

EXHIBIT 12

RF EXPOSURE ASSESSMENT

Section 1.1307 (b) Environmental Assessment Requirement for Equipment Authorization

Commission actions granting construction permits, licenses to transmit or renewals thereof, equipment authorizations or modifications in existing facilities, require the preparation of an Environmental Assessment (EA) if the particular facility, operation, or transmitter would cause human exposure to levels of radiofrequency radiation in excess of the limits in §§ 1.1310 and 2.1093 of this chapter.

Section 1.1310 Radio Frequency Radiation Exposure Limits

The criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in Section 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of § 2.1093 of this chapter. Further information on evaluating compliance with these limits can be found in the FCC’s OST/OET Bulletin Number 65, “Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation.”

Response

- The Nokia **AKQW AirScale RRH 8T8R 320W** is typically installed on poles or walls in fixed locations. Therefore, the AKQW is neither a portable nor a mobile wireless device. The Nokia AKQW is an 8 port radio head that transmits 40 Watts per port over the B77 spectrum (3700 - 3980 MHz). This product supports Single Carriers 20, 30, 40, 50, 60, 70, 80, 90, 100 MHz and Dual Carriers 20+20, 100+100 MHz in Contiguous and Non-Contiguous configurations utilizing QPSK, 16 QAM, 64QAM and 256QAM modulation formats. The 8 individual transmit ports are identical in design, rated power, and performance. The RF exposure assessment for the overall AKQW will be evaluated separately to ensure the compliance.

Table 13.1 Product Specifications on AKQW 5G-NR RRH Band 77

Product	Technologies	Transmitting Frequency (MHz)	Max Total Output Power (Watts)
AKQW	5G-NR 20, 30, 40, 50, 60, 70, 80, 90, 100 MHz, Q16/64/256QAM	Band 77 3700 - 3980	320.0

AKQW Antenna

No antenna is supplied with this product. Therefore, no Safety Distances are provided. The Table below shows the Maximum Conducted Total Power (Watts) for each bandwidth supported by the AKQW.

Table 13.2 Maximum Conducted Total Power (Watts)

Bandwidth (MHz)	Maximum Conducted Total Power (Watts)
20	154.15
30	240.7
40	280.47
50	338.90
60	333.62
70	329.34
80	328.47
90	335.75
100	372.45
20+20	334.58
100+100	377.86