The Walsh Spectra of some Functions (under the assumption $F(0) = 0$)

Condition	**Functions**	**Walsh Coefficient**	**Frequency**	**Ref.**
$m \leqslant n/2$	bent	$2^{\frac{n}{2}}$	$2^{n-1} + 2^{\frac{n}{2}-1}$	[2]
		$-2^{\frac{n}{2}}$	$2^{n-1} - 2^{\frac{n}{2}-1}$	
$m = n$, n is odd	AB	0	$2^n - 2^{n-1}$	[2] [4]
		$2^{\frac{n+1}{2}}$	$2^{n-3} + 2^{\frac{n-3}{2}}$	
		$-2^{\frac{n+1}{2}}$	$2^{n-3} + 2^{\frac{n-3}{2}}$	
	Inverse ($n \neq 3$)	Any value divisible by 4 in $[-2^{\frac{n}{2}+1} + 1, 2^{\frac{n}{2}+1} + 1]$	unknown	[3]
	Dobbertin	Divisible $2^{\frac{n}{5}}$, NOT divisible by $2^{\frac{2n}{5}+1}$	unknown	[1]
$m = n$, n is even	Gold	0	$(2^n - 1)(2^{n-2} + 1)$	[5]
		$2^{\frac{n}{2}}$	$\frac{1}{3}(2^n - 1)(2^n + 2^{\frac{n}{2}})$	
		$-2^{\frac{n}{2}}$	$\frac{1}{3}(2^n - 1)(2^n - 2^{\frac{n}{2}})$	
		$2^{\frac{n+2}{2}}$	$\frac{1}{12}(2^n - 1)(2^{n-1} + 2^{\frac{n}{2}})$	
		$-2^{\frac{n+2}{2}}$	$\frac{1}{12}(2^n - 1)(2^{n-1} - 2^{\frac{n}{2}})$	
	Dobbertin	Same as n is odd	unknown	[1]

References

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