

ACTIVE 3D ANTENNA PATTERN MEASUREMENTS



EUT:	Model 2051/3051
Serial Number:	2002
Customer:	Emerson Process Management
Attendees:	None
Customer Project:	None
Tested By:	Dustin Sparks
Test Run Description:	2405 MHz Low Ch

OTA 2018.01.04

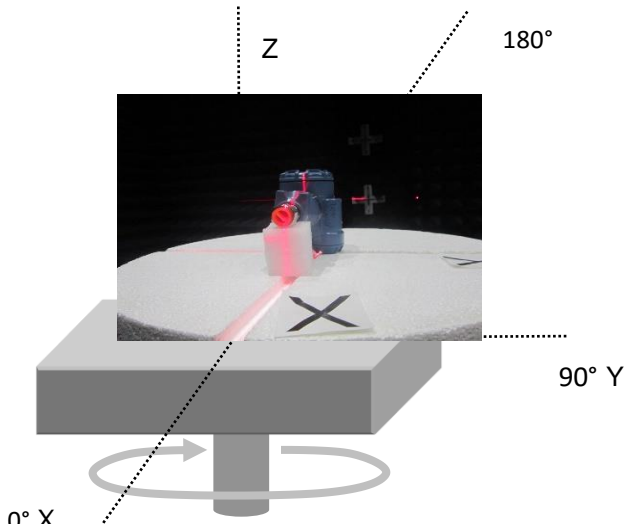
Work Order:	EMPM0077
Date:	10/31/2019
Temperature:	22.9 °C
Relative Humidity:	25.6% RH
Bar. Pressure:	1020 mbar
Job Site:	MN10

COMMENTS

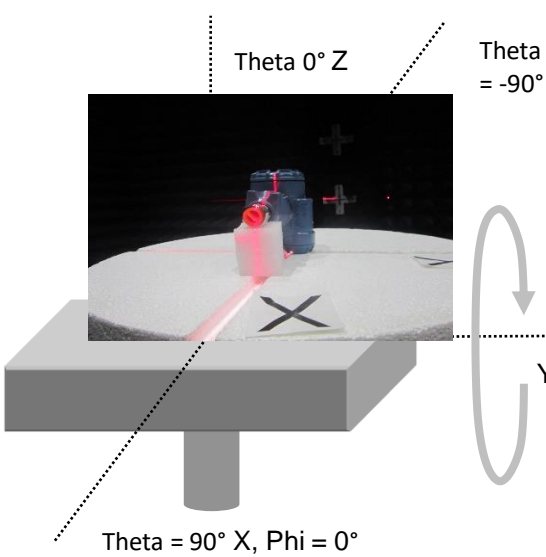
Low channel (2405 MHz)

3D PATTERN DATA	
Frequency (MHz)	2405
Ant. Port Input Pwr. (dBm)	8.00
Tot. Rad. Pwr. (dBm)	2.87
Peak EIRP (dBm)	7.23
Directivity (dBi)	4.36
Efficiency (dB)	-5.13
Efficiency (%)	30.68
Gain (dBi)	-0.77
Average Gain (dB)	-5.13
E-Plane 3 dB BW (°)	56.00

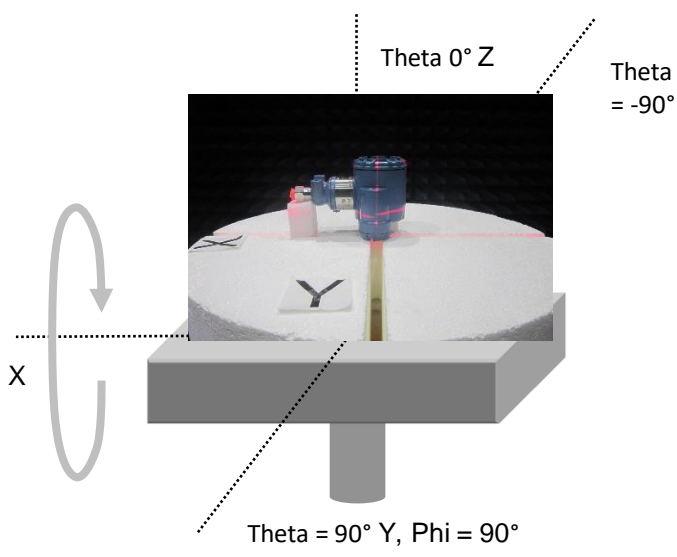
Azimuth Cut (Theta Axis = 90°)



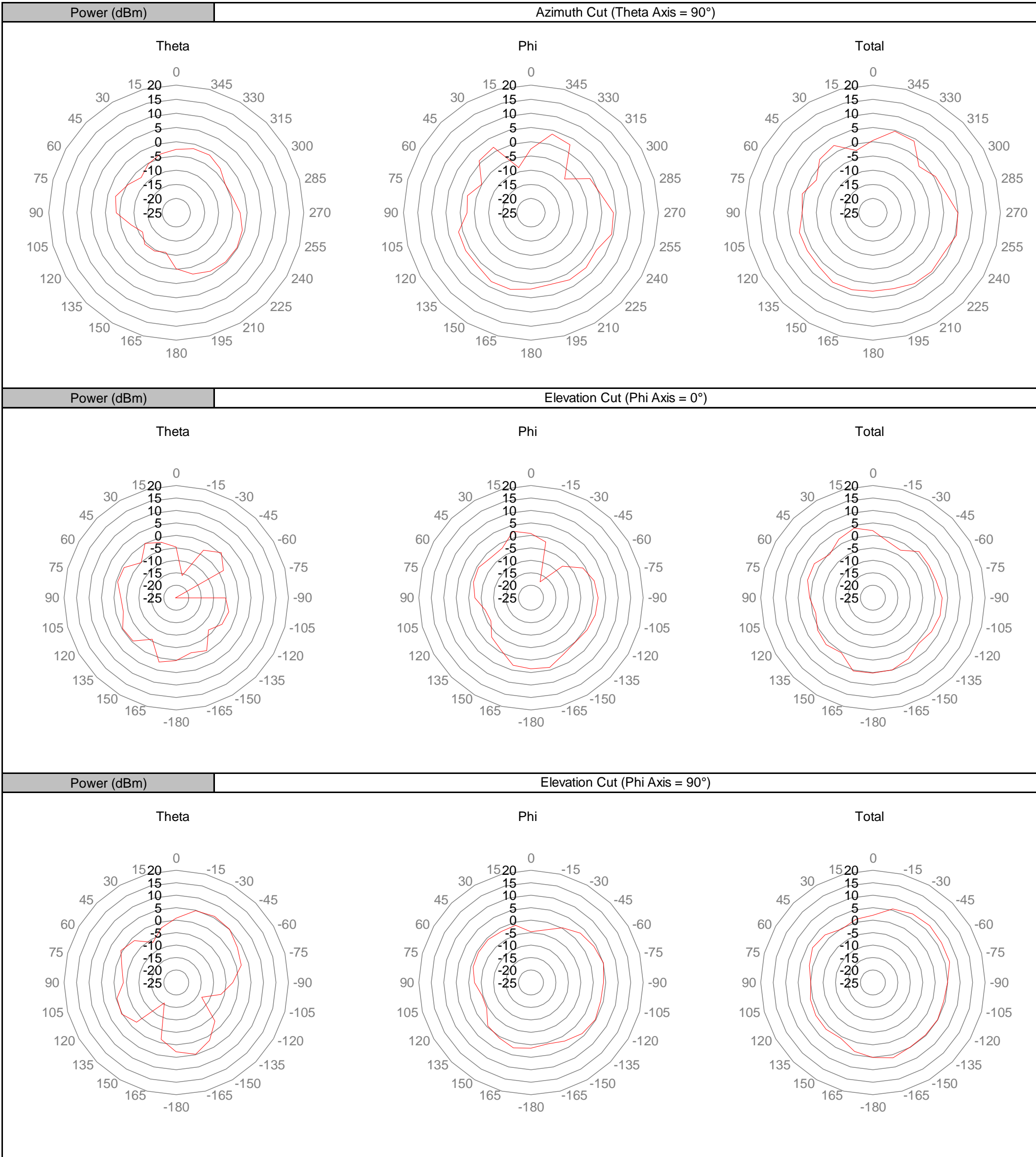
Elevation Cut (Phi Axis = 0°)



Elevation Cut (Phi Axis = 90°)



POLAR PLOTS



ACTIVE 3D ANTENNA PATTERN MEASUREMENTS



EUT:	Model 2051/3051
Serial Number:	2002
Customer:	Emerson Process Management
Attendees:	None
Customer Project:	None
Tested By:	Dustin Sparks
Test Run Description:	2440 MHz Mid Ch

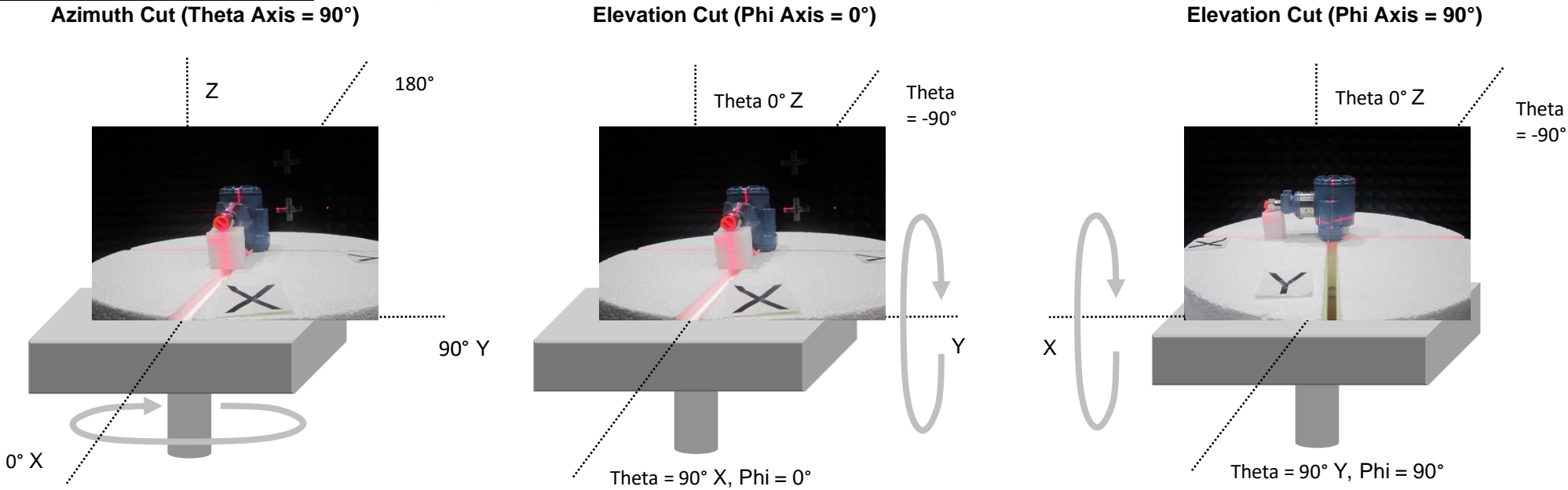
OTA 2018.01.04

Work Order:	EMPM0077
Date:	10/31/2019
Temperature:	22.9 °C
Relative Humidity:	25.6% RH
Bar. Pressure:	1020 mbar
Job Site:	MN10

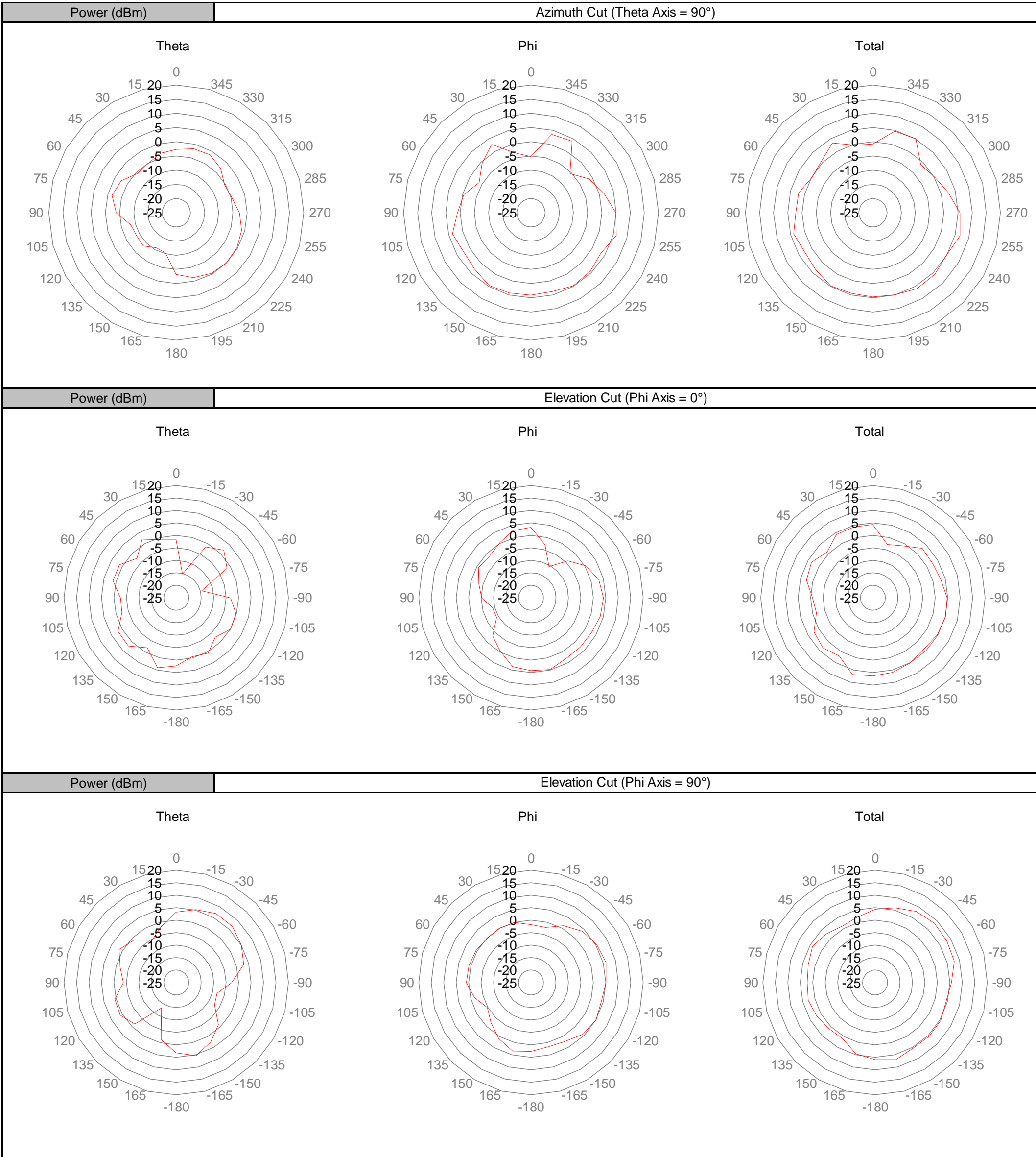
COMMENTS

Mid channel (2440 MHz)

3D PATTERN DATA	
Frequency (MHz)	2440
Ant. Port Input Pwr. (dBm)	8.00
Tot. Rad. Pwr. (dBm)	4.17
Peak EIRP (dBm)	8.61
Directivity (dBi)	4.44
Efficiency (dB)	-3.83
Efficiency (%)	41.36
Gain (dBi)	0.61
Average Gain (dB)	-3.83
E-Plane 3 dB BW (°)	81.00



POLAR PLOTS



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EUT:	Model 2051/3051
Serial Number:	2002
Customer:	Emerson Process Management
Attendees:	None
Customer Project:	None
Tested By:	Dustin Sparks
Test Run Description:	2475 MHz High Ch

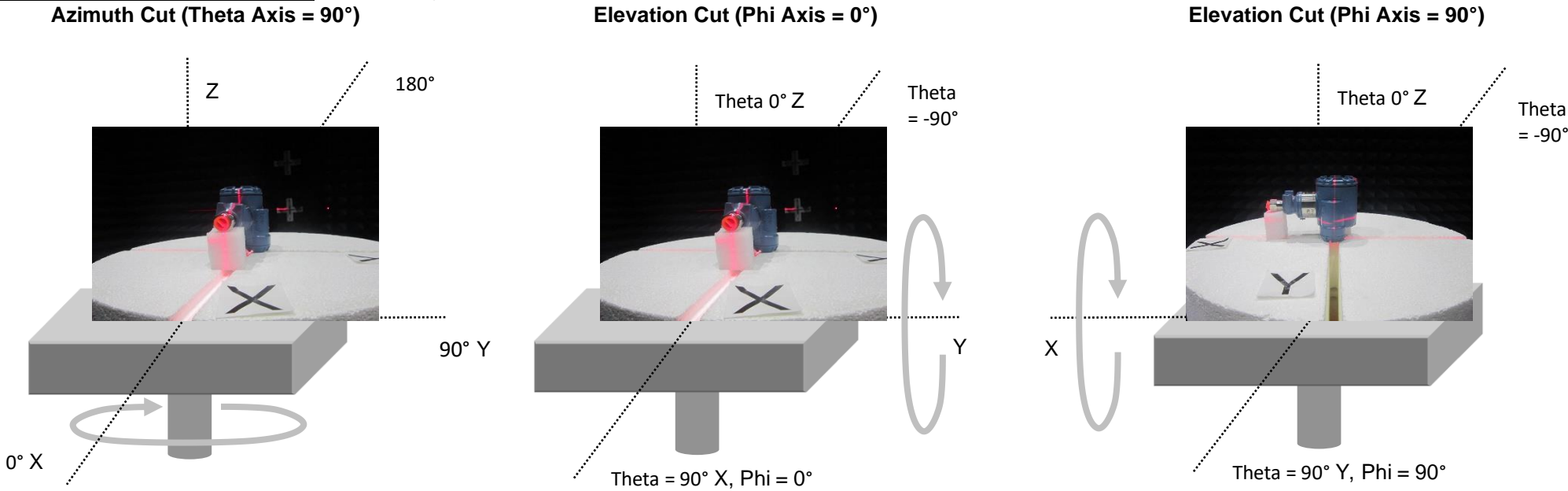
OTA 2018.01.04

Work Order:	EMPM0077
Date:	10/31/2019
Temperature:	22.9 °C
Relative Humidity:	25.6% RH
Bar. Pressure:	1020 mbar
Job Site:	MN10

COMMENTS

High channel (2475 MHz)

3D PATTERN DATA	
Frequency (MHz)	2475
Ant. Port Input Pwr. (dBm)	8.00
Tot. Rad. Pwr. (dBm)	3.39
Peak EIRP (dBm)	7.94
Directivity (dBi)	4.54
Efficiency (dB)	-4.61
Efficiency (%)	34.61
Gain (dBi)	-0.06
Average Gain (dB)	-4.61
E-Plane 3 dB BW (°)	74.00



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