



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF34-8C5, CF34-8C5/B
UNIQUE ID NUMBER: 07P27GE221
COMBUSTOR: LEC
ENGINE TYPE: TF
BYPASS RATIO: 4.9
PRESSURE RATIO (π_{o0}): 23.4
RATED THRUST (F_{o0}) (kN): 59.4

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{o0} (g/kN) or SN	0.5	55.6	40.9	10.4
AS % OF ORIGINAL LIMIT	2.4	47.1	47.1	38.2
AS % OF CAEP/2 LIMIT (NO _x)			58.9	
AS % OF CAEP/4 LIMIT (NO _x)			65.3	
AS % OF CAEP/6 LIMIT (NO _x)			69.2	
AS % OF CAEP/8 LIMIT (NO _x)			77.5	

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	0.657	0.01	0.89	14.15	8.1
CLIMB OUT	85	2.2	0.536	0.01	0.81	11.82	0.9
APPROACH	30	4.0	0.178	0.04	4.71	9.79	0.2
IDLE	7	26.0	0.065	0.15	23.68	4.42	0.6
LTO TOTAL FUEL (kg) or EMISSIONS (g)			243	18	2691	2096	-
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	45.3	35.3	8.1
SIGMA (D _p /F _{o0} in g/kN, or SN)				0.1	1.0	0.4	0.8
RANGE (D _p /F _{o0} in g/kN, or SN)				0.23-0.35	44.47-46.36	34.82-35.7	7.19-8.65

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)