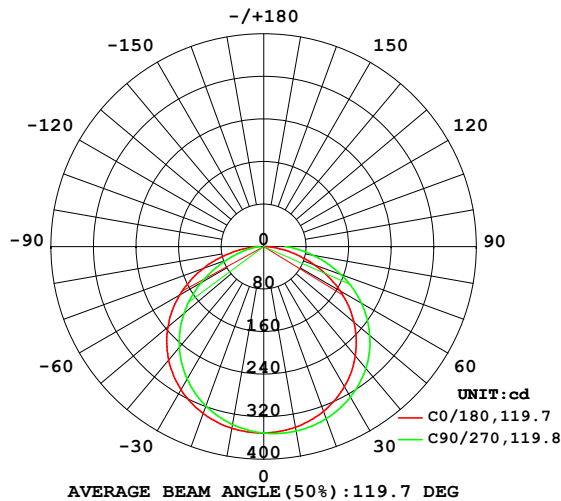


LUMINAIRE PHOTOMETRIC TEST REPORT

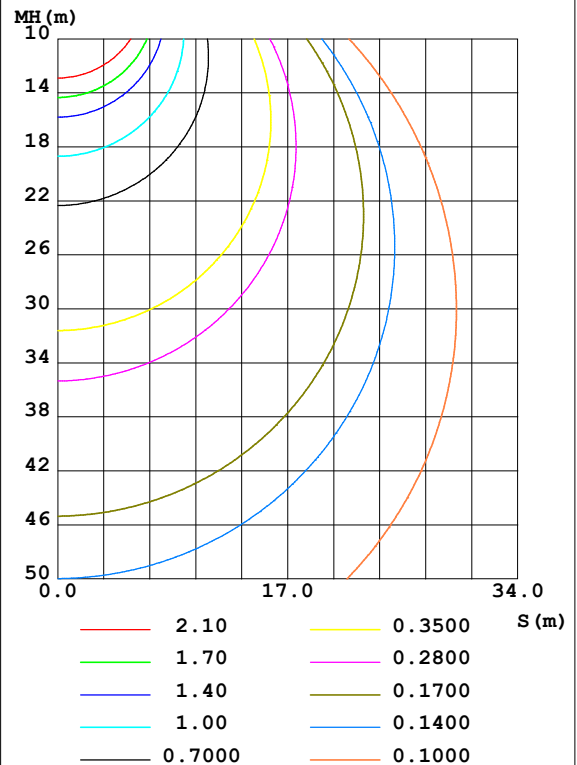
Test:U:24.00V I:0.3227A P:7.745W PF:1.000 Lamp Flux:1102.46x1 lm		
NAME: LD97E 8W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.002*1*0.01	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 142.34 lm/W			
MODEL	GLDD-CG06	I <sub>max</sub> (cd)	352.7	S/MH (C0/180)	1.32
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	100V	TOTAL FLUX (lm)	1102.5	η UP, DN (C0-180)	0.0, 54.8
NOMINAL FLUX (lm)	1102.46	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 45.2
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)		η down (%)	100.0	CIBSE SHR MAX	1.50

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2021-02-02

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity: 65.0%  
Test Distance: 9.660m [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	344.9	350.0	352.3	350.2	346.9	342.1	339.6	341.9	0- 10	33.24	33.24	3.02,3.02
20	329.5	339.5	344.3	340.4	333.8	323.7	318.9	323.4	10- 20	96.04	129.3	11.7,11.7
30	304.0	319.0	326.5	320.9	311.2	295.5	288.0	295.0	20- 30	148.0	277.2	25.1,25.1
40	268.2	288.4	298.9	291.7	278.2	257.3	247.0	256.1	30- 40	182.5	459.7	41.7,41.7
50	221.7	247.3	260.3	252.3	235.4	208.9	195.8	206.9	40- 50	194.5	654.2	59.3,59.3
60	165.5	196.5	212.1	202.9	182.9	151.3	136.3	147.9	50- 60	181.0	835.2	75.8,75.8
70	102.4	138.1	154.8	144.2	121.5	88.90	74.79	82.68	60- 70	142.8	978.0	88.7,88.7
80	41.17	78.57	93.62	80.29	57.65	36.00	30.22	26.13	70- 80	88.13	1066	96.7,96.7
90	2.299	28.86	40.84	25.04	10.09	10.71	7.577	2.389	80- 90	36.29	1102	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): 557.01 lm

%lum = 50.5%

%lamp = 50.5%

Conical surface Flux(120deg): 835.21 lm

%lum = 75.8%

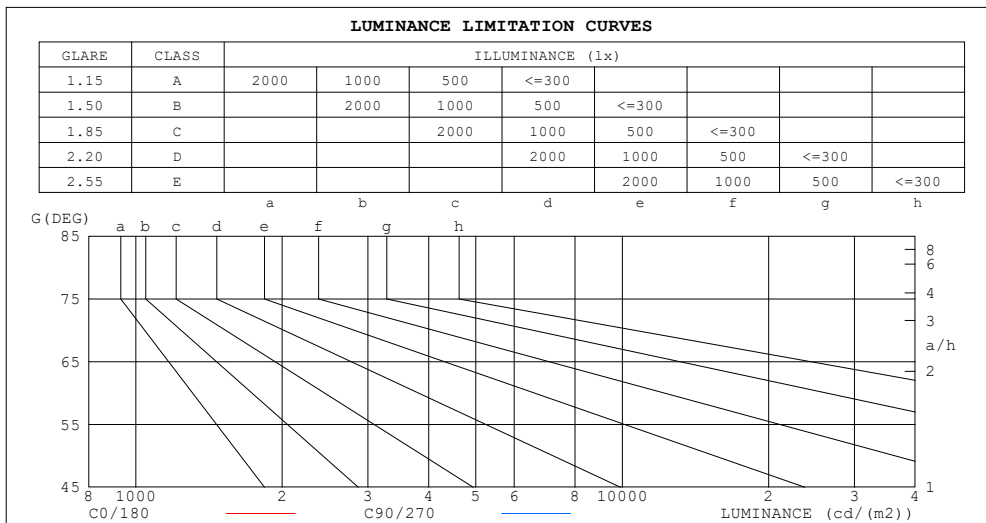
%lamp = 75.8%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-02-02

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
 Humidity:65.0%  
 Test Distance:9.660m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.3227A P:7.745W PF:1.000 Lamp Flux:1102.46x1 lm		
NAME: LD97E 8W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.002*1*0.01	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	9489374	37521109
80	11822448	26959456
75	13575427	23962387
70	14926695	22630934
65	15878435	21814905
60	16509747	21210039
55	16933517	20705118
50	17197369	20249824
45	17362962	19875840

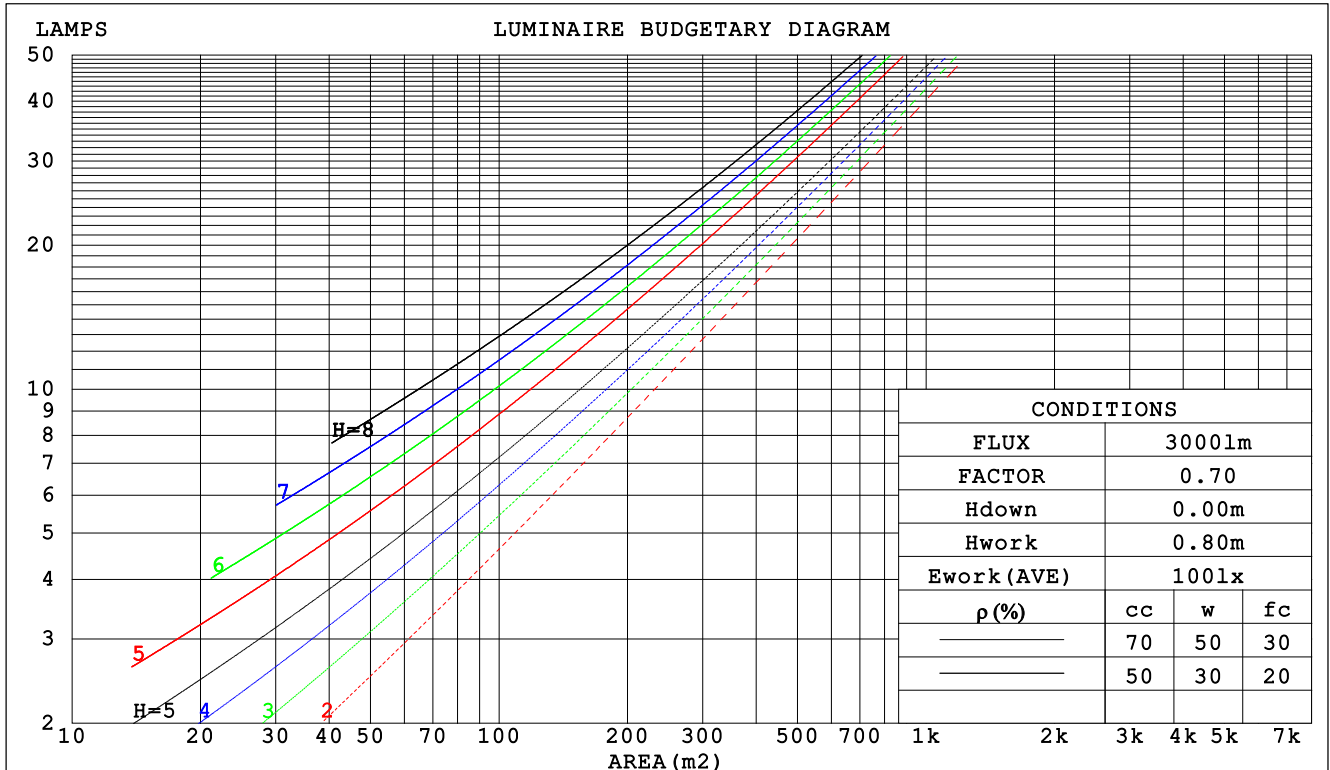
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-02-02

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:9.660m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.3227A P:7.745W PF:1.000 Lamp Flux:1102.46x1 lm		
NAME: LD97E 8W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.002*1*0.01	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	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
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	1.03	.98	.94	1.00	.96	.92	.96	.93	.89	.92	.89	.87	.89	.86	.84	.82
2.0	.89	.82	.76	.87	.80	.75	.83	.78	.73	.80	.75	.71	.77	.73	.70	.67
3.0	.78	.69	.62	.76	.68	.62	.73	.66	.61	.70	.64	.60	.68	.63	.59	.56
4.0	.69	.59	.52	.67	.59	.52	.65	.57	.51	.62	.56	.51	.60	.55	.50	.48
5.0	.61	.52	.45	.60	.51	.45	.58	.50	.44	.56	.49	.44	.54	.48	.43	.41
6.0	.55	.46	.39	.54	.45	.39	.52	.44	.38	.50	.43	.38	.49	.43	.38	.36
7.0	.50	.41	.34	.49	.40	.34	.47	.40	.34	.46	.39	.34	.44	.38	.33	.31
8.0	.45	.36	.31	.45	.36	.30	.43	.36	.30	.42	.35	.30	.41	.34	.30	.28
9.0	.41	.33	.27	.41	.33	.27	.40	.32	.27	.39	.32	.27	.38	.31	.27	.25
10.0	.38	.30	.25	.38	.30	.25	.37	.29	.25	.36	.29	.24	.35	.29	.24	.23



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-02-02

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
 Humidity:65.0%  
 Test Distance:9.660m [K=1.0000]  
 Remarks:

## WEC AND CCEC

Test:U:24.00V I:0.3227A P:7.745W PF:1.000 Lamp Flux:1102.46x1 lm					
NAME: LD97E 8W			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.: EVERFINE			SUR.:0.002*1*0.01		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	.332	.189	.060	.325	.185	.059	.312	.179	.057	.299	.173	.055	.288	.167	.054		
2.0	.306	.168	.052	.300	.165	.051	.288	.160	.050	.277	.156	.049	.267	.151	.048		
3.0	.281	.149	.045	.275	.147	.044	.265	.143	.044	.255	.140	.043	.246	.136	.042		
4.0	.257	.134	.039	.252	.132	.039	.243	.129	.039	.234	.126	.038	.226	.123	.037		
5.0	.237	.121	.035	.232	.119	.035	.224	.117	.034	.216	.114	.034	.209	.112	.034		
6.0	.219	.110	.031	.215	.109	.031	.208	.106	.031	.201	.104	.031	.194	.102	.030		
7.0	.203	.100	.028	.200	.099	.028	.193	.098	.028	.187	.096	.028	.181	.094	.028		
8.0	.189	.092	.026	.186	.092	.026	.180	.090	.026	.175	.089	.026	.170	.087	.025		
9.0	.177	.086	.024	.174	.085	.024	.169	.084	.024	.164	.082	.024	.159	.081	.023		
10.0	.166	.080	.022	.164	.079	.022	.159	.078	.022	.155	.077	.022	.150	.076	.022		

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	.182	.156	.133	.156	.134	.114	.106	.092	.079	.061	.053	.046	.020	.017	.015	
2.0	.174	.132	.096	.149	.113	.083	.102	.079	.058	.059	.046	.034	.019	.015	.011	
3.0	.167	.114	.073	.143	.099	.063	.098	.069	.044	.057	.040	.026	.018	.013	.009	
4.0	.159	.101	.057	.136	.087	.050	.094	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.151	.091	.046	.130	.079	.040	.090	.055	.028	.052	.032	.017	.017	.011	.006	
6.0	.144	.083	.038	.124	.071	.033	.085	.050	.024	.050	.029	.014	.016	.010	.005	
7.0	.137	.076	.033	.118	.066	.028	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.028	.112	.061	.025	.078	.043	.017	.045	.025	.010	.015	.008	.003	
9.0	.124	.065	.025	.107	.056	.022	.074	.040	.015	.043	.023	.009	.014	.008	.003	
10.0	.118	.061	.022	.102	.053	.019	.071	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-02-02

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:9.660m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.3227A P:7.745W PF:1.000    Lamp Flux:1102.46x1 lm										
NAME: LD97E 8W					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: EVERFINE					SUR.:0.002*1*0.01			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	47.0	48.6	47.3	48.8	49.0	48.0	49.5	48.2	49.7	49.9
3H	48.6	50.0	48.9	50.3	50.5	50.0	51.4	50.3	51.7	51.9
4H	49.2	50.6	49.5	50.8	51.1	51.0	52.4	51.3	52.6	52.9
6H	49.6	50.9	49.9	51.2	51.5	51.9	53.2	52.2	53.5	53.7
8H	49.7	51.0	50.1	51.3	51.6	52.3	53.6	52.7	53.9	54.2
12H	49.8	51.0	50.1	51.3	51.6	52.8	54.0	53.1	54.3	54.6
4H        2H	47.9	49.3	48.2	49.5	49.8	48.6	50.0	48.9	50.2	50.5
3H	49.7	50.9	50.0	51.2	51.5	50.8	52.1	51.2	52.4	52.7
4H	50.4	51.6	50.8	51.9	52.2	52.0	53.1	52.4	53.4	53.8
6H	51.0	52.0	51.4	52.4	52.7	53.1	54.1	53.5	54.4	54.8
8H	51.2	52.1	51.6	52.5	52.9	53.6	54.6	54.1	54.9	55.3
12H	51.3	52.2	51.8	52.6	53.0	54.2	55.0	54.6	55.4	55.8
8H        4H	51.0	51.9	51.4	52.3	52.7	52.3	53.2	52.7	53.6	54.0
6H	51.8	52.6	52.3	53.0	53.4	53.7	54.4	54.1	54.8	55.3
8H	52.1	52.8	52.6	53.3	53.7	54.4	55.1	54.8	55.5	55.9
12H	52.4	53.0	52.9	53.4	53.9	55.1	55.7	55.6	56.2	56.7
12H        4H	51.1	52.0	51.5	52.4	52.8	52.3	53.2	52.8	53.6	54.0
6H	52.0	52.7	52.5	53.2	53.6	53.8	54.5	54.2	54.9	55.3
8H	52.5	53.1	52.9	53.5	54.0	54.5	55.1	55.0	55.6	56.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.5					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 1102 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.3)

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-02-02

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:9.660m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.3227A P:7.745W PF:1.000 Lamp Flux:1102.46x1 lm		
NAME: LD97E 8W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.002*1*0.01	Shielding Angle:

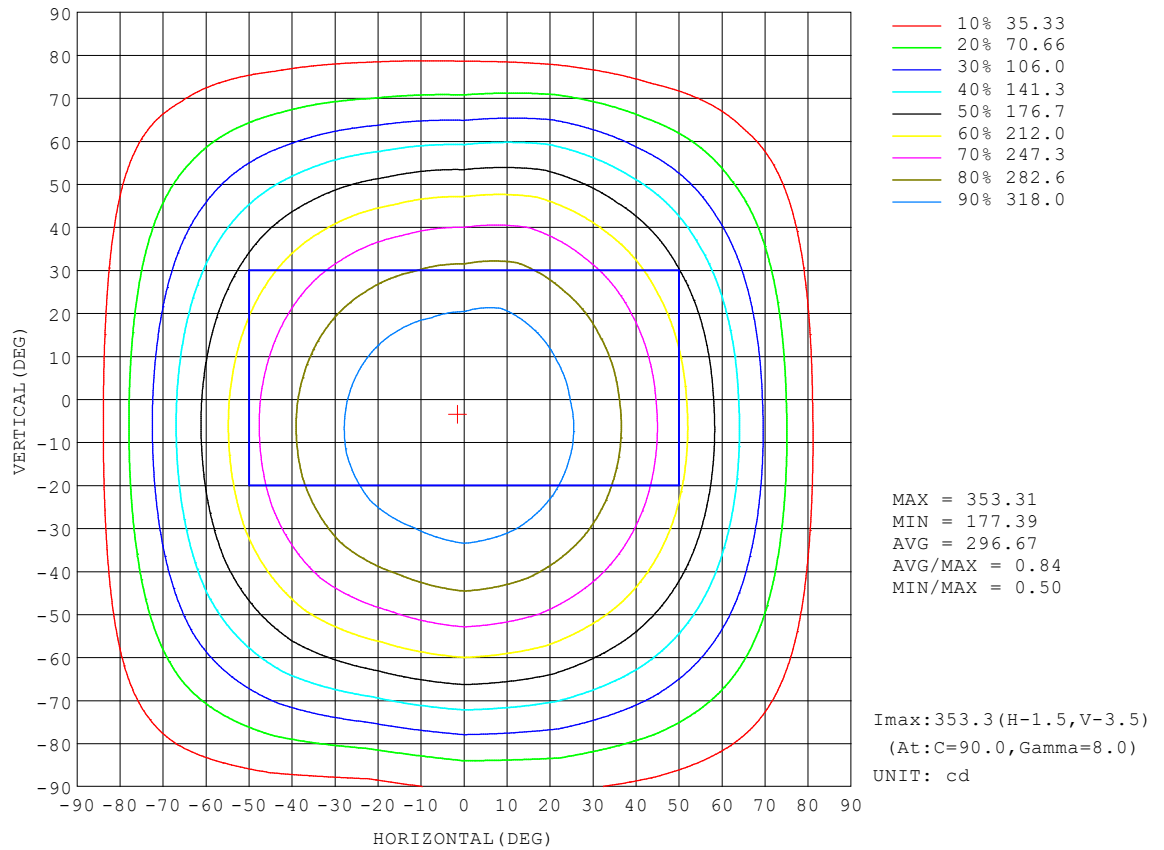
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	56	44	37	55	44	37	54	43	37	30
0.80	66	54	46	65	53	46	63	53	46	39
1.00	74	63	55	73	62	55	71	64	54	47
1.25	81	70	63	80	70	63	77	68	62	54
1.50	86	76	69	85	75	68	82	73	67	59
2.00	94	84	78	92	83	77	88	81	75	67
2.50	98	89	83	95	88	82	92	85	80	72
3.00	101	94	88	99	92	87	95	89	85	76
4.00	105	99	94	103	97	93	98	94	90	81
5.00	108	103	98	105	101	97	101	97	94	84
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-02-02

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:9.660m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:24.00V I:0.3227A P:7.745W PF:1.000 Lamp Flux:1102.46x1 lm		
NAME: LD97E 8W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.002*1*0.01	Shielding Angle:



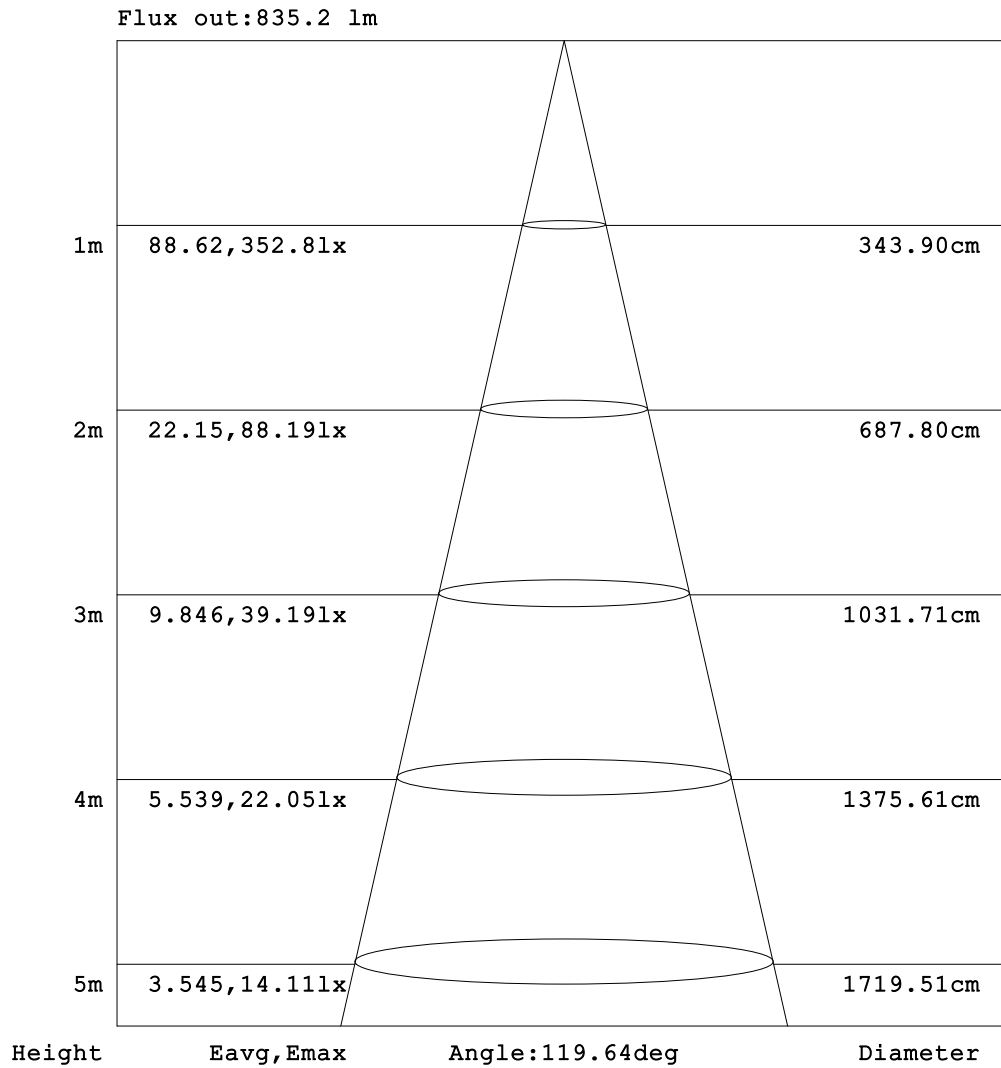
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-02-02

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:9.660m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:24.00V I:0.3227A P:7.745W PF:1.000 Lamp Flux:1102.46x1 lm		
NAME: LD97E 8W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.002*1*0.01	Shielding Angle:



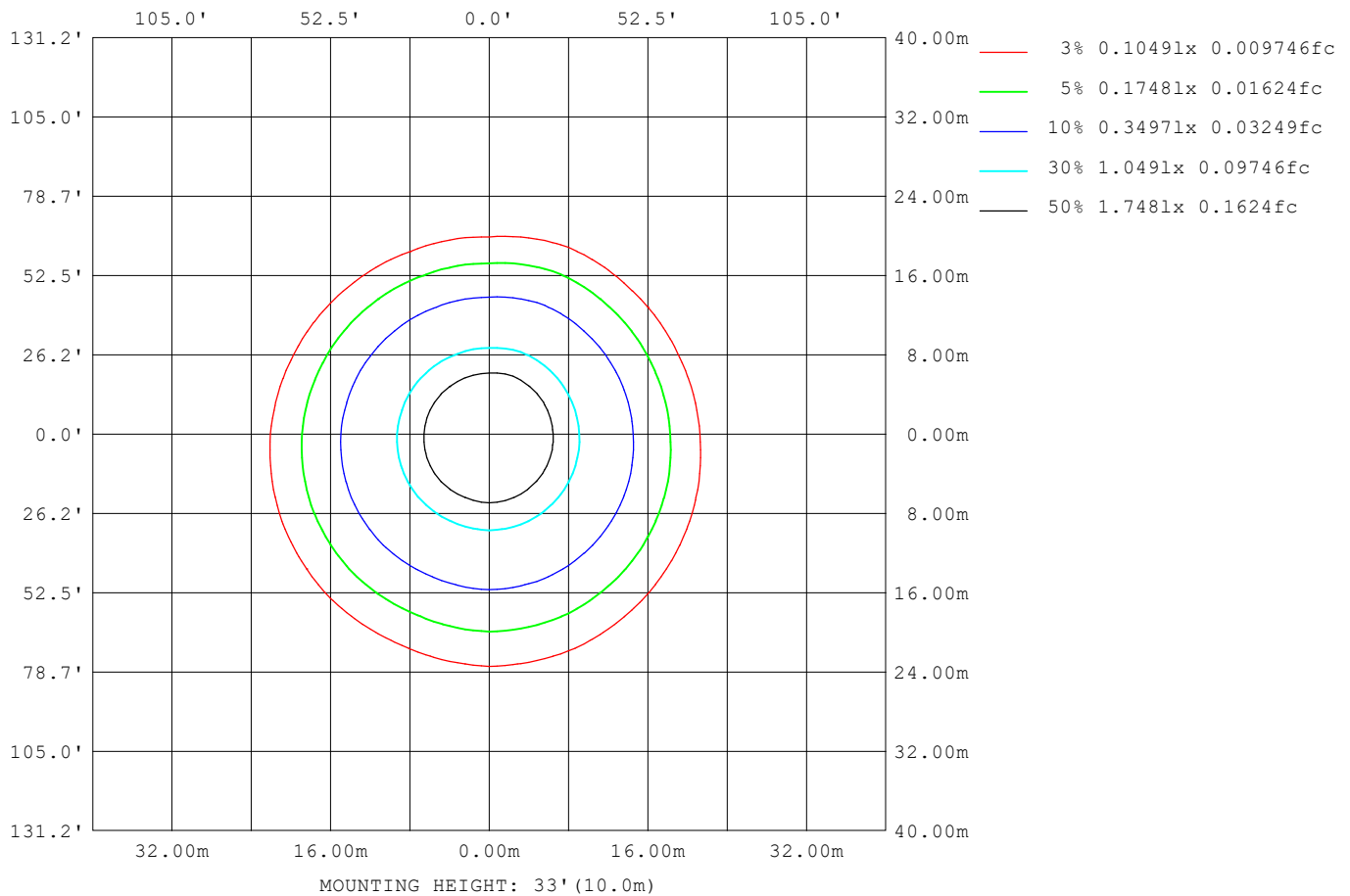
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-02-02

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
 Humidity:65.0%  
 Test Distance:9.660m [K=1.0000]  
 Remarks:

### ISOLUX DIAGRAM

Test:U:24.00V I:0.3227A P:7.745W PF:1.000 Lamp Flux:1102.46x1 lm		
NAME: LD97E 8W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.002*1*0.01	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-02-02

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:9.660m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:24.00V I:0.3227A P:7.745W PF:1.000 Lamp Flux:1102.46x1 lm		
NAME: LD97E 8W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.002*1*0.01	Shielding Angle:

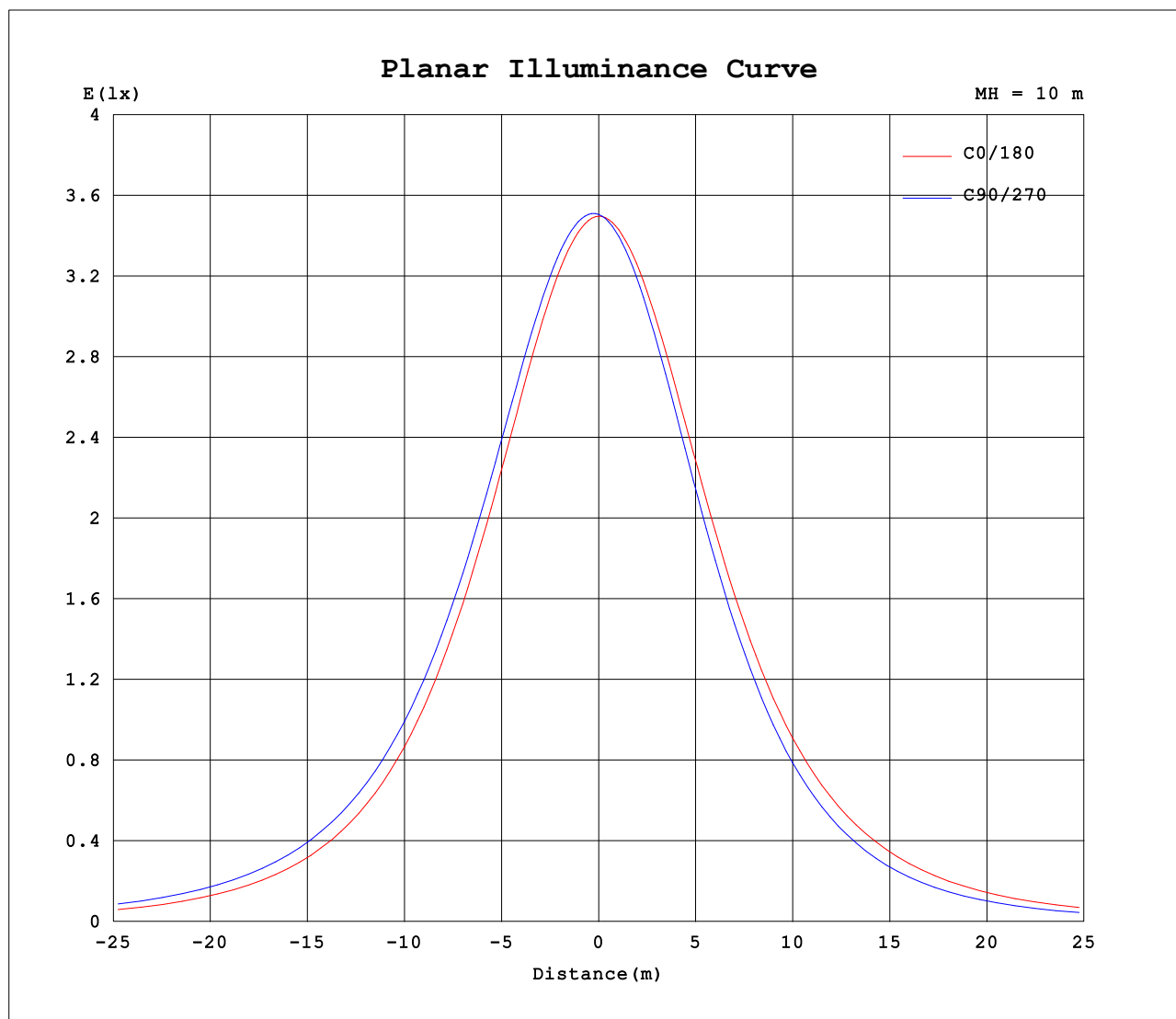
AvgL	cd/m2
L_0~180 (65) av	17017802
L_0~180 (75) av	15434082
L_0~180 (85) av	13224554
L_90~270 (65) av	17112195
L_90~270 (75) av	16754602
L_90~270 (85) av	23329352
L_45 (65) av	17101575
L_45 (75) av	16024970
L_45 (85) av	18854845

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2021-02-02

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:9.660m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2021-02-02

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity: 65.0%  
Test Distance: 9.660m [K=1.0000]  
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:9.660m [K=1.0000]
Remarks:

```