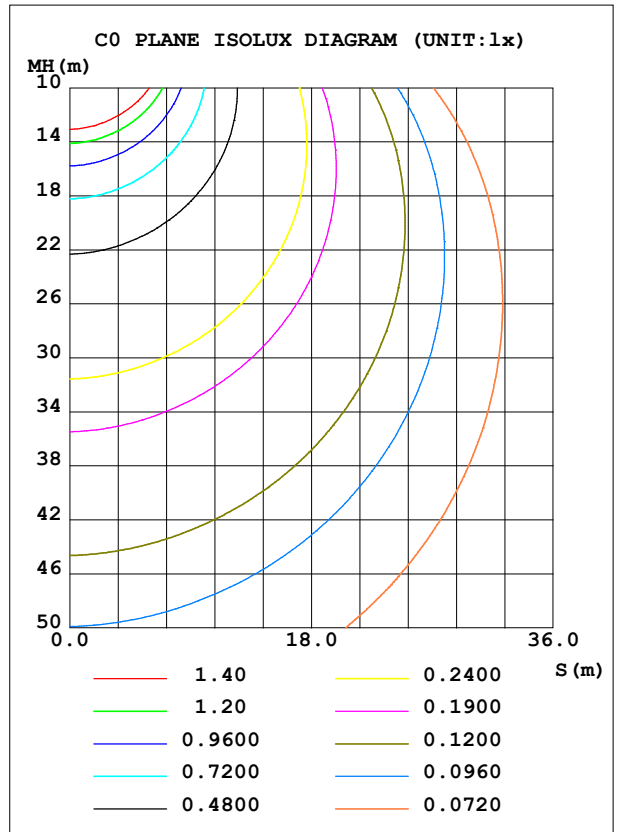
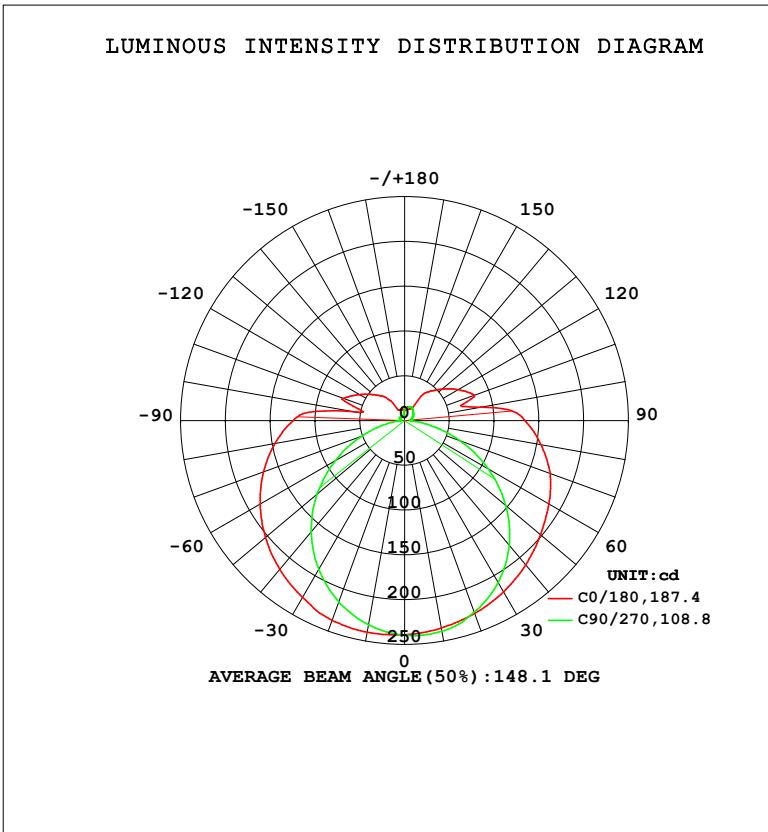


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.11V I:0.1462A P:16.518W PF:0.9407 Freq:59.98Hz Lamp Flux:1127.38x1 lm		
NAME: WS14-033B-BK 16W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 68.25 lm/W
MODEL	3500K	I <sub>max</sub> (cd)	240.4	S/MH (C0/180)	1.43	
NOMINAL POWER (W)	16	LOR (%)	100.0	S/MH (C90/270)	1.20	
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	1127.4	η UP, DN (C0-180)	10.6, 41.5	
NOMINAL FLUX (lm)	1127.38	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	8.4, 39.5	
LAMPS INSIDE	1	η up (%)	19.0	CIBSE SHR NOM	1.50	
TEST VOLTAGE (V)	120	η down (%)	81.0	CIBSE SHR MAX	1.50	



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:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C90	C180	C270				$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	235.2	238.8	239.8	231.5				0- 10	22.70	22.70	2.01,2.01
20	229.1	227.6	237.3	215.2				10- 20	65.72	88.43	7.84,7.84
30	220.8	208.9	228.0	191.9				20- 30	101.8	190.2	16.9,16.9
40	210.4	181.8	216.9	162.3				30- 40	127.3	317.5	28.2,28.2
50	198.2	147.5	202.8	127.8				40- 50	140.1	457.5	40.6,40.6
60	186.1	107.8	186.2	89.33				50- 60	139.5	597.1	53,53
70	173.0	65.58	167.7	51.26				60- 70	127.3	724.4	64.3,64.3
80	154.5	26.65	147.0	18.17				70- 80	105.9	830.3	73.6,73.6
90	134.4	7.036	124.5	4.959				80- 90	82.83	913.1	81,81
100	86.46	7.365	58.84	5.105				90-100	62.94	976.0	86.6,86.6
110	83.08	8.892	73.00	5.653				100-110	38.73	1015	90,90
120	69.36	10.76	58.39	6.753				110-120	39.30	1054	93.5,93.5
130	54.81	12.88	45.32	5.586				120-130	29.63	1084	96.1,96.1
140	42.40	14.90	34.67	6.372				130-140	20.93	1105	98,98
150	16.27	16.44	14.03	5.228				140-150	12.36	1117	99.1,99.1
160	14.11	16.34	12.64	5.372				150-160	5.832	1123	99.6,99.6
170	14.46	13.45	12.99	6.780				160-170	3.445	1126	99.9,99.9
180	12.89	12.76	12.90	12.85				170-180	1.125	1127	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

Conical surface Flux(90deg): 386.74 lm

%lum = 34.3%

%lamp = 34.3%

Conical surface Flux(120deg): 597.06 lm

%lum = 53.0%

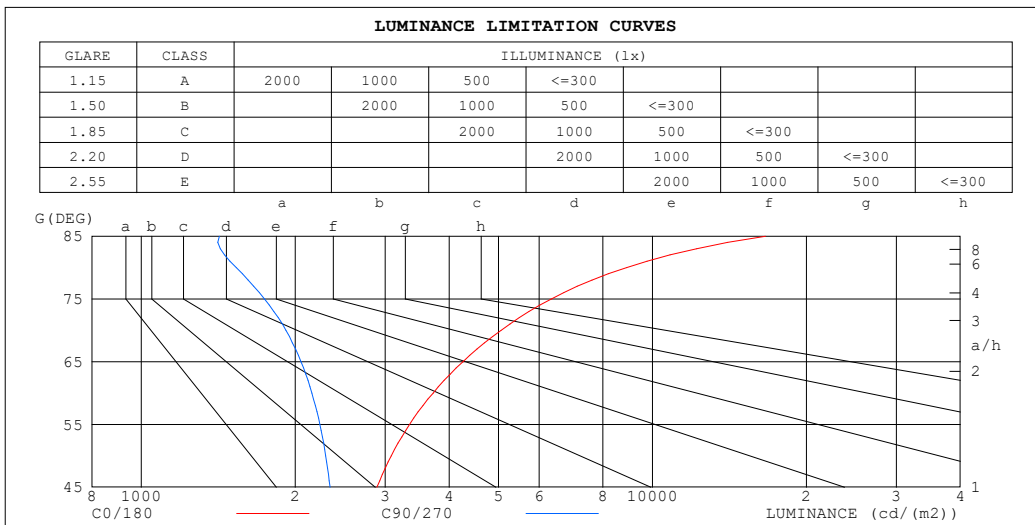
%lamp = 53.0%

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

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:120.11V I:0.1462A P:16.518W PF:0.9407 Freq:59.98Hz Lamp Flux:1127.38x1 lm		
NAME: WS14-033B-BK 16W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	16624	1422
80	8898	1535
75	6336	1742
70	5057	1917
65	4257	2053
60	3721	2156
55	3345	2235
50	3084	2295
45	2890	2340

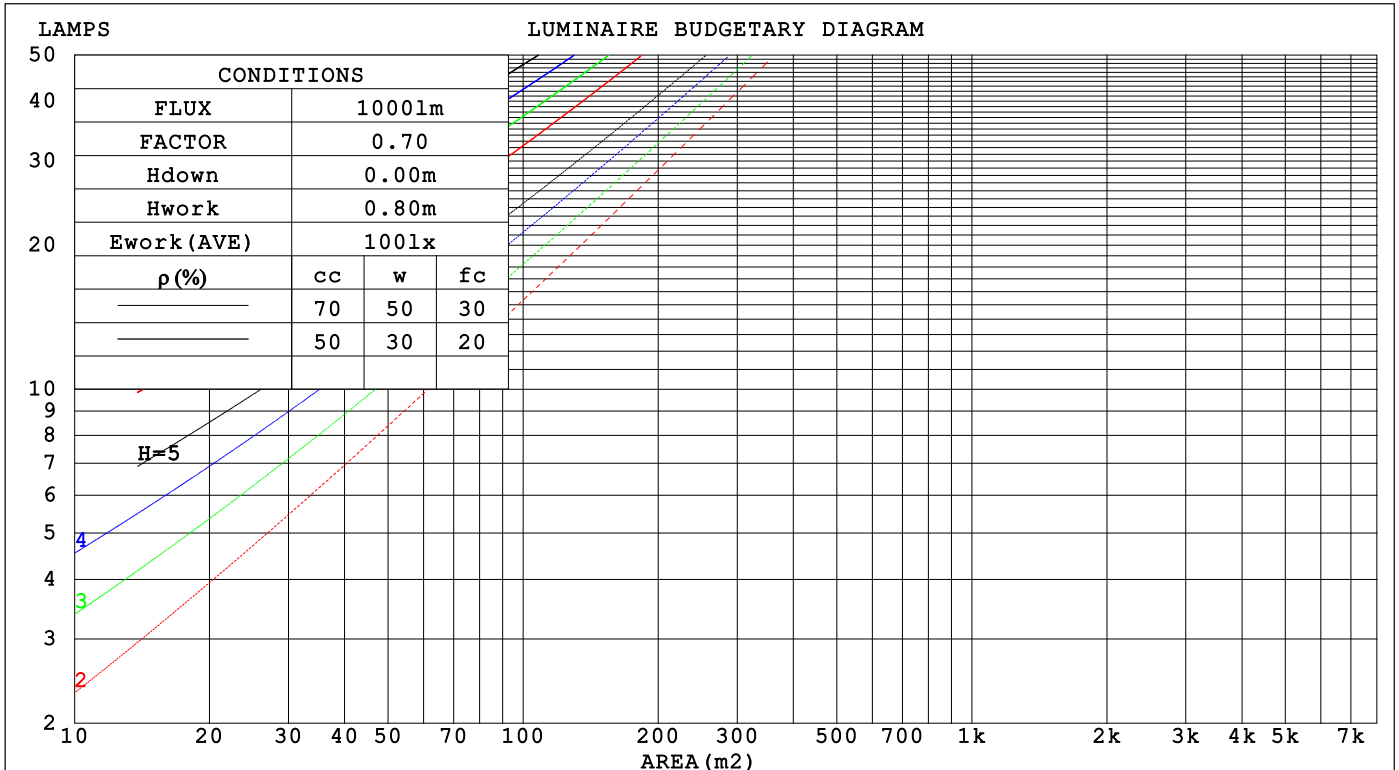
C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3 °C  
 Operators: DAMIN  
 Test Date: 10 February 2026

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:120.11V I:0.1462A P:16.518W PF:0.9407 Freq:59.98Hz Lamp Flux:1127.38x1 lm		
NAME: WS14-033B-BK 16W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.15	1.15	1.15	1.10	1.10	1.10	1.01	1.01	1.01	.92	.92	.92	.85	.85	.85	.81
1.0	.95	.90	.85	.91	.86	.82	.83	.80	.76	.76	.73	.70	.70	.67	.65	.61
2.0	.82	.74	.67	.78	.71	.65	.71	.66	.60	.65	.60	.56	.59	.56	.52	.49
3.0	.71	.62	.55	.68	.59	.53	.62	.55	.49	.57	.51	.46	.52	.47	.43	.40
4.0	.62	.53	.45	.59	.51	.44	.55	.47	.41	.50	.44	.39	.46	.41	.36	.33
5.0	.55	.46	.39	.53	.44	.37	.49	.41	.35	.44	.38	.33	.41	.35	.31	.28
6.0	.49	.40	.33	.47	.39	.32	.44	.36	.31	.40	.34	.29	.37	.31	.27	.25
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	.31	.25	.21	.19
9.0	.37	.29	.23	.36	.28	.22	.33	.26	.21	.31	.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 °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:

WEC AND CCEC

Test:U:120.11V I:0.1462A P:16.518W PF:0.9407 Freq:59.98Hz Lamp Flux:1127.38x1 lm		
NAME: WS14-033B-BK 16W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

ρ <sub>CC</sub>	80%			70%			50%			30%			10%			0
ρ <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ <sub>fc</sub>	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.384	.218	.069	.371	.211	.067	.346	.199	.063	.324	.187	.060	.303	.176	.057	
2.0	.332	.182	.056	.321	.177	.054	.299	.166	.052	.278	.156	.049	.259	.147	.046	
3.0	.295	.157	.047	.285	.153	.046	.265	.144	.044	.246	.135	.041	.229	.127	.039	
4.0	.266	.138	.041	.256	.134	.040	.238	.126	.038	.222	.119	.036	.206	.112	.034	
5.0	.242	.123	.036	.233	.120	.035	.217	.113	.033	.201	.106	.032	.187	.100	.030	
6.0	.222	.111	.032	.214	.108	.031	.199	.102	.030	.185	.096	.028	.172	.090	.027	
7.0	.204	.101	.029	.197	.098	.028	.183	.093	.027	.171	.087	.025	.158	.082	.024	
8.0	.190	.093	.026	.183	.090	.025	.170	.085	.024	.159	.080	.023	.147	.076	.022	
9.0	.177	.085	.024	.171	.083	.023	.159	.079	.022	.148	.074	.021	.138	.070	.020	
10.0	.165	.079	.022	.160	.077	.022	.149	.073	.021	.139	.069	.020	.129	.065	.019	

ρ <sub>CC</sub>	80%			70%			50%			30%			10%			0
ρ <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ <sub>fc</sub>	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.335	.335	.335	.287	.287	.287	.196	.196	.196	.112	.112	.112	.036	.036	.036	
1.0	.331	.302	.275	.284	.259	.236	.194	.178	.163	.112	.103	.095	.036	.033	.031	
2.0	.325	.279	.240	.278	.240	.208	.191	.166	.145	.110	.097	.085	.035	.031	.028	
3.0	.317	.262	.218	.272	.226	.189	.187	.157	.133	.108	.092	.078	.035	.030	.026	
4.0	.309	.250	.204	.266	.216	.177	.183	.150	.125	.106	.088	.074	.034	.029	.024	
5.0	.302	.240	.194	.259	.208	.169	.179	.145	.119	.103	.085	.071	.033	.028	.023	
6.0	.294	.232	.187	.253	.201	.163	.175	.141	.115	.101	.083	.069	.033	.027	.023	
7.0	.287	.226	.182	.247	.195	.159	.171	.137	.113	.099	.081	.067	.032	.026	.022	
8.0	.281	.220	.178	.242	.191	.155	.167	.134	.110	.097	.079	.066	.031	.026	.022	
9.0	.274	.215	.175	.236	.187	.153	.164	.131	.109	.095	.078	.065	.031	.025	.021	
10.0	.269	.211	.173	.231	.183	.151	.161	.129	.107	.094	.076	.064	.030	.025	.021	

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:120.11V I:0.1462A P:16.518W PF:0.9407 Freq:59.98Hz Lamp Flux:1127.38x1 lm		
NAME: WS14-033B-BK 16W 35K	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	15.9	17.3	16.4	17.8	18.4	14.0	15.4	14.5	15.9	16.5
3H	18.8	20.0	19.3	20.6	21.2	15.6	16.8	16.1	17.4	18.0
4H	20.4	21.6	21.0	22.2	22.8	16.2	17.4	16.7	17.9	18.6
6H	22.2	23.3	22.8	23.9	24.6	16.6	17.7	17.2	18.3	19.0
8H	23.2	24.3	23.8	24.9	25.6	16.7	17.8	17.3	18.4	19.1
12H	24.3	25.4	25.0	26.0	26.7	16.8	17.9	17.4	18.5	19.2
4H 2H	16.4	17.6	17.0	18.2	18.9	15.1	16.3	15.6	16.8	17.5
3H	19.5	20.5	20.1	21.2	21.9	16.9	17.9	17.5	18.6	19.3
4H	21.3	22.2	21.9	22.9	23.6	17.7	18.7	18.4	19.3	20.0
6H	23.3	24.1	23.9	24.8	25.5	18.4	19.2	19.0	19.9	20.6
8H	24.4	25.2	25.1	25.9	26.7	18.6	19.4	19.3	20.1	20.9
12H	25.7	26.5	26.4	27.1	27.9	18.8	19.5	19.5	20.2	21.0
8H 4H	21.6	22.4	22.2	23.0	23.8	18.7	19.5	19.4	20.2	20.9
6H	23.8	24.5	24.5	25.2	26.0	19.7	20.4	20.4	21.1	21.9
8H	25.1	25.7	25.9	26.5	27.3	20.2	20.8	20.9	21.5	22.3
12H	26.7	27.2	27.4	28.0	28.8	20.6	21.1	21.3	21.8	22.7
12H 4H	21.6	22.3	22.3	23.0	23.8	19.0	19.8	19.7	20.4	21.2
6H	23.9	24.5	24.6	25.2	26.1	20.2	20.9	21.0	21.6	22.4
8H	25.3	25.8	26.0	26.6	27.4	20.9	21.4	21.6	22.1	23.0
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					+ 0.3 / - 0.4				

CIE Pub.117, 1127 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.4)  
Area: 0.1 m2

C Range: 0 - 360DEG	γ Range: 0 - 180DEG
C Interval: 90.0DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Temperature:25.3℃	Humidity:65.0%
Operators:DAMIN	Test Distance:7.380m [K=1.0000]
Test Date:10 February 2026	Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:120.11V I:0.1462A P:16.518W PF:0.9407 Freq:59.98Hz Lamp Flux:1127.38x1 lm		
NAME: WS14-033B-BK 16W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

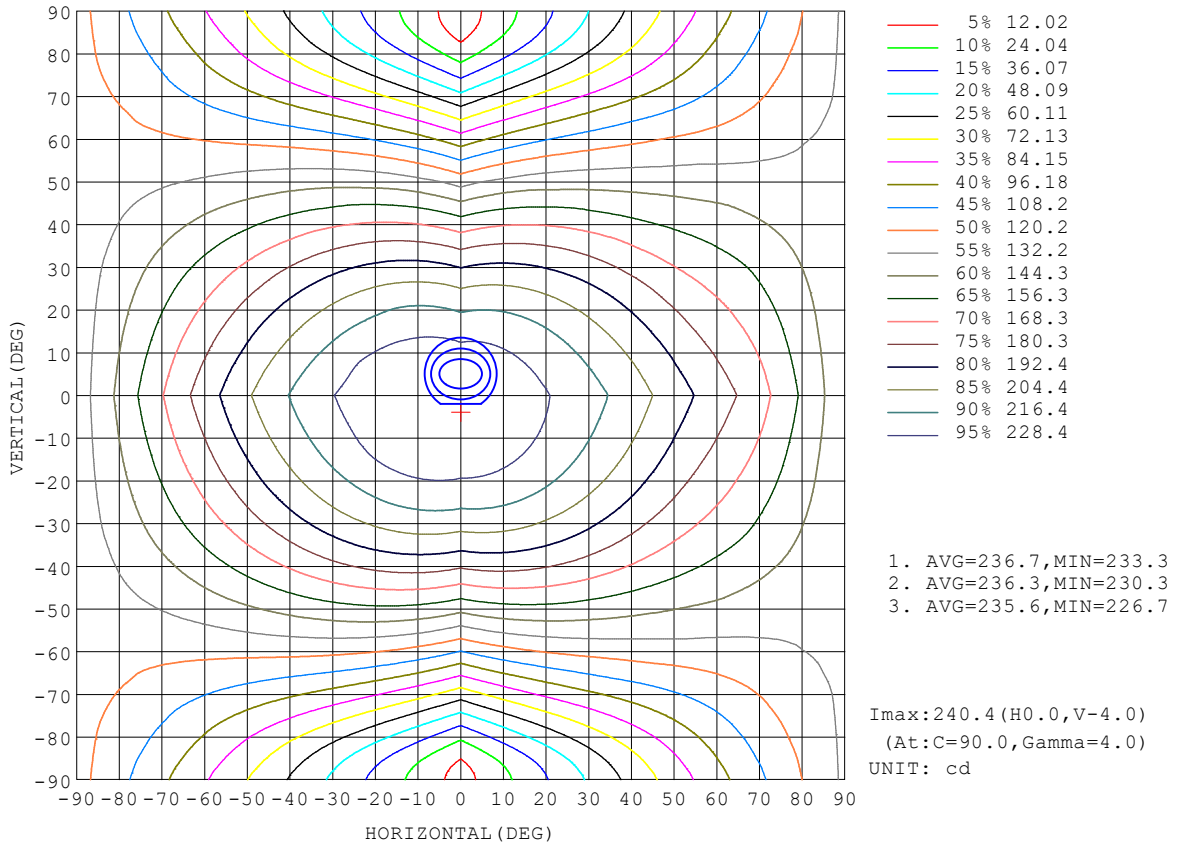
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	47	35	28	46	35	28	44	34	27	20
0.80	57	44	36	55	43	35	52	41	34	26
1.00	64	51	43	62	50	42	59	51	41	32
1.25	71	59	50	69	57	49	64	55	48	38
1.50	76	64	56	74	63	55	69	59	52	42
2.00	84	73	64	81	71	63	75	66	60	48
2.50	88	78	70	85	76	68	78	71	65	52
3.00	92	83	75	88	80	73	81	75	69	55
4.00	97	89	82	93	86	80	85	80	75	60
5.00	100	93	87	96	89	84	88	83	79	63
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

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:120.11V I:0.1462A P:16.518W PF:0.9407 Freq:59.98Hz Lamp Flux:1127.38x1 lm		
NAME: WS14-033B-BK 16W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

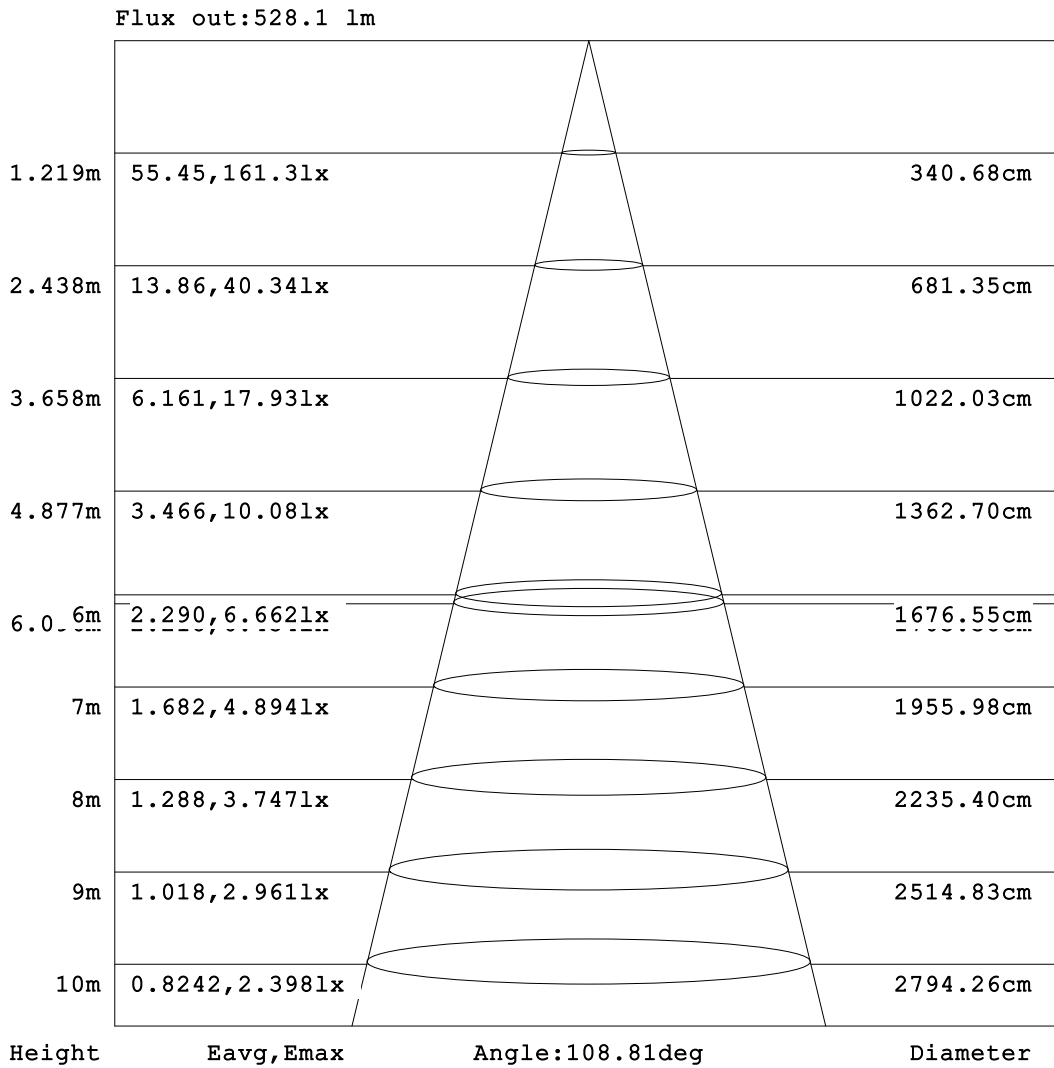


C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:10 February 2026

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:

**AAI Figure**

Test:U:120.11V I:0.1462A P:16.518W PF:0.9407 Freq:59.98Hz Lamp Flux:1127.38x1 lm		
NAME: WS14-033B-BK 16W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



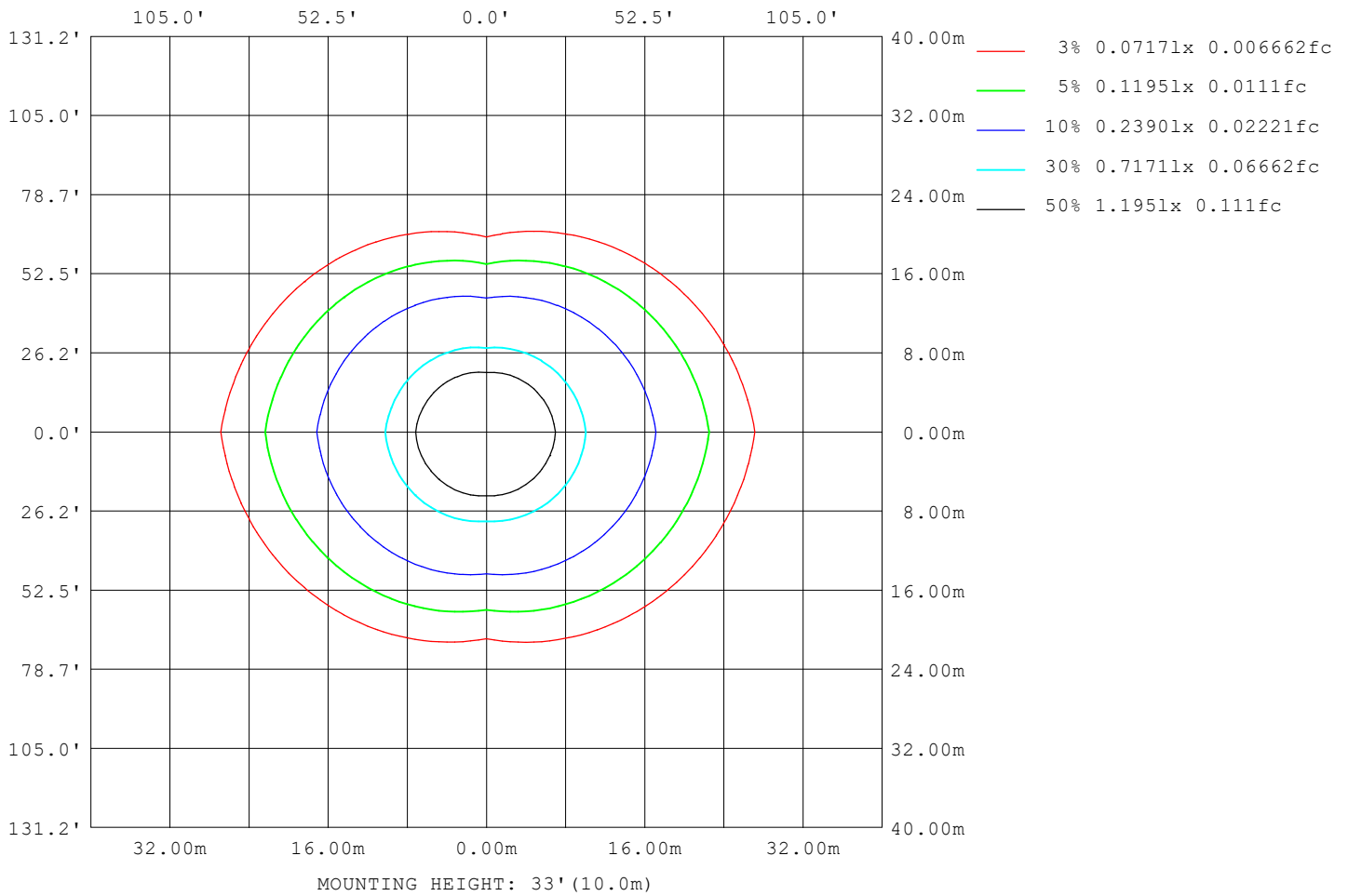
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°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:

**ISOLUX DIAGRAM**

Test:U:120.11V I:0.1462A P:16.518W PF:0.9407 Freq:59.98Hz Lamp Flux:1127.38x1 lm		
NAME: WS14-033B-BK 16W 35K	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:120.11V I:0.1462A P:16.518W PF:0.9407 Freq:59.98Hz Lamp Flux:1127.38x1 lm		
NAME: WS14-033B-BK 16W 35K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

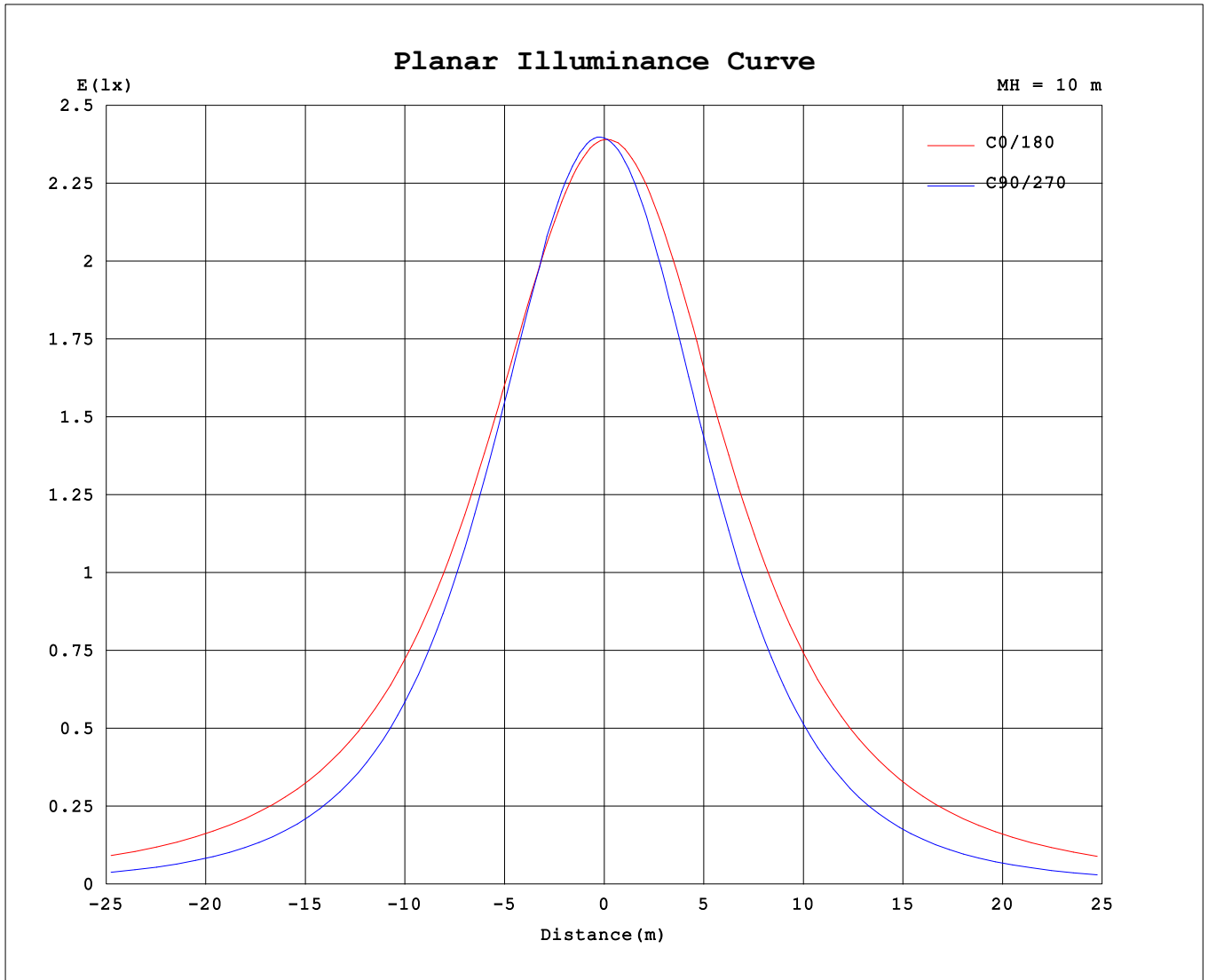
AvgL	cd/m2
L_0~180 (65) av	4226
L_0~180 (75) av	6213
L_0~180 (85) av	16129
L_90~270 (65) av	1857
L_90~270 (75) av	1517
L_90~270 (85) av	1165
L_45 (65) av	2743
L_45 (75) av	3270
L_45 (85) av	6746

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:120.11V I:0.1462A P:16.518W PF:0.9407 Freq:59.98Hz Lamp Flux:1127.38x1 lm		
NAME: WS14-033B-BK 16W 35K	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	239	240	239	240															
5	238	240	240	237															
10	235	239	240	232															
15	232	235	239	224															
20	229	228	237	215															
25	225	219	234	204															
30	221	209	228	192															
35	216	196	223	178															
40	210	182	217	162															
45	204	165	210	146															
50	198	147	203	128															
55	192	128	195	108															
60	186	108	186	89.3															
65	180	86.8	177	70.2															
70	173	65.6	168	51.3															
75	164	45.1	158	33.4															
80	155	26.6	147	18.2															
85	145	12.4	136	7.92															
90	134	7.04	124	4.96															
95	121	6.68	107	5.31															
100	86.5	7.36	58.8	5.10															
105	65.0	8.17	55.9	5.08															
110	83.1	8.89	73.0	5.65															
115	76.6	9.75	65.4	6.35															
120	69.4	10.8	58.4	6.75															
125	61.9	11.9	51.5	6.63															
130	54.8	12.9	45.3	5.59															
135	48.3	13.9	39.7	5.08															
140	42.4	14.9	34.7	6.37															
145	36.2	15.7	26.7	6.04															
150	16.3	16.4	14.0	5.23															
155	14.9	17.0	13.2	5.29															
160	14.1	16.3	12.6	5.37															
165	15.6	14.8	14.0	5.50															
170	14.5	13.5	13.0	6.78															
175	12.1	14.1	12.2	9.55															
180	12.9	12.8	12.9	12.9															

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: