

ANALYSIS OF VALMONT INDUSTRIES LIGHTING STRUCTURE
IN ACCORDANCE WITH AASHTO-2009 RQMTS. (FINAL DEFLECTED POSITION)
BY BNS 5/12/2014 VERSION Fuse 1.10.0.540 32-bit

SUBJECT: VERMONT, 42' MAST ARM & 16' LUM ARM

FOLDER: VTTRAF FILE: 4216

SIGNAL AND SIGN ARM 1

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SHAPE	= Round
SPAN LENGTH	= 42.00 FT
BASE O.D.	= 12.50 IN
TAPER	= 0.14 IN/FT
ATTACH. HT. *	= 20.00 FT
ORIENTATION **	= 0 DEGREES
SLOPE AT BASE	= 0 DEGREES
CENTROID LOCATION	
HORIZONTAL	= 18.85 FT
ABOVE ATTACH.	= 0.00 FT
UNBENT LENGTH	= 42.00 FT
MATERIAL-BASE	= S105 - 55 ksi
WEIGHT	= 912 LBS

ARM 1 SECTIONS

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BASE SECTION	
THICKNESS	= 0.2092 IN
LENGTH	= 42.00 FT
YIELD STRENGTH	= 55 KSI

BASE WELD FATIGUE CATEGORY = Full-Pen / E

* THIS IS HEIGHT OF ATTACHMENT TO POLE ABOVE BOTTOM OF
BASE PLATE OR TRANSFORMER BASE. SEE *** BELOW.

** ARM ORIENTATIONS ARE ANGLES FROM +X AXIS IN X-Y PLANE.
X AND Y AXIES ARE PERPENDICULAR/PARALLEL TO SIDES OF
POLE BASE PLATE. SEE *** BELOW.

*** IF ARM IS ATTACHED WITH A CLAMP, HEIGHT AND
ORIENTATION MUST NOT BE CHANGED FROM VALUES SHOWN
ABOVE WITHOUT CONSULTING VALMONT.