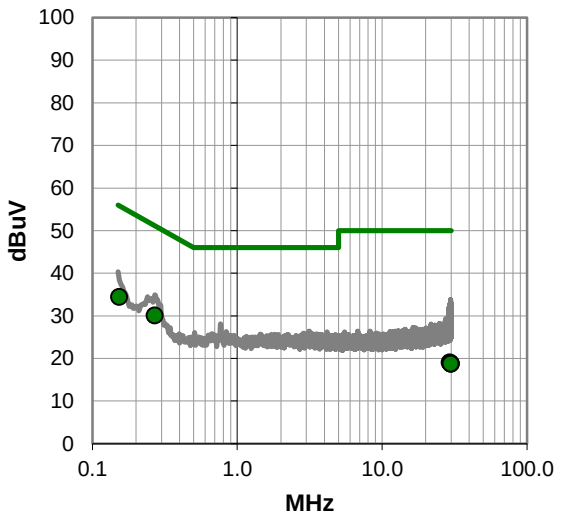
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

RESULTS - Run #11

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.268	12.0	20.5	32.5	61.2	-28.7
0.153	15.7	20.6	36.3	65.9	-29.6
29.221	6.4	22.6	29.0	60.0	-31.0
29.794	6.3	22.5	28.8	60.0	-31.2
29.746	5.8	22.5	28.3	60.0	-31.7
29.765	5.6	22.5	28.1	60.0	-31.9

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.268	9.6	20.5	30.1	51.2	-21.1
0.153	13.9	20.6	34.5	55.9	-21.4
29.221	-3.5	22.6	19.1	50.0	-30.9
29.746	-3.6	22.5	18.9	50.0	-31.1
29.794	-3.7	22.5	18.8	50.0	-31.2
29.765	-3.7	22.5	18.8	50.0	-31.2

CONCLUSION

Pass

Tested By

AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

EUT:	GLP12195 AccessPoint Left	Work Order:	ABBO0083
Serial Number:	ENG02-AP	Date:	2022-06-01
Customer:	Abbott Laboratories	Temperature:	21.8°C
Attendees:	None	Relative Humidity:	55.4%
Customer Project:	None	Bar. Pressure (PMSL):	1016 mb
Tested By:	Mark Baytan	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0083-6

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2022	ANSI C63.10:2013

TEST PARAMETERS

Run #:	6	Line:	High Line	Add. Ext. Attenuation (dB):	0

COMMENTS

None

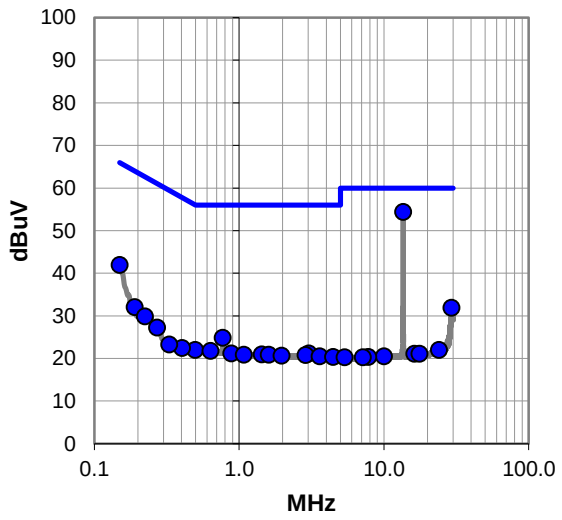
EUT OPERATING MODES

Transmitting RFID 13.56 MHz

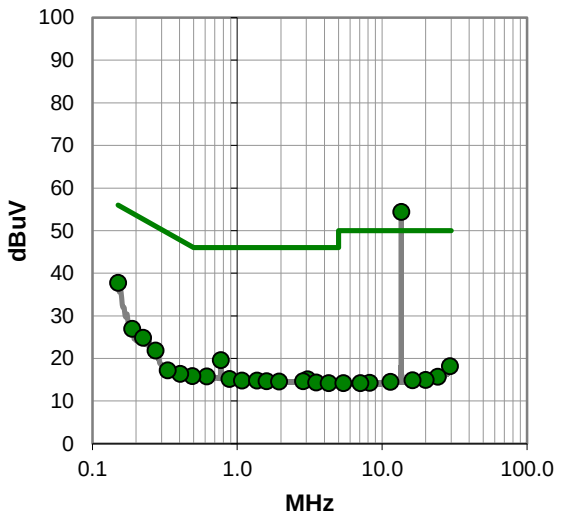
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

RESULTS - Run #6

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	33.5	20.9	54.4	60.0	-5.6
0.150	21.4	20.6	42.0	66.0	-24.0
29.354	9.3	22.6	31.9	60.0	-28.1
0.769	4.7	20.2	24.9	56.0	-31.1
0.190	11.5	20.6	32.1	64.1	-32.0
0.223	9.3	20.6	29.9	62.7	-32.8
0.272	6.8	20.5	27.3	61.1	-33.8
0.496	1.8	20.2	22.0	56.1	-34.1
0.634	1.6	20.2	21.8	56.0	-34.2
0.884	1.0	20.2	21.2	56.0	-34.8
3.034	1.0	20.2	21.2	56.0	-34.8
1.432	0.8	20.2	21.0	56.0	-35.0
1.079	0.9	20.0	20.9	56.0	-35.1
1.606	0.7	20.2	20.9	56.0	-35.1
2.877	0.6	20.2	20.8	56.0	-35.2
0.403	2.2	20.3	22.5	57.8	-35.3
1.963	0.5	20.2	20.7	56.0	-35.3
3.595	0.3	20.2	20.5	56.0	-35.5
4.454	0.2	20.2	20.4	56.0	-35.6
0.330	3.0	20.3	23.3	59.5	-36.2
23.966	0.1	21.9	22.0	60.0	-38.0
16.232	-0.1	21.2	21.1	60.0	-38.9
17.653	-0.1	21.2	21.1	60.0	-38.9
9.999	0.0	20.5	20.5	60.0	-39.5
7.794	0.0	20.4	20.4	60.0	-39.6

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	33.5	20.9	54.4	50.0	4.4
0.150	17.2	20.6	37.8	56.0	-18.2
0.769	-0.6	20.2	19.6	46.0	-26.4
0.188	6.4	20.6	27.0	54.1	-27.1
0.223	4.3	20.6	24.9	52.7	-27.8
0.272	1.4	20.5	21.9	51.1	-29.2
0.615	-4.4	20.2	15.8	46.0	-30.2
0.490	-4.3	20.2	15.9	46.2	-30.3
0.884	-5.0	20.2	15.2	46.0	-30.8
3.049	-5.1	20.2	15.1	46.0	-30.9
1.076	-5.2	20.0	14.8	46.0	-31.2
1.366	-5.3	20.1	14.8	46.0	-31.2
1.596	-5.5	20.2	14.7	46.0	-31.3
2.843	-5.5	20.2	14.7	46.0	-31.3
0.403	-3.9	20.3	16.4	47.8	-31.4
1.943	-5.6	20.2	14.6	46.0	-31.4
3.510	-5.8	20.2	14.4	46.0	-31.6
4.273	-6.0	20.2	14.2	46.0	-31.8
29.409	-4.3	22.5	18.2	50.0	-31.8
0.330	-3.1	20.3	17.2	49.5	-32.3
24.188	-6.3	22.0	15.7	50.0	-34.3
19.949	-6.4	21.4	15.0	50.0	-35.0
16.197	-6.3	21.2	14.9	50.0	-35.1
11.420	-6.2	20.7	14.5	50.0	-35.5
8.186	-6.1	20.4	14.3	50.0	-35.7

CONCLUSION

Evaluation

Tested By

AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

EUT:	GLP12195 AccessPoint Left	Work Order:	ABBO0083
Serial Number:	ENG02-AP	Date:	2022-06-01
Customer:	Abbott Laboratories	Temperature:	21.8°C
Attendees:	None	Relative Humidity:	55.4%
Customer Project:	None	Bar. Pressure (PMSL):	1016 mb
Tested By:	Mark Baytan	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0083-6

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2022	ANSI C63.10:2013

TEST PARAMETERS

Run #:	7	Line:	Neutral	Add. Ext. Attenuation (dB):	0

COMMENTS

None

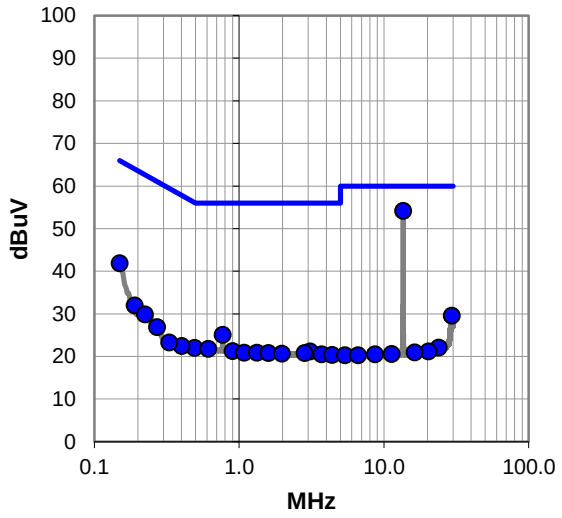
EUT OPERATING MODES

Transmitting RFID 13.56 MHz

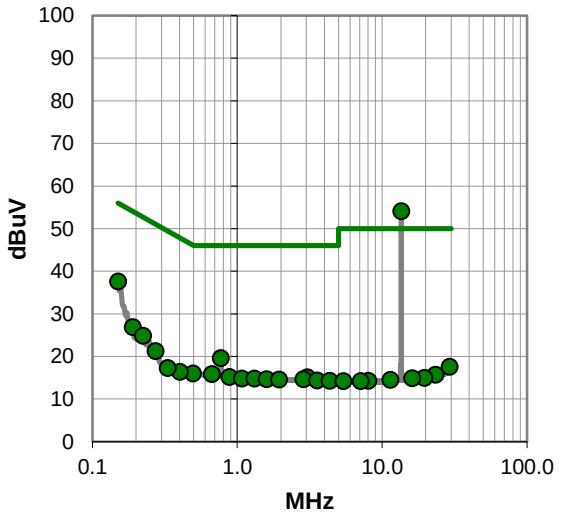
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

RESULTS - Run #7

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	33.3	20.9	54.2	60.0	-5.8
0.150	21.3	20.6	41.9	66.0	-24.1
29.380	7.0	22.6	29.6	60.0	-30.4
0.771	4.9	20.2	25.1	56.0	-30.9
0.190	11.4	20.6	32.0	64.1	-32.1
0.223	9.3	20.6	29.9	62.7	-32.8
0.493	1.8	20.2	22.0	56.1	-34.1
0.272	6.4	20.5	26.9	61.1	-34.2
0.612	1.6	20.2	21.8	56.0	-34.2
0.904	1.1	20.2	21.3	56.0	-34.7
3.089	1.0	20.2	21.2	56.0	-34.8
1.082	0.9	20.0	20.9	56.0	-35.1
1.326	0.8	20.1	20.9	56.0	-35.1
1.596	0.6	20.2	20.8	56.0	-35.2
2.837	0.6	20.2	20.8	56.0	-35.2
0.402	2.2	20.3	22.5	57.8	-35.3
1.979	0.5	20.2	20.7	56.0	-35.3
3.705	0.3	20.2	20.5	56.0	-35.5
4.398	0.2	20.2	20.4	56.0	-35.6
0.330	3.0	20.3	23.3	59.5	-36.2
23.940	0.2	21.9	22.1	60.0	-37.9
20.317	-0.2	21.4	21.2	60.0	-38.8
16.285	-0.2	21.2	21.0	60.0	-39.0
11.287	-0.1	20.7	20.6	60.0	-39.4
8.701	0.1	20.4	20.5	60.0	-39.5

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	33.2	20.9	54.1	50.0	4.1
0.150	17.0	20.6	37.6	56.0	-18.4
0.769	-0.6	20.2	19.6	46.0	-26.4
0.190	6.3	20.6	26.9	54.1	-27.2
0.223	4.3	20.6	24.9	52.7	-27.8
0.272	0.8	20.5	21.3	51.1	-29.8
0.493	-4.2	20.2	16.0	46.1	-30.1
0.667	-4.3	20.2	15.9	46.0	-30.1
0.884	-5.0	20.2	15.2	46.0	-30.8
3.048	-5.1	20.2	15.1	46.0	-30.9
1.076	-5.2	20.0	14.8	46.0	-31.2
1.311	-5.3	20.1	14.8	46.0	-31.2
1.596	-5.5	20.2	14.7	46.0	-31.3
2.861	-5.5	20.2	14.7	46.0	-31.3
0.402	-3.9	20.3	16.4	47.8	-31.4
1.943	-5.6	20.2	14.6	46.0	-31.4
3.556	-5.8	20.2	14.4	46.0	-31.6
4.331	-5.9	20.2	14.3	46.0	-31.7
0.330	-3.0	20.3	17.3	49.5	-32.2
29.326	-5.0	22.6	17.6	50.0	-32.4
23.437	-6.1	21.8	15.7	50.0	-34.3
19.592	-6.3	21.3	15.0	50.0	-35.0
16.169	-6.3	21.2	14.9	50.0	-35.1
11.436	-6.2	20.7	14.5	50.0	-35.5
8.031	-6.1	20.4	14.3	50.0	-35.7

CONCLUSION

Evaluation

Tested By

AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

EUT:	GLP12195 AccessPoint Left	Work Order:	ABBO0083
Serial Number:	ENG02-AP	Date:	2022-06-02
Customer:	Abbott Laboratories	Temperature:	21.7°C
Attendees:	None	Relative Humidity:	51.2%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Mark Baytan	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0083-6

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2022	ANSI C63.10:2013

TEST PARAMETERS

Run #:	12	Line:	High Line	Add. Ext. Attenuation (dB):	0

COMMENTS

Antenna removed from PCB and replaced with matching load.

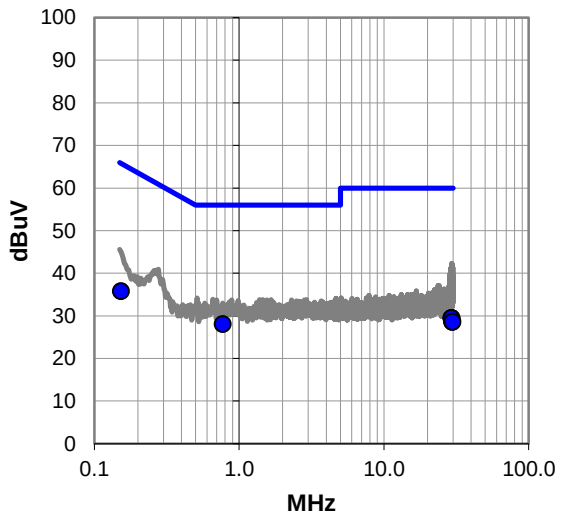
EUT OPERATING MODES

Transmitting RFID 13.56 MHz

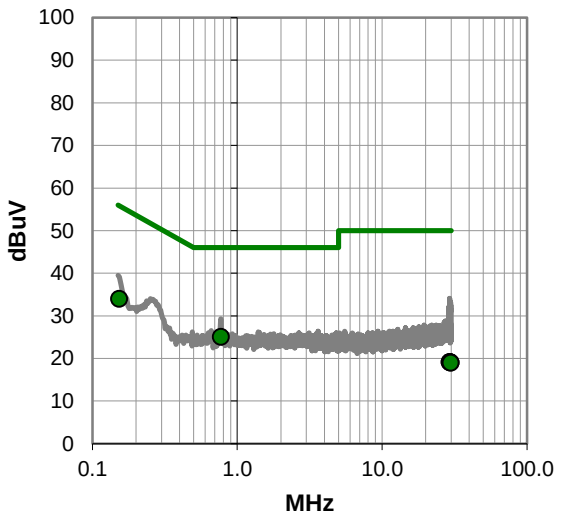
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

RESULTS - Run #12

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.770	7.9	20.2	28.1	56.0	-27.9
0.153	15.2	20.6	35.8	65.8	-30.0
29.255	6.9	22.6	29.5	60.0	-30.5
29.322	6.9	22.6	29.5	60.0	-30.5
29.643	6.1	22.5	28.6	60.0	-31.4
29.748	6.1	22.5	28.6	60.0	-31.4

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.770	4.9	20.2	25.1	46.0	-20.9
0.153	13.4	20.6	34.0	55.8	-21.8
29.255	-3.4	22.6	19.2	50.0	-30.8
29.322	-3.4	22.6	19.2	50.0	-30.8
29.643	-3.4	22.5	19.1	50.0	-30.9
29.748	-3.5	22.5	19.0	50.0	-31.0

CONCLUSION

Pass

Tested By

AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

EUT:	GLP12195 AccessPoint Left	Work Order:	ABBO0083
Serial Number:	ENG02-AP	Date:	2022-06-02
Customer:	Abbott Laboratories	Temperature:	21.7°C
Attendees:	None	Relative Humidity:	51.2%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Mark Baytan	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0083-6

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2022	ANSI C63.10:2013

TEST PARAMETERS

Run #:	13	Line:	Neutral	Add. Ext. Attenuation (dB):	0

COMMENTS

Antenna removed from PCB and replaced with matching load.

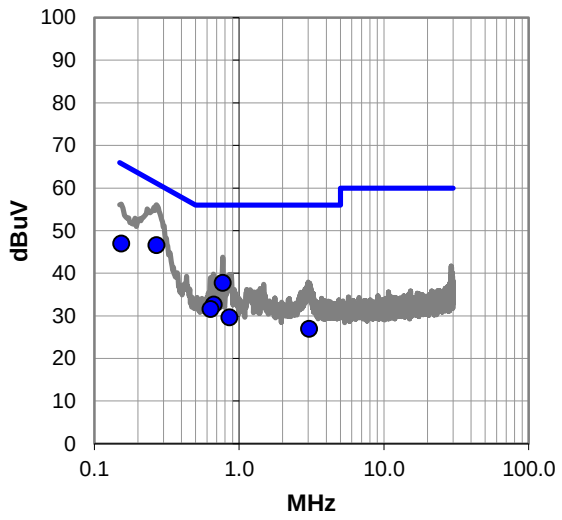
EUT OPERATING MODES

Transmitting RFID 13.56 MHz

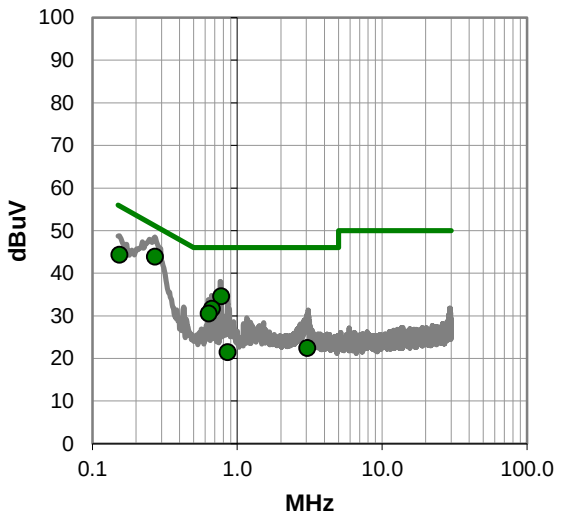
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

element
WTD.2021.09.21.0
EmiR5 2022.03.10.0
PSA-ESCI 2022.1.12.0

RESULTS - Run #13

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.269	26.1	20.5	46.6	61.1	-14.5
0.772	17.6	20.2	37.8	56.0	-18.2
0.154	26.4	20.6	47.0	65.8	-18.8
0.669	12.5	20.2	32.7	56.0	-23.3
0.635	11.4	20.2	31.6	56.0	-24.4
0.857	9.6	20.1	29.7	56.0	-26.3
3.047	6.8	20.2	27.0	56.0	-29.0

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.269	23.4	20.5	43.9	51.1	-7.2
0.154	23.8	20.6	44.4	55.8	-11.4
0.772	14.4	20.2	34.6	46.0	-11.4
0.669	11.5	20.2	31.7	46.0	-14.3
0.635	10.4	20.2	30.6	46.0	-15.4
3.047	2.3	20.2	22.5	46.0	-23.5
0.857	1.4	20.1	21.5	46.0	-24.5

CONCLUSION

Pass

Tested By

FIELD STRENGTH OF FUNDAMENTAL

PSA-ESCI 2022.1.12.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Transmitting RFID 13.56 MHz

POWER SETTINGS INVESTIGATED

220VAC/60Hz

CONFIGURATIONS INVESTIGATED

ABBO0083 - 8
ABBO0083 - 6
ABBO0083 - 7

FREQUENCY RANGE INVESTIGATED

Start Frequency	12.06 MHz	Stop Frequency	15.06 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Cable	Northwest EMC	RE 9kHz - 1GHz	TXB	2022-04-19	2023-04-19
Antenna - Loop	ETS Lindgren	6502	AZM	2020-07-09	2022-07-09
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFL	2022-03-22	2023-03-22

TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was continuously transmitting while set to the channel specified.

The fundamental carrier of the EUT was maximized by rotating the EUT on a turntable and adjusting the measurement antenna height and polarization (per ANSI C63.10). A calibrated active loop antenna was used for this test in order to provide sufficient measurement sensitivity. The reference point of the loop antenna was maintained at 1m above the ground plane during the testing.

Measurements were made with the required detectors and annotated on the data for each individual point using the following annotation:

QP = Quasi-Peak Detector
PK = Peak Detector
AV = RMS Detector

As outlined in 15.209(e), 15.31(f)(2), and RSS-GEN, 6.5, measurements may be performed at a distance closer than what is specified with the limit. The limit at the specified distance is shown on the data sheet. Measurements are made at a closer distance and the data is adjusted using a distance correction factor of 40dB/decade for comparison to the limit.

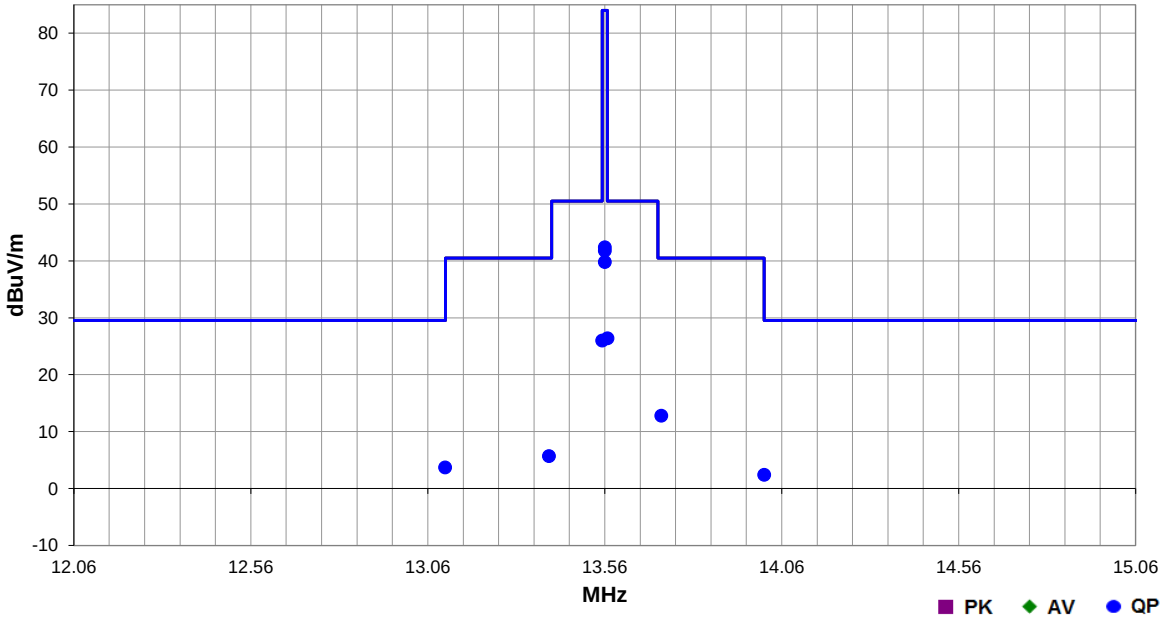
FIELD STRENGTH OF FUNDAMENTAL

EmiR5 2022.03.10.0 PSA-ESCI 2022.1.12.0

Work Order:	ABBO0083	**Date:**	2022-05-31		
Project:	None	**Temperature:**	22.7 °C		
Job Site:	TX02	**Humidity:**	53.9% RH		
Serial Number:	ENG05-AP	**Barometric Pres.:**	1014 mbar	**Tested by:**	Mark Baytan
EUT:	GLP12190 AccessPoint Center				
Configuration:	8				
Customer:	Abbott Laboratories				
Attendees:	None				
EUT Power:	220VAC/60Hz				
Operating Mode:	Transmitting RFID 13.56 MHz				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.225:2022	ANSI C63.10:2013

Run #	1	**Test Distance (m)**	10	**Antenna Height(s)**	1(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)
13.568	34.0	11.5	1.0	252.0	10.0	0.0	Para to GND	QP	-19.1	26.4	50.5	-24.1
13.553	33.6	11.5	1.0	199.0	10.0	0.0	Para to GND	QP	-19.1	26.0	50.5	-24.5
13.109	11.3	11.5	1.0	353.0	10.0	0.0	Para to GND	QP	-19.1	3.7	29.5	-25.8
14.011	10.0	11.5	1.0	78.0	10.0	0.0	Para to GND	QP	-19.1	2.4	29.5	-27.1
13.719	20.4	11.5	1.0	142.0	10.0	0.0	Para to GND	QP	-19.1	12.8	40.5	-27.7
13.402	13.3	11.5	1.0	159.0	10.0	0.0	Para to GND	QP	-19.1	5.7	40.5	-34.8
13.560	50.0	11.5	1.0	225.0	10.0	0.0	Para to GND	QP	-19.1	42.4	84.0	-41.6
13.560	49.4	11.5	1.0	240.0	10.0	0.0	Para to EUT	QP	-19.1	41.8	84.0	-42.2
13.560	47.4	11.5	1.0	229.0	10.0	0.0	Perp to EUT	QP	-19.1	39.8	84.0	-44.2

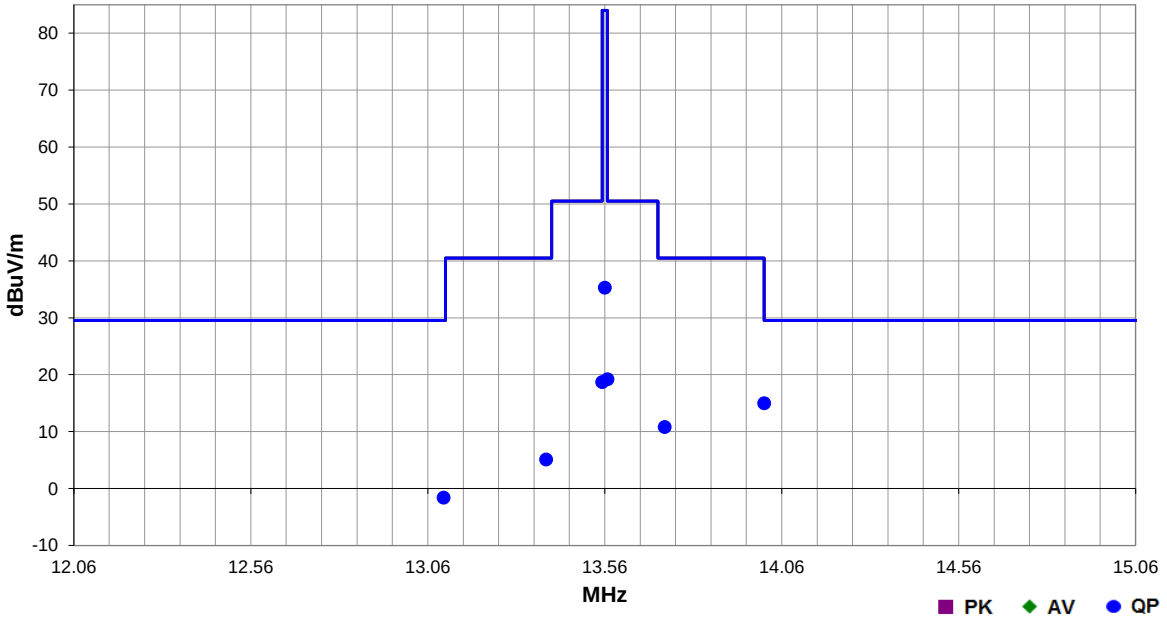
FIELD STRENGTH OF FUNDAMENTAL

EmiR5 2022.03.10.0 PSA-ESCI 2022.1.12.0

Work Order:	ABBO0083	**Date:**	2022-05-31		
Project:	None	**Temperature:**	22.7 °C		
Job Site:	TX02	**Humidity:**	53.9% RH		
Serial Number:	ENG02-AP	**Barometric Pres.:**	1014 mbar	**Tested by:**	Mark Baytan
EUT:	GLP12195 AccessPoint Left				
Configuration:	6				
Customer:	Abbott Laboratories				
Attendees:	None				
EUT Power:	220VAC/60Hz				
Operating Mode:	Transmitting RFID 13.56 MHz				
Deviations:	None				
Comments:	Using worst case antenna polarity found during testing on AccessPoint Center				

Test Specifications	**Test Method**
FCC 15.225:2022	ANSI C63.10:2013

Run #	2	**Test Distance (m)**	10	**Antenna Height(s)**	1(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)
14.011	22.6	11.5	1.0	298.0	10.0	0.0	Para to GND	QP	-19.1	15.0	29.5	-14.5
13.730	18.4	11.5	1.0	307.0	10.0	0.0	Para to GND	QP	-19.1	10.8	40.5	-29.7
13.105	6.0	11.5	1.0	112.0	10.0	0.0	Para to GND	QP	-19.1	-1.6	29.5	-31.1
13.568	26.8	11.5	1.0	197.0	10.0	0.0	Para to GND	QP	-19.1	19.2	50.5	-31.3
13.553	26.3	11.5	1.0	259.0	10.0	0.0	Para to GND	QP	-19.1	18.7	50.5	-31.8
13.394	12.7	11.5	1.0	349.0	10.0	0.0	Para to GND	QP	-19.1	5.1	40.5	-35.4
13.560	42.9	11.5	1.0	220.0	10.0	0.0	Para to GND	QP	-19.1	35.3	84.0	-48.7

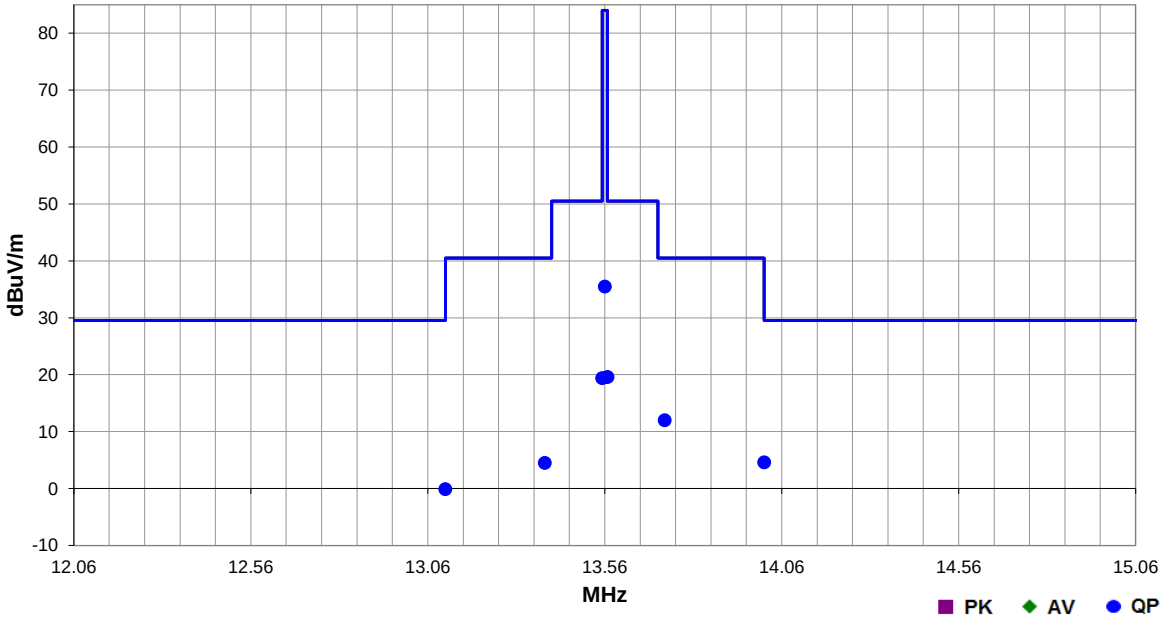
FIELD STRENGTH OF FUNDAMENTAL

EmiR5 2022.03.10.0 PSA-ESCI 2022.1.12.0

Work Order:	ABBO0083	**Date:**	2022-05-31		
Project:	None	**Temperature:**	22.7 °C		
Job Site:	TX02	**Humidity:**	53.9% RH		
Serial Number:	ENG03-AP	**Barometric Pres.:**	1014 mbar	**Tested by:**	Mark Baytan
EUT:	GLP12193 AccessPoint Right				
Configuration:	7				
Customer:	Abbott Laboratories				
Attendees:	None				
EUT Power:	220VAC/60Hz				
Operating Mode:	Transmitting RFID 13.56 MHz				
Deviations:	None				
Comments:	Using worst case antenna polarity found during testing on AccessPoint Center				

Test Specifications	**Test Method**
FCC 15.225:2022	ANSI C63.10:2013

Run #	3	**Test Distance (m)**	10	**Antenna Height(s)**	1(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)
14.011	12.2	11.5	1.0	358.0	10.0	0.0	Para to GND	QP	-19.1	4.6	29.5	-24.9
13.730	19.6	11.5	1.0	146.0	10.0	0.0	Para to GND	QP	-19.1	12.0	40.5	-28.5
13.110	7.5	11.5	1.0	356.0	10.0	0.0	Para to GND	QP	-19.1	-0.1	29.5	-29.6
13.568	27.2	11.5	1.0	232.0	10.0	0.0	Para to GND	QP	-19.1	19.6	50.5	-30.9
13.553	27.0	11.5	1.0	215.0	10.0	0.0	Para to GND	QP	-19.1	19.4	50.5	-31.1
13.391	12.1	11.5	1.0	42.0	10.0	0.0	Para to GND	QP	-19.1	4.5	40.5	-36.0
13.560	43.1	11.5	1.0	266.0	10.0	0.0	Para to GND	QP	-19.1	35.5	84.0	-48.5

FIELD STRENGTH OF SPURIOUS EMISSIONS (BELOW 30 MHz)

PSA-ESCI 2022.1.12.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Transmitting RFID 13.56 MHz

POWER SETTINGS INVESTIGATED

220VAC/60Hz

CONFIGURATIONS INVESTIGATED

ABBO0083 - 6
ABBO0083 - 7
ABBO0083 - 8

FREQUENCY RANGE INVESTIGATED

Start Frequency	490 kHz	Stop Frequency	30 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFL	2022-03-22	2023-03-22
Cable	Northwest EMC	RE 9kHz - 1GHz	TXB	2022-04-19	2023-04-19
Antenna - Loop	ETS Lindgren	6502	AZM	2020-07-09	2022-07-09

TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was continuously transmitting while set to the channel specified.

For each configuration, the spectrum was scanned throughout the specified range as part of the exploratory investigation of the emissions. These “pre-scans” are not included in the report. Final measurements on individual emissions were then made and included in this test report.

The individual emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis if required, and adjusting the measurement antenna height and polarization (per ANSI C63.10). An active loop antenna was used for this test in order to provide sufficient measurement sensitivity.

Measurements were made with the required detectors and annotated on the data for each individual point using the following annotation:

QP = Quasi-Peak Detector
PK = Peak Detector
AV = RMS Detector

If there are no detectable emissions above the noise floor, the data included may show noise floor measurements for reference only.

As outlined in 15.209(e), 15.31(f)(2), and RSS-GEN, 6.5, measurements may be performed at a distance closer than what is specified with the limit. The limit at the specified distance is shown on the data sheet. Measurements are made at a closer distance and the data is adjusted using a distance correction factor of 40dB/decade for comparison to the limit.

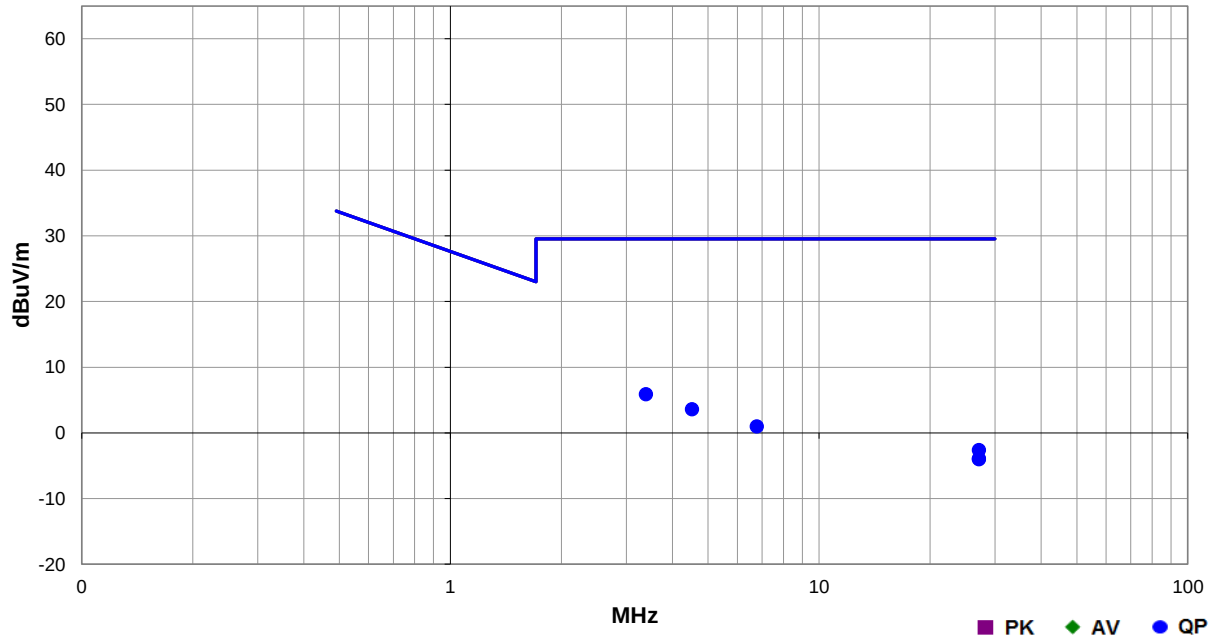
FIELD STRENGTH OF SPURIOUS EMISSIONS (BELOW 30 MHz)

EmiR5 2022.03.10.0 PSA-ESCI 2022.1.12.0

Work Order:	ABBO0083	**Date:**	2022-06-01		
Project:	None	**Temperature:**	21.3 °C		
Job Site:	TX02	**Humidity:**	58.5% RH		
Serial Number:	ENG04-AP	**Barometric Pres.:**	1014 mbar	**Tested by:**	Mark Baytan
EUT:	GLP12190 AccessPoint Center				
Configuration:	8				
Customer:	Abbott Laboratories				
Attendees:	None				
EUT Power:	220VAC/60Hz				
Operating Mode:	Transmitting RFID 13.56 MHz				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.225:2022	ANSI C63.10:2013

Run #	83	**Test Distance (m)**	10	**Antenna Height(s)**	1(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)
3.392	13.5	11.5	1.0	271.0	10.0	0.0	Perp to EUT	QP	-19.1	5.9	29.5	-23.6
4.522	11.1	11.6	1.0	18.0	10.0	0.0	Perp to EUT	QP	-19.1	3.6	29.5	-25.9
6.775	8.5	11.6	1.0	290.0	10.0	0.0	Perp to EUT	QP	-19.1	1.0	29.5	-28.5
27.117	6.6	9.9	1.0	0.0	10.0	0.0	Perp to EUT	QP	-19.1	-2.6	29.5	-32.1
27.125	5.3	9.9	1.0	124.0	10.0	0.0	Para to GND	QP	-19.1	-3.9	29.5	-33.4
27.124	5.2	9.9	1.0	162.0	10.0	0.0	Para to EUT	QP	-19.1	-4.0	29.5	-33.5

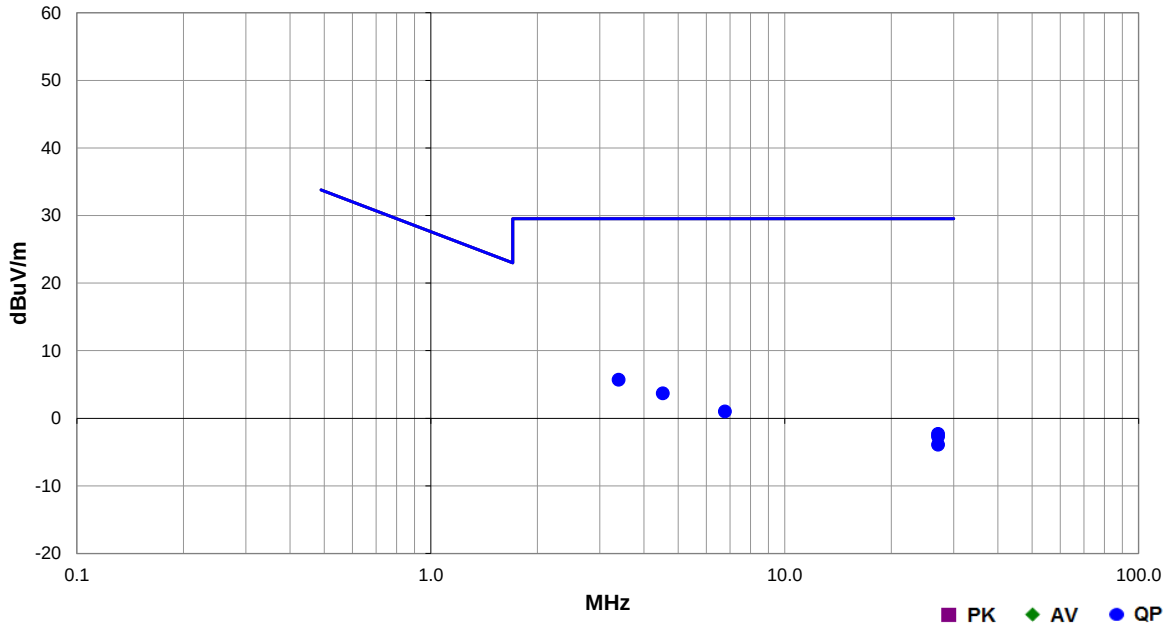
FIELD STRENGTH OF SPURIOUS EMISSIONS (BELOW 30 MHz)

EmiR5 2022.03.10.0 PSA-ESCI 2022.1.12.0

Work Order:	ABBO0083	**Date:**	2022-06-01		
Project:	None	**Temperature:**	21.3 °C		
Job Site:	TX02	**Humidity:**	58.5% RH		
Serial Number:	ENG03-AP	**Barometric Pres.:**	1014 mbar	**Tested by:**	Mark Baytan
EUT:	GLP12193 AccessPoint Right				
Configuration:	7				
Customer:	Abbott Laboratories				
Attendees:	None				
EUT Power:	220VAC/60Hz				
Operating Mode:	Transmitting RFID 13.56 MHz				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.225:2022	ANSI C63.10:2013

Run #	84	**Test Distance (m)**	10	**Antenna Height(s)**	1(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)
3.394	13.3	11.5	1.0	264.0	10.0	0.0	Perp to EUT	QP	-19.1	5.7	29.5	-23.8
4.525	11.2	11.6	1.0	191.0	10.0	0.0	Perp to EUT	QP	-19.1	3.7	29.5	-25.8
6.779	8.5	11.6	1.0	305.0	10.0	0.0	Perp to EUT	QP	-19.1	1.0	29.5	-28.5
27.122	6.9	9.9	1.0	64.0	10.0	0.0	Perp to EUT	QP	-19.1	-2.3	29.5	-31.8
27.116	6.5	9.9	1.0	213.0	10.0	0.0	Para to EUT	QP	-19.1	-2.7	29.5	-32.2
27.123	5.3	9.9	1.0	199.0	10.0	0.0	Para to GND	QP	-19.1	-3.9	29.5	-33.4

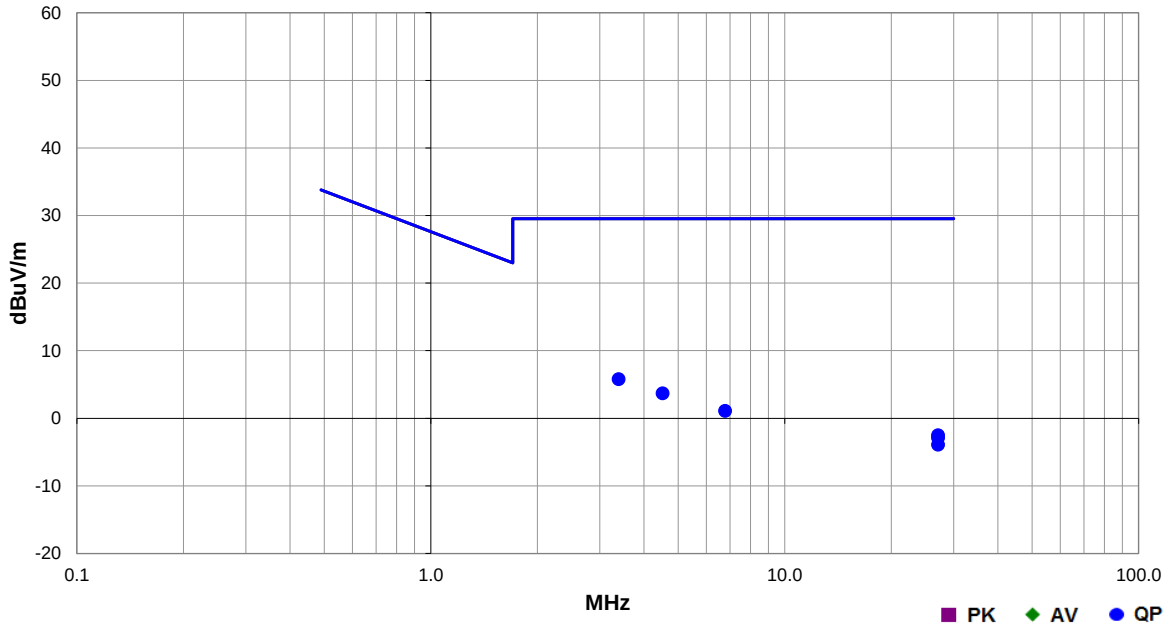
FIELD STRENGTH OF SPURIOUS EMISSIONS (BELOW 30 MHz)

EmiR5 2022.03.10.0 PSA-ESCI 2022.1.12.0

Work Order:	ABBO0083	**Date:**	2022-06-01		
Project:	None	**Temperature:**	21.3 °C		
Job Site:	TX02	**Humidity:**	58.5% RH		
Serial Number:	ENG02-AP	**Barometric Pres.:**	1014 mbar	**Tested by:**	Mark Baytan
EUT:	GLP12195 AccessPoint Left				
Configuration:	6				
Customer:	Abbott Laboratories				
Attendees:	None				
EUT Power:	220VAC/60Hz				
Operating Mode:	Transmitting RFID 13.56 MHz				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.225:2022	ANSI C63.10:2013

Run #	85	**Test Distance (m)**	10	**Antenna Height(s)**	1(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)
3.392	13.4	11.5	1.0	188.0	10.0	0.0	Perp to EUT	QP	-19.1	5.8	29.5	-23.7
4.520	11.2	11.6	1.0	240.0	10.0	0.0	Perp to EUT	QP	-19.1	3.7	29.5	-25.8
6.780	8.6	11.6	1.0	360.0	10.0	0.0	Perp to EUT	QP	-19.1	1.1	29.5	-28.4
27.123	6.7	9.9	1.0	126.0	10.0	0.0	Perp to EUT	QP	-19.1	-2.5	29.5	-32.0
27.119	6.3	9.9	1.0	299.0	10.0	0.0	Para to EUT	QP	-19.1	-2.9	29.5	-32.4
27.117	5.3	9.9	1.0	305.0	10.0	0.0	Para to GND	QP	-19.1	-3.9	29.5	-33.4

FIELD STRENGTH OF SPURIOUS EMISSIONS (ABOVE 30 MHz)

PSA-ESCI 2022.1.12.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Transmitting RFID 13.56 MHz

POWER SETTINGS INVESTIGATED

220VAC/60Hz

CONFIGURATIONS INVESTIGATED

ABBO0083 - 8
ABBO0083 - 7
ABBO0083 - 6

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	1000 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFL	2022-03-22	2023-03-22
Antenna - Biconilog	ETS Lindgren	3143B	AYF	2020-06-25	2022-06-25
Cable	Northwest EMC	RE 9kHz - 1GHz	TXB	2022-04-19	2023-04-19
Amplifier - Pre-Amplifier	Fairview Microwave	FMAM63001	PAS	2022-04-19	2023-04-19

TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was transmitting while set at the operating channel.

For each configuration, the spectrum was scanned throughout the specified range as part of the exploratory investigation of the emissions. These “pre-scans” are not included in the report. Final measurements on individual emissions were then made and included in this test report.

The individual emissions from the EUT were maximized by rotating the EUT on a turntable and adjusting the measurement antenna height and polarization (per ANSI C63.10). A preamp and high pass filter (and notch filter) were used for this test in order to provide sufficient measurement sensitivity.

Measurements were made with the required detectors and annotated on the data for each individual point using the following annotation:

QP = Quasi-Peak Detector
PK = Peak Detector
AV = RMS Detector

Measurements were made to satisfy the specific requirements of the test specification for out of band emissions as well as the restricted band requirements.

If there are no detectable emissions above the noise floor, the data included may show noise floor measurements for reference only.

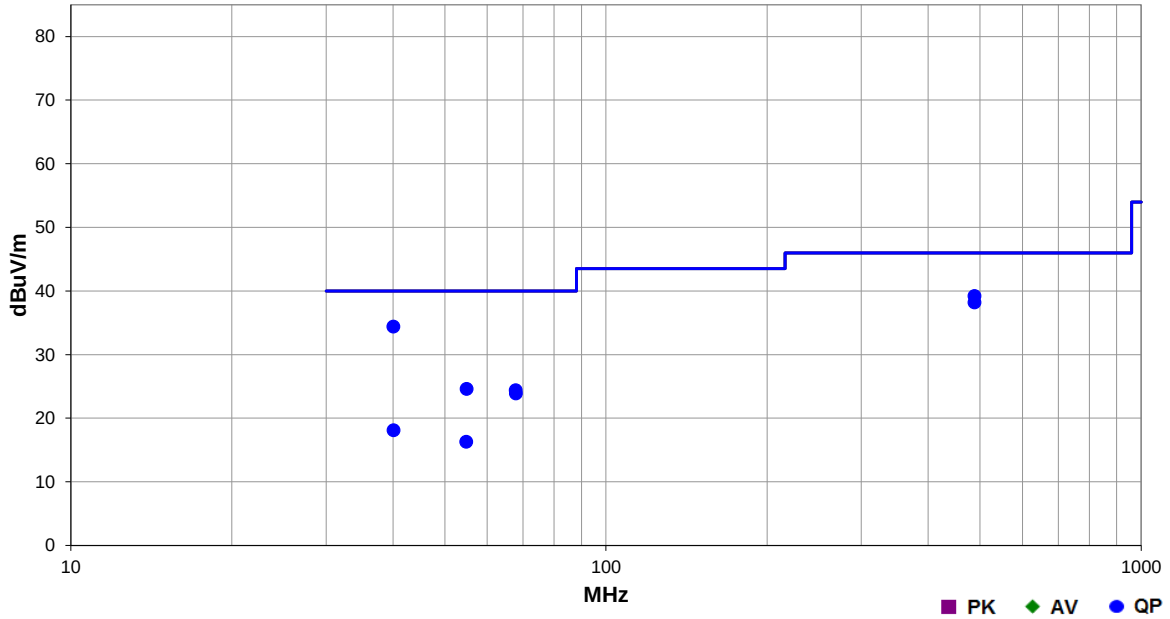
FIELD STRENGTH OF SPURIOUS EMISSIONS (ABOVE 30 MHz)

EmiR5 2022.03.10.0 PSA-ESCI 2022.1.12.0

Work Order:	ABBO0083	**Date:**	2022-06-01		
Project:	None	**Temperature:**	21.3 °C		
Job Site:	TX02	**Humidity:**	58.5% RH		
Serial Number:	ENG02-AP	**Barometric Pres.:**	1019 mbar	**Tested by:**	Mark Baytan
EUT:	GLP12195 AccessPoint Left				
Configuration:	6				
Customer:	Abbott Laboratories				
Attendees:	None				
EUT Power:	220VAC/60Hz				
Operating Mode:	Transmitting RFID 13.56 MHz				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.225:2022	ANSI C63.10:2013

Run #	86	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)
40.064	57.5	-23.1	1.0	360.0	3.0	0.0	Vert	QP	0.0	34.4	40.0	-5.6
488.166	50.3	-11.1	1.39	231.0	3.0	0.0	Vert	QP	0.0	39.2	46.0	-6.8
488.161	49.3	-11.1	1.0	265.0	3.0	0.0	Horz	QP	0.0	38.2	46.0	-7.8
54.872	51.5	-26.9	1.0	198.0	3.0	0.0	Vert	QP	0.0	24.6	40.0	-15.4
67.805	50.4	-26.0	1.0	264.0	3.0	0.0	Vert	QP	0.0	24.4	40.0	-15.6
67.872	49.9	-26.0	2.55	154.0	3.0	0.0	Horz	QP	0.0	23.9	40.0	-16.1
40.094	41.2	-23.1	1.0	80.0	3.0	0.0	Horz	QP	0.0	18.1	40.0	-21.9
54.811	43.2	-26.9	1.0	74.0	3.0	0.0	Horz	QP	0.0	16.3	40.0	-23.7

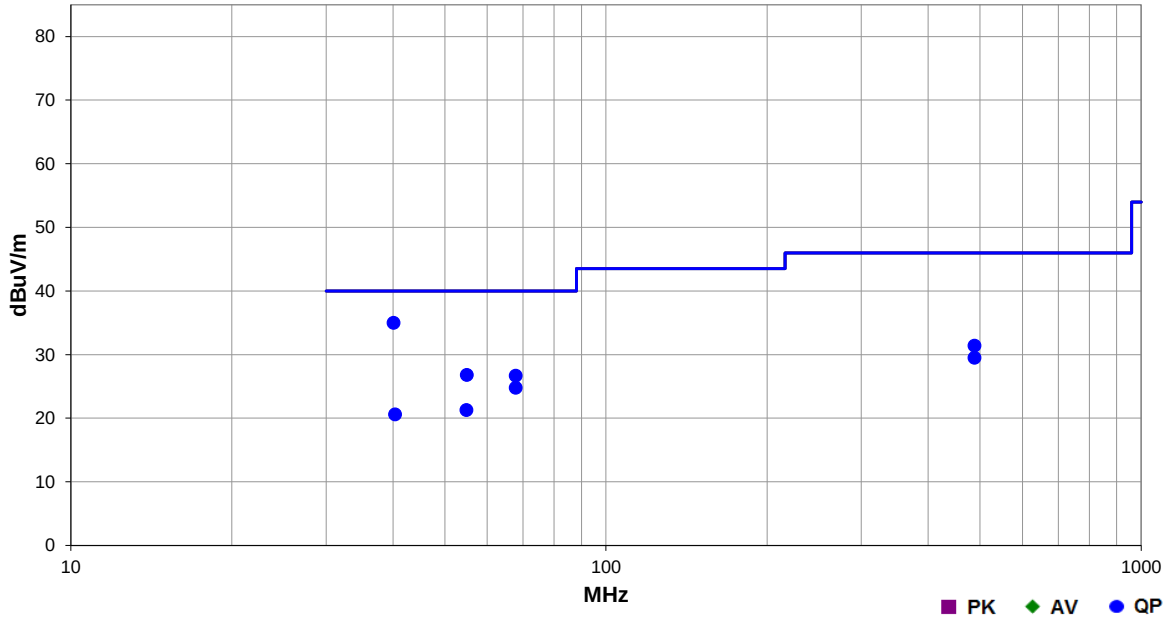
FIELD STRENGTH OF SPURIOUS EMISSIONS (ABOVE 30 MHz)

EmiR5 2022.03.10.0 PSA-ESCI 2022.1.12.0

Work Order:	ABBO0083	**Date:**	2022-06-01		
Project:	None	**Temperature:**	21.3 °C		
Job Site:	TX02	**Humidity:**	58.5% RH		
Serial Number:	ENG03-AP	**Barometric Pres.:**	1019 mbar	**Tested by:**	Mark Baytan
EUT:	GLP12193 AccessPoint Right				
Configuration:	7				
Customer:	Abbott Laboratories				
Attendees:	None				
EUT Power:	220VAC/60Hz				
Operating Mode:	Transmitting RFID 13.56 MHz				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.225:2022	ANSI C63.10:2013

Run #	87	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)
40.100	58.1	-23.1	1.0	306.0	3.0	0.0	Vert	QP	0.0	35.0	40.0	-5.0
54.918	53.7	-26.9	1.0	148.0	3.0	0.0	Vert	QP	0.0	26.8	40.0	-13.2
67.807	52.7	-26.0	1.0	234.0	3.0	0.0	Vert	QP	0.0	26.7	40.0	-13.3
488.165	42.5	-11.1	1.08	262.0	3.0	0.0	Horz	QP	0.0	31.4	46.0	-14.6
67.786	50.9	-26.1	2.28	95.0	3.0	0.0	Horz	QP	0.0	24.8	40.0	-15.2
488.166	40.6	-11.1	1.5	171.0	3.0	0.0	Vert	QP	0.0	29.5	46.0	-16.5
54.859	48.2	-26.9	3.16	231.0	3.0	0.0	Horz	QP	0.0	21.3	40.0	-18.7
40.357	43.9	-23.3	2.2	42.0	3.0	0.0	Horz	QP	0.0	20.6	40.0	-19.4

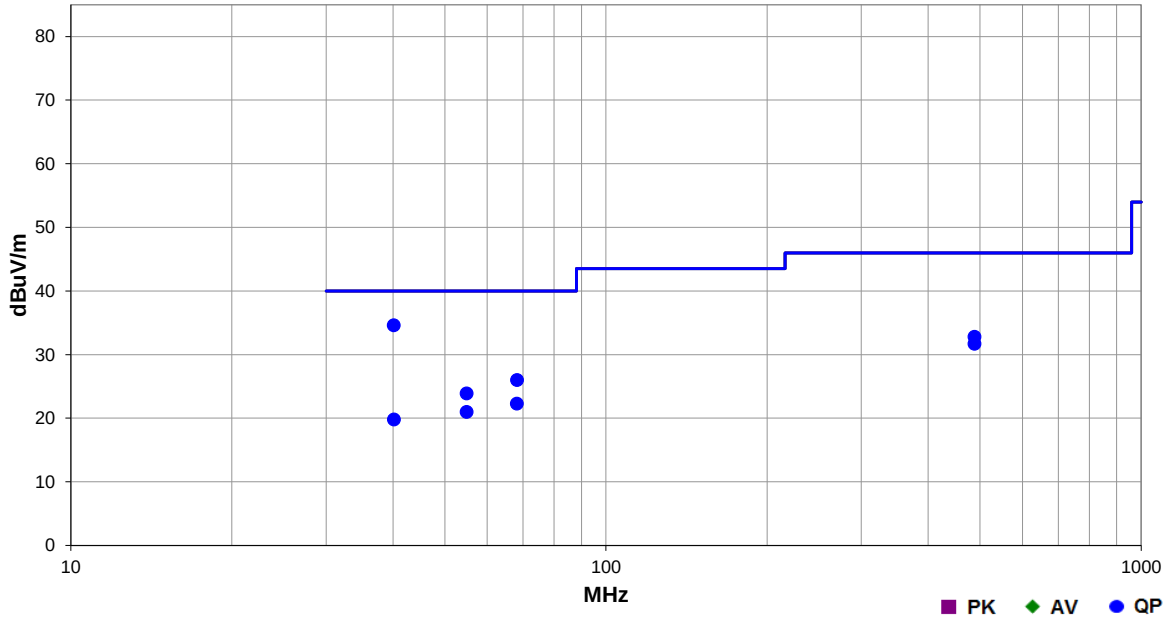
FIELD STRENGTH OF SPURIOUS EMISSIONS (ABOVE 30 MHz)

EmiR5 2022.03.10.0 PSA-ESCI 2022.1.12.0

Work Order:	ABBO0083	**Date:**	2022-06-01		
Project:	None	**Temperature:**	21.3 °C		
Job Site:	TX02	**Humidity:**	58.5% RH		
Serial Number:	ENG04-AP	**Barometric Pres.:**	1019 mbar	**Tested by:**	Mark Baytan
EUT:	GLP12190 AccessPoint Center				
Configuration:	8				
Customer:	Abbott Laboratories				
Attendees:	None				
EUT Power:	220VAC/60Hz				
Operating Mode:	Transmitting RFID 13.56 MHz				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.225:2022	ANSI C63.10:2013

Run #	88	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)
40.103	57.7	-23.1	1.0	132.0	3.0	0.0	Vert	QP	0.0	34.6	40.0	-5.4
488.028	44.0	-11.2	1.0	160.0	3.0	0.0	Horz	QP	0.0	32.8	46.0	-13.2
68.166	52.0	-26.0	3.1	129.0	3.0	0.0	Horz	QP	0.0	26.0	40.0	-14.0
488.175	42.8	-11.1	1.59	330.0	3.0	0.0	Vert	QP	0.0	31.7	46.0	-14.3
54.906	50.8	-26.9	1.0	63.0	3.0	0.0	Vert	QP	0.0	23.9	40.0	-16.1
68.153	48.3	-26.0	1.0	139.0	3.0	0.0	Vert	QP	0.0	22.3	40.0	-17.7
54.913	47.9	-26.9	2.62	215.0	3.0	0.0	Horz	QP	0.0	21.0	40.0	-19.0
40.133	42.9	-23.1	2.68	62.0	3.0	0.0	Horz	QP	0.0	19.8	40.0	-20.2

FREQUENCY STABILITY

XMit 2020.12.30.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Meter - Multimeter	Fluke	77-IV	MLT	2020-10-15	2023-10-15
Chamber - Temperature/Humidity	Cincinnati Sub Zero (CSZ)	ZPH-8-2-SCT/AC	TBH	NCR	NCR
Transformer	Staco Energy Products Co.	3PN2520B	XFZ	NCR	NCR
Thermometer	Omega Engineering, Inc.	HH311	DUI	2021-02-02	2024-02-02
Probe - Near Field Set	ETS Lindgren	7405	IPS	NCR	NCR
Cable	UtiFlex Micro-Coax	UFD1150A-1-0720-200200	TXJ	2020-09-22	2021-09-22
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFN	2021-01-06	2022-01-06

TEST DESCRIPTION

The spectrum analyzer is equipped with a precision frequency reference that exceeds the stability requirement of the EUT.

Measurements were made on the single transmit frequency as called out on the data sheets. Testing was done while the EUT was transmitting with an unmodulated carrier.

The primary supply voltage was varied from 85 % to 115% of the nominal voltage while at ambient temperature. Using a temperature chamber, the transmit frequency was recorded at the extremes of the specified temperature range of -20 ° to +50° C and at 10°C intervals.

The requirement of a frequency tolerance of ±0.01% is equivalent to 100 ppm
The formula to check for compliance is:

ppm = (Measured Frequency / Measured Nominal Frequency - 1) * 1,000,000

FREQUENCY STABILITY

TbtTx 2021.03.19.1 XMit 2020.12.30.0

EUT:	AccessPoint Radio			**Work Order:**	ABBO0083
Serial Number:	ENG05-AP			**Date:**	24-Jul-21
Customer:	Abbott Laboratories			**Temperature:**	25 °C
Attendees:	Don Mendell			**Humidity:**	47.8% RH
Project:	None			**Barometric Pres.:**	1019 mbar
Tested by:	Mark Baytan	**Power:**	220VAC/60Hz	**Job Site:**	TX05

TEST SPECIFICATIONS	**Test Method**
FCC 15.225:2021	ANSI C63.10:2013

COMMENTS

Contains the same AccessController IO (PCB:20008971) present in all variants of the AccessPoint: Center, Left, and Right.

DEVIATIONS FROM TEST STANDARD

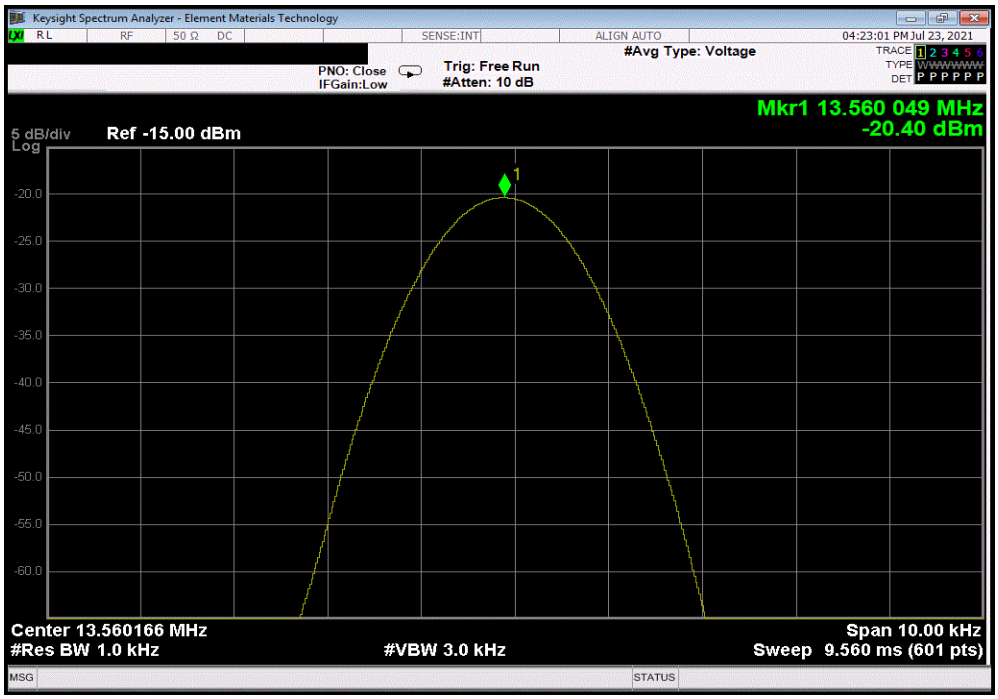
None

Configuration #	9	*Signature*

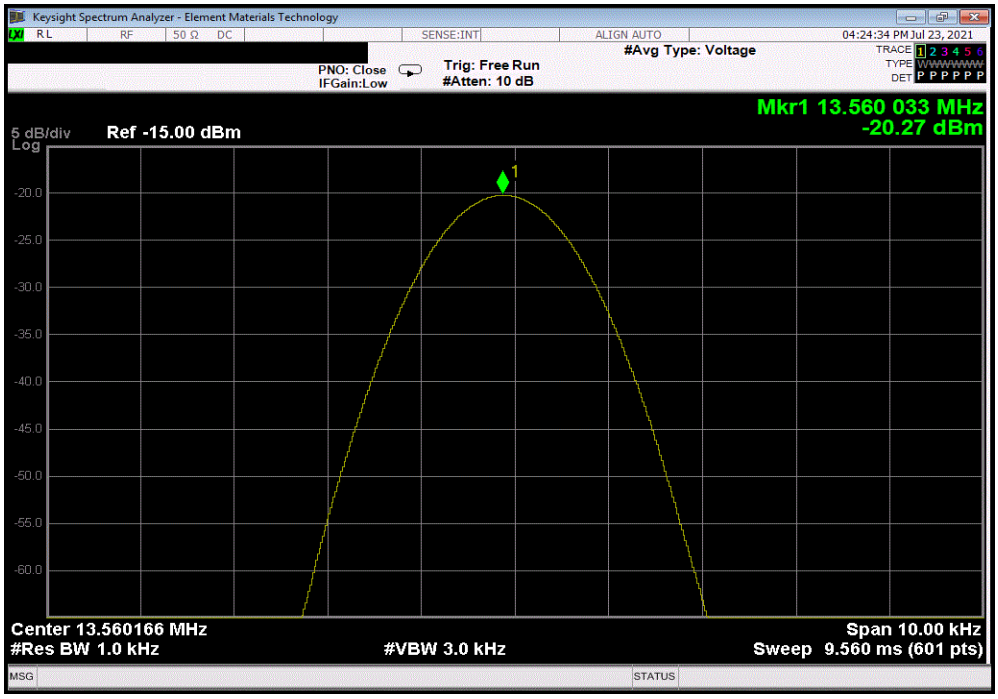
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
Normal Voltage					
Mid Channel, 13.56 MHz	13.56004933	13.56004933	3.6	100	Pass
Extreme Voltage +15%					
Mid Channel, 13.56 MHz	13.56003267	13.56004933	1.2	100	Pass
Extreme Voltage -15%					
Mid Channel, 13.56 MHz	13.56003367	13.56004933	1.2	100	Pass
Extreme Temperature +50°C					
Mid Channel, 13.56 MHz	13.55996633	13.56004933	6.1	100	Pass
Extreme Temperature +40°C					
Mid Channel, 13.56 MHz	13.55998367	13.56004933	4.8	100	Pass
Extreme Temperature +30°C					
Mid Channel, 13.56 MHz	13.560033	13.56004933	1.2	100	Pass
Extreme Temperature +20°C					
Mid Channel, 13.56 MHz	13.56003267	13.56004933	1.2	100	Pass
Extreme Temperature +10°C					
Mid Channel, 13.56 MHz	13.56009967	13.56004933	3.7	100	Pass
Extreme Temperature 0°C					
Mid Channel, 13.56 MHz	13.560116	13.56004933	4.9	100	Pass
Extreme Temperature -10°C					
Mid Channel, 13.56 MHz	13.560133	13.56004933	6.2	100	Pass
Extreme Temperature -20°C					
Mid Channel, 13.56 MHz	13.56011633	13.56004933	4.9	100	Pass

FREQUENCY STABILITY

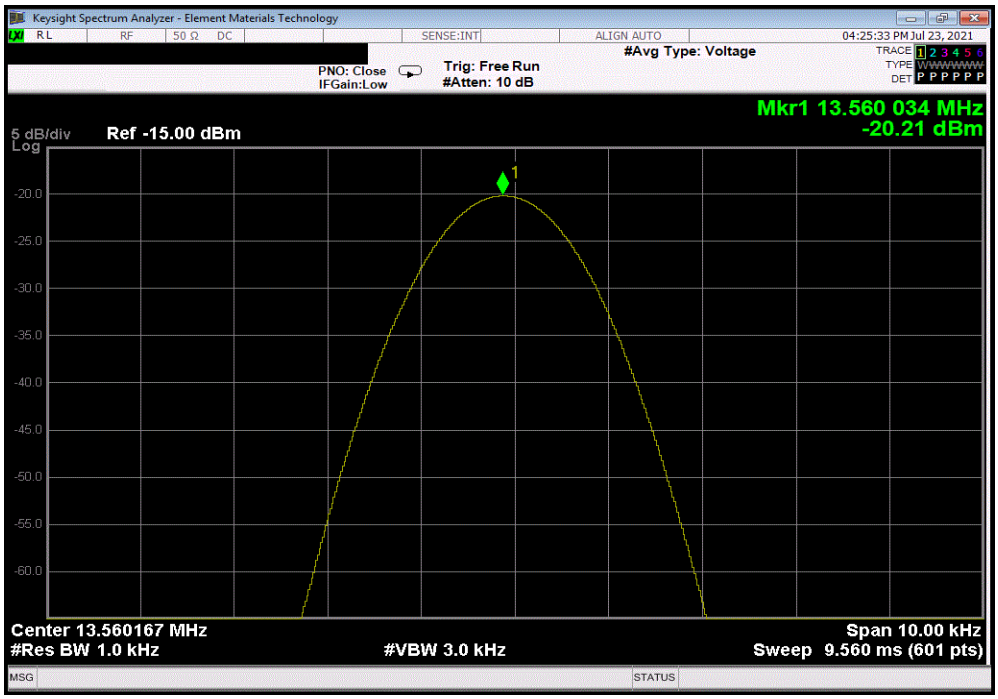
Normal Voltage, Mid Channel, 13.56 MHz						
		Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
		13.56004933	13.56004933	3.6	100	Pass



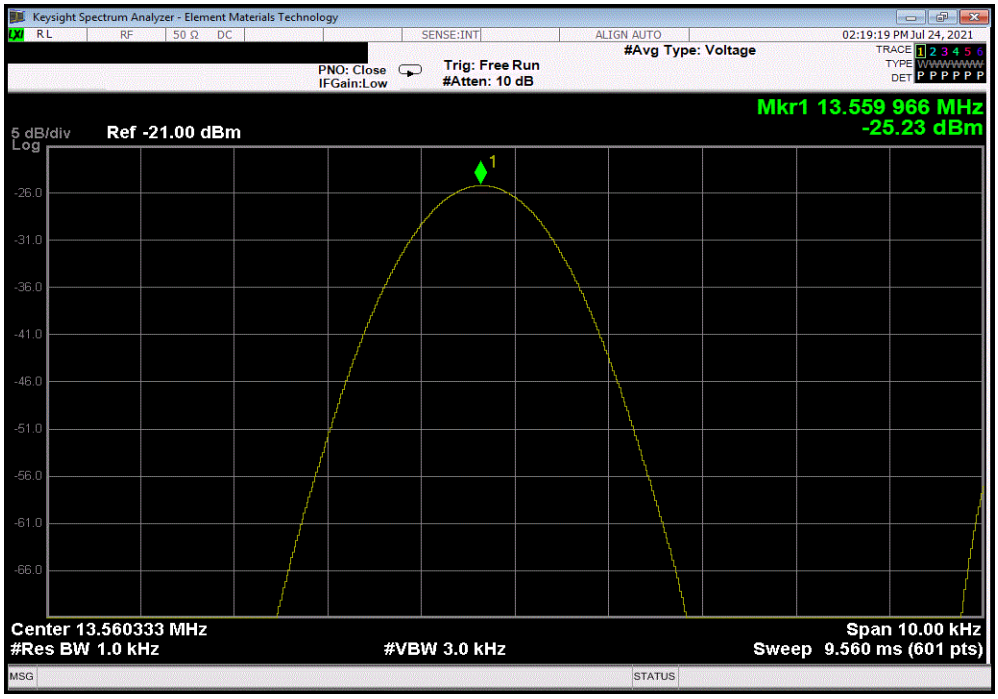
Extreme Voltage +15%, Mid Channel, 13.56 MHz						
		Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
		13.56003267	13.56004933	1.2	100	Pass



Extreme Voltage -15%, Mid Channel, 13.56 MHz						
		Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
		13.56003367	13.56004933	1.2	100	Pass

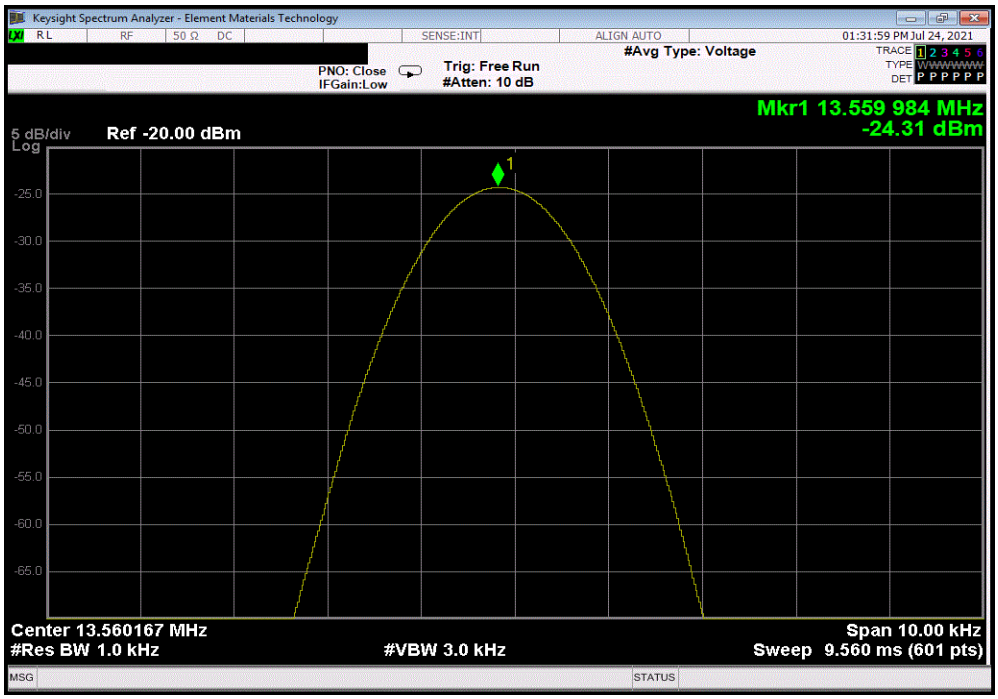


Extreme Temperature +50°C, Mid Channel, 13.56 MHz						
		Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
		13.55996633	13.56004933	6.1	100	Pass

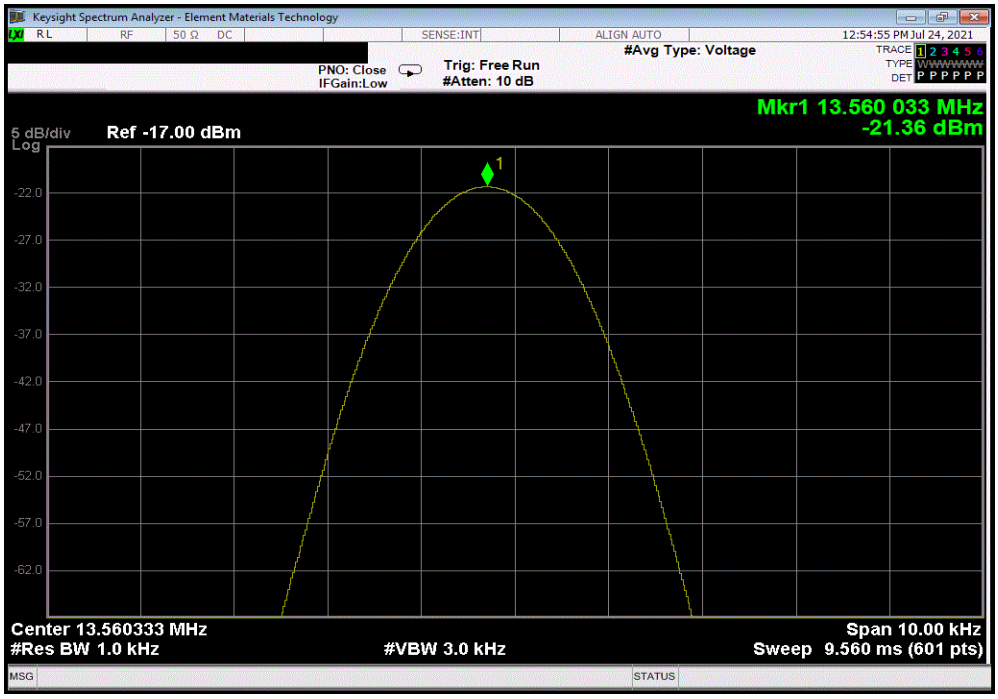


FREQUENCY STABILITY

Extreme Temperature +40°C, Mid Channel, 13.56 MHz						
		Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
		13.55998367	13.56004933	4.8	100	Pass

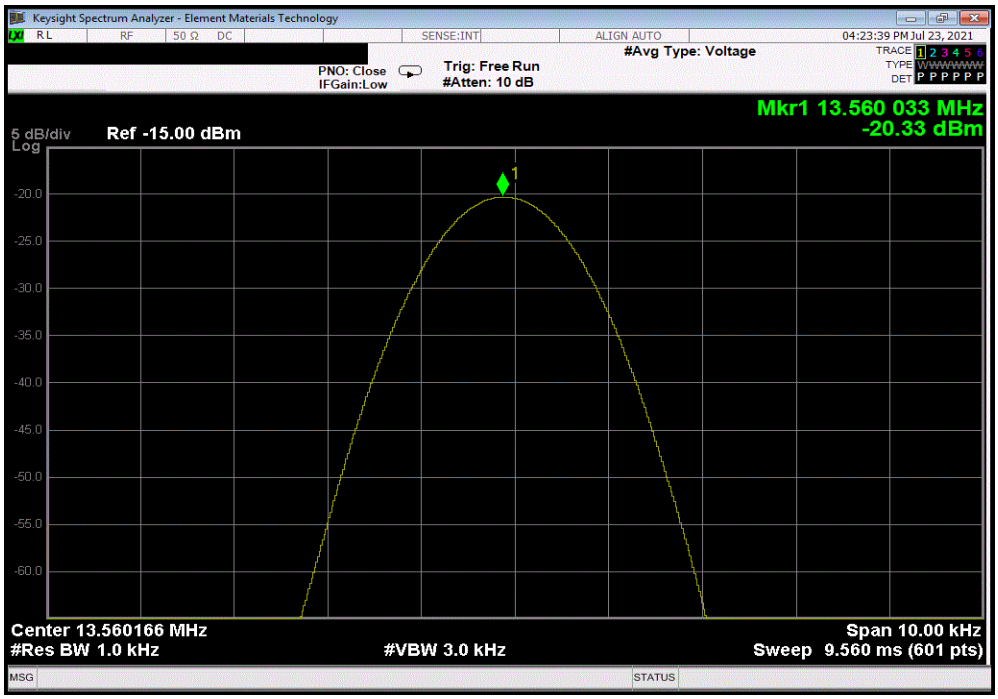


Extreme Temperature +30°C, Mid Channel, 13.56 MHz						
		Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
		13.560033	13.56004933	1.2	100	Pass

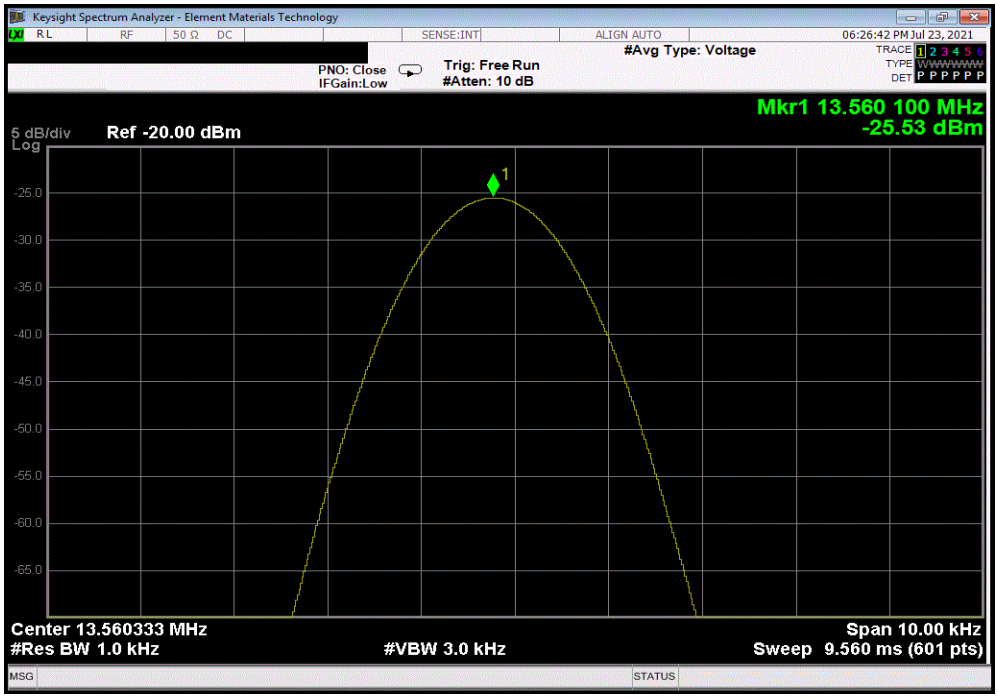


FREQUENCY STABILITY

Extreme Temperature +20°C, Mid Channel, 13.56 MHz						
		Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
		13.56003267	13.56004933	1.2	100	Pass

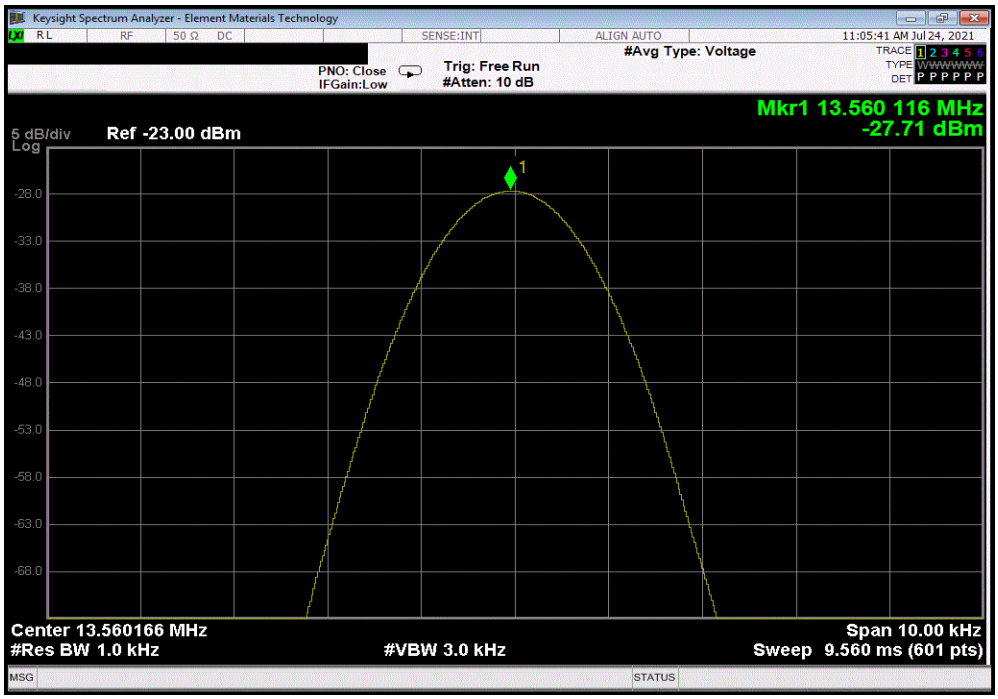


Extreme Temperature +10°C, Mid Channel, 13.56 MHz						
		Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
		13.56009967	13.56004933	3.7	100	Pass

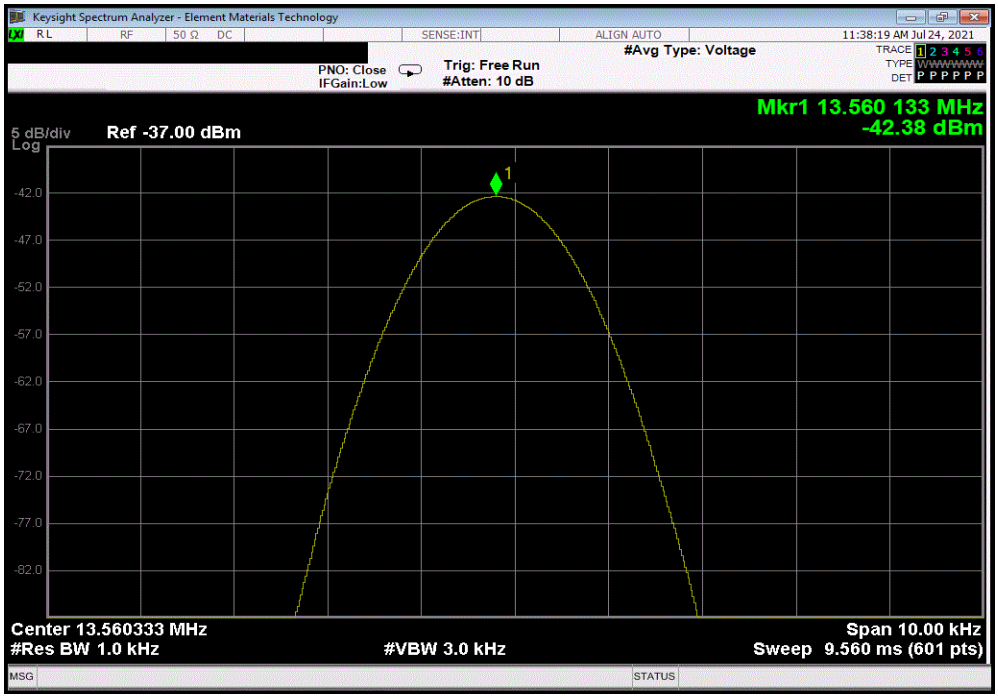


FREQUENCY STABILITY

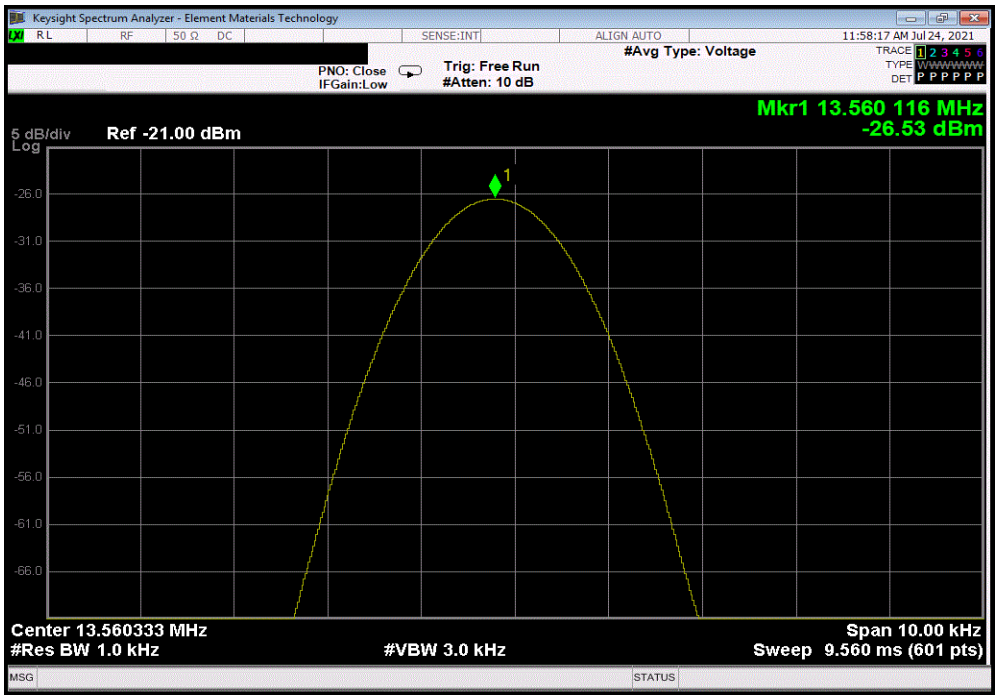
Extreme Temperature 0°C, Mid Channel, 13.56 MHz						
		Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
		13.560116	13.56004933	4.9	100	Pass



Extreme Temperature -10°C, Mid Channel, 13.56 MHz						
		Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
		13.560133	13.56004933	6.2	100	Pass



Extreme Temperature -20°C, Mid Channel, 13.56 MHz						
		Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
		13.56011633	13.56004933	4.9	100	Pass



OCCUPIED BANDWIDTH

XMit 2020.12.30.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Probe - Near Field Set	ETS Lindgren	7405	IPS	NCR	NCR
Cable	UtiFlex Micro-Coax	UFD1150A-1-0720-200200	TXJ	2020-09-22	2021-09-22
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFN	2021-01-06	2022-01-06

TEST DESCRIPTION

As defined in FCC 15.215 Part (c), intentional radiators must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise by specified in the specific rule section under which the equipment operates, is contained within the frequency band designed in the rule section under which the equipment is operated.

The 20 dB bandwidth must be contained within the band 13.110-14.010 MHz.

The emissions bandwidth was measured with the EUT configured for continuous modulated operation.

The resolution bandwidth (RBW) and video bandwidth (VBW) bandwidth was set to at least 3 times the resolution bandwidth. The analyzer sweep time was set to auto to prevent video filtering or averaging. A sample detector was used unless the device was not able to be operated in a continuous transmit mode, in which case a peak detector was used.

The spectrum analyzer occupied bandwidth measurement function was used to sum the power of the transmission in linear terms to obtain the 99% bandwidth.

OCCUPIED BANDWIDTH

TbtTx 2021.03.19.1 XMit 2020.12.30.0

EUT:	AccessPoint Radio			**Work Order:**	ABBO0083
Serial Number:	ENG05-AP			**Date:**	29-Jul-21
Customer:	Abbott Laboratories			**Temperature:**	21.1 °C
Attendees:	Don Mendell			**Humidity:**	57.8% RH
Project:	None			**Barometric Pres.:**	1021 mbar
Tested by:	Mark Baytan	**Power:**	220VAC/60Hz	**Job Site:**	TX02

TEST SPECIFICATIONS	Test Method
FCC 15.225:2021	ANSI C63.10:2013

COMMENTS

Emissions bandwidth taken with a 6% RBW and 26 dB bandwidth. This is worst case as compared with the 1-5% RBW and 20 dB bandwidth as called out in FCC 15.215. Contains the same AccessController IO (PCB:20008971) present in all variants of the AccessPoint: Center, Left, and Right.

DEVIATIONS FROM TEST STANDARD

None

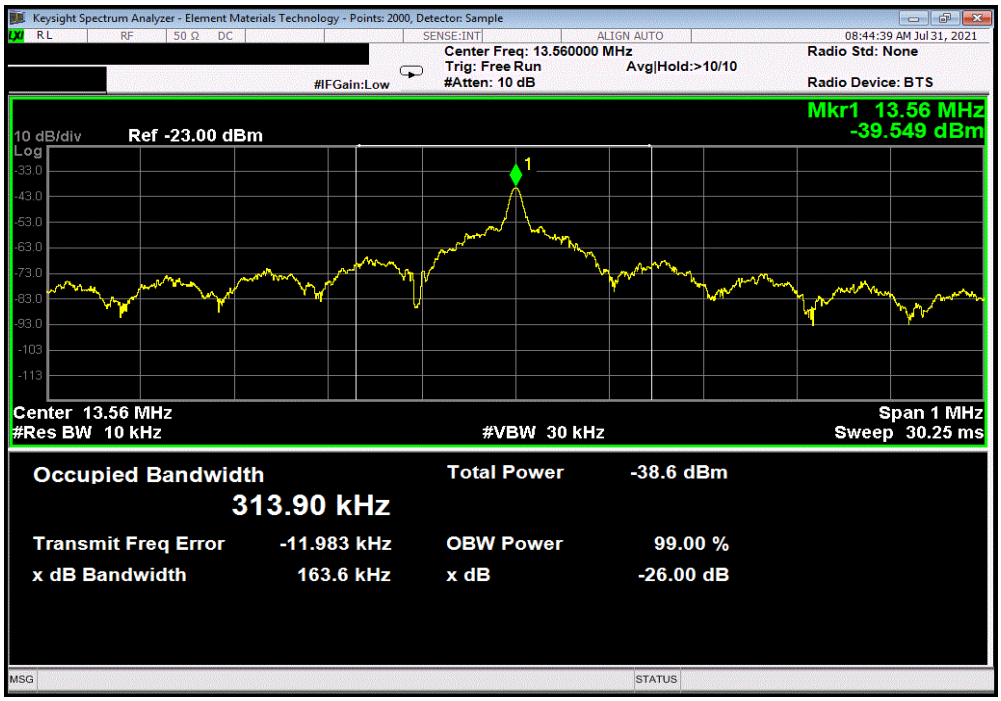
Configuration #	9	*Signature*

	Value	Limit 13.110 MHz ≥ BW ≤ 14.010 MHz	Result
Normal Voltage			
Mid Channel, 13.56 MHz	163.6 kHz	Within	Pass

OCCUPIED BANDWIDTH

TbtTx 2021.03.19.1 XMit 2020.12.30.0

Normal Voltage, Mid Channel, 13.56 MHz							
					Value	Limit 13.110 MHz ≥ BW ≤ 14.010 MHz	Result
					163.6 kHz	Within	Pass



End of Test Report