



element

Abbott Laboratories

GLP12408 SAL Alinity C End Section

GLP12409 SAL Alinity I End Section

FCC 15.225:2022

13.56 MHz

Report: ABBO0080.0 Rev. 5, Issue Date: November 17, 2022



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CERTIFICATE OF TEST

Last Date of Test: October 20, 2022
 Abbott Laboratories
 EUT: GLP12408 SAL Alinity C End Section
 GLP12409 SAL Alinity I End Section

Radio Equipment Testing

Standards

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

*Previous data has been reviewed to the latest standard and remains in compliance.

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	Removed track radio data from Field Strength of Fundamental and added the "segment" cross switch	2021-09-02	69-90
	Changed Powerline CE spec from Class A to FCC 15.209 and added the "segment cross switch	2021-09-02	19-68
02	Adjusted print area, Removed CrossSwitch 2 (Basic Kit) data from report.	2021-09-20	69-90
03	Combine both the "C" and "I" End Section variants into one report.	2022-06-23	Throughout report.
	Added configurations ABBO0182-1, ABBO0080-2	2022-06-23	N/A
04	Updated test dates	2022-10-21	2, 10, 18
	Updated configurations	2022-10-21	12-17
	Deleted photos in Powerline Conducted Emissions	2022-10-21	N/A
	Updated the power settings based on information provided by the customer	2022-10-21	11
	Updated the diagram	2022-10-21	7-9
05	Updated configurations to only include ABBO0080-2 , ABBO0181-4, ABBO0182-4	2022-11-17	12-17
	Updated configuration ABBO0080-2.	2022-11-17	12-13
	Updated ABBO0181 data to reference configuration ABBO0181-4.	2022-11-17	44, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 80, 81, 83, 85, 87, 89, 94, 95, 100, 101
	Updated ABBO0182 data to reference configuration ABBO0182-4.	2022-11-17	19, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 69, 70, 72, 74, 76, 78, 91, 92, 97, 98
	Corrected serial numbers in ABBO0181 and ABBO0182 data sheets.	2022-11-17	19-102

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

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

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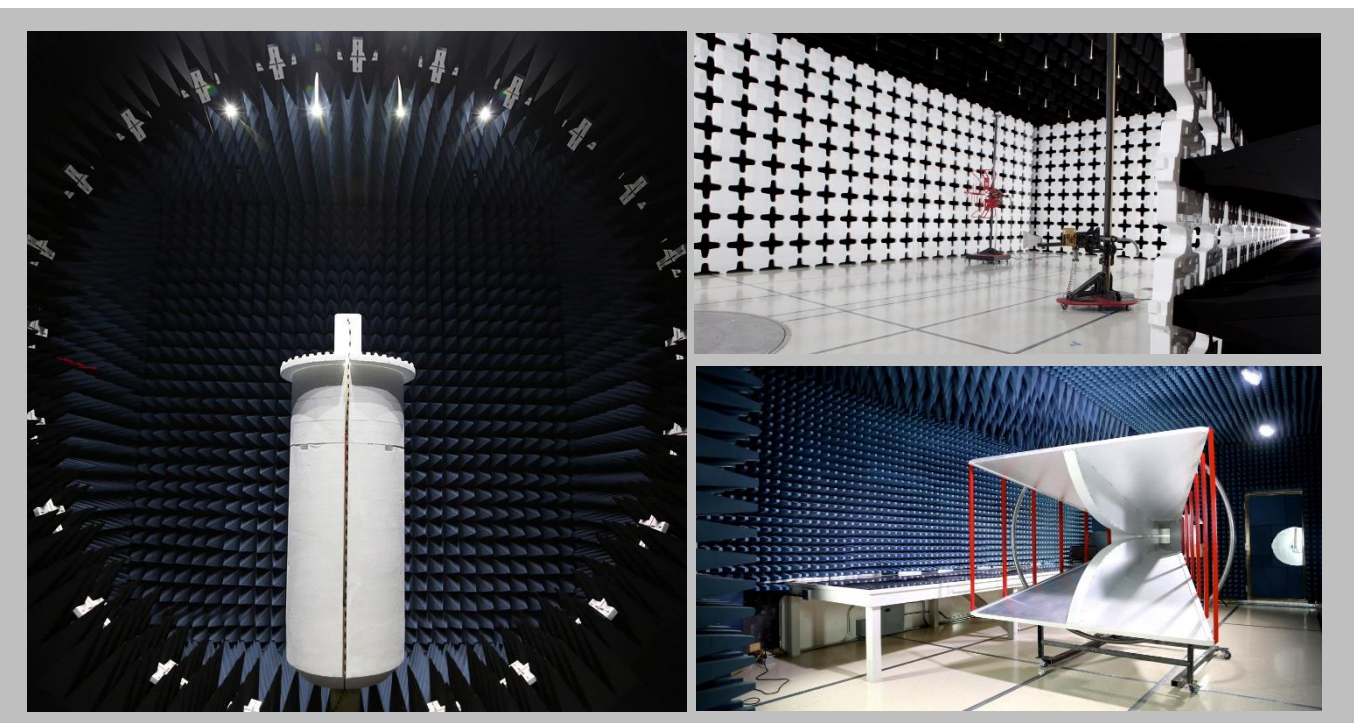
[Texas](#)

[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

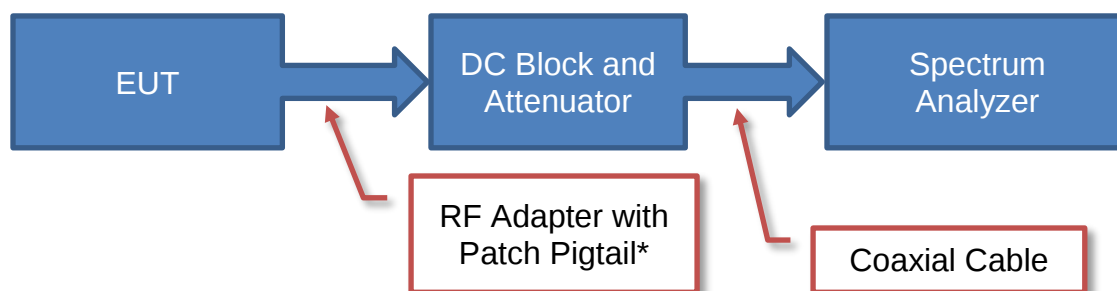
TEST SETUP BLOCK DIAGRAMS

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

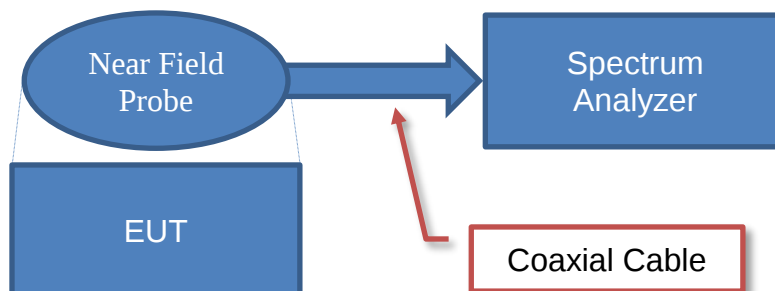


Sample Calculation (logarithmic units)

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

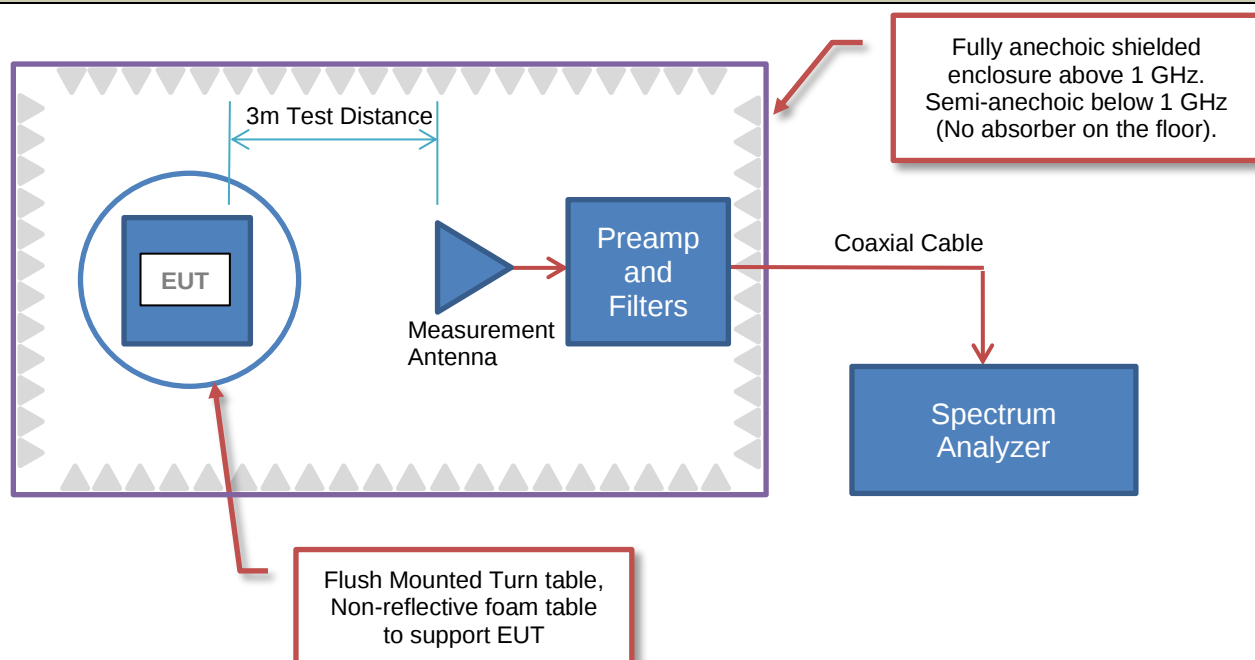


Sample Calculation (logarithmic units)

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

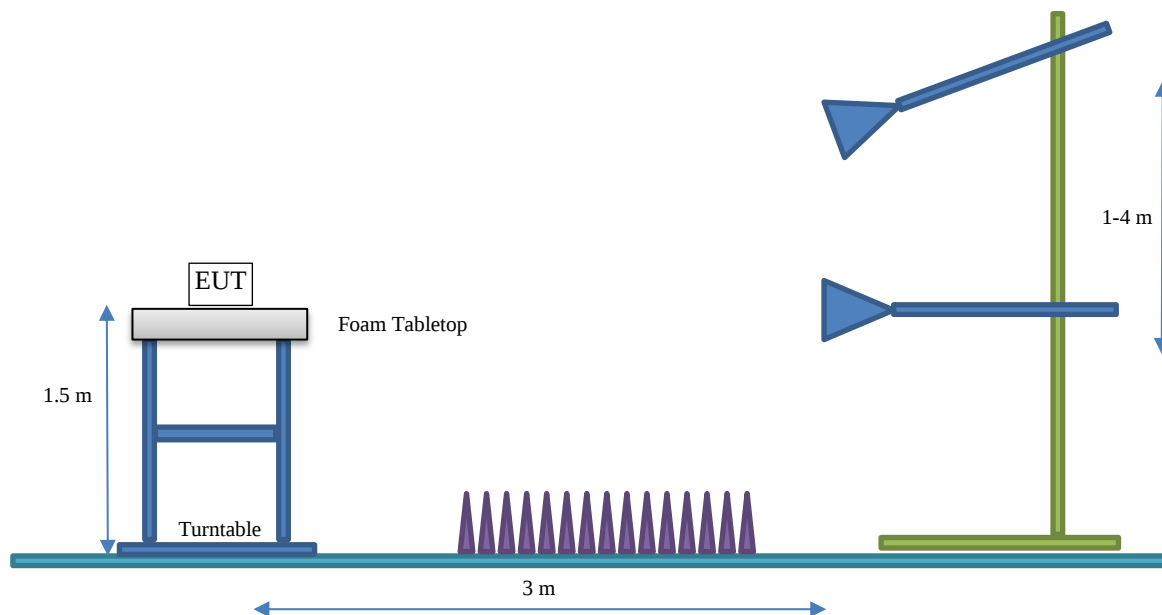
Radiated Power (ERP/EIRP) – Substitution Method:

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:	GLP12408 SAL Alinity C End Section GLP12409 SAL Alinity I End Section
First Date of Test:	July 24, 2021
Last Date of Test:	October 20, 2022
Receipt Date of Samples:	June 23, 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 C/I-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 end section, which contains an access point and barcode reader, is used to interface with a single Alinity C/I analyzer.

The SAL Alinity C/I End Section contains: 1 AccessPoint (1 RFID radio), 1 CrossSwitch (2 RFID radios within a CrossSwitch), 1 Special Convergent Switch (2 RFID radios within a Convergent Switch), 1 divergent left (1 RFID radio). In total of 6 RFID radios within 6 separate radios.

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.

*Antenna information/power setting is identical for each 13.56 MHz radio.

CONFIGURATIONS



Configuration ABBO0080- 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
Firmware	TrackEmvTest_Version_scsp_0.0_46817.bin

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Convergent Radio	GLP Systems	GLP12408	None
Divergent Radio	GLP Systems	GLP12408	None
Cross Switch	GLP Systems	GLP12152	None
AccessPoint	GLP Systems	GLP12190	None

Remote Equipment Outside of Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
AC Line Filter	GLP Systems	GLP12015	0001002
Laptop	Dell	Optiplex XE3	71HQQ72
Power Strip	GLP Systems	GLP41252	None
CAN Bus	GLP Systems	None	None
24V Power Supply	GLP Systems	GLP12010	C06A001511
5V Power Supply	GLP Systems	GLP12011	C07A001652
Power Board	GLP Systems	None	None
Switch 90 Convergent	GLP Systems	GLP12154	None
Switch 90 Divergent	GLP Systems	GLP12153	None
ChargeLane M	GLP Systems	GLP12553	None
PassPoint	GLP Systems	GLP12191	None
Drawer Reader	GLP Systems	GLP41252	None

CONFIGURATIONS

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 End Section
USB	Yes	5.0m	No	Laptop	SAL Alinity C End Section
AC Cable	No	1.1m	No	AC Mains	AC Line Filter
Auxiliary Bus Line	No	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	N/A	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 ABBO0181- 4

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_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
Firmware	TrackEmvTest_Version_scsp_0.0_46817.bin

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
AccessPoint Radio	GLP Systems	GLP12190	None
Convergent Radio	GLP Systems	GLP12408	None
Divergent Radio	GLP Systems	GLP12408	None
CrossSwitch Radio 1	GLP Systems	GLP12152	None
SAL Alinity i End Section	GLP Systems	GLP12409	SAL12409000010

Peripherals in Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
SAL Alinity Basic Kit (T-Element, 1 SCM Section)	GLP Systems	GLP12415	None
Input Filter	GLP Systems	GLP12013	None
Power Strip	GLP Systems	GLP12015	None
Power Strip	GLP Systems	GLP12015	None
ChargeLane Radio	GLP Systems	GLP12553	None
CrossSwitch Radio 2	GLP Systems	GLP12152	None
CrossSwitch Radio 3	GLP Systems	GLP12152	None
CrossSwitch Radio 4	GLP Systems	GLP12152	None
CrossSwitch Radio 5	GLP Systems	GLP12152	None
CrossSwitch Radio 6	GLP Systems	GLP12152	None
Segment Power Supply	GLP Systems	GLP12100	None
AC Line Filter	GLP Systems	GLP12015	0001002
Power Strip	GLP Systems	GLP41252	None
CAN Bus	GLP Systems	None	None
24V Power Supply	GLP Systems	GLP12010	C06A001511
5V Power Supply	GLP Systems	GLP12011	C07A001652
Power Board	GLP Systems	None	None

CONFIGURATIONS

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 End Section
USB	Yes	5.0m	No	Laptop	SAL Alinity C End Section
AC Cable	No	1.1m	No	AC Mains	AC Line Filter
Auxiliary Bus Line	No	1.0m	No	AC Line Filter	24V and 5V Power Supply
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	N/A	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 ABBO0182- 4

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_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
Firmware	TrackEmvTest_Version_scsp_0.0_46817.bin

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
SAL Alinity C End Section	GLP Systems	GLP12409	SAL12408000028
AccessPoint Radio	GLP Systems	GLP12190	None
Convergent Radio	GLP Systems	GLP12408	None
Divergent Radio	GLP Systems	GLP12408	None
CrossSwitch Radio 1	GLP Systems	GLP12152	None

Peripherals in Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
SAL Alinity Basic Kit (T-Element, 1 SCM Section)	GLP Systems	GLP12415	None
Input Filter	GLP Systems	GLP12013	None
Power Strip	GLP Systems	GLP12015	None
Power Strip	GLP Systems	GLP12015	None
ChargeLane Radio	GLP Systems	GLP12553	None
CrossSwitch Radio 2	GLP Systems	GLP12152	None
CrossSwitch Radio 3	GLP Systems	GLP12152	None
CrossSwitch Radio 4	GLP Systems	GLP12152	None
CrossSwitch Radio 5	GLP Systems	GLP12152	None
CrossSwitch Radio 6	GLP Systems	GLP12152	None
Segment Power Supply	GLP Systems	GLP12100	None
AC Line Filter	GLP Systems	GLP12015	0001002
Power Strip	GLP Systems	GLP41252	None
CAN Bus	GLP Systems	None	None
24V Power Supply	GLP Systems	GLP12010	C06A001511
5V Power Supply	GLP Systems	GLP12011	C07A001652
Power Board	GLP Systems	None	None

CONFIGURATIONS

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 End Section
USB	Yes	5.0m	No	Laptop	SAL Alinity C End Section
AC Cable	No	1.1m	No	AC Mains	AC Line Filter
Auxiliary Bus Line	No	1.0m	No	AC Line Filter	24V and 5V Power Supply
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	N/A	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

MODIFICATIONS

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	2021-09-02	Occupied Bandwidth	Tested as delivered to test station.	None	EUT remained at Element following the test.
2	2021-09-3	Frequency Stability	Tested as delivered to test station.	None	EUT remained at Element following the test.
3	2022-10-18	Field Strength of Spurious Emissions (Greater than 30 MHz)	Tested as delivered to test station.	None	EUT remained at Element following the test.
4	2022-10-18	Field Strength of Spurious Emissions (Less than 30 MHz)	Tested as delivered to test station.	None	EUT remained at Element following the test.
5	2022-10-18	Field Strength of Fundamental	Tested as delivered to test station.	None	EUT remained at Element following the test.
6	2022-10-20	Powerline Conducted Emissions	Tested as delivered to test station.	None	Scheduled testing was completed.

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.

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

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

For a device with a permanent or detachable antenna operating at or below 30 MHz, the FCC will accept measurements performed with a suitable dummy load in lieu of the antenna under the following conditions:

- (1) perform the AC power-line conducted tests with the antenna connected to determine compliance with Section 15.207 limits outside the transmitter's fundamental emission band;
- (2) retest with a dummy load in lieu of the antenna to determine compliance with Section 15.207 limits within the transmitter's fundamental emission band. For a detachable antenna, remove the antenna and connect a suitable dummy load to the antenna connector. For a permanent antenna, remove the antenna and terminate the RF output with a dummy load or network which simulates the antenna in the fundamental frequency band.

All measurements must be performed as specified in clause 6.2 of ANSI C63.10-2013.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
LISN	Solar Electronics	9252-50-R-24-BNC	LJK	2022-08-08	2023-08-08
Power Source/Analyzer	Hewlett Packard	6841A	THC	NCR	NCR
Receiver	Rohde & Schwarz	ESR7	ARI	2022-08-30	2023-08-30
Cable - Conducted Cable Assembly	Northwest EMC	TXA, HFC, TQU	TXAA	2022-01-24	2023-01-24

MEASUREMENT UNCERTAINTY

Description		
Expanded k=2	3.1 dB	-3.1 dB

CONFIGURATIONS INVESTIGATED

ABBO0182-4

MODES INVESTIGATED

Transmitting 13.56 MHz RFID

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12409 SAL Alinity c End Section	Work Order:	ABBO0182
Serial Number:	SAL12408000028	Date:	2022-10-19
Customer:	Abbott Laboratories	Temperature:	20.6°C
Attendees:	Frank Sun	Relative Humidity:	27.6%
Customer Project:	None	Bar. Pressure (PMSL):	1028 mb
Tested By:	Jarrod Brenden	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0182-4

TEST SPECIFICATIONS

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

TEST PARAMETERS

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

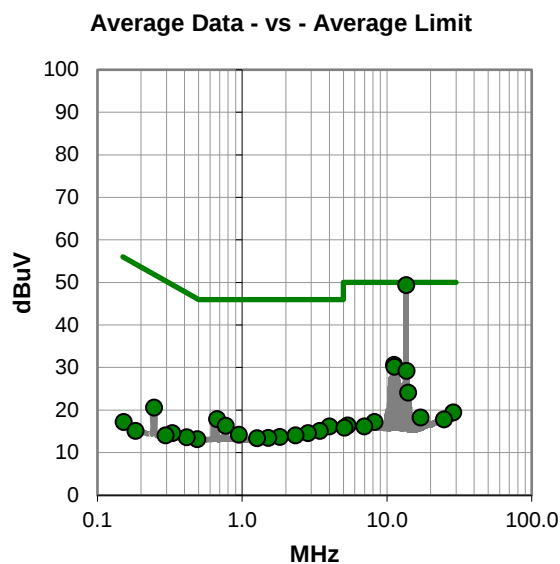
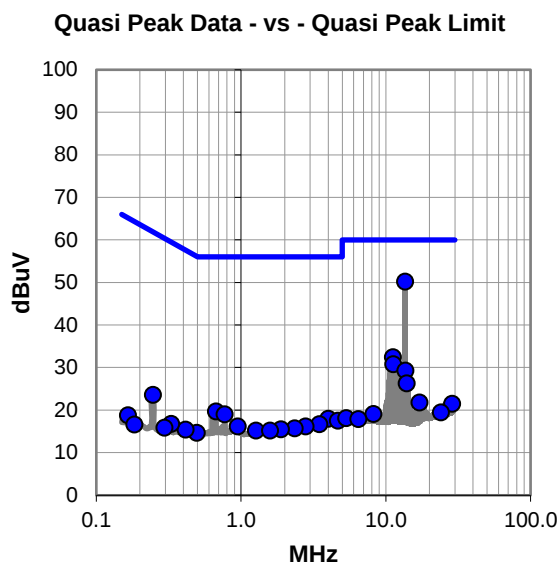
AccessPoint. PCB contains a single RFID radio. Radio ON.

EUT OPERATING MODES

Transmitting 13.56 MHz RFID

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #13

Quasi Peak Data - vs - Quasi Peak Limit

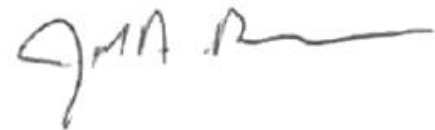
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	29.7	20.5	50.2	60.0	-9.8
11.204	11.9	20.5	32.4	60.0	-27.6
11.270	10.3	20.5	30.8	60.0	-29.2
13.680	8.8	20.5	29.3	60.0	-30.7
13.930	5.8	20.5	26.3	60.0	-33.7
0.670	-0.5	20.2	19.7	56.0	-36.3
0.770	-1.2	20.2	19.0	56.0	-37.0
4.000	-2.2	20.2	18.0	56.0	-38.0
17.072	1.0	20.8	21.8	60.0	-38.2
0.247	3.0	20.6	23.6	61.9	-38.3
4.657	-2.7	20.2	17.5	56.0	-38.5
28.650	-0.4	21.9	21.5	60.0	-38.5
3.469	-3.5	20.2	16.7	56.0	-39.3
0.950	-3.9	20.1	16.2	56.0	-39.8
2.785	-4.0	20.2	16.2	56.0	-39.8
2.353	-4.5	20.2	15.7	56.0	-40.3
1.889	-4.7	20.2	15.5	56.0	-40.5
24.011	-1.9	21.4	19.5	60.0	-40.5
1.270	-4.8	20.0	15.2	56.0	-40.8
1.590	-4.9	20.1	15.2	56.0	-40.8
8.212	-1.2	20.3	19.1	60.0	-40.9
0.494	-5.5	20.2	14.7	56.1	-41.4
5.330	-2.0	20.1	18.1	60.0	-41.9
6.475	-2.2	20.1	17.9	60.0	-42.1
0.413	-4.9	20.3	15.4	57.6	-42.2

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	28.9	20.5	49.4	50.0	-0.6
11.204	10.1	20.5	30.6	50.0	-19.4
11.270	9.7	20.5	30.2	50.0	-19.8
13.616	8.7	20.5	29.2	50.0	-20.8
13.990	3.6	20.5	24.1	50.0	-25.9
0.670	-2.3	20.2	17.9	46.0	-28.1
0.769	-3.9	20.2	16.3	46.0	-29.7
4.000	-4.0	20.2	16.2	46.0	-29.8
28.650	-2.4	21.9	19.5	50.0	-30.5
3.430	-5.1	20.2	15.1	46.0	-30.9
0.247	0.0	20.6	20.6	51.9	-31.3
2.850	-5.6	20.2	14.6	46.0	-31.4
17.072	-2.5	20.8	18.3	50.0	-31.7
0.950	-5.9	20.1	14.2	46.0	-31.8
2.330	-6.1	20.2	14.1	46.0	-31.9
24.750	-3.6	21.4	17.8	50.0	-32.2
1.822	-6.5	20.2	13.7	46.0	-32.3
1.516	-6.6	20.1	13.5	46.0	-32.5
1.268	-6.6	20.0	13.4	46.0	-32.6
8.212	-3.1	20.3	17.2	50.0	-32.8
0.490	-7.0	20.2	13.2	46.2	-33.0
5.350	-3.7	20.1	16.4	50.0	-33.6
6.965	-3.9	20.1	16.2	50.0	-33.8
0.413	-6.7	20.3	13.6	47.6	-34.0
5.090	-4.2	20.1	15.9	50.0	-34.1

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12409 SAL Alinity c End Section	Work Order:	ABBO0182
Serial Number:	SAL12408000028	Date:	2022-10-19
Customer:	Abbott Laboratories	Temperature:	20.6°C
Attendees:	Frank Sun	Relative Humidity:	27.6%
Customer Project:	None	Bar. Pressure (PMSL):	1028 mb
Tested By:	Jarrod Brenden	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0182-4

TEST SPECIFICATIONS

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

TEST PARAMETERS

Run #:	14	Line:	Neutral	Add. Ext. Attenuation (dB):	0
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COMMENTS

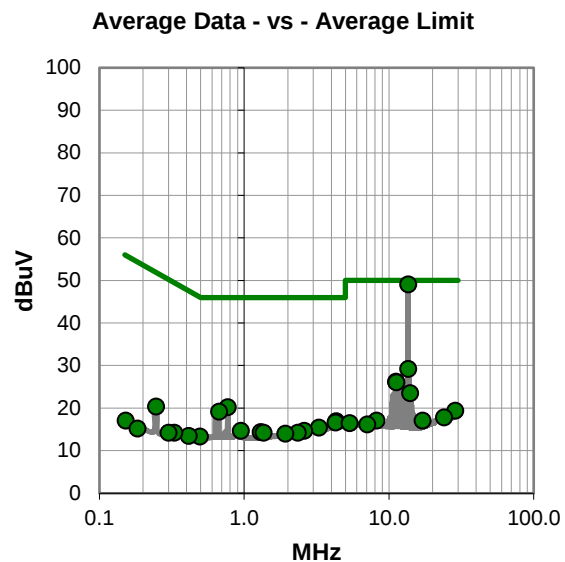
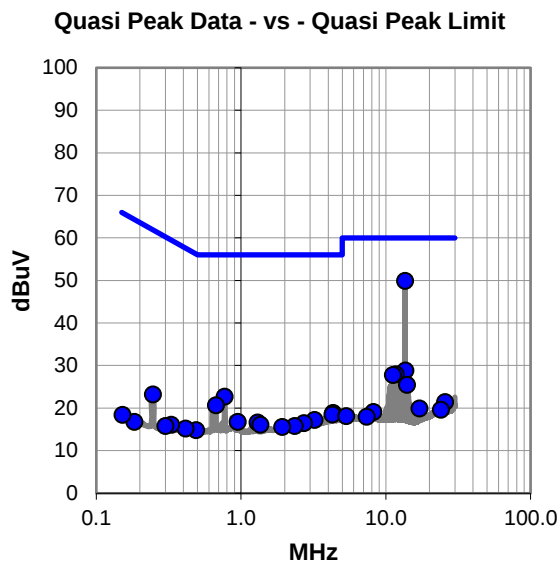
AccessPoint. PCB contains a single RFID radio. Radio ON.

EUT OPERATING MODES

Transmitting 13.56 MHz RFID

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #14

Quasi Peak Data - vs - Quasi Peak Limit

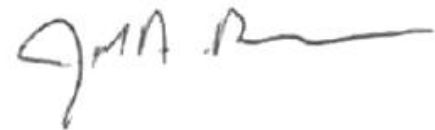
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	29.4	20.5	49.9	60.0	-10.1
13.680	8.3	20.5	28.8	60.0	-31.2
11.700	7.4	20.5	27.9	60.0	-32.1
11.200	7.3	20.5	27.8	60.0	-32.2
0.770	2.5	20.2	22.7	56.0	-33.3
13.990	5.0	20.5	25.5	60.0	-34.5
0.670	0.5	20.2	20.7	56.0	-35.3
4.333	-1.3	20.2	18.9	56.0	-37.1
4.270	-1.7	20.2	18.5	56.0	-37.5
25.600	0.0	21.4	21.4	60.0	-38.6
0.247	2.6	20.6	23.2	61.9	-38.7
3.220	-3.0	20.2	17.2	56.0	-38.8
0.950	-3.3	20.1	16.8	56.0	-39.2
1.300	-3.4	20.0	16.6	56.0	-39.4
2.722	-3.7	20.2	16.5	56.0	-39.5
1.360	-3.9	20.0	16.1	56.0	-39.9
17.072	-0.9	20.8	19.9	60.0	-40.1
2.353	-4.4	20.2	15.8	56.0	-40.2
1.920	-4.6	20.2	15.6	56.0	-40.4
24.000	-1.8	21.4	19.6	60.0	-40.4
8.212	-1.2	20.3	19.1	60.0	-40.9
0.490	-5.4	20.2	14.8	56.2	-41.4
5.330	-2.0	20.1	18.1	60.0	-41.9
7.390	-2.2	20.2	18.0	60.0	-42.0
0.413	-5.1	20.3	15.2	57.6	-42.4

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	28.6	20.5	49.1	50.0	-0.9
13.610	8.7	20.5	29.2	50.0	-20.8
11.200	5.7	20.5	26.2	50.0	-23.8
11.263	5.6	20.5	26.1	50.0	-23.9
0.770	0.0	20.2	20.2	46.0	-25.8
13.990	3.0	20.5	23.5	50.0	-26.5
0.670	-1.0	20.2	19.2	46.0	-26.8
4.333	-3.3	20.2	16.9	46.0	-29.1
4.270	-3.6	20.2	16.6	46.0	-29.4
3.280	-4.8	20.2	15.4	46.0	-30.6
28.650	-2.5	21.9	19.4	50.0	-30.6
0.950	-5.4	20.1	14.7	46.0	-31.3
2.600	-5.5	20.2	14.7	46.0	-31.3
0.247	-0.2	20.6	20.4	51.9	-31.5
1.300	-5.6	20.0	14.4	46.0	-31.6
1.360	-5.8	20.0	14.2	46.0	-31.8
2.348	-6.0	20.2	14.2	46.0	-31.8
1.920	-6.2	20.2	14.0	46.0	-32.0
24.000	-3.6	21.4	17.8	50.0	-32.2
0.494	-6.9	20.2	13.3	46.1	-32.8
8.212	-3.2	20.3	17.1	50.0	-32.9
17.072	-3.7	20.8	17.1	50.0	-32.9
5.350	-3.6	20.1	16.5	50.0	-33.5
7.064	-4.0	20.2	16.2	50.0	-33.8
0.413	-6.8	20.3	13.5	47.6	-34.1

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12409 SAL Alinity c End Section	Work Order:	ABBO0182
Serial Number:	SAL12408000028	Date:	2022-10-19
Customer:	Abbott Laboratories	Temperature:	20.6°C
Attendees:	Frank Sun	Relative Humidity:	27.6%
Customer Project:	None	Bar. Pressure (PMSL):	1028 mb
Tested By:	Jarrod Brenden	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0182-4

TEST SPECIFICATIONS

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

TEST PARAMETERS

Run #:	25	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

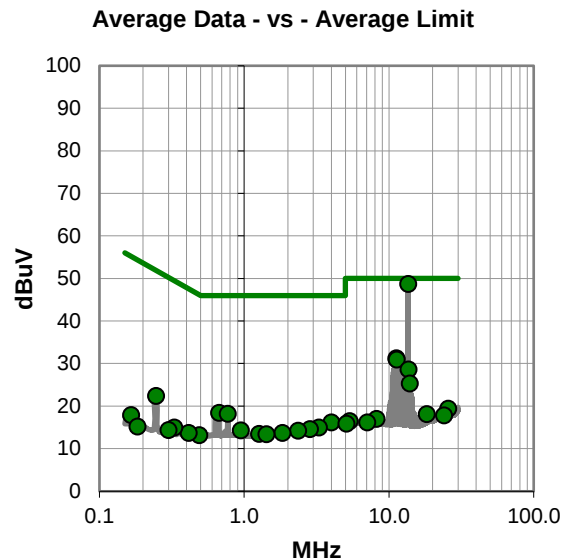
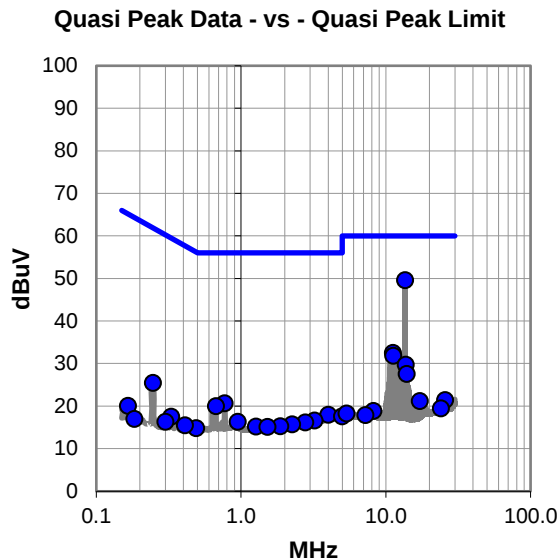
CrossSwitch. PCB contains 2 RFID radios. Radio 1 ON.

EUT OPERATING MODES

Transmitting 13.56 MHz RFID

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #25

Quasi Peak Data - vs - Quasi Peak Limit

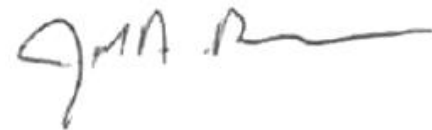
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	29.1	20.5	49.6	60.0	-10.4
11.210	12.0	20.5	32.5	60.0	-27.5
11.270	11.3	20.5	31.8	60.0	-28.2
13.690	9.2	20.5	29.7	60.0	-30.3
13.930	7.1	20.5	27.6	60.0	-32.4
0.770	0.5	20.2	20.7	56.0	-35.3
0.670	-0.2	20.2	20.0	56.0	-36.0
0.247	4.9	20.6	25.5	61.9	-36.4
4.000	-2.2	20.2	18.0	56.0	-38.0
4.981	-2.5	20.1	17.6	56.0	-38.4
25.600	0.0	21.4	21.4	60.0	-38.6
17.160	0.4	20.8	21.2	60.0	-38.8
3.212	-3.6	20.2	16.6	56.0	-39.4
0.950	-3.8	20.1	16.3	56.0	-39.7
2.770	-4.0	20.2	16.2	56.0	-39.8
2.250	-4.5	20.2	15.7	56.0	-40.3
24.000	-1.9	21.4	19.5	60.0	-40.5
1.870	-4.9	20.2	15.3	56.0	-40.7
1.268	-4.8	20.0	15.2	56.0	-40.8
1.520	-5.0	20.1	15.1	56.0	-40.9
8.212	-1.4	20.3	18.9	60.0	-41.1
0.490	-5.4	20.2	14.8	56.2	-41.4
5.350	-1.8	20.1	18.3	60.0	-41.7
0.330	-2.8	20.3	17.5	59.5	-42.0
0.410	-4.8	20.3	15.5	57.6	-42.1

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	28.2	20.5	48.7	50.0	-1.3
11.270	10.7	20.5	31.2	50.0	-18.8
11.330	10.4	20.5	30.9	50.0	-19.1
13.620	8.1	20.5	28.6	50.0	-21.4
13.931	4.8	20.5	25.3	50.0	-24.7
0.670	-1.8	20.2	18.4	46.0	-27.6
0.770	-2.0	20.2	18.2	46.0	-27.8
0.247	1.8	20.6	22.4	51.9	-29.5
4.000	-4.0	20.2	16.2	46.0	-29.8
25.600	-2.0	21.4	19.4	50.0	-30.6
3.280	-5.2	20.2	15.0	46.0	-31.0
2.850	-5.6	20.2	14.6	46.0	-31.4
0.950	-5.8	20.1	14.3	46.0	-31.7
2.360	-6.0	20.2	14.2	46.0	-31.8
18.240	-2.8	20.9	18.1	50.0	-31.9
24.000	-3.6	21.4	17.8	50.0	-32.2
1.835	-6.5	20.2	13.7	46.0	-32.3
1.268	-6.5	20.0	13.5	46.0	-32.5
1.426	-6.7	20.1	13.4	46.0	-32.6
0.490	-7.0	20.2	13.2	46.2	-33.0
8.212	-3.3	20.3	17.0	50.0	-33.0
5.350	-3.6	20.1	16.5	50.0	-33.5
7.078	-4.0	20.2	16.2	50.0	-33.8
0.413	-6.6	20.3	13.7	47.6	-33.9
5.090	-4.2	20.1	15.9	50.0	-34.1

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12409 SAL Alinity c End Section	Work Order:	ABBO0182
Serial Number:	SAL12408000028	Date:	2022-10-19
Customer:	Abbott Laboratories	Temperature:	20.6°C
Attendees:	Frank Sun	Relative Humidity:	27.6%
Customer Project:	None	Bar. Pressure (PMSL):	1028 mb
Tested By:	Jarrod Brenden	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0182-4

TEST SPECIFICATIONS

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

TEST PARAMETERS

Run #:	16	Line:	Neutral	Add. Ext. Attenuation (dB):	0
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COMMENTS

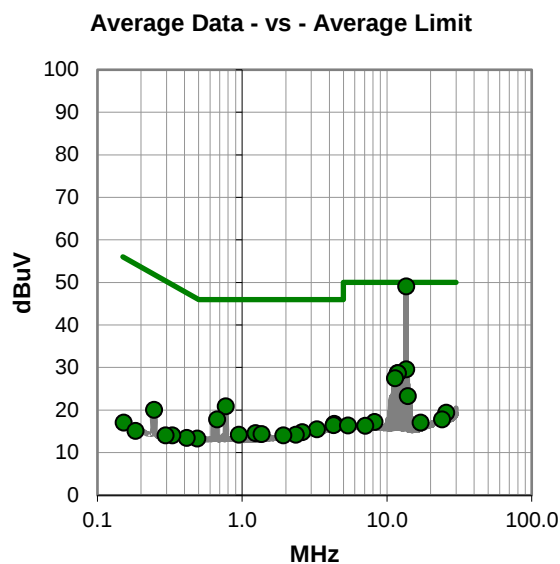
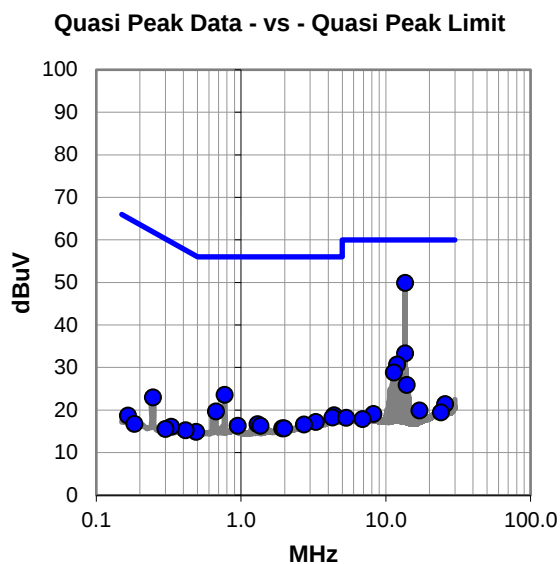
CrossSwitch. PCB contains 2 RFID radios. Radio 1 ON.

EUT OPERATING MODES

Transmitting 13.56 MHz RFID

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #16

Quasi Peak Data - vs - Quasi Peak Limit

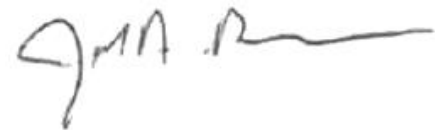
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	29.4	20.5	49.9	60.0	-10.1
13.610	12.8	20.5	33.3	60.0	-26.7
11.940	10.2	20.5	30.7	60.0	-29.3
11.384	8.3	20.5	28.8	60.0	-31.2
0.770	3.4	20.2	23.6	56.0	-32.4
13.930	5.4	20.5	25.9	60.0	-34.1
0.670	-0.5	20.2	19.7	56.0	-36.3
4.390	-1.4	20.2	18.8	56.0	-37.2
4.270	-1.9	20.2	18.3	56.0	-37.7
25.600	0.0	21.4	21.4	60.0	-38.6
3.280	-3.0	20.2	17.2	56.0	-38.8
0.247	2.4	20.6	23.0	61.9	-38.9
1.300	-3.3	20.0	16.7	56.0	-39.3
2.720	-3.6	20.2	16.6	56.0	-39.4
0.950	-3.8	20.1	16.3	56.0	-39.7
1.360	-3.7	20.0	16.3	56.0	-39.7
17.072	-0.9	20.8	19.9	60.0	-40.1
1.920	-4.5	20.2	15.7	56.0	-40.3
1.980	-4.5	20.2	15.7	56.0	-40.3
23.998	-1.9	21.4	19.5	60.0	-40.5
8.212	-1.2	20.3	19.1	60.0	-40.9
0.490	-5.3	20.2	14.9	56.2	-41.3
5.330	-1.9	20.1	18.2	60.0	-41.8
6.900	-2.2	20.1	17.9	60.0	-42.1
0.413	-5.0	20.3	15.3	57.6	-42.3

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	28.6	20.5	49.1	50.0	-0.9
13.610	9.1	20.5	29.6	50.0	-20.4
11.821	8.2	20.5	28.7	50.0	-21.3
11.880	8.2	20.5	28.7	50.0	-21.3
11.389	7.0	20.5	27.5	50.0	-22.5
0.770	0.7	20.2	20.9	46.0	-25.1
13.930	2.8	20.5	23.3	50.0	-26.7
0.670	-2.4	20.2	17.8	46.0	-28.2
4.333	-3.4	20.2	16.8	46.0	-29.2
4.270	-3.7	20.2	16.5	46.0	-29.5
3.280	-4.7	20.2	15.5	46.0	-30.5
25.600	-2.0	21.4	19.4	50.0	-30.6
2.600	-5.4	20.2	14.8	46.0	-31.2
1.237	-5.4	20.0	14.6	46.0	-31.4
1.360	-5.6	20.0	14.4	46.0	-31.6
0.247	-0.5	20.6	20.1	51.9	-31.8
0.950	-5.9	20.1	14.2	46.0	-31.8
2.353	-6.0	20.2	14.2	46.0	-31.8
1.920	-6.1	20.2	14.1	46.0	-31.9
23.984	-3.6	21.4	17.8	50.0	-32.2
8.212	-3.1	20.3	17.2	50.0	-32.8
17.072	-3.7	20.8	17.1	50.0	-32.9
0.490	-6.9	20.2	13.3	46.2	-32.9
5.372	-3.7	20.1	16.4	50.0	-33.6
7.078	-3.9	20.2	16.3	50.0	-33.7

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12409 SAL Alinity c End Section	Work Order:	ABBO0182
Serial Number:	SAL12408000028	Date:	2022-10-19
Customer:	Abbott Laboratories	Temperature:	20.6°C
Attendees:	Frank Sun	Relative Humidity:	27.6%
Customer Project:	None	Bar. Pressure (PMSL):	1028 mb
Tested By:	Jarrod Brenden	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0182-4

TEST SPECIFICATIONS

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

TEST PARAMETERS

Run #:	17	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

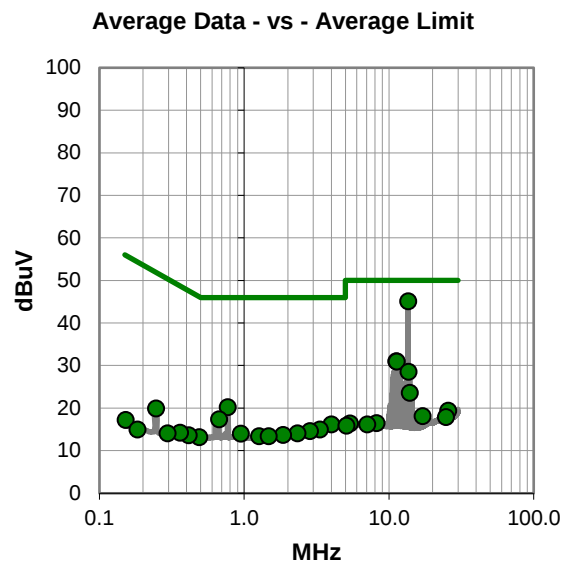
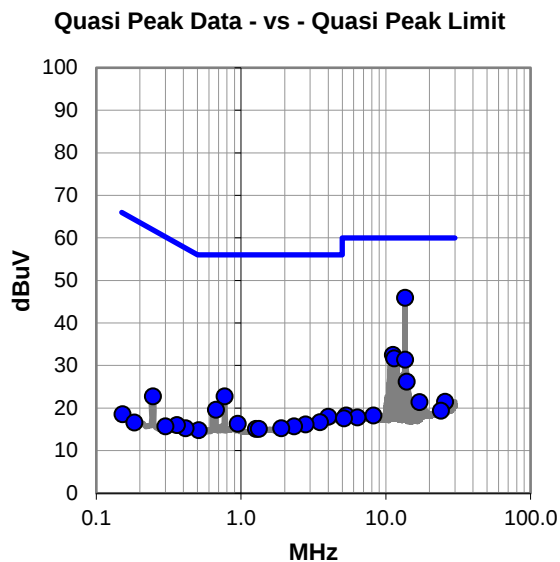
CrossSwitch. PCB contains 2 RFID radios. Radio 2 ON.

EUT OPERATING MODES

Transmitting 13.56 MHz RFID

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #17

Quasi Peak Data - vs - Quasi Peak Limit

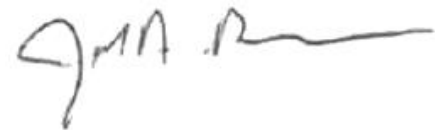
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	25.4	20.5	45.9	60.0	-14.1
11.204	12.0	20.5	32.5	60.0	-27.5
11.450	11.2	20.5	31.7	60.0	-28.3
13.610	10.9	20.5	31.4	60.0	-28.6
0.770	2.6	20.2	22.8	56.0	-33.2
13.930	5.7	20.5	26.2	60.0	-33.8
0.670	-0.6	20.2	19.6	56.0	-36.4
4.000	-2.2	20.2	18.0	56.0	-38.0
25.600	0.1	21.4	21.5	60.0	-38.5
17.072	0.6	20.8	21.4	60.0	-38.6
0.247	2.2	20.6	22.8	61.9	-39.1
3.505	-3.5	20.2	16.7	56.0	-39.3
0.950	-3.8	20.1	16.3	56.0	-39.7
2.789	-4.0	20.2	16.2	56.0	-39.8
2.320	-4.5	20.2	15.7	56.0	-40.3
23.970	-2.0	21.4	19.4	60.0	-40.6
1.900	-4.9	20.2	15.3	56.0	-40.7
1.270	-4.9	20.0	15.1	56.0	-40.9
1.330	-4.9	20.0	15.1	56.0	-40.9
0.510	-5.4	20.2	14.8	56.0	-41.2
5.327	-1.8	20.1	18.3	60.0	-41.7
8.212	-2.0	20.3	18.3	60.0	-41.7
6.360	-2.3	20.1	17.8	60.0	-42.2
0.413	-5.0	20.3	15.3	57.6	-42.3
5.140	-2.5	20.1	17.6	60.0	-42.4

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	24.6	20.5	45.1	50.0	-4.9
11.270	10.5	20.5	31.0	50.0	-19.0
11.326	10.4	20.5	30.9	50.0	-19.1
13.616	8.0	20.5	28.5	50.0	-21.5
0.770	0.0	20.2	20.2	46.0	-25.8
13.930	3.1	20.5	23.6	50.0	-26.4
0.670	-2.8	20.2	17.4	46.0	-28.6
4.000	-4.0	20.2	16.2	46.0	-29.8
25.600	-2.0	21.4	19.4	50.0	-30.6
3.330	-5.2	20.2	15.0	46.0	-31.0
2.848	-5.6	20.2	14.6	46.0	-31.4
2.330	-6.1	20.2	14.1	46.0	-31.9
17.072	-2.7	20.8	18.1	50.0	-31.9
0.247	-0.7	20.6	19.9	51.9	-32.0
0.950	-6.1	20.1	14.0	46.0	-32.0
24.740	-3.5	21.4	17.9	50.0	-32.1
1.860	-6.5	20.2	13.7	46.0	-32.3
1.268	-6.6	20.0	13.4	46.0	-32.6
1.480	-6.7	20.1	13.4	46.0	-32.6
0.490	-7.0	20.2	13.2	46.2	-33.0
8.212	-3.8	20.3	16.5	50.0	-33.5
5.370	-3.7	20.1	16.4	50.0	-33.6
7.070	-4.0	20.2	16.2	50.0	-33.8
0.413	-6.7	20.3	13.6	47.6	-34.0
5.089	-4.2	20.1	15.9	50.0	-34.1

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12409 SAL Alinity c End Section	Work Order:	ABBO0182
Serial Number:	SAL12408000028	Date:	2022-10-19
Customer:	Abbott Laboratories	Temperature:	20.6°C
Attendees:	Frank Sun	Relative Humidity:	27.6%
Customer Project:	None	Bar. Pressure (PMSL):	1028 mb
Tested By:	Jarrod Brenden	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0182-4

TEST SPECIFICATIONS

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

TEST PARAMETERS

Run #:	18	Line:	Neutral	Add. Ext. Attenuation (dB):	0
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COMMENTS

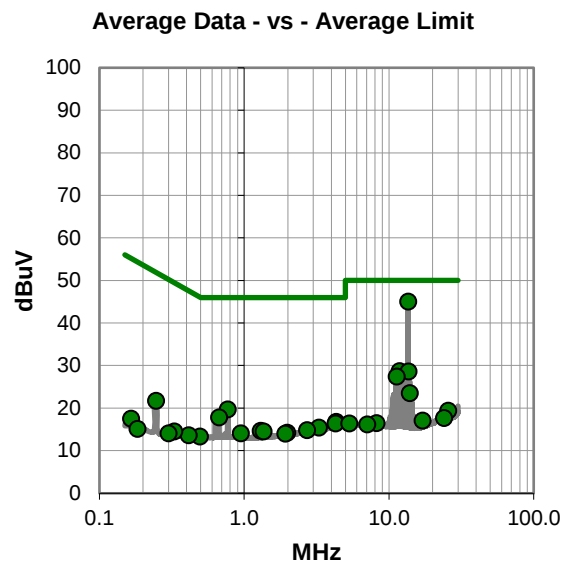
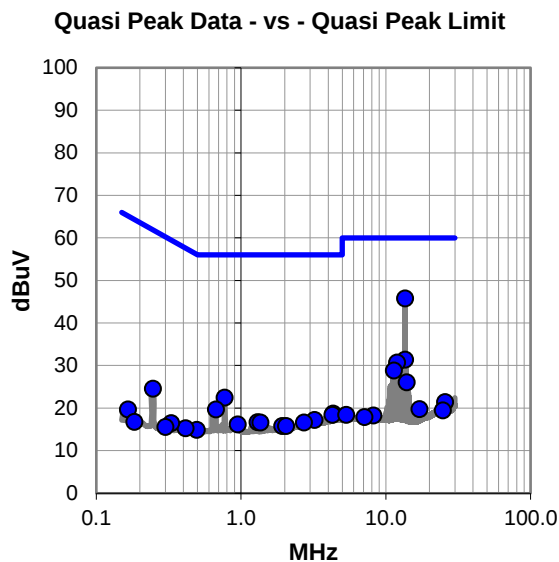
CrossSwitch. PCB contains 2 RFID radios. Radio 2 ON.

EUT OPERATING MODES

Transmitting 13.56 MHz RFID

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #18

Quasi Peak Data - vs - Quasi Peak Limit

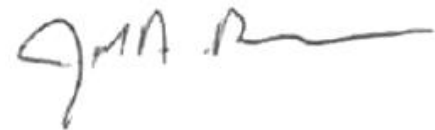
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	25.3	20.5	45.8	60.0	-14.2
13.610	10.9	20.5	31.4	60.0	-28.6
11.940	10.2	20.5	30.7	60.0	-29.3
11.390	8.3	20.5	28.8	60.0	-31.2
0.770	2.3	20.2	22.5	56.0	-33.5
13.930	5.6	20.5	26.1	60.0	-33.9
0.670	-0.5	20.2	19.7	56.0	-36.3
0.247	4.0	20.6	24.6	61.9	-37.3
4.333	-1.5	20.2	18.7	56.0	-37.3
4.270	-1.8	20.2	18.4	56.0	-37.6
25.600	0.0	21.4	21.4	60.0	-38.6
3.220	-3.0	20.2	17.2	56.0	-38.8
1.300	-3.3	20.0	16.7	56.0	-39.3
1.363	-3.4	20.0	16.6	56.0	-39.4
2.722	-3.6	20.2	16.6	56.0	-39.4
0.950	-3.9	20.1	16.2	56.0	-39.8
1.920	-4.4	20.2	15.8	56.0	-40.2
2.042	-4.4	20.2	15.8	56.0	-40.2
17.072	-1.0	20.8	19.8	60.0	-40.2
24.740	-1.9	21.4	19.5	60.0	-40.5
0.494	-5.3	20.2	14.9	56.1	-41.2
5.330	-1.7	20.1	18.4	60.0	-41.6
8.212	-2.0	20.3	18.3	60.0	-41.7
7.130	-2.3	20.2	17.9	60.0	-42.1
0.413	-5.0	20.3	15.3	57.6	-42.3

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	24.5	20.5	45.0	50.0	-5.0
11.820	8.2	20.5	28.7	50.0	-21.3
13.616	8.1	20.5	28.6	50.0	-21.4
11.326	6.9	20.5	27.4	50.0	-22.6
0.770	-0.5	20.2	19.7	46.0	-26.3
13.930	3.0	20.5	23.5	50.0	-26.5
0.670	-2.4	20.2	17.8	46.0	-28.2
4.333	-3.4	20.2	16.8	46.0	-29.2
4.270	-3.8	20.2	16.4	46.0	-29.6
0.247	1.1	20.6	21.7	51.9	-30.2
3.280	-4.8	20.2	15.4	46.0	-30.6
25.600	-2.0	21.4	19.4	50.0	-30.6
2.720	-5.4	20.2	14.8	46.0	-31.2
1.300	-5.3	20.0	14.7	46.0	-31.3
1.360	-5.5	20.0	14.5	46.0	-31.5
1.980	-6.0	20.2	14.2	46.0	-31.8
0.950	-6.0	20.1	14.1	46.0	-31.9
1.920	-6.2	20.2	14.0	46.0	-32.0
23.971	-3.7	21.4	17.7	50.0	-32.3
0.494	-6.9	20.2	13.3	46.1	-32.8
17.072	-3.7	20.8	17.1	50.0	-32.9
8.212	-3.8	20.3	16.5	50.0	-33.5
5.330	-3.7	20.1	16.4	50.0	-33.6
7.064	-4.0	20.2	16.2	50.0	-33.8
0.413	-6.7	20.3	13.6	47.6	-34.0

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12409 SAL Alinity c End Section	Work Order:	ABBO0182
Serial Number:	SAL12408000028	Date:	2022-10-19
Customer:	Abbott Laboratories	Temperature:	20.6°C
Attendees:	Frank Sun	Relative Humidity:	27.6%
Customer Project:	None	Bar. Pressure (PMSL):	1028 mb
Tested By:	Jarrod Brenden	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0182-4

TEST SPECIFICATIONS

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

TEST PARAMETERS

Run #:	19	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

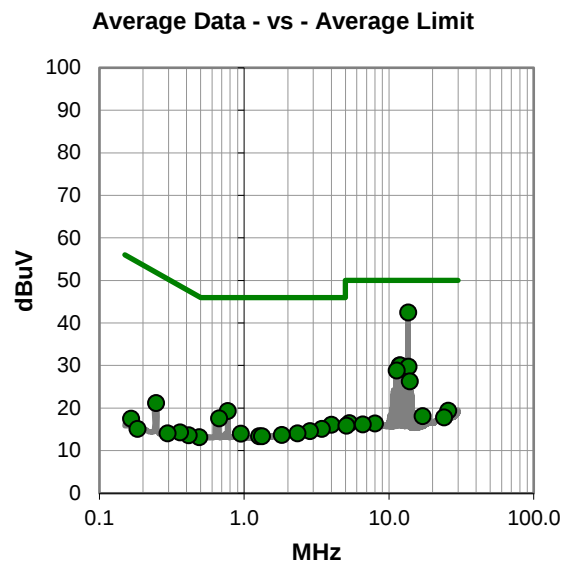
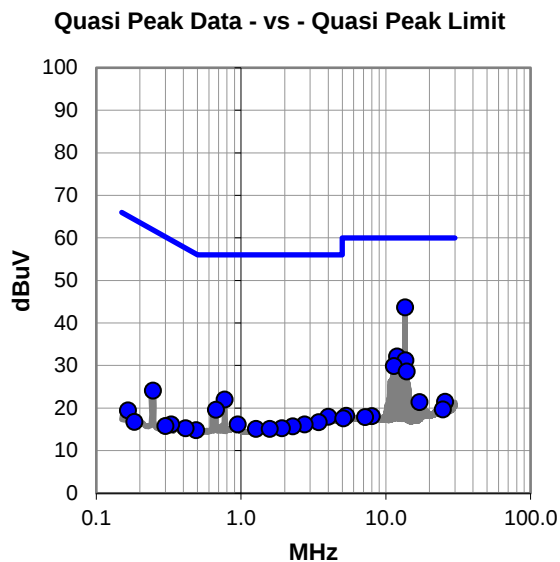
ConvergentSwitch. PCB contains 2 RFID radios. Radio 1 ON.

EUT OPERATING MODES

Transmitting 13.56 MHz RFID

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #19

Quasi Peak Data - vs - Quasi Peak Limit

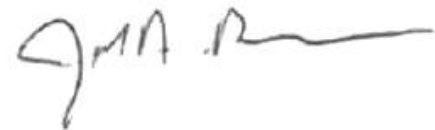
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	23.2	20.5	43.7	60.0	-16.3
11.947	11.6	20.5	32.1	60.0	-27.9
13.616	10.7	20.5	31.2	60.0	-28.8
11.389	9.4	20.5	29.9	60.0	-30.1
13.930	8.1	20.5	28.6	60.0	-31.4
0.770	1.8	20.2	22.0	56.0	-34.0
0.670	-0.6	20.2	19.6	56.0	-36.4
0.247	3.5	20.6	24.1	61.9	-37.8
4.000	-2.2	20.2	18.0	56.0	-38.0
25.600	0.1	21.4	21.5	60.0	-38.5
17.072	0.6	20.8	21.4	60.0	-38.6
3.433	-3.5	20.2	16.7	56.0	-39.3
0.950	-3.9	20.1	16.2	56.0	-39.8
2.753	-4.0	20.2	16.2	56.0	-39.8
2.272	-4.5	20.2	15.7	56.0	-40.3
24.740	-1.7	21.4	19.7	60.0	-40.3
1.912	-4.9	20.2	15.3	56.0	-40.7
1.268	-4.9	20.0	15.1	56.0	-40.9
1.580	-5.0	20.1	15.1	56.0	-40.9
0.490	-5.4	20.2	14.8	56.2	-41.4
5.330	-1.9	20.1	18.2	60.0	-41.8
8.000	-2.2	20.3	18.1	60.0	-41.9
7.204	-2.3	20.2	17.9	60.0	-42.1
0.413	-5.0	20.3	15.3	57.6	-42.3
5.093	-2.5	20.1	17.6	60.0	-42.4

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	22.0	20.5	42.5	50.0	-7.5
11.820	9.5	20.5	30.0	50.0	-20.0
11.947	9.5	20.5	30.0	50.0	-20.0
13.679	9.2	20.5	29.7	50.0	-20.3
11.330	8.3	20.5	28.8	50.0	-21.2
13.930	5.8	20.5	26.3	50.0	-23.7
0.770	-0.9	20.2	19.3	46.0	-26.7
0.670	-2.6	20.2	17.6	46.0	-28.4
4.000	-4.1	20.2	16.1	46.0	-29.9
25.600	-2.0	21.4	19.4	50.0	-30.6
0.247	0.6	20.6	21.2	51.9	-30.7
3.433	-5.1	20.2	15.1	46.0	-30.9
2.850	-5.6	20.2	14.6	46.0	-31.4
2.330	-6.1	20.2	14.1	46.0	-31.9
17.072	-2.7	20.8	18.1	50.0	-31.9
0.950	-6.1	20.1	14.0	46.0	-32.0
24.000	-3.6	21.4	17.8	50.0	-32.2
1.820	-6.5	20.2	13.7	46.0	-32.3
1.268	-6.6	20.0	13.4	46.0	-32.6
1.330	-6.6	20.0	13.4	46.0	-32.6
0.490	-7.0	20.2	13.2	46.2	-33.0
5.330	-3.6	20.1	16.5	50.0	-33.5
8.000	-3.9	20.3	16.4	50.0	-33.6
6.590	-3.9	20.1	16.2	50.0	-33.8
0.413	-6.7	20.3	13.6	47.6	-34.0

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12409 SAL Alinity c End Section	Work Order:	ABBO0182
Serial Number:	SAL12408000028	Date:	2022-10-19
Customer:	Abbott Laboratories	Temperature:	20.6°C
Attendees:	Frank Sun	Relative Humidity:	27.6%
Customer Project:	None	Bar. Pressure (PMSL):	1028 mb
Tested By:	Jarrod Brenden	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0182-4

TEST SPECIFICATIONS

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

TEST PARAMETERS

Run #:	20	Line:	Neutral	Add. Ext. Attenuation (dB):	0
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COMMENTS

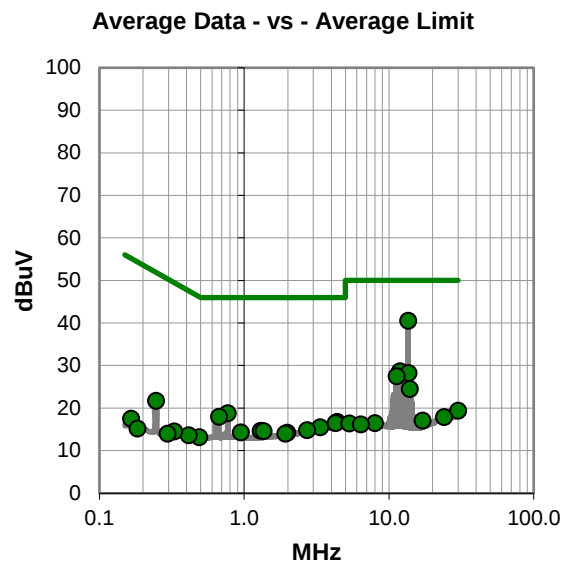
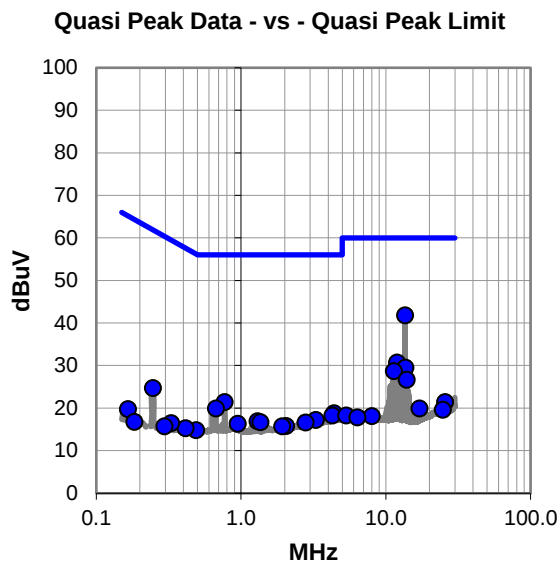
ConvergentSwitch. PCB contains 2 RFID radios. Radio 1 ON.

EUT OPERATING MODES

Transmitting 13.56 MHz RFID

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #20

Quasi Peak Data - vs - Quasi Peak Limit

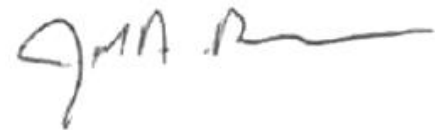
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	21.3	20.5	41.8	60.0	-18.2
11.947	10.2	20.5	30.7	60.0	-29.3
13.620	9.0	20.5	29.5	60.0	-30.5
11.390	8.2	20.5	28.7	60.0	-31.3
13.930	6.2	20.5	26.7	60.0	-33.3
0.770	1.2	20.2	21.4	56.0	-34.6
0.670	-0.3	20.2	19.9	56.0	-36.1
0.247	4.1	20.6	24.7	61.9	-37.2
4.396	-1.4	20.2	18.8	56.0	-37.2
4.270	-1.9	20.2	18.3	56.0	-37.7
25.600	0.0	21.4	21.4	60.0	-38.6
3.280	-3.0	20.2	17.2	56.0	-38.8
1.300	-3.1	20.0	16.9	56.0	-39.1
1.363	-3.3	20.0	16.7	56.0	-39.3
2.785	-3.6	20.2	16.6	56.0	-39.4
0.950	-3.8	20.1	16.3	56.0	-39.7
17.072	-0.9	20.8	19.9	60.0	-40.1
2.042	-4.4	20.2	15.8	56.0	-40.2
1.920	-4.5	20.2	15.7	56.0	-40.3
24.736	-1.8	21.4	19.6	60.0	-40.4
0.490	-5.4	20.2	14.8	56.2	-41.4
5.330	-1.8	20.1	18.3	60.0	-41.7
8.000	-2.2	20.3	18.1	60.0	-41.9
6.376	-2.3	20.1	17.8	60.0	-42.2
0.413	-5.0	20.3	15.3	57.6	-42.3

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	20.0	20.5	40.5	50.0	-9.5
11.890	8.1	20.5	28.6	50.0	-21.4
11.947	8.1	20.5	28.6	50.0	-21.4
13.680	7.7	20.5	28.2	50.0	-21.8
11.330	7.0	20.5	27.5	50.0	-22.5
13.930	4.0	20.5	24.5	50.0	-25.5
0.770	-1.4	20.2	18.8	46.0	-27.2
0.670	-2.2	20.2	18.0	46.0	-28.0
4.396	-3.4	20.2	16.8	46.0	-29.2
4.270	-3.7	20.2	16.5	46.0	-29.5
0.247	1.1	20.6	21.7	51.9	-30.2
3.343	-4.7	20.2	15.5	46.0	-30.5
29.996	-2.4	21.8	19.4	50.0	-30.6
2.720	-5.4	20.2	14.8	46.0	-31.2
1.300	-5.3	20.0	14.7	46.0	-31.3
1.363	-5.4	20.0	14.6	46.0	-31.4
0.950	-5.8	20.1	14.3	46.0	-31.7
1.980	-6.0	20.2	14.2	46.0	-31.8
1.920	-6.2	20.2	14.0	46.0	-32.0
24.000	-3.5	21.4	17.9	50.0	-32.1
17.072	-3.7	20.8	17.1	50.0	-32.9
0.490	-7.0	20.2	13.2	46.2	-33.0
8.000	-3.8	20.3	16.5	50.0	-33.5
5.330	-3.7	20.1	16.4	50.0	-33.6
6.380	-3.9	20.1	16.2	50.0	-33.8

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12409 SAL Alinity c End Section	Work Order:	ABBO0182
Serial Number:	SAL12408000028	Date:	2022-10-19
Customer:	Abbott Laboratories	Temperature:	20.6°C
Attendees:	Frank Sun	Relative Humidity:	27.6%
Customer Project:	None	Bar. Pressure (PMSL):	1028 mb
Tested By:	Jarrod Brenden	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0182-4

TEST SPECIFICATIONS

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

TEST PARAMETERS

Run #:	21	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

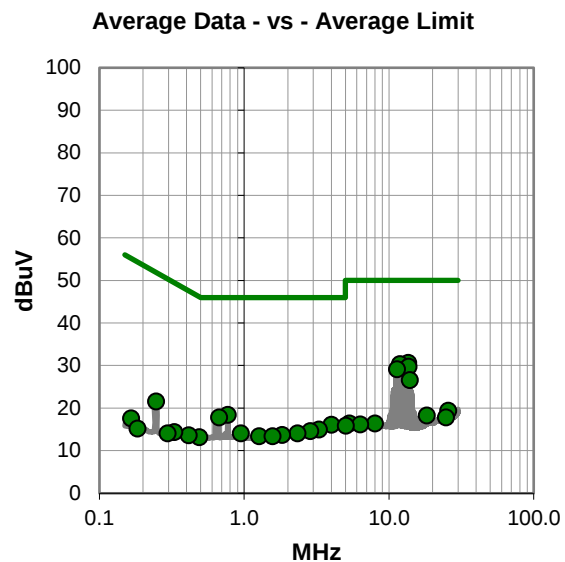
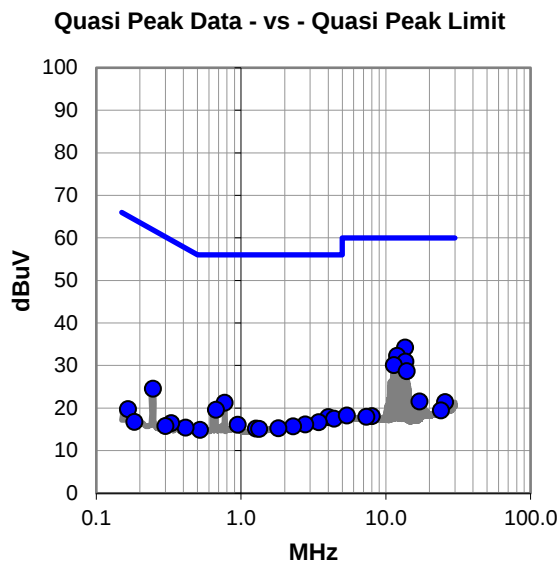
ConvergentSwitch. PCB contains 2 RFID radios. Radio 2 ON.

EUT OPERATING MODES

Transmitting 13.56 MHz RFID

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #21

Quasi Peak Data - vs - Quasi Peak Limit

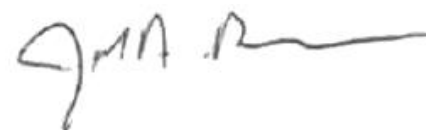
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	13.7	20.5	34.2	60.0	-25.8
11.947	11.8	20.5	32.3	60.0	-27.7
13.680	10.4	20.5	30.9	60.0	-29.1
11.390	9.6	20.5	30.1	60.0	-29.9
13.930	8.2	20.5	28.7	60.0	-31.3
0.770	1.1	20.2	21.3	56.0	-34.7
0.670	-0.6	20.2	19.6	56.0	-36.4
0.247	4.0	20.6	24.6	61.9	-37.3
4.000	-2.3	20.2	17.9	56.0	-38.1
17.072	0.8	20.8	21.6	60.0	-38.4
4.390	-2.7	20.2	17.5	56.0	-38.5
25.600	0.0	21.4	21.4	60.0	-38.6
3.440	-3.5	20.2	16.7	56.0	-39.3
2.780	-4.0	20.2	16.2	56.0	-39.8
0.950	-4.0	20.1	16.1	56.0	-39.9
2.290	-4.5	20.2	15.7	56.0	-40.3
23.998	-1.9	21.4	19.5	60.0	-40.5
1.813	-4.9	20.2	15.3	56.0	-40.7
1.270	-4.8	20.0	15.2	56.0	-40.8
1.336	-4.9	20.0	15.1	56.0	-40.9
0.521	-5.3	20.2	14.9	56.0	-41.1
5.372	-1.8	20.1	18.3	60.0	-41.7
8.000	-2.2	20.3	18.1	60.0	-41.9
7.325	-2.2	20.2	18.0	60.0	-42.0
0.413	-4.9	20.3	15.4	57.6	-42.2

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	10.1	20.5	30.6	50.0	-19.4
11.890	9.8	20.5	30.3	50.0	-19.7
13.680	9.2	20.5	29.7	50.0	-20.3
11.390	8.6	20.5	29.1	50.0	-20.9
13.930	6.1	20.5	26.6	50.0	-23.4
0.770	-1.8	20.2	18.4	46.0	-27.6
0.670	-2.4	20.2	17.8	46.0	-28.2
4.000	-4.1	20.2	16.1	46.0	-29.9
0.247	1.0	20.6	21.6	51.9	-30.3
25.600	-2.0	21.4	19.4	50.0	-30.6
3.280	-5.2	20.2	15.0	46.0	-31.0
2.860	-5.6	20.2	14.6	46.0	-31.4
18.242	-2.6	20.9	18.3	50.0	-31.7
0.950	-6.0	20.1	14.1	46.0	-31.9
2.330	-6.1	20.2	14.1	46.0	-31.9
24.740	-3.6	21.4	17.8	50.0	-32.2
1.831	-6.5	20.2	13.7	46.0	-32.3
1.268	-6.6	20.0	13.4	46.0	-32.6
1.570	-6.7	20.1	13.4	46.0	-32.6
0.490	-7.0	20.2	13.2	46.2	-33.0
5.330	-3.7	20.1	16.4	50.0	-33.6
8.000	-3.9	20.3	16.4	50.0	-33.6
6.335	-3.9	20.1	16.2	50.0	-33.8
0.413	-6.7	20.3	13.6	47.6	-34.0
5.030	-4.2	20.1	15.9	50.0	-34.1

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12409 SAL Alinity c End Section	Work Order:	ABBO0182
Serial Number:	SAL12408000028	Date:	2022-10-19
Customer:	Abbott Laboratories	Temperature:	20.6°C
Attendees:	Frank Sun	Relative Humidity:	27.6%
Customer Project:	None	Bar. Pressure (PMSL):	1028 mb
Tested By:	Jarrod Brenden	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0182-4

TEST SPECIFICATIONS

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

TEST PARAMETERS

Run #:	22	Line:	Neutral	Add. Ext. Attenuation (dB):	0
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COMMENTS

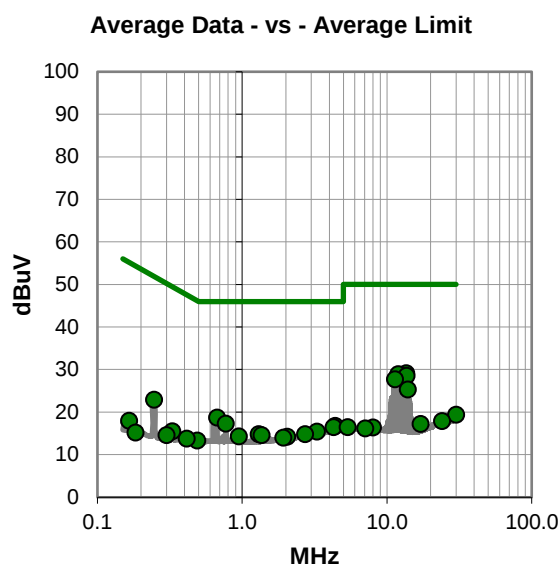
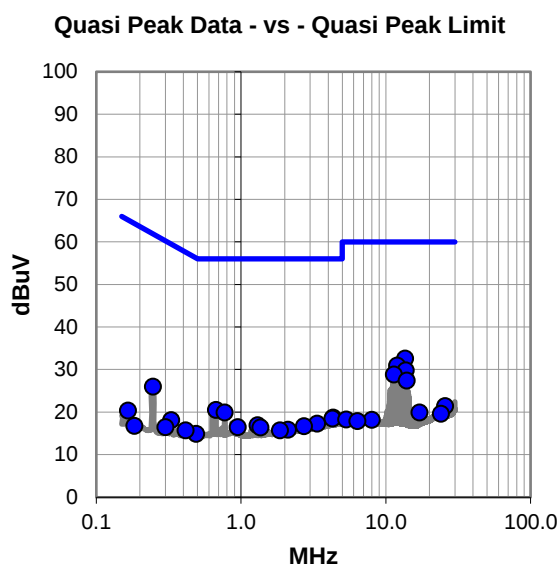
ConvergentSwitch. PCB contains 2 RFID radios. Radio 2 ON.

EUT OPERATING MODES

Transmitting 13.56 MHz RFID

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #22

Quasi Peak Data - vs - Quasi Peak Limit

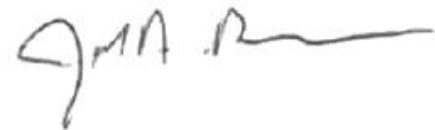
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	12.1	20.5	32.6	60.0	-27.4
11.947	10.4	20.5	30.9	60.0	-29.1
13.742	9.3	20.5	29.8	60.0	-30.2
11.390	8.3	20.5	28.8	60.0	-31.2
13.930	6.9	20.5	27.4	60.0	-32.6
0.670	0.3	20.2	20.5	56.0	-35.5
0.247	5.4	20.6	26.0	61.9	-35.9
0.770	-0.3	20.2	19.9	56.0	-36.1
4.333	-1.5	20.2	18.7	56.0	-37.3
4.270	-1.7	20.2	18.5	56.0	-37.5
25.600	0.0	21.4	21.4	60.0	-38.6
3.343	-2.9	20.2	17.3	56.0	-38.7
1.300	-3.1	20.0	16.9	56.0	-39.1
2.720	-3.5	20.2	16.7	56.0	-39.3
0.950	-3.6	20.1	16.5	56.0	-39.5
1.360	-3.6	20.0	16.4	56.0	-39.6
2.105	-4.3	20.2	15.9	56.0	-40.1
17.072	-0.9	20.8	19.9	60.0	-40.1
1.858	-4.5	20.2	15.7	56.0	-40.3
23.998	-1.8	21.4	19.6	60.0	-40.4
0.490	-5.3	20.2	14.9	56.2	-41.3
0.330	-2.2	20.3	18.1	59.5	-41.4
5.330	-1.8	20.1	18.3	60.0	-41.7
8.000	-2.1	20.3	18.2	60.0	-41.8
0.413	-4.6	20.3	15.7	57.6	-41.9

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	8.6	20.5	29.1	50.0	-20.9
11.947	8.4	20.5	28.9	50.0	-21.1
13.680	8.0	20.5	28.5	50.0	-21.5
11.390	7.2	20.5	27.7	50.0	-22.3
13.930	4.8	20.5	25.3	50.0	-24.7
0.670	-1.5	20.2	18.7	46.0	-27.3
0.770	-2.9	20.2	17.3	46.0	-28.7
0.247	2.3	20.6	22.9	51.9	-29.0
4.396	-3.4	20.2	16.8	46.0	-29.2
4.270	-3.7	20.2	16.5	46.0	-29.5
3.280	-4.8	20.2	15.4	46.0	-30.6
29.996	-2.4	21.8	19.4	50.0	-30.6
1.300	-5.2	20.0	14.8	46.0	-31.2
2.722	-5.4	20.2	14.8	46.0	-31.2
1.363	-5.4	20.0	14.6	46.0	-31.4
0.950	-5.8	20.1	14.3	46.0	-31.7
2.042	-6.0	20.2	14.2	46.0	-31.8
1.920	-6.2	20.2	14.0	46.0	-32.0
24.000	-3.5	21.4	17.9	50.0	-32.1
17.072	-3.6	20.8	17.2	50.0	-32.8
0.490	-6.9	20.2	13.3	46.2	-32.9
5.350	-3.6	20.1	16.5	50.0	-33.5
8.000	-3.9	20.3	16.4	50.0	-33.6
0.413	-6.5	20.3	13.8	47.6	-33.8
7.064	-4.0	20.2	16.2	50.0	-33.8

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12409 SAL Alinity c End Section	Work Order:	ABBO0182
Serial Number:	SAL12408000028	Date:	2022-10-19
Customer:	Abbott Laboratories	Temperature:	20.6°C
Attendees:	Frank Sun	Relative Humidity:	27.6%
Customer Project:	None	Bar. Pressure (PMSL):	1028 mb
Tested By:	Jarrod Brenden	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0182-4

TEST SPECIFICATIONS

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

TEST PARAMETERS

Run #:	23	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

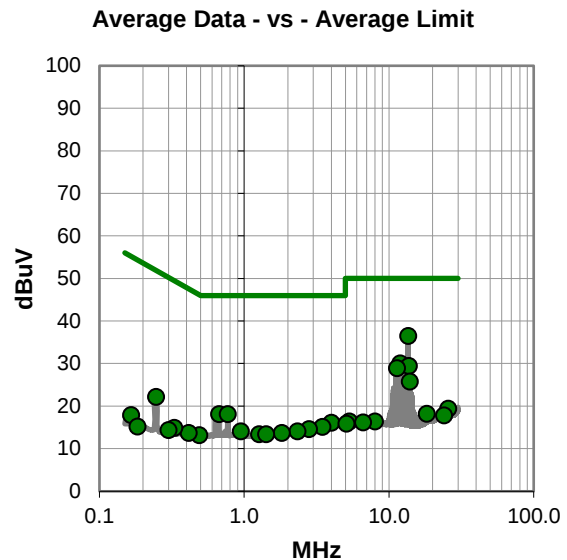
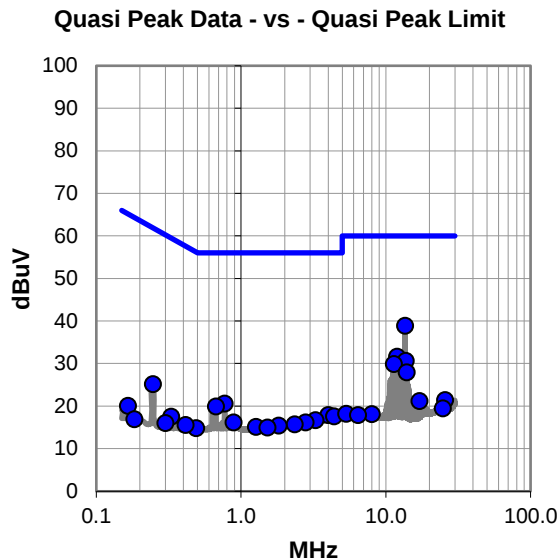
DivergentSwitch. PCB contains a single RFID radio. Radio ON.

EUT OPERATING MODES

Transmitting 13.56 MHz RFID

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #23

Quasi Peak Data - vs - Quasi Peak Limit

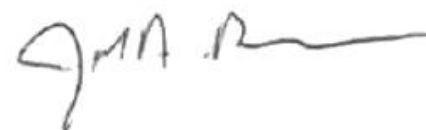
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	18.4	20.5	38.9	60.0	-21.1
11.950	11.1	20.5	31.6	60.0	-28.4
13.684	10.1	20.5	30.6	60.0	-29.4
11.393	9.4	20.5	29.9	60.0	-30.1
13.931	7.4	20.5	27.9	60.0	-32.1
0.770	0.4	20.2	20.6	56.0	-35.4
0.670	-0.3	20.2	19.9	56.0	-36.1
0.247	4.6	20.6	25.2	61.9	-36.7
4.000	-2.3	20.2	17.9	56.0	-38.1
4.396	-2.6	20.2	17.6	56.0	-38.4
25.600	0.0	21.4	21.4	60.0	-38.6
17.072	0.4	20.8	21.2	60.0	-38.8
3.270	-3.5	20.2	16.7	56.0	-39.3
0.890	-3.9	20.1	16.2	56.0	-39.8
2.789	-4.0	20.2	16.2	56.0	-39.8
2.350	-4.5	20.2	15.7	56.0	-40.3
24.736	-1.9	21.4	19.5	60.0	-40.5
1.820	-4.8	20.2	15.4	56.0	-40.6
1.268	-4.9	20.0	15.1	56.0	-40.9
1.520	-5.1	20.1	15.0	56.0	-41.0
0.490	-5.4	20.2	14.8	56.2	-41.4
5.327	-1.9	20.1	18.2	60.0	-41.8
8.000	-2.2	20.3	18.1	60.0	-41.9
0.330	-2.8	20.3	17.5	59.5	-42.0
0.413	-4.7	20.3	15.6	57.6	-42.0

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	16.0	20.5	36.5	50.0	-13.5
11.950	9.5	20.5	30.0	50.0	-20.0
13.684	8.9	20.5	29.4	50.0	-20.6
11.390	8.4	20.5	28.9	50.0	-21.1
13.931	5.3	20.5	25.8	50.0	-24.2
0.670	-2.1	20.2	18.1	46.0	-27.9
0.770	-2.1	20.2	18.1	46.0	-27.9
0.247	1.6	20.6	22.2	51.9	-29.7
4.000	-4.1	20.2	16.1	46.0	-29.9
25.600	-2.0	21.4	19.4	50.0	-30.6
3.478	-5.1	20.2	15.1	46.0	-30.9
2.803	-5.6	20.2	14.6	46.0	-31.4
18.242	-2.7	20.9	18.2	50.0	-31.8
0.950	-6.0	20.1	14.1	46.0	-31.9
2.330	-6.1	20.2	14.1	46.0	-31.9
23.998	-3.6	21.4	17.8	50.0	-32.2
1.820	-6.5	20.2	13.7	46.0	-32.3
1.268	-6.6	20.0	13.4	46.0	-32.6
1.420	-6.7	20.1	13.4	46.0	-32.6
0.490	-7.0	20.2	13.2	46.2	-33.0
5.330	-3.7	20.1	16.4	50.0	-33.6
8.000	-3.9	20.3	16.4	50.0	-33.6
6.632	-3.9	20.1	16.2	50.0	-33.8
0.413	-6.6	20.3	13.7	47.6	-33.9
5.093	-4.2	20.1	15.9	50.0	-34.1

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	GLP12409 SAL Alinity c End Section	Work Order:	ABBO0182
Serial Number:	SAL12408000028	Date:	2022-10-19
Customer:	Abbott Laboratories	Temperature:	20.6°C
Attendees:	Frank Sun	Relative Humidity:	27.6%
Customer Project:	None	Bar. Pressure (PMSL):	1028 mb
Tested By:	Jarrod Brenden	Job Site:	TX01
Power:	220VAC/60Hz	Configuration:	ABBO0182-4

TEST SPECIFICATIONS

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

TEST PARAMETERS

Run #:	24	Line:	Neutral	Add. Ext. Attenuation (dB):	0
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COMMENTS

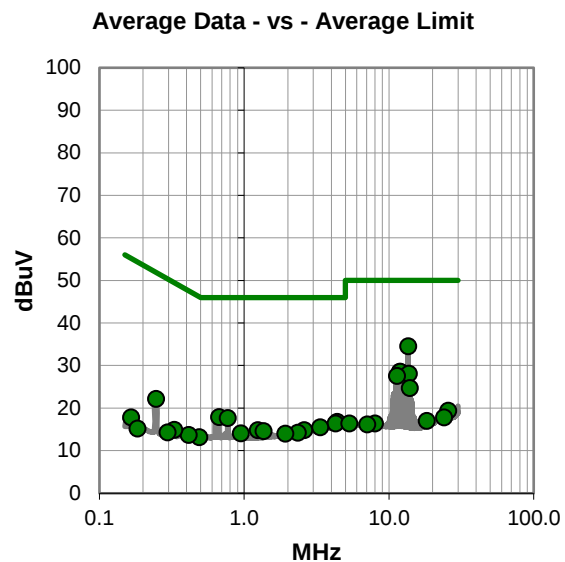
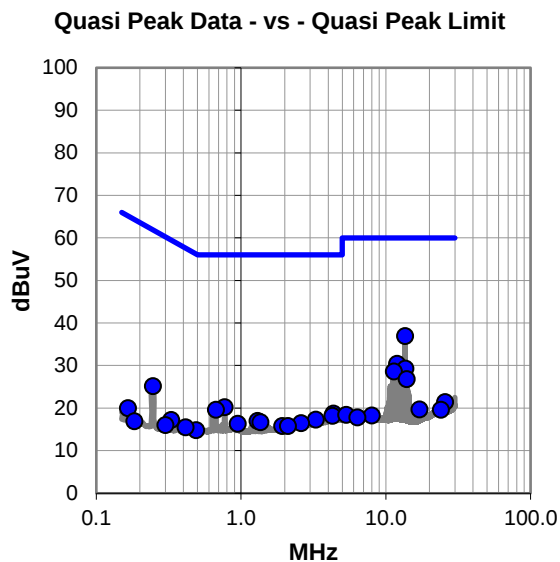
DivergentSwitch. PCB contains a single RFID radio. Radio ON.

EUT OPERATING MODES

Transmitting 13.56 MHz RFID

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #24

Quasi Peak Data - vs - Quasi Peak Limit

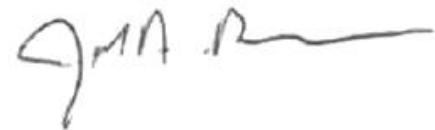
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	16.4	20.5	36.9	60.0	-23.1
11.947	9.9	20.5	30.4	60.0	-29.6
13.621	8.8	20.5	29.3	60.0	-30.7
11.390	8.1	20.5	28.6	60.0	-31.4
13.930	6.3	20.5	26.8	60.0	-33.2
0.770	0.0	20.2	20.2	56.0	-35.8
0.670	-0.6	20.2	19.6	56.0	-36.4
0.247	4.6	20.6	25.2	61.9	-36.7
4.340	-1.5	20.2	18.7	56.0	-37.3
4.270	-2.0	20.2	18.2	56.0	-37.8
25.600	0.0	21.4	21.4	60.0	-38.6
3.280	-2.9	20.2	17.3	56.0	-38.7
1.300	-3.0	20.0	17.0	56.0	-39.0
1.363	-3.3	20.0	16.7	56.0	-39.3
2.600	-3.7	20.2	16.5	56.0	-39.5
0.950	-3.8	20.1	16.3	56.0	-39.7
1.921	-4.4	20.2	15.8	56.0	-40.2
2.105	-4.4	20.2	15.8	56.0	-40.2
17.072	-1.1	20.8	19.7	60.0	-40.3
24.000	-1.8	21.4	19.6	60.0	-40.4
0.490	-5.4	20.2	14.8	56.2	-41.4
5.330	-1.7	20.1	18.4	60.0	-41.6
8.000	-2.0	20.3	18.3	60.0	-41.7
0.413	-4.8	20.3	15.5	57.6	-42.1
6.350	-2.3	20.1	17.8	60.0	-42.2

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
13.560	14.0	20.5	34.5	50.0	-15.5
11.888	8.0	20.5	28.5	50.0	-21.5
11.950	8.0	20.5	28.5	50.0	-21.5
13.684	7.6	20.5	28.1	50.0	-21.9
11.390	7.1	20.5	27.6	50.0	-22.4
13.930	4.2	20.5	24.7	50.0	-25.3
0.670	-2.3	20.2	17.9	46.0	-28.1
0.770	-2.5	20.2	17.7	46.0	-28.3
4.396	-3.4	20.2	16.8	46.0	-29.2
4.270	-3.8	20.2	16.4	46.0	-29.6
0.247	1.6	20.6	22.2	51.9	-29.7
3.343	-4.7	20.2	15.5	46.0	-30.5
25.600	-2.0	21.4	19.4	50.0	-30.6
1.240	-5.2	20.0	14.8	46.0	-31.2
2.600	-5.4	20.2	14.8	46.0	-31.2
1.363	-5.4	20.0	14.6	46.0	-31.4
2.350	-6.0	20.2	14.2	46.0	-31.8
0.950	-6.0	20.1	14.1	46.0	-31.9
1.920	-6.2	20.2	14.0	46.0	-32.0
23.998	-3.6	21.4	17.8	50.0	-32.2
0.490	-7.0	20.2	13.2	46.2	-33.0
18.242	-3.9	20.9	17.0	50.0	-33.0
5.330	-3.7	20.1	16.4	50.0	-33.6
8.000	-3.9	20.3	16.4	50.0	-33.6
7.080	-4.0	20.2	16.2	50.0	-33.8

CONCLUSION

Pass



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