

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

GROUP IV FATIGUE ANALYSIS OF ARMS:

| ANAL. LOCATION | | | | | | | |
|----------------|-----|-----------|--------------------|--------|---------|--------|------|
| ARM | ARM | LOAD CASE | STRESS | STRESS | BENDING | SHEAR | |
| TYPE | NO. | SITE | RATIO | CAT. | STRESS | STRESS | |
| | | ===== | | | KSI | KSI | |
| SIG | 1 | BASE | NATURAL WIND GUST | 1.00 | E | 4.49 | 0.09 |
| SIG | 1 | BASE | TRUCK-INDUCED GUST | 0.51 | E | 2.30 | 0.04 |