



Radio Frequency Exposure

Applicant : D-Link Corporation

Address : 14420 Myford Road Suite 100, Irvine, California
92606, United States

Equipment : AX3000 Wall Plate Access Point

Model No. : DAP-X3060W

Trade Name : D-Link

FCC ID : KA2APX3060WA1

I HEREBY CERTIFY THAT :

The sample was received on Mar. 31, 2025 and the testing was completed on Apr. 17, 2025 at CerpPASS Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of CerpPASS Technology Corp., the test report shall not be reproduced except in full.

Approved by:

Mark Liao / Supervisor

Laboratory Accreditation:

CerpPASS Technology Corporation Test Laboratory





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1. Summary of Test Procedure and Test Results

1.1. Applicable Standards

FCC Rules and Regulations Part 2.1091

| FCC Rule | Description of Test | Result |
|----------|--------------------------|--------|
| 2.1091 | Radio Frequency Exposure | PASS |

*The lab has reduced the uncertainty risk factor from test equipment, environment and staff technicians which according to the standard on contract. Therefore, the test result will only be determined by standard requirement, measurement uncertainty evaluation is not considered.



2. Test Configuration of Equipment under Test

2.1. Feature of Equipment under Test

| | |
|---------------------------|--|
| Operation Frequency Range | 2.4GHz:802.11b/g/n(TurboQAM)/ax:2400-2483.5MHz 5GHz:802.11a/n/ac/ax:5150-5250MHz, 5250-5350MHz, 5470-5725MHz, 5725-5875MHz |
| Center Frequency Range | 2.4GHz:802.11b/g/n(TurboQAM)/ax:2412MHz-2462MHz 5GHz:802.11a/n/ac/ax:5180-5240MHz, 5260-5320MHz, 5500-5700MHz, 5745-5825MHz |
| Modulation Type | 2.4GHz: 802.11b: CCK, DQPSK, DBPSK 802.11g/n: BPSK, QPSK, 16QAM, 64QAM, 256QAM(TurboQAM) 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM 5GHz: 802.11a/n: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM |
| Modulation Technology | DSSS, OFDM, OFDMA |
| Data Rate | 2.4GHz: 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS15, HT20/40 MCS0 – MCS9, VHT20/40(TurboQAM) 802.11ax: MCS0 – MCS11, HE20/40 5GHz: 802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS15, HT20/40 802.11ac: MCS0 – MCS9, VHT20/40/80/160 802.11ax: MCS0 – MCS11, HE20/40/80/160 |
| Antenna Type | PCB Antenna |
| Antenna Gain | 2400-2500MHz: ANT A: 2.98dBi, ANT B: 2.85dBi 5150-5250MHz: ANT A: 4.97dBi, ANT B: 4.93dBi 5250-5350MHz: ANT A: 4.99dBi, ANT B: 4.97dBi 5470-5725MHz: ANT A: 4.87dBi, ANT B: 4.93dBi 5725-5850MHz: ANT A: 4.93dBi, ANT B: 4.93dBi |

Note:

1. EUT support TPC Function.
2. EUT support AP Mode(Master).
3. EUT only support Full RU.
4. WLAN 2.4GHz 802.11n Support TurboQAM.
5. WLAN 2.4GHz 802.11n(TurboQAM) & 802.11ax support beamforming Function.
6. WLAN 5GHz 802.11ac & 802.11ax support beamforming Function.
7. EUT FW: v1.01
8. For more details, please refer to the User's manual of the EUT.



2.2. General Information of Test

| | | | |
|------------------------------|--|------------------|--|
| Organization | CerpPASS Technology Corp. | | |
| ☒ Test Site | CerpPASS Technology Corporation Test Laboratory Address: No.10, Ln. 2, Lianfu St., Luzhu Dist., Taoyuan City 33848, Taiwan (R.O.C.) Tel: +886-3-3226-888 Fax: +886-3-3226-881 | | |
| | FCC | TW1439, TW1079 | |
| | IC | 4934E-1, 4934E-2 | |
| Frequency Range Investigated | Conducted: from 150kHz to 30 MHz Radiation: from 30 MHz to 40,000MHz | | |
| Test Distance | The test distance of radiated emission from antenna to EUT is 3 M. | | |

For 2.4G
Non-Beamforming

| Test Item | Test Site | Test period | Environmental Conditions | Tested By |
|--------------|------------|-------------|--------------------------|------------|
| RF Conducted | RFCON01-NK | 2025/04/14 | 26.3°C / 53% | Leon Huang |
| RF Conducted | RFCON01-NK | 2025/04/15 | 26.1°C / 51% | Leon Huang |

Beamforming

| Test Item | Test Site | Test period | Environmental Conditions | Tested By |
|--------------|------------|-------------|--------------------------|------------|
| RF Conducted | RFCON01-NK | 2025/04/14 | 26.3°C / 53% | Leon Huang |
| RF Conducted | RFCON01-NK | 2025/04/15 | 26.1°C / 51% | Leon Huang |

For 5G
Non-Beamforming

| Test Item | Test Site | Test period | Environmental Conditions | Tested By |
|--------------|------------|-------------|--------------------------|------------|
| RF Conducted | RFCON01-NK | 2025/04/15 | 26.1°C / 51% | Leon Huang |
| RF Conducted | RFCON01-NK | 2025/04/16 | 25.8°C / 48% | Leon Huang |

For 5G
Beamforming

| Test Item | Test Site | Test period | Environmental Conditions | Tested By |
|--------------|------------|-------------|--------------------------|------------|
| RF Conducted | RFCON01-NK | 2025/04/17 | 25.1°C / 53% | Leon Huang |



2.3. Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

2.4G

| Measurement Item | Uncertainty |
|--|-------------|
| Radiated Spurious Emission(9KHz~30MHz) | ±3.5dB |
| Radiated Spurious Emission(30MHz~1GHz) | ±5.1dB |
| Radiated Spurious Emission(1GHz~40GHz) | ±5.2dB |
| Conducted Spurious Emission | ±2.1dB |
| 6dB Bandwidth | ±5.4% |
| 20dB Bandwidth | ±4.4% |
| Occupied Bandwidth | ±4.5% |
| Peak Output Power(Conducted Power Meter) | ±1.1dB |
| Dwell Time / Deactivation Time | ±7.6% |
| Power Spectral Density | ±2.0dB |
| Duty Cycle | ±3.5% |

5G

| Measurement Item | Uncertainty |
|--|-------------|
| Radiated Spurious Emission(9KHz~30MHz) | ±3.5dB |
| Radiated Spurious Emission(30MHz~1GHz) | ±5.1dB |
| Radiated Spurious Emission(1GHz~40GHz) | ±5.2dB |
| 6dB Bandwidth | ±5.4% |
| 26dB Bandwidth | ±4.4% |
| Occupied Bandwidth | ±4.5% |
| Peak Output Power(Conducted Power Meter) | ±1.1dB |
| Power Spectral Density | ±2.0dB |
| Duty Cycle | ±3.5% |
| Frequency Stability | ±0.23KHz |



3. Test Equipment and Ancillaries Used for Tests

For 2.4G

Non-Beamforming

| | | | | | |
|----------------------|-----------------|--------------|------------|------------------|------------|
| Test Item | RF Conducted | | | | |
| Test Site | RFCON01-NK | | | | |
| Instrument | Manufacturer | Model No | Serial No | Calibration Date | Valid Date |
| Spectrum Analyzer | ROHDE & SCHWARZ | FSP 40 | 100047 | 2025/03/03 | 2026/03/02 |
| Attenuator | KEYSIGHT | 8491B | MY39250703 | 2025/02/12 | 2026/02/11 |
| Cable-0.5m(1G-26.5G) | HUBER SUHNER | SUCOFLEX 102 | 28422/2 | 2024/05/13 | 2025/05/12 |
| Power Meter | Anritsu | ML2495A | 1224005 | 2025/02/12 | 2026/02/11 |
| Power Sensor | Anritsu | MA2411B | 1207295 | 2025/02/12 | 2026/02/11 |
| Switch Box | Theda | 1-4 | TW5451159 | NA | NA |

Beamforming

| | | | | | |
|----------------------|-----------------|--------------|------------|------------------|------------|
| Test Item | RF Conducted | | | | |
| Test Site | RFCON01-NK | | | | |
| Instrument | Manufacturer | Model No | Serial No | Calibration Date | Valid Date |
| Spectrum Analyzer | ROHDE & SCHWARZ | FSP 40 | 100047 | 2025/03/03 | 2026/03/02 |
| Attenuator | KEYSIGHT | 8491B | MY39250703 | 2025/02/12 | 2026/02/11 |
| Cable-0.5m(1G-26.5G) | HUBER SUHNER | SUCOFLEX 102 | 28422/2 | 2024/05/13 | 2025/05/12 |
| Power Meter | Anritsu | ML2495A | 1224005 | 2025/02/12 | 2026/02/11 |
| Power Sensor | Anritsu | MA2411B | 1207295 | 2025/02/12 | 2026/02/11 |
| Switch Box | Theda | 1-4 | TW5451159 | NA | NA |



For 5G
Non-Beamforming

| | | | | | |
|----------------------|-----------------|--------------|------------|------------------|------------|
| Test Item | RF Conducted | | | | |
| Test Site | RFCON01-NK | | | | |
| Instrument | Manufacturer | Model No | Serial No | Calibration Date | Valid Date |
| Spectrum Analyzer | ROHDE & SCHWARZ | FSP 40 | 100047 | 2025/03/03 | 2026/03/02 |
| Attenuator | KEYSIGHT | 8491B | MY39250703 | 2025/02/12 | 2026/02/11 |
| Cable-0.5m(1G-26.5G) | HUBER SUHNER | SUCOFLEX 102 | 28422/2 | 2024/05/13 | 2025/05/12 |
| Power Meter | Anritsu | ML2495A | 1224005 | 2025/02/12 | 2026/02/11 |
| Power Sensor | Anritsu | MA2411B | 1207295 | 2025/02/12 | 2026/02/11 |
| Switch Box | Theda | 1-4 | TW5451159 | NA | NA |

Beamforming

| | | | | | |
|----------------------|-----------------|--------------|------------|------------------|------------|
| Test Item | RF Conducted | | | | |
| Test Site | RFCON01-NK | | | | |
| Instrument | Manufacturer | Model No | Serial No | Calibration Date | Valid Date |
| Spectrum Analyzer | ROHDE & SCHWARZ | FSP 40 | 100047 | 2025/03/03 | 2026/03/02 |
| Attenuator | KEYSIGHT | 8491B | MY39250703 | 2025/02/12 | 2026/02/11 |
| Cable-0.5m(1G-26.5G) | HUBER SUHNER | SUCOFLEX 102 | 28422/2 | 2024/05/13 | 2025/05/12 |
| Power Meter | Anritsu | ML2495A | 1224005 | 2025/02/12 | 2026/02/11 |
| Power Sensor | Anritsu | MA2411B | 1207295 | 2025/02/12 | 2026/02/11 |
| Switch Box | Theda | 1-4 | TW5451159 | NA | NA |



4. Radio Frequency Exposure

4.1. Applicable Standards

| <input type="checkbox"/> §1.1307(b)(3)(i)(A) | The available maximum time-averaged power is no more than 1 mW, regardless of separation distance. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---------------------|--------------------|------------------|--|---------------|-----------|-----------|--------------------|--------------------|---|-----|------|-------|--------|-------------|------|----|--------|-------|-----------------|----|-----|-------|--------|------------|-----|-------|--------|---------|----------------|-------|---------|---------|--------|-----------|
| <input type="checkbox"/> §1.1307(b)(3)(i)(c) | <p>ERP is below a threshold calculated based on the distance , R between the person and t antenna / radiating structure, where $R > \lambda / 2 \pi$.</p> <p style="text-align: center;">TABLE B.1—THRESHOLDS FOR SINGLE RF SOURCES SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="2">RF Source Frequency</th> <th colspan="2">Minimum Distance</th> <th>Threshold ERP</th> </tr> <tr> <th>f_L MHz</th> <th>f_H MHz</th> <th>$\lambda_L / 2\pi$</th> <th>$\lambda_H / 2\pi$</th> <th>W</th> </tr> </thead> <tbody> <tr> <td>0.3</td> <td>1.34</td> <td>159 m</td> <td>35.6 m</td> <td>$1,920 R^2$</td> </tr> <tr> <td>1.34</td> <td>30</td> <td>35.6 m</td> <td>1.6 m</td> <td>$3,450 R^2/f^2$</td> </tr> <tr> <td>30</td> <td>300</td> <td>1.6 m</td> <td>159 mm</td> <td>$3.83 R^2$</td> </tr> <tr> <td>300</td> <td>1,500</td> <td>159 mm</td> <td>31.8 mm</td> <td>$0.0128 R^2/f$</td> </tr> <tr> <td>1,500</td> <td>100,000</td> <td>31.8 mm</td> <td>0.5 mm</td> <td>$19.2R^2$</td> </tr> </tbody> </table> <p>Subscripts L and H are low and high; λ is wavelength. From § 1.1307(b)(3)(i)(C), modified by adding Minimum Distance columns.</p> | RF Source Frequency | | Minimum Distance | | Threshold ERP | f_L MHz | f_H MHz | $\lambda_L / 2\pi$ | $\lambda_H / 2\pi$ | W | 0.3 | 1.34 | 159 m | 35.6 m | $1,920 R^2$ | 1.34 | 30 | 35.6 m | 1.6 m | $3,450 R^2/f^2$ | 30 | 300 | 1.6 m | 159 mm | $3.83 R^2$ | 300 | 1,500 | 159 mm | 31.8 mm | $0.0128 R^2/f$ | 1,500 | 100,000 | 31.8 mm | 0.5 mm | $19.2R^2$ |
| RF Source Frequency | | Minimum Distance | | Threshold ERP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| f_L MHz | f_H MHz | $\lambda_L / 2\pi$ | $\lambda_H / 2\pi$ | W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.3 | 1.34 | 159 m | 35.6 m | $1,920 R^2$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.34 | 30 | 35.6 m | 1.6 m | $3,450 R^2/f^2$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | 300 | 1.6 m | 159 mm | $3.83 R^2$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 300 | 1,500 | 159 mm | 31.8 mm | $0.0128 R^2/f$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,500 | 100,000 | 31.8 mm | 0.5 mm | $19.2R^2$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> § 1.1307(b)(3)(i)(B). | <p>Device operates between 300 MHz and 6 GHz and the maximum time-averaged power or effective radiated power (ERP), whichever is greater, $\leq P_{th}$</p> $P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$ <p>Where</p> $x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$ <p>and</p> $ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$ <p>$d =$ the separation distance (cm);</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



4.2. EUT Specification

| | |
|---|--|
| Frequency band (Operating) | <input checked="" type="checkbox"/> WLAN: 2412MHz ~ 2462MHz <input checked="" type="checkbox"/> WLAN: 5150MHz ~ 5250MHz <input checked="" type="checkbox"/> WLAN: 5250MHz ~ 5350MHz <input checked="" type="checkbox"/> WLAN: 5470MHz ~ 5725MHz <input checked="" type="checkbox"/> WLAN: 5725MHz ~ 5850MHz <input type="checkbox"/> Bluetooth: 2402MHz ~ 2480MHz |
| Device category | <input type="checkbox"/> Portable (<20cm separation) <input checked="" type="checkbox"/> Mobile (>20cm separation) |
| Antenna diversity | <input type="checkbox"/> Single antenna <input checked="" type="checkbox"/> Multiple antennas <input checked="" type="checkbox"/> Tx diversity <input type="checkbox"/> Rx diversity <input type="checkbox"/> Tx/Rx diversity |
| Evaluation applied | <input type="checkbox"/> Blanket 1 mW Blanket Exemption <input type="checkbox"/> MPE-based Exemption <input checked="" type="checkbox"/> SAR-based Exemption |
| Remark: | |
| The maximum conducted output power is <u>27.61dBm (576.42mW)</u> at <u>5745MHz</u> (with <u>4.93dBi antenna gain.</u>) | |

4.3. Result

For 2.4G

Non-Beamforming

| Modulation Type | Channel Frequency (MHz) | Max. Conducted output power(dBm) | Max. Tune up power (dBm) | Antenna Gain(dBi) | Max.Tune up e.r.p. Power (dBm) | Max. Tune up e.r.p power (mW) | Limit (mW) |
|-----------------|-------------------------|----------------------------------|--------------------------|-------------------|--------------------------------|-------------------------------|------------|
| 11ax HE20 | 2412-2462 | 24.45 | 24.95 | 2.98 | 25.78 | 378.64 | 3060 |

Beamforming

| Modulation Type | Channel Frequency (MHz) | Max. Conducted output power(dBm) | Max. Tune up power (dBm) | Antenna Gain(dBi) | Max.Tune up e.r.p. Power (dBm) | Max. Tune up e.r.p power (mW) | Limit (mW) |
|-----------------|-------------------------|----------------------------------|--------------------------|-------------------|--------------------------------|-------------------------------|------------|
| 11ax HE20 | 2412-2462 | 21.37 | 21.87 | 5.93 | 25.65 | 367.33 | 3060 |



For 5G
Non-Beamforming

| Modulation Type | Channel Frequency (MHz) | Max. Conducted output power(dBm) | Max. Tune up power (dBm) | Antenna Gain(dBi) | Max.Tune up e.r.p. Power (dBm) | Max. Tune up e.r.p power (mW) | Limit (mW) |
|-----------------|-------------------------|----------------------------------|--------------------------|-------------------|--------------------------------|-------------------------------|------------|
| 11a | 5180-5240 | 23.75 | 24.25 | 4.97 | 27.07 | 509.56 | 3060 |
| 11ax HE40 | 5260-5320 | 23.73 | 24.23 | 4.99 | 27.07 | 509.85 | 3060 |
| 11ax HE20 | 5500-5720 | 23.49 | 23.99 | 4.93 | 26.77 | 475.37 | 3060 |
| 11a | 5745-5825 | 24.33 | 24.83 | 4.93 | 27.61 | 576.42 | 3060 |

No non-compliance noted.

Beamforming

| Modulation Type | Channel Frequency (MHz) | Max. Conducted output power(dBm) | Max. Tune up power (dBm) | Antenna Gain(dBi) | Max.Tune up e.r.p. Power (dBm) | Max. Tune up e.r.p power (mW) | Limit (mW) |
|-----------------|-------------------------|----------------------------------|--------------------------|-------------------|--------------------------------|-------------------------------|------------|
| 11ax HE20 | 5180-5240 | 20.71 | 21.21 | 7.96 | 27.02 | 504.01 | 3060 |
| 11ax HE20 | 5260-5320 | 20.28 | 20.78 | 7.99 | 26.62 | 458.78 | 3060 |
| 11ax HE20 | 5500-5720 | 20.24 | 20.74 | 7.91 | 26.50 | 447.03 | 3060 |
| 11ax HE20 | 5745-5825 | 20.84 | 21.34 | 7.94 | 27.13 | 516.50 | 3060 |

Maximum Permissible Exposure (Co-location)

Non-Beamforming

| Modulation Type | Channel Frequency (MHz) | Max. Conducted output power (dBm) | Max. Tune up power (dBm) | Antenna Gain(dBi) | Distance (cm) | Max.Tune up e.r.p. Power(mW) | Limit (mW) | MPE Ratio |
|-------------------|-------------------------|-----------------------------------|--------------------------|-------------------|---------------|------------------------------|------------|-----------|
| 11ax HE20 | 2412-2462 | 24.45 | 24.95 | 2.98 | 20 | 378.64 | 3060.00 | 0.124 |
| 11a | 5745-5825 | 24.33 | 24.83 | 4.93 | 20 | 576.42 | 3060.00 | 0.188 |
| Co-location Total | | | | | | | | 0.312 |
| ΣMPE ratios Limit | | | | | | | | 1.000 |

Beamforming

| Modulation Type | Channel Frequency (MHz) | Max. Conducted output power (dBm) | Max. Tune up power (dBm) | Antenna Gain(dBi) | Distance (cm) | Max.Tune up e.r.p. Power(mW) | Limit (mW) | MPE Ratio |
|-------------------|-------------------------|-----------------------------------|--------------------------|-------------------|---------------|------------------------------|------------|-----------|
| 11ax HE20 | 2412-2462 | 21.37 | 21.87 | 5.93 | 20 | 367.33 | 3060.00 | 0.120 |
| 11ax HE20 | 5745-5825 | 20.84 | 21.34 | 7.94 | 20 | 516.50 | 3060.00 | 0.169 |
| Co-location Total | | | | | | | | 0.289 |
| ΣMPE ratios Limit | | | | | | | | 1.000 |

-----THE END OF REPORT-----