



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION:CF34-10A16/B/C/D

UNIQUE ID NUMBER:07P27GE229

COMBUSTOR:SAC

ENGINE TYPE:TF

BYPASS RATIO:5.6

PRESSURE RATIO ( $\pi_{o0}$ ):24.8

RATED THRUST ( $F_{o0}$ ) (kN):77.0

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>o0</sub> (g/kN) or SN	12.6	104.4	41.6	5.5
AS % OF ORIGINAL LIMIT	64.5	88.5	46.4	21.7
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			58.0	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			68.0	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			74.9	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			87.2	

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

xNEWLY MANUFACTURED ENGINES

-DEDICATED ENGINES TO PRODUCTION STANDARD

-OTHER (SEE REMARKS)

EMISSIONS STATUS

xDATA 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 <sub>o0</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	0.771	0.02	0.63	18.17	4.3
CLIMB OUT	85	2.2	0.638	0.02	0.56	15.18	2.7
APPROACH	30	4.0	0.216	0.04	4.19	7.91	0.4
IDLE	7	26.0	0.085	4.71	47.02	3.66	0.6
LTO TOTAL FUEL (kg) or EMISSIONS (g)			302	632	6546	2763	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>o0</sub> (g/kN) or AVERAGE SN (MAX)				8.2	85.1	35.9	4.3
SIGMA (D <sub>p</sub> /F <sub>o0</sub> in g/kN, or SN)				0.3	2.2	0.2	0.1
RANGE (D <sub>p</sub> /F <sub>o0</sub> in g/kN, or SN)				7.89-8.41	82.61-86.69	35.77-36.12	4.23-4.33

ACCESSORY LOADS

POWER EXTRACTION0(kW)

STAGE BLEED0(% CORE FLOW)

ATAllPOWER SETTINGS

ATAllPOWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.6-98
TEMPERATURE (K)	291-301
ABS HUMIDITY (kg/kg)	0.0079-0.0101

MANUFACTURER:General Electric Company

TEST ORGANIZATION:GE Aviation

TEST LOCATION:PTO,Ohio,USA

TEST DATES:09/04/2024-15/04/2024

REMARKS

1. Engine S/N 623-407/1
2. Ref. GE Report R2023AE304/Rev.0

FUEL

SPEC	Jet A
H/C	1.93
AROM (%)	19.4

NO<sub>x</sub> REGULATION PARAGRAPH

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

Compliance with Fuel Venting requirements:

x

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