



BP3309 隔离 LED 电源 DEMO

1, 设计规格

输入: 85Vac ~ 265Vac ; 47Hz ~ 63Hz
 输出电压: 32Vdc ~ 39Vdc (10~12 串 LED)
 输出电流: 440mA
 满载 PF 值: >0.95 @220Vac
 电源尺寸: 300*17*10mm (长、宽、高)
 引线方式: 接线

2, 评估结果

测试参数	测试结果	备注
PF 值	0.994	12*1 @110Vac
	0.966	12*1 @220Vac
线性调整率	±0.9%	Load: 12*1
负载调整率	±0.1%	9~12*1 @110Vac
	±0.4%	9~12*1 @220Vac
效率	88.9%	12*1 @110Vac
	88.8%	12*1 @220Vac
LED 短路保护	OK	
LED 开路保护	OK	
EMI	PASS	EN55015 & FCC PART15

3, 电气特性测试结果

1) 综合测试结果

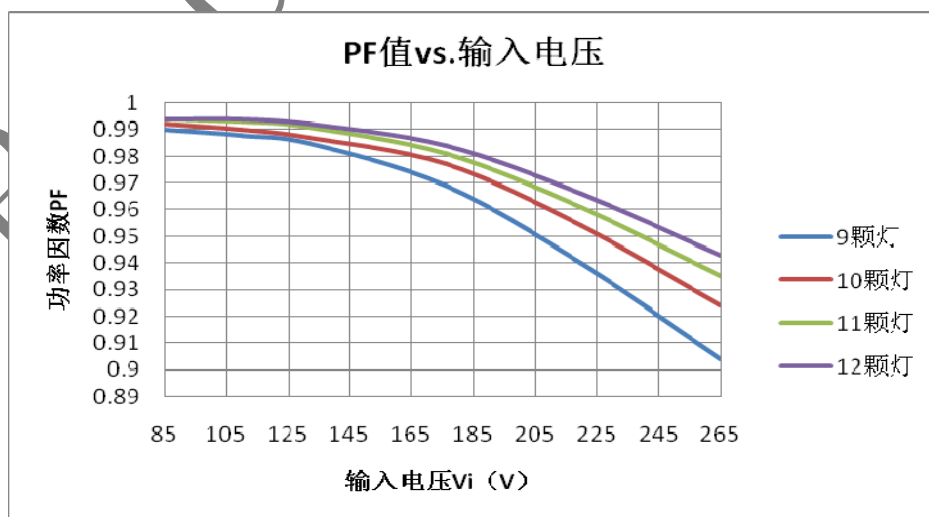
LED 灯数	输入电压	输入功率	输出电压	输出电流	PF 值
	(V)	(W)	(V)	(mA)	
9 颗灯	85	14.7	29.37	436	0.99
	110	14.5	29.37	437	0.988
	132	14.3	29.37	435	0.985
	176	14.4	29.38	436	0.969
	220	14.6	29.41	439	0.94
	265	14.9	29.43	440	0.904





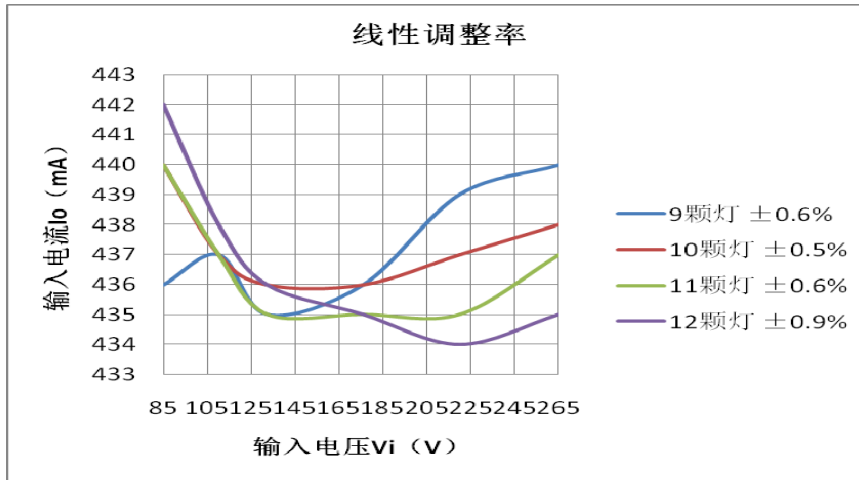
LED 灯数	输入电压	输入功率	输出电压	输出电流	PF 值
10 颗灯	(V)	(W)	(V)	(mA)	
	85	16.5	32.61	440	0.992
	110	16	32.53	437	0.99
	132	15.9	32.54	436	0.987
	176	15.8	32.56	436	0.977
	220	16.1	32.58	437	0.954
	265	16.4	32.56	438	0.924
LED 灯数	输入电压	输入功率	输出电压	输出电流	PF 值
11 颗灯	(V)	(W)	(V)	(mA)	
	85	18.1	35.88	440	0.994
	110	17.6	35.83	437	0.993
	132	17.4	35.81	435	0.991
	176	17.3	35.79	435	0.981
	220	17.5	35.8	435	0.961
	265	17.9	35.81	437	0.935
LED 灯数	输入电压	输入功率	输出电压	输出电流	PF 值
12 颗灯	(V)	(W)	(V)	(mA)	
	85	20	39.2	442	0.994
	110	19.3	39.2	438	0.994
	132	19	39.1	436	0.992
	176	18.9	39.1	435	0.984
	220	19.1	39.1	434	0.966
	265	19.4	39	435	0.943

2) PF 值 VS 输入电压





3) 线性调整率

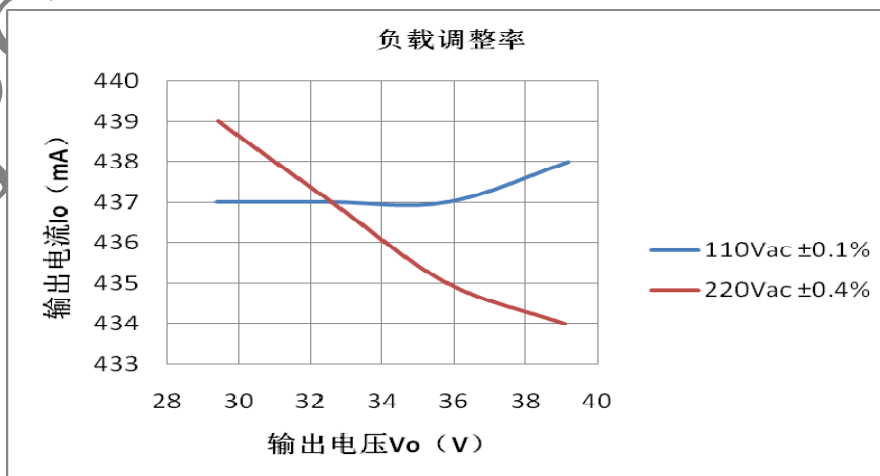


4) 效率

带载灯数 (个)	效率 (%)	
	110VAC	220VAC
9	88.5	88.4
10	88.8	88.4
11	88.9	88.9
12	88.9	88.8

5) 负载调整率

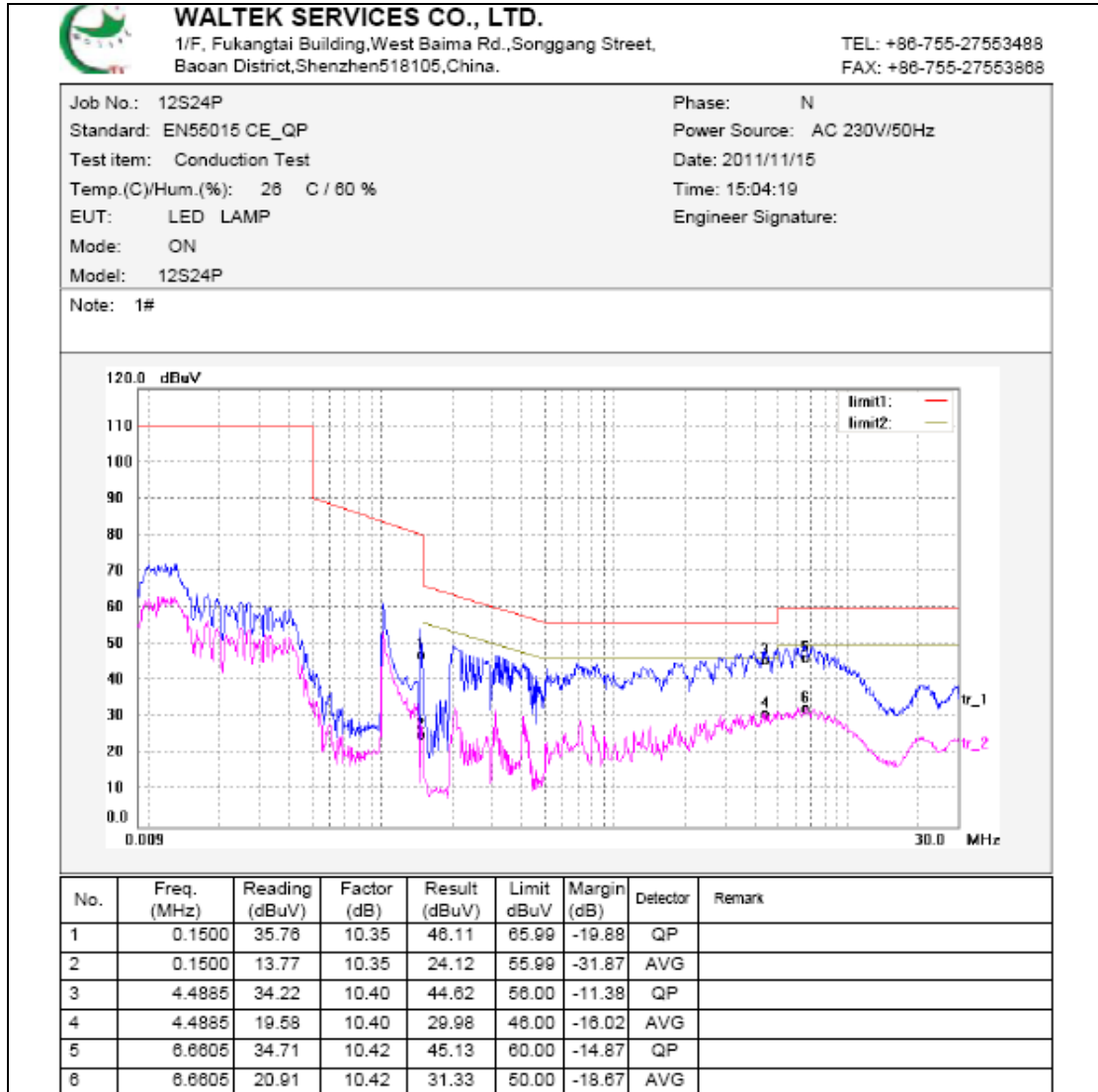
带载灯数 (个)	110VAC		220VAC	
	Vo (V)	Io (mA)	Vo (V)	Io (mA)
9	29.37	437	29.41	439
10	32.53	437	32.58	437
11	35.81	437	35.8	435
12	39.2	438	39.1	435
负载调整率 (%)	±0.1%		±0.4%	





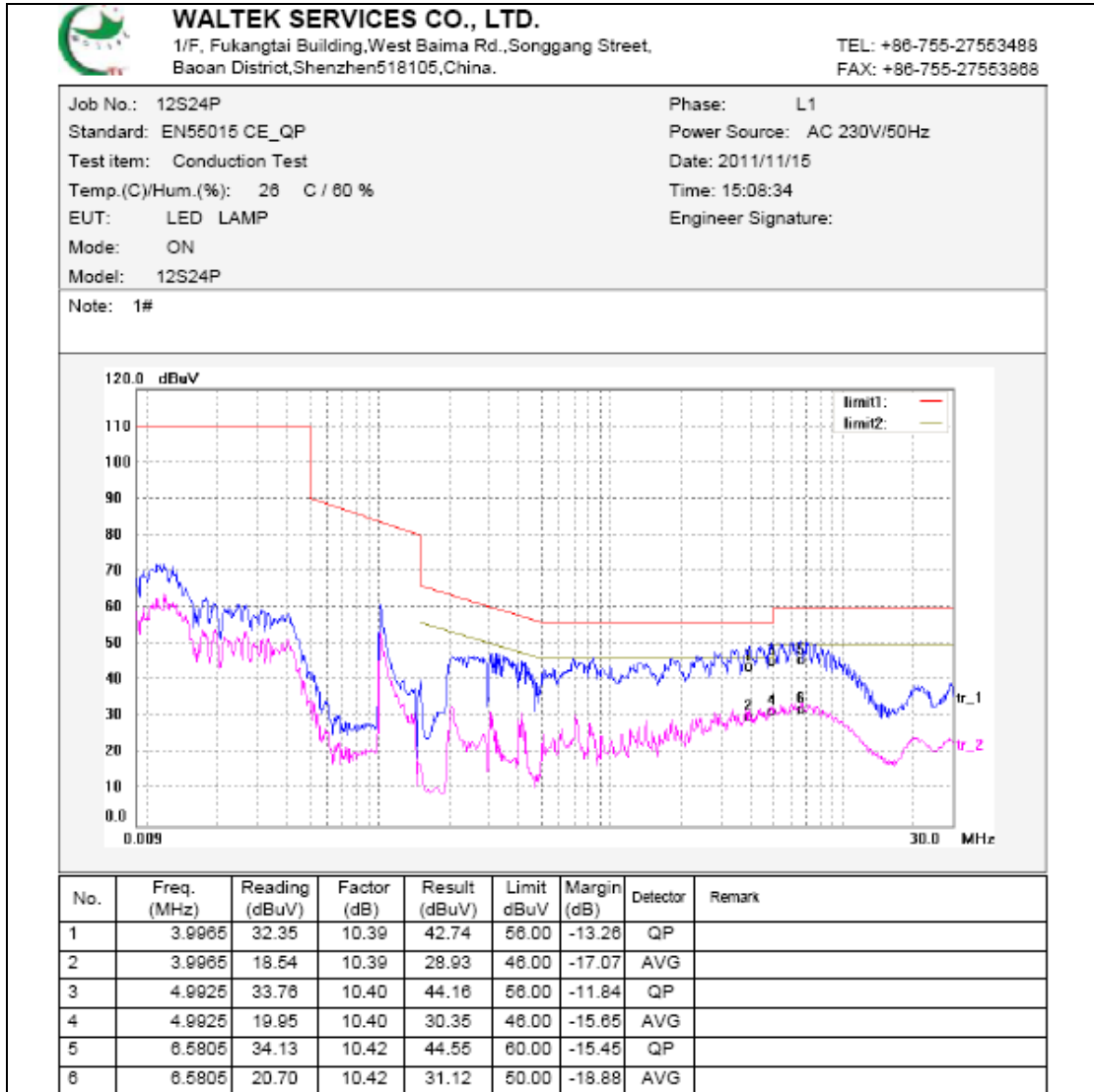
4, EMI 测试

1) Conduction test result @230Vac Nature





2) Conduction test result @230Vac Line

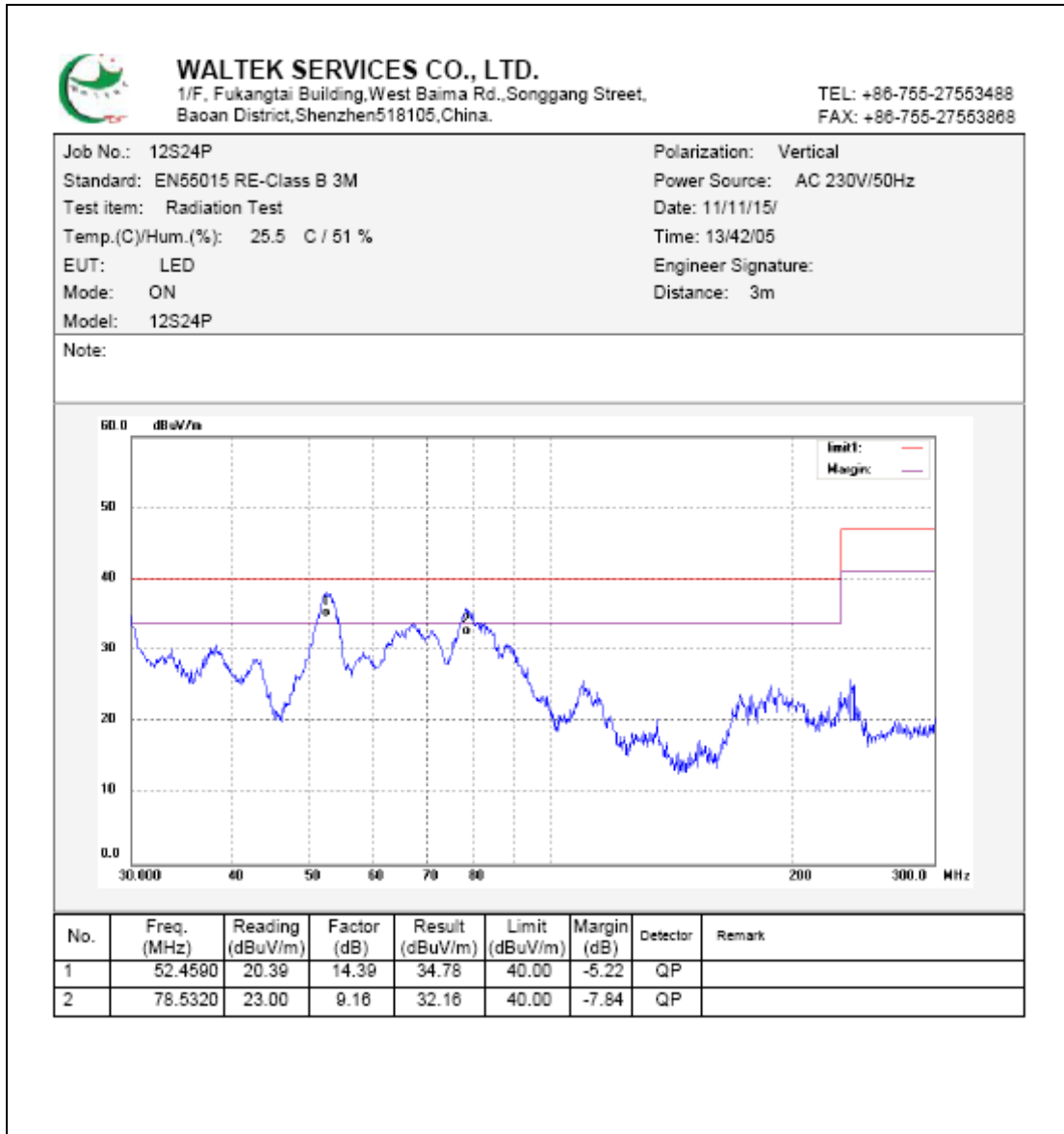


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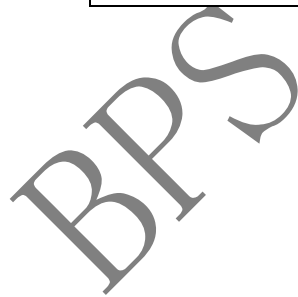


3) Radiation- Vertical test result @230Vac



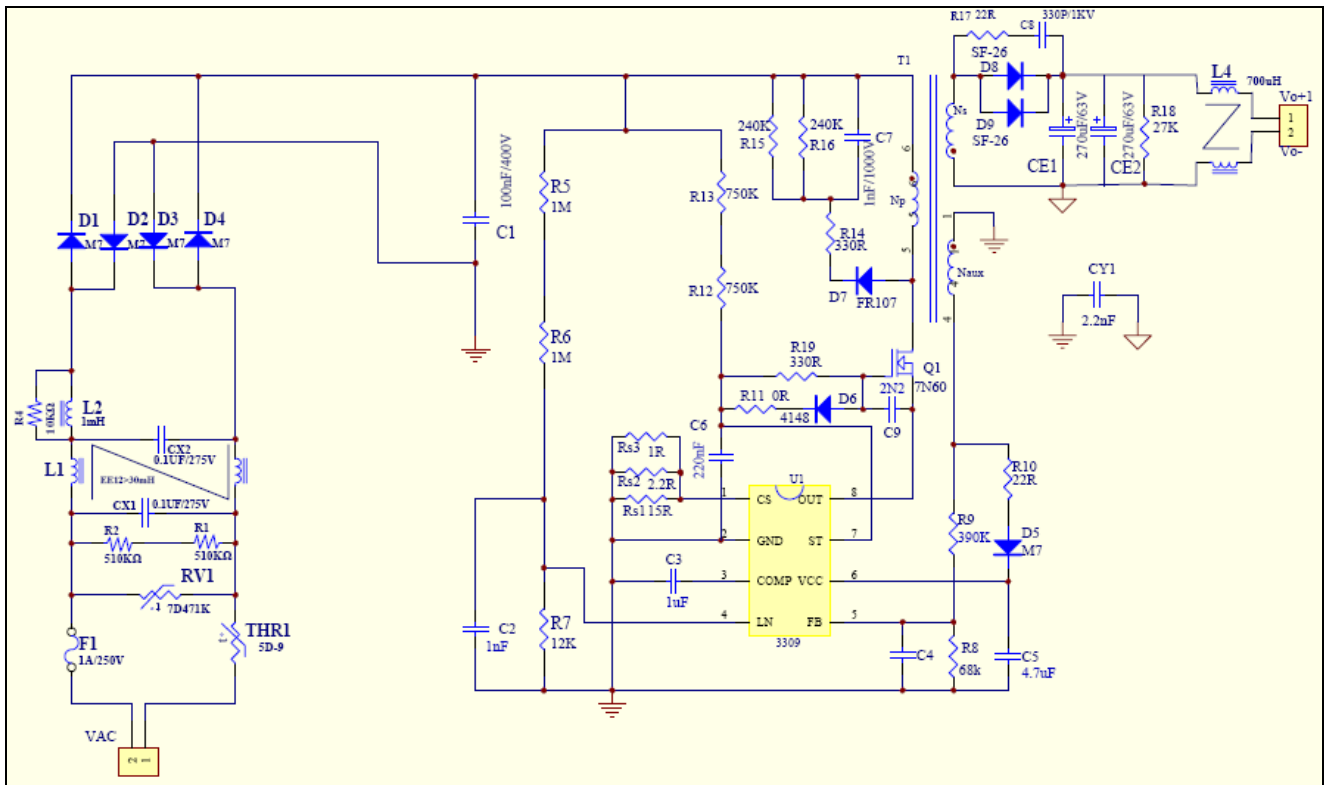


4) Radiation- Horizontal test result @230Vac





5, 应用原理图



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