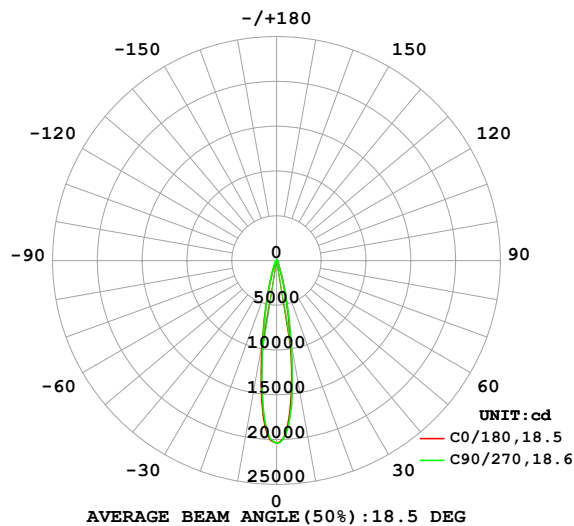


## LUMINAIRE PHOTOMETRIC TEST REPORT

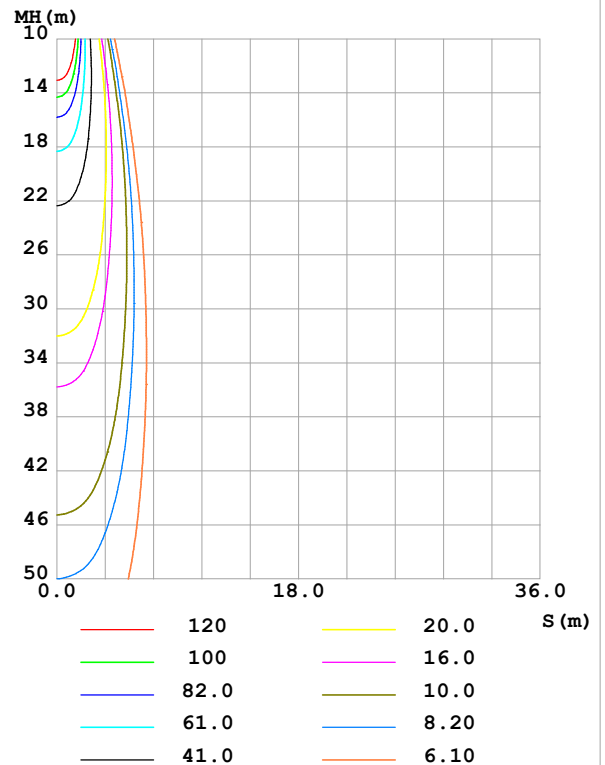
Test:U:230.15V I:0.107A P:23.55W PF:0.952 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3684.69x1 lm		
NAME: T1283A-18D-3090		
SPEC.: KGP 26W/650mA		
MFR.: SOTEN		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 130.19 lm/W			
MODEL	SH1814-0912J18W30H	I <sub>max</sub> (cd)	20421	S/MH (C0/180)	0.32
NOMINAL POWER(W)	25	LOR (%)	83.2	S/MH (C90/270)	0.31
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	3065.7	η UP,DN (C0-180)	0.0,42.9
NOMINAL FLUX(lm)	3684.69	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,40.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230	η down (%)	83.2	CIBSE SHR MAX	0.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 28 °C  
Operators: Li  
Test Date: 2025-09-05

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
Humidity: 75%  
Test Distance: 8.458m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	891.7	921.7	961.4	962.1	916.1	887.9	868.8	862.2	0- 10	1363	1363	44.4, 37
20	142.9	159.0	148.4	163.1	149.8	132.5	157.1	139.6	10- 20	1110	2473	80.7, 67.1
30	27.89	32.47	26.77	33.02	31.95	26.81	34.37	28.11	20- 30	316.1	2789	91, 75.7
40	11.36	14.53	11.18	13.93	12.77	10.83	13.80	11.17	30- 40	120.9	2910	94.9, 79
50	6.868	7.152	6.989	7.766	7.658	7.060	7.254	6.925	40- 50	69.31	2979	97.2, 80.9
60	4.026	3.909	4.200	4.017	3.999	4.144	3.833	3.984	50- 60	50.41	3030	98.8, 82.2
70	1.586	1.593	1.628	1.599	1.561	1.565	1.498	1.528	60- 70	25.58	3055	99.7, 82.9
80	0.3115	0.3111	0.3482	0.3226	0.3041	0.3163	0.2553	0.2860	70- 80	9.560	3065	100, 83.2
90	0.0334	0.0330	0.0331	0.0322	0.0309	0.0294	0.0310	0.0301	80- 90	0.7845	3066	100, 83.2
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:X10cd									UNIT:lm		

Conical surface Flux(90deg): 2947.4 lm

%lum = 96.1%

%lamp = 80.0%

Conical surface Flux(130deg): 3045.4 lm

%lum = 99.3%

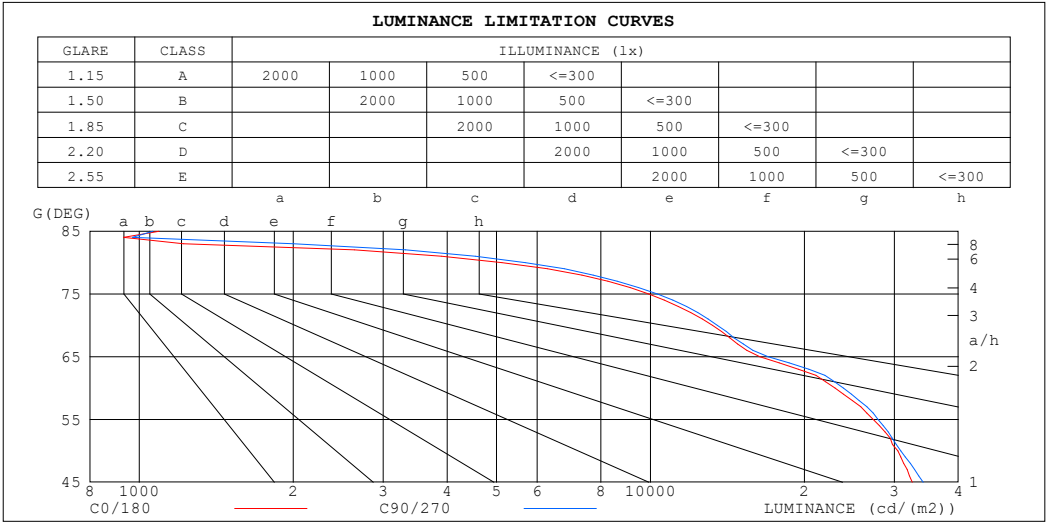
%lamp = 82.7%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 28℃  
 Operators: Li  
 Test Date: 2025-09-05

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
 Humidity: 75%  
 Test Distance: 8.458m [K=1.0000]  
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.15V I:0.107A P:23.55W PF:0.952 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3684.69x1 lm		
NAME: T1283A-18D-3090		
SPEC.: KGP 26W/650mA		
MFR.: SOTEN		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1094	1062
80	5118	5691
75	9922	10319
70	13230	13513
65	16367	16999
60	22975	23844
55	27259	27890
50	30481	30862
45	32506	34167

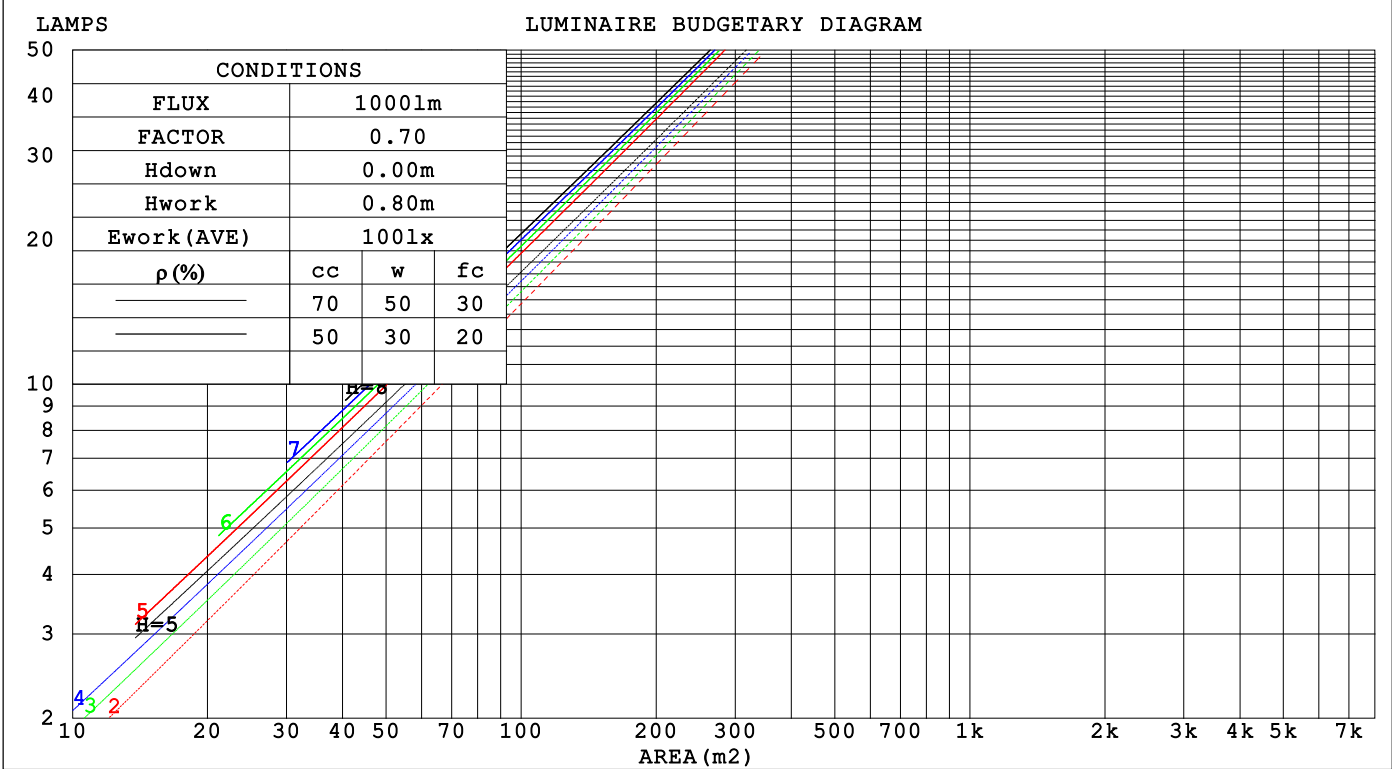
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:28℃  
Operators:Li  
Test Date:2025-09-05

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
Humidity:75%  
Test Distance:8.458m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.15V I:0.107A P:23.55W PF:0.952 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0		
Lamp Flux:3684.69x1 lm		
NAME: T1283A-18D-3090		
SPEC.: KGP 26W/650mA		
MFR.: SOTEN		

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	.99	.99	.99	.97	.97	.97	.92	.92	.92	.89	.89	.89	.85	.85	.85	.83
1.0	.94	.92	.91	.92	.91	.89	.89	.88	.87	.86	.85	.84	.83	.82	.82	.80
2.0	.89	.87	.85	.88	.86	.84	.85	.84	.82	.83	.82	.80	.81	.80	.79	.77
3.0	.86	.83	.80	.85	.82	.80	.82	.80	.78	.81	.79	.77	.79	.77	.76	.75
4.0	.82	.79	.77	.81	.78	.76	.80	.77	.75	.78	.76	.74	.77	.75	.74	.73
5.0	.79	.76	.74	.79	.76	.73	.77	.75	.73	.76	.74	.72	.75	.73	.71	.71
6.0	.77	.73	.71	.76	.73	.71	.75	.72	.70	.74	.72	.70	.73	.71	.70	.69
7.0	.75	.71	.69	.74	.71	.69	.73	.70	.68	.72	.70	.68	.72	.69	.68	.67
8.0	.73	.69	.67	.72	.69	.67	.71	.69	.67	.71	.68	.66	.70	.68	.66	.65
9.0	.71	.67	.65	.70	.67	.65	.70	.67	.65	.69	.67	.65	.69	.66	.65	.64
10.0	.69	.66	.64	.69	.66	.64	.68	.65	.63	.68	.65	.63	.67	.65	.63	.62



WEC AND CCEC

Test:U:230.15V I:0.107A P:23.55W PF:0.952 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3684.69x1 lm		
NAME: T1283A-18D-3090		
SPEC.: KGP 26W/650mA		
MFR.: SOTEN		

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.115	.065	.021	.109	.062	.020	.099	.057	.018	.090	.052	.017	.081	.047	.015		
2.0	.107	.058	.018	.102	.056	.017	.094	.052	.016	.086	.048	.015	.079	.044	.014		
3.0	.099	.053	.016	.095	.051	.015	.088	.048	.015	.082	.045	.014	.076	.042	.013		
4.0	.092	.048	.014	.089	.047	.014	.083	.044	.013	.078	.042	.013	.073	.039	.012		
5.0	.086	.044	.013	.084	.043	.013	.079	.041	.012	.074	.039	.012	.070	.037	.011		
6.0	.081	.041	.012	.079	.040	.011	.075	.038	.011	.071	.037	.011	.067	.035	.010		
7.0	.077	.038	.011	.075	.037	.011	.071	.036	.010	.067	.035	.010	.064	.033	.010		
8.0	.073	.036	.010	.071	.035	.010	.068	.034	.010	.065	.033	.009	.062	.032	.009		
9.0	.069	.033	.009	.068	.033	.009	.065	.032	.009	.062	.031	.009	.059	.030	.009		
10.0	.066	.032	.009	.065	.031	.009	.062	.030	.009	.060	.030	.008	.057	.029	.008		

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.158	.158	.158	.135	.135	.135	.092	.092	.092	.053	.053	.053	.017	.017	.017	
1.0	.140	.131	.123	.120	.113	.106	.082	.077	.073	.047	.045	.043	.015	.014	.014	
2.0	.125	.110	.098	.107	.095	.085	.073	.066	.059	.042	.038	.035	.014	.012	.011	
3.0	.113	.094	.080	.097	.081	.069	.066	.056	.048	.038	.033	.029	.012	.011	.009	
4.0	.102	.081	.066	.088	.070	.057	.060	.049	.040	.035	.029	.024	.011	.009	.008	
5.0	.093	.071	.055	.080	.062	.048	.055	.043	.034	.032	.025	.020	.010	.008	.007	
6.0	.086	.063	.046	.074	.054	.040	.051	.038	.029	.029	.022	.017	.010	.007	.006	
7.0	.079	.056	.040	.068	.049	.035	.047	.034	.025	.027	.020	.015	.009	.007	.005	
8.0	.074	.050	.034	.063	.044	.030	.044	.031	.021	.026	.018	.013	.008	.006	.004	
9.0	.069	.046	.030	.059	.040	.026	.041	.028	.019	.024	.016	.011	.008	.005	.004	
10.0	.064	.042	.026	.056	.036	.023	.039	.025	.016	.022	.015	.010	.007	.005	.003	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:28℃  
 Operators:Li  
 Test Date:2025-09-05

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
 Humidity:75%  
 Test Distance:8.458m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.15V I:0.107A P:23.55W PF:0.952 Freq:49.99Hz										
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3684.69x1 lm										
NAME: T1283A-18D-3090										
SPEC.: KGP 26W/650mA										
MFR.: SOTEN										
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	17.2	17.9	17.4	18.0	18.2	17.1	17.7	17.3	17.9	18.0
3H	17.6	18.2	17.9	18.4	18.6	17.5	18.1	17.8	18.3	18.5
4H	17.7	18.3	18.0	18.5	18.7	17.7	18.3	17.9	18.5	18.7
6H	17.8	18.3	18.0	18.5	18.8	17.7	18.2	18.0	18.5	18.7
8H	17.7	18.2	18.0	18.5	18.7	17.7	18.2	17.9	18.4	18.7
12H	17.7	18.2	18.0	18.4	18.7	17.6	18.1	17.9	18.4	18.6
4H 2H	17.4	18.0	17.7	18.2	18.4	17.3	17.9	17.6	18.1	18.3
3H	18.0	18.5	18.3	18.7	19.0	17.9	18.4	18.2	18.7	18.9
4H	18.1	18.6	18.5	18.9	19.2	18.1	18.5	18.4	18.8	19.1
6H	18.1	18.6	18.5	18.9	19.2	18.1	18.5	18.5	18.9	19.2
8H	18.1	18.5	18.5	18.8	19.2	18.1	18.5	18.5	18.8	19.2
12H	18.0	18.4	18.4	18.8	19.1	18.0	18.4	18.4	18.7	19.1
8H 4H	18.1	18.5	18.5	18.8	19.2	18.1	18.4	18.4	18.8	19.1
6H	18.1	18.4	18.5	18.8	19.2	18.1	18.4	18.5	18.8	19.2
8H	18.1	18.4	18.5	18.8	19.2	18.1	18.3	18.5	18.8	19.2
12H	18.0	18.3	18.5	18.7	19.2	18.0	18.2	18.5	18.7	19.1
12H 4H	18.0	18.4	18.5	18.8	19.2	18.0	18.4	18.4	18.7	19.1
6H	18.1	18.4	18.5	18.8	19.2	18.0	18.3	18.5	18.7	19.2
8H	18.0	18.3	18.5	18.7	19.2	18.0	18.2	18.5	18.7	19.2
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.9 / - 1.1					+ 0.8 / - 0.9				
1.5H	+ 1.2 / - 0.9					+ 0.9 / - 0.7				
2.0H	+ 1.0 / - 1.5					+ 0.9 / - 1.3				

CIE Pub.117, 3685 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 4.5$ )  
 Area: 0.003524 m<sup>2</sup>

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:28℃  
 Operators:Li  
 Test Date:2025-09-05

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
 Humidity:75%  
 Test Distance:8.458m [K=1.0000]  
 Remarks:

### UTILIZATION FACTORS TABLE

Test: U:230.15V I:0.107A P:23.55W PF:0.952 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3684.69x1 lm		
NAME: T1283A-18D-3090		
SPEC.: KGP 26W/650mA		
MFR.: SOTEN		

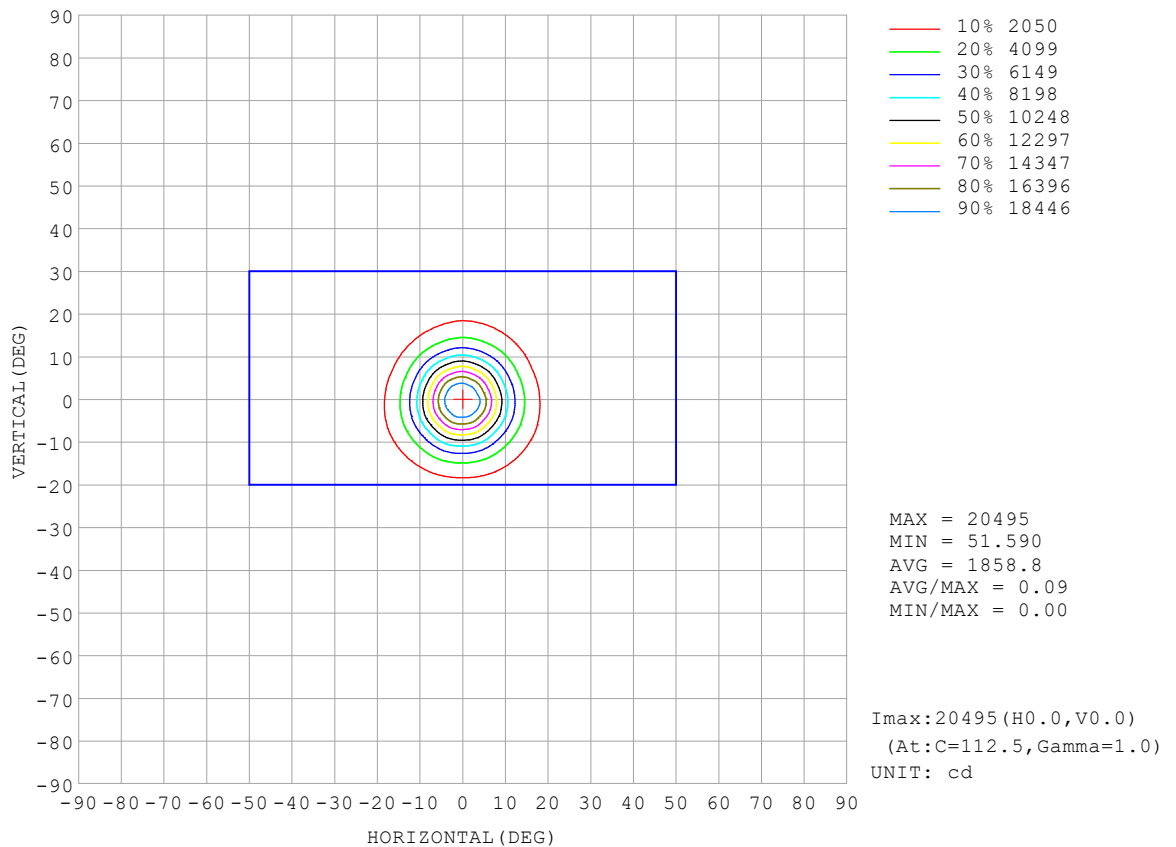
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	74	68	65	73	68	65	72	68	65	62
0.80	80	75	72	79	75	72	78	74	71	68
1.00	83	79	76	82	78	75	81	78	75	72
1.25	86	82	79	85	82	79	84	81	78	75
1.50	88	85	82	87	84	81	86	83	81	77
2.00	91	87	85	89	86	84	87	85	83	78
2.50	92	89	86	91	88	86	88	86	84	79
3.00	93	90	88	92	89	87	89	87	85	80
4.00	95	93	91	93	91	90	90	89	87	82
5.00	96	94	93	94	93	91	91	90	89	82
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 28°C  
 Operators: Li  
 Test Date: 2025-09-05

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
 Humidity: 75%  
 Test Distance: 8.458m [K=1.0000]  
 Remarks:

# ISOCANDELA DIAGRAM

Test:U:230.15V I:0.107A P:23.55W PF:0.952 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3684.69x1 lm		
NAME: T1283A-18D-3090		
SPEC.: KGP 26W/650mA		
MFR.: SOTEN		



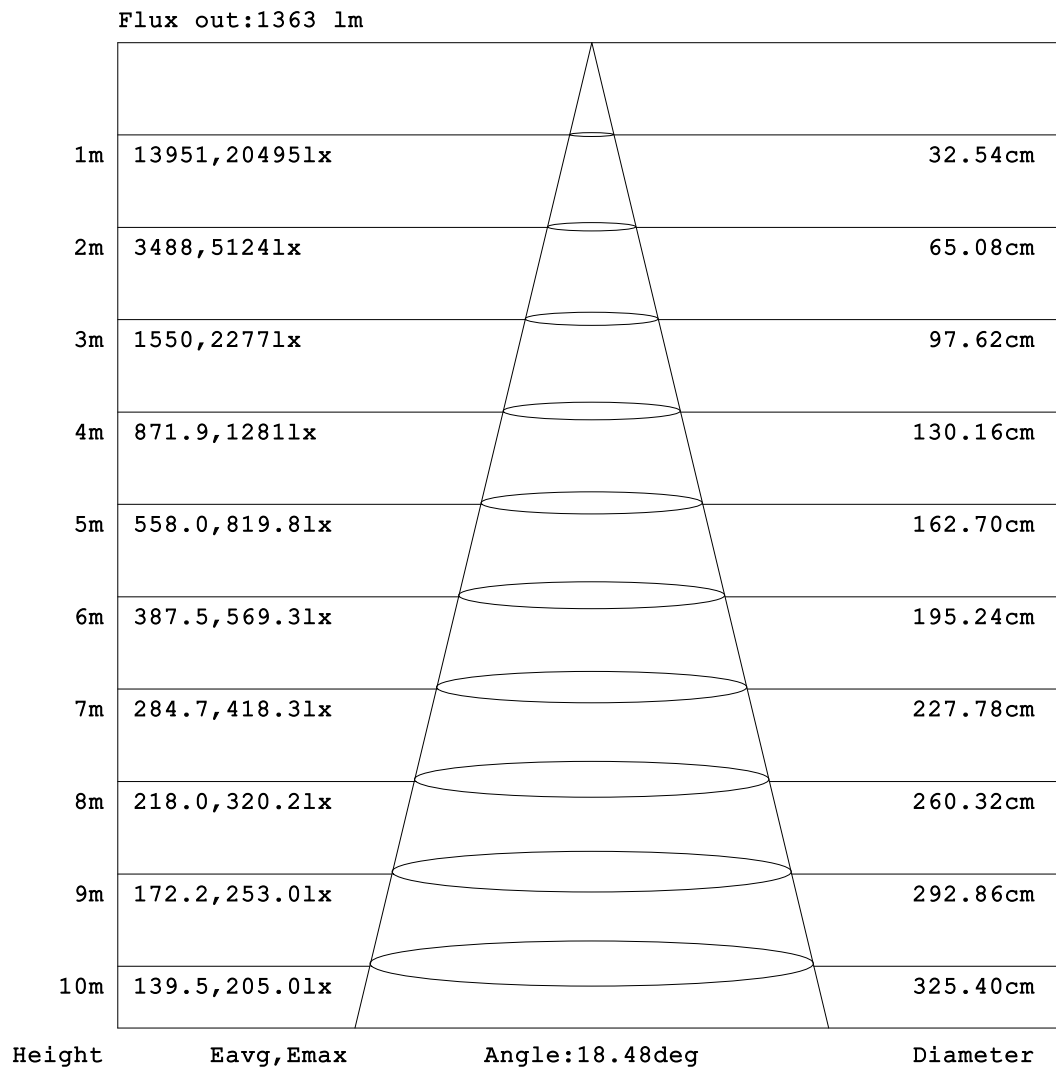
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:28℃  
 Operators:Li  
 Test Date:2025-09-05

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
 Humidity:75%  
 Test Distance:8.458m [K=1.0000]  
 Remarks:



### AAI Figure

Test:U:230.15V I:0.107A P:23.55W PF:0.952 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3684.69x1 lm		
NAME: T1283A-18D-3090		
SPEC.: KGP 26W/650mA		
MFR.: SOTEN		



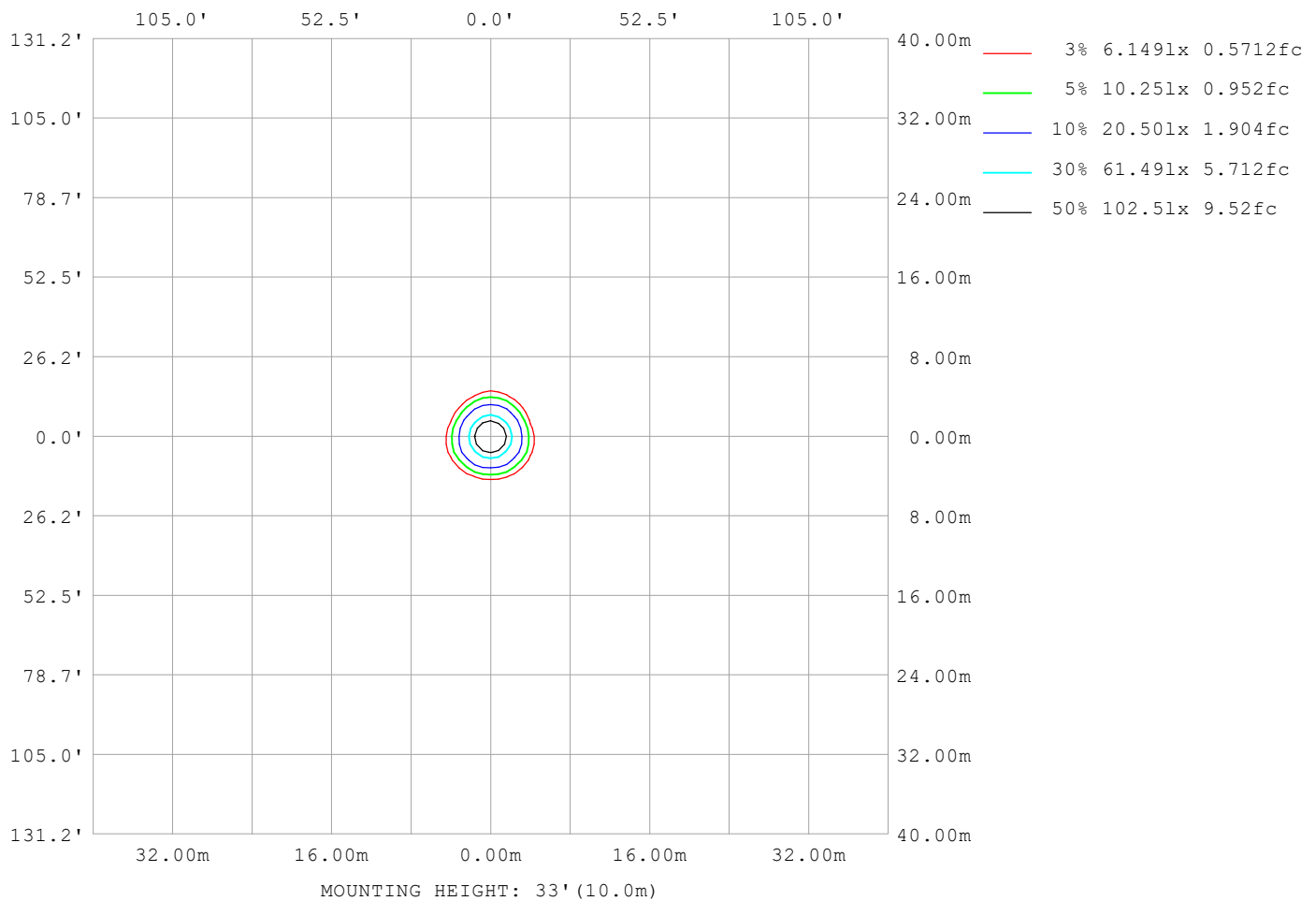
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 28°C  
 Operators: Li  
 Test Date: 2025-09-05

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
 Humidity: 75%  
 Test Distance: 8.458m [K=1.0000]  
 Remarks:

# ISOLUX DIAGRAM

Test:U:230.15V I:0.107A P:23.55W PF:0.952 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3684.69x1 lm		
NAME: T1283A-18D-3090		
SPEC.: KGP 26W/650mA		
MFR.: SOTEN		



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 28°C  
 Operators: Li  
 Test Date: 2025-09-05

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
 Humidity: 75%  
 Test Distance: 8.458m [K=1.0000]  
 Remarks:

### LED Avg.L Report

Test:U:230.15V I:0.107A P:23.55W PF:0.952 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3684.69x1 lm		
NAME: T1283A-18D-3090		
SPEC.: KGP 26W/650mA		
MFR.: SOTEN		

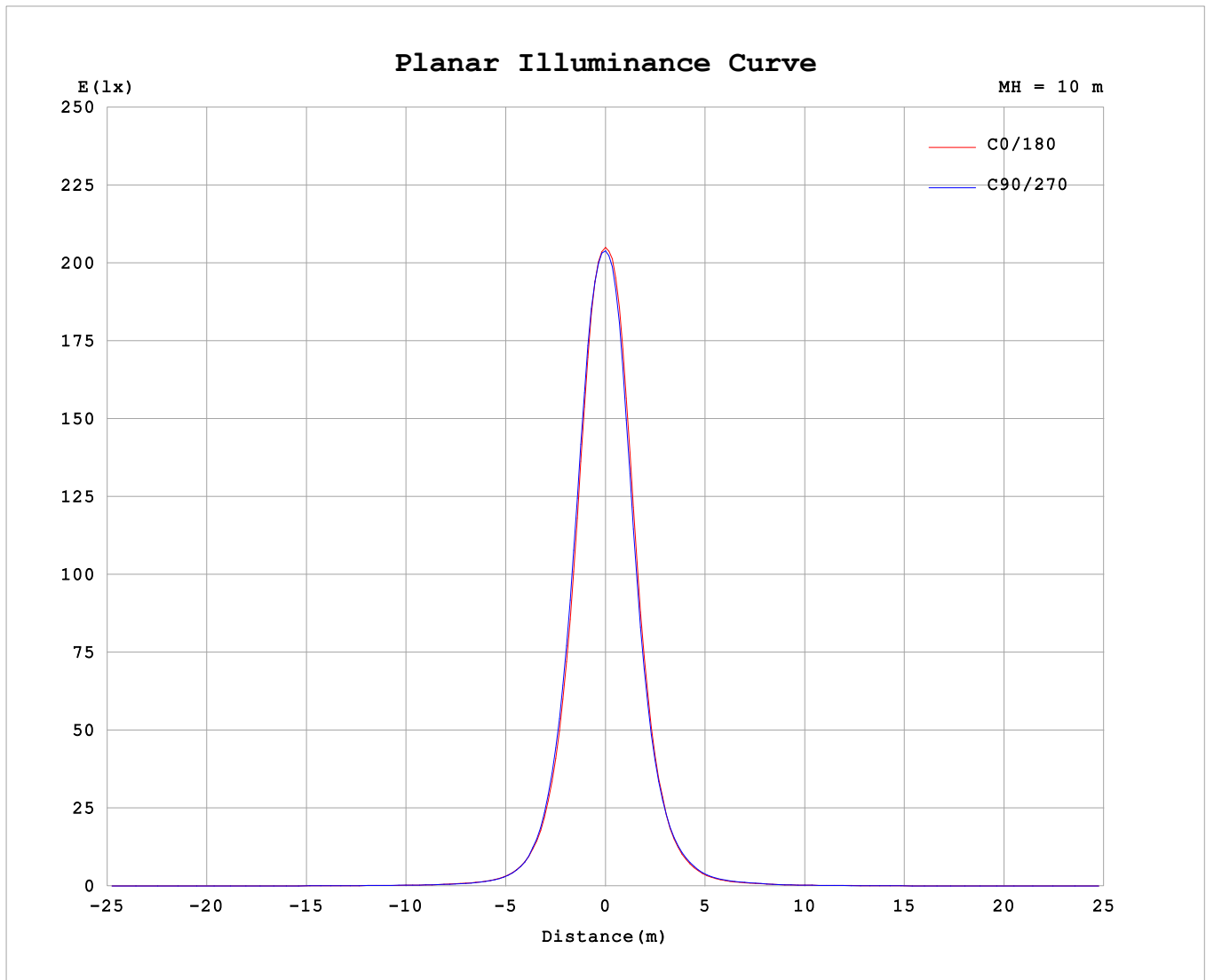
AvgL	cd/m2
L_0~180 (65) av	16086
L_0~180 (75) av	9787
L_0~180 (85) av	1022
L_90~270 (65) av	16099
L_90~270 (75) av	9737
L_90~270 (85) av	1003
L_45 (65) av	16065
L_45 (75) av	9751
L_45 (85) av	970

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 28℃  
 Operators: Li  
 Test Date: 2025-09-05

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
 Humidity: 75%  
 Test Distance: 8.458m [K=1.0000]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 28°C  
Operators: Li  
Test Date: 2025-09-05

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.485  
Humidity: 75%  
Test Distance: 8.458m [K=1.0000]  
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity:75%
Test Distance:8.458m [K=1.0000]
Remarks:

```