



Wistron NeWeb Corp.

Data Sheet for External LTE/WIFI Antenna

Customer Name: HP

Date: 07/11/2023

Doc. Version: V01

HP P/N	
WNC P/N	81EAB815.G23 & 81EAB815.G24
Description	DUAL BAND Antenna
Version	V01

Provided By Wistron NeWeb Corp	Reviewed By Wistron NeWeb Corp	Approved By Customer
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Wistron NeWeb Corp.

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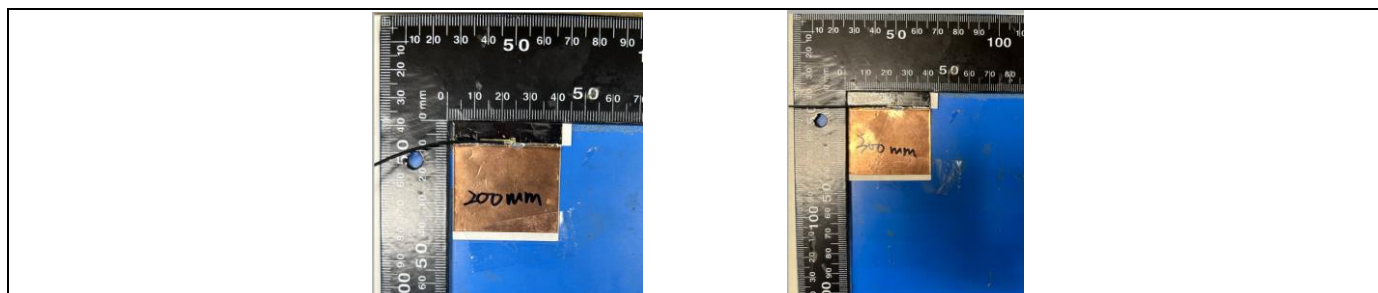
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Revision History

Date	Version	Change Description
11/07/2023	V01	1st Version
11/14/2023	V02	2rd Version

1. Product Specification



A. Electrical Characteristics

81EAB815.G23 Tested 1.13LLS cable 200mm at WNC chamber

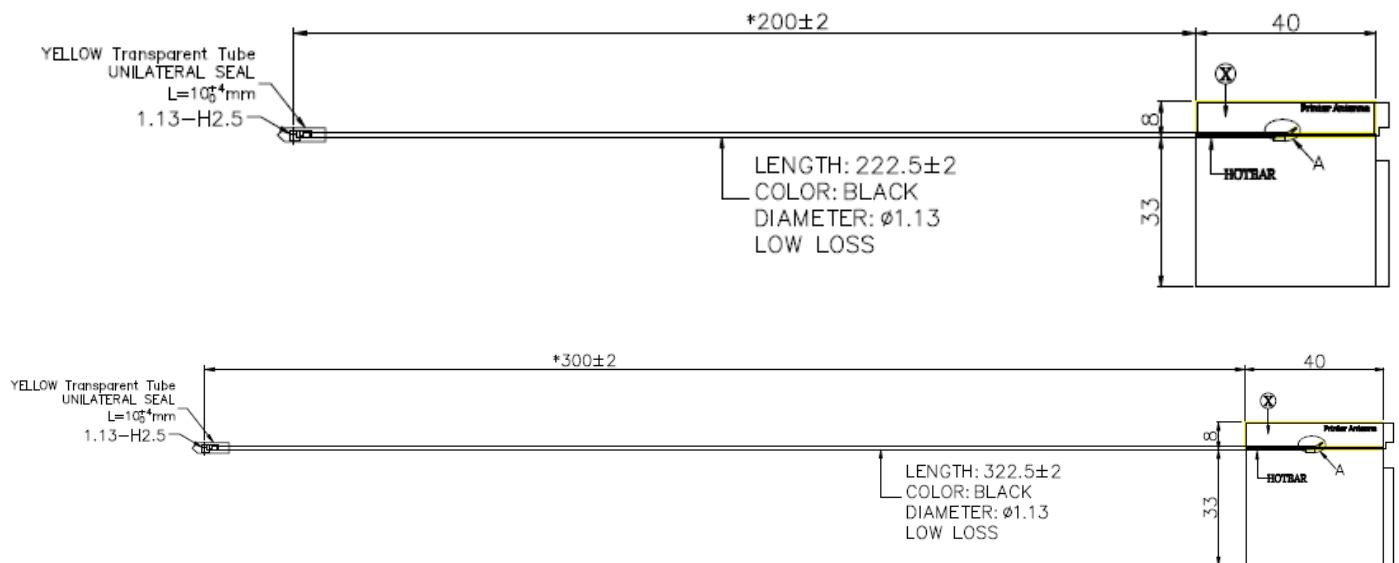
Frequency	V.S.W.R.	Peak Gain (max.)	Efficiency (avg.)
2400 ~ 2500 MHz	< 2.5	2 dBi	-2.35 dBm
5150 ~ 5250 MHz	< 2.5	2.6 dBi	-1.34 dBm
5250 ~ 5350 MHz	< 2.5	2.4 dBi	-1.34 dBm
5470 ~ 5725 MHz	< 2.5	3 dBi	-0.97 dBm
5725 ~ 5885 MHz	< 2.5	2.5 dBi	-0.99 dBm

81EAB815.G24 Tested 1.13LLS cable 300mm at WNC chamber

Frequency	V.S.W.R.	Peak Gain (max.)	Efficiency (avg.)
2400 ~ 2500 MHz	< 2.5	-0.3 dBi	-3 dBm
5150 ~ 5250 MHz	< 2.5	0.7 dBi	-1.57 dBm
5250 ~ 5350 MHz	< 2.5	0.8 dBi	-1.57 dBm
5470 ~ 5725 MHz	< 2.5	1.5 dBi	-1.35 dBm
5725 ~ 5885 MHz	< 2.5	1.5 dBi	-1.22 dBm

Material	PCB
Cable Type	1.13LLS
Connector Type	I-PEX 1st
Cable Color	Black
Dimension	40 x 8 x 0.4
Antenna type	PCB type antenna

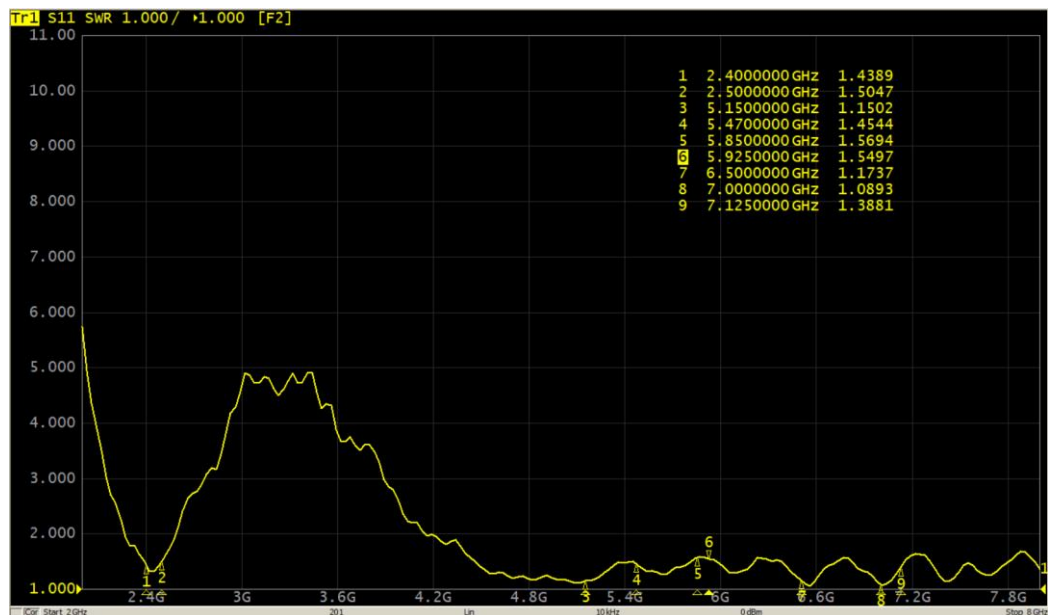
2. Antenna Outline Drawing



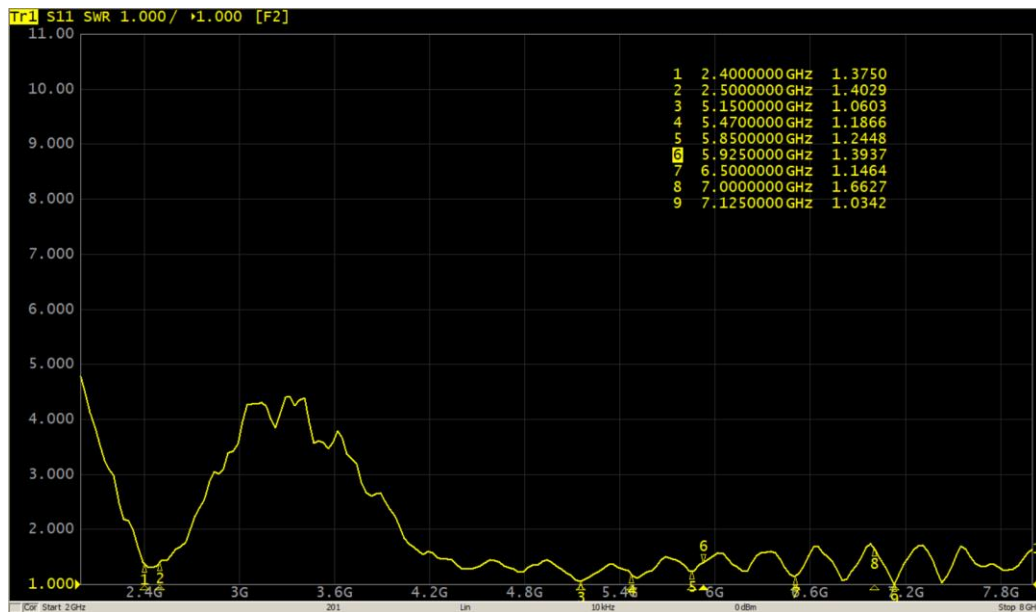
3. Antenna Performance

3.1 VSWR

Tested 1.13LLS cable 200mm at WNC chamber



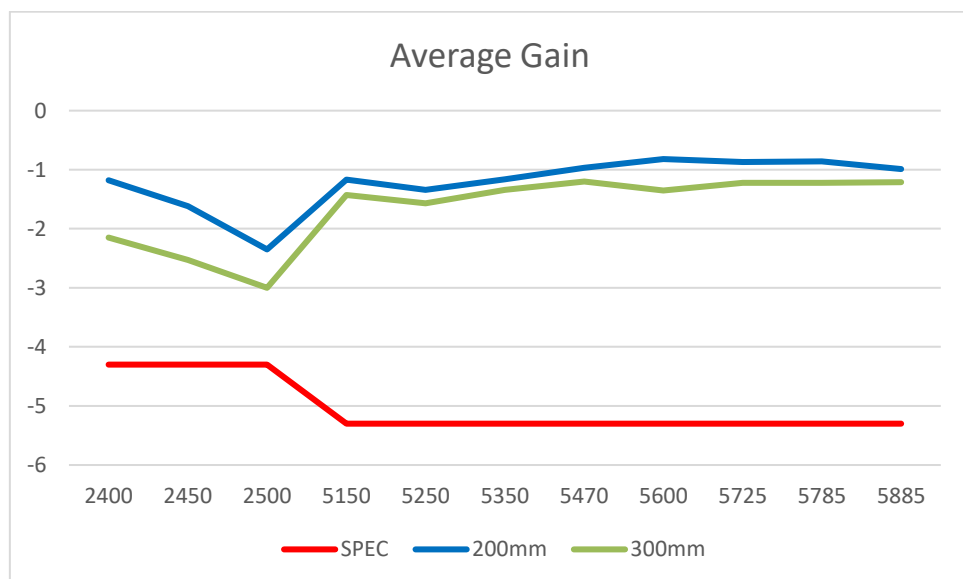
Tested 1.13LLS cable 300mm at WNC chamber



3.2 Efficiency (Average Gain)

Tested 1.13LLS cable 200mm at WNC chamber (blue line)

Tested 1.13LLS cable 300mm at WNC chamber (green line)



3.3 Peak Gain

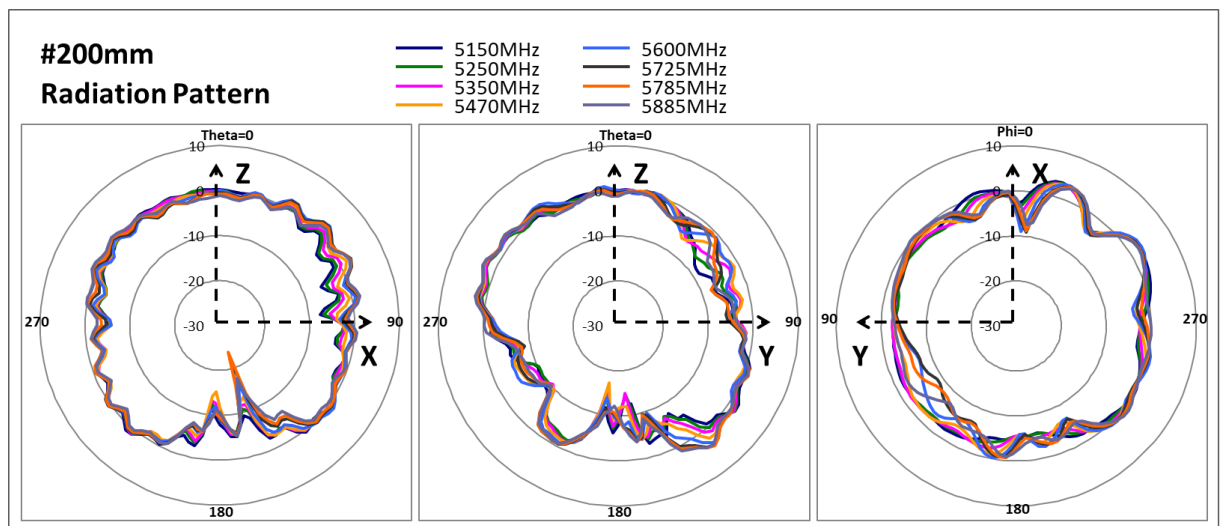
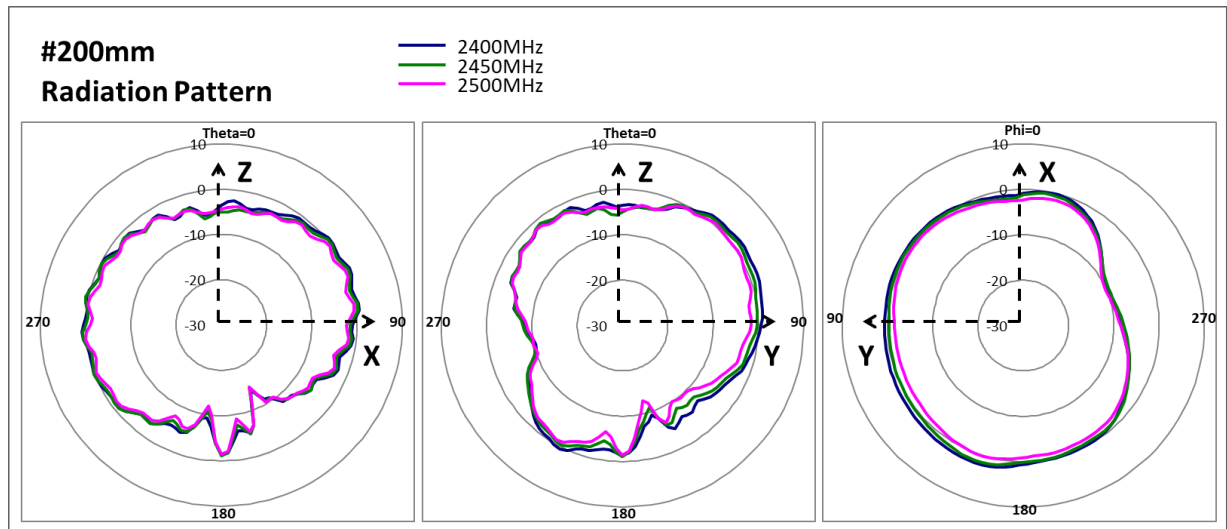
Tested 1.13LLS cable 200mm at WNC chamber

Tested 1.13LLS cable 300mm at WNC chamber

Peak Gain					
Band	Frequency	SPEC		200mm	300mm
		Min.	Max.		
2.4GHz	2400-2495	-2.0	3.0	2	-0.3
5GHz	5150-5250	-2.0	3.0	2.6	0.7
	5250-5350	-2.0	3.0	2.4	0.8
	5470-5725	-2.0	3.0	3	1.5
	5725-5885	-2.0	3.0	2.5	1.5

3.4 Radiation Pattern

Tested 1.13LLS cable 200mm at WNC chamber



Tested 1.13LLS cable 300mm at WNC chamber

