# **FCC Test Report**

Report No.: AGC07357160802FE03

FCC ID : 2AALA1325S

**APPLICATION PURPOSE** : Original Equipment

**PRODUCT DESIGNATION**: Camera

**BRAND NAME** : N/A

**MODEL NAME** : Refer to Page 5

**CLIENT**: Shantou City Hengdi Industry Co.,Ltd.

**DATE OF ISSUE** : Sep. 07, 2016

STANDARD(S)

TEST PROCEDURE(S) : FCC Part 15 Rules

**REPORT VERSION** V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd

## **CAUTION:**

This report shall not be reproduced except in full without the written permission of the test laboratory and shall not be quoted out of context.



Report No.: AGC07357160802FE03 Page 2 of 32

## **Report Revise Record**

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Sep. 07, 2016	Valid	Original Report

## **TABLE OF CONTENTS**

1. VERIFICATION OF CONFORMITY	4
2. GENERAL INFORMATION	5
2.1. PRODUCT DESCRIPTION	5
2.2. TABLE OF CARRIER FREQUENCY	6
3. MEASUREMENT UNCERTAINTY	7
4. DESCRIPTION OF TEST MODES	7
5. SYSTEM TEST CONFIGURATION	8
5.1. CONFIGURATION OF EUT SYSTEM	8
5.2. EQUIPMENT USED IN EUT SYSTEM	8
5.3. SUMMARY OF TEST RESULTS	8
6. TEST FACILITY	9
7. RADIATED EMISSION	10
7.1TEST LIMIT	10
7.2. MEASUREMENT PROCEDURE	11
7.3. TEST SETUP	13
7.4. TEST RESULT	14
8. BAND EDGE EMISSION	19
8.1. MEASUREMENT PROCEDURE	19
8.2 TEST SETUP	19
8.3 RADIATED TEST RESULT	19
9. 20DB BANDWIDTH	24
9.1. MEASUREMENT PROCEDURE	22
9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	22
9.3. MEASUREMENT RESULTS	24
APPENDIX A: PHOTOGRAPHS OF TEST SETUP	27
APPENDIX R. PHOTOGRAPHS OF FUT	28

Page 4 of 32

## 1. VERIFICATION OF CONFORMITY

Applicant	Shantou City Hengdi Industry Co.,Ltd.	
Address	West Of Ningchuanbei Road And South Of Huancui Road, Guangyi St,Chenghai District,Shantou,Guangdong,China	
Manufacturer	Shantou City Hengdi Industry Co.,Ltd.	
Address	West Of Ningchuanbei Road And South Of Huancui Road, Guangyi St,Chenghai District,Shantou,Guangdong,China	
Product Designation	Camera	
Brand Name	N/A	
Test Model	1325S	
Series Model	1332S,1325W,1325C,1306,1307,1310,1336,1336C,1319,1319C,1331A,1331 C,1331S,1331W,1332A,1332C,1332S,1332W,1332V,1332HD,1335A,1335C,1335 S,1335W,1327A,1327C,1327S,1327W,1333,1333C,1333W,1334A,1334C,1334S, 1334W,1337,1338,1338C,1338W,1314,1339A,1339C,1339S,1339W,1340A,1340C,1340S,1340W,1341A,1341C,1341S,1341W,1342A,1342C,1342S,1342W,1343A, 1343C,1343S,1343W,1344A,1344C,1344S,1344W,1345A,1345C,1345S,1345W, 1346A,1346C,1346S,1346W,1347A,1347C,1347S,1347W,1348A,1348C,1348S, 1348W,ODY-2016BF1,ODY-2016BFG,ODY-1508-Wi-Fi/VR,ODY-1811WIFI/VR, ODY-1811WIFI,ODY-1811FPV,ODY-1940WIFI,ODY-1940-WIFI/VR,ODY-1720NX	
Model Difference	All the same except for the model name and appearance.	
Date of test	Aug.28, 2016 to Sep.06, 2016	
Deviation	None	
<b>Condition of Test Sample</b>	Normal	
Test Result	Pass	
Report Template	AGCRT-US-BR/RF	

We hereby certify that:

The above equipment was tested by Dongguan Precise Testing Service Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rules Part 15.249.

Max Zhang(Zhang Yi) Sep.07, 2016

Reviewed by

Bart Xie(Xie Xiaobin)) Sep.07, 2016

Approved by

Solger Zhang(Zhang Hongyi) Sep.07, 2016

Authorized Officer

Report No.: AGC07357160802FE03 Page 5 of 32

## 2. GENERAL INFORMATION

## 2.1. PRODUCT DESCRIPTION

A major technical description of EUT is described as following

7 this jet too in ito a coon pilot of a coon is a conoming			
Operation Frequency	2.411 GHz to 2.476GHz		
Maximum field strength	89.93dBuV/m@3m(AV)		
Modulation	GFSK		
Number of channels	22		
Antenna Gain	2dBi		
Antenna Designation	Fixed Antenna (Met 15.203 Antenna requirement)		
Hardware Version	SR-TX-H01		
Software Version	V1.0		
Power Supply	DC 3.7V by battery		

Report No.: AGC07357160802FE03 Page 6 of 32

## 2.2. TABLE OF CARRIER FREQUENCY

Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2411	12	2446
02	2414	13	2449
03	2417	14	2452
04	2420	15	2455
05	2423	16	2458
06	2426	17	2461
07	2429	18	2464
08	2434	19	2467
09	2437	20	2470
10	2440	21	2473
11	2443	22	2476

Page 7 of 32

## 3. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y  $\pm U$ , where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %  $\circ$ 

No.	Item	Uncertainty
1	Conducted Emission Test	±3.18dB
2	All emissions,radiated	±3.91dB
3	Temperature	±0.5°C
4	Humidity	±2%

## 4. DESCRIPTION OF TEST MODES

TEST MODE DESCRIPTION
Low channel TX in GFSK modulation
Middle channel TX in GFSK modulation
High channel TX in GFSK modulation

#### Note:

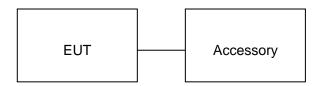
- 1. All the test modes can be supply by battery, only the result of the worst case was recorded in the report, if no other cases.
- 2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.

Report No.: AGC07357160802FE03 Page 8 of 32

## **5. SYSTEM TEST CONFIGURATION**

## **5.1. CONFIGURATION OF EUT SYSTEM**

Configure 1:



## **5.2. EQUIPMENT USED IN EUT SYSTEM**

Item	Equipment	Model No.	ID or Specification	Remark
1	Camera	1325S	2AALA1325S	EUT
2	Quadcopter	1335	N/A	Support

#### **5.3. SUMMARY OF TEST RESULTS**

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.249	Radiated Emission	Compliant
§15.249	Band Edges	Compliant
§15.215	20dB bandwidth	Compliant

Report No.: AGC07357160802FE03 Page 9 of 32

## **6. TEST FACILITY**

Site Dongguan Precise Testing Service Co., Ltd.	
Location  Building D, Baoding Technology Park, Guangming Road2, Dongcheng District Dongguan, Guangdong, China.	
FCC Registration No.	371540
Description	The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2014.

## **ALL TEST EQUIPMENT LIST**

Radiated Emission Test Site					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
EMI Test Receiver	Rohde & Schwarz	ESCI	101417	July 3, 2016	July 2, 2017
Trilog Broadband Antenna (25M-1GHz)	SCHWARZBECK	VULB9160	9160-3355	July 3, 2016	July 2, 2017
Signal Amplifier	SCHWARZBECK	BBV 9475	9745-0013	July 3, 2016	July 2, 2017
RF Cable	SCHWARZBECK	AK9515E	96221	July 3, 2016	July 2, 2017
3m Anechoic Chamber	CHENGYU	966	PTS-001	June 3, 2016	June 2, 2017
MULTI-DEVICE Positioning Controller	Max-Full	MF-7802	MF780208339	N/A	N/A
Active loop antenna (9K-30MHz)	Schwarzbeck	FMZB1519	1519-038	June 3, 2016	June 2, 2017
Spectrum analyzer	Agilent	E4407B	MY46185649	June 3, 2016	June 2, 2017
Horn Antenna (1G-18GHz)	SCHWARZBECK	BBHA9120D	9120D-1246	June 3, 2016	June 2, 2017
Horn Ant (18G-40GHz)	Schwarzbeck	BBHA 9170	9170-181	June 3, 2016	June 2, 2017

Page 10 of 32

## 7. RADIATED EMISSION

## 7.1TEST LIMIT

#### Standard FCC15.249

Fundamental Frequency	Field Strength of Fundamental	Field Strength of Harmonics	
	(millivolts/meter)	(microvolts/meter)	
900-928MHz	50	500	
2400-2483.5MHz	50	500	
5725-5875MHz	50	500	
24.0-24.25GHz	250	2500	

#### Standard FCC 15.209

Frequency	Distance	Field	Strengths Limit			
(MHz)	Meters	μ V/m	dB(μV)/m			
0.009 ~ 0.490	300	2400/F(kHz)				
0.490 ~ 1.705	30	24000/F(kHz)				
1.705 ~ 30	30	30				
30 ~ 88	3	100	40.0			
88 ~ 216	3	150	43.5			
216 ~ 960	3	200	46.0			
960 ~ 1000	3	500	54.0			
Above 1000	3	Other:74.0 dB(µV)/m	Other:74.0 dB(µV)/m (Peak) 54.0 dB(µV)/m (Average)			

Remark:

- (1) Emission level dB $\mu$  V = 20 log Emission level  $\mu$  V/m
- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

Page 11 of 32

#### 7.2. MEASUREMENT PROCEDURE

1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.

- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 8.If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.

Report No.: AGC07357160802FE03 Page 12 of 32

The following table is the setting of spectrum analyzer and receiver.

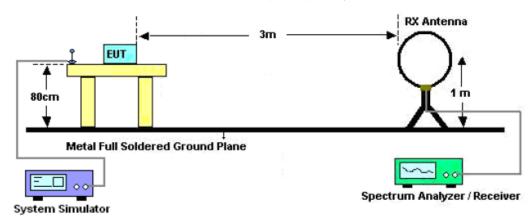
Spectrum Parameter	Setting		
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP		
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP		
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP		
Start ~Stop Frequency	1GHz~26.5GHz		
Otalt ~Otop i requeitey	1MHz/1MHz for Peak, 1MHz/10Hz for Average		

Receiver Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP

Page 13 of 32

#### 7.3. TEST SETUP

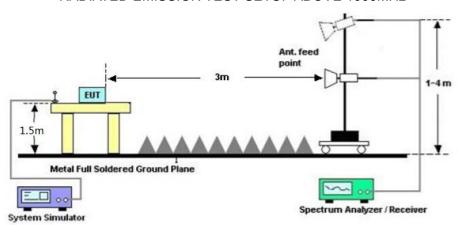
## Radiated Emission Test-Setup Frequency Below 30MHz



#### RADIATED EMISSION TEST SETUP 30MHz-1000MHz



## RADIATED EMISSION TEST SETUP ABOVE 1000MHz



Page 14 of 32

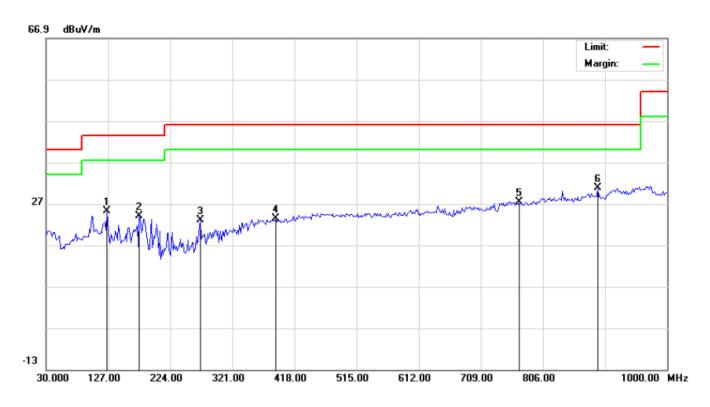
## 7.4. TEST RESULT

## **RADIATED EMISSION BELOW 30MHZ**

No emission found between lowest internal used/generated frequencies to 30MHz.

## **RADIATED EMISSION 30MHz-1GHZ**

EUT:	Camera	Model Name. :	1325S
Temperature:	20 ℃	Relative Humidtity:	48%
Pressure :	1010 hPa	Test Voltage :	DC3.7V
Test Mode :	Mode 1	Polarization :	Horizontal

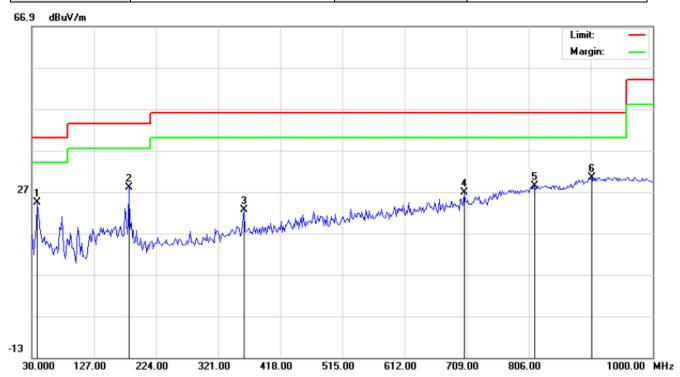


No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		125.3833	10.80	14.49	25.29	43.50	-18.21	peak			
2		175.5000	9.26	14.82	24.08	43.50	-19.42	peak			
3		270.8833	7.74	15.26	23.00	46.00	-23.00	peak			
4		388.9000	4.32	19.03	23.35	46.00	-22.65	peak			
5		768.8167	0.30	27.18	27.48	46.00	-18.52	peak			
6	*	891.6833	2.59	28.25	30.84	46.00	-15.16	peak			

**RESULT: PASS** 

Report No.: AGC07357160802FE03 Page 15 of 32

EUT:	Camera	Model Name. :	1325S
Temperature:	20 ℃	Relative Humidtity:	48%
Pressure :	1010 hPa	Test Voltage :	DC3.7V
Test Mode :	Mode 1	Polarization :	Vertical



No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height		Comment
	-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		38.0833	18.11	6.39	24.50	40.00	-15.50	peak			
2	*	181.9667	14.48	13.57	28.05	43.50	-15.45	peak			
3		361.4166	3.73	18.82	22.55	46.00	-23.45	peak			
4		705.7667	1.38	25.36	26.74	46.00	-19.26	peak			
5		815.7000	1.12	27.32	28.44	46.00	-17.56	peak			
6		904.6167	1.71	28.74	30.45	46.00	-15.55	peak			

## **RESULT: PASS**

#### Note:

Factor=Antenna Factor + Cable loss, Margin=Result-Limit.

The "Factor" value can be calculated automatically by software of measurement system.

The mode 1 is the worst case, and only the data of the worst case recorded in this test report.

Report No.: AGC07357160802FE03 Page 16 of 32

## **RADIATED EMISSION ABOVE 1GHZ**

EUT:	Camera	Model Name. :	1325S
Temperature:	20 ℃	Relative Humidtity:	48%
Pressure :	1010 hPa	Test Voltage :	DC3.7V
Test Mode :	Mode 1	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
2411.013	103.41	-9.37	94.04	114	-19.96	peak	
2411.013	98.25	-9.37	88.88	94	-5.12	AVG	
4822.026	48.12	3.74	51.86	74	-22.14	peak	
4822.026	42.75	3.74	46.49	54	-7.51	AVG	
7233.039	43.54	8.14	51.68	74	-22.32	peak	
7233.039 38.16 8.14 46.3 54 -7.7 AVG							
Remark:							
actor = Antenna Factor + Cable Loss – Pre-amplifier.							

EUT:	Camera	Model Name. :	1325S
Temperature:	20 ℃	Relative Humidtity:	48%
Pressure :	1010 hPa	Test Voltage :	DC3.7V
Test Mode :	Mode 1	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type		
2411.013	100.15	-9.37	90.78	114	-23.22	peak		
2411.013	95.32	-9.37	85.95	94	-8.05	AVG		
4822.026	47.25	3.74	50.99	74	-23.01	peak		
4822.026	41.67	3.74	45.41	54	-8.59	AVG		
7233.039	7233.039 43.15 8.14 51.29 74 -22.71 peak							
7233.039	7233.039 38.24 8.14 46.38 54 -7.62 AVG							
Remark:								
Factor = Ante	Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

Page 17 of 32

EUT:	Camera	Model Name. :	1325S
Temperature:	20 ℃	Relative Humidtity:	48%
Pressure :	1010 hPa	Test Voltage :	DC3.7V
Test Mode :	Mode 2	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
2434.016	103.12	-9.63	93.49	114	-20.51	peak
2434.016	97.44	-9.63	87.81	94	-6.19	AVG
4868.032	47.85	3.76	51.61	74	-22.39	peak
4868.032	42.14	3.76	45.9	54	-8.1	AVG
7302.048	43.74	8.17	51.91	74	-22.09	peak
7302.048	38.33	8.17	46.5	54	-7.5	AVG
Remark:						
Factor = Ante	Factor = Antenna Factor + Cable Loss – Pre-amplifier.					

EUT:	Camera	Model Name. :	1325S
Temperature :	20 ℃	Relative Humidtity:	48%
Pressure:	1010 hPa	Test Voltage :	DC3.7V
Test Mode :	Mode 2	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
2434.016	99.87	-9.63	90.24	114	-23.76	peak
2434.016	94.54	-9.63	84.91	94	-9.09	AVG
4868.032	47.14	3.76	50.9	74	-23.1	peak
4868.032	41.85	3.76	45.61	54	-8.39	AVG
7302.048	42.71	8.17	50.88	74	-23.12	peak
7302.048	37.69	8.17	45.86	54	-8.14	AVG
Remark:	Remark:					
	anna Factor I C	alala Laga De	a amamilifian			

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

Page 18 of 32

EUT:	Camera	Model Name. :	1325S
Temperature:	20 ℃	Relative Humidtity:	48%
Pressure :	1010 hPa	Test Voltage :	DC3.7V
Test Mode :	Mode 3	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
2476.021	104.47	-9.61	94.86	114	-19.14	peak
2476.021	99.54	-9.61	89.93	94	-4.07	AVG
4952.042	47.17	3.83	51	74	-23	peak
4952.042	42.07	3.83	45.9	54	-8.1	AVG
7428.063	44.75	8.21	52.96	74	-21.04	peak
7428.063	39.15	8.21	47.36	54	-6.64	AVG
Remark:						
-actor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT:	Camera	Model Name. :	1325S
Temperature:	20 ℃	Relative Humidtity:	48%
Pressure :	1010 hPa	Test Voltage :	DC3.7V
Test Mode :	Mode 3	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
2476.021	101.33	-9.61	91.72	114	-22.28	peak
2476.021	96.74	-9.61	87.13	94	-6.87	AVG
4952.042	46.57	3.83	50.4	74	-23.6	peak
4952.042	41.53	3.83	45.36	54	-8.64	AVG
7428.063	43.17	8.21	51.38	74	-22.62	peak
7428.063	38.44	8.21	46.65	54	-7.35	AVG
Remark:						
actor = Ante	enna Factor + Ca	able Loss – P	re-amplifier.			

**Note:** Other emissions from 8G to 25 GHz are considered as ambient noise. No recording in the test report. Factor=Antenna Factor + Cable loss - Amplifier gain, Margin=Measurement-Limit.

The "Factor" value can be calculated automatically by software of measurement system.

Page 19 of 32

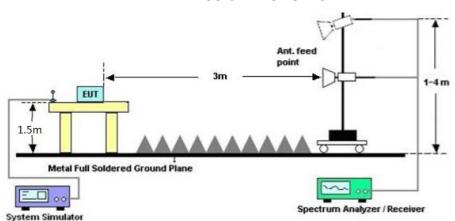
#### 8. BAND EDGE EMISSION

#### **8.1. MEASUREMENT PROCEDURE**

- 1. The lowest or highest channels are tested to verify the largest transmission and spurious emissions power at the continuous transmission mode.
- 2. Max hold the trace of the setp 1,and the EUT operates at hopping-on test mode to verify the largest spurious emissions power.
- 3. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission: (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
- (b) AVERAGE: RBW=1MHz; VBW=1/on time(1KHz) / Sweep=AUTO

#### **8.2 TEST SETUP**

#### RADIATED EMISSION TEST SETUP



#### **8.3 RADIATED TEST RESULT**

#### Note:

- 1. Factor=Antenna Factor + Cable loss Amplifier gain. Field Strength=Factor + Reading level
- 2. The factor had been edited in the "Input Correction" of the Spectrum Analyzer. So the Amplitude of test plots is equal to Reading level plus the Factor in dB. Use the A dB( $\mu$ V) to represent the Amplitude. Use the F dB( $\mu$ V/m) to represent the Field Strength. So A=F.

EUT:	Camera	Model Name. :	1325S
Temperature:	20 ℃	Relative Humidtity:	48%
Pressure:	1010 hPa	Test Voltage :	DC3.7V
Test Mode :	Mode 1	Polarization :	Horizontal

PK Value



**AV Value** 



Report No.: AGC07357160802FE03 Page 21 of 32

EUT:	Camera	Model Name. :	1325S
Temperature:	20 ℃	Relative Humidtity:	48%
Pressure :	1010 hPa	Test Voltage :	DC3.7V
Test Mode :	Mode 1	Polarization :	Vertical

#### PK Value



**AV Value** 



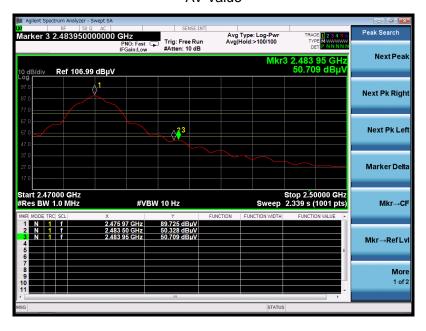
Report No.: AGC07357160802FE03 Page 22 of 32

EUT:	Camera	Model Name. :	1325S
Temperature:	20 ℃	Relative Humidtity:	48%
Pressure:	1010 hPa	Test Voltage :	DC3.7V
Test Mode :	Mode 3	Polarization :	Horizontal

PK Value



**AV Value** 



EUT:	Camera	Model Name. :	1325S
Temperature:	20 ℃	Relative Humidtity:	48%
Pressure:	1010 hPa	Test Voltage :	DC3.7V
Test Mode :	Mode 3	Polarization:	Vertical

PK Value



**AV Value** 



#### Note:

Factor=Antenna Factor + Cable loss - Amplifier gain, Over=Measure-Limit.

The "Factor" value can be calculated automatically by software of measurement system.

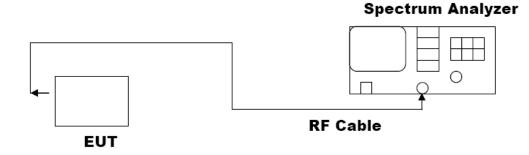
Page 24 of 32

## 9. 20DB BANDWIDTH

## 9.1. MEASUREMENT PROCEDURE

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set SPA Centre Frequency = Operation Frequency, RBW= 1% of SPAN, VBW ≥ 3×RBW.
- 4. Set SPA Trace 1 Max hold, then View.

## 9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)



#### 9.3. MEASUREMENT RESULTS

TEST ITEM	20DB BANDWIDTH
TEST MODE	Mode1;Mode2;Mode3

Test Data (MHz)		Criteria
Low Channel	4.726	PASS
Middle Channel	4.691	PASS
High Channel	4.704	PASS

#### TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



#### TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



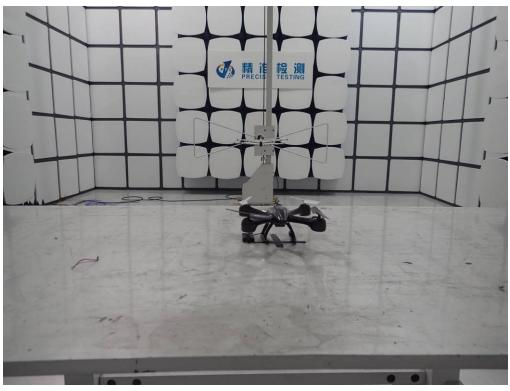
#### TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



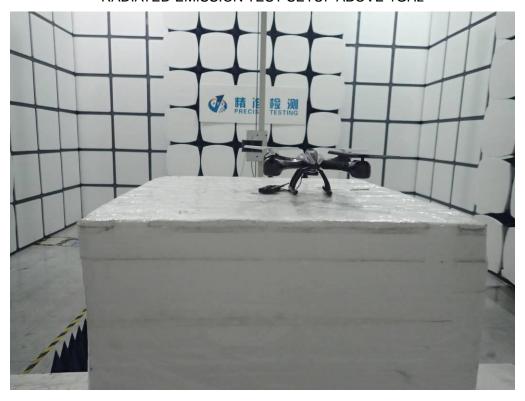
# Page 27 of 32

## **APPENDIX A: PHOTOGRAPHS OF TEST SETUP**

RADIATED EMISSION TEST SETUP BELOW 1GHz



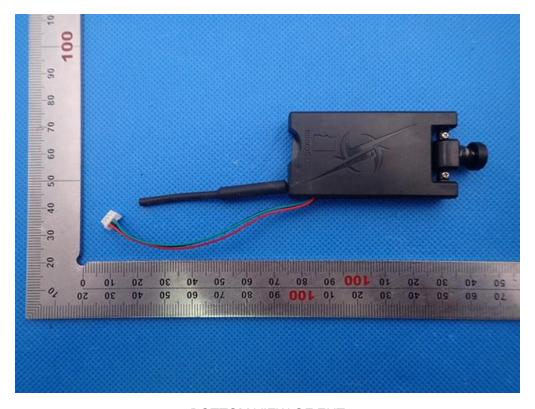
RADIATED EMISSION TEST SETUP ABOVE 1GHz



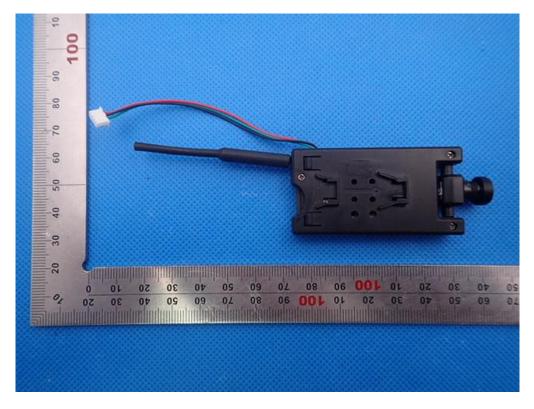
Page 28 of 32

#### **APPENDIX B: PHOTOGRAPHS OF EUT**

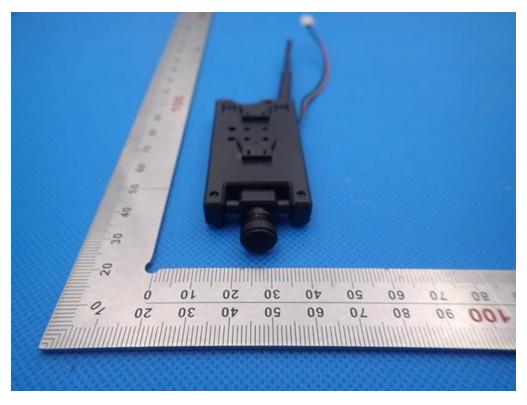
TOP VIEW OF EUT



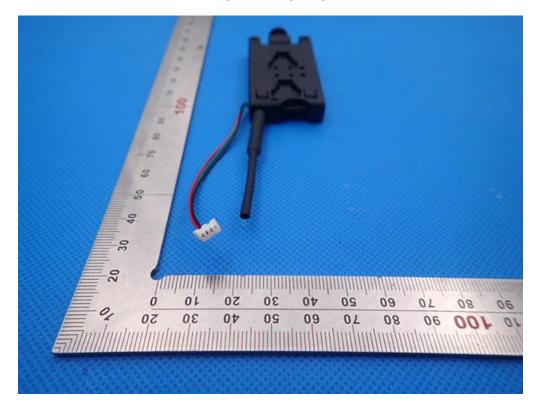
**BOTTOM VIEW OF EUT** 



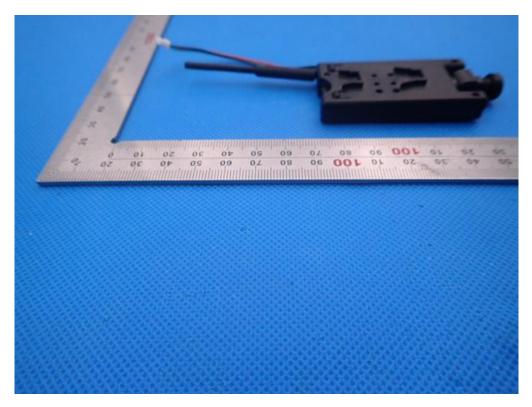
FRONT VIEW OF EUT



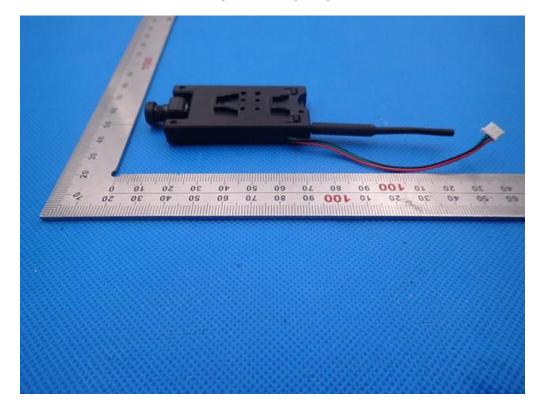
**BACK VIEW OF EUT** 



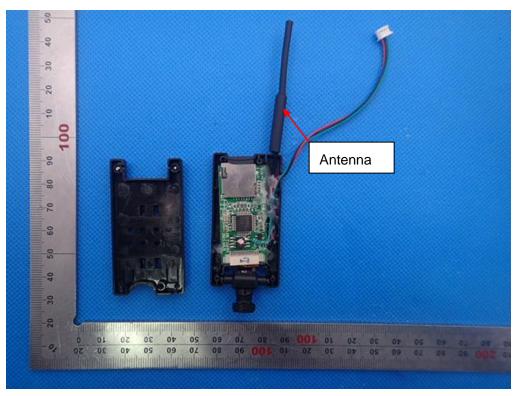
LEFT VIEW OF EUT



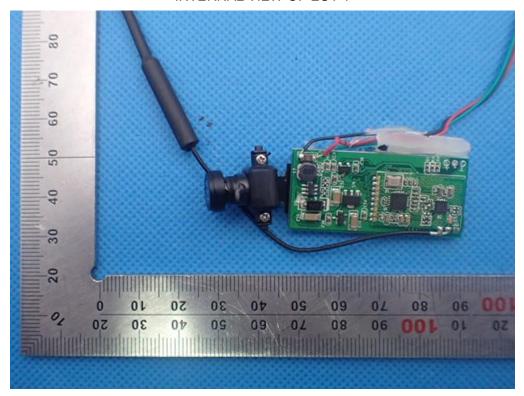
RIGHT VIEW OF EUT



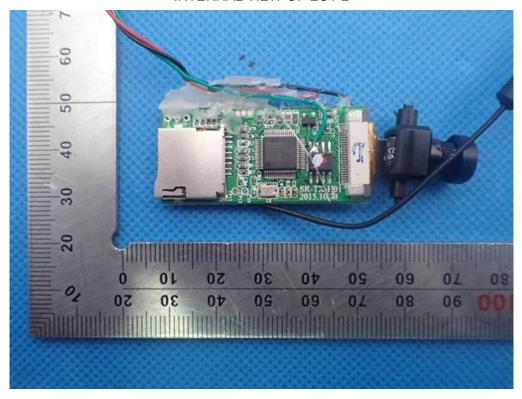
**OPEN VIEW OF EUT** 



**INTERNAL VIEW OF EUT-1** 



## **INTERNAL VIEW OF EUT-2**



----END OF REPORT----