



element

Abbott Laboratories

GLP12410 SAL Alinity C Section

GLP12411 SAL Alinity I Section

FCC 15.225:2022

13.56MHz

Report: ABBO0082 Rev. 5, Issue Date: August 14, 2022



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CERTIFICATE OF TEST



Last Date of Test: June 8, 2022
Abbott Laboratories
EUT: GLP12410 SAL Alinity C Section
GLP12411 SAL Alinity I Section

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	Updated standard	2021-08-25	2, 16 and 18
	Changed last date of test	2021-08-25	2, 9 and 14
02	Removed track radio data from Field Strength of Fundamental	2021-09-02	29-33
	Changed Powerline CE spec from Class A to FCC 15.209	2021-09-02	17, 19, 21, 23, 25 and 27
03	Updated report with data from ABBO0181	2022-06-16	31-51, 57-60, 63-64, 67-70
	Updated test dates	2022-06-16	1, 9, 17
	Added configuration from ABBO0181	2022-06-16	15
04	Updated standard on cover page.	2022-08-05	1
	Removed "previous data statement" from certificate of test.	2022-08-05	2
	Updated block diagram.	2022-08-05	7, 8, 9
	Updated functional description to better define model variants.	2022-08-05	10
	Added note that EUT was transmitting with an unmodulated carrier. Variac was used to vary power.	2022-08-05	73
	Updated comments in Occupied Bandwidth.	2022-08-05	93
05	Updated test description	2022-08-14	19, 32

ACCREDITATIONS AND AUTHORIZATIONS



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

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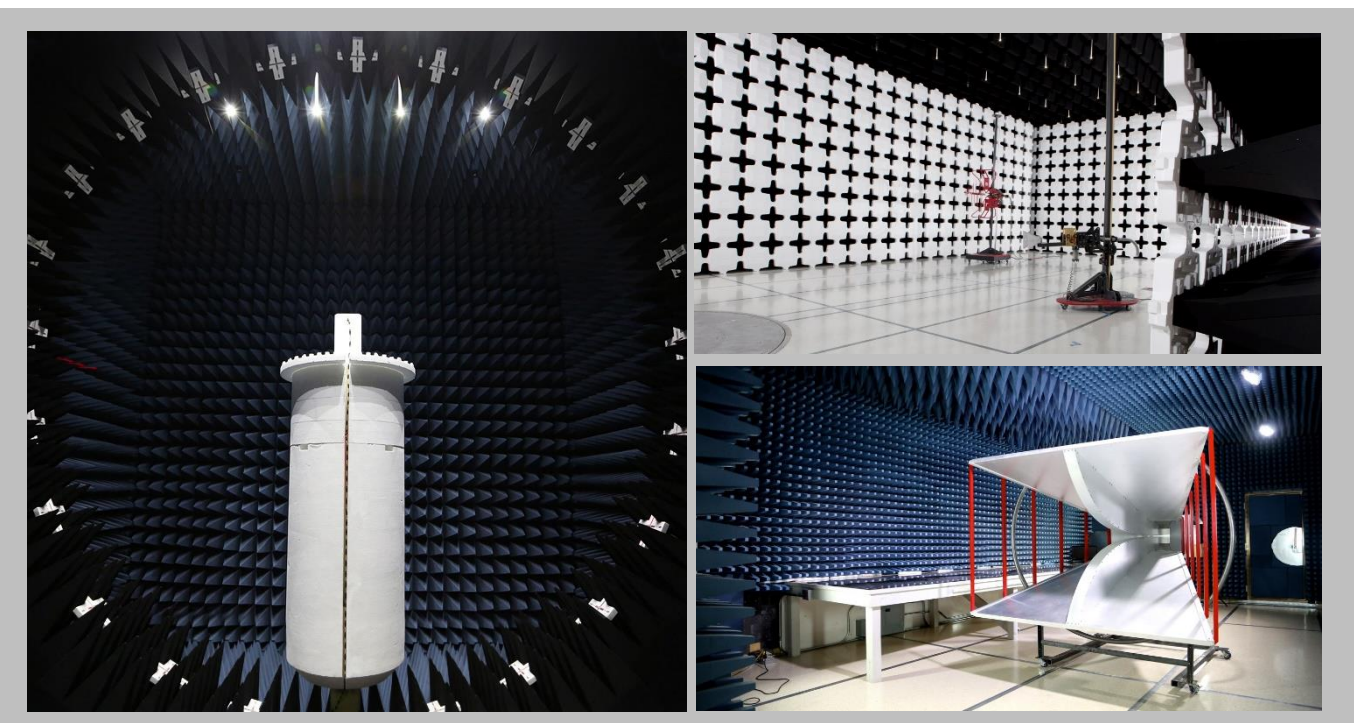
[Texas](#)

[Washington](#)

FACILITIES



California Labs OC01-17 41 Tesla Irvine, CA 92618 (949) 861-8918	Minnesota Labs MN01-11 9349 W Broadway Ave. Brooklyn Park, MN 55445 (612)-638-5136	Oregon Labs EV01-12 6775 NE Evergreen Pkwy #400 Hillsboro, OR 97124 (503) 844-4066	Texas Labs TX01-09 3801 E Plano Pkwy Plano, TX 75074 (469) 304-5255	Washington Labs NC01-05 19201 120 th 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



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)	5.2 dB	-5.2 dB
AC Powerline Conducted Emissions (dB)	2.6 dB	-2.6 dB

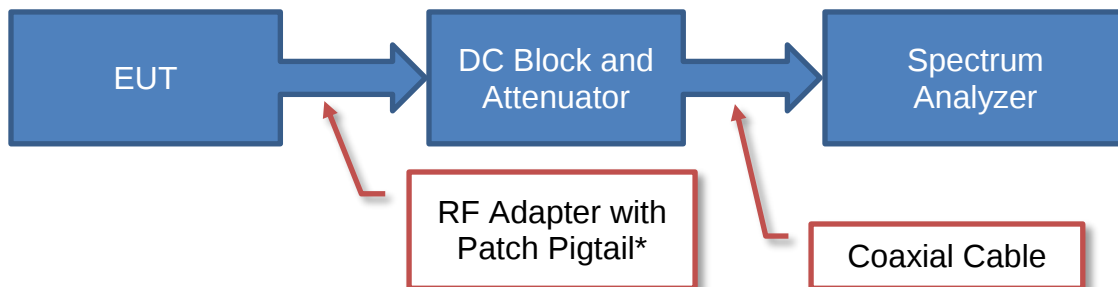
TEST SETUP BLOCK DIAGRAMS

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

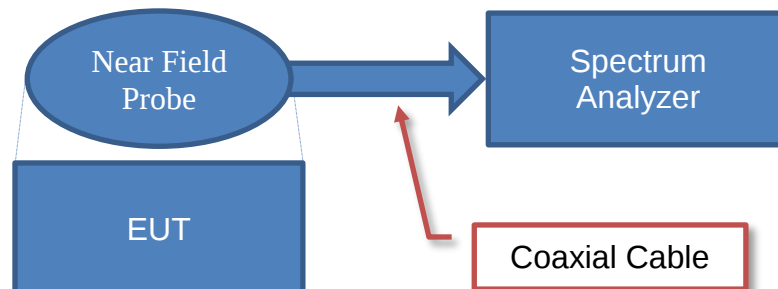


Sample Calculation (logarithmic units)

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

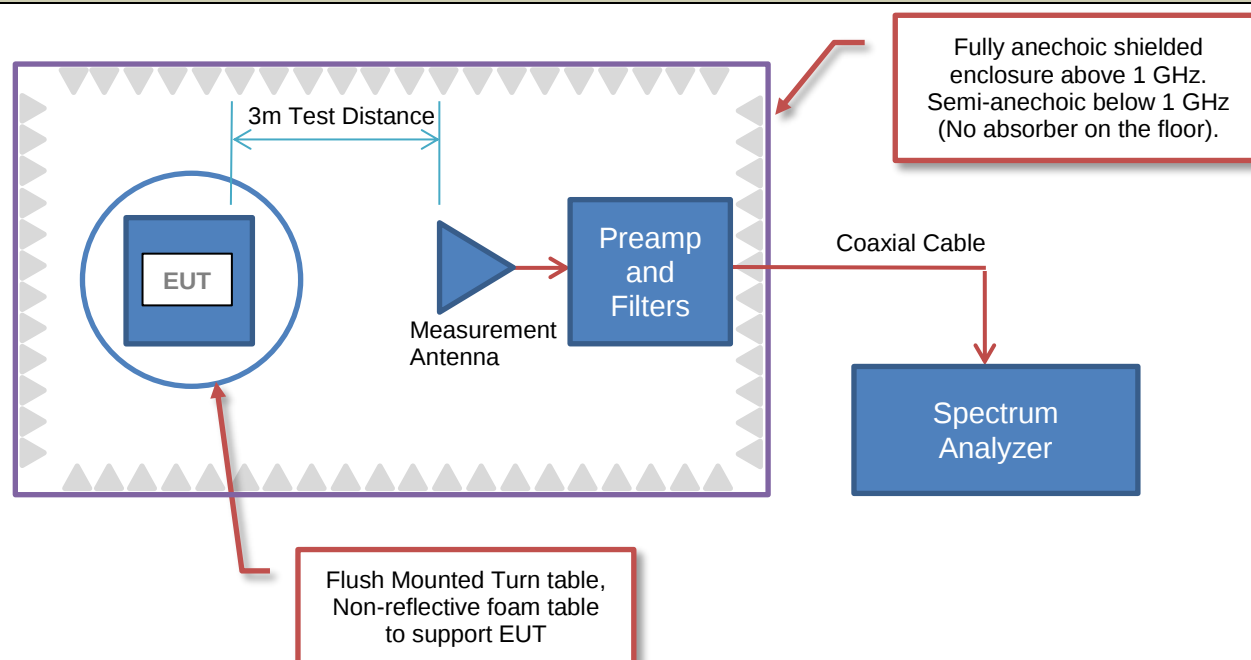


Sample Calculation (logarithmic units)

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			Distance Adjustment Factor	External Attenuation	Field Strength
	Antenna Factor	Cable Factor	Amplifier Gain			
42.6	28.6	3.1	40.8	0.0	0.0	33.5

Conducted Emissions:

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

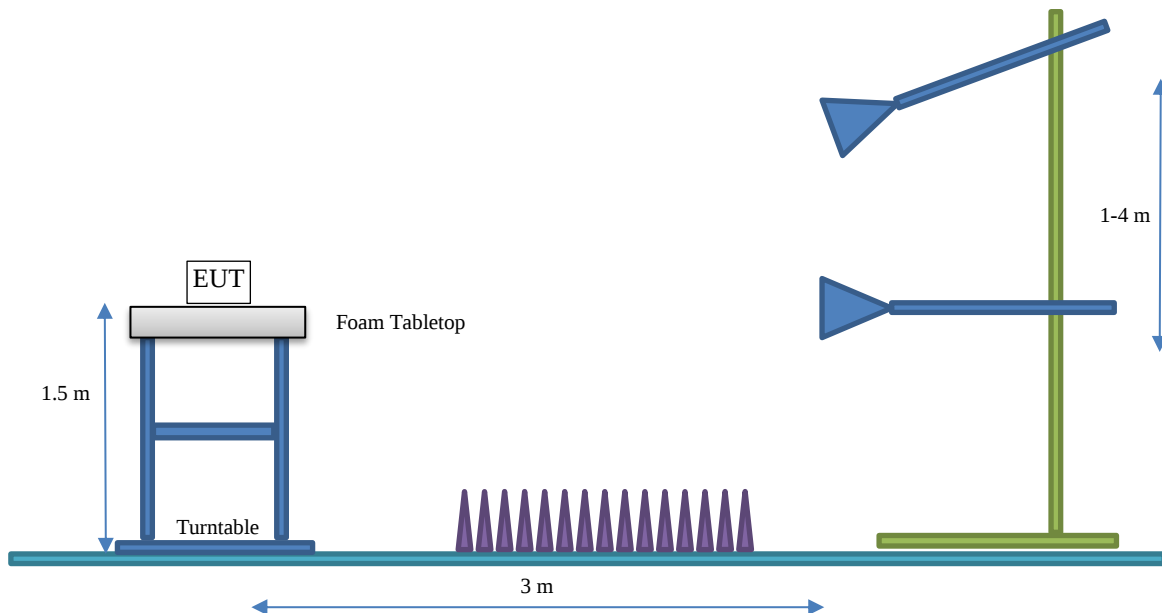
Radiated Power (ERP/EIRP) – Substitution Method:

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:	GLP12410 SAL Alinity C Section GLP12411 SAL Alinity I Section
First Date of Test:	June 19, 2021
Last Date of Test:	June 8, 2022
Receipt Date of Samples:	June 19, 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:

The SAL Alinity C/I series is the interface between the GLP systems Track and an Alinity ci-series analyzer. Patient samples to be analyzed by the Alinity C/I System are taken directly from the sample tube in the CAR using the pipette unit of an Alinity C or Alinity I processing module. SAL Alinity C/I section – used in addition to SAL Alinity C/I end section to interface with an additional Alinity C/I analyzer, up to 4 total. Both the Alinity C and I sections contain: 1 Access Point (1xRFID reader) and 2 CrossSwitches (2xRFID readers each).

The difference between the SAL Alinity C and SAL Alinity I is the orientation of the Access Point to account for the differing location of the dispense points between the Alinity C and Alinity I.

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 ABBO0082 - 2

Software/Firmware Running during test	
Description	Version
Firmware	TrackEmvTest_ap_wp_Version_0.0_46817.bin
Firmware	TrackEmvTest_atr_Version_0.0_47120.bin
Firmware	TrackEmvTest_cp_pp_tac_Version_0.0_46817.bin
Firmware	TrackEmvTest_scc_Version_0.0_46817.bin
Firmware	TrackEmvTest_scd_Version_0.0_46817.bin
Firmware	TrackEmvTest_scx_scr_Version_0.0_46817.bin

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
CrossSwitch Radio	GLP Systems	20005732	ENG05-CS
AccessPoint Radio	GLP Systems	20008971/20008841	ENG02-AP

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Power Strip	GLP Systems	GLP12015	None
CAN Bus	GLP Systems	None	None
24V Power Supply	GLP Systems	GLP12010	C06A001511
Power Board	GLP Systems	GLP12014	None
AC Line Filter	GLP Systems	GLP12013	0001002
Switch 90 Convergent	GLP Systems	GLP12154	ENG01-CN
Switch 90 Divergent	GLP Systems	GLP12153	ENG01-DV
ChargeLane M	GLP Systems	GLP12553	ENG02-CL M
PassPoint	GLP Systems	GLP12191	ENG02-PP
Drawer Reader	GLP Systems	20001805 Rev C (PCB:20001791 Rev. B)	ENG05-DR

CONFIGURATIONS

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Power Cable	Yes	1.1m	No	AC Mains	AC Line Filter
Auxiliary Bus Line	Yes	1.0m	No	AC Line Filter	24V and 5V Power Supply
Ethernet Cable	Yes	5.0m	No	Laptop	CAN Bus
Ethernet Cable	Yes	1.0m	No	CAN Bus	Switch 90 Divergent
Ethernet Cable	Yes	0.5m	Yes	Switch 90 Divergent	Switch 90 Convergent
Ethernet Cable	Yes	0.5m	Yes	Switch 90 Convergent	ChargeLane
Ethernet Cable	Yes	0.5m	Yes	ChargeLane	CrossSwitch
Ethernet Cable	Yes	0.5m	Yes	CrossSwitch	PassPoint
Ethernet Cable	Yes	0.5m	Yes	PassPoint	AccessPoint
Ethernet Terminator	No	0.6m	No	AccessPoint	Terminated
DC Power Cable	No	0.6m	Yes	Power Board	Switch 90 Divergent
DC Power Cable	No	0.6m	Yes	Power Board	Switch 90 Convergent
DC Power Cable	No	0.6m	Yes	Power Board	ChargeLane
DC Power Cable	No	0.6m	Yes	Power Board	Cross Switch
DC Power Cable	No	0.6m	Yes	Power Board	PassPoint
DC Power Cable	No	0.6m	Yes	Power Board	AccessPoint
DC Power Cable	No	0.6m	Yes	Power Board	Drawer Reader

CONFIGURATIONS



Configuration ABBO0082- 6

Software/Firmware Running during test	
Description	Version
Firmware	SALGeneric-Alinity_1.3.2.1_46961.bin
Firmware	TrackEmvTest_ap_wp_Version_0.0_46817.bin
Firmware	TrackEmvTest_cp_pp_tac_Version_0.0_46817.bin
Firmware	TrackEmvTest_Version_scsp_0.0_46817.bin
Firmware	TrackEmvTest_scx_scr_Version_0.0_46817.bin

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
SAL Alinity C Section	GLP Systems	GLP12410	SAL124100000016
AccessPoint Radio 2	GLP Systems	20031615 A (PCB:20008971)	ENG07-AP
CrossSwitch Radio 7	GLP Systems	GLP12152/20005732 A1.1	ENG14-CS
CrossSwitch Radio 8	GLP Systems	GLP12152/20005732 A1.1	ENG15-CS

CONFIGURATIONS

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
SAL Alinity C End Section	GLP Systems	GLP12408	SAL12408000028
SAL Alinity Basic Kit	GLP Systems	GLP12415	None
T-Element		GLP12412	SAL12412000044
Track Segment Unit		GLP12100	0001225
Track Segment Unit		GLP12100	0001200
24V Power Supply		GLP12100	None
SAL Alinity User Interface	GLP Systems	GLP12414	None
Input Filter	GLP Systems	GLP12013	None
Power Strip	GLP Systems	GLP12015	None
Power Strip	GLP Systems	GLP12015	None
5V Power Supply	GLP Systems	GLP12011	None
ChargeLane Track Radio (M)	GLP Systems	GLP12553	ENG03-CL M
ChargeLane Track (S)	GLP Systems	GLP12554	ENG03-CL S
AccessPoint Radio 1	GLP Systems	20031615 A (PCB:20008971)	ENG06-AP
CrossSwitch Radio 1	GLP Systems	GLP12152/20005732 A1.1	None
CrossSwitch Radio 2	GLP Systems	GLP12152/20005732 A1.1	None
CrossSwitch Track Radio 3	GLP Systems	GLP12152	ENG10-CS
CrossSwitch Track Radio 4	GLP Systems	GLP12152	ENG11-CS
CrossSwitch Track Radio 5	GLP Systems	GLP12152	ENG12-CS
CrossSwitch Track Radio 6	GLP Systems	GLP12152	ENG13-CS
Convergent Radio	GLP Systems	PCB: 20005732	ENG02-CN
Divergent Radio	GLP Systems	20031403 A (PCB:20031315)	ENG02-DVR
Track Segment Unit	GLP Systems	GLP12100	0001186
Car 1	GLP Systems	GLP12677 A	004 9494
Car 2	GLP Systems	GLP12677 A	004 8855

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	No	2.7m	No	AC Mains	Input Filter
AC Cable	No	2.7m	No	Input Filter	Power Strip
AC Cable	No	2.7m	No	Input Filter	Power Strip
Ethernet	Yes	10.0m	No	Laptop	SAL Alinity C Section
USB	Yes	5.0m	No	Laptop	SAL Alinity C Section

CONFIGURATIONS



Configuration ABBO0181- 1

Software/Firmware Running during test	
Description	Version
Firmware	SALGeneric-Alinity_1.3.2.1_46961.bin
Firmware	TrackEmvTest_ap_wp_Version_0.0_46817.bin
Firmware	TrackEmvTest_cp_pp_tac_Version_0.0_46817.bin
Firmware	TrackEmvTest_Version_scsp_0.0_46817.bin
Firmware	TrackEmvTest_scx_scr_Version_0.0_46817.bin

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
SAL Alinity I Section	GLP Systems	GLP12409	SAL124100000010
AccessPoint Radio 2	GLP Systems	20031615 A (PCB:20008971)	ENG07-AP
CrossSwitch Radio 7	GLP Systems	GLP12152/20005732 A1.1	ENG14-CS
CrossSwitch Radio 8	GLP Systems	GLP12152/20005732 A1.1	ENG15-CS

CONFIGURATIONS

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
SAL Alinity C End Section	GLP Systems	GLP12411	SAL12408000032
SAL Alinity Basic Kit	GLP Systems	GLP12415	None
T-Element		GLP12412	SAL12412000044
Track Segment Unit		GLP12100	0001225
Track Segment Unit		GLP12100	0001200
24V Power Supply		GLP12100	None
SAL Alinity User Interface	GLP Systems	GLP12414	None
Input Filter	GLP Systems	GLP12013	None
Power Strip	GLP Systems	GLP12015	None
Power Strip	GLP Systems	GLP12015	None
5V Power Supply	GLP Systems	GLP12011	None
ChargeLane Track Radio (M)	GLP Systems	GLP12553	ENG03-CL M
ChargeLane Track (S)	GLP Systems	GLP12554	ENG03-CL S
AccessPoint Radio 1	GLP Systems	20031615 A (PCB:20008971)	ENG06-AP
CrossSwitch Radio 1	GLP Systems	GLP12152/20005732 A1.1	None
CrossSwitch Radio 2	GLP Systems	GLP12152/20005732 A1.1	None
CrossSwitch Track Radio 3	GLP Systems	GLP12152	ENG10-CS
CrossSwitch Track Radio 4	GLP Systems	GLP12152	ENG11-CS
CrossSwitch Track Radio 5	GLP Systems	GLP12152	ENG12-CS
CrossSwitch Track Radio 6	GLP Systems	GLP12152	ENG13-CS
Convergent Radio	GLP Systems	PCB: 20005732	ENG02-CN
Divergent Radio	GLP Systems	20031403 A (PCB:20031315)	ENG02-DVR
Track Segment Unit	GLP Systems	GLP12100	0001186
Car 1	GLP Systems	GLP12677 A	004 9494
Car 2	GLP Systems	GLP12677 A	004 8855

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	No	2.7m	No	AC Mains	Input Filter
AC Cable	No	2.7m	No	Input Filter	Power Strip
AC Cable	No	2.7m	No	Input Filter	Power Strip
Ethernet	Yes	10.0m	No	Laptop	SAL Alinity I Section
USB	Yes	5.0m	No	Laptop	SAL Alinity I Section

MODIFICATIONS

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	2021-06-19	Field Strength of Fundamental	Tested as delivered to test station.	None	EUT remained at Element following the test.
2	2021-07-21	Occupied Bandwidth	Tested as delivered to test station.	None	EUT remained at Element following the test.
3	2021-07-24	Frequency Stability	Tested as delivered to test station.	None	EUT remained at Element following the test.
4	2022-06-08	Field Strength of Spurious Emissions (Less than 30 MHz)	Tested as delivered to test station.	None	EUT remained at Element following the test.
4	2022-06-08	Field Strength of Spurious Emissions (Greater than 30 MHz)	Tested as delivered to test station.	None	EUT remained at Element following the test.
5	2022-06-08	Powerline Conducted Emissions	Tested as delivered to test station.	None	Scheduled testing was completed.

POWERLINE CONDUCTED EMISSIONS



PSA-ESCI 2021.03.17.0

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.

MODES OF OPERATION

Transmitting RFID 13.56 MHz

POWER SETTINGS INVESTIGATED

220VAC/60Hz

CONFIGURATIONS INVESTIGATED

ABBO0082 - 1

SAMPLE CALCULATIONS

Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Receiver	Gauss	TDEMI 30M	ARL	2021-03-23	2022-03-23
Terminator	Fairview Microwave	ST3B-C	RGX	2021-06-04	2022-06-04
Cable - Conducted Cable	Northwest EMC	TXA, HFC, TQU	TXAA	2021-01-26	2022-01-26
LISN	Solar Electronics	9252-50-R-24-BNC	LJL	2020-08-25	2021-08-25
LISN	Solar Electronics	9252-50-R-24-BNC	LJK	2020-08-25	2021-08-25
Power Source/Analyzer	Hewlett Packard	6841A	THC	NCR	NCR

MEASUREMENT BANDWIDTHS

Frequency Range (MHz)	BW (kHz)
0.15 - 30.0	1.0
30.0 - 400.0	10.0
400.0 - 1000.0	100.0
1000.0 - 6000.0	1000.0

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

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. Measurement with all radios ON not tested as radios do not simultaneously transmit. For each radio, the spectrum was scanned from 150 kHz to 30 MHz. The test setup and procedures were in accordance with ANSI C63.10.

POWERLINE CONDUCTED EMISSIONS



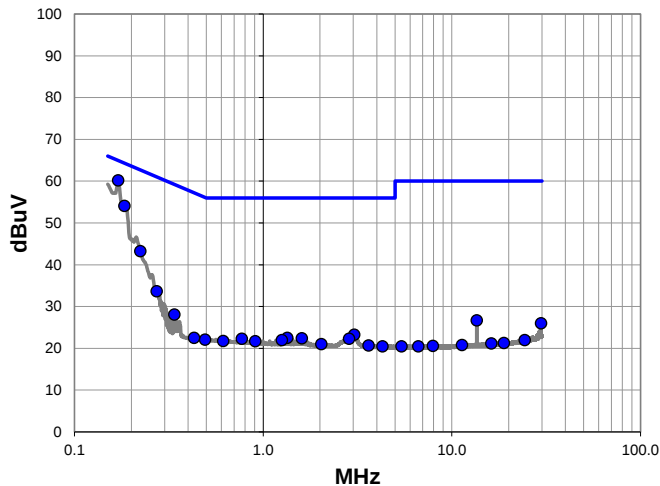
EmiR5 2021.06.24.0 PSA-ESCI 2021.03.17.0

Work Order:	ABBO0082	Date:	2021-08-06	
Project:	None	Temperature:	21.7 °C	
Job Site:	TX01	Humidity:	55.8% RH	
Serial Number:	ENG14-CS	Barometric Pres.:	1021 mbar	
EUT:	GLP12410 SAL Alinity C Section			Tested by: Travis Glasser
Configuration:	6			
Customer:	Abbott Laboratories			
Attendees:	Don Mendell			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	CrossSwitch Radio 7 - Both RFID Readers ON			

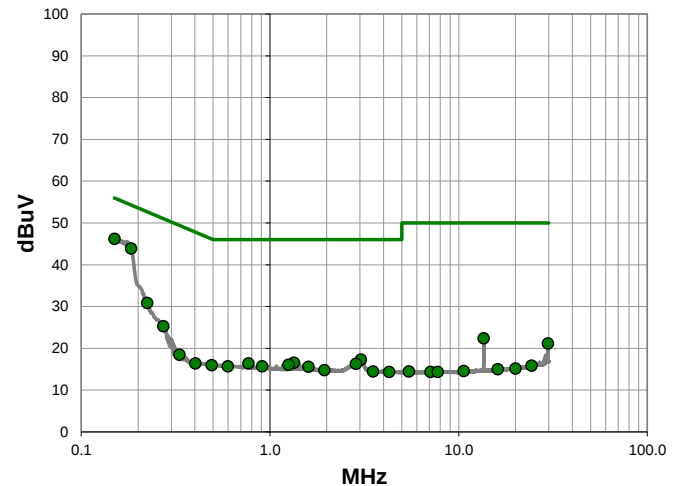
Test Specifications		Test Method	
FCC 15.207:2021		ANSI C63.10:2013	

Run #	1	Line:	Neutral	Ext. Attenuation:	0	Results	Pass
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Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.170	39.8	20.4	60.2	65.0	-4.8
0.184	33.7	20.4	54.1	64.3	-10.2
0.223	22.9	20.4	43.3	62.7	-19.4
0.272	13.3	20.4	33.7	61.1	-27.4
0.338	7.9	20.2	28.1	59.3	-31.2

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	25.8	20.4	46.2	56.0	-9.8
0.184	23.5	20.4	43.9	54.3	-10.4
0.223	10.5	20.4	30.9	52.7	-21.8
0.272	4.9	20.4	25.3	51.1	-25.8
13.560	1.3	21.1	22.4	50.0	-27.6

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
3.032	3.0	20.3	23.3	56.0	-32.7
13.560	5.6	21.1	26.7	60.0	-33.3
1.340	2.2	20.3	22.5	56.0	-33.5
1.600	2.1	20.3	22.4	56.0	-33.6
0.769	2.1	20.2	22.3	56.0	-33.7
2.854	2.0	20.3	22.3	56.0	-33.7
0.492	1.9	20.2	22.1	56.1	-34.0
1.255	1.7	20.3	22.0	56.0	-34.0
29.705	3.4	22.6	26.0	60.0	-34.0
0.614	1.6	20.2	21.8	56.0	-34.2
0.907	1.4	20.3	21.7	56.0	-34.3
0.429	2.3	20.2	22.5	57.3	-34.8
2.030	0.7	20.3	21.0	56.0	-35.0
3.618	0.4	20.3	20.7	56.0	-35.3
4.286	0.2	20.3	20.5	56.0	-35.5
24.339	-0.2	22.2	22.0	60.0	-38.0
18.869	-0.2	21.5	21.3	60.0	-38.7
16.194	-0.2	21.4	21.2	60.0	-38.8
11.316	-0.1	20.9	20.8	60.0	-39.2
7.930	0.0	20.6	20.6	60.0	-39.4
5.413	0.1	20.4	20.5	60.0	-39.5
6.638	0.1	20.4	20.5	60.0	-39.5

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
3.032	-3.0	20.3	17.3	46.0	-28.7
29.705	-1.4	22.6	21.2	50.0	-28.8
1.340	-3.7	20.3	16.6	46.0	-29.4
0.769	-3.8	20.2	16.4	46.0	-29.6
2.852	-4.0	20.3	16.3	46.0	-29.7
1.253	-4.2	20.3	16.1	46.0	-29.9
0.490	-4.2	20.2	16.0	46.2	-30.2
0.597	-4.5	20.2	15.7	46.0	-30.3
0.907	-4.6	20.3	15.7	46.0	-30.3
1.600	-4.7	20.3	15.6	46.0	-30.4
0.332	-1.7	20.2	18.5	49.4	-30.9
1.943	-5.5	20.3	14.8	46.0	-31.2
0.402	-3.8	20.2	16.4	47.8	-31.4
3.510	-5.8	20.3	14.5	46.0	-31.5
4.274	-5.9	20.3	14.4	46.0	-31.6
24.332	-6.3	22.2	15.9	50.0	-34.1
19.985	-6.4	21.6	15.2	50.0	-34.8
16.081	-6.4	21.4	15.0	50.0	-35.0
10.614	-6.2	20.8	14.6	50.0	-35.4
5.445	-5.9	20.4	14.5	50.0	-35.5
7.082	-6.1	20.5	14.4	50.0	-35.6
7.749	-6.2	20.6	14.4	50.0	-35.6

POWERLINE CONDUCTED EMISSIONS



EmiR5 2021.06.24.0

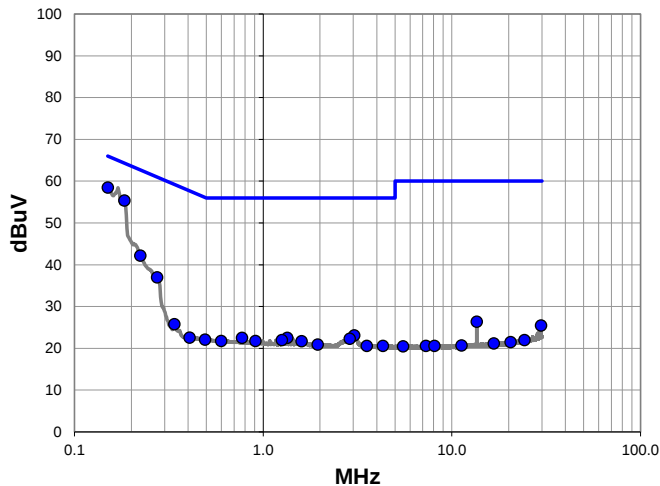
PSA-ESCI 2021.03.17.0

Work Order:	ABBO0082	Date:	2021-08-06	
Project:	None	Temperature:	21.7 °C	
Job Site:	TX01	Humidity:	55.8% RH	
Serial Number:	ENG14-CS	Barometric Pres.:	1021 mbar	
EUT:	GLP12410 SAL Alinity C Section			Tested by: Travis Glasser
Configuration:	6			
Customer:	Abbott Laboratories			
Attendees:	Don Mendell			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	CrossSwitch Radio 7 - Both RFID Readers ON			

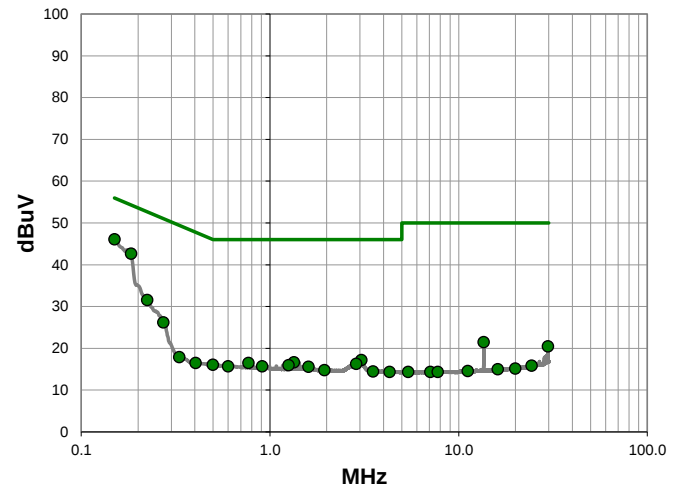
Test Specifications		Test Method	
FCC 15.207:2021		ANSI C63.10:2013	

Run #	2	Line:	High Line	Ext. Attenuation:	0	Results	Pass
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Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	38.1	20.4	58.5	66.0	-7.5
0.184	35.0	20.4	55.4	64.3	-8.9
0.223	21.8	20.4	42.2	62.7	-20.5
0.274	16.6	20.4	37.0	61.0	-24.0
3.032	2.8	20.3	23.1	56.0	-32.9

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	25.7	20.4	46.1	56.0	-9.9
0.184	22.3	20.4	42.7	54.3	-11.6
0.223	11.2	20.4	31.6	52.7	-21.1
0.272	5.8	20.4	26.2	51.1	-24.9
13.560	0.4	21.1	21.5	50.0	-28.5

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.338	5.6	20.2	25.8	59.3	-33.5
0.771	2.3	20.2	22.5	56.0	-33.5
1.340	2.2	20.3	22.5	56.0	-33.5
13.560	5.3	21.1	26.4	60.0	-33.6
2.877	2.0	20.3	22.3	56.0	-33.7
0.492	1.9	20.2	22.1	56.1	-34.0
1.255	1.7	20.3	22.0	56.0	-34.0
0.599	1.6	20.2	21.8	56.0	-34.2
0.908	1.5	20.3	21.8	56.0	-34.2
1.598	1.4	20.3	21.7	56.0	-34.3
29.690	2.9	22.6	25.5	60.0	-34.5
0.406	2.4	20.2	22.6	57.7	-35.1
1.943	0.6	20.3	20.9	56.0	-35.1
3.542	0.3	20.3	20.6	56.0	-35.4
4.306	0.3	20.3	20.6	56.0	-35.4
24.268	-0.2	22.2	22.0	60.0	-38.0
20.446	-0.1	21.6	21.5	60.0	-38.5
16.678	-0.2	21.4	21.2	60.0	-38.8
11.264	-0.2	20.9	20.7	60.0	-39.3
7.282	0.1	20.5	20.6	60.0	-39.4
8.083	0.0	20.6	20.6	60.0	-39.4
5.504	0.1	20.4	20.5	60.0	-39.5

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
3.049	-3.1	20.3	17.2	46.0	-28.8
1.340	-3.6	20.3	16.7	46.0	-29.3
0.769	-3.7	20.2	16.5	46.0	-29.5
29.688	-2.1	22.6	20.5	50.0	-29.5
2.860	-4.0	20.3	16.3	46.0	-29.7
0.498	-4.1	20.2	16.1	46.0	-29.9
1.253	-4.3	20.3	16.0	46.0	-30.0
0.599	-4.5	20.2	15.7	46.0	-30.3
0.907	-4.6	20.3	15.7	46.0	-30.3
1.598	-4.7	20.3	15.6	46.0	-30.4
1.943	-5.5	20.3	14.8	46.0	-31.2
0.403	-3.7	20.2	16.5	47.8	-31.3
3.508	-5.8	20.3	14.5	46.0	-31.5
0.330	-2.3	20.2	17.9	49.5	-31.6
4.296	-5.9	20.3	14.4	46.0	-31.6
24.334	-6.3	22.2	15.9	50.0	-34.1
19.946	-6.4	21.6	15.2	50.0	-34.8
16.081	-6.4	21.4	15.0	50.0	-35.0
11.151	-6.3	20.9	14.6	50.0	-35.4
5.391	-6.0	20.4	14.4	50.0	-35.6
7.066	-6.1	20.5	14.4	50.0	-35.6
7.749	-6.2	20.6	14.4	50.0	-35.6

POWERLINE CONDUCTED EMISSIONS



EmiR5 2021.06.24.0

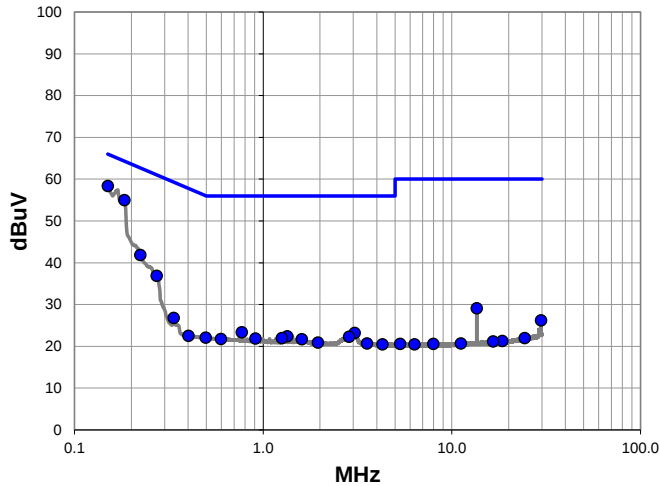
PSA-ESCI 2021.03.17.0

Work Order:	ABBO0082	Date:	2021-08-06	
Project:	None	Temperature:	21.7 °C	
Job Site:	TX01	Humidity:	55.8% RH	
Serial Number:	ENG15-CS	Barometric Pres.:	1021 mbar	
EUT:	GLP12410 SAL Alinity C Section			Tested by: Travis Glasser
Configuration:	6			
Customer:	Abbott Laboratories			
Attendees:	Don Mendell			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	CrossSwitch Radio 8 - Both RFID Readers ON			

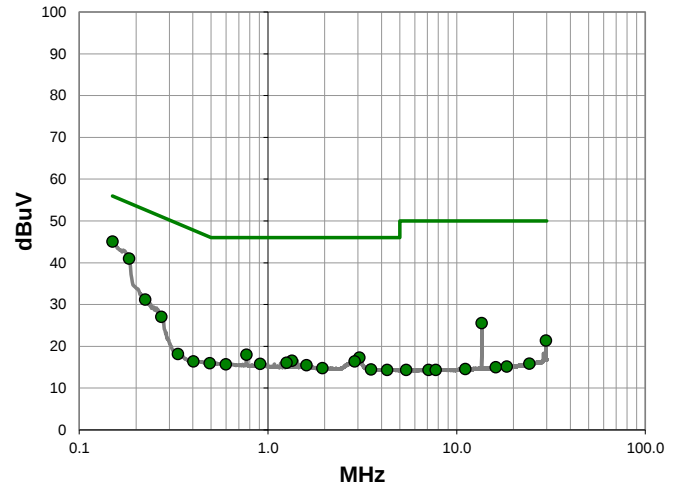
Test Specifications		Test Method	
FCC 15.207:2021		ANSI C63.10:2013	

Run #	3	Line:	High Line	Ext. Attenuation:	0	Results	Pass
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Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	38.0	20.4	58.4	66.0	-7.6
0.184	34.6	20.4	55.0	64.3	-9.3
0.223	21.5	20.4	41.9	62.7	-20.8
0.272	16.5	20.4	36.9	61.1	-24.2
13.560	8.0	21.1	29.1	60.0	-30.9

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	24.7	20.4	45.1	56.0	-10.9
0.184	20.6	20.4	41.0	54.3	-13.3
0.223	10.8	20.4	31.2	52.7	-21.5
0.272	6.7	20.4	27.1	51.1	-24.0
13.560	4.5	21.1	25.6	50.0	-24.4

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.335	6.6	20.2	26.8	59.3	-32.5
0.769	3.2	20.2	23.4	56.0	-32.6
3.049	2.9	20.3	23.2	56.0	-32.8
1.340	2.1	20.3	22.4	56.0	-33.6
2.852	2.0	20.3	22.3	56.0	-33.7
29.687	3.6	22.6	26.2	60.0	-33.8
0.495	1.9	20.2	22.1	56.1	-34.0
1.256	1.7	20.3	22.0	56.0	-34.0
0.908	1.6	20.3	21.9	56.0	-34.1
0.597	1.6	20.2	21.8	56.0	-34.2
1.600	1.4	20.3	21.7	56.0	-34.3
1.952	0.6	20.3	20.9	56.0	-35.1
0.402	2.3	20.2	22.5	57.8	-35.3
3.549	0.4	20.3	20.7	56.0	-35.3
4.282	0.2	20.3	20.5	56.0	-35.5
24.349	-0.2	22.2	22.0	60.0	-38.0
18.515	-0.2	21.5	21.3	60.0	-38.7
16.549	-0.2	21.4	21.2	60.0	-38.8
11.156	-0.2	20.9	20.7	60.0	-39.3
5.318	0.3	20.3	20.6	60.0	-39.4
7.973	0.0	20.6	20.6	60.0	-39.4
6.343	0.1	20.4	20.5	60.0	-39.5

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.769	-2.2	20.2	18.0	46.0	-28.0
29.687	-1.2	22.6	21.4	50.0	-28.6
3.049	-3.0	20.3	17.3	46.0	-28.7
1.340	-3.7	20.3	16.6	46.0	-29.4
2.877	-3.9	20.3	16.4	46.0	-29.6
1.253	-4.2	20.3	16.1	46.0	-29.9
0.908	-4.5	20.3	15.8	46.0	-30.2
0.490	-4.2	20.2	16.0	46.2	-30.2
0.597	-4.5	20.2	15.7	46.0	-30.3
1.598	-4.8	20.3	15.5	46.0	-30.5
0.333	-2.0	20.2	18.2	49.4	-31.2
1.943	-5.5	20.3	14.8	46.0	-31.2
0.402	-3.8	20.2	16.4	47.8	-31.4
3.510	-5.8	20.3	14.5	46.0	-31.5
4.274	-5.9	20.3	14.4	46.0	-31.6
24.287	-6.3	22.2	15.9	50.0	-34.1
18.389	-6.3	21.5	15.2	50.0	-34.8
16.087	-6.4	21.4	15.0	50.0	-35.0
11.114	-6.2	20.8	14.6	50.0	-35.4
5.393	-6.0	20.4	14.4	50.0	-35.6
7.086	-6.1	20.5	14.4	50.0	-35.6
7.749	-6.2	20.6	14.4	50.0	-35.6

POWERLINE CONDUCTED EMISSIONS



EmiR5 2021.06.24.0

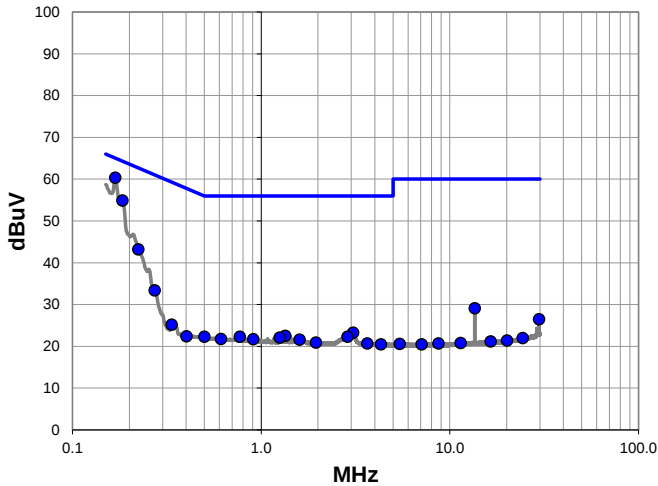
PSA-ESCI 2021.03.17.0

Work Order:	ABBO0082	Date:	2021-08-06	
Project:	None	Temperature:	21.7 °C	
Job Site:	TX01	Humidity:	55.8% RH	
Serial Number:	ENG15-CS	Barometric Pres.:	1021 mbar	
EUT:	GLP12410 SAL Alinity C Section			Tested by: Travis Glasser
Configuration:	6			
Customer:	Abbott Laboratories			
Attendees:	Don Mendell			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	CrossSwitch Radio 8 - Both RFID Readers ON			

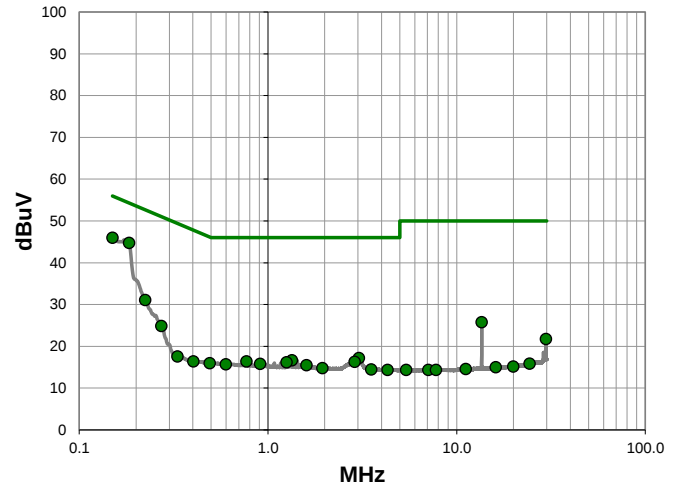
Test Specifications		Test Method	
FCC 15.207:2021		ANSI C63.10:2013	

Run #	4	Line:	Neutral	Ext. Attenuation:	0	Results	Pass
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Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.168	40.0	20.4	60.4	65.0	-4.6
0.184	34.5	20.4	54.9	64.3	-9.4
0.223	22.8	20.4	43.2	62.7	-19.5
0.272	13.0	20.4	33.4	61.1	-27.7
13.560	8.0	21.1	29.1	60.0	-30.9

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.184	24.4	20.4	44.8	54.3	-9.5
0.150	25.6	20.4	46.0	56.0	-10.0
0.223	10.7	20.4	31.1	52.7	-21.6
13.560	4.7	21.1	25.8	50.0	-24.2
0.272	4.5	20.4	24.9	51.1	-26.2

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
3.066	3.0	20.3	23.3	56.0	-32.7
1.340	2.2	20.3	22.5	56.0	-33.5
29.685	3.9	22.6	26.5	60.0	-33.5
0.499	2.1	20.2	22.3	56.0	-33.7
0.769	2.1	20.2	22.3	56.0	-33.7
2.869	2.0	20.3	22.3	56.0	-33.7
1.253	1.8	20.3	22.1	56.0	-33.9
0.335	5.0	20.2	25.2	59.3	-34.1
0.612	1.6	20.2	21.8	56.0	-34.2
0.907	1.4	20.3	21.7	56.0	-34.3
1.598	1.3	20.3	21.6	56.0	-34.4
1.952	0.6	20.3	20.9	56.0	-35.1
3.647	0.4	20.3	20.7	56.0	-35.3
0.402	2.2	20.2	22.4	57.8	-35.4
4.311	0.2	20.3	20.5	56.0	-35.5
24.346	-0.2	22.2	22.0	60.0	-38.0
20.085	-0.2	21.6	21.4	60.0	-38.6
16.440	-0.2	21.4	21.2	60.0	-38.8
11.389	-0.1	20.9	20.8	60.0	-39.2
8.693	0.1	20.6	20.7	60.0	-39.3
5.414	0.2	20.4	20.6	60.0	-39.4
7.080	0.0	20.5	20.5	60.0	-39.5

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
29.685	-0.8	22.6	21.8	50.0	-28.2
3.032	-3.1	20.3	17.2	46.0	-28.8
1.340	-3.6	20.3	16.7	46.0	-29.3
0.769	-3.8	20.2	16.4	46.0	-29.6
2.877	-4.0	20.3	16.3	46.0	-29.7
1.253	-4.1	20.3	16.2	46.0	-29.8
0.908	-4.5	20.3	15.8	46.0	-30.2
0.490	-4.2	20.2	16.0	46.2	-30.2
0.597	-4.5	20.2	15.7	46.0	-30.3
1.598	-4.8	20.3	15.5	46.0	-30.5
1.943	-5.5	20.3	14.8	46.0	-31.2
0.402	-3.8	20.2	16.4	47.8	-31.4
3.517	-5.8	20.3	14.5	46.0	-31.5
4.299	-5.9	20.3	14.4	46.0	-31.6
0.332	-2.6	20.2	17.6	49.4	-31.8
24.349	-6.3	22.2	15.9	50.0	-34.1
19.949	-6.4	21.6	15.2	50.0	-34.8
16.082	-6.4	21.4	15.0	50.0	-35.0
11.151	-6.3	20.9	14.6	50.0	-35.4
5.391	-6.0	20.4	14.4	50.0	-35.6
7.070	-6.1	20.5	14.4	50.0	-35.6
7.752	-6.2	20.6	14.4	50.0	-35.6

POWERLINE CONDUCTED EMISSIONS



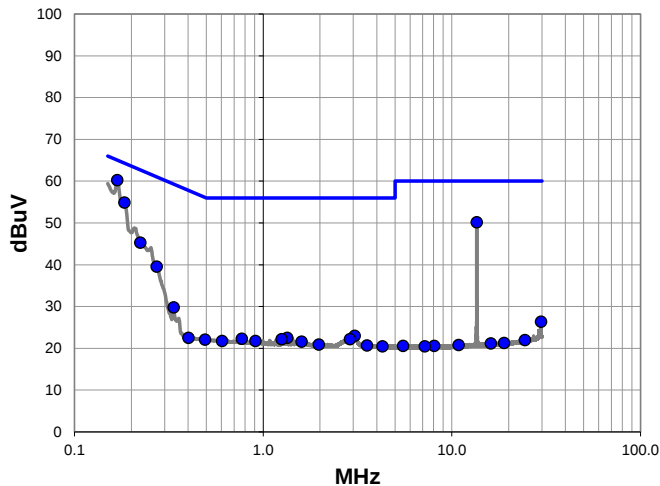
EmiR5 2021.06.24.0

PSA-ESCI 2021.03.17.0

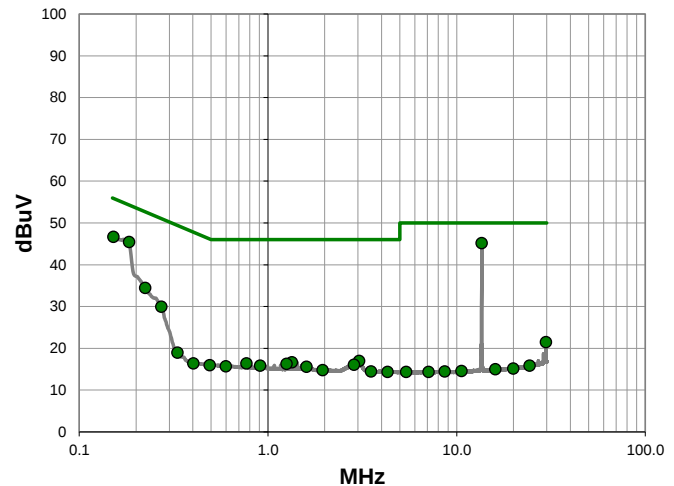
Work Order:	ABBO0082	Date:	2021-08-06	
Project:	None	Temperature:	21.7 °C	
Job Site:	TX01	Humidity:	55.8% RH	
Serial Number:	ENG07-AP	Barometric Pres.:	1021 mbar	
EUT:	GLP12410 SAL Alinity C Section			Tested by: Travis Glasser
Configuration:	6			
Customer:	Abbott Laboratories			
Attendees:	Don Mendell			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	AccessPoint Radio 2			

Test Specifications		Test Method	
FCC 15.207:2021		ANSI C63.10:2013	
Run #	6	Line:	Neutral
Ext. Attenuation:	0	Results	Pass

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.168	39.9	20.4	60.3	65.0	-4.7
0.184	34.5	20.4	54.9	64.3	-9.4
13.560	29.1	21.1	50.2	60.0	-9.8
0.223	24.9	20.4	45.3	62.7	-17.4
0.272	19.2	20.4	39.6	61.1	-21.5

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
13.560	24.1	21.1	45.2	50.0	-4.8
0.184	25.1	20.4	45.5	54.3	-8.8
0.152	26.3	20.4	46.7	55.9	-9.2
0.223	14.1	20.4	34.5	52.7	-18.2
0.272	9.6	20.4	30.0	51.1	-21.1

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.335	9.6	20.2	29.8	59.3	-29.5
3.049	2.7	20.3	23.0	56.0	-33.0
1.340	2.2	20.3	22.5	56.0	-33.5
29.685	3.8	22.6	26.4	60.0	-33.6
0.769	2.1	20.2	22.3	56.0	-33.7
1.253	1.9	20.3	22.2	56.0	-33.8
2.880	1.9	20.3	22.2	56.0	-33.8
0.492	1.9	20.2	22.1	56.1	-34.0
0.605	1.6	20.2	21.8	56.0	-34.2
0.908	1.5	20.3	21.8	56.0	-34.2
1.598	1.3	20.3	21.6	56.0	-34.4
1.970	0.6	20.3	20.9	56.0	-35.1
0.402	2.3	20.2	22.5	57.8	-35.3
3.545	0.4	20.3	20.7	56.0	-35.3
4.286	0.2	20.3	20.5	56.0	-35.5
24.377	-0.2	22.2	22.0	60.0	-38.0
18.907	-0.2	21.5	21.3	60.0	-38.7
16.107	-0.2	21.4	21.2	60.0	-38.8
10.857	0.0	20.8	20.8	60.0	-39.2
5.512	0.2	20.4	20.6	60.0	-39.4
8.048	0.0	20.6	20.6	60.0	-39.4
7.193	0.0	20.5	20.5	60.0	-39.5

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
29.683	-1.1	22.6	21.5	50.0	-28.5
3.040	-3.3	20.3	17.0	46.0	-29.0
1.340	-3.6	20.3	16.7	46.0	-29.3
0.769	-3.8	20.2	16.4	46.0	-29.6
1.255	-4.0	20.3	16.3	46.0	-29.7
2.852	-4.2	20.3	16.1	46.0	-29.9
0.907	-4.4	20.3	15.9	46.0	-30.1
0.490	-4.2	20.2	16.0	46.2	-30.2
0.597	-4.5	20.2	15.7	46.0	-30.3
0.332	-1.2	20.2	19.0	49.4	-30.4
1.598	-4.7	20.3	15.6	46.0	-30.4
1.944	-5.5	20.3	14.8	46.0	-31.2
0.402	-3.8	20.2	16.4	47.8	-31.4
3.508	-5.8	20.3	14.5	46.0	-31.5
4.296	-5.9	20.3	14.4	46.0	-31.6
24.343	-6.3	22.2	15.9	50.0	-34.1
19.946	-6.4	21.6	15.2	50.0	-34.8
16.023	-6.3	21.3	15.0	50.0	-35.0
10.602	-6.2	20.8	14.6	50.0	-35.4
8.644	-6.1	20.6	14.5	50.0	-35.5
5.393	-6.0	20.4	14.4	50.0	-35.6
7.088	-6.1	20.5	14.4	50.0	-35.6

POWERLINE CONDUCTED EMISSIONS



EmiR5 2021.06.24.0

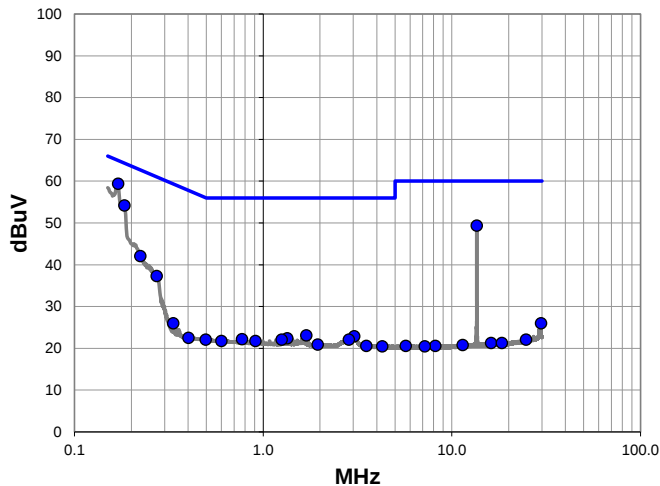
PSA-ESCI 2021.03.17.0

Work Order:	ABBO0082	Date:	2021-08-06	
Project:	None	Temperature:	21.7 °C	
Job Site:	TX01	Humidity:	55.8% RH	
Serial Number:	ENG07-AP	Barometric Pres.:	1021 mbar	
EUT:	GLP12410 SAL Alinity C Section			Tested by: Travis Glasser
Configuration:	6			
Customer:	Abbott Laboratories			
Attendees:	Don Mendell			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	AccessPoint Radio 2			

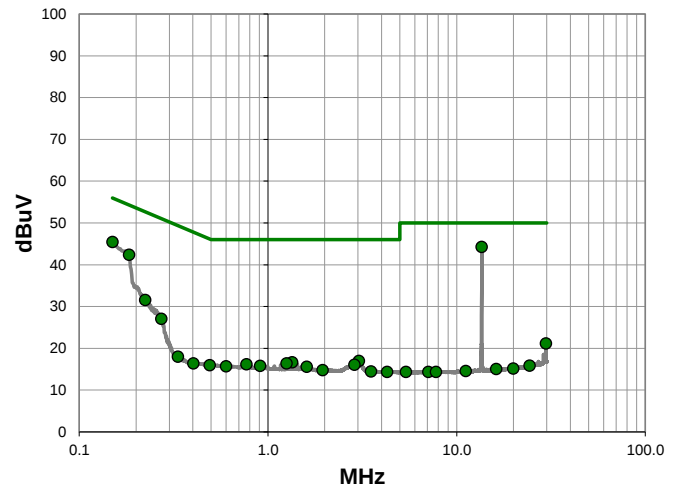
Test Specifications		Test Method	
FCC 15.207:2021		ANSI C63.10:2013	

Run #	7	Line:	High Line	Ext. Attenuation:	0	Results	Pass
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Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.170	39.0	20.4	59.4	65.0	-5.6
0.184	33.8	20.4	54.2	64.3	-10.1
13.560	28.3	21.1	49.4	60.0	-10.6
0.223	21.7	20.4	42.1	62.7	-20.6
0.272	16.9	20.4	37.3	61.1	-23.8

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
13.560	23.2	21.1	44.3	50.0	-5.7
0.150	25.1	20.4	45.5	56.0	-10.5
0.184	22.0	20.4	42.4	54.3	-11.9
0.223	11.2	20.4	31.6	52.7	-21.1
0.272	6.7	20.4	27.1	51.1	-24.0

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
1.691	2.8	20.3	23.1	56.0	-32.9
3.040	2.6	20.3	22.9	56.0	-33.1
0.333	5.8	20.2	26.0	59.4	-33.4
1.340	2.1	20.3	22.4	56.0	-33.6
0.771	2.0	20.2	22.2	56.0	-33.8
1.253	1.8	20.3	22.1	56.0	-33.9
2.845	1.8	20.3	22.1	56.0	-33.9
0.495	1.9	20.2	22.1	56.1	-34.0
29.685	3.4	22.6	26.0	60.0	-34.0
0.600	1.6	20.2	21.8	56.0	-34.2
0.908	1.5	20.3	21.8	56.0	-34.2
1.946	0.6	20.3	20.9	56.0	-35.1
0.402	2.3	20.2	22.5	57.8	-35.3
3.517	0.3	20.3	20.6	56.0	-35.4
4.274	0.2	20.3	20.5	56.0	-35.5
24.735	-0.1	22.2	22.1	60.0	-37.9
16.118	-0.1	21.4	21.3	60.0	-38.7
18.420	-0.2	21.5	21.3	60.0	-38.7
11.406	-0.1	20.9	20.8	60.0	-39.2
5.698	0.2	20.4	20.6	60.0	-39.4
8.173	0.0	20.6	20.6	60.0	-39.4
7.192	0.0	20.5	20.5	60.0	-39.5

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
29.683	-1.4	22.6	21.2	50.0	-28.8
3.032	-3.3	20.3	17.0	46.0	-29.0
1.342	-3.6	20.3	16.7	46.0	-29.3
1.255	-3.9	20.3	16.4	46.0	-29.6
0.769	-4.0	20.2	16.2	46.0	-29.8
2.869	-4.2	20.3	16.1	46.0	-29.9
0.908	-4.5	20.3	15.8	46.0	-30.2
0.490	-4.2	20.2	16.0	46.2	-30.2
0.599	-4.5	20.2	15.7	46.0	-30.3
1.601	-4.7	20.3	15.6	46.0	-30.4
1.944	-5.5	20.3	14.8	46.0	-31.2
0.333	-2.2	20.2	18.0	49.4	-31.4
0.402	-3.8	20.2	16.4	47.8	-31.4
3.508	-5.8	20.3	14.5	46.0	-31.5
4.276	-5.9	20.3	14.4	46.0	-31.6
24.337	-6.3	22.2	15.9	50.0	-34.1
19.949	-6.4	21.6	15.2	50.0	-34.8
16.172	-6.3	21.4	15.1	50.0	-34.9
11.156	-6.3	20.9	14.6	50.0	-35.4
5.374	-5.9	20.3	14.4	50.0	-35.6
7.079	-6.1	20.5	14.4	50.0	-35.6
7.750	-6.2	20.6	14.4	50.0	-35.6

POWERLINE CONDUCTED EMISSIONS

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.

TEST EQUIPMENT

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

MEASUREMENT UNCERTAINTY

Description		
Expanded k=2	3.1 dB	-3.1 dB

CONFIGURATIONS INVESTIGATED

ABBO0181-1

MODES INVESTIGATED

Transmitting RFID 13.56 MHz

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12411 SAL Alinity I Section	Work Order:	ABBO0181
Serial Number:	ENG07-AP	Date:	2022-06-08
Customer:	Abbott Laboratories	Temperature:	21.2°C
Attendees:	Frank Sun	Relative Humidity:	57.4%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Nolan De Ramos	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0181-1

TEST SPECIFICATIONS

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

TEST PARAMETERS

Run #:	1	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

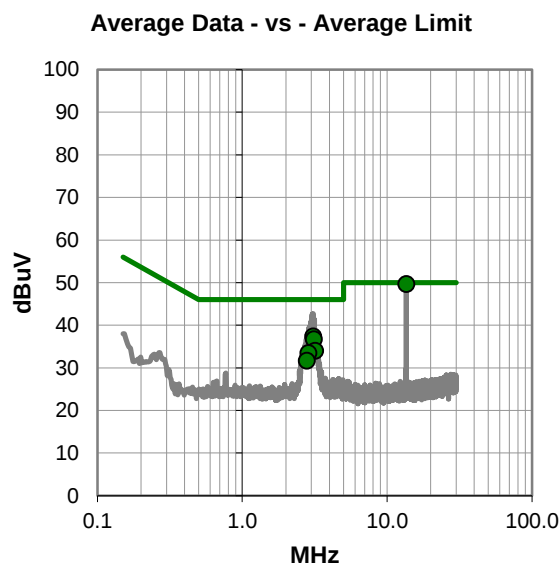
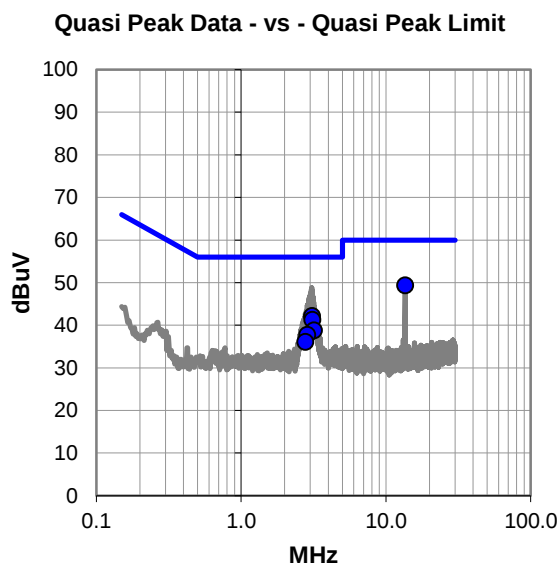
AccessPoint Radio 2

EUT OPERATING MODES

Transmitting RFID 13.56 MHz

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #1

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	28.5	20.9	49.4	60.0	-10.6
3.091	22.0	20.2	42.2	56.0	-13.8
3.113	21.1	20.2	41.3	56.0	-14.7
3.180	18.6	20.2	38.8	56.0	-17.2
2.861	17.6	20.2	37.8	56.0	-18.2
2.784	15.9	20.2	36.1	56.0	-19.9

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	28.8	20.9	49.7	50.0	-0.3
3.091	17.2	20.2	37.4	46.0	-8.6
3.113	16.5	20.2	36.7	46.0	-9.3
3.180	13.8	20.2	34.0	46.0	-12.0
2.861	13.3	20.2	33.5	46.0	-12.5
2.784	11.5	20.2	31.7	46.0	-14.3

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12411 SAL Alinity I Section	Work Order:	ABBO0181
Serial Number:	ENG07-AP	Date:	2022-06-08
Customer:	Abbott Laboratories	Temperature:	21.2°C
Attendees:	Frank Sun	Relative Humidity:	57.4%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Nolan De Ramos	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0181-1

TEST SPECIFICATIONS

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

TEST PARAMETERS

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

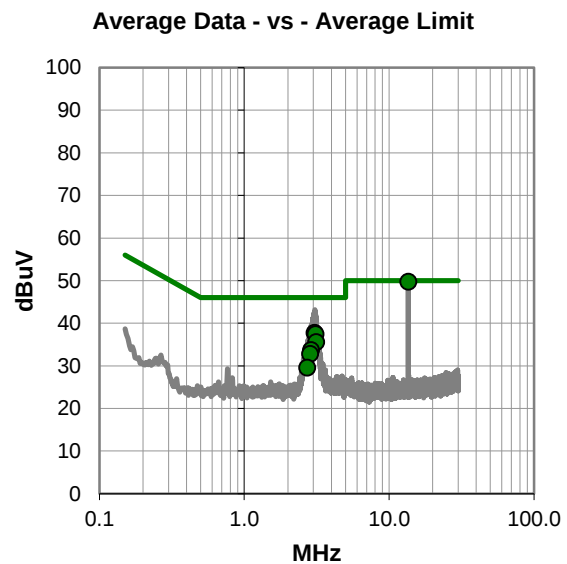
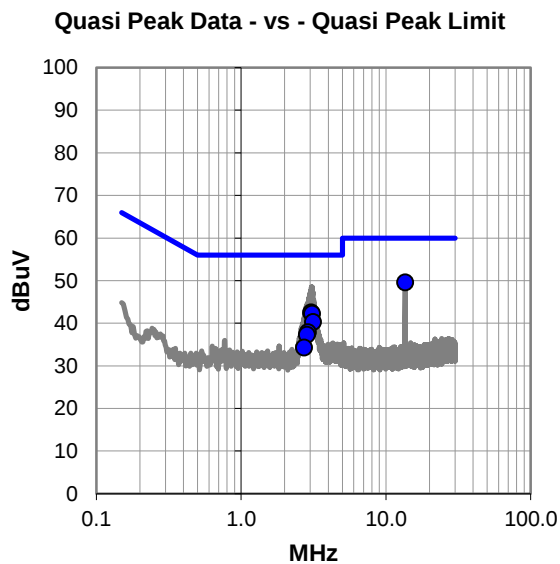
AccessPoint Radio 2

EUT OPERATING MODES

Transmitting RFID 13.56 MHz

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

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	28.7	20.9	49.6	60.0	-10.4
3.049	22.4	20.2	42.6	56.0	-13.4
3.098	22.1	20.2	42.3	56.0	-13.7
3.132	20.1	20.2	40.3	56.0	-15.7
2.895	17.7	20.2	37.9	56.0	-18.1
2.850	17.1	20.2	37.3	56.0	-18.7
2.716	14.1	20.2	34.3	56.0	-21.7

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	28.9	20.9	49.8	50.0	-0.2
3.049	17.6	20.2	37.8	46.0	-8.2
3.098	17.3	20.2	37.5	46.0	-8.5
3.132	15.4	20.2	35.6	46.0	-10.4
2.895	13.5	20.2	33.7	46.0	-12.3
2.850	12.6	20.2	32.8	46.0	-13.2
2.716	9.4	20.2	29.6	46.0	-16.4

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12411 SAL Alinity I Section	Work Order:	ABBO0181
Serial Number:	ENG14-CS	Date:	2022-06-08
Customer:	Abbott Laboratories	Temperature:	21.2°C
Attendees:	Frank Sun	Relative Humidity:	57.4%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Nolan De Ramos	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0181-1

TEST SPECIFICATIONS

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

TEST PARAMETERS

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

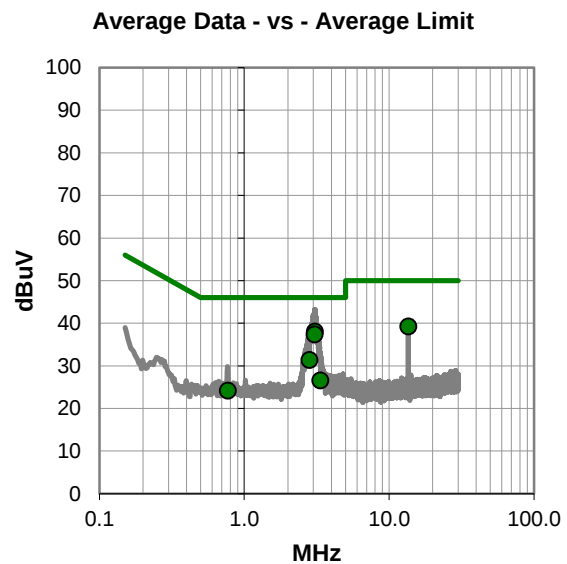
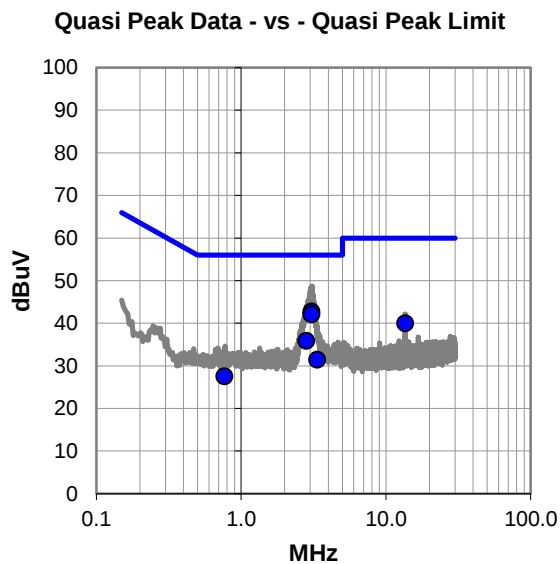
CrossSwitch Radio 7 – RFID Reader 1 ON
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EUT OPERATING MODES

Transmitting RFID 13.56 MHz

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #3

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
3.065	22.6	20.2	42.8	56.0	-13.2
3.053	21.9	20.2	42.1	56.0	-13.9
13.560	19.1	20.9	40.0	60.0	-20.0
2.823	15.7	20.2	35.9	56.0	-20.1
3.345	11.3	20.2	31.5	56.0	-24.5
0.768	7.4	20.2	27.6	56.0	-28.4

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
3.065	17.9	20.2	38.1	46.0	-7.9
3.053	17.2	20.2	37.4	46.0	-8.6
13.560	18.4	20.9	39.3	50.0	-10.7
2.823	11.2	20.2	31.4	46.0	-14.6
3.345	6.4	20.2	26.6	46.0	-19.4
0.768	4.0	20.2	24.2	46.0	-21.8

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12411 SAL Alinity I Section	Work Order:	ABBO0181
Serial Number:	ENG14-CS	Date:	2022-06-08
Customer:	Abbott Laboratories	Temperature:	21.2°C
Attendees:	Frank Sun	Relative Humidity:	57.4%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Nolan De Ramos	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0181-1

TEST SPECIFICATIONS

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

TEST PARAMETERS

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

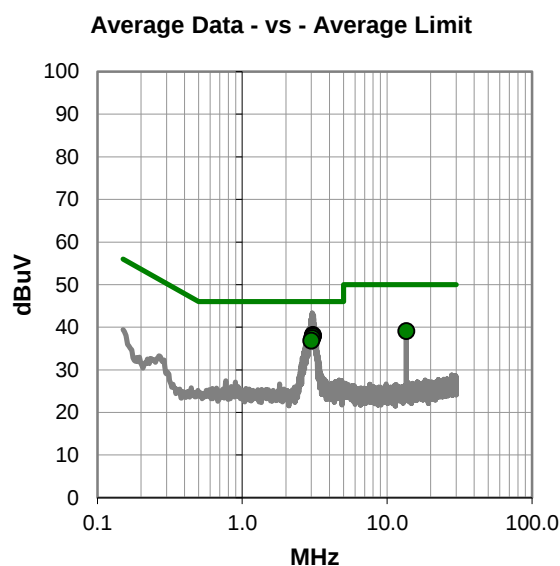
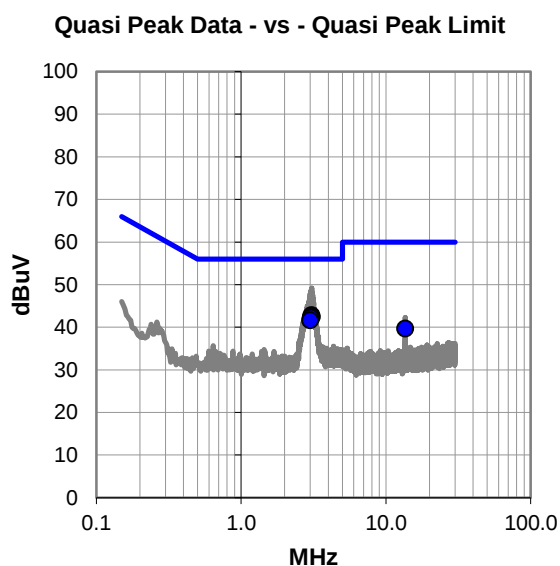
CrossSwitch Radio 7 – RFID Reader 1 ON

EUT OPERATING MODES

Transmitting RFID 13.56 MHz

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #4

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
3.066	22.7	20.2	42.9	56.0	-13.1
3.063	22.3	20.2	42.5	56.0	-13.5
3.071	22.2	20.2	42.4	56.0	-13.6
3.032	22.1	20.2	42.3	56.0	-13.7
2.999	21.5	20.2	41.7	56.0	-14.3
13.560	18.8	20.9	39.7	60.0	-20.3

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
3.066	18.0	20.2	38.2	46.0	-7.8
3.063	17.8	20.2	38.0	46.0	-8.0
3.071	17.7	20.2	37.9	46.0	-8.1
3.032	17.3	20.2	37.5	46.0	-8.5
2.999	16.7	20.2	36.9	46.0	-9.1
13.560	18.2	20.9	39.1	50.0	-10.9

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12411 SAL Alinity I Section	Work Order:	ABBO0181
Serial Number:	ENG14-CS	Date:	2022-06-08
Customer:	Abbott Laboratories	Temperature:	21.2°C
Attendees:	Frank Sun	Relative Humidity:	57.4%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Nolan De Ramos	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0181-1

TEST SPECIFICATIONS

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

TEST PARAMETERS

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

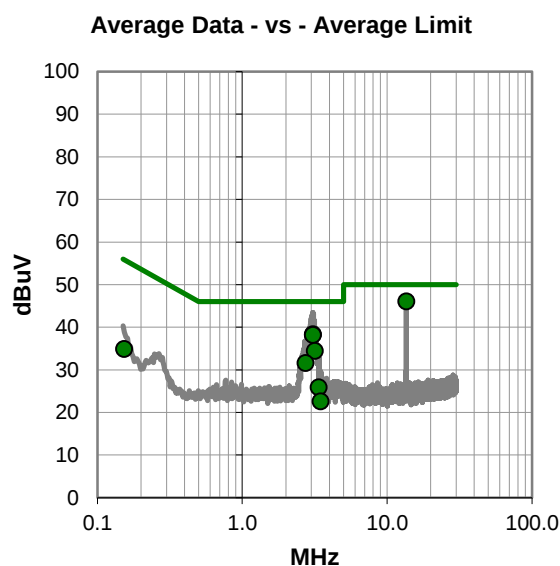
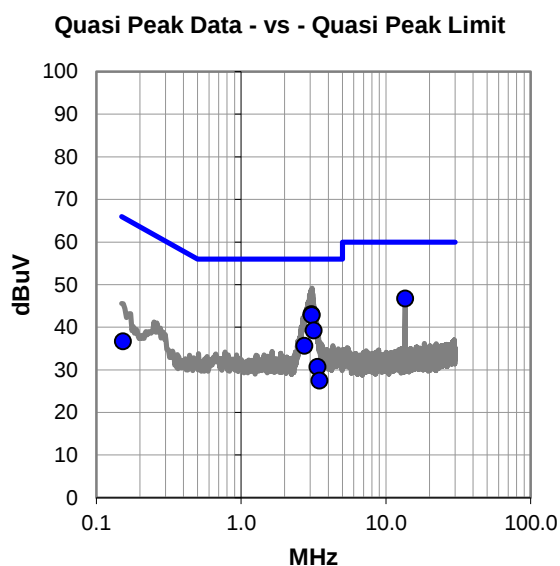
CrossSwitch Radio 7 – RFID Reader 2 ON
--

EUT OPERATING MODES

Transmitting RFID 13.56 MHz

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #5

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
3.065	22.9	20.2	43.1	56.0	-12.9
3.074	22.7	20.2	42.9	56.0	-13.1
13.560	25.9	20.9	46.8	60.0	-13.2
3.171	19.1	20.2	39.3	56.0	-16.7
2.730	15.5	20.2	35.7	56.0	-20.3
3.369	10.5	20.2	30.7	56.0	-25.3
3.477	7.3	20.2	27.5	56.0	-28.5
0.153	16.1	20.6	36.7	65.9	-29.2

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	25.2	20.9	46.1	50.0	-3.9
3.065	18.2	20.2	38.4	46.0	-7.6
3.074	18.0	20.2	38.2	46.0	-7.8
3.171	14.3	20.2	34.5	46.0	-11.5
2.730	11.4	20.2	31.6	46.0	-14.4
3.369	5.7	20.2	25.9	46.0	-20.1
0.153	14.3	20.6	34.9	55.9	-21.0
3.477	2.4	20.2	22.6	46.0	-23.4

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12411 SAL Alinity I Section	Work Order:	ABBO0181
Serial Number:	ENG14-CS	Date:	2022-06-08
Customer:	Abbott Laboratories	Temperature:	21.2°C
Attendees:	Frank Sun	Relative Humidity:	57.4%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Nolan De Ramos	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0181-1

TEST SPECIFICATIONS

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

TEST PARAMETERS

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

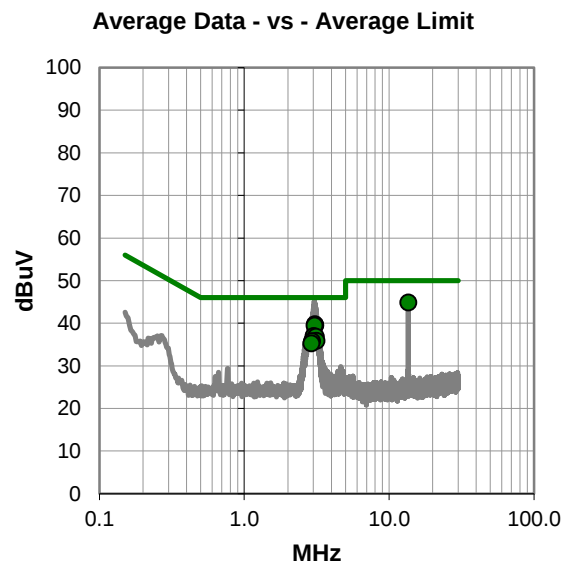
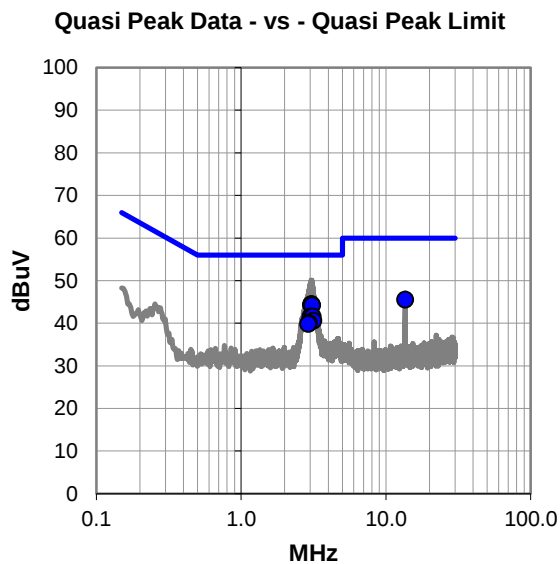
CrossSwitch Radio 7 – RFID Reader 2 ON

EUT OPERATING MODES

Transmitting RFID 13.56 MHz

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #8

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
3.066	24.3	20.2	44.5	56.0	-11.5
3.049	24.2	20.2	44.4	56.0	-11.6
3.082	24.2	20.2	44.4	56.0	-11.6
3.090	24.0	20.2	44.2	56.0	-11.8
3.011	21.4	20.2	41.6	56.0	-14.4
3.119	21.4	20.2	41.6	56.0	-14.4
13.559	24.7	20.9	45.6	60.0	-14.4
3.146	20.4	20.2	40.6	56.0	-15.4
2.939	19.9	20.2	40.1	56.0	-15.9
2.901	19.7	20.2	39.9	56.0	-16.1

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.559	24.0	20.9	44.9	50.0	-5.1
3.066	19.6	20.2	39.8	46.0	-6.2
3.082	19.4	20.2	39.6	46.0	-6.4
3.090	19.3	20.2	39.5	46.0	-6.5
3.049	19.3	20.2	39.5	46.0	-6.5
3.011	16.8	20.2	37.0	46.0	-9.0
3.119	16.7	20.2	36.9	46.0	-9.1
3.146	15.7	20.2	35.9	46.0	-10.1
2.939	15.6	20.2	35.8	46.0	-10.2
2.901	15.1	20.2	35.3	46.0	-10.7

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12411 SAL Alinity I Section	Work Order:	ABBO0181
Serial Number:	ENG15-CS	Date:	2022-06-08
Customer:	Abbott Laboratories	Temperature:	21.2°C
Attendees:	Frank Sun	Relative Humidity:	57.4%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Nolan De Ramos	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0181-1

TEST SPECIFICATIONS

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

TEST PARAMETERS

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

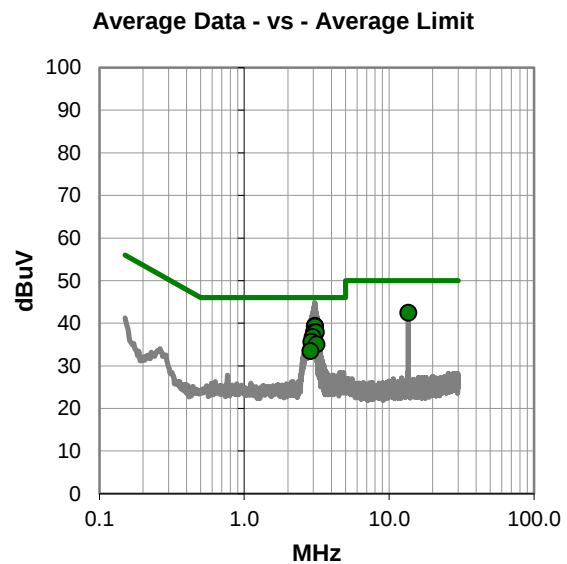
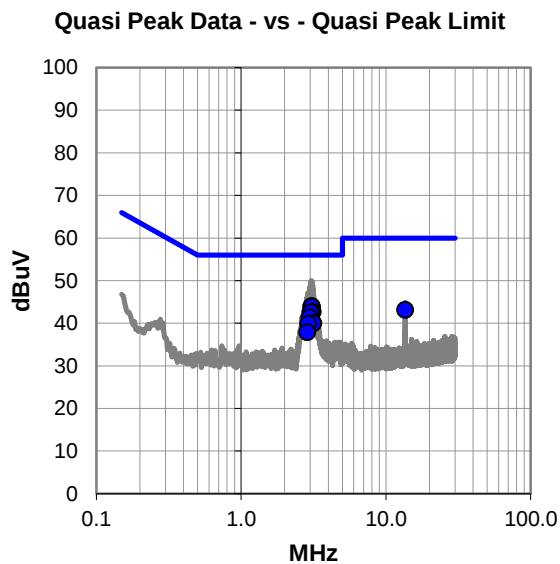
CrossSwitch Radio 8 – RFID Reader 1 ON
--

EUT OPERATING MODES

Transmitting RFID 13.56 MHz

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #6

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
3.073	23.8	20.2	44.0	56.0	-12.0
3.065	23.8	20.2	44.0	56.0	-12.0
3.072	23.7	20.2	43.9	56.0	-12.1
3.122	22.5	20.2	42.7	56.0	-13.3
3.025	22.4	20.2	42.6	56.0	-13.4
2.968	21.2	20.2	41.4	56.0	-14.6
3.155	19.8	20.2	40.0	56.0	-16.0
2.907	19.7	20.2	39.9	56.0	-16.1
13.560	22.3	20.9	43.2	60.0	-16.8
2.864	17.7	20.2	37.9	56.0	-18.1

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
3.065	19.2	20.2	39.4	46.0	-6.6
3.072	19.1	20.2	39.3	46.0	-6.7
3.073	19.1	20.2	39.3	46.0	-6.7
13.560	21.6	20.9	42.5	50.0	-7.5
3.025	17.7	20.2	37.9	46.0	-8.1
3.122	17.7	20.2	37.9	46.0	-8.1
2.968	16.6	20.2	36.8	46.0	-9.2
2.907	15.5	20.2	35.7	46.0	-10.3
3.155	14.9	20.2	35.1	46.0	-10.9
2.864	13.3	20.2	33.5	46.0	-12.5

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12411 SAL Alinity I Section	Work Order:	ABBO0181
Serial Number:	ENG15-CS	Date:	2022-06-08
Customer:	Abbott Laboratories	Temperature:	21.2°C
Attendees:	Frank Sun	Relative Humidity:	57.4%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Nolan De Ramos	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0181-1

TEST SPECIFICATIONS

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

TEST PARAMETERS

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

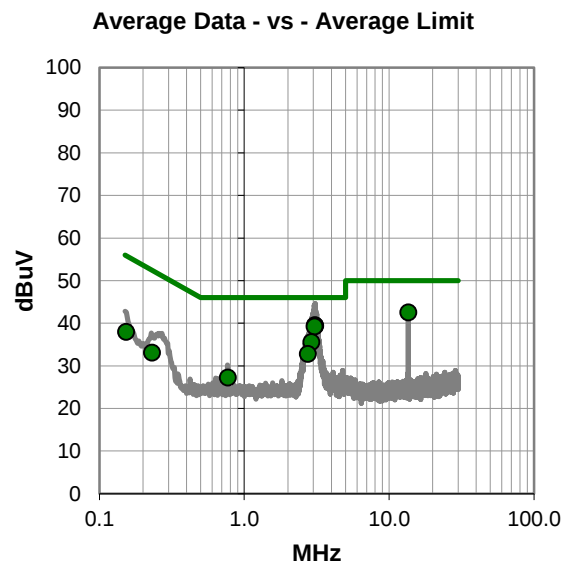
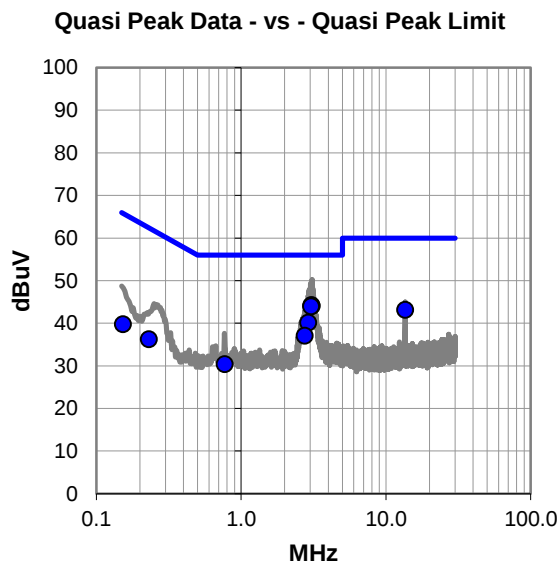
CrossSwitch Radio 8 – RFID Reader 1 ON
--

EUT OPERATING MODES

Transmitting RFID 13.56 MHz

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #7

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
3.065	24.1	20.2	44.3	56.0	-11.7
3.081	23.9	20.2	44.1	56.0	-11.9
3.048	23.8	20.2	44.0	56.0	-12.0
2.906	20.0	20.2	40.2	56.0	-15.8
13.561	22.3	20.9	43.2	60.0	-16.8
2.747	16.9	20.2	37.1	56.0	-18.9
0.771	10.2	20.2	30.4	56.0	-25.6
0.231	15.7	20.6	36.3	62.4	-26.1
0.153	19.2	20.6	39.8	65.9	-26.1

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
3.065	19.4	20.2	39.6	46.0	-6.4
3.081	19.2	20.2	39.4	46.0	-6.6
3.048	19.1	20.2	39.3	46.0	-6.7
13.561	21.7	20.9	42.6	50.0	-7.4
2.906	15.4	20.2	35.6	46.0	-10.4
2.747	12.6	20.2	32.8	46.0	-13.2
0.153	17.4	20.6	38.0	55.9	-17.9
0.771	7.1	20.2	27.3	46.0	-18.7
0.231	12.5	20.6	33.1	52.4	-19.3

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12411 SAL Alinity I Section	Work Order:	ABBO0181
Serial Number:	ENG15-CS	Date:	2022-06-08
Customer:	Abbott Laboratories	Temperature:	21.2°C
Attendees:	Frank Sun	Relative Humidity:	57.4%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Nolan De Ramos	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0181-1

TEST SPECIFICATIONS

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

TEST PARAMETERS

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

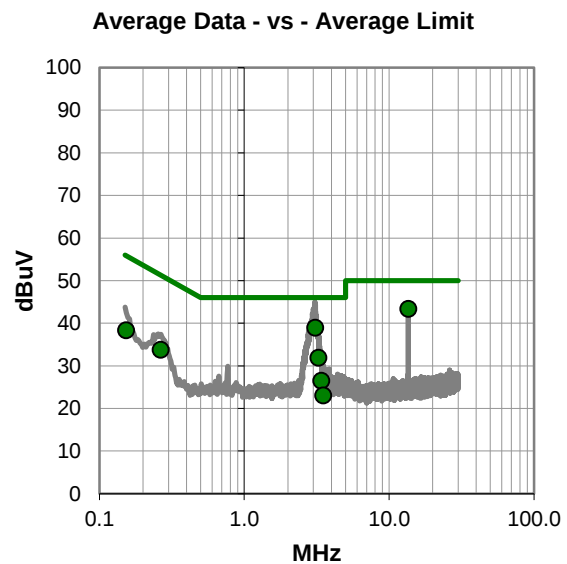
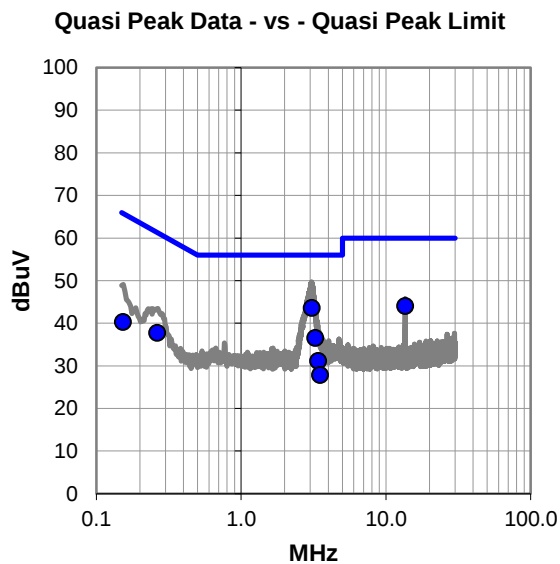
CrossSwitch Radio 8 – RFID Reader 2 ON
--

EUT OPERATING MODES

Transmitting RFID 13.56 MHz

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #9

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
3.081	23.4	20.2	43.6	56.0	-12.4
13.560	23.2	20.9	44.1	60.0	-15.9
3.245	16.4	20.2	36.6	56.0	-19.4
0.264	17.3	20.5	37.8	61.3	-23.5
3.401	11.0	20.2	31.2	56.0	-24.8
0.153	19.7	20.6	40.3	65.9	-25.6
3.502	7.7	20.2	27.9	56.0	-28.1

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	22.5	20.9	43.4	50.0	-6.6
3.081	18.8	20.2	39.0	46.0	-7.0
3.245	11.7	20.2	31.9	46.0	-14.1
0.264	13.3	20.5	33.8	51.3	-17.5
0.153	17.8	20.6	38.4	55.9	-17.5
3.401	6.3	20.2	26.5	46.0	-19.5
3.502	2.9	20.2	23.1	46.0	-22.9

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12411 SAL Alinity I Section	Work Order:	ABBO0181
Serial Number:	ENG15-CS	Date:	2022-06-08
Customer:	Abbott Laboratories	Temperature:	21.2°C
Attendees:	Frank Sun	Relative Humidity:	57.4%
Customer Project:	None	Bar. Pressure (PMSL):	1018 mb
Tested By:	Nolan De Ramos	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0181-1

TEST SPECIFICATIONS

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

TEST PARAMETERS

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

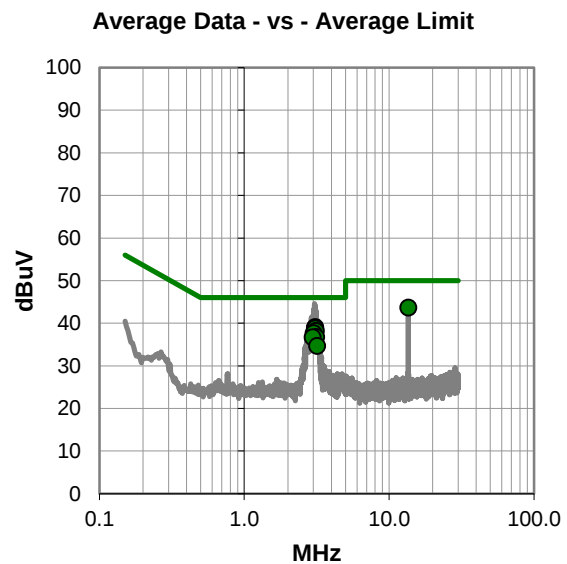
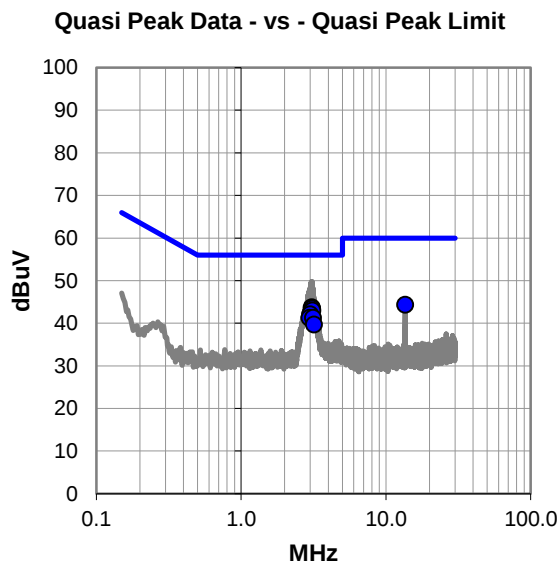
CrossSwitch Radio 8 – RFID Reader 2 ON
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EUT OPERATING MODES

Transmitting RFID 13.56 MHz

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #10

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
3.082	23.6	20.2	43.8	56.0	-12.2
3.072	23.3	20.2	43.5	56.0	-12.5
3.090	23.3	20.2	43.5	56.0	-12.5
3.114	22.8	20.2	43.0	56.0	-13.0
3.005	21.9	20.2	42.1	56.0	-13.9
2.970	21.1	20.2	41.3	56.0	-14.7
3.137	21.1	20.2	41.3	56.0	-14.7
13.560	23.5	20.9	44.4	60.0	-15.6
3.181	19.5	20.2	39.7	56.0	-16.3

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	22.8	20.9	43.7	50.0	-6.3
3.082	18.9	20.2	39.1	46.0	-6.9
3.072	18.7	20.2	38.9	46.0	-7.1
3.090	18.6	20.2	38.8	46.0	-7.2
3.114	18.0	20.2	38.2	46.0	-7.8
3.005	17.5	20.2	37.7	46.0	-8.3
3.137	16.6	20.2	36.8	46.0	-9.2
2.970	16.5	20.2	36.7	46.0	-9.3
3.181	14.5	20.2	34.7	46.0	-11.3

CONCLUSION

Pass



Tested By

FIELD STRENGTH OF FUNDAMENTAL

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

ABBO0082 - 6

FREQUENCY RANGE INVESTIGATED

Start Frequency	12.06 MHz	Stop Frequency	15.06 MHz
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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	E4440A	AFD	2020-07-30	2021-07-30
Antenna - Loop	ETS Lindgren	6502	AZM	2020-07-09	2022-07-09
Cable	Northwest EMC	RE 9kHz - 1GHz	TXB	2021-05-24	2022-05-24

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.

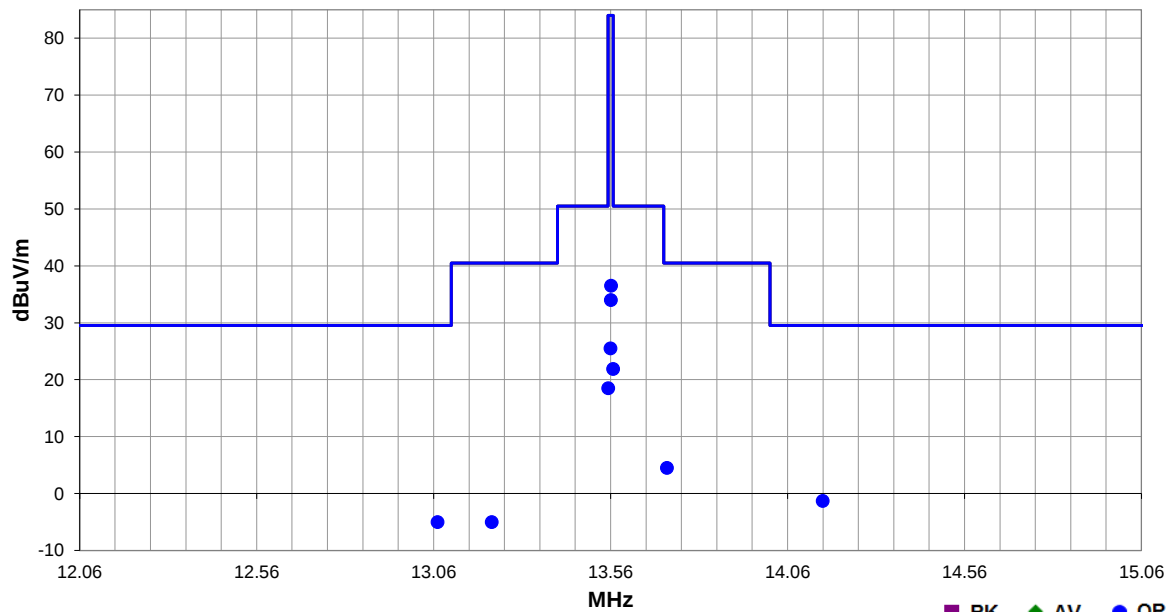
FIELD STRENGTH OF FUNDAMENTAL



Work Order:	ABBO0082	Date:	2021-06-19	
Project:	None	Temperature:	21.1 °C	
Job Site:	TX02	Humidity:	51.9% RH	
Serial Number:	See Configurations	Barometric Pres.:	1014 mbar	
EUT:	GLP12410 SAL Alinity C Section			Tested by: Mark Baytan
Configuration:	6			
Customer:	Abbott Laboratories			
Attendees:	Don Mendell			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	All Radios ON. Test mode only.			

Test Specifications	Test Method
FCC 15.225:2021	ANSI C63.10:2013

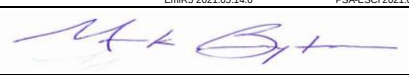
Run #	11	Test Distance (m)	10	Antenna Height(s)	1(m)	Results	Pass
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Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
13.567	29.4	11.6	1.0	268.9	10.0	0.0	Perp to EUT	QP	-19.1	21.9	50.5	-28.6	All Radios ON
14.159	6.2	11.6	1.0	36.0	10.0	0.0	Perp to EUT	QP	-19.1	-1.3	29.5	-30.8	All Radios ON
13.553	26.0	11.6	1.0	21.0	10.0	0.0	Perp to EUT	QP	-19.1	18.5	50.5	-32.0	All Radios ON
13.071	2.5	11.6	1.0	345.0	10.0	0.0	Perp to EUT	QP	-19.1	-5.0	29.5	-34.5	All Radios ON
13.719	12.0	11.6	1.0	279.9	10.0	0.0	Perp to EUT	QP	-19.1	4.5	40.5	-36.0	All Radios ON
13.224	2.5	11.6	1.0	320.0	10.0	0.0	Perp to EUT	QP	-19.1	-5.0	40.5	-45.5	All Radios ON
13.561	44.0	11.6	1.0	231.9	10.0	0.0	Perp to EUT	QP	-19.1	36.5	84.0	-47.5	All Radios ON
13.561	41.5	11.6	1.0	266.0	10.0	0.0	Para to GND	QP	-19.1	34.0	84.0	-50.0	All Radios ON
13.560	33.0	11.6	1.0	213.0	10.0	0.0	Para to EUT	QP	-19.1	25.5	84.0	-58.5	All Radios ON

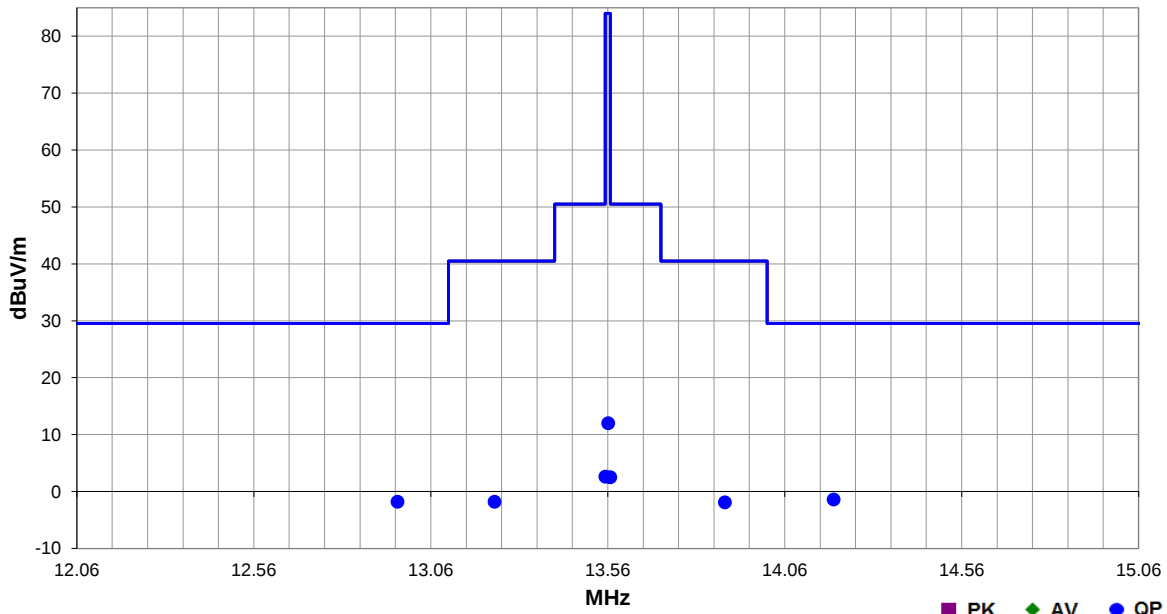
FIELD STRENGTH OF FUNDAMENTAL



Work Order:	ABBO0082	Date:	2021-06-19	
Project:	None	Temperature:	21.1 °C	
Job Site:	TX02	Humidity:	51.9% RH	
Serial Number:	ENG07-AP	Barometric Pres.:	1014 mbar	
EUT:	GLP12410 SAL Alinity C Section			Tested by: Mark Baytan
Configuration:	6			
Customer:	Abbott Laboratories			
Attendees:	Don Mendell			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	AccessPoint. All emissions were greater than 20 dB below the limit.			

Test Specifications	Test Method
FCC 15.225:2021	ANSI C63.10:2013

Run #	13	Test Distance (m)	10	Antenna Height(s)	1(m)	Results	Pass
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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)
14.198	6.1	11.6	1.0	237.9	10.0	0.0	Perp to EUT	QP	-19.1	-1.4	29.5	-30.9
12.966	5.7	11.6	1.0	321.0	10.0	0.0	Perp to EUT	QP	-19.1	-1.8	29.5	-31.3
13.240	5.7	11.6	1.0	168.0	10.0	0.0	Perp to EUT	QP	-19.1	-1.8	40.5	-42.3
13.891	5.6	11.6	1.0	349.0	10.0	0.0	Perp to EUT	QP	-19.1	-1.9	40.5	-42.4
13.553	10.1	11.6	1.0	150.0	10.0	0.0	Perp to EUT	QP	-19.1	2.6	50.5	-47.9
13.567	10.0	11.6	1.0	158.0	10.0	0.0	Perp to EUT	QP	-19.1	2.5	50.5	-48.0
13.561	19.5	11.6	1.0	150.0	10.0	0.0	Perp to EUT	QP	-19.1	12.0	84.0	-72.0

FIELD STRENGTH OF FUNDAMENTAL



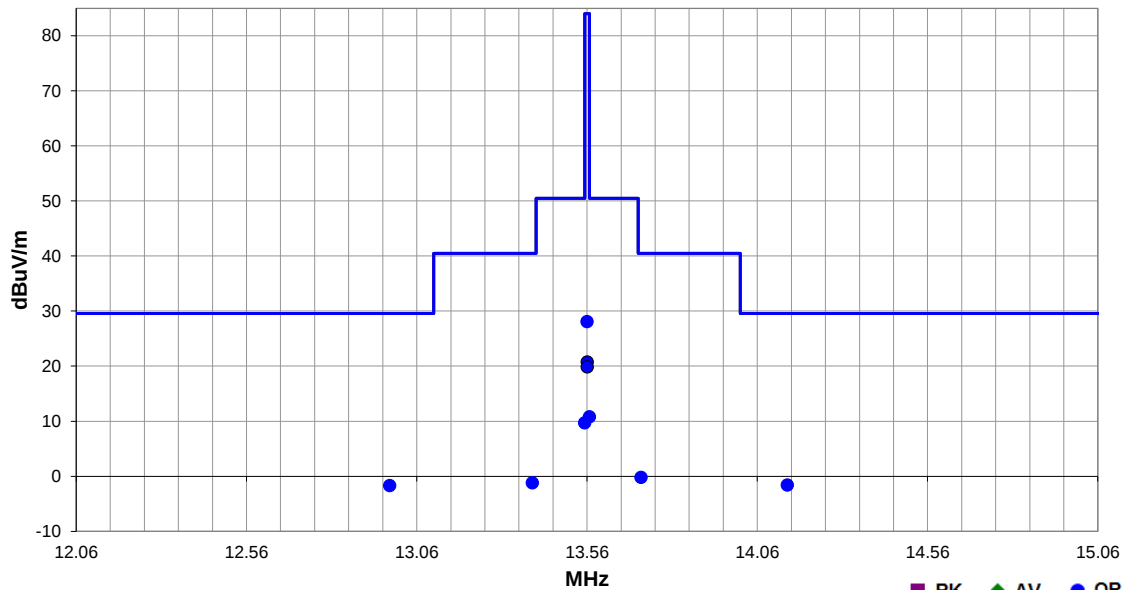
EmfRS 2021.06.24.0

PSA-ESCI 2021.03.17.0

Work Order:	ABBO0082	Date:	2021-06-19	
Project:	None	Temperature:	21.1 °C	
Job Site:	TX02	Humidity:	51.9% RH	
Serial Number:	ENG15-CS	Barometric Pres.:	1014 mbar	
EUT:		GLP12410 SAL Alinity C Section		
Configuration:		6		
Customer:		Abbott Laboratories		
Attendees:		Don Mendell		
EUT Power:		220VAC/60Hz		
Operating Mode:		Transmitting RFID 13.56 MHz		
Deviations:		None		
Comments:		CrossSwitch Radio 8. All emissions were greater than 20 dB below the limit.		

Test Specifications	Test Method
FCC 15.225:2021	ANSI C63.10:2013

Run #	16	Test Distance (m)	10	Antenna Height(s)	1(m)	Results	Pass
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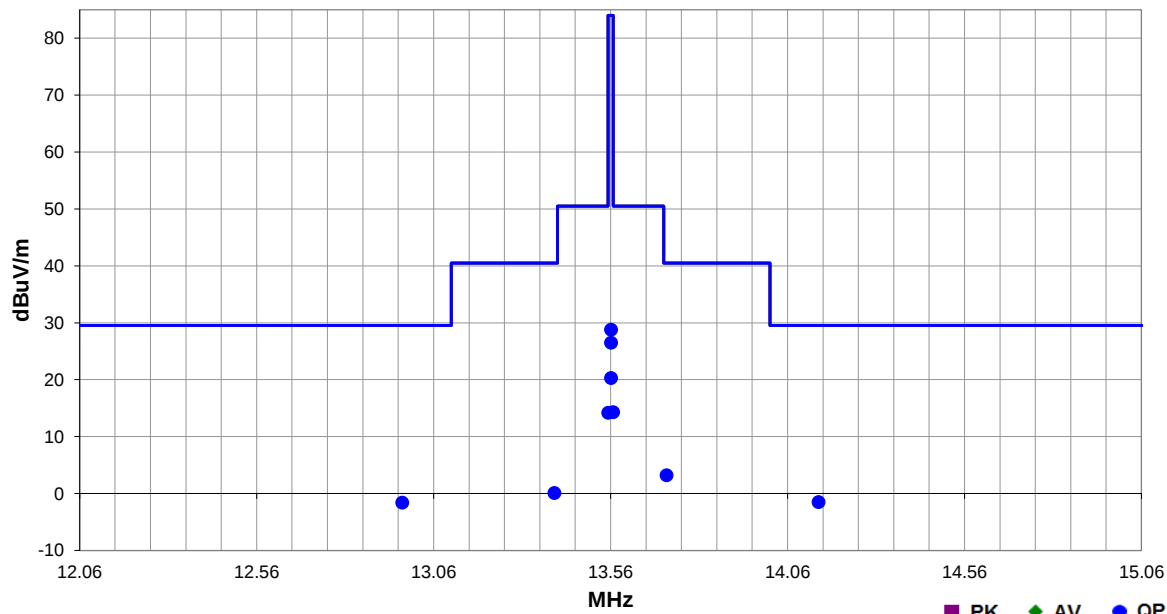
Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
14.148	5.9	11.6	1.0	332.0	10.0	0.0	Perp to EUT	QP	-19.1	-1.6	29.5	-31.1	All Radios ON
12.981	5.8	11.6	1.0	268.9	10.0	0.0	Perp to EUT	OP	-19.1	-1.7	29.5	-31.2	All Radios ON
13.567	18.3	11.6	1.0	231.0	10.0	0.0	Perp to EUT	OP	-19.1	10.8	50.5	-39.7	All Radios ON
13.719	7.3	11.6	1.0	192.0	10.0	0.0	Perp to EUT	QP	-19.1	-0.2	40.5	-40.7	All Radios ON
13.553	17.2	11.6	1.0	216.0	10.0	0.0	Perp to EUT	QP	-19.1	9.7	50.5	-40.8	All Radios ON
13.399	6.3	11.6	1.0	192.0	10.0	0.0	Perp to EUT	QP	-19.1	-1.2	40.5	-41.7	All Radios ON
13.560	35.6	11.6	1.0	238.9	10.0	0.0	Perp to EUT	QP	-19.1	28.1	84.0	-55.9	All Radios ON
13.560	28.3	11.6	1.0	225.9	10.0	0.0	Perp to EUT	QP	-19.1	20.8	84.0	-63.2	Radio 1 ON
13.560	27.4	11.6	1.0	57.9	10.0	0.0	Perp to EUT	QP	-19.1	19.9	84.0	-64.1	Radio 2 ON

FIELD STRENGTH OF FUNDAMENTAL



Work Order:	ABBO0082	Date:	2021-06-19	
Project:	None	Temperature:	21.1 °C	
Job Site:	TX02	Humidity:	51.9% RH	
Serial Number:	ENG14-CS	Barometric Pres.:	1014 mbar	
EUT:	GLP12410 SAL Alinity C Section			
Configuration:	6			
Customer:	Abbott Laboratories			
Attendees:	Don Mendell			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	CrossSwitch Radio 7. All emissions were greater than 20 dB below the limit.			
Test Specifications	FCC 15.225:2021		Test Method	ANSI C63.10:2013

Run #	17	Test Distance (m)	10	Antenna Height(s)	1(m)	Results	Pass
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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)	Comments
14.148	6.0	11.6	1.0	58.9	10.0	0.0	Perp to EUT	QP	-19.1	-1.5	29.5	-31.0	All Radios ON
12.971	5.9	11.6	1.0	220.9	10.0	0.0	Perp to EUT	QP	-19.1	-1.6	29.5	-31.1	All Radios ON
13.567	21.8	11.6	1.0	205.0	10.0	0.0	Perp to EUT	QP	-19.1	14.3	50.5	-36.2	All Radios ON
13.553	21.7	11.6	1.0	211.0	10.0	0.0	Perp to EUT	QP	-19.1	14.2	50.5	-36.3	All Radios ON
13.718	10.7	11.6	1.0	22.9	10.0	0.0	Perp to EUT	QP	-19.1	3.2	40.5	-37.3	All Radios ON
13.401	7.6	11.6	1.0	229.0	10.0	0.0	Perp to EUT	QP	-19.1	0.1	40.5	-40.4	All Radios ON
13.561	36.3	11.6	1.0	21.9	10.0	0.0	Perp to EUT	QP	-19.1	28.8	84.0	-55.2	All Radios ON
13.561	34.0	11.6	1.0	16.9	10.0	0.0	Perp to EUT	QP	-19.1	26.5	84.0	-57.5	Radio 1 ON
13.561	27.8	11.6	1.0	15.0	10.0	0.0	Perp to EUT	QP	-19.1	20.3	84.0	-63.7	Radio 2 ON

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

ABBO0181 - 1

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
Antenna - Loop	ETS Lindgren	6502	AZM	2020-07-09	2022-07-09
Cable	Northwest EMC	RE 9kHz - 1GHz	TXB	2022-04-19	2023-04-19
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, adjusting the position of the EUT and EUT antenna in three orthogonal axis, 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.

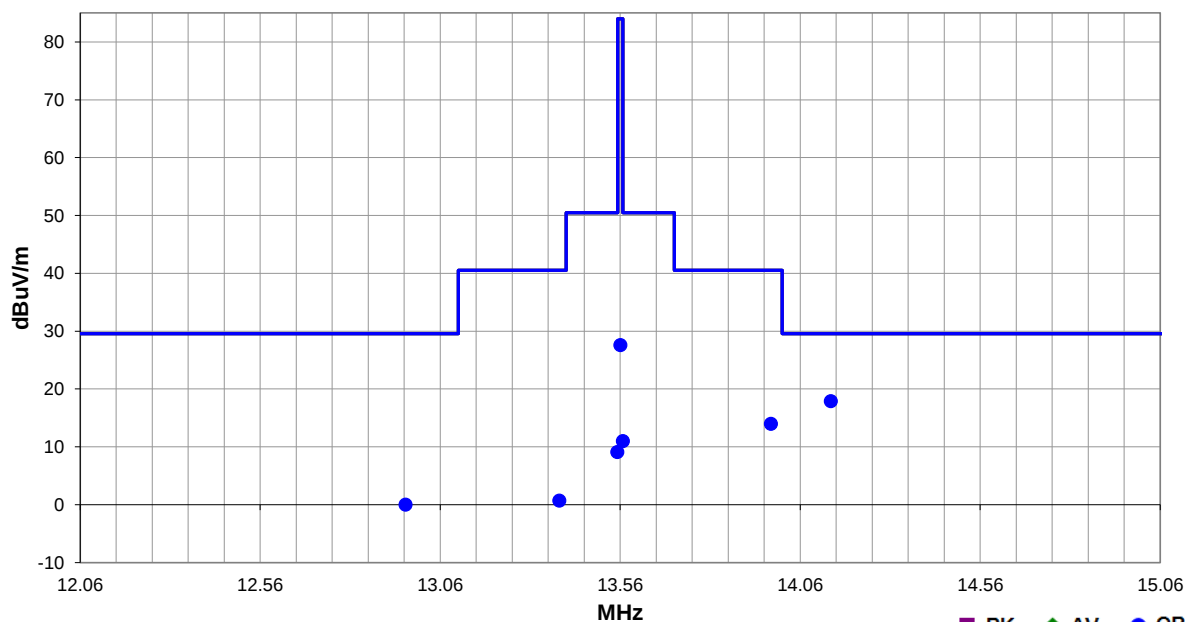
FIELD STRENGTH OF FUNDAMENTAL



Work Order:	ABBO0181	Date:	2022-06-07	
Project:	None	Temperature:	23 °C	
Job Site:	TX02	Humidity:	56.1% RH	
Serial Number:	ENG07-AP	Barometric Pres.:	1014 mbar	
EUT:	GLP12411 SAL Alinity I Section			Tested by: Nolan De Ramos
Configuration:	1			
Customer:	Abbott Laboratories			
Attendees:	Frank Sun			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	AccessPoint. Worst case receive antenna polarity (Perp to EUT) determined from Field Strength of Fundamental of GLP12410 SAL Alinity C Section.			

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
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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)
14.145	25.5	11.5	1.0	357.0	10.0	0.0	Perp to EUT	QP	-19.1	17.9	29.5	-11.6
13.978	21.6	11.5	1.0	357.0	10.0	0.0	Perp to EUT	QP	-19.1	14.0	40.5	-26.5
12.964	7.6	11.5	1.0	357.0	10.0	0.0	Perp to EUT	QP	-19.1	0.0	29.5	-29.5
13.568	18.6	11.5	1.0	357.0	10.0	0.0	Perp to EUT	QP	-19.1	11.0	50.5	-39.5
13.391	8.3	11.5	1.0	357.0	10.0	0.0	Perp to EUT	QP	-19.1	0.7	40.5	-39.8
13.552	16.7	11.5	1.0	357.0	10.0	0.0	Perp to EUT	QP	-19.1	9.1	50.5	-41.4
13.560	35.2	11.5	1.0	279.0	10.0	0.0	Perp to EUT	QP	-19.1	27.6	84.0	-56.4

FIELD STRENGTH OF FUNDAMENTAL



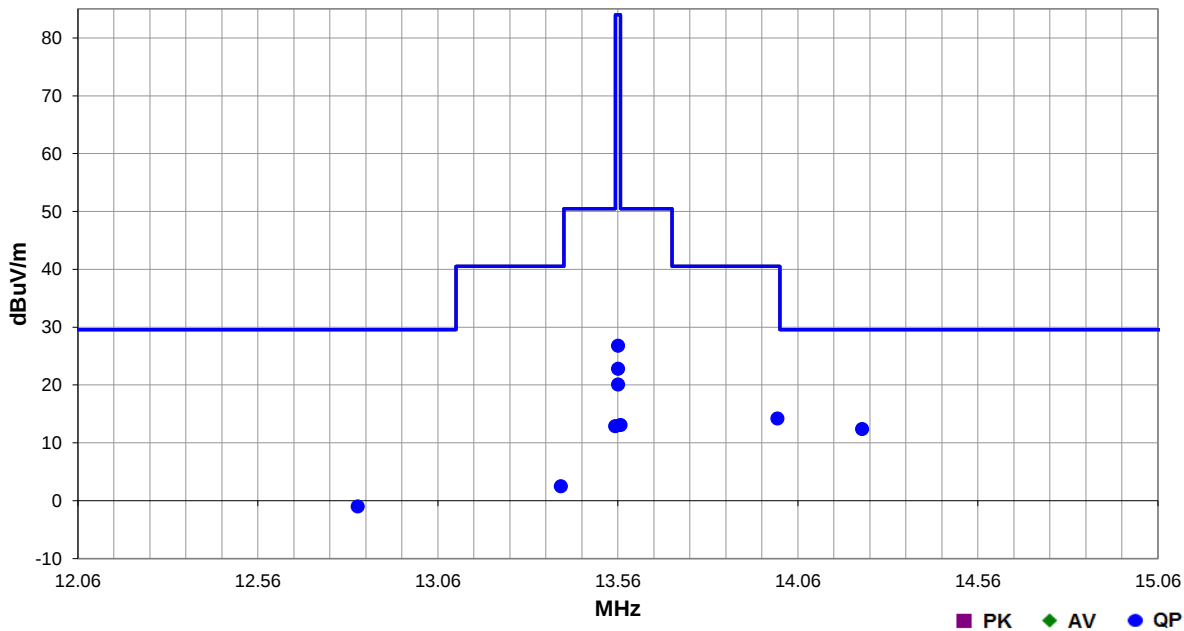
EmiRS 2022.03.10.0

PSA-ESCI 2022.1.12.0

Work Order:	ABBO0181	Date:	2022-06-07	
Project:	None	Temperature:	23 °C	
Job Site:	TX02	Humidity:	56.1% RH	
Serial Number:	ENG14-CS	Barometric Pres.:	1014 mbar	Tested by: Nolan De Ramos
EUT:	GLP12411 SAL Alinity I Section			
Configuration:	1			
Customer:	Abbott Laboratories			
Attendees:	Frank Sun			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	Crossswitch Radio 7. Worst case receive antenna polarity (Perp to EUT) determined from Field Strength of Fundamental of GLP12410 SAL Alinity C Section.			

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
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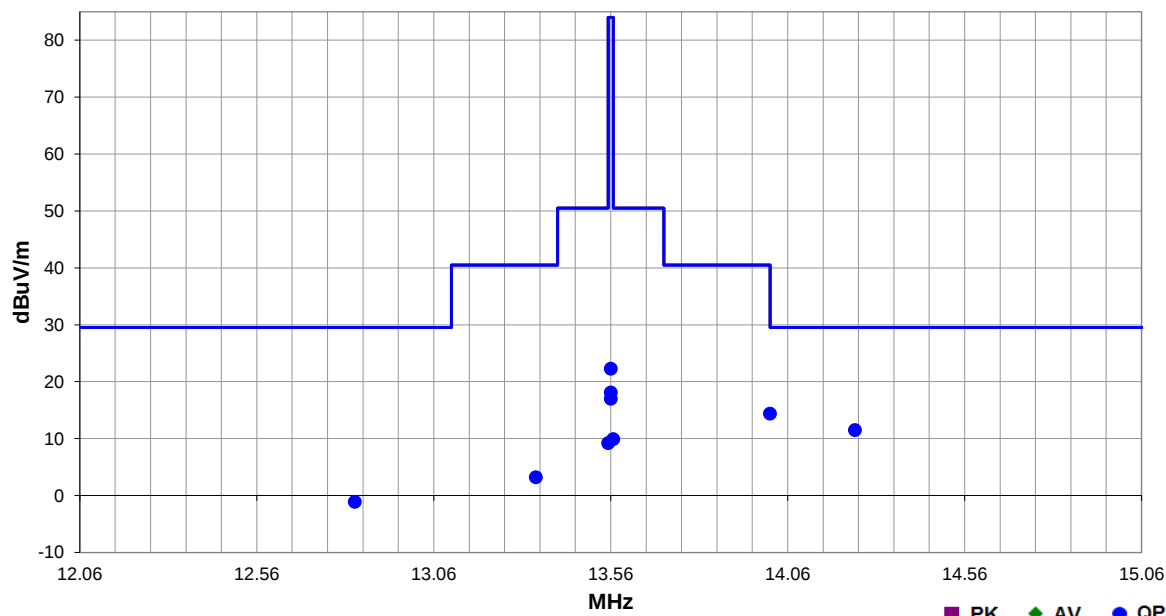
Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
14.238	20.0	11.5	1.0	285.0	10.0	0.0	Perp to EUT	QP	-19.1	12.4	29.5	-17.1	All Radios ON
14.003	21.8	11.5	1.0	285.0	10.0	0.0	Perp to EUT	QP	-19.1	14.2	40.5	-26.3	All Radios ON
12.837	6.6	11.5	1.0	285.0	10.0	0.0	Perp to EUT	QP	-19.1	-1.0	29.5	-30.5	All Radios ON
13.568	20.7	11.5	1.0	285.0	10.0	0.0	Perp to EUT	QP	-19.1	13.1	50.5	-37.4	All Radios ON
13.553	20.5	11.5	1.0	285.0	10.0	0.0	Perp to EUT	QP	-19.1	12.9	50.5	-37.6	All Radios ON
13.402	10.1	11.5	1.0	285.0	10.0	0.0	Perp to EUT	QP	-19.1	2.5	40.5	-38.0	All Radios ON
13.560	34.4	11.5	1.0	285.0	10.0	0.0	Perp to EUT	QP	-19.1	26.8	84.0	-57.2	All Radios ON
13.560	30.4	11.5	1.0	285.0	10.0	0.0	Perp to EUT	QP	-19.1	22.8	84.0	-61.2	Radio 2 ON
13.560	27.7	11.5	1.0	314.0	10.0	0.0	Perp to EUT	QP	-19.1	20.1	84.0	-63.9	Radio 1 ON

FIELD STRENGTH OF FUNDAMENTAL



Work Order:	ABBO0181	Date:	2022-06-07	
Project:	None	Temperature:	23 °C	
Job Site:	TX02	Humidity:	56.1% RH	
Serial Number:	ENG15-CS	Barometric Pres.:	1014 mbar	
EUT:		GLP12411 SAL Alinity I Section		
Configuration:	1			
Customer:	Abbott Laboratories			
Attendees:	Frank Sun			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	Crossswitch Radio 8. Worst case receive antenna polarity (Perp to EUT) determined from Field Strength of Fundamental of GLP12410 SAL Alinity C Section.			
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
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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)	Comments
14.250	19.1	11.5	1.0	294.0	10.0	0.0	Perp to EUT	QP	-19.1	11.5	29.5	-18.0	All Radios ON
14.010	22.0	11.5	1.0	294.0	10.0	0.0	Perp to EUT	QP	-19.1	14.4	40.5	-26.1	All Radios ON
12.837	6.5	11.5	1.0	294.0	10.0	0.0	Perp to EUT	QP	-19.1	-1.1	29.5	-30.6	All Radios ON
13.348	10.8	11.5	1.0	294.0	10.0	0.0	Perp to EUT	QP	-19.1	3.2	40.5	-37.3	All Radios ON
13.567	17.5	11.5	1.0	294.0	10.0	0.0	Perp to EUT	QP	-19.1	9.9	50.5	-40.6	All Radios ON
13.553	16.8	11.5	1.0	294.0	10.0	0.0	Perp to EUT	QP	-19.1	9.2	50.5	-41.3	All Radios ON
13.560	29.9	11.5	1.0	294.0	10.0	0.0	Perp to EUT	QP	-19.1	22.3	84.0	-61.7	All Radios ON
13.560	25.7	11.5	1.0	355.0	10.0	0.0	Perp to EUT	QP	-19.1	18.1	84.0	-65.9	Radio 2 ON
13.560	24.6	11.5	1.0	360.0	10.0	0.0	Perp to EUT	QP	-19.1	17.0	84.0	-67.0	Radio 1 ON

FIELD STRENGTH OF SPURIOUS EMISSIONS (Less Than 30 MHz)



PSA-ESCI 2021.03.17.0

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

ABBO0082 - 6

FREQUENCY RANGE INVESTIGATED

Start Frequency	490 kHz	Stop Frequency	30 MHz
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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	E4440A	AFD	2020-07-30	2021-07-30
Antenna - Loop	ETS Lindgren	6502	AZM	2020-07-09	2022-07-09
Cable	Northwest EMC	RE 9kHz - 1GHz	TXB	2021-05-24	2022-05-24

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 (Less Than 30 MHz)



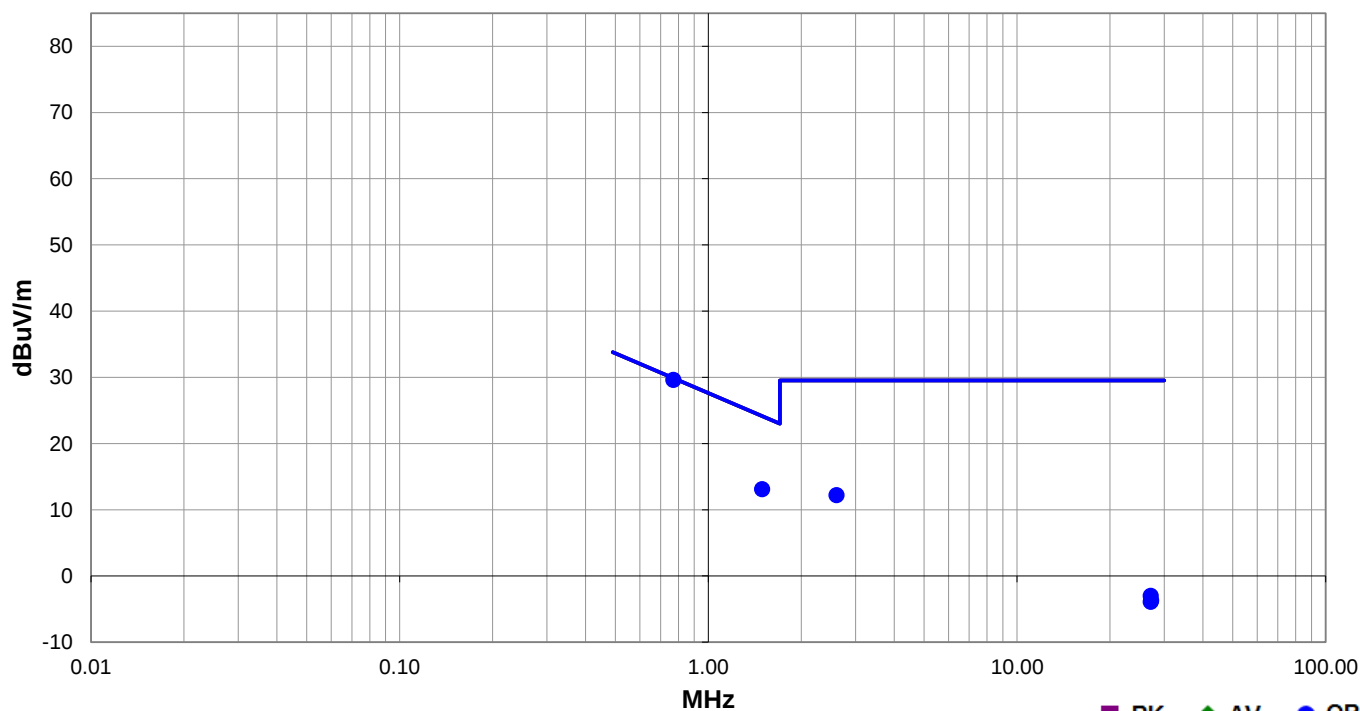
EmiR5 2021.05.14.0

PSA-ESCI 2021.03.17.0

Work Order:	ABBO0082	Date:	2021-06-19	
Project:	None	Temperature:	21.1 °C	
Job Site:	TX02	Humidity:	51.9% RH	
Serial Number:	See Configurations	Barometric Pres.:	1014 mbar	
EUT:	GLP12410 SAL Alinity C Section			Tested by: Mark Baytan
Configuration:	6			
Customer:	Abbott Laboratories			
Attendees:	Don Mendell			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	All radios ON: AccessPoint 2, CrossSwitch 7 (contains 2 radios), CrossSwitch 8 (contains 2 radios). Test mode only.			

Test Specifications	Test Method
FCC 15.225:2021	ANSI C63.10:2013

Run #	12	Test Distance (m)	10	Antenna Height(s)	1 to 4(m)	Results	Pass
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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)
0.770	37.8	10.9	1.0	98.0	10.0	0.0	Perp to EUT	QP	-19.1	29.6	29.9	-0.3
1.493	20.7	11.5	1.0	39.0	10.0	0.0	Perp to EUT	QP	-19.1	13.1	24.2	-11.1
2.604	19.7	11.6	1.0	255.0	10.0	0.0	Perp to EUT	QP	-19.1	12.2	29.5	-17.3
27.119	6.1	10.0	1.0	357.0	10.0	0.0	Perp to EUT	QP	-19.1	-3.0	29.5	-32.5
27.195	5.4	10.0	1.0	344.0	10.0	0.0	Para to GND	QP	-19.1	-3.7	29.5	-33.2
27.135	5.2	10.0	1.0	265.0	10.0	0.0	Para to EUT	QP	-19.1	-3.9	29.5	-33.4

FIELD STRENGTH OF SPURIOUS EMISSIONS (Less than 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

ABBO0181 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency	490 kHz	Stop Frequency	30 MHz
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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.

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.

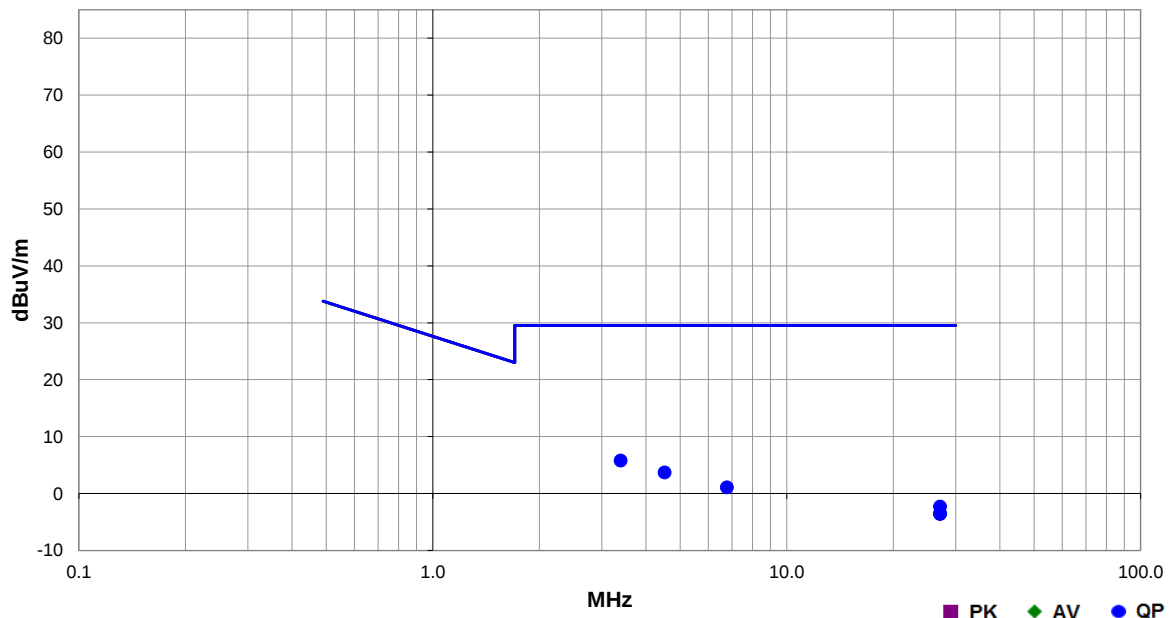
FIELD STRENGTH OF SPURIOUS EMISSIONS (Less than 30 MHz)



Work Order:	ABBO0181	Date:	2022-06-08	EmiR5 2022.03.10.0 PSA-ESCI 2022.1.12.0
Project:	None	Temperature:	21.8 °C	
Job Site:	TX02	Humidity:	54.3% RH	
Serial Number:	See Configurations	Barometric Pres.:	1014 mbar	
EUT:	GLP12411 SAL Alinity I Section			Tested by: Nolan De Ramos
Configuration:	1			
Customer:	Abbott Laboratories			
Attendees:	Frank Sun			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	All Radios on: CrossSwitch 7 (both radios), CrossSwitch 8 (both radios), AccessPoint 2. Test mode only without RFID tags.			

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

Run #	5	Test Distance (m)	10	Antenna Height(s)	1(m)	Results	Pass
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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)
3.395	13.4	11.5	1.0	79.0	10.0	0.0	Perp to EUT	QP	-19.1	5.8	29.5	-23.7
4.518	11.2	11.6	1.0	163.0	10.0	0.0	Perp to EUT	QP	-19.1	3.7	29.5	-25.8
6.775	8.6	11.6	1.0	6.0	10.0	0.0	Perp to EUT	QP	-19.1	1.1	29.5	-28.4
27.120	6.9	9.9	1.0	31.0	10.0	0.0	Perp to EUT	QP	-19.1	-2.3	29.5	-31.8
27.120	5.7	9.9	1.0	11.0	10.0	0.0	Para to GND	QP	-19.1	-3.5	29.5	-33.0
27.117	5.6	9.9	1.0	238.0	10.0	0.0	Para to EUT	QP	-19.1	-3.6	29.5	-33.1

FIELD STRENGTH OF SPURIOUS EMISSIONS (Greater Than 30 MHz)



PSA-ESCI 2021.03.17.0

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

ABBO0082 - 6

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	1000 MHz
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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	2021-05-24	2022-05-24
Amplifier - Pre-Amplifier	Fairview Microwave	FMAM63001	PAS	2021-05-24	2022-05-24
Filter - Low Pass	Micro-Tronics	LPM50004	HHV	2021-07-27	2022-07-27
Antenna - Biconilog	ETS Lindgren	3143B	AYF	2020-06-25	2022-06-25
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFD	2020-07-30	2021-07-30

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.

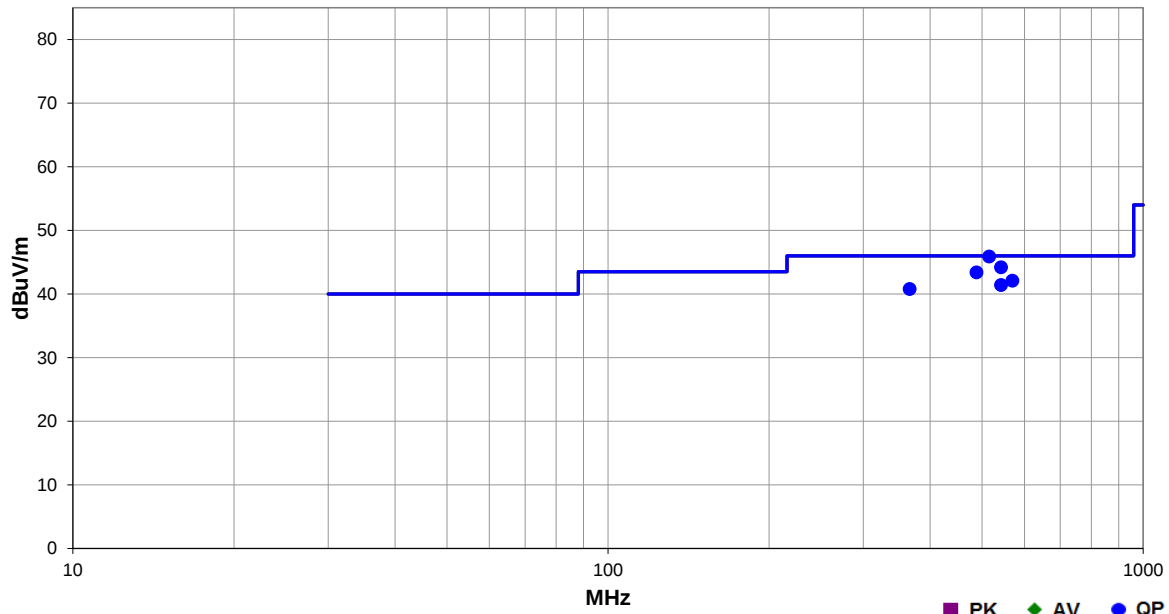
FIELD STRENGTH OF SPURIOUS EMISSIONS (Greater Than 30 MHz)



Work Order:	ABBO0082	Date:	2021-06-21	
Project:	None	Temperature:	23.2 °C	
Job Site:	TX02	Humidity:	48% RH	
Serial Number:	See Configurations	Barometric Pres.:	1015 mbar	Tested by: Mark Baytan
EUT:	GLP12410 SAL Alinity C Section			
Configuration:	6			
Customer:	Abbott Laboratories			
Attendees:	Don Mendell			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	All radios ON. Test mode only.			

Test Specifications	Test Method
FCC 15.225:2021	ANSI C63.10:2013

Run #	21	Test Distance (m)	3	Antenna Height(s)	1 to 4(m)	Results	Pass
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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)
515.291	55.6	-9.7	2.6	252.0	3.0	0.0	Vert	QP	0.0	45.9	46.0	-0.1
542.412	52.7	-8.5	1.0	33.0	3.0	0.0	Vert	QP	0.0	44.2	46.0	-1.8
488.172	54.4	-11.0	1.0	265.0	3.0	0.0	Vert	QP	0.0	43.4	46.0	-2.6
569.534	51.4	-9.3	1.06	7.0	3.0	0.0	Vert	QP	0.0	42.1	46.0	-3.9
542.408	49.9	-8.5	2.8	15.9	3.0	0.0	Horz	QP	0.0	41.4	46.0	-4.6
366.134	55.5	-14.7	1.76	42.0	3.0	0.0	Vert	QP	0.0	40.8	46.0	-5.2

FIELD STRENGTH OF SPURIOUS EMISSIONS (Greater than 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

ABBO0181 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	1000 MHz
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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
Filter - Low Pass	Micro-Tronics	LPM50004	HHV	2021-07-27	2022-07-27
Amplifier - Pre-Amplifier	Fairview Microwave	FMAM63001	PAS	2022-04-19	2023-04-19
Cable	Northwest EMC	RE 9kHz - 1GHz	TXB	2022-04-19	2023-04-19
Antenna - Biconilog	ETS Lindgren	3143B	AYF	2020-06-25	2022-06-25
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 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, adjusting the position of the EUT and EUT antenna in three orthogonal axis, 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.

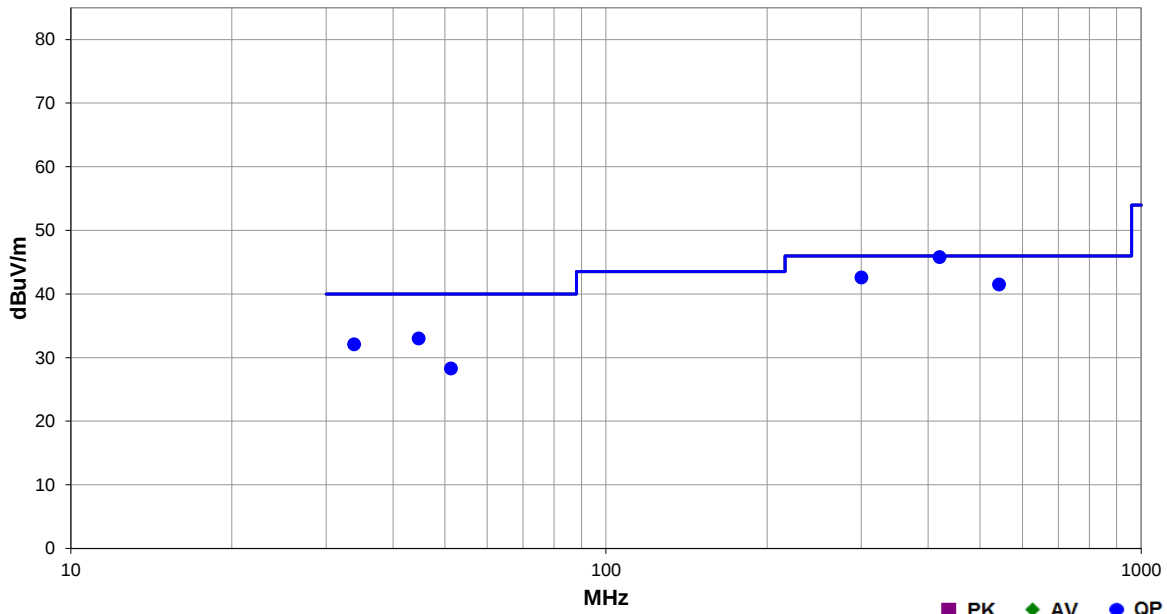
FIELD STRENGTH OF SPURIOUS EMISSIONS (Greater than 30 MHz)



Work Order:	ABBO0181	Date:	2022-06-08	
Project:	None	Temperature:	21.8 °C	
Job Site:	TX02	Humidity:	54.3% RH	
Serial Number:	ENG07-CS	Barometric Pres.:	1014 mbar	
EUT:	GLP12411 SAL Alinity I Section			
Configuration:	1			
Customer:	Abbott Laboratories			
Attendees:	Frank Sun			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	CrossSwitch 7 (both radios on)			

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

Run #	7	Test Distance (m)	10	Antenna Height(s)	1 to 4(m)	Results	Pass
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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)
420.009	48.2	-12.9	1.0	80.0	10.0	0.0	Vert	QP	10.5	45.8	46.0	-0.2
300.009	49.3	-17.2	3.8	126.0	10.0	0.0	Vert	QP	10.5	42.6	46.0	-3.4
542.404	39.6	-8.6	2.46	41.0	10.0	0.0	Vert	QP	10.5	41.5	46.0	-4.5
44.657	47.6	-25.1	1.0	70.0	10.0	0.0	Vert	QP	10.5	33.0	40.0	-7.0
33.835	41.1	-19.5	1.0	63.0	10.0	0.0	Vert	QP	10.5	32.1	40.0	-7.9
51.293	44.7	-26.9	3.67	297.0	10.0	0.0	Vert	QP	10.5	28.3	40.0	-11.7

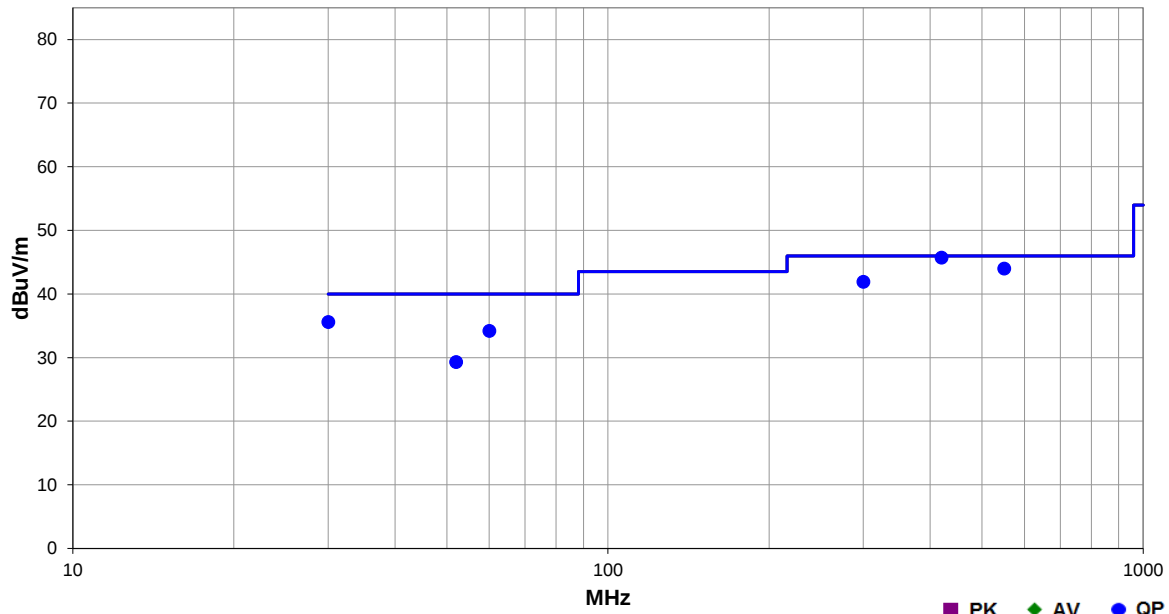
FIELD STRENGTH OF SPURIOUS EMISSIONS (Greater than 30 MHz)



Work Order:	ABBO0181	Date:	2022-06-08	
Project:	None	Temperature:	21.8 °C	
Job Site:	TX02	Humidity:	54.3% RH	
Serial Number:	ENG08-CS	Barometric Pres.:	1014 mbar	
EUT:	GLP12411 SAL Alinity I Section			
Configuration:	1			
Customer:	Abbott Laboratories			
Attendees:	Frank Sun			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	CrossSwitch 8 (both radios on)			

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

Run #	8	Test Distance (m)	10	Antenna Height(s)	1 to 4(m)	Results	Pass
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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)
420.009	48.1	-12.9	1.0	92.0	10.0	0.0	Vert	QP	10.5	45.7	46.0	-0.3
550.005	42.2	-8.7	2.35	306.0	10.0	0.0	Vert	QP	10.5	44.0	46.0	-2.0
300.005	48.6	-17.2	3.8	7.0	10.0	0.0	Horz	QP	10.5	41.9	46.0	-4.1
30.008	42.6	-17.5	1.0	36.0	10.0	0.0	Vert	QP	10.5	35.6	40.0	-4.4
60.005	50.3	-26.6	2.13	226.0	10.0	0.0	Vert	QP	10.5	34.2	40.0	-5.8
52.015	45.8	-27.0	1.5	355.0	10.0	0.0	Vert	QP	10.5	29.3	40.0	-10.7

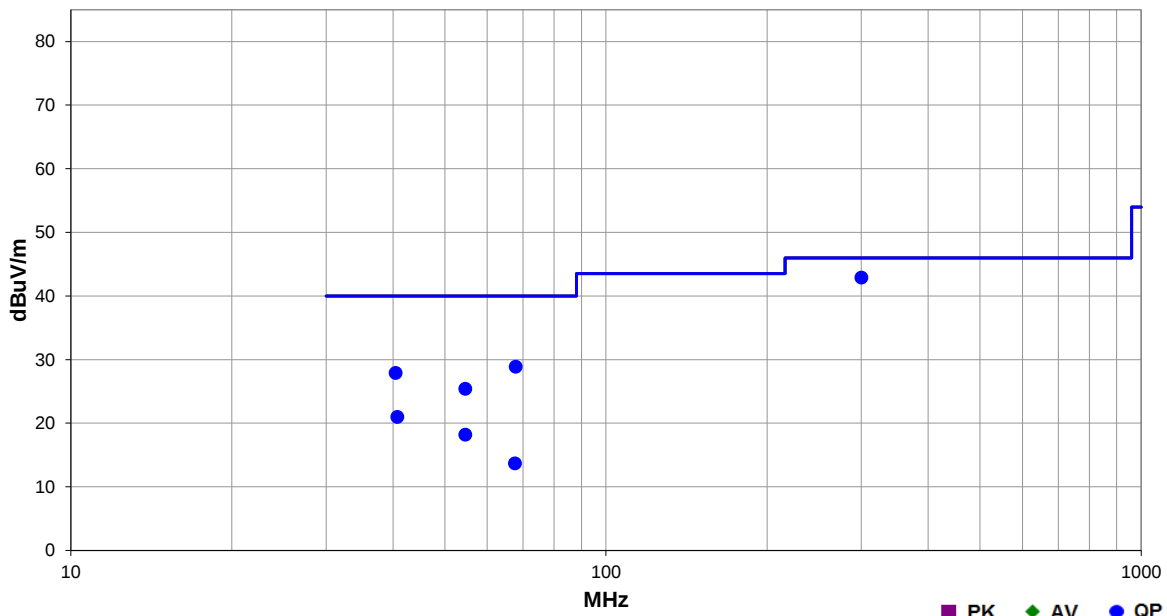
FIELD STRENGTH OF SPURIOUS EMISSIONS (Greater than 30 MHz)



Work Order:	ABBO0181	Date:	2022-06-08	
Project:	None	Temperature:	21.8 °C	
Job Site:	TX02	Humidity:	54.3% RH	
Serial Number:	ENG15-AP	Barometric Pres.:	1014 mbar	
EUT: GLP12411 SAL Alinity I Section				Tested by: Nolan De Ramos
Configuration:	1			
Customer:	Abbott Laboratories			
Attendees:	Frank Sun			
EUT Power:	220VAC/60Hz			
Operating Mode:	Transmitting RFID 13.56 MHz			
Deviations:	None			
Comments:	AccessPoint 2			

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

Run #	9	Test Distance (m)	10	Antenna Height(s)	1 to 4(m)	Results	Pass
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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)
300.009	49.6	-17.2	2.8	336.0	10.0	0.0	Horz	QP	10.5	42.9	46.0	-3.1
67.810	44.4	-26.0	2.06	211.0	10.0	0.0	Vert	QP	10.5	28.9	40.0	-11.1
40.455	40.7	-23.3	1.0	352.0	10.0	0.0	Vert	QP	10.5	27.9	40.0	-12.1
54.588	41.8	-26.9	2.79	358.0	10.0	0.0	Vert	QP	10.5	25.4	40.0	-14.6
40.735	34.0	-23.5	3.59	147.0	10.0	0.0	Horz	QP	10.5	21.0	40.0	-19.0
54.580	34.6	-26.9	3.4	21.0	10.0	0.0	Horz	QP	10.5	18.2	40.0	-21.8
67.563	29.3	-26.1	1.0	130.0	10.0	0.0	Horz	QP	10.5	13.7	40.0	-26.3

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	Com-Power	PS-400	IPX	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 $\pm 0.01\%$ is equivalent to 100 ppm
The formula to check for compliance is:

$$\text{ppm} = (\text{Measured Frequency} / \text{Measured Nominal Frequency} - 1) * 1,000,000$$

FREQUENCY STABILITY



TMTx 2021.03.19.1 XMR 2020.12.30.0

EUT: GLP12410 SAL Alinity C Section		Work Order: ABBO0082			
Serial Number: ENG02-AP		Date: 24-Jul-21			
Customer: Abbott Laboratories		Temperature: 25 °C			
Attendees: Don Mendell		Humidity: 48.4% RH			
Project: None		Barometric Pres.: 1019 mbar			
Tested by: Mark Baytan		Power: 220VAC/60Hz			
TEST SPECIFICATIONS		Test Method			
FCC 15.225:2021		ANSI C63.10:2013			
COMMENTS					
AccessPoint Radio					
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	2	Signature 			
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
Normal Voltage					
Mid Channel, 13.56 MHz	13.56004933	13.56004933	0	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

ThyTx 2021.02.19.1 YMit 2020.12.30.4

Keysight Spectrum Analyzer - Element Materials Technology

04:23:01 PM Jul 23, 2021

RL 50 Ω DC SENSE:INT ALIGN AUTO #Avg Type: Voltage

PNO: Close IFGain:Low Trig: Free Run #Atten: 10 dB

TRACE 1 2 3 4 5 6
TYPE WWWWWW
DET P P P P P P

5 dB/div Log Ref -15.00 dBm

Mkr1 13.560 049 MHz
-20.40 dBm

Center 13.560166 MHz
#Res BW 1.0 kHz #VBW 3.0 kHz Span 10.00 kHz
Sweep 9.560 ms (601 pts)

MSG STATUS

Keysight Spectrum Analyzer - Element Materials Technology

04:24:34 PM Jul 23, 2021

RL RF 50 Ω DC SENSE:INT ALIGN AUTO #Avg Type: Voltage

PNO: Close Trig: Free Run
IFGain:Low #Atten: 10 dB

TRACE 1 2 3 4 5 6
TYPE W W W W W W W W
DET P P P P P P P

5 dB/div Log Ref -15.00 dBm

Mkr1 13.560 033 MHz
-20.27 dBm

Center 13.560166 MHz
#Res BW 1.0 kHz

#VBW 3.0 kHz

Span 10.00 MHz
Sweep 9.560 ms (601 pts)

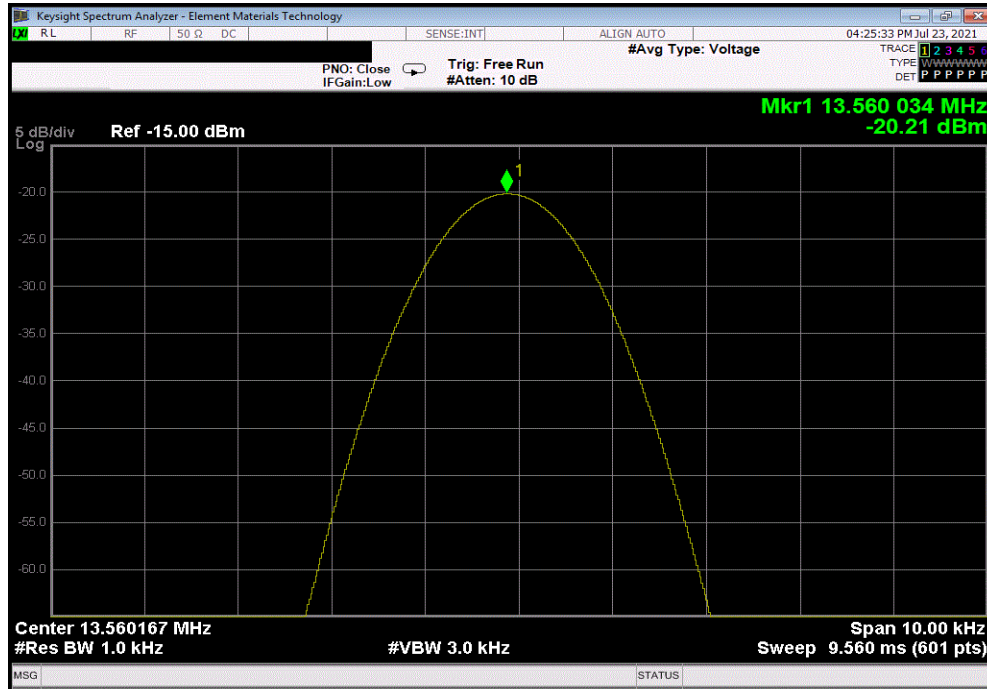
MSG STATUS

FREQUENCY STABILITY

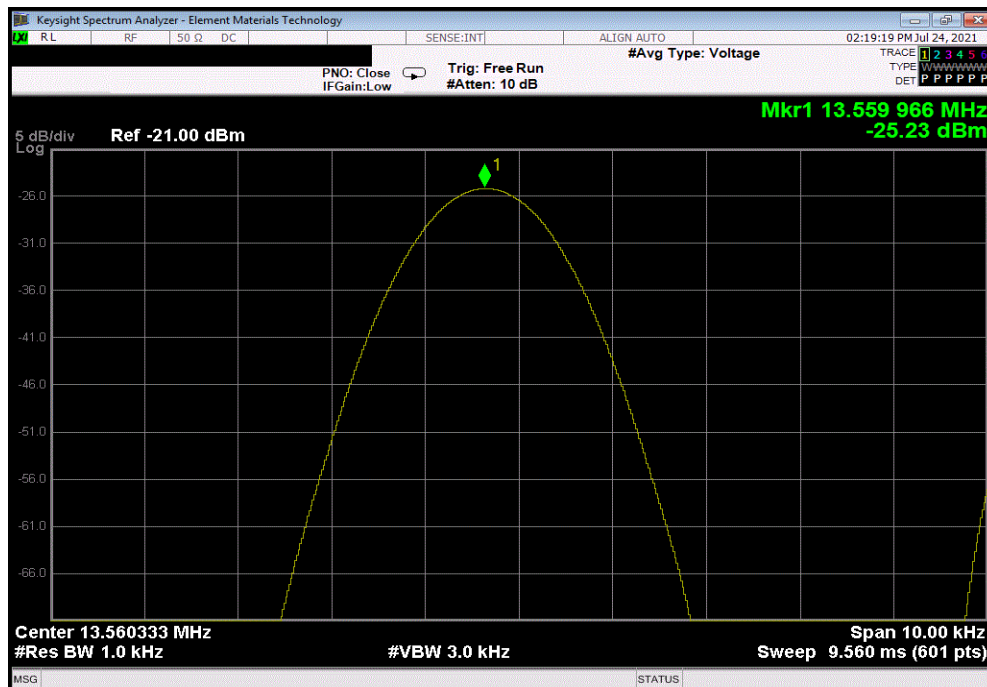


TbTtX 2021.03.19.1 XMt 2020.12.30.0

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

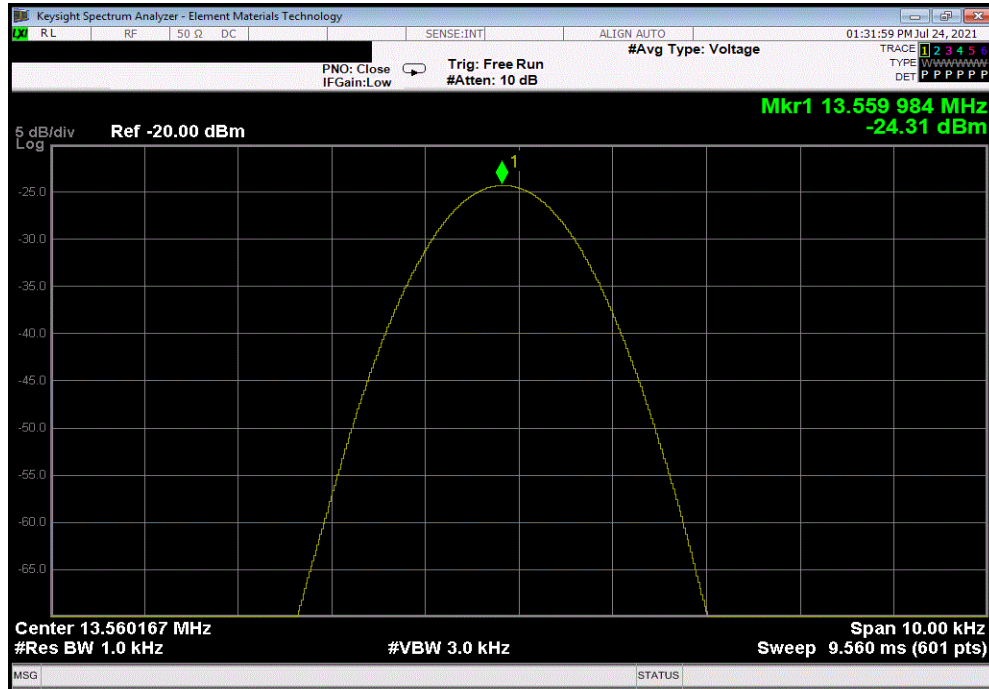


FREQUENCY STABILITY

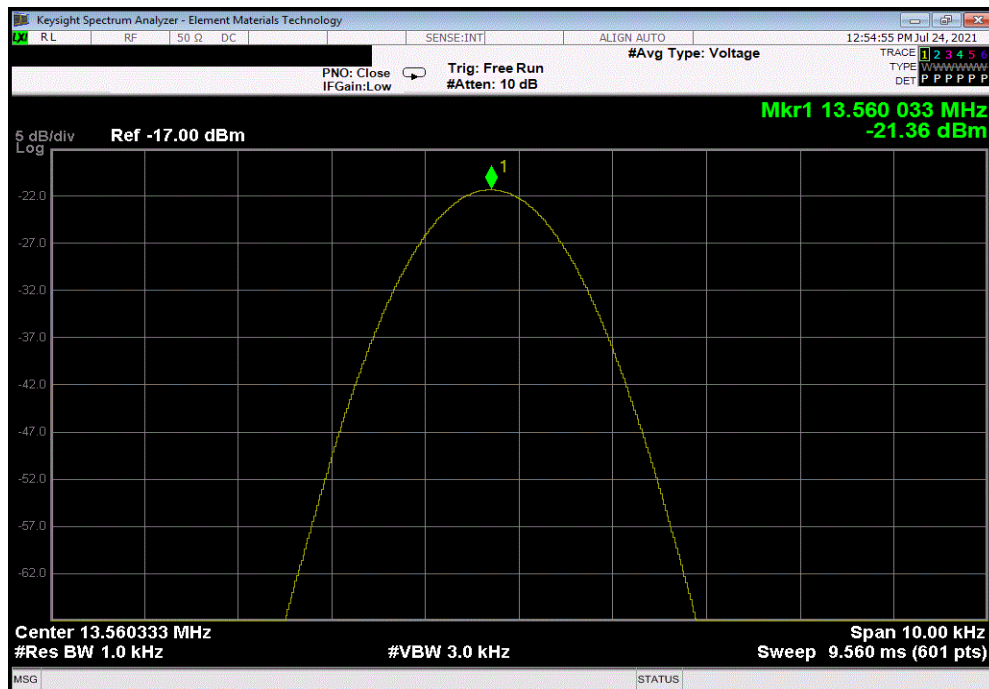


TbTx 2021.03.19.1 XMt 2020.12.30.0

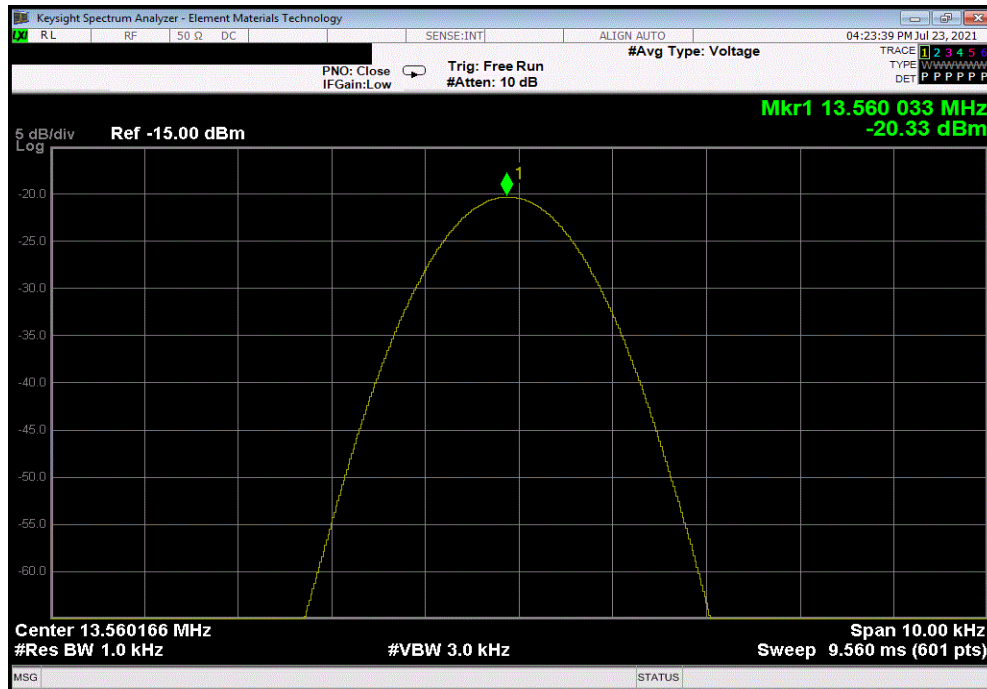
Extreme Temperature +40°C, Mid Channel, 13.56 MHz					
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
	13.55998367	13.56004933	4.8	100	Pass



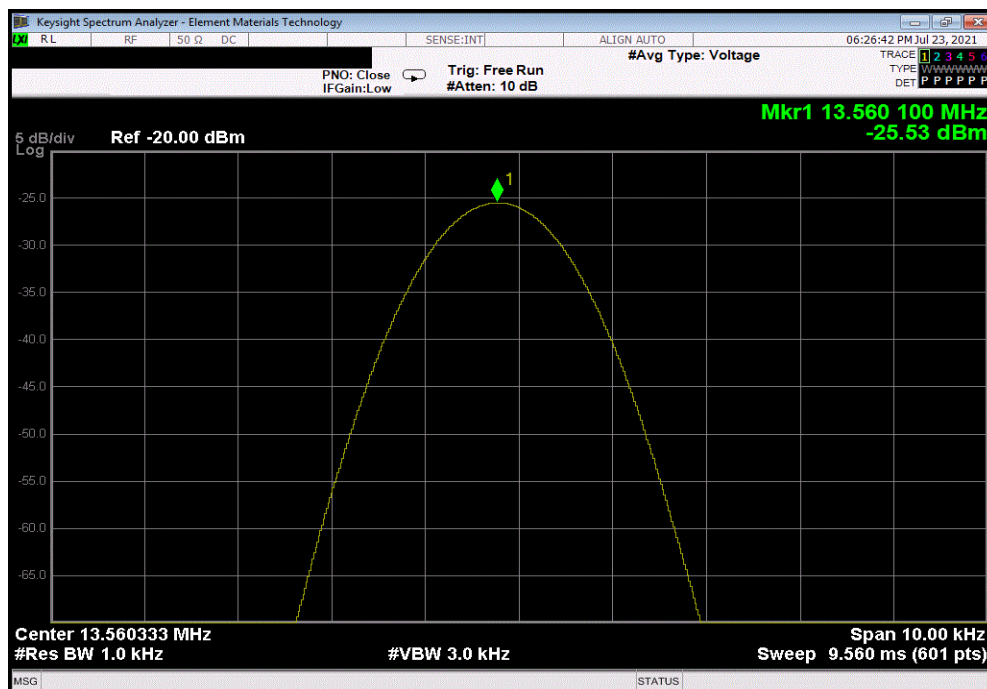
Extreme Temperature +30°C, Mid Channel, 13.56 MHz					
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
	13.560033	13.56004933	1.2	100	Pass



Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
13.56003267	13.56004933	1.2	100	Pass



Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
13.56009967	13.56004933	3.7	100	Pass

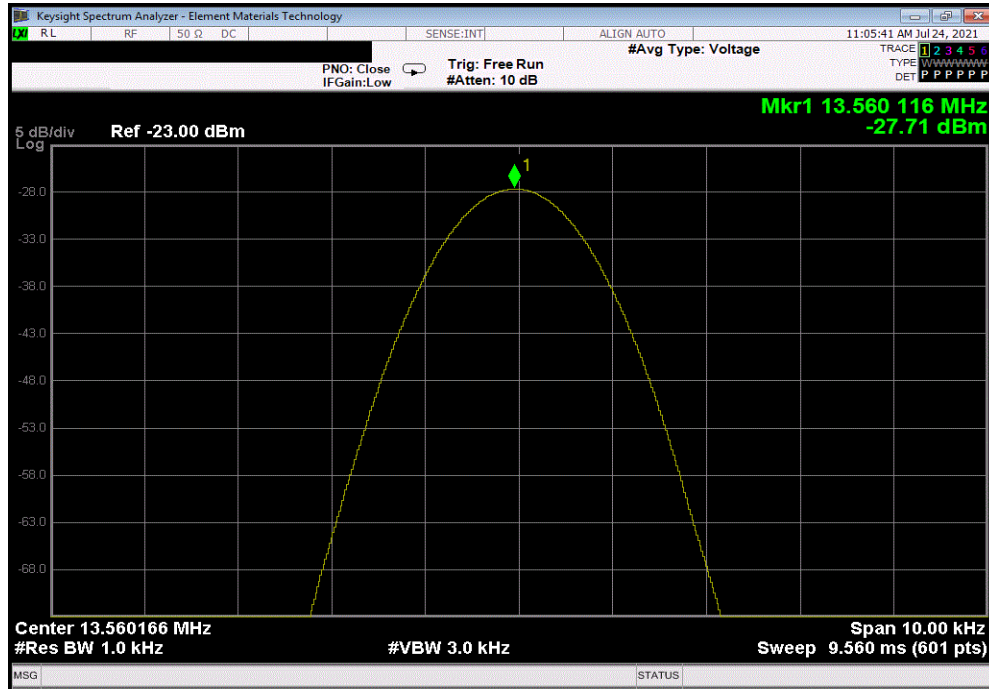


FREQUENCY STABILITY

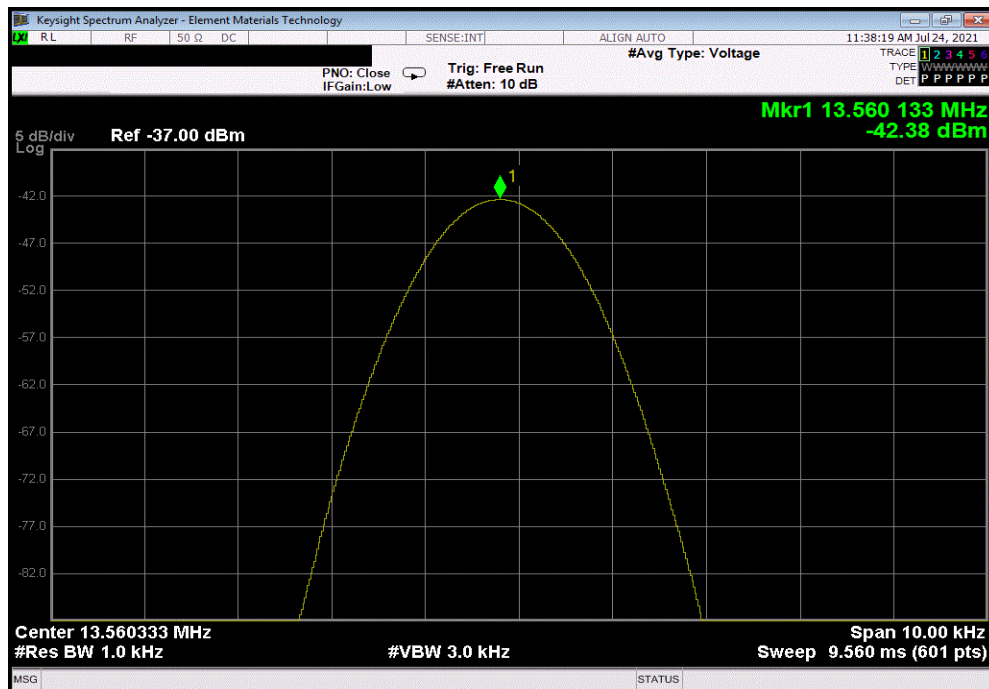


TbTx 2021.03.19.1 XMt 2020.12.30.0

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

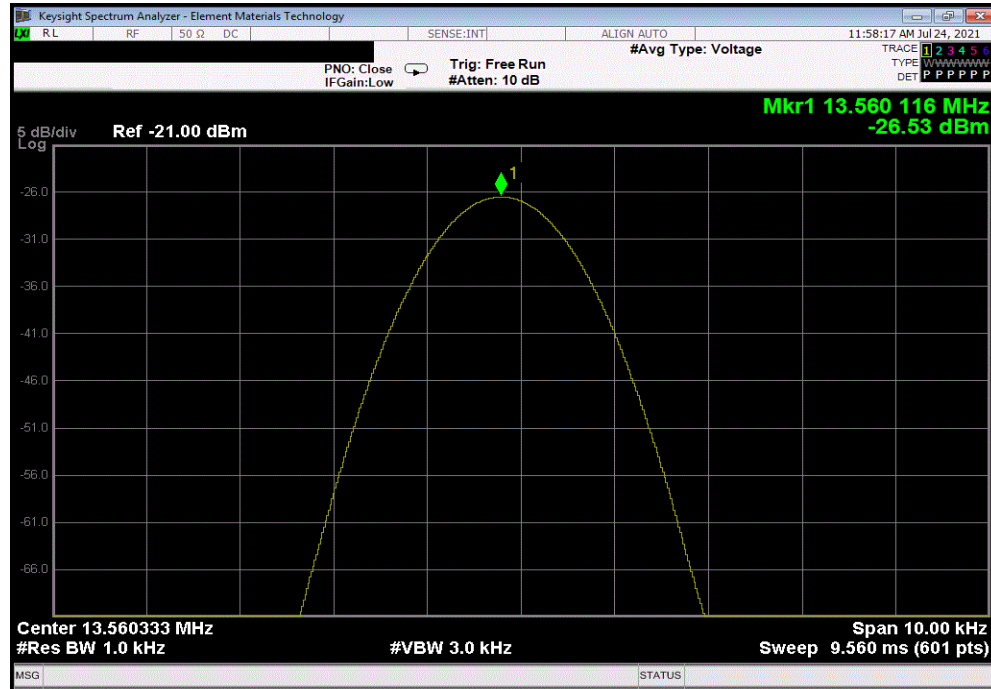


FREQUENCY STABILITY



TbTx 2021.03.19.1 XMt 2020.12.30.0

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



FREQUENCY STABILITY



TMTx 2021.03.19.1 XMR 2020.12.30.0

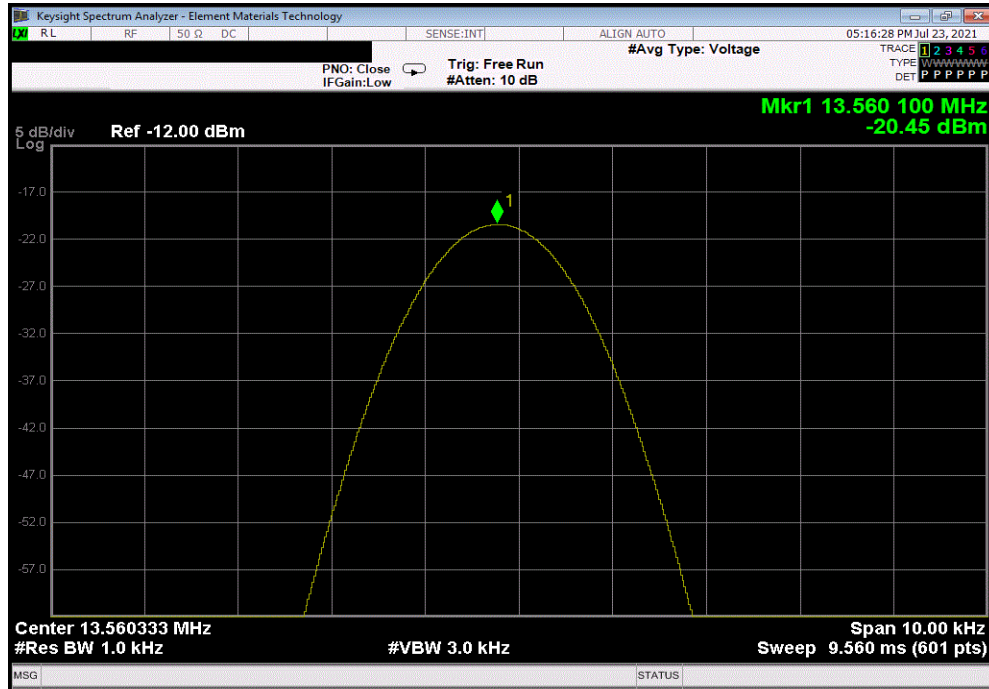
EUT: GLP12410 SAL Alinity C Section		Work Order: ABBO0082	
Serial Number: ENG05-CS		Date: 24-Jul-21	
Customer: Abbott Laboratories		Temperature: 25 °C	
Attendees: Don Mendell		Humidity: 48.4% RH	
Project: None		Barometric Pres.: 1019 mbar	
Tested by: Mark Baytan		Power: 220VAC/60Hz	
TEST SPECIFICATIONS		Job Site: TX05	
FCC 15.225:2021		Test Method	
		ANSI C63.10:2013	
COMMENTS			
CrossSwitch Radio/Convergent Radio. Both radios are electrically identical and share the same PCB: 20005732, therefore, the data presented accounts for both radios.			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	2	Signature 	
		Measured Value (MHz)	Nominal Value (MHz)
		Error (ppm)	Limit (ppm)
			Results
CrossSwitch Radio - Antenna 1			
Normal Voltage			
	Mid Channel, 13.56 MHz	13.56009967	13.56009967
	Extreme Voltage +15%	0	100
	Mid Channel, 13.56 MHz	13.56009967	13.56009967
	Extreme Voltage -15%	0	100
	Mid Channel, 13.56 MHz	13.56006633	13.56009967
	Extreme Temperature +50°C	2.5	100
	Mid Channel, 13.56 MHz	13.55998267	13.56009967
	Extreme Temperature +40°C	8.6	100
	Mid Channel, 13.56 MHz	13.560016	13.56009967
	Extreme Temperature +30°C	6.2	100
	Mid Channel, 13.56 MHz	13.56004967	13.56009967
	Extreme Temperature +20°C	3.7	100
	Mid Channel, 13.56 MHz	13.56006633	13.56009967
	Extreme Temperature +10°C	2.5	100
	Mid Channel, 13.56 MHz	13.56014967	13.56009967
	Extreme Temperature 0°C	3.7	100
	Mid Channel, 13.56 MHz	13.560183	13.56009967
	Extreme Temperature -10°C	6.1	100
	Mid Channel, 13.56 MHz	13.5602	13.56009967
	Extreme Temperature -20°C	7.4	100
	Mid Channel, 13.56 MHz	13.560183	13.56009967
		6.1	100
CrossSwitch Radio - Antenna 2			
Normal Voltage			
	Mid Channel, 13.56 MHz	13.56003267	13.56003267
	Extreme Voltage +15%	0	100
	Mid Channel, 13.56 MHz	13.56009967	13.56003267
	Extreme Voltage -15%	4.9	100
	Mid Channel, 13.56 MHz	13.560016	13.56003267
	Extreme Temperature +50°C	1.2	100
	Mid Channel, 13.56 MHz	13.55994933	13.56003267
	Extreme Temperature +40°C	6.1	100
	Mid Channel, 13.56 MHz	13.55993367	13.56003267
	Extreme Temperature +30°C	7.3	100
	Mid Channel, 13.56 MHz	13.55998333	13.56003267
	Extreme Temperature +20°C	3.6	100
	Mid Channel, 13.56 MHz	13.560066	13.56003267
	Extreme Temperature +10°C	2.5	100
	Mid Channel, 13.56 MHz	13.560066	13.56003267
	Extreme Temperature 0°C	2.5	100
	Mid Channel, 13.56 MHz	13.56009967	13.56003267
	Extreme Temperature -10°C	4.9	100
	Mid Channel, 13.56 MHz	13.56011633	13.56003267
	Extreme Temperature -20°C	6.1	100
	Mid Channel, 13.56 MHz	13.56008367	13.56003267
		3.8	100

FREQUENCY STABILITY

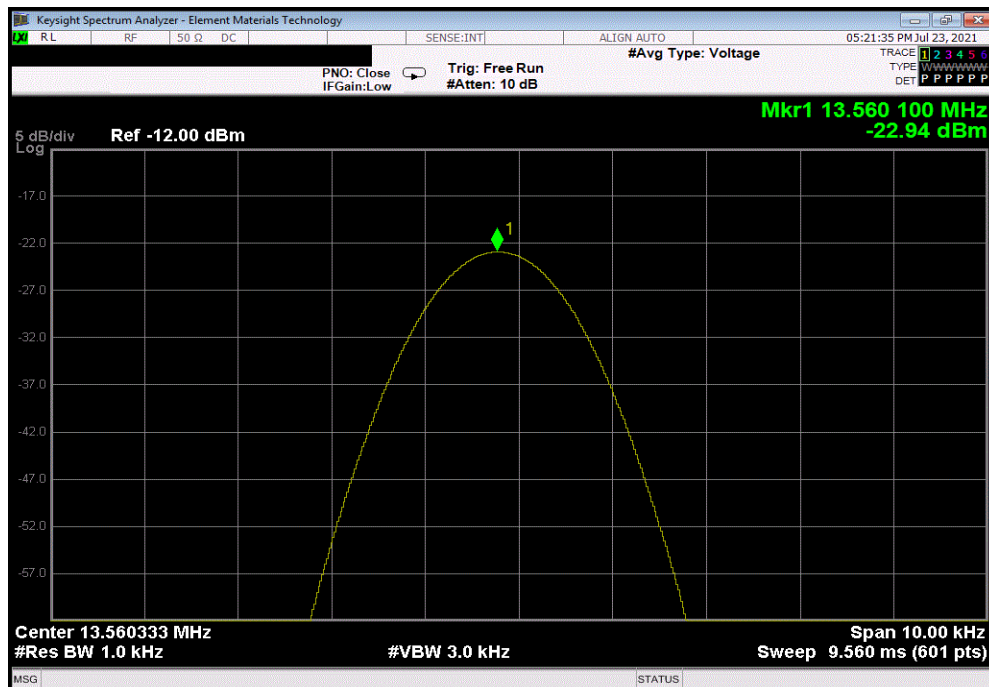


TbTtX 2021.03.19.1 XMt 2020.12.30.0

CrossSwitch Radio - Antenna 1, Normal Voltage, Mid Channel, 13.56 MHz					
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
	13.56009967	13.56009967	0	100	Pass



CrossSwitch Radio - Antenna 1, Extreme Voltage +15%, Mid Channel, 13.56 MHz					
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
	13.56009967	13.56009967	0	100	Pass



ThyTx 2021.02.19.1 YMit 2020.12.30.4

Keysight Spectrum Analyzer - Element Materials Technology

05:22:49 PM Jul 23, 2021

RL RF 50 Ω DC SENSE:INT ALIGN AUTO #Avg Type: Voltage

PNO: Close IFGain:Low Trig: Free Run #Atten: 10 dB

TRACE 1 2 3 4 5 6
TYPE WWWWWW
DET P P P P P P

5 dB/div Log Ref -12.00 dBm

Mkr1 13.560 066 MHz
-23.33 dBm

Center 13.560333 MHz
#Res BW 1.0 kHz #VBW 3.0 kHz Span 10.00 kHz
Sweep 9.560 ms (601 pts)

MSG STATUS

Keysight Spectrum Analyzer - Element Materials Technology

02:22:03 PM Jul 24, 2021

SENSE:INT ALIGN AUTO #Avg Type: Voltage

PNO: Close Trig: Free Run
IFGain:Low #Atten: 10 dB

TRACE 1 2 3 4 5 6
TYPE W W W W W W
DET P P P P P P

5 dB/div Ref -22.00 dBm

Mkr1 13.559 983 MHz
-27.80 dBm

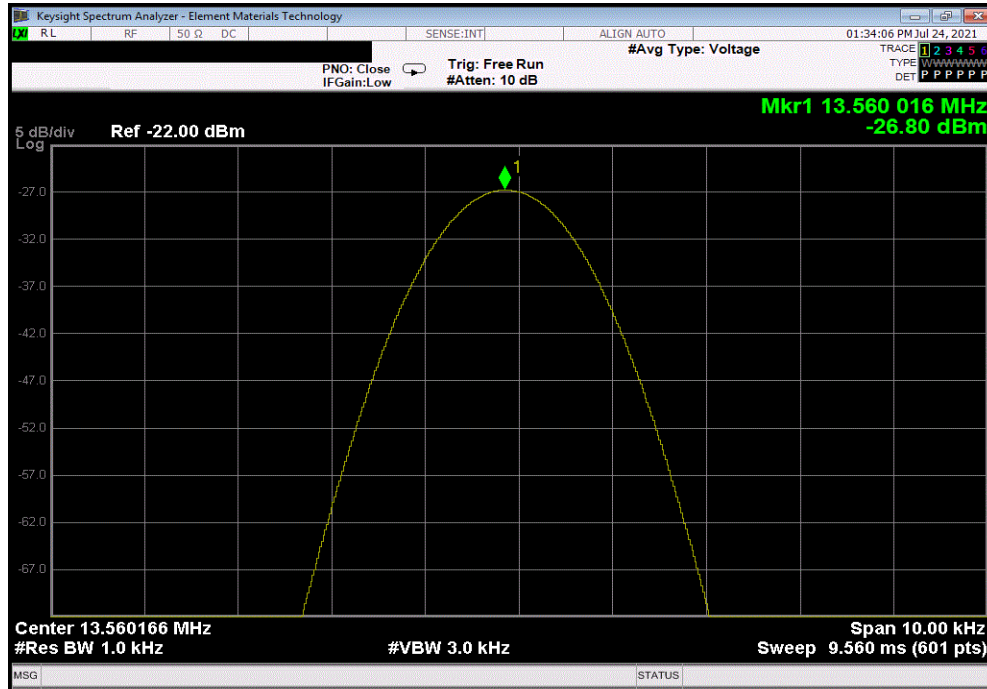
Center 13.560166 MHz
#Res BW 1.0 kHz #VBW 3.0 kHz Span 10.00 MHz
Sweep 9.560 ms (601 pts)

FREQUENCY STABILITY

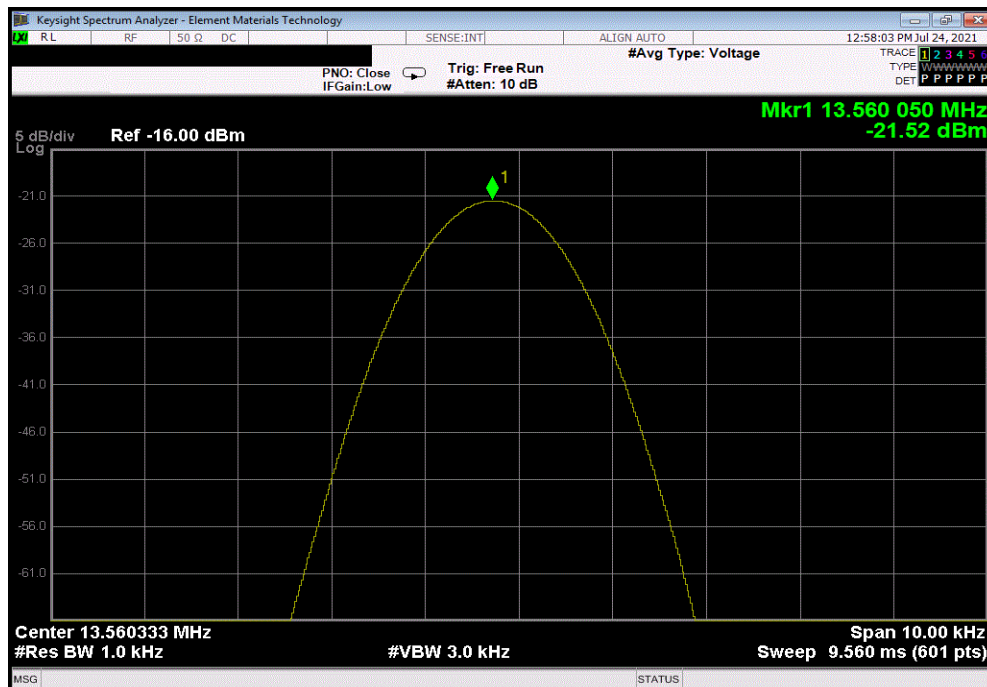


TbTx 2021.03.19.1 XMt 2020.12.30.0

CrossSwitch Radio - Antenna 1, Extreme Temperature +40°C, Mid Channel, 13.56 MHz						
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	13.560016	13.56009967	6.2	100	Pass	



CrossSwitch Radio - Antenna 1, Extreme Temperature +30°C, Mid Channel, 13.56 MHz						
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	13.56004967	13.56009967	3.7	100	Pass	



TbtTx 2021.03.19.1 XMIT 2020.12.30.1

Keysight Spectrum Analyzer - Element Materials Technology

05:17:42 PM Jul 23, 2021

RL RF 50 Ω DC SENSE:INT ALIGN AUTO #Avg Type: Voltage

PNO: Close IFGain:Low Trig: Free Run #Atten: 10 dB

TRACE 1 2 3 4 5 6
TYPE WWWWWW
DET P P P P P P

5 dB/div Ref -12.00 dBm

Mkr1 13.560 066 MHz
-22.99 dBm

Center 13.560333 MHz
#Res BW 1.0 kHz #VBW 3.0 kHz Span 10.00 kHz
Sweep 9.560 ms (601 pts)

MSG STATUS

Keysight Spectrum Analyzer - Element Materials Technology

06:20:17 PM Jul 23, 2021

SENSE:INT ALIGN AUTO #Avg Type: Voltage

PNO: Close Trig: Free Run
IFGain:Low #Atten: 10 dB

TRACE 1 2 3 4 5 6
TYPE W W W W W W
DET P P P P P P

5 dB/div Ref -26.00 dBm

Mkr1 13.560 150 MHz
-31.44 dBm

The plot shows a single, symmetric peak centered at 13.560 MHz. The peak is marked with a green diamond and the number '1'. The vertical axis represents power in dBm, ranging from -71.0 to -31.0. The horizontal axis represents frequency in MHz, ranging from 13.550 to 13.570. The peak height is approximately -31.44 dBm. The plot is titled 'Mkr1 13.560 150 MHz' and '-31.44 dBm'. The center frequency is 13.560333 MHz, the resolution bandwidth is 3.0 kHz, and the span is 10.00 kHz. The sweep time is 9.560 ms (601 pts).

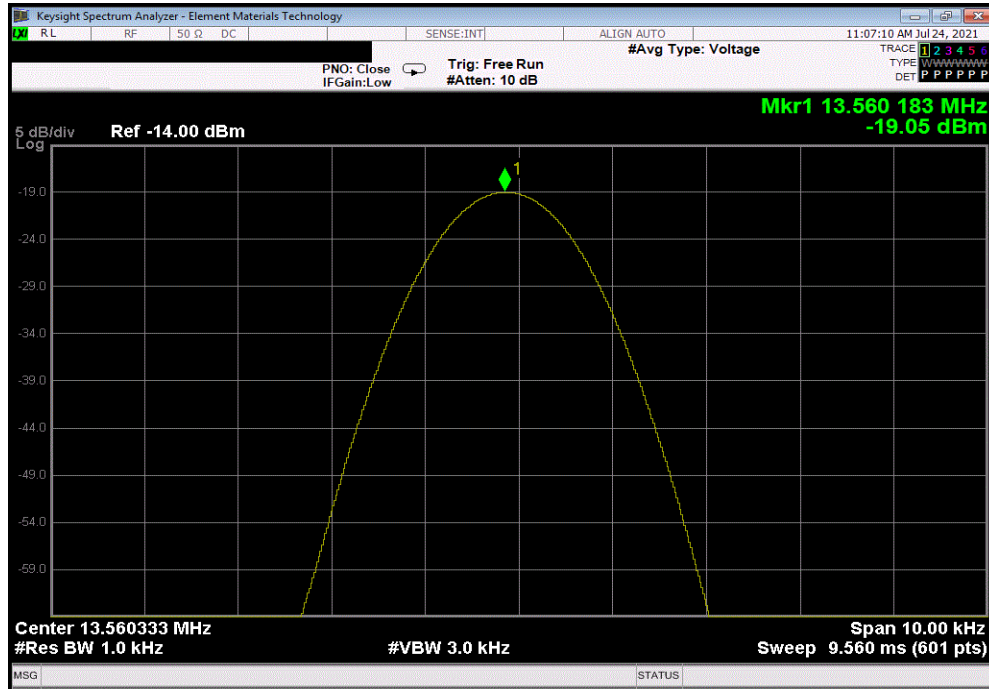
Center 13.560333 MHz
#Res BW 1.0 kHz #VBW 3.0 kHz Span 10.00 kHz
Sweep 9.560 ms (601 pts)

FREQUENCY STABILITY

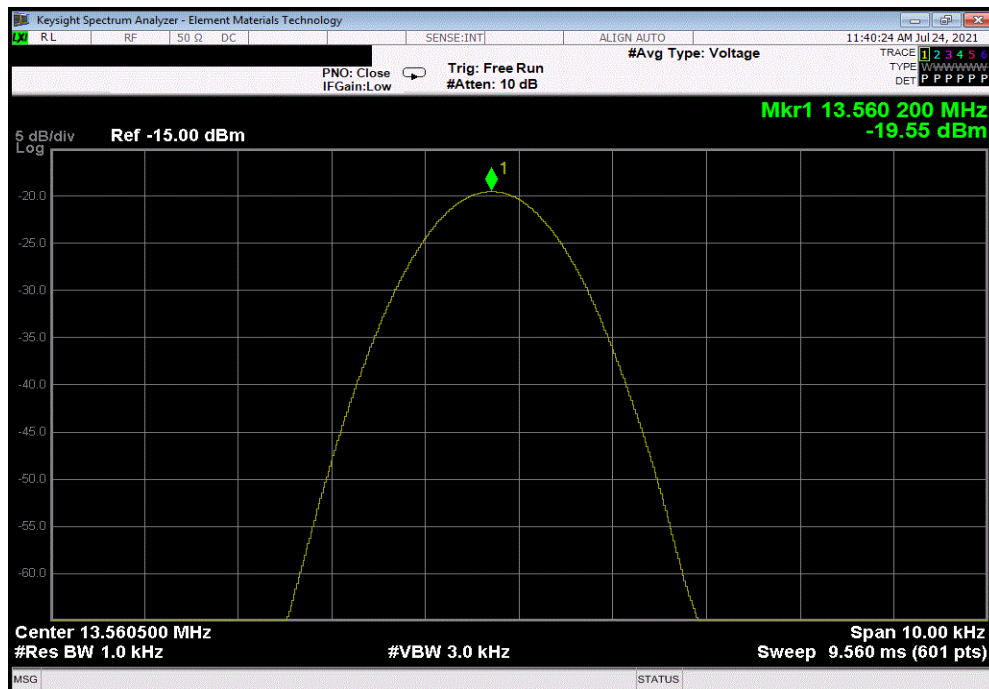


TbTtX 2021.03.19.1 XMt 2020.12.30.0

CrossSwitch Radio - Antenna 1, Extreme Temperature 0°C, Mid Channel, 13.56 MHz						
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	13.560183	13.56009967	6.1	100	Pass	



CrossSwitch Radio - Antenna 1, Extreme Temperature -10°C, Mid Channel, 13.56 MHz						
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	13.5602	13.56009967	7.4	100	Pass	

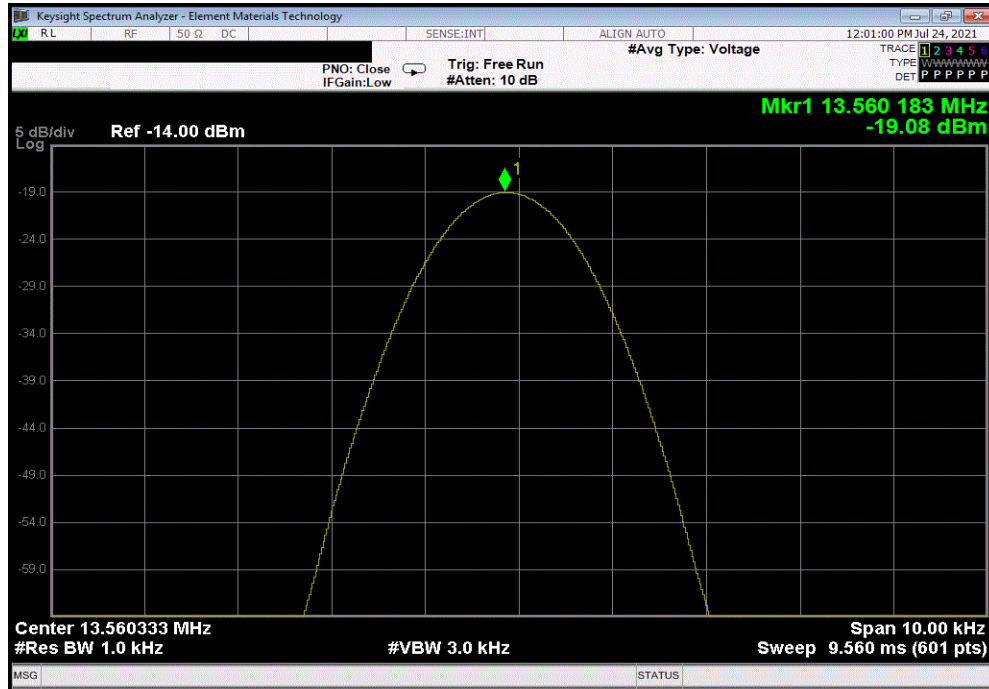


FREQUENCY STABILITY

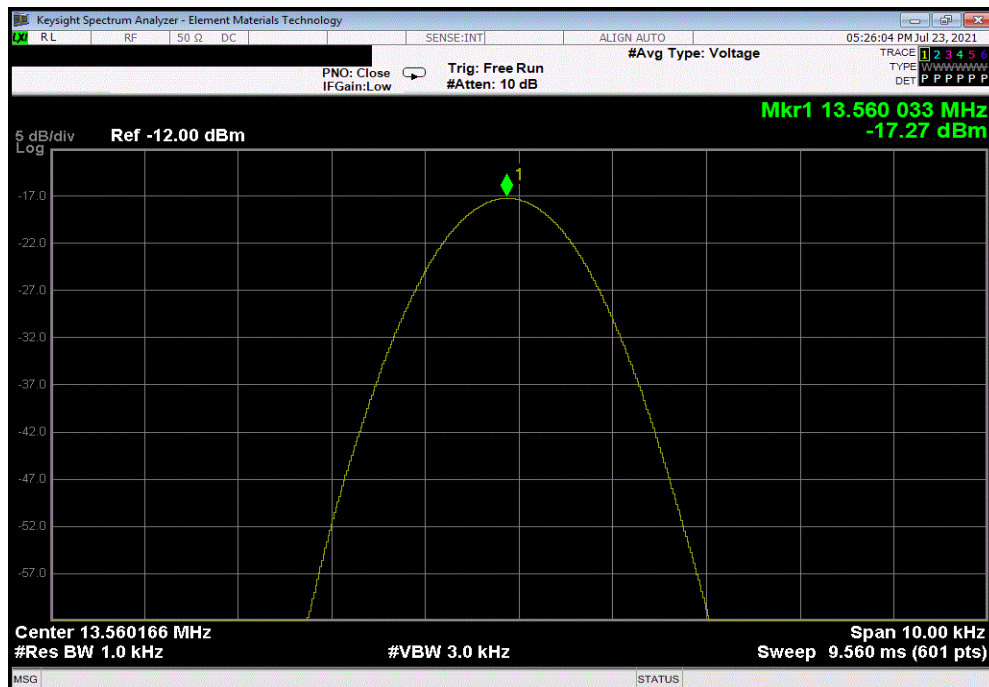


TbTx 2021.03.19.1 XMt 2020.12.30.0

CrossSwitch Radio - Antenna 1, Extreme Temperature -20°C, Mid Channel, 13.56 MHz						
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	13.560183	13.56009967	6.1	100	Pass	



CrossSwitch Radio - Antenna 2, Normal Voltage, Mid Channel, 13.56 MHz						
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results	
	13.56003267	13.56003267	0	100	Pass	



ThyTx 2021.02.19.1 YMit 2020.12.30.4

Keysight Spectrum Analyzer - Element Materials Technology

05:28:14 PM Jul 23, 2021

RL RF 50 Ω DC SENSE:INT ALIGN AUTO #Avg Type: Voltage

PNO: Close IFGain:Low Trig: Free Run #Atten: 10 dB

TRACE 1 2 3 4 5 6
TYPE WWWWWWW
DET P P P P P P

5 dB/div Ref -12.00 dBm

Mkr1 13.560 100 MHz
-20.03 dBm

Center 13.560333 MHz
#Res BW 1.0 kHz #VBW 3.0 kHz Span 10.00 kHz
Sweep 9.560 ms (601 pts)

MSG STATUS

The figure shows a Keysight Spectrum Analyzer interface. The main display is a log-log plot of power spectral density. The vertical axis is labeled '5 dB/div' and 'Log'. The horizontal axis is labeled 'Center 13.560333 MHz'. A single, sharp peak is visible at 13.560 MHz, with a power level of -20.03 dBm. The peak is marked with a green diamond and the number '1'. The background is black, and the grid is white. The top of the screen shows various settings and status information, including 'PNO: Close', 'IFGain:Low', 'Trig: Free Run', and '#Atten: 10 dB'. The bottom of the screen shows 'MSG' and 'STATUS' indicators.

Keysight Spectrum Analyzer - Element Materials Technology

05:31:47 PM Jul 23, 2021

RL RF 50 Ω DC SENSE:INT ALIGN AUTO

#Avg Type: Voltage

PNO: Close IF Gain: Low Trig: Free Run #Atten: 10 dB

TRACE 1 2 3 4 5 6
TYPE W W W W W W
DET P P P P P P

Mkr1 13.560 016 MHz
-17.37 dBm

5 dB/div
Log

Ref -12.00 dBm

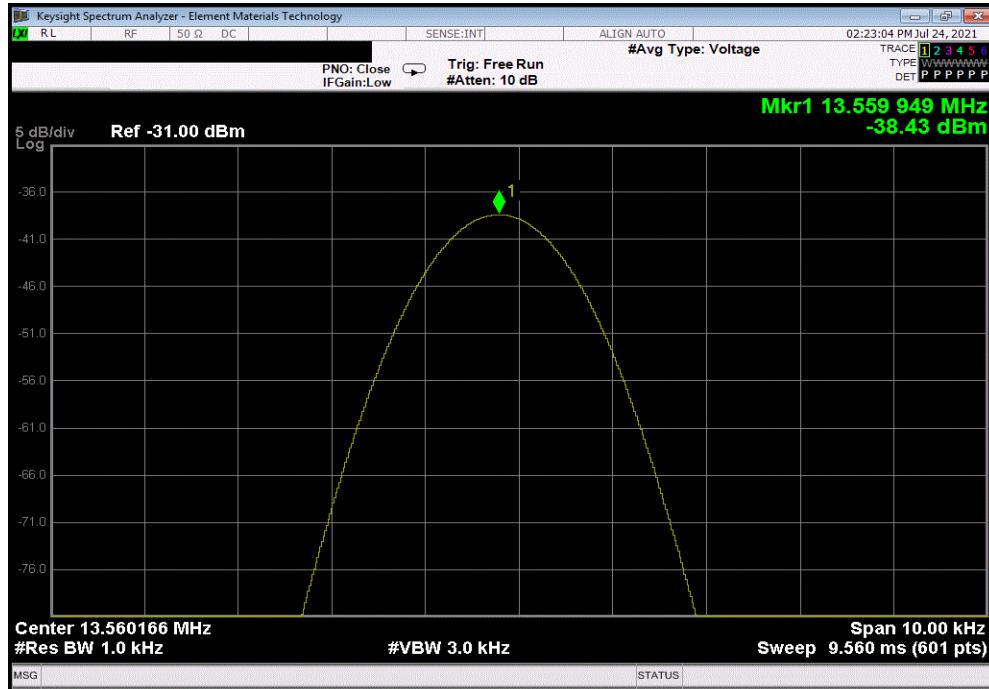
Center 13.560166 MHz
#Res BW 1.0 kHz
#VBW 3.0 kHz
Span 10.00 kHz
Sweep 9.560 ms (601 pts)

FREQUENCY STABILITY

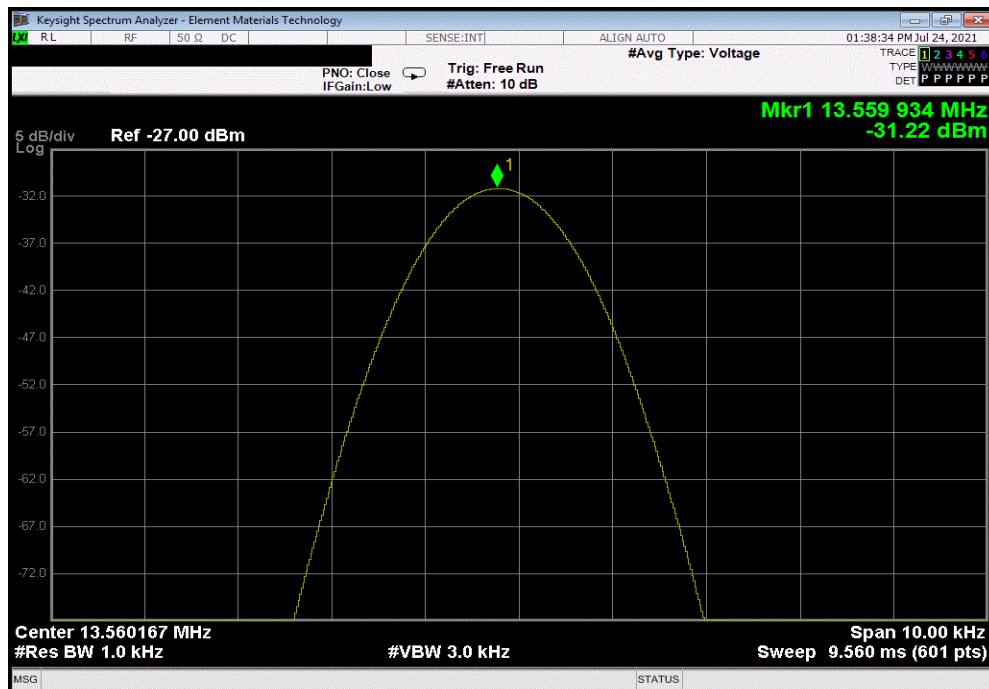


TbTx 2021.03.19.1 XMt 2020.12.30.0

CrossSwitch Radio - Antenna 2, Extreme Temperature +50°C, Mid Channel, 13.56 MHz					
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
	13.55994933	13.56003267	6.1	100	Pass



CrossSwitch Radio - Antenna 2, Extreme Temperature +40°C, Mid Channel, 13.56 MHz					
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
	13.55993367	13.56003267	7.3	100	Pass

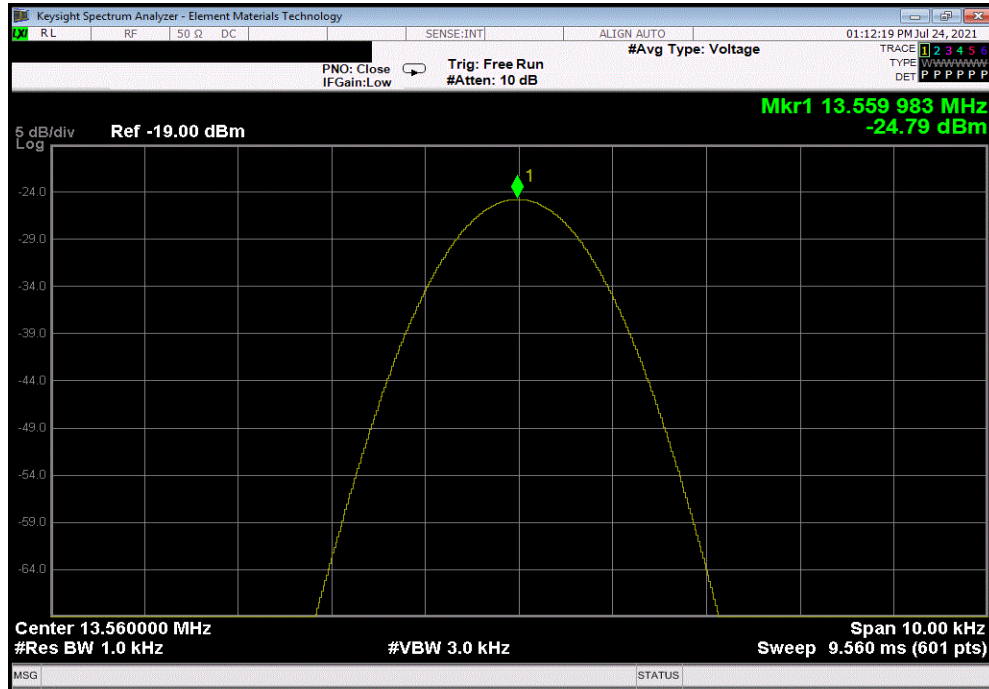


FREQUENCY STABILITY

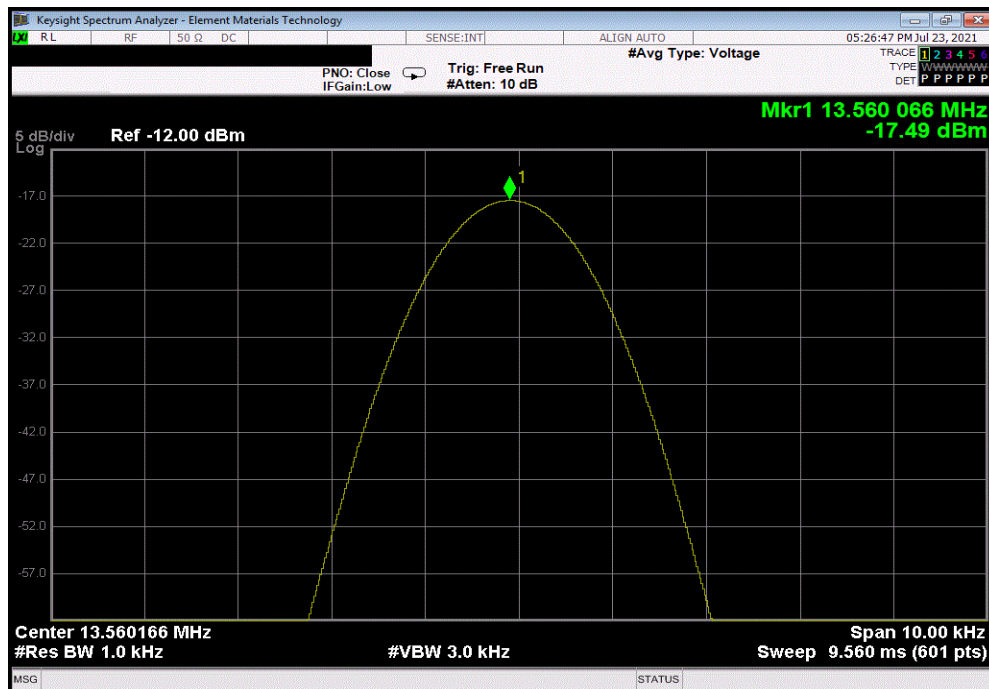


TbTx 2021.03.19.1 XMt 2020.12.30.0

CrossSwitch Radio - Antenna 2, Extreme Temperature +30°C, Mid Channel, 13.56 MHz					
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
	13.55998333	13.56003267	3.6	100	Pass

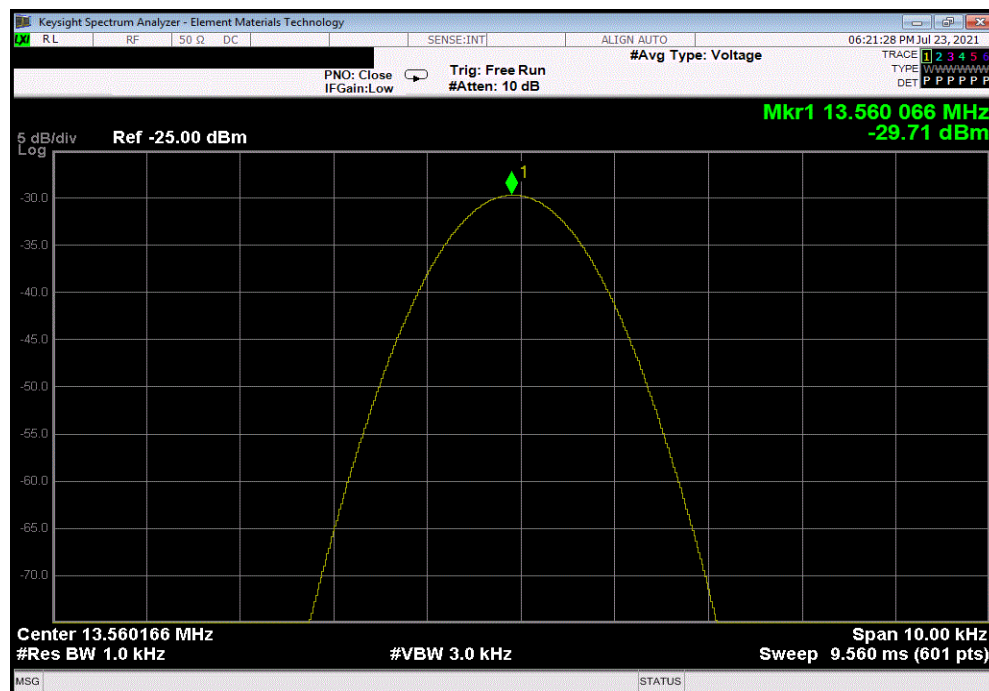


CrossSwitch Radio - Antenna 2, Extreme Temperature +20°C, Mid Channel, 13.56 MHz					
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
	13.560066	13.56003267	2.5	100	Pass

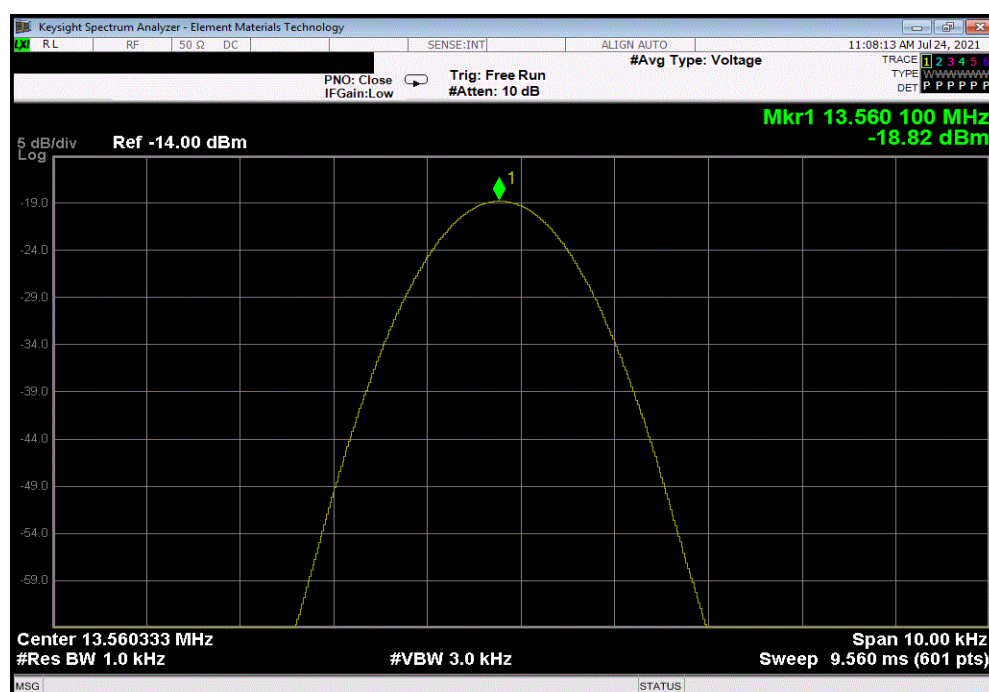


ThyTx 2021.02.19.1 YMit 2020.12.30.4

CrossSwitch Radio - Antenna 2, Extreme Temperature +10°C, Mid Channel, 13.56 MHz					
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
	13.560066	13.56003267	2.5	100	Pass



CrossSwitch Radio - Antenna 2, Extreme Temperature 0°C, Mid Channel, 13.56 MHz					
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
	13 56009967	13 56003267	4 9	100	Pass

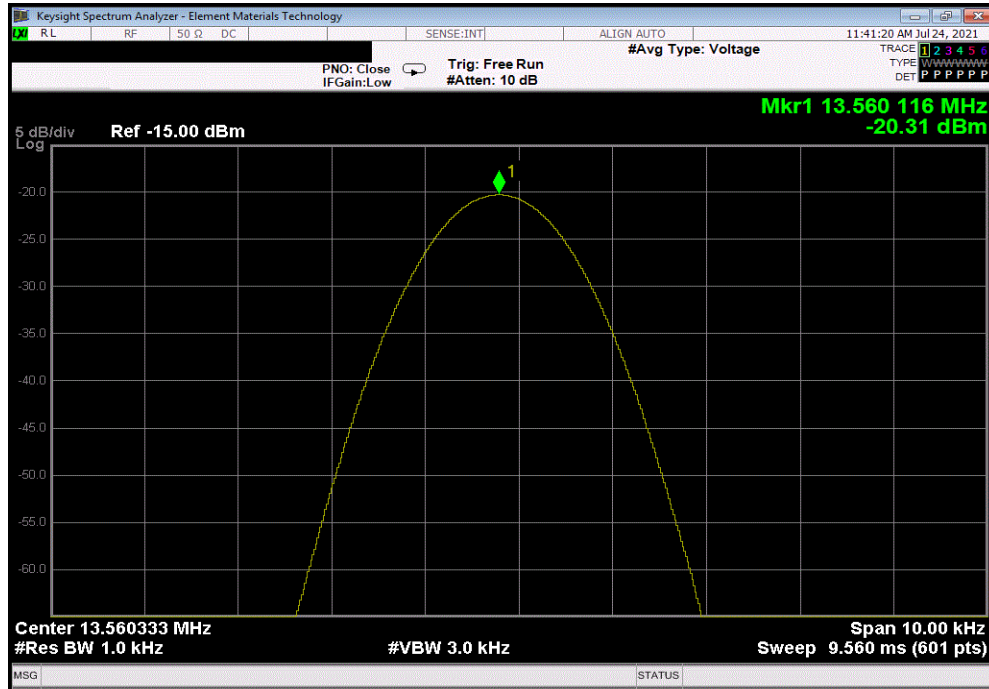


FREQUENCY STABILITY

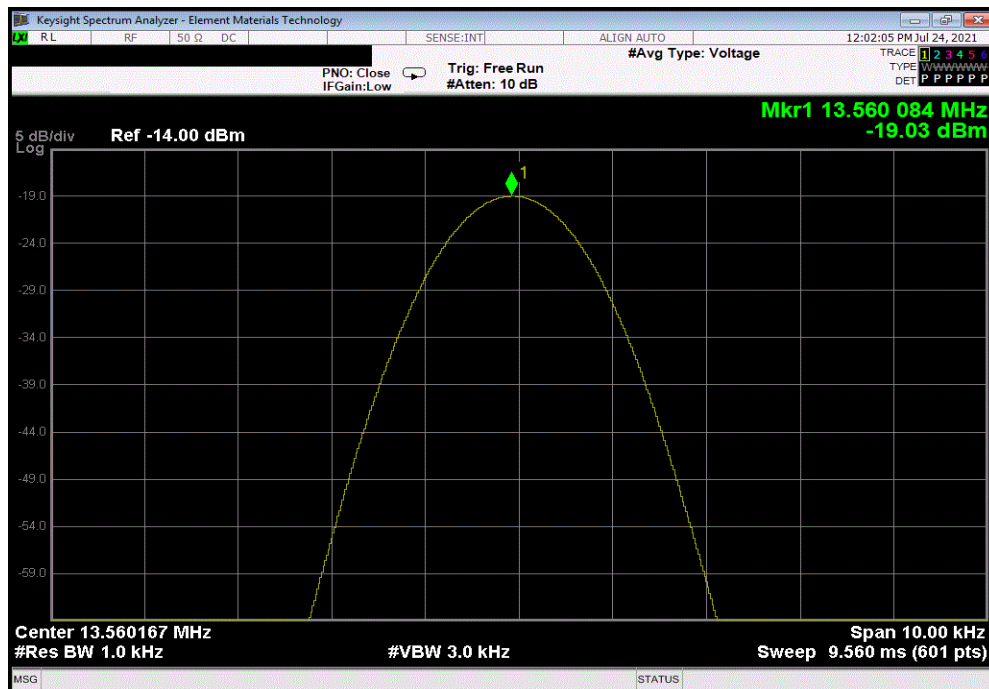


TbTx 2021.03.19.1 XMt 2020.12.30.0

CrossSwitch Radio - Antenna 2, Extreme Temperature -10°C, Mid Channel, 13.56 MHz					
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
	13.56011633	13.56003267	6.1	100	Pass



CrossSwitch Radio - Antenna 2, Extreme Temperature -20°C, Mid Channel, 13.56 MHz					
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
	13.56008367	13.56003267	3.8	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	Com-Power	PS-400	IPX	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 be 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 span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.

The 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 find the emissions bandwidth.

OCCUPIED BANDWIDTH



TutTx 2021.03.19.1 XMt 2020.12.30.0

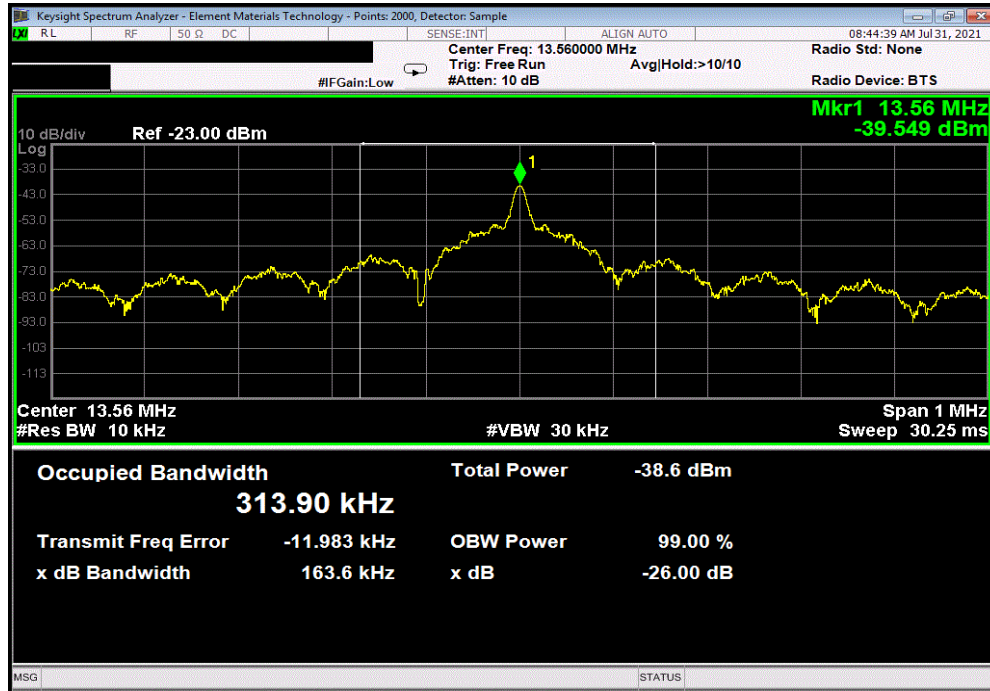
EUT:	GLP12410 SAL Alinity C Section		Work Order:	ABBO0082	
Serial Number:	ENG02-AP		Date:	24-Jul-21	
Customer:	Abbott Laboratories		Temperature:	25 °C	
Attendees:	Don Mendell		Humidity:	48.4% RH	
Project:	None		Barometric Pres.:	1019 mbar	
Tested by:	Mark Baytan	Power:	220VAC/60Hz	Job Site:	TX05
TEST SPECIFICATIONS			Test Method		
FCC 15.225:2021			ANSI C63.10:2013		
COMMENTS					
AccessPoint Radio. 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.					
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	2	Signature 			
			Value	Limit	Result
Normal Voltage			13.110 MHz $\geq$ BW $\leq$ 14.010 MHz		
Mid Channel, 13.56 MHz			163.60 kHz	Within	Pass

OCCUPIED BANDWIDTH



TbTtx 2021.03.19.1 XMH 2020.12.30.0

Normal Voltage, Mid Channel, 13.56 MHz				Limit	
Value		13.110 MHz $\geq$ BW $\leq$ 14.010 MHz		Result	
163.60 kHz		Within		Pass	



OCCUPIED BANDWIDTH



TRX1x 2021.03.10.1 XMM 2020.12.30.0

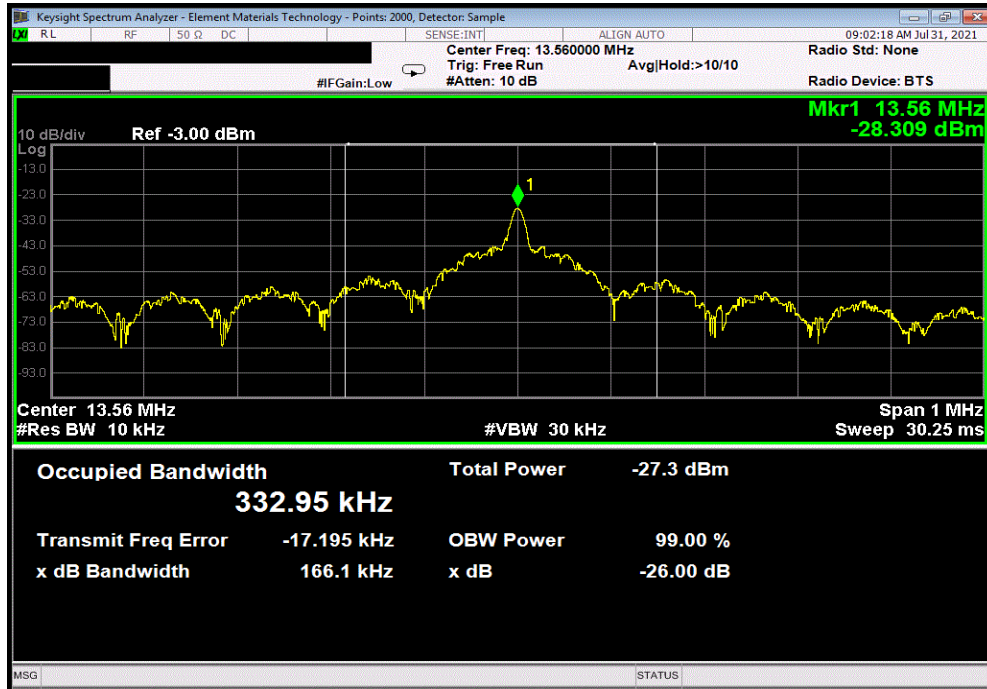
EUT: GLP12410 SAL Alinity C Section		Work Order: ABBO0082	
Serial Number: ENG05-CS		Date: 24-Jul-21	
Customer: Abbott Laboratories		Temperature: 25 °C	
Attendees: Don Mendell		Humidity: 48.4% RH	
Project: None		Barometric Pres.: 1019 mbar	
Tested by: Mark Baytan		Job Site: TX05	
Power: 220VAC/60Hz			
TEST SPECIFICATIONS		Test Method	
FCC 15.225:2021		ANSI C63.10:2013	
COMMENTS			
CrossSwitch Radio Radio. 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 called out in FCC 15.215.			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	2	Signature 	
		Value	Limit
Antenna 1	Normal Voltage		13.110 MHz ≥ BW ≤ 14.010 MHz
	Mid Channel, 13.56 MHz	166.1 kHz	Within
Antenna 2	Normal Voltage		
	Mid Channel, 13.56 MHz	167.7 kHz	Within
			Pass

OCCUPIED BANDWIDTH

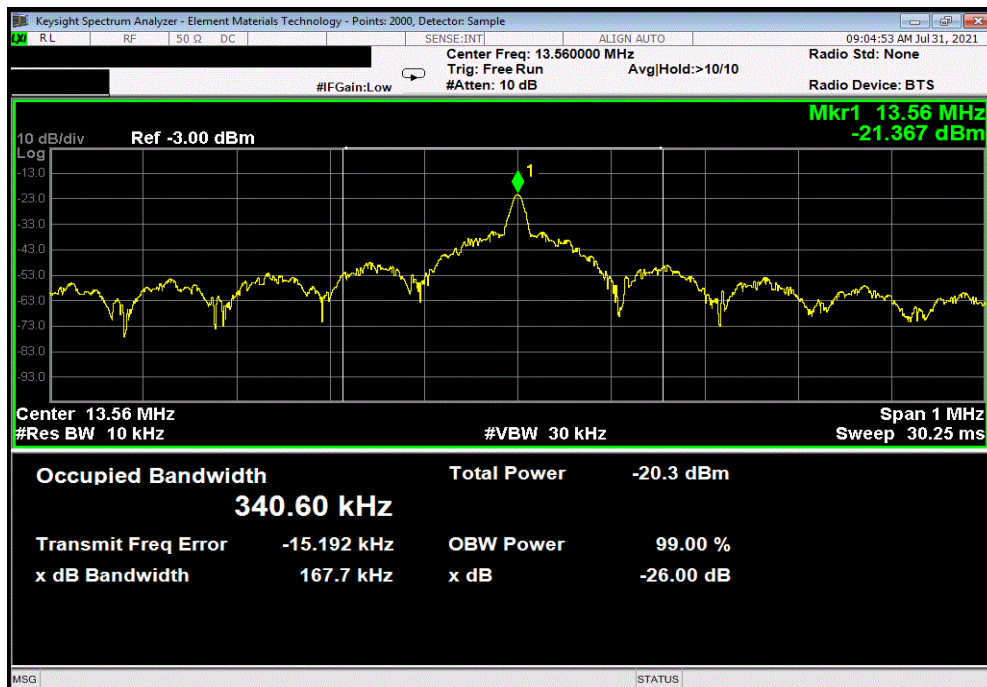


TbTb 2021.03.19.1 XMt 2020.12.30.0

Antenna 1, Normal Voltage, Mid Channel, 13.56 MHz					Limit	
Value					13.110 MHz $\geq$ BW $\leq$ 14.010 MHz	Result
				166.1 kHz	Within	Pass



Antenna 2, Normal Voltage, Mid Channel, 13.56 MHz					Limit	
Value					13.110 MHz $\geq$ BW $\leq$ 14.010 MHz	Result
				167.7 kHz	Within	Pass



End of Test Report