



ShenZhen Huaxinwei communication technology
Co.,Ltd.

Antenna test report

Customer Name: XunRui

Project Name: M9902A

Designer: Li Jun xian

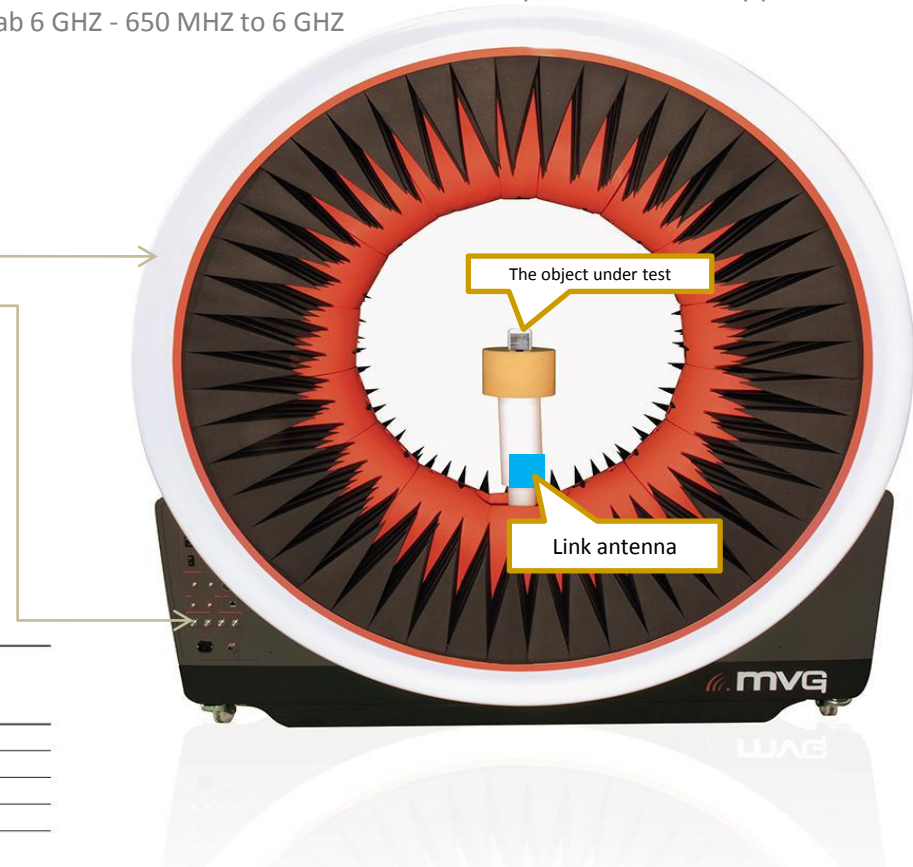
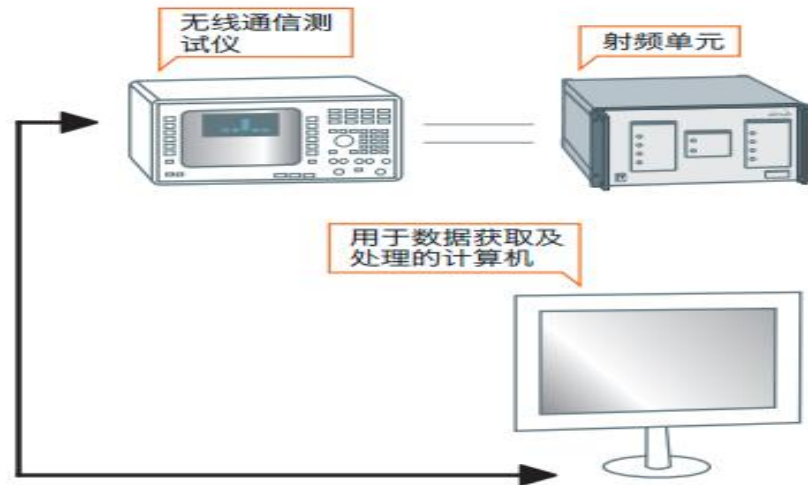
Date: 2023/11/08



The customer name		XunRui	Project Name	M9902A
NO.	project	Detailed above		
1	spectrum	GSM850/900/1800/1900+BC0/BC1/BC10 +WCDMA-B1/2/4/5/8+LTE-B1/2/3/4/5/7/8/12/17/18/19/20/25/26/28/66/38/40/41+GPS/WIFI/BT		
2	Project type	The mobile phone		
3	Antenna space area			
4	Feed point type			
5	The sensitivity			
6	Type of antenna			
7	The length of the PCB board			
8	note	Debugging prototype		
RF		Li Jun xian	1820807601	

1、 Test system and test equipment

System Brand: MVG(SATIMO) measurement features: gain • pattern beamwidth cross polarization resolution sidelobe level 3D cavity reflectance at any polarization cavity reflectance (line or arc) antenna efficiency TRP, TIS, EIRP and EIS. Frequency band: StarLab 6 GHz - 650 MHz to 6 GHz



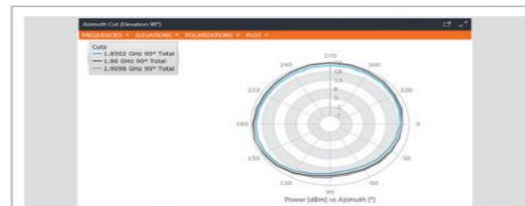
TIS预计测量时间 (一个信道每隔30° 取样)

灵敏度算法 \ 标准	GSM GPRS EDGE	CDMA 1 x RTT 1 x EvDO	WCDMA HSDPA LTE FDD/TDD	Wi-Fi 802.11 a/b/g/n	CTIA 批准方法
RSSI模式+线性化+TIS补偿	8 min		10 min		是
EIS模式+TIS补偿		5 min		5 min	是 ²
快速CDMA		8 min			No
EIRP模式+TIS补偿				10 min	No

1、根据RTC
2、根据协议

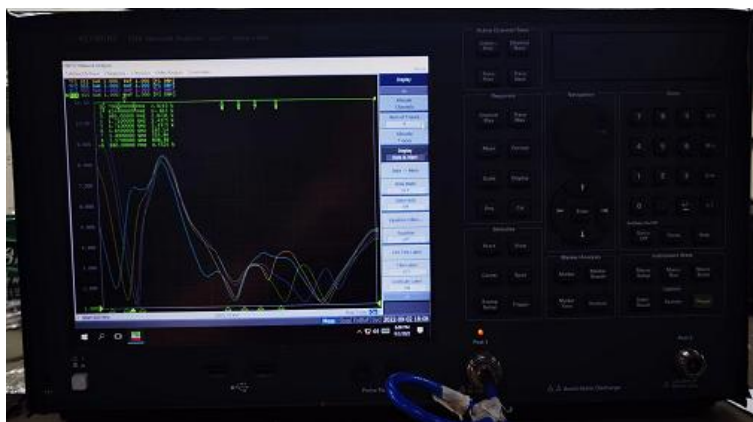


TIS 3D方位切割强度图



TRP 3D方位切割强度图

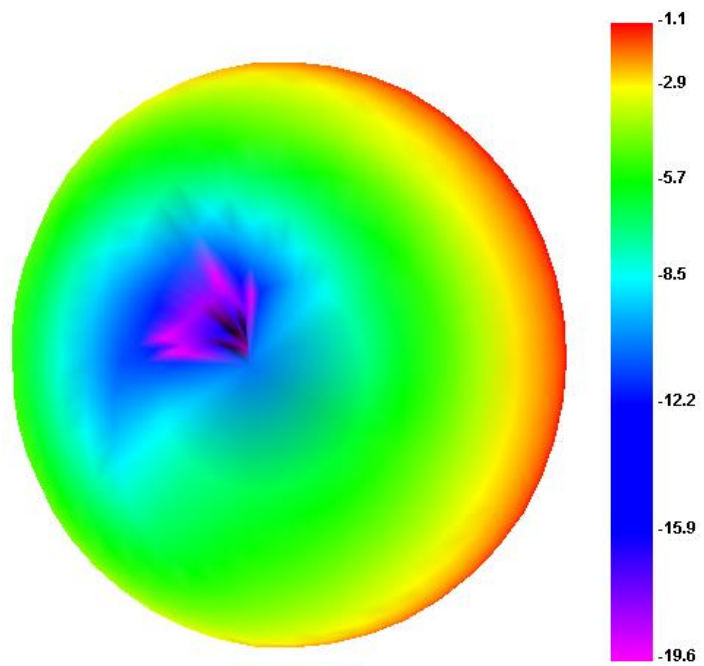
Test Equipment



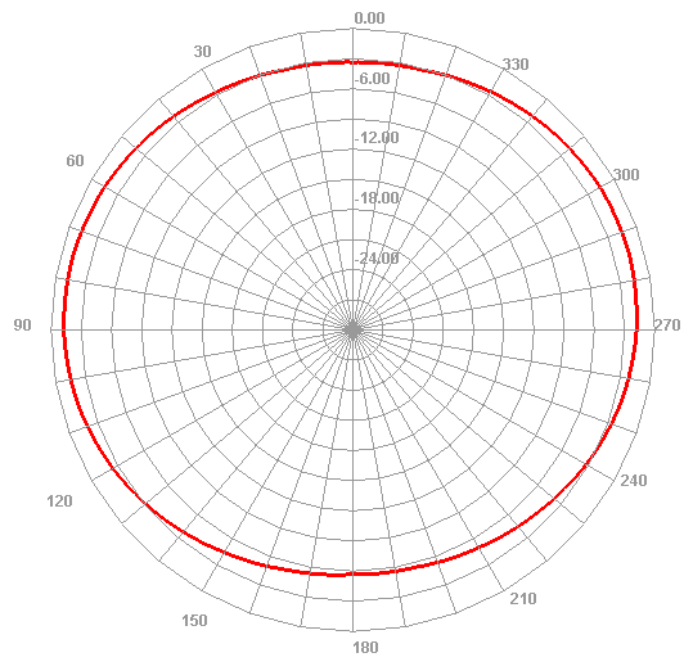
Efficient (2G+3G+4G+2. 4G-WiFi /BT)

PEAK GAIN			
2G:	Frequency range	Effi %	Gaim dBi
GSM850	824~894Mhz	21.80	-1.29
GSM900	880~960Mhz	20.84	-1.1
DCS1800	1710~1880Mhz	32.62	1.58
PCS1900	1850~1990Mhz	34.81	1.83
CDMA:			
BC0	815~894Mhz	21.80	-1.29
BC1	1850~1990Mhz	34.81	1.83
BC10	806~940Mhz	21.80	-1.29
3G:			
W1	1920~2170Mhz	32.85	1.55
W2	1850~1990Mhz	34.81	1.83
W4	1710~2155Mhz	32.37	1.58
W5	824~894Mhz	21.80	-1.29
W8	880~960Mhz	20.84	-1.1
4G:			
LTE-B1	1920~2170Mhz	32.85	1.55
LTE-B2	1850~1990Mhz	34.81	1.83
LTE-B3	1710~1880Mhz	32.62	1.58
LTE-B4	1710~2155Mhz	32.07	1.58
LTE-B5	824~894Mhz	21.80	-1.29
LTE-B7	2500~2690Mhz	26.01	0.94
LTE-B8	880~960Mhz	20.84	-1.1
LTE-B12	698~746Mhz	19.03	-1.58
LTE-B17	704~746Mhz	19.04	-1.58
LTE-B18	815~875Mhz	21.80	-1.29
LTE-B19	830~890Mhz	21.80	-1.29
LTE-B20	791~862Mhz	21.84	-1.29
LTE-B25	1850~1995Mhz	34.81	-1.58
LTE-B26	814~894Mhz	21.8	1.58
LTE-B28	708~798Mhz	19.05	-1.58
LTE-B66	1710~2170Mhz	32.62	1.58
LTE-B38	2570~2620Mhz	28.02	0.94
LTE-B40	2300~2400Mhz	27.21	1.38
LTE-B41	2500~2690Mhz	26.03	0.94
2. 4G-WIFI	2400~2500Mhz	35.52	1.01
5G WIFI	5000~5800Mhz	28.88	-1.19
BT	2400~2500Mhz	36.51	1.01
GPS	1575Mhz	36.73	1.23

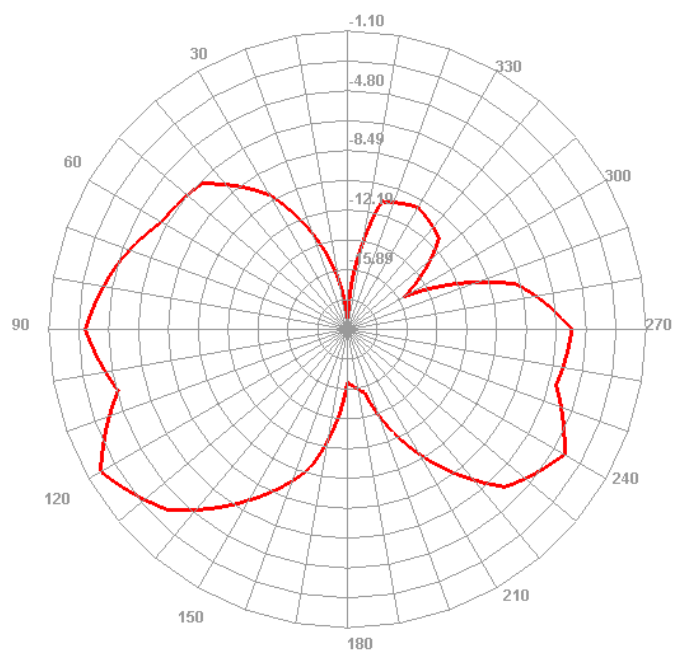
GSM 900



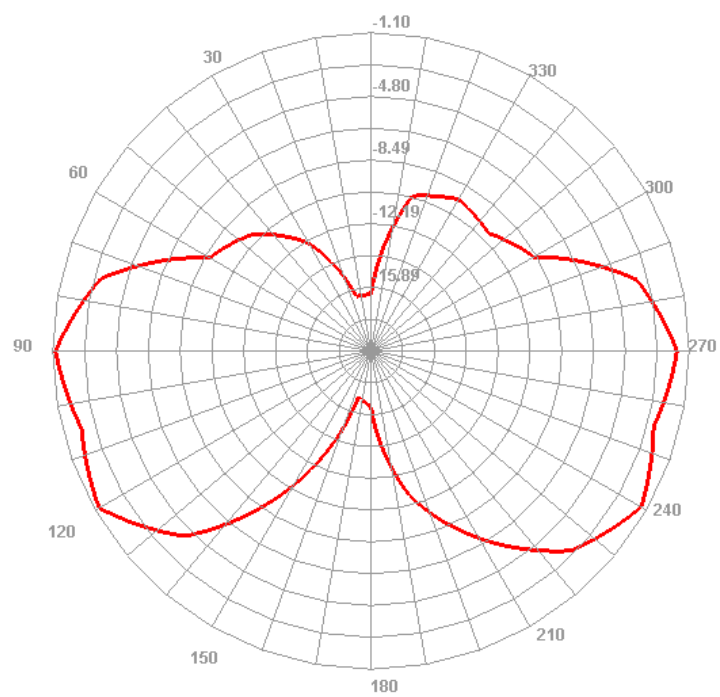
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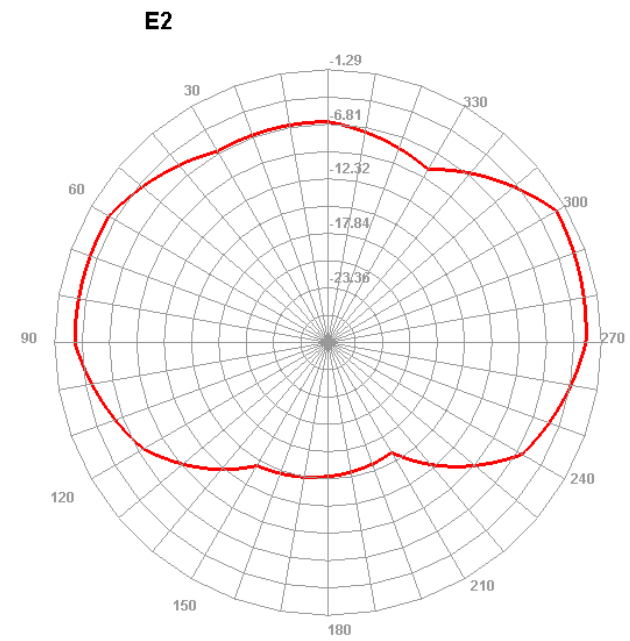
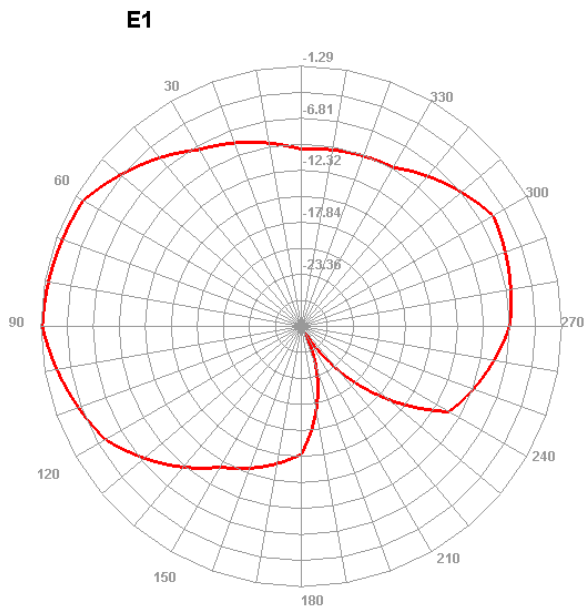
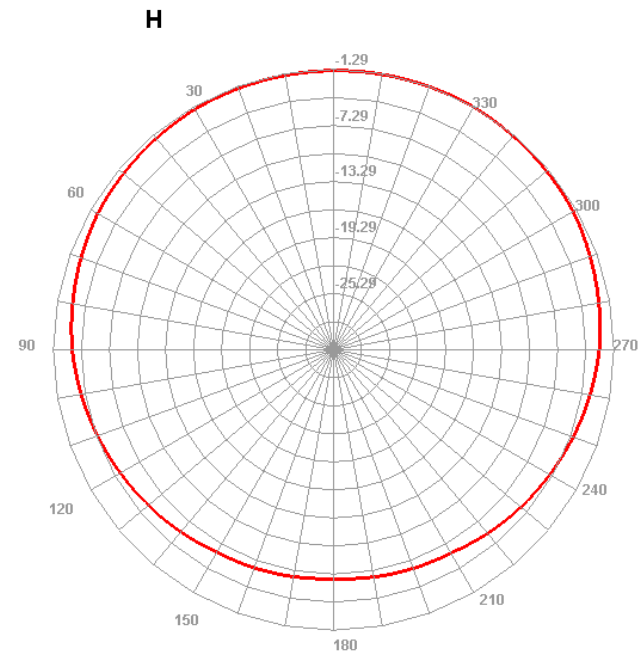
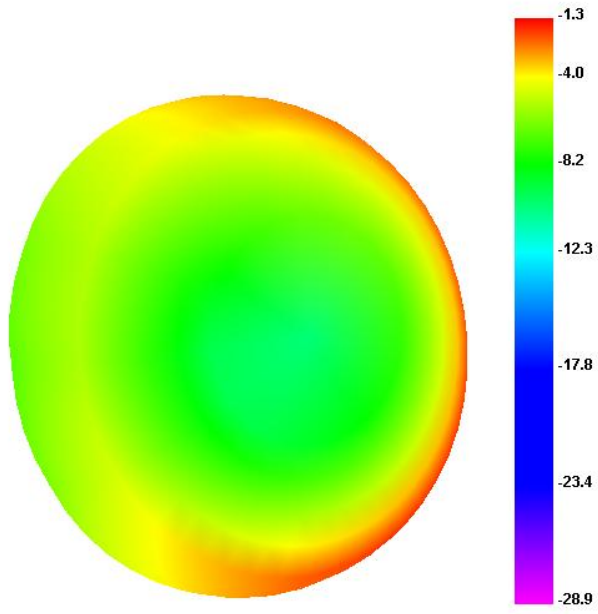
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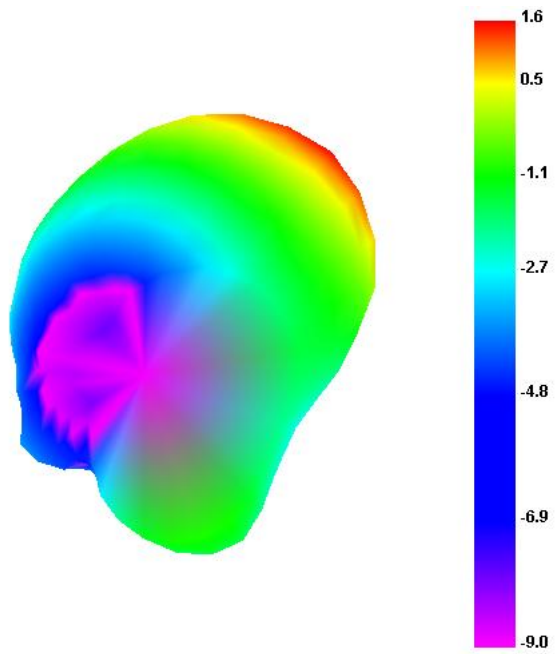
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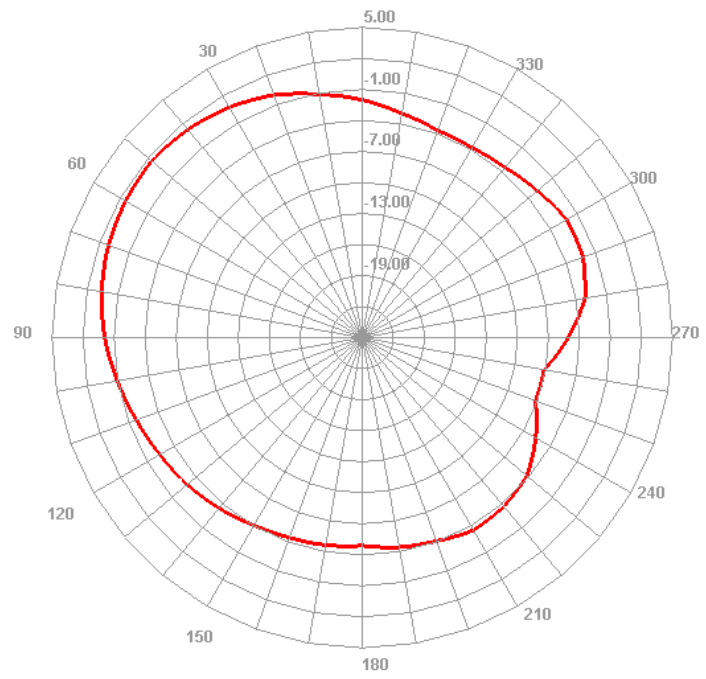
GSM 850



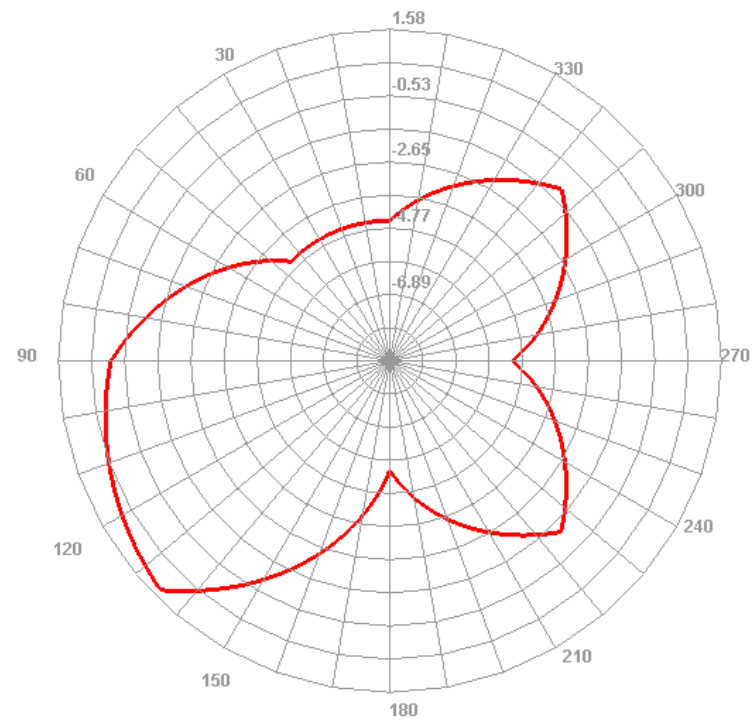
DCS1800



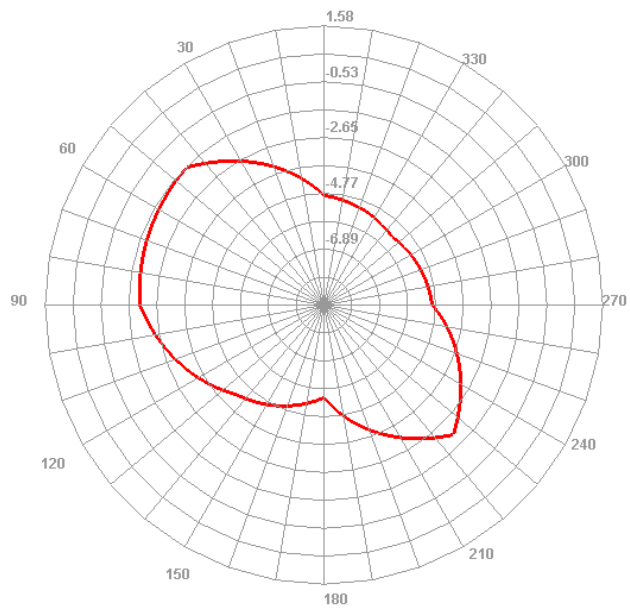
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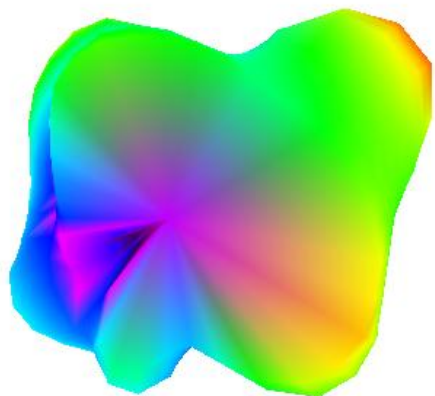
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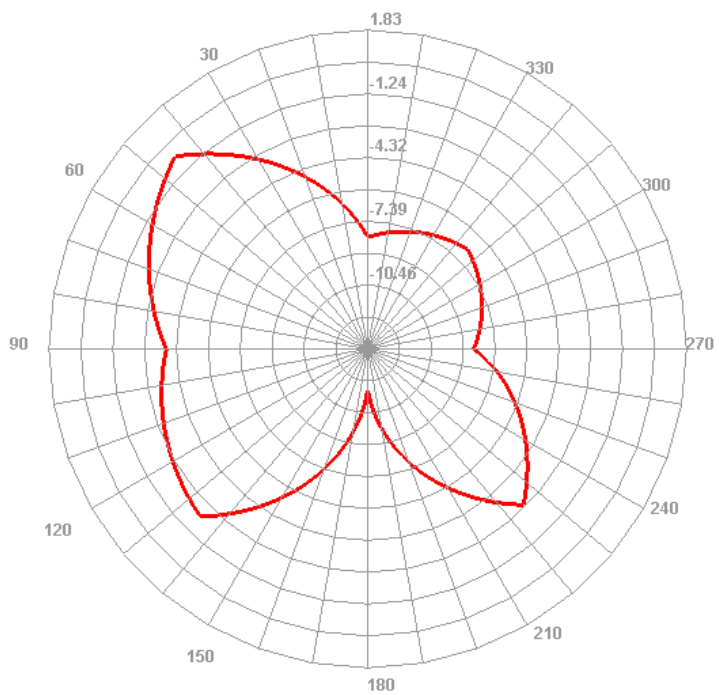
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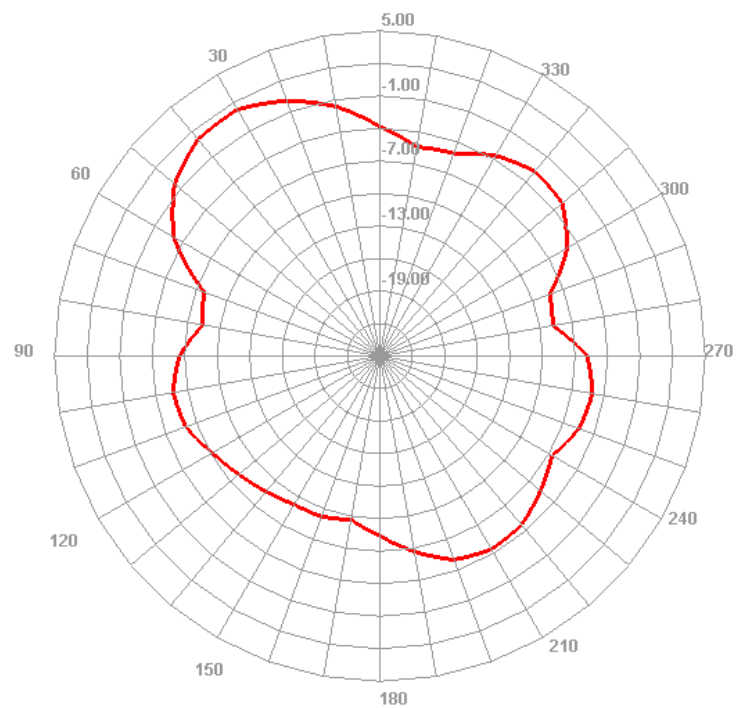
PCS1900



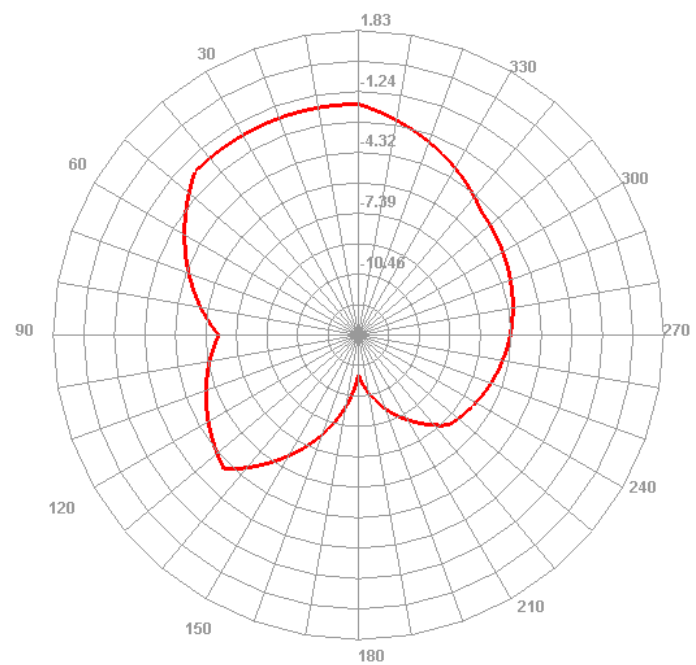
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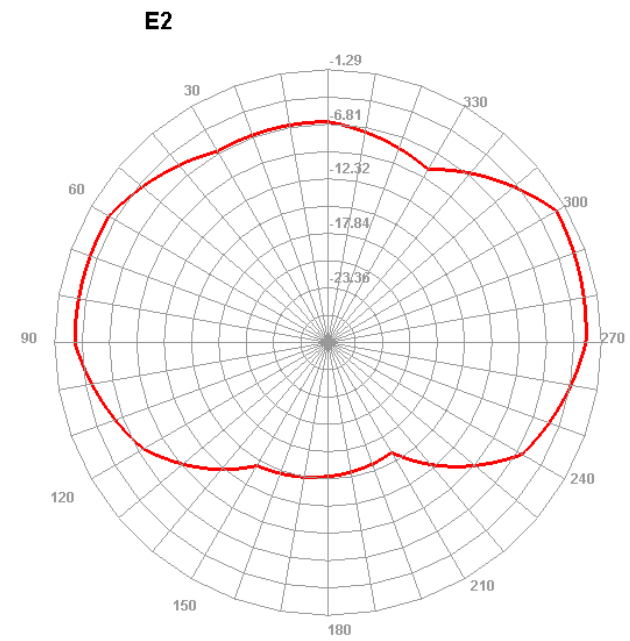
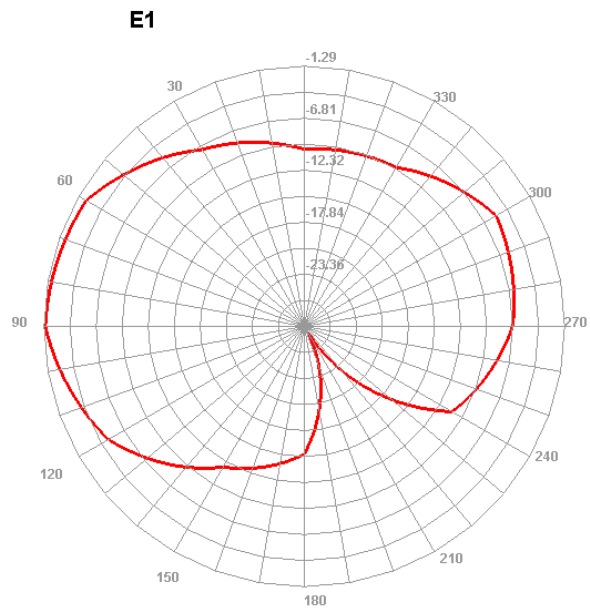
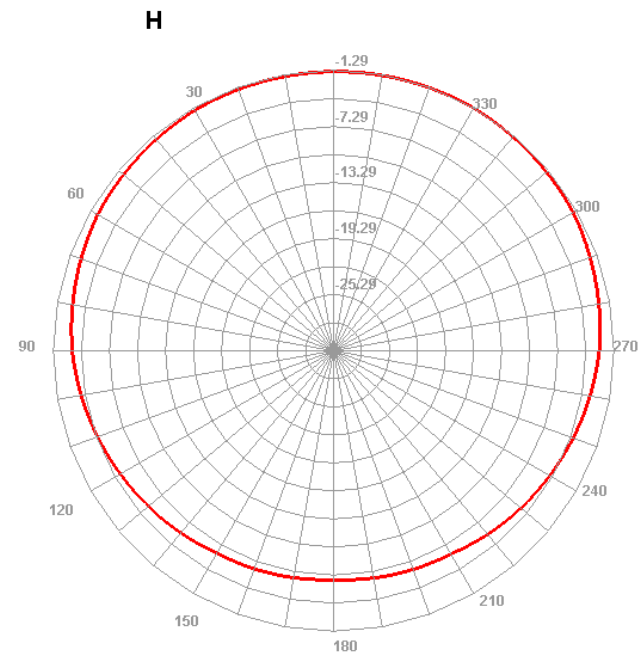
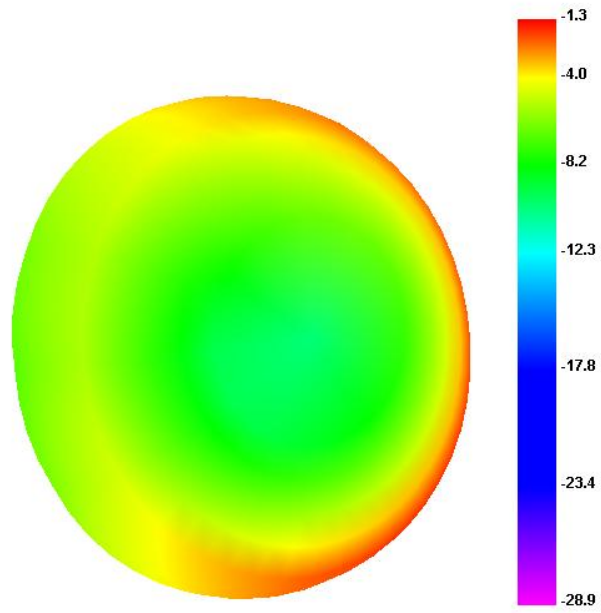
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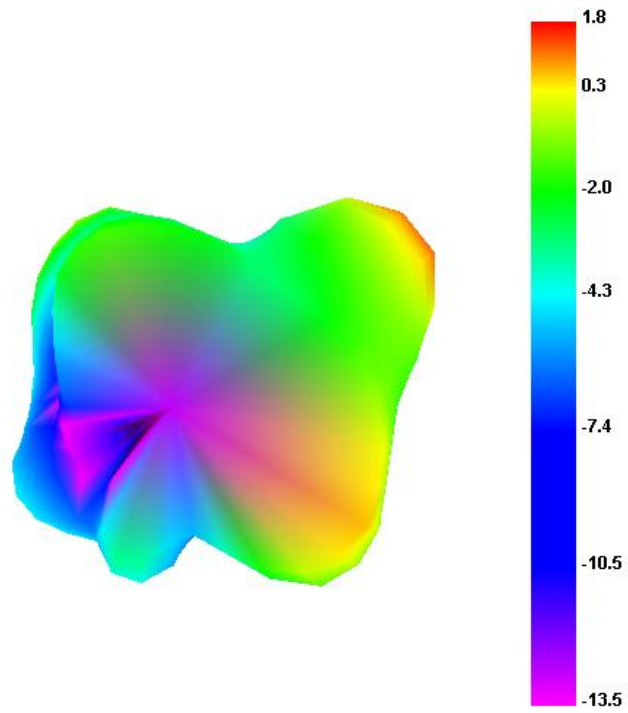
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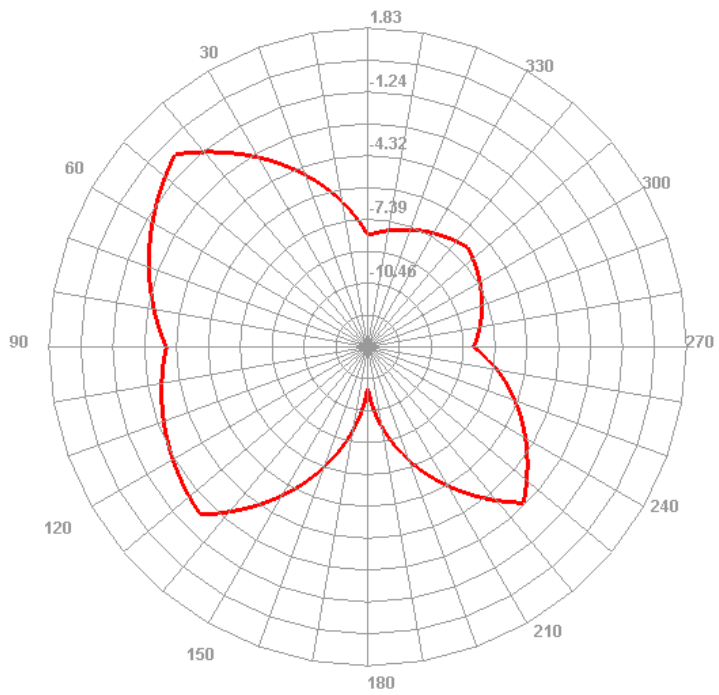
BC0



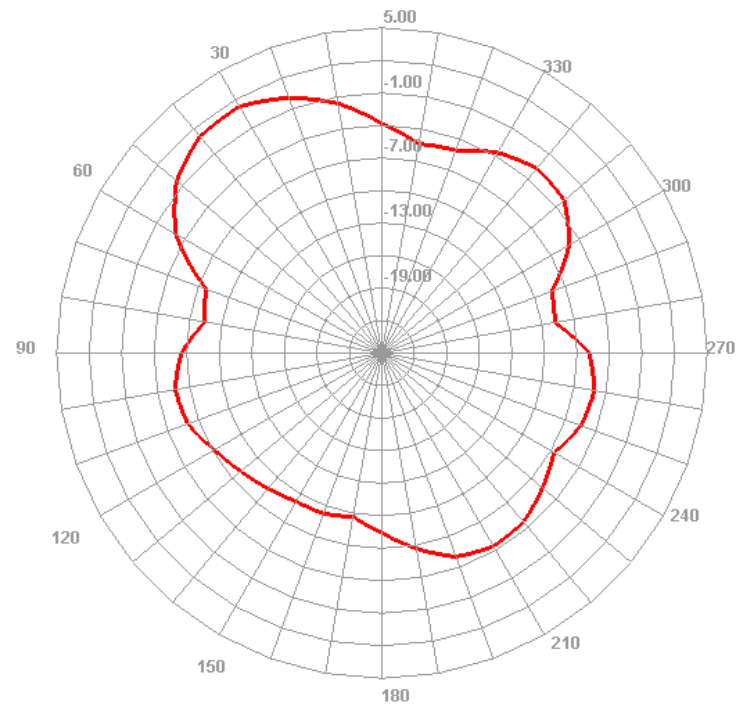
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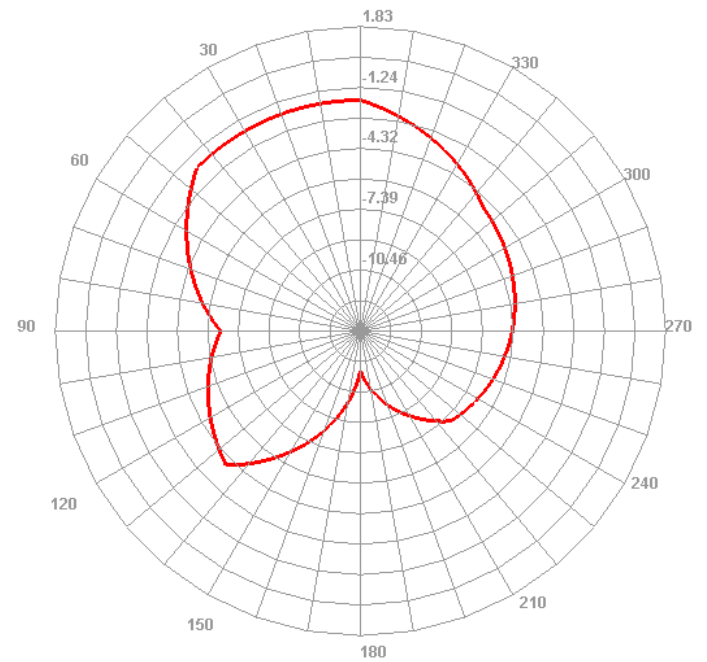
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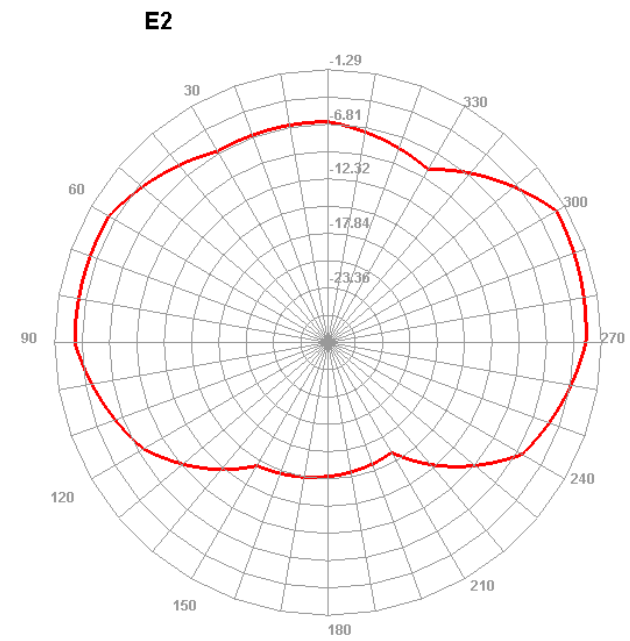
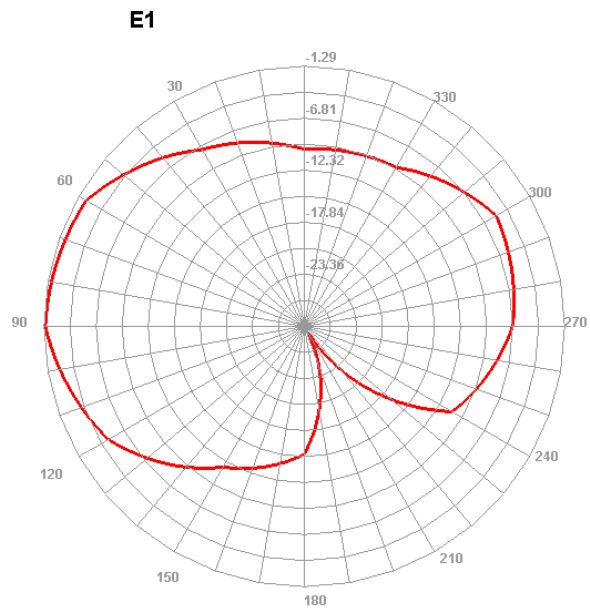
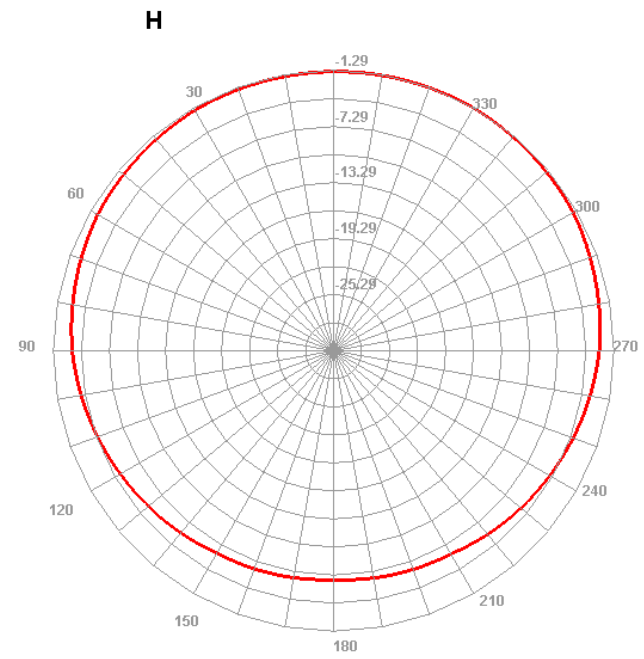
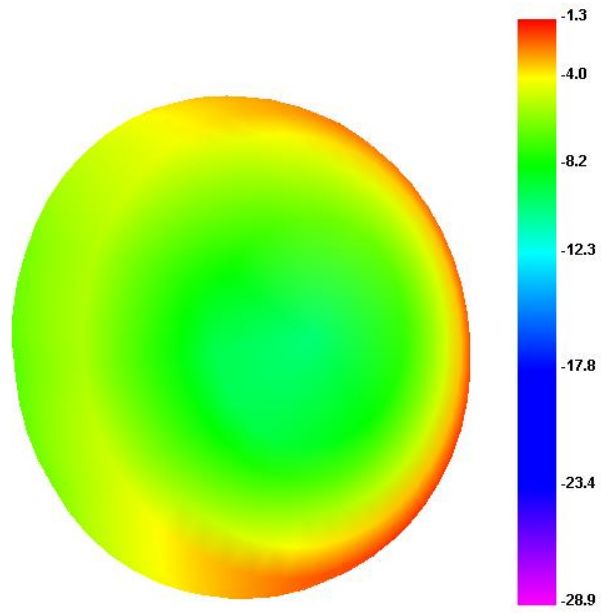
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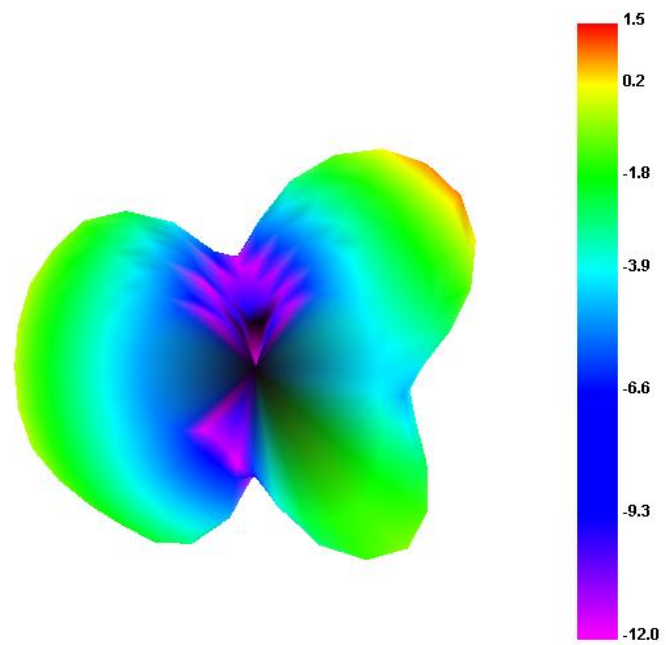
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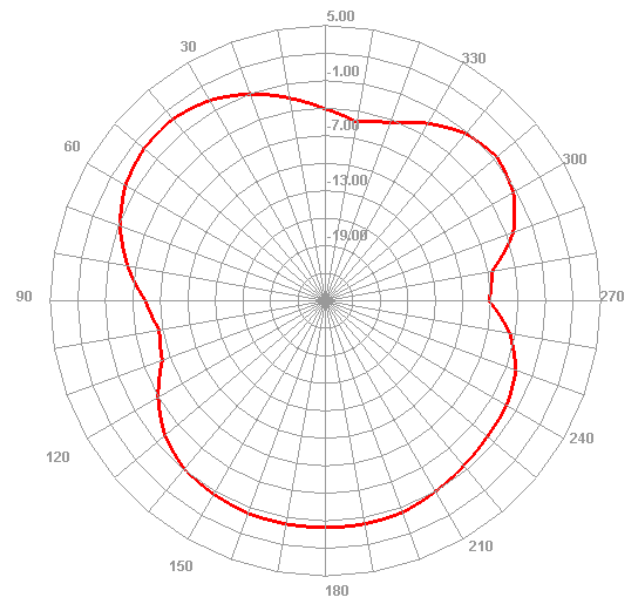
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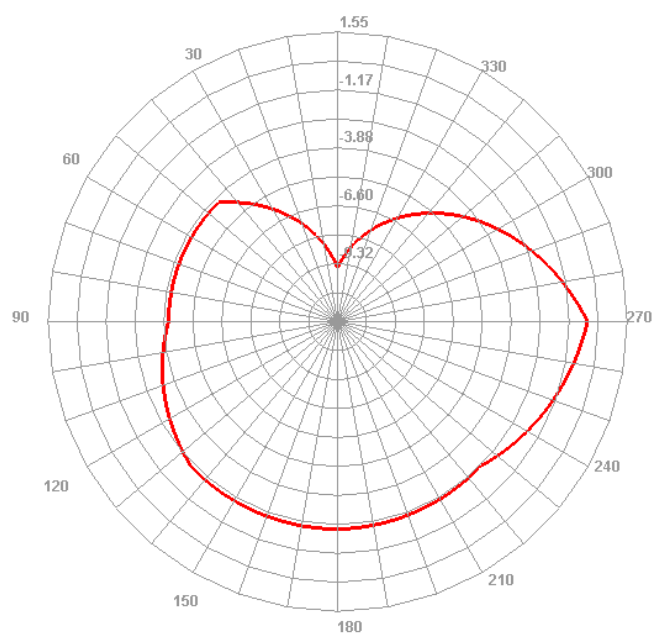
W2100



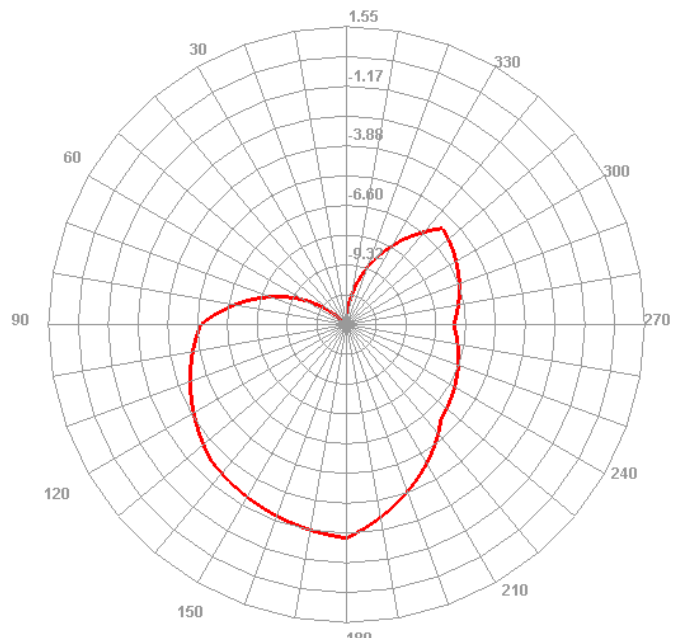
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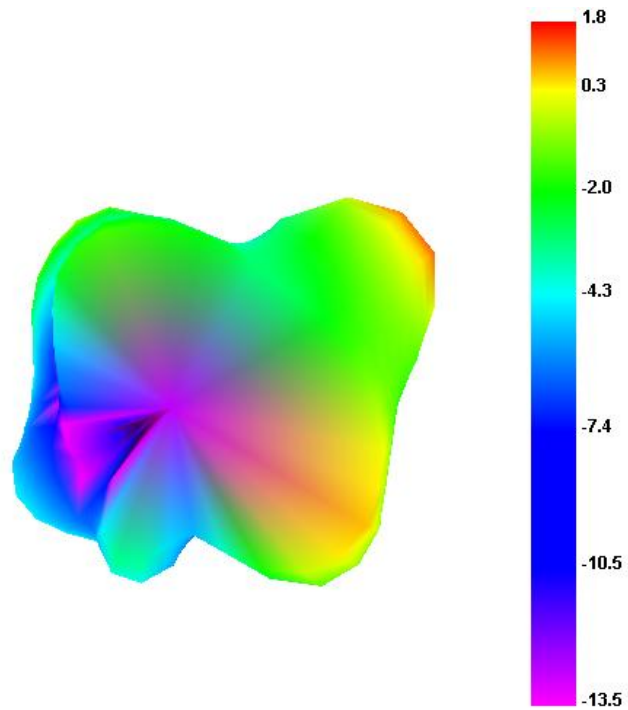
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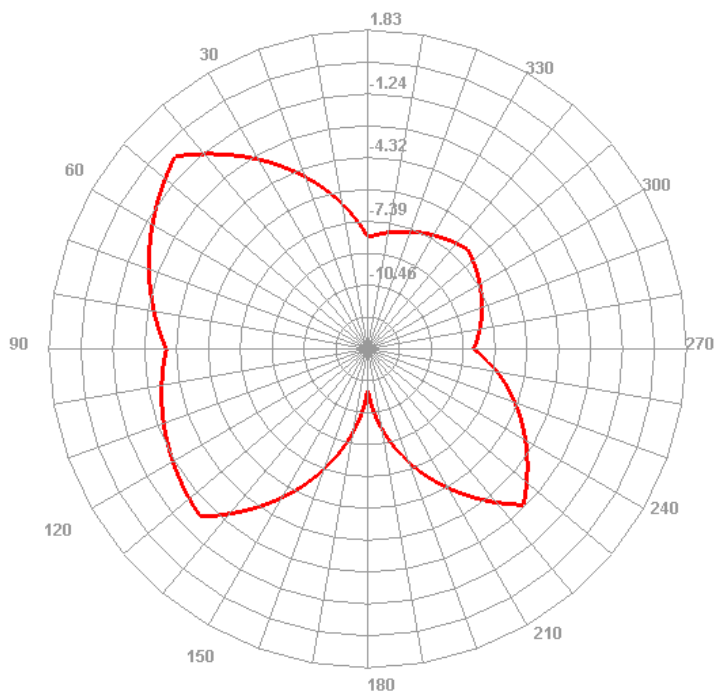
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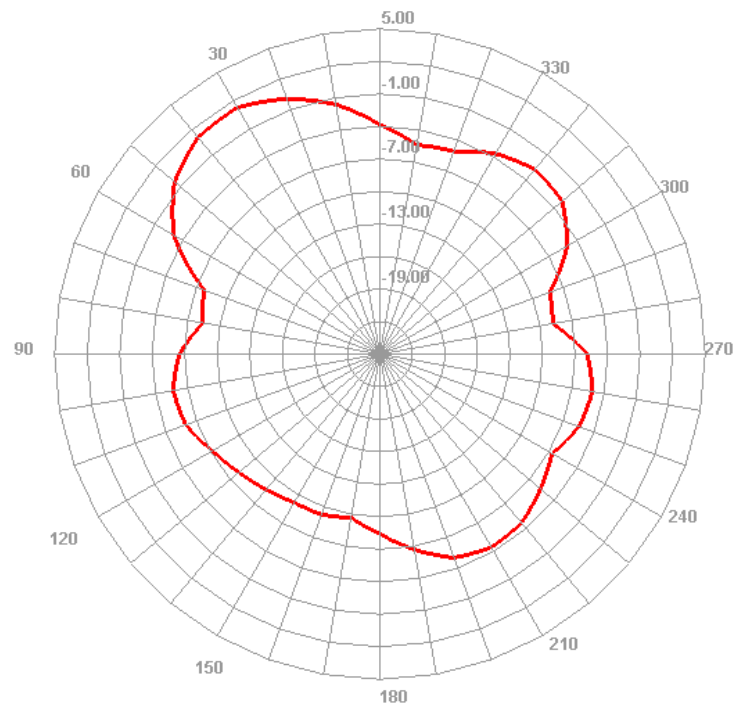
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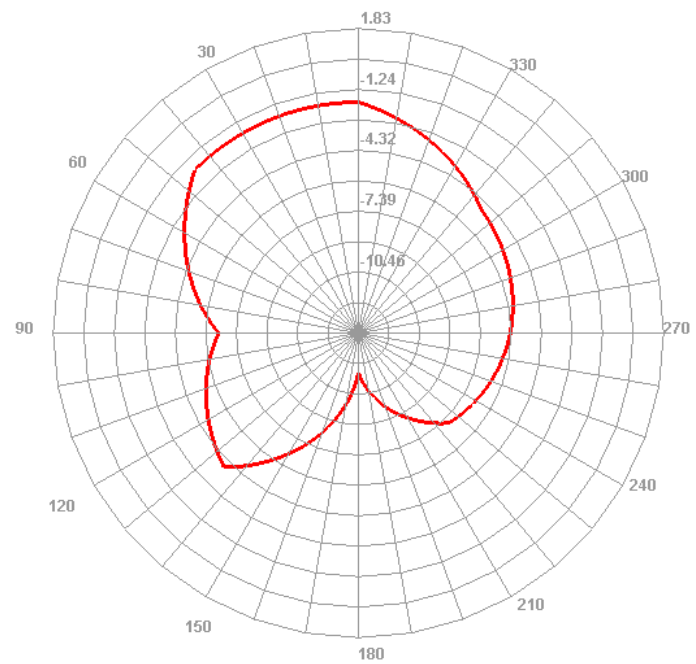
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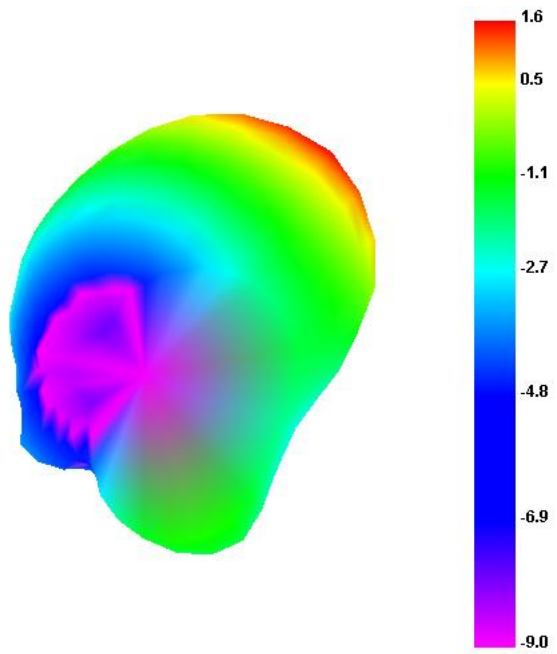
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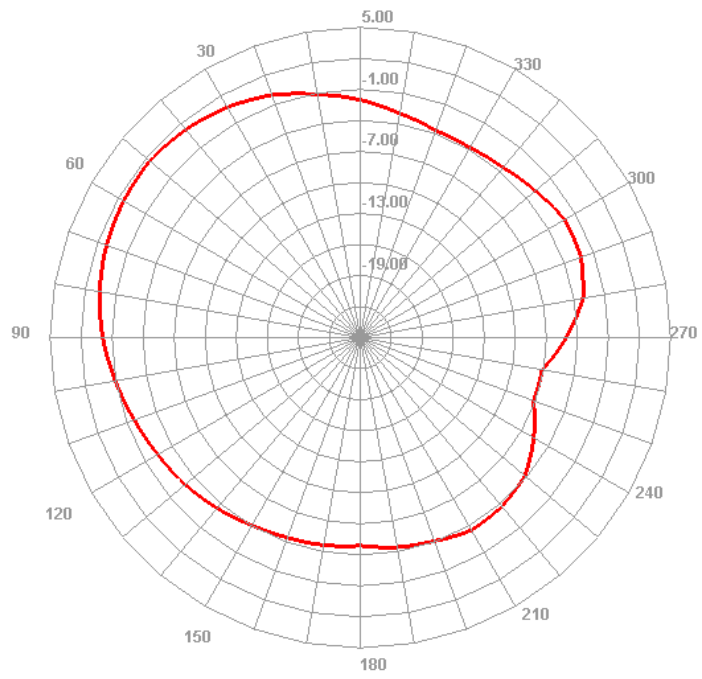
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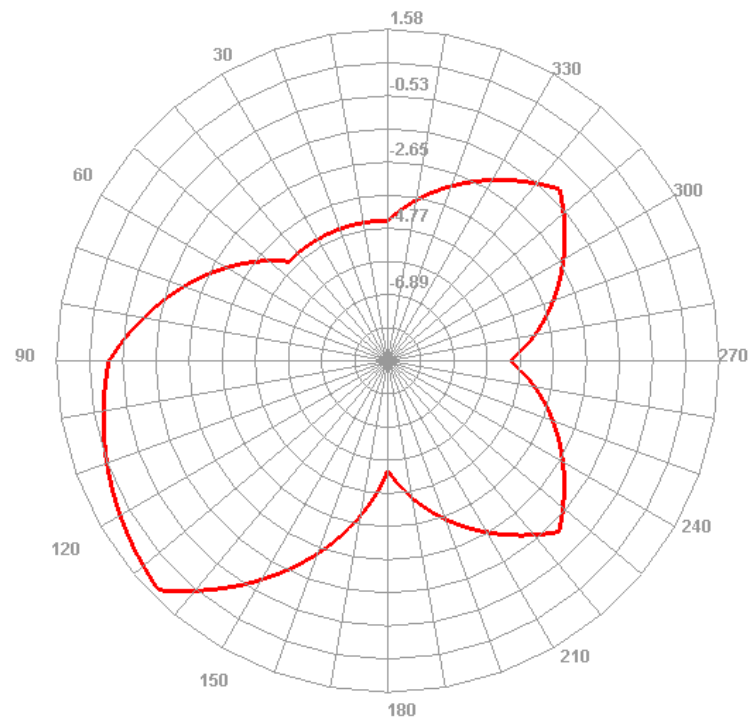
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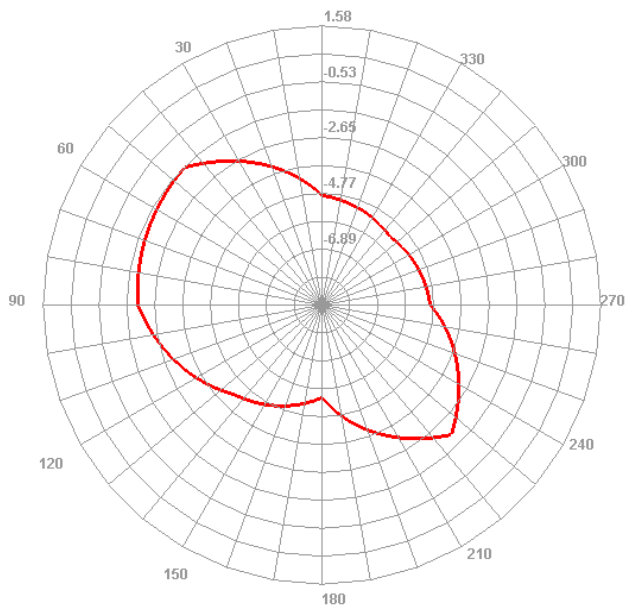
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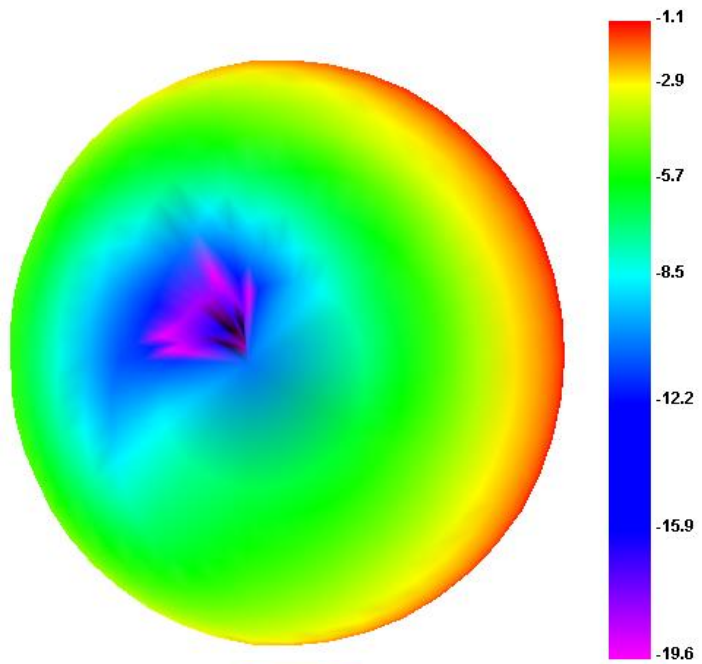
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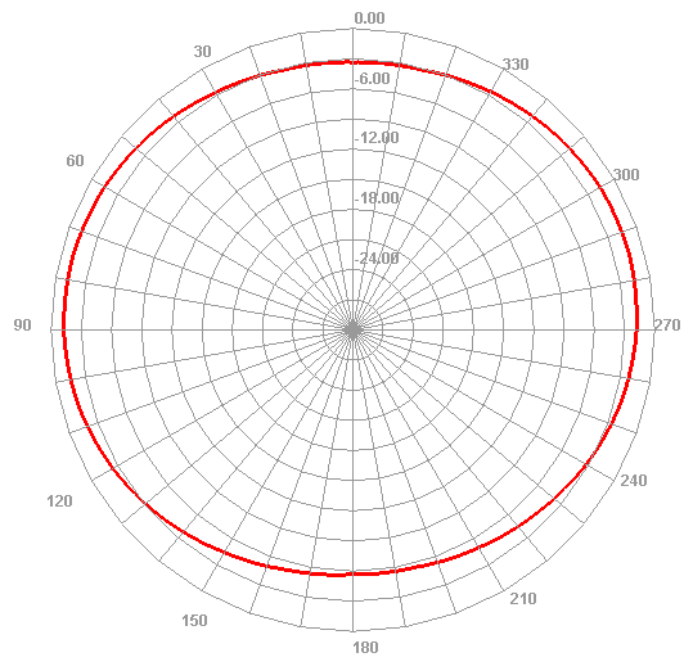
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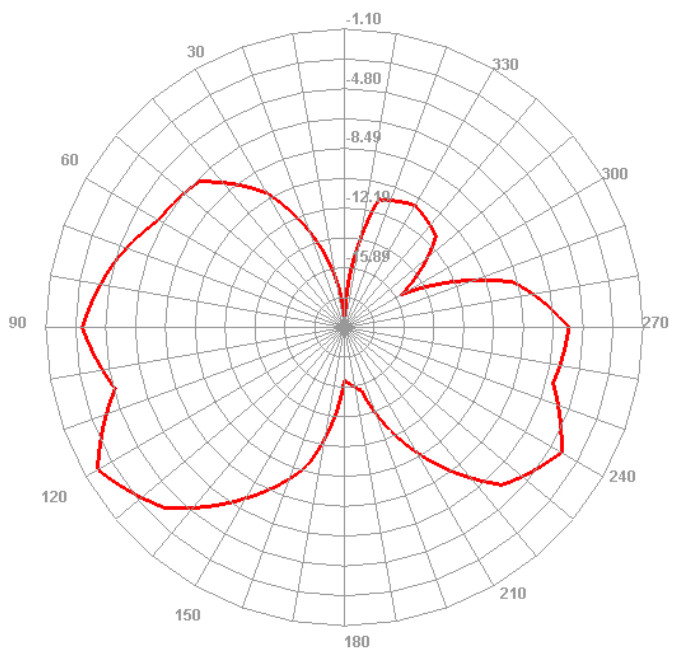
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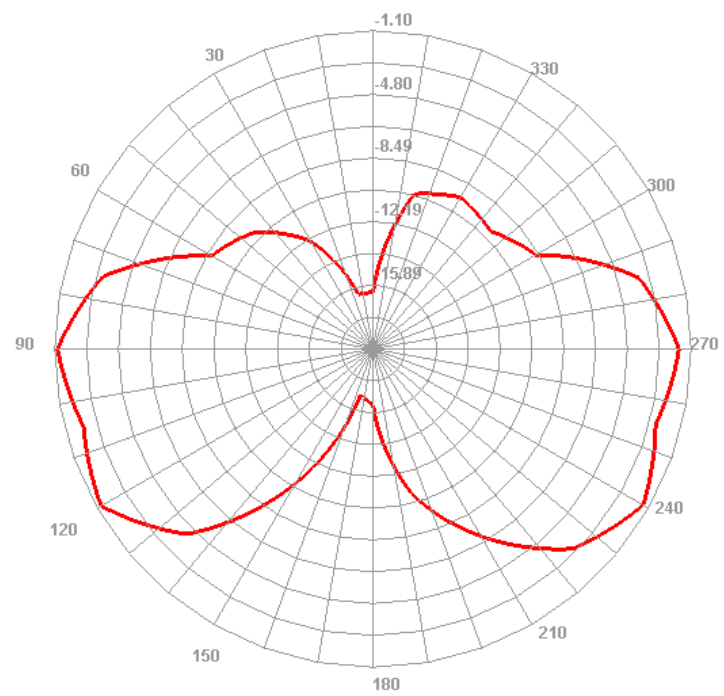
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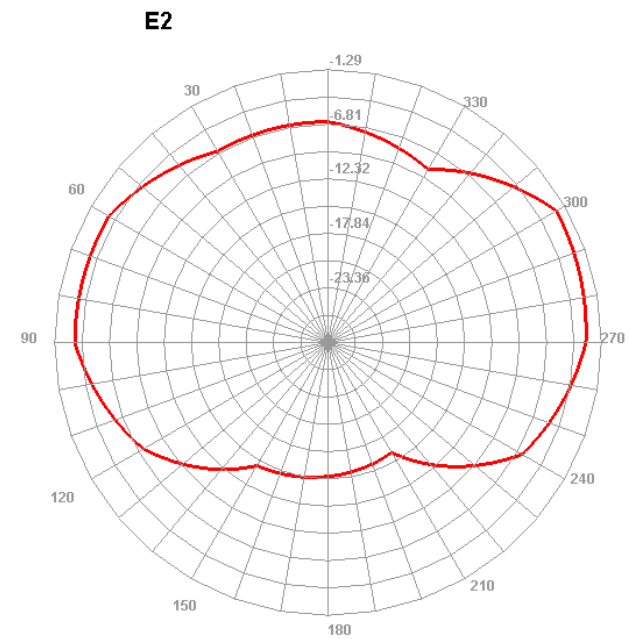
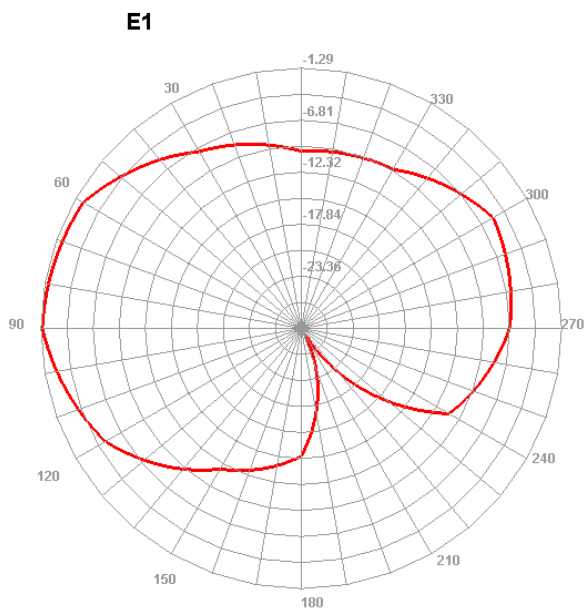
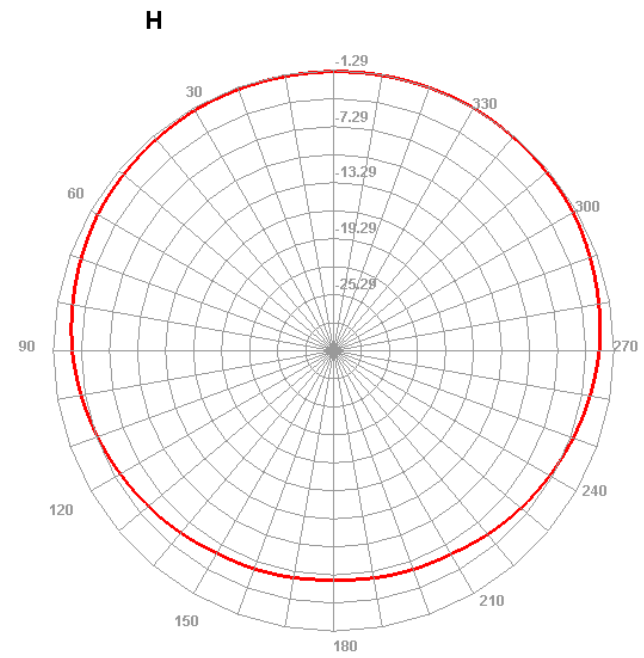
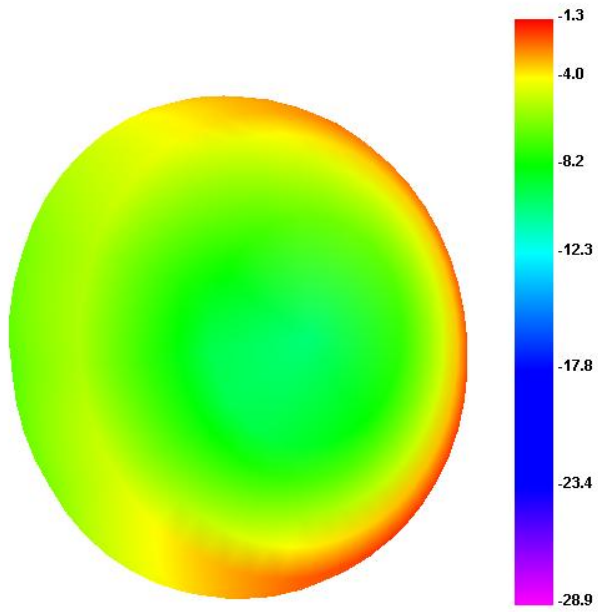
E1



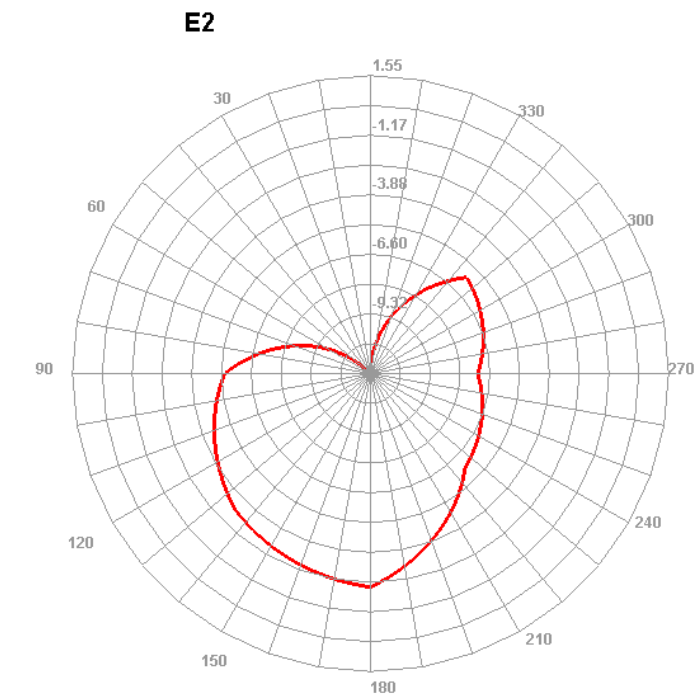
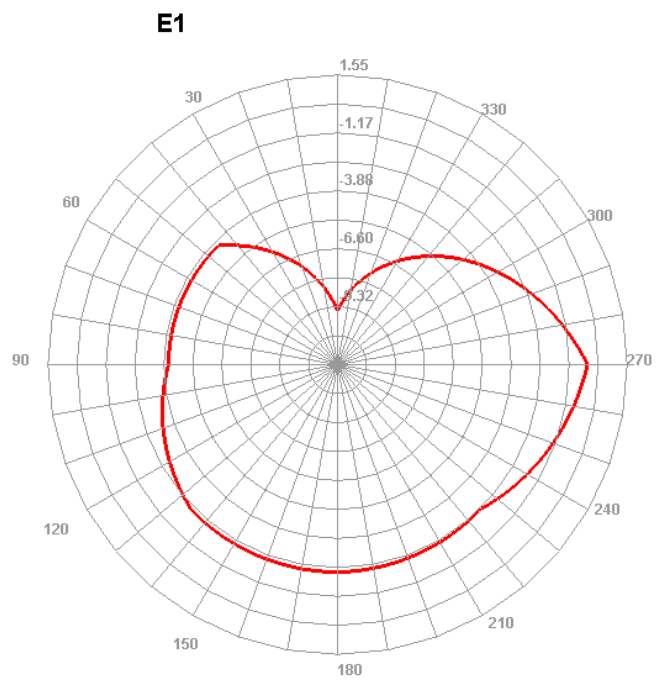
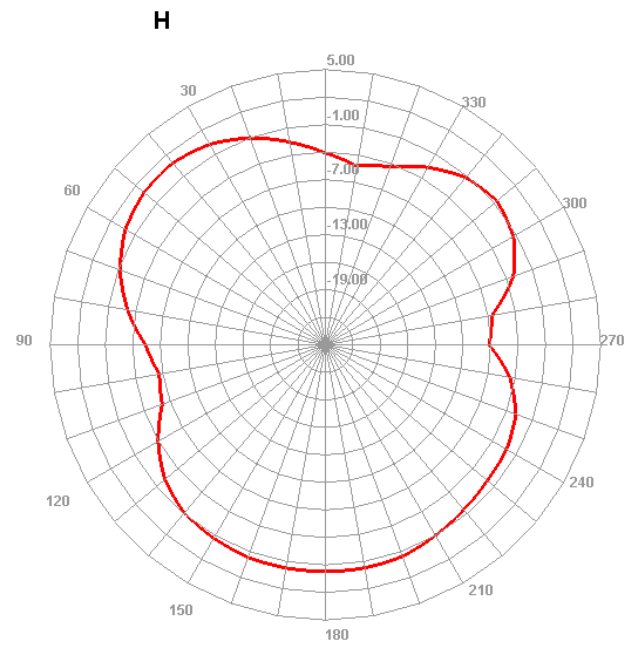
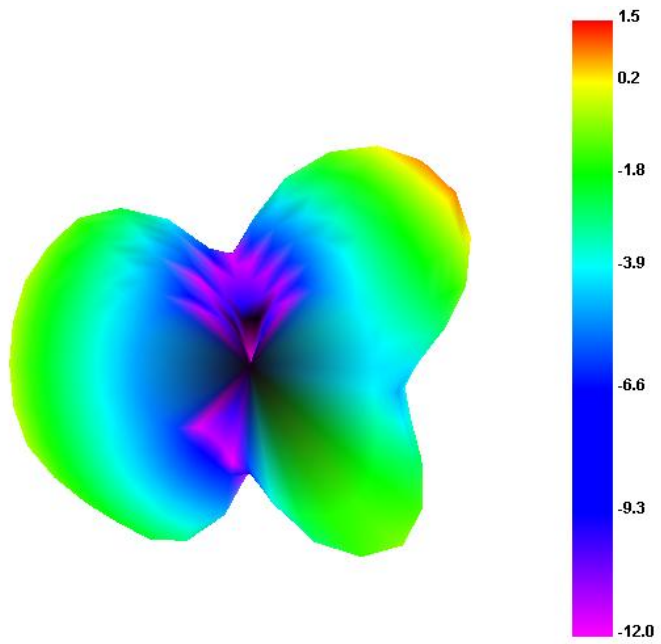
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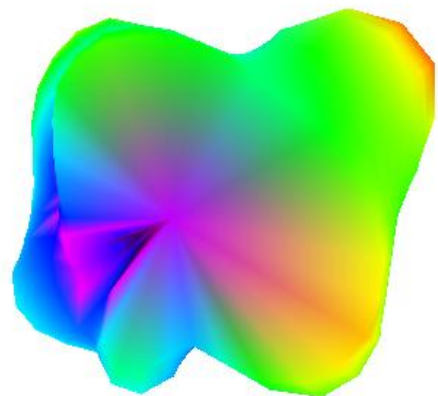
WCDMA B5



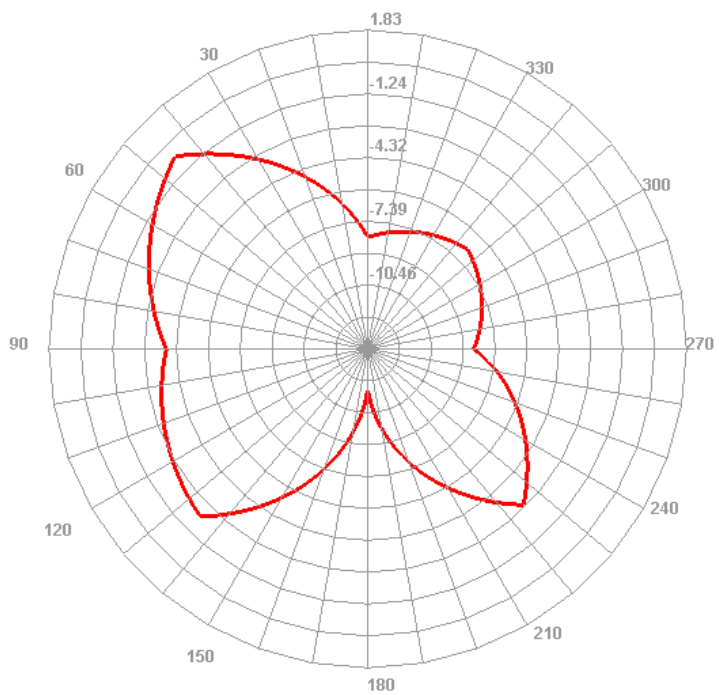
LTE-B1



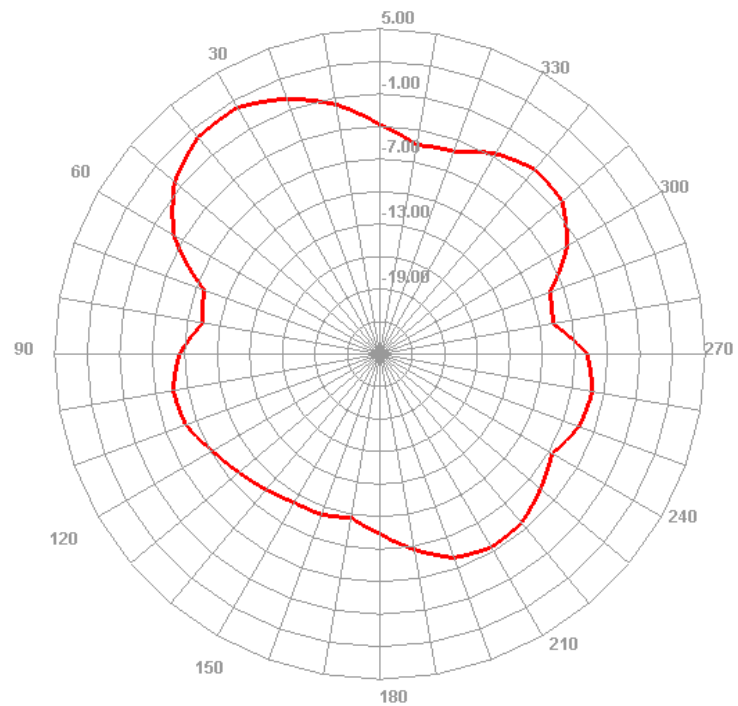
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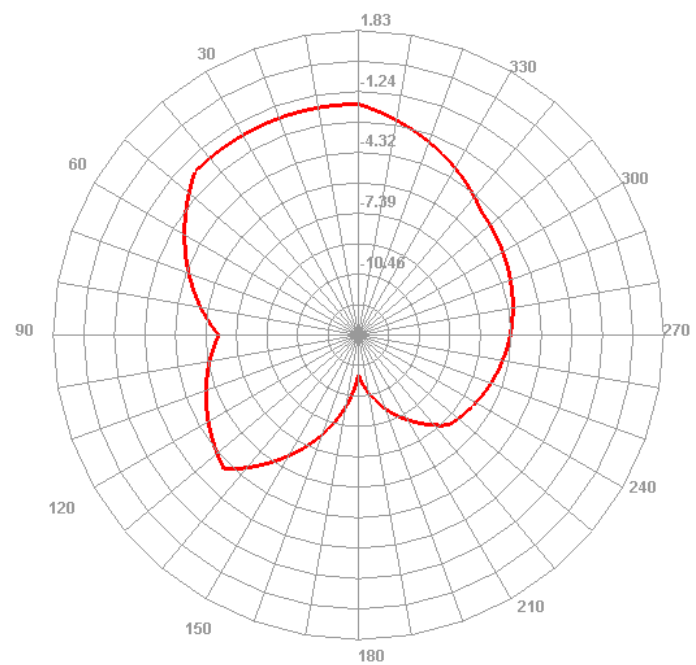
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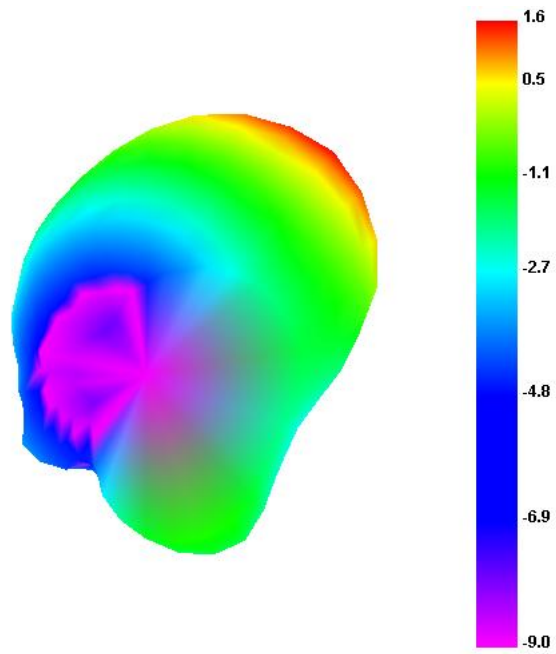
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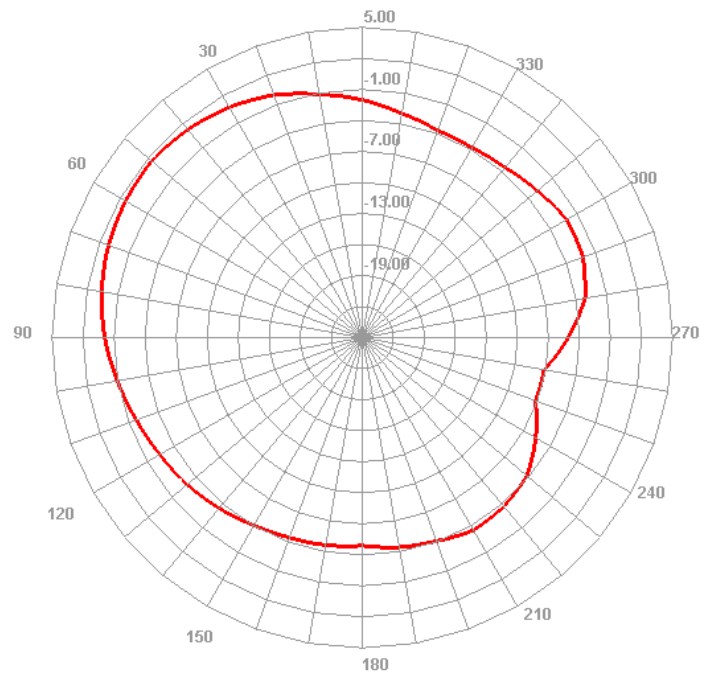
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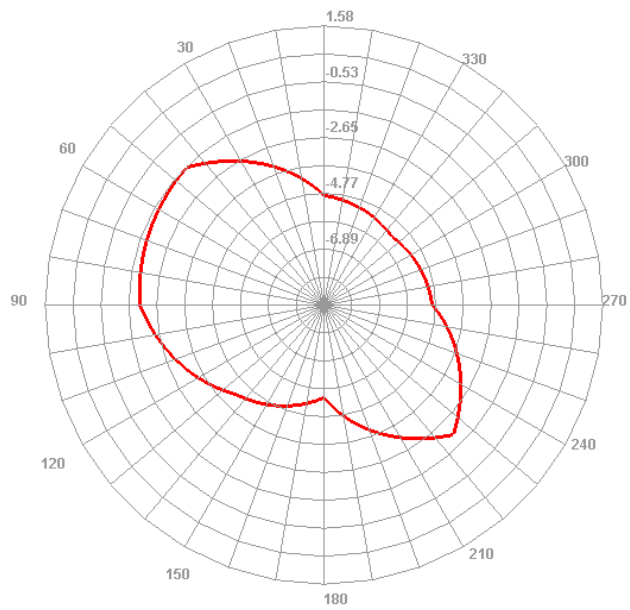
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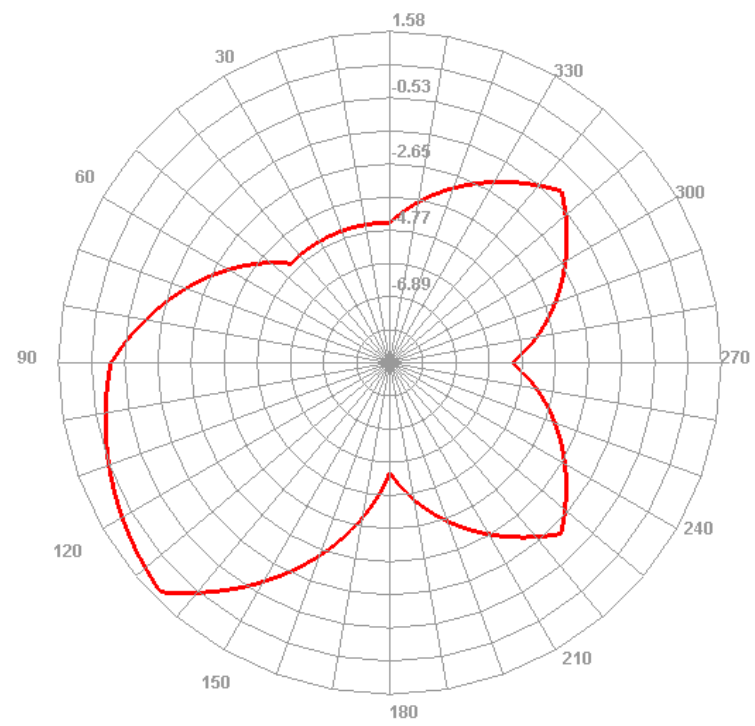
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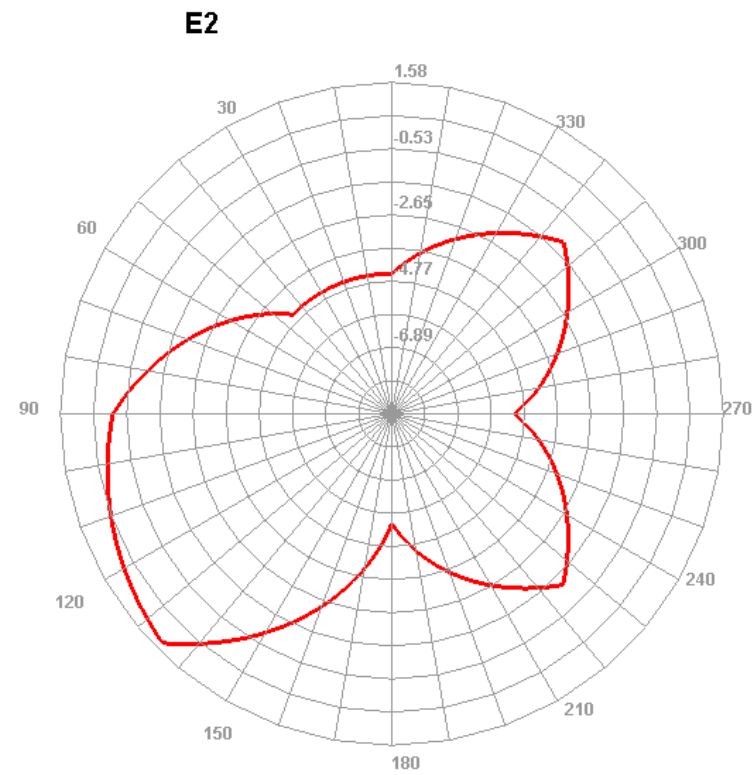
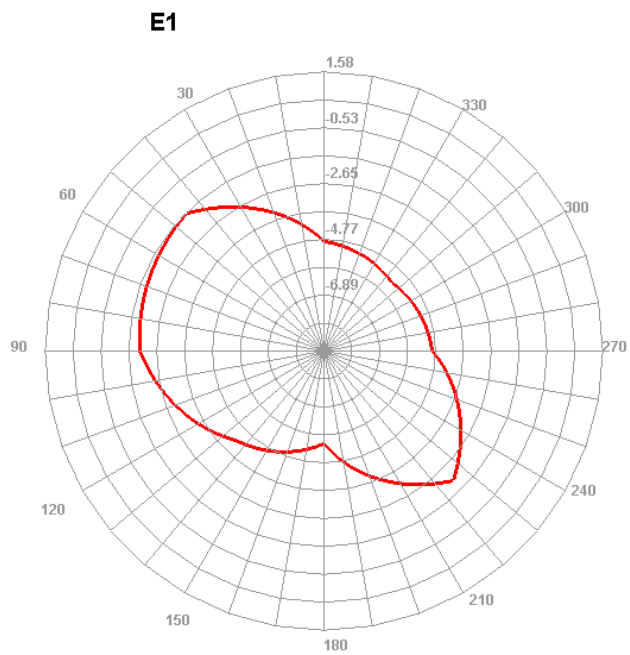
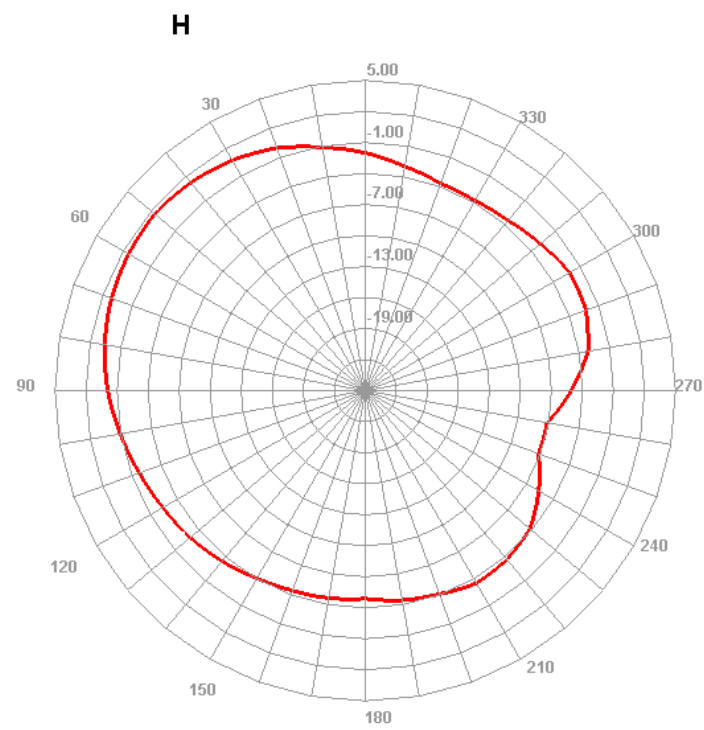
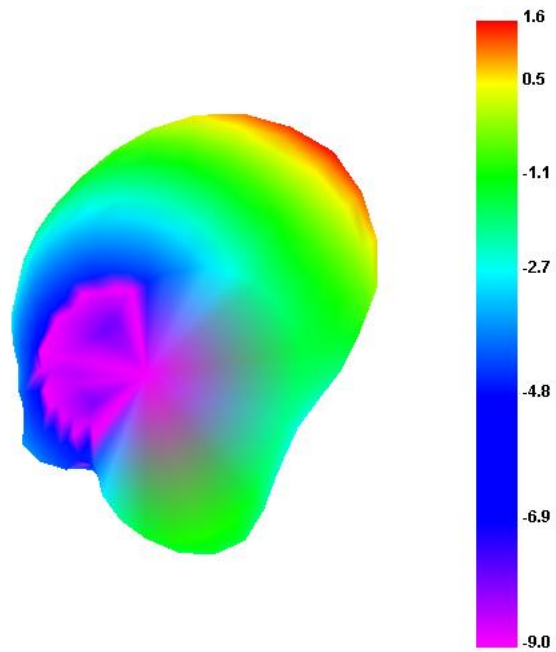
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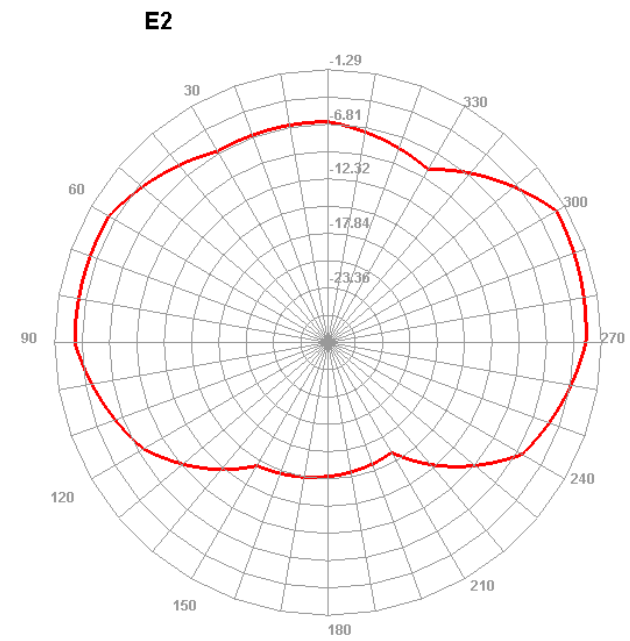
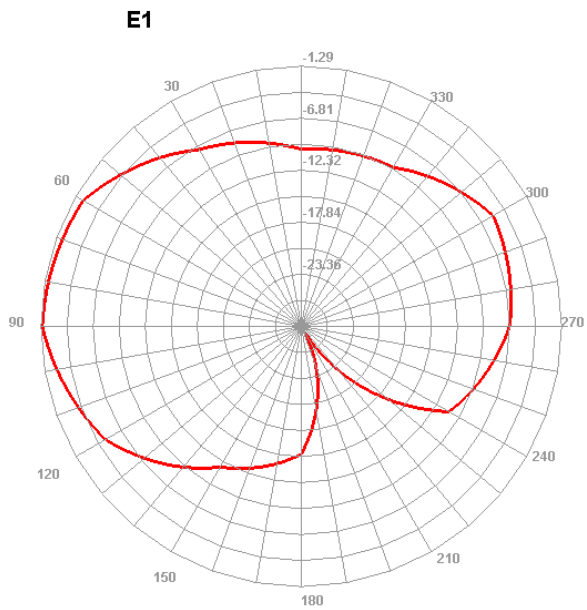
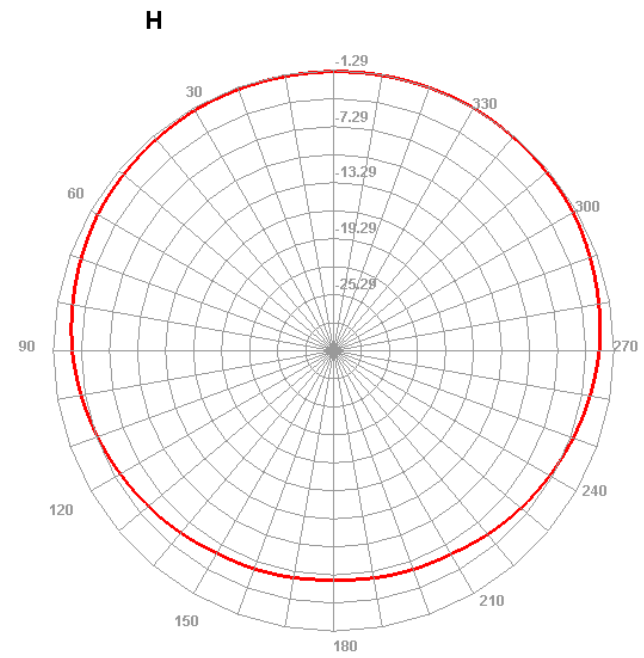
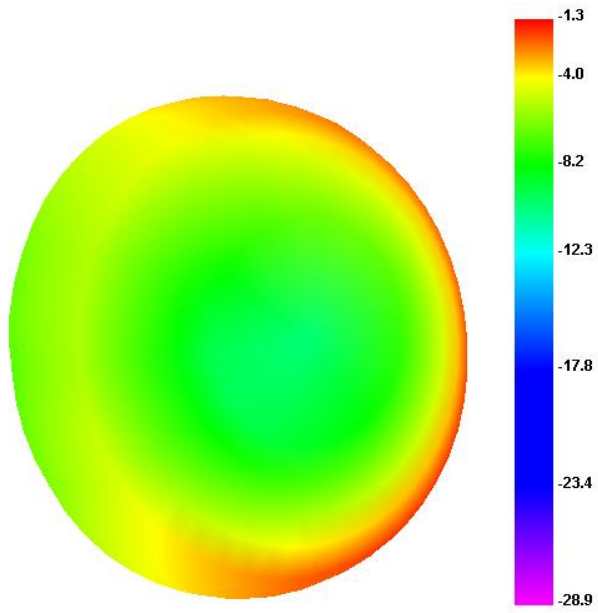
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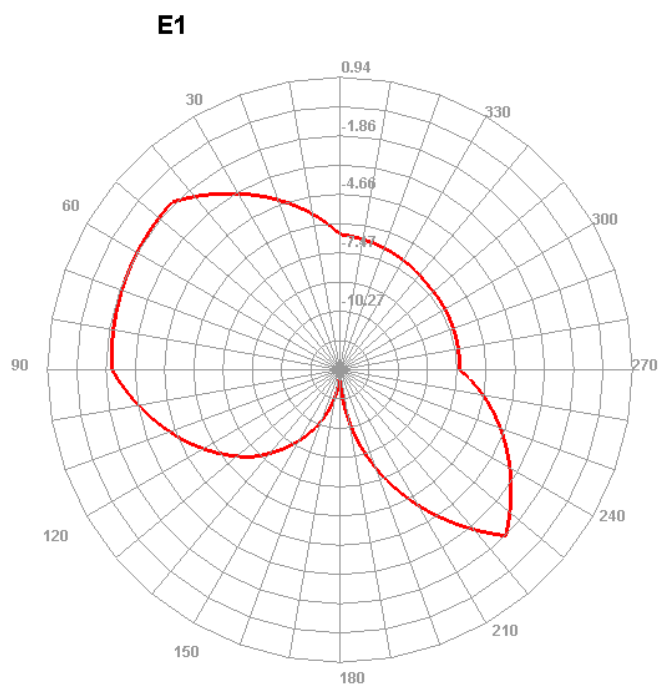
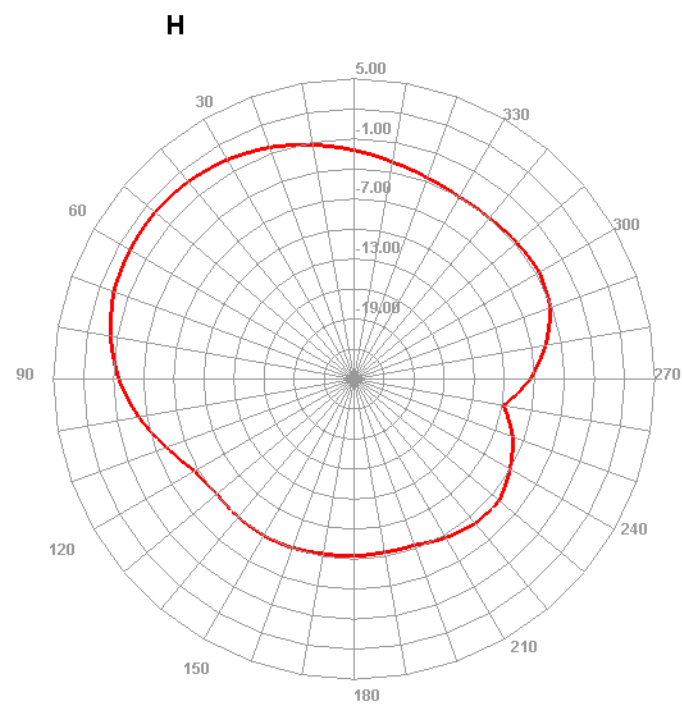
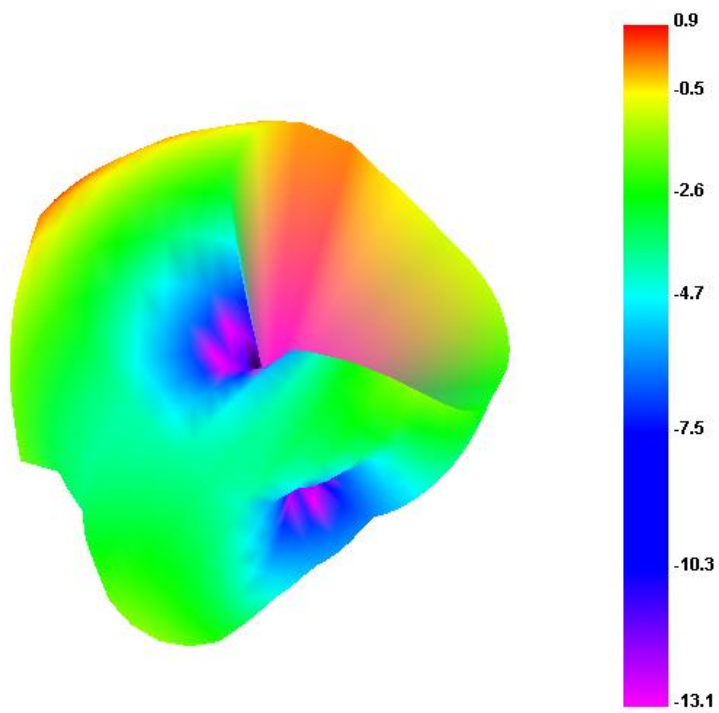
LTE-B4



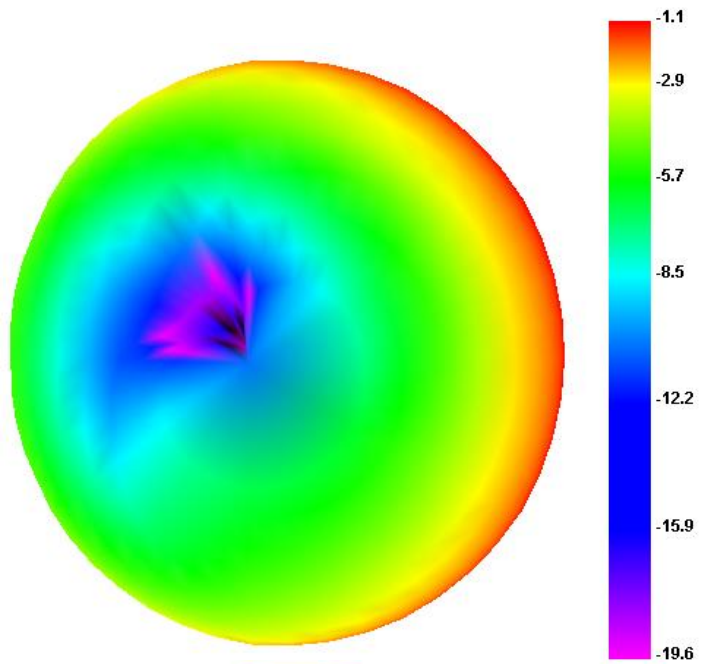
LTE-B5



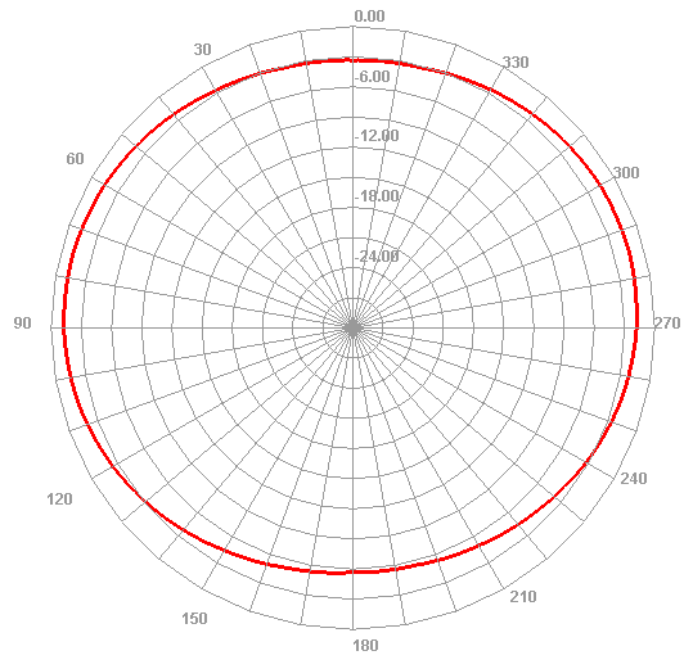
LTE-B7



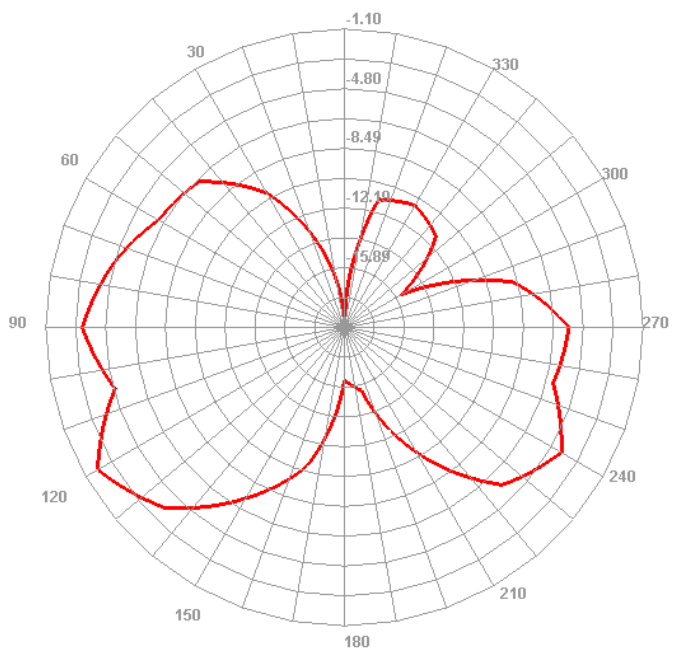
LTE-B8



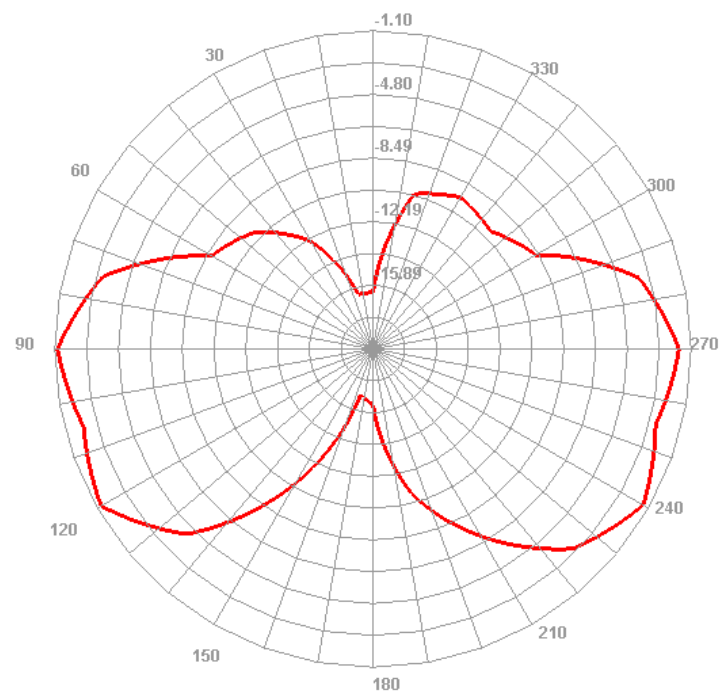
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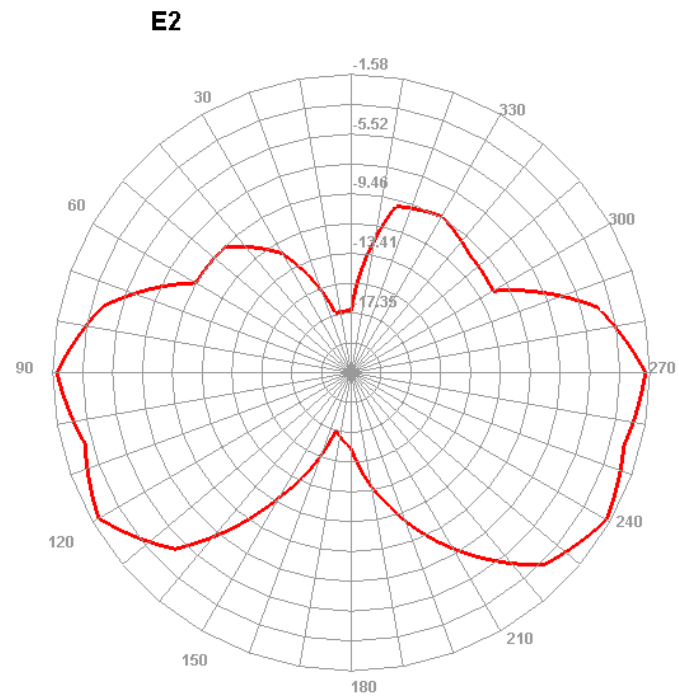
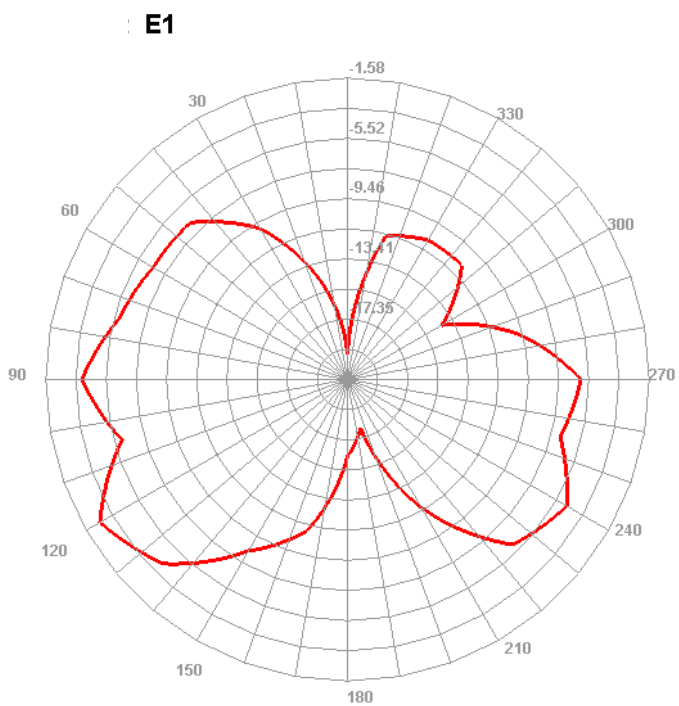
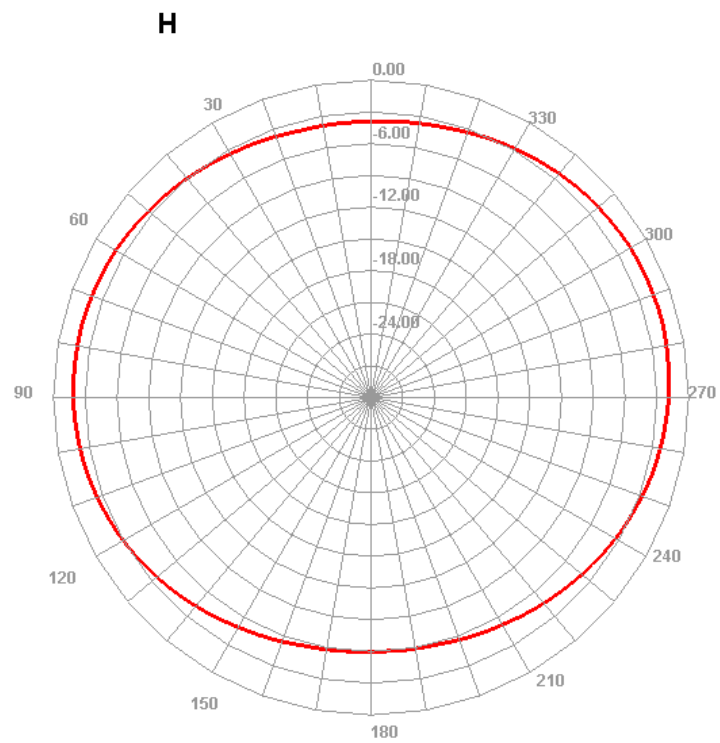
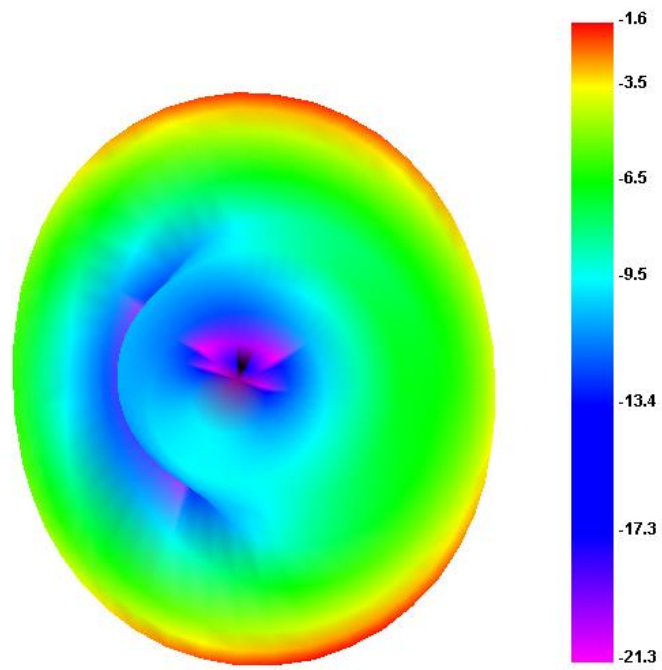
E1



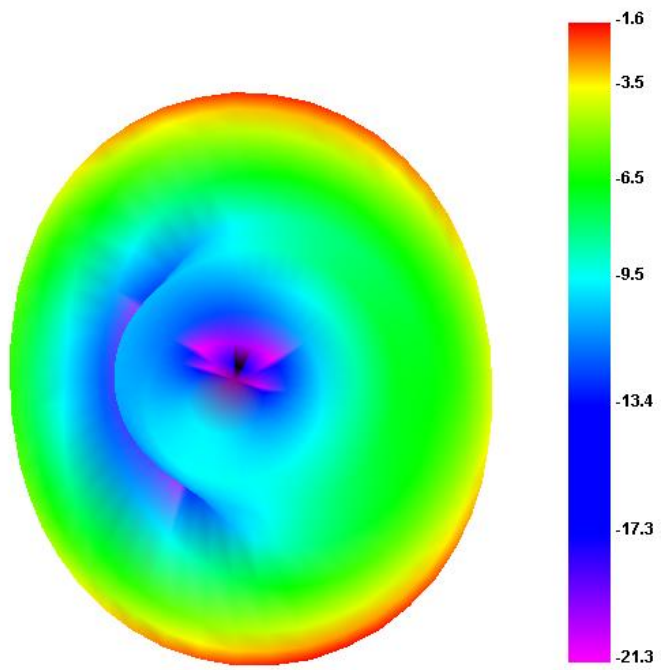
E2



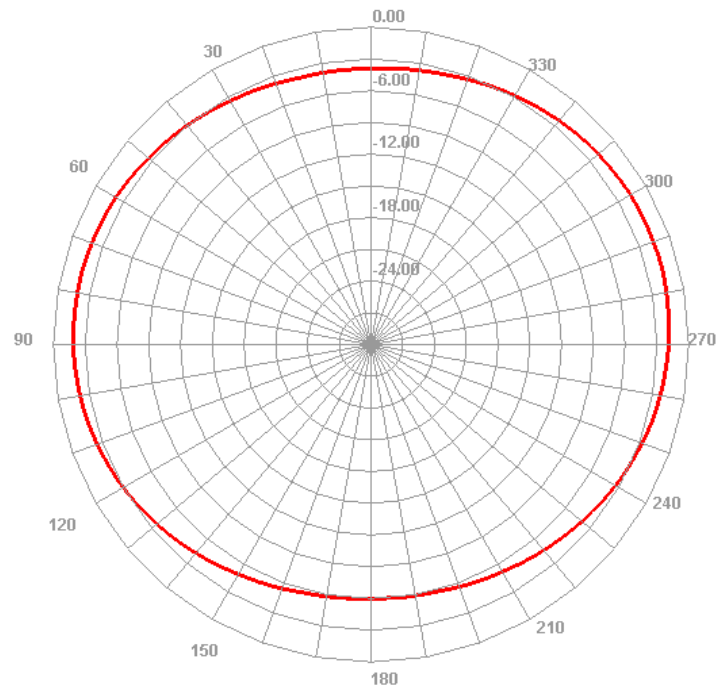
LTE-B12



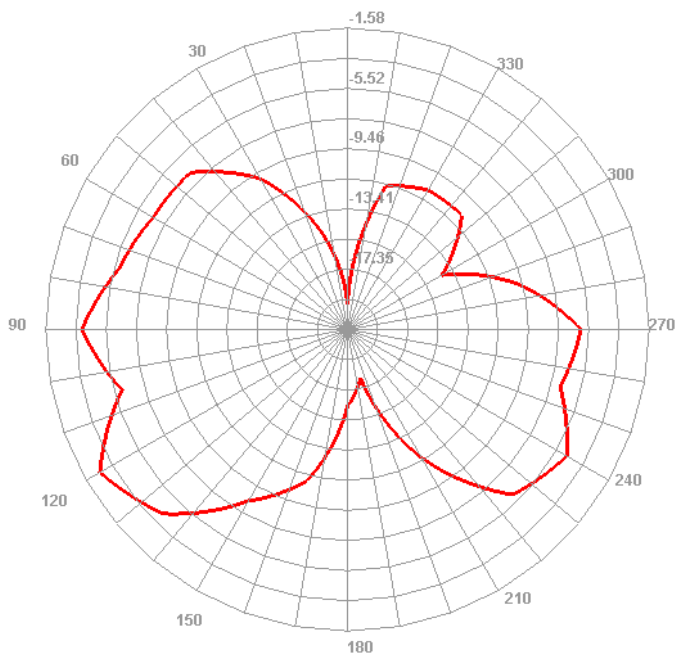
LTE-B17



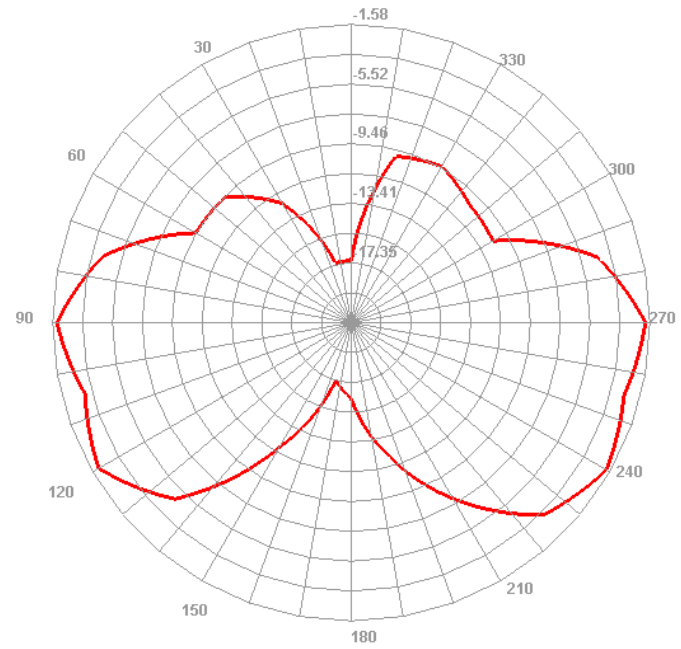
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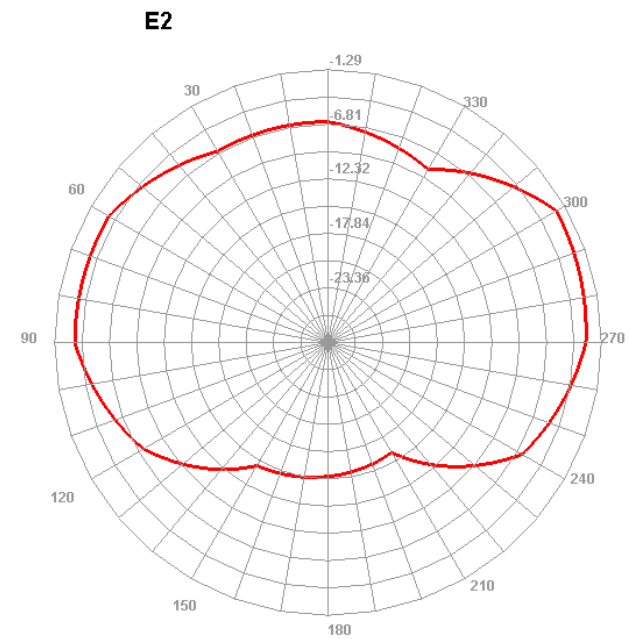
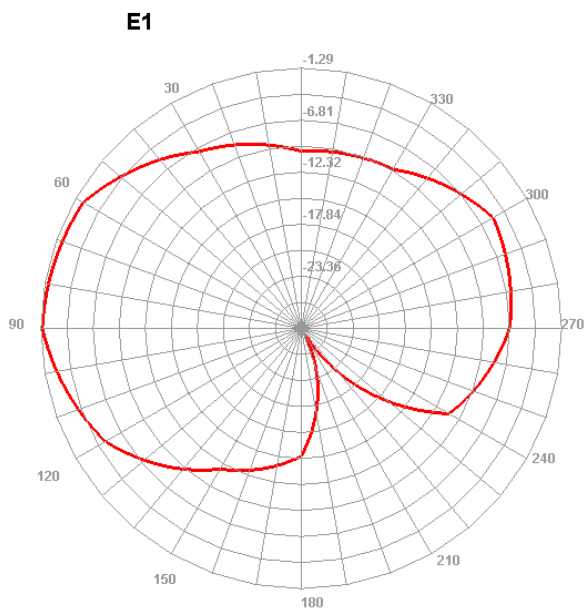
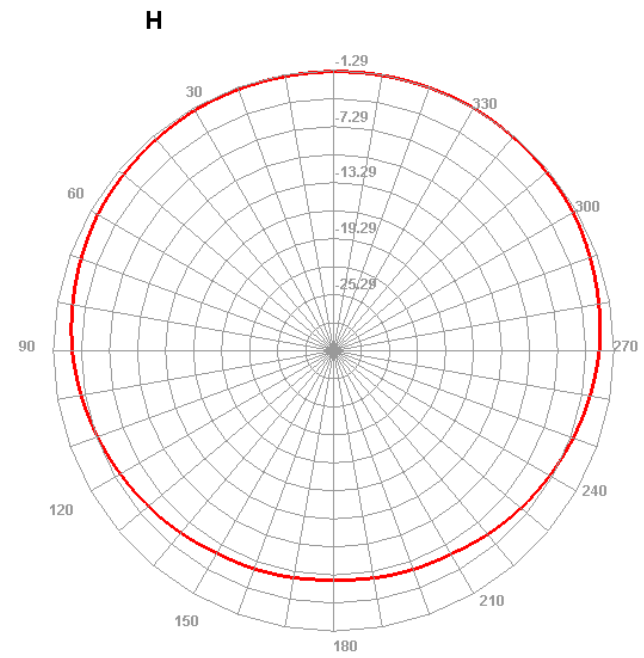
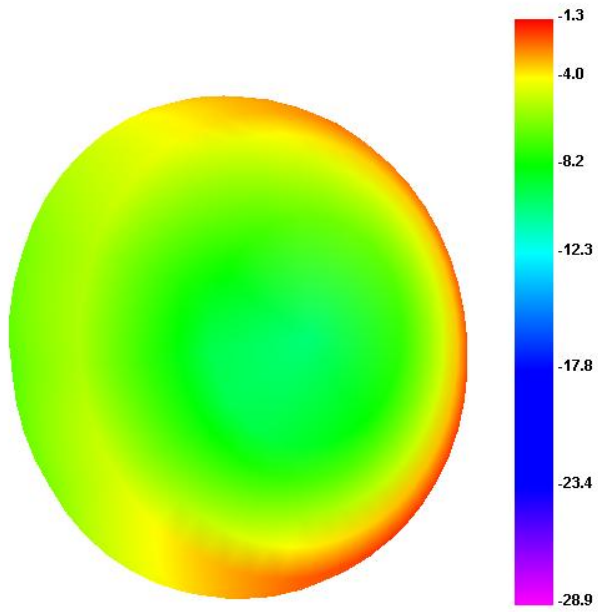
E1



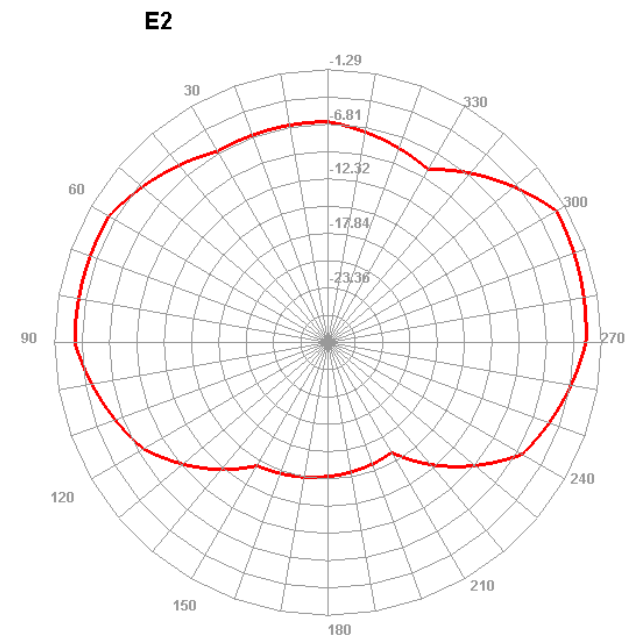
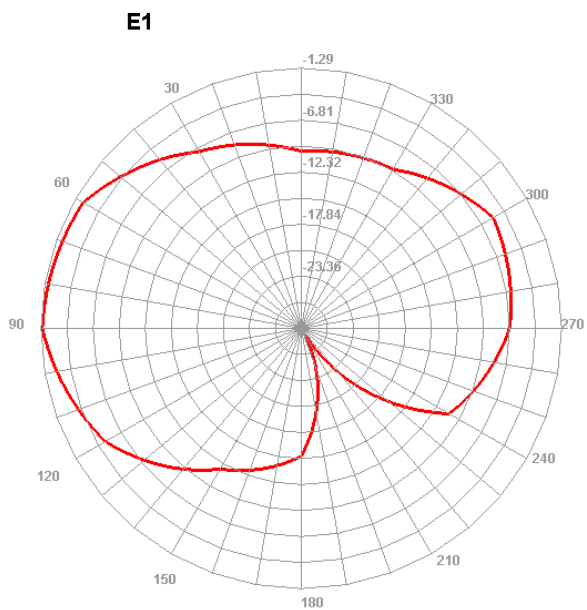
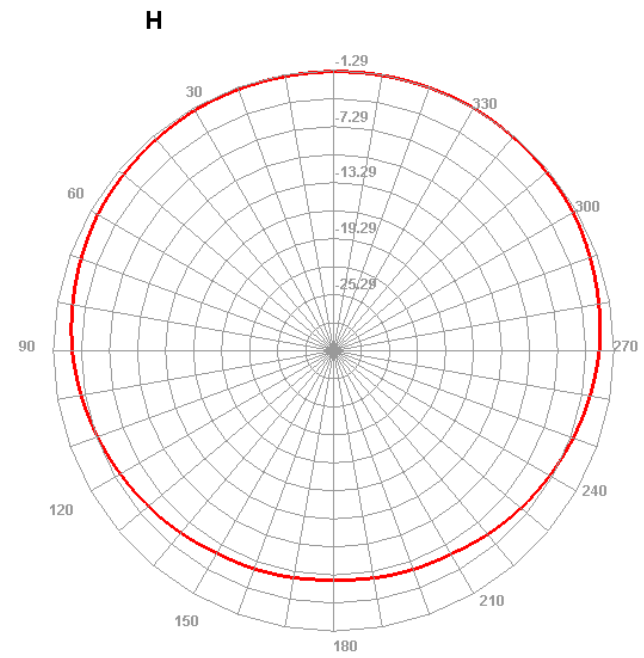
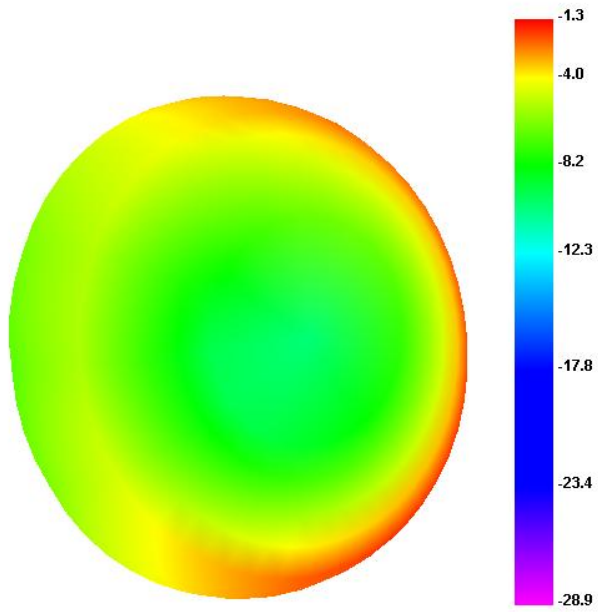
E2



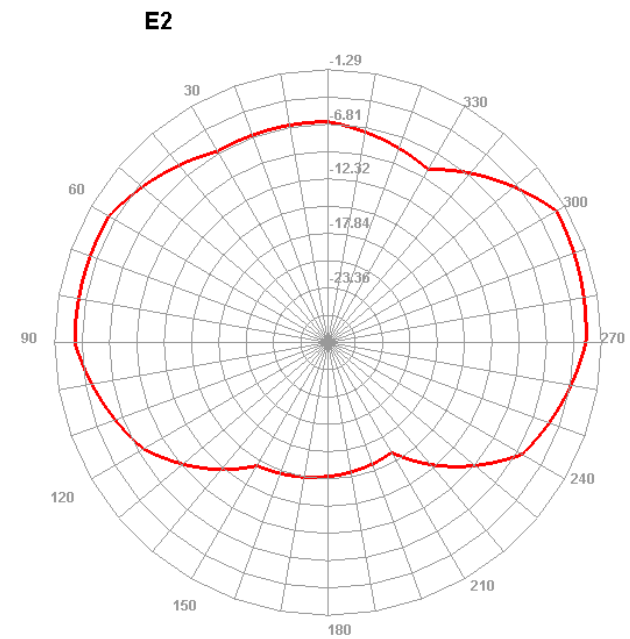
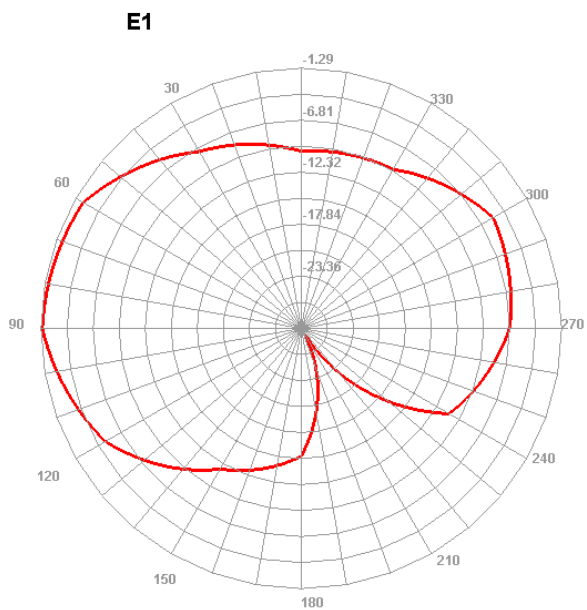
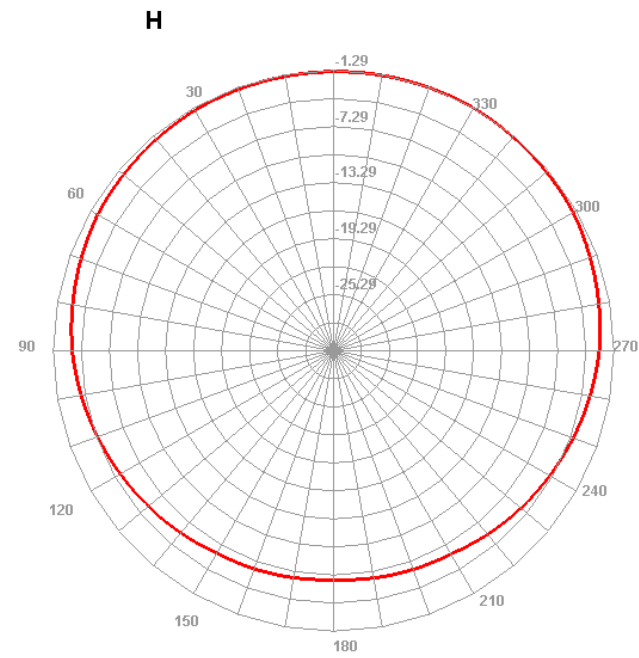
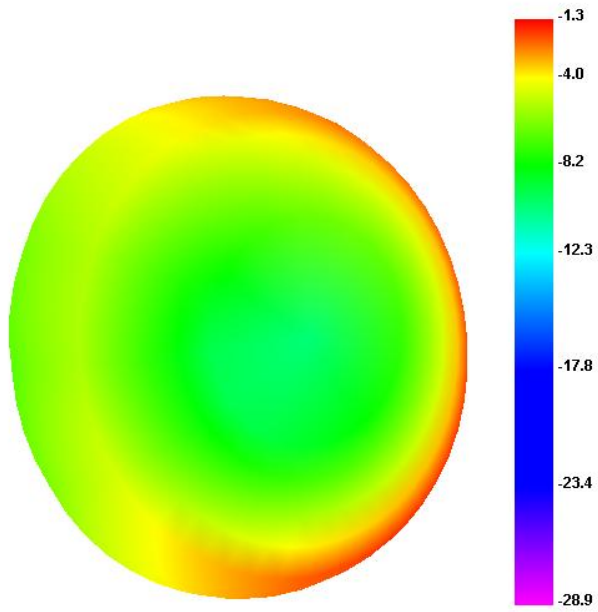
LTE-B18



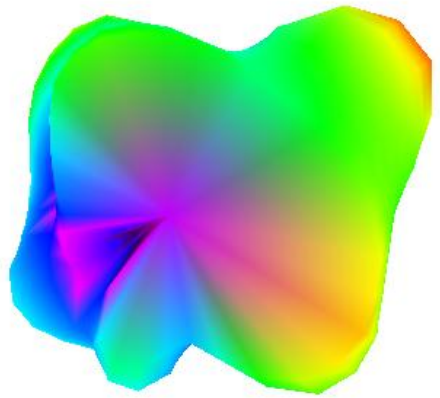
LTE-B19



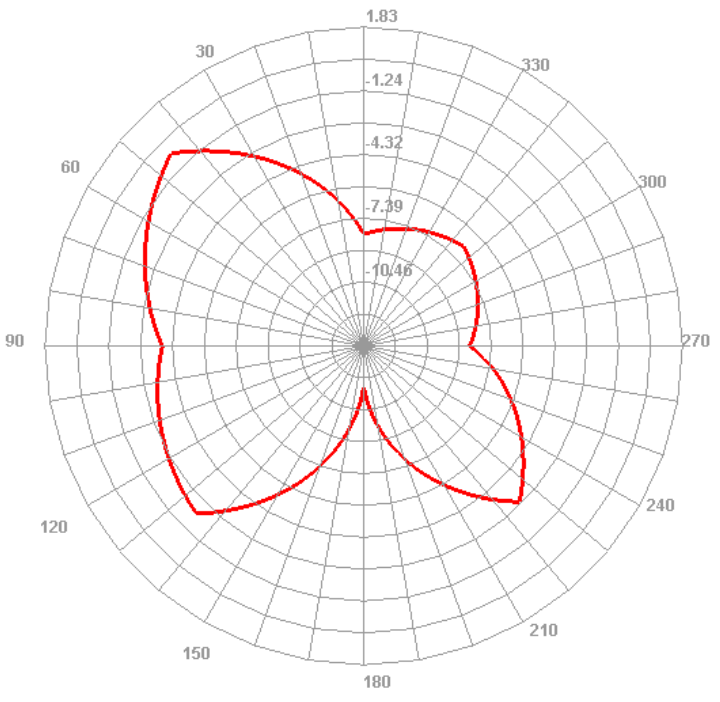
LTE-B20



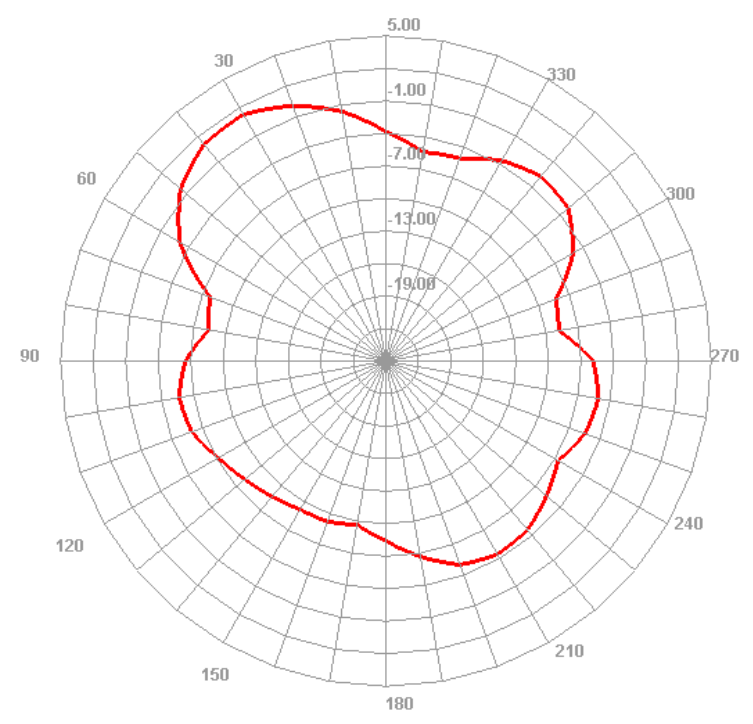
LTE-B25



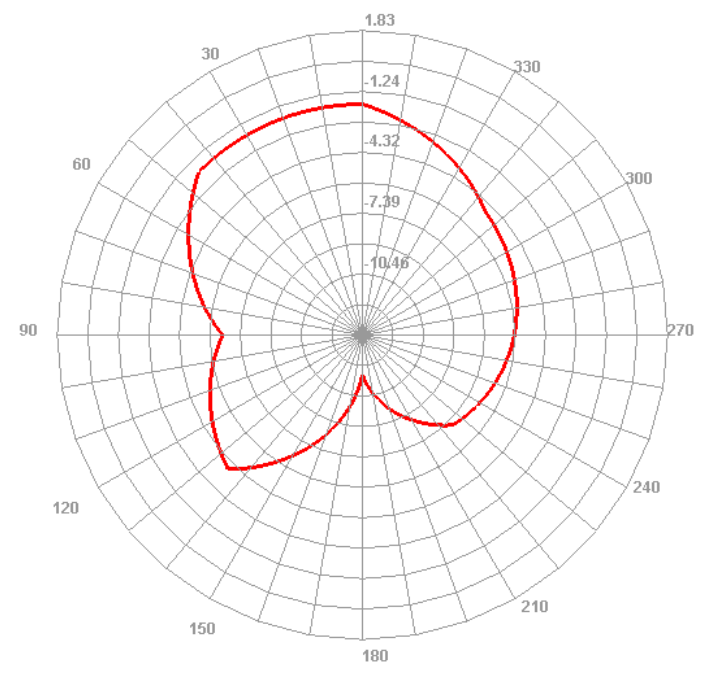
E1



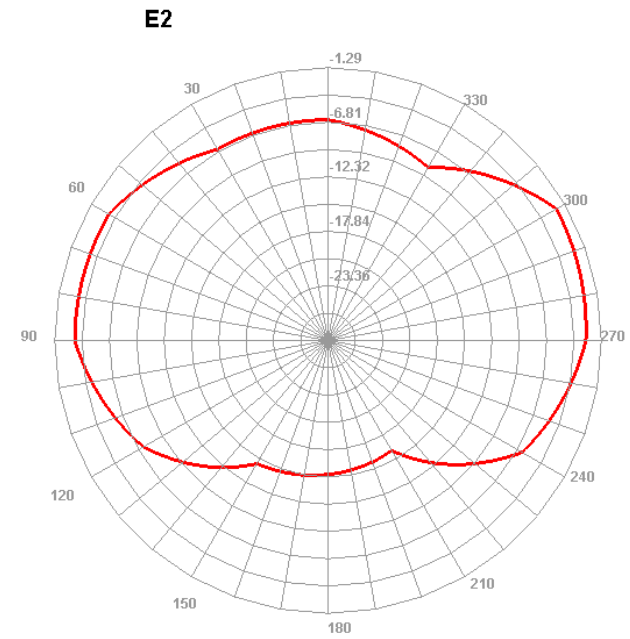
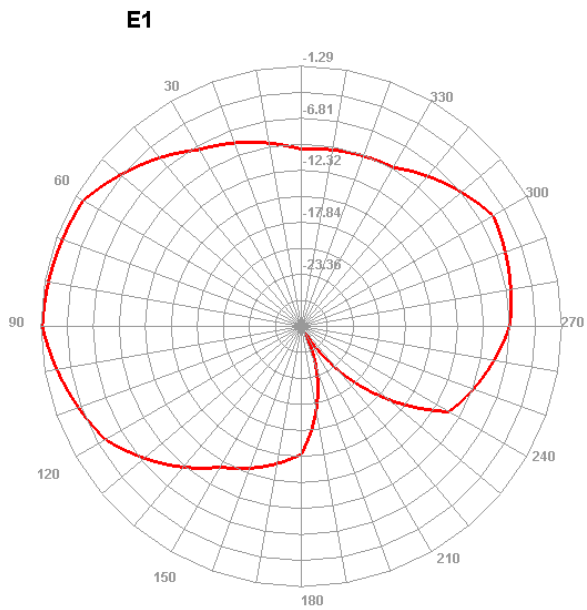
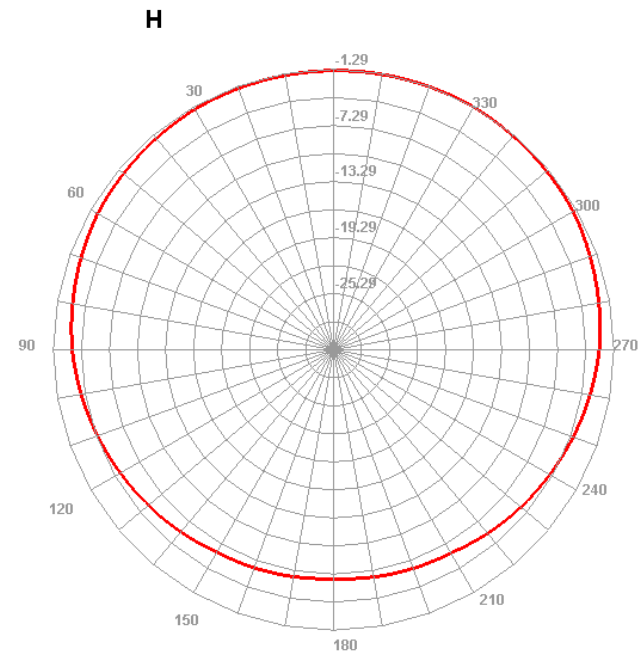
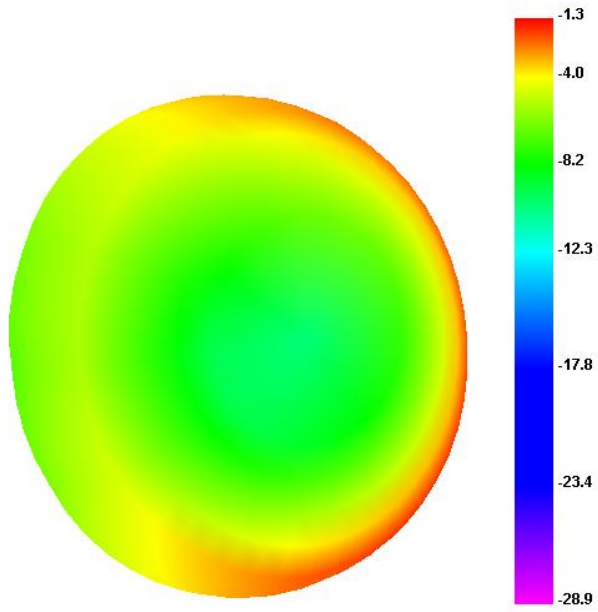
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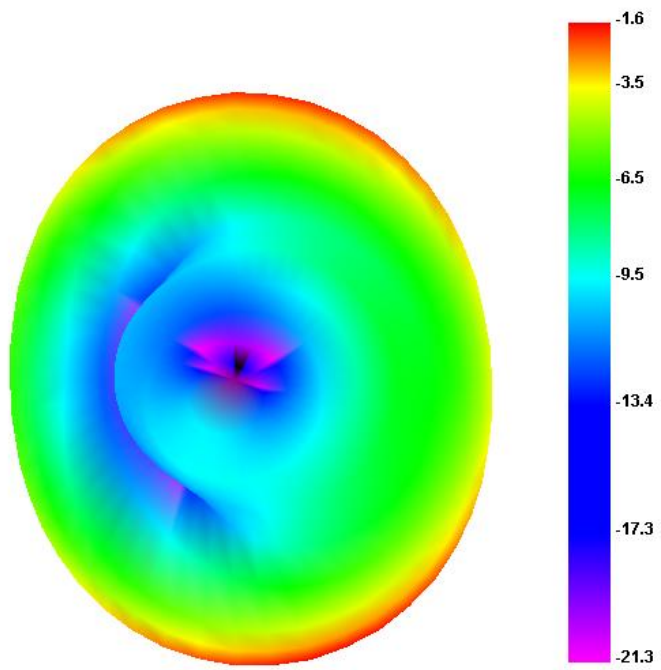
E2



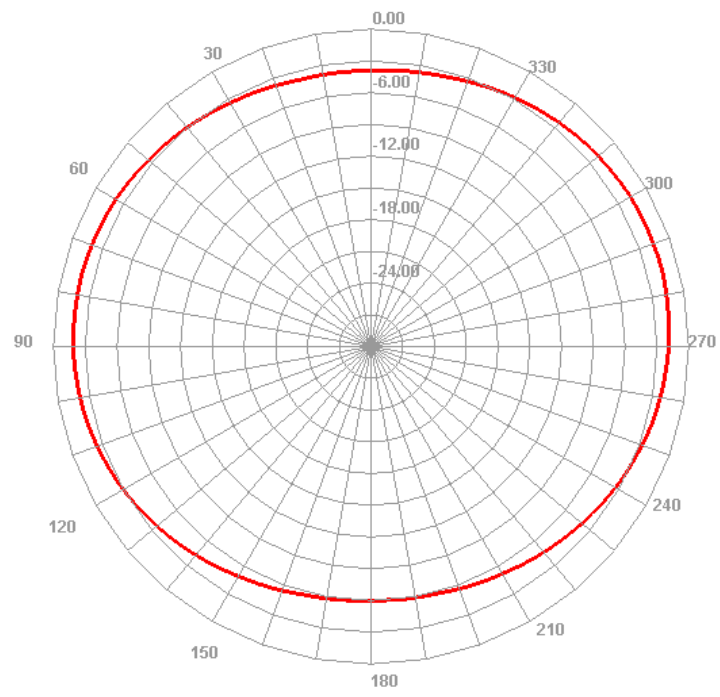
LTE-B26



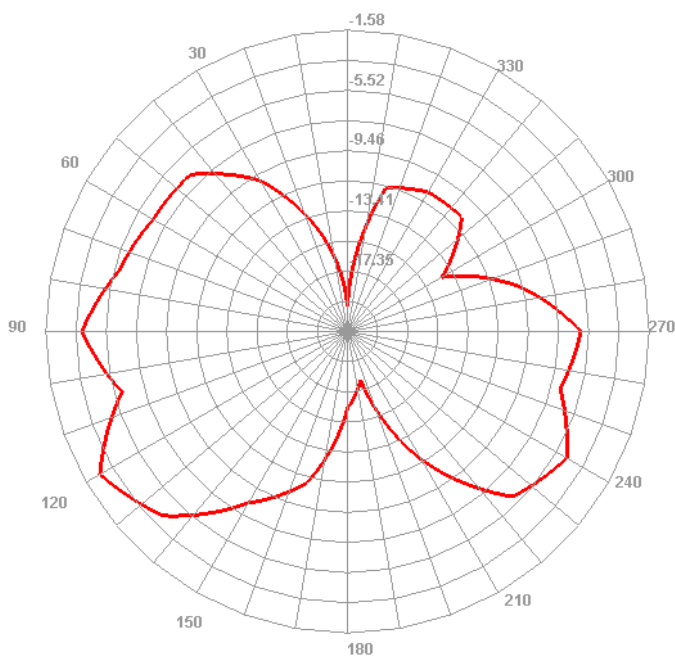
LTE-B28



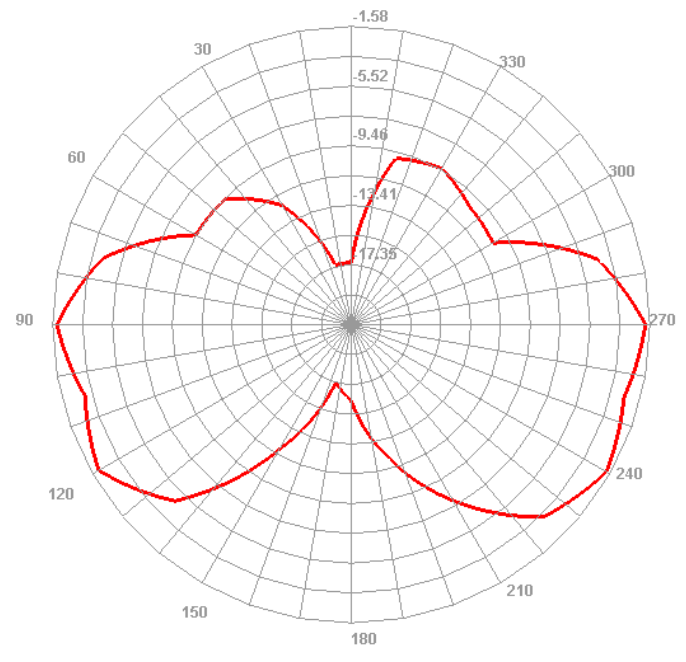
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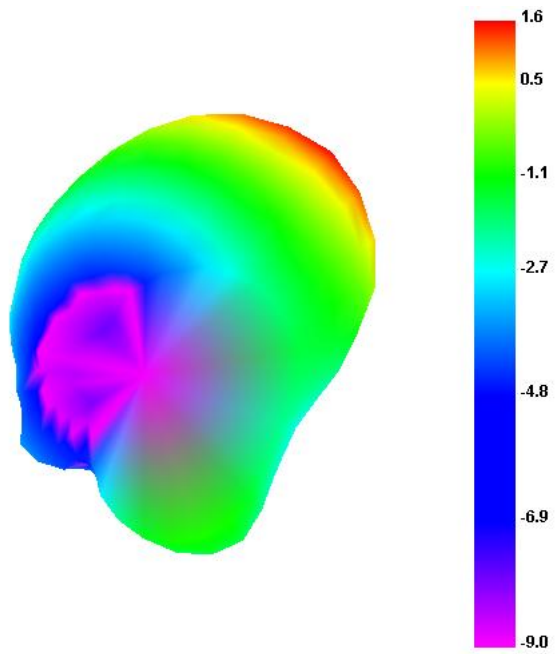
E1



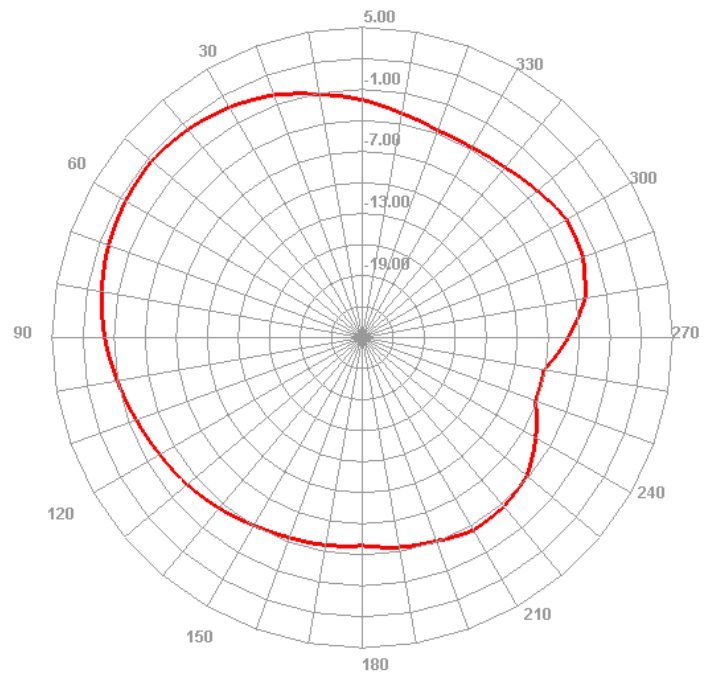
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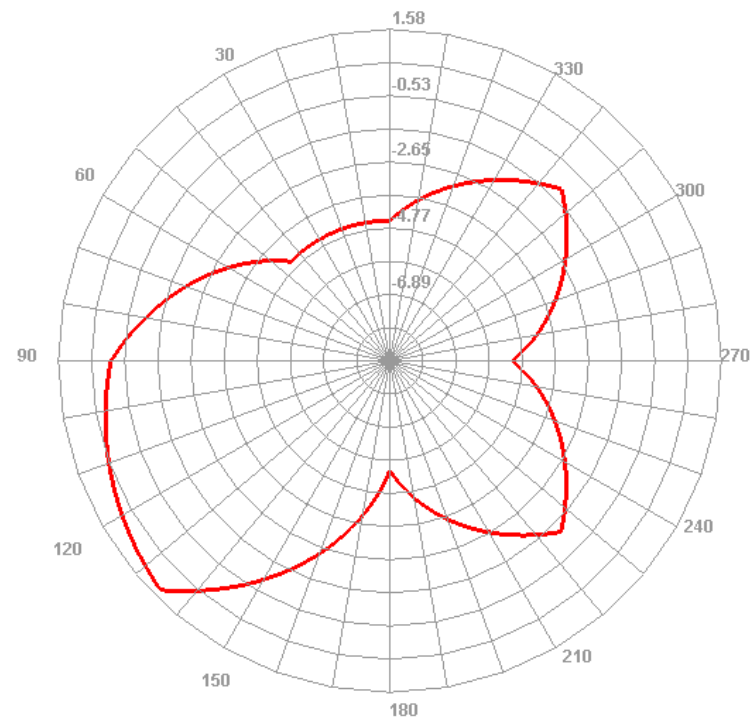
LTE-B66



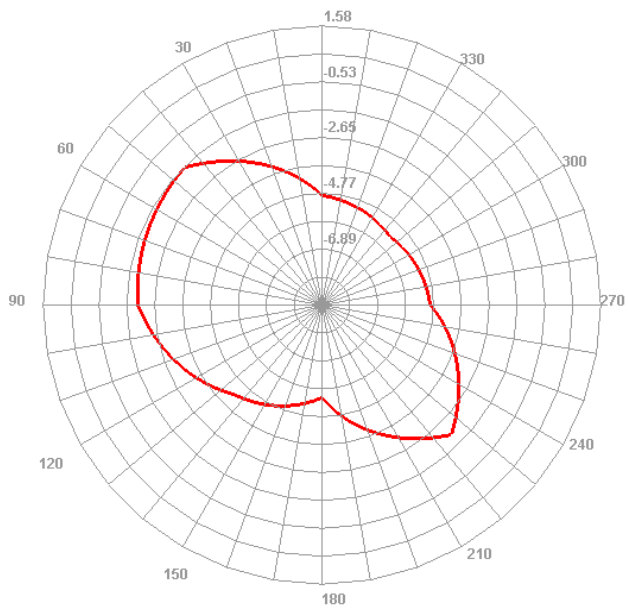
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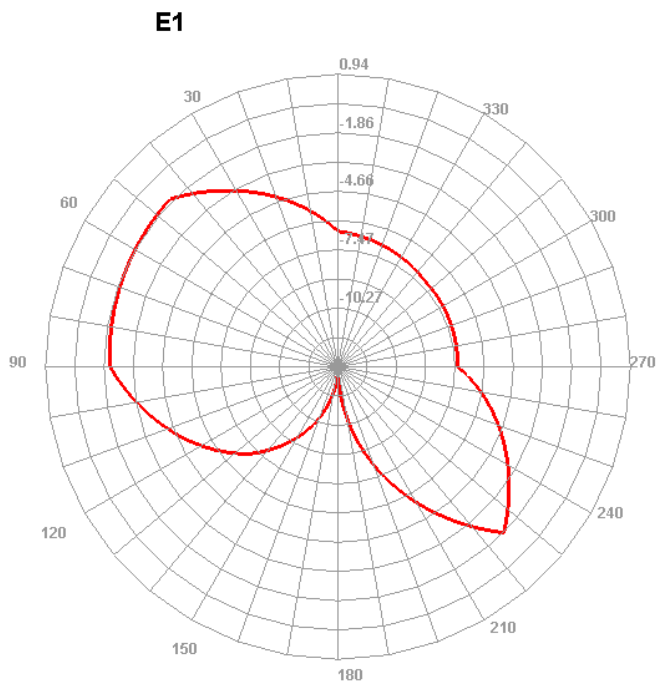
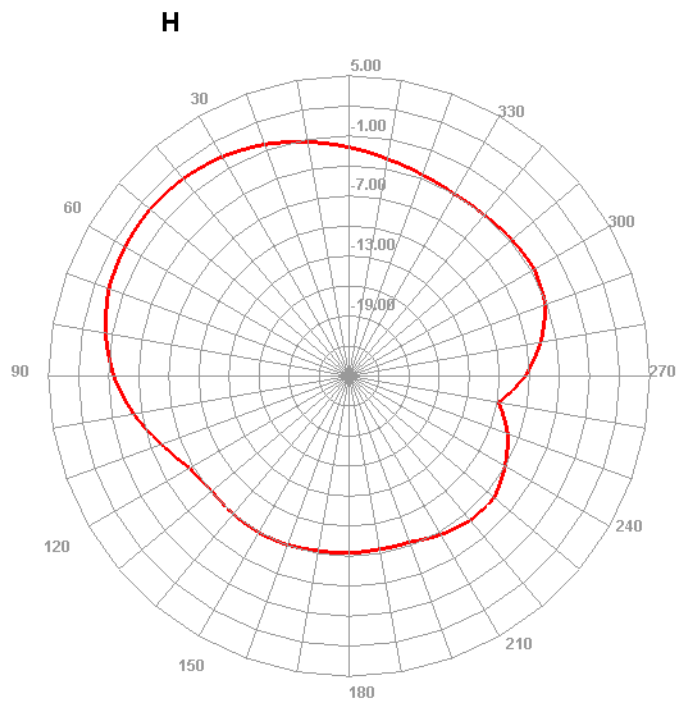
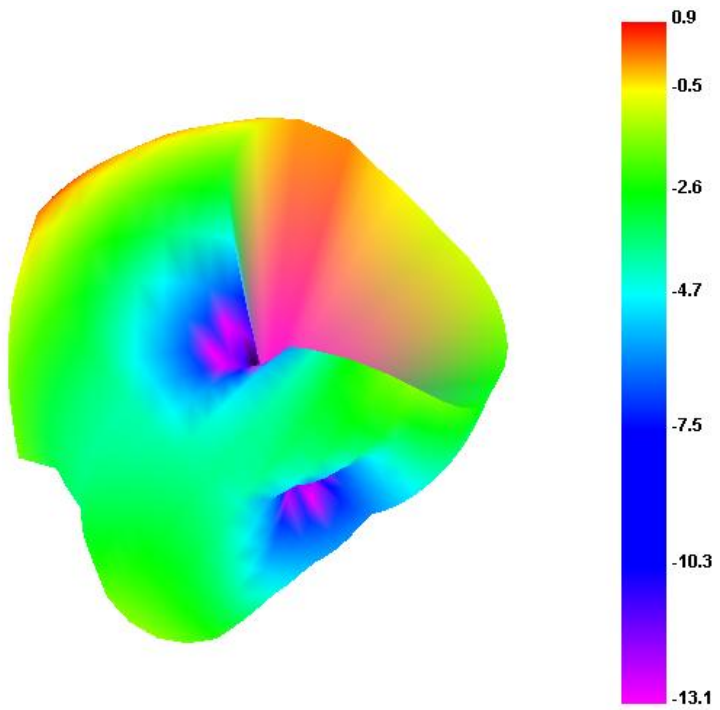
E2



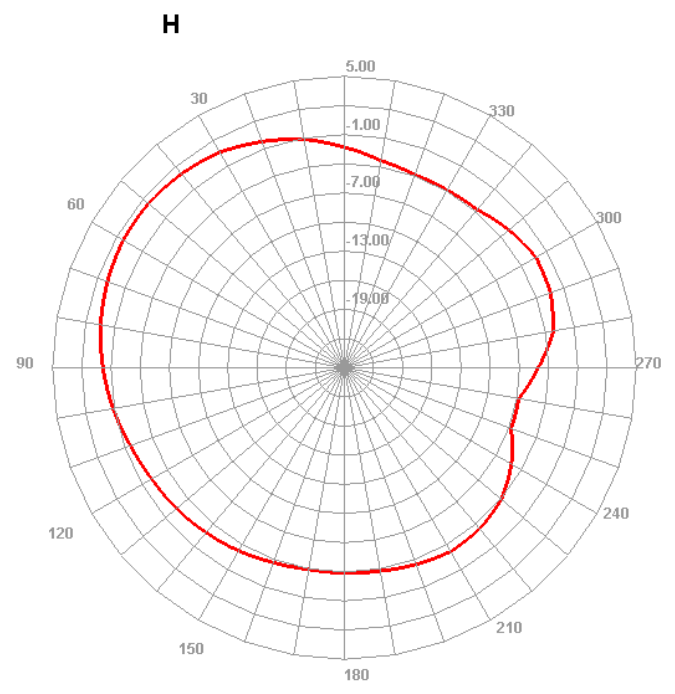
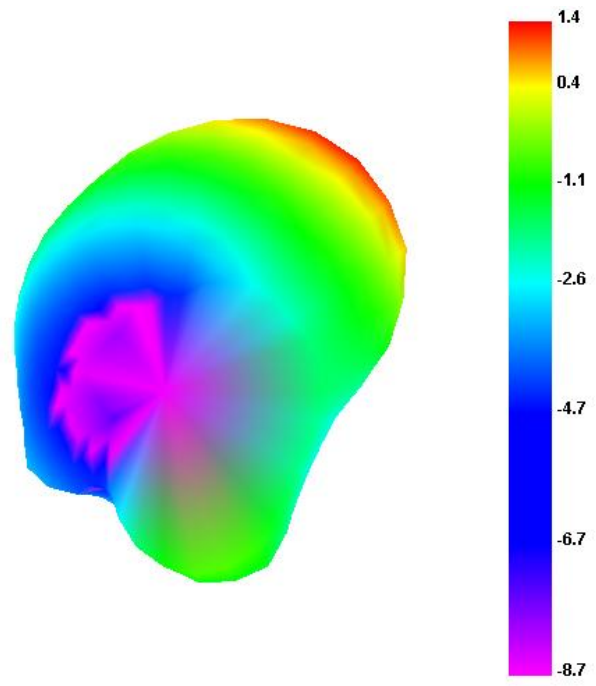
E1



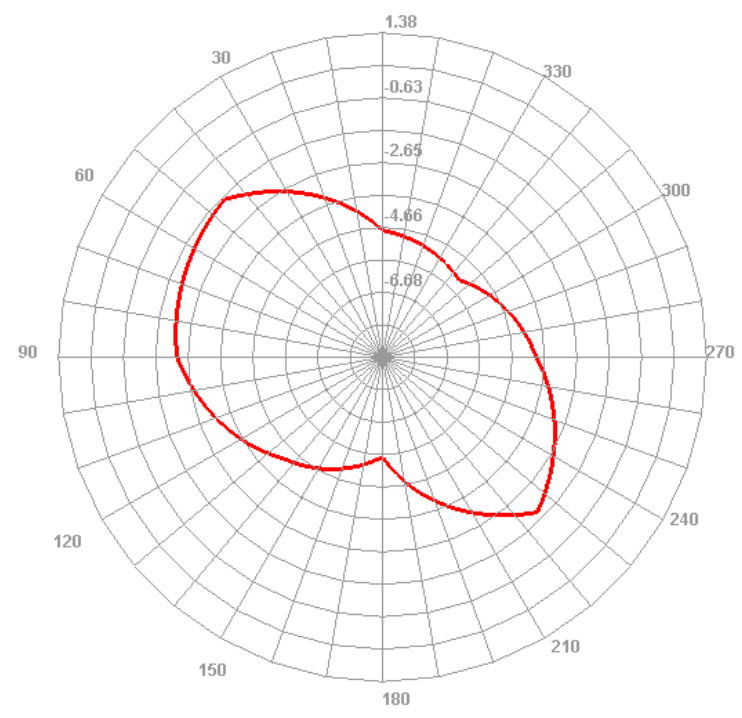
LTE-B38



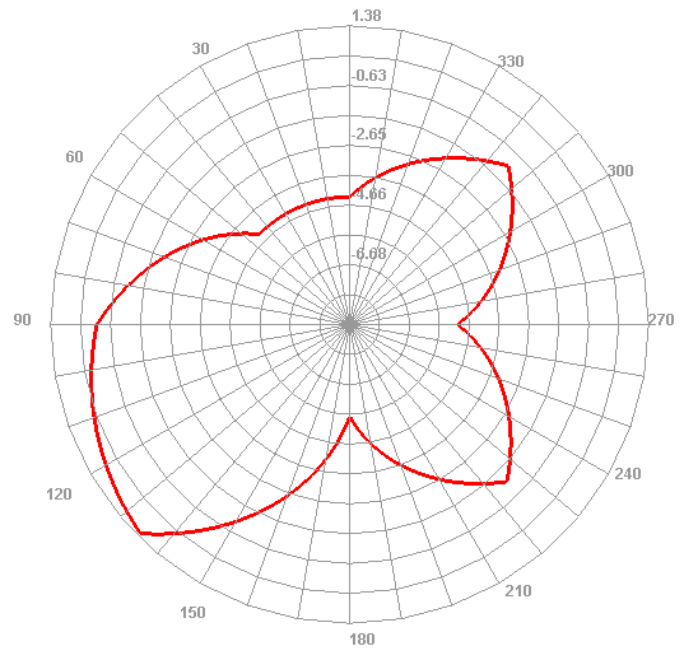
LTE-B40



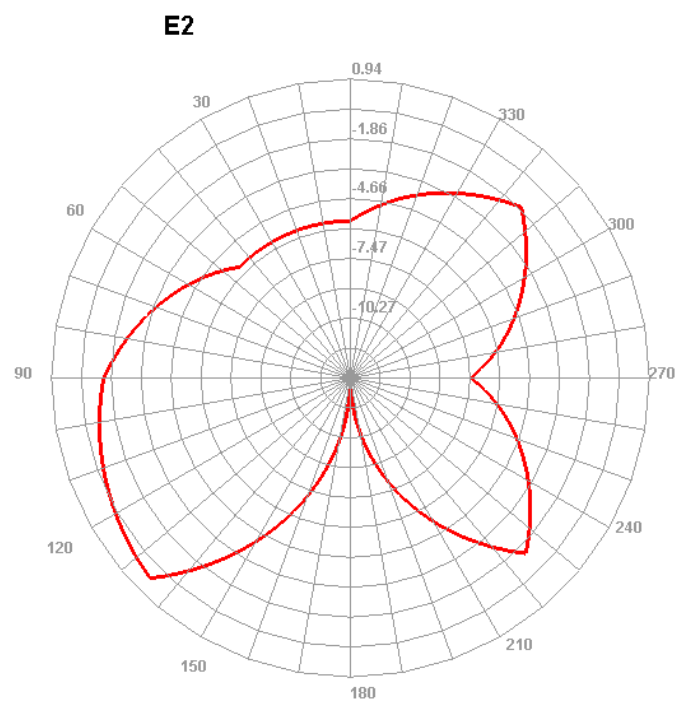
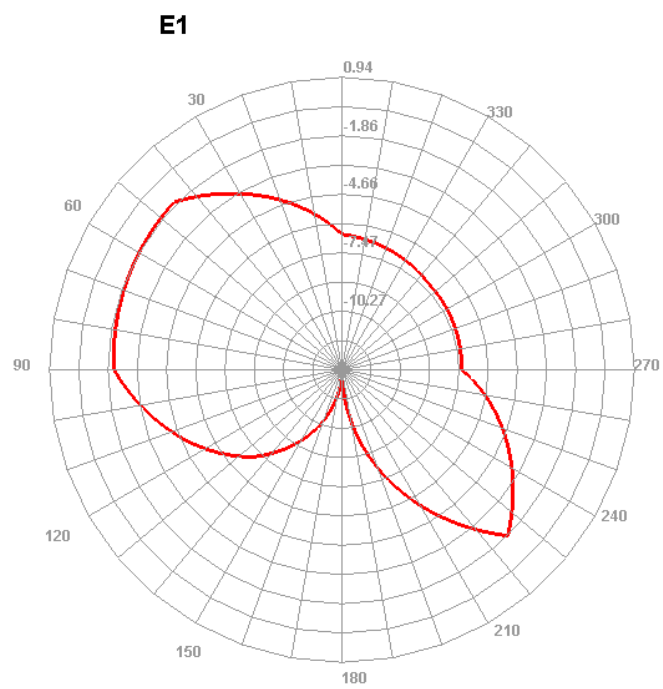
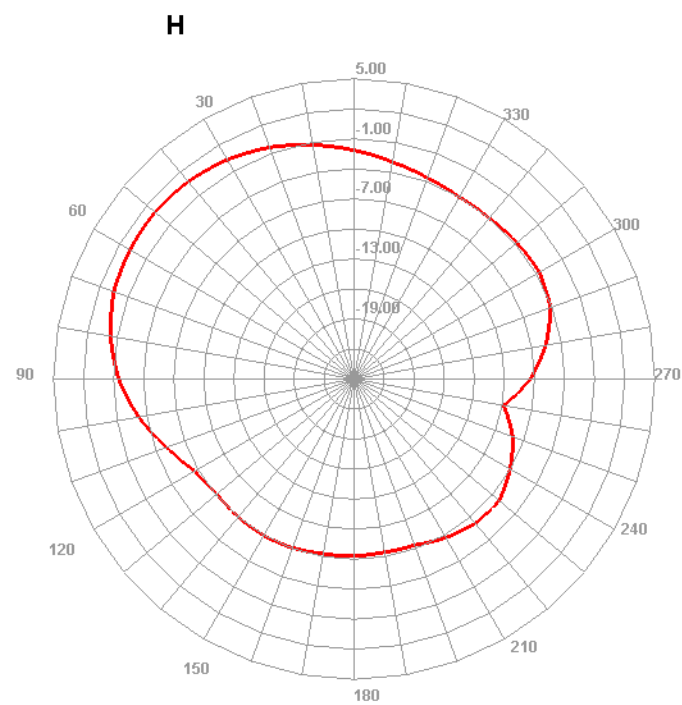
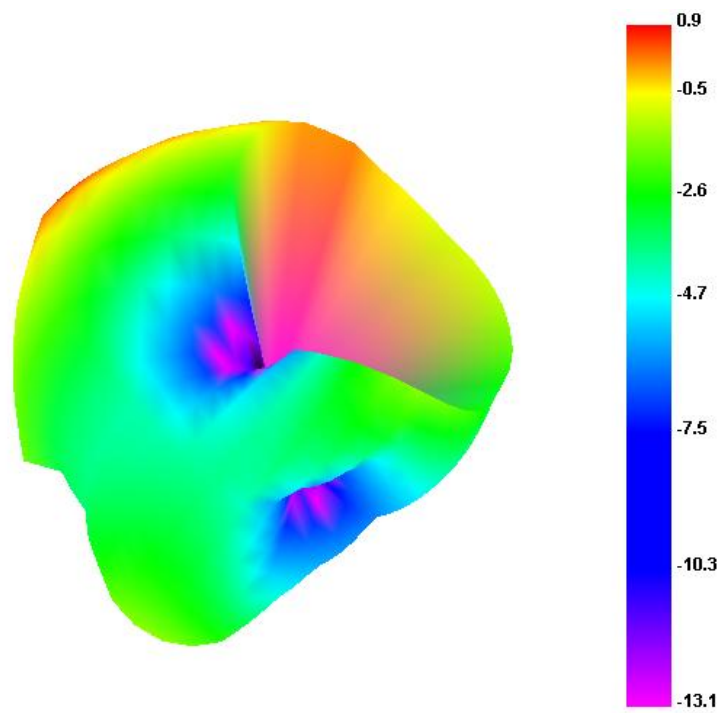
E1



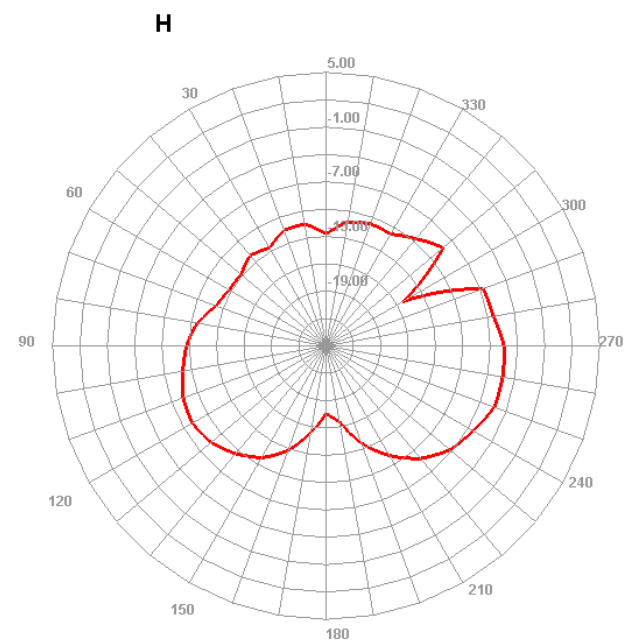
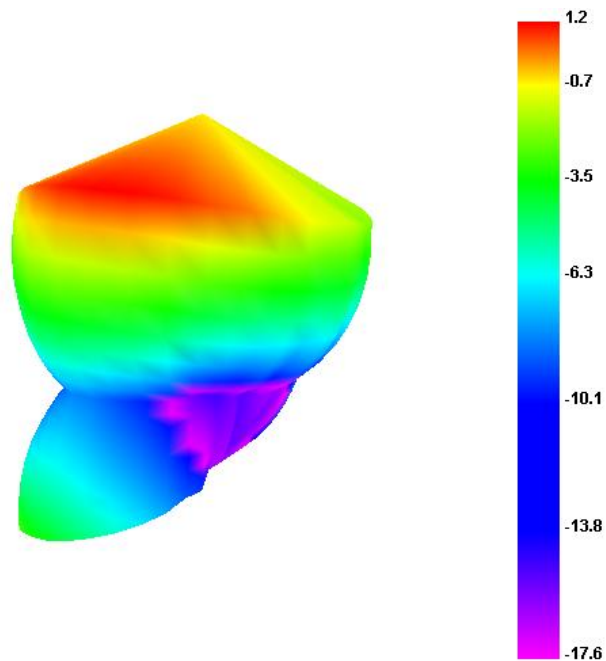
E2



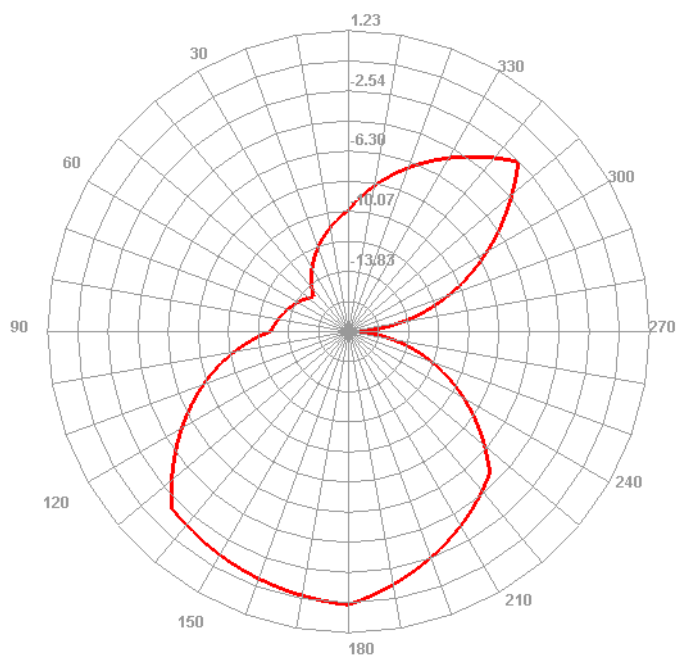
LTE-B41



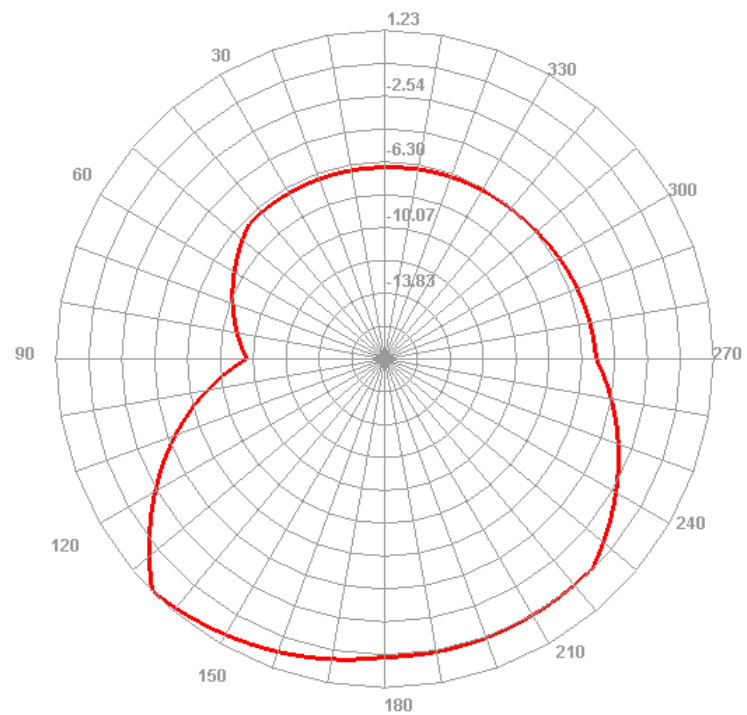
GPS



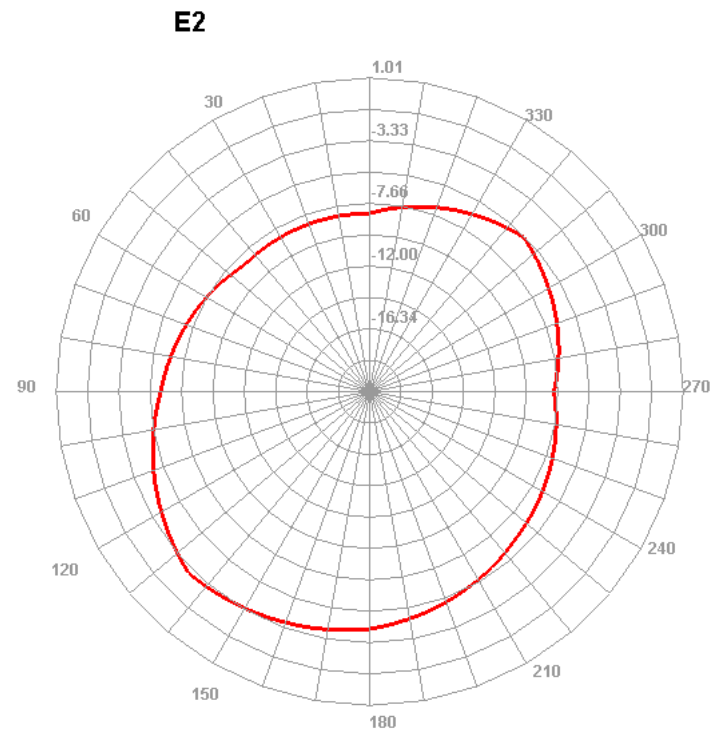
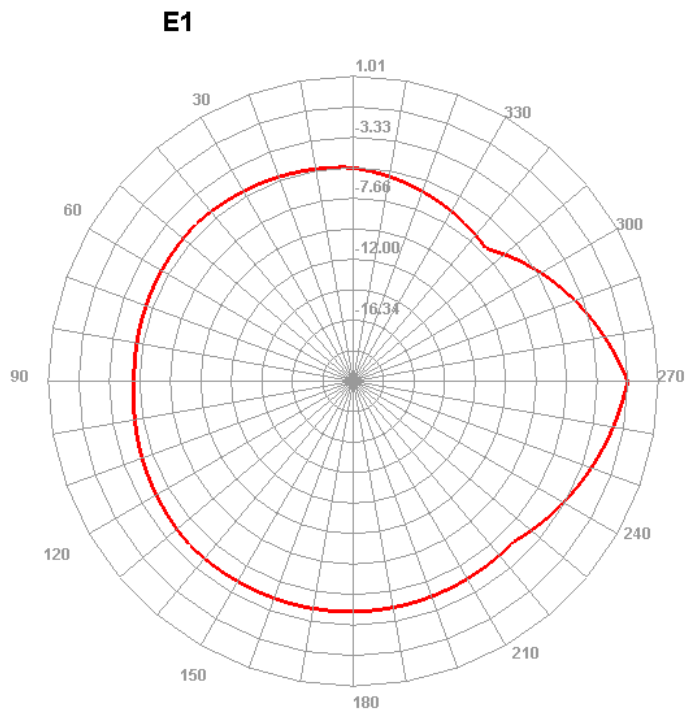
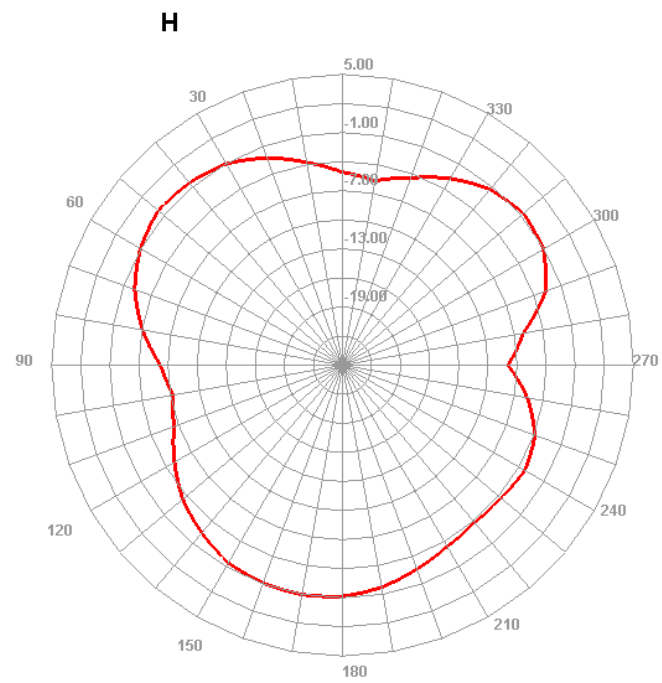
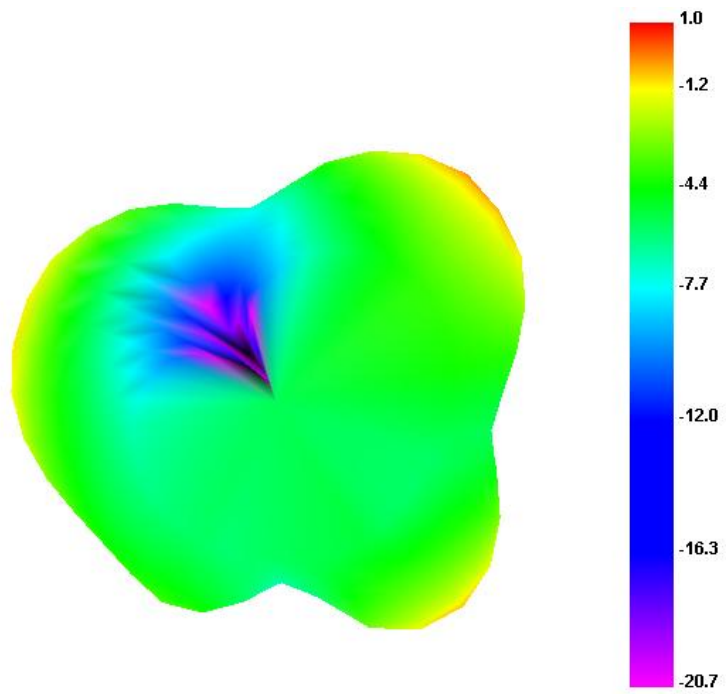
E1



E2



2.4G WiFi



5 G WiFi

