

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	3 meter measurements					DCCF	ACF	DCF	BW	FCC	Corrected
kHz	PK	QP	Avg	nf		dB	dB	dB	kHz	Limit	Values
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)

