

Given:

$$\begin{aligned}\Delta &= 110^{\circ}18'12'' \\ C &= 665.79' \\ PC &= 14+78.21\end{aligned}$$

Find:

Deflection angles and sub-chords to layout this curve on half stations.
Include the midpoint of arc in the table.

$$\begin{aligned}(1) \quad \Delta &= 110^{\circ}18'12'' \\ (2) \quad R &= \underline{405.64'} \\ (3) \quad L &= \underline{780.92'} \\ (4) \quad C &= 665.79' \\ (5) \quad T &= \underline{582.59'} \\ (6) \quad M &= \underline{173.85'} \\ (7) \quad E &= \underline{304.26'} \\ (8) \quad D_A &= \underline{14^{\circ}07'29''} \\ (9) \quad D_C &= \underline{14^{\circ}09'39''} \\ (10) \quad d_f &= \underline{0.0706^{\circ}}\end{aligned}$$

STATION	l	$\alpha/2$	SC
PC 14+78.21	-0-	-0-	-0-
15+00	21.79	1-32-20	21.79
15+50	71.79	5-04-12	71.70
16+00	121.79	8-36-05	121.33
16+50	171.79	12-07-57	170.51
17+00	221.79	15-39-49	219.04
17+50	271.79	19-11-42	266.73
18+00	321.79	22-43-34	313.42
18+50	371.79	26-15-26	358.91
MPOC 18+68.67	390.46	27-34-33	375.56
19+00	421.79	29-47-19	403.04
19+50	471.79	33-19-11	445.64
20+00	521.79	36-51-03	486.55
20+50	571.79	40-22-56	525.61
21+00	621.79	43-54-48	562.68
21+50	671.79	47-26-40	597.61
22+00	721.79	50-58-33	630.27
PT 22+59.13	780.92	55-09-06	665.79

Given:

$$\begin{aligned}\Delta &= 28^{\circ}31'17'' \\ R &= 393.44' \\ PC &= 1+00.00\end{aligned}$$

Find:

Deflection angles and sub-chords to layout this curve on quarter stations.
Include the midpoint of arc in the table.

$$\begin{aligned}(1) \quad \Delta &= 28^{\circ}31'17'' \\ (2) \quad R &= 393.44' \\ (3) \quad L &= \underline{195.85'} \\ (4) \quad C &= \underline{193.84'} \\ (5) \quad T &= \underline{100.00'} \\ (6) \quad M &= \underline{12.12'} \\ (7) \quad E &= \underline{12.51'} \\ (8) \quad D_A &= \underline{14^{\circ}33'46''} \\ (9) \quad D_C &= \underline{14^{\circ}36'08''} \\ (10) \quad d_f &= \underline{0.0728^{\circ}}\end{aligned}$$

STATION	l	$\alpha/2$	SC
PC 1+00	-0-	-0-	-0-
1+25	25.00	1-49-13	25.00
1+50	50.00	3-38-26	49.97
1+75	75.00	5-27-40	74.89
MPOC 1+97.93	97.93	7-07-50	97.68
2+25	125.00	9-06-06	124.47
2+50	150.00	10-55-19	149.09
2+75	175.00	12-44-33	173.56
PT 2+95.85	195.85	14-15-38	193.83