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Applicant	Device & Test Identification
Compressor Products International 4410 Greenbriar Drive Stafford, TX 77477	FCC ID: 2AZVT-PF2 Industry Canada ID: 30305-PF2 Model(s): PF2 Laboratory Project ID: 22258-15

1.0 Maximum Permissible Exposure Evaluation (Supplements the test report.)

The measured power is considered for the intended use of the device and resulting RF exposure to the user.

1.2 Criteria

Section Reference	Date
447498 D01 General RF Exposure Guidance v06	9 Sep 2021

1.3 Procedure

Using measurement of peak power and considering the intended application, determine the permissible exposure level, applicability of exclusion, or whether additional exposure tests (SAR) are indicated. When applicable justify conclusion for selected exposure level and separation distance.

The PF2 is a lubricant flow monitor, also called a shutdown device, used to track and optimize the lubricant usage for divider valve metering systems. The device contains user accessible buttons. The distance from these buttons to the antenna was used to determine maximum RF exposure conditions.

Antenna to user minimum separation distance = 41.4mm.

For the most conservative approach, no duty cycle limiting was used to calculate the exposure values.

1.4 Power to Exposure Calculation

For 2.4 GHz radio power is determined by conducted measurement. Safe exposure distance was calculated for the allowed maximum uncontrolled public exposure limit.

Table 1.4.1 Power Calculation for Exposure, 2.4 GHz Radio (Highest frequency 2.480 GHz)				
Measured Radiated Field Strength dBuV/m @ 3m	Source Duty Cycle Factor dB	Antenna Gain dBi	Calculated EIRP dBm	EIRP In Linear Terms mW
82.3	0	N/A	-12.9	0.051

1.5 SAR Exemption Calculation – FCC

Applicable requirement: KDB 447498 Clause 4.3.1 Section 1

Calculated power (max power including tune up tolerance = 0.051 mW):

$$[(0.051 \text{ mW})/(41.4 \text{ mm})] \cdot [\sqrt{2.4 \text{ (GHz)}}] = 0.002$$

$$0.002 \leq 6.0 \text{ (Limb exposure)}$$

$$0.002 \leq 3.0 \text{ (Non-Limb exposure)}$$

1.6 SAR Exemption Calculation – IC

Applying Table 1 of clause 2.5.1 applying 41.4mm spacing column and row 2450 MHz. The exemption limit is 173 mW.

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of ≤5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
≤300	71 mW	101 mW	132 mW	162 mW	193 mW
450	52 mW	70 mW	88 mW	106 mW	123 mW
835	17 mW	30 mW	42 mW	55 mW	67 mW
1900	7 mW	10 mW	18 mW	34 mW	60 mW
2450	4 mW	7 mW	15 mW	30 mW	52 mW
3500	2 mW	6 mW	16 mW	32 mW	55 mW
5800	1 mW	6 mW	15 mW	27 mW	41 mW

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of 30 mm	At separation distance of 35 mm	At separation distance of 40 mm	At separation distance of 45 mm	At separation distance of ≥50 mm
≤300	223 mW	254 mW	284 mW	315 mW	345 mW
450	141 mW	159 mW	177 mW	195 mW	213 mW
835	80 mW	92 mW	105 mW	117 mW	130 mW
1900	99 mW	153 mW	225 mW	316 mW	431 mW
2450	83 mW	123 mW	173 mW	235 mW	309 mW
3500	86 mW	124 mW	170 mW	225 mW	290 mW
5800	56 mW	71 mW	85 mW	97 mW	106 mW

$$0.051 \text{ mW} < 173 \text{ mW}$$

1.7 Conclusion

The exposure limit is satisfied.

Signed:



Larry Finn
