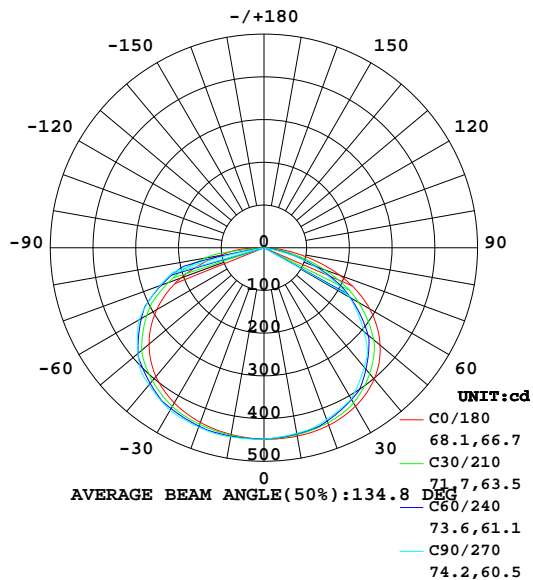


## LUMINAIRE PHOTOMETRIC TEST REPORT

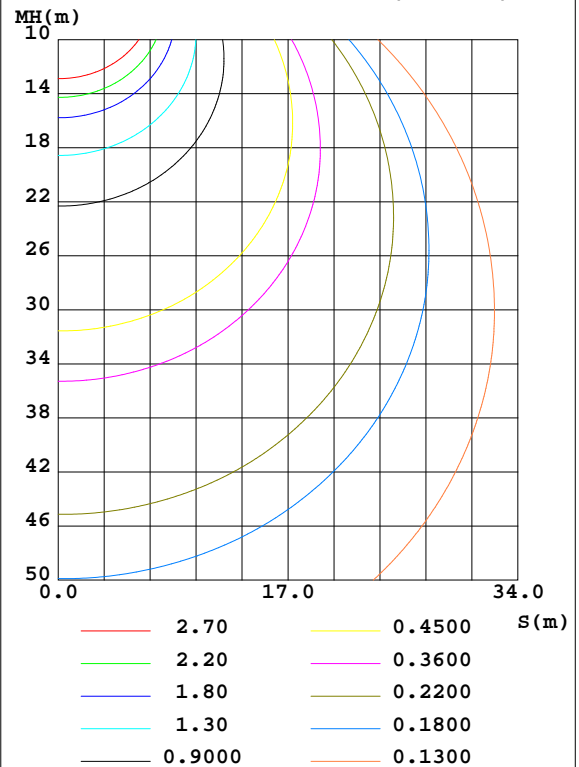
Test:U:24.00V I:1.302A P:31.24W PF:1.000 Lamp Flux:2613.99x1 lm		
NAME: LP-24-24x24-SP	TYPE:Basic LightPanel	WEIGHT:
SPEC.:FLS-1W4-4000K	DIM.: 24*24	SERIAL No.:01
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 51.43 lm/W			
MODEL	33.1212	I <sub>max</sub> (cd)	450.5	S/MH(C0/180)	1.41
NOMINAL POWER(W)	31.2444	LOR		S/MH(C90/270)	1.47
RATED VOLTAGE(V)	24	TOT	.0	η UP,DN(C0-180)	0.0,28.0
NOMINAL FLUX(lm)	2613.99	CIE	CT	η UP,DN(C180-360)	0.0,33.5
LAMPS INSIDE	1	η u		CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	η d		CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:07 November 2024

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
Humidity:65.0%  
Test Distance:5.640m [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
5	448.4	446.0	444.6	444.6	446.4	447.5	448.7	448.9	0- 5	10.69	10.69	0.67,0.41
10	447.7	443.3	441.2	440.6	443.9	446.5	449.4	449.2	5- 10	31.91	42.60	2.65,1.63
15	445.9	439.8	437.7	436.1	440.3	445.2	450.1	448.8	10- 15	52.67	95.27	5.93,3.64
20	442.4	435.3	428.1	430.7	435.2	443.4	446.8	448.0	15- 20	72.62	167.9	10.4,6.42
25	436.5	425.3	418.4	420.2	428.5	438.1	443.4	443.7	20- 25	91.21	259.1	16.1,9.91
30	428.3	412.9	408.7	407.8	419.6	431.2	440.0	437.3	25- 30	108.2	367.3	22.9,14.1
35	416.8	398.8	387.0	394.2	408.1	423.2	429.4	429.6	30- 35	122.9	490.2	30.5,18.8
40	401.4	381.4	365.3	377.6	393.5	413.4	418.9	419.5	35- 40	134.5	624.7	38.9,23.9
45	380.9	353.4	343.6	351.3	374.5	396.6	408.3	401.8	40- 45	142.9	767.6	47.8,29.4
50	354.7	323.1	306.1	323.4	351.1	378.1	385.0	381.7	45- 50	147.1	914.7	56.9,35
55	323.2	290.1	268.5	293.1	323.1	357.7	361.7	359.2	50- 55	146.1	1061	66,40.6
60	285.4	242.2	230.9	248.8	290.0	325.2	338.3	323.9	55- 60	140.2	1201	74.7,45.9
65	240.8	192.9	177.4	203.5	251.4	291.4	298.5	287.0	60- 65	128.9	1330	82.8,50.9
70	188.9	140.6	123.8	154.8	206.6	250.8	258.8	242.8	65- 70	111.4	1441	89.7,55.1
75	132.6	86.42	70.24	103.7	156.1	202.2	219.0	190.0	70- 75	89.46	1531	95.3,58.6
80	77.09	32.57	0	48.64	105.0	128.8	0	116.0	75- 80	57.04	1588	98.8,60.7
85	32.79	0	0	0	65.79	0	0	0	80- 85	17.20	1605	99.9,61.4
90	0.5434	0	0	0	7.153	0	0	0	85- 90	1.974	1607	100,61.5
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

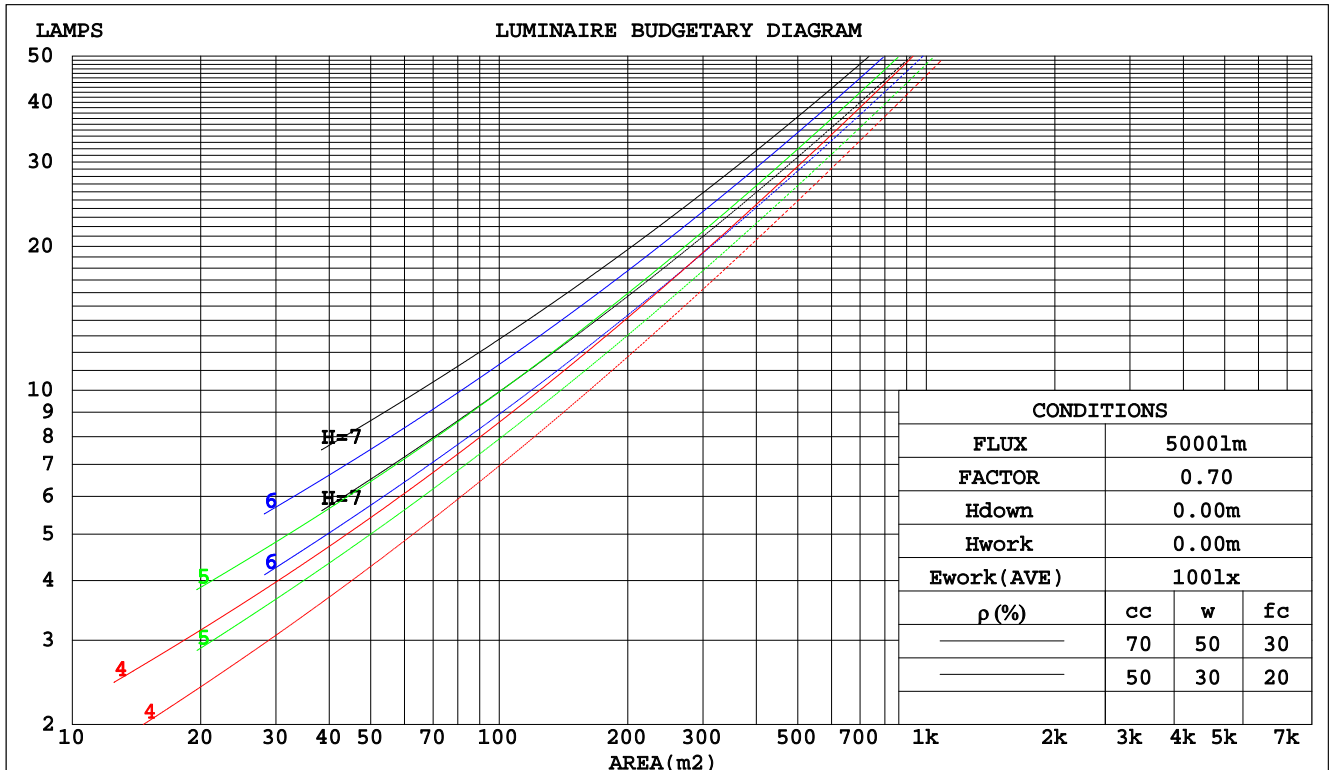
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:07 November 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
Humidity:65.0%  
Test Distance:5.640m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:1.302A P:31.24W PF:1.000 Lamp Flux:2613.99x1 lm		
NAME: LP-24-24x24-SP	TYPE:Basic LightPanel	WEIGHT:
SPEC.:FLS-1W4-4000K	DIM.: 24*24	SERIAL No.:01
MFR.: EVERFINE	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						Coefficients of Utilization(CU)									
0.0	.73	.73	.73	.71	.71	.71	.68	.68	.68	.65	.65	.65	.63	.63	.63	.61
1.0	.63	.61	.58	.62	.59	.57	.59	.57	.55	.57	.55	.54	.55	.53	.52	.51
2.0	.55	.50	.46	.53	.49	.46	.51	.48	.45	.49	.46	.44	.47	.45	.43	.41
3.0	.47	.42	.38	.46	.41	.37	.45	.40	.37	.43	.39	.36	.41	.38	.35	.34
4.0	.42	.36	.32	.41	.35	.31	.39	.35	.31	.38	.34	.30	.36	.33	.30	.29
5.0	.37	.31	.27	.36	.31	.27	.35	.30	.26	.34	.29	.26	.32	.29	.26	.24
6.0	.33	.27	.23	.32	.27	.23	.31	.26	.23	.30	.26	.23	.29	.25	.22	.21
7.0	.30	.24	.20	.29	.24	.20	.28	.23	.20	.27	.23	.20	.26	.23	.20	.18
8.0	.27	.22	.18	.27	.21	.18	.26	.21	.18	.25	.21	.18	.24	.20	.17	.16
9.0	.25	.19	.16	.24	.19	.16	.24	.19	.16	.23	.19	.16	.22	.18	.16	.14
10.0	.23	.18	.14	.22	.18	.14	.22	.17	.14	.21	.17	.14	.21	.17	.14	.13



## WEC AND CCEC

Test:U:24.00V I:1.302A P:31.24W PF:1.000 Lamp Flux:2613.99x1 lm		
NAME: LP-24-24x24-SP	TYPE:Basic LightPanel	WEIGHT:
SPEC.:FLS-1W4-4000K	DIM.: 24*24	SERIAL No.:01
MFR.: EVERFINE	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	.199	.113	.036	.195	.111	.035	.187	.107	.034	.179	.103	.033	.172	.100	.032	
2.0	.189	.104	.032	.185	.102	.031	.178	.099	.031	.171	.096	.030	.165	.093	.029	
3.0	.175	.093	.028	.171	.092	.028	.165	.089	.027	.159	.087	.027	.153	.085	.026	
4.0	.161	.084	.025	.158	.083	.024	.152	.081	.024	.147	.079	.024	.142	.077	.023	
5.0	.148	.076	.022	.145	.075	.022	.140	.073	.022	.136	.072	.021	.131	.070	.021	
6.0	.137	.069	.020	.135	.068	.020	.130	.067	.019	.126	.065	.019	.122	.064	.019	
7.0	.127	.063	.018	.125	.062	.018	.121	.061	.018	.117	.060	.017	.113	.059	.017	
8.0	.118	.058	.016	.116	.057	.016	.113	.056	.016	.109	.055	.016	.106	.054	.016	
9.0	.111	.053	.015	.109	.053	.015	.106	.052	.015	.102	.051	.015	.100	.051	.015	
10.0	.104	.050	.014	.102	.049	.014	.099	.049	.014	.096	.048	.014	.094	.047	.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	.117	.117	.117	.100	.100	.100	.068	.068	.068	.039	.039	.039	.013	.013	.013	
1.0	.111	.096	.082	.095	.082	.071	.065	.057	.049	.038	.033	.028	.012	.011	.009	
2.0	.107	.081	.059	.092	.070	.051	.063	.048	.036	.036	.028	.021	.012	.009	.007	
3.0	.103	.070	.044	.088	.061	.039	.061	.042	.027	.035	.025	.016	.011	.008	.005	
4.0	.098	.062	.035	.084	.054	.030	.058	.037	.021	.034	.022	.013	.011	.007	.004	
5.0	.094	.056	.028	.081	.048	.024	.055	.034	.017	.032	.020	.010	.010	.006	.003	
6.0	.089	.051	.023	.077	.044	.020	.053	.031	.014	.031	.018	.009	.010	.006	.003	
7.0	.085	.047	.020	.073	.040	.017	.051	.028	.012	.029	.017	.007	.009	.005	.002	
8.0	.081	.043	.017	.070	.037	.015	.048	.026	.011	.028	.015	.006	.009	.005	.002	
9.0	.077	.040	.015	.066	.035	.013	.046	.024	.009	.027	.014	.006	.009	.005	.002	
10.0	.074	.037	.013	.063	.033	.012	.044	.023	.008	.026	.014	.005	.008	.004	.002	

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:07 November 2024

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
Humidity:65.0%  
Test Distance:5.640m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:24.00V I:1.302A P:31.24W PF:1.000    Lamp Flux:2613.99x1 lm											
NAME: LP-24-24x24-SP						TYPE:Basic LightPanel			WEIGHT:		
SPEC.:FLS-1W4-4000K						DIM.: 24*24			SERIAL No.:01		
MFR.: EVERFINE						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		11.5	13.1	11.7	13.3	13.5	10.6	12.2	10.9	12.4	12.7
	3H	13.2	14.7	13.5	14.9	15.2	11.9	13.4	12.2	13.6	13.9
	4H	13.9	15.3	14.2	15.6	15.8	12.2	13.7	12.6	13.9	14.2
	6H	14.4	15.7	14.7	16.0	16.2	12.2	13.6	12.6	13.8	14.1
	8H	14.5	15.8	14.8	16.1	16.4	12.2	13.5	12.5	13.7	14.0
	12H	14.6	15.8	14.9	16.1	16.4	12.1	13.4	12.5	13.7	14.0
4H	2H	12.0	13.4	12.3	13.6	13.9	11.3	12.7	11.6	13.0	13.2
	3H	13.8	15.1	14.2	15.4	15.7	12.7	13.9	13.1	14.2	14.6
	4H	14.6	15.7	15.0	16.0	16.4	13.1	14.2	13.5	14.6	14.9
	6H	15.1	16.2	15.6	16.5	16.9	13.1	14.1	13.5	14.5	14.9
	8H	15.3	16.3	15.7	16.6	17.0	13.1	14.0	13.5	14.4	14.8
	12H	15.4	16.3	15.9	16.7	17.1	13.0	13.9	13.5	14.3	14.7
8H	4H	14.7	15.6	15.1	16.0	16.4	13.3	14.3	13.7	14.6	15.0
	6H	15.3	16.1	15.8	16.5	16.9	13.4	14.2	13.8	14.6	15.0
	8H	15.5	16.2	16.0	16.7	17.1	13.3	14.0	13.8	14.5	14.9
	12H	15.7	16.3	16.2	16.7	17.2	13.3	13.9	13.8	14.4	14.8
12H	4H	14.7	15.5	15.1	15.9	16.3	13.3	14.2	13.8	14.6	15.0
	6H	15.3	16.0	15.8	16.4	16.9	13.4	14.1	13.9	14.5	15.0
	8H	15.5	16.1	16.0	16.6	17.0	13.4	14.0	13.8	14.4	14.9
Variations with the observer position at spacings:											
S = 1.0H		+ 0.1 / - 0.1					+ 0.2 / - 0.3				
1.5H		+ 0.2 / - 0.2					+ 0.2 / - 0.5				
2.0H		+ 0.2 / - 0.4					+ 0.2 / - 0.5				

CIE Pub.117 Corrected 2614 lm Total Lamp Luminous Flux.(8log(F/F0) = 3.3)

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:07 November 2024

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
Humidity:65.0%  
Test Distance:5.640m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:24.00V I:1.302A P:31.24W PF:1.000 Lamp Flux:2613.99x1 lm		
NAME: LP-24-24x24-SP	TYPE:Basic LightPanel	WEIGHT:
SPEC.:FLS-1W4-4000K	DIM.: 24*24	SERIAL No.:01
MFR.: EVERFINE	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	33	26	21	33	26	21	32	25	21	17
0.80	40	32	27	39	32	27	38	31	27	22
1.00	45	38	33	44	37	33	43	38	32	28
1.25	49	43	38	48	42	38	47	41	37	32
1.50	53	46	42	52	46	41	50	44	41	36
2.00	57	52	47	56	51	47	54	49	46	41
2.50	60	55	51	59	54	50	56	52	49	44
3.00	62	58	54	61	57	53	58	55	52	47
4.00	65	61	58	63	60	57	61	58	56	50
5.00	66	63	61	65	62	60	62	60	58	52
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:07 November 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
Humidity:65.0%  
Test Distance:5.640m [K=1.0000]  
Remarks:

# ISOCANDELA DIAGRAM

Test:U:24.00V I:1.302A P:31.24W PF:1.000 Lamp Flux:2613.99x1 lm		
NAME: LP-24-24x24-SP	TYPE:Basic LightPanel	WEIGHT:
SPEC.:FLS-1W4-4000K	DIM.: 24*24	SERIAL No.:01
MFR.: EVERFINE	SUR.:	Shielding Angle:

Conical surface Flux(90deg):

767.6 lm

%lum = 47.8%

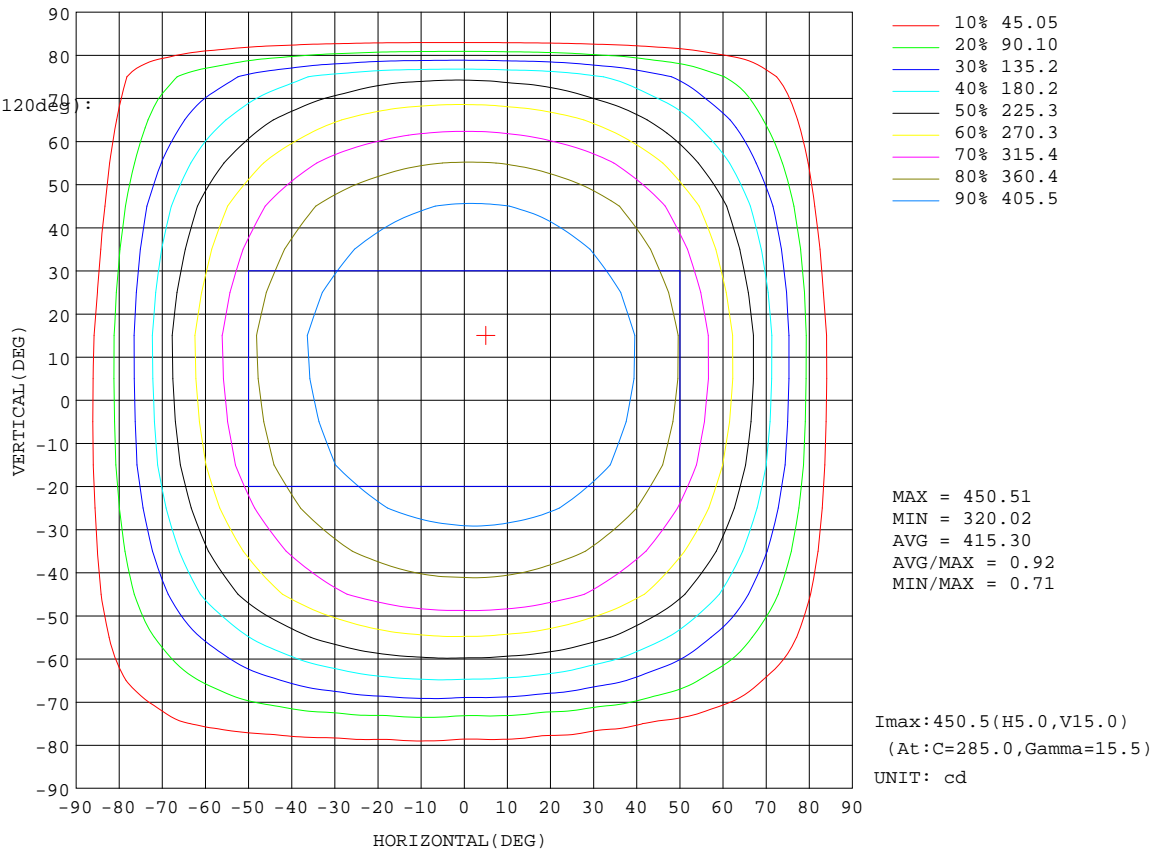
%lamp = 29.4%

Conical surface Flux(120deg):

1201 lm

%lum = 74.7%

%lamp = 45.9%

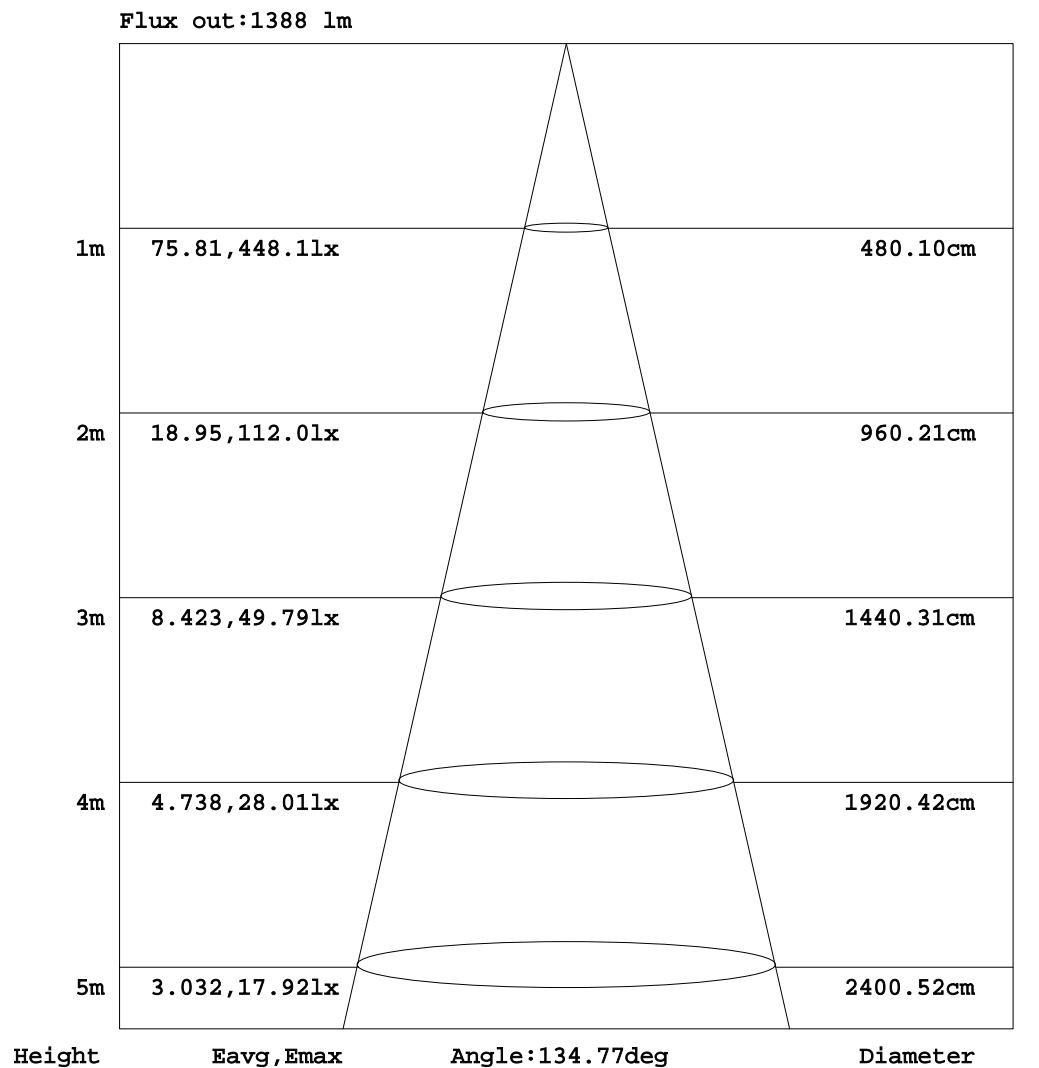


C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:07 November 2024

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
Humidity:65.0%  
Test Distance:5.640m [K=1.0000]  
Remarks:

### AAI Figure

Test:U:24.00V I:1.302A P:31.24W PF:1.000 Lamp Flux:2613.99x1 lm		
NAME: LP-24-24x24-SP	TYPE:Basic LightPanel	WEIGHT:
SPEC.:FLS-1W4-4000K	DIM.: 24*24	SERIAL No.:01
MFR.: EVERFINE	SUR.:	Shielding Angle:



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

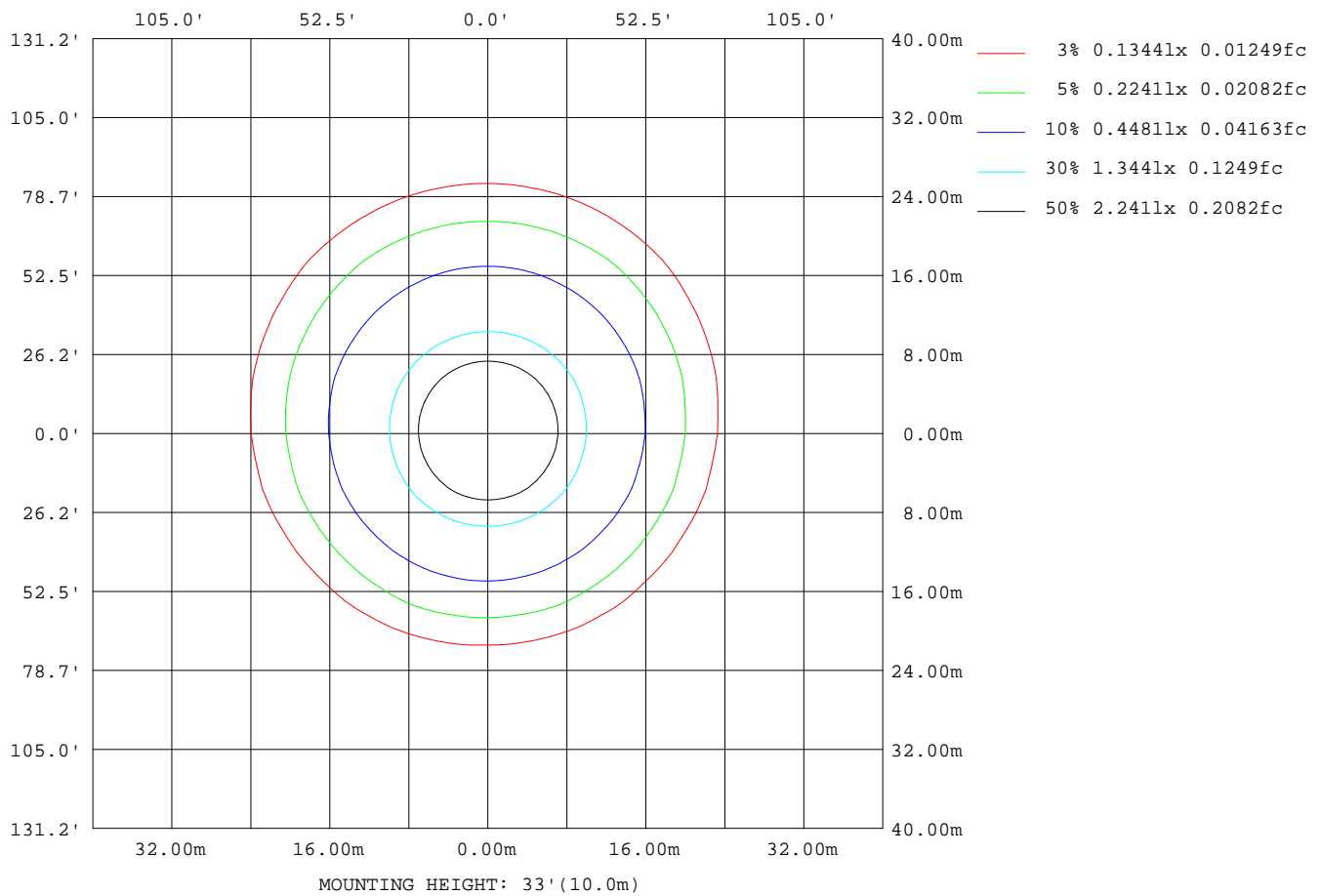
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:07 November 2024

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
Humidity:65.0%  
Test Distance:5.640m [K=1.0000]  
Remarks:



ISOLUX DIAGRAM

Test:U:24.00V I:1.302A P:31.24W PF:1.000 Lamp Flux:2613.99x1 lm		
NAME: LP-24-24x24-SP	TYPE:Basic LightPanel	WEIGHT:
SPEC.:FLS-1W4-4000K	DIM.: 24*24	SERIAL No.:01
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:07 November 2024

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
Humidity:65.0%  
Test Distance:5.640m [K=1.0000]  
Remarks:

### LED Avg.L Report

Test:U:24.00V I:1.302A P:31.24W PF:1.000 Lamp Flux:2613.99x1 lm		
NAME: LP-24-24x24-SP	TYPE:Basic LightPanel	WEIGHT:
SPEC.:FLS-1W4-4000K	DIM.: 24*24	SERIAL No.:01
MFR.: EVERFINE	SUR.:	Shielding Angle:

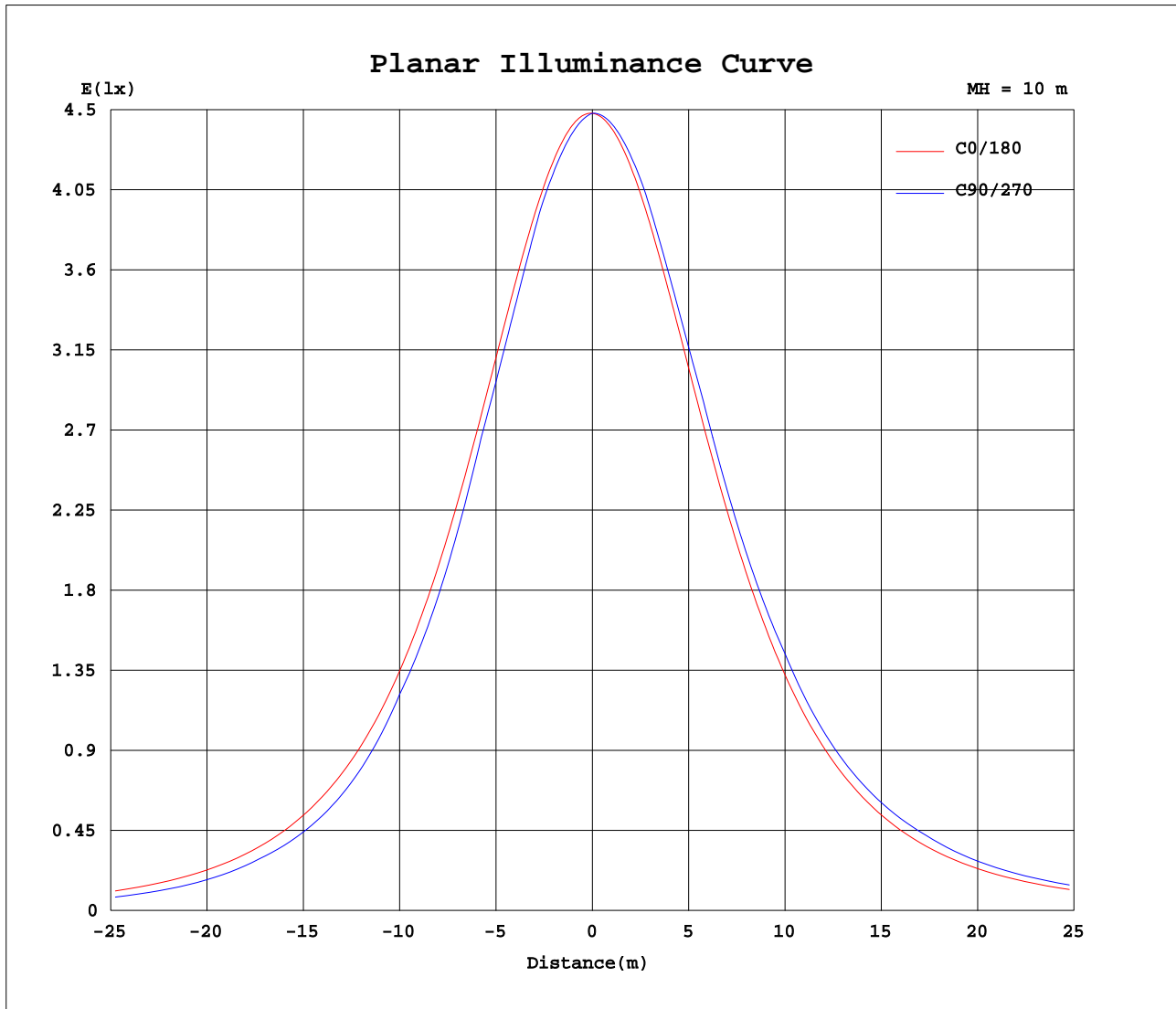
AvgL	cd/m2
L_0~180(65)av	697
L_0~180(75)av	668
L_0~180(85)av	677
L_90~270(65)av	674
L_90~270(75)av	669
L_90~270(85)av	0
L_45(65)av	691
L_45(75)av	674
L_45(85)av	0

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:07 November 2024

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
Humidity:65.0%  
Test Distance:5.640m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 07 November 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
 Humidity: 65.0%  
 Test Distance: 5.640m [K=1.0000]  
 Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.293
Humidity:65.0%
Test Distance:5.640m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.293
Humidity:65.0%
Test Distance:5.640m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.293
Humidity:65.0%
Test Distance:5.640m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.293
Humidity:65.0%
Test Distance:5.640m [K=1.0000]
Remarks:

```