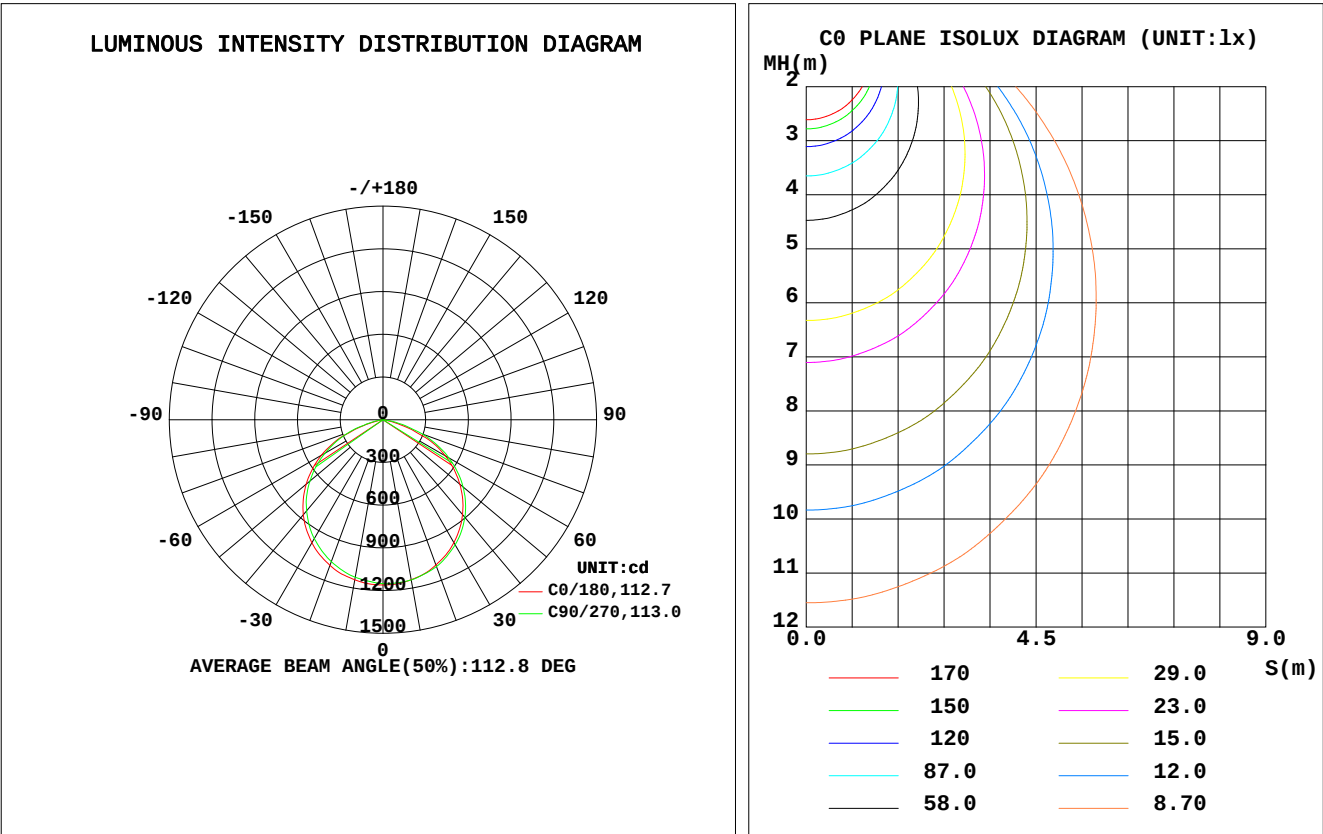


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: VAHA投光灯CCT 30W 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 106.28 lm/W			
MODEL		Imax(cd)	1160	S/MH(C0/180)	1.28
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.25
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	3179.6	η UP, DN(C0-180)	0.3, 50.8
NOMINAL FLUX(lm)	3179.62	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.3, 48.6
LAMPS INSIDE	1	η up(%)	0.6	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down(%)	99.4	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	1141	1142	1141	1123					0- 10	109.4	109.4	3.44, 3.44
20	1086	1097	1088	1061					10- 20	314.8	424.2	13.3, 13.3
30	996.1	1014	998.2	964.4					20- 30	480.5	904.6	28.5, 28.5
40	868.8	894.6	870.6	833.9					30- 40	584.6	1489	46.8, 46.8
50	704.2	734.7	704.8	670.0					40- 50	608.9	2098	66, 66
60	503.6	533.1	500.2	470.1					50- 60	541.7	2640	83, 83
70	234.5	295.1	226.4	247.9					60- 70	378.4	3018	94.9, 94.9
80	18.80	57.43	13.71	38.60					70- 80	136.0	3154	99.2, 99.2
90	0.5395	0.5634	0.6189	0.6663					80- 90	7.854	3162	99.4, 99.4
100	1.062	1.055	1.135	1.245					90-100	0.9127	3163	99.5, 99.5
110	1.808	1.769	1.896	1.966					100-110	1.562	3165	99.5, 99.5
120	2.593	2.554	2.674	2.759					110-120	2.234	3167	99.6, 99.6
130	3.354	3.284	3.435	3.497					120-130	2.696	3169	99.7, 99.7
140	4.084	4.038	4.157	4.203					130-140	2.900	3172	99.8, 99.8
150	4.727	4.649	4.807	4.806					140-150	2.783	3175	99.9, 99.9
160	5.298	5.299	5.386	5.417					150-160	2.332	3177	99.9, 99.9
170	5.782	5.798	5.909	5.877					160-170	1.585	3179	100, 100
180	6.091	6.083	6.147	6.028					170-180	0.5664	3180	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

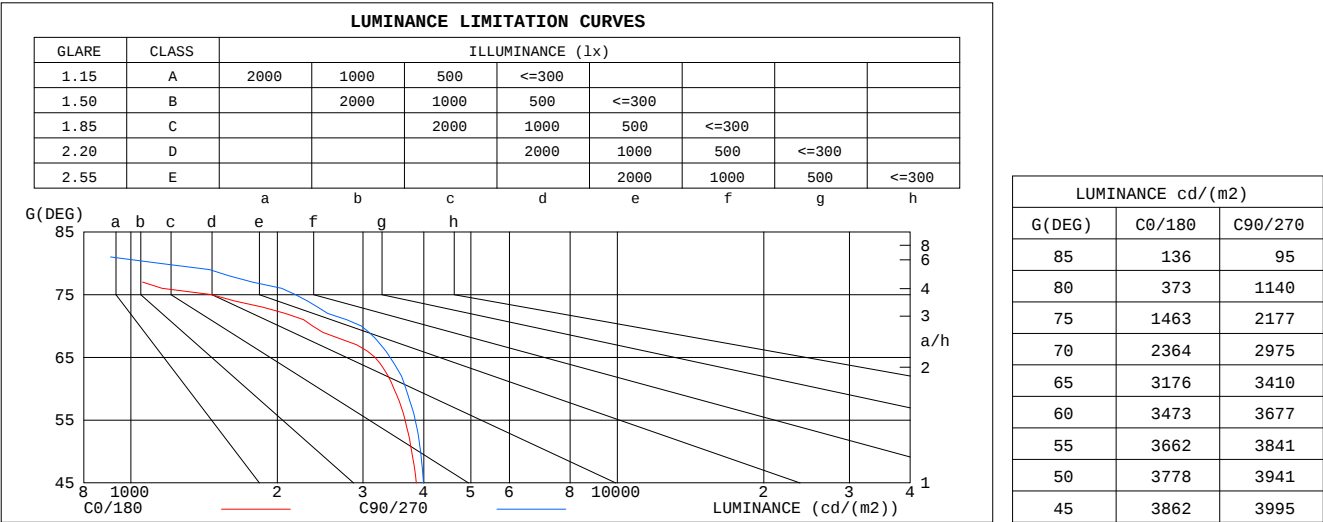
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:28 February 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.730m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

NAME: VAHA投光灯CCT 30W 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

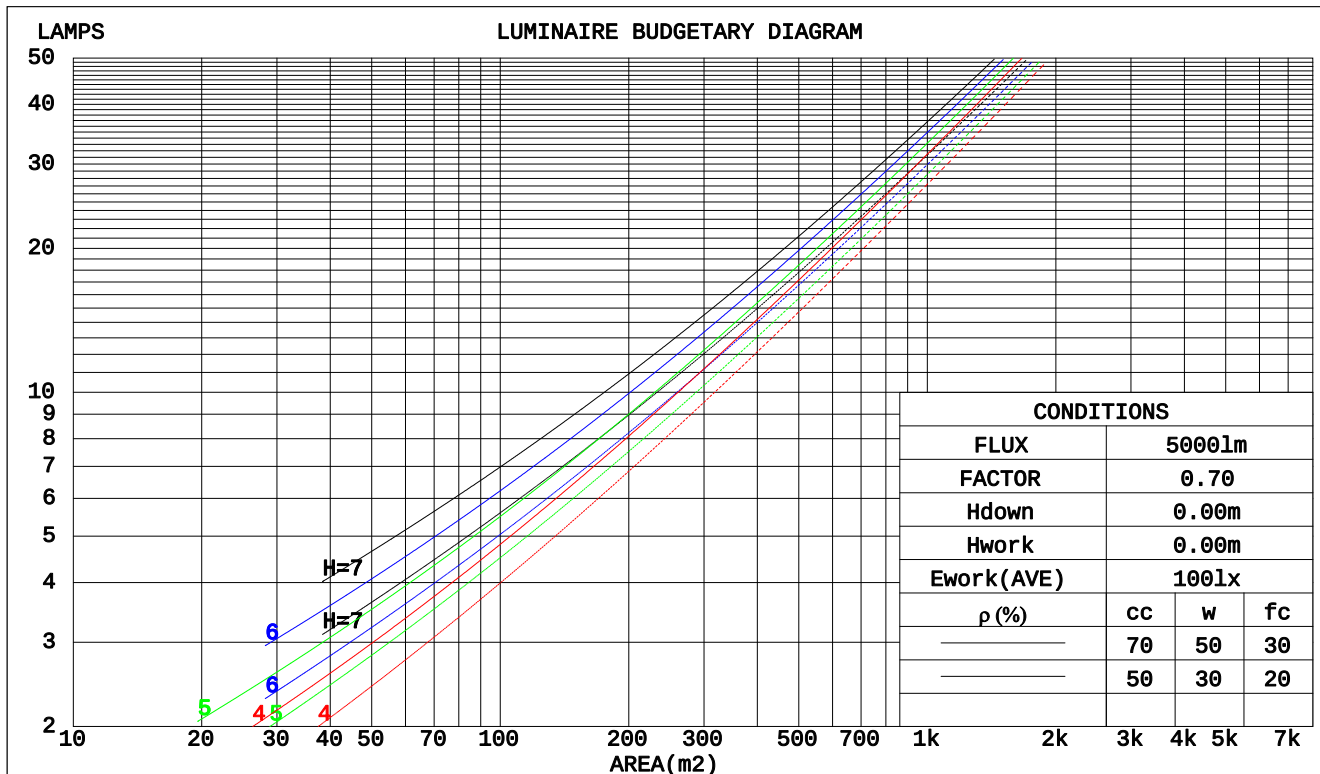
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: VAHA投光灯CCT 30W 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.99
1.0	1.05	1.01	.98	1.03	.99	.96	.99	.96	.93	.95	.92	.90	.91	.89	.88	.85
2.0	.92	.86	.81	.90	.85	.80	.87	.82	.78	.84	.79	.76	.80	.77	.74	.72
3.0	.81	.74	.67	.80	.73	.67	.77	.71	.65	.74	.69	.64	.71	.67	.63	.61
4.0	.72	.64	.57	.71	.63	.57	.68	.61	.56	.66	.60	.55	.64	.59	.54	.52
5.0	.64	.56	.49	.63	.55	.49	.61	.54	.48	.59	.53	.48	.57	.52	.47	.45
6.0	.58	.49	.43	.57	.49	.43	.55	.48	.42	.53	.47	.42	.52	.46	.42	.39
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.37	.49	.42	.37	.47	.41	.37	.35
8.0	.48	.40	.34	.47	.39	.34	.46	.39	.33	.45	.38	.33	.43	.37	.33	.31
9.0	.44	.36	.30	.43	.36	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.32	.27	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 28 February 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 10.730m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

NAME: VAHA投光灯CCT 30W 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.279	.159	.050	.272	.155	.049	.258	.148	.047	.246	.142	.046	.235	.136	.044		
2.0	.272	.149	.046	.265	.146	.045	.254	.141	.044	.243	.136	.043	.233	.132	.041		
3.0	.256	.136	.041	.251	.134	.040	.240	.130	.040	.231	.126	.039	.222	.123	.038		
4.0	.239	.124	.037	.234	.123	.036	.225	.119	.036	.216	.116	.035	.208	.113	.035		
5.0	.223	.114	.033	.219	.112	.033	.210	.110	.032	.203	.107	.032	.196	.105	.031		
6.0	.208	.104	.030	.204	.103	.030	.197	.101	.029	.190	.099	.029	.184	.097	.029		
7.0	.195	.096	.027	.191	.095	.027	.184	.093	.027	.178	.091	.027	.172	.090	.026		
8.0	.182	.089	.025	.179	.088	.025	.173	.087	.025	.168	.085	.025	.162	.083	.024		
9.0	.171	.083	.023	.168	.082	.023	.163	.081	.023	.158	.079	.023	.153	.078	.023		
10.0	.161	.077	.021	.159	.077	.021	.154	.075	.021	.149	.074	.021	.145	.073	.021		

ρ _{CC}	80%			70%			50%			30%			10%			0
ρ _W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.195	.195	.195	.166	.166	.166	.114	.114	.114	.065	.065	.065	.021	.021	.021	
1.0	.182	.161	.141	.156	.138	.121	.107	.095	.084	.061	.055	.049	.020	.018	.016	
2.0	.174	.136	.105	.149	.117	.091	.102	.081	.063	.059	.047	.037	.019	.015	.012	
3.0	.166	.118	.081	.142	.102	.070	.098	.071	.049	.056	.041	.029	.018	.013	.009	
4.0	.159	.105	.064	.136	.091	.056	.094	.063	.039	.054	.037	.023	.017	.012	.008	
5.0	.152	.095	.053	.130	.082	.046	.090	.057	.032	.052	.034	.019	.017	.011	.006	
6.0	.145	.086	.044	.124	.075	.039	.086	.052	.027	.050	.031	.016	.016	.010	.005	
7.0	.138	.079	.038	.119	.069	.033	.082	.048	.024	.048	.028	.014	.015	.009	.005	
8.0	.132	.074	.033	.114	.064	.029	.079	.045	.021	.046	.026	.012	.015	.009	.004	
9.0	.126	.069	.030	.109	.060	.026	.075	.042	.019	.044	.025	.011	.014	.008	.004	
10.0	.120	.064	.027	.104	.056	.024	.072	.039	.017	.042	.023	.010	.014	.008	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:28 February 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.730m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

NAME: VAHA投光灯CCT 30W 3000K						TYPE:			WEIGHT:		
SPEC.:						DIM.:			SERIAL No.:		
MFR.:						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	17.6	19.0	17.8	19.3	19.5	17.8	19.2	18.0	19.4	19.7	
3H	18.6	20.0	18.9	20.2	20.5	19.0	20.4	19.3	20.6	20.9	
4H	18.8	20.1	19.1	20.3	20.6	19.3	20.6	19.6	20.9	21.1	
6H	18.8	20.0	19.1	20.2	20.5	19.4	20.6	19.7	20.9	21.2	
8H	18.7	19.9	19.0	20.2	20.5	19.4	20.5	19.7	20.8	21.1	
12H	18.6	19.8	19.0	20.1	20.4	19.3	20.4	19.7	20.7	21.0	
4H 2H	18.1	19.4	18.5	19.7	19.9	18.3	19.6	18.6	19.8	20.1	
3H	19.3	20.4	19.7	20.7	21.0	19.7	20.8	20.0	21.1	21.4	
4H	19.5	20.5	19.9	20.9	21.2	20.0	21.0	20.4	21.4	21.7	
6H	19.5	20.4	19.9	20.8	21.1	20.1	21.0	20.5	21.4	21.8	
8H	19.5	20.3	19.9	20.7	21.1	20.1	20.9	20.5	21.3	21.7	
12H	19.4	20.2	19.9	20.6	21.0	20.1	20.8	20.5	21.2	21.6	
8H 4H	19.6	20.4	20.0	20.8	21.2	20.1	20.9	20.5	21.3	21.7	
6H	19.6	20.3	20.1	20.7	21.1	20.2	20.9	20.7	21.3	21.7	
8H	19.6	20.2	20.0	20.6	21.1	20.2	20.8	20.7	21.2	21.7	
12H	19.5	20.0	20.0	20.5	21.0	20.2	20.7	20.6	21.1	21.6	
12H 4H	19.6	20.3	20.0	20.7	21.1	20.0	20.8	20.5	21.2	21.6	
6H	19.6	20.2	20.0	20.6	21.1	20.2	20.8	20.6	21.2	21.7	
8H	19.5	20.1	20.0	20.5	21.0	20.2	20.7	20.6	21.1	21.6	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.3 / - 0.4					+ 0.2 / - 0.3					
1.5H	+ 0.3 / - 0.4					+ 0.2 / - 0.4					
2.0H	+ 0.4 / - 0.5					+ 0.4 / - 0.5					

CIE Pub.117 Corrected 3180 lm Total Lamp Luminous Flux.(8log(F/F0) = 4.0)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

NAME: VAHA投光灯CCT 30W 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	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) $k(RI) \times RCR = 5$									
$k = 0.60$	58	47	40	58	47	40	56	46	40	34
0.80	69	58	50	68	57	50	66	56	50	43
1.00	78	67	60	76	66	60	74	68	59	52
1.25	85	75	68	83	74	68	81	73	67	60
1.50	90	80	74	88	80	73	85	78	72	65
2.00	97	89	83	95	87	82	91	85	80	73
2.50	100	93	88	98	92	87	95	89	85	77
3.00	104	97	92	101	96	91	97	93	89	81
4.00	107	102	98	105	100	97	101	97	94	85
5.00	110	105	102	107	103	100	103	100	97	88
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended				SHRNOM = 1.25		

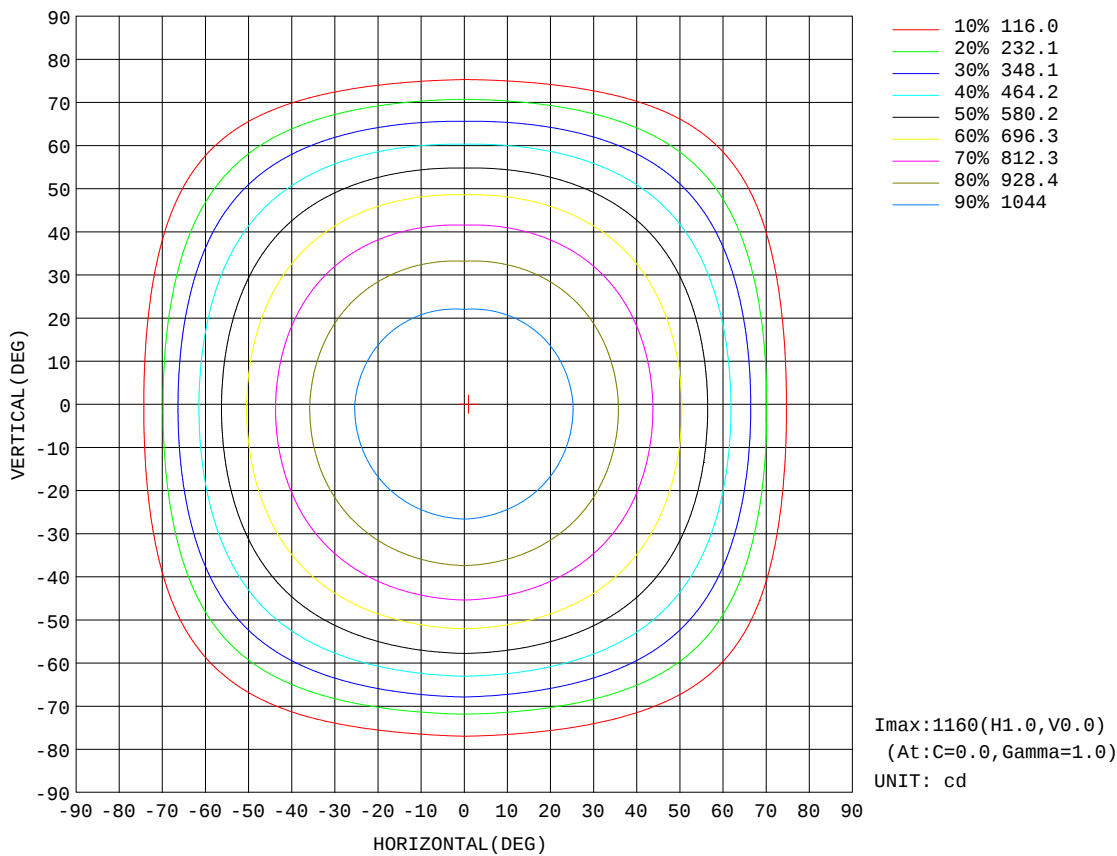
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 28 February 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 10.730m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

NAME: VAHA投光灯CCT 30W 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



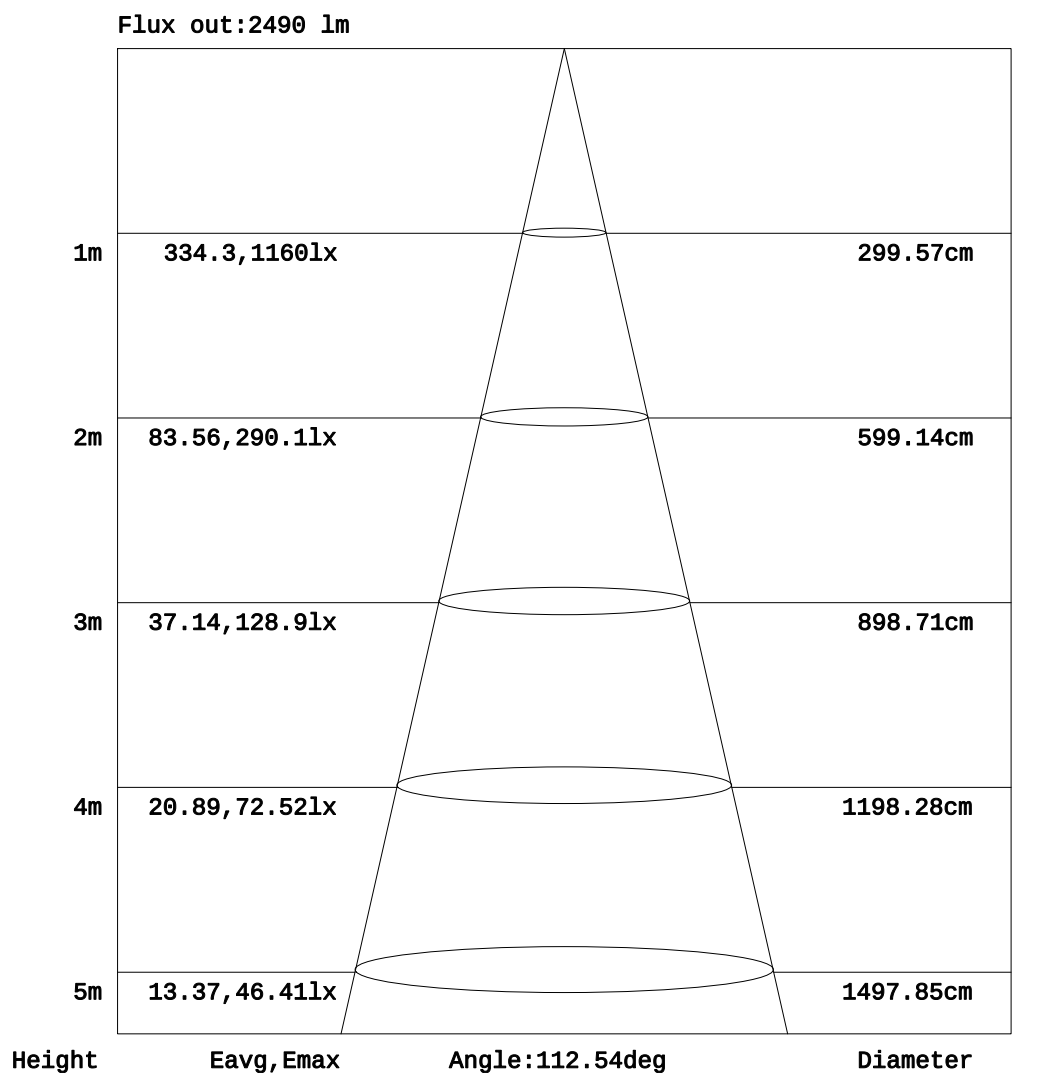
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

NAME: VAHA投光灯CCT 30W 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



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

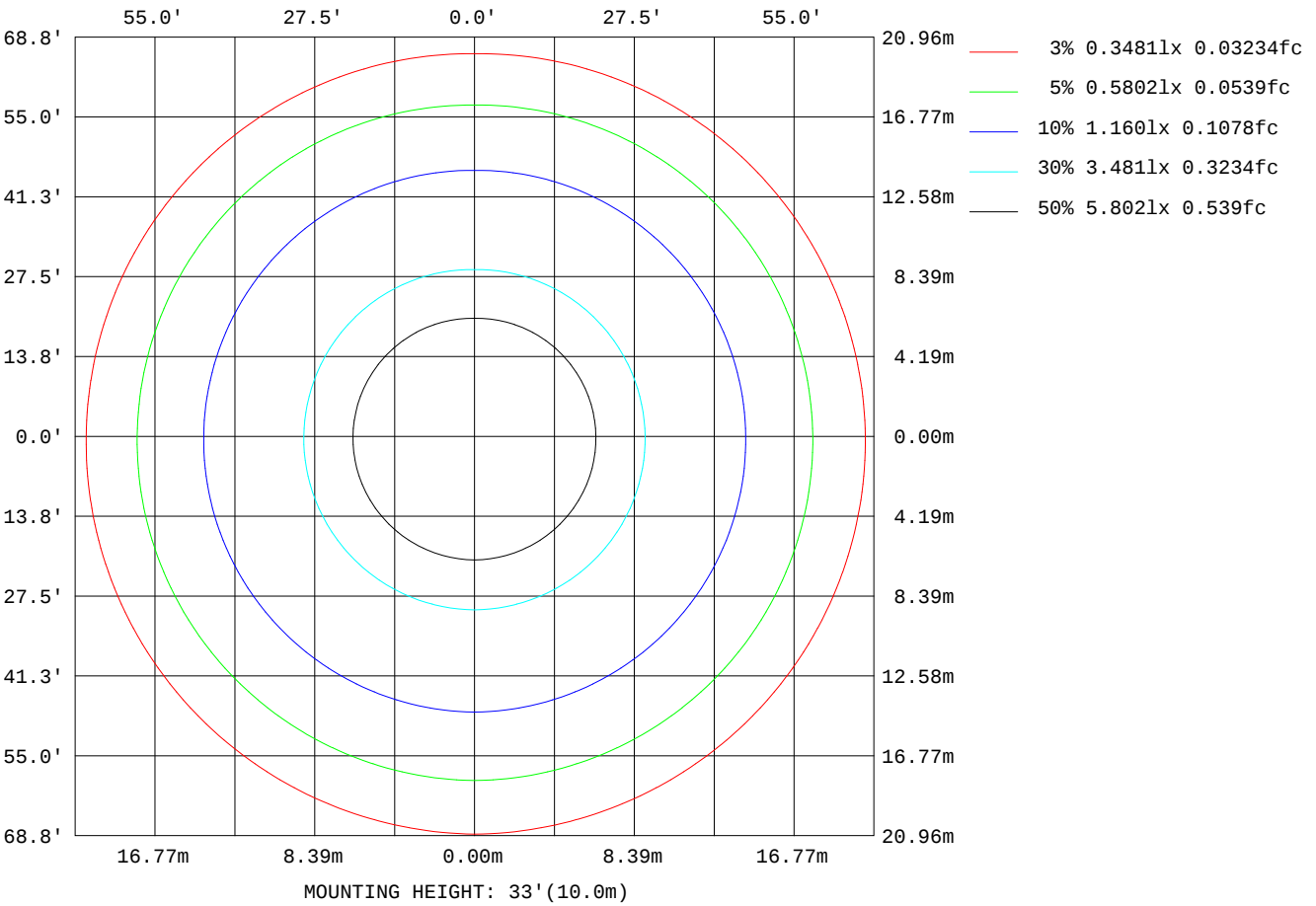
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

NAME: VAHA投光灯CCT 30W 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LED Avg.L Report

NAME: VAHA投光灯CCT 30W 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

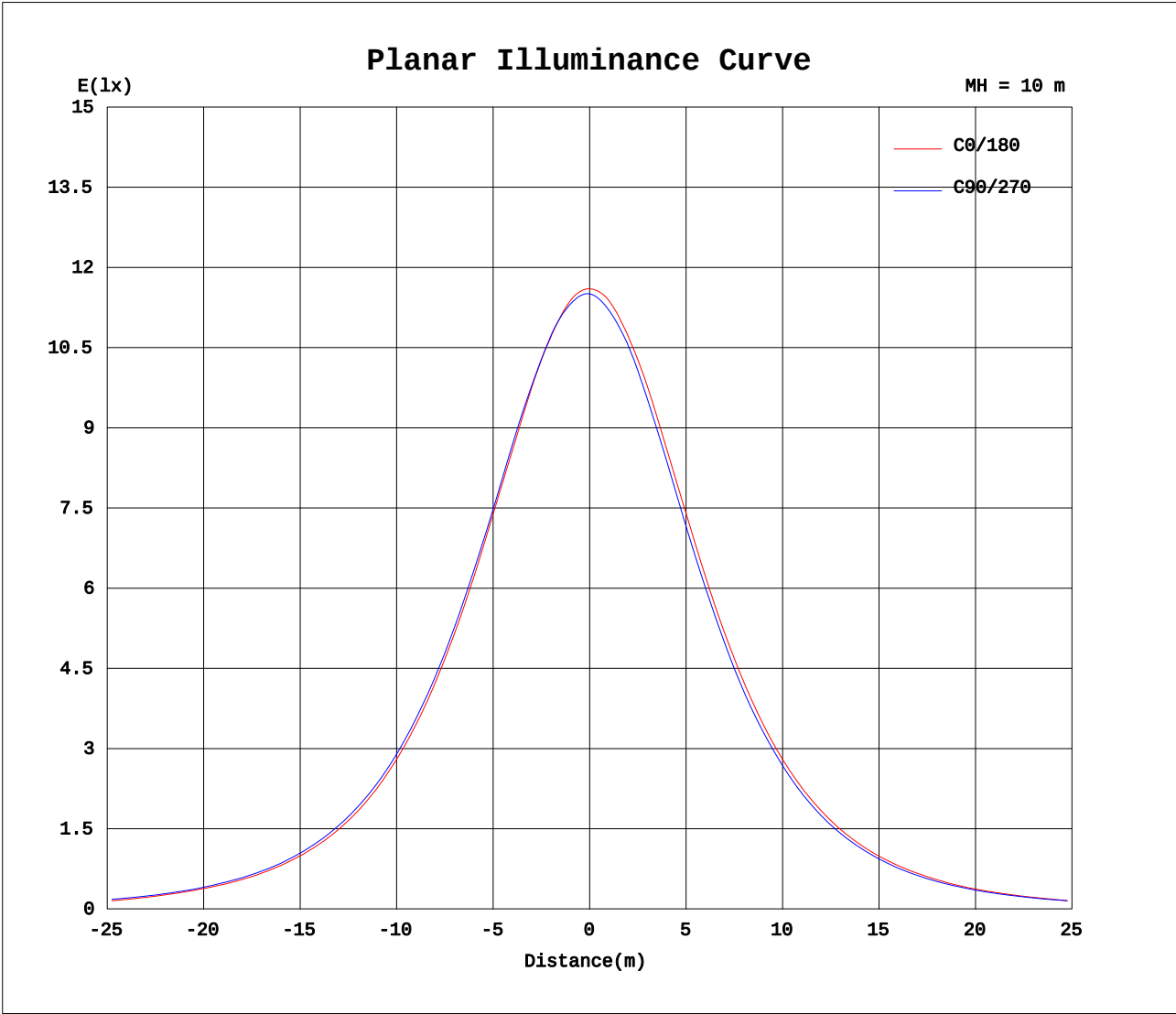
AvgL	cd/m2
L_0~180(65)av	3143
L_0~180(75)av	1357
L_0~180(85)av	136
L_90~270(65)av	3179
L_90~270(75)av	1895
L_90~270(85)av	89
L_45(65)av	3164
L_45(75)av	1687
L_45(85)av	106

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: VAHA投光灯CCT 30W 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1					UNIT: cd													
C(DEC) γ (DEC)	0	90	180	270														
0	1160	1151	1160	1151														
5	1157	1149	1157	1139														
10	1141	1142	1141	1123														
15	1120	1122	1121	1097														
20	1086	1097	1088	1061														
25	1046	1059	1048	1016														
30	996	1014	998	964														
35	938	959	938	904														
40	869	895	871	834														
45	792	819	792	758														
50	704	735	705	670														
55	609	639	606	575														
60	504	533	500	470														
65	389	418	381	361														
70	234	295	226	248														
75	110	163	94.0	121														
80	18.8	57.4	13.7	38.6														
85	3.43	2.41	3.42	2.08														
90	0.54	0.56	0.62	0.67														
95	0.77	0.79	0.84	0.91														
100	1.06	1.06	1.13	1.24														
105	1.42	1.39	1.49	1.59														
110	1.81	1.77	1.90	1.97														
115	2.22	2.17	2.29	2.36														
120	2.59	2.55	2.67	2.76														
125	2.97	2.90	3.05	3.11														
130	3.35	3.28	3.44	3.50														
135	3.73	3.66	3.81	3.83														
140	4.08	4.04	4.16	4.20														
145	4.43	4.35	4.48	4.52														
150	4.73	4.65	4.81	4.81														
155	5.01	5.00	5.12	5.15														
160	5.30	5.30	5.39	5.42														
165	5.56	5.60	5.69	5.68														
170	5.78	5.80	5.91	5.88														
175	5.97	5.96	6.03	5.94														
180	6.09	6.08	6.15	6.03														

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

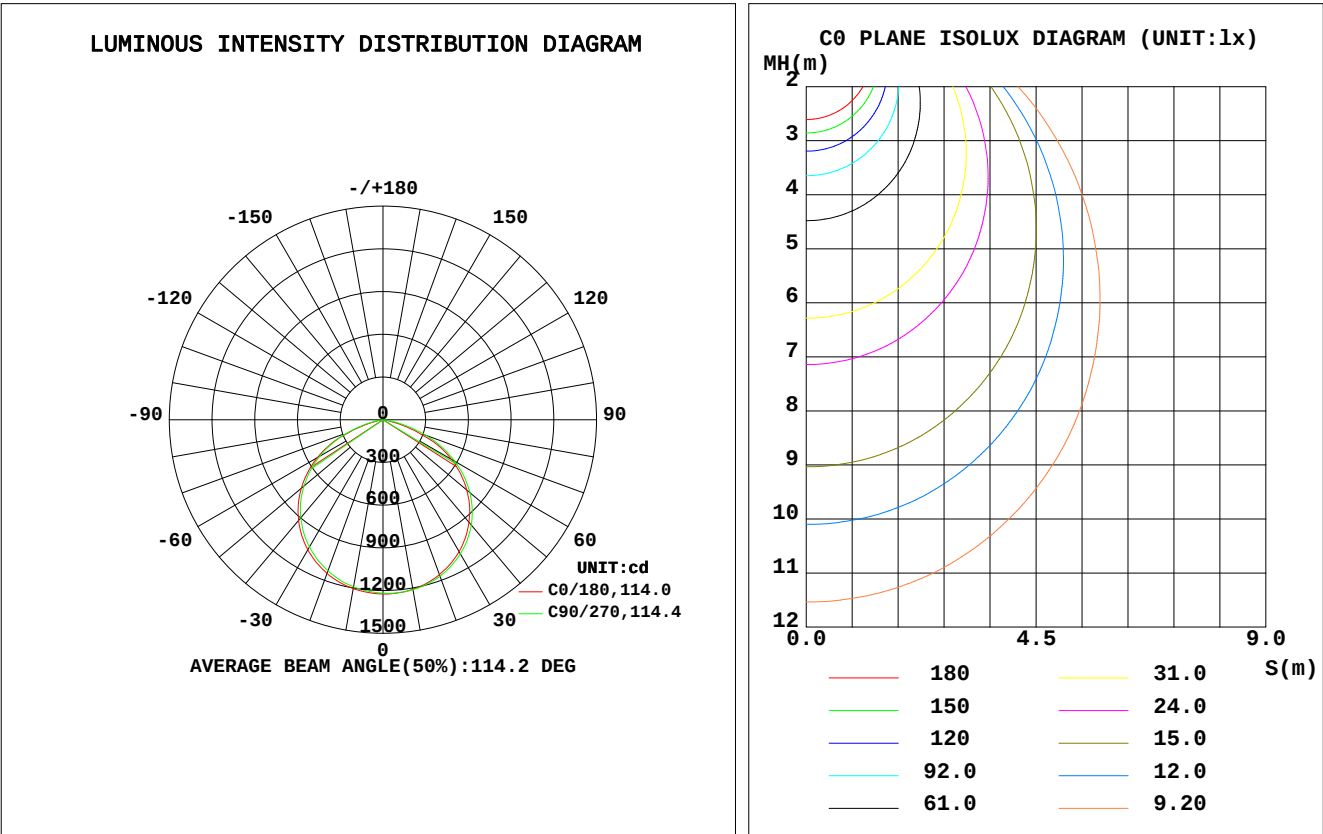
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: VAHA投光灯CCT 30W 4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 120.37 lm/W			
MODEL		Imax(cd)	1224	S/MH(C0/180)	1.28
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	3417.2	η UP, DN(C0-180)	0.3, 51.2
NOMINAL FLUX(lm)	3417.16	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.3, 48.3
LAMPS INSIDE	1	η up(%)	0.6	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down(%)	99.4	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum,lamp
10	1209	1212	1204	1191					0- 10	115.7	115.7	3.39,3.39
20	1158	1170	1149	1130					10- 20	334.0	449.7	13.2,13.2
30	1070	1087	1056	1033					20- 30	512.1	961.8	28.1,28.1
40	939.5	964.6	922.9	898.1					30- 40	626.3	1588	46.5,46.5
50	768.5	797.0	749.4	724.9					40- 50	655.8	2244	65.7,65.7
60	553.4	582.1	531.8	513.2					50- 60	586.7	2831	82.8,82.8
70	258.9	321.0	241.9	258.9					60- 70	411.2	3242	94.9,94.9
80	21.09	66.24	14.69	41.50					70- 80	147.7	3389	99.2,99.2
90	0.5793	0.6110	0.6272	0.7216					80- 90	8.813	3398	99.4,99.4
100	1.126	1.159	1.238	1.348					90-100	0.9853	3399	99.5,99.5
110	1.919	1.920	2.024	2.149					100-110	1.692	3401	99.5,99.5
120	2.767	2.737	2.888	2.997					110-120	2.409	3403	99.6,99.6
130	3.576	3.538	3.697	3.775					120-130	2.900	3406	99.7,99.7
140	4.353	4.315	4.458	4.536					130-140	3.110	3409	99.8,99.8
150	5.020	4.990	5.125	5.187					140-150	2.980	3412	99.9,99.9
160	5.631	5.640	5.727	5.829					150-160	2.487	3415	99.9,99.9
170	6.154	6.187	6.243	6.274					160-170	1.686	3417	100,100
180	6.480	6.472	6.488	6.464					170-180	0.6024	3417	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

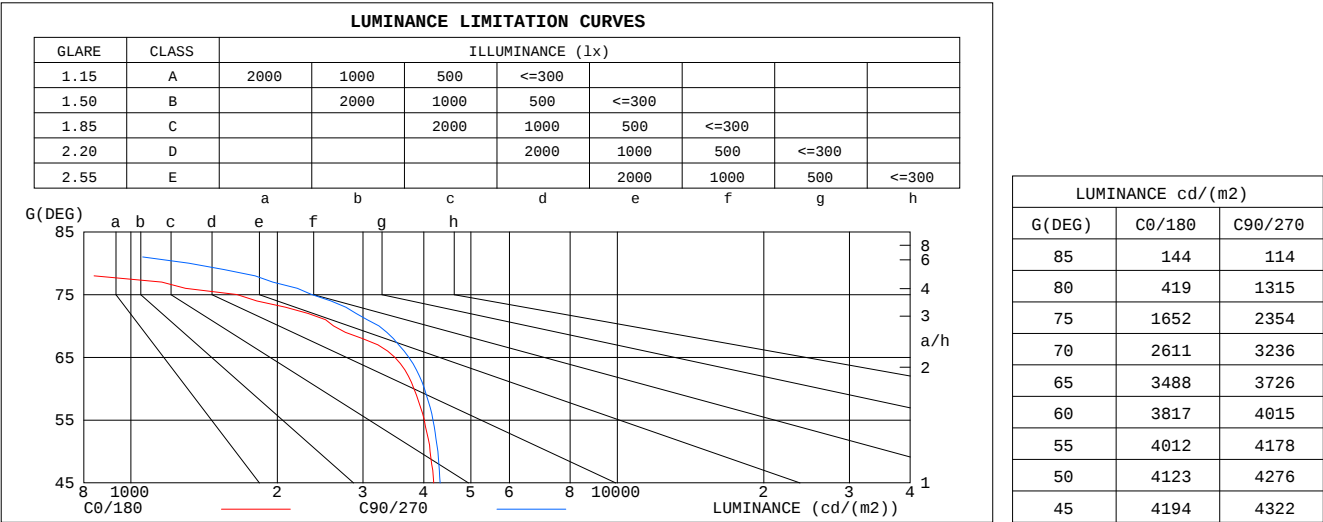
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

NAME: VAHA投光灯CCT 30W 4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

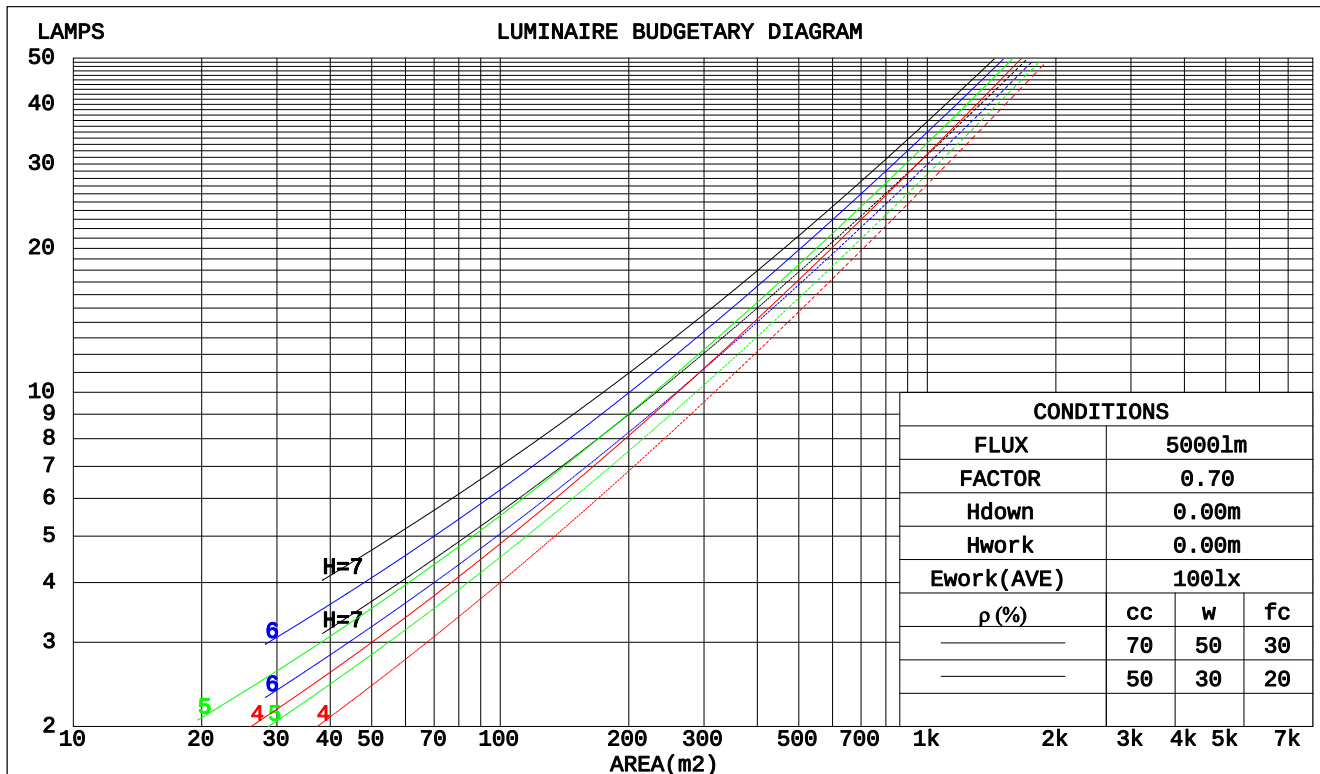
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: VAHA投光灯CCT 30W 4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.99
1.0	1.05	1.01	.98	1.03	.99	.96	.99	.96	.93	.95	.92	.90	.91	.89	.87	.85
2.0	.92	.86	.80	.90	.84	.79	.87	.82	.78	.83	.79	.76	.80	.77	.74	.72
3.0	.81	.73	.67	.80	.72	.67	.77	.70	.65	.74	.69	.64	.71	.67	.63	.61
4.0	.72	.63	.57	.71	.63	.57	.68	.61	.56	.66	.60	.55	.64	.58	.54	.52
5.0	.64	.56	.49	.63	.55	.49	.61	.54	.48	.59	.53	.48	.57	.52	.47	.45
6.0	.58	.49	.43	.57	.49	.43	.55	.48	.42	.53	.47	.42	.52	.46	.41	.39
7.0	.52	.44	.38	.52	.43	.38	.50	.43	.37	.49	.42	.37	.47	.41	.37	.35
8.0	.48	.39	.34	.47	.39	.33	.46	.38	.33	.44	.38	.33	.43	.37	.33	.31
9.0	.44	.36	.30	.43	.35	.30	.42	.35	.30	.41	.34	.30	.40	.34	.30	.28
10.0	.40	.33	.27	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 28 February 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 10.730m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

NAME: VAHA投光灯CCT 30W 4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.280	.159	.050	.273	.156	.049	.259	.149	.048	.247	.142	.046	.236	.137	.044		
2.0	.273	.149	.046	.266	.147	.045	.255	.142	.044	.244	.137	.043	.234	.132	.042		
3.0	.257	.137	.041	.251	.135	.041	.241	.131	.040	.231	.127	.039	.222	.123	.038		
4.0	.240	.125	.037	.235	.123	.036	.226	.120	.036	.217	.117	.035	.209	.114	.035		
5.0	.224	.114	.033	.219	.113	.033	.211	.110	.032	.203	.107	.032	.196	.105	.031		
6.0	.209	.105	.030	.205	.103	.030	.197	.101	.029	.190	.099	.029	.184	.097	.029		
7.0	.195	.096	.027	.192	.095	.027	.185	.094	.027	.179	.092	.027	.173	.090	.026		
8.0	.183	.089	.025	.180	.088	.025	.174	.087	.025	.168	.085	.025	.163	.084	.024		
9.0	.172	.083	.023	.169	.082	.023	.164	.081	.023	.158	.079	.023	.154	.078	.023		
10.0	.162	.078	.022	.159	.077	.021	.154	.076	.021	.150	.074	.021	.145	.073	.021		

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.195	.195	.195	.166	.166	.166	.114	.114	.114	.065	.065	.065	.021	.021	.021	
1.0	.182	.161	.141	.156	.138	.121	.107	.095	.084	.061	.055	.049	.020	.018	.016	
2.0	.174	.136	.105	.149	.117	.090	.102	.081	.063	.059	.047	.037	.019	.015	.012	
3.0	.166	.118	.080	.143	.102	.070	.098	.071	.049	.057	.041	.029	.018	.013	.009	
4.0	.159	.105	.064	.136	.091	.056	.094	.063	.039	.054	.037	.023	.017	.012	.008	
5.0	.152	.095	.052	.130	.082	.046	.090	.057	.032	.052	.034	.019	.017	.011	.006	
6.0	.145	.086	.044	.125	.075	.038	.086	.052	.027	.050	.031	.016	.016	.010	.005	
7.0	.138	.079	.038	.119	.069	.033	.082	.048	.024	.048	.028	.014	.015	.009	.005	
8.0	.132	.074	.033	.114	.064	.029	.079	.045	.021	.046	.026	.012	.015	.009	.004	
9.0	.126	.069	.030	.109	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
10.0	.121	.064	.027	.104	.056	.024	.072	.039	.017	.042	.023	.010	.014	.008	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:28 February 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.730m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

NAME: VAHA投光灯CCT 30W 4000K						TYPE:			WEIGHT:		
SPEC.:						DIM.:			SERIAL No.:		
MFR.:						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		17.9	19.4	18.2	19.6	19.8	18.1	19.6	18.4	19.8	20.0
	3H	19.0	20.4	19.3	20.6	20.9	19.4	20.7	19.7	21.0	21.2
	4H	19.2	20.5	19.5	20.7	21.0	19.7	21.0	20.0	21.2	21.5
	6H	19.1	20.4	19.5	20.6	20.9	19.8	21.0	20.1	21.3	21.5
	8H	19.1	20.3	19.4	20.6	20.9	19.7	20.9	20.1	21.2	21.5
	12H	19.0	20.2	19.4	20.5	20.8	19.7	20.8	20.0	21.1	21.4
4H	2H	18.5	19.8	18.8	20.0	20.3	18.6	19.9	19.0	20.2	20.5
	3H	19.7	20.8	20.1	21.1	21.4	20.0	21.1	20.4	21.4	21.8
	4H	19.9	20.9	20.3	21.3	21.6	20.4	21.4	20.8	21.7	22.1
	6H	19.9	20.8	20.3	21.2	21.5	20.5	21.4	20.9	21.8	22.1
	8H	19.9	20.7	20.3	21.1	21.5	20.5	21.3	20.9	21.7	22.1
	12H	19.8	20.6	20.3	21.0	21.4	20.5	21.2	20.9	21.6	22.0
8H	4H	20.0	20.8	20.4	21.2	21.6	20.4	21.3	20.9	21.6	22.0
	6H	20.0	20.7	20.5	21.1	21.5	20.6	21.3	21.0	21.7	22.1
	8H	20.0	20.6	20.4	21.0	21.5	20.6	21.2	21.1	21.6	22.1
	12H	19.9	20.5	20.4	20.9	21.4	20.6	21.1	21.0	21.5	22.0
12H	4H	20.0	20.7	20.4	21.1	21.5	20.4	21.2	20.8	21.6	22.0
	6H	20.0	20.6	20.5	21.0	21.5	20.6	21.2	21.0	21.6	22.1
	8H	20.0	20.5	20.4	20.9	21.4	20.6	21.1	21.0	21.5	22.0
Variations with the observer position at spacings:											
S = 1.0H		+ 0.3 / - 0.4					+ 0.2 / - 0.3				
1.5H		+ 0.3 / - 0.5					+ 0.2 / - 0.4				
2.0H		+ 0.4 / - 0.5					+ 0.4 / - 0.4				

CIE Pub.117 Corrected 3417 lm Total Lamp Luminous Flux.(8log(F/F0) = 4.3)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

NAME: VAHA投光灯CCT 30W 4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	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) x RCR = 5									
k = 0.60	58	47	40	57	47	40	56	46	40	33
0.80	69	57	50	68	57	50	66	56	49	43
1.00	77	67	60	76	66	59	74	67	59	52
1.25	85	75	68	83	74	67	81	72	66	59
1.50	90	80	74	88	79	73	85	78	72	65
2.00	97	89	82	95	87	82	91	85	80	72
2.50	100	93	87	98	92	86	94	89	85	76
3.00	104	97	92	101	96	91	97	93	89	80
4.00	107	102	98	105	100	96	101	97	94	85
5.00	110	105	102	107	103	100	103	100	97	88
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004										
Suspended										
SHRNOM = 1.25										

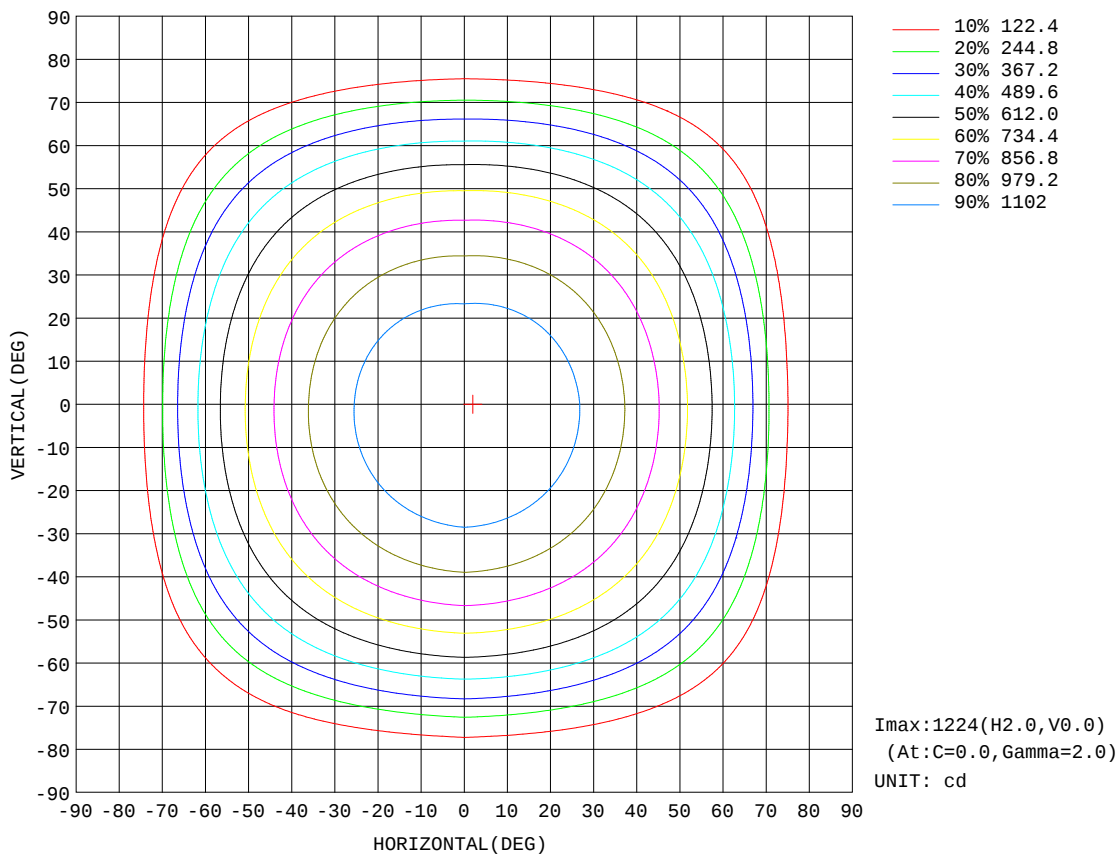
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 28 February 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 10.730m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

NAME: VAHA投光灯CCT 30W 4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



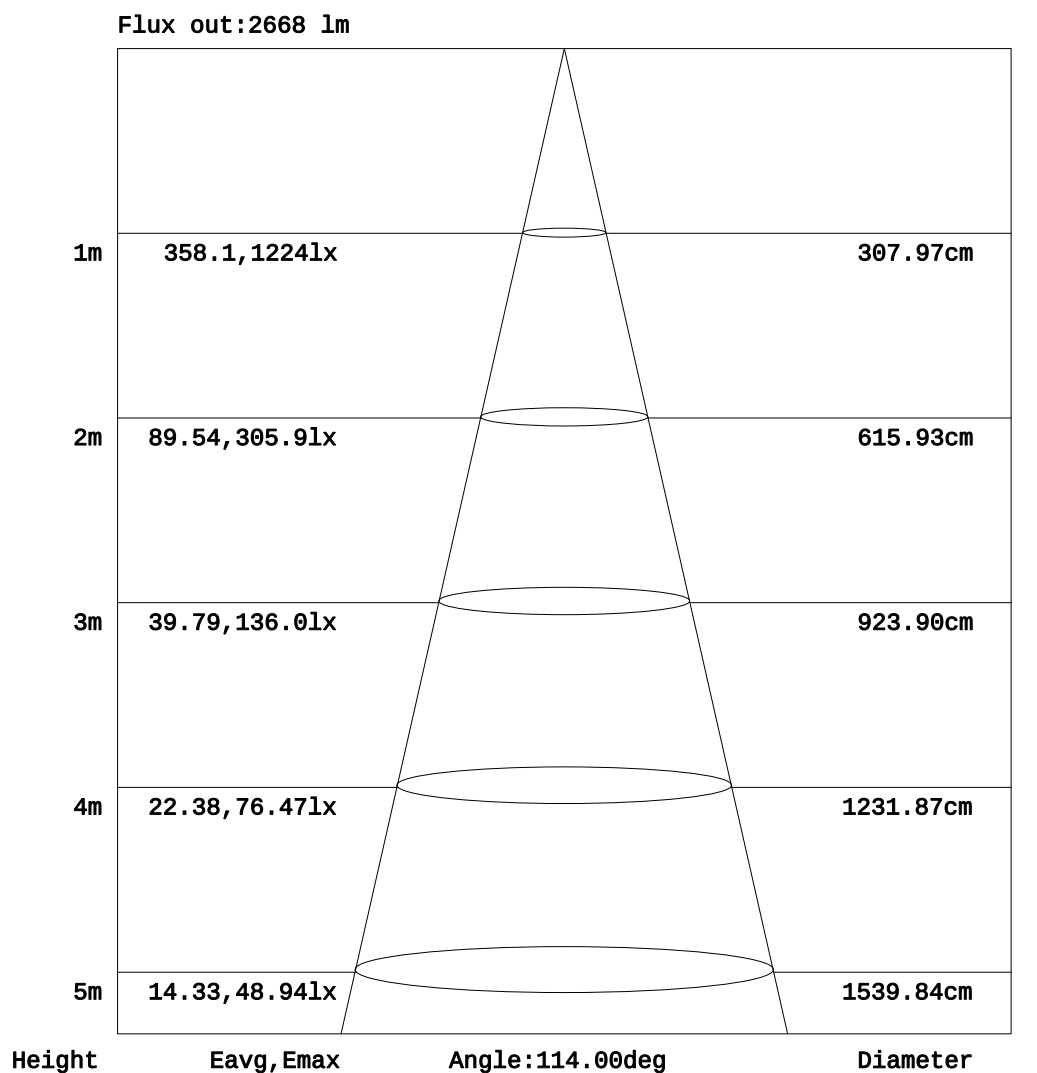
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

NAME: VAHA投光灯CCT 30W 4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



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

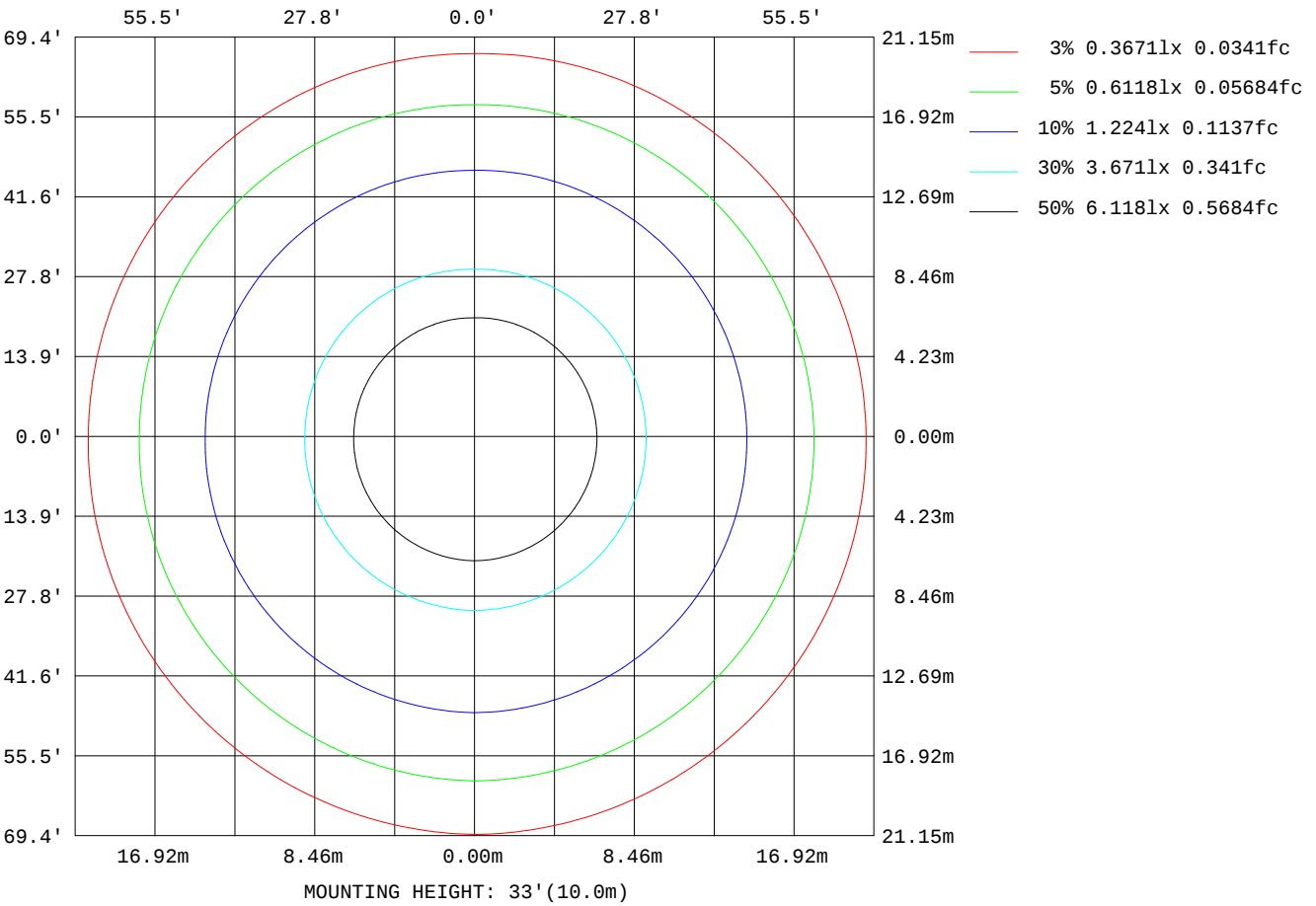
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

NAME: VAHA投光灯CCT 30W 4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LED Avg.L Report

NAME: VAHA投光灯CCT 30W 4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

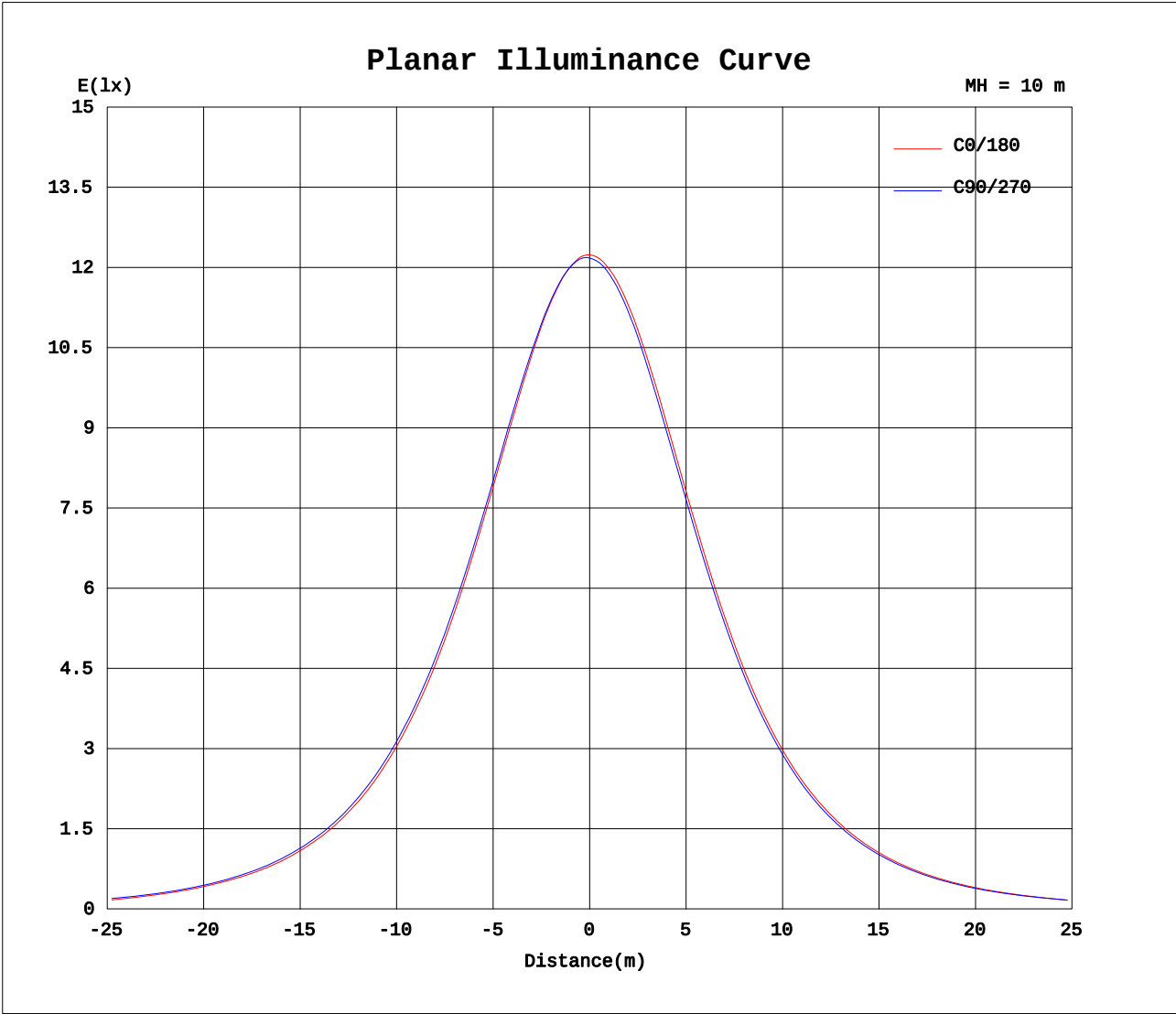
AvgL	cd/m2
L_0~180(65)av	3404
L_0~180(75)av	1485
L_0~180(85)av	143
L_90~270(65)av	3471
L_90~270(75)av	2066
L_90~270(85)av	102
L_45(65)av	3441
L_45(75)av	1838
L_45(85)av	117

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: VAHA投光灯CCT 30W 4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1					UNIT: cd													
C(DEG) γ (DEG)	0	90	180	270														
0	1224	1218	1224	1218														
5	1220	1219	1217	1209														
10	1209	1212	1204	1191														
15	1189	1194	1181	1166														
20	1158	1170	1149	1130														
25	1118	1133	1106	1086														
30	1070	1087	1056	1033														
35	1010	1032	994	971														
40	940	965	923	898														
45	860	886	841	817														
50	769	797	749	725														
55	667	695	646	623														
60	553	582	532	513														
65	427	457	407	394														
70	259	321	242	259														
75	124	177	99.0	134														
80	21.1	66.2	14.7	41.5														
85	3.63	2.89	3.60	2.25														
90	0.58	0.61	0.63	0.72														
95	0.82	0.84	0.90	1.01														
100	1.13	1.16	1.24	1.35														
105	1.51	1.52	1.63	1.74														
110	1.92	1.92	2.02	2.15														
115	2.35	2.35	2.47	2.58														
120	2.77	2.74	2.89	3.00														
125	3.16	3.13	3.29	3.38														
130	3.58	3.54	3.70	3.77														
135	3.97	3.91	4.09	4.14														
140	4.35	4.32	4.46	4.54														
145	4.70	4.69	4.79	4.88														
150	5.02	4.99	5.12	5.19														
155	5.31	5.32	5.43	5.50														
160	5.63	5.64	5.73	5.83														
165	5.90	5.93	6.02	6.08														
170	6.15	6.19	6.24	6.27														
175	6.34	6.35	6.36	6.35														
180	6.48	6.47	6.49	6.46														

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

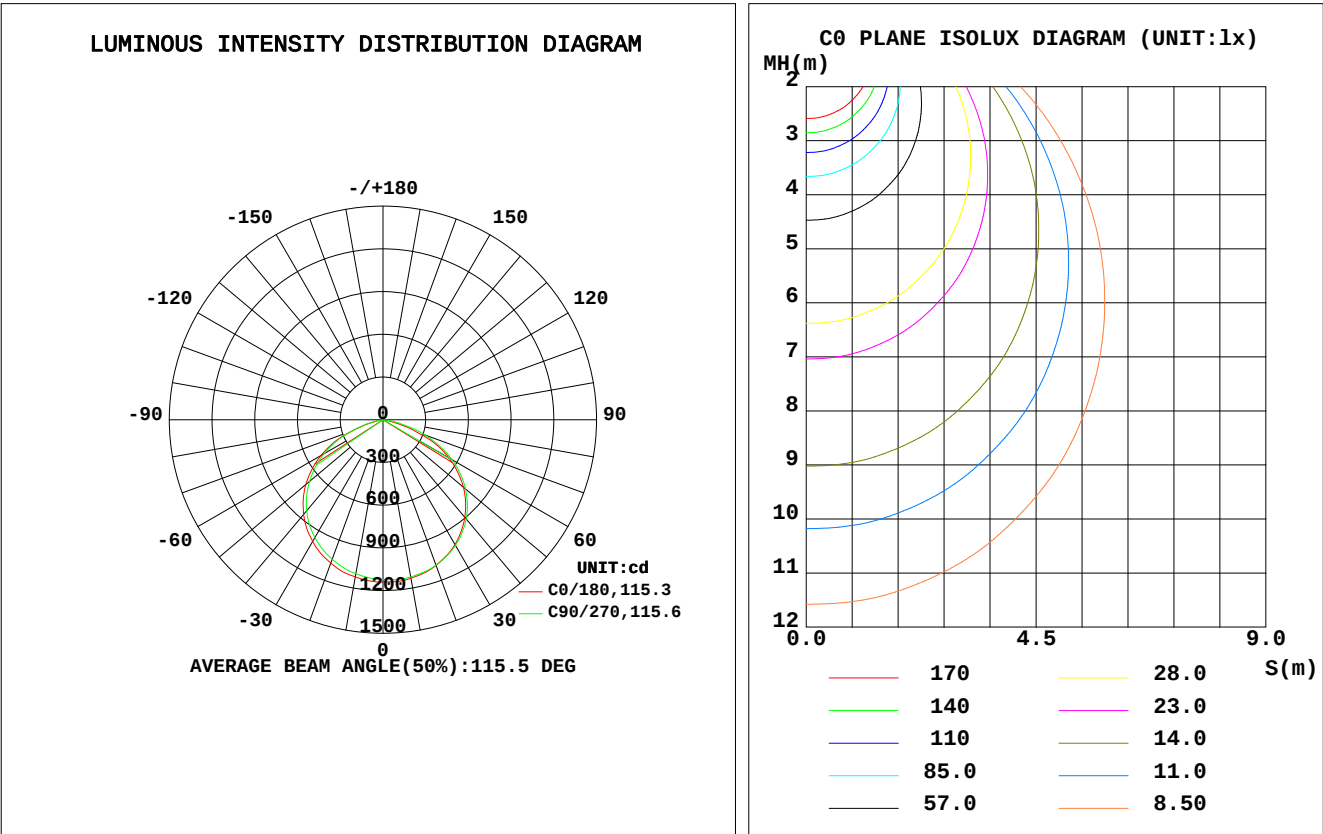
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: VAHA投光灯CCT 30W 6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 108.87 lm/W			
MODEL		Imax(cd)	1140	S/MH(C0/180)	1.29
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.27
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	3218.5	η UP, DN(C0-180)	0.3, 51.6
NOMINAL FLUX(lm)	3218.53	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.3, 47.8
LAMPS INSIDE	1	η up(%)	0.5	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down(%)	99.5	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	1131	1121	1121	1098					0- 10	107.4	107.4	3.34, 3.34
20	1088	1088	1072	1043					10- 20	310.7	418.1	13, 13
30	1012	1018	987.7	956.0					20- 30	478.4	896.5	27.9, 27.9
40	894.1	909.9	867.1	833.7					30- 40	587.9	1484	46.1, 46.1
50	737.6	757.1	707.2	673.1					40- 50	618.4	2103	65.3, 65.3
60	534.1	558.5	503.5	477.1					50- 60	556.0	2659	82.6, 82.6
70	250.1	314.5	229.5	228.1					60- 70	391.6	3050	94.8, 94.8
80	23.20	70.57	14.24	34.40					70- 80	142.0	3192	99.2, 99.2
90	0.5318	0.5318	0.6192	0.7058					80- 90	8.527	3201	99.5, 99.5
100	1.062	1.071	1.190	1.276					90-100	0.9279	3202	99.5, 99.5
110	1.807	1.761	1.960	2.038					100-110	1.597	3203	99.5, 99.5
120	2.601	2.539	2.745	2.831					110-120	2.265	3206	99.6, 99.6
130	3.323	3.268	3.522	3.537					120-130	2.725	3208	99.7, 99.7
140	4.044	4.014	4.228	4.235					130-140	2.914	3211	99.8, 99.8
150	4.655	4.609	4.847	4.830					140-150	2.784	3214	99.9, 99.9
160	5.234	5.235	5.394	5.401					150-160	2.319	3216	99.9, 99.9
170	5.702	5.719	5.870	5.806					160-170	1.570	3218	100, 100
180	6.020	5.988	6.001	5.965					170-180	0.5597	3219	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

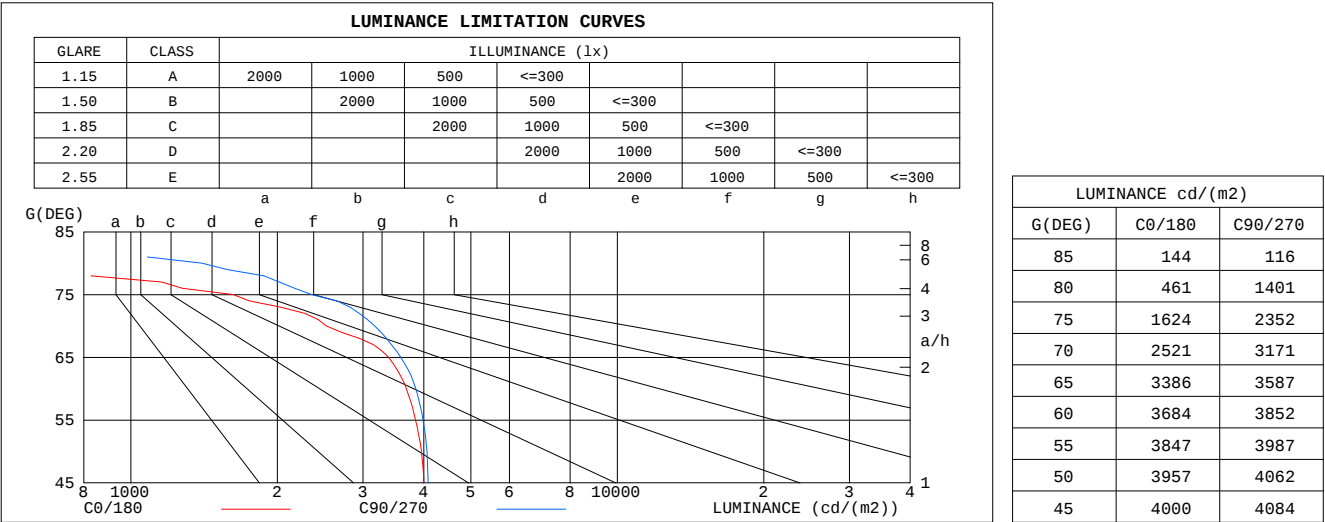
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:28 February 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.730m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

NAME: VAHA投光灯CCT 30W 6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

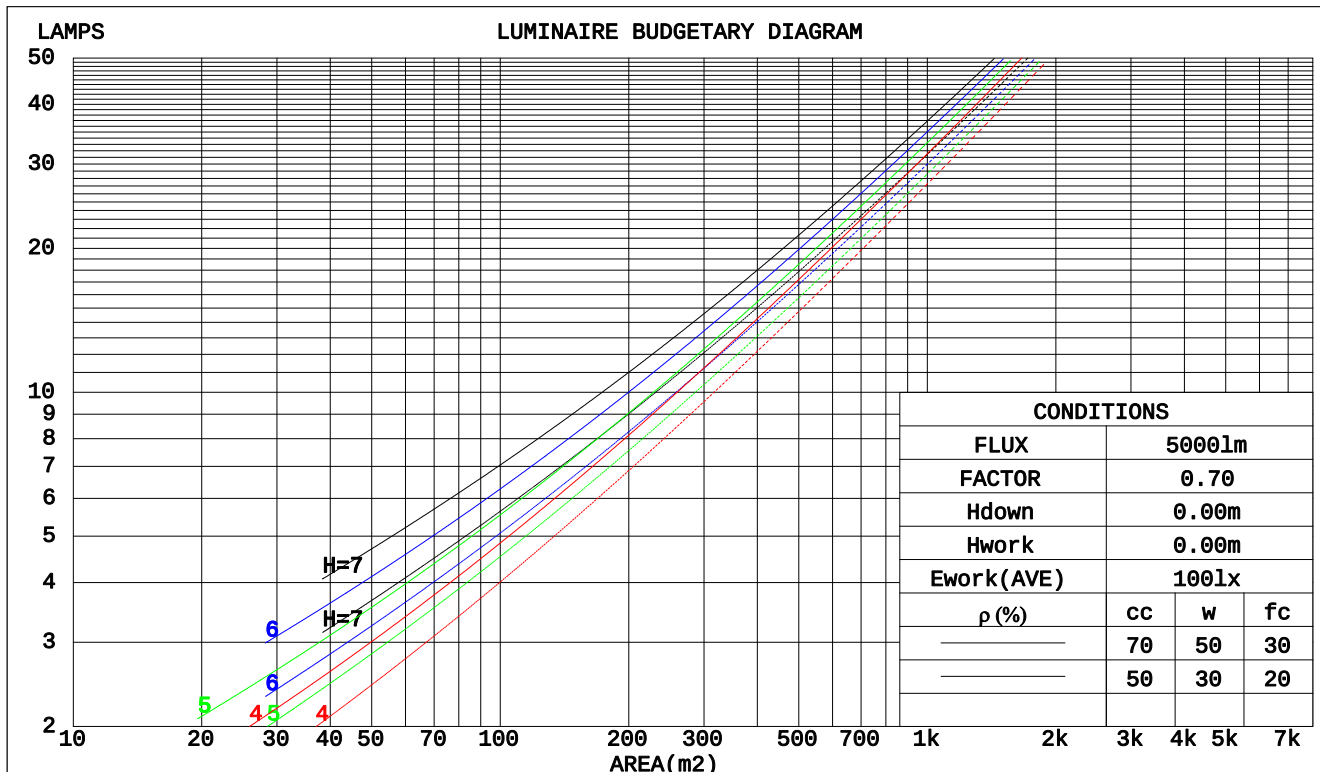
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: VAHA投光灯CCT 30W 6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	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	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.99
1.0	1.05	1.01	.98	1.03	.99	.96	.99	.96	.93	.95	.92	.90	.91	.89	.87	.85
2.0	.92	.86	.80	.90	.84	.79	.87	.82	.77	.83	.79	.76	.80	.77	.74	.72
3.0	.81	.73	.67	.79	.72	.66	.76	.70	.65	.74	.68	.64	.71	.67	.63	.61
4.0	.72	.63	.57	.71	.63	.56	.68	.61	.56	.66	.60	.55	.63	.58	.54	.52
5.0	.64	.55	.49	.63	.55	.49	.61	.54	.48	.59	.52	.47	.57	.51	.47	.45
6.0	.58	.49	.43	.57	.48	.42	.55	.47	.42	.53	.47	.41	.52	.46	.41	.39
7.0	.52	.44	.37	.51	.43	.37	.50	.42	.37	.48	.42	.37	.47	.41	.36	.34
8.0	.48	.39	.33	.47	.39	.33	.46	.38	.33	.44	.38	.33	.43	.37	.33	.31
9.0	.44	.35	.30	.43	.35	.30	.42	.35	.30	.41	.34	.29	.40	.34	.29	.27
10.0	.40	.32	.27	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 28 February 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 10.730m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

NAME: VAHA投光灯CCT 30W 6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.281	.160	.051	.274	.156	.050	.261	.149	.048	.248	.143	.046	.237	.137	.044		
2.0	.274	.150	.046	.267	.147	.045	.256	.142	.044	.245	.137	.043	.235	.133	.042		
3.0	.258	.137	.041	.252	.135	.041	.242	.131	.040	.232	.127	.039	.223	.124	.038		
4.0	.241	.125	.037	.236	.123	.036	.227	.120	.036	.218	.117	.035	.210	.114	.035		
5.0	.224	.114	.033	.220	.113	.033	.212	.110	.032	.204	.108	.032	.197	.105	.032		
6.0	.209	.105	.030	.205	.104	.030	.198	.101	.030	.191	.099	.029	.185	.097	.029		
7.0	.196	.097	.027	.192	.096	.027	.185	.094	.027	.179	.092	.027	.173	.090	.026		
8.0	.183	.089	.025	.180	.089	.025	.174	.087	.025	.168	.085	.025	.163	.084	.024		
9.0	.172	.083	.023	.169	.082	.023	.164	.081	.023	.159	.080	.023	.154	.078	.023		
10.0	.162	.078	.022	.159	.077	.021	.155	.076	.021	.150	.075	.021	.146	.073	.021		

ρ _{CC}	80%			70%			50%			30%			10%			0
ρ _W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.195	.195	.195	.166	.166	.166	.114	.114	.114	.065	.065	.065	.021	.021	.021	
1.0	.183	.161	.141	.156	.138	.121	.107	.095	.084	.061	.055	.049	.020	.018	.016	
2.0	.174	.136	.104	.149	.117	.090	.102	.081	.063	.059	.047	.037	.019	.015	.012	
3.0	.166	.118	.080	.143	.102	.070	.098	.071	.049	.057	.041	.029	.018	.013	.009	
4.0	.159	.105	.064	.137	.091	.055	.094	.063	.039	.054	.037	.023	.017	.012	.008	
5.0	.152	.095	.052	.131	.082	.046	.090	.057	.032	.052	.034	.019	.017	.011	.006	
6.0	.145	.086	.044	.125	.075	.038	.086	.052	.027	.050	.031	.016	.016	.010	.005	
7.0	.138	.079	.038	.119	.069	.033	.082	.048	.023	.048	.028	.014	.015	.009	.005	
8.0	.132	.074	.033	.114	.064	.029	.079	.045	.021	.046	.026	.012	.015	.009	.004	
9.0	.126	.069	.030	.109	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
10.0	.121	.064	.027	.104	.056	.024	.072	.039	.017	.042	.023	.010	.014	.008	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:28 February 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:10.730m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

NAME: VAHA投光灯CCT 30W 6000K						TYPE:			WEIGHT:		
SPEC.:						DIM.:			SERIAL No.:		
MFR.:						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						17.9	19.3	18.1	19.5	19.8	18.0
3H						19.0	20.3	19.3	20.6	20.8	19.3
4H						19.2	20.4	19.5	20.7	21.0	19.7
6H						19.1	20.3	19.5	20.6	20.9	19.8
8H						19.1	20.2	19.4	20.5	20.8	19.8
12H						19.0	20.1	19.4	20.4	20.8	19.7
4H 2H						18.4	19.7	18.7	20.0	20.2	18.5
3H						19.7	20.8	20.0	21.1	21.4	20.0
4H						19.9	20.9	20.3	21.3	21.6	20.4
6H						19.9	20.8	20.3	21.2	21.5	20.6
8H						19.9	20.7	20.3	21.1	21.5	20.5
12H						19.8	20.6	20.2	21.0	21.4	20.5
8H 4H						20.0	20.8	20.4	21.2	21.6	20.5
6H						20.0	20.7	20.5	21.1	21.6	20.6
8H						20.0	20.6	20.5	21.0	21.5	20.6
12H						19.9	20.5	20.4	20.9	21.4	20.6
12H 4H						20.0	20.7	20.4	21.1	21.5	20.4
6H						20.0	20.6	20.5	21.0	21.5	20.6
8H						20.0	20.5	20.4	20.9	21.4	20.6
Variations with the observer position at spacings:											
S = 1.0H						+ 0.3 / - 0.3			+ 0.2 / - 0.3		
1.5H						+ 0.3 / - 0.5			+ 0.3 / - 0.5		
2.0H						+ 0.3 / - 0.4			+ 0.3 / - 0.4		

CIE Pub.117 Corrected 3219 lm Total Lamp Luminous Flux.(8log(F/F0) = 4.1)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

NAME: VAHA投光灯CCT 30W 6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	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) $k(RI) \times RCR = 5$									
$k = 0.60$	58	47	40	57	46	40	56	46	39	33
0.80	68	57	50	67	57	50	66	56	49	42
1.00	77	66	59	76	66	59	74	67	58	51
1.25	84	74	68	83	74	67	80	72	66	59
1.50	90	80	73	88	79	73	85	77	72	64
2.00	96	88	82	95	87	81	91	85	80	72
2.50	100	93	87	98	92	86	94	89	84	76
3.00	103	97	92	101	96	91	97	93	89	80
4.00	107	102	98	105	100	96	101	97	94	85
5.00	110	105	101	107	103	100	103	100	97	88
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended				SHRNOM = 1.25		

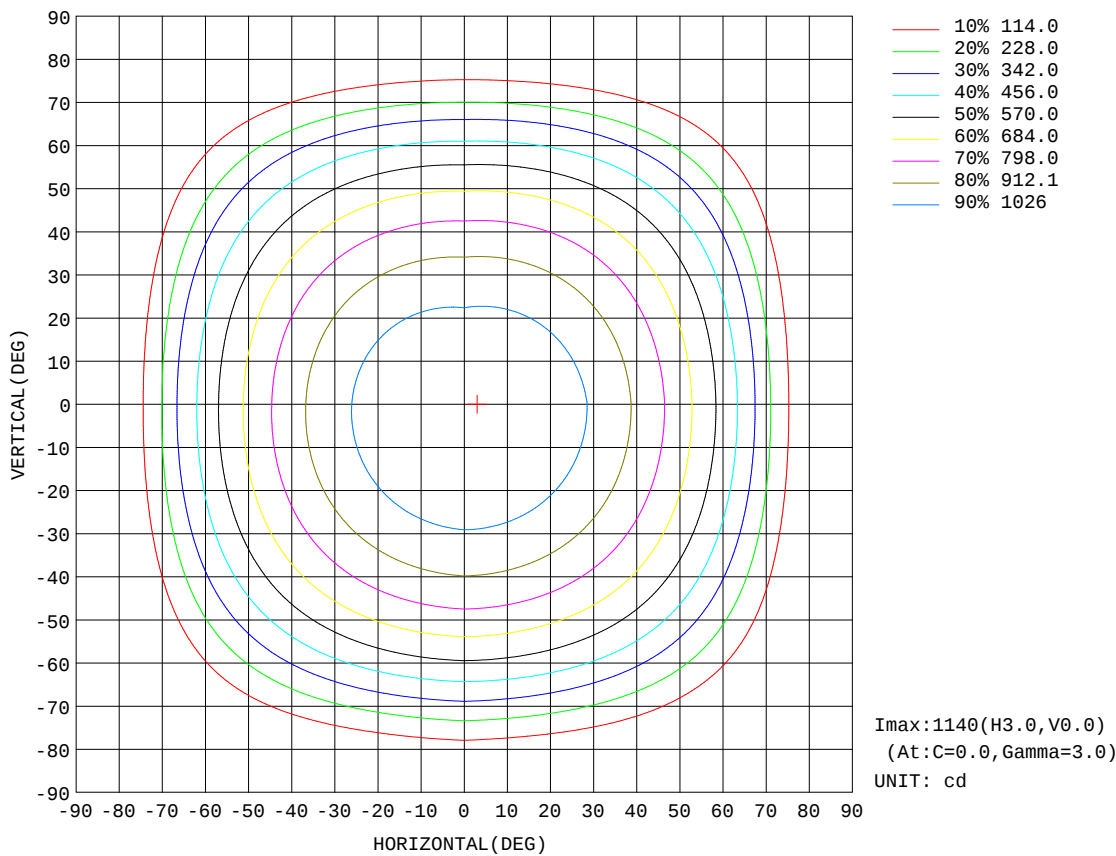
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 28 February 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 10.730m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

NAME: VAHA投光灯CCT 30W 6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



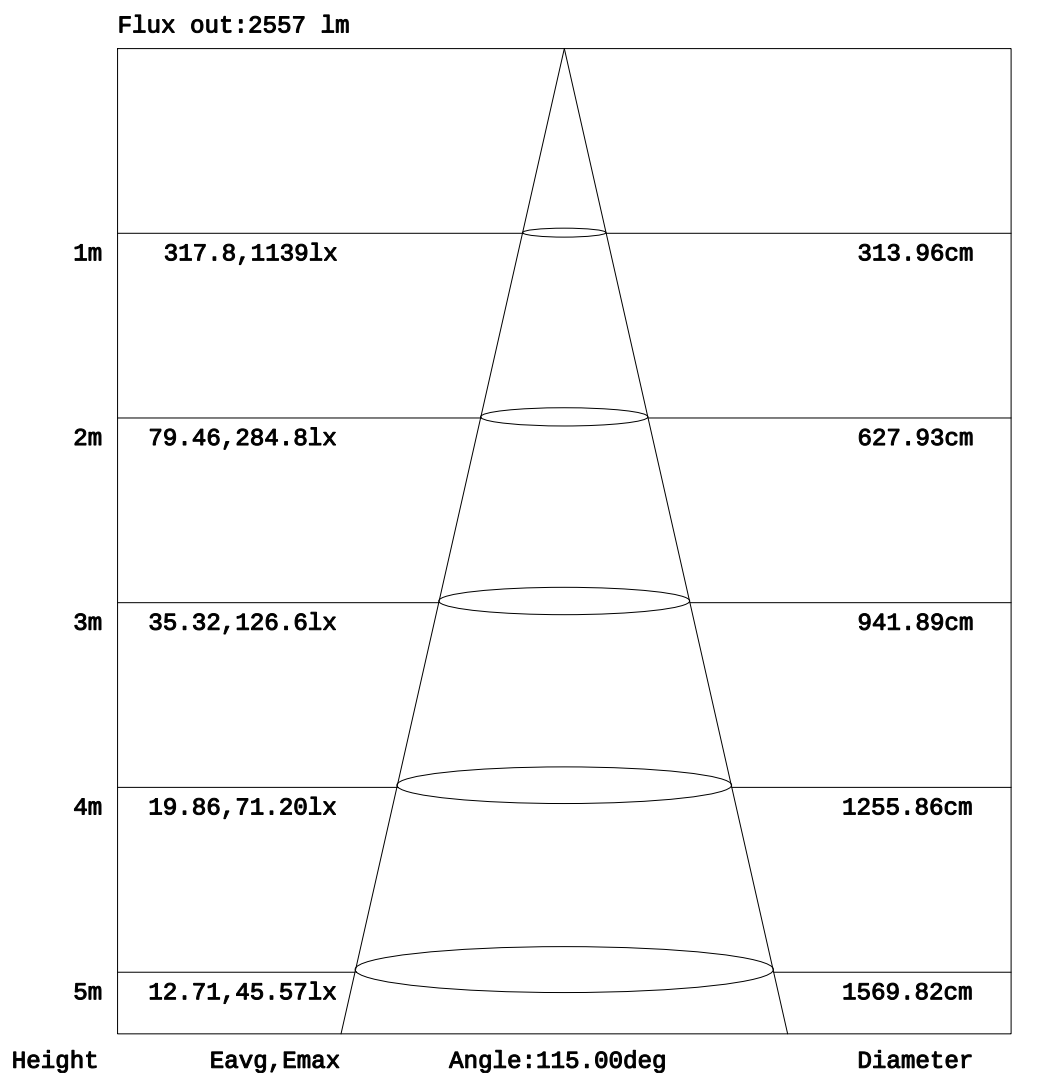
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

NAME: VAHA投光灯CCT 30W 6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



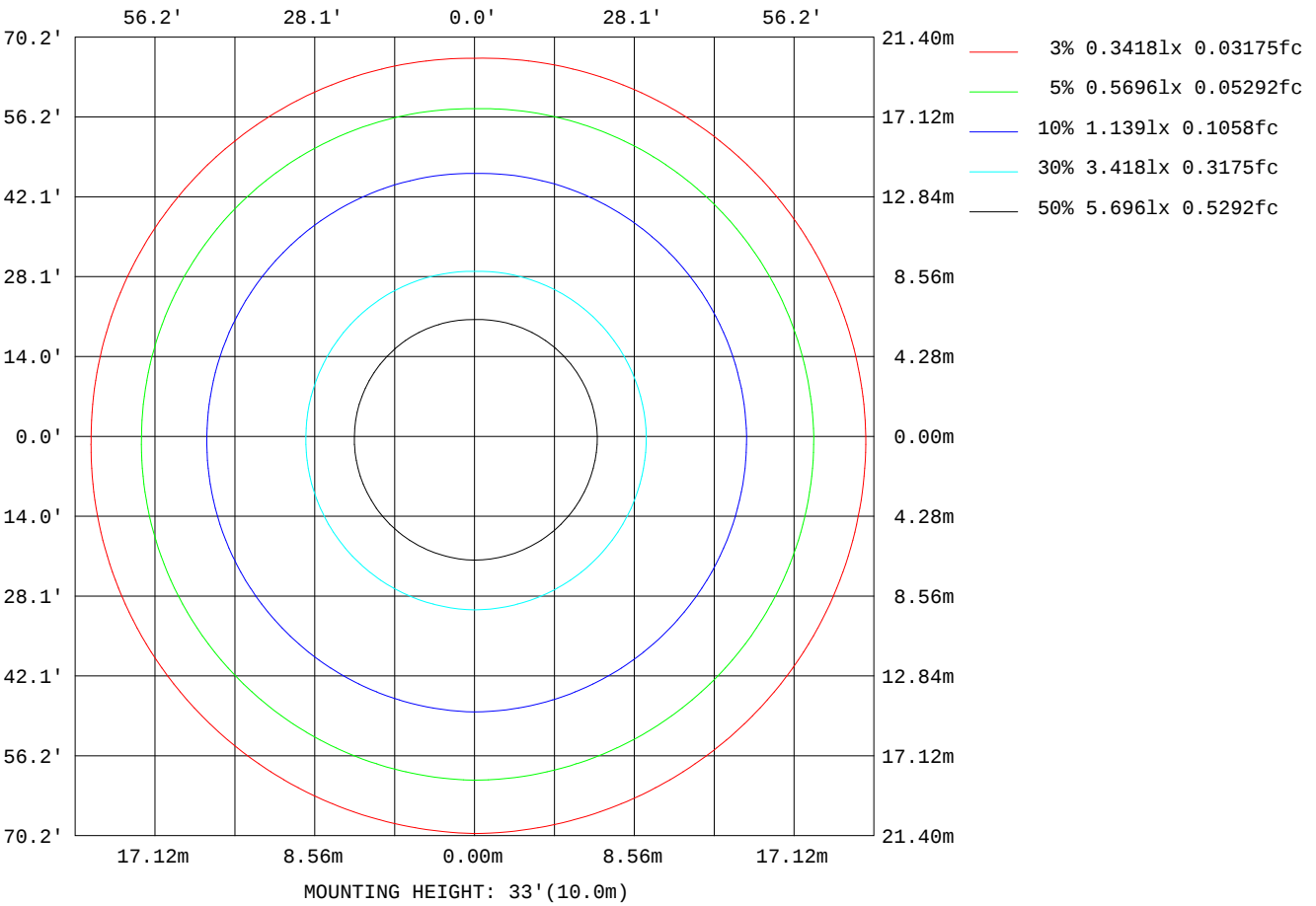
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

NAME: VAHA投光灯CCT 30W 6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LED Avg.L Report

NAME: VAHA投光灯CCT 30W 6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

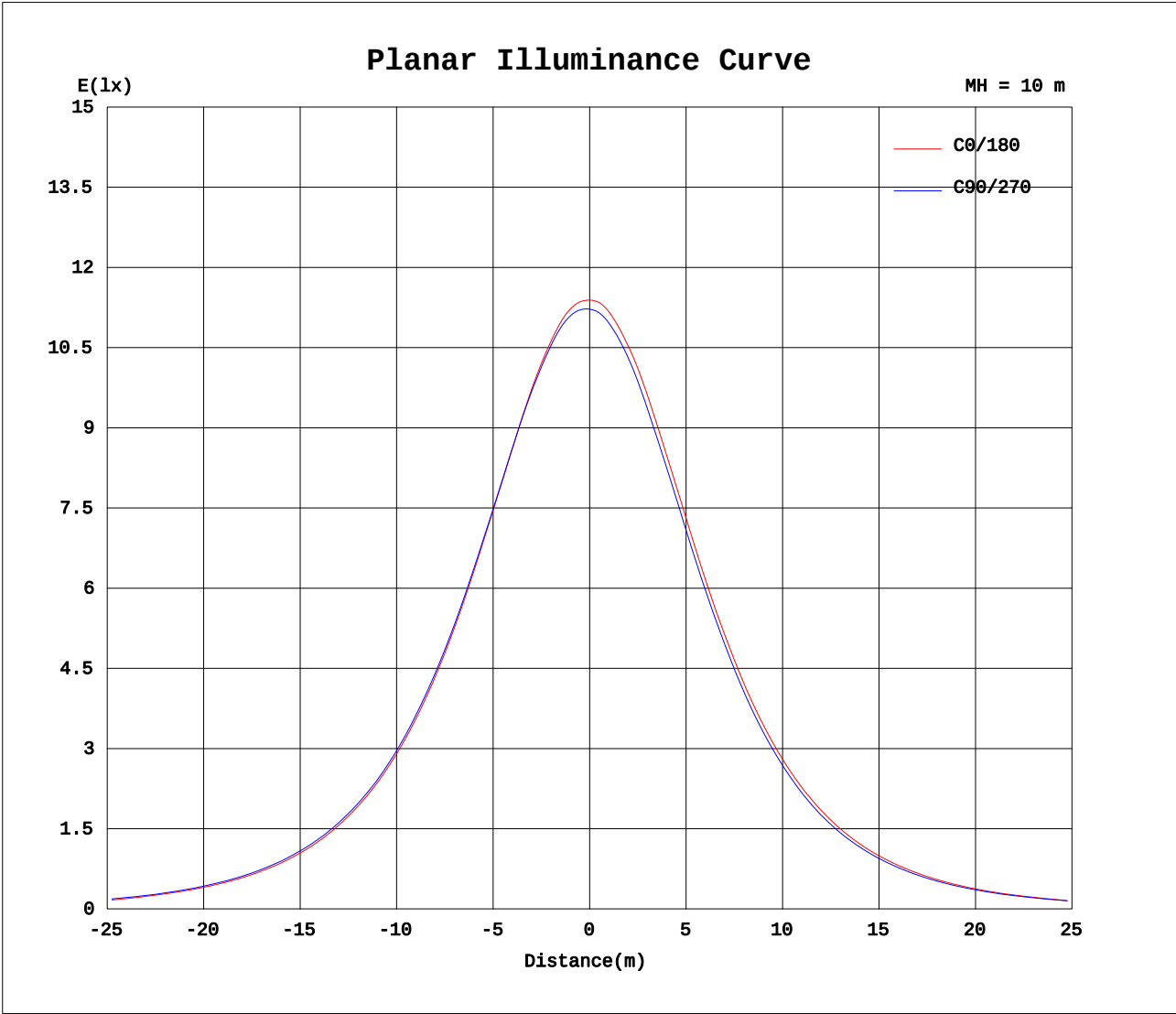
AvgL	cd/m2
L_0~180(65)av	3261
L_0~180(75)av	1464
L_0~180(85)av	141
L_90~270(65)av	3283
L_90~270(75)av	1981
L_90~270(85)av	95
L_45(65)av	3267
L_45(75)av	1777
L_45(85)av	112

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: VAHA投光灯CCT 30W 6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1					UNIT: cd													
C(DEG) γ (DEG)	0	90	180	270														
0	1139	1122	1139	1122														
5	1140	1126	1136	1115														
10	1131	1121	1121	1098														
15	1114	1108	1103	1075														
20	1088	1088	1072	1043														
25	1054	1056	1035	1005														
30	1012	1018	988	956														
35	957	968	933	901														
40	894	910	867	834														
45	820	837	792	759														
50	738	757	707	673														
55	640	663	610	580														
60	534	558	503	477														
65	415	440	384	365														
70	250	315	229	228														
75	122	177	97.9	121														
80	23.2	70.6	14.2	34.4														
85	3.63	2.93	3.50	1.88														
90	0.53	0.53	0.62	0.71														
95	0.75	0.78	0.87	0.95														
100	1.06	1.07	1.19	1.28														
105	1.42	1.40	1.56	1.65														
110	1.81	1.76	1.96	2.04														
115	2.20	2.16	2.36	2.44														
120	2.60	2.54	2.75	2.83														
125	2.96	2.90	3.15	3.16														
130	3.32	3.27	3.52	3.54														
135	3.72	3.63	3.89	3.89														
140	4.04	4.01	4.23	4.23														
145	4.36	4.34	4.55	4.54														
150	4.66	4.61	4.85	4.83														
155	4.94	4.93	5.12	5.13														
160	5.23	5.24	5.39	5.40														
165	5.48	5.50	5.66	5.64														
170	5.70	5.72	5.87	5.81														
175	5.89	5.89	5.97	5.88														
180	6.02	5.99	6.09	5.96														

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks: