



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GENx-1B58/P1
UNIQUE ID NUMBER: 12GE149
COMBUSTOR: TAPS
ENGINE TYPE: TF

BYPASS RATIO: 9.2
PRESSURE RATIO (π_{00}): 37.1
RATED THRUST (F_{00}) (kN): 271.3

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	1.6	34.1	28.5	9.8
AS % OF ORIGINAL LIMIT	8.1	28.9	25.0	54.4
AS % OF CAEP/2 LIMIT (NO _x)			31.2	
AS % OF CAEP/4 LIMIT (NO _x)			35.1	
AS % OF CAEP/6 LIMIT (NO _x)			39.0	
AS % OF CAEP/8 LIMIT (NO _x)			44.3	

DATA STATUS

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

TEST ENGINE STATUS

x 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	2.033	0.02	0.24	18.86	0.0
CLIMB OUT	85	2.2	1.683	0.02	0.80	11.67	0.0
APPROACH	30	4.0	0.567	0.07	3.60	8.48	2.6
IDLE	7	26.0	0.200	0.84	21.97	4.22	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			756	278	7548	6673	-
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)				1.0	27.8	24.6	7.6
SIGMA (D _p /F ₀₀ in g/kN, or SN)				0.1	0.6	0.0	2.0
RANGE (D _p /F ₀₀ in g/kN, or SN)				0.97-1.09	27.29-28.44	24.58-24.63	5.26-8.96

ACCESSORY LOADS

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

AT All POWER SETTINGS
AT All POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.4-98.6
TEMPERATURE (K)	280.5-299
ABS HUMIDITY (kg/kg)	0.00345-0.00716

FUEL

SPEC	Jet A
H/C	1.89
AROM (%)	15.3

MANUFACTURER: General Electric Company
TEST ORGANIZATION: General Electric Company
TEST LOCATION: PTO, Ohio
TEST DATES: 29/09/2009-03/10/2009

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. Ref. GE REPORT R2010AE595
2. Engine S/N 956-108/2
3. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
4. 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)