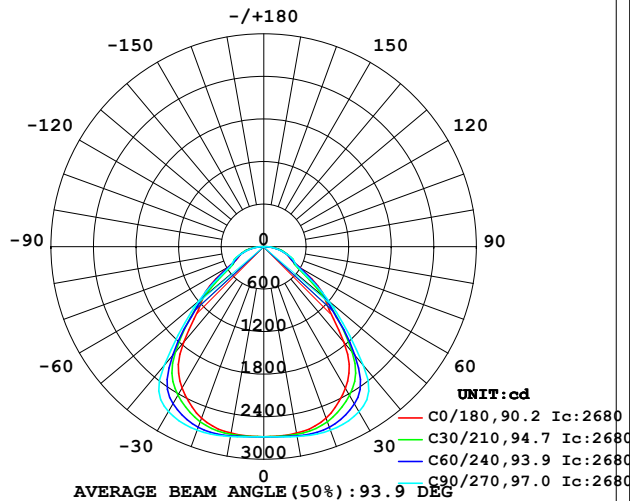


## LUMINAIRE PHOTOMETRIC TEST REPORT

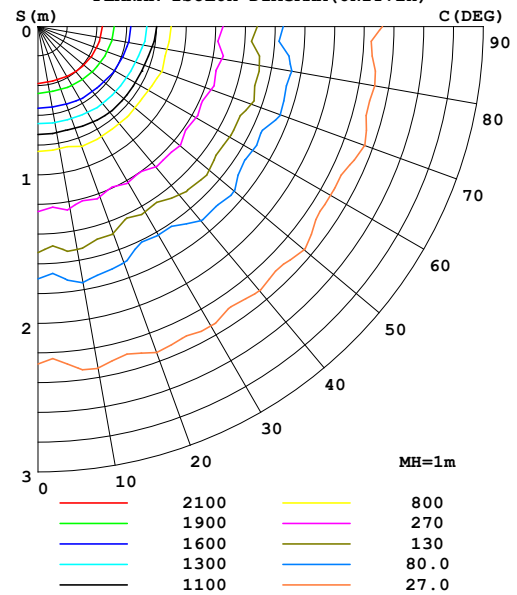
Test:U:35.000V I:1.4000A P:49.000W PF:0.9440 Freq:50.00Hz Lamp Flux:6338.98x1 lm		
NAME: LTY40X060CT19 700x2mA_3500K	TYPE: YALA ONE	WEIGHT:
SPEC.:	DIM.: 600X600x12	SERIAL No.:1
MFR.: TECONEX	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 129.37 lm/W			
MODEL	LTY40X060CT19	Imax(cd)	2754	S/MH(C0/180)	1.26
NOMINAL POWER(W)	52	LOR(%)	100.0	S/MH(C90/270)	1.35
RATED VOLTAGE(V)	35	TOTAL FLUX(lm)	6339.0	$\eta$ UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	6338.98	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	1.35

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:2021-06-26

$\gamma$  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	2670	2701	2718	2701	2670	2701	2718	2701	0- 10	256.9	256.9	4.05,4.05
20	2572	2658	2754	2658	2572	2658	2754	2658	10- 20	762.3	1019	16.1,16.1
30	2306	2452	2688	2452	2306	2452	2688	2452	20- 30	1191	2211	34.9,34.9
40	1757	1864	2185	1864	1757	1864	2185	1864	30- 40	1406	3617	57.1,57.1
50	1124	1113	1204	1113	1124	1113	1204	1113	40- 50	1151	4767	75.2,75.2
60	581.2	604.3	536.5	604.3	581.2	604.3	536.5	604.3	50- 60	733.3	5501	86.8,86.8
70	364.5	330.3	380.9	330.3	364.5	330.3	380.9	330.3	60- 70	457.1	5958	94,94
80	202.0	183.1	181.4	183.1	202.0	183.1	181.4	183.1	70- 80	283.8	6242	98.5,98.5
90	0.2140	0	0	0	0.2140	0	0	0	80- 90	97.47	6339	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): 4355.3 lm

%lum = 68.7%

%lamp = 68.7%

Conical surface Flux(120deg): 5500.7 lm

%lum = 86.8%

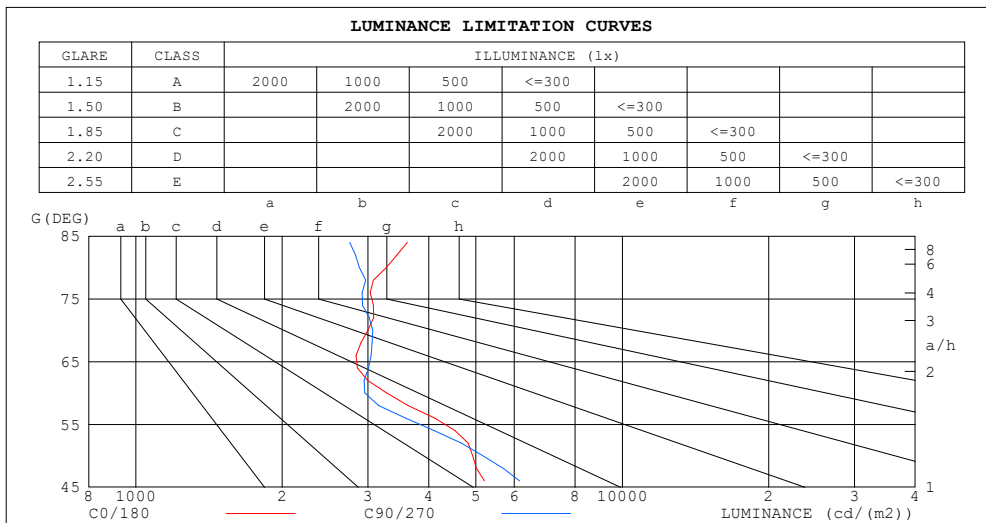
%lamp = 86.8%

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

$\gamma$  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:1.4000A P:49.000W PF:0.9440 Freq:50.00Hz Lamp Flux:6338.98x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4338	3302
80	3278	2879
75	3277	3116
70	3002	3068
65	2962	3123
60	3275	2956
55	4642	4206
50	4925	5160
45	5663	6790

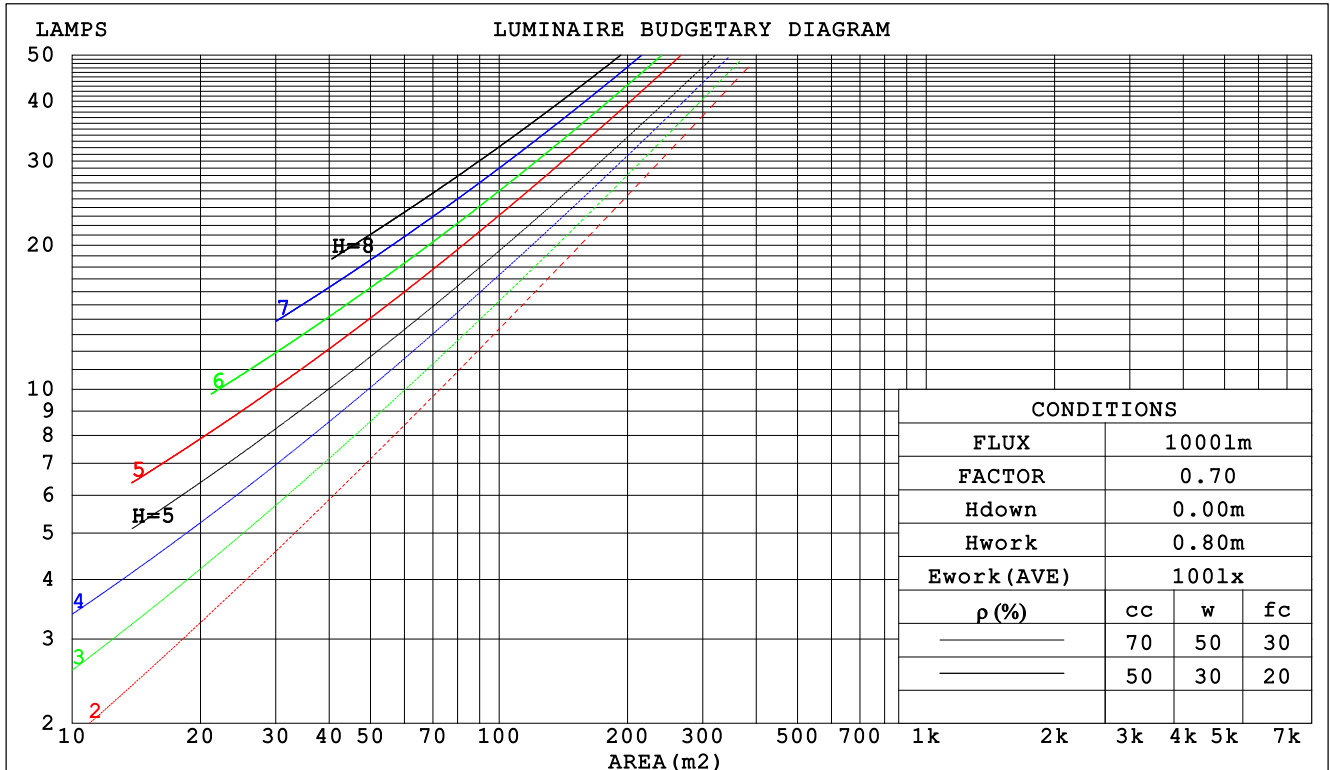
C Range: 0 - 90DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-06-26

$\gamma$  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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:35.000V I:1.4000A P:49.000W PF:0.9440 Freq:50.00Hz Lamp Flux:6338.98x1 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	.88	.86
2.0	.94	.88	.83	.92	.87	.82	.89	.84	.80	.85	.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	.47	.59	.52	.47	.58	.51	.47	.56	.51	.46	.44
7.0	.57	.48	.43	.56	.48	.42	.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:1.4000A P:49.000W PF:0.9440 Freq:50.00Hz Lamp Flux:6338.98x1 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	.266	.151	.048	.252	.145	.046	.240	.139	.044	.229	.133	.043		
2.0	.258	.141	.043	.252	.139	.043	.240	.134	.041	.230	.129	.040	.220	.124	.039		
3.0	.241	.128	.038	.235	.126	.038	.225	.122	.037	.216	.118	.036	.208	.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	.184	.098	.029		
6.0	.196	.098	.028	.192	.097	.028	.186	.095	.028	.179	.093	.027	.173	.091	.027		
7.0	.184	.091	.026	.181	.090	.026	.175	.088	.025	.169	.087	.025	.163	.085	.025		
8.0	.173	.085	.024	.170	.084	.024	.165	.082	.023	.159	.081	.023	.155	.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	.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:2021-06-26

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:1.4000A P:49.000W PF:0.9440 Freq:50.00Hz Lamp Flux:6338.98x1 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	16.8	18.2	17.1	18.4	18.6	17.1	18.5	17.4	18.7	18.9
	17.7	19.0	18.0	19.2	19.5	17.9	19.2	18.2	19.4	19.7
	18.3	19.5	18.6	19.7	19.9	18.3	19.6	18.7	19.8	20.0
	18.8	19.9	19.1	20.2	20.5	18.8	19.9	19.1	20.2	20.4
	19.0	20.1	19.4	20.4	20.7	18.9	20.0	19.3	20.3	20.6
	19.2	20.3	19.6	20.6	20.8	19.0	20.1	19.4	20.3	20.6
4H	17.1	18.3	17.4	18.6	18.8	17.4	18.6	17.7	18.8	19.1
	18.3	19.4	18.7	19.7	20.0	18.5	19.5	18.8	19.8	20.1
	19.0	20.0	19.4	20.3	20.6	19.0	20.0	19.4	20.3	20.6
	19.8	20.6	20.1	20.9	21.3	19.6	20.4	20.0	20.8	21.1
	20.1	20.9	20.5	21.2	21.6	19.8	20.6	20.2	21.0	21.3
	20.3	21.1	20.8	21.4	21.8	20.0	20.7	20.4	21.1	21.5
8H	19.3	20.1	19.7	20.4	20.8	19.3	20.1	19.7	20.4	20.8
	20.2	20.9	20.7	21.3	21.7	20.0	20.7	20.4	21.1	21.5
	20.7	21.3	21.1	21.7	22.1	20.3	20.9	20.8	21.3	21.8
	21.1	21.6	21.5	22.0	22.5	20.6	21.1	21.0	21.5	22.0
12H	19.3	20.0	19.7	20.4	20.8	19.3	20.0	19.7	20.4	20.8
	20.3	20.9	20.8	21.3	21.8	20.1	20.7	20.6	21.1	21.6
	20.8	21.3	21.3	21.8	22.2	20.5	21.0	20.9	21.4	21.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.6				
1.5H	+ 0.2 / - 0.4					+ 0.3 / - 0.2				
2.0H	+ 0.7 / - 0.5					+ 1.0 / - 0.8				

CIE Pub.117, 6339 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:2021-06-26

$\gamma$  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:1.4000A P:49.000W PF:0.9440 Freq:50.00Hz Lamp Flux:6338.98x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

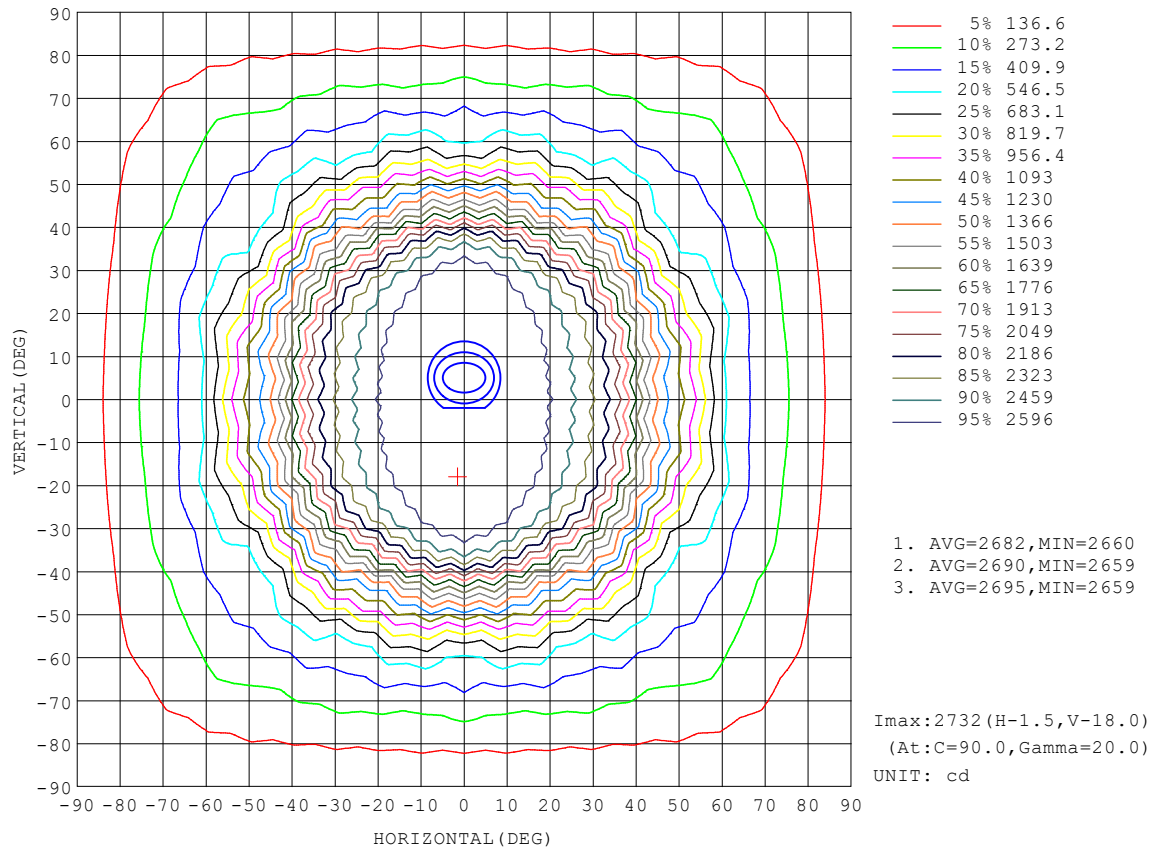
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	65	55	48	64	54	48	63	54	48	42
0.80	75	64	58	74	64	58	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	78	89	82	77	71
2.00	99	92	86	97	91	86	94	88	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:2021-06-26

$\gamma$  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:1.4000A P:49.000W PF:0.9440 Freq:50.00Hz Lamp Flux:6338.98x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



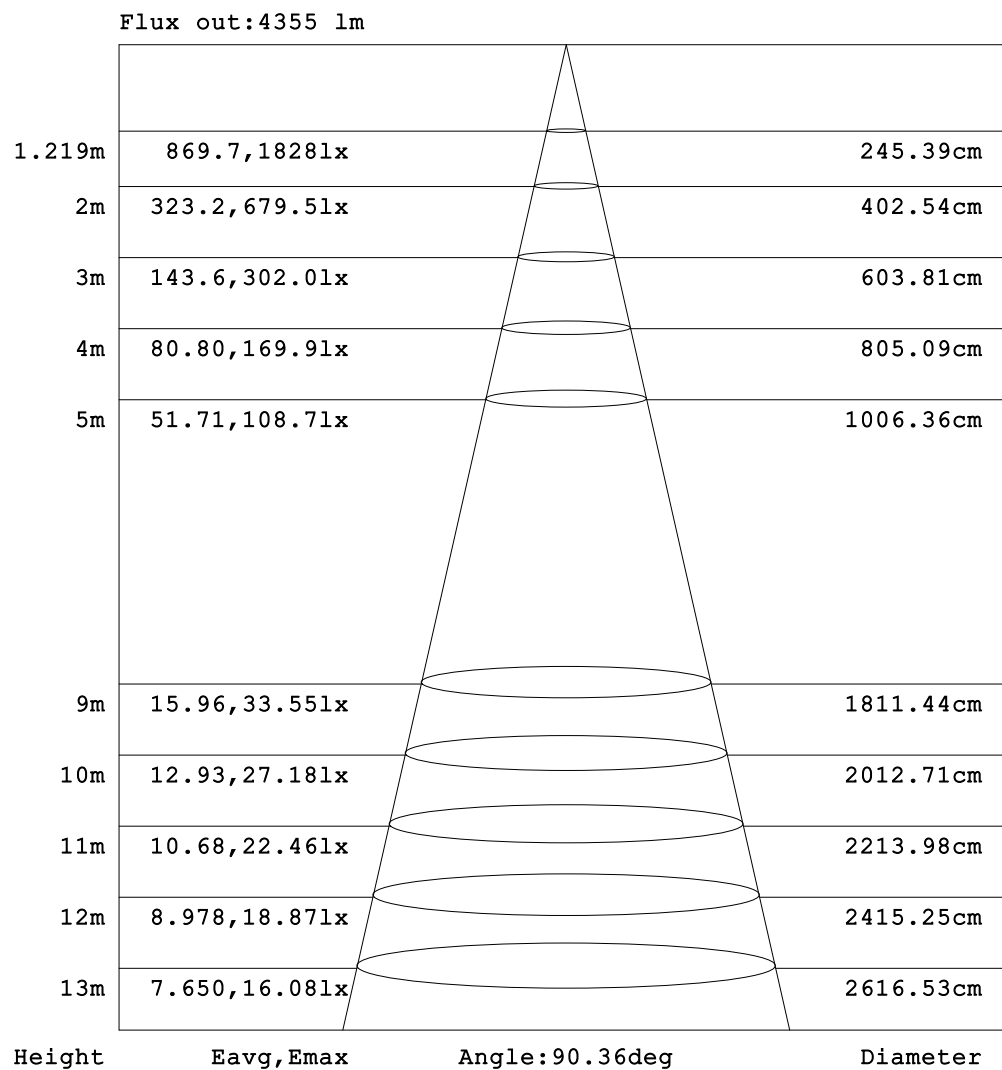
C Range: 0 - 90DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-06-26

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:



### AAI Figure

Test:U:35.000V I:1.4000A P:49.000W PF:0.9440 Freq:50.00Hz Lamp Flux:6338.98x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



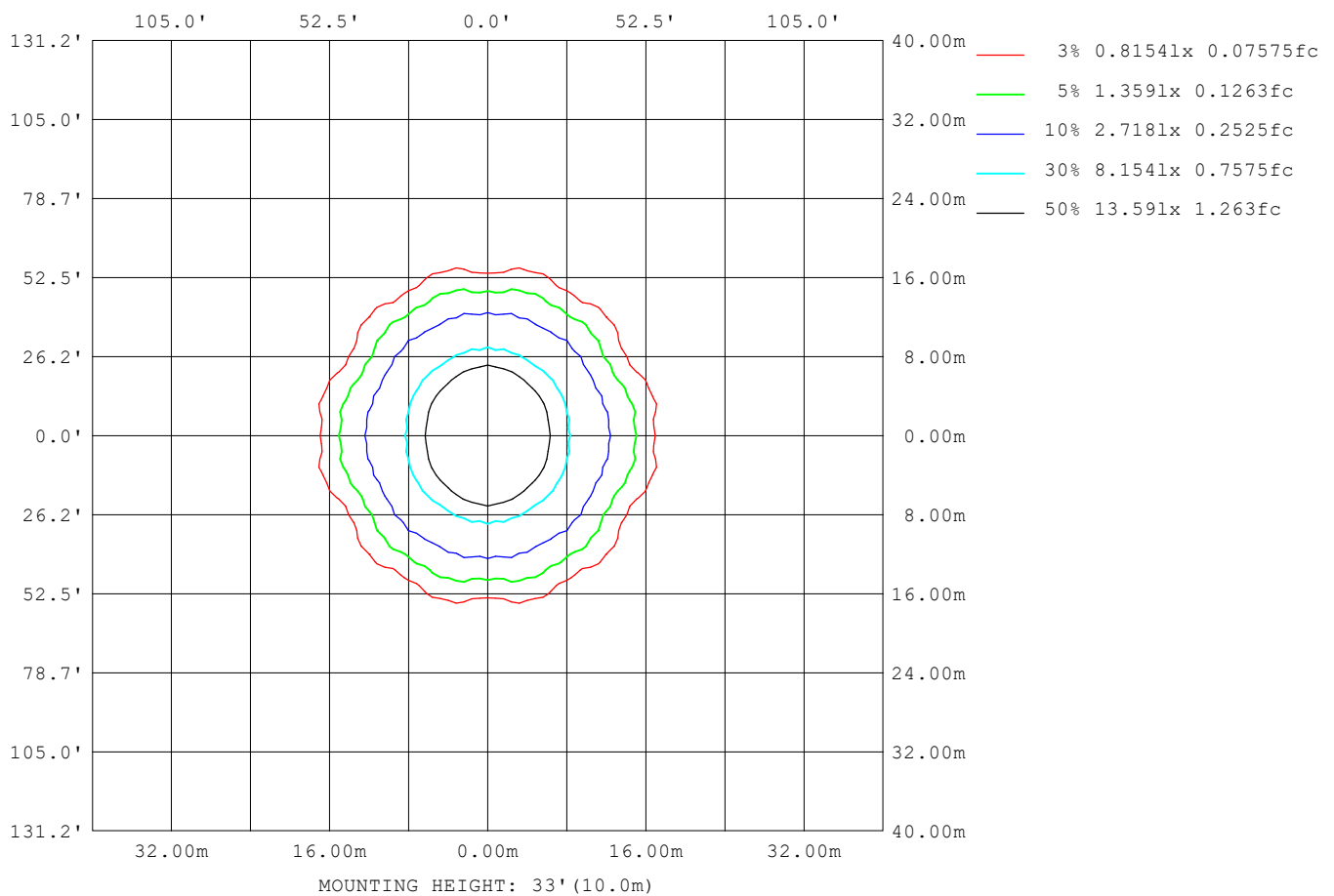
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:1.4000A P:49.000W PF:0.9440 Freq:50.00Hz Lamp Flux:6338.98x1 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:1.4000A P:49.000W PF:0.9440 Freq:50.00Hz Lamp Flux:6338.98x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

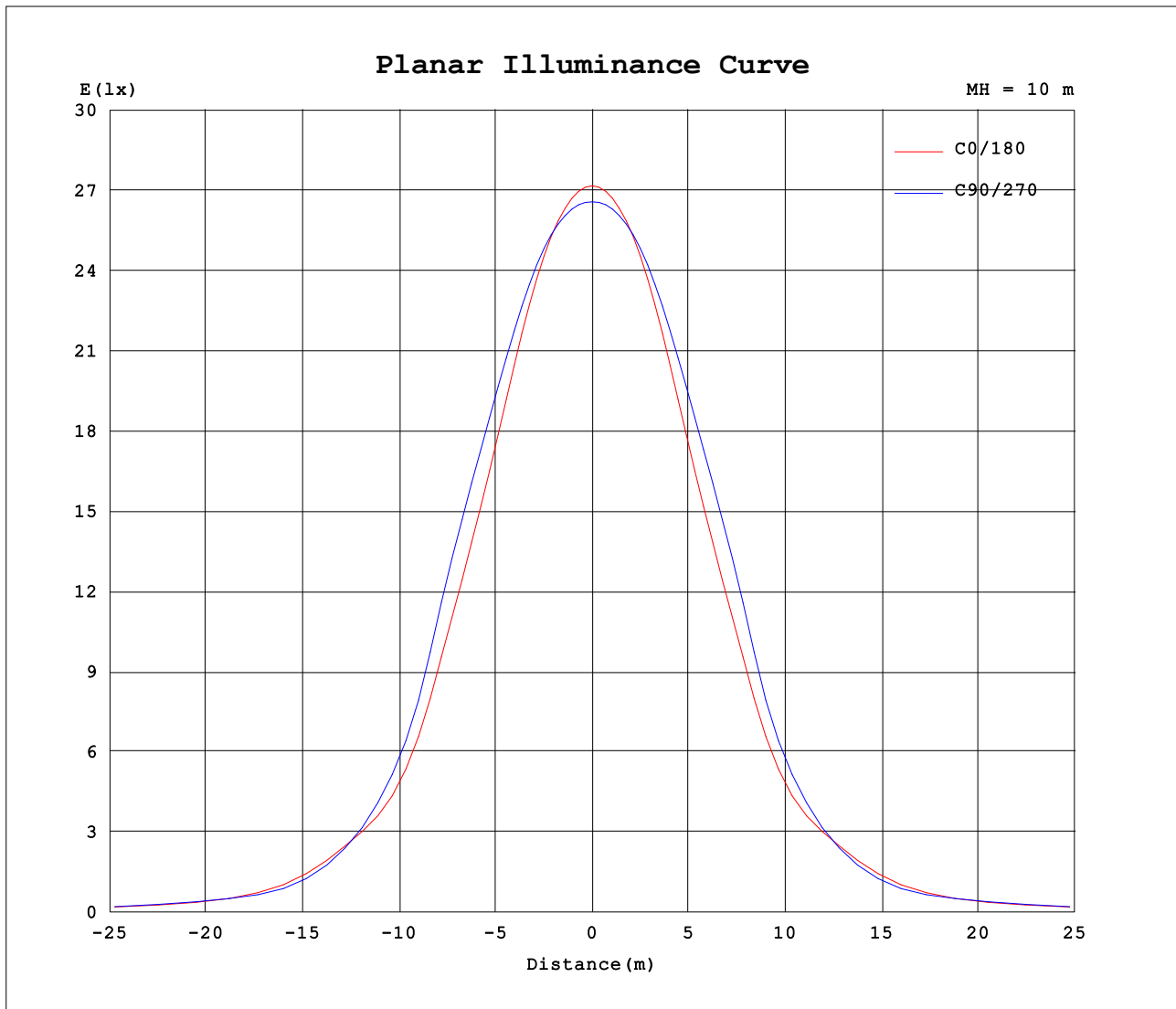
AvgL	cd/m2
L_0~180 (65) av	2793
L_0~180 (75) av	3011
L_0~180 (85) av	3611
L_90~270 (65) av	3057
L_90~270 (75) av	2938
L_90~270 (85) av	2653
L_45 (65) av	3053
L_45 (75) av	2779
L_45 (85) av	2558

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:

```