Product Service

Certificate of Conformity

No. ESY 120820 0006 Rev. 00

Holder of Certificate: **Renac Power Technology Co., Ltd.**
Block C-12, No. 20 Datong Road, Comprehensive Bonded Zone
Suzhou Hi-Tech District
215004 Suzhou
PEOPLE'S REPUBLIC OF CHINA

Product: **Converter
(Hybrid Inverter)**

Model(s): **N3-HB-50.0**

Parameters: See page 2

Applicable standards: VDE-AR-N 4105:2018
DIN VDE V 0124-100 (VDE V 0124-100):2020

This Certificate of Conformity confirms the compliance with the above listed standards on a voluntary basis. It refers only to the sample submitted to TÜV SÜD Product Service GmbH and does not certify the quality or safety of the serial products. It was issued according to TÜV SÜD Product Service certification program Photovoltaics and Grid Integration. For details see: www.tuvsud.com/ps-cert

Test report no.: 64290233051701

Date, 2023-09-15

(Billy Qiu)

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Parameters:

Model:	N3-HB-50.0
PV input parameter	
Maximum input voltage	1000 Vd.c.
MPPT voltage range	350~800 Vd.c.
MPPT voltage range (full load)	667~750 Vd.c.
Maximum continuous input current	108 Ad.c. (36Ad.c. per PV string)
Maximum PV short circuit current	120 Ad.c. (40Ad.c. per PV string)
Maximum input power	75 kW
Battery input/output parameter	
Battery type	Lithium-ion
Input voltage range	350~750 Vd.c.
Rated voltage	512 Vd.c.
Maximum input/output voltage	750 Vd.c.
Maximum charging current	2*55 Ad.c.
Maximum charging power	55000 W
Maximum discharging current	2*55 Ad.c.
Maximum discharging power	55000 W
Grid parameter	
Rated input/output voltage	230/400 Va.c., 3/N/PE
Rated input/output frequency	50 Hz
Maximum input current	80 Aa.c.
Maximum input active power	50000 W
Maximum input apparent power	55000 VA
Rated output current	72 Aa.c.
Maximum continuous output current	80 Aa.c.
Rated output active power	50000 W
Maximum output active power	50000 W
Maximum output apparent power	55000 VA
Maximum active power P_{Emax}	50764 W
Maximum active power S_{Emax}	55974 VA
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)

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E.4 Unit certificate

<table>
<tr><td colspan="3" align="center">Unit certificate</td></tr>
<tr><td>Manufacturer</td><td colspan="2">Renac Power Technology Co., Ltd.</td></tr>
<tr><td>Power generation unit type</td><td colspan="2">Hybrid Inverter: N3-HB-50.0</td></tr>
<tr><td rowspan="5">Assessment values</td><td>max. active power P_{Emax}</td><td><u>50764 W</u></td></tr>
<tr><td>max. apparent power S_{Emax}</td><td><u>55974 VA</u></td></tr>
<tr><td>Rated voltage</td><td><u>3/N/PE~, 230/400 Va.c.</u></td></tr>
<tr><td>Rated current (AC) I_r</td><td><u>72 Aa.c.</u></td></tr>
<tr><td>Initial short-circuit AC current I''_k</td><td><u>120 Ad.c.</u></td></tr>
<tr><td>Network connection rule</td><td colspan="2">VDE-AR-N 4105 "Generators connected to the low-voltage distribution network"

Technical minimum requirements for connection and parallel operation of power generation systems connected to the low-voltage network</td></tr>
<tr><td>Test requirement</td><td colspan="2">DIN VDE V 0124-100 (VDE V 0124-100) "Network integration of power generation systems – Low voltage"

Test requirements for power generation units intended for connection to and parallel operation on the low-voltage network</td></tr>
<tr><td>Test report</td><td colspan="2"><u>64.290.23.30517.01</u> from <u>2023-08-25</u></td></tr>
<tr><td colspan="3">The above designated power generation unit meets the requirements of VDE-AR-N 4105</td></tr>
</table>

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E.5 Test report "Network interactions" for power generation units with an input current > 75 A

Extract of the test report for power generation units	
"Determination of electrical properties"	
System manufacturer:	Renac Power Technology Co., Ltd.
	Block C-12, No. 20 Datong Road, Comprehensive Bonded Zone, Suzhou Hi-Tech District, 215004 Suzhou, PEOPLE'S REPUBLIC OF CHINA
Manufacturer indications:	Type of system
	Max. active power P_{Emax}
	Rated voltage
Measurement period:	From 2022-12-30 to 2023-07-17, 2023-07-20 to 2023-08-20

Manufacturer indications:		
	Type of system	Hybrid inverter for PV and battery system
	Max. active power P_{Emax}	50764 W
	Rated voltage	3/N/PE~, 230/400 Va.c.

Rapid voltage change	
Model	N3-HB-50.0
Connection without provisions (regarding the primary energy carrier)	K_i=0.534
Most adverse case when switching between generator levels	K_i=0.537
Connection at nominal conditions (of the primary energy carrier)	K_i=1.093
Disconnection at rated power	K_i=1.035
Worst value of all switching operations	k_{imax}=1.093

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Flicker (>16 A and ≤75 A) (N3-HB-50.0)						
Simulated network voltage (V)	L1-N	230	Network impedance	L1	--	
	L2-N	230		L2	--	
	L3-N	230		L3	--	
	--	--		N	--	
EZE operating current (A)	L1	72	EZE operating power (VA)	L1	16667	
	L2	72		L2	16667	
	L3	72		L3	16667	
Simulated network frequency (Hz)	50		Short circuit power Sk (VA)	1815000		
Plt (Maximum measured Pst)	L1	0.371	EZE nominal power (W)	50000		
	L2	0.360				
	L3	0.329				
Maximum flicker coefficient Cφk	L1	12.243	--	--		
	L2	11.880				
	L3	10.857				

Pst	#1	#2	#3	#4	#5	#6
L1	0.159	0.268	0.332	0.371	0.339	0.329
L2	0.165	0.260	0.321	0.360	0.341	0.323
L3	0.164	0.240	0.296	0.329	0.309	0.292
Pst	#7	#8	#9	#10	#11	#12
L1	0.363	0.330	0.163	0.161	0.303	0.371
L2	0.356	0.330	0.160	0.158	0.275	0.360
L3	0.320	0.298	0.165	0.164	0.264	0.328

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Harmonics (>16 A and ≤75 A) (N3-HB-50.0)												
Phase L1												
Harmon. Nr.	P/P_{Emax}											Limit
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
1	0.97%	9.96%	20.49%	30.54%	40.66%	50.71%	60.71%	71.14%	82.35%	91.46%	101.43%	--
2	0.83%	0.87%	0.95%	1.01%	1.01%	1.15%	1.17%	1.16%	1.16%	1.22%	1.39%	8%
3	0.20%	0.29%	0.31%	0.31%	0.31%	0.34%	0.34%	0.36%	0.38%	0.44%	0.44%	--
4	0.18%	0.22%	0.09%	0.11%	0.14%	0.17%	0.17%	0.19%	0.21%	0.21%	0.22%	4%
5	0.32%	0.61%	0.62%	0.66%	0.85%	0.99%	1.03%	1.04%	1.03%	1.05%	1.01%	10.7%
6	0.16%	0.19%	0.38%	0.44%	0.43%	0.39%	0.38%	0.37%	0.36%	0.33%	0.27%	2.6%
7	0.30%	0.39%	0.42%	0.42%	0.32%	0.41%	0.43%	0.51%	0.59%	0.68%	0.72%	7.2%
8	0.14%	0.12%	0.09%	0.09%	0.10%	0.15%	0.17%	0.19%	0.23%	0.19%	0.17%	2%
9	0.10%	0.11%	0.10%	0.11%	0.10%	0.11%	0.10%	0.10%	0.10%	0.10%	0.10%	--
10	0.12%	0.12%	0.09%	0.10%	0.11%	0.15%	0.16%	0.18%	0.21%	0.19%	0.15%	1.6%
11	0.12%	0.14%	0.10%	0.14%	0.21%	0.27%	0.25%	0.24%	0.24%	0.33%	0.41%	3.1%
12	0.10%	0.12%	0.09%	0.10%	0.09%	0.11%	0.12%	0.12%	0.14%	0.13%	0.14%	1.3%
13	0.11%	0.16%	0.16%	0.12%	0.17%	0.21%	0.20%	0.18%	0.16%	0.21%	0.26%	2.0%
14	0.10%	0.11%	0.09%	0.10%	0.10%	0.11%	0.11%	0.12%	0.13%	0.10%	0.10%	--
15	0.10%	0.09%	0.09%	0.09%	0.09%	0.09%	0.10%	0.10%	0.10%	0.11%	0.11%	--
16	0.09%	0.09%	0.10%	0.10%	0.09%	0.11%	0.11%	0.11%	0.12%	0.12%	0.13%	--
17	0.10%	0.13%	0.16%	0.15%	0.13%	0.13%	0.15%	0.14%	0.11%	0.14%	0.18%	--
18	0.09%	0.10%	0.11%	0.10%	0.09%	0.11%	0.11%	0.11%	0.12%	0.10%	0.11%	--
19	0.10%	0.14%	0.15%	0.13%	0.13%	0.10%	0.10%	0.12%	0.15%	0.22%	0.25%	--
20	0.10%	0.09%	0.10%	0.10%	0.10%	0.10%	0.10%	0.11%	0.12%	0.10%	0.09%	--
21	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.10%	0.10%	0.09%	0.09%	0.09%	--
22	0.10%	0.10%	0.10%	0.10%	0.10%	0.09%	0.10%	0.10%	0.11%	0.11%	0.13%	--
23	0.09%	0.10%	0.11%	0.11%	0.10%	0.10%	0.10%	0.11%	0.19%	0.25%	0.25%	--
24	0.09%	0.09%	0.10%	0.10%	0.10%	0.10%	0.10%	0.09%	0.11%	0.09%	0.10%	--
25	0.09%	0.10%	0.11%	0.10%	0.10%	0.12%	0.15%	0.25%	0.45%	0.55%	0.44%	--
26	0.10%	0.09%	0.09%	0.10%	0.10%	0.10%	0.10%	0.10%	0.09%	0.10%	0.12%	--
27	0.09%	0.10%	0.09%	0.09%	0.09%	0.09%	0.10%	0.10%	0.10%	0.12%	0.13%	--
28	0.09%	0.10%	0.09%	0.10%	0.09%	0.09%	0.10%	0.12%	0.13%	0.10%	0.11%	--
29	0.11%	0.11%	0.10%	0.11%	0.12%	0.13%	0.17%	0.27%	0.52%	0.67%	0.58%	--
30	0.09%	0.10%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.10%	0.11%	0.13%	--
31	0.10%	0.10%	0.10%	0.10%	0.09%	0.09%	0.10%	0.09%	0.10%	0.10%	0.12%	--
32	0.09%	0.10%	0.10%	0.10%	0.10%	0.09%	0.09%	0.09%	0.09%	0.09%	0.10%	--
33	0.09%	0.10%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.10%	0.10%	--
34	0.09%	0.10%	0.10%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	--
35	0.10%	0.10%	0.10%	0.09%	0.10%	0.09%	0.09%	0.09%	0.09%	0.12%	0.16%	--
36	0.09%	0.09%	0.10%	0.10%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	--
37	0.10%	0.09%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.14%	0.15%	0.15%	--
38	0.09%	0.09%	0.10%	0.10%	0.10%	0.10%	0.10%	0.09%	0.09%	0.10%	0.10%	--
39	0.09%	0.09%	0.09%	0.09%	0.10%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	--
40	0.09%	0.09%	0.10%	0.10%	0.09%	0.10%	0.09%	0.10%	0.09%	0.09%	0.09%	--
THD	1.14%	1.35%	1.44%	1.51%	1.59%	1.80%	1.84%	1.89%	2.02%	2.18%	2.25%	13%
PWHD	2.54%	2.66%	2.74%	2.70%	2.65%	2.66%	2.82%	3.22%	4.57%	5.47%	5.06%	22%
Phase L2												
Harm	P/P_{Emax}											Limit

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on. Nr.	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
1	1.07%	9.87%	20.21%	30.28%	40.3%	50.37%	60.41%	70.81%	80.88%	90.56%	100.10%	--
2	0.56%	0.77%	0.61%	0.58%	0.61%	0.69%	0.72%	0.71%	0.77%	0.88%	1.06%	8%
3	0.22%	0.25%	0.40%	0.39%	0.42%	0.43%	0.44%	0.49%	0.59%	0.80%	1.09%	--
4	0.27%	0.19%	0.40%	0.43%	0.50%	0.55%	0.59%	0.62%	0.61%	0.56%	0.51%	4%
5	0.34%	0.54%	0.73%	0.86%	1.01%	1.15%	1.21%	1.21%	1.15%	1.04%	0.88%	10.7%
6	0.28%	0.26%	0.48%	0.54%	0.58%	0.49%	0.47%	0.47%	0.52%	0.59%	0.65%	2.6%
7	0.25%	0.31%	0.41%	0.34%	0.27%	0.27%	0.29%	0.35%	0.46%	0.62%	0.82%	7.2%
8	0.18%	0.13%	0.18%	0.15%	0.18%	0.21%	0.26%	0.29%	0.37%	0.53%	0.74%	2%
9	0.09%	0.11%	0.11%	0.11%	0.12%	0.10%	0.10%	0.11%	0.11%	0.16%	0.25%	--
10	0.15%	0.11%	0.14%	0.18%	0.20%	0.20%	0.19%	0.19%	0.22%	0.35%	0.57%	1.6%
11	0.14%	0.12%	0.09%	0.13%	0.19%	0.23%	0.23%	0.22%	0.22%	0.24%	0.26%	3.1%
12	0.13%	0.13%	0.11%	0.09%	0.11%	0.17%	0.19%	0.22%	0.32%	0.46%	0.66%	1.3%
13	0.13%	0.15%	0.15%	0.13%	0.14%	0.16%	0.18%	0.16%	0.16%	0.21%	0.26%	2.0%
14	0.09%	0.11%	0.09%	0.10%	0.10%	0.10%	0.11%	0.11%	0.10%	0.22%	0.46%	--
15	0.09%	0.10%	0.10%	0.09%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.16%	--
16	0.09%	0.10%	0.11%	0.09%	0.09%	0.10%	0.11%	0.12%	0.14%	0.26%	0.42%	--
17	0.10%	0.14%	0.14%	0.13%	0.13%	0.13%	0.14%	0.13%	0.11%	0.10%	0.15%	--
18	0.10%	0.09%	0.12%	0.10%	0.09%	0.11%	0.13%	0.15%	0.21%	0.28%	0.42%	--
19	0.09%	0.12%	0.13%	0.13%	0.11%	0.09%	0.09%	0.10%	0.14%	0.19%	0.31%	--
20	0.09%	0.09%	0.10%	0.10%	0.10%	0.09%	0.10%	0.12%	0.09%	0.14%	0.23%	--
21	0.09%	0.09%	0.10%	0.10%	0.09%	0.09%	0.09%	0.10%	0.10%	0.18%	0.33%	--
22	0.09%	0.10%	0.10%	0.09%	0.10%	0.09%	0.09%	0.10%	0.12%	0.17%	0.20%	--
23	0.09%	0.09%	0.10%	0.11%	0.10%	0.10%	0.11%	0.13%	0.18%	0.24%	0.29%	--
24	0.11%	0.10%	0.10%	0.11%	0.10%	0.10%	0.10%	0.15%	0.19%	0.14%	0.19%	--
25	0.10%	0.10%	0.10%	0.12%	0.11%	0.13%	0.16%	0.25%	0.45%	0.68%	0.77%	--
26	0.10%	0.09%	0.09%	0.09%	0.10%	0.09%	0.09%	0.10%	0.10%	0.13%	0.17%	--
27	0.10%	0.09%	0.09%	0.09%	0.10%	0.10%	0.10%	0.11%	0.12%	0.23%	0.31%	--
28	0.09%	0.10%	0.09%	0.09%	0.09%	0.09%	0.10%	0.12%	0.13%	0.10%	0.11%	--
29	0.10%	0.11%	0.10%	0.11%	0.12%	0.13%	0.16%	0.26%	0.43%	0.46%	0.38%	--
30	0.09%	0.13%	0.10%	0.09%	0.09%	0.09%	0.09%	0.10%	0.11%	0.12%	0.20%	--
31	0.09%	0.09%	0.10%	0.11%	0.10%	0.10%	0.09%	0.09%	0.12%	0.28%	0.44%	--
32	0.09%	0.10%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.10%	0.16%	0.28%	--
33	0.10%	0.10%	0.10%	0.09%	0.10%	0.09%	0.09%	0.09%	0.10%	0.17%	0.22%	--
34	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.10%	0.09%	0.10%	0.17%	0.27%	--
35	0.10%	0.10%	0.10%	0.09%	0.10%	0.09%	0.09%	0.09%	0.10%	0.14%	0.22%	--
36	0.09%	0.10%	0.11%	0.10%	0.09%	0.10%	0.09%	0.10%	0.11%	0.21%	0.32%	--
37	0.09%	0.10%	0.10%	0.09%	0.10%	0.10%	0.10%	0.11%	0.13%	0.17%	0.16%	--
38	0.09%	0.09%	0.09%	0.10%	0.09%	0.09%	0.10%	0.09%	0.11%	0.22%	0.32%	--
39	0.09%	0.09%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	--
40	0.09%	0.09%	0.09%	0.10%	0.09%	0.09%	0.09%	0.10%	0.11%	0.20%	0.28%	--
THD	1.02%	1.23%	1.42%	1.48%	1.63%	1.75%	1.84%	1.90%	2.07%	2.41%	2.94%	13%
PWHD	2.53%	2.69%	2.71%	2.69%	2.66%	2.66%	2.81%	3.34%	4.51%	6.35%	8.29%	22%

Phase L3												
Harm on. Nr.	P/P_{Emax}											Limit
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	

1	0.91%	9.9%	20.40%	30.51%	40.54%	50.58%	60.64%	71.01%	81.08%	90.93%	100.73%	--
2	0.61%	0.73%	0.57%	0.60%	0.59%	0.71%	0.73%	0.71%	0.72%	0.85%	1.11%	8%
3	0.20%	0.20%	0.28%	0.31%	0.32%	0.33%	0.33%	0.37%	0.48%	0.69%	1.02%	--
4	0.15%	0.13%	0.42%	0.47%	0.58%	0.56%	0.58%	0.60%	0.60%	0.52%	0.46%	4%
5	0.41%	0.68%	0.76%	0.80%	0.91%	1.00%	1.03%	1.01%	0.91%	0.77%	0.65%	10.7%
6	0.21%	0.15%	0.15%	0.15%	0.19%	0.17%	0.18%	0.20%	0.24%	0.35%	0.47%	2.6%
7	0.30%	0.39%	0.46%	0.41%	0.34%	0.39%	0.38%	0.45%	0.57%	0.78%	1.01%	7.2%
8	0.21%	0.13%	0.19%	0.16%	0.17%	0.13%	0.14%	0.17%	0.20%	0.36%	0.61%	2%
9	0.11%	0.10%	0.10%	0.11%	0.11%	0.10%	0.10%	0.10%	0.11%	0.17%	0.26%	--
10	0.12%	0.10%	0.14%	0.15%	0.16%	0.11%	0.10%	0.10%	0.12%	0.29%	0.54%	1.6%
11	0.13%	0.14%	0.10%	0.13%	0.23%	0.27%	0.25%	0.25%	0.22%	0.25%	0.30%	3.1%
12	0.13%	0.10%	0.10%	0.10%	0.10%	0.13%	0.13%	0.16%	0.22%	0.37%	0.56%	1.3%
13	0.14%	0.17%	0.14%	0.13%	0.15%	0.20%	0.20%	0.18%	0.17%	0.26%	0.36%	2.0%
14	0.11%	0.12%	0.10%	0.10%	0.10%	0.12%	0.13%	0.12%	0.11%	0.22%	0.42%	--
15	0.09%	0.11%	0.10%	0.10%	0.10%	0.10%	0.09%	0.10%	0.11%	0.13%	0.20%	--
16	0.09%	0.11%	0.11%	0.10%	0.10%	0.11%	0.11%	0.11%	0.11%	0.19%	0.37%	--
17	0.11%	0.14%	0.17%	0.15%	0.14%	0.14%	0.14%	0.14%	0.10%	0.17%	0.28%	--
18	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.12%	0.16%	0.24%	0.37%	--
19	0.09%	0.13%	0.17%	0.14%	0.12%	0.11%	0.10%	0.10%	0.16%	0.32%	0.50%	--
20	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.11%	0.11%	0.12%	0.16%	0.22%	--
21	0.09%	0.10%	0.09%	0.10%	0.10%	0.09%	0.10%	0.09%	0.11%	0.19%	0.33%	--
22	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.12%	0.17%	--
23	0.09%	0.10%	0.11%	0.11%	0.10%	0.10%	0.11%	0.13%	0.23%	0.39%	0.50%	--
24	0.11%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.13%	0.13%	0.14%	0.18%	--
25	0.10%	0.10%	0.12%	0.12%	0.11%	0.13%	0.15%	0.24%	0.50%	0.74%	0.76%	--
26	0.11%	0.10%	0.09%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.13%	0.16%	--
27	0.10%	0.10%	0.10%	0.09%	0.10%	0.10%	0.10%	0.11%	0.12%	0.19%	0.28%	--
28	0.10%	0.10%	0.09%	0.09%	0.09%	0.09%	0.10%	0.11%	0.12%	0.10%	0.15%	--
29	0.10%	0.11%	0.10%	0.11%	0.12%	0.13%	0.18%	0.28%	0.52%	0.56%	0.31%	--
30	0.09%	0.11%	0.09%	0.09%	0.09%	0.09%	0.09%	0.10%	0.10%	0.11%	0.13%	--
31	0.10%	0.11%	0.10%	0.10%	0.09%	0.10%	0.10%	0.10%	0.12%	0.26%	0.37%	--
32	0.10%	0.09%	0.10%	0.10%	0.09%	0.09%	0.09%	0.09%	0.09%	0.16%	0.26%	--
33	0.09%	0.10%	0.10%	0.09%	0.10%	0.09%	0.10%	0.10%	0.11%	0.16%	0.19%	--
34	0.10%	0.10%	0.10%	0.09%	0.10%	0.10%	0.10%	0.09%	0.10%	0.17%	0.26%	--
35	0.09%	0.10%	0.09%	0.10%	0.10%	0.10%	0.09%	0.09%	0.10%	0.10%	0.13%	--
36	0.09%	0.10%	0.10%	0.10%	0.09%	0.09%	0.09%	0.10%	0.12%	0.19%	0.30%	--
37	0.10%	0.09%	0.10%	0.09%	0.09%	0.09%	0.10%	0.11%	0.16%	0.20%	0.18%	--
38	0.09%	0.10%	0.10%	0.10%	0.09%	0.10%	0.10%	0.10%	0.11%	0.20%	0.28%	--
39	0.09%	0.10%	0.10%	0.10%	0.09%	0.09%	0.10%	0.10%	0.10%	0.10%	0.10%	--
40	0.09%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.11%	0.20%	0.26%	--
THD	1.06%	1.27%	1.34%	1.38%	1.48%	1.60%	1.64%	1.69%	1.85%	2.26%	2.85%	13%
PWHD	2.61%	2.79%	2.81%	2.75%	2.68%	2.73%	2.89%	3.34%	4.91%	6.84%	8.15%	22%

Phase L1												
Inter-harmon. (Hz)	P/P_{Emax}											Limit
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
75	0.02%	0.02%	0.04%	0.04%	0.99%	1.49%	0.06%	0.09%	0.17%	0.13%	0.13%	-
125	0.01%	0.02%	0.03%	0.03%	0.83%	1.17%	0.06%	0.05%	0.09%	0.12%	0.11%	-
175	0.01%	0.02%	0.02%	0.02%	0.68%	0.84%	0.05%	0.04%	0.07%	0.15%	0.13%	-

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Inter-harmon. (Hz)	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	Limit
225	0.01%	0.02%	0.02%	0.02%	0.40%	0.47%	0.03%	0.04%	0.09%	0.22%	0.22%	-
275	0.01%	0.01%	0.02%	0.01%	0.12%	0.19%	0.02%	0.02%	0.05%	0.08%	0.08%	-
325	0.01%	0.01%	0.01%	0.01%	0.10%	0.15%	0.02%	0.03%	0.08%	0.21%	0.20%	-
375	0.01%	0.01%	0.01%	0.01%	0.08%	0.11%	0.01%	0.01%	0.02%	0.03%	0.03%	-
425	0.01%	0.01%	0.01%	0.01%	0.06%	0.10%	0.01%	0.01%	0.01%	0.02%	0.01%	-
475	0.01%	0.01%	0.01%	0.01%	0.05%	0.07%	0.01%	0.01%	0.01%	0.01%	0.01%	-
525	0.01%	0.01%	0.01%	0.01%	0.03%	0.05%	0.01%	0.01%	0.02%	0.03%	0.03%	-
575	0.01%	0.01%	0.01%	0.01%	0.03%	0.04%	0.01%	0.01%	0.01%	0.01%	0.01%	-
625	0.01%	0.01%	0.01%	0.01%	0.02%	0.04%	0.01%	0.01%	0.02%	0.02%	0.02%	-
675	0.01%	0.01%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
725	0.01%	0.01%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
775	0.01%	0.00%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
825	0.01%	0.00%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
875	0.01%	0.01%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
925	0.01%	0.01%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
975	0.01%	0.00%	0.01%	0.01%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1025	0.01%	0.00%	0.00%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1075	0.01%	0.00%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1175	0.01%	0.00%	0.00%	0.00%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1225	0.01%	0.00%	0.00%	0.00%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1275	0.01%	0.00%	0.01%	0.01%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1325	0.01%	0.00%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1375	0.01%	0.00%	0.00%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1425	0.01%	0.01%	0.00%	0.00%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1475	0.01%	0.01%	0.00%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1525	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1575	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1625	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.00%	0.01%	0.01%	0.01%	-
1675	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1725	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1775	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1825	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1875	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1925	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1975	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-

Phase L2

Inter-harmon. (Hz)	P/P$_{Emax}$											Limit
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
75	0.04%	0.04%	0.05%	0.05%	0.94%	1.37%	0.07%	0.09%	0.17%	0.11%	0.10%	-
125	0.03%	0.04%	0.04%	0.04%	0.77%	1.10%	0.07%	0.06%	0.09%	0.11%	0.13%	-
175	0.03%	0.04%	0.04%	0.04%	0.67%	0.89%	0.06%	0.06%	0.11%	0.15%	0.15%	-
225	0.03%	0.03%	0.03%	0.03%	0.41%	0.48%	0.05%	0.05%	0.11%	0.25%	0.24%	-
275	0.03%	0.02%	0.02%	0.03%	0.15%	0.21%	0.03%	0.03%	0.06%	0.07%	0.08%	-
325	0.02%	0.02%	0.02%	0.02%	0.12%	0.17%	0.03%	0.03%	0.08%	0.21%	0.20%	-
375	0.02%	0.01%	0.02%	0.02%	0.09%	0.12%	0.02%	0.02%	0.03%	0.04%	0.04%	-
425	0.01%	0.01%	0.01%	0.01%	0.07%	0.09%	0.02%	0.02%	0.02%	0.02%	0.02%	-
475	0.01%	0.01%	0.01%	0.01%	0.05%	0.07%	0.02%	0.01%	0.02%	0.02%	0.02%	-
525	0.01%	0.01%	0.01%	0.01%	0.03%	0.05%	0.01%	0.01%	0.02%	0.03%	0.03%	-
575	0.01%	0.01%	0.01%	0.01%	0.03%	0.05%	0.01%	0.01%	0.01%	0.01%	0.01%	-

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												Limit
625	0.01%	0.01%	0.01%	0.01%	0.03%	0.04%	0.01%	0.01%	0.02%	0.02%	0.02%	-
675	0.01%	0.01%	0.01%	0.01%	0.02%	0.04%	0.01%	0.01%	0.01%	0.01%	0.01%	-
725	0.01%	0.01%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
775	0.01%	0.01%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
825	0.01%	0.01%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
875	0.01%	0.01%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
925	0.01%	0.01%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
975	0.01%	0.01%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1025	0.01%	0.01%	0.01%	0.01%	0.01%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1075	0.01%	0.00%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1175	0.01%	0.01%	0.00%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1225	0.01%	0.00%	0.00%	0.00%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1275	0.01%	0.00%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1325	0.01%	0.00%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1375	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1425	0.01%	0.01%	0.00%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1475	0.01%	0.01%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1525	0.01%	0.01%	0.01%	0.01%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1575	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.00%	0.01%	0.01%	0.01%	0.01%	-
1625	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1675	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1725	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1775	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1825	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1875	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1925	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1975	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-

Phase L3

Inter-harmon. (Hz)	P/P$_{Emax}$											Limit
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
75	0.04%	0.04%	0.05%	0.05%	1.00%	1.44%	0.07%	0.10%	0.17%	0.12%	0.11%	-
125	0.04%	0.04%	0.05%	0.04%	0.82%	1.15%	0.07%	0.06%	0.10%	0.13%	0.11%	-
175	0.03%	0.04%	0.04%	0.04%	0.67%	0.83%	0.06%	0.06%	0.07%	0.09%	0.10%	-
225	0.03%	0.03%	0.03%	0.03%	0.39%	0.47%	0.05%	0.05%	0.12%	0.29%	0.28%	-
275	0.03%	0.02%	0.03%	0.03%	0.11%	0.16%	0.03%	0.03%	0.06%	0.10%	0.10%	-
325	0.02%	0.02%	0.02%	0.02%	0.10%	0.13%	0.03%	0.03%	0.08%	0.21%	0.20%	-
375	0.02%	0.01%	0.02%	0.02%	0.08%	0.10%	0.02%	0.02%	0.03%	0.04%	0.03%	-
425	0.01%	0.01%	0.01%	0.01%	0.05%	0.08%	0.02%	0.02%	0.02%	0.02%	0.02%	-
475	0.01%	0.01%	0.01%	0.01%	0.04%	0.06%	0.02%	0.01%	0.02%	0.02%	0.02%	-
525	0.01%	0.01%	0.01%	0.01%	0.03%	0.05%	0.01%	0.01%	0.03%	0.03%	0.03%	-
575	0.01%	0.01%	0.01%	0.01%	0.02%	0.04%	0.01%	0.01%	0.01%	0.01%	0.01%	-
625	0.01%	0.01%	0.01%	0.01%	0.02%	0.03%	0.01%	0.01%	0.02%	0.02%	0.02%	-
675	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
725	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
775	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
825	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
875	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
925	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
975	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-

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											Limit
1025	0.00%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1075	0.01%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1175	0.01%	0.00%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1225	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1275	0.01%	0.01%	0.01%	0.01%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1325	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1375	0.01%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1425	0.01%	0.01%	0.00%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1475	0.01%	0.01%	0.01%	0.01%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1525	0.01%	0.01%	0.01%	0.01%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1575	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1625	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1675	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1725	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1775	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1825	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1875	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1925	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
1975	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-

Phase L1											
Higher-harmon. (kHz)	P/P_{Emax}										Limit
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
2.1	0.02%	0.03%	0.03%	0.04%	0.04%	0.05%	0.07%	0.09%	0.08%	0.09%	0.09%	-
2.3	0.02%	0.02%	0.03%	0.04%	0.04%	0.04%	0.05%	0.06%	0.06%	0.06%	0.05%	-
2.5	0.02%	0.02%	0.02%	0.03%	0.04%	0.04%	0.04%	0.04%	0.05%	0.05%	0.05%	-
2.7	0.01%	0.02%	0.02%	0.02%	0.02%	0.03%	0.03%	0.03%	0.03%	0.03%	0.04%	-
2.9	0.01%	0.01%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.03%	-
3.1	0.01%	0.01%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	-
3.3	0.01%	0.01%	0.01%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	-
3.5	0.01%	0.01%	0.01%	0.01%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
3.7	0.01%	0.01%	0.01%	0.01%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
3.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
4.1	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
4.3	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
4.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
4.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
4.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
5.1	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
5.3	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
5.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
5.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
5.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
6.1	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
6.3	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
6.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
6.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
6.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
7.1	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
7.3	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-

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Certificate of Conformity

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Higher-harmon. (kHz)	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	Limit
7.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
7.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
7.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
8.1	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
8.3	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
8.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
8.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
8.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-

Phase L2

Higher-harmon. (kHz)	P/P_{Emax}											Limit
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
2.1	0.03%	0.04%	0.03%	0.03%	0.03%	0.05%	0.06%	0.08%	0.07%	0.08%	0.08%	-
2.3	0.03%	0.02%	0.03%	0.04%	0.04%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	-
2.5	0.02%	0.02%	0.02%	0.03%	0.04%	0.04%	0.04%	0.04%	0.05%	0.05%	0.05%	-
2.7	0.01%	0.02%	0.02%	0.02%	0.02%	0.03%	0.02%	0.03%	0.03%	0.04%	0.04%	-
2.9	0.01%	0.01%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	-
3.1	0.01%	0.01%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	-
3.3	0.01%	0.01%	0.01%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	-
3.5	0.01%	0.01%	0.01%	0.01%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
3.7	0.01%	0.01%	0.01%	0.01%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
3.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
4.1	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
4.3	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
4.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
4.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
4.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
5.1	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
5.3	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
5.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
5.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
5.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
6.1	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
6.3	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
6.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
6.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
6.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
7.1	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
7.3	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
7.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
7.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
7.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
8.1	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
8.3	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
8.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
8.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
8.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-

Phase L3

Higher-harmon. (kHz)	P/P_{Emax}											Limit
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	

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2.1	0.02%	0.03%	0.03%	0.04%	0.04%	0.06%	0.08%	0.08%	0.08%	0.09%	0.10%	-
2.3	0.03%	0.02%	0.03%	0.04%	0.04%	0.04%	0.05%	0.05%	0.05%	0.05%	0.05%	-
2.5	0.02%	0.02%	0.03%	0.03%	0.03%	0.03%	0.04%	0.04%	0.04%	0.04%	0.05%	-
2.7	0.01%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.03%	0.04%	0.04%	0.04%	-
2.9	0.01%	0.01%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.03%	-
3.1	0.01%	0.01%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	-
3.3	0.01%	0.01%	0.01%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	-
3.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	-
3.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
3.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
4.1	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
4.3	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
4.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
4.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
4.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
5.1	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
5.3	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
5.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
5.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
5.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
6.1	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
6.3	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
6.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
6.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
6.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
7.1	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
7.3	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
7.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
7.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
7.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
8.1	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
8.3	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
8.5	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
8.7	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-
8.9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	-

Remark:
1. Iref=72 Ad.c.
2. The harmonic values are maximum values from all phases.