



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GE90-115B
UNIQUE ID NUMBER: 07P27GE240
COMBUSTOR: DAC
ENGINE TYPE: TF

BYPASS RATIO: 7.0
PRESSURE RATIO (π_{oo}): 43.2
RATED THRUST (F_{oo}) (kN): 513.9

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{oo} (g/kN) or SN	9.4	55.6	74.3	1.7
AS % OF ORIGINAL LIMIT	48.0	47.1	58.8	10.9
AS % OF CAEP/2 LIMIT (NO _x)			73.4	
AS % OF CAEP/4 LIMIT (NO _x)			79.5	
AS % OF CAEP/6 LIMIT (NO _x)			87.0	
AS % OF CAEP/8 LIMIT (NO _x)			97.0	

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 _{oo})	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	4.594	0.04	0.12	50.35	0.7
CLIMB OUT	85	2.2	3.562	0.03	0.39	34.92	0.7
APPROACH	30	4.0	1.069	0.03	2.45	15.99	0.4
IDLE	7	26.0	0.339	5.88	42.43	5.12	0.4
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1449	3141	23296	32941	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F _{oo} (g/kN) or AVERAGE SN (MAX)				6.1	45.3	64.1	1.3
SIGMA (D _p /F _{oo} in g/kN, or SN)				1.2	4.4	1.5	0.7
RANGE (D _p /F _{oo} in g/kN, or SN)				4.73-7.05	40.34-48.88	63.18-65.87	0.6-2.01

ACCESSORY LOADS

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

AT All POWER SETTINGS
AT All POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.5-97.9
TEMPERATURE (K)	278.6-293
ABS HUMIDITY (kg/kg)	0.0035-0.0038

FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	15.4

MANUFACTURER: General Electric Company
TEST ORGANIZATION: GE Aviation
TEST LOCATION: PTO, Ohio, USA
TEST DATES: 18/10/2022-21/10/2022

NO_x REGULATION PARAGRAPH

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

REMARKS

- Engine S/N 901-648/1
- Ref. GE Report R2021AE291/Rev. 1

Compliance with Fuel Venting requirements:

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