

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, 34' & 31' MAST ARMS W/12' LUM ARM

FOLDER: VTTRAF FILE: 3431L12

ANALYSIS OF POLE: FORCES AND MOMENTS

SECTION GROUP		FORCES (LBS)			MOMENTS (FT-LBS)			WIND
HEIGHT*	LOAD	=====			=====			DIRECT**
(FT)	NO.	FX	FY	FZ	MX	MY	MZ	(DEGREES)
26.50	1	546	2	-157	-3	-41	11	0
26.50	2	538	109	-154	-189	-42	643	90
26.50	3	893	88	-265	-158	-77	539	90
20.00	1	40	32	2013	-15266	19345	0	0
20.00	2	122	2265	1930	-16248	18147	30657	90
20.00	3	175	1508	3526	-32496	37946	19018	90
0.00	1	2	2	2612	-15588	19753	0	0
0.00	2	5	2376	2612	-62830	19102	30658	90
0.00	3	8	1592	4380	-63629	39496	19018	90

* THESE HEIGHTS ARE ABOVE THE POLE BASE PLATE.

** THESE ARE DIRECTIONS TOWARD WHICH THE WIND IS FLOWING.
 THEY ARE ANGLES FROM THE +X AXIS IN THE X-Y PLANE