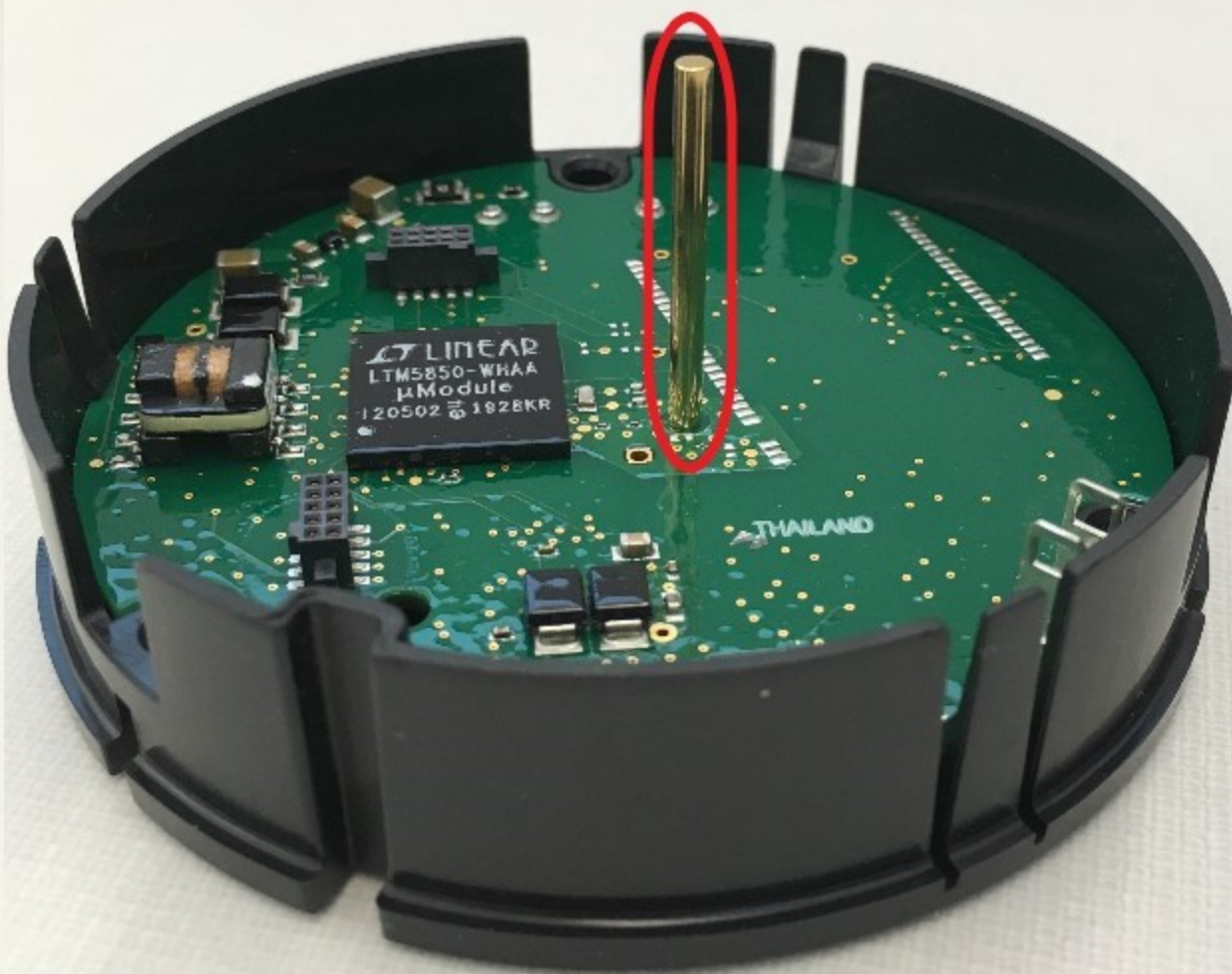


Integral Monopole Antenna
Peak Gain 2 dBi Max



ACTIVE 3D ANTENNA PATTERN MEASUREMENTS



OTA 2018.01.04

EUT:	781 Smart Antenna
Serial Number:	1021
Customer:	Emerson Process Management
Attendees:	John, Betsy, Blake, Scott
Customer Project:	None
Tested By:	Dustin Sparks
Test Run Description:	1021 2405 MHz

Work Order:	EMPM0061
Date:	3/13/2019
Temperature:	
Relative Humidity:	
Bar. Pressure:	
Job Site:	MN10

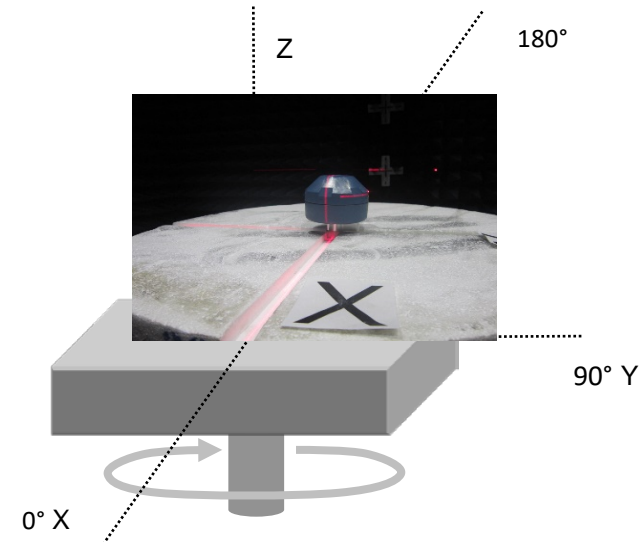
COMMENTS

None

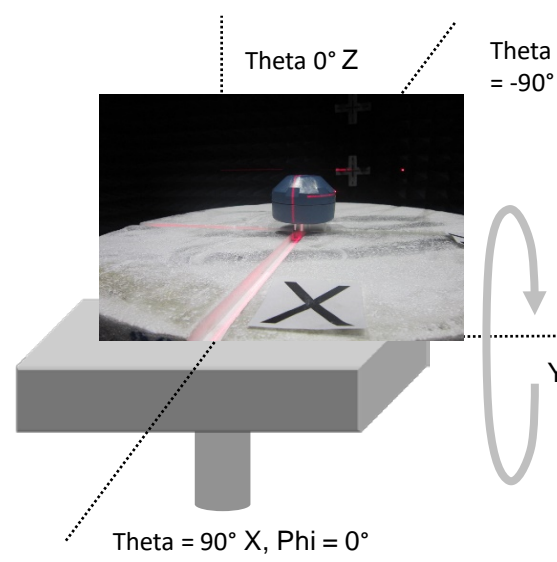
3D PATTERN DATA

Frequency (MHz)	2405
Ant. Port Input Pwr. (dBm)	8.00
Tot. Rad. Pwr. (dBm)	5.91
Peak EIRP (dBm)	9.25
Directivity (dBi)	3.34
Efficiency (dB)	-2.09
Efficiency (%)	61.85
Gain (dBi)	1.25
Average Gain (dB)	-2.09
E-Plane 3 dB BW (°)	68.00

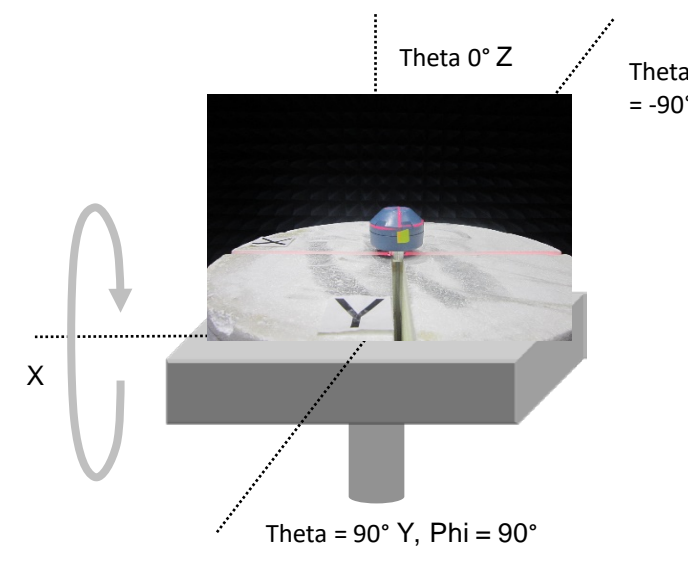
Azimuth Cut (Theta Axis = 90°)



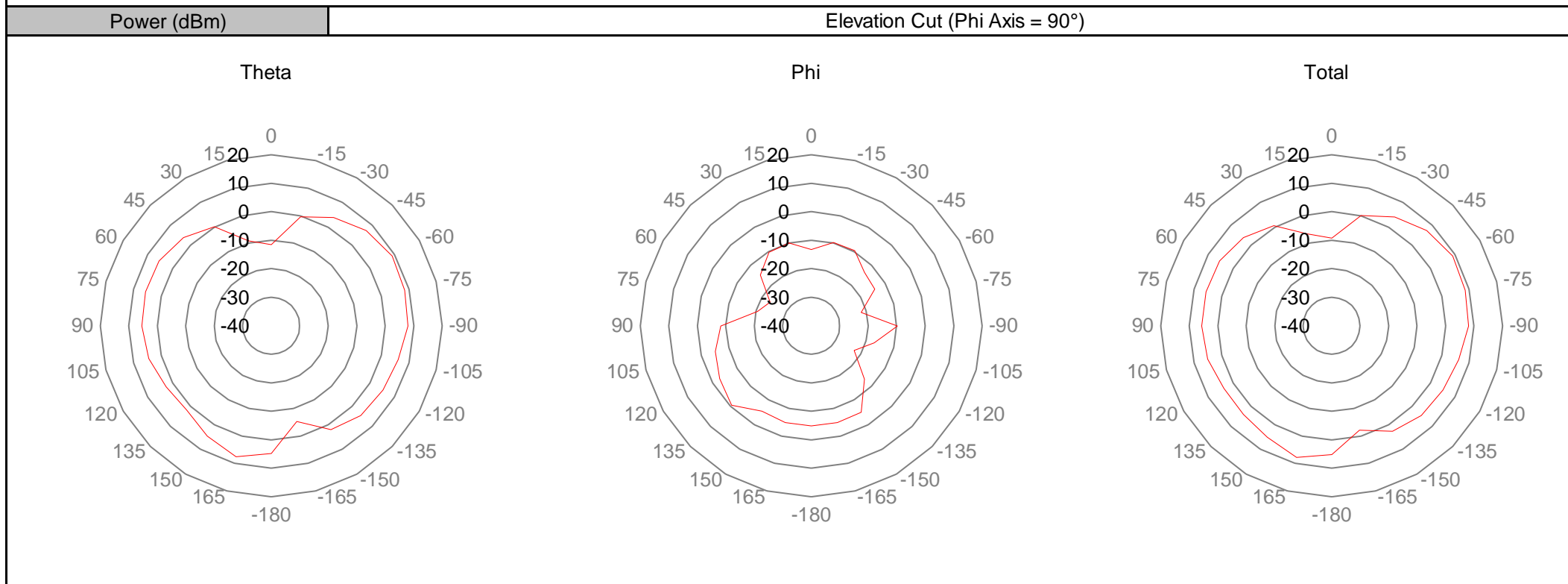
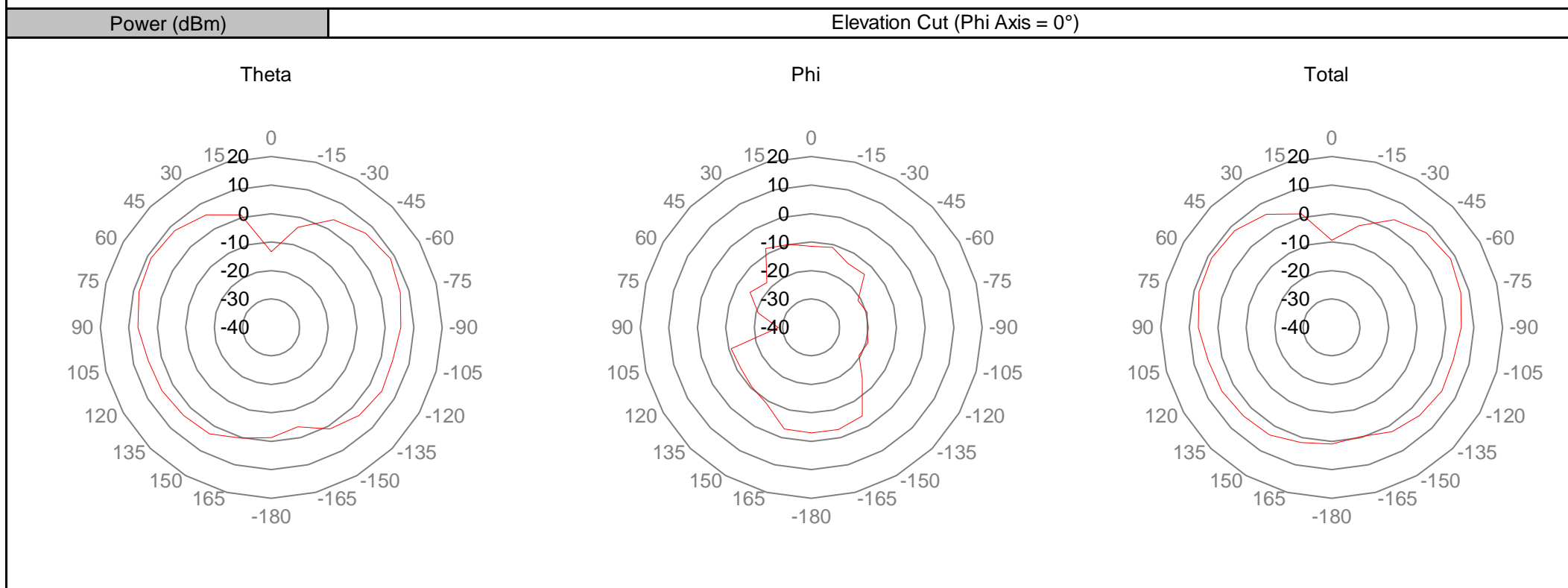
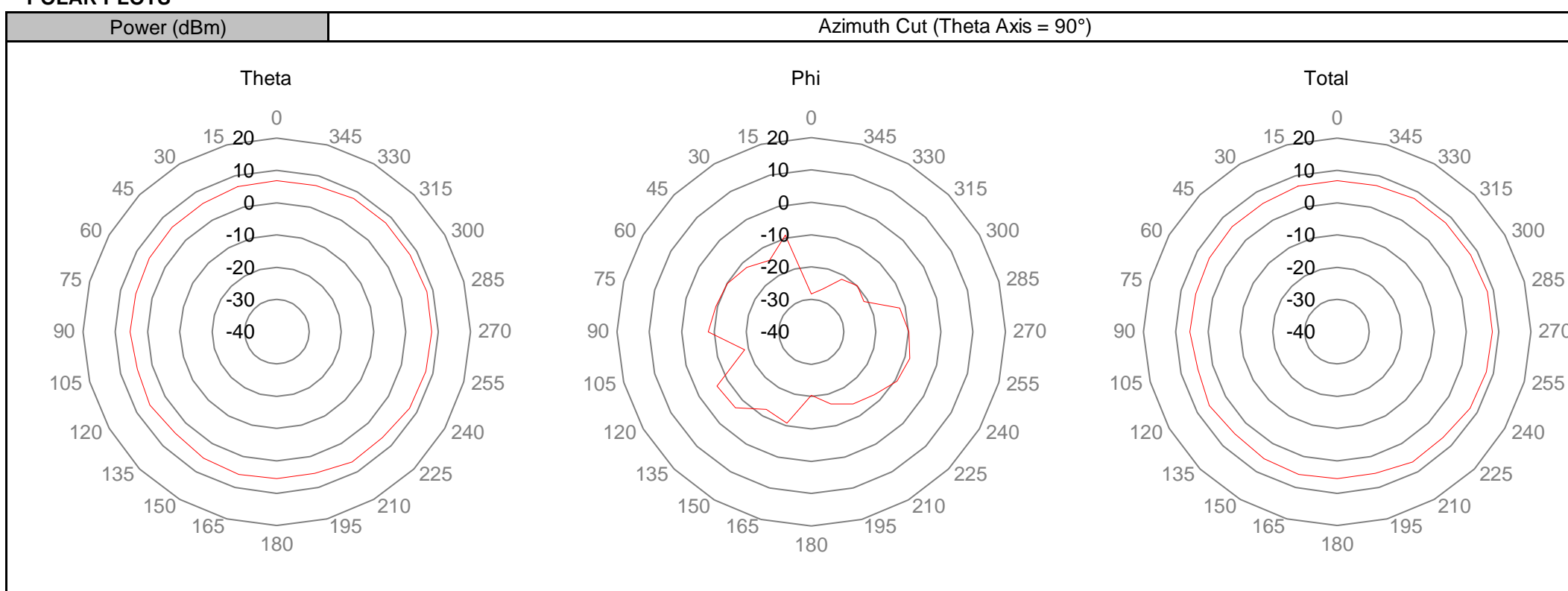
Elevation Cut (Phi Axis = 0°)



Elevation Cut (Phi Axis = 90°)



POLAR PLOTS



ACTIVE 3D ANTENNA PATTERN MEASUREMENTS



OTA 2018.01.04

EUT:	781 Smart Antenna
Serial Number:	1021
Customer:	Emerson Process Management
Attendees:	John, Betsy, Blake, Scott
Customer Project:	None
Tested By:	Dustin Sparks
Test Run Description:	1021 2440 MHz

Work Order:	EMPM0061
Date:	3/13/2019
Temperature:	
Relative Humidity:	
Bar. Pressure:	
Job Site:	MN10

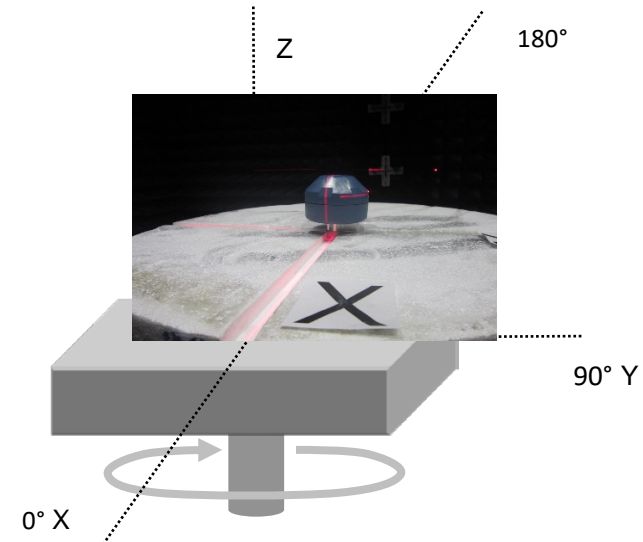
COMMENTS

None

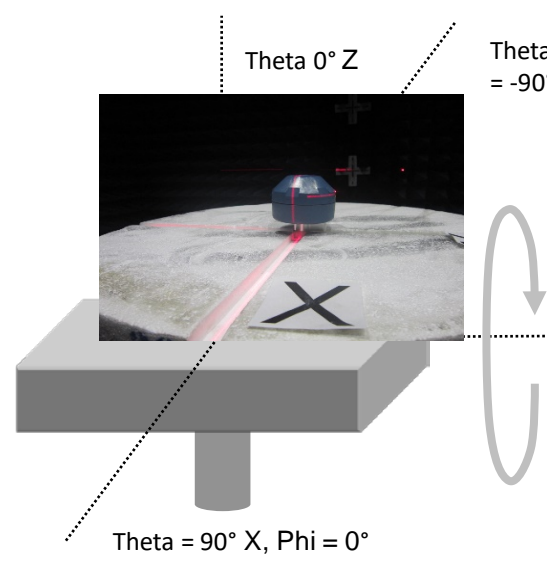
3D PATTERN DATA

Frequency (MHz)	2440
Ant. Port Input Pwr. (dBm)	8.00
Tot. Rad. Pwr. (dBm)	5.76
Peak EIRP (dBm)	8.99
Directivity (dBi)	3.23
Efficiency (dB)	-2.24
Efficiency (%)	59.69
Gain (dBi)	0.99
Average Gain (dB)	-2.24
E-Plane 3 dB BW (°)	73.00

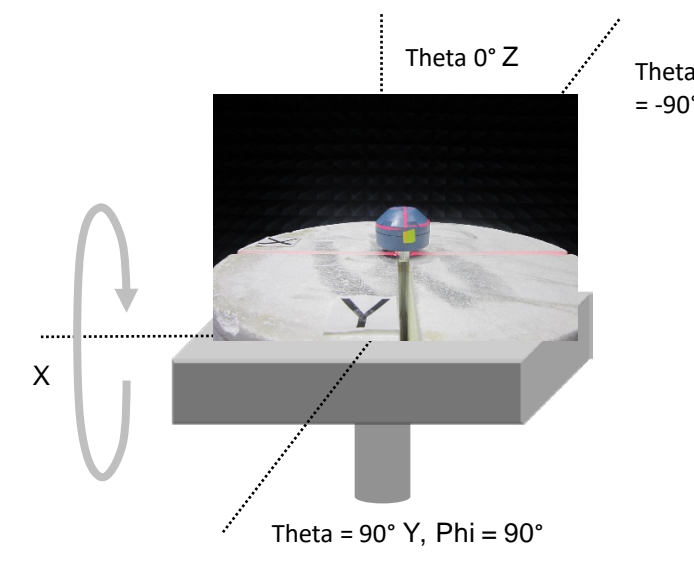
Azimuth Cut (Theta Axis = 90°)



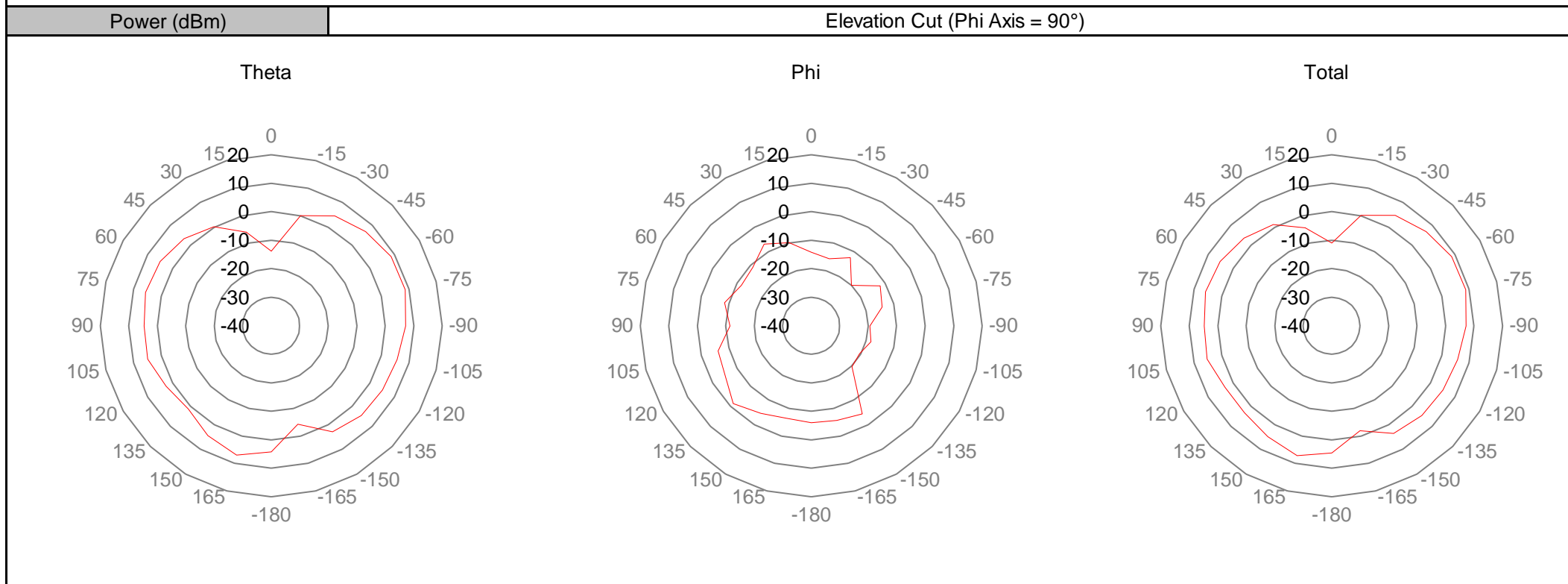
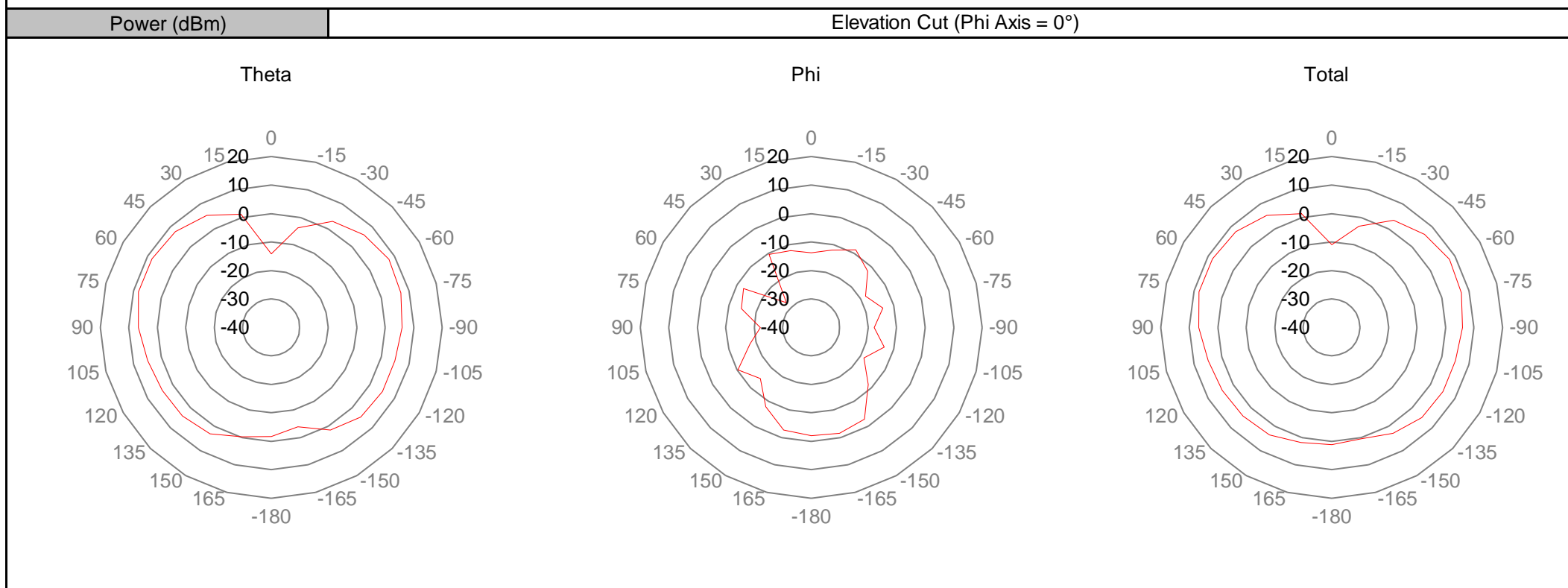
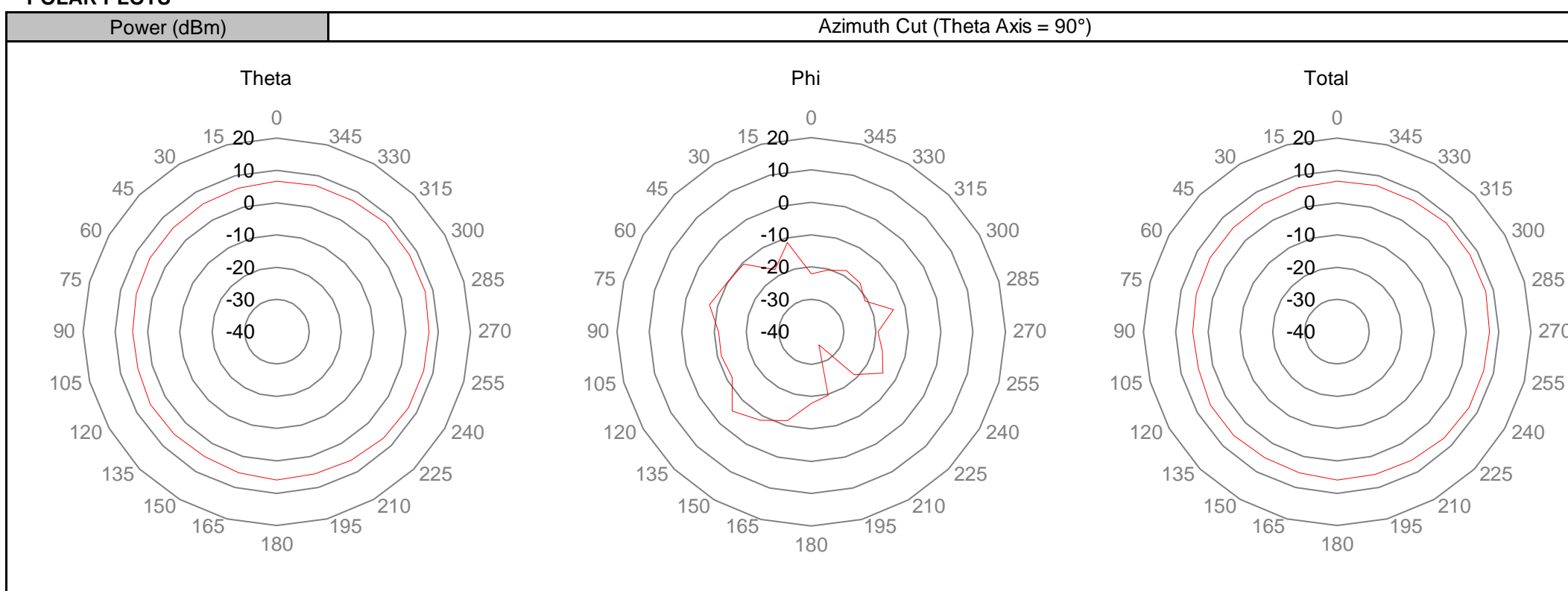
Elevation Cut (Phi Axis = 0°)



Elevation Cut (Phi Axis = 90°)



POLAR PLOTS



ACTIVE 3D ANTENNA PATTERN MEASUREMENTS



OTA 2018.01.04

EUT:	781 Smart Antenna
Serial Number:	1021
Customer:	Emerson Process Management
Attendees:	John, Betsy, Blake, Scott
Customer Project:	None
Tested By:	Dustin Sparks
Test Run Description:	1021 2475 MHz

Work Order:	EMPM0061
Date:	3/13/2019
Temperature:	
Relative Humidity:	
Bar. Pressure:	
Job Site:	MN10

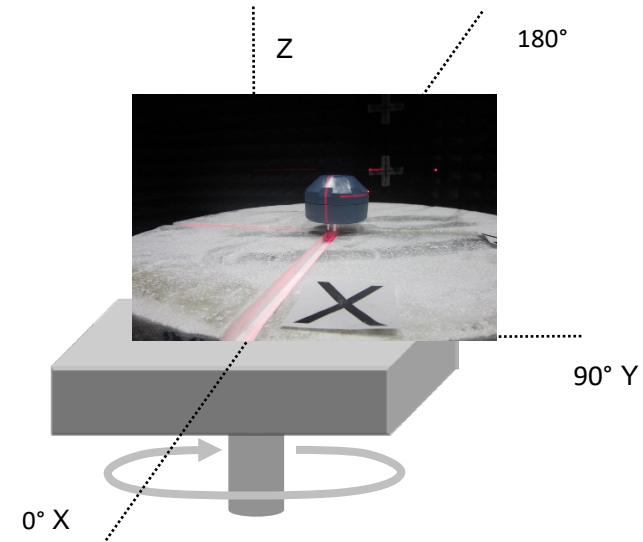
COMMENTS

None

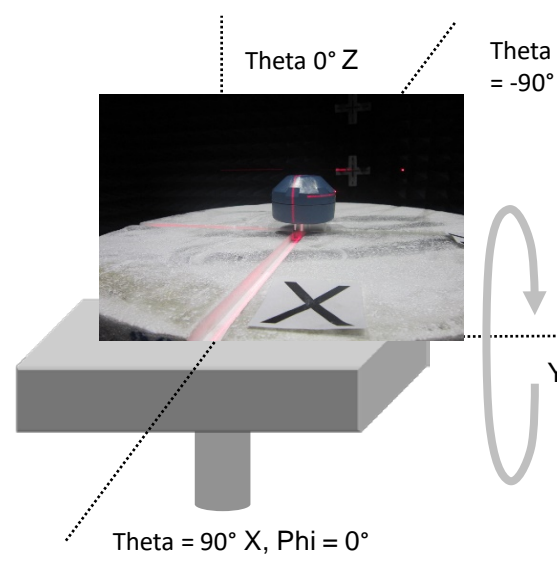
3D PATTERN DATA

Frequency (MHz)	2475
Ant. Port Input Pwr. (dBm)	8.00
Tot. Rad. Pwr. (dBm)	5.35
Peak EIRP (dBm)	8.50
Directivity (dBi)	3.15
Efficiency (dB)	-2.65
Efficiency (%)	54.28
Gain (dBi)	0.50
Average Gain (dB)	-2.65
E-Plane 3 dB BW (°)	74.00

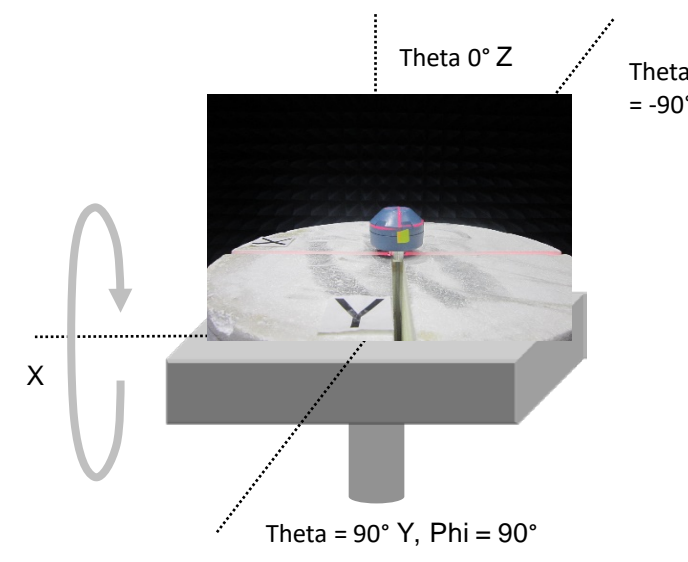
Azimuth Cut (Theta Axis = 90°)



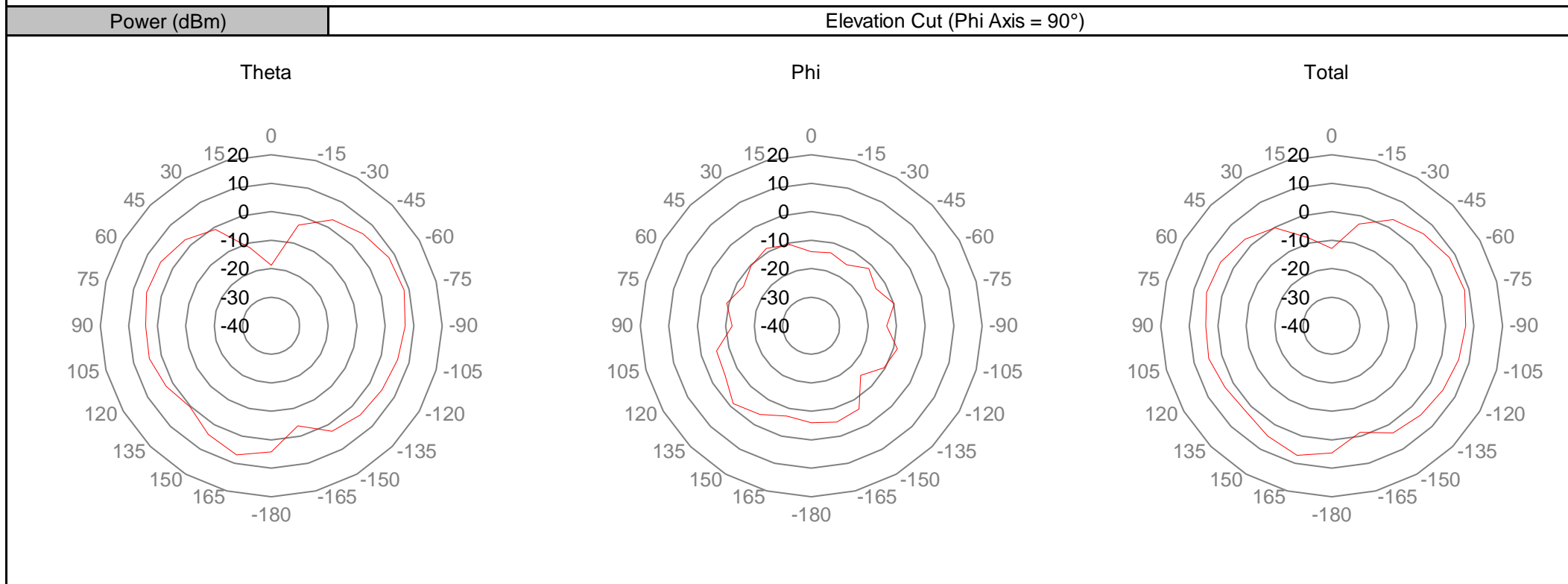
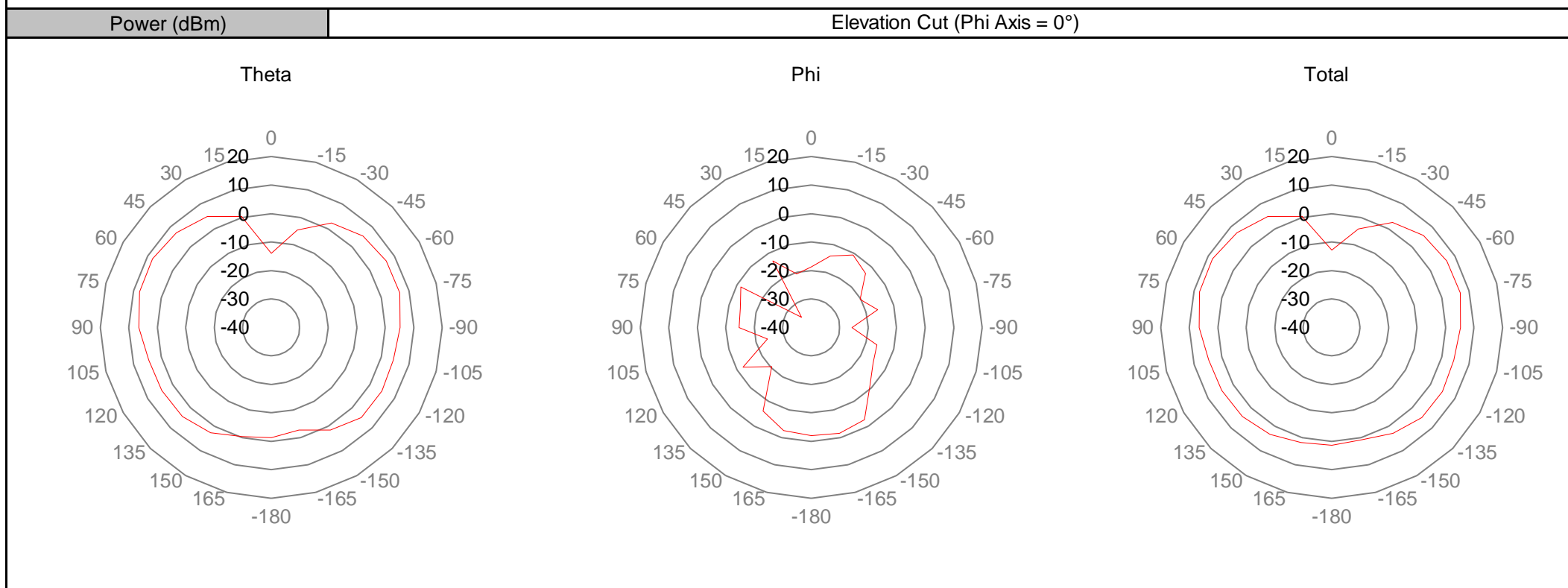
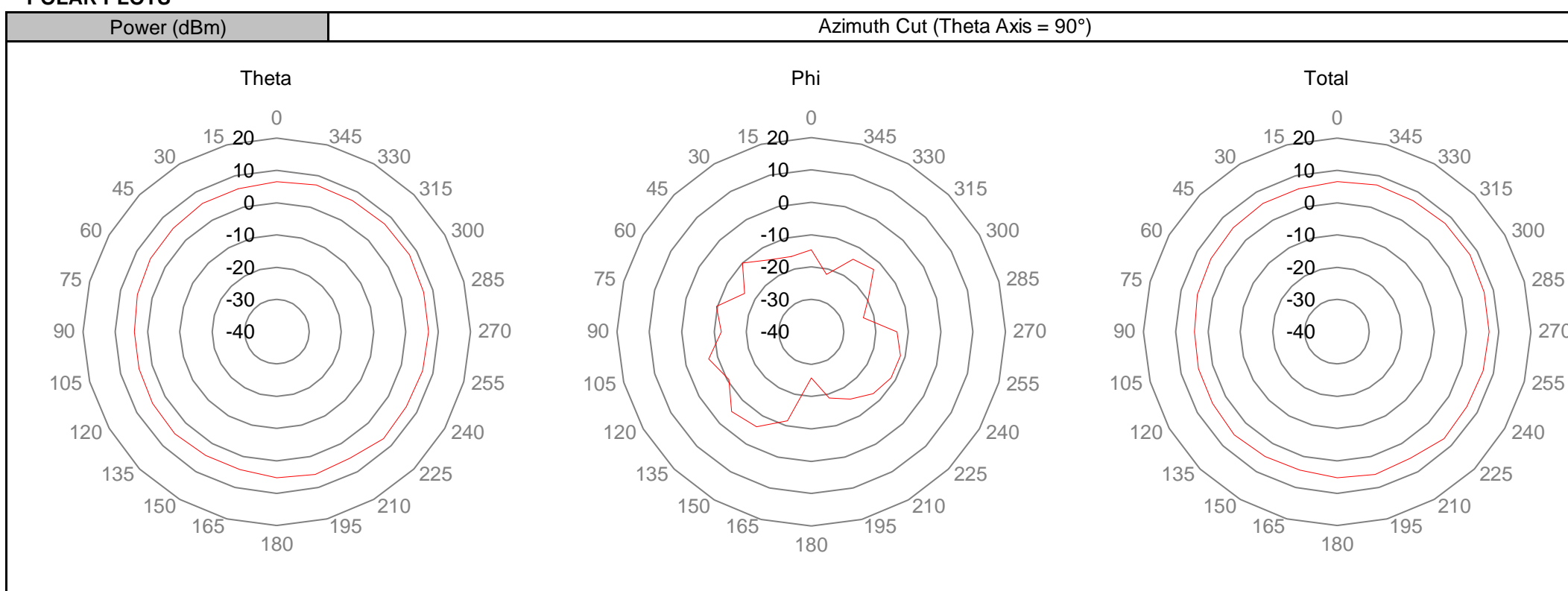
Elevation Cut (Phi Axis = 0°)



Elevation Cut (Phi Axis = 90°)



POLAR PLOTS



ACTIVE 3D ANTENNA PATTERN MEASUREMENTS



OTA 2018.01.04

EUT:	781 Smart Antenna
Serial Number:	1018
Customer:	Emerson Process Management
Attendees:	John, Betsy, Blake, Scott
Customer Project:	None
Tested By:	Dustin Sparks
Test Run Description:	1018 2405 MHz

Work Order:	EMPM0061
Date:	3/13/2019
Temperature:	
Relative Humidity:	
Bar. Pressure:	
Job Site:	MN10

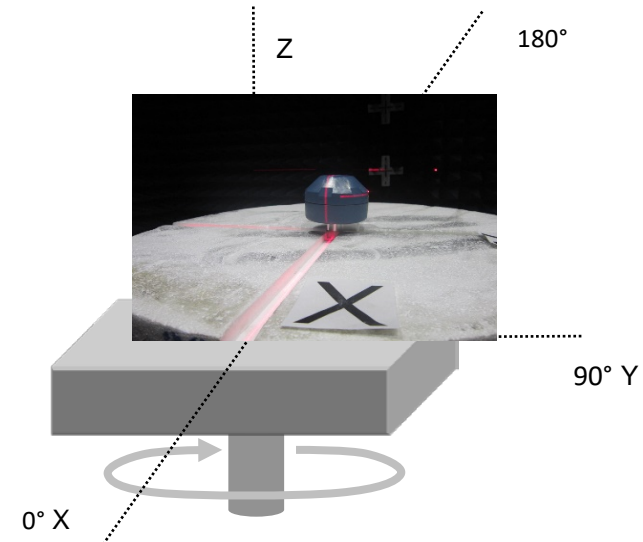
COMMENTS

None

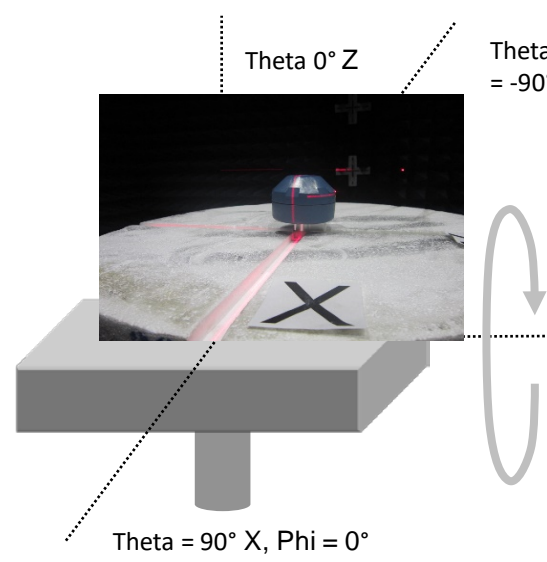
3D PATTERN DATA

Frequency (MHz)	2405
Ant. Port Input Pwr. (dBm)	8.00
Tot. Rad. Pwr. (dBm)	6.55
Peak EIRP (dBm)	9.63
Directivity (dBi)	3.07
Efficiency (dB)	-1.45
Efficiency (%)	71.66
Gain (dBi)	1.63
Average Gain (dB)	-1.45
E-Plane 3 dB BW (°)	66.00

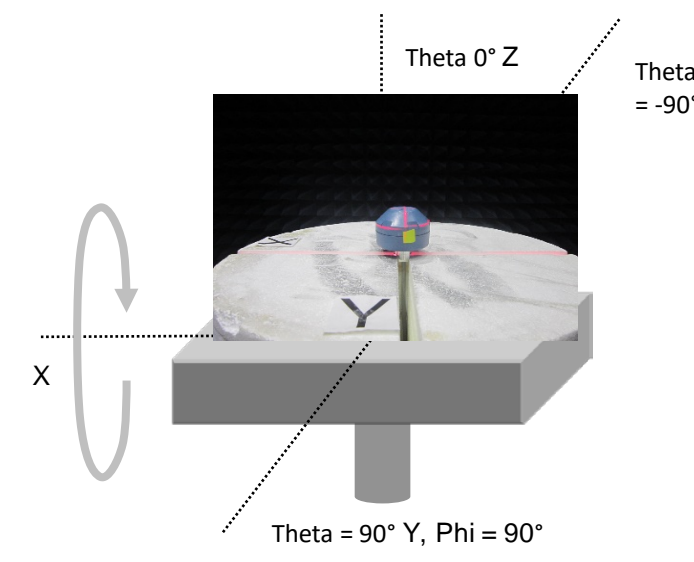
Azimuth Cut (Theta Axis = 90°)



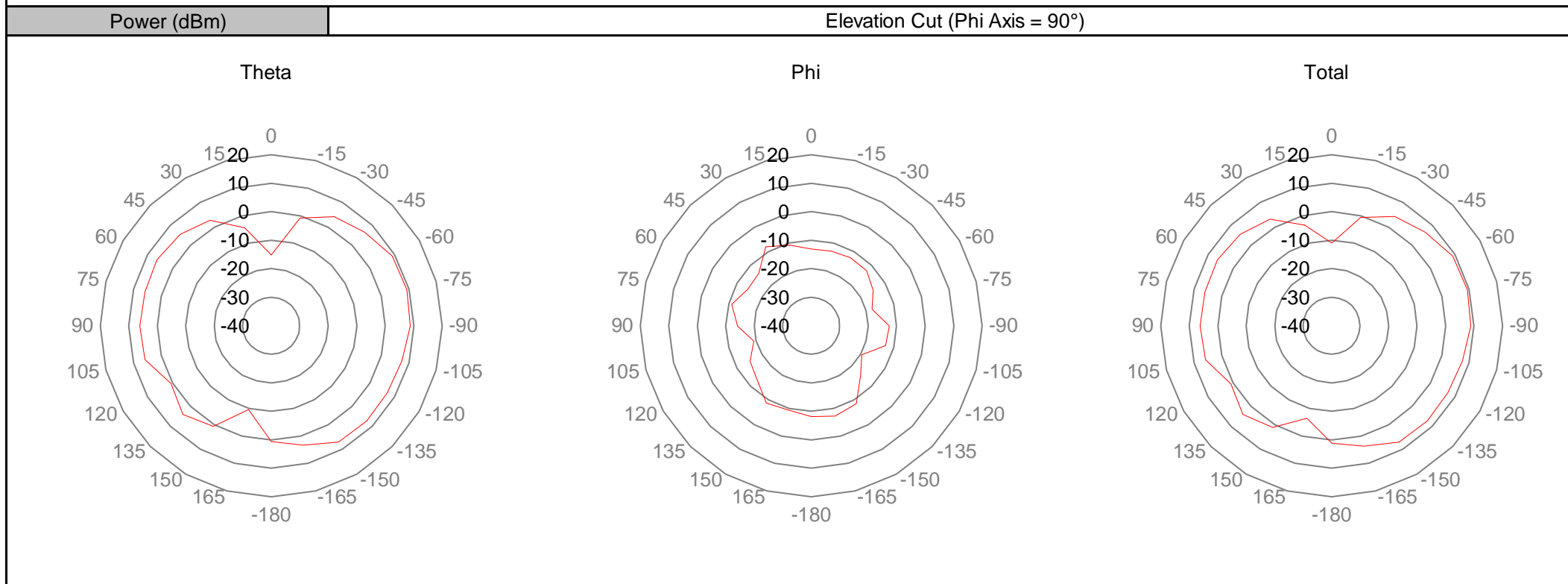
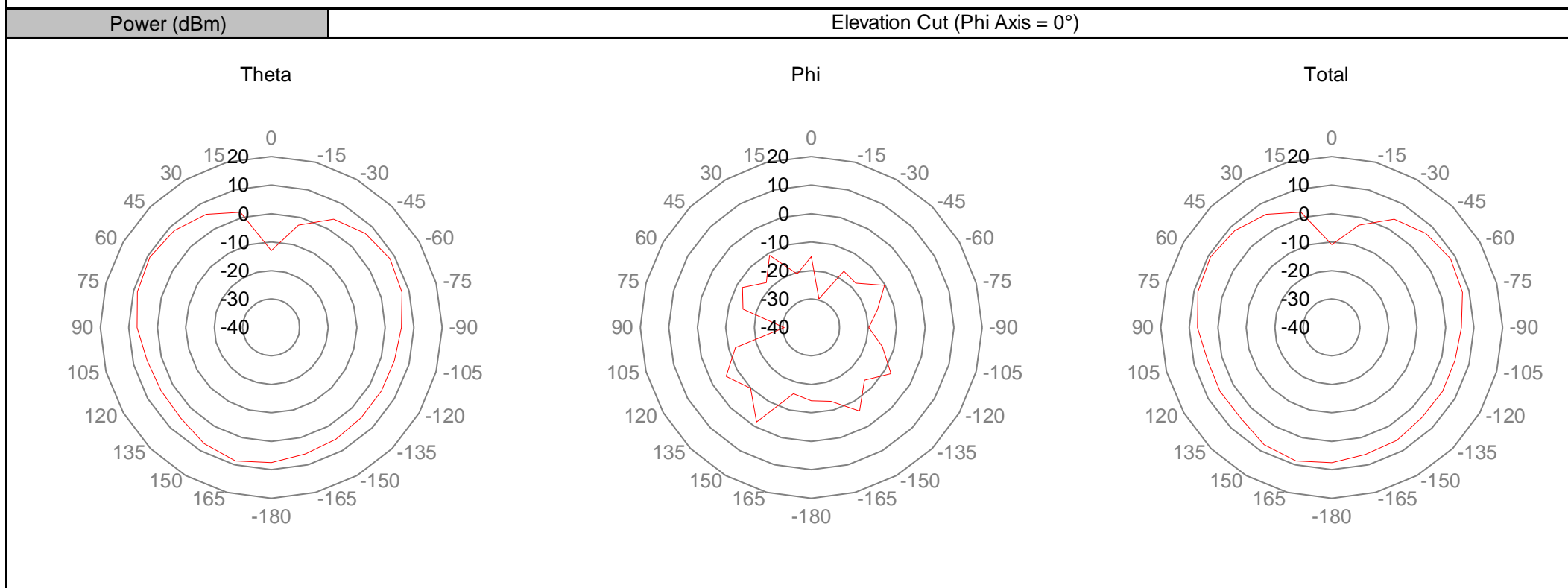
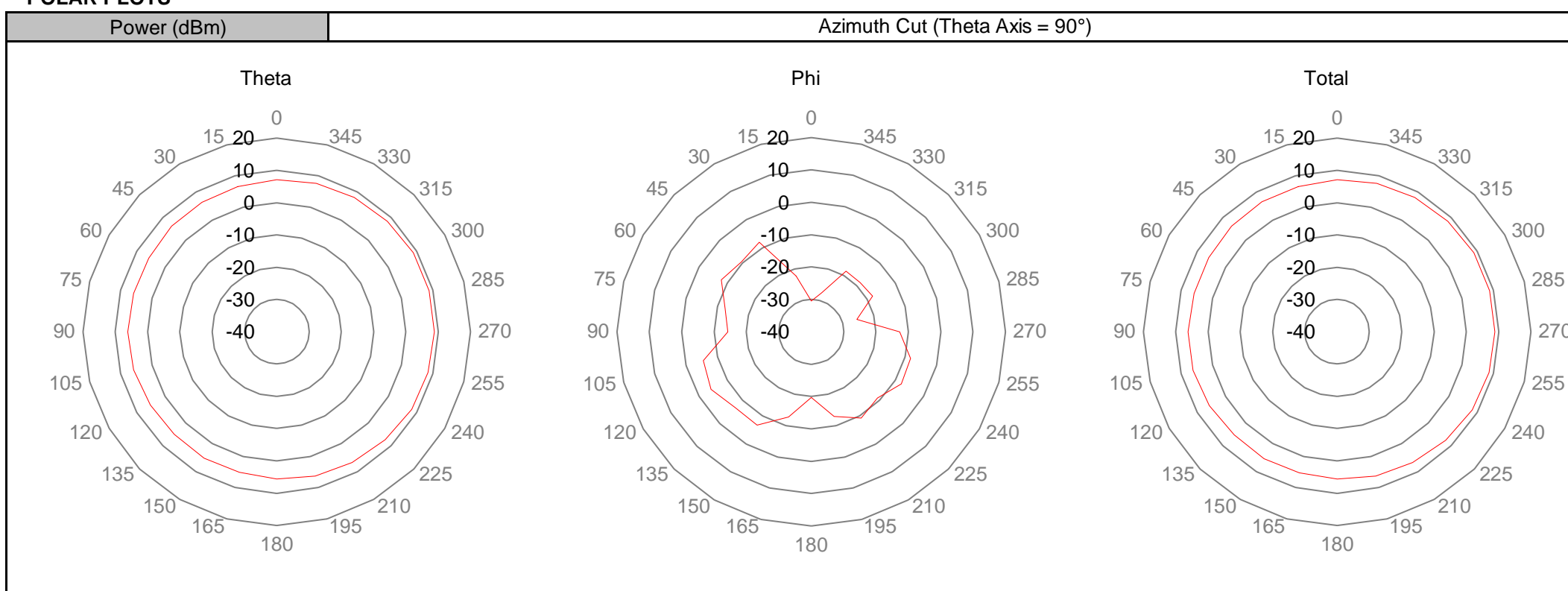
Elevation Cut (Phi Axis = 0°)



Elevation Cut (Phi Axis = 90°)



POLAR PLOTS



ACTIVE 3D ANTENNA PATTERN MEASUREMENTS



OTA 2018.01.04

EUT:	781 Smart Antenna
Serial Number:	1018
Customer:	Emerson Process Management
Attendees:	John, Betsy, Blake, Scott
Customer Project:	None
Tested By:	Dustin Sparks
Test Run Description:	1018 2440 MHz

Work Order:	EMPM0061
Date:	3/13/2019
Temperature:	
Relative Humidity:	
Bar. Pressure:	
Job Site:	MN10

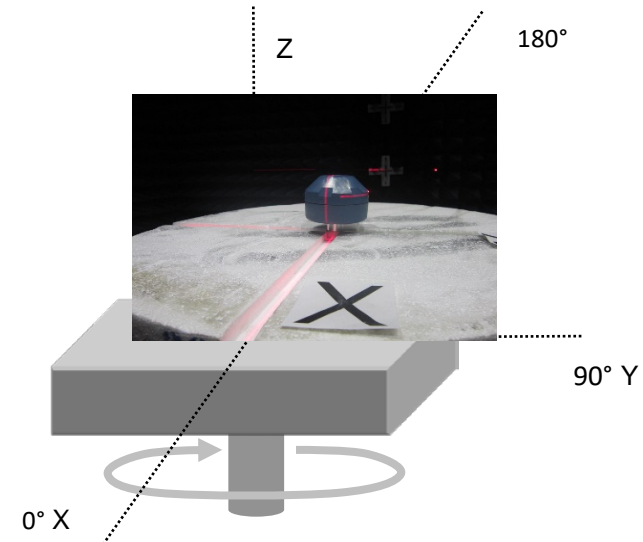
COMMENTS

None

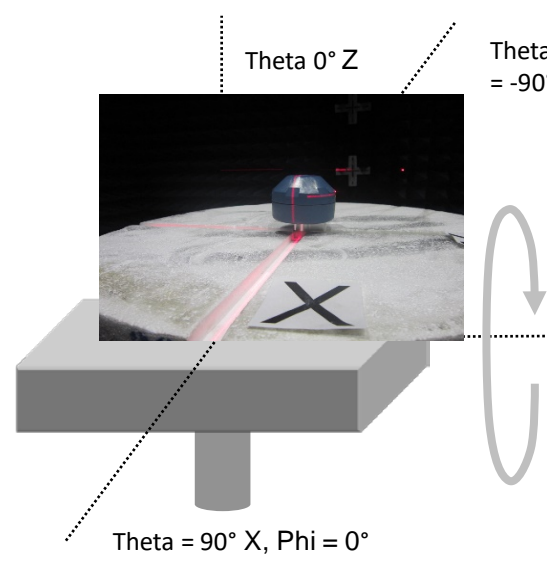
3D PATTERN DATA

Frequency (MHz)	2440
Ant. Port Input Pwr. (dBm)	8.00
Tot. Rad. Pwr. (dBm)	6.35
Peak EIRP (dBm)	9.96
Directivity (dBi)	3.61
Efficiency (dB)	-1.65
Efficiency (%)	68.45
Gain (dBi)	1.96
Average Gain (dB)	-1.65
E-Plane 3 dB BW (°)	67.00

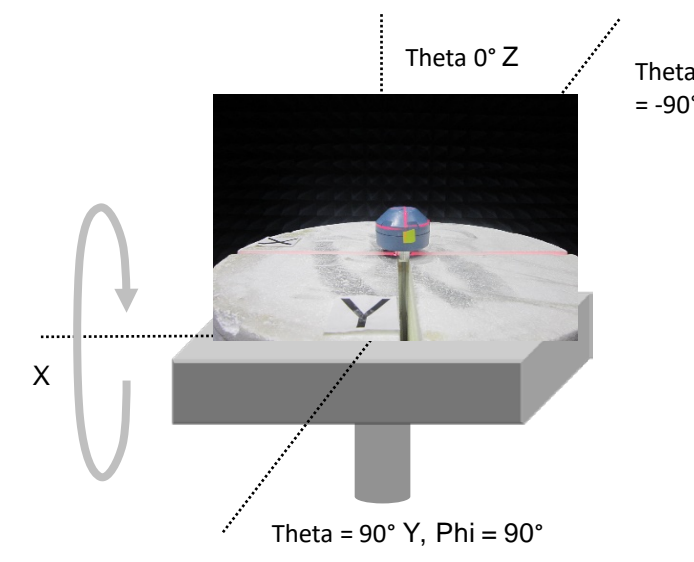
Azimuth Cut (Theta Axis = 90°)



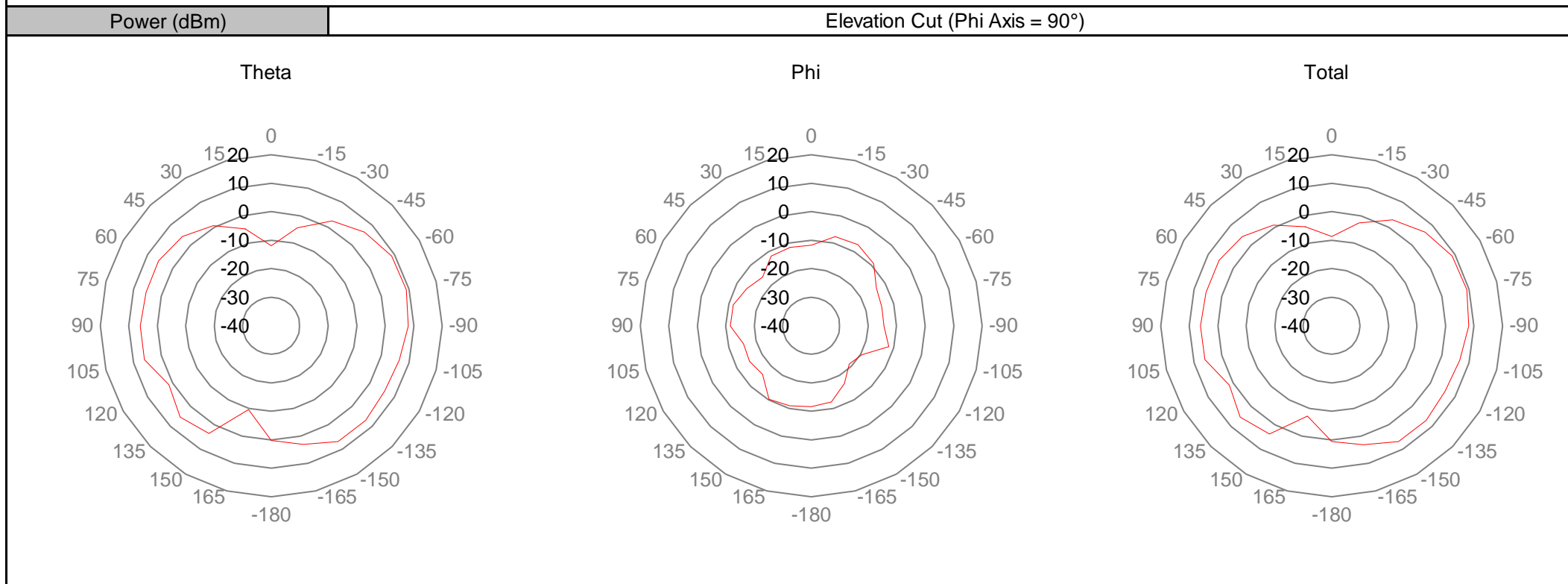
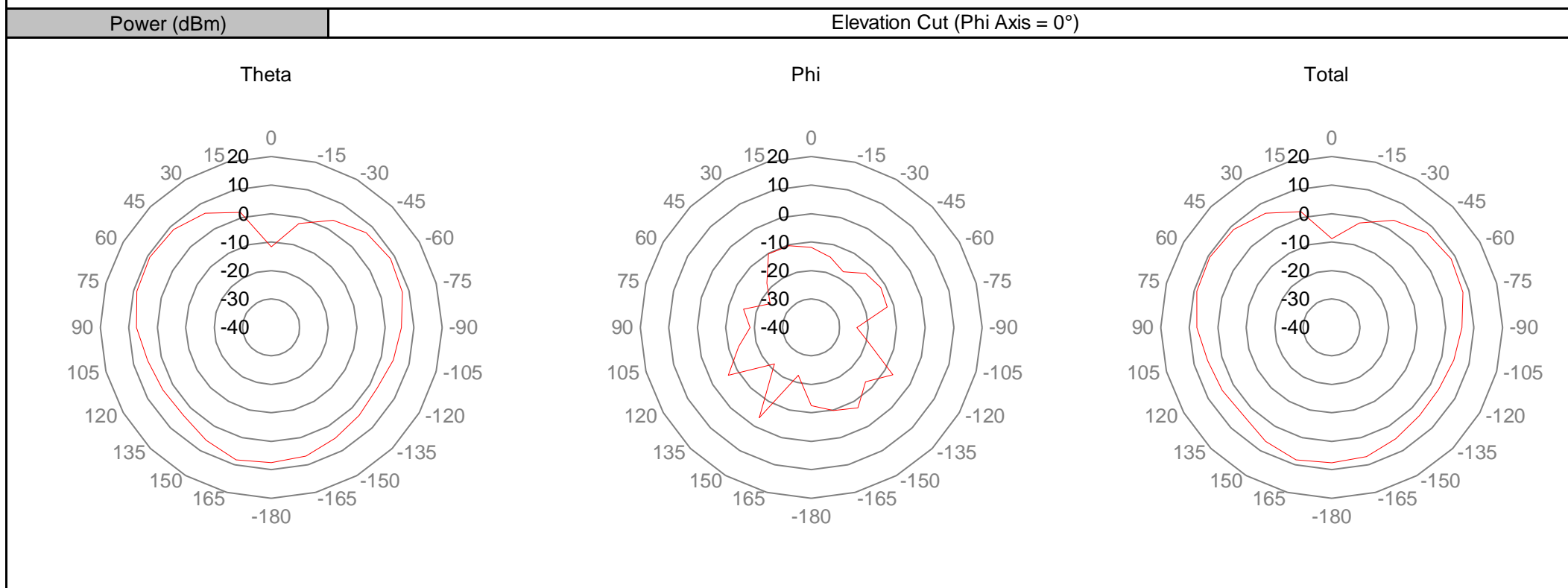
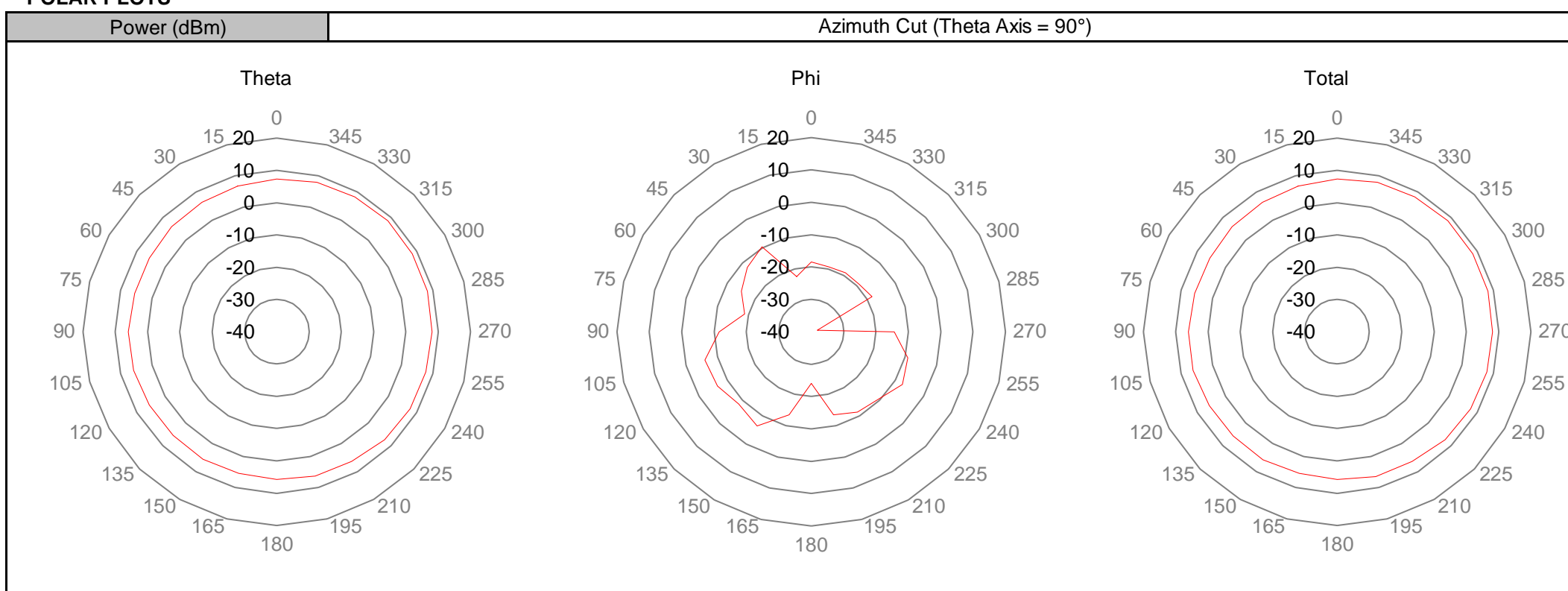
Elevation Cut (Phi Axis = 0°)



Elevation Cut (Phi Axis = 90°)



POLAR PLOTS



ACTIVE 3D ANTENNA PATTERN MEASUREMENTS



OTA 2018.01.04

EUT:	781 Smart Antenna
Serial Number:	1018
Customer:	Emerson Process Management
Attendees:	John, Betsy, Blake, Scott
Customer Project:	None
Tested By:	Dustin Sparks
Test Run Description:	1018 2475 MHz

Work Order:	EMPM0061
Date:	3/13/2019
Temperature:	
Relative Humidity:	
Bar. Pressure:	
Job Site:	MN10

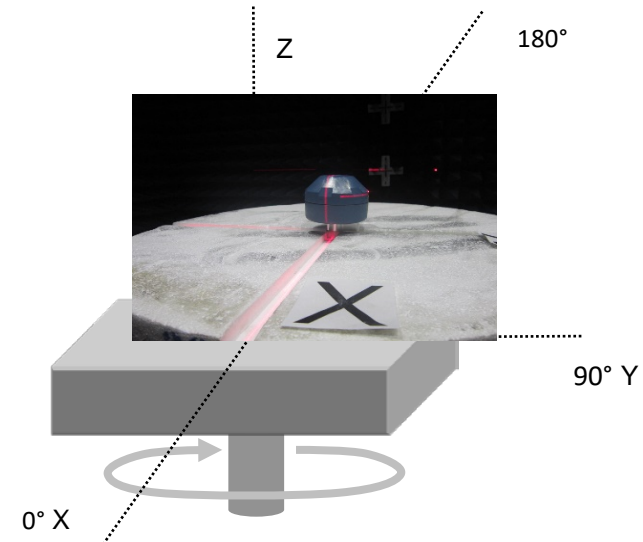
COMMENTS

None

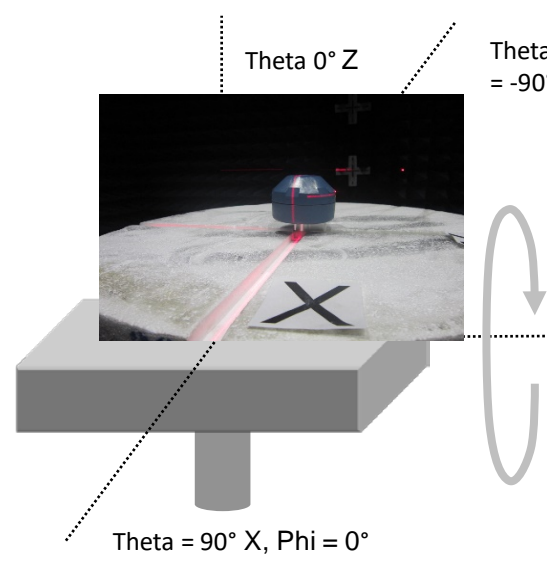
3D PATTERN DATA

Frequency (MHz)	2475
Ant. Port Input Pwr. (dBm)	8.00
Tot. Rad. Pwr. (dBm)	5.94
Peak EIRP (dBm)	9.07
Directivity (dBi)	3.13
Efficiency (dB)	-2.06
Efficiency (%)	62.19
Gain (dBi)	1.07
Average Gain (dB)	-2.06
E-Plane 3 dB BW (°)	75.00

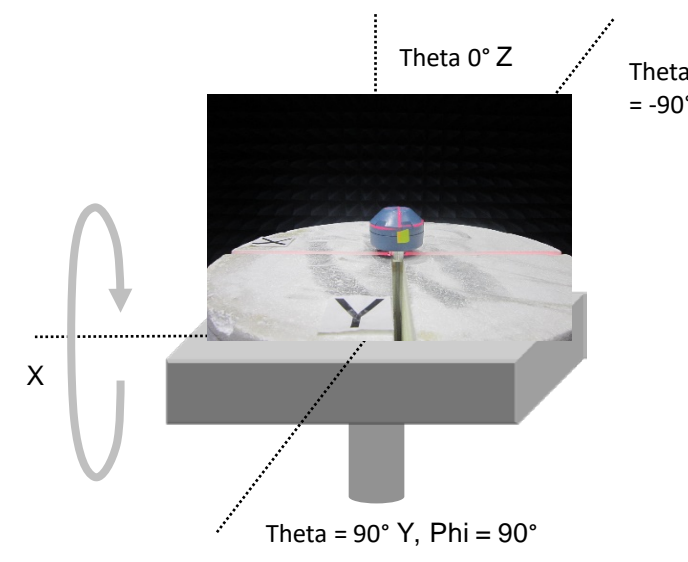
Azimuth Cut (Theta Axis = 90°)



Elevation Cut (Phi Axis = 0°)



Elevation Cut (Phi Axis = 90°)



POLAR PLOTS

