

filename : HFI-LED-23.LDT
 meas. number : 2744
 luminaire number : HFI-LED-23
 date / operator : 24-10-2018



default lamp type(s)

no of lamps	lamp type	luminaire lumens	input wattage
1	LED STICK-LITE	2600 lm	20.6 W

dimensions

luminaire		luminous area	
length	: 1555 mm	length	: 1455 mm
width	: 30 mm	width	: 25 mm
height	: 30 mm	height	: 25 mm

coordinate system

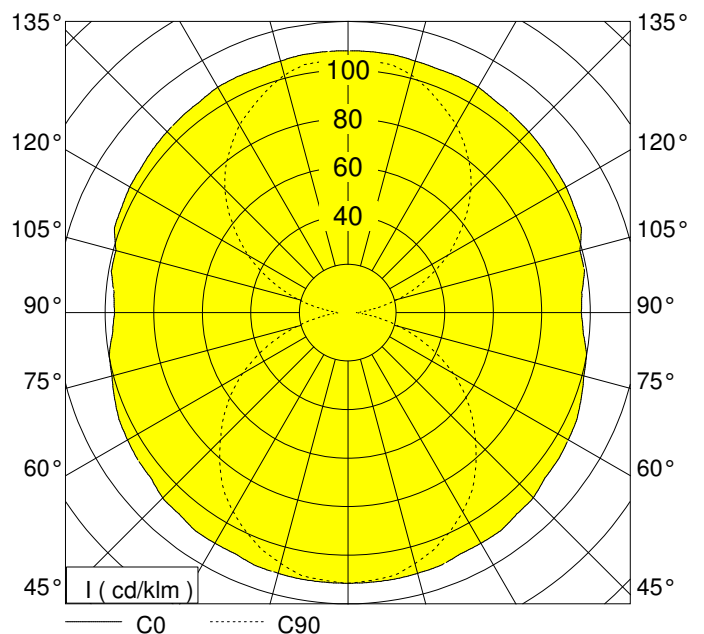
no of planes	: 7	samples / plane	: 37
first c-plane	: 0.0 °	first gamma-angle	: 0.0 °
step angle	: 15.0 °	step angle	: 5.0 °
last c-plane	: 90.0 °	last gamma-angle	: 180.0 °
symmetrics : symmetry to C0 / C90			

performance

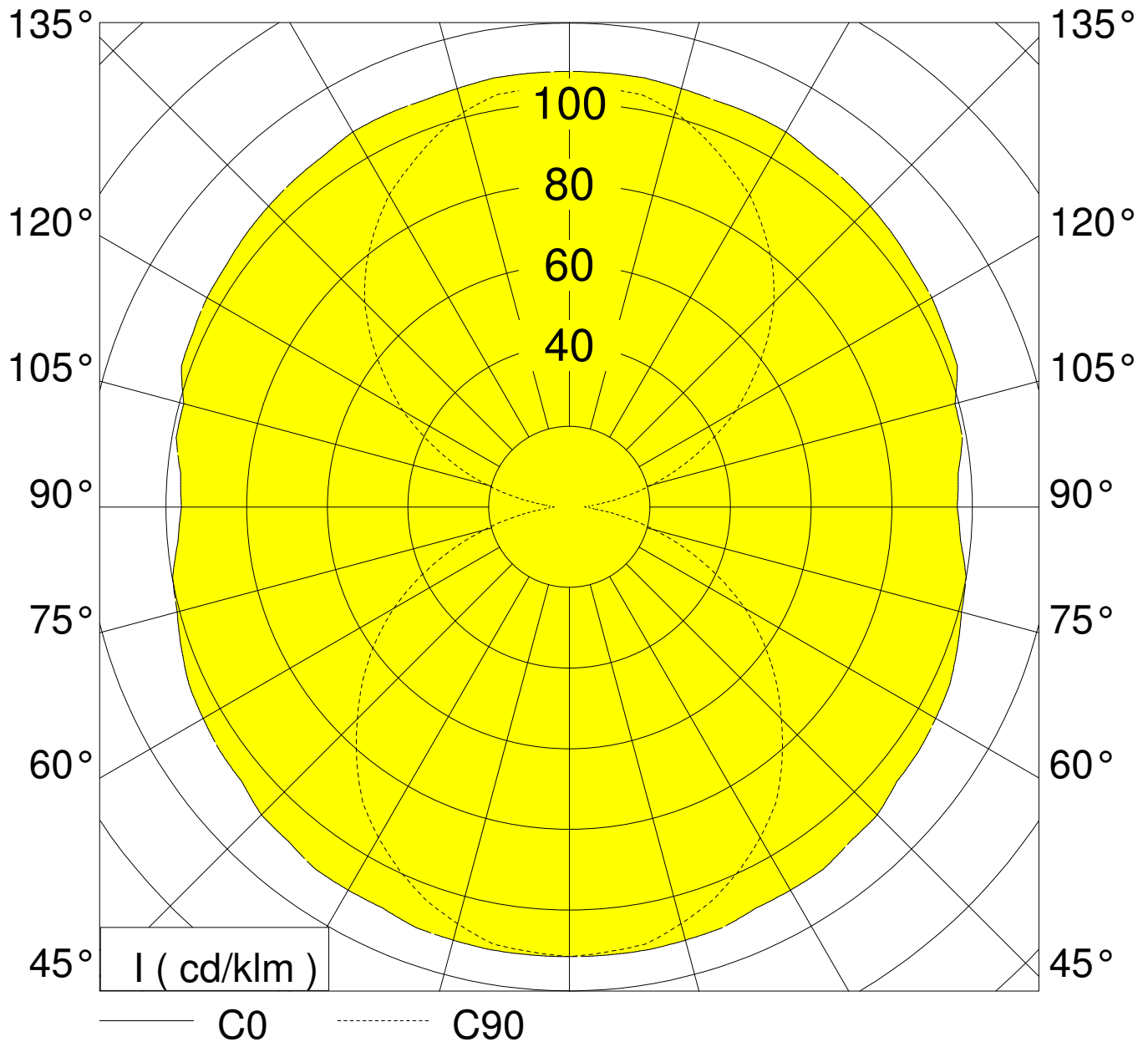
light output ratio	: 100.0 %
DFF	: 50.6 %
UFF	: 49.4 %

classification

LiTG / DIN	: C22
UTE	: 0.51H+0.49T
CIE	: 32 59 81 51 100
BZ	: 1 6 6 6 6 6 6 6 6
Ambient Temperature	: 25 degC
Input Voltage	: 240 V
Circuit Watts	: 20.6W
Amps (running)	: 0.088A
V.A.	: 21.24VA
Power Factor	: 0.97
CCT	: 4157K (measured): 4200K (declared)
CRI (Ra)	: 92
S/P Ratio	: 1.8
Luminaire Lumens	: 2600 LLm
Luminaire Lm/circ.Watt	: 126 LLm/circ.Watt



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°	111.40	111.40	111.40	111.40	111.40	111.40	111.40
5.0°	111.40	111.30	111.10	111.10	111.10	110.90	110.60
10.0°	111.40	111.10	110.80	110.30	109.80	109.90	109.90
15.0°	111.10	110.80	110.60	109.60	108.40	107.70	106.90
20.0°	110.90	110.00	109.00	106.90	104.80	104.30	103.70
25.0°	109.60	108.80	108.10	104.80	101.50	100.40	99.40
30.0°	109.60	108.40	107.30	102.80	98.40	96.50	94.60
35.0°	109.60	106.40	103.30	98.30	93.40	91.40	89.30
40.0°	108.20	105.20	102.10	95.70	89.30	85.70	82.00
45.0°	107.90	103.70	99.60	91.30	82.90	78.60	74.30
50.0°	105.90	102.20	98.50	88.20	77.90	72.40	66.80
55.0°	105.60	100.10	94.50	83.30	72.10	65.40	58.80
60.0°	104.80	99.10	93.30	79.80	66.30	58.30	50.20
65.0°	104.00	97.80	91.70	76.30	60.70	50.70	40.70
70.0°	102.30	95.80	89.50	72.20	54.90	42.90	31.00
75.0°	100.60	93.30	86.10	68.30	50.50	36.10	21.70
80.0°	99.80	92.10	84.40	65.60	46.80	30.00	13.10
85.0°	97.30	89.90	82.40	62.90	43.50	25.00	6.50
90.0°	96.10	88.50	80.70	60.30	40.00	21.60	3.20
95.0°	96.70	89.20	81.50	61.40	41.40	23.80	6.20
100.0°	98.90	91.60	84.10	64.30	44.60	28.70	12.80
105.0°	98.90	92.10	85.20	67.00	48.80	35.00	21.10
110.0°	102.30	95.00	87.80	70.50	53.20	41.50	29.60
115.0°	102.80	96.40	90.00	74.30	58.50	48.50	38.50
120.0°	103.70	97.50	91.50	77.60	63.70	55.70	47.60
125.0°	104.00	98.50	93.20	81.30	69.60	62.60	55.60
130.0°	104.80	100.40	95.90	85.50	75.20	69.50	63.90
135.0°	105.40	101.20	97.00	88.80	80.40	76.10	71.70
140.0°	105.90	102.90	99.90	93.00	86.00	82.10	78.30
145.0°	106.20	104.50	102.70	96.80	91.00	87.40	83.90
150.0°	107.30	106.00	104.70	100.60	96.50	92.90	89.30
155.0°	107.30	106.30	105.30	102.70	100.10	96.70	93.30
160.0°	107.00	107.00	107.00	105.10	103.10	100.30	97.50
165.0°	107.30	107.70	108.10	106.70	105.40	103.30	101.30
170.0°	107.90	108.70	109.50	108.40	107.30	105.50	103.70
175.0°	107.90	108.70	109.50	109.00	108.40	106.20	104.00
180.0°	107.90	108.70	109.50	109.00	108.40	106.50	104.50
	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	15.9	17.0	16.8	17.9	19.0	14.8	15.8	15.6	16.7	17.8
	3H	19.0	20.2	20.1	21.4	23.1	17.0	18.1	18.1	19.3	21.1
	4H	20.3	21.5	21.5	22.7	24.6	17.7	18.8	18.8	20.1	22.0
	6H	21.6	22.7	22.8	24.0	26.1	18.2	19.3	19.4	20.6	22.6
	8H	22.3	23.4	23.6	24.7	26.9	18.5	19.5	19.7	20.9	23.0
	12H	23.0	24.1	24.3	25.5	27.7	18.6	19.7	19.9	21.1	23.3
4H	2H	17.1	18.3	18.3	19.5	21.4	16.2	17.4	17.4	18.6	20.5
	3H	20.0	21.0	21.2	22.4	24.6	18.2	19.2	19.4	20.6	22.8
	4H	21.5	22.6	22.9	24.0	26.4	19.2	20.2	20.5	21.6	24.1
	6H	22.9	23.7	24.2	25.2	27.5	19.7	20.6	21.1	22.0	24.4
	8H	23.6	24.4	25.0	25.9	28.4	20.0	20.8	21.4	22.3	24.8
	12H	24.5	25.2	26.0	26.9	29.8	20.4	21.1	21.9	22.8	25.7
8H	4H	21.7	22.5	23.1	24.0	26.5	19.8	20.5	21.2	22.1	24.6
	6H	23.7	24.4	25.2	26.1	29.2	21.0	21.7	22.5	23.4	26.5
	8H	24.7	25.4	26.3	27.2	30.6	21.6	22.3	23.2	24.0	27.5
	12H	25.6	26.1	27.2	27.9	31.2	21.9	22.5	23.5	24.2	27.6
12H	4H	21.9	22.6	23.4	24.3	27.2	20.1	20.8	21.6	22.5	25.4
	6H	23.9	24.6	25.5	26.4	29.8	21.5	22.1	23.1	23.9	27.3
	8H	24.8	25.4	26.5	27.2	30.5	22.0	22.5	23.6	24.3	27.6
variation of observer position											
S =	1.0H	+0.1/		-0.1		+0.1/		-0.1			
	1.5H	+0.2/		-0.2		+0.2/		-0.2			
	2.0H	+0.2/		-0.2		+0.2/		-0.4			
standard-table	BK11					BK08					
correction for luminaire	8.9					4.6					
correct glare indices for a total flux of 2600lm											

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	

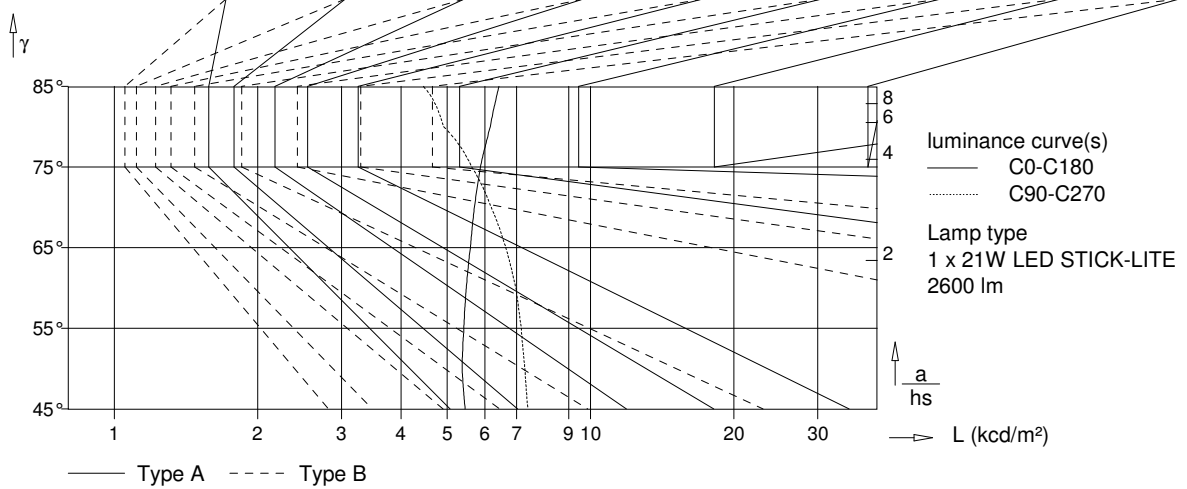


Table of intensities

gamma	C 0	C 90	C 180	C 270
45°	5453.5	7383.7	5453.5	7383.7
50°	5372.9	7279.1	5372.9	7279.1
55°	5419.6	7152.0	5419.6	7152.0
60°	5483.7	6969.0	5483.7	6969.0
65°	5593.7	6639.0	5593.7	6639.0
70°	5705.0	6186.5	5705.0	6186.5
75°	5871.1	5631.7	5871.1	5631.7
80°	6157.7	4913.5	6157.7	4913.5
85°	6419.7	4455.7	6419.7	4455.7

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	N/A	50	56	61	68	72	75	80	83
70	30	20	N/A	43	49	54	61	66	70	75	79
70	10	20	N/A	37	43	48	55	61	65	71	75
50	50	20	N/A	42	48	51	57	61	63	67	70
50	30	20	N/A	37	42	46	52	56	59	64	67
50	10	20	N/A	32	37	41	48	52	55	60	64
30	50	20	N/A	35	39	43	47	50	52	55	58
30	30	20	N/A	31	35	38	43	47	49	53	55
30	10	20	N/A	27	32	35	40	44	46	50	53
0	0	0	N/A	19	22	25	28	31	33	36	38
BZ-class			1	6	6	6	6	6	6	6	6
SHRnom : 1.75						SHRmax : 1.877					

