



RF Exposure Evaluation Declaration

IC: 32876-WR3602BE
Applicant: TP-Link Systems Inc.
Product: BE3600 Wi-Fi 7 Portable Router
Model No.: TL-WR3602BE
Brand Name: tp-link
ISED Rule(s): RSS-102 Issue 6
Result: Complies
Evaluation Date: 2025-12-15

Reviewed By:

Yuri Li

Yuri Li

Approved By:

Robin Wu

Robin Wu



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report. Testing was performed in accordance with the applicable measurement procedures. The test results reported herein apply only to the specific item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
R25S1068112-C401	V01	Initial Report	2025-12-29	Valid

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1.4. Product Information

Product Name	BE3600 Wi-Fi 7 Portable Router
Model No.	TL-WR3602BE
Wi-Fi Specification	8802.11a/b/g/n/ac/ax/be
Antenna Specification	Refer to clause 1.5
Power Type	AC/DC Adapter
Operating Environment	Indoor use
Accessory(ies)	
AC/DC Adapter	Model No.: ICP20-050-3000D Input: 100-240 V ~ 50/60 Hz, 0.6 A Output: 5.0 V – 3.0 A, 36.0 W

Note: The information of the EUT (Equipment Under Test) was provided by the manufacturer. The accuracy, completeness, and validity of the information are solely the responsibility of the manufacturer.

1.5. Antenna Details

Antenna Type	Frequency Band (MHz)	Tx Paths	Nss	Max Antenna Gain (dBi)	Beamforming Directional Gain (dBi)	CDD Directional Gain (dBi)	
						For Power	For PSD
Dipole	2400 ~ 2500	2	1	1.87	4.90	1.87	4.90
	5150 ~ 5250	2	1	2.53	5.52	2.53	5.52
	5250 ~ 5350	2	1	2.64	5.63	2.64	5.63
	5470 ~ 5725	2	1	2.55	5.54	2.55	5.54
	5725 ~ 5850	2	1	2.62	5.62	2.62	5.62

Remark:

1. The device supports CDD Mode and Beamforming mode, details refer to the table as below.

2. CDD signals are correlated, the directional gain as follows,

When Nss=1, for power measurements: the max directional gain (each angle) = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10}) / N_{ANT}]$

For power spectral density (PSD) measurements: the max directional gain (each angle) = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$

3. Beamforming signals are correlated, the directional gain as follows, the max directional gain (each angle) = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$

4. The information as above is from the antenna report.

Test Mode	Tx Paths	CDD Mode	Beamforming Mode
802.11a/b/g/n	2	√	X
802.11ax/be	2	√	√

1.6. Device Classification

According to the user manual, this device is classified as a Mobile Device. So, the RF exposure evaluation requirements of RSS-102 Issue 6 for mobile device exposure conditions subject to MPE limits.

2. RF Exposure Evaluation

2.1. Limits

The electric and magnetic field strength reference levels, power density reference levels, and associated reference period for devices employed by the general public (uncontrolled environment) and controlled-use devices (controlled environment) are specified in following. Note that the power density limits specified in these tables apply to whole body exposure conditions.

Frequency range (MHz)	Electric field (V _{RMS} /m)	Magnetic field (A _{RMS} /m)	Power density (W/m ²)	Reference period (minutes)
Limits for devices used by the general public (uncontrolled environment)				
10 ~ 20	27.46	0.0728	2	6
20 ~ 48	58.07 / f ^{0.25}	0.1540 / f ^{0.25}	8.944 / f ^{0.5}	6
48 ~ 300	22.06	0.05852	1.291	6
300 ~ 6000	3.142 f ^{0.3417}	0.008335 f ^{0.3417}	0.02619f ^{0.6834}	6
6000 ~ 15000	61.4	0.163	10	6
15000 ~ 50000	61.4	0.163	10	616000/f ^{1.2}
150000 ~ 300000	0.158f ^{0.5}	4.21 × 10 ⁻⁴ f ^{0.5}	6.67 × 10 ⁻⁵ f	616000/f ^{1.2}
Limits for controlled-use devices (controlled environment)				
10 ~ 20	61.4	0.163	10	6
20 ~ 48	129.8 / f ^{0.25}	0.3444 / f ^{0.25}	44.72 / f ^{0.5}	6
48 ~ 100	49.33	0.1309	6.455	6
100 ~ 6000	15.60f ^{0.25}	0.04138f ^{0.25}	0.6455f ^{0.5}	6
6000 ~ 15000	137	0.364	50	6
15000 ~ 50000	137	0.364	50	616000/f ^{1.2}
150000 ~ 300000	0.354f ^{0.5}	9.40 × 10 ⁻⁴ f ^{0.5}	3.33 × 10 ⁻⁴ f	616000/f ^{1.2}

2.2. Exemption Limits for Routine Evaluation

According to RSS-102 section 6.6: Field reference level (FRL) exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm (i.e. mobile devices), except when the device operates as follows:

- below 20 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 1 W (adjusted for tune-up tolerance)
- at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than $4.49/f^{0.5}W$ (adjusted for tune-up tolerance), where f is in MHz
- at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance)
- at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than $1.31 \times 10^{-2}f^{0.6834}W$ (adjusted for tune-up tolerance), where f is in MHz
- at or above 6 GHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 5 W (adjusted for tune-up tolerance)

2.3. Field reference level (FRL) evaluation

Mobile devices or other apparatus under the scope of RSS-102 requiring an FRL exposure evaluation shall be assessed in accordance with the requirements outlined in the latest version of IEEE C95.3.

Calculation Formula: $P_d = (P_{out} \times G)/(4 \times \pi \times r^2)$

Where

P_d = power density in W/m^2

P_{out} = output power to antenna in W

G = gain of antenna in linear scale

π = 3.1416

r = distance between observation point and center of the radiator in m

2.4. Calculated Result

Product	BE3600 Wi-Fi 7 Portable Router
Test Item	RF Exposure Evaluation

Test Mode	Frequency Band (MHz)	Max Conducted Power (dBm)	Tune-up Conducted Power (dBm)	Antenna Gain (dBi)	Tune-up EIRP (dBm)	Tune-up EIRP (mW)	Exemption Limits (mW)
2.4 GHz Wi-Fi	2412 ~ 2462	22.48	22.98	1.87	24.85	305.49	2684.03
5 GHz Wi-Fi	5180 ~ 5825	28.26	28.76	2.64	31.40	1380.38	4525.17

Notes:

1. The Tune-up Conducted Power (dBm) of 2.4 GHz Wi-Fi is referenced from report No.: 2502TW0125-C4.
2. The Tune-up Conducted Power (dBm) of 5 GHz Wi-Fi is referenced from report No.: R25S1068112-C202.
3. $\text{Tune-up EIRP (dBm)} = \text{Tune up Conducted Power (dBm)} + \text{Antenna Gain (dBi)}$.
4. The EUT supports simultaneous transmissions of 2.4 GHz Wi-Fi and 5 GHz Wi-Fi, therefore, the worst-case total exposure ratios is calculated as: $305.49/2684.03 + 1380.38/4525.17 = 0.53 < 1$.

Conclusion:

The device qualifies for RF exposure test exemption at 20 cm distance.

_____ The End _____