

**Sample 1 – Horizontal Scratching – 10- $\mu$ m Crack Opening Dimension**



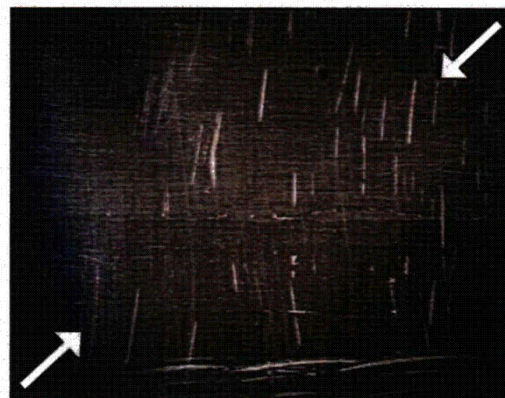
**Figure B.13 - Sample 1  
Diffuse On-Axis Lighting**



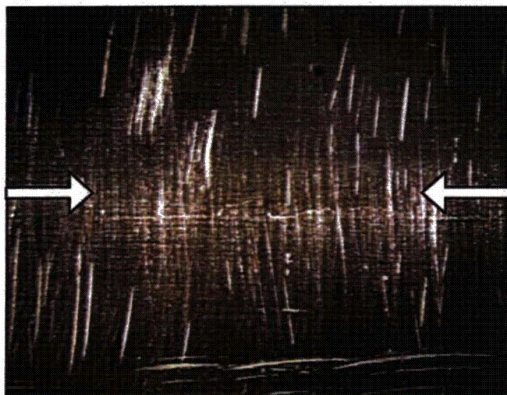
**Figure B.14 - Sample 1  
Diffuse Ring Lighting**



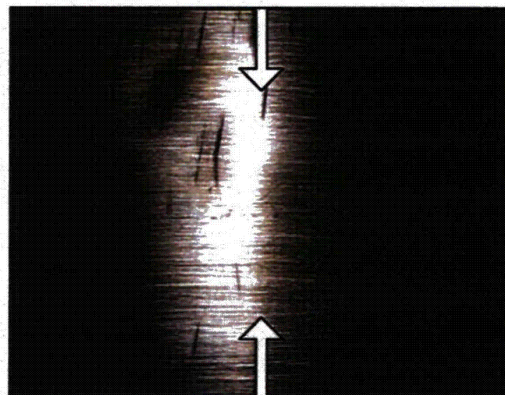
**Figure B.15 - Sample 1  
Spotlighting from Indicated Directions**



**Figure B.16 - Sample 1  
Spotlighting from Indicated Directions**



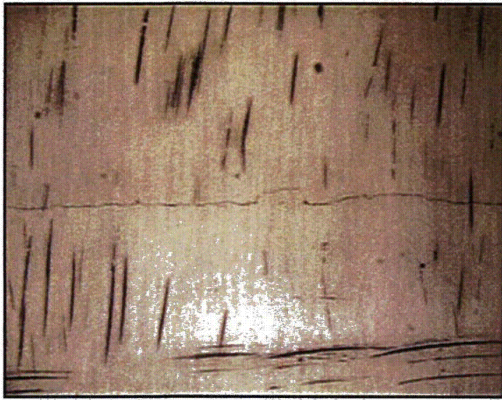
**Figure B.17 - Sample 1  
Spotlighting from Indicated Direction**



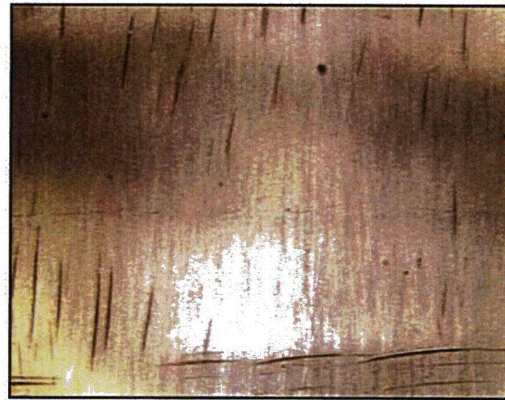
**Figure B.18 - Sample 1  
Spotlighting from Indicated Direction**



**Sample 1 – Vertical Scratching – 10- $\mu$ m Crack Opening Dimension**



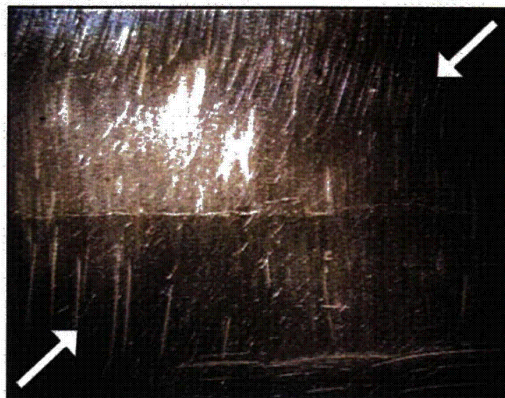
**Figure B.19 - Sample 1  
Diffuse On-Axis Lighting**



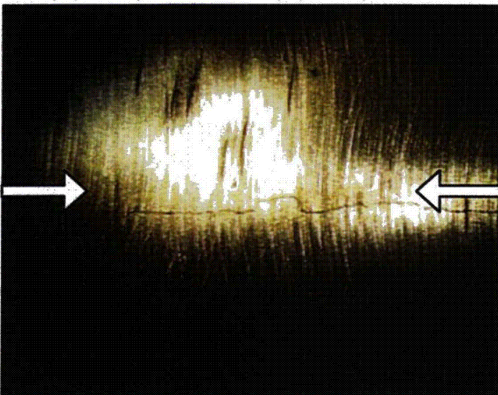
**Figure B.20 - Sample 1  
Diffuse Ring Lighting**



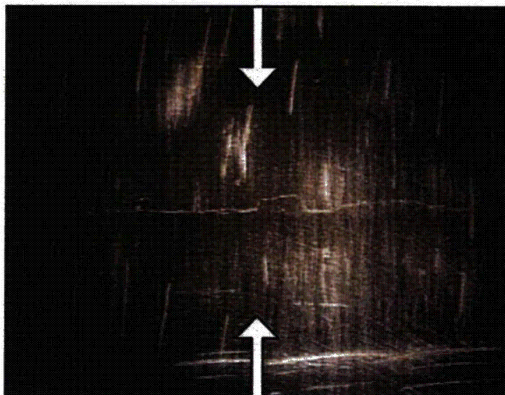
**Figure B.21 - Sample 1  
Spotlighting from Indicated Directions**



**Figure B.22 - Sample 1  
Spotlighting from Indicated Directions**



**Figure B.23 - Sample 1  
Spotlighting from Indicated Direction**



**Figure B.24 - Sample 1  
Spotlighting from Indicated Direction**



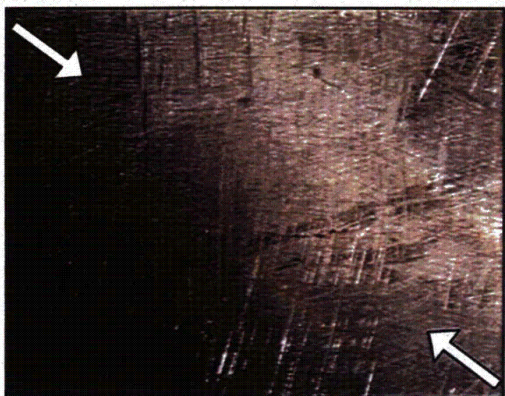
**Sample 2 – Unpolished – 10- $\mu$ m Crack Opening Dimension**



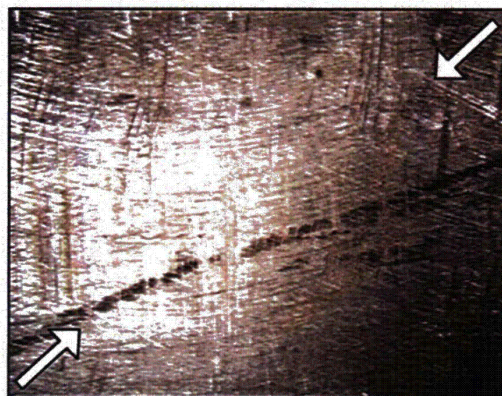
**Figure B.25 - Sample 2  
Diffuse On-Axis Lighting**



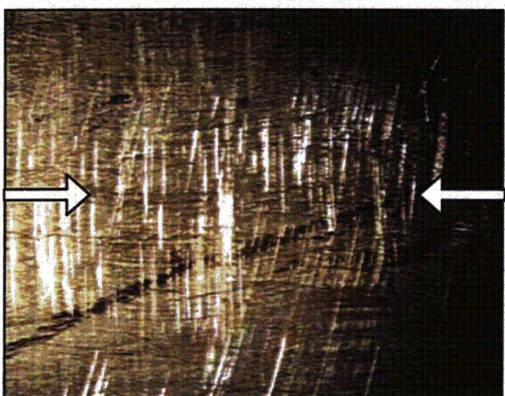
**Figure B.26 - Sample 2  
Diffuse Ring Lighting**



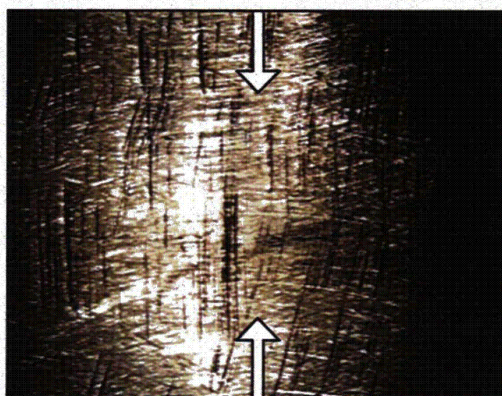
**Figure B.27 - Sample 2  
Spotlighting from Indicated Directions**



**Figure B.28 - Sample 2  
Spotlighting from Indicated Directions**



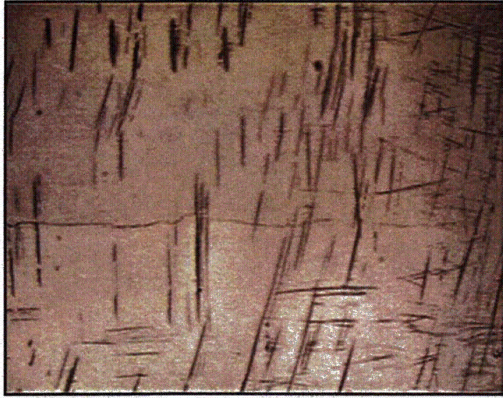
**Figure B.29 - Sample 2  
Spotlighting from Indicated Direction**



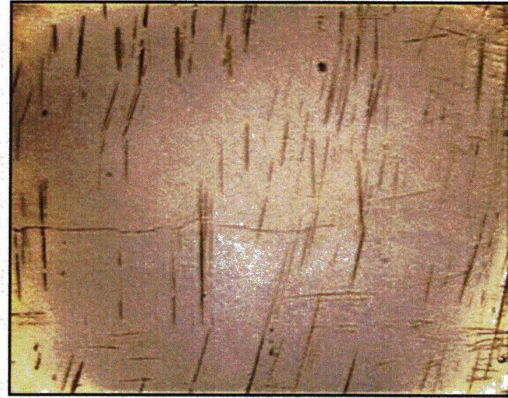
**Figure B.30 - Sample 2  
Spotlighting from Indicated Direction**



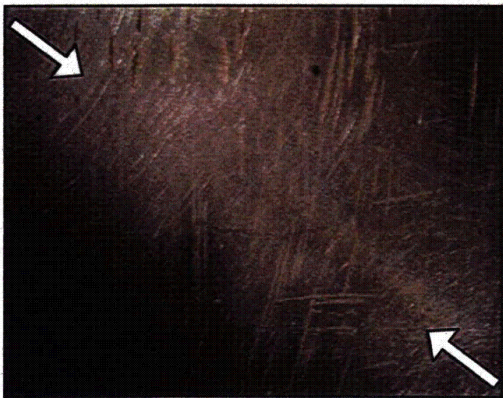
Sample 2 – Polished – 10- $\mu$ m Crack Opening Dimension



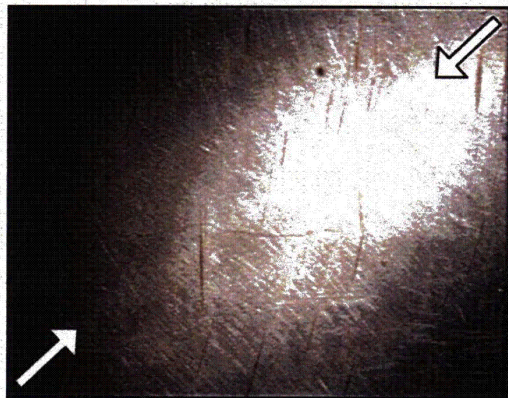
**Figure B.31 - Sample 2  
Diffuse On-Axis Lighting**



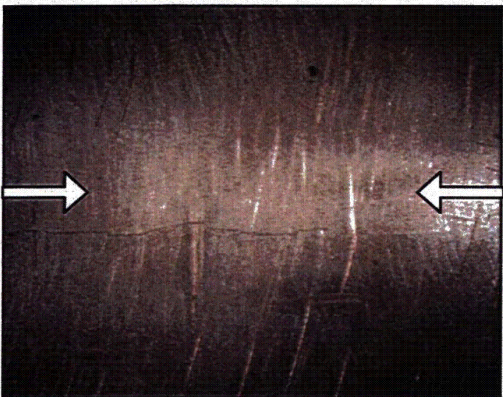
**Figure B.32 - Sample 2  
Diffuse Ring Lighting**



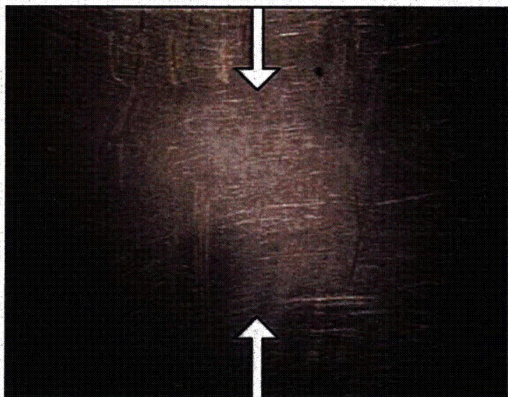
**Figure B.33 - Sample 2  
Spotlighting from Indicated Directions**



**Figure B.34 - Sample 2  
Spotlighting from Indicated Directions**



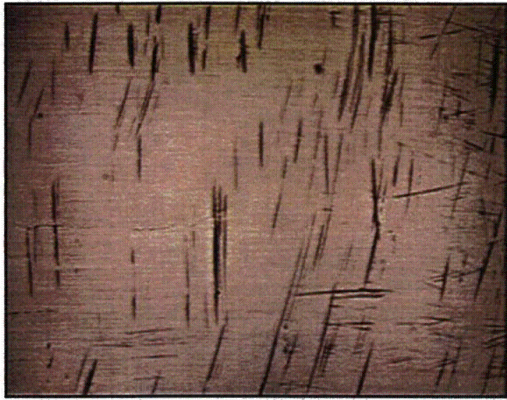
**Figure B.35 - Sample 2  
Spotlighting from Indicated Direction**



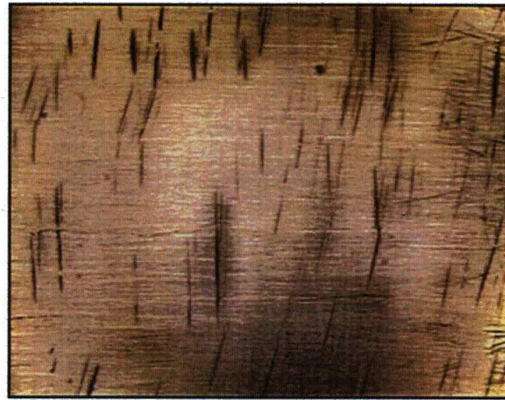
**Figure B.36 - Sample 2  
Spotlighting from Indicated Direction**



**Sample 2 – Horizontal Scratching – 10- $\mu$ m Crack Opening Dimension**



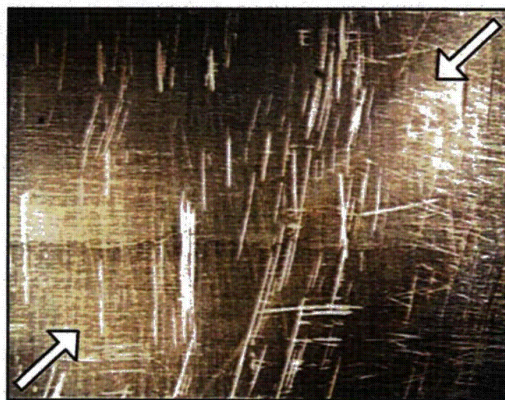
**Figure B.37 - Sample 2  
Diffuse On-Axis Lighting**



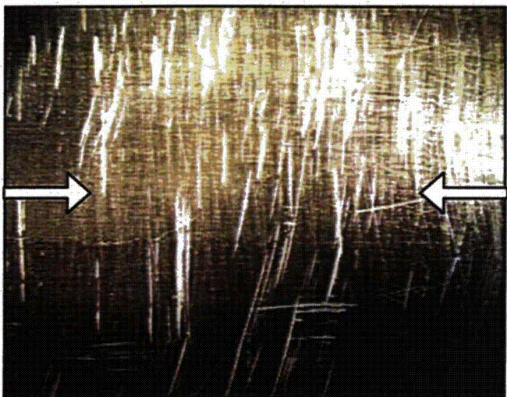
**Figure B.38 - Sample 2  
Diffuse Ring Lighting**



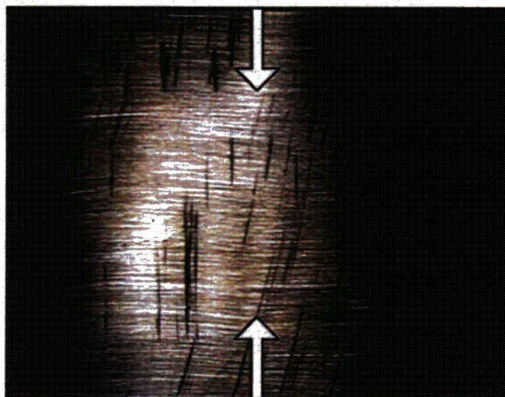
**Figure B.39 - Sample 2  
Spotlighting from Indicated Directions**



**Figure B.40 - Sample 2  
Spotlighting from Indicated Directions**



**Figure B.41 - Sample 2  
Spotlighting from Indicated Direction**



**Figure B.42 - Sample 2  
Spotlighting from Indicated Direction**



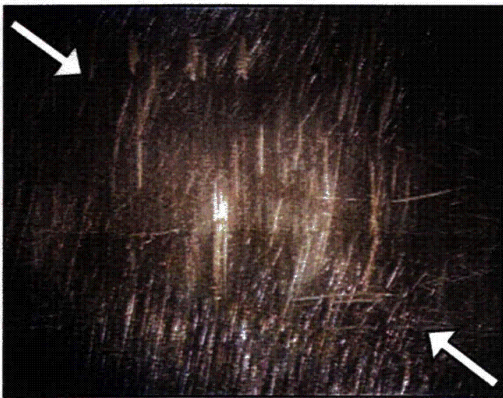
**Sample 2 – Vertical Scratching – 10- $\mu$ m Crack Opening Dimension**



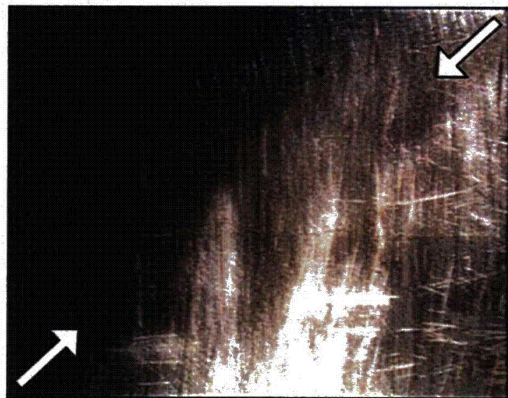
**Figure B.43 - Sample 2  
Diffuse On-Axis Lighting**



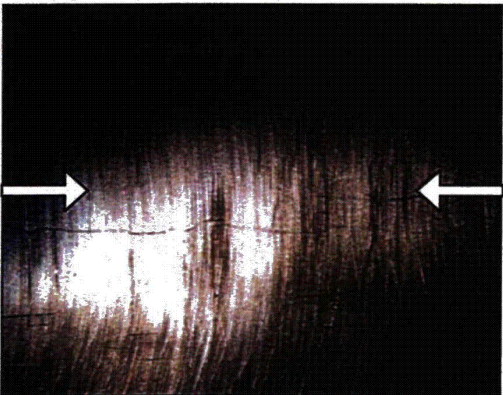
**Figure B.44 - Sample 2  
Diffuse Ring Lighting**



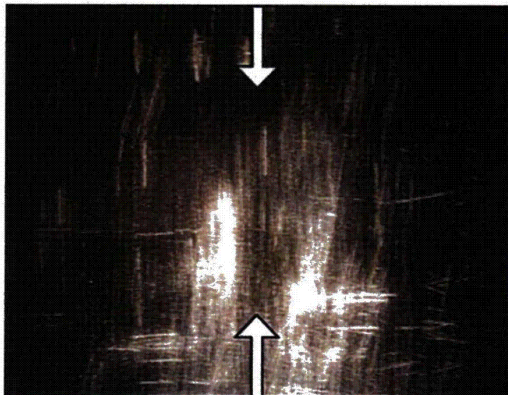
**Figure B.45 - Sample 2  
Spotlighting from Indicated Directions**



**Figure B.46 - Sample 2  
Spotlighting from Indicated Directions**



**Figure B.47 - Sample 2  
Spotlighting from Indicated Direction**



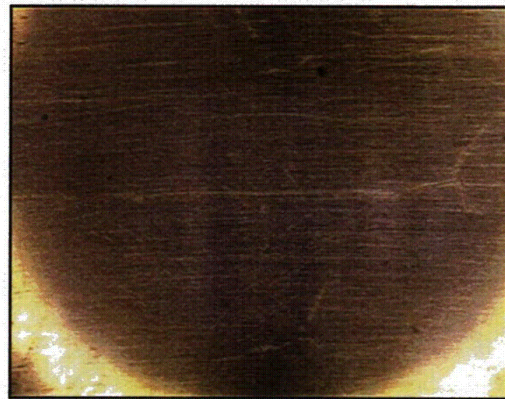
**Figure B.48 - Sample 2  
Spotlighting from Indicated Direction**



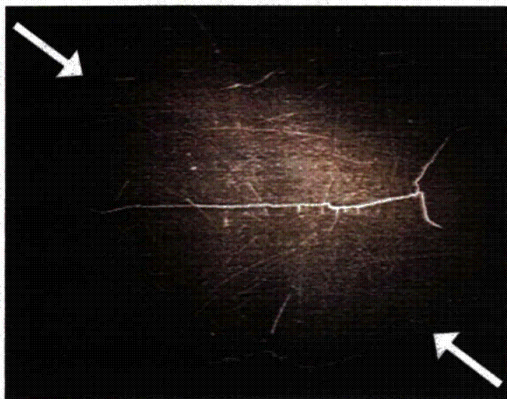
**Sample 3 – Polished – 35- $\mu$ m Crack Opening Dimension**



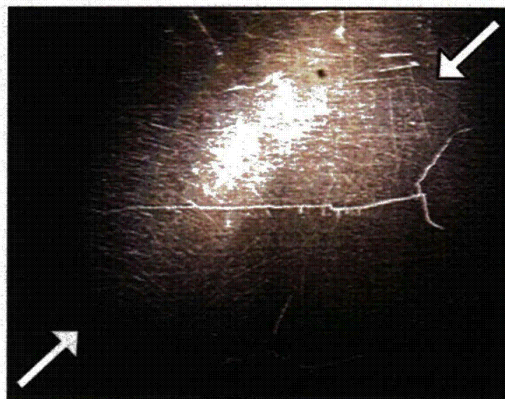
**Figure B.49 - Sample 3  
Diffuse On-Axis Lighting**



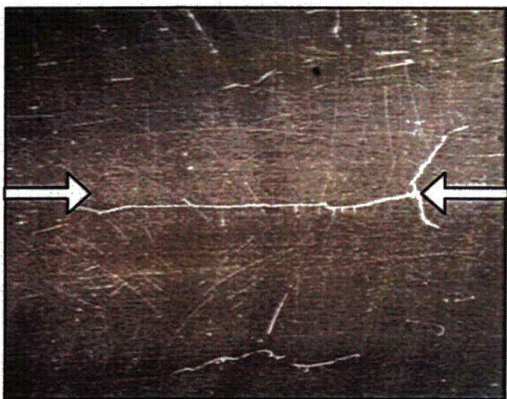
**Figure B.50 - Sample 3  
Diffuse Ring Lighting**



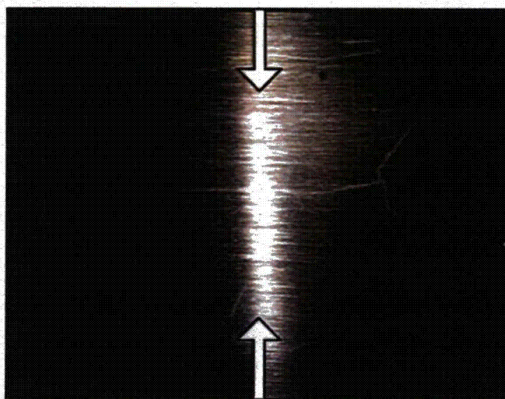
**Figure B.51 - Sample 3  
Spotlighting from Indicated Directions**



**Figure B.52 - Sample 3  
Spotlighting from indicated Directions**



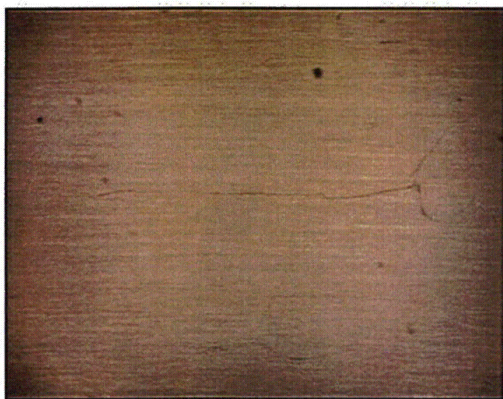
**Figure B.53 - Sample 3  
Spotlighting from Indicated Direction**



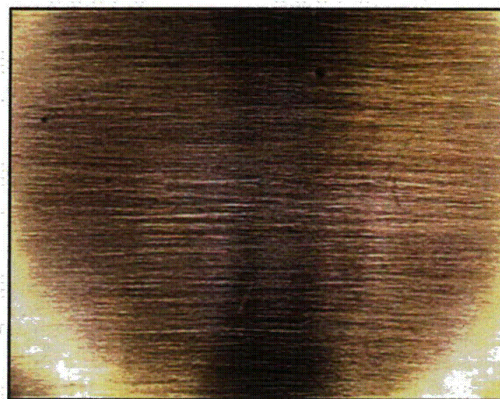
**Figure B.54 - Sample 3  
Spotlighting from Indicated Direction**



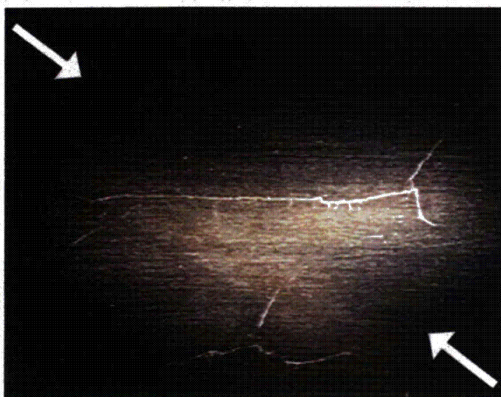
**Sample 3 – Horizontal Scratching – 35- $\mu$ m Crack Opening Dimension**



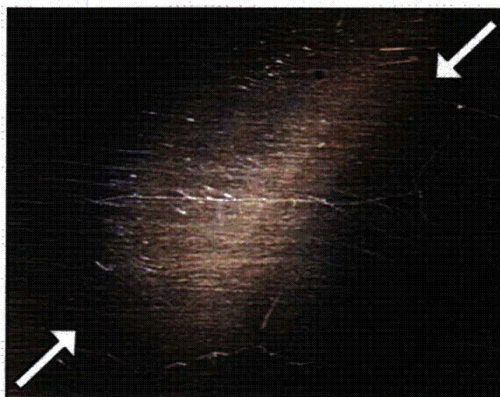
**Figure B.55 - Sample 3  
Diffuse On-Axis Lighting**



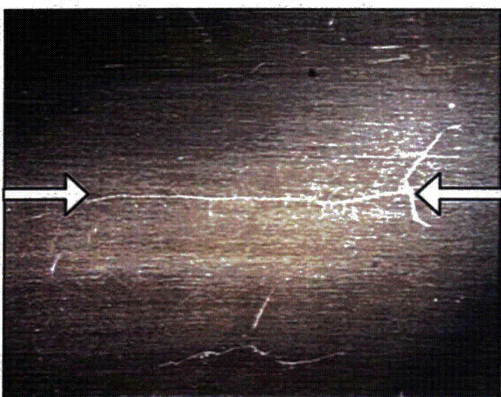
**Figure B.56 - Sample 3  
Diffuse Ring Lighting**



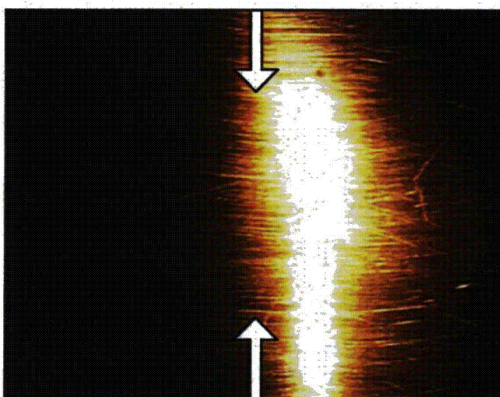
**Figure B.57 - Sample 3  
Spotlighting from Indicated Directions**



**Figure B.58 - Sample 3  
Spotlighting from Indicated Directions**



**Figure B.59 - Sample 3  
Spotlighting from Indicated Direction**



**Figure B.60 - Sample 3  
Spotlighting from Indicated Direction**



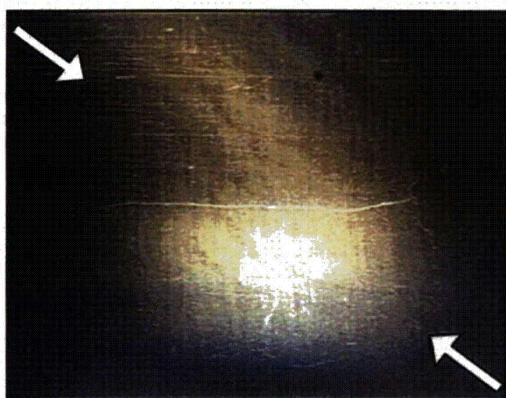
**Sample 3 – Vertical Scratching – 35- $\mu$ m Crack Opening Dimension**



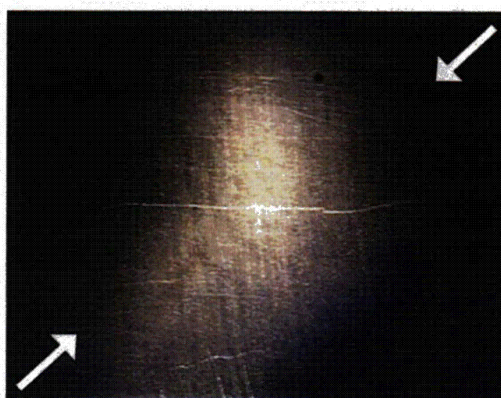
**Figure B.61 - Sample 3  
Diffuse On-Axis Lighting**



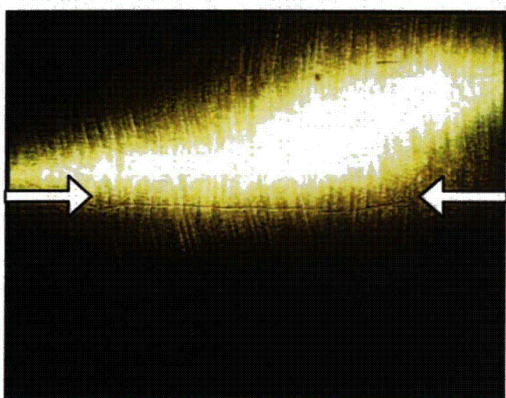
**Figure B.62 - Sample 3  
Diffuse Ring Lighting**



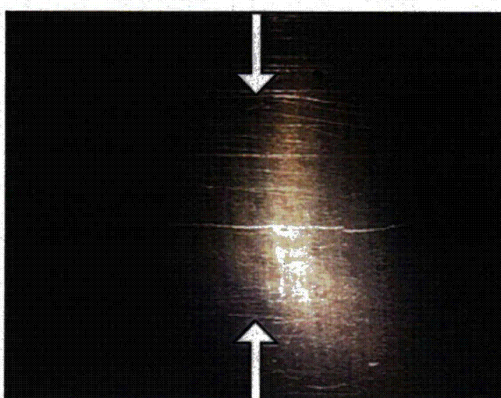
**Figure B.63 - Sample 3  
Spotlighting from Indicated Directions**



**Figure B.64 - Sample 3  
Spotlighting from Indicated Directions**



**Figure B.65 - Sample 3  
Spotlighting from Indicated Direction**



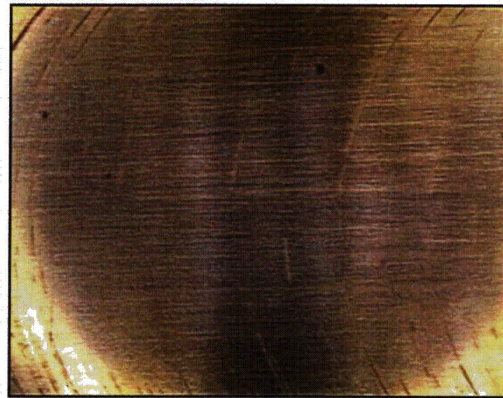
**Figure B.66 - Sample 3  
Spotlighting from Indicated Direction**



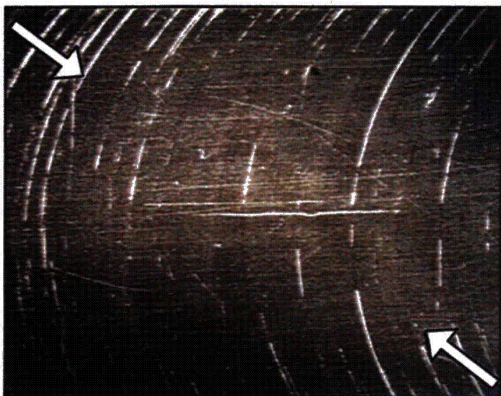
**Sample 4 – Polished – 40- $\mu$ m Crack Opening Dimension**



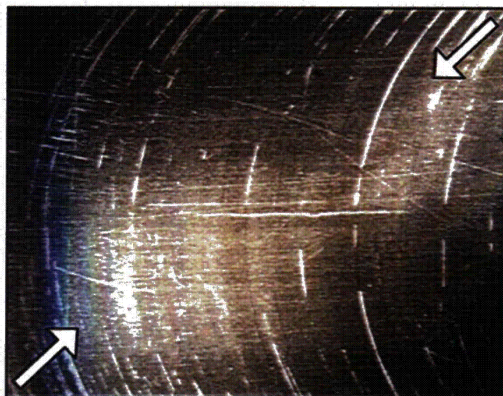
**Figure B.67 - Sample 4  
Diffuse On-Axis Lighting**



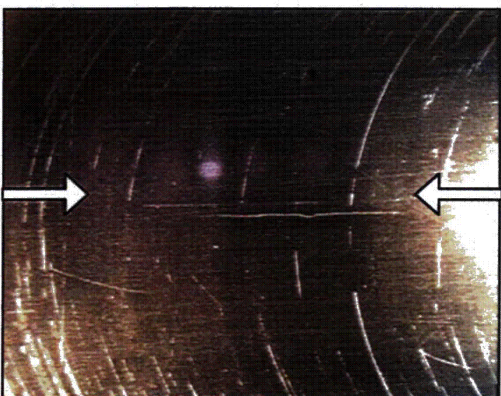
**Figure B.68 - Sample 4  
Diffuse Ring Lighting**



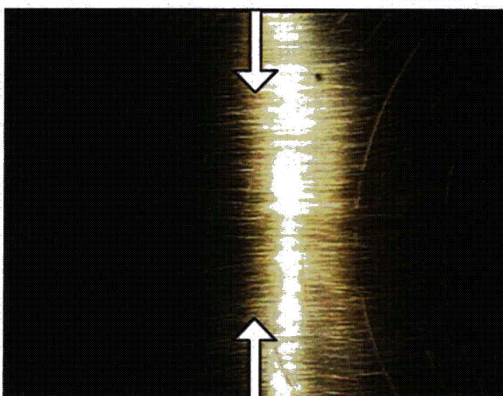
**Figure B.69 - Sample 4  
Spotlighting from Indicated Directions**



**Figure B.70 - Sample 4  
Spotlighting from Indicated Directions**



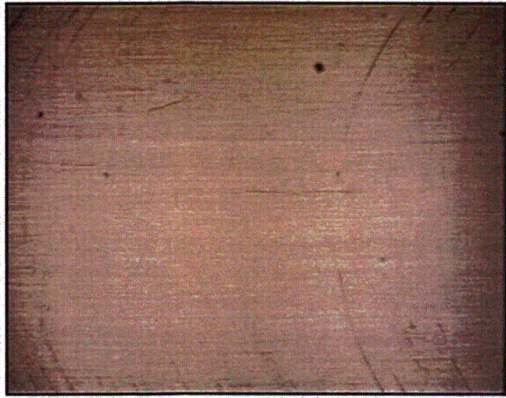
**Figure B.71 - Sample 4  
Spotlighting from Indicated Direction**



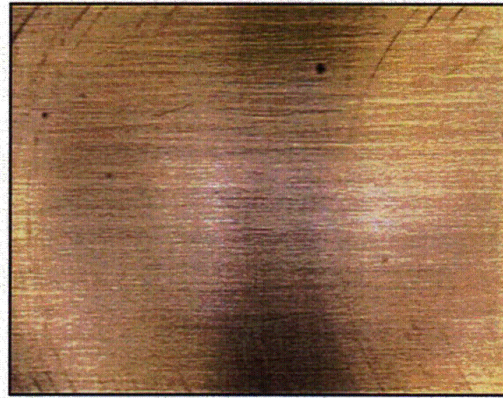
**Figure B.72 - Sample 4  
Spotlighting from Indicated Direction**



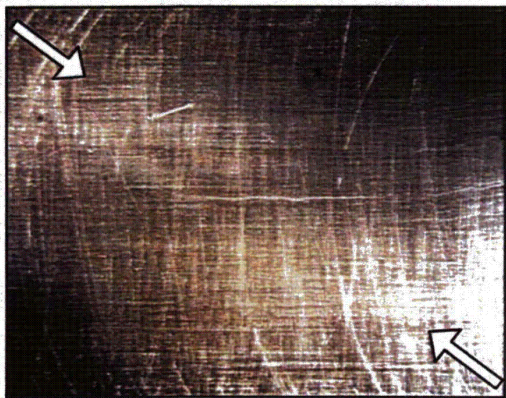
**Sample 4 – Horizontal Scratching – 40- $\mu$ m Crack Opening Dimension**



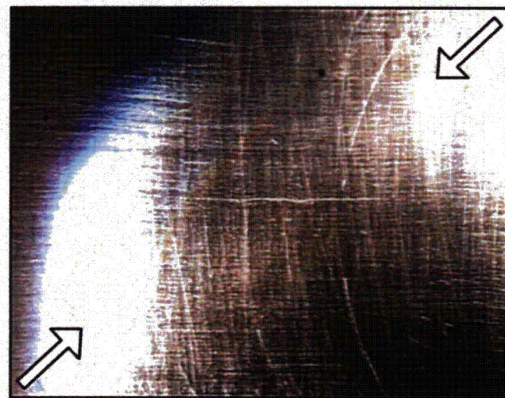
**Figure B.73 - Sample 4  
Diffuse On-Axis Lighting**



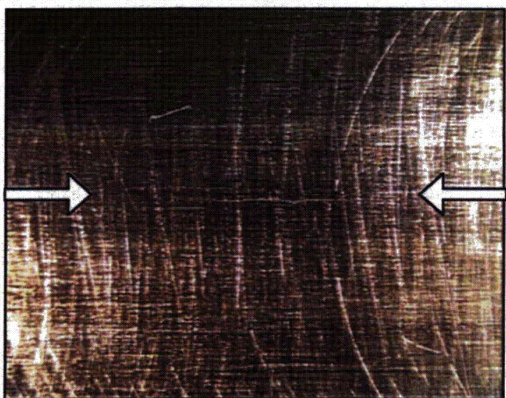
**Figure B.74 - Sample 4  
Diffuse Ring Lighting**



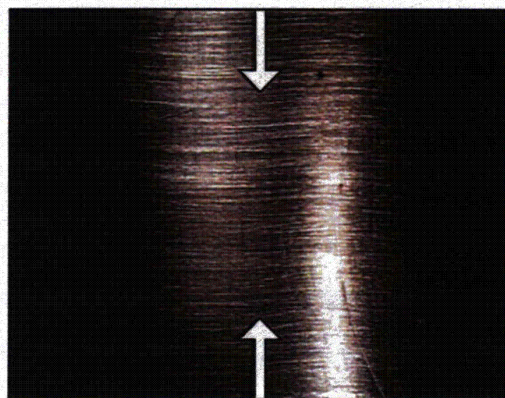
**Figure B.75 - Sample 4  
Spotlighting from Indicated Directions**



**Figure B.76 - Sample 4  
Spotlighting from Indicated Directions**



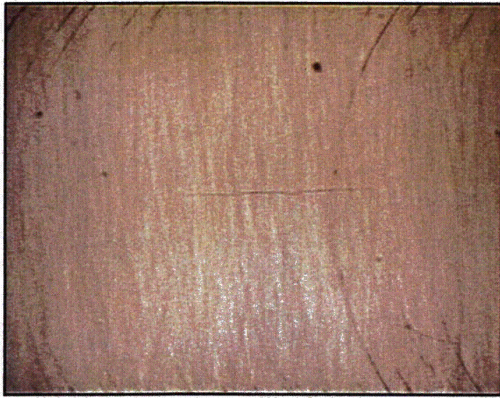
**Figure B.77 - Sample 4  
Spotlighting from Indicated Direction**



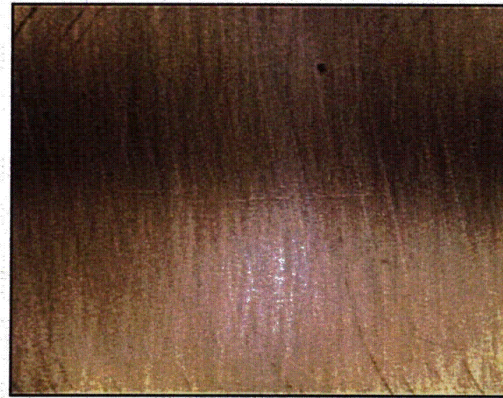
**Figure B.78 - Sample 4  
Spotlighting from Indicated Direction**



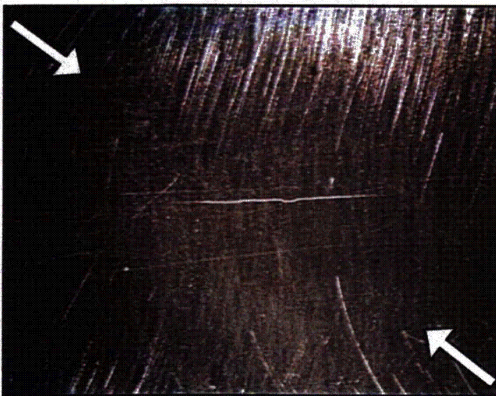
**Sample 4 – Vertical Scratching – 40- $\mu$ m Crack Opening Dimension**



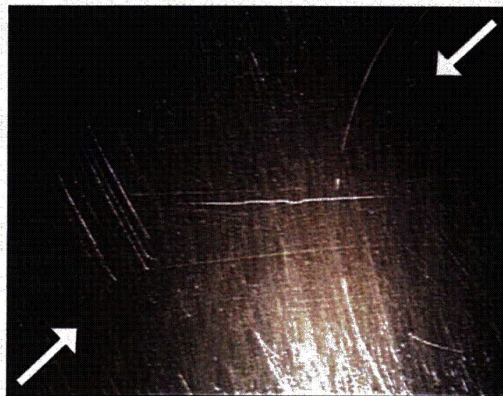
**Figure B.79 - Sample 4  
Diffuse On-Axis Lighting**



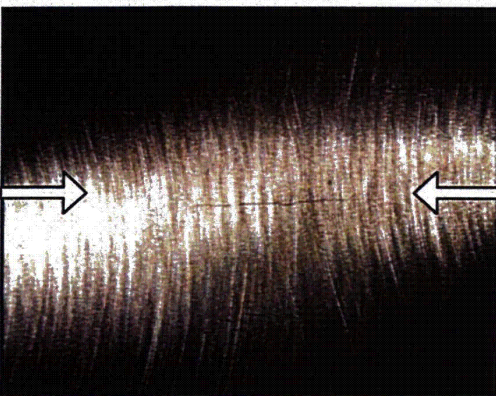
**Figure B.80 - Sample 4  
Diffuse Ring Lighting**



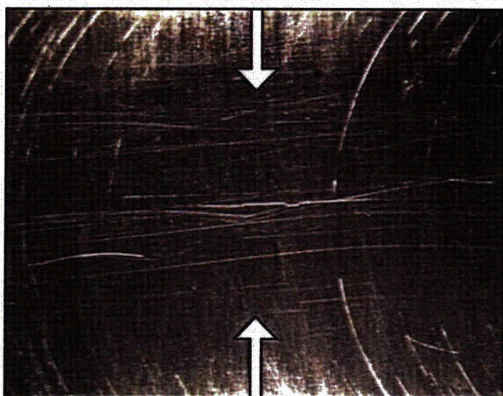
**Figure B.81 - Sample 4  
Spotlighting from Indicated Directions**



**Figure B.82 - Sample 4  
Spotlighting from Indicated Directions**



**Figure B.83 - Sample 4  
Spotlighting from Indicated Direction**



**Figure B.84 - Sample 4  
Spotlighting from Indicated Direction**