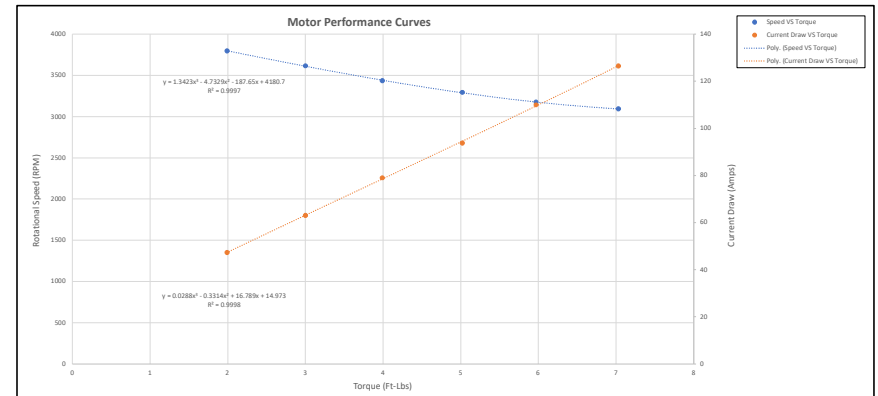
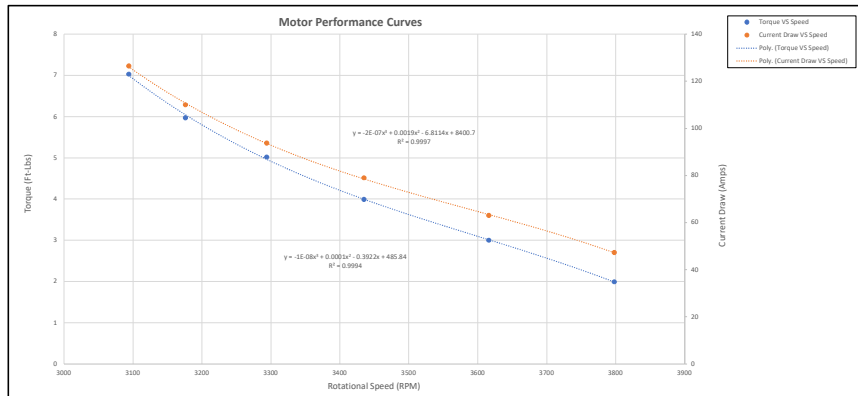
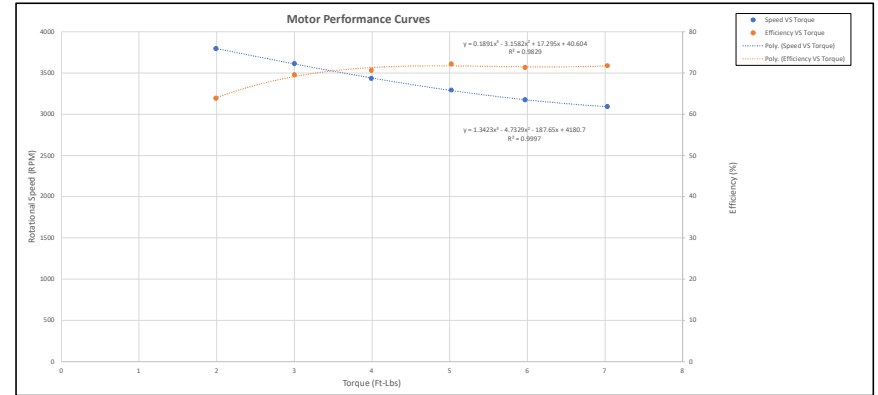
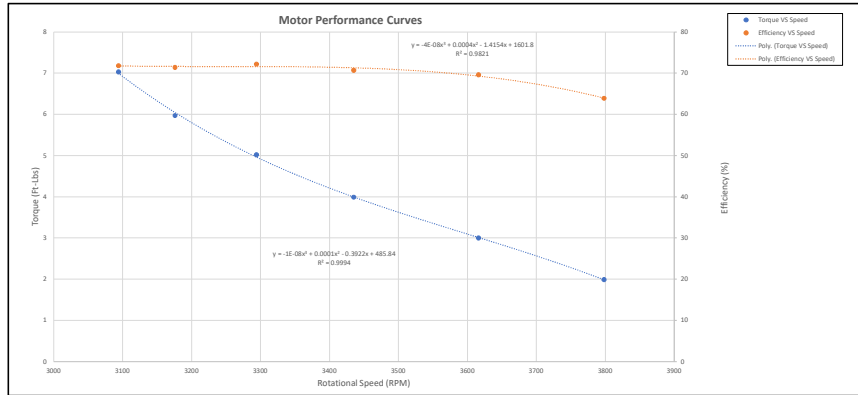


Engineering Performance Test Report

Performance Spec (PS) Number: 14

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	3798	35.3	47.3	3.1	1.92	49.22	2.25	1.44	63.9
3	3616	35.1	63	3.1	1.95	54.95	2.97	2.07	69.6
3.99	3455	34.8	79	3.1	1.98	60.88	3.69	2.61	70.7
5.02	3294	34.6	93.8	3.1	1.89	95.69	4.35	3.15	72.2
5.97	3176	34.3	110	3.1	1.92	111.92	5.06	3.61	71.4
7.03	3094	34	126.5	3.1	1.94	128.44	5.77	4.14	71.8

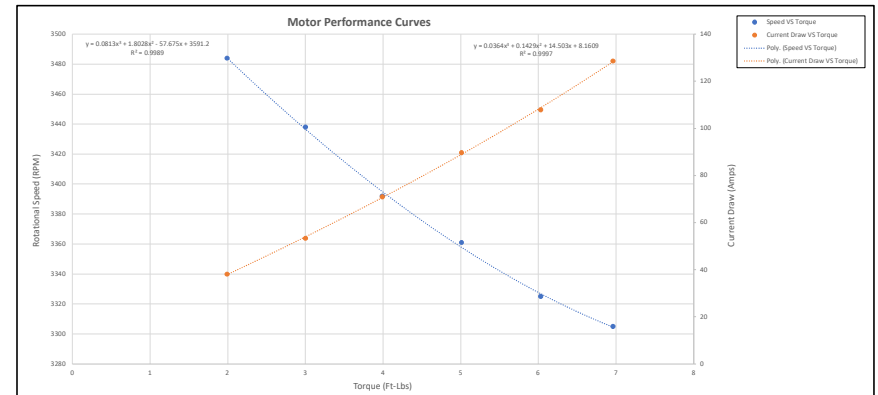
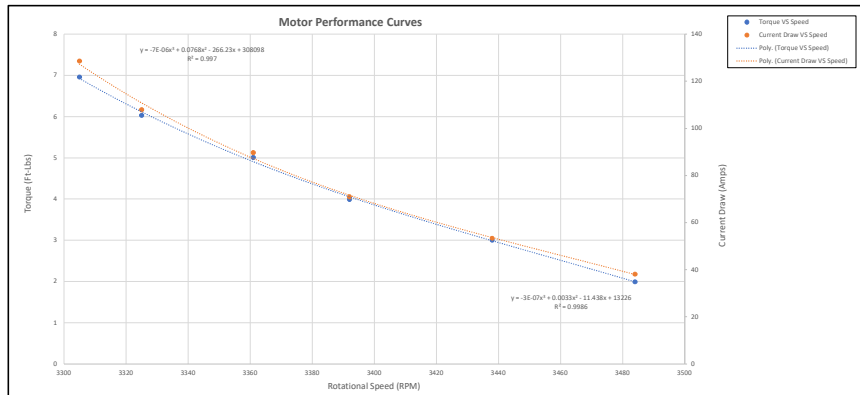
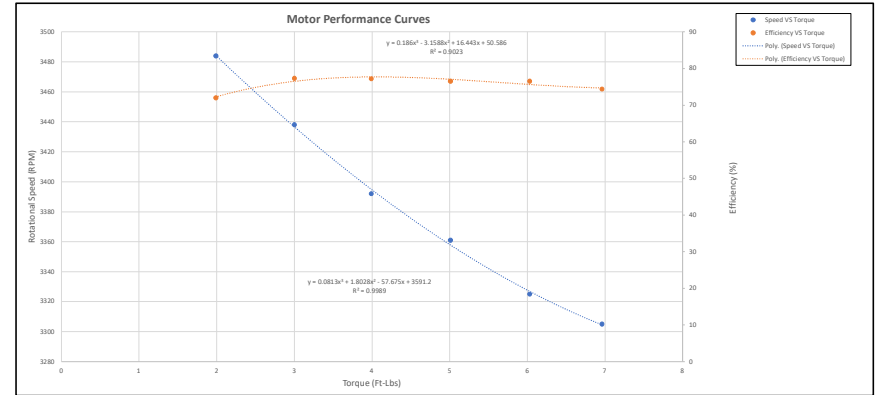
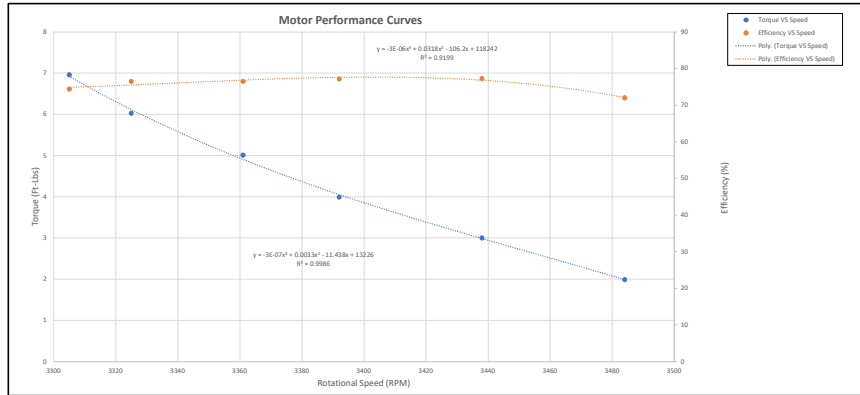


Engineering Performance Test Report

Performance Spec (PS) Number: 14

System Voltage (V): 36 - (I * 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	3484	35.5	38.1	4.7	2.93	41.03	1.83	1.32	72
3	3438	35.3	33.3	4.8	2.94	36.24	2.54	1.96	77.3
3.99	3392	35	30.9	4.8	2.94	33.84	3.34	2.58	77.2
5.01	3361	34.7	29.7	4.8	2.95	32.65	4.19	3.21	76.5
6.03	3325	34.4	27.9	4.8	2.95	31.85	4.99	3.82	76.5
6.95	3295	34	26.6	4.8	2.9	31.5	5.99	4.38	74.4

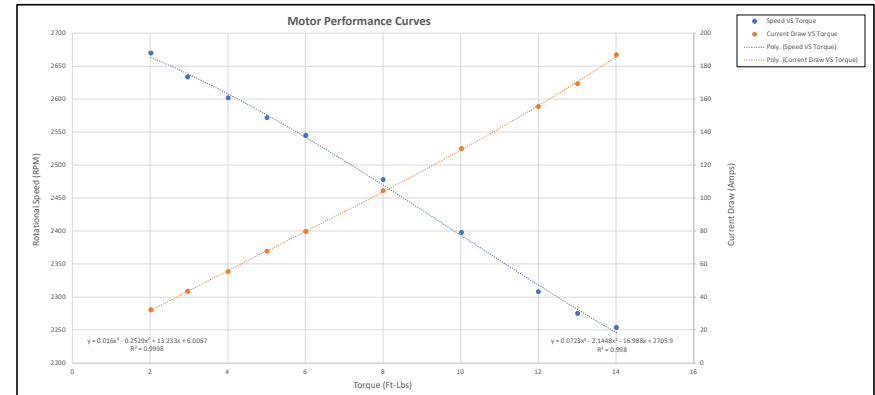
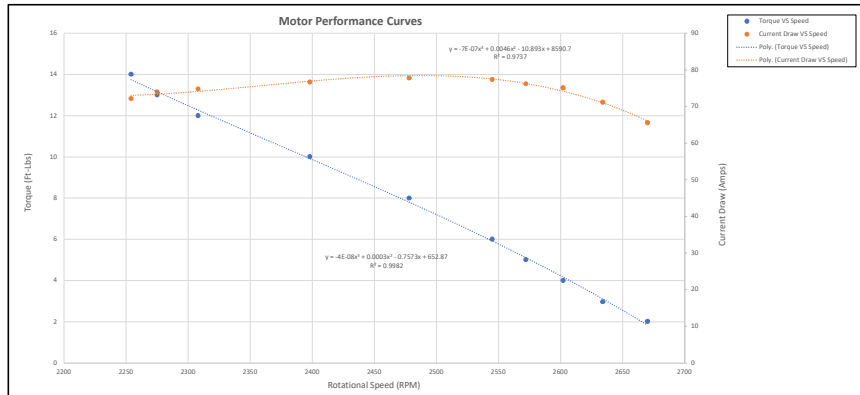
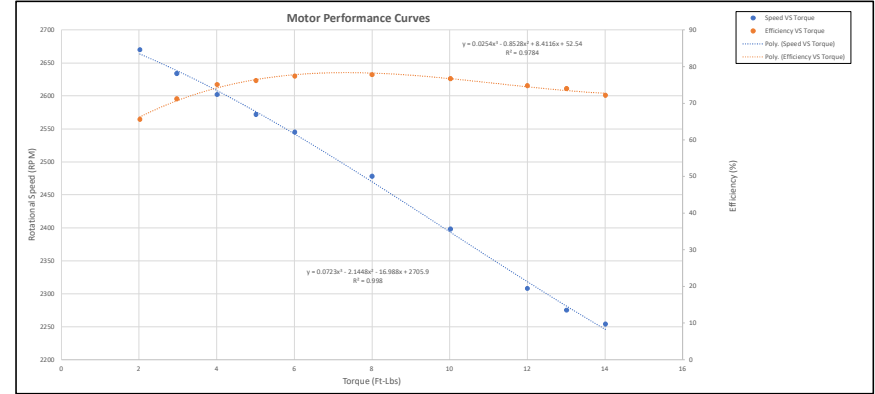


Engineering Performance Test Report

Performance Spec (PS) Number: 14

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 (%)
2.02	2670	35.5	32.2	6.2	3.95	36.15	1.56	1.03	65.6
2.97	2634	35.4	33.5	6.2	3.91	37.41	2.09	1.49	71.2
4.01	2602	35.2	35.4	6.2	3.91	39.31	2.65	1.99	75.1
5.01	2572	35	37.8	6.2	3.95	41.75	3.22	2.45	76.2
6.01	2545	34.9	39.8	6.3	3.98	43.78	3.76	2.91	77.4
8	2478	34.4	104.5	6.3	3.93	108.43	4.85	3.77	77.6
10.02	2398	34	130.1	6.3	3.99	134.09	5.96	4.57	76.7
12	2308	33.7	155.5	6.3	3.94	159.44	7.05	5.27	74.8
13.01	2275	33.4	169.4	6.3	3.99	173.39	7.62	5.64	74
14.01	2254	33.1	186.9	6.3	3.95	190.85	8.33	6.02	72.2

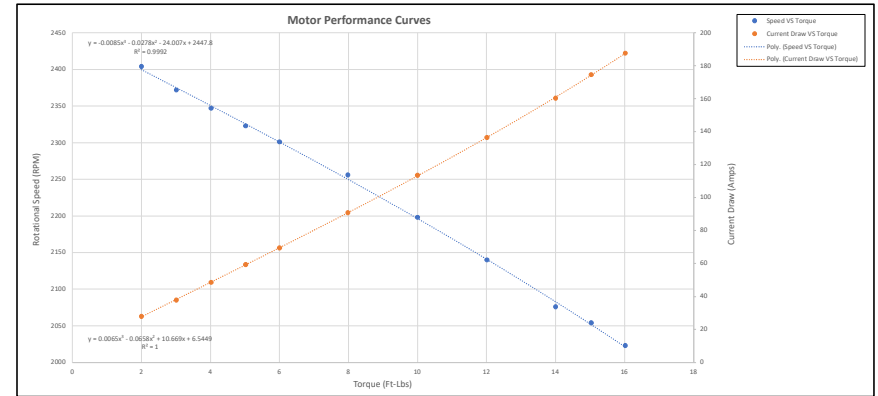
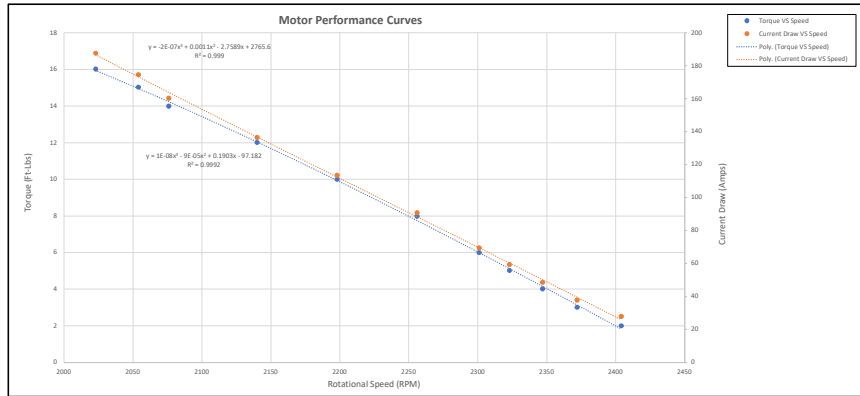
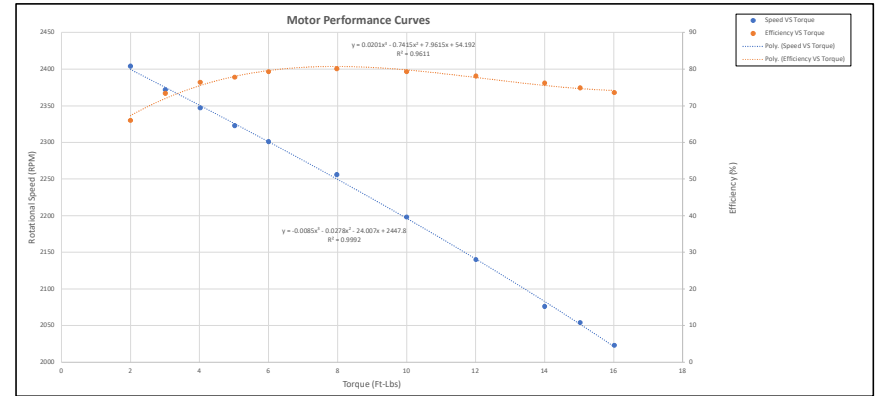
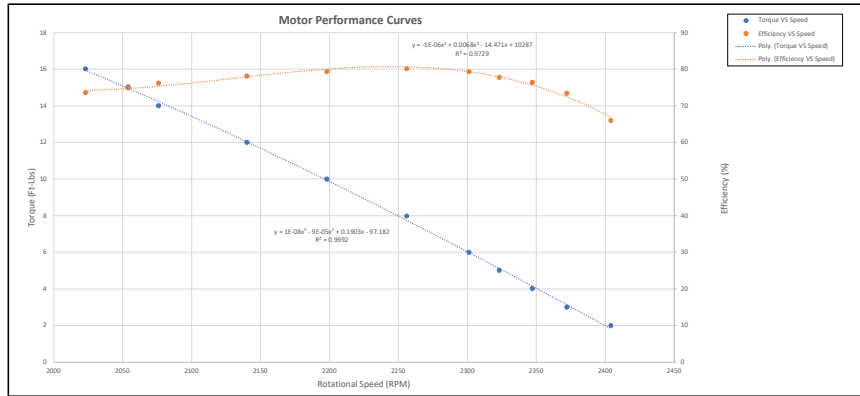


Engineering Performance Test Report

Performance Spec (PS) Number: 14

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	2404	35.6	28	8	4.94	32.94	1.39	0.92	66
3.01	2372	35.5	27.9	8	4.95	42.85	1.85	1.36	73.4
4.02	2347	35.3	48.6	8	4.97	53.57	2.35	1.8	76.4
5.02	2323	35.2	59.4	8	4.96	64.36	2.85	2.22	77.8
6	2301	35	69.5	8	4.96	74.46	3.31	2.63	79.3
7.98	2256	34.7	90.9	8	4.97	95.87	4.28	3.43	80.1
10	2198	34.3	113.6	8	4.99	118.59	5.28	4.19	79.3
12.01	2140	33.9	136.5	8	4.97	141.47	6.26	4.89	78.1
14	2076	33.6	160.3	8.1	4.91	165.21	7.26	5.53	76.2
15.03	2054	33.3	174.6	8.1	4.95	179.55	7.85	5.88	74.9
16.02	2023	33.1	187.6	8.1	4.99	192.59	8.38	6.17	73.6

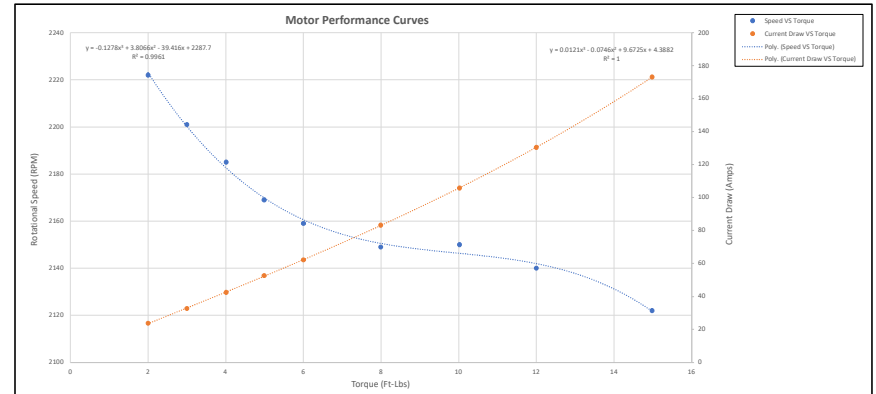
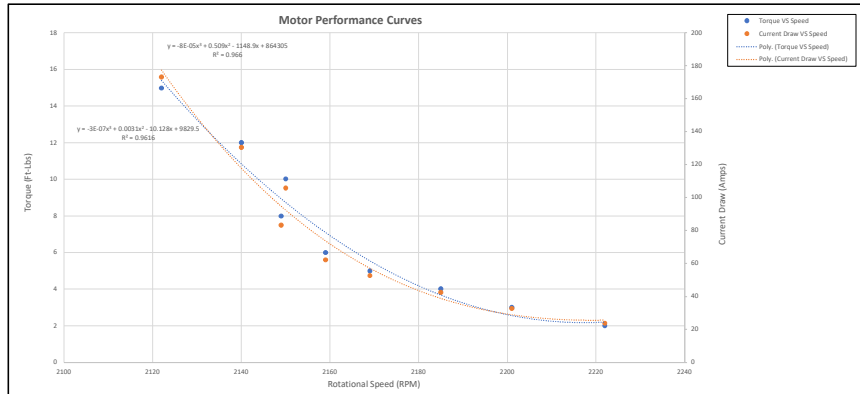
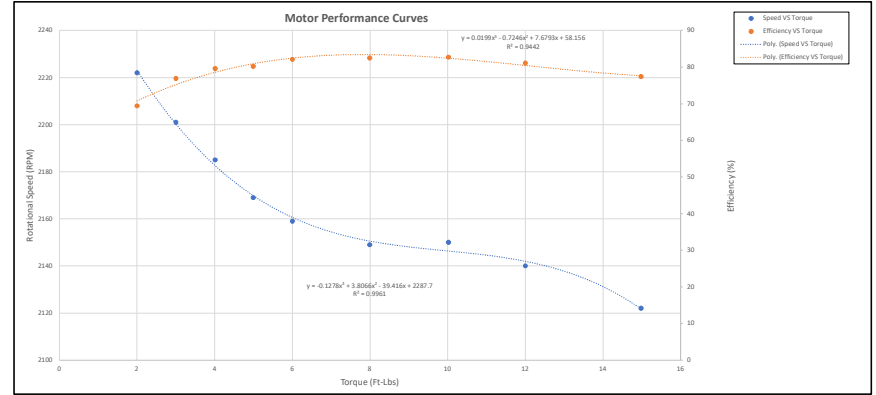
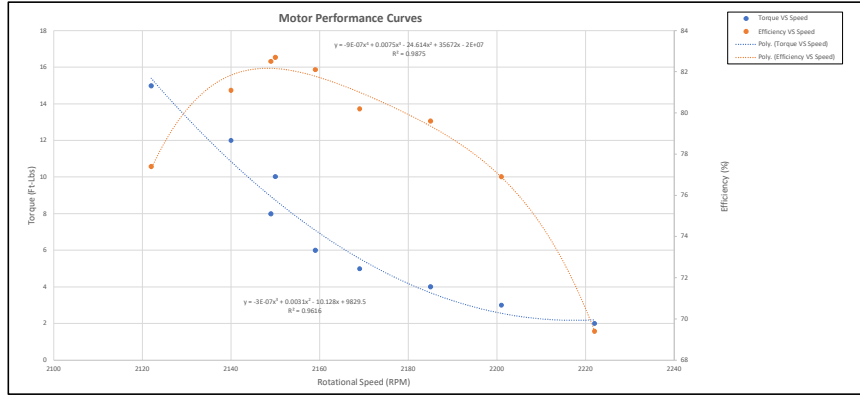


Engineering Performance Test Report

Performance Spec (PS) Number: 14

System Voltage (V): 36 - (V ± 0.015)

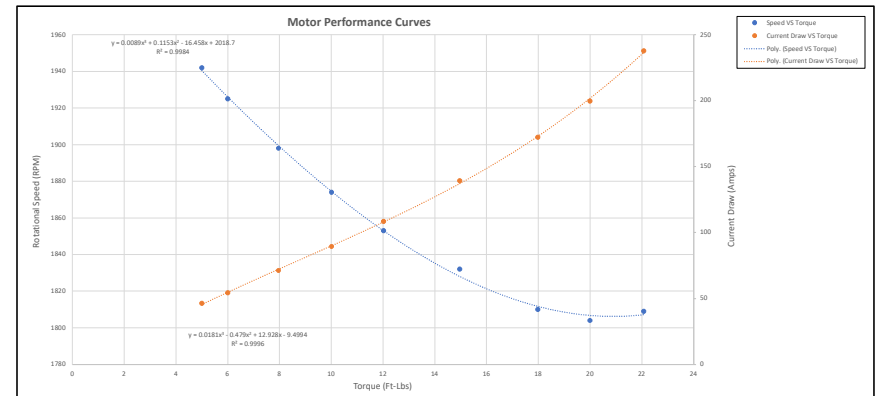
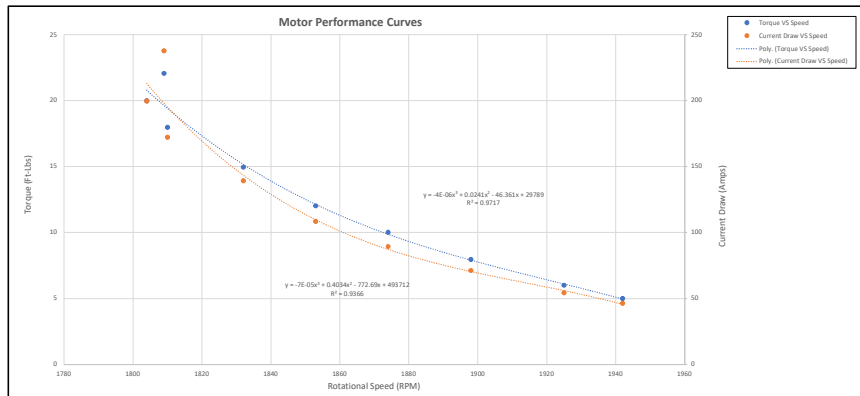
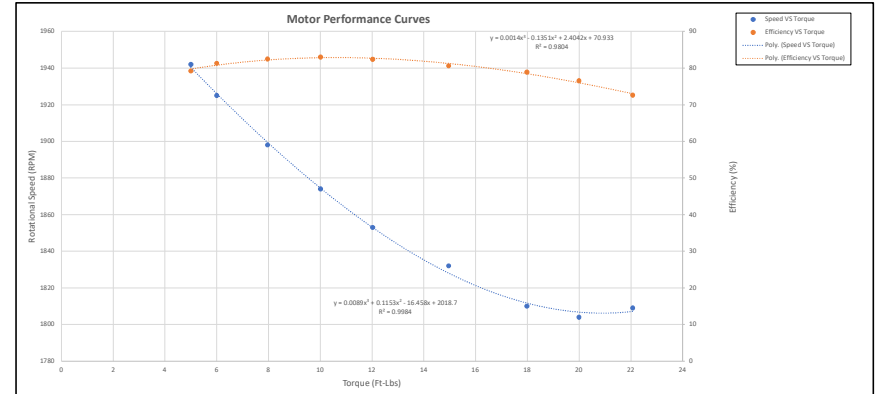
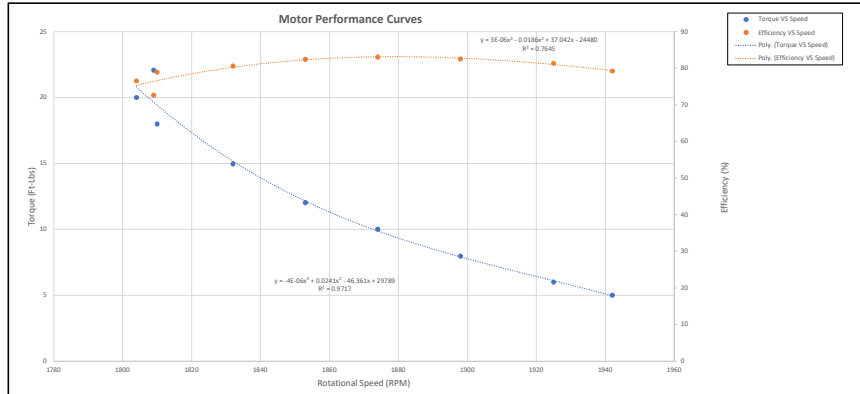
Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
2	2222	35.7	23.8	9.7	5.99	29.79	1.22	0.84	69.4
3	2201	35.5	22.7	9.7	5.99	28.69	1.54	1.26	76.3
4.01	2185	35.4	22.5	9.8	5.97	48.47	2.09	1.67	79.6
4.99	2169	35.3	22.7	9.8	5.96	58.66	2.57	2.06	80.2
6	2159	35.1	22.2	9.8	5.95	68.15	3	2.46	82.1
7.99	2149	34.8	21.3	9.8	6.03	89.32	3.97	3.27	82.5
10.02	2150	34.4	19.8	9.8	5.99	111.79	4.96	4.1	82.7
12	2140	34	19.5	9.9	5.91	136.41	6.03	4.89	81.1
14.98	2122	33.3	17.1	9.9	5.96	179.06	7.81	6.05	77.4



Engineering Performance Test Report

Performance Spec (PS) Number: 14
 System Voltage (V): 36 - (I² * 0.015)

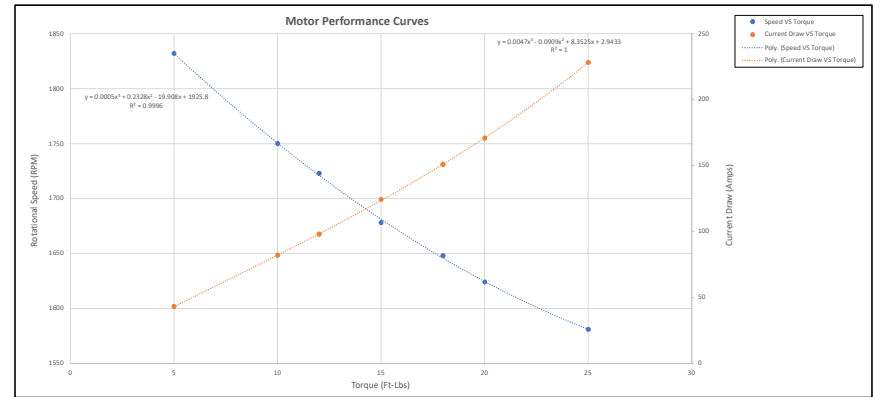
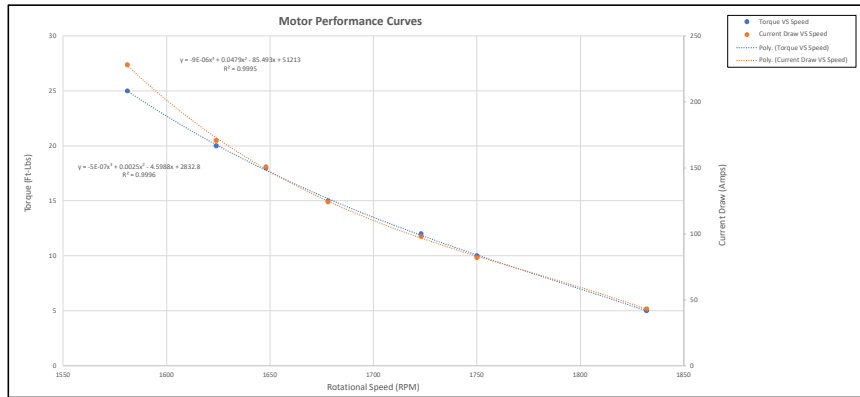
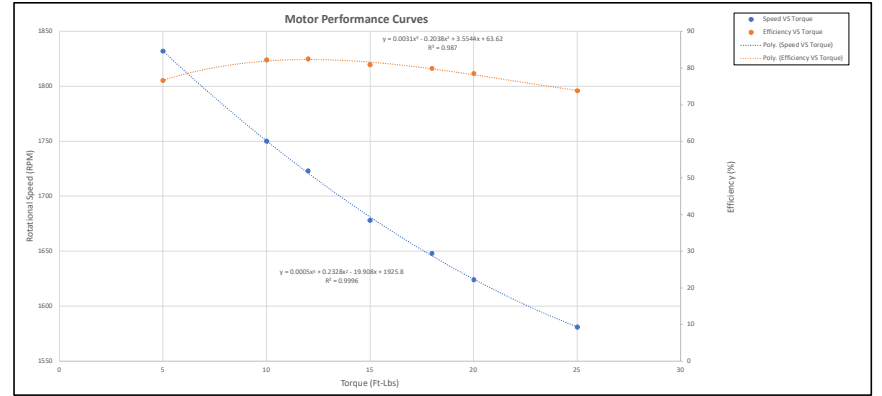
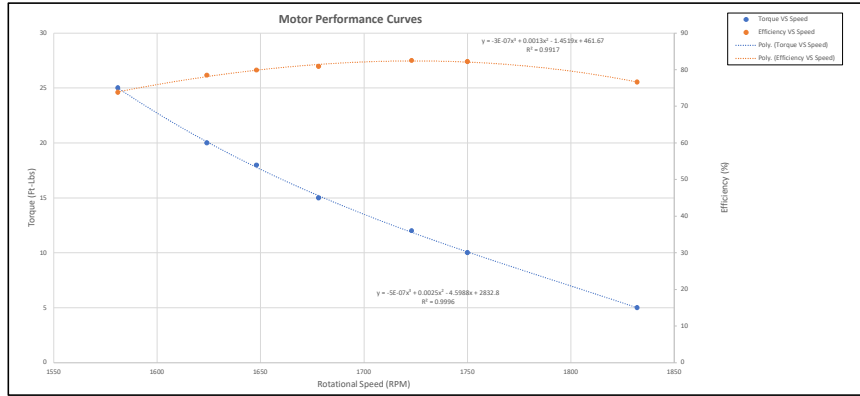
Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
5	1942	35.3	46.3	13.3	8.04	54.34	2.33	1.85	79.2
6	1925	35.2	54.3	13.3	8.02	62.32	2.71	2.2	81.3
7.96	1898	35	71.2	13.4	8.06	79.36	3.48	2.88	82.5
10.01	1874	34.7	89.4	13.4	8.03	97.43	4.3	3.57	83
12.02	1853	34.4	108.5	13.5	8.08	116.58	5.15	4.24	82.4
14.96	1832	33.9	139.3	13.5	8.01	147.31	6.48	5.22	80.6
17.98	1810	33.4	172.3	13.6	8.02	180.32	7.86	6.19	78.9
19.99	1804	33	199.7	13.6	8.12	207.82	8.97	6.87	76.5
22.07	1809	32.4	237.8	13.6	8.19	245.99	10.47	7.6	72.6



Engineering Performance Test Report

Performance Spec (PS) Number: 14
 System Voltage (V): 36 - (I² * 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	1832	35.4	43.1	17.4	9.98	53.08	2.28	1.74	76.6
10.01	1750	34.8	41.9	17.4	10.06	51.95	4.05	3.34	82.2
12.01	1723	34.6	98	17.5	10	108	4.78	3.94	82.5
15	1678	34.1	124.3	17.6	10.01	134.31	5.92	7.9	80.9
17.99	1648	33.7	150.9	17.6	10.16	161.06	7.67	5.64	79.9
20.01	1624	33.4	170.8	17.7	10	180.8	7.88	6.19	78.5
25.01	1581	32.5	228.2	17.8	10.23	238.43	10.20	7.53	73.8

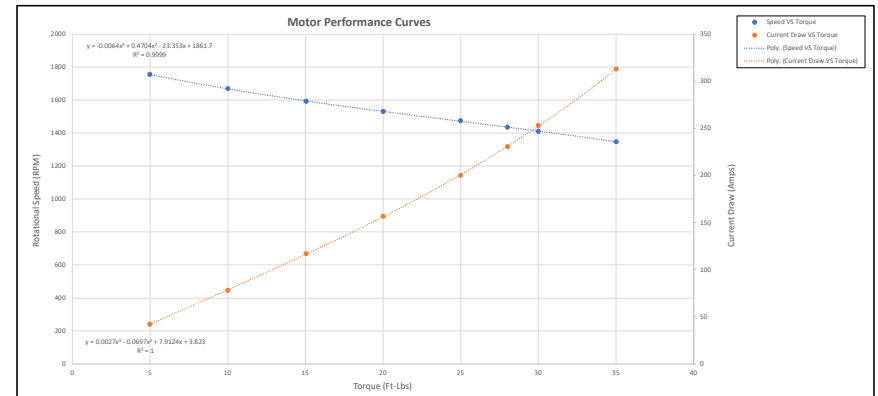
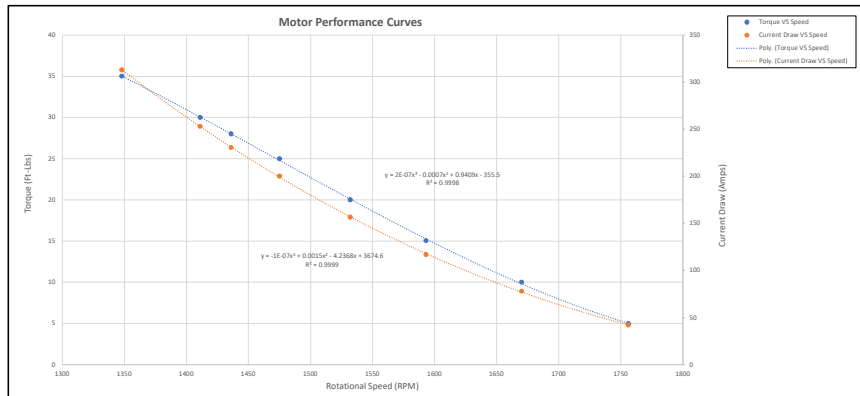
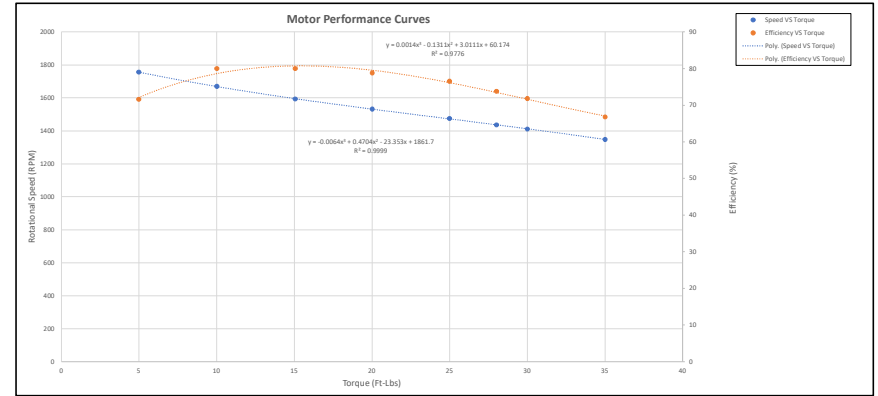
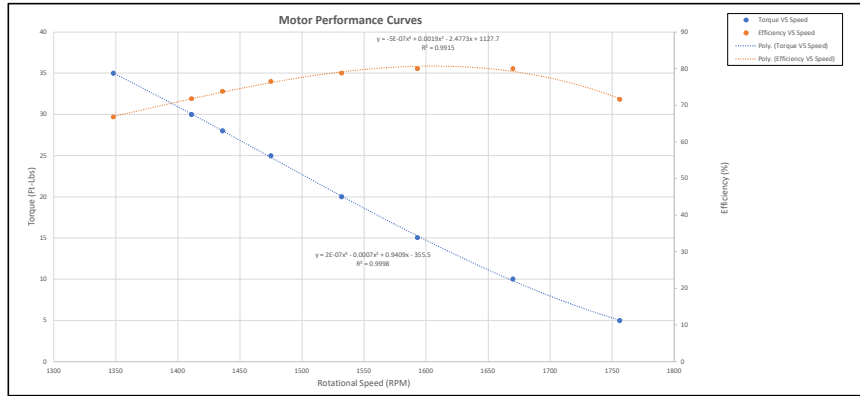


Engineering Performance Test Report

Performance Spec (PS) Number: 14

System Voltage (V): 36 - (I * 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 (%)
4.98	1756	35.4	42.1	20.5	12.05	54.15	2.33	1.67	71.6
10.01	1670	34.9	78	20.6	12.05	90.05	3.96	3.18	80
15.05	1593	34.3	117	20.7	12.1	129.1	5.71	4.56	80
20.01	1532	33.7	156.7	20.9	12.08	168.78	7.41	5.84	78.8
24.99	1475	32.9	200.2	21	12	212.2	9.18	7.02	76.5
28.01	1436	32.5	230.6	21.1	12.12	242.72	10.38	7.66	73.8
30	1411	32.1	253	21.2	12.22	265.22	11.24	8.06	71.8
35.01	1348	31.3	313	21.3	11.96	324.96	13.46	8.99	66.8

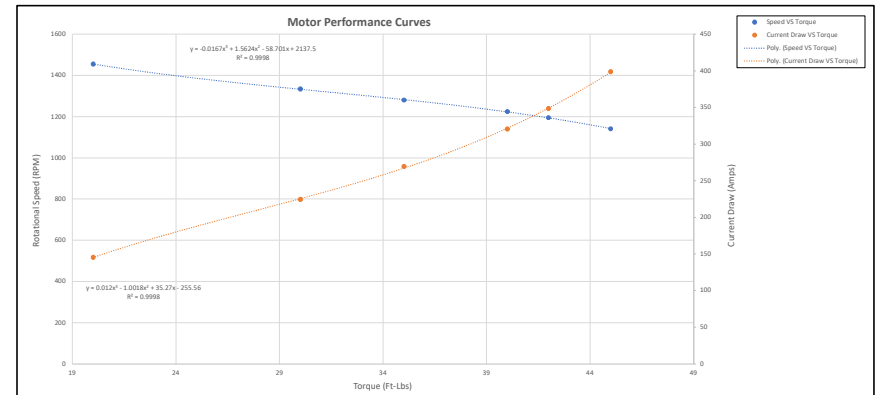
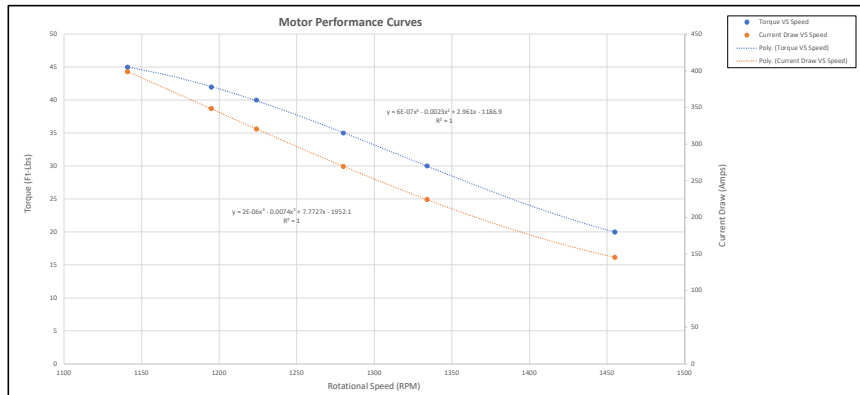
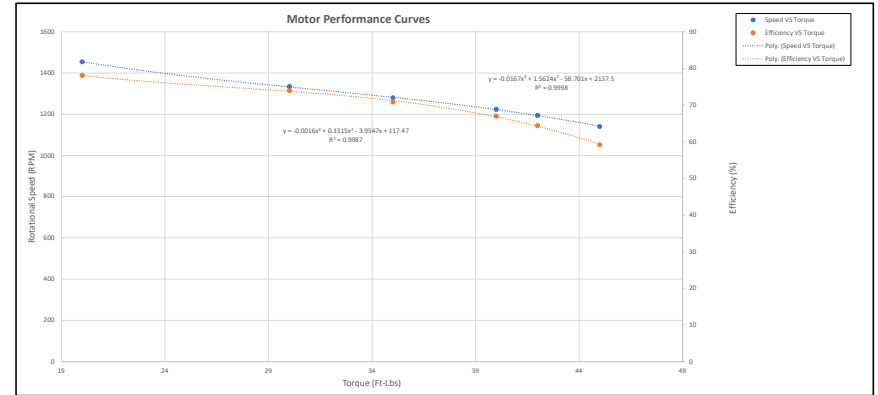
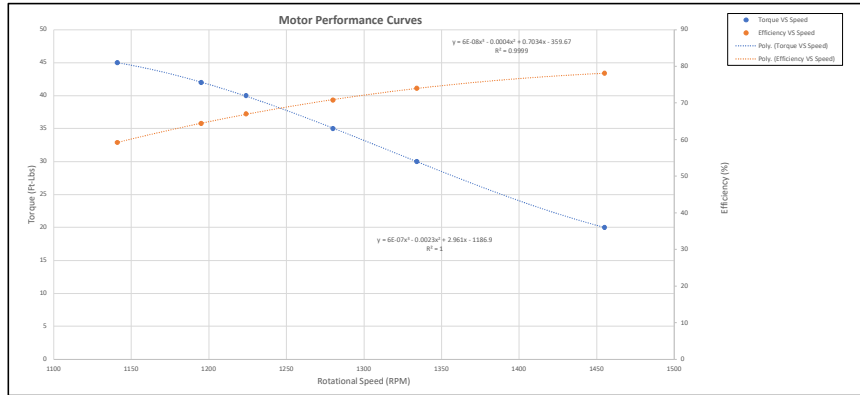


Engineering Performance Test Report

Performance Spec (PS) Number: 14

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 (%)
20	1455	33.8	145.4	24.8	15	160.4	7.09	5.54	78.1
30.01	1234	32.6	234.4	25	15.06	239.46	10.3	7.63	74
35.01	1180	31.9	269.4	25.3	15.1	284.5	12.04	8.53	70.8
40	1224	31.2	320.5	25.6	15.34	335.84	13.92	9.32	67
41.99	1195	30.7	348.5	25.9	14.99	363.49	14.85	9.56	64.4
44.99	1141	29.9	388.8	26.2	14.98	413.78	16.51	9.77	59.2

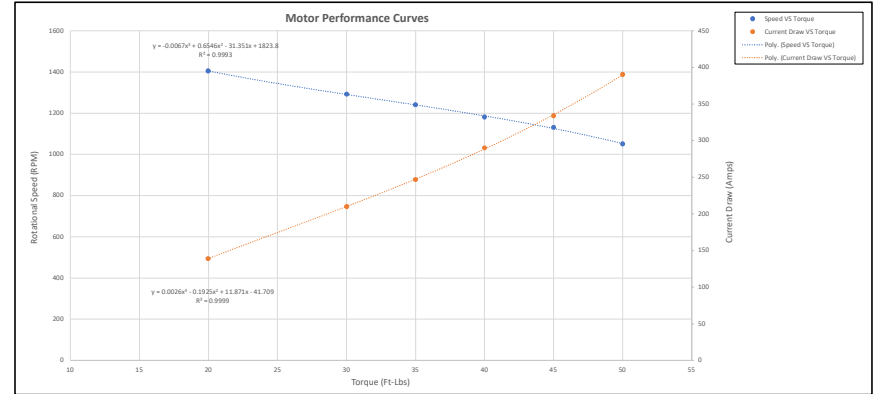
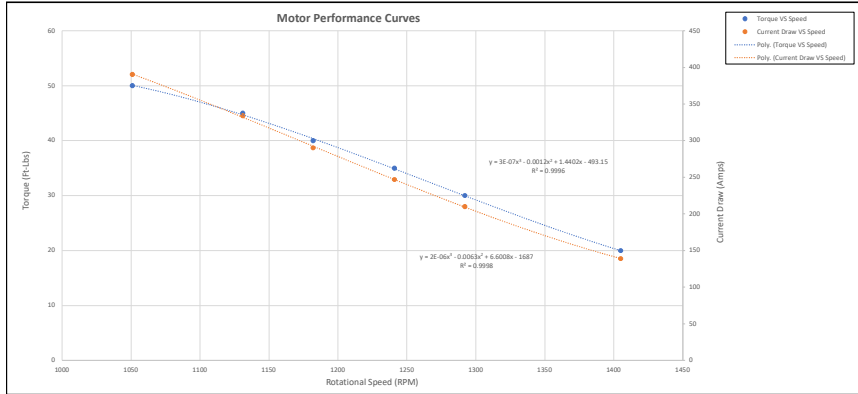
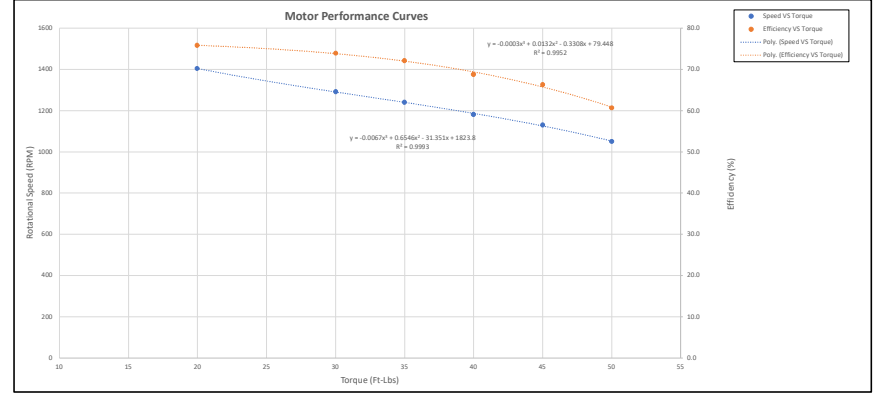
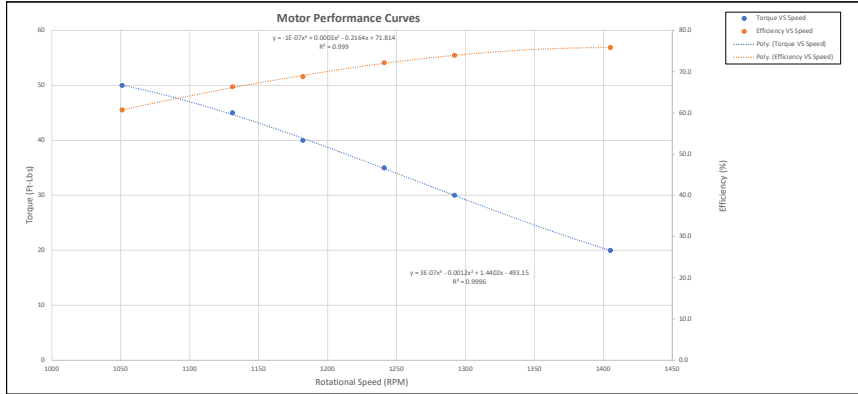


Engineering Performance Test Report

Performance Spec (PS) Number: 14

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 (%)
19.97	1405	33.9	139	29.9	18.09	157.09	7.04	5.34	75.9
30.01	1292	32.8	210	30.4	18.13	228.13	9.90	7.38	73.9
34.99	1241	32.3	247	30.8	18.04	257.04	11.46	8.27	72.2
39.99	1182	31.6	290.2	31.2	18.31	308.51	13.08	9	68.8
45	1131	30.9	334	31.7	18.16	352.16	14.61	9.69	66.3
50	1051	30	390.4	32.1	17.94	408.34	16.49	10.01	60.7

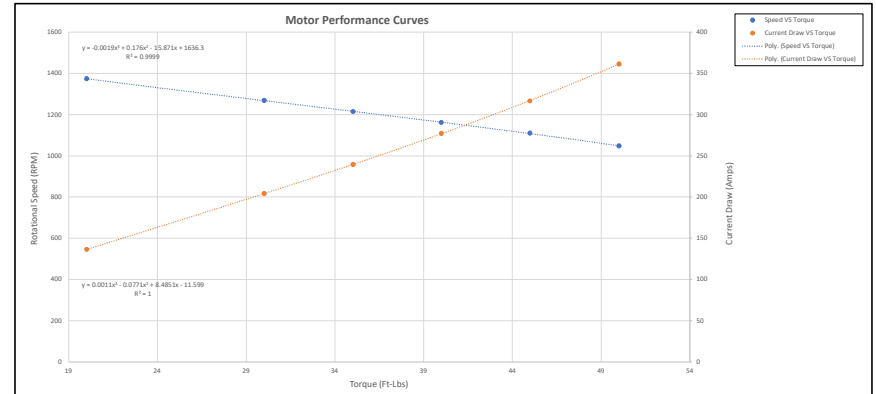
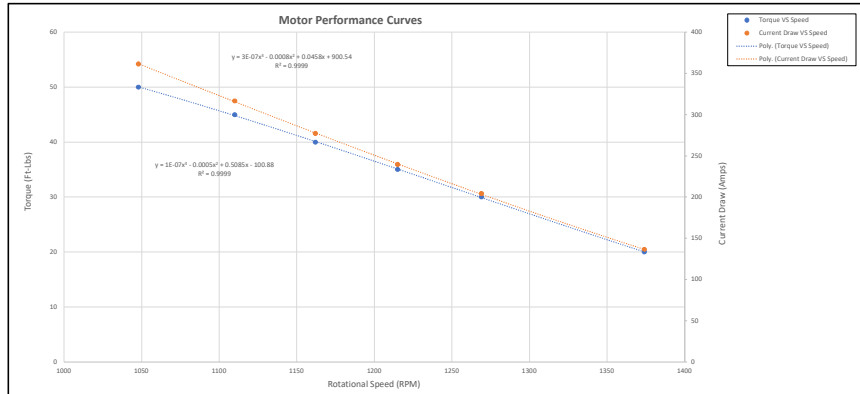
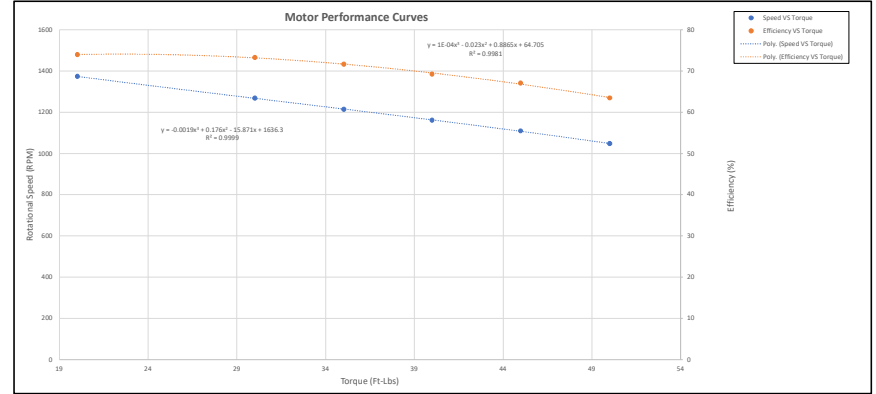
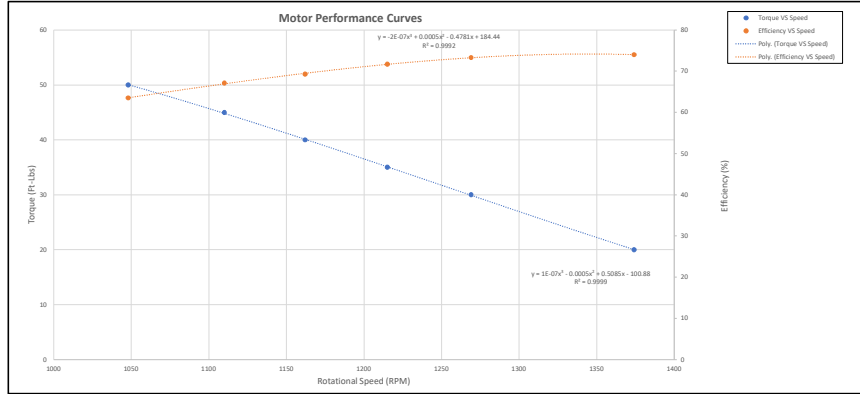


Engineering Performance Test Report

Performance Spec (PS) Number: 14

System Voltage (V): 36 (V ± 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 (%)
20.01	1374	34	136.4	32.4	20	156.4	7.08	5.23	74
30.01	1209	32.9	204.2	31	20.03	224.23	9.9	7.25	73.3
35.02	1155	32.4	239.4	33.6	20.12	259.52	11.3	8.1	71.7
39.99	1162	31.9	277.2	34.2	20.16	297.36	12.76	8.85	69.3
44.98	1110	31.2	316.7	34.8	20.07	336.77	14.18	9.51	67.1
50	1048	30.5	361.4	35.3	20.07	381.47	15.71	9.97	63.5

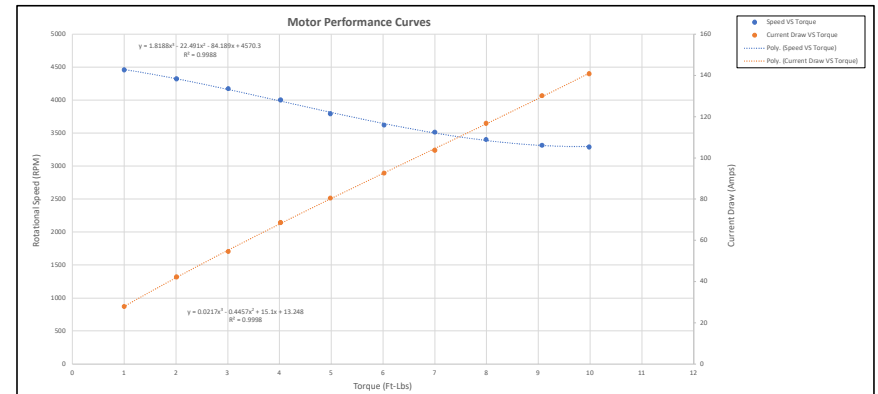
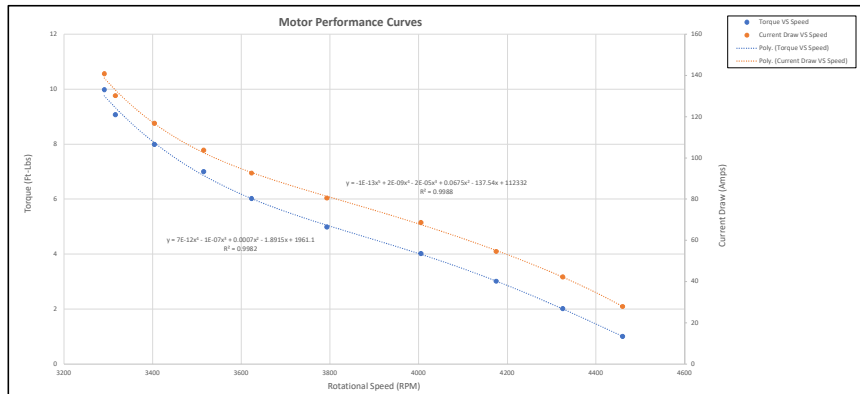
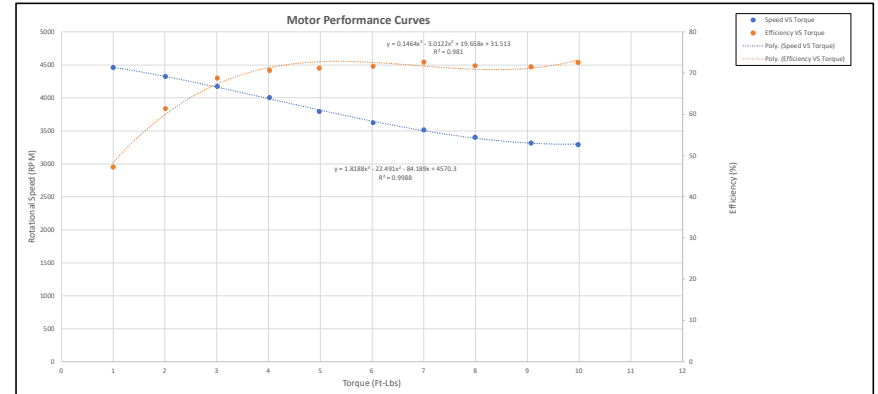
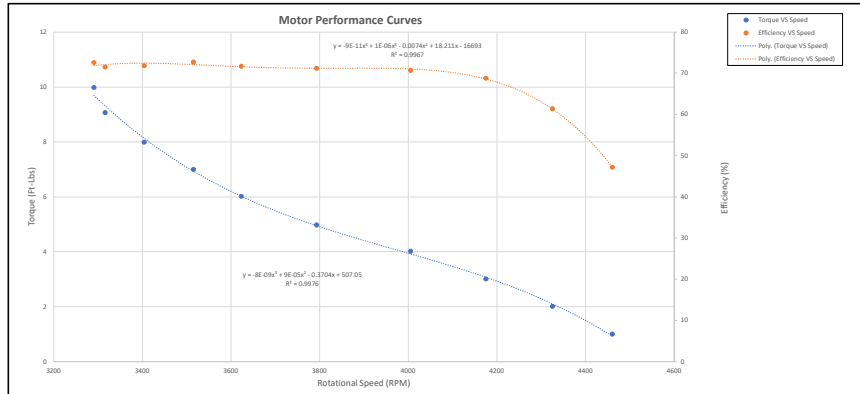


Engineering Performance Test Report

Performance Spec (PS) Number: 14

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	4460	47.6	27.9	4.2	2.92	30.82	1.8	0.85	47.2
2.01	4325	47.4	42.2	4.2	2.91	45.11	2.7	1.66	61.4
3.01	4175	47.2	54.6	4.2	2.93	57.53	3.48	2.39	68.6
4.02	4005	47	68.6	4.2	2.95	71.55	4.34	3.06	70.7
4.98	3793	46.7	80.5	4.2	2.96	83.46	5.05	3.6	71.2
6.02	3623	46.5	93.6	4.2	2.92	95.52	5.79	4.15	71.7
7	3515	46.2	103.7	4.2	2.93	106.63	6.45	4.69	72.7
7.99	3404	46	116.8	4.3	2.93	119.73	7.22	5.18	71.8
9.07	3316	45.8	130.2	4.3	2.91	133.11	8.02	5.73	71.5
9.98	3251	45.6	140.8	4.3	2.99	143.79	8.62	6.26	72.6

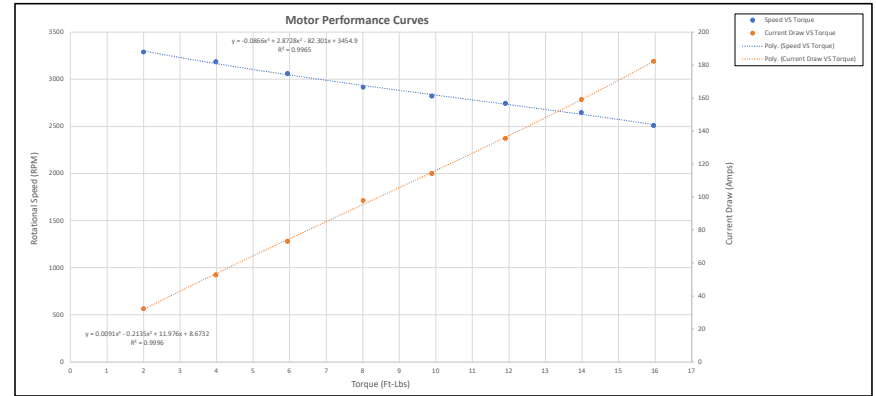
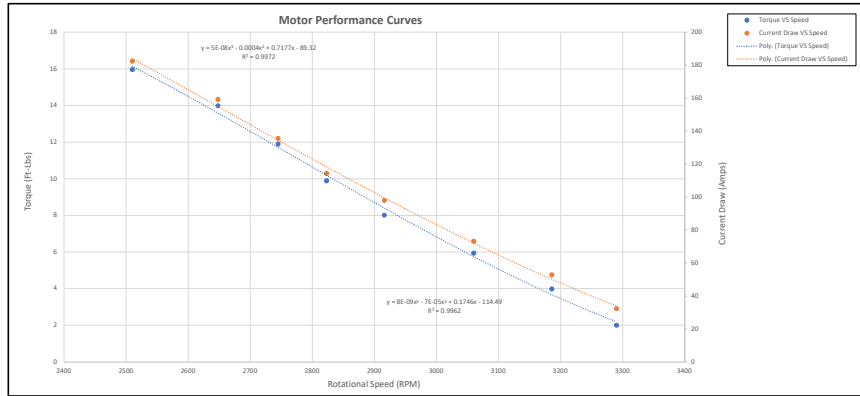
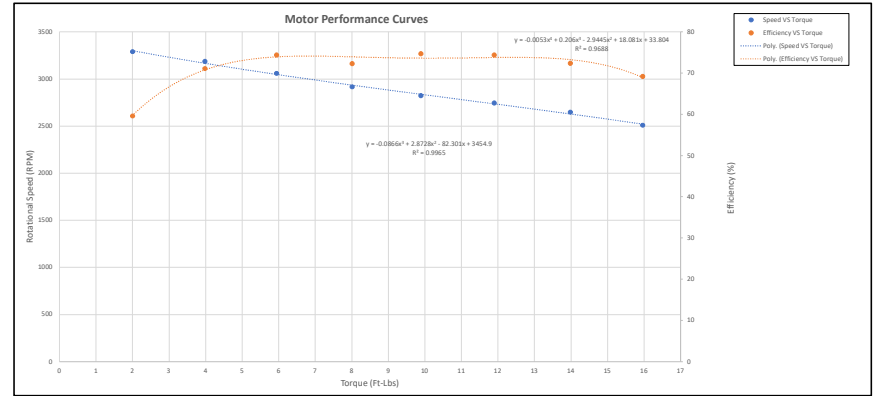
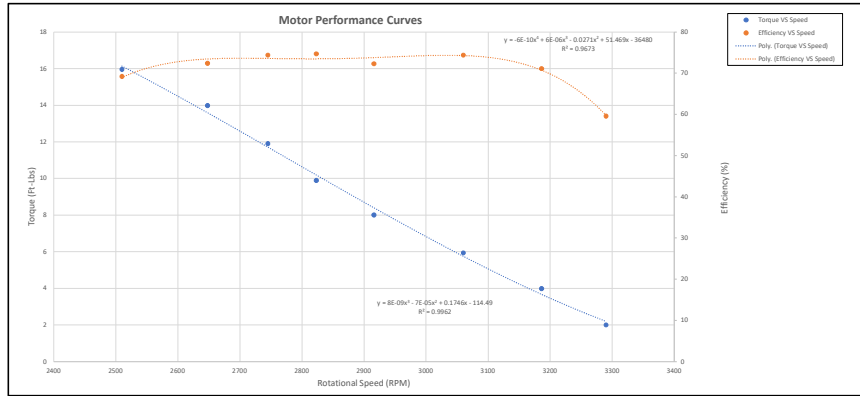


Engineering Performance Test Report

Performance Spec (PS) Number: 14

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	3290	47.6	32.3	7	4.97	37.27	2.11	1.26	59.6
3.98	3186	47.3	32.8	7	4.96	37.26	2.11	2.41	71.1
5.94	3080	47	33.2	7	4.95	37.15	4.65	3.46	74.4
8.01	2916	46.5	37.9	7	4.97	40.87	6.15	4.45	72.3
9.89	2823	46.1	114.3	7	4.97	119.27	7.12	5.31	74.7
11.9	2765	45.8	135.6	7.1	5.04	140.64	8.36	6.22	74.4
13.98	2648	45.4	159.2	7	4.97	164.17	9.73	7.05	72.4
15.96	2510	44.9	182.4	7.1	5.09	187.49	11.03	7.63	69.2

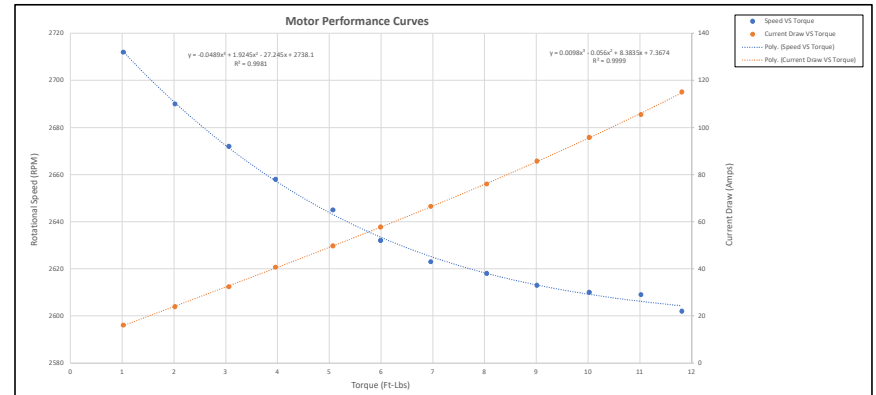
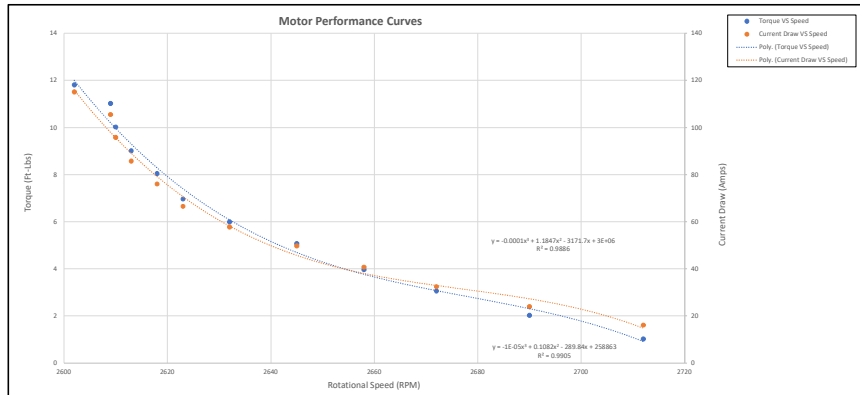
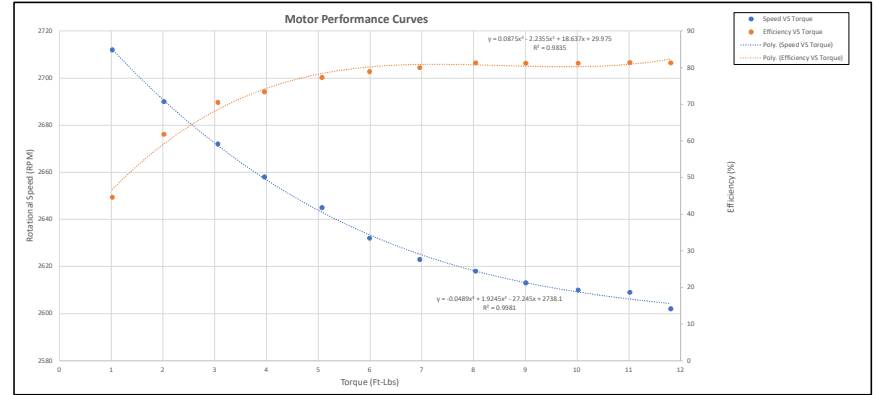
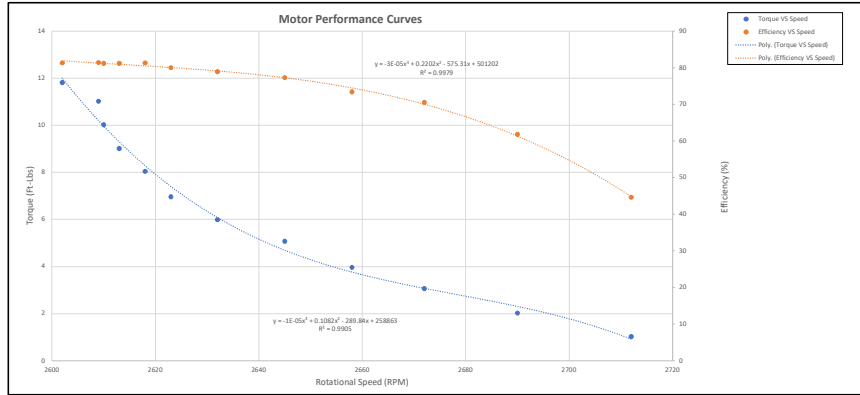


Engineering Performance Test Report

Performance Spec (PS) Number: 14

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 (%)
1.02	2712	47.8	16.1	13.6	8.06	24.16	1.18	0.52	44.6
2.02	2698	47.7	23.8	13.6	8.06	31.95	1.60	1.04	61.8
3.06	2672	47.6	32.4	13.6	8.06	40.46	2.21	1.56	70.5
3.96	2658	47.5	40.7	13.6	8.06	48.76	2.73	2.01	73.4
5.07	2645	47.3	49.7	13.7	8.05	57.75	3.3	2.55	77.3
5.99	2632	47.2	57.2	13.7	8.09	65.29	3.8	3.1	78.6
6.96	2623	47.1	65.5	13.7	8.05	74.55	4.35	3.48	80
8.04	2618	47	76	13.7	8.02	84.02	4.93	4.01	81.3
9.01	2613	46.8	85.7	13.7	8.03	92.73	5.52	4.48	81.2
10.02	2610	46.7	95.8	13.8	8.05	103.85	6.14	4.98	81.2
11.02	2609	46.5	105.5	13.8	8.01	113.51	6.72	5.47	81.4
11.81	2602	46.5	115.1	13.9	8.05	123.15	7.32	5.96	81.3

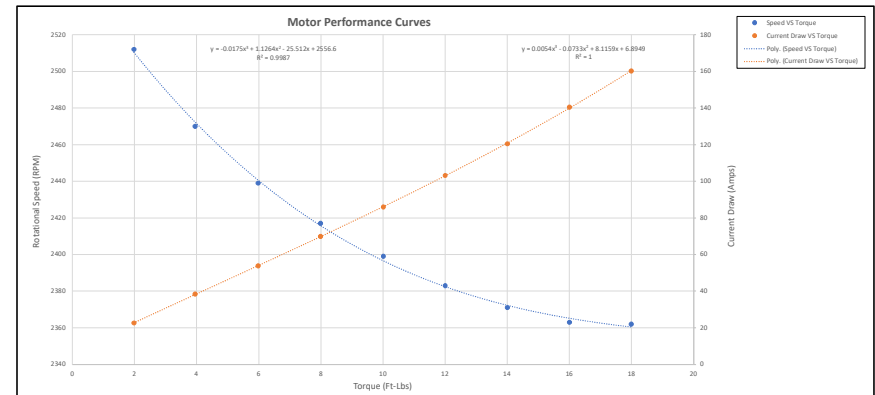
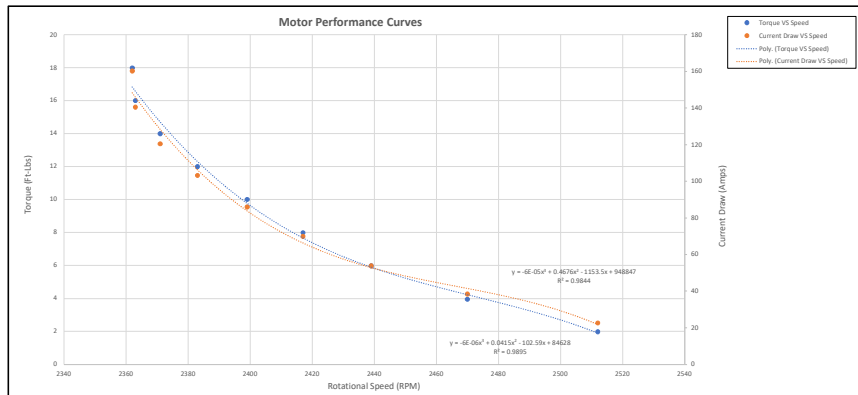
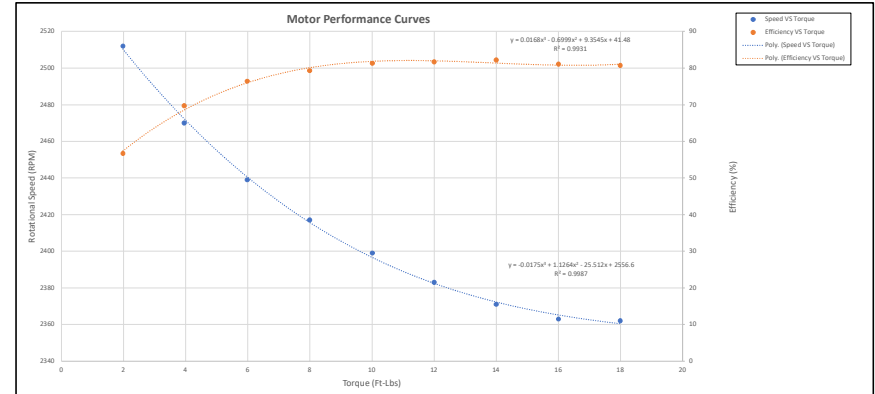
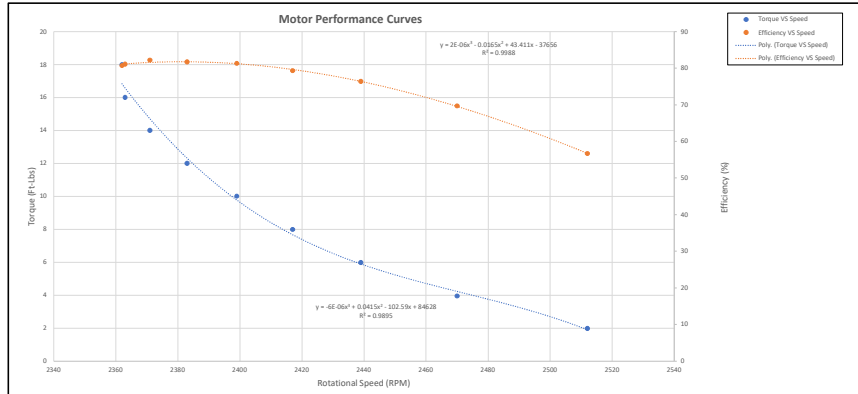


Engineering Performance Test Report

Performance Spec (PS) Number: 14

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 (%)
1.98	2512	47.7	22.6	16.6	10.08	32.68	1.67	0.94	56.7
3.95	2470	47.5	38.4	16.7	10.06	48.46	2.67	1.86	69.7
5.98	2439	47.3	53.8	16.7	10.05	63.89	3.64	2.78	76.4
7.99	2417	47.1	69.9	16.8	10.08	79.98	4.63	3.68	79.3
10.01	2399	46.8	86	16.8	10.05	96.05	5.62	4.57	81.3
12	2383	46.5	103.2	16.9	10.04	113.24	6.66	5.45	81.7
14	2371	46.3	120.4	17	10.1	130.5	7.69	6.32	82.2
16	2363	45.9	140.5	17	10.05	150.55	8.88	7.2	81.1
17.99	2362	45.6	160.2	17.1	10.24	170.44	10.03	8.09	80.7

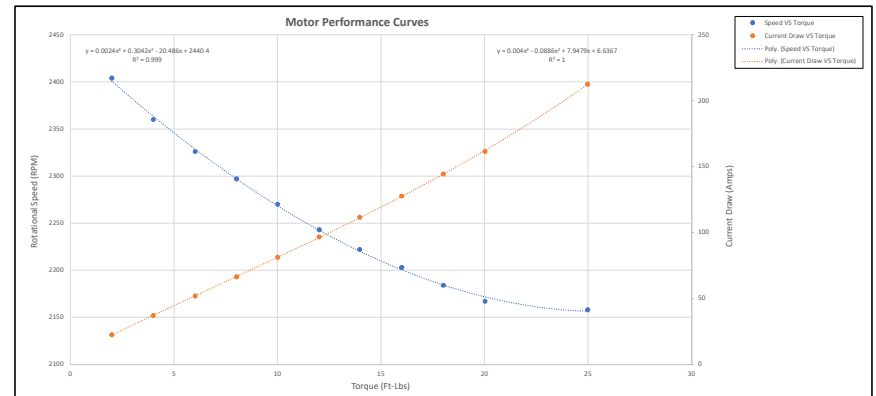
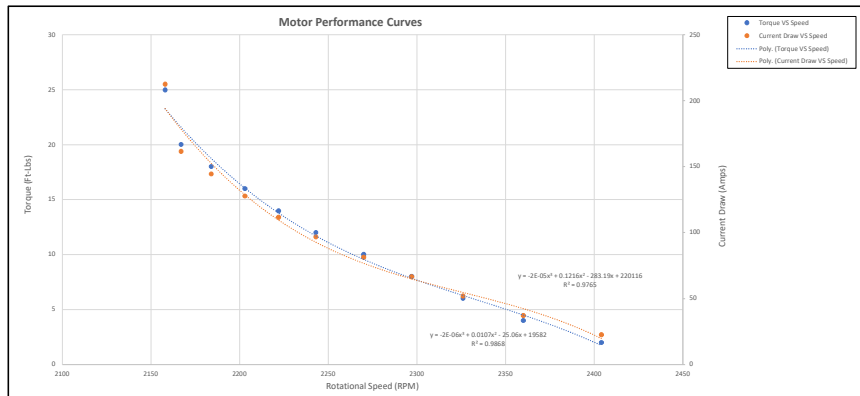
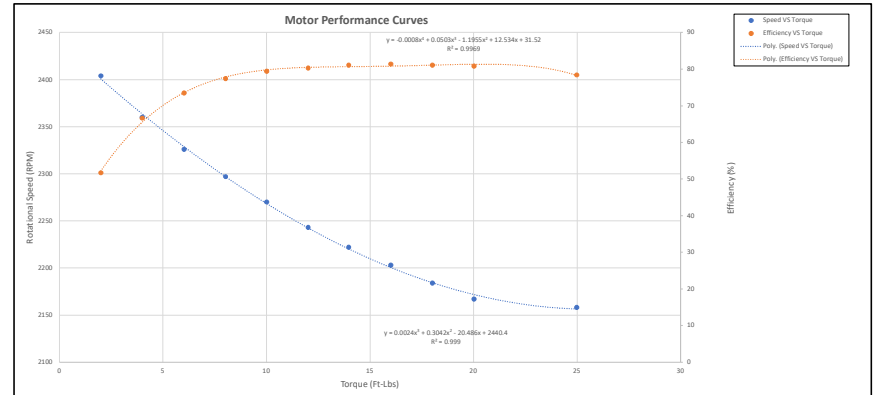
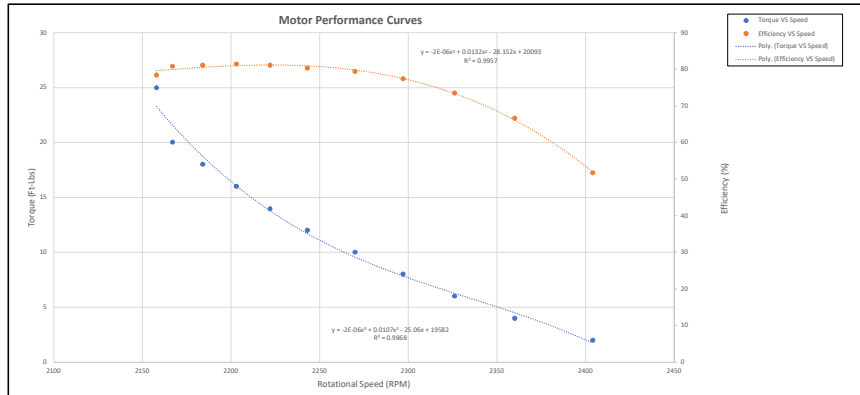


Engineering Performance Test Report

Performance Spec (PS) Number: 14

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	2404	47.7	22.5	20.6	12.12	34.62	1.77	0.92	51.7
4	2300	47.5	27.8	20.6	12.1	40.2	2.09	1.8	86.6
6.02	2295	47.3	31.9	20.7	12.08	43.98	2.66	2.66	73.5
8.02	2297	47.1	66.4	20.8	12.14	78.54	4.53	3.51	77.4
10.01	2270	46.9	81.3	20.9	12.14	93.44	5.45	4.33	79.4
12.01	2243	46.7	96.7	21	12.09	108.79	6.39	5.13	80.3
13.97	2222	46.4	111.6	21.1	12.11	123.71	7.29	5.91	81.1
16	2203	46.1	127.7	21.2	12.11	139.81	8.24	6.71	81.4
18.03	2184	45.9	144.5	21.3	12.08	156.68	9.23	7.49	81.1
20.02	2167	45.6	161.6	21.3	12.08	173.68	10.21	8.26	80.8
24.98	2158	44.8	212.5	21.4	11.98	224.48	13.09	10.26	78.4

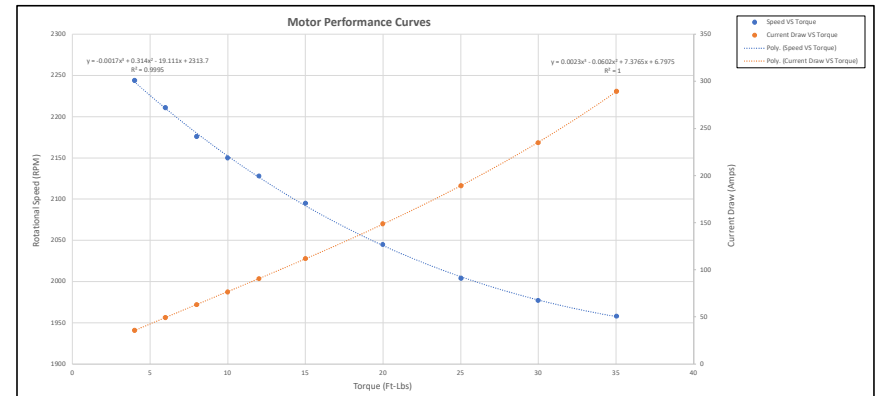
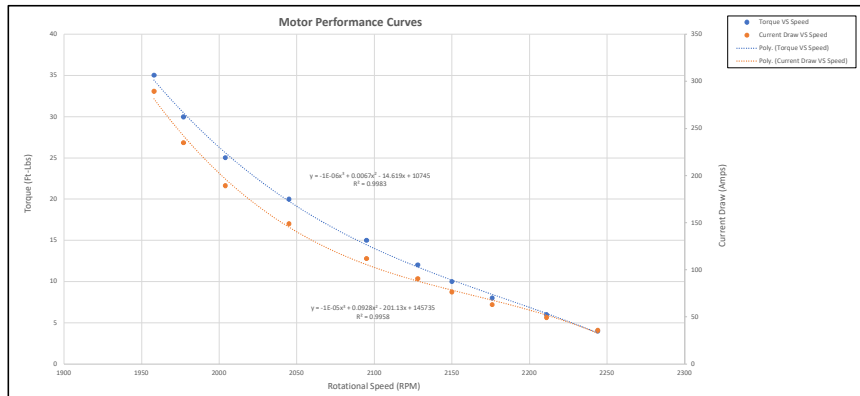
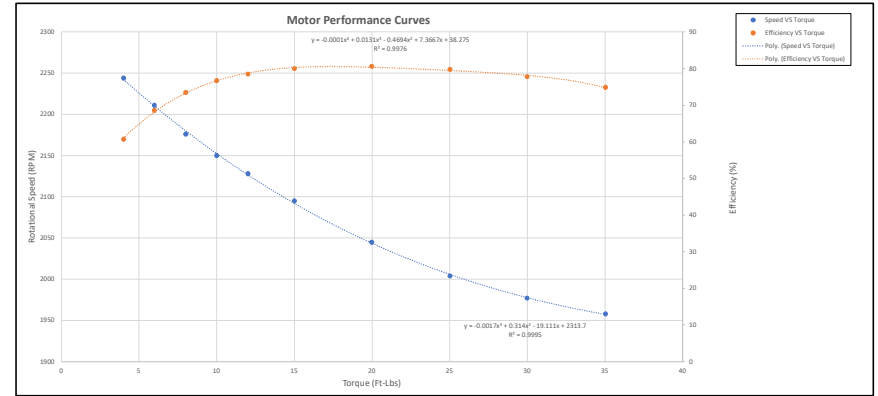
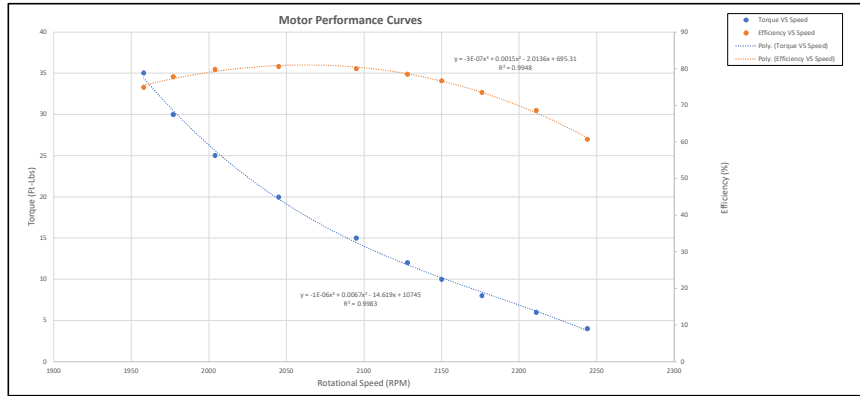


Engineering Performance Test Report

Performance Spec (PS) Number: 14

System Voltage [V]: 48 (1 * 0.015)

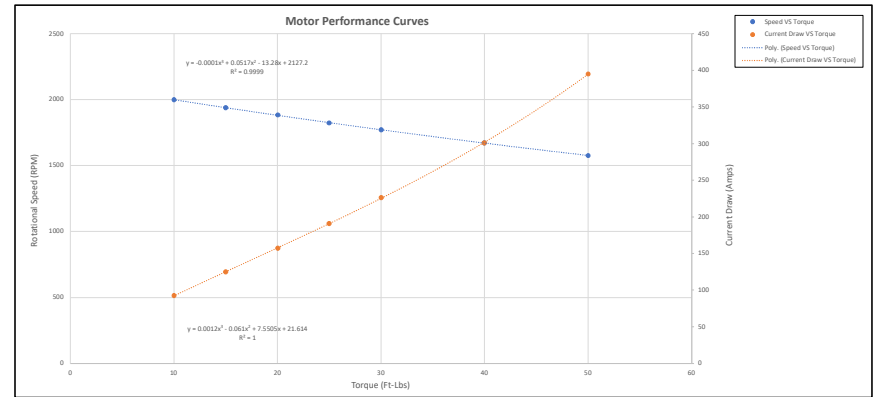
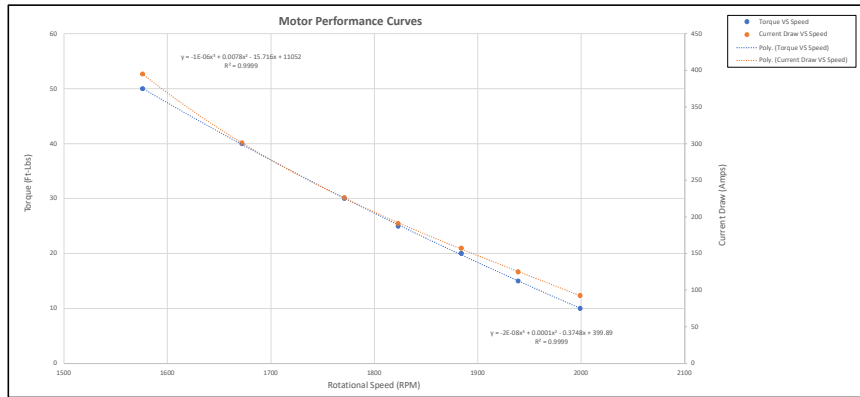
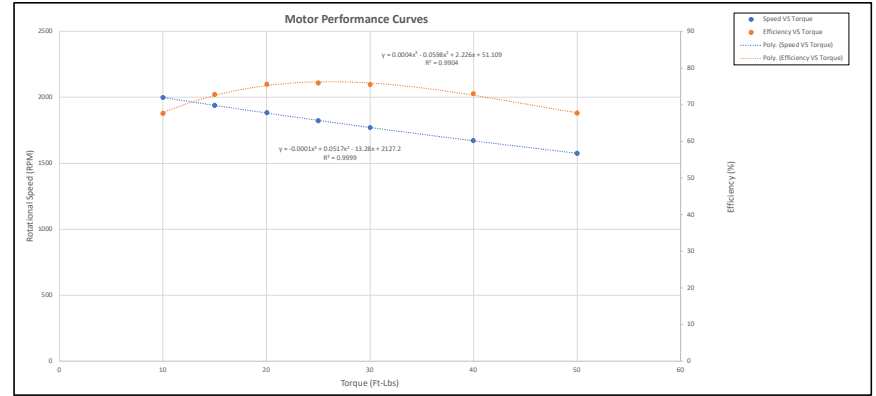
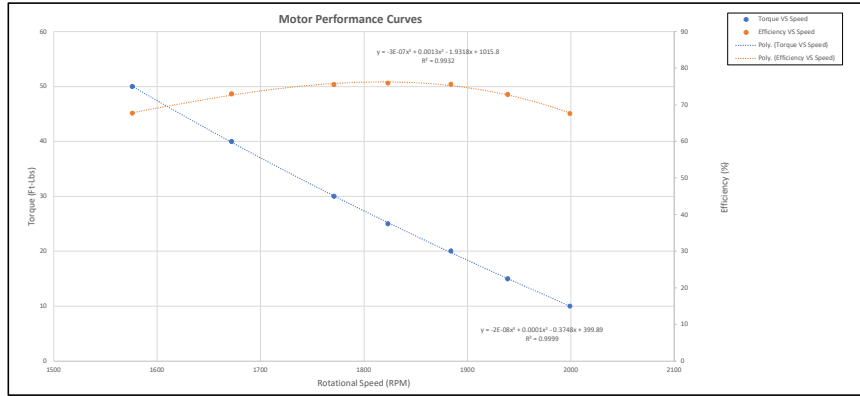
Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
4	2244	47.5	35.7	26.9	15.1	50.8	2.82	1.71	60.7
5.98	2211	47.4	49.3	26.8	15.09	64.39	3.67	2.52	68.6
8	2176	47.2	62.9	26.6	15.12	78.02	4.51	3.32	73.5
9.99	2150	46.9	76.4	26.4	15.1	91.5	5.34	4.09	76.7
12.01	2128	46.7	90.5	26.2	15.12	105.62	6.2	4.87	78.5
15	2095	46.4	111.9	26	15.07	126.97	7.48	5.98	80
19.98	2045	45.8	148.8	25.8	15.08	163.88	9.65	7.78	80.6
25.02	2004	45.1	189.2	25.6	15.07	204.27	11.96	9.55	79.8
29.98	1977	44.4	234.9	25.3	15.16	250.06	14.51	11.29	77.8
35.03	1958	43.6	289.5	25.1	15.19	304.69	17.45	13.66	78.6



Engineering Performance Test Report

Performance Spec (PS) Number: 14
 System Voltage (V): 48 - (I * 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 (%)
30	1999	47	72.3	40	20.16	92.46	5.63	3.81	67.6
14.99	1939	46.5	104.7	39.4	20.19	124.89	7.6	5.53	72.8
20.03	1884	46	137.2	38.9	30.1	157.3	9.5	7.18	75.6
24.99	1823	45.4	170.7	38.3	20.16	190.86	11.43	8.67	75.9
30.01	1771	44.8	205.1	37.7	20.18	226.28	13.4	10.12	75.5
39.97	1672	43.7	280.8	37	20.17	300.97	17.45	12.73	73
50	1576	42.2	374.5	36.4	20.52	395.02	22.16	15.01	67.7

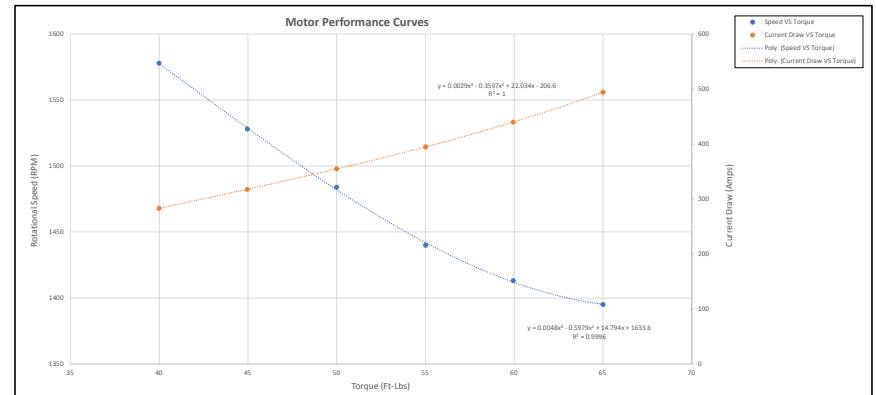
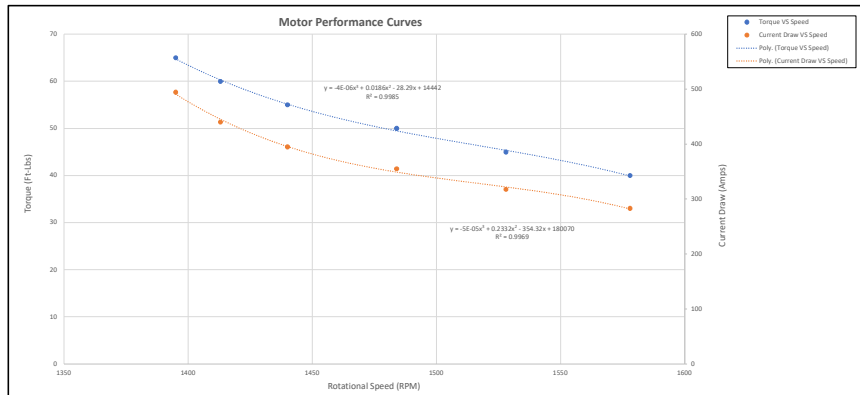
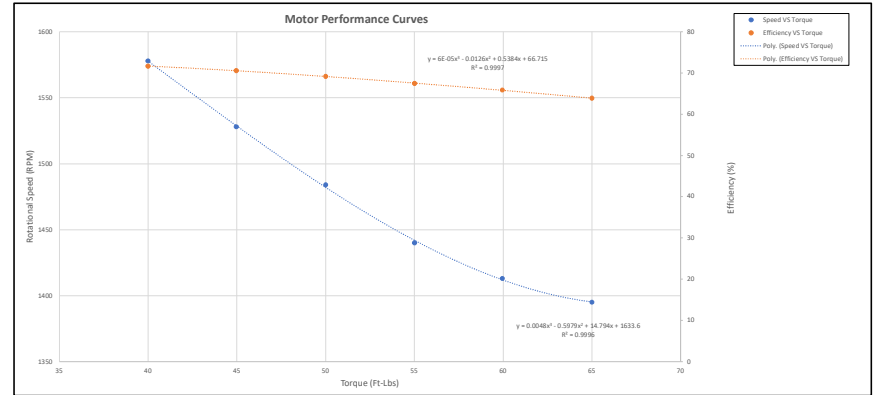
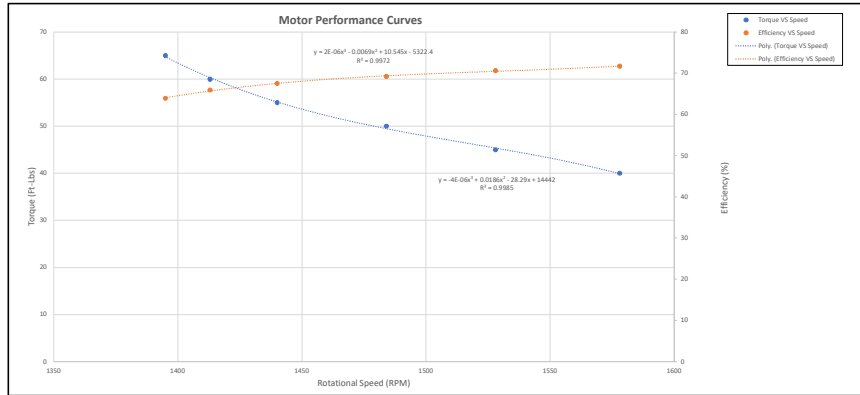


Engineering Performance Test Report

Performance Spec (PS) Number: 14

System Voltage [V]: 48 (1 * 0.015)

Torque (Ft-Lbs)	Speed (RPM)	Analogic Voltage (Volts)	Amature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
39.99	1578	44	257.9	46.1	25.09	282.99	16.77	12.01	71.7
44.96	1528	43.4	292.6	44.8	25.01	317.61	18.54	13.08	70.6
50	1484	42.9	339.8	43.5	25.13	354.93	20.42	14.13	69.2
55.01	1440	42.2	369.9	42.2	25.11	395.01	22.34	15.08	67.5
59.95	1413	41.6	414.9	40.8	25.06	439.96	24.49	16.12	65.9
65	1395	40.8	469.3	39.4	25.19	494.39	27.01	17.26	63.9

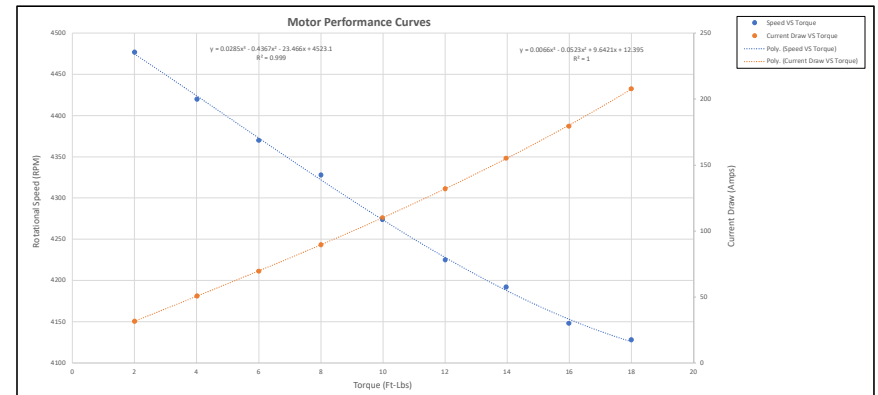
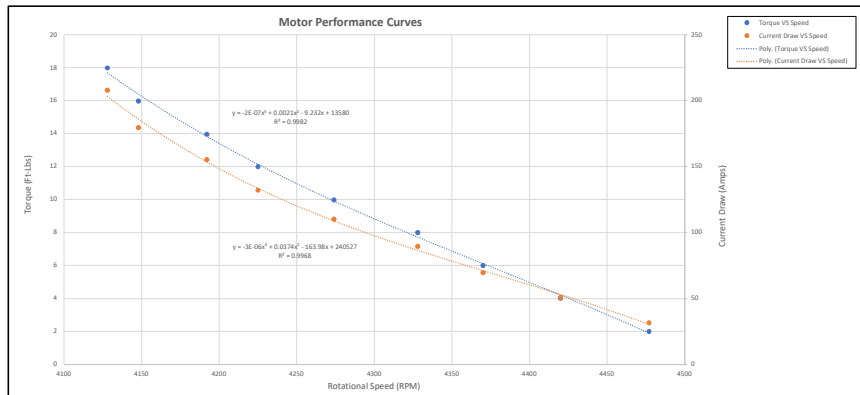
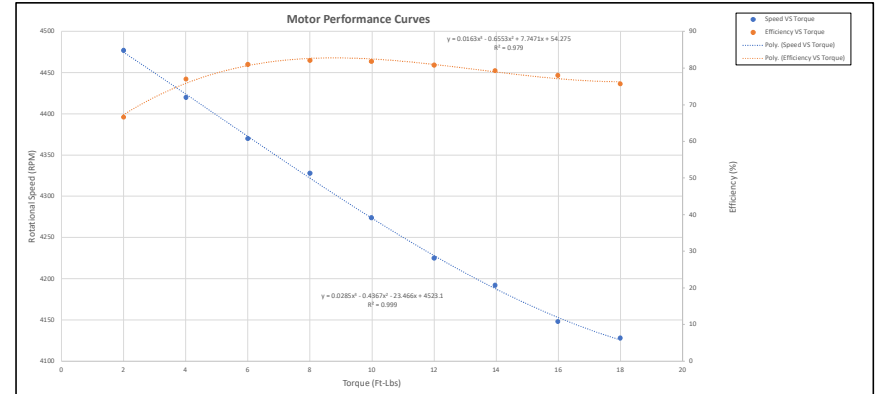
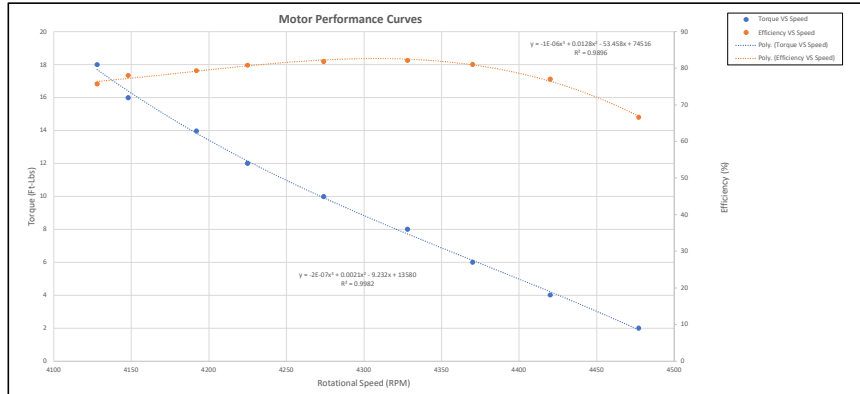


Engineering Performance Test Report

Performance Spec (PS) Number: 14

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	4477	71.8	25.6	12.2	5.96	31.56	2.56	1.7	66.6
4.01	4420	71.5	44.2	12.2	6.01	50.71	4.30	3.38	77
6	4370	71.2	63.5	12.2	6.05	69.55	6.16	4.99	81
8	4328	70.9	83.6	12.3	6	89.6	8.03	6.59	82.1
9.98	4274	70.5	104.1	12.3	5.99	110.09	9.94	8.12	81.8
12	4225	70.1	125.1	12.3	6	132.1	11.95	9.65	80.8
13.96	4192	69.7	149.3	12.3	5.97	155.27	14.04	11.14	79.3
15.98	4148	69.2	173.4	12.3	6.08	179.48	16.18	12.62	78
17.99	4128	68.7	201.9	12.4	5.95	207.85	18.68	14.14	75.7

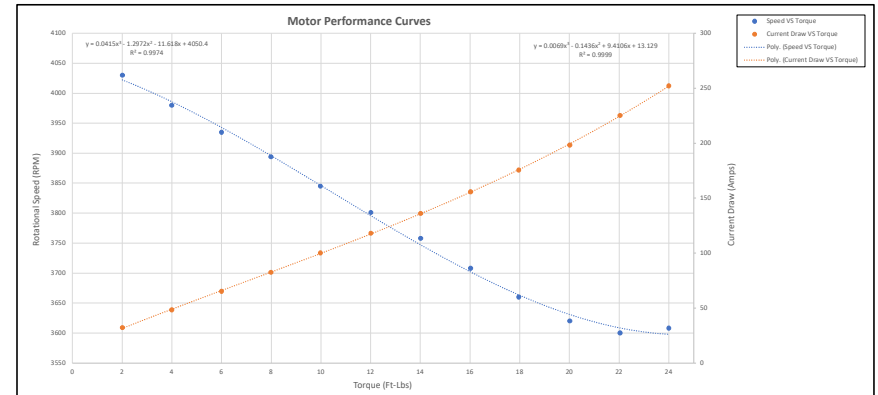
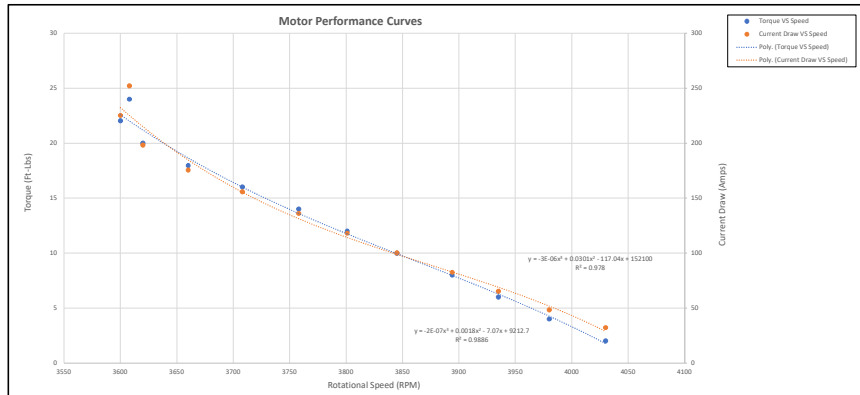
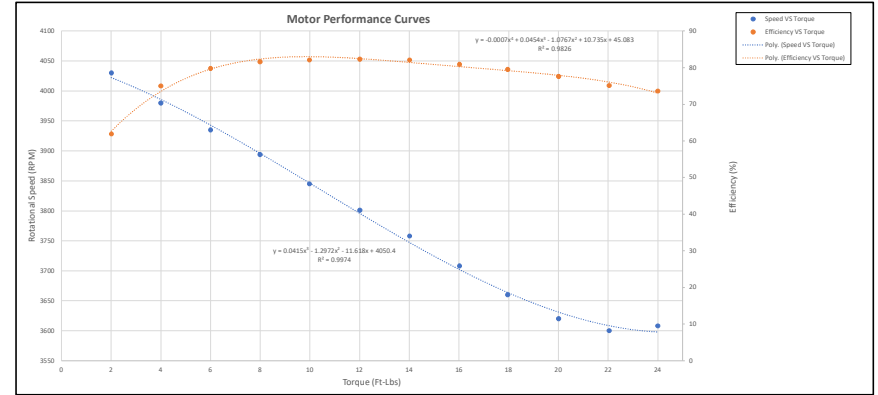
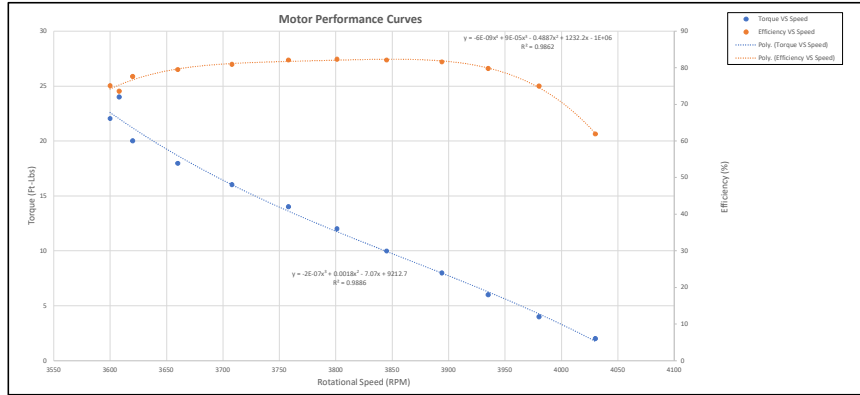


Engineering Performance Test Report

Performance Spec (PS) Number: 14

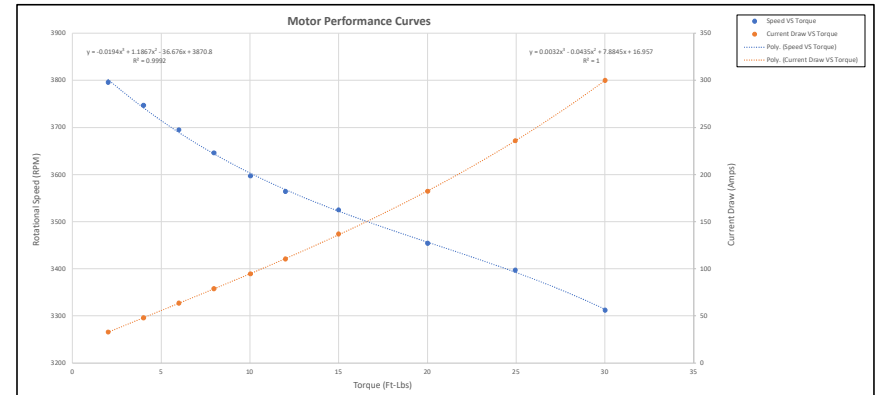
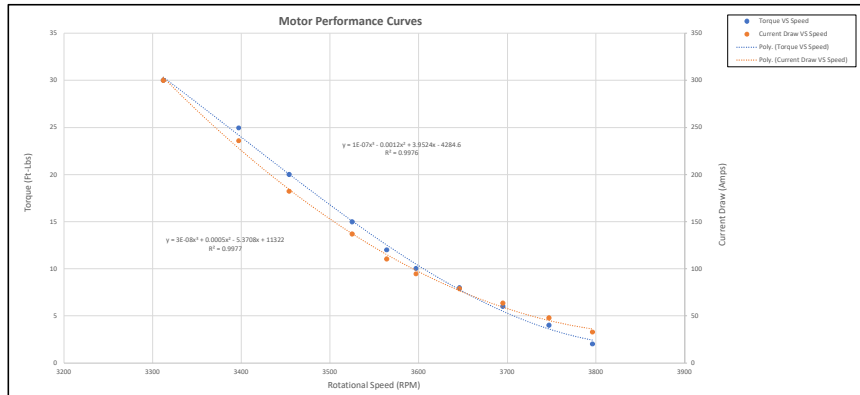
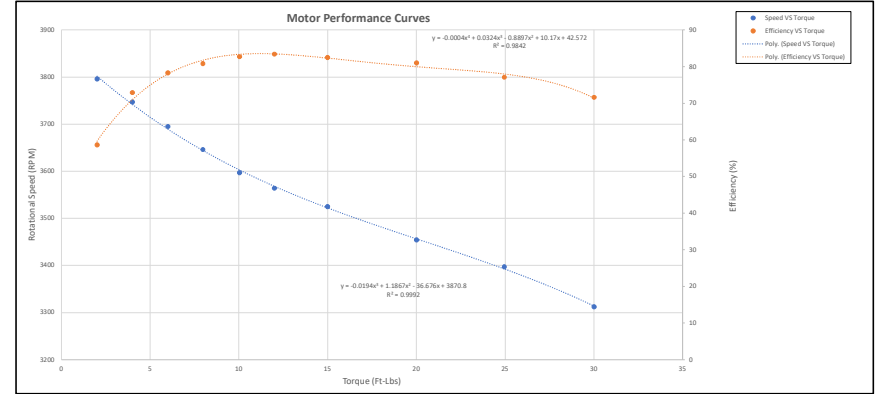
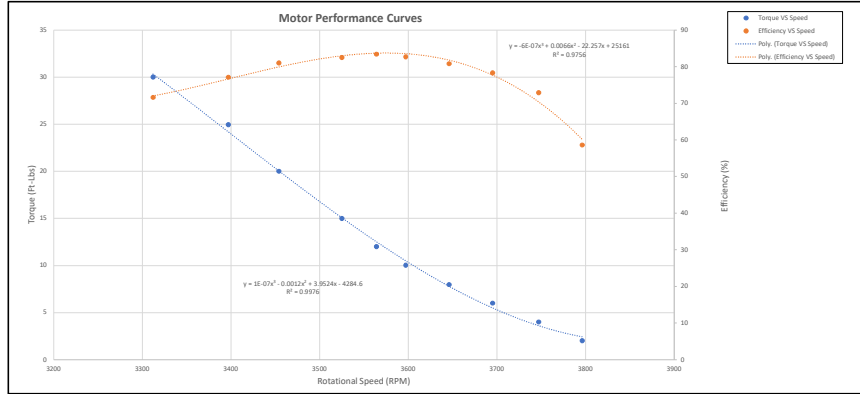
System Voltage [V]: 72 (1 * 0.030)

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	4030	71.8	24.1	16.2	8.07	32.17	2.49	1.54	61.9
4	3990	71.6	40.3	16.2	8.06	48.36	4.04	3.03	75
6	3935	71.3	57.1	16.2	8.09	65.19	5.63	4.49	79.8
7.99	3894	71	74.4	16.3	8.09	82.49	7.25	5.92	81.6
9.98	3845	70.7	92	16.3	8.07	100.07	8.9	7.3	82.1
12.01	3801	70.4	110	16.4	8.07	118.07	10.56	8.69	82.1
14.01	3758	70.1	128	16.4	8.05	136.05	12.2	10.02	82.1
16.02	3708	69.7	147.2	16.4	8.05	155.75	13.98	11.31	80.9
17.96	3660	69.3	167.5	16.4	8.04	175.54	15.74	12.52	79.5
20.01	3620	69	190.4	16.5	7.98	198.38	17.78	13.79	77.6
22.04	3600	68.5	217.2	16.5	8.05	225.25	20.11	15.1	75.1
24	3608	67.9	244.1	16.6	8.06	252.16	22.4	16.48	73.6



Engineering Performance Test Report
 Performance Spec (PS) Number: 14
 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	3796	71.8	22.7	21.6	10.06	32.76	2.47	1.45	58.6
4	3747	71.6	23.8	21.5	10.04	47.84	3.91	2.85	72.5
6	3695	71.4	53.3	21.5	10.1	63.4	5.39	4.22	78.3
7.97	3646	71.1	68.8	21.4	10.08	78.88	6.84	5.53	80.8
10.03	3597	70.8	84.5	21.3	10.07	94.57	8.31	6.87	82.7
12	3544	70.5	100.3	21.2	10.07	110.37	9.76	8.14	83.4
14.99	3525	70.1	126.8	21	10.09	136.89	12.19	10.06	82.5
20.01	3454	69.2	172.2	20.9	10.06	182.26	16.25	13.16	81
24.95	3397	68.2	225.2	20.7	10.18	235.88	20.93	16.14	77.1
30.01	3312	67.3	289.9	20.6	10.14	300.04	26.43	18.92	71.6

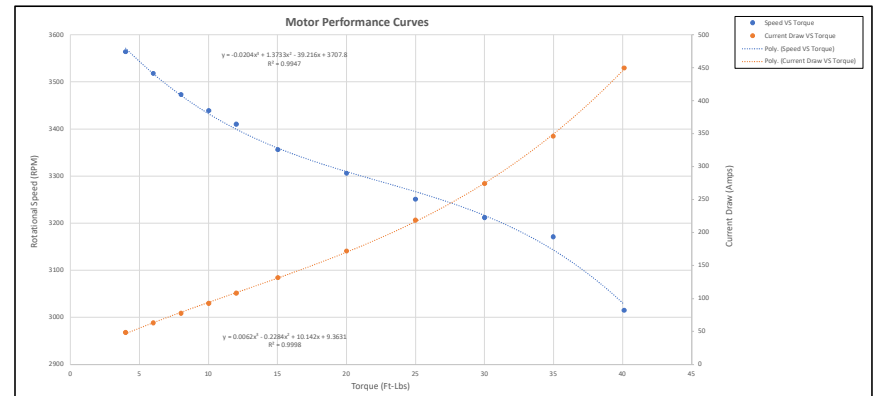
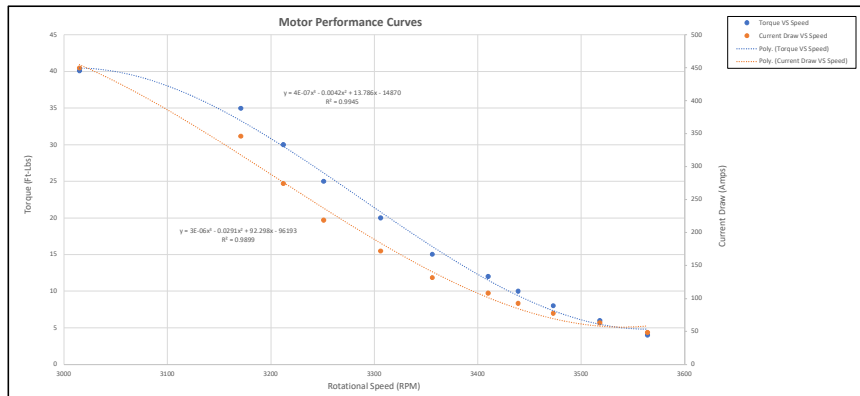
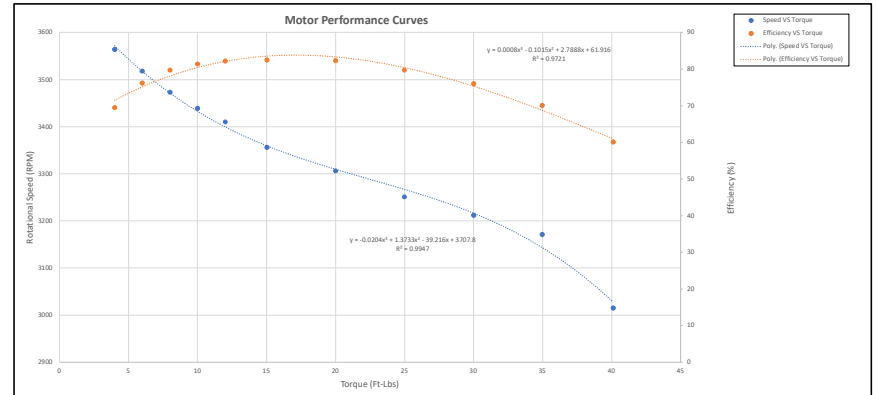
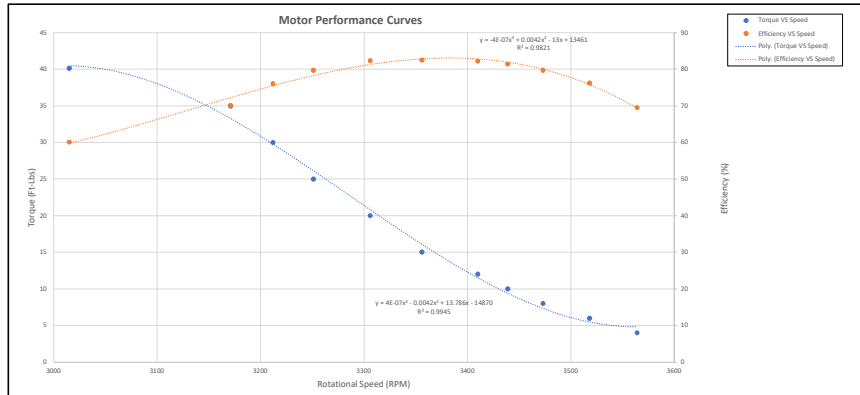


Engineering Performance Test Report

Performance Spec (PS) Number: 14

System Voltage [V]: 72 (1 + 0.03%)

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	3564	71.6	36.5	25	12.1	48.6	3.91	2.72	69.5
6	3518	71.4	50.9	24.9	12.18	63.08	5.26	4.03	76.2
8.01	3473	71.2	65.5	24.7	12.15	77.65	6.65	5.31	79.7
10.01	3439	70.9	80.5	24.5	12.17	92.67	8.05	6.55	81.4
12.01	3410	70.7	96	24.3	12.11	108.11	9.48	7.8	82.2
15.03	3356	70.2	119.5	24.1	12.18	131.68	11.63	9.6	82.5
20	3306	69.5	159.9	23.8	12.14	172.04	15.3	12.59	82.3
24.99	3251	68.6	206.9	23.5	11.99	218.89	19.41	15.47	79.7
30	3212	67.6	262.3	23.3	12.07	274.97	24.15	18.35	76
34.97	3171	66.5	319.9	23	12.2	346.1	30.33	21.97	70.1
40.11	3015	64.7	437.4	22.7	12.26	449.66	38.31	23.03	60.1

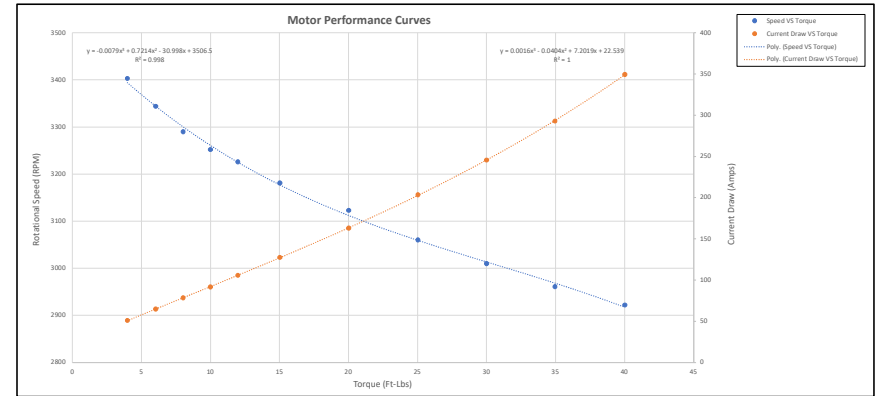
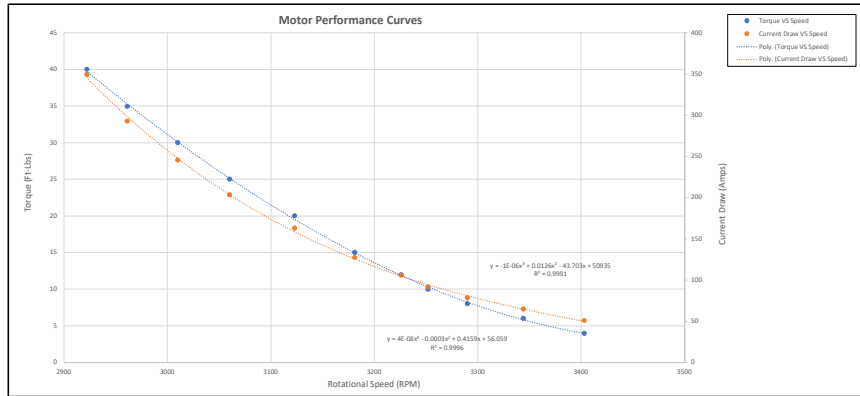
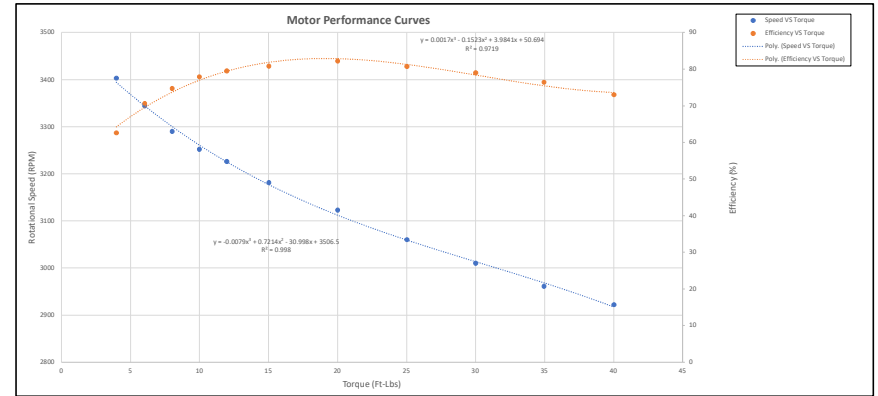
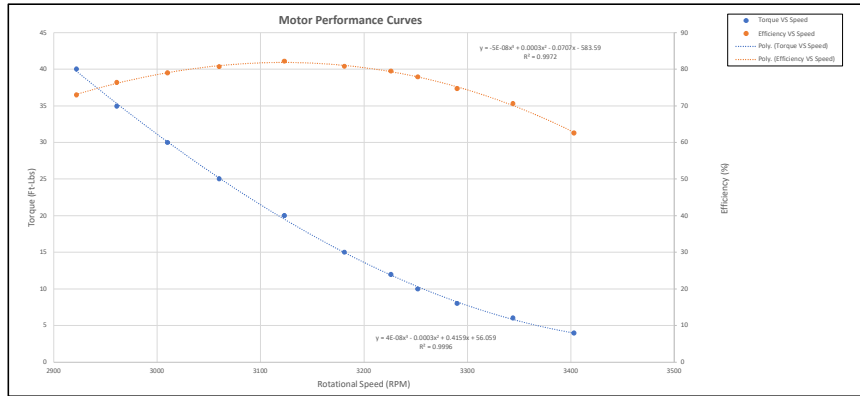


Engineering Performance Test Report

Performance Spec (PS) Number: 14

System Voltage (V): 72 - (V ± 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 (%)
3.98	3403	71.6	35.8	33.9	15.15	50.95	4.12	2.58	62.6
6.03	3344	71.4	48.7	33.6	15.09	64.39	5.44	3.84	70.6
8.02	3290	71.2	63.3	33.4	15.13	78.43	6.72	5.02	74.7
9.99	3252	71	76.5	33.1	15.09	91.59	7.94	6.18	77.9
11.98	3226	70.8	90.7	32.8	15.04	105.74	9.26	7.36	79.5
15.02	3181	70.4	112.4	32.5	15.1	127.5	11.26	9.1	80.8
20.01	3123	69.8	147.8	32.2	15.21	163.01	14.48	11.9	82.2
25.03	3060	69	188.4	31.8	15.05	203.45	18.08	14.58	80.7
30	3010	68.4	230.5	31.5	15.14	245.94	21.76	17.2	79
34.95	2961	67.6	272.8	31.1	15.14	292.94	25.76	19.7	76.4
40.02	2922	66.7	334.6	30.7	14.91	349.51	30.51	22.26	73

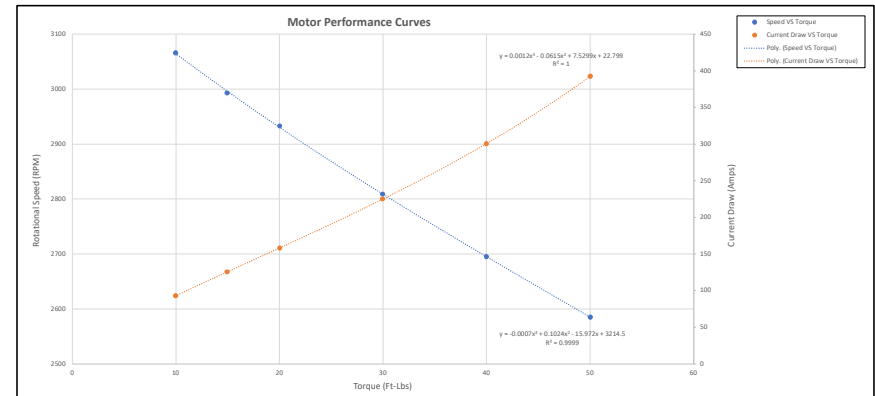
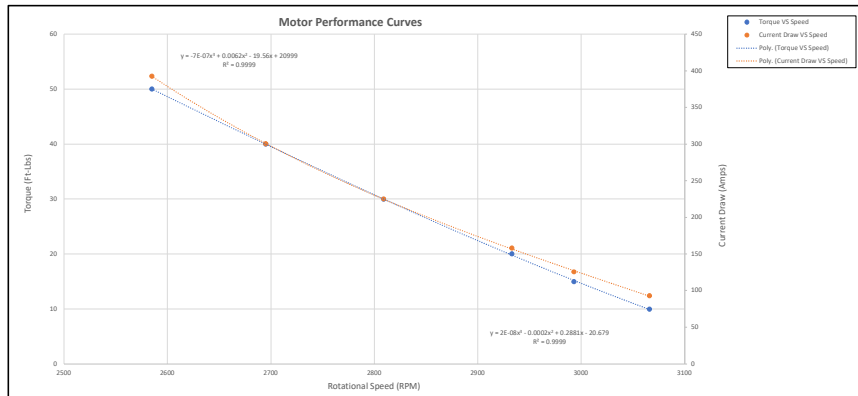
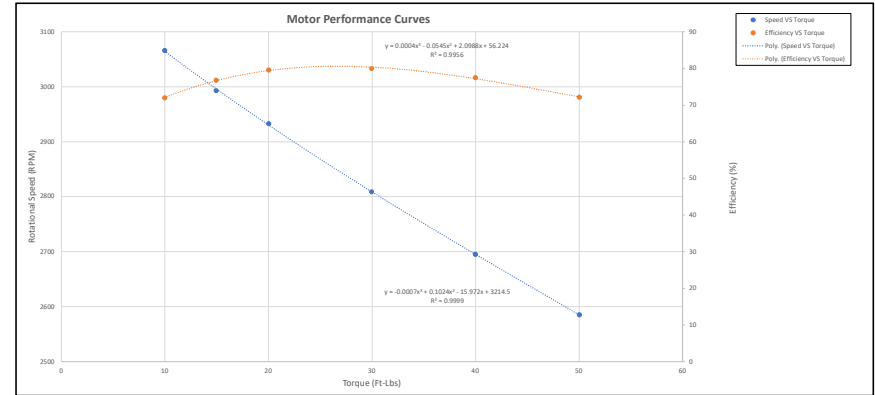
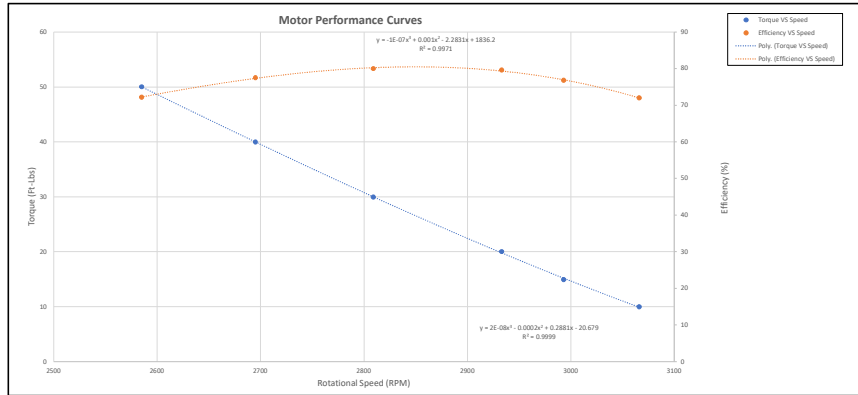


Engineering Performance Test Report

Performance Spec (PS) Number: 14

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

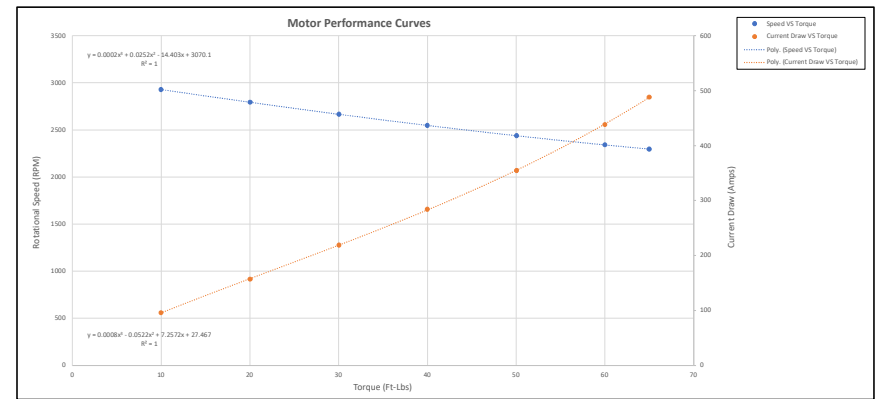
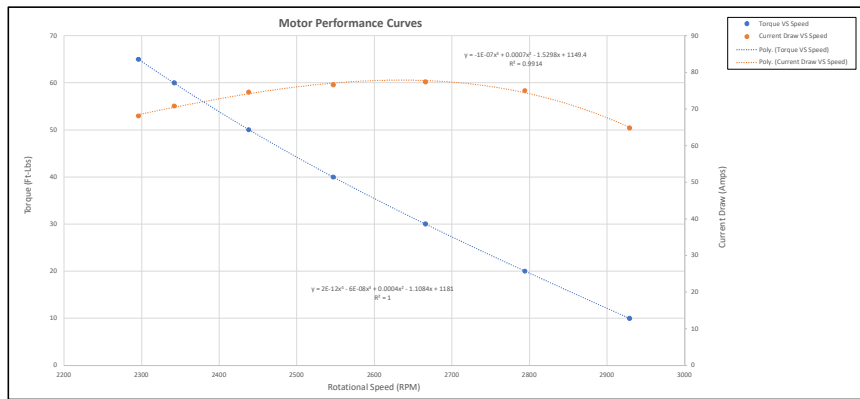
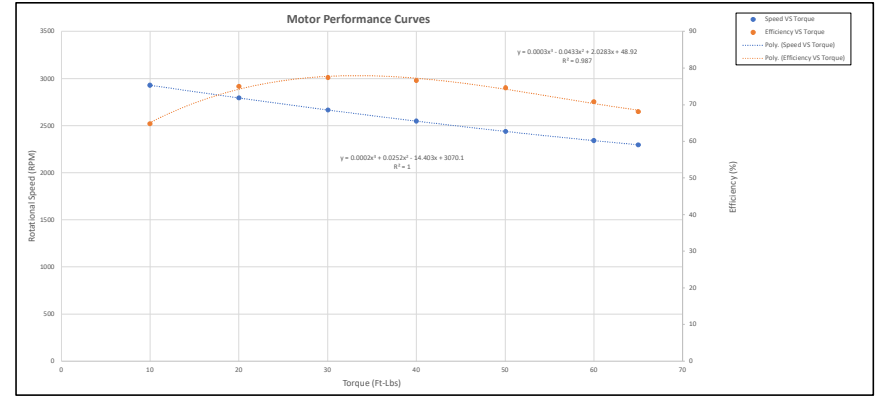
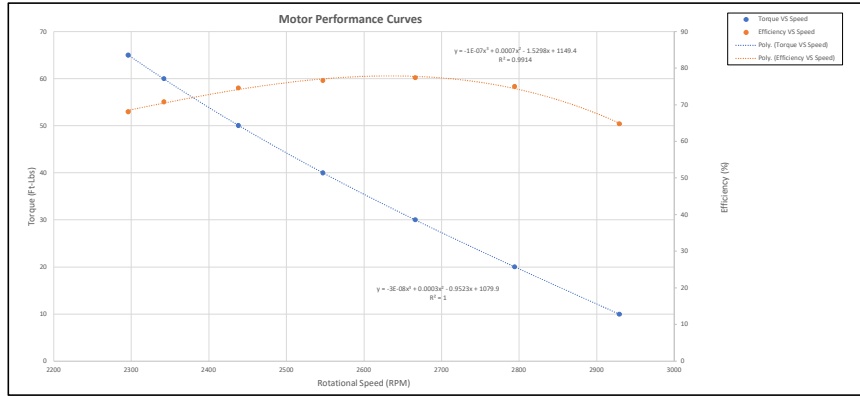
Torque (Ft-Lbs)	Speed (RPM)	Applied Voltage (Volts)	Armature Current (Amps)	Field Voltage (Volts)	Field Current (Amps)	Total Current (Amps)	Power In (Horsepower)	Power Out (Horsepower)	Efficiency (%)
9.97	3066	71.1	72.8	42.5	20.15	92.95	8.08	5.82	72
14.94	2993	70.5	105.4	41.8	20.22	125.62	11.09	8.51	76.8
20.02	2933	70	137.8	41.1	20.14	157.94	14.04	11.18	79.6
29.95	2809	68.9	205	40.3	20.16	225.16	20.02	16.02	80
39.98	2695	67.6	280.4	39.4	19.94	300.34	26.48	20.52	77.5
50.02	2585	66.2	372.6	38.6	20.04	392.64	34.09	24.62	72.2



Engineering Performance Test Report

Performance Spec (PS) Number: 14
 System Voltage (V): 72 - (I² + 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 (%)
9.97	2929	71.1	70.6	55	25.15	95.75	8.58	5.56	64.8
20.03	2794	70.1	131.9	53.6	25.13	157.03	14.2	10.64	75
30.03	2666	69	193.8	52.2	25.05	218.85	19.69	15.25	77.4
39.98	2547	67.9	259.2	50.6	24.94	284.14	25.29	19.38	76.6
50.04	2438	66.8	329.4	49.1	25.29	354.69	31.15	23.23	74.6
59.99	2342	65.3	413.2	47.5	25.15	438.35	37.71	26.75	70.8
64.99	2296	64.7	462.8	45.9	25.48	488.28	41.71	28.41	68.1

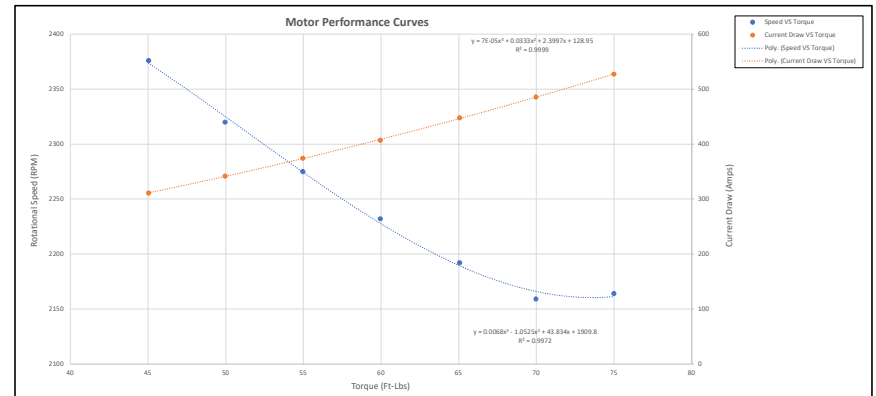
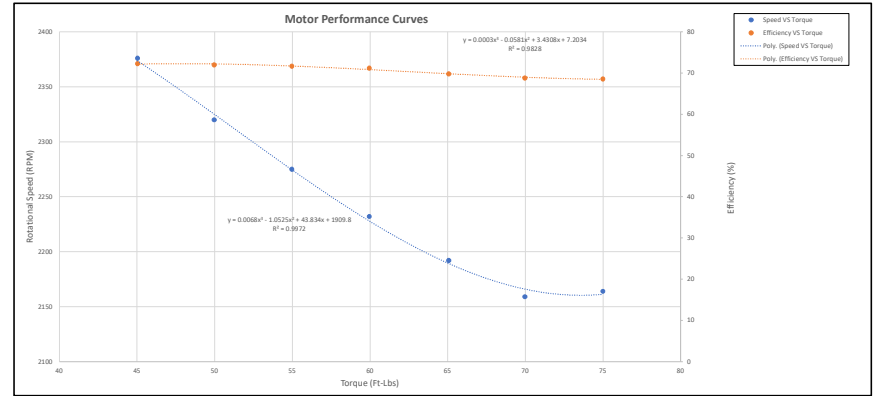
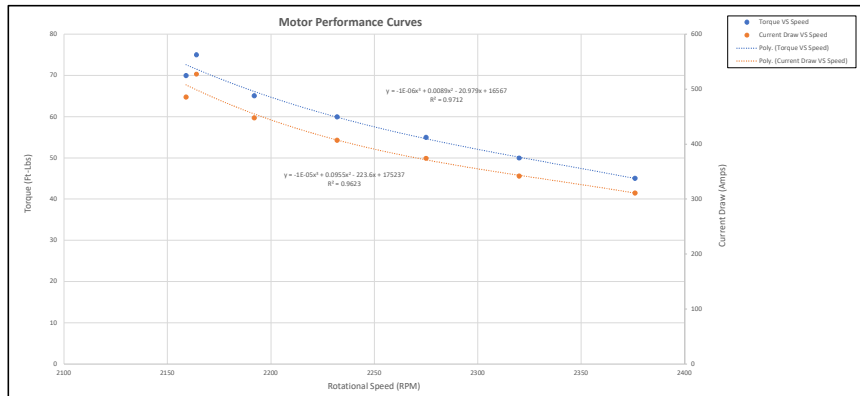
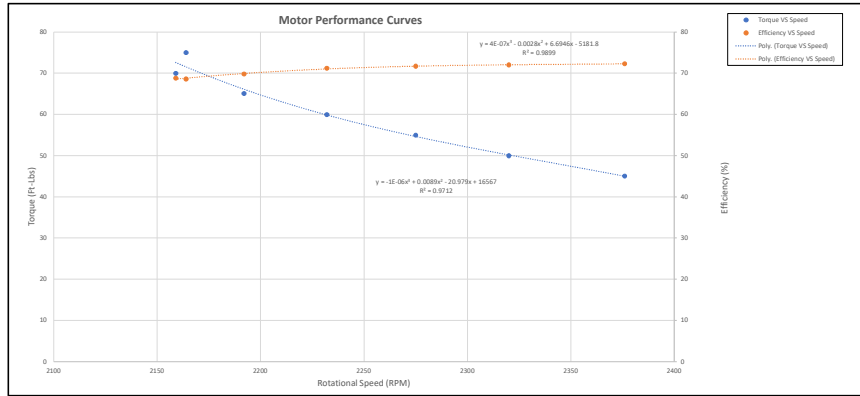


Engineering Performance Test Report

Performance Spec (PS) Number: 14

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 (%)
40.01	2441	67.9	249.5	71.9	30.12	279.62	25.61	18.6	72.6
45.03	2376	67.4	281	69.4	30.06	311.06	26.16	20.38	72.3
49.96	2320	66.9	311.9	66.8	30.01	341.91	30.67	22.07	72
54.96	2275	66.4	344.1	64.2	30.14	374.24	33.22	23.81	71.7
59.95	2232	65.9	376.8	61.6	30.12	406.92	35.78	25.48	71.2
65.06	2192	65.3	417.8	58.9	29.84	447.64	38.93	27.15	69.8
69.97	2159	64.8	455.8	56.3	29.74	485.54	41.82	28.76	68.8
74.99	2164	64.3	497.8	53.8	29.66	527.46	45.03	30.9	68.6



Engineering Performance Test Report

Performance Spec (PS) Number: 14
 System Voltage (V): 72 (1 ± 0.03%)

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 (%)
59.98	2149	66.1	362.6	78.2	34.92	397.52	35.76	24.54	68.6
64.94	2107	65.6	351.9	74.1	34.97	426.97	37.94	26.06	68.7
70.01	2070	65.1	424.2	70	34.92	459.12	40.26	27.59	68.5
74.94	2051	64.6	457.4	66	35.2	492.6	42.74	29.27	68.5
80.03	2014	64	496.4	62	35.16	531.56	45.54	30.69	67.4
85	1989	63.6	539.8	58.2	35.16	574.96	48.76	32.19	66

