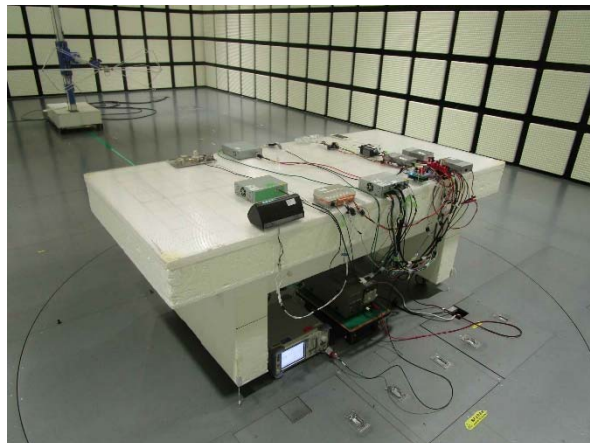
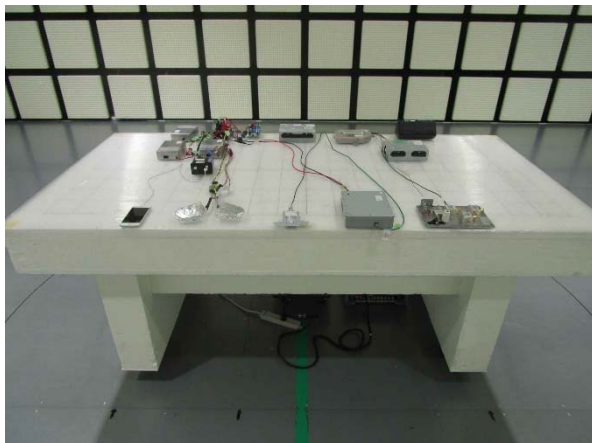


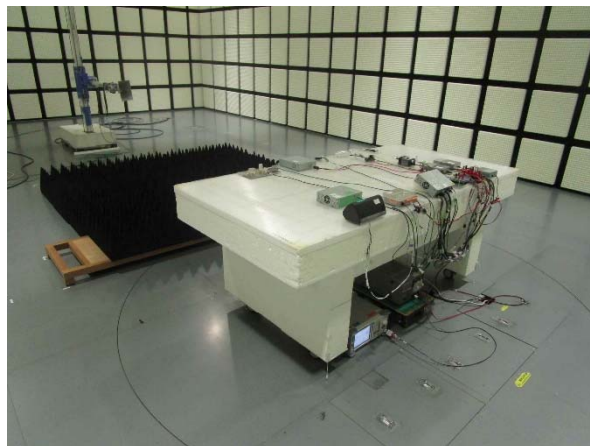
Appendix 3: Photographs of test setup

Radiated emission (1/2)

Analog Below 1 GHz

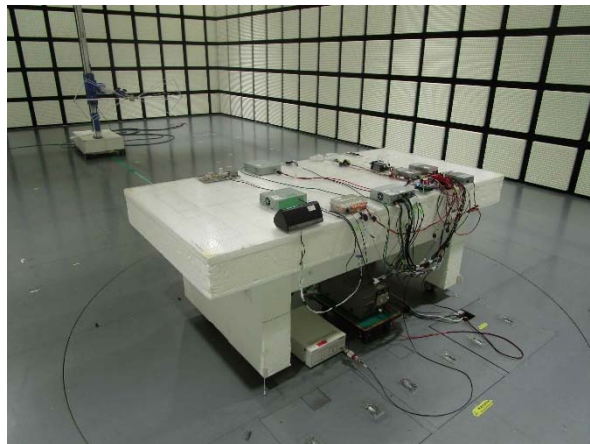
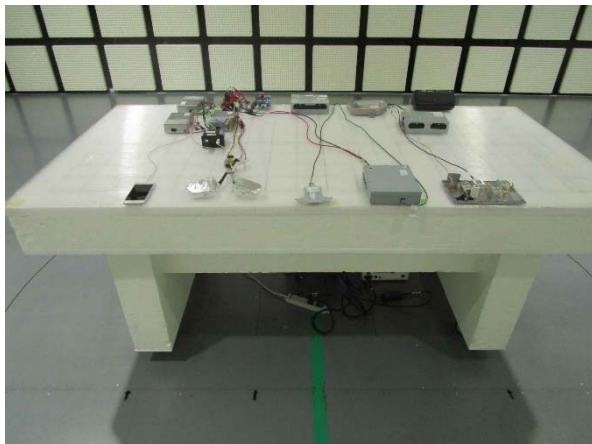


Above 1 GHz

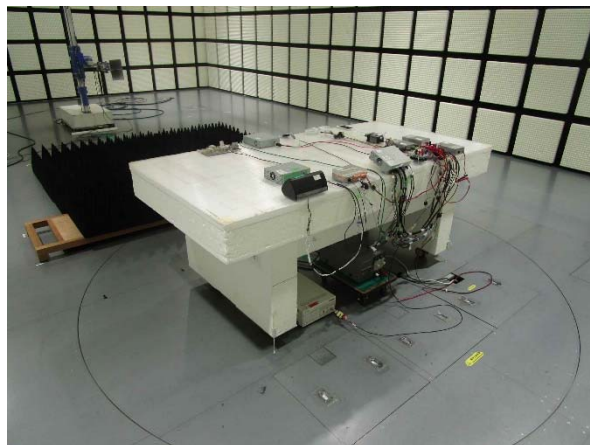
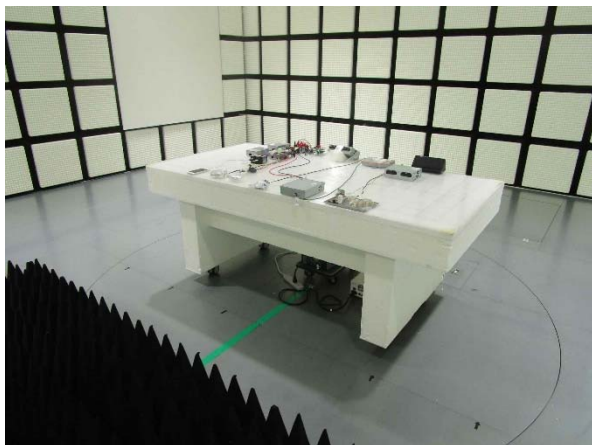


Radiated emission (2/2)

Digital Below 1 GHz

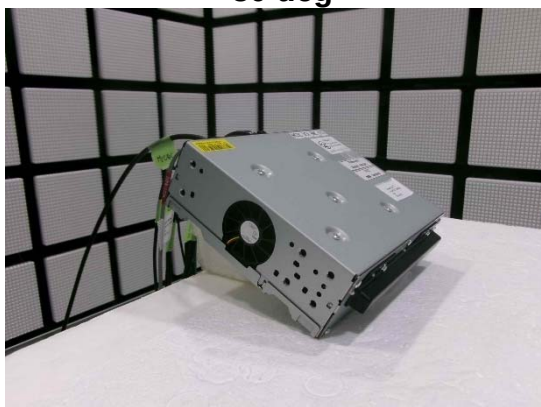


Above 1 GHz

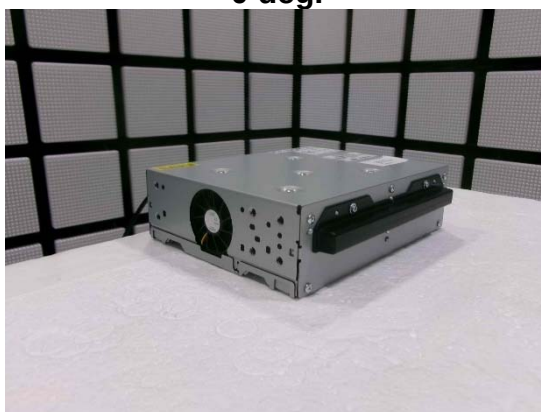


Pre-Check Worst Case Position

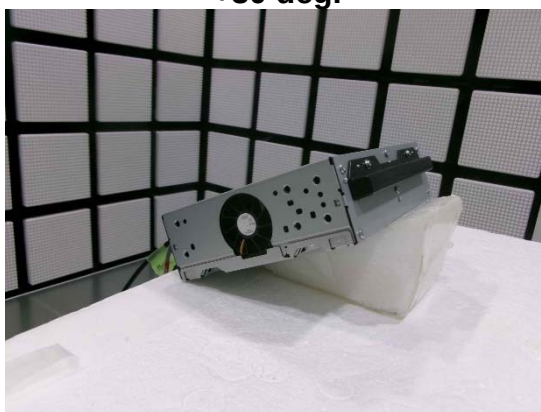
-30 deg



0 deg.

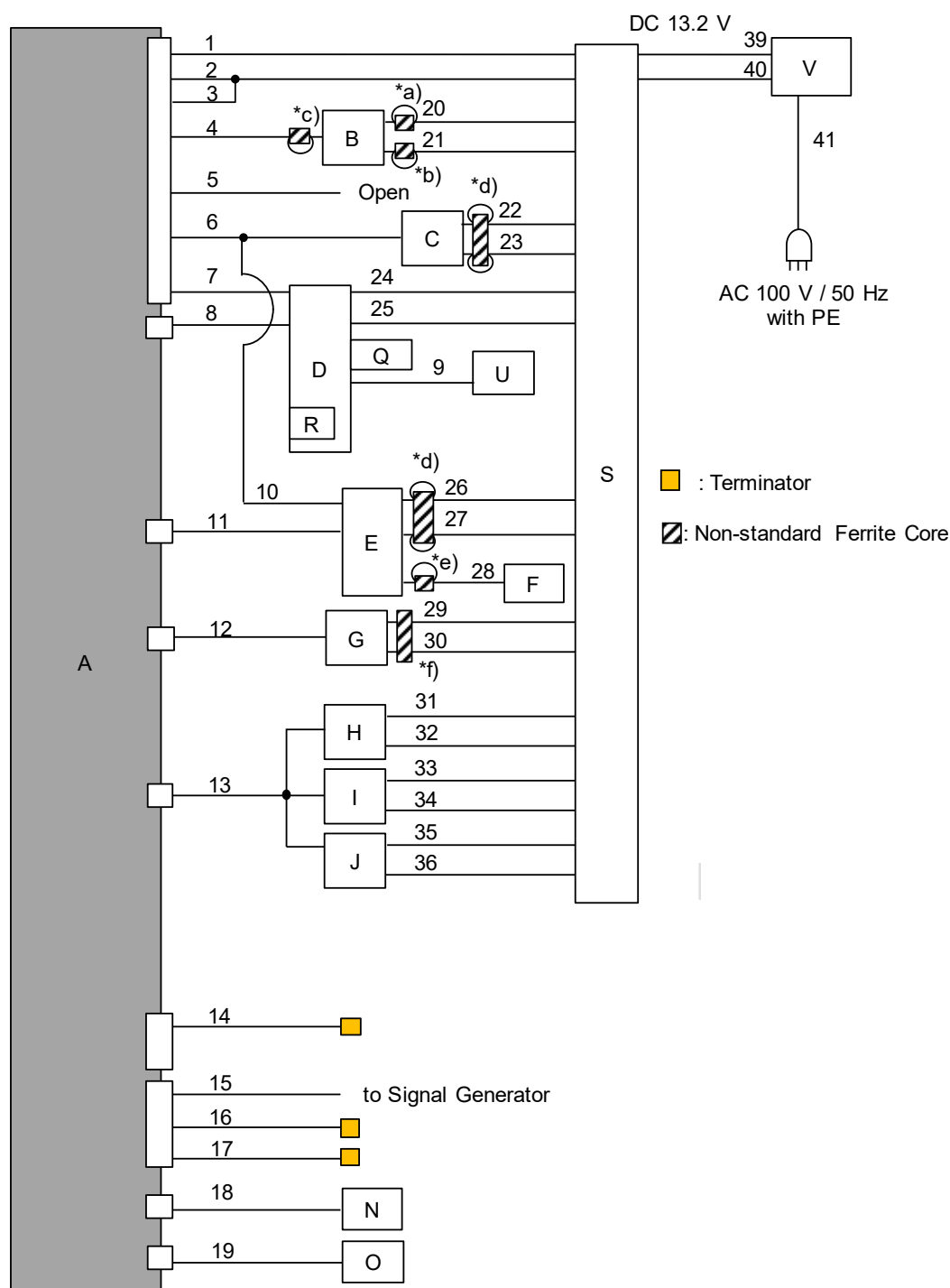


+30 deg.



Appendix 4: Configuration and peripherals

For Radiated emission test



*a) Ferrite Core Model No. E04SR200932 (Manufacture SEIWA) , 4 turns

*b) Ferrite Core Model No. E04SR211132 (Manufacture SEIWA) , 4 turns

*c) Ferrite Core Model No. E04SR211132 (Manufacture SEIWA) , 2 turns

*d) Ferrite Core Model No. ZCAT2235-1030 (Manufacture TDK) , 2 turns

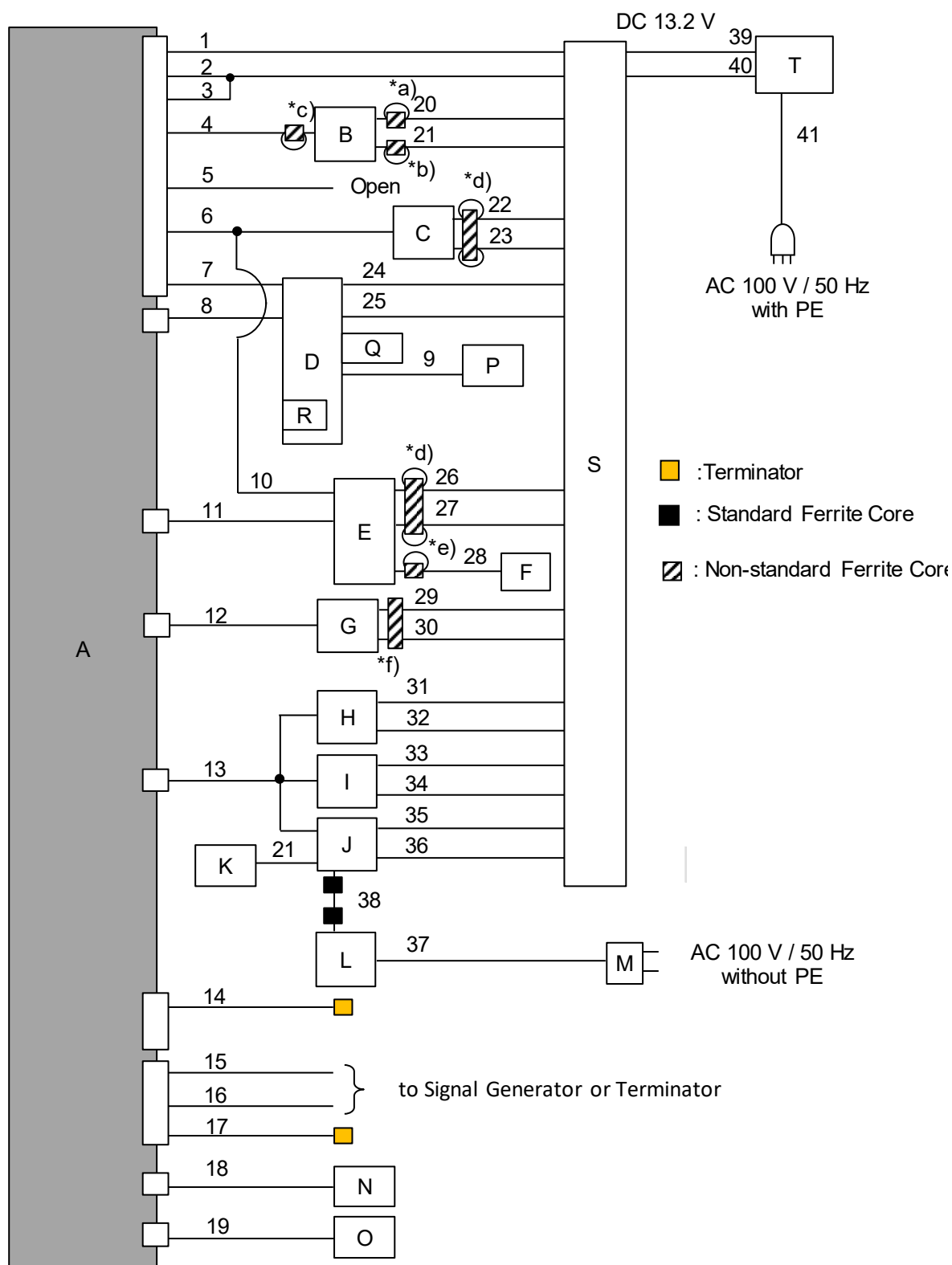
*e) Ferrite Core Model No. ZCAT2035-0930 (Manufacture TDK) , 2 turns

*f) Ferrite Core Model No. ZCAT08V (Manufacture TDK) , 1 turn

* Cabling and setup(s) were taken into consideration and test data was taken under worse case conditions.

* Non-standard Ferrite Cores do not affect to EMC performance for EUT.

For Antenna power conduction for receivers test



* Cabling and setup(s) were taken into consideration and test data was taken under worse case conditions.

* Non-standard Ferrite Cores do not affect to EMC performance for EUT.

Description of EUT and Support equipment

No.	Item	Model number	Serial number	Manufacturer	Remark
A	Car AV Control Unit for CDC	AM2301	MCDC_DCV_HWC_076	Panasonic	EUT
B	Steering Switch	-	-	Panasonic	-
C	CAN SIM JIG BOX	-	-	Panasonic	-
D	USB BOX	MD4115/46	P4500141154600000396	Desay SV	-
E	ISPU	-	-	MITSUBISHI	-
F	Speaker	AK-323	-	ARCHILL	-
G	Advanced Driving Assistance System JIG	-	18	Panasonic	-
H	DISPLAY BOX JIG (METER)	-	-	Panasonic	-
I	DISPLAY BOX JIG (HUD)	-	-	Panasonic	-
J	DISPLAY BOX JIG (CID)	-	-	Panasonic	-
K	USB JIG	-	-	Panasonic	-
L	10.1 inch HD capacitive touch monitor	FA1014-NP/C/T	1014TB41693167	LILLIPUT	-
M	AC Adapter	FJ-SW126G120200N	-	SHENZHEN FUJIA APPLIANCE CO., LTD.	-
N	Ether Counterpart device	AM0204	MCDC_2S_JP_KS_055	Panasonic	
O	GPS Antenna	KA152/KT258	3L152020	MITSUMI ELECTRIC CO., LTD.	-
P	Smartphone	MTML3J/A	GV39XXD6JL	Apple	-
Q	USB Memory	SDDDC2-064G-G46	-	SanDisk	-
R	SD Card	SD-K08C	1751 WM31436	TOSHIBA	-
S	Power Supply Terminal BOX	-	-	Panasonic	-
T	Power Supply (DC)	PAN35-10A	DE001677	KIKUSUI	-
U	Smart phone	MQ792J/A	C8PY95XLJC6H	Apple	-
V	Power Supply(DC)	PAN35-10A	BP002287	KIKUSUI	-

List of cables used

No.	Name	Length (m)	Shield		Remarks
			Cable	Connector	
1	GND	2.0	Unshielded	Unshielded	Main Harness 1
2	B+	2.0	Unshielded	Unshielded	
3	ACC	2.0	Unshielded	Unshielded	
4	Signal	2.0 + 1.0	Unshielded	Unshielded	
5	Signal	2.0	Unshielded	Unshielded	
6	Signal	2.0 + 0.2 + 0.5	Unshielded	Unshielded	
7	Signal	2.0 + 0.2 + 1.0	Unshielded	Unshielded	
8	USB	2.0	Shielded	Shielded	USB
9	USB	0.95	Shielded	Shielded	-
10	Signal	2.0 + 0.3 + 1.0	Unshielded	Unshielded	-
11	ISPU	2.0	Shielded	Shielded	ISPU
12	GVIF (ADAS)	2.0	Shielded	Shielded	ADAS
13	GMSL	2.0	Shielded	Shielded	GMSL
14	XM Antenna	2.0	Shielded	Shielded	-
15	FM/AM Antenna (Main)	2.0	Shielded	Shielded	FM/AM
16	FM/AM Antenna (Sub)	2.0	Shielded	Shielded	
17	FM/AM Main Antenna Power	2.0	Unshielded	Unshielded	
18	Ether	2.0	Shielded	Shielded	Ethernet
19	GPS	0.1 + 2.0	Shielded	Shielded	GPS
20	B+ / ACC	0.8 0.8 + 1.8 *1)	Unshielded	Unshielded	-
21	GND	0.8 0.8 + 1.8 *1)	Unshielded	Unshielded	-
22	B+ / ACC	0.4 0.4 + 1.8 *1)	Unshielded	Unshielded	-
23	GND	0.4 0.4 + 1.8 *1)	Unshielded	Unshielded	-
24	B+ / ACC	1.0 1.0 + 1.8 *1)	Unshielded	Unshielded	-
25	GND	1.0 1.0 + 1.8 *1)	Unshielded	Unshielded	-
26	B+ / ACC	0.9 0.9 + 1.8 *1)	Unshielded	Unshielded	-
27	GND	0.9 0.9 + 1.8 *1)	Unshielded	Unshielded	-
28	Speaker	1.0	Unshielded	Unshielded	-
29	B+ / ACC	1.1 1.1 + 1.8 *1)	Unshielded	Unshielded	-
30	GND	1.1 1.1 + 1.8 *1)	Unshielded	Unshielded	-
31	B+ / ACC	0.15 0.15 + 1.8 *1)	Unshielded	Unshielded	-
32	GND	0.15 0.15 + 1.8 *1)	Unshielded	Unshielded	-
33	B+ / ACC	0.15 0.15 + 1.8 *1)	Unshielded	Unshielded	-
34	GND	0.15 0.15 + 1.8 *1)	Unshielded	Unshielded	-
35	B+ / ACC	0.15 0.15 + 1.8 *1)	Unshielded	Unshielded	-
36	GND	0.15 0.15 + 1.8 *1)	Unshielded	Unshielded	-
37	DC	1.45	Unshielded	Unshielded	-
38	HDMI	1.4	Shielded	Shielded	-
39	B+ / ACC	0.5 + 1.8	Unshielded	Unshielded	-
40	GND	0.5 + 1.8	Unshielded	Unshielded	-
41	AC	1.8	Unshielded	Unshielded	-

End of Report