RSE Test Summary

FOR:

Model Name: TL260GS-SM

GSM Alarm communicator for DSC Power Series Panels which includes IP interface for redundant/back-up communication over 10/100 BaseT Ethernet RS422 Interface for connection to a 3rd party equipment.

TEST SUMMARY #: EMC_TYCOS_031_11002_RSE
DATE: 2011-04-27

1. Assessment

The following device was tested against the applicable criteria specified in 3GPP TS 51.010-1 and with applicable criteria in Candidate Harmonized European Standards (Telecommunication Series) ETSI EN 301 511 V9.0.2 and no deviations were ascertained during the course of the tests performed.

Company	Description	Model #
Digital Security Systems (Division of Tyco Safety Products Canada Ltd.)	GSM Alarm communicator for DSC Power Series Panels which includes IP interface for redundant/back-up communication over 10/100 BaseT Ethernet RS422 Interface for connection to a 3rd party equipment.	TL260GS-SM

Responsible for Testing Laboratory:

Date	Section	Name	Signature
2011-04-27	Compliance	Sajay Jose (Test Lab Manager)	Sajay Jose 2011.04.28 17:12:05 -07'00'

Responsible for the Summary:

Date	Section	Name	Signature
2011-04-27	Compliance	Christopher Torio (EMC Test Engineer)	Christopher Torio Digitally signed by Christopher Torio DN: cn=Christopher Torio, c=US, o=Cetecom, Inc., ou=Compliance, email=christopher.torio@cetecomusa.com Date: 2011.04.28 16:25:05 -07'00'

The test results of this test summary relate exclusively to the test item specified in Section3.
CETECOM Inc. USA does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of CETECOM Inc. USA.

2. Administrative Data

Identification of the Testing Laboratory Issuing the EMC Test Summary

Company Name:	CETECOM Inc.
Department:	Compliance
Address:	411 Dixon Landing Road Milpitas, CA 95035 U.S.A.
Telephone:	+1 (408) 586 6200
Fax:	+1 (408) 586 6299
Responsible Test Lab Manager:	Heiko Strehlow
Responsible Project Leader:	Clarence Ip
Project Number:	TYCOS_031_11002

Identification of the Client

Applicant's Name:	Digital Security Controls (Division of Tyco Safety Products Canada Ltd.)
Street Address:	3301 Langstaff Rd.
City/Zip Code	Concord, Ontario L4K4L2
Country	Canada
Contact Person:	Dan Nita
Phone No.	905-760-3000
Fax:	905-760-3020
e-mail:	dnita@dsc.com

3. Equipment under Test (EUT)

Specification of the Equipment under Test

Marketing Name:	TL260GS-SM
Model No./Name:	TL260GS-SM
Product Description:	GSM Alarm communicator for DSC Power Series Panels which includes IP interface for redundant/back-up communication over 10/100 BaseT Ethernet RS422 Interface for connection to a 3rd party equipment.
Hardware Version :	UA585 Rev. 01
Software Version:	G24-L Radio: FPR1
Frequency:	GSM 850/900/1800/1900
Antenna Type:	☐Internal ■ External
Power Supply:	AC Adapter
Voltage Range:	9.5/13.8/14.5 VDC

Identification of the Equipment Under Test (EUT)

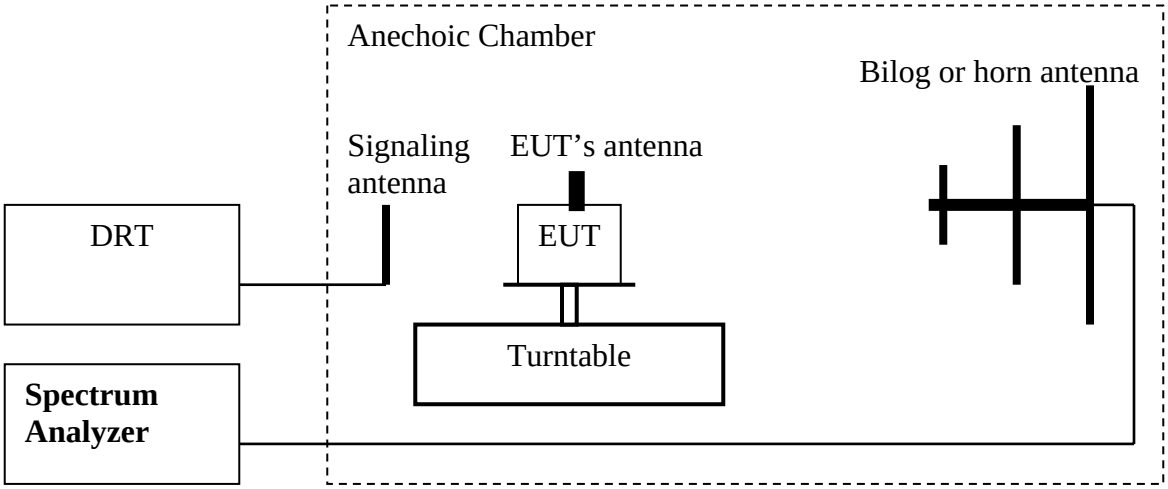
EUT #	Serial Number	Cetecom ID	HW Version	SW Version
1	IMEI: 353273020169682	C011201	UA585 Rev. 01	G24-L Radio: FPR1

Identification of Accessory equipment (AE)

AE #	Type	Manufacturer	Model	Serial Number	Cetecom ID
1	GSM Antenna	N/A	N/A	N/A	C011202
2	AC Adapter	DSC	PTC1640U	88014305	C011203

4. Measurement Procedure

Ref: TIA-603C 2004- 2.2.12 Unwanted emissions: Radiated Spurious



1. Connect the equipment as shown in the above diagram with the EUT's antenna in a horizontal orientation.
2. Adjust the settings of the Digital RadioCommunication Tester (DRT) to set the EUT to its maximum power at the required channel.
3. Set the spectrum analyzer to measure peak hold with the required settings.
4. Place the measurement antenna in a horizontal orientation. Rotate the EUT 360°. Raise the measurement antenna up to 4 meters in 0.5 meters increments and rotate the EUT 360° at each height to maximize all emissions. Measure and record all spurious emissions (**LVL**) up to the tenth harmonic of the carrier frequency.
5. Replace the EUT with a horizontally polarized half wave dipole or known gain antenna. The center of the antenna should be at the same location as the center of the EUT's antenna.
6. Connect the antenna to a signal generator with known output power and record the path loss in dB (**LOSS)**. **LOSS** = Generator Output Power (dBm) – Analyzer reading (dBm).
7. Determine the level of spurious emissions using the following equation:
   Spurious (dBm) = **LVL** (dBm) + **LOSS** (dB):
8. Repeat steps 4, 5 and 6 with all antennas vertically polarized.
9. Determine the level of spurious emissions using the following equation:
   Spurious (dBm) = **LVL** (dBm) + **LOSS** (dB):
10. Measurements are to be performed with the EUT set to the middle channel of each frequency band.
    (N**ote:** Steps 5 and 6 above are performed prior to testing and **LOSS** is recorded by test software. Steps 3, 4 and 7 above are performed with test software.)

RSE Summary			
Test Case Reference:	3GPP TS 51.010 TC 12.2.x		
Test Case:	12.2.1 Radiated Spurious Emissions- MS allocated a channel		
Test Conditions:	GSM 850; Mid ARFCN- 190		
Type of test:	☐Partial ■Full		
Extreme Conditions:	☐Applicable ■ Not Applicable		
EUT:	EUT #1 + AE #1,2		
Voltage:	AC Adapter		
Location:	EMC Lab		
Test Engineer:	Sam M.		
Sweep	**Antenna**	**EUT Configuration**	**Verdict**
30M- 1GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
1GHz- 4GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
Date of Test:	2011-03-03		

RSE Summary			
Test Case Reference:	3GPP TS 51.010 TC 12.2.x		
Test Case:	12.2.2 Radiated Spurious Emissions- MS in Idle Mode		
Test Conditions:	GSM 850; Mid ARFCN- 190		
Type of test:	☐Partial ■Full		
Extreme Conditions:	☐Applicable ■ Not Applicable		
EUT:	EUT #1 + AE #1,2		
Voltage:	AC Adapter		
Location:	EMC Lab		
Test Engineer:	Sam M.		
Sweep	**Antenna**	**EUT Configuration**	**Verdict**
30M- 1GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
1GHz- 4GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
Date of Test:	2011-03-03		

RSE Summary			
Test Case Reference:	3GPP TS 51.010 TC 12.2.x		
Test Case:	12.2.1 Radiated Spurious Emissions- MS allocated a channel		
Test Conditions:	GSM 900; Mid ARFCN- 62		
Type of test:	☐Partial ■Full		
Extreme Conditions:	☐Applicable ■ Not Applicable		
EUT:	EUT #1 + AE #1,2		
Voltage:	AC Adapter		
Location:	EMC Lab		
Test Engineer:	Sam M.		
Sweep	**Antenna**	**EUT Configuration**	**Verdict**
30M- 1GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
1GHz- 4GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
Date of Test:	2011-03-03		

RSE Summary			
Test Case Reference:	3GPP TS 51.010 TC 12.2.x		
Test Case:	12.2.2 Radiated Spurious Emissions- MS in Idle Mode		
Test Conditions:	GSM 900; Mid ARFCN- 62		
Type of test:	☐Partial ■Full		
Extreme Conditions:	☐Applicable ■ Not Applicable		
EUT:	EUT #1 + AE #1,2		
Voltage:	AC Adapter		
Location:	EMC Lab		
Test Engineer:	Sam M.		
Sweep	**Antenna**	**EUT Configuration**	**Verdict**
30M- 1GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
1GHz- 4GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
Date of Test:	2011-03-03		

RSE Summary			
Test Case Reference:	3GPP TS 51.010 TC 12.2.x		
Test Case:	12.2.1 Radiated Spurious Emissions- MS allocated a channel		
Test Conditions:	GSM 1800; Mid ARFCN- 700		
Type of test:	☐Partial ■Full		
Extreme Conditions:	☐Applicable ■ Not Applicable		
EUT:	EUT #1 + AE #1,2		
Voltage:	AC Adapter		
Location:	EMC Lab		
Test Engineer:	Sam M.		
Sweep	**Antenna**	**EUT Configuration**	**Verdict**
30M- 1GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
1GHz- 4GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
Date of Test:	2011-03-03		

RSE Summary			
Test Case Reference:	3GPP TS 51.010 TC 12.2.x		
Test Case:	12.2.2 Radiated Spurious Emissions- MS in Idle Mode		
Test Conditions:	GSM 1800; Mid ARFCN- 700		
Type of test:	☐Partial ■Full		
Extreme Conditions:	☐Applicable ■ Not Applicable		
EUT:	EUT #1 + AE #1,2		
Voltage:	AC Adapter		
Location:	EMC Lab		
Test Engineer:	Sam M.		
Sweep	**Antenna**	**EUT Configuration**	**Verdict**
30M- 1GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
1GHz- 4GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
Date of Test:	2011-03-03		

RSE Summary			
Test Case Reference:	3GPP TS 51.010 TC 12.2.x		
Test Case:	12.2.1 Radiated Spurious Emissions- MS allocated a channel		
Test Conditions:	GSM 1900; Mid ARFCN- 661		
Type of test:	☐Partial ■Full		
Extreme Conditions:	☐Applicable ■ Not Applicable		
EUT:	EUT #1 + AE #1,2		
Voltage:	AC Adapter		
Location:	EMC Lab		
Test Engineer:	Sam M.		
Sweep	**Antenna**	**EUT Configuration**	**Verdict**
30M- 1GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
1GHz- 4GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
Date of Test:	2011-03-03		

RSE Summary			
Test Case Reference:	3GPP TS 51.010 TC 12.2.x		
Test Case:	12.2.2 Radiated Spurious Emissions- MS in Idle Mode		
Test Conditions:	GSM 1900; Mid ARFCN- 661		
Type of test:	☐Partial ■Full		
Extreme Conditions:	☐Applicable ■ Not Applicable		
EUT:	EUT #1 + AE #1,2		
Voltage:	AC Adapter		
Location:	EMC Lab		
Test Engineer:	Sam M.		
Sweep	**Antenna**	**EUT Configuration**	**Verdict**
30M- 1GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
1GHz- 4GHz	H	☐H ■V	Passed
	V	☐H ■V	Passed
Date of Test:	2011-03-03		