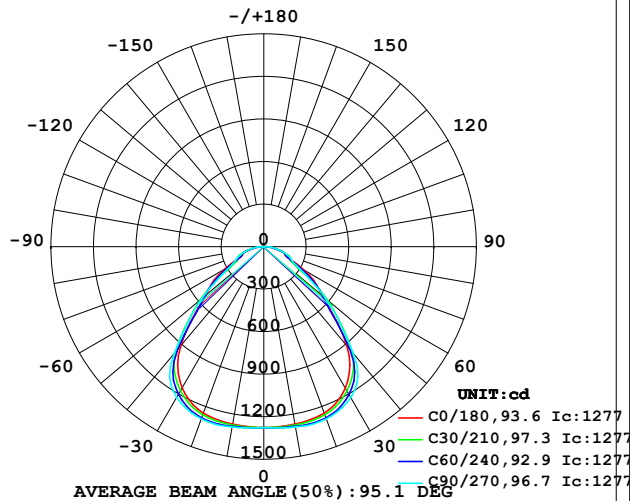


## LUMINAIRE PHOTOMETRIC TEST REPORT

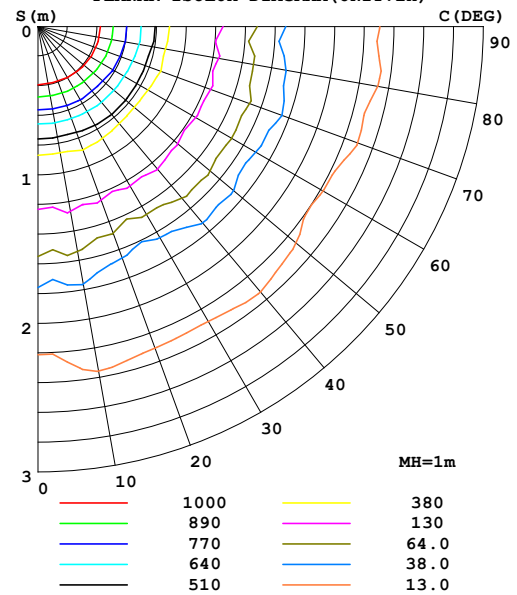
Test:U:35.000V I:0.7000A P:24.500W PF:0.9420 Freq:50.00Hz Lamp Flux:3029.53x1 lm		
NAME: LTY40X312CT19 700mA_3000K	TYPE: YALA ONE	WEIGHT:
SPEC.:	DIM.: 300X1200X12	SERIAL No.:1
MFR.: TECONEX	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 123.65 lm/W			
MODEL	LTY40X312CT19	I <sub>max</sub> (cd)	1298	S/MH(C0/180)	1.31
NOMINAL POWER(W)	26	LOR(%)	100.0	S/MH(C90/270)	1.33
RATED VOLTAGE(V)	35	TOTAL FLUX(lm)	3029.5	η UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	3029.53	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	35	η down(%)	100.0	CIBSE SHR MAX	1.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



PLANAR ISOLUX DIAGRAM(UNIT:lx)



C Range: 0 - 90DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-06-26

γ Range: 0 - 90DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.295  
 Humidity:65.0%  
 Test Distance:10.270m [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	1271	1283	1292	1283	1271	1283	1292	1283	0- 10	122.2	122.2	4.03,4.03
20	1249	1269	1292	1269	1249	1269	1292	1269	10- 20	362.7	484.9	16,16
30	1151	1167	1228	1167	1151	1167	1228	1167	20- 30	569.8	1055	34.8,34.8
40	910.4	874.7	985.3	874.7	910.4	874.7	985.3	874.7	30- 40	673.8	1728	57.1,57.1
50	533.3	529.6	572.5	529.6	533.3	529.6	572.5	529.6	40- 50	553.8	2282	75.3,75.3
60	321.3	288.0	261.3	288.0	321.3	288.0	261.3	288.0	50- 60	361.4	2644	87.3,87.3
70	157.1	167.5	179.6	167.5	157.1	167.5	179.6	167.5	60- 70	214.6	2858	94.3,94.3
80	81.69	72.77	92.47	72.77	81.69	72.77	92.47	72.77	70- 80	129.8	2988	98.6,98.6
90	0	0	0	0	0	0	0	0	80- 90	41.50	3030	100,100
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:cd									UNIT:lm		

Conical surface Flux(90deg): 2083.4 lm

%lum = 68.8%

%lamp = 68.8%

Conical surface Flux(120deg): 2643.7 lm

%lum = 87.3%

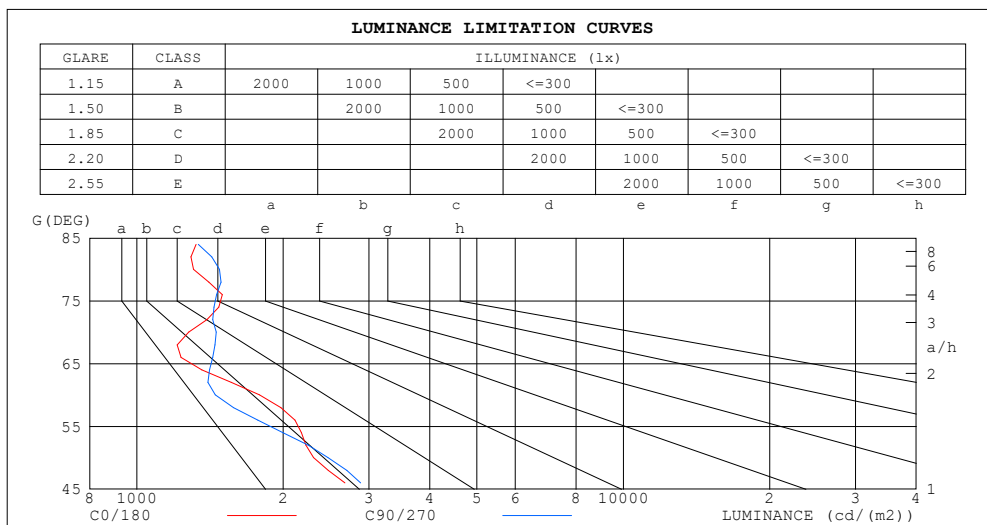
%lamp = 87.3%

C Range: 0 - 90DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-06-26

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.295  
 Humidity:65.0%  
 Test Distance:10.270m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:35.000V I:0.7000A P:24.500W PF:0.9420 Freq:50.00Hz Lamp Flux:3029.53x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1588	1605
80	1309	1478
75	1571	1536
70	1278	1457
65	1411	1463
60	1788	1450
55	2234	2045
50	2308	2472
45	2960	3130

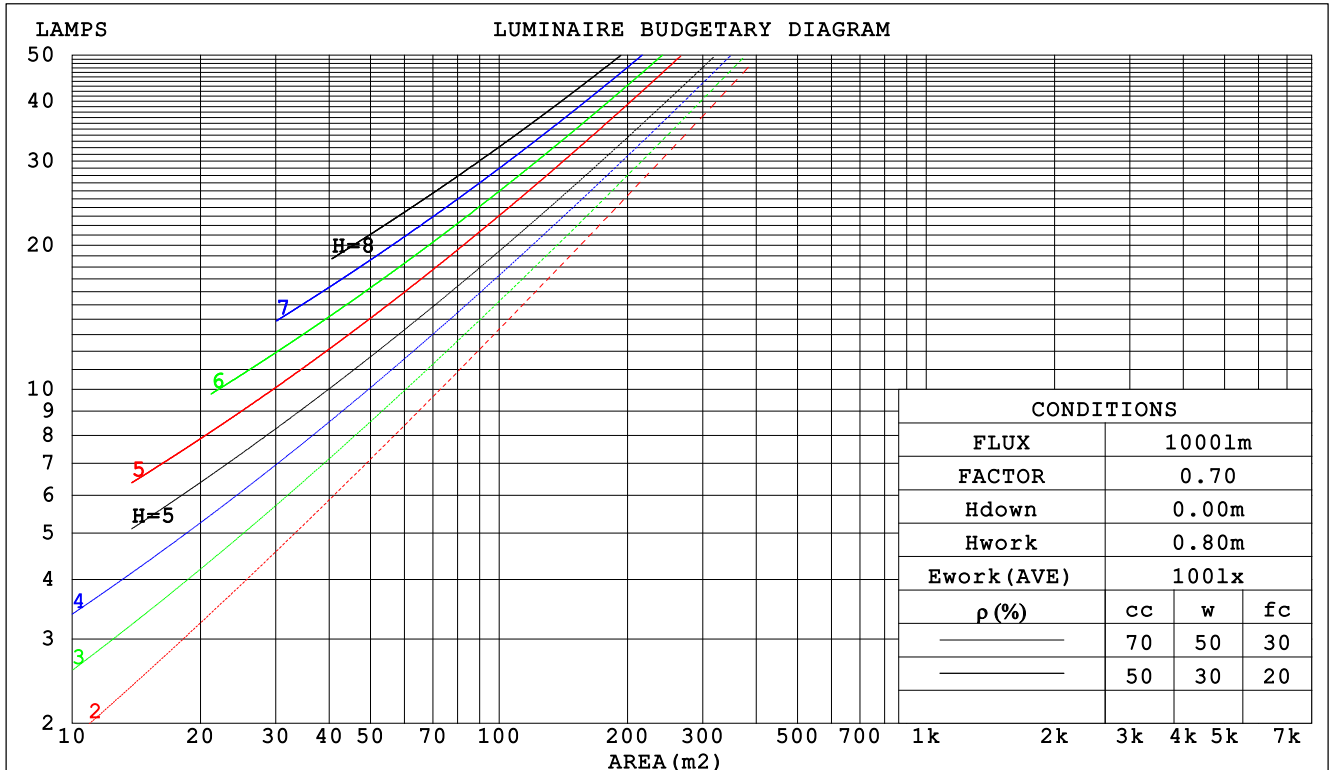
C Range: 0 - 90DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-06-26

γ Range: 0 - 90DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:10.270m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:35.000V I:0.7000A P:24.500W PF:0.9420 Freq:50.00Hz Lamp Flux:3029.53x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	Coefficients of Utilization(CU)															
	RCR:Room Cavity Ratio															
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	1.06	1.02	.99	1.04	1.00	.97	.90	.97	.94	.96	.93	.91	.92	.90	.89	.87
2.0	.94	.88	.83	.92	.87	.82	.89	.84	.80	.86	.82	.78	.83	.80	.77	.75
3.0	.84	.77	.71	.83	.76	.70	.80	.74	.69	.77	.72	.68	.74	.70	.67	.65
4.0	.76	.68	.61	.74	.67	.61	.72	.65	.60	.70	.64	.59	.67	.63	.59	.57
5.0	.68	.60	.54	.67	.59	.54	.65	.58	.53	.63	.57	.53	.61	.56	.52	.50
6.0	.62	.54	.48	.61	.53	.48	.59	.52	.47	.58	.51	.47	.56	.51	.46	.44
7.0	.57	.48	.43	.56	.48	.43	.54	.47	.42	.53	.47	.42	.52	.46	.42	.40
8.0	.52	.44	.38	.51	.44	.38	.50	.43	.38	.49	.42	.38	.48	.42	.38	.36
9.0	.48	.40	.35	.47	.40	.35	.46	.39	.35	.45	.39	.34	.44	.38	.34	.33
10.0	.44	.37	.32	.44	.37	.32	.43	.36	.32	.42	.36	.31	.41	.35	.31	.30



C Range: 0 - 90DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-06-26

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.295  
 Humidity:65.0%  
 Test Distance:10.270m [K=1.0000]  
 Remarks:

## WEC AND CCEC

Test:U:35.000V I:0.7000A P:24.500W PF:0.9420 Freq:50.00Hz Lamp Flux:3029.53x1 lm					
NAME:		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:1	
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	.270	.154	.049	.263	.150	.048	.250	.143	.046	.238	.137	.044	.227	.131	.042		
2.0	.256	.140	.043	.250	.138	.042	.239	.133	.041	.228	.128	.040	.219	.124	.039		
3.0	.240	.128	.038	.235	.126	.038	.225	.122	.037	.215	.118	.036	.207	.114	.035		
4.0	.224	.116	.034	.219	.115	.034	.210	.112	.033	.202	.109	.033	.195	.106	.032		
5.0	.209	.107	.031	.205	.105	.031	.197	.103	.030	.190	.100	.030	.183	.098	.029		
6.0	.196	.098	.028	.192	.097	.028	.185	.095	.028	.179	.093	.027	.173	.091	.027		
7.0	.184	.091	.026	.181	.090	.026	.174	.088	.025	.169	.086	.025	.163	.085	.025		
8.0	.173	.085	.024	.170	.084	.024	.165	.082	.023	.159	.081	.023	.154	.079	.023		
9.0	.163	.079	.022	.161	.078	.022	.156	.077	.022	.151	.076	.022	.147	.074	.022		
10.0	.154	.074	.021	.152	.073	.020	.148	.072	.020	.143	.071	.020	.139	.070	.020		

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.178	.156	.138	.152	.134	.118	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.167	.132	.102	.143	.114	.088	.098	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.159	.114	.079	.136	.098	.068	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.151	.100	.062	.129	.087	.054	.089	.060	.038	.051	.035	.022	.017	.012	.007	
5.0	.143	.090	.050	.123	.078	.044	.085	.054	.031	.049	.032	.018	.016	.010	.006	
6.0	.136	.081	.042	.117	.070	.036	.081	.049	.026	.047	.029	.015	.015	.009	.005	
7.0	.130	.074	.035	.112	.064	.031	.077	.045	.022	.045	.027	.013	.014	.009	.004	
8.0	.124	.068	.030	.107	.059	.026	.074	.042	.019	.043	.025	.011	.014	.008	.004	
9.0	.118	.063	.026	.102	.055	.023	.071	.039	.016	.041	.023	.010	.013	.007	.003	
10.0	.113	.059	.023	.097	.051	.020	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 90DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-06-26

γ Range: 0 - 90DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:10.270m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:35.000V I:0.7000A P:24.500W PF:0.9420 Freq:50.00Hz Lamp Flux:3029.53x1 lm										
NAME:					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:1		
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	14.5	15.8	14.7	16.0	16.2	14.4	15.8	14.7	16.0	16.2
3H	15.4	16.7	15.7	16.9	17.1	15.3	16.6	15.6	16.8	17.0
4H	15.8	17.1	16.2	17.3	17.5	15.7	16.9	16.0	17.2	17.4
6H	16.2	17.3	16.5	17.6	17.9	16.2	17.3	16.5	17.6	17.9
8H	16.3	17.4	16.7	17.7	18.0	16.4	17.4	16.7	17.7	18.0
12H	16.5	17.5	16.8	17.8	18.1	16.4	17.5	16.8	17.8	18.1
4H 2H	14.8	16.0	15.1	16.2	16.5	14.7	15.9	15.0	16.1	16.4
3H	16.0	17.0	16.3	17.3	17.6	15.8	16.8	16.1	17.1	17.4
4H	16.5	17.5	16.9	17.8	18.1	16.4	17.3	16.7	17.6	17.9
6H	17.0	17.9	17.4	18.2	18.6	17.0	17.8	17.4	18.2	18.6
8H	17.3	18.0	17.7	18.4	18.8	17.2	18.0	17.7	18.4	18.8
12H	17.4	18.1	17.8	18.5	18.9	17.4	18.1	17.8	18.5	18.9
8H 4H	16.7	17.5	17.1	17.8	18.2	16.6	17.3	17.0	17.7	18.1
6H	17.4	18.0	17.8	18.4	18.9	17.3	18.0	17.8	18.4	18.8
8H	17.7	18.3	18.2	18.7	19.2	17.7	18.3	18.1	18.7	19.1
12H	18.0	18.5	18.5	18.9	19.4	17.9	18.4	18.4	18.9	19.3
12H 4H	16.7	17.4	17.1	17.8	18.2	16.6	17.3	17.0	17.7	18.1
6H	17.5	18.0	17.9	18.4	18.9	17.4	18.0	17.9	18.4	18.9
8H	17.8	18.3	18.3	18.8	19.3	17.8	18.3	18.3	18.7	19.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.5				
1.5H	+ 0.3 / - 0.4					+ 0.3 / - 0.4				
2.0H	+ 0.8 / - 1.0					+ 1.0 / - 0.8				

CIE Pub.117, 3030 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 3.9$ )

C Range: 0 - 90DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-06-26

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:10.270m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:35.000V I:0.7000A P:24.500W PF:0.9420 Freq:50.00Hz Lamp Flux:3029.53x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

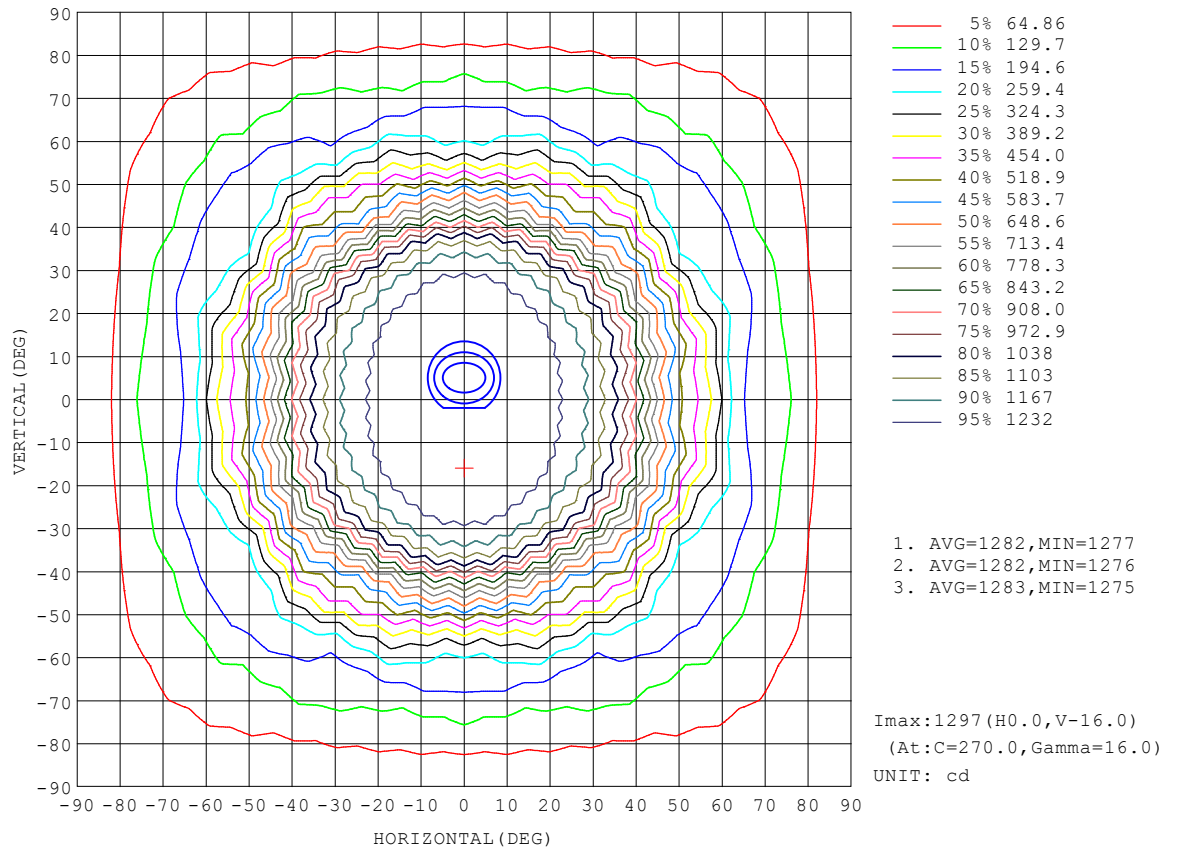
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	65	54	48	64	54	48	63	54	48	42
0.80	75	64	58	74	64	58	72	63	58	51
1.00	83	73	67	81	72	66	79	73	66	60
1.25	89	80	74	88	79	74	85	78	73	66
1.50	93	85	79	92	84	79	89	83	78	71
2.00	99	92	87	97	91	86	94	89	84	77
2.50	102	96	91	100	94	90	97	92	88	80
3.00	105	99	95	103	98	94	99	95	91	84
4.00	108	104	100	106	102	98	102	99	96	87
5.00	110	106	103	108	104	101	104	101	98	89
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 90DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-06-26

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:10.270m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:35.000V I:0.7000A P:24.500W PF:0.9420 Freq:50.00Hz Lamp Flux:3029.53x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



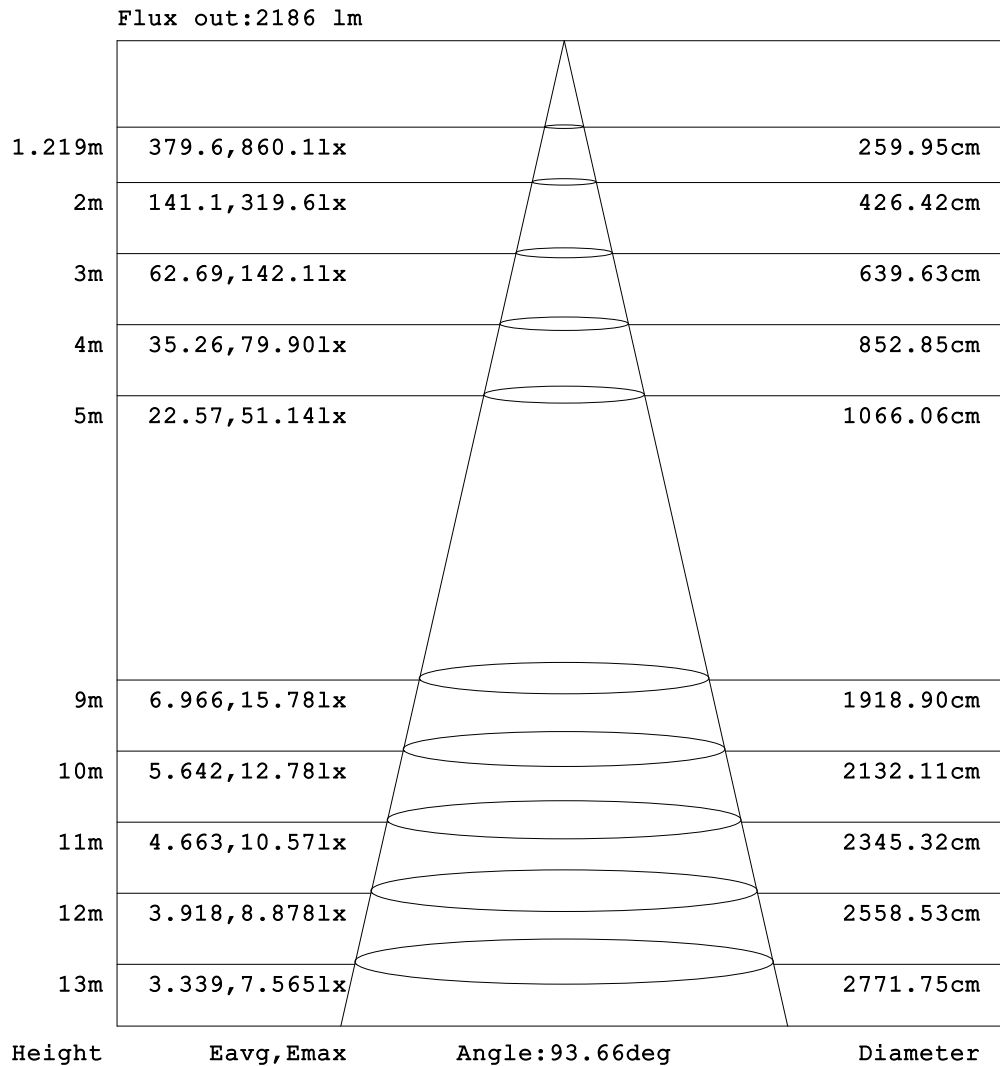
C Range: 0 - 90DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-06-26

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:10.270m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:35.000V I:0.7000A P:24.500W PF:0.9420 Freq:50.00Hz Lamp Flux:3029.53x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



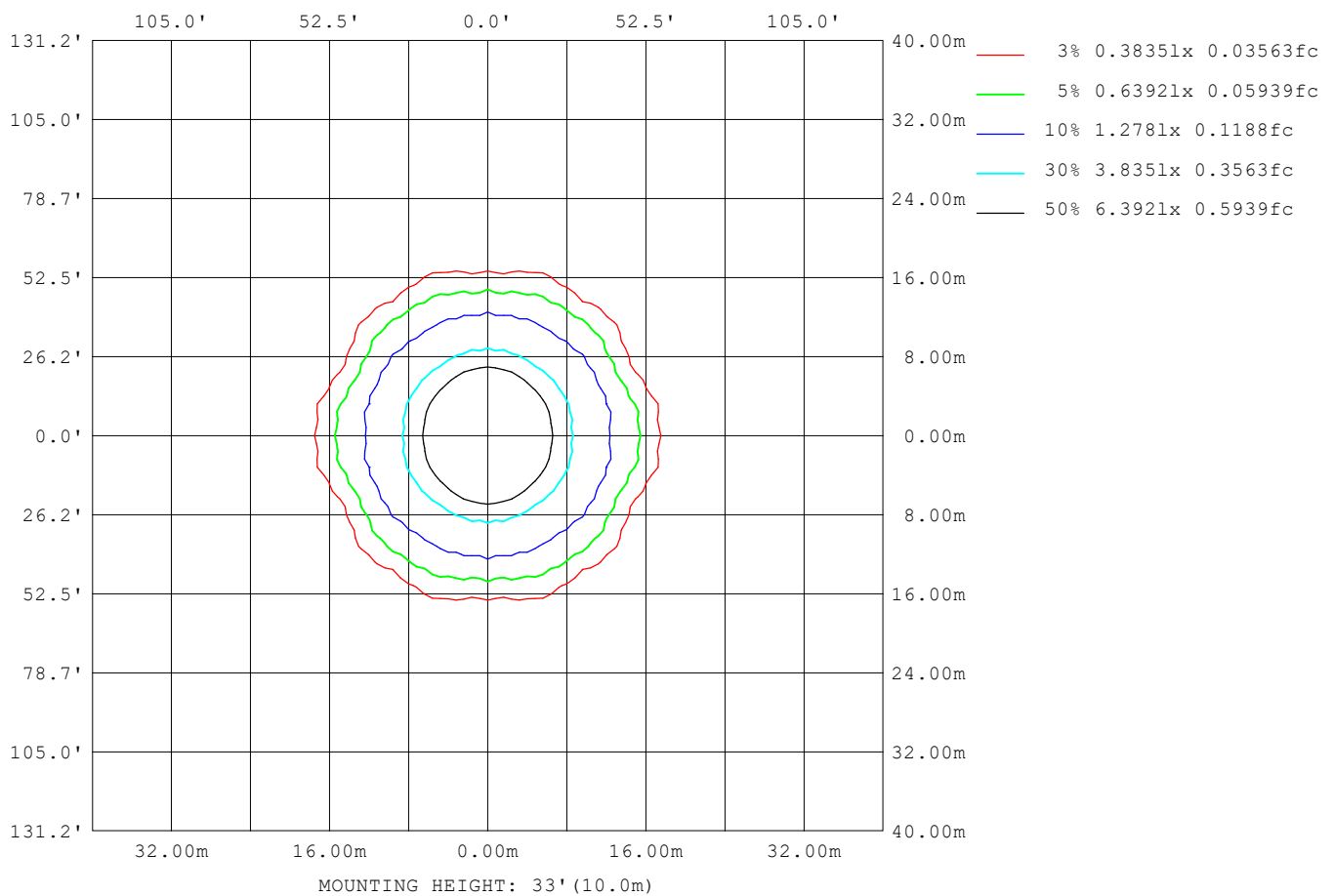
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 90DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2021-06-26

γ Range: 0 - 90DEG  
γ Interval: 2.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.295  
Humidity: 65.0%  
Test Distance: 10.270m [K=1.0000]  
Remarks:

# ISOLUX DIAGRAM

Test:U:35.000V I:0.7000A P:24.500W PF:0.9420 Freq:50.00Hz Lamp Flux:3029.53x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 90DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-06-26

γ Range: 0 - 90DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:10.270m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:35.000V I:0.7000A P:24.500W PF:0.9420 Freq:50.00Hz Lamp Flux:3029.53x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

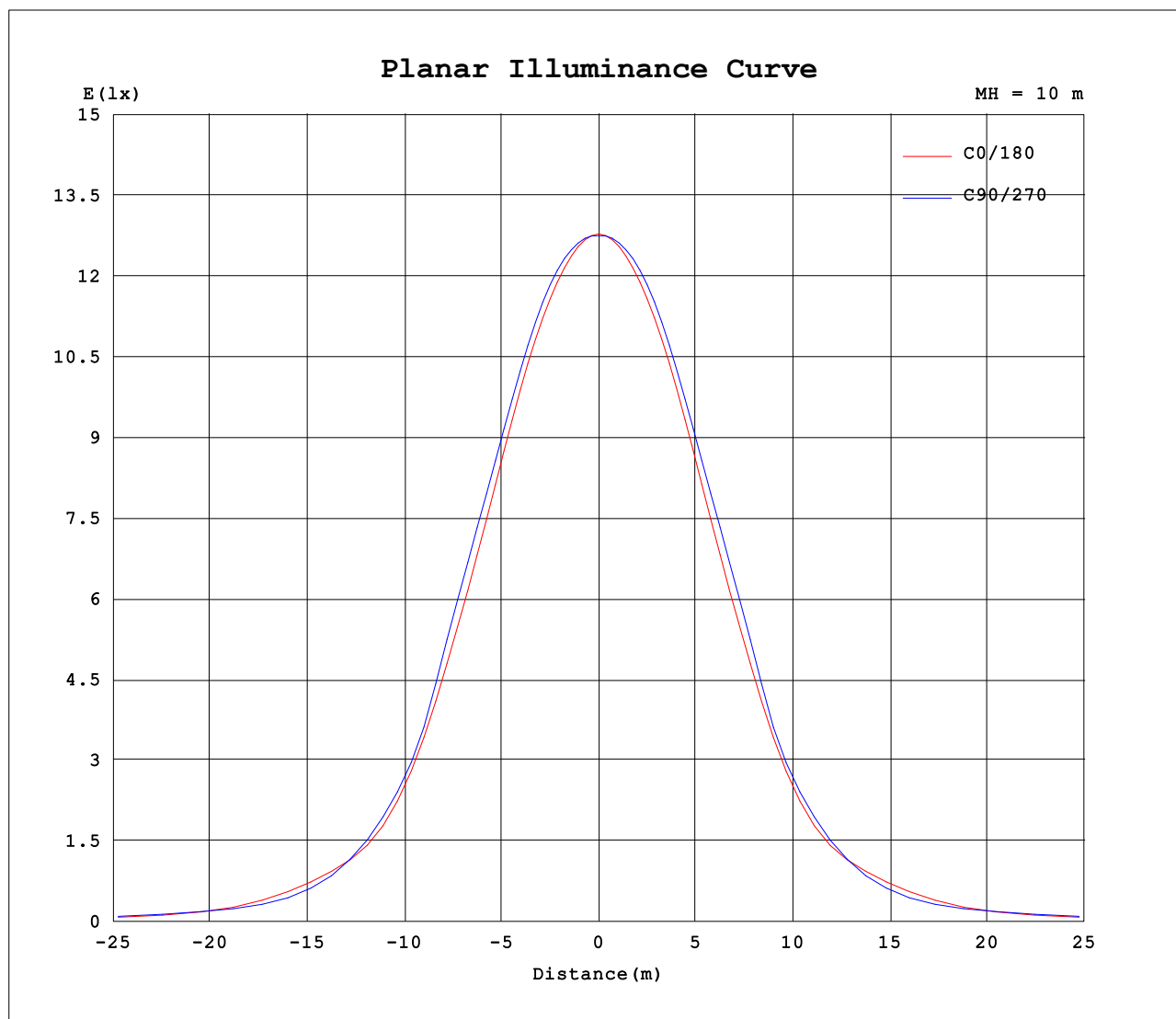
AvgL	cd/m2
L_0~180 (65) av	1283
L_0~180 (75) av	1495
L_0~180 (85) av	1333
L_90~270 (65) av	1422
L_90~270 (75) av	1450
L_90~270 (85) av	1255
L_45 (65) av	1431
L_45 (75) av	1209
L_45 (85) av	1077

Standard: GB/T 29293-2012

C Range: 0 - 90DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-06-26

γ Range: 0 - 90DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.295  
 Humidity:65.0%  
 Test Distance:10.270m [K=1.0000]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 90DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2021-06-26

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.295  
Humidity: 65.0%  
Test Distance: 10.270m [K=1.0000]  
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.270m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.270m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.270m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.270m [K=1.0000]
Remarks:

```