



**DATE: 5 August 2014**

**I.T.L. (PRODUCT TESTING) LTD.**

# **FCC Radio Test Report**

for


## **Corning Optical Communication Wireless**

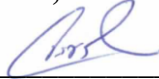
**Equipment under test:**

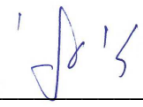
### **Mobile Telephone In-Building Distribution System**

### **1200-G-PCS-AO\***

\*See customer's Declaration on page 5

Written by:   
R. Pinchuck, Documentation

Approved by:   
A. Sharabi, Test Engineer

Approved by:   
I. Raz, EMC Laboratory Manager

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This report relates only to items tested.





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# 1. General Information

## 1.1 Administrative Information

Manufacturer:	Corning Optical Communication Wireless
Manufacturer's Address:	13221 Woodland Park Rd., Suite #400 Herndon, VA. 20171 Vienna, VA 22182 U.S.A. Tel: +1-541-758-2880 Fax: +1-703-848-0260
Manufacturer's Representative:	Habib Riazi
Equipment Under Test (E.U.T):	Mobile Telephone In-Building Distribution System
Equipment Model No.:	1200-G-PCS-AO*
Equipment Serial No.:	Not Designated
Date of Receipt of E.U.T:	22.05.14
Start of Test:	22.05.14
End of Test:	25.05.14
Test Laboratory Location:	I.T.L (Product Testing) Ltd. Kfar Bin Nun, ISRAEL 99780
Test Specifications:	FCC Part 24, Sub-part E

\*See customer's Declaration on following page.



CORNING

Date: August 13<sup>th</sup> 2014

## DECLARATION

I hereby declare that the name, model, and serial number of the E.U.T. tested at the I.T.L. EMC laboratory between May 22, 2014 and May 25, 2014 is as follows:

**E.U.T. Name: Mobile Telephone In-Building  
Distribution System**  
**Model Name: 1200-G-PCS-AO**  
**Serial Number: Not designated**

Please use the above names and serial number in the test report and certificate.

Thank you,

Signature: \_\_\_\_\_  \_\_\_\_\_  
Printed Name: Habib Riazi  
Title: Director PLM

1.2



## **1.2 List of Accreditations**

The EMC laboratory of I.T.L. is accredited by the following bodies:

1. The American Association for Laboratory Accreditation (A2LA) (U.S.A.), Certificate No. 1152.01.
2. The Federal Communications Commission (FCC) (U.S.A.), Registration No. 90715.
3. The Israel Ministry of the Environment (Israel), Registration No. 1104/01.
4. The Voluntary Control Council for Interference by Information Technology Equipment (VCCI) (Japan), Registration Numbers: C-1350, R-1285.
5. Industry Canada (Canada), IC File No.: 46405-4025; Site No. IC 4025B-1.

I.T.L. Product Testing Ltd. is accredited by the American Association for Laboratory Accreditation (A2LA) and the results shown in this test report have been determined in accordance with I.T.L.'s terms of accreditation unless stated otherwise in the report.



### **1.3 Product Description**

The MobileAccess 1200 Add-on module is a high power module, supporting a single frequency band (low or high). It is designed to be integrated with a host RHU 1000 module. The RHU 1000 module provides the following functionality for both units:

- Optical interface (to the BU) and conversion
- RF interface (to antennas) and conversion
- Control signals

In addition, WLAN services can also be combined with MA 1200 add-on and RHU 1000 services. (However, in this type of configuration the combined services interface to the coax infrastructure through the MA 850/860 ports.)

### **1.4 Test Methodology**

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4: 2003. Radiated testing was performed at an antenna to EUT distance of 3 meters.

### **1.5 Test Facility**

The radiated emissions tests were performed at I.T.L.'s testing facility at Kfar Bin-Nun, Israel. This site is a FCC listed test laboratory (FCC Registration No. 90715, date of listing November 21, 2012).

I.T.L.'s EMC Laboratory is also accredited by A2LA, certificate No. 1152.01.

### **1.6 Measurement Uncertainty**

Conducted Emission (CISPR 11, EN 55011, CISPR 22, EN 55022, ANSI C63.4)

0.15 – 30 MHz:

Expanded Uncertainty (95% Confidence, K=2):

± 3.44 dB

Radiated Emission (CISPR 11, EN 55011, CISPR 22, EN 55022, ANSI C63.4) for open site 30-1000MHz:

Expanded Uncertainty (95% Confidence, K=2):

± 4.96 dB

## 2. System Test Configuration

### 2.1 Justification

A FCC Grant was issued for the E.U.T. on 05/28/2008. The LTE modulation has been added to the PCS band requiring a C2PC. The following tests were performed:

Peak Output Power  
Occupied Bandwidth  
Spurious emissions at antenna terminals  
Band edge spectrum

### 2.2 EUT Exercise Software

The Unit is operated by the embedded SW version 3.4 b00 and managed by the NMS SW version 22.03.18. The SW is used by the professional installers to operate, calibrate and maintain the unit. The main features are enabling and disabling transmission, and adjusting unit output power per a given input signal.

### 2.3 Special Accessories

No special accessories were needed in order to achieve compliance.

### 2.4 Equipment Modifications

No modifications were needed in order to achieve compliance.

### 2.5 Configuration of Tested System

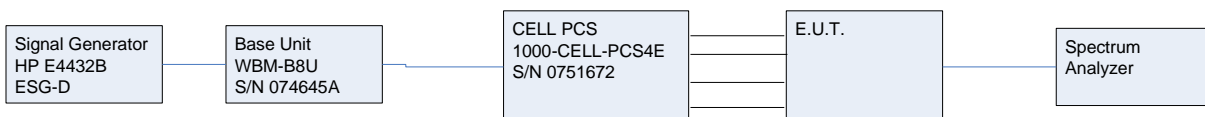


Figure 1. Tests Set-up

Note: The antenna ports were terminated with 50 Ohm termination.



### 3. Conducted Measurement Test Set-Up Photo

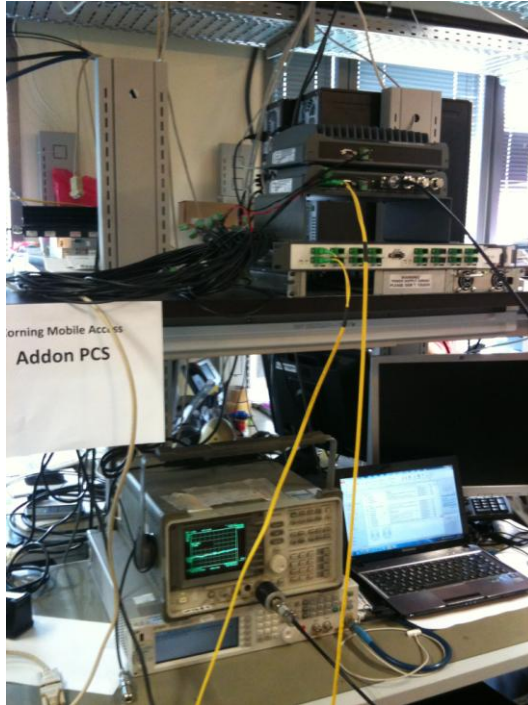


Figure 2. Conducted Emission From Antenna Ports Tests

## 4. Peak Output Power PCS

### 4.1 Test Specification

FCC Part 24, Sub-part E

### 4.2 Test procedure

Peak Power Output must not exceed 100 Watts (50dBm).

The E.U.T. antenna terminal was connected to the Spectrum Analyzer through an external attenuator (30 dB) and an appropriate coaxial cable (0.5 dB). The E.U.T. RF output was LTE modulated. Special attention was taken to prevent Spectrum Analyzer RF input overload. The Spectrum Analyzer was set to 1.0 MHz RBW. The output power level was measured at 1935.00, 1960.00, and 1990.00 MHz.

LTE 10MHz, QPSK:

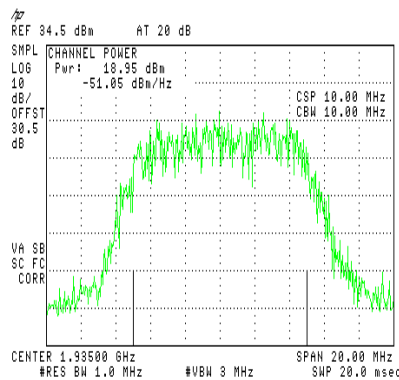


Figure 3.— 1935.00 MHz

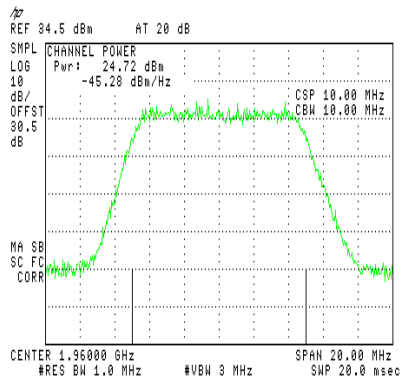


Figure 4.— 1960.00 MHz

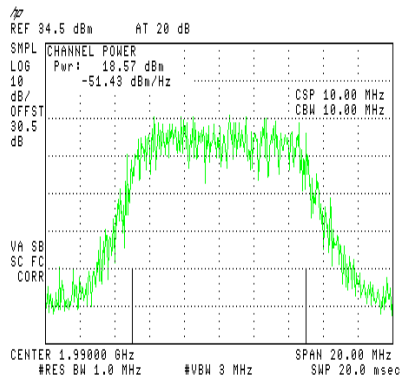


Figure 5.— 1990.00 MHz



LTE 10MHz, 16QAM:

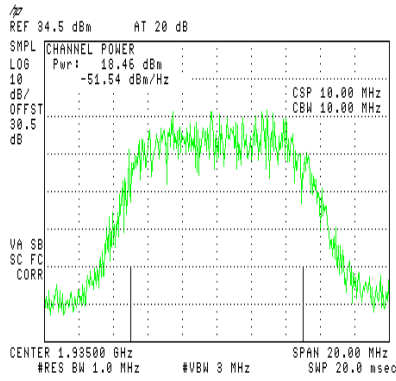


Figure 6.— 1935.00 MHz

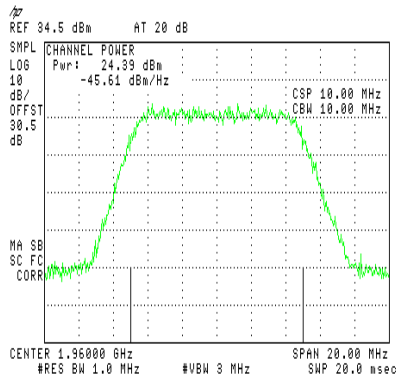


Figure 7.— 1960.00 MHz

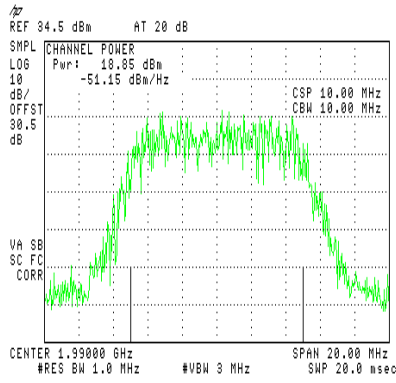


Figure 8.— 1990.00 MHz

LTE 10MHz, 64QAM:

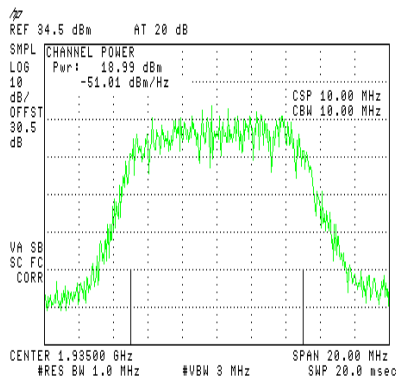


Figure 9.— 1935.00 MHz

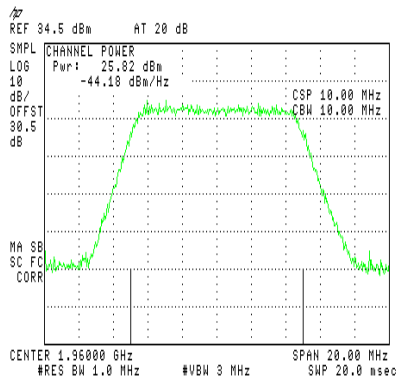


Figure 10.— 1960.00 MHz

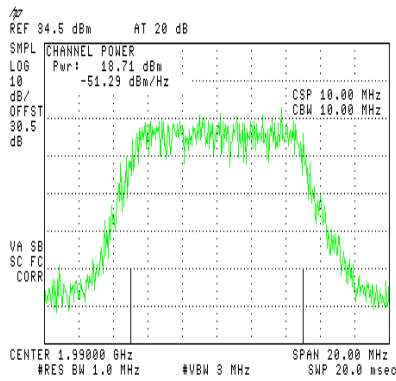


Figure 11.— 1990.00 MHz



**4.3 Results table**

E.U.T. Description: Mobile Telephone In-Building Distribution System

Model No.: 1200-G-PCS-AO

Serial Number: Not Designated


Specification: FCC Part 24, Sub-part E, Section 232, FCC Part 2, Section 1046

Modulation	Operation Frequency (MHz)	Reading (dBm)	Specification (dBm)	Margin (dB)
LTE 10 MHz, QPSK	1935.00	18.95	50.0	-31.05
LTE 10 MHz, QPSK	1960.00	24.72	50.0	-25.28
LTE 10 MHz, QPSK	1990.00	18.57	50.0	-31.43
LTE 10 MHz, 16QAM	1935.00	18.46	50.0	-31.54
LTE 10 MHz, 16QAM	1960.00	24.39	50.0	-25.61
LTE 10 MHz, 16QAM	1990.00	18.85	50.0	-31.15
LTE 10 MHz, 64QAM	1935.00	18.99	50.0	-31.01
LTE 10 MHz, 64QAM	1960.00	25.82	50.0	-24.18
LTE 10 MHz, 64QAM	1990.00	18.71	50.0	-31.29

**Figure 12 Peak Output Power PCS**

JUDGEMENT: Passed by 24.18dB

TEST PERSONNEL:

Tester Signature: 

Date: 17.08.14

Typed/Printed Name: A. Sharabi



**4.4 Test Equipment Used; Peak Output Power PCS**

Instrument	Manufacturer	Model	Serial Number	Calibration	
				Last Calibration Date	Period
Spectrum Analyzer	HP	8592L	3826A01204	February 28, 2014	1 year
Signal Generator	HP	N5182A	MY48180244	July 28, 2013	1 year
Attenuator	MCE	46-30-34		May 22, 2014	1 year
Cable	Rhophase	KPS-5000-KPS	A1674	May 22, 2014	1 year

**Figure 13 Test Equipment Used**



## 5. Occupied Bandwidth PCS

### 5.1 Test Specification

FCC Part 2, Section 1049

### 5.2 Test Procedure

The E.U.T. was set to the applicable test frequency with LTE modulation. The E.U.T. antenna terminal was connected to the spectrum analyzer through an external attenuator (at the output test) and an appropriate coaxial cable. The spectrum analyzer was set to 100 kHz resolution B.W.

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limit, the mean powers radiated are each equal to 0.5% of the total mean power radiated by a given emission.

The occupied bandwidth of the E.U.T. at the points of 20 dB below maximum peak power was measured and recorded.

Occupied bandwidth measured was repeated in the input terminal of the E.U.T.

Input, LTE 10MHz, QPSK:

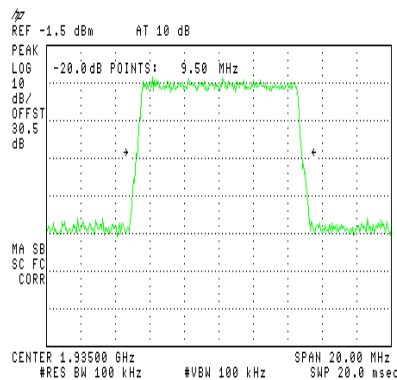


Figure 14.— 1935.00 MHz

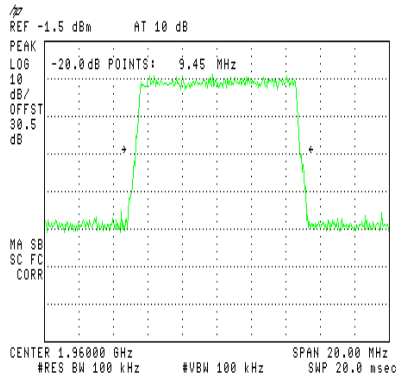


Figure 15.— 1960.00 MHz

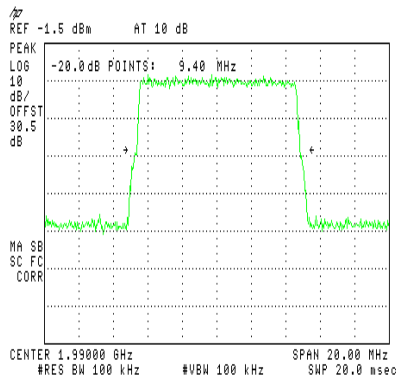


Figure 16.— 1990.00 MHz

Input,LTE 10MHz, 16QAM:

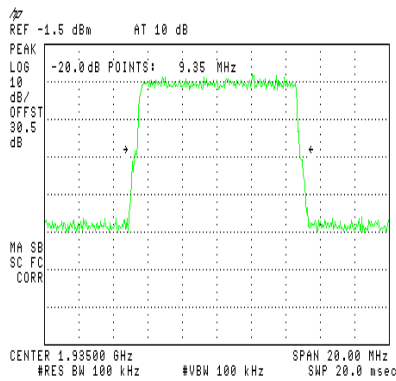


Figure 17.— 1935.00 MHz

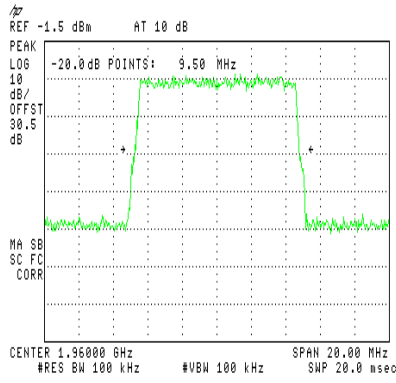


Figure 18.— 1960.00 MHz

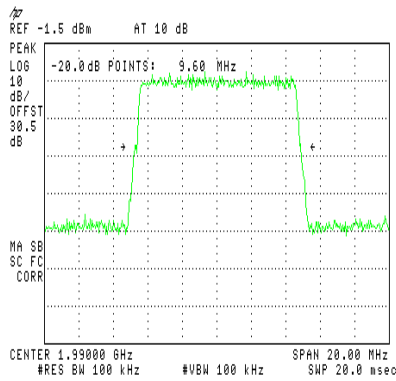


Figure 19.— 1990.00 MHz

Input,LTE 10MHz, 64QAM:

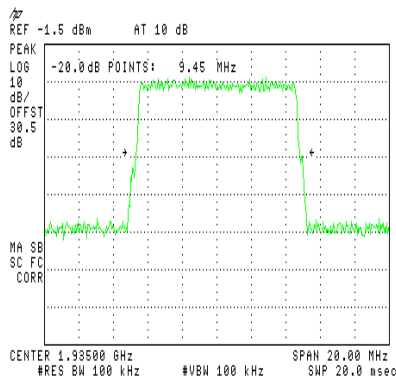


Figure 20.— 1935.00 MHz

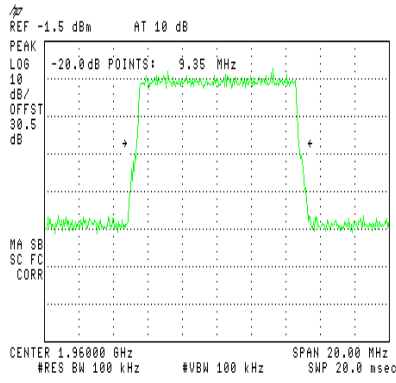


Figure 21.— 1960.00 MHz

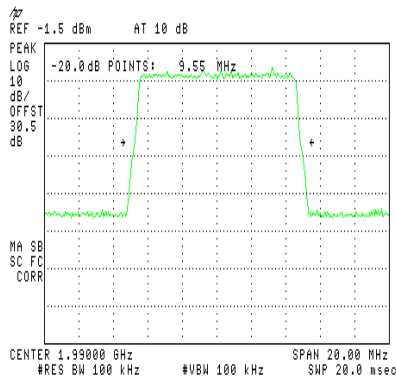


Figure 22.— 1990.00 MHz

Output, LTE 10MHz, QPSK:

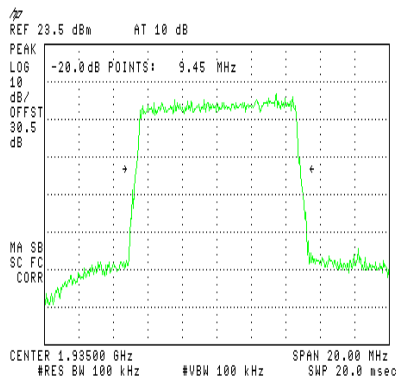


Figure 23.— 1935.00 MHz

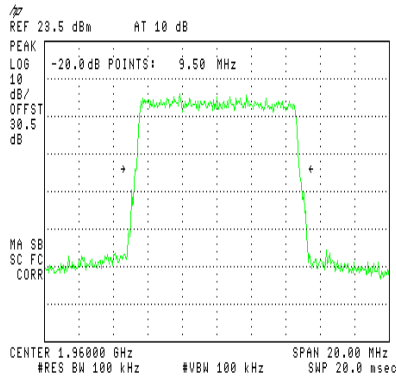


Figure 24.— 1960.00 MHz

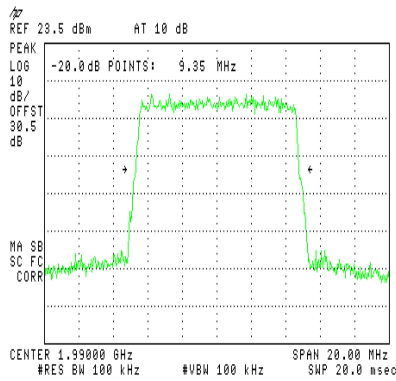


Figure 25.— 1990.00 MHz

Output, LTE 10MHz, 16QAM:

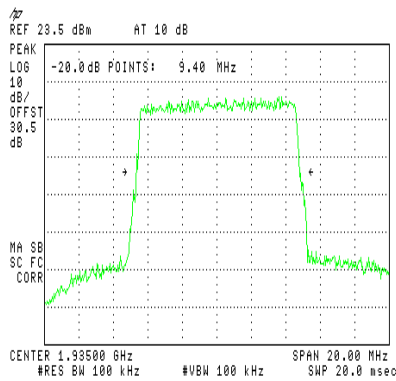


Figure 26.— 1935.00 MHz

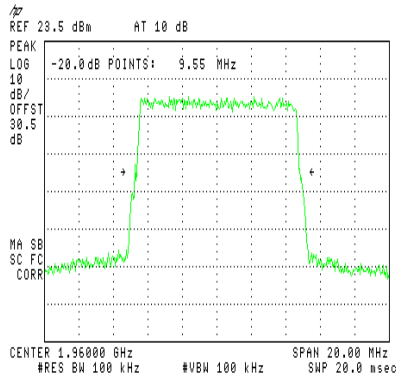


Figure 27.— 1960.00 MHz

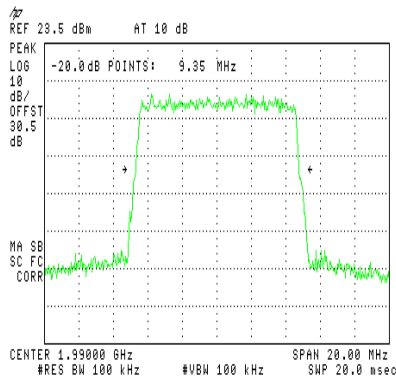


Figure 28.— 1990.00 MHz

Output, LTE 10MHz, 64QAM:

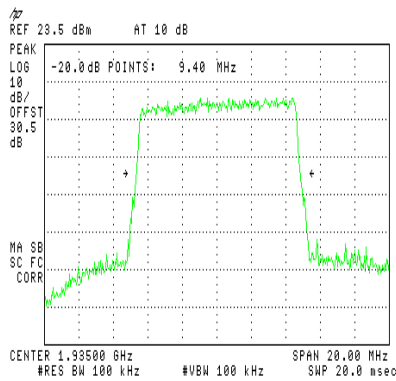


Figure 29.— 1935.00 MHz

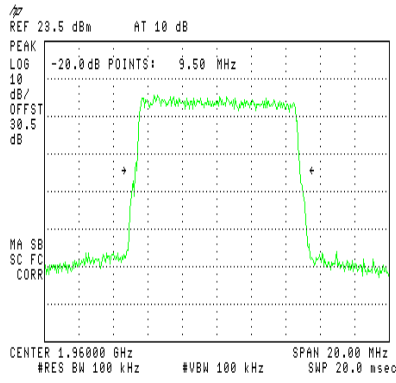


Figure 30.— 1960.00 MHz

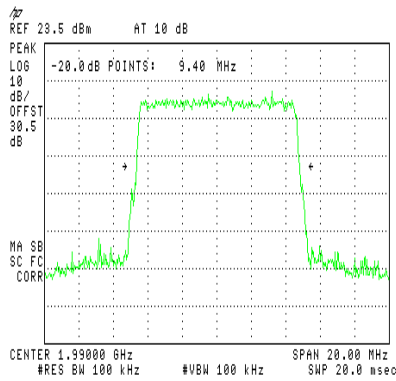


Figure 31.— 1990.00 MHz




**5.3 Results Table**

E.U.T. Description: Mobile Telephone In-Building Distribution System  
 Model No.: 1200-G-PCS-AO  
 Serial Number: Not Designated  
 Specification: FCC Part 2, Section 1049

Modulation		Operating Frequency (MHz)	Reading (MHz)
LTE 10 MHZ QPSK	Input	1935	9.50
	Input	1960	9.45
	Input	1990	9.40
LTE 10 MHZ 16QAM	Input	1935	9.35
	Input	1960	9.50
	Input	1985	9.60
LTE 10 MHZ 64QAM	Input	1935	9.45
	Input	1960	9.35
	Input	1990	9.55
LTE 10 MHZ QPSK	Output	1935	9.45
	Output	1960	9.50
	Output	1990	9.35
LTE 10 MHZ 16QAM	Output	1935	9.40
	Output	1960	9.55
	Output	1990	9.35
LTE 10 MHZ 64QAM	Output	1935	9.40
	Output	1960	9.50
	Output	1990	9.40

**Figure 32 Occupied Bandwidth PCS**

TEST PERSONNEL:

Tester Signature: 

Date: 17.08.14

Typed/Printed Name: A. Sharabi





**5.4 Test Equipment Used; Occupied Bandwidth PCS**

Instrument	Manufacturer	Model	Serial Number	Calibration	
				Last Calibration.	Period
Spectrum Analyzer	HP	8592L	3826A01204	February 28, 2014	1 year
Signal Generator	HP	N5182A	MY48180244	July 28, 2013	1 year
Attenuator	MCE	46-30-34	-	May 22 2014	1 year
Cable	Rhophase	KPS-5000-KPS	A1674	May 22, 2014	1 year

**Figure 33 Test Equipment Used**

## 6. Out of Band Emissions at Antenna Terminals PCS

### 6.1 Test Specification

FCC Part 24, Sub-part E, Section 238; FCC Part 2.1051

### 6.2 Test procedure

The power of any emission outside of the authorized operating frequency ranges (1930-1995 MHz) must be attenuated below the transmitting power (P) by a factor of at least  $43 + \log(P)$  dB, yielding  $-13\text{dBm}$ .

The E.U.T. antenna terminal was connected to the spectrum analyzer through an external attenuator and an appropriate coaxial cable (30.5 dB).

The spectrum analyzer was set to 100 kHz R.B.W.

LTE 10MHz, QPSK:

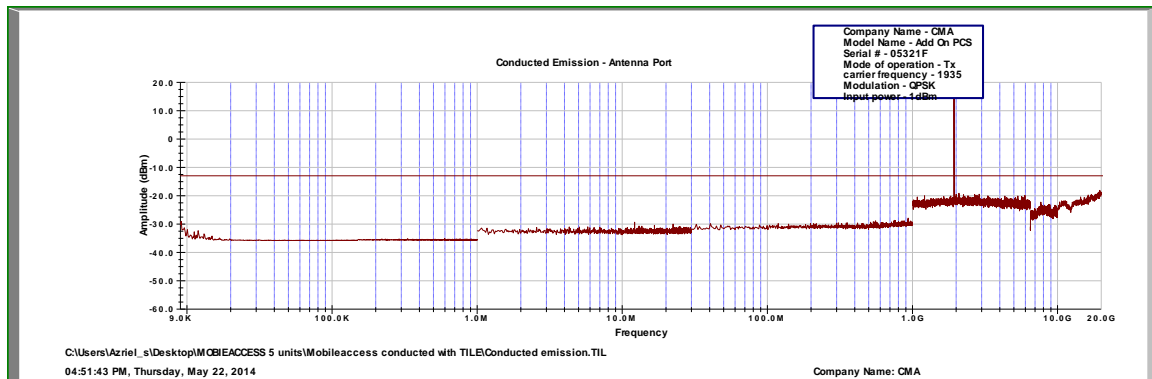


Figure 34.— 1935.00 MHz

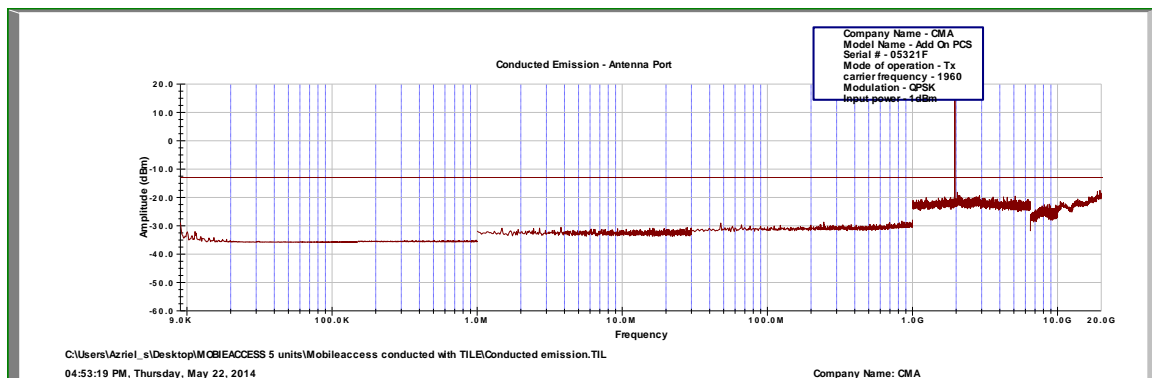


Figure 35.— 1960.00 MHz

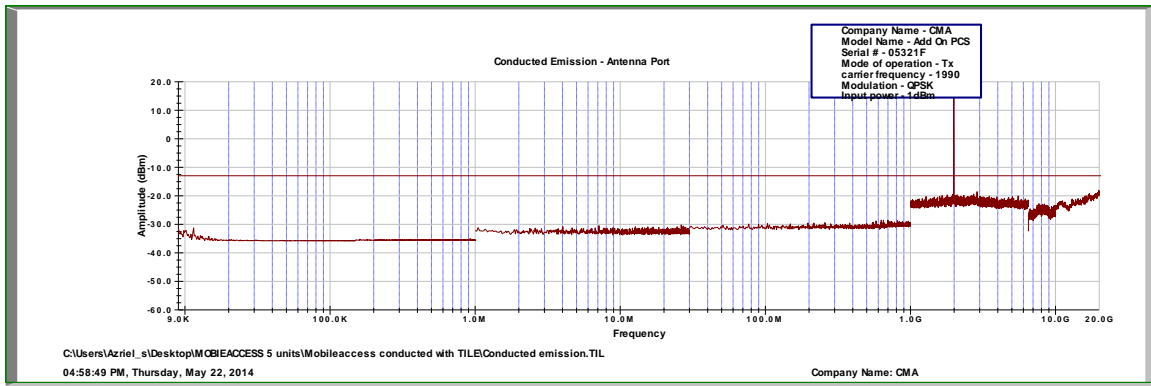


Figure 36.— 1990.00 MHz

LTE 10MHz, 16QAM:

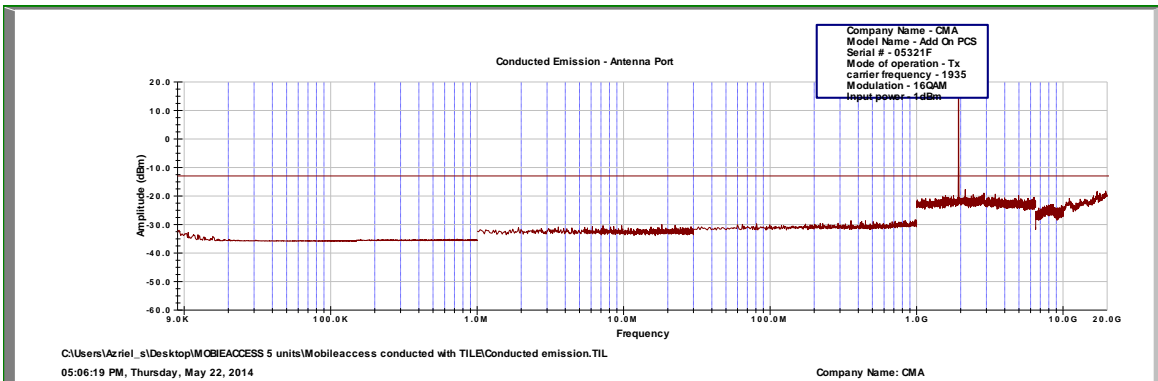


Figure 37.— 1935.00 MHz

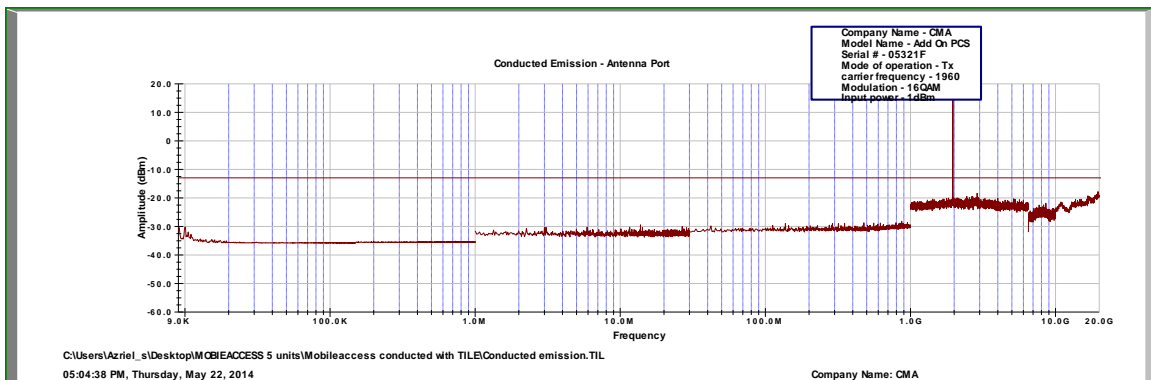


Figure 38.— 1960.00 MHz

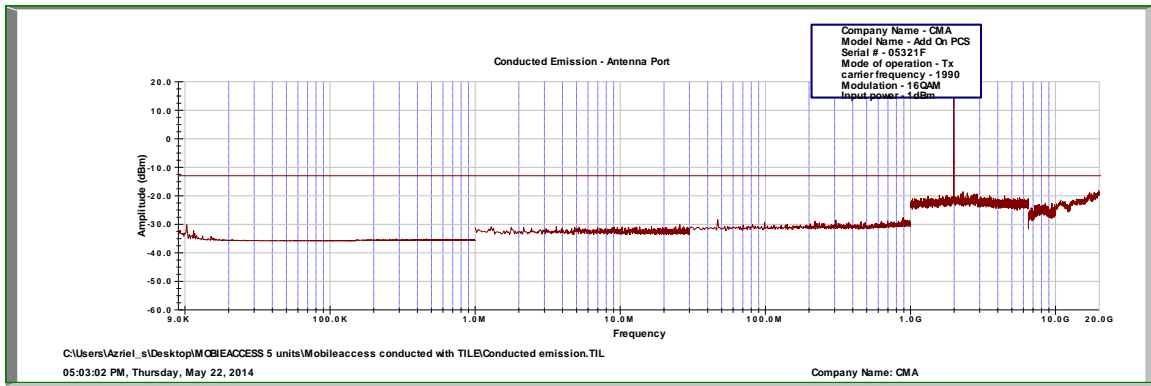


Figure 39.— 1990.00 MHz

LTE 10MHz, 64QAM:

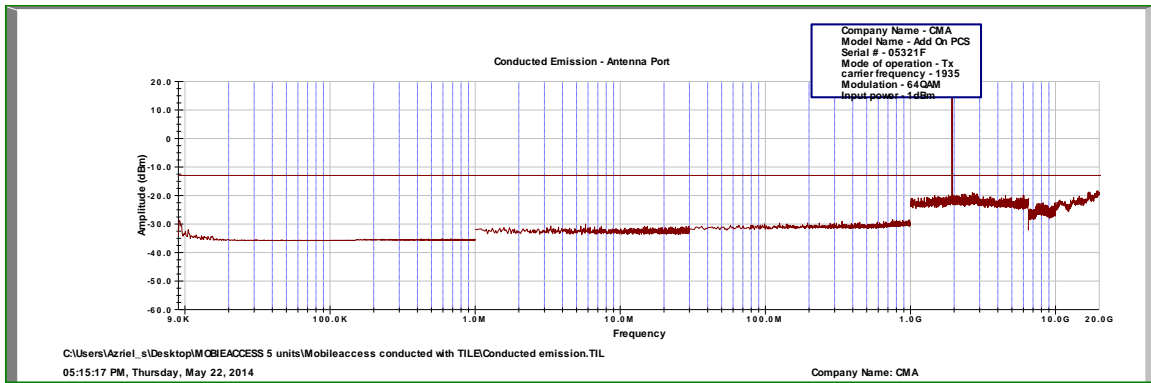


Figure 40.— 1935.00 MHz

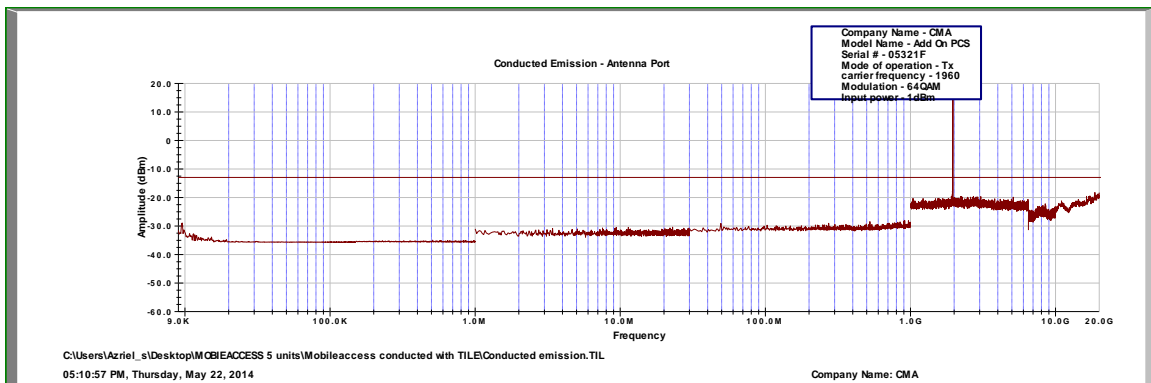


Figure 41.— 1960.00 MHz

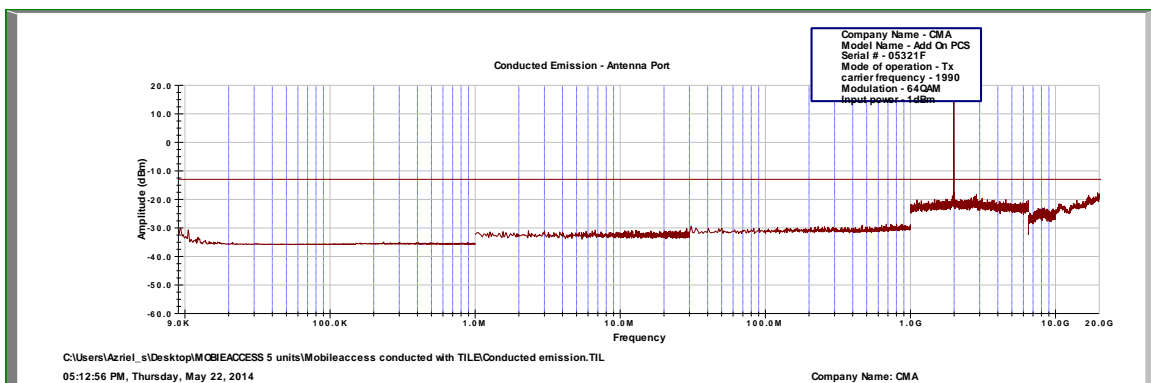


Figure 42.— 1990.00 MHz




### 6.3 Results table

E.U.T. Description: Mobile Telephone In-Building Distribution System  
Model No.: 1200-G-PCS-AO  
Serial Number: Not Designated  
Specification: FCC Part 24, Sub-part E, Section 238; Part 2 Section 1051

JUDGEMENT: Passed

TEST PERSONNEL:

Tester Signature: \_\_\_\_\_ 

Date: 17.08.14

Typed/Printed Name: A. Sharabi



**6.4 Test Equipment Used; Out of Band Emission at Antenna  
Terminals, PCS**

Instrument	Manufacturer	Model	Serial Number	Calibration	
				Last Calibration	Period
Spectrum Analyzer	HP	8592L	3826A01204	February 28, 2014	1 year
Signal Generator	HP	N5182A	MY48180244	July 28, 2013	1 year
Attenuator	MCE	46-30-34	-	May 22, 2014	1 year
Cable	Rhophase	KPS-5000-KPS	A1674	May 22, 2014	1 year

**Figure 43 Test Equipment Used**



## 7. Band Edge Spectrum

### 7.1 Test Specification

FCC Part 24, Sub-part E, Section 238; FCC Part 2.1051

### 7.2 Test procedure

Enclosed are spectrum analyzer plots for the lowest operation frequency (1932.5 MHz) and the highest operation frequency (1992.5 MHz) in which the E.U.T. is planned to be used.

The power of any emission outside of the authorized operating frequency ranges (1932.50-1992.50 MHz) must be attenuated below the transmitting power (P) by a factor of at least  $43 + \log(P)$  dB, yielding  $-13\text{dBm}$ .

The E.U.T. antenna terminal was connected to the spectrum analyzer through an external attenuator and an appropriate coaxial cable (21.0 dB).

The spectrum analyzer was set to 100 kHz R.B.W.

LTE 10MHz, QPSK:

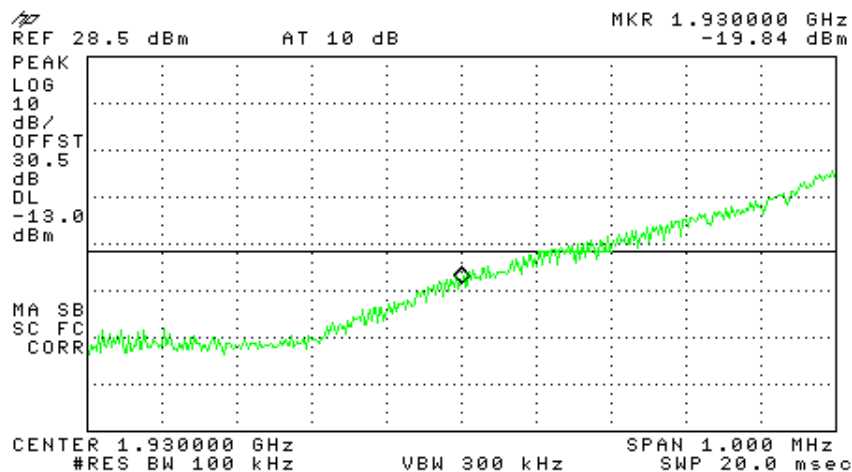


Figure 44.— 1935.00 MHz

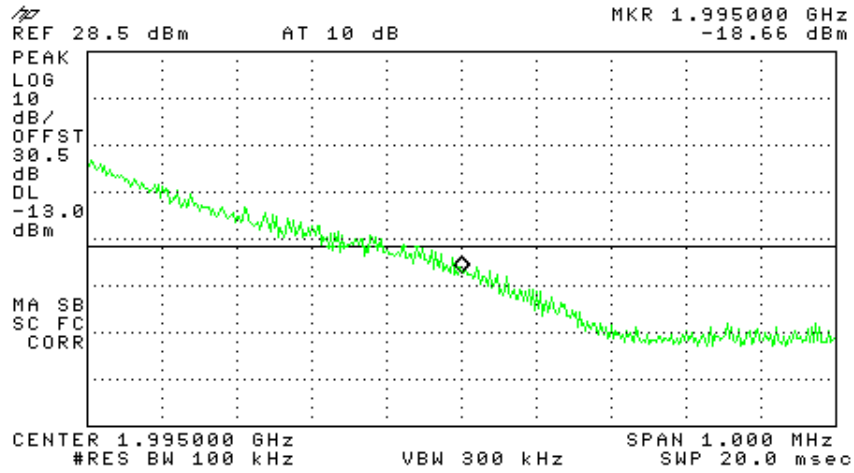


Figure 45.— 1990.00 MHz

LTE 10MHz, 16QAM:

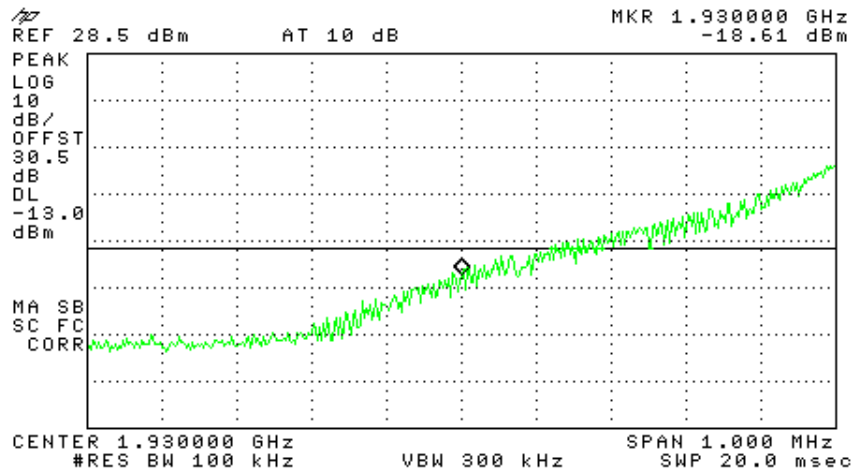


Figure 46.— 1935.00 MHz



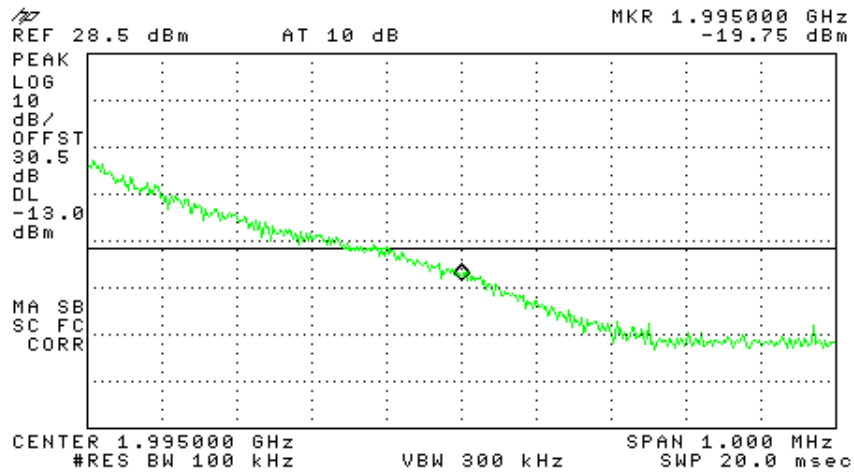


Figure 47.— 1990.00 MHz

LTE 10MHz, 64QAM:

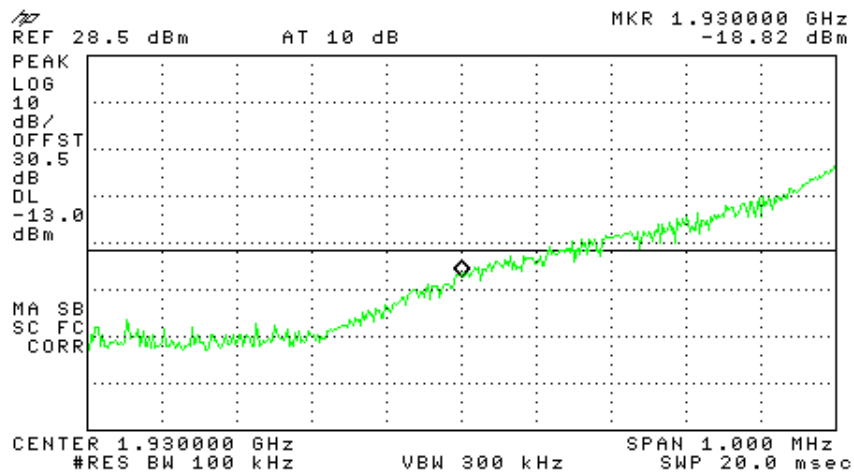


Figure 48.— 1935.00 MHz

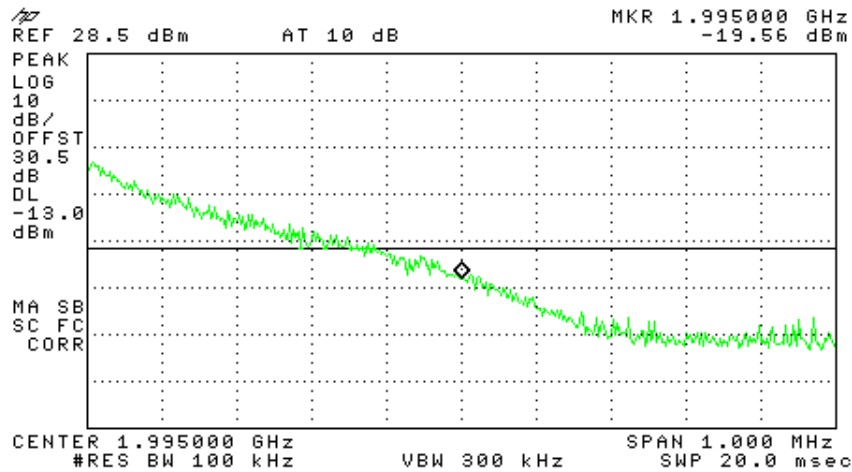


Figure 49.— 1990.00 MHz

### 7.3 Results Table


E.U.T. Description: Mobile Telephone In-Building Distribution System  
 Model No.: 1200-G-PCS-AO  
 Serial Number: Not Designated  
 Specification: FCC Part 24, Sub-part E, Section 238; Part 2 Section 1051

Modulation	Operation Frequency (MHz)	Band Edge Frequency (MHz)	Reading (dBm)	Specification (dBm)	Margin (dB)
LTE 10 MHz, QPSK	1935	1930	-19.84	-13.0	-6.84
	1990	1995	-18.66	-13.0	-5.66
LTE 10 MHz, 16QAM	1935	1930	-18.61	-13.0	-5.61
	1990	1995	-19.75	-13.0	-6.75
LTE 10 MHz, 64QAM	1935	1930	-18.82	-13.0	-5.82
	1990	1995	-19.56	-13.0	-6.56

Figure 50 Band Edge Spectrum Results

JUDGEMENT: Passed by 5.61 dB

TEST PERSONNEL:

Tester Signature: 

Date: 17.08.14

Typed/Printed Name: A. Sharabi



**7.4 Test Equipment Used; Band Edge Spectrum**

Instrument	Manufacturer	Model	Serial Number	Calibration	
				Last Calibration	Period
Spectrum Analyzer	HP	8592L	3826A01204	February 28, 2014	1 year
Signal Generator	HP	N5182A	MY48180244	July 28, 2013	1 year
Attenuator	MCE	46-30-34	-	May 22, 2014	1 year
Cable	Rhophase	KPS-5000-KPS	A1674	May 22, 2014	1 year

**Figure 51 Test Equipment Used**



## 8. APPENDIX A - CORRECTION FACTORS

### 8.1 Correction factors for CABLE from EMI receiver to test antenna at 3 meter range.

FREQUENCY (MHz)	CORRECTION FACTOR (dB)	FREQUENCY (MHz)	CORRECTION FACTOR (dB)
10.0	0.3	1200.0	7.3
20.0	0.6	1400.0	7.8
30.0	0.8	1600.0	8.4
40.0	0.9	1800.0	9.1
50.0	1.1	2000.0	9.9
60.0	1.2	2300.0	11.2
70.0	1.3	2600.0	12.2
80.0	1.4	2900.0	13.0
90.0	1.6		
100.0	1.7		
150.0	2.0		
200.0	2.3		
250.0	2.7		
300.0	3.1		
350.0	3.4		
400.0	3.7		
450.0	4.0		
500.0	4.3		
600.0	4.7		
700.0	5.3		
800.0	5.9		
900.0	6.3		
1000.0	6.7		

**NOTES:**

1. The cable type is RG-214.
2. The overall length of the cable is 27 meters.
3. The above data is located in file 27MO3MO.CBL on the disk marked "Radiated Emission Tests EMI Receiver".



**8.2 Correction factors for CABLE**  
**from EMI receiver**  
**to test antenna**  
**at 3 meter range.**

FREQUENCY (GHz)	CORRECTION FACTOR (dB)
1.0	1.2
2.0	1.6
3.0	2.0
4.0	2.4
5.0	3.0
6.0	3.4
7.0	3.8
8.0	4.2
9.0	4.6
10.0	5.0
12.0	5.8

*NOTES:*

- 1. The cable type is RG-8.*
- 2. The overall length of the cable is 10 meters.*



**8.3 Correction factors for CABLE**  
**from spectrum analyzer**  
**to test antenna above 2.9 GHz**

FREQUENCY (GHz)	CORRECTION FACTOR (dB)	FREQUENCY (GHz)	CORRECTION FACTOR (dB)
1.0	1.9	14.0	9.1
2.0	2.7	15.0	9.5
3.0	3.5	16.0	9.9
4.0	4.2	17.0	10.2
5.0	4.9	18.0	10.4
6.0	5.5	19.0	10.7
7.0	6.0	20.0	10.9
8.0	6.5	21.0	11.2
9.0	7.0	22.0	11.6
10.0	7.5	23.0	11.9
11.0	7.9	24.0	12.3
12.0	8.3	25.0	12.6
13.0	8.7	26.0	13.0

*NOTES:*

- 1. The cable type is SUCOFLEX 104 E manufactured by SUHNER.*
- 2. The cable is used for measurements above 2.9 GHz.*
- 3. The overall length of the cable is 10 meters.*



**12.6 Correction factors for LOG PERIODIC ANTENNA**

**Type LPD 2010/A  
at 3 and 10 meter ranges.**

**Distance of 3 meters**

<b>FREQUENCY (MHz)</b>	<b>AFE (dB/m)</b>
200.0	9.1
250.0	10.2
300.0	12.5
400.0	15.4
500.0	16.1
600.0	19.2
700.0	19.4
800.0	19.9
900.0	21.2
1000.0	23.5

**Distance of 10 meters**

<b>FREQUENCY (MHz)</b>	<b>AFE (dB/m)</b>
200.0	9.0
250.0	10.1
300.0	11.8
400.0	15.3
500.0	15.6
600.0	18.7
700.0	19.1
800.0	20.2
900.0	21.1
1000.0	23.2

*NOTES:*

1. Antenna serial number is 1038.
2. The above lists are located in file number 38M30.ANT for a 3 meter range,  
and file number 38M100.ANT for a 10 meter range.
3. The files mentioned above are located on the disk marked "Radiated Emission  
Test EMI Receiver".



**8.4 Correction factors for**

**LOG PERIODIC ANTENNA**

**Type SAS-200/511  
at 3 meter range.**

<b>FREQUENCY</b> (GHz)	<b>ANTENNA</b> <b>FACTOR</b> (dB)
1.0	24.9
1.5	27.8
2.0	29.9
2.5	31.2
3.0	32.8
3.5	33.6
4.0	34.3
4.5	35.2
5.0	36.2
5.5	36.7
6.0	37.2
6.5	38.1

<b>FREQUENCY</b> (GHz)	<b>ANTENNA</b> <b>FACTOR</b> (dB)
7.0	38.6
7.5	39.2
8.0	39.9
8.5	40.4
9.0	40.8
9.5	41.1
10.0	41.7
10.5	42.4
11.0	42.5
11.5	43.1
12.0	43.4
12.5	44.4
13.0	44.6

**NOTES:**

1. Antenna serial number is 253.
2. The above lists are located in file number SAS3M0.ANT for a 3 meter range.
3. The files mentioned above are located on the disk marked "Antenna Factors".





**8.5 Correction factors for BICONICAL ANTENNA  
Type BCD-235/B,  
at 3 meter range**

<b>FREQUENCY (MHz)</b>	<b>AFE (dB/m)</b>
20.0	19.4
30.0	14.8
40.0	11.9
50.0	10.2
60.0	9.1
70.0	8.5
80.0	8.9
90.0	9.6
100.0	10.3
110.0	11.0
120.0	11.5
130.0	11.7
140.0	12.1
150.0	12.6
160.0	12.8
170.0	13.0
180.0	13.5
190.0	14.0
200.0	14.8
210.0	15.3
220.0	15.8
230.0	16.2
240.0	16.6
250.0	17.6
260.0	18.2
270.0	18.4
280.0	18.7
290.0	19.2
300.0	19.9
310	20.7
320	21.9
330	23.4
340	25.1
350	27.0

*NOTES:*

- 1. Antenna serial number is 1041.*
- 2. The above list is located in file 19BC10M1.ANT on the disk marked "Radiated Emissions Tests EMI Receiver".*



**8.6 Correction factors for Double-Ridged Waveguide Horn**

**Model: 3115, S/N 29845  
at 3 meter range.**

FREQUENCY (GHz)	ANTENNA FACTOR (dB 1/m)	ANTENN A Gain (dBi)	FREQUENCY (GHz)	ANTENNA FACTOR (dB 1/m)	ANTENNA Gain (dBi)
1.0	24.8	5.4	10.0	38.8	11.4
1.5	26.1	7.6	10.5	38.9	11.8
2.0	28.6	7.7	11.0	39.0	12.1
2.5	29.8	8.4	11.5	39.6	11.8
3.0	31.4	8.4	12.0	39.8	12.0
3.5	32.4	8.7	12.5	39.6	12.5
4.0	33.7	8.6	13.0	40.0	12.5
4.5	33.4	9.9	13.5	39.8	13.0
5.0	34.5	9.7	14.0	40.2	13.0
5.5	35.1	9.9	14.5	40.6	12.9
6.0	35.4	10.4	15.0	41.3	12.4
6.5	35.6	10.8	15.5	39.5	14.6
7.0	36.2	10.9	16.0	38.8	15.5
7.5	37.3	10.4	16.5	40.0	14.6
8.0	37.7	10.6	17.0	41.4	13.4
8.5	38.3	10.5	17.5	44.8	10.3
9.0	38.5	10.8	18.0	47.2	8.1
9.5	38.7	11.1			



**8.7 Correction factors for ACTIVE LOOP ANTENNA**  
**Model 6502**  
**S/N 9506-2950**

<b>FREQUENCY</b> (MHz)	<b>Magnetic Antenna Factor</b> (dB)	<b>Electric Antenna Factor</b> (dB)
.009	-35.1	16.4
.010	-35.7	15.8
.020	-38.5	13.0
.050	-39.6	11.9
.075	-39.8	11.8
.100	-40.0	11.6
.150	-40.0	11.5
.250	-40.0	11.6
.500	-40.0	11.5
.750	-40.1	11.5
1.000	-39.9	11.7
2.000	-39.5	12.0
3.000	-39.4	12.1
4.000	-39.7	11.9
5.000	-39.7	11.8
10.000	40.2	11.3
15.000	-40.7	10.8
20.000	-40.5	11.0
25.000	-41.3	10.2
30.000	42.3	9.2