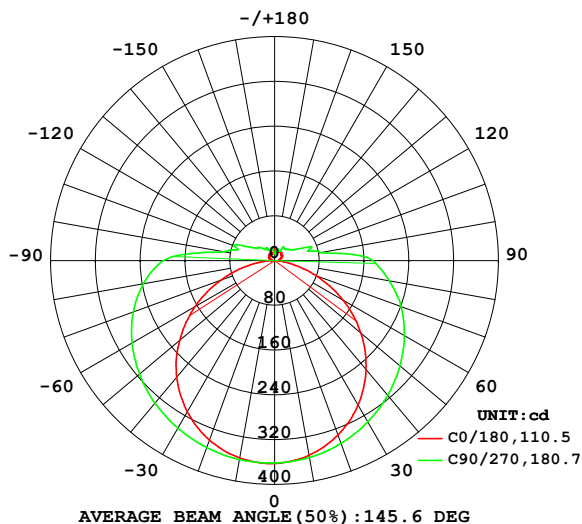


LUMINAIRE PHOTOMETRIC TEST REPORT

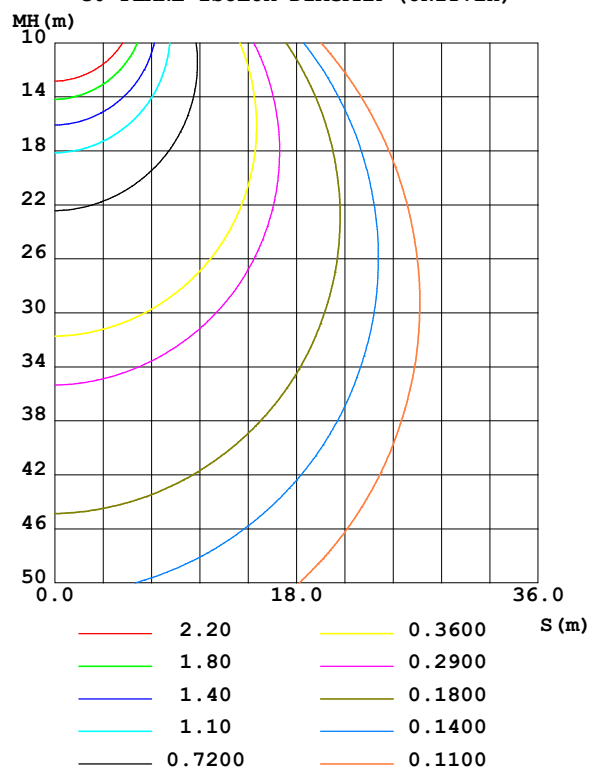
Test:U:120.12V I:0.2154A P:24.253W PF:0.9372 Freq:59.98Hz Lamp Flux:1609.83x1 lm		
NAME: WS24-033B-BN 24W 27K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 66.38 lm/W
MODEL	2700K	I _{max} (cd)	362.5	S/MH(C0/180)	1.28	
NOMINAL POWER(W)	24	LOR(%)	100.0	S/MH(C90/270)	1.44	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1609.8	η UP,DN(C0-180)	6.9,40.9	
NOMINAL FLUX(lm)	1609.83	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	7.4,44.8	
LAMPS INSIDE	1	η up(%)	14.3	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	120	η down(%)	85.7	CIBSE SHR MAX	1.55	

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: 10 February 2026

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity: 65.0%
Test Distance: 7.380m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	353.2	357.2	358.0	361.0					0- 10	34.33	34.33	2.13,2.13
20	331.5	347.4	341.0	355.4					10- 20	99.37	133.7	8.31,8.31
30	298.2	332.8	312.1	345.8					20- 30	154.1	287.8	17.9,17.9
40	254.2	314.2	272.2	332.5					30- 40	193.3	481.1	29.9,29.9
50	201.2	292.3	221.1	315.3					40- 50	213.3	694.4	43.1,43.1
60	141.2	267.9	163.9	293.9					50- 60	212.7	907.1	56.3,56.3
70	78.28	240.7	102.2	268.7					60- 70	193.0	1100	68.3,68.3
80	24.49	207.8	43.53	238.0					70- 80	158.6	1259	78.2,78.2
90	6.754	175.5	7.573	199.1					80- 90	121.2	1380	85.7,85.7
100	8.772	85.27	7.132	92.33					90-100	80.49	1460	90.7,90.7
110	11.70	70.80	9.590	78.06					100-110	44.33	1505	93.5,93.5
120	14.75	39.08	12.62	47.62					110-120	35.36	1540	95.7,95.7
130	16.13	31.45	13.17	36.93					120-130	23.26	1563	97.1,97.1
140	17.79	27.72	14.98	26.54					130-140	17.63	1581	98.2,98.2
150	17.76	20.29	15.15	24.73					140-150	13.79	1595	99.1,99.1
160	16.52	18.80	13.34	20.81					150-160	8.364	1603	99.6,99.6
170	17.12	18.46	14.80	22.71					160-170	5.060	1608	99.9,99.9
180	20.19	13.00	20.22	13.08					170-180	1.616	1610	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 586.57 lm

%lum = 36.4%

%lamp = 36.4%

Conical surface Flux(120deg): 907.09 lm

%lum = 56.3%

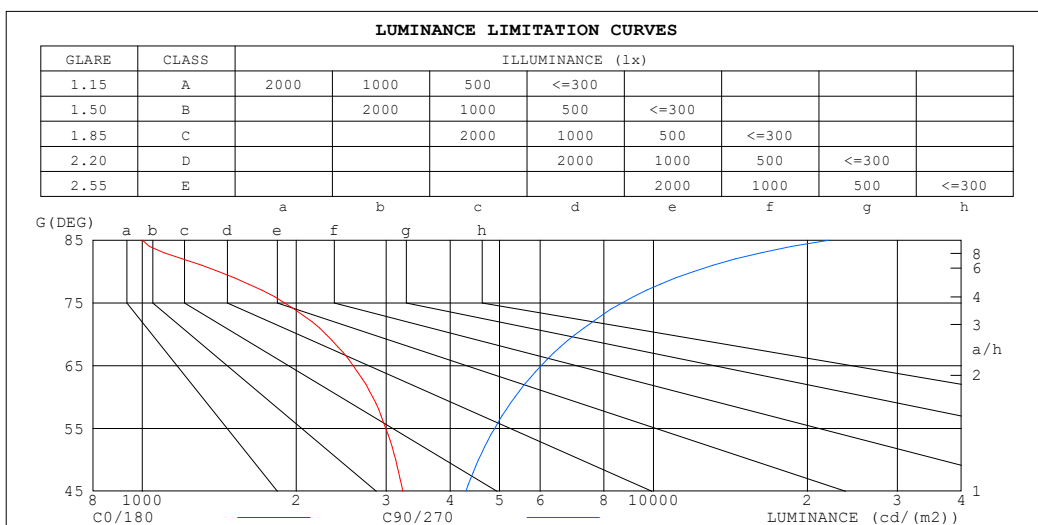
%lamp = 56.3%

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:DAMIN
 Test Date:10 February 2026

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459
 Humidity:65.0%
 Test Distance:7.380m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.12V I:0.2154A P:24.253W PF:0.9372 Freq:59.98Hz Lamp Flux:1609.83x1 lm		
NAME: WS24-033B-BN 24W 27K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1001	21989
80	1410	11968
75	1900	8674
70	2289	7038
65	2587	6027
60	2824	5357
55	2996	4888
50	3130	4547
45	3235	4295

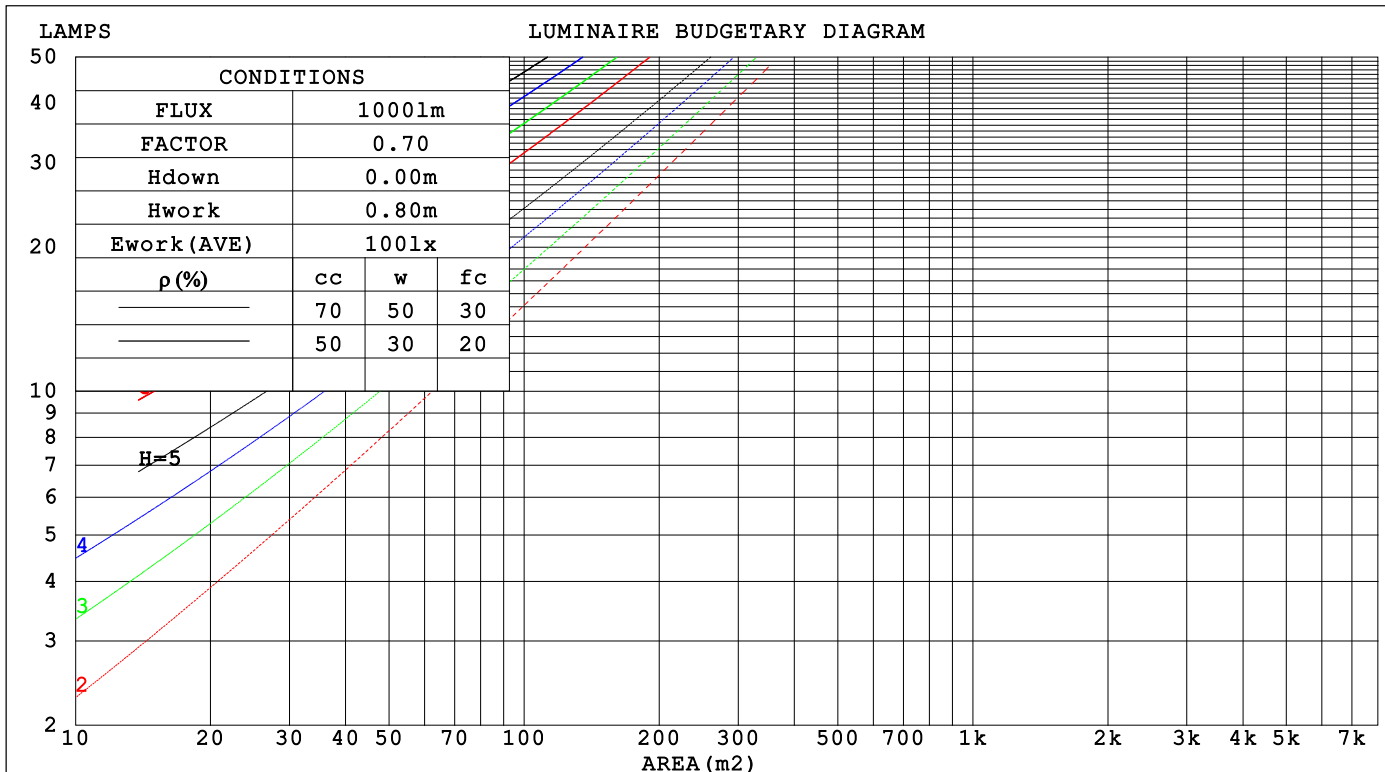
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:10 February 2026

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity:65.0%
Test Distance:7.380m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.12V I:0.2154A P:24.253W PF:0.9372 Freq:59.98Hz Lamp Flux:1609.83x1 lm		
NAME: WS24-033B-BN 24W 27K	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															Coefficients of Utilization(CU)														
0.0	1.16	1.16	1.16	1.11	1.11	1.11	1.03	1.03	1.03	.96	.96	.96	.89	.89	.89	.86														
1.0	.96	.91	.86	.93	.88	.83	.86	.82	.78	.79	.76	.73	.73	.71	.68	.65														
2.0	.82	.74	.68	.79	.72	.66	.73	.67	.62	.68	.63	.58	.63	.59	.55	.52														
3.0	.71	.62	.55	.69	.60	.54	.64	.57	.51	.59	.53	.48	.54	.50	.45	.42														
4.0	.63	.53	.46	.60	.51	.45	.56	.48	.42	.52	.45	.40	.48	.43	.38	.35														
5.0	.56	.46	.39	.54	.45	.38	.50	.42	.36	.46	.40	.34	.43	.37	.33	.30														
6.0	.50	.40	.33	.48	.39	.33	.45	.37	.31	.42	.35	.30	.39	.33	.29	.26														
7.0	.45	.36	.29	.43	.35	.29	.40	.33	.27	.38	.31	.26	.35	.30	.25	.23														
8.0	.41	.32	.26	.39	.31	.25	.37	.30	.24	.35	.28	.23	.32	.27	.22	.20														
9.0	.37	.29	.23	.36	.28	.23	.34	.27	.22	.32	.25	.21	.30	.24	.20	.18														
10.0	.34	.26	.21	.33	.26	.20	.31	.24	.20	.29	.23	.19	.28	.22	.18	.16														



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:10 February 2026

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity:65.0%
Test Distance:7.380m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:120.12V I:0.2154A P:24.253W PF:0.9372 Freq:59.98Hz Lamp Flux:1609.83x1 lm		
NAME: WS24-033B-BN 24W 27K	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	.388	.221	.070	.377	.215	.068	.355	.204	.065	.335	.193	.062	.317	.183	.059		
2.0	.337	.184	.057	.326	.180	.055	.307	.170	.053	.288	.162	.051	.272	.154	.048		
3.0	.299	.159	.048	.290	.155	.047	.272	.147	.045	.256	.140	.043	.240	.133	.041		
4.0	.269	.140	.041	.261	.136	.040	.245	.130	.039	.230	.123	.037	.216	.117	.036		
5.0	.245	.125	.036	.237	.122	.035	.223	.116	.034	.209	.110	.033	.196	.105	.032		
6.0	.224	.112	.032	.217	.110	.032	.204	.105	.030	.192	.100	.029	.180	.095	.028		
7.0	.207	.102	.029	.200	.100	.028	.188	.095	.027	.177	.091	.026	.167	.087	.025		
8.0	.192	.094	.026	.186	.091	.026	.175	.087	.025	.165	.083	.024	.155	.079	.023		
9.0	.178	.086	.024	.173	.084	.024	.163	.081	.023	.154	.077	.022	.145	.073	.021		
10.0	.167	.080	.022	.162	.078	.022	.153	.075	.021	.144	.072	.020	.136	.068	.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	.299	.299	.299	.256	.256	.256	.175	.175	.175	.100	.100	.100	.032	.032	.032		
1.0	.295	.265	.238	.253	.228	.205	.173	.157	.142	.100	.091	.082	.032	.029	.027		
2.0	.289	.242	.203	.247	.208	.176	.169	.144	.122	.098	.084	.072	.031	.027	.023		
3.0	.281	.226	.181	.241	.195	.157	.165	.135	.110	.096	.079	.065	.031	.026	.021		
4.0	.273	.213	.167	.235	.184	.145	.161	.128	.102	.093	.075	.060	.030	.024	.020		
5.0	.266	.203	.157	.228	.176	.137	.157	.123	.096	.091	.072	.057	.029	.024	.019		
6.0	.258	.195	.150	.222	.169	.131	.153	.118	.092	.089	.070	.055	.029	.023	.018		
7.0	.251	.188	.145	.216	.163	.126	.149	.115	.089	.087	.067	.053	.028	.022	.018		
8.0	.244	.183	.141	.210	.159	.123	.145	.111	.087	.085	.066	.052	.027	.022	.017		
9.0	.238	.178	.138	.205	.154	.120	.142	.109	.085	.083	.064	.051	.027	.021	.017		
10.0	.232	.174	.135	.200	.151	.118	.139	.106	.084	.081	.063	.050	.026	.021	.017		

C Range: 0 - 360DEG

C Interval: 90.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:10 February 2026

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459

Humidity:65.0%

Test Distance:7.380m [K=1.0000]

Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.12V I:0.2154A P:24.253W PF:0.9372 Freq:59.98Hz Lamp Flux:1609.83x1 lm										
NAME: WS24-033B-BN 24W 27K					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	13.8	15.2	14.3	15.7	16.2	16.0	17.4	16.5	17.9	18.4
3H	15.1	16.5	15.6	16.9	17.5	18.8	20.1	19.3	20.6	21.1
4H	15.6	16.9	16.1	17.4	17.9	20.3	21.6	20.8	22.1	22.6
6H	15.9	17.1	16.4	17.6	18.2	22.0	23.2	22.5	23.7	24.3
8H	15.9	17.1	16.5	17.6	18.2	23.0	24.1	23.5	24.6	25.2
12H	16.0	17.1	16.5	17.6	18.2	24.1	25.2	24.6	25.7	26.3
4H 2H	14.9	16.1	15.4	16.6	17.2	16.5	17.8	17.0	18.3	18.8
3H	16.5	17.6	17.1	18.2	18.8	19.4	20.6	20.0	21.1	21.7
4H	17.2	18.2	17.8	18.8	19.4	21.2	22.2	21.7	22.7	23.4
6H	17.7	18.6	18.3	19.2	19.9	23.1	24.0	23.7	24.6	25.2
8H	17.8	18.7	18.5	19.3	20.0	24.2	25.0	24.8	25.6	26.3
12H	17.9	18.7	18.6	19.3	20.1	25.4	26.2	26.1	26.8	27.5
8H 4H	18.2	19.1	18.8	19.7	20.4	21.4	22.3	22.0	22.9	23.6
6H	19.1	19.8	19.7	20.4	21.2	23.6	24.3	24.2	24.9	25.7
8H	19.4	20.1	20.1	20.7	21.5	24.9	25.5	25.5	26.2	26.9
12H	19.7	20.3	20.4	21.0	21.7	26.4	27.0	27.1	27.6	28.4
12H 4H	18.5	19.3	19.2	19.9	20.7	21.4	22.2	22.0	22.8	23.5
6H	19.6	20.3	20.3	20.9	21.7	23.6	24.3	24.3	25.0	25.7
8H	20.2	20.7	20.8	21.4	22.2	25.0	25.6	25.7	26.3	27.0
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.2				
2.0H	+ 0.2 / - 0.5					+ 0.2 / - 0.3				

CIE Pub.117, 1610 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.7)
Area: 0.1 m2

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:10 February 2026

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity:65.0%
Test Distance:7.380m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.12V I:0.2154A P:24.253W PF:0.9372 Freq:59.98Hz Lamp Flux:1609.83x1 lm		
NAME: WS24-033B-BN 24W 27K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

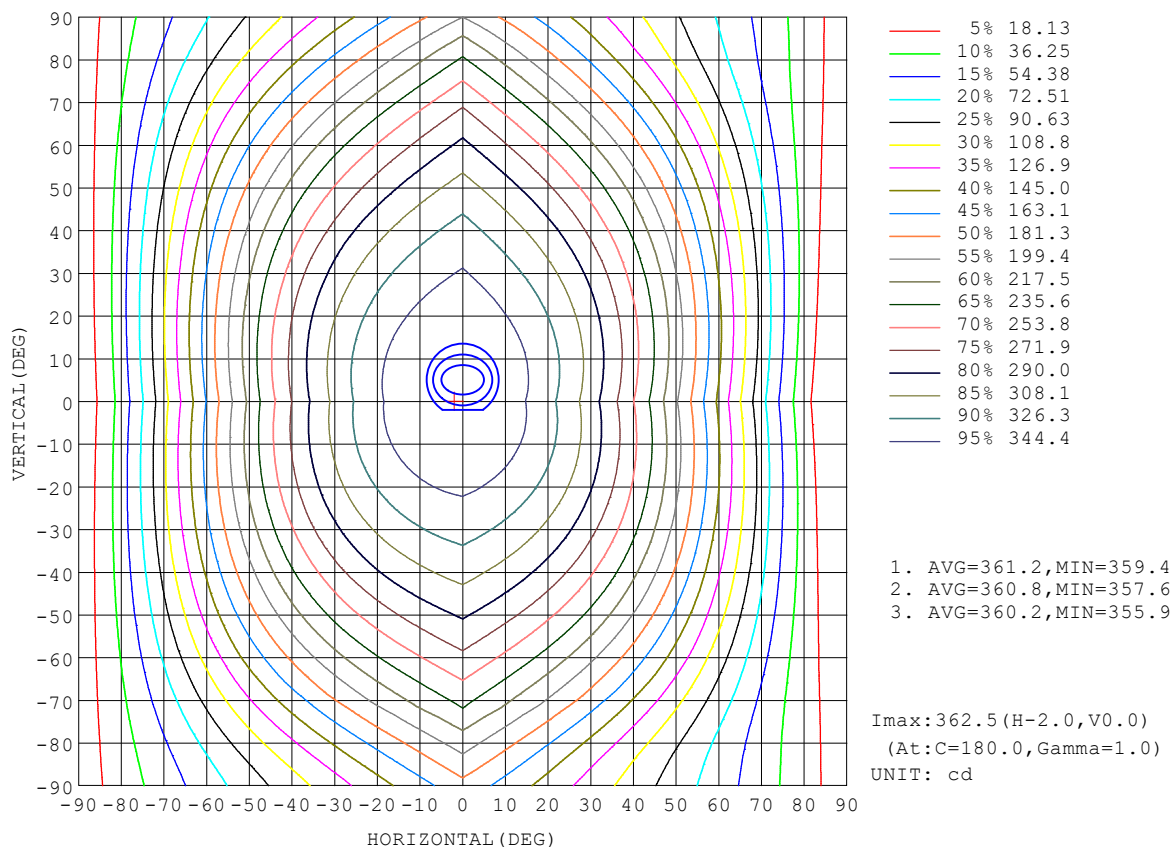
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	49	36	29	48	36	29	46	35	28	22
0.80	58	45	37	56	44	37	54	43	36	28
1.00	66	53	44	64	52	44	61	53	43	34
1.25	73	60	52	70	59	51	66	57	49	40
1.50	78	66	57	75	64	56	71	61	54	44
2.00	85	74	66	82	72	65	77	69	62	51
2.50	90	79	72	86	77	70	81	73	67	55
3.00	93	84	77	90	82	75	84	77	71	59
4.00	98	90	84	94	87	81	88	82	77	64
5.00	101	94	88	97	91	86	90	85	81	67
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: 10 February 2026

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity: 65.0%
Test Distance: 7.380m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.12V I:0.2154A P:24.253W PF:0.9372 Freq:59.98Hz Lamp Flux:1609.83x1 lm		
NAME: WS24-033B-BN 24W 27K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

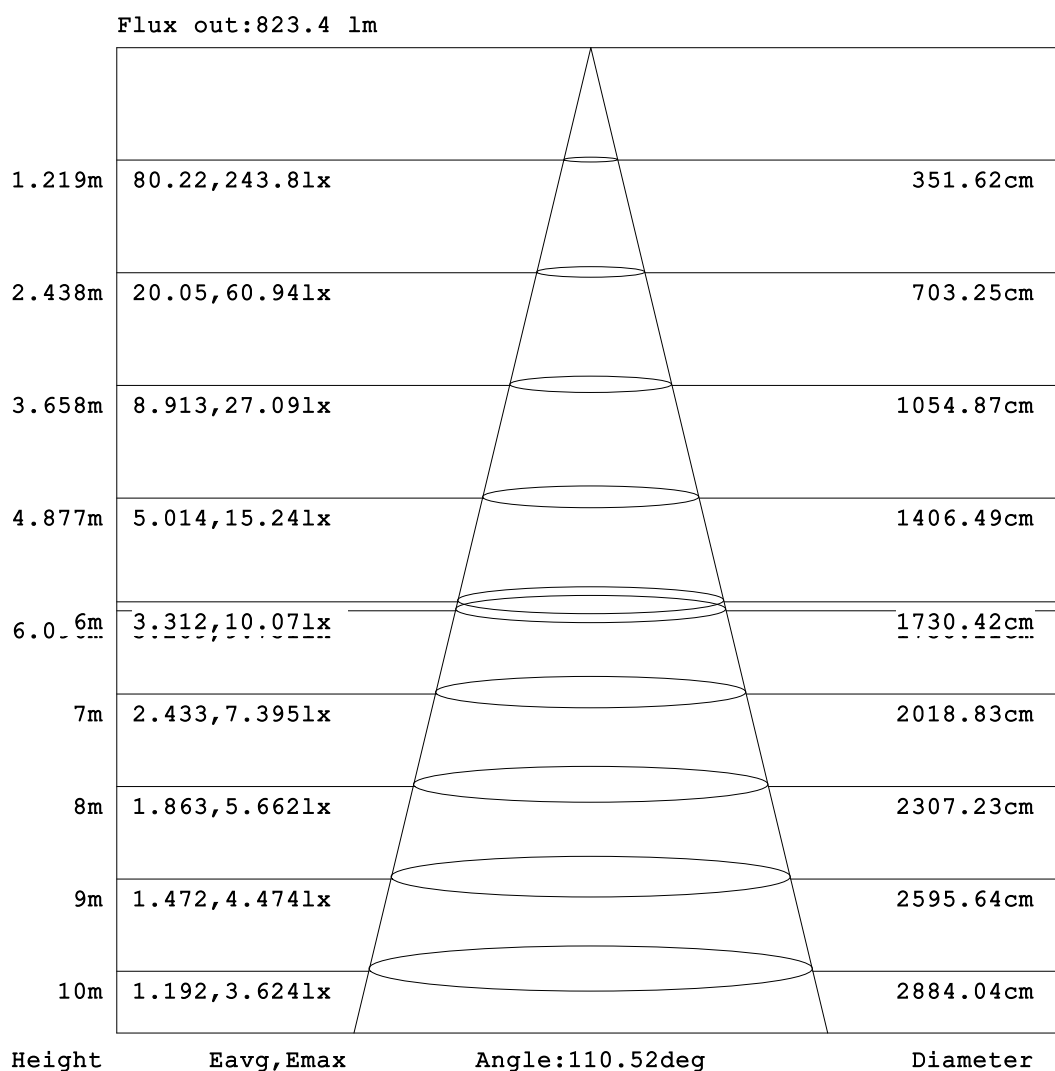


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:10 February 2026

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity:65.0%
Test Distance:7.380m [K=1.0000]
Remarks:

AAI Figure

Test:U:120.12V I:0.2154A P:24.253W PF:0.9372 Freq:59.98Hz Lamp Flux:1609.83x1 lm		
NAME: WS24-033B-BN 24W 27K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



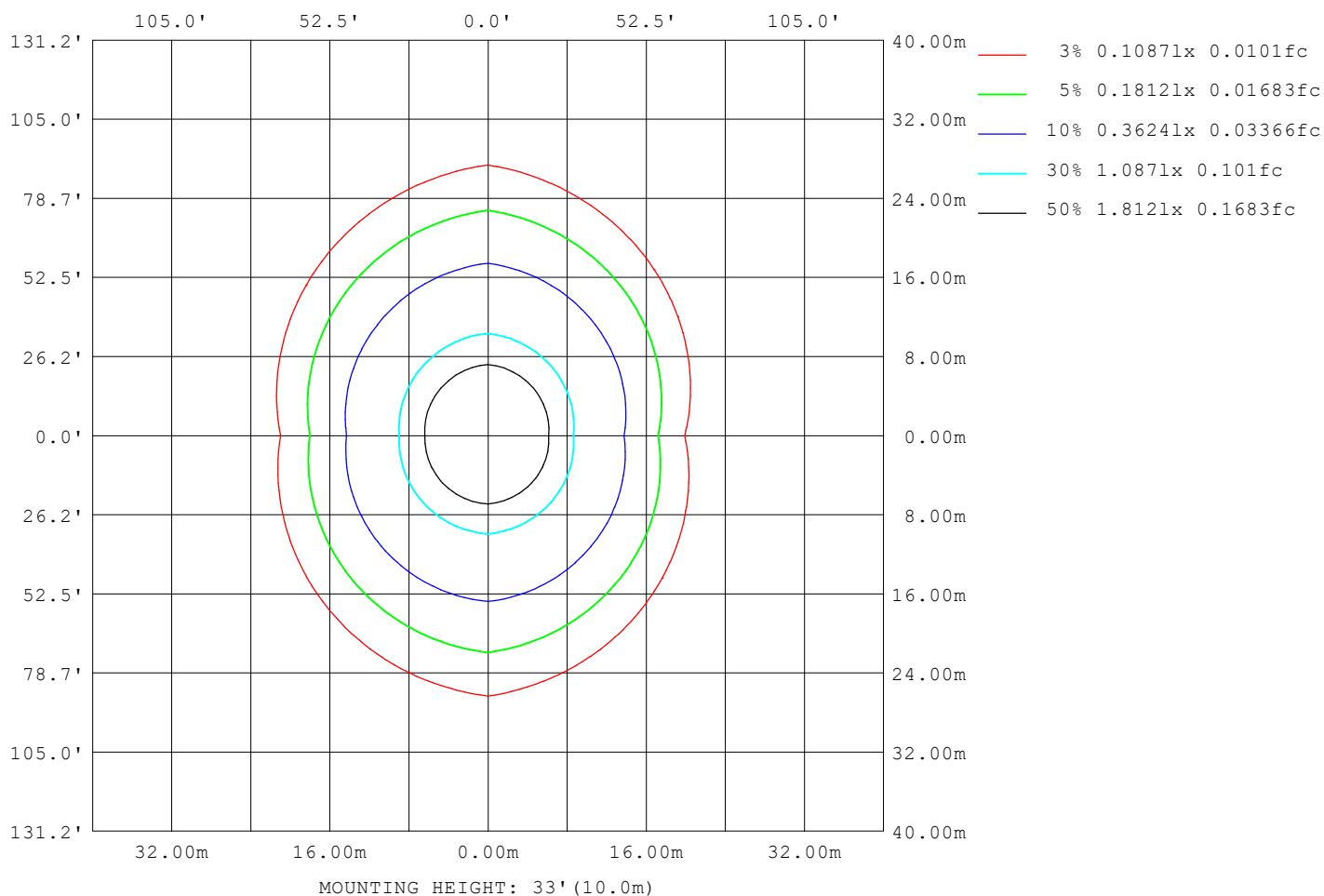
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:10 February 2026

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity:65.0%
Test Distance:7.380m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:120.12V I:0.2154A P:24.253W PF:0.9372 Freq:59.98Hz Lamp Flux:1609.83x1 lm		
NAME: WS24-033B-BN 24W 27K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 10 February 2026

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity: 65.0%
Test Distance: 7.380m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:120.12V I:0.2154A P:24.253W PF:0.9372 Freq:59.98Hz Lamp Flux:1609.83x1 lm		
NAME: WS24-033B-BN 24W 27K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

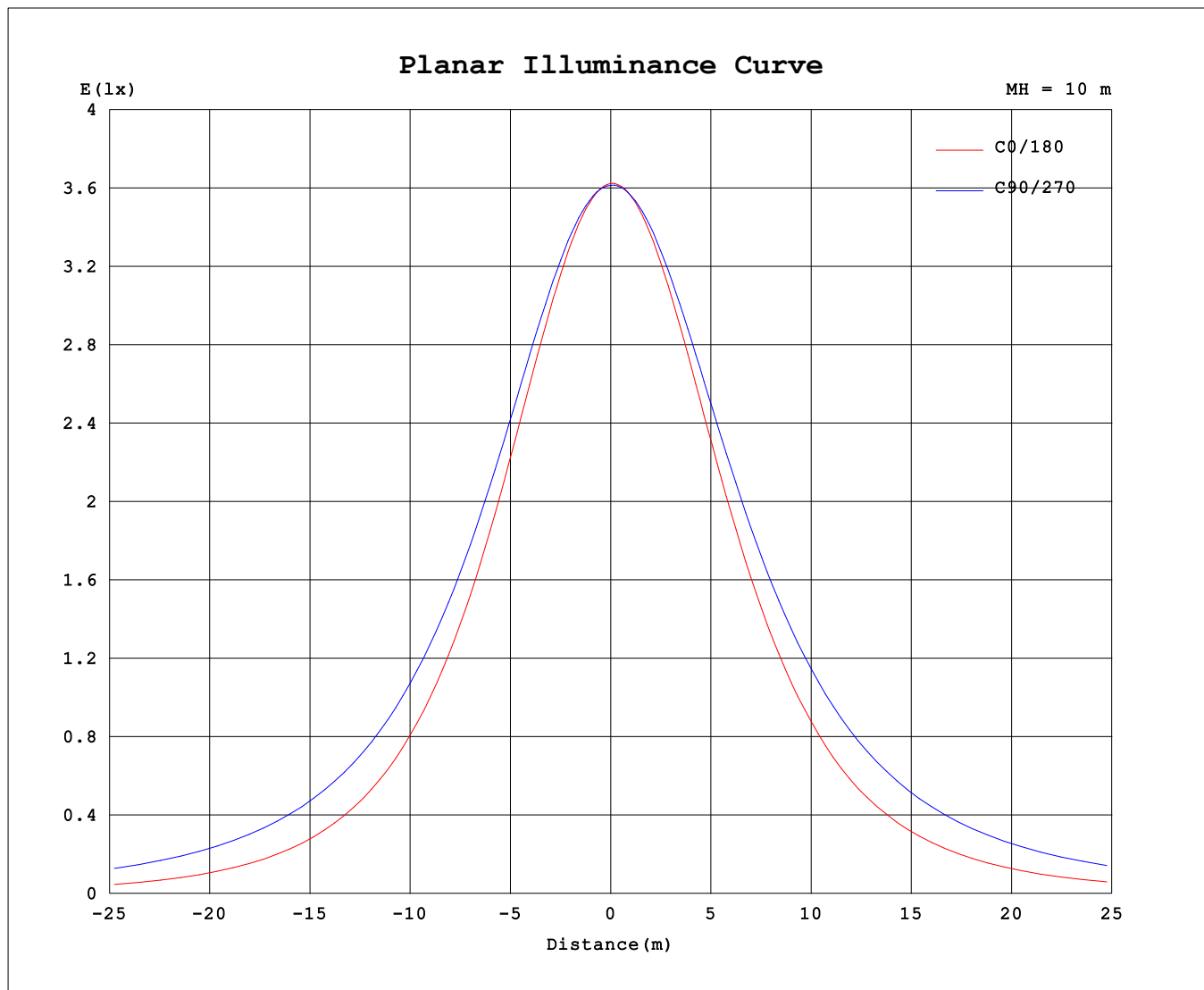
AvgL	cd/m2
L_0~180 (65) av	2871
L_0~180 (75) av	2335
L_0~180 (85) av	1680
L_90~270 (65) av	6350
L_90~270 (75) av	9242
L_90~270 (85) av	23608
L_45 (65) av	5063
L_45 (75) av	6679
L_45 (85) av	15427

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:10 February 2026

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity:65.0%
Test Distance:7.380m [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: 10 February 2026

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity: 65.0%
Test Distance: 7.380m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.12V I:0.2154A P:24.253W PF:0.9372 Freq:59.98Hz Lamp Flux:1609.83x1 lm		
NAME: WS24-033B-BN 24W 27K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270														
0	362	361	362	361														
5	359	360	362	362														
10	353	357	358	361														
15	344	353	351	359														
20	332	347	341	355														
25	316	341	328	351														
30	298	333	312	346														
35	277	324	293	340														
40	254	314	272	333														
45	229	304	249	324														
50	201	292	221	315														
55	172	280	193	305														
60	141	268	164	294														
65	109	255	133	282														
70	78.3	241	102	269														
75	49.2	225	71.7	254														
80	24.5	208	43.5	238														
85	8.73	192	20.6	220														
90	6.75	176	7.57	199														
95	7.66	135	6.43	150														
100	8.77	85.3	7.13	92.3														
105	10.0	64.8	7.82	74.8														
110	11.7	70.8	9.59	78.1														
115	13.3	51.7	10.9	64.2														
120	14.8	39.1	12.6	47.6														
125	15.8	34.7	12.7	38.4														
130	16.1	31.5	13.2	36.9														
135	16.2	28.8	13.6	32.1														
140	17.8	27.7	15.0	26.5														
145	18.6	28.4	15.8	25.7														
150	17.8	20.3	15.1	24.7														
155	17.4	19.2	14.6	21.3														
160	16.5	18.8	13.3	20.8														
165	15.8	21.8	12.8	22.9														
170	17.1	18.5	14.8	22.7														
175	19.1	12.3	18.0	14.5														
180	20.2	13.0	20.2	13.1														

C Range: 0 - 360DEG

C Interval: 90.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:10 February 2026

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459

Humidity:65.0%

Test Distance:7.380m [K=1.0000]

Remarks: