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EMC TEST REPORT

Flammenpilot

(SNR. 20130625)

Reime GmbH

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EMC TEST SCHEDULE

Contractor: Reime GmbH **Date:** 25.06.2013

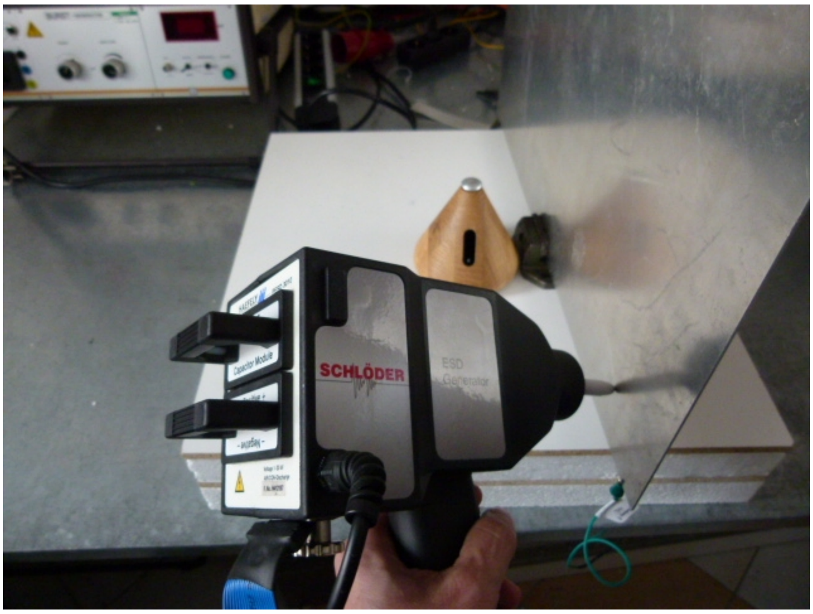
Product: Flammenpilot

Serial No.: 20130625

No.	A	ENorm	Description	Year	TL	Notes
1	☐	61000-3-2	Harmonic current emissions, ≤16A	2010		
2	☐	61000-3-3	Limit.volt. changes, fluct., flicker, ≤16A	2006		
3	☐	61000-3-11	Limit.volt. changes, fluct., flicker, ≤75A	2001		
4	☐	61000-3-12	Harmonic current emissions, ≤75A	2005		
5	☒	61000-4-2	Electrostatic discharge ESD	2009		
6	☒	61000-4-3	Radiated electromagn. immunity	2011		
7	☐	61000-4-4	Fast transient burst immunity	2010		
8	☐	61000-4-5	Surge immunity test	2007		
9	☐	61000-4-6	Conducted elektromagn. immunity	2009		
10	☐	61000-4-8	Power magnetic field immunity	2010		
11	☐	61000-4-9	Pulse magnetic field immunity	2001		
12	☐	61000-4-10	Damped osc. magnetic field immunity	2001		
13	☐	61000-4-11	Voltage Dips, Interruptions, Var. (16A)	2005		
14	☐	61000-4-12	Ring Wave Immunity	2007		
15	☐	61000-4-14	Voltage Fluctuation Immunity ≤16A	2010		
16	☐	61000-4-16	Conduct. Comm. Mode Immunity	2005		
17	☐	61000-4-29	Voltage interruption (DC)	2001		
18	☐	55011 Rad.	Radio Frequency Disturbance ISM	2011		
19	☐	55011 Cond.	Radio Frequency Disturbance ISM	2011		
20	☐	55012	Vehicles, boats, rad. disturbance	2010		
21	☒	55014	Radio Frequency Dist. Electr. Tools	2007		
22	☐	55015	Radio Frequency Dist. Lighting Equ.	2009		
23	☐	55022 Rad	Radio Frequency Disturbance ITE	2008		
24	☐	55022 Cond	Radio Frequency Disturbance ITE	2008		

Date: 28.06.2013 **Signature:**

hummel electronic	**Manuf.:**	Reime GmbH	**Date:**
	UUT:	Flammenpilot	25.06.2013
	SNR:	20130625	
	Spec.:	EN61000-4-2	



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EMS
Electrostatic discharge
EN61000-4-2

Manuf.:	Reime GmbH	**Date:**	26.06.2013
UUT:	Flammenpilot	**Temp.:**	22 °C
SNR:	20130625	**Hum.:**	41 %

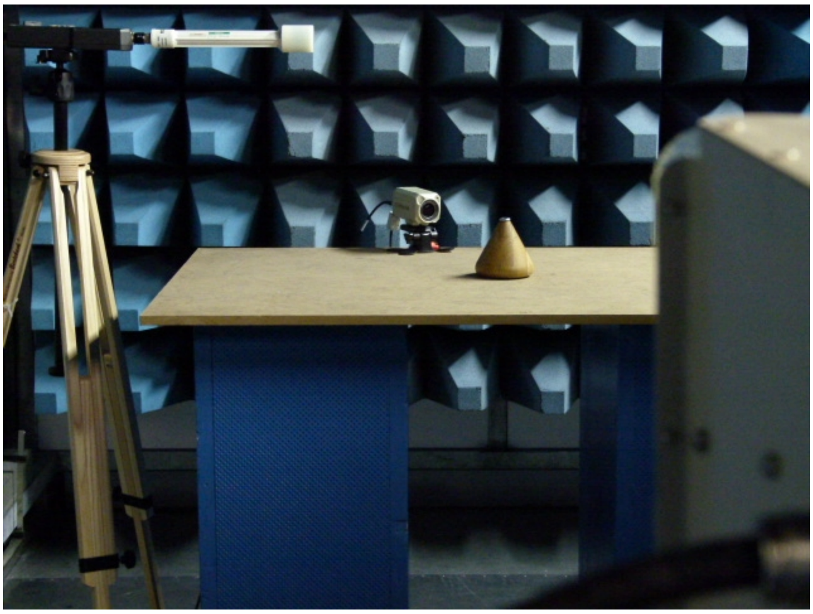
Generator: PESD 3010

Imm. test level:	☐ 1	☐ 2	☒ 3	☐ 4	☐ X
U_i [kV] air:	2	4	8	15	
U_i [kV] cond:	2	4	6	8	
No. of pulses:	10	10	10	10	

No.	Location	U_i [kV]	Pol.	Air	Cond	Crit.	Remarks
1	Direction X	8	+	☒	☐	A	C.P.
2	Direction X	8	-	☒	☐	A	C.P.
3	Direction Y	8	+	☒	☐	A	C.P.
4	Direction Y	8	-	☒	☐	A	C.P.
5	Direction Z	8	+	☒	☐	A	C.P.
6	Direction Z	8	-	☒	☐	A	C.P.
7				☐	☐		
8				☐	☐		
9				☐	☐		
10				☐	☐		
11				☐	☐		
12				☐	☐		
13				☐	☐		
14				☐	☐		
15				☐	☐		
16				☐	☐		
17				☐	☐		
18				☐	☐		
19				☐	☐		
20				☐	☐		

Rem.: C.P. = Coupling Plate.
No changes in performance. Crit. A.

Date: 28.06.2013 **Sig.:**



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EMS
Electromagnetic Susceptibility
EN61000-4-3

Manuf.: Reime GmbH
UUT: Flammenpilot
SNR: 20130625

Date: 25.06.2013
Temp.: 21 °C
Hum.: 30 %

Generator: SME06
Amplifier: 7200LC-CE, 5182
Antenna: LPA20-2000, BHA-1-6
Dist. [m]: ☐ 1 ☒ 3 ☐ 10

Imm. test level: ☐ 1 ☒ 2 ☐ 3 ☐4 ☐X
E_l [V/m]: 1 3 10 30

No.	f [MHz]	Pol.	Ang. [°]	Crit.	Remarks
1	80-1000	H	0	A	
2	80-1000	V	0	A	
3	80-1000	H	90	A	
4	80-1000	V	90	A	
5	80-1000	H	180	A	
6	80-1000	V	180	A	
7	80-1000	H	270	A	
8	80-1000	V	270	A	
9	1000-4000	H	0	A	
10	1000-4000	V	0	A	
11	1000-4000	H	90	A	
12	1000-4000	V	90	A	
13	1000-4000	H	180	A	
14	1000-4000	V	180	A	
15	1000-4000	H	270	A	
16	1000-4000	V	270	A	

Rem.: No changes in performance. Crit.A.

Date: 28.06.2013

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EMS
Electromagnetic Susceptibility
EN61000-4-3

Manuf.:	Reime GmbH	**Date:**	25.06.2013
UUT:	Flammenpilot	**Temp.:**	21 °C
SNR:	20130625	**Hum.:**	30 %

Generator: SME06
Amplifier: A340/CJ
Antenna: BHA-1-6
Dist. [m]: ☐ 1 ☒ 3 ☐ 10

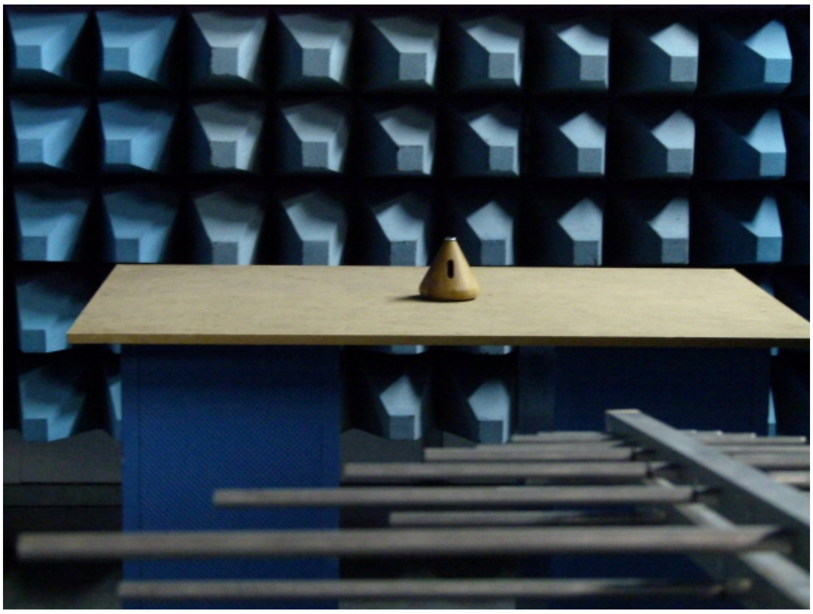
Imm. test level: ☐ 1 ☒ 2 ☐ 3 ☐4 ☐X
E_l [V/m]: 1 3 10 30

No.	f [MHz]	Pol.	Ang. [°]	Crit.	Remarks
1	4000-6000	H	0	A	
2	4000-6000	V	0	A	
3	4000-6000	H	90	A	
4	4000-6000	V	90	A	
5	4000-6000	H	180	A	
6	4000-6000	V	180	A	
7	4000-6000	H	270	A	
8	4000-6000	V	270	A	
9					
10					
11					
12					
13					
14					
15					
16					

Rem.: No changes in performance. Crit.A.

Date: 28.06.2013

hummel electronic	**Manuf.:** Reime GmbH **UUT:** Flammenpilot **SNR:** 20130625 **Spec.:** EN55014	**Date:** 25.06.2013



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EMC
Electromagnetic compatibility
EN55014

Manuf.:	Reime GmbH	**Date:**	25.06.2013
UUT:	Flammenpilot	**Temp.:**	22 °C
SNR:	20130625	**Hum.:**	40 %

Rad.:

Receiver:	8572A
Amplifier:	-
Antenna:	LPA20-2000
Dist. [m]:	☐ 1 ☒ 3 ☐ 10
Rem.:	-

Cond.:

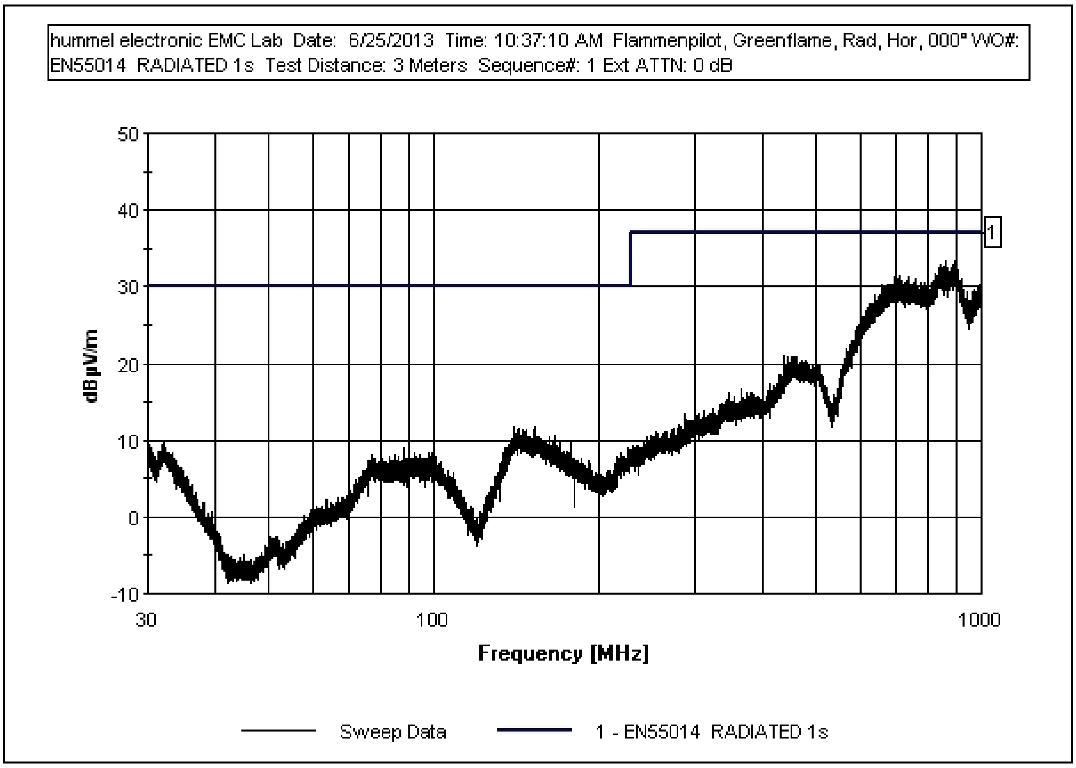
Receiver:	-
Amplifier:	-
LISN:	-
Rem.:	-

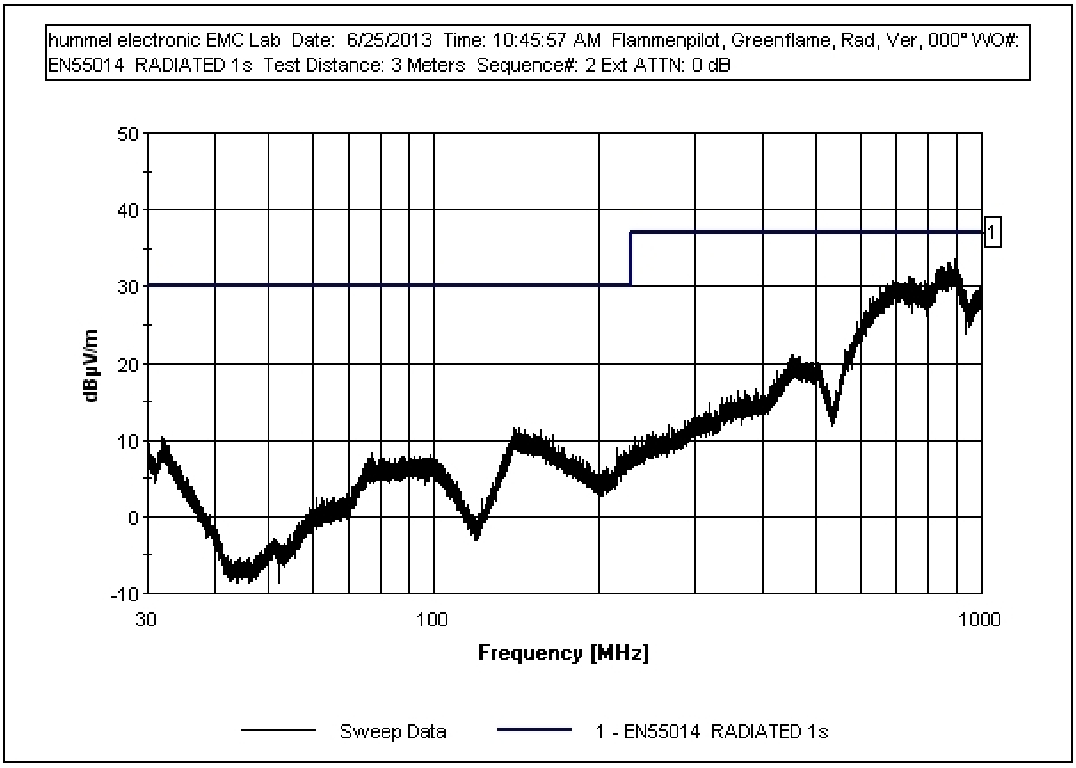
Rem.: Compliant EN55014. See plots.

Date: 28.06.2013

Sig.:

hummel electronic	**Manuf.:**	Reime GmbH	**Date:**	
	UUT:	Flammenpilot	25.06.2010	
	SNR:	20130625		
	Spec.:	EN55014 (rad.)		





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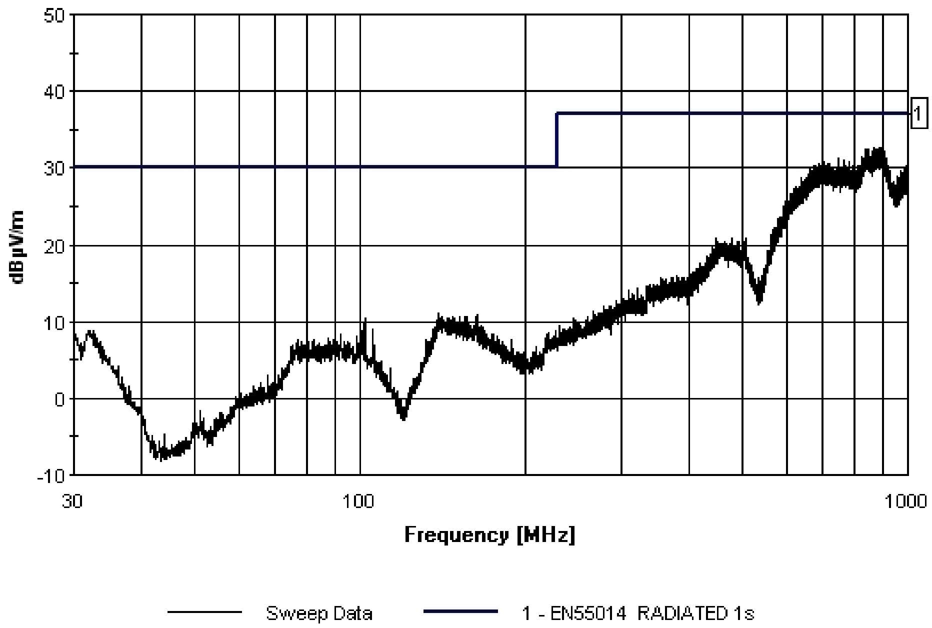
	Manuf.:	Reime GmbH	25.06.2010
	UUT:	Flammenpilot	
	SNR:	20130625	
	Spec.:	EN55014 (rad.)	

hummel electronic EMC Lab Date: 6/25/2013 Time: 1:20:44 PM Flammenpilot, Greenflame, Rad, Hor, 090° WO#:
EN55014 RADIATED 1s Test Distance: 3 Meters Sequence#: 4 Ext ATTN: 0 dB



hummel electronic EMC Lab Date: 6/25/2013 Time: 1:16:33 PM Flammenpilot, Greenflame, Rad, Ver, 090° WO#:
EN55014 RADIATED 1s Test Distance: 3 Meters Sequence#: 3 Ext ATTN: 0 dB