

EMC test laboratory Royal Philips Drachten, Netherlands

Report : SM 9643	Samples : 3	Appliance : Trimmer
Date : October 20, 2020		Type nr. : QP6550
Test engineer : H. Bodde		Derivatives: See page 2
Tested sample: QP6550		
Remarks : Excalibur SHE Li-Ion (EB2 & EB4)		
Test purpose : Release (DQD20200441 & 20200594)		Rating : 100-240V / 9W
Manufacturer : Indonesia (Batam)		50/60Hz

Test equipment calibrated up to : February, 2021

Picture of the EUT :

SUMMARY OF TEST RESULTS:

Tested according to	Test result
2014/30/EU	PASS



RF Emission :

Test according to :	Result
EN 55011:2009+A1	N.A.
CISPR 11:2009+A1	
EN 55014-1:2017	Pass
CISPR 14-1:2016	
EN 55015:2013+A1	N.A.
CISPR 15:2013+A1	

Content : Page :

Summary :	1
Derived types :	2
Equipment :	3
Uncertainties :	4
Interference source :	5
Interference suppression :	5
Circuitdiagram :	6
EMC-EMF measurements :	7-x

LF Emission :

Test according to :	Result
EN 61000-3-2:2014	Pass
IEC 61000-3-2:2014	
EN 61000-3-3:2013	Pass
IEC 61000-3-3:2013+A1	

Test information :

Freq. Micro processor :	16 MHz.
Test Voltage LiSN up to 500KHz :	100 V.
Test Voltage LiSN up to 30MHz :	240 V.
Test Voltage Clamp 30-300MHz :	240 V.
Test Voltage CFar up to 1GHz :	230 V.
Test Voltage Loop up to 30MHz :	n.a V.
Test Voltage Immunity testing :	230 V.
Test Voltage EMF :	230 V.

Immunity :

Test according to :	Result
EN 55014-2:2015	Pass
CISPR 14-2:2015	
EN 60601-1-2:2014	N.A.
IEC 60601-1-2:2014	

Clamp Data :

Data 1,2 & 3 : Measured on auxiliary cord.
Data 4,5 & 6 : Measured on mains cord.

Remarks :

EUT tested with Powerplug :

HQ8505/D (PI electronics) see : SM9468 U5
HQ8505/SSW2600 (Salom)see : SM8859 U4

(most unfavorable values noted in this report)

FINAL TEST RESULT:

Fulfills EMC-requirements for CE-mark

PHILIPS
EMC testlab.
Box 20100
9200 CA Drachten
Netheriands



Measurements are done according required standards and norms in all aspects such as test setup, placement (distance) of EUT, cord length, test voltage.ref.GTS 02.02.08,etc.

Test Engineer : H. Bodde

Date : October 20, 2020

Signed for approval : J. Hoekstra

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Type numbers

Parent : QP6550
Derived : QP6650

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Equipment

Reg. nr :	Brand :	Model :	Equipment :	Calibration date :	In place :
PH-DTN-201-00018 30560-15-012	SCHAFFNER	NSG2070	GENERATOR	November, 2020	Spare
PH-DTN-201-00054 30553-15-232	SCHAFFNER	NSG2070	GENERATOR	November, 2021	Spare
PH-DTN-201-00060	TESEQ	NSG4070C	GENERATOR	July, 2021	x
PHDTN20100021/22 30560-82-002	NARDA	ELT-400	EMF meter	December, 2020	x
PH-DTN-201-00008 30560-15-015	SCHAFFNER	NSG435	ESD	July, 2022	x
PH-DTN-20100009 30560-15-016	EMTEST	UCS500N	GENERATOR	July, 2022	x
PH-DTN-201-00055 30560-15-017	EMTEST	UCS500N	GENERATOR	December, 2021	Spare
PH-DTN-201-00027 30560-18-022	RADIS	RADISENSE6	SENSOR, FIELD	December, 2020	x
PH-DTN-201-00025 30560-18-023	RADIS	RPR2006C	POWERHEAD	December, 2020	x
PH-DTN-201-00026 30560-18-024	RADIS	RPR2006C	POWERHEAD	December, 2020	x
PH-DTN-201-00024 30560-18-019	AMPLI	DC6080	VERZWAKKER	December, 2020	x
PH-DTN-201-00057 30560-18-021	ETS-LINDGREN	3142E	ANTENNE	February, 2024	x
PH-DTN-201-00007 30560-07-008	LECROY	WJ334	OSCILLOSCOOP	July, 2022	x
PH-DTN-201-00019 30560-17-004	ELGAR	SW5250	Powersupply	October, 2020	x
PH-DTN-201-00023 30560-34-001	QUADT	SENTRY PLUS	High Voltage tester	October, 2020	x
PH-DTN-201-00039 30560-16-008	SCHWARZBECK	FMLK1518-239	RECEIVER	February, 2021	x
PH-DTN-00041 30560-16-014	TESEQ	SMR4503	RECEIVER	February, 2021	x
PH-DTN-201-00042 30560-16-015	TESEQ	SMR4503	RECEIVER	February, 2021	x
PH-DTN-201-00043 30560-16-016	TESEQ	SMR4503	RECEIVER	February, 2021	x
PH-DTN-201-00053 30560-15-013	CALIFORNIA	5001ix	GENERATOR	February, 2021	x
PH-DTN-201-00050 30560-18-014	R&S	Luthi	CLAMP Setup	February, 2021	x
PH-DTN-201-00046 30560-18-015	PHILIPS	Homemade	Voltage PROBE	February, 2021	x
PH-DTN-201-00052 30560-18-020	PHILIPS	Homemade	ANTENNE Loop	February, 2021	x
PH-DTN-201-00045 30560-20-015	ROHDES	ENV216	AMN	February, 2021	x
PH-DTN-201-00044 30560-20-016	ROHDES	ENV216	AMN	February, 2021	x
PH-DTN-201-00051 30560-20-017	TESEQ	CDN M216	CDN	February, 2021	x
PH-DTN-201-00056 LI-600275	DIN	Tool	Liniaal	March, 2025	x

Execute calibration :

Ref : QSOP Equipement and Calibration ASV 240.2/120005

Calibration request shall be called out by the calibration database at least 1 month before the calibration due
Calibration shall be done in the calendar month of the calibration due date.

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Measurement Uncertainties

A measurement result only approximates the value of the measurand, because uncertainties in quantities that influence the measurement give rise to uncertainty in that result. The measurement uncertainty U describes an interval about the measurement result within which the value of the measurand is believed to lie with a specified level of confidence.

Accuracy of measurement

The reported expanded uncertainty is stated as the standard uncertainty of measurement multiplied by the coverage factor $k = 2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.

A lack of reproducibility caused by different interpretations of an ambiguous or incomplete test method, is not a contributor to the reported measurement uncertainty.

CISPR 16-4-2 uncertainty values (Ucisprr)

Ucisprr, is a measurement uncertainty achievable using well-calibrated quality test equipment which meets CISPR 16-1 specifications, and applying good engineering practice.

If the measurement uncertainty U is less than or equal to Ucisprr, compliance is deemed to occur provided no measured emission exceeds the emission limits.

If the measurement uncertainty U is greater than Ucisprr, compliance is deemed to occur provided no measured emission, increased by $(U - Ucisprr)$, exceeds the emission limit.

Measurement	Equipment	Standard	Measurement uncertainty [dB]		
			Utest lab	Ucisprr	
EMISSION					
Mains terminal disturbance voltage 9 kHz – 150 kHz	LISN R&S, receiver PMM 9000	CISPR 15 / FCC 18	3.6	4.0	
Mains terminal disturbance voltage 9 kHz – 50 kHz	LISN R&S, receiver Schwarzbeck FMLK 1518	CISPR 15 / FCC 18	(14.0)	4.0	(Receiver not used below 150kHz)
Mains terminal disturbance voltage 50 kHz – 150 kHz	LISN R&S, receiver Schwarzbeck FMLK 1518	CISPR 15 / FCC 18	6.2	4.0	
Mains terminal disturbance voltage 0.15 - 30 MHz	LISN R&S, receiver PMM 9000	CISPR 11/13/14/15/22 FCC 15/18	3.6	3.6	
Mains terminal disturbance voltage 0.15 - 30 MHz	LISN R&S, receiver Schwarzbeck FMLK 1518	CISPR 11/13/14/15/22 FCC 15/18	3.8	3.6	
Mains terminal disturbance voltage 9kHz - 30 MHz	LISN R&S, receiver TESEQ SMR4503	CISPR 11/13/14/15/22 FCC 15/18	3.5	3.6	
Conducted emission: voltage probe 0.15-30MHz	Voltage probe, receiver PMM9000	CISPR 14	3.1	u.c.	
Conducted emission: voltage probe 0.15-30MHz	Voltage probe, receiver TESEQ SMR4503	CISPR 14	3.0	u.c.	
Disturbance power 30 - 300 MHz absorbing clamp	Clamp, receiver PMM9000	CISPR 13/14	4.4	4.5	
Disturbance power 30 - 300 MHz absorbing clamp	Clamp, receiver TESEQ SMR4503	CISPR 13/14	4.4	4.5	
Disturbance radiation 9 kHz - 30 MHz large loop	LLA, receiver FMLK 1518	CISPR 11 / 15	4.0	u.c.	
Disturbance radiation 9 kHz - 30 MHz large loop	LLA, receiver TESEQ SMR4503	CISPR 11 / 15	3.9	u.c.	
Disturbance 30-300MHz CDN method	CDN216, receiver PMM9000	CISPR 15 annex B	2.7		
Disturbance 30-300MHz CDN method	CDN216, receiver TESEQ SMR4503	CISPR 15 annex B	2.5		
Field strength measurement 30-1000MHz	Schwarzbeck VUMA 1521 antenna ETS3142E	CISPR 11/14	3.5		
Field strength measurement 30-1000MHz	TESEQ SMR4503 antenna ETS3142E	CISPR 11/14	3.0		
Inrush current	California Instruments model 5001X	EN 61000-3-3	note 1)	±8 %	Calibrated by voltage measurement
Mains harmonic currents emission	California Instruments model 5001X	IEC 61000-3-2	note 1)	See Annex A.2	harmonics not calibrated, software control
Mains voltage fluctuations and flicker	California Instruments model 5001X	IEC 61000-3-3	note 1)	Clause 6.2	
EMF	ELT-400 model BN-2304/03 + 100cm ² probe	EN-IEC62233	4.4	25%	
IMMUNITY					
Electrostatic discharge	NSG 435	IEC 61000-4-2	Utest lab note 1)	Ucisprr Annex E	See calibration report for uc
Radiated, RF-electromagnetic field	Radi Field Sensor + Radi Power heads	IEC 61000-4-3	2.8	Annex E	
Electrical fast transient/burst	UCS500N5	IEC 61000-4-4	note 1)		
Surge	UCS500N5	IEC 61000-4-5	note 1)		
Immunity to RF-conducted disturbances	NSG2070	IEC 61000-4-6	note 1)		
Immunity to RF-conducted disturbances	NSG4070	IEC 61000-4-6	1.1		
Power frequency magnetic field	Loop	IEC 61000-4-8	note 2)	Current measurement ±2%	
Voltage dips and interruptions	California Instruments model 5001X	IEC 61000-4-11	note 1)	voltage levels checked by software	
Mains harmonic currents injected in the mains	California Instruments model 5001X	IEC 61000-3-2	note 1)	See Annex A.2	harmonics not calibrated, software control

u.c. = under consideration

Note 1)

The Test Equipment meets the specified requirements in the standard (covered by calibration procedure)

Note 2)

Field check with EMF meter

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Test purpose : Release (DQD20200441 & 20200594)	Rating : 100-240V / 9W
Manufacturer : Indonesia (Batam)	50/60Hz

Interference source

Commutator motor :	Jiaai: JP20155X50A	2V4
	exchangeable with :	
Commutator motor :	Loda: LD180FF2653	2V4
Electronics :		

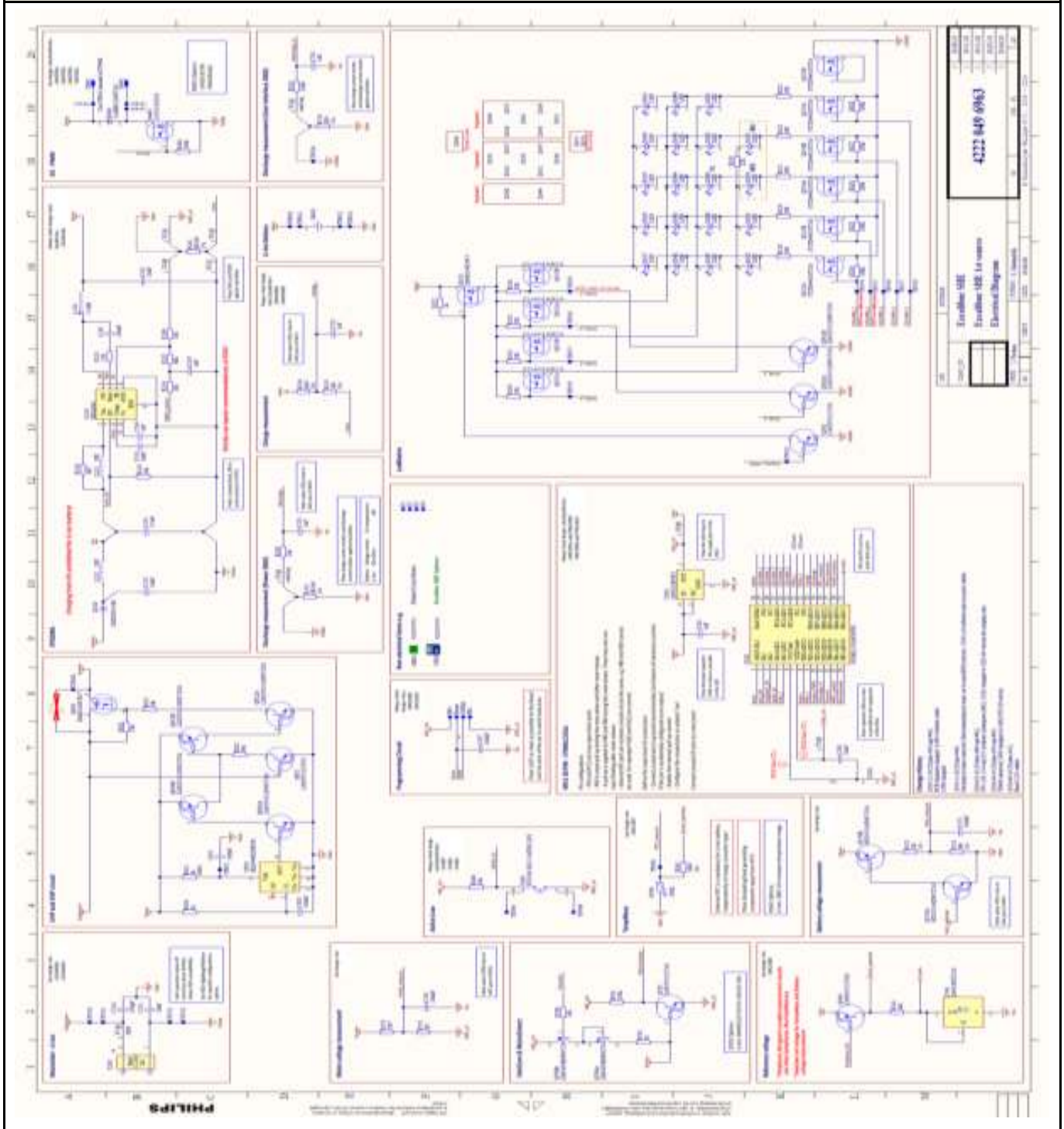
Interference suppression

Comp :	Sort :	Value :	Brand :	Type
<M>	Varistor	on motor		Disc
C710	Cap	470pF	Samsung	470pF 50V X7R 0402
C132	Cap	10nF	Samsung	10nF 25V X7R 0402
C131	Cap	4.7uF	Samsung	4.7uF 25V X7R 0805
D401	Diode	-	LRC	LMBR120SFT1G
L131	Ferrite bead	10R	Murata	10R 100MHz 0402
L132	Ferrite bead	10R	Murata	10R 100MHz 0402

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Circuit diagram



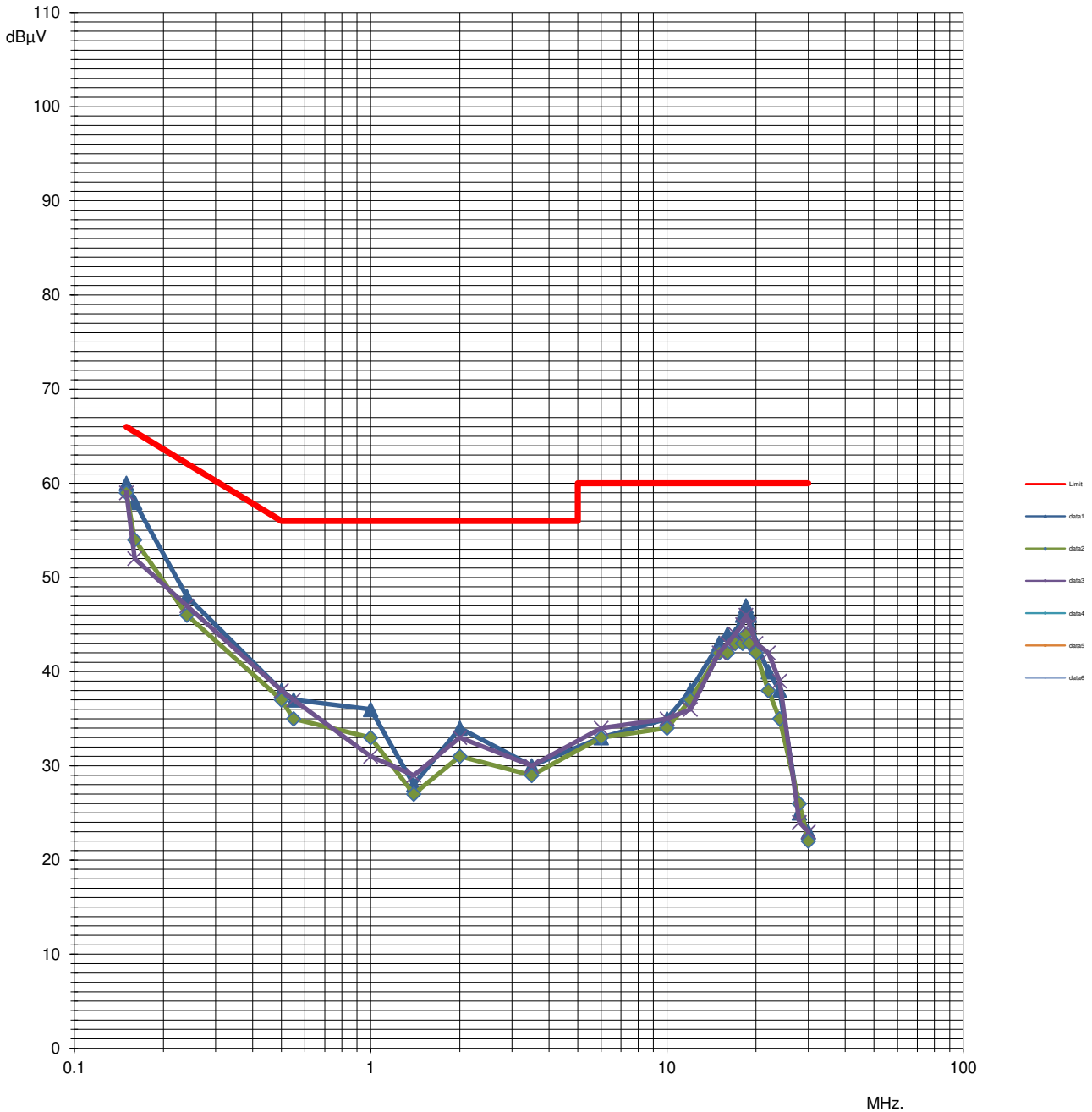
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Voltage measurement 0.1485-30 MHz. acc. to CISPR-14 Q-PEAK detector / Q-PEAK limit

Test equipment : Receiver TESEQ SMR4503

LISN ROHDE&SCHWARZ ENV 216



TESTRESULT

PASS

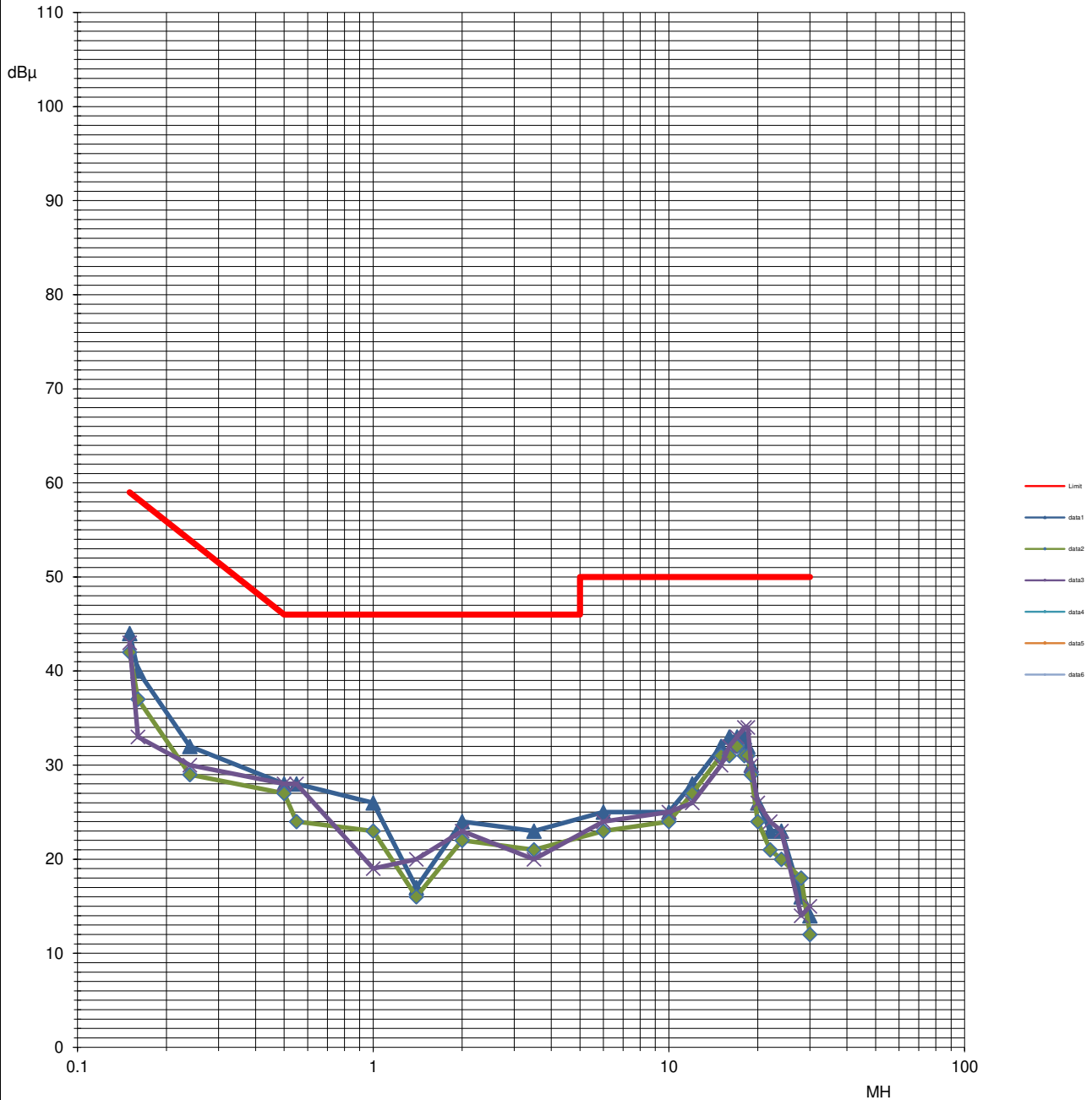
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Voltage measurement 0.1485-30 MHz. acc. to CISPR-14 AVERAGE detector / AVERAGE limit

Test equipment : Receiver TESEQ SMR4503

LISN ROHDE&SCHWARZ ENV 216



TESTRESULT	PASS
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Voltage measurement 0.1485-30 MHz. acc. to CISPR-14 AVERAGE detector / AVERAGE limit

Test equipment : Receiver TESEQ SMR4503 LISN ROHDE&SCHWARZ ENV 216

Frequency (MHz.)	Emission of appliance nr.: (dB μ V)										80%/80% calculation			Limit	
	1	2	3	---	---	---	Margin1	Margin2	Margin3			X	S		X+K*S
0.1500	44	42	43												59
0.1600	40	37	33												58.3
0.2400	32	29	30				-15.0	-17.0	-16.0			-16	1	-14	53.9
0.5000	28	27	28												46
0.5500	28	24	28												46
1.0000	26	23	19												46
1.4000	17	16	20												46
2.0000	24	22	23												46
3.5000	23	21	20				-18.0	-19.0	-18.0			-18	0.6	-17.1	46
6.0000	25	23	24												50
10.0000	25	24	25												50
12.0000	28	27	26												50
15.0000	32	31	30												50
16.0000	33	31	32												50
17.0000	33	32	33												50
18.0000	33	31	34												50
18.5000	32	31	34												50
19.0000	30	29	30												50
20.0000	26	24	26												50
22.0000	23	21	24												50
24.0000	23	20	23												50
28.0000	16	18	14												50
30.0000	14	12	15				-17.0	-18.0	-16.0			-17	1	-15	50
TESTRESULT							PASS								

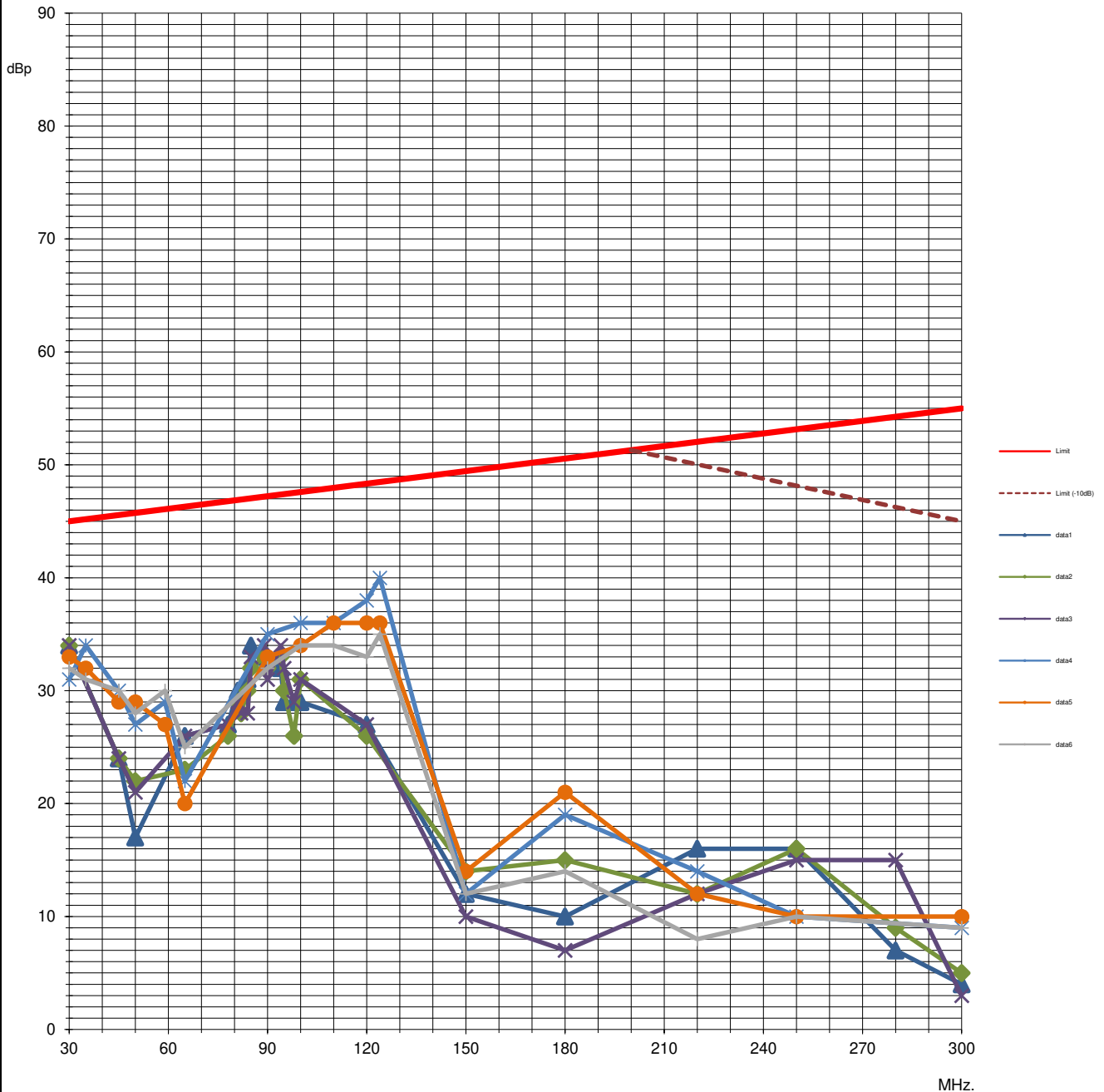
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Test purpose : Release (DQD20200441 & 20200594)		Rating : 100-240V / 9W
Manufacturer : Indonesia (Batam)		50/60Hz

Power measurement 30-300 MHz. acc. to CISPR-14 Q-PEAK detector / Q-PEAK limit

Test equipment : Receiver TESEQ SMR4503

Clamp Lüthi MdS 21



TESTRESULT

PASS

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Manufacturer : Indonesia (Batam)	50/60Hz	

Power measurement 30-300 MHz. acc. to CISPR-14 Q-PEAK detector / Q-PEAK limit

Test equipment : Receiver TESEQ SMR4503

Clamp Lüthi MdS 21

Frequency (MHz.)	Emission of appliance nr.:										80%/80% calculation			Limit		
	1	2	3	---	---	---	Margin1	Margin2	Margin3		X	S	X+K*S			
30.0000	34	34	34												45	
45.0000	24	24	24												45.6	
50.0000	17	22	21												45.7	
65.0000	26	23	26												46.3	
78.0000	27	26	27												46.8	
81.0000	30	29	29												46.9	
82.0000	30	28	28												46.9	
84.0000	31	30	28												47	
85.0000	34	32	33												47	
89.0000	33	33	34												47.2	
90.0000	33	32	31												47.2	
94.0000	32	33	34												47.4	
95.0000	29	30	32												47.4	
98.0000	29	26	29				-11.0	-11.0	-11.0		-11	0	-11		47.5	
100.0000	29	31	31												47.6	
120.0000	27	26	27												48.3	
150.0000	12	14	10												49.4	
180.0000	10	15	7				-18.6	-16.6	-16.6		-17	1.2	-14.9		50.6	
220.0000	16	12	12												52	
250.0000	16	16	15												53.1	
280.0000	7	9	15												54.3	
300.0000	4	5	3				-36.0	-37.1	-38.1		-37	1.1	-34.9		55	
				4	5	6										
30.0000				31	33	32									45	
35.0000				34	32	31									45.2	
45.0000				30	29	30									45.6	
50.0000				27	29	28									45.7	
59.0000				29	27	30									46.1	
65.0000				22	20	25									46.3	
90.0000				35	33	32				-11.2	-12.0	-13.0	-12	0.9	-10.3	47.2
100.0000				36	34	34									47.6	
110.0000				36	36	34									48	
120.0000				38	36	33									48.3	
124.0000				40	36	35									48.5	
150.0000				12	14	12									49.4	
180.0000				19	21	14				-8.5	-12.0	-13.5	-11	2.6	-6	50.6
220.0000				14	12	8									52	
250.0000				10	10	10									53.1	
300.0000				9	10	9				-38.0	-40.0	-43.1	-40	2.6	-35.1	55
TESTRESULT										PASS						

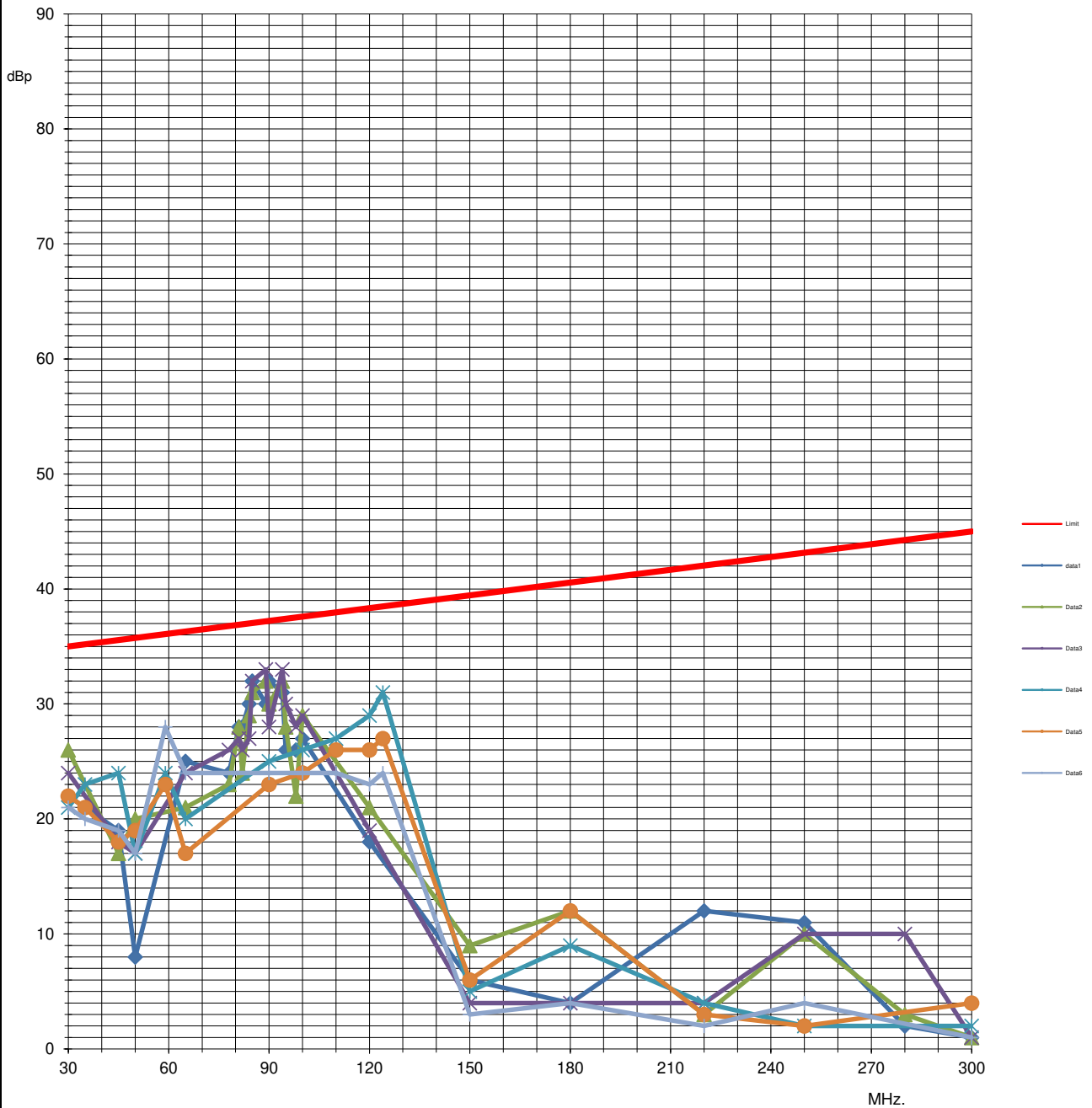
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Power measurement 30-300 MHz. acc. to CISPR-14 AVERAGE detector / AVERAGE limit

Test equipment : Receiver TESEQ SMR4503

Clamp Lüthi MdS 21



TESTRESULT

PASS

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Clamp Lüthi MdS 21

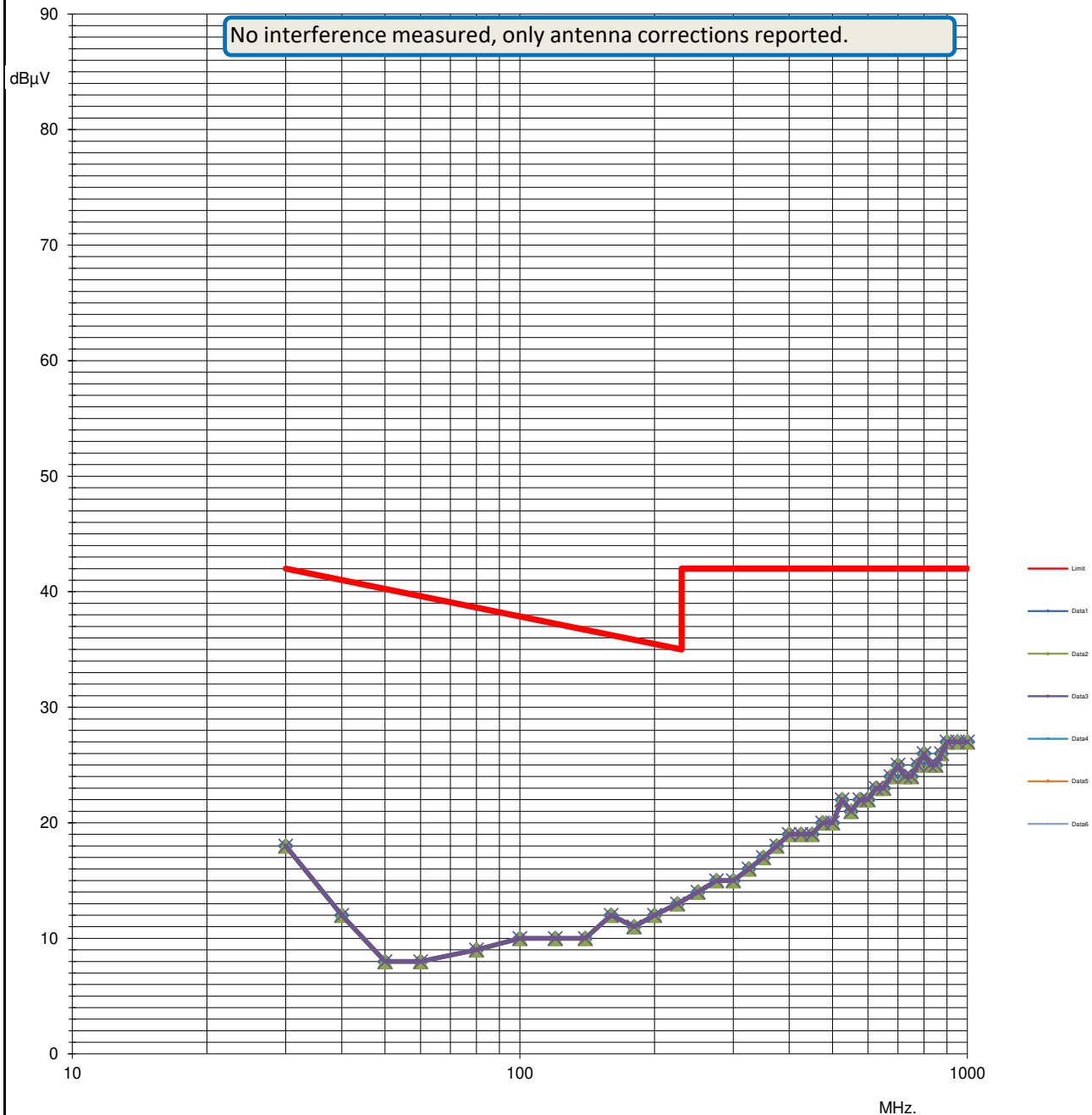
Frequency (MHz.)	Emission of appliance nr.:										80%/80% calculation			Limit	
	1	2	3	---	---	---	Margin1	Margin2	Margin3		X	S	X+K*S		
30.0000	22	26	24												35
45.0000	19	17	18												35.6
50.0000	8	20	17												35.7
65.0000	25	21	24												36.3
78.0000	24	23	26												36.8
81.0000	28	28	27												36.9
82.0000	28	24	26												36.9
84.0000	30	29	27												37
85.0000	32	31	32												37
89.0000	30	32	33												37.2
90.0000	32	30	28												37.2
94.0000	31	32	33												37.4
95.0000	26	28	30												37.4
98.0000	26	22	28				-5.0	-5.2	-4.2		-4.8	0.5	-3.8		37.5
100.0000	27	29	29												37.6
120.0000	18	21	19												38.3
150.0000	6	9	4												39.4
180.0000	4	12	4				-10.6	-8.6	-8.6		-9.3	1.2	-6.9		40.6
220.0000	12	3	4												42
250.0000	11	10	10												43.1
280.0000	2	3	10												44.3
300.0000	1	1	1				-30.0	-33.1	-33.1		-32	1.8	-28.4		45
				4	5	6									
30.0000				21	22	21									35
35.0000				23	21	20									35.2
45.0000				24	18	19									35.6
50.0000				17	19	17									35.7
59.0000				24	23	28									36.1
65.0000				20	17	24									36.3
90.0000				25	23	24				-11.6	-13.0	-8.1	-11	2.5	37.2
100.0000				26	24	24									37.6
110.0000				27	26	24									38
120.0000				29	26	23									38.3
124.0000				31	27	24									38.5
150.0000				5	6	3									39.4
180.0000				9	12	4				-7.5	-11.5	-13.6	-11	3.1	40.6
220.0000				4	3	2									42
250.0000				2	2	4									43.1
300.0000				2	4	1				-38.0	-39.0	-39.1	-39	0.6	45
							TESTRESULT	PASS							

EMC test laboratory Royal Philips Drachten, Netherlands

Report : SM 9643	Samples : 3	Appliance : Trimmer
Date : October 20, 2020		type nr. : QP6550
Test engineer : H. Bodde		Derivatives: See page 2
Tested sample: QP6550		
Remarks : Tested in Running mode (Jiaai motor)		
Test purpose : Release (DQD20200441 & 20200594)		Rating : 100-240V / 9W
Manufacturer : Indonesia (Batam)		50/60Hz

Fieldstrength measurement (3M) 30-1000 MHz. acc. to CISPR-14 Q-PEAK detector

Test equipment : Receiver TESEQ SMR4503, Antenna 3142E ETS-Lindgren, C.F.A.R. RAINFORD



TESTRESULT	PASS
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EMC test laboratory Royal Philips Drachten, Netherlands

Report : SM 9643	Samples : 3	Appliance : Trimmer
Date : October 20, 2020	type nr. : QP6550	
Test engineer : H. Bodde	Derivatives: See page 2	
Tested sample: QP6550		
Remarks : Tested in Running mode (Jiaai motor)		
Test purpose : Release (DQD20200441 & 20200594)	Rating : 100-240V / 9W	
Manufacturer : Indonesia (Batam)	50/60Hz	

Fieldstrength measurement (3M) 30-1000 MHz. acc. to CISPR-14 Q-PEAK detector

Test equipment : Receiver TESEQ SMR4503, Antenna 3142E ETS-Lindgren, C.F.A.R. RAINFORD

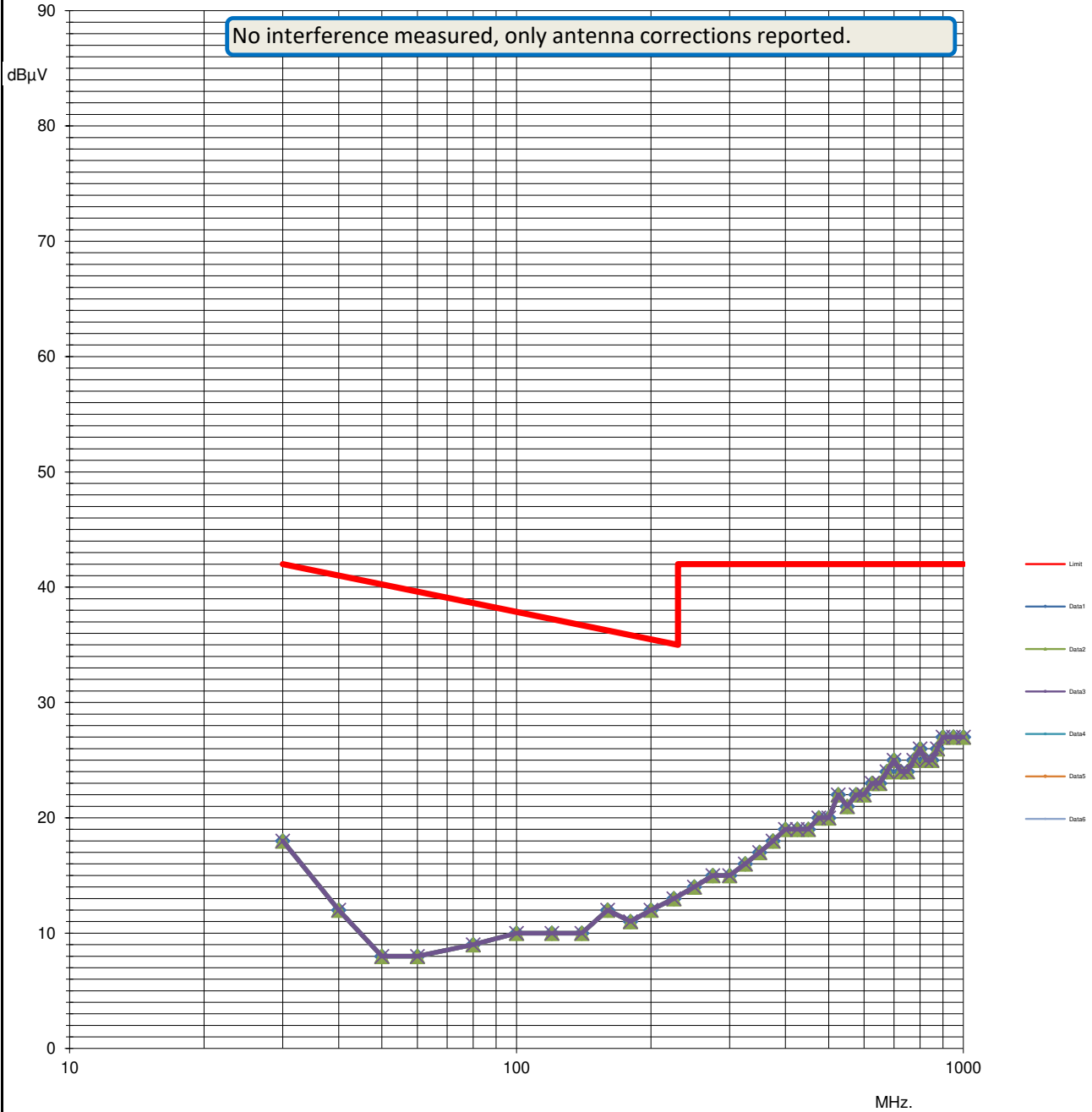
Frequency (MHz.)	Emission of appliance nr.: (dB μ Vm)										80%/80% calculation			Limit	
	1	2	3	---	---	---	Margin1	Margin2	Margin3		X	S	X+K*S		
30.0000	18	18	18												42
40.0000	12	12	12												41
50.0000	8	8	8												40.2
60.0000	8	8	8												39.6
80.0000	9	9	9												38.6
100.0000	10	10	10												37.9
120.0000	10	10	10												37.2
140.0000	10	10	10												36.7
160.0000	12	12	12												36.2
180.0000	11	11	11												35.8
200.0000	12	12	12												35.5
225.0000	13	13	13				-22.1	-22.1	-22.1		-22	0	-22.1		35.1
250.0000	14	14	14												42
275.0000	15	15	15												42
300.0000	15	15	15												42
325.0000	16	16	16												42
350.0000	17	17	17												42
375.0000	18	18	18												42
400.0000	19	19	19												42
425.0000	19	19	19												42
450.0000	19	19	19												42
475.0000	20	20	20				-22.0	-22.0	-22.0		-22	0	-22.0		42
500.0000	20	20	20												42
525.0000	22	22	22												42
550.0000	21	21	21												42
575.0000	22	22	22												42
600.0000	22	22	22												42
625.0000	23	23	23												42
650.0000	23	23	23												42
675.0000	24	24	24												42
700.0000	25	25	25												42
725.0000	24	24	24												42
750.0000	24	24	24												42
775.0000	25	25	25												42
800.0000	26	26	26												42
825.0000	25	25	25												42
850.0000	25	25	25												42
875.0000	26	26	26												42
900.0000	27	27	27												42
950.0000	27	27	27												42
1,000.0000	27	27	27				-15.0	-15.0	-15.0		-15	0	-15.0		42
							TESTRESULT		PASS						

EMC test laboratory Royal Philips Drachten, Netherlands

Report : SM 9643	Samples : 3	Appliance : Trimmer
Date : October 20, 2020		type nr. : QP6550
Test engineer : H. Bodde		Derivatives: See page 2
Tested sample: Tested in Running mode (Loda motor)		
Remarks : Excalibur SHE Li-Ion (EB2 & EB4)		
Test purpose : Release (DQD20200441 & 20200594)		Rating : 100-240V / 9W
Manufacturer : Indonesia (Batam)		50/60Hz

Fieldstrength measurement (3M) 30-1000 MHz. acc. to CISPR-14 Q-PEAK detector

Test equipment : Receiver TESEQ SMR4503, Antenna 3142E ETS-Lindgren, C.F.A.R. RAINFORD



TESTRESULT	PASS
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EMC test laboratory Royal Philips Drachten, Netherlands

Report : SM 9643	Samples : 3	Appliance : Trimmer
Date : October 20, 2020	type nr. : QP6550	
Test engineer : H. Bodde	Derivatives: See page 2	
Tested sample: QP6550		
Remarks : Tested in Running mode (Loda motor)		
Test purpose : Release (DQD20200441 & 20200594)	Rating : 100-240V / 9W	
Manufacturer : Indonesia (Batam)	50/60Hz	

Fieldstrength measurement (3M) 30-1000 MHz. acc. to CISPR-14 Q-PEAK detector

Test equipment : Receiver TESEQ SMR4503, Antenna 3142E ETS-Lindgren, C.F.A.R. RAINFORD

Frequency (MHz.)	Emission of appliance nr.: (dB μ Vm)										80%/80% calculation			Limit	
	1	2	3	---	---	---	Margin1	Margin2	Margin3		X	S	X+K*S		
30.0000	18	18	18												42
40.0000	12	12	12												41
50.0000	8	8	8												40.2
60.0000	8	8	8												39.6
80.0000	9	9	9												38.6
100.0000	10	10	10												37.9
120.0000	10	10	10												37.2
140.0000	10	10	10												36.7
160.0000	12	12	12												36.2
180.0000	11	11	11												35.8
200.0000	12	12	12												35.5
225.0000	13	13	13				-22.1	-22.1	-22.1		-22	0	-22.1		35.1
250.0000	14	14	14												42
275.0000	15	15	15												42
300.0000	15	15	15												42
325.0000	16	16	16												42
350.0000	17	17	17												42
375.0000	18	18	18												42
400.0000	19	19	19												42
425.0000	19	19	19												42
450.0000	19	19	19												42
475.0000	20	20	20				-22.0	-22.0	-22.0		-22	0	-22.0		42
500.0000	20	20	20												42
525.0000	22	22	22												42
550.0000	21	21	21												42
575.0000	22	22	22												42
600.0000	22	22	22												42
625.0000	23	23	23												42
650.0000	23	23	23												42
675.0000	24	24	24												42
700.0000	25	25	25												42
725.0000	24	24	24												42
750.0000	24	24	24												42
775.0000	25	25	25												42
800.0000	26	26	26												42
825.0000	25	25	25												42
850.0000	25	25	25												42
875.0000	26	26	26												42
900.0000	27	27	27												42
950.0000	27	27	27												42
1,000.0000	27	27	27				-15.0	-15.0	-15.0		-15	0	-15.0		42
										TESTRESULT		PASS			

EMC test laboratory Royal Philips Drachten, Netherlands

Report : SM 9643	Samples : 1	Appliance : Trimmer
Date : October 20, 2020		type nr. : QP6550
Test engineer : H. Bodde		Derivatives: See page 2
Tested sample: QP6550		
Remarks : Excalibur SHE Li-Ion (EB2 & EB4)		
Test purpose : Release (DQD20200441 & 20200594)		Rating : 100-240V / 9W
Manufacturer : Indonesia (Batam)		50/60Hz

Flicker measurement, according to EN61000-3-3

Test equipment : California Instruments Interface PACS-1, AC Powersource 5001ix

THIS APPLIANCE FULFILLS THE REQUIREMENT WITHOUT TESTING

(conclusion based on electrical diagram / power-rating / number of switchings)

EMC test laboratory Royal Philips Drachten, Netherlands

Report : SM 9643	Samples : 1	Appliance : Trimmer
Date : October 20, 2020		type nr. : QP6550
Test engineer : H. Bodde		Derivatives: See page 2
Tested sample: QP6550		
Remarks : Excalibur SHE Li-Ion (EB2 & EB4)		
Test purpose : Release (DQD20200441 & 20200594)		Rating : 100-240V / 9W
Manufacturer : Indonesia (Batam)		50/60Hz

Flicker, Inrush measurement , according to EN61000-3-3

Test equipment : California Instruments Interface PACS-1, AC Powersource 5001ix

Determining the type of equipment (limit d_{max})

X	Equipment with manual switching and max. r.m.s. current (including inrush current) ≤ 20 A. and the supply current after inrush is within a variation band of 1.5 A.
	Equipment without additional conditions.
	Equipment switched on manually or automatic more frequently than twice per day, and also has either a delayed restart (> 0.2 sec)
	Equipment attended whilst in use (hairdrier, vac cleaner, kitchen equipment such as mixers), or switched on automatically, or is intended to be switched on manually, no more than twice per day, and also has either a delayed restart (> 0.2 sec.) or manual restart, after a power supply interruption.

THIS APPLIANCE FULFILLS THE REQUIREMENT WITHOUT TESTING

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EMC test laboratory Royal Philips Drachten, Netherlands

Report	: SM 9643	Samples	: 1	Appliance	: Trimmer
Date	: October 20, 2020	type nr.	: QP6550	Derivatives:	See page 2
Test engineer	: H. Bodde				
Tested sample:	QP6550				
Remarks	: Excalibur SHE Li-Ion (EB2 & EB4)				
Test purpose	: Release (DQD20200441 & 20200594)				
Manufacturer	: Indonesia (Batam)				
		Rating	: 100-240V / 9W 50/60Hz		

Harmonic-current measurement domestic appliances, according to EN 61000-3-2

Test equipment : California Instruments Interface PACS-1, AC Powersource 5001ix

THIS APPLIANCE FULFILLS THE REQUIREMENT WITHOUT TESTING

(conclusion based on electrical diagram / power-rating)

EMC test laboratory Royal Philips Drachten, Netherlands

Report : SM 9643	Samples : 1	Appliance : Trimmer
Date : October 20, 2020		type nr. : QP6550
Test engineer : H. Bodde		Derivatives: See page 2
Tested sample: QP6550		
Remarks : Excalibur SHE Li-Ion (EB2 & EB4)		
Test purpose : Release (DQD20200441 & 20200594)		Rating : 100-240V / 9W
Manufacturer : Indonesia (Batam)		50/60Hz

Immunity test, according to EN55014-2

Test equipm.: EMtest UCS500N,Schaffner NSG2070/4070,Schaffner NSG435,California Instruments PACS-1;5001ix

Classification of apparatus	
	category I
	category II
	category III
X	category IV

Tested criteria :			
X	Motor speed		Illumination
X	Switching	X	Display data
X	Standby mode		Data storage
	Temperature		Sensor functions
	Power consumption		Audible signal
	Heating	X	Charge process
	Timing		

		Result	Comment on performance loss
IEC / EN 61000-4-2			
Electro Static	Contact : 4kV	Pass	
Discharge	Air : 8kV		
IEC / EN 61000-4-3			
RF Electro	Level 2(3Vm)	Pass	
Magnetic Field			
IEC / EN 61000-4-4			
Fast	Level 2(1kV) 5/100kHz	Pass	
Transients	Pos. / Neg. for 2min.		
IEC / EN 61000-4-5			
Surges	L-L Level 2(1kV/2Ω)	Pass	
	L-E Level 3(2kV/12Ω)		
IEC / EN 61000-4-6			
Injected	0.15-250MHz.	Pass	
Current	Level 2(3V)mod.80%		
IEC / EN 61000-4-11			
Volt. Dips and	All levels / durations	Pass	
Interruptions			

TOTAL TESTRESULT	PASS
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EMC test laboratory Royal Philips Drachten, Netherlands

Report : EMF 9643	Samples : 1	Appliance : Trimmer
Date : October 20, 2020		type nr. : QP6550
Test engineer : H. Bodde		Derivatives: See page 2
Tested sample: QP6550		
Remarks : Excalibur SHE Li-Ion (EB2 & EB4)		
Test purpose : Release (DQD20200441 & 20200594)		Rating : 100-240V / 9W
Manufacturer : Indonesia (Batam)		50/60Hz

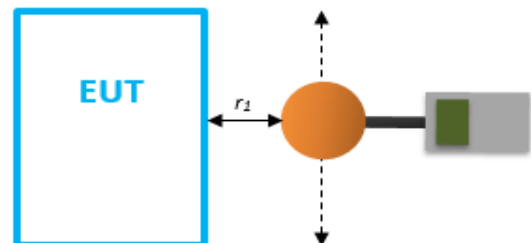
E.M.F. measurement according to IEC / EN62233 (2008)

Test equipment : Narda ELT-400 model BN2304/03 + Probe model BN2300/90.10



Measuring position	Test distance	W	Result
On cutter (Ioda)	0 cm.	6.17 %	Pass
On cutter (Jiaai)	0 cm.	4.22 %	Pass
All surfaces (adapter)	30 cm.	1.37 %	Pass

TEST RESULT **PASS**



Assessed by KEMA
see 2082764.01-QUA/BST