

FCC

To whom it may concern:

SUBJECT: SENSORMATIC ELECTRONICS CORP.FCC ID: APS1000

REFERENCE: JOB 1074UC2

From: DONALD UMBDENSTOCK:

The distance correction factor is explained as follows:

Test report Section IV, Radiated Emissions: "Propagation loss was determined by extrapolating the results to 300 meters as per 15.31(f)(2), using the 2 point roll-off extrapolation method."

Test report Section VIII, Data, Part B, Radiated Emissions, footnotes at the bottom of the page:

"DCF: Distance Correction Factor

$$DCF = 20 \log(\text{Test Dist} / 300)P = 20 P \log (\text{Test Dist} / 300)$$

Where P is the roll-off exponent . P is found as follows:

$$P = (\text{Level(at Distance 1)} - \text{Level(at Distance 2)}) / 20 \log (\text{Distance 2} / \text{Distance 1})$$
$$P = 3$$

The above formulas explains the 2 point method allowed by the rules.  
The following is the formula with values plugged in:

$$P = (59.4 - 41.3) / 20 \log (20/10)$$
$$= 18/6$$
$$= 3$$

$$DCF = 20 P \log (10/300)$$
$$= (20)(3) \log (1/30)$$
$$= 60 \log (1/30)$$
$$= - 88.6$$

Similarly for test distance at 30 meters,

$$DCF = 60 \log (10/30)$$
$$= - 28.6$$

Let me know if you need any further clarification.

Kind regards,

Don Umbdenstock