**765KV DC DA-DD TYPE(FLAT)**

d = 3.5;  
*#n = int(input('total number of strand in bundle='));*n = 1;  
*#s = float(input('space between any 2 strand='));*s = 45.7;  
*#nphase = int(input('total no of phases='));*nphase = 8;  
pi = cmath.pi;  
db = s / math.sin(pi/n);  
eradi = n\*d/db;  
eradi = math.pow(eradi, 1/n);  
eradi = eradi\*db/2;  
Im=[442.2,442.2,442.2,442.2,442.2,442.2,0,0]; *# Current array  
#Im=[100\*math.sqrt(3)]; # Current array*Pm=[0,120,240,0,120,240,0,0]; *# phase angle array*h111=[29,43.6,60.5,29,43.6,60.5,72.9,72.9];  
h222=[29,43.6,60.5,29,43.6,60.5,72.9,72.9];  
x\_cor=[12.5,11.1,10,-12.5,-11.1,-10,10.4,-10.4];  
min\_cle11=[18.2,32.8,49.6,18.2,32.8,49.6,61.5,61.5];  
*#V=[(-151.6+262.5j),(303.1+0j),(-151.6-262.5j)]; # in kV  
# code for fetching voltage and phase angle data automatically*a=0;  
*#Vm=[];  
#Pm=[];*I=[];  
span=386;  
*#span = float(input('span length='));*weight=0.35;

cond\_div=1;  
div=20;

*#def measurement(div):*X=[];  
Y=[];  
Z=[];

**LATERAL PROFILE:**

*#x\_start = float(input('starting x cordinate of measured point='));*x\_start = -32 ;  
*#x\_end = float(input('ending x cordinate of measured point='));*x\_end = 32;  
*#y\_start = float(input('starting y cordinate of measured point='));*y\_start = 1;  
*#y\_end = float(input('ending y cordinate of measured point='));*y\_end = 1;  
*#z\_start = float(input('starting z cordinate of measured point='));*z\_start = 193;  
*#z\_end = float (input('ending z cordinate of measured point='));*z\_end = 193;

Measurement height= 1m

[2546.6474072534374, 3026.7951109124215, 3538.962937501348, 4058.5990604417193, 4553.4943985185755, 4989.573678225564, 5339.742673999412, 5591.973970768485, 5751.621530473827, 5835.608733496095, 5861.217574519193, 5835.608733496098, 5751.621530473828, 5591.973970768482, 5339.7426739994135, 4989.573678225564, 4553.494398518576, 4058.5990604417193, 3538.9629375013474, 3026.795110912421, 2546.647407253439]

Measurement height= 1.8m

[2550.4408737066933, 3032.219490171923, 3546.4547501599777, 4068.378927066825, 4565.317595157843, 5002.559609372996, 5352.484585619126, 5603.025505309301, 5760.176240260513, 5841.9651343977175, 5866.702725334651, 5841.9651343977175, 5760.176240260513, 5603.025505309302, 5352.484585619124, 5002.559609372996, 4565.317595157853, 4068.3789270668262, 3546.4547501599786, 3032.219490171923, 2550.4408737066938]

**LONGITUDINAL PROFILE:**

x\_start = 12.5 ;  
*#x\_end = float(input('ending x cordinate of measured point='));*x\_end = 12.5;  
*#y\_start = float(input('starting y cordinate of measured point='));*y\_start = 1;  
*#y\_end = float(input('ending y cordinate of measured point='));*y\_end = 1;  
*#z\_start = float(input('starting z cordinate of measured point='));*z\_start = 0;  
*#z\_end = float (input('ending z cordinate of measured point='));*z\_end = 386;

Measurement height= 1m

[2674.0729881024245, 4511.478785121036, 5184.269313027221, 5348.279221907171, 5380.852593309656, 5382.654887374317, 5378.265080182179, 5373.683306023341, 5370.275837131301, 5368.254310404434, 5367.589274050168, 5368.254310404481, 5370.275837131249, 5373.683306023343, 5378.265080182135, 5382.654887374313, 5380.852593309669, 5348.279221907191, 5184.269313027186, 4511.478785121023, 2674.072988102407]

Measurement height= 1.8m

[2686.1258081176434, 4527.657287640463, 5198.092786402768, 5361.216440690303, 5393.562749568336, 5395.308743050117, 5390.905770428927, 5386.321877783328, 5382.9148669164015, 5380.894032047045, 5380.229271348726, 5380.894032047032, 5382.9148669164, 5386.32187778326, 5390.905770428865, 5395.308743050099, 5393.562749568336, 5361.216440690302, 5198.092786402743, 4527.657287640446, 2686.125808117624]