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,

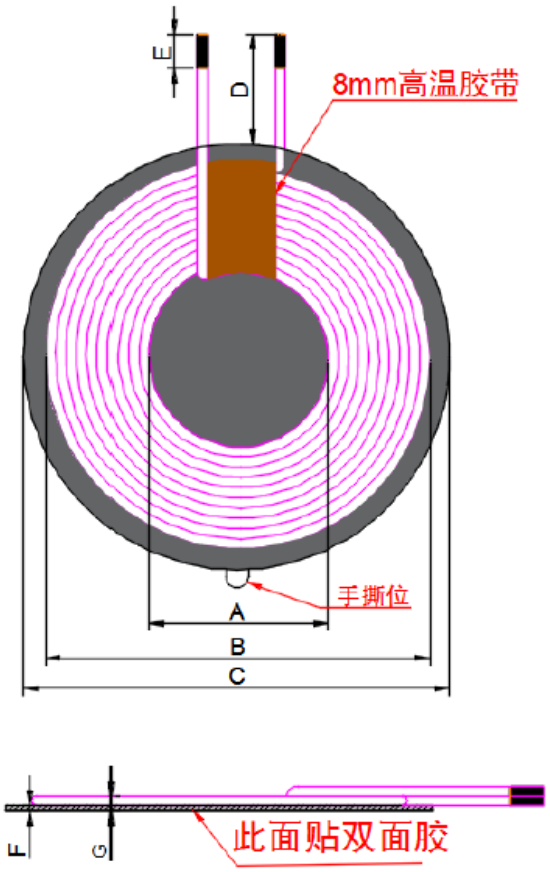
Only radiated measurements are used for EUT with *FCC ID: 23451-A25M3* to show compliance with FCC limits for fundamental and spurious emissions. All measurements were performed radiated and therefore additional antenna gain documentation is not required.

The detailed information for antenna as below shows:

Design Specifications	Typical
Antenna Type	Loop Antenna
Working Frequency	Output 1 (for iphone): 119.20-141.20kHz & 356.60-369.60kHz 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

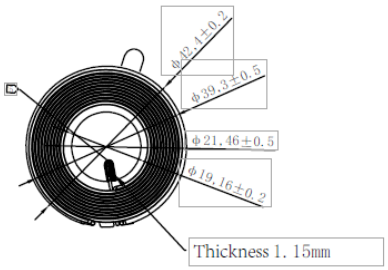
For Output3:

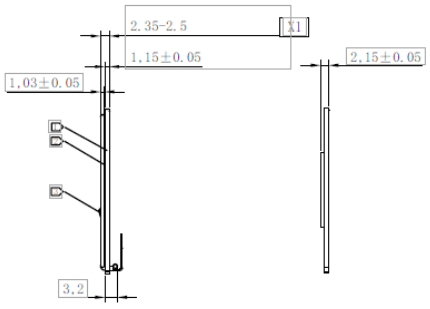
一，外观与尺寸（Appearance Size）：（单位/mm）



A	20.5±0.5
B	43.5±1
C	50±1
D	24±1.5
E	3.5±1.5
F	1.0±0.2
G	2.8MAX
H	
I	
J	
K	
L	
M	
N	
O	
P	
Q	
R	
S	
T	
U	
V	
W	
X	
Y	
Z	

For Output1:

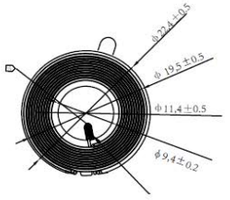


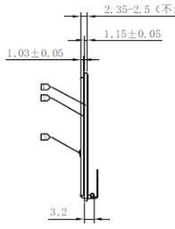


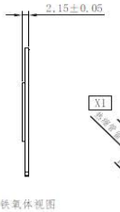
Wire specification			Winding specification		
Diameter	Strands	Enamel-cover type	Turns	Strands	Layer
0.08 (AWG40)	65	Grade 2	11	1	1
Electrical specification			Shielding		
RDC (Max)	RAC (Max)	Inductance	Material	Permeability	Bs
70m ohm	150m ohm	8.4uH±5%	DMR95	μ' @100kHz=3300±20%	μ" @100kH≤500 ≥300mT
Test conditions: 360k/1V					

For Output2

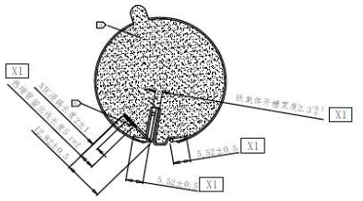
REV.	ECN. RECORD	DATE	APPD.
X0	发行初版	20230427	xu
X1	尺寸修改	20230814	xu







铁氧体视图



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Test conditions: 360k/1V						

技术要求:

. Number of turns: 11