

filename : LED-X-APLED2-SATINE.LDT  
 meas. number : 3203  
 luminaire number : LED-X/APLED2/SATINE  
 date / operator : 27-11-2013

**default lamp type(s)**

no of lamps	lamp type	luminaire lumens	input wattage
1	2x700mA LED Panels	1010 lm	16.5 W

**dimensions**

luminaire		luminous area	
length	: 570 mm	length	: 565 mm
width	: 28 mm	width	: 25 mm
height	: 24 mm	height	: 5 mm

**coordinate system**

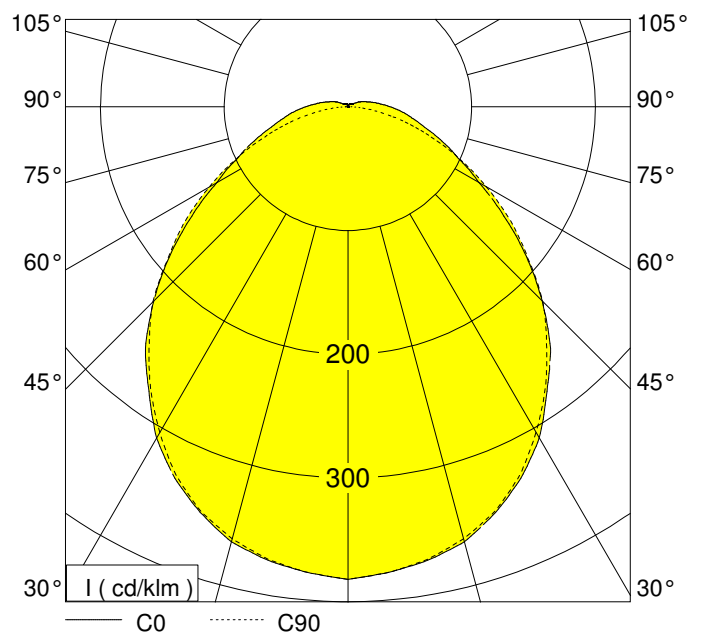
no of planes	: 24	samples / plane	: 37
first c-plane	: 0.0 °	first gamma-angle	: 0.0 °
step angle	: 15.0 °	step angle	: 5.0 °
last c-plane	: 345.0 °	last gamma-angle	: 180.0 °
symmetrics	: bi-symmetric		

**performance**

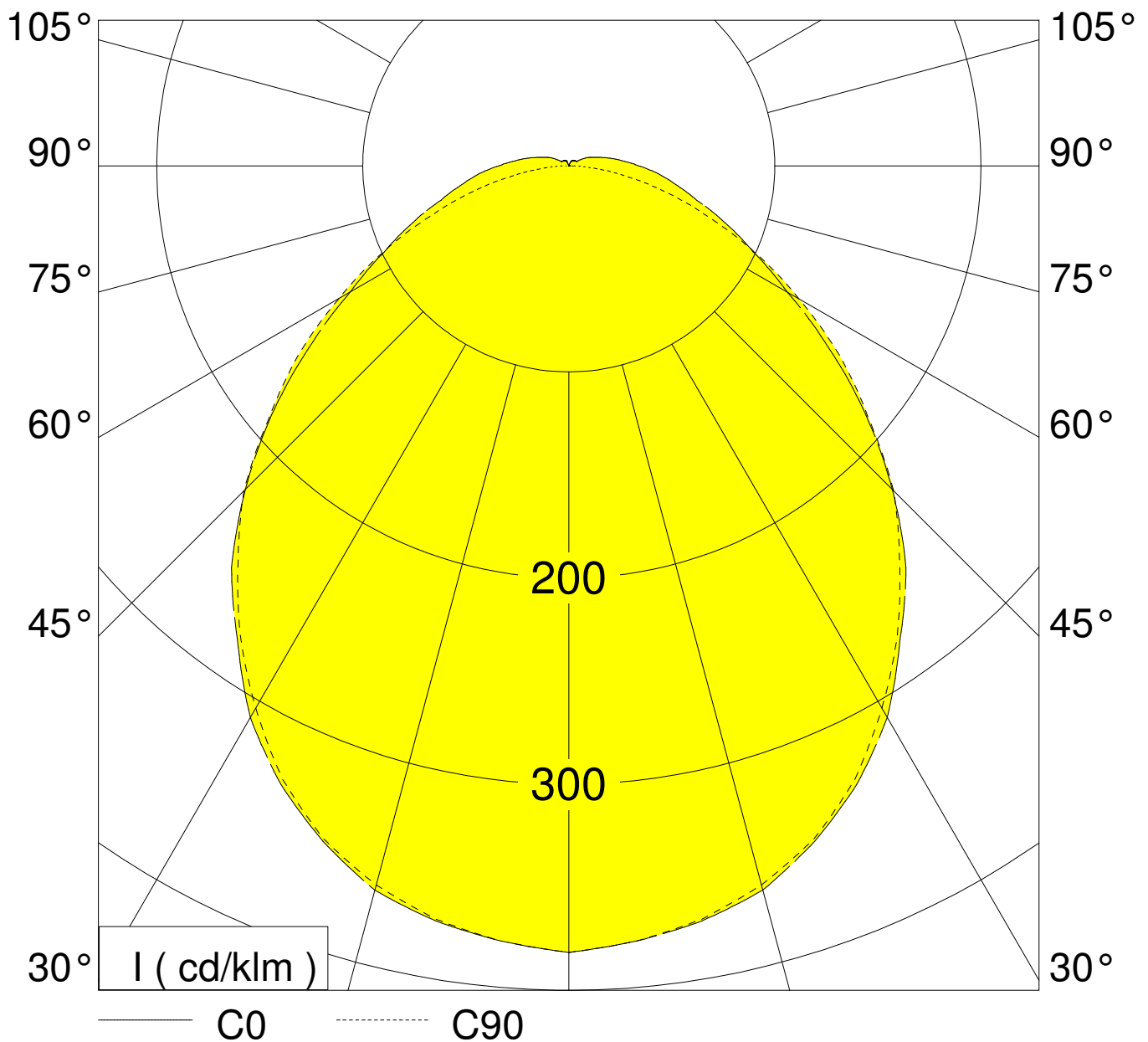
light output ratio : 100.0 %  
 DFF : 96.4 %  
 UFF : 3.6 %

**classification**

LiTG / DIN : A41  
 UTE : 0.96D+0.04T  
 CIE : 50 80 94 96 100  
 BZ : 3 4 4 4 4 4 4 4 4  
 Ambient Temperature : 25 degC  
 Input Voltage : 240 V  
 Circuit Watts : 16.5 W  
 Amps (running) : 0.074 A  
 V.A. : 17.7 VA  
 Power Factor : 0.93  
 CCT : 3849K(measured):4000K(nominal)  
 Ballast/Driver Details: : Harvard CL700-240-C



Measurements made are in absolute units  
The luminaire is treated as if it was a lamp as it  
is not possible to measure each LED separately  
- hence an LOR of 100%  
The Light output ratio in real terms would be  
less than 100%. If it was possible to compare  
real LED lumens with the total output from the  
luminaire we could obtain an actual LOR  
This also means that the total lumens emitted  
from the LED's would be greater than the 1010  
lumens measured.  
In reality the LED lumens would approximate to  
this value divided by the actual Light Output



	C 0.0	C 15.0	C 30.0	C 45.0	C 60.0	C 75.0	C 90.0	C 105.0
0.0°	381.50	381.50	381.50	381.50	381.50	381.50	381.50	381.50
5.0°	377.40	378.10	378.80	378.10	377.40	377.40	377.40	377.40
10.0°	371.90	371.20	370.60	369.90	369.20	370.10	371.00	370.10
15.0°	363.70	363.00	362.40	361.00	359.60	360.40	361.10	360.40
20.0°	348.70	347.30	346.00	345.30	344.60	346.00	347.50	346.00
25.0°	330.90	328.90	326.90	326.20	325.50	326.90	328.40	326.90
30.0°	309.00	306.90	304.90	302.20	299.40	301.60	303.80	301.60
35.0°	280.30	279.60	278.90	276.20	273.50	275.70	277.90	275.70
40.0°	254.60	253.60	252.60	249.10	245.60	247.60	249.60	247.60
45.0°	221.90	221.60	221.30	219.40	217.40	220.10	222.90	220.10
50.0°	188.30	186.20	184.10	185.30	186.60	188.10	189.50	188.10
55.0°	153.90	154.20	154.50	153.90	153.20	156.70	160.30	156.70
60.0°	122.30	124.50	126.70	126.00	125.40	127.10	128.90	127.10
65.0°	98.70	100.20	101.70	101.50	101.20	100.50	99.90	100.50
70.0°	80.60	80.20	79.90	77.30	74.80	73.20	71.60	73.20
75.0°	64.20	63.30	62.50	57.80	53.10	50.60	48.00	50.60
80.0°	52.80	51.30	49.70	43.00	36.50	31.80	27.20	31.80
85.0°	43.40	40.80	38.10	30.80	23.50	17.00	10.50	17.00
90.0°	34.00	31.90	29.80	23.90	18.00	10.20	2.40	10.20
95.0°	26.60	25.30	23.90	17.40	10.90	5.50	0.00	5.50
100.0°	20.90	19.20	17.50	12.30	7.10	3.60	0.00	3.60
105.0°	15.70	14.30	13.00	8.80	4.60	2.30	0.00	2.30
110.0°	12.00	10.80	9.60	6.70	3.80	1.90	0.00	1.90
115.0°	9.30	7.00	4.60	4.00	3.40	1.70	0.00	1.70
120.0°	4.40	4.10	3.80	1.90	0.00	0.00	0.00	0.00
125.0°	4.00	3.80	3.70	1.80	0.00	0.00	0.00	0.00
130.0°	3.70	3.60	3.60	1.80	0.00	0.00	0.00	0.00
135.0°	3.70	3.60	3.40	1.70	0.00	0.00	0.00	0.00
140.0°	3.40	3.30	3.30	1.60	0.00	0.00	0.00	0.00
145.0°	3.30	3.30	3.30	1.60	0.00	0.00	0.00	0.00
150.0°	2.90	2.90	3.00	1.50	0.00	0.00	0.00	0.00
155.0°	2.20	2.20	2.20	1.10	0.00	0.00	0.00	0.00
160.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	cd / klm							

	C 120.0	C 135.0	C 150.0	C 165.0	C 180.0	C 195.0	C 210.0	C 225.0
0.0°	381.50	381.50	381.50	381.50	381.50	381.50	381.50	381.50
5.0°	377.40	378.10	378.80	378.10	377.40	378.10	378.80	378.10
10.0°	369.20	369.90	370.60	371.20	371.90	371.20	370.60	369.90
15.0°	359.60	361.00	362.40	363.00	363.70	363.00	362.40	361.00
20.0°	344.60	345.30	346.00	347.30	348.70	347.30	346.00	345.30
25.0°	325.50	326.20	326.90	328.90	330.90	328.90	326.90	326.20
30.0°	299.40	302.20	304.90	306.90	309.00	306.90	304.90	302.20
35.0°	273.50	276.20	278.90	279.60	280.30	279.60	278.90	276.20
40.0°	245.60	249.10	252.60	253.60	254.60	253.60	252.60	249.10
45.0°	217.40	219.40	221.30	221.60	221.90	221.60	221.30	219.40
50.0°	186.60	185.30	184.10	186.20	188.30	186.20	184.10	185.30
55.0°	153.20	153.90	154.50	154.20	153.90	154.20	154.50	153.90
60.0°	125.40	126.00	126.70	124.50	122.30	124.50	126.70	126.00
65.0°	101.20	101.50	101.70	100.20	98.70	100.20	101.70	101.50
70.0°	74.80	77.30	79.90	80.20	80.60	80.20	79.90	77.30
75.0°	53.10	57.80	62.50	63.30	64.20	63.30	62.50	57.80
80.0°	36.50	43.00	49.70	51.30	52.80	51.30	49.70	43.00
85.0°	23.50	30.80	38.10	40.80	43.40	40.80	38.10	30.80
90.0°	18.00	23.90	29.80	31.90	34.00	31.90	29.80	23.90
95.0°	10.90	17.40	23.90	25.30	26.60	25.30	23.90	17.40
100.0°	7.10	12.30	17.50	19.20	20.90	19.20	17.50	12.30
105.0°	4.60	8.80	13.00	14.30	15.70	14.30	13.00	8.80
110.0°	3.80	6.70	9.60	10.80	12.00	10.80	9.60	6.70
115.0°	3.40	4.00	4.60	7.00	9.30	7.00	4.60	4.00
120.0°	0.00	1.90	3.80	4.10	4.40	4.10	3.80	1.90
125.0°	0.00	1.80	3.70	3.80	4.00	3.80	3.70	1.80
130.0°	0.00	1.80	3.60	3.60	3.70	3.60	3.60	1.80
135.0°	0.00	1.70	3.40	3.60	3.70	3.60	3.40	1.70
140.0°	0.00	1.60	3.30	3.30	3.40	3.30	3.30	1.60
145.0°	0.00	1.60	3.30	3.30	3.30	3.30	3.30	1.60
150.0°	0.00	1.50	3.00	2.90	2.90	2.90	3.00	1.50
155.0°	0.00	1.10	2.20	2.20	2.20	2.20	2.20	1.10
160.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	cd / klm							

	C 240.0	C 255.0	C 270.0	C 285.0	C 300.0	C 315.0	C 330.0	C 345.0
0.0°	381.50	381.50	381.50	381.50	381.50	381.50	381.50	381.50
5.0°	377.40	377.40	377.40	377.40	377.40	378.10	378.80	378.10
10.0°	369.20	370.10	371.00	370.10	369.20	369.90	370.60	371.20
15.0°	359.60	360.40	361.10	360.40	359.60	361.00	362.40	363.00
20.0°	344.60	346.00	347.50	346.00	344.60	345.30	346.00	347.30
25.0°	325.50	326.90	328.40	326.90	325.50	326.20	326.90	328.90
30.0°	299.40	301.60	303.80	301.60	299.40	302.20	304.90	306.90
35.0°	273.50	275.70	277.90	275.70	273.50	276.20	278.90	279.60
40.0°	245.60	247.60	249.60	247.60	245.60	249.10	252.60	253.60
45.0°	217.40	220.10	222.90	220.10	217.40	219.40	221.30	221.60
50.0°	186.60	188.10	189.50	188.10	186.60	185.30	184.10	186.20
55.0°	153.20	156.70	160.30	156.70	153.20	153.90	154.50	154.20
60.0°	125.40	127.10	128.90	127.10	125.40	126.00	126.70	124.50
65.0°	101.20	100.50	99.90	100.50	101.20	101.50	101.70	100.20
70.0°	74.80	73.20	71.60	73.20	74.80	77.30	79.90	80.20
75.0°	53.10	50.60	48.00	50.60	53.10	57.80	62.50	63.30
80.0°	36.50	31.80	27.20	31.80	36.50	43.00	49.70	51.30
85.0°	23.50	17.00	10.50	17.00	23.50	30.80	38.10	40.80
90.0°	18.00	10.20	2.40	10.20	18.00	23.90	29.80	31.90
95.0°	10.90	5.50	0.00	5.50	10.90	17.40	23.90	25.30
100.0°	7.10	3.60	0.00	3.60	7.10	12.30	17.50	19.20
105.0°	4.60	2.30	0.00	2.30	4.60	8.80	13.00	14.30
110.0°	3.80	1.90	0.00	1.90	3.80	6.70	9.60	10.80
115.0°	3.40	1.70	0.00	1.70	3.40	4.00	4.60	7.00
120.0°	0.00	0.00	0.00	0.00	0.00	1.90	3.80	4.10
125.0°	0.00	0.00	0.00	0.00	0.00	1.80	3.70	3.80
130.0°	0.00	0.00	0.00	0.00	0.00	1.80	3.60	3.60
135.0°	0.00	0.00	0.00	0.00	0.00	1.70	3.40	3.60
140.0°	0.00	0.00	0.00	0.00	0.00	1.60	3.30	3.30
145.0°	0.00	0.00	0.00	0.00	0.00	1.60	3.30	3.30
150.0°	0.00	0.00	0.00	0.00	0.00	1.50	3.00	2.90
155.0°	0.00	0.00	0.00	0.00	0.00	1.10	2.20	2.20
160.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	cd / klm							

glare rating according to UGR											
ρ -ceiling		70	70	50	50	30	70	70	50	50	30
ρ -walls		50	30	50	30	30	50	30	50	30	30
ρ -workplane		20	20	20	20	20	20	20	20	20	20
room dimensions X                      Y		viewed crosswise					viewed endwise				
2H	2H	21.8	23.2	22.1	23.5	23.8	22.4	23.8	22.7	24.0	24.3
	3H	22.5	23.6	22.8	23.9	24.1	23.1	24.2	23.4	24.4	24.7
	4H	23.2	24.3	23.5	24.5	24.8	23.6	24.7	24.0	25.0	25.3
	6H	23.8	24.8	24.1	25.1	25.4	24.0	25.0	24.4	25.3	25.6
	8H	24.1	25.2	24.5	25.5	25.8	24.2	25.2	24.5	25.5	25.8
	12H	24.5	25.5	24.9	25.8	26.2	24.3	25.3	24.6	25.6	25.9
4H	2H	21.9	23.0	22.3	23.3	23.5	22.4	23.4	22.7	23.7	24.0
	3H	23.5	24.5	23.9	24.9	25.2	24.0	25.0	24.3	25.3	25.6
	4H	24.4	25.4	24.8	25.7	26.1	24.7	25.7	25.1	26.0	26.4
	6H	25.0	25.8	25.4	26.2	26.6	25.0	25.8	25.4	26.2	26.6
	8H	25.4	26.2	25.8	26.6	27.0	25.2	26.0	25.6	26.4	26.8
	12H	25.9	26.7	26.4	27.2	27.7	25.5	26.2	26.0	26.7	27.2
8H	4H	24.5	25.3	25.0	25.7	26.2	24.8	25.6	25.2	26.0	26.4
	6H	25.8	26.5	26.3	27.0	27.5	25.7	26.4	26.2	26.9	27.4
	8H	26.4	27.1	26.9	27.6	28.2	26.0	26.7	26.6	27.3	27.9
	12H	26.8	27.4	27.4	28.0	28.6	26.2	26.7	26.7	27.3	27.9
12H	4H	24.7	25.5	25.2	26.0	26.5	25.0	25.8	25.5	26.2	26.7
	6H	26.0	26.7	26.5	27.2	27.8	25.9	26.6	26.4	27.1	27.7
	8H	26.4	27.0	27.0	27.6	28.2	26.1	26.7	26.7	27.2	27.8
variation of observer position											
S =	1.0H	+0.1/                      -0.1				+0.1/                      -0.1					
	1.5H	+0.2/                      -0.4				+0.2/                      -0.4					
	2.0H	+0.4/                      -0.7				+0.5/                      -0.7					
standard-table		BK06					BK05				
correction for luminaire		8.8					8.4				
correct glare indices for a total flux of 1010lm											

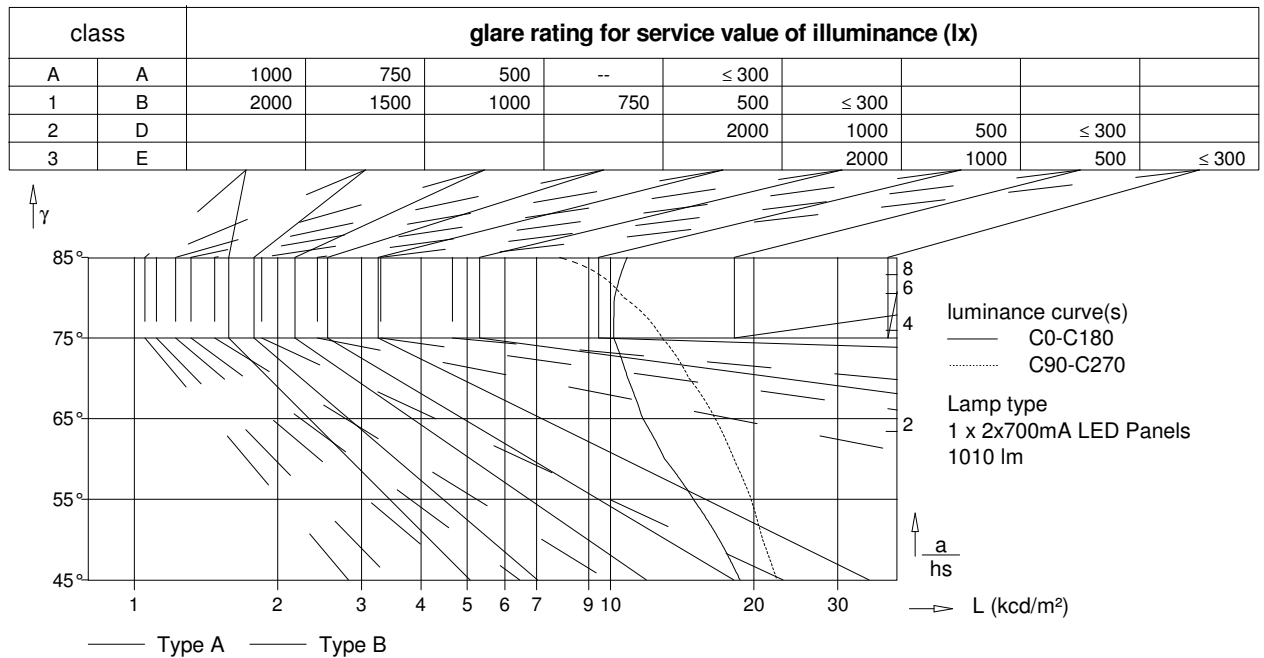


Tabelle der berechneten Leuchtdichten

gamma	C 0	C 90	C 180	C 270
45°	18699.2	22342.5	18699.2	22342.5
50°	16915.0	20860.2	16915.0	20860.2
55°	14923.3	19734.3	14923.3	19734.3
60°	12990.1	18155.6	12990.1	18155.6
65°	11686.9	16587.7	11686.9	16587.7
70°	10874.9	14613.7	10874.9	14613.7
75°	10156.1	12837.1	10156.1	12837.1
80°	10187.1	10665.1	10187.1	10665.1
85°	10835.7	7823.1	10835.7	7823.1

alle Werte in cd/m<sup>2</sup>

