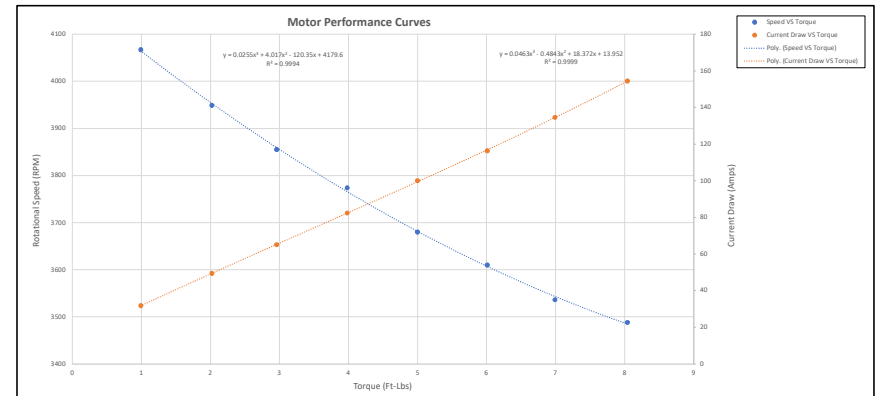
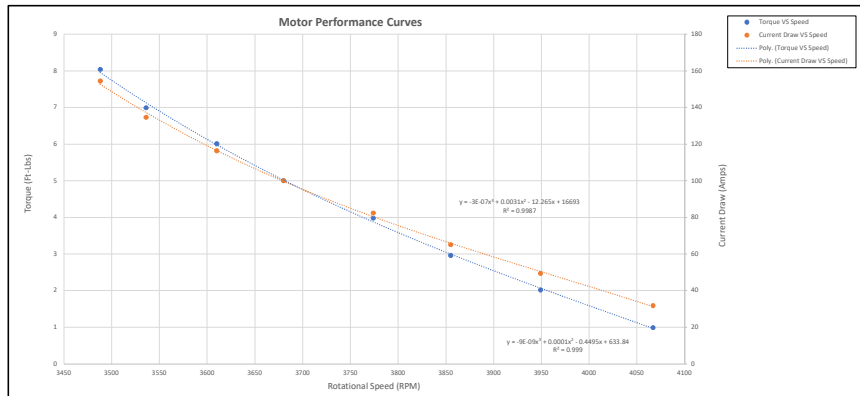
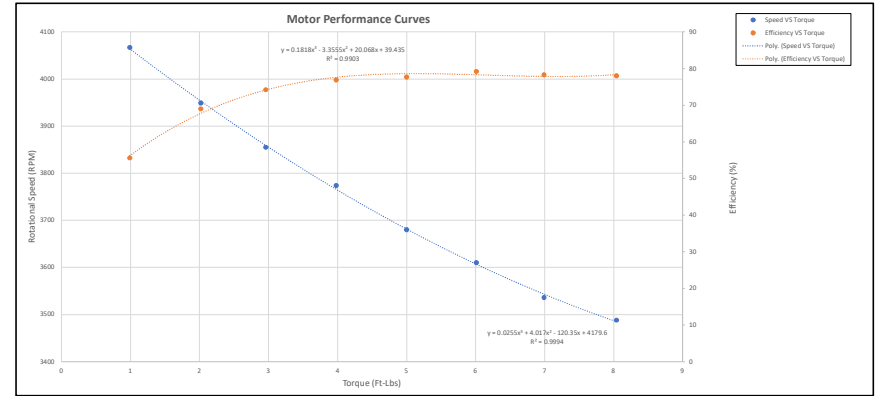
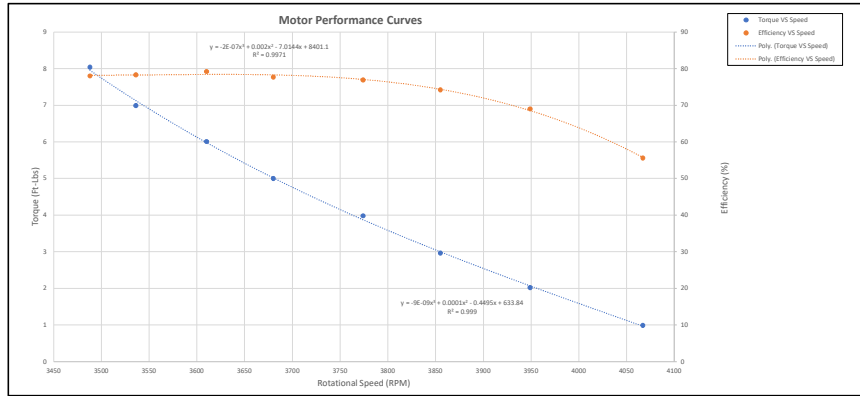


Engineering Performance Test Report

Performance Spec (PS) Number: 47
 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 (%)
0.99	4067	35.5	28.8	2.9	2.98	31.78	1.38	0.77	55.6
2.03	3949	35.3	46.8	2.9	3.01	49.44	2.2	1.52	69
2.96	3855	35.1	62.1	2.9	3.99	65.99	2.93	2.17	74.2
3.98	3774	34.8	79.4	2.9	2.98	82.38	3.72	2.86	76.9
5	3680	34.6	97	2.9	3.04	100.04	4.51	3.5	77.7
6.01	3550	34.3	113.4	2.9	3.94	116.34	5.22	4.13	79.2
6.99	3536	34	131.7	2.9	2.93	134.63	6.01	4.71	78.3
8.04	3488	33.7	151.2	2.9	3.23	154.43	6.85	5.34	78

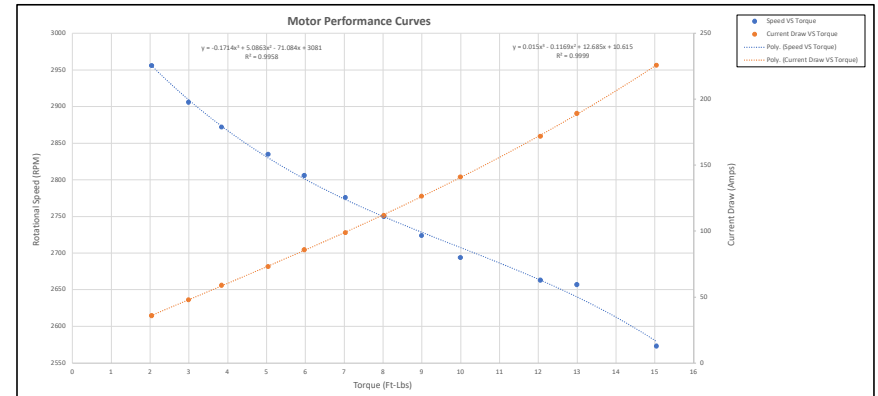
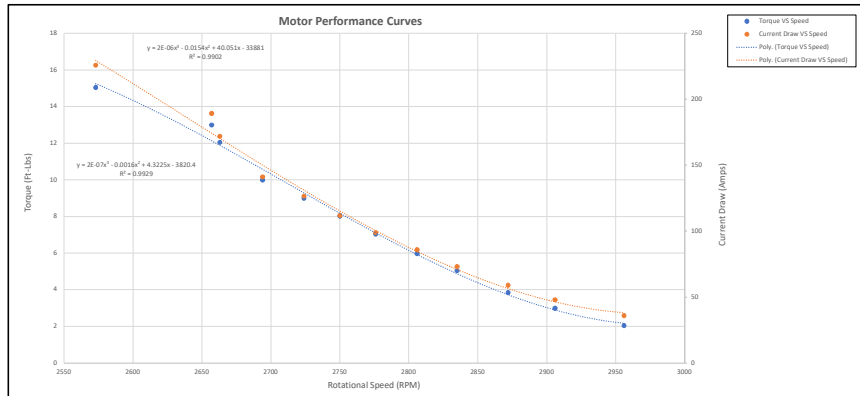
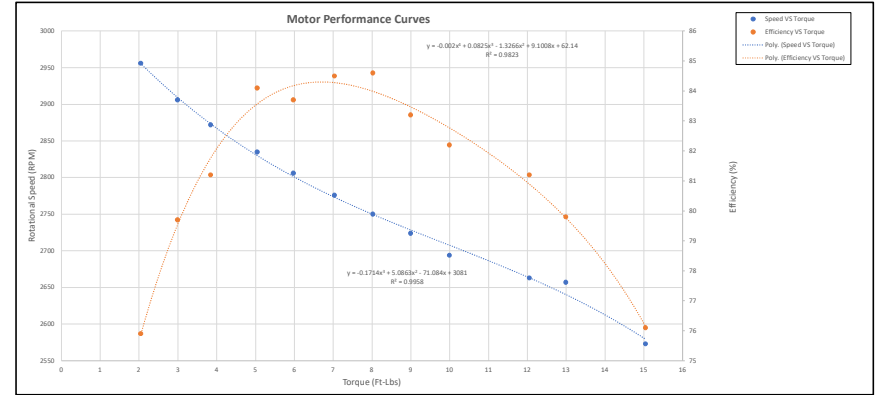
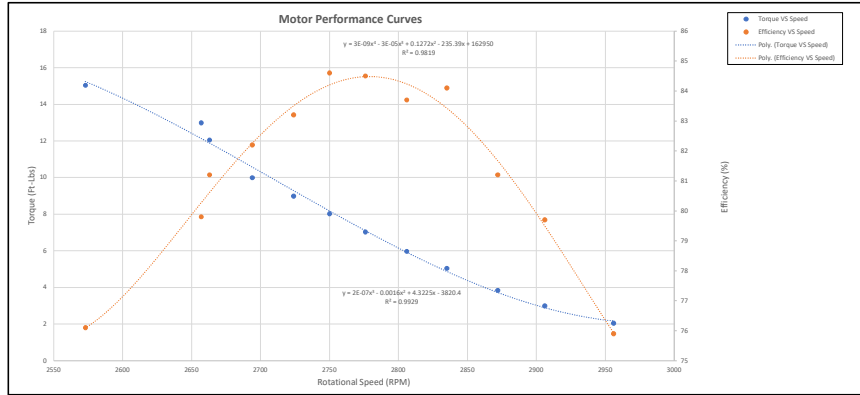


Engineering Performance Test Report

Performance Spec (PS) Number: 47

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 (%)
2.04	2956	35.5	30.8	6.4	5.09	35.89	1.51	1.15	75.9
2.99	2906	35.3	42.8	6.4	5.07	47.87	2.07	1.65	79.2
3.84	2872	35.2	53.9	6.4	5.05	58.95	2.58	2.11	81.2
5.04	2835	35	68.1	6.4	5.05	73.15	3.24	2.72	84.1
5.97	2806	34.8	80.8	6.4	5.08	85.88	3.81	3.19	83.7
7.03	2776	34.6	93.8	6.4	5.05	98.85	4.4	3.71	84.5
8.02	2750	34.4	106.8	6.3	5.03	111.83	4.96	4.2	84.6
8.99	2724	34.2	121.5	6.3	5	126.5	5.6	4.66	83.2
9.99	2694	33.9	136	6.3	5.09	141.09	6.23	5.12	82.2
12.05	2661	33.5	167	6.3	4.93	174.93	7.53	6.11	81.2
12.99	2657	33.2	184.1	6.3	5.17	189.27	8.23	6.57	79.8
15.04	2573	32.6	220.7	6.3	5.12	225.82	9.69	7.37	76.1

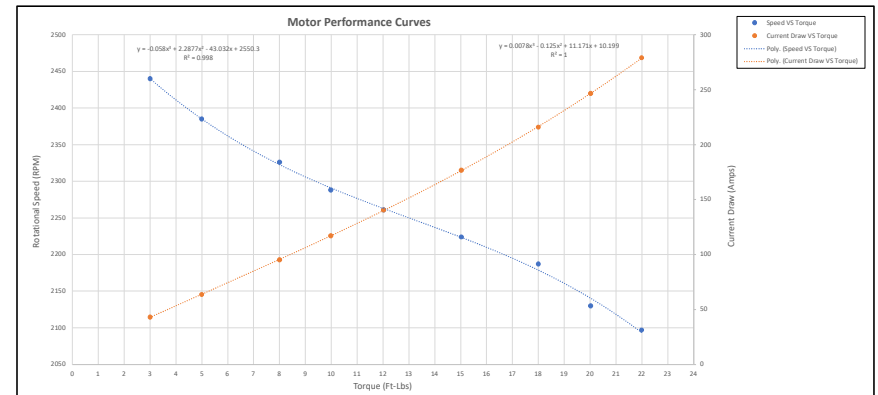
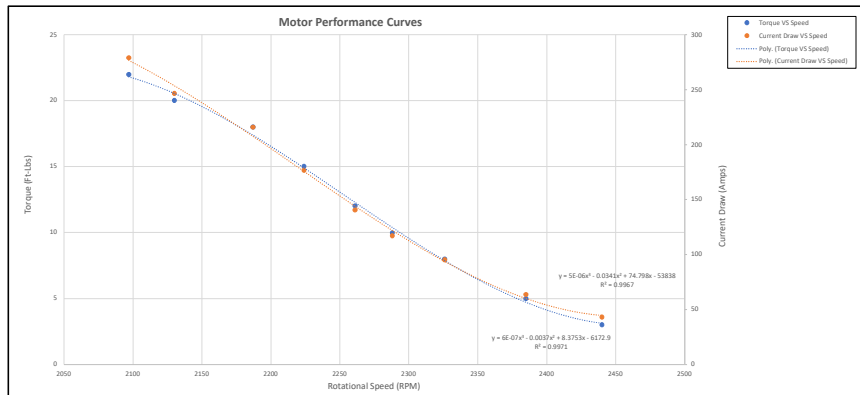
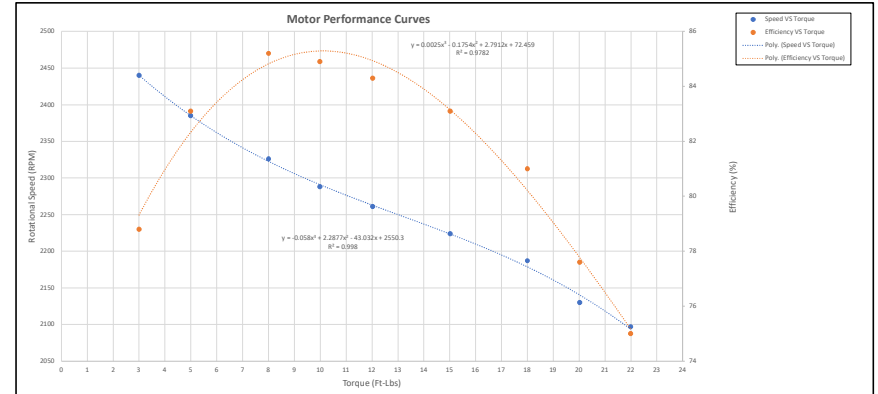
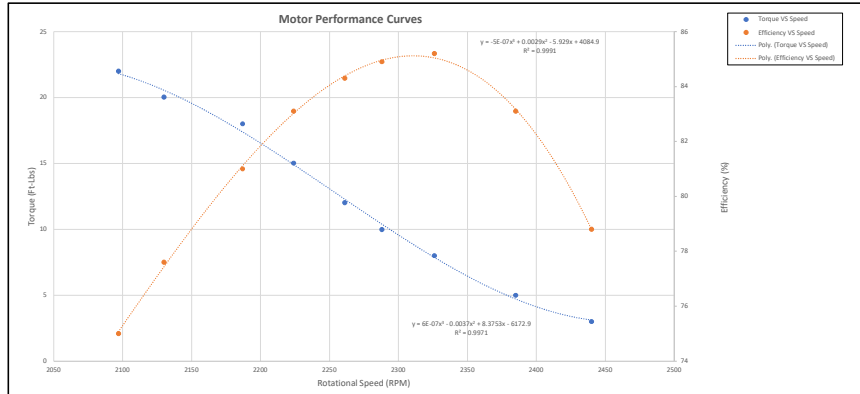


Engineering Performance Test Report

Performance Spec (PS) Number: 47

System Voltage (VS): 36 - (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 (%)
3	2440	35.5	35	9.6	8.01	43.01	1.77	1.39	78.8
4.99	2385	35.4	35.3	9.7	7.94	43.46	2.23	2.27	83.1
8	2325	34.7	37.2	9.7	7.99	95.19	4.16	3.55	85.2
9.98	2288	34.3	109	9.7	8.07	117.07	5.12	4.35	84.9
12.02	2261	34	132.5	9.7	8.01	140.51	6.14	5.18	84.2
15.02	2124	31.4	168.5	9.7	8.18	176.68	7.65	6.36	83.1
18	2187	32.8	208	9.7	7.94	215.94	9.26	7.49	81
20.02	2130	32.4	238.8	9.7	7.8	246.6	10.46	8.12	77.6
21.99	2097	31.9	271.2	9.8	7.83	279.03	11.7	8.78	75

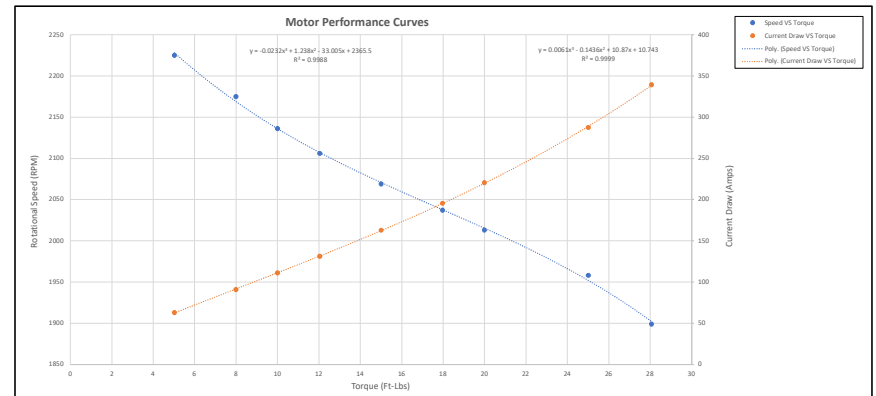
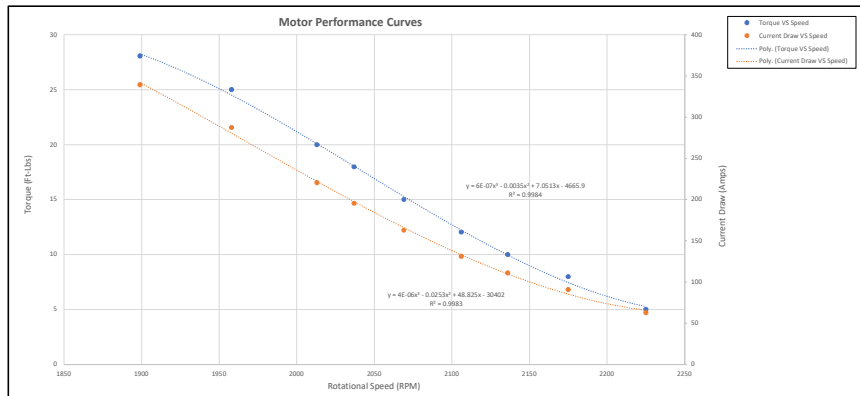
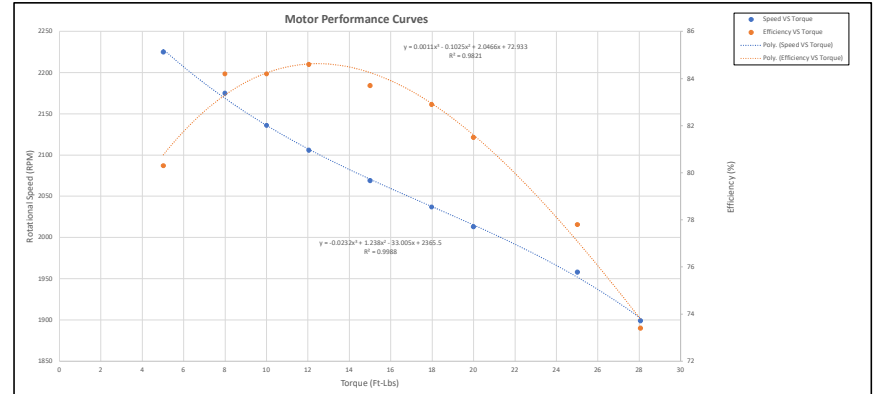
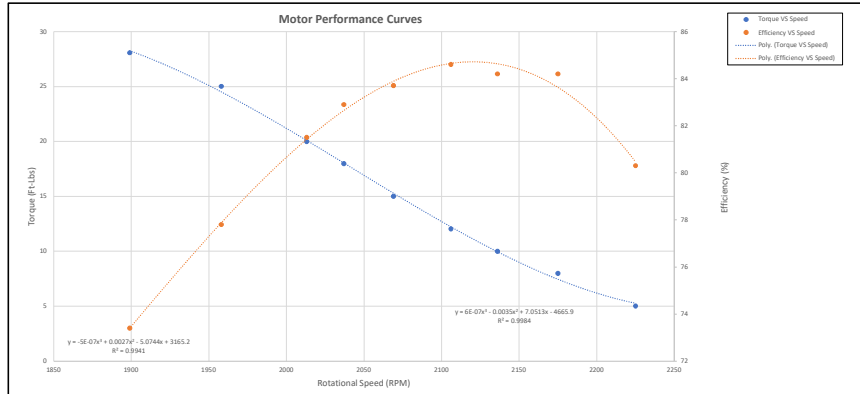


Engineering Performance Test Report

Performance Spec (PS) Number: 47

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 (%)
5.02	2225	35.2	52.9	11.6	10.04	62.94	2.65	2.13	80.3
7.99	2175	34.8	60.8	11.6	10.01	90.91	3.93	3.31	84.2
10	2136	34.5	101.1	11.6	9.97	111.07	4.83	4.07	84.2
12.04	2106	34.1	121.2	11.7	10	131.2	5.7	4.83	84.6
15	2069	33.7	152.8	11.7	10.03	162.83	7.06	5.91	83.7
17.97	2037	33.2	185.6	11.7	9.95	195.55	8.4	6.97	82.8
19.99	2013	32.8	210.3	11.8	10.2	220.5	9.4	7.66	81.5
25.01	1958	31.8	277.4	11.8	10.01	287.41	11.98	9.32	77.8
28.06	1899	31	329.1	11.8	10.21	339.31	13.83	10.15	73.4

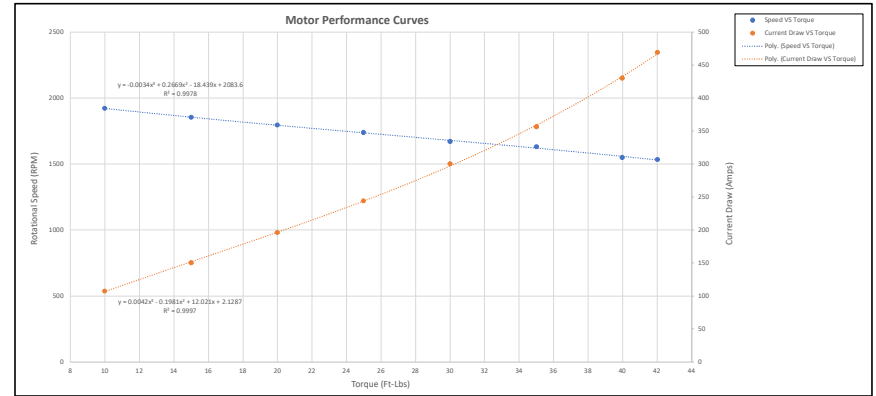
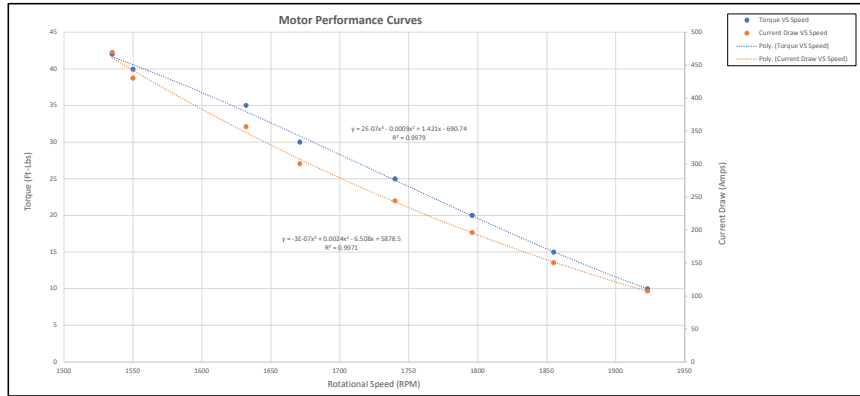
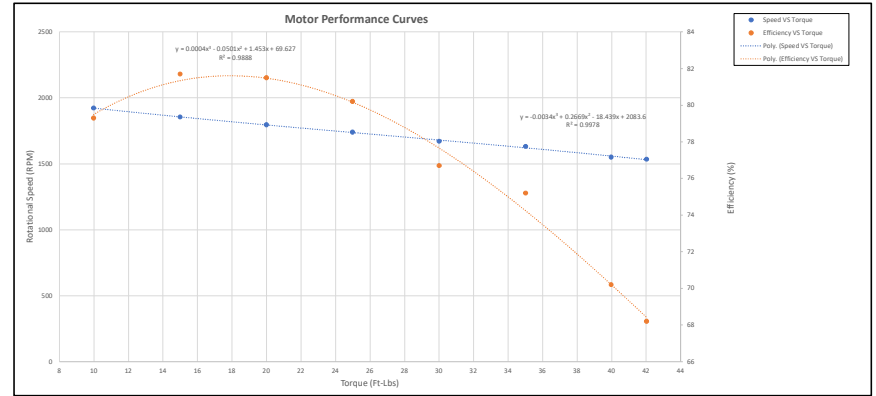
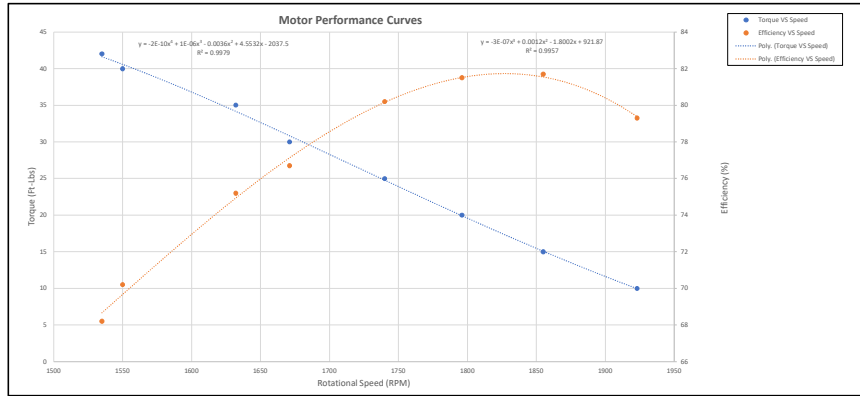


Engineering Performance Test Report

Performance Spec (PS) Number: 47

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 (%)
9.98	1923	34.6	92.3	16.2	15.1	107.4	4.61	3.65	79.3
14.99	1855	34	135.2	16.3	15.08	150.28	6.48	5.3	81.2
19.99	1796	33.2	180.9	16.5	15.27	196.17	8.39	6.84	81.5
24.98	1740	32.5	228.8	16.6	15.42	244.22	10.32	8.27	80.2
30	1671	31.7	285.3	16.7	15.25	300.55	12.45	9.55	76.7
35.01	1623	30.8	341.7	16.8	14.97	356.67	14.66	10.88	74.2
39.97	1550	29.6	415.3	16.9	15.04	430.34	16.81	11.8	70.2
42.02	1535	29	454.6	17	14.84	469.44	18.02	12.28	68.2

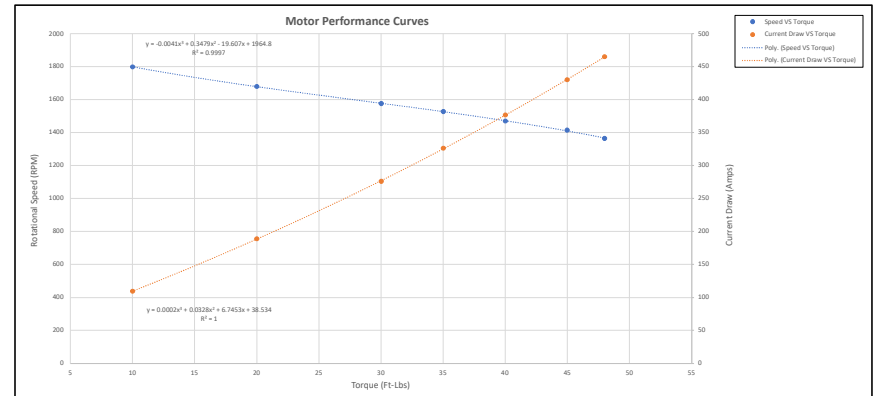
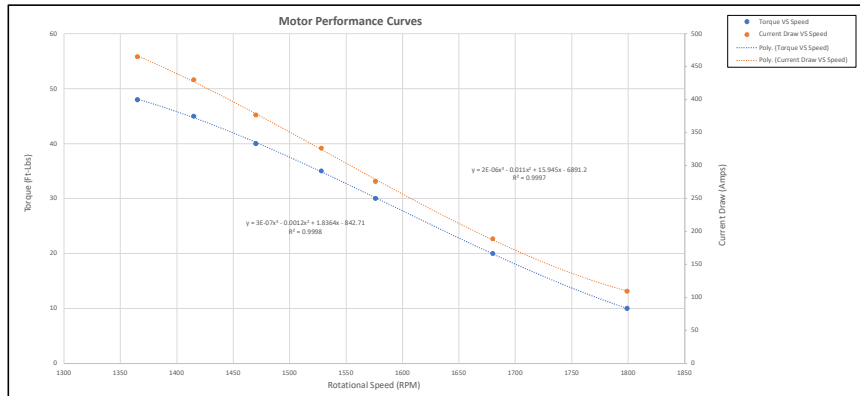
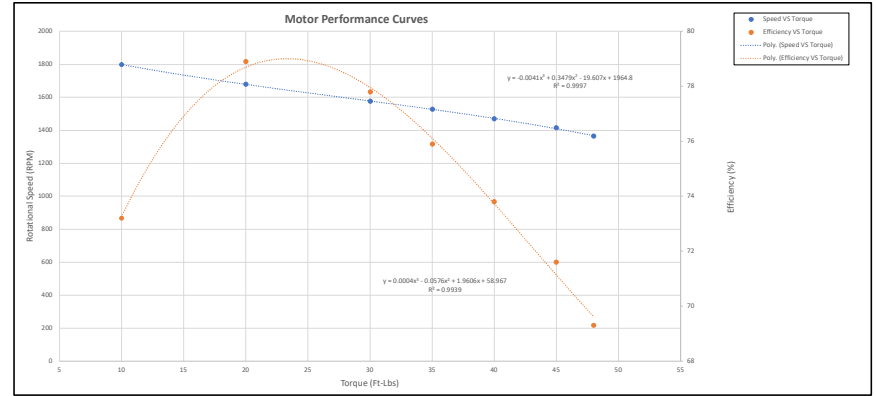
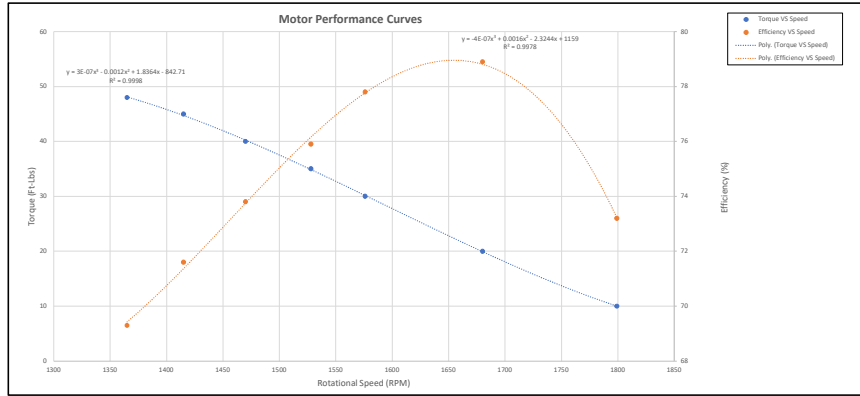


Engineering Performance Test Report

Performance Spec (PS) Number: 47

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 (%)
10	1799	34.7	89.3	19.7	20.13	109.43	4.68	3.42	73.2
20	1680	33.4	109	20	19.94	128.94	8.11	6.4	78.3
30.02	1576	32.1	256.1	20.3	20.08	276.18	11.58	9.01	77.8
35.02	1528	31.4	306	20.5	20.32	326.32	13.43	10.19	75.9
40	1470	30.6	356.8	20.8	19.97	376.77	15.18	11.2	73.8
44.98	1415	29.8	409.8	21.1	20.4	430.2	16.92	12.22	71.6
47.99	1365	29.2	445	21.3	20.05	465.05	18.01	12.47	69.3

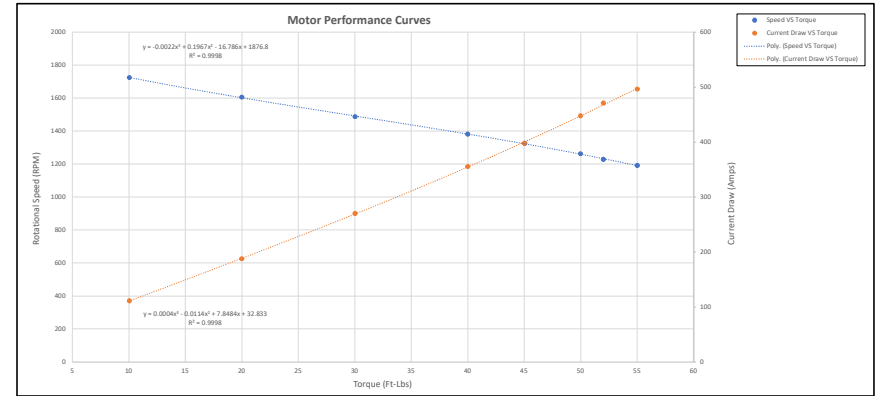
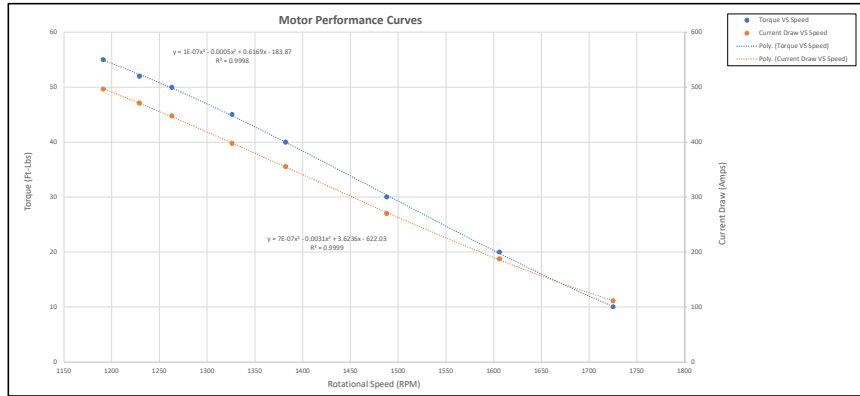
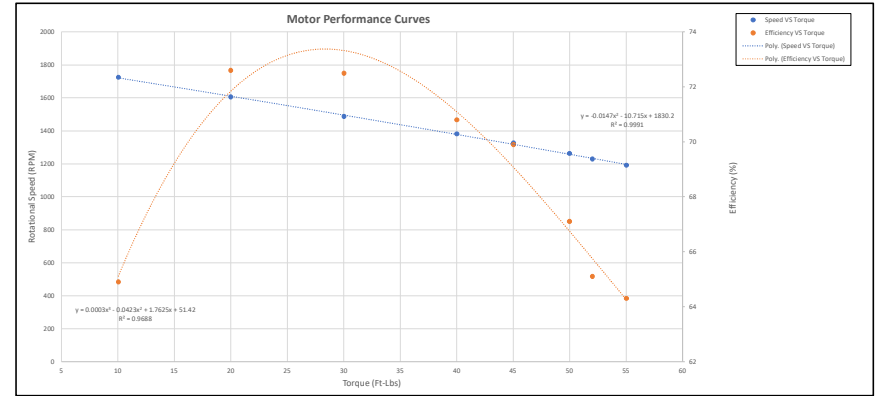
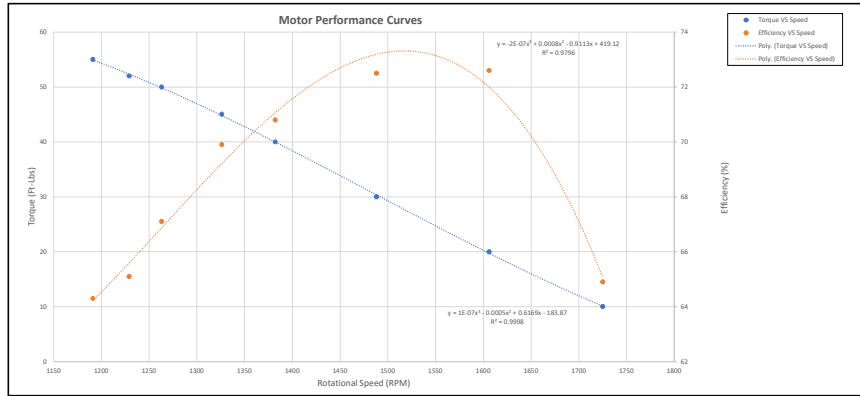


Engineering Performance Test Report

Performance Spec (PS) Number: 47

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 (%)
10.04	1725	34.7	85.8	32.2	25.24	111.04	5.08	3.3	64.9
19.99	1606	33.6	102.5	32.8	25.27	107.77	8.42	6.11	72.6
30.02	1488	32.3	244.6	33.3	25.56	270.16	11.73	8.51	72.5
40	1382	31	330	33.8	25.39	355.39	14.87	10.53	70.8
45.03	1326	30.3	372	34.3	25.51	397.51	16.28	11.27	69.9
49.98	1263	29.6	424.4	34.8	25.39	467.79	17.93	12.02	67.1
52	1229	29.3	445.5	35.3	25.41	470.91	18.69	12.17	65.1
55.01	1191	28.8	471.2	35.8	25.2	496.4	19.39	12.47	64.3

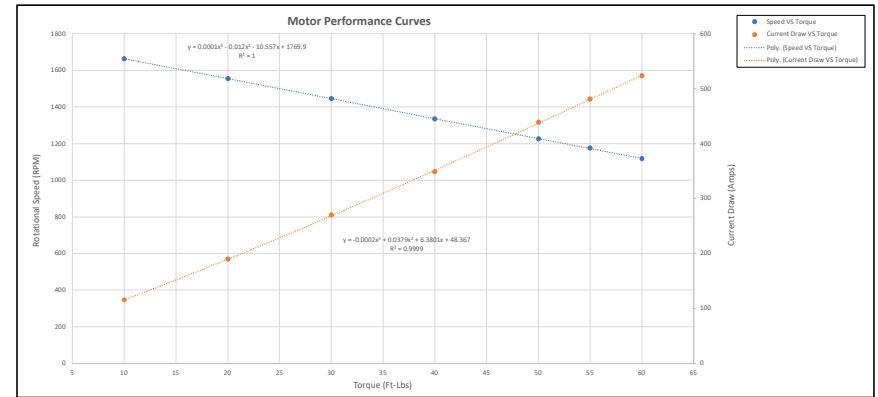
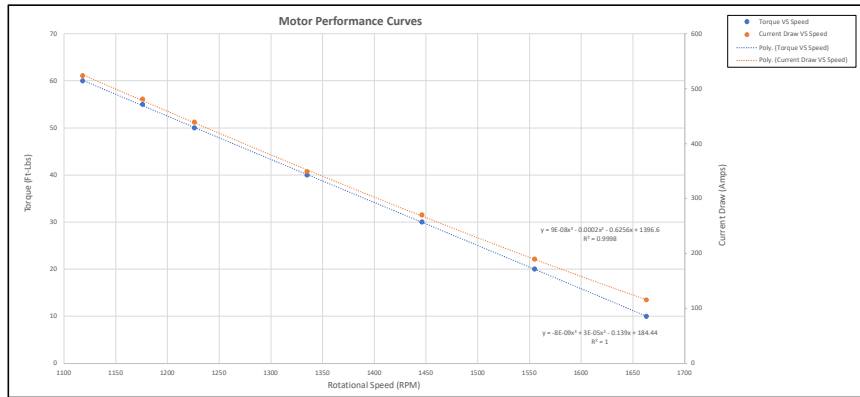
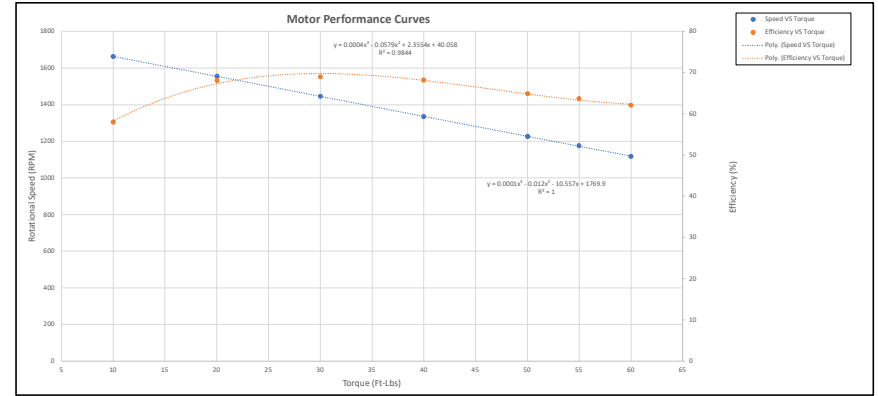
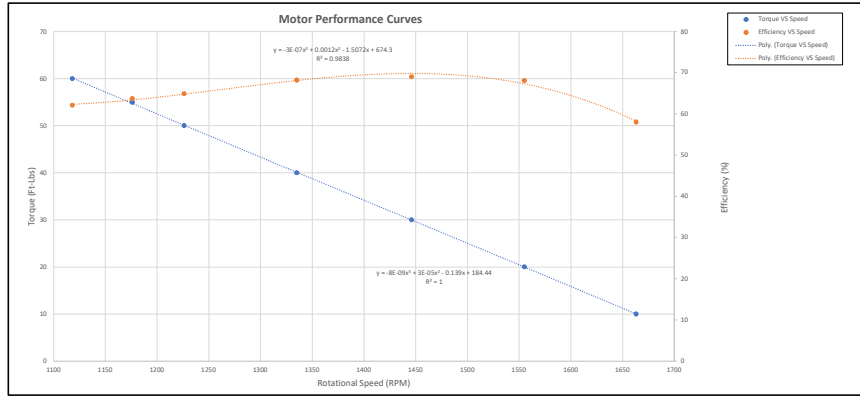


Engineering Performance Test Report

Performance Spec (PS) Number: 47

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 (%)
10	1663	34.7	85.4	36.5	30.24	115.64	5.46	3.17	58
20.02	1555	33.6	159.4	37.6	30.22	189.62	8.7	5.29	60.1
30.01	1446	32.4	239.7	38.6	30.33	270.03	11.97	8.26	69
39.99	1335	31.2	317.9	39.6	30.72	348.62	14.9	10.16	68.2
50.02	1226	29.8	408.7	40.6	30.19	438.89	17.98	11.68	64.9
54.98	1176	29.2	490.5	41.5	30.37	480.87	19.35	12.32	63.2
60	1118	28.5	493.3	42.5	30.29	523.59	20.58	12.77	62.1

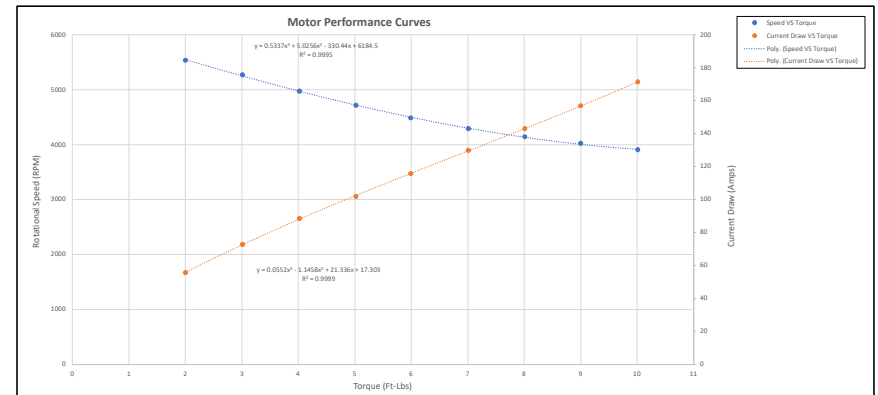
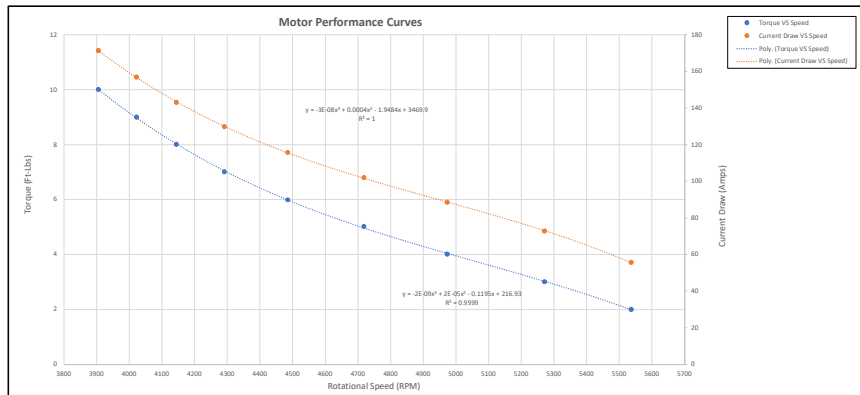
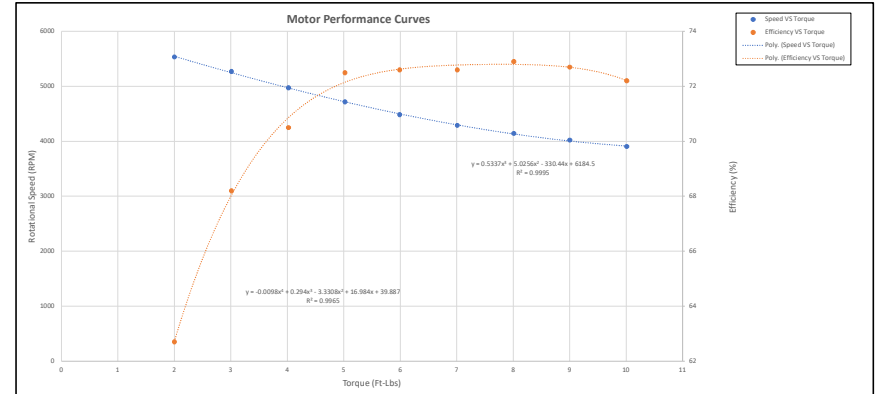
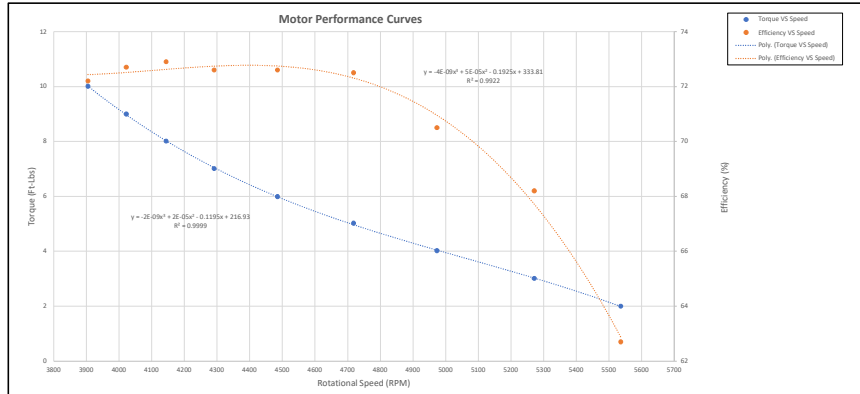


Engineering Performance Test Report

Performance Spec (PS) Number: 47

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	5536	47.4	52.7	3	2.97	55.67	3.36	2.11	62.7
3.01	5271	47.2	69.9	3	2.94	72.94	4.43	3.02	68.2
4.02	4973	46.9	85.6	3	2.97	88.57	5.4	3.8	70.5
5.02	4718	46.7	99	3	2.97	101.97	6.22	4.51	72.5
5.99	4485	46.5	112.8	3	2.92	115.72	7.05	5.12	72.6
7.01	4291	46.3	126.9	3	2.93	129.83	7.88	5.73	72.6
8.01	4144	46.1	140.1	3	2.96	143.06	8.67	6.32	72.9
9	4022	45.8	154	3	2.93	156.93	9.48	6.89	72.7
10.01	3905	45.6	168.4	3	2.98	171.38	10.3	7.44	72.2

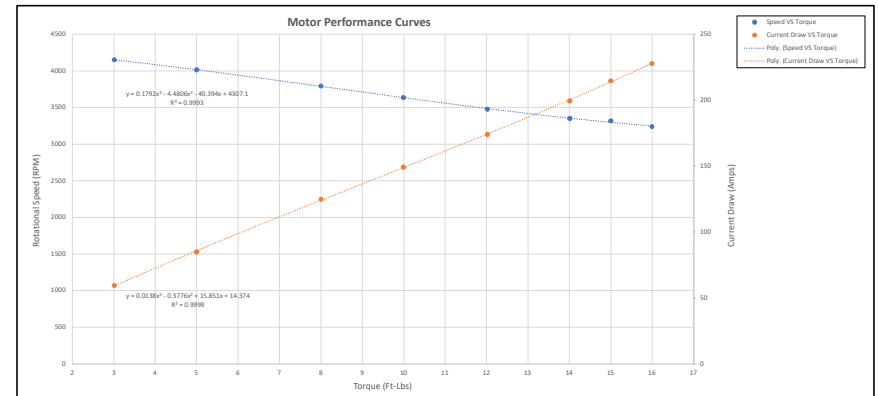
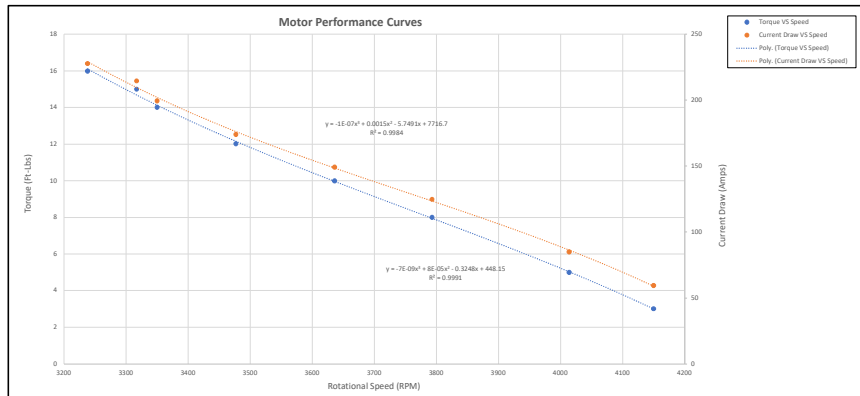
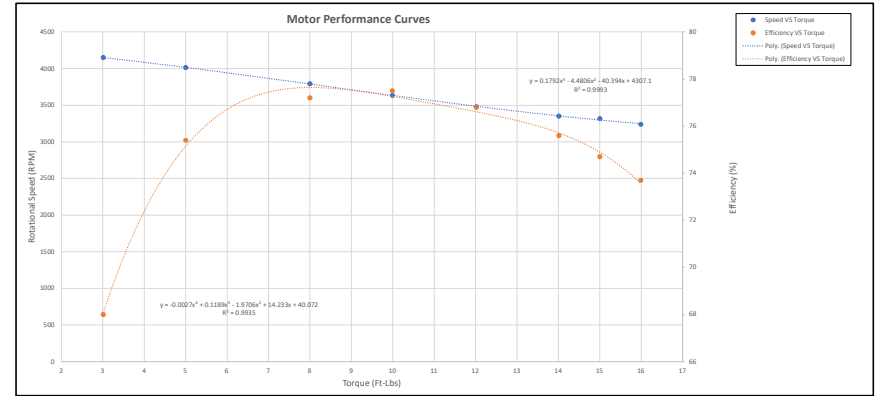
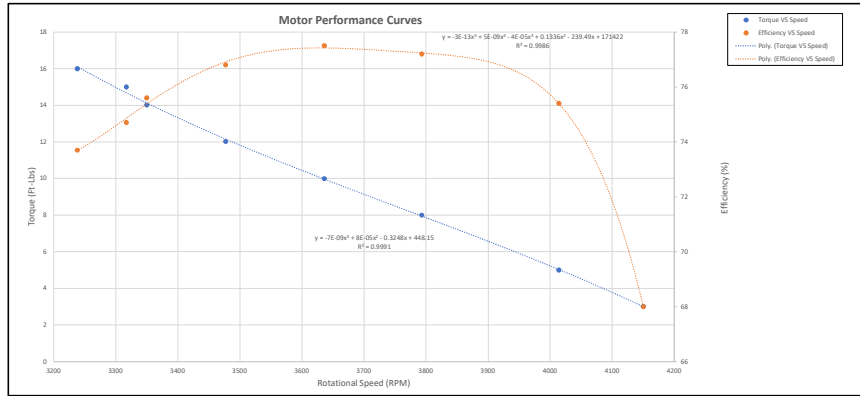


Engineering Performance Test Report

Performance Spec (PS) Number: 47

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 (%)
3.01	4150	47.4	54.5	4.9	4.97	59.47	3.49	2.38	68
5	4014	47	79.9	4.9	5	84.9	5.07	3.82	75.4
8	3793	46.4	119.8	4.9	5.01	124.81	7.49	5.78	77.2
9.99	3636	46	144.2	4.9	4.99	149.19	8.93	6.92	77.5
12.02	3477	45.6	169.1	5	4.96	174.06	10.37	7.96	76.8
14.01	3350	45.2	194.5	5	4.98	199.48	11.82	8.94	76.4
15	3317	45	209.7	5	4.91	214.61	12.68	9.47	74.7
15.99	3238	44.7	222.9	5	4.88	227.78	13.38	9.86	73.7

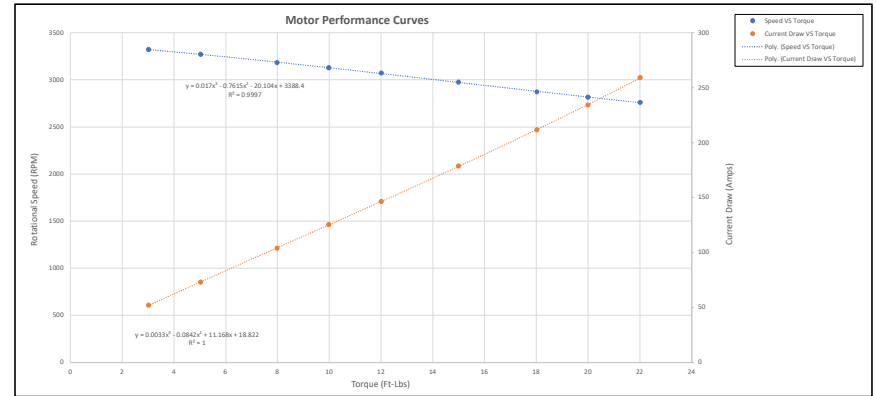
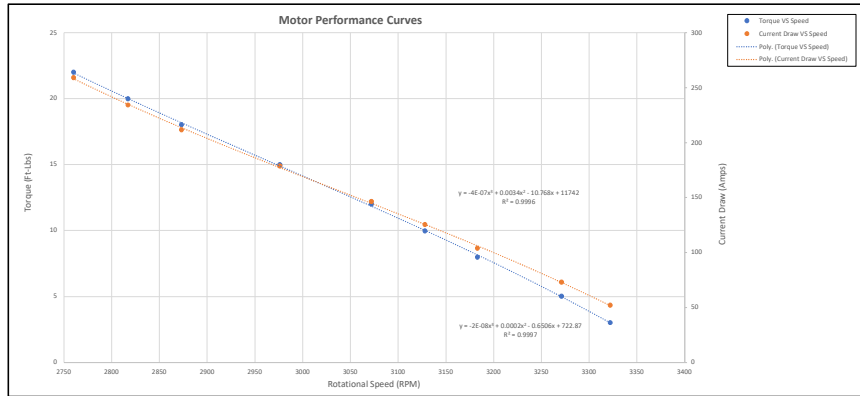
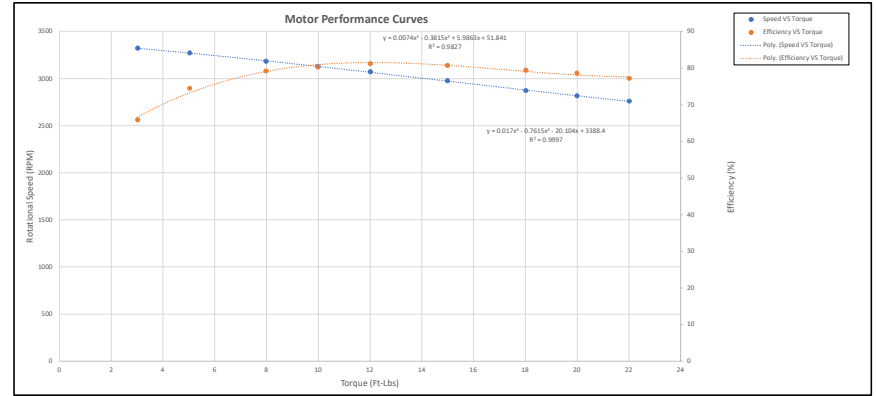
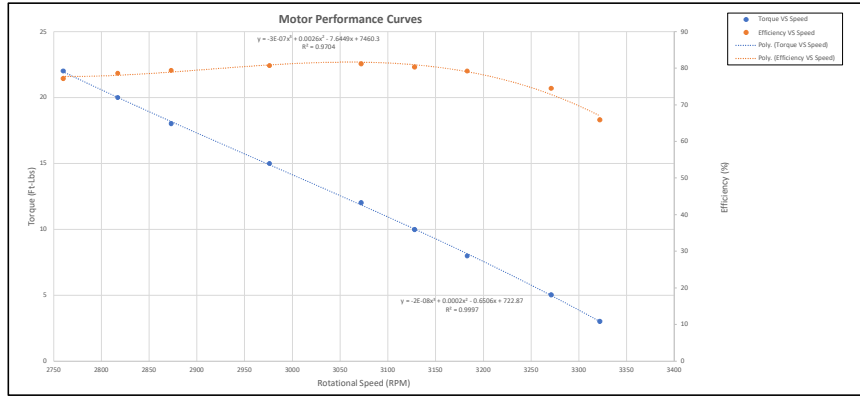


Engineering Performance Test Report

Performance Spec (PS) Number: 47

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 (%)
3.02	3322	47.6	44	8.2	8.06	52.06	2.89	1.91	65.9
5.03	3271	47.3	65	8.2	8.05	73.05	4.21	3.13	74.5
7.98	3183	46.8	96	8.3	8.02	104.02	6.11	4.83	79.2
9.98	3128	46.5	117.3	8.3	8.07	125.37	7.4	5.94	80.3
12.01	3072	46.2	138.4	8.3	8.09	146.49	8.65	7.03	81.2
14.99	2976	45.6	170.2	8.3	8.04	178.24	10.52	8.49	80.2
18.02	2873	45.1	203.7	8.3	8.03	211.73	12.41	9.86	79.4
19.99	2817	44.7	226.3	8.4	7.99	234.29	13.64	10.72	78.6
22.01	2760	44.3	251	8.4	8.12	259.12	14.99	11.57	77.2

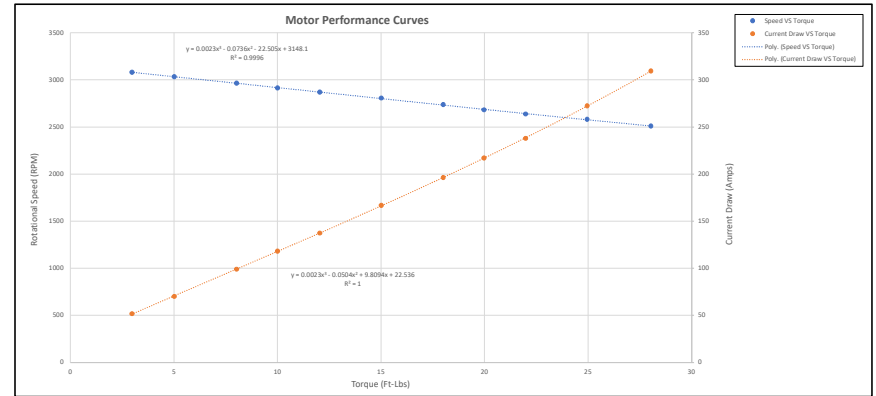
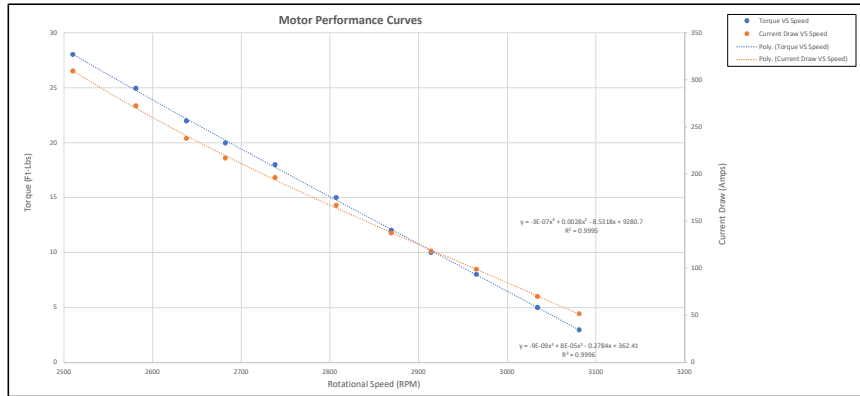
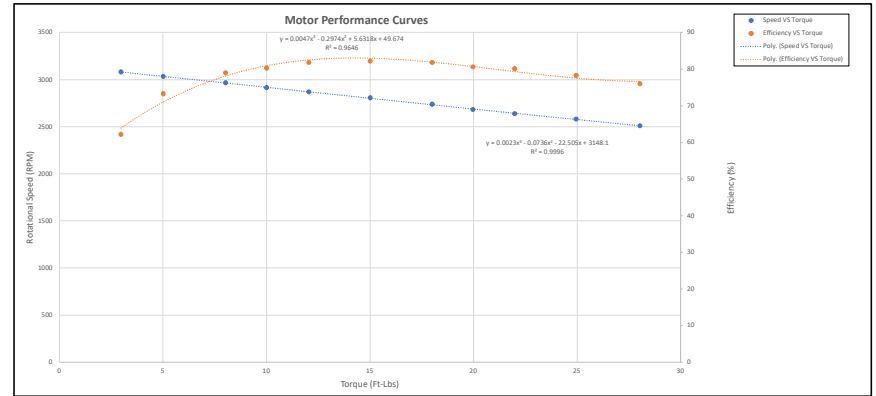
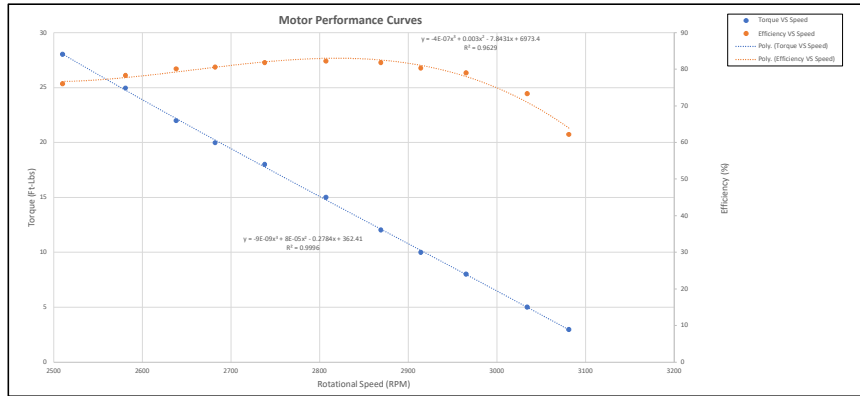


Engineering Performance Test Report

Performance Spec (PS) Number: 47

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 (%)
2.97	3081	47.7	41.7	10.3	10.04	51.74	2.8	1.74	62.2
5.01	3034	47.3	60	10.4	10.06	70.06	3.95	2.89	73.3
8.02	2985	46.9	88.9	10.4	10.08	98.98	5.73	4.53	79
10	2914	46.6	108.2	10.4	10.07	118.27	6.9	5.55	80.3
12.04	2869	46.3	127.2	10.5	10.09	137.29	8.04	6.58	81.8
15.01	2807	45.8	156.7	10.5	10.07	166.77	9.76	8.02	82.2
18	2738	45.4	186.3	10.5	9.97	196.27	11.47	9.38	81.8
19.97	2682	45.1	207.1	10.6	10.02	217.12	12.65	10.2	80.6
21.98	2638	44.7	227.8	10.6	10.12	237.92	13.78	11.04	80.1
24.95	2581	44.1	262.3	10.6	10.12	272.42	15.66	12.26	78.3
28.03	2510	43.6	299.4	10.7	9.93	309.33	17.62	13.4	76

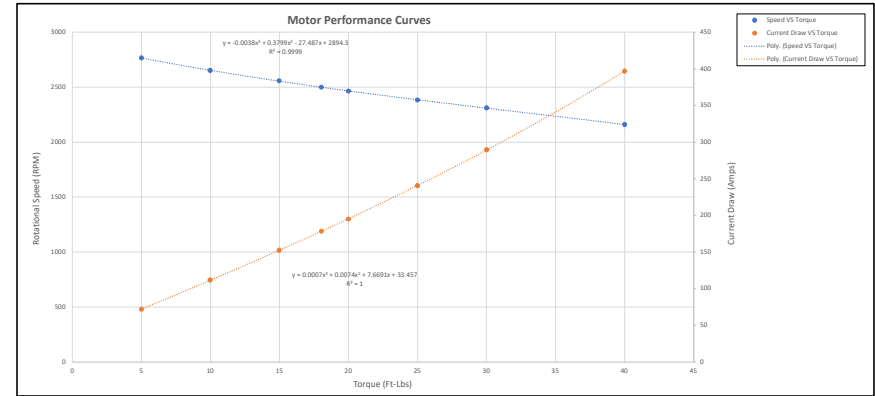
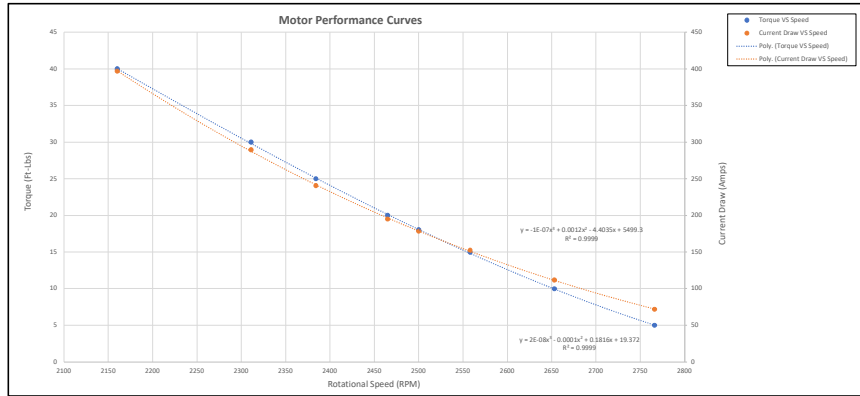
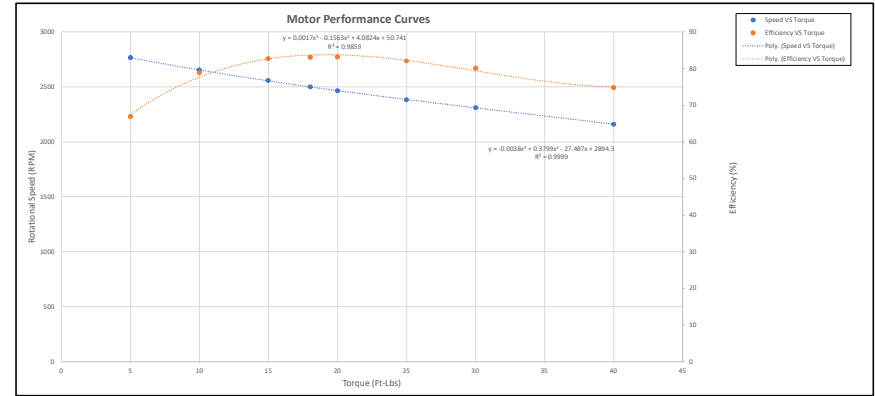
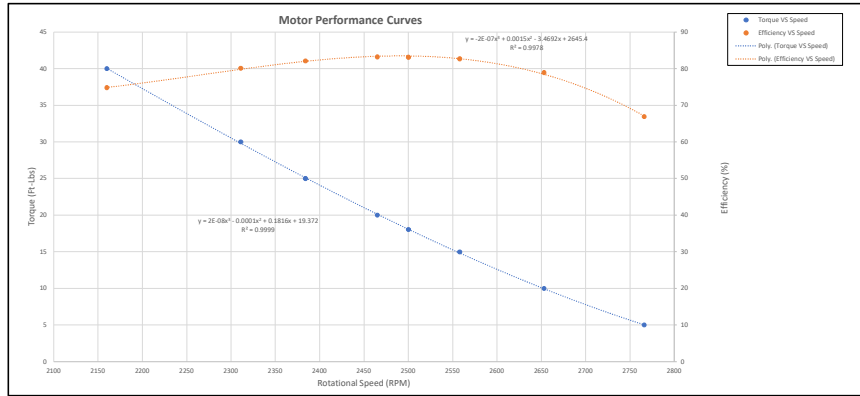


Engineering Performance Test Report

Performance Spec (PS) Number: 47

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	2766	47.4	56.8	16.3	15.1	71.9	3.94	2.63	66.9
9.98	2553	46.8	56.3	16.2	15.08	71.178	6.30	5.04	70.8
14.97	2558	46.2	137.2	16.1	15.13	152.31	8.82	7.29	82.7
18.03	2500	45.7	163.2	16	15.19	178.39	10.32	8.58	83.1
19.99	2485	45.4	179.7	15.8	15.18	194.88	11.27	9.38	83.2
24.99	2384	44.7	235.4	15.7	15.14	240.54	13.82	11.34	82.1
30	2311	43.9	274.6	15.6	14.95	289.55	16.48	13.2	80.1
40	2160	42.3	382	15.4	15.01	397.01	21.99	16.45	74.8

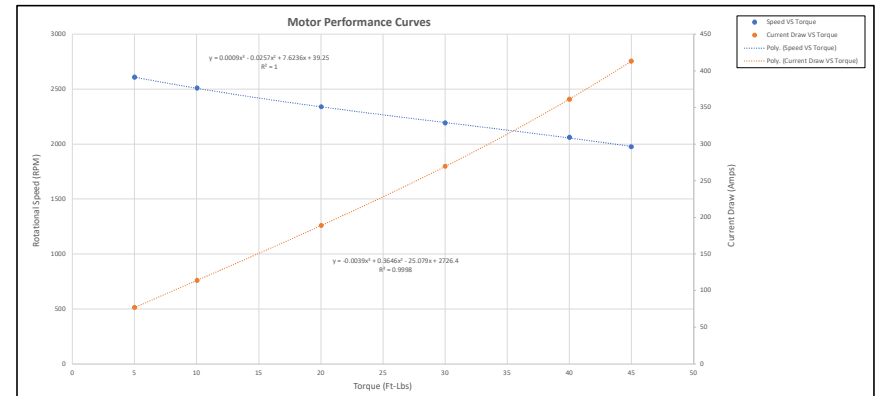
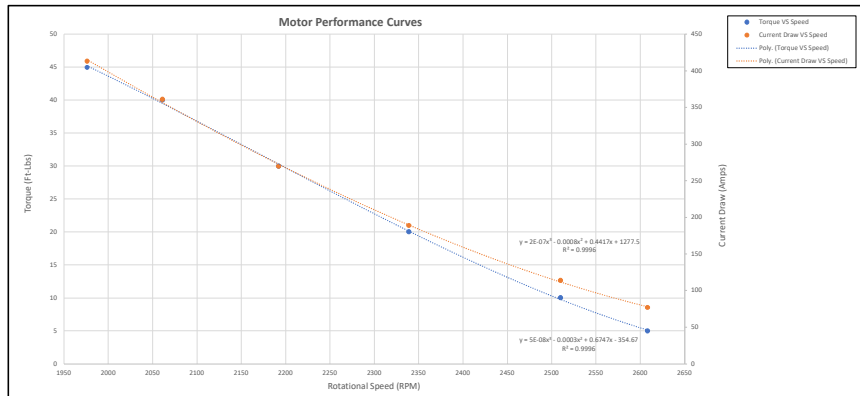
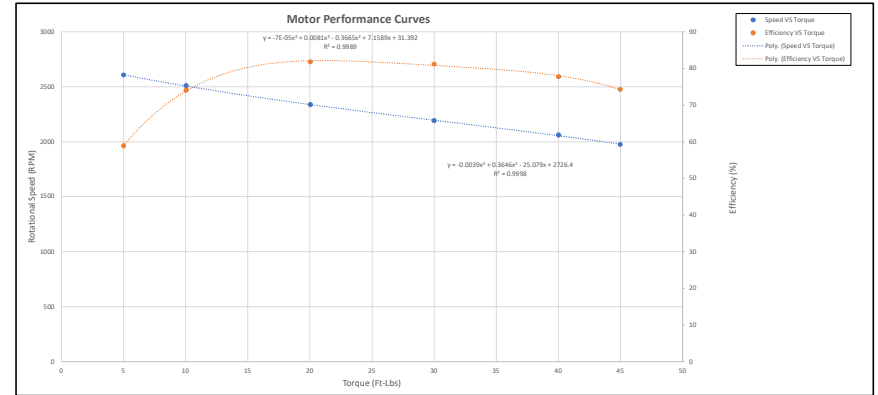
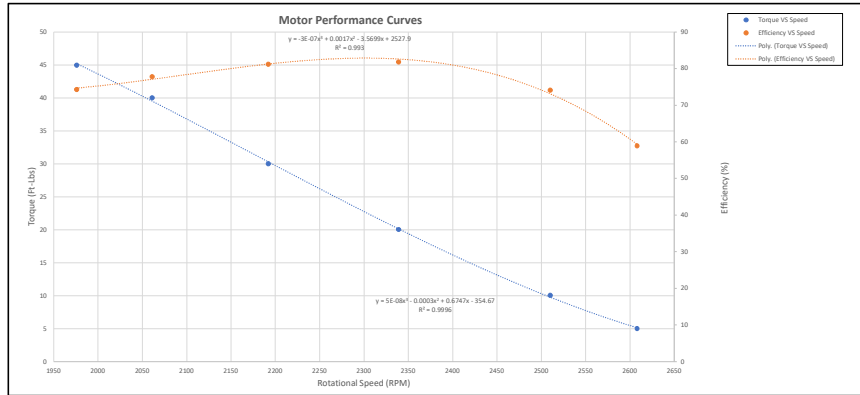


Engineering Performance Test Report

Performance Spec (PS) Number: 47

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	2608	47.4	56.9	22.2	20.07	76.97	4.21	2.48	58.9
10.04	2510	46.8	53.8	21.9	20.11	113.91	6.47	4.9	74.1
20.03	2339	45.6	168.8	21.7	20.13	188.93	10.91	8.92	81.8
30	2192	44.3	249.7	21.4	20.1	269.8	15.42	12.52	81.2
40.01	2061	42.9	340.7	21.1	20.33	361.03	20.18	15.7	77.8
44.97	1976	42.1	393.3	20.7	19.98	413.28	22.77	16.91	74.3

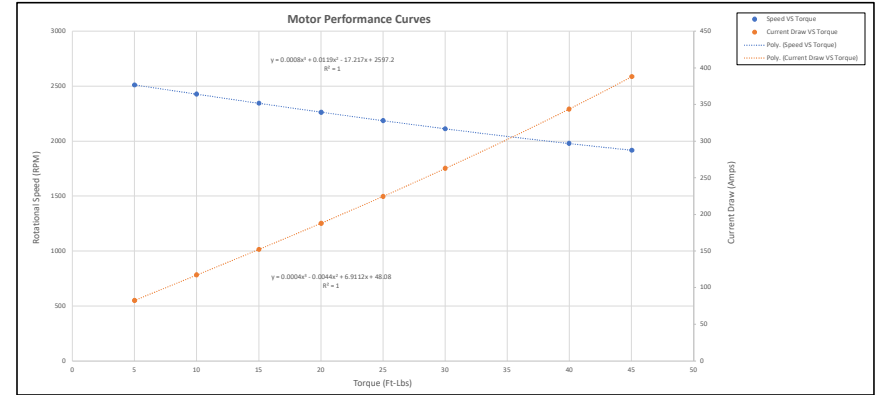
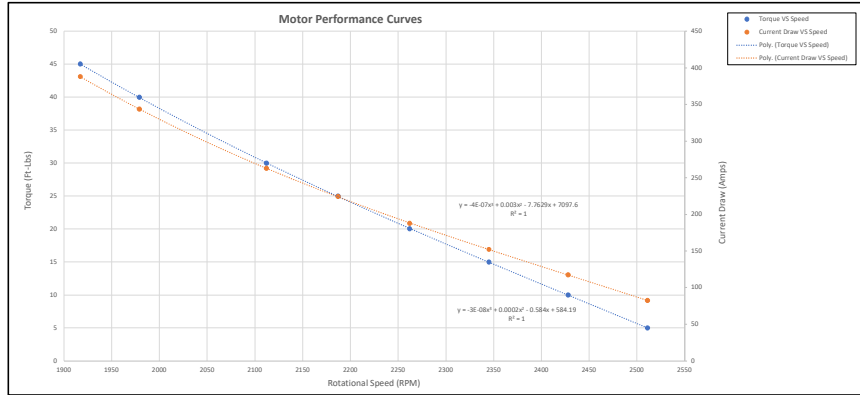
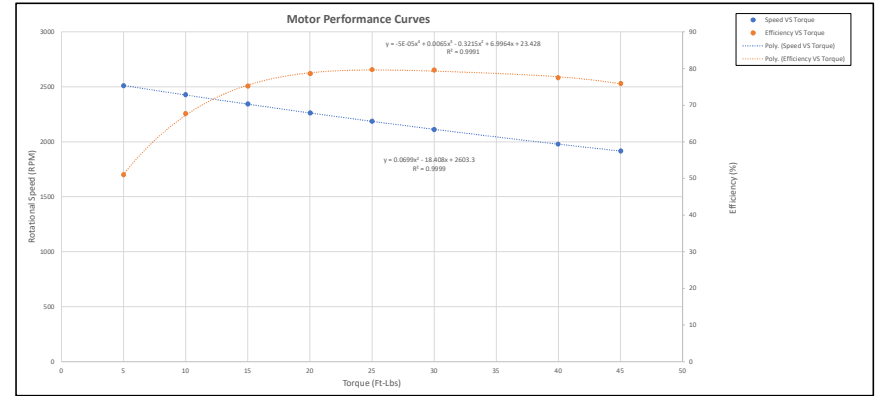
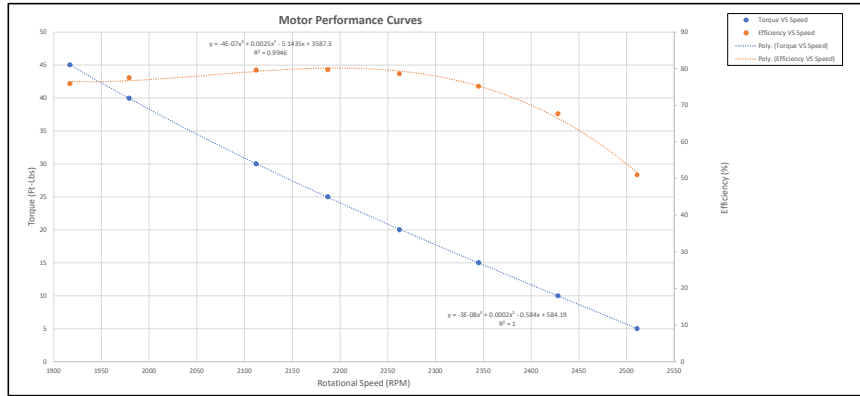


Engineering Performance Test Report

Performance Spec (PS) Number: 47

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	2511	47.3	57.5	31.1	24.99	82.49	4.69	2.39	51
9.99	2428	46.8	92.3	30.7	24.99	117.29	6.82	4.62	67.2
15.01	2345	46.3	127.2	30.2	25.03	152.21	8.91	6.7	75.2
20.02	2262	45.7	162.8	29.6	24.97	187.77	10.97	8.62	78.6
25	2187	45.2	199.6	29.1	24.98	224.58	13.06	10.41	79.7
30	2112	44.6	237.2	28.5	25.05	262.75	15.15	12.06	79.6
39.97	1979	43.3	318.5	27.9	25.12	343.62	19.43	15.06	77.5
45.02	1917	42.6	363	27.3	25.02	388.02	21.64	16.43	75.8

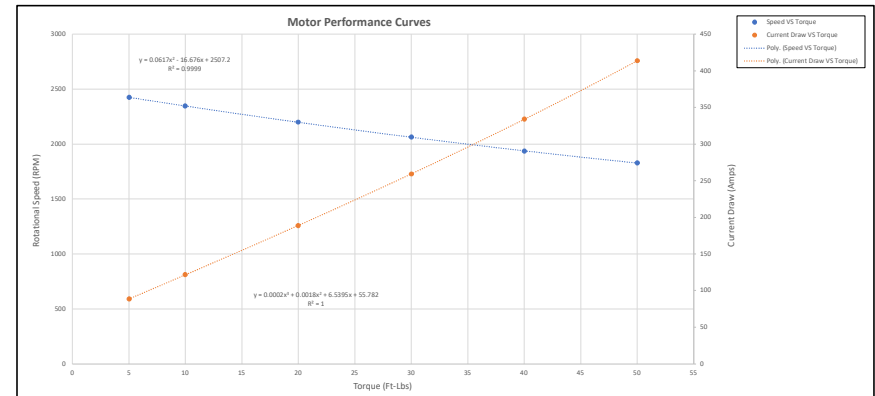
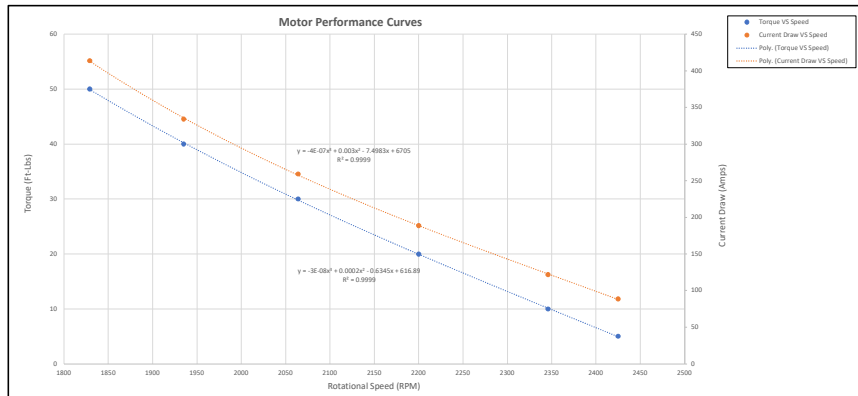
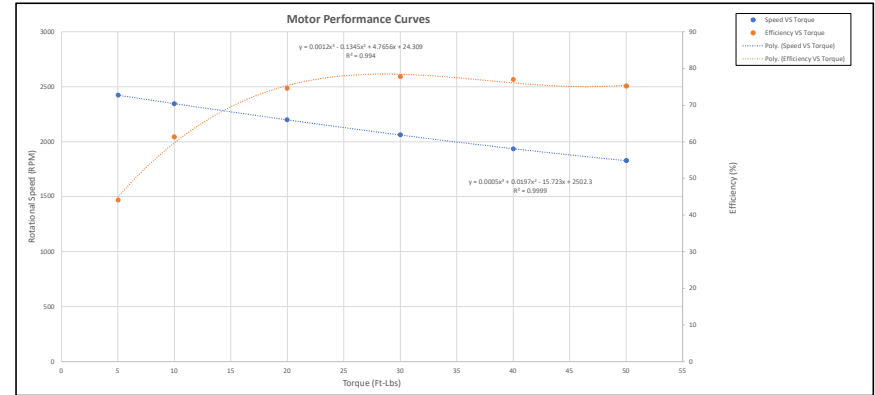
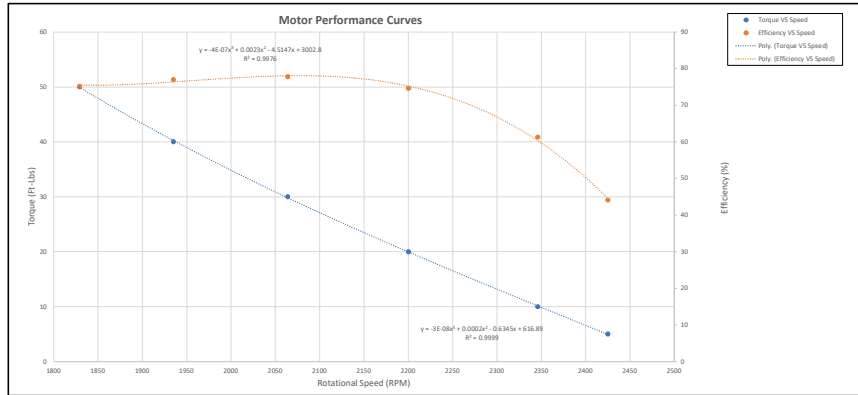


Engineering Performance Test Report

Performance Spec (PS) Number: 47

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 (%)
5.02	2425	47.3	58.6	38.4	29.88	88.48	5.26	2.32	44.1
9.98	2346	46.8	51.9	37.5	29.89	121.79	7.27	4.46	61.3
19.98	2300	45.8	158.9	36.6	29.85	188.75	11.22	8.37	74.6
30.01	2064	44.7	229.3	35.7	29.83	259.13	15.16	11.79	77.8
40.01	1935	43.5	304.2	34.7	29.95	334.15	19.14	14.74	77
50.01	1829	42.4	383.9	33.7	29.83	413.73	23.15	17.41	75.2

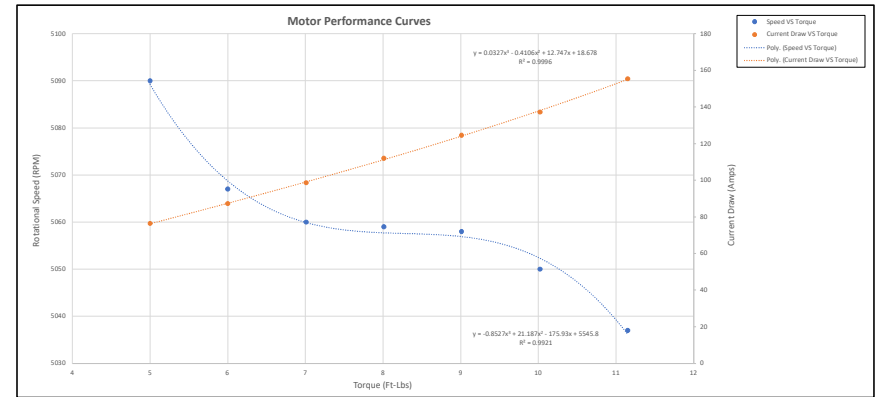
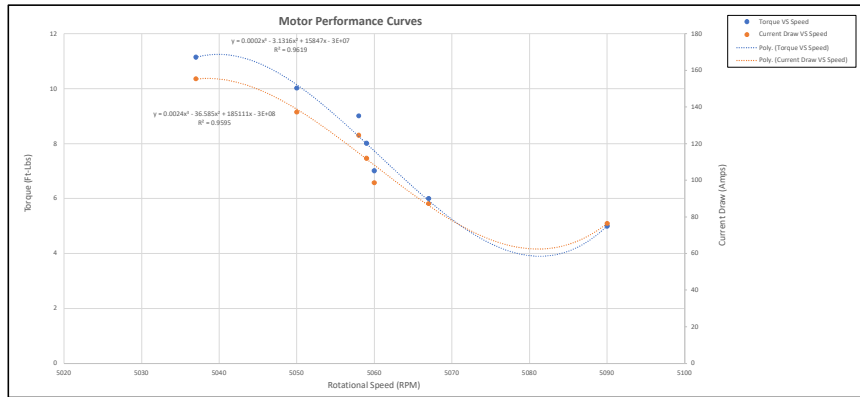
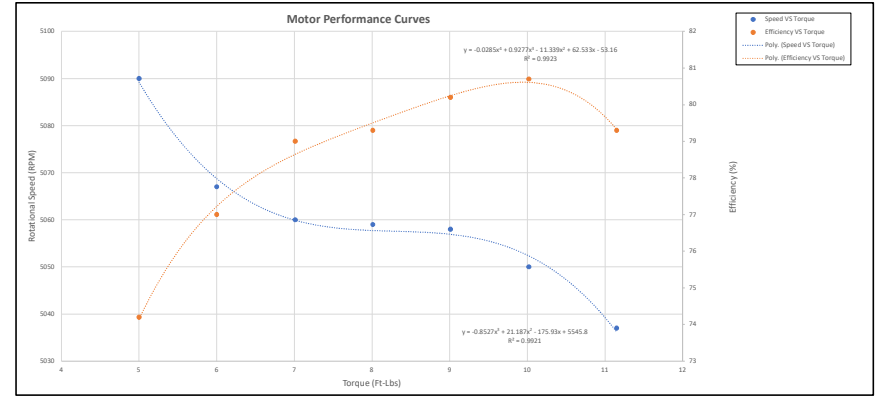
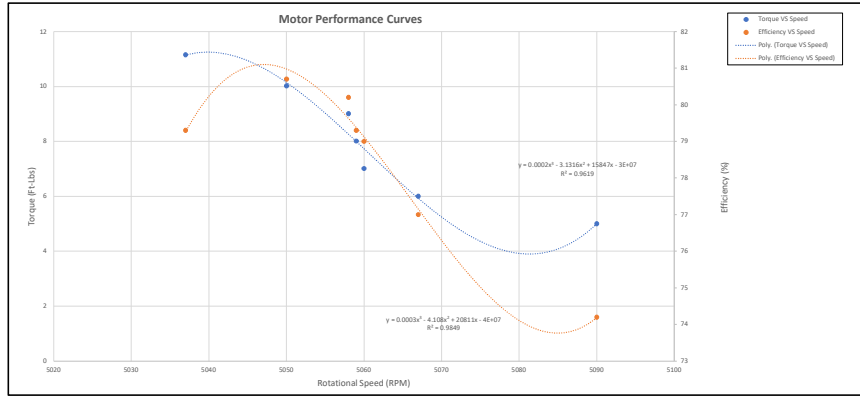


Engineering Performance Test Report

Performance Spec (PS) Number: 47

System Voltage (V): 72-1 * 0.030

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	5090	70.3	68.4	8.1	8.01	76.41	6.53	4.84	74.2
6	5067	70	79.2	8.1	8.02	87.21	7.51	5.28	72
7.01	5060	69.6	90.6	8.1	8.02	98.62	8.54	6.75	79
8.01	5059	69.2	103.9	8.2	8.04	111.94	9.72	7.71	79.3
9.01	5058	68.8	116.5	8.2	8.03	124.53	10.82	8.68	80.2
10.01	5050	68.4	129.2	8.2	7.98	137.18	11.91	9.63	80.7
11.15	5037	67.8	147.3	8.2	8.07	155.37	13.49	10.69	79.3

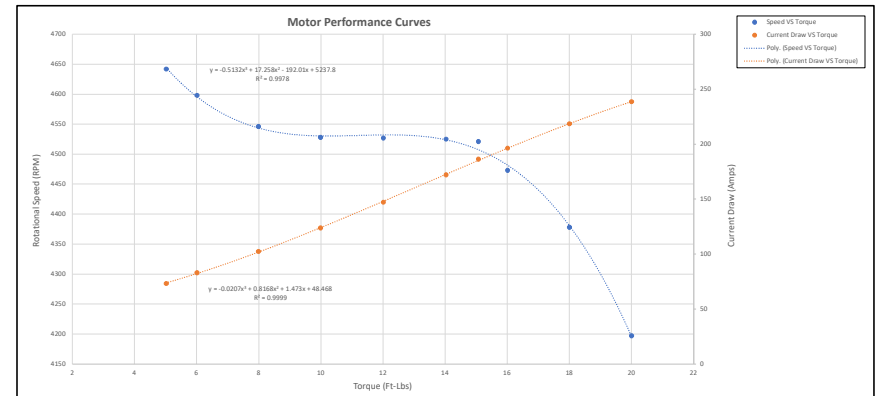
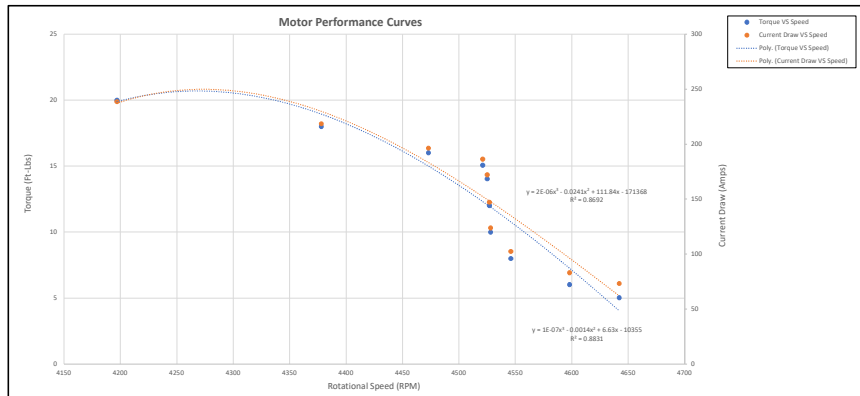
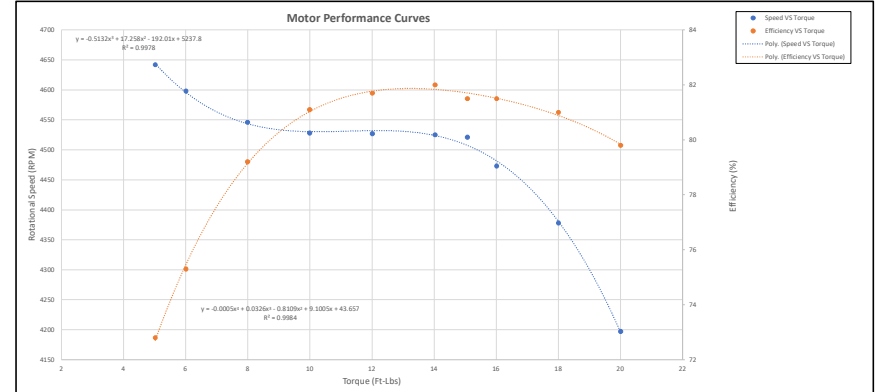


Engineering Performance Test Report

Performance Spec (PS) Number: 47

System Voltage (V): 72 - (1 * 0.030)

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 (%)
5.02	4642	70.6	63.1	10	10.04	73.14	6.1	4.44	72.8
6.01	4598	70.1	73	10	10.04	83.04	6.99	5.27	75.3
7.99	4546	69.5	92.4	10	9.98	102.38	8.74	6.92	79.2
9.99	4528	68.8	113.7	10	10.07	123.77	10.63	8.61	81.1
12.01	4527	68.2	137.1	10	10.05	147.15	12.66	10.34	81.7
14.03	4525	67.3	162	10.1	10.15	172.15	14.75	12.09	82
15.07	4521	66.8	176.4	10.1	9.98	186.38	15.94	12.98	81.5
16.01	4473	66.5	186.3	10.1	10.06	196.36	16.74	13.64	81.5
18	4378	65.7	208.6	10.2	9.92	218.52	18.51	15	81
20	4197	64.9	228.7	10.2	9.93	238.63	20.03	15.98	79.8

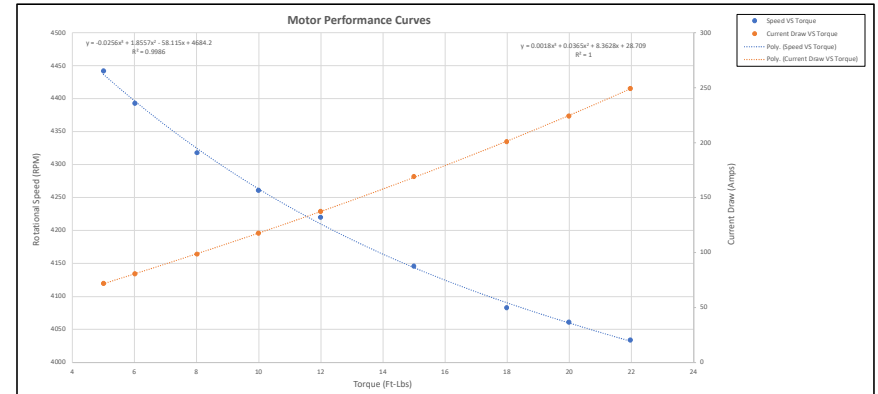
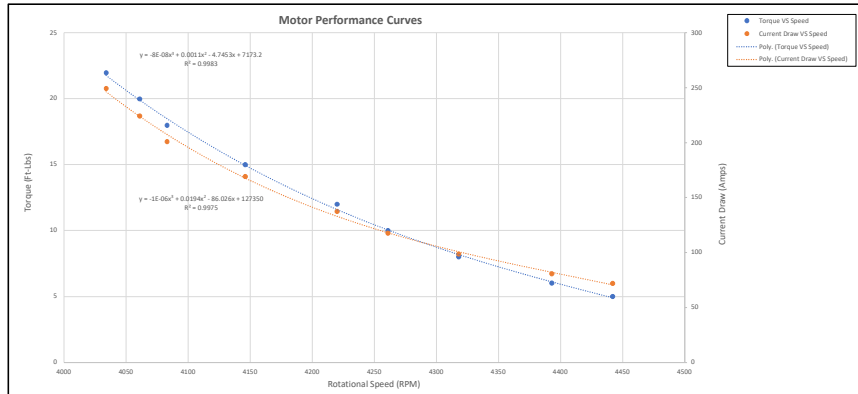
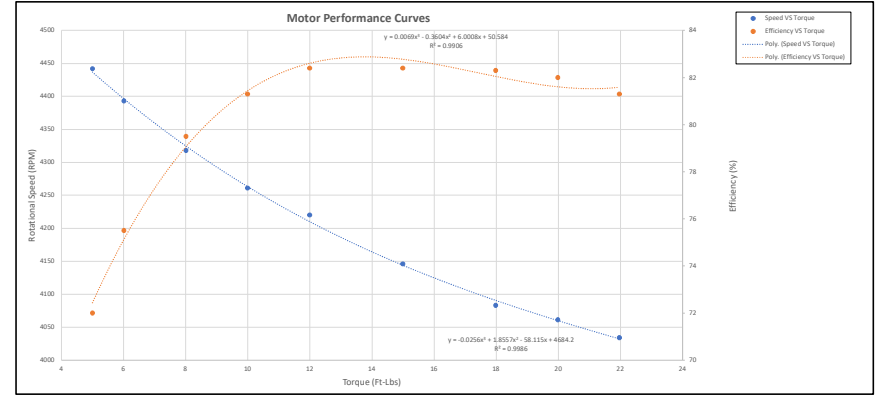
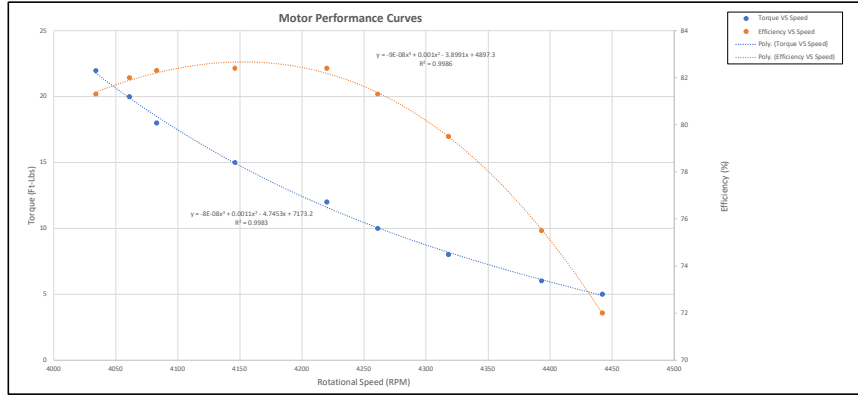


Engineering Performance Test Report

Performance Spec (PS) Number: 47

System Voltage (V): 72 - (1 * 0.030)

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	4442	70.7	59.8	12.3	12.05	71.85	5.87	4.23	72
6.01	4393	70.3	68.6	12.7	12.28	80.58	6.57	5.03	75.5
8.01	4318	69.7	86.5	12.2	12.06	98.56	8.28	6.58	79.5
9.99	4261	69.1	105.5	12.1	12.11	117.61	9.97	8.11	81.3
11.99	4220	68.4	125.3	12.1	12.07	137.37	11.69	9.63	82.4
14.99	4146	67.4	157	12	12.05	159.05	14.36	11.83	82.4
17.98	4083	66.4	188.8	12	12.12	200.92	17	13.98	82.3
19.98	4061	65.6	212.2	11.9	12.02	224.22	18.84	15.45	82
21.96	4034	64.7	237	11.9	12.31	249.31	20.76	16.87	81.3

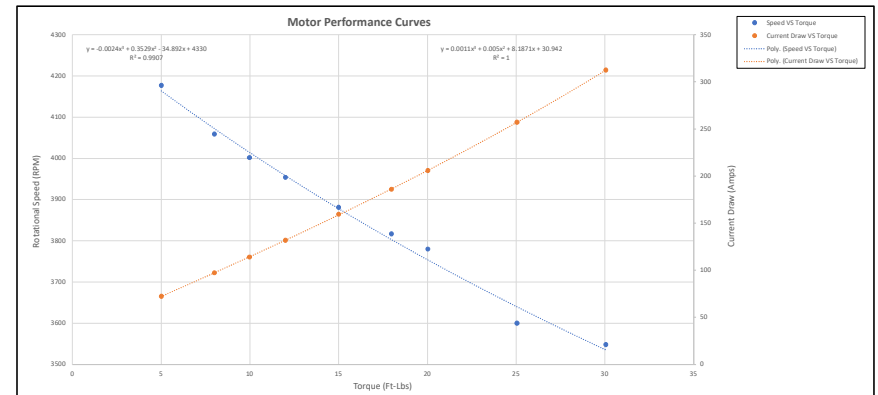
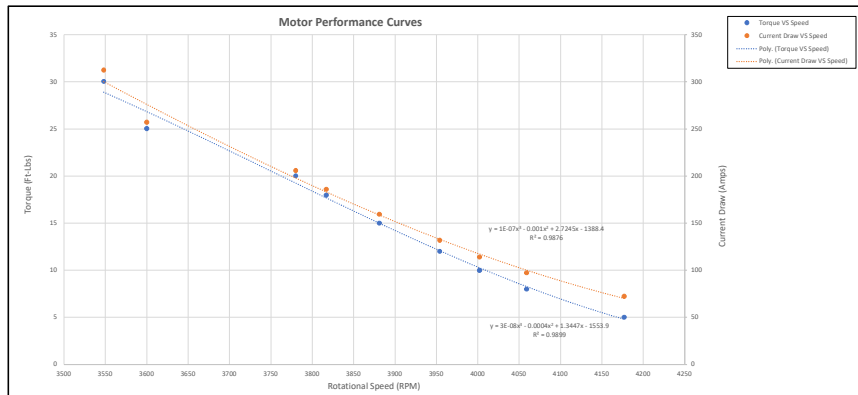
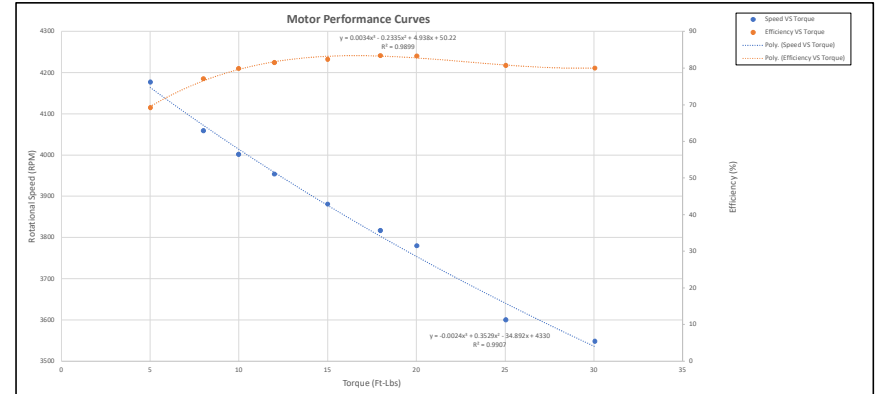
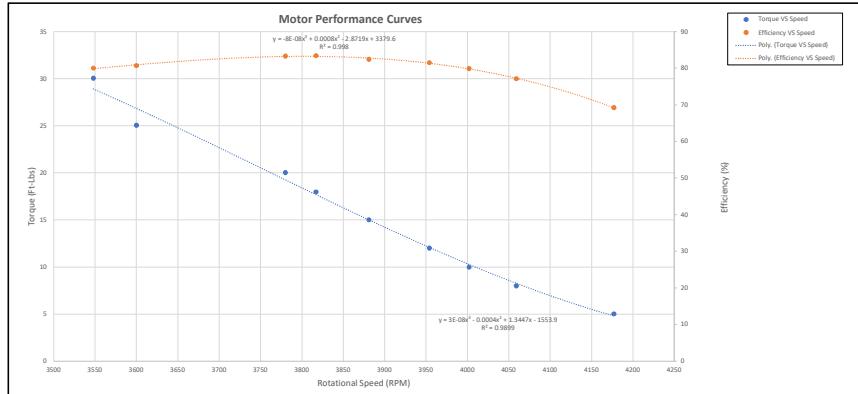


Engineering Performance Test Report

Performance Spec (PS) Number: 47

System Voltage (V): 72 - (1 * 0.030)

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	4177	70.7	57.3	15.05	15.05	72.35	5.76	3.99	69.2
9	4059	69.8	82.2	16.2	15.07	97.27	8.02	6.18	77.1
9.98	4002	69.3	98.9	16.1	15.05	113.95	8.52	7.6	79.5
12	3954	68.7	116.8	16	15.04	131.84	11.09	9.03	81.5
15	3881	67.8	144.4	15.9	15.09	159.49	13.46	11.08	82.4
17.97	3812	67	170.9	15.9	15.08	185.98	15.66	13.06	83.4
20.02	3780	66.3	190.8	15.8	15.02	205.82	17.29	14.41	83.3
25.04	3600	64.6	242.1	15.7	14.96	267.06	21.26	17.16	80.7
30.05	3548	62.9	297.2	15.6	15.22	312.42	25.37	20.3	80

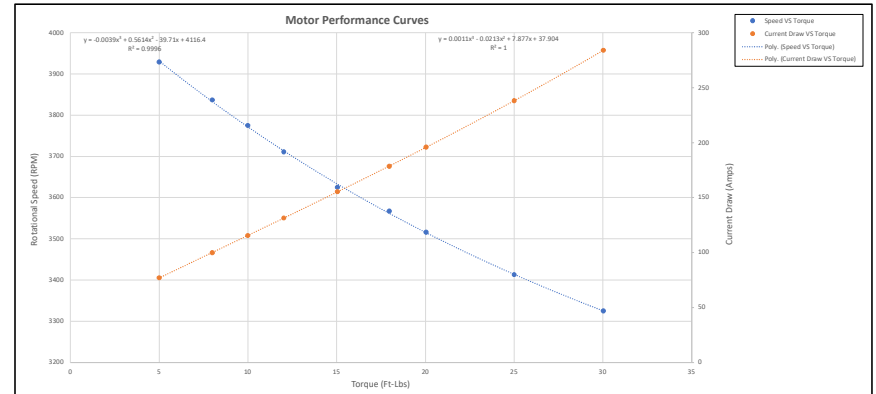
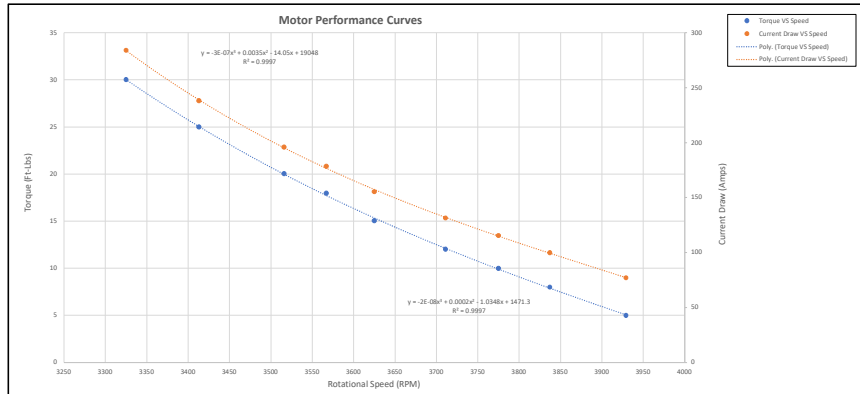
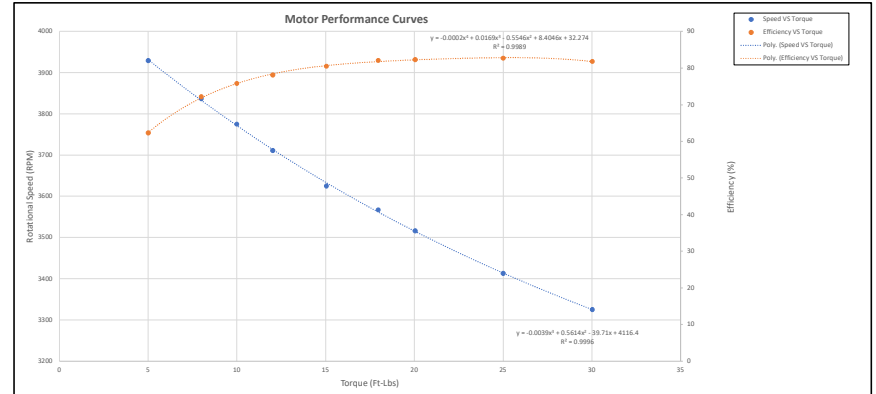
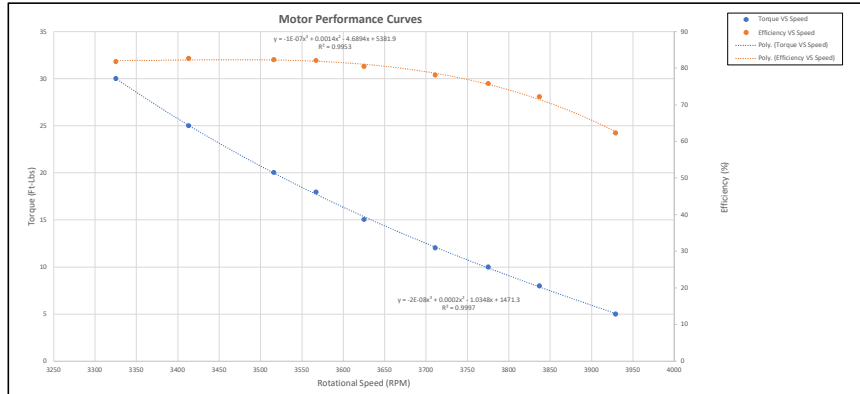


Engineering Performance Test Report

Performance Spec (PS) Number: 47

System Voltage (V): 72 - (1 * 0.030)

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	3929	70.8	56.9	22.6	20.1	77	6.01	3.74	62.3
7.99	3837	70	79.7	22.4	20.13	99.83	6.06	5.83	72.2
9.99	3775	69.4	95.4	22.3	20.08	115.48	9.47	7.18	75.8
12.02	3711	68.9	111.3	22.1	20.11	131.41	10.87	8.5	78.1
15.04	3625	67.69	135.3	21.9	20.1	155.4	12.91	10.38	80.5
17.96	3567	67.2	158.4	21.8	20.13	178.53	14.85	12.09	82.1
20.04	3516	66.7	175.9	21.5	19.98	195.88	16.3	13.41	82.3
25	3413	65.3	217.9	21.3	20.18	238.08	19.64	16.25	82.7
30.02	3325	64.1	263.9	21.1	20.16	284.06	23.25	19.01	81.8

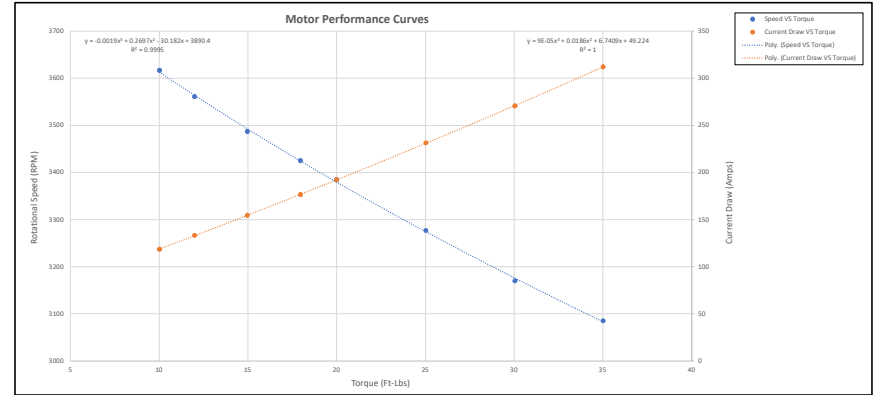
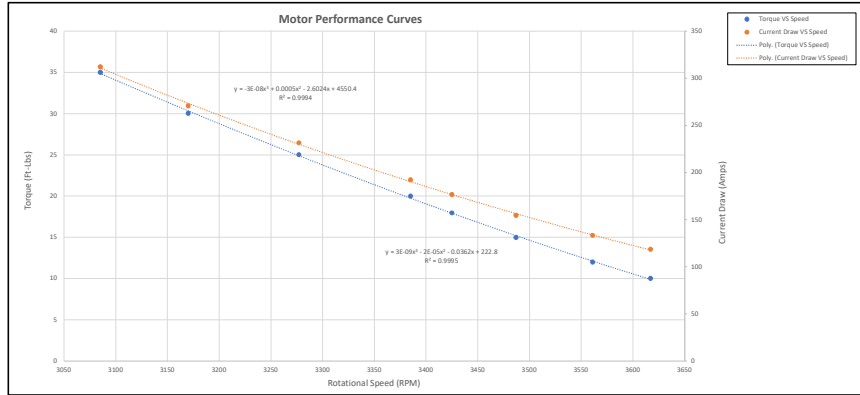
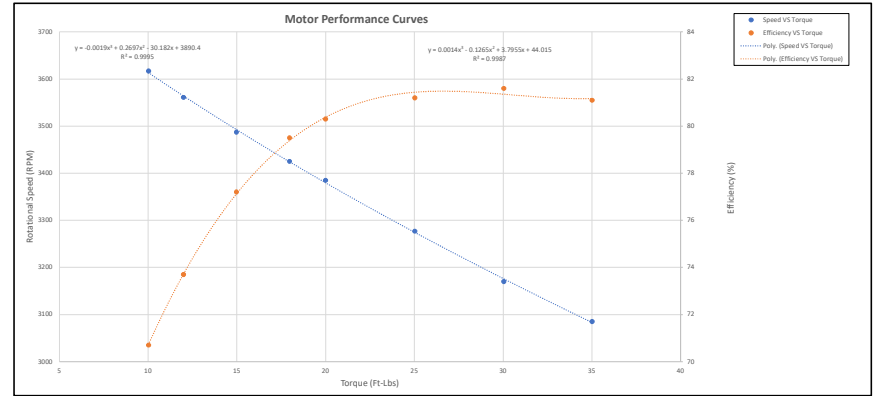
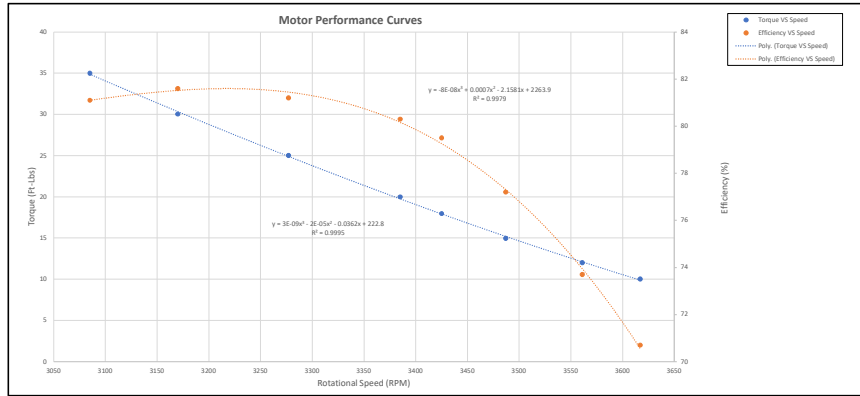


Engineering Performance Test Report

Performance Spec (PS) Number: 47

System Voltage (V): 72 - (1 * 0.030)

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 (%)
10.02	3617	69.5	93.6	31.4	25	118.6	9.76	6.9	70.7
11.99	3561	68.9	108.2	31.1	25.01	133.21	11.04	8.13	73.7
14.97	3487	68.2	139.6	30.9	24.94	154.54	12.88	9.84	77.2
17.96	3425	67.5	151.5	30.6	25.03	176.53	14.73	11.71	79.5
19.99	3385	67.1	167.3	30.3	24.89	192.19	16.05	12.88	80.3
25.02	3327	65.8	206.6	30	24.93	231.53	19.33	15.61	81.2
30.04	3170	64.5	245.6	29.7	25.11	270.71	22.24	18.13	81.6
35.01	3085	63.3	287.3	29.4	24.93	312.23	25.37	20.56	81.1

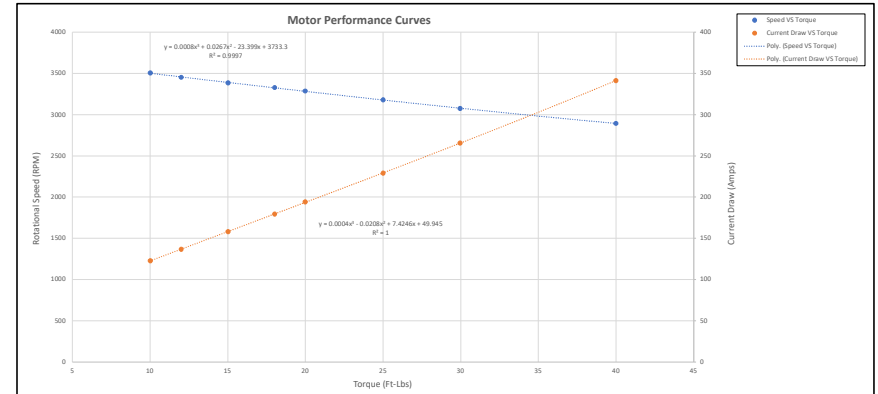
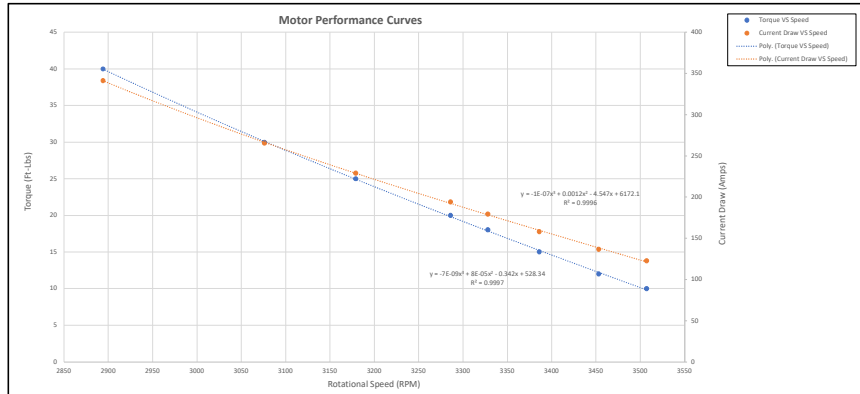
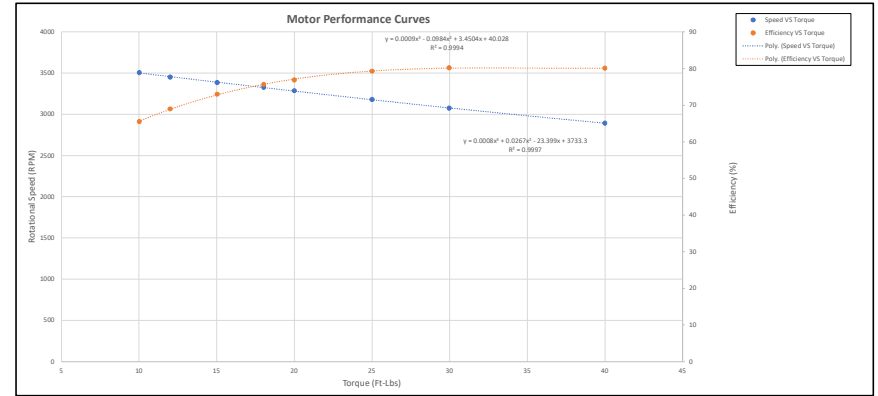
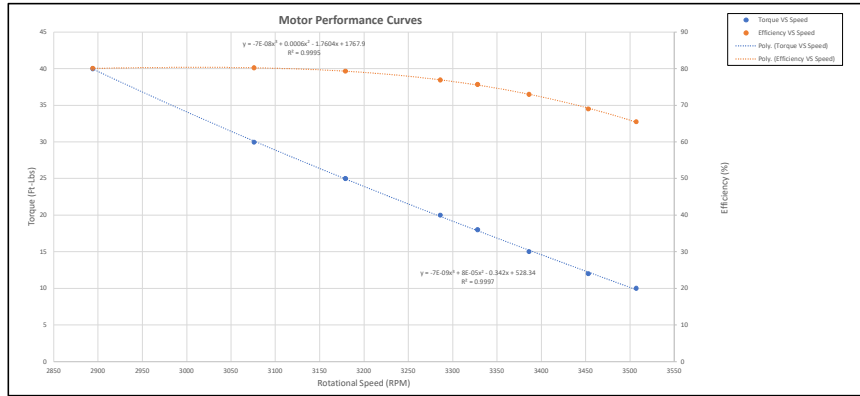


Engineering Performance Test Report

Performance Spec (PS) Number: 47

System Voltage (V): 72 - (1 * 0.030)

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 (%)
10.01	3507	69.6	92.9	38.9	29.84	122.74	10.22	6.69	65.5
17	3453	69.4	106.8	38.4	29.92	136.71	11.43	7.89	69
15.02	3386	68.4	108.1	37.9	29.86	137.96	13.26	9.68	73
18.02	3328	67.8	149.6	37.3	29.88	179.48	15.08	11.42	75.7
19.99	3286	67.2	164.2	36.8	29.89	194.09	16.27	12.51	76.9
35	3179	66.1	199.1	36.2	29.87	238.97	19.09	15.33	79.3
29.96	3076	64.8	235.7	35.6	29.79	265.49	21.88	17.55	80.2
39.99	2894	62.5	311.6	35	29.74	341.34	27.51	22.03	80.1



Engineering Performance Test Report

Performance Spec (PS) Number: 47

System Voltage (V): 72 - (1 * 0.030)

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 (%)
9.96	3319	69.6	93	52.9	40.02	133.02	11.51	6.29	54.7
15	3128	68.5	136.3	51.1	40.05	166.35	14.34	9.19	64.1
20.01	3122	67.5	159.1	49.4	39.99	199.09	17.03	11.9	69.9
24.95	3019	66.4	190.9	47.5	40.01	230.91	19.54	14.34	73.4
30	2921	65.2	224.1	45.7	40.09	264.19	22.05	16.69	75.7
39.97	2736	62.7	291.7	43.7	39.93	331.63	26.86	20.62	77.5
49.98	2582	60.8	361.7	41.8	39.93	401.63	31.73	24.57	77.4

