



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW1127G1-JM
UNIQUE ID NUMBER: 15PW104
COMBUSTOR: TALON X
ENGINE TYPE: TF

BYPASS RATIO: 12.2
PRESSURE RATIO (π_{00}): 32.1
RATED THRUST (F_{00}) (kN): 120.4

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.3	34.1	31.2	1.8
AS % OF ORIGINAL LIMIT	1.5	28.9	29.9	8.0
AS % OF CAEP/2 LIMIT (NO _x)			37.4	
AS % OF CAEP/4 LIMIT (NO _x)			43.8	
AS % OF CAEP/6 LIMIT (NO _x)			49.4	
AS % OF CAEP/8 LIMIT (NO _x)			57.4	

DATA STATUS

- PRE-REGULATION
x CERTIFICATION
- REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
x DEDICATED ENGINES TO PRODUCTION STANDARD
- OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
(ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)

x OUT OF PRODUCTION (DATE: -)
- OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	0.800	0.03	0.22	17.76	1.4
CLIMB OUT	85	2.2	0.661	0.03	0.32	14.18	0.3
APPROACH	30	4.0	0.232	0.04	5.49	8.85	0.4
IDLE	7	26.0	0.090	0.11	21.47	6.55	0.6
LTO TOTAL FUEL (kg) or EMISSIONS (g)			317	21	3348	3244	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				0.2	27.8	26.9	1.4
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW)
STAGE BLEED 0 (% CORE FLOW)

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99.6-101.7
TEMPERATURE (K)	265.6-278.2
ABS HUMIDITY (kg/kg)	0.00071-0.00203

FUEL

SPEC	Jet A
H/C	1.86
AROM (%)	15.1-16.6

MANUFACTURER: Pratt & Whitney
TEST ORGANIZATION: Pratt & Whitney
TEST LOCATION: X8 Test Stand, East Hartford, CT
TEST DATES: 11/03/2014-14/03/2014

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

REMARKS

1. Data from Certification Report PWA-9968
2. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
3. NO_x levels in accordance with Part III, Chapter 2, 2.3.2 e) (CAEP/8)

Compliance with Fuel Venting requirements:

x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)