

验证报告

No. SHAEC1523246702

日期: 2015年11月25日 第1页,共9页

上海庆科信息技术有限公司

上海市普陀区金沙江路2145弄5号9楼

样品名称: EMW1062
 SGS工作编号: SP15-037471 - SUZ
 测试基本型号: EMW1062
 客户参考信息: EMW1062-P/EMW1062-E /EMW1062-B
 样品接收日期: 2015年11月13日
 验证周期: 2015年11月13日 - 2015年11月23日
 验证要求: 参考欧盟RoHS指令2002/95/EC的重订指令2011/65/EU。
 验证方法: 请参见后续页。
 验证结果: 请参见后续页。
 验证结论: 依据对所提供样品的相关验证, 铅、汞、镉、六价铬、多溴联苯(PBBs)、多溴二苯醚(PBDEs)的测试结果符合欧盟RoHS指令2002/95/EC的重订指令2011/65/EU附录II的限值要求。
 备注: 本报告测试数据仅代表所测试样品的结果, 未经实验室书面授权, 不得部分复制本报告。

通标标准技术服务(上海)有限公司
 授权签名

王卫

Terry Wang 王卫
 批准签署人



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No. SHAEC1523246702

日期: 2015年11月25日 第2页,共9页

验证方法:

1. 参考IEC 62321-2:2013, 拆分申请者提供的成品。
2. 参考IEC 62321-1:2013, 仅对本报告照片中标识的样品进行了下列测试分析。
 - (1) 参考IEC 62321-3-1: 2013, 用能量色散型X射线荧光分析仪器进行筛选
 - (2) 湿法化学测试方法
 - a. 参考IEC 62321-5:2013, 用ICP-OES测定镉的含量
 - b. 参考IEC 62321-5:2013, 用ICP-OES测定铅的含量
 - c. 参考IEC 62321-4:2013, 用ICP-OES测定汞的含量
 - d. 参考IEC 62321:2008, 用点测试法或比色法测定六价格的含量
 - e. 参考IEC 62321:2008, 用GC-MS测定多溴联苯和多溴二苯醚的含量



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日期: 2015年11月25日 第3页,共9页

样品编号	样品描述	清单编号	限用物质	EDXRF 测试结果(1)	化学测试结果(2) (mg/kg)	EU RoHS 结论	样品提交/再次提交日期
1	EMW1062-PCB 防尘盖上 白色塑料标签		Pb Cd Hg Cr(VI) PBBs PBDEs	BL BL BL BL BL BL	--- --- --- --- --- ---	符合 符合 符合 符合 符合 符合	13 Nov 2015
2	EMW1062-PCB 上银色金属防尘盖		Pb Cd Hg Cr(VI) PBBs PBDEs	BL BL BL BL --- ---	--- --- --- --- --- ---	符合 符合 符合 符合 --- ---	13 Nov 2015
3	EMW1062-PCB 上黑色电容本体		Pb Cd Hg Cr(VI) PBBs PBDEs	BL BL BL BL BL BL	--- --- --- --- --- ---	符合 符合 符合 符合 符合 符合	13 Nov 2015
4	EMW1062-PCB 上银色晶振本体		Pb Cd Hg Cr(VI) PBBs PBDEs	BL BL BL BL BL BL	--- --- --- --- --- ---	符合 符合 符合 符合 符合 符合	13 Nov 2015



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No. SHAEC1523246702

日期: 2015年11月25日 第4页,共9页

样品编号	样品描述	清单编号	限用物质	EDXRF 测试结果(1)	化学测试结果(2) (mg/kg)	EU RoHS 结论	样品提交/再次提交日期
5	EMW1062-PCB 上黑色IC1本体		Pb	BL	---	符合	13 Nov 2015
			Cd	BL	---	符合	
			Hg	BL	---	符合	
			Cr(VI)	BL	---	符合	
			PBBs	BL	---	符合	
			PBDEs	BL	---	符合	
6	EMW1062-PCB 上黑色IC2本体		Pb	BL	---	符合	13 Nov 2015
			Cd	BL	---	符合	
			Hg	BL	---	符合	
			Cr(VI)	BL	---	符合	
			PBBs	BL	---	符合	
			PBDEs	BL	---	符合	
7	EMW1062-PCB 上白色IPEX本体		Pb	BL	---	符合	13 Nov 2015
			Cd	BL	---	符合	
			Hg	BL	---	符合	
			Cr(VI)	BL	---	符合	
			PBBs	BL	---	符合	
			PBDEs	BL	---	符合	
8	EMW1062-PCB 上银色金属焊锡		Pb	BL	---	符合	13 Nov 2015
			Cd	BL	---	符合	
			Hg	BL	---	符合	
			Cr(VI)	BL	---	符合	
			PBBs	---	---	---	
			PBDEs	---	---	---	



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No. SHAEC1523246702

日期: 2015年11月25日 第5页,共9页

样品编号	样品描述	清单编号	限用物质	EDXRF测试结果(1)	化学测试结果(2)(mg/kg)	EU RoHS结论	样品提交/再次提交日期
9	EMW1062-蓝色PCB本体		Pb	BL	---	符合	13 Nov 2015
			Cd	BL	---	符合	
			Hg	BL	---	符合	
			Cr(VI)	BL	---	符合	
			PBBs	BL	---	符合	
			PBDEs	BL	---	符合	



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备注:

- (1) (a) 对于限用物质是PBBs和PBDEs, 其结果显示的是总Br含量; 限用物质是Cr(VI), 其结果显示的是总Cr含量。
- (b) EDXRF所得的测试结果只作初步筛选, 如果EDXRF结果超出IEC62321-3-1:2013所规定的警戒范围, 我们建议客户用更精确的化学测试方法测试样品, 如用ICP-OES测试Cd, Pb, Hg; 用UV-Vis测试Cr(VI); 用GC-MS测试PBBs和PBDEs(单位: mg/kg)。

元素	聚合物	金属	复合材料
Cd	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$LOD < X < (150+3\sigma) \leq OL$
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Br	$BL \leq (300-3\sigma) < X$	--	$BL \leq (250-3\sigma) < X$
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$

(c) BL = 低于限度, OL = 超出限度, IN = 不确定, LOD = 检测极限值, -- = 未规定。

(d) 对于复合材料, XRF筛选测试RoHS元素所得数据可能与样品中实际含量不同。

(2) (a) mg/kg = 0.0001%, MDL = 方法检测限, ND = 未检出 (低于MDL), --- = 未检测, - = 无清单编号。

(b) 化学测试方法的表达单位和方法检测限

测试项目	Pb	Cd	Hg
单位	mg/kg	mg/kg	mg/kg
方法检测限	10	10	10

任何一种PBBs和PBDEs的方法检测限是100mg/kg;
聚合物和复合材料样品中Cr(VI)的方法检测限是10mg/kg。

(c) 按照IEC62321:2008, 金属样品中Cr(VI)的结果表示为阳性/阴性。
阳性 = 检测到Cr(VI), 阴性 = 未检测到Cr(VI)。



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(3) 根据申请商申明, 型号“EMW1062”的材质与型号“EMW1062-P, EMW1062-E, EMW1062-B”的相同, 其测试结果用于替代型号“EMW1062-P, EMW1062-E, EMW1062-B”的测试结果。申请公司将承担所有的差异和风险。



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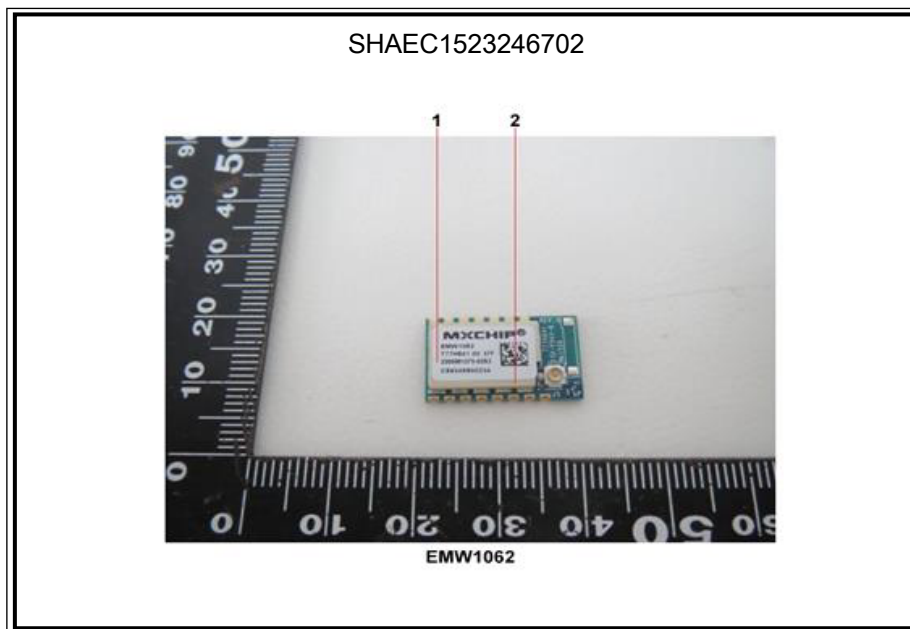
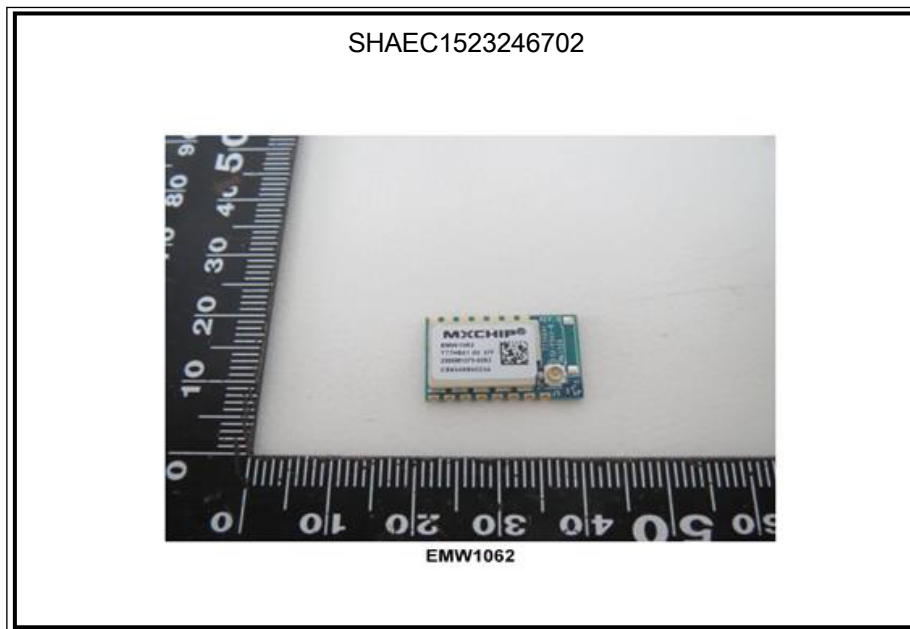
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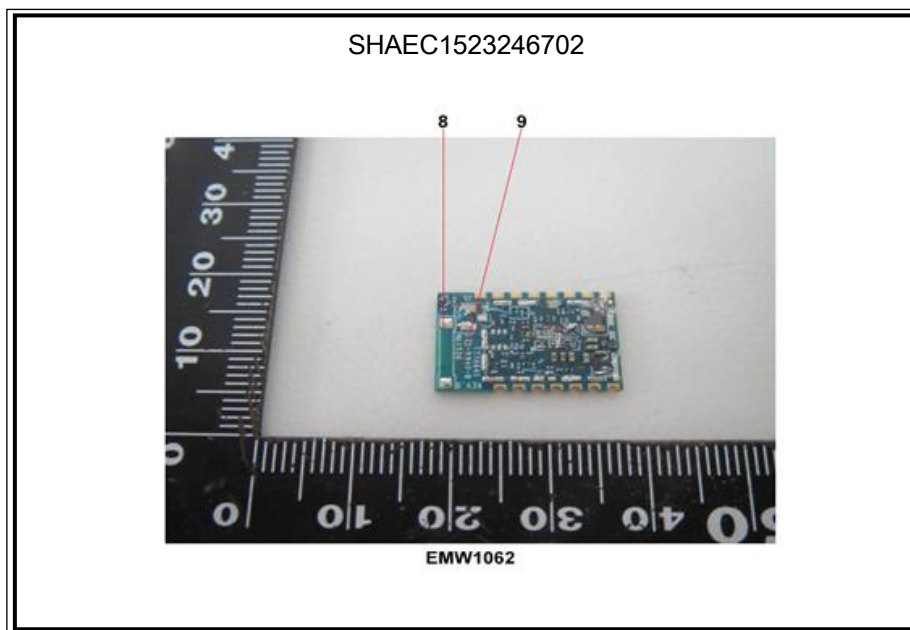
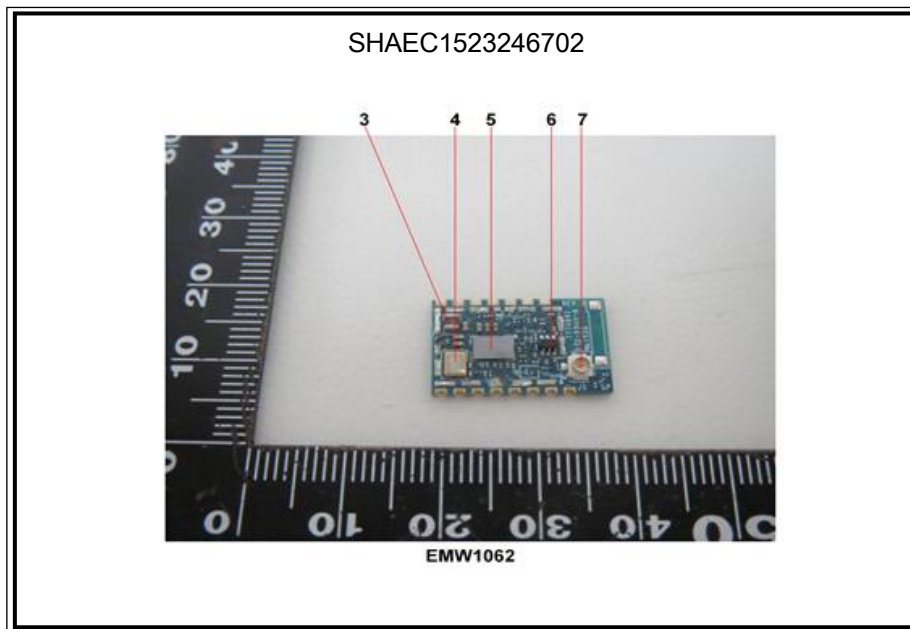
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日期: 2015年11月25日 第8页,共9页

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*** 报告完 ***