E115WB FCC FILING

MAY 18, 2016

GEE INROUTE CARRIER CONFIGURATIONS FOR E115WB

EIRP Density and Tx Power (1.024 MHz Emission Bandwidth)	EIRP Density and Tx Power (1.024 MHz Emission Bandwidth)	EIRP Density and Tx Power (2.048 MHz Emission Bandwidth)	EIRP Density and Tx Power (4.096 MHz Emission Bandwidth)	Skew Limit
16.5 dBW/4kHz (41.8 dBm Tx Power	18.7 dBW/4kHz (44.0 dBm Tx Power	15.7 dBW/4kHz (44.0 dBm Tx Power	12.7 dBW/4kHz (44.0 dBm Tx Power	25°
16.5 dBW/4kHz (41.8 dBm Tx Power	18.7 dBW/4kHz (44.0 dBm Tx Power	15.7 dBW/4kHz (44.0 dBm Tx Power	12.7 dBW/4kHz (44.0 dBm Tx Power	35°
16.5 dBW/4kHz (41.8 dBm Tx Power	18.7 dBW/4kHz (44.0 dBm Tx Power	15.7 dBW/4kHz (44.0 dBm Tx Power	12.7 dBW/4kHz (44.0 dBm Tx Power	45°

The EIRP Density/Tx Power/Emission Bandwidths combinations correspond to each of the 3 skew limits (25, 35, 45 degrees). The geographical representation of E115WB coverage (including the corresponding EIRP density values) is provided later in the document.

SAA AZIMUTH PERFORMANCE TO CO-POL/CROSS-POL FCC MASK, SECTION 25.227

- GEE is not compliant with the FCC masks (Section 25.227(a)(1)(i)(A)) and (Section 25.227(a)(1)(i)(C) for the inroute carrier configurations, but complies to E115WB's Coordinated limits and has received a coordination letter from Eutelsat.

SAA ELEVATION PERFORMANCE TO CO-POL FCC MASK, SECTION 25.227

- GEE cannot meet the static elevation plane criteria under Section 25.227(a)(1)(i)(B). Moreover, because the antenna is less than 1.2 meters in diameter, it is not subject to routine processing under Section 25.212(c). Accordingly, GEE has coordinated this non-conforming use pursuant to Sections 25.209(f) and 25.220 of the Commission's Rules with the satellite operators that will provide space segment capacity for the service or who are operating adjacent satellites to the target satellites.

E115WB COORDINATION LIMITS

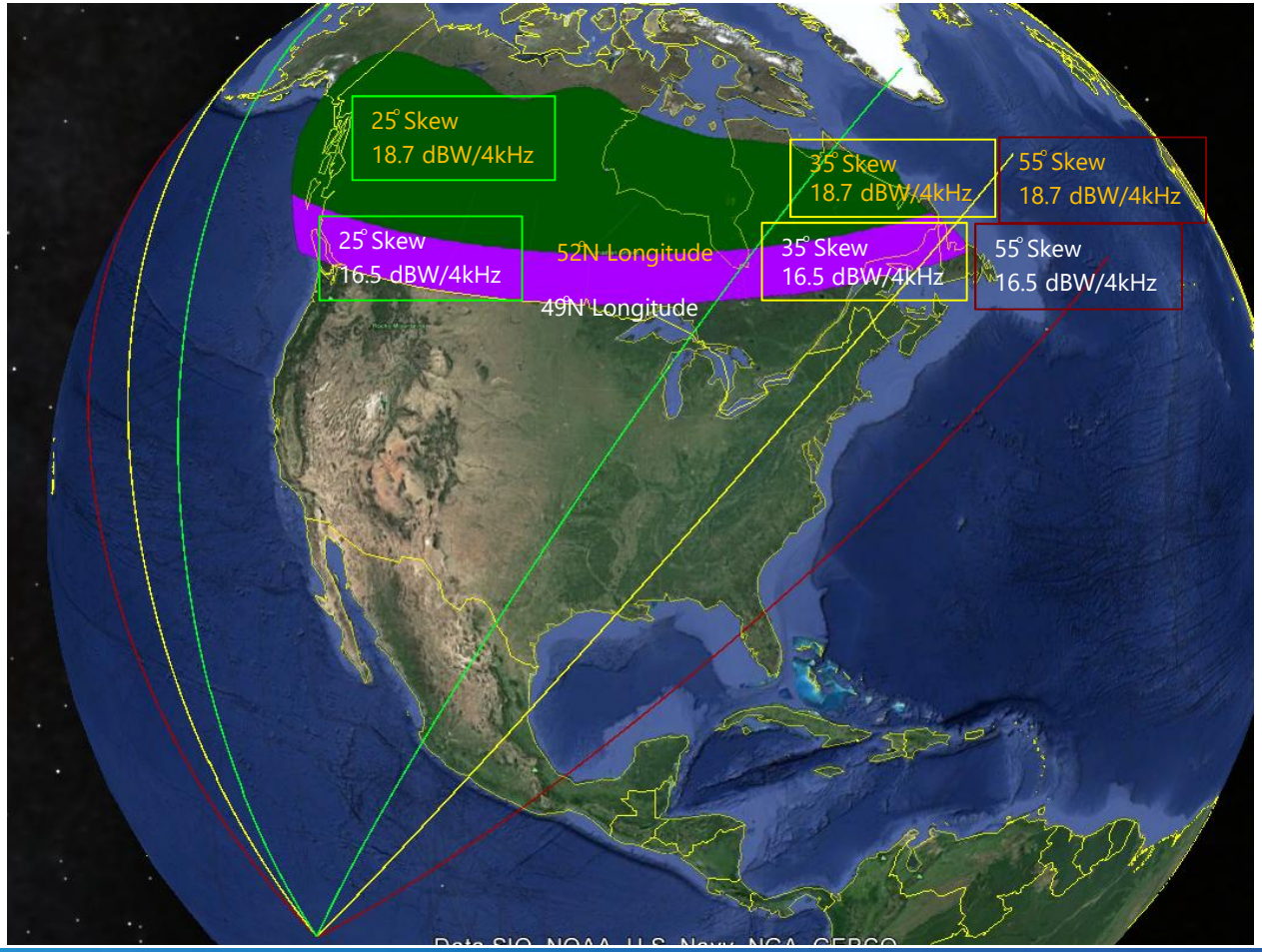
Table 8.2 Uplink Density Limits transmitting towards Satmex 7E/S Location	Maximum PSD at antenna flange for antennas complying 29-25*log(theta) gain envelope	Maximum EIRP Density towards 113.0° and 116.8° orbital slots.
South of Mexico-US Border	-55.0 dBW/Hz	-33.0 dBW/Hz
North of Mexico-US Border and South of parallel 49° N. Between frequency range: 14320 to 14360 MHz	-52.0 dBW/Hz	-30.0 dBW/Hz
North of Mexico-US Border and South of parallel 49° N, not within the frequency ranges stated above	-50.0 dBW/Hz	-28.0 dBW/Hz
North of parallel 49° and South of parallel 52°	-48.0 dBW/Hz	-26.0 dBW/Hz
North of parallel 52° and South of parallel 55°	-46.0 dBW/Hz	-24.0 dBW/Hz
North of parallel 55°	-42.0 dBW/Hz	-20.0 dBW/Hz

Table 8.3 Downlink Density Limits transmitted by Satmex 5 and Satmex 7

Downlink Area	Maximum EIRP Density
South of Mexico-US Border	35.2 dBW/MHz
Continental Contiguous U.S.	38.2 dBW/MHz
Alaska and Canada	41.2 dBW/MHz

NOTE: FOR EMISSION BANDWIDTH OF 1.024 MHZ
THE 16.5 DBW/ 4 KHZ EIRP DENSITY CORRESPONDS TO THE COORDINATED FLANGE DENSITY OF -48 DBW/HZ, 49 N TO 52 N CRITERIA.
THE 18.7 DBW/ 4 KHZ EIRP DENSITY CORRESPONDS TO THE COORDINATED FLANGE DENSITY OF -46 DBW/HZ, 52 N TO 55 N CRITERIA.

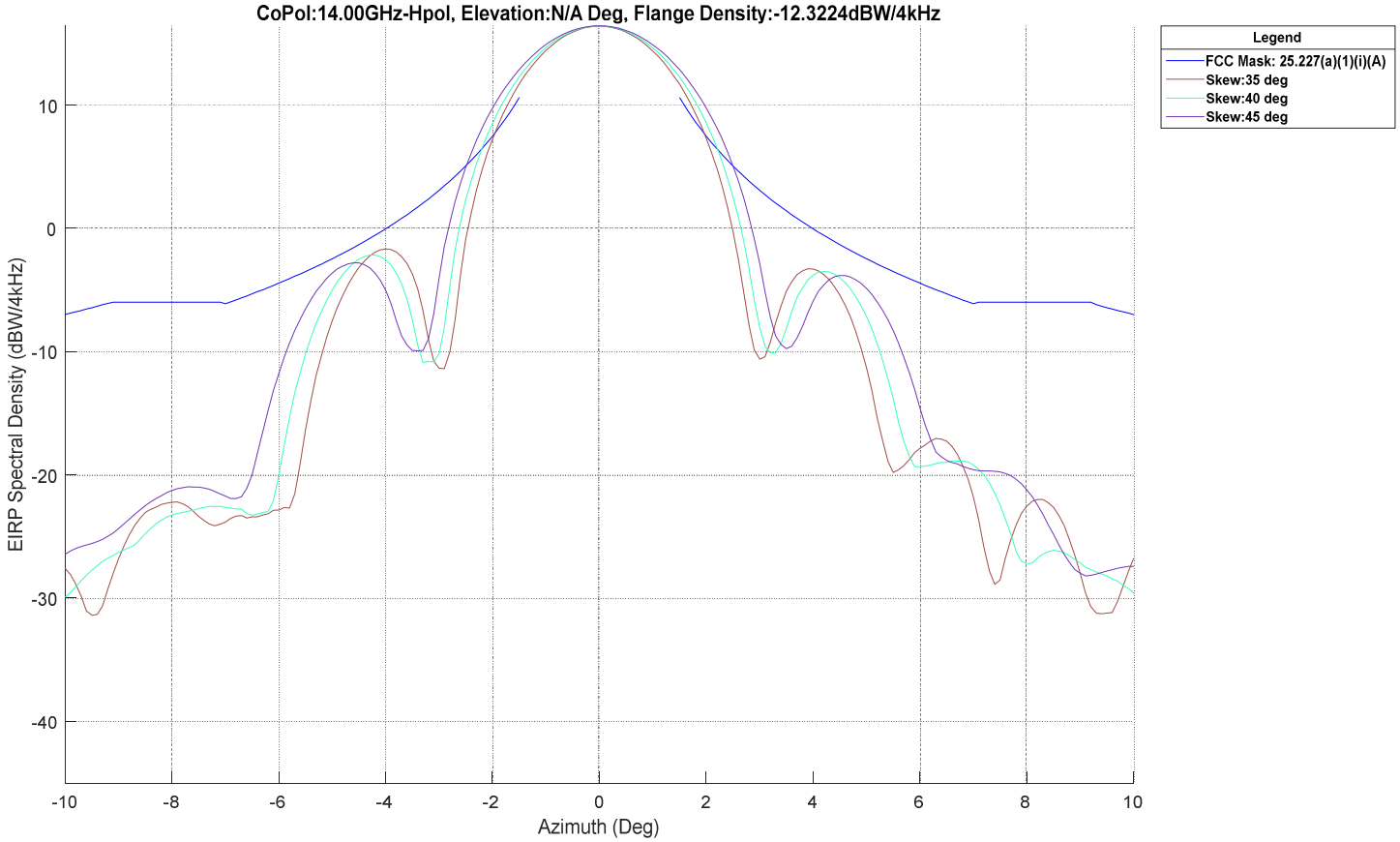
GEE E115WB COVERAGE



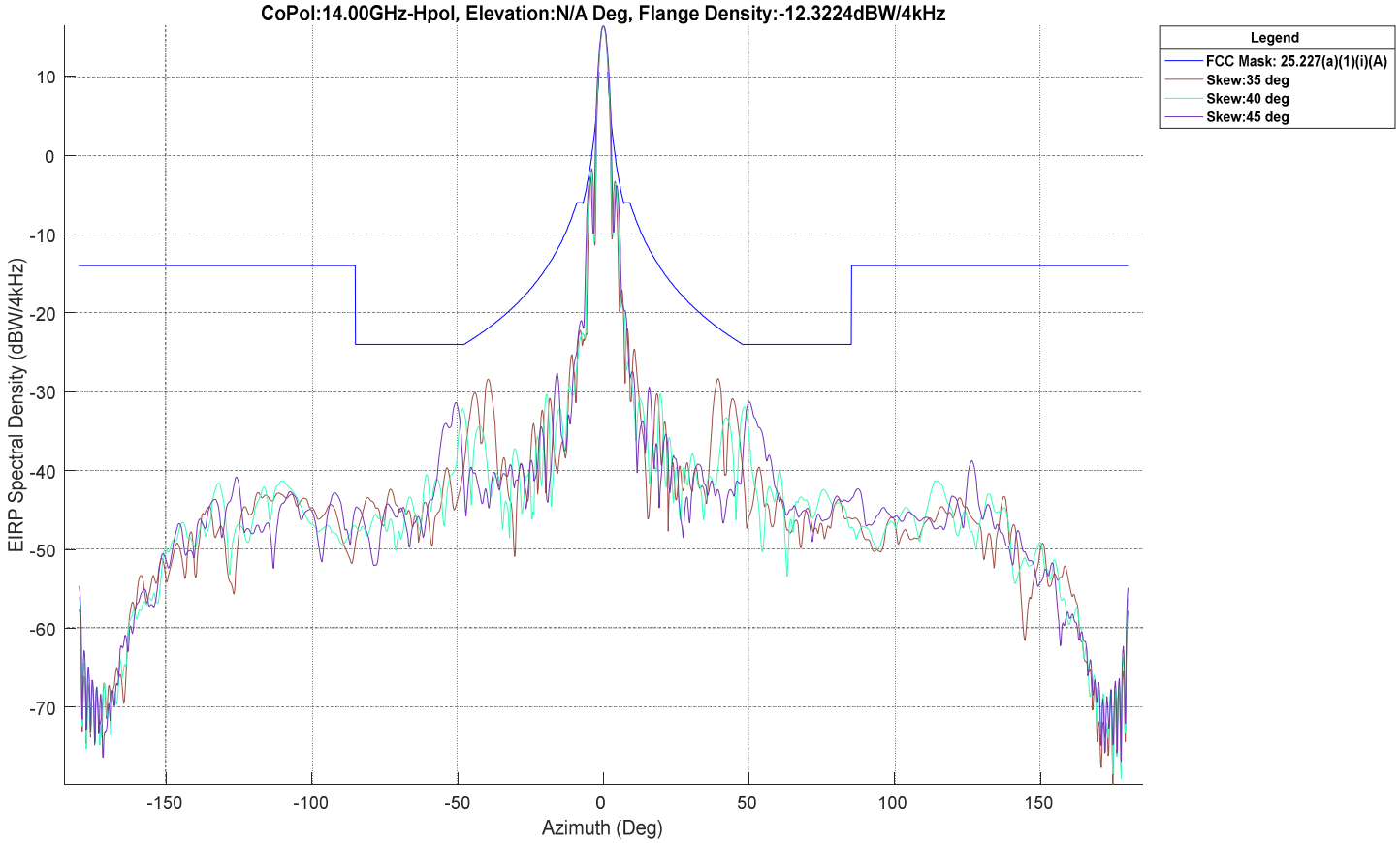
E115WB CO-POL PLOTS

1.024 MHZ, EIRP DENSITY: 16.5 DBW/4KHZ, TX POWER: 41.8 DBM, FLANGE DENSITY: -12.3 DBW/4KHZ

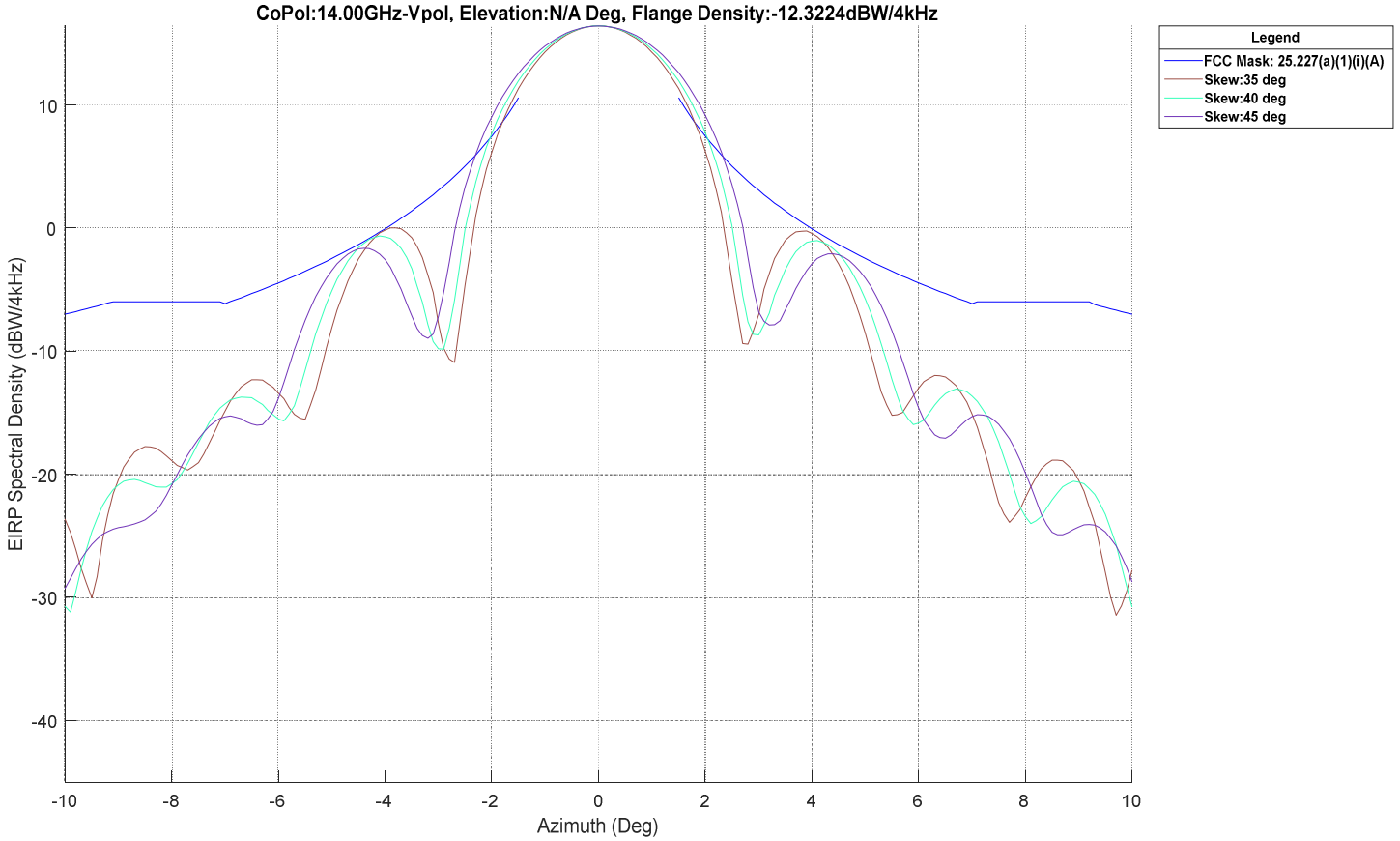
COPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



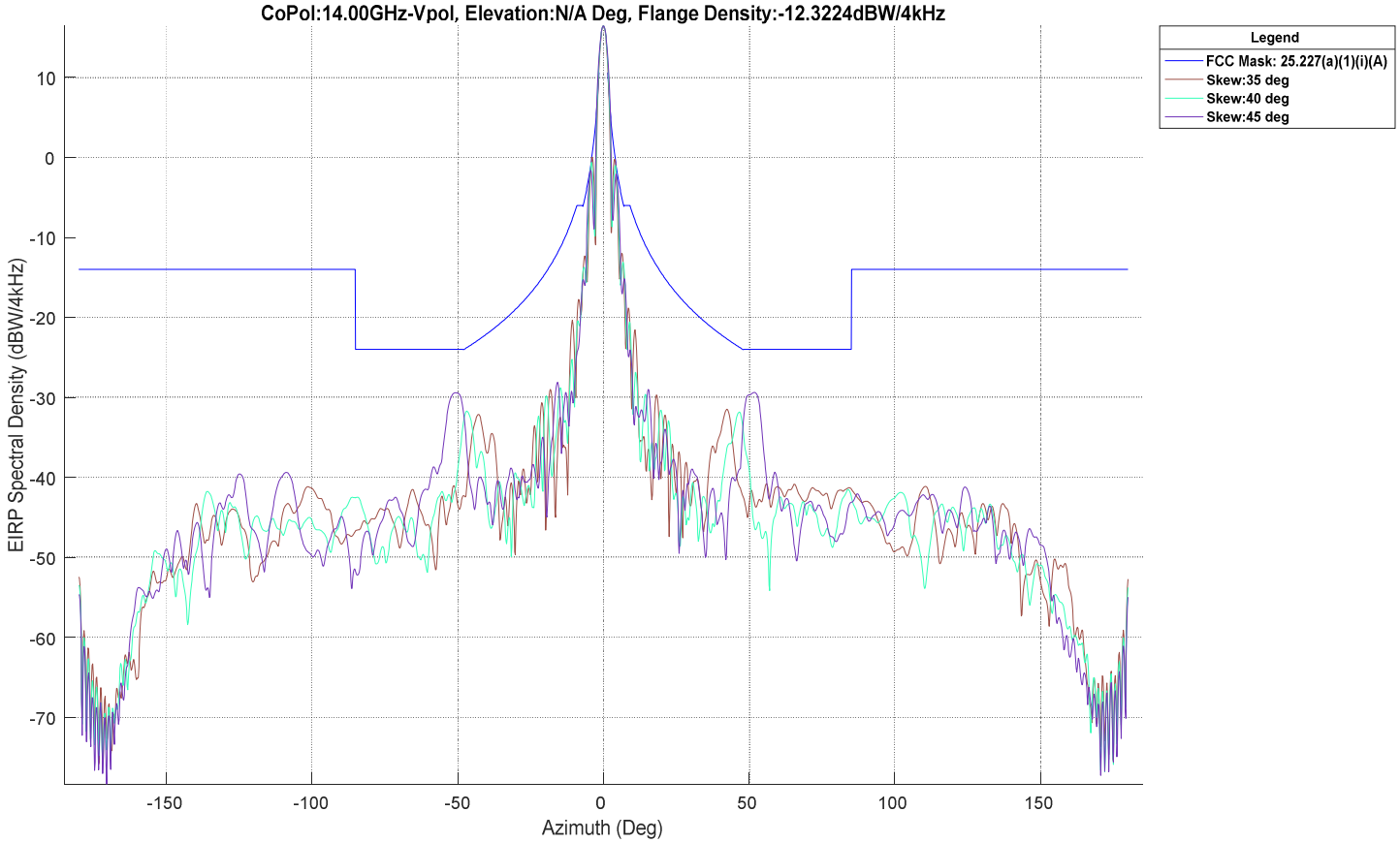
COPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



COPOL:14.00GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



COPOL:14.00GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



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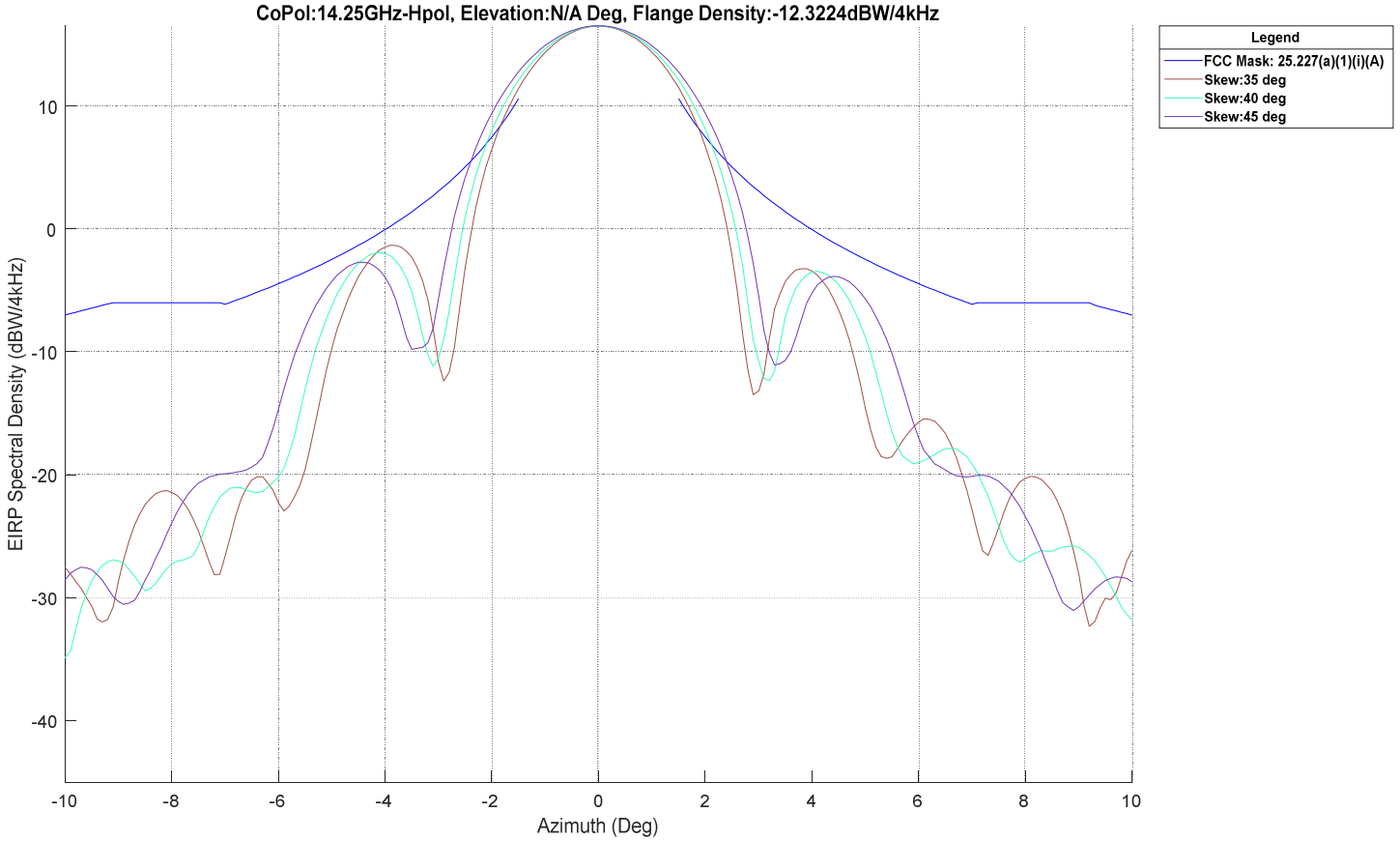
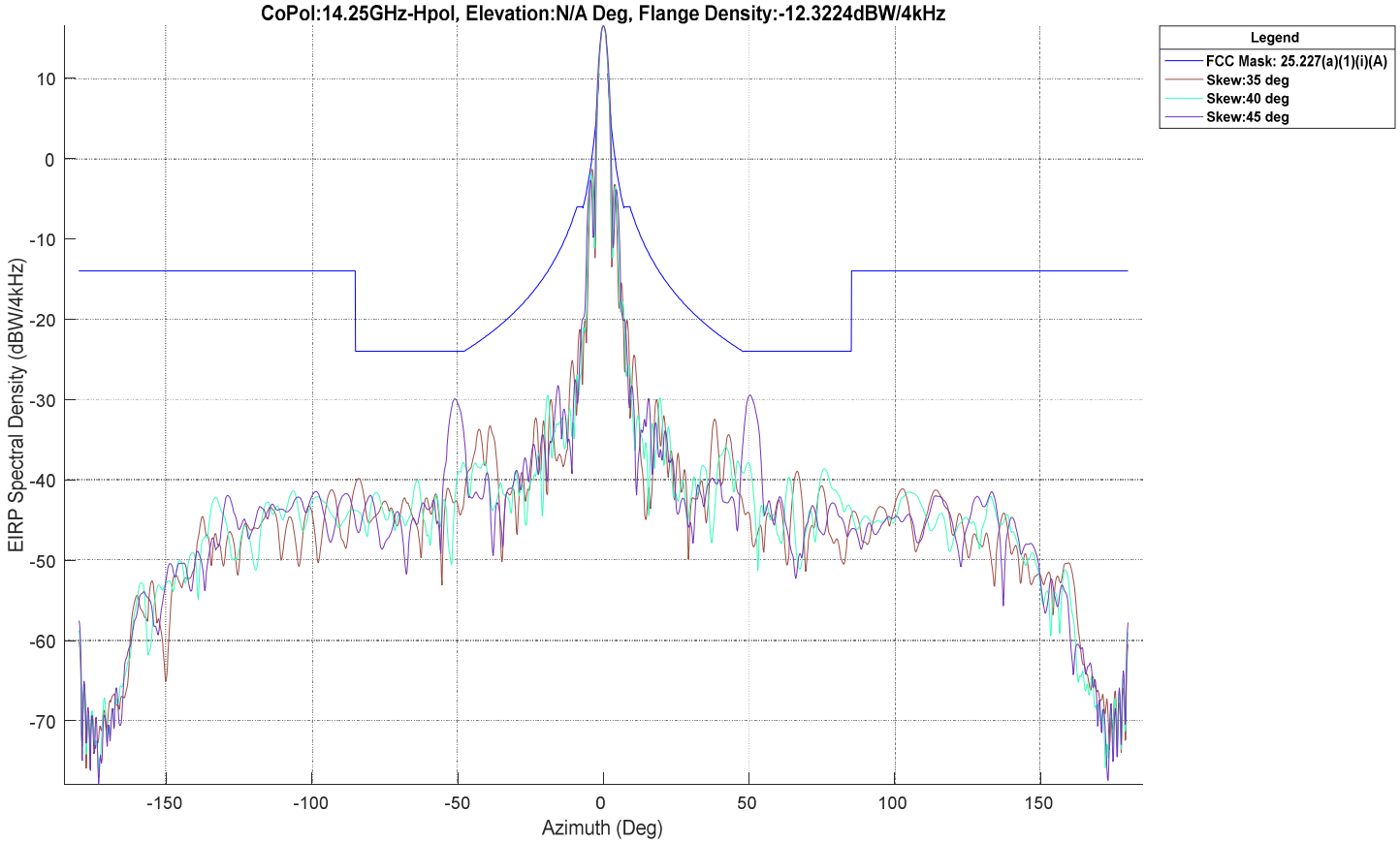
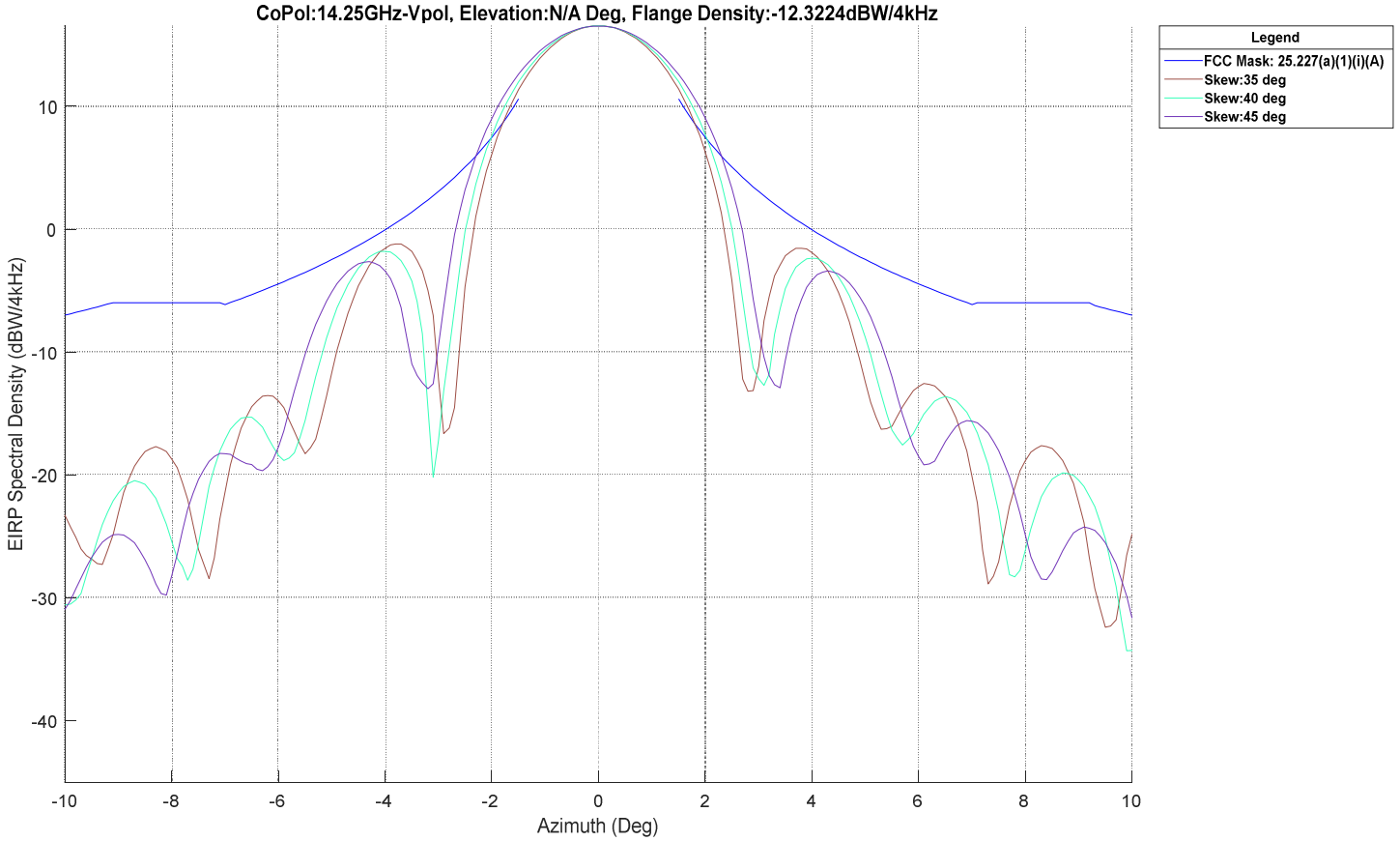


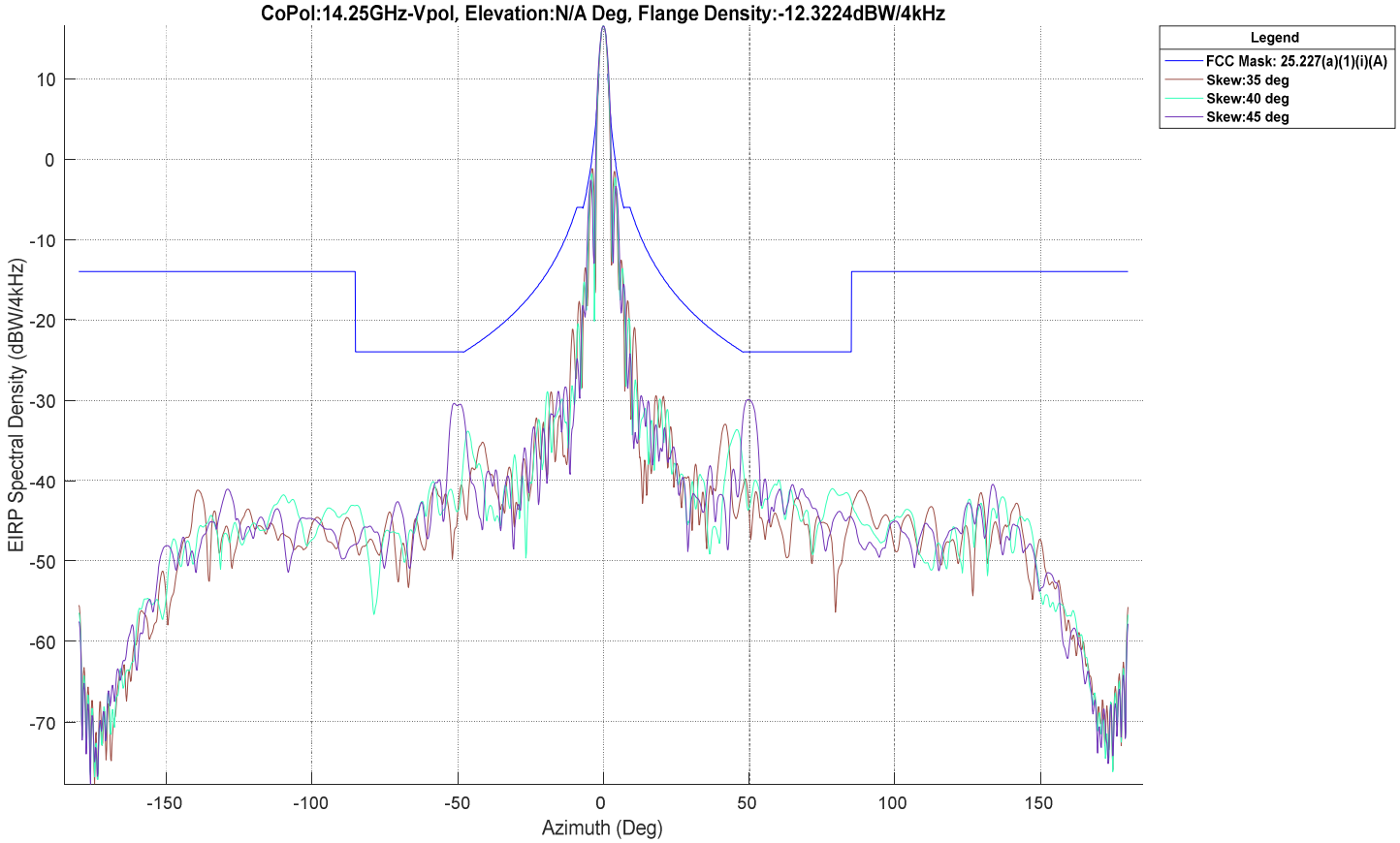
COPOL:14.25GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



COPOL:14.25GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



COPOL:14.25GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



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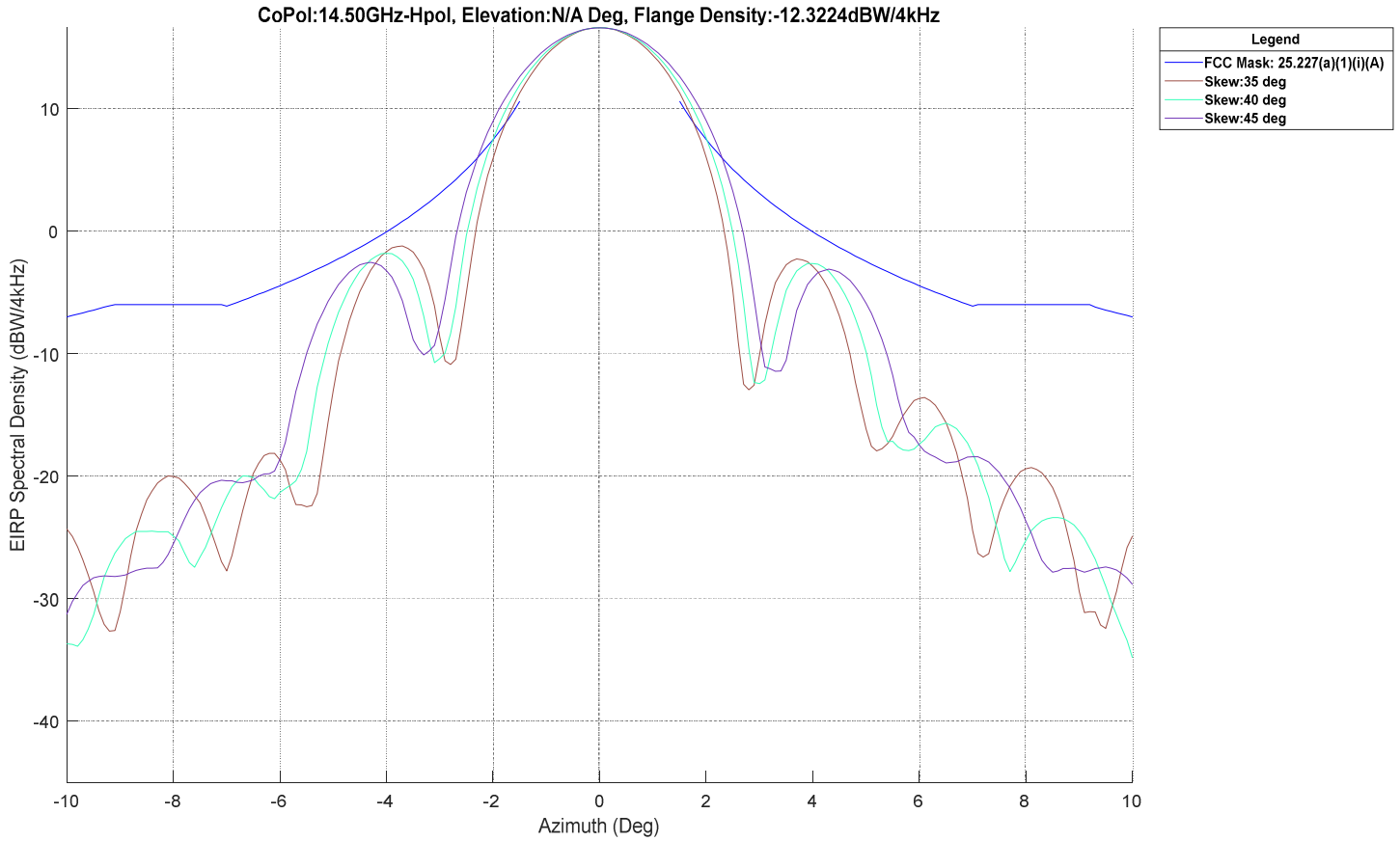
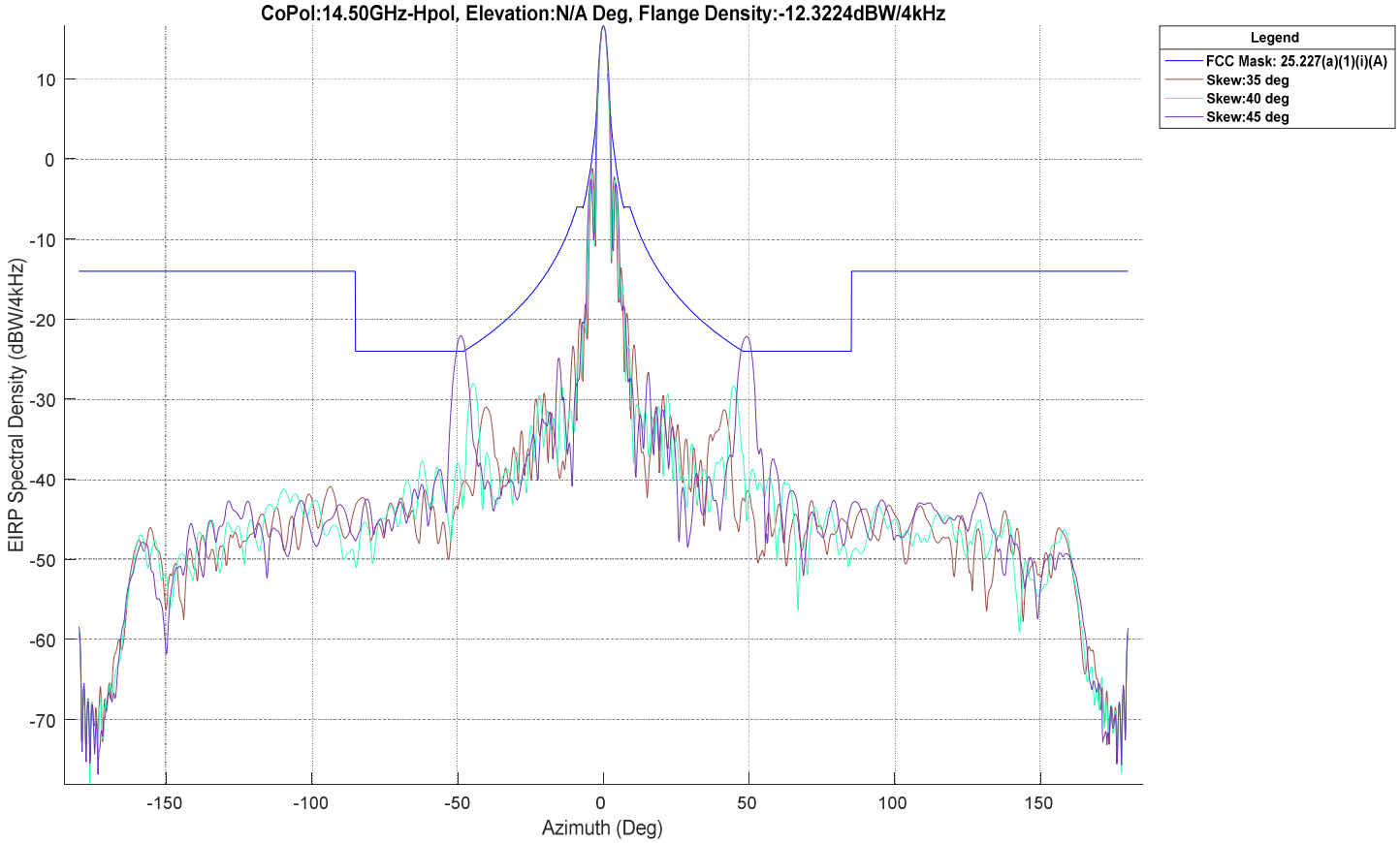
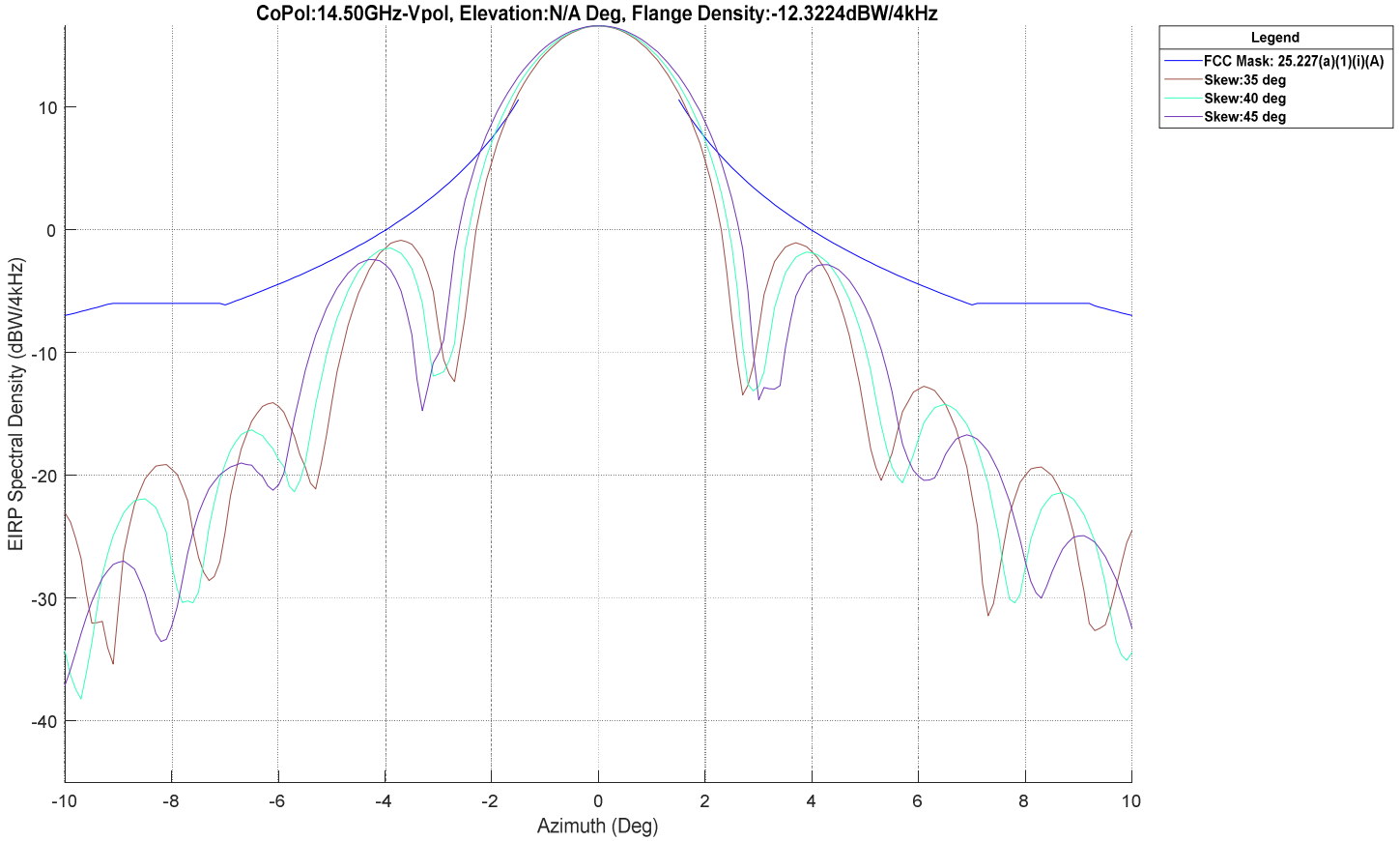


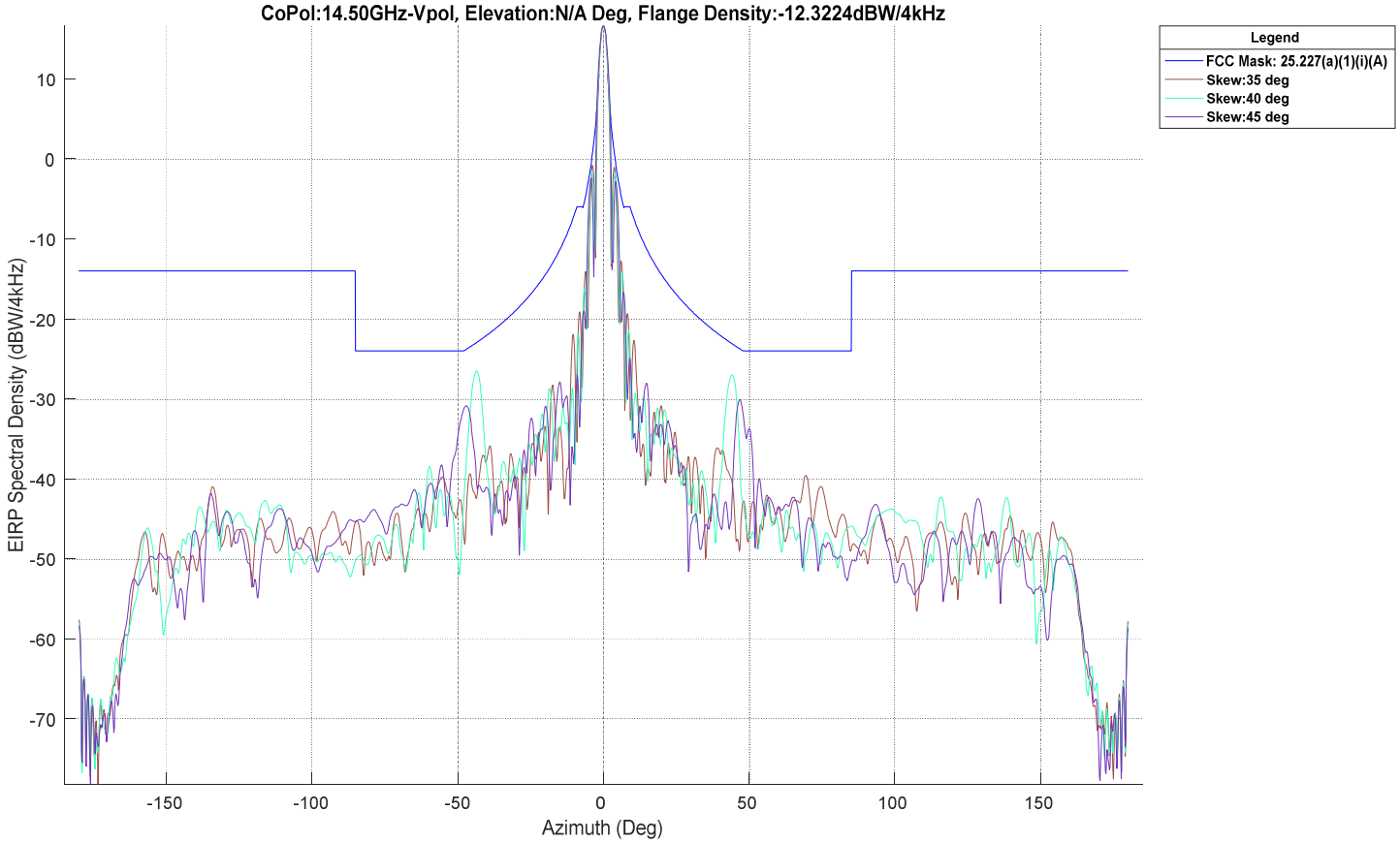
COPOL:14.50GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



COPOL:14.50GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ

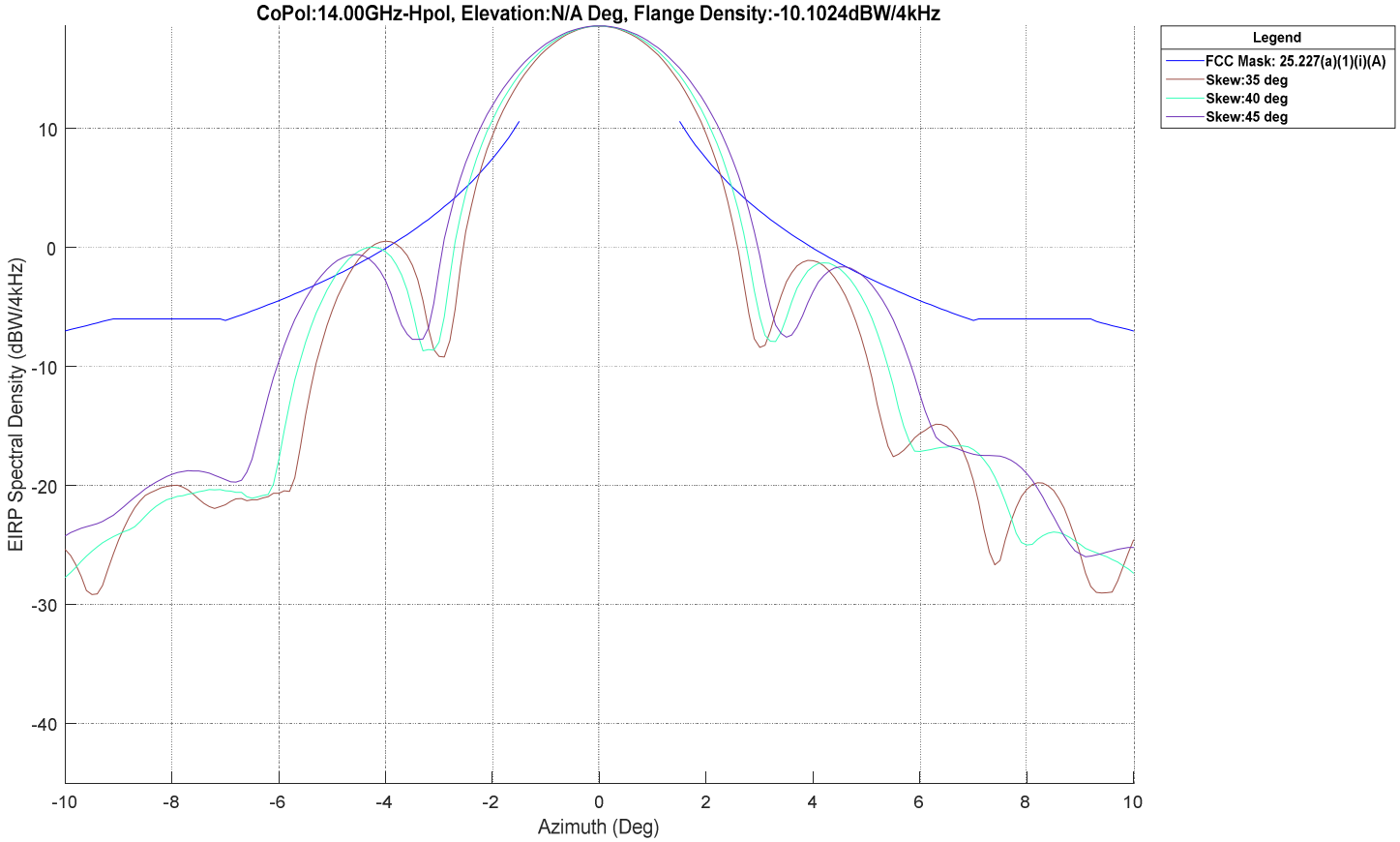


COPOL:14.50GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ

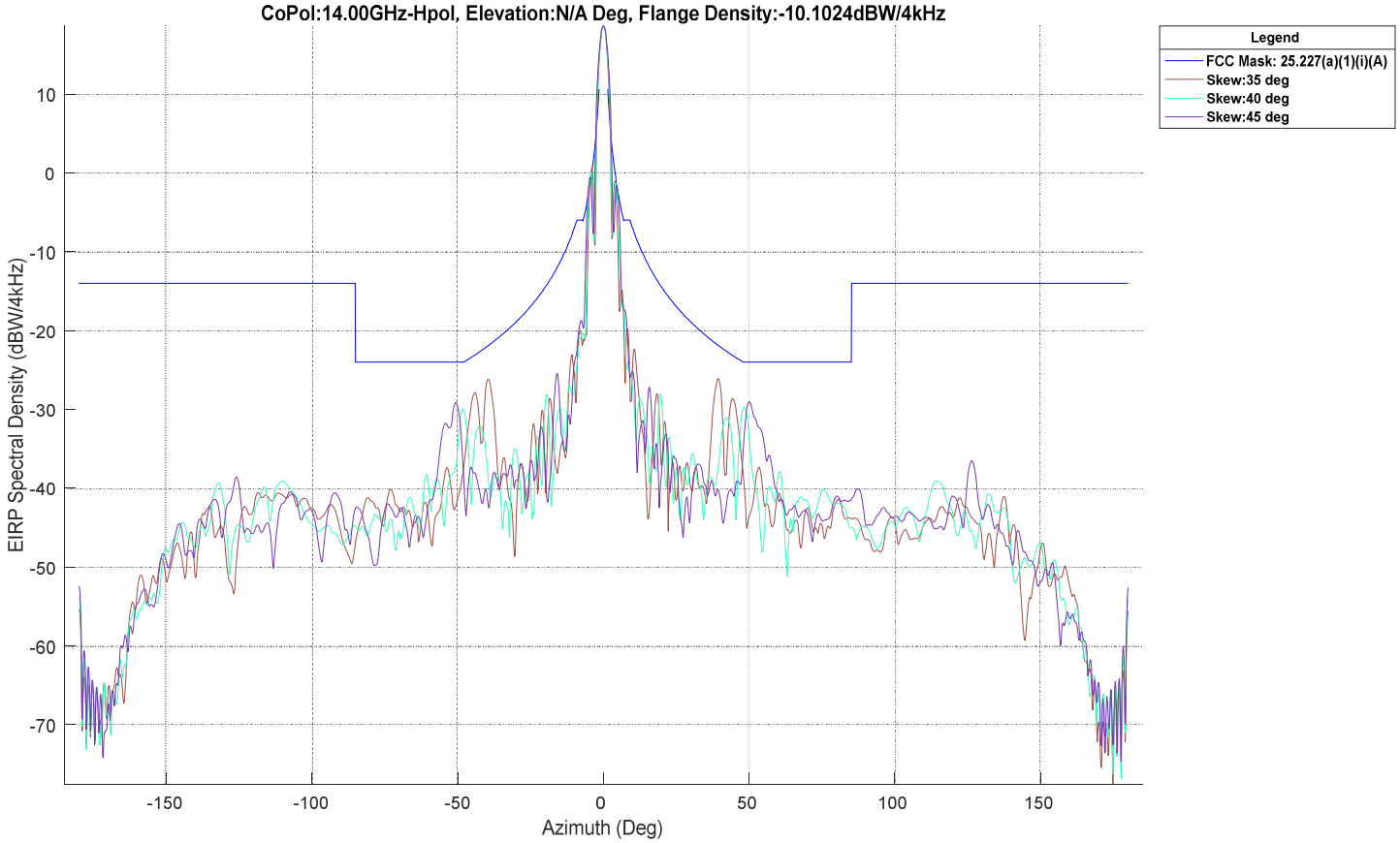


1.024 MHZ, EIRP DENSITY: 18.7 DBW/4KHZ, TX POWER: 44.0 DBM, FLANGE DENSITY: -10.1 DBW/4KHZ

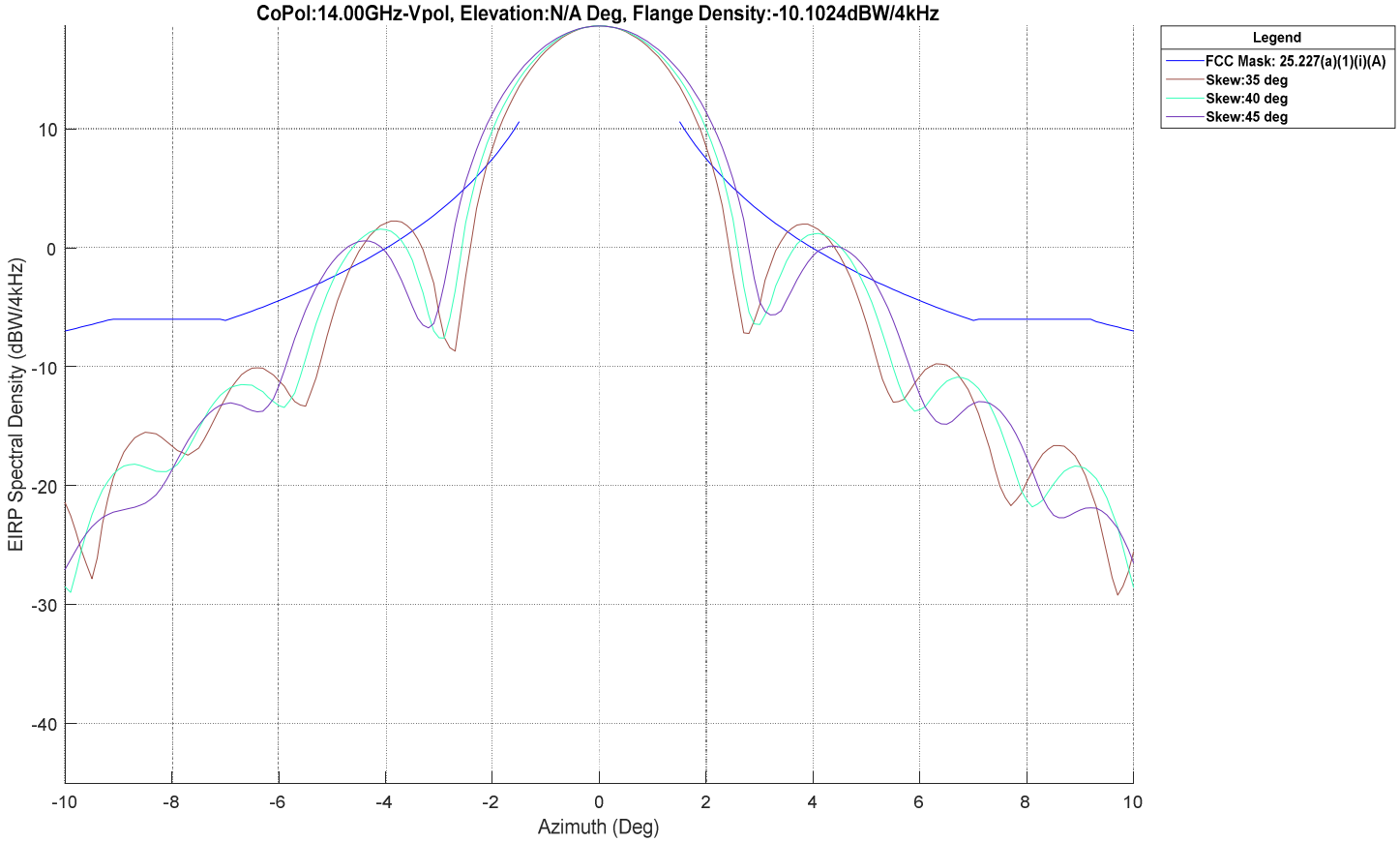
COPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



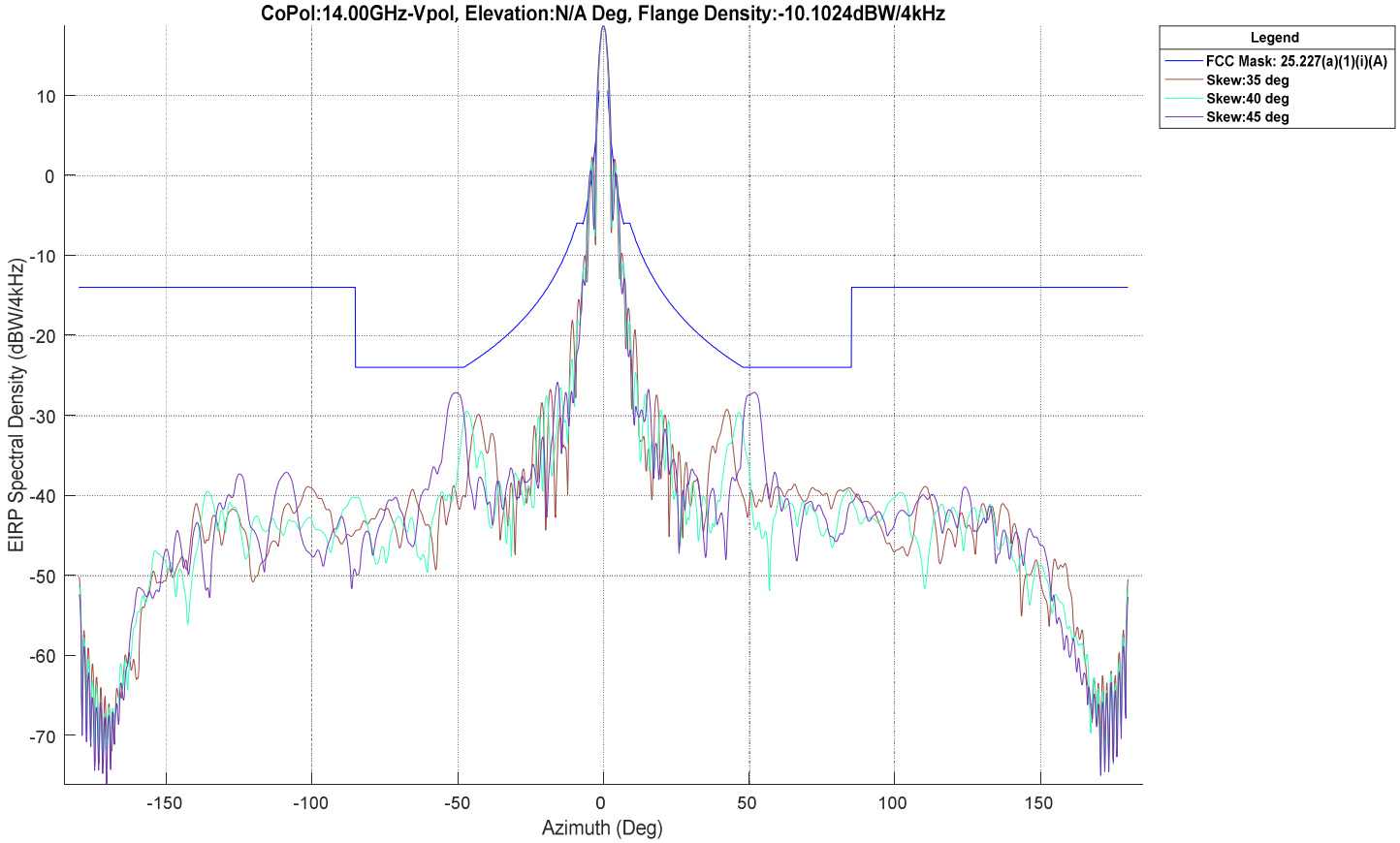
COPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



COPOL:14.00GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



COPOL:14.00GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



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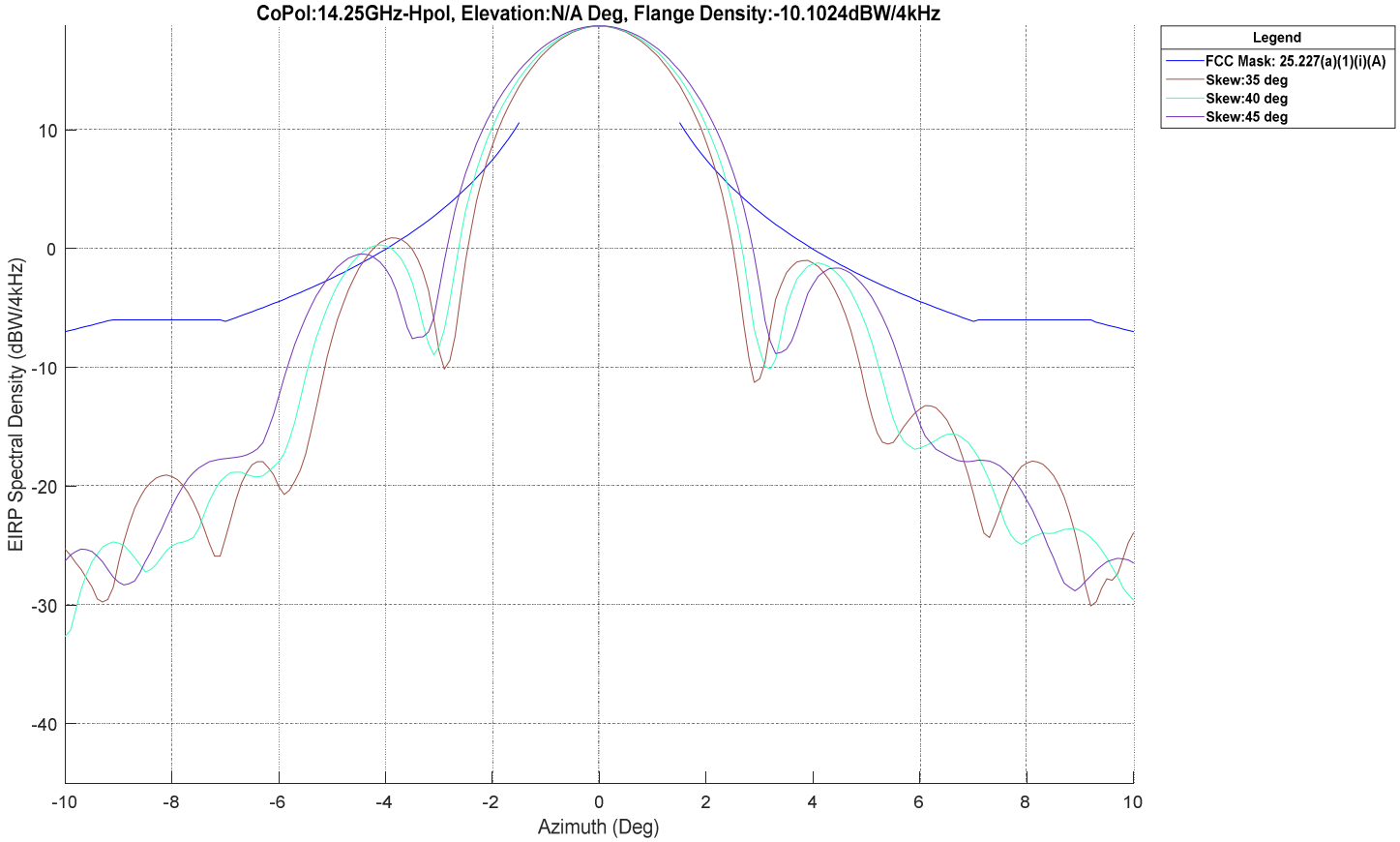
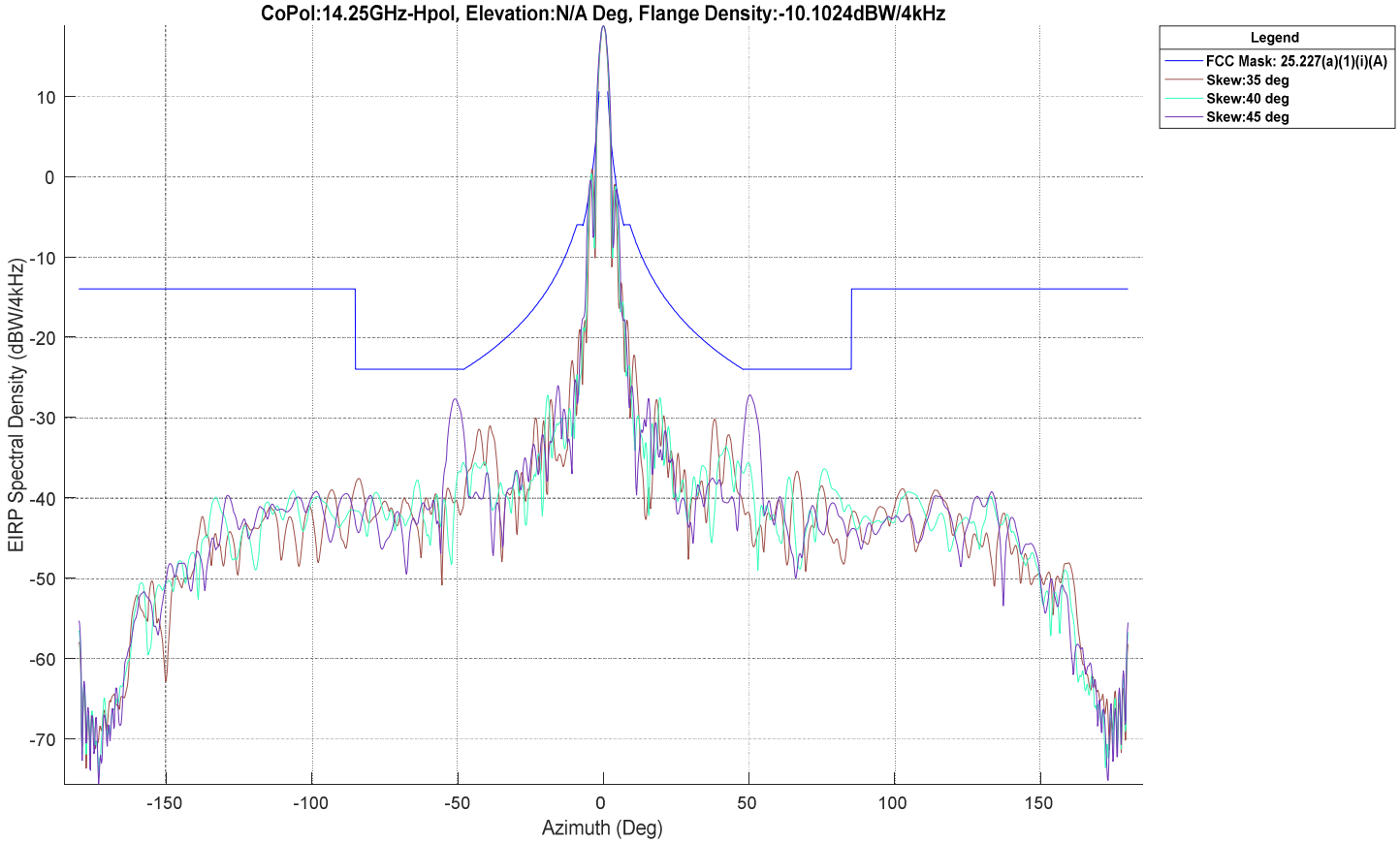
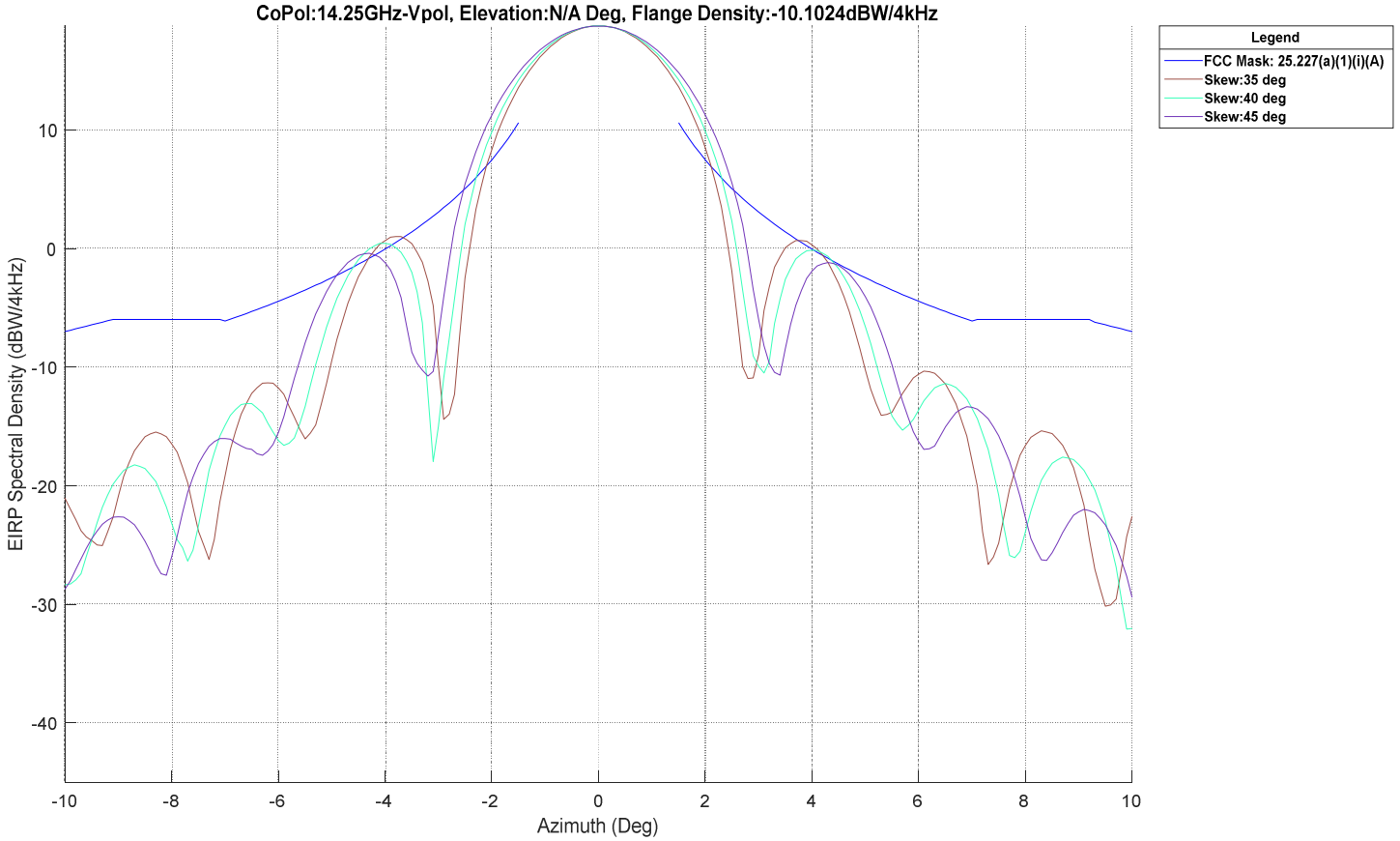


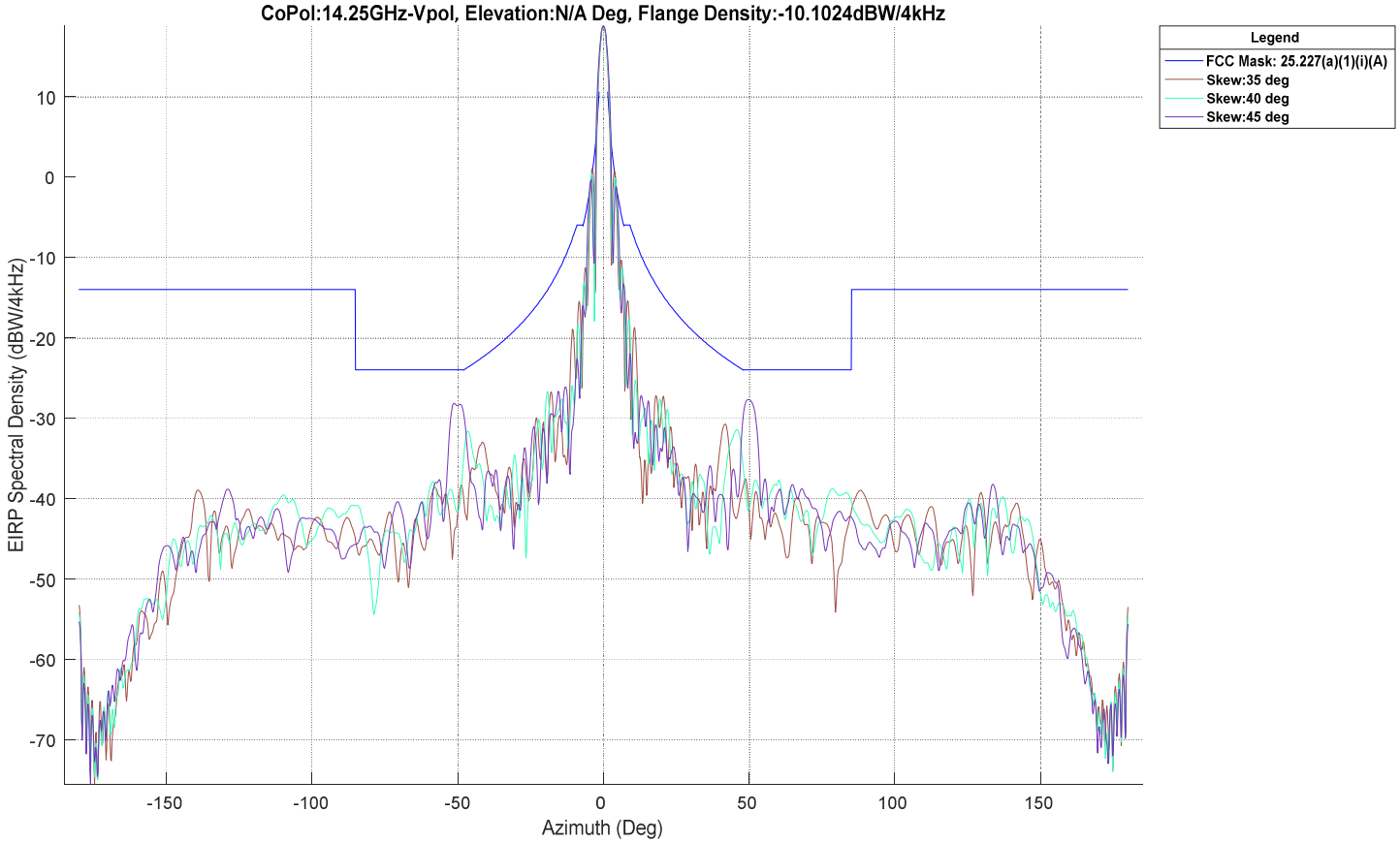
COPOL:14.25GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



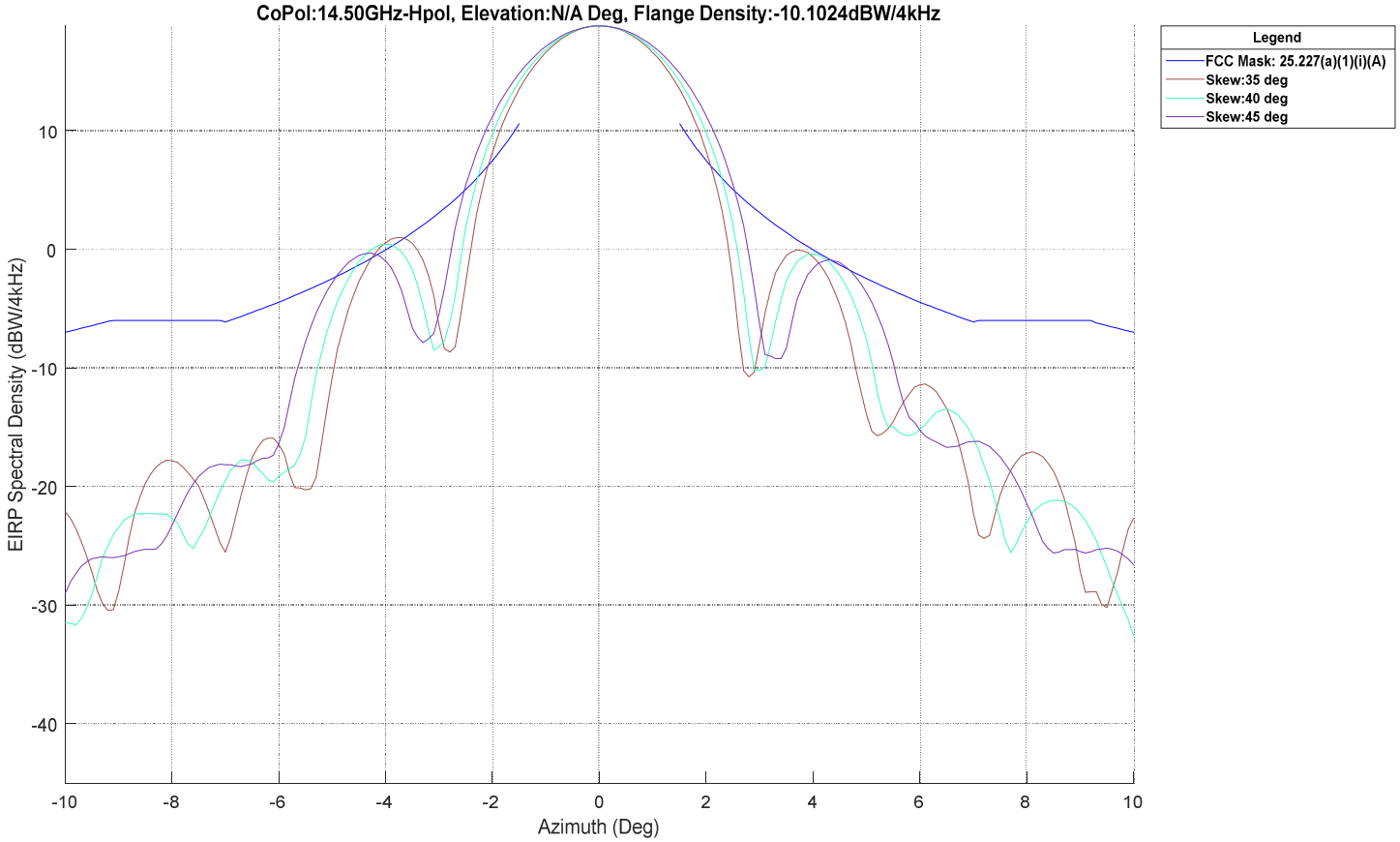
COPOL:14.25GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



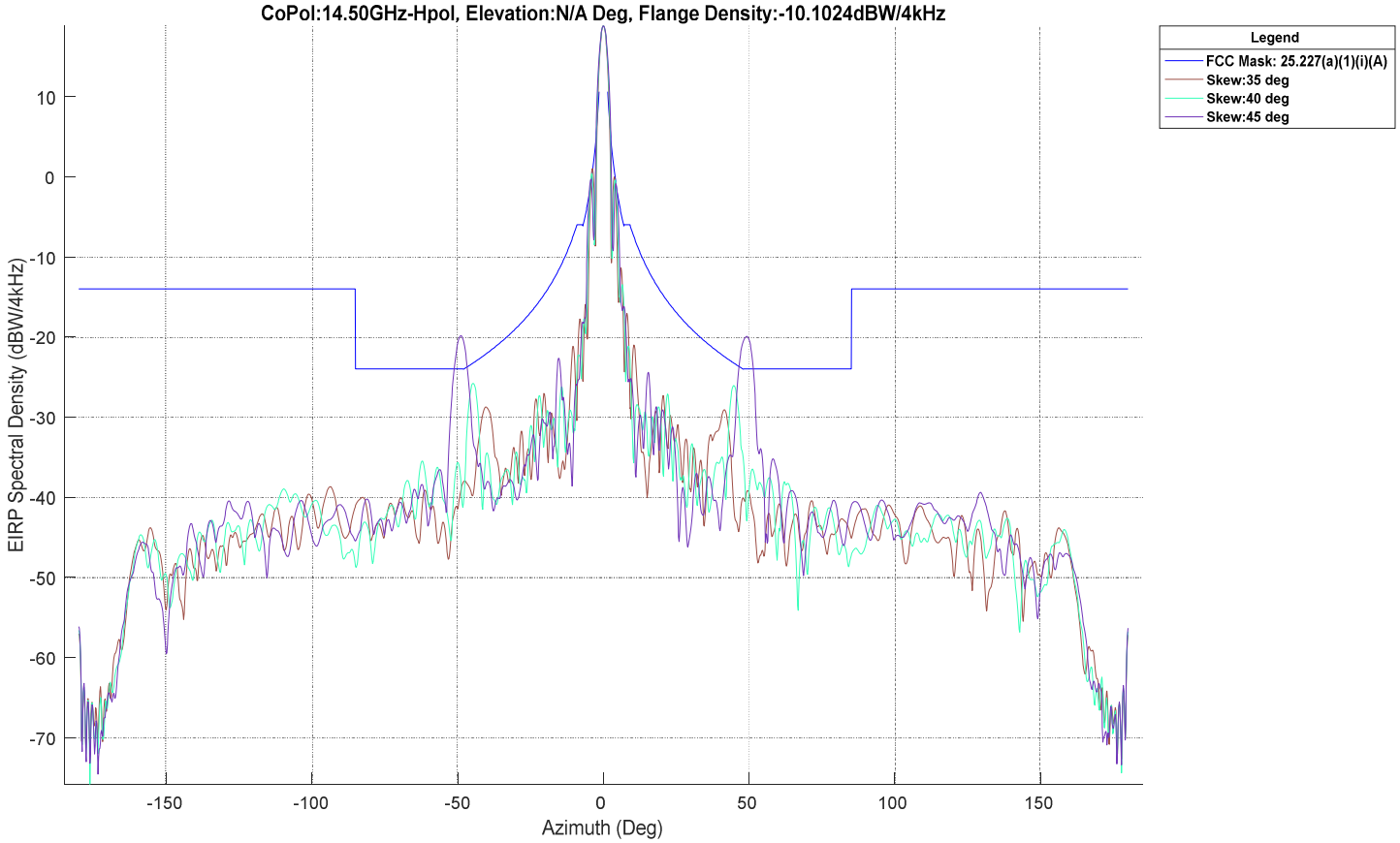
COPOL:14.25GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



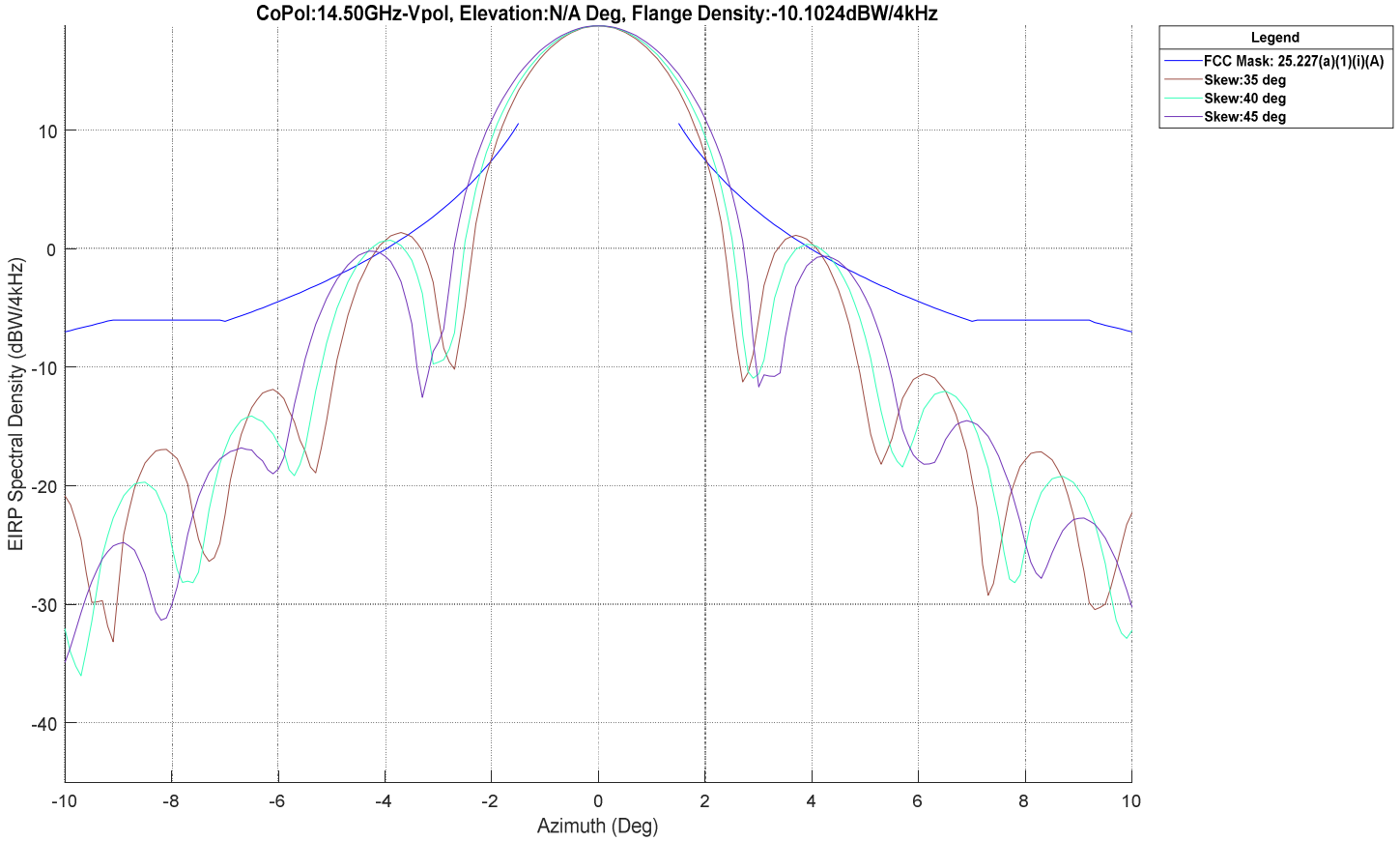
COPOL:14.50GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



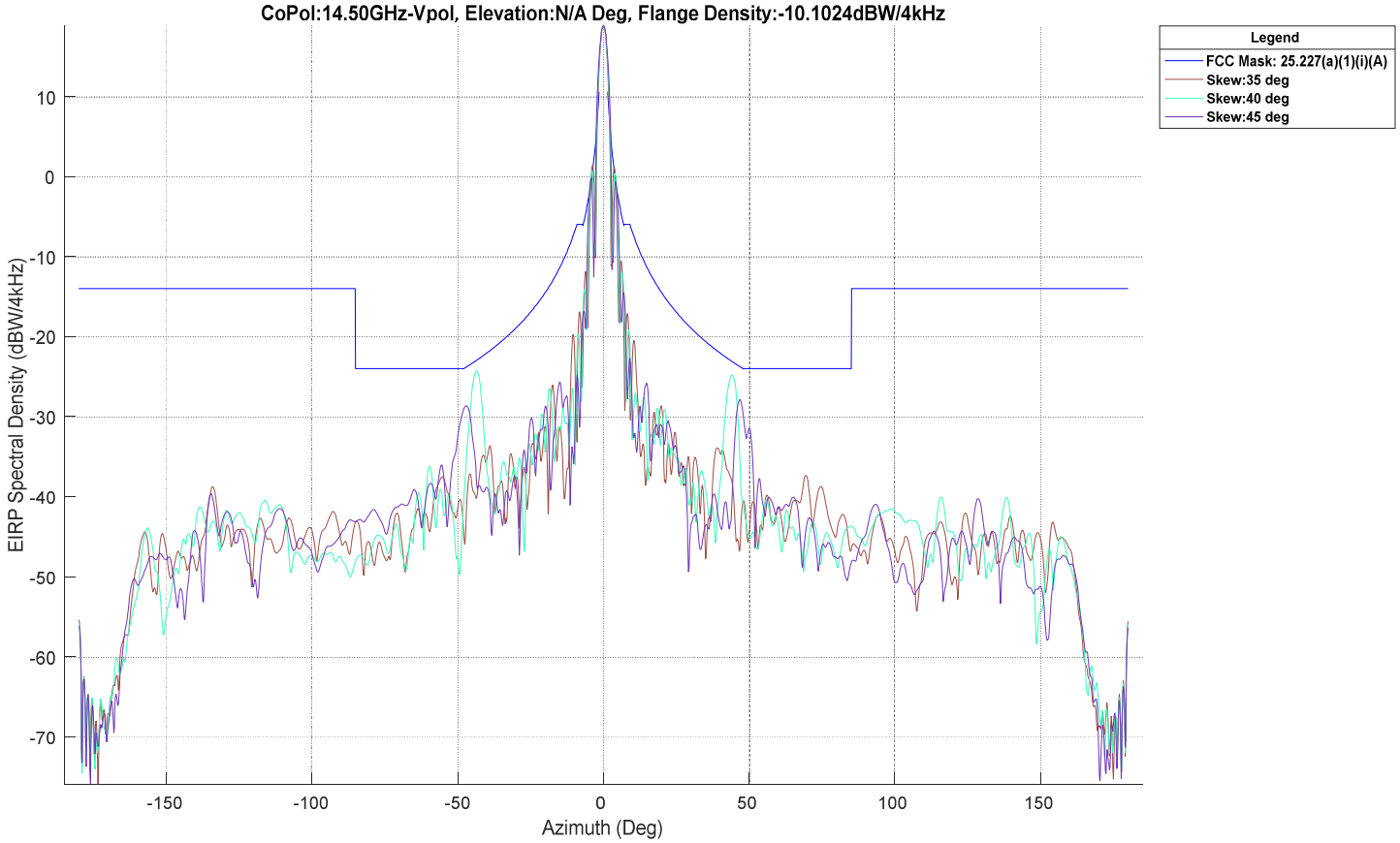
COPOL:14.50GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



COPOL:14.50GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ

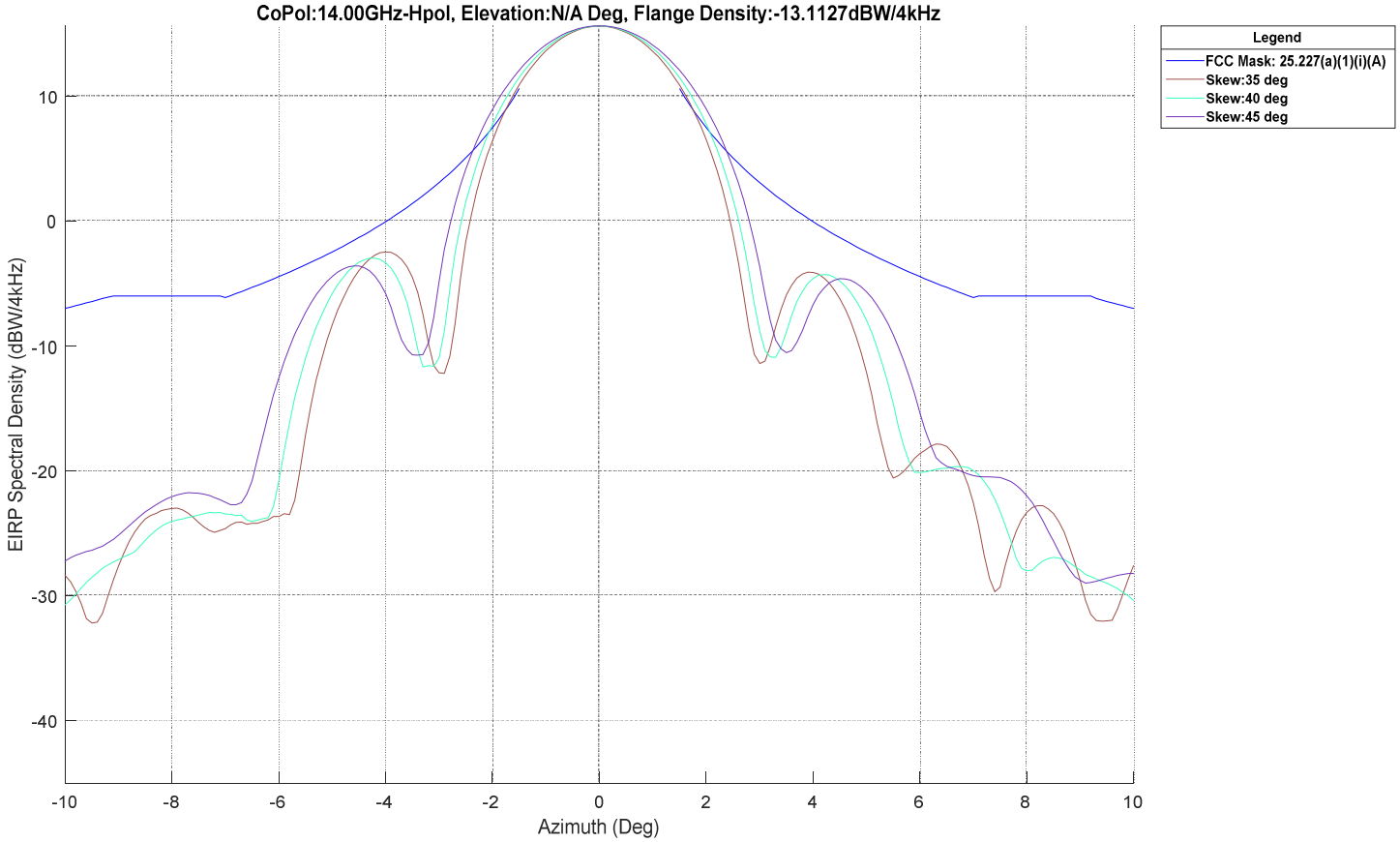


COPOL:14.50GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ

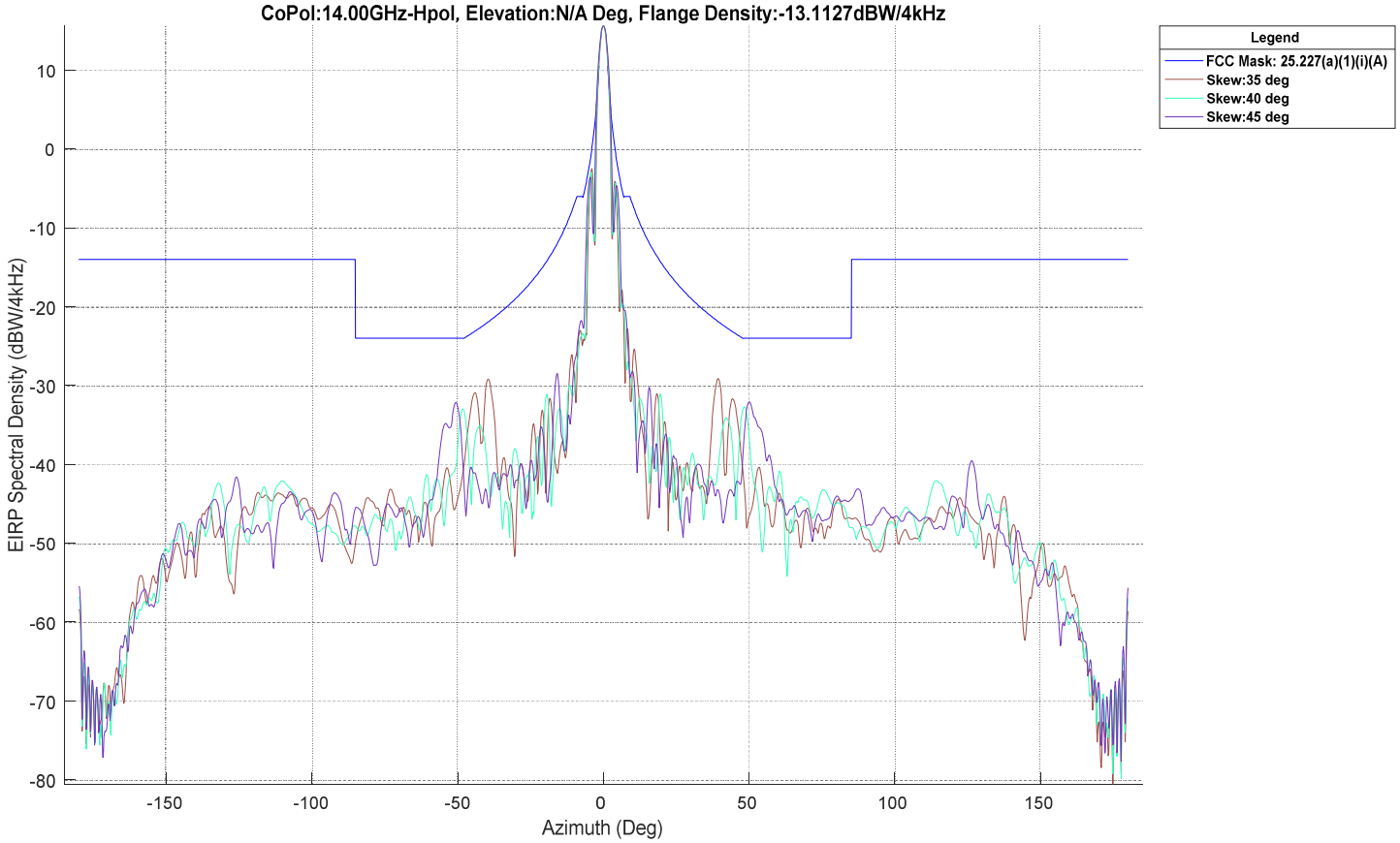


2.048 MHZ, EIRP DENSITY: 15.7 DBW/4KHZ, TX POWER: 44.0 DBM, FLANGE DENSITY: -13.1 DBW/4KHZ

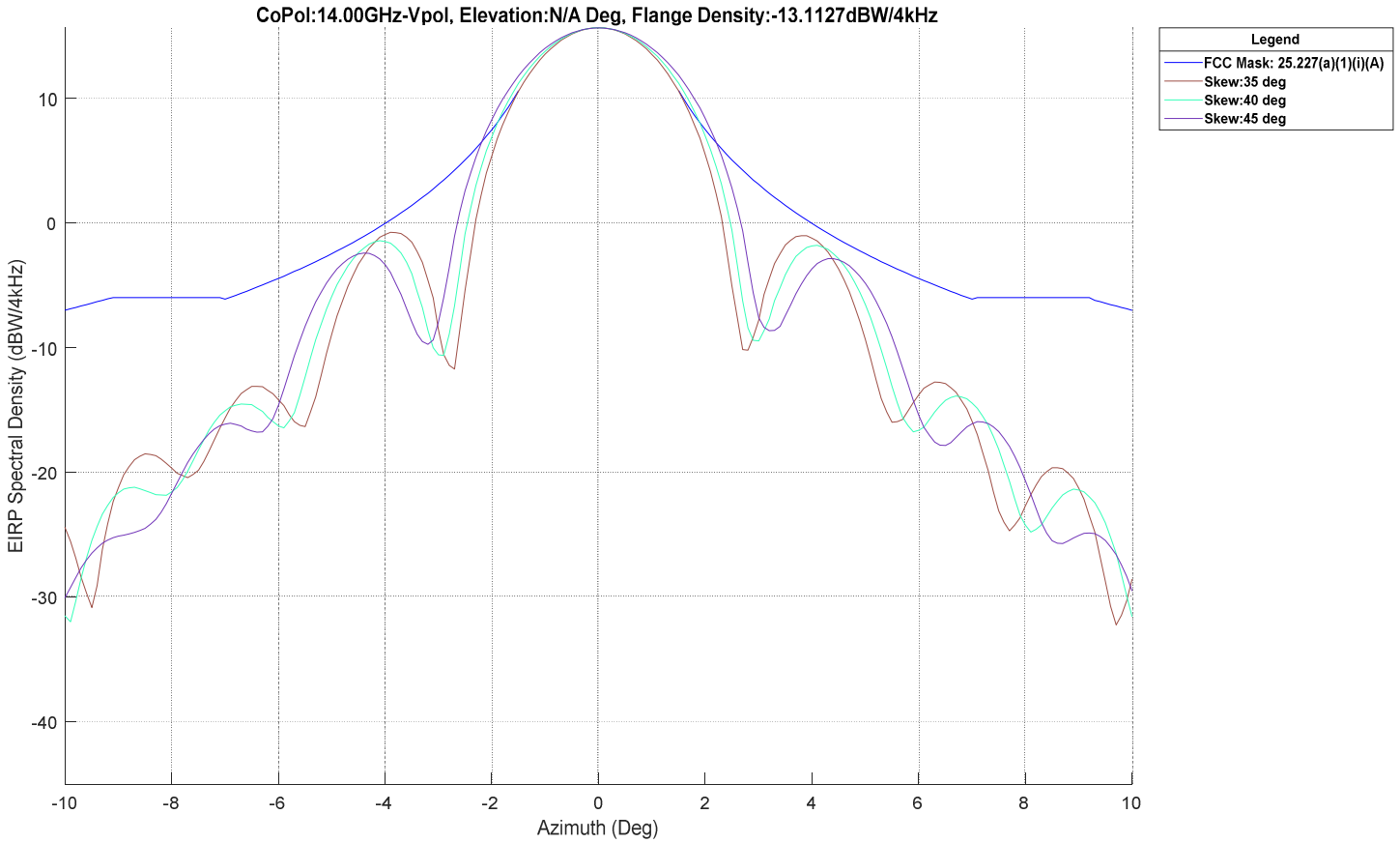
COPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



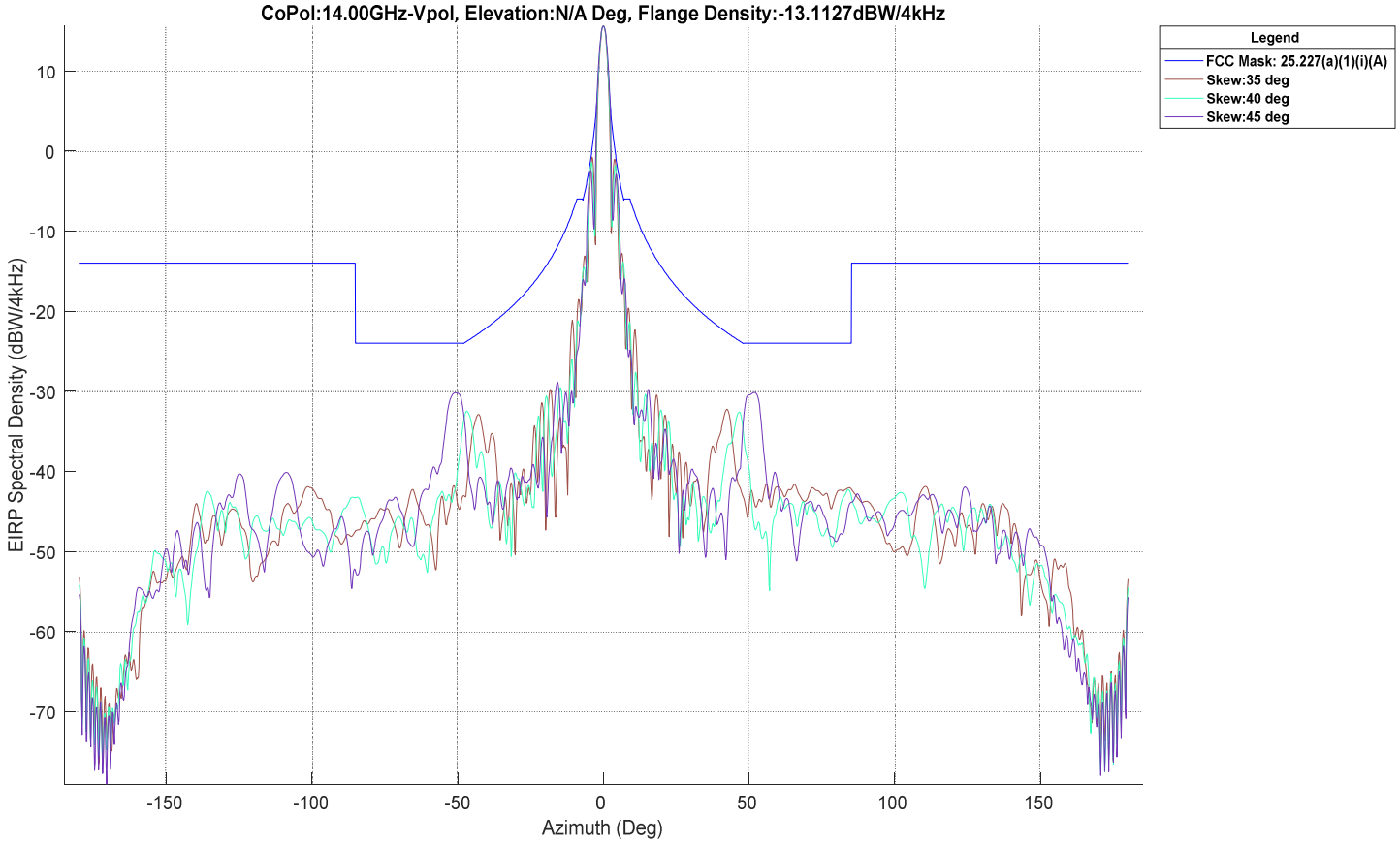
COPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



COPOL:14.00GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



COPOL:14.00GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



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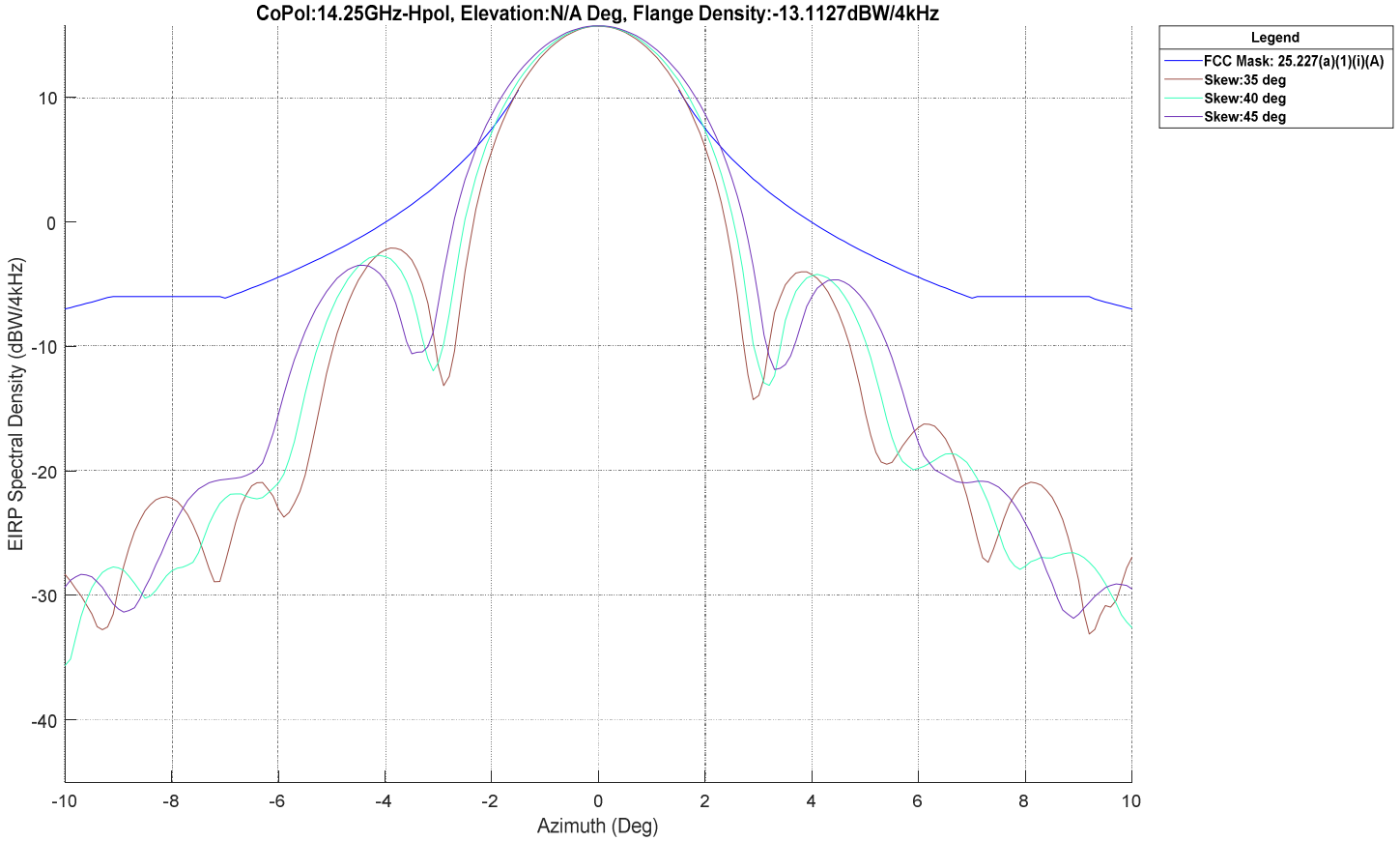
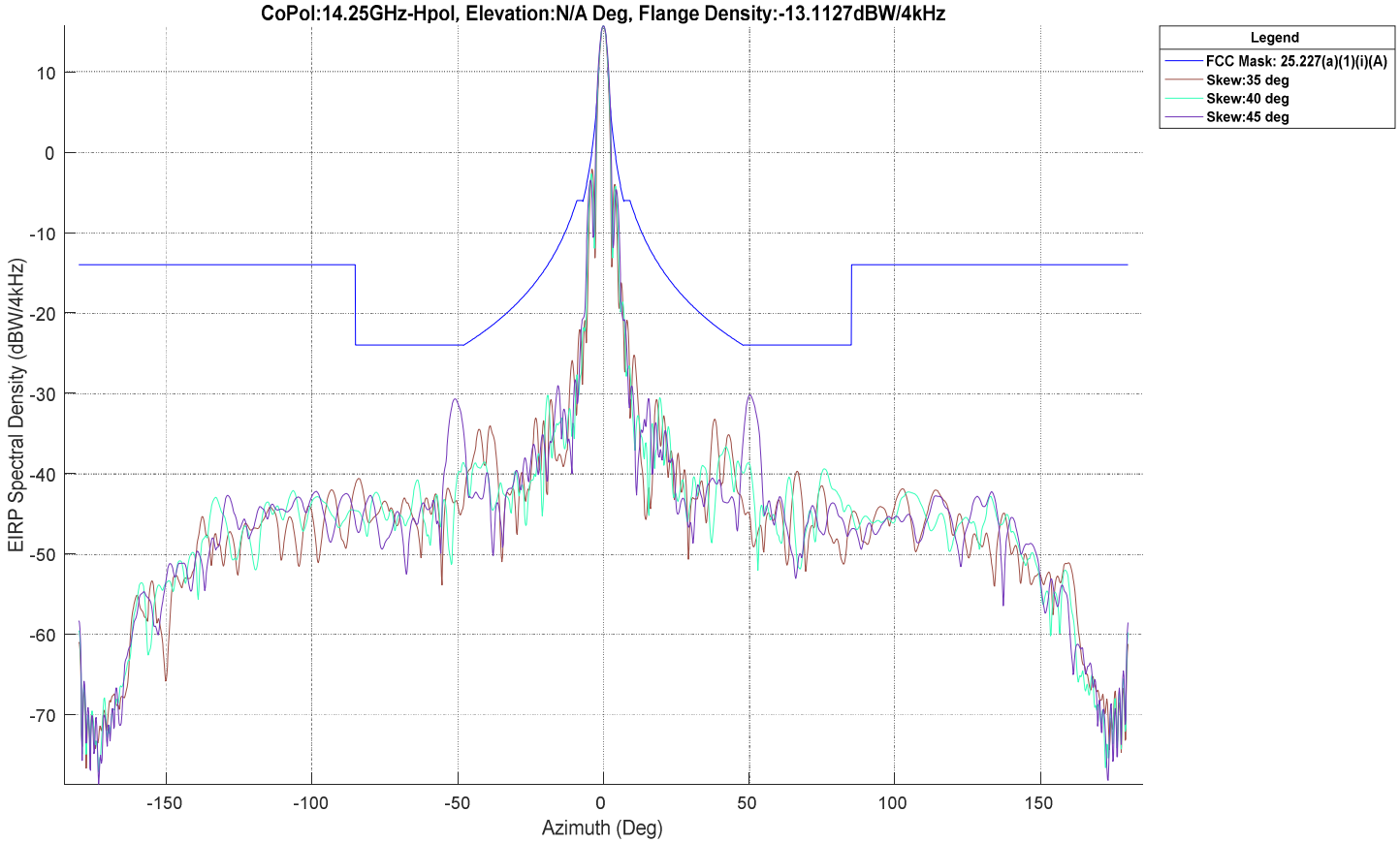
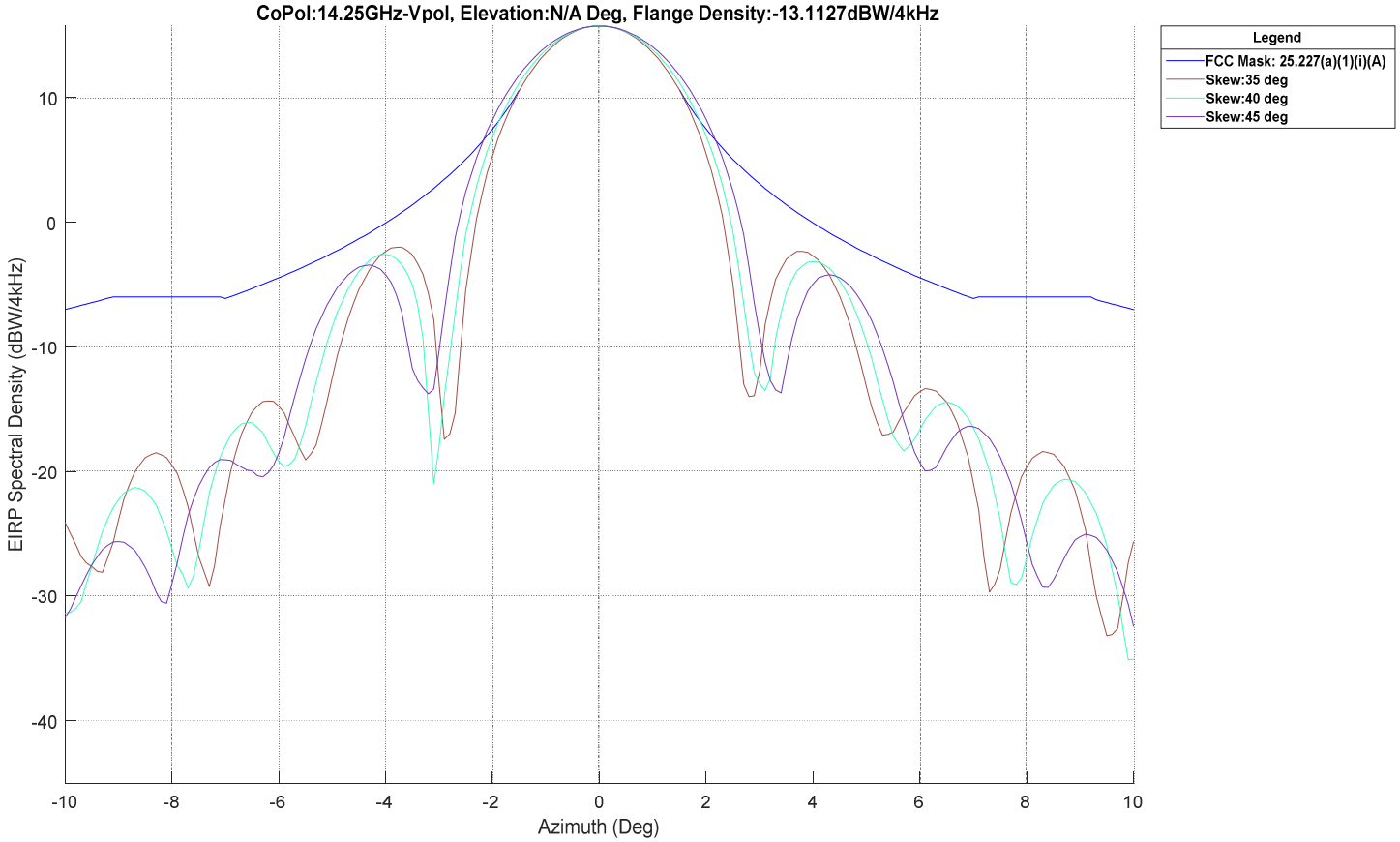


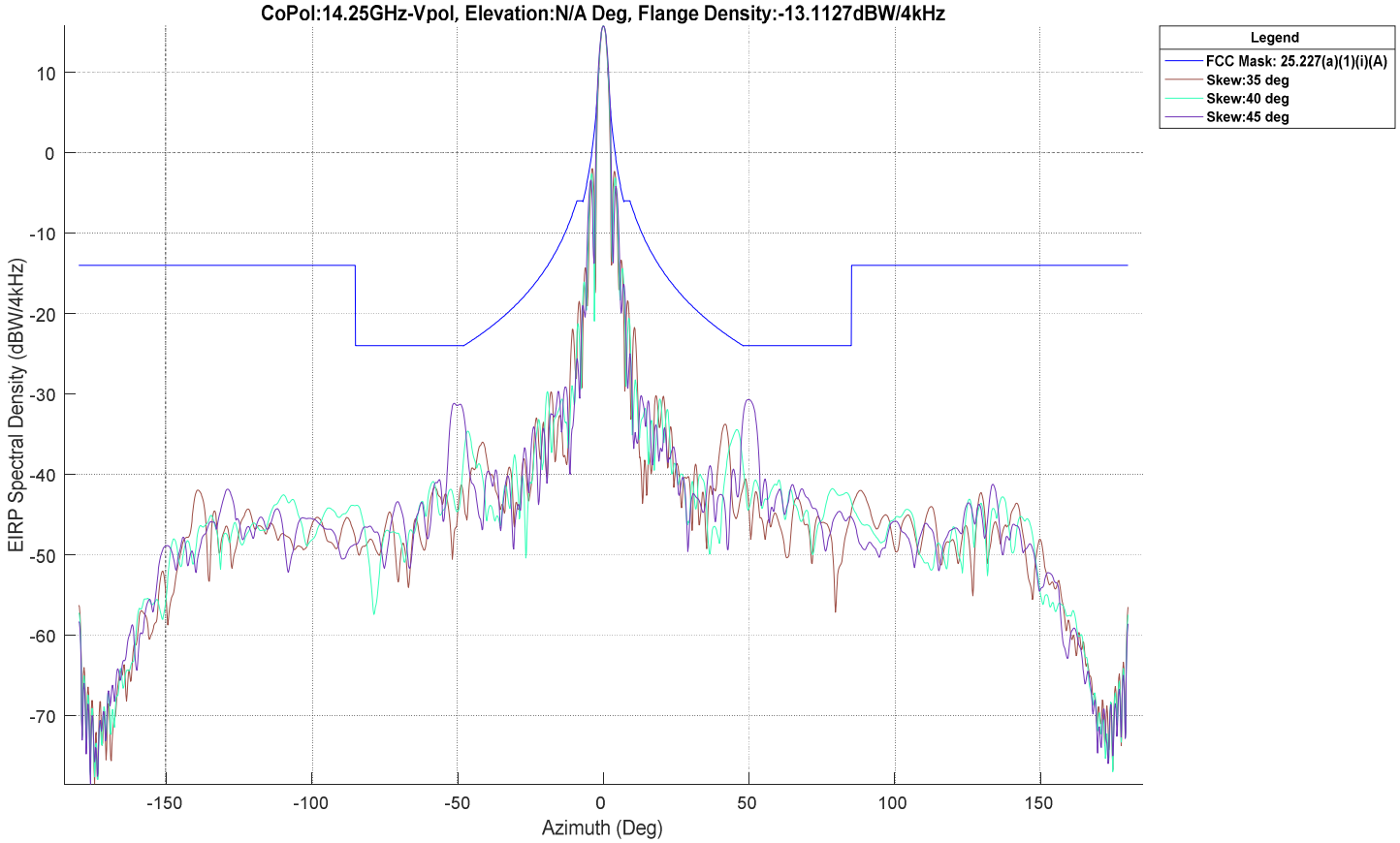
COPOL:14.25GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



COPOL:14.25GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



COPOL:14.25GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



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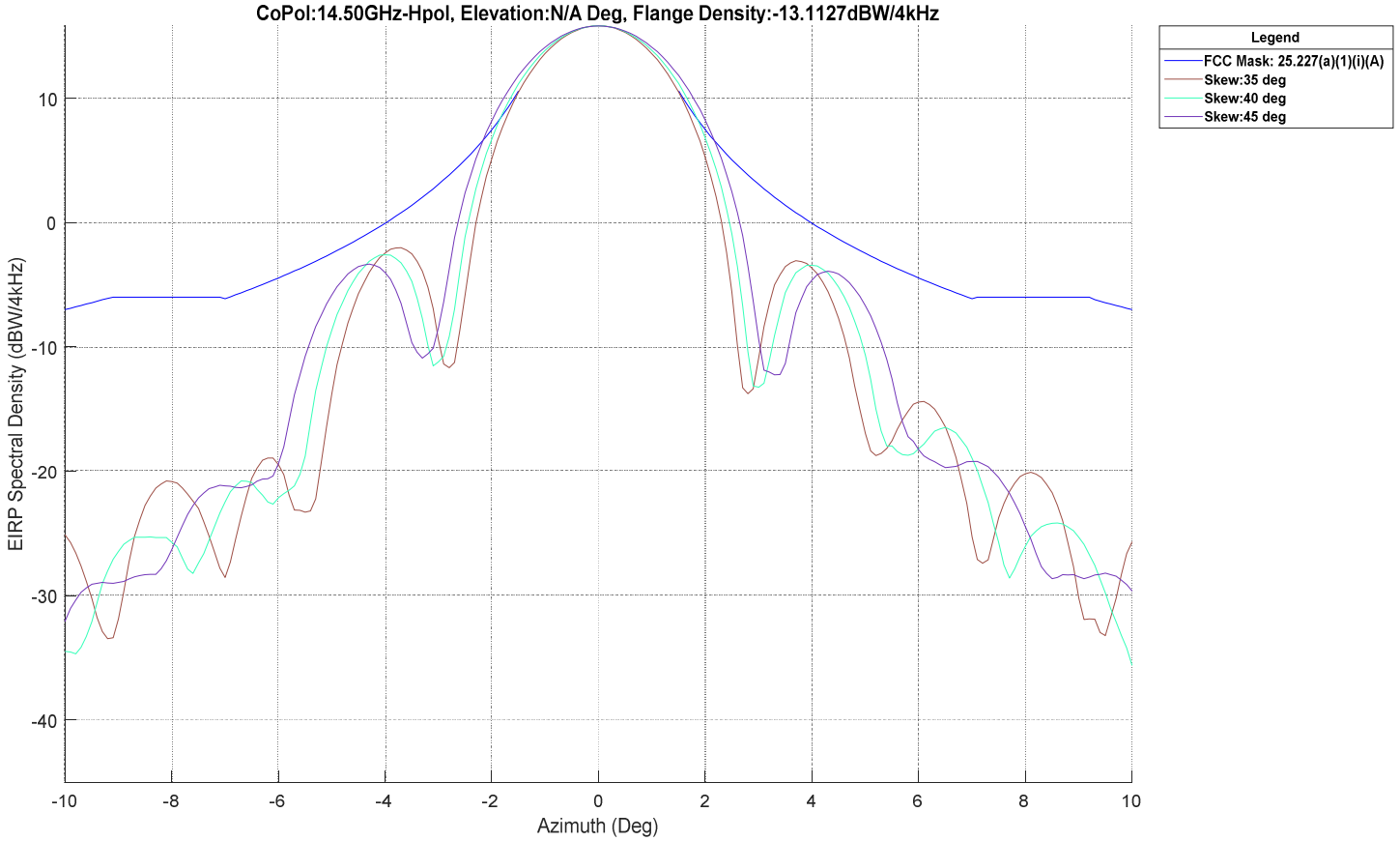

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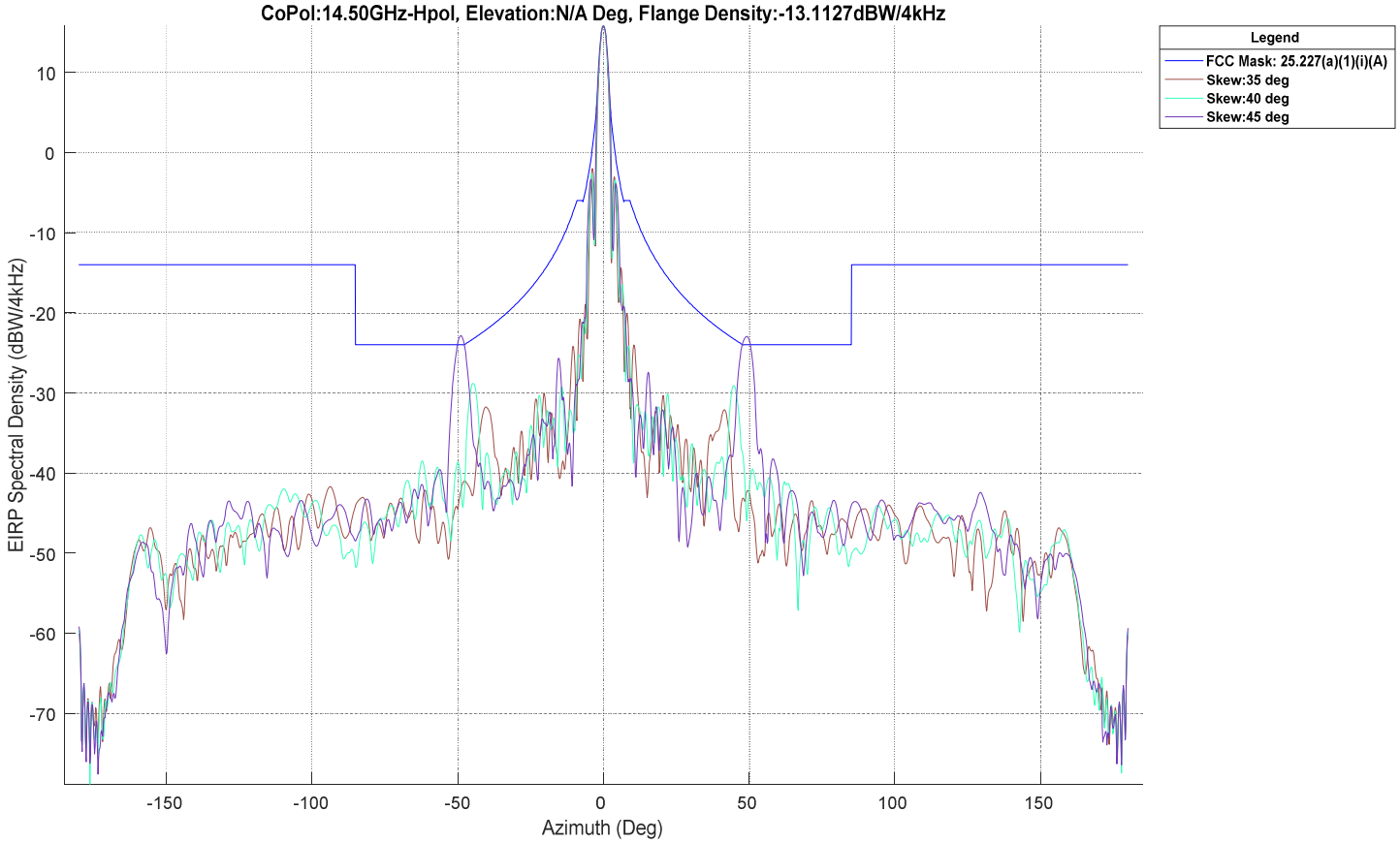
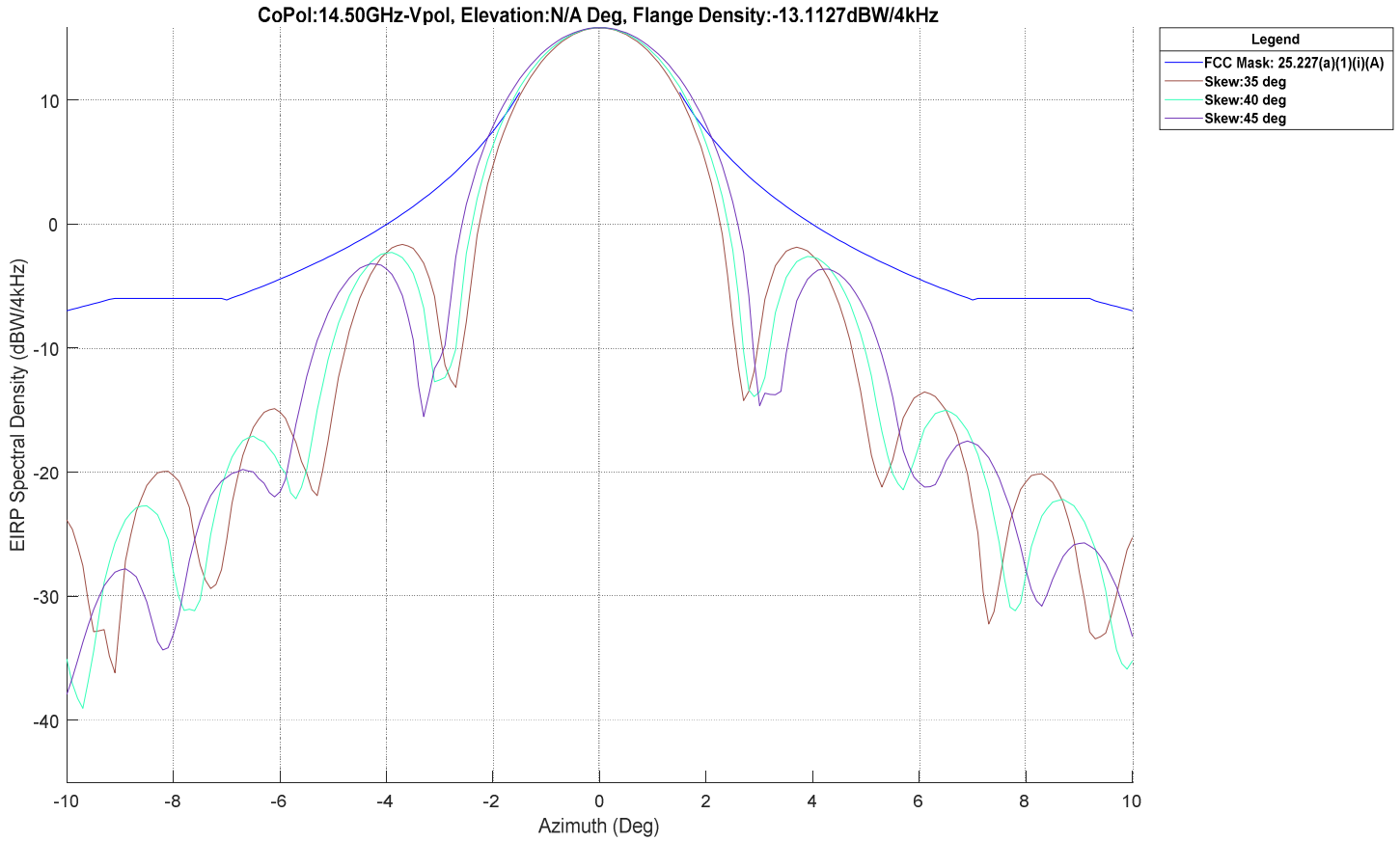
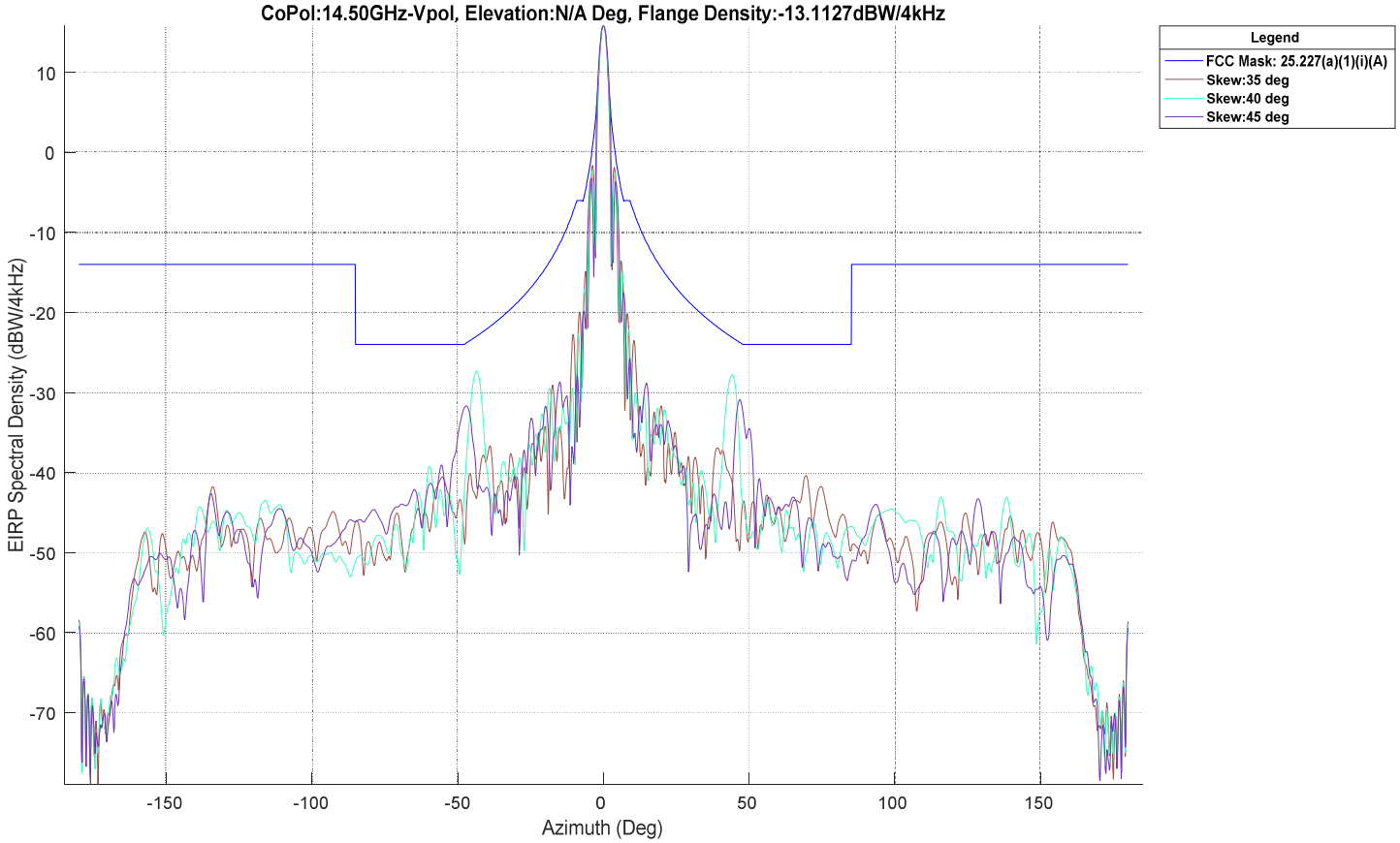


COPOL:14.50GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ

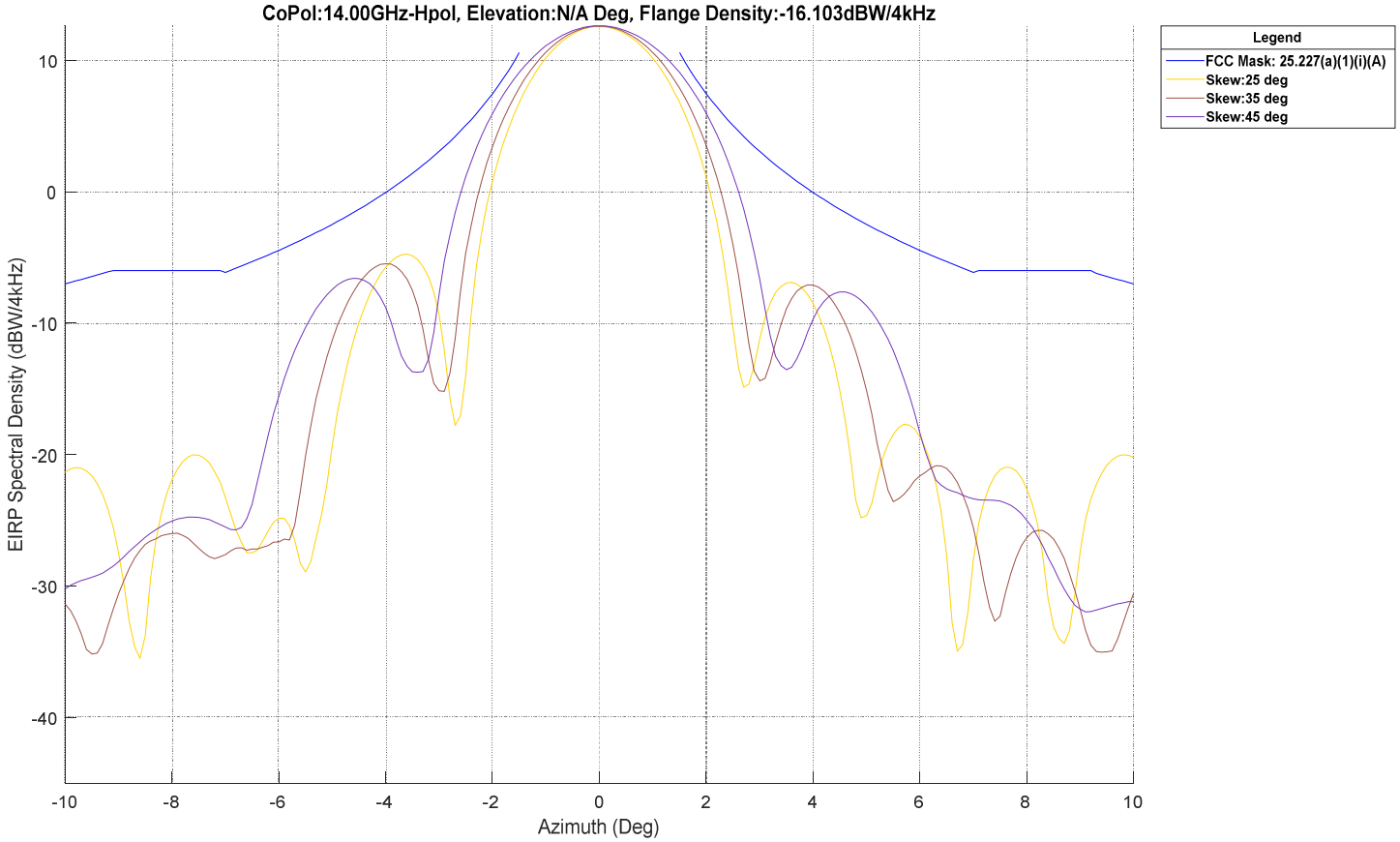


COPOL:14.50GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ

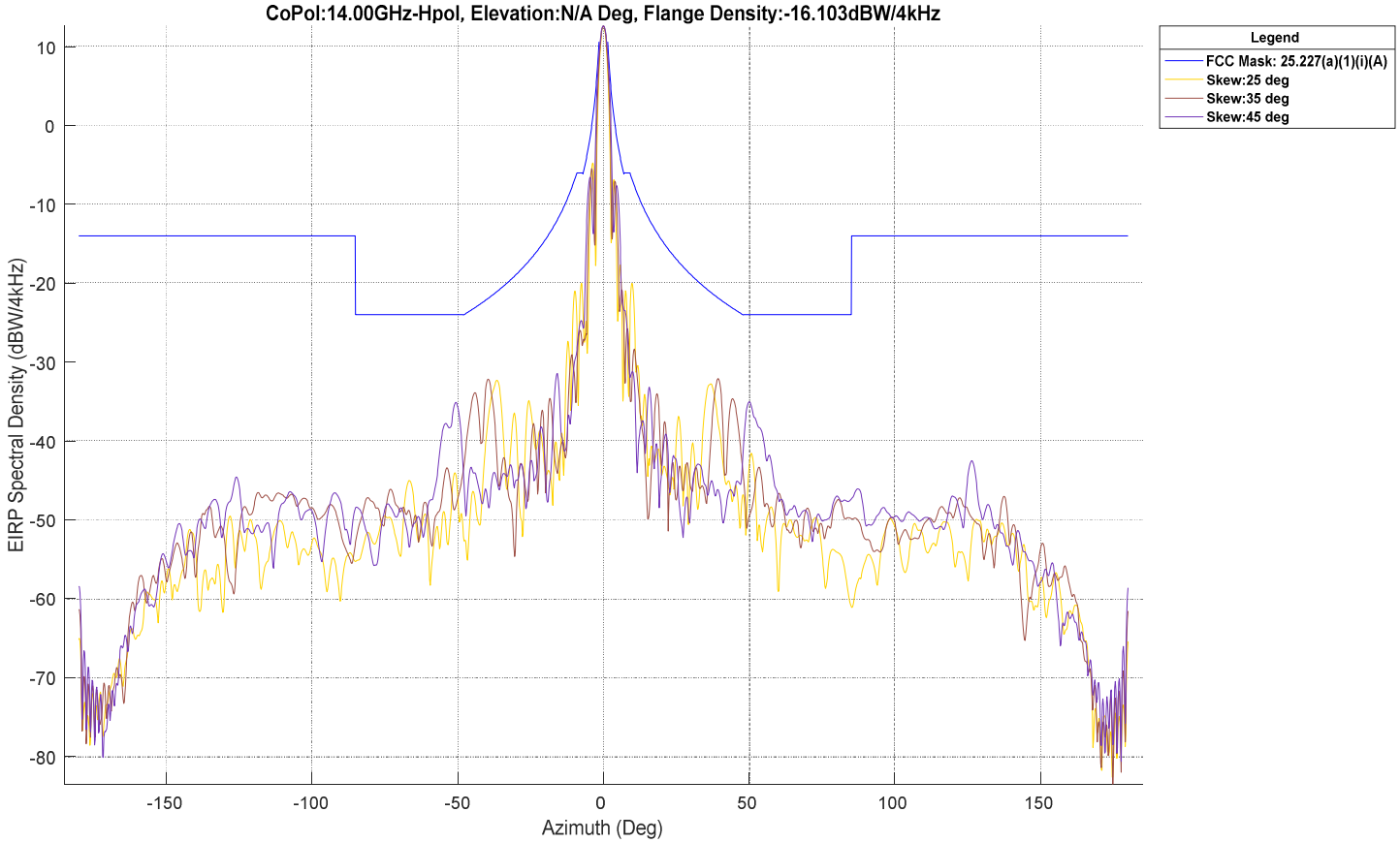


4.096 MHZ, EIRP DENSITY: 12.7 DBW/4KHZ, TX POWER: 44.0 DBM, FLANGE DENSITY: -16.1 DBW/4KHZ

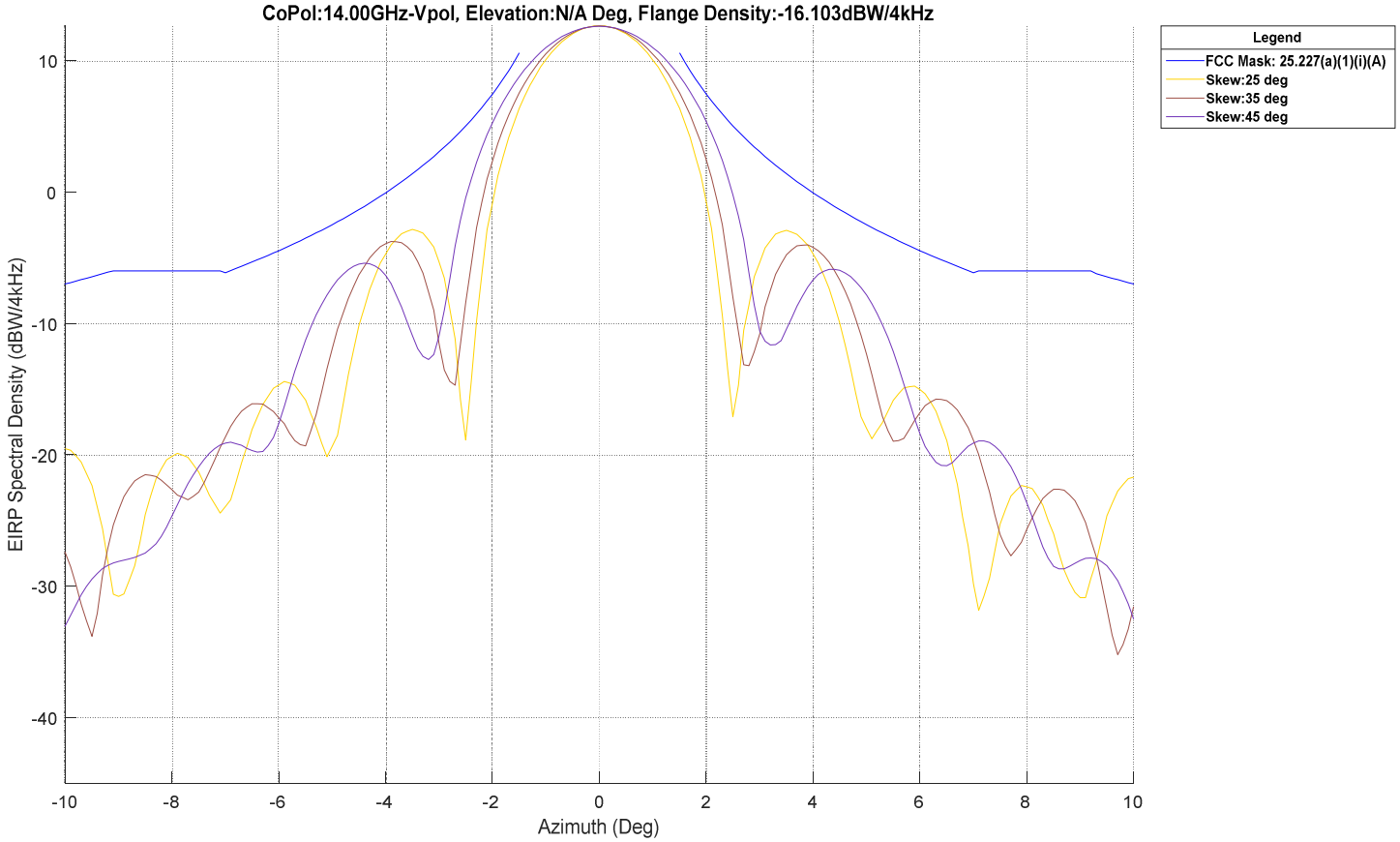
COPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-16.103DBW/4KHZ



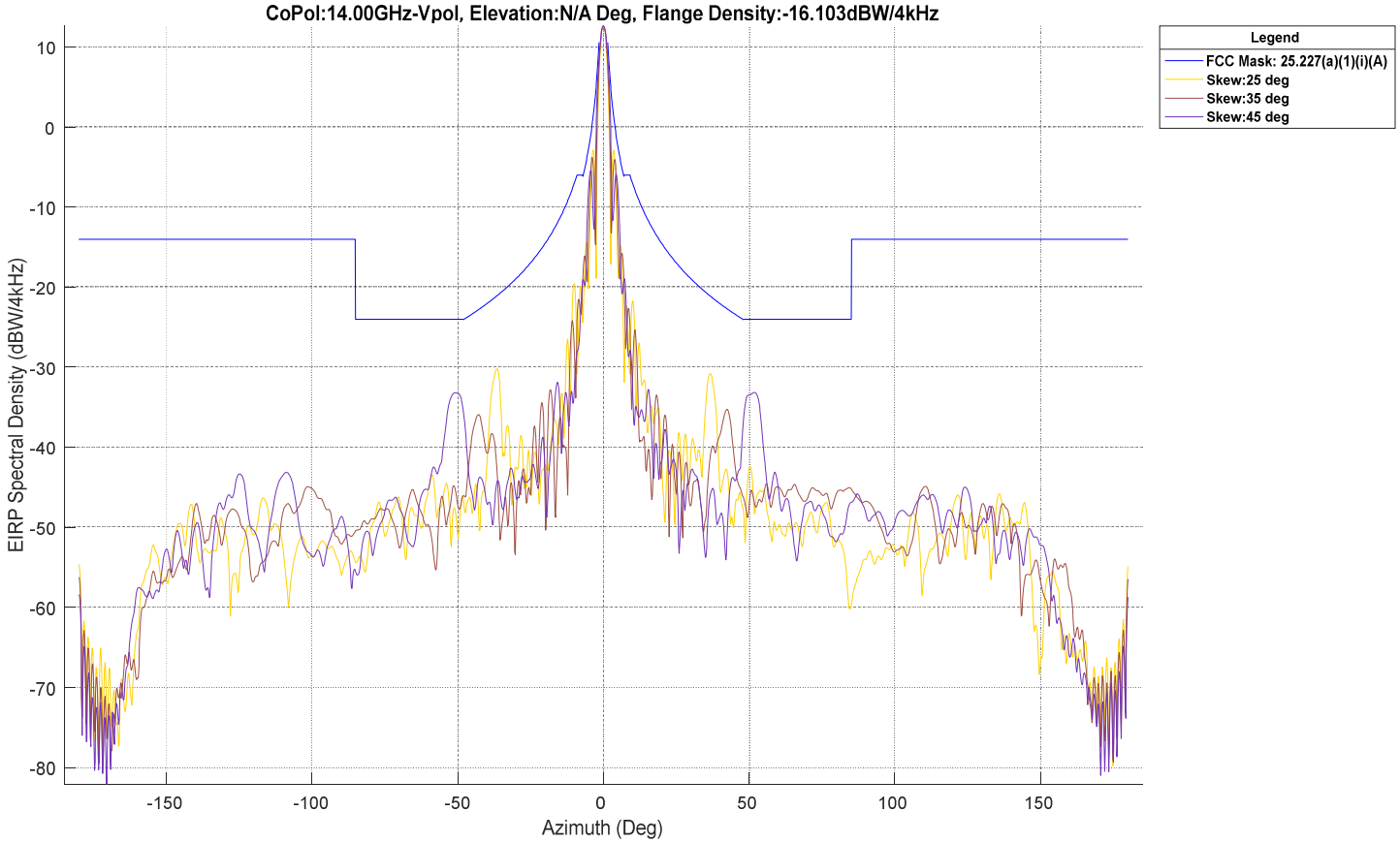
COPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-16.103DBW/4KHZ



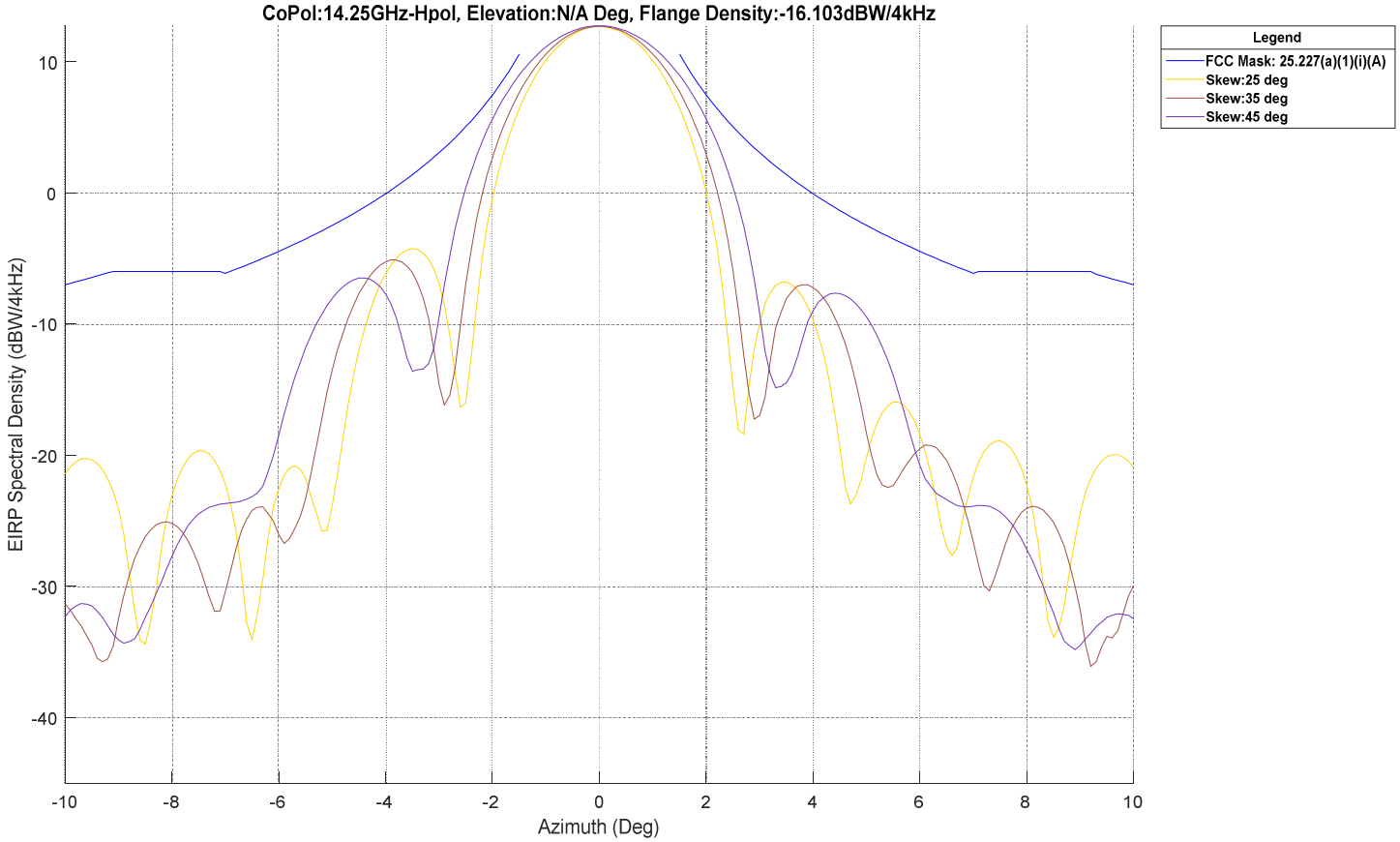
COPOL:14.00GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-16.103DBW/4KHZ



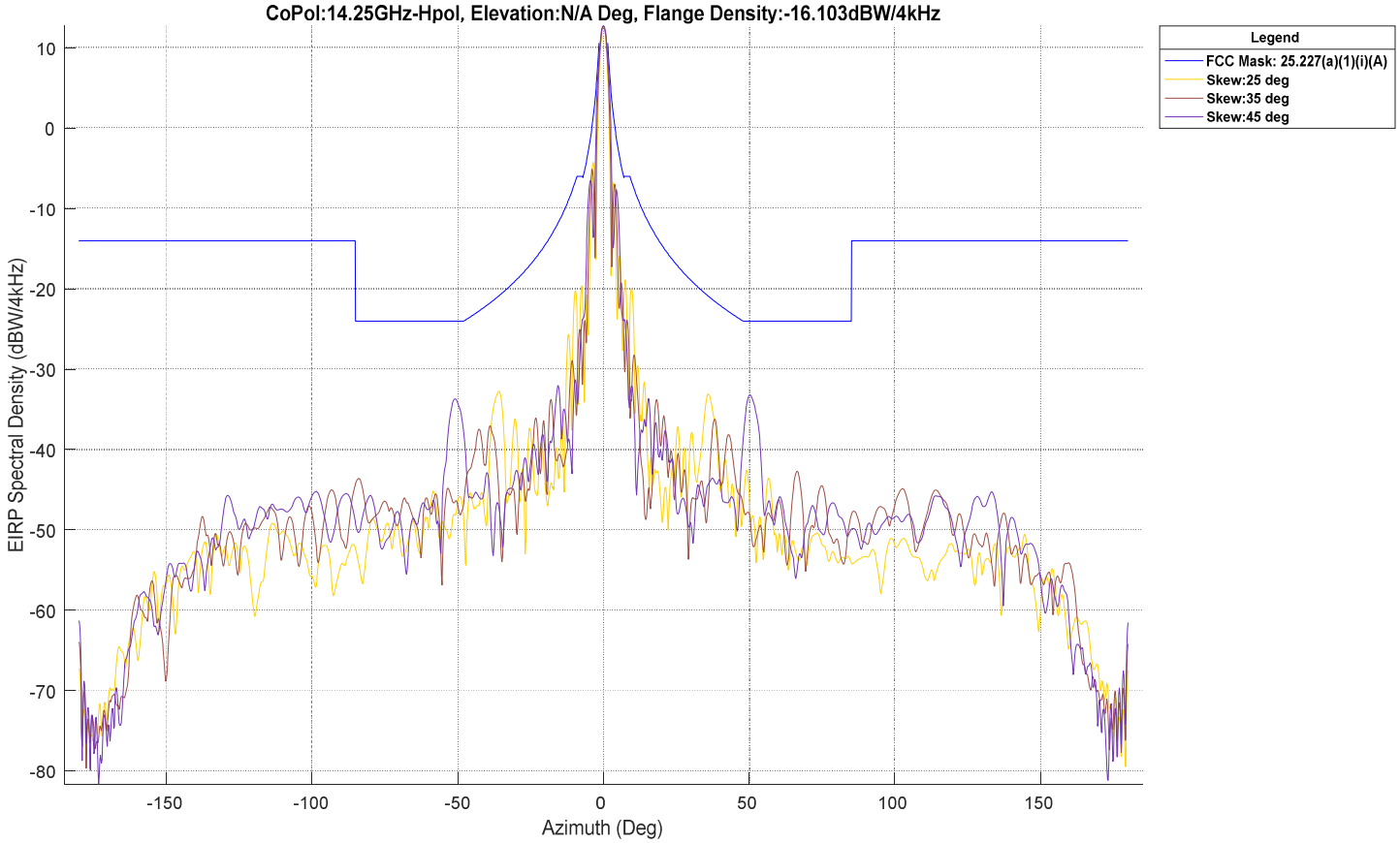
COPOL:14.00GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-16.103DBW/4KHZ



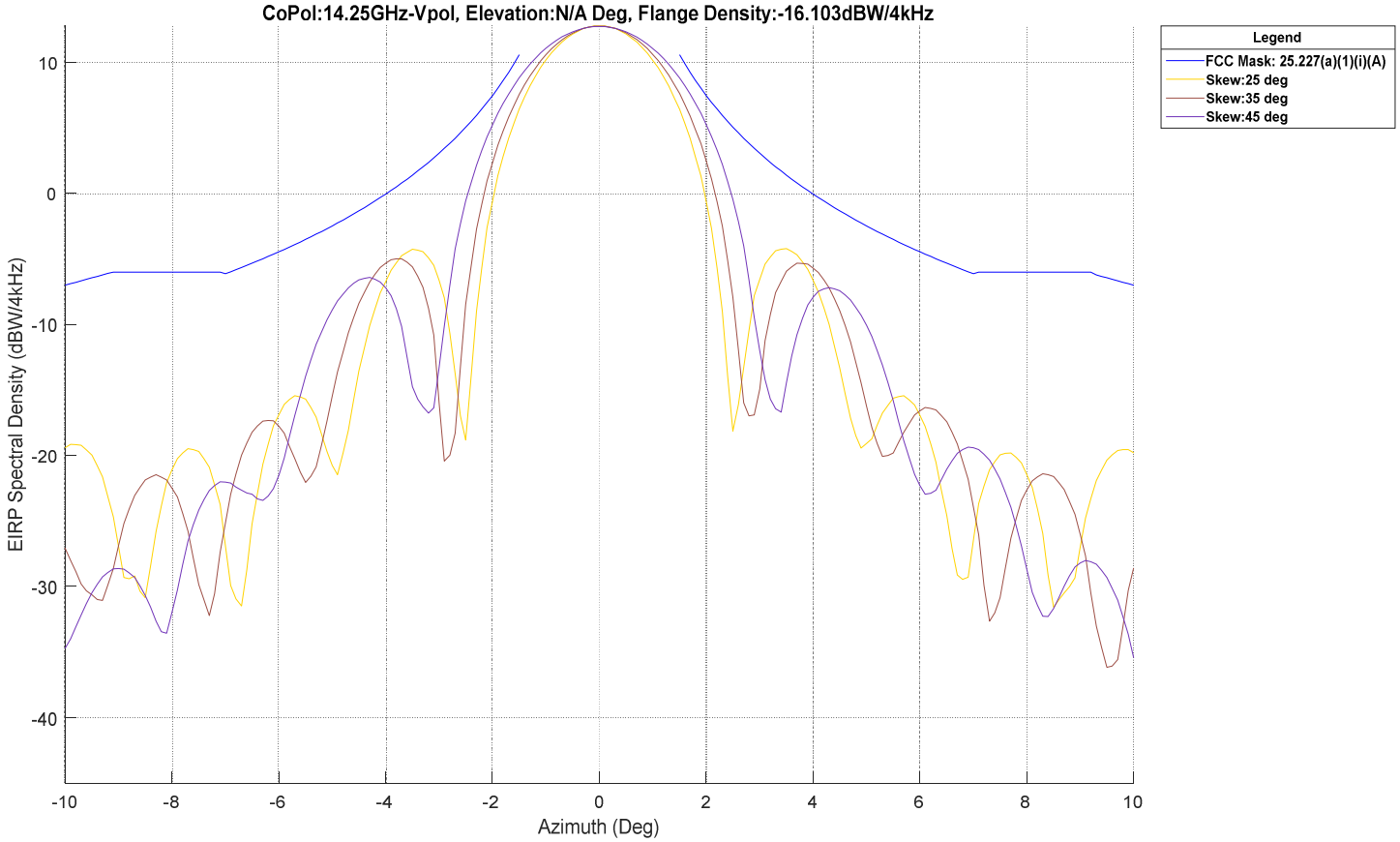
COPOL:14.25GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-16.103DBW/4KHZ



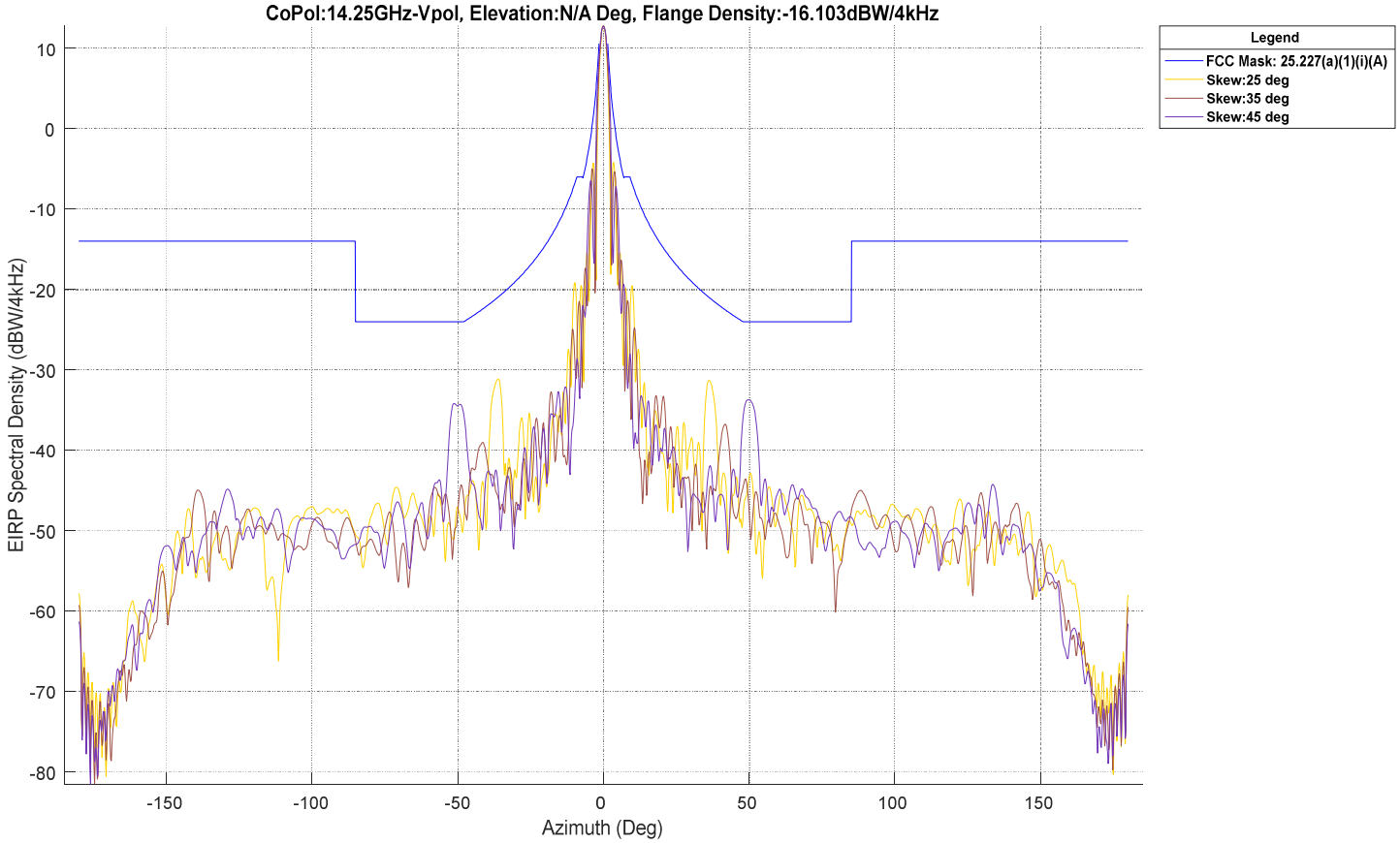
COPOL:14.25GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-16.103DBW/4KHZ



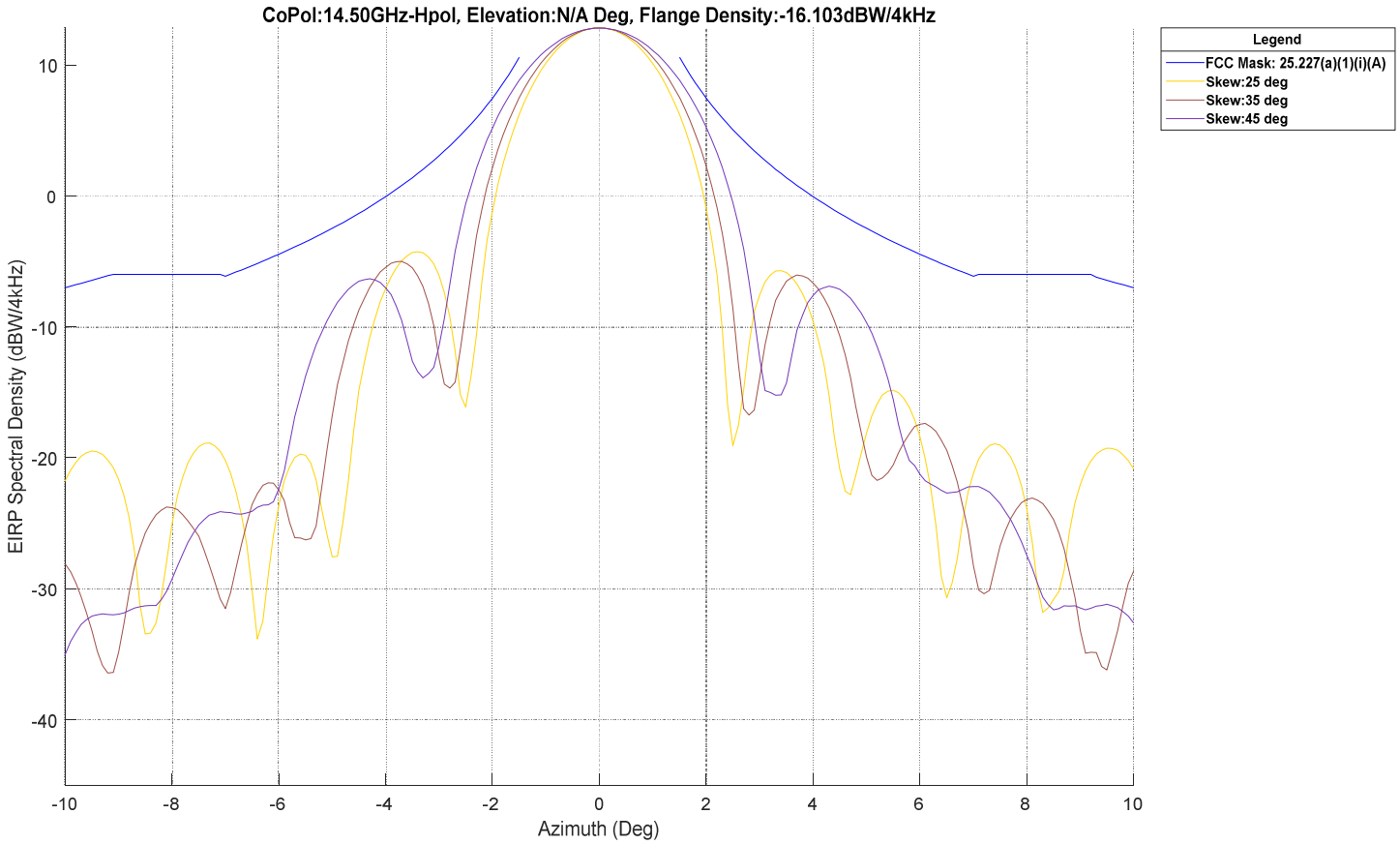
COPOL:14.25GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-16.103DBW/4KHZ



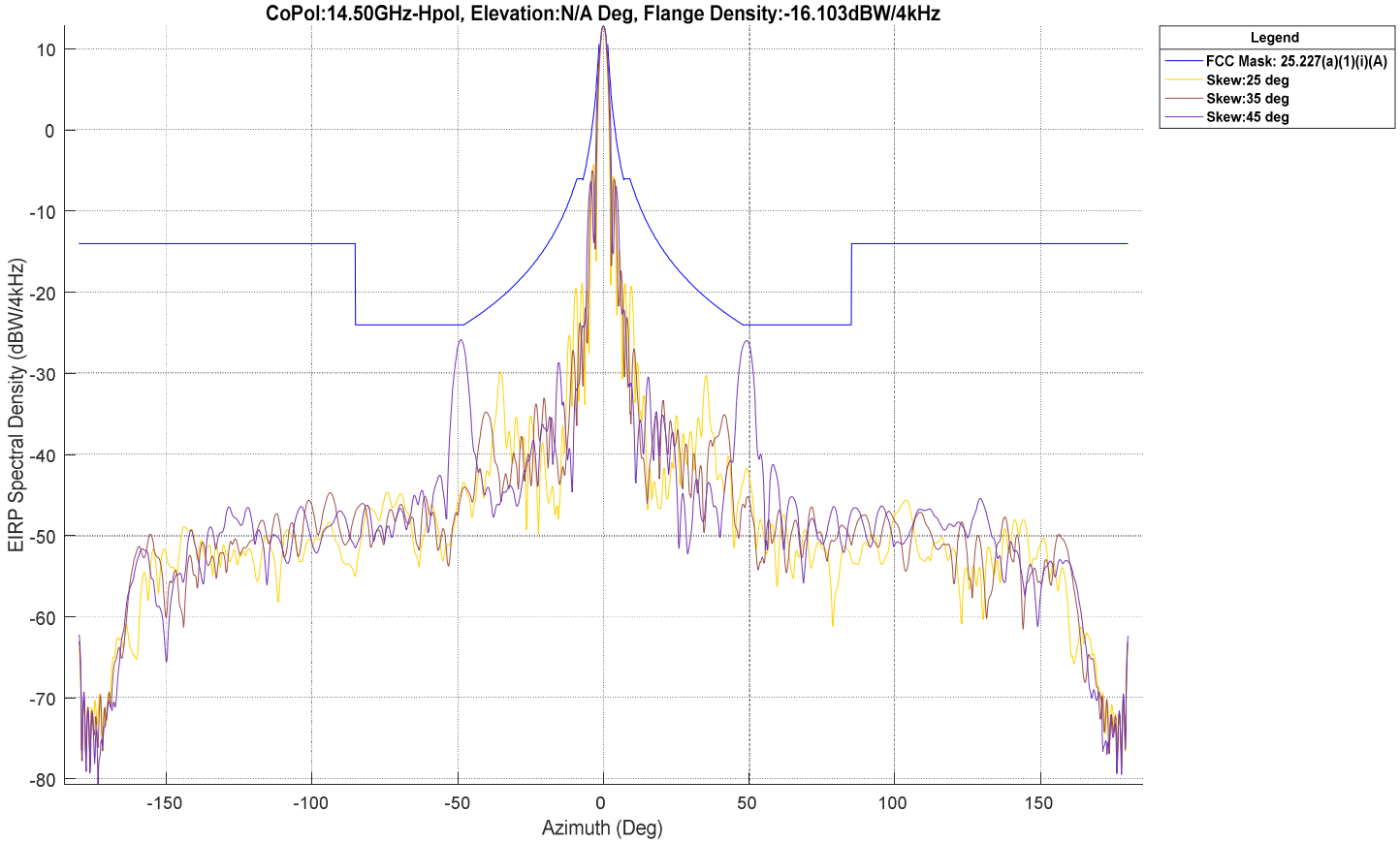
COPOL:14.25GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-16.103DBW/4KHZ



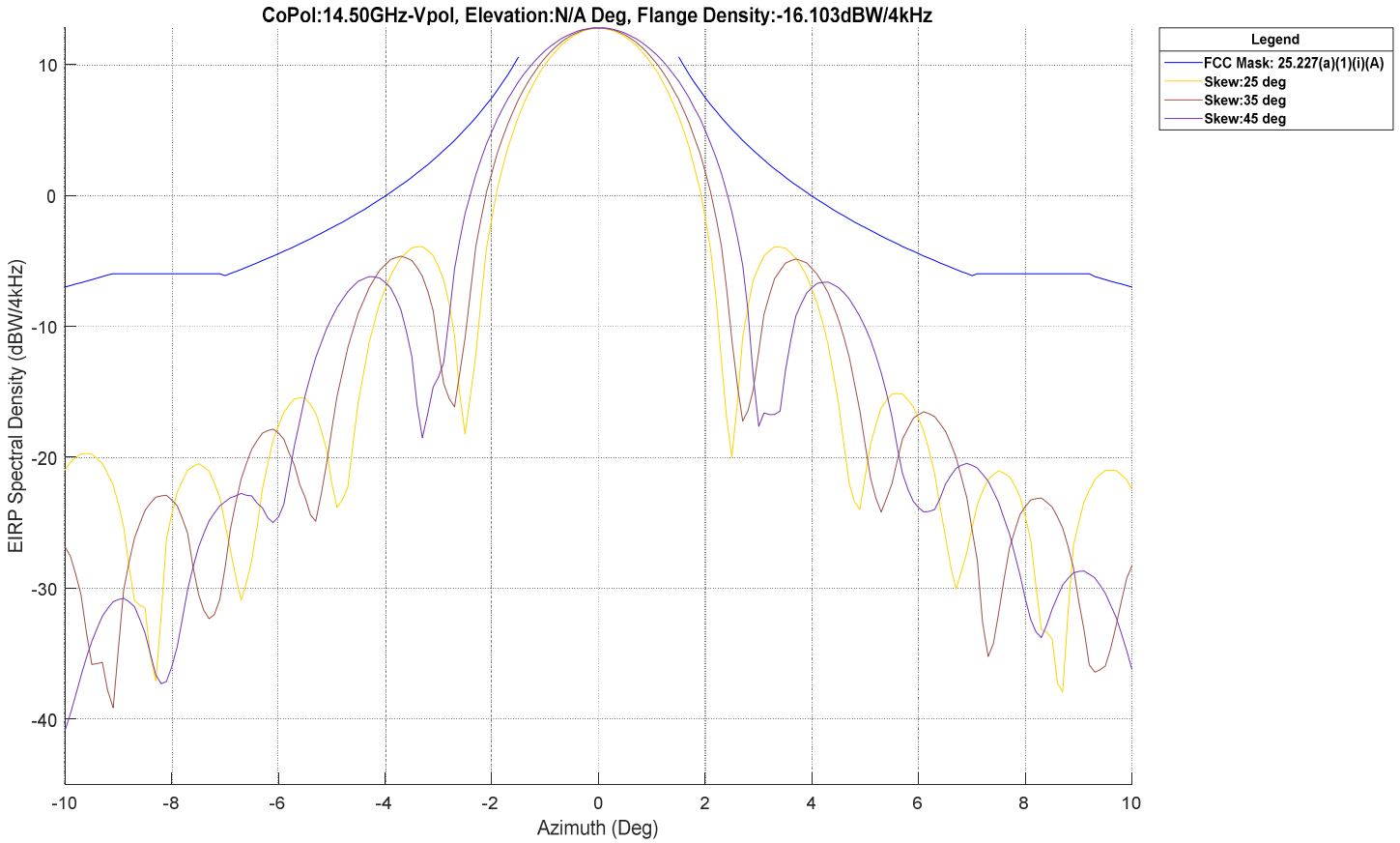
COPOL:14.50GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-16.103DBW/4KHZ



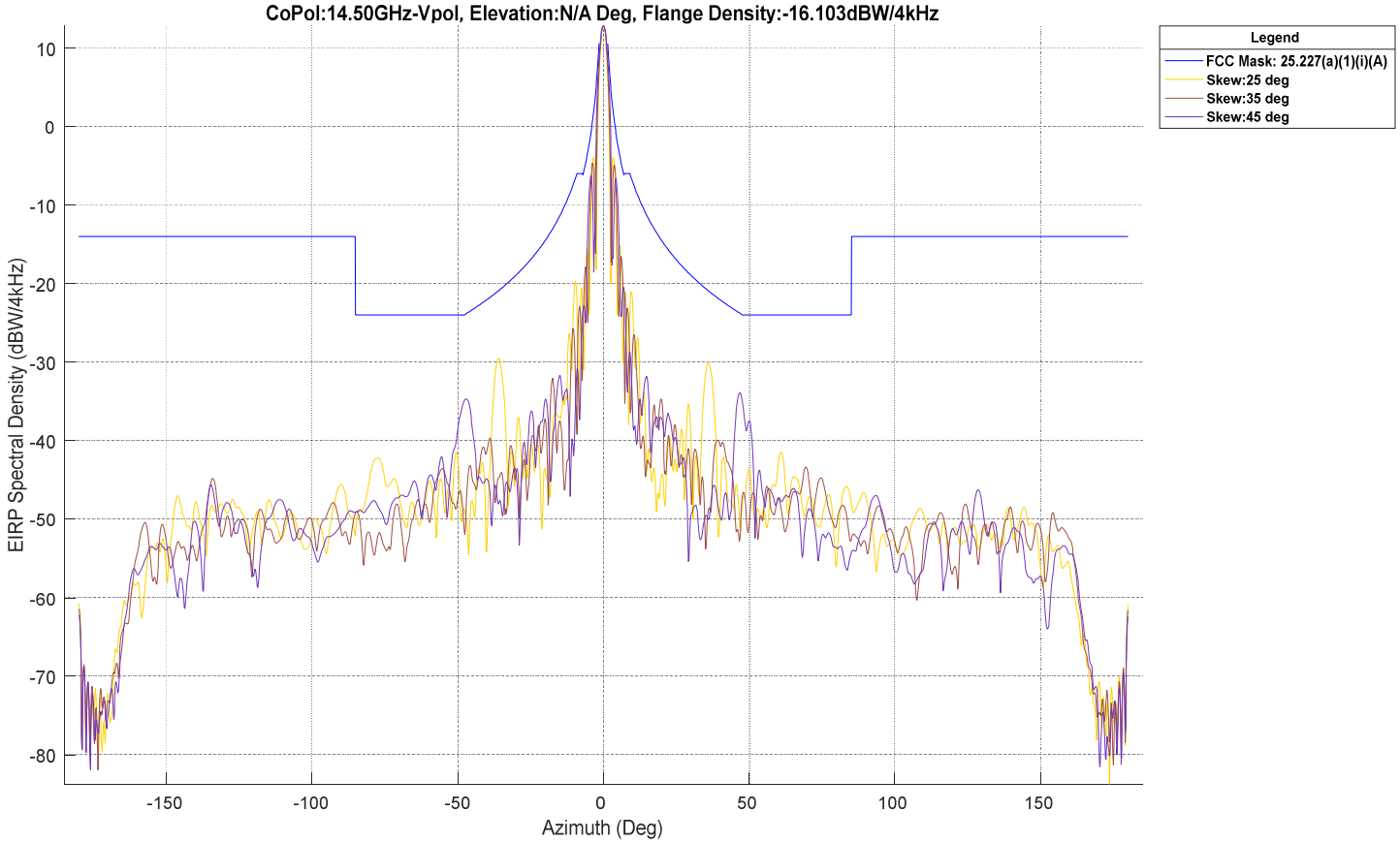
COPOL:14.50GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-16.103DBW/4KHZ



COPOL:14.50GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-16.103DBW/4KHZ



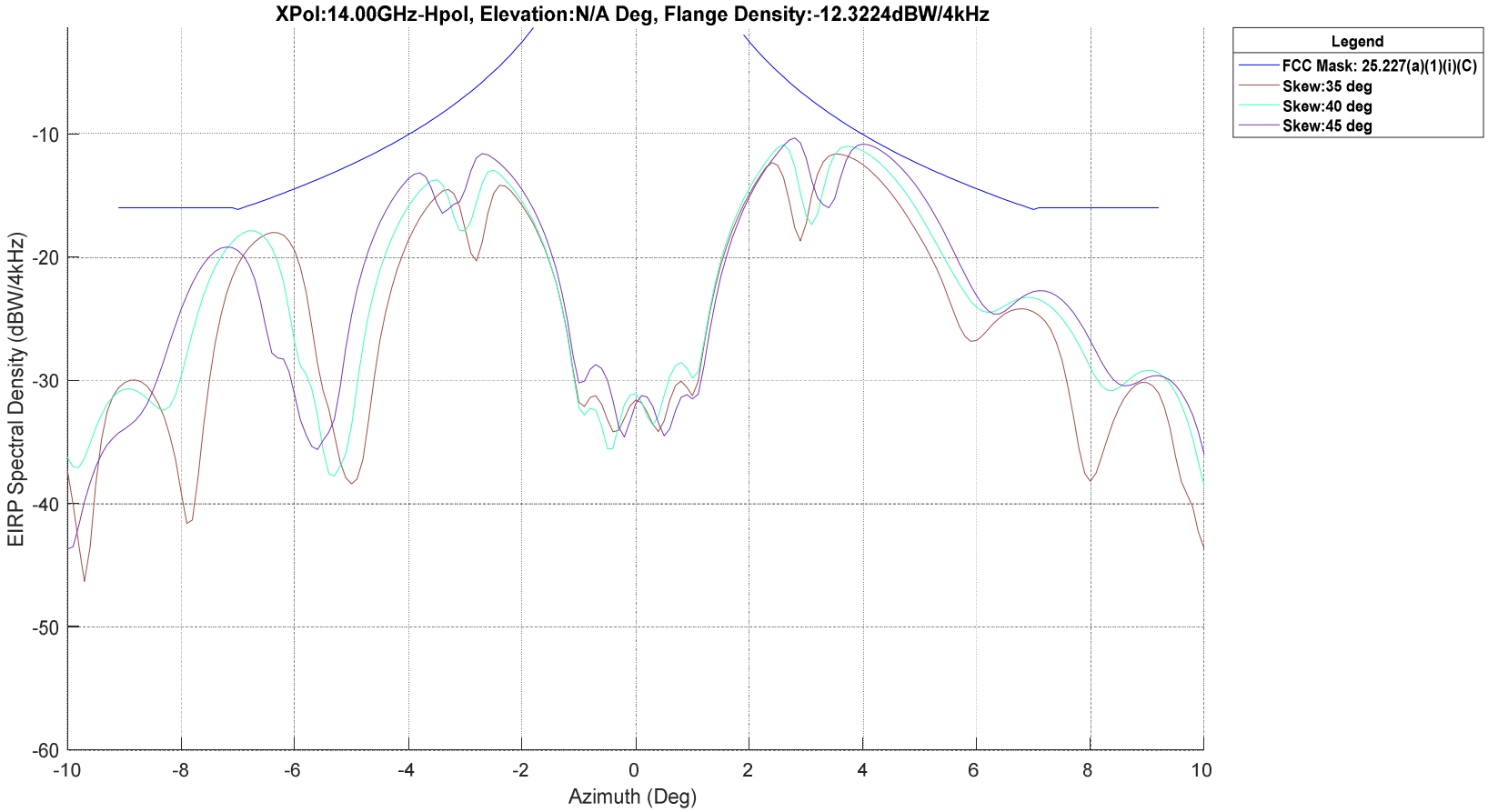
COPOL:14.50GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-16.103DBW/4KHZ



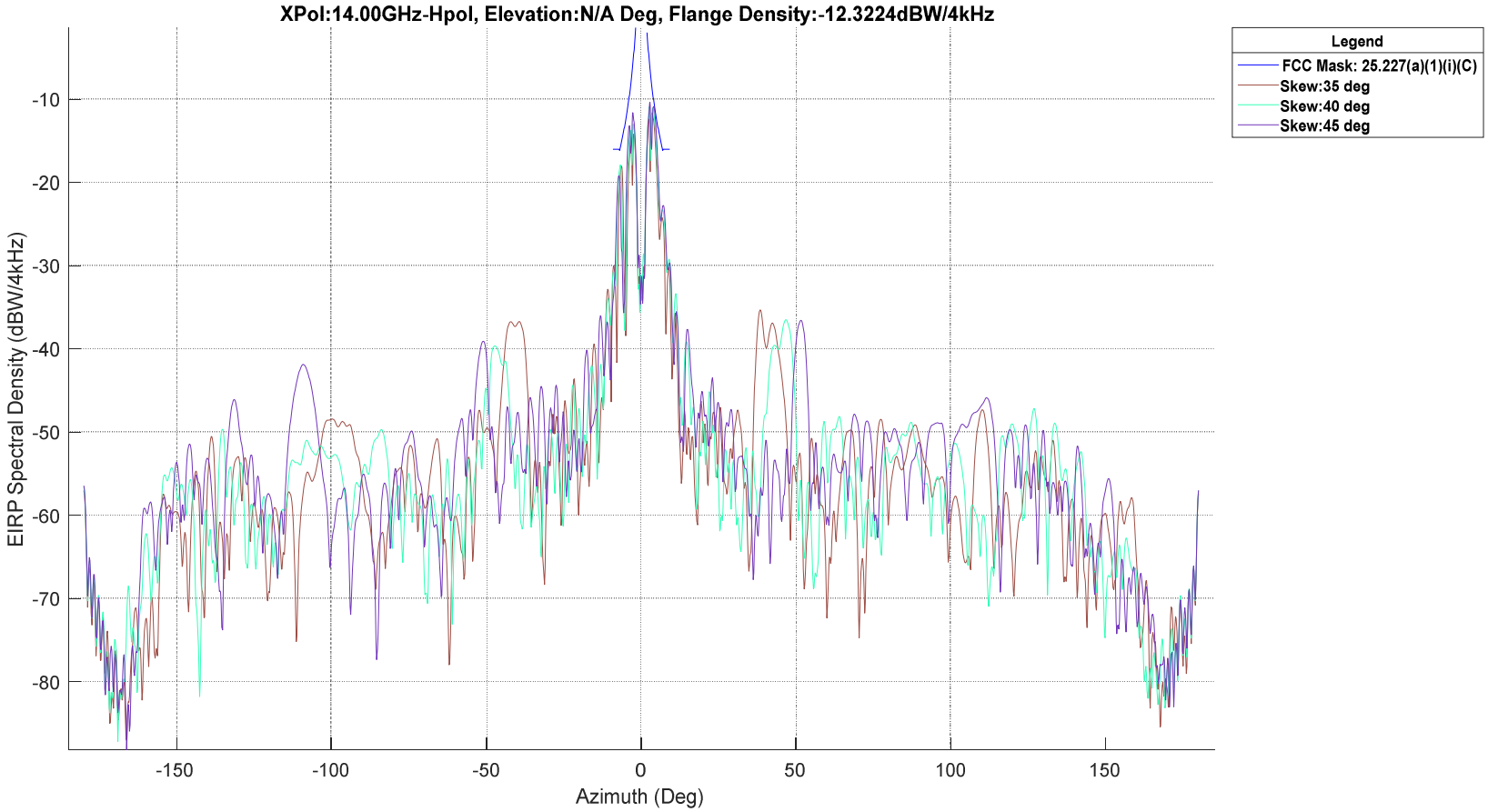
E115WB CROSS-POL PLOTS

1.024 MHZ, EIRP DENSITY: 16.5 DBW/4KHZ, TX POWER: 41.8 DBM, FLANGE DENSITY: -12.3 DBW/4KHZ

XPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



XPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



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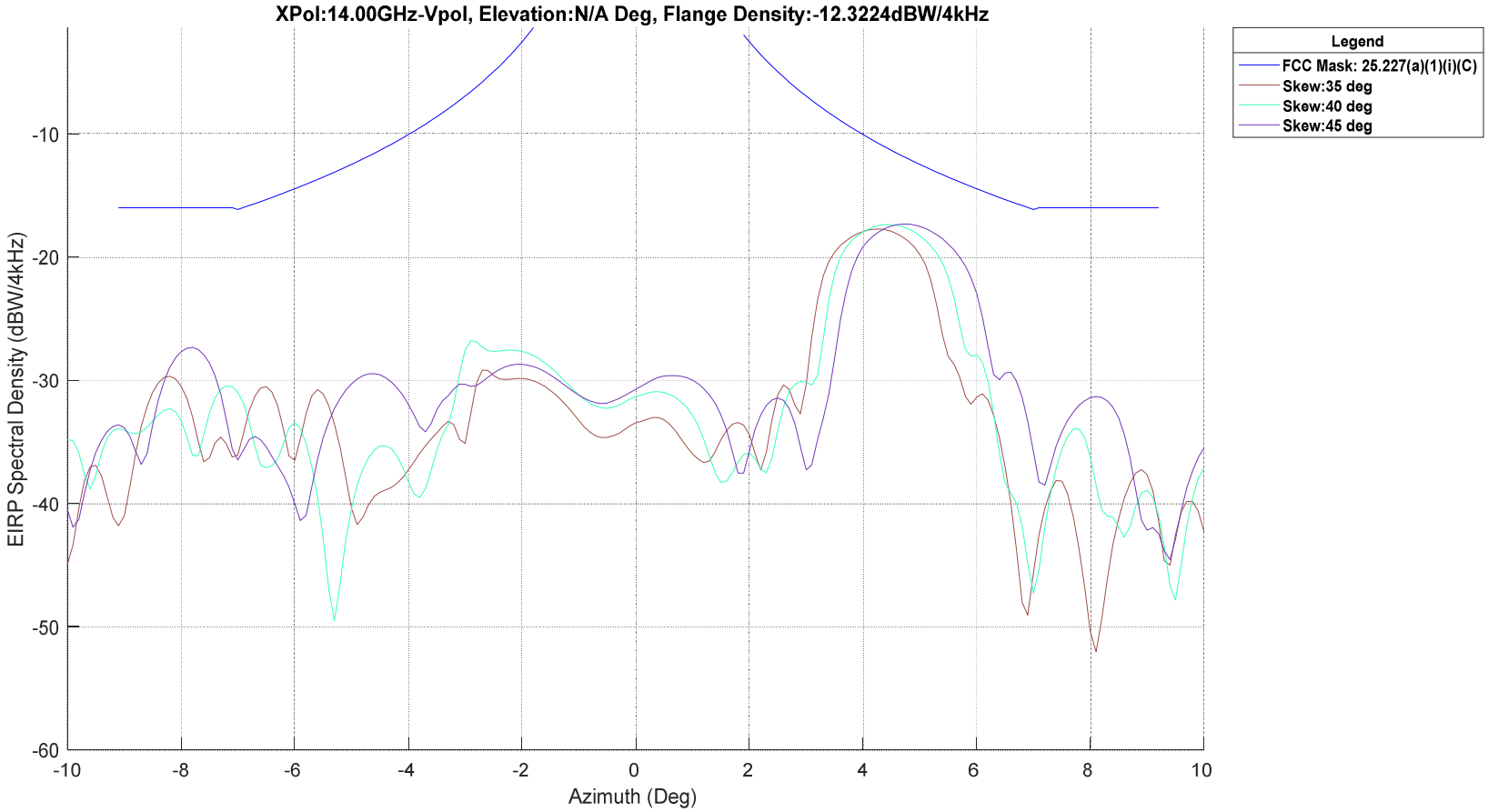
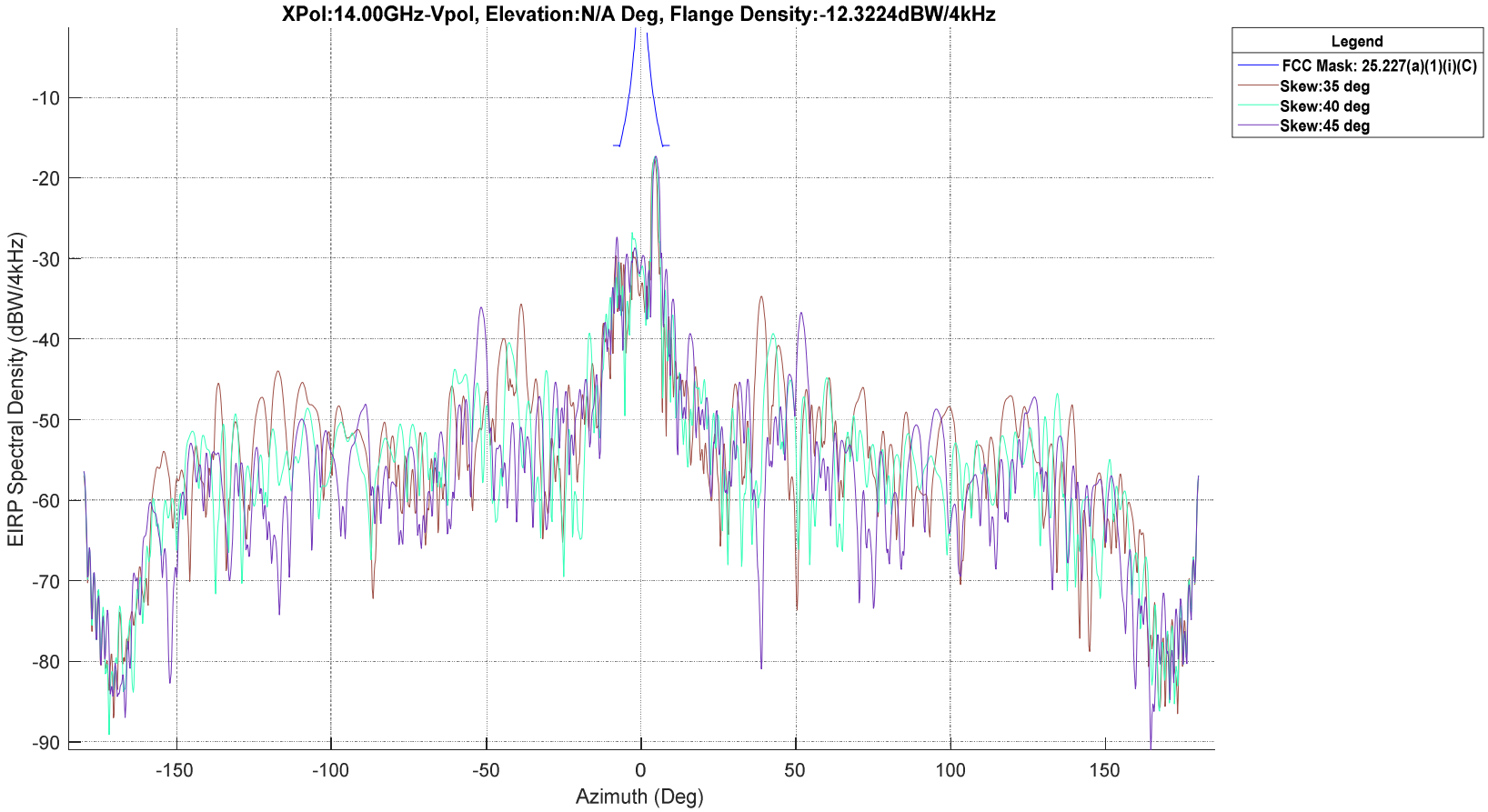
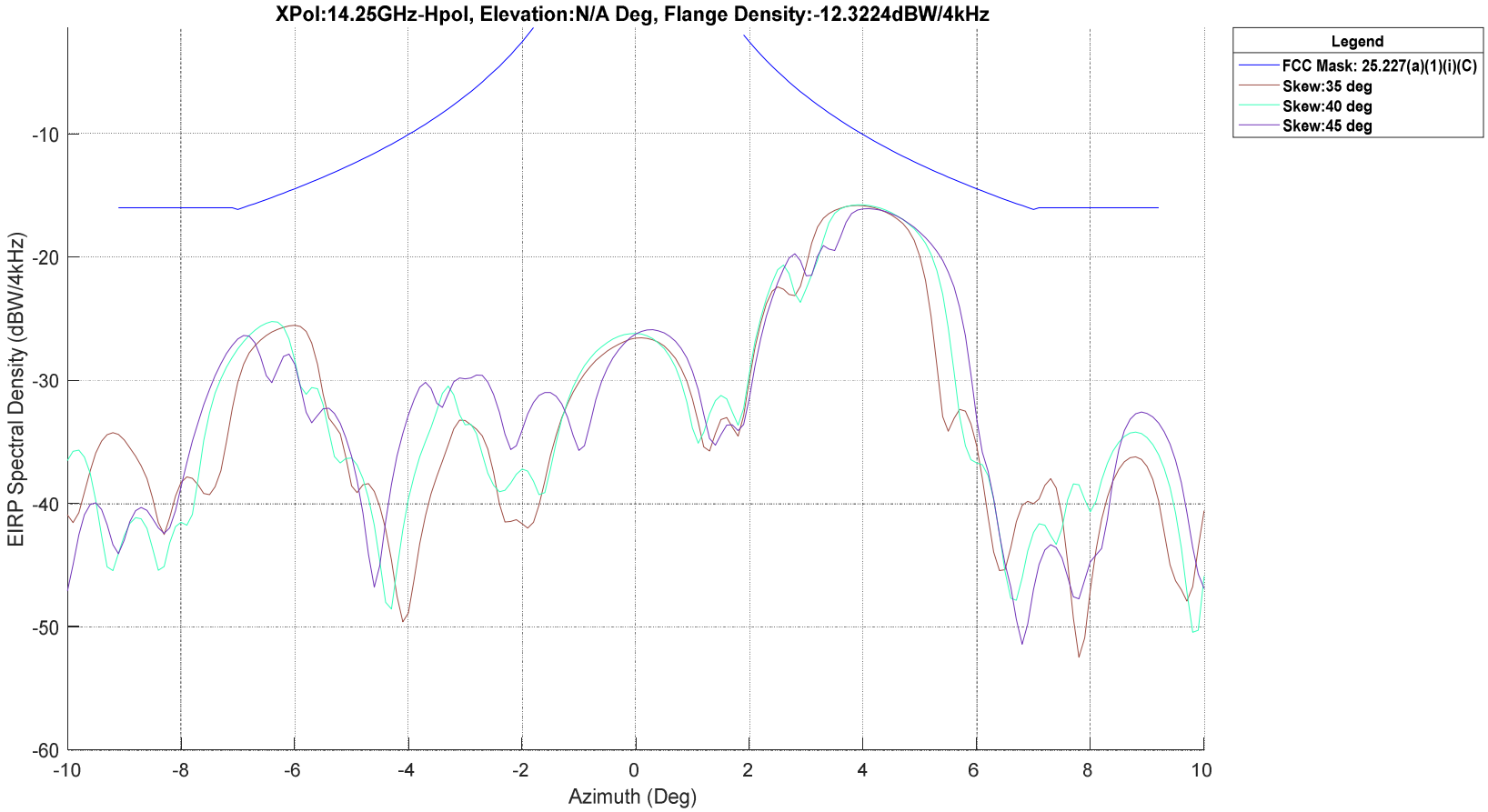


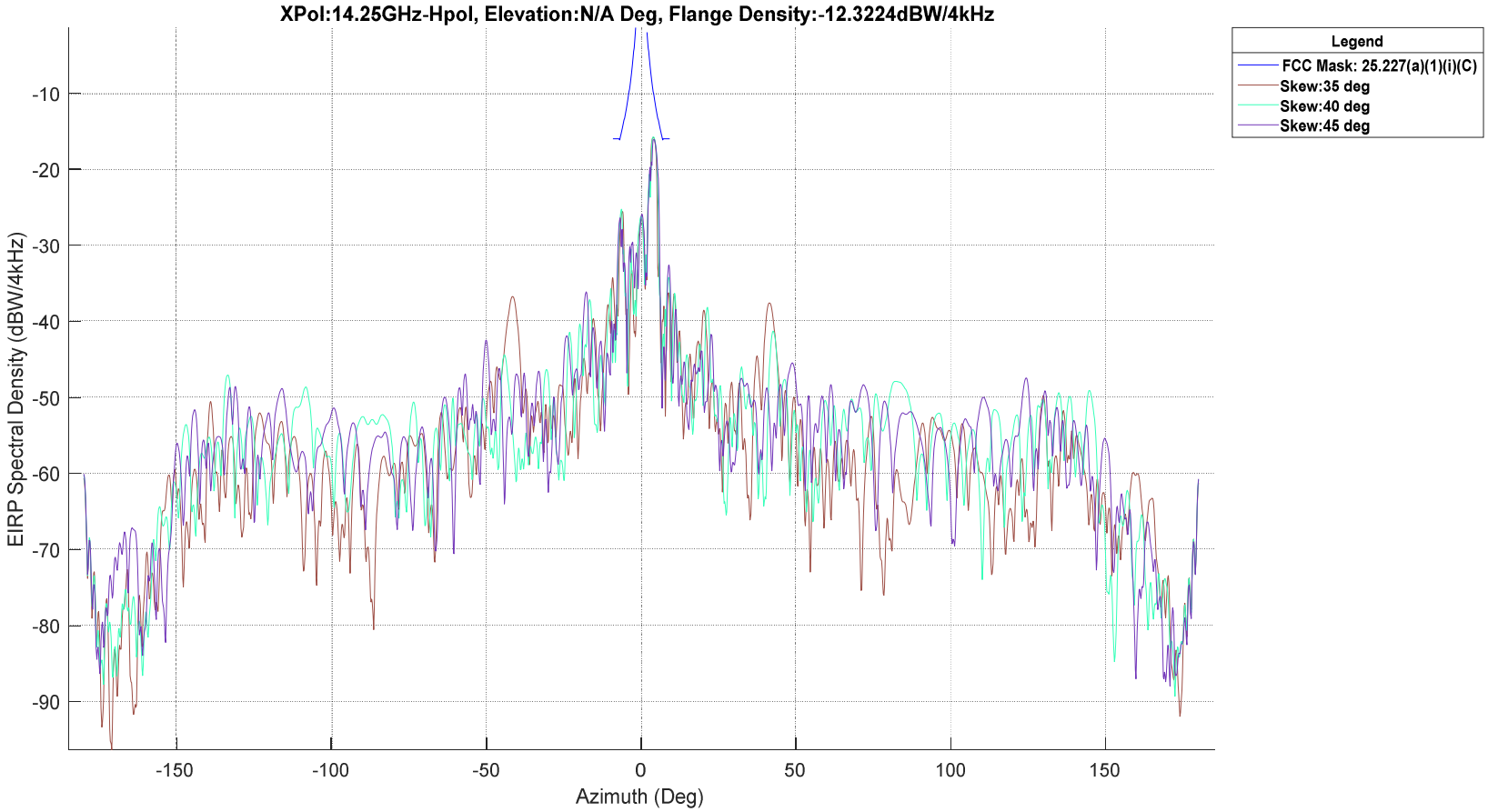
XPOL:14.00GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



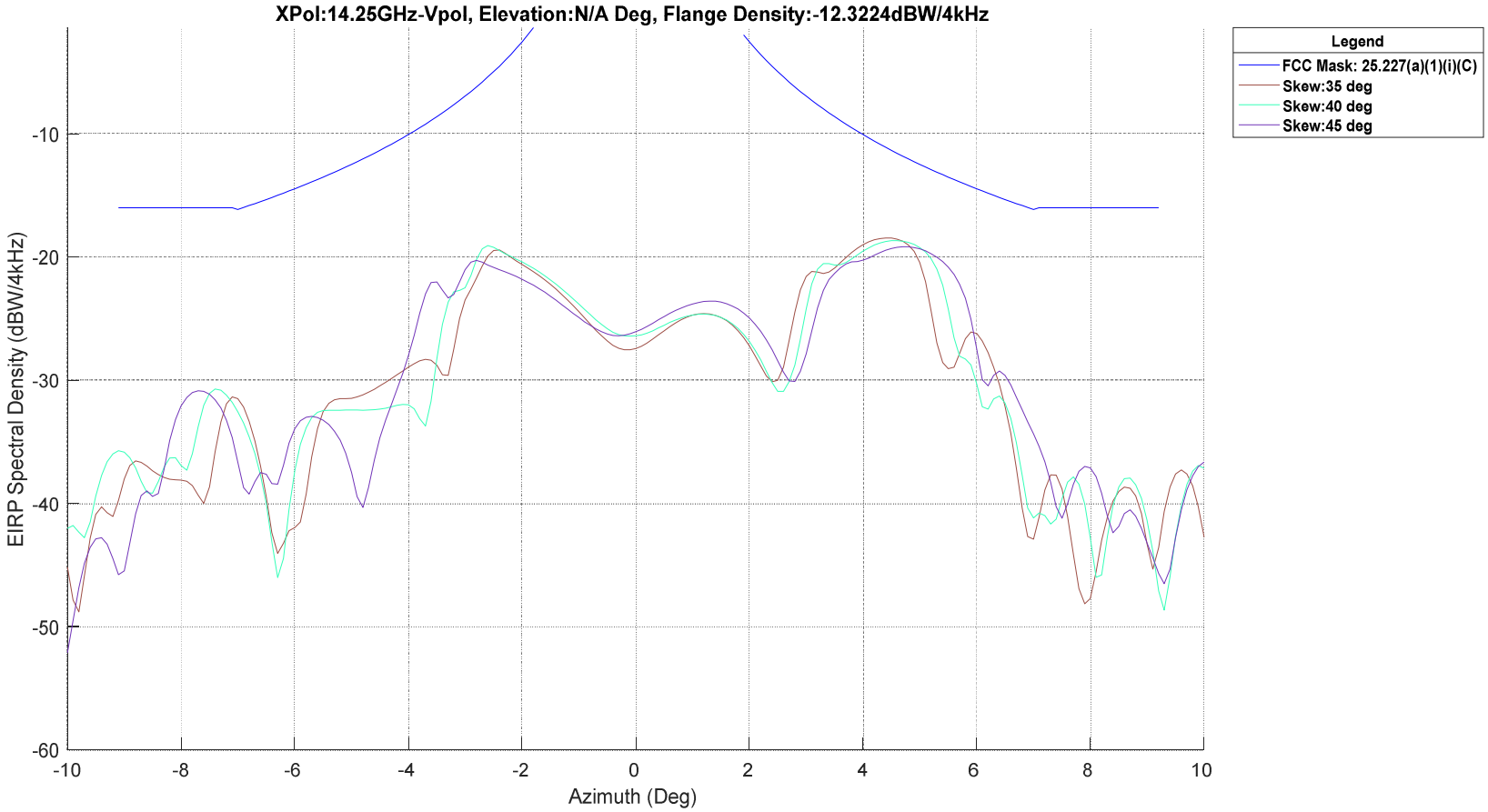
XPOL:14.25GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



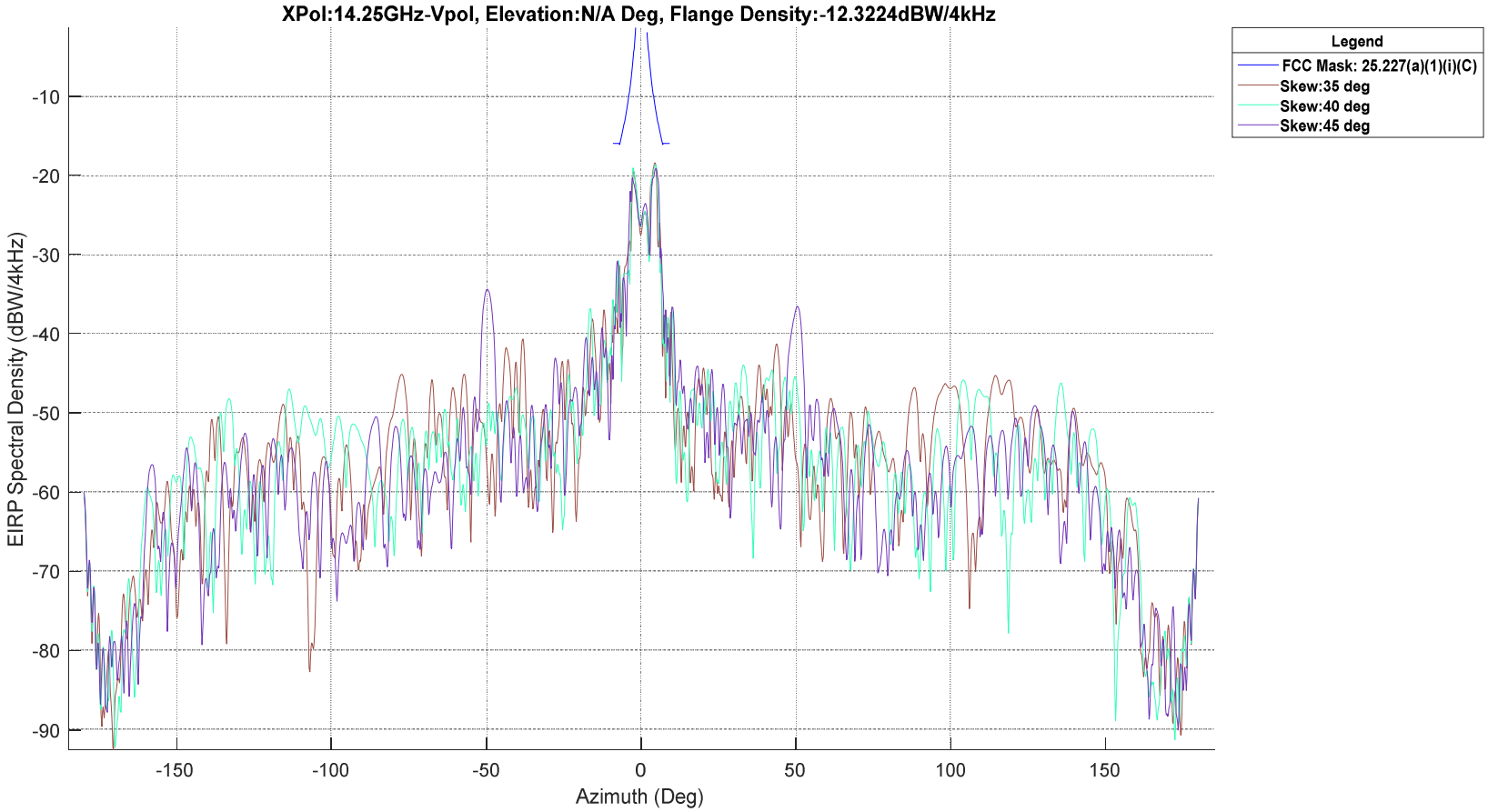
XPOL:14.25GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



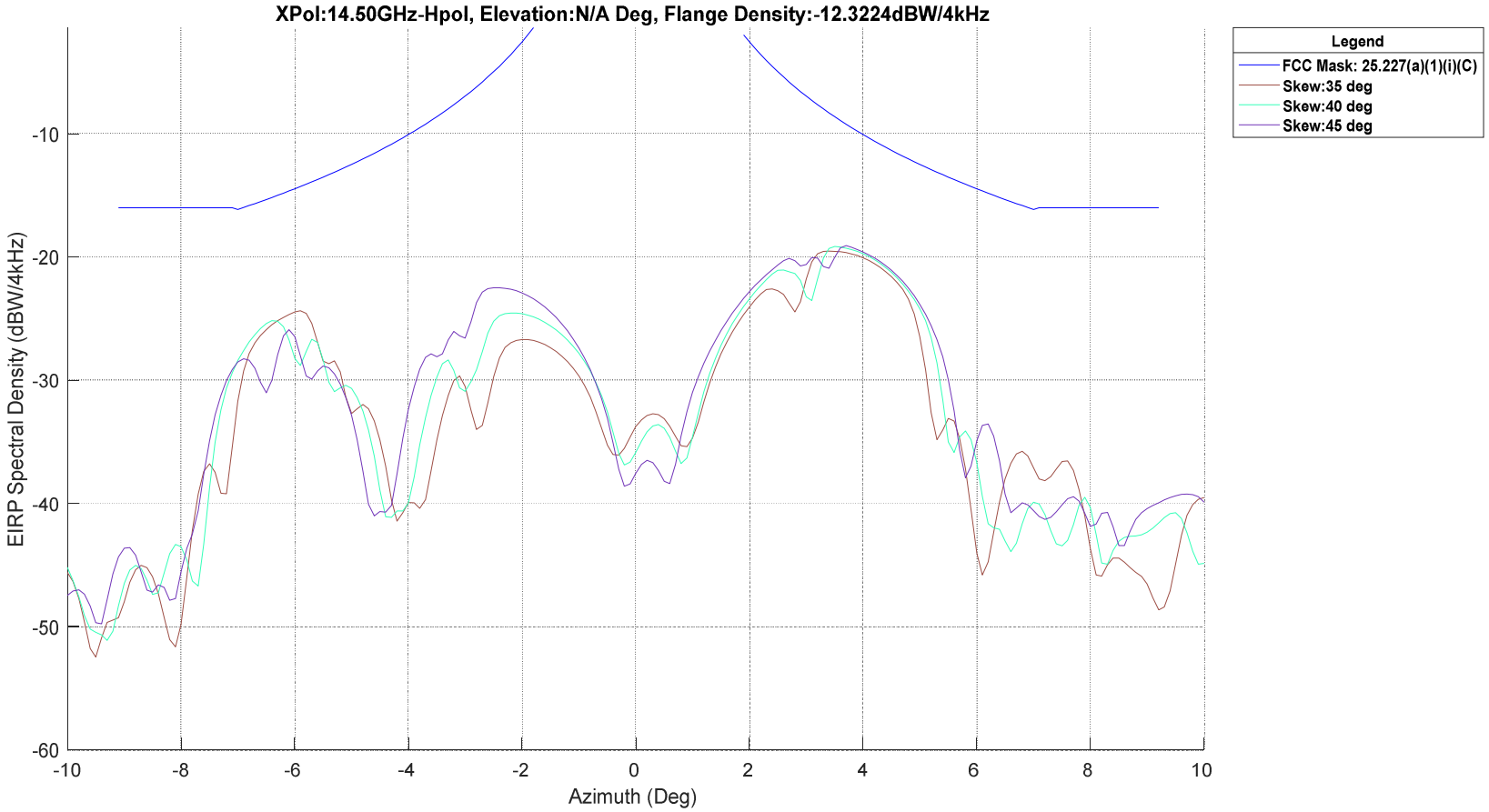
XPOL:14.25GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



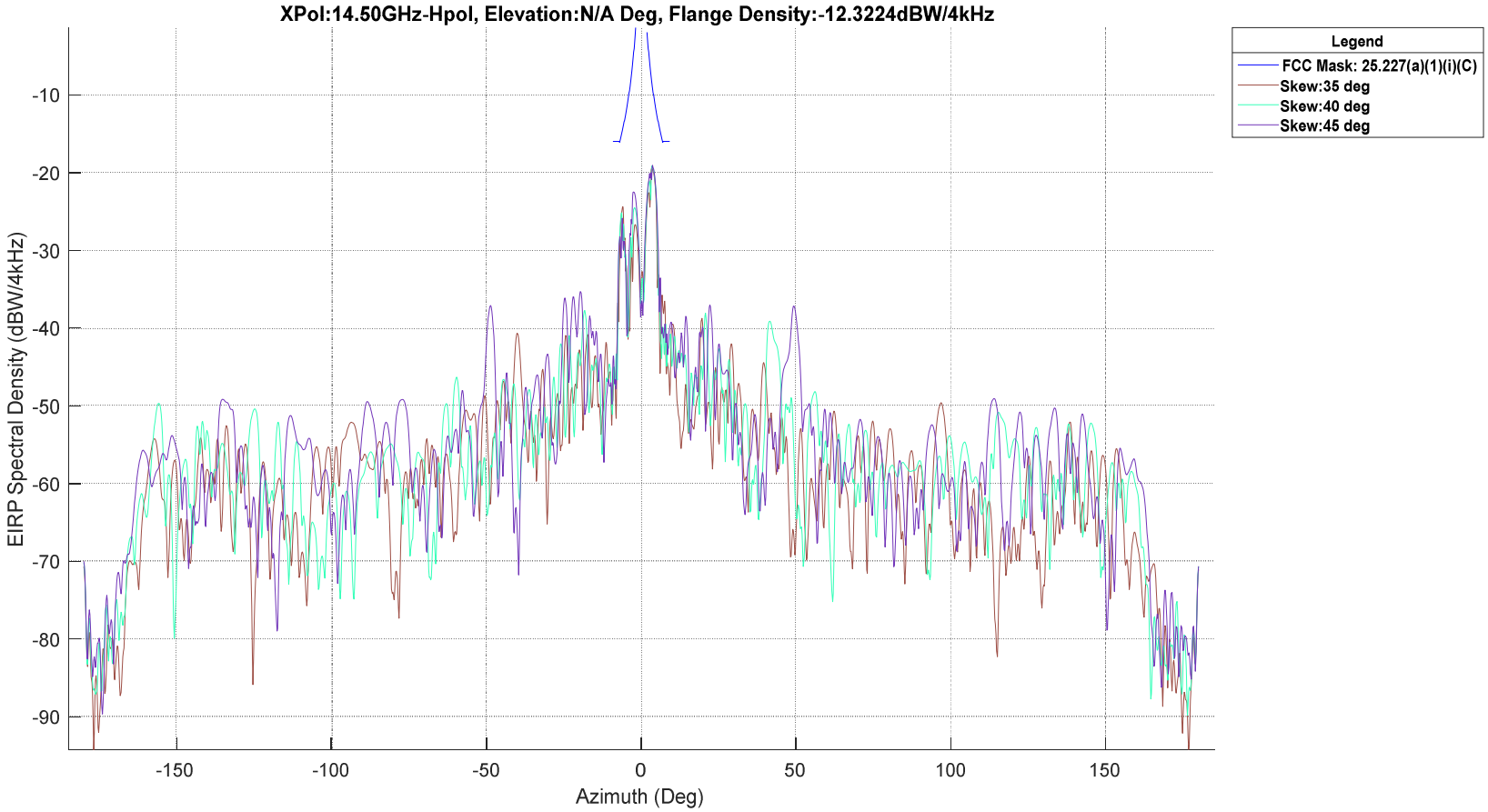
XPOL:14.25GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



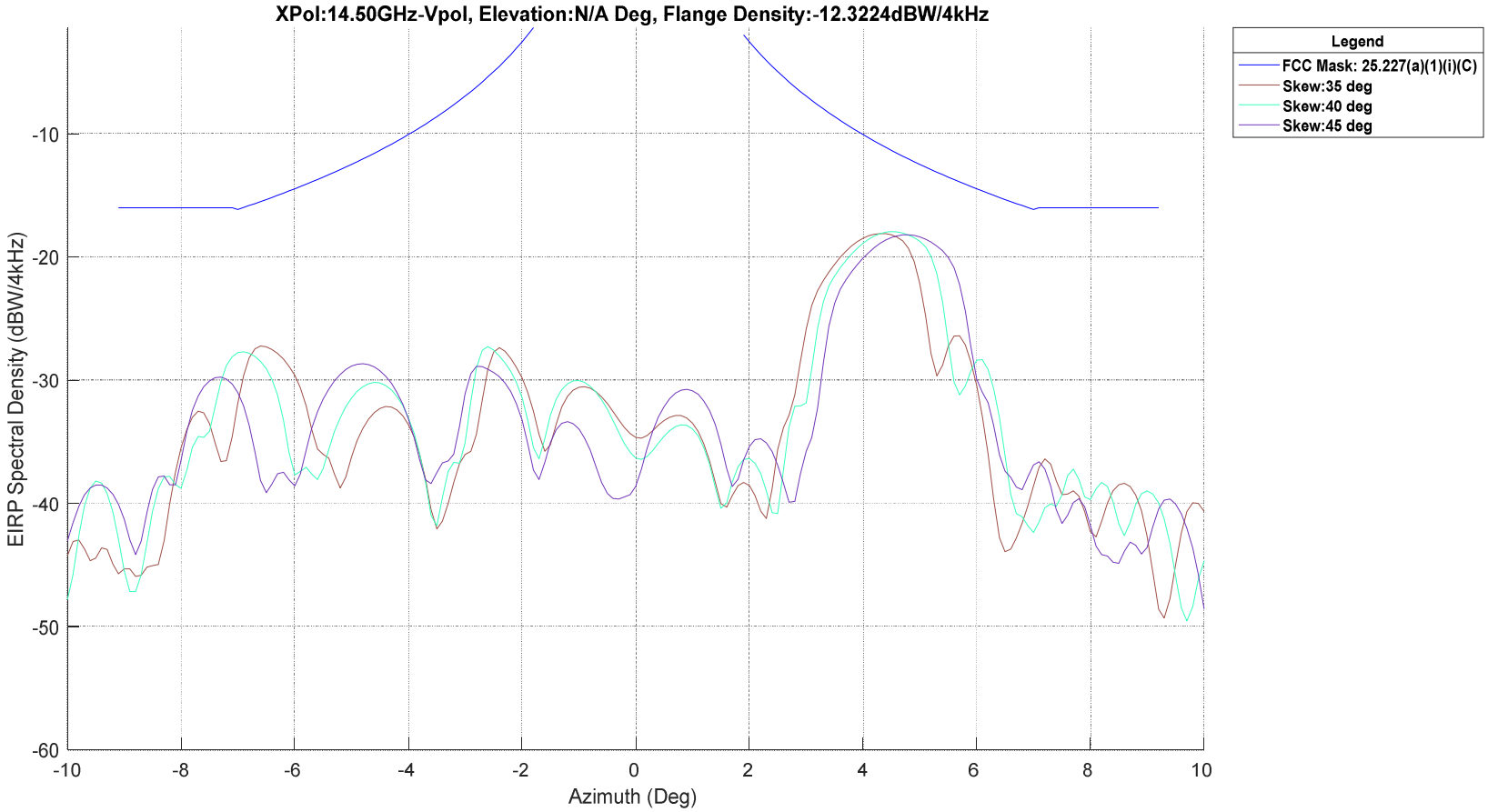
XPOL:14.50GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



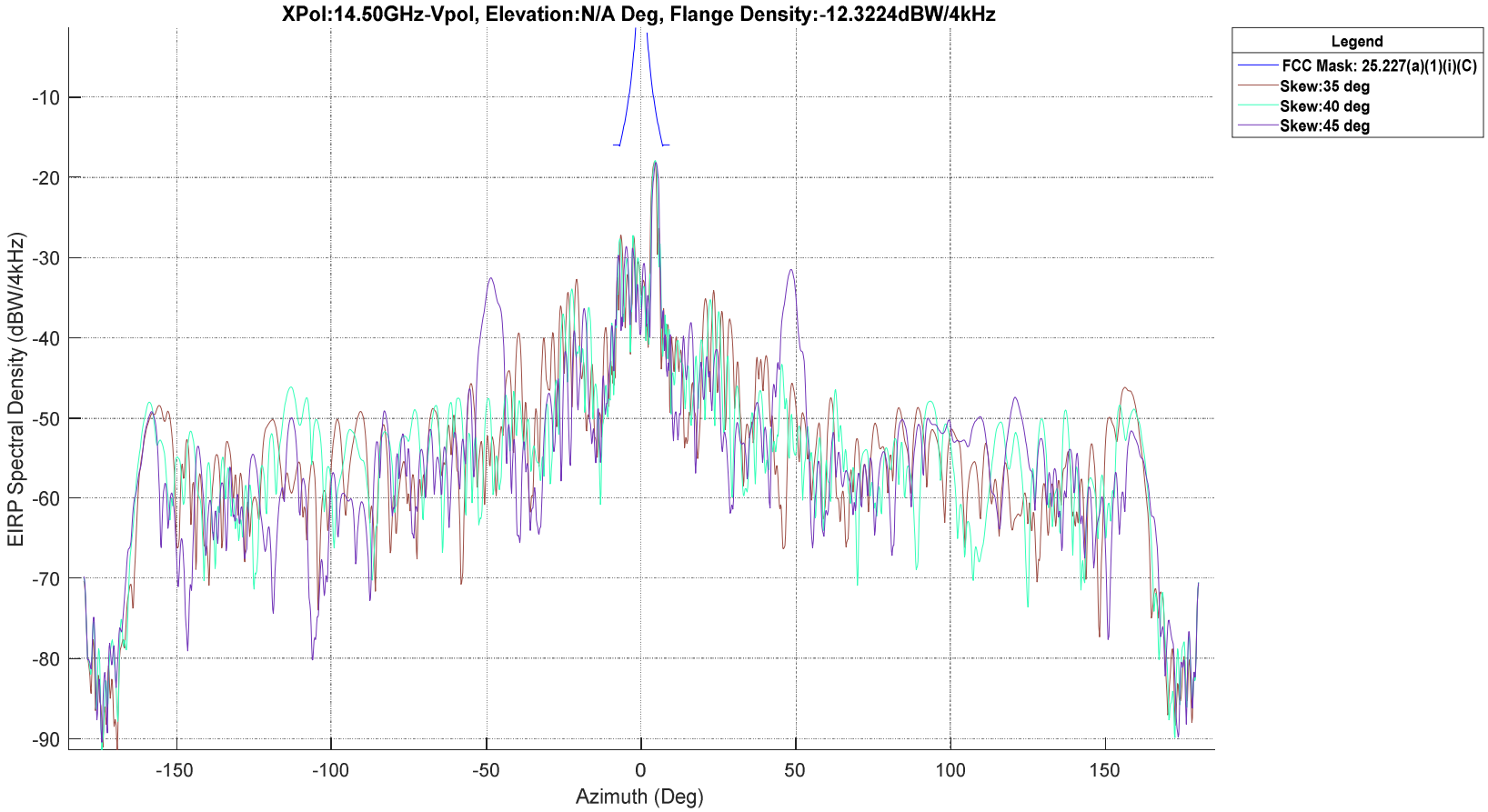
XPOL:14.50GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ



XPOL:14.50GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ

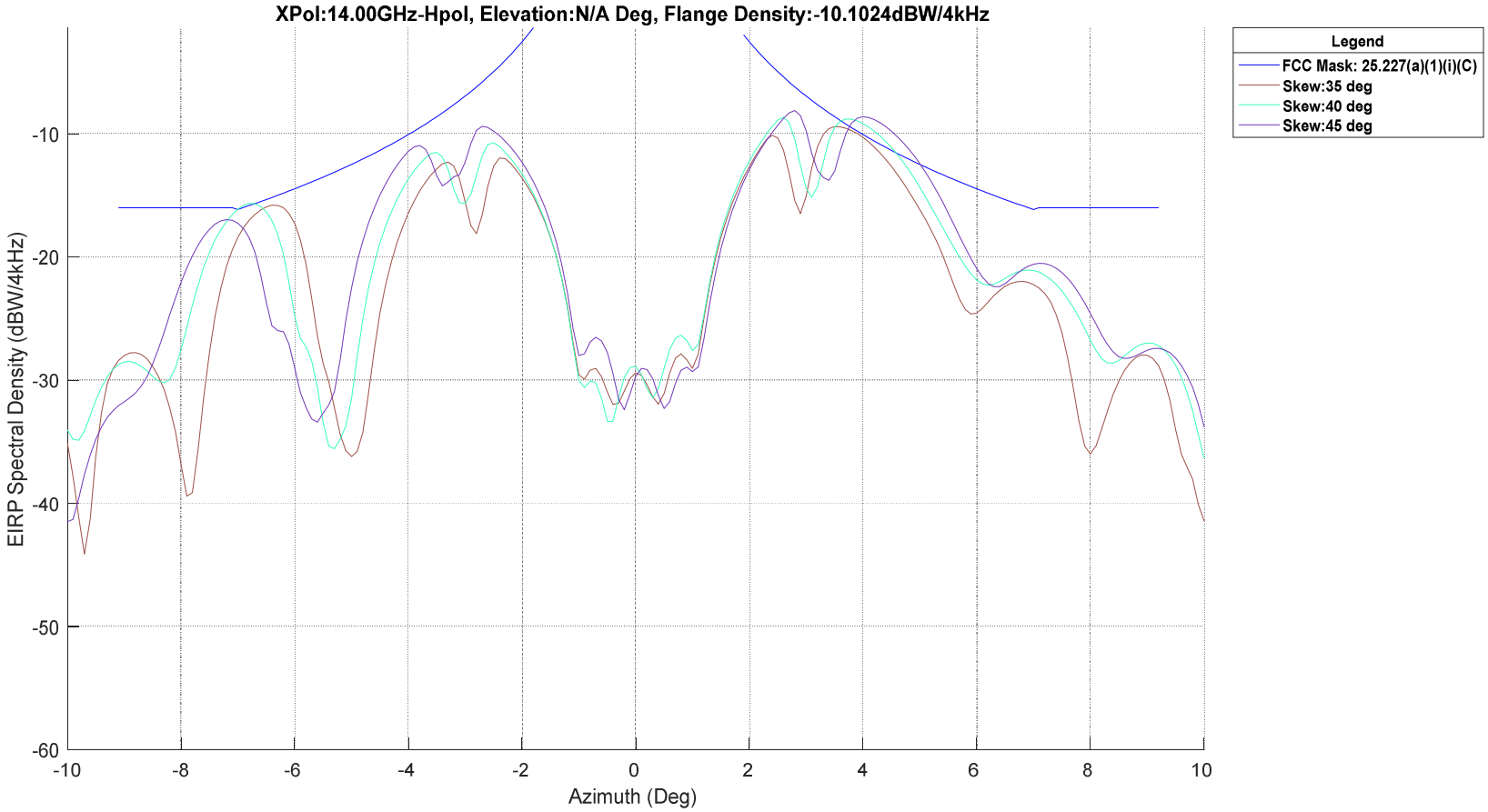


XPOL:14.50GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-12.3224DBW/4KHZ

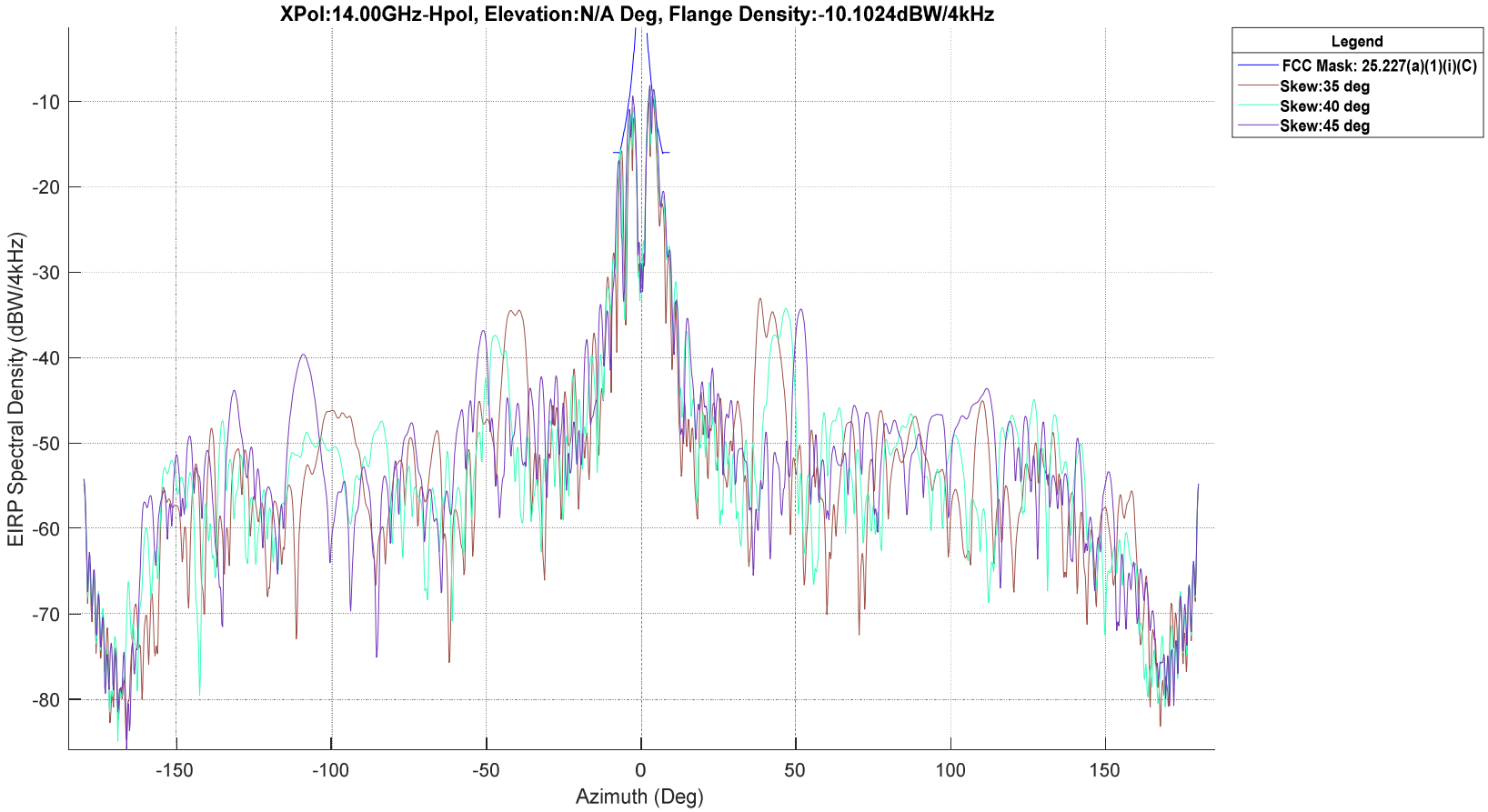


1.024 MHZ, EIRP DENSITY: 18.7 DBW/4KHZ, TX POWER: 44.0 DBM, FLANGE DENSITY: -10.1 DBW/4KHZ

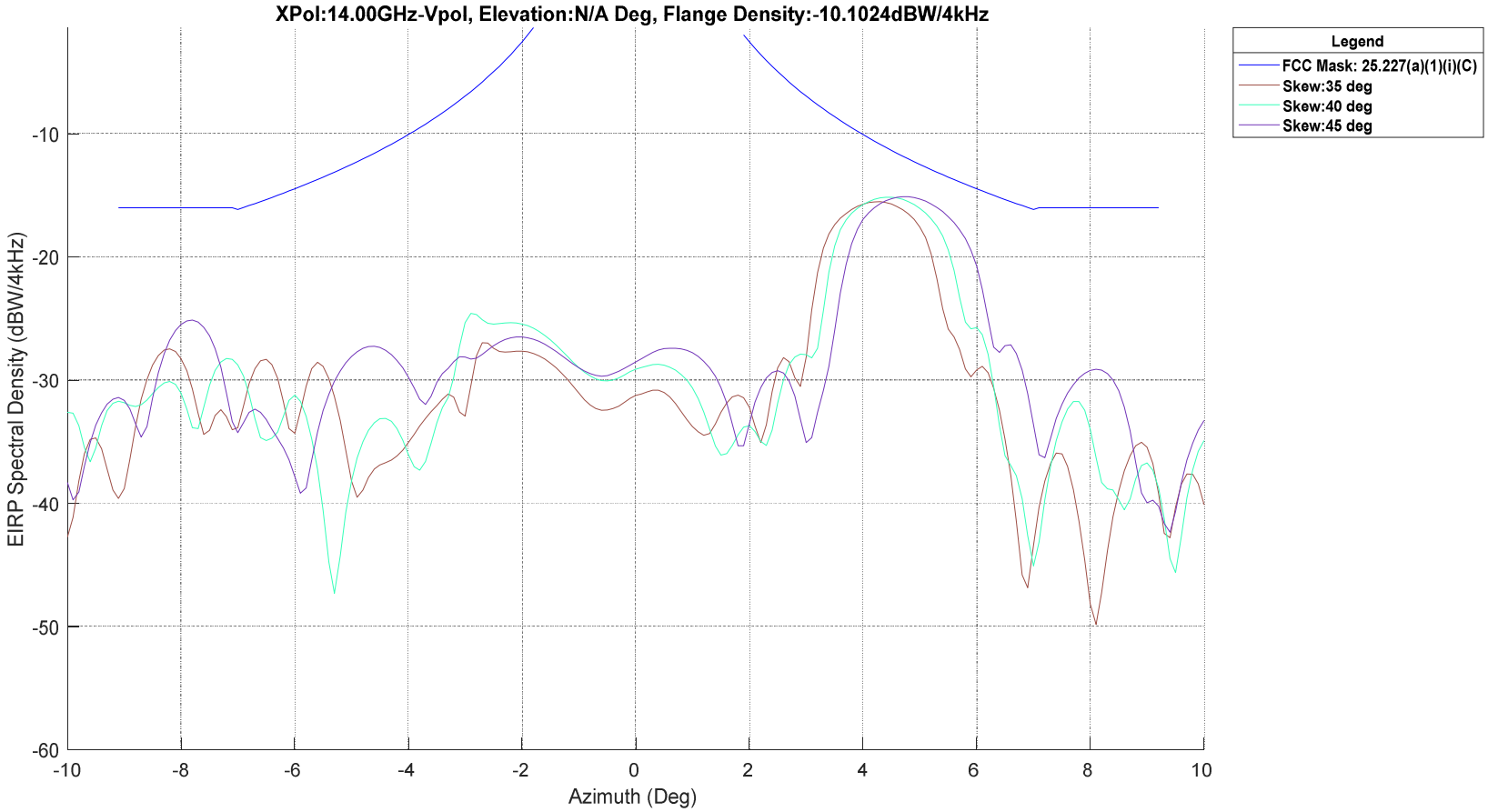
XPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



XPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



XPOL:14.00GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



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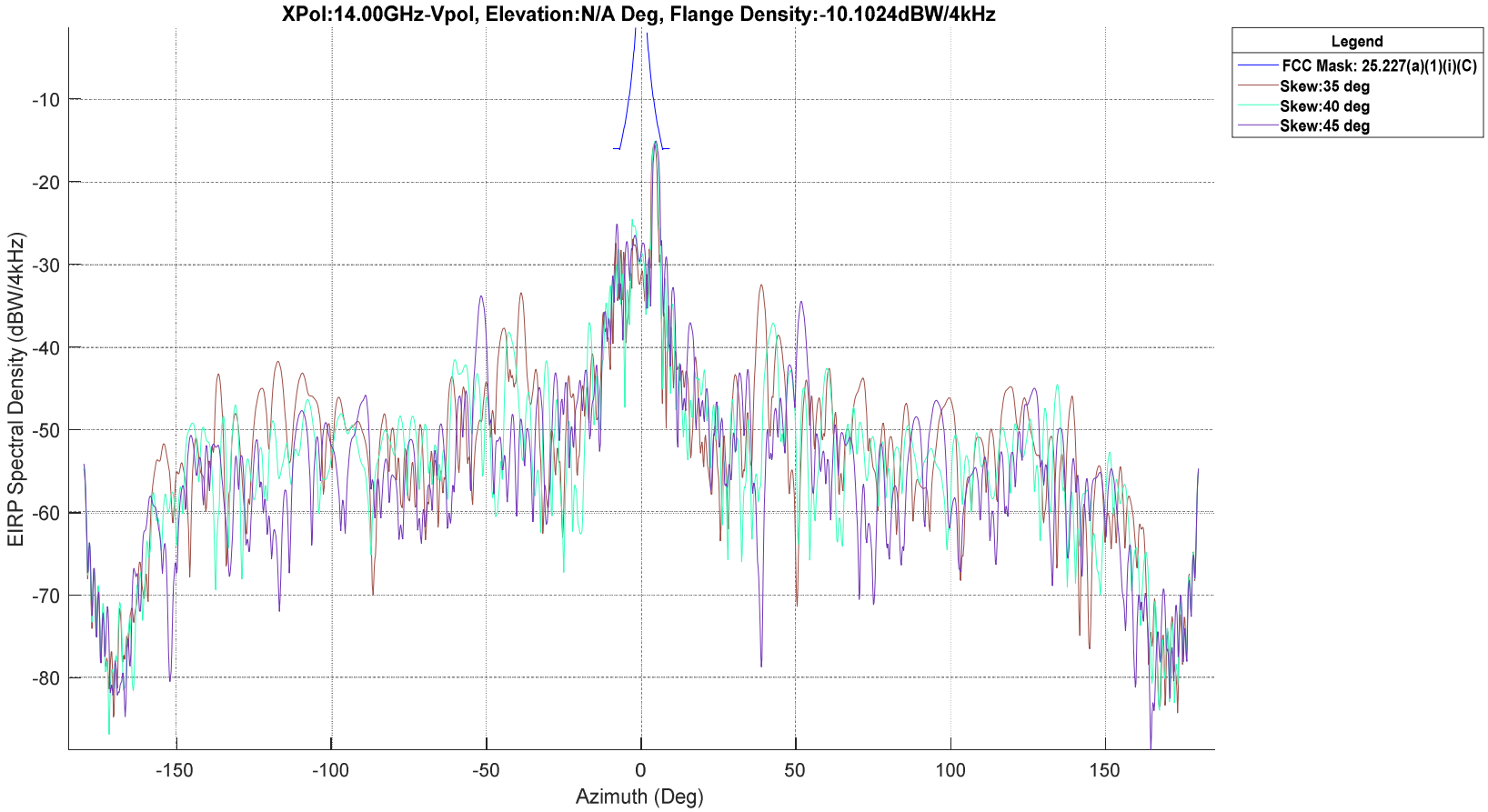

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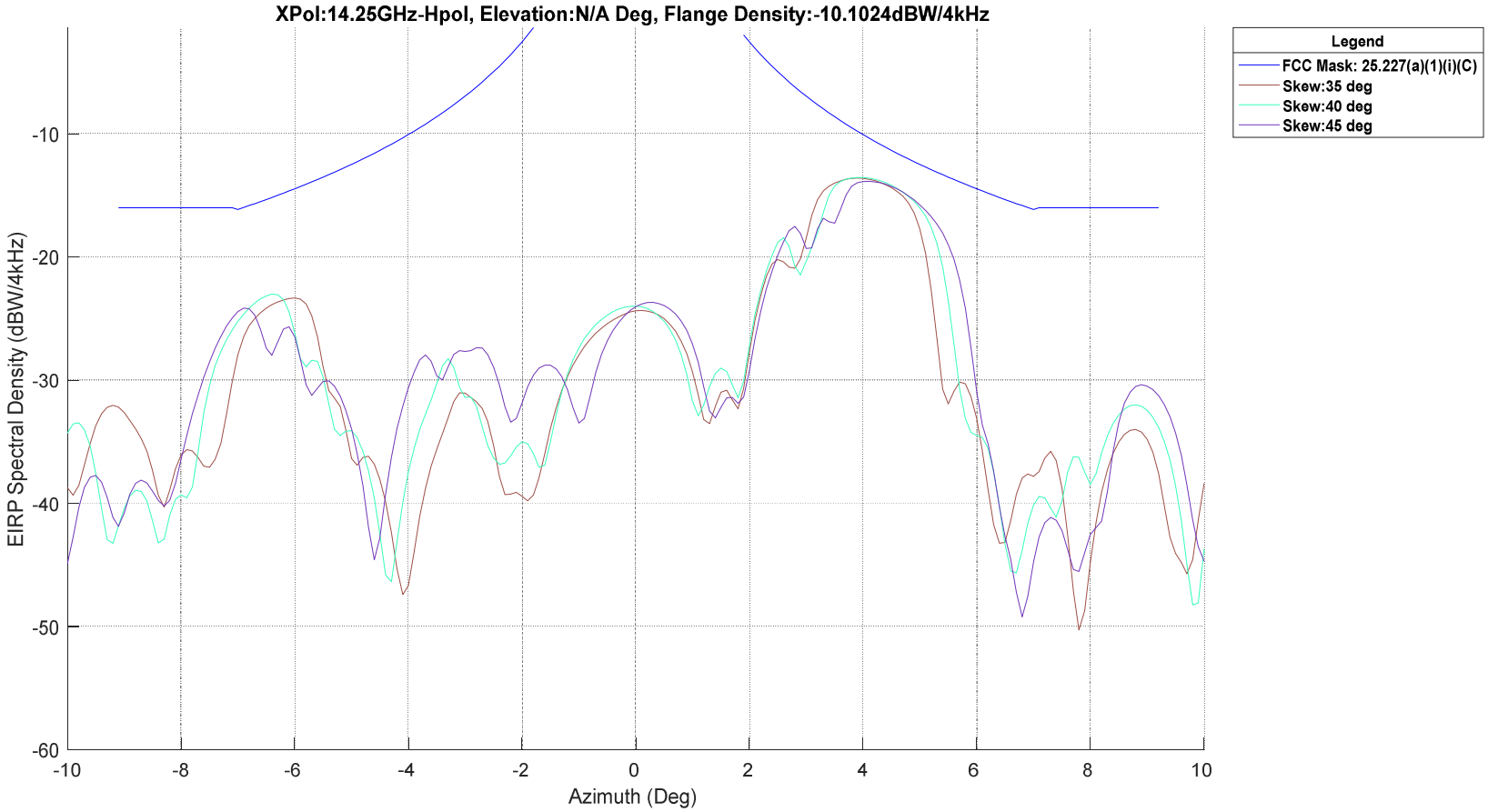
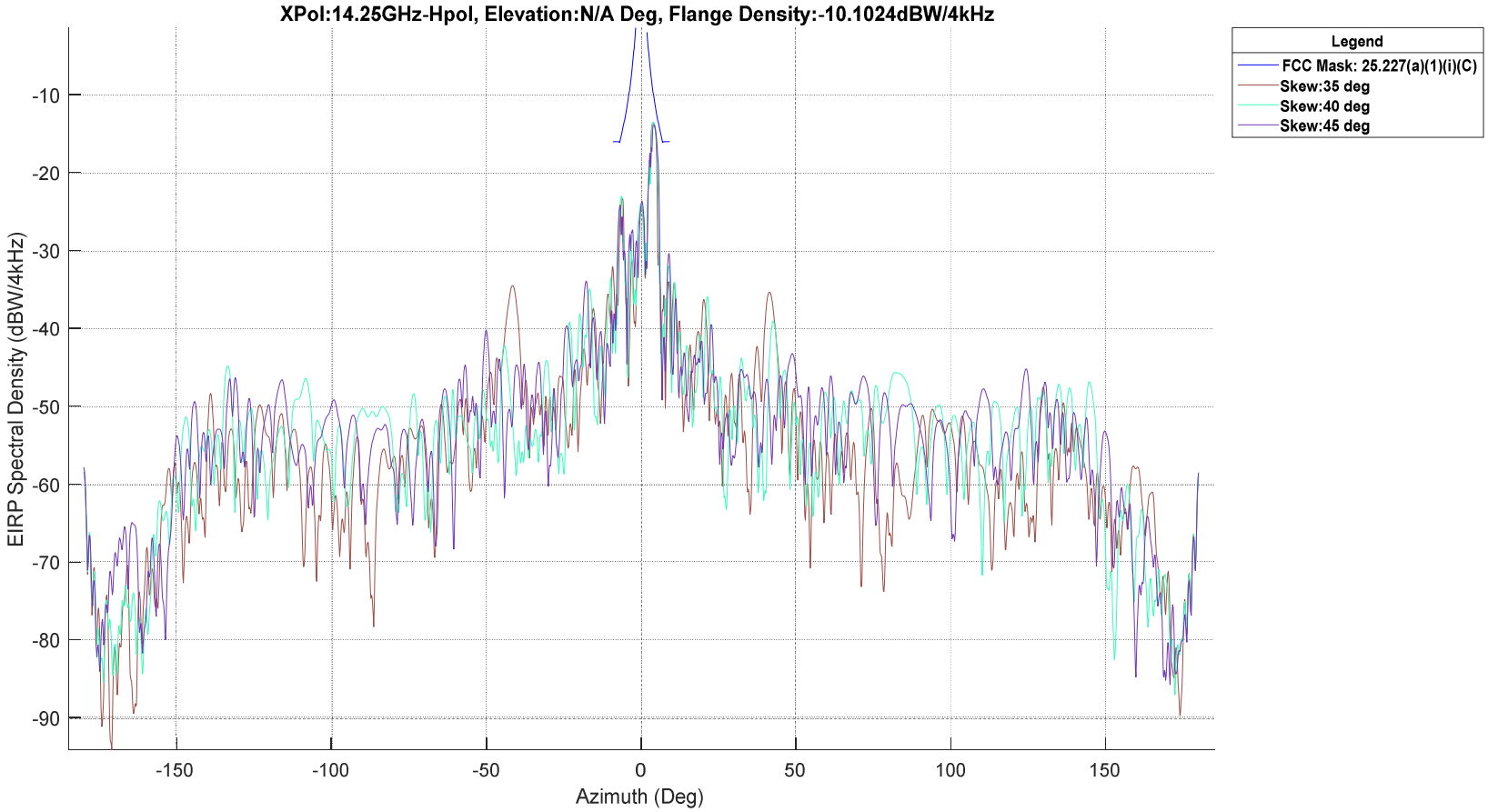
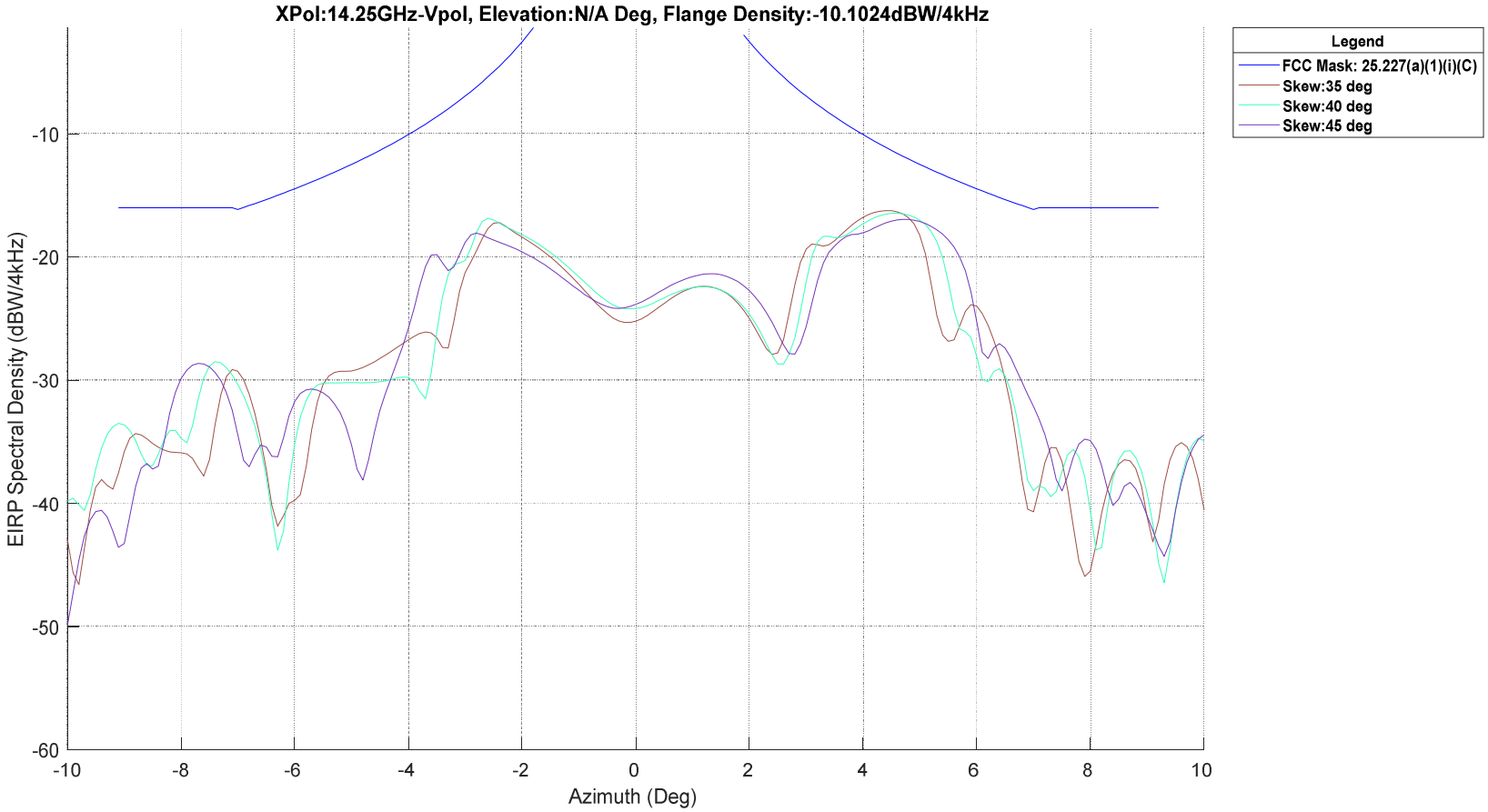


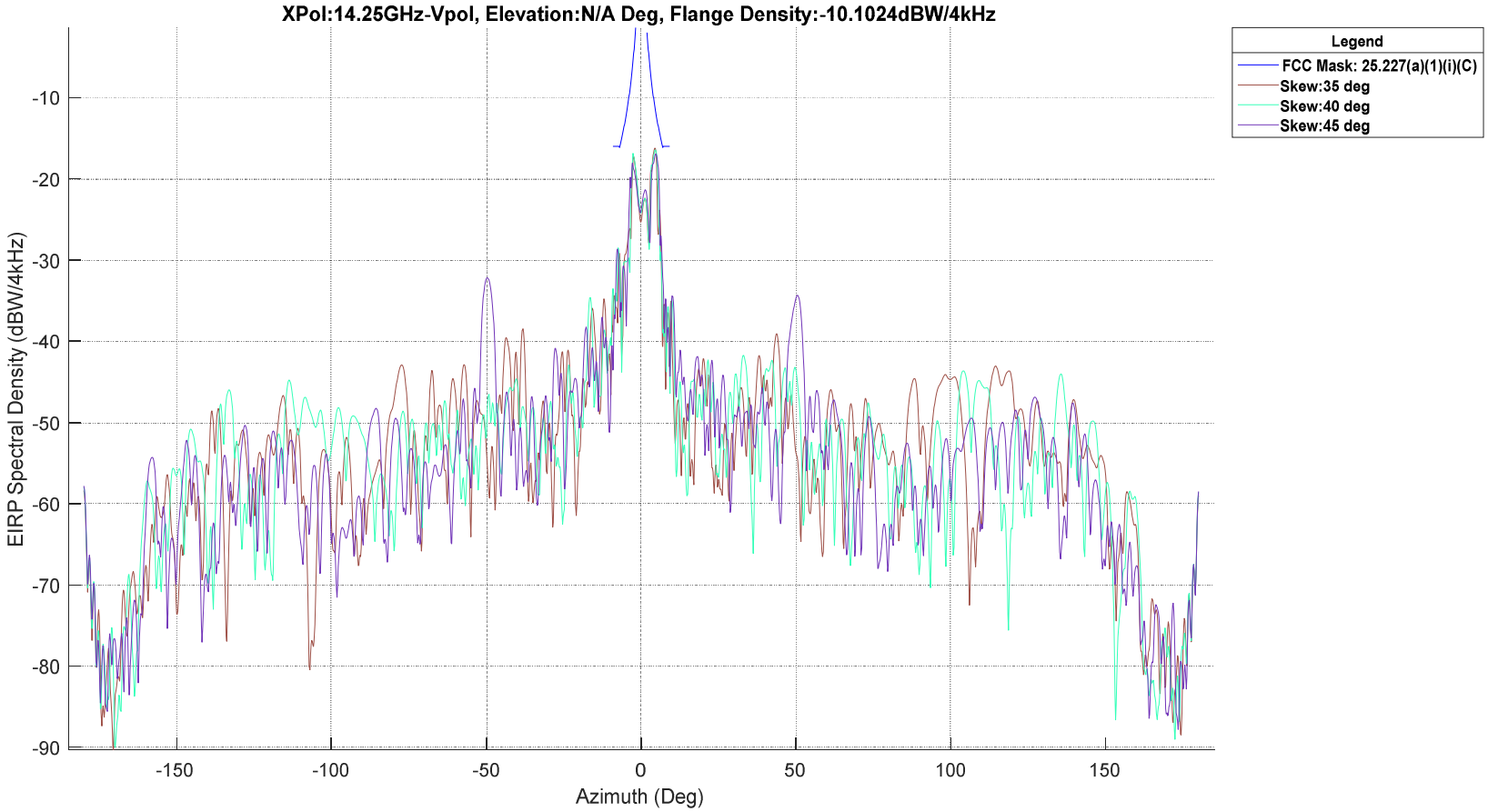
XPOL:14.25GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



XPOL:14.25GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



XPOL:14.25GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



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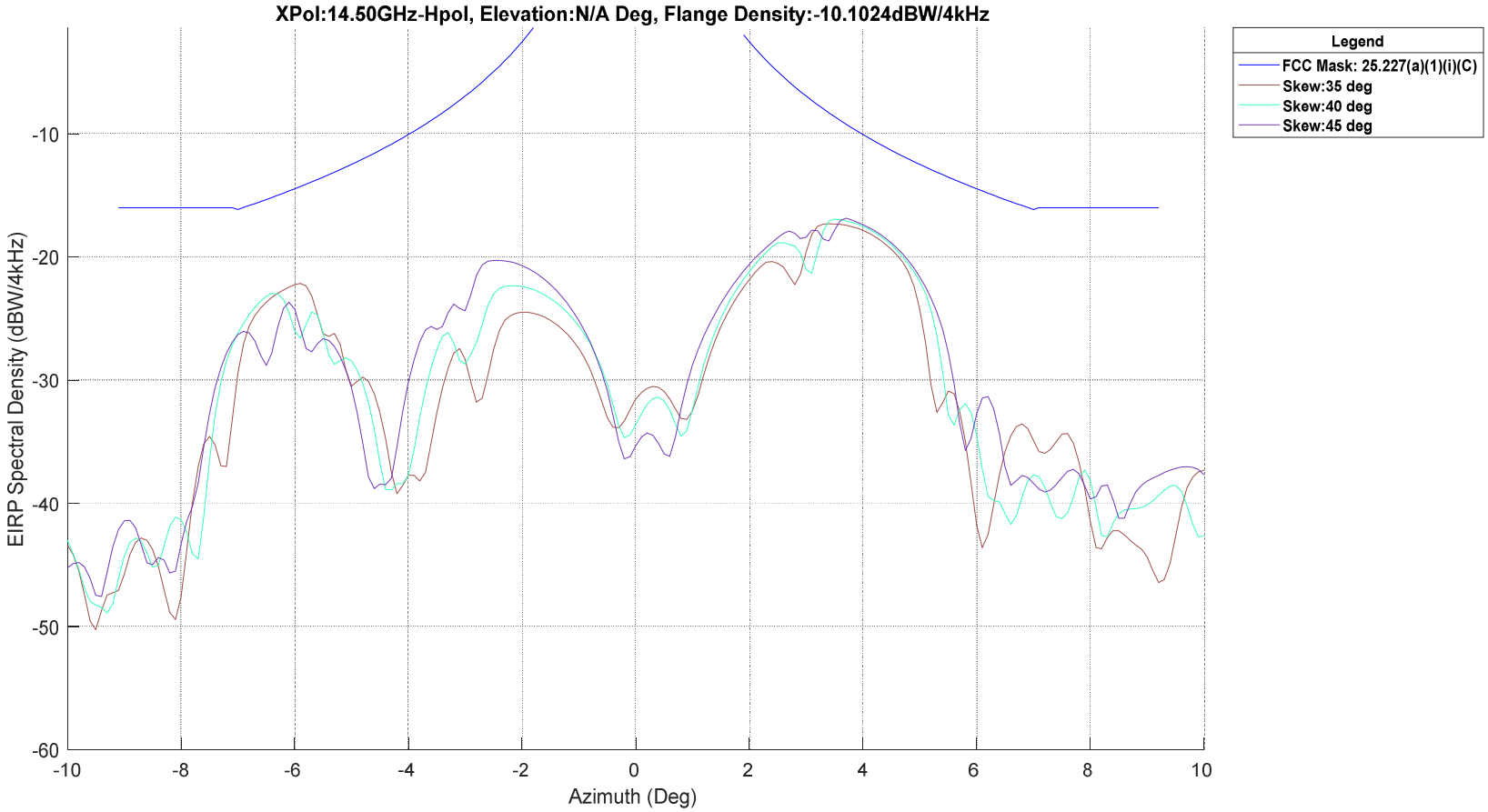
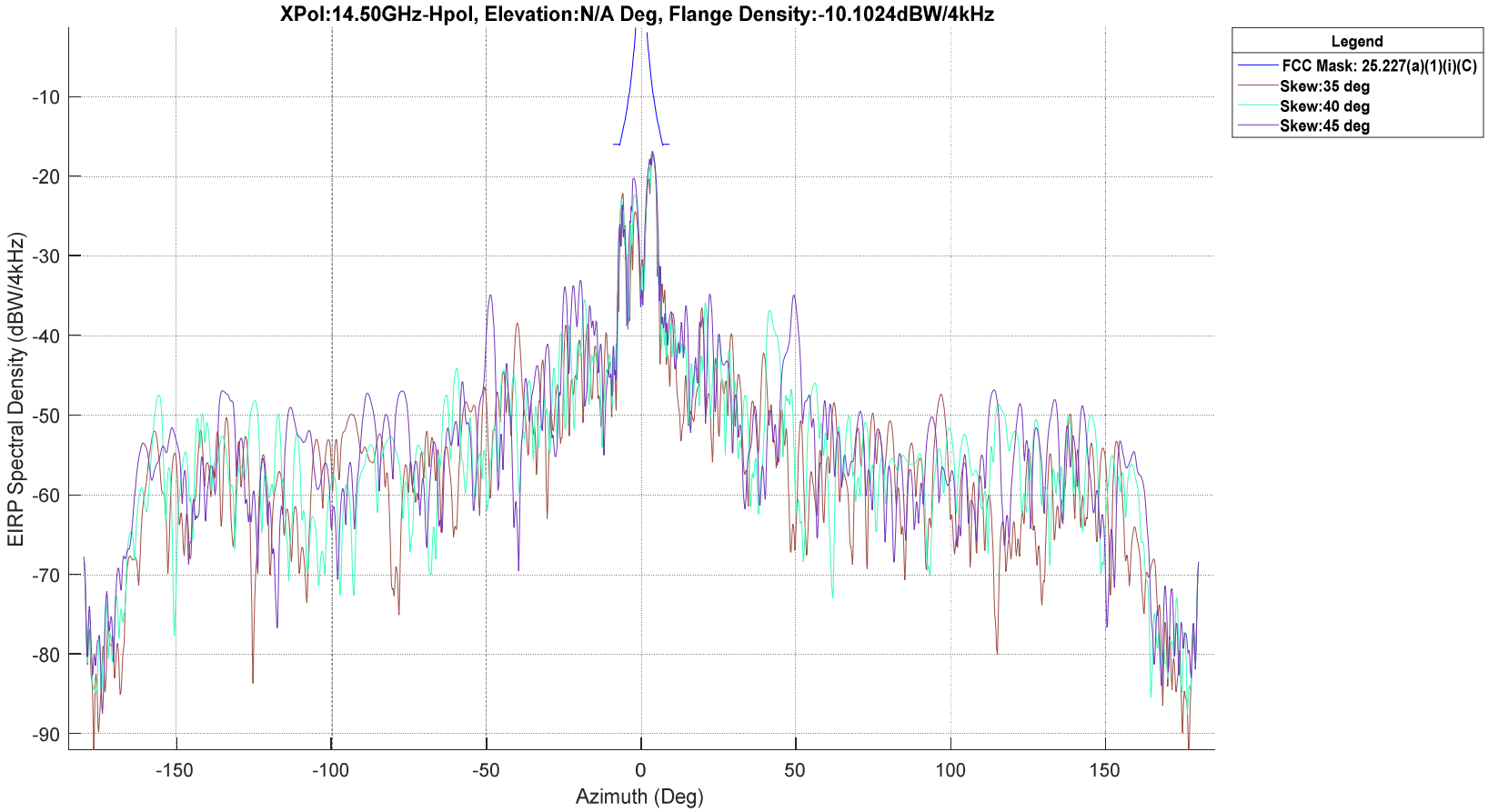
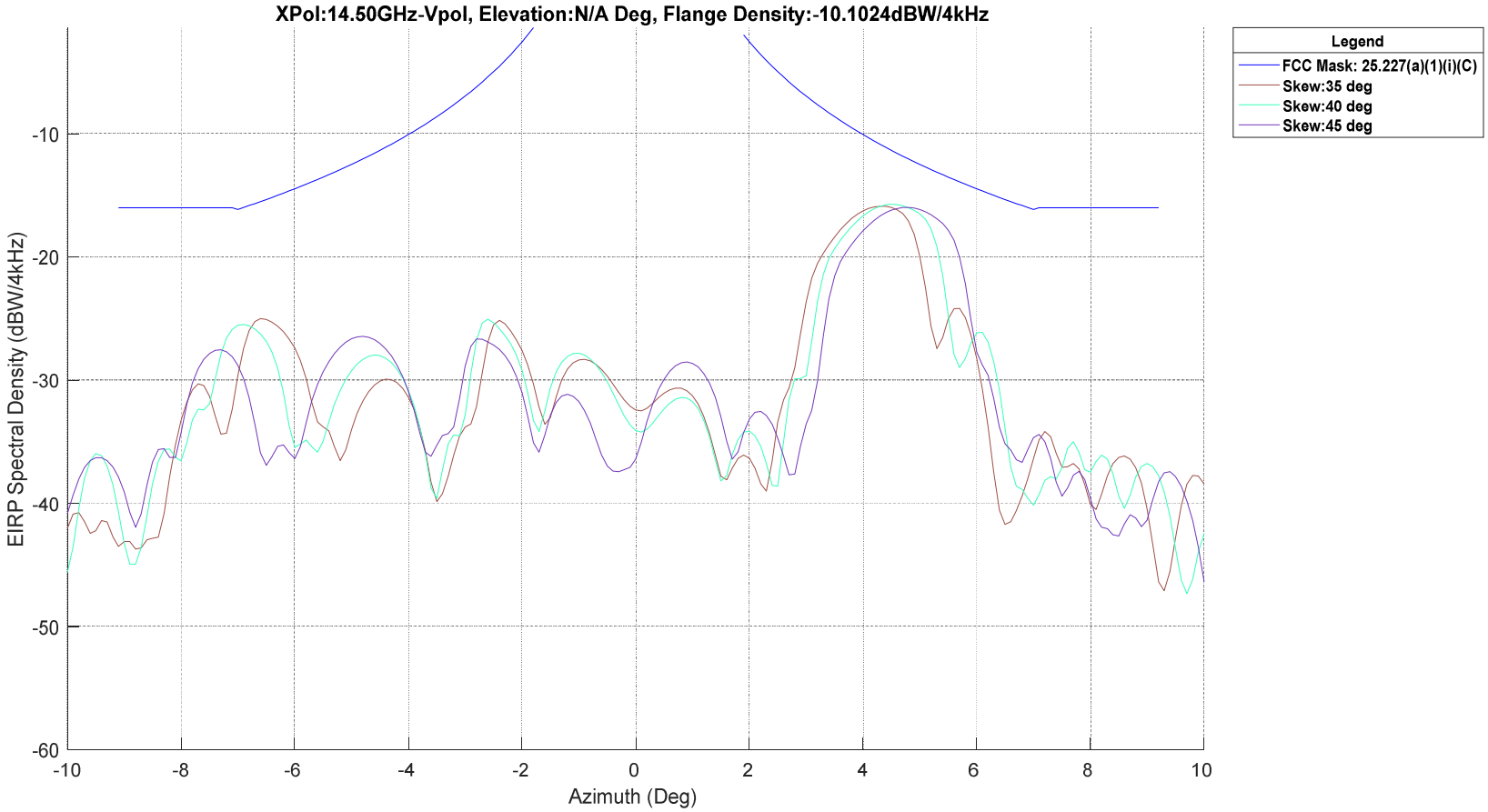


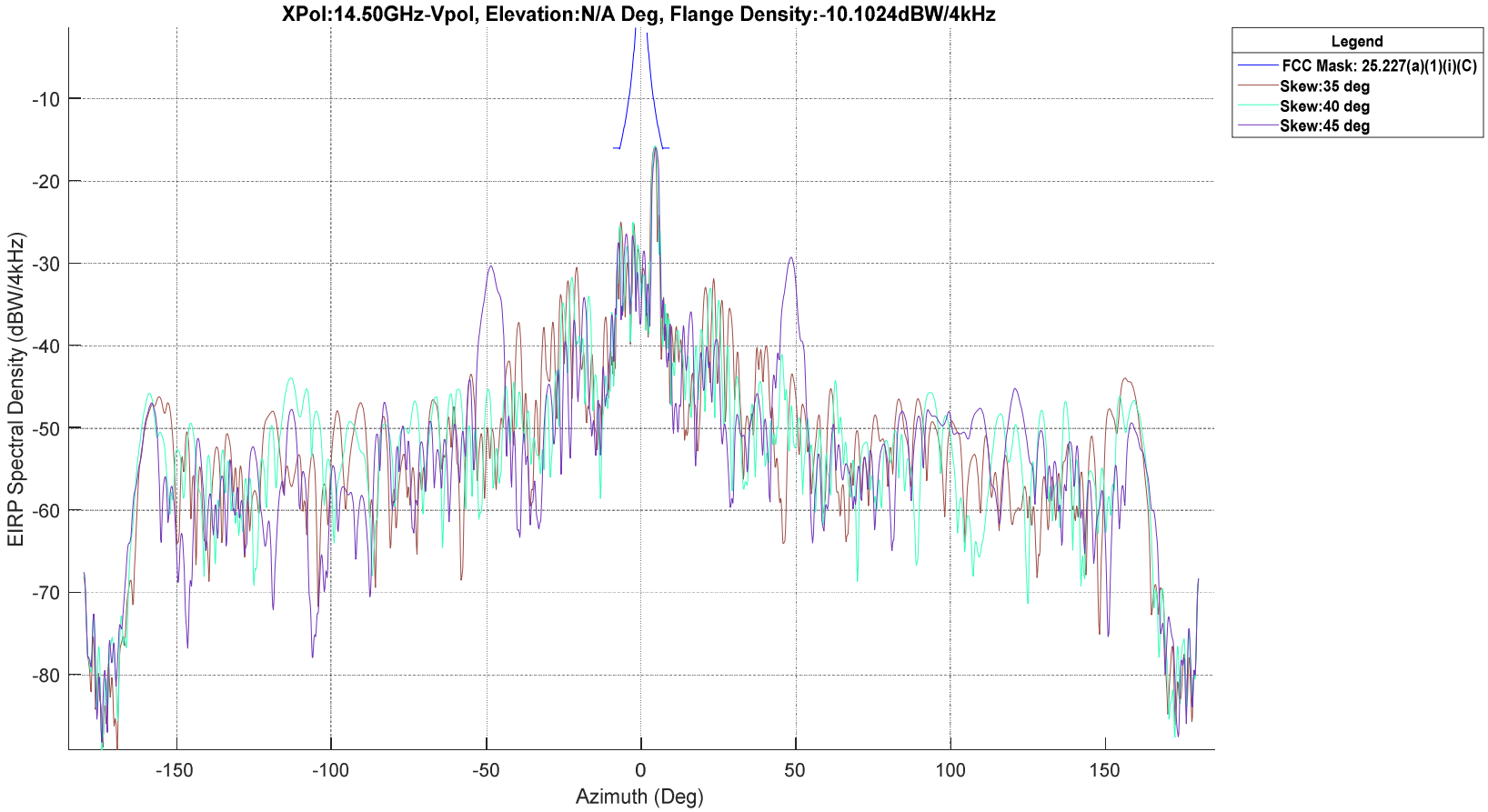
XPOL:14.50GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ



XPOL:14.50GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ

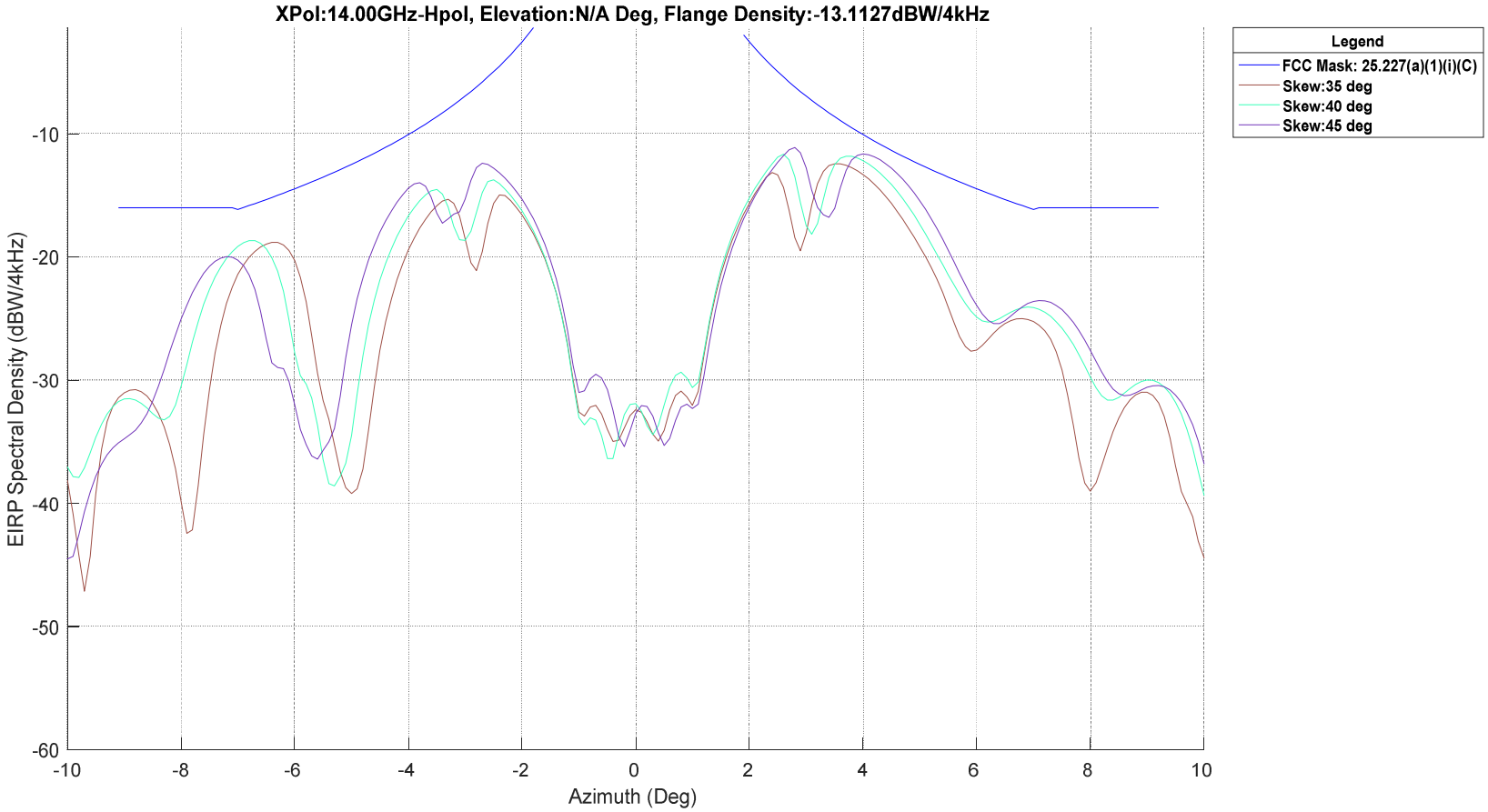


XPOL:14.50GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-10.1024DBW/4KHZ

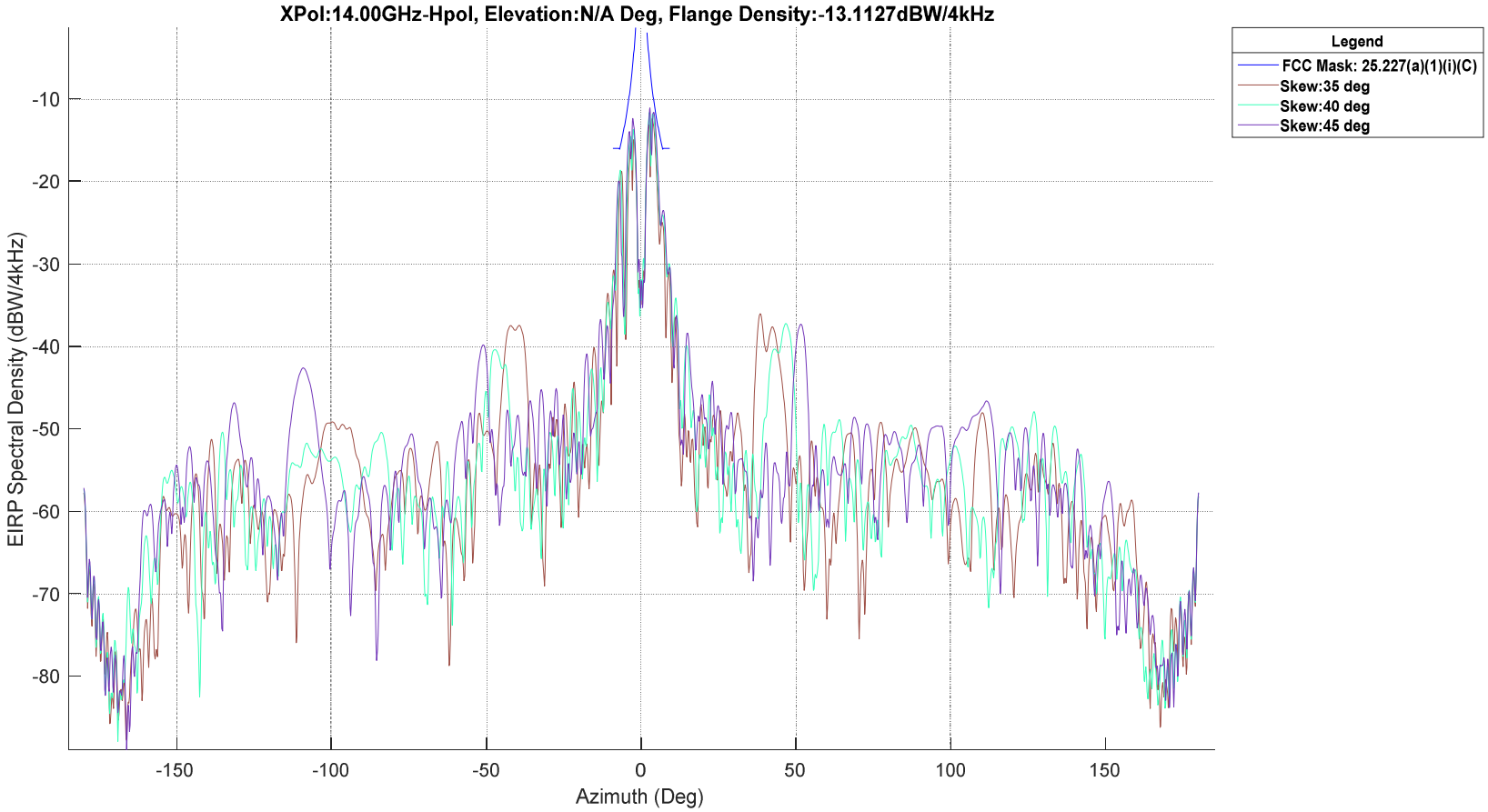


2.048 MHZ, EIRP DENSITY: 15.7 DBW/4KHZ, TX POWER: 44.0 DBM, FLANGE DENSITY: -13.1 DBW/4KHZ

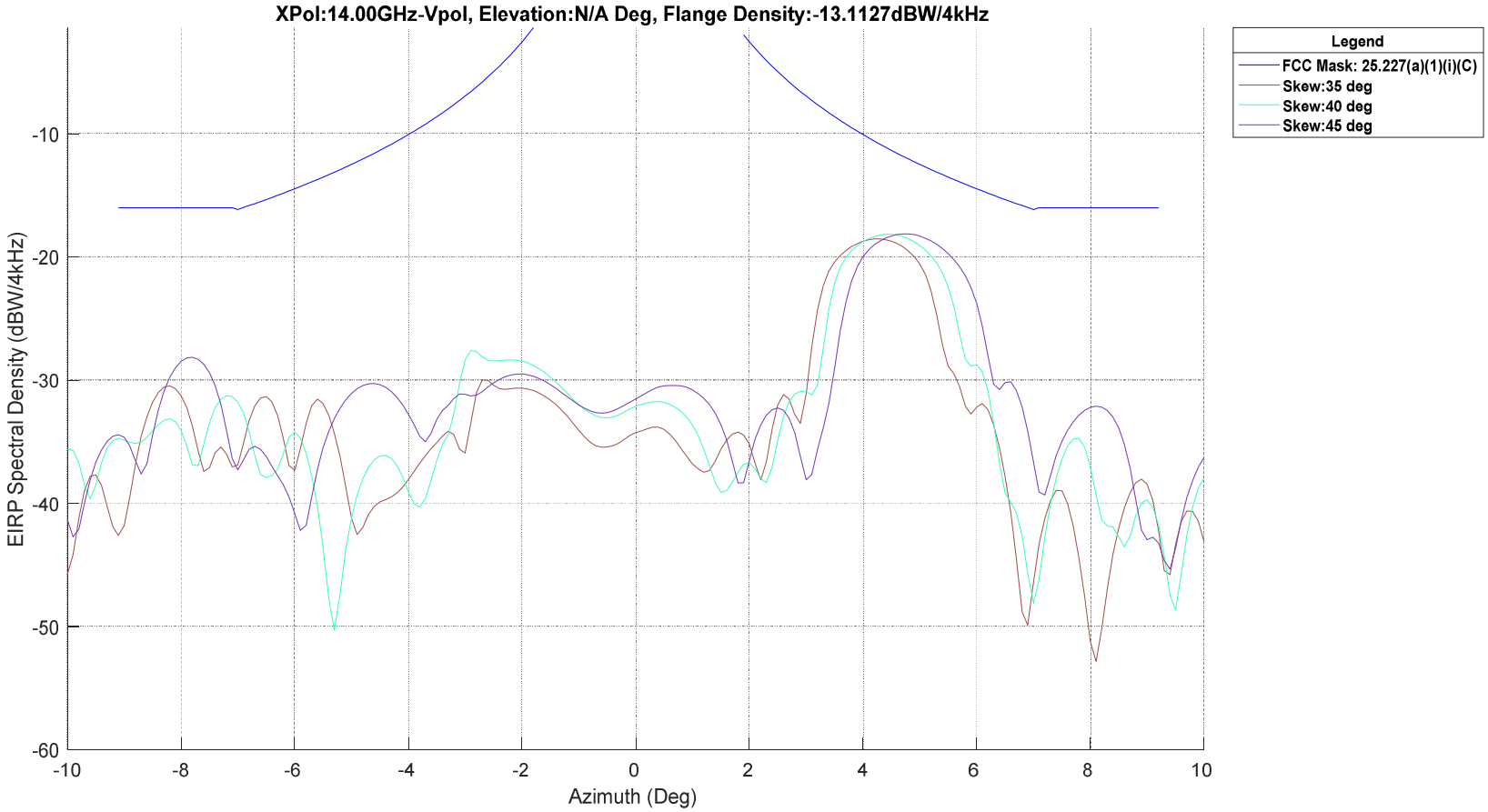
XPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



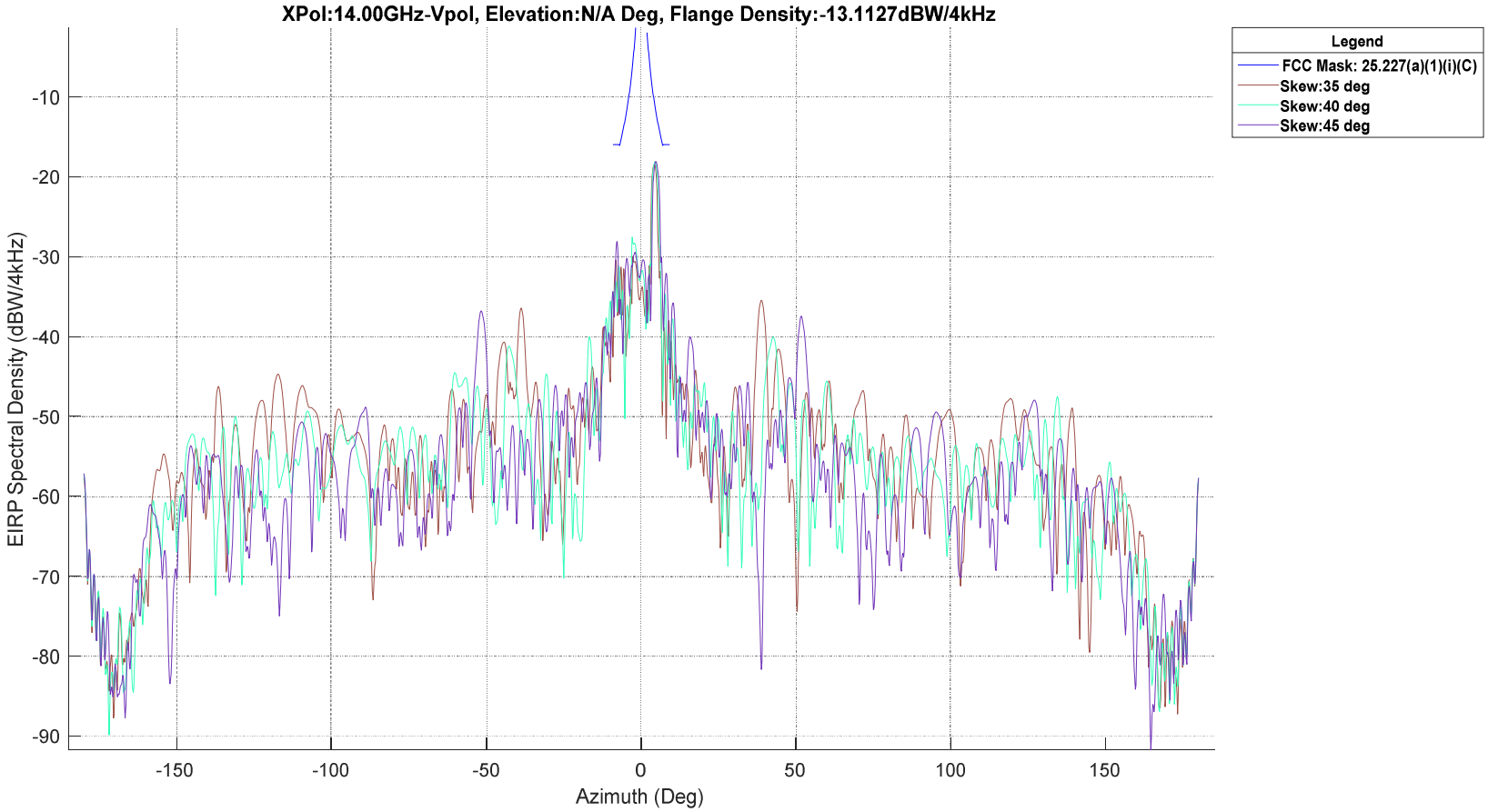
XPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



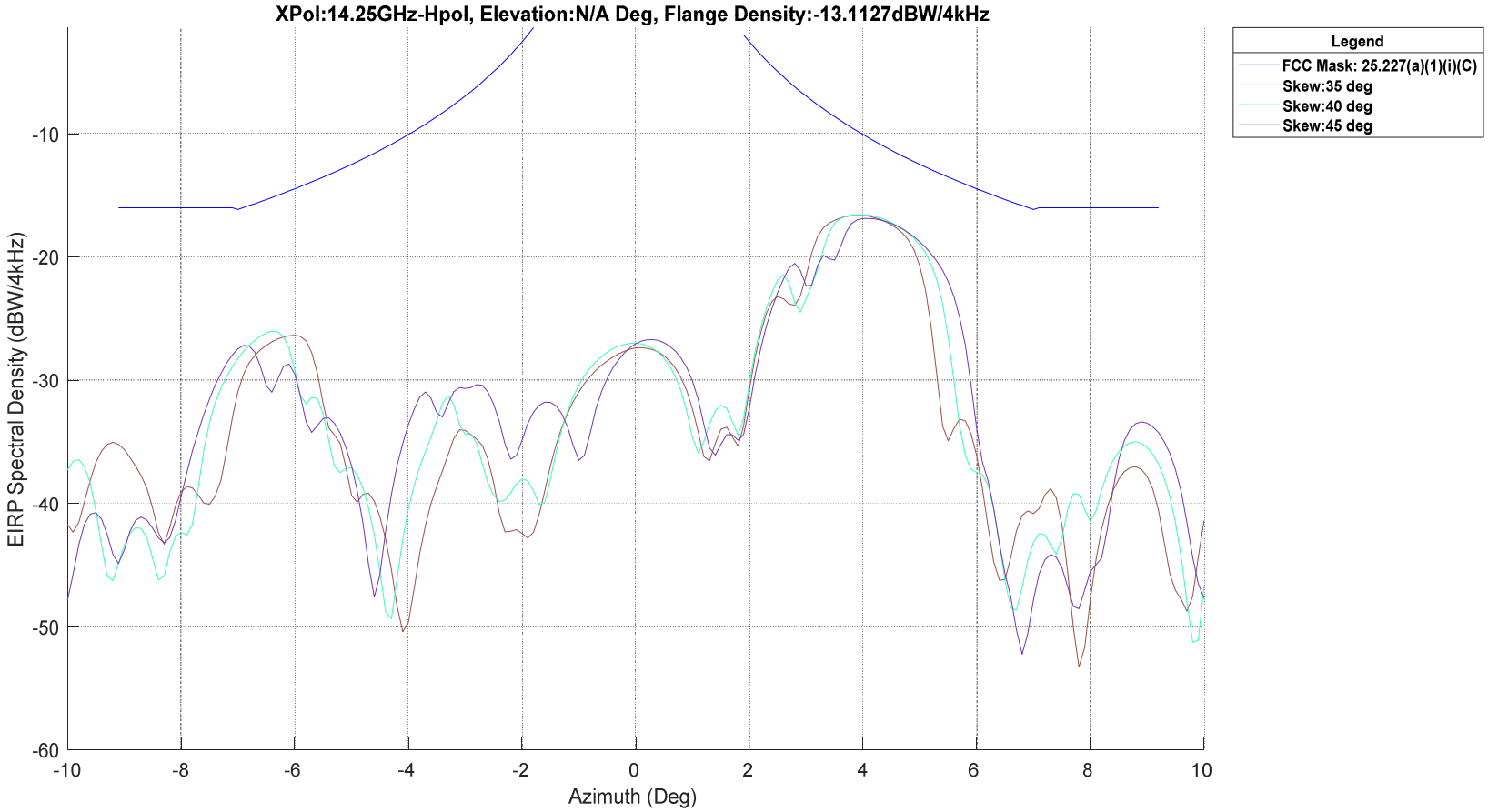
XPOL:14.00GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



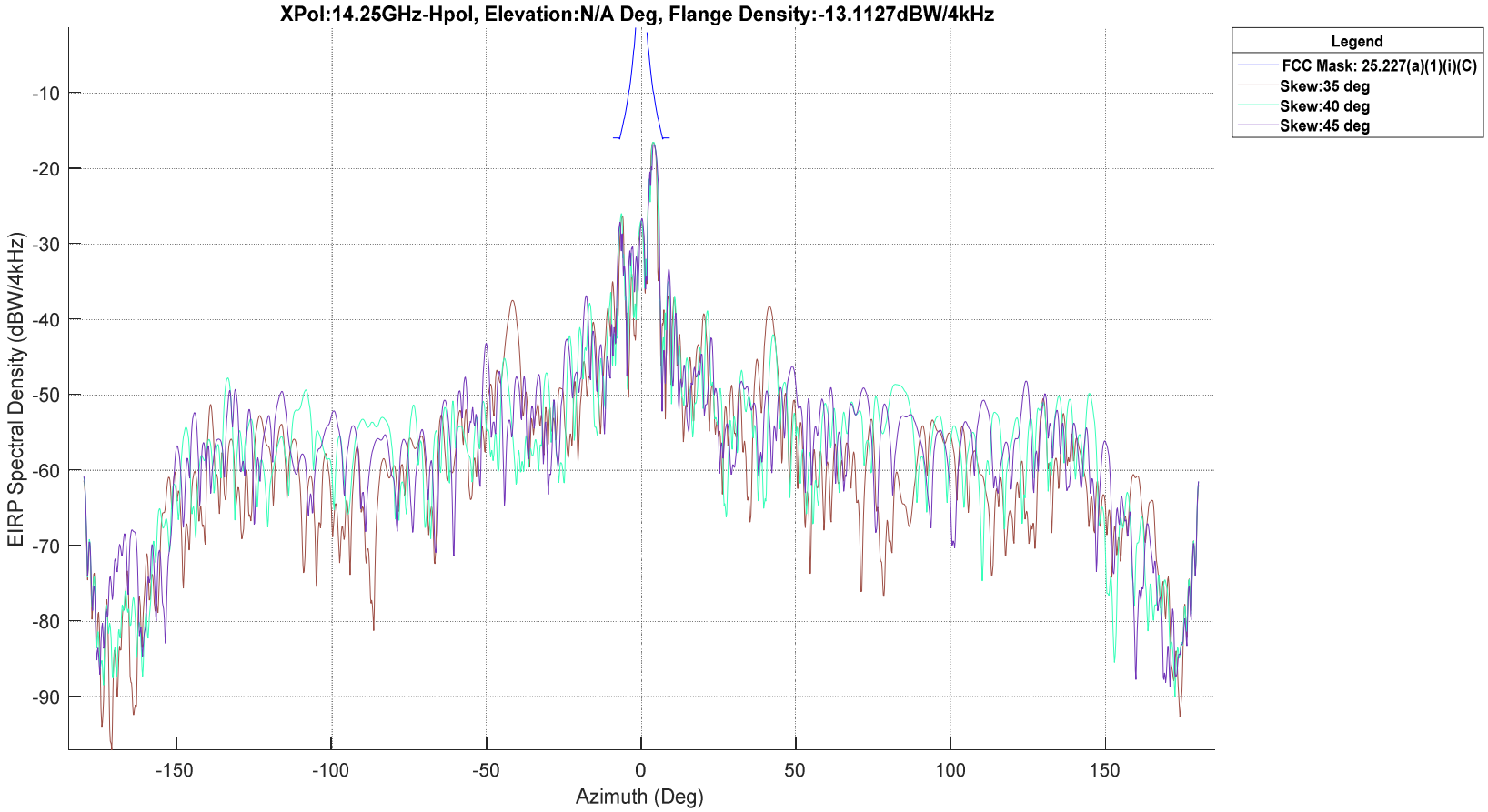
XPOL:14.00GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



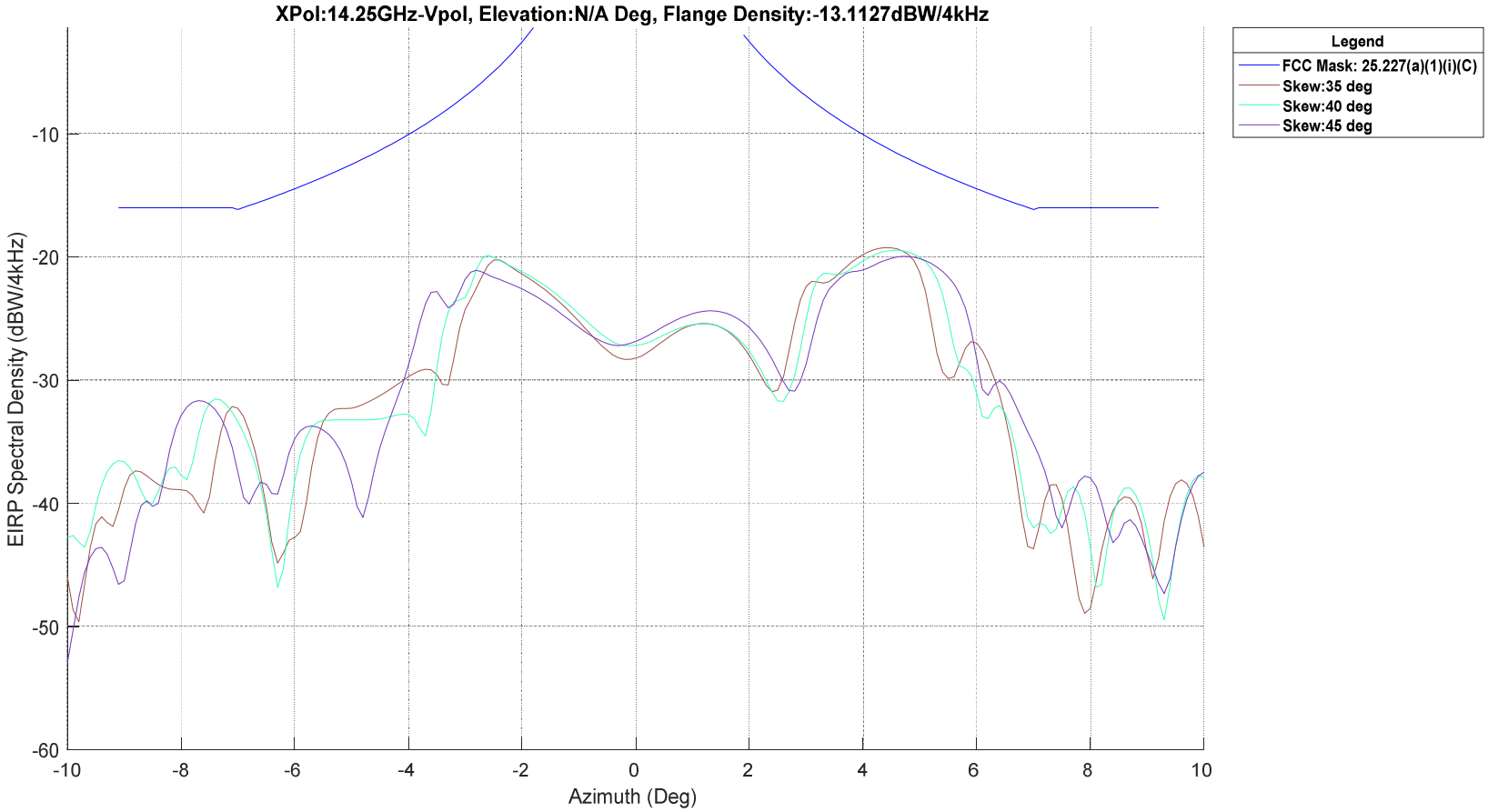
XPOL:14.25GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



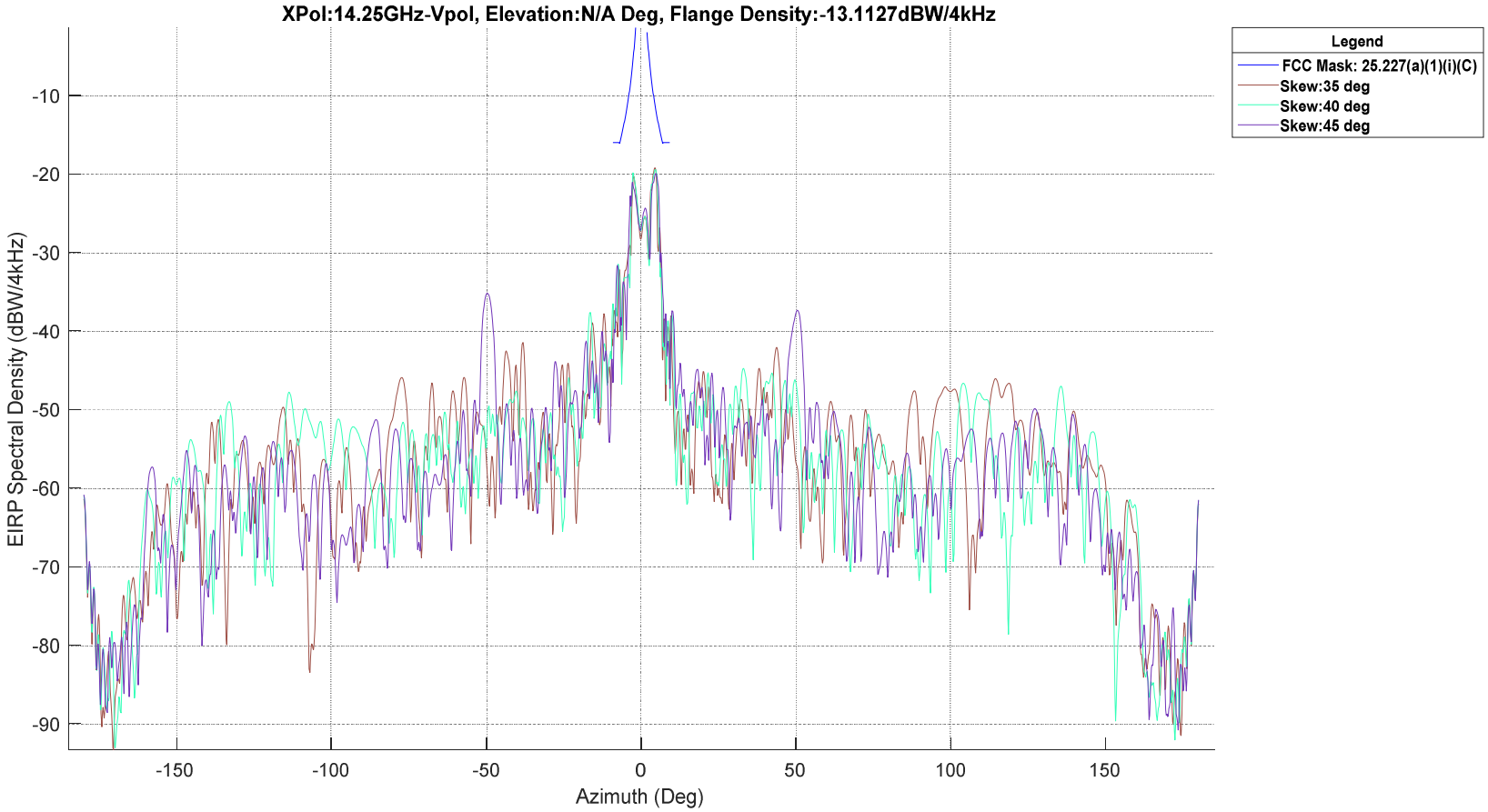
XPOL:14.25GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



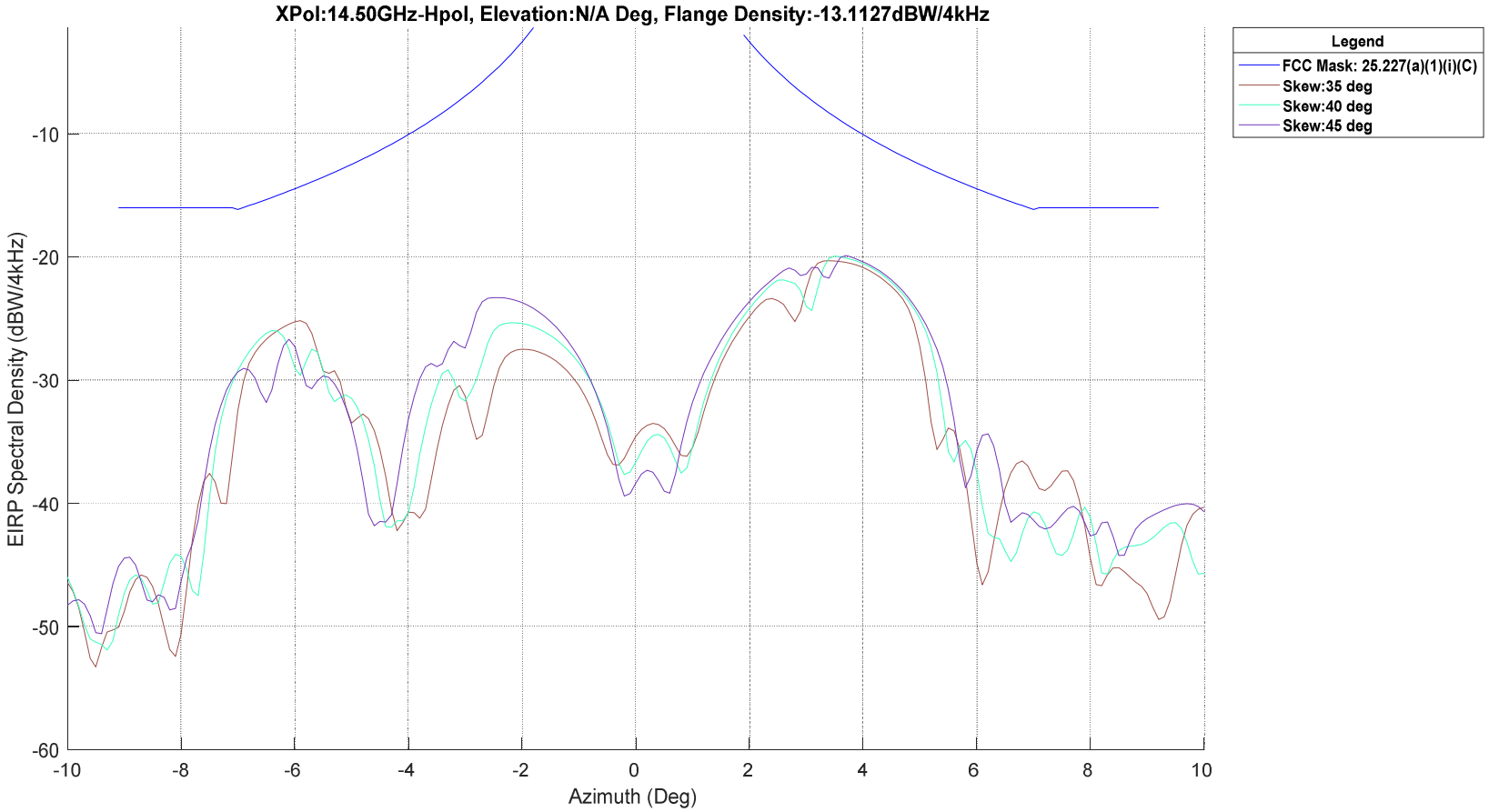
XPOL:14.25GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



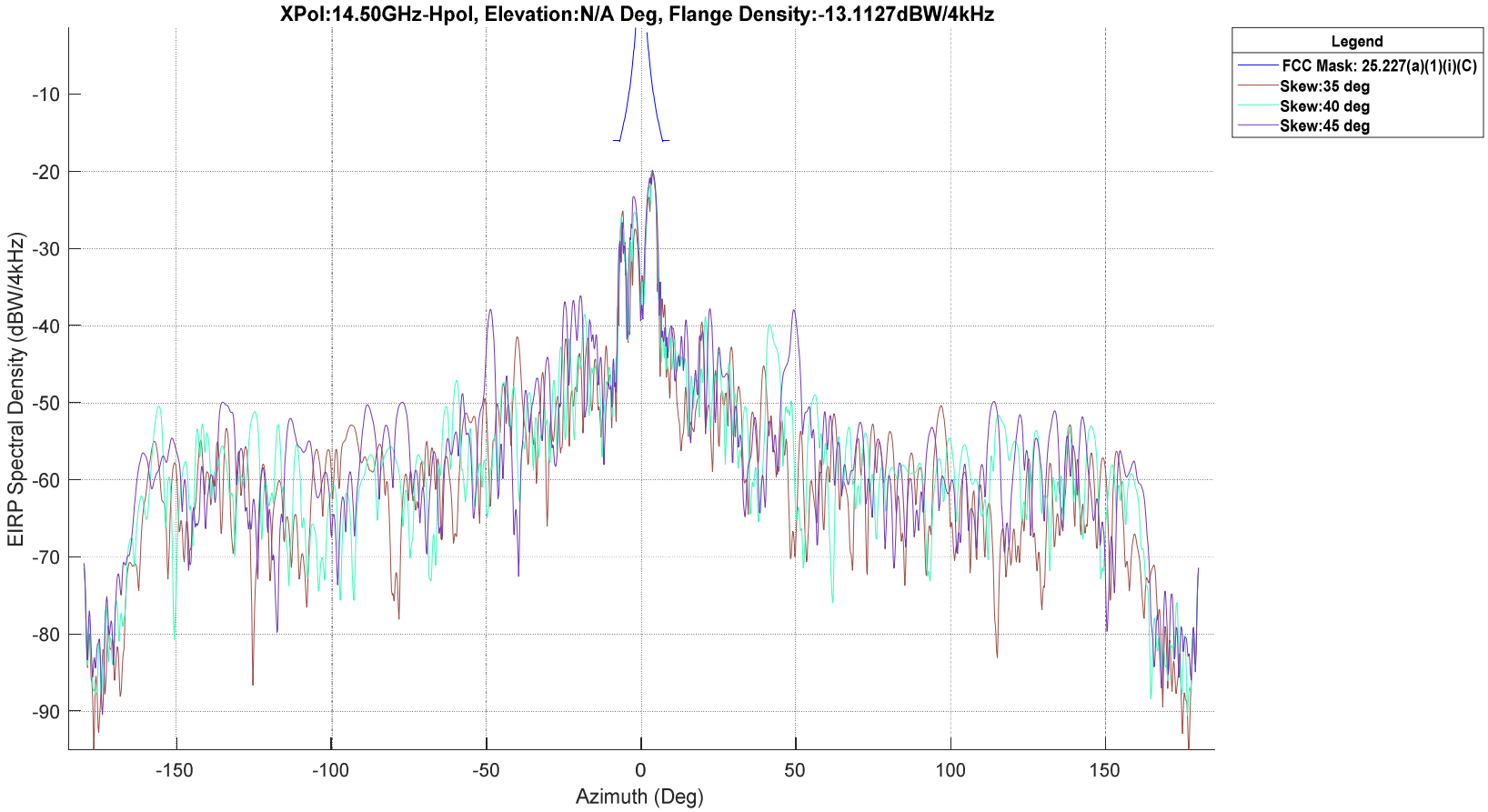
XPOL:14.25GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



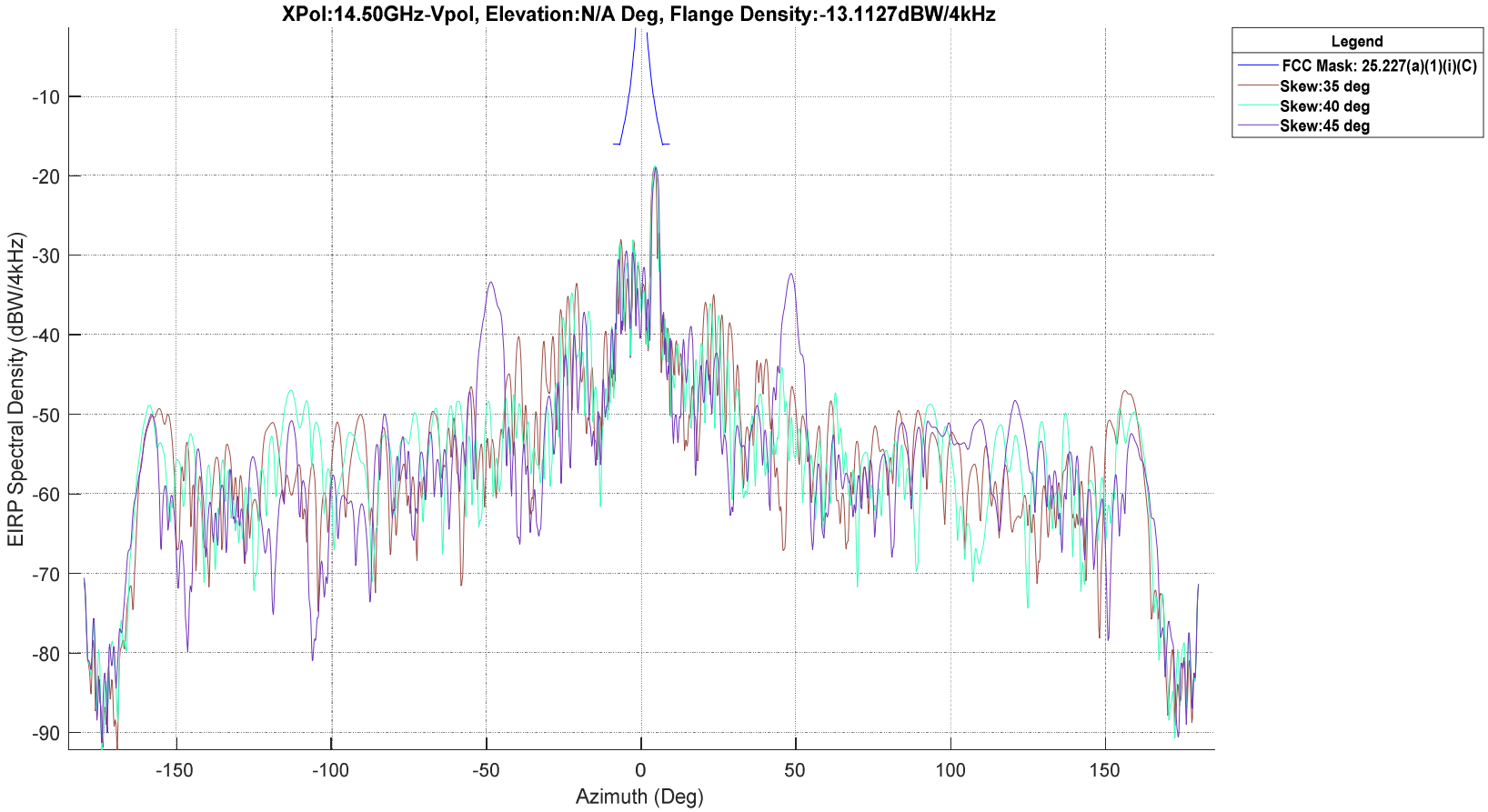
XPOL:14.50GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



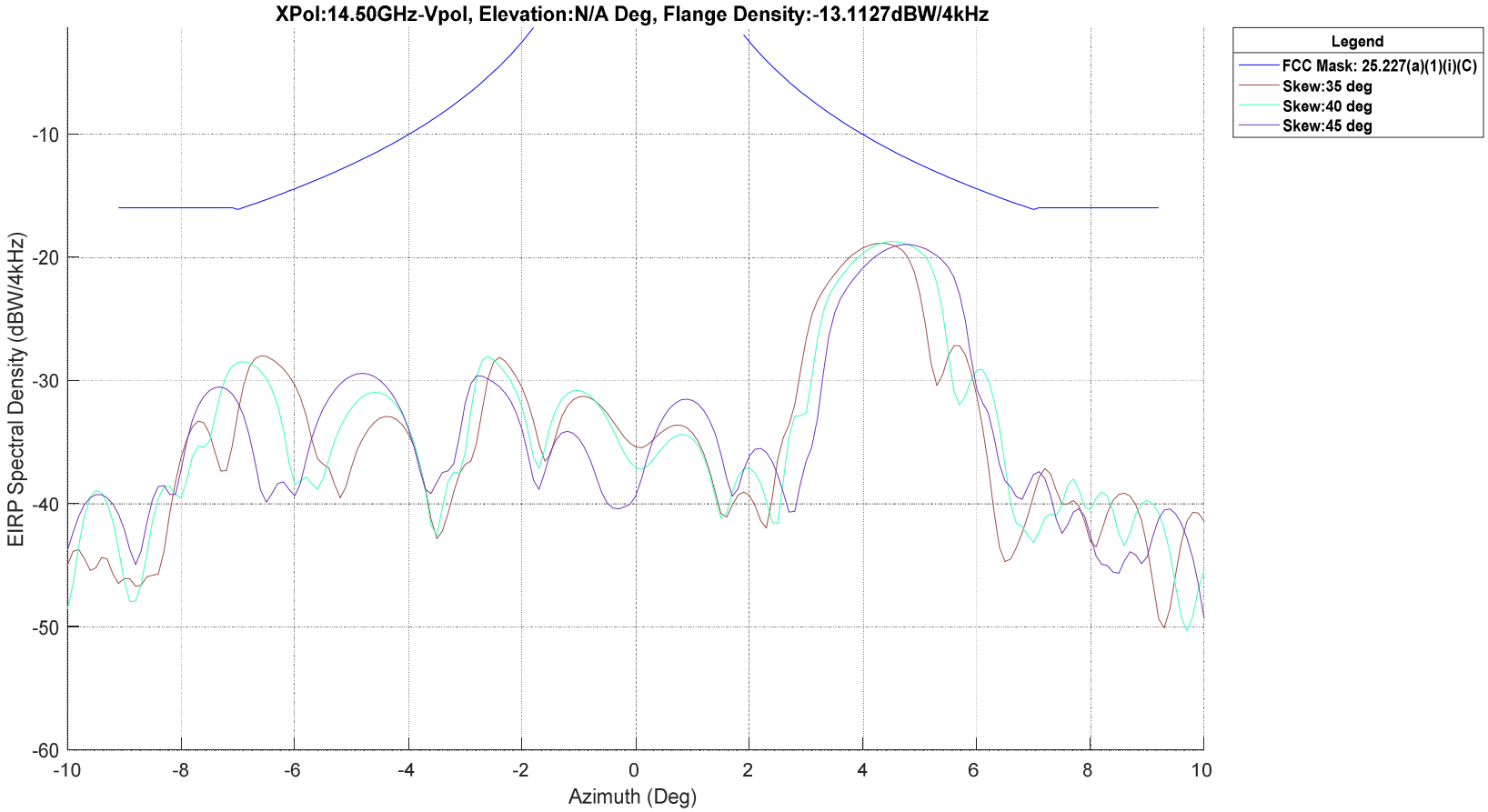
XPOL:14.50GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ



XPOL:14.50GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ

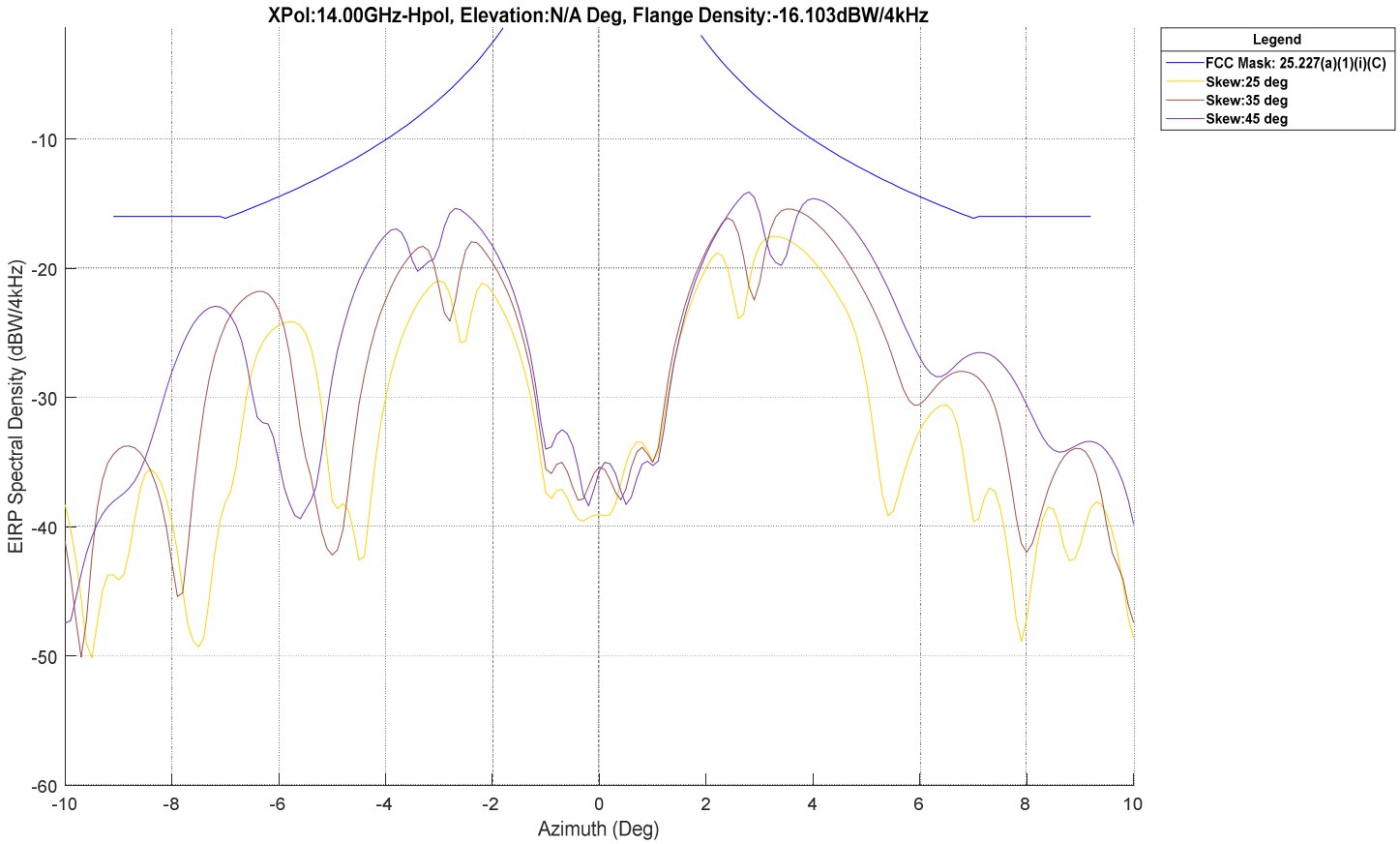


XPOL:14.50GHZ-VPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-13.1127DBW/4KHZ

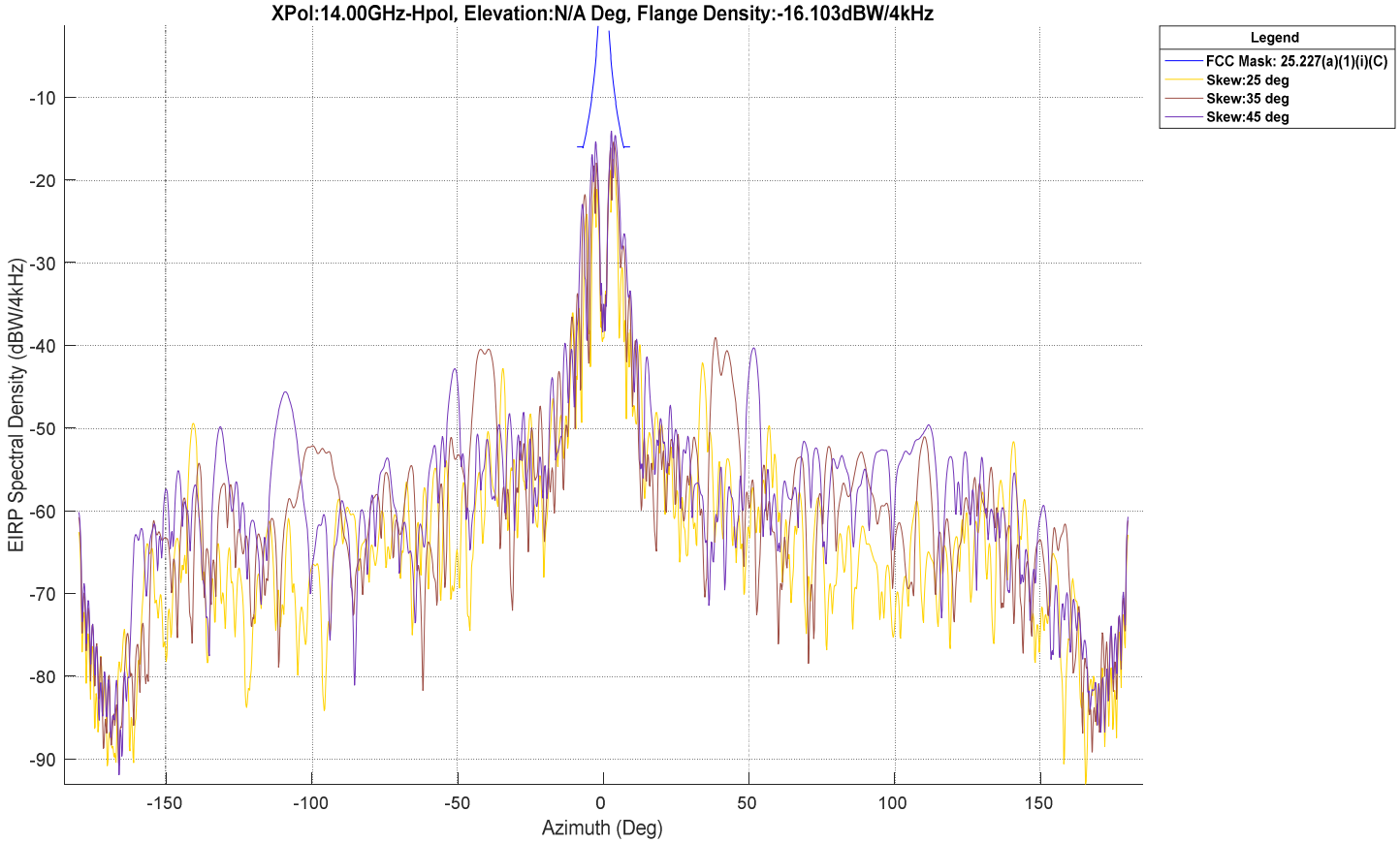


4.096 MHZ, EIRP DENSITY: 12.7 DBW/4KHZ, TX POWER: 44.0 DBM, FLANGE DENSITY: -16.1 DBW/4KHZ

XPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-16.103DBW/4KHZ



XPOL:14.00GHZ-HPOL, ELEVATION:N/A DEG, FLANGE DENSITY:-16.103DBW/4KHZ



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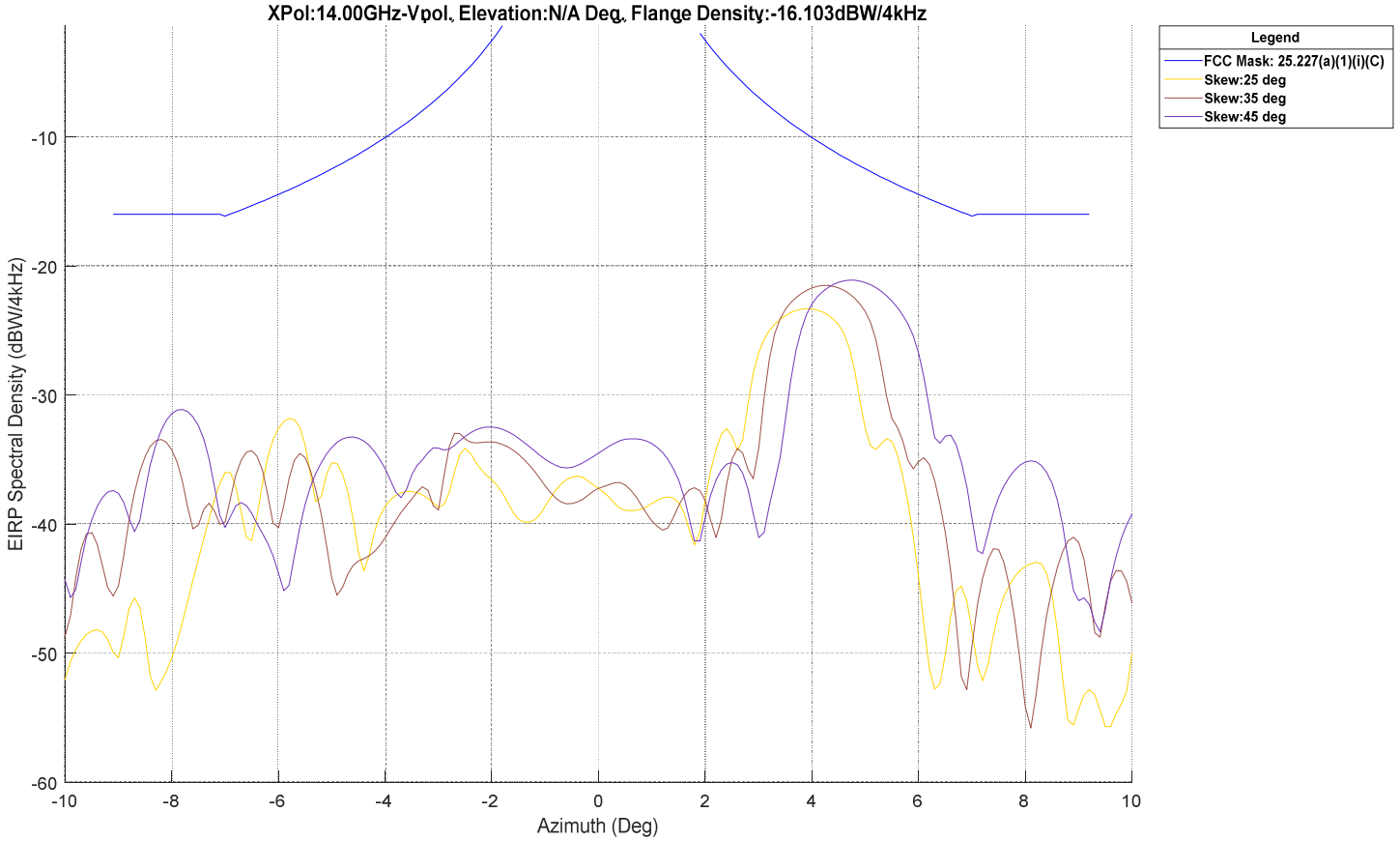

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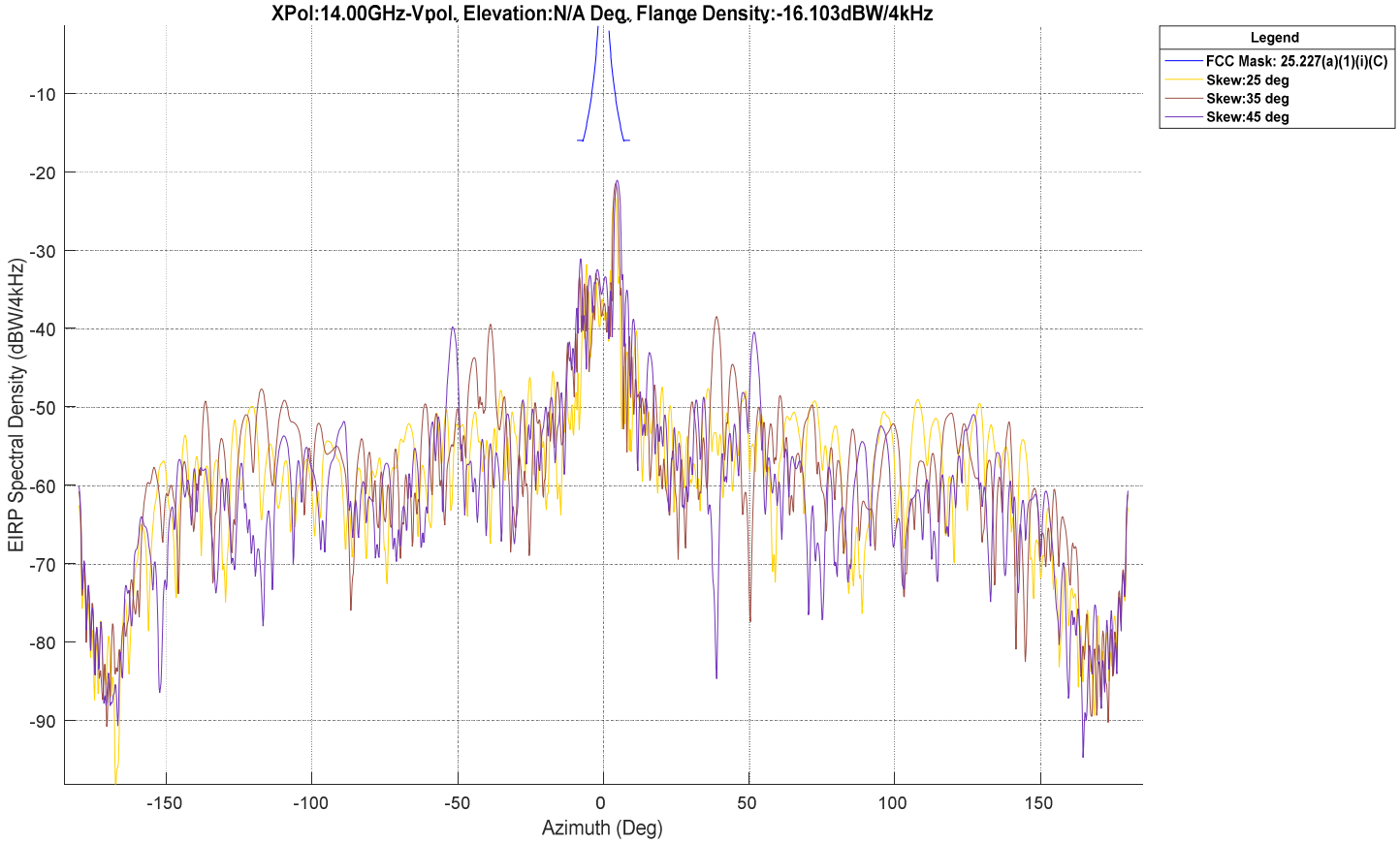

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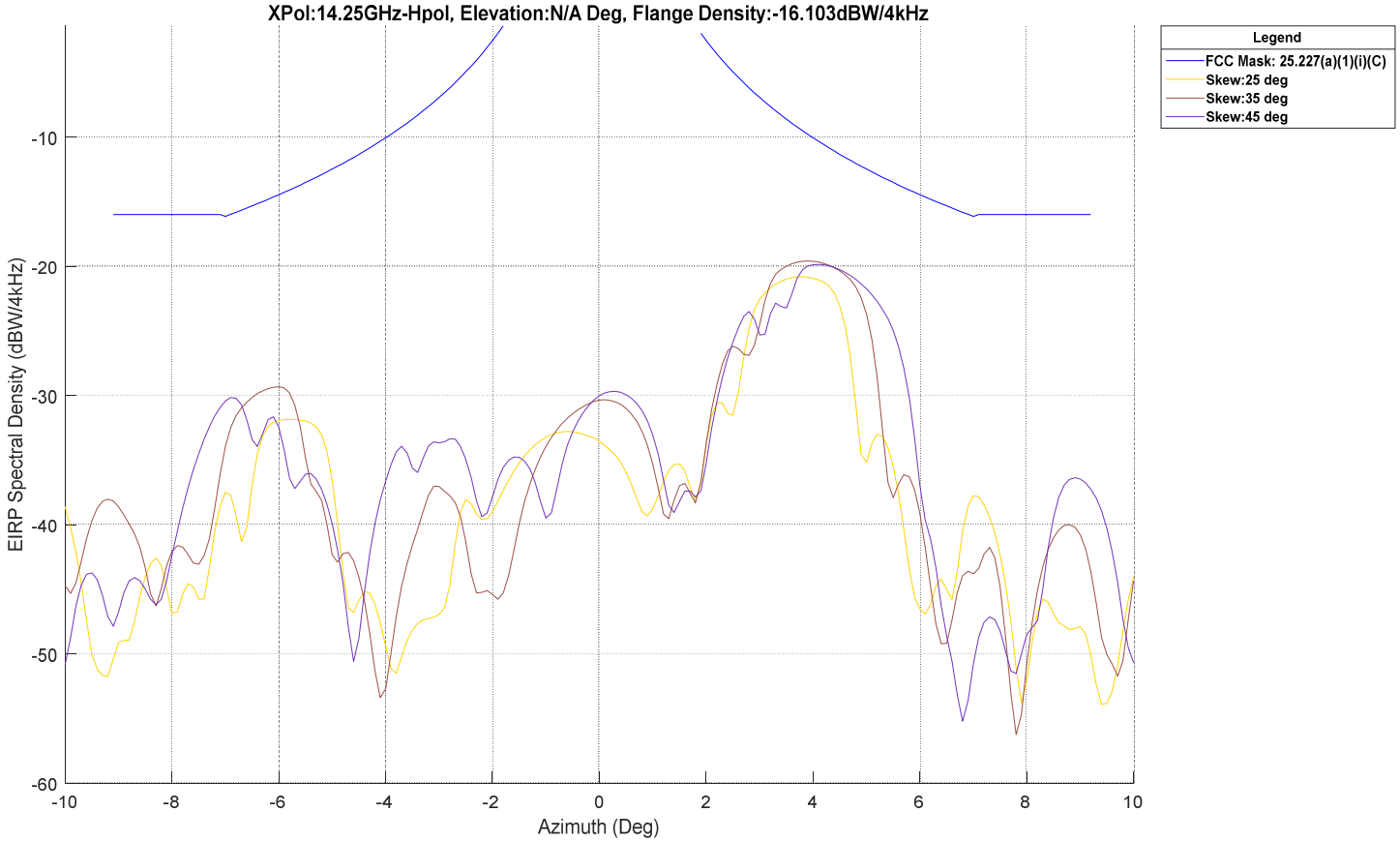

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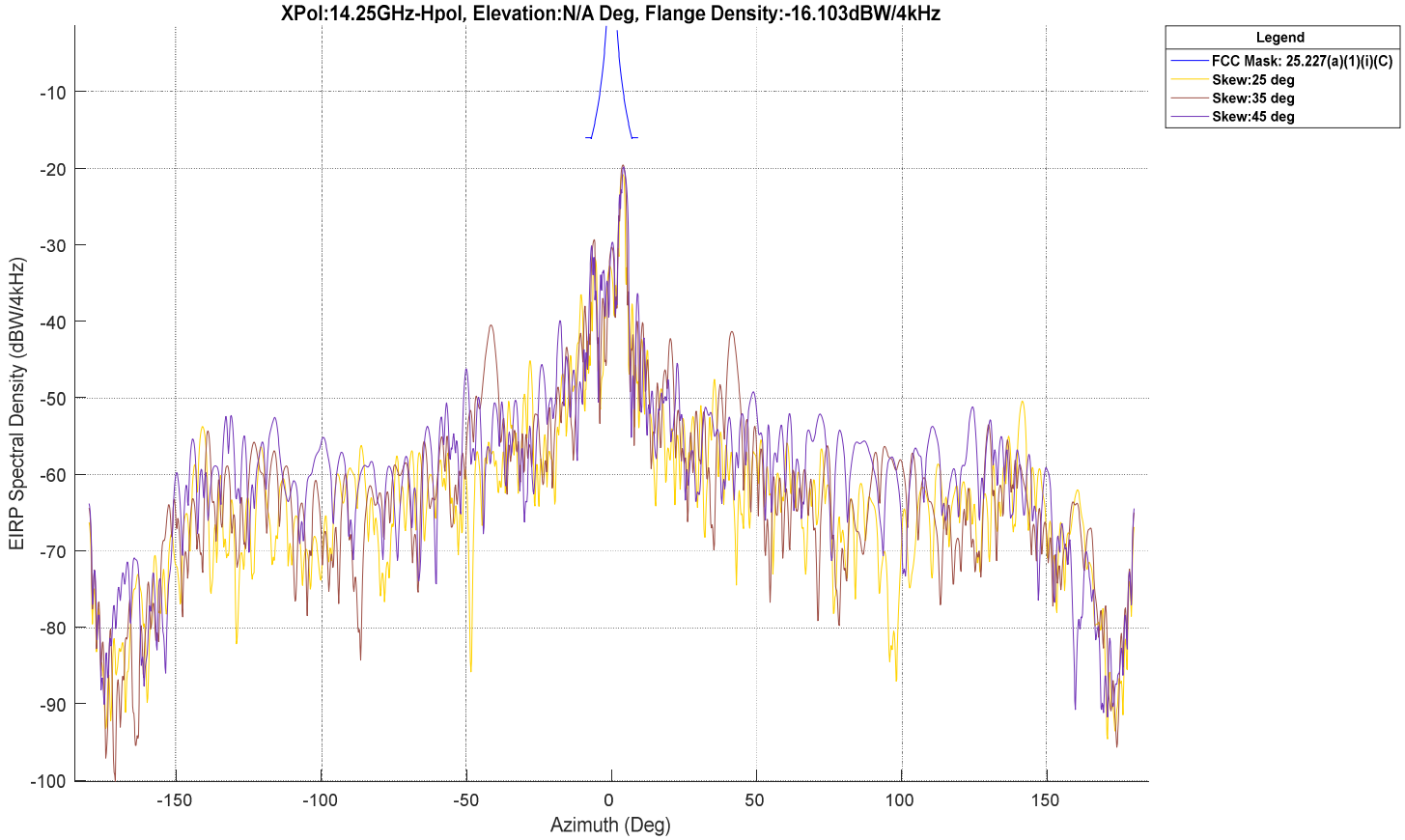

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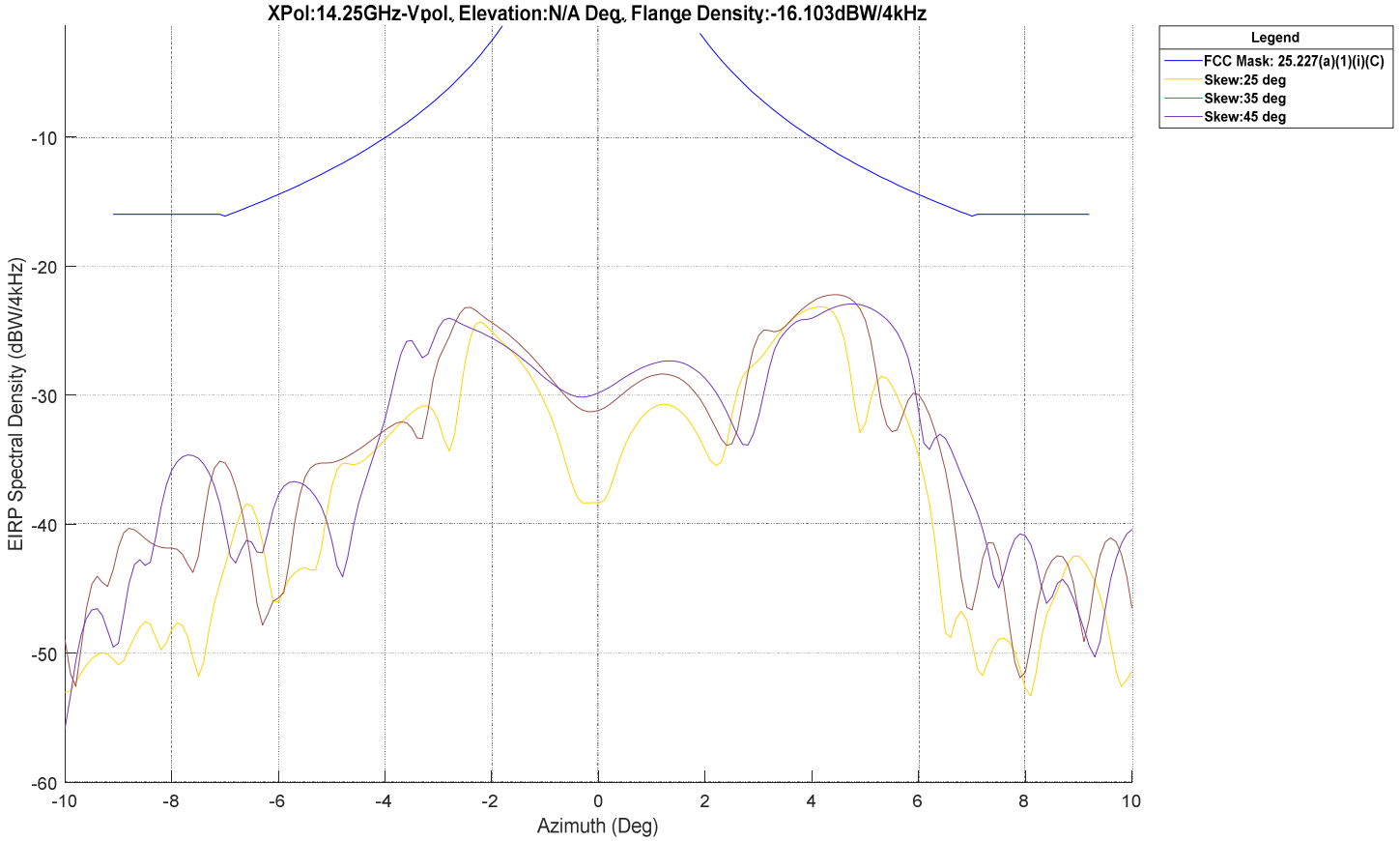

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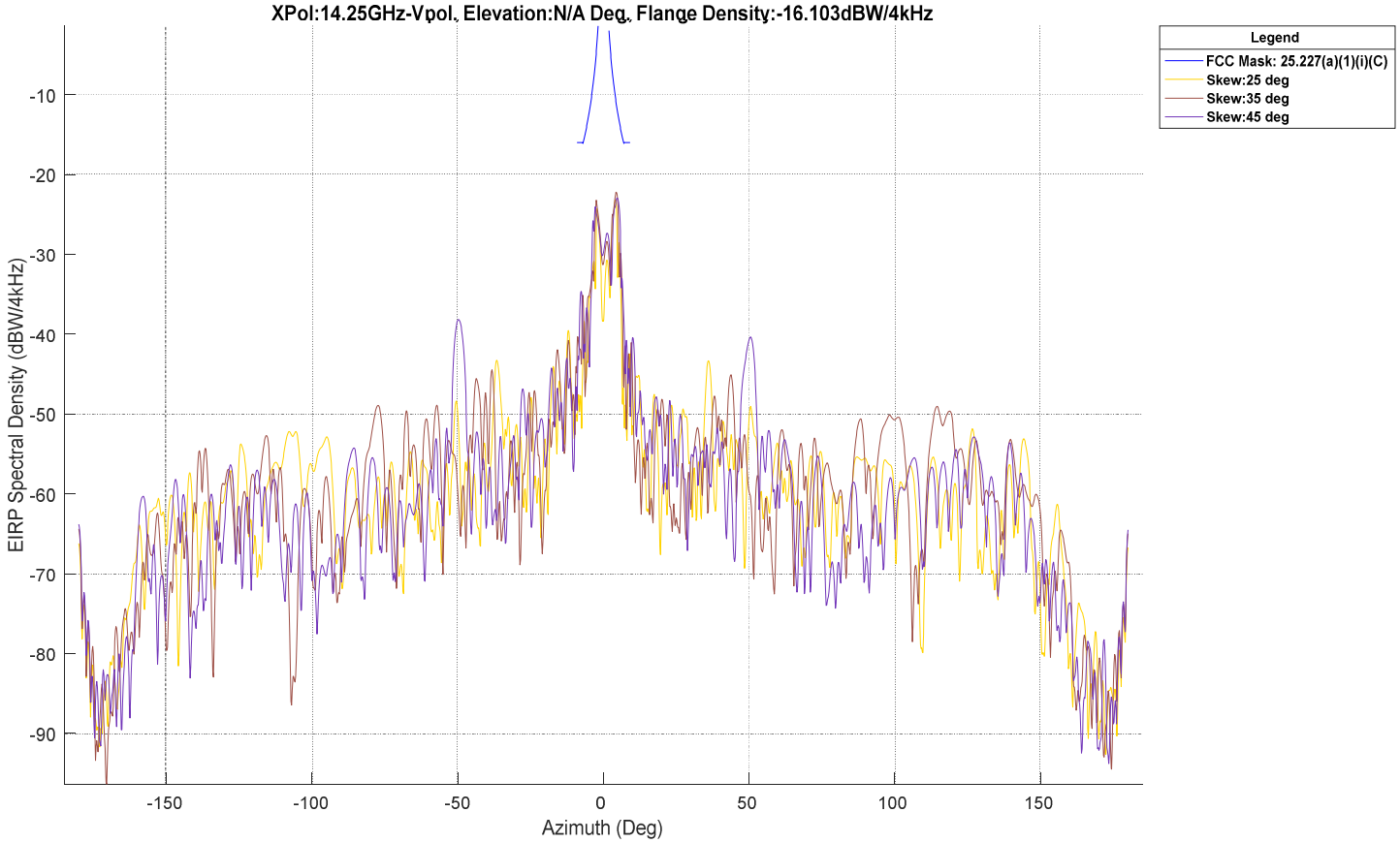

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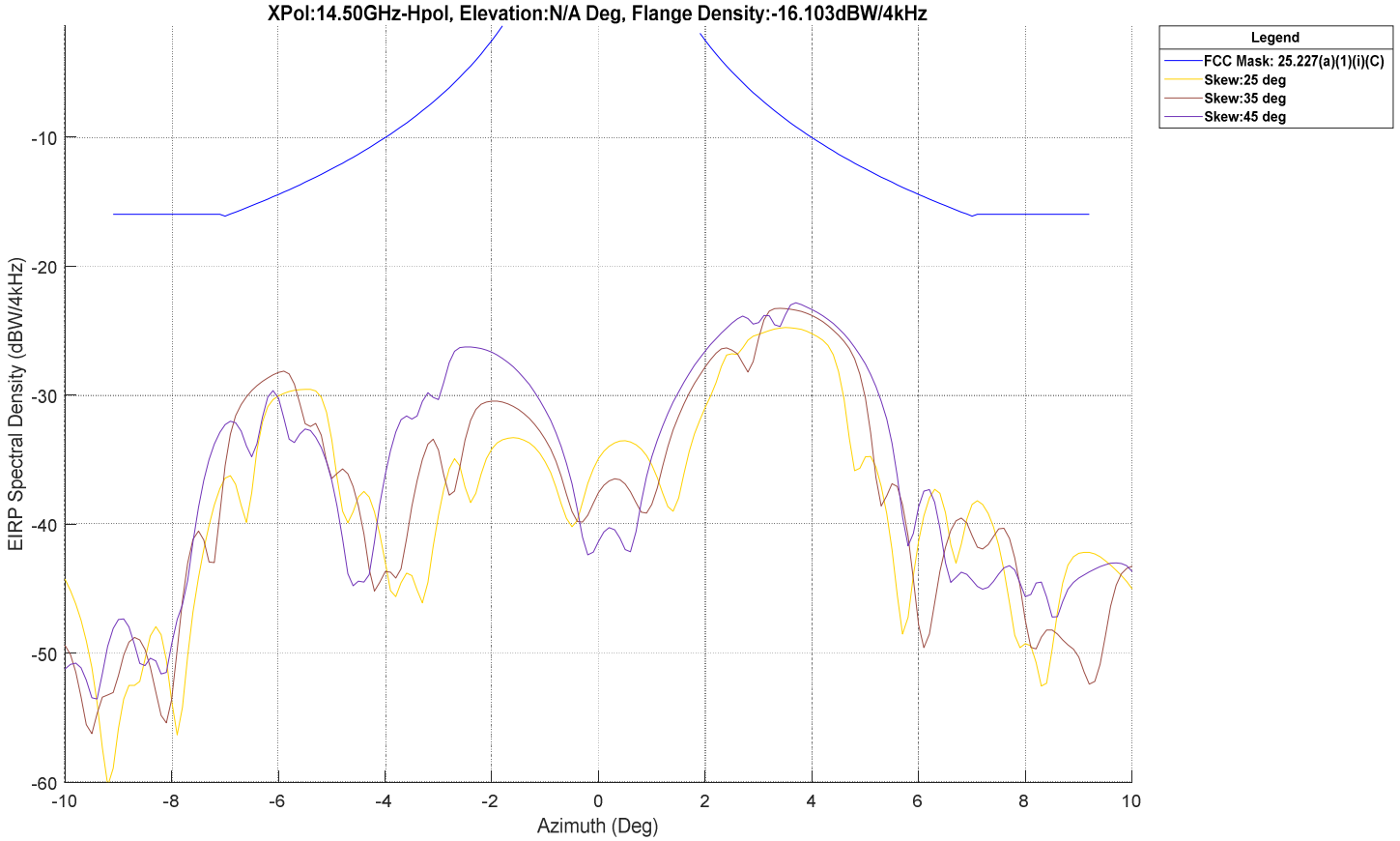

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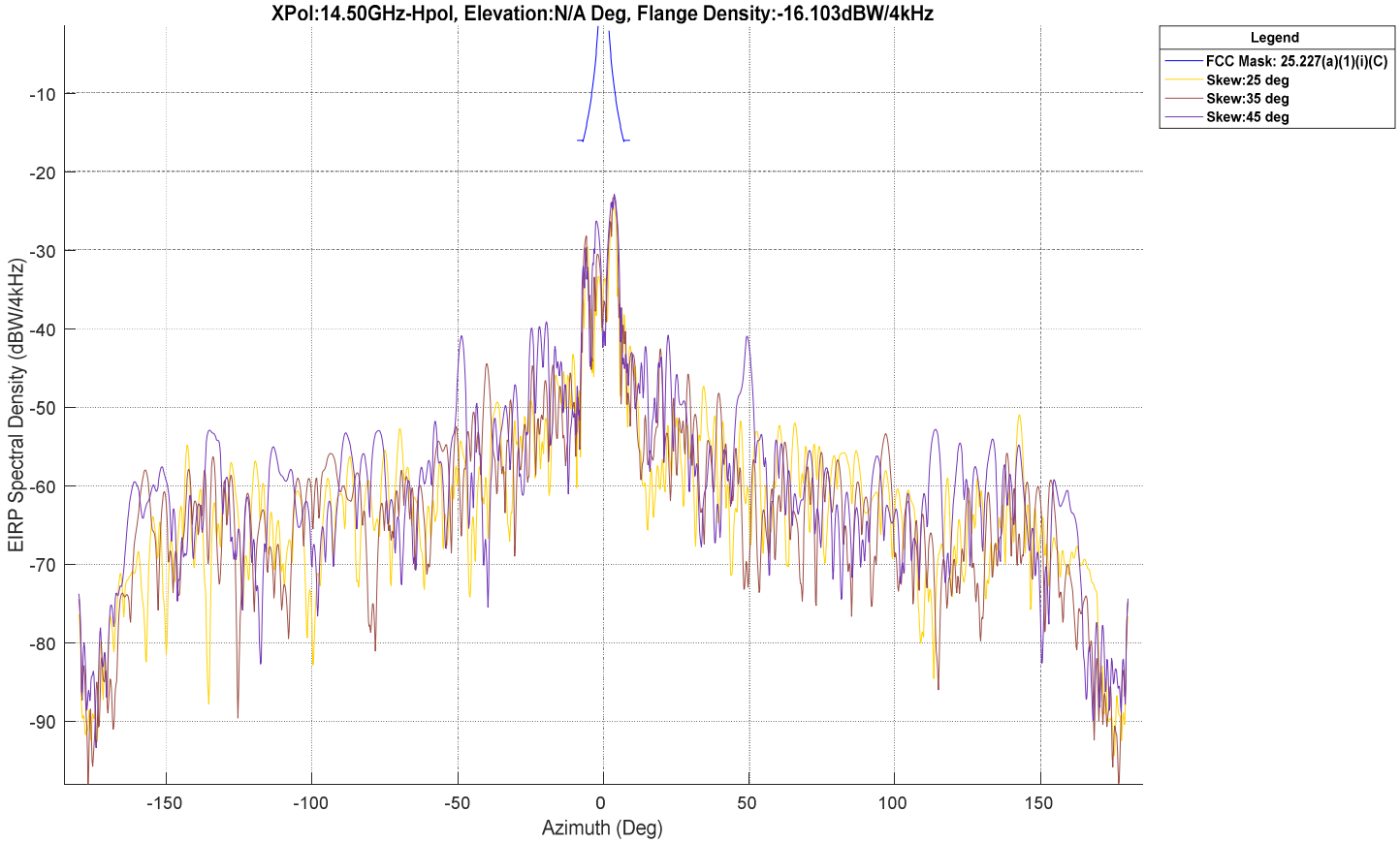

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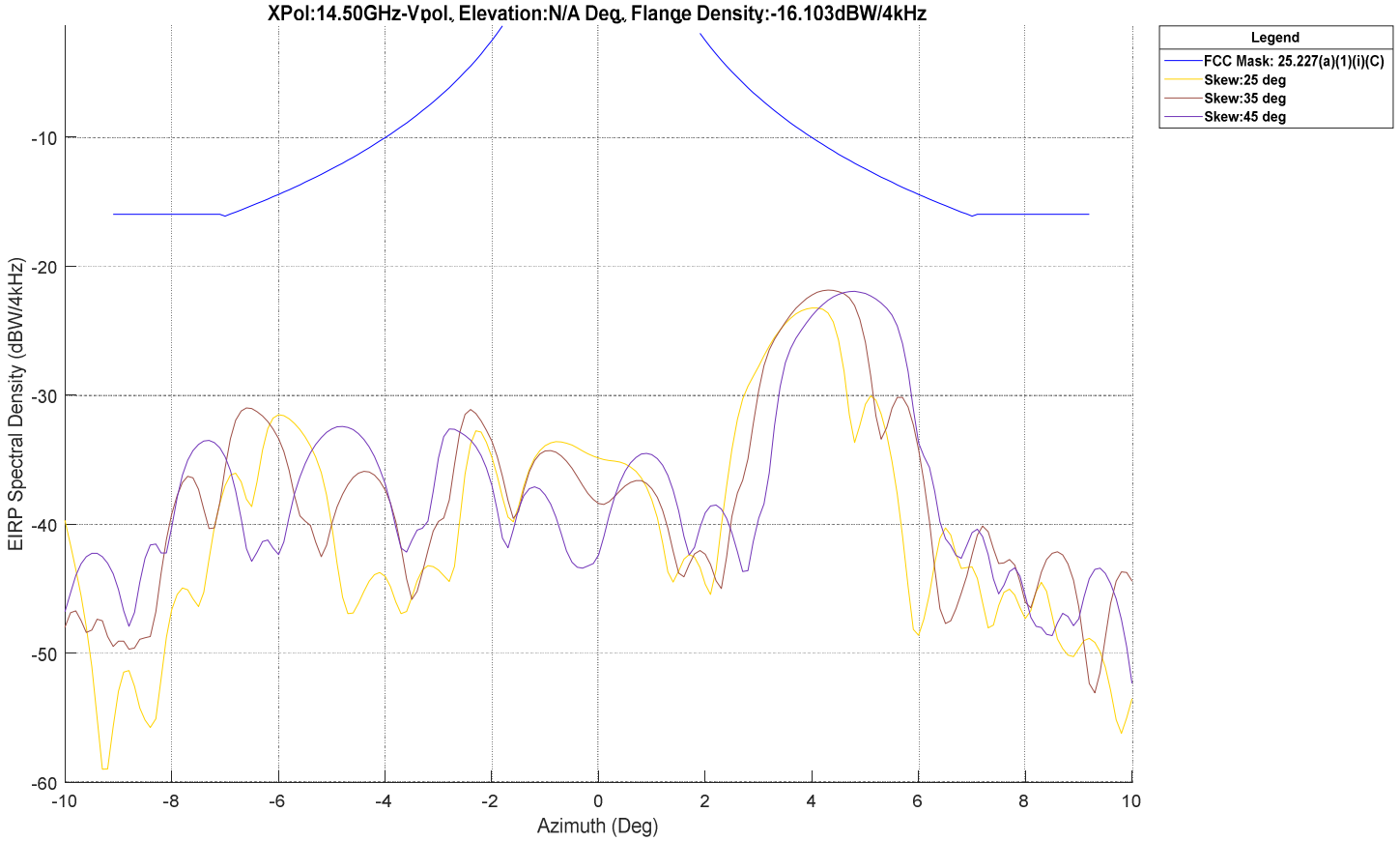

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