

FWS-7250

Reliability Prediction Report

(MTBF)

Summary	Failure Rate: 9043.981383 ppm MTBF: 110,571 Hours
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Issue date	Approval	Test Engineer
2015/03/26	KJ Wang	Leo Liu

Reliability Prediction (MTBF)

I . Model Name: FWS-7250

II . Prediction Date: March. 26, 2015

III . Prediction Site: AAEON Q.E. Dept.

IV . Predicted by: Leo Liu

V . Equipment: Windchill Quality Solutions 10.1

VI. Simulation Environment:

- Temperature: 30 degrees C
- Standard: Telcordia (Bellcore) Standard

VII. Term and Definition:

- Unit : An assembly of device.
- Duty Cycle : Used to specify the percentage of time that the element is in an on state, and it is equal to the percentage of total time the item is in the active environment.
- Quantity : The quantity of the selected item.
- Failure Rate : Used to specify that the failure rate is to be calculated based the selected Calculation models. The Failure rate multiplier is 1000000000.
- MTBF : MTBF is always specified in hours.

VIII. Prediction Result:

FWS-7250 (9697725003-D):

- Failure Rate: 9043.981383 ppm

- MTBF: 110,571 Hours

**AAEON Reliability Prediction
Summary**

File Name: FWS-7250.rfp
Duty Cycle: 100
Calculation Model: Telcordia Issue 2
Method: Method I Case 3

Failure Rate: 9043.981383
MTBF (hrs): 110,571
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Assembly Name	Part Number	Ref Des	Quantity	Failure Rate	MTBF
FWS-7250	9697725003-D		1	9043.981383	110,571

File Name: FWS-7250.rfp
Assembly: 9697725003-D
Ref Des:
Description:

Failure Rate: 9043.981383
MTBF (hrs): 110,571
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050501004	Resistor	R388		2.547039	1	282340674.079668
1050501054	Resistor	R199,R469		2.547039	2	154078778.388085
1050501064	Resistor	R515		2.547039	1	282340674.079668
1050501234	Resistor	R200		2.547039	1	282340674.079668
1050501634	Resistor	R102		2.547039	1	282340674.079668
1050501834	Resistor	R769		2.547039	1	282340674.079668
1050502004	Resistor	R477,R742		2.547039	2	154078778.388085
1050502204	Resistor	R163,R484,R485, R491,R496		2.547039	5	67008142.102588
1050502224	Resistor	R18,R444,R454,R462, R470,R96		2.547039	6	56573956.677649
1050502734	Resistor	R68		2.547039	1	282340674.079668
1050503324	Resistor	R124,R15,R216,R222		2.547039	4	82309758.689546
1050503334	Resistor	R139,R298		2.547039	2	154078778.388085
1050503934	Resistor	R717,R719,R798		2.547039	3	107020754.986850
1050504324	Resistor	R710		2.547039	1	282340674.079668

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050504724	Resistor	R106,R111,R146, R153,R159,R162, R165,R168,R172, R182,R183,R186, R190,R193,R201, R205,R208,R232, R234,R240,R278, R284,R286,R287, R318,R350,R360, R361,R366,R403, R415,R417,R418, R419,R420,R426, R427,R428,R433, R434,R435,R436, R437,R460,R486, R523,R525,R568,		2.547039	59	6343183.296372
1050505134	Resistor	R380		2.547039	1	282340674.079668
1050505633	Resistor	R825		2.547039	1	282340674.079668
1050506224	Resistor	R140,R29		2.547039	2	154078778.388085
1050510034	Resistor	R117,R130,R148, R158,R175,R268, R277,R279,R291, R340,R542,R76,R78, R80,R82,R83		2.547039	16	22425139.809646
1050512124	Resistor	R87		2.547039	1	282340674.079668
1050512414	Resistor	R541,R555		2.547039	2	154078778.388085
1050513724	Resistor	R149		2.547039	1	282340674.079668
1050514034	Resistor	R783		2.547039	1	282340674.079668
1050515034	Resistor	R776,R778		2.547039	2	154078778.388085
1050516014	Resistor	R136		2.547039	1	282340674.079668
1050516204	Resistor	R305		2.547039	1	282340674.079668
1050516924	Resistor	R384		2.547039	1	282340674.079668

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1050516934	Resistor	R775		2.547039	1	282340674.079668
1050516964	Resistor	R467,R756		2.547039	2	154078778.388085
1050520004	Resistor	R564		2.547039	1	282340674.079668
1050520034	Resistor	R405		2.547039	1	282340674.079668
1050523264	Resistor	R299		2.547039	1	282340674.079668
1050524909	Resistor	R34		2.547039	1	282340674.079668
1050529464	Resistor	R294		2.547039	1	282340674.079668
1050530004	Resistor	R156,R157,R166		2.547039	3	107020754.986850
1050530124	Resistor	R138		2.547039	1	282340674.079668
1050533004	Resistor	R913,R914		2.547039	2	154078778.388085
1050540204	Resistor	R353,R445,R451		2.547039	3	107020754.986850
1050540214	Resistor	R503		2.547039	1	282340674.079668
1050545364	Resistor	R536,R557		2.547039	2	154078778.388085
1050547004	Resistor	R41,R46,R50,R52,R53,R55,R56,R57,R60,R611		2.547039	10	35079934.879747
1050547564	Resistor	R508		2.547039	1	282340674.079668
1050549934	Resistor	R85		2.547039	1	282340674.079668
1050549964	Resistor	R300,R304,R316,R365,R522		2.547039	5	67008142.102588
1050560424	Resistor	R129		2.547039	1	282340674.079668
1050573264	Resistor	R741,R748,R755		2.547039	3	107020754.986850
1050578724	Resistor	R707		2.547039	1	282340674.079668
1050595314	Resistor	R363		2.547039	1	282340674.079668
1050701504	Resistor	R370,R393		2.547039	2	154078778.388085
1050703334	Resistor	R313,R323,R647,R650,R652,R668,R750,R752,R758,R768		2.547039	10	35079934.879747
1053510009	Resistor	R47		2.547039	1	282340674.079668
1059700001	Resistor	R245,R372,R62,R634,R70,R733,R792,R794,R796,R836,R967		2.547039	11	32049696.385471
105A500103	Resistor	R666,R738		2.547039	2	154078778.388085
105A500133	Resistor	R675		2.547039	1	282340674.079668

File Name: FWS-7250.rfp
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Ref Des:
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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A500139	Resistor	R169,R181,R230, R359,R577,R579, R581,R63,R637,R643, R723,R908		2.547039	12	29507083.749401
105A500239	Resistor	R464		2.547039	1	282340674.079668
105A501003	Resistor	R746		2.547039	1	282340674.079668
105A501033	Resistor	R152		2.547039	1	282340674.079668
105A501039	Resistor	R101,R120,R121, R155,R167,R185, R264,R265,R285, R290,R32,R378,R379, R39,R447,R449,R452, R479,R480,R487, R493,R494,R509, R519,R538,R549, R560,R583,R599, R602,R631,R633, R638,R64,R642,R646, R656,R657,R660, R664,R670,R671, R676,R678,R682, R683,R684,R685, R69		2.547039	113	3355470.219926
105A501323	Resistor	R40		2.547039	1	282340674.079668
105A501529	Resistor	R223		2.547039	1	282340674.079668
105A501539	Resistor	R116,R28,R500		2.547039	3	107020754.986850
105A502039	Resistor	R673,R674,R680		2.547039	3	107020754.986850
105A503039	Resistor	R276,R349,R531,R67, R74		2.547039	5	67008142.102588
105A503309	Resistor	R33		2.547039	1	282340674.079668
105A505109	Resistor	R598,R619,R625, R628		2.547039	4	82309758.689546

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105A505123	Resistor	R150		2.547039	1	282340674.079668
105A505629	Resistor	R271,R894		2.547039	2	154078778.388085
105A510009	Resistor	R103,R20,R374,R712,R713		2.547039	5	67008142.102588
105A510033	Resistor	R736		2.547039	1	282340674.079668
105A515009	Resistor	R254,R260,R344,R377,R38,R386,R424,R439,R441,R911,R912,R916,R925,R934,R943		2.547039	15	23852782.943395
105A515034	Resistor	R764		2.547039	1	282340674.079668
105A515423	Resistor	R263		2.547039	1	282340674.079668
105A515823	Resistor	R706,R799		2.547039	2	154078778.388085
105A519629	Resistor	R137		2.547039	1	282340674.079668
105A529429	Resistor	R681,R770		2.547039	2	154078778.388085
105A533269	Resistor	R765		2.547039	1	282340674.079668
105A535703	Resistor	R443		2.547039	1	282340674.079668
105A538323	Resistor	R151,R319		2.547039	2	154078778.388085
105A540233	Resistor	R716		2.547039	1	282340674.079668
105A549919	Resistor	R700,R727,R810,R902		2.547039	4	82309758.689546
105A568033	Resistor	R789		2.547039	1	282340674.079668
105A568103	Resistor	R701		2.547039	1	282340674.079668
105A578713	Resistor	R809		2.547039	1	282340674.079668
105A578733	Resistor	R747		2.547039	1	282340674.079668
105A700003	Resistor	R107,R133,R23,R280,R609,R621,R629,R635,R641,R661,R662,R69,R802,R834,R835,R856,R905,R906		2.547039	18	20032117.836120

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105A700009	Resistor	R1,R108,R115,R12,R125,R126,R128,R131,R135,R143,R164,R173,R174,R177,R192,R196,R197,R207,R21,R211,R220,R225,R227,R228,R229,R237,R238,R241,R243,R251,R253,R259,R282,R293,R3,R303,R330,R333,R335,R336,R338,R348,R35,R369,R371,R373,R375,R376,R381, R3		2.547039	124	3062567.251153

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105A70000A	Resistor	R221,R226,R255, R275,R288,R289, R296,R301,R307, R309,R314,R324, R342,R347,R356, R411,R414,R482, R483,R490,R492, R498,R502,R504, R512,R516,R524, R533,R539,R565, R590,R591,R620, R622,R623,R705, R734,R797,R858, R892,R964,R965, R966,R968,R969, R970,R971,R972, R123,R171		2.547039	51	7312342.249386
105A700139	Resistor	R123,R171		2.547039	2	154078778.388085

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A701039	Resistor	R176,R179,R212, R213,R218,R236, R244,R247,R257, R258,R267,R283, R345,R351,R358, R367,R383,R387, R391,R396,R400, R401,R461,R474, R481,R495,R497, R505,R506,R507, R511,R514,R526, R585,R600,R616, R855,R857		2.547039	38	9736567.158302
105A701069	Resistor	R421		2.547039	1	282340674.079668
105A702039	Resistor	R527		2.547039	1	282340674.079668
105A702209	Resistor	R100,R104,R109, R160,R161,R170, R180,R184,R187, R191,R194,R195, R202,R203,R206, R209,R215,R302, R306,R322,R325, R346,R362,R48,R65, R66,R71,R72,R90, R99		2.547039	30	12244464.256771
105A702229	Resistor	R389,R397,R406, R407		2.547039	4	82309758.689546
105A702263	Resistor	R757		2.547039	1	282340674.079668
105A702269	Resistor	R262,R320,R75,R77, R79,R81,R93		2.547039	7	48991237.965885

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105A703309	Resistor	R113,R134,R141, R144,R448,R573, R584,R593,R610, R626,R630,R636, R645,R688,R689, R690,R691,R814, R815,R816,R817		2.547039	21	17274945.076062
105A703329	Resistor	R548,R550,R551, R586,R587,R601, R604,R605,R614, R615,R649,R665, R667,R724,R739, R753,R759,R766, R772,R777,R793, R795,R840,R841, R847,R852,R889		2.547039	27	13557741.157915
105A704729	Resistor	R26,R37,R627, R648		2.547039	4	82309758.689546
105A705129	Resistor	R17,R25,R95, R97		2.547039	4	82309758.689546
105A708209	Resistor	R105,R110,R147		2.547039	3	107020754.986850
105A710009	Resistor	R145		2.547039	1	282340674.079668
105A710039	Resistor	R132,R725,R790		2.547039	3	107020754.986850
105A743033	Resistor	R832		2.547039	1	282340674.079668
105A747009	Resistor	R49		2.547039	1	282340674.079668
106B510034	Resistor	RT1,RT2,RT3, RT4		7.724580	4	21923287.146155
106BA01033	Resistor	R273,R457		2.547039	2	154078778.388085
1112633190	Capacitor	C42		4.744484	1	159663026.715137
1119647191	Capacitor	C11		4.744484	1	159663026.715137
1121415090	Capacitor	C235,C423,C425, C484		1.128806	4	196873384.410843

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1121501680	Capacitor	C393,C406,C439, C443		1.128806	4	196873384.410843
1121501690	Capacitor	C31,C44,C52,C61,C70,C72,C73,C74,C93,C96		1.128806	10	82101057.548118
1121501691	Capacitor	C112,C12,C154,C159,C163,C378,C389,C444,C448,C462,C528,C59		1.128806	12	68856937.301178
1121533480	Capacitor	C447		1.128806	1	704977644.692287
1122501780	Capacitor	C427		1.128806	1	704977644.692287
1122722080	Capacitor	C107,C108		1.128806	2	375289731.076049
1124418090	Capacitor	C313,C327		1.128806	2	375289731.076049
1124418190	Capacitor	C178,C179,C180,C181,C182,C183,C184,C185,C518,C519,C520,C521,C522,C523,C524, C525		1.128806	16	52112480.802928
1124427090	Capacitor	C284,C288		1.128806	2	375289731.076049
1124427091	Capacitor	C403,C405,C411,C418,C487,C488,C514,C515		1.128806	8	101746760.035398
1124522290	Capacitor	C417,C433		1.128806	2	375289731.076049
1124533280	Capacitor	C3,C46		1.128806	2	375289731.076049
1129522790	Capacitor	C41,C467,C474,C485,C494		1.128806	5	159367490.199266
1129601080	Capacitor	C13,C34		1.128806	2	375289731.076049

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1129610080	Capacitor	C114,C118,C119, C120,C126,C131, C136,C137,C138, C214,C220,C228, C230,C236,C237, C252,C253,C256, C257,C270,C275, C277,C291,C304, C337,C344,C345, C369,C374,C379, C498,C501,C503,C86, C87,C88,C89		1.128806	37	22998172.632301
1129610260	Capacitor	C472,C480,C481, C482		1.128806	4	196873384.410843
1129622690	Capacitor	C144,C155,C157, C158,C356,C368		1.128806	6	133979725.056342
1129701690	Capacitor	C127,C128,C129, C130,C134,C135, C145,C146,C207, C208,C209,C212, C213,C222,C225, C234,C244,C404,C80, C81,C82,C84,C85, C90		1.128806	24	35120617.936543
1129701790	Capacitor	C43,C48,C97,C98		1.128806	4	196873384.410843
1129710090	Capacitor	C102,C105,C106,C6		1.128806	4	196873384.410843
1129710091	Capacitor	C195,C197,C203, C210,C221,C223		1.128806	6	133979725.056342

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1129722091	Capacitor	C198,C211,C224, C471		1.128806	4	196873384.410843
1169656132	Capacitor	C4		4.744484	1	159663026.715137
1174518180	Capacitor	CP1,CP2,CP3,CP4		1.128806	4	196873384.410843
1189610153	Capacitor	C14,TC1,TC10,TC12,TC4,TC5,TC6,TC7, TC9		4.744484	9	21223953.983763
1189615154	Capacitor	C141,C142,C513		4.744484	3	59399119.141203
1189633151	Capacitor	TC2,TC3		4.744484	2	86049450.747498
1189633184	Capacitor	TC11,TC8		4.744484	2	86049450.747498
1189656196	Capacitor	C1,C10,C409,C506, C67		4.744484	5	36944177.000623
118C6331B0	Capacitor	C373,C388,C413,C435,C534		4.744484	5	36944177.000623
11A2422190	Capacitor	C111,C116,C121,C99		1.128806	4	196873384.410843
11C1501080	Capacitor	C39		1.128806	1	704977644.692287
11C1510390	Capacitor	C18,C245,C246,C261,C266,C267,C280,C283,C285,C290,C314,C316,C351,C450,C451,C452,C453,C454,C455,C456,C457,C458,C459,C460,C461,C478,C491,C496, C504		1.128806	29	29193260.380640
11C1539840	Capacitor	C382,C402,C479, C511		1.128806	4	196873384.410843
11C2501790	Capacitor	C238,C239,C240,C241,C94,C95		1.128806	6	133979725.056342
11C4515290	Capacitor	C529		1.128806	1	704977644.692287
11C4515380	Capacitor	C30		1.128806	1	704977644.692287

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Ref Des:
Description:

Failure Rate: 9043.981383
MTBF (hrs): 110,571
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11C9510490	Capacitor	C115,C117,C139, C140,C147,C161, C167,C170,C19,C2, C206,C217,C229, C232,C242,C248, C250,C251,C254, C258,C259,C260, C262,C263,C264, C265,C269,C271, C272,C273,C274, C276,C278,C279, C281,C287,C289, C292,C295,C298, C299,C300,C302, C305,C306,C312, C315,C317,C31		1.128806	92	9384747.805892
11E1510050	Capacitor	C15,C218,C226,C227, C25,C35,C58		1.128806	7	115633865.771428
11E1522680	Capacitor	C420,C75		1.128806	2	375289731.076049
11E2501030	Capacitor	C436		1.128806	1	704977644.692287

File Name: FWS-7250.rfp
Assembly: 9697725003-D
Ref Des:
Description:

Failure Rate: 9043.981383
MTBF (hrs): 110,571
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11E2501690	Capacitor	BC10,BC11,B C12, BC13,BC14,B C15, BC16,BC17,B C18, BC19,BC20,B C21, BC22,BC23,B C24, BC25,BC26,B C27, BC28,BC29,B C3,BC30, BC31,BC32,B C33, BC34,BC35,B C36, BC37,BC38,B C39,BC4, BC40,BC41,B C42, BC43,BC44,B C45, BC46,BC47,B C48, BC49,BC5,BC 50,BC51, BC52,BC6,BC 7,BC8, B		1.128806	54	15865848.114680
11E2610030	Capacitor	C414,C415,C 421, C422,C430,C 431, C437,C445,C 51,C533, C535,C57		1.128806	12	68856937.301178
11E4433090	Capacitor	C162,C172,C 200,C37, C424,C63,C6 4,C65, C66		1.128806	9	90863428.080946
11E9501080	Capacitor	C470		1.128806	1	704977644.692287
11E9501090	Capacitor	C153,C169,C 193,C26, C27,C28,C29 ,C40, C416,C432,C 438,C45, C476,C509		1.128806	14	59316298.011235

**Reliability Prediction
Summary**

File Name: FWS-7250.rfp
Assembly: 9697725003-D
Ref Des:
Description:

Failure Rate: 9043.981383
MTBF (hrs): 110,571
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11E9501091	Capacitor	C113,C122,C123, C124,C125,C156, C160,C164,C166, C168,C171,C173, C174,C176,C186, C187,C188,C189, C191,C192,C194, C199,C202,C205, C268,C293,C294, C296,C297,C301, C303,C308,C310, C311,C321,C328, C332,C333,C336, C339,C342,C346, C348,C354,C358, C361,C364,C365,		1.128806	63	13632557.733278
11E9522490	Capacitor	C426,C465,C486		1.128806	3	257514172.353070
11E9547490	Capacitor	C307		1.128806	1	704977644.692287
11E9547630	Capacitor	C463		1.128806	1	704977644.692287
11E9547681	Capacitor	C394		1.128806	1	704977644.692287

File Name: FWS-7250.rfp
Assembly: 9697725003-D
Ref Des:
Description:

Failure Rate: 9043.981383
MTBF (hrs): 110,571
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11E9610080	Capacitor	C109,C110,C148, C152,C16,C165,C17, C190,C20,C21,C23, C24,C331,C360,C366, C375,C385,C390, C396,C412,C419, C434,C440,C441, C442,C469,C47,C477, C483,C489,C490,C50, C507,C508,C512, C516,C517,C527,C53, C62,C68		1.128806	41	20795506.904934
11E9622050	Capacitor	C247,C391,C400, C401,C410,C54,C55		1.128806	7	115633865.771428
11E9622080	Capacitor	C196,C255,C338, C341,C343,C350, C353,C357		1.128806	8	101746760.035398
11E9647690	Capacitor	C349,C359		1.128806	2	375289731.076049
121110156R	Inductor	L2	30.7	8.386119	1	91243298.018839
121110156S	Inductor	L1		4.944252	1	154760964.143460
121110156U	Inductor	L4		4.944252	1	154760964.143460
1211104270	Inductor	L3	30.3	8.333801	1	91816111.338254
1211104270	Inductor	L5		4.944252	1	154760964.143460
1212306030	Inductor	FB12,FB13,F B14, FB15,FB16,F B17, FB18,FB19,F B20, FB21		4.944252	10	18485101.557872
121230603I	Inductor	FB1,FB2		4.944252	2	83201062.149749
12123C0005	Inductor	FB10,FB11,F B6,FB7, FB8,FB9		4.944252	6	30055900.223009
12123C000A	Inductor	FB3,FB5		4.944252	2	83201062.149749
12123C0010	Inductor	FB4		4.944252	1	154760964.143460

File Name: FWS-7250.rfp
Assembly: 9697725003-D
Ref Des:
Description:

Failure Rate: 9043.981383
MTBF (hrs): 110,571
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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1214309000	Inductor	CH1,CH2,CH3		4.944252	3	57363284.375370
1214309006	Inductor	CH10,CH11,CH12,CH13,CH14,CH15,CH16,CH17,CH18,CH19,CH4,CH5,CH6,CH7,CH8,CH9		4.944252	16	11765215.454728
123132505D	Miscellaneous	Y5,Y6,Y7,Y8		19.200000	4	4388233.395340
123132505M	Miscellaneous	Y1,Y3		19.200000	2	8854051.752197
1231332726	Miscellaneous	Y4		19.200000	1	23844262.770939
1233348053	Miscellaneous	Y2		19.200000	1	23844262.770939
1252NS8920	Inductor	TF1,TF2,TF3,TF4		4.944252	4	43912872.424775
1300414844	Semiconductor	D12		7.793411	1	92807310.010983
1300414848	Semiconductor	D1		7.793411	1	92807310.010983
1301005450	Semiconductor	Q44		22.463360	1	31642600.748419
1301053040	Semiconductor	D11,D3,D4,D5		7.793411	4	26989084.126235
1301400642	Semiconductor	D13,D2		7.793411	2	50578095.223398
1304400500	Optical Device	LED1		79.003355	1	6497172.749112
1305099140	Semiconductor	D6,D7,D9		7.793411	3	35106858.962001
1305100541	Semiconductor	U17,U21,U42,U44,U45,U47		22.463360	6	6378891.324740
1310222211	Semiconductor	Q32,Q35		22.463360	2	17315095.066101
1310390411	Semiconductor	Q26		22.463360	1	31642600.748419
1310390413	Semiconductor	Q11,Q36		22.463360	2	17315095.066101
1314108412	Semiconductor	U2	37.9	57.302050	1	12404427.588229
1315009250	Semiconductor	Q31		22.463360	1	31642600.748419
1315034430	Semiconductor	Q34		22.463360	1	31642600.748419
1315050311	Semiconductor	Q30		22.463360	1	31642600.748419
1315230211	Semiconductor	Q46,Q49,Q57,Q59		22.463360	4	9270607.712006
1315230511	Semiconductor	Q71,Q73,Q75,Q83		22.463360	4	9270607.712006

**Reliability Prediction
Summary**

File Name: FWS-7250.rfp
Assembly: 9697725003-D
Ref Des:
Description:

Failure Rate: 9043.981383
MTBF (hrs): 110,571
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1315700211	Semiconductor	Q1,Q10,Q15, Q18,Q2, Q22,Q27,Q2 9,Q3,Q37, Q38,Q39,Q4 0,Q41, Q42,Q43,Q5 0,Q51, Q53,Q56,Q5 8,Q6,Q60, Q62,Q63,Q6 5,Q66, Q67,Q68,Q6 9,Q7,Q70, Q72,Q74,Q7 6,Q77, Q78,Q79,Q8, Q80,Q81, Q82,Q84,Q8 5		22.463360	44	955251.920562
1315700212	Semiconductor	Q45		22.463360	1	31642600.748419
1315700216	Semiconductor	Q12,Q33		22.463360	2	17315095.066101
1315970211	Semiconductor	U37,U46		22.463360	2	17315095.066101
1315D4C500	Semiconductor	Q64		22.463360	1	31642600.748419
1430012830	Integrated Circuit	U10,U11,U12 ,U13, U18,U23,U24 ,U4		43.803003	8	2144463.783749
1430021430	Integrated Circuit	U5		43.803003	1	11739202.588727
1430304210	Integrated Circuit	U34		43.803003	1	11739202.588727
1430973740	Integrated Circuit	U40		43.803003	1	11739202.588727
143S596410	Integrated Circuit	U39		43.803003	1	11739202.588727
1440003301	Integrated Circuit	U15		43.803003	1	11739202.588727
1440038080	Integrated Circuit	U6		43.803003	1	11739202.588727
1440210AT0	Integrated Circuit	U38	26.8	250.134739	1	2055741.360356
1440210AT0	Integrated Circuit	U31,U33,U41		43.803003	3	4923240.069161
1440J19000	Integrated Circuit	U28	39	100.057109	1	5139188.368971
1482640HC0	Integrated Circuit	U20	22.7	195.201314	1	2634266.741937
149TB01040	Integrated Circuit	U22,U35,U36		43.803003	3	4923240.069161
14S2750100	Integrated Circuit	U8		43.803003	1	11739202.588727
14S3121600	Integrated Circuit	U9		43.803003	1	11739202.588727
14S4081102	Integrated Circuit	U1,U14		43.803003	2	6834791.244197
14S4872800	Integrated Circuit	U29	24	211.310527	1	2433443.980950
14S5912300	Integrated Circuit	U16		26.018600	1	25551442.237972
14S5A00821	Integrated Circuit	U3,U7		26.018600	2	14194252.866846
14S5A23200	Integrated Circuit	U25	24.4	70.633070	1	9412202.465449
14S5A23200	Integrated Circuit	U43	27.5	79.346413	1	8378611.234674
14S6206403	Integrated Circuit	U43		11.063278	1	58231413.220643
14S9860300	Integrated Circuit	U30	25.1	225.864594	1	2276639.820483

File Name: FWS-7250.rfp
Assembly: 9697725003-D
Ref Des:
Description:

Failure Rate: 9043.981383
MTBF (hrs): 110,571
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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1540722281	Resistor	RP2		9.971436	1	51606907.671214
1540733085	Resistor	RP1		9.971436	1	51606907.671214
1540775082	Resistor	RP3,RP4,RP5,RP6		9.971436	4	17049357.262242
1601110201	Connection	SW1		16.184835	1	35685591.360212
16515A2994	Connection	DIMM1		16.184835	1	35685591.360212
16515A2995	Connection	DIMM2		16.184835	1	35685591.360212
165251220B	Connection	CN21,CN22,CN23,CN24,CN25		16.184835	5	9343344.843761
1653002100	Connection	CN2		16.184835	1	35685591.360212
1653003101	Connection	CN13,CN16,CN17,JP1		16.184835	4	11344857.509064
1653004200	Connection	FP1,FP2		16.184835	2	20390152.380746
165300420F	Connection	CN8		16.184835	1	35685591.360212
165300420L	Connection	CN18		16.184835	1	35685591.360212
1653005201	Connection	CN11		16.184835	1	35685591.360212
1653008100	Connection	CN7		16.184835	1	35685591.360212
1653205203	Connection	COM1		16.184835	1	35685591.360212
165320820B	Connection	CN12		16.184835	1	35685591.360212
1653212203	Connection	CN6		16.184835	1	35685591.360212
1653300100	Connection	FP1(5-7)		16.184835	1	35685591.360212
1653300102	Connection	CN16(2-3),CN17(2-3),JP1(1-2)		16.184835	3	14515880.849373
1653300107	Connection	CN13(2-3)		16.184835	1	35685591.360212
165392521J	Connection	CN5		16.184835	1	35685591.360212
1654205230	Connection	CN19		16.184835	1	35685591.360212
1654808309	Connection	CN20		16.184835	1	35685591.360212
1654903900	Connection	CN4		16.184835	1	35685591.360212
165490700G	Connection	CN15		16.184835	1	35685591.360212
1655004011	Connection	CN14		16.184835	1	35685591.360212
1655004018	Connection	CPU_FAN1,SYS_FAN1		16.184835	2	20390152.380746
1655424020	Connection	CN1		16.184835	1	35685591.360212
175011901H	Miscellaneous	BT1		306.000000	1	1681683.006787
1750220323	Connection	BT1		16.184835	1	35685591.360212

**Reliability Prediction
Summary**

File Name: FWS-7250.rfp
Assembly: 9697725003-D
Ref Des:
Description:

Failure Rate: 9043.981383
MTBF (hrs): 110,571
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1751300005	Relay	RELAY1,REL AY10, RELAY11,REL AY12, RELAY13,REL AY14, RELAY15,REL AY16, RELAY2,REL AY3, RELAY4,REL AY5, RELAY6,REL AY7, RELAY8,REL AY9		19.477355	16	2689762.931351
1752310000	Miscellaneous	FS1,FS2		2.400000	2	143944727.196625