

11/25/03

FCC ID: BVCAMB9020

Duty Cycle Correction Factor method of calculating field strength, expanding upon data collected 11/07/03.

The transmitter transmits for 1.6 ms at a maximum rate of 180 Hz, or

Duration: 1.6 ms
 Period: 5.6 ms
 $20 \log (1.6/5.6) = -10.9$

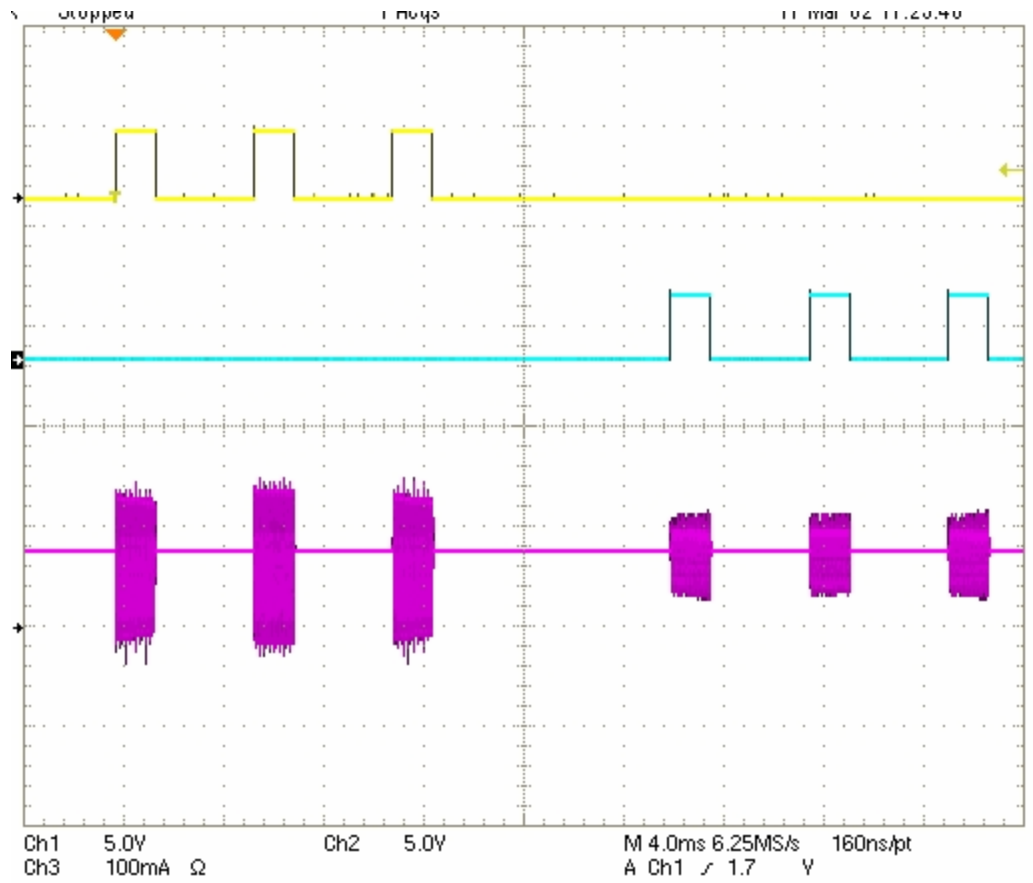
Corrected Value (dB) = PK(dB) + DCCF + ACF + DCF

Freq in kHz	3 meter measurements				DCCF dB	ACF dB	DCF dB	BW kHz	FCC Limit	Corrected Values
	PK	QP	Avg	nf						
58	61.6	54.5	42.7	2.7	-10.9	62.5	-120.0	9	32.3/300	-6.8
116	31.1	22.7	16.2	0.8	-10.9	56.6	-120.0	9	26.3/300	-43.2
174	35.7	27.3	17.3	-3.4	-10.9	53.1	-120.0	9	22.8/300	-42.1
232	nf	13.7	11.8	-5.6	-10.9	50.6	-120.0	9	20.3/300	nf
290	18.8	10.2	4.8	1.0	-10.9	48.7	-120.0	9	18.4/300	-63.4
348	nf	7.5	3.0	2.4	-10.9	47.1	-120.0	9	16.8/300	nf
406	15.1	6.2	0.9	0.0	-10.9	45.7	-120.0	9	15.4/300	-70.1
464	nf	10.2	0.1	-0.5	-10.9	44.6	-120.0	9	14.3/300	nf
522	nf	10.2	nf	3.5	-10.9	43.5	-60.0	9	33.3/30	-17.2
580	amb	21.5			-10.9	42.6	-60.0	9	32.3/30	ambient

The above demonstrates readings compliant with 15.209 and compliance with 15.35 (b).

DCCF = -10.9 dB; therefore, the peak reading is less than 20 dB above the average value.

- PK Peak (peak detector reading in dB)
- QP Quasi Peak (detector reading in dB)
- Avg Average (detector reading in dB)
- nf Noise Floor, read in pk detector mode.
- DCCF Duty Cycle Correction Factor
- ACF Antenna Correction Factor
- DCF Distance Correction Factor
- BW Band Width (resolution bandwidth)



Channel 1

Channel 2

Actual transmit pulses