

FCC Test Report

Product Name	AI Camera
Model No	AICAMX2
FCC ID.	2ACQ9-16880002

Applicant	altek Corporation
Address	No.12, Li-Hsin Road, Science-based Industrial Park,
	Hsin-Chu City, Taiwan

Date of Receipt	Mar. 12, 2019	
Issue Date	Apr. 19, 2019	
Report No.	1930148R-RFUSP26V00	
Report Version	V1.0	
TESTINg Laboratory 3023		

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.

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Test Report

Issue Date: Apr. 19, 2019 Report No.: 1930148R-RFUSP26V00

DEKRA

Product Name	AI Camera
Applicant	altek Corporation
Address	No.12, Li-Hsin Road, Science-based Industrial Park, Hsin-Chu City, Taiwan
Manufacturer	Altek (Kunshan) Co., Ltd.
Model No.	AICAMX2
FCC ID.	2ACQ9-16880002
EUT Rated Voltage	DC 3.8V by Battery or DC 5V by USB
EUT Test Voltage	DC 5V by USB
Trade Name	Altek
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2017
	ANSI C63.4: 2014, ANSI C63.10: 2013
	KDB 558074 D01 15.247 Meas Guidance v05
Test Result	Complied

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TABLE OF CONTENTS

Description		Page
1.	GENERAL INFORMATION	5
1.1.	EUT Description	5
1.2.	Operational Description	
1.3.	Tested System Details	
1.4.	Configuration of Tested System	
1.5.	EUT Exercise Software	
1.6.	Test Facility	
1.7.	List of Test Equipment	10
2.	Conducted Emission	11
2.1.	Test Setup	
2.2.	Limits	
2.3.	Test Procedure	
2.4.	Uncertainty	
2.5.	Test Result of Conducted Emission	
3.	Peak Power Output	17
3.1.	Test Setup	
3.2.	Limits	
3.3.	Test Procedure	
3.4.	Uncertainty	
3.5.	Test Result of Peak Power Output	
4.	Radiated Emission	
4.1.	Test Setup	
4.2.	Limits	
4.3.	Test Procedure	
4.4.	Uncertainty	
4.5.	Test Result of Radiated Emission	
5.	RF antenna conducted test	58
5.1.	Test Setup	
5.2.	Limits	
5.3.	Test Procedure	
5.4.	Uncertainty	
5.5.	Test Result of RF antenna conducted test	
6.	Band Edge	63
6.1.	Test Setup	
6.2.	Limits	
6.3.	Test Procedure	64
6.4.	Uncertainty	
6.5.	Test Result of Band Edge	
7.	6dB Bandwidth	82
71	Test Setun	87
7 2	Limits	
,.2.		

DEKRA

7.3.	Test Procedure	
7.4.	Uncertainty	
7.5.	Test Result of 6dB Bandwidth	
8.	Power Density	91
8.1.	Test Setup	
8.2.	Limits	91
8.3.	Test Procedure	
8.4.	Uncertainty	
8.5.	Test Result of Power Density	92
9.	Duty Cycle	
9.1.	Test Setup	
9.2.	Test Procedure	
9.3.	Uncertainty	
9.4.	Test Result of Duty Cycle	101
10.	EMI Reduction Method During Compliance Testing	
Attachment 1:	EUT Test Photographs	

Attachment 2: EUT Detailed Photographs



1. GENERAL INFORMATION

1.1. EUT Description

Product Name	AI Camera
Trade Name	Altek
Model No.	AICAMX2
FCC ID.	2ACQ9-16880002
Frequency Range	2412-2462MHz for 802.11b/g/n-20BW, 2422-2452MHz for 802.11n-40BW
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7
Data Speed	802.11b: 1-11Mbps, 802.11g: 6-54Mbps, 802.11n: up to 150Mbps
Type of Modulation	802.11b:DSSS (DBPSK, DQPSK, CCK)
	802.11g/n:OFDM (BPSK, QPSK, 16QAM, 64QAM)
Antenna Type	PIFA Antenna
Antenna Gain	Refer to the table "Antenna List"
Channel Control	Auto
USB Cable	Shielded,1m

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	INPAQ	WAG-F-LB-00-030	PIFA	3.01dBi For 2.4GHz

Note: The antenna of EUT conforms to FCC 15.203.



802.11b/g/n-20MHz Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01:	2412 MHz	Channel 02:	2417 MHz	Channel 03:	2422 MHz	Channel 04:	2427 MHz
Channel 05:	2432 MHz	Channel 06:	2437 MHz	Channel 07:	2442 MHz	Channel 08:	2447 MHz
Channel 09:	2452 MHz	Channel 10:	2457 MHz	Channel 11:	2462 MHz		
802.11n-40M	Hz Center Fre	equency of Ead	ch Channel:				
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 03:	2422 MHz	Channel 04:	2427 MHz	Channel 05:	2432 MHz	Channel 06:	2437 MHz
Channel 07:	2442 MHz	Channel 08:	2447 MHz	Channel 09:	2452 MHz		

- 1. The EUT is a AI Camera with a built-in WLAN, Bluetooth transceiver, this report for 2.4GHz WLAN.
- 2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
- Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11b is 1Mbps \$\circ\$ 802.11g is 6Mbps \$\circ\$ 802.11n(20M-BW) is 7.2Mbps and 802.11n(40M-BW) is 15Mbps).
- 4. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.

Test Mode:	Mode 1: Transmit (802.11b 1Mbps)
	Mode 2: Transmit (802.11g 6Mbps)
	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)
	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Prod	uct	Manufacturer	Model No.	Serial No.	Power Cord
1	LCD Monitor	ASUS	VS229HA	F4LMQS135395	Non-Shielded, 1.8m
2	Notebook PC	DELL	Latitude 5580	2HRD7H2	Non-Shielded, 0.8m
3	Microphone & Earphone	Ergotech	ET-E201	N/A	Non-Shielded, 2.0m

Signal Cable Type		Signal cable Description
А	USB Cable	Non-Shielded, 1.0m
В	HDMI Cable	Non-Shielded, 1.5m
С	Microphone & Earphone Cable	Non-Shielded, 2.0m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

- 1. Setup the EUT as shown in Section 1.4.
- 2. Execute software "QRCT, Ver. 3.0.303.0" on the EUT.
- 3. Configure the test mode, the test channel, and the data rate.
- 4. Press "OK" to start the continuous Transmit.
- 5. Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site:

http://www.dekra.com.tw/english/about/certificates.aspx?bval=5

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: <u>http://www.dekra.com.tw/index_en.aspx</u>

Site Description:	Accredited by TAF Accredited Number: 3023
Site Name: Site Address:	DEKRA Testing and Certification Co., Ltd No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C. TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : <u>info.tw@dekra.com</u>

FCC Accreditation Number: TW3023



1.7. List of Test Equipment

For	Conducted	measurements	/CB3/SR8
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	Equipment	Manufacturer	Model No.	Serial No.	Cali. Date	Due. Date
	Temperature Chamber	WIT GROUP	TH-1S-B	EQ-201-00146	2019/2/26	2020/2/25
Х	Spectrum Analyzer	Agilent	N9010A	MY53470892	2018/09/27	2019/09/26
Х	Peak Power Analyzer	Keysight	8990B	MY51000410	2018/08/01	2019/07/31
Х	Wideband Power Sensor	Keysight	N1923A	MY56080003	2018/07/25	2019/07/24
Х	Wideband Power Sensor	Keysight	N1923A	MY56080004	2018/07/25	2019/07/24
Х	EMI Test Receiver	R&S	ESCS 30	100369	2018/11/19	2019/11/18
Х	LISN	R&S	ENV216	101105	2019/03/30	2020/03/29
Х	LISN	R&S	ESH3-Z5	836679/014	2018/04/02	2019/04/01
X	Coaxial Cable	DEKRA	RG 400	LC018-RG	2018/06/21	2019/06/20

For Radiated measurements /Site3/CB8

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Date	Due. Date
Х	Spectrum Analyzer	R&S	FSP40	100170	2019/3/11	2020/3/10
Х	Loop Antenna	Teseq	HLA6121	37133	2017/10/13	2019/10/12
Х	Bilog Antenna	Schaffner Chase	CBL6112B	2707	2018/06/24	2019/06/23
Х	Coaxial Cable	DEKRA	RG 214	LC003-RG	2018/06/14	2019/06/13
Х	Pre-Amplifier	Jet-Power	JPA-10M1G33	170101000330010	2018/06/14	2019/06/13
Х	Horn Antenna	ETS-Lindgren	3117	00135205	2018/05/03	2019/05/02
Х	Horn Antenna	SCHWARZBECK	9120D	576	2018/12/18	2019/12/17
Х	Pre-Amplifier	EMCI	EMC012630SE	980210	2018/04/10	2019/04/09
Х	Horn Antenna	Com-Power	AH-840	101043	2019/01/19	2020/01/18
Х	Amplifier + Cable	EMCI	EMC184045SE	980370	2019/3/21	2020/3/20
X	Filter	MICRO-TRONICS	BRM50702	G270	2018/08/06	2019/08/05
X	Filter	MICRO-TRONICS	BRM50716	G196	2018/08/06	2019/08/05

Note:

1. All equipments are calibrated every one year.

2. The test instruments marked with "X" are used to measure the final test results.

3. Test Software version :QuieTek EMI 2.0 V2.1.113.



2. Conducted Emission

2.1. Test Setup





2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBµV) Limit							
Frequency	Limits						
MHz	QP	AVG					
0.15 - 0.50	66-56	56-46					
0.50-5.0	56	46					
5.0 - 30	60	50					

2.3. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.4. Uncertainty

± 2.26 dB



2.5. Test Result of Conducted Emission

Product	:	AI Camera
Test Item	:	Conducted Emission Test
Power Line	:	Line 1
Test Date	:	2019/04/19
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	Factor (dB)	(dBuV)	(dBuV)	(dB)	(dBuV)	
1		0.158	9.746	33.330	43.076	-22.695	65.771	QUASIPEAK
2		0.193	9.738	34.970	44.708	-20.063	64.771	QUASIPEAK
3		0.248	9.740	28.200	37.940	-25.260	63.200	QUASIPEAK
4	*	0.490	9.750	26.640	36.390	-19.896	56.286	QUASIPEAK
5		3.548	9.880	24.270	34.150	-21.850	56.000	QUASIPEAK
6		9.564	10.064	24.050	34.114	-25.886	60.000	QUASIPEAK

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. " * ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor



Product	:	AI Camera
Test Item	:	Conducted Emission Test
Power Line	:	Line 1
Test Date	:	2019/04/19
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	Factor (dB)	(dBuV)	(dBuV)	(dB)	(dBuV)	
1		0.158	9.746	14.740	24.486	-31.285	55.771	AVERAGE
2		0.193	9.738	23.300	33.038	-21.733	54.771	AVERAGE
3		0.248	9.740	21.010	30.750	-22.450	53.200	AVERAGE
4	*	0.490	9.750	17.700	27.450	-18.836	46.286	AVERAGE
5		3.548	9.880	13.760	23.640	-22.360	46.000	AVERAGE
6		9.564	10.064	18.840	28.904	-21.096	50.000	AVERAGE

1. All Reading Levels are Quasi-Peak and average value.

2. " * ", means this data is the worst emission level.

3. Measurement Level = Reading Level + Correct Factor



Product	:	AI Camera
Test Item	:	Conducted Emission Test
Power Line	:	Line 2
Test Date	:	2019/04/19
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	Factor (dB)	(dBuV)	(dBuV)	(dB)	(dBuV)	
1	*	0.197	9.738	35.880	45.618	-19.039	64.657	QUASIPEAK
2		0.244	9.740	30.590	40.330	-22.984	63.314	QUASIPEAK
3		0.298	9.735	26.820	36.555	-25.216	61.771	QUASIPEAK
4		0.502	9.740	26.740	36.480	-19.520	56.000	QUASIPEAK
5		3.572	9.871	24.260	34.131	-21.869	56.000	QUASIPEAK
6		10.216	10.096	20.460	30.556	-29.444	60.000	QUASIPEAK

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor



Product	:	AI Camera
Test Item	:	Conducted Emission Test
Power Line	:	Line 2
Test Date	:	2019/04/19
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	Factor (dB)	(dBuV)	(dBuV)	(dB)	(dBuV)	
1	*	0.197	9.738	25.250	34.988	-19.669	54.657	AVERAGE
2		0.244	9.740	20.620	30.360	-22.954	53.314	AVERAGE
3		0.298	9.735	15.700	25.435	-26.336	51.771	AVERAGE
4		0.502	9.740	15.450	25.190	-20.810	46.000	AVERAGE
5		3.572	9.871	13.700	23.571	-22.429	46.000	AVERAGE
6		10.216	10.096	14.960	25.056	-24.944	50.000	AVERAGE

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor



3. Peak Power Output

3.1. Test Setup



3.2. Limits

The maximum peak power shall be less 1 Watt.

3.3. Test Procedure

Tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements. The maximum peak conducted output power using KDB 558074 section 8.3.1.3 PKPM1 Peak power meter method. The maximum average conducted output power using KDB 558074 section 8.3.2.3 Method (Measurement using a gated RF average-reading power meter)

3.4. Uncertainty

± 1.19 dB

3.5. Test Result of Peak Power Output

Product	:	AI Camera
Test Item	:	Peak Power Output Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/21
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps)

Channel No.	For d	Average ifferent Da	e Power ata Rate (N	/lbps)	Peak Power	Required	Result	
Channel No	(MHz)	1	2	5.5	11	1	Limit	Result
			Measurement Level (dBm)					
01	2412	15.93				18.27	<30dBm	Pass
06	2437	15.96	15.81	15.66	15.52	18.24	<30dBm	Pass
11	2462	15.75				18.11	<30dBm	Pass

Note: Peak Power Output Value = Reading value on power meter + cable loss



Product	:	AI Camera
Test Item	:	Peak Power Output Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/21
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps)

					Peak							
	Fraguanay		F	for diffe	erent Da	ata Rate	e (Mbps	5)		Power	Doquirad	
Channel No	(MHz)	6	9	12	18	24	36	48	54	6	Limit	Result
				Ν	Aeasure	ement L	.evel (d	Bm)				
01	2412	11.72								16.25	<30dBm	Pass
06	2437	11.89	11.75	11.58	11.44	11.31	11.2	11.1	10.94	16.45	<30dBm	Pass
11	2462	11.86								16.37	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss



Product	:	AI Camera
Test Item	:	Peak Power Output Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/21
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

				1	Peak							
	Frequency		F	or diffe	Power	Required						
Channel No	(MHz)	HT0	HT1	HT2	HT3	HT4	HT5	HT6	HT7	HT0	Limit	Result
				Ν	Aeasure	ement L	.evel (d	Bm)				
01	2412	11.66								16.33	<30dBm	Pass
06	2437	11.81	11.75	11.6	11.53	11.37	11.27	11.13	11.01	16.32	<30dBm	Pass
11	2462	11.62								16.3	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss



Product	:	AI Camera
Test Item	:	Peak Power Output Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/21
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

					Peak							
	Frequency		F	or diffe	Power	Required						
Channel No	(MHz)	HT0	HT1	HT2	HT3	HT4	HT5	HT6	HT7	HT0	Limit	Result
				Ν	Measure	ement L	.evel (d	Bm)				
03	2422	9.93					-			16.14	<30dBm	Pass
06	2437	9.84	9.77	9.71	9.63	9.5	9.33	9.21	9.11	16.4	<30dBm	Pass
09	2452	9.83								16.12	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss



4. Radiated Emission

4.1. Test Setup

Radiated Emission Under 30MHz



3m

Radiated Emission Below 1GHz





Radiated Emission Above 1GHz



4.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits								
Frequency MHz	Field strength	Measurement distance						
IVIIIZ	(microvolts/meter)	(meter)						
0.009-0.490	2400/F(kHz)	300						
0.490-1.705	24000/F(kHz)	30						
1.705-30	30	30						
30-88	100	3						
88-216	150	3						
216-960	200	3						
Above 960	500	3						

Remarks: E field strength $(dB\mu V/m) = 20 \log E$ field strength (uV/m)

4.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground, when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 meter above ground.

The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement. The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The measurement frequency range form 9kHz - 10th Harmonic of fundamental was investigated.

RBW and VBW Parameter setting:

According to KDB 558074 Peak power measurement procedure

RBW = as specified in Table 1.

VBW \geq 3 x RBW.

Table 1 — RBW as a function of frequency

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

According to KDB 558074 Average power measurement procedure

RBW = 1MHz.

VBW = 10Hz, when duty cycle \ge 98 %

VBW \geq 1/T, when duty cycle < 98 %

(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

<u> </u>	<u>^</u>			A /
2.4GHz band	Duty Cycle	Т	1/T	VBW
	(%)	(ms)	(Hz)	(Hz)
802.11b	99.07	12.3478	81	10
802.11g	97.92	2.0435	489	500
802.11n20	96.67	1.8913	529	1000
802.11n40	91.24	0.9058	1104	2000

Note: Duty Cycle Refer to Section 9.

4.4. Uncertainty

± 4.08 dB above 1GHz

± 4.22 dB below 1GHz



4.5. Test Result of Radiated Emission

Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/25
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

Horizontal



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBµV)	(dBµV/m)	(dB)	(dBµV/m)	Туре
1	*	4824.000	6.858	37.605	44.463	-29.537	74.000	PEAK
2		7236.000	11.502	30.200	41.702	-32.298	74.000	PEAK
3		9648.000	14.752	29.004	43.757	-30.243	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/25
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

Vertical



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBµV)	(dBµV/m)	(dB)	(dBµV/m)	Туре
1	*	4824.000	6.858	39.725	46.583	-27.417	74.000	PEAK
2		7236.000	11.502	31.850	43.352	-30.648	74.000	PEAK
3		9648.000	14.752	28.074	42.827	-31.173	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/25
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)

Horizontal



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBµV)	(dBµV/m)	(dB)	(dBµV/m)	Туре
1		4874.000	6.921	32.587	39.508	-34.492	74.000	PEAK
2		7311.000	11.462	30.479	41.941	-32.059	74.000	PEAK
3	*	9748.000	15.194	26.942	42.136	-31.864	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/25
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1	*	4874.000	6.921	37.407	44.328	-29.672	74.000	PEAK
2		7311.000	11.462	31.154	42.616	-31.384	74.000	PEAK
3		9748.000	15.194	27.872	43.066	-30.934	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/25
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2462 MHz)

Horizontal



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4924.000	6.982	33.186	40.168	-33.832	74.000	PEAK
2		7386.000	11.436	32.212	43.648	-30.352	74.000	PEAK
3	*	9848.000	15.087	29.701	44.788	-29.212	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/25
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2462 MHz)



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1	*	4924.000	6.982	38.176	45.158	-28.842	74.000	PEAK
2		7386.000	11.436	30.785	42.221	-31.779	74.000	PEAK
3		9848.000	15.087	29.151	44.238	-29.762	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/25
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

Horizontal



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4824.000	6.858	31.844	38.702	-35.298	74.000	PEAK
2		7236.000	11.502	30.450	41.952	-32.048	74.000	PEAK
3	*	9648.000	14.752	29.194	43.947	-30.053	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



:	AI Camera
:	Harmonic Radiated Emission Data
:	No.3 OATS
:	2019/03/25
:	Mode 2: Transmit (802.11g 6Mbps) (2412MHz)
	: : : :



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4824.000	6.858	35.425	42.283	-31.717	74.000	PEAK
2		7236.000	11.502	31.244	42.746	-31.254	74.000	PEAK
3	*	9648.000	14.752	28.924	43.677	-30.323	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/25
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2437 MHz)

Horizontal



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4874.000	6.921	29.457	36.378	-37.622	74.000	PEAK
2	*	7311.000	11.462	31.934	43.396	-30.604	74.000	PEAK
3		9748.000	15.194	27.322	42.516	-31.484	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/25
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2437 MHz)

Vertical



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1	*	4874.000	6.921	36.632	43.553	-30.447	74.000	PEAK
2		7311.000	11.462	31.079	42.541	-31.459	74.000	PEAK
3		9748.000	15.194	26.642	41.836	-32.164	74.000	PEAK

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
 - 5. The emission levels of other frequencies are very lower than the limit and not show in test

report.



Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/25
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2462 MHz)

Horizontal



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4924.000	6.982	29.816	36.798	-37.202	74.000	PEAK
2		7386.000	11.436	30.285	41.721	-32.279	74.000	PEAK
3	*	9848.000	15.087	28.696	43.783	-30.217	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/25
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2462 MHz)

Vertical



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4924.000	6.982	38.049	45.031	-28.969	74.000	PEAK
2		7386.000	11.436	30.692	42.128	-31.872	74.000	PEAK
3	*	9848.000	15.087	31.361	46.448	-27.552	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
 - 5. The emission levels of other frequencies are very lower than the limit and not show in test report.


Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/25
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2412MHz)

Horizontal



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4824.000	6.858	30.164	37.022	-36.978	74.000	PEAK
2		7236.000	11.502	30.880	42.382	-31.618	74.000	PEAK
3	*	9648.000	14.752	28.004	42.757	-31.243	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/25
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2412MHz)

Vertical



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4824.000	6.858	34.885	41.743	-32.257	74.000	PEAK
2		7236.000	11.502	31.274	42.776	-31.224	74.000	PEAK
3	*	9648.000	14.752	29.864	44.617	-29.383	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



- Product : AI Camera
- Test Item : Harmonic Radiated Emission Data
- Test Site : No.3 OATS
- Test Date : 2019/03/25

Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437 MHz)

Horizontal



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4874.000	6.921	30.387	37.308	-36.692	74.000	PEAK
2	*	7311.000	11.462	30.719	42.181	-31.819	74.000	PEAK
3		9748.000	15.194	26.522	41.716	-32.284	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



- Product : AI Camera
- Test Item : Harmonic Radiated Emission Data
- Test Site : No.3 OATS
- Test Date : 2019/03/25

Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437 MHz)

Vertical



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4874.000	6.921	35.802	42.723	-31.277	74.000	PEAK
2	*	7311.000	11.462	32.004	43.466	-30.534	74.000	PEAK
3		9748.000	15.194	27.512	42.706	-31.294	74.000	PEAK

Note:

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
 - 5. The emission levels of other frequencies are very lower than the limit and not show in test

report.



- Product : AI Camera
- Test Item : Harmonic Radiated Emission Data
- Test Site : No.3 OATS
- Test Date : 2019/03/25

Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462 MHz)

Horizontal



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4924.000	6.982	29.236	36.218	-37.782	74.000	PEAK
2		7386.000	11.436	30.345	41.781	-32.219	74.000	PEAK
3	*	9848.000	15.087	27.646	42.733	-31.267	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



- Product : AI Camera
- Test Item : Harmonic Radiated Emission Data
- Test Site : No.3 OATS
- Test Date : 2019/03/25

Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462 MHz)

Vertical



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4924.000	6.982	34.879	41.861	-32.139	74.000	PEAK
2		7386.000	11.436	30.962	42.398	-31.602	74.000	PEAK
3	*	9848.000	15.087	29.791	44.878	-29.122	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
 - 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



- Product : AI Camera
- Test Item : Harmonic Radiated Emission Data
- Test Site : No.3 OATS
- Test Date : 2019/03/25

Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2422MHz)

Horizontal



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4844.000	6.891	29.670	36.561	-37.439	74.000	PEAK
2		7266.000	11.410	31.005	42.416	-31.584	74.000	PEAK
3	*	9688.000	14.884	27.595	42.479	-31.521	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



- Product : AI Camera
- Test Item : Harmonic Radiated Emission Data
- Test Site : No.3 OATS
- Test Date : 2019/03/25

Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2422MHz)

Vertical



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4844.000	6.891	33.116	40.007	-33.993	74.000	PEAK
2		7266.000	11.410	31.395	42.806	-31.194	74.000	PEAK
3	*	9688.000	14.884	28.809	43.693	-30.307	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product		AI Camera	
Test Item	diated Emission Data	Harmonic Radiated Emis	
Test Site		No.3 OATS	
Test Date		: 2019/03/25	
Test Mode	ısmit (802.11n MCS0 15Mbps 40M-BW) (243	: Mode 4: Transmit (802.1	M-BW) (2437 MHz)
Test Nem Test Site Test Date Test Mode	nsmit (802.11n MCS0 15Mbps 40M-BW) (243	 No.3 OATS 2019/03/25 Mode 4: Transmit (802.1 	M-BW) (2437 N

Horizontal



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4874.000	6.921	28.177	35.098	-38.902	74.000	PEAK
2	*	7311.000	11.462	30.939	42.401	-31.599	74.000	PEAK
3		9748.000	15.194	25.372	40.566	-33.434	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data

- Test Site : No.3 OATS
- Test Date : 2019/03/25

Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437 MHz)

Vertical



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4874.000	6.921	32.762	39.683	-34.317	74.000	PEAK
2	*	7311.000	11.462	32.204	43.666	-30.334	74.000	PEAK
3		9748.000	15.194	27.232	42.426	-31.574	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/26
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2452 MHz)

Horizontal



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4904.000	6.965	30.353	37.318	-36.682	74.000	PEAK
2		7356.000	11.345	30.677	42.022	-31.978	74.000	PEAK
3	*	9808.000	14.971	27.923	42.894	-31.106	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	AI Camera
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/26
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2452 MHz)

Vertical



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector
		(MHz)	Factor (dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	Туре
1		4904.000	6.965	35.036	42.001	-31.999	74.000	PEAK
2		7356.000	11.345	31.303	42.648	-31.352	74.000	PEAK
3	*	9808.000	14.971	29.984	44.955	-29.045	74.000	PEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	:	AI Camera
Test Item	:	General Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/27
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps)(2437 MHz)

Horizontal



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	Factor (dB)	(dBµV)	(dBµV/m)	(dB)	(dBµV/m)	
1	*	31.940	5.185	31.986	37.171	-2.829	40.000	QUASIPEAK
2		169.680	-2.789	37.467	34.678	-8.822	43.500	QUASIPEAK
3		291.900	1.460	34.297	35.757	-10.243	46.000	QUASIPEAK
4		388.900	4.619	26.494	31.113	-14.887	46.000	QUASIPEAK
5		491.720	6.545	33.671	40.216	-5.784	46.000	QUASIPEAK
6		755.560	10.274	22.468	32.742	-13.258	46.000	QUASIPEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	AI Camera
Test Item	:	General Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/27
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps)(2437 MHz)

Vertical



		Frequency	Correct	Reading Level Measure Level		Margin	Limit	Detector Type
		(MHz)	Factor (dB)	(dBµV)	(dBµV/m)	(dB)	(dBµV/m)	
1	*	35.820	4.005	30.583	34.588	-5.412	40.000	QUASIPEAK
2		66.860	-7.075	35.056	27.981	-12.019	40.000	QUASIPEAK
3		121.180	-0.585	28.361	27.776	-15.724	43.500	QUASIPEAK
4		231.760	-1.122	33.723	32.601	-13.399	46.000	QUASIPEAK
5		499.480	6.683	24.241	30.924	-15.076	46.000	QUASIPEAK
6		833.160	11.404	24.464	35.868	-10.132	46.000	QUASIPEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	AI Camera
Test Item	:	General Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/27
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps)(2437 MHz)

Horizontal



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	Factor (dB)	(dBµV)	(dBµV/m)	(dB)	(dBµV/m)	
1	*	31.940	5.185	28.810	33.995	-6.005	40.000	QUASIPEAK
2		171.620	-2.855	38.034	35.179	-8.321	43.500	QUASIPEAK
3		291.900	1.460	33.343	34.803	-11.197	46.000	QUASIPEAK
4		386.960	4.566	27.669	32.235	-13.765	46.000	QUASIPEAK
5		491.720	6.545	30.291	36.836	-9.164	46.000	QUASIPEAK
6		912.700	12.324	21.895	34.219	-11.781	46.000	QUASIPEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	AI Camera
Test Item	:	General Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/27
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps)(2437 MHz)

Vertical



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	Factor (dB)	(dBµV)	(dBµV/m)	(dB)	(dBµV/m)	
1	*	35.820	4.005	31.841	35.846	-4.154	40.000	QUASIPEAK
2		64.920	-7.056	35.285	28.229	-11.771	40.000	QUASIPEAK
3		282.200	1.230	26.766	27.996	-18.004	46.000	QUASIPEAK
4		499.480	6.683	24.252	30.935	-15.065	46.000	QUASIPEAK
5		720.640	9.717	21.838	31.555	-14.445	46.000	QUASIPEAK
6		833.160	11.404	24.236	35.640	-10.360	46.000	QUASIPEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	AI Camera
Test Item	:	General Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/27
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2437 MHz)





		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	Factor (dB)	(dBµV)	(dBµV/m)	(dB)	(dBµV/m)	
1	*	31.940	5.185	28.162	33.347	-6.653	40.000	QUASIPEAK
2		169.680	-2.789	36.798	34.009	-9.491	43.500	QUASIPEAK
3		262.800	1.468	33.892	35.360	-10.640	46.000	QUASIPEAK
4		352.040	3.477	30.926	34.403	-11.597	46.000	QUASIPEAK
5		491.720	6.545	31.585	38.130	-7.870	46.000	QUASIPEAK
6		889.420	12.035	21.779	33.814	-12.186	46.000	QUASIPEAK

Note:

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- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	AI Camera
Test Item	:	General Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/27
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2437 MHz)

Vertical



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	Factor (dB)	(dBµV)	(dBµV/m)	(dB)	(dBµV/m)	
1	*	31.940	5.185	33.281	38.466	-1.534	40.000	QUASIPEAK
2		66.860	-7.075	32.917	25.842	-14.158	40.000	QUASIPEAK
3		136.700	-1.014	26.131	25.117	-18.383	43.500	QUASIPEAK
4		262.800	1.468	25.778	27.246	-18.754	46.000	QUASIPEAK
5		499.480	6.683	23.721	30.404	-15.596	46.000	QUASIPEAK
6		833.160	11.404	24.663	36.067	-9.933	46.000	QUASIPEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	AI Camera
Test Item	:	General Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/27
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2437 MHz)





		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	Factor (dB)	(dBµV)	(dBµV/m)	(dB)	(dBµV/m)	
1		31.940	5.185	27.758	32.943	-7.057	40.000	QUASIPEAK
2		169.680	-2.789	36.985	34.196	-9.304	43.500	QUASIPEAK
3		352.040	3.477	32.668	36.145	-9.855	46.000	QUASIPEAK
4	*	493.660	6.580	32.545	39.125	-6.875	46.000	QUASIPEAK
5		811.820	10.995	20.788	31.783	-14.217	46.000	QUASIPEAK
6		937.920	12.746	22.280	35.026	-10.974	46.000	QUASIPEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.



Product	:	AI Camera
Test Item	:	General Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/27
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2437 MHz)

Vertical



		Frequency	Correct	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	Factor (dB)	(dBµV)	(dBµV/m)	(dB)	(dBµV/m)	
1	*	35.820	4.005	30.530	34.535	-5.465	40.000	QUASIPEAK
2		260.860	1.594	31.155	32.749	-13.251	46.000	QUASIPEAK
3		289.960	1.410	31.265	32.675	-13.325	46.000	QUASIPEAK
4		625.580	8.760	22.152	30.912	-15.088	46.000	QUASIPEAK
5		833.160	11.404	22.933	34.337	-11.663	46.000	QUASIPEAK
6		970.900	13.144	22.007	35.151	-18.849	54.000	QUASIPEAK

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 5. No emission found between lowest internal used/generated frequency to 30MHz.

5. **RF** antenna conducted test

5.1. Test Setup

RF antenna Conducted Measurement:



5.2. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.3. Test Procedure

Tested according to DTS test procedure of KDB558074 section 8.5 DTS emissions in non-restricted frequency bands for compliance to FCC 47CFR 15.247 requirements. Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.

5.4. Uncertainty

The measurement uncertainty Conducted is defined as ± 1.20 dB



5.5. Test Result of RF antenna conducted test

Product	:	AI Camera
Test Item	:	RF antenna conducted test
Test Site	:	No.3 OATS
Test Date	:	2019/03/21
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps)

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)





Product	:	AI Camera
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	No.3 OATS
Test Date	:	2019/03/21
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps)

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)





Product	:	AI Camera
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	No.3 OATS
Test Date	:	2019/03/21
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)





Product	:	AI Camera
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	No.3 OATS
Test Date	:	2019/03/21
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

Channel 01 (2422MHz)



Channel 04 (2437MHz)



Channel 07 (2452MHz)





6. Band Edge

6.1. Test Setup





6.2. Limits

According to FCC Section 15.247(d). In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

6.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.

RBW and VBW Parameter setting:

According to KDB 558074 Peak power measurement procedure

RBW = as specified in Table 1.

VBW \geq 3 x RBW.

Table 1 — RBW as a function of frequency

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

According to KDB 558074 Average power measurement procedure

RBW = 1MHz.

VBW = 10Hz, when duty cycle \ge 98 %

VBW \geq 1/T, when duty cycle < 98 %

(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

<u> </u>	<u>^</u>			A /
2.4GHz band	Duty Cycle	Т	1/T	VBW
	(%)	(ms)	(Hz)	(Hz)
802.11b	99.07	12.3478	81	10
802.11g	97.92	2.0435	489	500
802.11n20	96.67	1.8913	529	1000
802.11n40	91.24	0.9058	1104	2000

Note: Duty Cycle Refer to Section 9.

6.4. Uncertainty

± 4.08 dB above 1GHz

± 4.22 dB below 1GHz



6.5. Test Result of Band Edge

Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

RF Radiated Measurement (Horizontal):

Channal No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Dogult
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
01 (Peak)	2388.696	6.469	43.011	49.480	74.00	54.00	Pass
01 (Peak)	2390.000	6.474	41.545	48.020	74.00	54.00	Pass
01 (Peak)	2400.000	6.528	48.973	55.501			
01 (Peak)	2413.043	6.610	93.850	100.460			
01 (Average)	2390.000	6.474	24.852	31.327	74.00	54.00	Pass
01 (Average)	2400.000	6.528	40.893	47.421	74.00	54.00	Pass
01 (Average)	2412.754	6.608	90.242	96.850			





- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

RF Radiated Measurement (VERTICAL):

Channal No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Degult
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
01 (Peak)	2390.000	5.880	49.032	54.913	74.00	54.00	Pass
01 (Peak)	2400.000	5.879	55.166	61.045			
01 (Peak)	2413.043	5.921	101.830	107.750			
01 (Average)	2390.000	5.880	31.059	36.940	74.00	54.00	Pass
01 (Average)	2400.000	5.879	48.826	54.705	74.00	54.00	Pass
01 (Average)	2412.754	5.919	98.131	104.049			

Figure Channel 01:

VERTICAL (Peak)



Figure Channel 01:

VERTICAL (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2462MHz)

RF Radiated Measurement (Horizontal):

Channal No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Dogult
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
11 (Peak)	2460.891	6.951	93.031	99.982			
11 (Peak)	2483.500	7.110	42.717	49.827	74.00	54.00	Pass
11 (Average)	2461.181	6.953	89.451	96.404			
11 (Average)	2483.500	7.110	25.533	32.643	74.00	54.00	Pass

Figure Channel 11:

Horizontal (Peak)



Figure Channel 11:

Horizontal (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2462MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Degult
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
11 (Peak)	2460.891	6.223	99.219	105.441			
11 (Peak)	2483.500	6.363	43.795	50.158	74.00	54.00	Pass
11 (Peak)	2484.080	6.367	46.105	52.472	74.00	54.00	Pass
11 (Average)	2461.181	6.224	95.692	101.916			
11 (Average)	2483.500	6.363	28.574	34.937	74.00	54.00	Pass

Figure Channel 11:

VERTICAL (Peak)



Figure Channel 11:

VERTICAL (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

RF Radiated Measurement (Horizontal):

Channal Na	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Degult
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	(dBµV/m)	$(dB\mu V/m)$	Result
01 (Peak)	2390.000	6.474	42.896	49.371	74.00	54.00	Pass
01 (Peak)	2400.000	6.528	65.852	72.380			
01 (Peak)	2410.580	6.593	90.972	97.565			
01 (Average)	2390.000	6.474	25.530	32.005	74.00	54.00	Pass
01 (Average)	2400.000	6.528	49.131	55.659			
01 (Average)	2413.333	6.612	80.375	86.987			





Horizontal (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Degult
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
01 (Peak)	2390.000	5.880	47.114	52.995	74.00	54.00	Pass
01 (Peak)	2400.000	5.879	75.741	81.620			
01 (Peak)	2415.652	5.936	100.643	106.580			
01 (Average)	2390.000	5.880	32.847	38.728	74.00	54.00	Pass
01 (Average)	2400.000	5.879	59.439	65.318			
01 (Average)	2414.493	5.930	90.829	96.758			

Figure Channel 01:

VERTICAL (Peak)



Figure Channel 01:

VERTICAL (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2462MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Degult
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
11 (Peak)	2460.601	6.949	92.505	99.453			
11 (Peak)	2483.500	7.110	44.263	51.373	74.00	54.00	Pass
11 (Average)	2461.036	6.952	82.399	89.351			
11 (Average)	2483.500	7.110	28.932	36.042	74.00	54.00	Pass

Figure Channel 11:

Horizontal (Peak)





- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2462MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MITZ)	(ub)	(αρμν)	(ubµ v/m)	(ubµ v/m)	(ubµv/m)	
11 (Peak)	2460.167	6.217	99.028	105.246			
11 (Peak)	2483.500	6.363	47.511	53.874	74.00	54.00	Pass
11 (Average)	2460.891	6.223	88.494	94.716			
11 (Average)	2483.500	6.363	33.272	39.635	74.00	54.00	Pass

Figure Channel 11:

VERTICAL (Peak)



Figure Channel 11:

VERTICAL (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.


Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2412MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Degult
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
01 (Peak)	2390.000	6.474	41.986	48.461	74.00	54.00	Pass
01 (Peak)	2400.000	6.528	65.348	71.876			
01 (Peak)	2416.667	6.636	90.058	96.694			
01 (Average)	2390.000	6.474	26.295	32.770	74.00	54.00	Pass
01 (Average)	2400.000	6.528	50.784	57.312			
01 (Average)	2414.493	6.621	80.307	86.927			



Horizontal (Peak)





Horizontal (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2412MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Dogult
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
01 (Peak)	2390.000	5.880	46.920	52.801	74.00	54.00	Pass
01 (Peak)	2400.000	5.879	76.583	82.462			
01 (Peak)	2414.638	5.931	100.892	106.822			
01 (Average)	2390.000	5.880	33.361	39.242	74.00	54.00	Pass
01 (Average)	2400.000	5.879	60.603	66.482			
01 (Average)	2417.391	5.947	90.586	96.533			

Figure Channel 01:

VERTICAL (Peak)



Figure Channel 01:

VERTICAL (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Peak Limit (dBµV/m)	Average Limit (dBµV/m)	Result
11 (Peak)	2460.891	6.951	92.141	99.092			
11 (Peak)	2483.500	7.110	44.756	51.866	74.00	54.00	Pass
11 (Average)	2461.036	6.952	80.917	87.869			
11 (Average)	2483.500	7.110	29.066	36.176	74.00	54.00	Pass

Figure Channel 11:

Horizontal (Peak)





- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Peak Limit (dBµV/m)	Average Limit (dBµV/m)	Result
11 (Peak)	2460.746	6.222	98.344	104.565			
11 (Peak)	2483.500	6.363	48.470	54.833	74.00	54.00	Pass
11 (Average)	2460.891	6.223	88.079	94.301			
11 (Average)	2483.500	6.363	33.992	40.355	74.00	54.00	Pass

Figure Channel 11:

VERTICAL (Peak)





VERTICAL (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2422MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Degult
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
03 (Peak)	2390.000	6.474	43.145	49.620	74.00	54.00	Pass
03 (Peak)	2400.000	6.528	54.046	60.574			
03 (Peak)	2424.203	6.690	85.996	92.686			
03 (Average)	2390.000	6.474	25.953	32.428	74.00	54.00	Pass
03 (Average)	2400.000	6.528	40.473	47.001			
03 (Average)	2426.522	6.706	76.682	83.388			



Horizontal (Peak)





Horizontal (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2422MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Dogult
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
03 (Peak)	2389.420	5.883	48.522	54.405	74.00	54.00	Pass
03 (Peak)	2390.000	5.880	47.463	53.344	74.00	54.00	Pass
03 (Peak)	2400.000	5.879	63.905	69.784			
03 (Peak)	2424.493	5.992	96.527	102.519			
03 (Average)	2390.000	5.880	34.328	40.209	74.00	54.00	Pass
03 (Average)	2400.000	5.879	50.141	56.020			
03 (Average)	2426.667	6.005	87.475	93.481			

Figure Channel 03:

VERTICAL (Peak)





VERTICAL (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2452MHz)

RF Radiated Measurement (Horizontal):

Channal No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Degult
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
09 (Peak)	2456.978	6.923	84.933	91.856			
09 (Peak)	2483.500	7.110	42.132	49.242	74.00	54.00	Pass
09 (Average)	2456.543	6.919	76.011	82.931			
09 (Average)	2483.500	7.110	26.034	33.144	74.00	54.00	Pass

Figure Channel 09:

Horizontal (Peak)





- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



Product	:	AI Camera
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2019/03/16
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2452MHz)

RF Radiated Measurement (VERTICAL):

Channal No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Docult
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
09 (Peak)	2455.384	6.187	93.668	99.855			
09 (Peak)	2483.500	6.363	45.908	52.271	74.00	54.00	Pass
09 (Average)	2456.543	6.194	85.006	91.201			
09 (Average)	2483.500	6.363	31.597	37.960	74.00	54.00	Pass
09 (Average)	2486.978	6.385	31.926	38.311	74.00	54.00	Pass

Figure Channel 09:

VERTICAL (Peak)





VERTICAL (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. The average measurement was not performed when the peak measured data under the limit of average detection.



7. 6dB Bandwidth

7.1. Test Setup



7.2. Limits

The minimum bandwidth shall be at least 500 kHz.

7.3. Test Procedure

Tested according to DTS test procedure of KDB558074 section 8.2 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 1-5% of the emission bandwidth, VBW $\geq 3*RBW$

7.4. Uncertainty

± 283Hz



7.5. Test Result of 6dB Bandwidth

Product	:	AI Camera
Test Item	:	6dB Bandwidth Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	9100	>500	Pass
06	2437	8650	>500	Pass
11	2462	9100	>500	Pass

🊺 Ke	ysight	Spectr	um A	nalyzer - Swe	ept SA									
(X) R Cen	L Iter	Fre	RF q 2	50 Ω 2.41200	AC 0000 GH	lz	SET	Run	Avg T	AL ype: l	IGN AUTO Log-Pwr	03:34:02 PI TRAC	Mar 16, 2019 E 1 2 3 4 5 6 E M WWWW	Frequency
Г			Ref	Offset 0.8	PI IFC	Gain:Low	#Atten: 3	0 dB			Mkr2	2 2.407	45 GHz	Auto Tune
10 d 10.8 0.800	B/div	·	Ref	20.80 c	1Bm	μ.	2 - A	1 <u>/</u>	3			1.4	41 OBM 1.54 dBm	Center Freq 2.412000000 GHz
-9.20 -19.2 -29.2 -39.2				a0.	want	AND AND A				la y				Start Freq 2.387000000 GHz
-49.2 -59.2 -69.2	w	nehr	ar-of	Werd Arts	Y						- Later	Mar Mary	nhan ann ann ann ann ann ann ann ann ann	Stop Freq 2.437000000 GHz
Cen #Re	ter : s Bl	2.41 N 1	20 00	0 GHz kHz		#VBV	V 300 kHz		Swee	p (#	Swp) 4.	Span 5 800 ms (0.00 MHz 1001 pts)	CF Step 5.000000 MHz Auto Man
MKR 1 2 3 4 5 6 7 8 9 10 11 11	MODE N N	TRC 1 1	SCL f f		X 2.411 5 2.407 4 2.416 5	0 GHz 5 GHz 5 GHz	Y 7.54 di 1.41 di 1.15 di	3m 3m 3m 3m		FUNCT	TION WIDTH	FUNCTIO		Freq Offset 0 Hz
MSG											STATUS			



🊺 Keysig	ght Spect	rum A	analyzer - Swe	pt SA								
(X) RL Cente	er Fre	RF	50 Ω 2 43700		17	SEI	NSE:INT	Avg Typ	ALIGN AUTO e: Log-Pwr	03:39:12 PI TRAC	M Mar 16, 2019	Frequency
	PNO: Fast Trig: Free Run IFGain:Low #Atten: 30 dB Ref Offset 0.8 dB Ref Offset 0.8 dB Ref Offset 0.8 dB -0.27 dBm										Auto Tune	
10 dB/c Log 10.8	div	Rei	20.80 d	BM		2 army	1	3 M.		-0./	1.53 dBm	Center Freq 2.437000000 GHz
-19.2 — -29.2 — -39.2 —					Mar V				x			Start Freq 2.412000000 GHz
-49.2	work	Uni	m the form	grower a						and and and a second	unal Internet	Stop Freq 2.462000000 GHz
Cente #Res	er 2.43 BW 1	370 00	0 GHz kHz	×	#VBV	/ 300 kHz	EIN	Sweep	(#Swp) 4	Span 5 .800 ms (0.00 MHz 1001 pts)	CF Step 5.000000 MHz <u>Auto</u> Man
1 N 2 N 3 N 4 5 6		f f f		2.437 5 2.432 9 2.441 5	0 GHz 0 GHz 5 GHz	7.53 dl -0.27 dl 1.13 dl	3m 3m 3m				E	Freq Offset 0 Hz
7 8 9 10 11						m						
MSG									STATUS			L





Product	:	AI Camera
Test Item	:	6dB Bandwidth Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	15200	>500	Pass
06	2437	15400	>500	Pass
11	2462	15200	>500	Pass

50 Ω AC 2.412000000 GHz PNO: Fast IFGain:Low Offset 0.8 dB ' 20.80 dBm	Trig: Free Run #Atten: 30 dB	ALIGN AUTO Avg Type: Log-Pwr Mkr	03:45:31 PM Mar 16, 2019 TRACE[12 3 4 5 6 TYPE MWWWWW DET P NNNN 2 2.404 40 GHz	Frequency Auto Tune
PN0: Fast IFGain:Low Offset 0.8 dB [†] 20.80 dBm	#Atten: 30 dB	Mkr	2 2.404 40 GHz	Auto Tune
			-5.74 dBm	
\$ 2	And adar and a dealer	3 www.	-3.67 dBm	Center Freq 2.412000000 GHz
			lum	Start Freq 2.387000000 GHz
240 ¹⁰ /1 ¹⁰			William Million Million	Stop Freq 2.437000000 GHz
0 GHz kHz #VE	300 kHz	Sweep (#Swp) 4	Span 50.00 MHz .800 ms (1001 pts)	CF Step 5.000000 MHz <u>Auto</u> Man
X 2.413 25 GHz 2.404 40 GHz 2.419 60 GHz	Y FUN 2.33 dBm -5.74 dBm -4.56 dBm -1.56 dBm			Freq Offset 0 Hz
0 GH:	z #WE 2.413 25 GHz 2.404 40 GHz 2.419 60 GHz	X Y FUN 2 #VBW 300 kHz 1 2 #VBW 300 kHz 1 2 #VBW 300 kHz 1 2.413 25 GHz 2.33 dBm 2.404 40 GHz -5.74 dBm 2.419 60 GHz -5.74 dBm 1 1 2.419 60 GHz -5.74 dBm 1 1	Image: Stratus Image: Stratus Image: Stratus Image: Stratus	2413 25 GHz 2.33 dBm 2413 25 GHz 2.33 dBm 2413 25 GHz 5.74 dBm 2413 26 GHz -5.74 dBm 2413 60 GHz -5.74 dBm 2419 60 GHz -5.74 dBm

🎉 Keysight Sp	pectrum Analyzei	r - Swept SA								
Center F	_R , req 2.43	50 Ω AC 7000000 GH	lz	SEN	ISE:INT	Avg Type	ALIGN AUTO E: Log-Pwr	03:55:14 P	Mar 16, 2019	Frequency
10 dB/div	Ref Offset 0.8 dB Mkr2 2.429 40 10 dB/div Ref 20.80 dBm -4.46								40 GHz 46 dBm	Auto Tune
10.8 0.800 -9.20			2 printelium	Laft and the second second	produced been do an	3			-3.53 dBm	Center Freq 2.437000000 GHz
-19.2 -29.2 -39.2		when the stand of					Mannan	S PROVING		Start Freq 2.412000000 GHz
-49.2 -59.2 -69.2	homeward	·							างโรงจะให้ทั้งประจะ	Stop Freq 2.462000000 GHz
Center 2 #Res BW	.43700 GH / 100 kHz	Iz	#VBW	300 kHz		Sweep (#Swp) 4.	Span 5 800 ms (0.00 MHz 1001 pts)	CF Step 5.000000 MHz <u>Auto</u> Man
1 N 2 N 3 N 4 5 6	1 f 1 f 1 f	2.438 2 2.429 4 2.444 8	5 GHz 0 GHz 0 GHz	2.47 dE -4.46 dE -3.58 dE	3m 3m 3m			PONCTIC	E	Freq Offset 0 Hz
8 9 10 11 1 MSG				m			STATUS		*	

🎉 Keysight S	Spectrum An	alyzer - Swe	pt SA								
Center	_R ⊧ Freq 2.	50 Ω 46200	AC 0000 GH	z	SEN	Run	Avg Typ	ALIGN AUTO e: Log-Pwr	03:58:00 PI TRAC	MMar 16, 2019 E 1 2 3 4 5 6 E M WWWWW	Frequency
10 dB/div	Ref C)ffset 0.8 20.80 d	dB Bm	io: Fast ∟ Gain:Low	#Atten: 3	0 dB		Mkr	2 2.454 -4.	40 GHz 50 dBm	Auto Tune
10.8 0.800 -9.20				2 for the second	hallowhalling	port-number	al al and			-3.59 dBm	Center Freq 2.462000000 GHz
-19.2 -29.2 -39.2		- MAN	with the with	w				Multon Martin	how when		Start Freq 2.437000000 GHz
-49.2 -59.2	Manhon	41 ⁰⁰⁷							- Kavia	hall a files of all	Stop Freq 2.487000000 GHz
Center 2 #Res Bi	2.46200 N 100 k	GHz Hz		#VBV	/ 300 kHz		Sweep	(#Swp) 4	Span 5 .800 ms (0.00 MHz 1001 pts)	CF Step 5.000000 MHz Auto Man
MKR MODE 1 N 2 N 3 N 4 - 5 - 6 - 7 - 8 - 9 - 10 -	TRC SCL 1 f 1 f 1 f - - - - - - - -		X 2.463 2 2.454 4 2.469 6	5 GHz 0 GHz 0 GHz	Y 2.41 dE -4.50 dE -4.28 dE	FUN 3m 3m 3m	CTION FU	NCTION WIDTH	FUNCTIO	DN VALUE	Freq Offset 0 Hz
A MSG	-				ш			STATUS	\$	•	



Product	:	AI Camera
Test Item	:	6dB Bandwidth Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	15250	>500	Pass
06	2437	15200	>500	Pass
11	2462	15800	>500	Pass

🎉 Keysight	t Spectrum	Analyzer - Swe	ept SA								
K RL Center	· Freq	F 50 Ω 2.41200	AC 0000 GH	z	SEN	ISE:INT	Avg Typ	ALIGN AUTO	04:02:18 P	M Mar 16, 2019	Frequency
10 dB/di	Re v R e	of Offset 0.8	Pt IFC dB IBm	IO: Fast 🕞 Sain:Low	∃ Trig: Free #Atten: 3	e Run 0 dB		Mkr	2 2.404 -5.	35 GHz 57 dBm	Auto Tune
Log 10.8 0.800 -9.20				2 /*****		particultured.	- Jun			-3.90 dBm	Center Freq 2.412000000 GHz
-19.2 -29.2 -39.2		UMARA	n frot Wingon Jaw					Martin Martin Carles	Dáte wayan		Start Freq 2.387000000 GHz
-49.2 -59.2 -69.2	whyen by w	- Wow								man	Stop Freq 2.437000000 GHz
Center #Res B	2.412 W 100	00 GHz kHz	×	#VBV	/ 300 kHz	EUN	Sweep	(#Swp) 4	Span 5 .800 ms (0.00 MHz 1001 pts)	CF Step 5.000000 MHz <u>Auto</u> Man
1 N 2 N 3 N 4 5 6 7 8 9 10 11	IRC SC 1 f 1 f 1 f 1 f 1 f 1 f		x 2.413 2: 2.404 3: 2.419 6:	5 GHz 5 GHz 0 GHz	2.10 dE -5.57 dE -5.35 dE				FUNCTION		Freq Offset 0 Hz
•	+ +	1			III	•			1	- F	
MSG								STATUS			



🎉 Keysight Spectrum Ana	alyzer - Swept SA				
Center Freq 2.4	50 Ω AC 437000000 GHz	SENSE:INT	ALIGN AUTO Avg Type: Log-Pw	0 04:04:58 PM Mar 16, 2019 r TRACE 1 2 3 4 5 6 TYPE M WWWWW	Frequency
Ref O 10 dB/div Ref 2	FNO: Fast IFGain:Lov ffset 0.8 dB 20.80 dBm	#Atten: 30 dB	М	r2 2.429 40 GHz -4.61 dBm	Auto Tune
Log 10.8 0.800 -9.20	Juneary C	2 mlwww.howlowellaw	3	-3.43 dBm	Center Freq 2.437000000 GHz
-19.2 -29.2 -39.2			Manuna Min	hong Marco	Start Freq 2.412000000 GHz
-49.2 -59.2 -69.2					Stop Freq 2.462000000 GHz
Center 2.43700 #Res BW 100 ki	GHz Hz #V	'BW 300 kHz	Sweep (#Swp)	Span 50.00 MHz 4.800 ms (1001 pts)	CF Step 5.000000 MHz Auto Man
MRR MODE IRG SCL 1 N 1 f 2 N 1 f 3 N 1 f 4 - - - 5 - - -	x 2.438 25 GHz 2.429 40 GHz 2.444 60 GHz	2.57 dBm -4.61 dBm -4.16 dBm			Freq Offset 0 Hz
7 8 9 10 11 1					
MSG			STA	TUS	

🊺 Keysight	t Spectrur	n Analyzer - Sw	ept SA								
Center	· Frec	RF 50 Ω 2.46200	AC 00000 GH	z	SEN		Avg Typ	ALIGN AUTO e: Log-Pwr	04:10:40 PI TRAC	M Mar 16, 2019	Frequency
10 dB/di	R iv R	ef Offset 0.1 ef 20.80 (PI IFC 8 dB dBm	NO: Fast ⊆ Gain:Low	#Atten: 3	0 dB		Mkr	2 2.453 -5.	80 GHz 11 dBm	Auto Tune
10.8 0.800 -9.20					w al what	1 perhodual	- A Barrier			-3.67 dBm	Center Freq 2.462000000 GHz
-19.2 -29.2 -39.2			Mundul and a second				\	Walat Walker	hing the second se		Start Freq 2.437000000 GHz
-49.2 -59.2 -69.2	william								"Trupy	Malmon	Stop Freq 2.487000000 GHz
Center #Res B	2.462 W 10	00 GHz 0 kHz		#VBV	V 300 kHz		Sweep	(#Swp) 4	Span 5 .800 ms (0.00 MHz 1001 pts)	CF Step 5.000000 MHz Auto Man
MKR MODE 1 N 2 N 3 N 4 5 6 7 8 9 10 11 <			X 2.463 2 2.453 8 2.469 6	5 GHz 0 GHz 0 GHz	Y 2.33 df -5.11 df -5.30 df	FU 3m 3m 3m 		NCTION WIDTH	FUNCTIO		Freq Offset 0 Hz
MSG								STATUS		,	



Product	:	AI Camera
Test Item	:	6dB Bandwidth Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
03	2422	35900	>500	Pass
06	2437	35500	>500	Pass
09	2452	35900	>500	Pass

Bit Rt RF S0.0 AC SENSE.INT ALIGN AUTO Det20:28 PMWar 16, 2019 Frequency Center Freq 2.422000000 GHz PNO: Fast Trig: Free Run Avg Type: Log-Pwr Trace [1: 2: 45 6 Frequency PNO: Fast Trig: Free Run Avg Type: Log-Pwr Trace [1: 45 6 Auto Tune 108 Ref Offset0.3 dB -9.65 dBm -9.65 dBm Center Freq 108 2 1 -9.65 dBm 2.422000000 GHz 2.422000000 GHz 2 1 -9.65 dBm 2.422000000 GHz 9.0 2 2 1 -9.65 dBm 2.422000000 GHz 9.2 2 2 1 -9.65 dBm 2.422000000 GHz 9.2 2 2 -1 -9.65 dBm -9.65 dBm 9.2 2 2 -1 -9.65 dBm -9.65 dBm 10.2 2 2 -1 -9.65 dBm -9.65 dBm 9.2 2 2 -9.65 dBm -9.60 dBm -9.60 dBm 10.2 2	💓 Keysight Spectr	rum Analyzer - Swept	SA						
Phò: Fast Ing: Free Run #Atten: 30 dB Mkr2 2:404 4 GHz -9.65 dBm Auto Tune 10g -9.65 dBm -9.6	Center Fre	RF 50 Ω	AC 000 GHz	SENSE	Avg Ty	ALIGN AUTO	04:20:28 Pf	Mar 16, 2019	Frequency
Log 1 Center Freq 0.800 2 1 Center Freq 9.20 39.2 39.2 39.2 49.2 49.2 49.2 59.0 em 49.2 49.2 59.2 59.0 em 69.2 1 1 1 1 Center 2.42200 GHz #VBW 300 kHz Span 100.0 MHz Stop Freq 2.472000000 GHz #VBW 300 kHz Sweep (#Swp) 9.600 ms (1001 pts) 10.000000 MHz 1 N 1 1 2.440 3 GHz -12.46 dBm 1 1 3 N 1 f 2.440 3 GHz -12.46 dBm 5 6 </td <td>10 dB/div</td> <td>Ref Offset 0.8 d Ref 20.80 dB</td> <td>PNO: Fast IFGain:Low B</td> <td>#Atten: 30 d</td> <td>iB</td> <td>Mł</td> <td>(r2 2.404 -9.0</td> <td>4 4 GHz 65 dBm</td> <td>Auto Tune</td>	10 dB/div	Ref Offset 0.8 d Ref 20.80 dB	PNO: Fast IFGain:Low B	#Atten: 30 d	iB	Mł	(r2 2.404 -9.0	4 4 GHz 65 dBm	Auto Tune
-19.2 -19.2 <td< td=""><td>10.8 0.800 -9.20</td><td></td><td>2- •</td><td>بهاسيد المراجع المراجع</td><td>1 Allahar</td><td>3</td><td></td><td>-9.50 dBm</td><td>Center Freq 2.422000000 GHz</td></td<>	10.8 0.800 -9.20		2- •	بهاسيد المراجع المراجع	1 Allahar	3		-9.50 dBm	Center Freq 2.422000000 GHz
49.2	-19.2 -29.2 -39.2			V					Start Freq 2.372000000 GHz
Center 2.42200 GHz Span 100.0 MHz CF Step 10.00000 MHz #Res BW 100 kHz #VBW 300 kHz Sweep (#Swp) 9.600 ms (1001 pts) Low of the step 10.00000 MHz MKE MODE TRC SCL X Y FUNCTION FUNCTION width FUNCTION value Function value Function value 1 1 f 2.425 7 GHz -3.50 dBm Function width Function value Function value <td>-49.2 -59.2</td> <td>hours and the second</td> <td></td> <td></td> <td></td> <td>work</td> <td>minimuta</td> <td>hallow and the second of the s</td> <td>Stop Freq 2.472000000 GHz</td>	-49.2 -59.2	hours and the second				work	minimuta	hallow and the second of the s	Stop Freq 2.472000000 GHz
MRR MODE TRC SCI X Y FUNCTION FUNCTION FUNCTION WIDTH FUNCTION VALUE A 1 N 1 f 2.425 7 GHz -3.60 dBm - - - - - Function width Function value A - - - - - - - Final Ansatz -	Center 2.42 #Res BW 1	2200 GHz 00 kHz	#VI	BW 300 kHz	Sweep	o (#Swp) 9	Span 1 0.600 ms (00.0 MHz 1001 pts)	CF Step 10.000000 MHz Auto Man
	MKR MODE TRG 1 N 1 2 N 1 3 N 1 4 - - 6 - - 7 - - 8 - - 9 - - 10 - -	SCL f f f 	X 2.425 7 GHz 2.404 4 GHz 2.440 3 GHz	Y -3.50 dBn -9.65 dBn -12.46 dBn	FUNCTION F	UNCTION WIDTH	FUNCTIC		Freq Offset 0 Hz



🎉 Keysight Sp	ectrum /	Analyzer - Swe	pt SA								
Center F	req 2	50 Ω 2.43700	AC 0000 GH	Z	SEN	Run	Avg Type	ALIGN AUTO e: Log-Pwr	04:25:00 PI TRAC	MMar 16, 2019 E 1 2 3 4 5 6 E M WWWWW	Frequency
10 dB(div	Ref	Offset 0.8	dB Bm	iO: Fast Sain:Low	#Atten: 30) dB		Mk	r2 2.419	3 GHz 84 dBm	Auto Tune
		20.00 u			alalahahan a	1	. La La La	3		-8.96 dBm	Center Freq 2.437000000 GHz
-19.2 -29.2 -39.2								No.			Start Freq 2.387000000 GHz
-49.2 -59.2 -69.2	ng ayah	สะปัสวิการสะดาษุสต	venshalmt					h warnalise	m lon birgen	mento do antiliate	Stop Freq 2.487000000 GHz
Center 2. #Res BW	4370 100	0 GHz kHz		#VBW	/ 300 kHz		Sweep	(#Swp) 9	Span 1 .600 ms (00.0 MHz 1001 pts)	CF Step 10.000000 MHz <u>Auto</u> Man
1 N 2 N 3 N 4	1 f 1 f 1 f		2.442 2.419 2.454	D GHz 3 GHz 3 GHz	-2.96 dE -10.84 dE -9.19 dE	3m 3m 3m			FUNCTION		Freq Offset 0 Hz
0 7 8 9 10 11											
MSG								STATUS	3	•	

Figure Channel 09:

🊺 Ke	ysight	Spect	rum /	Analyzer - Swe	ept SA								
<mark>⊯</mark> R Cen	L Iter	Fre	RF eq 2	50 Ω 2.45200	AC 00000 GH	z	SE Trig: Fre	NSE:INT	Avg Ty	ALIGN AUTO	04:28:18 P TRAC	M Mar 16, 2019 E 1 2 3 4 5 6 PE M WWWWW	Frequency
10 d	B/div		Ref Ref	Offset 0.8	B dB	NO: Fast ∟ Gain:Low	#Atten: 3	0 dB		М	(r2 2.434 -10.1	4 3 GHz 29 dBm	Auto Tune
Log 10.8 0.800 -9.20							Lalestolehener		بالمسارعين المرالية	∂ 3		-9.67 dBm	Center Freq 2.452000000 GHz
-19.2 -29.2 -39.2													Start Freq 2.402000000 GHz
-49.2 -59.2 -69.2	w.bo		and the second second	odani wik	Jangang Jaka Jawa					h Horan M	dat who have more any	Wiples y and a tom	Stop Freq 2.502000000 GHz
Cen #Re	ter s B	2.4: W 1	520 00	0 GHz kHz		#VB\	N 300 kHz		Sweep	o (#Swp) 9	Span 1 0.600 ms (00.0 MHz 1001 pts)	CF Step 10.000000 MHz <u>Auto</u> Man
MKG 1 3 4 5 6 7 8 9 10 11 < □		1 1 1			x 2.455 2.434 2.470	7 GHz 3 GHz 2 GHz	Y -3.67 dl -10.29 dl -10.59 dl	5 m 3 m 3 m 		UNCTION WIDTH		DN VALUE	Freq Offset 0 Hz
MSG										STATU	s		



8. **Power Density**

8.1. Test Setup



8.2. Limits

The transmitted power density averaged over any 1 second interval shall not be greater +8dBm in any 3kHz bandwidth.

8.3. Test Procedure

Tested according to DTS test procedure of KDB558074 section 8.4 for compliance to FCC 47CFR 15.247 requirements.

8.4. Uncertainty

 \pm 1.20 dB



8.5. Test Result of Power Density

Product	:	AI Camera
Test Item	:	Power Density Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	7.460	\leq 8dBm	Pass
06	2437	7.680	\leq 8dBm	Pass
11	2462	7.770	\leq 8dBm	Pass

🇾 Kej	ysight Spectrum Analyzer - Swept SA								- d ×
l xi Ri	L RF 50 Ω AC		SEN	SE:INT		ALIGN AUTO	03:34:23 PI	M Mar 16, 2019	Erequency
Cen	ter Freq 2.41200000	GHz	T		Avg Type	: Log-Pwr	TRAC	E 1 2 3 4 5 6	Frequency
		PNO: Fast 😱 IFGain:Low	#Atten: 3	0 dB			DE		
10 dE	Ref Offset 0.8 dB 3/div Ref 20.80 dBm					Mkr1	2.411 4 7.	95 GHz 46 dBm	Auto Tune
Log									
			.1						Center Freq
10.8			•'-						2.412000000 GHz
0.000	. h.A.	rrm	m	m	Mr	A.A.I			
0.800	, politica		V	V			M	п	Start Freq
-9.20	M							$/ \sim$	2.405175000 GHz
0.20								\sim 1	
-19.2									Ctop From
									3 419935000 CH-
-29.2									2.418825000 GH2
-39.2									CF Step
									Auto Man
-49.2									
									Eren Offset
-59.2									
-69.2									
Cen	ter 2.412000 GHz			1	1	1	Span 1	3.65 MHz	
#Re	s BW 100 kHz	#VBW	300 kHz		Sweep (#Swp) 1	.333 ms (1001 pts)	
MSG						STATUS	3		



🊺 Ke	ysight Spe	trum Analyzer - S	wept SA								
<mark>גא</mark> ℝ Cen	ter Fr	eq 2.4370	00000 G	Hz	SEN	Run	Avg Type	LIGN AUTO	03:39:33 PI TRAC	MMar 16, 2019 E 1 2 3 4 5 6 E M WWWWW	Frequency
		Ref Offset 0	IF .8 dB	NO: Fast Gain:Low	o: Fast) Ing. Free Run ain:Low #Atten: 30 dB			Mkr	1 2.437 4	93 GHz	Auto Tune
10 di Log	3/div	Ref 20.80	dBm						7.		
10.8						∮ 1					Center Freq 2.437000000 GHz
			AA	nor	M	M	m	~~~	0		
-9.20	~~	m				V			my	\sum	Start Freq 2.430512500 GHz
		N .								\sim	
-19.2											Stop Freq 2.443487500 GHz
-29.2											
-39.2											CF Step 1.297500 MHz <u>Auto</u> Man
-49.2											
-59.2											Freq Offset 0 Hz
-69.2											
Cen #Re:	ter 2.4 s BW	37000 GHz 100 kHz	:	#VBW	300 kHz		Sweep (#Swp)	Span 1 1.267 ms (2.98 MHz 1001 pts)	
MSG								STATU	JS		

Figure Channel 06:





Product	:	AI Camera
Test Item	:	Power Density Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	2.130	\leq 8dBm	Pass
06	2437	2.470	\leq 8dBm	Pass
11	2462	2.520	\leq 8dBm	Pass

								pt SA	n Analyzer - Swe	sight Spectru	Key
Frequency	M Mar 16, 2019	03:45:52 PI TRAC	ALIGN AUTO		NSE:INT	SEI	17		RF 50 Ω	ter Fred	RL
Auto Tur		TYF DE		•	e Run 0 dB	Trig: Free #Atten: 3	NO: Fast 🕞 Gain:Low	PI IF(2.41200		
	277 GHz 13 dBm	Mkr1 2.413 277 GI 2.13 dB						dB I Bm	ef Offset 0.8 ef 20.80 d	R S/div R) dE
Center Fr											שיי 18
2.41200000 G					∮ ¹						
Start Fr 2.400600000 G		hala	March	Aurrh	man	malmy	nurun	monto	mbr		
		h							<i>.</i>		20
Stop Fr 2.423400000 G	www.	5							feel	VIIV	.2
CF St											2
2.280000 N <u>Auto</u> N											2
Freq Offs											~
0											.2
											.2
	2.80 MHz 1001 pts)	Span 2 2,200 ms (#Swp) 2	Sweep		300 kHz	#VBW		00 GHz) kHz	ter 2.412 s BW 10	∟ ent tes
<u></u>		3	STATU								G



🊺 Ke	ysight Spee	trum Analyzer - Sw	ept SA								
<mark>⊯</mark> R Cen	ter Fr	RF 50 Ω eq 2.43700	AC 0000 GH	lz	SEI	NSE:INT	Avg Type	LIGN AUTO	03:55:34 P	MMar 16, 2019 E 1 2 3 4 5 6 E M WWWWW	Frequency
10 di	3/div	Ref Offset 0.0 Ref 20.80	B dB B dB	NO: Fast Gain:Low	#Atten: 3	0 dB		Mkr1	2.438 24 2.	7 4 GHz 47 dBm	Auto Tune
10.8											Center Freq 2.437000000 GHz
0.800 -9.20		mha	mont	www.	metra	pmlum	huntry	mbrund	way		Start Freq 2.425450000 GHz
-19.2 -29.2	w	mm mm								www.	Stop Freq 2.448550000 GHz
-39.2 -49.2											CF Step 2.310000 MHz <u>Auto</u> Man
-59.2											Freq Offset 0 Hz
-69.2 Cen	ter 2.4	3700 GHz		#\/B\A/	300 kH2		Sween	#Swn\	Span 2	3.10 MHz	
MSG	3 099			#VDV	500 KAZ		oweeh (stat	2.207 IIIS (1001 pts)	

🊺 Ke	ysight Spec	trum Analyzer - Sv	vept SA								
ιxu ℝ Cer	ter Fr	eq 2.4620	00000 GH	lz	SEI	Run	Avg Type	Log-Pw	03:58:20 Pl r TRAC	M Mar 16, 2019	Frequency
10 di	3/div	Ref Offset 0. Ref 20.80	8 dB dBm	NO: Fast 🕒 Gain:Low	#Atten: 3	0 dB		Mkr	1 2.463 2 2.	77 GHz 52 dBm	Auto Tune
10.8						▲ ¹					Center Freq 2.462000000 GHz
0.800 -9.20		- pmh	Manah	m. Anon	working	pontos	Ann	Warah	hundry		Start Freq 2.450600000 GHz
-19.2 -29.2	ww	well well well and the second s								Mr Month	Stop Freq 2.473400000 GHz
-39.2											CF Step 2.280000 MHz <u>Auto</u> Man
-59.2											Freq Offset 0 Hz
-69.2 Cen #Re	ter 2.4 s BW 1	6200 GHz 100 kHz		#VBW	/ 300 kHz		Sweep ((#Swp)	Span 2 2.200 ms (2.80 MHz 1001 pts)	
MSG								STAT	US		



Product	:	AI Camera
Test Item	:	Power Density Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	2.180	\leq 8dBm	Pass
06	2437	2.560	\leq 8dBm	Pass
11	2462	2.730	\leq 8dBm	Pass

🊺 Ke	ysight Spec	trum Analyzer - Sw	ept SA								
Cen	ter Fr	RF 50 Ω eq 2.41200	AC 0000 GH	łz	SEN	NSE:INT	Avg Type	LIGN AUTO	04:02:40 PI r TRAC	Mar 16, 2019	Frequency
10 di	Ref Offset 0.8 dB 0 dB/div Ref 20.80 dBm							Mkr	Auto Tune		
10.8						↓ ¹					Center Freq 2.412000000 GHz
0.800 -9.20		provide	mm	nahmal	maling	mhr	Ambri	Junion	montion		Start Freq 2.400562500 GHz
-19.2 -29.2	rever	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~								h www.w.a	Stop Freq 2.423437500 GHz
-39.2											CF Step 2.287500 MHz <u>Auto</u> Man
-59.2											Freq Offset 0 Hz
-69.2 Cen #Re	ter 2.4 s BW 1	1200 GHz 00 kHz		#VBW	/ 300 kHz		Sweep (#Swp)	Span 2 2.200 ms (2.88 MHz 1001 pts)	
MSG								STAT	US		



🊺 Ke	ysight Spec	trum Analyzer - Sv	vept SA								
Cen	ter Fr	eq 2.4370	00000 GH	lz	SEI	NSE:INT	Avg Type	Log-Pwr	04:05:18 PI	MMar 16, 2019 E 1 2 3 4 5 6 E M WWWWW	Frequency
10 di	3/div	Ref Offset 0. Ref 20.80	8 dB dBm	NO: Fast Gain:Low	#Atten: 3	0 dB		Mkr	1 2.438 2 2.	54 GHz 56 dBm	Auto Tune
L og 10.8						▲ 1					Center Freq 2.437000000 GHz
0.800 -9.20		punto	mm	when	walnung	porto	Annaha	Maril	mertary		Start Freq 2.425600000 GHz
-19.2 -29.2	an Marina	N.								how was	Stop Freq 2.448400000 GHz
-39.2 -49.2											CF Step 2.280000 MHz <u>Auto</u> Man
-59.2											Freq Offset 0 Hz
-69.2 Cen #Re:	ter 2.4	3700 GHz		#VBW	300 kHz		Sweep ((#Swp)	Span 2 2.200 ms (2.80 MHz 1001 pts)	
MSG								STAT	us		

🊺 Ke	ysight Spec	trum Analyzer - Sv	vept SA								
<mark>ιχι</mark> ℝ Cen	ter Fr	eq 2.4620	00000 GH	lz	SEI	NSE:INT	Avg Type	LOG-PWI	04:11:01 P	MMar 16, 2019	Frequency
10 di	3/div	Ref Offset 0. Ref 20.80	8 dB dBm	NO: Fast 🕒 Gain:Low	#Atten: 3	0 dB		Mkr1	2.463 25 2.	6 1 GHz 73 dBm	Auto Tune
10.8						↓ ¹					Center Freq 2.462000000 GHz
0.800 -9.20		pint	mandanal	man	hardtering	produces	hardy	Annh	intra		Start Freq 2.450150000 GHz
-19.2 -29.2	ww	urmi -							<u>\</u>	March Aller Anna	Stop Freq 2.473850000 GHz
-39.2											CF Step 2.370000 MHz <u>Auto</u> Man
-59.2											Freq Offset 0 Hz
-69.2 Cen #Re	ter 2.4	6200 GHz		#VBW	(300 kHz		Sweep	(#Swp)	Span 2	3.70 MHz	
MSG					000 KHZ			STAT	us		



Product	:	AI Camera
Test Item	:	Power Density Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
03	2422	-3.450	\leq 8dBm	Pass
06	2437	-3.120	\leq 8dBm	Pass
09	2452	-3.540	\leq 8dBm	Pass

Figure Cha	nnel 03:	
SENSE:INT	ALIGN AUTO	0
	Avg Type: Log-Pwr	

🊺 Key	ysight Spect	rum Analyzer - Sw	ept SA		0						
Cen	ter Fre	RF 50 Ω eq 2.42200	AC 0000 GH	lz	SEI		Avg Type	ALIGN AUTO : Log-Pwr	04:20:49 PM TRAC	Mar 16, 2019	Frequency
10 dF	B/div	Ref Offset 0.8	P IF 3 dB 1Bm	NO: Fast 🕞 Gain:Low	#Atten: 3	0 dB		Mk	r1 2.427 -3.4	01 GHz	Auto Tune
Log 10.8											Center Freq 2.422000000 GHz
0.800 -9.20			l _{ubber} had	marte and the second	Antonia	pmalmlud	1	holalah	n-mhy-		Start Freq 2.395075000 GHz
-19.2					ļ	r T					Stop Freq 2.448925000 GHz
-39.2		W.							- ³ /4	<u>М</u> 10 10	CF Step 5.385000 MHz <u>Auto</u> Man
-49.2 -59.2	Windows									"ետրկան	Freq Offset 0 Hz
-69.2 Cen	ter 2.42	2200 GHz							Span 5	3.85 MHz	
#Re MSG	s BW 1	00 kHz		#VBW	/ 300 kHz		Sweep	(#Swp)	5.200 ms (^{JS}	1001 pts)	

鱦 Key	ysight Spe	trum Analyzer - Sw	ept SA								
l XI RI	L	RF 50 Ω	AC		SEN	SE:INT		ALIGN AUTO	04:25:21 PM	Mar 16, 2019	Erequency
Cen	ter Fr	eq 2.43700	00000 GH	lz	Tains Free	. D	Avg Type	: Log-Pwr	TRAC	E 1 2 3 4 5 6	riequency
			P	NO: Fast 🛛 🖵 Gain:Low	#Atten: 3	0 dB			DE		
								Mkr	1 2,440	73 GHz	Auto Tune
10 de	Ridio	Ref Offset 0.8	3 dB 1Bm						-3.1	12 dBm	
Log	57417	1(01 20.00 (1				
											Center Freg
10.8											2 /37000000 GHz
											2.407000000 0112
0.000						1					
0.000						● .					Start Fred
			1 8 1		holeshow	mound	halushar	Adult	L.A		2 410375000 GHz
-9.20		rlat	har Marthart	to and the state of the second	and the second	1	de televites de	and the street of			2.410010000 0112
						V					
-19.2						•					Stop Freg
									h		2 463625000 GHz
-29.2		~~~~~							4		2.100020000 0112
		al ^V							~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
-39.2										L _{LA}	CF Step
00.2		n*'								N.	5.325000 MHz
40.0	14	1								۳	<u>Auto</u> Man
-49.2	herry									hypeline	
	11.000										Freg Offset
-59.2											0 Hz
-69.2											
Cen	ter 2.4	3700 GHz					-		Span 5	3.25 MHz	
#Re	S BW	IUU KHZ		#VBW	300 KHZ		sweep (#Swp) 5	.133 ms (1001 pts)	
MSG								STATUS			

Figure Channel 09:

🊺 Key	/sight Spect	rum Analyzer - Sw	ept SA								
Cen	ter Fre	RF 50 Ω cq 2.45200	AC 00000 GH	z	SEN	NSE:INT	Avg Type	ALIGN AUTO	04:28:39 PM TRAC	Mar 16, 2019	Frequency
10 dE	3/div	Ref Offset 0.8 Ref 20.80 (B dB B dB	NO: Fast ⊆ Gain:Low	#Atten: 3	0 dB		Mk	r1 2.455 -3.	72 GHz 54 dBm	Auto Tune
Log 10.8											Center Freq 2.452000000 GHz
0.800 -9.20			L. J. A. Ander		Andustrain	walnulad	alndroderin	Inden I. A. I.	r hurdy		Start Freq 2.425075000 GHz
-19.2 -29.2		- Port			4	Y					Stop Freq 2.478925000 GHz
-39.2 -49.2	Jul .	M.							Ϋ́η		CF Step 5.385000 MHz <u>Auto</u> Man
-59.2	rihaluda"									Wylere	Freq Offset 0 Hz
-69.2 Cent	ter 2.45	200 GHz							Span 5	3.85 MHz	
#Res MSG	5 BW 1			#VBW	300 KHZ		sweep	#SWP) : Statu	s.200 ms (1001 pts)	



9. Duty Cycle

9.1. Test Setup



9.2. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

9.3. Uncertainty

± 2.31msec



9.4. Test Result of Duty Cycle

Product	:	AI Camera
Test Item	:	Duty Cycle
Test Mode	:	Transmit

Duty Cycle Formula:

Duty Cycle = Ton / (Ton + Toff)

Duty Factor = 10 Log (1/Duty Cycle)

Results:

2.4GHz band	Ton	Ton + Toff	Duty Cycle	Duty Factor	
	(ms)	(ms)	(%)	(dB)	
802.11b	12.3478	12.4638	99.07	0.04	
802.11g	2.0435	2.0870	97.92	0.09	
802.11n20	1.8913	1.9565	96.67	0.15	
802.11n40	0.9058	0.9928	91.24	0.40	

802.11b



Date: 3.JAN.2007 21:01:21



^{802.11}g



Date: 3.JAN.2007 22:06:21

802.11n20

Spect	rum	S	pectrum 2 🛛 🕅	Spectrum 3	X Spectru	um 4 🛛 🔊		
Ref Le Att SGL	evel :	117.00 d 20	ВµV — — — — — — — — — — — — — — — — — — —	RBW 1 MHz VBW 1 MHz				
Pk Ch	ſW		35	VC 93	1010 P.0100 P.0			
110 dBµ	iv				D3[1]		1.46 dB 1.95652 ms	
100 dBµ	N-						775.36 µs	
90 dBµV		0758	-		-			
80-daux	and the second	WE DW	where and with the providence of the second se	be tablaubact ways of	2 Barriston and and and and and and and and and an	and when white work	vocoble and the portable	
70 dBµV								
60 dBµV								
50 dBµV		-U						
40 dBµV								
30 dBµV								
20 dBµV								
CF 2.41	12 GH	z		691 pt:	5		500.0 µs/	
Marker								
Type	Ref	Trc	X-value	Y-value	Function	Funct	ion Result	
M1		1	775.36 µs	79.06 dBµV				
D2 D3	M1 M1	1	1.8913 ms 1.95652 ms	-0.82 dB 1.46 dB				
		Y			De adv.		03.01.2007	

Date: 3.JAN.2007 22:09:46





Date: 3.JAN.2007 22:13:16



10. EMI Reduction Method During Compliance Testing

No modification was made during testing.