Report on Compliance with Clause 5.3.6.2.2.1 of EN 81-20:2014

(Safety rules for the construction and installation of lifts - Lifts for the transport of persons and goods Part 20: Passenger and goods passenger lifts)

Report requested by:

Manufacturer:	**Avire Limited.**
Address:	**Unit 1. The Switchback, Gardner Road, Maidenhead, Berkshire SL6 7RJ**
Submission By:	**Steve Reddicliffe (Design Support Engineer)**
Date of Request:	**4th December 2018**
Date of Testing:	**15th January 2019**

Description of Product:

Panachrome+ Family of light curtain systems [including]:

- **G3510 (3D) light curtain}**
- **G3520 (3D) light curtain}**
- **G3540 (3D) light curtain}**
- **G3550 (3D) light curtain}**   **with controller Types G3850**
- **G2510 (2D) light curtain}**   **&   G3851**
- **G2520 (2D) light curtain}**
- **G2540 (2D) light curtain}**
- **G2550 (2D) light curtain}**

The following drawings/documents have been examined:
1. **EN 81-20 Test Plan Schedule.**
2. **Product scans covering the G 3510 light curtain dated January 2019.**
3. **Panachrome+ Universal Controller data sheets and installation guide.**

Conclusions of examination

The documents detailed in this report have been examined and the testing detailed in this report for the light curtain products specifically mentioned has been satisfactorily completed and these light curtains detailed are found to be in compliance with EN 81-20:2014.

Special conditions applicable to the issue of this report: None.

This report on compliance is valid for 5 years until **31st January 2024**

Report No. **Avire-Prod-003**   *BV Contract No.* **6483595**

Signed: _____   *Date:* **30th January 2019**
                Mike Smith – Principal Lift Specialist

Atlantic House, Atlas Business Park, Simonsway, Manchester M22 5PR

1. This report is applicable to the following range of light curtains.

Product	No. of Diodes	IP rating	Range	Fixing Arrangement	
				Dynamic	Comment
G3510	48	65	6 metres	Yes	No Restrictions
G3520	48	65	6 metres	Yes	No Restrictions
G3540	48	65	6 metres	Yes	No Restrictions
G3550	48	65	6 metres	Yes	No Restrictions
G2510	48	65	6 metres	Yes	No Restrictions
G2520	48	65	6 metres	Yes	No Restrictions
G2540	48	65	6 metres	Yes	No Restrictions
G2550	48	65	6 metres	Yes	No Restrictions

2. The following verification/testing was carried out on the G3510 light curtain detailed in the product range at point 1. (All products contain the same printed circuit boards).

EN 81-20 clause	Requirement	G3510 Product
5.3.6.2.2.1 b) 1)	Protective device to cover at least 25mm to 1600mm above car sill	Verified
5.3.6.2.2.1 b) 2)	Protective device shall be capable of detecting obstacles of minimum 50mm diameter	Passed
5.3.6.2.2.1 b) 3)	To counteract persistent obstructions when closing the protective device may be deactivated after pre-determined time	Passed (default is 10 seconds but adjustable to 360 seconds).

3. The following additional verification/testing was carried out on the G3510 light curtain detailed in the product range at point 1. (All products contain the same printed circuit board).

Test Requirement	Expected Result	Product G35 10
Simulate obstruction of top diode	Signal sent to controller to reduce kinetic energy of the doors (Relay 1)	Passed
Simulate obstruction of bottom diode	Signal sent to controller to reduce kinetic energy of the doors (Relay 1)	Passed
Simulate obstruction of 2 adjacent diodes	Signal sent to controller to reduce kinetic energy of the doors (Relay 1)	Passed
Simulate obstruction of up to 5 randomly distributed diodes	Signal sent to controller to reduce kinetic energy of the doors (Relay 2)	Passed
Simulate obstruction of 6 randomly distributed diodes	Signal sent to controller to reduce kinetic energy of the doors (Relay 1)	Passed