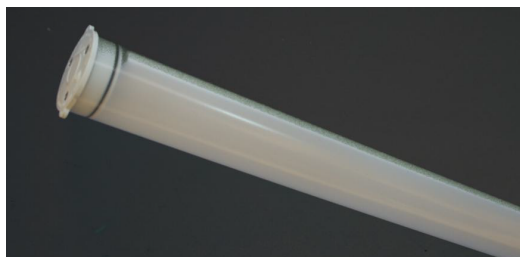


filename : MT70-LED-T5-SC-HE.LDT  
 meas. number : 2681  
 luminaire number : MT70 LED T5 SC HE  
 date / operator : 31-08-2018

**default lamp type(s)**

no of lamps	lamp type	luminaire lumens	input wattage
1	LED MODULE	3140 lm	22.8 W

**dimensions**

luminaire		luminous area	
length	: 1510 mm	length	: 1450 mm
width	: 75 mm	width	: 70 mm
height	: 75 mm	height	: 70 mm

**coordinate system**

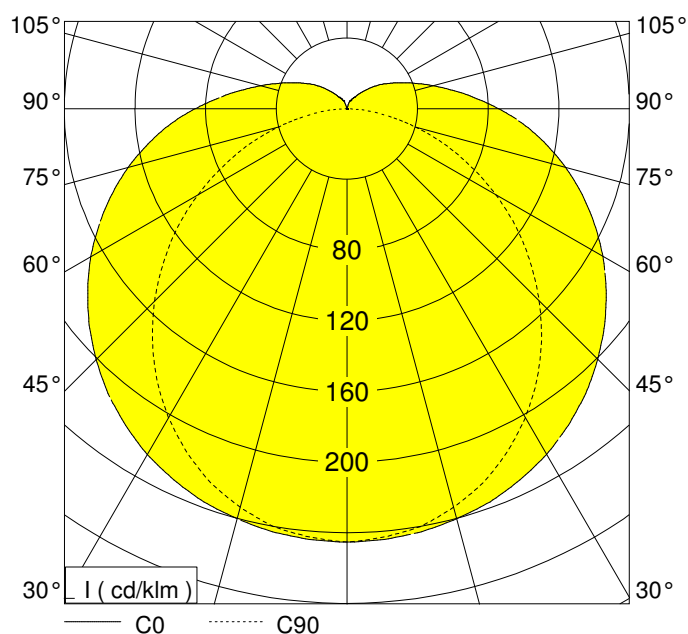
no of planes	: 7	samples / plane	: 37
first c-plane	: 0.0 °	first gamma-angle	: 0.0 °
step angle	: 15.0 °	step angle	: 5.0 °
last c-plane	: 90.0 °	last gamma-angle	: 180.0 °
symmetrics : symmetry to C0 / C90			

**performance**

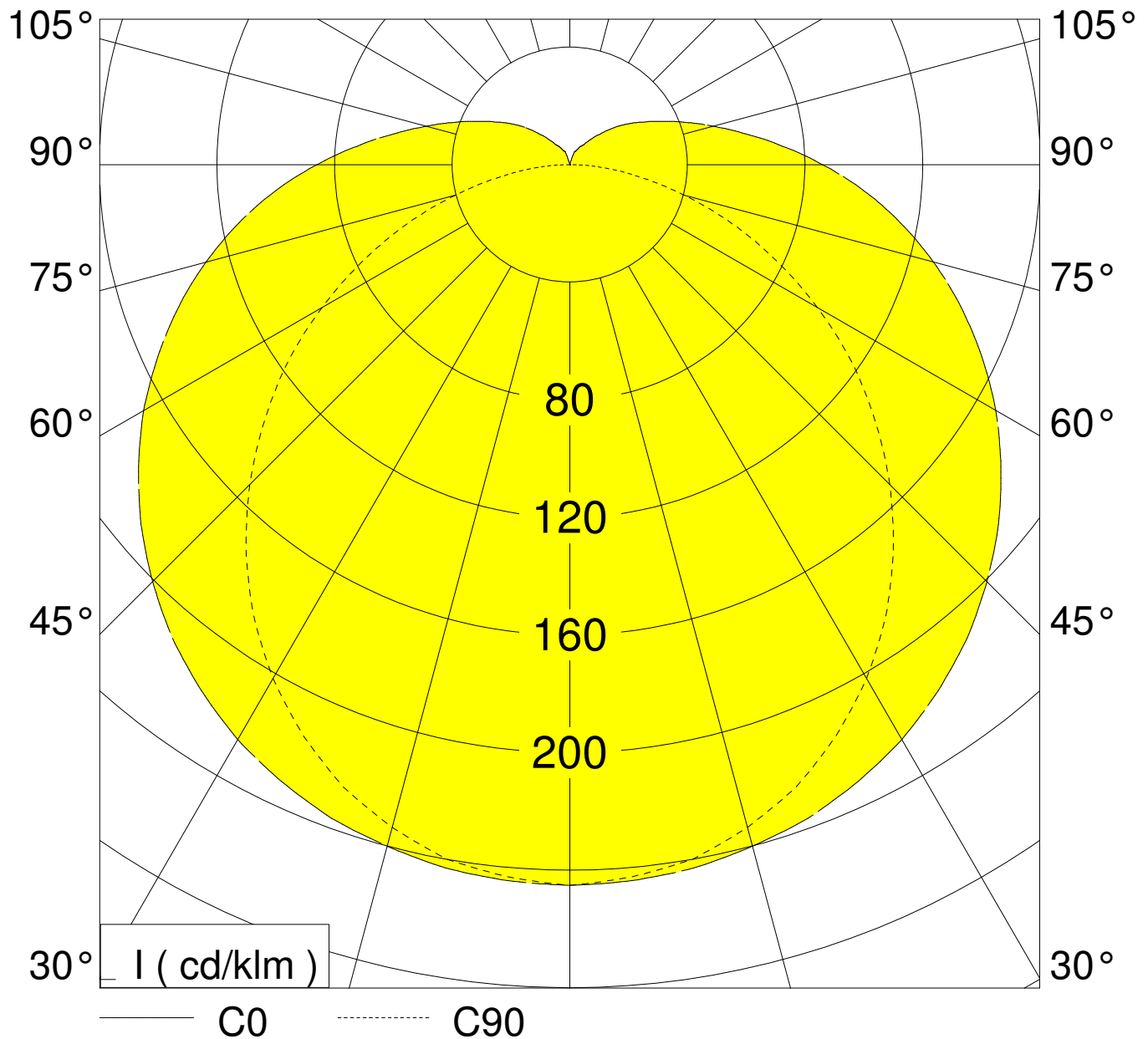
light output ratio : 100.0 %  
 DFF : 88.1 %  
 UFF : 11.9 %

**classification**

LITG / DIN : B31  
 UTE : 0.88G+0.12T  
 CIE : 39 67 88 88 100  
 BZ : 6 6 6 6 6 6 6 6 6  
 Ambient Temperature : 25 degC  
 Input Voltage : 240 V  
 Circuit Watts : 22.8W  
 Amps (running) : 0.106A  
 V.A. : 25.33VA  
 Power Factor : 0.90  
 CCT : 4053K (measured); 4000K (declared)  
 CRI (Ra) : 90  
 S/P Ratio : 1.8  
 Luminaire Lumens : 3140LLm  
 Output Current DC : 170mA  
 Output Voltage DC : 113.6V  
 Output Power : 19.36W  
 Luminaire Lm/circ.Watt : 138 LLm/circ.Watt  
 Driver Efficiency : 85%  
 Driver Details : TRIDONIC LC50 100-400mA FLEX C Ip EXC 28000680



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.



	C 0.0	C 15.0	C 30.0	C 45.0	C 60.0	C 75.0	C 90.0
0.0°	245.00	245.00	245.00	245.00	245.00	245.00	245.00
5.0°	244.30	244.30	244.30	244.20	244.10	243.60	243.00
10.0°	242.80	242.60	242.40	241.70	241.10	240.50	239.80
15.0°	239.90	239.40	238.90	237.60	236.40	234.80	233.20
20.0°	236.50	235.20	234.00	231.60	229.30	227.30	225.10
25.0°	231.50	229.60	227.80	224.20	220.60	217.40	214.20
30.0°	225.70	222.90	220.10	215.10	210.20	205.90	201.70
35.0°	218.30	214.90	211.50	204.90	198.20	192.80	187.30
40.0°	210.10	205.80	201.50	193.30	185.00	178.00	171.10
45.0°	200.50	195.50	190.60	180.50	170.50	162.10	153.80
50.0°	190.20	184.50	178.80	166.80	154.90	145.20	135.50
55.0°	178.90	172.50	166.00	152.30	138.70	127.80	117.00
60.0°	167.20	160.30	153.40	137.90	122.50	109.90	97.20
65.0°	154.50	147.30	140.10	123.30	106.50	92.10	77.60
70.0°	141.50	134.20	126.80	108.90	90.90	74.80	58.80
75.0°	128.00	120.70	113.30	94.70	76.10	58.20	40.30
80.0°	114.20	107.10	99.90	81.10	62.30	43.00	23.90
85.0°	100.20	93.30	86.60	68.30	49.90	30.40	10.80
90.0°	85.90	79.60	73.40	56.70	39.90	20.00	0.00
95.0°	72.50	66.80	61.10	46.00	30.90	15.50	0.00
100.0°	60.50	55.70	50.70	37.40	24.10	12.00	0.00
105.0°	50.40	46.10	42.00	30.40	19.00	9.40	0.00
110.0°	42.00	38.20	34.40	24.80	15.10	7.60	0.00
115.0°	34.80	31.60	28.40	20.00	11.50	5.80	0.00
120.0°	29.00	26.20	23.60	16.20	8.90	4.50	0.00
125.0°	24.30	21.70	19.00	13.00	7.10	3.50	0.00
130.0°	19.50	17.10	14.70	10.30	6.00	3.00	0.00
135.0°	14.90	13.20	11.50	8.40	5.20	2.60	0.00
140.0°	11.40	10.00	8.50	6.70	4.70	2.40	0.00
145.0°	8.30	7.70	7.10	3.60	0.00	0.00	0.00
150.0°	7.00	6.50	6.00	3.00	0.00	0.00	0.00
155.0°	5.40	5.20	4.90	2.50	0.00	0.00	0.00
160.0°	4.60	4.50	4.50	2.30	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	18.5	19.9	18.9	20.3	20.8	17.5	19.0	18.0	19.4	19.8
	3H	20.4	21.6	20.8	22.0	22.4	18.8	20.0	19.2	20.4	20.9
	4H	21.4	22.6	21.9	23.1	23.6	19.4	20.6	19.9	21.1	21.6
	6H	22.5	23.6	23.0	24.1	24.6	19.9	21.0	20.4	21.5	22.0
	8H	23.0	24.1	23.5	24.6	25.2	20.1	21.2	20.6	21.7	22.2
	12H	23.5	24.6	24.0	25.2	25.7	20.2	21.3	20.7	21.9	22.4
4H	2H	18.9	20.1	19.4	20.6	21.0	18.2	19.4	18.6	19.8	20.3
	3H	21.4	22.5	21.9	23.0	23.6	20.0	21.2	20.5	21.7	22.2
	4H	22.7	23.8	23.3	24.3	25.0	20.9	22.0	21.5	22.6	23.2
	6H	23.7	24.6	24.3	25.2	25.8	21.3	22.2	21.9	22.8	23.4
	8H	24.3	25.2	24.9	25.8	26.4	21.6	22.5	22.2	23.0	23.7
	12H	25.0	25.9	25.7	26.5	27.3	21.9	22.7	22.6	23.4	24.2
8H	4H	22.9	23.7	23.5	24.3	25.0	21.3	22.2	22.0	22.8	23.5
	6H	24.5	25.4	25.2	26.1	26.9	22.5	23.3	23.2	24.0	24.8
	8H	25.4	26.2	26.1	26.9	27.8	22.9	23.7	23.7	24.5	25.4
	12H	26.0	26.7	26.8	27.4	28.3	23.2	23.8	23.9	24.6	25.4
12H	4H	23.0	23.9	23.7	24.5	25.3	21.6	22.5	22.3	23.1	23.9
	6H	24.8	25.5	25.5	26.3	27.2	22.8	23.6	23.6	24.4	25.2
	8H	25.5	26.1	26.2	26.9	27.8	23.2	23.9	23.9	24.6	25.5
variation of observer position											
S =	1.0H	+0.1/                      -0.1				+0.1/                      -0.1					
	1.5H	+0.2/                      -0.2				+0.2/                      -0.3					
	2.0H	+0.2/                      -0.3				+0.3/                      -0.5					
standard-table		BK09					BK07				
correction for luminaire		8.8					5.7				
correct glare indices for a total flux of 3140lm											

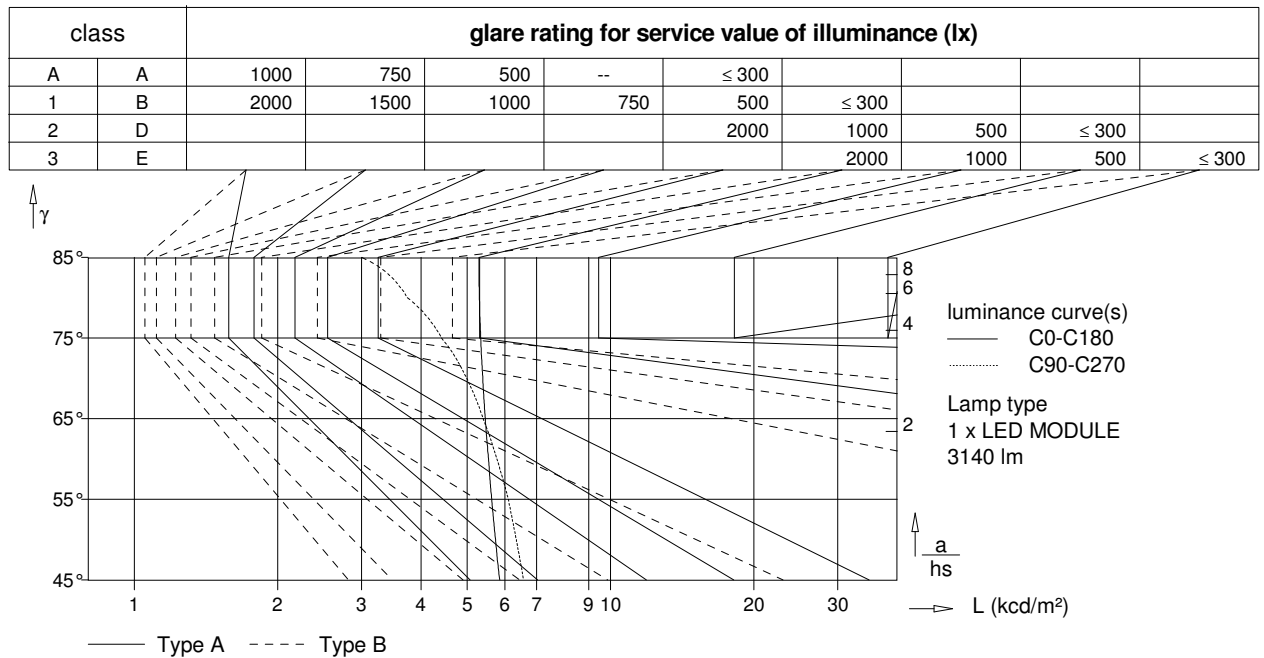


Table of intensities

gamma	C 0	C 90	C 180	C 270
45°	5847.9	6570.2	5847.9	6570.2
50°	5736.0	6339.0	5736.0	6339.0
55°	5629.3	6100.1	5629.3	6100.1
60°	5543.9	5772.6	5543.9	5772.6
65°	5457.6	5400.8	5457.6	5400.8
70°	5391.8	4987.7	5391.8	4987.7
75°	5338.2	4418.9	5338.2	4418.9
80°	5304.2	3745.2	5304.2	3745.2
85°	5296.5	3004.5	5296.5	3004.5

all values in cd/m²

<b>utilization factors / TM5</b>											
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	51	59	66	71	78	84	87	92	95
70	30	20	43	51	58	64	71	77	81	87	91
70	10	20	37	45	52	57	66	71	76	82	87
50	50	20	48	56	62	67	73	78	81	86	89
50	30	20	41	49	55	60	68	73	76	82	85
50	10	20	36	43	50	55	63	68	72	78	82
30	50	20	46	52	59	63	69	73	76	80	83
30	30	20	40	46	53	57	64	69	72	77	80
30	10	20	35	42	48	53	60	65	68	74	77
0	0	0	32	38	44	48	54	59	62	67	70
BZ-class			6	6	6	6	6	6	6	6	6
SHRnom : 1.50						SHRmax : 1.702					

