

Test Report

Test report No.:
T-J0005-I0105

Date of issue:
2017-12-01

Applicant:
Bee-Fee Ltd., 27 Old Gloucester Street, WC1N 3AX London, United Kingdom

Manufacturer:
Bee-Fee Ltd., 27 Old Gloucester Street, WC1N 3AX London, United Kingdom

Product:
Energy Stars
Product type:
Internet games (reels)

Target device:
BF Games
Target device type:
Internet gaming system

Jurisdiction:
United Kingdom
Test Criteria:
Remote gambling and software technical standards June 2017.

Pages (with annexes):	Verdict (subject to conditions in Chapter 1):
12	Pass
Test report type:	Subject file No.:
Game	17000460008
Test group(s):	
Payback, Software	
Remarks:	
N.A.	

Project responsible person [signature]:

Reviewed by [signature]:

Gregor Zakrajšek

Franci Pikl



1 Conditions and settings for compliance with test criteria

Testing performed with English language setting.

Game texts are stored in file **allJSON.json**; this file shall include the following section:

"es_rules_about": "Energy Stars is a 5-reel, 3-row video slot with 20 paylines. The objective is to land as many identical symbols as possible along a payline. Winning combinations start on the first reel on the left (excluding the SCATTER symbol) and run along an active payline to the last reel on the right. Only the highest winning combination of one symbol is paid out.",

"es_rules_wild_symbol": "The WILD in the game is the STAR symbol. Combinations using only WILD symbols can create wins on lines with bets. The WILD can appear on all reels and substitute for all other symbols except SCATTER symbols. It is possible to land up to three WILD symbols on each reel. Therefore, it is possible to spin fifteen WILD symbols on the reels, allowing for the biggest possible win in this game.",

"es_rules_scatter_symbol": "The SCATTER in this game is the BELL symbol. SCATTER symbols can appear on all reels. Only one SCATTER can appear on each reel. Landing three or more SCATTER symbols on the reels creates a winning combination."

To comply with RTS 8 Auto-play functionality, server configuration (available in adminui) shall include the following setting:

```
"autoplaySpinCountLimits": [ 10, 20, 30, 40 ], //number of autospins
```

To comply with RTS 13B Reality checks functionality, server configuration (available in adminui) shall include the following setting:

```
"realityChecks": [{"caption": "RealityCheck", "interval": 600, "isDefault": true}]
```

2 Protection against unauthorized access

See the corresponding platform test report(s).

3 Gaming device general properties

General device design:	Server, Linux, MongoDB
Cabinet(s):	N.A.
Available player denominations:	N.A.
Available tokenizations:	N.A.
Supported communication protocols:	N.A.
Supported progressives:	N.A.
Minimum bet (credits):	1 (per line)
Maximum bet (credits):	20 (per line)



4 Annexes

Annex / Test group	Attached [yes/no]	Remark
Functional tests	No	/
Randomness tests	No	/
Payback ratio tests	Yes	/
Software analysis	Yes	/
Device specific tests	No	/
Other annexes	No	/

5 Previous / transferred test reports results

N.A.

6 Additional information

The following RTS articles from Remote gambling and software technical standards, June 2017 were reviewed during testing and found compliant:

- RTS 1 Requirements 1A (before April 1, 2018), 1A (after April 1, 2018), 1B (before April 1, 2018), 1B (after April 1, 2018), 1C (after April 1, 2018): **Not applicable (IGS requirements)**
- RTS 2 Requirements 2A (before April 1, 2018), 2A (after April 1, 2018), 2B (before April 1, 2018), 2B (after April 1, 2018), 2C (after April 1, 2018), 2D: **Game compliant where applicable, see also IGS and RGS tests**
- RTS 3 Requirements 3A, 3C, 3D: **Game compliant where applicable (No virtual events)**
- RTS 4 Requirements 4A, 4B: **Game complies (No influence for time-critical events)**
- RTS 5 Requirement 5A: **Game complies**
- RTS 6 Requirement 6A: **Game complies**
- RTS 7 Requirements 7A, 7B, 7C, 7D, 7E: **Game compliant where applicable (see also RGS tests)**
- RTS 8 Requirement 8A: **Game complies**
- RTS 9 Requirements 9A, 9B: **Not applicable (No progressives configured during testing)**
- RTS 10 Requirements 10A, 10B, 10C: **Not applicable (No peer-to-peer betting; Stateless game)**
- RTS 11 Requirements 11A (before October 1, 2018), 11A (after October 1, 2018), 11B (before April 1, 2018), 11B (after April 1, 2018): **Not applicable (No peer-to-peer betting)**
- RTS 12 Requirements 12A (before April 1, 2018), 12A (after April 1, 2018), 12B: RTS 8 Requirement 8A: **Not applicable (not game related)**
- RTS 13 Requirements 13A, 13B: **Game complies**
- RTS 14 Requirement 14A: **Game complies**
- RTS 15 Requirement 15A: **Not applicable (classic internet reel game)**
- RTS 16 Requirements 16A, 16B (after October 1, 2018), 16C: **Not applicable (no peer-to-peer)**
- RTS 17 Requirement 17A: **Not applicable (no live dealer studios)**

7 Documentation references

The following documentation was used:

- User help,



- Screen capture images,
- Par sheets, Game description,
- Source code and configuration files.

8 Other test report references

Test group	Laboratory	Test report identification and date	Remarks
Functional tests	SIQ	T-J0005-I0098, 2017-12-01	BF Gameserver (with extensions)
Software analysis	SIQ	T-J0005-I0098, 2017-12-01	BF Gameserver (with extensions)
Randomness tests	SIQ	T-J0005-I0098, 2017-12-01	BF Gameserver (with extensions)

Test report replacements and extensions may apply.



1 Description of the game

Game Notes

This is a 3x5 video slot. The number of lines: 20.

All winning combinations are left to right only on a pay line, except scatter combinations, which may occur in any position.

Only the highest winning combination is paid per line.

Minimum bet per line: 1

Maximum bet per line (recommended): 20

All wins are multiplied by the line bet.

Only Scatter wins are multiplied by the total game bet.

3 or more Scatter symbols on the screen form winning combination.

Wild Symbol

Wild symbols appear on all reels.

"Winnings from Wild symbols are possible. The Wild symbols can makes winnings on each line with bet."

"Wild are stacked symbol. On each reel can be seen 1, 2 or 3 Wild symbols. 15 Wild symbols on screen will make the maximum possible win for this game."

Substitutes for all symbols on its own position only, except for Scatter.

Scatter Symbol

Scatter symbols appear on all reels.

3 or more SCATTER symbols on the screen form winning combination.

"When all reels are stopped, on each reel on the screen can be seen only one SCATTER symbol."

Symbols

- CHERRY
- PLUM
- LEMON
- MELON
- ORANGE
- GRAPE
- STAR
- BELL

2 Pay-glass / artwork illustrations or photos





3 Payback ratio

3.1 Payback ratio determination method

The payback ratio value (return to player) was derived using simulation.

3.2 Payback ratio results

Energy Stars	
Declared by manufacturer	Verified by test laboratory
96,01%	96,08%

4 Test summary

The following tests for the game were performed:

- Calculation of the payback ratio,
- Conditions and settings for compliance with test criteria,
- Verification of the information to the player.



1 Software identification

Software version(s): 1.0

Software components:

Manufacturer, product ID	Description, function	Media, type	Position, circuit	Size	ID code (SHA1)	ID code (MD5)
Bee-Fee, libenergystars.s o	Game library	HDD / SSD	lib\plugins\	146,52 KB	bbac4f3fdc82 21bd86fae3df 175214da8f1f c9d3	3ba741058e30 c0740a68ff00 94c8b137
Bee-Fee, base_config.js on	Graphics configuration file	HDD / SSD	games\es\	6,73 KB	e5f4deb014c8 abc7a3fd42fd a8ec0255b899 052d	a3b7bbb7c65d 82dd686a0960 a053f597
Bee-Fee, es_16_10.jpg	Game graphics file	HDD / SSD	games\es\i mages\16_ 10\	1 MB	75188def648c 67ff23e5bde5 01c2476e1b90 9cc8	9b044c086761 10eb49498992 2b31b2f5
Bee-Fee, es_16_10.json	Graphics configuration file	HDD / SSD	games\es\i mages\16_ 10\	1,65 KB	26cc742f23ca cd6d68520f6e 552aa0999a6f 6178	0b03f5b345b4 22c0d03fbd3b c8e01111
Bee-Fee, es_16_10_payta ble_en.jpg	Game graphics file	HDD / SSD	games\es\i mages\16_ 10\	210,64 KB	952d47a5c327 c93bcae05218 5d648a37bf64 015a	ec1789730c98 321f8b099b0d c38d1dd8
Bee-Fee, es_5_4.jpg	Game graphics file	HDD / SSD	games\es\i mages\5_4 \	1,14 MB	6f33c2b86d33 82ed68f970ab 7ffce2a8aaf3 0d1e	ff1278ae8d08 d90ce7e1b18c 4826ebd3
Bee-Fee, es_5_4.json	Graphics configuration file	HDD / SSD	games\es\i mages\5_4 \	1,67 KB	5f3fbc5d3362 7a260f34f6d7 add28ee76823 fd39	b57a44240216 3d11287c4ec0 de0e8e0e
Bee-Fee, es_5_4_paytabl e_en.jpg	Game graphics file	HDD / SSD	games\es\i mages\5_4 \	0,83 MB	52697c70c35c c834608d1de6 6f79b6c36091 3db8	bb6bc5a8bc89 a7754736ae8a 65ad0275
Bee-Fee, es_common.js on	Graphics configuration file	HDD / SSD	games\es\i mages\co mmon\	6,47 KB	1632b4a70b94 71bc2835085d 11ae8bf64205 f7a3	8a0542fb1dbd d3b71e2a0f37 9ab80ede
Bee-Fee, es_common.png _main.jpg	Game graphics file	HDD / SSD	games\es\i mages\co mmon\	292,71 KB	0844656d2c6a bfa6850520d7 1879a8206a05 c65c	3990d49bce0e cf95674df06a eeebf339
Bee-Fee, es_common.png _mask.jpg	Game graphics file	HDD / SSD	games\es\i mages\co mmon\	105,53 KB	cea262e54de6 4fe0cfd2418f 420ce5f30680 d9e7	da6fd1ee2123 b64af7bb6654 488ce535
Bee-Fee, es_en.json	Graphics configuration file	HDD / SSD	games\es\i mages\co mmon\	1,63 KB	962725fe7da3 633bc79d953e ac20c8caa94f fbc1	9e1b8027bab9 b88ba2fb9dd8 1149e9af



Manufacturer, product ID	Description, function	Media, type	Position, circuit	Size	ID code (SHA1)	ID code (MD5)
Bee-Fee, es_en.png_main.jpg	Game graphics file	HDD / SSD	games\es\images\common\	19,58 KB	dce747f982bc367837a5a4d2fe3f5ee060e9a8a6	784066ca3ed8b0e8d4a3e21821ad9b06
Bee-Fee, es_en.png_mask.jpg	Game graphics file	HDD / SSD	games\es\images\common\	23,62 KB	9e30a57f27095fc79e75d9d59e0e62cb9dd076da	a880199bd04e6a6802a48bfc b43f9b2a
Bee-Fee, es_font.json	Graphics configuration file	HDD / SSD	games\es\images\common\	21,14 KB	c265a2d9859024905fb1f63de455db02e5b55848	f504eb9532b16da0c01596a352a16935
Bee-Fee, es_font.png_main.jpg	Game graphics file	HDD / SSD	games\es\images\common\	47,94 KB	ed8f3869b0f2b13923fa7bb6056bc66751556011	1bd96939b342c2b8d654c95e05717a57
Bee-Fee, es_font.png_mask.jpg	Game graphics file	HDD / SSD	games\es\images\common\	59,72 KB	7d37cf4950297ce28d9604f0b28fe106a0c73b19	43ed2531ca6d7dc145cc86477df25e44
Bee-Fee, es_symbols.json	Graphics configuration file	HDD / SSD	games\es\images\common\	81,73 KB	199bb84fe1307c81a9a282df20ae374fcac71827	1cf22bd2beb22df4e2c64258f46aa20c
Bee-Fee, es_symbols.png_main.jpg	Game graphics file	HDD / SSD	games\es\images\common\	1,31 MB	eaedb7062db502b0332f8c17e120a29c8b91a8f	5f571a2dc6073e21368b75eeb1411c22
Bee-Fee, es_symbols.png_mask.jpg	Game graphics file	HDD / SSD	games\es\images\common\	745,99 KB	efdd55d5a1ab725f77dd1ee5b671664ccd08a066	9a6a5555d098390a1d5a454f6602e6f
Bee-Fee, icons_es.json	Graphics configuration file	HDD / SSD	games\es\images\common\	40,47 KB	bf13d31ece07ba93a1222ee7b44ffca4a96ee27f	db5460cb8a5bb48e4cc041f2d090614
Bee-Fee, icons_es.png_main.jpg	Game graphics file	HDD / SSD	games\es\images\common\	1,85 MB	c8ace188173fbc3c4837aba25ebef63ab2e5d48e	5851118efa47357d987666ab5b03d809
Bee-Fee, icons_es.png_mask.jpg	Game graphics file	HDD / SSD	games\es\images\common\	0,81 MB	1a16c01cb9c7c9d9174cc4d4cf0a963b3948004f	9c6e1b9cc8657b35be0d2bde78bf1b58
Bee-Fee, es_background_mobile.jpg	Game graphics file	HDD / SSD	games\es\images\webl\	345,3 KB	2f3fc2e32cda8b2c41912a6ca26079af3bbfb15c	0111ae8cd5d5c82516b106ad4fa9251b
Bee-Fee, es_logo.png	Game graphics file	HDD / SSD	games\es\images\webl\	101,01 KB	243fca0f0f789b6438a85ba03b583d280c8b7986	5fd420742500719fdd875b69f76ee31b
Bee-Fee, es_paytable_en_web.png	Game graphics file	HDD / SSD	games\es\images\webl\	784,64 KB	4ab14fb469b8e4f8cf1b8354f1ff06b9ce9edd40	8bb07029a4f8fbc4c439bc8431b73a6d



Manufacturer, product ID	Description, function	Media, type	Position, circuit	Size	ID code (SHA1)	ID code (MD5)
Bee-Fee, es_rules_web.json	Graphics configuration file	HDD / SSD	games\es\images\web\	1,67 KB	fe7d794487d1569fa2cf5560a94b0d7050d72697	f60ec8a19717ad4c2371d49fd72d6b41
Bee-Fee, es_rules_web.png_main.jpg	Game graphics file	HDD / SSD	games\es\images\web\	246 KB	c21db855142c6bef02bbb83512bc1e96399ace79	f88d55ba50d842cc7f674f46d89e2d44
Bee-Fee, es_rules_web.png_mask.jpg	Game graphics file	HDD / SSD	games\es\images\web\	47,88 KB	8bd12d6831561f42a8c2be8d189e2950a399a3d6	721d1dd1bd8e0a0160b7aa701c2c06e9
Bee-Fee, es_web.json	Graphics configuration file	HDD / SSD	games\es\images\web\	3,25 KB	ea8818858093497e5a20c97a7f7bc3b3122769d8	ced775983cb0e2876b89cb8fc3cdb2db
Bee-Fee, es_web.png_main.jpg	Game graphics file	HDD / SSD	games\es\images\web\	203,51 KB	671d97a0008aad5b6fbbe4d452a075e8cfbb86f	6eb946e66db8421f7a6cfb70211a15e1
Bee-Fee, es_web.png_mask.jpg	Game graphics file	HDD / SSD	games\es\images\web\	48,86 KB	5c22eb00b5a261e6d5481776b43bab41660d1560	12a0e09726996642584bba9c3fea9290

2 Test summary

Software analysis for the game was performed:

- Source code analysis:
 - o Jurisdiction independent tests: software review.
 - o Jurisdiction dependent tests.
- Binary code authentication.
- Archiving and depositing.