FCC PART 27
FCC PART 22H, PART 24E
TEST REPORT

For

Inrico Technologies Co., Ltd

3/F, Building No.118, High Tech Industrial Park, 72 Guowei Road, Luohu District, Shenzhen, China

FCC ID: 2AIV6-2-T310

Report Type:	**Product Type:**
Amended Report	Smart phone

Report Number:	SZGMA210712-28475E-00CA1
Report Date:	2021-09-09
Reviewed By:	Candy Li RF Engineer
Prepared By:	Shenzhen Accurate Technology Co., Ltd. 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China Tel: (0755) 26503290 Fax: (0755) 26503396 Http://www.atc-lab.com

Note: This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "★".

Shenzhen Accurate Technology Co., Ltd. is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with an asterisk '*'. Customer model name, addresses, names, trademarks etc. are not considered data.

TABLE OF CONTENTS

DOCUMENT REVISION HISTORY

Revision Number	Description of Revision	Report Number	Date of Revision
Rev.01	Original Report	RDG200812009-00B	2020-12-22
Rev.02	Amended Report	SZGMA210712-28475E-00CA1	2021-09-09

Note: This is Amended Report application which was based on the Original Report. The differences between them as following:

1. The current device is identical with certified device except activating Wi-Fi & BT functions.

2. Updated FCC ID, applicant name and address.

The changes between the previous device and the current one are stated and guaranteed by the applicant. According to their differences, we retest the item of Field Strength of Spurious Radiation, and other test data, setup photos and EUT photos please refer to the original test report: RDG200812009-00B.

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Smart phone
Trademark	Inrico
Tested Model	T310
Frequency Range	GSM 850: 824-849 MHz(TX); 869-894 MHz(RX) PCS 1900: 1850-1910 MHz(TX); 1930-1990 MHz(RX) WCDMA Band 5: 824-849 MHz(TX); 869-894 MHz(RX) LTE Band 2:1850-1910 MHz(TX), 1930-1990 MHz(RX) LTE Band 4:1710-1755 MHz(TX), 2110-2155 MHz(RX) LTE Band 12: 699-716 MHz(TX), 729-746 MHz(RX) LTE Band 17: 704-716 MHz(TX), 734-746 MHz(RX)
Modulation Technique	GMSK, 8PSK, BPSK, QPSK, 16QAM
Antenna Specification*	GSM850/WCDMA B5: -0.3 dBi(-2.45dBd) PCS1900/LTE B2: 0.5 dBi LTE B4: 0.5 dBi LTE B12/17: -0.3 dBi(-2.45dBd)
Voltage Range	DC 3.7V from battery or DC 5V from Adapter
Date of Test	2021-09-09
Sample serial number	SZGMA210712-28475E-RFA1-S_DCI (Assigned by ATC)
Received date	2021-07-12
Sample/EUT Status	Good condition
Adapter information	Model: HJ-0501000E1-US Input: AC 100-240V, 50/60Hz, 0.2A Output: DC 5V, 1000mA

Objective

This test report is in accordance with Part 2-Subpart J, Part 22-Subpart H, Part 24-Subpart E, and Subpart 27 of the Federal Communication Commission's rules.

The objective is to determine the compliance of the EUT with FCC rules for output power, modulation characteristic, occupied bandwidth, and spurious emission at antenna terminal, spurious radiated emission, frequency stability and band edge.

Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47 Part 2-Subpart J as well as the following parts:

Part 22 Subpart H - Public Mobile Services
Part 24 Subpart E - Personal Communication Services
Part 27 - Miscellaneous Wireless Communications Services

ANSI C63.26-2015: American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

All emissions measurement was performed at Shenzhen Accurate Technology Co., Ltd. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		5%
RF output power, conducted		0.73dB
Unwanted Emission, conducted		1.6dB
RF Frequency		$0.082*10^{-7}$
Emissions, Radiated	30MHz - 1GHz	4.28dB
	1GHz - 18GHz	4.98dB
	18GHz - 26.5GHz	5.06dB
Temperature		1℃
Humidity		6%
Supply voltages		0.4%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The Test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358, the FCC Designation No.: CN1189. Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 429 7.01.

Listed by Innovation, Science and Economic Development Canada (ISEDC), the Registration Number is 5077A.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The final qualification test was performed with the EUT operating at normal mode.

The test items were performed with the EUT operating at testing mode. Test was performed with channels as below table:

Band	Channel Bandwidth	Frequency
GSM/GPRS/EDGE 850	0.25 MHz	824.2MHz, 836.6MHz, 848.8MHz
GSM/GPRS/EDGE 1900	0.25 MHz	1850.2MHz, 1880.0MHz, 1909.8MHz;
WCDMA Band 5	4.2 MHz	826.4MHz, 836.6MHz, 846.6MHz
LTE Band 2	1.4 MHz	1850.7MHz, 1880.0 MHz, 1909.3 MHz;
	3.0 MHz	1851.5MHz, 1880.0 MHz, 1908.5 MHz;
	5.0 MHz	1852.5MHz, 1880.0 MHz, 1907.5 MHz;
	10.0 MHz	1855MHz, 1880.0 MHz, 1905 MHz;
	15.0 MHz	1857.5MHz, 1880.0 MHz, 1902.5 MHz;
	20.0 MHz	1860MHz, 1880.0 MHz, 1900MHz;
LTE Band 4	1.4 MHz	1710.7MHz, 1732.5MHz, 1754.3MHz;
	3.0 MHz	1711.5MHz, 1732.5MHz, 1753.5MHz
	5.0 MHz	1712.5MHz, 1732.5MHz, 1752.5MHz
	10.0 MHz	1715MHz, 1732.5MHz, 1750MHz
	15.0 MHz	1717.5MHz, 1732.5MHz, 1747.5MHz
	20.0 MHz	1720MHz, 1732.5MHz, 1745MHz
LTE Band 12	1.4 MHz	699.7MHz, 707.5MHz, 715.3MHz
	3.0 MHz	700.5MHz, 707.5MHz, 714.5MHz
	5.0 MHz	701.5MHz, 707.5MHz, 713.5MHz
	10.0 MHz	704MHz, 707.5MHz, 711MHz
LTE Band 17	5.0 MHz	706.5MHz, 710.0MHz, 713.5MHz
	10.0 MHz	709.0MHz, 710.0MHz, 711.0MHz

Equipment Modifications

No modification was made to the EUT.

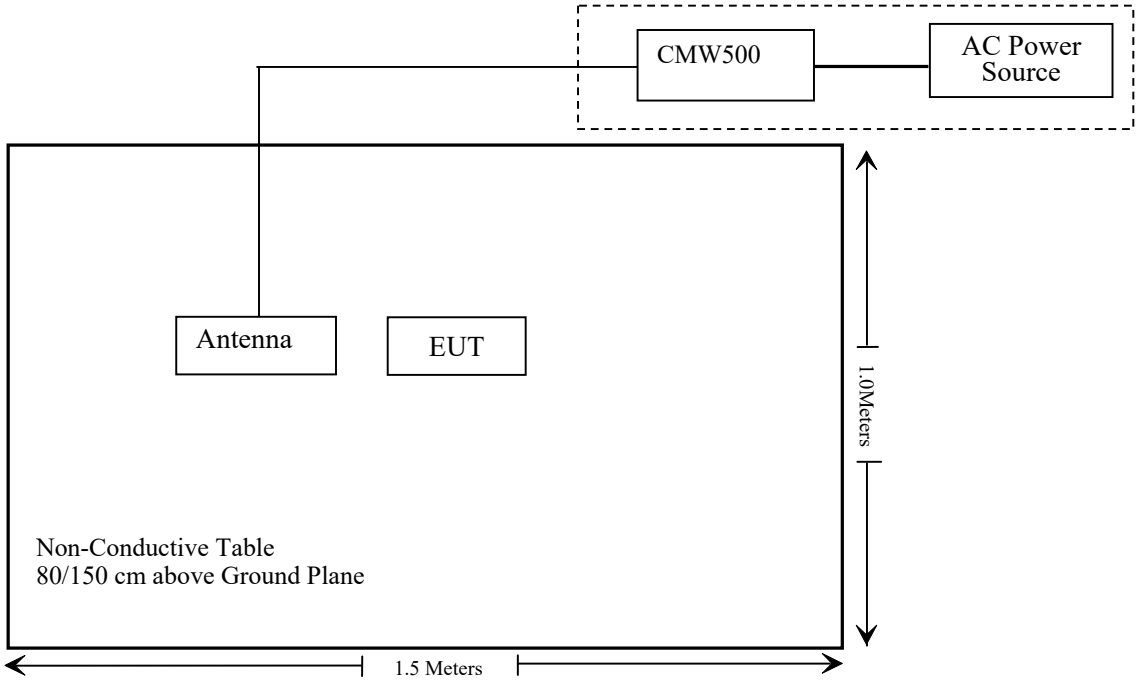
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	154606
Unknown	ANTANNA	Unknown	Unknown

Support Cable Description

Cable Description	Length (m)	From / Port	To
/	/	/	/

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 , §2.1093	RF Exposure (SAR)	Compliance*
§2.1046; § 22.913 (a); § 24.232 (c); §27.50 (a) (b) (c) (d) (h);	RF Output Power	Compliance**
§ 2.1047	Modulation Characteristics	Not Applicable
§ 2.1049; § 22.905; § 22.917; § 24.238; §27.53	Occupied Bandwidth	Compliance**
§ 2.1051; § 22.917 (a); § 24.238 (a); §27.53;	Spurious Emissions at Antenna Terminal	Compliance**
§ 2.1053; § 22.917 (a); § 24.238 (a); §27.53	Field Strength of Spurious Radiation	Compliance
§ 22.917 (a); § 24.238 (a); §27.53 (c) (h) (m)	Band Edge	Compliance**
§ 2.1055; § 22.355; § 24.235; §27.54;	Frequency stability	Compliance**

Note:
Compliance**: Please refer to SAR report number: SZGMA210712-28475E-20AA1.
Compliance**: Please refer to the test report: RDG200812009-00B

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test					
Rohde & Schwarz	Spectrum Analyzer	FSV-40	101495	2020/12/24	2021/12/23
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	154606	2020/12/25	2021/12/24
Vector Signal Generator	AGILENT	N5182A	MY50143401	2020/12/25	2021/12/24
V.R. of Signal Generators	Anritsu	68369B	004114	2021/07/31	2022/07/30
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-1067	2020/01/05	2023/01/04
SCHWARZBECK	HORN ANTENNA	BBHA9120D	9120D-655	2020/01/05	2023/01/04
Schwarzbeck	HORN ANTENNA	BBHA9170	9170-359	2020/01/05	2023/01/04
Ducommun Technolagies	Horn antenna	ARH-4223-02	1007726-01 1304	2020/12/06	2023/12/05
A.H. Systems, inc.	Preamplifier	PAM-0118P	531	2021/07/08	2022/07/07
Quinstar	Amplifier	QLW-184055 36-J0	15964001002	2020/11/28	2021/11/27
Rohde& Schwarz	Test Receiver	ESR	101817	2020/12/24	2021/12/23
SONOMA INSTRUMENT	Amplifier	310 N	186131	2020/12/25	2021/12/24
Anritsu Corp	50 Coaxial Switch	MP59B	6100237248	2020/12/25	2021/12/24
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2020/01/05	2023/01/04
Schwarzbeck	Bilog Antenna	VULB9163	9163-194	2020/01/05	2023/01/04
RF Coaxial Cable	Unknown	N-5m	No.3	2020/12/25	2021/12/24
RF Coaxial Cable	Unknown	N-5m	No.4	2020/12/25	2021/12/24
Unknown	RF Coaxial Cable	N-1m	No.5	2020/12/25	2021/12/24
RF Coaxial Cable	Unknown	N-1m	No.6	2020/12/25	2021/12/24
RF Coaxial Cable	Unknown	N-2m	No.11	2020/12/25	2021/12/24

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test					
Unknown	Band Reject Filter	MSF1850-1910MS-1148	201706003	2020/12/25	2021/12/24
Unknown	Band Reject Filter	MSF1710-1785MS-1150	201706003	2020/12/25	2021/12/24
Unknown	Band Reject Filter	MSF824-862 MS-1147	201706003	2020/12/25	2021/12/24
Unknown	Band Reject Filter	MSF700-800 MS-1153	201706003	2020/12/25	2021/12/24
Unknown	High Pass Filter	HPM-1.2/18G-60	110	2020/12/25	2021/12/24

* Statement of Traceability: Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §1.1307(b) & §2.1093 - RF EXPOSURE INFORMATION

Applicable Standard

FCC§1.1310 and §2.1093.

Test Result

Compliance, please refer to the SAR report: SZGMA210712-28475E-20AA1.

FCC § 2.1053; § 22.917 (a);§ 24.238 (a); §27.53 - SPURIOUS RADIATED EMISSIONS

Applicable Standard

FCC § 2.1053, §22.917(a) & § 24.238(a) & § 27.53.

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the receiving antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Test Data

Environmental Conditions

Temperature:	28 ℃
Relative Humidity:	50 %
ATM Pressure:	101.0 kPa

The testing was performed by Black Ding on 2021-09-09.

EUT operation mode: Transmitting (Worst case record in the reports)

The worst case is as below:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
	Reading (dBm)	PK/ QP/ Ave.		Height (m)	Polar (H/V)				
GSM850, 30MHz-10GHz									
Low Channel									
55.22	-76.87	PK	58	2.00	H	0.62	-76.25	-13.00	63.25
54.84	-69.28	PK	103	2.10	V	0.34	-68.94	-13.00	55.94
1648.40	-32.01	PK	288	1.30	H	-2.32	-34.33	-13.00	21.33
1648.40	-31.58	PK	274	1.50	V	-2.29	-33.87	-13.00	20.87
Middle Channel									
55.22	-77.00	PK	147	1.80	H	0.62	-76.38	-13.00	63.38
54.84	-69.37	PK	187	2.10	V	0.34	-69.03	-13.00	56.03
1673.20	-30.82	PK	271	1.30	H	-2.34	-33.16	-13.00	20.16
1673.20	-32.07	PK	71	1.80	V	-2.31	-34.38	-13.00	21.38
High Channel									
55.22	-76.93	PK	354	2.10	H	0.62	-76.31	-13.00	63.31
54.84	-69.48	PK	141	1.70	V	0.34	-69.14	-13.00	56.14
1697.60	-31.90	PK	241	2.00	H	-2.38	-34.28	-13.00	21.28
1697.60	-31.02	PK	180	1.90	V	-2.34	-33.36	-13.00	20.36
PCS1900, 30MHz-20GHz									
Low Channel									
55.22	-76.86	PK	215	2.00	H	0.62	-76.24	-13.00	63.24
54.84	-69.41	PK	56	1.20	V	0.34	-69.07	-13.00	56.07
3700.40	-28.18	PK	81	1.60	H	4.72	-23.46	-13.00	10.46
3700.40	-28.40	PK	287	1.60	V	4.61	-23.79	-13.00	10.79
Middle Channel									
55.22	-76.90	PK	271	1.80	H	0.62	-76.28	-13.00	63.28
54.84	-69.45	PK	72	1.80	V	0.34	-69.11	-13.00	56.11
3760.00	-29.45	PK	96	1.00	H	4.94	-24.51	-13.00	11.51
3760.00	-29.08	PK	287	1.30	V	4.85	-24.23	-13.00	11.23
High Channel									
55.22	-76.95	PK	248	1.80	H	0.62	-76.33	-13.00	63.33
54.84	-69.49	PK	56	1.90	V	0.34	-69.15	-13.00	56.15
3819.60	-34.52	PK	222	1.80	H	5.25	-29.27	-13.00	16.27
3819.60	-32.70	PK	41	1.40	V	5.08	-27.62	-13.00	14.62
WCDMA BAND 5, 30MHz-10GHz									
Low Channel									
55.22	-76.86	PK	125	1.90	H	0.62	-76.24	-13.00	63.24
54.84	-69.47	PK	259	1.80	V	0.34	-69.13	-13.00	56.13
1652.80	-49.27	PK	289	1.10	H	-2.32	-51.59	-13.00	38.59
1652.80	-49.85	PK	317	1.60	V	-2.29	-52.14	-13.00	39.14
Middle Channel									
55.22	-76.99	PK	145	1.90	H	0.62	-76.37	-13.00	63.37

54.84	-69.59	PK	259	1.10	V	0.34	-69.25	-13.00	56.25
1673.20	-49.14	PK	262	1.60	H	-2.34	-51.48	-13.00	38.48
1673.20	-49.70	PK	246	2.10	V	-2.31	-52.01	-13.00	39.01
High Channel									
55.22	-76.91	PK	360	1.70	H	0.62	-76.29	-13.00	63.29
54.84	-69.51	PK	15	1.60	V	0.34	-69.17	-13.00	56.17
1693.20	-48.94	PK	262	1.10	H	-2.38	-51.32	-13.00	38.32
1693.20	-49.77	PK	283	2.00	V	-2.34	-52.11	-13.00	39.11
LTE BAND 2, QPSK, 30MHz-20GHz									
Low Channel									
55.22	-76.93	PK	234	1.40	H	0.62	-76.31	-13.00	63.31
54.84	-69.58	PK	202	1.80	V	0.34	-69.24	-13.00	56.24
3701.40	-52.07	PK	166	2.00	H	4.72	-47.35	-13.00	34.35
3701.40	-51.87	PK	169	1.60	V	4.61	-47.26	-13.00	34.26
Middle Channel									
55.22	-76.80	PK	2	1.90	H	0.62	-76.18	-13.00	63.18
54.84	-69.41	PK	38	1.80	V	0.34	-69.07	-13.00	56.07
3760.00	-52.15	PK	166	1.40	H	4.94	-47.21	-13.00	34.21
3760.00	-51.72	PK	77	1.50	V	4.85	-46.87	-13.00	33.87
High Channel									
55.22	-76.76	PK	323	1.30	H	0.62	-76.14	-13.00	63.14
54.84	-69.40	PK	149	1.60	V	0.34	-69.06	-13.00	56.06
3818.60	-49.40	PK	261	2.10	H	5.22	-44.18	-13.00	31.18
3818.60	-49.69	PK	280	1.10	V	5.05	-44.64	-13.00	31.64
LTE BAND 4, QPSK, 30MHz-20GHz									
Low Channel									
55.22	-76.87	PK	72	1.60	H	0.62	-76.25	-13.00	63.25
54.84	-69.38	PK	13	1.40	V	0.34	-69.04	-13.00	56.04
3421.40	-49.03	PK	214	1.70	H	2.72	-46.31	-13.00	33.31
3421.40	-48.74	PK	11	1.20	V	2.59	-46.15	-13.00	33.15
Middle Channel									
55.22	-76.80	PK	287	1.80	H	0.62	-76.18	-13.00	63.18
54.84	-69.41	PK	197	1.10	V	0.34	-69.07	-13.00	56.07
3465.00	-49.35	PK	18	1.80	H	3.09	-46.26	-13.00	33.26
3465.00	-49.16	PK	19	1.60	V	2.97	-46.19	-13.00	33.19
High Channel									
55.22	-76.85	PK	142	1.80	H	0.62	-76.23	-13.00	63.23
54.84	-69.51	PK	40	1.40	V	0.34	-69.17	-13.00	56.17
3508.60	-50.64	PK	31	1.40	H	3.44	-47.20	-13.00	34.20
3508.60	-50.39	PK	185	1.30	V	3.31	-47.08	-13.00	34.08
LTE BAND 12, QPSK, 30MHz-10GHz									
Low Channel									
55.22	-76.91	PK	171	1.20	H	0.62	-76.29	-13.00	63.29
54.84	-69.48	PK	284	1.40	V	0.34	-69.14	-13.00	56.14

1399.40	-53.16	PK	239	1.30	H	-0.62	-53.78	-13.00	40.78
1399.40	-52.75	PK	345	2.10	V	-0.84	-53.59	-13.00	40.59
Middle Channel									
55.22	-76.84	PK	156	1.70	H	0.62	-76.22	-13.00	63.22
54.84	-69.51	PK	155	1.90	V	0.34	-69.17	-13.00	56.17
1415.00	-53.40	PK	32	2.10	H	-0.65	-54.05	-13.00	41.05
1415.00	-53.89	PK	210	1.70	V	-0.87	-54.76	-13.00	41.76
High Channel									
55.22	-76.90	PK	326	1.40	H	0.62	-76.28	-13.00	63.28
54.84	-69.40	PK	4	1.70	V	0.34	-69.06	-13.00	56.06
1430.60	-53.18	PK	321	2.20	H	-0.71	-53.89	-13.00	40.89
1430.60	-53.68	PK	352	1.10	V	-0.94	-54.62	-13.00	41.62
LTE BAND 17, QPSK, 30MHz-10GHz									
Low Channel									
55.22	-76.97	PK	158	1.10	H	0.62	-76.35	-13.00	63.35
54.84	-69.53	PK	293	1.70	V	0.34	-69.19	-13.00	56.19
1413.00	-51.49	PK	201	1.60	H	-0.65	-52.14	-13.00	39.14
1413.00	-52.06	PK	131	1.90	V	-0.87	-52.93	-13.00	39.93
Middle Channel									
55.22	-76.89	PK	210	1.70	H	0.62	-76.27	-13.00	63.27
54.84	-69.47	PK	210	1.80	V	0.34	-69.13	-13.00	56.13
1420.00	-52.35	PK	353	1.90	H	-0.67	-53.02	-13.00	40.02
1420.00	-51.96	PK	165	1.50	V	-0.91	-52.87	-13.00	39.87
High Channel									
55.22	-76.92	PK	110	1.90	H	0.62	-76.3	-13.00	63.30
54.84	-69.50	PK	164	2.10	V	0.34	-69.16	-13.00	56.16
1427.00	-51.64	PK	176	1.90	H	-0.71	-52.35	-13.00	39.35
1427.00	-52.30	PK	104	1.70	V	-0.94	-53.24	-13.00	40.24

Note:
Absolute Level = Reading Level + Substituted Factor
Substituted Factor contains: SG Level - Cable loss+ Antenna Gain
Margin = Limit - Absolute Level

******* END OF REPORT *******