Poker Cards Analysis - August 2020

The Directors
GVC Plc

This is to confirm that iTech Labs has examined the game logs for Poker games for the period **August 01, 2020** to **August 31, 2020** as recorded by the respective game servers and analyzed the Poker cards for statistical randomness. The results of the analysis are given below.

For details on the gaming sites serviced by the GVC Plc game servers and used in this audit refer to the List.

1. Poker hand types statistics

These calculations were done for Royal Flush, Straight Flush, Four of a Kind, Full House, Flush, Straight, 3 of a Kind, 2 pairs, 1 Pair, High Card.

The Poker hand types analysis involved creating subsets of data and conducting Chi-square tests on each subset.

The null hypothesis for the chi-square test is that the observed frequencies of each type of hand matches the theoretical values for a deck that has been shuffled using a perfect random number generator. The p-values observed in these multiple tests are expected to follow a uniform distribution for the range 0.0 to 1.0.

The analysis performs a KS Test (Kolmogorov-Smirnov test) for uniform distribution on the observed p-values, and the combined p-value result of this test is taken as the final result of the Poker hand types statistics tests.

1.1 Poker hand types statistics for 52 cards deck:

Test No.	DOF	ChiSqr	P-Value
1	9	8.93	0.44380
2	9	6.98	0.63876
3	9	9.71	0.37463
4	9	8.30	0.50399
5	9	9.02	0.43574
6	9	11.64	0.23467
7	9	5.10	0.82527
8	9	6.76	0.66247
9	9	13.72	0.13273
10	9	5.78	0.76180
11	9	11.98	0.21418
12	9	16.42	0.05866
13	9	3.11	0.95994
14	9	8.81	0.45500
15	9	9.00	0.43726
16	9	20.82	0.01348
17	9	7.34	0.60125
18	9	7.17	0.61990
19	9	10.43	0.31715
20	9	5.27	0.81029
21	9	11.29	0.25615
22	9	11.51	0.24208
23	9	7.64	0.57049
24	9	5.80	0.75999
25	9	6.75	0.66280

26	9	5.21	0.81608
27	9	10.31	0.32569
28	9	11.01	0.27534
29	9	15.88	0.06948
30	9	11.61	0.23599
31	9	7.19	0.61715
32	9	9.64	0.38027
33	9	5.33	0.80425
34	9	3.34	0.94919
35	9	7.64	0.57100
36	9	6.40	0.69980
37	9	3.10	0.96022
38	9	6.93	0.64430
39	9	3.47	0.94259
40	9	8.37	0.49774
41	9	6.37	0.70205
42	9	9.05	0.43250
43	9	10.83	0.28762
44	9	10.75	0.29323
45	9	8.38	0.49620
46	9	8.64	0.47137
47	9	4.52	0.87392
48	9	7.12	0.62440
49	9	5.86	0.75405
50	9	14.11	0.11835
51	9	17.11	0.04696
52	9	12.23	0.20077
53	9	5.64	0.77514
54	9	13.57	0.13844
55	9	6.79	0.65913
56	9	12.58	0.18273
57	9	6.02	0.73755
58	9	3.29	0.95166
59	9	12.61	0.18093
60	9	19.06	0.02465
61	9	9.08	0.42982
62	9	7.71	0.56386
63	9	11.16	0.26465
64	9	11.32	0.25455
65	9	7.33	0.60314
66	9	5.88	0.75174
67	9	16.16	0.06353
68	9	7.07	0.62970
69	9	7.00	0.63728
70	9	6.52	0.68701
71	9	9.67	0.37769
72	9	17.58	0.04031
73	9	3.04	0.96274
74	9	5.11	0.82441
75	9	4.48	0.87699
76	9	15.79	0.07131
77	9	8.76	0.45964
78	9	15.60	0.07563
79	9	9.43	0.39831
80	9	11.43	0.24739

81	9	4.98	0.83570
82	9	9.91	0.35746
83	9	5.82	0.75768
84	9	14.46	0.10703
85	9	9.94	0.35554
86	9	16.00	0.06681
87	9	3.19	0.95617
88	9	8.49	0.48525
89	9	10.26	0.33007
90	9	8.29	0.50495
91	9	16.45	0.05813
92	9	6.50	0.68873
93	9	9.99	0.35165
94	9	5.61	0.77782
95	9	2.72	0.97435
96	9	8.58	0.47724
97	9	3.99	0.91183
98	9	13.56	0.13867
99	9	7.24	0.61183
100	9	5.44	0.79399
Combined P-value for all tests (Using KS method)			0.98639

Notes:
1) The P-values are observed probabilities from the Chi-Square tests. The last row shows the result of the KS Test performed on the p-values for all Chi-Square tests, where there are sufficient data.

1.2 Poker hand types statistics for 36 cards deck:

Test No.	DOF	ChiSqr	P-Value
1	9	9.44	0.39731
2	9	5.85	0.75473
3	9	16.00	0.06686
4	9	6.75	0.66300
5	9	5.75	0.76422
6	9	9.14	0.42438
7	9	8.34	0.50059
8	9	8.46	0.48891
9	9	1.81	0.99413
10	9	10.07	0.34515
11	9	4.41	0.88211
12	9	17.30	0.04427
13	9	13.66	0.13488
14	9	3.46	0.94332
15	9	8.15	0.51918
16	9	10.31	0.32588
17	9	9.29	0.41087
Combined P-value for all tests (Using KS method)			0.81042

Notes:
1) The P-values are observed probabilities from the Chi-Square tests. The last row shows the result of the KS Test performed on the p-values for all Chi-Square tests, where there are sufficient data.

2. Poker rank statistics

The Poker rank analysis aims to establish that the rank of the cards in each position was equally distributed in one of the 13 possible ranks (2, 3, 4, 5, 6, 7, 8, 9, 10, J, Q, K, A) for a 52 card deck and 9 ranks (6, 7, 8, 9, 10, J, Q, K, A) for a 36 card deck.

The Poker rank analysis involved creating subsets of data and conducting Chi-square tests on each subset. The analysis performs a KS Test (Kolmogorov-Smirnov test) for uniform distribution on the observed p-values, and the combined p-value result of this test is taken as the final result of the Ranks statistics tests.

2.1 Poker rank statistics for 52 cards deck:

Test No.	Positions	DOF	ChiSqr	P-Value
1	7	84	92.03	0.25732
2	7	84	78.85	0.63841
3	7	84	108.22	0.03880
4	7	84	106.95	0.04636
5	7	84	89.56	0.31893
6	7	84	101.39	0.09516
7	7	84	89.05	0.33234
8	7	84	65.37	0.93417
9	7	84	66.64	0.91802
10	7	84	86.47	0.40526
11	7	84	81.70	0.55084
12	7	84	71.50	0.83270
13	7	84	77.12	0.68936
14	7	84	76.52	0.70663
15	7	84	65.53	0.93220
16	7	84	68.36	0.89232
17	7	84	70.46	0.85417
18	7	84	65.53	0.93230
19	7	84	81.97	0.54239
20	7	84	105.59	0.05574
21	7	84	84.87	0.45281
22	7	84	81.59	0.55430
23	7	84	75.83	0.72568
24	7	84	102.91	0.07890
25	7	84	73.97	0.77490
26	7	84	91.32	0.27415
27	7	84	76.58	0.70472
28	7	84	109.15	0.03399
29	7	84	69.58	0.87109
30	7	84	84.85	0.45347
31	7	84	72.11	0.81921
32	7	84	112.53	0.02058
33	7	84	86.61	0.40096
34	7	84	79.80	0.60936
35	7	84	84.84	0.45393
36	7	84	97.56	0.14799
37	7	84	70.63	0.85073
38	7	84	93.32	0.22822
39	7	84	66.61	0.91848
40	7	84	80.70	0.58163
41	7	84	69.21	0.87769
42	7	84	69.94	0.86421
43	7	84	90.54	0.29348

44	7	84	64.19	0.94692
45	7	84	95.67	0.18064
46	7	84	91.44	0.27130
47	7	84	108.07	0.03967
48	7	84	102.20	0.08615
49	7	84	78.30	0.65471
50	7	84	61.66	0.96807
51	7	84	72.84	0.80245
52	7	84	82.64	0.52161
53	7	84	64.08	0.94798
54	7	84	95.80	0.17825
55	7	84	72.04	0.82072
56	7	84	53.38	0.99631
57	7	84	70.38	0.85567
58	7	84	77.96	0.66489
59	7	84	104.39	0.06531
60	7	84	65.47	0.93297
61	7	84	104.55	0.06391
62	7	84	70.45	0.85444
63	7	84	86.28	0.41069
64	7	84	78.23	0.65692
65	7	84	83.78	0.48639
66	7	84	95.99	0.17487
67	7	84	88.42	0.34960
68	7	84	83.99	0.47964
69	7	84	93.21	0.23057
70	7	84	69.51	0.87222
71	7	84	91.99	0.25818
72	7	84	93.68	0.22039
73	7	84	86.28	0.41087
74	7	84	93.92	0.21535
75	7	84	75.52	0.73429
76	7	84	63.71	0.95157
77	7	84	70.46	0.85416
78	7	84	78.45	0.65048
79	7	84	96.22	0.17061
80	7	84	93.89	0.21595
81	7	84	77.54	0.67731
82	7	84	95.27	0.18820
83	7	84	87.79	0.36719
84	7	84	94.26	0.20821
85	7	84	95.48	0.18422
86	7	84	92.97	0.23590
87	7	84	84.71	0.45769
88	7	84	82.50	0.52585
89	7	84	101.22	0.09720
90	7	84	80.29	0.59434
91	7	84	75.20	0.74289
92	7	84	85.20	0.44279
93	7	84	80.00	0.60320
94	7	84	97.54	0.14827
95	7	84	80.57	0.58591
96	7	84	68.58	0.88868
97	7	84	95.44	0.18509
98	7	84	76.63	0.70353

99	7	84	82.39	0.52919
100	7	84	93.49	0.22449
Combined P-value for all tests (Using KS method)				0.68345

Notes:

1) The P-values are observed probabilities from the Chi-Square tests. The last row shows the result of the KS Test performed on the p-values for all Chi-Square tests, where there are sufficient data.

2.2 Poker rank statistics for 36 cards deck:

Test No.	Positions	DOF	ChiSqr	P-Value
1	7	56	57.47	0.42057
2	7	56	49.19	0.72844
3	7	56	48.85	0.73981
4	7	56	64.06	0.21466
5	7	56	74.43	0.05031
6	7	56	52.73	0.59950
7	7	56	51.30	0.65309
8	7	56	57.08	0.43484
9	7	56	55.79	0.48277
10	7	56	47.03	0.79768
11	7	56	56.88	0.44196
12	7	56	53.50	0.57009
13	7	56	49.19	0.72827
14	7	56	49.69	0.71116
15	7	56	65.75	0.17487
16	7	56	52.75	0.59857
17	7	56	51.68	0.63893
18	7	56	52.64	0.60267
19	7	56	49.96	0.70151
20	7	56	59.03	0.36540
21	7	56	50.00	0.70008
22	7	56	48.52	0.75092
23	7	56	55.27	0.50236
24	7	56	66.79	0.15327
25	7	56	60.65	0.31207
26	7	56	44.23	0.87236
27	7	56	71.66	0.07749
28	7	56	44.98	0.85416
29	7	56	55.66	0.48753
30	7	56	56.24	0.46586
31	7	56	45.25	0.84743
32	7	56	40.35	0.94293
33	7	56	63.87	0.21949
34	7	56	68.02	0.13020
35	7	56	53.02	0.58830
36	7	56	67.33	0.14273
37	7	56	48.93	0.73712
38	7	56	70.61	0.09045
39	7	56	54.49	0.53204
40	7	56	46.36	0.81736
41	7	56	55.71	0.48583
42	7	56	56.31	0.46317
43	7	56	63.32	0.23383
44	7	56	51.36	0.65080
45	7	56	49.48	0.71852

46	7	56	45.24	0.84754
47	7	56	61.30	0.29164
48	7	56	72.44	0.06881
49	7	56	54.10	0.54702
50	7	56	66.41	0.16083
51	7	56	76.00	0.03888
52	7	56	68.36	0.12437
53	7	56	54.62	0.52740
54	7	56	47.31	0.78938
55	7	56	51.84	0.63287
56	7	56	41.23	0.93019
57	7	56	46.51	0.81312
58	7	56	51.22	0.65612
59	7	56	39.53	0.95328
60	7	56	56.77	0.44628
61	7	56	45.47	0.84170
62	7	56	79.37	0.02167
63	7	56	63.85	0.22018
64	7	56	49.95	0.70199
65	7	56	40.52	0.94065
66	7	56	63.90	0.21868
67	7	56	48.73	0.74406
68	7	56	53.81	0.55804
69	7	56	64.20	0.21119
70	7	56	67.55	0.13862
71	7	56	42.46	0.90915
72	7	56	58.01	0.40113
73	7	56	22.21	0.99999
74	7	56	40.35	0.94293
75	7	56	48.65	0.74646
76	7	56	43.83	0.88121
77	7	56	55.16	0.50664
78	7	56	71.20	0.08293
79	7	56	67.77	0.13468
80	7	56	46.92	0.80103
81	7	56	57.12	0.43335
82	7	56	60.49	0.31708
83	7	56	57.14	0.43269
84	7	56	52.23	0.61850
85	7	56	52.37	0.61306
86	7	56	69.66	0.10377
87	7	56	64.12	0.21322
88	7	56	40.30	0.94359
89	7	56	33.02	0.99387
90	7	56	58.94	0.36864
91	7	56	67.78	0.13452
92	7	56	44.04	0.87658
93	7	56	53.29	0.57800
94	7	56	40.12	0.94602
95	7	56	67.52	0.13920
96	7	56	76.27	0.03716
97	7	56	46.95	0.80023
98	7	56	74.41	0.05046
99	7	56	84.61	0.00807
100	7	56	65.14	0.18872

Combined P-value for all tests (Using KS method)	0.64999

Notes:
1) The P-values are observed probabilities from the Chi-Square tests. The last row shows the result of the KS Test performed on the p-values for all Chi-Square tests, where there are sufficient data.

3. Poker suits statistics

The Poker suits analysis aims to verify that that the cards dealt exhibit an equal probability of all 4 suits (Clubs, Diamonds, Hearts and Spades) in all positions.

The Poker suits analysis involved creating subsets of data and conducting Chi-square tests on each subset. The analysis performs a KS Test (Kolmogorov-Smirnov test) for uniform distribution on the observed p-values, and the combined p-value result of this test is taken as the final result of the Suits statistics tests.

3.1 Poker suits statistics for 52 cards deck:

Test No.	Positions	DOF	ChiSqr	P-Value
1	7	21	13.64	0.88447
2	7	21	28.74	0.12028
3	7	21	30.35	0.08513
4	7	21	24.74	0.25877
5	7	21	13.57	0.88728
6	7	21	42.62	0.00352
7	7	21	19.01	0.58442
8	7	21	27.70	0.14898
9	7	21	19.85	0.53106
10	7	21	27.54	0.15362
11	7	21	17.20	0.69869
12	7	21	18.60	0.61049
13	7	21	18.98	0.58619
14	7	21	16.45	0.74396
15	7	21	21.54	0.42670
16	7	21	18.55	0.61369
17	7	21	11.74	0.94625
18	7	21	29.51	0.10219
19	7	21	19.18	0.57372
20	7	21	19.41	0.55902
21	7	21	19.21	0.57175
22	7	21	20.91	0.46418
23	7	21	24.16	0.28526
24	7	21	19.85	0.53065
25	7	21	23.62	0.31197
26	7	21	39.07	0.00962
27	7	21	33.68	0.03919
28	7	21	11.81	0.94472
29	7	21	19.58	0.54778
30	7	21	25.22	0.23793
31	7	21	19.95	0.52473
32	7	21	21.06	0.45534
33	7	21	32.51	0.05191
34	7	21	14.63	0.84089
35	7	21	25.67	0.21916
36	7	21	12.66	0.91997
37	7	21	12.40	0.92811
38	7	21	21.71	0.41631
39	7	21	19.08	0.57995

40	7	21	16.45	0.74371
41	7	21	11.21	0.95846
42	7	21	26.28	0.19599
43	7	21	9.54	0.98430
44	7	21	27.28	0.16182
45	7	21	24.59	0.26526
46	7	21	22.60	0.36579
47	7	21	32.67	0.04997
48	7	21	27.59	0.15204
49	7	21	17.92	0.65401
50	7	21	15.84	0.77852
51	7	21	25.40	0.23013
52	7	21	15.60	0.79191
53	7	21	25.41	0.22987
54	7	21	19.14	0.57591
55	7	21	12.01	0.93936
56	7	21	17.64	0.67176
57	7	21	19.53	0.55140
58	7	21	21.37	0.43630
59	7	21	27.17	0.16523
60	7	21	16.20	0.75834
61	7	21	18.47	0.61924
62	7	21	19.22	0.57086
63	7	21	15.57	0.79327
64	7	21	27.30	0.16117
65	7	21	24.35	0.27654
66	7	21	21.42	0.43345
67	7	21	27.61	0.15170
68	7	21	9.65	0.98315
69	7	21	17.99	0.64962
70	7	21	12.48	0.92573
71	7	21	22.68	0.36143
72	7	21	30.81	0.07685
73	7	21	22.43	0.37491
74	7	21	29.05	0.11274
75	7	21	10.82	0.96625
76	7	21	31.52	0.06540
77	7	21	17.61	0.67356
78	7	21	13.79	0.87865
79	7	21	11.82	0.94437
80	7	21	19.58	0.54821
81	7	21	17.92	0.65415
82	7	21	27.21	0.16399
83	7	21	16.06	0.76604
84	7	21	19.23	0.57035
85	7	21	21.65	0.41976
86	7	21	13.25	0.89946
87	7	21	19.01	0.58432
88	7	21	15.50	0.79729
89	7	21	19.48	0.55446
90	7	21	26.77	0.17875
91	7	21	20.04	0.51869
92	7	21	24.12	0.28718
93	7	21	27.25	0.16276
94	7	21	10.40	0.97330

95	7	21	17.11	0.70435
96	7	21	20.01	0.52077
97	7	21	22.05	0.39672
98	7	21	18.33	0.62835
99	7	21	11.75	0.94616
100	7	21	23.23	0.33199
Combined P-value for all tests (Using KS method)				0.54871

Notes:

1) The P-values are observed probabilities from the Chi-Square tests. The last row shows the result of the KS Test performed on the p-values for all Chi-Square tests, where there are sufficient data.

3.2 Poker suits statistics for 36 cards deck:

Test No.	Positions	DOF	ChiSqr	P-Value
1	7	21	27.47	0.15594
2	7	21	32.34	0.05405
3	7	21	22.92	0.34826
4	7	21	26.29	0.19558
5	7	21	21.97	0.40151
6	7	21	16.19	0.75892
7	7	21	22.95	0.34683
8	7	21	14.00	0.86969
9	7	21	19.28	0.56744
10	7	21	23.21	0.33299
11	7	21	15.68	0.78735
12	7	21	20.45	0.49269
13	7	21	18.88	0.59297
14	7	21	20.63	0.48161
15	7	21	19.87	0.52951
16	7	21	26.52	0.18745
17	7	21	22.46	0.37365
18	7	21	28.23	0.13369
19	7	21	29.08	0.11214
20	7	21	19.00	0.58514
21	7	21	13.45	0.89197
22	7	21	24.75	0.25798
23	7	21	23.99	0.29374
24	7	21	23.27	0.32996
25	7	21	19.44	0.55694
26	7	21	19.90	0.52748
27	7	21	19.86	0.53014
28	7	21	13.42	0.89313
29	7	21	14.83	0.83158
30	7	21	20.22	0.50749
31	7	21	14.52	0.84615
32	7	21	23.89	0.29842
33	7	21	18.39	0.62408
34	7	21	20.93	0.46298
35	7	21	11.83	0.94404
36	7	21	20.15	0.51153
37	7	21	20.61	0.48285
38	7	21	19.85	0.53065
39	7	21	19.25	0.56898
40	7	21	19.72	0.53905
41	7	21	21.21	0.44631

42	7	21	19.29	0.56680
43	7	21	26.51	0.18752
44	7	21	23.77	0.30424
45	7	21	19.76	0.53663
46	7	21	15.55	0.79427
47	7	21	24.52	0.26864
48	7	21	33.05	0.04571
49	7	21	23.20	0.33341
50	7	21	22.72	0.35909
51	7	21	27.31	0.16070
52	7	21	16.47	0.74269
53	7	21	10.74	0.96758
54	7	21	16.78	0.72459
55	7	21	16.73	0.72710
56	7	21	31.07	0.07257
57	7	21	24.45	0.27158
58	7	21	23.93	0.29627
59	7	21	23.44	0.32087
60	7	21	9.21	0.98748
61	7	21	18.52	0.61590
62	7	21	17.59	0.67453
63	7	21	17.20	0.69879
64	7	21	19.05	0.58206
65	7	21	29.38	0.10513
66	7	21	19.16	0.57462
67	7	21	10.48	0.97198
68	7	21	28.00	0.14021
69	7	21	11.86	0.94322
70	7	21	26.18	0.19952
71	7	21	26.36	0.19298
72	7	21	18.53	0.61552
73	7	21	22.83	0.35322
74	7	21	16.07	0.76548
75	7	21	26.52	0.18717
76	7	21	20.02	0.51999
77	7	21	27.85	0.14440
78	7	21	27.81	0.14562
79	7	21	16.00	0.76976
80	7	21	34.11	0.03523
81	7	21	17.56	0.67640
82	7	21	13.61	0.88576
83	7	21	29.03	0.11333
84	7	21	17.92	0.65381
85	7	21	16.79	0.72352
86	7	21	14.03	0.86822
87	7	21	25.73	0.21709
88	7	21	16.68	0.73007
89	7	21	31.73	0.06228
90	7	21	22.08	0.39503
91	7	21	21.98	0.40078
92	7	21	17.64	0.67191
93	7	21	33.49	0.04106
94	7	21	22.79	0.35528
95	7	21	9.69	0.98271
96	7	21	29.03	0.11328

97	7	21	28.42	0.12858
98	7	21	20.77	0.47307
99	7	21	14.81	0.83246
100	7	21	19.12	0.57734
Combined P-value for all tests (Using KS method)				0.57629

Notes:
1) The P-values are observed probabilities from the Chi-Square tests. The last row shows the result of the KS Test performed on the p-values for all Chi-Square tests, where there are sufficient data.

4. Summary of the analysis

4.1 Summary of the analysis of 52 cards deck:

The analysis of 52 cards completes by combining the result of the KS Test performed in the 3 types of analysis (Hand Types, Ranks and Suits) for 52 card decks using the Holm's method and producing a single Combined P -value.

The combined p-value produced using the Holm's method is used as indication for statistical randomness.

Combination of p-values using Holm's Method		
Test	**P-Value**	**P-Adjusted**
Ranks Test	0.68345	1.00000
Suits Test	0.54871	1.00000
Hand Types Test	0.98639	1.00000
Combined P-Value using Holm's Method		1.00000

Notes:
1) The combined p-value of all statistical tests using Holm's Method conducted for 52 card decks is greater than the minimum value of 0.05 which indicates that the randomness of the observed data falls within 95% confidence limits.

The final outcome of the analysis of 52 cards deck indicates that the RNG is working correctly.

4.2 Summary of the analysis of 36 cards deck:

The analysis of 36 cards completes by combining the result of the KS Test performed in the 3 types of analysis (Hand Types, Ranks and Suits) for 36 card decks using the Holm's method and producing a single Combined P -value. Where there are insufficient data the individual Chi-Square tests results are used in the Holm's method for producing a combined p-value.

The combined p-value produced from the using the Holm's method is used as indication for statistical randomness.

Combination of p-values using Holm's Method		
Test	**P-Value**	**P-Adjusted**
Ranks Test	0.64999	1.00000
Suits Test	0.57629	1.00000
Hands Type Test	0.81042	1.00000
Combined P-Value using Holm's Method		1.00000

Notes:
1) The combined p-value of all statistical tests using Holm's Method conducted for 36 card decks is greater than the minimum value of 0.05 which indicates that the randomness of the observed data falls within 95% confidence limits.

The final outcome of the analysis of 36 cards deck indicates that the RNG is working correctly.
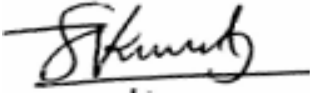
5. Conclusion

Analysis of actual data from game logs for 'Hand Types, 'Ranks' and 'Suits' for **52-card decks** and **36-card decks** indicated statistical randomness.

iTech Labs has done limited sanity checks to verify the integrity of the game logs. iTech Labs also maintains a copy of the game logs for verification purposes. There were a large enough number of game records to give the calculations sufficient statistical power.

We conclude that the Random Number Generator (RNG) is working correctly.

Please click here to see the Original report.

Signed:

Kiren Sreekumar
Principal Consultant
iTech Labs Australia
Date: 18 September, 2020

Signed:

Geoff Nicoll
Principal Consultant
iTech Labs Australia
Date: 18 September, 2020

Disclaimer.
While it is not possible to test all possible scenarios in a laboratory environment, iTech Labs has conducted a level of testing appropriate for a component test of this type.