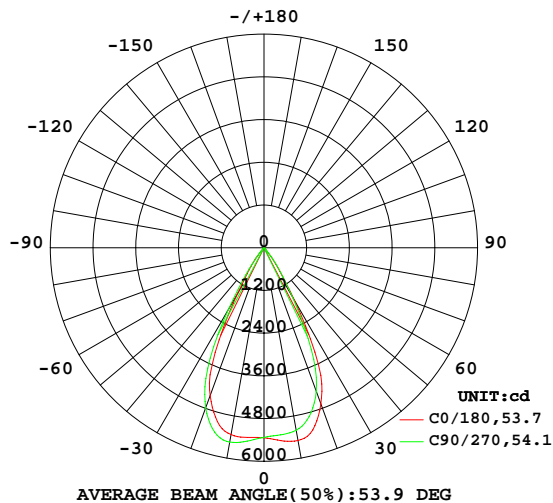


## LUMINAIRE PHOTOMETRIC TEST REPORT

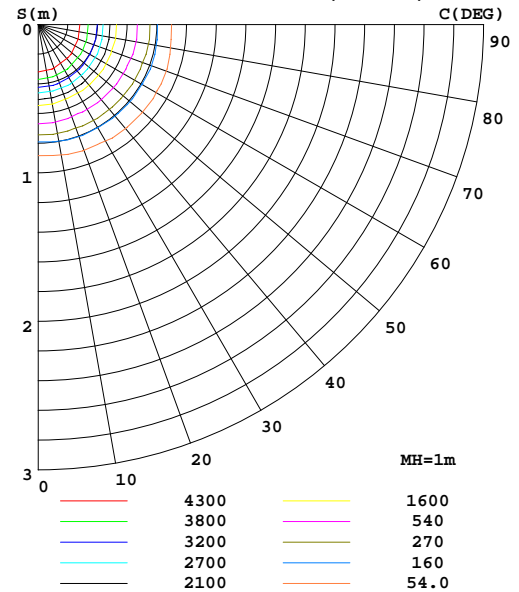
Test:U:229.99V I:0.1838A P:40.632W PF:0.9614 Freq:49.80Hz Lamp Flux:3960.59x1 lm					
NAME: LENO-C		TYPE:		WEIGHT:	
SPEC.:		DIM.: 1190*160*30		SERIAL No.:	
MFR.: NEXOL		SUR.:1.168*0.06		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 97.47 lm/W
MODEL		Imax(cd)	5566	S/MH(C0/180)	0.79	
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	0.77	
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	3960.6	$\eta$ UP,DN(C0-180)	0.0,48.6	
NOMINAL FLUX(lm)	3960.59	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,51.4	
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	230.0	$\eta$ down(%)	100.0	CIBSE SHR MAX	0.75	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



PLANAR ISOLUX DIAGRAM(UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:26 May 2020

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:9.370m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

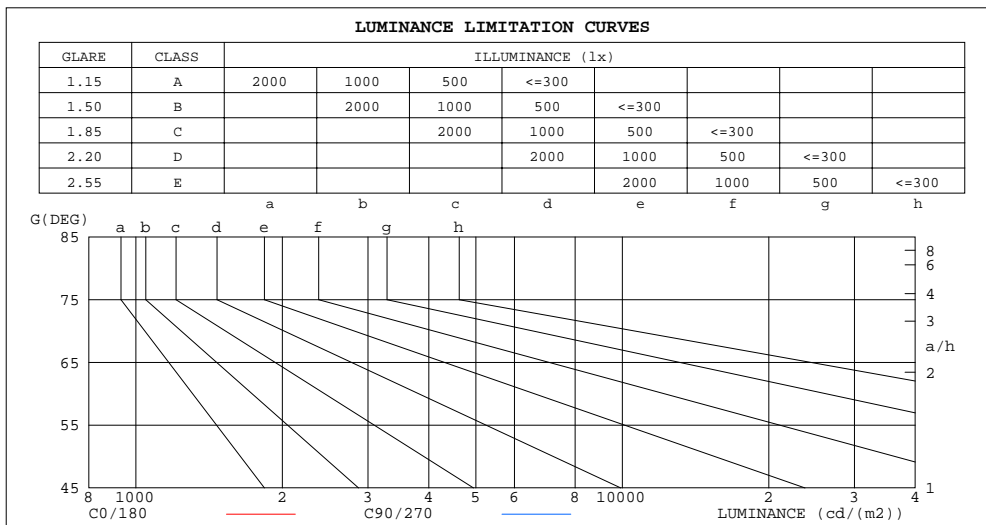
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\%lum, lamp$
10	5496	5335	5206	5209	5330	5457	5543	5565	0- 10	514.1	514.1	13,13
20	4670	4464	4296	4275	4424	4621	4788	4800	10- 20	1429	1943	49.1,49.1
30	1740	1655	1611	1491	1475	1733	2020	1940	20- 30	1490	3433	86.7,86.7
40	194.0	252.5	237.1	247.5	192.6	218.4	190.5	216.2	30- 40	468.0	3901	98.5,98.5
50	11.19	20.43	11.81	19.62	10.70	18.81	11.16	18.88	40- 50	53.77	3955	99.9,99.9
60	0.5493	1.542	0.6483	1.475	0.4848	1.398	0.5453	1.411	50- 60	4.859	3960	100,100
70	0.1818	0.1820	0.1995	0.1819	0.1360	0.1212	0.1665	0.1212	60- 70	0.3412	3960	100,100
80	0.1461	0.1463	0.1562	0.1514	0.1273	0.1126	0.1256	0.1147	70- 80	0.1532	3960	100,100
90	0.1212	0.1267	0.1212	0.1267	0.1212	0.1102	0.1102	0.1102	80- 90	0.1371	3961	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		

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:26 May 2020

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:9.370m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:229.99V I:0.1838A P:40.632W PF:0.9614 Freq:49.80Hz Lamp Flux:3960.59x1 lm		
NAME: LENO-C	TYPE:	WEIGHT:
SPEC.:	DIM.: 1190*160*30	SERIAL No.:
MFR.: NEXOL	SUR.:1.168*0.06	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	22	23
80	12	13
75	9	10
70	8	8
65	7	8
60	16	19
55	81	83
50	248	262
45	742	902

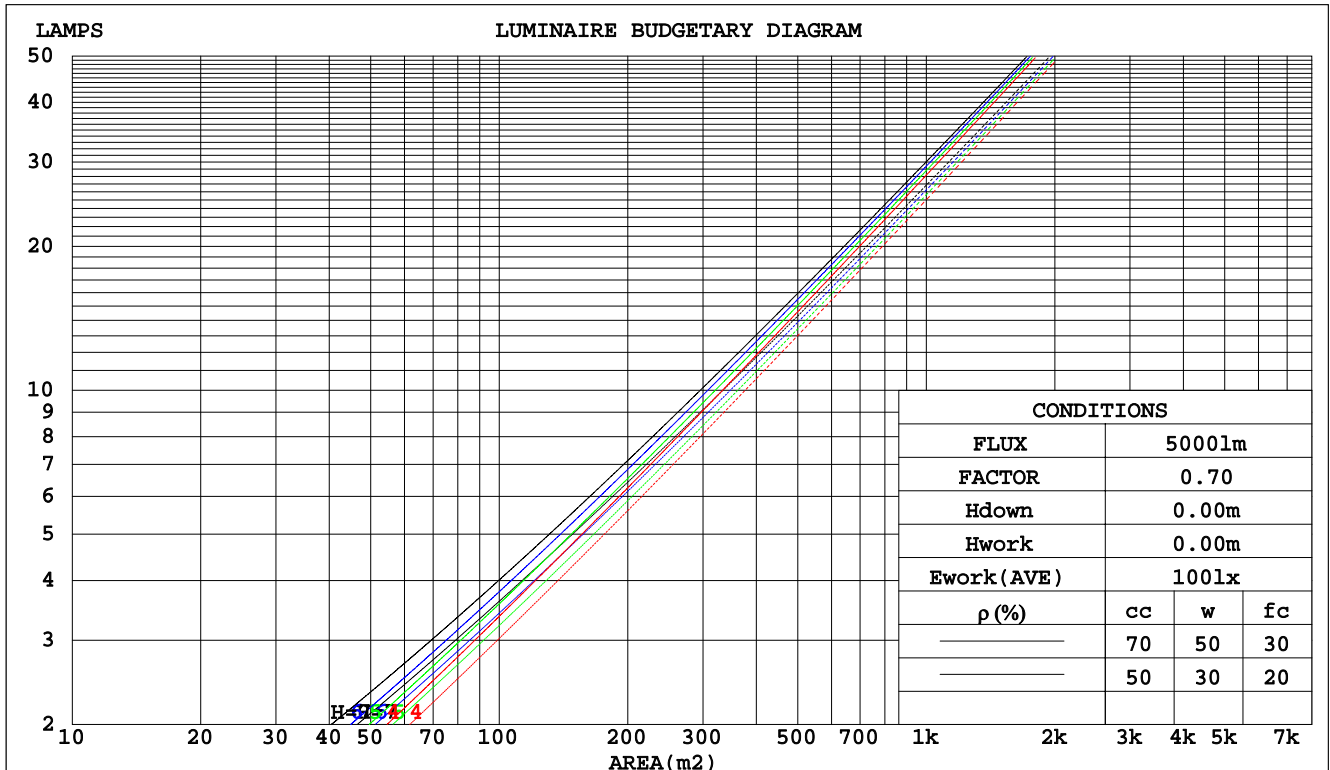
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:26 May 2020

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.10  
 Humidity:65.0%  
 Test Distance:9.370m [K=1.0000]  
 Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:229.99V I:0.1838A P:40.632W PF:0.9614 Freq:49.80Hz Lamp Flux:3960.59x1 lm		
NAME: LENO-C	TYPE:	WEIGHT:
SPEC.:	DIM.: 1190*160*30	SERIAL No.:
MFR.: NEXOL	SUR.:1.168*0.06	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															



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:26 May 2020

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:9.370m [K=1.0000]  
Remarks:

## WEC AND CCEC

Test:U:229.99V I:0.1838A P:40.632W PF:0.9614 Freq:49.80Hz Lamp Flux:3960.59x1 lm		
NAME: LENO-C	TYPE:	WEIGHT:
SPEC.:	DIM.: 1190*160*30	SERIAL No.:
MFR.: NEXOL	SUR.:1.168*0.06	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	.162	.092	.029	.156	.089	.028	.143	.082	.026	.132	.076	.024	.121	.070	.023	
2.0	.154	.084	.026	.148	.082	.025	.138	.077	.024	.128	.072	.023	.119	.068	.021	
3.0	.146	.078	.023	.141	.076	.023	.133	.072	.022	.124	.068	.021	.117	.065	.020	
4.0	.139	.072	.021	.135	.071	.021	.127	.068	.020	.120	.065	.019	.114	.062	.019	
5.0	.133	.068	.020	.129	.066	.019	.122	.064	.019	.116	.061	.018	.111	.059	.018	
6.0	.127	.063	.018	.124	.062	.018	.118	.060	.018	.113	.058	.017	.107	.057	.017	
7.0	.121	.060	.017	.119	.059	.017	.114	.057	.017	.109	.056	.016	.104	.054	.016	
8.0	.116	.057	.016	.114	.056	.016	.110	.055	.016	.105	.053	.015	.101	.052	.015	
9.0	.112	.054	.015	.110	.054	.015	.106	.052	.015	.102	.051	.015	.098	.050	.014	
10.0	.108	.052	.014	.106	.051	.014	.102	.050	.014	.099	.049	.014	.095	.048	.014	

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	.170	.157	.146	.146	.135	.126	.100	.093	.087	.057	.054	.051	.018	.017	.016		
2.0	.154	.133	.115	.132	.114	.099	.090	.079	.069	.052	.046	.041	.017	.015	.013		
3.0	.141	.113	.092	.121	.098	.080	.083	.068	.056	.048	.040	.033	.015	.013	.011		
4.0	.130	.099	.075	.111	.085	.065	.077	.059	.046	.044	.035	.027	.014	.011	.009		
5.0	.121	.087	.062	.104	.075	.054	.071	.052	.038	.041	.031	.022	.013	.010	.007		
6.0	.113	.077	.052	.097	.067	.045	.067	.047	.032	.039	.028	.019	.013	.009	.006		
7.0	.106	.069	.044	.091	.060	.038	.063	.042	.027	.037	.025	.016	.012	.008	.005		
8.0	.100	.063	.038	.086	.055	.033	.060	.038	.023	.035	.023	.014	.011	.007	.005		
9.0	.095	.058	.033	.082	.050	.028	.057	.035	.020	.033	.021	.012	.011	.007	.004		
10.0	.091	.053	.028	.078	.046	.025	.054	.033	.018	.032	.019	.011	.010	.006	.003		

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:26 May 2020

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:9.370m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:229.99V I:0.1838A P:40.632W PF:0.9614 Freq:49.80Hz Lamp Flux:3960.59x1 lm												
NAME: LENO-C					TYPE:			WEIGHT:				
SPEC.:					DIM.: 1190*160*30			SERIAL No.:				
MFR.: NEXOL					SUR.:1.168*0.06			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		9.7	10.6	9.9	10.7	10.9	10.0	10.9	10.3	11.0	11.2	
		3H	9.6	10.3	9.8	10.5	10.7	9.9	10.7	10.1	10.8	11.0
		4H	9.5	10.2	9.7	10.4	10.6	9.8	10.5	10.1	10.7	11.0
		6H	9.4	10.1	9.7	10.3	10.6	9.7	10.4	10.0	10.6	10.9
		8H	9.3	10.0	9.6	10.3	10.5	9.7	10.3	10.0	10.6	10.8
		12H	9.3	9.9	9.6	10.2	10.5	9.6	10.2	9.9	10.5	10.8
4H	2H	9.5	10.2	9.7	10.4	10.6	9.8	10.5	10.1	10.7	11.0	
	3H	9.3	9.9	9.6	10.2	10.5	9.6	10.2	9.9	10.5	10.8	
	4H	9.2	9.8	9.5	10.1	10.4	9.5	10.1	9.9	10.4	10.7	
	6H	9.1	9.6	9.5	9.9	10.3	9.4	9.9	9.8	10.3	10.6	
	8H	9.0	9.5	9.4	9.9	10.2	9.4	9.8	9.8	10.2	10.6	
	12H	9.0	9.4	9.4	9.8	10.2	9.3	9.7	9.7	10.1	10.5	
8H	4H	9.0	9.5	9.4	9.9	10.2	9.4	9.8	9.8	10.2	10.6	
	6H	8.9	9.3	9.4	9.7	10.1	9.3	9.6	9.7	10.0	10.5	
	8H	8.9	9.2	9.3	9.6	10.1	9.2	9.5	9.7	10.0	10.4	
	12H	8.8	9.1	9.3	9.6	10.0	9.1	9.4	9.6	9.9	10.3	
12H	4H	9.0	9.4	9.4	9.8	10.2	9.3	9.7	9.7	10.1	10.5	
	6H	8.9	9.2	9.3	9.6	10.1	9.2	9.5	9.7	10.0	10.4	
	8H	8.8	9.1	9.3	9.6	10.0	9.1	9.4	9.6	9.9	10.3	
Variations with the observer position at spacings:												
S = 1.0H		+ 4.0 / -25.7				+ 4.0 / -26.2						
1.5H		+ 6.7 / -18.9				+ 6.7 / -19.3						
2.0H		+ 6.7 / -16.9				+ 7.1 / -17.2						

CIE Pub.117, 3961 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 4.8$ )

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:26 May 2020

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:9.370m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:229.99V I:0.1838A P:40.632W PF:0.9614 Freq:49.80Hz Lamp Flux:3960.59x1 lm		
NAME: LENO-C	TYPE:	WEIGHT:
SPEC.:	DIM.: 1190*160*30	SERIAL No.:
MFR.: NEXOL	SUR.:1.168*0.06	Shielding Angle:

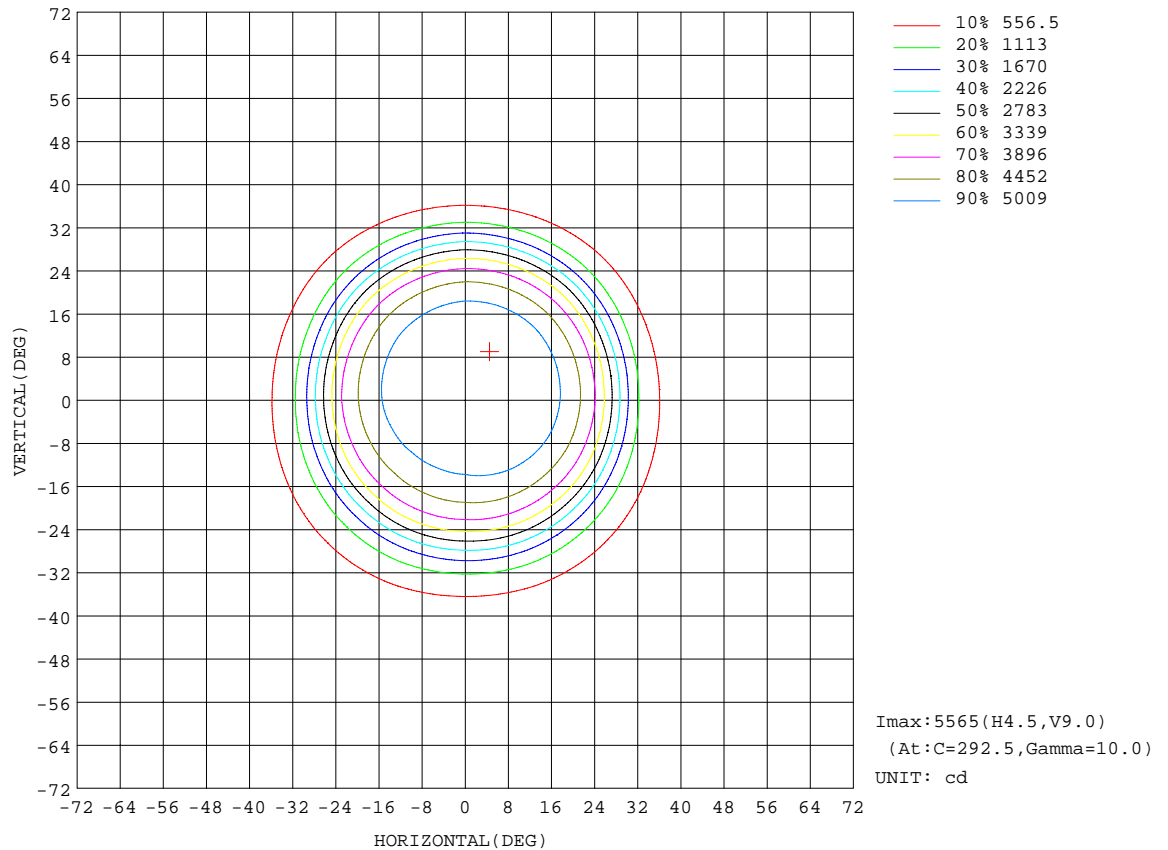
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	91	85	81	90	85	81	89	84	81	78
0.80	98	92	89	97	92	89	96	92	89	85
1.00	102	96	93	101	96	93	99	96	92	89
1.25	105	100	97	104	100	97	102	99	96	92
1.50	108	103	100	106	103	100	104	101	99	95
2.00	110	106	103	108	105	102	106	103	101	96
2.50	111	108	105	110	107	104	107	104	102	97
3.00	113	110	107	111	108	106	108	105	104	98
4.00	114	112	110	112	110	109	109	107	106	99
5.00	116	114	112	114	112	110	110	108	107	100
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:  
Test Date:26 May 2020

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:9.370m [K=1.0000]  
Remarks:

**ISOCANDELA DIAGRAM**

Test:U:229.99V I:0.1838A P:40.632W PF:0.9614 Freq:49.80Hz Lamp Flux:3960.59x1 lm		
NAME: LENO-C	TYPE:	WEIGHT:
SPEC.:	DIM.: 1190*160*30	SERIAL No.:
MFR.: NEXOL	SUR.:1.168*0.06	Shielding Angle:



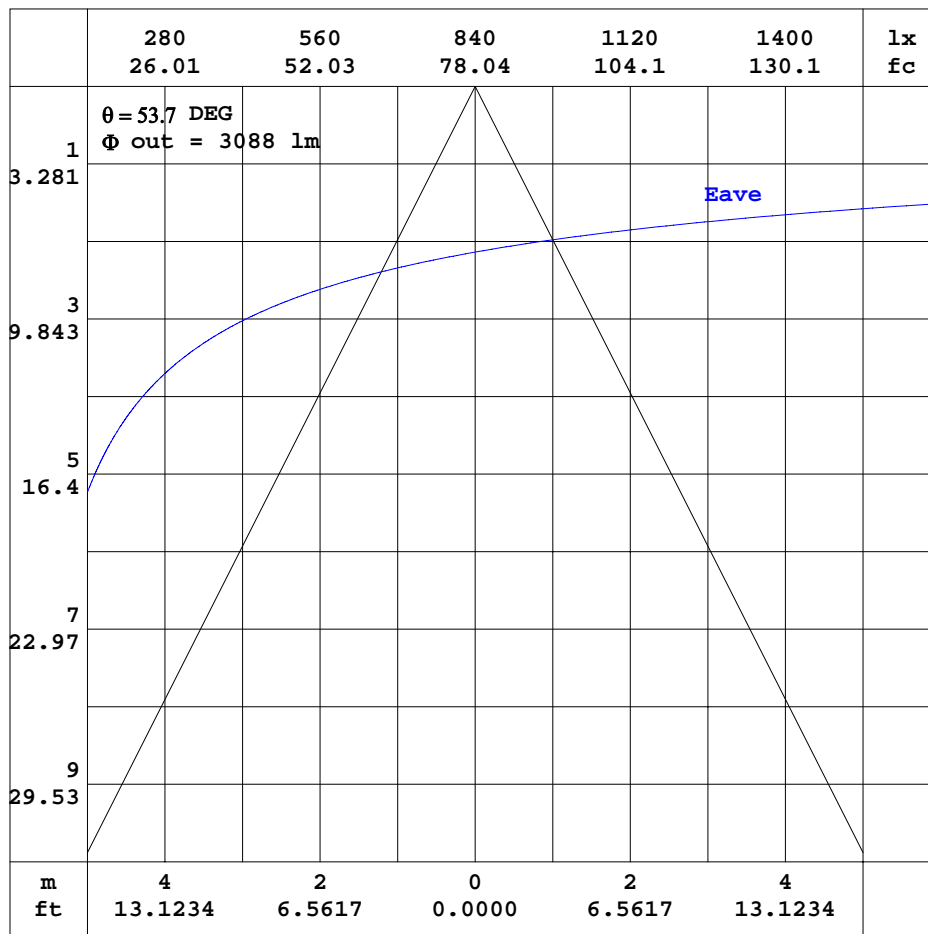
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:26 May 2020

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.10  
 Humidity:65.0%  
 Test Distance:9.370m [K=1.0000]  
 Remarks:



AAI CURVES

Test:U:229.99V I:0.1838A P:40.632W PF:0.9614 Freq:49.80Hz Lamp Flux:3960.59x1 lm		
NAME: LENO-C	TYPE:	WEIGHT:
SPEC.:	DIM.: 1190*160*30	SERIAL No.:
MFR.: NEXOL	SUR.:1.168*0.06	Shielding Angle:



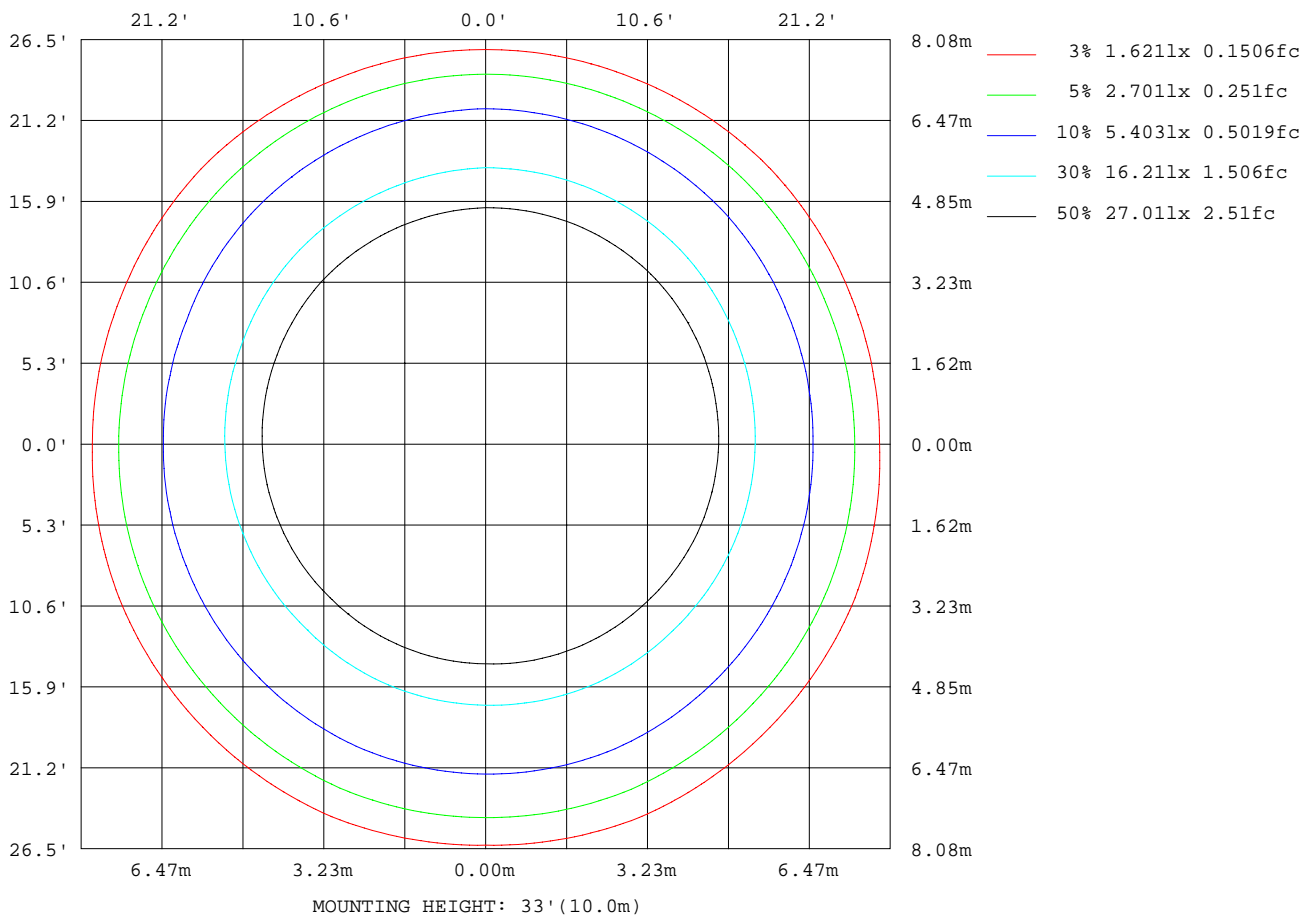
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:26 May 2020

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:9.370m [K=1.0000]  
Remarks:

ISOLUX DIAGRAM

Test:U:229.99V I:0.1838A P:40.632W PF:0.9614 Freq:49.80Hz Lamp Flux:3960.59x1 lm		
NAME: LENO-C	TYPE:	WEIGHT:
SPEC.:	DIM.: 1190*160*30	SERIAL No.:
MFR.: NEXOL	SUR.:1.168*0.06	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 26 May 2020

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.10  
 Humidity: 65.0%  
 Test Distance: 9.370m [K=1.0000]  
 Remarks:

### LED Avg.L Report

Test:U:229.99V I:0.1838A P:40.632W PF:0.9614 Freq:49.80Hz Lamp Flux:3960.59x1 lm		
NAME: LENO-C	TYPE:	WEIGHT:
SPEC.:	DIM.: 1190*160*30	SERIAL No.:
MFR.: NEXOL	SUR.:1.168*0.06	Shielding Angle:

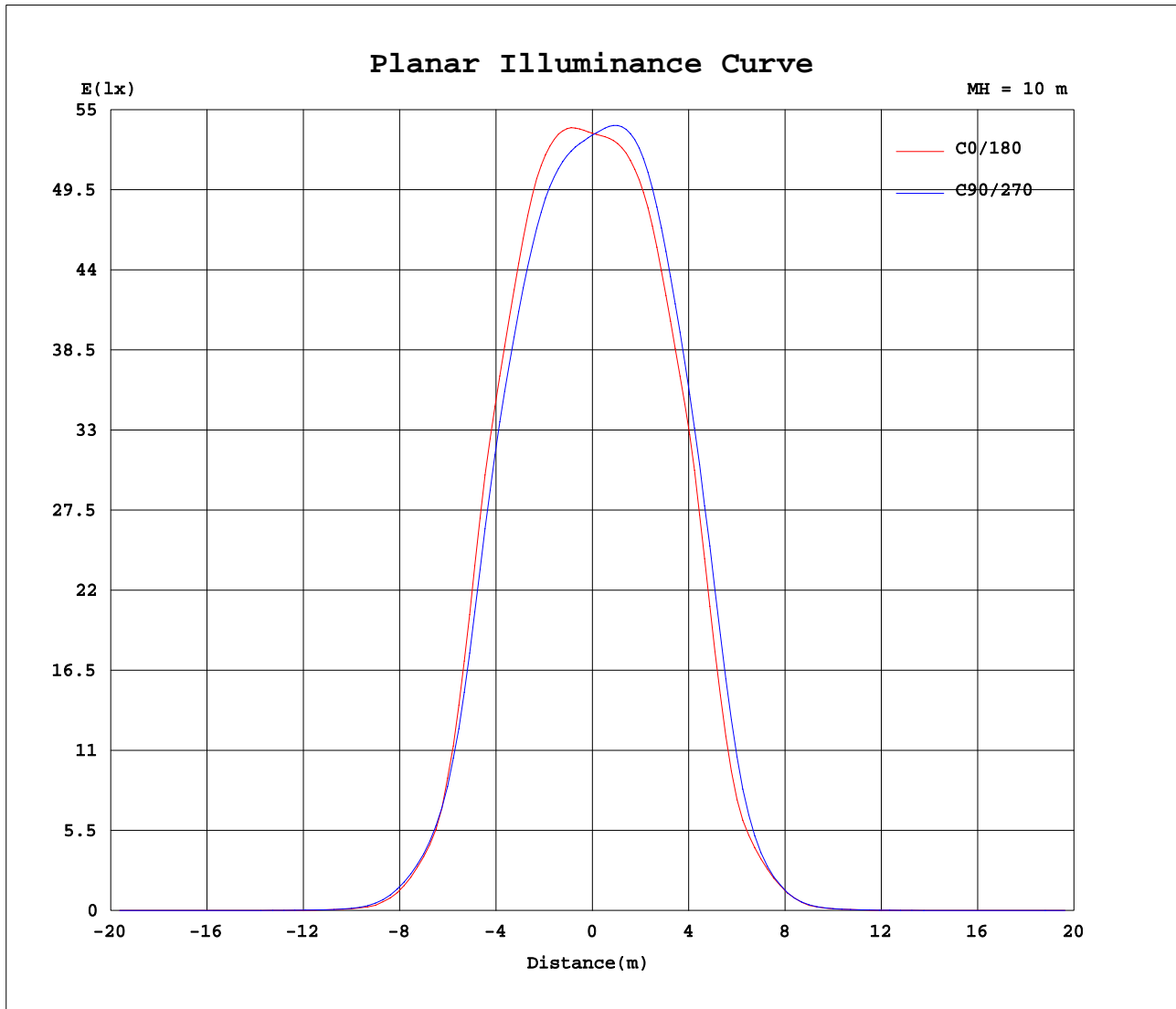
AvgL	cd/m2
L_0~180(65)av	7
L_0~180(75)av	8
L_0~180(85)av	21
L_90~270(65)av	8
L_90~270(75)av	9
L_90~270(85)av	21
L_45(65)av	10
L_45(75)av	8
L_45(85)av	20

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:26 May 2020

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:9.370m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 26 May 2020

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.10  
 Humidity: 65.0%  
 Test Distance: 9.370m [K=1.0000]  
 Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:9.370m [K=1.0000]
Remarks:

```