

Header Element Fields		
Manufacturer	varchar(30)	N
CatalogNumber	varchar(20)	N
Description	varchar(255)	
DocumentCreator	varchar(30)	
UniqueIdentifier	varchar(20)	N
MeasurementEquipment	varchar(20)	N
Laboratory	varchar(30)	N
ReportNumber	varchar(20)	N
ReportDate	timestamp	N
DocumentCreationDate	timestamp	

```
CREATE TABLE ReflectionGeometry (
0 varchar(5) DEFAULT 'di:8' NOT NULL,
1 varchar(5) DEFAULT 'de:8' NOT NULL,
2 varchar(5) DEFAULT '8:di' NOT NULL,
3 varchar(5) DEFAULT '8:de' NOT NULL,
4 varchar(5) DEFAULT 'd:d' NOT NULL,
5 varchar(5) DEFAULT 'd:0' NOT NULL,
6 varchar(5) DEFAULT '45a:0' NOT NULL,
7 varchar(5) DEFAULT '45c:0' NOT NULL,
8 varchar(5) DEFAULT '0:45a' NOT NULL,
9 varchar(5) DEFAULT '45x:0' NOT NULL,
10 varchar(5) DEFAULT '0:45x' NOT NULL,
11 varchar(5) DEFAULT 'other' NOT NULL);
```

```
CREATE TABLE SpectralQuantity (
0 varchar(4) DEFAULT 'flux' NOT NULL,
1 varchar(11) DEFAULT 'absorptance' NOT NULL,
2 varchar(13) DEFAULT 'transmittance' NOT NULL,
3 varchar(11) DEFAULT 'reflectance' NOT NULL,
4 varchar(9) DEFAULT 'intensity' NOT NULL,
5 varchar(10) DEFAULT 'irradiance' NOT NULL,
6 varchar(8) DEFAULT 'radiance' NOT NULL,
7 varchar(8) DEFAULT 'exitance' NOT NULL,
8 varchar(8) DEFAULT 'R-Factor' NOT NULL,
9 varchar(8) DEFAULT 'T-Factor' NOT NULL,
10 varchar(8) DEFAULT 'relative' NOT NULL,
11 varchar(5) DEFAULT 'other' NOT NULL);
```

**To-Do:**







ReflectionGeometry only required if SpectralQuantity = 3, "reflectance"

TransmissionGeometry only required if SpectralQuantity = 2, "transmittance"

ReflectionGeometry goes to table ReflectionGeometry

TransmissionGeometry goes to table TransmissionGeometry

SpectralQuantity goes to table SpectralQuantity

Spectral Distribution Fields		
 SpectralQuantity	varchar(13)	
 ReflectionGeometry	varchar(5)	
 TransmissionGeometry	varchar(5)	
 BandwidthFWHM	decimal(6, 6)	N
 BandwidthCorrected	tinyint(1)	N
 SpectralData	varchar(255)	

ReflectionGeometry	
 0	varchar(5)
 1	varchar(5)
 2	varchar(5)
 3	varchar(5)
 4	varchar(5)
 5	varchar(5)
 6	varchar(5)
 7	varchar(5)
 8	varchar(5)
 9	varchar(5)
 10	varchar(5)
 11	varchar(5)

SpectralQuantity	
 0	varchar(4)
 1	varchar(11)
 2	varchar(13)
 3	varchar(11)
 4	varchar(9)
 5	varchar(10)
 6	varchar(8)
 7	varchar(8)
 8	varchar(8)
 9	varchar(8)
 10	varchar(8)
 11	varchar(5)

```
CREATE TABLE `Header Element Fields` (
Manufacturer varchar(30),
CatalogNumber varchar(20),
Description varchar(255) NOT NULL,
DocumentCreator varchar(30) NOT NULL,
UniqueIdentifier varchar(20),
MeasurementEquipment varchar(20),
Laboratory varchar(30),
ReportNumber varchar(20),
ReportDate timestamp NULL,
DocumentCreationDate timestamp NOT NULL);
```

```
CREATE TABLE `Spectral Distribution Fields` (
SpectralQuantity varchar(13) NOT NULL,
ReflectionGeometry varchar(5) NOT NULL,
TransmissionGeometry varchar(5) NOT NULL,
BandwidthFWHM decimal(6, 6),
BandwidthCorrected tinyint(1),
SpectralData varchar(255) NOT NULL,
PRIMARY KEY (SpectralQuantity));
```