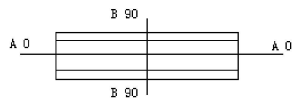
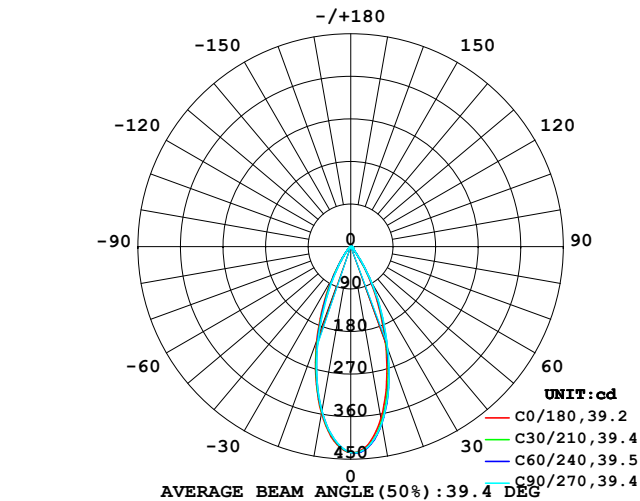


## LUMINAIRE PHOTOMETRIC TEST REPORT

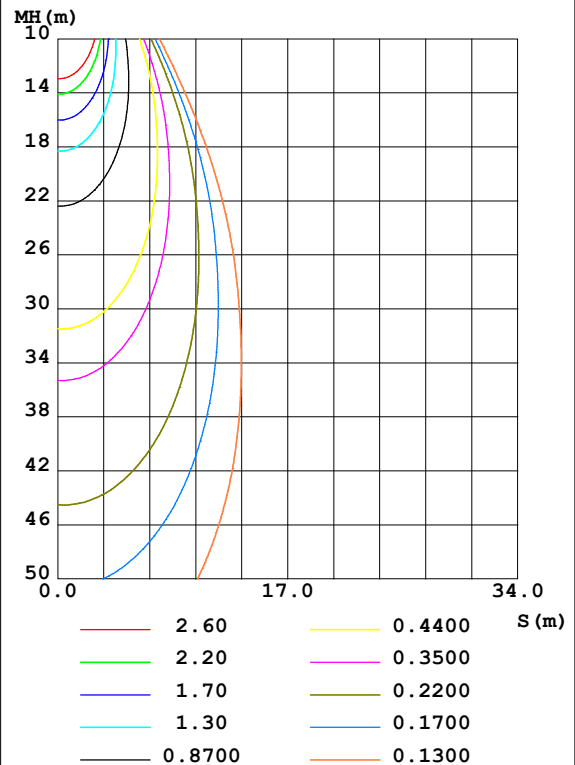
Test:U:24.00V I:0.100A P:2.40W PF:1.000 Freq:0Hz Lamp Flux:224.15x1 lm		
NAME: DE12CTWWS-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 2025062302
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 93.40 lm/W
MODEL		I <sub>max</sub> (cd)	436.6	S/MH (C0/180)	0.63	
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	0.61	
RATED VOLTAGE (V)	24	TOTAL FLUX (lm)	224.15	η UP, DN (C0-180)	0.0, 52.9	
NOMINAL FLUX (lm)	224.15	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 47.0	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50	
TEST VOLTAGE (V)	24	η down (%)	100.0	CIBSE SHR MAX	0.65	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators: SENPU  
Test Date: 2025-06-21

γ Range: 0 - 100DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.444  
Humidity: 61%  
Test Distance: 8.000m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	369.2	382.6	378.8	373.1	357.7	350.1	352.9	351.2	0- 10	38.05	38.05	17,17
20	214.9	228.3	229.3	228.2	209.8	200.4	198.3	196.7	10- 20	80.31	118.4	52.8,52.8
30	82.35	91.63	90.55	93.94	79.73	71.29	68.17	68.51	20- 30	64.02	182.4	81.4,81.4
40	15.40	16.28	17.69	18.65	16.99	16.39	15.99	14.96	30- 40	25.44	207.8	92.7,92.7
50	5.941	6.002	6.333	6.228	6.036	5.975	5.940	5.766	40- 50	7.520	215.3	96.1,96.1
60	3.401	3.406	3.593	3.555	3.432	3.383	3.241	3.226	50- 60	4.035	219.4	97.9,97.9
70	2.110	2.117	2.311	2.265	2.116	2.041	1.864	1.927	60- 70	2.673	222.0	99.1,99.1
80	0.4276	1.054	1.195	1.202	0.3306	0.9945	0.8621	0.8812	70- 80	1.583	223.6	99.8,99.8
90	0.1743	0.1743	0.1743	0.1569	0	0.0261	0	0.0001	80- 90	0.4278	224.0	100,100
100	0.1743	0.1743	0.1656	0.1569	0.0087	0.0174	0	0	90-100	0.0961	224.1	100,100
110	0	0	0	0	0	0	0	0	100-110	0.0047	224.1	100,100
120	0	0	0	0	0	0	0	0	110-120	0	224.1	100,100
130	0	0	0	0	0	0	0	0	120-130	0	224.1	100,100
140	0	0	0	0	0	0	0	0	130-140	0	224.1	100,100
150	0	0	0	0	0	0	0	0	140-150	0	224.1	100,100
160	0	0	0	0	0	0	0	0	150-160	0	224.1	100,100
170	0	0	0	0	0	0	0	0	160-170	0	224.1	100,100
180	0	0	0	0	0	0	0	0	170-180	0	224.1	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 212.33 lm

%lum = 94.7%

%lamp = 94.7%

Conical surface Flux(120deg): 219.36 lm

%lum = 97.9%

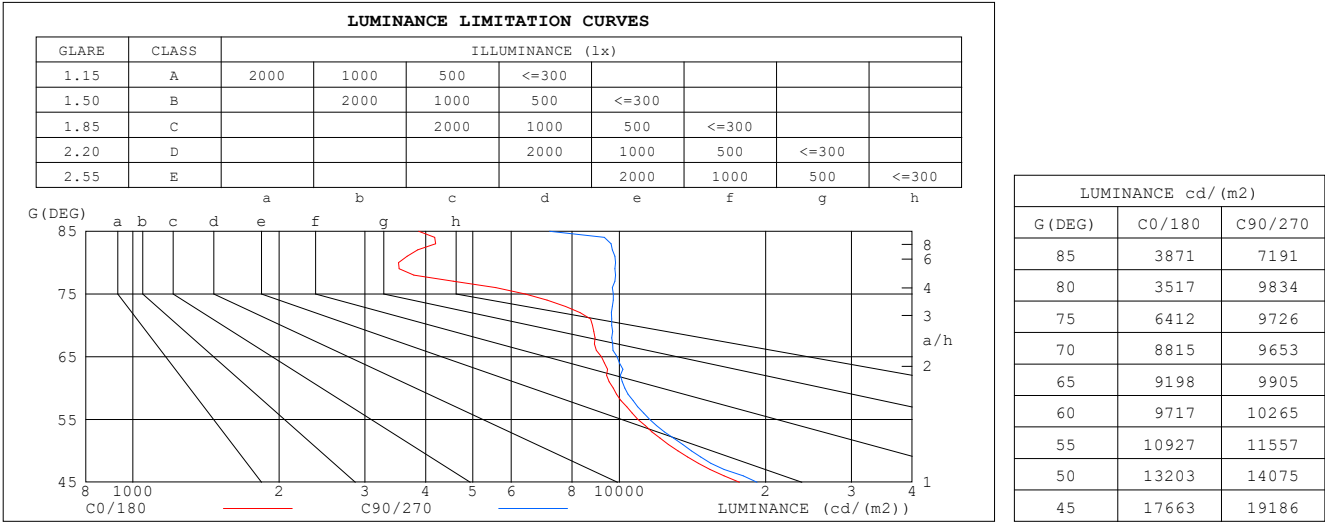
%lamp = 97.9%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:SENPU  
 Test Date:2025-06-21

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.444  
 Humidity:61%  
 Test Distance:8.000m [K=1.0000]  
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.100A P:2.40W PF:1.000 Freq:0Hz		
Lamp Flux:224.15x1 lm		
NAME: DE12CTWWS-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 2025062302
MFR.:	SUR.:	Shielding Angle:



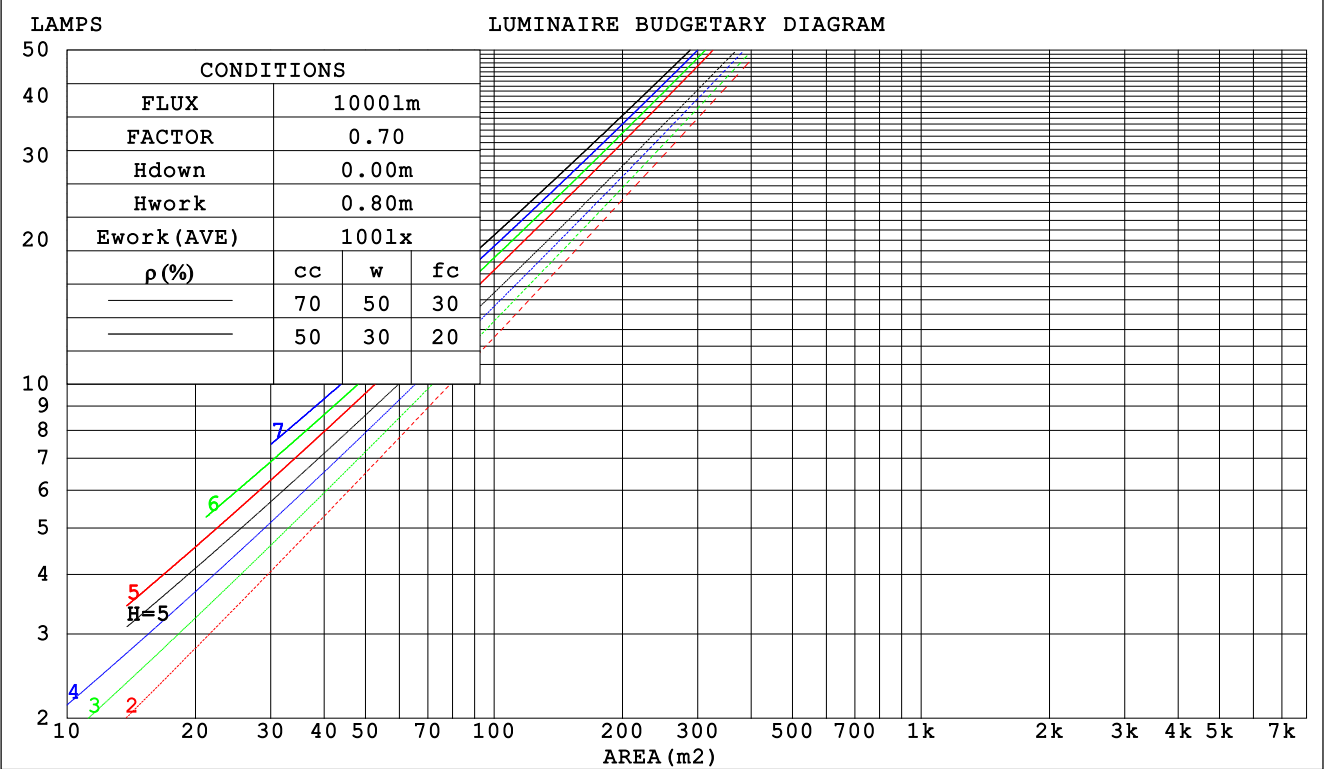
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:SENPU  
Test Date:2025-06-21

γ Range: 0 - 100DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.444  
Humidity:61%  
Test Distance:8.000m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.100A P:2.40W PF:1.000 Freq:0Hz		
Lamp Flux:224.15x1 lm		
NAME: DE12CTWWS-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 2025062302
MFR.:	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	.00	.99	.98	.97	.96	.94
2.0	1.04	1.00	.97	1.02	.99	.96	.99	.96	.94	.96	.94	.92	.93	.91	.90	.88
3.0	.98	.93	.89	.96	.92	.89	.94	.90	.87	.91	.88	.86	.89	.87	.84	.83
4.0	.92	.87	.83	.91	.86	.83	.89	.85	.82	.87	.83	.81	.85	.82	.80	.78
5.0	.87	.82	.78	.86	.81	.77	.84	.80	.77	.83	.79	.76	.81	.78	.75	.74
6.0	.83	.77	.73	.82	.77	.73	.80	.76	.72	.79	.75	.72	.78	.74	.71	.70
7.0	.78	.73	.69	.78	.73	.69	.77	.72	.69	.75	.71	.68	.74	.71	.68	.67
8.0	.75	.69	.66	.74	.69	.65	.73	.69	.65	.72	.68	.65	.71	.67	.65	.63
9.0	.71	.66	.62	.71	.66	.62	.70	.65	.62	.69	.65	.62	.68	.65	.62	.60
10.0	.68	.63	.60	.68	.63	.59	.67	.62	.59	.66	.62	.59	.66	.62	.59	.58



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:SENPU  
Test Date:2025-06-21

γ Range: 0 - 100DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.444  
Humidity:61%  
Test Distance:8.000m [K=1.0000]  
Remarks:

## WEC AND CCEC

Test:U:24.00V I:0.100A P:2.40W PF:1.000 Freq:0Hz Lamp Flux:224.15x1 lm		
NAME: DE12CTWWS-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 2025062302
MFR.:	SUR.:	Shielding Angle:

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	.172	.098	.031	.165	.094	.030	.152	.087	.028	.141	.081	.026	.130	.075	.024		
2.0	.162	.089	.027	.156	.086	.027	.146	.081	.025	.136	.076	.024	.127	.072	.023		
3.0	.153	.081	.024	.148	.079	.024	.139	.075	.023	.131	.072	.022	.123	.068	.021		
4.0	.144	.075	.022	.140	.073	.022	.132	.070	.021	.125	.067	.020	.119	.064	.020		
5.0	.136	.070	.020	.133	.068	.020	.126	.066	.019	.120	.063	.019	.114	.061	.018		
6.0	.130	.065	.019	.126	.064	.018	.121	.062	.018	.115	.060	.018	.110	.058	.017		
7.0	.123	.061	.017	.121	.060	.017	.115	.058	.017	.111	.057	.017	.106	.055	.016		
8.0	.118	.058	.016	.115	.057	.016	.111	.055	.016	.106	.054	.016	.102	.053	.015		
9.0	.113	.054	.015	.110	.054	.015	.106	.053	.015	.103	.051	.015	.099	.050	.015		
10.0	.108	.052	.014	.106	.051	.014	.102	.050	.014	.099	.049	.014	.096	.048	.014		

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	.191	.191	.191	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.171	.158	.146	.146	.135	.125	.100	.093	.087	.058	.054	.050	.018	.017	.016	
2.0	.155	.133	.114	.133	.114	.099	.091	.079	.069	.053	.046	.040	.017	.015	.013	
3.0	.142	.114	.091	.122	.098	.079	.084	.068	.055	.048	.040	.033	.016	.013	.011	
4.0	.131	.099	.074	.113	.086	.065	.077	.060	.045	.045	.035	.027	.014	.011	.009	
5.0	.122	.087	.061	.105	.075	.053	.072	.053	.038	.042	.031	.022	.013	.010	.007	
6.0	.114	.078	.052	.098	.067	.045	.068	.047	.032	.039	.028	.019	.013	.009	.006	
7.0	.107	.070	.044	.092	.061	.038	.064	.043	.027	.037	.025	.016	.012	.008	.005	
8.0	.101	.064	.038	.087	.055	.033	.060	.039	.023	.035	.023	.014	.011	.007	.005	
9.0	.096	.058	.033	.083	.051	.029	.057	.036	.020	.033	.021	.012	.011	.007	.004	
10.0	.091	.054	.029	.079	.047	.025	.055	.033	.018	.032	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:SENPU  
Test Date:2025-06-21

γ Range: 0 - 100DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.444  
Humidity:61%  
Test Distance:8.000m [K=1.0000]  
Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.100A P:2.40W PF:1.000 Freq:0Hz Lamp Flux:224.15x1 lm										
NAME: DE12CTWWS-6000K					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.: 2025062302		
MFR.:					SUR.:			Shielding Angle:		
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	17.4	18.2	17.6	18.4	18.6	17.9	18.8	18.1	18.9	19.1
3H	17.8	18.6	18.0	18.7	18.9	18.3	19.1	18.5	19.3	19.5
4H	17.9	18.7	18.2	18.9	19.1	18.5	19.3	18.8	19.5	19.7
6H	18.0	18.7	18.3	18.9	19.2	18.7	19.5	19.0	19.7	19.9
8H	18.0	18.7	18.3	18.9	19.2	18.8	19.5	19.1	19.8	20.0
12H	18.0	18.6	18.3	18.9	19.2	18.9	19.6	19.2	19.8	20.1
4H 2H	17.4	18.2	17.7	18.4	18.6	17.9	18.6	18.2	18.9	19.1
3H	18.0	18.6	18.3	18.9	19.2	18.4	19.1	18.8	19.4	19.7
4H	18.3	18.9	18.6	19.2	19.5	18.8	19.4	19.2	19.7	20.0
6H	18.5	19.0	18.8	19.3	19.7	19.2	19.7	19.6	20.0	20.4
8H	18.5	19.0	18.9	19.4	19.7	19.3	19.8	19.7	20.2	20.5
12H	18.5	19.0	18.9	19.3	19.7	19.4	19.9	19.8	20.2	20.6
8H 4H	18.4	18.9	18.8	19.3	19.6	18.9	19.4	19.3	19.7	20.1
6H	18.7	19.1	19.2	19.5	20.0	19.4	19.8	19.8	20.2	20.6
8H	18.9	19.2	19.3	19.7	20.1	19.6	20.0	20.1	20.4	20.8
12H	18.9	19.2	19.4	19.7	20.2	19.8	20.1	20.2	20.5	21.0
12H 4H	18.4	18.9	18.8	19.2	19.6	18.9	19.3	19.3	19.7	20.1
6H	18.8	19.1	19.2	19.6	20.0	19.4	19.8	19.9	20.2	20.6
8H	19.0	19.3	19.4	19.7	20.2	19.7	20.0	20.1	20.4	20.9
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.1 / - 1.1					+ 1.2 / - 1.2				
1.5H	+ 2.2 / - 0.9					+ 2.5 / - 1.0				
2.0H	+ 1.0 / - 0.6					+ 1.1 / - 0.4				

CIE Pub.117, 224.1 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = -5.2$ )  
Area: 0.0007 m<sup>2</sup>

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:SENPU  
Test Date:2025-06-21

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.444  
Humidity:61%  
Test Distance:8.000m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.100A P:2.40W PF:1.000 Freq:0Hz Lamp Flux:224.15x1 lm		
NAME: DE12CTWWS-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 2025062302
MFR.:	SUR.:	Shielding Angle:

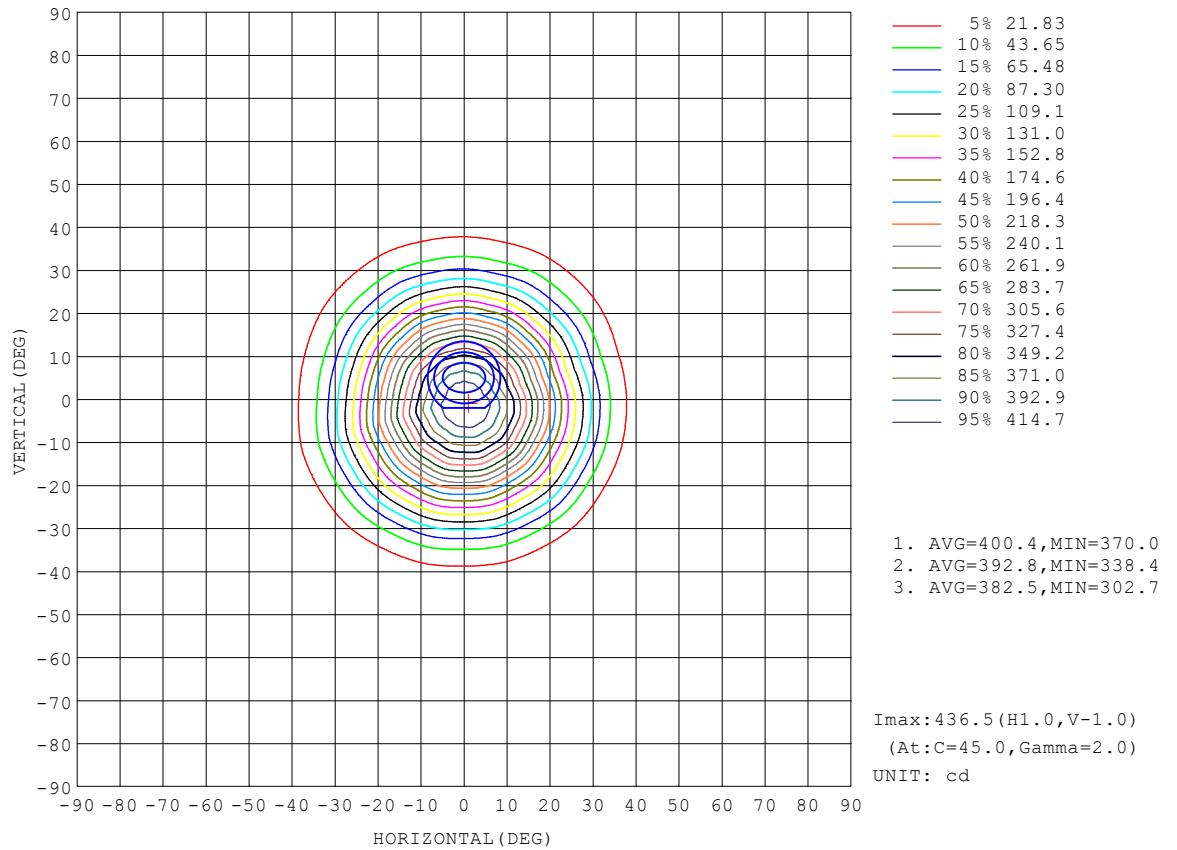
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	81	77	87	80	77	86	80	77	73
0.80	94	88	85	94	88	85	93	88	84	80
1.00	99	93	89	98	93	89	96	93	89	85
1.25	103	97	94	102	97	94	100	96	93	89
1.50	105	101	97	104	100	97	102	98	96	91
2.00	108	104	101	107	103	100	104	101	98	93
2.50	110	106	103	108	105	102	105	102	100	94
3.00	111	108	105	110	107	104	106	104	102	95
4.00	114	111	108	112	109	107	108	106	104	97
5.00	115	113	111	113	111	109	109	107	106	98
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators: SENPU  
 Test Date: 2025-06-21

γ Range: 0 - 100DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.444  
 Humidity: 61%  
 Test Distance: 8.000m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

Test:U:24.00V I:0.100A P:2.40W PF:1.000 Freq:0Hz Lamp Flux:224.15x1 lm		
NAME: DE12CTWWS-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 2025062302
MFR.:	SUR.:	Shielding Angle:



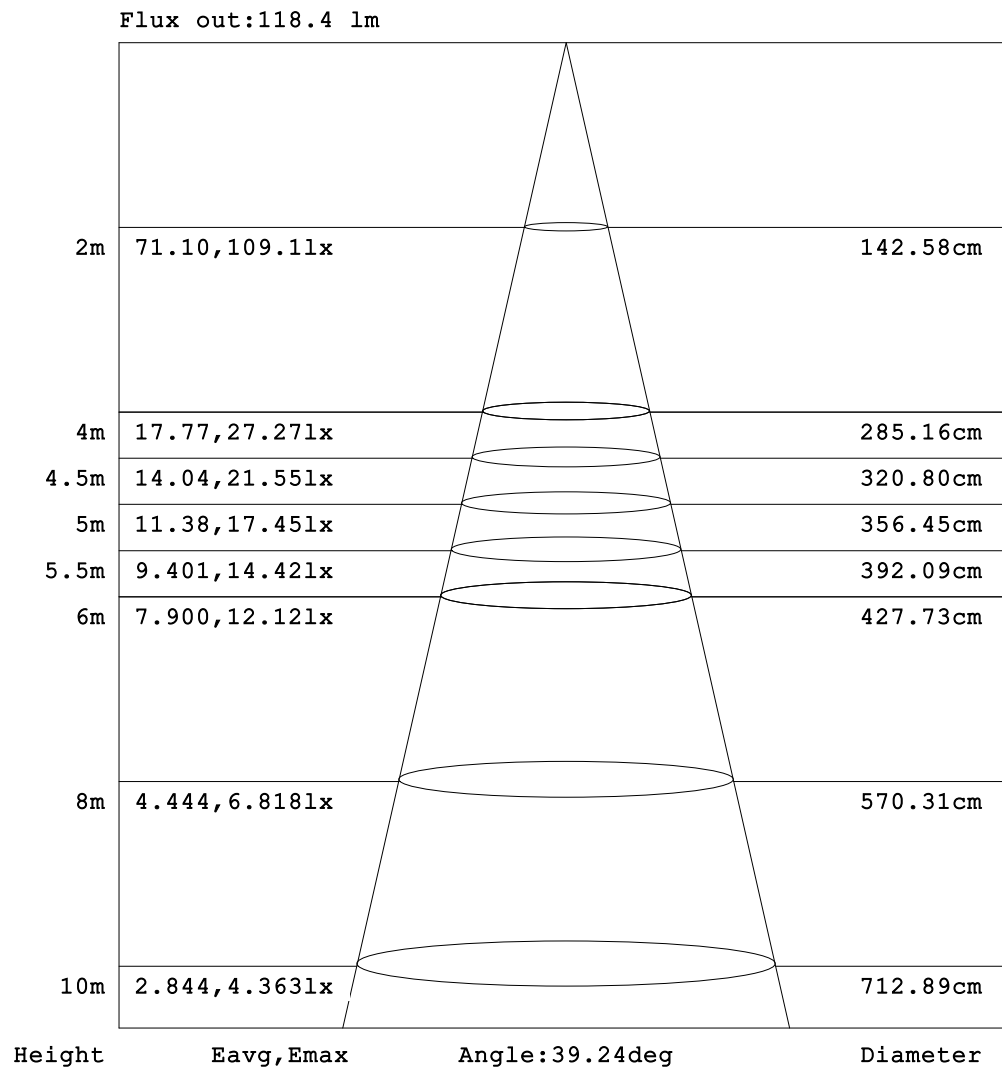
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators: SENPU  
Test Date: 2025-06-21

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.444  
Humidity: 61%  
Test Distance: 8.000m [K=1.0000]  
Remarks:



## AAI Figure

Test:U:24.00V I:0.100A P:2.40W PF:1.000 Freq:0Hz Lamp Flux:224.15x1 lm		
NAME: DE12CTWWS-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 2025062302
MFR.:	SUR.:	Shielding Angle:



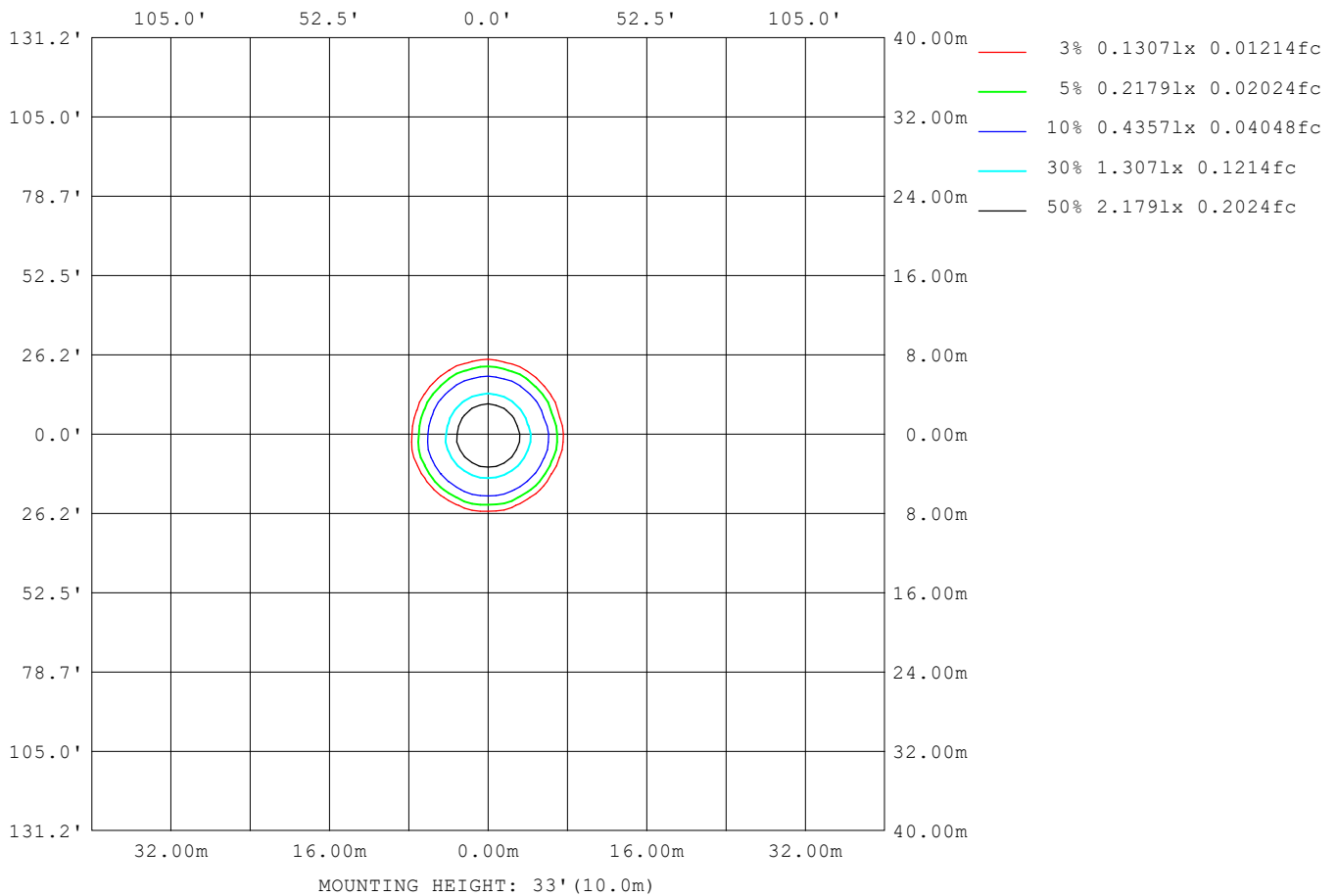
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators: SENPU  
Test Date: 2025-06-21

γ Range: 0 - 100DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.444  
Humidity: 61%  
Test Distance: 8.000m [K=1.0000]  
Remarks:

## ISOLUX DIAGRAM

Test:U:24.00V I:0.100A P:2.40W PF:1.000 Freq:0Hz Lamp Flux:224.15x1 lm		
NAME: DE12CTWWS-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 2025062302
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:SENPU  
Test Date:2025-06-21

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.444  
Humidity:61%  
Test Distance:8.000m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:24.00V I:0.100A P:2.40W PF:1.000 Freq:0Hz Lamp Flux:224.15x1 lm		
NAME: DE12CTWWS-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 2025062302
MFR.:	SUR.:	Shielding Angle:

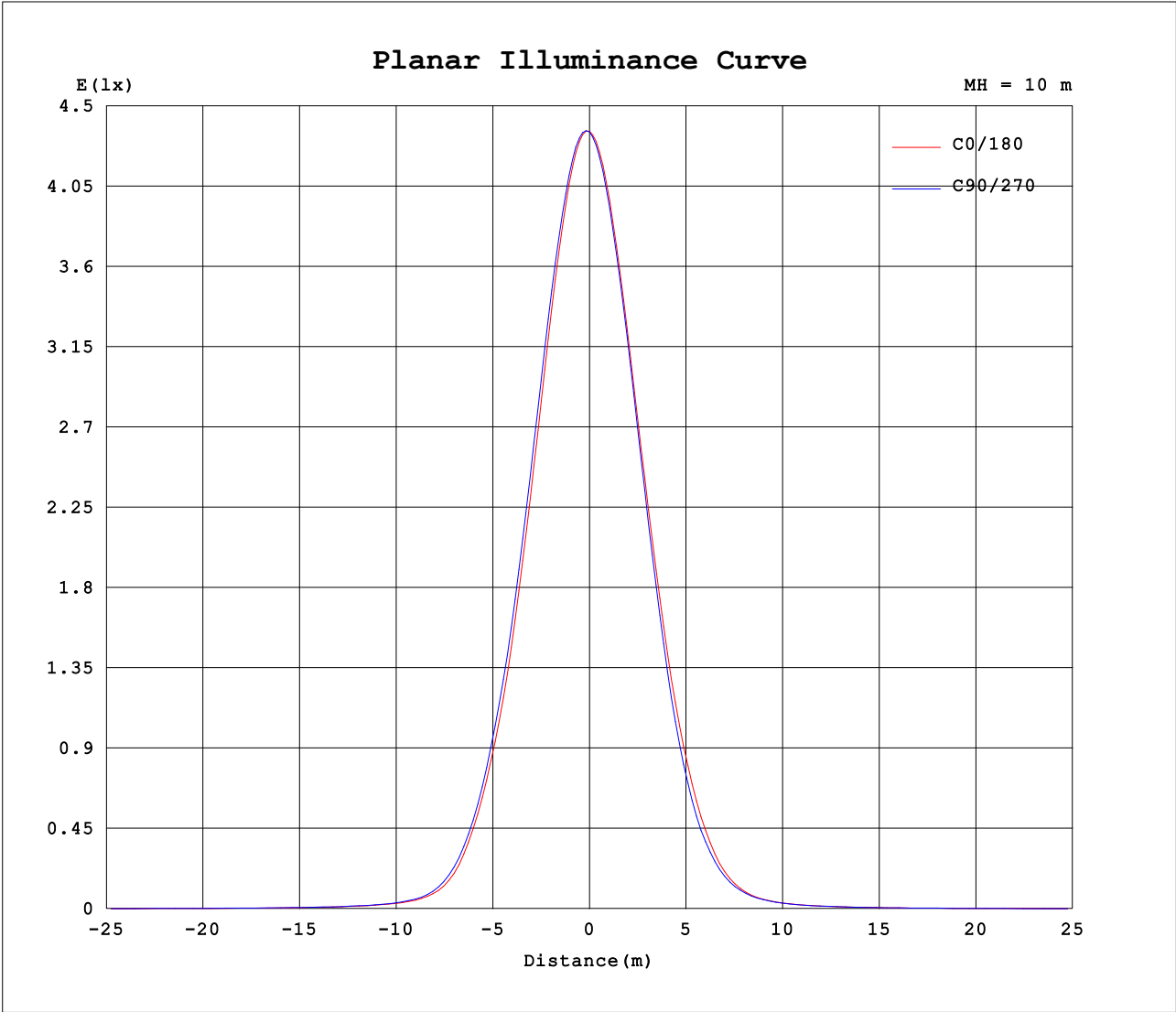
AvgL	cd/m2
L_0~180 (65) av	9134
L_0~180 (75) av	6953
L_0~180 (85) av	2712
L_90~270 (65) av	9119
L_90~270 (75) av	8565
L_90~270 (85) av	5854
L_45 (65) av	9016
L_45 (75) av	8588
L_45 (85) av	5643

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:SENPU  
Test Date:2025-06-21

γ Range: 0 - 100DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.444  
Humidity:61%  
Test Distance:8.000m [K=1.0000]  
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:SENPU  
Test Date:2025-06-21

γ Range: 0 - 100DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.444  
Humidity:61%  
Test Distance:8.000m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.100A P:2.40W PF:1.000 Freq:0Hz Lamp Flux:224.15x1 lm		
NAME: DE12CTWWS-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 2025062302
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	436	435	436	435	435	435	435	435	436	435	436	436	436	435	436	435	435	435	435
5	421	424	425	427	426	427	425	425	422	422	419	419	412	408	410	407	409	406	408
10	369	376	376	383	380	384	379	379	373	373	368	370	358	352	355	350	354	349	353
15	295	304	304	312	309	315	310	312	304	305	298	300	286	281	283	279	281	276	279
20	215	222	222	228	227	232	229	233	227	228	223	225	210	204	206	200	202	196	198
25	142	148	147	153	152	157	155	159	155	156	151	152	138	132	133	128	128	123	124
30	82.4	87.4	86.6	91.6	89.3	93.0	90.6	94.3	91.9	93.9	90.8	91.5	79.7	75.2	75.5	71.3	71.8	67.7	68.2
35	36.4	38.8	37.8	41.5	40.8	43.9	42.8	45.6	43.8	45.7	43.5	44.6	38.0	36.2	36.5	34.6	35.1	32.9	33.3
40	15.4	15.8	15.4	16.3	16.6	18.0	17.7	18.7	17.9	18.7	18.2	19.1	17.0	16.7	17.0	16.4	16.6	15.9	16.0
45	8.74	8.92	8.90	9.13	9.29	9.58	9.50	9.70	9.43	9.62	9.46	9.92	9.16	9.03	9.25	8.97	9.16	8.87	8.99
50	5.94	5.94	5.91	6.00	6.05	6.19	6.33	6.27	6.20	6.23	6.22	6.33	6.04	5.98	6.04	5.98	6.02	5.95	5.94
55	4.39	4.37	4.41	4.42	4.50	4.55	4.64	4.60	4.62	4.59	4.63	4.63	4.45	4.44	4.43	4.40	4.39	4.35	4.32
60	3.40	3.35	3.41	3.41	3.51	3.49	3.59	3.56	3.61	3.55	3.59	3.55	3.43	3.44	3.38	3.38	3.32	3.33	3.24
65	2.72	2.67	2.74	2.72	2.82	2.81	2.93	2.88	2.91	2.82	2.89	2.82	2.68	2.70	2.61	2.63	2.55	2.56	2.47
70	2.11	2.06	2.15	2.12	2.23	2.20	2.31	2.25	2.34	2.27	2.32	2.25	2.12	2.10	2.01	2.04	1.93	1.97	1.86
75	1.16	1.47	1.62	1.60	1.70	1.66	1.76	1.71	1.80	1.73	1.80	1.58	1.36	1.57	1.46	1.51	1.41	1.44	1.34
80	0.43	0.91	1.11	1.05	1.14	1.09	1.20	1.14	1.26	1.20	1.26	0.57	0.33	0.94	0.96	0.99	0.90	0.94	0.86
85	0.24	0.31	0.36	0.33	0.37	0.36	0.44	0.44	0.54	0.53	0.64	0.30	0.09	0.36	0.31	0.38	0.30	0.36	0.28
90	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.18	0.17	0.00	0.02	0.00	0.03	0.01	0.03	0.00
95	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.18	0.17	0.00	0.00	0.00	0.02	0.01	0.01	0.00
100	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.17	0.17	0.01	0.00	0.00	0.02	0.01	0.01	0.00
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:SENPU  
Test Date:2025-06-21

γ Range: 0 - 100DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.444  
Humidity:61%  
Test Distance:8.000m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.100A P:2.40W PF:1.000 Freq:0Hz Lamp Flux:224.15x1 lm		
NAME: DE12CTWWS-6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 2025062302
MFR.:	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	435	436	435	436	436														
5	406	409	408	412	411														
10	350	355	351	357	355														
15	276	281	278	282	280														
20	194	199	197	202	199														
25	121	125	124	129	127														
30	65.7	69.3	68.5	72.1	71.0														
35	31.9	33.7	32.8	33.6	32.0														
40	15.3	15.6	15.0	15.0	14.0														
45	8.67	8.82	8.48	8.56	8.15														
50	5.86	5.89	5.77	5.77	5.66														
55	4.29	4.28	4.25	4.25	4.19														
60	3.26	3.21	3.23	3.20	3.24														
65	2.50	2.46	2.49	2.46	2.53														
70	1.91	1.87	1.93	1.87	1.93														
75	1.39	1.34	1.38	1.28	1.01														
80	0.92	0.82	0.88	0.77	0.43														
85	0.26	0.17	0.14	0.07	0.06														
90	0.00	0.00	0.00	0.00	0.02														
95	0.00	0.00	0.00	0.00	0.00														
100	0.00	0.01	0.00	0.00	0.00														
105	0.00	0.00	0.00	0.00	0.00														
110	0.00	0.00	0.00	0.00	0.00														
115	0.00	0.00	0.00	0.00	0.00														
120	0.00	0.00	0.00	0.00	0.00														
125	0.00	0.00	0.00	0.00	0.00														
130	0.00	0.00	0.00	0.00	0.00														
135	0.00	0.00	0.00	0.00	0.00														
140	0.00	0.00	0.00	0.00	0.00														
145	0.00	0.00	0.00	0.00	0.00														
150	0.00	0.00	0.00	0.00	0.00														
155	0.00	0.00	0.00	0.00	0.00														
160	0.00	0.00	0.00	0.00	0.00														
165	0.00	0.00	0.00	0.00	0.00														
170	0.00	0.00	0.00	0.00	0.00														
175	0.00	0.00	0.00	0.00	0.00														
180	0.00	0.00	0.00	0.00	0.00														

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:SENPU  
Test Date:2025-06-21

γ Range: 0 - 100DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.444  
Humidity:61%  
Test Distance:8.000m [K=1.0000]  
Remarks: