

(54)

가

1

(compensator)

(LCD)

가

(HAN)

(TN)

(

LCD

가

(VAN)

" 0

)

가

가

가

. VAN

n_z

, $n_z > n_x = n_y$

, 가

, HAN

n_x, n_y 가

, $n_z < n_x = n_y$ 2

TN

가 가

300nm

200nm

(LCP)

, 150nm

$350\text{nm} / \bar{n}$

, \bar{n}

n

가

0.25

(LCD)

LCD 가

LCD (VAN, HAN T N)

00nm) (0 < 3 50nm) 가 (> 4

가 no ne no $= (\overline{no} + ne) / 2$ $(no + ne) / 2 > no$ 가

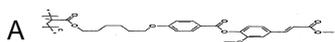
LCP

가 250nm 가 (HTP) $n \cdot d$ 가 250 500nm(n, d) LCP VAN μm

LCP)

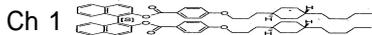
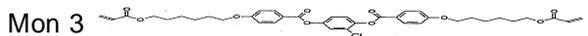
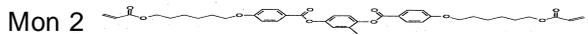
가 (LPP) LCP, 가

1 가 (LPP) 가 A 1 % S_{LPP}



S_{LPP} 2 23 2000rpm 50nm 150 30
10

2 LCP
Mon 1, Mon 2, Mon 3, Ch 1
BHT(2,6 - - 3 - - 4 - /" IRGACURE 369(: Ciba SC)
") S_{LCP}



S_{LCP} :

Mon 1 24 %
Mon 2 4.5 %
Mon 3 1.5 %
Ch 1 3 %
Irgacure 369 0.5 %
BHT 0.5 %

66 %

5 23 가 . LPP/LCP 6 200 ,

$\lambda_0 = 350\text{nm}$

3.2 μm

2 LCP 가 6.5 μ m 가
 . LCP 350nm .

(" WVASE" , J. A. Woollam Co.) LCP 가 (400
 800nm) 가 가
 . $n = o - (n_o + n_e) / 2 = -0.07$

가 , n · d=420nm VAN . (" EZ -
 " , ELDIM) , , 1 VAN LPP 2 - V
 AN - LCD , 1 3 , 1
 , 2 가 , 3

(57)

1.

가 가
 (compensator).

2.

1 , 가 300nm .

3.

2 , 가 200nm .

4.

3 , 가 150nm .

5.

1 , 가 $350nm / \bar{n} (\bar{n})$.

6.

1 5 , .

7.

1 6 , n 0.25 .

8.

1 7 ,
.

9.

1 8 , .

10.

9 , .

11.

1 10 .

12.

11 , .

13.

11 12 , .

14.

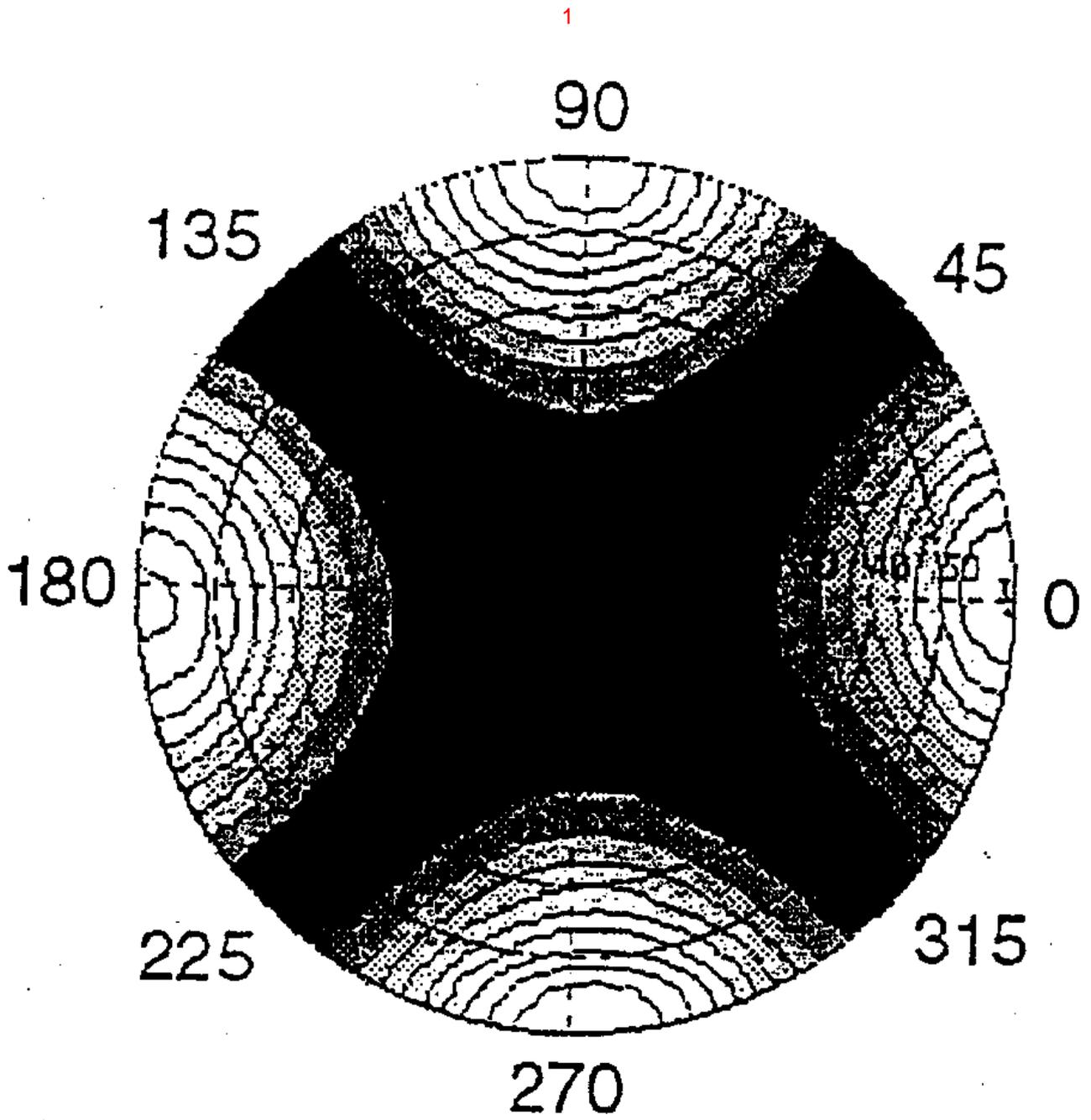
11 13 , .

15.

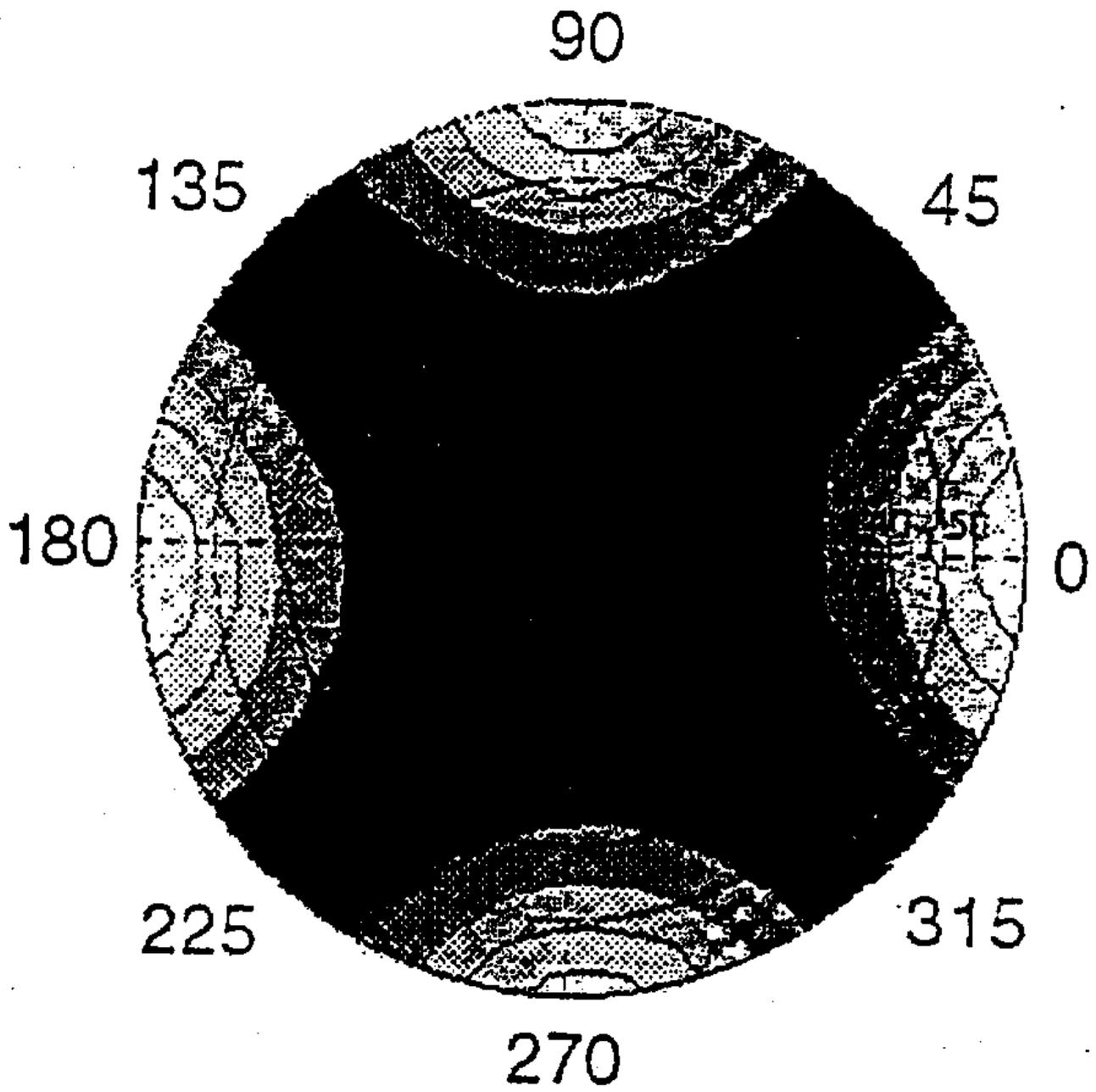
11 13 , .

16.

11 13 , .



2



3

