QUALIFICATIONS AND CERTIFICATIONS SECTION 2.911(d)

September 30, 2011

SECTION 2.911(d) QUALIFICATION OF ENGINEER (who performed or supervised the Tests).

Dheena D. Moongilan is a Distinguished Member of Technical Staff, Alcatel-Lucent. He received his BSEE, and MSEE from Madras University, India and another MSEE from Illinois Institute of Technology, Chicago, Illinois. He was trained in FCC testing procedures by his former Supervisor, Donald N. Heirman. He has 27 years of EMC testing experience. He is a NARTE certified EMC Engineer, certificate #EMC-00/1022-NE.

SECTION 2.911(d) CERTIFICATION OF TECHNICAL TEST DATA

I hereby certify that the technical test data are the results of tests performed or supervised by me.

D. Moongilaw

Dheena Moongilan Distinguished Member of Technical Staff Global Product Compliance Laboratory MH 5A-115, Alcatel-Lucent 600, Mountain Avenue Murray Hill, NJ 07974-0636 **Tel:** 908 582 5539

MANUFACTURERS — IDENTIFIER SECTION 2.1033 (c) 1 and 2

MANUFACTURERS IDENTIFIER

SECTION 2.1033(c) 1

The full name and mailing address of the manufacturer of the device and the applicant for certification:

RESPONSE: APPLICATION:

Alcatel-Lucent 600-700 Mountain Avenue Murray Hill, NJ 07974 Attention: Rudolf J Pillmeier

SECTION 2.1033(c) 2

FCC Identifier:

RESPONSE: LTE AWS Transceiver Duplexer Unit "LTE TRDU2x60 is AWS Commercial **Broadband**" to be operated under Part 27 and OET Rules 662911 D01 and D02 of the FCC Rules.

FCC Identifier:	AS5
FCC ID:	AS5BBTRX-11

EMISSIONS, FREQUENCY RANGE, POWER LEVEL

SECTION 2.1033 (c) (4), (5), (6) and (7)

EMISSIONS, FREQUENCY RANGE, POWER LEVEL

SECTION 2.1033(c) (4)

Type or types of emission:

RESPONSE:

The "AWS Transceiver Duplexer Unit (**LTE TRDU2x60-AWS Commercial Broadband**)" capable of amplifying transmission involving the following types of emissions:

Measured Emission type: 9M48F9W for 10 MHz Bandwidth and 18M85F9W for 20 MHz Bands.

SECTION 2.1033(c) (5)

Frequency Range

RESPONSE:

FCC 27.5 h (1) and (2)

Block	Transmit Frequency Range MHz	Bandwidth MHz
А	2110-2120	10
В	2120-2130	10
С	2130-2135	5
D	2135-2140	5
Е	2140-2145	5
F	2145-2155	10

SECTION 2.1033(c) (6)

Range of operating power values or specific operating power levels, and description of any means provided for variation of operating power.

RESPONSE:

The "LTE TRDU2x60-AWS Commercial Broadband," is capable of operating from 0.002 to 60 watts/port 2X2MIMO mode. The output power is measured at the External Antenna Connection (EAC) output connector of the 9712 cabinet in which "LTE TRDU2x60-AWS Commercial Broadband" is mounted. The power is under continuous software control. The short term peak power due to channel activity fluctuations is 60W +0.3/-1dB.

SECTION 2.1033(c) (7)

Maximum power rating as defined in the applicable part(s) of the rules.

Alcatel-Lucent's 9712 cabinet RESPONSE:

The maximum average power output of the "**LTE TRDU2x60-AWS Commercial Broadband**" at **9712** cabinet EAC port is 2x60 watts (MIMO). The radio transmitter is operated under 47 CFR 27 and OET Rules 662911 D01 and D02. There were 12 External antenna port (EAC) ports and the ports were randomly selected and configured for all antenna port conducted tests.