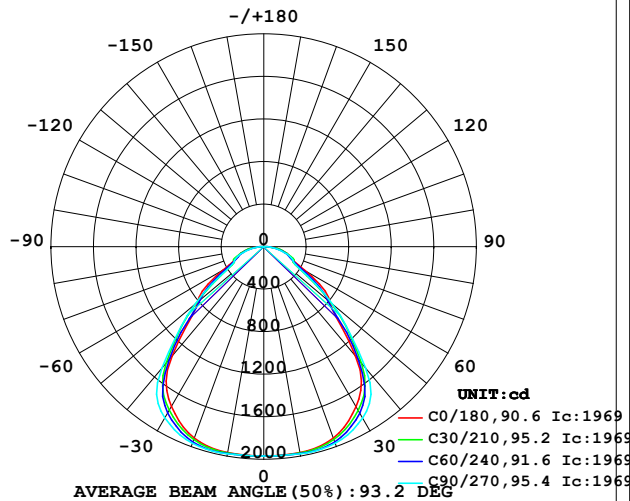


## LUMINAIRE PHOTOMETRIC TEST REPORT

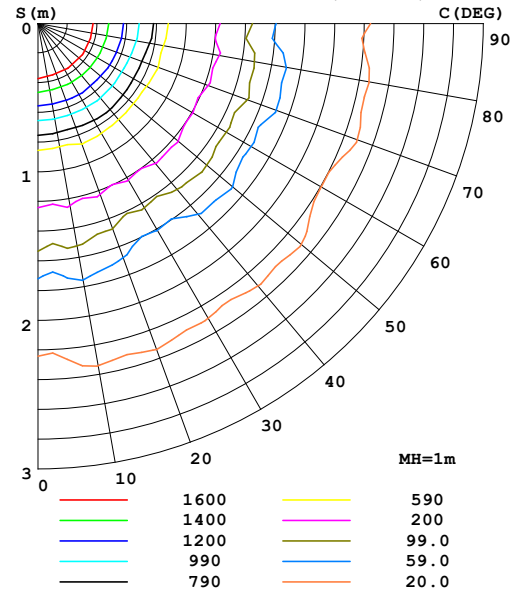
Test:U:35.000V I:1.0000A P:35.000W PF:1.0000 Freq:0Hz Lamp Flux:4549.02x1 lm		
NAME: LTY18X030CT19 500x2mA_3500K	TYPE: YALA ONE	WEIGHT:
SPEC.:	DIM.: 300x600x12	SERIAL No.:1
MFR.: TECONEX	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 129.97 lm/W			
MODEL	LTY18X030CT19	Imax(cd)	1982	S/MH(C0/180)	1.27
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	1.32
RATED VOLTAGE(V)	35	TOTAL FLUX(lm)	4549.0	$\eta$ UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	4549.02	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,50.0
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	35	$\eta$ 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

$\gamma$  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:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	1965	1973	1977	1973	1965	1973	1977	1973	0- 10	188.1	188.1	4.14, 4.14
20	1914	1933	1967	1933	1914	1933	1967	1933	10- 20	555.8	743.9	16.4, 16.4
30	1737	1761	1860	1761	1737	1761	1860	1761	20- 30	861.9	1606	35.3, 35.3
40	1342	1327	1491	1327	1342	1327	1491	1327	30- 40	1007	2613	57.4, 57.4
50	811.0	804.5	842.0	804.5	811.0	804.5	842.0	804.5	40- 50	820.2	3433	75.5, 75.5
60	443.7	429.1	348.1	429.1	443.7	429.1	348.1	429.1	50- 60	527.8	3961	87.1, 87.1
70	256.7	240.4	258.7	240.4	256.7	240.4	258.7	240.4	60- 70	322.3	4283	94.2, 94.2
80	146.4	127.7	126.5	127.7	146.4	127.7	126.5	127.7	70- 80	199.7	4483	98.5, 98.5
90	0	0	0	0	0	0	0	0	80- 90	66.37	4549	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): 3138.3 lm

%lum = 69.0%

%lamp = 69.0%

Conical surface Flux(120deg): 3960.7 lm

%lum = 87.1%

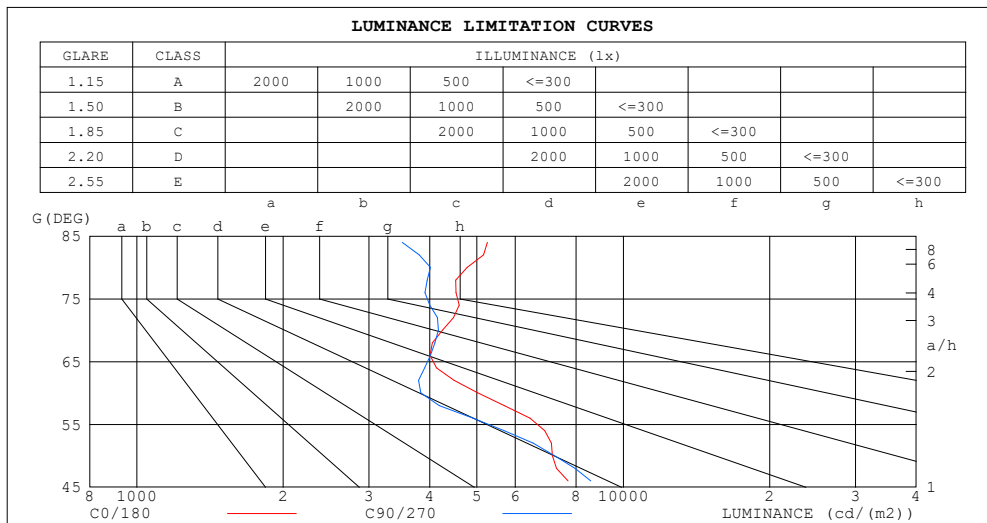
%lamp = 87.1%

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:1.0000A P:35.000W PF:1.0000 Freq:0Hz Lamp Flux:4549.02x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	6306	4214
80	4777	4013
75	4895	4259
70	4250	4166
65	4282	4054
60	5026	3835
55	7062	5827
50	7146	7216
45	8526	9371

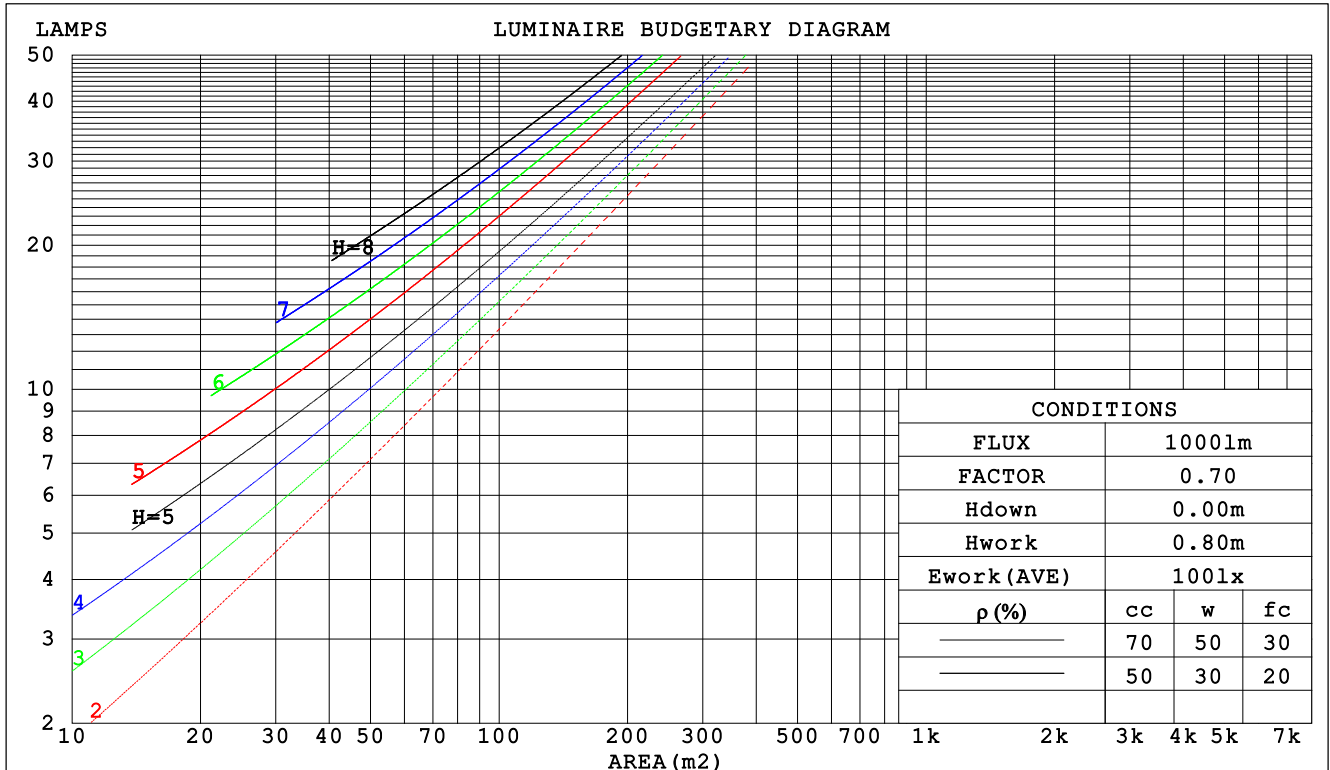
C Range: 0 - 90DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-06-26

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:1.0000A P:35.000W PF:1.0000 Freq:0Hz Lamp Flux:4549.02x1 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	1.00
1.0	1.06	1.02	.99	1.04	1.00	.97	.99	.97	.94	.96	.93	.91	.92	.90	.89	.87
2.0	.94	.88	.83	.92	.87	.82	.89	.84	.80	.86	.82	.78	.83	.79	.77	.75
3.0	.84	.77	.71	.83	.76	.70	.80	.74	.69	.77	.72	.68	.75	.70	.67	.65
4.0	.76	.68	.62	.74	.67	.61	.72	.65	.60	.70	.64	.60	.68	.63	.59	.57
5.0	.68	.60	.54	.67	.60	.54	.65	.58	.53	.63	.57	.53	.62	.56	.52	.50
6.0	.62	.54	.48	.61	.53	.48	.59	.53	.47	.58	.52	.47	.56	.51	.47	.45
7.0	.57	.49	.43	.56	.48	.43	.54	.48	.42	.53	.47	.42	.52	.46	.42	.40
8.0	.52	.44	.39	.51	.44	.39	.50	.43	.38	.49	.43	.38	.48	.42	.38	.36
9.0	.48	.40	.35	.47	.40	.35	.46	.40	.35	.45	.39	.35	.44	.39	.34	.33
10.0	.44	.37	.32	.44	.37	.32	.43	.36	.32	.42	.36	.32	.41	.36	.32	.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:1.0000A P:35.000W PF:1.0000 Freq:0Hz Lamp Flux:4549.02x1 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	.271	.154	.049	.264	.150	.048	.251	.144	.046	.239	.138	.044	.227	.132	.043		
2.0	.256	.140	.043	.250	.138	.042	.239	.133	.041	.228	.128	.040	.219	.124	.039		
3.0	.240	.128	.038	.234	.125	.038	.224	.122	.037	.215	.118	.036	.206	.114	.035		
4.0	.224	.116	.034	.219	.115	.034	.210	.111	.033	.202	.108	.033	.194	.106	.032		
5.0	.209	.106	.031	.205	.105	.031	.197	.103	.030	.190	.100	.030	.183	.098	.029		
6.0	.195	.098	.028	.192	.097	.028	.185	.095	.028	.178	.093	.027	.172	.091	.027		
7.0	.183	.091	.026	.180	.090	.026	.174	.088	.025	.168	.086	.025	.163	.085	.025		
8.0	.173	.084	.024	.170	.084	.024	.164	.082	.023	.159	.081	.023	.154	.079	.023		
9.0	.163	.079	.022	.160	.078	.022	.155	.077	.022	.151	.075	.022	.146	.074	.021		
10.0	.154	.074	.021	.152	.073	.020	.147	.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	.137	.152	.134	.118	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.168	.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	.106	.059	.026	.074	.042	.019	.043	.025	.011	.014	.008	.004	
9.0	.118	.063	.027	.102	.055	.023	.070	.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:1.0000A P:35.000W PF:1.0000 Freq:0Hz Lamp Flux:4549.02x1 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	18.2	19.6	18.5	19.8	20.0	18.1	19.5	18.4	19.7	19.9
3H	19.2	20.5	19.5	20.7	20.9	18.9	20.2	19.2	20.4	20.7
4H	19.7	20.9	20.0	21.1	21.4	19.3	20.5	19.6	20.8	21.0
6H	20.2	21.3	20.5	21.6	21.9	19.7	20.9	20.1	21.1	21.4
8H	20.4	21.5	20.8	21.8	22.1	19.9	21.0	20.2	21.2	21.5
12H	20.6	21.7	21.0	21.9	22.2	19.9	21.0	20.3	21.3	21.6
4H 2H	18.5	19.7	18.8	20.0	20.2	18.4	19.6	18.7	19.8	20.1
3H	19.7	20.8	20.1	21.1	21.4	19.5	20.5	19.8	20.8	21.1
4H	20.4	21.4	20.8	21.7	22.0	20.0	21.0	20.4	21.3	21.6
6H	21.1	22.0	21.5	22.3	22.7	20.6	21.4	21.0	21.8	22.1
8H	21.4	22.2	21.8	22.6	23.0	20.8	21.6	21.2	21.9	22.3
12H	21.7	22.4	22.1	22.8	23.2	20.9	21.6	21.3	22.0	22.4
8H 4H	20.6	21.4	21.0	21.8	22.2	20.3	21.1	20.7	21.4	21.8
6H	21.6	22.2	22.0	22.6	23.0	21.0	21.6	21.4	22.0	22.5
8H	22.0	22.6	22.5	23.0	23.5	21.3	21.9	21.7	22.3	22.7
12H	22.4	22.9	22.8	23.3	23.8	21.5	22.0	22.0	22.4	22.9
12H 4H	20.6	21.4	21.1	21.7	22.1	20.3	21.0	20.7	21.4	21.8
6H	21.6	22.2	22.1	22.6	23.1	21.1	21.7	21.6	22.1	22.5
8H	22.1	22.6	22.6	23.1	23.5	21.4	21.9	21.9	22.4	22.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.3 / - 0.4					+ 0.4 / - 0.6				
1.5H	+ 0.2 / - 0.4					+ 0.3 / - 0.2				
2.0H	+ 0.7 / - 0.8					+ 1.1 / - 1.0				

CIE Pub.117, 4549 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 5.3$ )

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:

### UTILIZATION FACTORS TABLE

Test:U:35.000V I:1.0000A P:35.000W PF:1.0000 Freq:0Hz Lamp Flux:4549.02x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

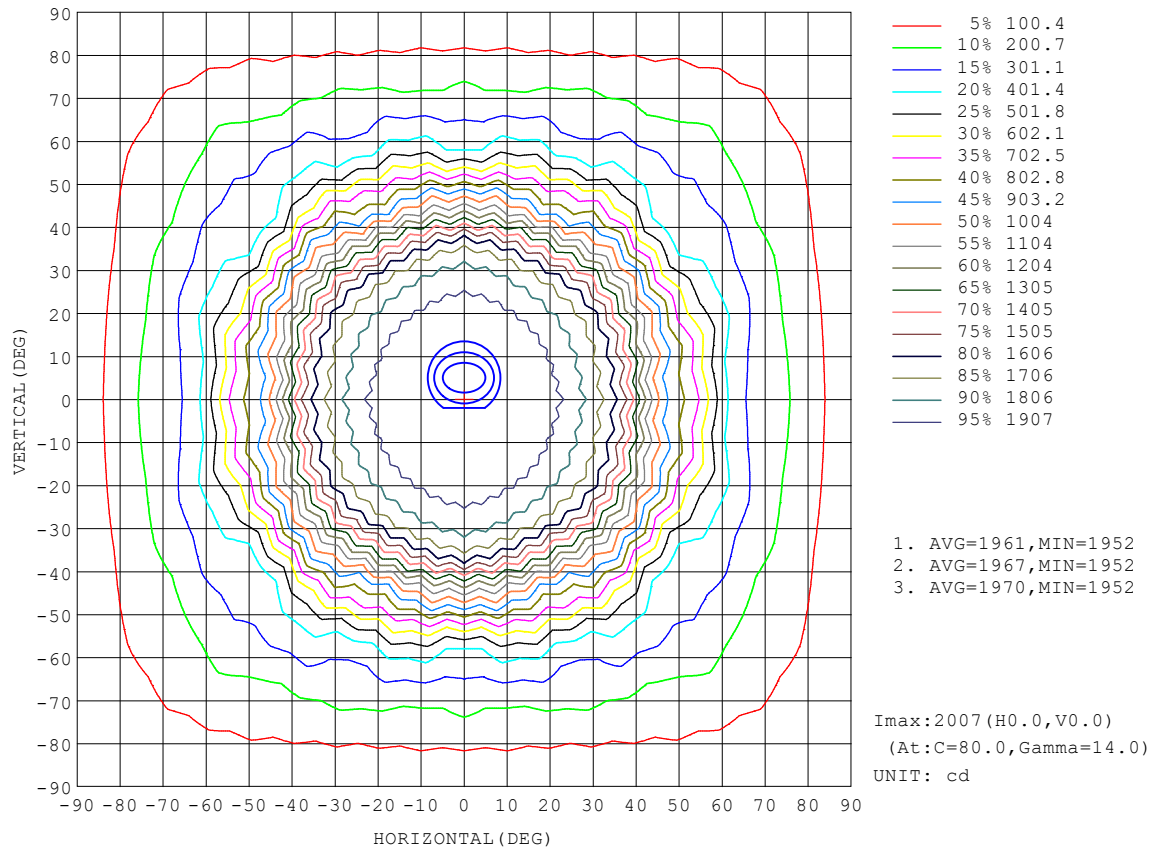
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	65	55	49	64	55	48	63	54	48	43
0.80	75	65	58	74	64	58	72	64	58	52
1.00	83	73	67	82	73	67	79	74	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:1.0000A P:35.000W PF:1.0000 Freq:0Hz Lamp Flux:4549.02x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



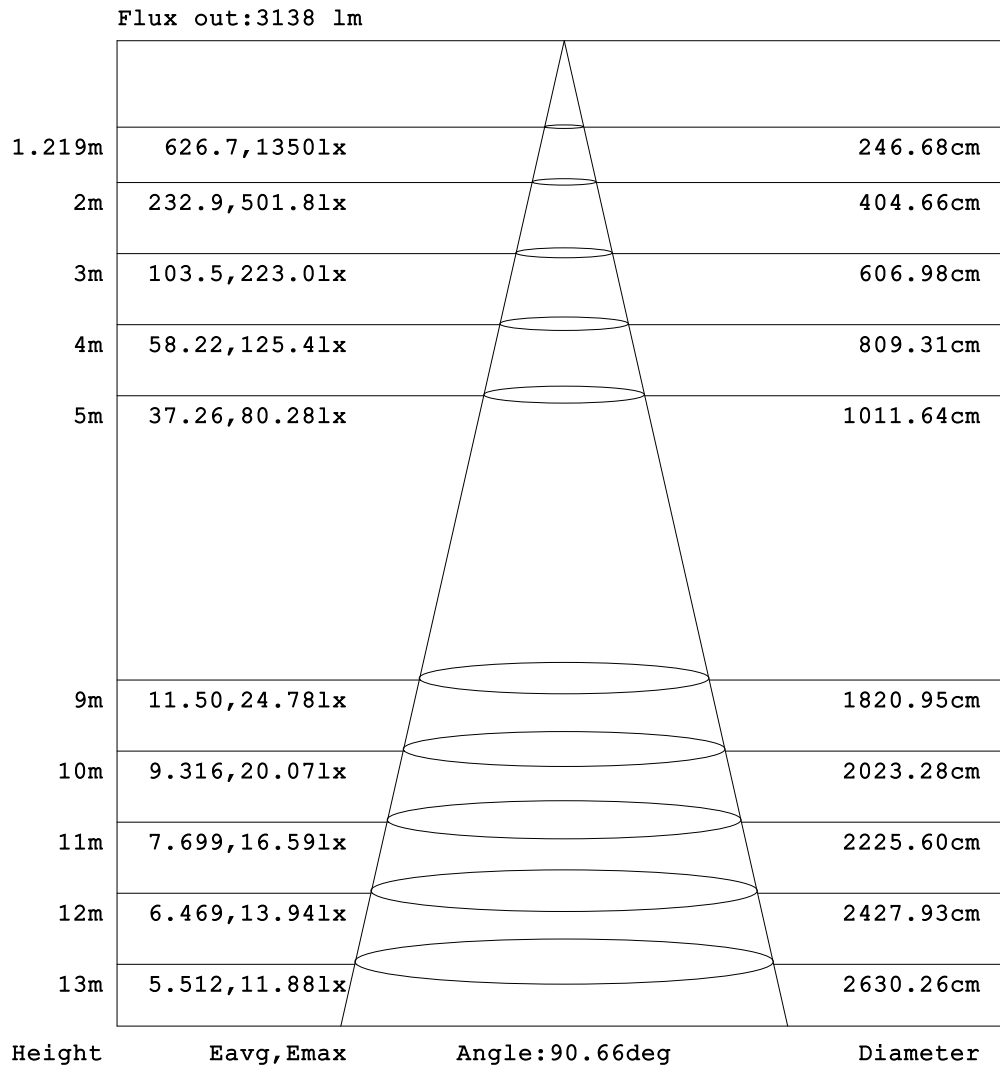
C Range: 0 - 90DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-06-26

$\gamma$  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:1.0000A P:35.000W PF:1.0000 Freq:0Hz Lamp Flux:4549.02x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



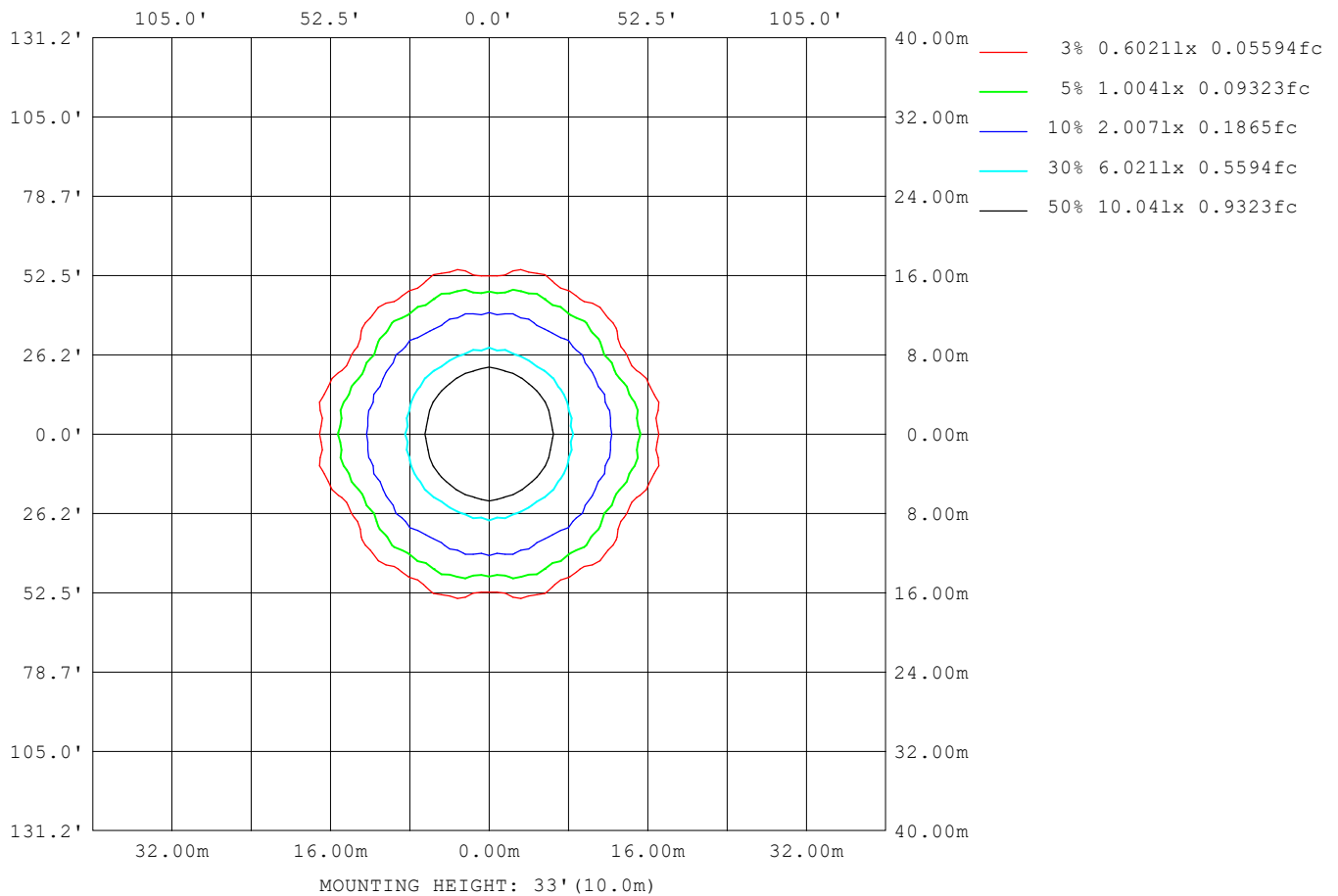
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:1.0000A P:35.000W PF:1.0000 Freq:0Hz Lamp Flux:4549.02x1 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:1.0000A P:35.000W PF:1.0000 Freq:0Hz Lamp Flux:4549.02x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

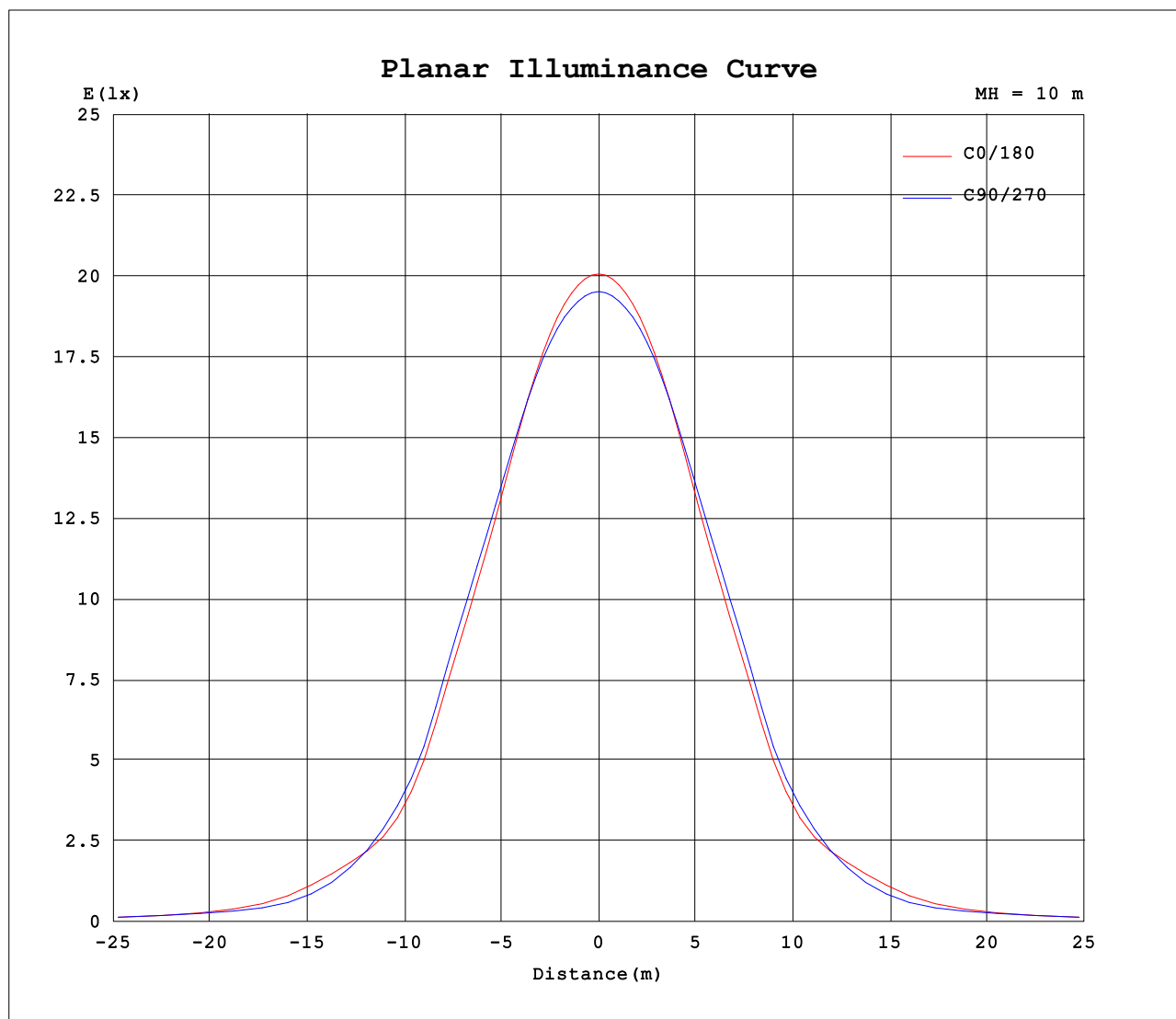
AvgL	cd/m2
L_0~180 (65) av	3964
L_0~180 (75) av	4489
L_0~180 (85) av	5203
L_90~270 (65) av	3996
L_90~270 (75) av	3978
L_90~270 (85) av	3249
L_45 (65) av	4436
L_45 (75) av	3775
L_45 (85) av	3433

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:

```

```

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

```