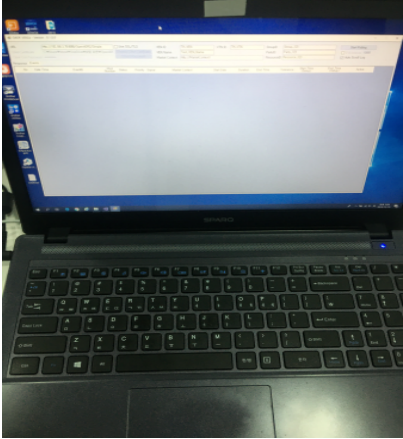


Prüfbericht-Nr.: <i>Test Report No.:</i>	50327683 001	Auftrags-Nr.: <i>Order No.:</i>	133058405	Seite 1 von 7 <i>Page 1 of 7</i>
Kunden-Referenz-Nr.: <i>Client Reference No.:</i>	687815	Auftragsdatum: <i>Order date:</i>	14.Nov.2018	
Auftraggeber: <i>Client:</i>	CUROO Inc. 403 Seokwan, 152, Jukjeon-ro, Suji-gu, Yongin-si, Gyeonggi-do, Republic of Korea			
Prüfgegenstand: <i>Test item:</i>	2.0a / VEN / PULL			
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	CUROO DRMS VEN			
Auftrags-Inhalt: <i>Order content:</i>	OpenADR Certification Testing			
Prüfgrundlage: <i>Test specification:</i>	OpenADR 2.0a Certification Test Specification v1.1.3			
Wareneingangsdatum: <i>Date of receipt:</i>	17.Dec.2019			
Prüfmuster-Nr.: <i>Test sample No.:</i>	A001045307			
Prüfzeitraum: <i>Testing period:</i>	17.Dec.2019 ~19.Dec.2019			
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:		
19.Dec.2019 Young-Ju Yoon/Proj.Engineer		19.Dec.2019 GwangHyeon Ryu/Technical Reviewer		
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>		
* 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 Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested				
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 permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

v04

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1. General Product Information

1.1 General SUT Information

Order number: 133058405
Hardware version: 1.0
Firmware version: 1.0

1.2 General EUT Description

Equipment under test: see page 1

1.3 Type of Product

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

2. Testing Laboratory

Company name: TÜV Rheinland Korea Ltd.

Address: 2F, Young City, N-Tower, 25, Mullaero 28-gil, Yeongdeungpo-gu
Seoul, #07298, Rep. of Korea

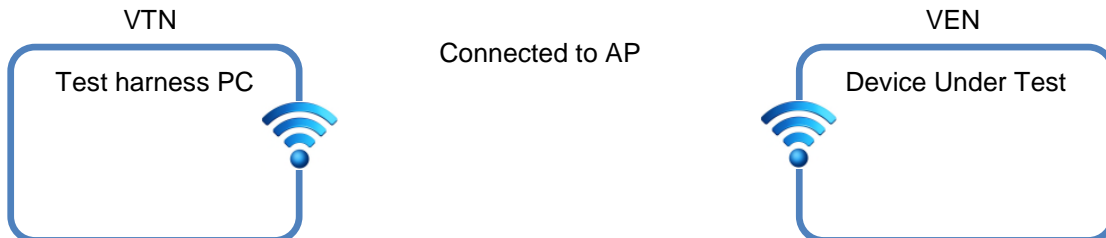
2.1 Test Equipment

GTEM	Instrument	Manufacturer	Model Number	Version/Errata
1806727	Test tool	QualityLogic	OpenADR2.0aCertTest	1.1.3

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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 Profile 2.0a

4.1.1 VEN Pull Tests

No.	Test Cass	Date	Result	Log
1	E1_0020_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_135551_511.txt
2	E1_0040_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_141840_078.txt
3	E1_0060_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_142540_215.txt
4	E1_0070_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_142643_436.txt
5	E1_0082_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_143056_139.txt
6	E1_0086_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_143229_930.txt
7	E1_0090_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_144148_515.txt
8	E1_0092_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_144233_128.txt
9	E1_0094_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_144351_495.txt
10	E1_0096_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_144529_722.txt
11	E1_0098_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_144642_337.txt
12	E1_0100_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_144841_174.txt
13	E1_0102_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_145152_090.txt
14	E1_0104_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_145228_976.txt
15	E1_0110_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_145417_127.txt
16	E1_0130_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_145456_804.txt
17	E1_0180_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_145534_745.txt
18	E1_0190_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_145614_927.txt
19	E1_0200_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_151054_530.txt
20	E1_0210_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_151156_343.txt
21	E1_0220_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_153515_460.txt
22	E1_0230_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_155439_484.txt
23	E1_0240_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_160942_037.txt
24	E1_0250_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_161919_789.txt
25	E1_0260_TH_VTN	Dec / 17 / 2019	PASS	View Log TraceLog_121719_162156_496.txt
26	E1_0262_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_094452_553.txt
27	E1_0267_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_095756_618.txt
28	E1_0268_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_100619_730.txt
29	E1_0270_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_101346_704.txt
30	E1_0280_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_102914_797.txt
31	E1_0285_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_103216_274.txt
32	E1_0292_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_103402_799.txt
33	E1_0297_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_103511_201.txt
34	E1_0300_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_103807_268.txt
35	E1_0310_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_103851_714.txt

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36	E1_0320_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_103957_086.txt
37	E1_0340_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_104043_979.txt
38	E1_0345_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_104115_131.txt
39	E1_0360_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_104216_920.txt
40	E1_0370_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_104310_023.txt
41	E1_0384_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_104449_142.txt
42	E1_0390_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_104602_856.txt
43	E1_0392_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_104845_241.txt

4.1.2 Transport Tests

No.	Test Cass	Date	Result	Log
1	T9_1200	Dec / 19 / 2019	PASS	View Log TraceLog_121919_105107_467.txt
2	T9_1210	Dec / 19 / 2019	PASS	View Log TraceLog_121919_105131_578.txt

4.1.3 Security Tests

No.	Test Cass	Date	Result	Log
1	S1_1400_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_125513_212.txt
2	S1_1405_TH_VTN	Dec / 19 / 2019	PASS	View Log TraceLog_121919_125713_114.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.

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Appendix B: Photos

Photo 1: Test harness PC



Photo 2: Test Device

