

DECLARATION OF CONFORMITY

Manufacturer's declaration about conformity of ADB Safegate lights to aerodromes requirements.

We herewith declare that the lights described in the Annex 1 to this declaration:

- have been developed by ADB Safegate,
- are in compliance with the following standards and their respective requirements:
 - ICAO Annex 14 Aerodrome Standards and Recommended Practices - ASRP Vol 1 - Aerodrome Design And Operations,
 - EASA - Certification Specifications Aerodromes Design - CS-ADR-DSN Issue 4/2017,
 - TCCA CAR Part 3 TP312 - Aerodrome Standards and Recommended Practices (Canada) 5th Edition/2015,
 - CASA Manual Of Standards -MOS Part 139 (Australia) version 1.14/2017,
 - NATO STANAG 3316 AATMP-07 STD - Airfield Lighting Edition A Version1 /2018.
 - Their respective catalogue sheets.

The following survey operations have been carried out at an ISO17025 accredited laboratory without noticeable remarks:

- Examination of test equipment,
- Checking of installation of units before testing,
- Colorimetric tests per applicable procedure and method.
- Photometric tests per applicable procedures and method,
 - Results of intensity values inside the beam,
 - Isocandela curves.
- Appendix 1: Specifications
- Appendices 2 & 3: summary of testing

Taking into account the satisfactory results of actual tests and examinations, we confirm that the manufacturing and the test results for the above specified units are in conformity with applicable standards, specification and data sheets.



This document supersedes DC20190131.

Issued in Zaventem – Belgium by ADB Safegate by
June 9, 2020

A handwritten signature in blue ink, appearing to read 'J. McCraner', written over the printed name.

Joshua McCraner
Director Quality Management



ANNEX 1											
LIGHT DATA	IDENTIFICATION (FAMILY)	IDENTIFICATION (LIGHT)	COLOUR	APPLICATION	REQUIREMENT						TEST REPORT
					CATALOGUE SHEET	ICAO ANNEX 14 AERODROME STANDARDS and RECOMMENDED PRACTICES - ASRP VOL 1 - AERODROME DESIGN and OPERATIONS 8th Edition, July 2018	EASA - CERTIFICATION SPECIFICATIONS AERODROMES DESIGN - CS-ADR-DSN Issue 4, December 2017	TCCA CAR PART 3 TP312-AERODROME STANDARDS and RECOMMENDED PRACTICES 5th Edition, September 2015	CASA MANUAL of STANDARDS - MOS PART 139 Version 1.14, January 2017	NATO STANAG 3316 AATMP-07 STD - AIRFIELD LIGHTING Edition A Version 1 June 2018	
FED	FED-x-xxxx	FED-1-100-RM/N Runway End High-Intensity Inset Light 12" FED-2-200-CMY Runway End High-Intensity Inset Light 12"	Clear / Yellow / Red	Runway Edge and Stopway Lights	A.03.211e	\$5.3.9 Runway edge lights \$5.3.16 Stopway lights	\$CS ADR-DSN.M.675 \$CS ADR-DSN.M.705	\$5.3.12 Runway Edge Lights \$5.3.9 Stopway Lights	\$Section 9.10.2 Runway Edge Lights \$Section 9.11 Isocandela Diagrams of Runway Lighting \$Section 9.10.22 Stopway Lights	\$4.1 Runway Edge Lighting \$4.7 Stopway Lights	MTx8P08694rev1
FAP	FAP-1-xxxx	FAP-1-300-R Approach High-Intensity Inset Light 12" FAP-1-300-C Approach High-Intensity Inset Light 12"	Clear / Red	Approach Centreline, Barrette and Side Row Lights	A.02.312e	\$5.3.4 Approach lighting systems	\$CS ADR-DSN.M.625 \$CS ADR-DSN.M.626	\$5.3.5 Approach Lighting Systems	\$Section 9.7: Approach Lighting Systems \$Section 9.8: Isocandela Diagrams of Approach Lighting	\$3.1 Simple Approach Lighting \$3.2 Precision Approach Category I Lighting System \$3.3 Precision Approach Category II/III Lighting System	MTx8P08694rev1
FTH	FTH-1-xxxx	FTH-1-200-G Threshold High-Intensity Inset Light 12"	Green	Runway Threshold and Wing Bar Inset Light	A.02.313e	\$5.3.10 Runway threshold and wing bar lights	\$CS ADR-DSN.M.680	\$5.3.7 Runway Threshold and Wing Bar Lights	\$Section 9.10.15 Additional Lighting to Enhance Threshold Location (Wing Bars) \$ Section 9.11, Figure 9.11-6.	\$4.2 Runway Threshold and Threshold Wing Bars	MTx8P08694rev1
FEN	FEN-1-xxxx	FEN-1-100-R Runway End High-Intensity Inset Light 12"	Red	Runway End Inset Light	A.03.231e	\$5.3.11 Runway end lights	\$CS ADR-DSN.M.685	\$5.3.8 Runway End Lights	\$Section 9.10.16 Runway End Lights \$Section 9.10.17 Location of Runway End Lights \$Section 9.10.18 Pattern of Runway End Lights \$Section 9.11 Isocandela Diagrams of Runway Lighting	\$ 4.3 Runway End Lights	MTx8P08694rev1



FTE	FTE-2-300	FTE-2-300 - Combined Threshold and Runway End High-Intensity Inset Light	Red / Green	Runway Threshold and Runway End Inset Light	A.02.322e	\$5.3.10 Runway threshold and wing bar lights \$5.3.11 Runway end lights	\$CS ADR-DSN.M.680 \$CS ADR-DSN.M.685	\$5.3.7 Runway Threshold and Wing Bar Lights \$5.3.8 Runway End Lights	\$Section 9.10.15 Additional Lighting to Enhance Threshold Location (Wing Bars) \$Section 9.10.16 Runway End Lights \$Section 9.10.17 Location of Runway End Lights \$Section 9.10.18 Pattern of Runway End Lights \$Section 9.11 Isocandela Diagrams of Runway Lighting	\$4.2 Runway Threshold and Threshold Wing Bars \$4.3 Runway End Lights	MTt8P08694rev1
FTD	FTD-1-045	FTD-1-045-S Taxiway Centreline, Stopbar and Intersection Inset Light	Red	Taxiway Centreline, Stopbar and Intersection Inset Light	A.03.432e	\$5.3.17 Taxiway centre line lights \$5.3.20 Stop bars	\$CS ADR-DSN.M.710 Taxiway centre line lights \$CS ADR-DSN.M.730 Stop Bar	\$5.3.21 Taxiway Centreline Lights \$5.3.23 Stop Bars	-	\$ 5.1 Taxiway Lighting \$ 5.2 Stop Bars	MTt9P03997-1
FTD	FTD-1-045	FTD-1-045-C Taxiway Centreline, Stopbar and Intersection Inset Light	Red	Taxiway Centreline, Stopbar and Intersection Inset Light	A.03.432e	\$5.3.17 Taxiway centre line lights \$5.3.20 Stop bars	\$CS ADR-DSN.M.710 Taxiway centre line lights \$CS ADR-DSN.M.730 Stop Bar	\$5.3.21 Taxiway Centreline Lights \$5.3.23 Stop Bars	-	\$ 5.1 Taxiway Lighting \$ 5.2 Stop Bars	MTt9P03997-1
FTZ	FTZ-1-045	FTZ-1-045-C	White	Touchdown Zone High Intensity Inset Light	A.03.242e	\$5.3.13 Runway touchdown zone lights	\$CS ADR-DSN.M.695	\$5.3.14 Runway Touchdown Zone Lights	-	\$ 4.5 Runway Touchdown Zone Lights	MTt9P03997-1
FRC	FRC-2-090	FRC-2-090	Red / White	Runway Centreline High-Intensity Inset Light	A.03.252e	\$5.3.12 Runway centre line lights	\$CS ADR-DSN.M.690	\$5.3.13 Runway Centreline Lights	-	\$ 4.4 Runway Centre Line Lights	MTt9P03997-1

Appendix 2: Summary of testing according to ICAO specifications

Test object	Test report	Measurement date
ADB FEN-1-100-R (Red)	MTt8P08694rev2	February 2019
ADB FAP-1-300-R (Red)	MTt8P08694rev2	February 2019
ADB FED-1-100-RM/N (Red)	MTt8P08694rev2	February 2019
ADB FTE-2-300-G/R (Red)	MTt8P08694rev2	February 2019
ADB FAP-1-300-C (White)	MTt8P08694rev2	February 2019
ADB FED-2-200-CM (White)	MTt8P08694rev2	February 2019
ADB FTH-1-200-G (Green)	MTt8P08694rev2	February 2019
ADB TLP-2_080_GY-S-2 (Green/Yellow)	MTt8P08694rev2	February 2019
ADB TLP-2_080_GY-C-2 (Green/Yellow)	MTt8P08694rev2	February 2019
ADB TLP-1_040_RN-S-1 (Red)	MTt8P08694rev2	February 2019

RISE Research Institutes of Sweden is accredited for photometric testing against ICAO Annex 14 *Aerodromes*, Volume I, July 2018.

RISE Research Institutes of Sweden AB

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ASSESSMENT

Date:
2020-04-09

Reference:
MTt8P08694-2

Page:
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Summary of results

Object	Test scope ICAO Annex 14 <i>Aerodromes</i> , Volume I, July 2018	Test result
ADB FEN-1-100-R	Runway end light Colour: Figure A1-1a Luminous intensity: Figure A2-8	Pass
ADB FAP-1-300-R	Approach side row light Colour: Figure A1-1a Luminous intensity: Figure A2-2	Pass
ADB FED-1-100-RM/N	Runway edge light Colour: Figure A1-1a Luminous intensity: Figures A2-9 and A2-10	Pass
ADB FTE-2-300-G/R	Threshold / Runway end light Colour: Figure A1-1a Luminous intensity: Figures A2-3 and A2-8	Pass
ADB FAP-1-300-C	Approach centre line light Colour: Figure A1-1a Luminous intensity: Figure A2-1	Pass
ADB FED-2-200-CM	Runway edge light Colour: Figure A1-1a Luminous intensity: Figures A2-9 and A2-10	Pass
ADB FTH-1-200-G	Threshold light Colour: Figure A1-1a Luminous intensity: Figure A2-3	Pass
ADB TLP-2_080_GY-S-2	Taxiway centre line light Colour: Figure A1-1a Luminous intensity: Figure A2-12	Pass
ADB TLP-2_080_GY-C-2	Taxiway centre line light Colour: Figure A1-1a Luminous intensity: Figure A2-14	Pass
ADB TLP-1_040_RN-S-1	Taxiway centre line light Colour: Figure A1-1a Luminous intensity: Figure A2-12	Pass

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2020-03-16

Reference

MTt9P03997-4

Page

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Belgium

Summary of testing of photometric properties of runway lights

Test object	Test report	Measurement date
FTD-1-045-S-RN-I-0 Red	MTt9P03997-1	25 February 2020
FTD-1-045-C-RN-I-0 Red	MTt9P03997-1	25 February 2020
FTZ-1-045-C-R-I-0-C0 White	MTt9P03997-1	25 February 2020
FRC-2-090-CR-II-0-C0 White	MTt9P03997-1	25 February 2020

RISE Research Institutes of Sweden is accredited for photometric testing against ICAO Annex 14 *Aerodromes*, Volume I, July 2018.

Summary of results

Object	Test scope ICAO Annex 14 <i>Aerodromes</i> , Volume I, July 2018	Test result
FTD-1-045-S-RN-I-0 Red	Taxiway Centre Line, Stop Bar and Intersection Light Colour: Figure A1-1a Luminous intensity: Figure A2-12 and A2-13	Pass
FTD-1-045-C-RN-I-0 Red	Taxiway Centre Line, Stop Bar and Intersection Light Colour: Figure A1-1a Luminous intensity: Figure A2-12 and A2-13	Pass
FTZ-1-045-C-R-I-0-C0 White	Touchdown Zone Light Colour: Figure A1-1a Luminous intensity: Figure A2-5	Pass
FRC-2-090-CR-II-0-C0 White	Runway Centre Line Light (15-m and 30-m) Colour: Figure A1-1a Luminous intensity: Figure A2-6 and A2-7	Pass

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Appendix 3: Summary of testing according to CASA MOS 139 specifications

	<h2>ASSESSMENT</h2>		
	Contact person RISE Mikael Lindgren Measurement Science and Technology +46 10 516 57 13 mikael.lindgren@rise.se	Date: 2020-04-15	Reference: MTt8P08694-3
		ADB Safegate International AB Leuvensesteenweg 585 1930 ZAVENTEM Belgium	
<h4>Summary of testing of photometric properties of runway lights</h4>			
Test object	Test report	Measurement date	
ADB FEN-1-100-R (Red)	MTt8P08694rev2	February 2019	
ADB FAP-1-300-R (Red)	MTt8P08694rev2	February 2019	
ADB FED-1-100-RM/N (Red)	MTt8P08694rev2	February 2019	
ADB FTE-2-300-G/R (Red)	MTt8P08694rev2	February 2019	
ADB FAP-1-300-C (White)	MTt8P08694rev2	February 2019	
ADB FED-2-200-CM (White)	MTt8P08694rev2	February 2019	
ADB FTH-1-200-G (Green)	MTt8P08694rev2	February 2019	
ADB TLP-2_080_GY-S-2 (Green/Yellow)	MTt8P08694rev2	February 2019	
ADB TLP-2_080_GY-C-2 (Green/Yellow)	MTt8P08694rev2	February 2019	
ADB TLP-1_040_RN-S-1 (Red)	MTt8P08694rev2	February 2019	
RISE Research Institutes of Sweden has performed measurements according to requirements in CASA (Civil Aviation and Safety Authority of Australia) MOS (Manual of Standards) Part 139 – Aerodromes, Version 1.13: March 2016.			
RISE Research Institutes of Sweden AB			
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Summary of results

Object	Test scope	Test result
	CASA MOS 139 – Aerodromes, 1.13:2016	
ADB FEN-1-100-R	Runway end light Colour: Figure 9.2-1 Luminous intensity: Figure 9.11-7	Pass
ADB FAP-1-300-R	Approach side row light Colour: Figure 9.2-1 Luminous intensity: Figure 9.8-2	Pass
ADB FED-1-100-RM/N	Runway edge light Colour: Figure 9.2-1 Luminous intensity: Figures 9.11-3 and 9.11-4	Pass
ADB FTE-2-300-G/R	Threshold / Runway end light Colour: Figure 9.2-1 Luminous intensity: Figures 9.11-5 and 9.11-7	Pass
ADB FAP-1-300-C	Approach centre line light Colour: Figure 9.2-1 Luminous intensity: Figure 9.8-1	Pass
ADB FED-2-200-CM	Runway edge light Colour: Figure 9.2-1 Luminous intensity: Figures 9.11-3 and 9.11-4	Pass
ADB FTH-1-200-G	Threshold light Colour: Figure 9.2-1 Luminous intensity: Figure 9.11-5	Pass
ADB TLP-2_080_GY-S-2	Taxiway centre line light Colour: Figure 9.2-1 Luminous intensity: Figure 9.14-3	Pass
ADB TLP-2_080_GY-C-2	Taxiway centre line light Colour: Figure 9.2-1 Luminous intensity: Figure 9.14-5	Pass
ADB TLP-1_040_RN-S-1	Taxiway centre line light Colour: Figure 9.2-1 Luminous intensity: Figure 9.14-3	Pass

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