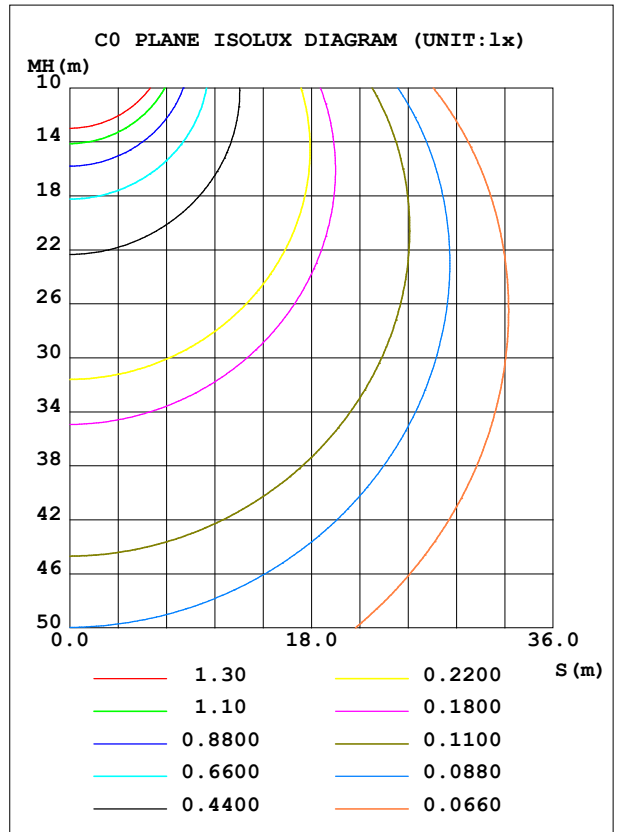
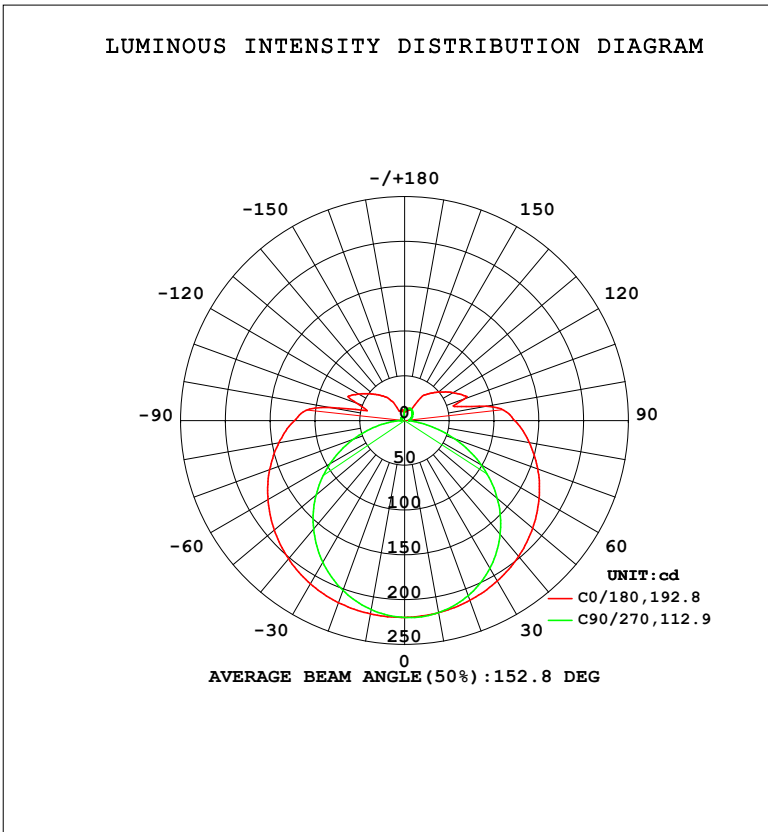


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.95V I:0.1433A P:16.142W PF:0.9393 Freq:59.98Hz Lamp Flux:1066.58x1 lm		
NAME: WS14-033B-BN 16W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 66.07 lm/W
MODEL	3000K	I <sub>max</sub> (cd)	220.1	S/MH (C0/180)	1.44	
NOMINAL POWER (W)	16	LOR (%)	100.0	S/MH (C90/270)	1.24	
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	1066.6	η UP, DN (C0-180)	10.3, 40.4	
NOMINAL FLUX (lm)	1066.58	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	8.9, 40.5	
LAMPS INSIDE	1	η up (%)	19.1	CIBSE SHR NOM	1.50	
TEST VOLTAGE (V)	120	η down (%)	80.9	CIBSE SHR MAX	1.50	



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3 °C  
 Operators: DAMIN  
 Test Date: 24 April 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	217.8	217.8	219.2	214.3				0- 10	20.86	20.86	1.96,1.96
20	213.5	207.9	216.3	201.7				10- 20	60.53	81.39	7.63,7.63
30	206.9	190.6	210.4	182.8				20- 30	94.31	175.7	16.5,16.5
40	198.1	166.0	201.6	158.3				30- 40	119.0	294.7	27.6,27.6
50	186.8	135.2	190.1	129.1				40- 50	132.2	426.8	40,40
60	173.5	98.87	176.2	96.14				50- 60	133.0	559.8	52.5,52.5
70	158.1	59.12	160.4	60.85				60- 70	122.0	681.7	63.9,63.9
80	141.4	21.78	142.6	26.61				70- 80	101.6	783.4	73.4,73.4
90	123.1	4.885	123.1	5.447				80- 90	79.18	862.5	80.9,80.9
100	92.70	5.839	84.77	3.700				90-100	63.33	925.9	86.8,86.8
110	70.99	7.504	56.89	4.314				100-110	35.49	961.4	90.1,90.1
120	62.65	9.502	59.59	5.259				110-120	36.38	997.7	93.5,93.5
130	49.70	11.39	46.34	4.654				120-130	27.99	1026	96.2,96.2
140	38.57	13.10	35.42	5.422				130-140	19.71	1045	98,98
150	14.79	14.50	13.09	4.312				140-150	11.90	1057	99.1,99.1
160	12.64	14.70	11.15	4.461				150-160	5.193	1063	99.6,99.6
170	12.49	12.59	11.63	5.621				160-170	3.054	1066	99.9,99.9
180	11.63	11.53	11.63	11.52				170-180	0.9946	1067	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

Conical surface Flux(90deg): 359.85 lm

%lum = 33.7%

%lamp = 33.7%

Conical surface Flux(120deg): 559.78 lm

%lum = 52.5%

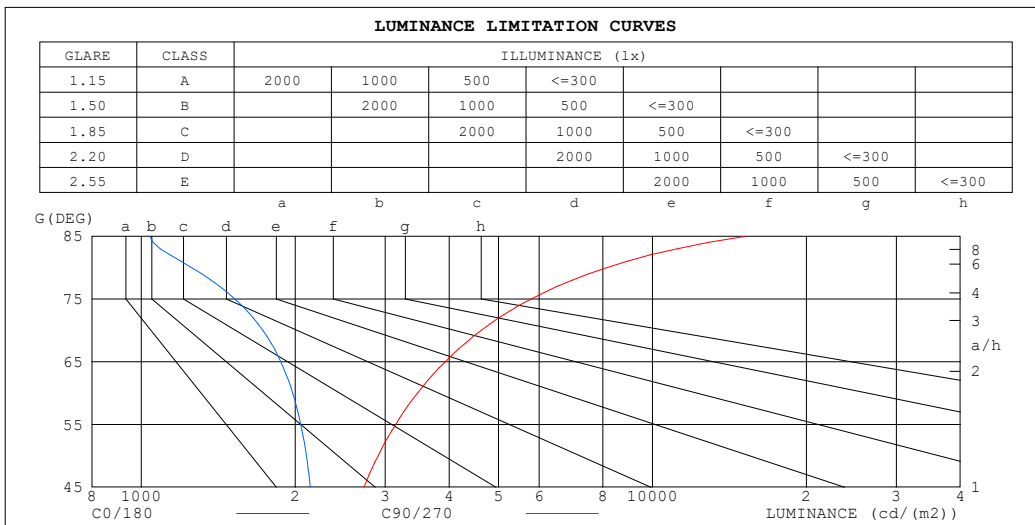
%lamp = 52.5%

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:24 April 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:119.95V I:0.1433A P:16.142W PF:0.9393 Freq:59.98Hz Lamp Flux:1066.58x1 lm		
NAME: WS14-033B-BN 16W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	15234	1039
80	8143	1254
75	5792	1524
70	4624	1728
65	3931	1874
60	3469	1977
55	3143	2050
50	2906	2103
45	2725	2140

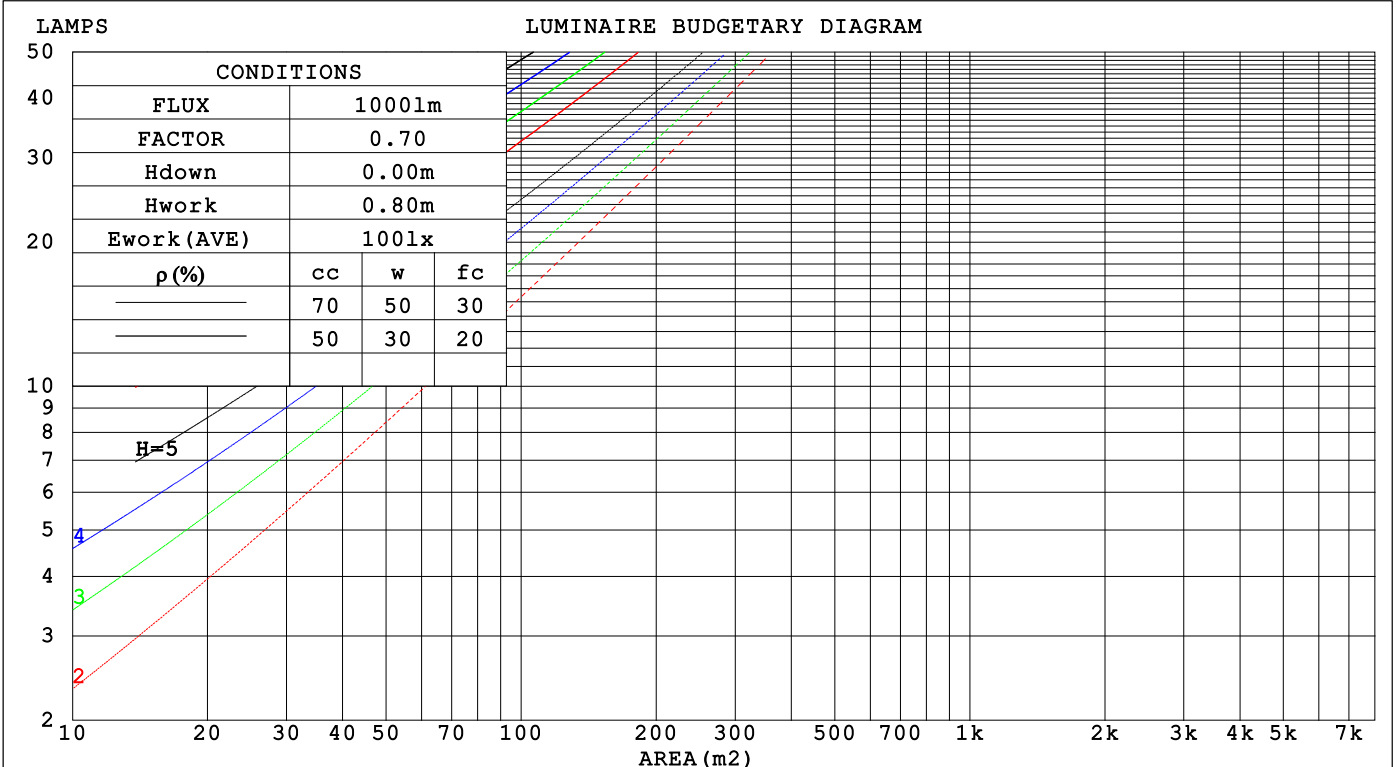
C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3 °C  
 Operators: DAMIN  
 Test Date: 24 April 2026

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:119.95V I:0.1433A P:16.142W PF:0.9393 Freq:59.98Hz Lamp Flux:1066.58x1 lm		
NAME: WS14-033B-BN 16W 30K	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	1.14	1.14	1.14	1.10	1.10	1.10	1.00	1.00	1.00	.92	.92	.92	.84	.84	.84	.81
1.0	.95	.90	.85	.91	.86	.82	.83	.79	.76	.76	.73	.70	.69	.67	.65	.61
2.0	.81	.74	.67	.78	.71	.65	.71	.65	.60	.65	.60	.56	.59	.55	.52	.49
3.0	.71	.61	.54	.67	.59	.53	.62	.55	.49	.56	.51	.46	.51	.47	.43	.40
4.0	.62	.52	.45	.59	.51	.44	.54	.47	.41	.50	.43	.38	.45	.40	.36	.33
5.0	.55	.45	.38	.53	.44	.37	.48	.41	.35	.44	.38	.33	.40	.35	.31	.28
6.0	.49	.40	.33	.47	.38	.32	.43	.36	.30	.40	.33	.28	.36	.31	.27	.24
7.0	.44	.35	.29	.42	.34	.28	.39	.32	.26	.36	.30	.25	.33	.28	.24	.21
8.0	.40	.31	.25	.39	.30	.25	.36	.29	.23	.33	.27	.22	.30	.25	.21	.19
9.0	.37	.28	.23	.35	.27	.22	.33	.26	.21	.30	.24	.20	.28	.23	.19	.17
10.0	.34	.26	.20	.32	.25	.20	.30	.23	.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:24 April 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:119.95V I:0.1433A P:16.142W PF:0.9393 Freq:59.98Hz Lamp Flux:1066.58x1 lm		
NAME: WS14-033B-BN 16W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

$\rho_{CC}$	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	.386	.219	.070	.373	.213	.068	.348	.200	.064	.326	.188	.060	.305	.177	.057	
2.0	.334	.183	.056	.322	.178	.055	.300	.167	.052	.280	.157	.049	.261	.148	.047	
3.0	.297	.158	.047	.286	.153	.046	.266	.144	.044	.248	.136	.042	.230	.128	.039	
4.0	.267	.139	.041	.257	.135	.040	.239	.127	.038	.222	.119	.036	.207	.112	.034	
5.0	.243	.124	.036	.234	.120	.035	.217	.113	.033	.202	.107	.032	.188	.100	.030	
6.0	.222	.111	.032	.214	.108	.031	.199	.102	.030	.185	.096	.028	.172	.091	.027	
7.0	.205	.101	.029	.198	.099	.028	.184	.093	.027	.171	.088	.026	.159	.083	.024	
8.0	.190	.093	.026	.183	.090	.026	.171	.085	.024	.159	.080	.023	.148	.076	.022	
9.0	.177	.086	.024	.171	.083	.023	.159	.079	.022	.148	.074	.021	.138	.070	.020	
10.0	.166	.079	.022	.160	.077	.022	.149	.073	.021	.139	.069	.020	.129	.065	.019	

$\rho_{CC}$	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	.336	.336	.336	.287	.287	.287	.196	.196	.196	.113	.113	.113	.036	.036	.036	
1.0	.333	.302	.275	.285	.260	.237	.195	.179	.164	.112	.103	.095	.036	.033	.031	
2.0	.326	.280	.241	.279	.241	.208	.191	.167	.145	.110	.097	.085	.035	.031	.028	
3.0	.318	.263	.219	.273	.227	.190	.187	.158	.133	.108	.092	.079	.035	.030	.026	
4.0	.311	.251	.205	.267	.217	.178	.183	.151	.125	.106	.088	.074	.034	.029	.024	
5.0	.303	.241	.195	.260	.209	.170	.179	.146	.120	.104	.086	.071	.033	.028	.023	
6.0	.296	.233	.188	.254	.202	.164	.175	.141	.116	.102	.083	.069	.033	.027	.023	
7.0	.289	.227	.183	.248	.196	.160	.171	.138	.113	.100	.081	.067	.032	.027	.022	
8.0	.282	.221	.179	.243	.192	.156	.168	.135	.111	.098	.079	.066	.032	.026	.022	
9.0	.276	.216	.176	.237	.188	.154	.164	.132	.109	.096	.078	.065	.031	.026	.022	
10.0	.270	.212	.174	.232	.184	.152	.161	.130	.108	.094	.077	.064	.031	.025	.021	

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:24 April 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:

**UGR(Unified Glare Rating) Table**

Test:U:119.95V I:0.1433A P:16.142W PF:0.9393 Freq:59.98Hz Lamp Flux:1066.58x1 lm		
NAME: WS14-033B-BN 16W 30K	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	15.8	17.2	16.3	17.7	18.3	13.8	15.2	14.3	15.7	16.3
3H	18.6	19.9	19.2	20.4	21.0	15.3	16.6	15.9	17.1	17.8
4H	20.2	21.4	20.8	22.0	22.6	15.9	17.1	16.5	17.7	18.3
6H	22.0	23.1	22.6	23.7	24.4	16.3	17.4	16.9	18.0	18.7
8H	23.0	24.1	23.6	24.7	25.3	16.4	17.5	17.0	18.1	18.8
12H	24.1	25.2	24.7	25.8	26.5	16.4	17.5	17.0	18.1	18.8
4H 2H	16.3	17.5	16.9	18.1	18.7	14.9	16.1	15.5	16.7	17.3
3H	19.3	20.4	19.9	21.0	21.7	16.7	17.7	17.3	18.3	19.0
4H	21.1	22.0	21.7	22.7	23.4	17.4	18.4	18.1	19.0	19.8
6H	23.0	23.9	23.7	24.6	25.3	18.0	18.9	18.7	19.6	20.3
8H	24.2	25.0	24.8	25.6	26.4	18.2	19.0	18.9	19.7	20.5
12H	25.5	26.2	26.2	26.9	27.7	18.4	19.1	19.1	19.8	20.6
8H 4H	21.3	22.1	22.0	22.8	23.6	18.4	19.2	19.1	19.9	20.7
6H	23.6	24.2	24.3	24.9	25.8	19.4	20.1	20.1	20.8	21.6
8H	24.9	25.5	25.6	26.2	27.1	19.8	20.4	20.5	21.1	22.0
12H	26.5	27.0	27.2	27.7	28.6	20.1	20.7	20.9	21.4	22.3
12H 4H	21.3	22.1	22.0	22.8	23.6	18.7	19.5	19.4	20.2	21.0
6H	23.6	24.3	24.4	25.0	25.8	19.9	20.5	20.6	21.2	22.1
8H	25.1	25.6	25.8	26.3	27.2	20.5	21.0	21.2	21.8	22.6

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 / - 0.5

CIE Pub.117, 1067 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.2)  
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:24 April 2026	Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:119.95V I:0.1433A P:16.142W PF:0.9393 Freq:59.98Hz Lamp Flux:1066.58x1 lm		
NAME: WS14-033B-BN 16W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

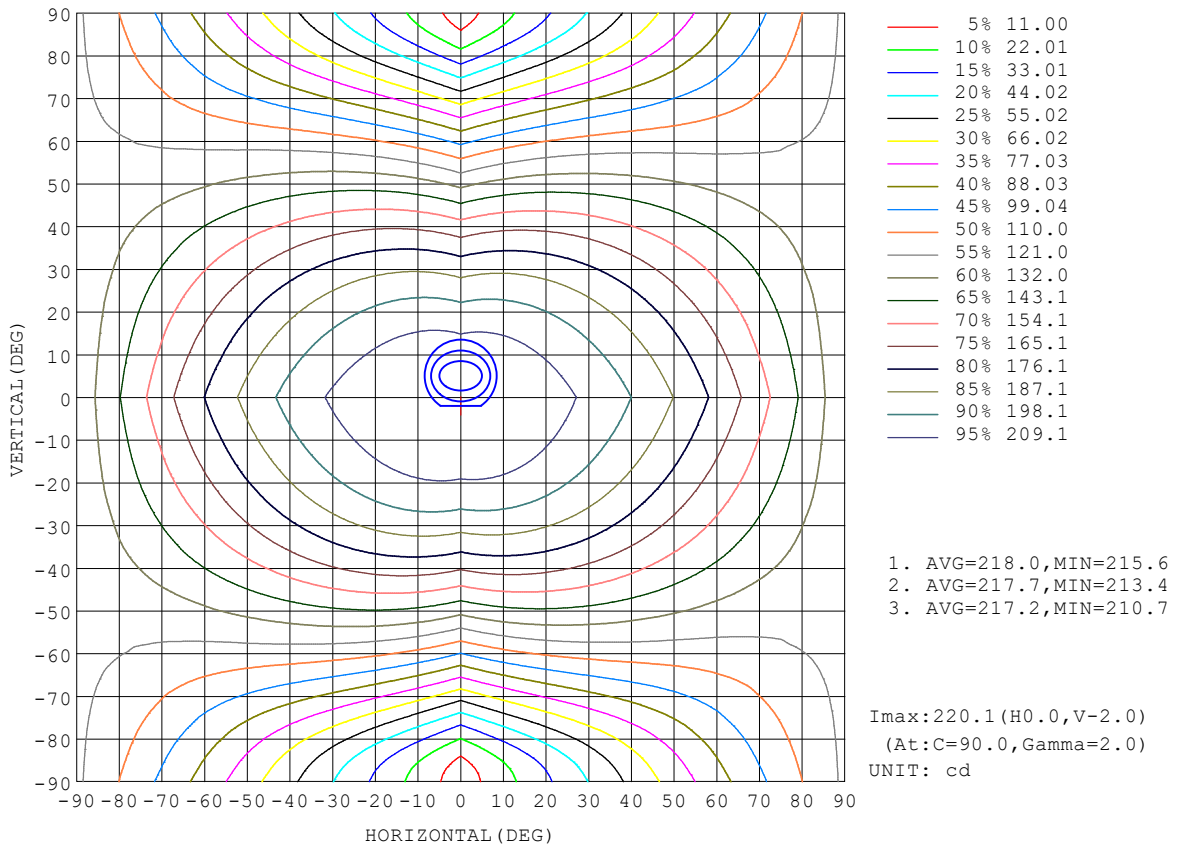
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	47	35	27	46	34	27	44	33	27	20
0.80	56	43	35	55	42	35	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	62	74	66	60	48
2.50	88	78	70	85	75	68	78	70	64	51
3.00	92	82	75	88	80	73	81	74	69	55
4.00	97	89	82	92	85	79	85	79	74	60
5.00	100	93	87	95	89	84	88	83	78	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:24 April 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:119.95V I:0.1433A P:16.142W PF:0.9393 Freq:59.98Hz Lamp Flux:1066.58x1 lm		
NAME: WS14-033B-BN 16W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

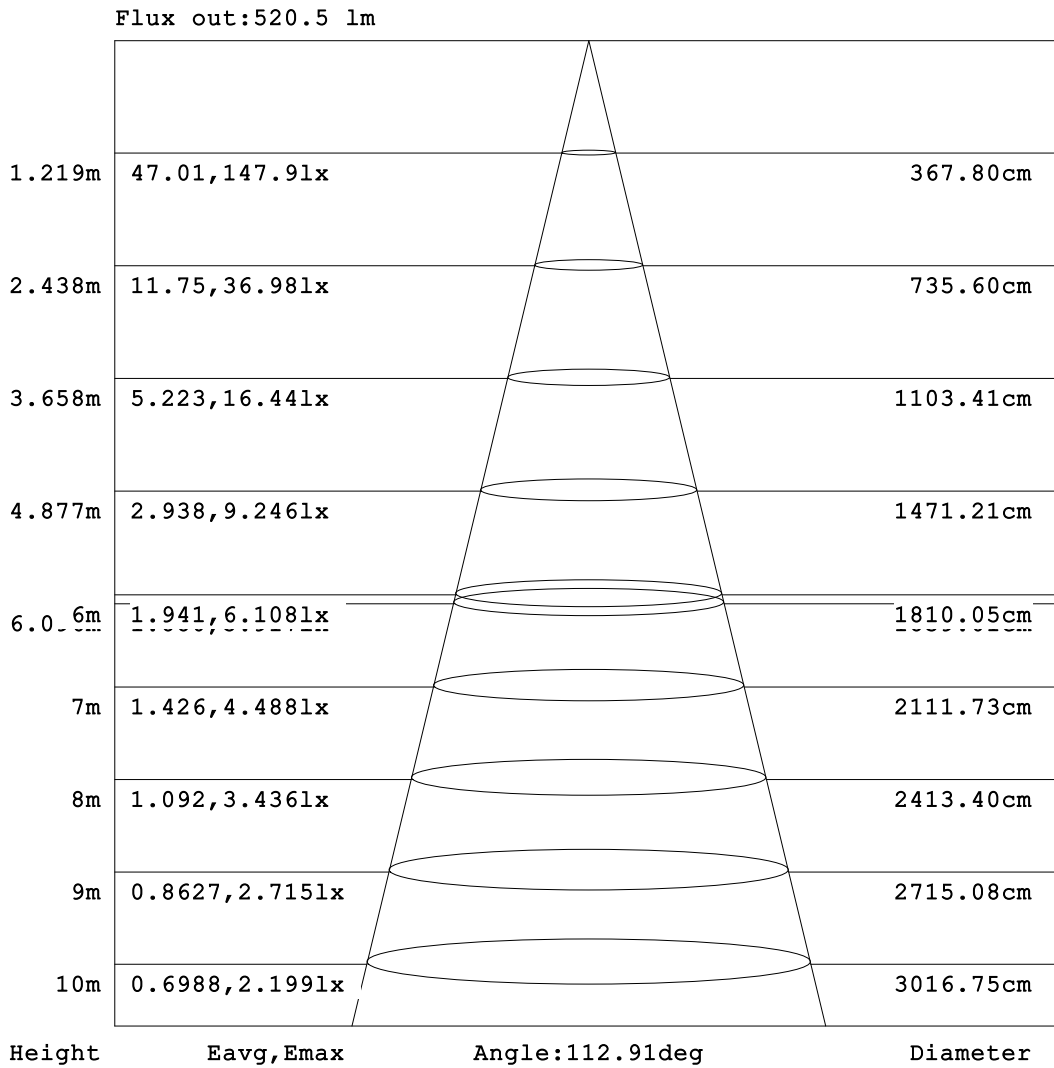


C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:DAMIN  
Test Date:24 April 2026

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:119.95V I:0.1433A P:16.142W PF:0.9393 Freq:59.98Hz Lamp Flux:1066.58x1 lm		
NAME: WS14-033B-BN 16W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



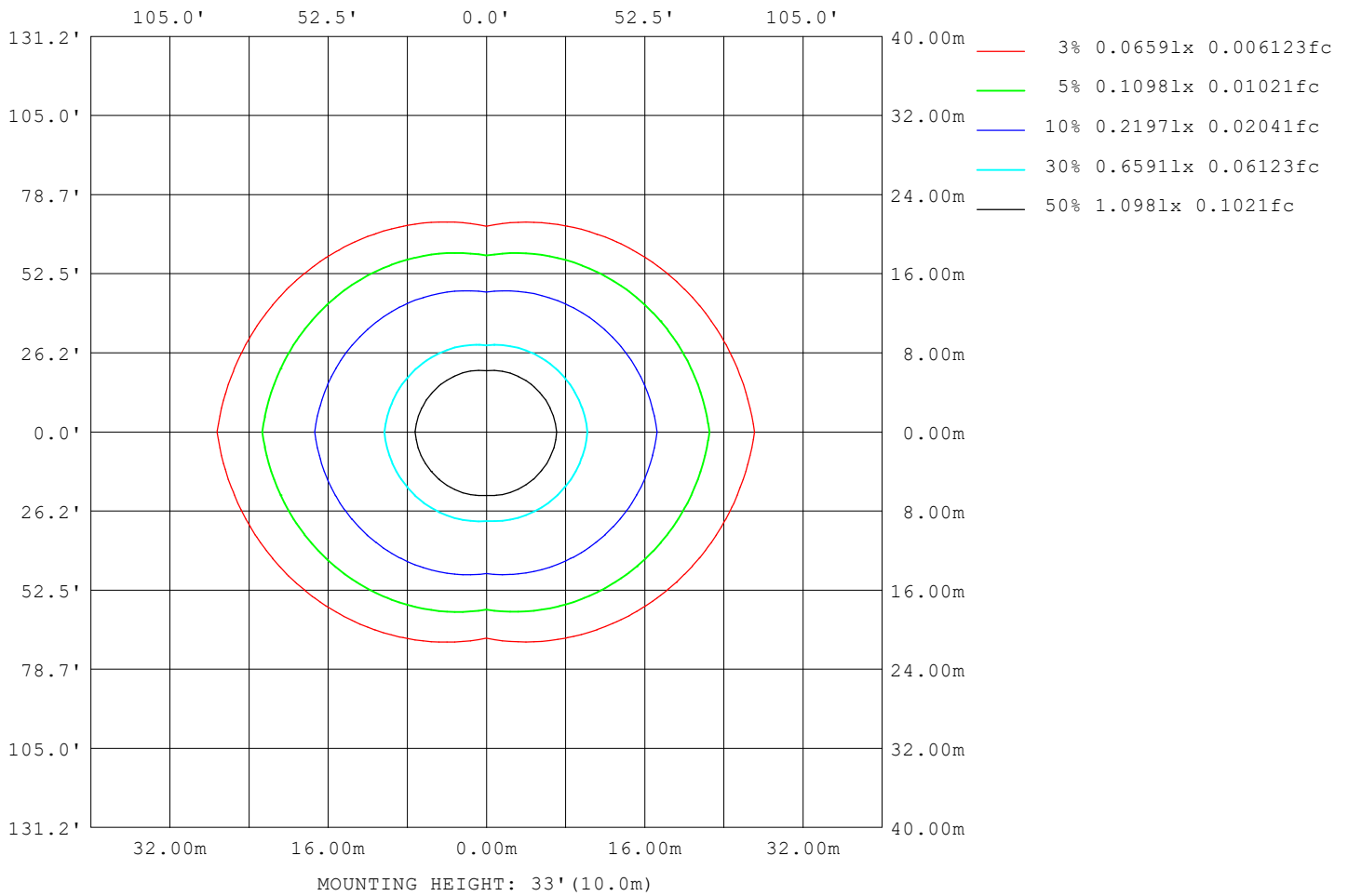
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:DAMIN  
Test Date:24 April 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:119.95V I:0.1433A P:16.142W PF:0.9393 Freq:59.98Hz Lamp Flux:1066.58x1 lm		
NAME: WS14-033B-BN 16W 30K	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:24 April 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:119.95V I:0.1433A P:16.142W PF:0.9393 Freq:59.98Hz Lamp Flux:1066.58x1 lm		
NAME: WS14-033B-BN 16W 30K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

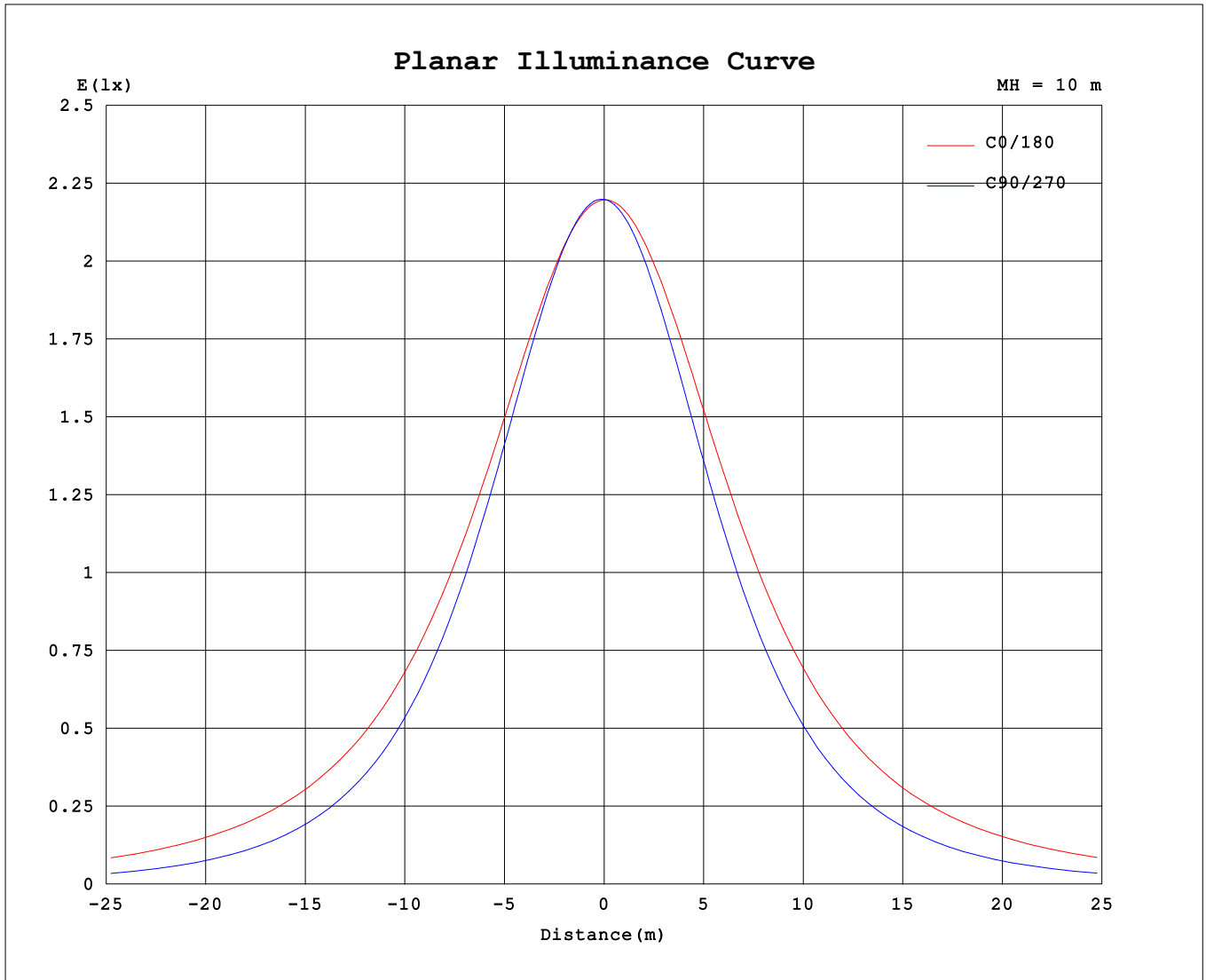
AvgL	cd/m2
L_0~180 (65) av	3959
L_0~180 (75) av	5825
L_0~180 (85) av	15267
L_90~270 (65) av	1867
L_90~270 (75) av	1598
L_90~270 (85) av	1269
L_45 (65) av	2654
L_45 (75) av	3185
L_45 (85) av	6520

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3℃  
 Operators:DAMIN  
 Test Date:24 April 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: 24 April 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:119.95V I:0.1433A P:16.142W PF:0.9393 Freq:59.98Hz Lamp Flux:1066.58x1 lm		
NAME: WS14-033B-BN 16W 30K	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	220	220	220	220															
5	219	220	220	218															
10	218	218	219	214															
15	216	214	218	209															
20	213	208	216	202															
25	210	200	214	193															
30	207	191	210	183															
35	203	179	206	171															
40	198	166	202	158															
45	193	151	196	144															
50	187	135	190	129															
55	180	118	183	113															
60	173	98.9	176	96.1															
65	166	79.2	169	78.6															
70	158	59.1	160	60.9															
75	150	39.4	152	43.3															
80	141	21.8	143	26.6															
85	133	9.05	133	13.1															
90	123	4.88	123	5.45															
95	114	5.22	114	3.80															
100	92.7	5.84	84.8	3.70															
105	61.3	6.73	43.4	3.84															
110	71.0	7.50	56.9	4.31															
115	69.4	8.50	66.7	4.74															
120	62.6	9.50	59.6	5.26															
125	56.2	10.5	52.9	5.37															
130	49.7	11.4	46.3	4.65															
135	43.9	12.3	40.6	4.21															
140	38.6	13.1	35.4	5.42															
145	31.2	13.8	28.6	5.26															
150	14.8	14.5	13.1	4.31															
155	13.8	15.1	11.6	4.38															
160	12.6	14.7	11.1	4.46															
165	14.1	13.4	12.2	4.58															
170	12.5	12.6	11.6	5.62															
175	10.6	13.0	10.0	8.53															
180	11.6	11.5	11.6	11.5															

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3℃  
 Operators:DAMIN  
 Test Date:24 April 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: