

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

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	790	0	-171	0	-59	0	0
26.50	2	794	131	-171	-205	-59	913	90
26.50	3	1301	104	-291	-160	-108	704	90
20.00	1	48	0	1527	0	30335	0	0
20.00	2	122	1463	1503	-2102	29650	41889	90
20.00	3	179	1054	2462	-1501	56409	26457	90
0.00	1	3	0	2125	0	30831	0	0
0.00	2	6	1622	2126	-33229	30728	41890	90
0.00	3	576	812	3267	-15476	67623	17129	55

* 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