

FCC SAR Exclusion Report

Product name : AXA IN ERL BLE 2
Applicant : AXA Stenman Nederland B.V
FCC ID : 2AIOH-AXA-ERL-02

Test report No. : 190100025 FCC RF exposure Ver 1.00

Laboratory information

Documentation

The test report must always be reproduced in full; reproduction of an excerpt only is subject to written approval of the testing laboratory. The documentation of the testing performed on the tested devices is archived for 10 years at Telefication Nederland.

Testing Location

Test Site	Telefication BV
Test Site location	Edisonstraat 12a 6902 PK Zevenaar The Netherlands Tel. +31889983600 Fax. +31316583189

Revision History

Version	Date	Remarks	By
v0.50	18-03-2019	Draft version	KR
v1.00	18-03-2019	Release version	KR

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1 General Description

1.1 Applicant

Client name:	AXA Stenman Nederland B.V
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Contact name:	Mr. G. Hutten

1.2 Manufacturer

Manufacturer name:	AXA Stenman Nederland B.V
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Telephone:	+31 318 536 111
E-mail:	Gerbrand.hutten@allegion.com
Contact name:	Mr. G. Hutten

1.3 Tested Equipment Under Test (EUT)

Product name:	AXA IN ERL BLE2
Brand name:	AXA
Product Description:	Electronic bicycle lock with BLE
FCC ID:	2AIOH-AXA-ERL-02
ISED ID:	21586-AXAERL02
Software version:	--
Hardware version:	--
Date of receipt	22-01-2019
Date of assessment:	18-03-2019

1.4 SAR Measurement Evaluation

1.4.1 Maximum Output Power

The maximum radiated power including tune-up tolerance is shown as below.

Mode	Field Strength (dB μ V/m)	EIRP (mW)
Bluetooth LE *	83.2 @ 10m	0.7
RFID **	2.8 @ 10m	0.0000000065
NFC ***	21.3 @ 30m	0.000005
	Total	0.7

* from Telefication report 190100025 005 v2.00

** from Telefication report 190100025 002 v1.00

*** from Telefication report 190100025 004 v2.00

1.4.2 SAR Testing Exclusions, Portable use, < 100 MHz and < 200 mm

Appendix C

SAR Test Exclusion Thresholds for < 100 MHz and < 200 mm

Approximate SAR test exclusion power thresholds at selected frequencies and test separation distances are illustrated in the following table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

MHz	< 50	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	mm
100	237	474	481	487	494	501	507	514	521	527	534	541	547	554	561	567	mW
50	308	617	625	634	643	651	660	669	677	686	695	703	712	721	729	738	
10	474	948	961	975	988	1001	1015	1028	1041	1055	1068	1081	1095	1108	1121	1135	
1	711	1422	1442	1462	1482	1502	1522	1542	1562	1582	1602	1622	1642	1662	1682	1702	
0.1	948	1896	1923	1949	1976	2003	2029	2056	2083	2109	2136	2163	2189	2216	2243	2269	
0.05	1019	2039	2067	2096	2125	2153	2182	2211	2239	2268	2297	2325	2354	2383	2411	2440	
0.01	1185	2370	2403	2437	2470	2503	2537	2570	2603	2637	2670	2703	2737	2770	2803	2837	

1.4.3 SAR Testing Exclusions, Portable use, for 100 MHz and 6 GHz and < 50 mm

Appendix A

SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	<i>SAR Test Exclusion Threshold (mW)</i>
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	
MHz	30	35	40	45	50	mm
150	232	271	310	349	387	<i>SAR Test Exclusion Threshold (mW)</i>
300	164	192	219	246	274	
450	134	157	179	201	224	
835	98	115	131	148	164	
900	95	111	126	142	158	
1500	73	86	98	110	122	
1900	65	76	87	98	109	
2450	57	67	77	86	96	
3600	47	55	63	71	79	
5200	39	46	53	59	66	
5400	39	45	52	58	65	
5800	37	44	50	56	62	

Note: 10-g Extremity SAR Test Exclusion Power Thresholds are 2.5 times higher than the 1-g *SAR Test Exclusion Thresholds* indicated above. These thresholds do not apply, by extrapolation or other means, to occupational exposure limits.

1.5 Summary

This device has a maximum output power below 1 mW and is therefore exempted from SAR as per KDB 447498 D01 General RF Exposure Guidance v06.