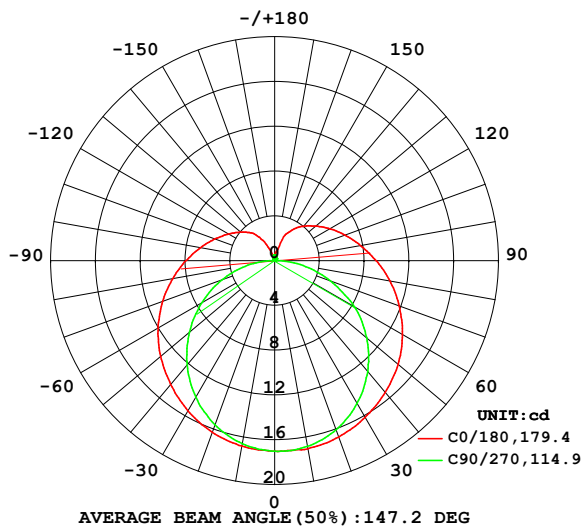


## LUMINAIRE PHOTOMETRIC TEST REPORT

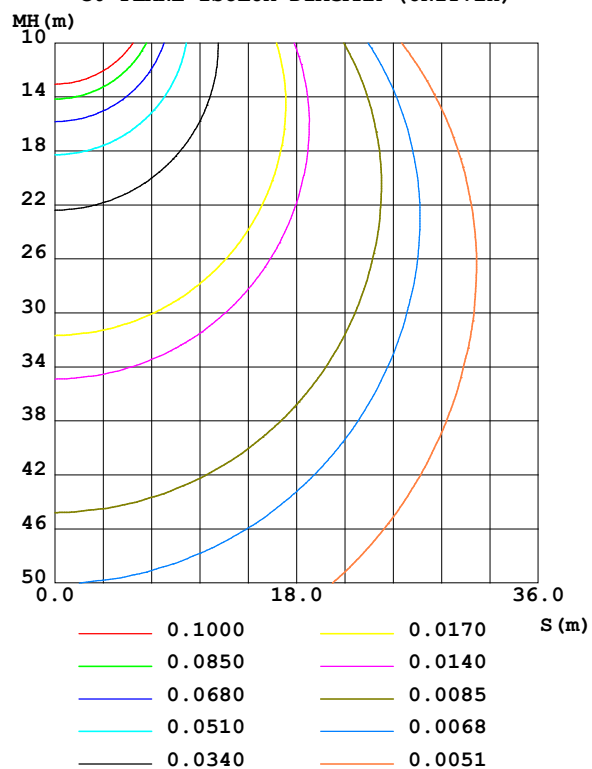
Test:U:101.40V I:0.0620A P:5.0000W PF:0.7940 Freq:50.00Hz Lamp Flux:81.6293x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 16.33 lm/W
MODEL	80031RGB白光	I <sub>max</sub> (cd)	17.07	S/MH(C0/180)	1.43	
NOMINAL POWER(W)	7	LOR(%)	100.0	S/MH(C90/270)	1.29	
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	81.629	η UP,DN(C0-180)	9.2,38.4	
NOMINAL FLUX(lm)	81.6293	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	11.1,41.3	
LAMPS INSIDE	1	η up (%)	20.3	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	100	η down (%)	79.7	CIBSE SHR MAX	1.50	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:02 January 2025

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
Humidity:65.0%  
Test Distance:8.186m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C90	C180	C270					$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	16.82	16.60	17.07	16.84					0- 10	1.616	1.616	1.98,1.98
20	16.30	15.61	16.77	16.07					10- 20	4.680	6.296	7.71,7.71
30	15.49	14.08	16.17	14.73					20- 30	7.244	13.54	16.6,16.6
40	14.45	12.17	15.37	12.94					30- 40	9.058	22.60	27.7,27.7
50	13.30	9.923	14.40	10.75					40- 50	9.996	32.59	39.9,39.9
60	12.02	7.512	13.20	8.241					50- 60	10.02	42.62	52.2,52.2
70	10.65	4.982	11.85	5.293					60- 70	9.135	51.75	63.4,63.4
80	9.250	2.456	10.46	2.591					70- 80	7.599	59.35	72.7,72.7
90	7.933	0.1144	9.058	0.2220					80- 90	5.691	65.04	79.7,79.7
100	6.737	0	7.794	0.0353					90-100	4.329	69.37	85,85
110	5.688	0.0573	6.701	0.0926					100-110	3.585	72.96	89.4,89.4
120	4.783	0.1103	5.713	0.1720					110-120	2.895	75.85	92.9,92.9
130	3.975	0.1897	4.817	0.2293					120-130	2.246	78.10	95.7,95.7
140	3.246	0.2603	4.026	0.2603					130-140	1.652	79.75	97.7,97.7
150	2.086	0.3926	3.197	0.2999					140-150	1.097	80.85	99,99
160	0.3652	0.4763	2.029	0.4058					150-160	0.5634	81.41	99.7,99.7
170	0.1759	0.5205	0.7727	0.5072					160-170	0.1721	81.58	99.9,99.9
180	0.4875	0.5381	0.4962	0.5205					170-180	0.0459	81.63	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 27.535 lm

%lum = 33.7%

%lamp = 33.7%

Conical surface Flux(130deg): 47.347 lm

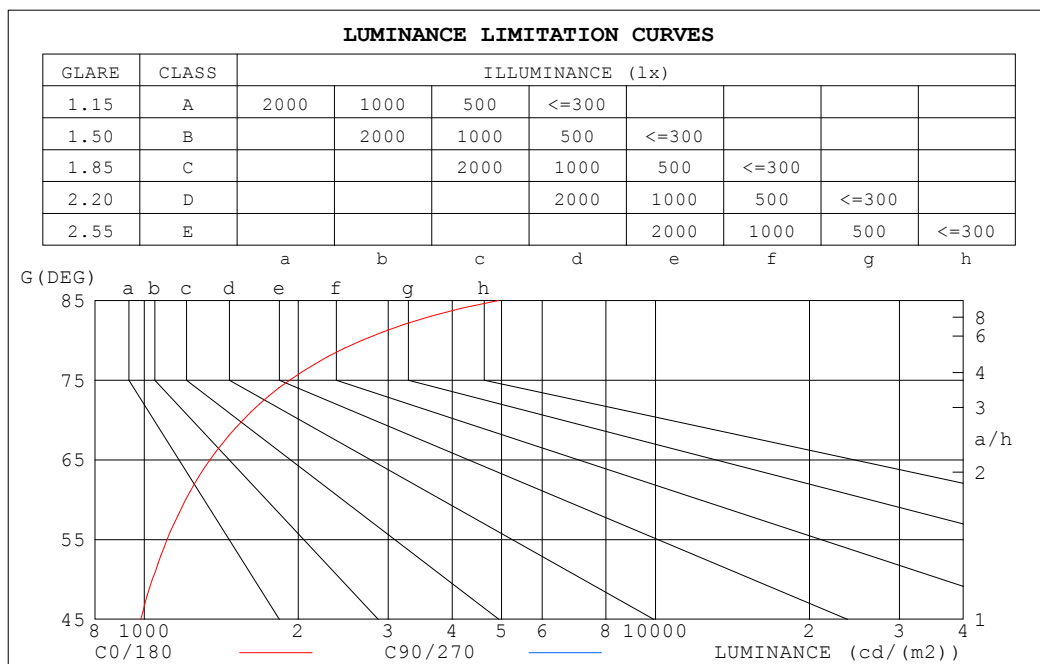
%lum = 58.0%

%lamp = 58.0%

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:02 January 2025

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
 Humidity:65.0%  
 Test Distance:8.186m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES



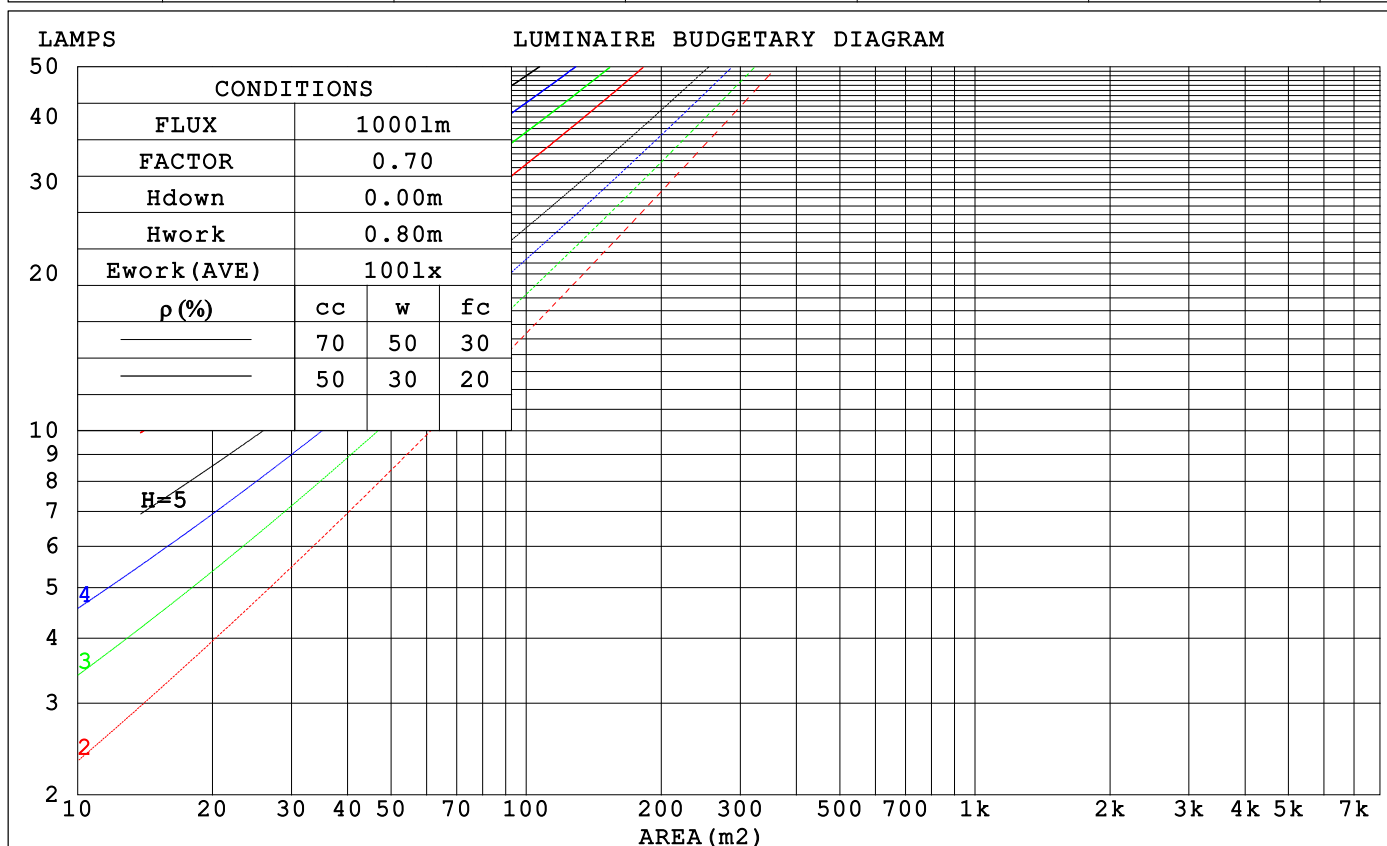
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4927	682
80	2669	706
75	1923	718
70	1560	727
65	1344	739
60	1205	750
55	1107	761
50	1037	770
45	984	782

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:DAMIN  
Test Date:02 January 2025

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
Humidity:65.0%  
Test Distance:8.186m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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	1.14	1.14	1.14	1.09	1.09	1.09	.00	.00	.00	.91	.91	.91	.83	.83	.83	.80
1.0	.95	.90	.85	.91	.86	.82	.83	.79	.76	.76	.73	.70	.69	.66	.64	.61
2.0	.82	.74	.67	.78	.71	.65	.71	.65	.60	.65	.60	.56	.59	.55	.52	.48
3.0	.71	.62	.55	.68	.59	.53	.62	.55	.49	.56	.51	.46	.51	.46	.43	.39
4.0	.62	.53	.45	.59	.51	.44	.54	.47	.41	.49	.43	.39	.45	.40	.36	.33
5.0	.55	.46	.39	.53	.44	.37	.48	.41	.35	.44	.38	.33	.40	.35	.31	.28
6.0	.49	.40	.33	.47	.39	.32	.43	.36	.30	.40	.33	.29	.36	.31	.27	.24
7.0	.44	.35	.29	.43	.34	.28	.39	.32	.27	.36	.30	.25	.33	.28	.24	.21
8.0	.40	.32	.26	.39	.31	.25	.36	.29	.24	.33	.27	.22	.30	.25	.21	.19
9.0	.37	.28	.23	.35	.28	.22	.33	.26	.21	.30	.24	.20	.28	.23	.19	.17
10.0	.34	.26	.21	.33	.25	.20	.30	.24	.19	.28	.22	.18	.26	.21	.17	.15



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:02 January 2025

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
Humidity:65.0%  
Test Distance:8.186m [K=1.0000]  
Remarks:

### WEC AND CCEC

$\rho_{cc}$	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						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.380	.216	.068	.366	.209	.066	.341	.196	.062	.318	.183	.059	.297	.172	.055	
2.0	.330	.181	.055	.318	.175	.054	.295	.164	.051	.274	.154	.048	.255	.144	.045	
3.0	.294	.156	.047	.283	.152	.046	.262	.142	.043	.243	.133	.041	.226	.125	.039	
4.0	.265	.138	.040	.255	.133	.039	.236	.125	.037	.219	.118	.035	.203	.110	.034	
5.0	.241	.123	.036	.232	.119	.035	.215	.112	.033	.199	.105	.031	.184	.098	.030	
6.0	.221	.111	.032	.213	.107	.031	.197	.101	.029	.183	.095	.028	.169	.089	.026	
7.0	.204	.101	.029	.196	.098	.028	.182	.092	.027	.169	.086	.025	.156	.081	.024	
8.0	.189	.092	.026	.182	.090	.025	.169	.084	.024	.157	.079	.023	.145	.075	.022	
9.0	.176	.085	.024	.170	.083	.023	.158	.078	.022	.146	.073	.021	.136	.069	.020	
10.0	.165	.079	.022	.159	.077	.021	.148	.072	.020	.137	.068	.019	.127	.064	.018	

$\rho_{cc}$	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						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.345	.345	.345	.295	.295	.295	.201	.201	.201	.116	.116	.116	.037	.037	.037	
1.0	.341	.312	.285	.292	.267	.245	.200	.184	.170	.115	.106	.099	.037	.034	.032	
2.0	.334	.289	.251	.286	.249	.217	.196	.172	.151	.113	.100	.089	.036	.032	.029	
3.0	.327	.272	.229	.280	.235	.198	.193	.163	.139	.111	.095	.082	.036	.031	.027	
4.0	.319	.260	.215	.274	.225	.186	.188	.157	.131	.109	.092	.078	.035	.030	.026	
5.0	.312	.250	.205	.268	.217	.178	.184	.151	.126	.107	.089	.075	.034	.029	.025	
6.0	.304	.242	.198	.262	.210	.172	.181	.147	.122	.105	.086	.072	.034	.028	.024	
7.0	.297	.236	.193	.256	.204	.168	.177	.143	.119	.103	.084	.071	.033	.028	.023	
8.0	.291	.230	.189	.250	.200	.165	.173	.140	.117	.101	.083	.070	.033	.027	.023	
9.0	.285	.225	.186	.245	.196	.162	.170	.138	.115	.099	.081	.069	.032	.027	.023	
10.0	.279	.221	.183	.240	.192	.160	.167	.135	.114	.097	.080	.068	.032	.026	.022	

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 02 January 2025

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
 Humidity: 65.0%  
 Test Distance: 8.186m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

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	12.1	13.4	12.6	14.0	14.6	10.4	11.8	10.9	12.3	12.9
3H	14.8	16.0	15.3	16.6	17.2	12.1	13.3	12.7	13.9	14.6
4H	16.3	17.5	16.9	18.0	18.7	12.8	14.0	13.4	14.6	15.3
6H	18.0	19.1	18.6	19.7	20.4	13.4	14.6	14.1	15.2	15.9
8H	18.9	20.0	19.5	20.6	21.3	13.7	14.7	14.3	15.4	16.1
12H	20.0	21.0	20.6	21.7	22.4	13.8	14.9	14.4	15.5	16.2
4H 2H	12.6	13.8	13.2	14.4	15.1	11.4	12.6	12.0	13.2	13.9
3H	15.5	16.5	16.1	17.2	17.9	13.4	14.4	14.0	15.0	15.7
4H	17.2	18.1	17.8	18.8	19.5	14.3	15.2	14.9	15.9	16.6
6H	19.1	19.9	19.7	20.6	21.4	15.1	15.9	15.8	16.6	17.4
8H	20.1	20.9	20.8	21.6	22.4	15.4	16.2	16.1	16.9	17.7
12H	21.4	22.1	22.1	22.8	23.6	15.6	16.4	16.3	17.1	17.9
8H 4H	17.5	18.3	18.2	19.0	19.8	15.1	15.9	15.8	16.6	17.4
6H	19.6	20.3	20.3	21.0	21.8	16.3	16.9	17.0	17.7	18.5
8H	20.9	21.5	21.6	22.2	23.1	16.8	17.4	17.5	18.1	19.0
12H	22.4	22.9	23.1	23.6	24.5	17.2	17.7	18.0	18.5	19.4
12H 4H	17.5	18.2	18.2	18.9	19.8	15.4	16.1	16.1	16.8	17.7
6H	19.7	20.3	20.5	21.0	21.9	16.7	17.3	17.4	18.0	18.9
8H	21.1	21.6	21.8	22.3	23.2	17.4	17.9	18.1	18.6	19.5
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117, 81.63 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = -8.7$ )  
Area: 0.02 m2

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:02 January 2025

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
Humidity:65.0%  
Test Distance:8.186m [K=1.0000]  
Remarks:

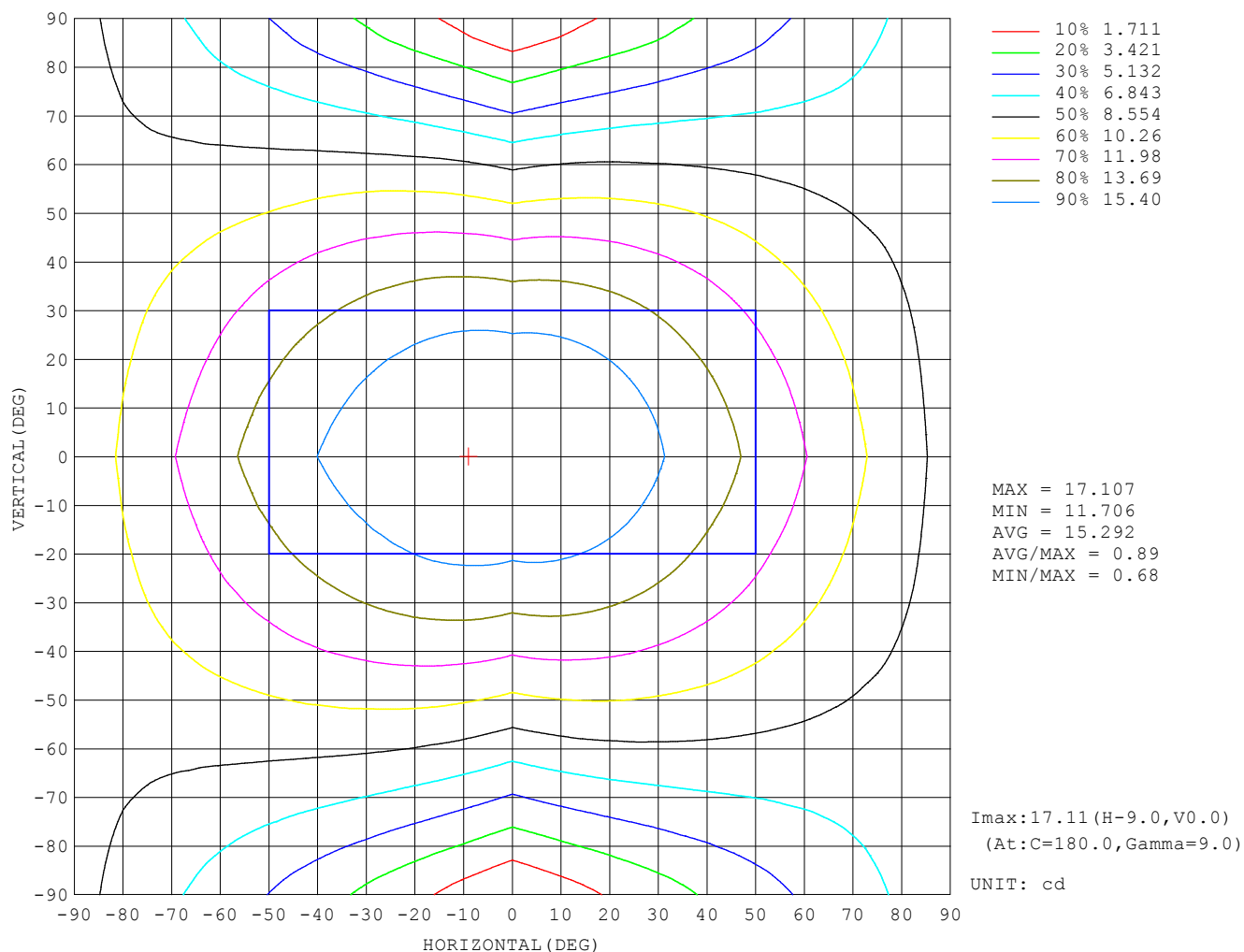
### UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	47	35	28	46	34	27	44	33	27	20
0.80	56	43	35	55	43	35	52	41	34	26
1.00	64	51	43	62	50	42	58	50	41	32
1.25	71	58	50	69	57	49	64	54	47	37
1.50	76	64	55	73	62	54	68	59	52	41
2.00	83	72	64	80	70	63	74	66	59	47
2.50	88	78	70	84	75	68	78	70	64	51
3.00	92	83	75	88	80	73	81	74	69	55
4.00	96	89	82	92	85	79	85	79	74	59
5.00	99	93	87	95	89	84	87	82	78	62
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 02 January 2025

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
 Humidity: 65.0%  
 Test Distance: 8.186m [K=1.0000]  
 Remarks:

# ISOCANDELA DIAGRAM

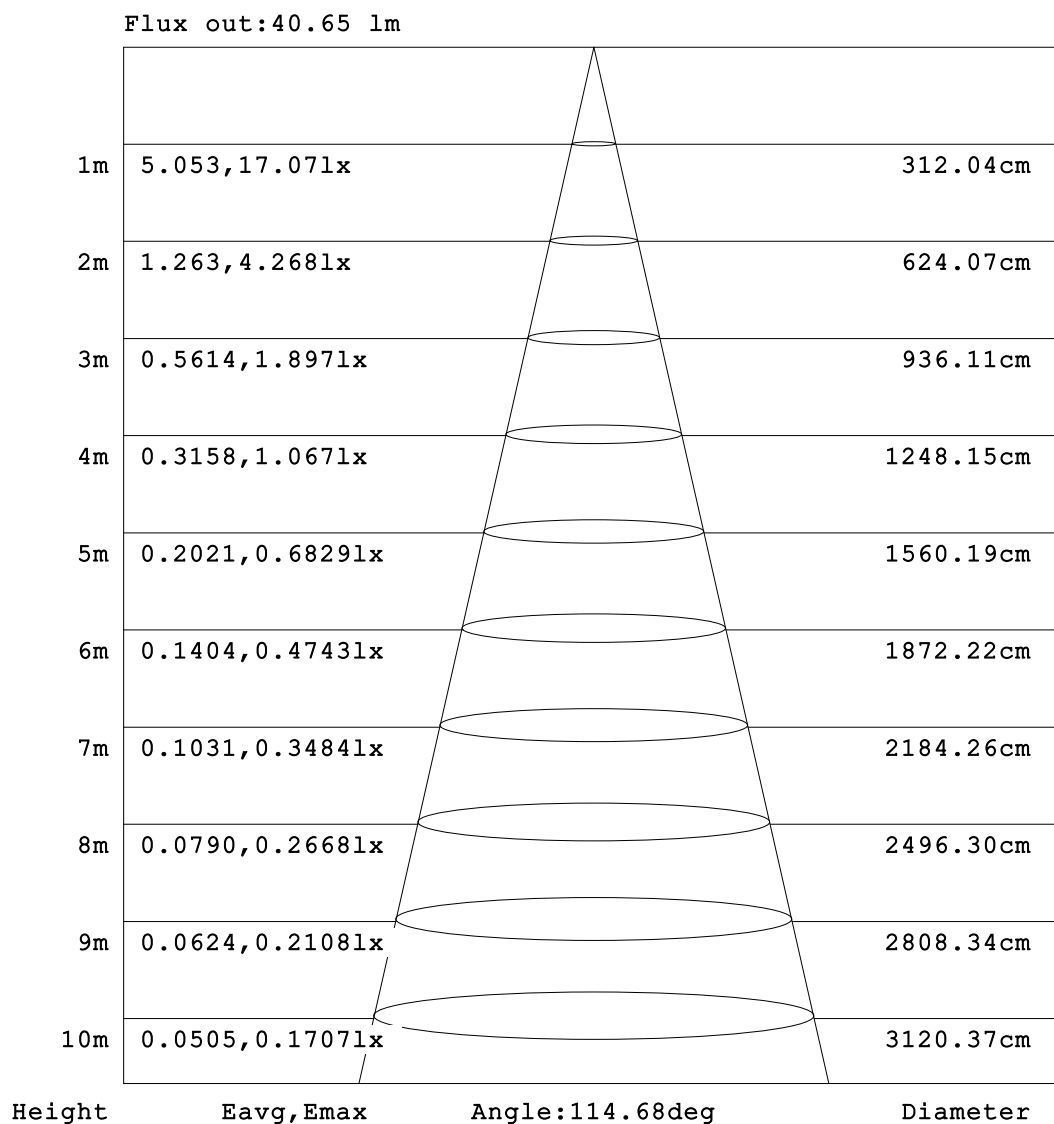


C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:DAMIN  
Test Date:02 January 2025

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
Humidity:65.0%  
Test Distance:8.186m [K=1.0000]  
Remarks:



### AAI Figure

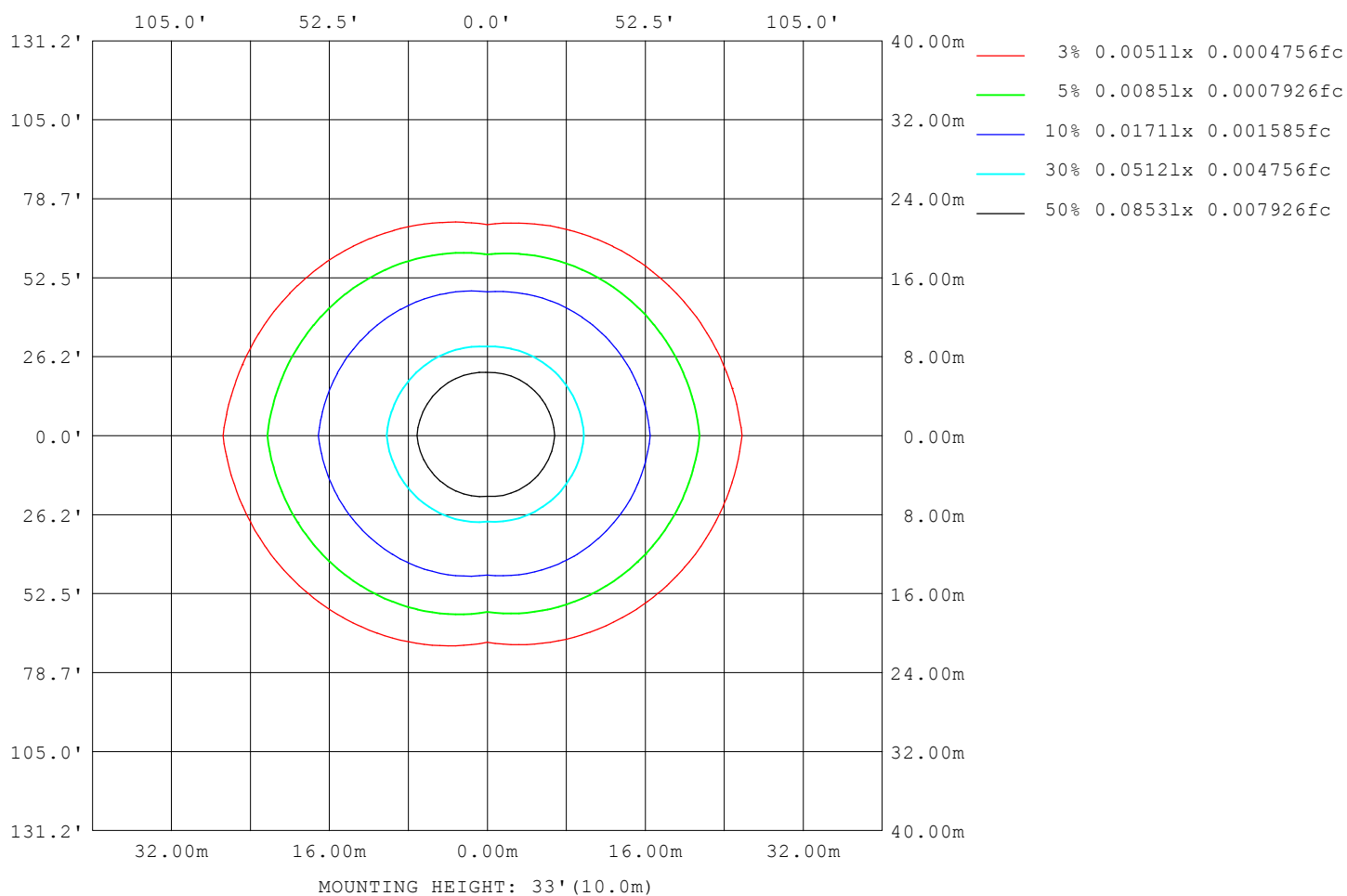


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3℃  
 Operators:DAMIN  
 Test Date:02 January 2025

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
 Humidity:65.0%  
 Test Distance:8.186m [K=1.0000]  
 Remarks:

# ISOLUX DIAGRAM



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 02 January 2025

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
 Humidity: 65.0%  
 Test Distance: 8.186m [K=1.0000]  
 Remarks:

### LED Avg.L Report

Test:U:101.40V I:0.0620A P:5.0000W PF:0.7940 Freq:50.00Hz Lamp Flux:81.6293x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

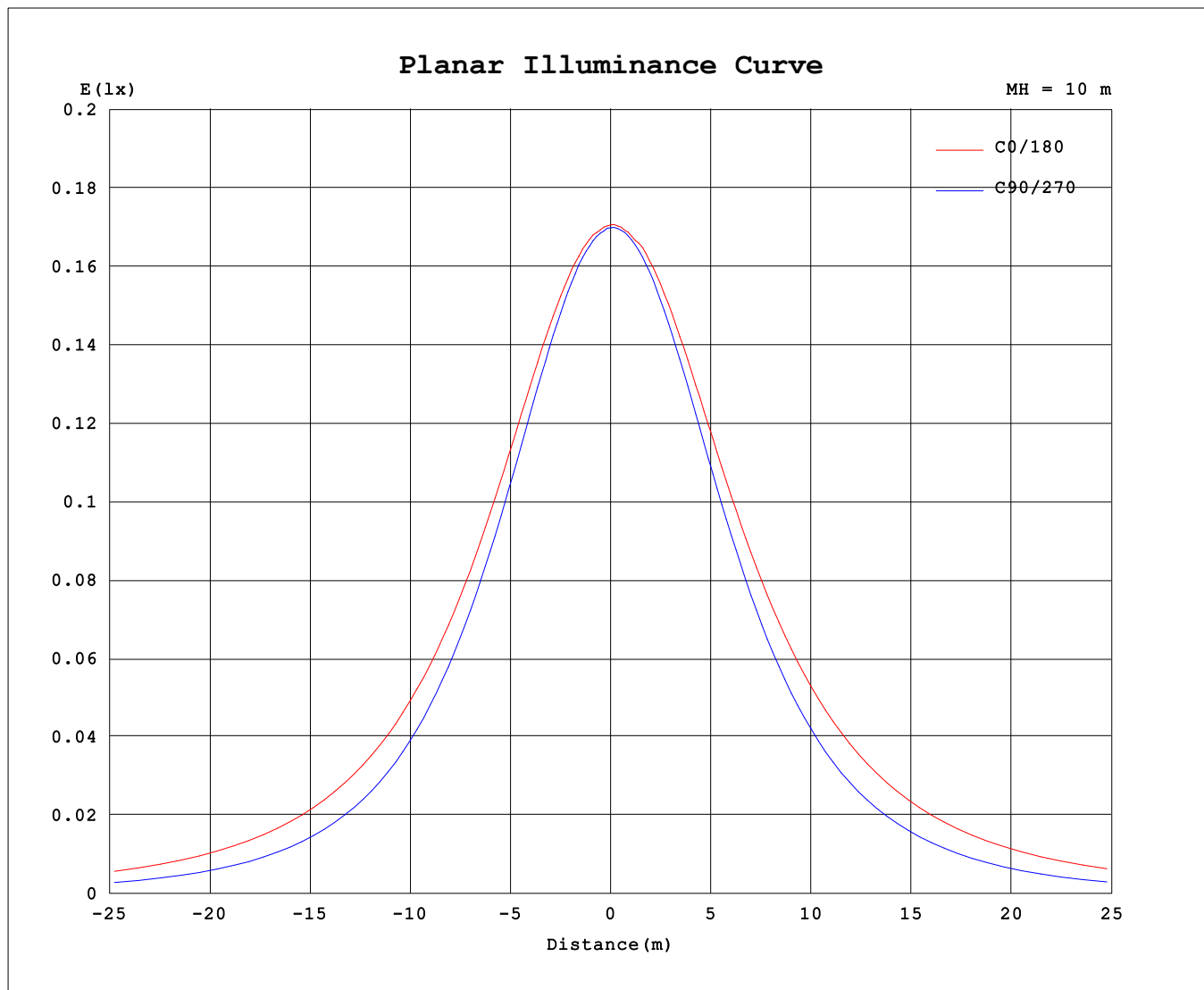
AvgL	cd/m2
L_0~180 (65) av	1411
L_0~180 (75) av	2038
L_0~180 (85) av	5257
L_90~270 (65) av	767
L_90~270 (75) av	737
L_90~270 (85) av	690
L_45 (65) av	1014
L_45 (75) av	1234
L_45 (85) av	2428

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:02 January 2025

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
Humidity:65.0%  
Test Distance:8.186m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: DAMIN  
Test Date: 02 January 2025

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
Humidity: 65.0%  
Test Distance: 8.186m [K=1.0000]  
Remarks:

# LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	17.0	17.0	17.0	17.0															
5	17.0	16.9	17.0	17.0															
10	16.8	16.6	17.1	16.8															
15	16.6	16.2	16.9	16.5															
20	16.3	15.6	16.8	16.1															
25	15.9	14.9	16.5	15.5															
30	15.5	14.1	16.2	14.7															
35	15.0	13.2	15.8	13.9															
40	14.5	12.2	15.4	12.9															
45	13.9	11.1	14.9	11.9															
50	13.3	9.92	14.4	10.7															
55	12.7	8.75	13.8	9.55															
60	12.0	7.51	13.2	8.24															
65	11.3	6.26	12.5	6.71															
70	10.6	4.98	11.9	5.29															
75	9.93	3.73	11.2	3.90															
80	9.25	2.46	10.5	2.59															
85	8.57	1.19	9.76	1.21															
90	7.93	0.11	9.06	0.22															
95	7.32	0.00	8.41	0.05															
100	6.74	0.00	7.79	0.04															
105	6.20	0.01	7.25	0.04															
110	5.69	0.06	6.70	0.09															
115	5.20	0.07	6.19	0.14															
120	4.78	0.11	5.71	0.17															
125	4.37	0.15	5.27	0.20															
130	3.98	0.19	4.82	0.23															
135	3.60	0.22	4.42	0.25															
140	3.25	0.26	4.03	0.26															
145	2.71	0.32	3.64	0.28															
150	2.09	0.39	3.20	0.30															
155	1.25	0.44	2.74	0.36															
160	0.37	0.48	2.03	0.41															
165	0.25	0.49	1.03	0.47															
170	0.18	0.52	0.77	0.51															
175	0.26	0.54	0.63	0.50															
180	0.49	0.54	0.50	0.52															

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:DAMIN  
Test Date:02 January 2025

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.459  
Humidity:65.0%  
Test Distance:8.186m [K=1.0000]  
Remarks: