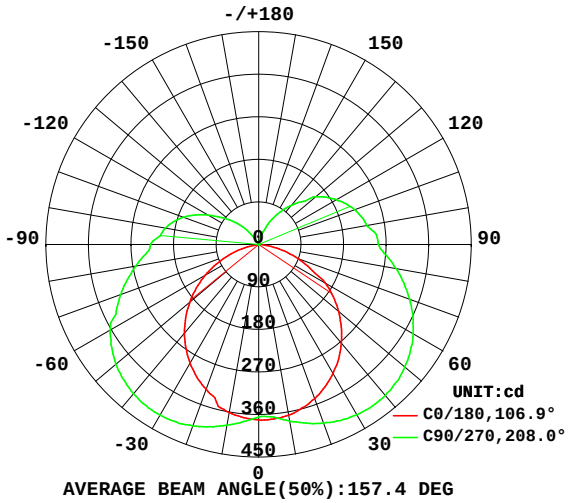
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.3V I:0.2400A P:28.47W PF:0.9859 Lamp Flux:2141.31x1 lm		
NAME: I-VBDF-25W-TD/DV-5CCT-L24"	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: ASL	SUR.:	PROTECTION ANGLE:

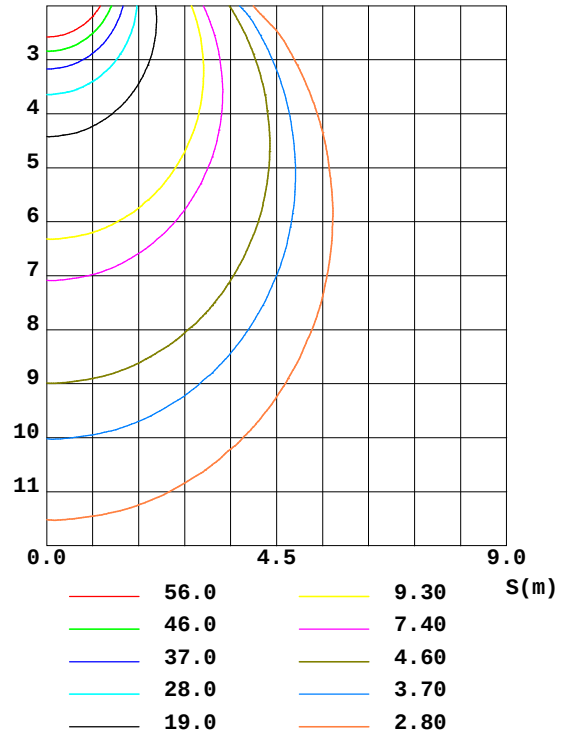
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 75.20 lm/W	
MODEL		Imax(cd)	418.4	S/MH(C0/180)	1.26
NOMINAL POWER(W)	28	LOR(%)	100.0	S/MH(C90/270)	1.71
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	2141.3	η UP,DN(C0-180)	12.7,39.2
NOMINAL FLUX(lm)	2141.31	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	8.8,39.3
LAMPS INSIDE	1	η up(%)	21.5	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120.3	η down(%)	78.5	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):157.4 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	366.7	379.7	379.9	359.3	361.2	375.5	388.1	389.3	0- 10	35.53	35.53	1.66,1.66
20	347.2	388.6	402.1	359.2	326.2	374.5	408.4	403.5	10- 20	106.7	142.2	6.64,6.64
30	315.1	387.2	415.9	345.5	290.3	365.1	417.2	405.4	20- 30	172.7	314.9	14.7,14.7
40	272.6	374.1	416.9	322.4	244.4	343.9	412.6	394.3	30- 40	224.9	539.8	25.2,25.2
50	221.1	337.8	403.4	293.4	190.7	310.6	394.1	370.3	40- 50	257.4	797.2	37.2,37.2
60	162.9	301.0	377.3	254.1	130.5	268.1	363.0	332.5	50- 60	264.5	1062	49.6,49.6
70	88.80	254.0	340.0	209.9	68.23	220.2	310.8	285.4	60- 70	245.5	1307	61,61
80	27.07	202.0	295.5	168.1	1.772	173.0	264.5	232.0	70- 80	207.7	1515	70.7,70.7
90	0	155.0	253.5	156.0	0	140.6	229.0	179.9	80- 90	166.3	1681	78.5,78.5
100	0	143.1	232.1	124.1	0	109.2	200.7	154.3	90-100	142.1	1823	85.2,85.2
110	0	105.8	216.0	117.8	0	92.84	169.3	84.27	100-110	115.1	1938	90.5,90.5
120	0	95.97	190.0	103.9	0	63.63	125.3	55.20	110-120	88.63	2027	94.7,94.7
130	0	78.59	157.6	82.23	0	14.51	81.54	27.96	120-130	60.77	2088	97.5,97.5
140	0	56.41	108.7	49.91	0	0	40.95	3.512	130-140	33.52	2121	99.1,99.1
150	0	32.31	68.65	19.33	0	0	0	0	140-150	14.72	2136	99.8,99.8
160	0	9.321	29.41	0	0	0	0	0	150-160	4.543	2141	100,100
170	0	0	2.502	0	0	0	0	0	160-170	0.6468	2141	100,100
180	0	0	0	0	0	0	0	0	170-180	0.0029	2141	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

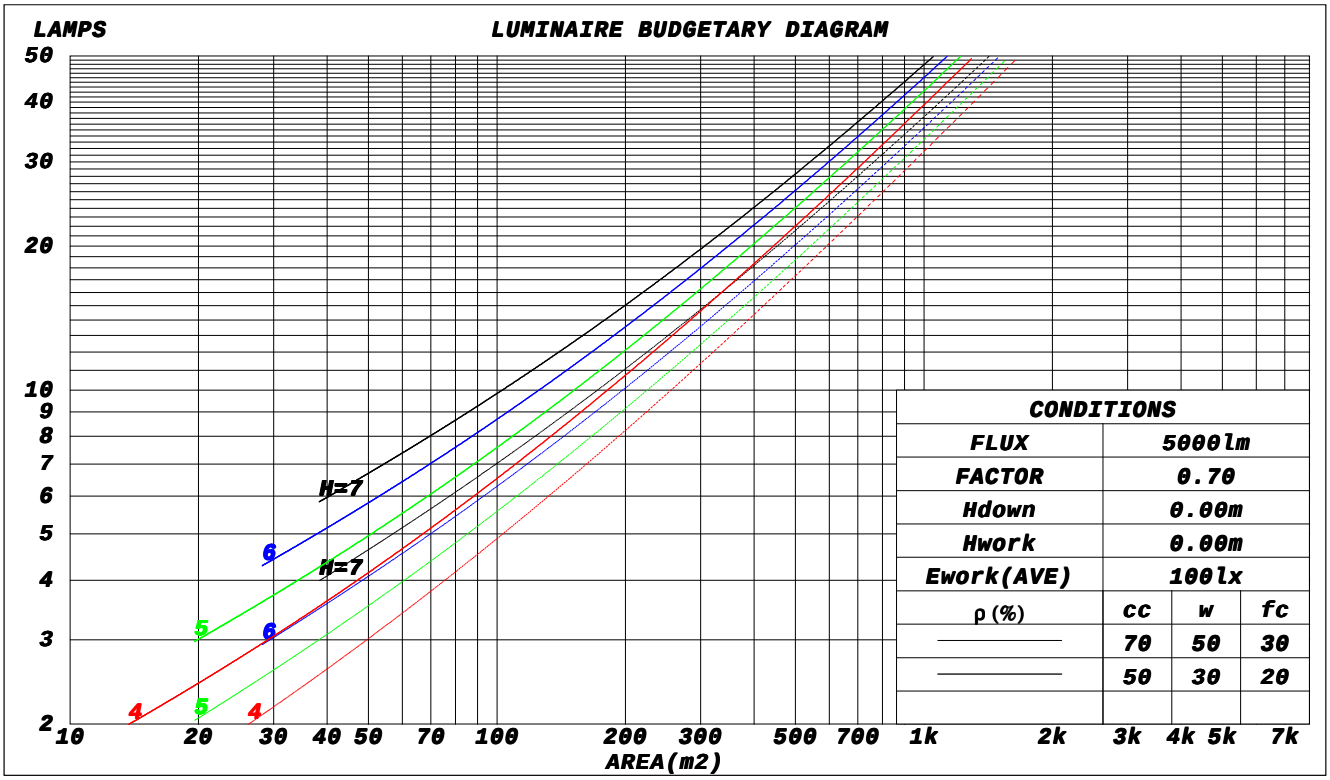
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-09-14

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:0.2400A P:28.47W PF:0.9859 Lamp Flux:2141.31x1 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	.79
1.0	.94	.89	.84	.90	.85	.81	.82	.78	.74	.74	.71	.68	.67	.65	.62	.59
2.0	.80	.72	.66	.77	.69	.63	.69	.64	.59	.63	.58	.54	.57	.53	.50	.46
3.0	.69	.60	.53	.66	.58	.51	.60	.53	.48	.54	.49	.44	.49	.45	.41	.37
4.0	.61	.51	.44	.58	.49	.42	.53	.45	.40	.48	.42	.37	.43	.38	.34	.31
5.0	.54	.44	.37	.51	.43	.36	.47	.39	.34	.42	.36	.31	.38	.33	.29	.26
6.0	.48	.39	.32	.46	.37	.31	.42	.34	.29	.38	.32	.27	.35	.29	.25	.22
7.0	.43	.34	.28	.41	.33	.27	.38	.31	.25	.35	.28	.24	.31	.26	.22	.19
8.0	.39	.30	.24	.38	.29	.24	.34	.27	.22	.32	.25	.21	.29	.23	.19	.17
9.0	.36	.27	.22	.34	.26	.21	.32	.25	.20	.29	.23	.19	.26	.21	.17	.15
10.0	.33	.25	.19	.31	.24	.19	.29	.22	.18	.27	.21	.17	.24	.19	.16	.14



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:0.2400A P:28.47W PF:0.9859 Lamp Flux:2141.31x1 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	.353	.202	.065	.329	.190	.061	.307	.178	.057	
2.0	.338	.185	.057	.326	.179	.055	.302	.168	.052	.281	.157	.049	.261	.147	.047	
3.0	.300	.160	.048	.288	.154	.047	.267	.145	.044	.248	.136	.042	.229	.127	.039	
4.0	.269	.140	.041	.259	.136	.040	.240	.127	.038	.222	.119	.036	.205	.112	.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	.090	.027	
7.0	.206	.102	.029	.198	.099	.028	.184	.093	.027	.170	.087	.025	.157	.082	.024	
8.0	.191	.093	.026	.184	.091	.026	.170	.085	.024	.158	.080	.023	.146	.075	.022	
9.0	.178	.086	.024	.171	.084	.023	.159	.079	.022	.147	.074	.021	.136	.069	.020	
10.0	.166	.080	.022	.160	.077	.022	.149	.073	.021	.138	.068	.019	.128	.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	.354	.354	.354	.303	.303	.303	.207	.207	.207	.119	.119	.119	.038	.038	.038	
1.0	.351	.320	.293	.300	.275	.252	.205	.189	.174	.118	.109	.101	.038	.035	.033	
2.0	.345	.298	.259	.295	.256	.224	.202	.177	.156	.117	.103	.091	.037	.033	.030	
3.0	.337	.282	.237	.289	.243	.206	.199	.169	.144	.115	.099	.085	.037	.032	.028	
4.0	.330	.269	.223	.283	.233	.194	.195	.162	.136	.113	.095	.081	.036	.031	.027	
5.0	.322	.260	.213	.277	.225	.186	.190	.157	.131	.110	.092	.078	.036	.030	.026	
6.0	.315	.252	.207	.270	.218	.180	.187	.153	.127	.108	.090	.076	.035	.029	.025	
7.0	.307	.245	.201	.265	.213	.176	.183	.149	.124	.106	.088	.074	.034	.029	.024	
8.0	.301	.240	.198	.259	.208	.172	.179	.146	.122	.104	.086	.073	.034	.028	.024	
9.0	.295	.235	.195	.254	.204	.170	.176	.143	.121	.102	.085	.072	.033	.028	.024	
10.0	.289	.231	.192	.249	.200	.168	.173	.141	.119	.101	.083	.071	.033	.027	.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:0.2400A P:28.47W PF:0.9859 Lamp Flux:2141.31x1 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	16.0	17.4	16.6	17.9	18.6	18.9	20.3	19.5	20.8	21.5
3H	17.4	18.7	18.0	19.2	19.9	21.8	23.0	22.3	23.6	24.3
4H	17.9	19.1	18.5	19.7	20.4	23.3	24.5	23.9	25.1	25.8
6H	18.2	19.4	18.9	20.0	20.7	25.0	26.1	25.7	26.8	27.5
8H	18.3	19.4	18.9	20.0	20.7	26.0	27.1	26.6	27.7	28.4
12H	18.3	19.3	18.9	19.9	20.7	27.1	28.1	27.7	28.7	29.5
4H 2H	17.5	18.7	18.1	19.3	20.0	19.5	20.7	20.1	21.3	22.0
3H	19.2	20.3	19.9	20.9	21.7	22.5	23.6	23.2	24.2	24.9
4H	20.0	20.9	20.7	21.6	22.4	24.2	25.2	24.9	25.9	26.6
6H	20.6	21.4	21.2	22.1	22.9	26.2	27.0	26.9	27.7	28.5
8H	20.7	21.5	21.4	22.2	23.0	27.2	28.0	27.9	28.7	29.6
12H	20.8	21.5	21.5	22.2	23.1	28.5	29.2	29.2	29.9	30.8
8H 4H	21.3	22.1	22.0	22.8	23.6	24.6	25.4	25.3	26.1	26.9
6H	22.3	23.0	23.1	23.7	24.6	26.8	27.4	27.5	28.2	29.0
8H	22.7	23.3	23.5	24.1	25.0	28.0	28.6	28.8	29.4	30.3
12H	23.0	23.5	23.8	24.3	25.2	29.5	30.0	30.3	30.8	31.7
12H 4H	21.7	22.4	22.4	23.2	24.0	24.6	25.3	25.3	26.0	26.9
6H	23.0	23.6	23.7	24.4	25.2	26.9	27.5	27.6	28.2	29.1
8H	23.6	24.2	24.4	24.9	25.8	28.2	28.8	29.0	29.5	30.4
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 2141 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.6)

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:0.2400A P:28.47W PF:0.9859 Lamp Flux:2141.31x1 lm		
NAME: 24寸方形L+U-BN-5CCT	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: WORBEST	SUR.:	PROTECTION ANGLE:

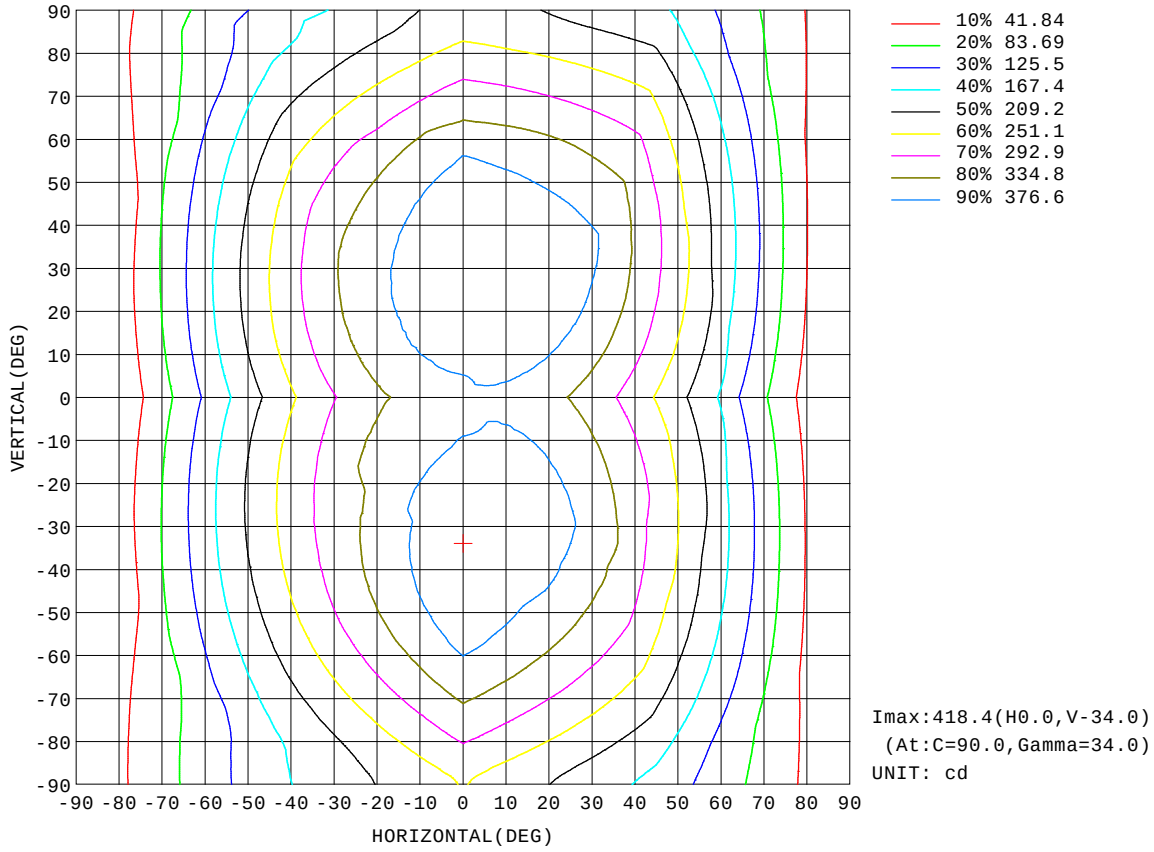
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	46	33	26	44	32	25	42	31	25	18
0.80	55	41	33	53	41	33	50	39	32	24
1.00	62	49	40	60	48	40	57	48	39	30
1.25	69	56	48	67	55	47	62	52	45	35
1.50	75	62	53	72	60	52	67	57	50	39
2.00	82	71	62	79	68	60	73	64	57	45
2.50	87	76	68	83	73	66	76	68	62	49
3.00	91	81	73	87	78	71	79	72	67	52
4.00	95	87	80	91	84	78	83	78	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:0.2400A P:28.47W PF:0.9859 Lamp Flux:2141.31x1 lm		
NAME: 24寸方形L+U-BN-5CCT	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: WORBEST	SUR.:	PROTECTION ANGLE:

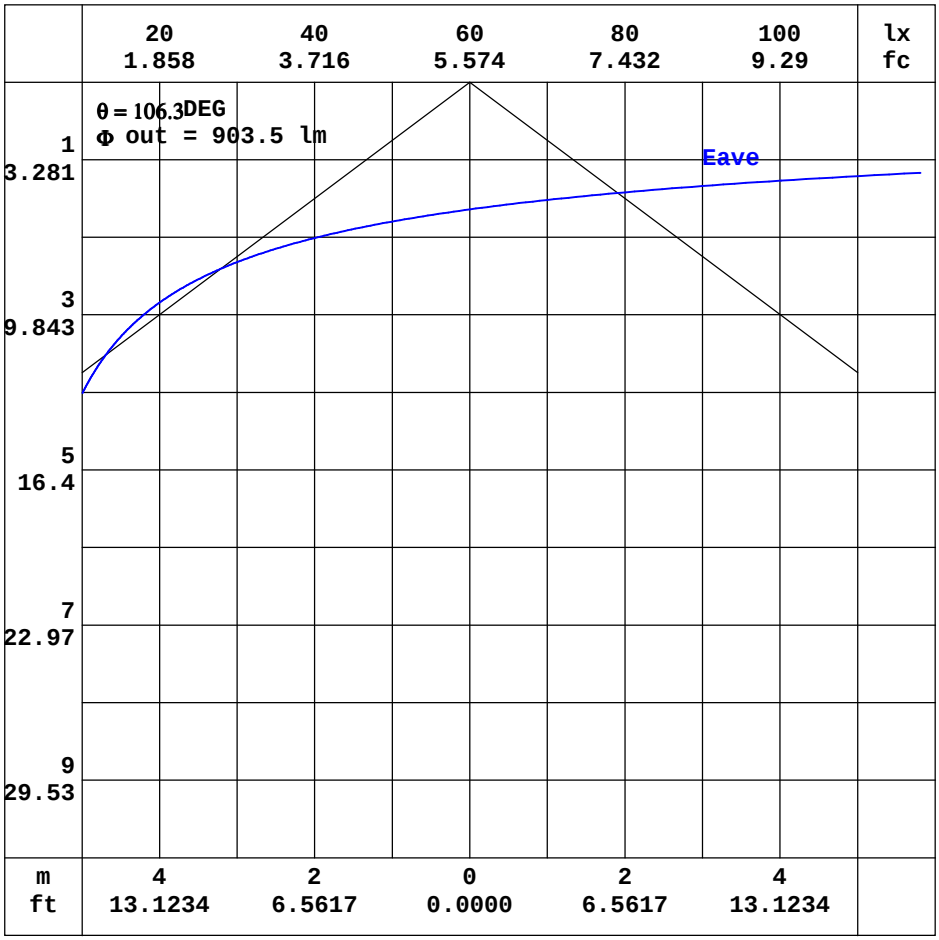


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-09-14

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:0.2400A P:28.47W PF:0.9859 Lamp Flux:2141.31x1 lm		
NAME: 24寸方形L+U-BN-5CCT	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: WORBEST	SUR.:	PROTECTION ANGLE:



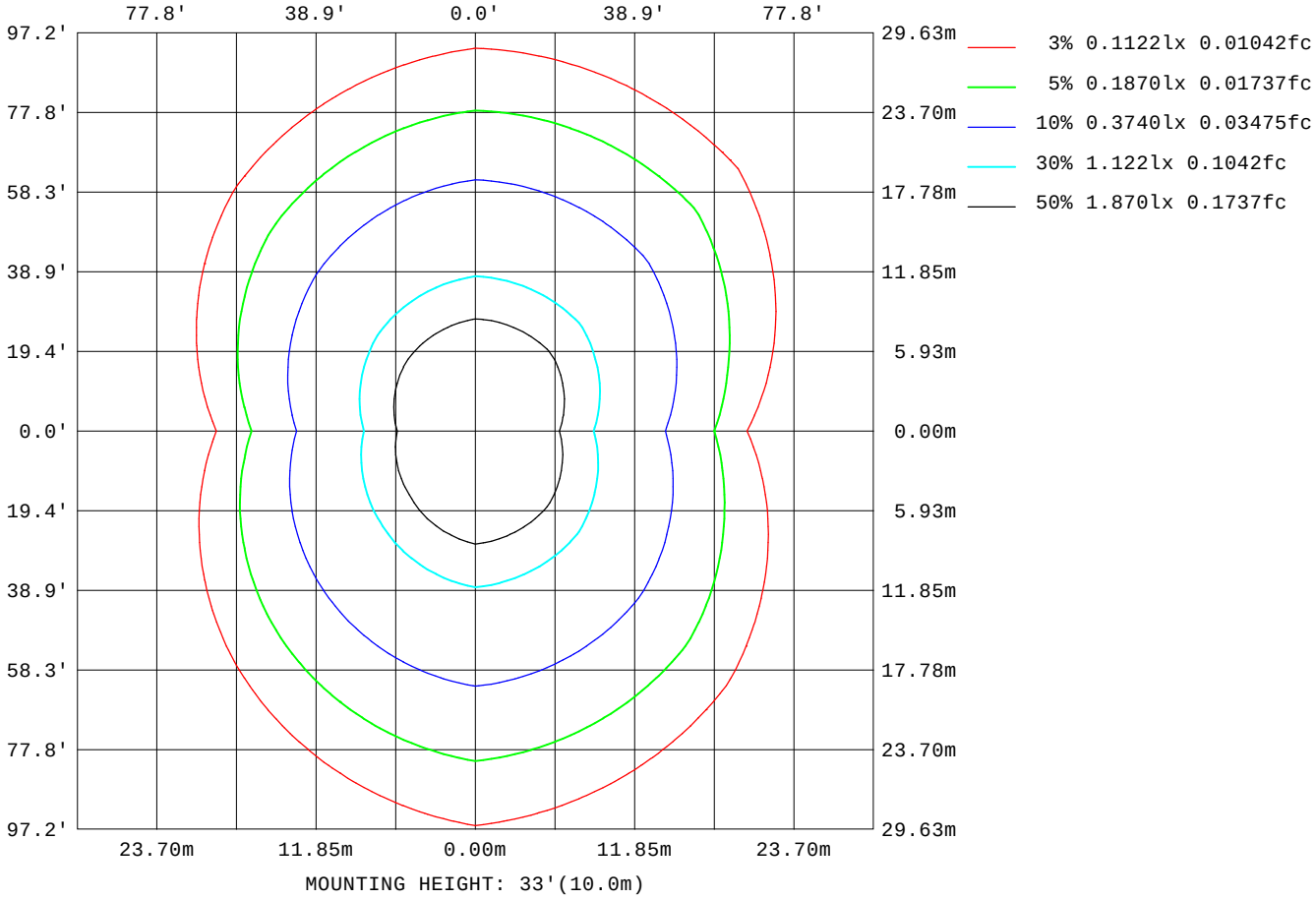
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

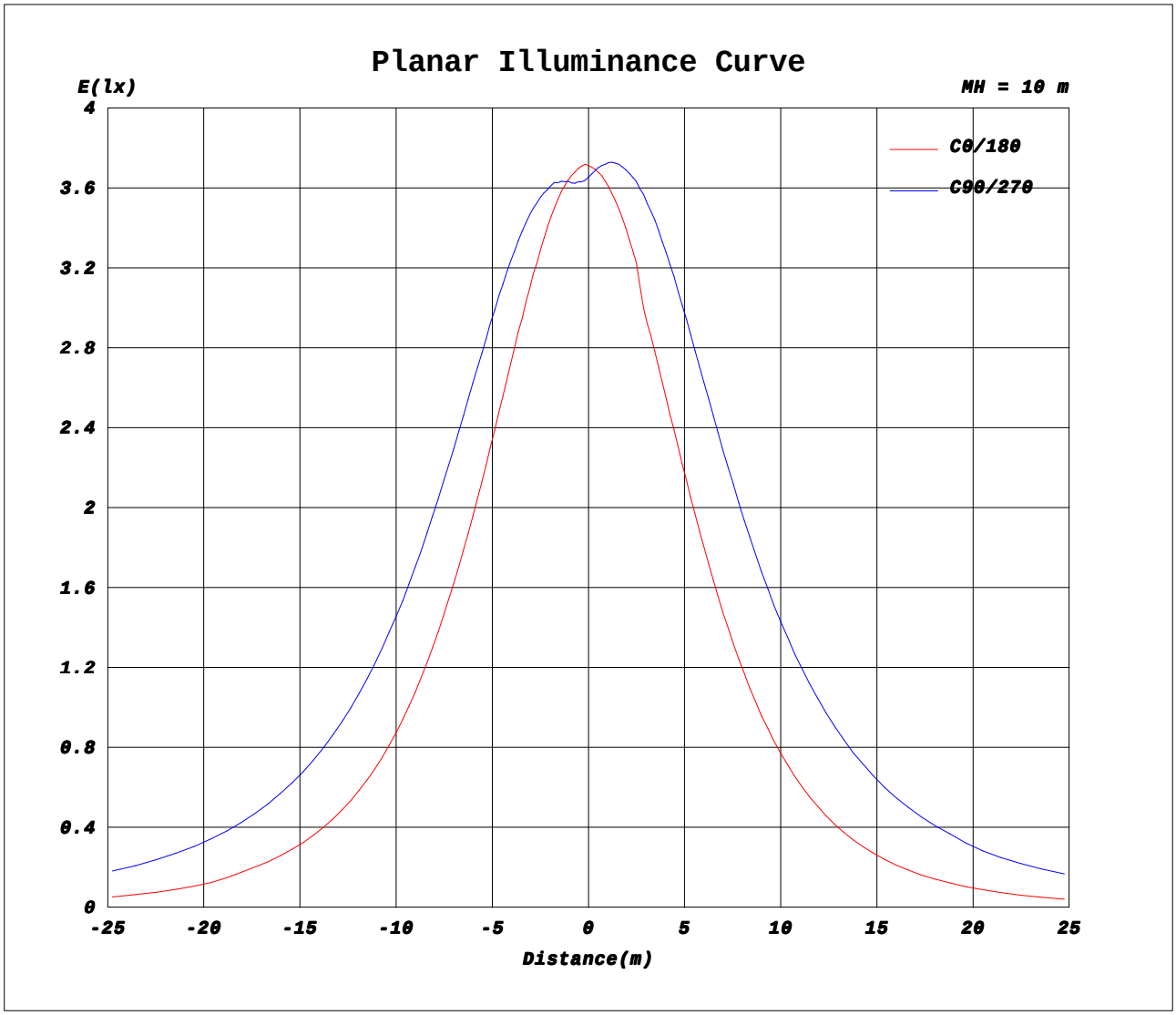
Test:U:120.3V I:0.2400A P:28.47W PF:0.9859 Lamp Flux:2141.31x1 lm		
NAME: 24寸方形L+U-BN-5CCT	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: WORBEST	SUR.:	PROTECTION ANGLE:



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:0.2400A P:28.47W PF:0.9859 Lamp Flux:2141.31x1 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

γ (DEG) \ C(DEG)	0	45	90	135	180	225	270	315
0	371	370	365	366	371	370	365	366
5	371	372	367	360	368	373	376	379
10	367	380	380	359	361	375	388	389
15	358	385	391	360	345	377	399	398
20	347	389	402	359	326	375	408	404
25	333	389	411	357	310	371	414	407
30	315	387	416	346	290	365	417	405
35	295	382	418	332	268	356	416	402
40	273	374	417	322	244	344	413	394
45	248	363	412	309	218	329	405	385
50	221	338	403	293	191	311	394	370
55	193	321	392	275	161	290	380	353
60	163	301	377	254	131	268	363	332
65	121	278	360	232	99.6	244	332	311
70	88.8	254	340	210	68.2	220	311	285
75	57.5	228	318	188	37.7	196	287	259
80	27.1	202	295	168	1.77	173	265	232
85	0.06	176	271	158	0.00	156	240	204
90	0.00	155	254	156	0.00	141	229	180
95	0.00	148	250	143	0.00	129	210	165
100	0.00	143	232	124	0.00	109	201	154
105	0.00	121	225	121	0.00	101	187	113
110	0.00	106	216	118	0.00	92.8	169	84.3
115	0.00	101	204	112	0.00	79.7	148	69.3
120	0.00	96.0	190	104	0.00	63.6	125	55.2
125	0.00	88.3	175	94.1	0.00	40.9	102	41.5
130	0.00	78.6	158	82.2	0.00	14.5	81.5	28.0
135	0.00	67.8	128	67.1	0.00	0.00	61.4	15.1
140	0.00	56.4	109	49.9	0.00	0.00	40.9	3.51
145	0.00	44.5	88.9	34.0	0.00	0.00	17.4	0.00
150	0.00	32.3	68.7	19.3	0.00	0.00	0.00	0.00
155	0.00	22.2	48.5	0.95	0.00	0.00	0.00	0.00
160	0.00	9.32	29.4	0.00	0.00	0.00	0.00	0.00
165	0.00	0.00	15.2	0.00	0.00	0.00	0.00	0.00
170	0.00	0.00	2.50	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