

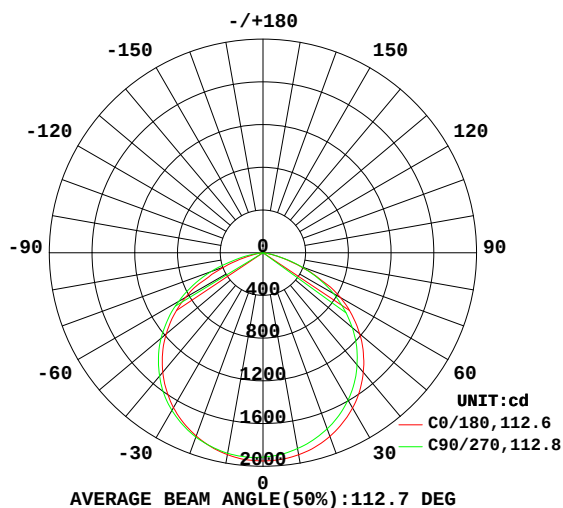
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

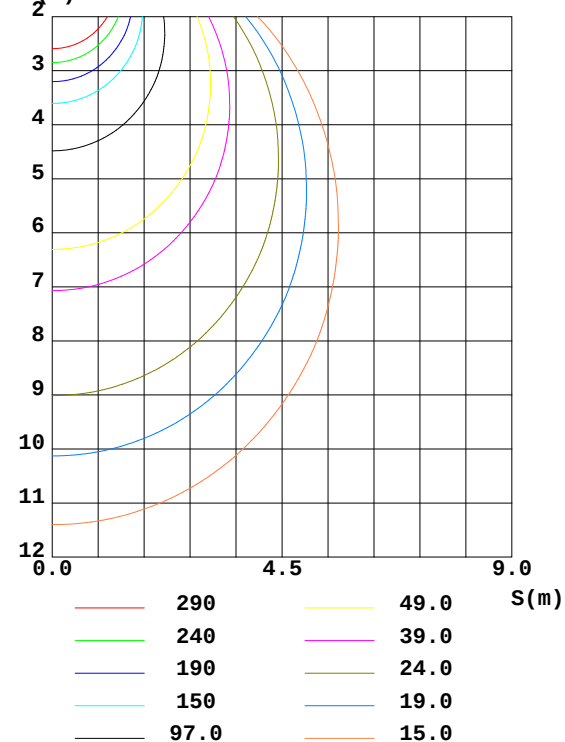
NAME: VAH 投光灯CCT 50W 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 108.19 lm/W			
MODEL		Imax(cd)	1949	S/MH(C0/180)	1.28
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.32
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	5318.7	η UP, DN(C0-180)	0.3, 48.1
NOMINAL FLUX(lm)	5318.71	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.3, 51.4
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

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



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	1921	1861	1919	1907					0- 10	183.0	183.0	3.44, 3.44
20	1831	1755	1827	1837					10- 20	526.5	709.5	13.3, 13.3
30	1678	1593	1677	1705					20- 30	804.3	1514	28.5, 28.5
40	1461	1370	1461	1507					30- 40	978.5	2492	46.9, 46.9
50	1182	1092	1183	1246					40- 50	1018	3510	66, 66
60	835.8	761.9	838.0	911.1					50- 60	904.3	4414	83, 83
70	370.3	380.0	376.4	521.4					60- 70	621.0	5035	94.7, 94.7
80	44.18	59.78	48.90	125.8					70- 80	235.8	5271	99.1, 99.1
90	0.9519	1.087	1.024	0.9514					80- 90	18.01	5289	99.4, 99.4
100	1.839	2.103	1.928	1.768					90-100	1.544	5291	99.5, 99.5
110	3.092	3.380	3.166	2.854					100-110	2.634	5293	99.5, 99.5
120	4.424	4.689	4.499	4.076					110-120	3.742	5297	99.6, 99.6
130	5.685	5.934	5.815	5.305					120-130	4.521	5302	99.7, 99.7
140	6.907	7.163	7.061	6.503					130-140	4.866	5306	99.8, 99.8
150	8.010	8.186	8.203	7.621					140-150	4.681	5311	99.9, 99.9
160	8.978	9.098	9.210	8.716					150-160	3.924	5315	99.9, 99.9
170	9.826	9.859	10.07	9.613					160-170	2.668	5318	100, 100
180	10.38	10.15	10.52	10.03					170-180	0.9543	5319	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT: lm		

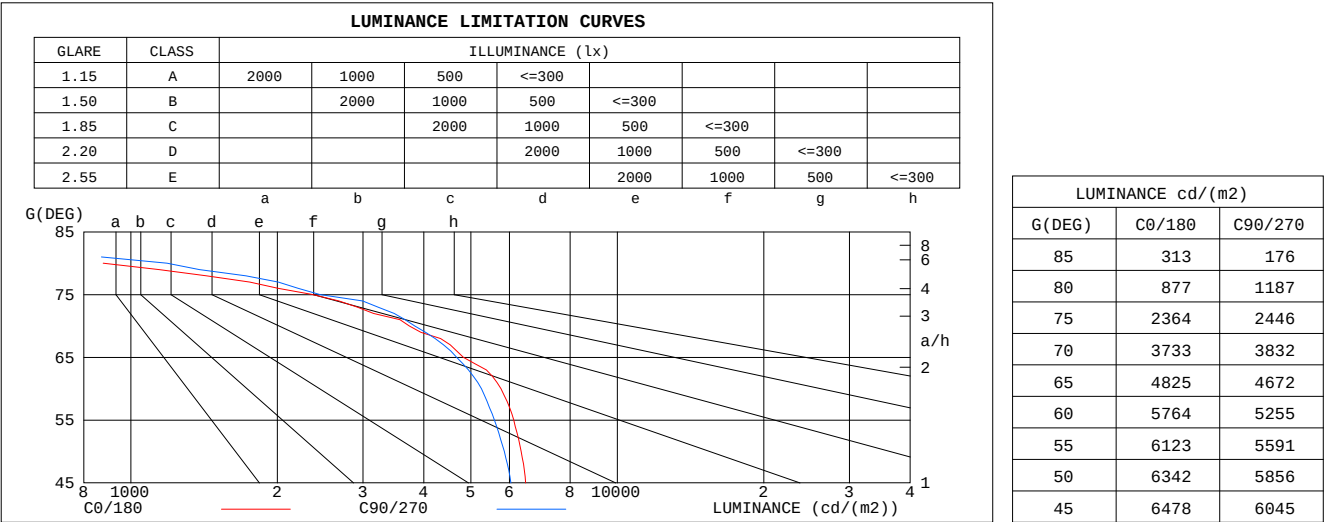
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 28 February 2025

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: VAH 投光灯CCT 50W 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

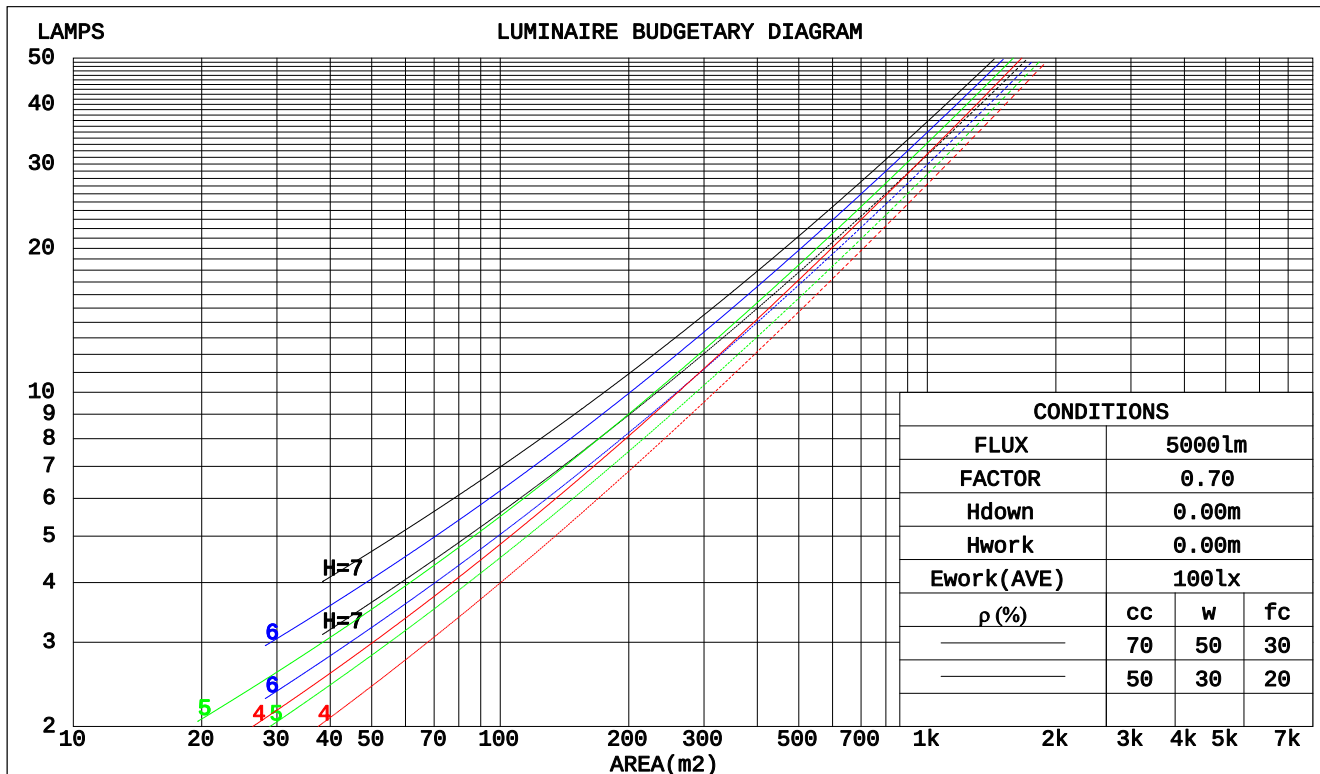
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: VAH 投光灯CCT 50W 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	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	.81	.90	.85	.80	.87	.82	.78	.84	.79	.76	.80	.77	.74	.72
3.0	.81	.74	.67	.80	.72	.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	.33	.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: VAH 投光灯CCT 50W 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 Coeffcients(WEC)										
0.0																	
1.0	.280	.159	.050	.273	.156	.049	.260	.149	.048	.247	.143	.046	.236	.137	.044		
2.0	.272	.149	.046	.266	.146	.045	.254	.141	.044	.243	.136	.043	.233	.132	.042		
3.0	.256	.136	.041	.251	.134	.040	.240	.130	.040	.231	.126	.039	.222	.123	.038		
4.0	.239	.124	.037	.235	.123	.036	.225	.119	.036	.217	.116	.035	.209	.113	.035		
5.0	.223	.114	.033	.219	.112	.033	.211	.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	.183	.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	.119	.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	.034	.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	.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: VAH 投光灯CCT 50W 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	2H	19.1	20.6	19.4	20.8	21.0	18.8	20.2	19.0	20.5	20.7
	3H	20.1	21.4	20.4	21.7	21.9	19.8	21.2	20.1	21.4	21.7
	4H	20.2	21.5	20.5	21.8	22.0	20.0	21.3	20.4	21.6	21.8
	6H	20.2	21.4	20.5	21.7	22.0	20.0	21.2	20.4	21.5	21.8
	8H	20.1	21.3	20.5	21.6	21.9	20.0	21.1	20.3	21.4	21.7
	12H	20.1	21.2	20.4	21.5	21.8	19.9	21.0	20.3	21.3	21.7
4H	2H	19.6	20.8	19.9	21.1	21.4	19.3	20.6	19.6	20.8	21.1
	3H	20.6	21.7	21.0	22.0	22.4	20.4	21.6	20.8	21.9	22.2
	4H	20.8	21.8	21.2	22.2	22.5	20.7	21.7	21.1	22.0	22.4
	6H	20.8	21.7	21.2	22.1	22.5	20.7	21.6	21.1	22.0	22.4
	8H	20.8	21.6	21.2	22.0	22.4	20.7	21.5	21.1	21.9	22.3
	12H	20.7	21.5	21.2	21.9	22.3	20.7	21.4	21.1	21.8	22.2
8H	4H	20.9	21.7	21.3	22.1	22.5	20.7	21.6	21.2	21.9	22.3
	6H	20.9	21.6	21.3	22.0	22.4	20.8	21.5	21.2	21.9	22.3
	8H	20.8	21.4	21.3	21.9	22.3	20.8	21.4	21.2	21.8	22.3
	12H	20.8	21.3	21.3	21.8	22.3	20.7	21.2	21.2	21.7	22.2
12H	4H	20.8	21.6	21.3	22.0	22.4	20.7	21.5	21.1	21.9	22.3
	6H	20.8	21.4	21.3	21.9	22.3	20.8	21.4	21.2	21.8	22.3
	8H	20.8	21.3	21.3	21.8	22.3	20.7	21.3	21.2	21.7	22.2
Variations with the observer position at spacings:											
S = 1.0H		+ 0.3 / - 0.4					+ 0.3 / - 0.4				
1.5H		+ 0.3 / - 0.5					+ 0.3 / - 0.5				
2.0H		+ 0.5 / - 0.7					+ 0.4 / - 0.5				

CIE Pub.117 Corrected 5319 lm Total Lamp Luminous Flux.(8log(F/F0) = 5.8)

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: VAH 投光灯CCT 50W 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	57	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	87	98	92	87	94	89	85	77
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		

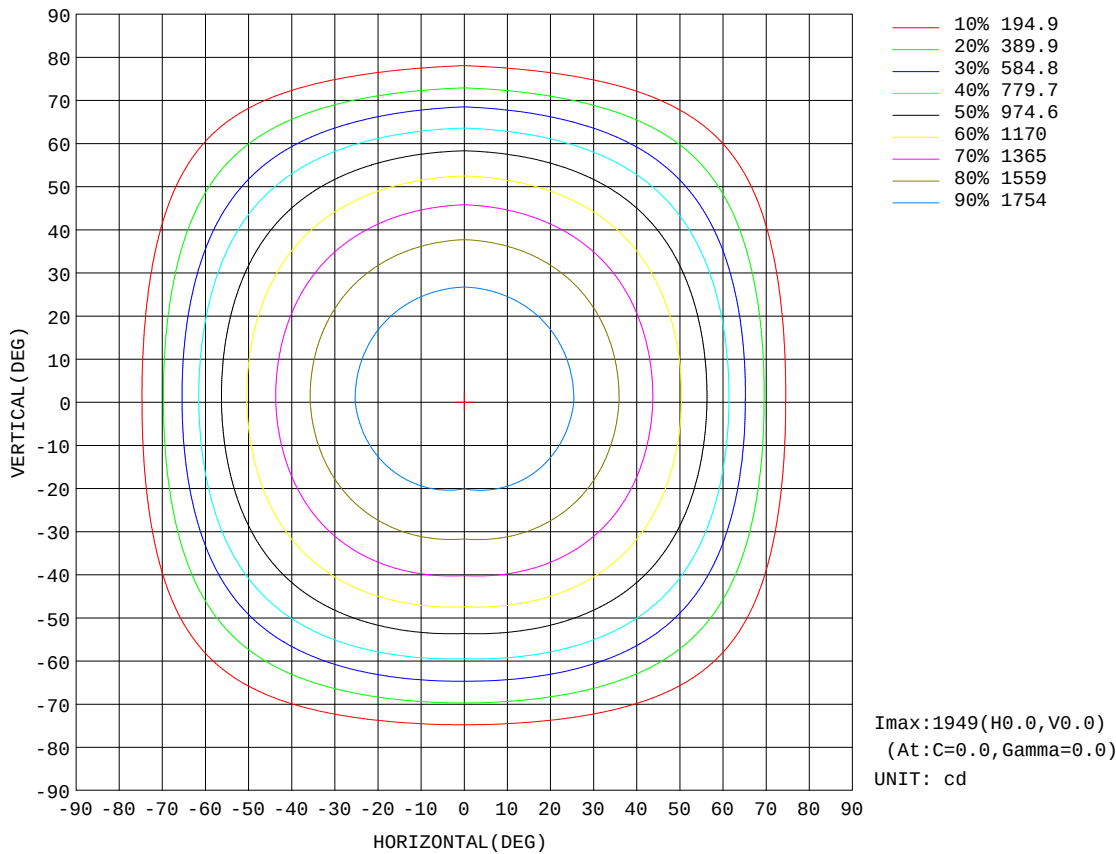
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 28 February 2025

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: VAH 投光灯CCT 50W 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



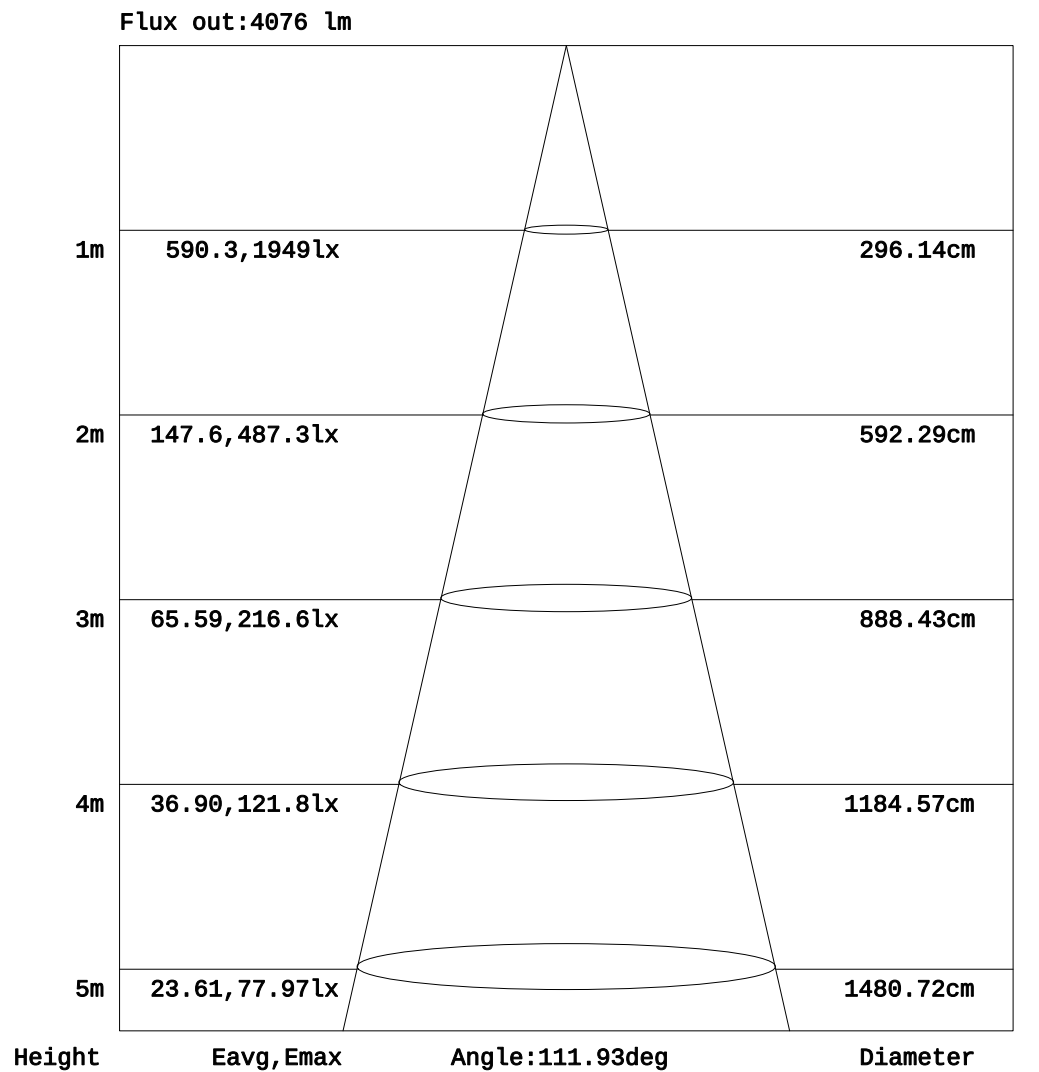
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

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: VAH 投光灯CCT 50W 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.

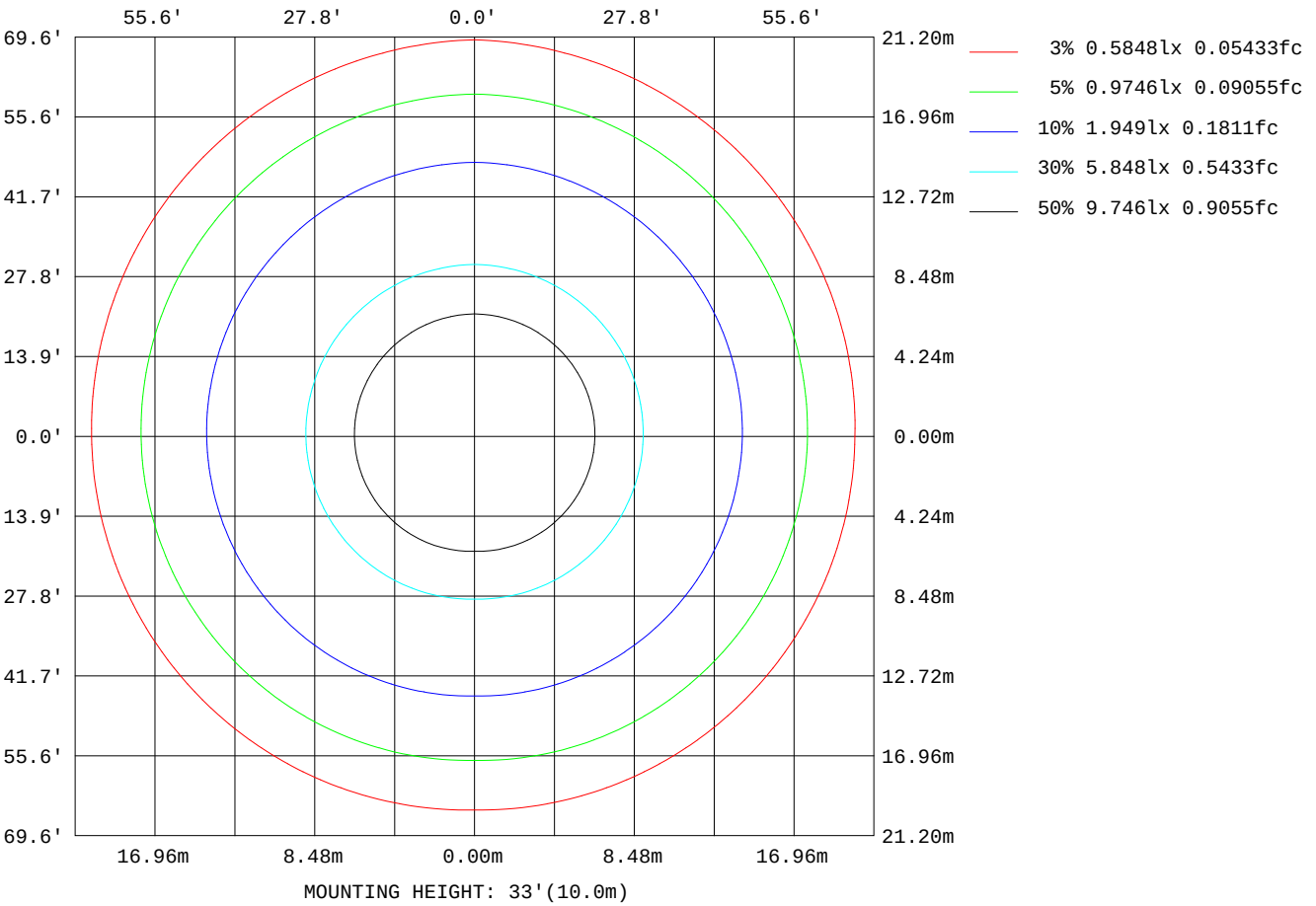
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

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: VAH 投光灯CCT 50W 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: VAH 投光灯CCT 50W 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

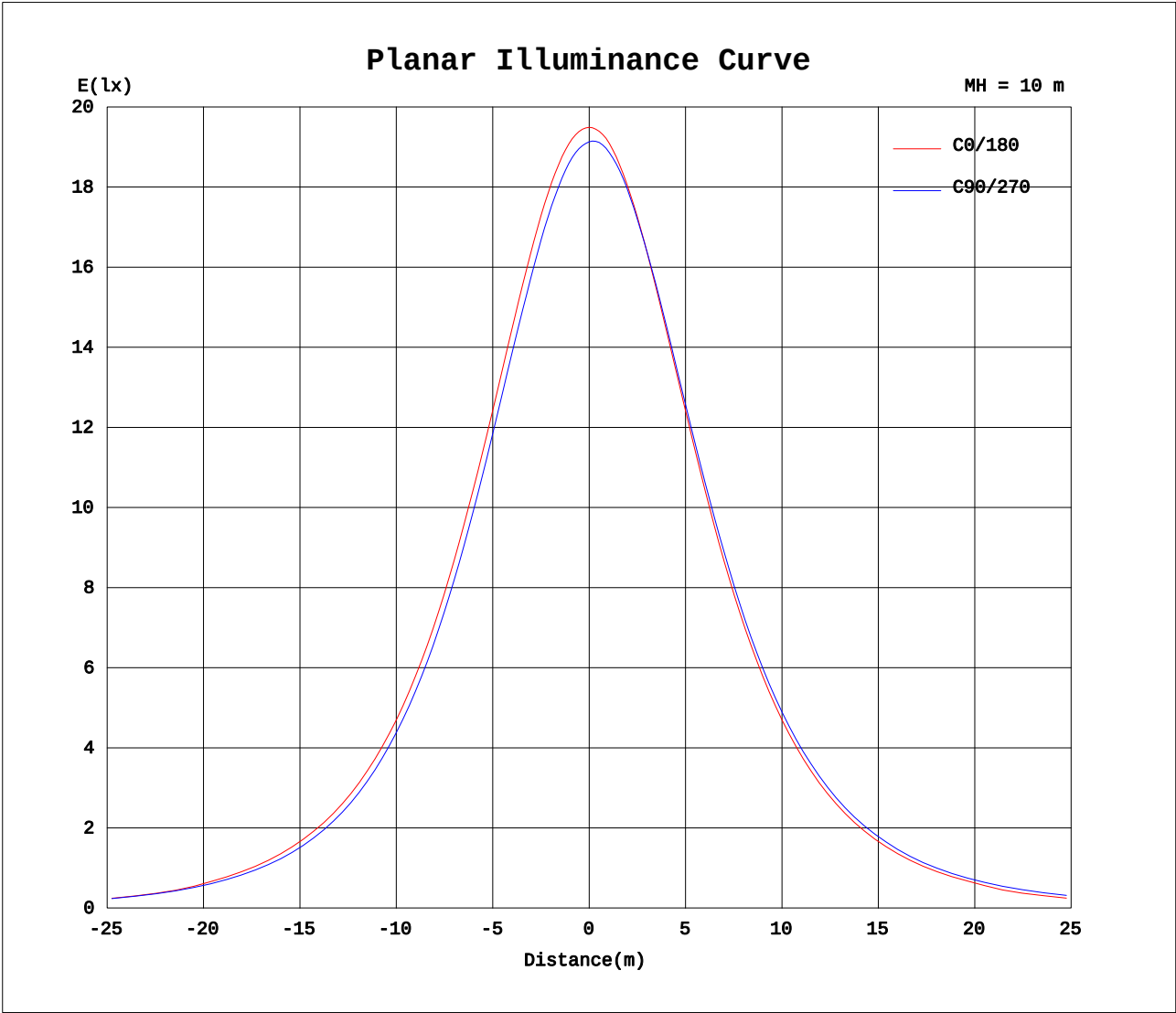
AvgL	cd/m2
L_0~180(65)av	4878
L_0~180(75)av	2391
L_0~180(85)av	314
L_90~270(65)av	5293
L_90~270(75)av	3191
L_90~270(85)av	275
L_45(65)av	5140
L_45(75)av	2893
L_45(85)av	290

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: VAH 投光灯CCT 50W 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1					UNIT: cd													
C(DEC) γ (DEC)	0	90	180	270														
0	1949	1913	1949	1913														
5	1943	1896	1944	1919														
10	1921	1861	1919	1907														
15	1884	1815	1881	1877														
20	1831	1755	1827	1837														
25	1760	1682	1759	1777														
30	1678	1593	1677	1705														
35	1579	1490	1575	1617														
40	1461	1370	1461	1507														
45	1328	1240	1329	1385														
50	1182	1092	1183	1246														
55	1019	930	1019	1088														
60	836	762	838	911														
65	591	573	604	725														
70	370	380	376	521														
75	177	184	182	295														
80	44.2	59.8	48.9	126														
85	7.91	4.45	7.97	9.43														
90	0.95	1.09	1.02	0.95														
95	1.35	1.55	1.40	1.30														
100	1.84	2.10	1.93	1.77														
105	2.43	2.71	2.51	2.27														
110	3.09	3.38	3.17	2.85														
115	3.77	4.05	3.83	3.47														
120	4.42	4.69	4.50	4.08														
125	5.05	5.31	5.15	4.69														
130	5.69	5.93	5.82	5.31														
135	6.31	6.57	6.44	5.90														
140	6.91	7.16	7.06	6.50														
145	7.50	7.70	7.66	7.08														
150	8.01	8.19	8.20	7.62														
155	8.52	8.65	8.73	8.18														
160	8.98	9.10	9.21	8.72														
165	9.44	9.53	9.69	9.24														
170	9.83	9.86	10.1	9.61														
175	10.1	10.1	10.3	9.80														
180	10.4	10.2	10.5	10.0														

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

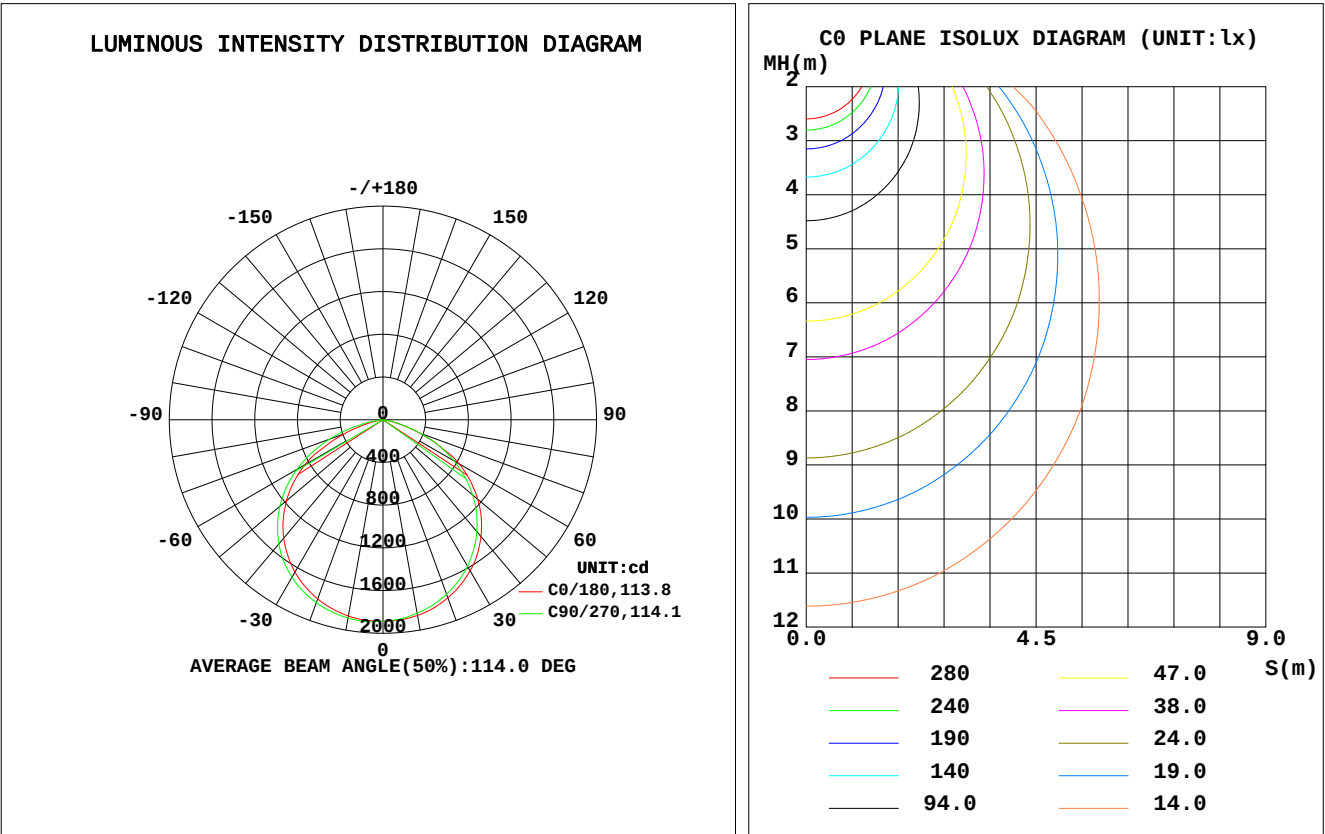
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: VAHA投光灯CCT 50W 4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 115.65 lm/W			
MODEL		Imax(cd)	1895	S/MH(C0/180)	1.30
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.34
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	5278.6	η UP, DN(C0-180)	0.3, 47.7
NOMINAL FLUX(lm)	5278.57	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.3, 51.7
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	1861	1840	1866	1885					0- 10	179.1	179.1	3.39,3.39
20	1775	1739	1787	1824					10- 20	516.5	695.6	13.2,13.2
30	1633	1583	1649	1703					20- 30	792.4	1488	28.2,28.2
40	1426	1366	1447	1517					30- 40	968.5	2457	46.5,46.5
50	1159	1097	1180	1261					40- 50	1013	3470	65.7,65.7
60	820.1	765.4	843.1	930.3					50- 60	905.0	4375	82.9,82.9
70	364.9	370.3	380.0	535.2					60- 70	622.3	4997	94.7,94.7
80	39.81	55.59	44.15	128.0					70- 80	234.6	5232	99.1,99.1
90	0.9372	1.095	0.9921	0.9277					80- 90	17.82	5249	99.4,99.4
100	1.847	2.111	1.865	1.736					90-100	1.529	5251	99.5,99.5
110	3.076	3.396	3.063	2.862					100-110	2.617	5254	99.5,99.5
120	4.393	4.696	4.371	4.076					110-120	3.715	5257	99.6,99.6
130	5.661	5.918	5.633	5.281					120-130	4.476	5262	99.7,99.7
140	6.828	7.124	6.854	6.487					130-140	4.805	5267	99.8,99.8
150	7.883	8.091	7.933	7.590					140-150	4.613	5271	99.9,99.9
160	8.819	8.995	8.900	8.676					150-160	3.859	5275	99.9,99.9
170	9.604	9.701	9.709	9.525					160-170	2.617	5278	100,100
180	10.12	9.978	10.16	9.970					170-180	0.9350	5279	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT: lm		

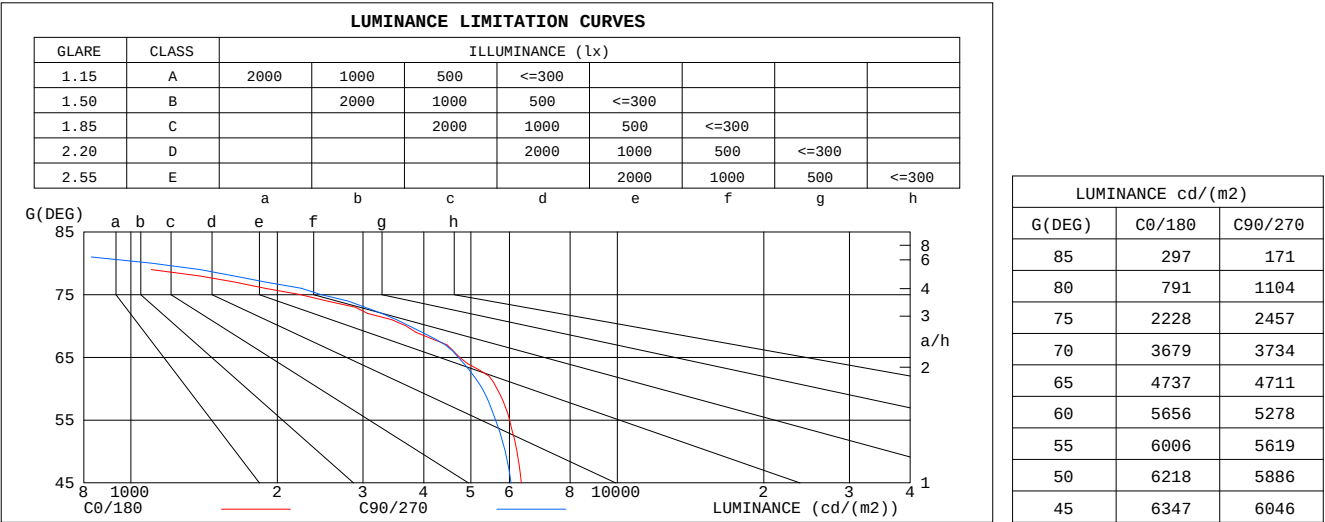
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:28 February 2025

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 50W 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

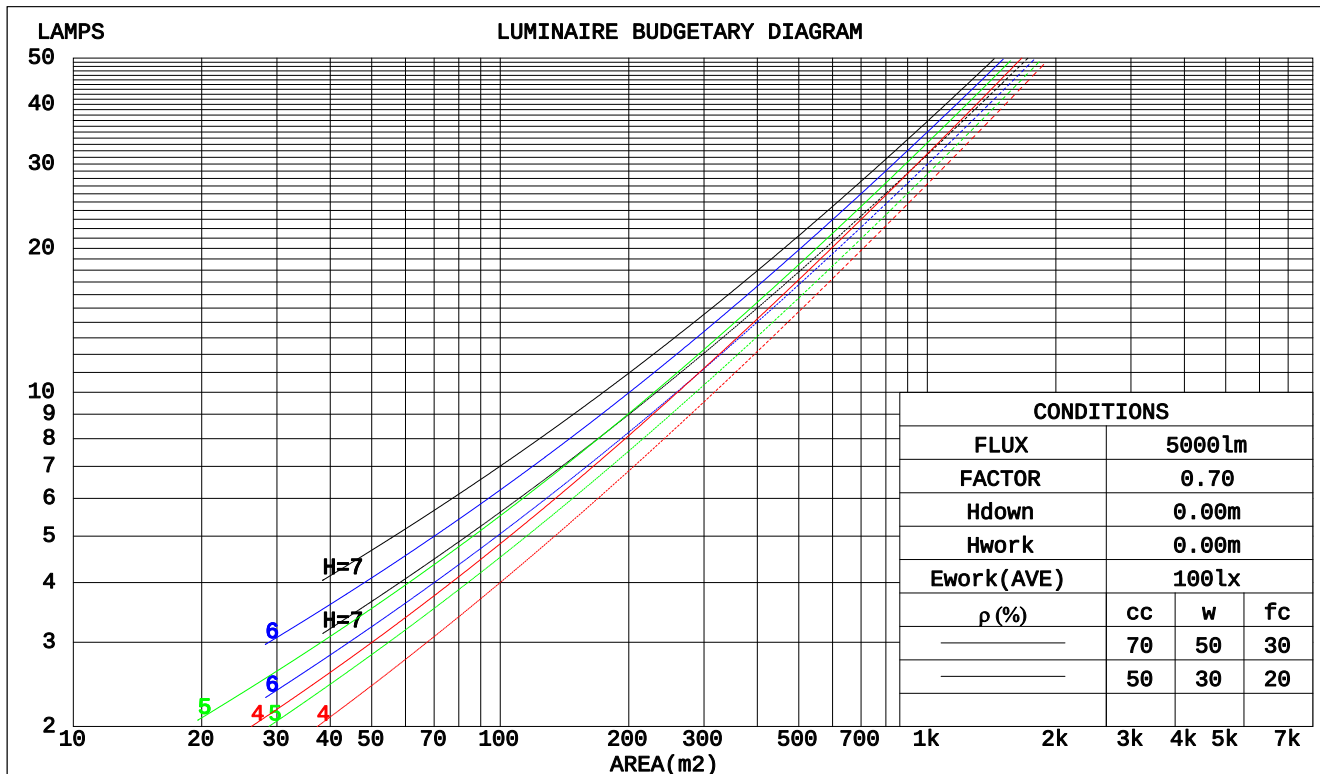
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: VAHA投光灯CCT 50W 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 50W 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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.281	.160	.051	.274	.156	.050	.260	.149	.048	.248	.143	.046	.236	.137	.044		
2.0	.273	.150	.046	.267	.147	.045	.255	.142	.044	.244	.137	.043	.234	.132	.042		
3.0	.257	.137	.041	.252	.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	.191	.095	.027	.185	.093	.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	.163	.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	.183	.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	.119	.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 50W 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						19.0	20.5	19.3	20.7	20.9	18.8
3H						20.0	21.3	20.3	21.6	21.8	19.8
4H						20.1	21.4	20.4	21.7	21.9	20.0
6H						20.1	21.3	20.4	21.6	21.8	20.0
8H						20.0	21.2	20.4	21.5	21.8	19.9
12H						20.0	21.1	20.3	21.4	21.7	19.9
4H 2H						19.5	20.8	19.8	21.0	21.3	19.3
3H						20.5	21.6	20.9	21.9	22.3	20.4
4H						20.7	21.7	21.1	22.1	22.4	20.7
6H						20.7	21.6	21.1	22.0	22.3	20.7
8H						20.7	21.5	21.1	21.9	22.3	20.6
12H						20.6	21.4	21.1	21.8	22.2	20.6
8H 4H						20.7	21.6	21.2	21.9	22.3	20.7
6H						20.8	21.4	21.2	21.9	22.3	20.7
8H						20.7	21.3	21.2	21.8	22.2	20.7
12H						20.7	21.2	21.2	21.7	22.1	20.7
12H 4H						20.7	21.5	21.1	21.9	22.3	20.6
6H						20.7	21.3	21.2	21.8	22.2	20.7
8H						20.7	21.2	21.2	21.7	22.1	20.7
Variations with the observer position at spacings:											
S = 1.0H						+ 0.4 / - 0.4			+ 0.3 / - 0.4		
1.5H						+ 0.3 / - 0.5			+ 0.3 / - 0.5		
2.0H						+ 0.5 / - 0.6			+ 0.4 / - 0.4		

CIE Pub.117 Corrected 5279 lm Total Lamp Luminous Flux.(8log(F/F0) = 5.8)

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 50W 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) $k(RI) \times RCR = 5$									
$k = 0.60$	58	47	40	57	47	40	56	46	40	33
0.80	69	57	50	68	57	50	66	56	50	43
1.00	77	67	60	76	66	59	74	67	59	52
1.25	85	75	68	83	74	67	81	72	67	59
1.50	90	80	74	88	79	73	85	78	72	65
2.00	97	88	82	95	87	82	91	85	80	72
2.50	100	93	87	98	92	86	94	89	84	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	101	107	103	100	103	100	97	88
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended				SHRNOM = 1.25		

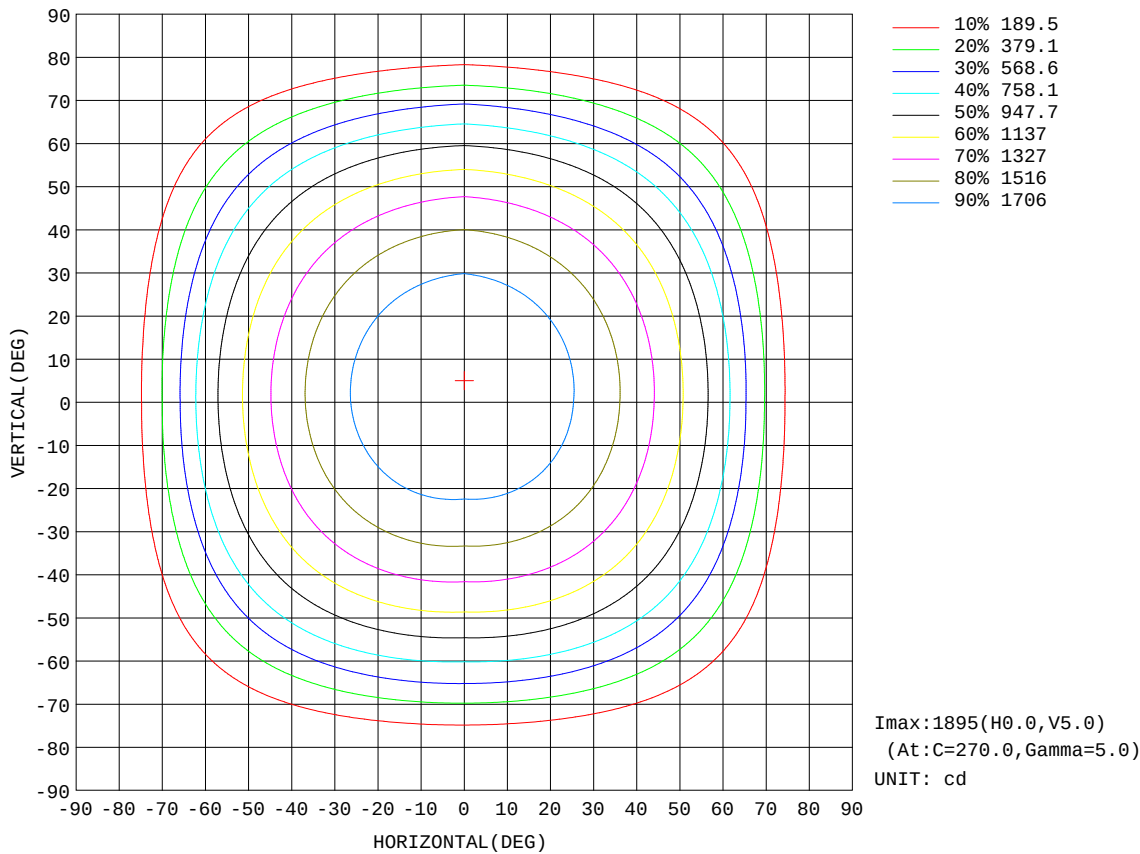
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 28 February 2025

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 50W 4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



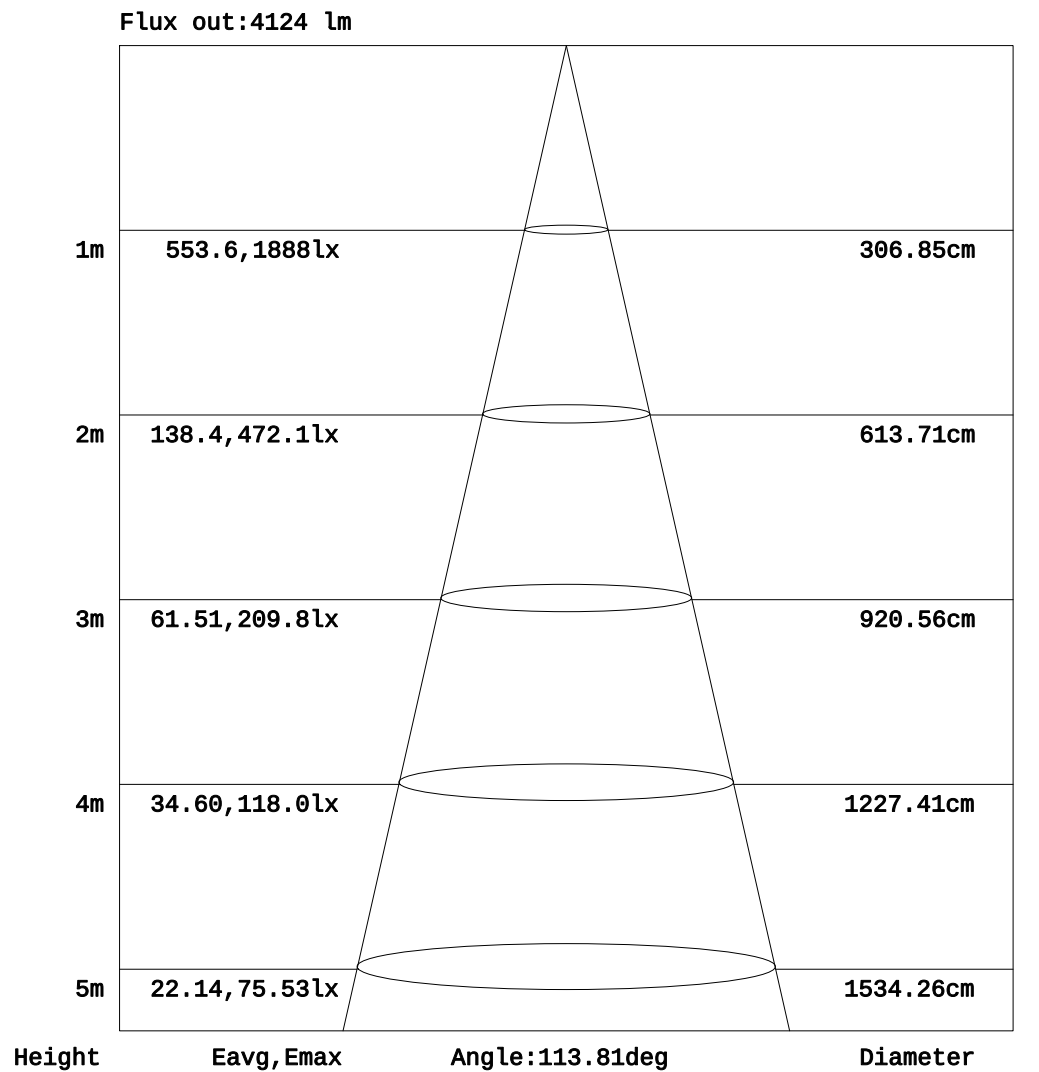
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

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 50W 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.

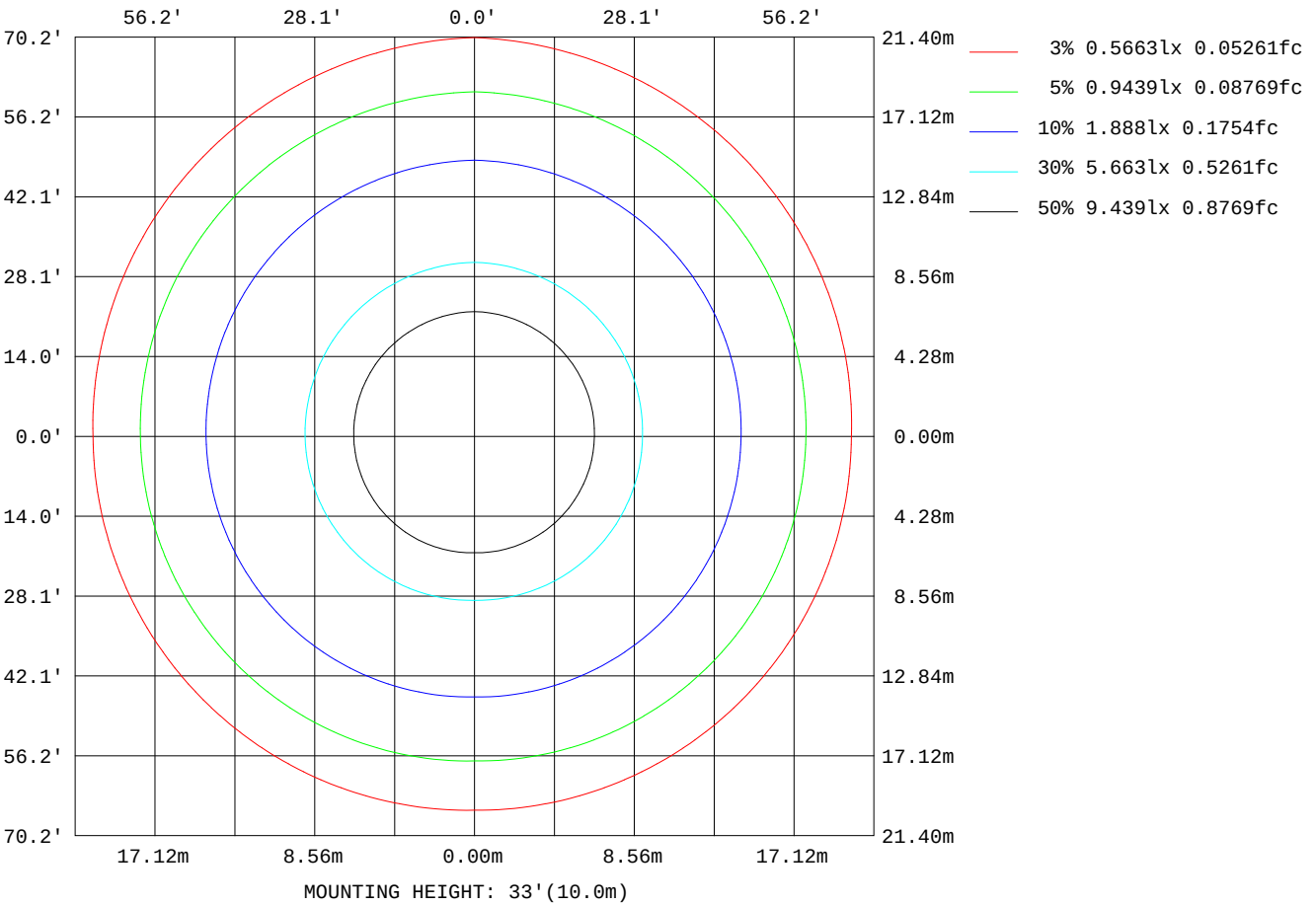
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

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 50W 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 50W 4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

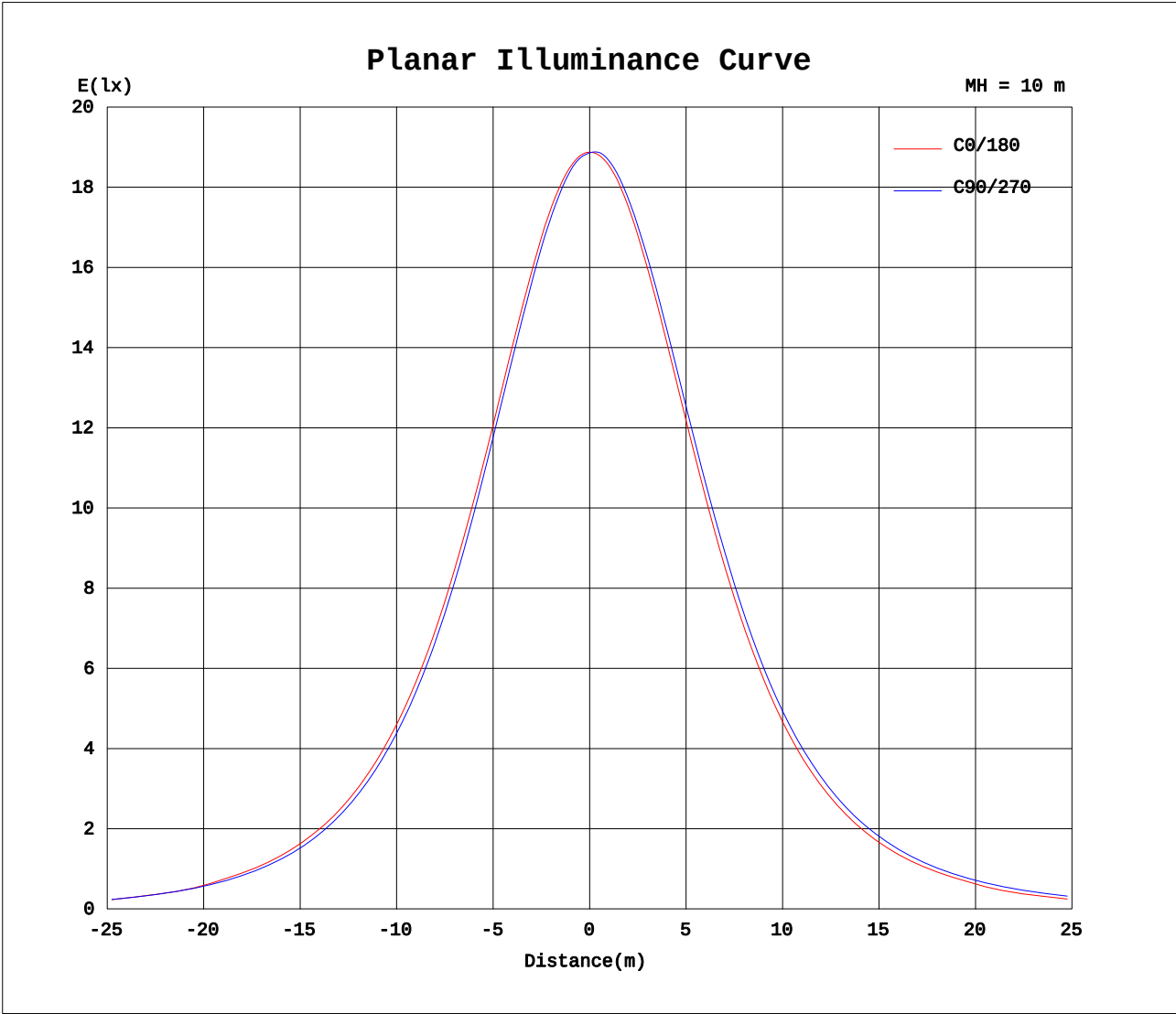
AvgL	cd/m2
L_0~180(65)av	4837
L_0~180(75)av	2326
L_0~180(85)av	306
L_90~270(65)av	5375
L_90~270(75)av	3341
L_90~270(85)av	282
L_45(65)av	5180
L_45(75)av	2966
L_45(85)av	291

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 50W 4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1					UNIT: cd														
C(DEG) γ (DEG)	0	90	180	270															
0	1888	1886	1888	1886															
5	1881	1872	1884	1895															
10	1861	1840	1866	1885															
15	1826	1797	1833	1860															
20	1775	1739	1787	1824															
25	1711	1669	1724	1771															
30	1633	1583	1649	1703															
35	1539	1482	1554	1621															
40	1426	1366	1447	1517															
45	1302	1240	1321	1396															
50	1159	1097	1180	1261															
55	999	935	1020	1105															
60	820	765	843	930															
65	581	577	605	740															
70	365	370	380	535															
75	167	184	182	317															
80	39.8	55.6	44.2	128															
85	7.51	4.32	7.94	9.92															
90	0.94	1.10	0.99	0.93															
95	1.35	1.55	1.37	1.28															
100	1.85	2.11	1.87	1.74															
105	2.43	2.71	2.44	2.27															
110	3.08	3.40	3.06	2.86															
115	3.76	4.04	3.74	3.48															
120	4.39	4.70	4.37	4.08															
125	5.01	5.32	4.98	4.68															
130	5.66	5.92	5.63	5.28															
135	6.25	6.54	6.22	5.89															
140	6.83	7.12	6.85	6.49															
145	7.41	7.62	7.40	7.06															
150	7.88	8.09	7.93	7.59															
155	8.37	8.57	8.43	8.14															
160	8.82	9.00	8.90	8.68															
165	9.26	9.42	9.37	9.17															
170	9.60	9.70	9.71	9.53															
175	9.91	9.88	9.92	9.76															
180	10.1	9.98	10.2	9.97															

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:

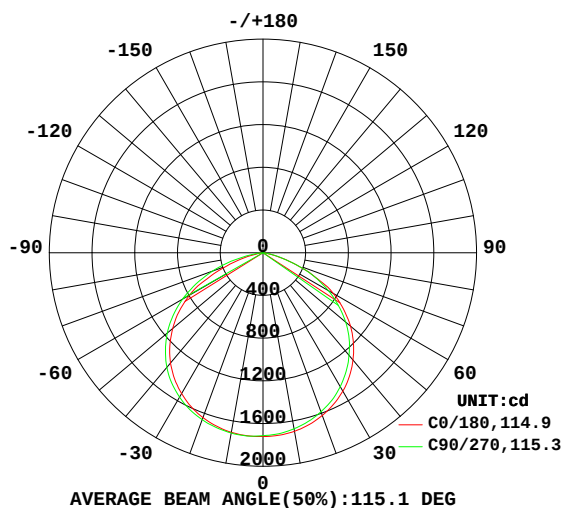
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

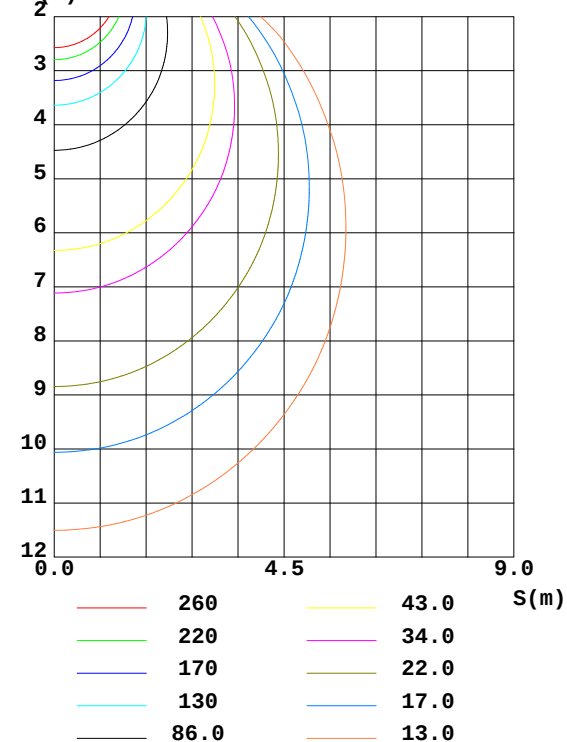
NAME: VAH 投光灯CCT 50W 6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 103.11 lm/W			
MODEL		Imax(cd)	1722	S/MH(C0/180)	1.31
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.35
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	4874.1	η UP, DN(C0-180)	0.3, 47.4
NOMINAL FLUX(lm)	4874.05	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.3, 52.0
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

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



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	1698	1673	1707	1714					0- 10	163.1	163.1	3.35,3.35
20	1622	1585	1643	1663					10- 20	471.6	634.7	13,13
30	1496	1448	1524	1562					20- 30	726.2	1361	27.9,27.9
40	1311	1254	1347	1401					30- 40	891.5	2252	46.2,46.2
50	1070	1012	1104	1171					40- 50	937.3	3190	65.4,65.4
60	758.1	704.6	795.0	870.4					50- 60	841.2	4031	82.7,82.7
70	337.8	331.8	359.9	502.9					60- 70	580.0	4611	94.6,94.6
80	37.57	47.48	43.04	122.7					70- 80	219.0	4830	99.1,99.1
90	0.8970	1.024	0.9208	0.8484					80- 90	17.31	4847	99.4,99.4
100	1.728	1.976	1.730	1.601					90-100	1.424	4849	99.5,99.5
110	2.894	3.150	2.833	2.624					100-110	2.430	4851	99.5,99.5
120	4.115	4.339	4.030	3.751					110-120	3.441	4854	99.6,99.6
130	5.257	5.458	5.173	4.853					120-130	4.136	4859	99.7,99.7
140	6.320	6.521	6.275	5.932					130-140	4.423	4863	99.8,99.8
150	7.288	7.401	7.266	6.931					140-150	4.234	4867	99.9,99.9
160	8.097	8.210	8.147	7.899					150-160	3.531	4871	99.9,99.9
170	8.819	8.868	8.900	8.692					160-170	2.393	4873	100,100
180	9.264	9.097	9.312	9.074					170-180	0.8542	4874	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT: lm		

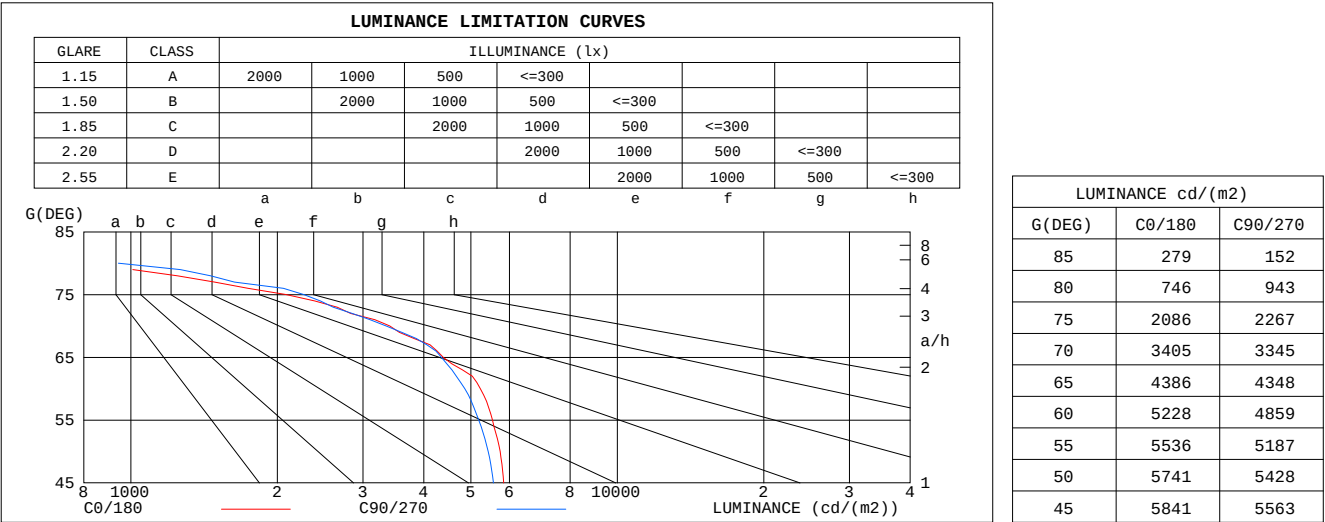
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:28 February 2025

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: VAH 投光灯CCT 50W 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

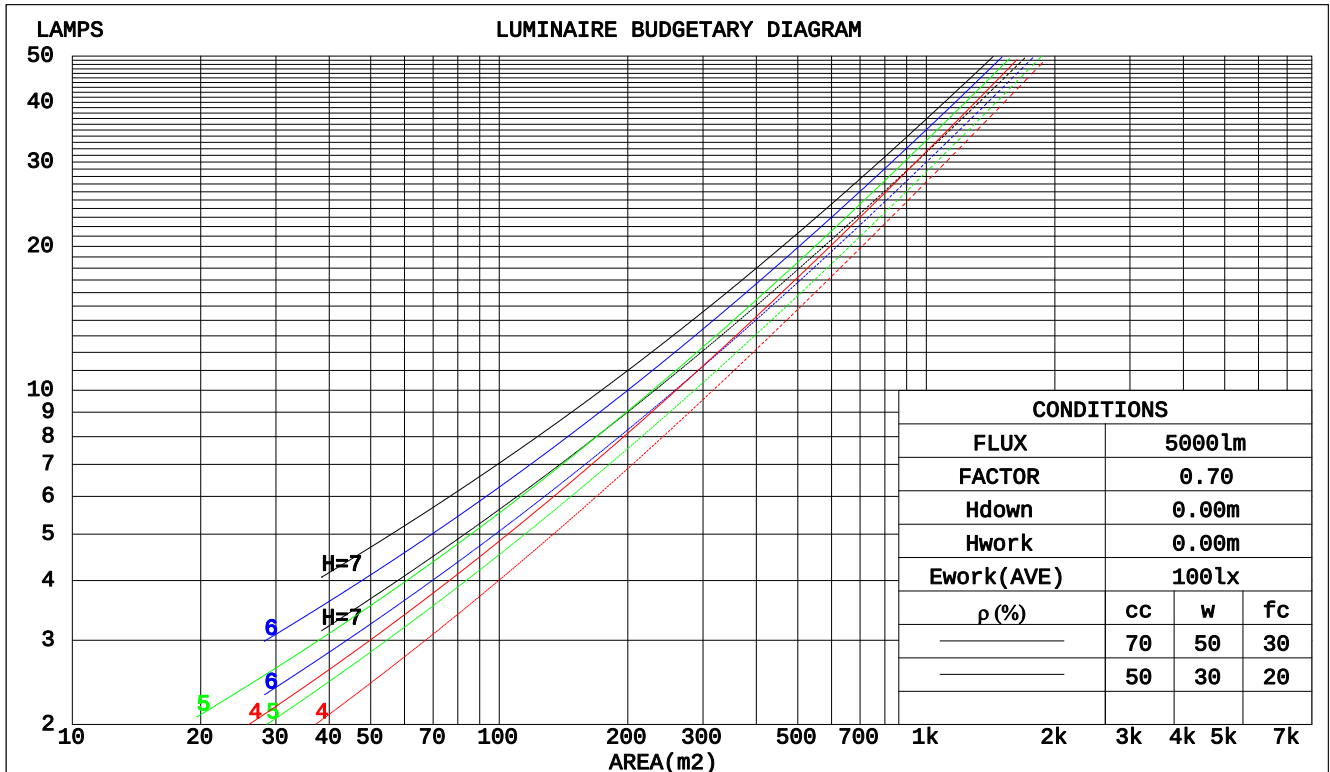
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:10.730m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: VAH 投光灯CCT 50W 6000K	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	.77	.83	.79	.76	.80	.77	.74	.72
3.0	.81	.73	.67	.80	.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	.42	.52	.46	.41	.39
7.0	.52	.44	.38	.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	.36	.30	.43	.35	.30	.42	.35	.30	.41	.34	.30	.40	.34	.29	.28
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: VAH 投光灯CCT 50W 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 Coeffcients(WEC)										
0.0																	
1.0	.282	.160	.051	.275	.157	.050	.261	.150	.048	.249	.144	.046	.237	.138	.044		
2.0	.274	.150	.046	.268	.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	.226	.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	.029	.191	.099	.029	.184	.097	.029		
7.0	.195	.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	.074	.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	.062	.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	.119	.080	.143	.102	.070	.098	.071	.049	.057	.041	.029	.018	.013	.009	
4.0	.159	.105	.064	.136	.091	.055	.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	.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: VAH 投光灯CCT 50W 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						18.7	20.2	19.0	20.4	20.6	18.5
3H						19.7	21.0	20.0	21.3	21.5	19.5
4H						19.8	21.1	20.1	21.4	21.6	19.7
6H						19.8	21.0	20.1	21.3	21.6	19.7
8H						19.7	20.9	20.1	21.2	21.5	19.6
12H						19.7	20.8	20.0	21.1	21.4	19.6
4H 2H						19.2	20.5	19.5	20.7	21.0	19.0
3H						20.2	21.4	20.6	21.7	22.0	20.1
4H						20.4	21.4	20.8	21.8	22.1	20.3
6H						20.4	21.3	20.8	21.7	22.1	20.3
8H						20.4	21.2	20.8	21.6	22.0	20.3
12H						20.4	21.1	20.8	21.5	21.9	20.3
8H 4H						20.4	21.3	20.9	21.7	22.0	20.3
6H						20.5	21.1	20.9	21.6	22.0	20.4
8H						20.4	21.0	20.9	21.5	21.9	20.4
12H						20.4	20.9	20.9	21.4	21.8	20.3
12H 4H						20.4	21.2	20.8	21.6	22.0	20.3
6H						20.4	21.0	20.9	21.5	21.9	20.4
8H						20.4	20.9	20.9	21.4	21.8	20.3
Variations with the observer position at spacings:											
S = 1.0H						+ 0.4 / - 0.4			+ 0.3 / - 0.4		
1.5H						+ 0.3 / - 0.5			+ 0.2 / - 0.5		
2.0H						+ 0.5 / - 0.7			+ 0.4 / - 0.5		

CIE Pub.117 Corrected 4874 lm Total Lamp Luminous Flux.(8log(F/F0) = 5.5)

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: VAH 投光灯CCT 50W 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	59	52
1.25	85	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	91	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	99	97	88
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended				SHRNOM = 1.25		

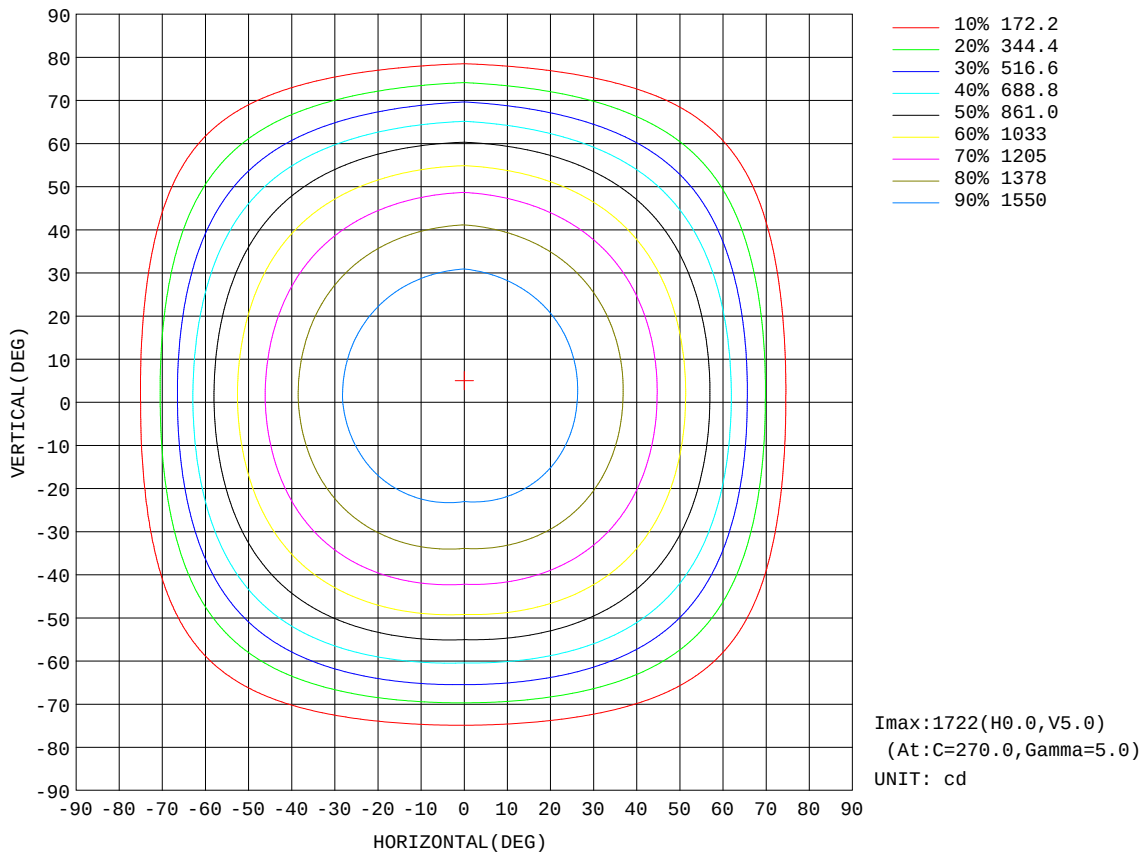
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 28 February 2025

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: VAH 投光灯CCT 50W 6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



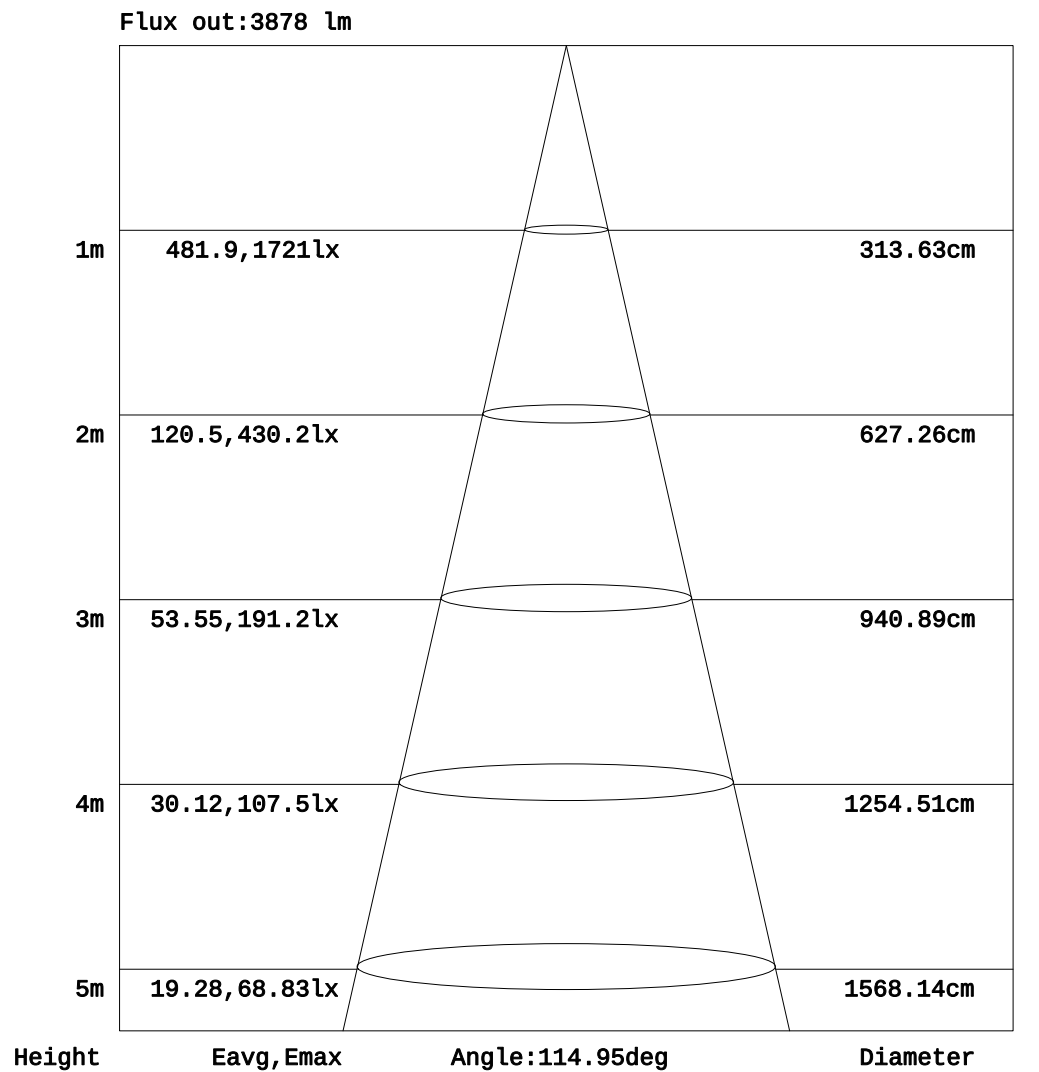
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:28 February 2025

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: VAH 投光灯CCT 50W 6000K	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.

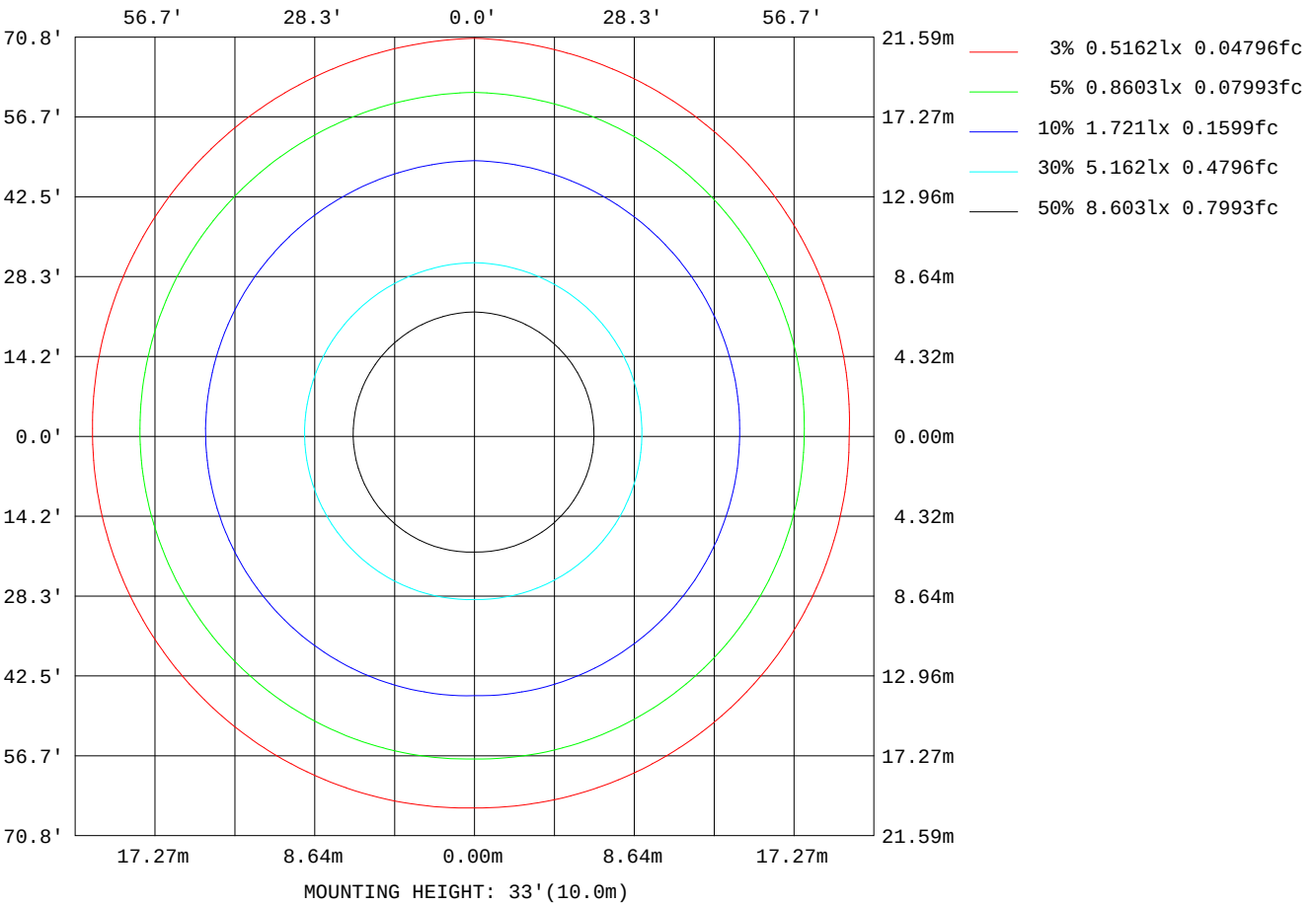
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 28 February 2025

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: VAH 投光灯CCT 50W 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: VAH 投光灯CCT 50W 6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

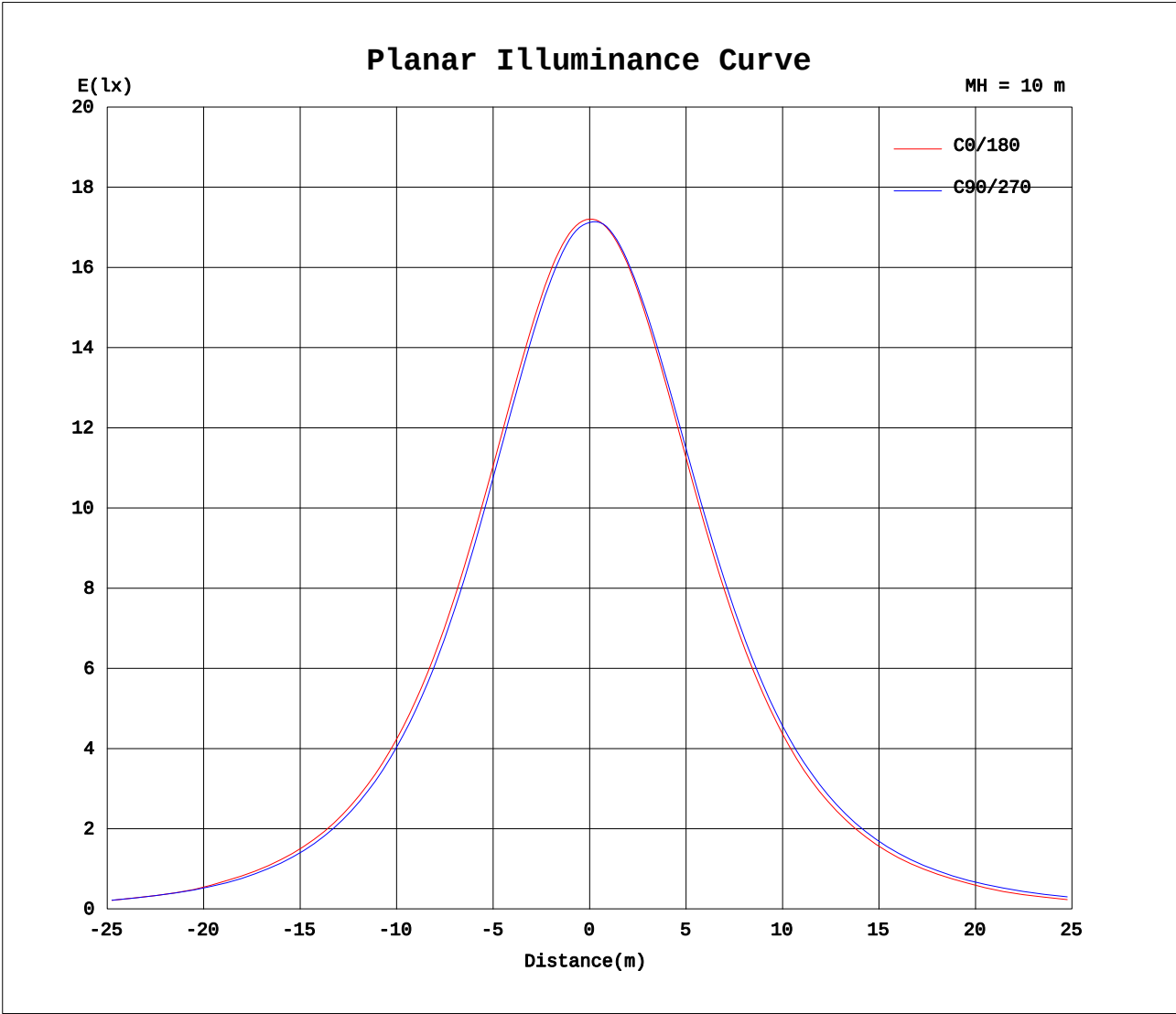
AvgL	cd/m2
L_0~180(65)av	4545
L_0~180(75)av	2196
L_0~180(85)av	289
L_90~270(65)av	5003
L_90~270(75)av	3203
L_90~270(85)av	290
L_45(65)av	4841
L_45(75)av	2832
L_45(85)av	290

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: VAH 投光灯CCT 50W 6000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1					UNIT: cd													
C(DEC) γ (DEC)	0	90	180	270														
0	1721	1712	1721	1712														
5	1715	1701	1720	1722														
10	1698	1673	1707	1714														
15	1666	1636	1681	1694														
20	1622	1585	1643	1663														
25	1565	1525	1591	1620														
30	1496	1448	1524	1562														
35	1412	1357	1443	1490														
40	1311	1254	1347	1401														
45	1198	1141	1234	1291														
50	1070	1012	1104	1171														
55	921	863	959	1029														
60	758	705	795	870														
65	537	533	576	694														
70	338	332	360	503														
75	157	170	173	311														
80	37.6	47.5	43.0	123														
85	7.05	3.83	7.53	10.8														
90	0.90	1.02	0.92	0.85														
95	1.24	1.46	1.29	1.17														
100	1.73	1.98	1.73	1.60														
105	2.29	2.54	2.27	2.09														
110	2.89	3.15	2.83	2.62														
115	3.52	3.78	3.44	3.18														
120	4.12	4.34	4.03	3.75														
125	4.68	4.90	4.61	4.29														
130	5.26	5.46	5.17	4.85														
135	5.80	6.00	5.74	5.40														
140	6.32	6.52	6.28	5.93														
145	6.83	7.00	6.79	6.45														
150	7.29	7.40	7.27	6.93														
155	7.69	7.81	7.71	7.42														
160	8.10	8.21	8.15	7.90														
165	8.48	8.58	8.57	8.34														
170	8.82	8.87	8.90	8.69														
175	9.07	9.01	9.08	8.86														
180	9.26	9.10	9.31	9.07														

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: