



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-8E5A1 BYPASS RATIO: 4.7
UNIQUE ID NUMBER: 07P27GE227 PRESSURE RATIO (π_{o0}): 24.7
COMBUSTOR: LEC
ENGINE TYPE: TF RATED THRUST (F_{o0}) (kN): 62.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{o0} (g/kN) or SN	0.4	48.6	43.4	17.0
AS % OF ORIGINAL LIMIT	2.0	41.2	48.6	63.1
AS % OF CAEP/2 LIMIT (NO _x)			60.7	
AS % OF CAEP/4 LIMIT (NO _x)			67.9	
AS % OF CAEP/6 LIMIT (NO _x)			72.4	
AS % OF CAEP/8 LIMIT (NO _x)			81.3	

For non-volatile particulate matter (nvPM) emissions, please refer to the ICAO Engine nvPM Emissions Data Sheet.

DATA STATUS

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

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
- 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)
- OUT OF PRODUCTION (DATE: -)
- OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F _{o0})	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	0.691	0.01	0.94	15.55	13.2
CLIMB OUT	85	2.2	0.565	0.01	0.81	12.72	2.1
APPROACH	30	4.0	0.190	0.03	4.49	9.93	0.2
IDLE	7	26.0	0.066	0.13	21.14	4.74	0.6
LTO TOTAL FUEL (kg) or EMISSIONS (g)			252	16	2475	2342	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F _{o0} (g/kN) or AVERAGE SN (MAX)				0.3	39.6	37.5	13.2
SIGMA (D _p /F _{o0} in g/kN, or SN)				0.0	0.9	0.4	1.1
RANGE (D _p /F _{o0} in g/kN, or SN)				0.2-0.3	38.88-40.55	37.03-37.9	12.04-14.11

ACCESSORY LOADS

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

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	98.2-99.1
TEMPERATURE (K)	279.5-287.7
ABS HUMIDITY (kg/kg)	0.0017-0.0029

FUEL

SPEC	Jet A
H/C	1.92
AROM (%)	20.6

MANUFACTURER: General Electric Company
TEST ORGANIZATION: GE Aviation
TEST LOCATION: PTO, Ohio, USA
TEST DATES: 16/12/2023-21/12/2023

NO_x REGULATION PARAGRAPH

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

REMARKS

- Engine S/N 908-337/1
- Ref. GE Report R2023AE234/Rev.0

Compliance with Fuel Venting requirements:

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