

BEC 7700N Internal and External Wi-Fi Antenna Performance Report

The advantages of embedded/Internal antenna:

- Reduced size and weight
- Flexible design
- Mechanical Robustness
- Excellent Form Factor
- Security
- Durable and Reliable

Tech Specs of Two Antennas:



Antenna	Internal	External
Frequency	2.4 -- 2.5GHz	2.4 -- 2.5GHz
E-Plane	360	360
H-Plane	180	180
Power	30dBm	30dBm
Gain	5.0dBi	5.0dBi
VSWR	2.0	2.0
Impedance	50 ohms	50 ohms
Polarization	Vertical	Vertical

Performance Comparison Results:

BEC 7700N R5 Desktop Type (Internal Antenna)			
Distance	10 Feet above		
Direction	Direct Facing		
AP(DUT)	BEC 7700N R5 (2T2R)		
Client	ASUS AC88 (4T4R)		
TX IP: 192.168.1.15 (NB)			
RX IP: 192.168.1.40(PC)			
tool	IxChariot	8Pairs	
Test Channel	CH9		
Mode/Bandwidth	11n/40MHz		
OTA			
	TX	RX	T+R
	94	94	141

BEC7700N R5 Desktop type(External Antenna)			
Distance	10 Feet above		
AP(DUT)	BEC7700N R5 (2T2R)		
Client	ASUS AC88 (4T4R)		
TX IP: 192.168.1.15 (NB)			
RX IP: 192.168.1.40(PC)			
tool	IxChariot	8Pairs	
Test Channel	CH9		
Mode/Bandwidth	11n/40MHz		
OTA			
	TX	RX	T+R
	94	94	137

BEC 7700N R5 Desktop Type (Internal Antenna)			
Distance	40 Feet above		
Direction	Direct Facing		
AP(DUT)	BEC 7700N R5 (2T2R)		
Client	ASUS AC88 (4T4R)		
TX IP: 192.168.1.15 (NB)			
RX IP: 192.168.1.40(PC)			
tool	IxChariot	8Pairs	
Test Channel	CH9		
Mode/Bandwidth	11n/40MHz		
OTA			
	TX	RX	T+R
	94	94	139

BEC 7700N R5 Desktop Type (External Antenna)			
Distance	40 Feet above		
AP(DUT)	BEC 7700N R5 (2T2R)		
Client	ASUS AC88 (4T4R)		
TX IP: 192.168.1.15 (NB)			
RX IP: 192.168.1.40(PC)			
tool	IxChariot	8Pairs	
Test Channel	CH9		
Mode/Bandwidth	11n/40MHz		
OTA			
	TX	RX	T+R
	94	93	138