

FCC ID ABZ99FT3081

Raw MPE Data

Meter reads in % of controlled limit; controlled limit = 1.0 for 30-300MHz

Test Frequency = 219.500 MHz

External Vehicle spec. limits = 0.20 mW/cm²

External Vehicle Power Density (Pwr. Den. (cal.)) = average over body/2

Internal Vehicle Power Density (Pwr. Den. (cal.)) = average over (head/chest/leg)/2

External Vehicle Measurements (mW/cm ²)					
Antenna Type: HKAD4001A, 1/4 wave				Mounted: Roof center	Length: 32.5 cm
Power Density E/H (mW/cm ²) over body @_60_cm; 110 cm actual					Comments
1 (20 cm):	0%	6 (120 cm):	17%	Average Pwr. Den (%)	Meter Model: 8718 (01122)
2 (40 cm):	0%	7 (140 cm):	20%	15.1	Probe Model: 8722B (12023)
3 (60 cm):	3%	8 (160 cm):	26%		Calib. Factor: 0.95
4 (80 cm):	8%	9 (180 cm):	30%	Power Density (mW/cm ²)	E/H-Field: E
5 (100 cm):	14%	10 (200 cm):	33%	0.151	Pwr. Den. (cal.): 0.076

Antenna Type: HKAD4001A, 1/4 wave				Mounted: Roof center	Length: 32.5 cm
Power Density E/H (mW/cm ²) over body @_60_cm; 110 cm actual					Comments
1 (20 cm):	0	6 (120 cm):	0.075	Average Pwr. Den (%)	Meter Model: 8616 (11126)
2 (40 cm):	0.025	7 (140 cm):	0.12	0.098	Probe Model: 8631 (02012)
3 (60 cm):	0.03	8 (160 cm):	0.195		Calib. Factor: 0.95
4 (80 cm):	0.035	9 (180 cm):	0.22	Power Density (mW/cm ²)	E/H-Field: H
5 (100 cm):	0.06	10 (200 cm):	0.22	0.098 * 0.95 = 0.093	Pwr. Den. (cal.): 0.047

External Vehicle Measurements (mW/cm^2))						
Antenna Type: HKAD4001A, 1/4 wave			Mounted: Trunk center		Length: 32.5 cm	
					Comments	
Power Density E/H (mW/cm^2) over body @ 60 cm; 110 cm actual						
1 (20 cm):	3.00%	6 (120 cm):	70.00%	Average Pwr. Den (%)	Meter Model:	8718 (01122)
2 (40 cm):	7.00%	7 (140 cm):	58.00%	35.40	Probe Model:	8722B (12023)
3 (60 cm):	20.00%	8 (160 cm):	42.00%		Calib. Factor:	0.95
4 (80 cm):	47.00%	9 (180 cm):	26.00%	Power Density (mW/cm^2)	E/H-Field:	E
5 (100 cm):	65.00%	10 (200 cm):	16.00%	0.354	Pwr. Den. (cal.):	0.178

Antenna Type: HKAD4002A, 3dB gain wave					Mounted: Trunk center		Length: 76.5 cm	
Power Density E/H (mW/cm^2) over body @_60_cm					Comments			
1 (20 cm):	2.00%	6 (120 cm):	52.00%	Average Pwr. Den (%)		Meter Model:	8718 (01122)	
2 (40 cm):	4.00%	7 (140 cm):	59.00%	30.5		Probe Model:	8722B (12023)	
3 (60 cm):	6.00%	8 (160 cm):	59.00%			Calib. Factor:	0.95	
4 (80 cm):	14.00%	9 (180 cm):	43.00%	Power Density (mW/cm^2)		E/H-Field:	E	
5 (100 cm):	41.00%	10 (200 cm):	25.00%	0.305		Pwr. Den. (cal.):	0.153	

Antenna Type: HKAD4001A, 1/4 wave		Mounted: Trunk (cnt)		Length: 32.5 cm	
				Comments	
Power Density E/H (mW/cm^2) over body @_60_cm					
1 (20 cm):	0.03	6 (120 cm):	0.65	Average Pwr. Den (%)	Meter Model: 8616 (11126)
2 (40 cm):	0.08	7 (140 cm):	0.50	0.304	Probe Model: 8631 (02012)
3 (60 cm):	0.13	8 (160 cm):	0.35		Calib. Factor: 0.95
4 (80 cm):	0.35	9 (180 cm):	0.25	Power Density (mW/cm^2)	E/H-Field: H
5 (100 cm):	0.55	10 (200 cm):	0.15	0.304 * 0.95 = 0.289	Pwr. Den. (cal.): 0.14

Antenna Type: <u>HKAD4002A, 3dB gain wave</u> Mounted: <u>Trunk center</u>				Length: <u>76.5 cm</u>	
Power Density E/H (mW/cm ²) over body @ <u>60 cm</u>				Comments	
1 (20 cm):	0.01	6 (120 cm):	0.50	Average Pwr. Den (%)	Meter Model: 8616 (11126)
2 (40 cm):	0.04	7 (140 cm):	0.67	0.287	Probe Model: 8631 (02012)
3 (60 cm):	0.08	8 (160 cm):	0.60		Calib. Factor: 0.95
4 (80 cm):	0.09	9 (180 cm):	0.40	Power Density (mW/cm ²)	E/H-Field: H
5 (100 cm):	0.23	10 (200 cm):	0.25	0.287 * 0.95 = 0.273	Pwr. Den. (cal.): 0.136

Internal Vehicle Measurements (mW/cm ²)					
E-Field:	HKAD4001A, 1/4 wave		Mounted:	Trunk center	Length: 32.5 cm
Back Seat	Hd: 50%	Ch: 37%	Leg: 15%	Avg = 34% = 0.34	Pwr. Den. (cal.): 0.17
Front Seat	Hd: 20 %	Ch: 14%	Leg: 18%	Avg = 17.3% = 0.173	Pwr. Den. (cal.): 0.087
E-Field:	HKAD4002A, 3dB gain wave		Mounted:	Trunk center	Length: 76.5 cm
Back Seat	Hd:40%	Ch: 23%	Leg:15%	Avg = 26% = 0.26	Pwr. Den. (cal.): 0.13
Front Seat	Hd:8%	Ch: 10%	Leg: 13%	Avg = 10.3% = 0.103	Pwr. Den. (cal.): 0.052
H-Field:	HKAD4001A, 1/4 wave		Mounted:	Trunk center	Length: 32.5 cm
Back Seat	Hd: 0.3	Ch: 0.15	Leg: 0.10	Avg = 0.18	Pwr. Den. (cal.): 0.09
Front Seat	Hd: 0.15	Ch: 0.15	Leg: 0.15	Avg = 0.15	Pwr. Den. (cal.): 0.075
H-Field:	HKAD4002A, 3dB gain wave		Mounted:	Trunk center	Length: 76.5 cm
Back Seat	Hd: 0.22	Ch: 0.09	Leg: 0.06	Avg = 0.12	Pwr. Den. (cal.): 0.06
Front Seat	Hd: 0.09	Ch: 0.065	Leg: 0.08	Avg = 0.08	Pwr. Den. (cal.): 0.04

		Internal Vehicle Measurements (mW/cm^2)				
E-Field:	HKAD4001A, 1/4 wave		Mounted:	Roof center	Length:	32.5 cm
Back Seat	Hd: 17%	Ch: 14%	Leg: 6%	Avg. = 12.3% = 0.123	Pwr. Den. (cal.):	0.062
Front Seat	Hd: 15%	Ch: 10%	Leg: 16%	Avg. = 13.7% = 0.137	Pwr. Den. (cal.):	0.069
H-Field:	HKAD4001A, 1/4 wave		Mounted:	Roof center	Length:	32.5 cm
Back Seat	Hd: 0.075	Ch: 0.045	Leg: 0.015	Avg = 0.045	Pwr. Den. (cal.):	0.023
Front Seat	Hd: 0.055	Ch: 0.03	Leg: 0.035	Avg = 0.040	Pwr. Den. (cal.):	0.02