

FWS-2260

Reliability Prediction Report (MTBF)

Summary	Failure Rate: 11720.431972 ppm MTBF: 85,321 Hours
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Issue date	Approval	Test Engineer
2016/01/22	KJ Wang	Danny Chen

Reliability Prediction (MTBF)

I . Model Name: FWS-2260

II . Prediction Date: JAN .22, 2016

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

IV . Predicted by: Danny

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-2260 (9697226012-D):

- Failure Rate: 11720.431972 ppm
- MTBF: 85,321 Hours

**AAEON Reliability Prediction
Summary**

File Name: FWS-2260.rfp
Duty Cycle: 100
Calculation Model: Telcordia Issue 2
Method: Method I Case 3

Failure Rate: 11720.431972
MTBF (hrs): 85,321
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Assembly Name	Part Number	Ref Des	Quantity	Failure Rate	MTBF
FWS-2260	9697226012-D		1	11720.431972	85,321

File Name: FWS-2260.rfp
Assembly: 9697226012-D
Ref Des:
Description:

Failure Rate: 11720.431972
MTBF (hrs): 85,321
Temperature: 30
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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050500104	Resistor	R1036,R1108 ,R655, R660		2.547039	4	82309758.689546
1050501054	Resistor	R1419		2.547039	1	282340674.079668
1050501064	Resistor	R312		2.547039	1	282340674.079668
1050502204	Resistor	R209,R211,R 213, R214		2.547039	4	82309758.689546
1050502224	Resistor	R11,R1158,R 1219, R1220,R1222 ,R27, R28,R303,R4 3,R549, R582,R607,R 621, R631,R71		2.547039	15	23852782.943395
1050503324	Resistor	R1028,R1076 ,R1077, R1078,R1079 ,R1080, R1091,R1104 ,R1105, R1106,R1107 ,R1159, R1193,R1210 ,R531, R532,R565,R 566, R578,R690,R 73,R771, R772,R773,R 774, R778,R779,R 780, R781,R782,R 788, R790,R791,R 792, R793,R794,R 795, R797,R932,R 941, R942,R945		2.547039	42	8834121.532637
1050503334	Resistor	R1038,R1039 ,R1123, R1124,R593, R599, R600,R610,R 611, R628,R630,R 632		2.547039	12	29507083.749401
1050503624	Resistor	R1406		2.547039	1	282340674.079668
1050504324	Resistor	R1427		2.547039	1	282340674.079668

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1050504724	Resistor	R1026,R1043 ,R1056, R1147,R124, R125, R126,R128,R 1332, R1333,R1335 ,R1336, R1337,R1338 ,R1342, R1343,R1344 ,R1345, R1346,R1347 ,R1349, R1362,R1364 ,R1365, R1366,R143, R144, R178,R186,R 187, R189,R190,R 191,R2, R204,R22,R2 27,R245, R277,R42,R4 43,R46, R470,R472,R 491,R		2.547039	47	7918121.839508
1050504724-00	Resistor	R1214,R1239 ,R693, R988,R992,R 993		2.547039	6	56573956.677649
1050504734	Resistor	R677,R837		2.547039	2	154078778.388085
1050505134	Resistor	R1425,R848		2.547039	2	154078778.388085
1050505164	Resistor	R83		2.547039	1	282340674.079668
1050506224	Resistor	R52		2.547039	1	282340674.079668
1050508224	Resistor	R76,R77,R81 7		2.547039	3	107020754.986850
1050510034	Resistor	R1000,R1110 ,R1154, R1211,R316, R79,R80, R81,R810,R8 66		2.547039	10	35079934.879747
1050510524	Resistor	R1428,R829		2.547039	2	154078778.388085
1050512004	Resistor	R615		2.547039	1	282340674.079668
1050514304	Resistor	R970		2.547039	1	282340674.079668
1050516234	Resistor	R1062		2.547039	1	282340674.079668
1050516924	Resistor	R1293		2.547039	1	282340674.079668
1050517424	Resistor	R1321,R842		2.547039	2	154078778.388085
1050518204	Resistor	R100,R86		2.547039	2	154078778.388085

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1050518703	Resistor	R800		2.547039	1	282340674.079668
1050518744	Resistor	R852		2.547039	1	282340674.079668
1050520004	Resistor	R663		2.547039	1	282340674.079668
1050520034	Resistor	R1125,R12,R 301, R322,R75		2.547039	5	67008142.102588
1050521024	Resistor	R519		2.547039	1	282340674.079668
1050527034	Resistor	R1432		2.547039	1	282340674.079668
1050528734	Resistor	R844,R851		2.547039	2	154078778.388085
1050532414	Resistor	R742,R832		2.547039	2	154078778.388085
1050539214	Resistor	R754		2.547039	1	282340674.079668
1050540204	Resistor	R314,R326,R 334, R340,R351		2.547039	5	67008142.102588
1050545364	Resistor	R353		2.547039	1	282340674.079668
1050547004	Resistor	R1004,R1005 ,R1006		2.547039	3	107020754.986850
1050549964	Resistor	R435,R659,R 664		2.547039	3	107020754.986850
1050557604	Resistor	R681		2.547039	1	282340674.079668
1050559004	Resistor	R971		2.547039	1	282340674.079668
1050563420	Resistor	R1314		2.547039	1	282340674.079668
1050568004	Resistor	R652,R689		2.547039	2	154078778.388085
1050568034	Resistor	R567		2.547039	1	282340674.079668
1050569804	Resistor	R808		2.547039	1	282340674.079668
1050578714	Resistor	R847		2.547039	1	282340674.079668
1050580664	Resistor	R419		2.547039	1	282340674.079668
1050591034	Resistor	R562		2.547039	1	282340674.079668
1050593104	Resistor	R967,R969		2.547039	2	154078778.388085
1050593114	Resistor	R1304,R687		2.547039	2	154078778.388085
1050709124	Resistor	R1405		2.547039	1	282340674.079668
105270000A	Resistor	R455		2.547039	1	282340674.079668
1059700001	Resistor	R1089,R119, R136, R362,R367,R 370, R371,R54		2.547039	8	43225424.698300
105A500139	Resistor	R1051,R1204 ,R1430, R1431,R192, R196, R310,R324,R 485, R520,R536,R 546, R904,R931,R 939, R959,R960,R 961, R991		2.547039	19	19019185.781770

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105A500173	Resistor	R1324		2.547039	1	282340674.079668
105A500239	Resistor	R1363,R944		2.547039	2	154078778.388085
105A501039	Resistor	R1025,R1031 ,R1032, R1037,R1040 ,R1041, R1042,R1054 ,R1055, R1057,R1058 ,R1059, R106,R1060, R1209, R1275,R137, R1423, R145,R148,R 164, R169,R170,R 171, R172,R179,R 180, R181,R193,R 194, R200,R201,R 202, R203,R205,R 243, R261,R393,R 458,R48, R490,R522,R 554, R563,R569,R		2.547039	66	5684918.384720
105A501233	Resistor	R135		2.547039	1	282340674.079668
105A501323	Resistor	R893		2.547039	1	282340674.079668
105A501539	Resistor	R1016,R13,R 645		2.547039	3	107020754.986850
105A502039	Resistor	R1308,R1316 ,R1441, R269,R373,R 819, R840,R936,R 938		2.547039	9	38754445.632391
105A502263	Resistor	R559,R571,R 576, R577,R984		2.547039	5	67008142.102588
105A503039	Resistor	R1295,R1309 ,R751		2.547039	3	107020754.986850
105A503309	Resistor	R1202,R176, R533, R545		2.547039	4	82309758.689546
105A503423	Resistor	R803,R805		2.547039	2	154078778.388085

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105A505109	Resistor	R257,R258,R259, R260,R272,R329, R506,R509,R997		2.547039	9	38754445.632391
105A506829	Resistor	R1011,R644, R720		2.547039	3	107020754.986850
105A506834	Resistor	R806,R814		2.547039	2	154078778.388085
105A507509	Resistor	R704,R798		2.547039	2	154078778.388085
105A510009	Resistor	R327,R335,R349, R350,R355,R356,R51, R723,R888,R910, R935,R972		2.547039	12	29507083.749401
105A510723	Resistor	R775		2.547039	1	282340674.079668
105A511303	Resistor	R358		2.547039	1	282340674.079668
105A512039	Resistor	R1065		2.547039	1	282340674.079668
105A513009	Resistor	R686,R776,R968		2.547039	3	107020754.986850
105A515009	Resistor	R1017,R1024, R352, R711		2.547039	4	82309758.689546
105A519629	Resistor	R1323		2.547039	1	282340674.079668
105A524919	Resistor	R444,R705,R836		2.547039	3	107020754.986850
105A526100	Resistor	R816		2.547039	1	282340674.079668
105A538323	Resistor	R1305		2.547039	1	282340674.079668
105A549919	Resistor	R1009,R1012, R1019, R1236,R1237, R949		2.547039	6	56573956.677649
105A556003	Resistor	R625,R896		2.547039	2	154078778.388085
105A561909	Resistor	R1276,R1277, R1278, R1279,R1280, R1281, R1282,R1283		2.547039	8	43225424.698300
105A562034	Resistor	R140		2.547039	1	282340674.079668
105A700003	Resistor	R1294,R1306, R1307, R1315,R1322, R1420, R1421,R1429, R44, R82,R84,R90, R98		2.547039	13	27342571.921361

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105A700009	Resistor	R1,R10,R100 2,R1007, R1008,R1013 ,R1014, R1018,R1022 ,R103, R1034,R1035 ,R105, R1050,R1068 ,R1087, R1088,R1093 ,R1094, R1102,R1114 ,R1121, R1126,R1142 ,R1144, R1146,R1152 ,R1156, R1196,R1200 ,R1205, R122,R1221, R1227, R123,R1242, R1243, R1244,R1245 ,R1246, R1247,R1248		2.547039	214	1788554.966535
105A70000A	Resistor	R1033,R1044 ,R1053, R1111,R1112 ,R1113, R1115,R1116 ,R120, R1352,R1355 ,R273, R295,R298,R 300, R369,R372,R 377, R424,R585,R 588, R724,R729,R 734, R741,R78,R8 18,R823, R830,R831,R 839, R843,R856,R 911		2.547039	34	10846303.620910
105A700103	Resistor	R1424		2.547039	1	282340674.079668
105A700139	Resistor	R220,R234,R 401, R402,R58		2.547039	5	67008142.102588

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105A701039	Resistor	R1001,R1052 ,R1071, R1083,R1085 ,R1095, R110,R1101, R111, R1117,R1120 ,R1122, R1129,R1143 ,R1145, R1148,R1153 ,R1155, R1157,R1195 ,R1198, R1203,R1206 ,R131, R1339,R1372 ,R138, R141,R230,R 246, R284,R285,R 286, R287,R305,R 311, R328,R378,R 379, R380,R413,R 414, R415,R41		2.547039	91	4150431.630548
105A701053	Resistor	R149		2.547039	1	282340674.079668
105A701069	Resistor	R496		2.547039	1	282340674.079668
105A701529	Resistor	R1334		2.547039	1	282340674.079668
105A702039	Resistor	R1240,R493		2.547039	2	154078778.388085
105A702263	Resistor	R962,R964		2.547039	2	154078778.388085
105A702729	Resistor	R333		2.547039	1	282340674.079668

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105A703309	Resistor	R1063,R1069 ,R1075, R1084,R1090 ,R1092, R1097,R1103 ,R1199, R1212,R667, R675, R676,R688,R 700, R702,R703,R 722, R733,R739,R 740, R752,R770,R 786, R787,R809,R 953, R965,R966,R 979		2.547039	30	12244464.256771
105A703329	Resistor	R422,R462,R 463, R479,R789		2.547039	5	67008142.102588
105A704729	Resistor	R1020,R1048 ,R1049, R1194,R1285 ,R1286, R1288,R1370 ,R1371, R1412,R1413 ,R1437, R262,R263,R 398, R558,R564,R 881, R884,R987,R 990, R998		2.547039	22	16518584.576317
105A705129	Resistor	R23,R72		2.547039	2	154078778.388085
105A708209	Resistor	R210,R212,R 215		2.547039	3	107020754.986850
105A710009	Resistor	R339,R348,R 421, R539,R551,R 573, R579,R580,R 581, R669,R670		2.547039	11	32049696.385471

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105A710039	Resistor	R1151,R1284, R1291, R1299,R1301, R1313, R1320,R218, R256, R336,R337,R 354, R357,R361,R 464,R47, R74		2.547039	17	21160422.299251
105A715009	Resistor	R117,R1224, R1225, R14,R15,R16 ,R17, R18,R19,R24 ,R25, R26,R29,R33 ,R34, R35,R36,R37 ,R4,R41, R5,R6,R67,R 68,R7, R8,R9		2.547039	27	13557741.157915
105A733003	Resistor	R102,R127		2.547039	2	154078778.388085
105A733009	Resistor	R1207,R1208 ,R1215, R1216,R1217 ,R1218		2.547039	6	56573956.677649
105A747009	Resistor	R147		2.547039	1	282340674.079668
106B504734	Resistor	RT1,RT3,RT4 ,RT5		7.724580	4	21923287.146155
106BA01033	Resistor	R323,R601		7.724580	2	38596617.434771
1121415090	Capacitor	C401		1.128806	1	704977644.692287

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1121501690	Capacitor	C169,C196,C238,C255,C318,C319,C367,C412,C422,C423,C431,C501,C503,C511,C555,C584,C592,C597,C599,C620,C635,C644,C65,C671,C674,C676,C679,C684,C70,C71,C72,C763,C772,C778,C892		1.128806	35	24285352.591796
1121501691	Capacitor	C249,C321,C344,C345,C347,C368,C374,C407,C408,C409,C410,C545,C668,C699,C793,C801,C802,C808,C813,C884,C900,C901		1.128806	22	38230892.707156
1122522890	Capacitor	C185,C478,C558,C629		1.128806	4	196873384.410843
1124412090	Capacitor	C898,C899		1.128806	2	375289731.076049
1124418090	Capacitor	C186,C198		1.128806	2	375289731.076049
1124418190	Capacitor	C59,C60,C61,C62,C670,C672,C673,C675,C680,C681,C773,C774,C775,C776,C777,C779,C780,C781,C782,C783		1.128806	20	41950408.034165

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1124427090	Capacitor	C580,C581,C582, C583,C593,C595, C600,C601,C725, C731,C739,C741		1.128806	12	68856937.301178
1124433090	Capacitor	C29		1.128806	1	704977644.692287
1124433190	Capacitor	C44		1.128806	1	704977644.692287
1124468090	Capacitor	C465,C467		1.128806	2	375289731.076049
1124522290	Capacitor	C872		1.128806	1	704977644.692287
1124533191	Capacitor	C311,C602		1.128806	2	375289731.076049
1124533280	Capacitor	C3		1.128806	1	704977644.692287
1124539180	Capacitor	C488,C495		1.128806	2	375289731.076049
1129522790	Capacitor	C591,C625,C667, C744		1.128806	4	196873384.410843
1129610051	Capacitor	C25,C36,C77,C78		1.128806	4	196873384.410843
1129610080	Capacitor	C104,C106,C110, C116,C117,C121, C124,C128,C130, C135,C137,C144, C146,C156,C162, C172,C21,C24,C33, C35,C39,C512,C513, C514,C516,C52,C520, C53,C569,C570,C571, C572,C574,C575, C576,C577,C646, C689,C721,C722, C723,C724,C828, C831,C836,C839, C840,C849,C857,C96		1.128806	50	17113035.871263
1129610260	Capacitor	C728,C729,C730, C734		1.128806	4	196873384.410843

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1129701690	Capacitor	C100,C103,C105, C107,C108,C112, C115,C119,C122, C125,C127,C131, C138,C145,C154, C159,C263,C268, C293,C320,C57,C678, C685,C75,C86,C90, C97,C99		1.128806	28	30212160.975569
1129701790	Capacitor	C669		1.128806	1	704977644.692287
1129722091	Capacitor	C63,C64		1.128806	2	375289731.076049
1169656192	Capacitor	C26,C330,C357,C865, TC1		1.128806	5	159367490.199266
1189610153	Capacitor	C160		4.744484	1	159663026.715137
1189656196	Capacitor	C181,C466,C610, C624,C645,C733, C749,C902,C903		4.744484	9	21223953.983763
118C6331B0	Capacitor	C904,C905,TC2		1.128806	3	257514172.353070
11A4410040	Capacitor	C184,C224		1.128806	2	375289731.076049
11C1501050	Capacitor	C587		1.128806	1	704977644.692287
11C1501080	Capacitor	C7,C76		1.128806	2	375289731.076049
11C1510390	Capacitor	C835,C844,C845, C848,C854,C855, C856,C861,C862,C863		1.128806	10	82101057.548118
11C1539840	Capacitor	C499,C567,C568, C578,C706,C718		1.128806	6	133979725.056342
11C1647780	Capacitor	C462,C468		1.128806	2	375289731.076049
11C2410480	Capacitor	C398,C434		1.128806	2	375289731.076049
11C2501790	Capacitor	C240,C241,C242,C243		1.128806	4	196873384.410843
11C2610030	Capacitor	C879,C880,C906		1.128806	3	257514172.353070

**Reliability Prediction
Summary**

File Name: FWS-2260.rfp
Assembly: 9697226012-D
Ref Des:
Description:

Failure Rate: 11720.431972
MTBF (hrs): 85,321
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11C4501790	Capacitor	C113,C114,C176,C177,C47,C48,C784,C785,C786,C787,C82, C83		1.128806	12	68856937.301178
11C4510240	Capacitor	C876		1.128806	1	704977644.692287
11C4510280	Capacitor	C887		1.128806	1	704977644.692287
11C4522290	Capacitor	C430,C889		1.128806	2	375289731.076049
11C4533240	Capacitor	C663,C735,C877, C888		1.128806	4	196873384.410843
11C4533380	Capacitor	C41		1.128806	1	704977644.692287
11C4547730	Capacitor	C442,C459		1.128806	2	375289731.076049
11C9510490	Capacitor	C109,C111,C148,C158,C16,C17,C179,C18,C180,C214,C215,C216,C217,C225,C226,C227,C228,C27,C306,C328,C5,C502,C504,C505,C509,C510,C515,C518,C519,C522,C523,C524,C525,C526,C527,C528,C529,C530,C531,C532,C533,C534,C535,C536,C537,C538,C539,C540,C541, C		1.128806	173	5025283.133888

File Name: FWS-2260.rfp
Assembly: 9697226012-D
Ref Des:
Description:

Failure Rate: 11720.431972
MTBF (hrs): 85,321
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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11CA501040	Capacitor	C118,C120,C126, C129,C134,C140, C147,C15,C163,C164, C165,C166,C167, C190,C191,C192, C193,C194,C197, C209,C210,C219, C220,C221,C230, C231,C232,C233, C235,C251,C252, C259,C260,C270,C28, C283,C284,C285, C286,C287,C301, C323,C324,C325, C326,C327,C348, C349,C3		1.128806	53	16160213.088941
11E1501040	Capacitor	C294		1.128806	1	704977644.692287
11E1510050	Capacitor	C139,C560,C561, C562,C690		1.128806	5	159367490.199266
11E1522440	Capacitor	C174		1.128806	1	704977644.692287
11E1522680	Capacitor	C483,C494,C623, C630,C677,C736, C745,C764,C767		1.128806	9	90863428.080946
11E1547650	Capacitor	C517,C521		1.128806	2	375289731.076049
11E1647650	Capacitor	C37		1.128806	1	704977644.692287
11E2501030	Capacitor	C544		1.128806	1	704977644.692287
11E2501080	Capacitor	C882		1.128806	1	704977644.692287

File Name: FWS-2260.rfp
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Description:

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11E2501690	Capacitor	C1,C101,C102,C13,C143,C222,C223,C273,C333,C339,C34,C375,C413,C429,C438,C440,C45,C457,C458,C463,C474,C475,C479,C484,C485,C489,C496,C498,C54,C55,C557,C617,C621,C622,C664,C683,C692,C704,C719,C720,C726,C727,C754,C85,C88,C881,C98		1.128806	47	18185851.719462
11E2510060	Capacitor	C711,C732,C897		1.128806	3	257514172.353070
11E2622020	Capacitor	C717		1.128806	1	704977644.692287
11E2647650	Capacitor	C486,C487		1.128806	2	375289731.076049
11E4433090	Capacitor	C791,C797,C799,C806,C811		1.128806	5	159367490.199266
11E4510440	Capacitor	C611,C710,C878		1.128806	3	257514172.353070
11E9501080	Capacitor	C883		1.128806	1	704977644.692287
11E9501091	Capacitor	C149,C150,C151,C152,C153,C22,C23,C31,C32,C38,C40,C43,C49,C58,C794,C803,C804,C809,C814,C838,C858,C91,C92,C93,C94,C95		1.128806	26	32480878.530766

File Name: FWS-2260.rfp
Assembly: 9697226012-D
Ref Des:
Description:

Failure Rate: 11720.431972
MTBF (hrs): 85,321
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11E9510050	Capacitor	C171,C556,C682		1.128806	3	257514172.353070
11E9510051	Capacitor	C6		1.128806	1	704977644.692287
11E9547630	Capacitor	C274,C275,C276, C277,C289,C290		1.128806	6	133979725.056342
11E9610080	Capacitor	C229,C244,C416, C424,C588,C604, C619,C700,C73,C74, C792,C798,C800, C807,C812,C885		1.128806	16	52112480.802928
11E9622050	Capacitor	C331,C341,C342		1.128806	3	257514172.353070
11E9622080	Capacitor	C142,C161,C168,C19, C30,C395,C402,C403, C585,C586,C603, C614,C66,C67,C68, C69,C891,C893,C894, C895,C896		1.128806	21	40003791.624280
11EA647010	Capacitor	C631,C632,C633, C634,C765,C766		1.128806	6	133979725.056342
11EB501040	Capacitor	C2,C295,C296		1.128806	3	257514172.353070
11EB522010	Capacitor	C279,C280,C281, C282,C307,C308, C309,C335,C336, C337,C338,C340		1.128806	12	68856937.301178
11EB522640	Capacitor	C170		1.128806	1	704977644.692287
11EB610050	Capacitor	C312,C313,C314, C358,C359,C360, C361,C362,C419, C425,C436		1.128806	11	74892583.279796

**Reliability Prediction
Summary**

File Name: FWS-2260.rfp
Assembly: 9697226012-D
Ref Des:
Description:

Failure Rate: 11720.431972
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Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
121110156P	Inductor	L1,L26	38.8	4.944252	2	83201062.149749
1211103676	Inductor	L3,L5		4.944252	2	83201062.149749
1211133075	Inductor	L25		4.944252	1	154760964.143460
1211147071	Inductor	L8		9.489213	1	80636521.041000
1212306030	Inductor	FB14,FB17,F B18, FB21		4.944252	4	43912872.424775
1212306033	Inductor	FB3		4.944252	1	154760964.143460
121230603I	Inductor	FB4,FB5		4.944252	2	83201062.149749
1212308054	Inductor	FB25,FB33,F B34		4.944252	3	57363284.375370
121430900A	Inductor	CH4,CH5,CH 6,CH7		4.944252	4	43912872.424775
12143B0002	Inductor	CH10,CH11,C H12, CH13,CH14,C H15		4.944252	6	30055900.223009
12310025A6	Miscellaneous	Y1,Y10,Y5,Y6 ,Y7,Y8, Y9		19.200000	7	2747550.850695
12310192A0	Miscellaneous	Y2		19.200000	1	23844262.770939
1231332726	Miscellaneous	Y11,Y3		19.200000	2	8854051.752197
12333048A2	Miscellaneous	Y4		19.200000	1	23844262.770939
1300414844	Semiconductor	D8		7.793411	1	92807310.010983
1301005440	Semiconductor	D9	7.793411	1	92807310.010983	
1301053040	Semiconductor	D1,D2,D6	7.793411	3	35106858.962001	
1301400642	Semiconductor	D3,D7	7.793411	2	50578095.223398	
1304100250	Optical Device	LED2,LED3	79.003355	2	3783722.582110	
1304400150	Optical Device	LED1	79.003355	1	6497172.749112	
1304451450	Optical Device	LED4,LED5,L ED6, LED7,LED8,L ED9	79.003355	6	1523626.609050	
1305099140	Semiconductor	D4,D5	7.793411	2	50578095.223398	
1305100541	Semiconductor	U55,U56,U57 ,U58	7.793411	4	26989084.126235	
1310039040	Semiconductor	Q15	22.463360	1	31642600.748419	
1310390411	Semiconductor	Q14	22.463360	1	31642600.748419	
1310390413	Semiconductor	Q34,Q87	22.463360	2	17315095.066101	
1311390612	Semiconductor	Q31	22.463360	1	31642600.748419	
1314111719	Semiconductor	Q27	22.463360	1	31642600.748419	
1315033510	Semiconductor	Q121,Q22	22.463360	2	17315095.066101	
1315060300	Semiconductor	Q36	22.463360	1	31642600.748419	
1315060300	Semiconductor	Q119,Q120, Q13,Q35, Q37,Q38,Q7	22.463360	7	5525968.936223	

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Assembly: 9697226012-D
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Description:

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1315070020	Semiconductor	Q1,Q2,Q3,Q4 ,Q5,Q53, Q54,Q55,Q5 8,Q59,Q6, Q60,Q61,Q6 2,Q63, Q69,Q70,Q7 1,Q74, Q75,Q80,Q8 3		22.463360	22	1867312.998876
1315200312	Semiconductor	Q76,Q82		22.463360	2	17315095.066101
1315230511	Semiconductor	Q56,Q57,Q7 8,Q79		22.463360	4	9270607.712006
1315413410	Semiconductor	Q64,Q73		22.463360	2	17315095.066101
1315443512	Semiconductor	Q68		22.463360	1	31642600.748419
13156K1N10	Semiconductor	Q118,Q122		22.463360	2	17315095.066101
1315700211	Semiconductor	Q10,Q11,Q1 6,Q17, Q20,Q21,Q2 5,Q26, Q32,Q8,Q85, Q9		22.463360	12	3332353.664911
1315700216	Semiconductor	Q114,Q115, Q12,Q18, Q19,Q23,Q2 4,Q30, Q39,Q40,Q4 1,Q42, Q43,Q44,Q4 5,Q46, Q47,Q50,Q5 1,Q52, Q66,Q67,Q7 2,Q84, Q86,Q88,Q8 9		22.463360	27	1533030.992154
1315762010	Semiconductor	Q81		22.463360	1	31642600.748419
1430082021	Integrated Circuit	U78		43.803003	1	11739202.588727
14308161B0	Integrated Circuit	U34,U35		43.803003	2	6834791.244197
14308239B0	Integrated Circuit	U44		43.803003	1	11739202.588727
1440211AT0	Integrated Circuit	U41,U42,U43 , U62,U63		43.803003	5	3214211.402100
1440211AT0	Integrated Circuit	U40	36.4	436.667491	1	1177583.265167
1440N31500	Integrated Circuit	U8		43.803003	1	11739202.588727
1482640HC1	Integrated Circuit	U47		43.803003	1	11739202.588727
149TB01040	Integrated Circuit	U24,U25,U29		43.803003	3	4923240.069161
149TS01040	Integrated Circuit	U28		43.803003	1	11739202.588727
14S2951700	Integrated Circuit	U66,U77		43.803003	2	6834791.244197
14S3104500	Integrated Circuit	U69,U70,U71		43.803003	3	4923240.069161

File Name: FWS-2260.rfp
Assembly: 9697226012-D
Ref Des:
Description:

Failure Rate: 11720.431972
MTBF (hrs): 85,321
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
14S3820700	Integrated Circuit	U3		43.803003	1	11739202.588727
14S3902500	Integrated Circuit	U15,U23,U7		43.803003	3	4923240.069161
14S3902500	Integrated Circuit	U20	39.9	530.885961	1	968592.818701
14S3902500	Integrated Circuit	U5	45.8	731.442266	1	703011.506809
14S4021301	Integrated Circuit	U73		43.803003	1	11739202.588727
14S4033001	Integrated Circuit	U6		43.803003	1	11739202.588727
14S4081102	Integrated Circuit	U45,U65		43.803003	2	6834791.244197
14S4872800	Integrated Circuit	U32		43.803003	1	11739202.588727
14S5912300	Integrated Circuit	U64		26.018600	1	25551442.237972
14S5A00821	Integrated Circuit	U16		26.018600	1	25551442.237972
14S6206403	Integrated Circuit	U21		26.018600	1	25551442.237972
14S9541200	Integrated Circuit	U72		43.803003	1	11739202.588727
1540722085	Resistor	RP3,RP4,RP5 ,RP6, RP7		9.971436	5	14126297.426094
1540775082	Resistor	RP10,RP11,R P8,RP9		9.971436	4	17049357.262242
1540782080	Resistor	RP1		9.971436	1	51606907.671214
1540782280	Resistor	RP2		9.971436	1	51606907.671214
160102US90	Connection	SW2		16.184835	1	35685591.360212
1601615600	Connection	SW1		16.184835	1	35685591.360212
16515A2994	Connection	DIMM1		16.184835	1	35685591.360212
16515A2995	Connection	DIMM2		16.184835	1	35685591.360212
1652503209	Connection	CN22		16.184835	1	35685591.360212
1652510206	Connection	LAN5,LAN6		16.184835	2	20390152.380746
165251220H	Connection	CON1,LAN1,L AN2, LAN3,LAN4		16.184835	5	9343344.843761
1653003101	Connection	CN12,JP1,JP 2		16.184835	3	14515880.849373
165300420F	Connection	CN4		16.184835	1	35685591.360212
165300420L	Connection	CN15		16.184835	1	35685591.360212
1653005207	Connection	CN5,CN8		16.184835	2	20390152.380746
1653300102	Connection	CN12(1- 2),JP1(2-3), JP2(1-2)		16.184835	3	14515880.849373
165392521H	Connection	CN6		16.184835	1	35685591.360212
1654226303	Connection	CN13		16.184835	1	35685591.360212
1654818301	Connection	CN20		16.184835	1	35685591.360212
1654903900	Connection	CN14		16.184835	1	35685591.360212
165490700G	Connection	CN11		16.184835	1	35685591.360212
1654919302	Connection	CN23		16.184835	1	35685591.360212
1655004011	Connection	CN10		16.184835	1	35685591.360212
1655004018	Connection	CPU_FAN1		16.184835	1	35685591.360212
1655912031	Connection	LPC1		16.184835	1	35685591.360212
1750113016	Miscellaneous	BT1		306.000000	1	1681683.006787
1750220323	Miscellaneous	BT1		306.000000	1	1681683.006787

**Reliability Prediction
Summary**

File Name: FWS-2260.rfp
Assembly: 9697226012-D
Ref Des:
Description:

Failure Rate: 11720.431972
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Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1751300006	Miscellaneous	RELAY1,REL AY10, RELAY11,REL AY12, RELAY13,REL AY14, RELAY15,REL AY16, RELAY2,REL AY3, RELAY4,REL AY5, RELAY6,REL AY7, RELAY8,REL AY9		2.400000	16	22549172.286795
1752000501	Miscellaneous	FS3		2.400000	1	254626042.602335
1752001603	Miscellaneous	FS6		2.400000	1	254626042.602335
1752002500	Miscellaneous	FS5		2.400000	1	254626042.602335
1752002700	Miscellaneous	FS1		2.400000	1	254626042.602335
1759100002	Miscellaneous	BZ1		2.400000	1	254626042.602335