



**FCC 47 CFR PART 15 SUBPART C
INDUSTRY CANADA RSS-210
INDUSTRY CANADA RSS-GEN**

TEST REPORT

FOR

Keypad Access Panel

MODEL NUMBER: MPIKTSMF

REPORT NUMBER: 13073027B

**FCC ID: PV3MPIKTSMF
IC: 12252A-MPIKTSMF**

ISSUE DATE: 2020-07-06

Prepared for
**Honeywell International Inc.
Commercial Fire & Security Div 12 Clintonville Rd.
Northford, CT 06472, U.S.A.**

Prepared by
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Revision History

Rev.	Issue Date	Revisions	Revised By
--	2020-07-06	Initial Issue	--

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Honeywell International Inc.
Commercial Fire & Security Div 12 Clintonville Rd.
Northford, CT 06472, U.S.A

EUT DESCRIPTION: Keypad Access Panel

MODEL: MPIKTSMF

SERIAL NUMBER: non-serialized

DATE TESTED: 2020-03-12 thru 2020-06-17

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 15 SUBPART C	Complies
INDUSTRY CANADA RSS-210 Issue 10	Complies
INDUSTRY CANADA RSS-GEN Issue 5 + A1	Complies

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

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

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

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, FCC CFR 47 Part 2, FCC CFR 47 Part 15 SUBPART C, RSS-GEN Issue 5, and RSS-210 Issue 10.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 333 Pfingsten Road, Northbrook, IL 60062 USA.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \text{Cable} \\ &\text{Loss (dB)} - \text{Preamp Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Final Voltage (dBuV)} &= \text{Measured Voltage (dBuV)} + \text{Cable Loss (dB)} + \text{Limiter Factor} \\ &\text{(dB)} + \text{LISN Insertion Loss.} \\ 36.5 \text{ dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} &= 46.6 \text{ dBuV} \end{aligned}$$

4.3. MEASUREMENT UNCERTAINTY

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

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test	Range	Equipment	Uncertainty k=2
Radiated Emissions	30-200MHz	Bicon 10m Horz	4.27dB
Radiated Emissions	30-200MHz	Bicon 10m Vert	4.28dB
Radiated Emissions	200-1000MHz	LogP 10m Horz	3.33dB
Radiated Emissions	200-1000MHz	LogP 10m Vert	3.39dB
AC Conducted Disturbance	0.15 to 30MHz	LISN	3.65dB
Radiated Emissions	0.009 to 30MHz	H-Filed Loop	2.52dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT, Model MPIKTSMF is a Dual Frequency Access Keypad. This report only covers the 125kHz. See UL Report 13073027A for data on 13.56MHz.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak field strength:

Frequency Range (MHz)	Mode	Peak Field Strength dBuV/m @ 300m	Notes
0.120860	TX	-12.58	No Card
0.119970	TX	-8.77	With Card

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an integral multitrn loop antenna.

5.4. SOFTWARE AND FIRMWARE

AE Equipment – Control Panel
FW version: 7.91
BSP version: 7.1r3

EUT – Keypad
AMS: 0.9.54

5.5. WORST-CASE CONFIGURATION AND MODE

The fundamental of the EUT was measured while the EUT is placed in normal installation orientation.

5.6. MODIFICATIONS

No modifications were made during testing.

5.7. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Control Panel	Honeywell	Eagle Control Panel	non-serilaized	-

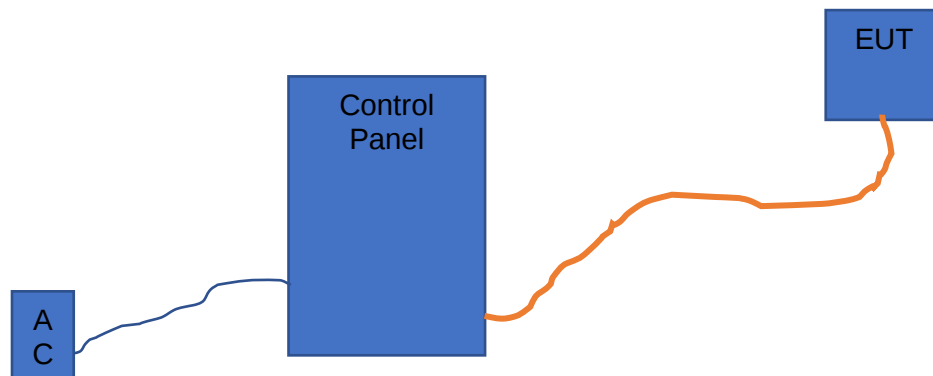
I/O CABLES

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC	1	IEC C13	3 wire	1m	connected to EUT input
2	Power and Data	1	wired in	4 wire, 24 AWG	1m	shielded cable with unterminated shield

TEST SETUP

The EUT is a standalone keypad connected via 4 wire power and data back to control panel.
EUT was tested as standalone.

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

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

UL SOFTWARE			
AC Line Conducted Software and Radiated Emissions Software	UL	UL EMC	Ver 9.5, April 3, 2015

Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI Test Receiver	Rohde & Schwarz	ESCI	EMC4328	2019-12-28	2020-12-31
Bicon Antenna	Electro-Metrics	EM6912A	EMC4070	2019-12-31	2020-12-31
Log-P Antenna	Chase	UPA6109	EMC4258	2019-12-31	2020-12-31
Loop Antenna	EMCO	6502/1	EMC4026	2020-01-28	2021-01-31
EMI Test Receiver	Rohde & Schwarz	ESR	EMC4377	2019-12-30	2020-12-31
Transient Limiter	Electro-Metrics	EM7600-2	EMC4224	N/A	N/A
High-Pass Filter	Solar Electronics	2803-150	EMC4327	N/A	N/A
Attenuator	HP	8494B	2831A00838	N/A	N/A
LISN - L1	Solar Electronics	8602-50-TS-50-N	EMC4066	2019-12-16	2020-12-31
LISN - L2	Solar Electronics	8602-50-TS-50-N	EMC4064	2019-12-16	2020-12-31
Signal Analyzer	Aglient	N9030A PXA	EMC4360	2019-12-22	2020-12-31

7. OCCUPIED BANDWIDTH

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. The RBW is set to 1kHz. The VBW is set to 10kHz. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

Note: Since the transmitter signal is CW-like it is impractical to use an RBW setting of 1 - 5% of the emission bandwidth since the emission bandwidth will be proportional to the RBW.

TESTED BY:

bm06740

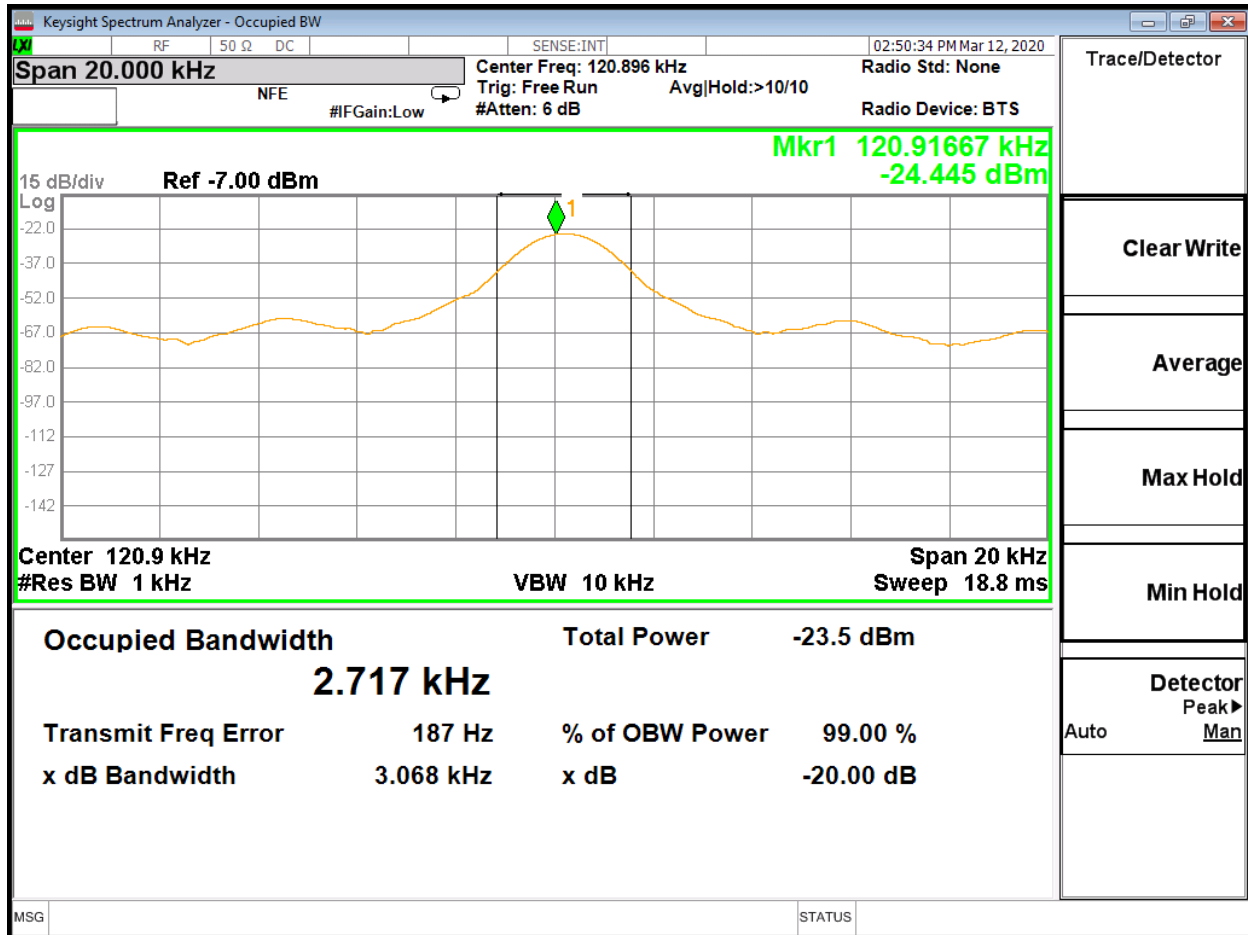
RESULTS

99% and 20dB BW

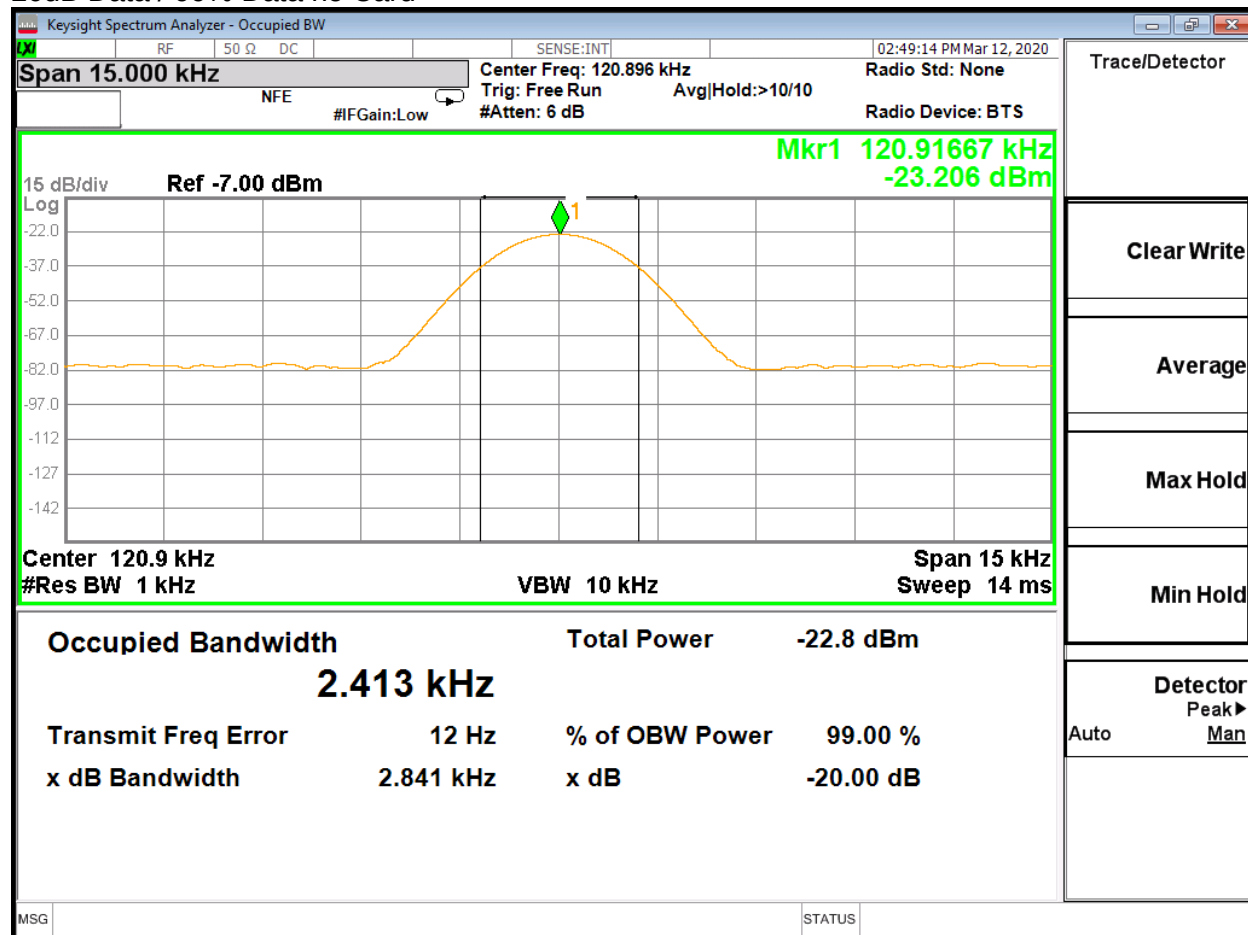
Frequency (MHz)	99% Bandwidth (KHz)	20dB Bandwidth (KHz)
120kHz with card	2.717	3.068
120khz no card	2.413	2.841

7.1. Bandwidth Data

20dB Data / 99% Data with Card



20dB Data / 99% Data no Card



8. RADIATED EMISSION TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.209 (a)
IC RSS-GEN, Section 8.9 (Transmitter)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (m)
0.009–0.490	2400/F(kHz)	300
0.490–1.705	24000/F(kHz)	30
1.705–30.0	30	30
30–88	100	3
88 to 216	150	3
216 to 960	200	3
Above 960 MHz	500	3

Note1: The lower limit shall apply at the transition frequency.
Note2: The limits in CFR 47, Part 15, Subpart C, paragraph 15.209(a), are identical to those in RSS-Gen section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as report in the table) using free space impedance of 377 Ohms. For example, the measurement at frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to $Y-51.5 = Z$ dBuA/m, which has the same margin, W dB to the corresponding RSS-Gen Table 6 limit as it has to 15.209(a) limit.

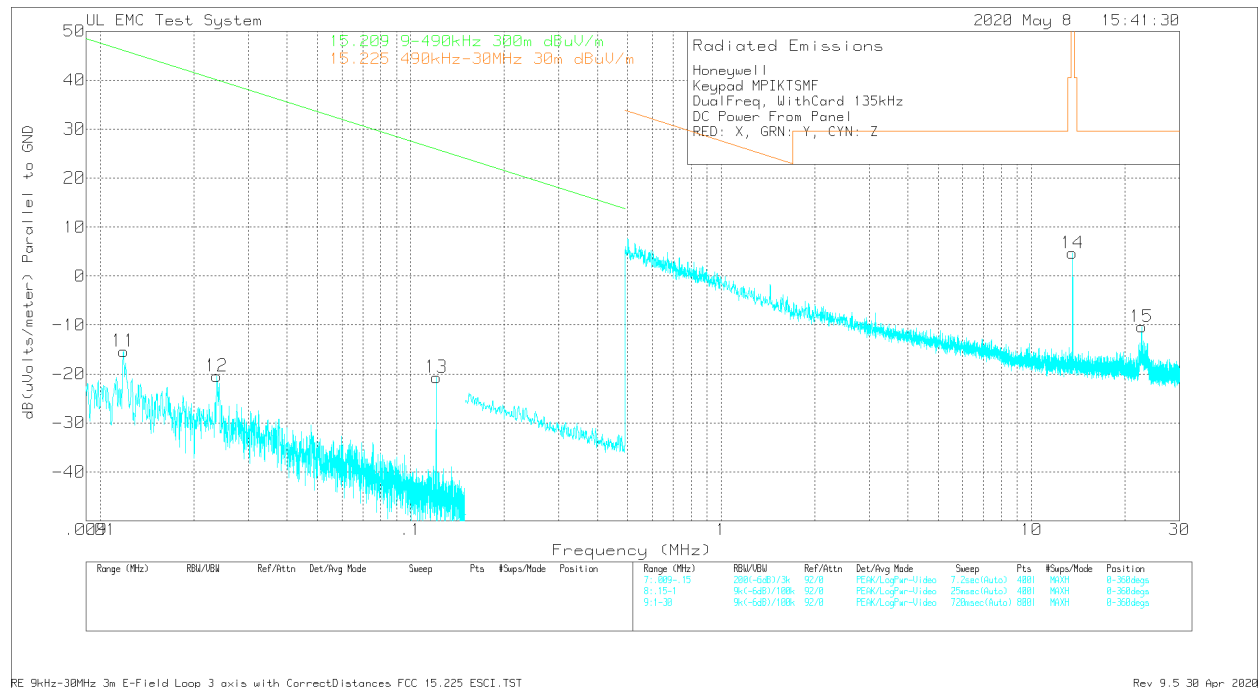
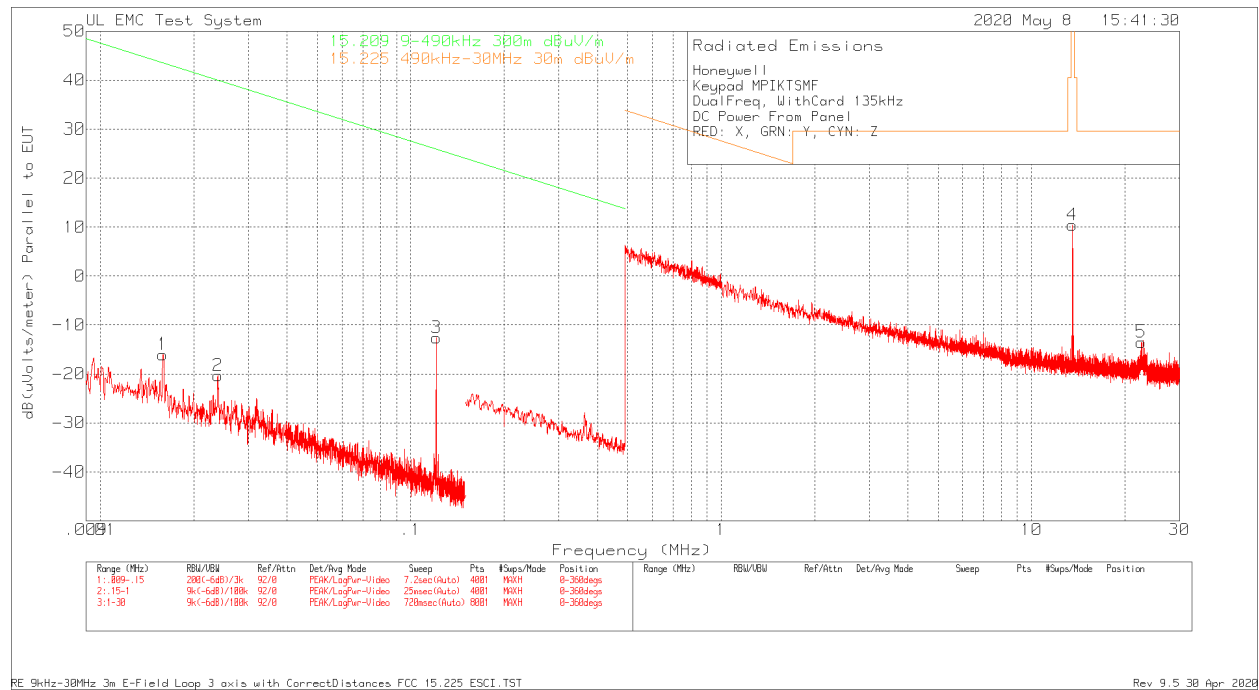
TESTED BY:

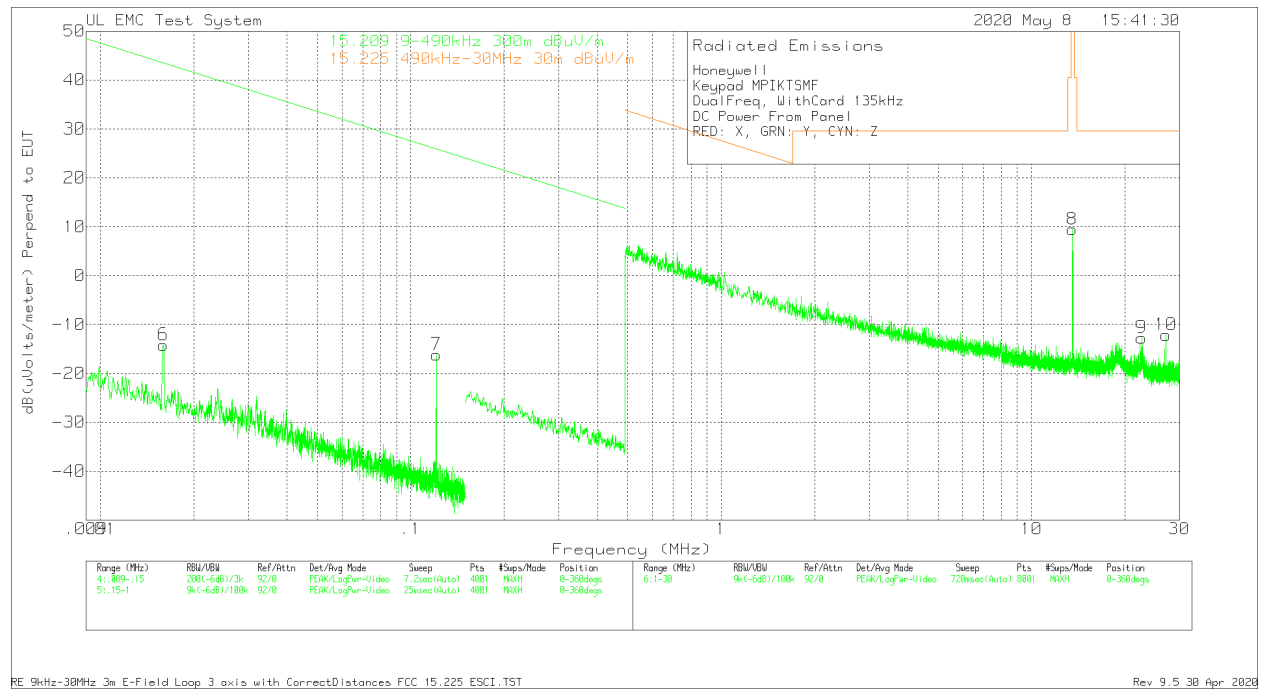
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RESULTS

8.2. Fundamental and SPURIOUS EMISSIONS 0.009 TO 30 MHz

8.2.1. Plot Data with Card





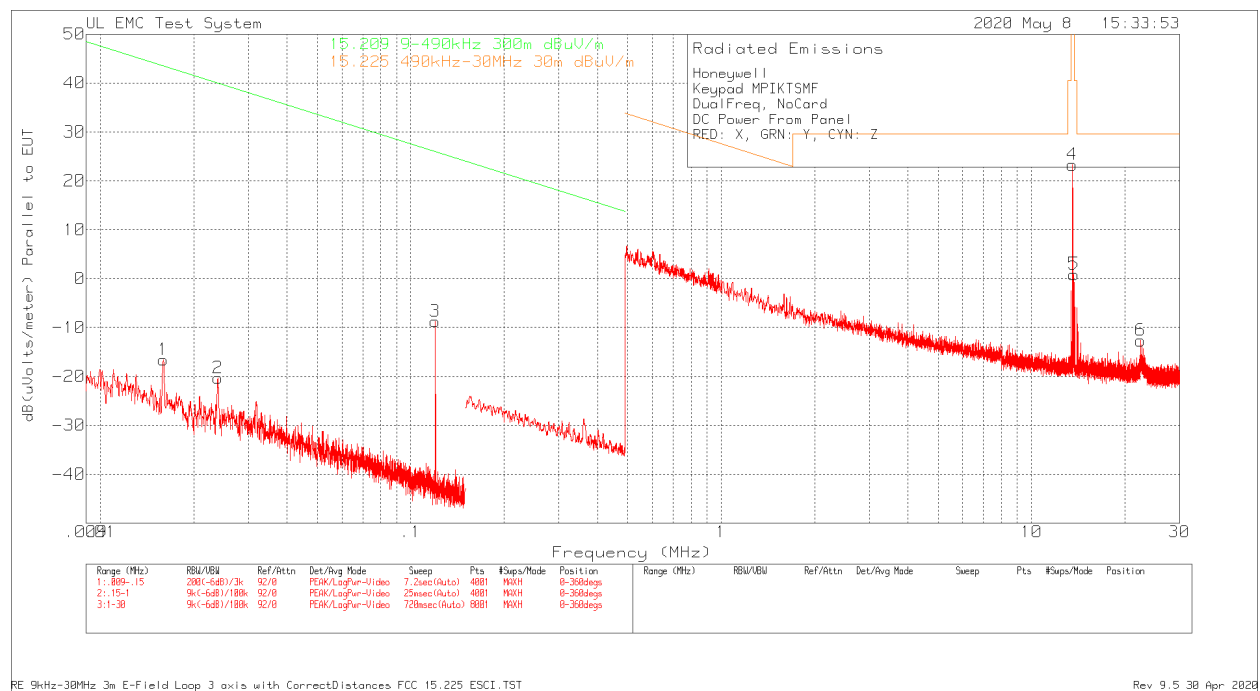
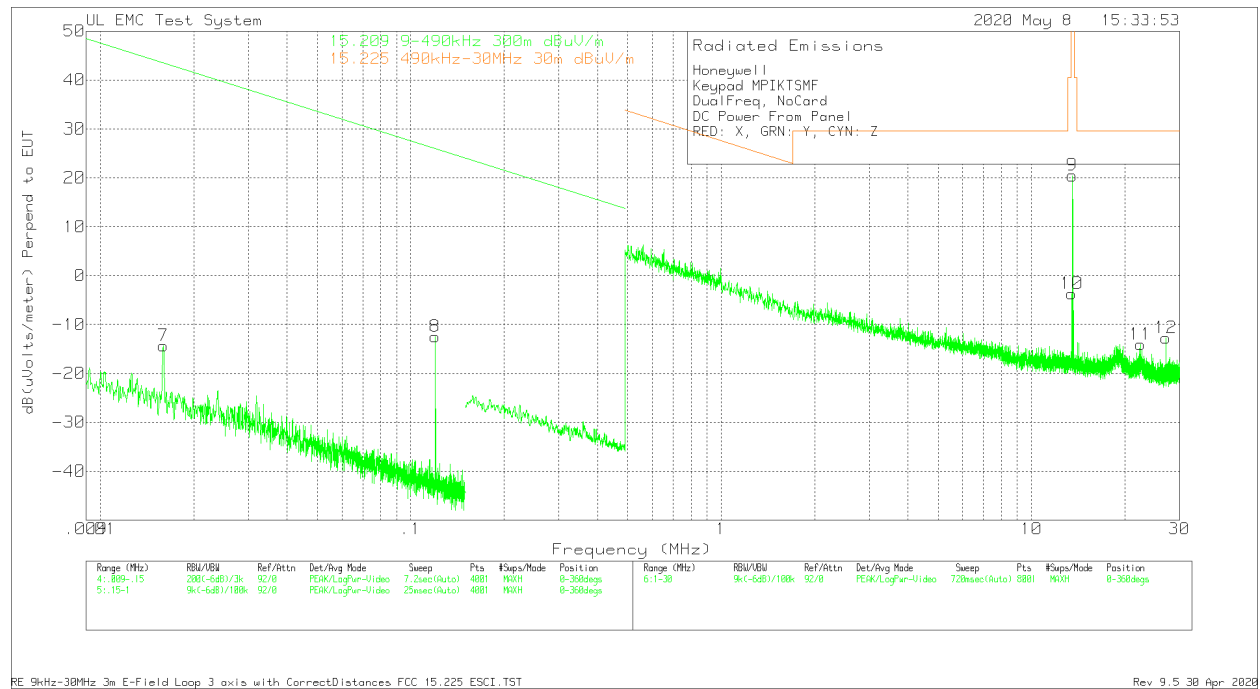
8.2.2. Tabular Data with Card

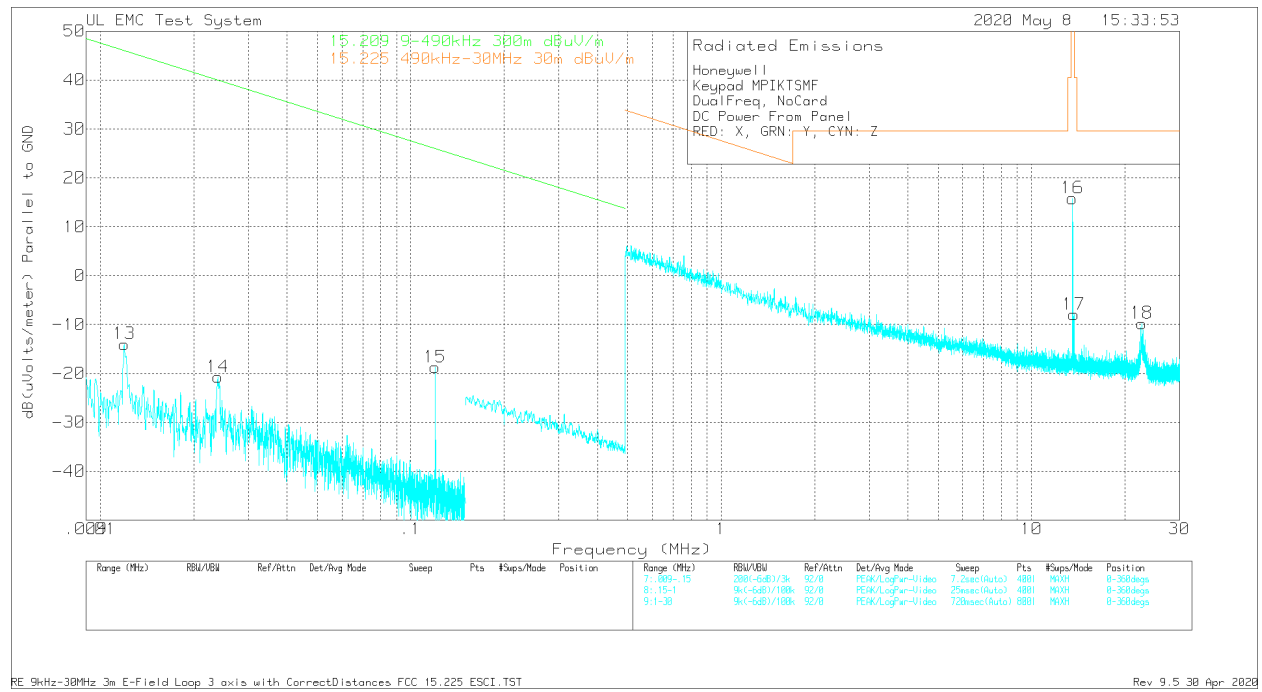
Honeywell												
Keypad MPIKTSMF												
DualFreq, WithCard 135kHz												
DC Power From Panel												
RED: X, GRN: Y, CYN: Z												
Trace Markers												
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Path Factor dB	Distance Factor 300mTo3m & 30mTo3m dB	Level dBuV/m	Limit 15.209 9-490kHz 300m dBuV/m	Margin (dB)	Limit 15.225 490kHz-30MHz 30m dBuV/m	Margin (dB)	Azimuth [Degs]
1*	0.015895	42.96	Pk	20.9	0.1	-80	-16.04	43.57	-59.61	-	-	0-360
2*	0.02391	41.26	Pk	18.3	0.1	-80	-20.34	40.03	-60.37	-	-	0-360
3	0.12086	55.12	Pk	12.2	0.1	-80	-12.58	25.96	-38.54	-	-	0-360
4**	13.56063	38.71	Pk	11.3	0.4	-40	10.41	-	-	84	-73.59	0-360
5	22.61588	15.89	Pk	10.1	0.5	-40	-13.51	-	-	29.54	-43.05	0-360
6*	0.01593	44.84	Pk	20.9	0.1	-80	-14.16	43.55	-57.71	-	-	0-360
7	0.12086	51.53	Pk	12.2	0.1	-80	-16.17	25.96	-42.13	-	-	0-360
8**	13.56063	37.78	Pk	11.3	0.4	-40	9.48	-	-	84	-74.52	0-360
9	22.63038	16.7	Pk	10.1	0.5	-40	-12.7	-	-	29.54	-42.24	0-360
10	27.12538	17.87	Pk	9.4	0.6	-40	-12.13	-	-	29.54	-41.67	0-360
11*	0.01187	41.54	Pk	23	0.1	-80	-15.36	46.11	-61.47	-	-	0-360
12*	0.0237	41.07	Pk	18.4	0.1	-80	-20.43	40.1	-60.53	-	-	0-360
13	0.12086	47.01	Pk	12.2	0.1	-80	-20.69	25.96	-46.65	-	-	0-360
14**	13.56063	32.99	Pk	11.3	0.4	-40	4.69	-	-	84	-79.31	0-360
15	22.634	19.03	Pk	10.1	0.5	-40	-10.37	-	-	29.54	-39.91	0-360
Pk - Peak detector												

* ambient not subject to measurement

** The 13.56MHz transmitter is collocated with the 125kHz transmitter. See report report # 13073027A for data on 13.56MHz transmitter.

8.2.3. Plot Data no Card





8.2.4. Tabular Data no Card

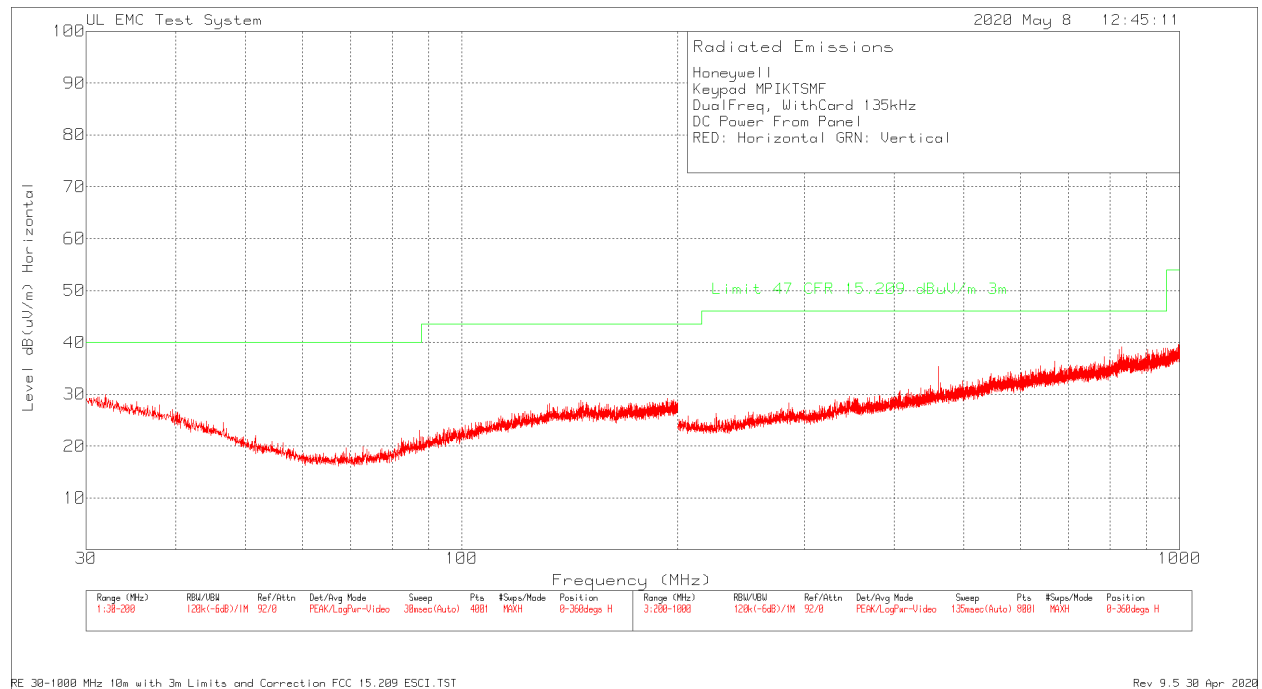
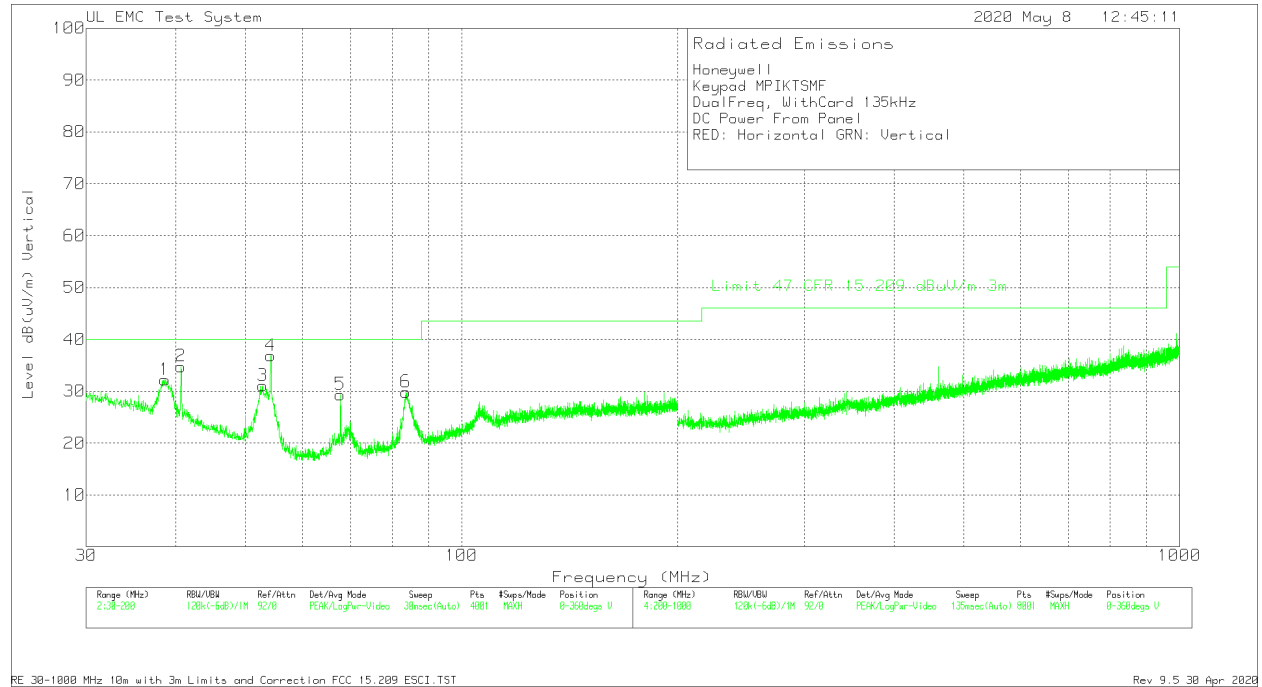
Honeywell												
Keypad MPIKTSMF												
DualFreq, NoCard												
DC Power From Panel												
RED: X, GRN: Y, CYN: Z												
Trace MArkers												
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Path Factor dB	Distance Factor 300mTo3m & 30mTo3m dB	Level dBuV/m	Limit 15.209 9-490kHz 300m dBuV/m	Margin (dB)	Limit 15.225 490kHz-30MHz 30m dBuV/m	Margin (dB)	Azimuth [Degs]
1*	0.01593	42.36	Pk	20.9	0.1	-80	-16.64	43.55	-60.19	-	-	0-360
2*	0.02391	41.25	Pk	18.3	0.1	-80	-20.35	40.03	-60.38	-	-	0-360
3	0.11997	58.93	Pk	12.2	0.1	-80	-8.77	26.02	-34.79	-	-	0-360
4**	13.56063	51.57	Pk	11.3	0.4	-40	23.27	-	-	84	-60.73	0-360
5**	13.69838	29.19	Pk	11.3	0.4	-40	0.89	-	-	50.47	-49.58	0-360
6	22.46	16.73	Pk	10.1	0.5	-40	-12.67	-	-	29.54	-42.21	0-360
7*	0.01593	44.68	Pk	20.9	0.1	-80	-14.32	43.55	-57.87	-	-	0-360
8	0.119985	55.2	Pk	12.2	0.1	-80	-12.5	26.02	-38.52	-	-	0-360
9**	13.56063	48.77	Pk	11.3	0.4	-40	20.47	-	-	84	-63.53	0-360
10**	13.49175	24.52	Pk	11.4	0.4	-40	-3.68	-	-	50.47	-54.15	0-360
11	22.46	15.28	Pk	10.1	0.5	-40	-14.12	-	-	29.54	-43.66	0-360
12	27.12538	17.26	Pk	9.4	0.6	-40	-12.74	-	-	29.54	-42.28	0-360
13*	0.01194	42.89	Pk	23	0.1	-80	-14.01	46.06	-60.07	-	-	0-360
14*	0.02391	40.86	Pk	18.3	0.1	-80	-20.74	40.03	-60.77	-	-	0-360
15	0.11997	48.96	Pk	12.2	0.1	-80	-18.74	26.02	-44.76	-	-	0-360
16**	13.56063	44.11	Pk	11.3	0.4	-40	15.81	-	-	84	-68.19	0-360
17**	13.702	20.34	Pk	11.3	0.4	-40	-7.96	-	-	50.47	-58.43	0-360
18	22.69925	19.63	Pk	10.1	0.5	-40	-9.77	-	-	29.54	-39.31	0-360
Pk - Peak detector												

* ambient not subject to measurement

** The 13.56MHz transmitter is collocated with the 125kHz transmitter. See report report # 13073027A for data on 13.56MHz transmitter.

8.3. TX SPURIOUS EMISSION 30 TO 1000 MHz

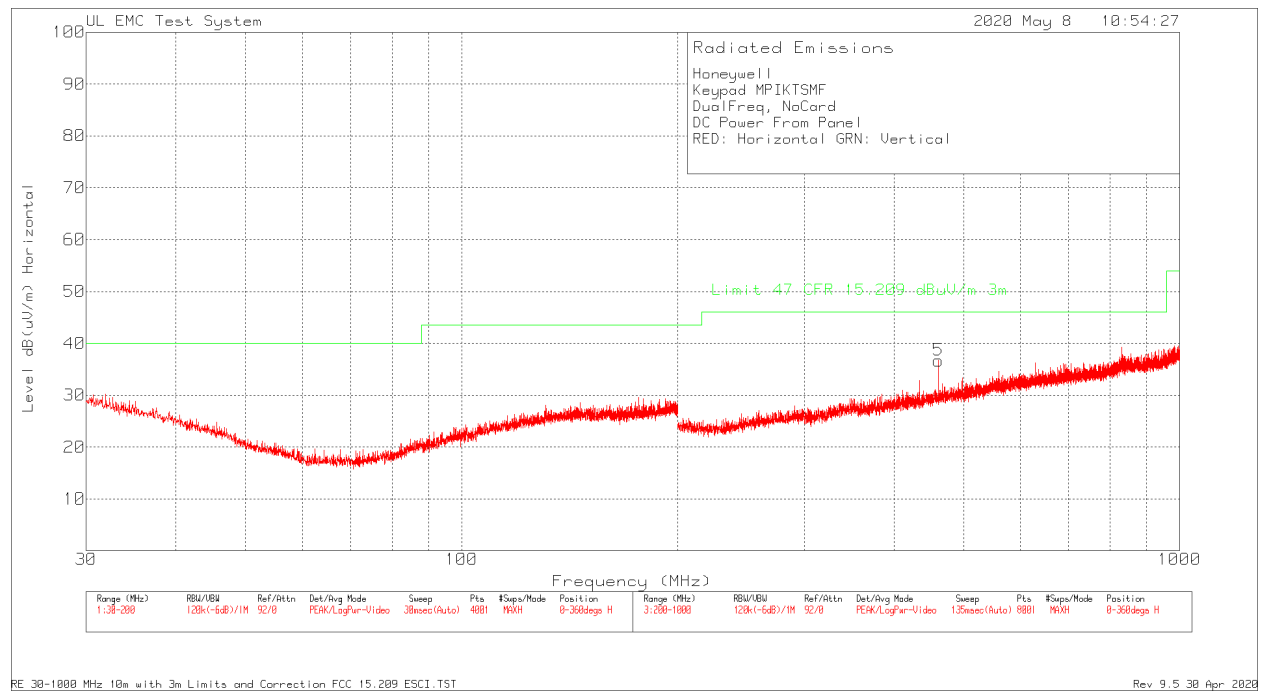
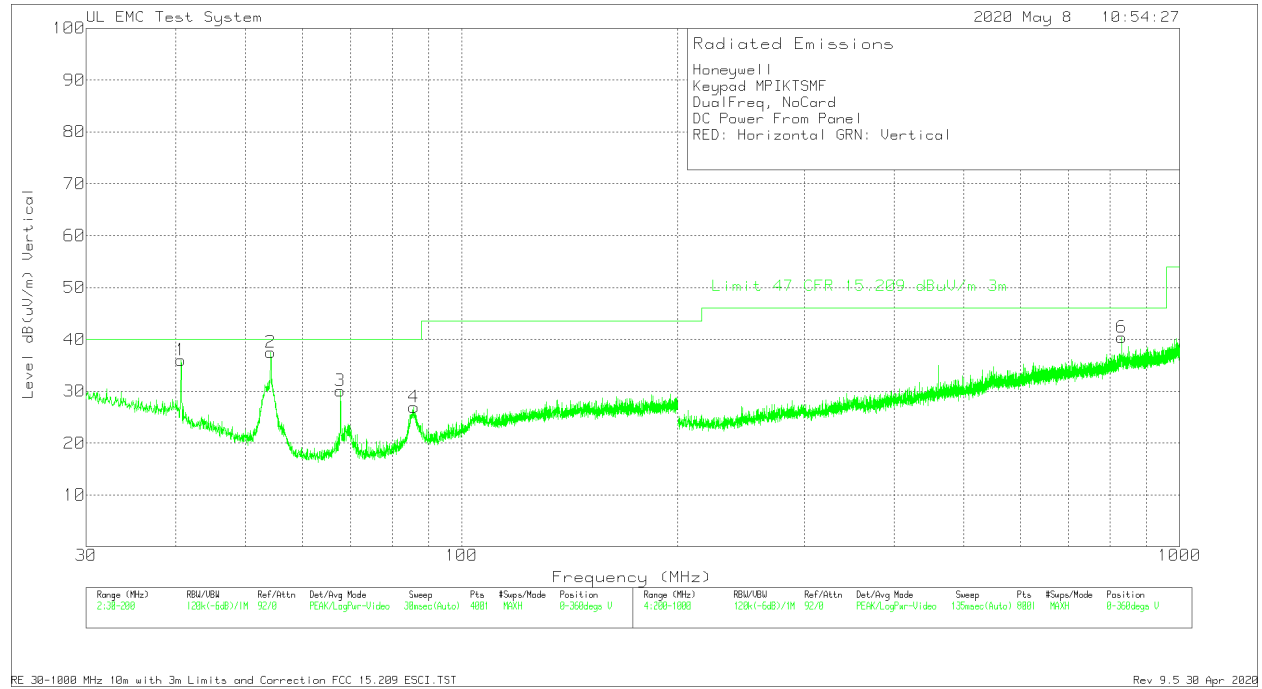
8.3.1. Plot Data with Card



8.3.2. Tabular Data with Card

Honeywell												
Keypad MPIKTSMF												
DualFreq, WithCard 135kHz												
DC Power From Panel												
RED: Horizontal GRN: Vertical												
Trace Markers												
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	EMC4070 Bicon dB/m	Path Factor dB	10m to 3m Factor dB	Corrected Reading Level dB(uV/m)	Limit 47 CFR 15.209 dBuV/m 3m	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
1	38.6275	37.3	Pk	14.5	-30.1	10.5	32.2	40	-7.8	0-360	101	V
2	40.6675	40.79	Pk	13.6	-30.1	10.5	34.79	40	-5.21	0-360	101	V
3	52.865	42.15	Pk	8.4	-30	10.5	31.05	40	-8.95	0-360	101	V
4	54.2463	48.65	Pk	7.8	-30.1	10.5	36.85	40	-3.15	0-360	251	V
5	67.7825	42.68	Pk	6.2	-30	10.5	29.38	40	-10.62	0-360	251	V
6	83.72	40.77	Pk	8.5	-29.9	10.5	29.87	40	-10.13	0-360	101	V
Radiated Emission Data												
	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	EMC4070 Bicon dB/m	Path Factor dB	10m to 3m Factor dB	Corrected Reading Level dB(uV/m)	Limit 47 CFR 15.209 dBuV/m 3m	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
	40.68238	40.44	Qp	13.6	-30.1	10.5	34.44	40	-5.56	0	100	V
	54.0063	36.57	Qp	7.9	-30.1	10.5	24.87	40	-15.13	334	289	V
	54.23394	47.48	Qp	7.8	-30.1	10.5	35.68	40	-4.32	57	256	V
Pk - Peak detector												
Qp - Quasi-Peak detector												

8.3.3. Plot Data no Card



[illegible]

9. AC MAINS LINE CONDUCTED EMISSIONS

LIMITS

§15.207 (a)
IC RSS-GEN, Section 7.2.2

Frequency of emission (MHz)	Conducted Limit (dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50
* Decreases with the logarithm of the frequency.		

TEST PROCEDURE

ANSI C63.4

TESTED BY:

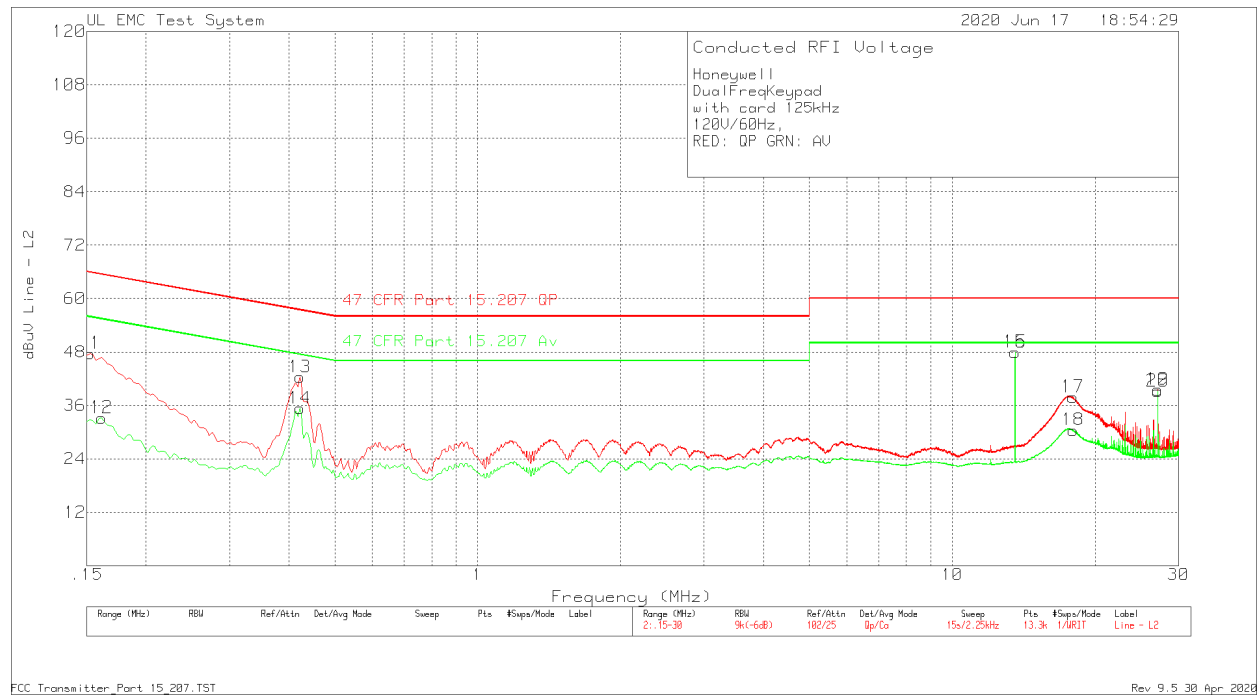
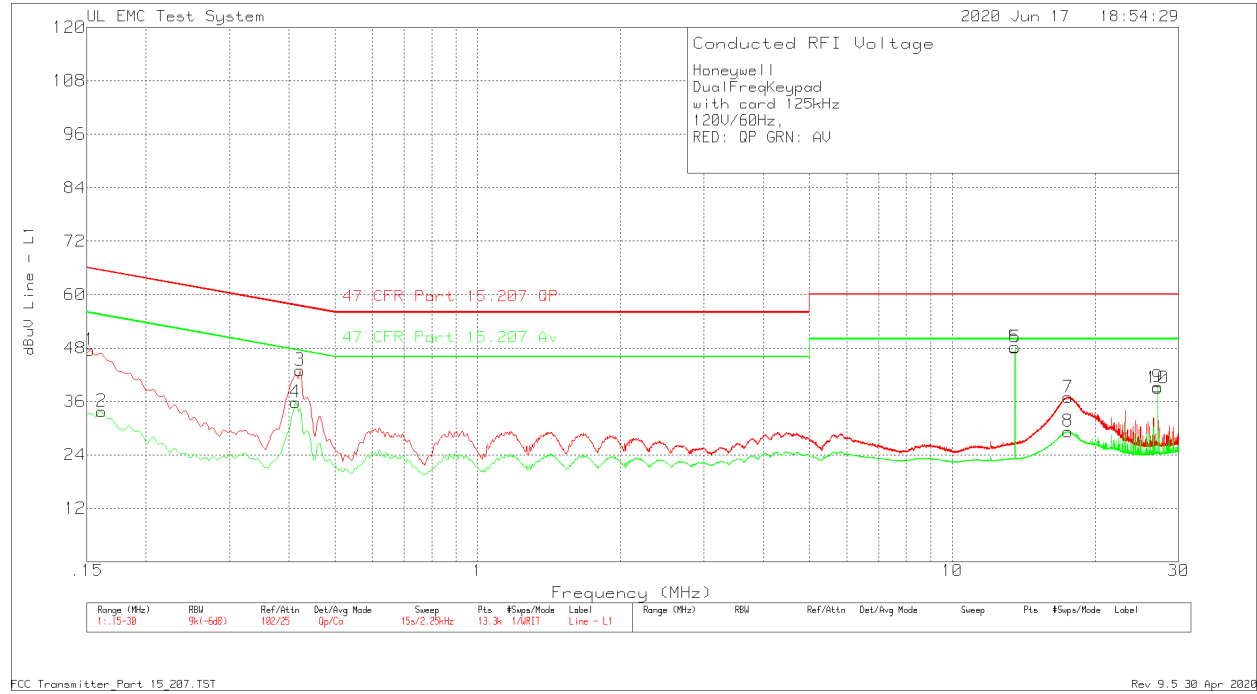
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RESULTS

No non-compliance noted:

9.1. Line Conducted Emissions

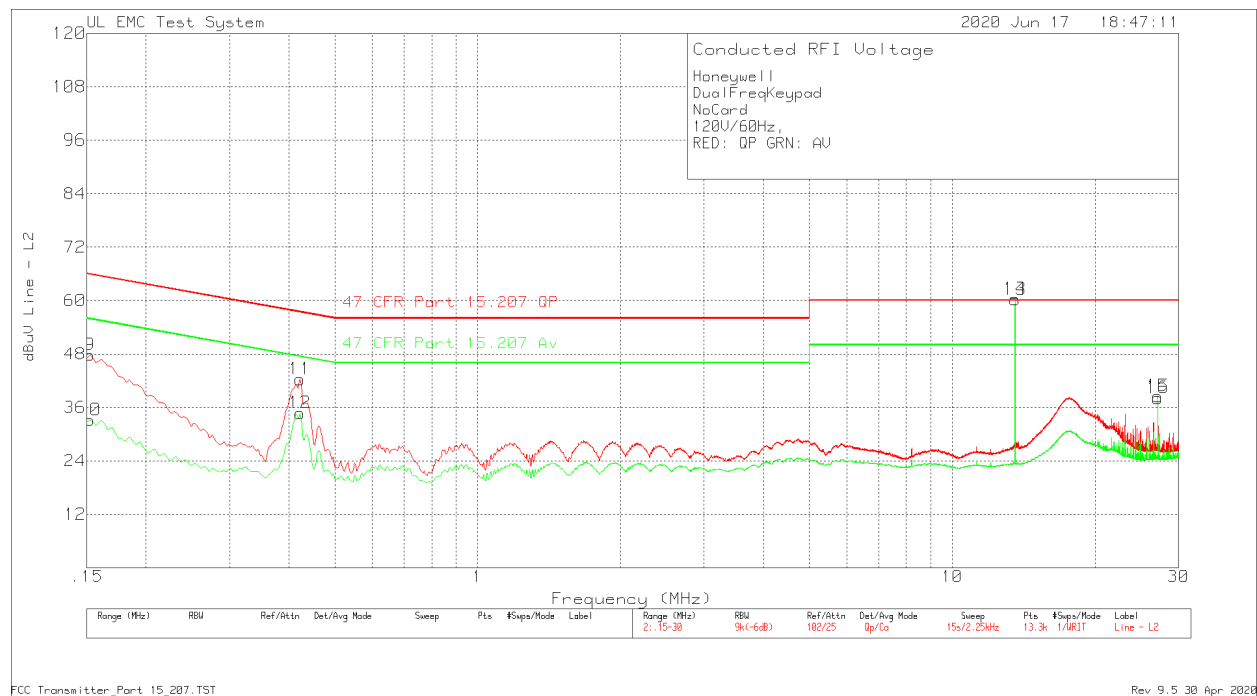
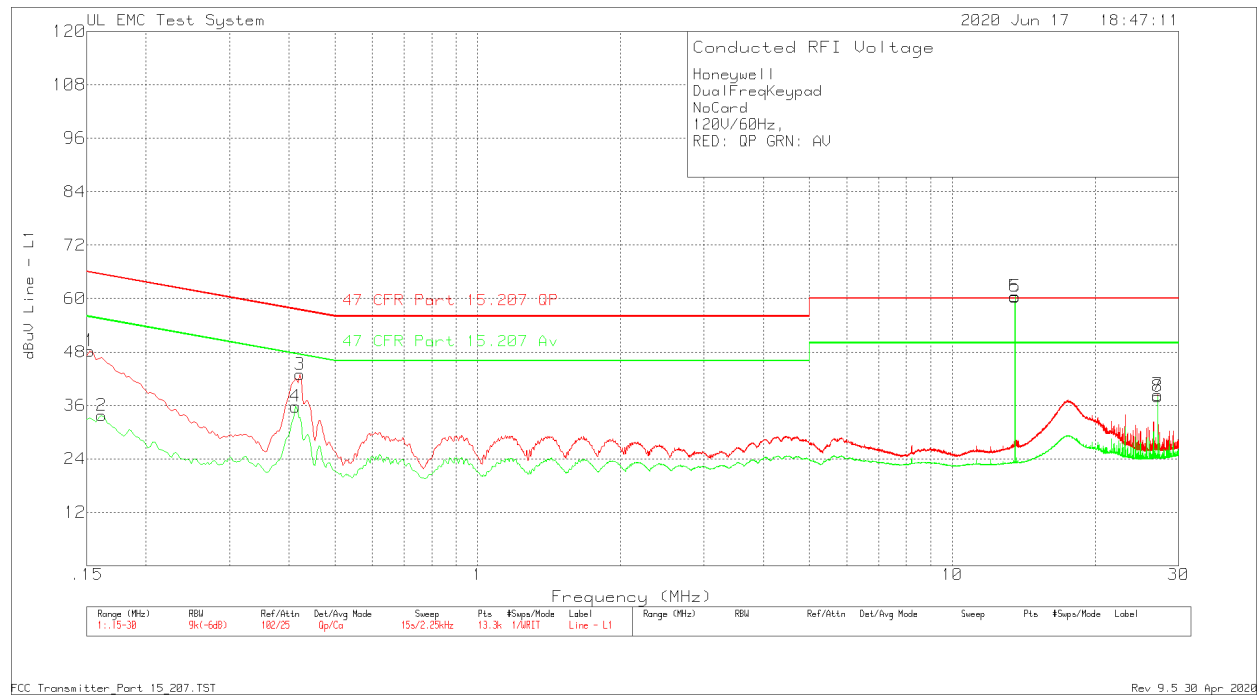
9.1.1. Plot data with Card



9.1.2. Tabular Data with Card

Honey well										
DualFreqKey pad										
with card 125kHz										
120V/60Hz,										
RED: QP GRN: AV										
Trace MArkers										
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	LISN Factor dB	Path Factor	Corrected Reading dBuV	Limit 47 CFR Part 15.207 QP	Margin (dB)	Limit 47 CFR Part 15.207 Av	Margin (dB)
Line 1										
1	0.15225	32.86	Qp	0	14.7	47.56	65.88	-18.32	55.88	-8.32
2	0.16125	20.48	Ca	0	13.3	33.78	65.4	-31.62	55.4	-21.62
3	0.42225	32.29	Qp	0	10.7	42.99	57.4	-14.41	47.4	-4.41
4	0.41325	25.11	Ca	0	10.7	35.81	57.58	-21.77	47.58	-11.77
5	13.56	36.96	Qp	0	11.2	48.16	60	-11.84	50	-1.84
6	13.56	37	Ca	0	11.2	48.2	60	-11.8	50	-1.8
7	17.538	25.64	Qp	0	11.3	36.94	60	-23.06	50	-13.06
8	17.54025	17.97	Ca	0	11.3	29.27	60	-30.73	50	-20.73
9	27.12075	27.7	Qp	-0.1	11.7	39.3	60	-20.7	50	-10.7
10	27.12075	27.38	Ca	-0.1	11.7	38.98	60	-21.02	50	-11.02
Line 2										
11	0.15225	32.85	Qp	0.1	14.7	47.65	65.88	-18.23	55.88	-8.23
12	0.16125	19.91	Ca	0	13.3	33.21	65.4	-32.19	55.4	-22.19
13	0.42225	31.65	Qp	0	10.7	42.35	57.4	-15.05	47.4	-5.05
14	0.42225	24.63	Ca	0	10.7	35.33	57.4	-22.07	47.4	-12.07
15	13.56	36.85	Qp	0	11.1	47.95	60	-12.05	50	-2.05
16	13.56	36.88	Ca	0	11.1	47.98	60	-12.02	50	-2.02
17	17.9655	26.46	Qp	0	11.4	37.86	60	-22.14	50	-12.14
18	17.9925	19.06	Ca	0	11.4	30.46	60	-29.54	50	-19.54
19	27.12075	27.93	Qp	-0.1	11.7	39.53	60	-20.47	50	-10.47
20	27.12075	27.59	Ca	-0.1	11.7	39.19	60	-20.81	50	-10.81
Qp - Quasi-Peak detector										
Ca - CISPR Average detection										

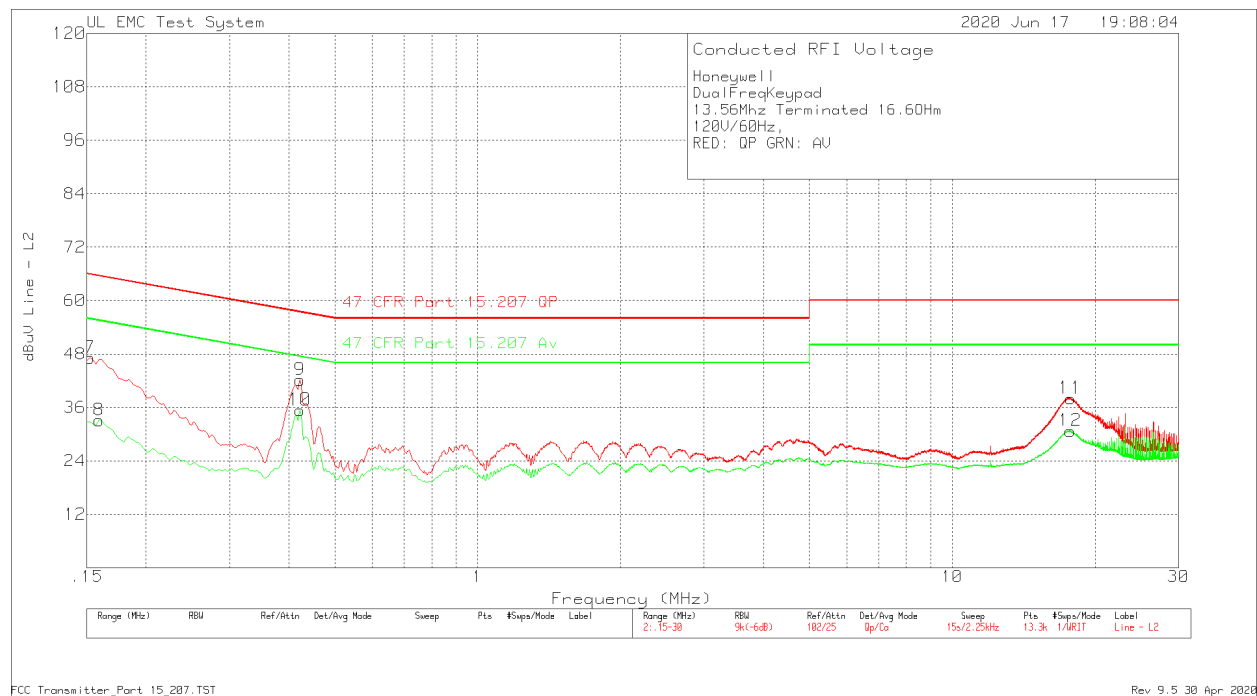
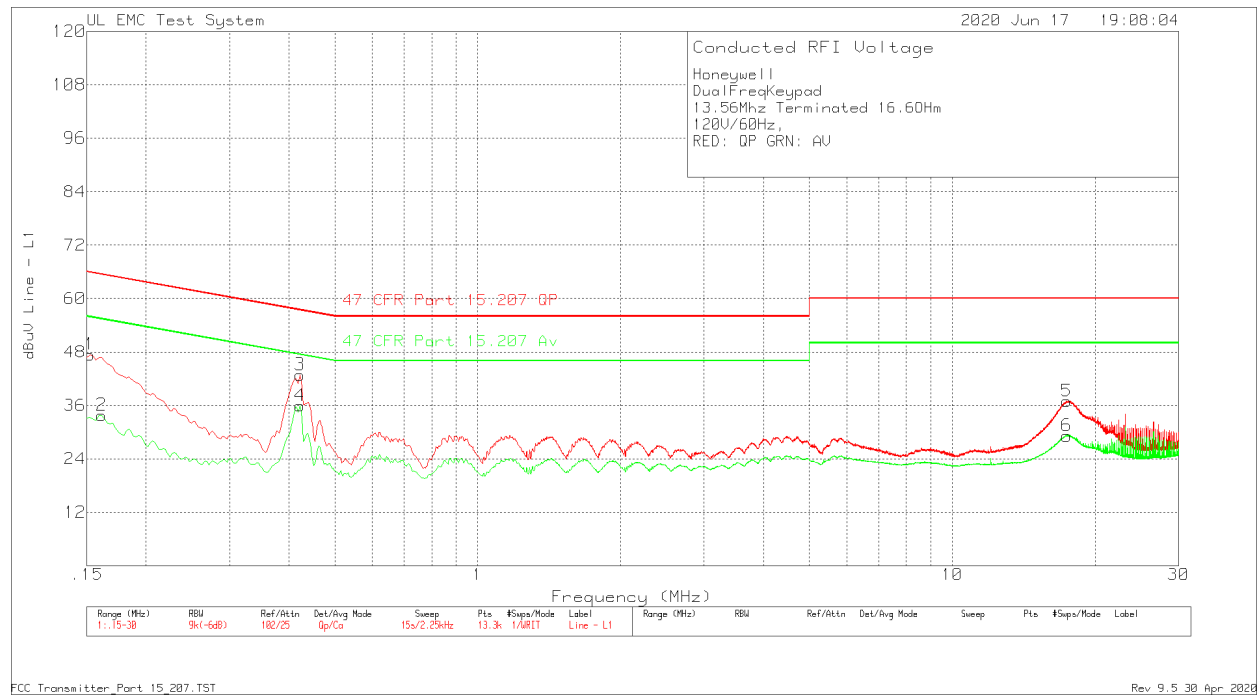
9.1.3. Plot Data no Card



9.1.4. Tabular Data no Card

Honey well										
DualFreqKey pad										
NoCard										
120V/60Hz,										
RED: QP GRN: AV										
Trace MArkers										
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	LISN Factor dB	Path Factor	Corrected Reading dBuV	Limit 47 CFR Part 15.207 QP	Margin (dB)	Limit 47 CFR Part 15.207 Av	Margin (dB)
Line 1										
1	0.15225	33.52	Qp	0	14.7	48.22	65.88	-17.66	55.88	-7.66
2	0.16125	20.44	Ca	0	13.3	33.74	65.4	-31.66	55.4	-21.66
3	0.42225	32.22	Qp	0	10.7	42.92	57.4	-14.48	47.4	-4.48
4	0.41325	25.05	Ca	0	10.7	35.75	57.58	-21.83	47.58	-11.83
5	13.56	49.21	Qp	0	11.2	60.41	60	0.41	50	10.41
6	13.56	49.28	Ca	0	11.2	60.48	60	0.48	50	10.48
7	27.12075	26.77	Qp	-0.1	11.7	38.37	60	-21.63	50	-11.63
8	27.12075	26.38	Ca	-0.1	11.7	37.98	60	-22.02	50	-12.02
Line 2										
9	0.15225	32.98	Qp	0.1	14.7	47.78	65.88	-18.1	55.88	-8.1
10	0.15225	18.33	Ca	0.1	14.7	33.13	65.88	-32.75	55.88	-22.75
11	0.42225	31.61	Qp	0	10.7	42.31	57.4	-15.09	47.4	-5.09
12	0.42225	24	Ca	0	10.7	34.7	57.4	-22.7	47.4	-12.7
13	13.56	49.13	Qp	0	11.1	60.23	60	0.23	50	10.23
14	13.56	49.18	Ca	0	11.1	60.28	60	0.28	50	10.28
15	27.12075	26.91	Qp	-0.1	11.7	38.51	60	-21.49	50	-11.49
16	27.12075	26.48	Ca	-0.1	11.7	38.08	60	-21.92	50	-11.92
Qp - Quasi-Peak detector										
Ca - CISPR Average detection										

9.1.5. Plot Data no Card (13.56MHz terminated with resistor)



9.1.6. Tabular Data no Card (13.56MHz terminated with resistor)

Honey well										
DualFreqKeypad										
13.56Mhz Terminated 16.60Hm										
120V/60Hz,										
RED: QP GRN: AV										
Trace MArkers										
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	LISN Factor dB	Path Factor	Corrected Reading dBuV	Limit 47 CFR Part 15.207 QP	Margin (dB)	Limit 47 CFR Part 15.207 Av	Margin (dB)
Line 1										
1	0.15225	32.7	Qp	0	14.7	47.4	65.88	-18.48	55.88	-8.48
2	0.16125	20.48	Ca	0	13.3	33.78	65.4	-31.62	55.4	-21.62
3	0.42225	32.15	Qp	0	10.7	42.85	57.4	-14.55	47.4	-4.55
4	0.42225	25.21	Ca	0	10.7	35.91	57.4	-21.49	47.4	-11.49
5	17.421	25.64	Qp	0	11.3	36.94	60	-23.06	50	-13.06
6	17.44125	17.86	Ca	0	11.3	29.16	60	-30.84	50	-20.84
Line 2										
7	0.15225	32.35	Qp	0.1	14.7	47.15	65.88	-18.73	55.88	-8.73
8	0.159	19.3	Ca	0.1	13.7	33.1	65.52	-32.42	55.52	-22.42
9	0.42225	31.47	Qp	0	10.7	42.17	57.4	-15.23	47.4	-5.23
10	0.42225	24.69	Ca	0	10.7	35.39	57.4	-22.01	47.4	-12.01
11	17.74275	26.64	Qp	0	11.4	38.04	60	-21.96	50	-11.96
12	17.73825	19.35	Ca	0	11.4	30.75	60	-29.25	50	-19.25
Qp - Quasi-Peak detector										
Ca - CISPR Average detection										