RF EXPOSURE EVALUATION

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency(RF) Radiation as specified in §1.1307(b)

FCC ID: 2AS3V-D107-1

EUT Specification

EUT	Azuga Safetycam
Model Number	Gen-2 D107
Rating	DC 5V, 2A
Frequency band (Operating)	☐BT: 2.402GHz ~ 2.480GHz ☒WLAN: 2.412GHz ~ 2.462GHz ☒WLAN: 5.18GHz ~ 5.32GHz ☐WLAN: 5.50GHz ~ 5.70GHz ☐WLAN: 5.745GHz ~ 5.825GHz
Device category	☐Portable (<20cm separation) ☒Mobile (>20cm separation)
Exposure classification	☐Occupational/Controlled exposure (S = 5mW/cm2) ☒General Population/Uncontrolled exposure (S=1mW/cm2)
Antenna diversity	☒Single antenna ☐Multiple antennas ☐Tx diversity ☐Rx diversity ☐Tx/Rx diversity
Max. output power（peak power）	IEEE 802.11b: 12.19 dBm IEEE 802.11g: 10.49 dBm IEEE 802.11n-HT20: 10.13 dBm IEEE 802.11n-HT40: 9.45 dBm 5180 MHz to 5240 MHz: 10.89 dBm
Antenna gain (Max)	2.4GHz WIFI: 2.17dBi 5.8G WIFI: 1.74dBi
Evaluation applied	☒MPE Evaluation ☐SAR Evaluation

Limits for Maximum Permissible Exposure(MPE)

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density(mW/cm^2)	Average Time
(A) Limits for Occupational/Control Exposures				
300-1500	**--**	**--**	**F/300**	**6**
1500-100000	**--**	**--**	**5**	**6**

(B) Limits for General Population/Uncontrol Exposures				
300-1500	**--**	**--**	**F/1500**	**6**
1500-100000	**--**	**--**	**1**	**30**

Friis transmission formula: Pd=(Pout*G)\(4*pi*R2)

Where
Pd= Power density in mW/cm^2, Pout=output power to antenna in Mw
G= gain of antenna in linear scale, Pi=3.1416
R= distance between observation point and center of the radiator in cm=20cm
Pd the limit of MPE, 1mW/cm2. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

Measurement Result

2.4GHz WIFI:

Operation Mode	Channel Number	Channel Frequency (MHz)	Measurement Level (dBm)	Limit (dBm)	Verdict
802.11b	1	2412	12.19	30	PASS
	6	2437	11.67	30	PASS
	11	2462	11.21	30	PASS
802.11g	1	2412	10.49	30	PASS
	6	2437	9.89	30	PASS
	11	2462	9.23	30	PASS
802.11n (HT20)	1	2412	10.13	30	PASS
	6	2437	9.68	30	PASS
	11	2462	9.03	30	PASS
802.11n (HT40)	3	2422	9.45	30	PASS
	6	2437	9.25	30	PASS
	9	2452	9	30	PASS

Operating Mode	Test Channel	Tune up tolerance (dBm)	Max tune up conducted power(dBm)	Output Peak power (mW)	Ant. Gain (dBi)	Ant. Gain (numeric)	Power density at 20cm (mW/ cm2)	Power density Limits (mW/ cm2)
802.11b	1	12±1	13	19.953	2.17	1.648	0.006542	1
	6	12±1	13	19.953	2.17	1.648	0.006542	1
	11	11±1	12	15.849	2.17	1.648	0.005197	1
802.11g	1	10±1	11	12.589	2.17	1.648	0.004128	1
	6	10±1	11	12.589	2.17	1.648	0.004128	1
	11	9±1	10	10.000	2.17	1.648	0.003279	1
802.11n (HT20)	1	10±1	11	12.589	2.17	1.648	0.004128	1
	6	10±1	11	12.589	2.17	1.648	0.004128	1
	11	9±1	10	10.000	2.17	1.648	0.003279	1
802.11n (HT40)	3	9±1	10	10.000	2.17	1.648	0.003279	1
	6	9±1	10	10.000	2.17	1.648	0.003279	1
	9	9±1	10	10.000	2.17	1.648	0.003279	1

5.8GHz WIFI:

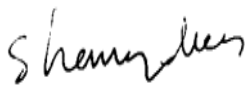
UNII-1:

Operation Mode	Channel Number	Channel Frequency (MHz)	Measurement Level (dBm)	Limit (dBm)	Verdict
			Ant1		
802.11a	36	5180	10.89	24	PASS
	40	5200	10.53	24	PASS
	48	5240	10.45	24	PASS
11n HT20	36	5180	10.42	24	PASS
	40	5200	10.02	24	PASS
	48	5240	10	24	PASS
11n HT40	38	5190	10.47	24	PASS
	46	5230	10.39	24	PASS
11ac VHT20	36	5180	9.33	24	PASS
	40	5200	9.15	24	PASS
	48	5240	9.14	24	PASS
11ac VHT40	38	5190	8.83	24	PASS
	46	5230	8.77	24	PASS
11ac VHT80	42	5210	6.64	24	PASS

Operating Mode	Test Channel	Tune up tolerance (dBm)	Max tune up conducted power(dBm)	Output Peak power (mW)	Ant. Gain (dBi)	Ant. Gain (numeric)	Power density at 20cm (mW/ cm2)	Power density Limits (mW/cm2)
802.11a	36	11±1	12	15.849	1.74	1.493	0.004707	1
	40	11±1	12	15.849	1.74	1.493	0.004707	1
	48	10±1	11	12.589	1.74	1.493	0.003739	1
802.11n HT20	36	10±1	11	12.589	1.74	1.493	0.003739	1
	40	10±1	11	12.589	1.74	1.493	0.003739	1
	48	10±1	11	12.589	1.74	1.493	0.003739	1
802.11n HT40	38	10±1	11	12.589	1.74	1.493	0.003739	1
	46	10±1	11	12.589	1.74	1.493	0.003739	1
802.11ac VHT20	36	9±1	10	10.000	1.74	1.493	0.002970	1
	40	9±1	10	10.000	1.74	1.493	0.002970	1
	48	9±1	10	10.000	1.74	1.493	0.002970	1
802.11ac VHT40	38	9±1	10	10.000	1.74	1.493	0.002970	1
	46	9±1	10	10.000	1.74	1.493	0.002970	1
802.11ac VHT80	42	7±1	8	6.310	1.74	1.493	0.001874	1

The Product unsupported at the same time to Transmitting. According to KDB 447498, and no simultaneous SAR measurement is required.

Signature:



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