## Justification statement for Antenna

To: Federal Communication Commission
Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, MID 21046

Regarding: FCC ID: 23451-A25M3

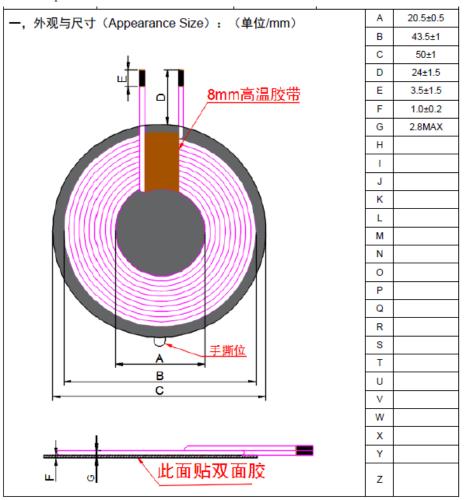
Dear Sir/Madam,

Only radiated measurements are used for EUT with *FCC ID: 23451-A25M3* to show compliance with FCC limits for fundamental and spurious emissions. All measurements were performed radiated and therefore additional antenna gain documentation is not required.

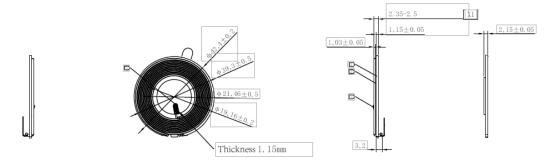
The detailed information for antenna as below shows:

Design Specifications	Typical
Antenna Type	Loop Antenna
	Output 1 (for iphone): 119.20-141.20kHz & 356.60-369.60kHz
Working Frequency	Output 2 (for iwatch): 325.32-327.60kHz & 1.776-1.779MHz
	Output 3 (for TWS): 111.40-180.00kHz
Overall Dimensions	refer to below appearance size

## For Output3:



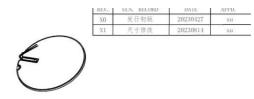
For Output1:





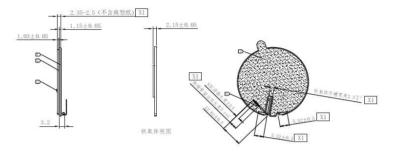
	V	re specifi	catio	n.		Win	nding specificati	on
Dianeter	S	Strands Ena		Enamel-cover type		Türns	Strands	Layer
0.08 (AWG40	))	65		Grade 2		11	1	1
Electrica	l speci	ication				Shieldin	ng	
RDC (Max)	RAC (Ma	C (Max) Inductance		Material	Permeability			Bs
70m ohm	150m e	8. 4uH	± 5%	i ——		MI II 4000 I 004		
Test conditions: 360k/1V		/1V	DMR95   µ'@!		00kHz=3300±20%	μ" <b>9100</b> kH≤56	)0 ≥300mT	

## For Output2











Fire specification				T:	Winding specification		
Diameter         Strands           0.08 (AWG40)         65		Rnamel-cover	type Torns	Strands	Leyer		
		15	Grade 2	11	1	1	
Blectric	al specific	ation		Shieldi	ing		
RDC (Max)	RAC (Max)	Inductance	Material	Permeability		Bs	
70m ohn	150≡ ehn	8. 4uH±	5%				
Test conditions: 360k/1V		DMR95	µ ' @100kiis=3300±205	µ <b>" @100</b> kH≤500	≥300 <u>n</u> T		

5术要求: Number of turns: 11