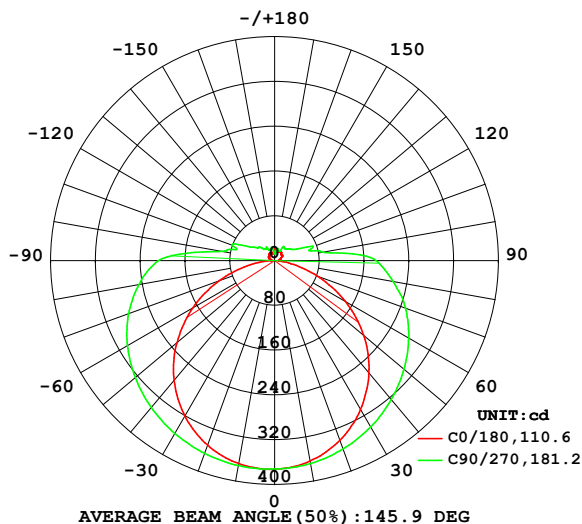


LUMINAIRE PHOTOMETRIC TEST REPORT

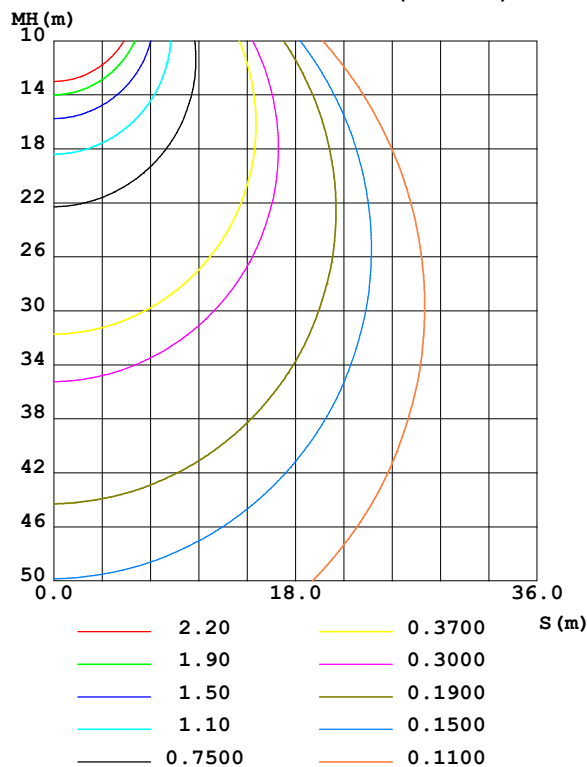
Test:U:120.10V I:0.2159A P:24.329W PF:0.9382 Freq:59.98Hz Lamp Flux:1662.07x1 lm		
NAME: WS24-033B-BN 24W 50K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 68.32 lm/W			
MODEL	5000K	I _{max} (cd)	373.0	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)	1662.1	η UP,DN(C0-180)	6.9,40.9
NOMINAL FLUX(lm)	1662.07	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	363.6	368.2	368.4	371.7					0- 10	35.35	35.35	2.13,2.13
20	341.5	358.0	350.8	366.3					10- 20	102.4	137.7	8.29,8.29
30	307.4	343.3	320.9	356.7					20- 30	158.8	296.5	17.8,17.8
40	262.2	324.2	279.7	342.8					30- 40	199.2	495.7	29.8,29.8
50	207.9	301.8	227.2	325.2					40- 50	219.9	715.6	43.1,43.1
60	146.1	276.7	168.4	303.6					50- 60	219.4	935.0	56.3,56.3
70	81.14	248.8	104.9	277.5					60- 70	199.3	1134	68.2,68.2
80	25.70	214.8	44.52	246.0					70- 80	163.9	1298	78.1,78.1
90	6.986	181.6	7.826	207.9					80- 90	125.6	1424	85.7,85.7
100	9.047	88.45	7.612	96.14					90-100	83.86	1508	90.7,90.7
110	12.06	73.56	10.04	80.95					100-110	45.96	1554	93.5,93.5
120	15.25	40.52	13.09	48.99					110-120	36.72	1590	95.7,95.7
130	16.64	32.51	13.58	37.77					120-130	24.06	1614	97.1,97.1
140	18.24	28.60	15.53	28.12					130-140	18.08	1632	98.2,98.2
150	18.22	20.90	15.58	25.87					140-150	14.12	1647	99.1,99.1
160	16.64	19.43	14.02	21.31					150-160	8.605	1655	99.6,99.6
170	17.68	19.07	15.05	23.26					160-170	5.205	1660	99.9,99.9
180	20.78	13.86	20.76	13.84					170-180	1.669	1662	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 604.37 lm

%lum = 36.4%

%lamp = 36.4%

Conical surface Flux(120deg): 935.02 lm

%lum = 56.3%

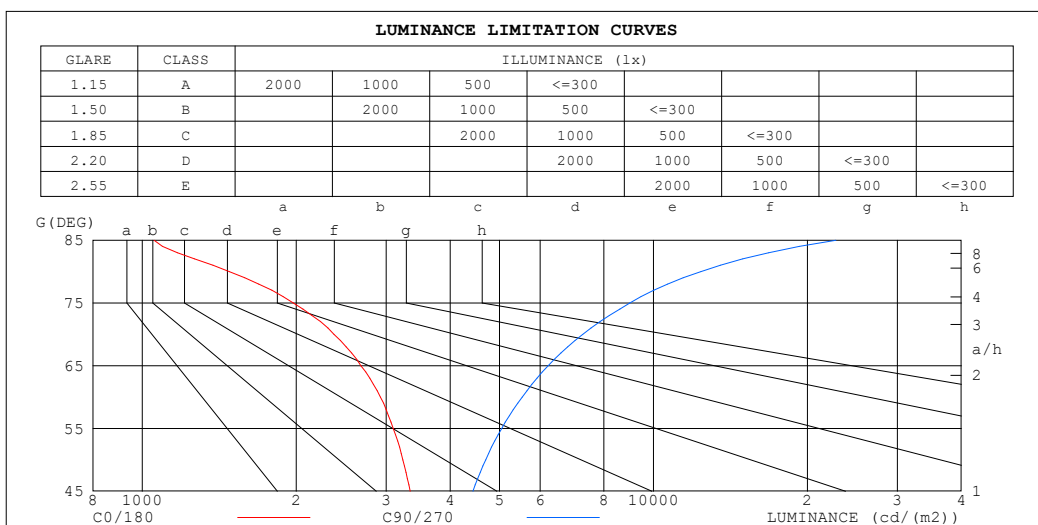
%lamp = 56.3%

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:120.10V I:0.2159A P:24.329W PF:0.9382 Freq:59.98Hz Lamp Flux:1662.07x1 lm		
NAME: WS24-033B-BN 24W 50K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1054	22746
80	1480	12369
75	1973	8990
70	2373	7275
65	2676	6226
60	2922	5535
55	3095	5048
50	3234	4695
45	3341	4433

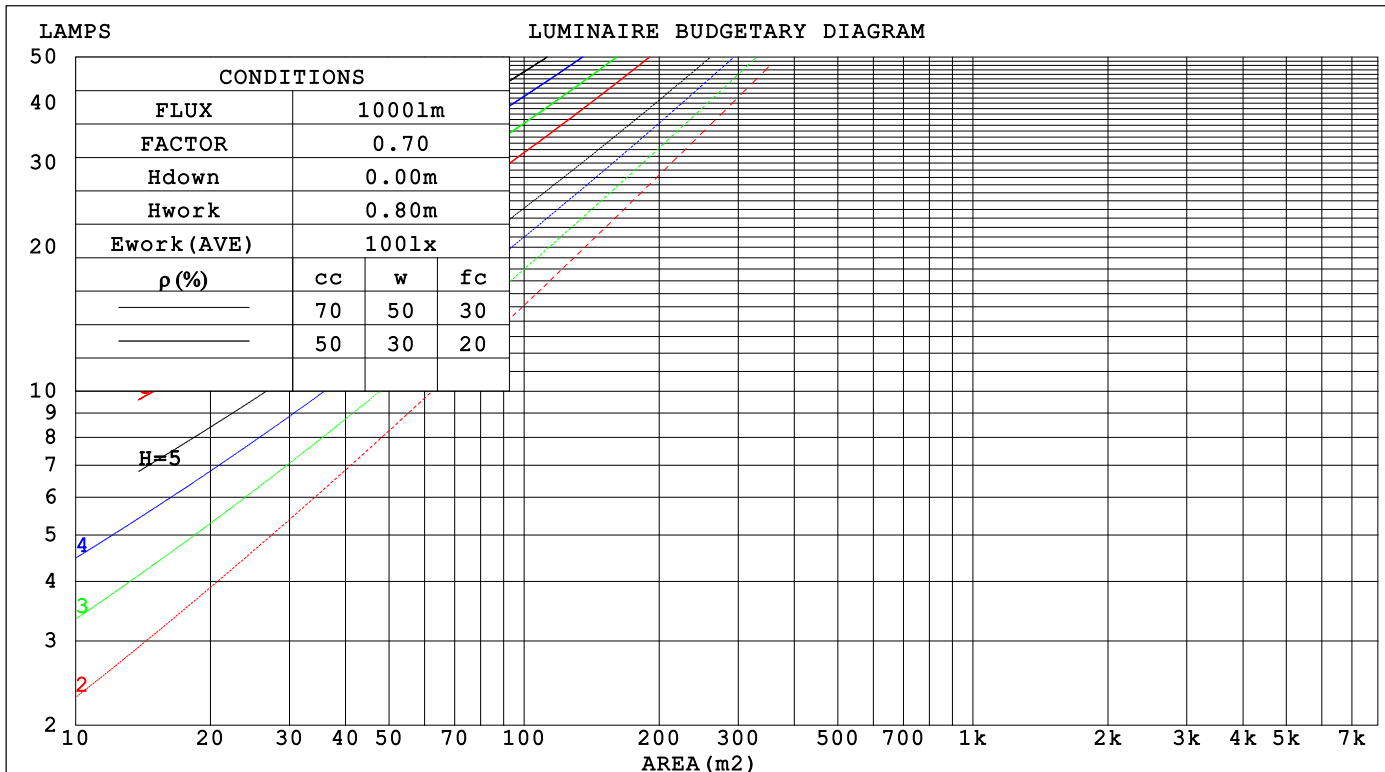
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3 °C
Operators: DAMIN
Test Date: 10 February 2026

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.10V I:0.2159A P:24.329W PF:0.9382 Freq:59.98Hz Lamp Flux:1662.07x1 lm		
NAME: WS24-033B-BN 24W 50K	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	.62	.59	.55	.52														
3.0	.71	.62	.55	.69	.60	.53	.63	.56	.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	.53	.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	.29	.25	.23														
8.0	.41	.32	.26	.39	.31	.25	.37	.30	.24	.34	.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:120.10V I:0.2159A P:24.329W PF:0.9382 Freq:59.98Hz Lamp Flux:1662.07x1 lm		
NAME: WS24-033B-BN 24W 50K	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	.389	.221	.070	.377	.215	.068	.355	.204	.065	.335	.193	.062	.317	.184	.059		
2.0	.337	.185	.057	.326	.180	.055	.307	.171	.053	.289	.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	.166	.086	.025		
8.0	.192	.094	.026	.186	.091	.026	.175	.087	.025	.164	.083	.024	.155	.079	.023		
9.0	.179	.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	.300	.300	.300	.256	.256	.256	.175	.175	.175	.100	.100	.100	.032	.032	.032		
1.0	.296	.266	.238	.253	.228	.205	.173	.157	.142	.100	.091	.082	.032	.029	.027		
2.0	.289	.243	.203	.248	.209	.176	.170	.144	.123	.098	.084	.072	.031	.027	.023		
3.0	.282	.226	.182	.241	.195	.157	.166	.135	.110	.096	.079	.065	.031	.026	.021		
4.0	.274	.213	.167	.235	.184	.145	.162	.128	.102	.093	.075	.061	.030	.025	.020		
5.0	.266	.204	.157	.228	.176	.137	.157	.123	.097	.091	.072	.057	.029	.024	.019		
6.0	.258	.196	.150	.222	.169	.131	.153	.119	.093	.089	.070	.055	.029	.023	.018		
7.0	.251	.189	.145	.216	.164	.126	.149	.115	.090	.087	.068	.053	.028	.022	.018		
8.0	.245	.183	.141	.211	.159	.123	.146	.112	.087	.085	.066	.052	.027	.022	.017		
9.0	.238	.178	.138	.205	.155	.120	.142	.109	.085	.083	.064	.051	.027	.021	.017		
10.0	.232	.174	.136	.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:120.10V I:0.2159A P:24.329W PF:0.9382 Freq:59.98Hz Lamp Flux:1662.07x1 lm										
NAME: WS24-033B-BN 24W 50K					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	17.0	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	22.6	23.7	24.3
8H	16.0	17.1	16.5	17.6	18.2	23.0	24.1	23.5	24.7	25.3
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	19.5	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	22.8	23.4
6H	17.7	18.6	18.3	19.2	19.9	23.1	24.0	23.7	24.6	25.3
8H	17.9	18.7	18.5	19.3	20.0	24.2	25.0	24.8	25.6	26.3
12H	18.0	18.7	18.6	19.4	20.1	25.4	26.2	26.1	26.8	27.6
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	20.5	21.2	23.6	24.3	24.2	24.9	25.7
8H	19.5	20.1	20.1	20.8	21.5	24.9	25.5	25.5	26.2	26.9
12H	19.8	20.3	20.4	21.0	21.8	26.4	27.0	27.1	27.6	28.4
12H 4H	18.5	19.3	19.2	20.0	20.7	21.4	22.2	22.0	22.8	23.5
6H	19.6	20.3	20.3	20.9	21.7	23.7	24.3	24.3	25.0	25.7
8H	20.2	20.7	20.9	21.4	22.2	25.0	25.6	25.7	26.3	27.1
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, 1662 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.8)
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:120.10V I:0.2159A P:24.329W PF:0.9382 Freq:59.98Hz Lamp Flux:1662.07x1 lm		
NAME: WS24-033B-BN 24W 50K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

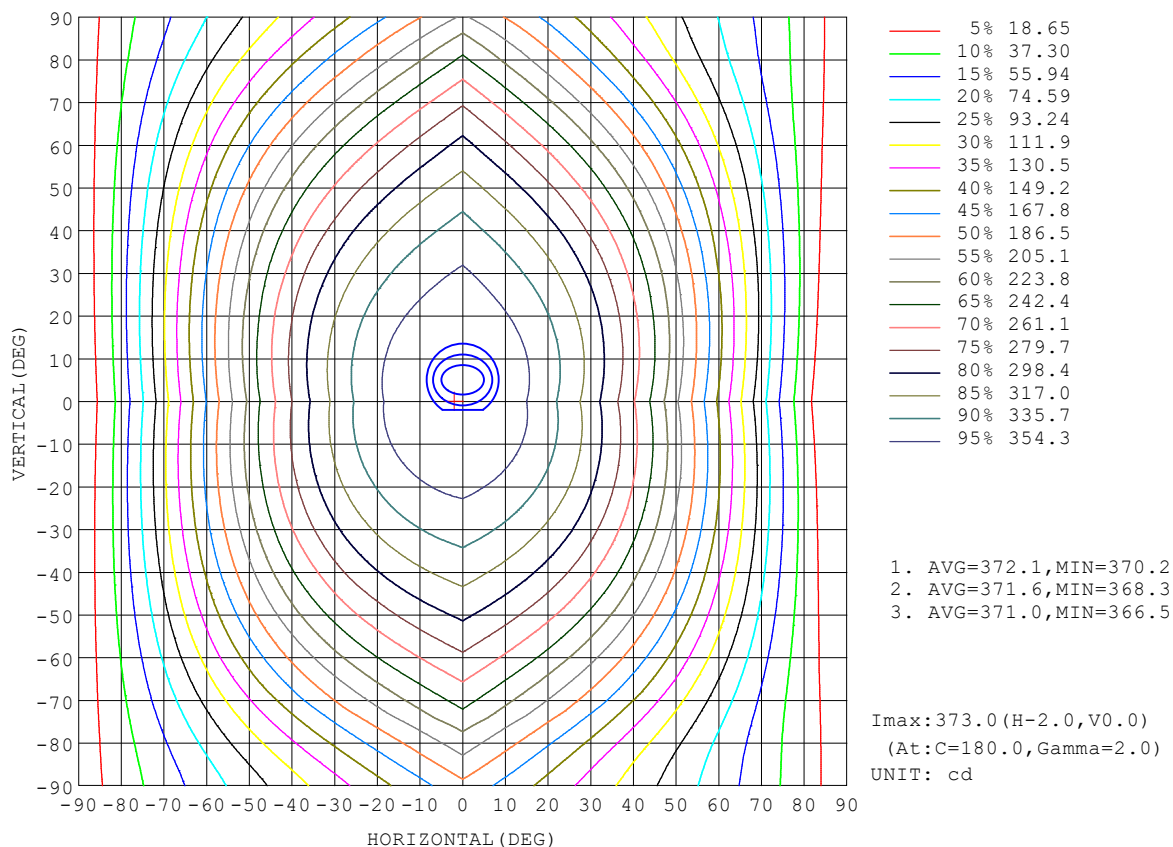
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	49	36	29	48	36	29	46	35	28	21
0.80	58	45	37	56	44	36	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	89	79	71	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:120.10V I:0.2159A P:24.329W PF:0.9382 Freq:59.98Hz Lamp Flux:1662.07x1 lm		
NAME: WS24-033B-BN 24W 50K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

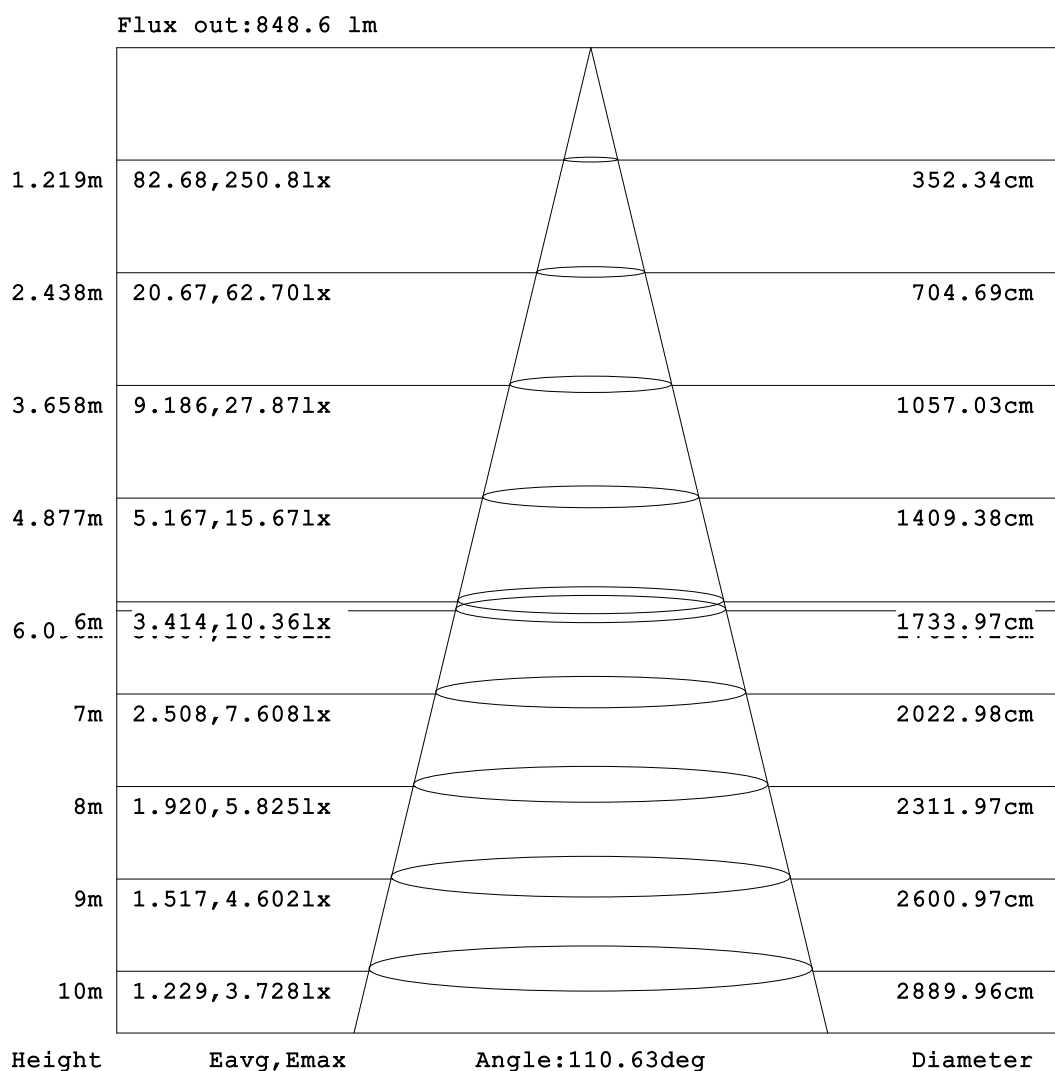


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:10 February 2026

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:120.10V I:0.2159A P:24.329W PF:0.9382 Freq:59.98Hz Lamp Flux:1662.07x1 lm		
NAME: WS24-033B-BN 24W 50K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



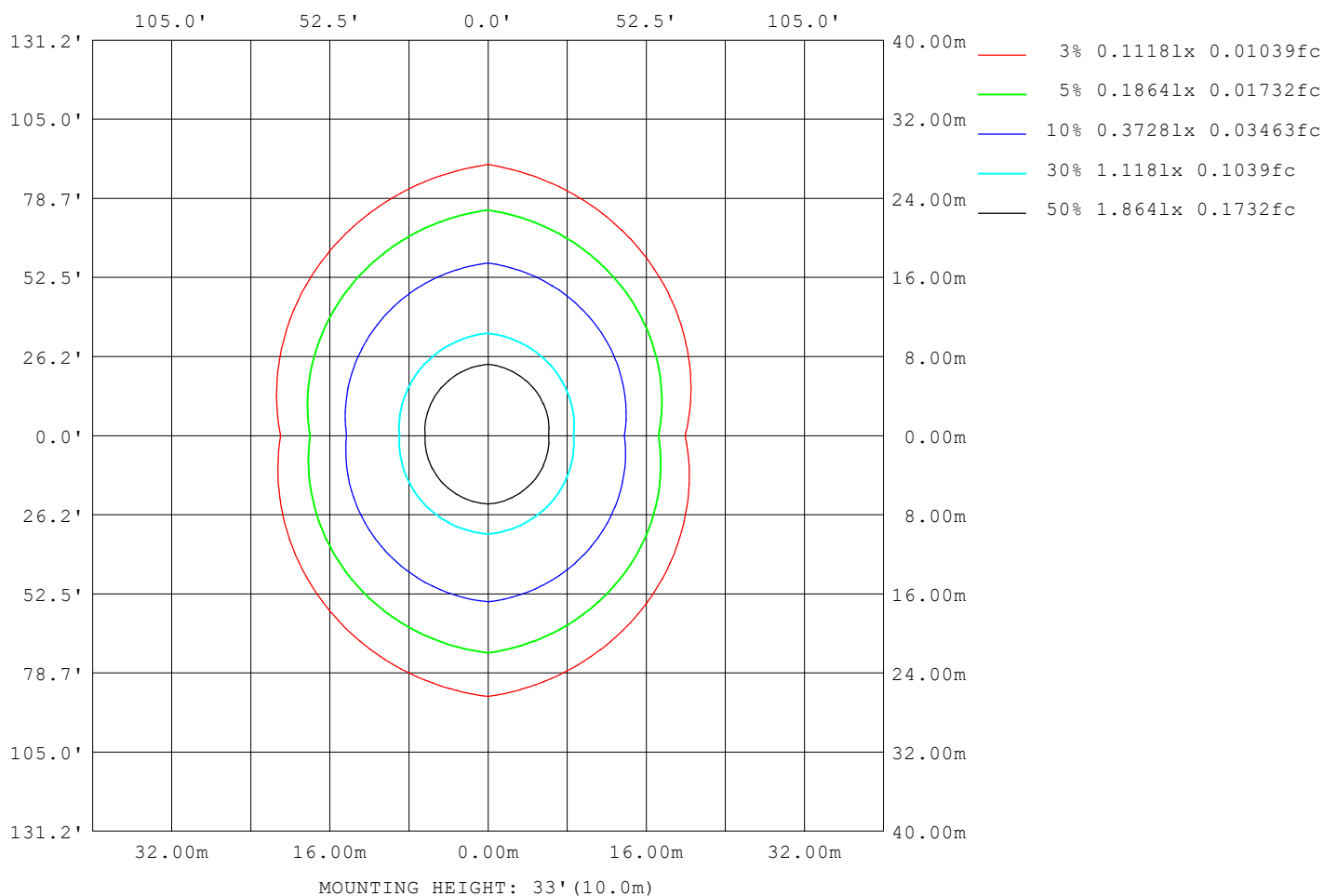
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:120.10V I:0.2159A P:24.329W PF:0.9382 Freq:59.98Hz Lamp Flux:1662.07x1 lm		
NAME: WS24-033B-BN 24W 50K	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:120.10V I:0.2159A P:24.329W PF:0.9382 Freq:59.98Hz Lamp Flux:1662.07x1 lm		
NAME: WS24-033B-BN 24W 50K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

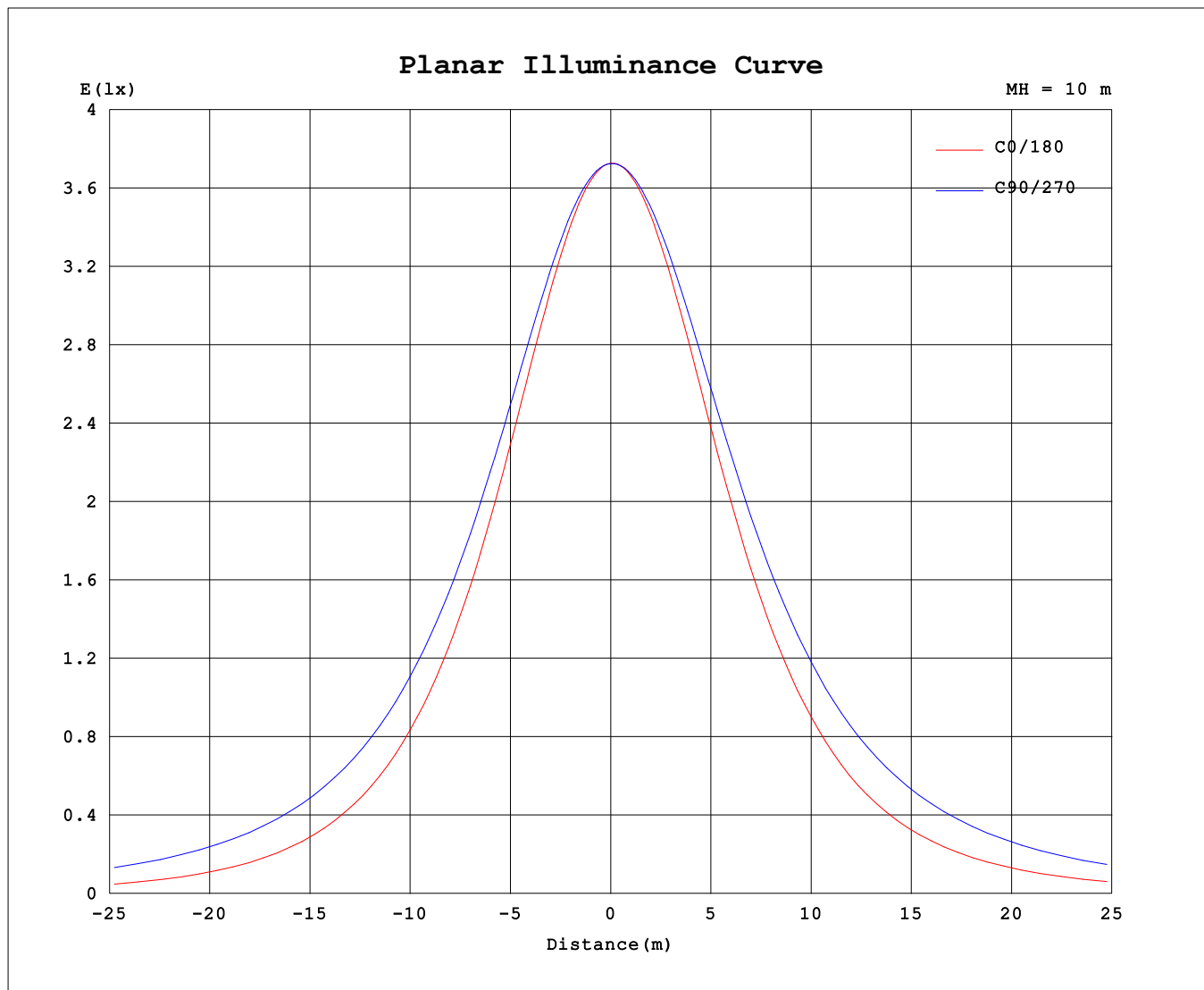
AvgL	cd/m2
L_0~180 (65) av	2958
L_0~180 (75) av	2407
L_0~180 (85) av	1728
L_90~270 (65) av	6559
L_90~270 (75) av	9562
L_90~270 (85) av	24482
L_45 (65) av	5226
L_45 (75) av	6906
L_45 (85) av	15992

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:120.10V I:0.2159A P:24.329W PF:0.9382 Freq:59.98Hz Lamp Flux:1662.07x1 lm		
NAME: WS24-033B-BN 24W 50K	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	373	372	373	372														
5	370	371	372	373														
10	364	368	368	372														
15	354	364	361	370														
20	341	358	351	366														
25	326	351	337	362														
30	307	343	321	357														
35	286	334	302	350														
40	262	324	280	343														
45	236	313	255	335														
50	208	302	227	325														
55	178	290	199	315														
60	146	277	168	304														
65	113	263	137	291														
70	81.1	249	105	277														
75	51.1	233	73.5	262														
80	25.7	215	44.5	246														
85	9.19	198	20.9	229														
90	6.99	182	7.83	208														
95	7.91	141	6.82	157														
100	9.05	88.4	7.61	96.1														
105	10.3	67.6	8.28	77.5														
110	12.1	73.6	10.0	81.0														
115	13.7	53.8	11.5	66.7														
120	15.2	40.5	13.1	49.0														
125	16.3	35.9	13.3	40.8														
130	16.6	32.5	13.6	37.8														
135	16.6	29.8	14.1	31.7														
140	18.2	28.6	15.5	28.1														
145	19.1	29.1	16.3	26.6														
150	18.2	20.9	15.6	25.9														
155	17.6	19.8	15.2	21.8														
160	16.6	19.4	14.0	21.3														
165	16.0	22.5	13.4	23.6														
170	17.7	19.1	15.0	23.3														
175	19.7	13.1	18.4	15.0														
180	20.8	13.9	20.8	13.8														

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: