



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW1524G
UNIQUE ID NUMBER: 16PW111
COMBUSTOR: TALON X
ENGINE TYPE: TF

BYPASS RATIO: 11.1
PRESSURE RATIO (π_{00}): 38.7
RATED THRUST (F_{00}) (kN): 108.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.4	16.3	39.8	4.1
AS % OF ORIGINAL LIMIT	2.0	13.8	33.9	17.7
AS % OF CAEP/2 LIMIT (NO _x)			42.4	
AS % OF CAEP/4 LIMIT (NO _x)			47.2	
AS % OF CAEP/6 LIMIT (NO _x)			52.2	
AS % OF CAEP/8 LIMIT (NO _x)			59.0	

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	0.790	0.10	0.00	28.10	3.4
CLIMB OUT	85	2.2	0.650	0.10	0.10	21.20	2.8
APPROACH	30	4.0	0.230	0.10	1.60	11.10	2.4
IDLE	7	26.0	0.080	0.10	13.00	6.10	2.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			299	30	1719	4125	-
NUMBER OF ENGINES				3	3	3	3
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				0.3	15.1	37.6	3.8
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)				0.2-0.4	14.6-15.5	36.5-38.3	1.7-5.7

ACCESSORY LOADS

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

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99.2-101.4
TEMPERATURE (K)	259.5-282
ABS HUMIDITY (kg/kg)	0.00081-0.00317

FUEL

SPEC	Jet A
H/C	1.9
AROM (%)	16.4-18.1

MANUFACTURER: Pratt & Whitney
TEST ORGANIZATION: Pratt & Whitney Canada
TEST LOCATION: Mirabel Aerospace Centre - Quebec
TEST DATES: 15/01/2016-10/05/2016

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-10061
2. Certification in accordance with Part III, Chapter 2, of Amendment 8 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)