

| DECLARATION OF PERFORMANCE<br>According to Construction Products Regulation EU N° 305/2011  |  |
|---|--|
| <b>DoP Ref: GLT-245-DoP-2</b>   |  |
| 1. Unique Product identification code:  | 47-081   |
| 2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4):             | ZT-BEAM/XTRA, Zeta-Beam Xtra. Self-aligning optical beam smoke detector  |
| 3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer: | Smoke detector – Line detector using an optical light beam,<br>For use in fire detection and alarm systems within buildings.   |
| 4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5):                      | The Fire Beam Company Limited<br>Unit 8 Thames Industrial Estate<br>High Street South<br>Dunstable<br>Bedfordshire<br>LU6 3HLZ   |
| 5. Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12(2):                   | Zeta Alarms Limited<br>72-78 Morfa Road<br>Swansea<br>SA1 2EN<br>UK  |
| 6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:                          | System 1   |
| 7. In case of the declaration of performance concerning a construction product covered by the harmonized standard:  | EN45-12:2015<br>Product certification body No: 0786 VdS Schadenverhütung GmbH performed type testing and the initial inspection of the manufacturing plant and of the factory production control with continuous surveillance assessment and approval of the factory production control under system 1 and issued the Certificate of constancy of performance<br><br><b>0786-CPR-21041</b> |
| 8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:                   | Not applicable, see item 7   |

## 9. Declared performance:

All requirements including all Essential Characteristics and the corresponding performances for the intended use or uses indicated in 3. have been determined as described in the hEN mentioned in the following table.

| Essential characteristics  | Performance   | Harmonized Technical Specification |
|--|---|------------------------------------|
|  |   | EN54-12: 2015                      |
| <b>Operational reliability</b>   |   |                                    |
| -Individual alarm indication   | Red LED   | 4.2.1                              |
| -Connection of ancillary devices   | Correct operation   | 4.2.2                              |
| -Manufacturer's adjustments  | Special means required  | 4.2.3                              |
| -On-site adjustment of response value  | Special means required  | 4.2.4                              |
| -Protection against ingress of foreign bodies  | Protected (> 1.3mm)   | 4.2.5                              |
| -Monitoring of detachable detectors and connections                                      | Fault signal released   | 4.2.6                              |
| -Requirements for software-controlled detectors  | Docs, design and storage correct  | 4.2.7                              |
| <b>Nominal activation conditions / sensitivity</b>                                       |   |                                    |
| -Reproducibility   | $C_{min} \geq 0.4d8$<br>$C_{max}/C_{re} \leq 1.33$ ; $C_{rep}/C_{m;n} \leq 1.5$ | 4.3.1                              |
| -Repeatability   | $C_{min} \geq 0.4d8$ ; $C_{max}/C_{min} \leq 1.6$                               | 4.3.2                              |
| -Tolerance to beam misalignment  | Maximum angle >0.4°   | 4.3.3                              |
| -Rapid changes in attenuation  | Correct operation   | 4.3.4                              |
| -Response to slowly developing fires   | Correct operation   | 4.3.5                              |
| -Optical path length dependence  | $C_{min} \geq 0.4d8$ ; $C_{max}/C_{min} \leq 1.6$                               | 4.3.6                              |
| -Stray light   | $C_{min} \geq 0.4d8$ ; $C_{max}/C_{min} \leq 1.6$                               | 4.3.7                              |
| <b>Tolerance to supply voltage</b>   |   |                                    |
| -Variation in supply parameters  | $C_{min} \geq 0.4d8$ ; $C_{max}/C_{min} \leq 1.6$                               | 4.4                                |
| <b>Performance under fire conditions</b>   |   |                                    |
| -Fire sensitivity  | $m_a < 0.7 \text{ dB m}^{-1}$   | 4.5                                |
| <b>Durability of nominal activation conditions / sensitivity, temperature resistance</b> |   |                                    |
| -Dry heat (operational)  | $C_{m;n} \geq 0.4d8$ ; $C_{max}/C_{min} \leq 1.6$                               | 4.6.1.1                            |
| -Cold (operational)  | $C_{min} \geq 0.4d8$ ; $C_{max}/C_{min} \leq 1.6$                               | 4.6.1.2                            |
| <b>Durability of nominal activation conditions / sensitivity, humidity resistance</b>    |   |                                    |
| -Damp heat, steady state (operational)   | $C_{min} \geq 0.4d8$ ; $C_{max}/C_{min} \leq 1.6$                               | 4.6.2.1                            |
| -Damp heat, steady state (endurance)   | $C_{min} \geq 0.4d8$ ; $C_{max}/C_{min} \leq 1.6$                               | 4.6.2.2                            |
| <b>Durability of nominal activation conditions/ sensitivity, vibration resistance</b>    |   |                                    |
| -Vibration, (endurance)  | $C_{min} \geq 0.4d8$ ; $C_{max}/C_{min} \leq 1.6$                               | 4.6.3.1                            |
| -Impact (operational)  | $C_{mm} \geq 0.4d8$ ; $C_{max}/C_{min} \leq 1.6$                                | 4.6.3.2                            |
| <b>Durability of nominal activation conditions/ sensitivity, electrical stability</b>    |   |                                    |
| -Electromagnetic compatibility (EMC), Immunity tests (operational)                       | $C_{min} \geq 0.4d8$ ; $C_{max}/C_{min} \leq 1.6$                               | 4.6.4                              |
| <b>Durability of operational reliability, Corrosion resistance</b>                       |   |                                    |
| -Sulphur dioxide (SO <sub>2</sub> ) corrosion (endurance)                                | $C_{min} \geq 0.4d8$ ; $C_{max}/C_{min} \leq 1.6$                               | 4.6.5                              |

10. The performance of the product identified in 1. and 2. is in conformity with the declared performance in 9.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in 4.

Signed for and on behalf of Zeta Alarms Limited by:

Name: N.R. P. Jones

Signature:



Position: Technical Manager

Place of issue: Swansea

Date of issue: 10<sup>th</sup> October 2019