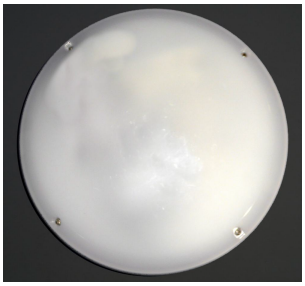


filename	: IMPALA LedLite CC.LDT
meas. number	: 2570
luminaire number	: IMPALA LedLite CC
date / operator	: 18-04-2018

default lamp type(s))

no of lamps	lamp type	mains luminaire lumens	mains input wattage
1	LED MODULE	1680 lm	21.8 W
	EMERGENCY LED MODULE	emergency luminaire lumens 70 lm	

dimensions

luminaire			luminous area		
diameter	:	310 mm	diameter	:	290 mm
height	:	90 mm	height	:	40 mm

coordinate system

no of planes	:	7	samples / plane	:	37
first c-plane	:	0.0 °	first gamma-angle	:	0.0 °
step angle	:	15.0 °	step angle	:	5.0 °
last c-plane	:	90.0 °	last gamma-angle	:	180.0 °

symmetrics : symmetry to C0 / C90

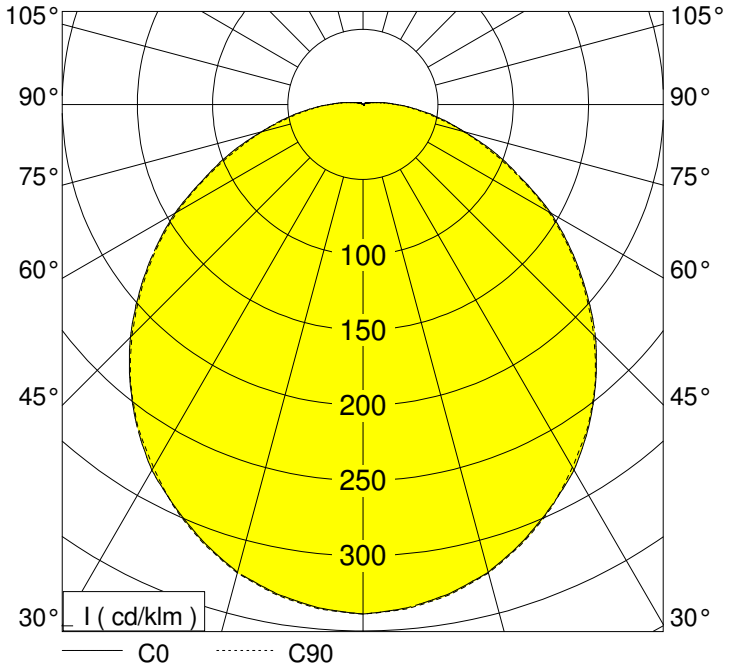
performance

light output ratio	:	100.0 %
DFF	:	97.5 %
UFF	:	2.5 %

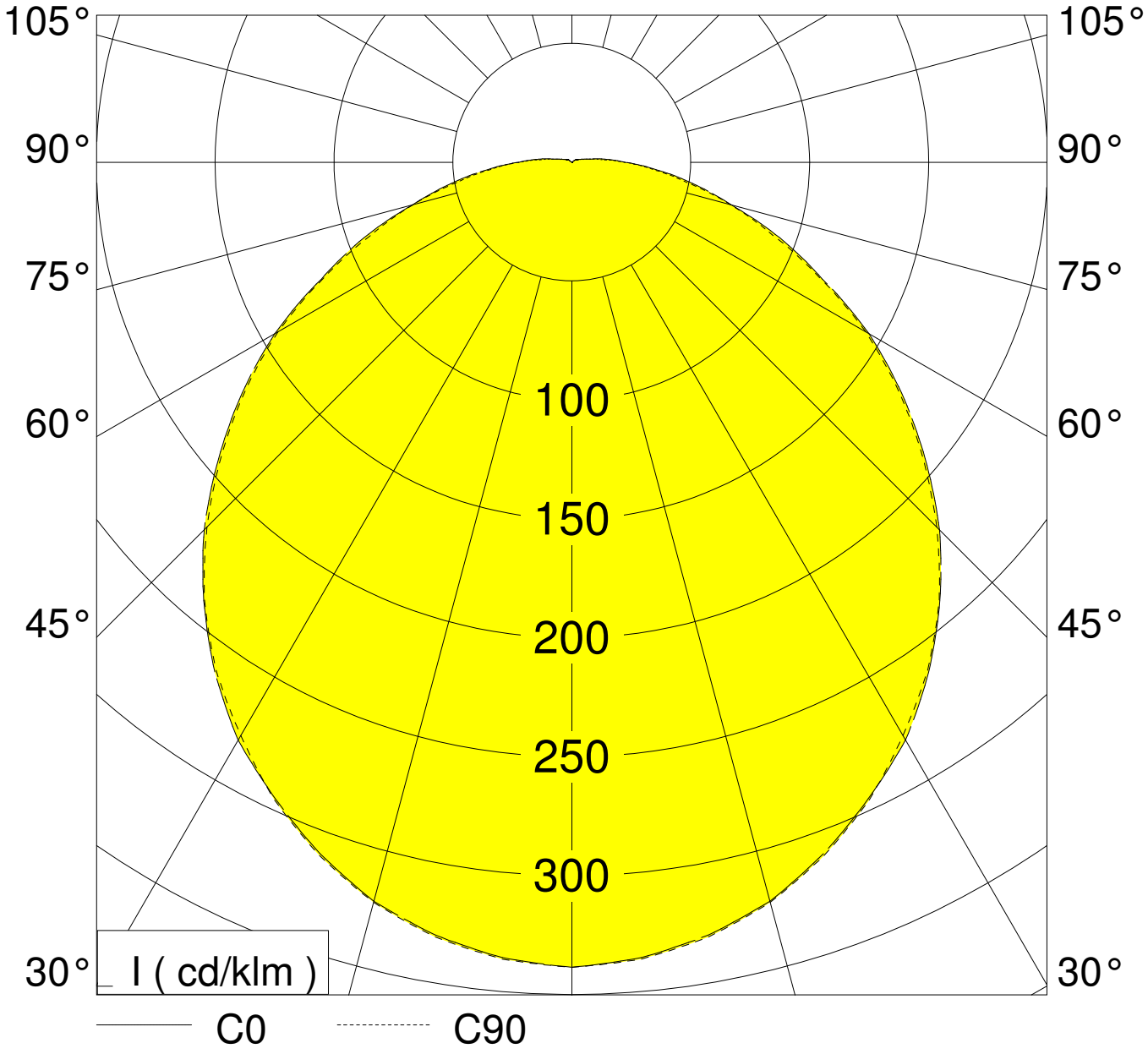
classification

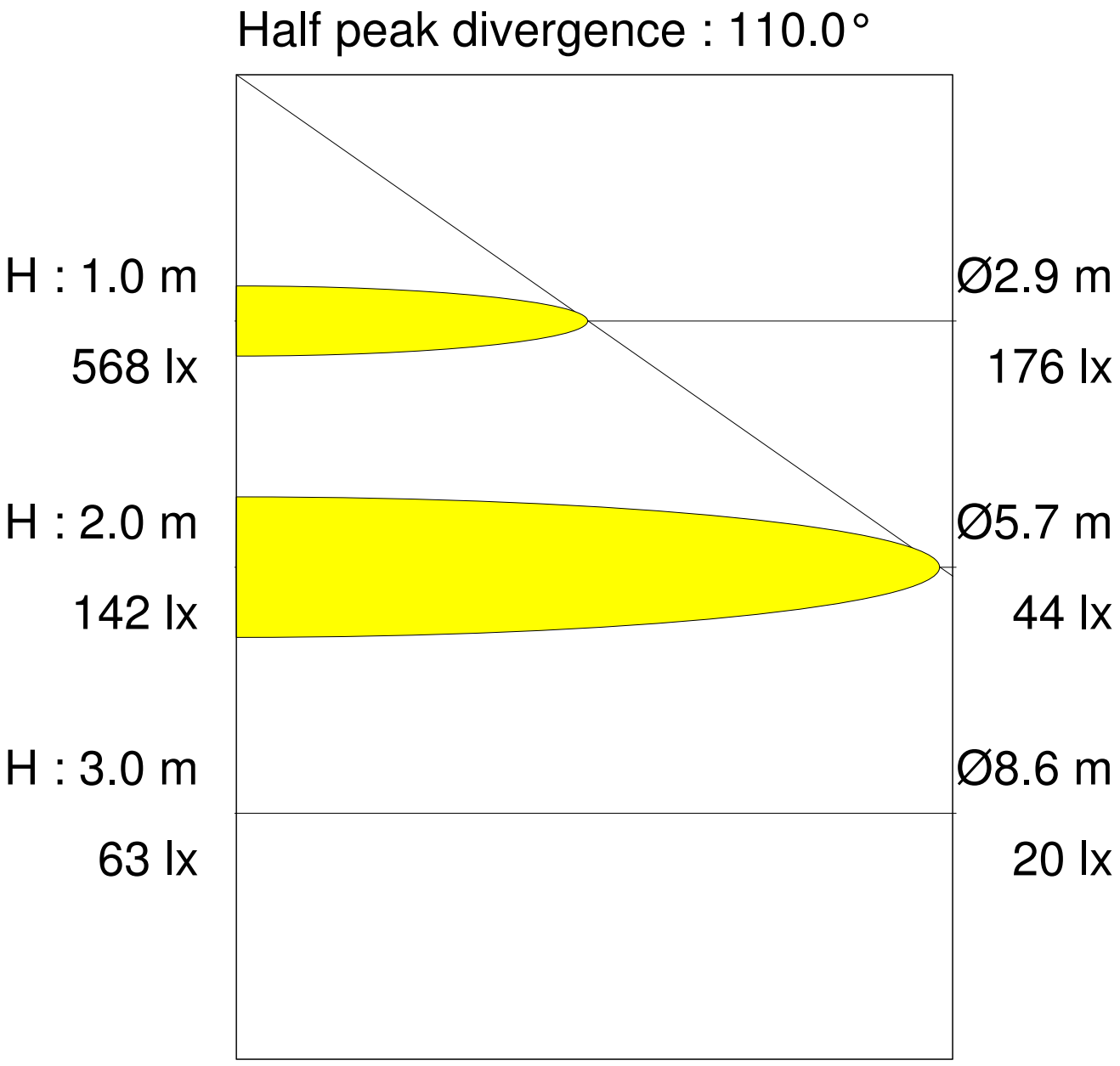
LiTG / DIN	: A41
UTE	: 0.97E+0.03T
CIE	: 46 76 93 97 100
BZ	: 4 5 5 5 5 5 5 5 5

Ambient Temperature	: 25 degC
Input Voltage	: 240 V
Circuit Watts	: 21.8W
Amps (running)	: 0.106A
V.A.	: 25.35VA
Power Factor	: 0.86
CCT	: 4001K (measured): 4000K (declared)
CRI (Ra)	: 88
S/P Ratio	: 1.7
Mains Luminaire Lumens	: 1680 LLm
Emergency luminaire lumens	: 70 LLm at 3hours
Mains Luminaire Lm/circ.Watt	: 77.1 LLm/circ.Watt
Driver Details	: OSRAM OPTOTRONIC OTe 25/220-240/700CS



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 Luminaire Lumens measured. In reality the LED lumens would approximate to this value divided by the actual Light Output.




Half peak divergence : 110.0°
H : 1.0 m
568 lx
Ø2.9 m
176 lx
H : 2.0 m
142 lx
Ø5.7 m
44 lx
H : 3.0 m
63 lx
Ø8.6 m
20 lx

	C 0.0	C 15.0	C 30.0	C 45.0	C 60.0	C 75.0	C 90.0
0.0°	338.30	338.30	338.30	338.30	338.30	338.30	338.30
5.0°	335.50	335.90	336.30	336.20	336.10	336.10	336.10
10.0°	329.80	330.60	331.50	331.30	331.10	330.80	330.60
15.0°	321.50	322.00	322.50	322.20	321.90	321.90	322.00
20.0°	309.20	310.20	311.10	311.20	311.30	310.60	310.00
25.0°	295.00	296.30	297.50	297.90	298.30	297.00	295.70
30.0°	280.40	280.50	280.60	281.00	281.50	279.90	278.20
35.0°	261.50	262.20	263.00	262.50	262.10	261.30	260.60
40.0°	240.60	241.90	243.20	242.50	241.70	240.90	240.10
45.0°	218.50	219.30	220.00	219.90	219.70	218.30	216.80
50.0°	193.80	194.90	196.10	195.60	195.10	193.70	192.30
55.0°	169.10	170.30	171.50	170.70	169.90	168.80	167.60
60.0°	144.10	145.30	146.60	145.60	144.50	143.50	142.50
65.0°	116.20	117.70	119.20	118.00	116.80	115.90	115.00
70.0°	93.00	94.20	95.40	93.70	92.00	91.00	90.10
75.0°	69.30	71.00	72.70	71.10	69.60	69.30	69.10
80.0°	51.50	52.10	52.70	50.70	48.80	49.00	49.20
85.0°	35.50	36.00	36.50	35.90	35.20	34.70	34.10
90.0°	22.30	22.60	23.00	22.70	22.40	22.30	22.30
95.0°	14.60	14.20	13.80	13.70	13.60	13.20	12.80
100.0°	7.90	7.80	7.80	7.80	7.80	7.60	7.40
105.0°	4.90	4.90	4.80	4.70	4.60	4.60	4.60
110.0°	3.60	3.50	3.40	3.50	3.60	3.50	3.40
115.0°	2.80	2.70	2.60	2.60	2.60	2.60	2.60
120.0°	2.20	2.10	2.00	2.00	2.00	2.00	2.00
125.0°	2.00	1.90	1.80	1.80	1.80	1.80	1.80
130.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155.0°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.0°	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
170.0°	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
180.0°	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	18.9	20.4	19.2	20.6	20.9	18.8	20.3	19.1	20.6	20.8
	3H	19.8	20.9	20.1	21.2	21.4	19.7	20.8	20.0	21.1	21.3
	4H	20.4	21.6	20.8	21.8	22.1	20.3	21.5	20.6	21.7	22.0
	6H	21.0	22.0	21.3	22.3	22.6	20.8	21.9	21.2	22.2	22.5
	8H	21.2	22.3	21.6	22.6	22.9	21.1	22.2	21.4	22.5	22.7
	12H	21.5	22.5	21.8	22.8	23.2	21.3	22.4	21.7	22.7	23.0
4H	2H	19.0	20.2	19.3	20.4	20.7	19.0	20.1	19.3	20.4	20.6
	3H	20.8	21.9	21.2	22.2	22.5	20.7	21.8	21.1	22.1	22.4
	4H	21.7	22.7	22.1	23.0	23.4	21.6	22.6	21.9	22.9	23.3
	6H	22.1	23.0	22.5	23.4	23.7	22.0	22.8	22.4	23.2	23.6
	8H	22.5	23.3	22.9	23.7	24.1	22.3	23.1	22.7	23.5	23.9
	12H	22.9	23.7	23.4	24.1	24.6	22.7	23.5	23.2	23.9	24.4
8H	4H	21.8	22.6	22.3	23.0	23.4	21.7	22.5	22.1	22.9	23.3
	6H	22.9	23.7	23.4	24.2	24.7	22.8	23.5	23.3	24.0	24.5
	8H	23.4	24.2	24.0	24.7	25.2	23.3	24.0	23.8	24.5	25.0
	12H	23.7	24.3	24.3	24.9	25.4	23.5	24.2	24.1	24.7	25.2
12H	4H	22.0	22.8	22.5	23.3	23.7	21.9	22.7	22.4	23.2	23.6
	6H	23.1	23.9	23.7	24.4	24.9	23.0	23.7	23.5	24.2	24.8
	8H	23.5	24.1	24.0	24.6	25.2	23.3	23.9	23.9	24.5	25.0
variation of observer position											
S =	1.0H			+0.1/	-0.1			+0.1/	-0.1		
	1.5H			+0.2/	-0.3			+0.2/	-0.3		
	2.0H			+0.3/	-0.6			+0.4/	-0.6		
standard-table				BK06				BK06			
correction for luminaire				6.0				5.9			
correct glare indices for a total flux of 1680lm											

class		glare rating for service value of illuminance (lx)								
A	A	1000	750	500	--	≤ 300				
1	B	2000	1500	1000	750	500	≤ 300			
2	D					2000	1000	500	≤ 300	
3	E						2000	1000	500	≤ 300

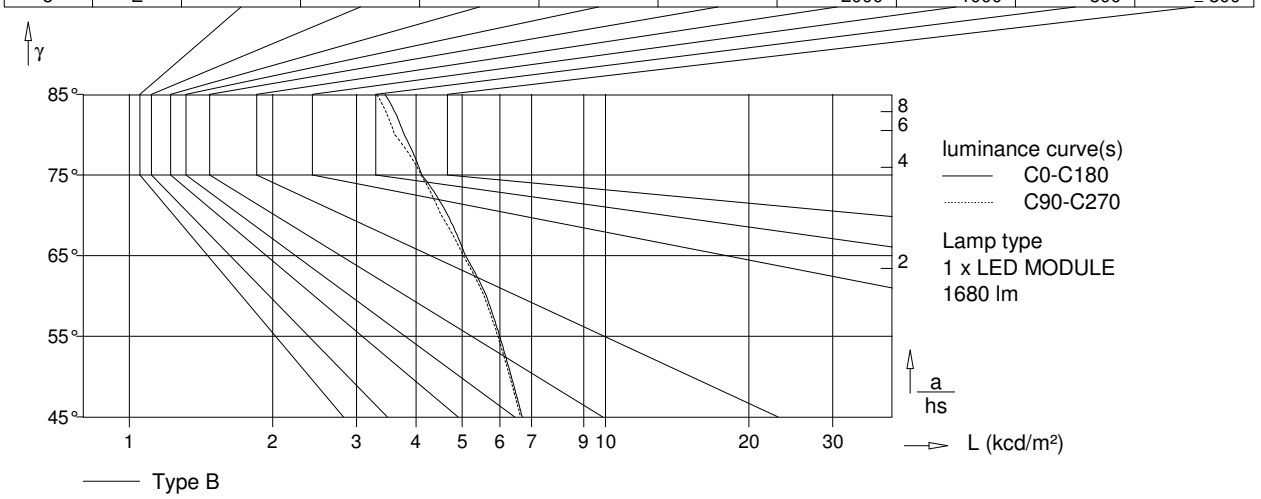


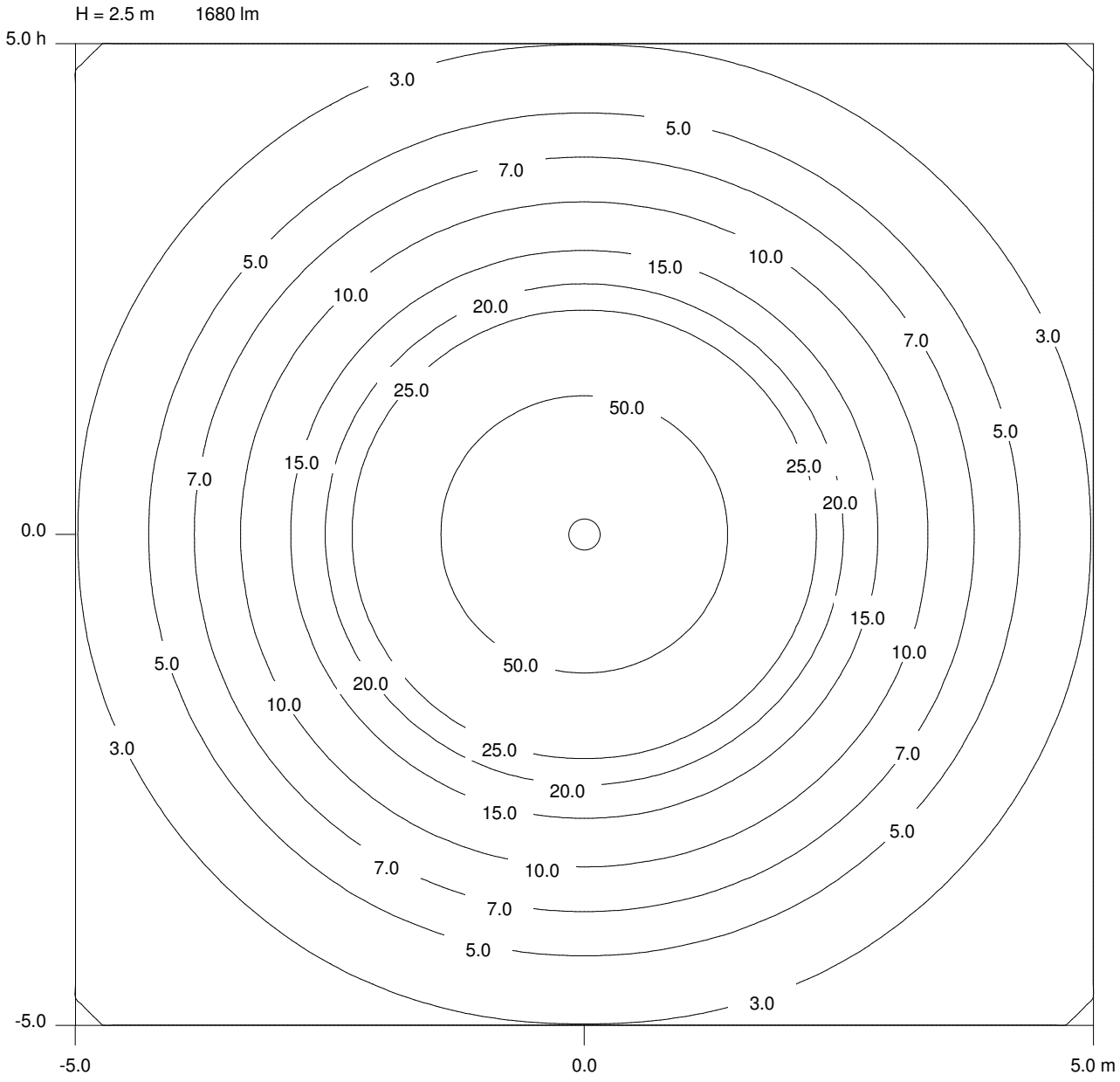
Table of intensities

gamma	C 0	C 90	C 180	C 270
45°	6685.3	6633.3	6685.3	6633.3
50°	6341.3	6292.2	6341.3	6292.2
55°	5994.9	5941.8	5994.9	5941.8
60°	5620.6	5558.1	5620.6	5558.1
65°	5080.1	5027.6	5080.1	5027.6
70°	4665.1	4519.6	4665.1	4519.6
75°	4113.9	4102.0	4113.9	4102.0
80°	3779.2	3610.4	3779.2	3610.4
85°	3444.9	3309.0	3444.9	3309.0

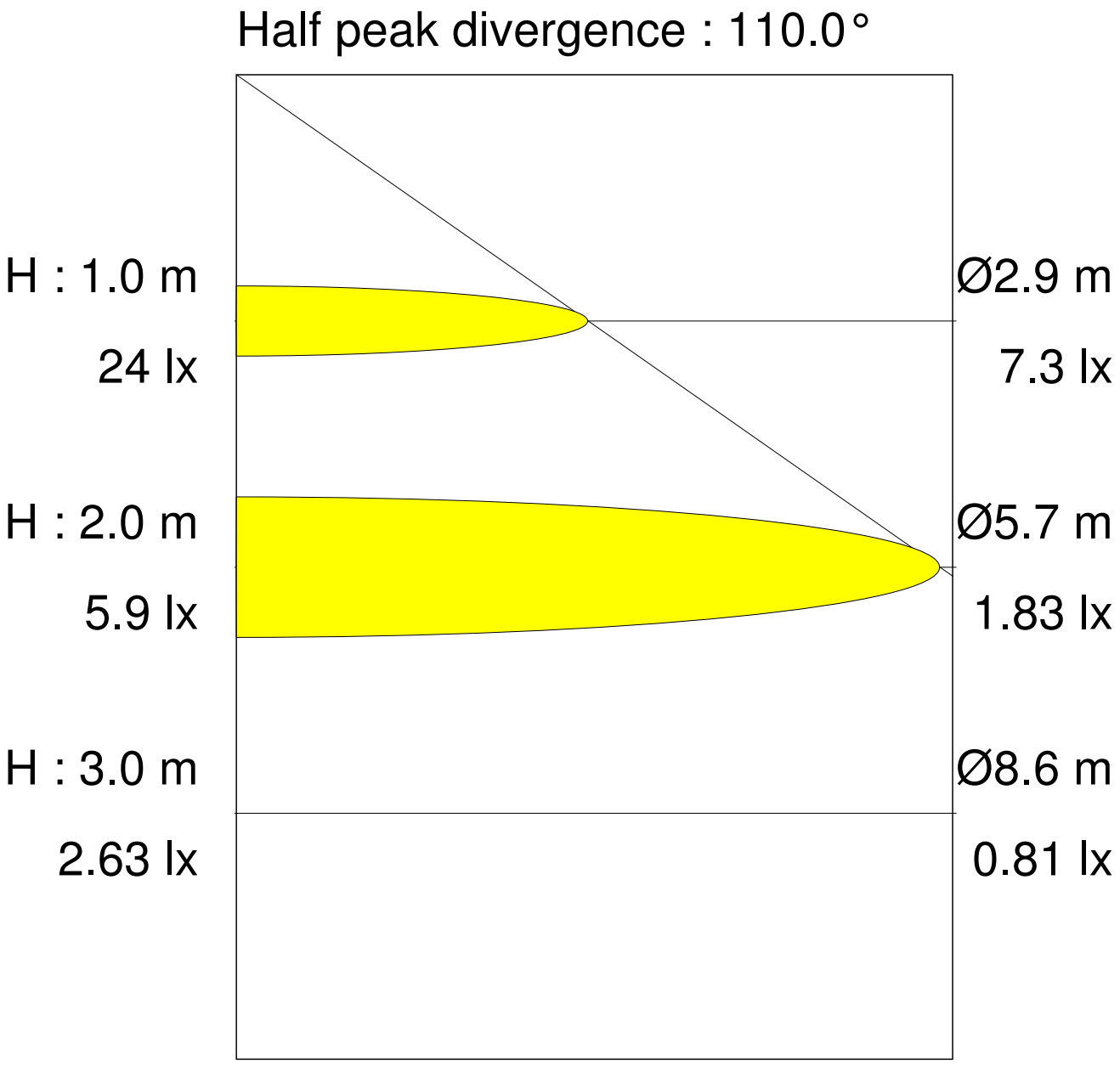
all values in cd/m²

utilization factors / TM5

reflection			room index								
C	W	F	0.75	1.0	1.25	1.5	2.0	2.5	3.0	4.0	5.0
70	50	20	58	67	74	79	86	91	94	98	101
70	30	20	51	59	66	72	79	85	89	94	97
70	10	20	45	53	61	66	74	80	84	90	94
50	50	20	57	64	71	76	82	87	90	94	97
50	30	20	50	57	65	70	77	82	85	90	94
50	10	20	45	52	60	65	72	78	82	87	91
30	50	20	55	62	68	73	79	83	86	90	92
30	30	20	49	56	63	68	75	79	82	87	90
30	10	20	44	52	59	64	71	76	79	84	87
0	0	0	42	49	56	60	67	71	75	79	82
BZ-class			4	5	5	5	5	5	5	5	5
SHRnom : 1.50 SHRmax : 1.554											


H = 2.5 m
1680 lm
5.0 h
0.0
-5.0
-5.0
0.0
5.0 m
3.0
5.0
7.0
10.0
15.0
20.0
25.0
50.0

EMERGENCY OPERATION AT 3 HOURS



EMERGENCY OPERATION AT 3 HOURS