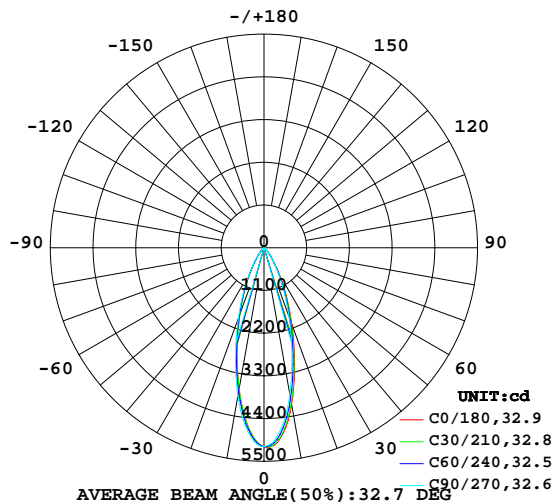


## LUMINAIRE PHOTOMETRIC TEST REPORT

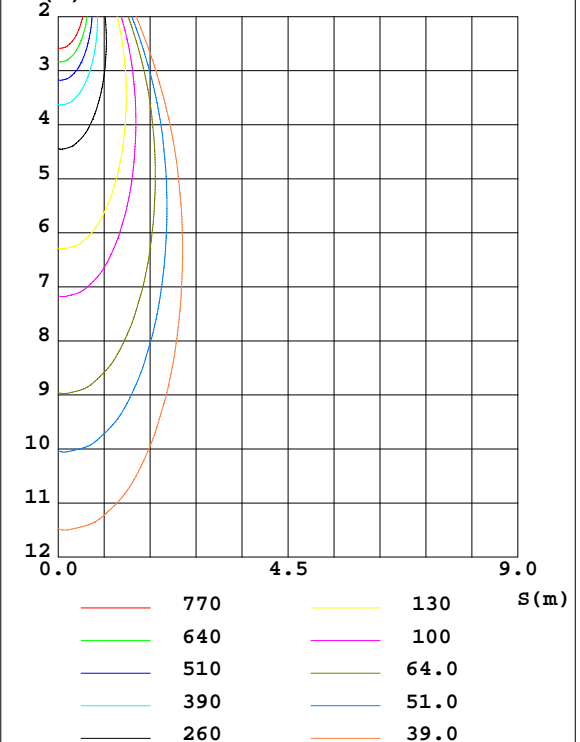
Test:U:229.87V I:0.1105A P:24.965W PF:0.9827 Freq:49.99Hz Lamp Flux:2134.99x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 85.52 lm/W			
MODEL		Imax(cd)	5155	S/MH(C0/180)	0.57
NOMINAL POWER(W)	25	LOR(%)	100.0	S/MH(C90/270)	0.53
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	2135.0	$\eta$ UP,DN(C0-180)	0.0,50.2
NOMINAL FLUX(lm)	2134.99	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,49.8
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	230.0	$\eta$ down(%)	100.0	CIBSE SHR MAX	0.60

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-07-20

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

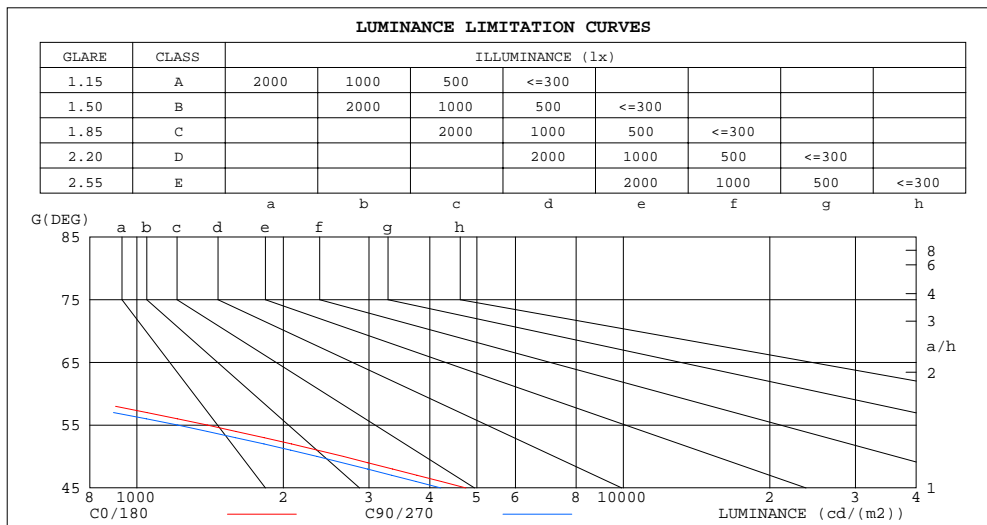
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum, lamp
10	4099	4022	3843	3743	3699	3702	3873	4013	0- 10	425.3	425.3	19.9,19.9
20	2096	2019	1889	1856	1823	1817	1935	2047	10- 20	781.3	1207	56.5,56.5
30	796.9	756.8	693.3	679.7	662.9	654.1	711.9	768.9	20- 30	567.7	1774	83.1,83.1
40	217.1	205.6	190.4	190.3	188.7	183.7	196.0	210.7	30- 40	249.3	2024	94.8,94.8
50	56.89	54.69	50.23	49.43	47.65	46.95	50.26	54.52	40- 50	83.44	2107	98.7,98.7
60	11.01	10.36	9.019	8.038	7.490	7.629	9.076	10.35	50- 60	22.60	2130	99.8,99.8
70	1.720	1.589	1.617	1.340	1.330	1.496	1.475	1.600	60- 70	3.792	2134	99.9,99.9
80	0.6970	0.5837	0.6370	0.4804	0.4977	0.6278	0.5489	0.6619	70- 80	1.053	2135	100,100
90	0.1031	0.0945	0.0859	0.0773	0.1632	0.1546	0.1632	0.1632	80- 90	0.3277	2135	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: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-07-20

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
 Humidity:65.0%  
 Test Distance:11.700m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:229.87V I:0.1105A P:24.965W PF:0.9827 Freq:49.99Hz Lamp Flux:2134.99x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:



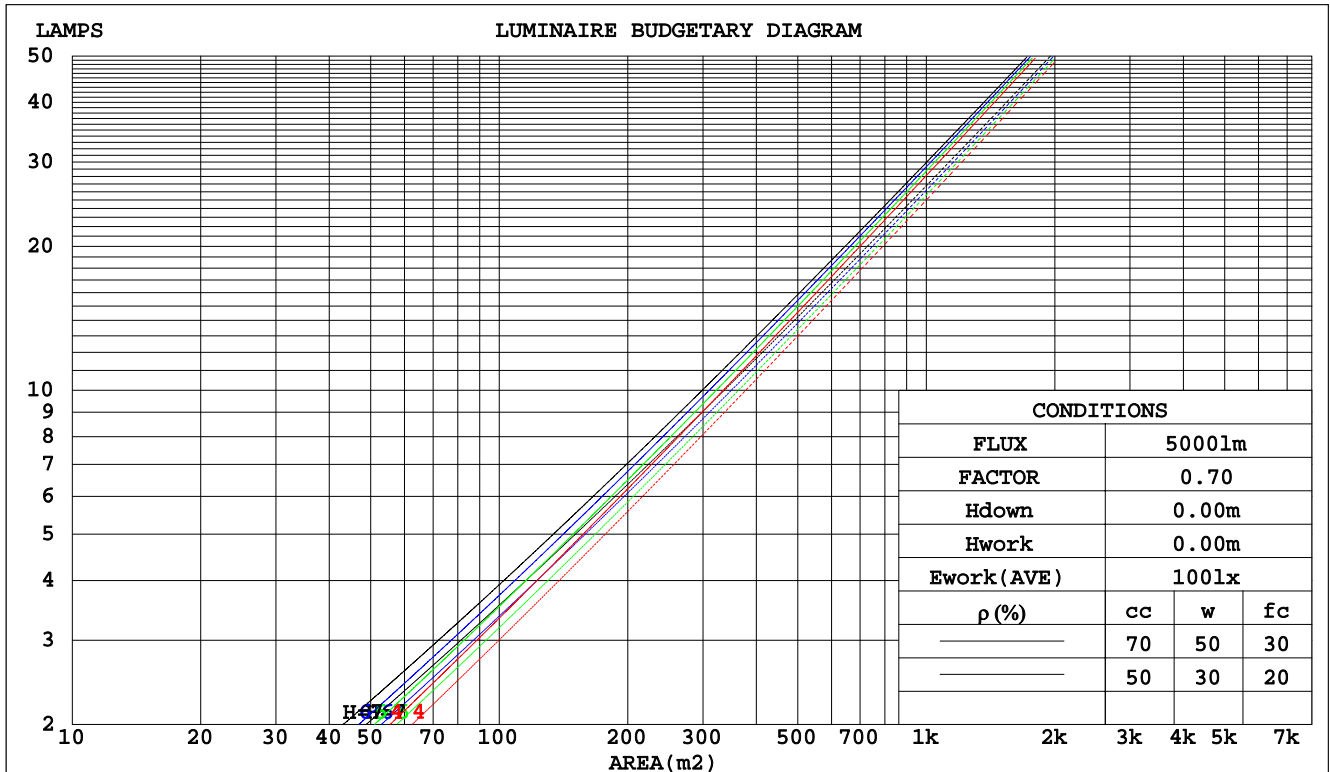
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2022-07-20

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity: 65.0%  
Test Distance: 11.700m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:229.87V I:0.1105A P:24.965W PF:0.9827 Freq:49.99Hz Lamp Flux:2134.99x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	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						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	1.12	1.09	1.07	1.10	1.08	1.06	1.06	1.04	1.03	1.02	1.01	.99	.98	.97	.97	.95
2.0	1.05	1.01	.98	1.03	1.00	.97	1.00	.98	.95	.97	.95	.93	.95	.93	.91	.90
3.0	.99	.95	.91	.98	.94	.90	.95	.92	.89	.93	.90	.88	.91	.88	.86	.85
4.0	.94	.89	.85	.93	.88	.85	.91	.87	.84	.89	.85	.83	.87	.84	.82	.80
5.0	.89	.84	.80	.88	.83	.80	.86	.82	.79	.85	.81	.78	.83	.80	.78	.76
6.0	.85	.79	.76	.84	.79	.75	.82	.78	.75	.81	.77	.74	.80	.76	.74	.73
7.0	.81	.75	.72	.80	.75	.72	.79	.74	.71	.78	.74	.71	.77	.73	.70	.69
8.0	.77	.72	.68	.76	.71	.68	.75	.71	.68	.74	.70	.68	.74	.70	.67	.66
9.0	.74	.68	.65	.73	.68	.65	.72	.68	.65	.71	.67	.65	.71	.67	.64	.63
10.0	.71	.66	.62	.70	.65	.62	.69	.65	.62	.69	.65	.62	.68	.64	.62	.60



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-07-20

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
 Humidity:65.0%  
 Test Distance:11.700m [K=1.0000]  
 Remarks:

## WEC AND CCEC

Test:U:229.87V I:0.1105A P:24.965W PF:0.9827 Freq:49.99Hz Lamp Flux:2134.99x1 lm					
NAME:		TYPE:		WEIGHT:	
SPEC.:		DIM.: 228*48		SERIAL No.:	
MFR.:		SUR.:3.14*0.0.103*0.103		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	.160	.091	.029	.153	.088	.028	.141	.081	.026	.129	.075	.024	.119	.069	.022	
2.0	.152	.083	.026	.146	.081	.025	.136	.075	.023	.126	.071	.022	.117	.066	.021	
3.0	.144	.076	.023	.139	.074	.022	.130	.070	.021	.122	.067	.020	.114	.063	.020	
4.0	.136	.071	.021	.132	.069	.020	.125	.066	.020	.118	.063	.019	.111	.060	.018	
5.0	.129	.066	.019	.126	.065	.019	.119	.062	.018	.113	.060	.018	.108	.058	.017	
6.0	.123	.062	.018	.120	.061	.017	.115	.059	.017	.109	.057	.017	.104	.055	.016	
7.0	.118	.058	.016	.115	.057	.016	.110	.056	.016	.105	.054	.016	.101	.052	.015	
8.0	.112	.055	.015	.110	.054	.015	.106	.053	.015	.102	.051	.015	.098	.050	.015	
9.0	.108	.052	.015	.106	.051	.014	.102	.050	.014	.098	.049	.014	.094	.048	.014	
10.0	.103	.050	.014	.102	.049	.014	.098	.048	.014	.095	.047	.013	.091	.046	.013	

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	.145	.135	.126	.099	.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	.140	.113	.092	.120	.098	.080	.082	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.129	.098	.075	.111	.085	.065	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.120	.087	.062	.103	.075	.054	.071	.052	.038	.041	.031	.023	.013	.010	.007	
6.0	.112	.077	.052	.096	.067	.045	.066	.047	.032	.038	.027	.019	.012	.009	.006	
7.0	.105	.069	.044	.090	.060	.039	.062	.042	.027	.036	.025	.016	.012	.008	.005	
8.0	.099	.063	.038	.085	.054	.033	.059	.038	.024	.034	.023	.014	.011	.007	.005	
9.0	.093	.057	.033	.081	.050	.029	.056	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.089	.053	.029	.077	.046	.025	.053	.032	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-07-20

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:229.87V I:0.1105A P:24.965W PF:0.9827 Freq:49.99Hz Lamp Flux:2134.99x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 228*48			SERIAL No.:			
MFR.:					SUR.:3.14*0.0.103*0.103			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		12.0	12.8	12.2	13.0	13.1	11.4	12.2	11.6	12.4	12.5
3H		11.8	12.6	12.1	12.8	13.0	11.2	12.0	11.5	12.2	12.4
4H		11.8	12.5	12.0	12.7	12.9	11.2	11.9	11.4	12.1	12.3
6H		11.7	12.3	12.0	12.6	12.8	11.1	11.7	11.4	12.0	12.2
8H		11.6	12.3	11.9	12.5	12.8	11.0	11.7	11.3	11.9	12.2
12H		11.6	12.2	11.9	12.5	12.7	11.0	11.6	11.3	11.9	12.1
4H 2H		11.8	12.5	12.0	12.7	12.9	11.2	11.9	11.4	12.1	12.3
3H		11.6	12.2	11.9	12.5	12.8	11.0	11.6	11.3	11.9	12.2
4H		11.5	12.1	11.9	12.4	12.7	10.9	11.5	11.3	11.8	12.1
6H		11.4	11.9	11.8	12.2	12.6	10.8	11.3	11.2	11.6	12.0
8H		11.4	11.8	11.8	12.2	12.5	10.8	11.2	11.2	11.6	11.9
12H		11.3	11.7	11.7	12.1	12.5	10.7	11.1	11.1	11.5	11.9
8H 4H		11.4	11.8	11.8	12.2	12.5	10.8	11.2	11.2	11.6	11.9
6H		11.3	11.6	11.7	12.0	12.4	10.7	11.0	11.1	11.4	11.9
8H		11.2	11.5	11.7	12.0	12.4	10.6	10.9	11.1	11.4	11.8
12H		11.1	11.4	11.6	11.9	12.3	10.6	10.8	11.0	11.3	11.8
12H 4H		11.3	11.7	11.7	12.1	12.5	10.7	11.1	11.1	11.5	11.9
6H		11.2	11.5	11.6	12.0	12.4	10.6	10.9	11.1	11.4	11.8
8H		11.1	11.4	11.6	11.9	12.3	10.6	10.8	11.0	11.3	11.7
Variations with the observer position at spacings:											
S = 1.0H		+ 3.1 / - 9.2					+ 2.8 / - 9.4				
1.5H		+ 4.8 / - 6.7					+ 4.4 / - 6.4				
2.0H		+ 5.6 / - 9.7					+ 5.4 / - 9.5				

CIE Pub.117, 2135 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 2.6$ )

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-07-20

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

Test:U:229.87V I:0.1105A P:24.965W PF:0.9827 Freq:49.99Hz Lamp Flux:2134.99x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:

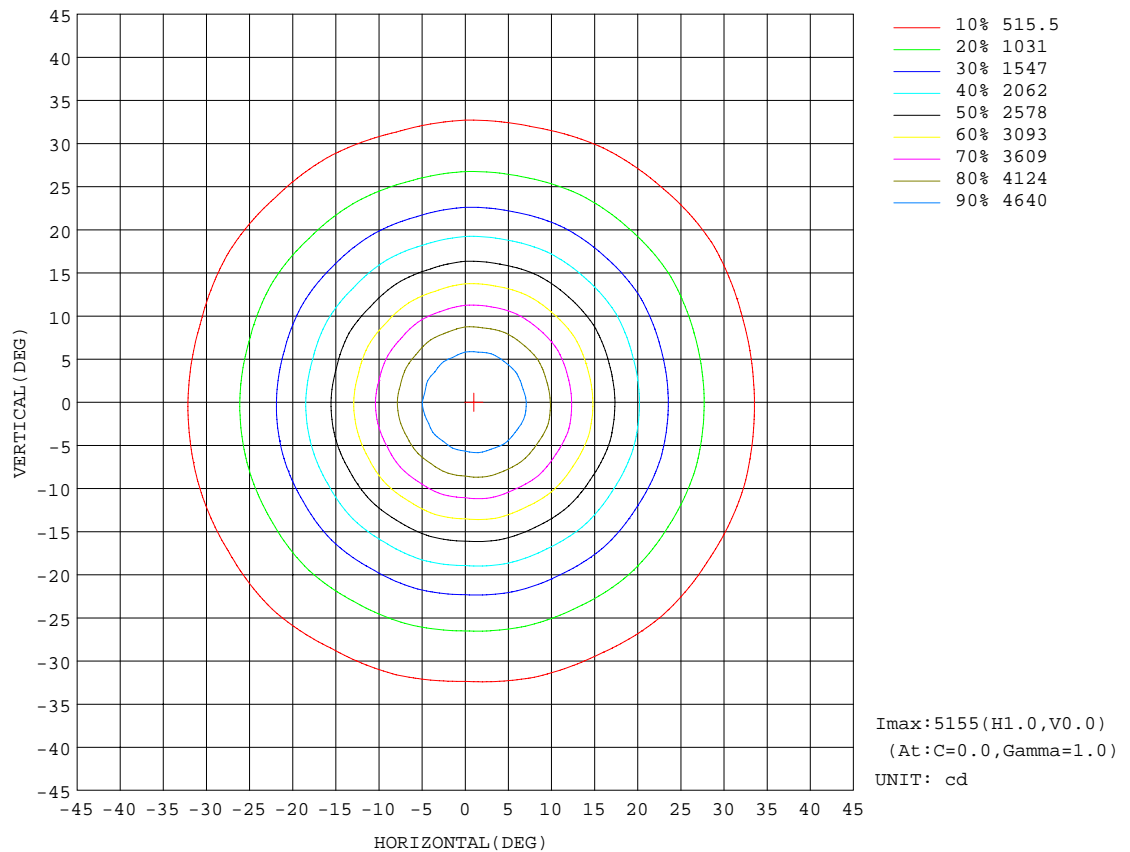
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	82	78	88	82	78	87	82	78	75
0.80	96	90	86	95	90	86	94	89	86	82
1.00	100	95	91	99	94	91	98	94	90	86
1.25	104	99	96	103	98	95	101	97	94	90
1.50	106	102	99	105	101	98	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	95
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	97
4.00	114	111	109	112	110	108	108	107	105	98
5.00	115	113	111	113	111	110	109	108	107	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-07-20

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:229.87V I:0.1105A P:24.965W PF:0.9827 Freq:49.99Hz Lamp Flux:2134.99x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:

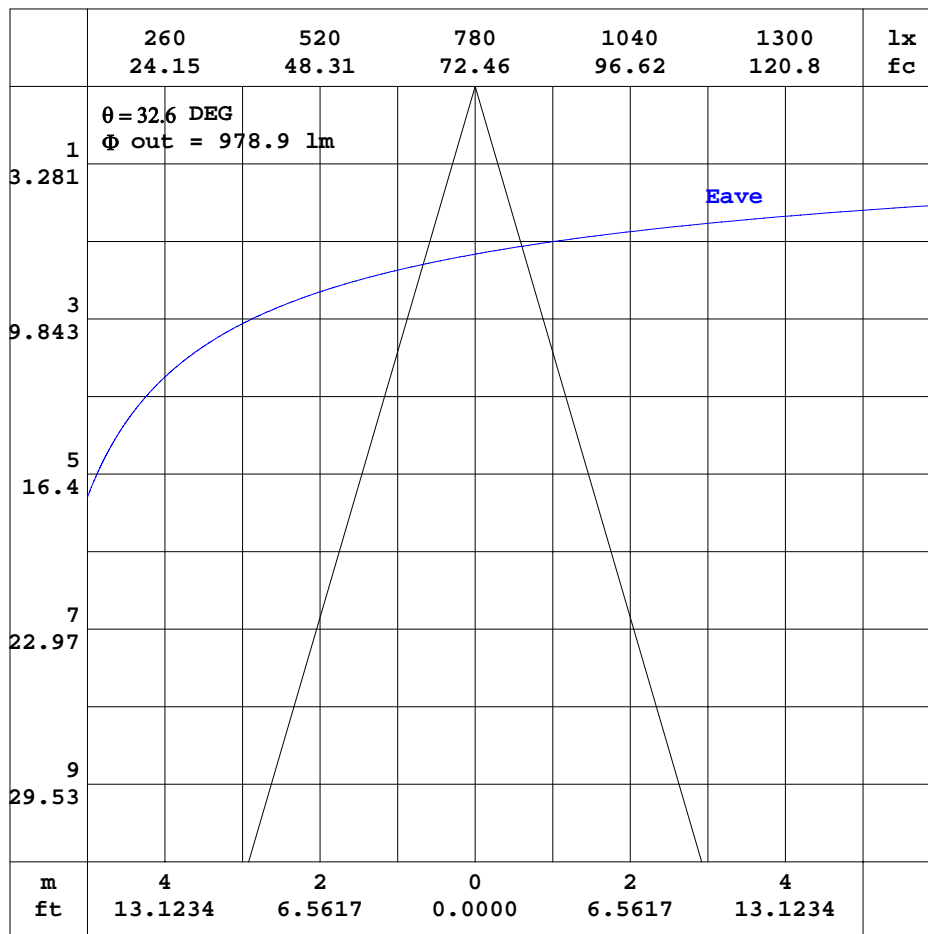


C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-07-20

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=1.0000]  
Remarks:

## AAI CURVES

Test:U:229.87V I:0.1105A P:24.965W PF:0.9827 Freq:49.99Hz Lamp Flux:2134.99x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:



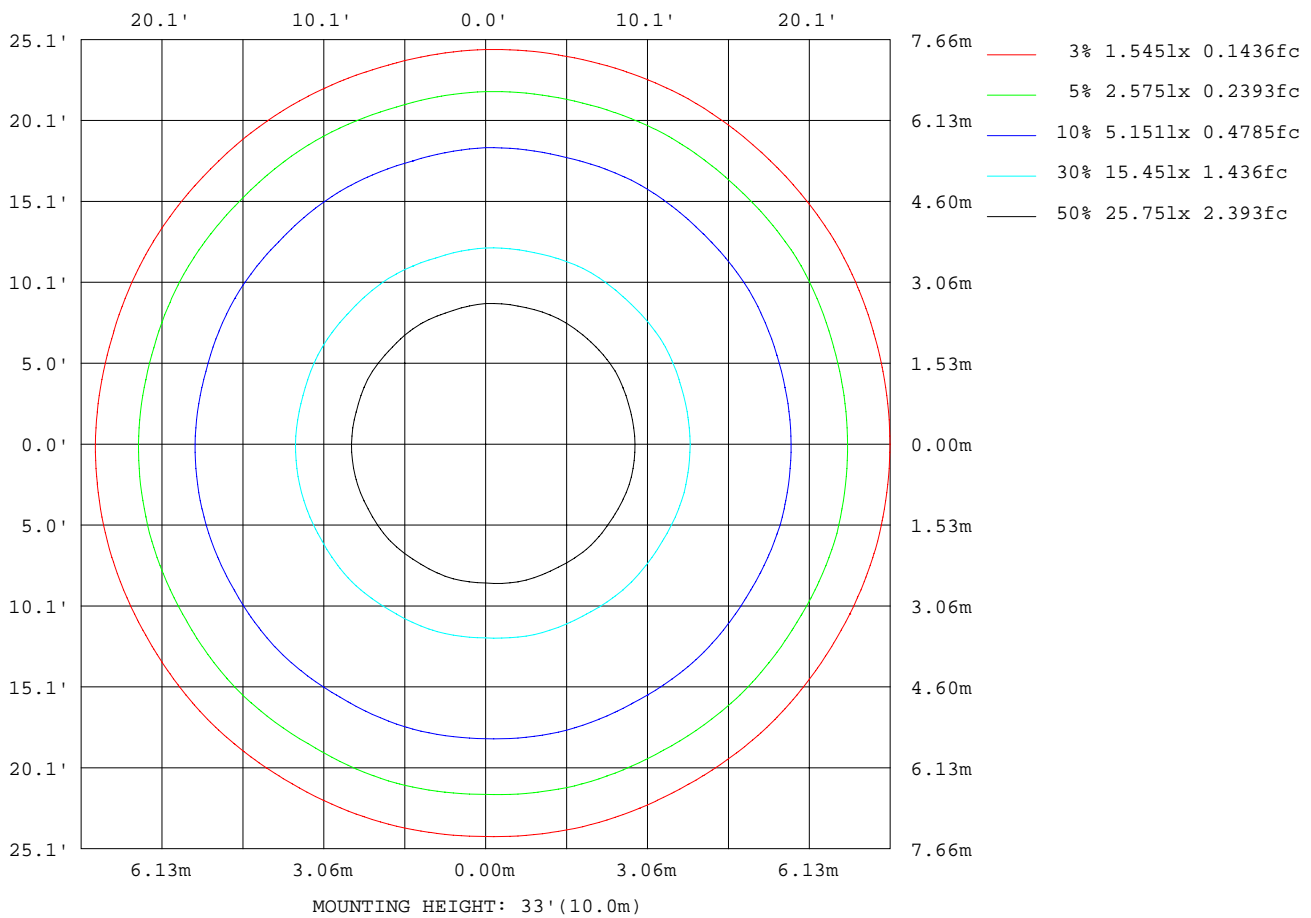
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-07-20

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
 Humidity:65.0%  
 Test Distance:11.700m [K=1.0000]  
 Remarks:

## ISOLUX DIAGRAM

Test:U:229.87V I:0.1105A P:24.965W PF:0.9827 Freq:49.99Hz Lamp Flux:2134.99x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2022-07-20

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity: 65.0%  
Test Distance: 11.700m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:229.87V I:0.1105A P:24.965W PF:0.9827 Freq:49.99Hz Lamp Flux:2134.99x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:

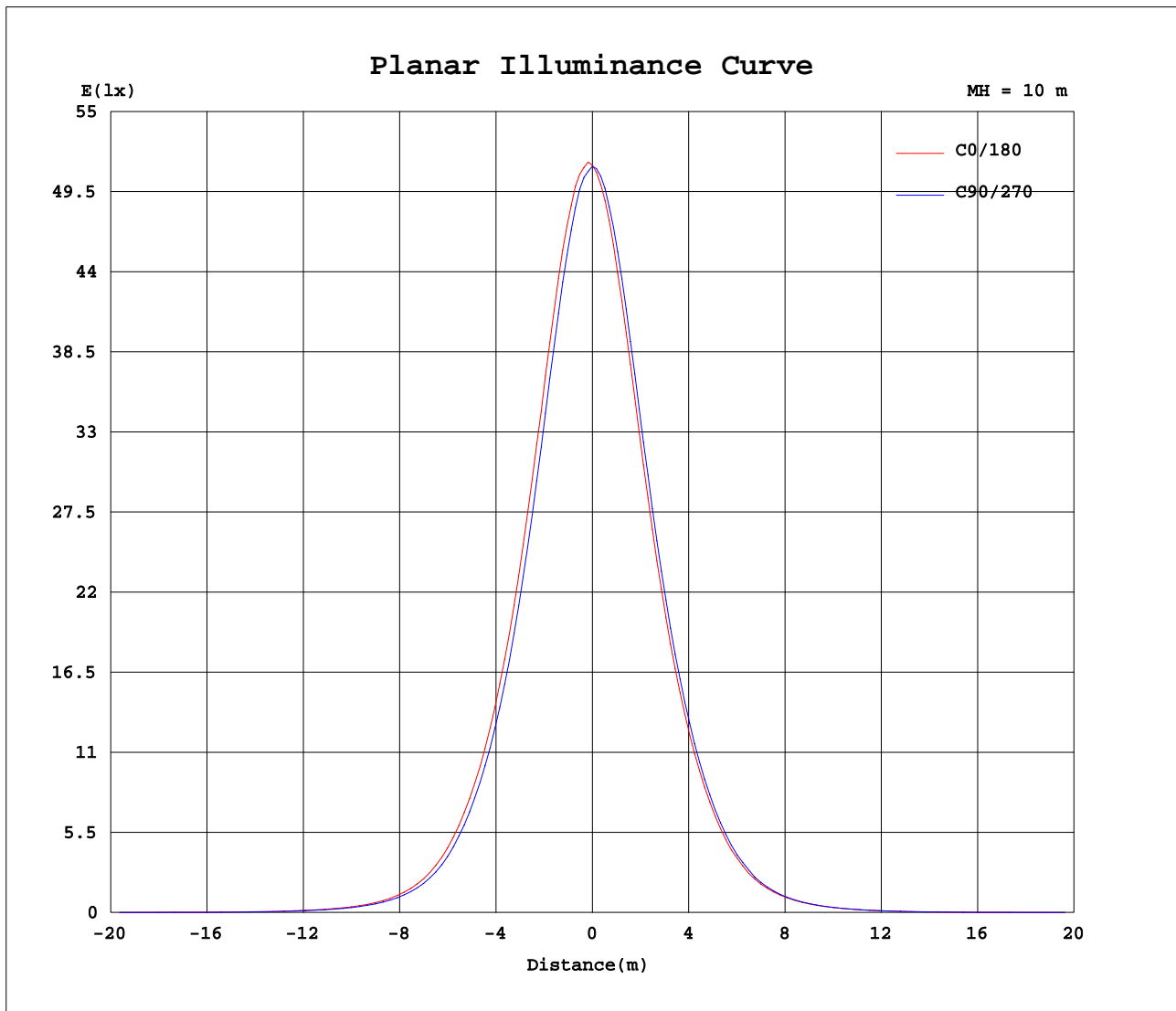
AvgL	cd/m2
L_0~180(65)av	224
L_0~180(75)av	113
L_0~180(85)av	93
L_90~270(65)av	222
L_90~270(75)av	116
L_90~270(85)av	96
L_45(65)av	220
L_45(75)av	112
L_45(85)av	90

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-07-20

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2022-07-20

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.406.10  
Humidity: 65.0%  
Test Distance: 11.700m [K=1.0000]  
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

```