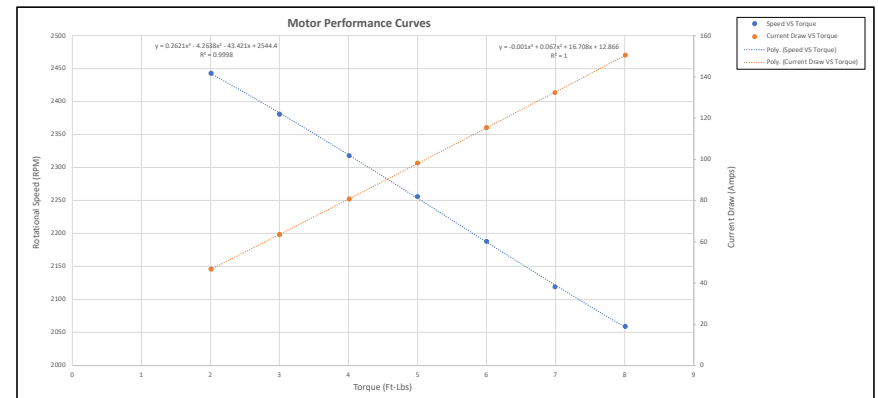
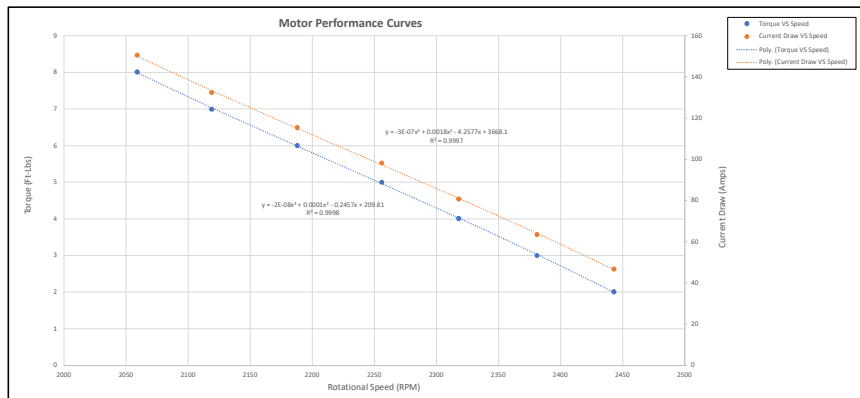
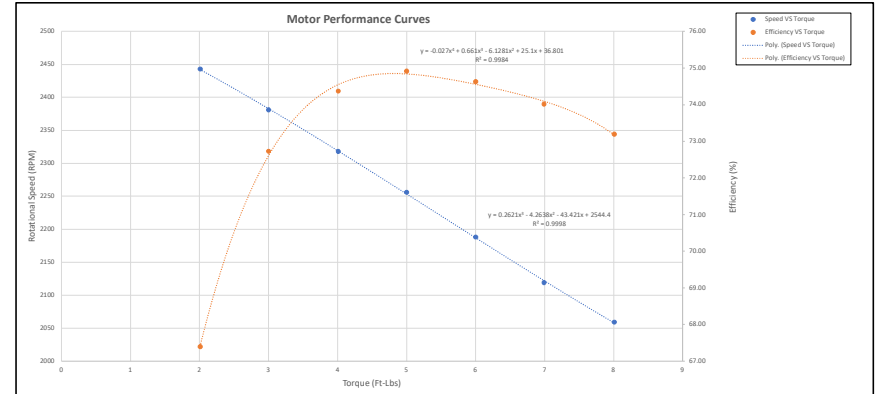
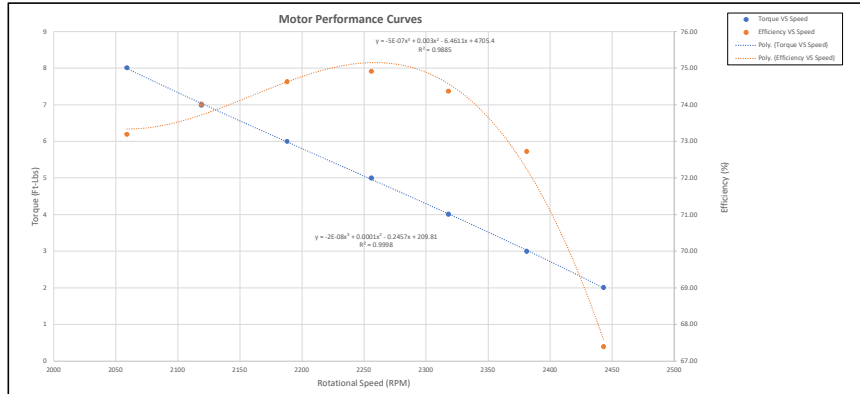


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 24 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
2.01	2443	23.17	43.7	4.89	3.07	46.77	1.38	0.93	67.39
3	2381	22.9	60.8	4.89	3.07	63.87	1.87	1.36	72.73
4.01	2318	22.64	77.7	4.89	3.08	80.78	2.38	1.77	74.97
5	2256	22.38	95.1	4.9	3.07	98.17	2.87	2.15	74.91
6	2188	22.12	112.3	4.9	3.07	115.37	3.35	2.5	74.63
6.99	2119	21.86	129.3	4.9	3.07	132.37	3.81	2.82	74.02
8.01	2059	21.58	147.5	4.91	3.07	150.57	4.29	3.14	73.19

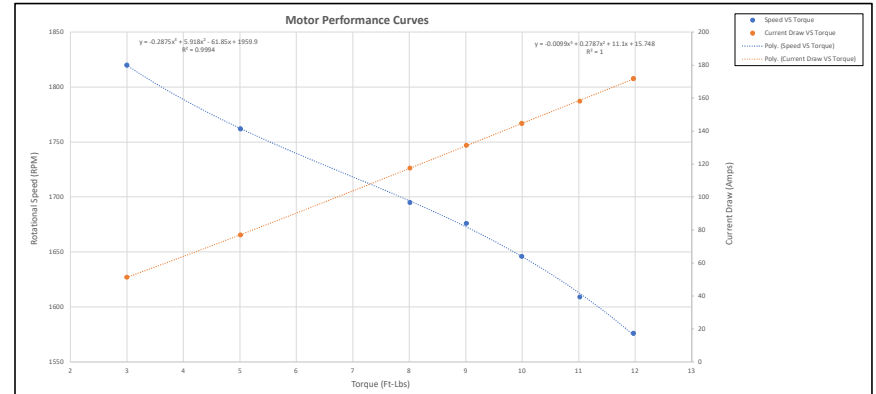
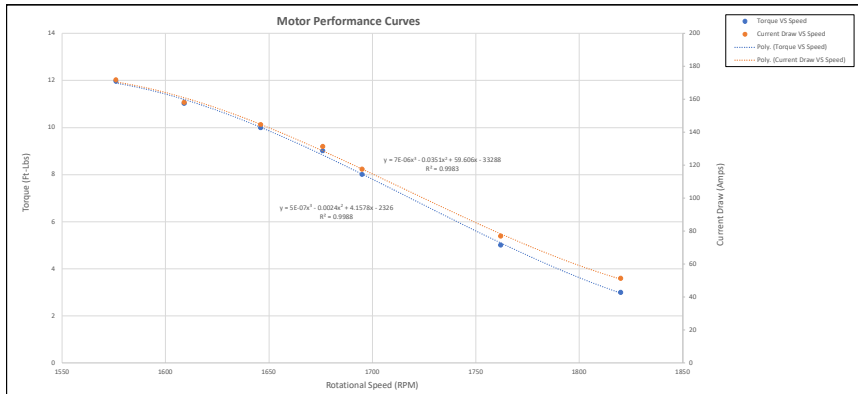
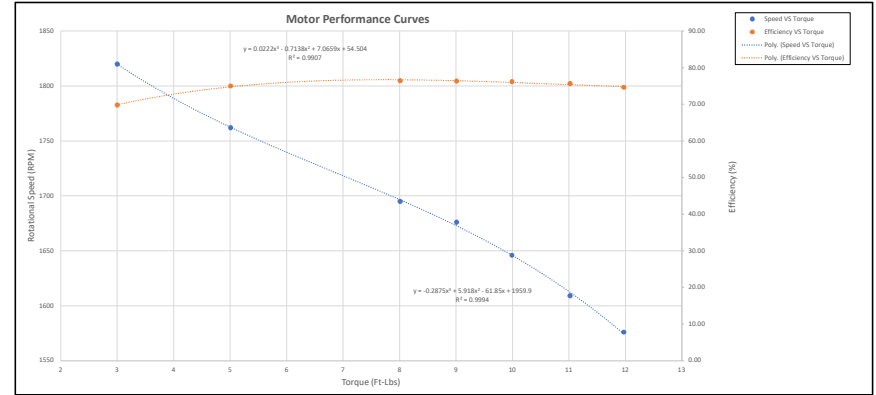
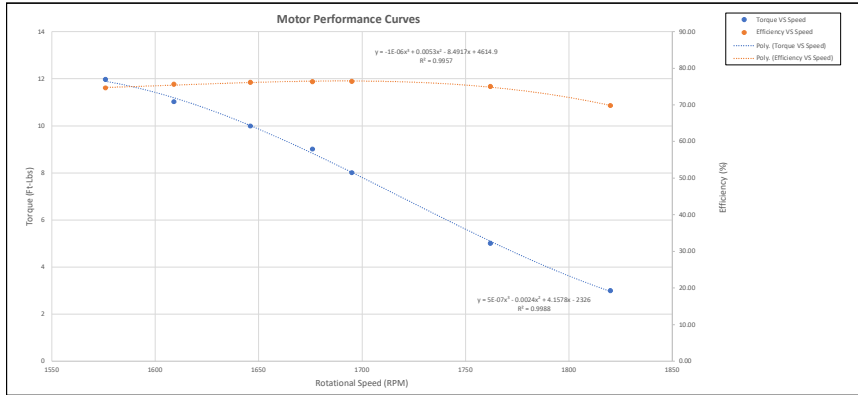


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 24 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
3	1820	23.11	46.3	7.94	5.05	51.35	1.49	1.04	69.80
5.01	1782	22.72	71.9	7.94	5.05	76.95	2.24	1.68	75.00
8.01	1695	22.12	112.5	7.95	5.05	117.55	3.39	2.59	76.40
9.01	1676	21.9	126.3	7.96	5.05	131.35	3.76	2.87	76.33
9.99	1646	21.7	139.6	7.97	5.06	144.66	4.11	3.13	76.16
11.02	1609	21.5	153.1	7.98	5.05	158.15	4.47	3.39	75.62
11.97	1576	21.29	166.8	8	5.06	171.86	4.81	3.59	74.64
12.99	1558	21.05	182.1	8.01	5.05	187.15	5.19	3.86	74.37
13.28	1533	20.81	197.5	8.01	5.05	202.55	5.56	4.08	73.38

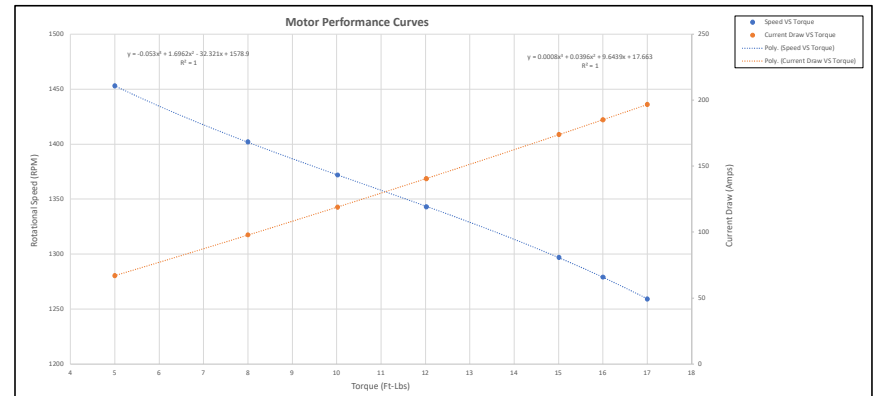
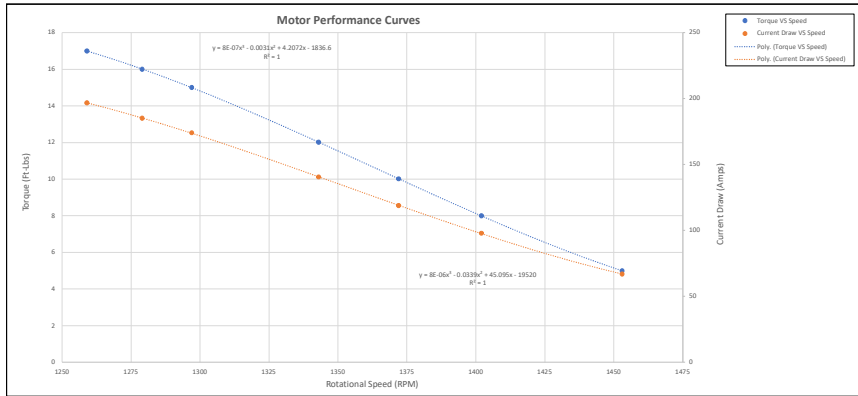
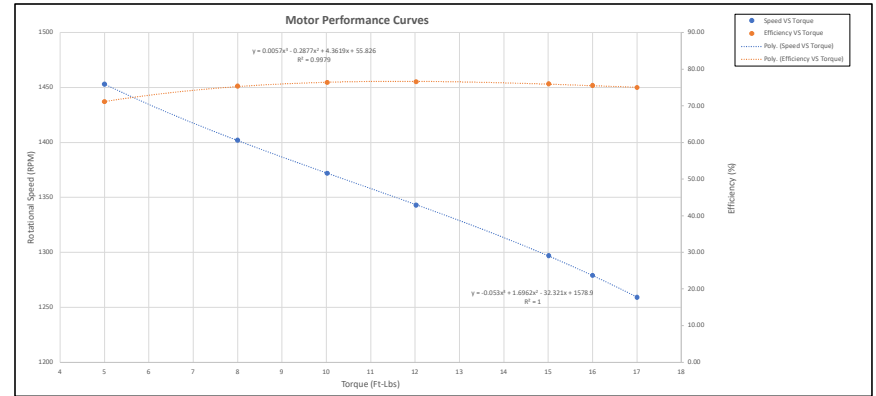
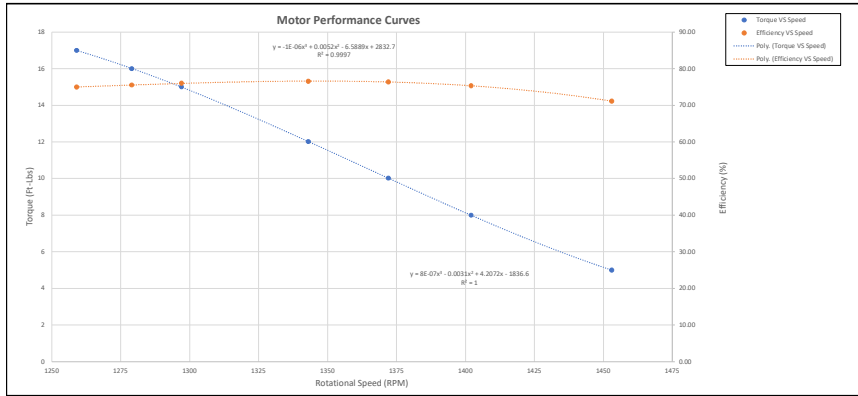


Engineering Performance Test Report

Performance Spec (PS) Number: 49

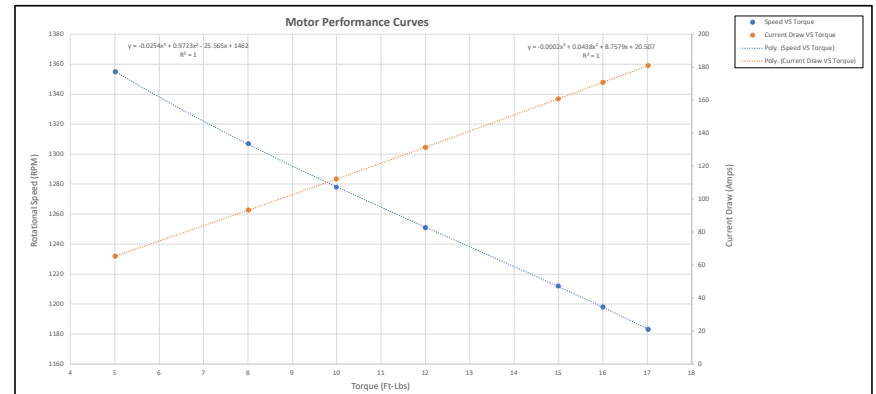
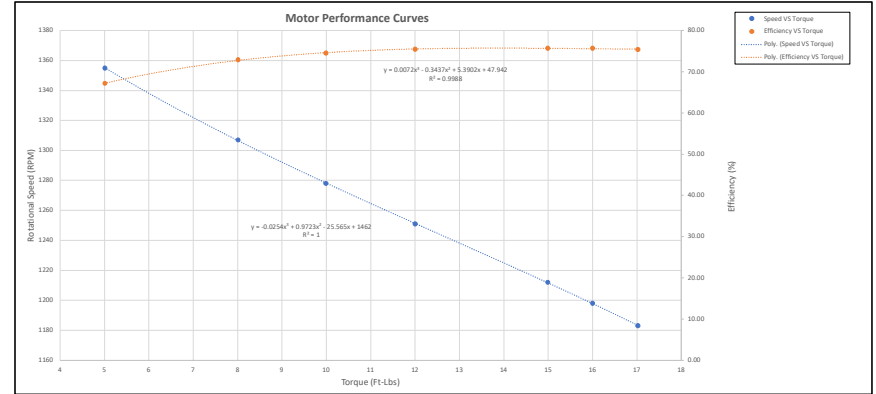
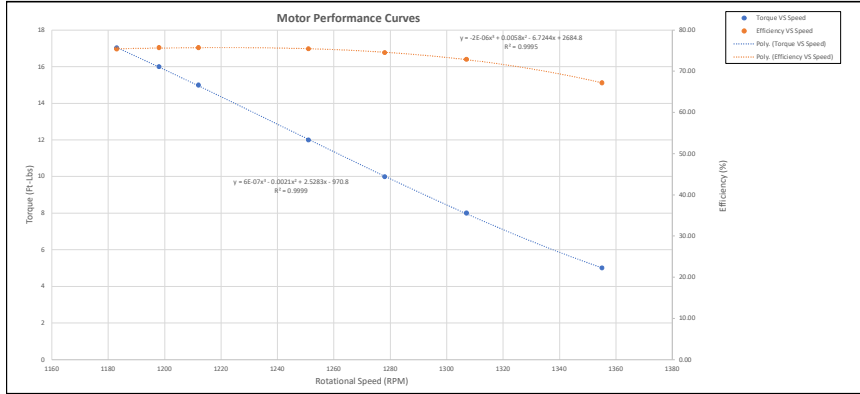
System Voltage (V): 24 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
5	1453	22.93	58.9	12.61	8.04	66.94	1.94	1.38	71.13
8	1402	22.46	49.8	12.45	8.05	57.85	2.84	2.14	72.35
10.02	1372	22.34	130.9	12.7	8.05	118.95	3.43	2.62	76.38
12.02	1343	21.38	132.5	12.73	8.04	140.54	4.01	3.07	76.56
15.01	1297	21.3	166	12.77	8.05	174.05	4.88	3.71	76.02
16	1279	21.13	177.1	12.8	8.04	185.14	5.15	3.89	75.53
17	1259	20.96	188.7	12.83	8.04	196.74	5.44	4.08	75.00
17.99	1243	20.78	200.6	12.86	8.04	208.64	5.72	4.26	74.48
19.04	1219	20.58	234.2	12.9	8.06	232.26	6.05	4.42	73.06
20	1211	20.41	255	12.93	8.05	233.05	6.30	4.61	73.29



Engineering Performance Test Report
 Performance Spec (PS) Number: 49
 System Voltage (V): 24 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
5.01	1355	22.98	55.4	10.05	10.05	65.45	1.92	1.29	67.19
8.01	1307	22.95	43.3	10.05	99.35	2.73	1.99	72.89	
9.99	1278	22.27	102.1	10.05	112.15	3.36	2.43	74.54	
12	1251	21.98	121.4	10.04	131.44	3.79	2.86	75.46	
14.99	1212	21.53	150.8	10.05	160.85	4.57	3.46	75.71	
16	1198	21.39	160.8	10.04	170.84	4.82	3.65	75.72	
17.02	1183	21.22	171	10.04	181.04	5.08	3.83	75.39	
18.01	1167	21.06	181.4	10.05	191.45	5.34	4	74.91	
19.02	1152	20.9	192.1	10.04	202.14	5.6	4.17	74.46	
20.02	1139	20.74	202.7	10.04	212.74	5.86	4.34	74.06	

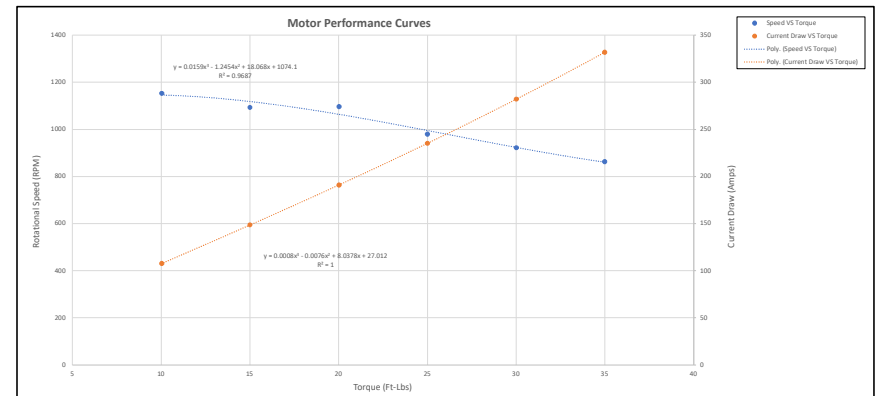
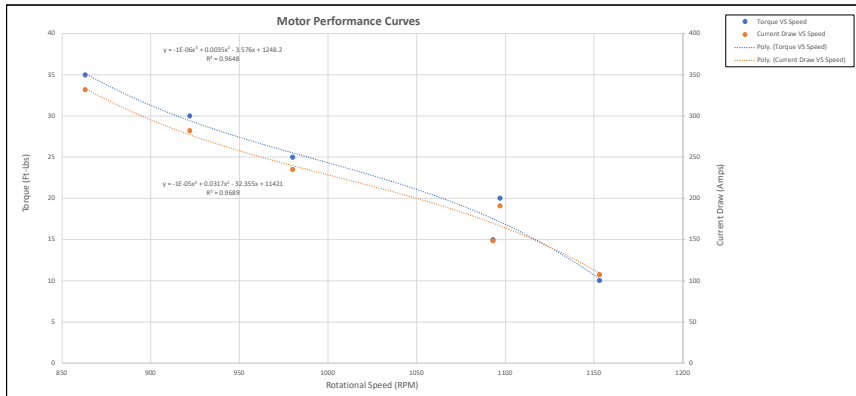
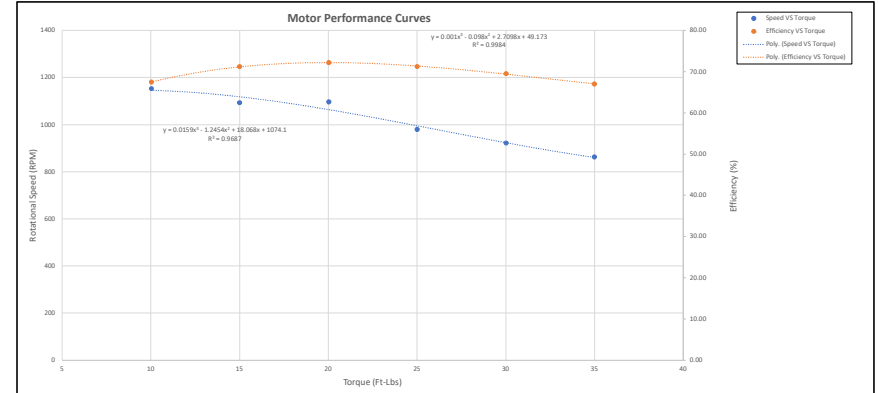


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 24 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
10.03	1153	22.42	92.6	23.53	15	107.6	3.26	2.2	67.48
15	1093	21.79	133.6	23.79	15.01	148.61	4.36	3.17	71.23
20.02	1097	21.16	175.9	24.03	15	190.9	5.47	3.95	71.21
25	980	20.49	200.2	24.28	15.01	235.21	6.54	4.66	71.25
30.01	922	19.78	267.2	24.51	15	282.2	7.58	5.27	69.53
34.99	863	19.02	316.8	24.73	15	331.8	8.58	5.75	67.02

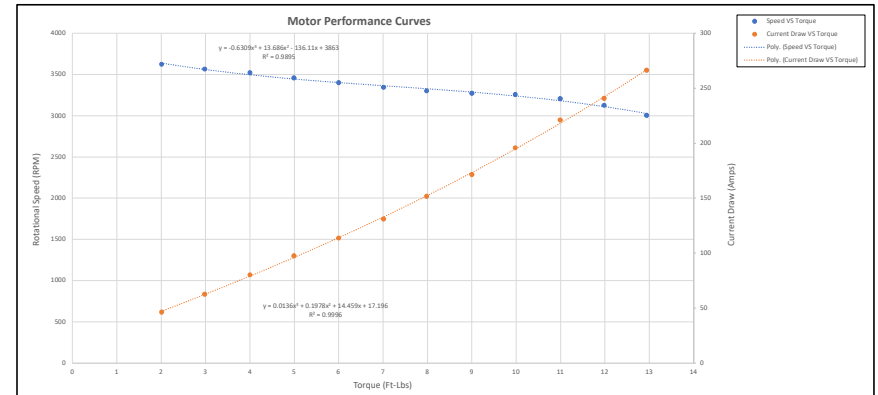
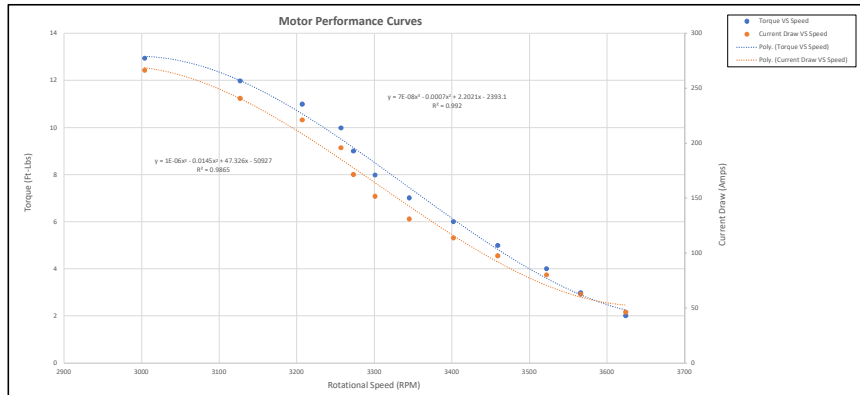
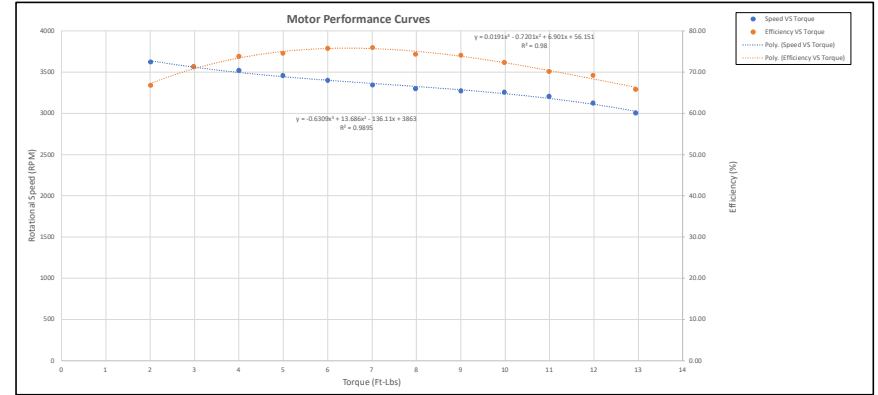
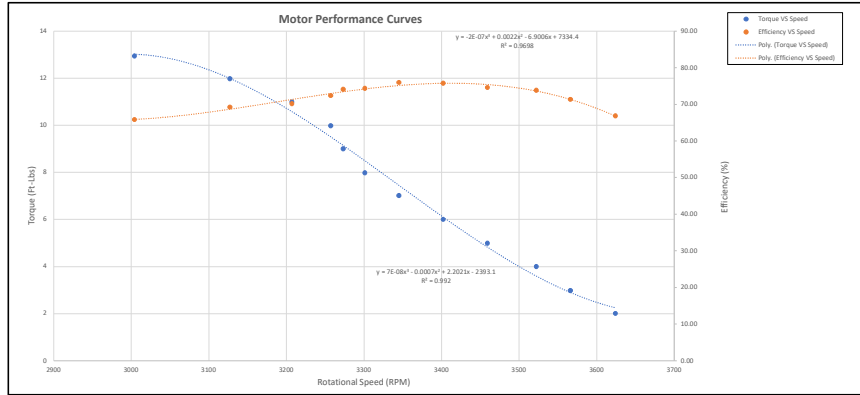


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 36 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
2.01	3624	35.4	43.4	4.9	2.95	46.35	2.08	1.39	66.83
2.98	3556	35.2	59.6	4.9	2.95	62.55	2.83	2.02	71.28
4	3522	34.9	77.2	4.9	2.95	80.15	3.63	2.68	73.83
4.99	3459	34.6	94.5	4.9	2.95	97.45	4.41	3.29	74.60
6	3402	34.3	110.7	4.9	2.96	113.66	5.12	3.88	75.78
7.01	3345	34.1	128.2	4.9	2.92	131.12	5.87	4.46	75.98
7.98	3301	33.8	148.7	4.9	2.91	151.61	6.75	5.02	74.37
9	3273	33.4	168.5	4.9	3.06	171.56	7.57	5.61	74.11
9.98	3257	33	192.9	4.9	2.92	195.82	8.55	6.19	72.40
10.99	3207	32.6	218.2	5	2.92	221.12	9.56	6.71	70.19
11.98	3127	32.2	238.1	5	2.74	240.84	10.31	7.14	69.25
12.94	3004	31.8	263.4	5	2.97	266.37	11.24	7.4	65.84

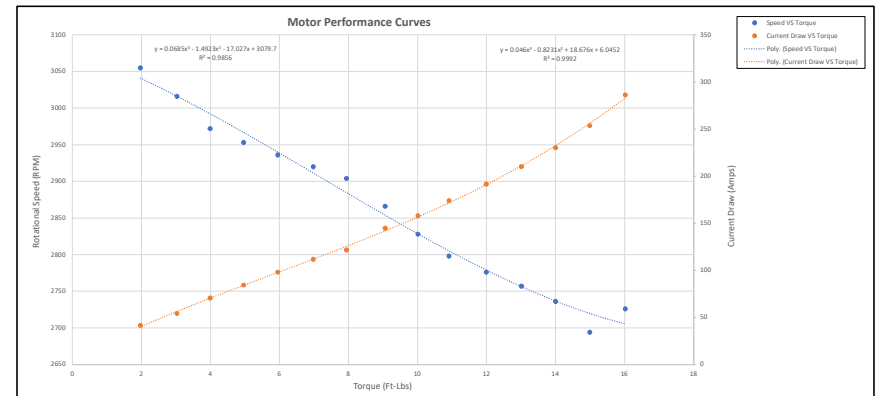
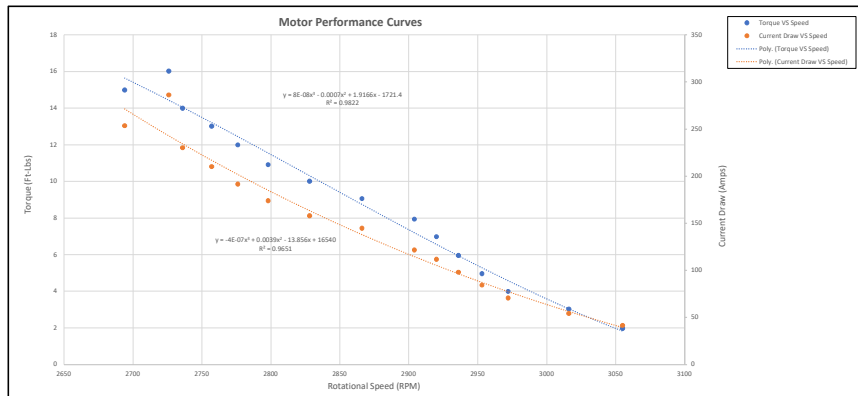
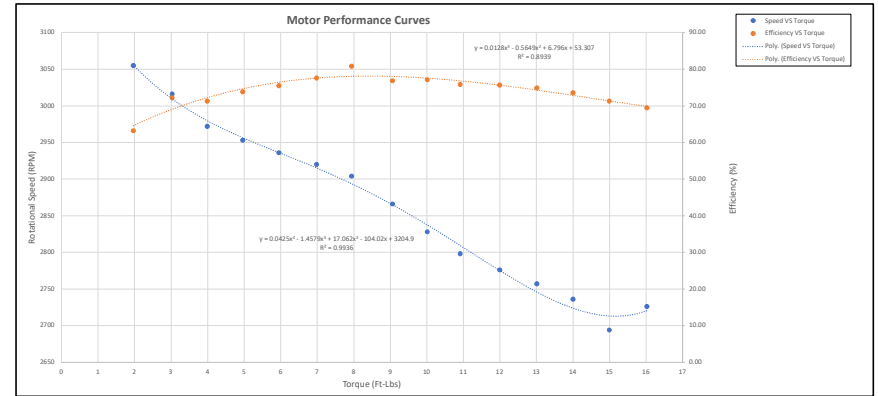
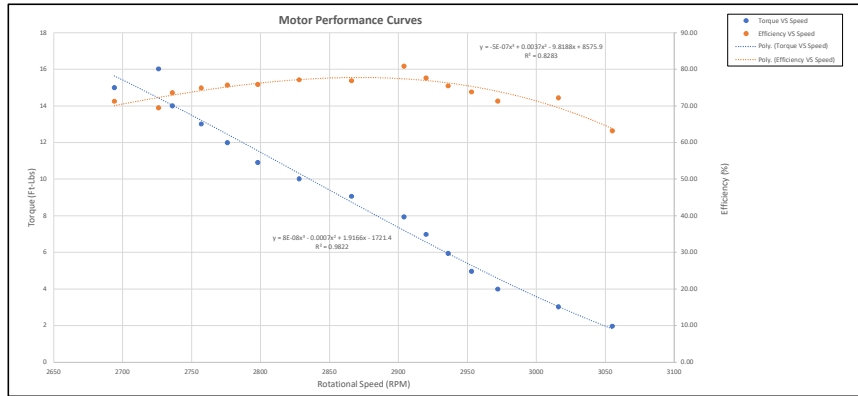


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 36 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
1.97	3055	35.5	37.6	6.4	3.96	41.56	1.82	1.15	63.19
3.03	3016	35.3	38.2	6.4	3.96	54.49	2.41	1.74	72.20
3.99	2972	35	36.7	6.4	3.97	70.87	3.17	2.26	71.29
4.96	2953	34.8	38.4	6.4	3.95	84.35	3.78	2.79	73.81
5.95	2936	34.6	39.1	6.4	3.9	98	4.4	3.32	75.45
6.98	2920	34.4	39.7	6.4	3.97	111.67	5	3.88	77.68
7.94	2904	34.2	117.7	6.5	3.93	121.63	5.43	4.39	80.85
9.06	2886	34	140.8	6.5	4.01	144.81	6.44	4.95	76.86
10.01	2828	33.7	154	6.5	3.9	157.9	6.99	5.39	77.11
10.91	2798	33.5	169.9	6.5	3.93	173.81	7.66	5.81	75.85
11.99	2776	33.2	187.7	6.5	3.85	191.55	8.38	6.34	75.66
13.01	2757	32.9	206.1	6.5	3.97	210.07	9.12	6.83	74.89
14	2736	32.6	226.2	6.5	4	230.2	9.91	7.29	73.56
14.99	2694	32.2	249.4	6.5	4.08	253.48	10.79	7.69	71.27
16.02	2726	31.6	282.1	6.6	4.1	286.2	11.98	8.32	69.45

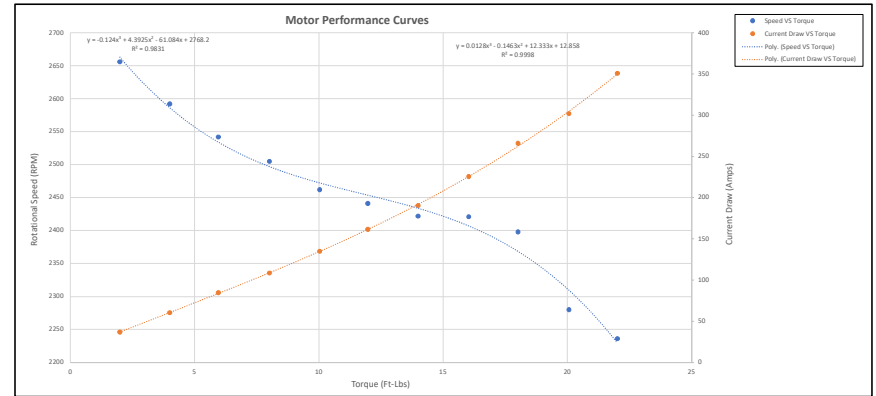
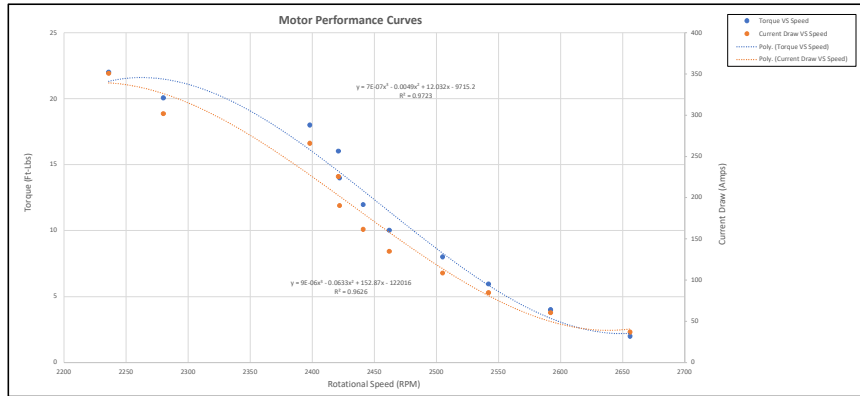
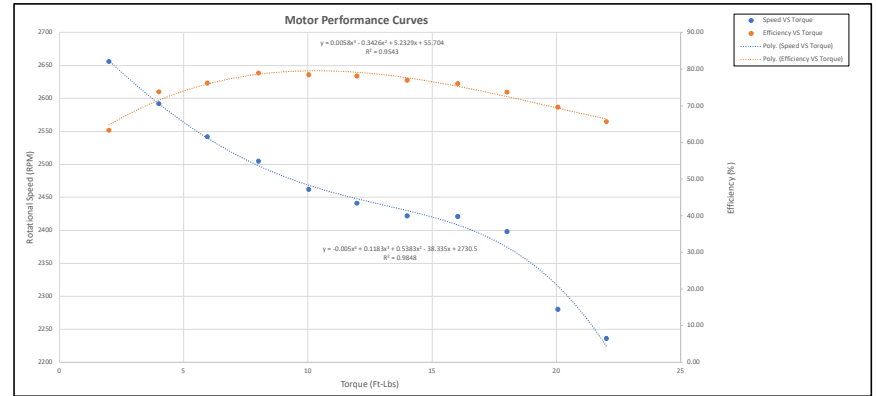
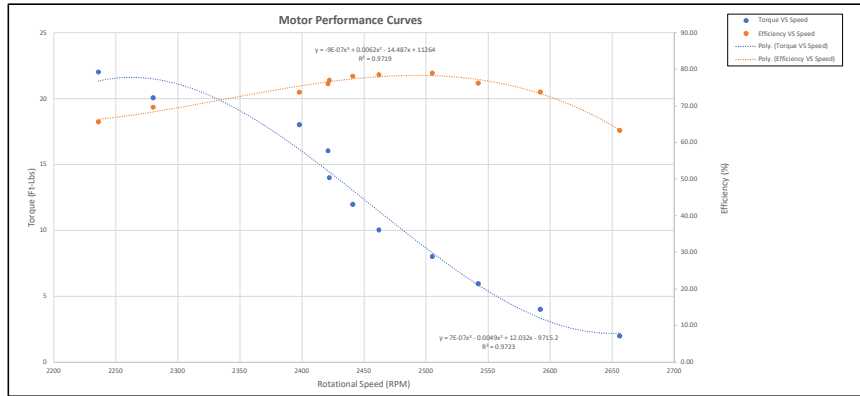


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 36 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
1.99	2656	35.6	31.9	8.4	4.93	36.83	1.58	1	63.29
4	2592	35.2	35.4	8.5	4.95	40.35	2.67	1.97	73.78
5.95	2542	34.9	39.7	8.5	4.97	44.67	3.76	2.88	76.39
8.01	2505	34.5	103.6	8.5	4.95	108.55	4.84	3.82	78.93
10.03	2462	34.1	129.9	8.5	4.95	134.85	5.99	4.7	78.46
11.97	2441	33.7	156.6	8.5	4.93	161.53	7.12	5.56	78.09
13.99	2422	33.2	185.4	8.6	4.96	190.36	8.3	6.39	76.99
16.03	2421	32.7	220.6	8.6	4.97	225.57	9.72	7.39	76.03
18.01	2398	32.1	260.8	8.6	5.07	265.87	11.26	8.3	73.71
20.06	2380	31.3	292	8.6	4.87	301.87	12.51	8.71	69.63
22.01	2236	30.7	346	8.7	4.77	350.77	14.27	9.37	65.66

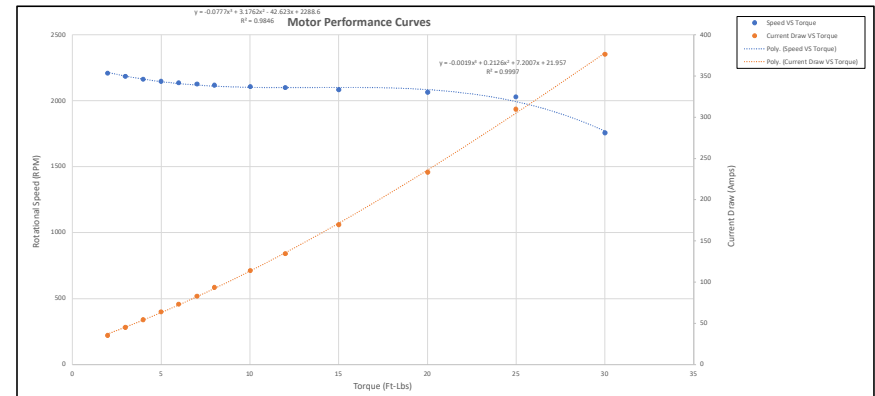
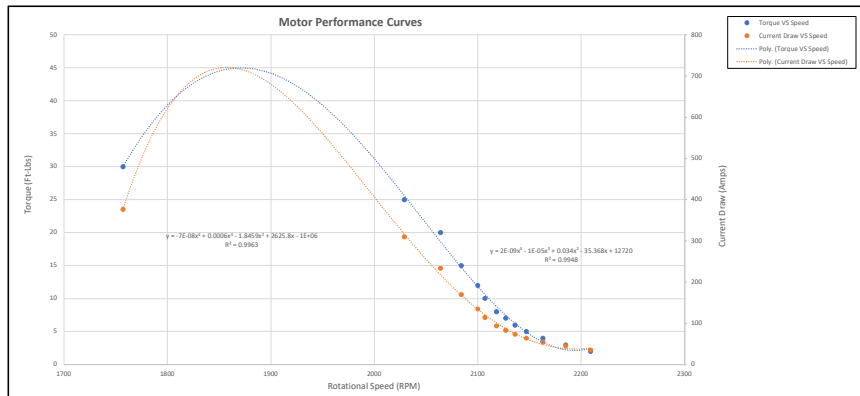
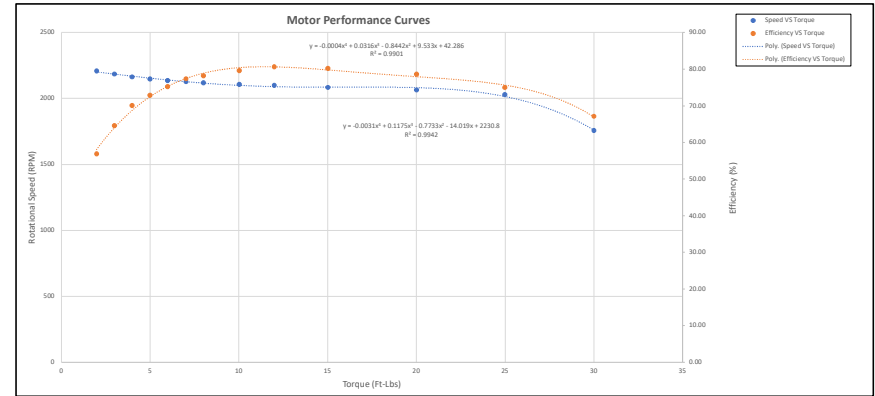
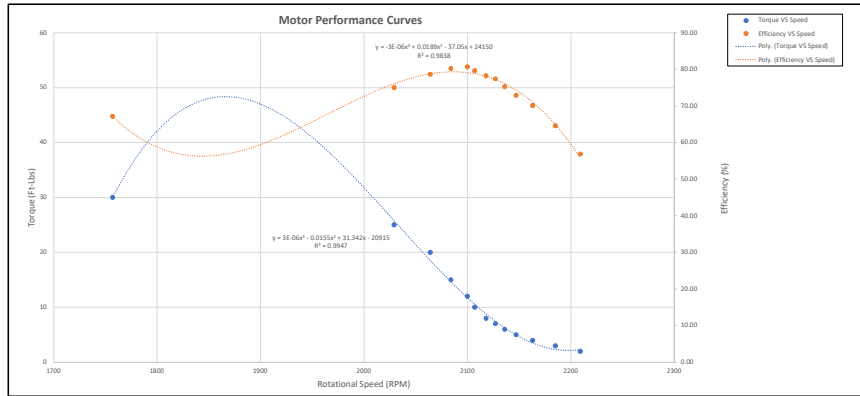


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 36 - (1 * 0.015)

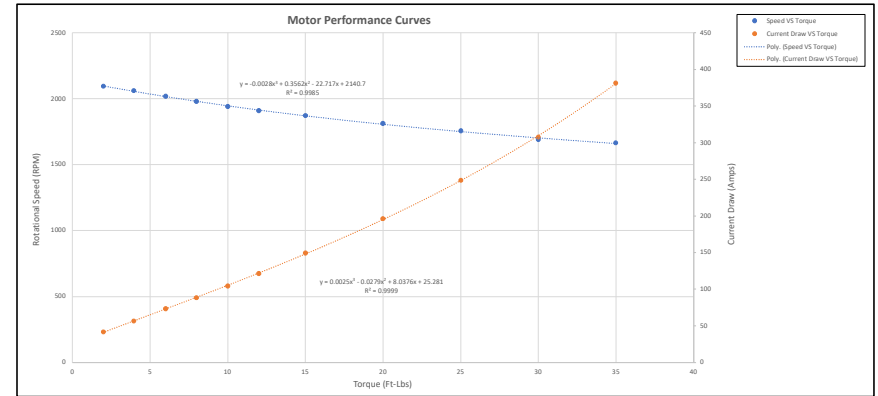
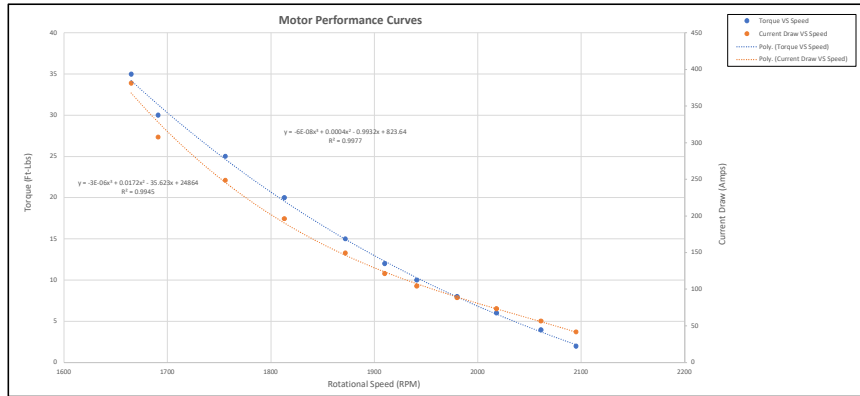
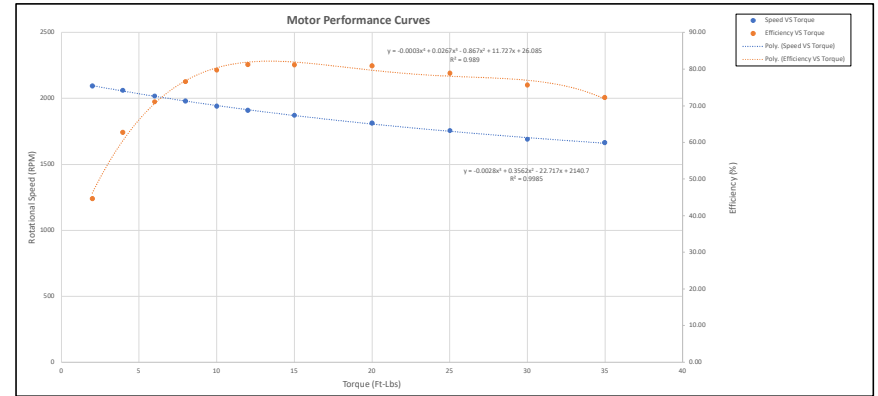
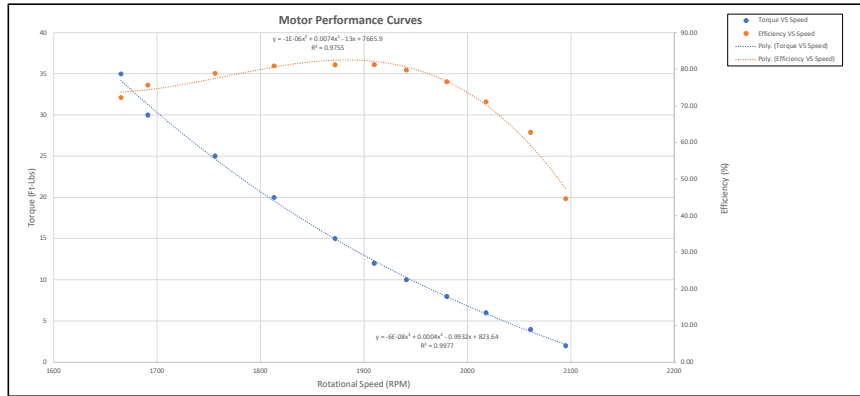
Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
1.98	2209	35.6	27.2	14.9	8.03	35.23	1.46	0.83	56.85
2.98	2185	35.5	27	14.9	8.06	35.05	1.52	1.24	64.58
3.98	2163	35.4	46.1	14.8	8.06	54.16	2.34	1.64	70.09
4.99	2147	35.2	55.9	14.8	8.04	63.94	2.8	2.04	72.86
5.98	2136	35.1	65.2	14.7	8.01	73.21	3.23	2.43	75.23
7.02	2122	34.9	74.9	14.7	8.03	82.92	3.67	2.84	77.38
8	2118	34.8	85.4	14.6	8.03	93.43	4.13	3.23	78.21
10.02	2107	34.4	106	14.6	8.02	114.02	5.05	4.02	79.60
11.99	2100	34.1	135.4	14.5	8.07	134.47	5.94	4.79	80.64
15.01	2084	33.6	161.6	14.4	8.06	169.66	7.43	5.96	80.22
20.01	2064	32.6	225.3	14.3	8.04	233.34	10	7.86	78.60
24.98	2029	31.4	301.6	14.3	8.18	309.78	12.87	9.65	74.98
30	1757	30	368.3	14.2	8.09	376.39	14.94	10.03	67.14



Engineering Performance Test Report

Performance Spec (PS) Number: 49
 System Voltage (V): 36 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
1.99	2095	35.5	31.6	19.8	10.08	41.68	1.77	0.79	44.63
3.95	2061	35.3	46.5	19.8	10.07	56.57	2.47	1.55	62.75
6	2018	35.1	63.4	19.7	10.06	73.46	3.25	2.31	71.08
7.98	1980	34.9	78.4	19.6	10.04	88.44	3.93	3.01	76.59
10	1941	34.6	94.2	19.6	10.04	104.24	4.64	3.7	79.74
12	1910	34.3	111.3	19.5	10.01	121.31	5.38	4.27	81.23
15	1872	33.9	139.4	19.5	10.07	149.47	6.59	5.35	81.18
19.99	1813	33.2	186.2	19.4	9.96	196.16	8.53	6.9	80.89
25.01	1756	32.3	238.6	19.3	10.1	248.7	10.6	8.36	78.87
30	1691	31.4	297.7	19.3	9.91	307.61	12.77	9.66	75.65
34.98	1665	30.3	371.2	19.2	10.23	381.43	15.35	11.09	72.25

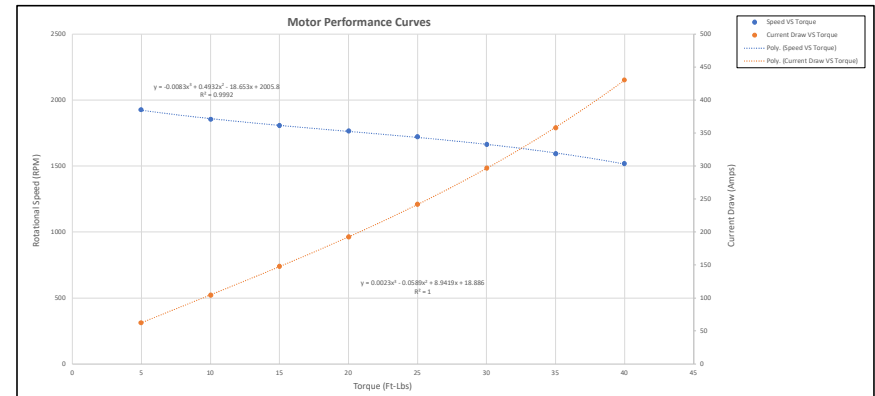
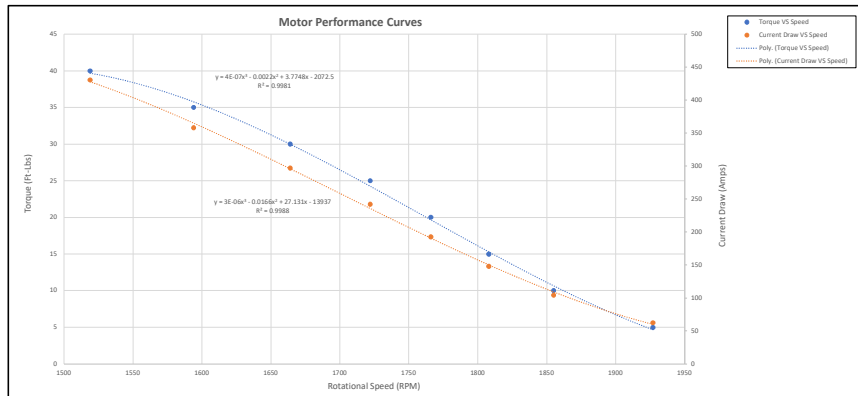
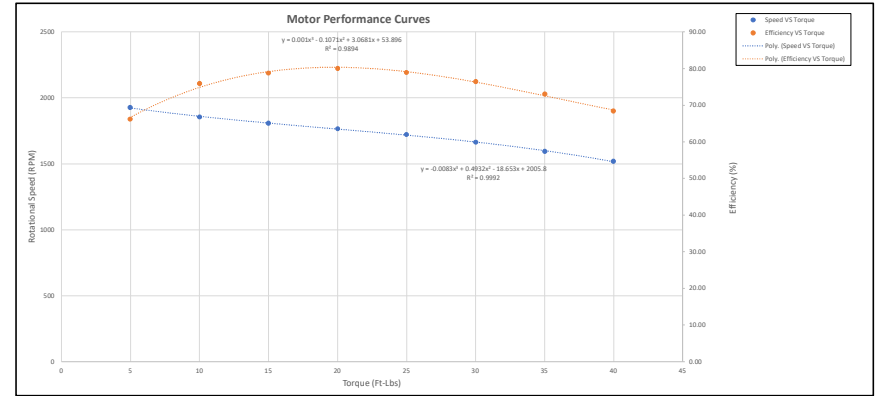
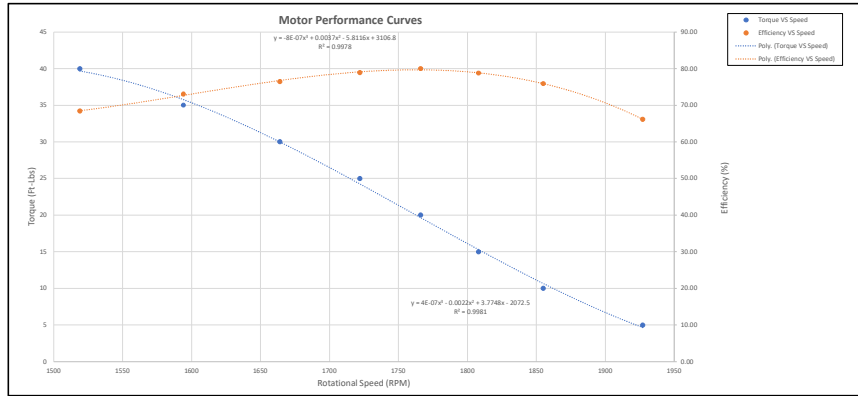


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 36 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
4.97	1927	35.3	50.4	22.9	12.05	62.45	2.75	1.82	66.18
10.01	1855	34.7	52.3	22.8	12.05	64.45	4.65	3.23	75.91
14.99	1808	34	135.7	22.6	12.11	147.81	6.55	5.16	78.78
20.01	1766	33.3	180.5	22.4	12.09	192.59	8.41	6.73	80.02
24.99	1722	32.5	230.1	22.3	12.01	242.11	10.39	8.2	78.92
30.01	1664	31.6	284.9	22.1	12.2	297.1	12.44	9.51	76.45
35.01	1594	30.6	346.2	21.9	11.95	358.15	14.55	10.63	73.06
39.98	1519	29.5	418.6	21.8	11.97	430.57	16.91	11.57	68.42

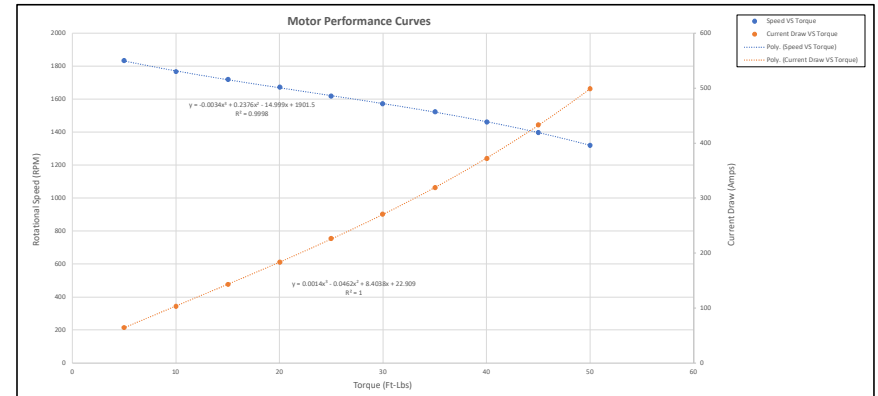
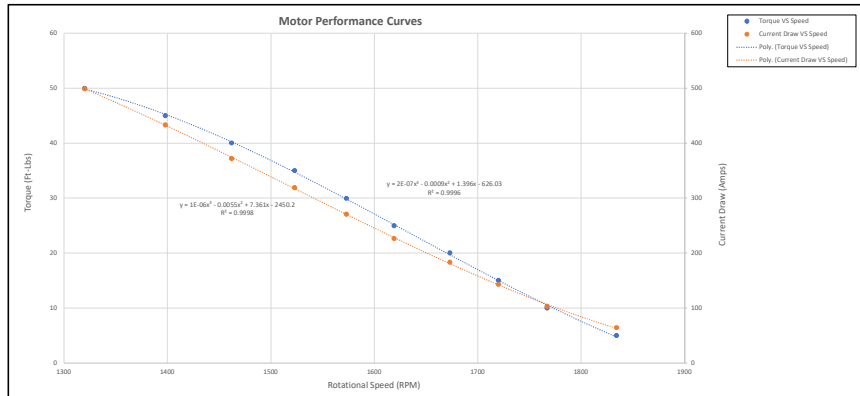
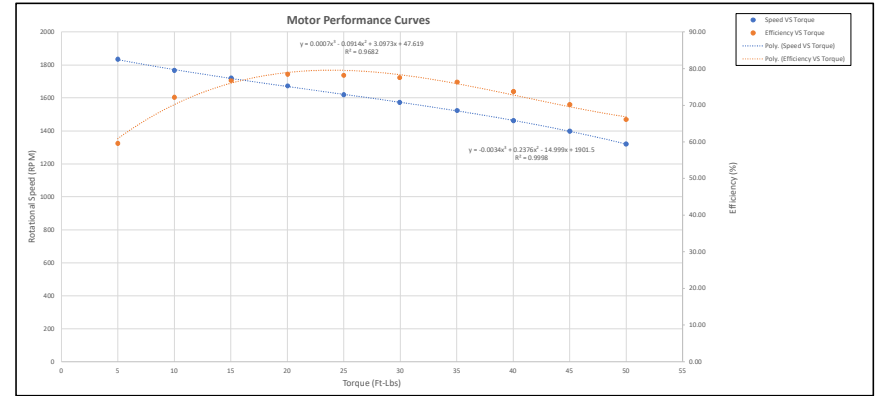
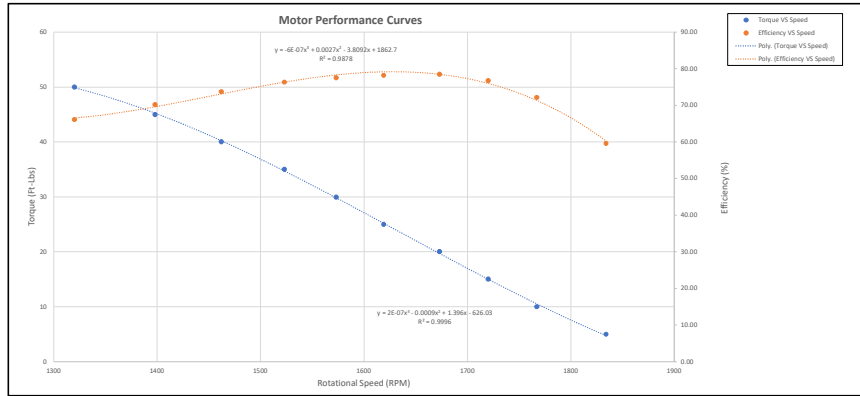


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 36 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
4.99	1834	35.3	49.4	28.9	15.03	64.43	2.92	1.74	59.59
10	1767	34.7	47.9	28.6	15.07	63.07	4.67	3.27	72.16
15.03	1720	34.1	179.9	28.3	15.06	142.96	6.41	4.92	76.26
20.03	1673	33.5	168.6	28	14.99	183.59	8.13	6.38	78.47
24.99	1619	32.8	211.3	27.7	15.17	226.47	9.85	7.77	78.17
29.95	1573	32.1	255.8	27.4	15.15	270.95	11.57	8.97	77.53
35.03	1523	31.3	304.1	27.1	14.83	318.93	13.31	10.16	76.33
40.03	1462	30.5	357.1	26.7	14.9	372	15.11	11.14	73.73
45	1398	29.5	418	26.4	15.31	433.31	17.07	11.98	70.18
49.99	1320	28.5	481.8	26	15.14	498.94	19	12.56	66.11

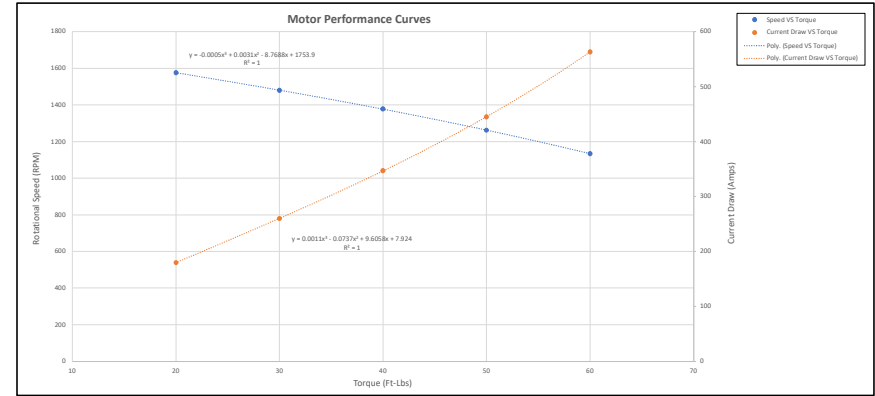
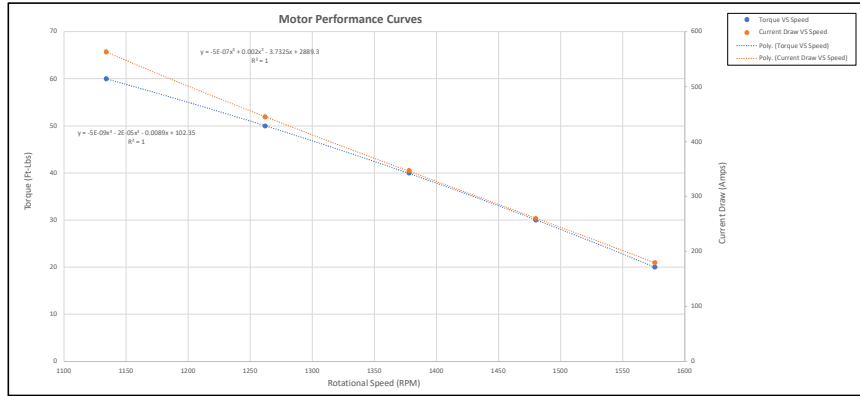
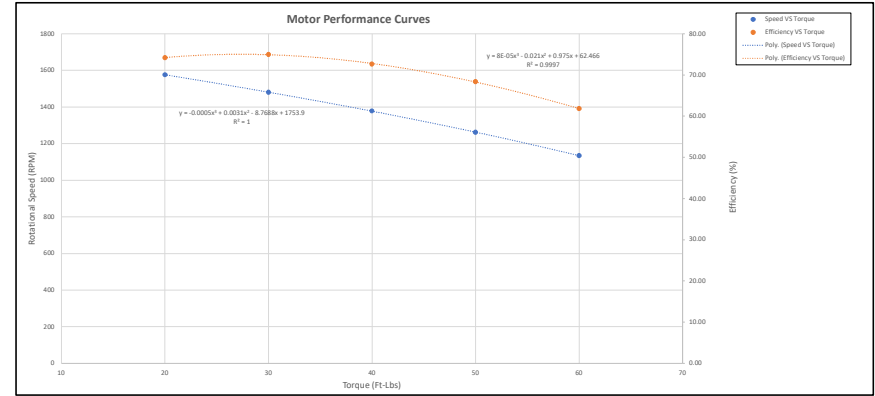
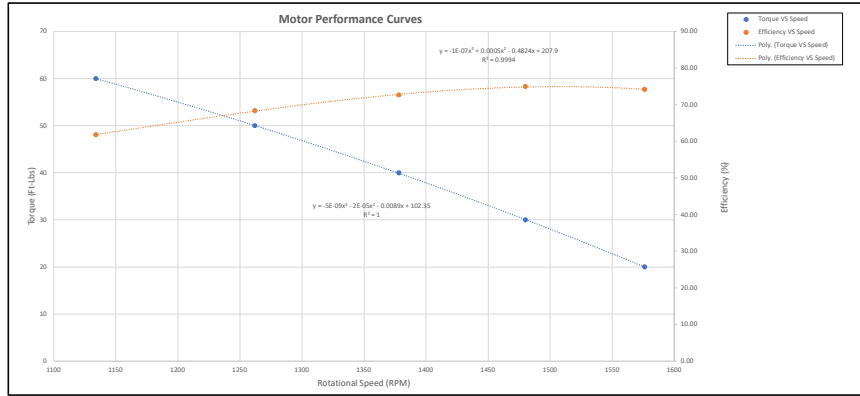


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 36 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Available Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
20	1576	33.6	161.5	34.2	18.2	179.7	8.09	6	74.17
29.99	1400	32.3	241.8	33.6	18.08	259.88	11.27	8.45	74.98
39.98	1378	30.9	338.8	33	18.17	346.97	14.44	10.49	72.65
49.98	1262	29.3	426.8	32.4	17.98	444.78	17.57	12.01	68.36
59.99	1134	27.6	545.3	31.8	17.9	563.2	20.95	12.95	61.81

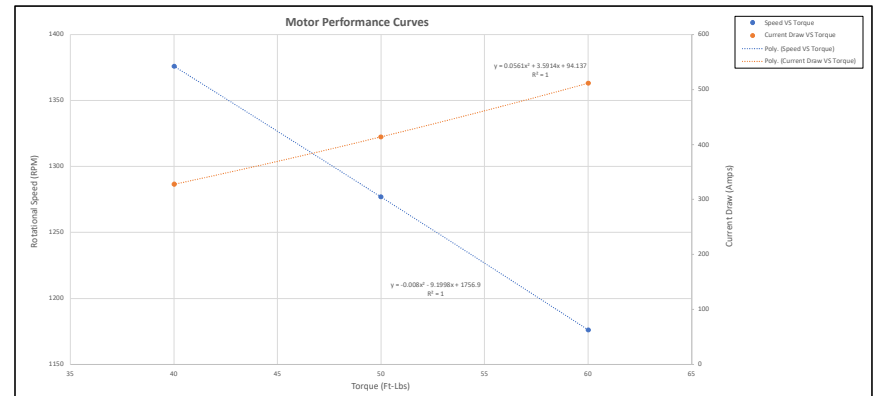
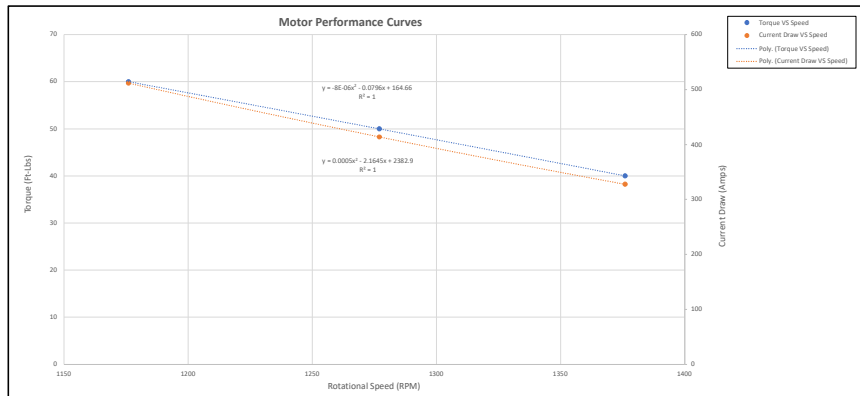
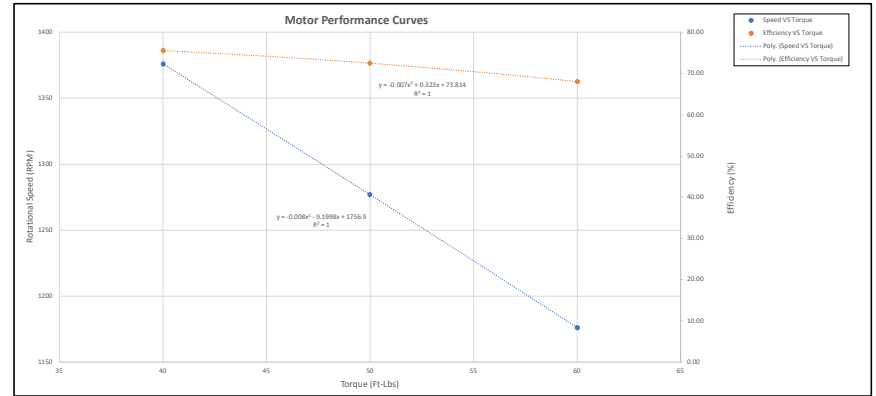
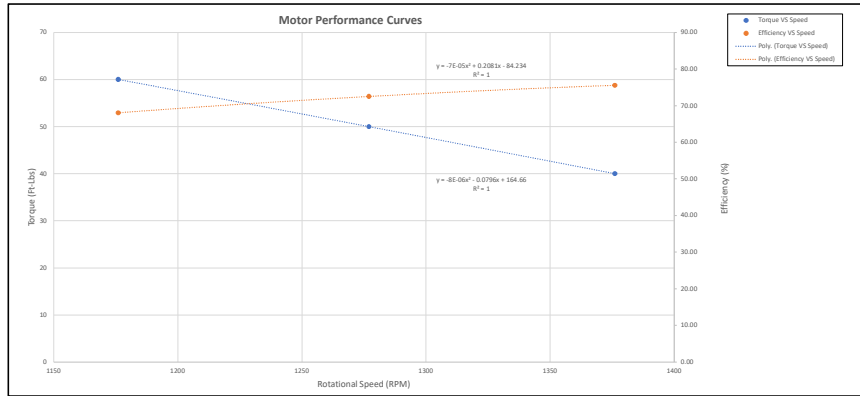


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 36 - (1) * 0.015

Torque (Ft-Lbs)	Speed (RPM)	Available Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
40.01	1176	31.3	307.7	35.8	19.95	327.65	13.87	10.48	75.56
49.99	1177	30	303.8	35	19.99	413.89	16.77	12.16	72.51
60.01	1176	28.6	491.7	34.3	20.02	511.72	19.75	13.44	68.05

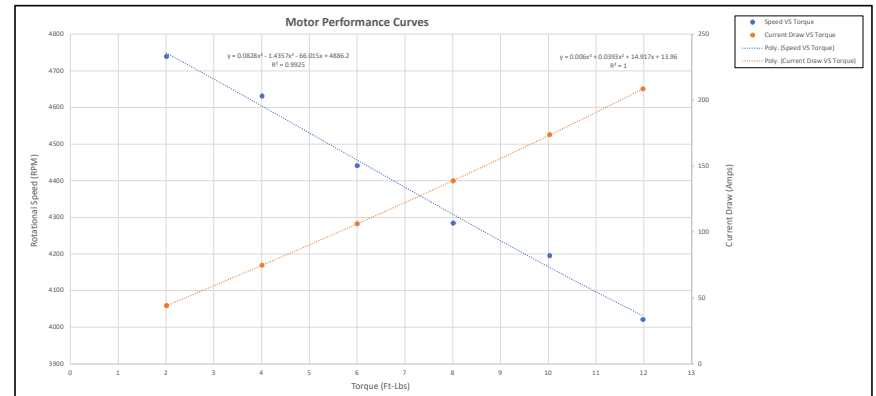
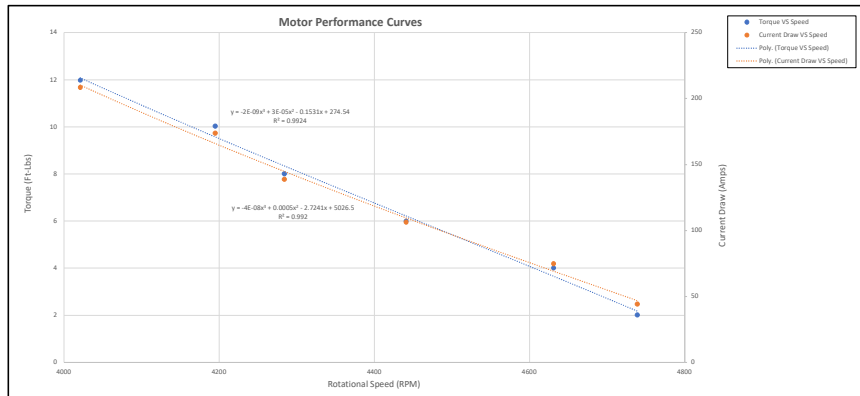
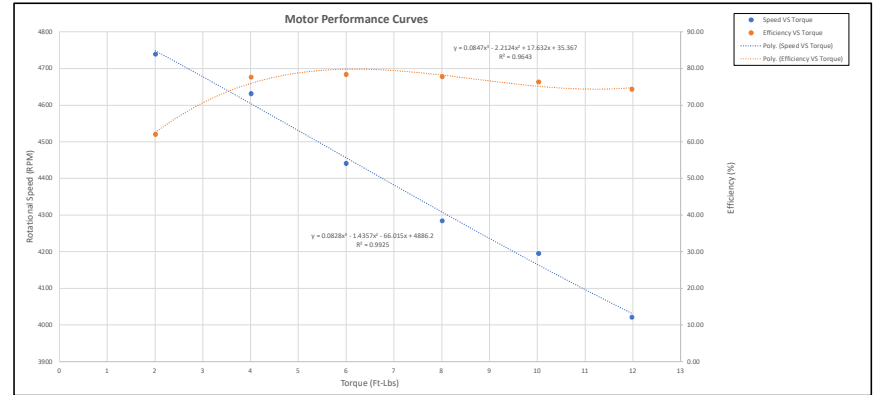
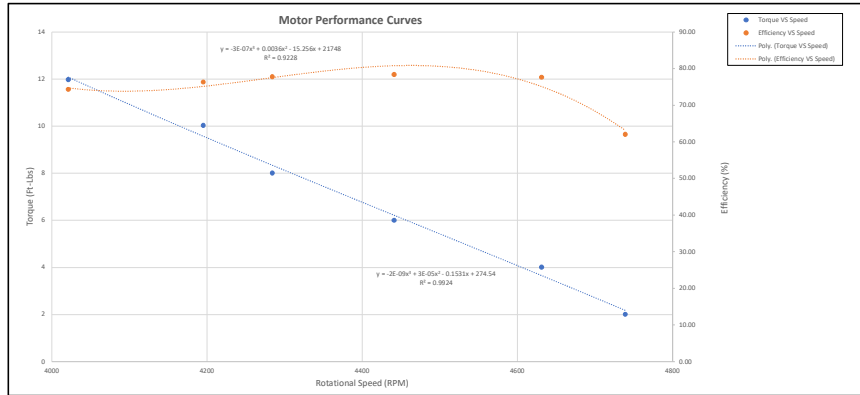


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 48 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
2.01	4739	47.6	41.2	5.3	2.93	44.13	2.95	1.83	62.03
4.01	4638	47.1	71.9	5.3	2.92	74.91	4.50	3.54	72.63
6	4441	46.6	103.3	5.3	2.98	106.28	6.47	5.07	78.36
8.01	4284	46.1	135.8	5.3	2.97	138.77	8.41	6.54	77.76
10.03	4195	45.4	170.9	5.3	2.88	173.78	10.43	7.96	76.32
11.98	4021	44.7	205.6	5.1	2.92	208.52	12.35	9.18	74.33

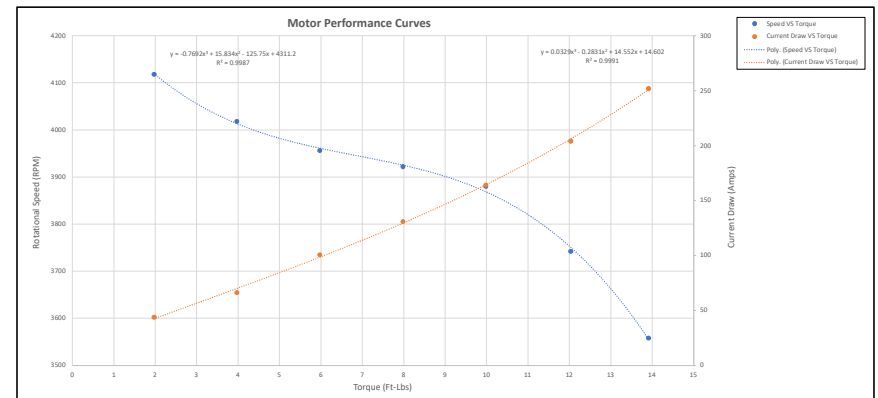
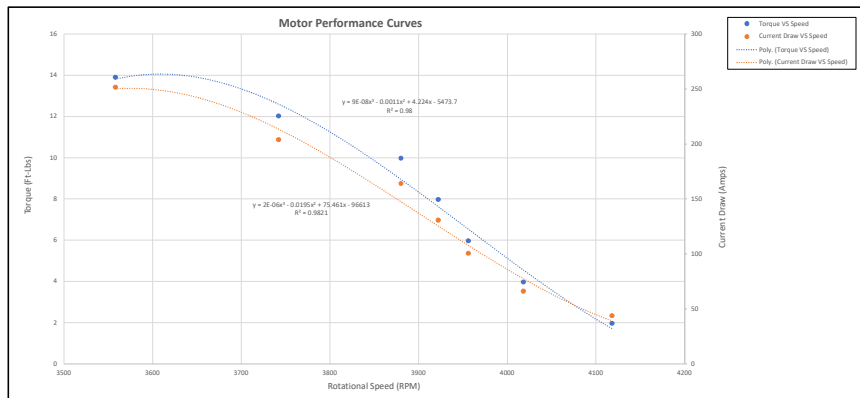
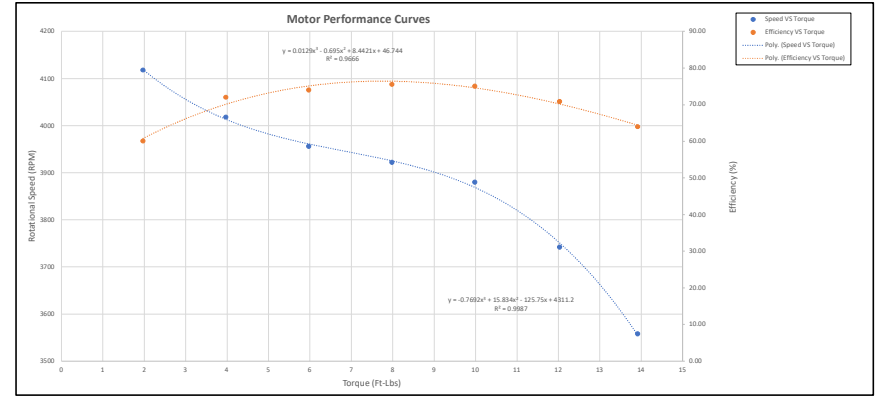
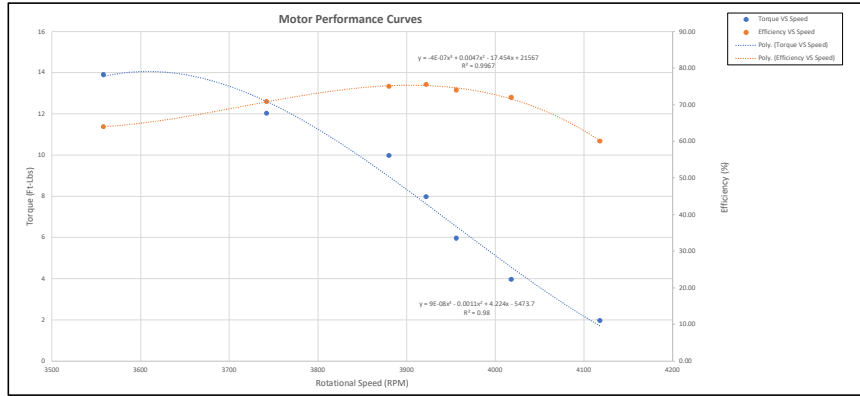


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 48 - (1 * 0.015)

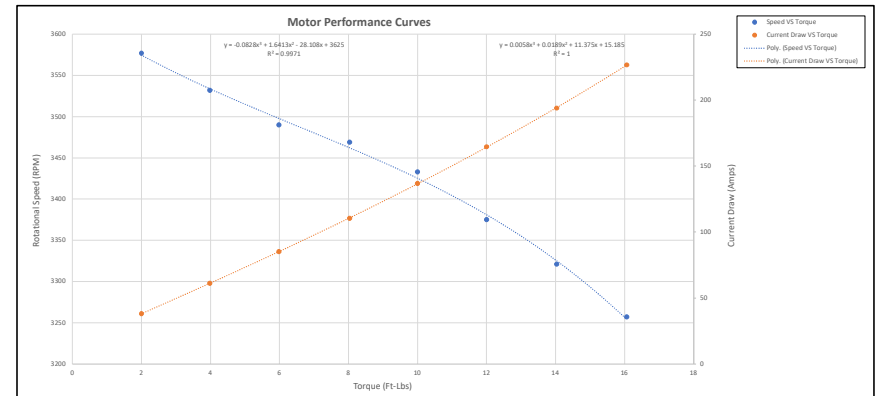
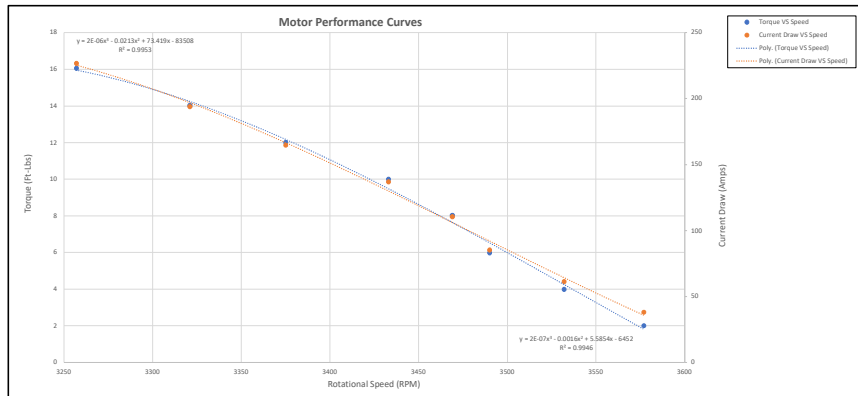
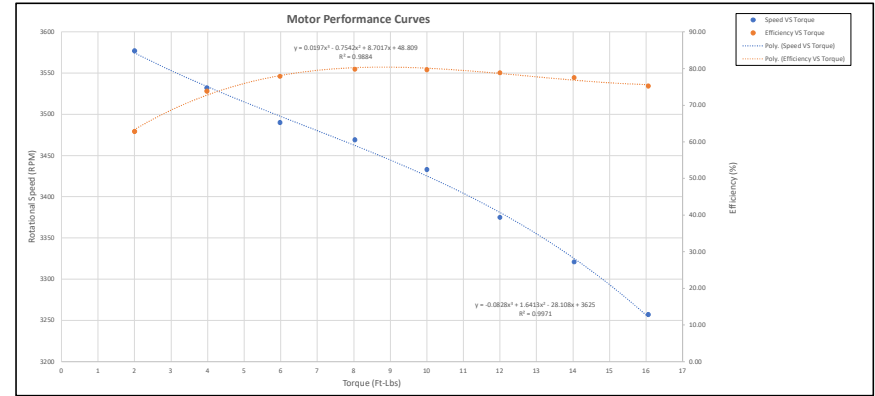
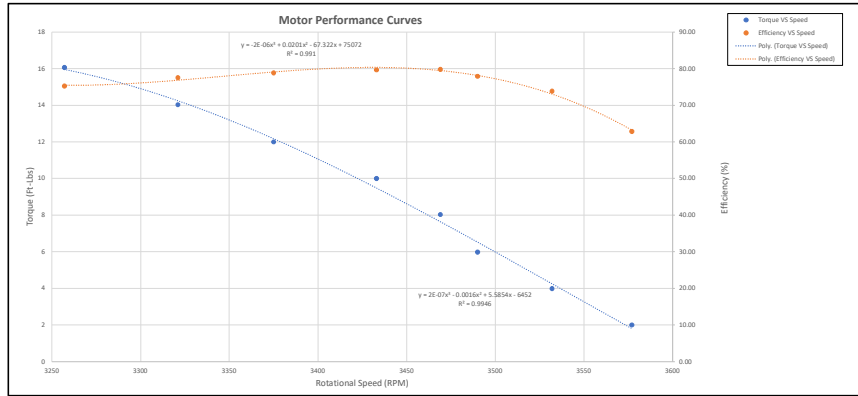
Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
1.97	4118	47.6	39.9	6.4	3.93	43.83	2.58	1.55	60.08
3.97	4018	47.1	42.2	6.4	3.93	66.13	4.22	3.04	72.04
5.97	3956	46.7	96.7	6.4	3.9	100.6	6.08	4.5	74.01
7.98	3922	46.2	126.9	6.4	3.95	130.85	7.89	5.96	75.54
9.98	3880	45.6	160.2	6.4	3.91	164.11	9.82	7.37	75.05
12.03	3742	44.9	200.1	6.5	3.94	204.04	12.09	8.57	70.89
13.91	3558	44.2	248	6.5	3.83	251.83	14.72	9.42	63.99



Engineering Performance Test Report

Performance Spec (PS) Number: 49
 System Voltage (V): 48 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
2	3577	47.7	33.1	9.1	4.95	38.05	2.18	1.37	62.84
3.98	3536	47.3	35.2	9.1	4.96	41.46	3.63	2.68	72.83
5.98	3490	47	40.2	9.2	4.96	45.16	5.11	3.98	77.89
8.03	3469	46.6	45.4	9.2	4.99	49.59	6.64	5.3	79.82
10	3433	46.1	51.9	9.2	4.95	56.85	8.21	6.54	79.66
12	3375	45.4	59.6	9.2	5	64.6	9.78	7.71	78.83
14.03	3321	44.9	68.1	9.2	4.9	73.01	11.44	8.87	77.53
16.06	3257	44.3	77.8	9.2	4.92	82.72	13.24	9.96	75.23

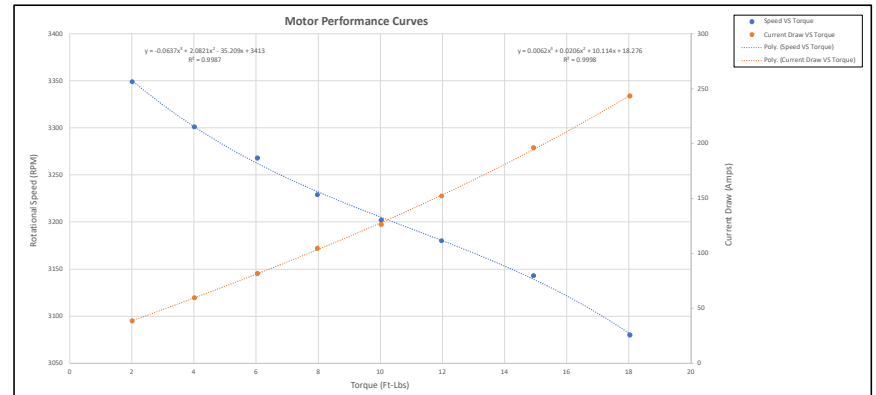
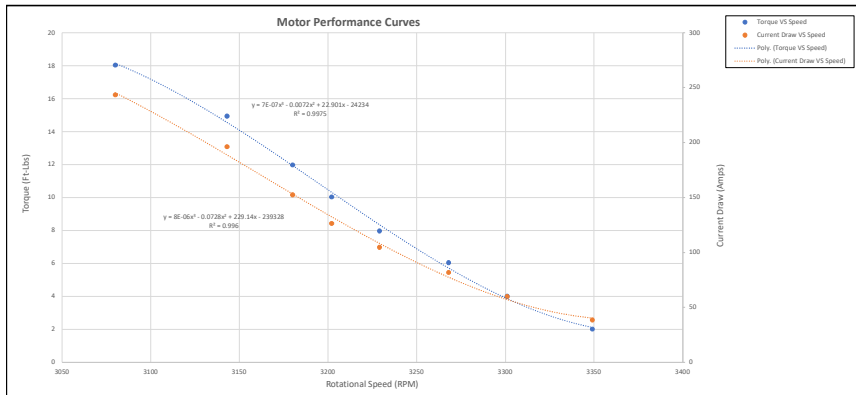
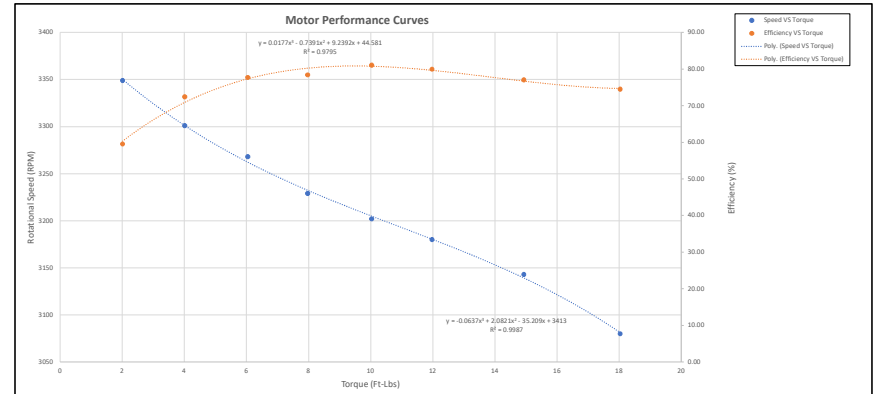
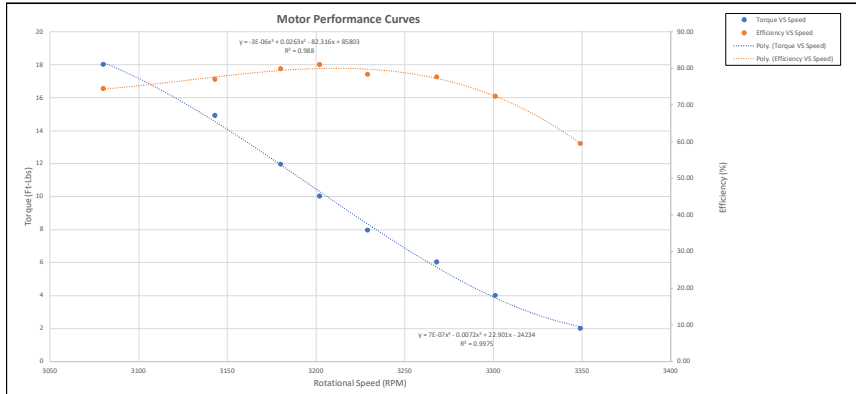


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 48 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
2.01	3349	47.7	32.5	9.3	6	38.5	2.15	1.28	59.53
4.01	3301	47.4	33.7	9.4	5.98	59.68	3.46	2.52	72.41
6.04	3308	47	35.7	9.4	5.98	81.68	4.84	3.76	77.69
7.97	3229	46.7	38.7	9.4	5.97	104.67	6.25	4.9	78.40
10.03	3202	46.3	40.4	9.4	5.95	126.35	7.55	6.12	81.06
11.97	3180	45.9	44.3	9.5	5.98	152.28	9.07	7.25	79.99
14.93	3143	45.2	190.2	9.5	5.92	196.12	11.59	8.93	77.05
18.03	3080	44.3	237.4	9.5	5.93	243.33	14.19	10.57	74.49
20.02	3020	43.9	270.8	9.6	5.99	276.79	16	11.91	71.94

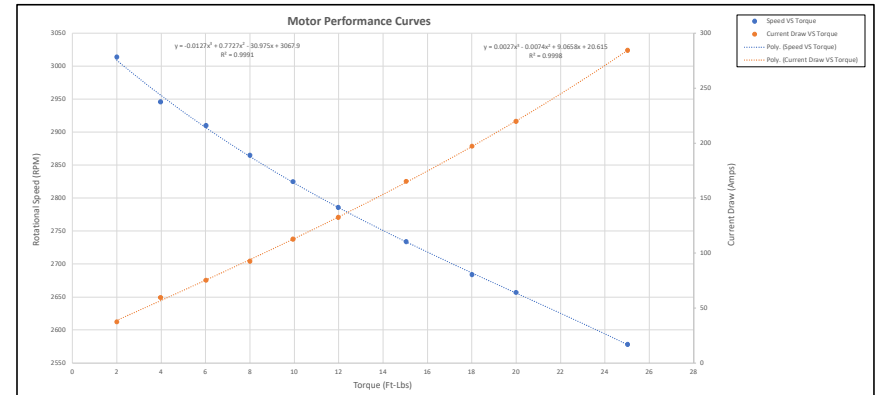
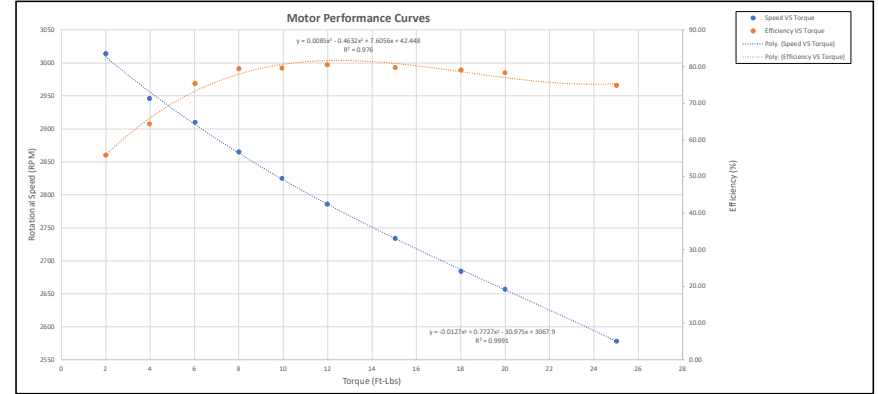
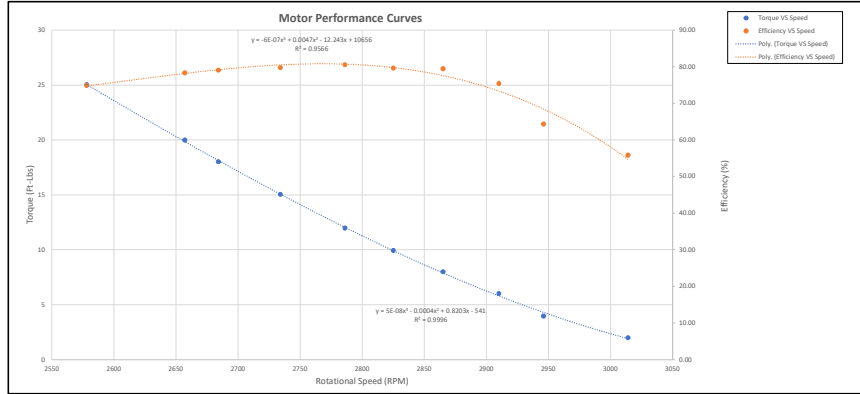


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 48 - (1 * 0.015)

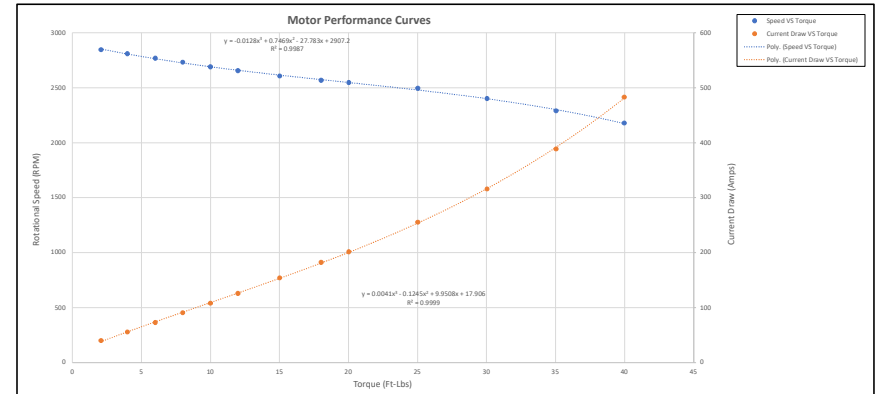
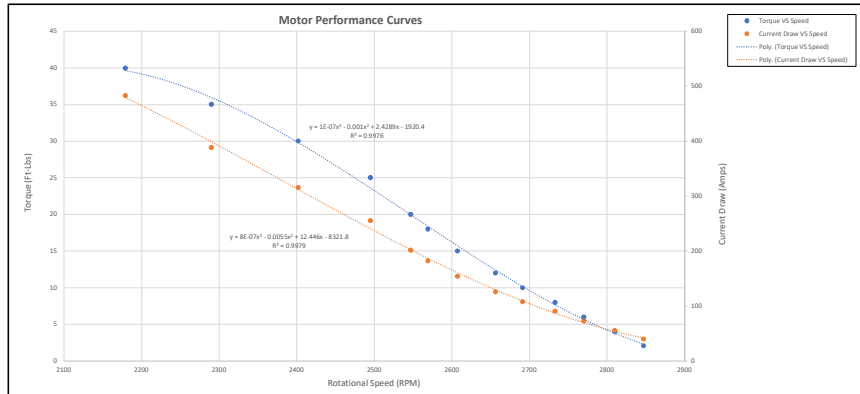
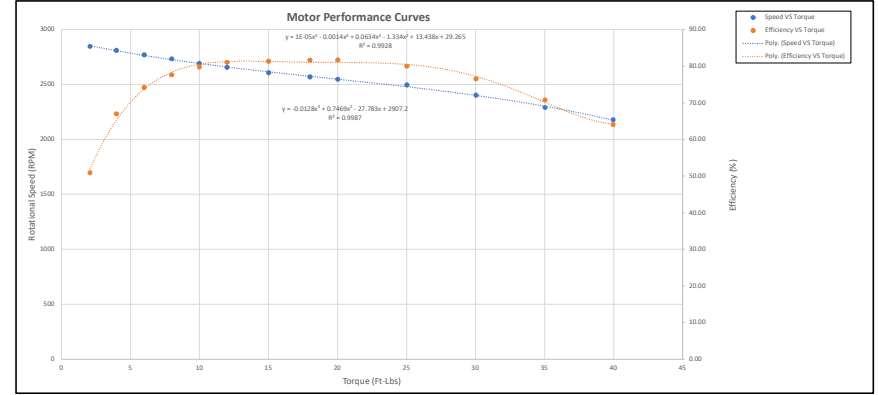
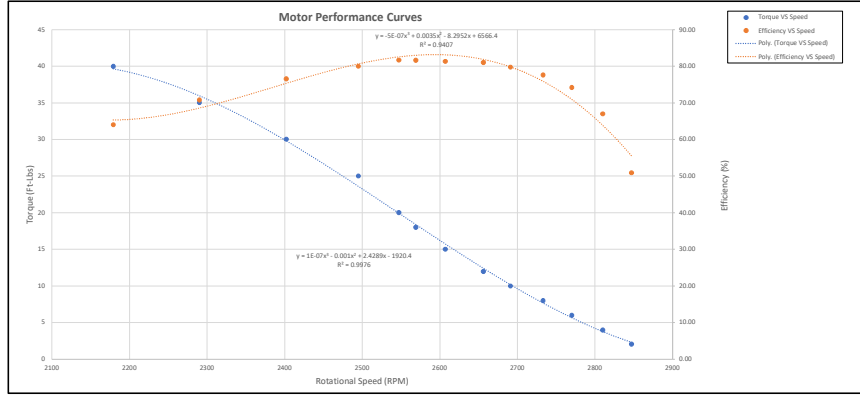
Torque (Ft-Lbs)	Speed (RPM)	Available Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
2	3014	47.7	29.3	17.2	8.02	37.32	2.06	1.15	55.83
3.07	2946	47.4	31.5	17.2	7.98	39.48	3.45	2.21	64.25
6.02	2910	47.1	67.3	17.3	8.04	75.24	4.43	3.34	75.40
8	2865	46.9	84.5	17.3	8.03	92.53	5.49	4.36	79.42
9.94	2825	46.6	104.6	17.3	8.01	112.61	6.72	5.35	79.61
11.98	2786	46.3	134.4	17.3	8	132.4	7.91	6.36	80.51
15.04	2734	45.7	157.2	17.4	8.03	165.23	9.82	7.83	79.74
18.01	2684	45.2	189.2	17.4	8.02	197.22	11.65	9.21	79.06
19.99	2657	44.8	211.8	17.4	8	219.8	12.91	10.11	78.31
25.02	2578	43.7	276.6	17.4	7.92	284.52	16.4	12.28	74.88



Engineering Performance Test Report

Performance Spec (PS) Number: 49
 System Voltage (V): 48 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
2.07	2847	47.7	29.9	21.2	10.05	39.95	2.2	1.12	50.91
3.98	2810	47.5	45.5	21.7	10.01	55.51	3.16	2.13	66.96
6	2770	47.2	62.8	21.3	9.98	72.78	4.26	3.16	74.38
7.99	2733	47	80.5	21.3	10.02	90.52	5.36	4.16	77.61
9.99	2691	46.7	97.9	21.3	9.99	107.89	6.42	5.12	79.75
11.99	2656	46.4	115.7	21.4	10	125.7	7.48	6.06	81.02
15.01	2607	46	143.9	21.4	10.09	153.99	9.16	7.45	81.33
18.01	2569	45.5	172.3	21.5	9.98	182.28	10.79	8.81	81.65
20.02	2547	45.2	191.5	21.5	10.01	201.51	11.89	9.71	81.67
25.02	2485	44.3	245.2	21.5	10.06	255.26	14.85	11.88	80
30.03	2402	43.1	305.8	21.6	10.02	315.82	17.95	13.74	76.55
35.03	2290	41.9	378.7	21.6	10.01	388.71	21.57	15.27	70.79
39.97	2179	40.4	472.9	21.7	10.15	483.05	25.89	16.58	64.04

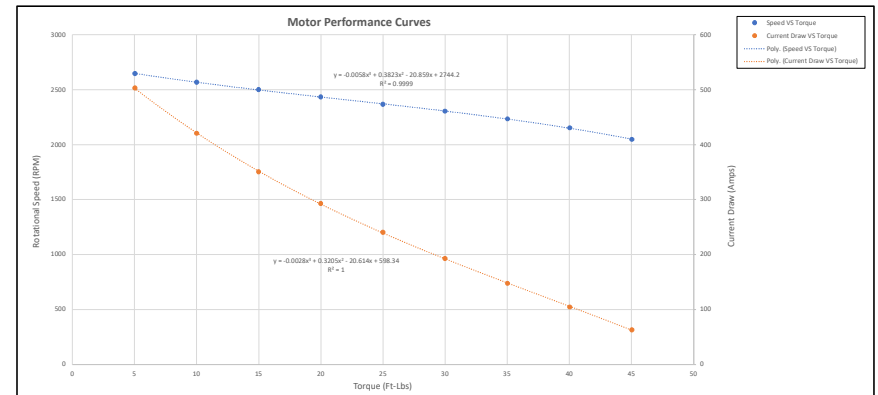
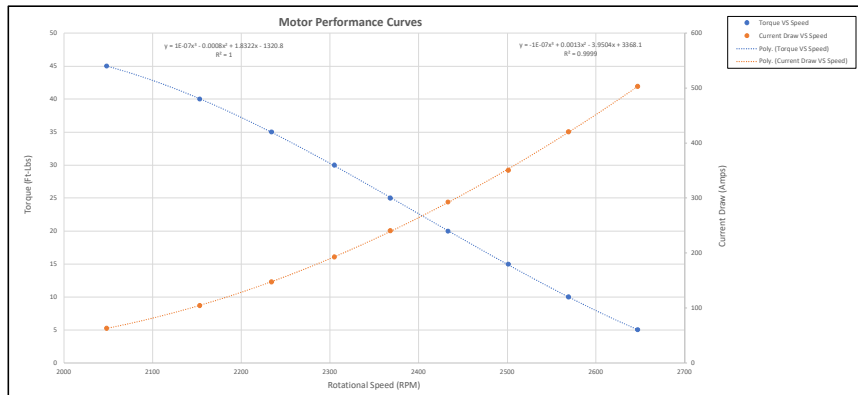
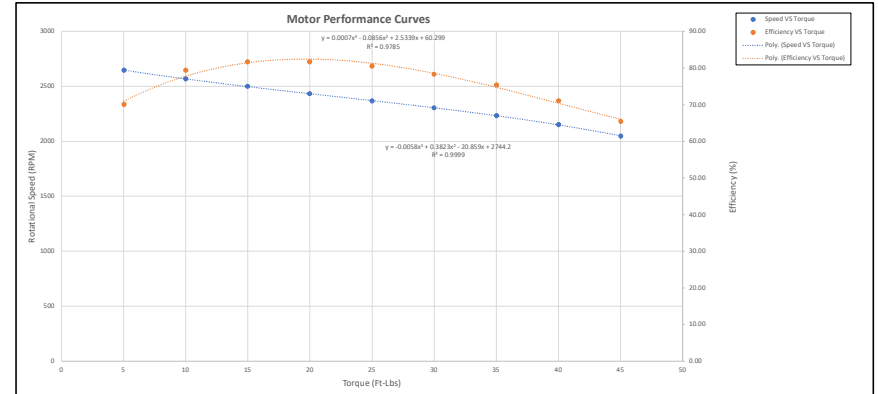
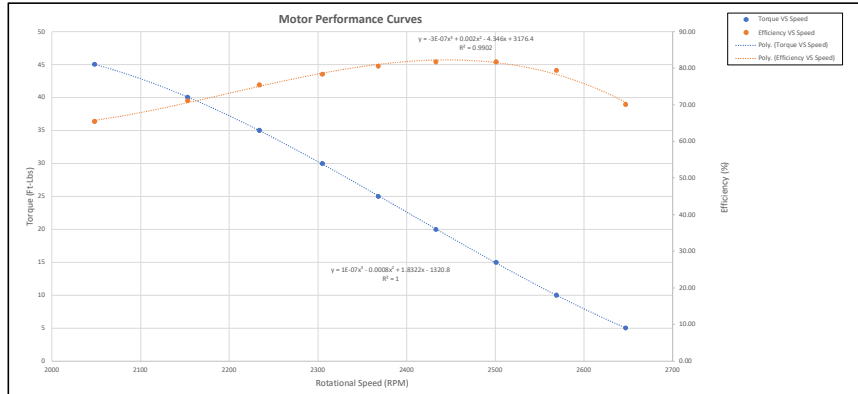


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 48 - (1 * 0.015)

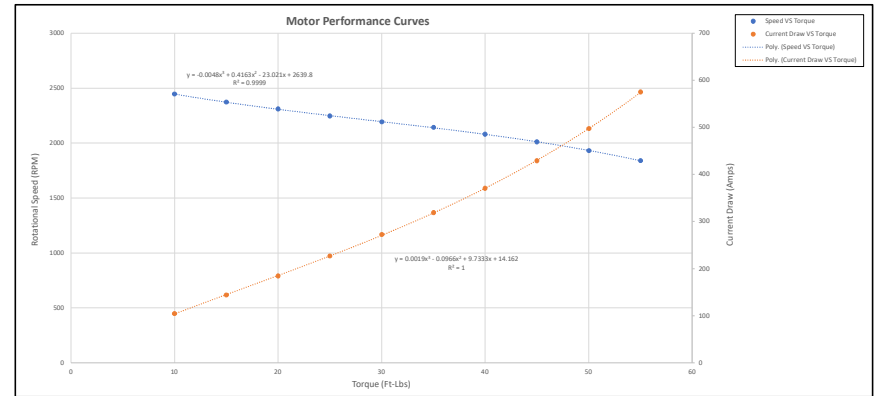
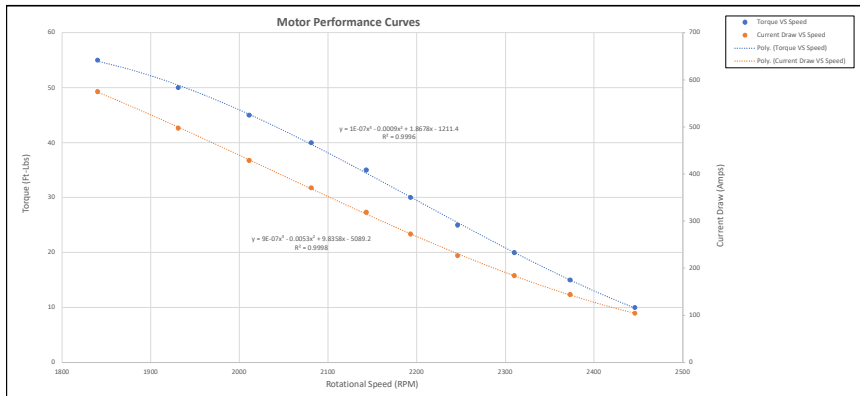
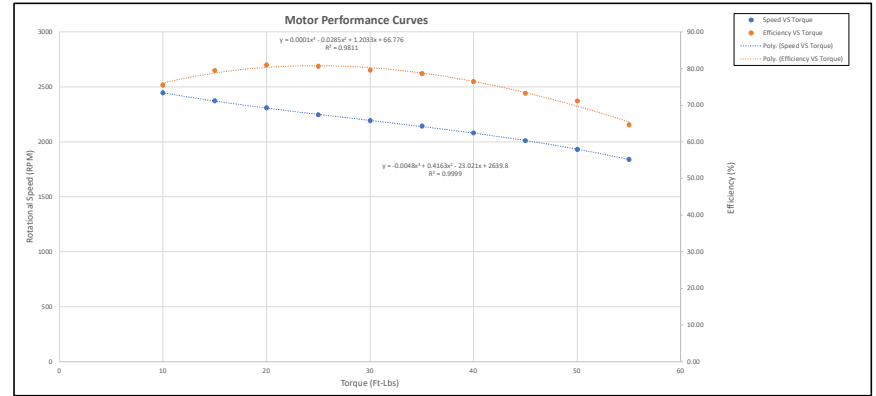
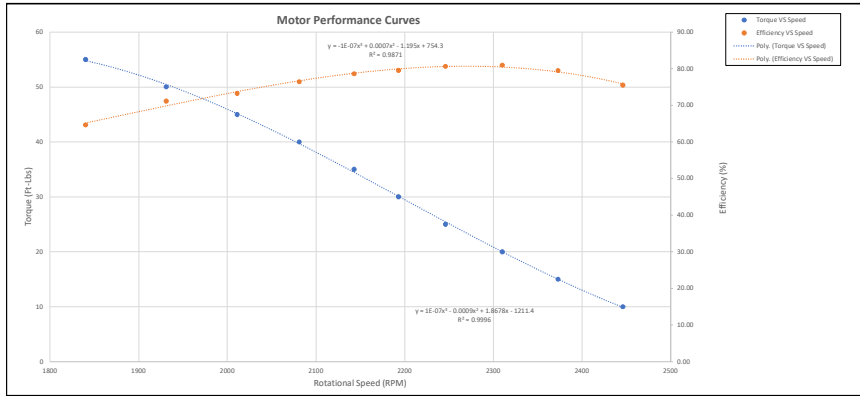
Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
5.03	2647	40.3	491.1	22.5	12.06	503.16	3.61	2.53	70.08
10	2598	41.5	488.5	22.3	12.07	490.57	6.16	4.89	79.38
14.98	2501	42.8	388.6	22.1	12.02	350.62	8.74	7.14	81.69
19.98	2433	43.7	280.7	21.9	12.08	292.78	11.32	9.25	81.71
24.99	2368	44.6	228.3	21.7	12.13	240.43	13.99	11.27	80.56
29.98	2305	45.4	180.5	21.5	12.23	192.72	16.6	13.66	79.33
35.02	2234	46.1	135.5	21.3	12.01	147.51	19.76	14.9	75.40
40.02	2153	46.8	92.4	21	11.97	104.37	23.08	16.41	71.10
45.02	2048	47.4	51.1	20.8	11.93	63.03	26.83	17.56	65.45



Engineering Performance Test Report

Performance Spec (PS) Number: 49
System Voltage (V): 48 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Analogic Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
9.99	2446	46.8	89.4	27	15.06	104.46	6.16	4.65	75.49
15	2373	46.3	129	26.7	15.06	144.05	8.53	6.78	79.48
20	2310	45.6	169.2	26.4	15.08	184.28	10.87	8.8	80.96
25	2246	44.9	211.7	26.1	15.11	226.81	13.26	10.69	80.62
30.02	2193	44.1	257.5	25.7	15.08	272.58	15.75	12.53	79.56
35.02	2143	43.4	303.9	25.3	14.98	318.89	18.16	14.29	78.60
39.99	2081	42.5	355.5	24.9	15.12	370.62	20.74	15.85	76.42
45	2011	41.5	414	24.5	15	429	23.52	17.23	73.26
50.02	1931	40.4	482.5	24.1	14.94	497.44	26.6	18.93	71.17
55.01	1840	39.1	560.1	23.8	14.89	574.99	29.81	19.27	64.64

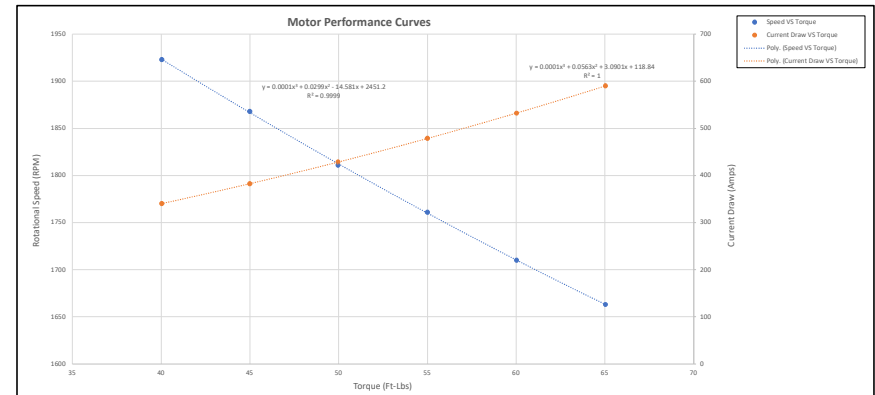
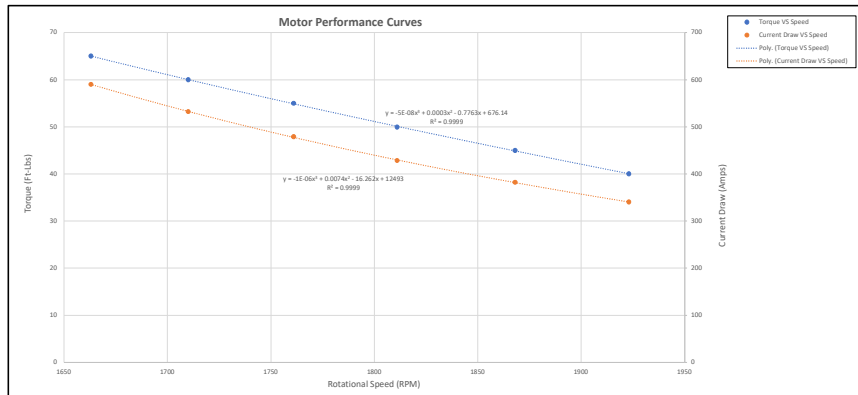
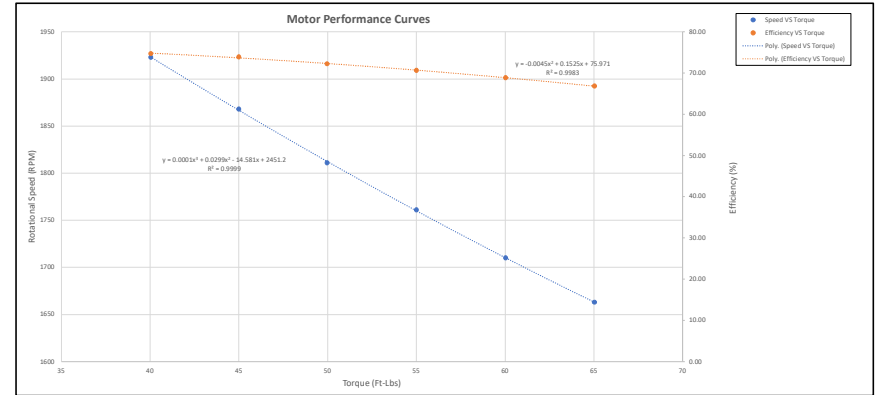
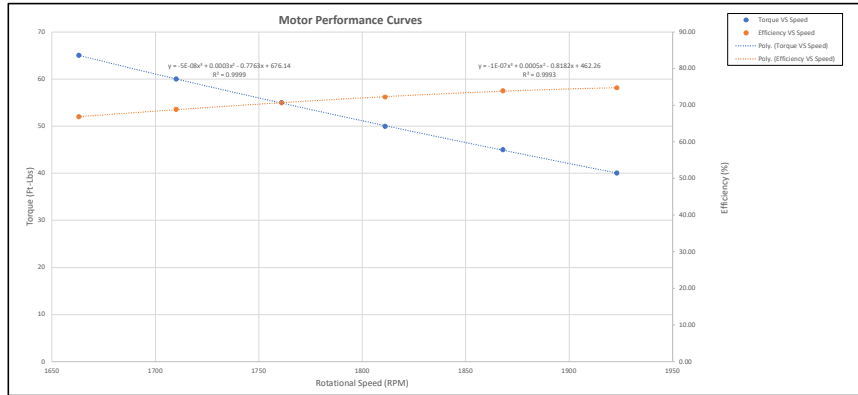


Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 48 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
40.03	1923	39	320.3	41.1	20.11	340.41	19.6	14.65	74.74
44.99	1858	39.8	352.2	40.4	20.03	382.23	21.54	16	73.84
49.96	1811	40.8	408.4	39.5	20.24	428.64	23.85	17.23	72.24
55	1761	41.6	459	38.7	19.84	478.84	26.11	18.45	70.66
60.02	1710	42.4	512.1	37.9	20.16	532.26	28.37	19.54	68.88
65.03	1663	43.1	570.1	37.1	20.19	590.29	30.8	20.99	66.85



Engineering Performance Test Report

Performance Spec (PS) Number: 49

System Voltage (V): 48 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
54.98	1722	41.5	415.3	46.4	24.91	440.21	24.67	18.03	73.08
60.07	1672	40.9	400.0	44.9	25.14	405.24	26.70	19.33	72.49
65.05	1610	40.1	503.2	43.3	25.21	528.41	28.54	19.94	69.87
70.06	1569	39.4	554.2	41.8	24.98	579.18	30.67	20.93	68.24

