

External 2.4G Antenna Gain Information

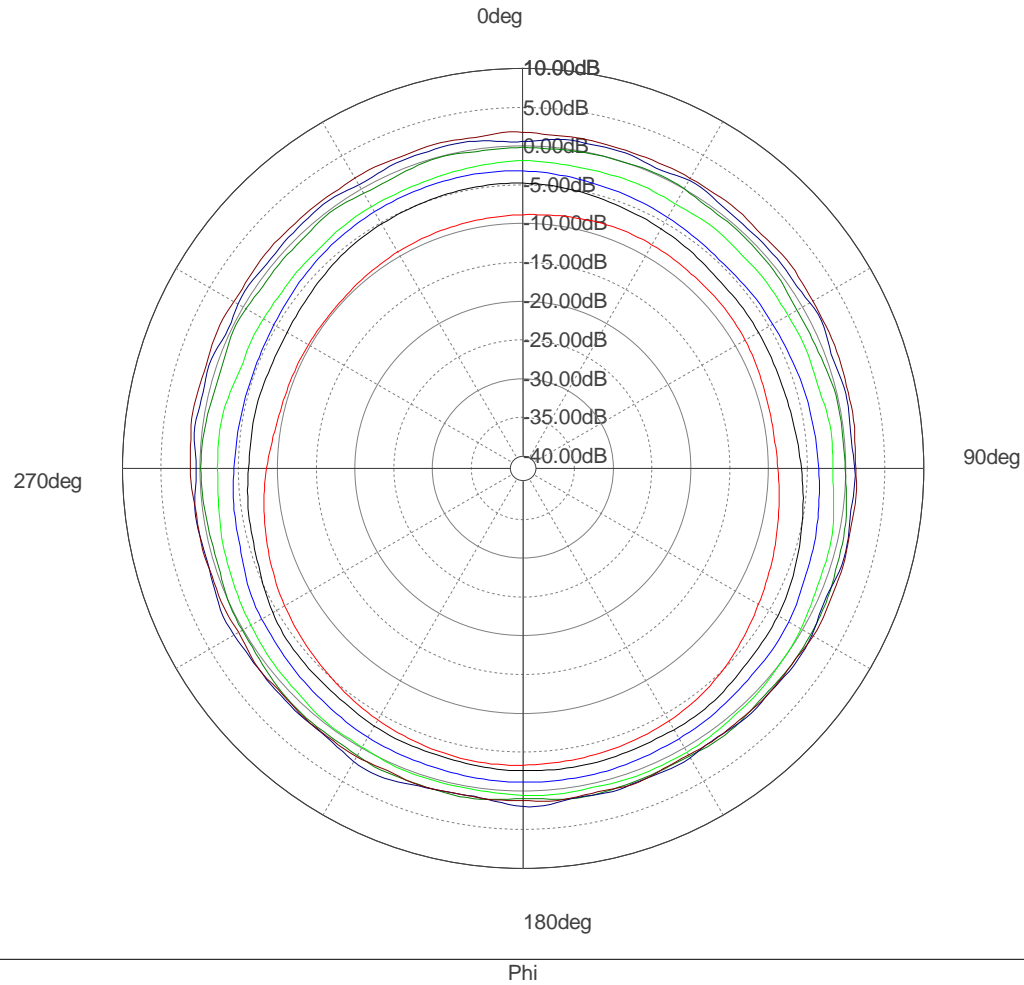
Model: INFO3.5 CSM MY20

- Manufacture of the antenna: TE Connectivity
- Part number of External Wi-Fi antenna: 84375197
- Type of antenna: Dipole

**(9/25/2017) Frequency=2412.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 1 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**



- 20.00(deg)
- 30.00(deg)
- 40.00(deg)
- 50.00(deg)
- 60.00(deg)
- 70.00(deg)
- 80.00(deg)

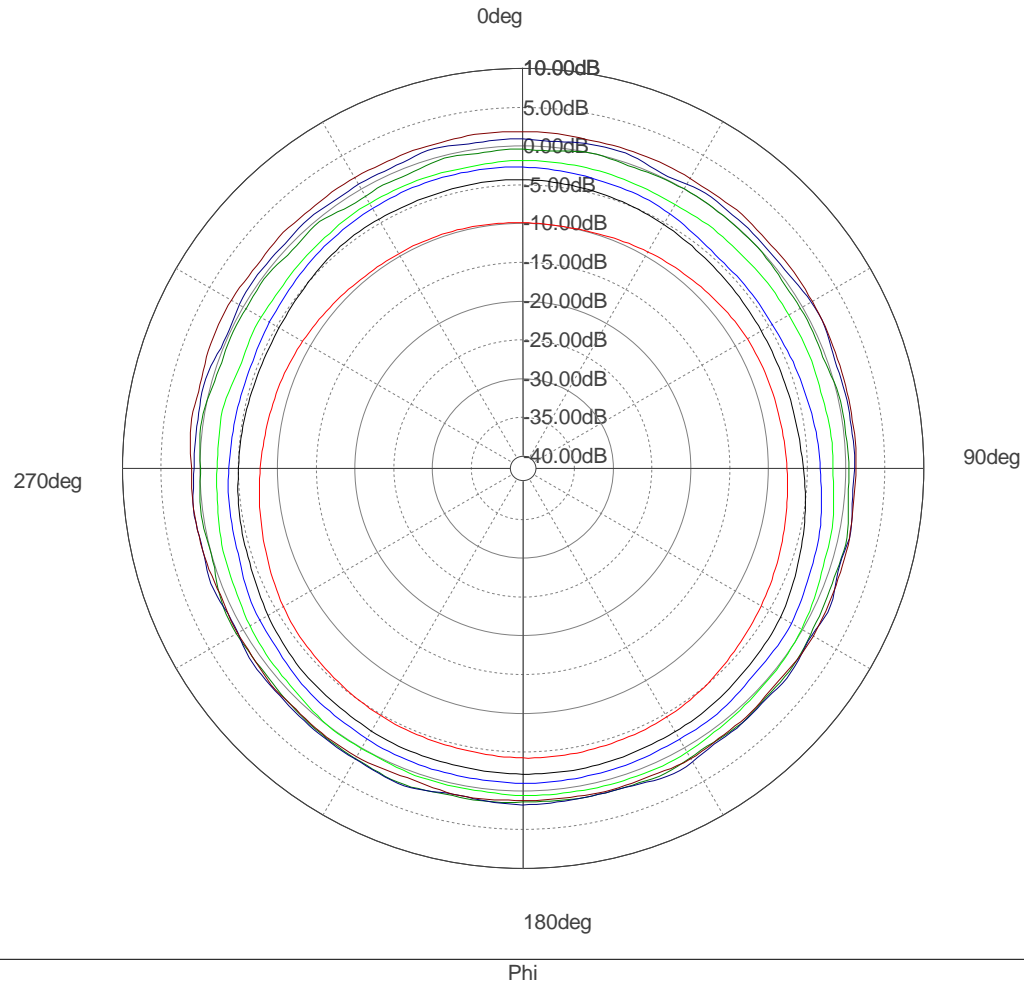


Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-3.35 dB	184.90 deg	-9.79 dB	308.57 deg	6.44 dB	-6.96 dB	2.18
30(deg)	-2.58 dB	168.09 deg	-6.64 dB	294.16 deg	4.05 dB	-4.75 dB	1.37
40(deg)	-1.17 dB	176.50 deg	-4.77 dB	289.36 deg	3.60 dB	-3.03 dB	1.18
50(deg)	0.65 dB	159.69 deg	-3.14 dB	304.97 deg	3.79 dB	-1.30 dB	1.19
60(deg)	1.47 dB	142.88 deg	-0.88 dB	61.23 deg	2.35 dB	0.24 dB	0.75
70(deg)	2.16 dB	206.52 deg	0.36 dB	295.36 deg	1.80 dB	1.09 dB	0.35
80(deg)	1.75 dB	357.80 deg	0.68 dB	240.13 deg	1.07 dB	1.34 dB	0.24

**(9/25/2017) Frequency=2427.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 1 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**

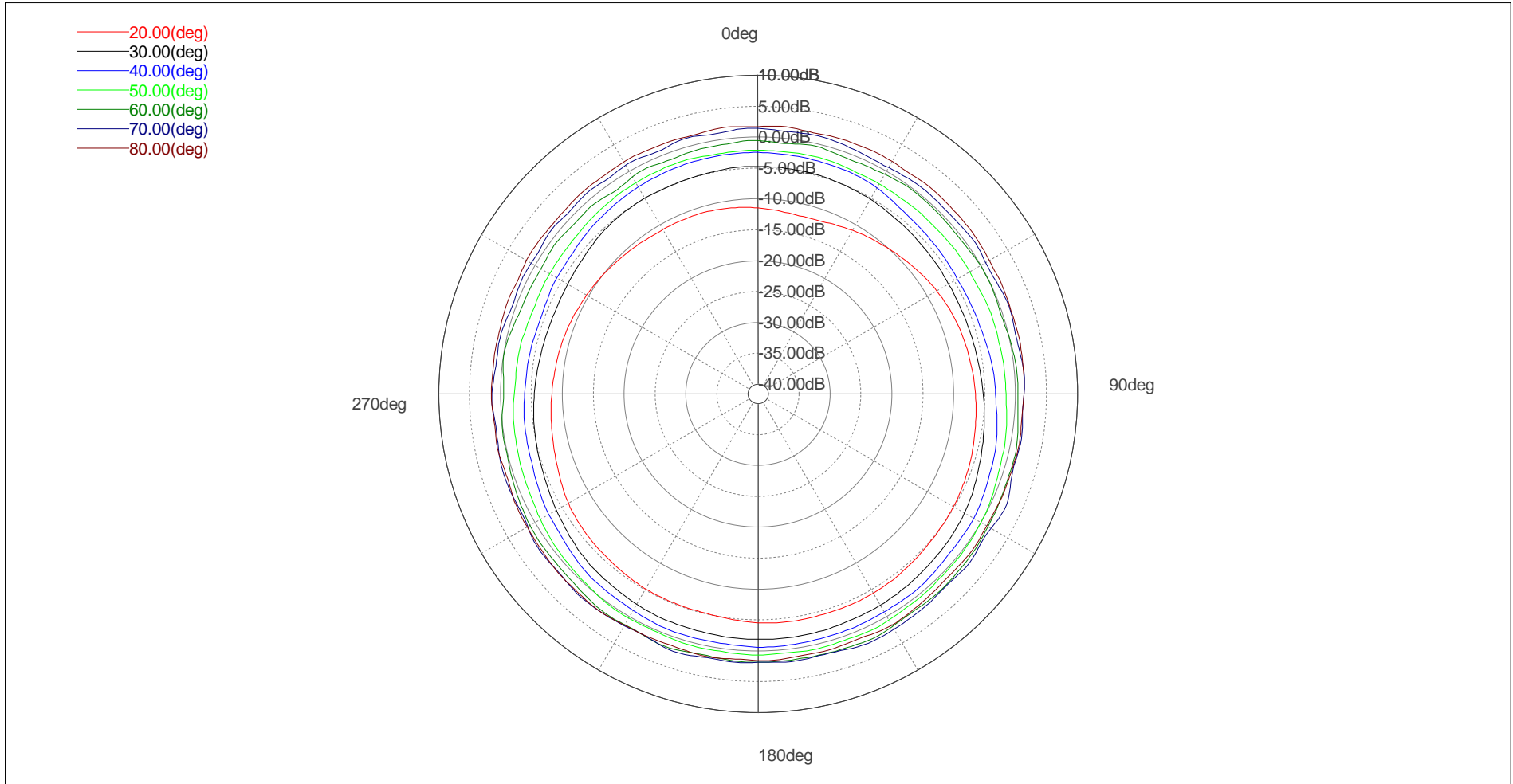


- 20.00(deg)
- 30.00(deg)
- 40.00(deg)
- 50.00(deg)
- 60.00(deg)
- 70.00(deg)
- 80.00(deg)



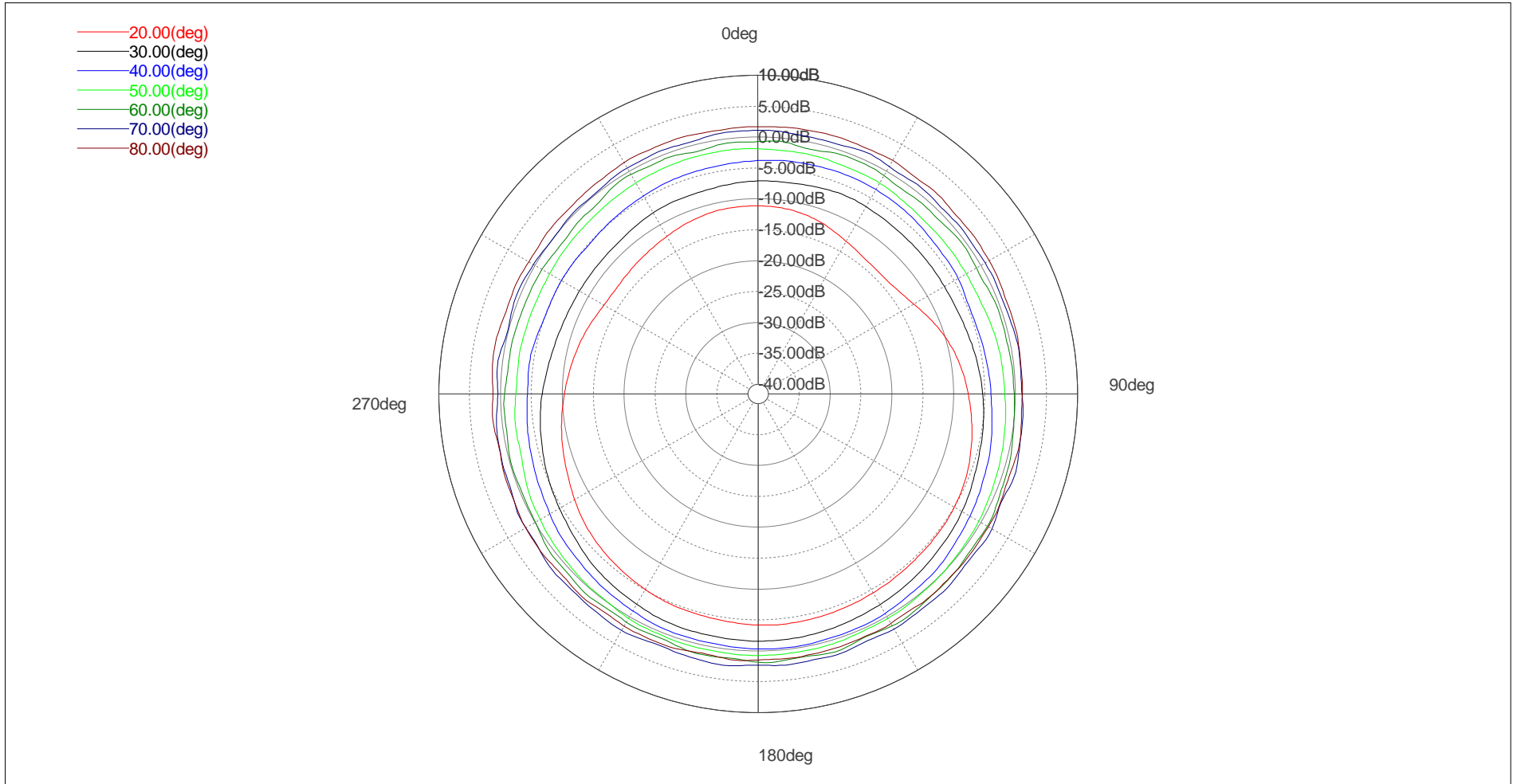
Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-4.28 dB	174.10 deg	-10.04 dB	7.20 deg	5.76 dB	-7.10 dB	1.95
30(deg)	-2.20 dB	170.49 deg	-6.19 dB	64.84 deg	3.98 dB	-4.13 dB	1.26
40(deg)	-1.04 dB	177.70 deg	-4.60 dB	45.63 deg	3.56 dB	-2.70 dB	1.11
50(deg)	0.73 dB	153.69 deg	-2.89 dB	290.56 deg	3.62 dB	-1.20 dB	1.13
60(deg)	1.87 dB	200.51 deg	-1.17 dB	327.78 deg	3.04 dB	0.45 dB	0.85
70(deg)	2.23 dB	153.69 deg	0.19 dB	294.16 deg	2.04 dB	1.14 dB	0.44
80(deg)	1.86 dB	353.00 deg	0.63 dB	247.34 deg	1.23 dB	1.38 dB	0.26

**(9/25/2017) Frequency=2437.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 1 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**



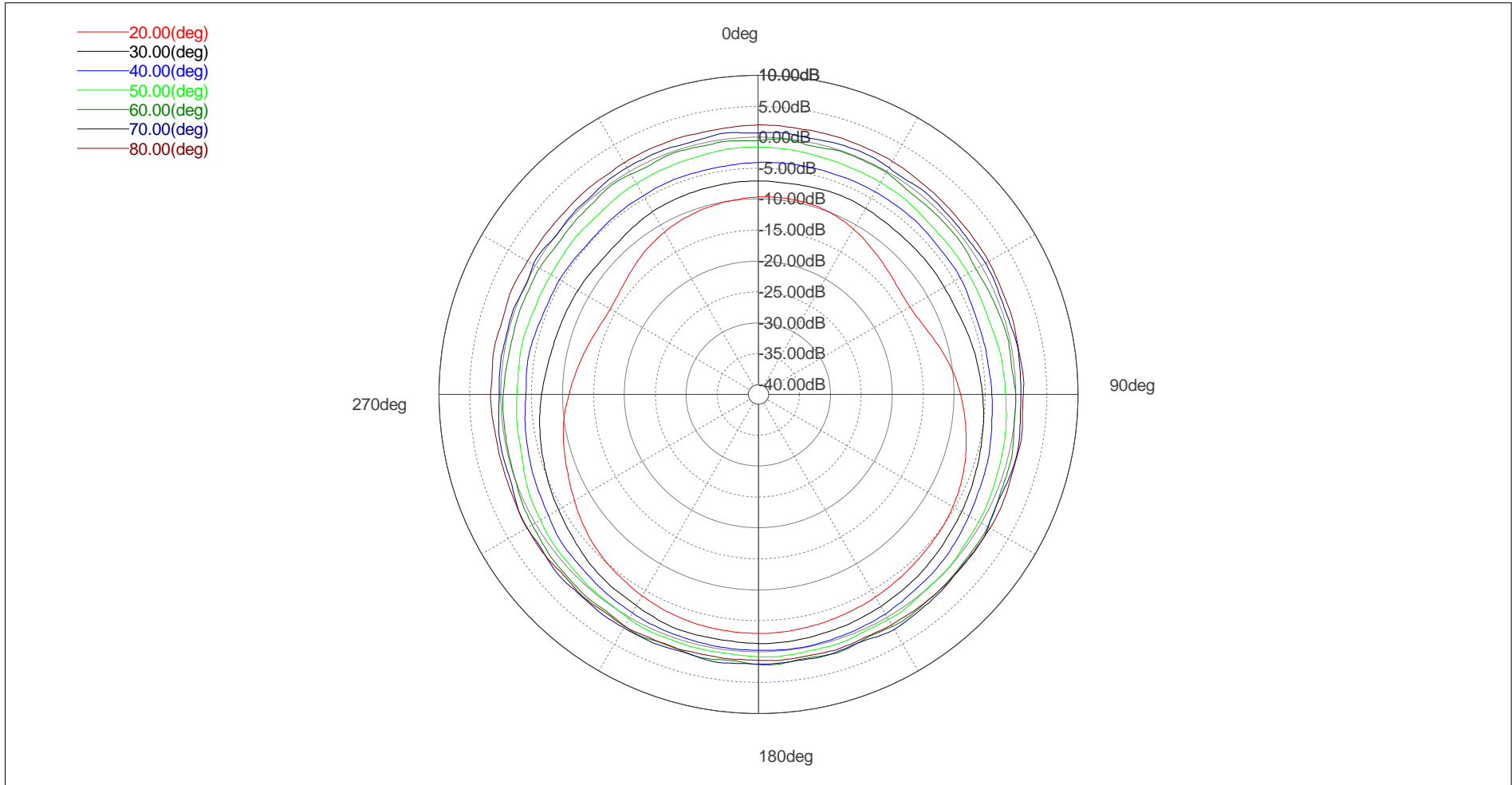
Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-4.41 dB	153.69 deg	-12.04 dB	14.41 deg	7.64 dB	-7.34 dB	2.53
30(deg)	-1.89 dB	171.70 deg	-6.23 dB	292.96 deg	4.34 dB	-4.19 dB	1.46
40(deg)	-0.66 dB	176.50 deg	-4.46 dB	289.36 deg	3.80 dB	-2.53 dB	1.23
50(deg)	0.76 dB	153.69 deg	-2.83 dB	291.76 deg	3.59 dB	-1.18 dB	1.19
60(deg)	2.06 dB	154.89 deg	-1.50 dB	325.38 deg	3.56 dB	0.37 dB	1.07
70(deg)	2.47 dB	154.89 deg	0.54 dB	290.56 deg	1.93 dB	1.40 dB	0.48
80(deg)	1.86 dB	40.82 deg	1.02 dB	133.27 deg	0.83 dB	1.49 dB	0.20

**(9/25/2017) Frequency=2462.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 1 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**



Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-4.17 dB	172.90 deg	-13.94 dB	44.42 deg	9.77 dB	-8.18 dB	3.39
30(deg)	-1.64 dB	178.90 deg	-8.38 dB	308.57 deg	6.73 dB	-5.00 dB	2.26
40(deg)	-0.30 dB	174.10 deg	-5.18 dB	312.17 deg	4.88 dB	-2.91 dB	1.56
50(deg)	0.67 dB	180.10 deg	-2.81 dB	296.57 deg	3.48 dB	-1.29 dB	1.20
60(deg)	1.90 dB	163.29 deg	-1.68 dB	307.37 deg	3.58 dB	0.02 dB	1.04
70(deg)	2.57 dB	187.30 deg	-0.07 dB	307.37 deg	2.65 dB	1.32 dB	0.75
80(deg)	1.98 dB	30.02 deg	1.08 dB	92.45 deg	0.90 dB	1.45 dB	0.22

**(9/25/2017) Frequency=2472.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 1 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**

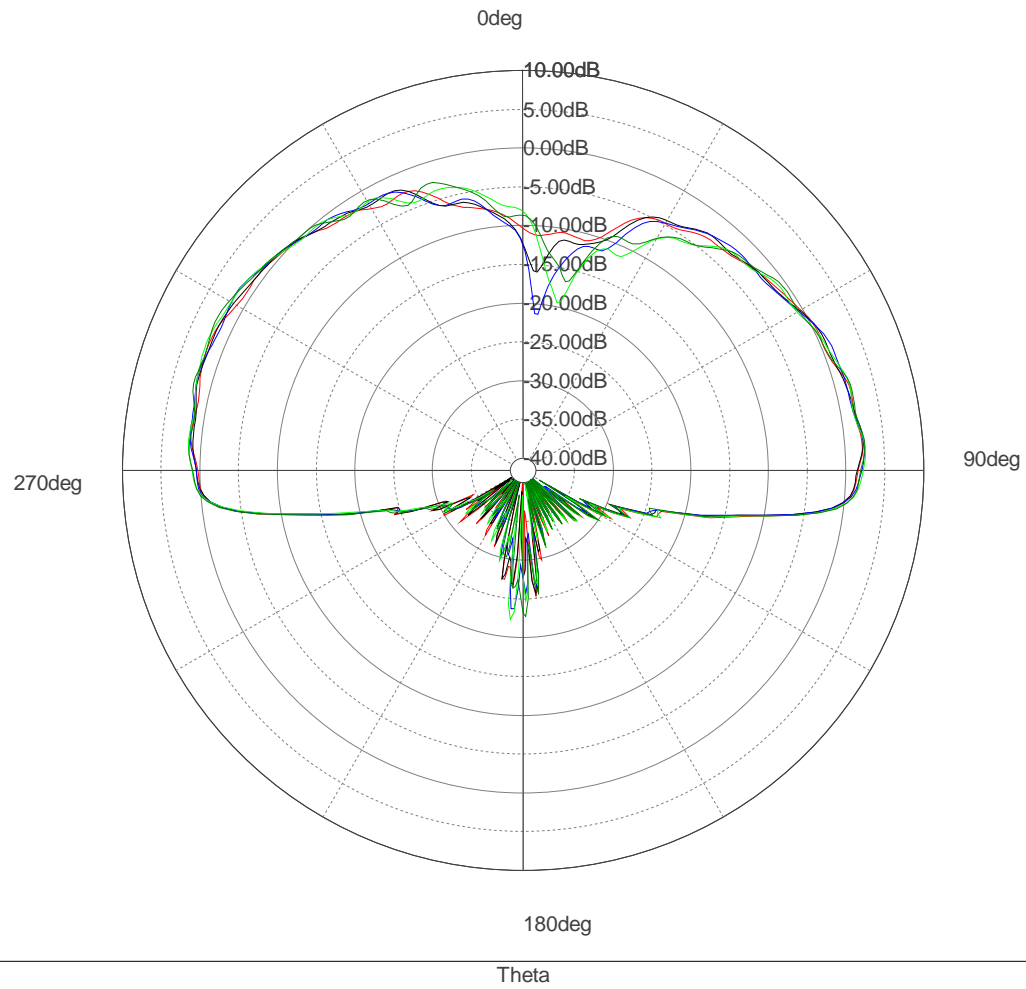


Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-3.03 dB	178.90 deg	-14.02 dB	300.17 deg	10.98 dB	-7.81 dB	3.59
30(deg)	-1.39 dB	177.70 deg	-8.29 dB	312.17 deg	6.90 dB	-4.90 dB	2.29
40(deg)	-0.17 dB	170.49 deg	-4.87 dB	312.17 deg	4.69 dB	-2.83 dB	1.53
50(deg)	0.80 dB	176.50 deg	-2.93 dB	292.96 deg	3.73 dB	-1.27 dB	1.19
60(deg)	2.13 dB	177.70 deg	-1.14 dB	307.37 deg	3.27 dB	0.28 dB	0.98
70(deg)	2.20 dB	148.88 deg	-0.14 dB	295.36 deg	2.33 dB	1.05 dB	0.61
80(deg)	1.89 dB	1.20 deg	1.04 dB	79.24 deg	0.85 dB	1.48 dB	0.19

**(9/25/2017) Phi=0.00deg / WiFi Low Free Space
Passive WiFi TE Connectivity Sample 1 / ATS Antenna Polar Pattern
WiFi Free Space Development E(Theta) . Amp dB**



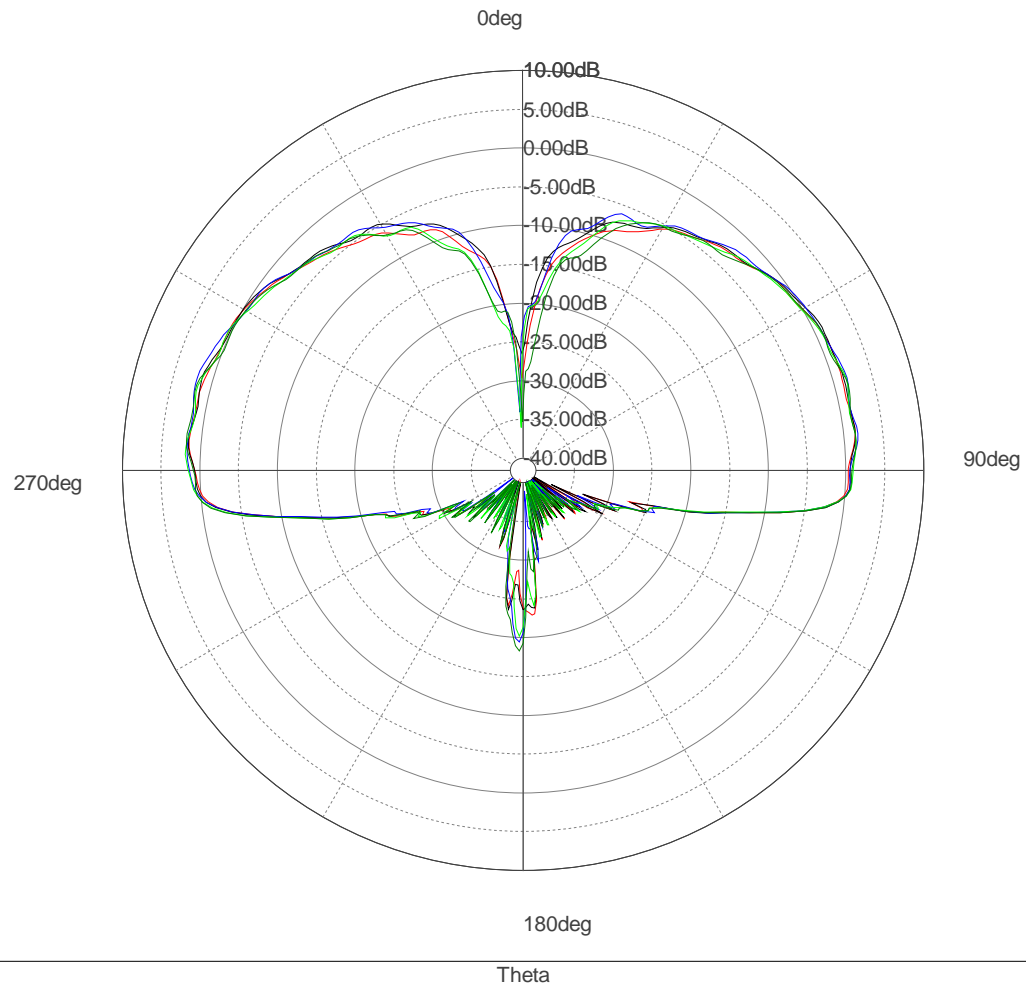
- 2412.00(MHz)
- 2427.00(MHz)
- 2437.00(MHz)
- 2462.00(MHz)
- 2472.00(MHz)



**(9/25/2017) Phi=90.00deg / WiFi Low Free Space
Passive WiFi TE Connectivity Sample 1 / ATS Antenna Polar Pattern
WiFi Free Space Development E(Theta) . Amp dB**



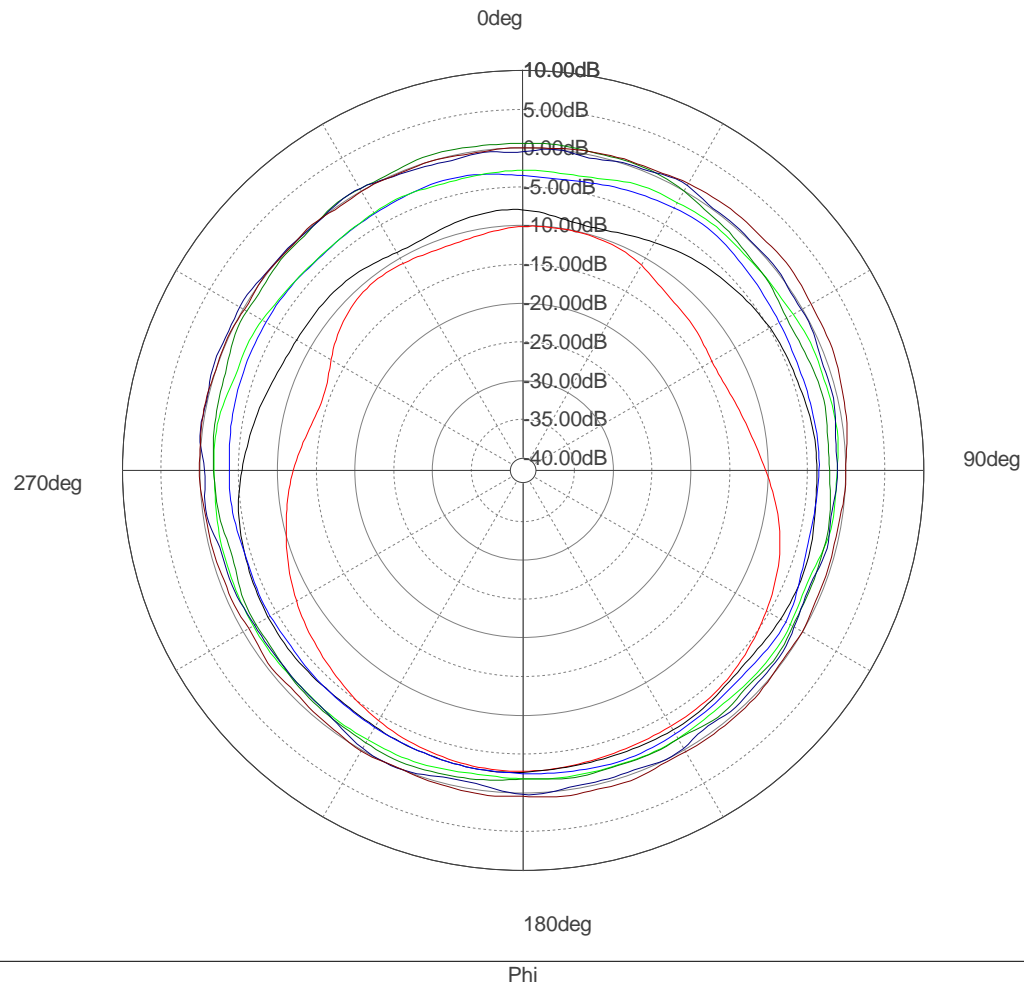
- 2412.00(MHz)
- 2427.00(MHz)
- 2437.00(MHz)
- 2462.00(MHz)
- 2472.00(MHz)



**(9/25/2017) Frequency=2412.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 2 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**

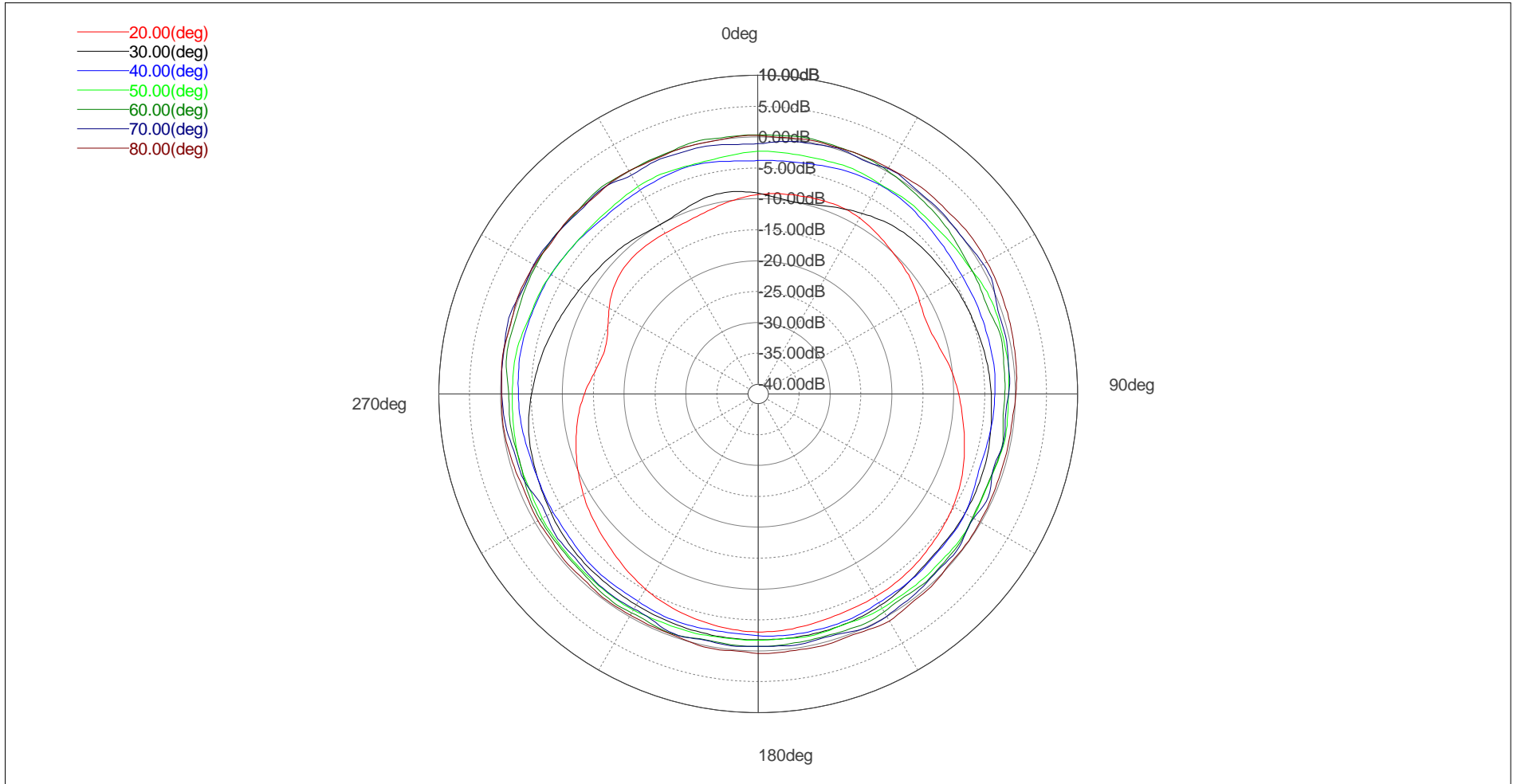


- 20.00(deg)
- 30.00(deg)
- 40.00(deg)
- 50.00(deg)
- 60.00(deg)
- 70.00(deg)
- 80.00(deg)



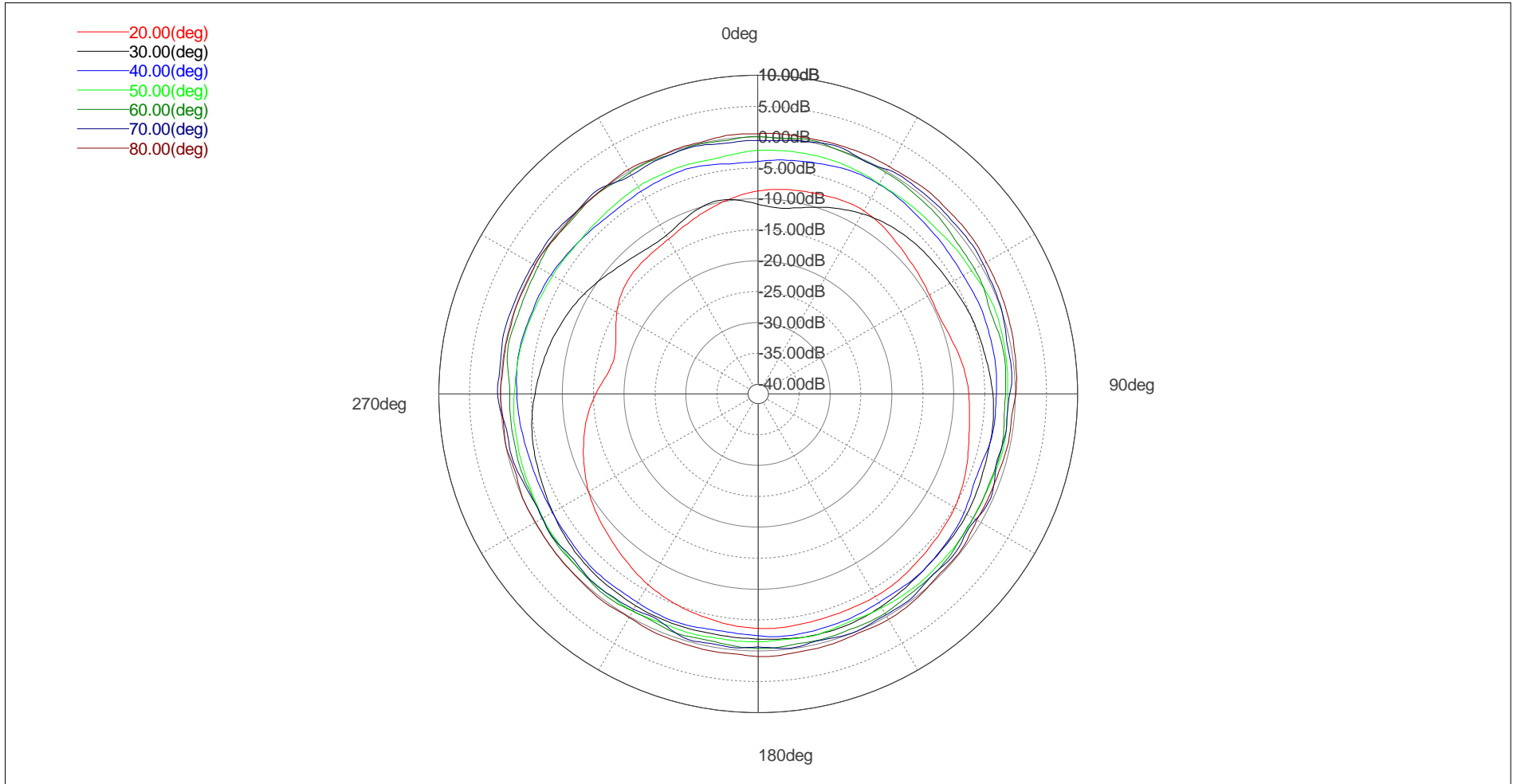
Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-2.86 dB	181.30 deg	-14.25 dB	289.36 deg	11.39 dB	-8.00 dB	3.67
30(deg)	-2.67 dB	184.90 deg	-9.26 dB	333.79 deg	6.59 dB	-5.03 dB	2.22
40(deg)	-2.11 dB	160.89 deg	-4.27 dB	252.14 deg	2.17 dB	-3.24 dB	0.54
50(deg)	-0.80 dB	82.85 deg	-3.66 dB	316.98 deg	2.86 dB	-1.99 dB	0.71
60(deg)	0.74 dB	344.59 deg	-2.58 dB	253.34 deg	3.32 dB	-1.07 dB	0.90
70(deg)	0.81 dB	28.82 deg	-1.81 dB	231.73 deg	2.62 dB	-0.47 dB	0.65
80(deg)	1.60 dB	51.63 deg	-0.89 dB	238.93 deg	2.49 dB	0.20 dB	0.55

**(9/25/2017) Frequency=2427.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 2 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**



Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-3.13 dB	177.70 deg	-15.86 dB	285.76 deg	12.73 dB	-8.04 dB	3.55
30(deg)	-1.80 dB	165.69 deg	-10.03 dB	330.18 deg	8.23 dB	-4.73 dB	2.81
40(deg)	-2.27 dB	162.09 deg	-3.90 dB	359.00 deg	1.62 dB	-3.09 dB	0.43
50(deg)	-0.90 dB	81.65 deg	-3.41 dB	315.78 deg	2.51 dB	-1.90 dB	0.66
60(deg)	0.55 dB	10.81 deg	-1.96 dB	68.44 deg	2.51 dB	-0.73 dB	0.67
70(deg)	0.54 dB	32.42 deg	-2.33 dB	242.54 deg	2.87 dB	-0.60 dB	0.65
80(deg)	1.22 dB	54.03 deg	-0.76 dB	247.34 deg	1.98 dB	0.11 dB	0.45

**(9/25/2017) Frequency=2437.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 2 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**

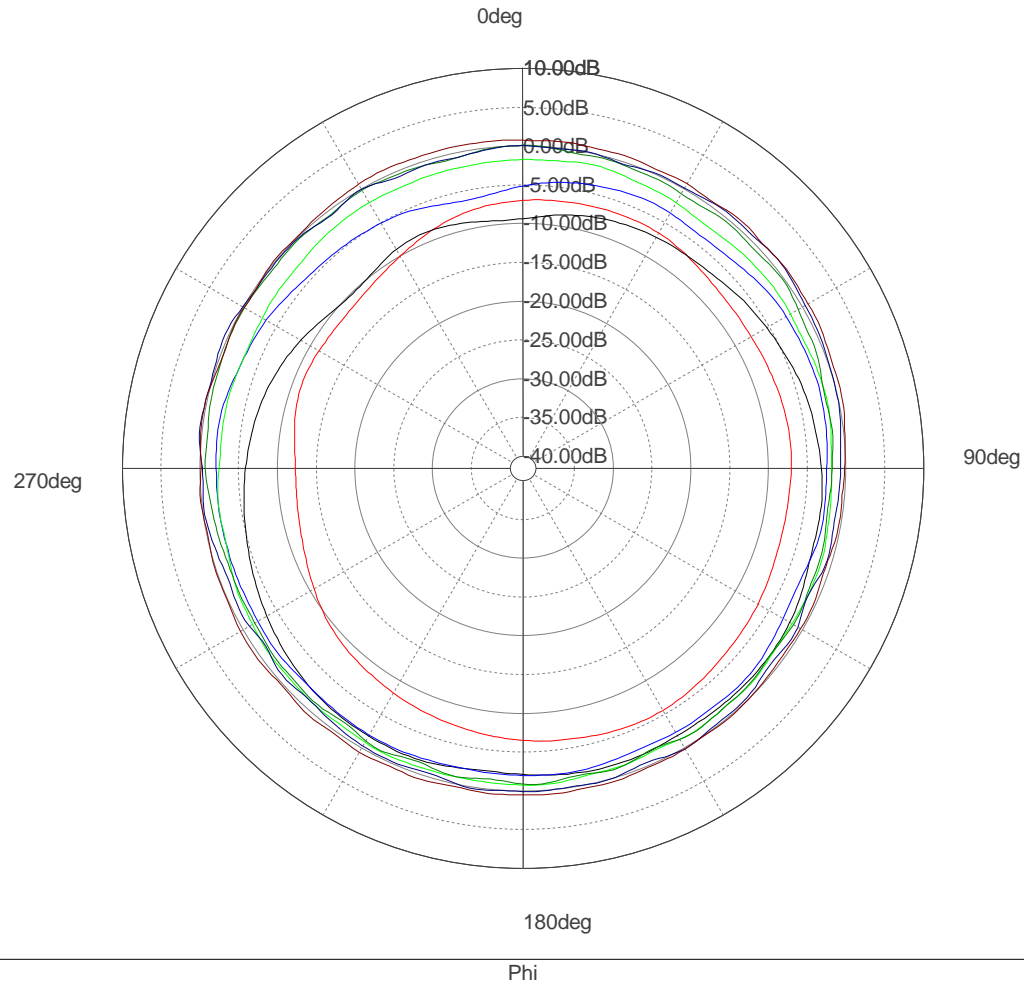


Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-3.66 dB	176.50 deg	-17.66 dB	283.36 deg	14.00 dB	-8.05 dB	3.91
30(deg)	-1.53 dB	163.29 deg	-12.14 dB	326.58 deg	10.62 dB	-4.95 dB	3.42
40(deg)	-2.22 dB	171.70 deg	-4.17 dB	355.40 deg	1.95 dB	-3.03 dB	0.48
50(deg)	-0.94 dB	72.04 deg	-3.63 dB	309.77 deg	2.69 dB	-1.92 dB	0.71
60(deg)	0.31 dB	12.01 deg	-1.76 dB	70.84 deg	2.07 dB	-0.83 dB	0.51
70(deg)	0.62 dB	284.56 deg	-1.73 dB	205.31 deg	2.35 dB	-0.38 dB	0.62
80(deg)	1.20 dB	52.83 deg	-0.80 dB	117.67 deg	2.00 dB	0.24 dB	0.48

**(9/25/2017) Frequency=2462.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 2 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**

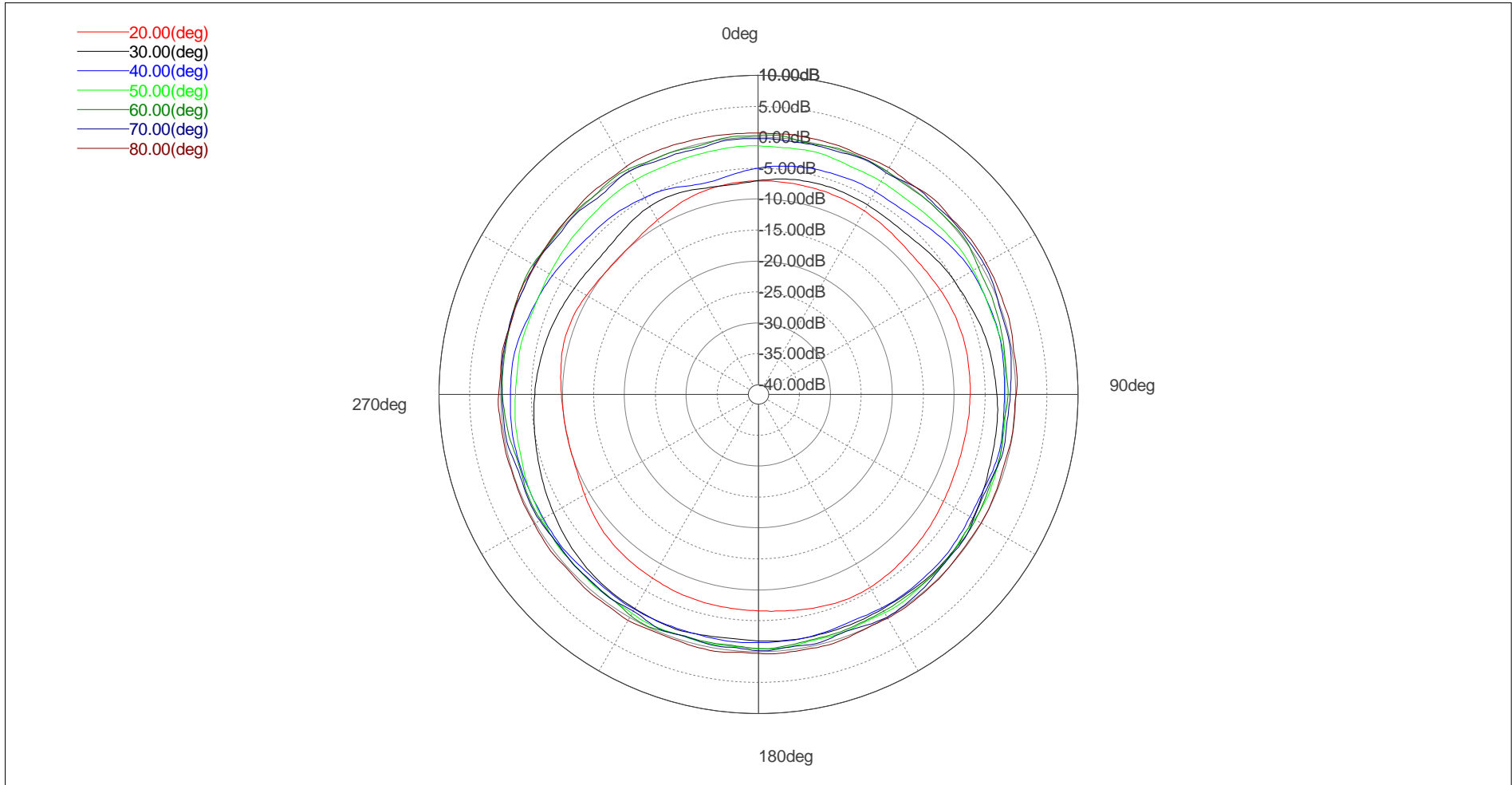


- 20.00(deg)
- 30.00(deg)
- 40.00(deg)
- 50.00(deg)
- 60.00(deg)
- 70.00(deg)
- 80.00(deg)



Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-5.59 dB	152.48 deg	-12.36 dB	267.75 deg	6.77 dB	-8.09 dB	2.06
30(deg)	-1.63 dB	162.09 deg	-10.20 dB	315.78 deg	8.57 dB	-4.56 dB	2.89
40(deg)	-1.98 dB	205.31 deg	-6.35 dB	348.19 deg	4.37 dB	-2.94 dB	1.19
50(deg)	-0.77 dB	205.31 deg	-2.97 dB	294.16 deg	2.20 dB	-1.72 dB	0.56
60(deg)	0.01 dB	1.20 deg	-1.98 dB	97.25 deg	1.99 dB	-0.98 dB	0.54
70(deg)	0.86 dB	51.63 deg	-1.39 dB	114.06 deg	2.25 dB	-0.27 dB	0.47
80(deg)	0.94 dB	52.83 deg	-0.59 dB	108.06 deg	1.54 dB	0.29 dB	0.38

**(9/25/2017) Frequency=2472.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 2 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**

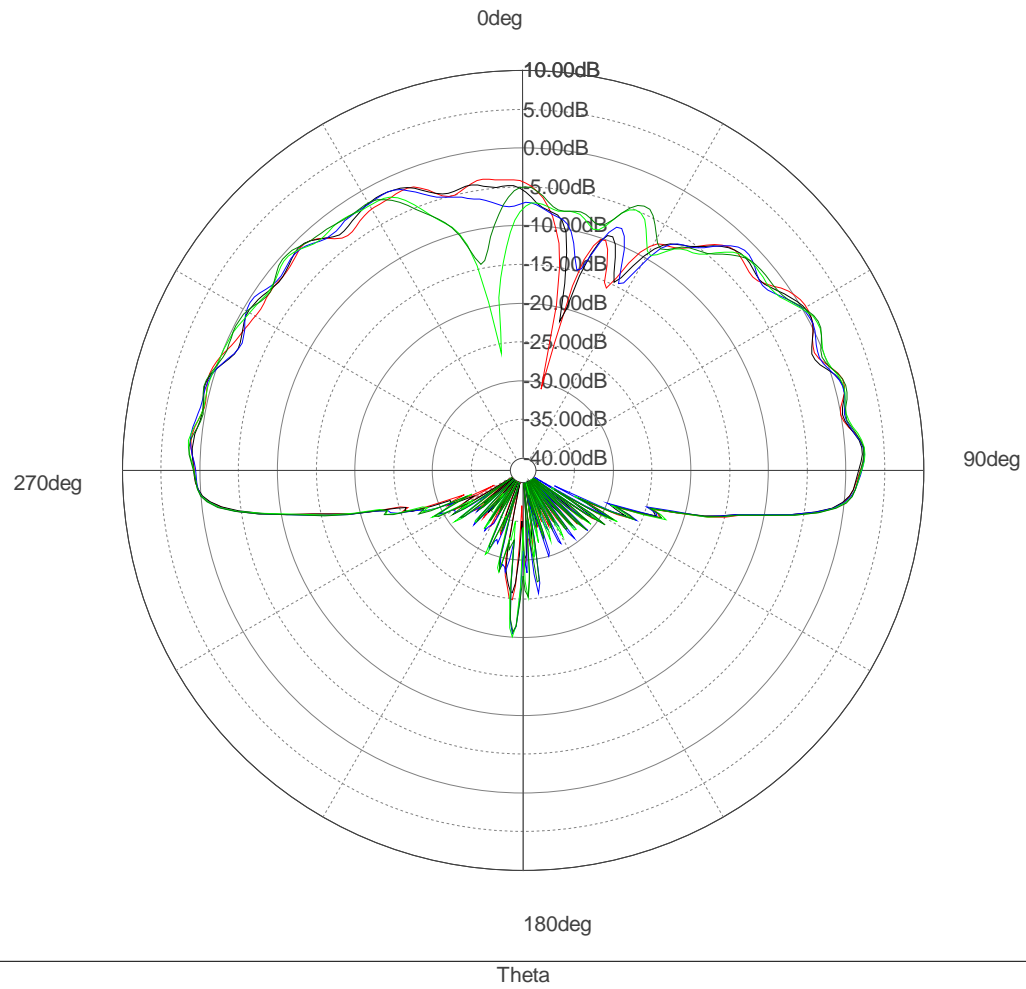


Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-5.57 dB	153.69 deg	-10.14 dB	313.37 deg	4.57 dB	-7.75 dB	1.26
30(deg)	-1.23 dB	132.07 deg	-7.78 dB	310.97 deg	6.55 dB	-3.99 dB	2.24
40(deg)	-1.40 dB	261.75 deg	-6.44 dB	346.99 deg	5.03 dB	-2.49 dB	1.38
50(deg)	-0.46 dB	176.50 deg	-2.82 dB	291.76 deg	2.37 dB	-1.50 dB	0.58
60(deg)	0.46 dB	327.78 deg	-1.67 dB	97.25 deg	2.14 dB	-0.55 dB	0.59
70(deg)	0.52 dB	60.03 deg	-1.73 dB	114.06 deg	2.25 dB	-0.45 dB	0.50
80(deg)	1.05 dB	333.79 deg	-0.31 dB	105.66 deg	1.37 dB	0.34 dB	0.30

**(9/25/2017) Phi=0.00deg / WiFi Low Free Space
Passive WiFi TE Connectivity Sample 2 / ATS Antenna Polar Pattern
WiFi Free Space Development E(Theta) . Amp dB**



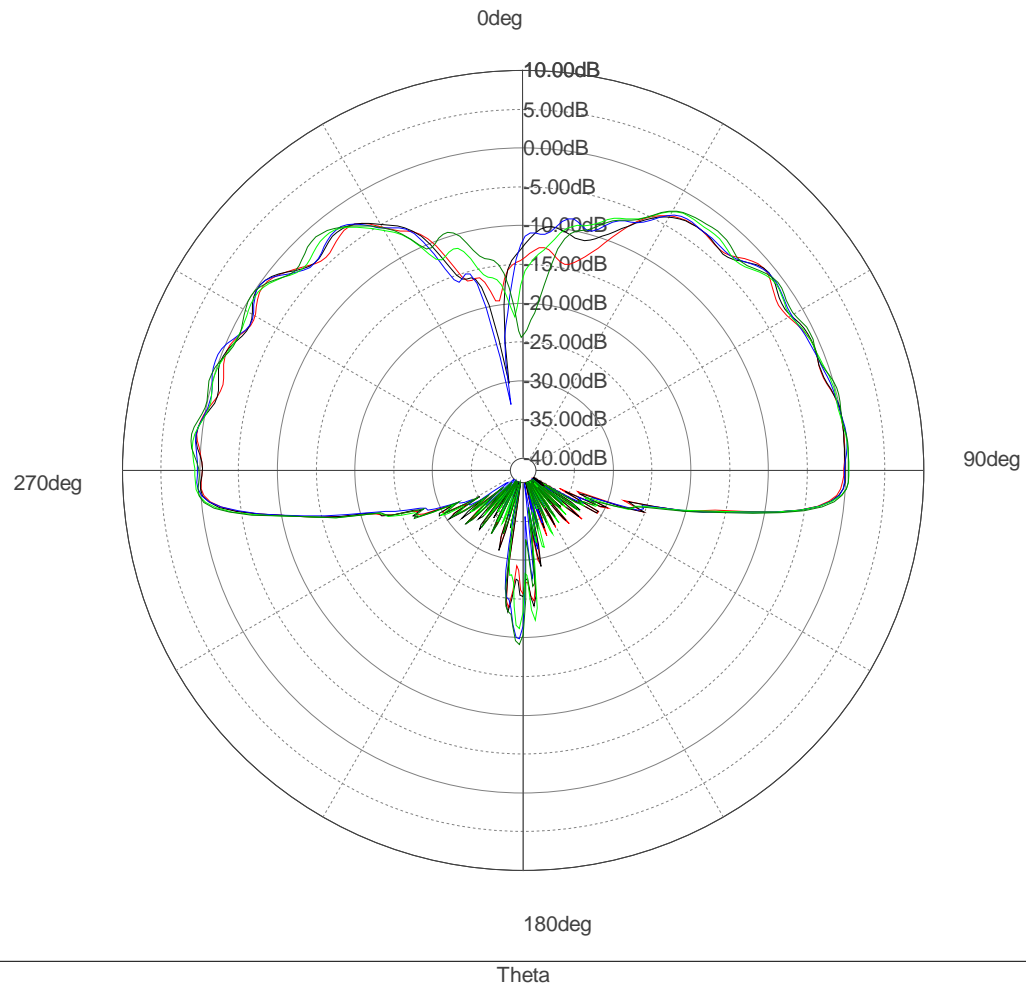
- 2412.00(MHz)
- 2427.00(MHz)
- 2437.00(MHz)
- 2462.00(MHz)
- 2472.00(MHz)



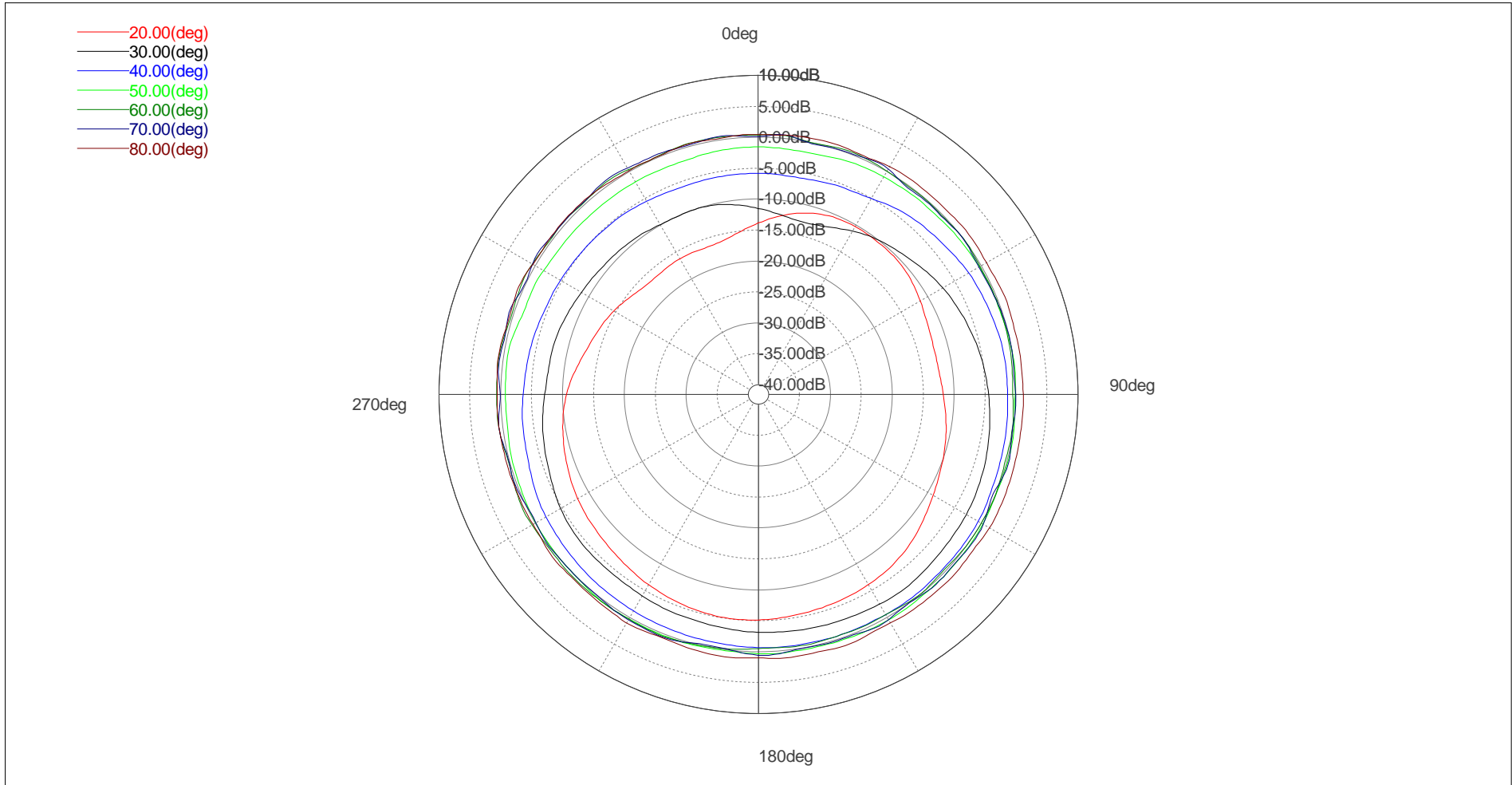
**(9/25/2017) Phi=90.00deg / WiFi Low Free Space
Passive WiFi TE Connectivity Sample 2 / ATS Antenna Polar Pattern
WiFi Free Space Development E(Theta) . Amp dB**



- 2412.00(MHz)
- 2427.00(MHz)
- 2437.00(MHz)
- 2462.00(MHz)
- 2472.00(MHz)

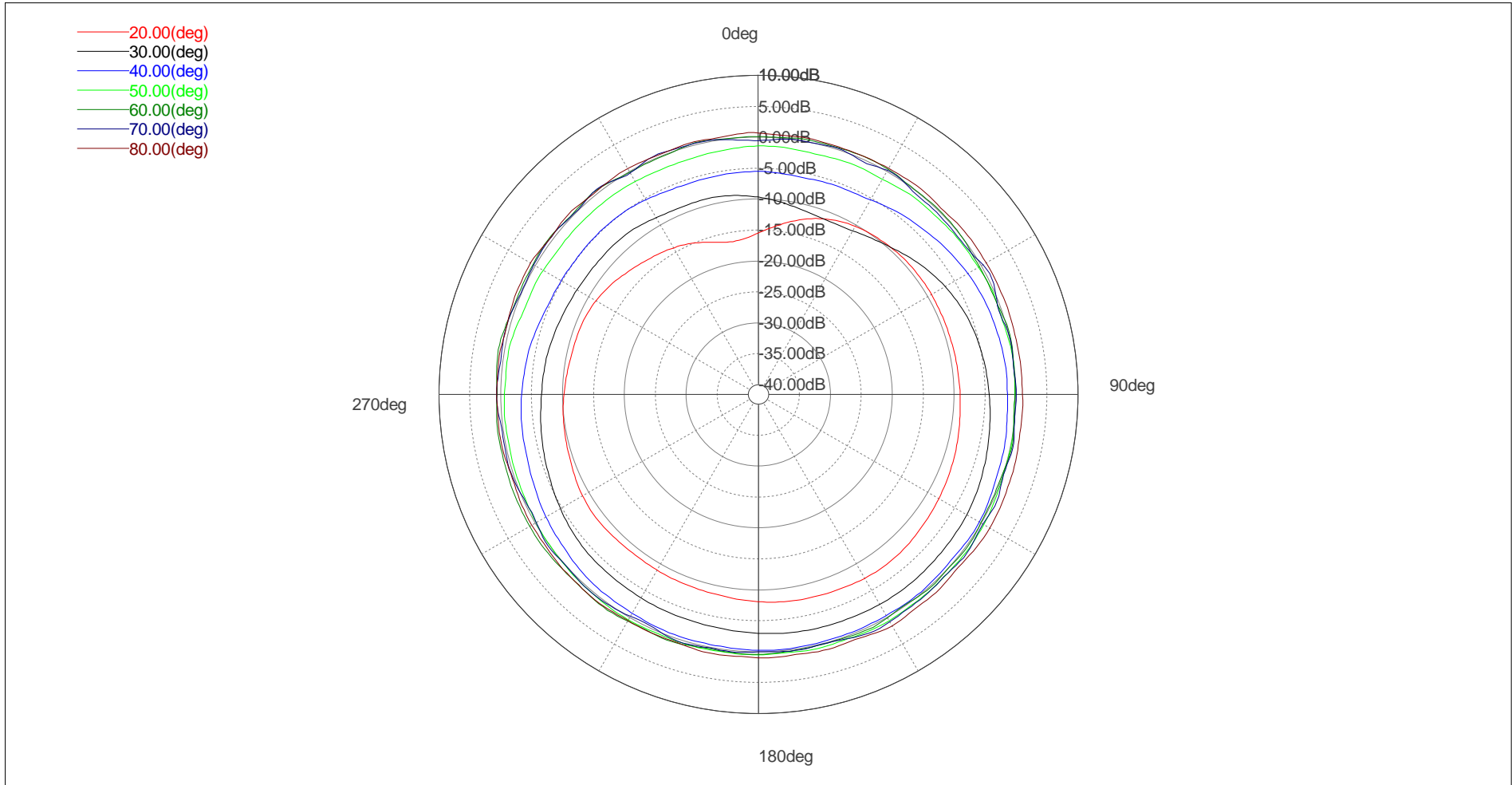


**(9/25/2017) Frequency=2412.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 3 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**



Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-5.14 dB	186.10 deg	-16.47 dB	340.99 deg	11.33 dB	-9.66 dB	3.49
30(deg)	-2.36 dB	142.88 deg	-12.87 dB	14.41 deg	10.51 dB	-5.93 dB	3.16
40(deg)	-0.49 dB	144.08 deg	-6.03 dB	9.61 deg	5.54 dB	-2.62 dB	1.96
50(deg)	0.44 dB	150.08 deg	-2.07 dB	339.79 deg	2.52 dB	-0.53 dB	0.82
60(deg)	0.73 dB	277.35 deg	-0.64 dB	177.70 deg	1.37 dB	0.08 dB	0.36
70(deg)	0.86 dB	325.38 deg	-0.48 dB	61.23 deg	1.34 dB	0.17 dB	0.30
80(deg)	1.51 dB	117.67 deg	0.07 dB	336.19 deg	1.44 dB	0.81 dB	0.36

**(9/25/2017) Frequency=2427.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 3 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**

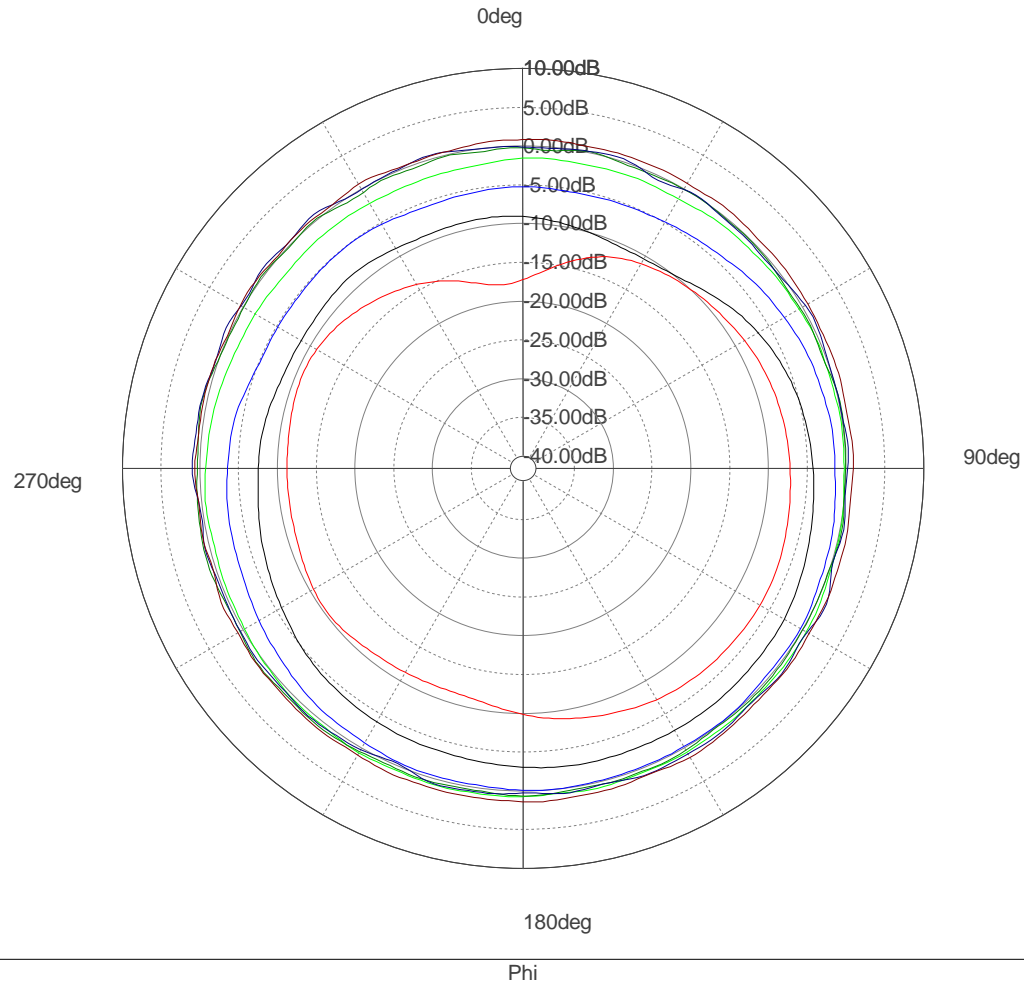


Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-7.24 dB	144.08 deg	-16.61 dB	350.60 deg	9.37 dB	-9.83 dB	2.43
30(deg)	-2.40 dB	142.88 deg	-11.44 dB	22.81 deg	9.03 dB	-5.55 dB	2.77
40(deg)	-0.24 dB	175.30 deg	-5.87 dB	12.01 deg	5.62 dB	-2.48 dB	2.03
50(deg)	0.61 dB	152.48 deg	-2.04 dB	339.79 deg	2.65 dB	-0.49 dB	0.86
60(deg)	1.00 dB	236.53 deg	-0.40 dB	61.23 deg	1.40 dB	0.28 dB	0.37
70(deg)	0.96 dB	152.48 deg	-0.62 dB	0.00 deg	1.58 dB	0.13 dB	0.33
80(deg)	1.55 dB	118.87 deg	0.23 dB	338.59 deg	1.32 dB	0.78 dB	0.32

**(9/25/2017) Frequency=2437.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 3 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**



- 20.00(deg)
- 30.00(deg)
- 40.00(deg)
- 50.00(deg)
- 60.00(deg)
- 70.00(deg)
- 80.00(deg)

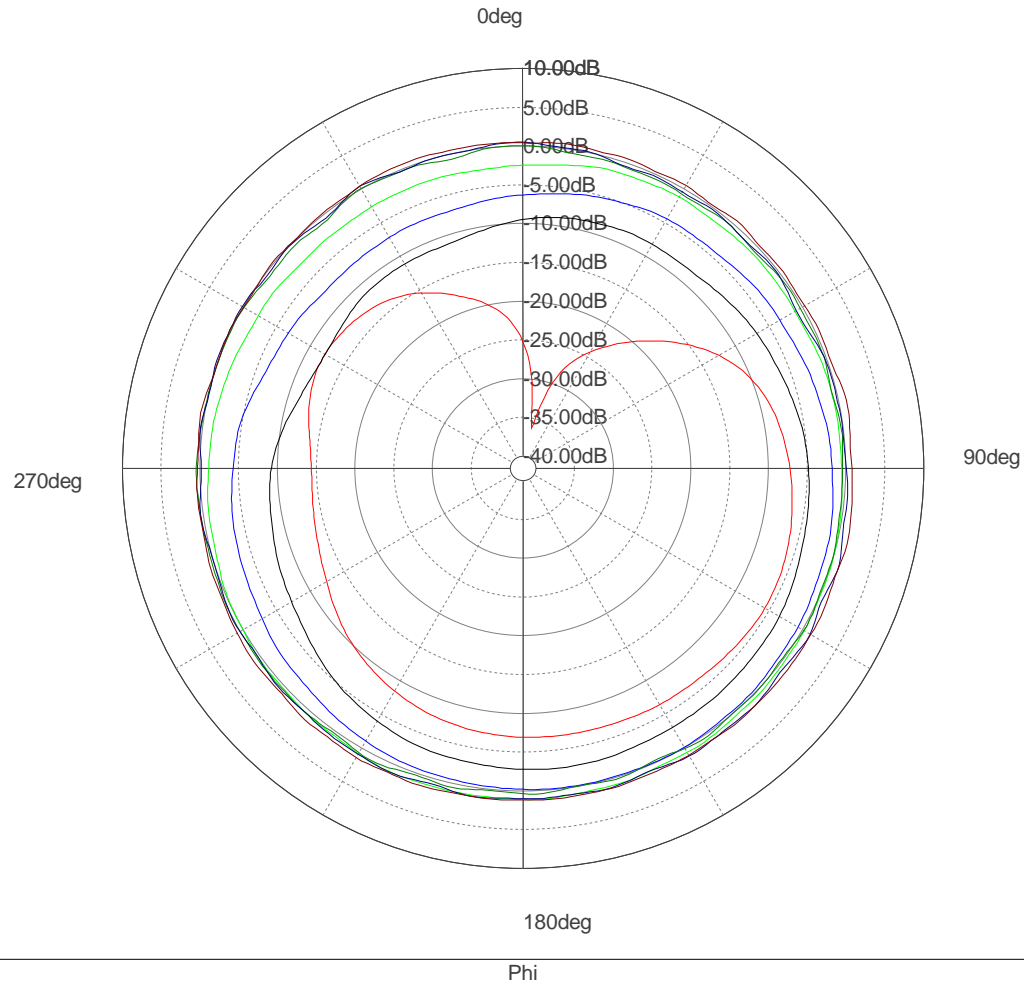


Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-6.35 dB	118.87 deg	-17.83 dB	354.20 deg	11.48 dB	-10.07 dB	2.92
30(deg)	-2.55 dB	141.68 deg	-10.50 dB	27.62 deg	7.95 dB	-5.75 dB	2.64
40(deg)	-0.10 dB	175.30 deg	-5.66 dB	339.79 deg	5.57 dB	-2.47 dB	2.04
50(deg)	0.72 dB	194.51 deg	-2.27 dB	336.19 deg	2.99 dB	-0.50 dB	1.00
60(deg)	0.83 dB	232.93 deg	-0.63 dB	327.78 deg	1.46 dB	0.12 dB	0.36
70(deg)	1.23 dB	114.06 deg	-0.62 dB	25.21 deg	1.85 dB	0.34 dB	0.36
80(deg)	1.39 dB	148.88 deg	0.12 dB	294.16 deg	1.28 dB	0.81 dB	0.31

**(9/25/2017) Frequency=2462.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 3 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**



- 20.00(deg)
- 30.00(deg)
- 40.00(deg)
- 50.00(deg)
- 60.00(deg)
- 70.00(deg)
- 80.00(deg)

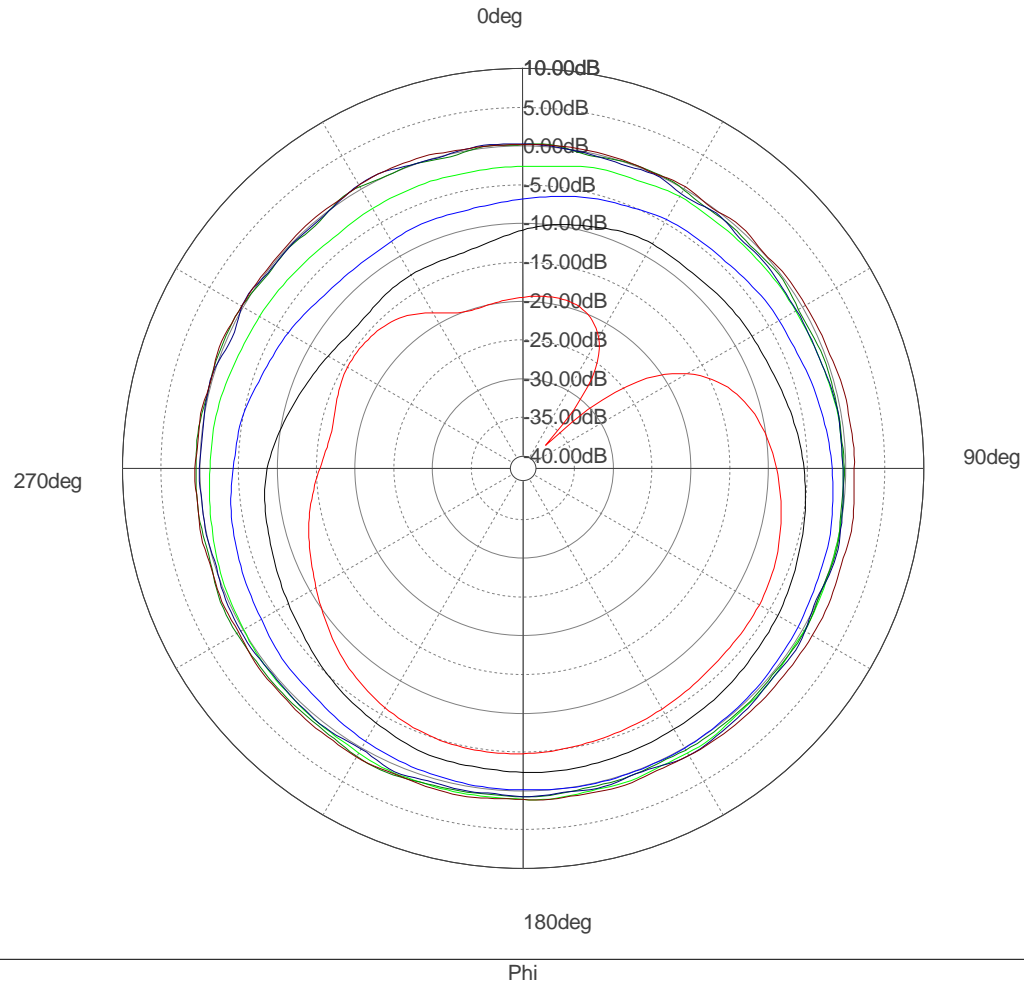


Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-5.63 dB	118.87 deg	-36.34 dB	12.01 deg	30.71 dB	-10.85 dB	6.97
30(deg)	-2.74 dB	170.49 deg	-12.22 dB	300.17 deg	9.49 dB	-6.39 dB	3.11
40(deg)	-0.10 dB	151.28 deg	-7.46 dB	314.58 deg	7.36 dB	-2.96 dB	2.48
50(deg)	1.07 dB	177.70 deg	-2.79 dB	325.38 deg	3.86 dB	-0.64 dB	1.25
60(deg)	0.78 dB	207.72 deg	-0.88 dB	320.58 deg	1.67 dB	-0.09 dB	0.39
70(deg)	1.20 dB	148.88 deg	-0.99 dB	61.23 deg	2.19 dB	0.28 dB	0.54
80(deg)	1.39 dB	210.12 deg	-0.15 dB	302.57 deg	1.54 dB	0.70 dB	0.42

**(9/25/2017) Frequency=2472.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 3 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**



- 20.00(deg)
- 30.00(deg)
- 40.00(deg)
- 50.00(deg)
- 60.00(deg)
- 70.00(deg)
- 80.00(deg)

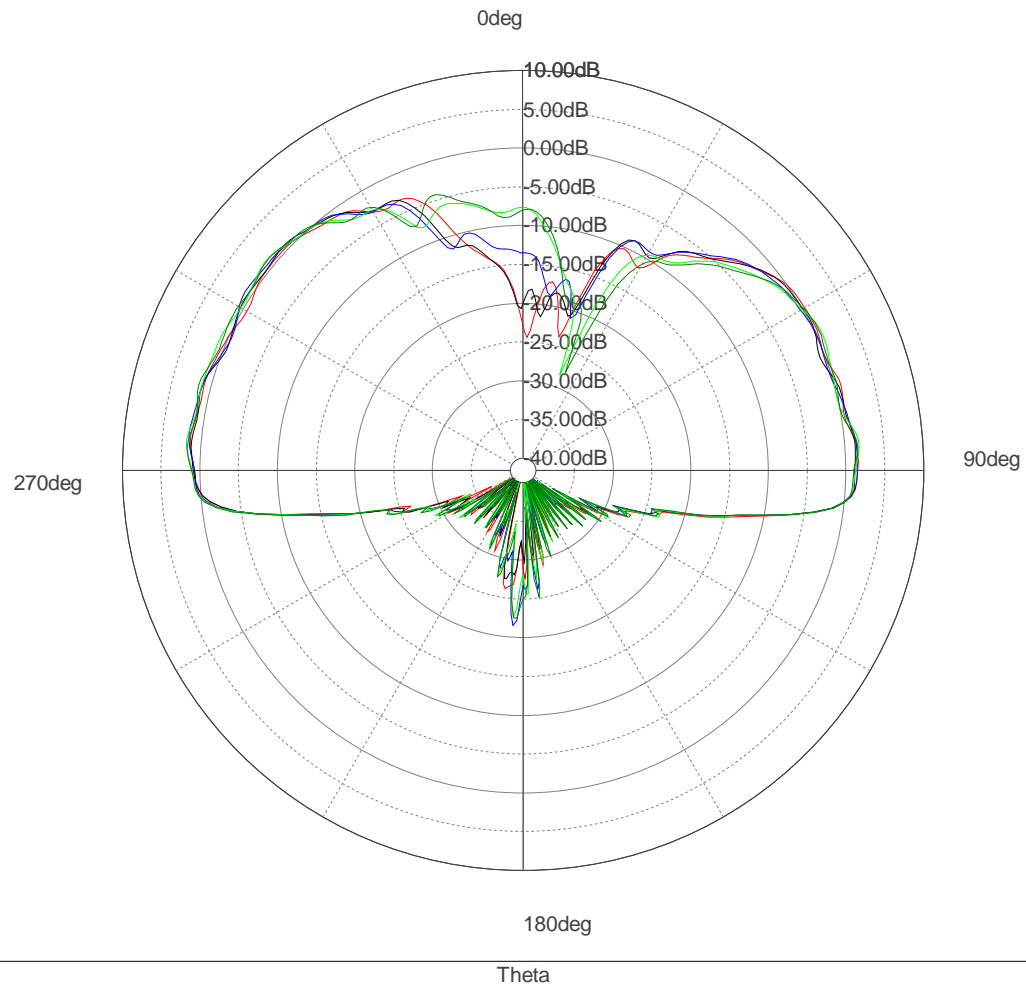


Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-4.82 dB	186.10 deg	-37.45 dB	44.42 deg	32.63 dB	-10.82 dB	6.85
30(deg)	-2.39 dB	174.10 deg	-13.47 dB	312.17 deg	11.09 dB	-6.51 dB	3.57
40(deg)	0.03 dB	151.28 deg	-8.00 dB	324.18 deg	8.03 dB	-2.99 dB	2.64
50(deg)	1.12 dB	176.50 deg	-3.17 dB	320.58 deg	4.29 dB	-0.69 dB	1.32
60(deg)	1.34 dB	206.52 deg	-0.68 dB	61.23 deg	2.02 dB	0.20 dB	0.46
70(deg)	1.13 dB	148.88 deg	-0.94 dB	57.63 deg	2.07 dB	0.07 dB	0.47
80(deg)	1.49 dB	116.46 deg	-0.13 dB	36.02 deg	1.61 dB	0.73 dB	0.45

**(9/25/2017) Phi=0.00deg / WiFi Low Free Space
Passive WiFi TE Connectivity Sample 3 / ATS Antenna Polar Pattern
WiFi Free Space Development E(Theta) . Amp dB**



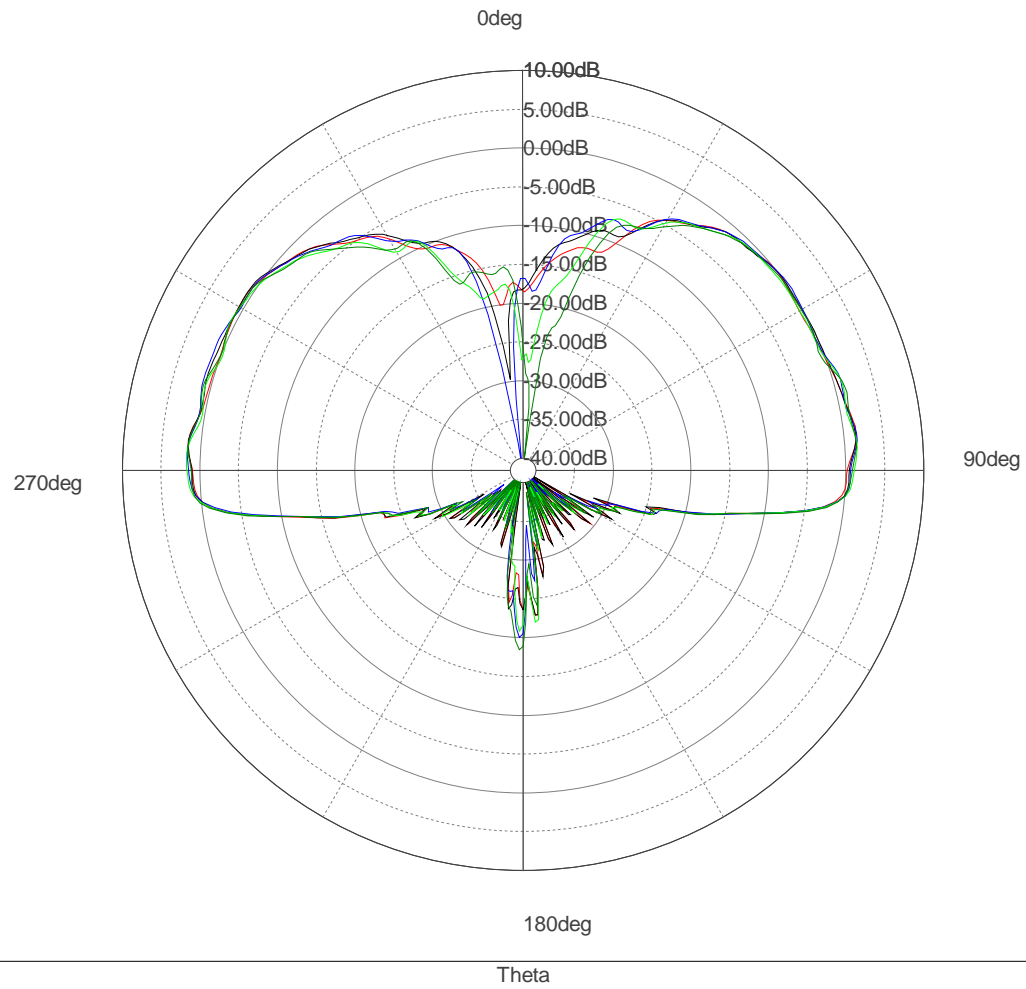
- 2412.00(MHz)
- 2427.00(MHz)
- 2437.00(MHz)
- 2462.00(MHz)
- 2472.00(MHz)



**(9/25/2017) Phi=90.00deg / WiFi Low Free Space
Passive WiFi TE Connectivity Sample 3 / ATS Antenna Polar Pattern
WiFi Free Space Development E(Theta) . Amp dB**



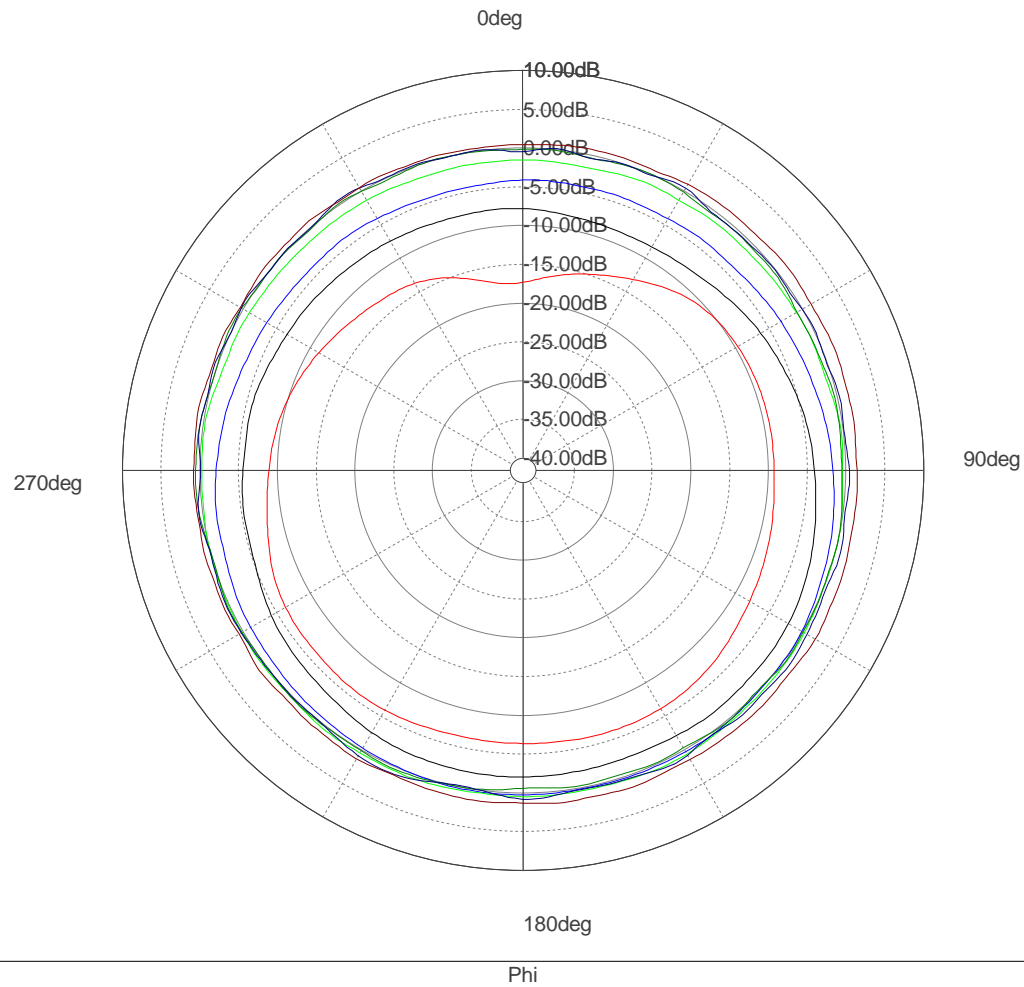
- 2412.00(MHz)
- 2427.00(MHz)
- 2437.00(MHz)
- 2462.00(MHz)
- 2472.00(MHz)



**(9/25/2017) Frequency=2412.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 4 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**

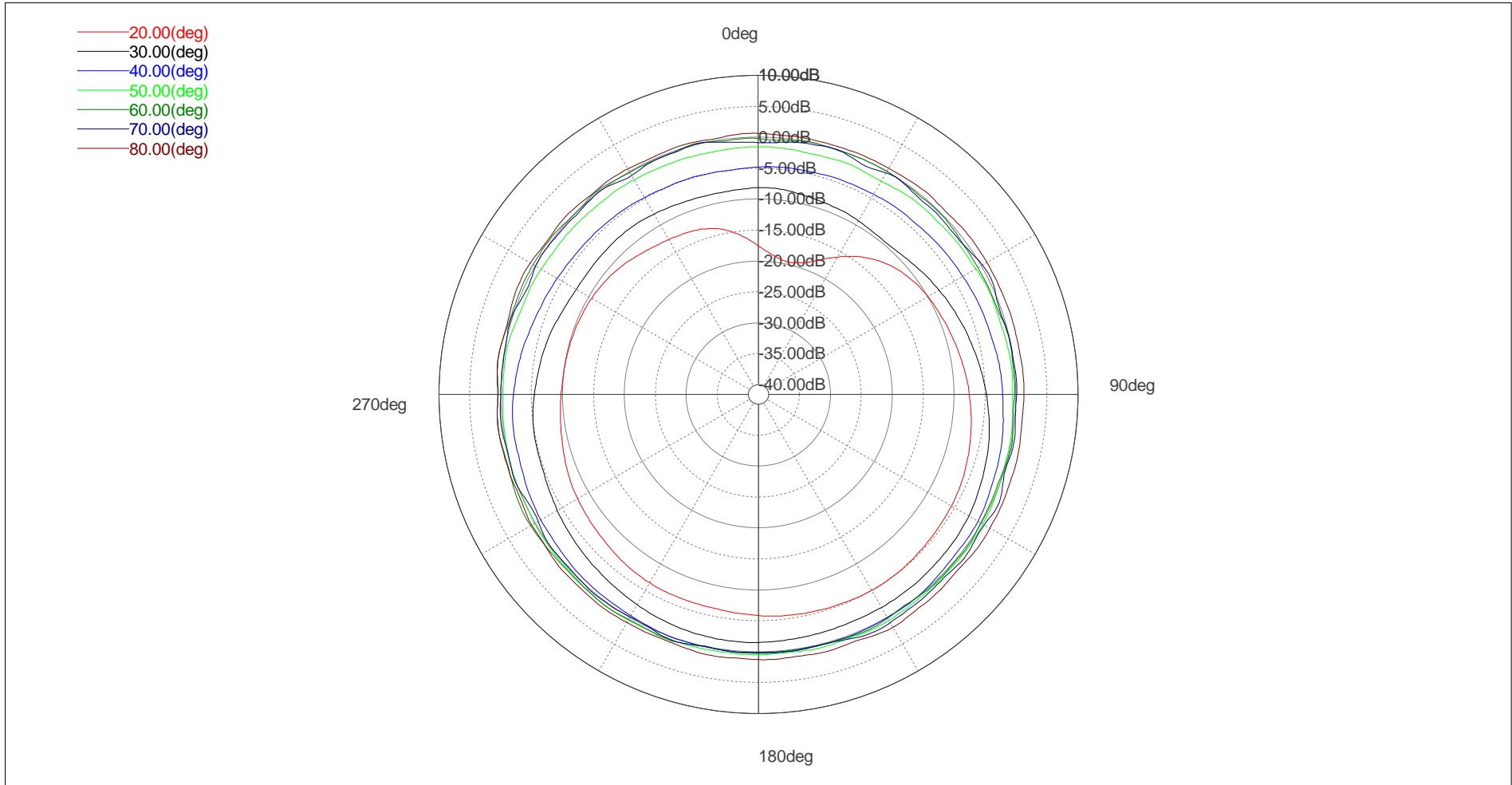


- 20.00(deg)
- 30.00(deg)
- 40.00(deg)
- 50.00(deg)
- 60.00(deg)
- 70.00(deg)
- 80.00(deg)



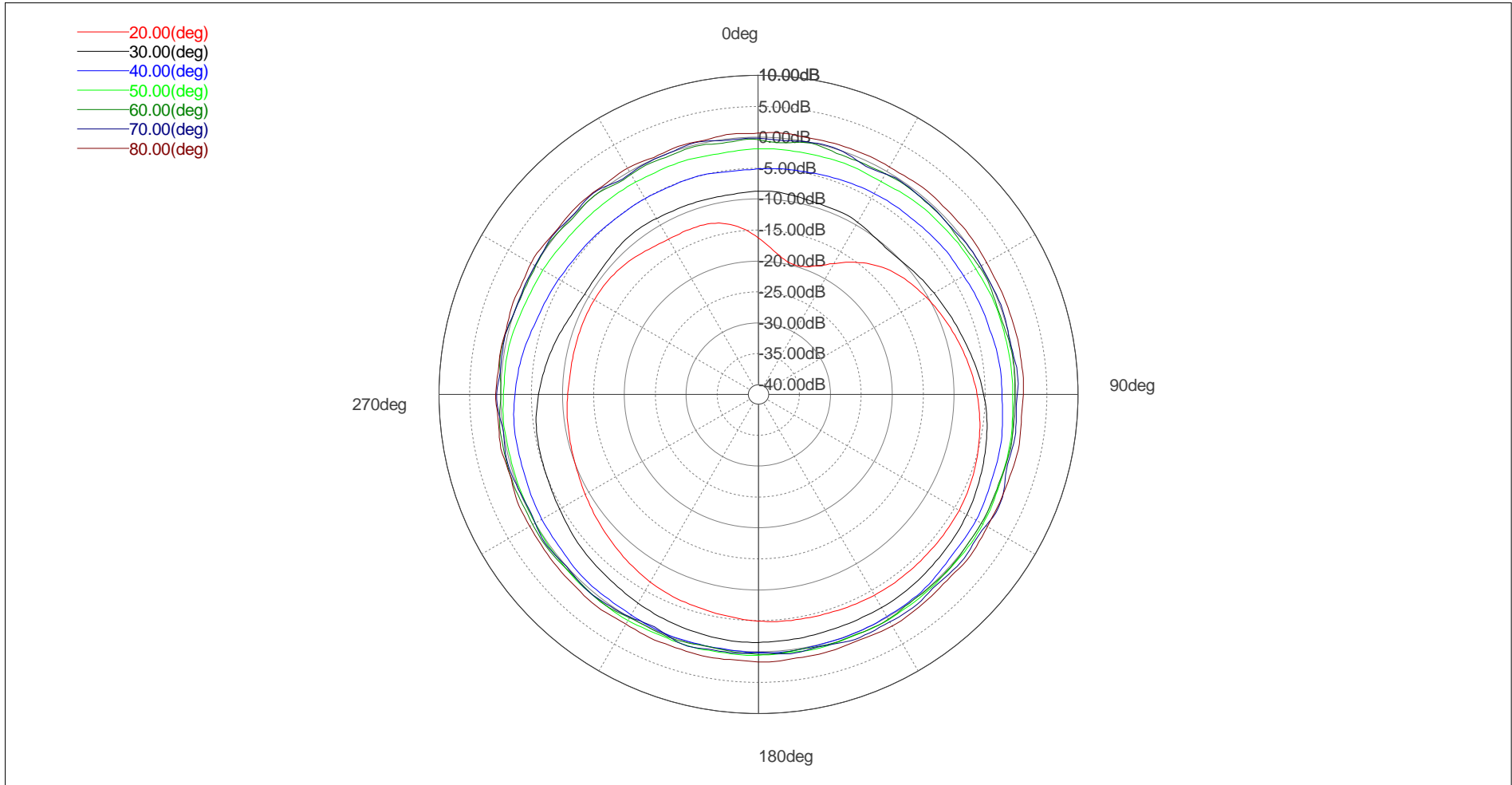
Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-5.93 dB	214.92 deg	-17.53 dB	356.60 deg	11.60 dB	-9.09 dB	3.41
30(deg)	-1.94 dB	140.48 deg	-8.46 dB	22.81 deg	6.53 dB	-4.68 dB	2.27
40(deg)	0.28 dB	144.08 deg	-4.47 dB	346.99 deg	4.75 dB	-1.89 dB	1.71
50(deg)	0.62 dB	152.48 deg	-1.75 dB	10.81 deg	2.37 dB	-0.42 dB	0.77
60(deg)	0.56 dB	267.75 deg	-0.83 dB	61.23 deg	1.38 dB	-0.12 dB	0.30
70(deg)	0.95 dB	205.31 deg	-0.56 dB	359.00 deg	1.52 dB	0.21 dB	0.33
80(deg)	1.88 dB	118.87 deg	0.29 dB	351.80 deg	1.59 dB	1.04 dB	0.43

**(9/25/2017) Frequency=2427.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 4 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**



Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-5.03 dB	146.48 deg	-19.69 dB	13.21 deg	14.65 dB	-8.84 dB	3.96
30(deg)	-1.54 dB	183.70 deg	-9.58 dB	39.62 deg	8.04 dB	-4.91 dB	2.73
40(deg)	0.21 dB	177.70 deg	-5.12 dB	353.00 deg	5.33 dB	-2.14 dB	1.86
50(deg)	0.60 dB	152.48 deg	-1.89 dB	28.82 deg	2.49 dB	-0.49 dB	0.83
60(deg)	0.88 dB	243.74 deg	-0.67 dB	57.63 deg	1.54 dB	0.09 dB	0.36
70(deg)	1.06 dB	153.69 deg	-0.95 dB	1.20 deg	2.01 dB	-0.02 dB	0.44
80(deg)	1.84 dB	150.08 deg	0.27 dB	349.39 deg	1.56 dB	0.91 dB	0.39

**(9/25/2017) Frequency=2437.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 4 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**

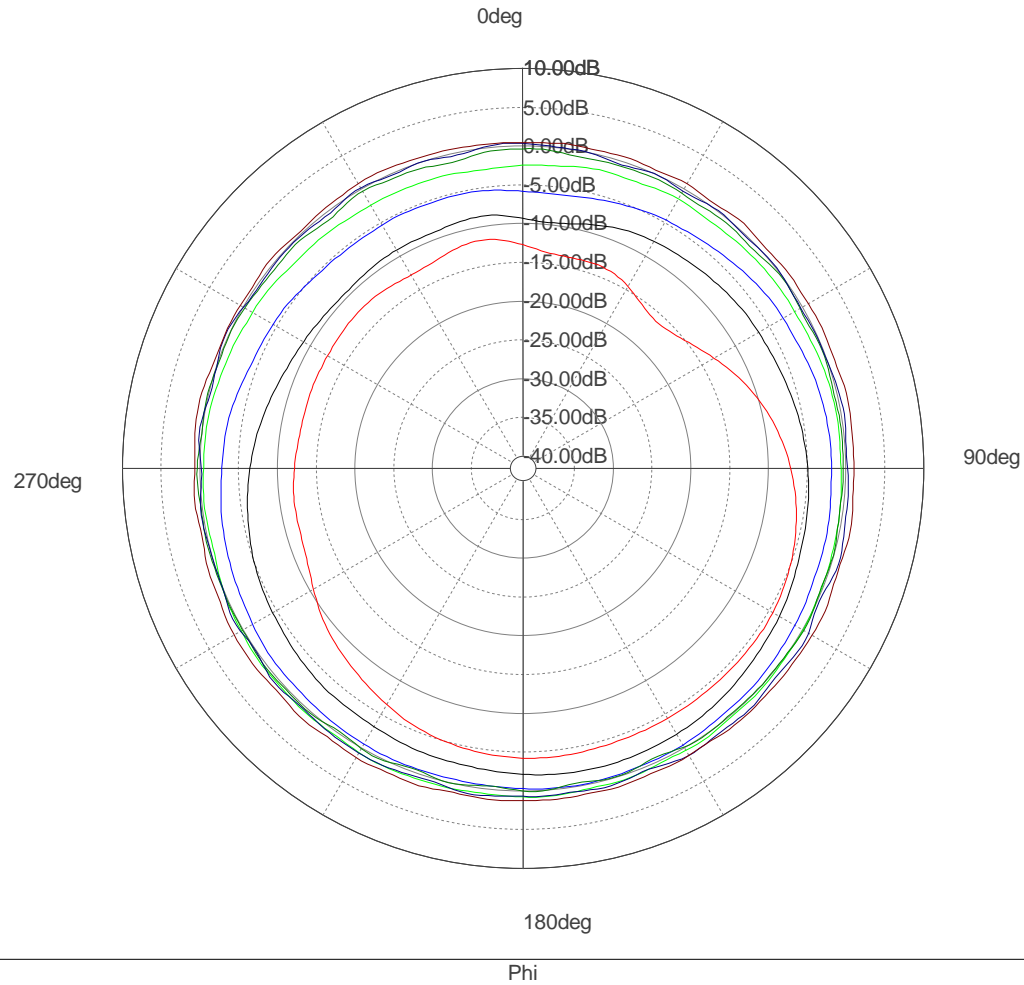


Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-4.06 dB	140.48 deg	-19.92 dB	15.61 deg	15.86 dB	-8.56 dB	4.32
30(deg)	-1.57 dB	182.50 deg	-10.23 dB	42.02 deg	8.66 dB	-5.35 dB	3.01
40(deg)	0.15 dB	175.30 deg	-5.33 dB	355.40 deg	5.48 dB	-2.27 dB	1.84
50(deg)	0.54 dB	211.32 deg	-2.23 dB	350.60 deg	2.77 dB	-0.59 dB	0.94
60(deg)	0.53 dB	279.76 deg	-0.84 dB	4.80 deg	1.37 dB	-0.06 dB	0.35
70(deg)	1.28 dB	115.26 deg	-0.86 dB	26.41 deg	2.14 dB	0.18 dB	0.39
80(deg)	1.63 dB	177.70 deg	0.23 dB	337.39 deg	1.40 dB	0.99 dB	0.36

**(9/25/2017) Frequency=2462.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 4 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**

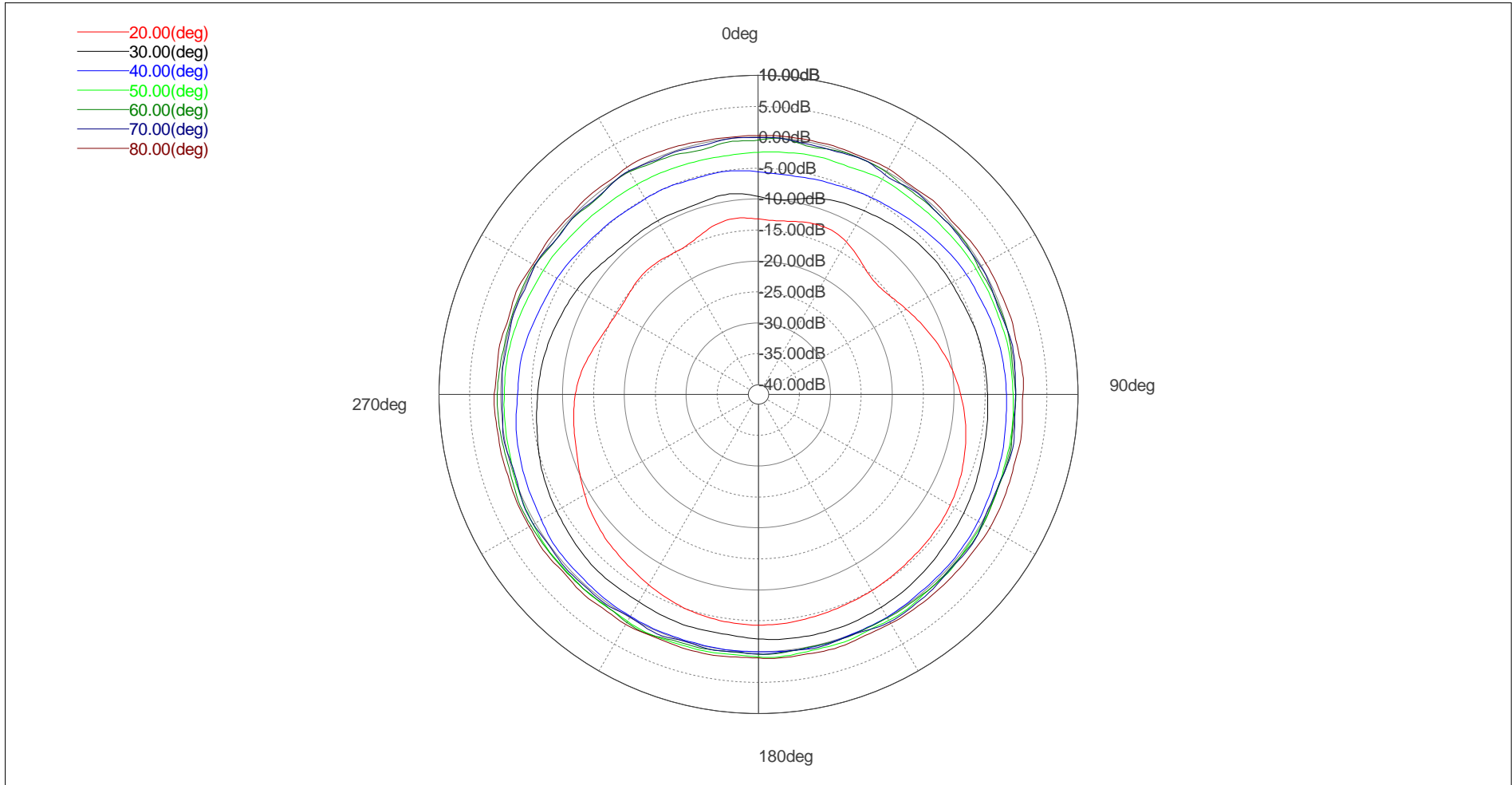


- 20.00(deg)
- 30.00(deg)
- 40.00(deg)
- 50.00(deg)
- 60.00(deg)
- 70.00(deg)
- 80.00(deg)



Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-4.24 dB	175.30 deg	-16.05 dB	42.02 deg	11.81 dB	-8.78 dB	3.83
30(deg)	-1.86 dB	164.49 deg	-9.77 dB	6.00 deg	7.90 dB	-5.35 dB	2.60
40(deg)	-0.19 dB	170.49 deg	-6.06 dB	6.00 deg	5.87 dB	-2.48 dB	1.92
50(deg)	0.77 dB	176.50 deg	-2.81 dB	351.80 deg	3.58 dB	-0.64 dB	1.09
60(deg)	0.37 dB	268.95 deg	-1.18 dB	346.99 deg	1.55 dB	-0.27 dB	0.33
70(deg)	1.10 dB	148.88 deg	-0.48 dB	18.01 deg	1.58 dB	0.25 dB	0.39
80(deg)	1.44 dB	116.46 deg	0.26 dB	316.98 deg	1.18 dB	0.92 dB	0.33

**(9/25/2017) Frequency=2472.00MHz / WiFi Low Free Space
 Passive WiFi TE Connectivity Sample 4 / ATS Antenna Polar Pattern
 WiFi Free Space Development E(Theta) . Amp dB**

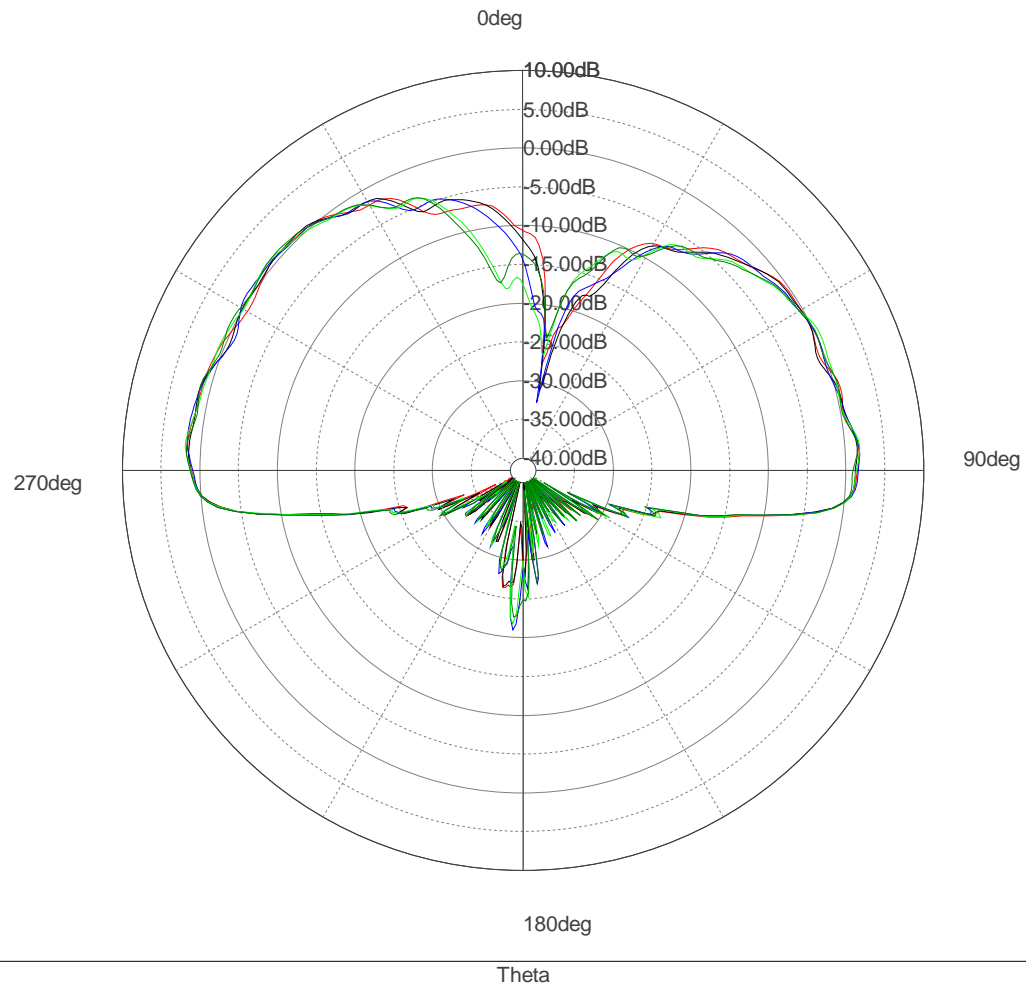


Layer	Max value	Position	Min value	Position	Max/Min	Average	Standard Devia
20(deg)	-4.37 dB	178.90 deg	-15.49 dB	46.83 deg	11.12 dB	-9.33 dB	3.90
30(deg)	-1.74 dB	162.09 deg	-10.02 dB	4.80 deg	8.28 dB	-5.00 dB	2.56
40(deg)	0.13 dB	168.09 deg	-5.92 dB	7.20 deg	6.05 dB	-2.19 dB	2.02
50(deg)	0.89 dB	176.50 deg	-2.74 dB	350.60 deg	3.63 dB	-0.59 dB	1.14
60(deg)	1.05 dB	206.52 deg	-1.10 dB	346.99 deg	2.15 dB	0.04 dB	0.44
70(deg)	0.85 dB	148.88 deg	-0.75 dB	31.22 deg	1.61 dB	-0.01 dB	0.31
80(deg)	1.57 dB	117.67 deg	0.16 dB	36.02 deg	1.41 dB	0.87 dB	0.38

**(9/25/2017) Phi=0.00deg / WiFi Low Free Space
Passive WiFi TE Connectivity Sample 4 / ATS Antenna Polar Pattern
WiFi Free Space Development E(Theta) . Amp dB**



- 2412.00(MHz)
- 2427.00(MHz)
- 2437.00(MHz)
- 2462.00(MHz)
- 2472.00(MHz)



**(9/25/2017) Phi=90.00deg / WiFi Low Free Space
Passive WiFi TE Connectivity Sample 4 / ATS Antenna Polar Pattern
WiFi Free Space Development E(Theta) . Amp dB**



- 2412.00(MHz)
- 2427.00(MHz)
- 2437.00(MHz)
- 2462.00(MHz)
- 2472.00(MHz)

