



WPTA WISE

PRELIMINARY RESULTS

DATE OF SURVEY - 22/10/2019

**TUA-04-10/40H-1-T-R
HORIZONTAL**



TUA-04-10/40H-1-T-R - HORIZONTAL

1/ SITE

NAME WPTA WISE
LAT 41.102111 °d
LONG -85.184318 °d
STRUCTURE HEIGHT 250 m
BASE HEIGHT 248.8 m
NOTES
STRUCTURE TYPE Mast

2/ ANTENNA

NAME TUA-04-10/40H-1-T-R
LAT 41.102111 °d
LONG -85.184318 °d
AGL 227.9 m
APERTURE 12 m
FEED TYPE Single

3/ SERVICES

	WPTA	WISE
POLARITY	Horizontal	Horizontal
MODULATION	ATSC	ATSC
FREQUENCY (MHz)	533	593
BANDWIDTH (KHz)	6000	6000
DESIGNED ERP (dBW)	50.5	50.6
ACTUAL TX POWER(W)	5000	5000



4/ RESULTS

VRP – FACE B 130 °

FLIGHT DISTANCE 122 m, START HEIGHT 60 m, STOP HEIGHT 250 m

WPTA - 533 MHZ

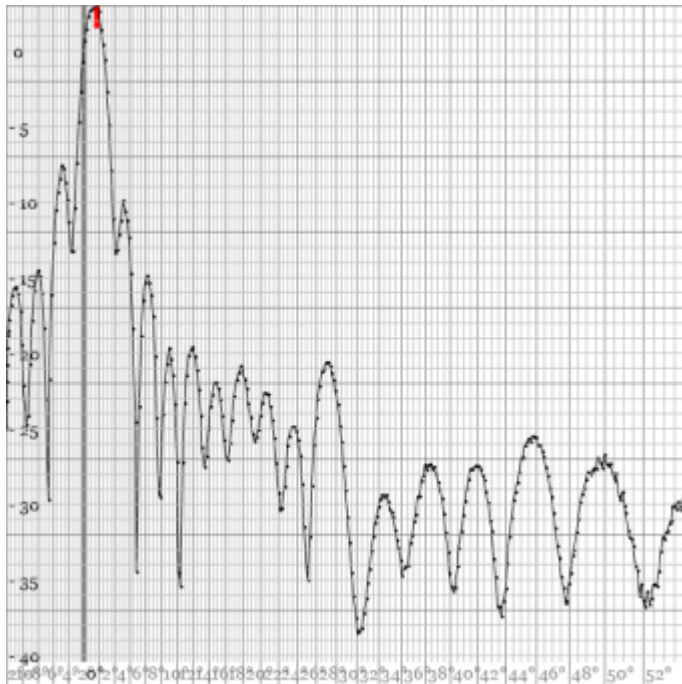
Beam Tilt: 1.45 ° @ 225.5 m above T/O (473.6 m AMSL)

Maximum ERP: 51.19 dBW

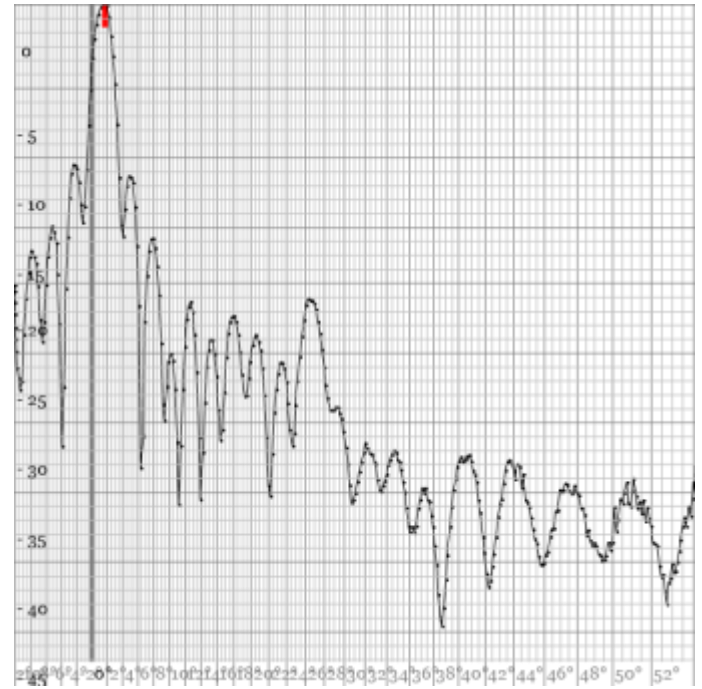
WISE - 593 MHZ

Beam Tilt: 1.49 ° @ 225.5 m above T/O (473.6 m AMSL)

Maximum ERP: 50.27 dBW



Depression Angle



Depression Angle



TUA-04-10/40H-1-T-R - HORIZONTAL

VRP – FACE C 220 °

FLIGHT DISTANCE 122 m, START HEIGHT 60 m, STOP HEIGHT 250 m

WPTA - 533 MHZ

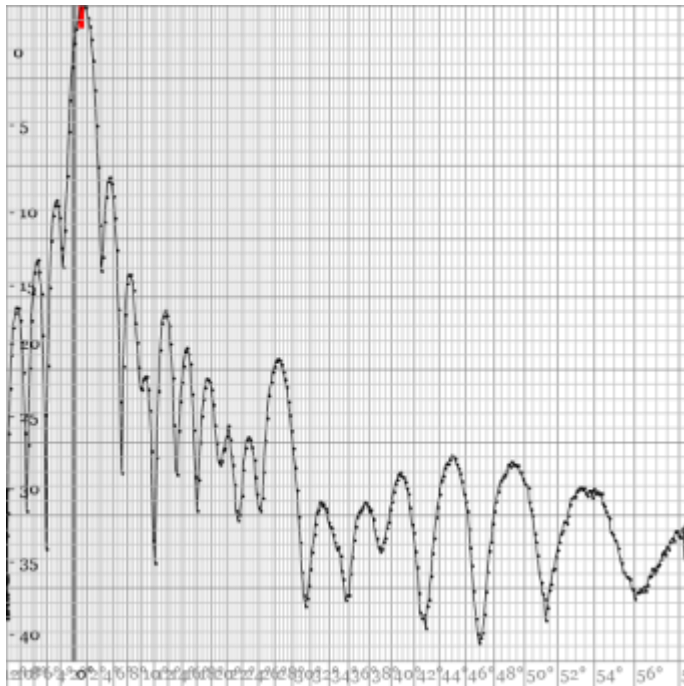
Beam Tilt: 1.24 ° @ 226.7 m above T/O (474.8 m AMSL)

Maximum ERP: 52.10 dBW

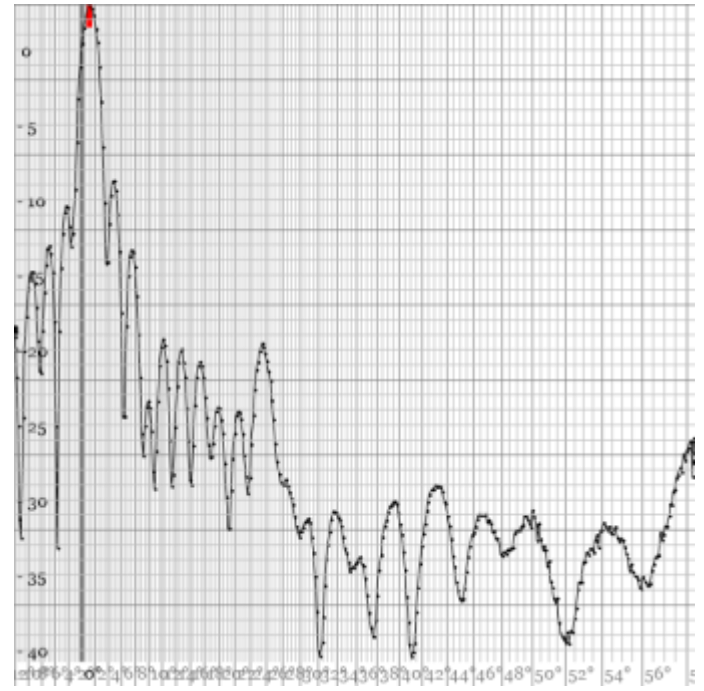
WISE - 593 MHZ

Beam Tilt: 1.24 ° @ 226.7 m above T/O (474.8 m AMSL)

Maximum ERP: 51.81 dBW



Depression Angle



Depression Angle



TUA-04-10/40H-1-T-R - HORIZONTAL

HRP – FACE C 220 °

FLIGHT DISTANCE 85 m, **FLIGHT HEIGHT** 227 m

WPTA - 533 MHZ

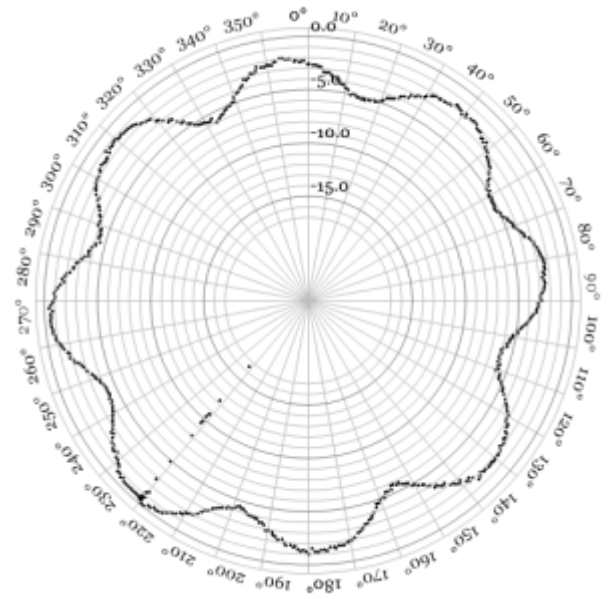
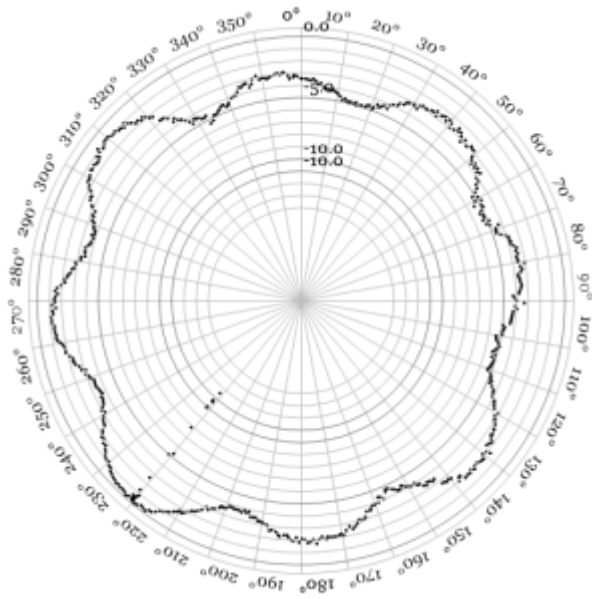
Depression Angle: 1.32 °

Maximum ERP: 51.86 dBW

WISE - 593 MHZ

Depression Angle: 1.32 °

Maximum ERP: 51.22 dBW



5/ PARAMETERS

SPECTRUM ANALYSER SETUP

START FREQUENCY	529.4 MHz
STOP FREQUENCY	596.6 MHz
RBW	100 kHz
VBW	100 kHz
AVERAGE SWEEP TIME	563 ms
SERIAL NUMBER	60400426
DETECTOR	Average



TUA-04-10/40H-1-T-R - HORIZONTAL

6/ RECEIVER SETUP

	WPTA	WISE
ANTENNA MODEL	LPY607	LPY607
ANTENNA POLARISATION	Horizontal	Horizontal
ANTENNA GAIN (DBD)	3.5	4.2
FACTOR (DB)	22.6026022680022	23.529151954756
CABLE LOSS (DB)	0.4	0.4
ATTENUATION 1 (DB)	20	20
ATTENUATION 2 (DB)	10	10
PRECISION OFFSET (M)	0	0
CALIBRATION FACTOR (DB)	49.5026022680022	49.729151954756