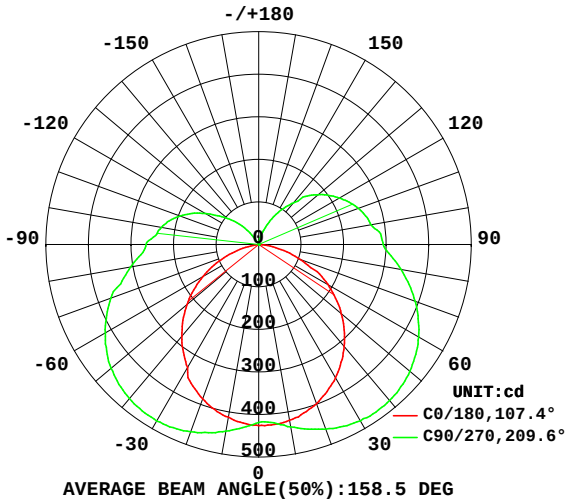
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.3V I:0.2313A P:27.42W PF:0.9851 Lamp Flux:2484.38x1 lm		
NAME: I-VBDF-25W-TD/DV-5CCT-L24"	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: ASL	SUR.:	PROTECTION ANGLE:

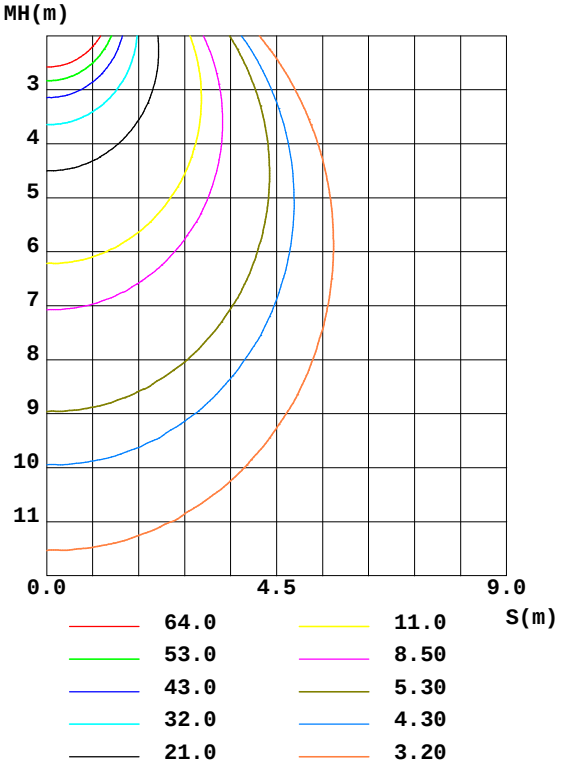
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 90.60 lm/W	
MODEL		Imax(cd)	481.0	S/MH(C0/180)	1.26
NOMINAL POWER(W)	28	LOR(%)	100.0	S/MH(C90/270)	1.72
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	2484.4	η UP,DN(C0-180)	12.8,39.1
NOMINAL FLUX(lm)	2484.38	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	9.0,39.1
LAMPS INSIDE	1	η up(%)	21.8	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120.3	η down(%)	78.2	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):158.5 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-09-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks: LM79

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	419.9	434.5	435.6	413.0	412.1	431.4	445.6	447.4	0- 10	40.76	40.76	1.64,1.64
20	398.0	445.6	461.9	413.1	386.4	429.9	468.6	464.6	10- 20	122.7	163.4	6.58,6.58
30	361.6	443.8	478.8	404.1	334.2	418.7	479.4	467.5	20- 30	198.9	362.3	14.6,14.6
40	312.9	428.9	478.8	383.1	281.6	393.7	473.0	455.1	30- 40	259.3	621.6	25,25
50	254.1	399.3	464.1	344.7	220.2	357.1	452.9	426.0	40- 50	297.1	918.7	37,37
60	187.8	357.2	434.3	294.8	151.6	309.0	416.5	382.5	50- 60	305.8	1225	49.3,49.3
70	104.8	293.1	391.5	244.5	80.56	253.7	369.9	329.0	60- 70	285.1	1510	60.8,60.8
80	34.13	233.3	340.2	196.1	9.821	199.4	305.9	267.6	70- 80	241.0	1751	70.5,70.5
90	0	179.5	292.6	182.5	0	175.0	264.8	208.0	80- 90	192.8	1943	78.2,78.2
100	0	167.2	268.0	145.4	0	127.7	232.4	178.3	90-100	166.0	2109	84.9,84.9
110	0	124.5	249.4	138.5	0	108.9	196.4	99.44	100-110	134.7	2244	90.3,90.3
120	0	112.7	219.0	122.8	0	75.55	146.5	65.98	110-120	103.6	2348	94.5,94.5
130	0	93.09	182.3	97.64	0	19.30	95.73	34.77	120-130	71.43	2419	97.4,97.4
140	0	67.45	128.4	60.42	0	0	49.60	7.038	130-140	40.52	2460	99,99
150	0	39.86	82.04	25.03	0	0	0	0.7660	140-150	17.84	2477	99.7,99.7
160	0	18.10	36.80	0	0	0	0	0.4292	150-160	5.882	2483	100,100
170	0	0	5.831	0	0	0	0	0	160-170	0.9890	2484	100,100
180	0	0	0	0	0	0	0	0	170-180	0.0129	2484	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-09-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks: LM79

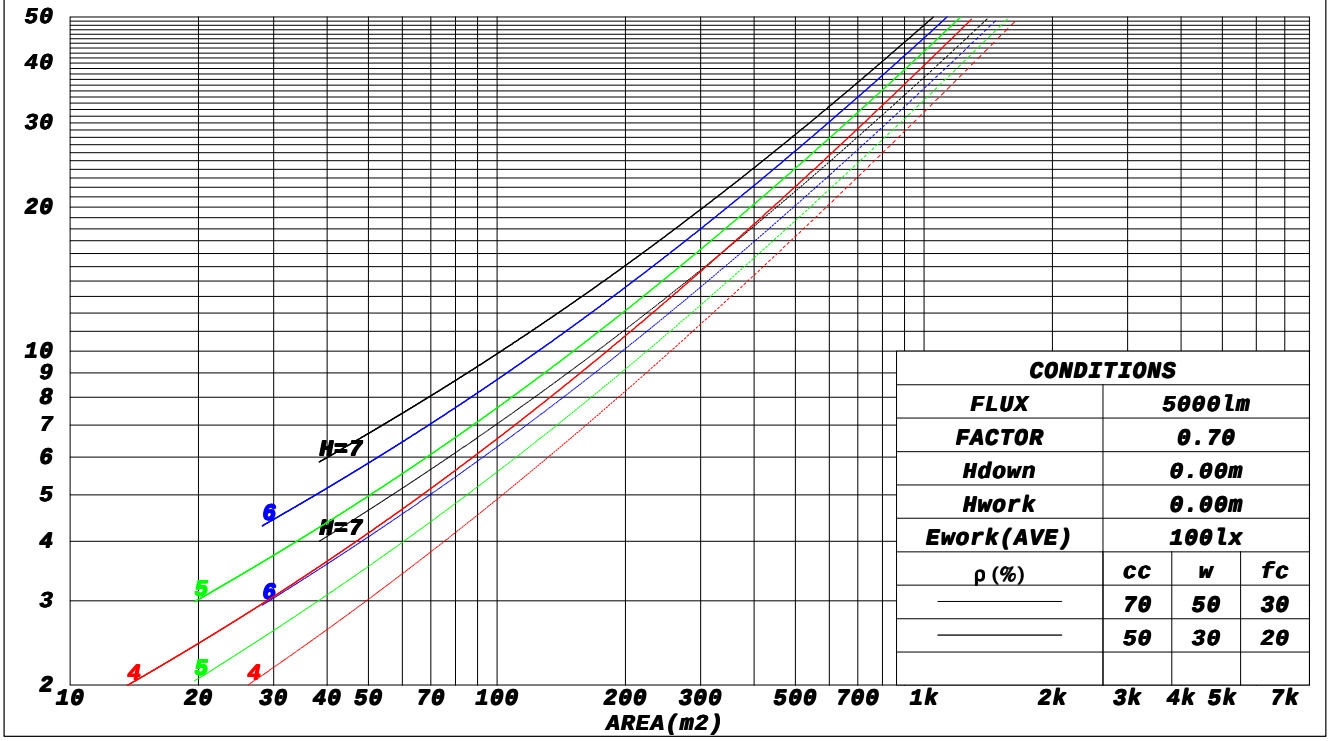
CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.3V I:0.2313A P:27.42W PF:0.9851 Lamp Flux:2484.38x1 lm		
NAME: 24寸方形L+U-BN-5CCT	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: WORBEST	SUR.:	PROTECTION 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	1.09	1.09	1.09	.99	.99	.99	.90	.90	.90	.82	.82	.82	.78
1.0	.94	.89	.84	.90	.85	.81	.82	.78	.74	.74	.71	.68	.67	.64	.62	.58
2.0	.80	.72	.66	.77	.69	.63	.69	.63	.58	.63	.58	.54	.57	.53	.49	.46
3.0	.69	.60	.53	.66	.58	.51	.60	.53	.47	.54	.49	.44	.49	.44	.40	.37
4.0	.61	.51	.44	.58	.49	.42	.53	.45	.39	.48	.42	.37	.43	.38	.34	.31
5.0	.54	.44	.37	.51	.42	.36	.47	.39	.33	.42	.36	.31	.38	.33	.29	.26
6.0	.48	.39	.32	.46	.37	.31	.42	.34	.29	.38	.32	.27	.34	.29	.25	.22
7.0	.43	.34	.28	.41	.33	.27	.38	.30	.25	.34	.28	.23	.31	.26	.22	.19
8.0	.39	.30	.24	.37	.29	.24	.34	.27	.22	.31	.25	.21	.29	.23	.19	.17
9.0	.36	.27	.22	.34	.26	.21	.31	.25	.20	.29	.23	.18	.26	.21	.17	.15
10.0	.33	.25	.19	.31	.24	.19	.29	.22	.18	.27	.21	.17	.24	.19	.16	.14

LAMPS

LUMINAIRE BUDGETARY DIAGRAM



CONDITIONS			
FLUX	5000lm		
FACTOR	0.70		
Hdown	0.00m		
Hwork	0.00m		
Ework(AVE)	100lx		
ρ(%)	cc	w	fc
———	70	50	30
———	50	30	20

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-09-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks: LM79

WEC AND CCEC

Test:U:120.3V I:0.2313A P:27.42W PF:0.9851 Lamp Flux:2484.38x1 lm		
NAME: 24寸方形L+U-BN-5CCT	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: WORBEST	SUR.:	PROTECTION 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			Wall Exitance Coeffcients(WEC)												
0.0																
1.0	.392	.223	.071	.378	.216	.069	.352	.202	.065	.328	.189	.061	.306	.178	.057	
2.0	.338	.185	.057	.326	.179	.055	.302	.168	.052	.280	.157	.049	.260	.147	.046	
3.0	.300	.160	.048	.288	.154	.046	.267	.145	.044	.247	.136	.042	.229	.127	.039	
4.0	.269	.140	.041	.259	.136	.040	.240	.127	.038	.222	.119	.036	.205	.111	.034	
5.0	.245	.125	.036	.235	.121	.035	.218	.113	.033	.201	.106	.032	.186	.099	.030	
6.0	.224	.112	.032	.215	.109	.031	.199	.102	.030	.184	.096	.028	.170	.089	.027	
7.0	.206	.102	.029	.198	.099	.028	.184	.093	.027	.170	.087	.025	.157	.081	.024	
8.0	.191	.093	.026	.184	.091	.026	.170	.085	.024	.157	.080	.023	.145	.075	.022	
9.0	.178	.086	.024	.171	.083	.023	.159	.078	.022	.147	.074	.021	.136	.069	.020	
10.0	.166	.080	.022	.160	.077	.022	.149	.073	.021	.138	.068	.019	.127	.064	.018	

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			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.356	.356	.356	.305	.305	.305	.208	.208	.208	.119	.119	.119	.038	.038	.038	
1.0	.353	.323	.295	.302	.277	.254	.207	.191	.176	.119	.110	.102	.038	.035	.033	
2.0	.347	.300	.261	.297	.258	.225	.204	.179	.157	.117	.104	.092	.038	.034	.030	
3.0	.340	.284	.239	.291	.245	.208	.200	.170	.146	.115	.099	.086	.037	.032	.028	
4.0	.332	.271	.225	.285	.235	.196	.196	.163	.138	.113	.096	.082	.036	.031	.027	
5.0	.324	.262	.216	.278	.226	.188	.192	.158	.132	.111	.093	.079	.036	.030	.026	
6.0	.317	.254	.209	.272	.220	.182	.188	.154	.129	.109	.091	.076	.035	.030	.025	
7.0	.310	.247	.204	.266	.214	.178	.184	.150	.126	.107	.089	.075	.035	.029	.025	
8.0	.303	.242	.200	.261	.210	.174	.181	.147	.124	.105	.087	.074	.034	.028	.024	
9.0	.297	.237	.197	.256	.206	.172	.177	.145	.122	.103	.085	.073	.033	.028	.024	
10.0	.291	.233	.195	.251	.202	.170	.174	.142	.121	.101	.084	.072	.033	.028	.024	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-09-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks: LM79

Uncorrected UGR Table

Test:U:120.3V I:0.2313A P:27.42W PF:0.9851 Lamp Flux:2484.38x1 lm		
NAME: 24寸方形L+U-BN-5CCT	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: WORBEST	SUR.:	PROTECTION 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	16.6	17.9	17.1	18.5	19.1	19.4	20.8	20.0	21.3	22.0
3H	18.0	19.2	18.6	19.8	20.5	22.2	23.5	22.8	24.1	24.7
4H	18.5	19.7	19.1	20.3	21.0	23.8	25.0	24.4	25.6	26.3
6H	18.8	19.9	19.5	20.6	21.3	25.5	26.6	26.1	27.2	28.0
8H	18.9	20.0	19.5	20.6	21.3	26.4	27.5	27.1	28.2	28.9
12H	18.9	19.9	19.5	20.6	21.3	27.5	28.6	28.2	29.2	30.0
4H 2H	18.0	19.2	18.6	19.8	20.5	20.0	21.2	20.6	21.8	22.5
3H	19.8	20.8	20.4	21.5	22.2	23.0	24.0	23.6	24.7	25.4
4H	20.5	21.5	21.2	22.2	22.9	24.7	25.7	25.4	26.3	27.1
6H	21.1	22.0	21.8	22.7	23.5	26.6	27.5	27.3	28.2	29.0
8H	21.3	22.1	22.0	22.8	23.6	27.7	28.5	28.4	29.2	30.0
12H	21.3	22.1	22.1	22.8	23.7	28.9	29.7	29.6	30.4	31.2
8H 4H	21.8	22.6	22.5	23.3	24.2	25.0	25.8	25.7	26.5	27.4
6H	22.9	23.5	23.6	24.3	25.1	27.2	27.9	28.0	28.6	29.5
8H	23.3	23.9	24.0	24.6	25.5	28.5	29.1	29.2	29.9	30.7
12H	23.6	24.1	24.3	24.9	25.8	30.0	30.5	30.7	31.3	32.2
12H 4H	22.2	23.0	22.9	23.7	24.5	25.1	25.8	25.8	26.5	27.4
6H	23.5	24.1	24.3	24.9	25.8	27.3	27.9	28.1	28.7	29.6
8H	24.2	24.7	24.9	25.5	26.4	28.7	29.2	29.5	30.0	30.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.2				
2.0H	+ 0.3 / - 0.5					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 2484 lm Total Lamp Luminous Flux.(8log(F/F0) = 3.2)

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-09-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks: LM79

UTILIZATION FACTORS TABLE

Test:U:120.3V I:0.2313A P:27.42W PF:0.9851 Lamp Flux:2484.38x1 lm		
NAME: 24寸方形L+U-BN-5CCT	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: WORBEST	SUR.:	PROTECTION ANGLE:

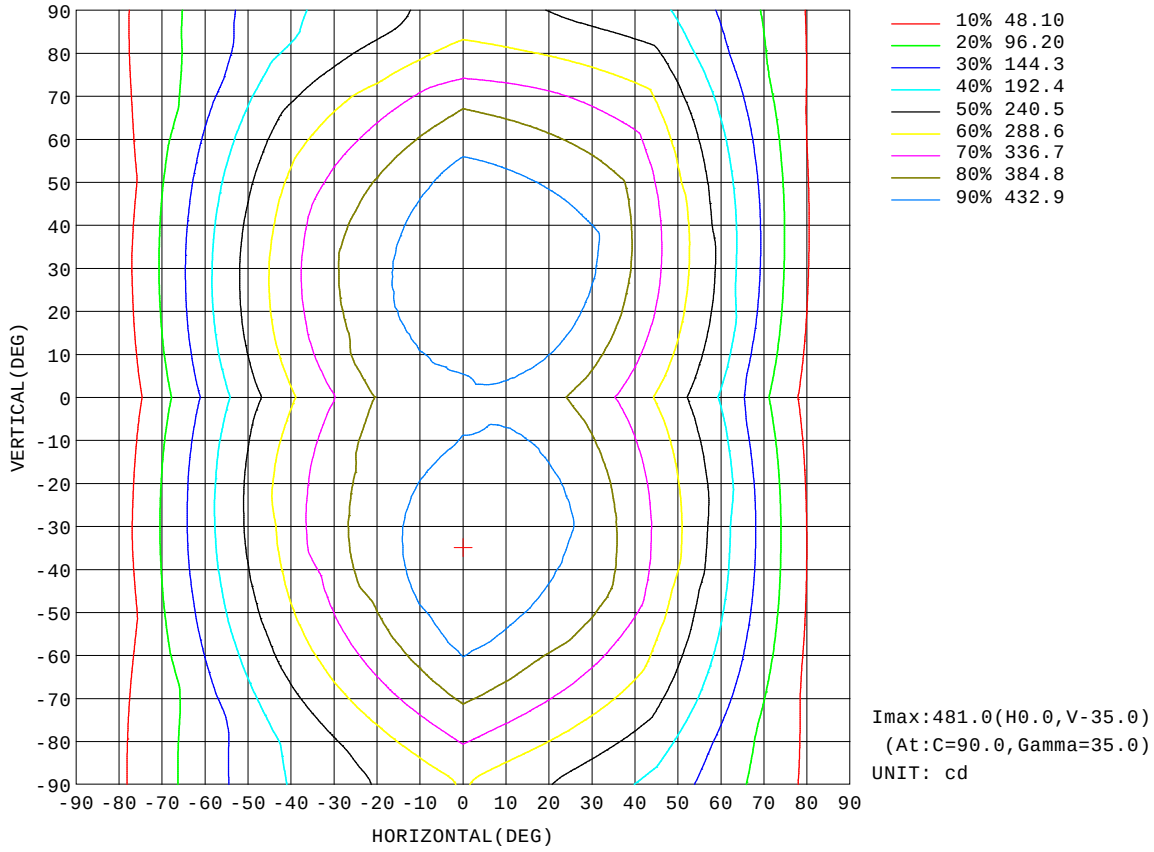
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	45	33	25	44	32	25	42	31	25	18
0.80	55	41	33	53	40	33	50	39	32	24
1.00	62	49	40	60	48	40	56	48	38	29
1.25	69	56	47	67	55	46	62	52	45	35
1.50	74	62	53	72	60	52	66	57	49	38
2.00	82	70	62	79	68	60	72	64	57	45
2.50	87	76	68	83	73	66	76	68	62	49
3.00	90	81	73	87	78	71	79	72	66	52
4.00	95	87	80	91	84	77	83	77	72	57
5.00	98	91	85	94	88	82	86	81	76	60
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended					SHRNOM = 1.25	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-09-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks: LM79

ISOCANDELA DIAGRAM

Test:U:120.3V I:0.2313A P:27.42W PF:0.9851 Lamp Flux:2484.38x1 lm		
NAME: 24寸方形L+U-BN-5CCT	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: WORBEST	SUR.:	PROTECTION ANGLE:

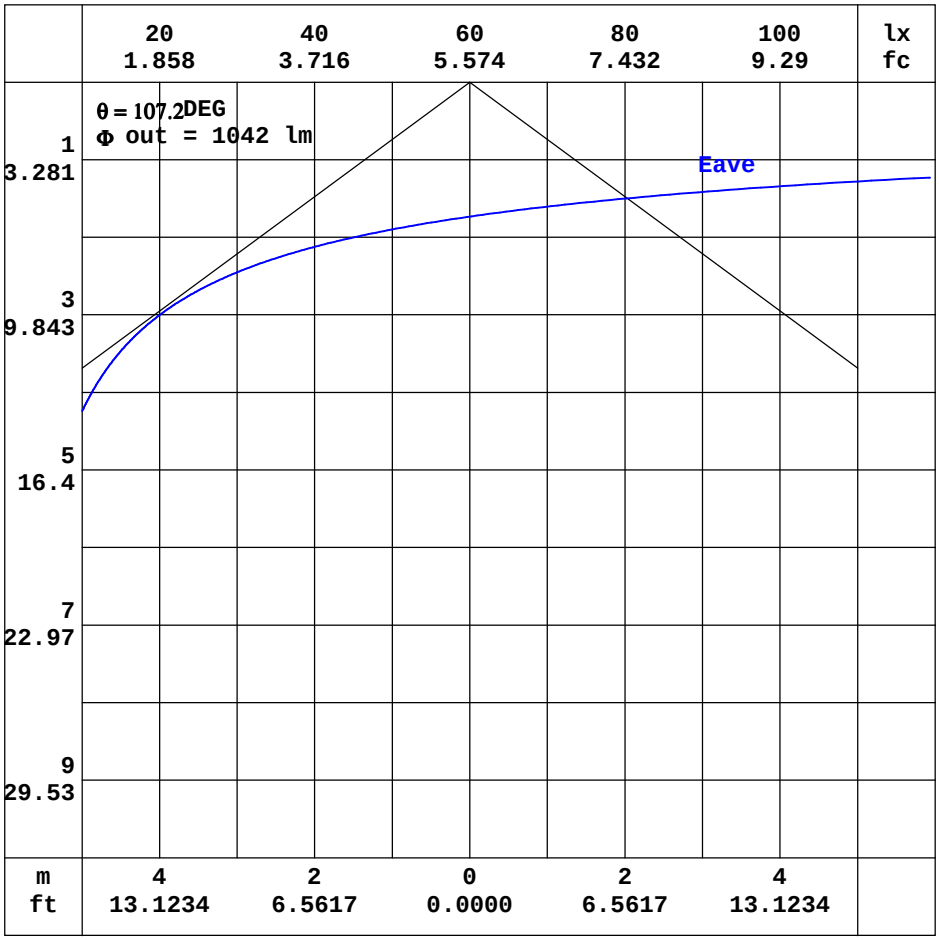


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-09-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks: LM79

AAI CURVES

Test:U:120.3V I:0.2313A P:27.42W PF:0.9851 Lamp Flux:2484.38x1 lm		
NAME: 24寸方形L+U-BN-5CCT	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: WORBEST	SUR.:	PROTECTION ANGLE:



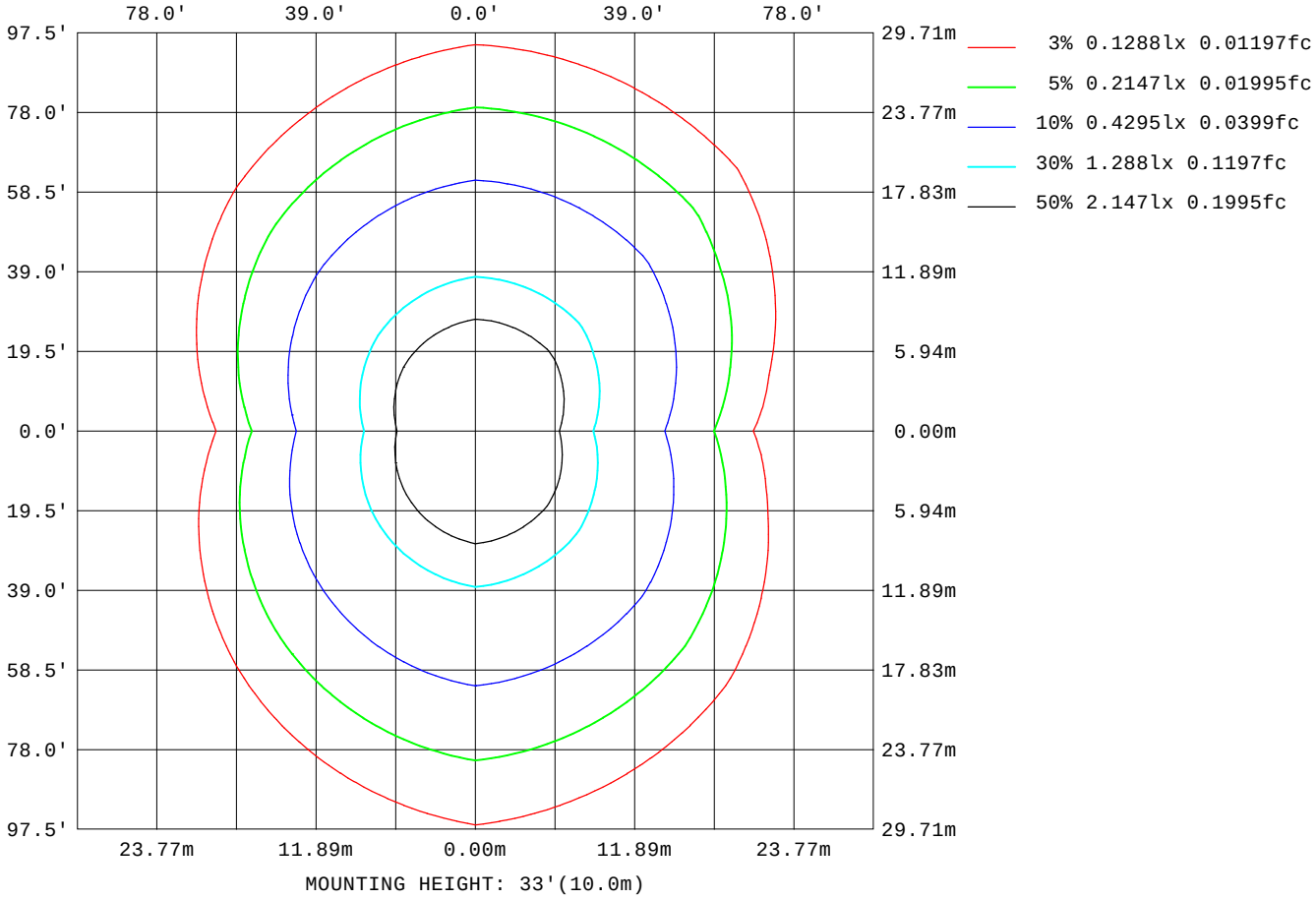
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-09-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks: LM79

ISOLUX DIAGRAM

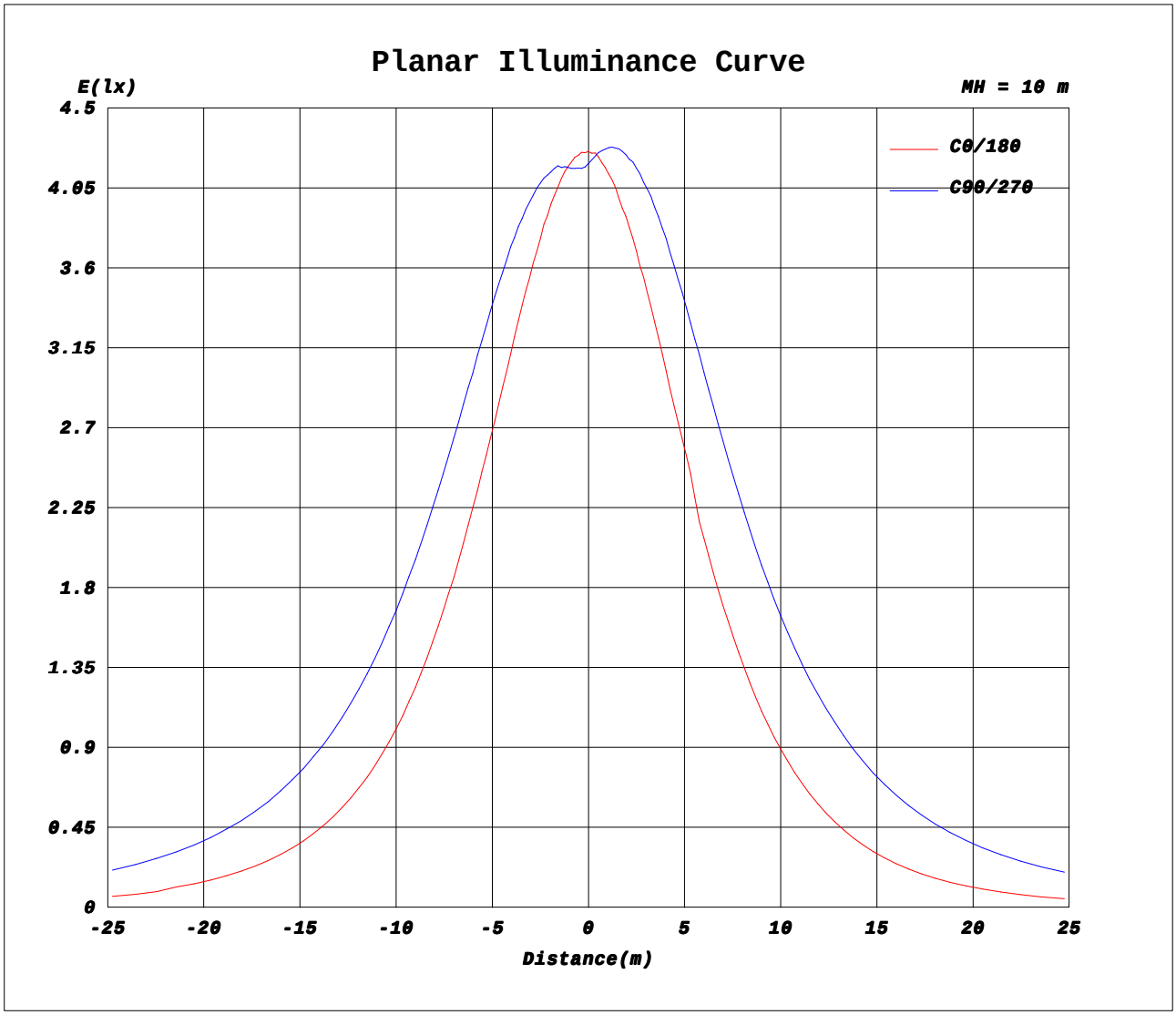
Test:U:120.3V I:0.2313A P:27.42W PF:0.9851 Lamp Flux:2484.38x1 lm		
NAME: 24寸方形L+U-BN-5CCT	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: WORBEST	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-09-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks: LM79

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-09-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks: LM79

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.3V I:0.2313A P:27.42W PF:0.9851 Lamp Flux:2484.38x1 lm		
NAME: 24寸方形L+U-BN-5CCT	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: WORBEST	SUR.:	PROTECTION ANGLE:

Table--1 UNIT: cd

C(DEG) / γ (DEG)	0	45	90	135	180	225	270	315
0	426	424	419	421	426	424	419	421
5	425	427	421	413	421	427	432	435
10	420	435	436	413	412	431	446	447
15	410	441	449	414	401	432	458	457
20	398	446	462	413	386	430	469	465
25	381	446	472	410	367	425	475	468
30	362	444	479	404	334	419	479	468
35	338	438	481	395	309	409	478	463
40	313	429	479	383	282	394	473	455
45	284	415	473	368	252	377	465	442
50	254	399	464	345	220	357	453	426
55	221	381	451	319	187	334	437	406
60	188	357	434	295	152	309	417	383
65	152	321	414	270	116	281	394	357
70	105	293	391	244	80.6	254	370	329
75	68.8	264	366	219	45.7	226	332	299
80	34.1	233	340	196	9.82	199	306	268
85	2.95	204	313	184	0.00	179	278	235
90	0.00	180	293	183	0.00	175	265	208
95	0.00	172	288	167	0.00	161	243	191
100	0.00	167	268	145	0.00	128	232	178
105	0.00	141	260	141	0.00	119	217	132
110	0.00	124	249	139	0.00	109	196	99.4
115	0.00	119	236	132	0.00	94.1	173	82.1
120	0.00	113	219	123	0.00	75.5	146	66.0
125	0.00	104	202	111	0.00	49.6	119	50.1
130	0.00	93.1	182	97.6	0.00	19.3	95.7	34.8
135	0.00	80.5	162	79.9	0.00	0.03	72.8	20.0
140	0.00	67.4	128	60.4	0.00	0.00	49.6	7.04
145	0.00	53.8	105	41.9	0.00	0.00	22.6	0.03
150	0.00	39.9	82.0	25.0	0.00	0.00	0.00	0.77
155	0.00	28.4	58.7	9.00	0.00	0.00	0.00	1.85
160	0.00	18.1	36.8	0.00	0.00	0.00	0.00	0.43
165	0.00	0.12	20.6	0.00	0.00	0.00	0.00	0.07
170	0.00	0.00	5.83	0.00	0.00	0.00	0.00	0.00
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-09-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks: LM79