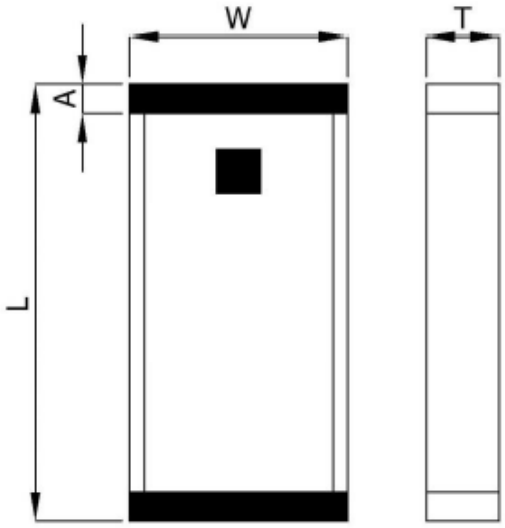
RCA-MH7-3116-W-001

ELECTRICAL SPECIFICATION

PARAMETERS	VALUE	UNIT
Frequency Range	2400.000 ~ 2483.500	MHz
Gain, typ	2.0	dBi
Polarization	Linear	-
VSWR, max	2.0	-
Polarization	Linear	-
Azimuth Beamwidth	Omni-Directional	-
Impedance	50	Ω

MECHANICAL SPECIFICATION



Symbol	Dimension (mm)
L	3.10 ± 0.20
W	1.60 ± 0.20
T	0.60 ± 0.10
A	0.25 ± 0.20

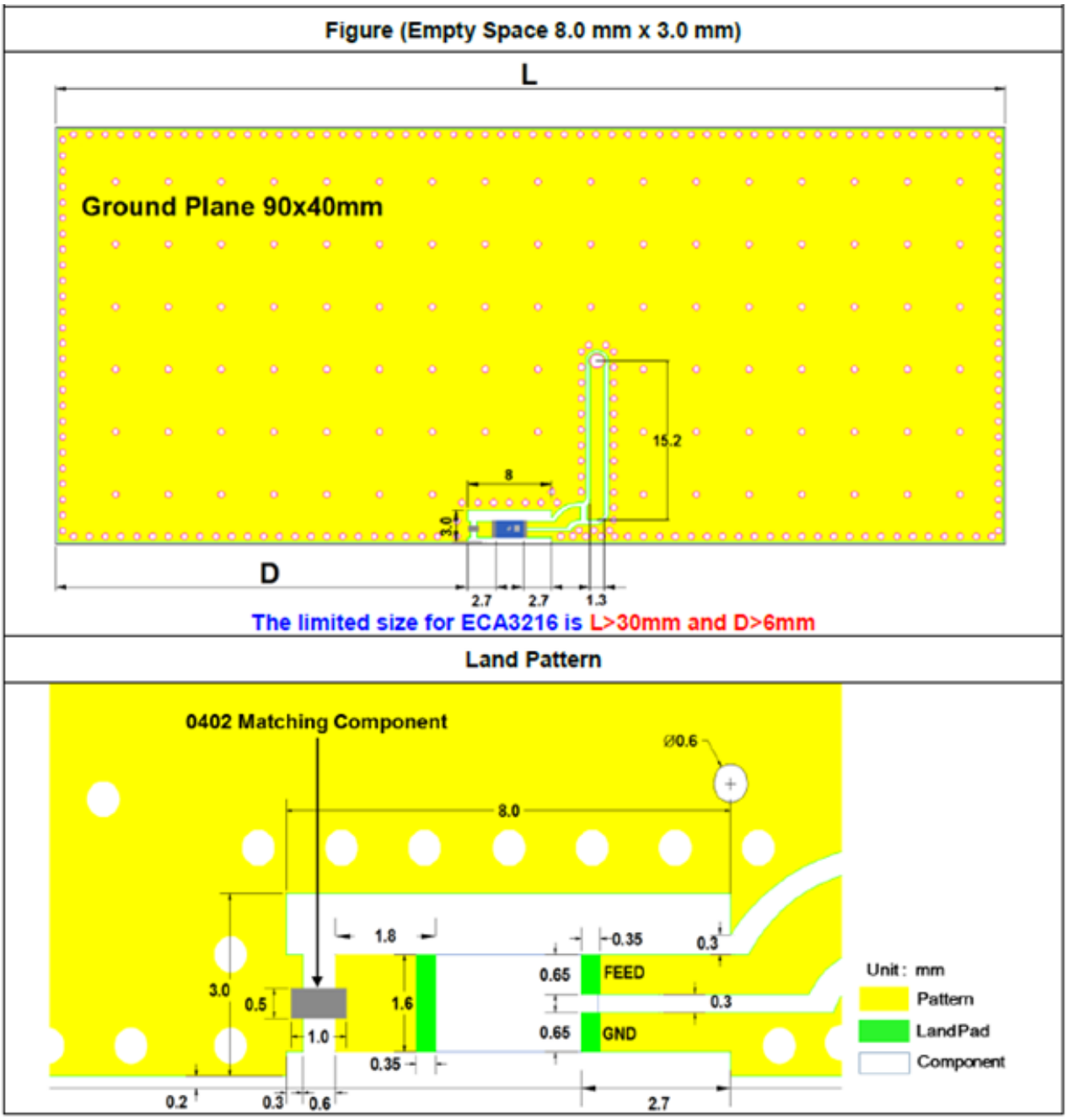
CONSTRUCTION

Top view

PIN	Connection
P1	Feeding
P2	Soldering terminal

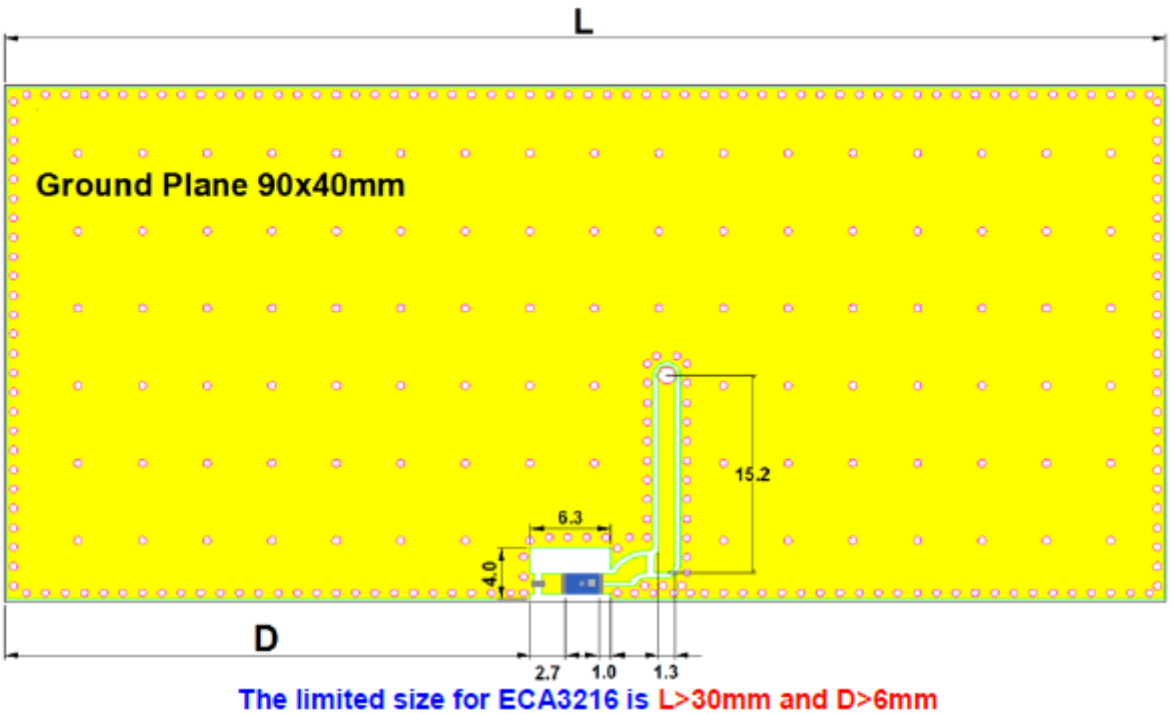
SOLDER LAND PATTERN DESIGN

Type 1: Empty Space 8.0mm x 3.0 mm



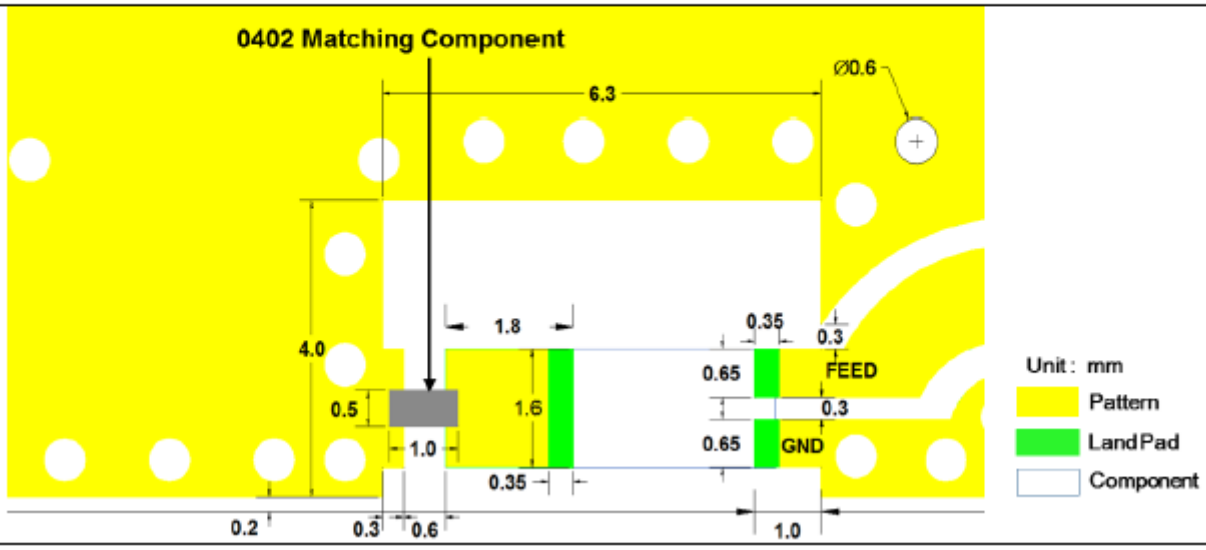
Type 2: Empty Space 6.3mm x 4.0 mm

Figure (Empty Space 6.3 mm x 4.0 mm)



The limited size for ECA3216 is L>30mm and D>6mm

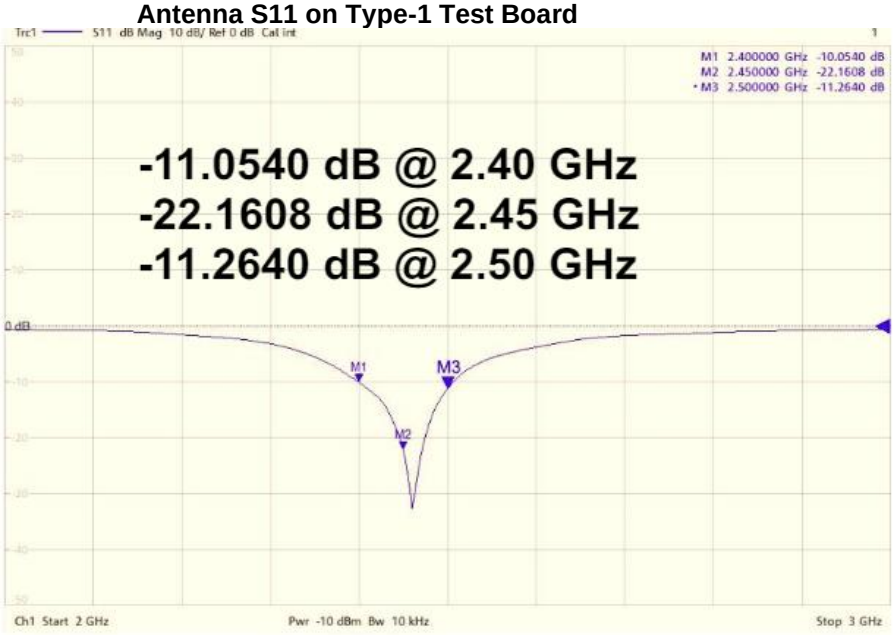
Land Pattern



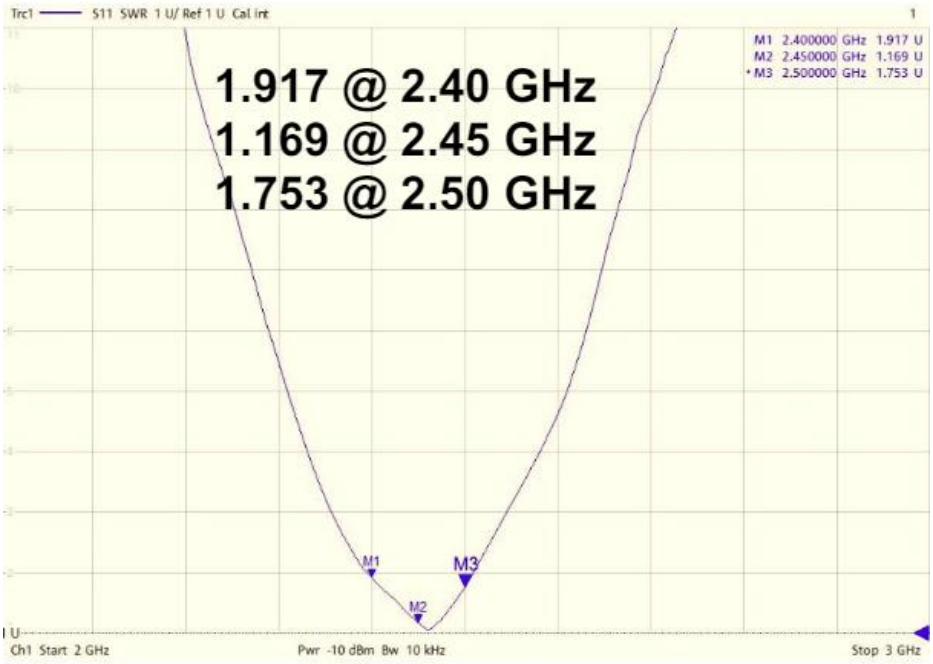
FREQUENCY CHARACTERISTICS

Type-1 Test Board (Empty Space 8x3 mm &Thick ness 0.8mm)

Antenna S11 on Type-1 Test Board



Antenna VSWR on Type-1 Test Board

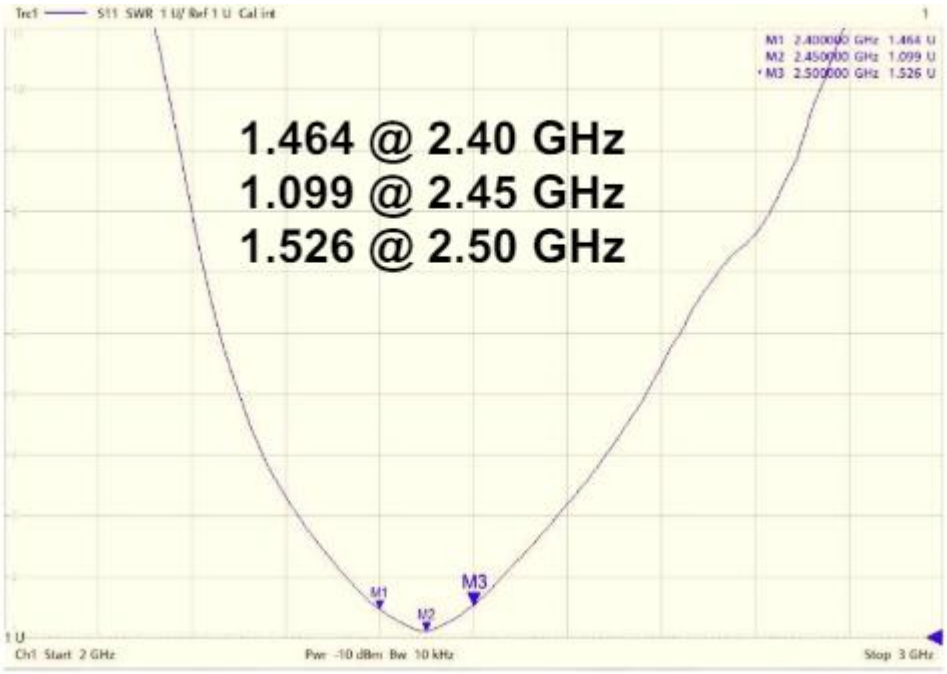


FREQUENCY CHARACTERISTICS

Type-2 Test Board (Empty Space 6.3x4 mm &Thick ness 0.8mm)

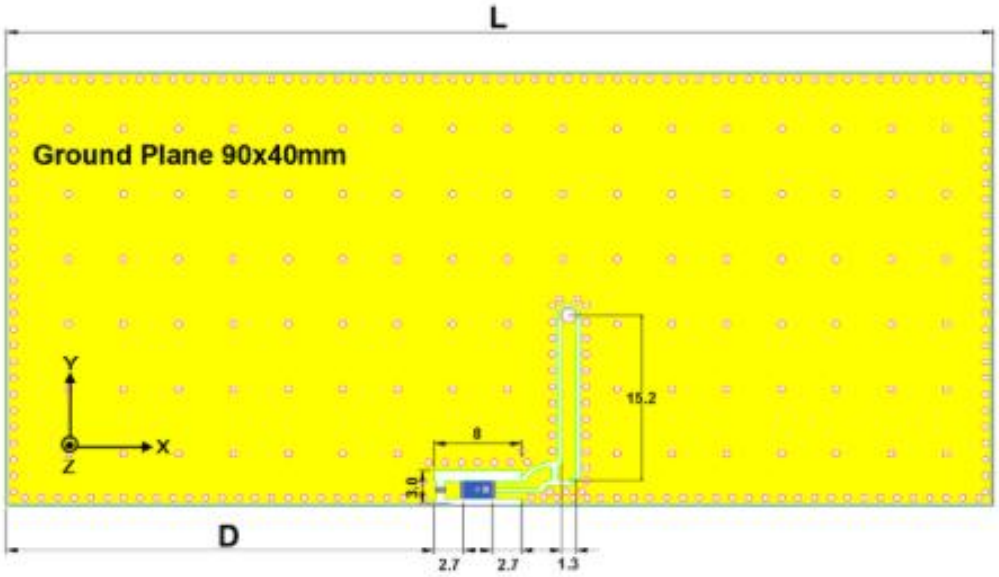
Antenna S11 on Type-1 Test Board

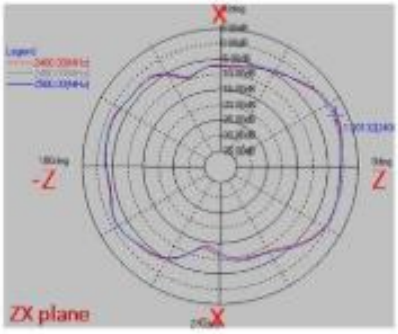
Antenna VSWR on Type-1 Test Board

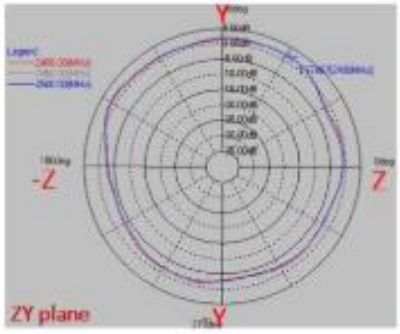


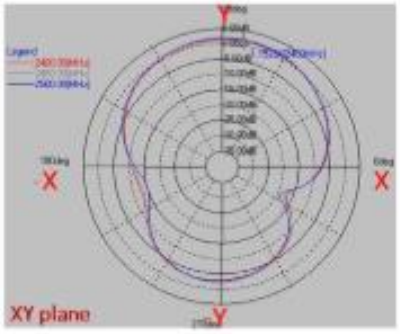
RADIATION PATTERN

Antenna on Type-1 Test Board



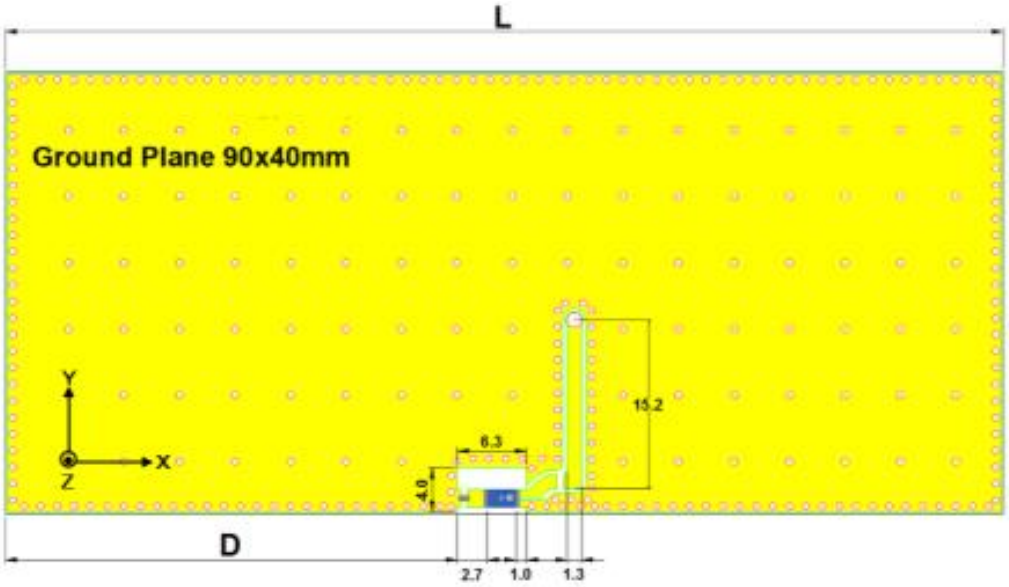


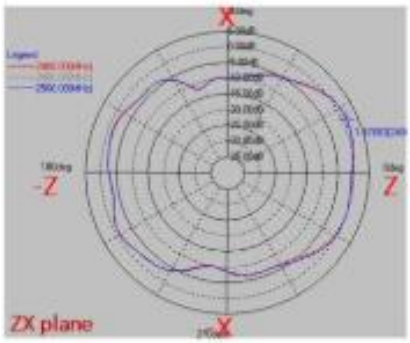


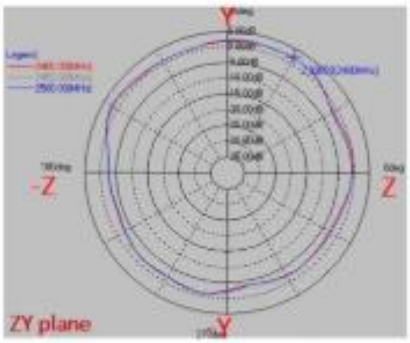


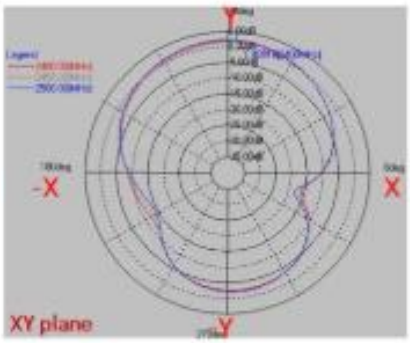
	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
2400	1.20	-3.16	1.78	-0.77	1.15	-3.16
2450	1.54	-2.79	2.06	-0.48	1.79	-2.64
2500	1.06	-3.20	1.80	-0.80	1.63	-2.89

Antenna on Type-2 Test Board









	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
2400	1.48	-2.89	2.03	-0.57	1.41	-2.89
2450	1.56	-2.72	2.07	-0.50	1.72	-2.68
2500	1.32	-2.86	2.16	-0.52	1.94	-2.57

ENVIRONMENTAL

PARAMETER	VALUE
RoHS	Compliant
REACH SVHC	Compliant
HALOGEN-FREE	Compliant

APPROVAL

RALTRON	
DRAWN BY:	AR, May 10, 2024
APPROVED BY:	CP, May 10, 2024
REVISION:	A, Initial Release