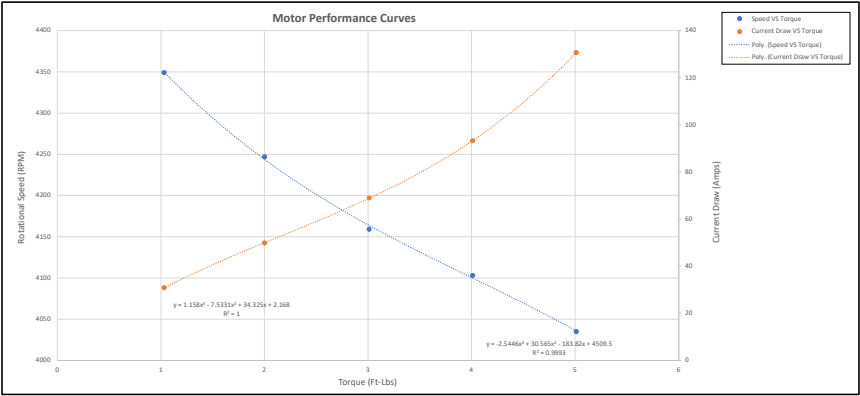
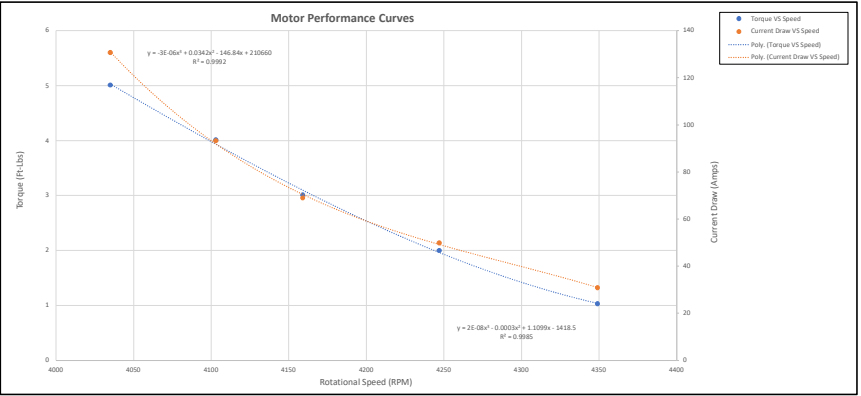
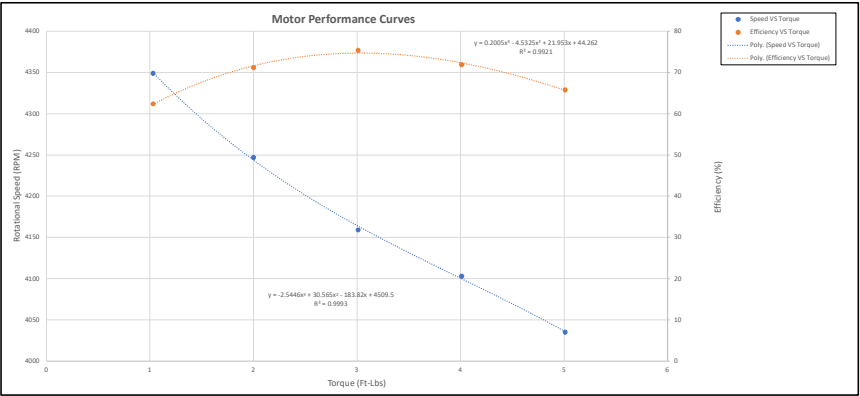
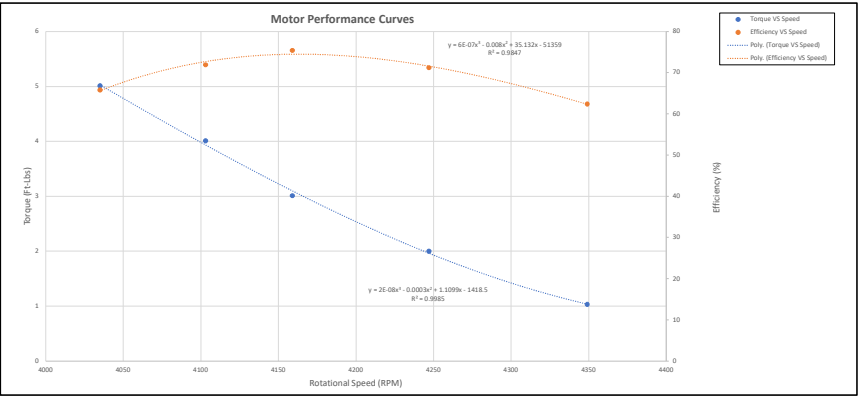


Engineering Performance Test Report

Performance Spec (PS) Number: 15

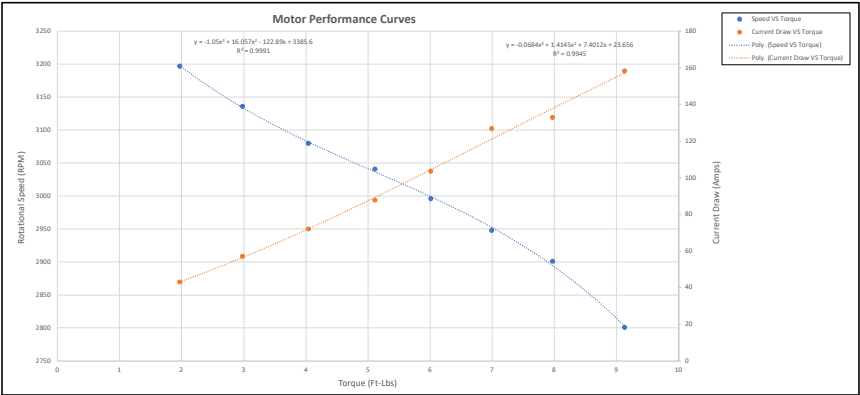
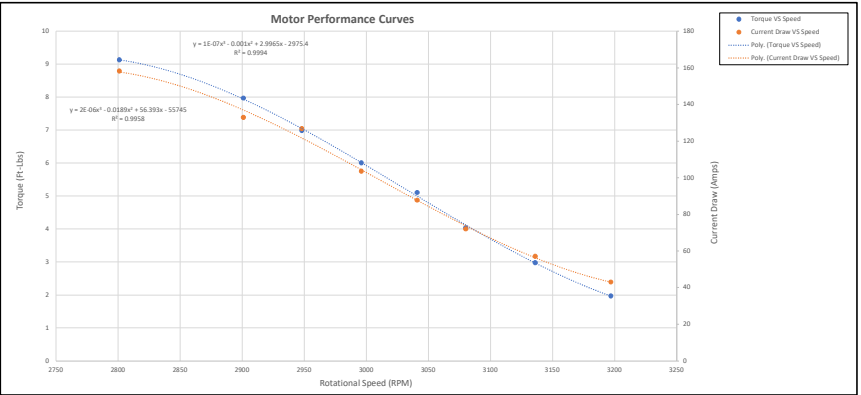
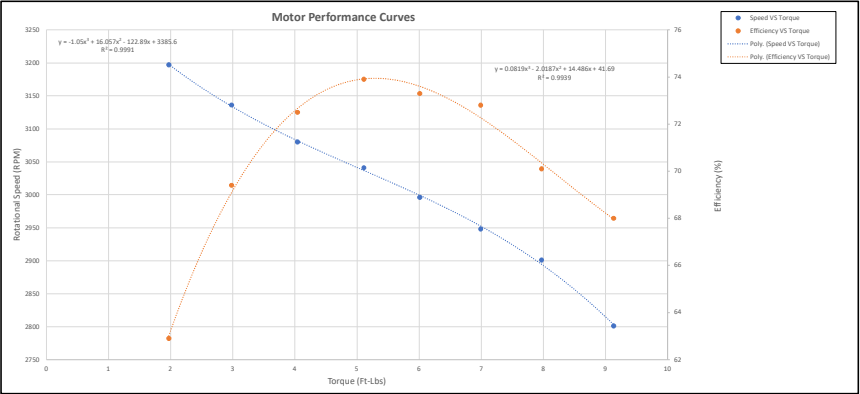
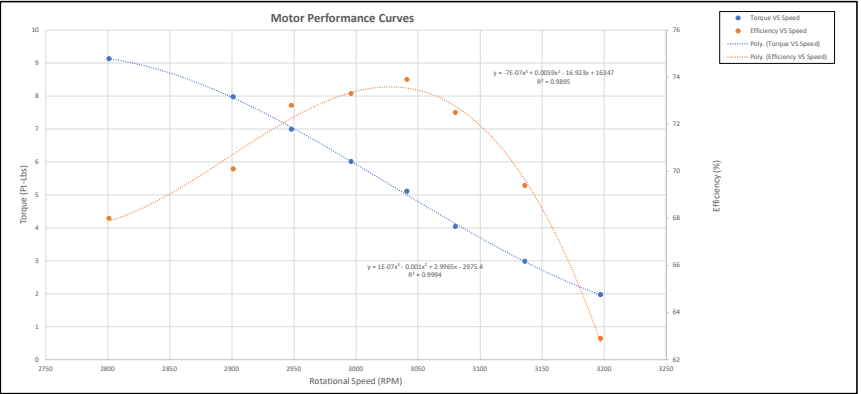
System Voltage (V): 36 - 1 * 0.015

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amper)	Field Voltage (Volts)	Field Current (Amper)	Total Current (Amper)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
1.03	4349	36.3	27.9	1.8	2.92	30.82	1.36	0.85	62.4
2	4247	36	46.9	1.8	2.96	49.86	2.27	1.62	71.2
3.01	4159	35.7	66	1.8	2.95	68.95	3.16	2.39	75.4
4.01	4103	35.3	90.3	1.8	2.96	93.26	4.28	3.08	71.9
5.01	4035	34.7	127.8	1.8	2.9	130.7	5.94	3.91	65.8



Engineering Performance Test Report
Performance Spec (PS) Number: 15
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	3197	36.2	39.1	2.6	3.95	43.05	1.91	1.2	62.9
2.98	3136	35.9	33.3	2.6	3.98	37.08	2.57	1.78	69.4
4.04	3080	35.7	68.1	2.6	3.94	72.04	3.27	2.37	72.5
5.11	3041	35.5	83.9	2.6	3.89	87.79	4	2.96	73.9
6.01	2996	35.2	99.6	2.6	3.92	103.52	4.71	3.43	73.3
6.99	2948	34.9	122.9	2.6	3.95	126.85	5.77	3.92	72.8
7.97	2901	34.7	129	2.6	3.93	132.93	6.01	4.4	70.1
9.11	2801	34.3	154.4	2.6	3.91	158.31	7.12	4.87	68

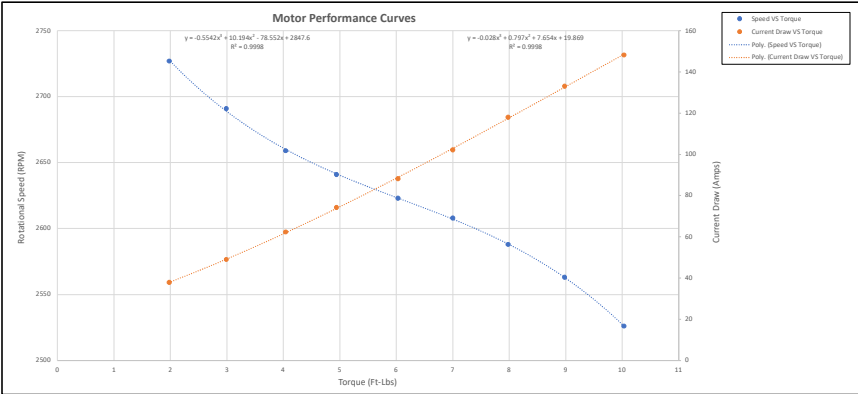
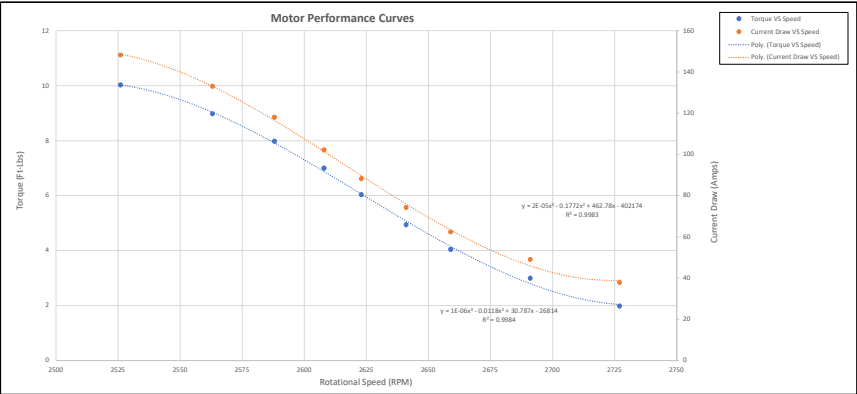
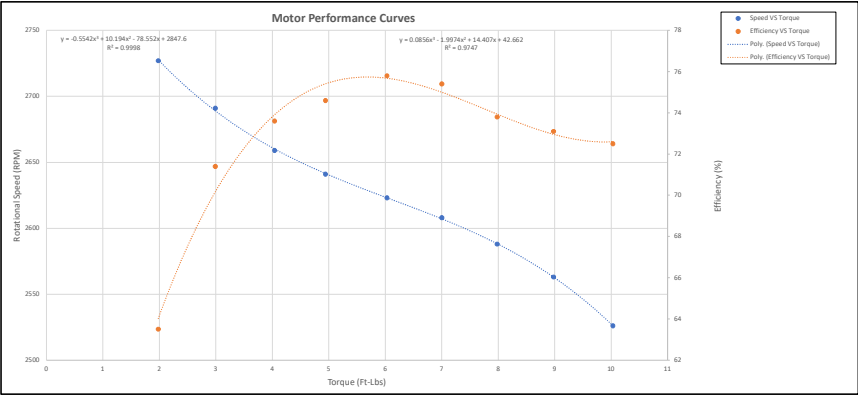
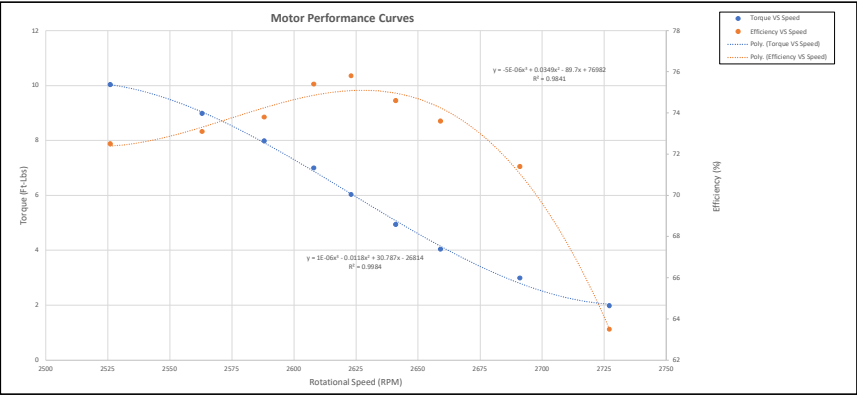


Engineering Performance Test Report

Performance Spec (PS) Number: 15

System Voltage (V): 36 - 11 * 0.0153

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	2727	36.3	32.9	3.2	4.96	37.86	1.62	1.03	63.5
2.99	2699	36.4	44	3.2	4.98	48.98	2.15	1.53	71.4
4.04	2659	35.8	57.4	3.2	4.94	62.34	2.78	2.04	73.6
4.94	2641	35.7	69.3	3.2	4.95	74.25	3.33	2.48	74.6
6.03	2623	35.5	83.2	3.2	4.96	88.16	3.98	3.01	75.8
7	2608	35.2	97.3	3.2	5.01	102.21	4.61	3.48	75.4
7.98	2588	35	113.1	3.2	4.96	118.06	5.33	3.93	73.8
8.98	2563	34.8	128.1	3.2	4.99	133.09	6	4.38	73.1
10.03	2526	34.6	143.2	3.3	5.04	148.24	6.66	4.83	72.5

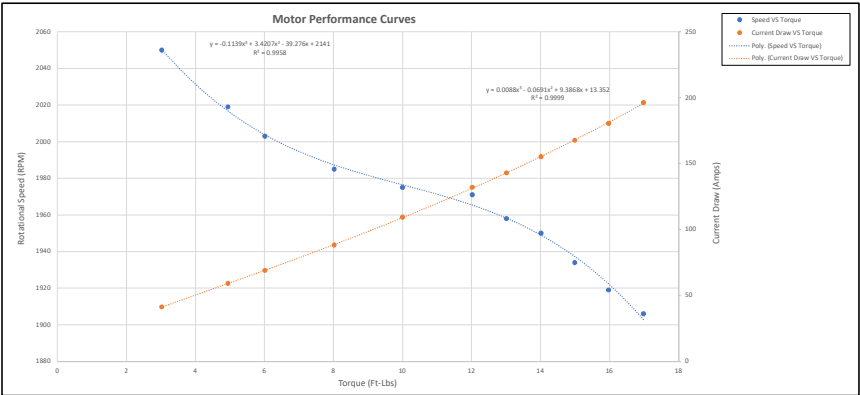
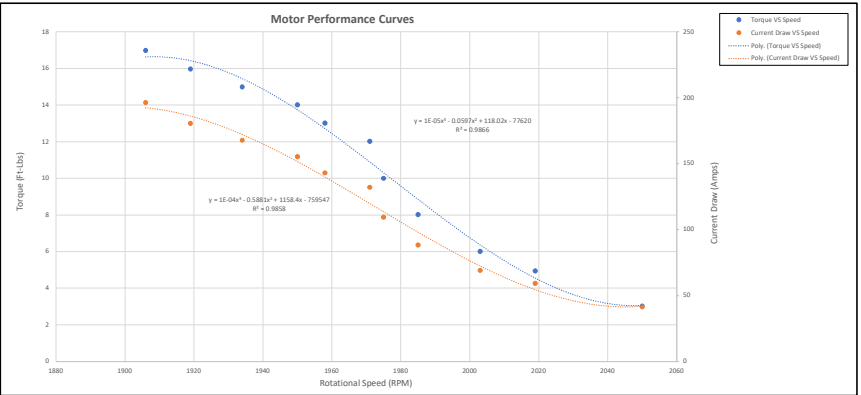
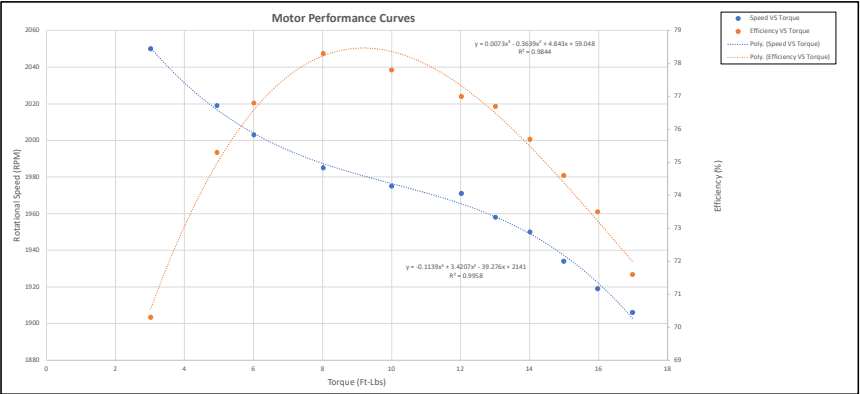


Engineering Performance Test Report

Performance Spec (PS) Number: 15

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 (%)
3.02	2050	36.2	33.3	5.2	8.06	41.36	1.67	1.18	70.3
4.94	2019	35.9	51.2	5.3	8.02	59.22	2.52	1.9	75.3
6.01	2003	35.8	61	5.3	8.03	69.03	2.98	2.29	76.8
8.02	1985	35.5	80.2	5.3	8.03	88.23	3.87	3.03	78.3
10	1975	35.2	101.3	5.3	8.06	109.36	4.83	3.76	77.8
12.02	1971	34.9	124.1	5.3	7.98	132.08	5.85	4.51	77
13.01	1958	34.7	134.9	5.3	8.09	142.99	6.33	4.85	76.7
14.01	1950	34.5	147.3	5.3	7.99	155.29	6.87	5.2	75.7
14.99	1934	34.3	159.8	5.3	7.98	167.78	7.4	5.52	74.6
15.97	1919	34.1	172.6	5.3	7.99	180.59	7.95	5.84	73.5
16.98	1906	33.9	188.2	5.3	8.1	196.3	8.6	6.16	71.6

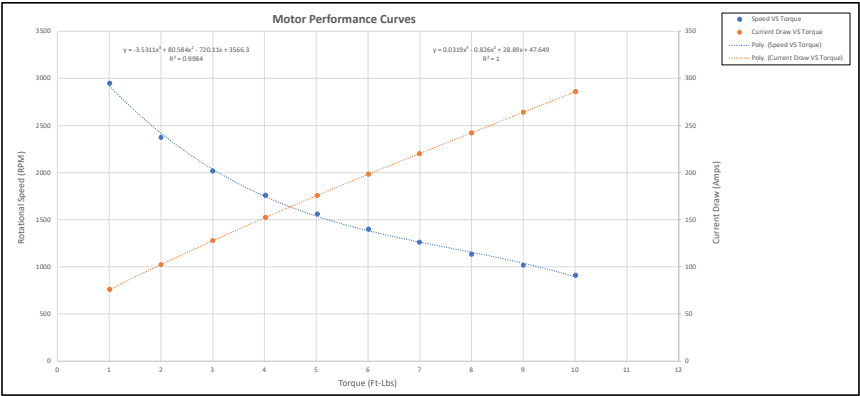
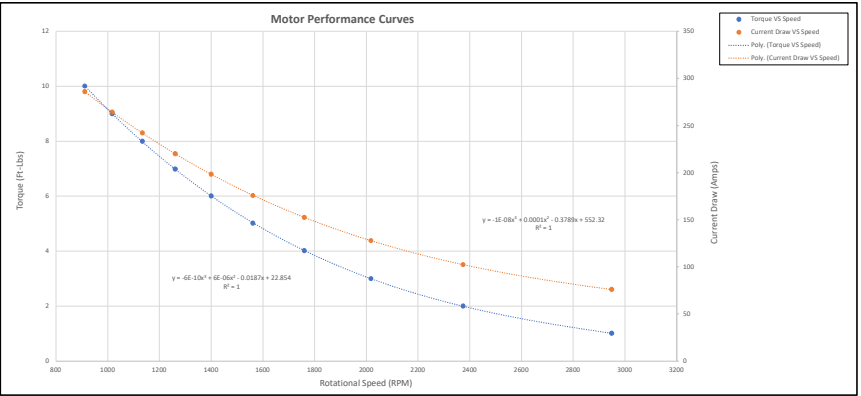
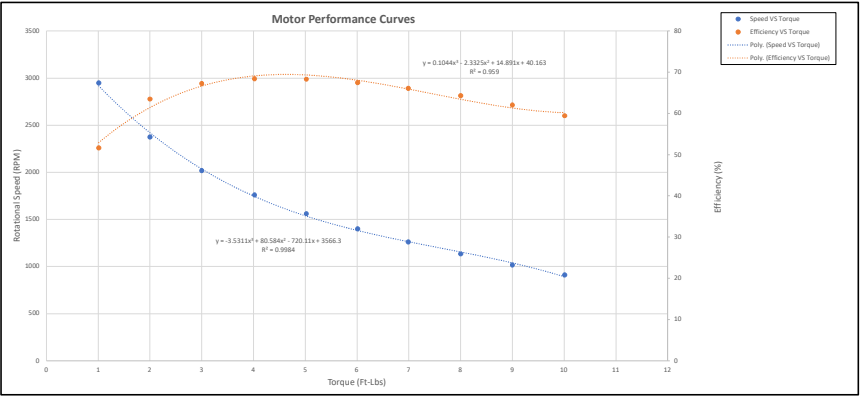
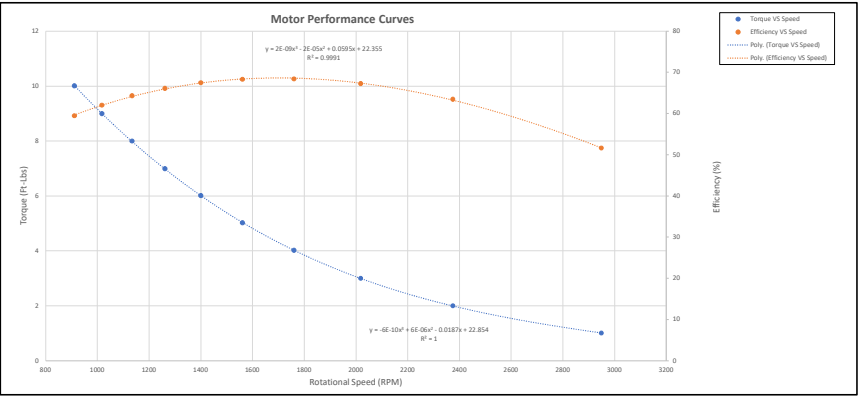


Engineering Performance Test Report

Performance Spec (PS) Number: 15

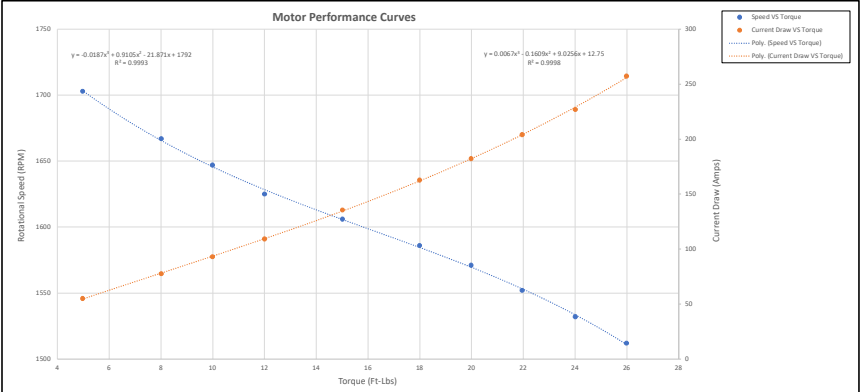
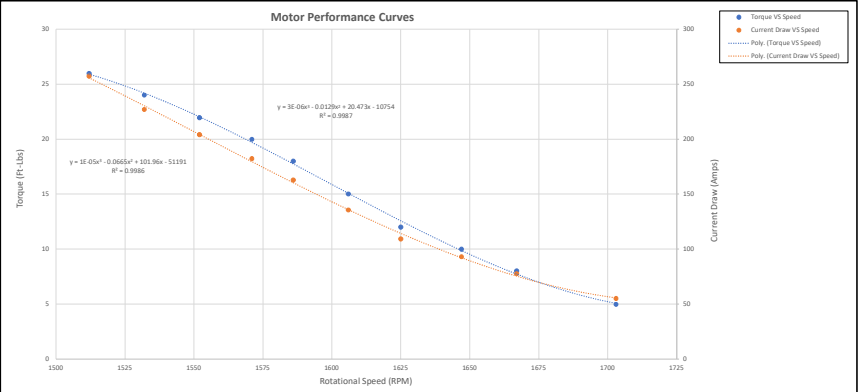
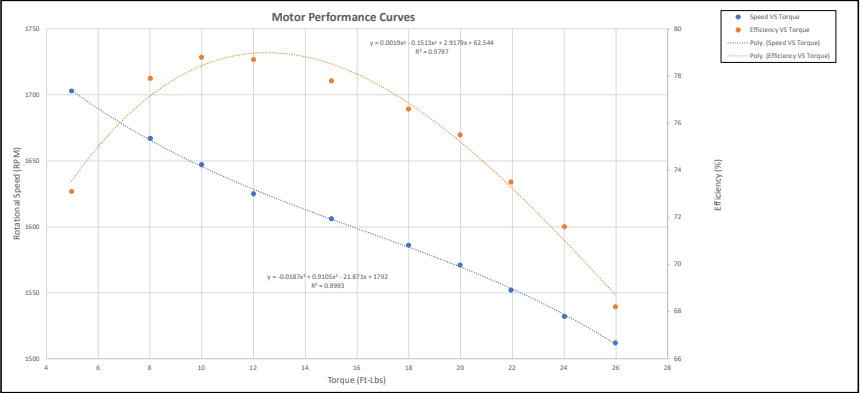
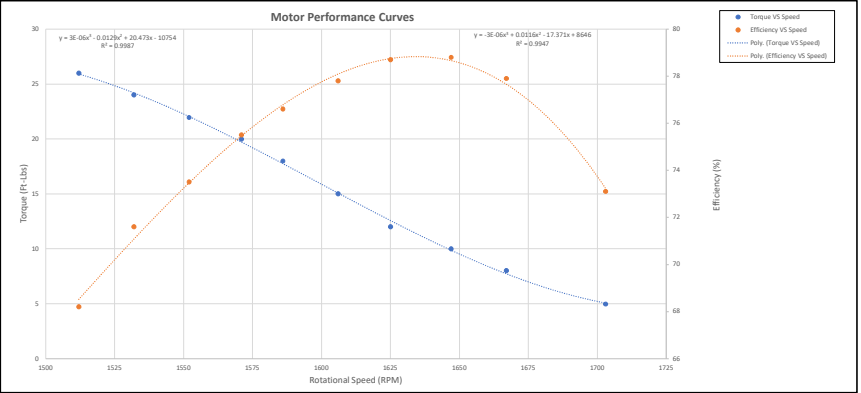
System Voltage (V): 36 - 1 * 0.015)

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 (%)
2.94	1855	36.3	30.4	6.5	10.01	40.41	1.56	1.04	66.5
4.98	1822	36	46.4	6.5	10.06	56.45	2.33	1.73	74.5
6	1816	35.9	54.2	6.5	10.08	64.38	2.7	2.07	76.9
8.01	1795	35.6	71.2	6.6	10.01	81.21	3.49	2.74	78.5
10	1782	35.4	88.3	6.6	10.02	98.32	4.28	3.39	79.4
12	1768	35.1	107.1	6.6	9.97	117.07	5.13	4.04	78.8
13	1764	35	117.3	6.6	10.06	127.36	5.59	4.37	78.2
14.01	1758	34.8	126.5	6.6	10.02	136.52	5.99	4.69	78.3
15.01	1749	34.7	137.6	6.6	10.04	147.64	6.48	5	77.1
15.99	1738	34.5	147.8	6.6	9.91	157.71	6.93	5.29	76.4
17.03	1728	34.3	157.7	6.7	9.98	167.68	7.35	5.6	76.2
18	1710	34.1	169.2	6.7	10.02	179.22	7.83	5.86	74.9
19	1699	34	180.4	6.7	10.18	190.58	8.31	6.15	73.9
19.98	1687	33.8	192.9	6.7	9.85	202.75	8.83	6.42	72.7



Engineering Performance Test Report
Performance Spec (PS) Number: 15
System Voltage (V): 36 - 11 * 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	1703	36.1	42.9	7.8	12.07	54.97	2.2	1.61	73.1
8.01	1667	35.7	65.5	7.9	12.06	77.56	3.26	2.54	77.5
9.99	1647	35.5	80.9	7.9	12.05	92.95	3.97	3.13	78.8
12	1625	35.3	97.1	7.9	12.1	109.2	4.72	3.71	78.7
15.01	1606	34.9	123.4	7.9	12.15	135.55	5.9	4.59	77.8
17.99	1586	34.5	150.8	8	12.95	162.75	7.09	5.43	76.6
19.98	1571	34.1	170.2	8	12	182.2	7.92	5.98	75.5
21.95	1552	33.8	191.8	8	12.19	203.99	8.82	6.49	73.5
24.01	1532	33.5	214.9	8	12.11	227.01	9.78	7.16	71.6
25.98	1512	33	245.1	8.1	12.09	257.29	10.97	7.48	68.2

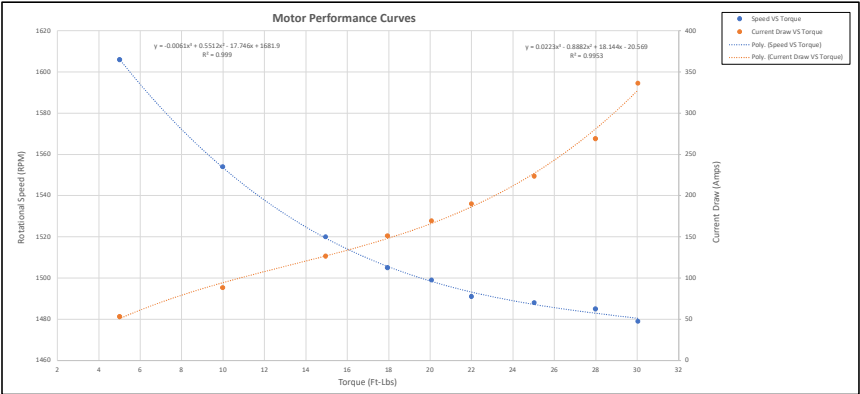
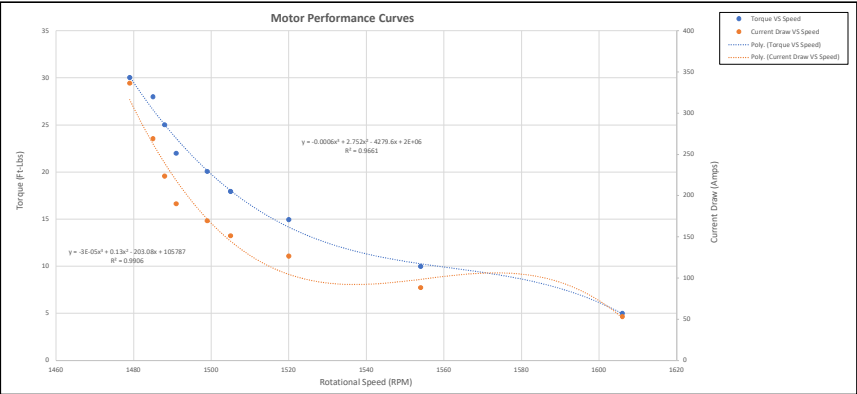
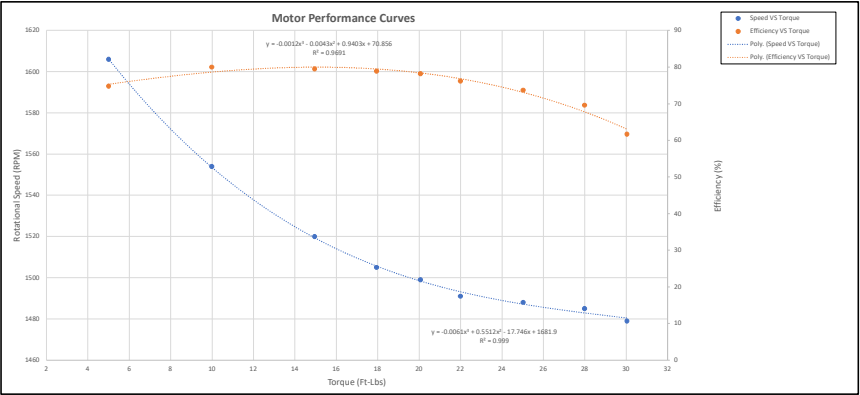
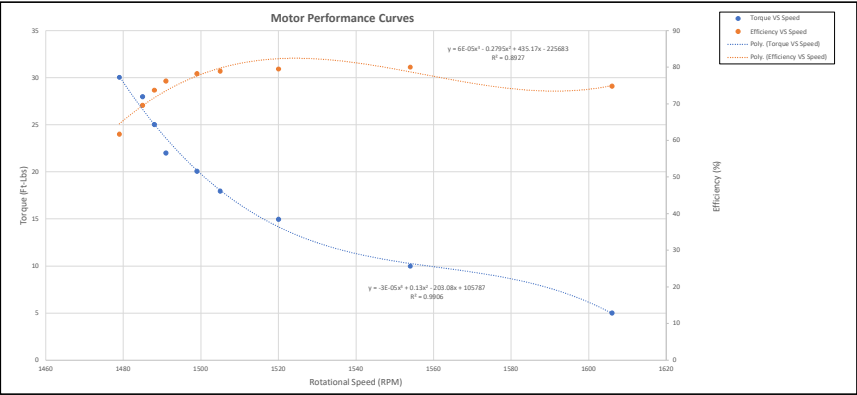


Engineering Performance Test Report

Performance Spec (PS) Number: 15

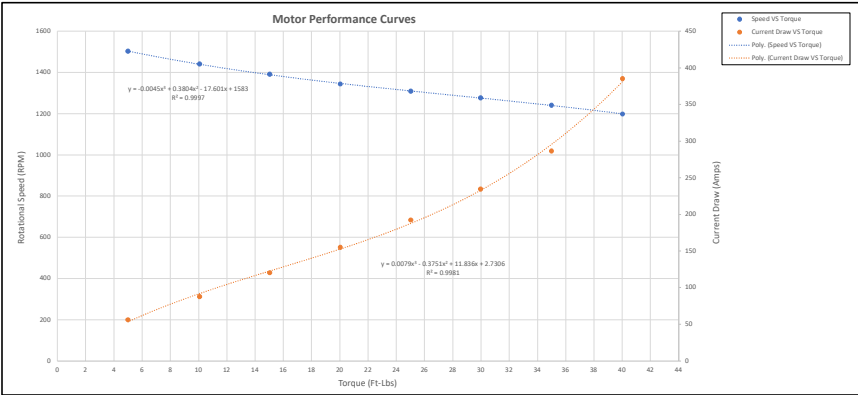
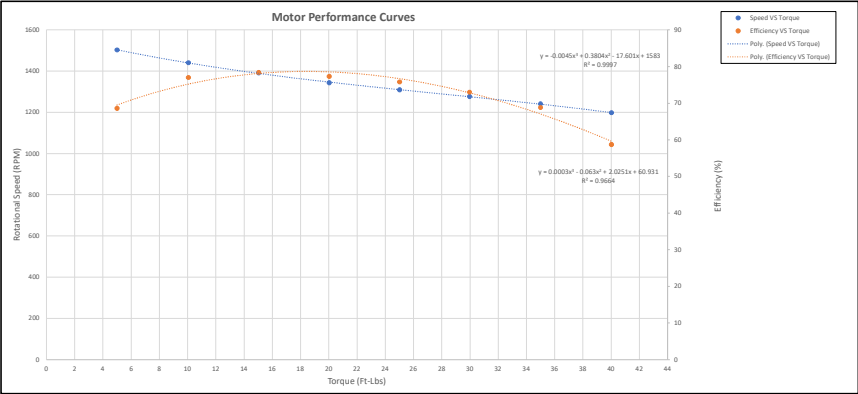
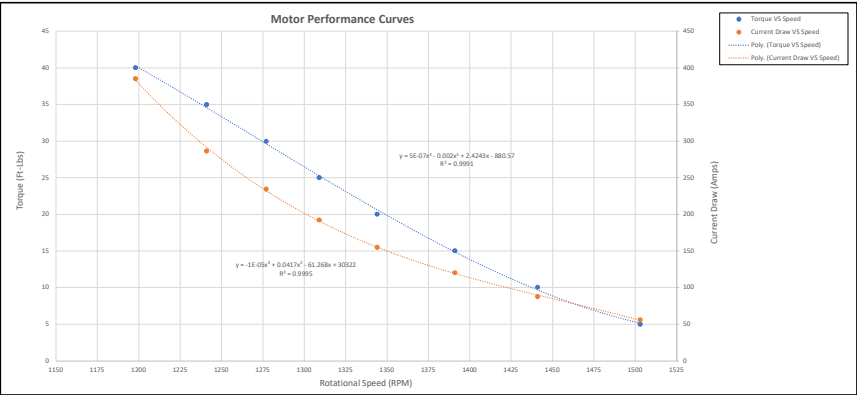
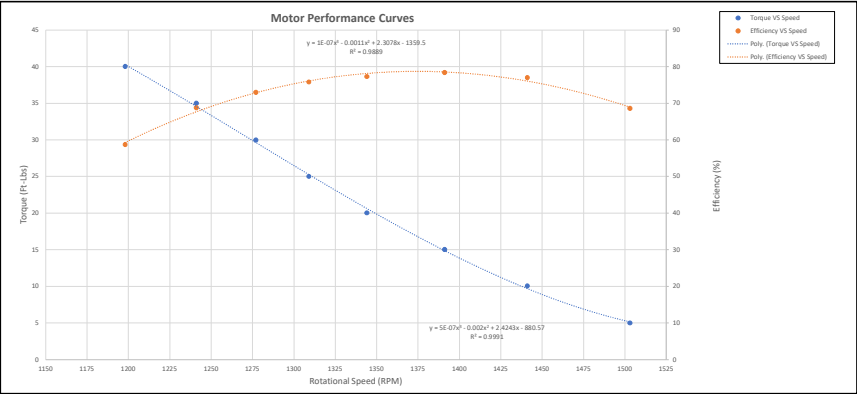
System Voltage (V): 36 - 1 * 0.015

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amper)	Field Voltage (Volts)	Field Current (Amper)	Total Current (Amper)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
5	1606	36.2	38.1	9.6	15.06	53.16	2.04	1.53	74.8
9.98	1554	35.6	73.3	9.7	15.04	88.31	3.69	2.95	80
14.95	1520	35.1	111.6	9.7	14.99	126.59	5.44	4.33	79.5
17.94	1505	34.7	136	9.8	15.21	151.21	6.52	5.14	78.9
20.06	1499	34.4	154.5	9.8	14.96	169.46	7.33	5.73	78.2
21.99	1491	34.1	175	9.8	14.98	189.98	8.19	6.24	76.2
25.02	1488	33.6	208.5	9.9	15.23	223.73	9.59	7.07	73.7
27.98	1485	32.8	204.1	9.9	15.04	269.14	11.38	7.92	69.6
30.03	1479	31.9	321.2	10	15.15	336.35	13.91	8.58	61.7



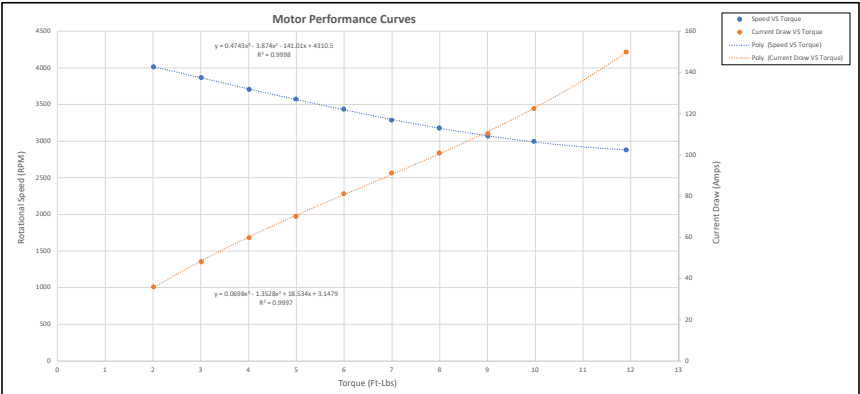
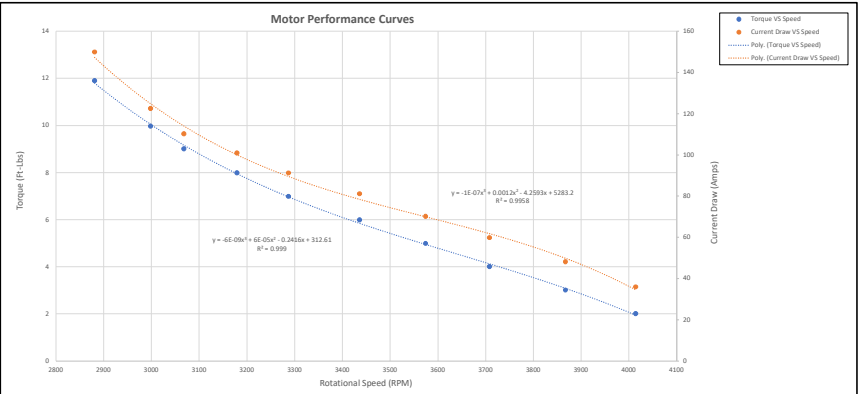
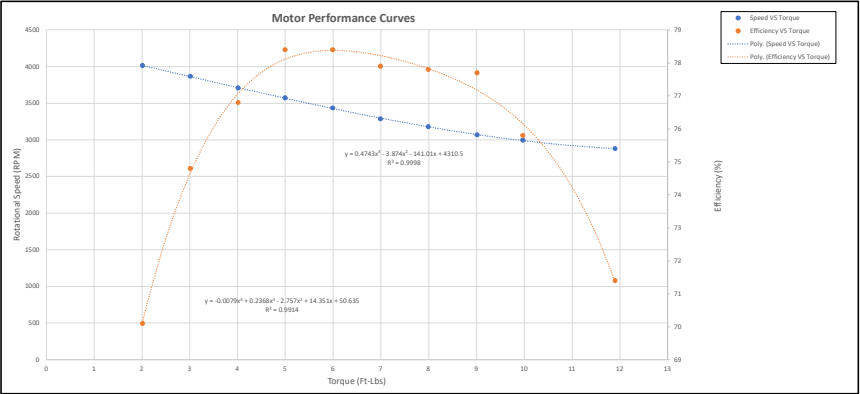
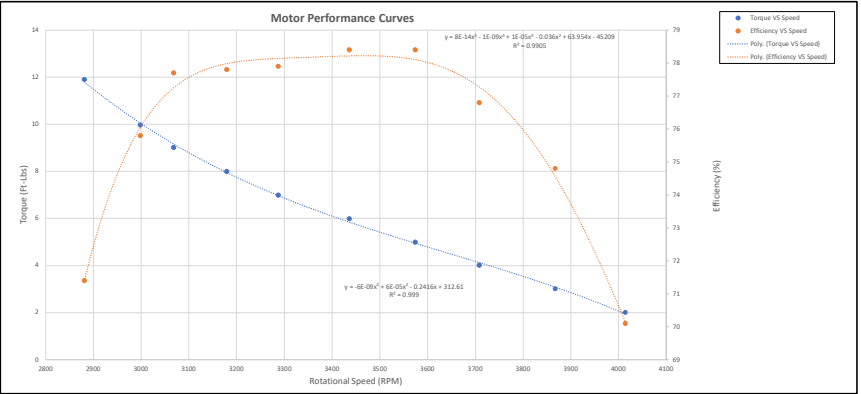
Engineering Performance Test Report
Performance Spec (PS) Number: 15
System Voltage (V): 36 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amper)	Field Voltage (Volts)	Field Current (Amper)	Total Current (Amper)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
5	1503	36.2	36	12.7	20.11	56.11	2.09	1.43	68.6
10.06	1444	35.7	67.7	12.8	20.04	87.74	3.56	2.76	77
15.03	1395	35.2	100.3	12.9	20.07	120.37	5.08	3.98	78.4
20.03	1344	34.7	134.9	13	20.21	155.11	6.63	5.13	77.3
25.02	1309	34.1	172.1	13.1	20.18	192.28	8.22	6.24	75.8
29.97	1277	33.5	214.5	13.2	20.14	234.64	9.99	7.29	73
34.99	1241	32.7	266.4	13.3	20	286.4	12.02	8.77	68.8
40.02	1198	31	365.2	13.4	20.09	385.29	15.55	9.13	58.7



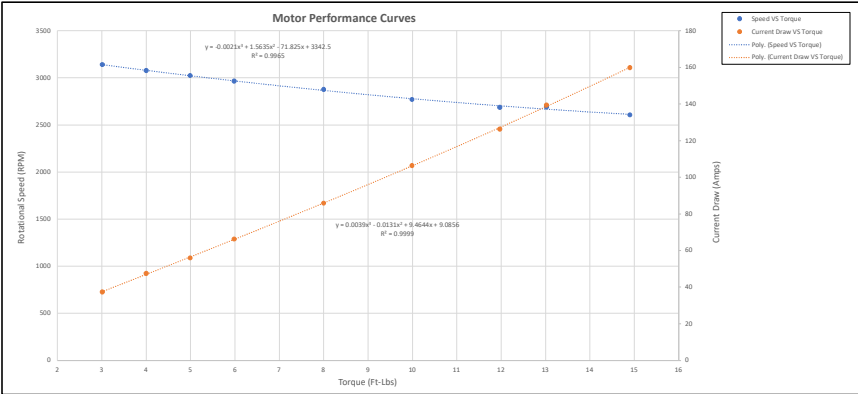
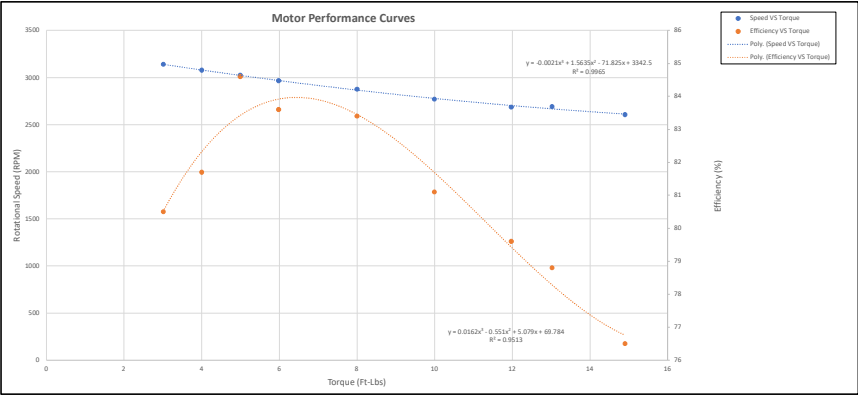
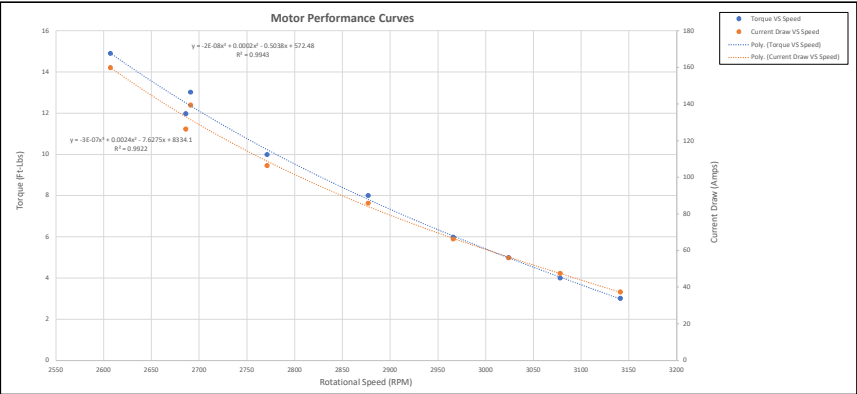
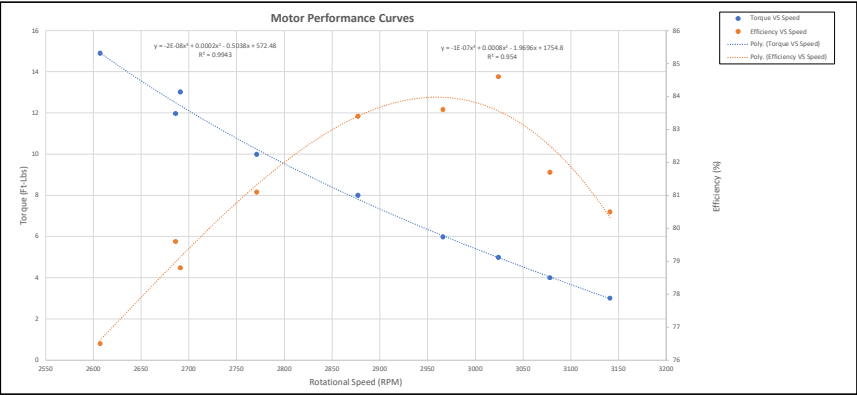
Engineering Performance Test Report
Performance Spec (PS) Number: 15
System Voltage (V): 48 - (1 * 0.015)

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	4014	47.8	34	5	1.94	35.94	2.19	1.53	70.1
3.01	3857	47.6	46.2	5	1.96	48.16	2.96	2.21	74.8
4.01	3708	47.4	57.9	5	1.96	59.86	3.69	2.83	76.8
4.99	3574	47.2	68.2	5	1.94	70.14	4.33	3.39	78.4
5.99	3436	47	79.2	5	1.95	81.15	5	3.92	78.4
6.99	3287	46.9	89.3	5	1.97	91.27	5.62	4.38	77.8
7.99	3179	46.7	99	5	1.92	100.92	6.21	4.84	77.8
9.01	3068	46.6	108.3	5	1.93	110.23	6.77	5.26	77.7
9.97	2998	46.4	120.6	5	1.95	122.55	7.51	5.69	75.8
11.9	2881	46	148	5	1.95	149.95	9.14	6.53	71.4



Engineering Performance Test Report
Performance Spec (PS) Number: 15
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	3141	47.8	34.4	8.3	2.97	37.37	2.23	1.8	80.5
4	3078	47.6	44.5	8.3	2.99	47.49	2.87	2.35	81.7
4.99	3024	47.4	53	8.3	2.97	55.97	3.4	2.87	84.6
5.98	2966	47.3	63.3	8.3	2.97	66.27	4.04	3.38	83.6
8	2877	47	82.9	8.3	2.99	85.89	5.25	4.38	83.4
9.99	2771	46.7	103.4	8.3	2.99	106.39	6.5	5.27	81.1
11.97	2686	46.3	123.4	8.3	2.94	126.34	7.7	6.12	79.6
13.02	2691	46.1	136.5	8.3	2.97	139.47	8.47	6.67	78.8
14.9	2607	45.8	156.9	8.3	2.97	159.87	9.66	7.4	76.5

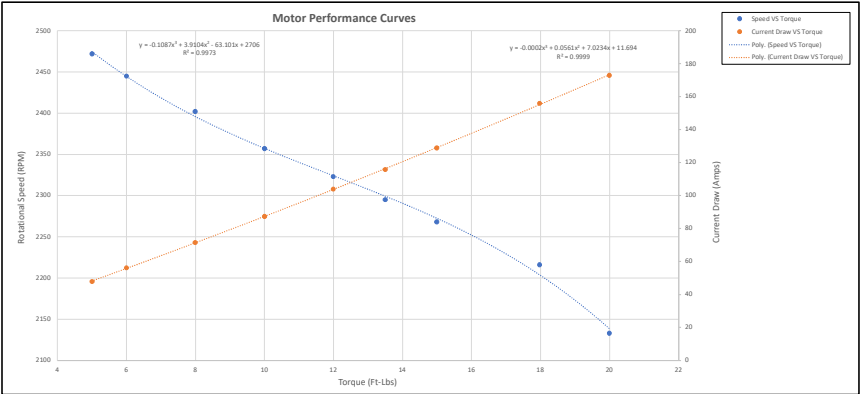
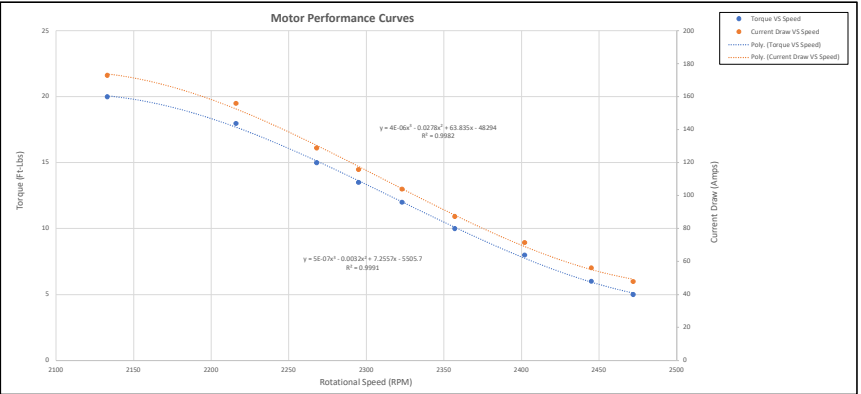
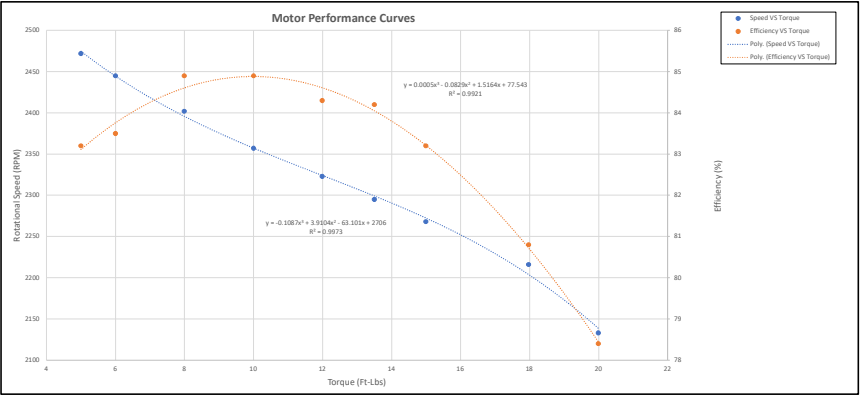
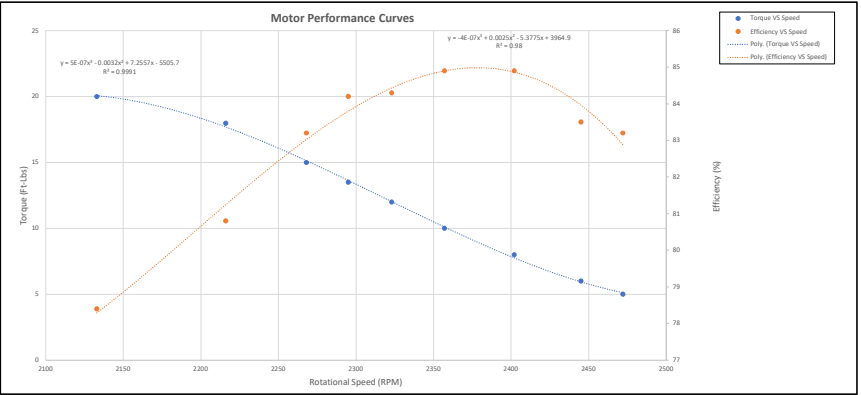


Engineering Performance Test Report

Performance Spec (PS) Number: 15

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	2472	47.6	42.9	14.1	4.97	47.87	2.83	2.35	83.2
6	2445	47.5	51.2	14.1	4.97	56.17	3.35	2.79	83.5
7.99	2402	47.2	66.5	14.1	4.96	71.46	4.31	3.66	84.9
10	2357	47	82.4	14.1	4.95	87.35	5.28	4.49	84.9
11.99	2323	46.8	99	14.1	4.95	103.95	6.29	5.3	84.3
13.5	2295	46.6	110.8	14.1	5	115.8	7.01	5.9	84.2
14.99	2268	46.3	123.9	14.1	4.99	128.89	7.79	6.47	83.2
17.97	2216	45.9	151	14.1	4.94	155.94	9.38	7.58	80.8
19.99	2133	45.6	168	14.1	4.96	172.96	10.36	8.12	78.4

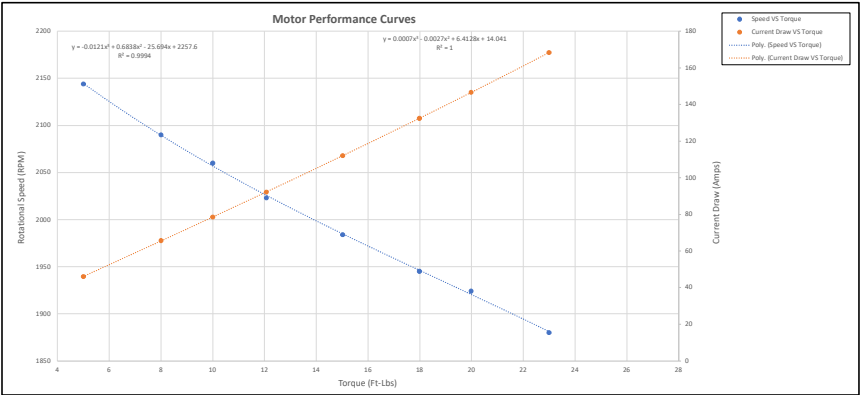
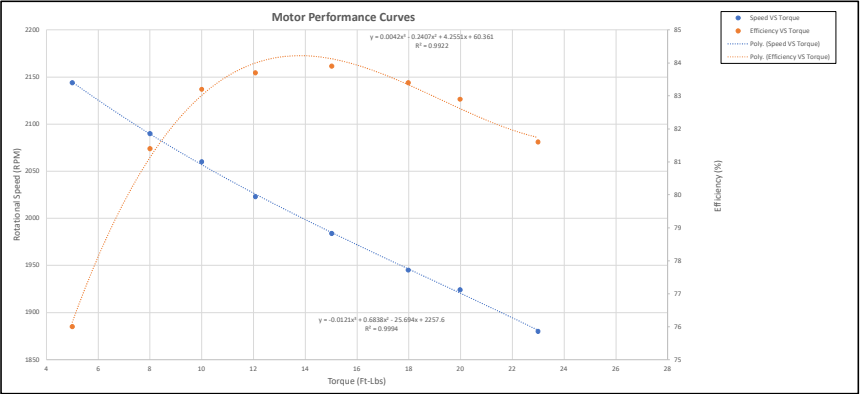
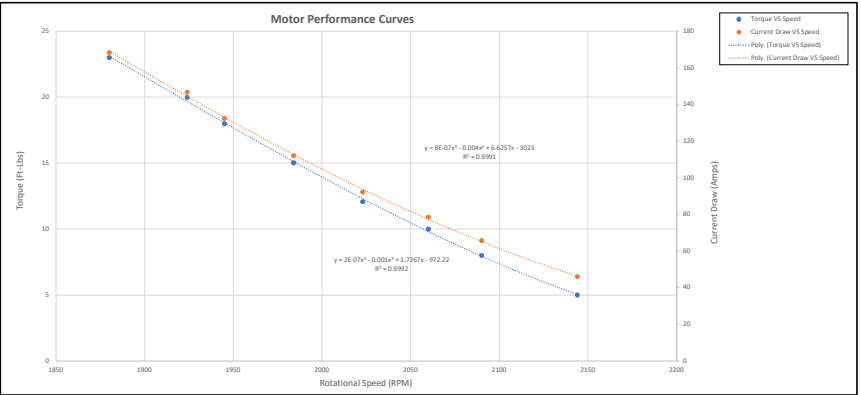
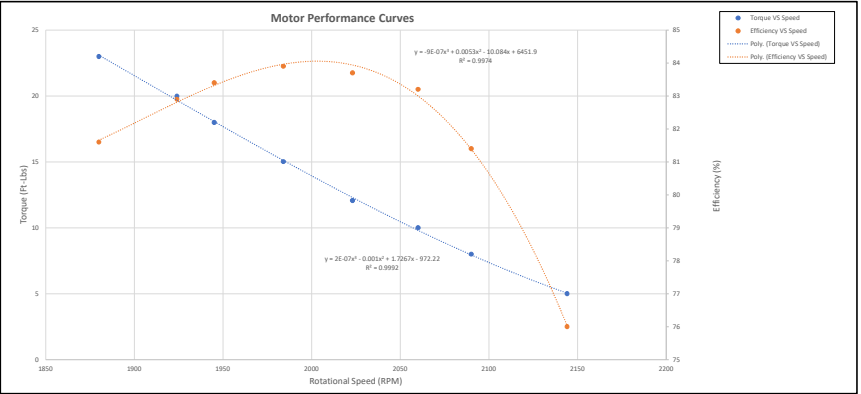


Engineering Performance Test Report

Performance Spec (PS) Number: 15

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

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amper)	Field Voltage (Volts)	Field Current (Amper)	Total Current (Amper)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
5	2144	47.7	38	23.9	8.07	46.07	2.69	2.04	76
8	2090	47.4	57.6	23.8	8.07	65.87	3.92	3.18	81.4
10	2060	47.2	70.5	23.8	8.05	78.55	4.71	3.92	83.2
12.07	2023	47	84.1	23.8	8.07	92.17	5.55	4.65	83.7
15.02	1984	46.7	104	23.8	8.06	112.06	6.76	5.67	83.9
17.98	1945	46.4	124.4	23.7	8.03	132.42	7.99	6.66	83.4
19.98	1924	46.1	138.6	23.7	8.04	146.64	8.83	7.32	82.9
22.99	1880	45.8	160.2	23.7	8.11	168.31	10.08	8.23	81.6

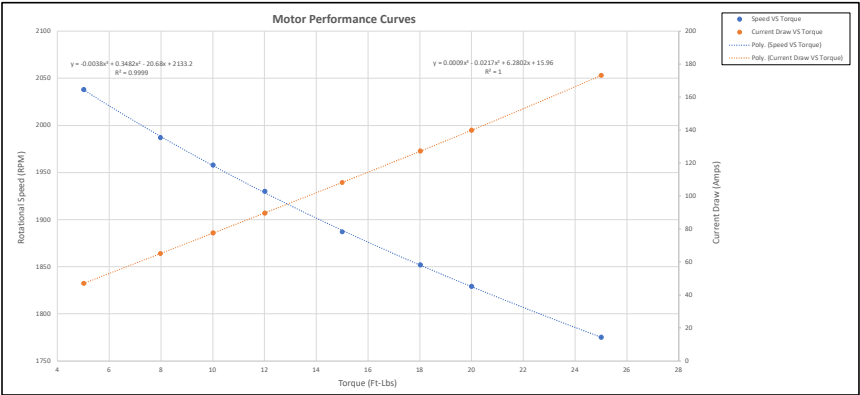
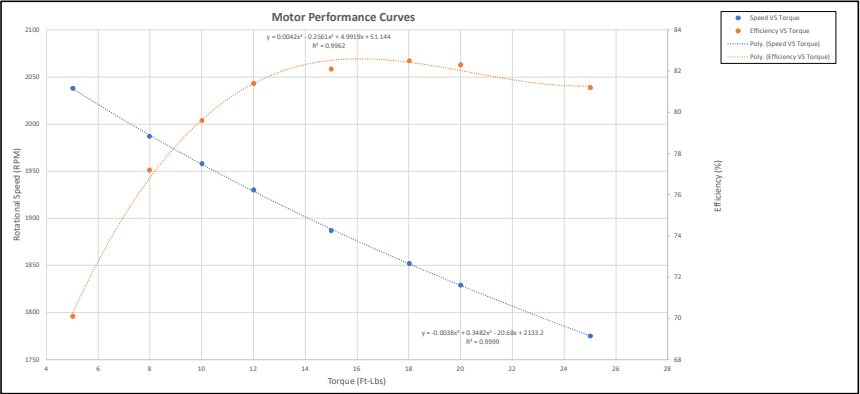
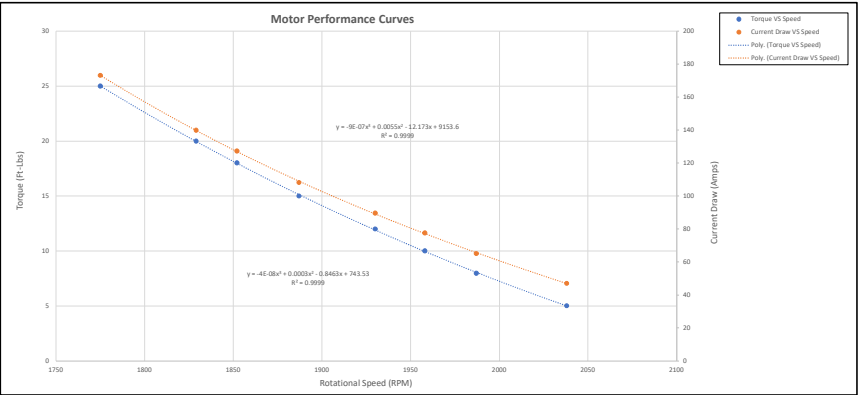


Engineering Performance Test Report

Performance Spec (PS) Number: 15

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

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amper)	Field Voltage (Volts)	Field Current (Amper)	Total Current (Amper)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
5.02	2038	47.7	37	30.6	10.03	47.03	2.77	1.95	70.1
7.98	1987	47.4	35.3	30.5	10.06	65.46	3.91	3.02	77.2
10.01	1958	47.2	67.6	30.4	10.03	77.63	4.69	3.73	79.6
12.01	1930	47	79.6	30.3	10.06	89.66	5.43	4.41	81.4
15	1887	46.8	98.2	30.2	10.05	108.25	6.56	5.39	82.1
18.02	1852	46.5	117.2	30.2	10.07	127.27	7.71	6.35	82.5
20	1829	46.3	129.9	30.1	10.04	139.94	8.46	6.96	82.3
25.01	1775	45.7	163.2	29.9	10.04	173.24	10.4	8.45	81.2

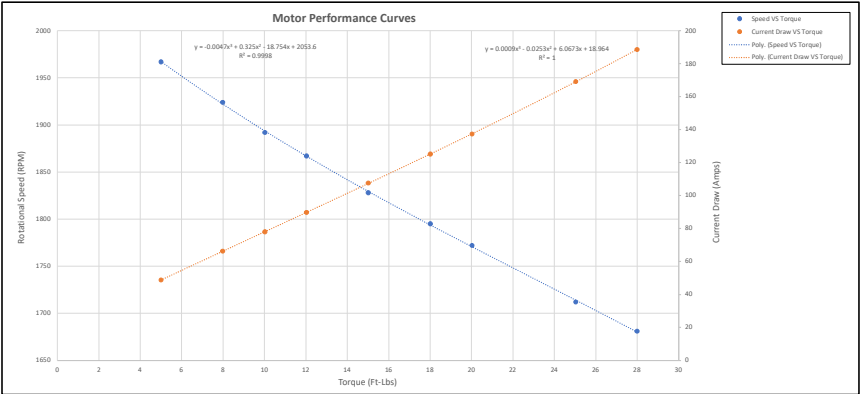
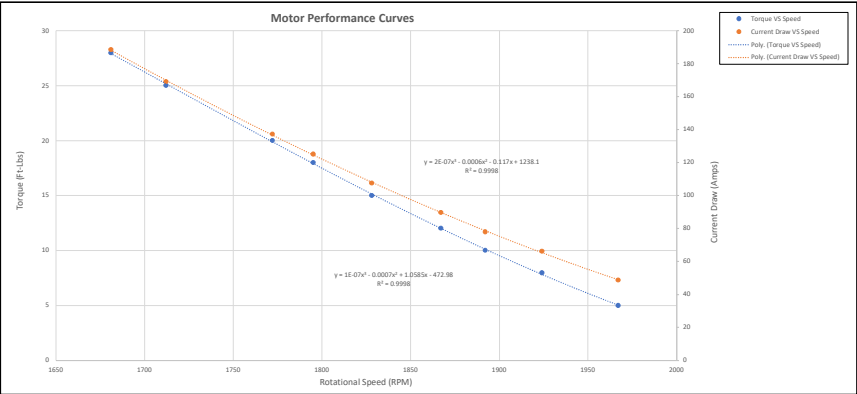
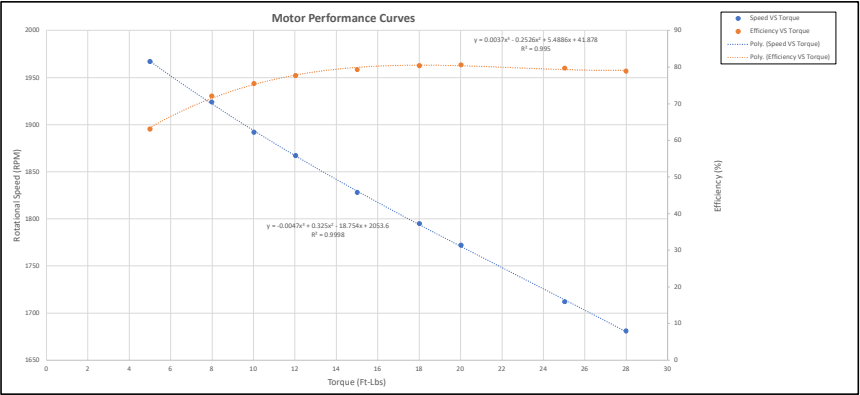
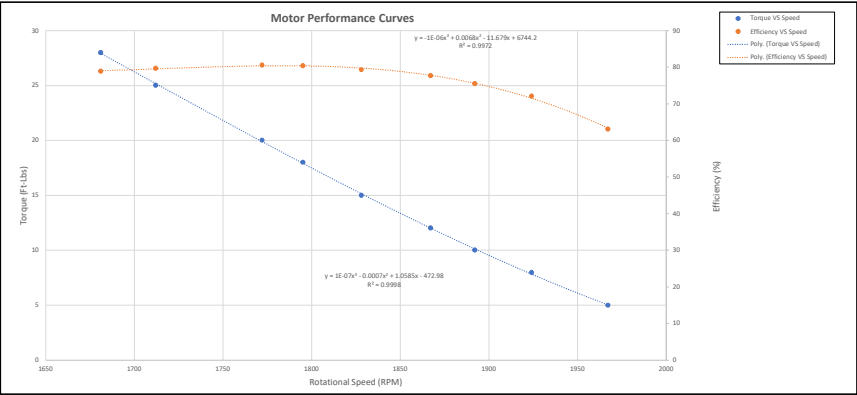


Engineering Performance Test Report

Performance Spec (PS) Number: 15

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

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amper)	Field Voltage (Volts)	Field Current (Amper)	Total Current (Amper)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
5	1967	47.7	36.7	38	12.07	48.77	2.96	1.87	63.1
7.98	1924	47.4	34.2	37.8	12.1	49.5	4.05	2.92	72.1
10.02	1892	47.2	65.9	37.6	12.11	78.01	4.78	3.61	75.5
12.03	1867	47.1	77.7	37.5	12.1	89.8	5.51	4.28	77.7
15.01	1828	46.8	95.5	37.3	12.07	107.57	6.59	5.23	79.3
18.01	1795	46.5	113.1	37.1	12.11	125.21	7.66	6.15	80.4
20.02	1772	46.4	125.3	36.8	12.06	137.36	8.38	6.75	80.6
25.03	1712	45.8	157	36.6	12.15	169.15	10.24	8.16	79.7
27.99	1681	45.5	176.6	36.4	12	188.6	11.36	8.96	78.9

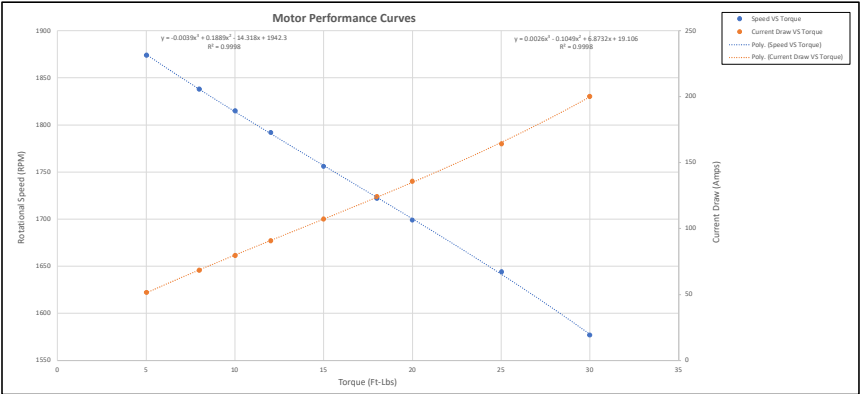
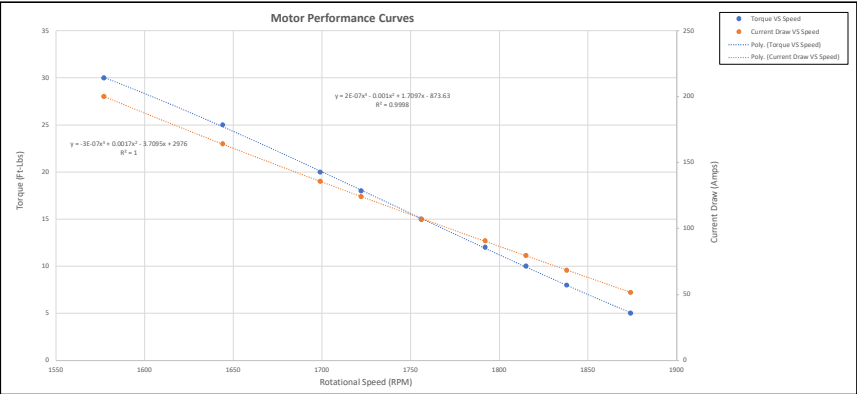
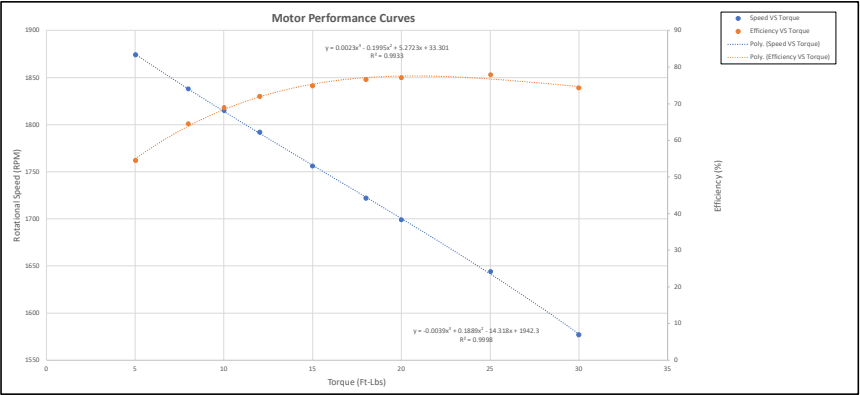
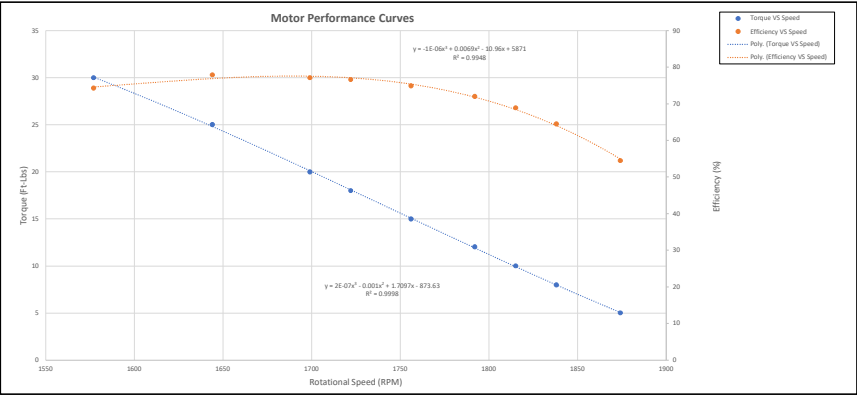


Engineering Performance Test Report

Performance Spec (PS) Number: 15

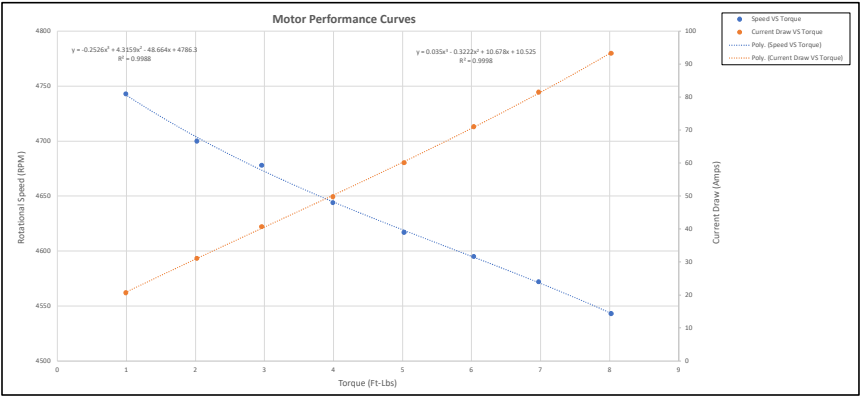
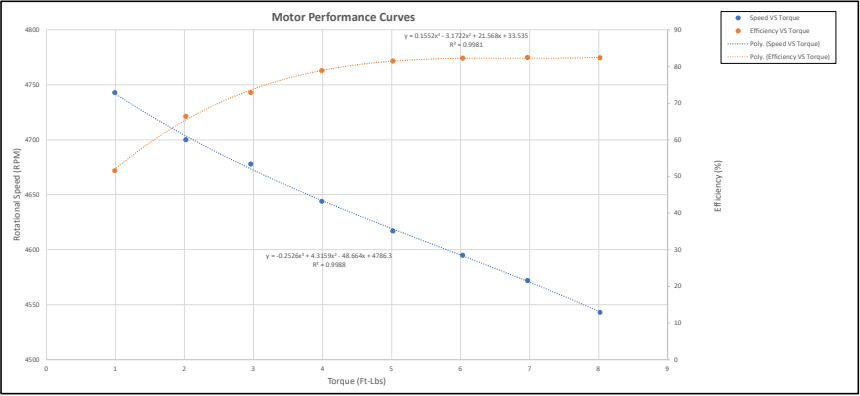
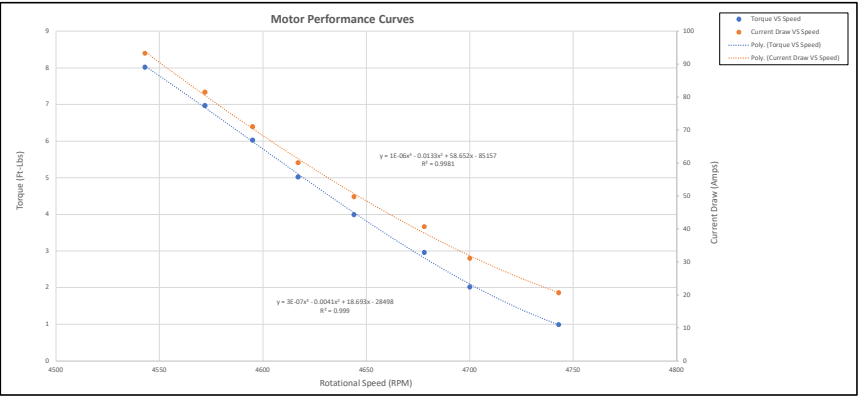
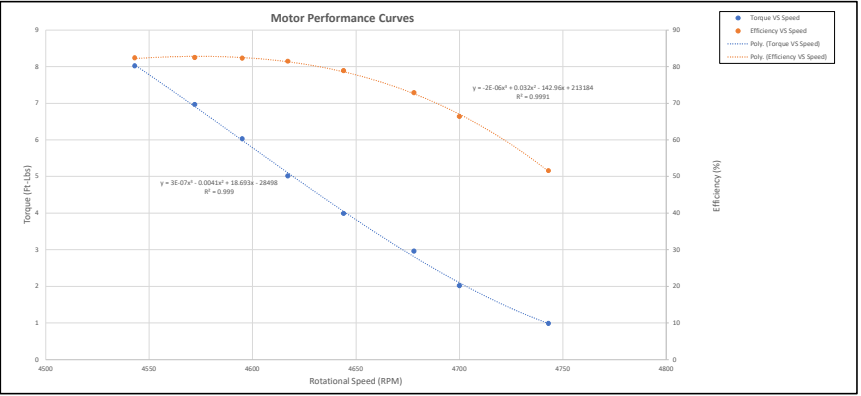
System Voltage (V): 48 - (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amper)	Field Voltage (Volts)	Field Current (Amper)	Total Current (Amper)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
5.02	1874	47.7	36.5	47.2	15.11	51.61	3.29	1.79	54.5
7.99	1838	47.4	33.3	46.6	15.12	48.42	4.33	2.8	64.5
10.01	1815	47.3	64.5	46.1	15.08	79.58	5.02	3.46	68.9
12.02	1792	47.1	75.7	45.5	15.06	90.76	5.69	4.1	72
14.99	1756	46.8	92.1	44.8	15.1	107.2	6.69	5.01	74.9
18	1722	46.6	109.1	44.2	15.12	124.22	7.71	5.9	76.6
19.99	1699	46.4	120.7	43.5	15.11	135.81	8.39	6.47	77.1
25.02	1644	46	149.1	42.8	15.12	164.22	10.06	7.83	77.8
29.99	1577	45.4	185.1	42.1	15.11	200.21	12.12	9	74.3



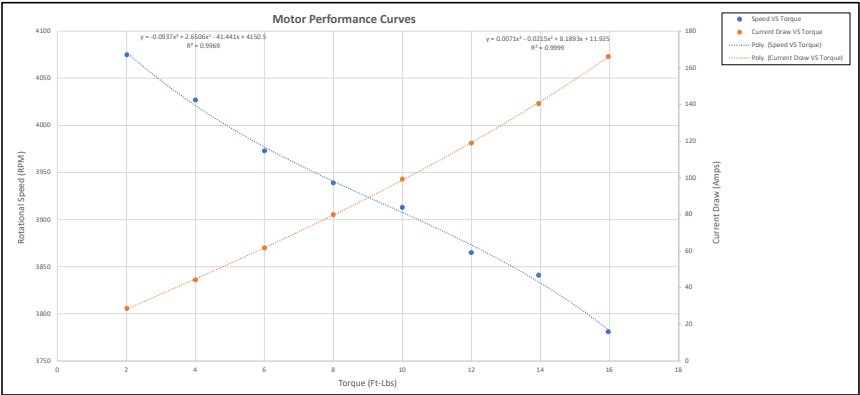
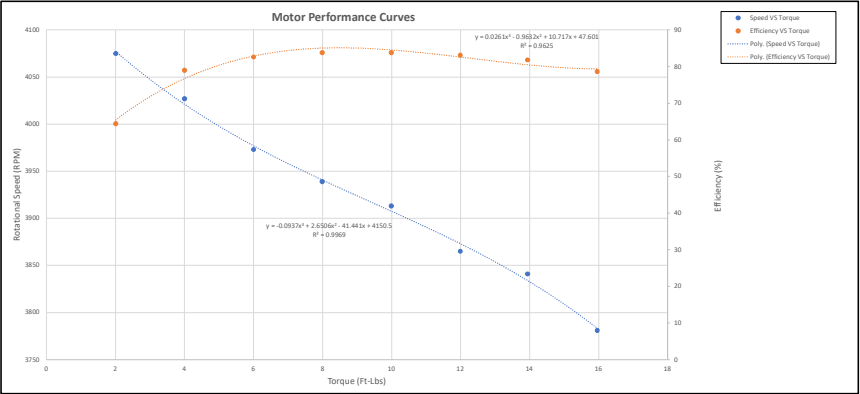
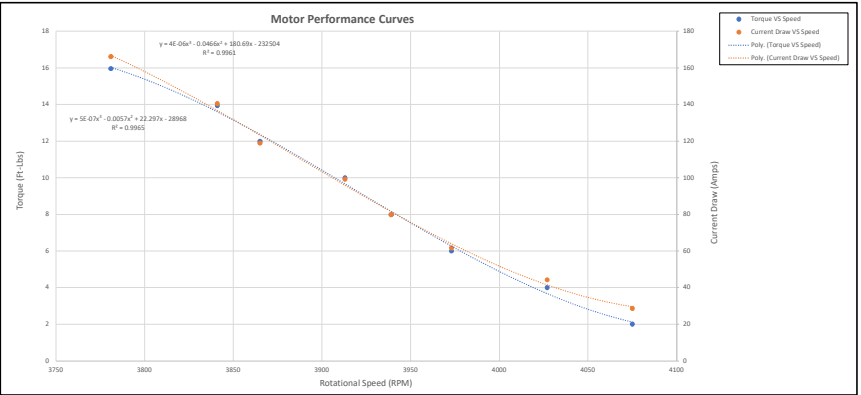
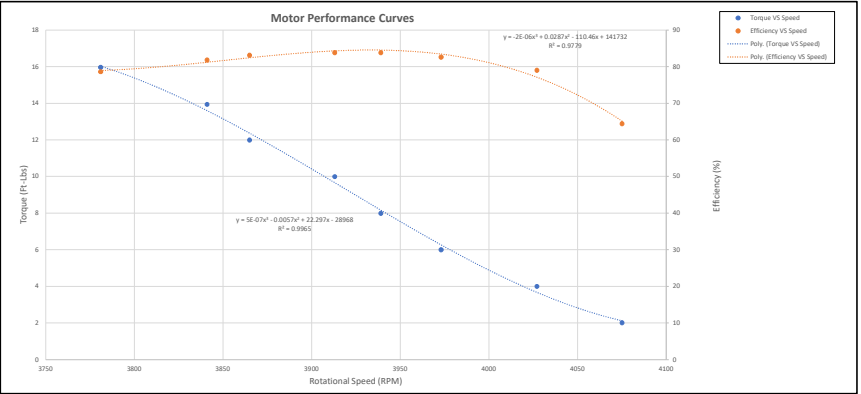
Engineering Performance Test Report
Performance Spec (PS) Number: 15
System Voltage (V): 72 - (1 * 0.030)

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 (%)
0.99	4743	71.5	17.7		8.9	3	20.7	1.73	0.9
2.02	4700	71.2	28.3		8.9	3.01	31.11	2.72	1.81
2.96	4678	71	37.7		8.9	3.02	40.72	3.62	2.64
3.99	4644	70.6	46.8		8.9	3	49.8	4.47	3.53
5.02	4617	70.3	57.1		8.9	3.02	60.12	5.41	4.41
6.03	4595	69.9	68		8.9	3.03	71.03	6.41	5.28
6.97	4572	69.6	78.5		8.9	3.01	81.51	7.36	6.07
8.02	4543	69.3	90.3		8.8	3.02	93.32	8.42	6.94



Engineering Performance Test Report
Performance Spec (PS) Number: 15
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 (%)
2.01	4075	71.3	24.6	12.2	4.05	28.65	2.42	1.56	64.4
4	4022	70.9	40.2	12.2	4.07	44.27	3.88	3.07	79
6	3973	70.3	57.6	12.2	4.05	61.65	5.49	4.54	82.6
7.99	3939	69.7	75.8	12.2	4.07	79.87	7.15	5.99	83.8
9.99	3913	69.2	95.2	12.2	4.04	99.24	8.89	7.45	83.8
11.99	3865	68.5	114.9	12.2	4	118.9	10.61	8.82	82.1
13.94	3841	67.8	136.4	12.2	4.1	140.5	12.46	10.2	81.8
15.96	3781	67	162.1	12.2	4.04	166.14	14.62	11.49	78.6

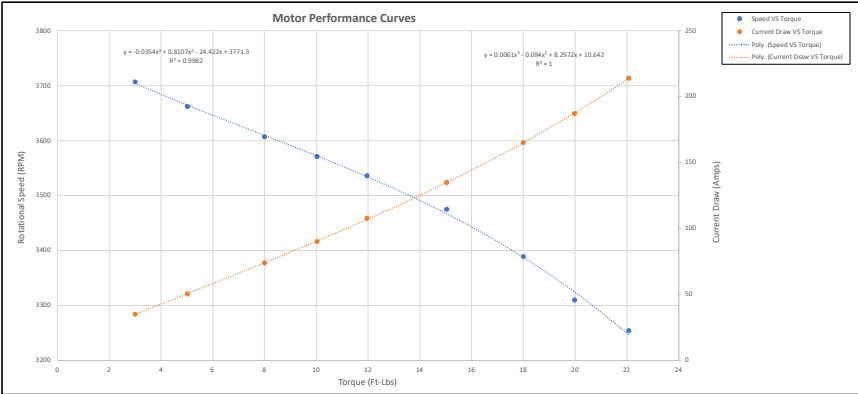
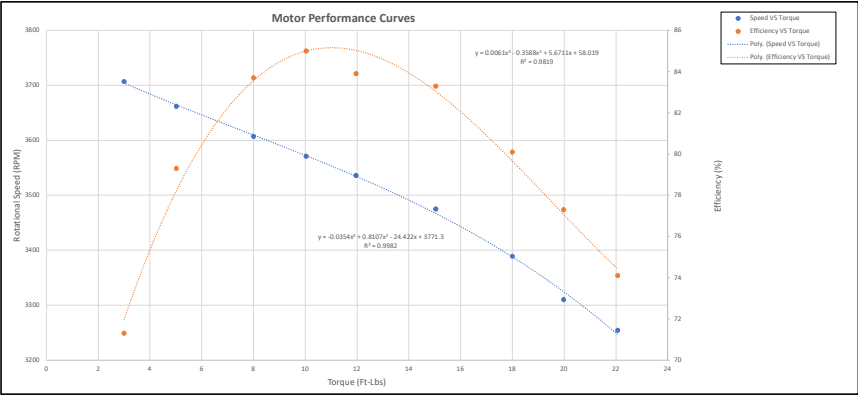
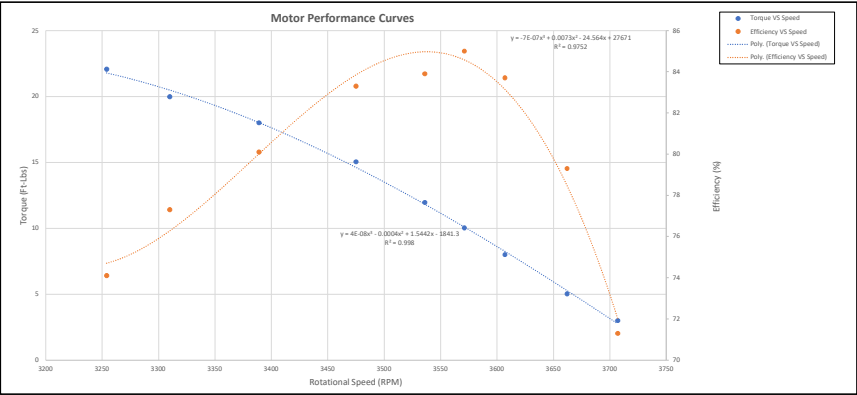


Engineering Performance Test Report

Performance Spec (PS) Number: 15

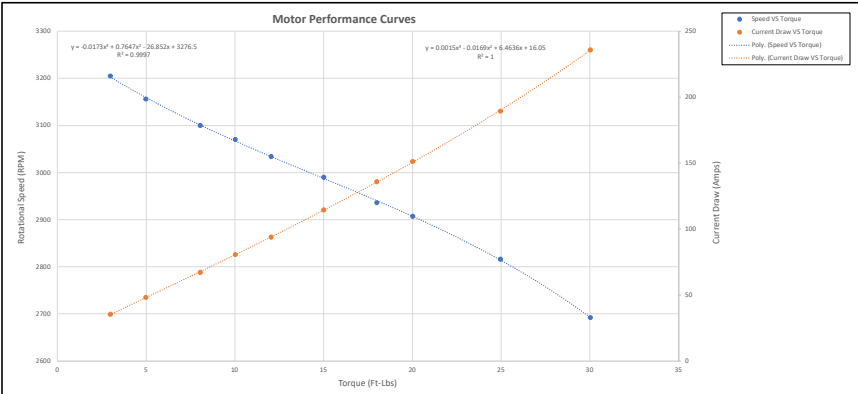
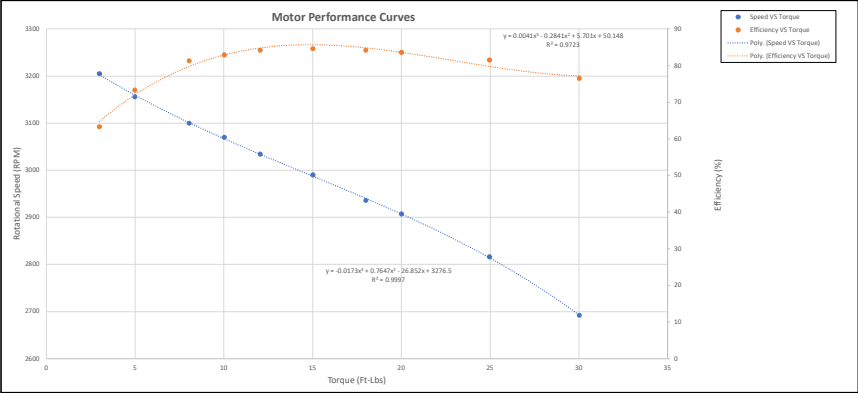
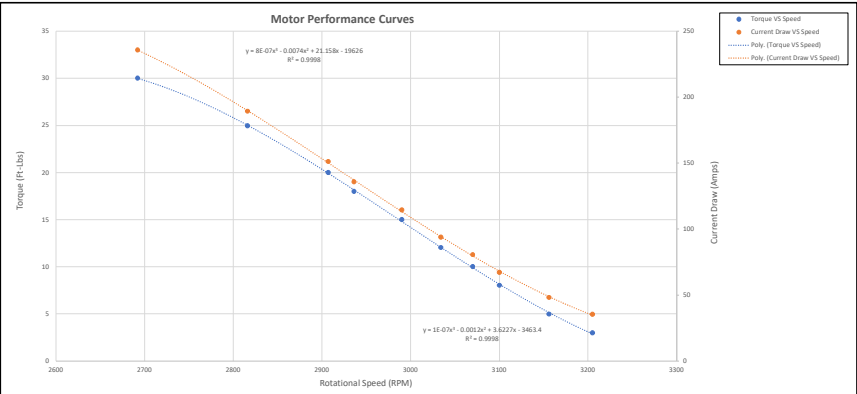
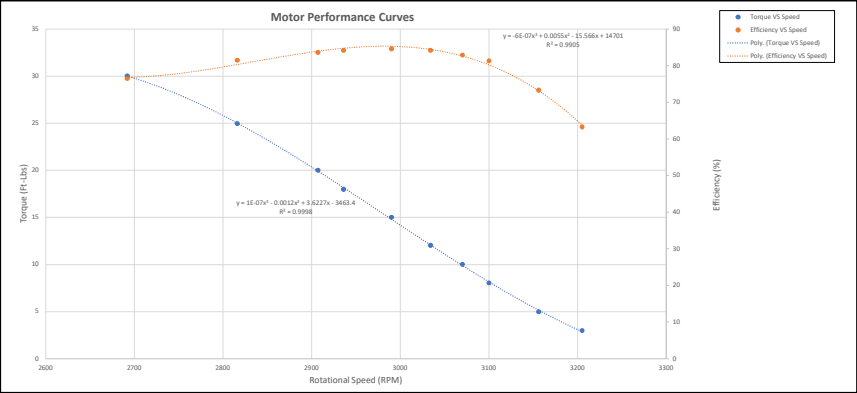
System Voltage (V): 72 - 11 * 0.030

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amper)	Field Voltage (Volts)	Field Current (Amper)	Total Current (Amper)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
3	3707	71.2	30	15.6	5.08	35.08	2.97	2.11	71.3
5.07	3650	70.7	45.4	15.5	5.03	50.43	4.41	3.5	79.3
8	3607	70	68.9	15.5	5.07	73.97	6.56	5.49	83.7
10.03	3571	69.5	85.1	15.5	5.09	90.19	8.03	6.82	85
11.96	3536	68.9	102.7	15.5	5.07	107.77	9.6	8.06	83.9
15.04	3475	68.1	129.8	15.5	5.08	134.88	11.95	9.95	83.3
18	3389	67.1	160.1	15.5	5.01	165.11	14.49	11.61	80.1
19.98	3310	66.4	182.1	15.5	5.1	187.2	16.3	12.59	77.3
22.07	3254	65.5	209.1	15.5	4.87	213.97	18.45	13.67	74.3



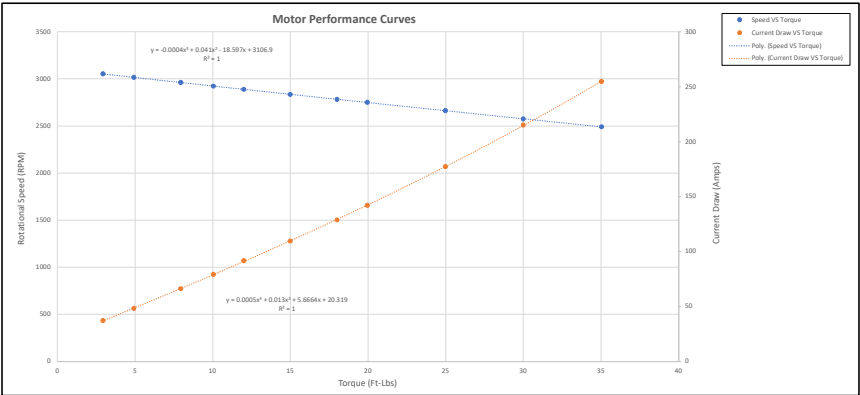
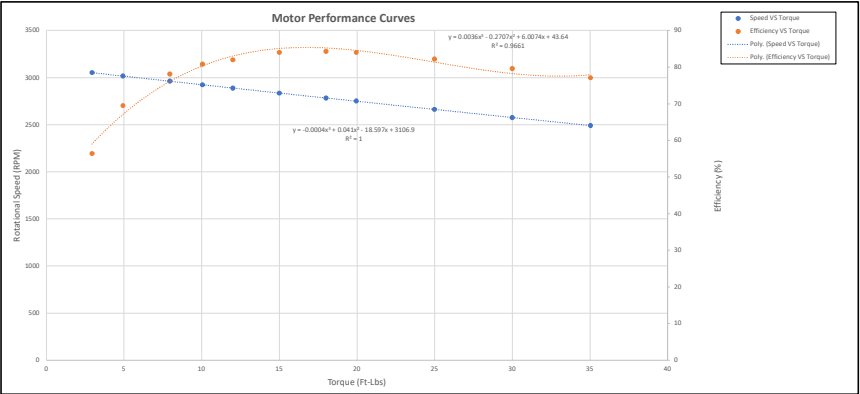
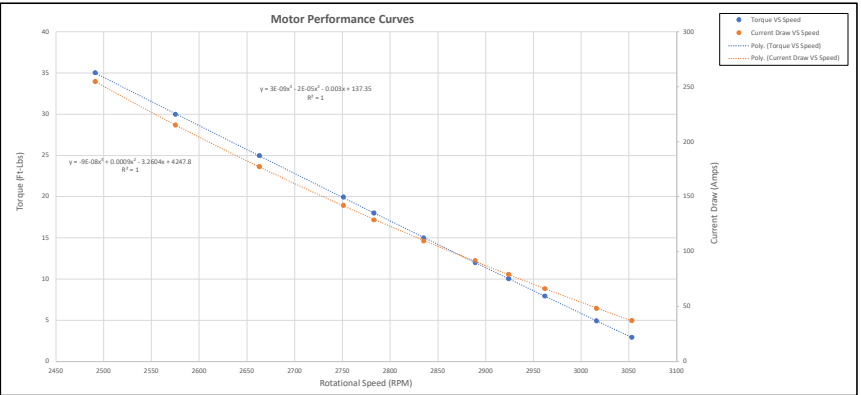
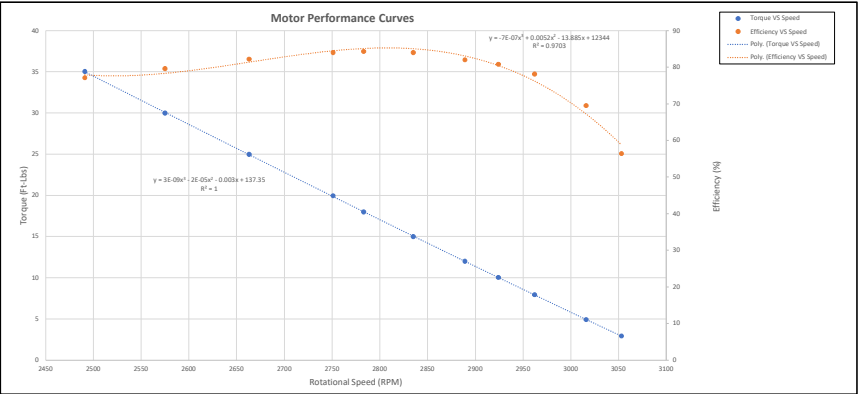
Engineering Performance Test Report
Performance Spec (PS) Number: 15
System Voltage (V): 72 - (1 * 0.030)

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 (%)
2.98	3205	71.2	27.2	25.4	8.11	35.31	2.87	1.82	63.3
4.98	3156	70.9	40.1	25.4	8.08	48.18	4.06	2.99	73.3
8.04	3100	70.3	59.1	25.4	8.08	67.18	5.84	4.75	81.3
10.02	3070	69.9	72.5	25.5	8.11	80.61	7.06	5.85	82.9
12.04	3034	69.5	85.8	25.5	8.11	93.91	8.27	6.96	84.2
15.01	2990	68.8	109.5	25.5	8.07	114.57	10.1	8.54	84.6
17.99	2936	68.2	127.7	25.5	8.11	135.81	11.95	10.06	84.2
20.01	2907	67.6	143.1	25.6	8.11	151.21	13.26	11.08	83.6
24.96	2816	66.5	181.2	25.6	8.15	189.35	16.42	13.39	81.5
30.02	2692	64.9	222.7	25.7	8.12	235.82	20.1	15.38	76.5



Engineering Performance Test Report
Performance Spec (PS) Number: 15
System Voltage [V]: 72 - (1 * 0.030)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amper)	Field Voltage (Volts)	Field Current (Amper)	Total Current (Amper)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
2.93	3053	71.3	26.9	33	10.24	37.14	3.02	1.7	56.4
4.92	3036	70.9	38	32.9	10.23	48.23	4.06	2.83	69.5
7.94	2962	70.4	56	32.8	10.28	66.36	5.74	4.48	78.1
10.04	2924	69.9	69	32.7	10.19	79.19	6.92	5.59	80.8
12	2889	69.6	81.5	32.5	10.25	91.75	8.05	6.6	82
14.99	2835	69	93.3	32.4	10.32	109.62	9.64	8.09	84
18	2783	68.4	118.6	32.3	10.2	128.8	11.32	9.54	84.3
19.95	2751	68	131.8	32.1	10.16	141.96	12.45	10.45	84
24.98	2663	66.9	167	31.9	10.3	177.3	15.41	12.67	82.2
28.99	2575	65.6	205	31.8	10.18	215.18	18.47	14.7	79.6
35.03	2491	64.4	244.5	31.6	10.24	254.74	21.54	16.61	77.1

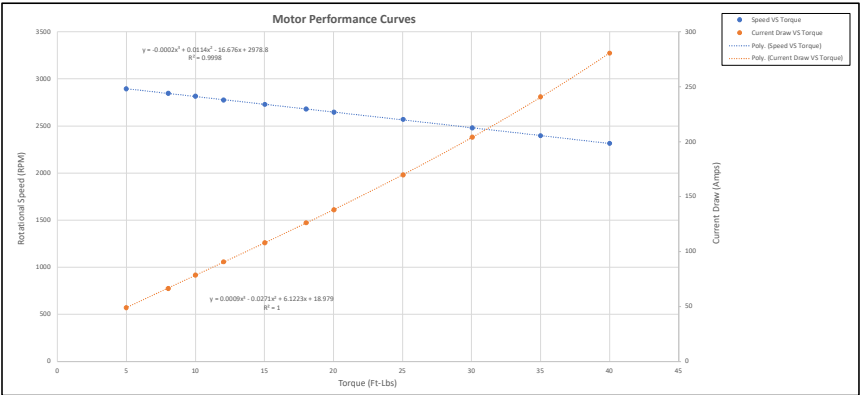
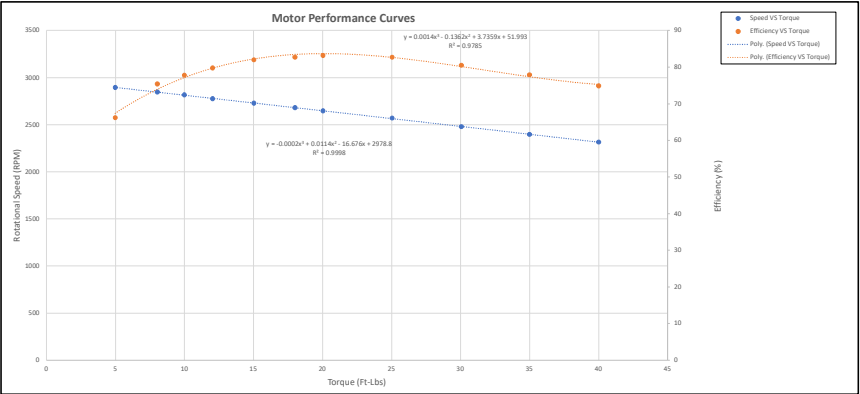
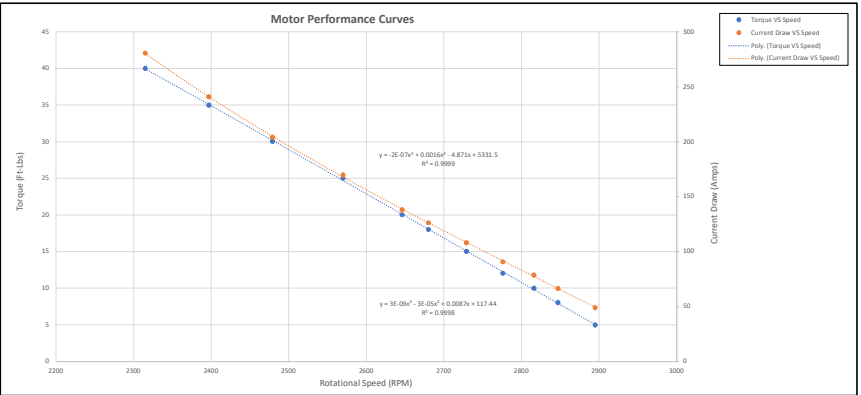
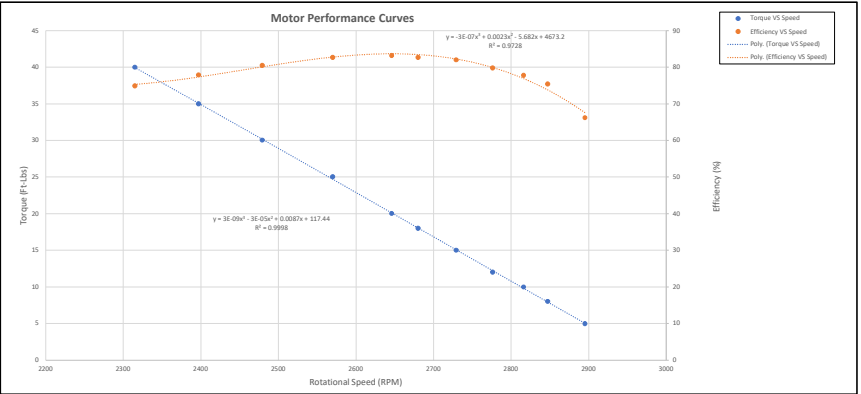


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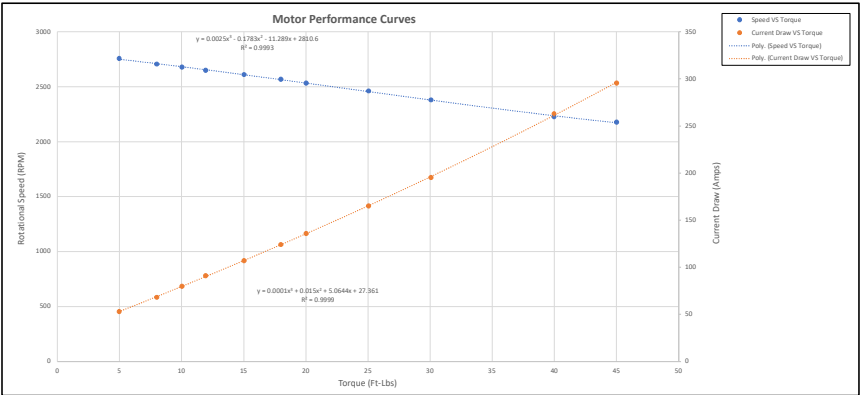
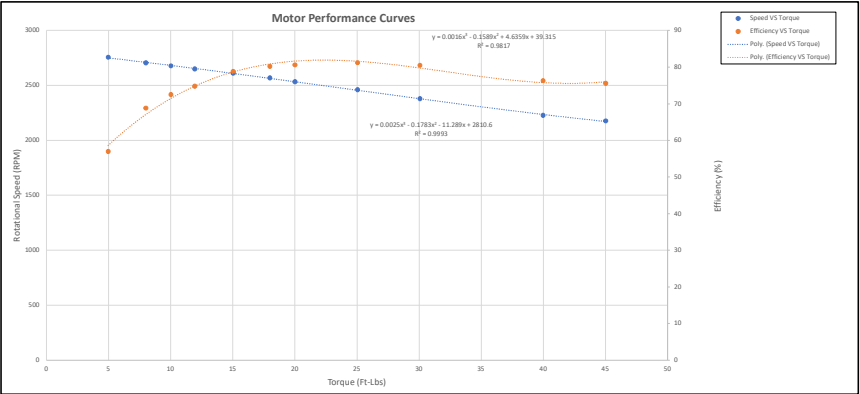
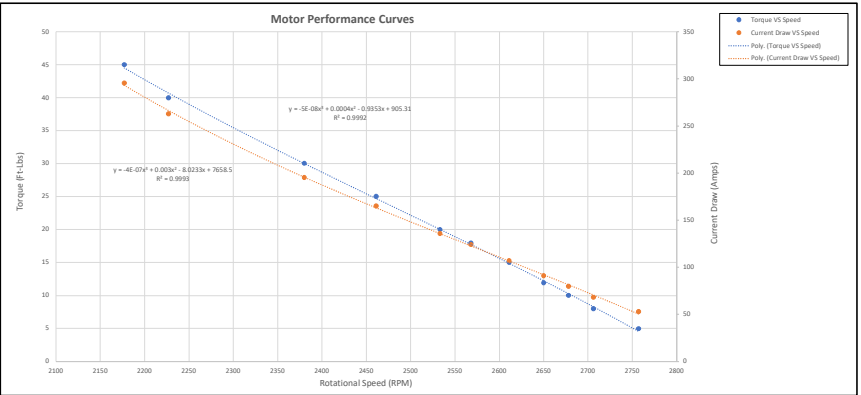
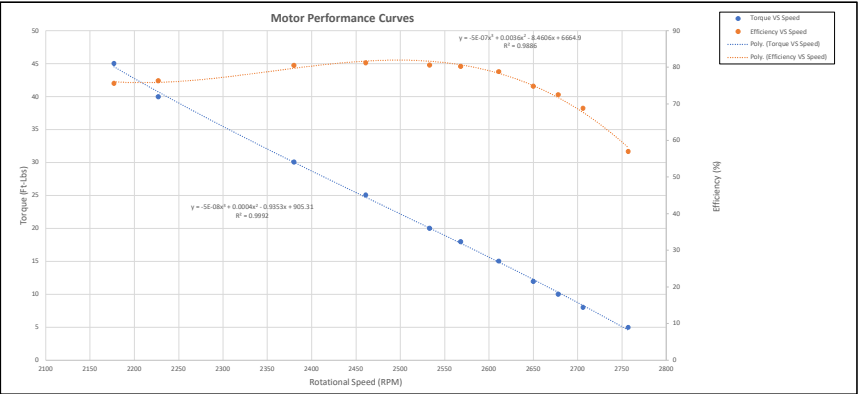
System Voltage (V): 72 - (1 * 0.030)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amper)	Field Voltage (Volts)	Field Current (Amper)	Total Current (Amper)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
4.98	2895	70.9	36.7	40.3	12.26	48.96	4.15	2.75	66.2
8.03	2847	70.4	34.2	40.1	12.26	46.46	5.78	4.35	75.4
9.99	2816	70	66.3	39.9	12.3	78.6	6.88	5.35	77.8
12.03	2776	69.7	78.4	39.6	12.25	90.65	7.97	6.36	79.8
15.02	2729	69.1	95.7	39.4	12.29	107.99	9.52	7.81	82
18.01	2680	68.6	113.9	39.2	12.28	126.18	11.11	9.19	82.7
20.03	2646	68.2	125.8	38.9	12.24	138.04	12.13	10.09	83.2
25.04	2570	67.2	157.5	38.6	12.27	169.77	14.82	12.25	82.7
30.05	2479	66.1	191.8	38.3	12.21	204.01	17.63	14.18	80.5
34.99	2392	64.9	234.4	38	12.32	240.77	20.51	15.97	77.8
40	2315	63.7	268.3	37.7	12.28	280.58	23.54	17.64	74.9



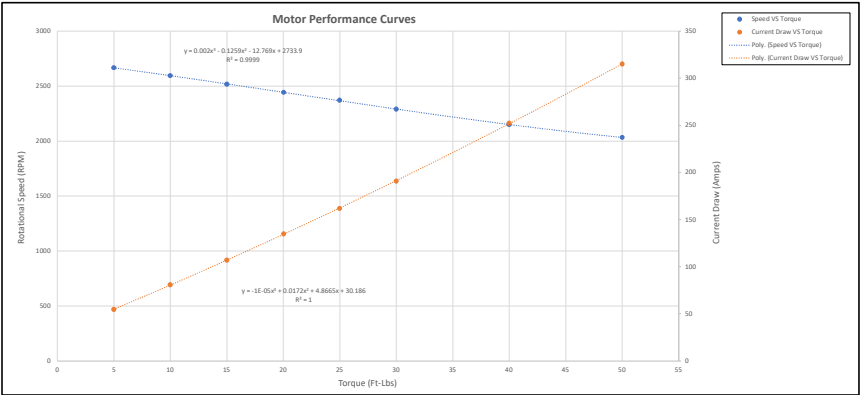
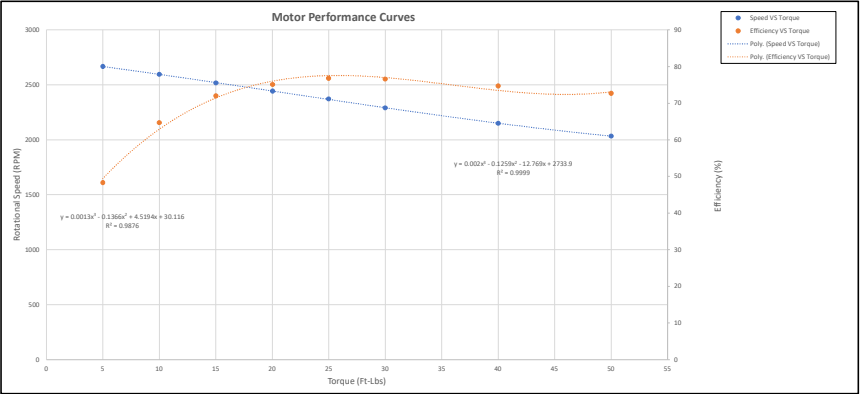
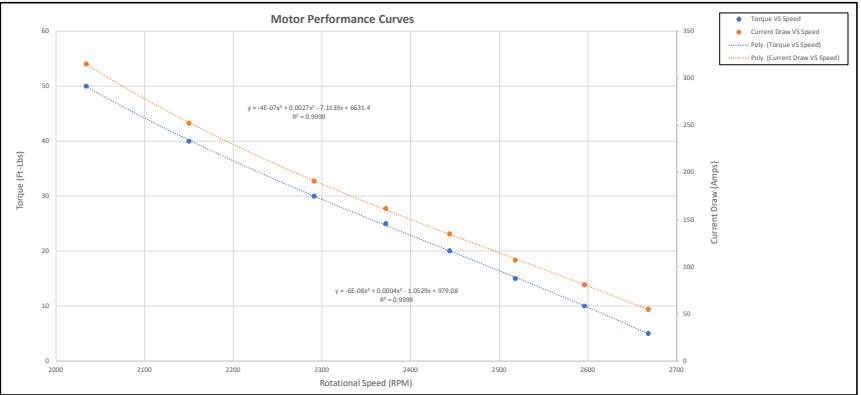
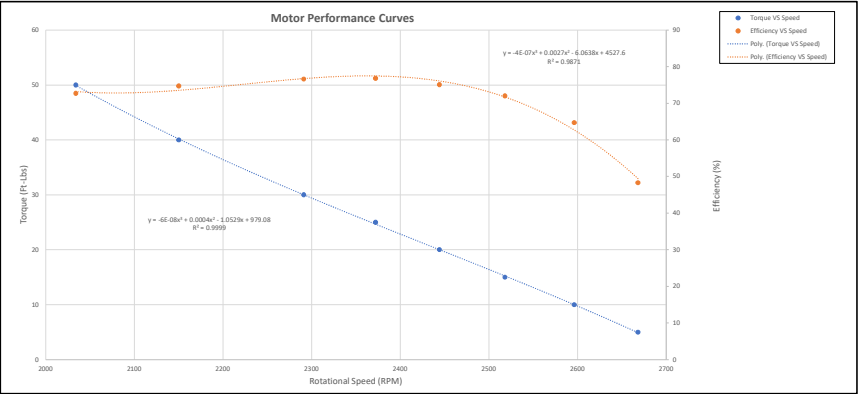
Engineering Performance Test Report
Performance Spec (PS) Number: 15
System Voltage (V): 72 - (1 * 0.030)

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 (%)
4.97	2757	71	37.6	49	15.32	52.92	4.58	2.61	57
8	2706	70.5	33.9	48.5	15.22	49.17	5.99	4.12	68.8
10.02	2678	70.1	64.6	47.9	15.29	79.89	7.05	5.11	72.5
11.93	2650	69.8	75.7	47.2	15.33	91.03	8.04	6.02	74.8
15.02	2611	69.3	91.8	46.6	15.28	107.08	9.48	7.46	78.8
17.98	2568	68.7	108.8	45.9	15.31	124.11	10.97	8.79	80.2
20.01	2533	68.4	120.6	45.2	15.24	135.84	11.98	9.65	80.6
25.04	2461	67.4	149.8	44.4	15.36	165.16	14.45	11.73	81.2
30.06	2380	66.5	179.9	43.6	15.34	195.24	16.93	13.62	80.5
39.97	2227	64.3	247.5	42.8	15.38	262.88	22.22	16.95	76.3
45.01	2177	63.4	280.4	42	15.26	295.66	24.68	18.66	75.6



Engineering Performance Test Report
Performance Spec (PS) Number: 15
System Voltage (V): 72 - (1 * 0.030)

Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amper)	Field Voltage (Volts)	Field Current (Amper)	Total Current (Amper)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
4.99	2668	71	36.3	72.8	18.36	54.66	5.24	2.53	48.3
9.98	2596	70.4	63.5	71.9	18.77	80.77	7.63	4.94	64.7
15	2518	69.4	88.7	70.8	18.36	107.06	9.99	7.19	71
20.02	2444	68.5	116.5	69.8	18.35	134.85	12.41	9.32	75.1
24.98	2372	67.6	143.6	68.7	18.25	161.85	14.69	11.28	76.8
29.99	2291	66.6	172.7	67.6	18.26	190.36	17.08	13.08	76.6
39.99	2150	64.7	234.1	66.5	18.2	252.3	21.92	16.37	74.7
50	2034	62.9	296.8	65.3	18.41	315.21	26.62	19.36	72.7

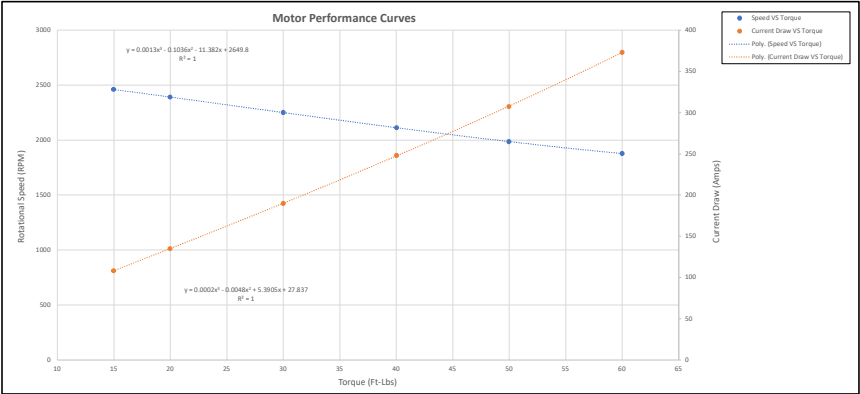
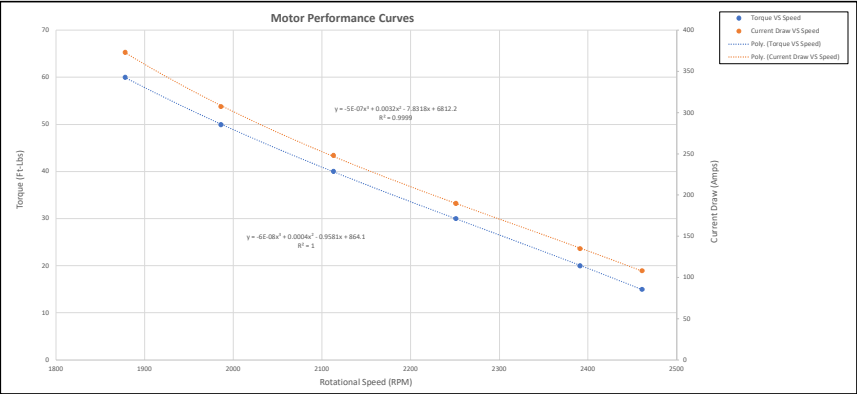
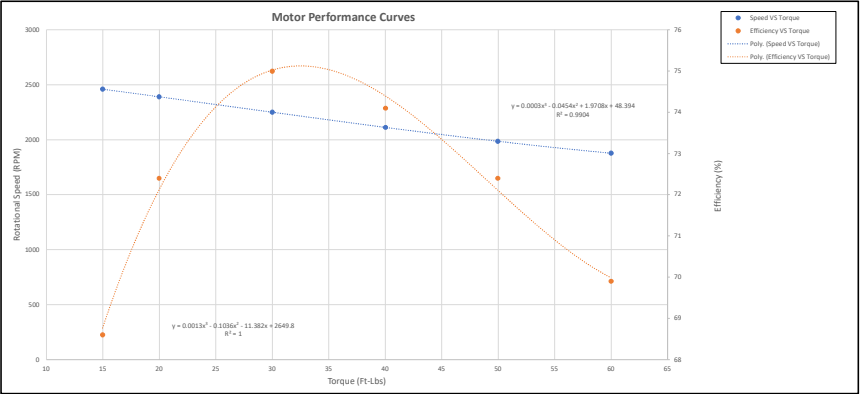


Engineering Performance Test Report

Performance Spec (PS) Number: 15

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 (%)
14.97	2461	69.4	87.8	75.8	20.35	108.15	10.23	7.02	68.6
19.97	2391	68.5	114.5	74.1	20.42	134.92	12.55	9.09	72.4
29.99	2321	66.8	169.4	72.4	20.38	189.78	17.14	12.85	75
40.02	2113	64.9	227.7	70.6	20.36	248.06	21.73	16.1	74.1
49.96	1986	63	286.8	68.7	20.5	307.3	26.11	18.9	72.4
59.99	1878	61.1	353	66.9	20.18	373.18	30.7	21.45	69.9



Engineering Performance Test Report
Performance Spec (PS) Number: 15
System Voltage (V): 72 - (1 * 0.030)

Torque (Ft-Lbs)	Speed (RPM)	Armature Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
59.93	1807	61.7	328.8	81.8	25.65	354.45	30.02	20.62	68.7
70.08	1795	59.7	389.6	77.8	25.38	414.98	33.82	22.75	67.3
80	1611	57.9	454.7	73.8	25.52	480.22	37.83	24.53	64.5

