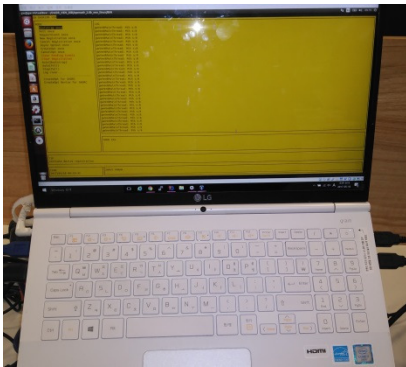
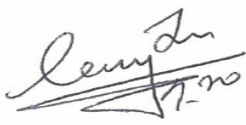
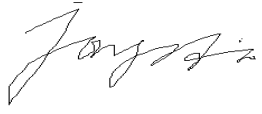


Prüfbericht-Nr.: <i>Test Report No.:</i>	50083563 001	Auftrags-Nr.: <i>Order No.:</i>	133050831	Seite 1 von 9 <i>Page 1 of 9</i>
Kunden-Referenz-Nr.: <i>Client Reference No.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	22.May.2017	
Auftraggeber: <i>Client:</i>	NURI TELECOM Co., Ltd. NURI Bld., 16 Sapyeong-daero, Seocho-gu, Seoul, Korea			
Prüfgegenstand: <i>Test item:</i>	2.0b / VEN / PULL			
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	AiMiR			
Auftrags-Inhalt: <i>Order content:</i>	OpenADR Certification Testing			
Prüfgrundlage: <i>Test specification:</i>	OpenADR 2.0b Certification Test Specification v1.1.0			
Wareneingangsdatum: <i>Date of receipt:</i>	17.May.2017			
Prüfmuster-Nr.: <i>Test sample No.:</i>	A000550778			
Prüfzeitraum: <i>Testing period:</i>	17.May.2017 ~ 17.May.2017			
Ort der Prüfung: <i>Place of testing:</i>	TÜV Rheinland Korea Ltd.			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland Korea Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von / tested by:		kontrolliert von / reviewed by:		
				
22.May.2017 Young-Ju Yoon/Proj.Engineer		22.May.2017 Jong-Shik Her/Proj.Manager		
Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>
				Unterschrift <i>Signature</i>
Sonstiges / Other:				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		
<p>* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet <i>Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor</i> P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested</p>				
<p>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht a uszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not per mitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i></p>				

v04

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1. General Product Information

1.1 General SUT Information

Order number: 133050831
Hardware version: N/A
Firmware version: V3.0

1.2 General EUT Description

Equipment under test: see page 1

1.3 Type of Product

Product type: VEN
OpenADR profile: 2.0b
Mode: Pull
Transport: Simple HTTP
Security: Standard

2. Testing Laboratory

Company name: TÜV Rheinland Korea Ltd.

Address: E & C Venture Dream Tower 6, 197-28, Guro-dong, Guro-gu
Seoul, 152-719, Korea

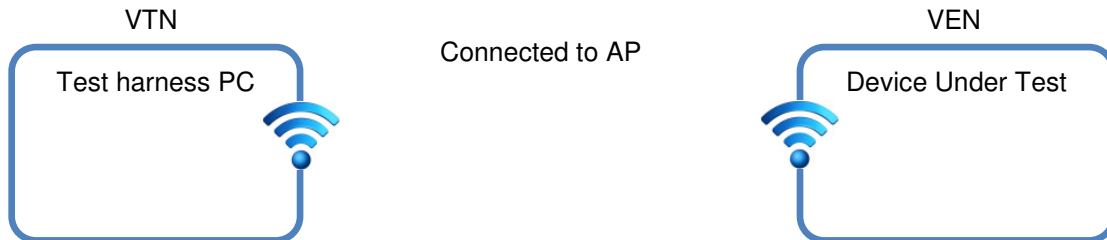
2.1 Test Equipment

Instrument	Manufacturer	Model Number	Version/Errata
Test tool	QualityLogic	OpenADR2.0bCertTest	1.1.0

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2.2 Test Setup



3. Information about Test Results

3.1 General

Documentation of tested devices and results:

The complete set of measurement results is stored at the TÜV Rheinland Korea Ltd. test laboratory and is available on demand.

Interpretation of test results:

The results of the inspection are described on the following pages. "Pass" in the summary list of this test report means the performed tests according to the test specification were verified and that the tested device is conformant to the specifications.

4. Test Results

4.1 VEN Pull Tests

4.1.1 EiRegisterParty Service

No.	Test Cass	Date	Result	Log
1	N1_0010_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_103408_261.txt
2	N1_0015_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_110327_815.txt
3	N1_0020_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_102238_745.txt
4	N1_0025_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_110753_647.txt
5	N1_0030_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_103112_720.txt
6	N1_0040_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_110010_463.txt
7	N1_0050_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_103647_845.txt
8	N1_0060_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_104943_528.txt
9	N1_0065_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_105145_891.txt
10	N1_0070_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_105425_380.txt
11	N1_0080_TH_VTN_1	May / 17 / 2017	NA	View Log TraceLog_051717_105558_856.txt

4.1.2 EiOpt Service

No.	Test Cass	Date	Result	Log
1	P1_2010_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_111353_316.txt
2	P1_2015_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_111516_052.txt
3	P1_2020_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_111652_718.txt
4	P1_2030_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_111838_194.txt
5	P1_2040_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_112244_081.txt
6	P1_2050_TH_VTN_1	May / 17 / 2017	NA	View Log TraceLog_051717_112404_841.txt

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4.1.3 EiReport Service

No.	Test Cass	Date	Result	Log
1	R1_3010_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_125836_596.txt
2	R1_3020_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_125941_103.txt
3	R1_3025_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_130232_867.txt
4	R1_3027_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_130640_913.txt
5	R1_3030_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_131250_916.txt
6	R1_3040_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_131457_246.txt
7	R1_3045_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_131624_652.txt
8	R1_3150_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_131906_027.txt
9	R1_3160_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_132041_629.txt
10	R1_3170_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_132449_779.txt
11	R1_3180_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_132916_652.txt
12	R1_3190_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_133057_936.txt

4.1.4 EiEvent Service

No.	Test Cass	Date	Result	Log
1	E1_1010_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_133420_595.txt
2	E1_1020_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_133531_922.txt
3	E1_1025_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_133659_000.txt
4	E1_1027_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_133822_782.txt
5	E1_1030_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_133916_555.txt
6	E1_1040_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_134401_545.txt
7	E1_1050_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_134603_207.txt
8	E1_1055_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_134739_753.txt
9	E1_1060_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_135209_184.txt
10	E1_1065_TH_VTN_1	May / 17 / 2017	NA	View Log TraceLog_051717_135338_580.txt
11	E1_1070_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_135413_754.txt
12	E1_1080_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_135531_926.txt
13	E1_1090_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_135650_893.txt

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4.1.5 EiEvent Ported A Profile

No.	Test Cass	Date	Result	Log
1	A_E1_0020_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_140555_419.txt
2	A_E1_0040_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_140749_427.txt
3	A_E1_0060_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_140900_829.txt
4	A_E1_0070_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_141038_764.txt
5	A_E1_0082_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_141132_287.txt
6	A_E1_0086_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_141224_095.txt
7	A_E1_0090_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_141403_055.txt
8	A_E1_0092_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_141533_914.txt
9	A_E1_0094_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_141704_442.txt
10	A_E1_0096_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_141801_234.txt
11	A_E1_0098_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_141903_780.txt
12	A_E1_0100_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_142102_188.txt
13	A_E1_0102_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_142511_510.txt
14	A_E1_0104_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_142642_497.txt
15	A_E1_0110_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_142804_868.txt
16	A_E1_0130_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_142955_346.txt
17	A_E1_0180_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_143055_770.txt
18	A_E1_0190_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_143241_035.txt
19	A_E1_0200_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_143428_621.txt
20	A_E1_0210_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_143958_210.txt
21	A_E1_0220_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_145047_379.txt
22	A_E1_0230_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_145322_281.txt
23	A_E1_0240_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_150125_047.txt
24	A_E1_0250_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_150852_253.txt
25	A_E1_0260_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_151219_266.txt
26	A_E1_0262_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_152536_636.txt
27	A_E1_0267_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_154102_969.txt
28	A_E1_0268_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_155025_794.txt
29	A_E1_0270_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_160603_254.txt
30	A_E1_0280_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_161117_176.txt
31	A_E1_0285_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_161507_987.txt
32	A_E1_0300_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_161655_602.txt
33	A_E1_0310_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_161751_713.txt
34	A_E1_0340_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_161931_095.txt

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35	A_E1_0345_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_162033_668.txt
36	A_E1_0360_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_162156_838.txt
37	A_E1_0370_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_162757_090.txt
38	A_E1_0390_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_163100_874.txt
39	A_E1_0392_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_163222_463.txt

4.1.6 General Tests

No.	Test Cass	Date	Result	Log
1	G1_4005_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_164427_374.txt
2	G1_4007_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_164231_602.txt
3	G1_4011_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_164839_522.txt
4	G1_4012_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_164944_612.txt
5	G1_4015_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_165132_961.txt
6	G1_4030_TH_VTN_1	May / 17 / 2017	PASS	View Log TraceLog_051717_165258_863.txt

Appendix A: Remarks and References

Log files for the executed test cases are provided in the electronic format.

List of all executed tests with links to the log files is located in the "logfile.xml" which could be opened in any web-browser.

Appendix B: Photos

Photo 1: Test harness PC



Photo 2: Test Device

