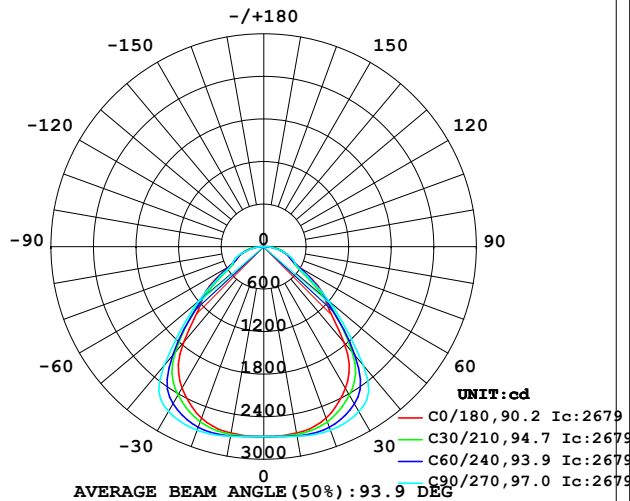


## LUMINAIRE PHOTOMETRIC TEST REPORT

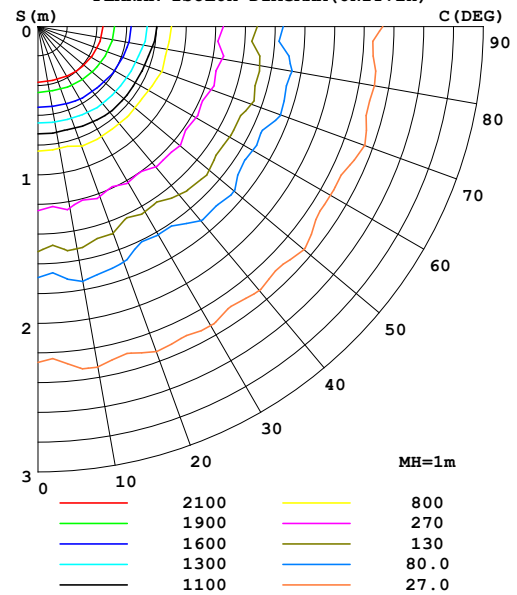
Test:U:35.000V I:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6330.08x1 lm		
NAME: LTY40X612CT19 1400mA_4000K	TYPE: YALA ONE	WEIGHT:
SPEC.:	DIM.: 600x1200x12	SERIAL No.:1
MFR.: TECONEX	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 129.19 lm/W			
MODEL	LTY40X612CT19	I <sub>max</sub> (cd)	2752	S/MH(C0/180)	1.26
NOMINAL POWER(W)	54	LOR(%)	100.0	S/MH(C90/270)	1.35
RATED VOLTAGE(V)	35	TOTAL FLUX(lm)	6330.1	η UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	6330.08	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	1.35

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:2021-07-15

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	2670	2699	2716	2699	2670	2699	2716	2699	0- 10	256.7	256.7	4.06, 4.06
20	2573	2656	2752	2656	2573	2656	2752	2656	10- 20	761.9	1019	16.1, 16.1
30	2307	2449	2685	2449	2307	2449	2685	2449	20- 30	1191	2209	34.9, 34.9
40	1757	1862	2184	1862	1757	1862	2184	1862	30- 40	1405	3615	57.1, 57.1
50	1122	1110	1203	1110	1122	1110	1203	1110	40- 50	1150	4764	75.3, 75.3
60	575.8	602.1	535.0	602.1	575.8	602.1	535.0	602.1	50- 60	731.5	5496	86.8, 86.8
70	362.9	331.5	379.3	331.5	362.9	331.5	379.3	331.5	60- 70	455.7	5952	94, 94
80	204.6	181.2	184.3	181.2	204.6	181.2	184.3	181.2	70- 80	282.4	6234	98.5, 98.5
90	0	0	0	0	0	0	0	0	80- 90	96.19	6330	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): 4352.7 lm

%lum = 68.8%

%lamp = 68.8%

Conical surface Flux(120deg): 5495.9 lm

%lum = 86.8%

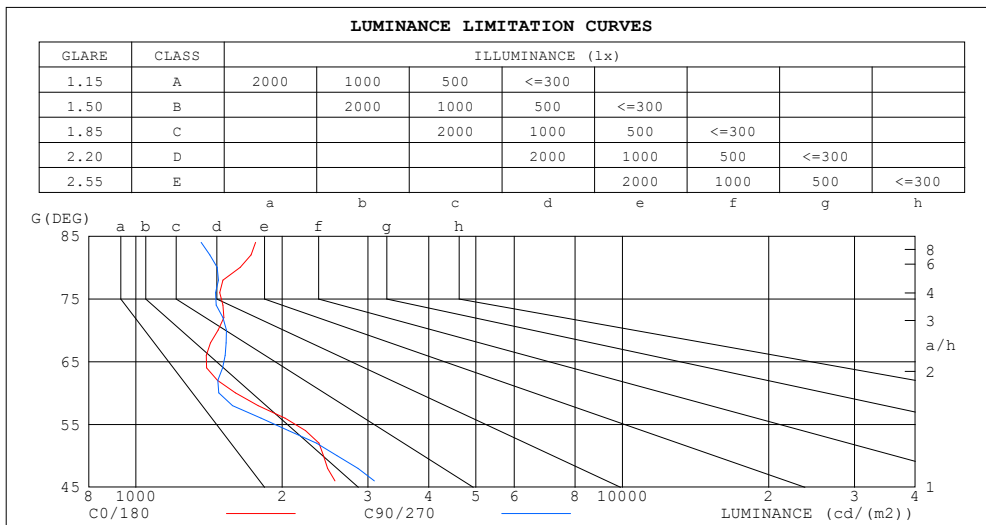
%lamp = 86.8%

C Range: 0 - 90DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2021-07-15

$\gamma$  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:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6330.08x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2115	1634
80	1640	1470
75	1609	1559
70	1477	1536
65	1450	1564
60	1603	1482
55	2287	2113
50	2430	2592
45	2797	3411

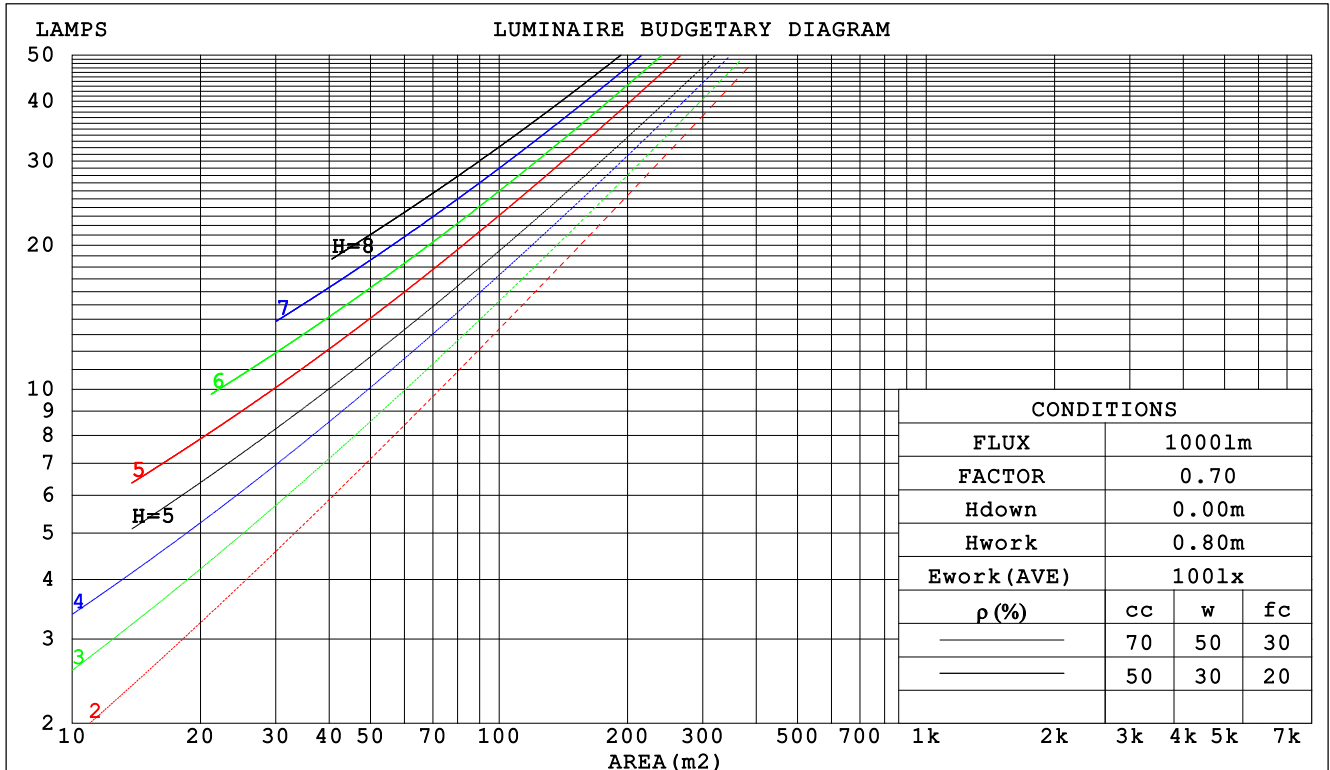
C Range: 0 - 90DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-07-15

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:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6330.08x1 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	.99	.97	.94	.96	.93	.91	.92	.90	.88	.86
2.0	.94	.88	.83	.92	.87	.82	.89	.84	.80	.86	.82	.78	.83	.79	.76	.74
3.0	.84	.77	.71	.82	.76	.70	.80	.74	.69	.77	.72	.68	.74	.70	.67	.65
4.0	.75	.67	.61	.74	.67	.61	.72	.65	.60	.69	.64	.59	.67	.63	.59	.57
5.0	.68	.60	.54	.67	.59	.54	.65	.58	.53	.63	.57	.52	.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:2021-07-15

$\gamma$  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:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6330.08x1 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	.272	.155	.049	.265	.151	.048	.252	.145	.046	.240	.138	.044	.229	.133	.043		
2.0	.257	.141	.043	.251	.138	.043	.240	.133	.041	.229	.129	.040	.220	.124	.039		
3.0	.241	.128	.038	.235	.126	.038	.225	.122	.037	.216	.118	.036	.207	.115	.036		
4.0	.224	.117	.034	.220	.115	.034	.211	.112	.033	.203	.109	.033	.195	.106	.032		
5.0	.210	.107	.031	.205	.105	.031	.198	.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	.175	.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	.146	.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	.137	.152	.134	.118	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.168	.132	.102	.144	.114	.088	.098	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.159	.114	.078	.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:2021-07-15

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:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6330.08x1 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	2H	14.3	15.7	14.6	15.9	16.1	14.7	16.1	15.0	16.3	16.5
	3H	15.3	16.6	15.6	16.8	17.0	15.6	16.8	15.8	17.0	17.3
	4H	15.8	17.0	16.1	17.2	17.5	16.0	17.2	16.3	17.4	17.7
	6H	16.3	17.4	16.6	17.7	18.0	16.4	17.5	16.7	17.8	18.1
	8H	16.5	17.6	16.9	17.9	18.2	16.5	17.6	16.9	17.9	18.2
	12H	16.7	17.8	17.1	18.1	18.4	16.6	17.7	17.0	18.0	18.2
4H	2H	14.7	15.9	15.0	16.1	16.4	15.0	16.2	15.3	16.4	16.7
	3H	15.9	16.9	16.2	17.2	17.5	16.1	17.1	16.4	17.4	17.7
	4H	16.6	17.5	16.9	17.8	18.2	16.6	17.6	17.0	17.9	18.2
	6H	17.3	18.1	17.7	18.5	18.8	17.2	18.0	17.6	18.4	18.8
	8H	17.6	18.4	18.0	18.8	19.1	17.4	18.2	17.8	18.6	19.0
	12H	17.9	18.6	18.3	19.0	19.4	17.6	18.3	18.0	18.7	19.1
8H	4H	16.8	17.6	17.2	18.0	18.4	16.9	17.7	17.3	18.0	18.4
	6H	17.8	18.4	18.2	18.8	19.3	17.6	18.3	18.1	18.7	19.1
	8H	18.2	18.8	18.7	19.2	19.7	17.9	18.5	18.4	18.9	19.4
	12H	18.6	19.1	19.1	19.5	20.0	18.2	18.7	18.6	19.1	19.6
12H	4H	16.9	17.6	17.3	18.0	18.4	16.9	17.6	17.3	18.0	18.4
	6H	17.9	18.4	18.3	18.9	19.3	17.7	18.3	18.2	18.7	19.2
	8H	18.4	18.9	18.8	19.3	19.8	18.1	18.6	18.5	19.0	19.5
Variations with the observer position at spacings:											
S = 1.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.6					
1.5H	+ 0.2 / - 0.4					+ 0.4 / - 0.3					
2.0H	+ 0.7 / - 0.6					+ 1.1 / - 0.8					

CIE Pub.117, 6330 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 6.4$ )

C Range: 0 - 90DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-07-15

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:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6330.08x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

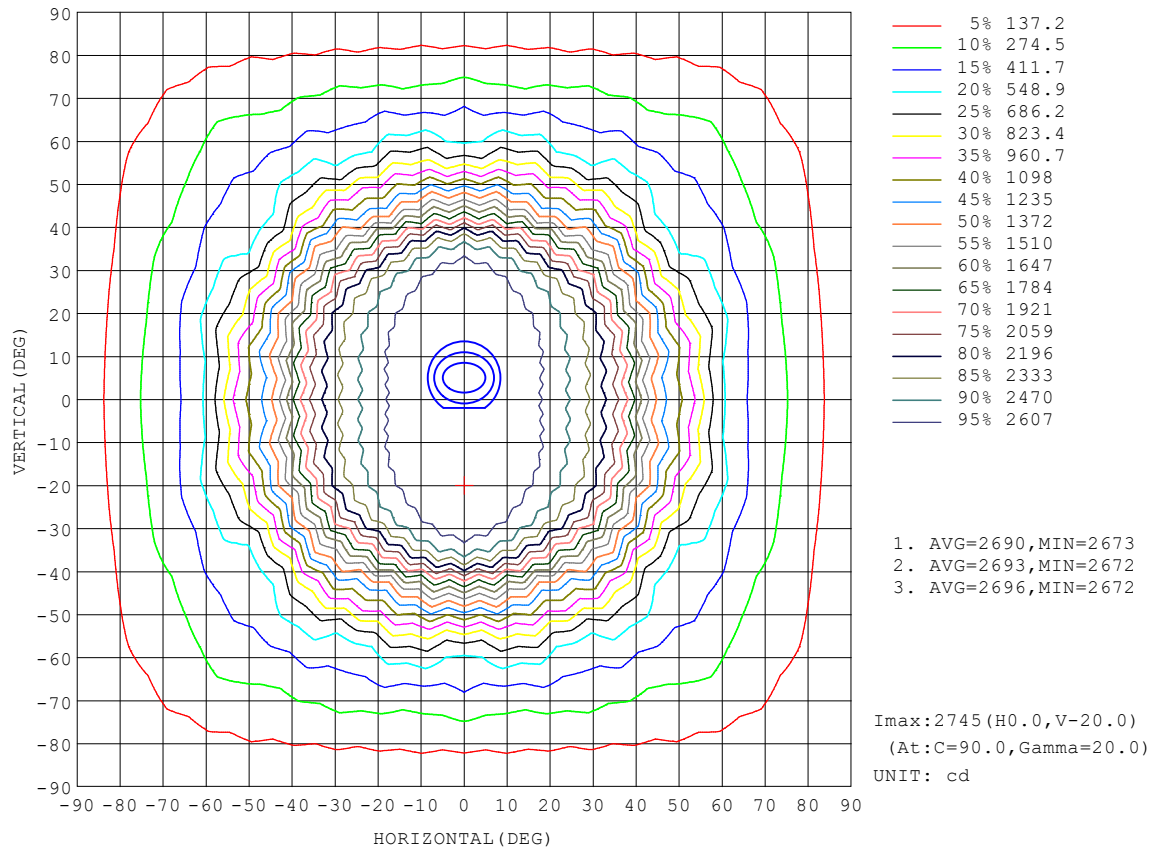
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	65	55	48	64	54	48	63	54	48	42
0.80	75	65	58	74	64	58	72	63	58	51
1.00	82	73	67	81	72	66	79	73	66	60
1.25	89	80	74	88	79	73	85	78	73	66
1.50	93	85	79	92	84	79	89	82	77	71
2.00	99	92	86	97	91	86	94	89	84	77
2.50	102	96	90	100	94	90	97	92	88	80
3.00	105	99	94	103	98	93	99	95	91	83
4.00	108	103	99	106	102	98	102	98	95	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:2021-07-15

$\gamma$  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:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6330.08x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



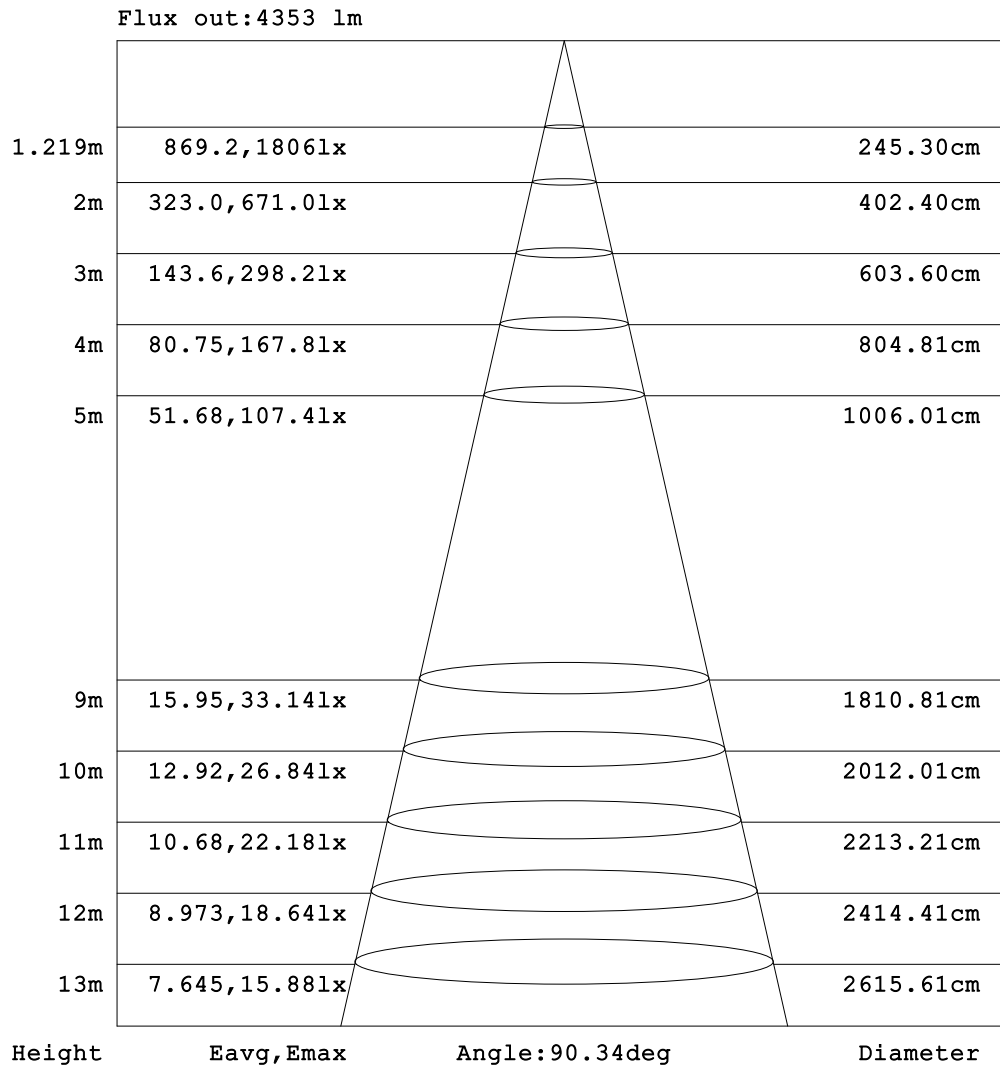
C Range: 0 - 90DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-07-15

$\gamma$  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:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6330.08x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



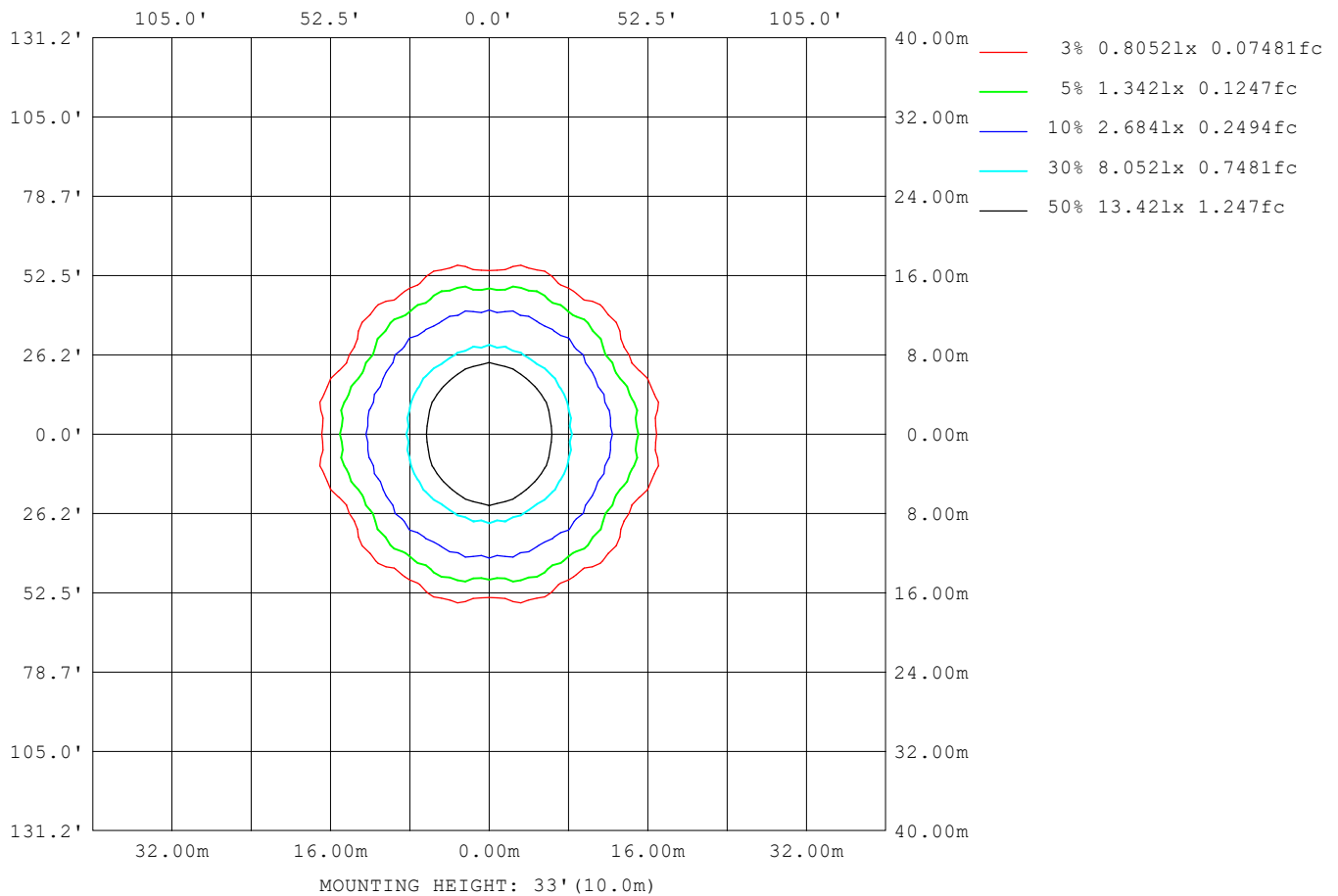
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 90DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2021-07-15

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:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6330.08x1 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:2021-07-15

$\gamma$  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:

## LED Avg.L Report

Test:U:35.000V I:1.4000A P:49.000W PF:1.0000 Freq:0Hz Lamp Flux:6330.08x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

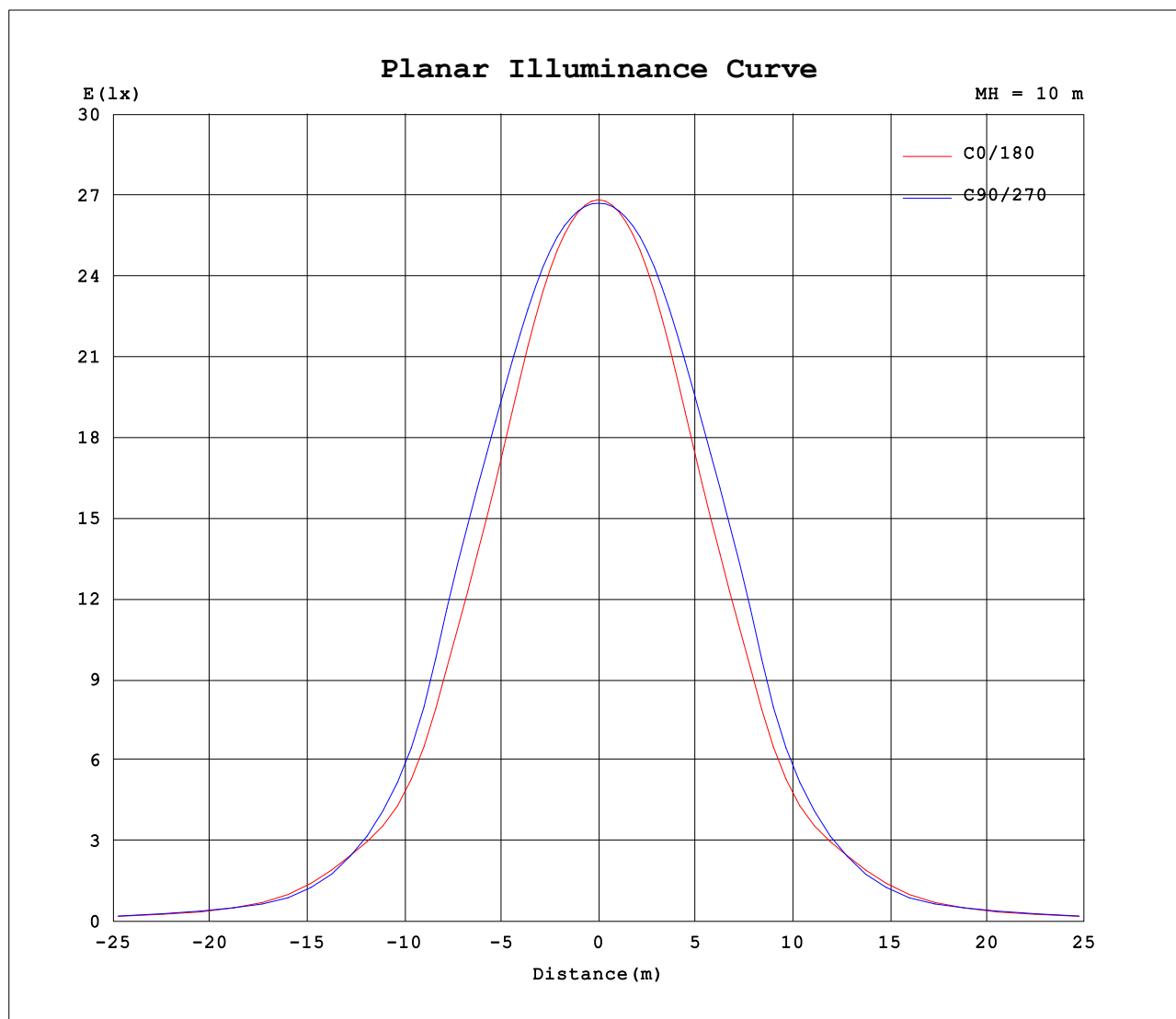
AvgL	cd/m2
L_0~180 (65) av	1387
L_0~180 (75) av	1495
L_0~180 (85) av	1773
L_90~270 (65) av	1523
L_90~270 (75) av	1460
L_90~270 (85) av	1299
L_45 (65) av	1520
L_45 (75) av	1378
L_45 (85) av	1250

Standard: GB/T 29293-2012

C Range: 0 - 90DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-07-15

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: 2021-07-15

$\gamma$  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:

```