

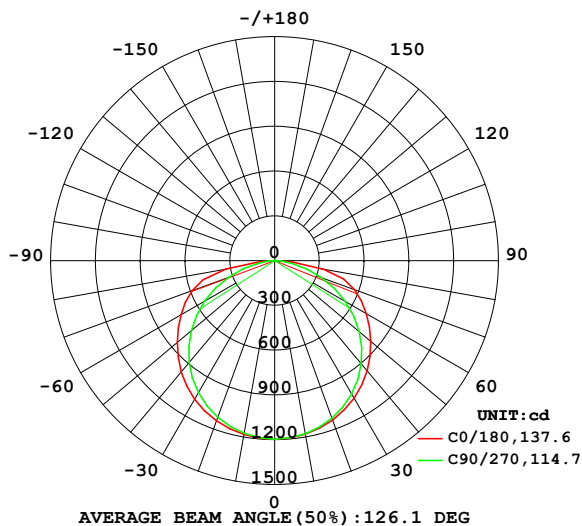
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

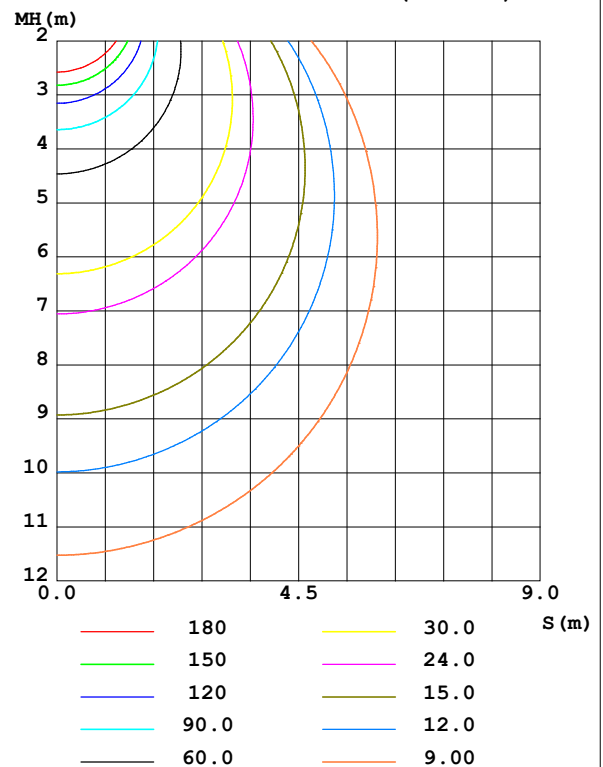
Test:U:276.88V I:0.1137A P:30.236W PF:0.9600 Freq:60.01Hz Lamp Flux:3909.22x1 lm		
NAME: ASD-LTR-22A 30 277V 30W 5000K		
MFR.: EVERFINE		

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 129.29 lm/W
MODEL		I _{max} (cd)	1196	S/MH(C0/180)		1.34
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)		1.27
RATED VOLTAGE(V)	277	TOTAL FLUX(lm)	3909.2	η UP,DN(C0-180)		0.0,50.1
NOMINAL FLUX(lm)	3909.22	CIE CLASS	DIRECT	η UP,DN(C180-360)		0.0,49.9
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM		1.50
TEST VOLTAGE(V)	277	η down(%)	100.0	CIBSE SHR MAX		1.50

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-04-09

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.3000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1180	1179	1178	1181	1183	1178	1174	1177	0- 10	113.3	113.3	2.9,2.9
20	1137	1131	1124	1134	1142	1129	1117	1126	10- 20	327.2	440.6	11.3,11.3
30	1064	1050	1032	1055	1072	1046	1021	1043	20- 30	504.0	944.6	24.2,24.2
40	963.8	936.3	903.1	942.8	974.1	932.8	892.2	929.7	30- 40	622.7	1567	40.1,40.1
50	840.4	795.1	740.5	801.6	852.6	791.0	729.4	789.4	40- 50	668.7	2236	57.2,57.2
60	708.9	633.5	548.8	639.7	722.8	628.9	539.9	629.3	50- 60	638.4	2874	73.5,73.5
70	569.1	460.5	334.8	467.0	590.1	457.4	328.0	458.3	60- 70	540.8	3415	87.4,87.4
80	333.3	261.0	126.4	262.5	332.3	258.9	123.6	260.5	70- 80	376.6	3792	97,97
90	4.069	3.333	1.548	2.927	2.021	1.265	0.1143	2.106	80- 90	115.7	3908	100,100
100	1.057	0.6496	0.1624	0.6500	0.0812	0	0	0	90-100	1.060	3909	100,100
110	0.4872	0.2439	0	0.1628	0.0812	0	0	0	100-110	0.2048	3909	100,100
120	0.4872	0.3240	0	0.1628	0.0812	0	0	0	110-120	0.1234	3909	100,100
130	0.4872	0.1626	0	0.1628	0.0812	0	0	0.0810	120-130	0.1070	3909	100,100
140	0.4872	0	0	0	0.0812	0	0	0	130-140	0.0731	3909	100,100
150	0.4060	0	0	0	0.0812	0.1626	0	0	140-150	0.0461	3909	100,100
160	0.4060	0	0	0	0.2436	0.1626	0	0	150-160	0.0421	3909	100,100
170	0.4060	0	0	0	0.3248	0.4065	0	0	160-170	0.0369	3909	100,100
180	0.4060	0	0	0	0.3248	0.4065	0	0	170-180	0.0136	3909	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

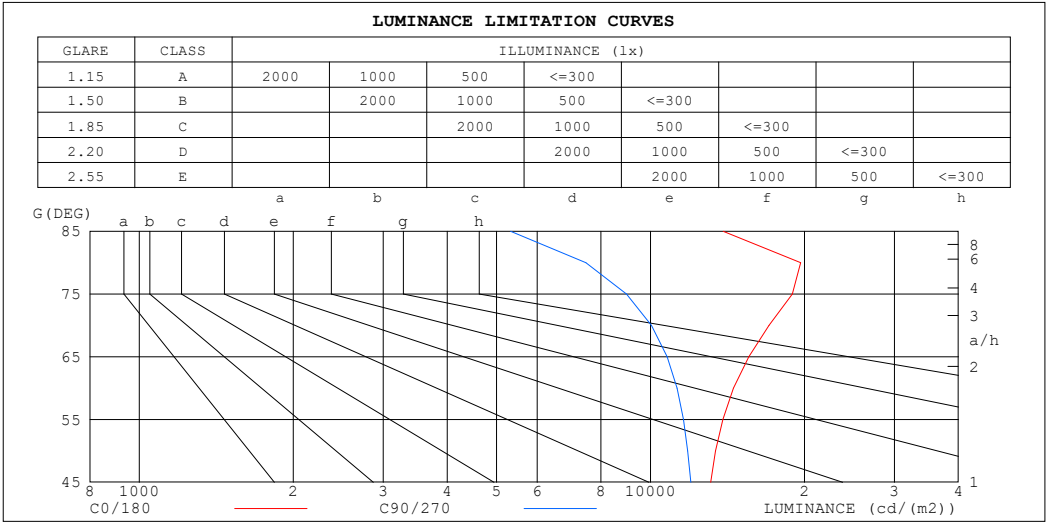
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-04-09

γ Range: 0 - 180DEG
 γ Interval: 5.0DEG
 γ Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.3000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

Test:U:276.88V I:0.1137A P:30.236W PF:0.9600 Freq:60.01Hz		
Lamp Flux:3909.22x1 lm		
NAME: ASD-LTR-22A 30 277V 30W 5000K		
MFR.: EVERFINE		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	13876	5325
80	19669	7470
75	18926	8980
70	17053	10048
65	15577	10779
60	14530	11266
55	13847	11603
50	13399	11824
45	13109	11983

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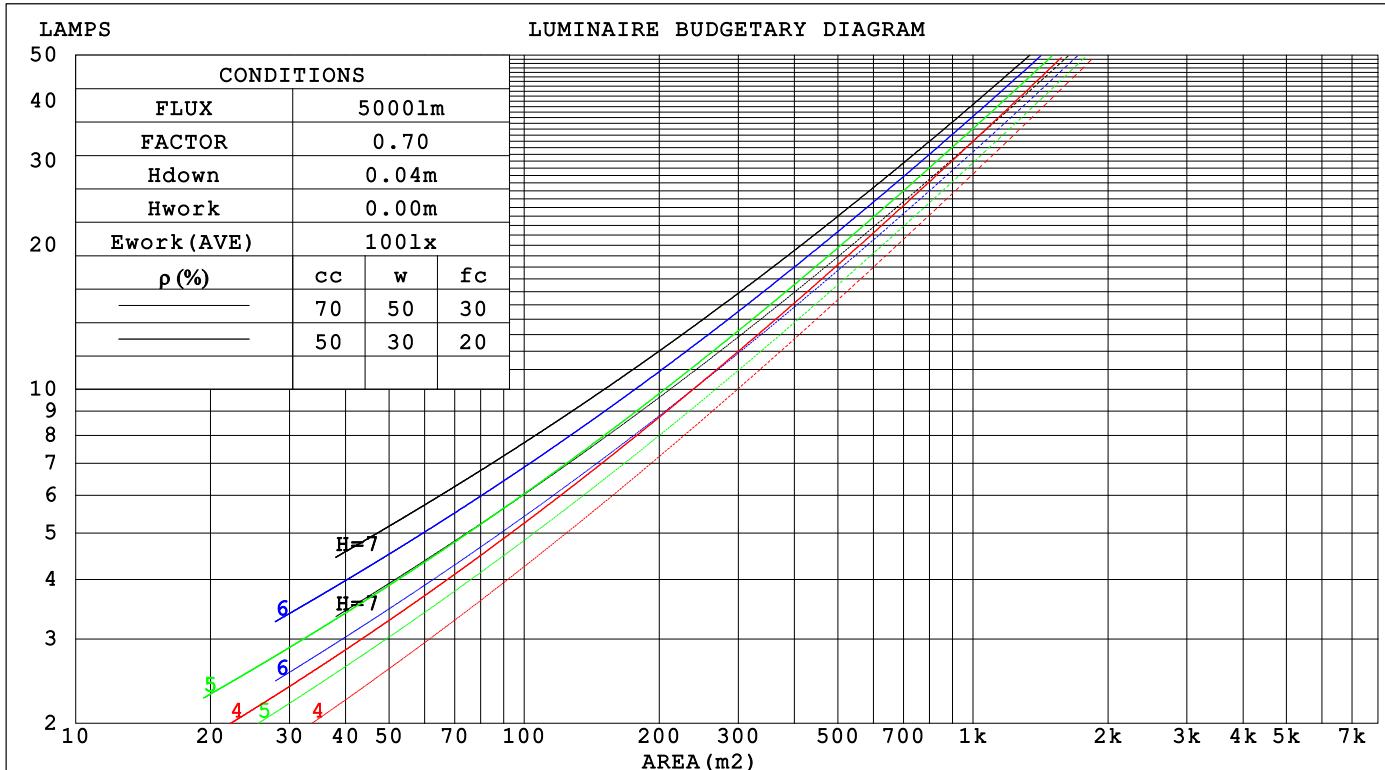
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γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.3000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:276.88V I:0.1137A P:30.236W PF:0.9600 Freq:60.01Hz		
Lamp Flux:3909.22x1 lm		
NAME: ASD-LTR-22A 30 277V 30W 5000K		
MFR.: EVERFINE		

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



C Range: 0 - 360DEG
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γ Range: 0 - 180DEG
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Humidity:65.0%
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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

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Lamp Flux:3909.22x1 lm		
NAME: ASD-LTR-22A 30 277V 30W 5000K		
MFR.: EVERFINE		

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.339	.193	.061	.332	.190	.060	.319	.183	.058	.306	.177	.057	.295	.171	.055		
2.0	.314	.172	.053	.307	.169	.052	.295	.164	.051	.284	.159	.050	.274	.155	.049		
3.0	.287	.153	.046	.281	.150	.045	.270	.147	.045	.261	.143	.044	.252	.139	.043		
4.0	.262	.136	.040	.257	.135	.040	.248	.131	.039	.239	.128	.039	.231	.125	.038		
5.0	.240	.123	.035	.236	.121	.035	.228	.119	.035	.220	.116	.035	.213	.114	.034		
6.0	.222	.111	.032	.218	.110	.032	.210	.108	.031	.204	.106	.031	.197	.104	.031		
7.0	.205	.102	.029	.202	.101	.029	.195	.099	.028	.189	.097	.028	.183	.095	.028		
8.0	.191	.093	.026	.188	.093	.026	.182	.091	.026	.177	.089	.026	.171	.088	.026		
9.0	.179	.086	.024	.176	.086	.024	.171	.084	.024	.166	.083	.024	.161	.082	.024		
10.0	.168	.080	.022	.165	.080	.022	.160	.079	.022	.156	.077	.022	.152	.076	.022		

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.191	.191	.191	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020		
1.0	.183	.156	.132	.156	.134	.114	.107	.092	.079	.062	.053	.046	.020	.017	.015		
2.0	.175	.132	.096	.150	.114	.083	.103	.079	.058	.059	.046	.034	.019	.015	.011		
3.0	.168	.115	.072	.144	.099	.063	.099	.069	.044	.057	.040	.026	.018	.013	.008		
4.0	.160	.102	.057	.138	.088	.049	.095	.061	.035	.055	.036	.021	.018	.012	.007		
5.0	.153	.091	.046	.131	.079	.040	.090	.055	.028	.052	.032	.017	.017	.011	.006		
6.0	.145	.083	.038	.125	.072	.033	.086	.050	.024	.050	.030	.014	.016	.010	.005		
7.0	.138	.076	.033	.119	.066	.028	.082	.046	.020	.048	.027	.012	.015	.009	.004		
8.0	.132	.070	.028	.113	.061	.025	.078	.043	.018	.046	.025	.010	.015	.008	.003		
9.0	.125	.065	.025	.108	.057	.022	.075	.040	.015	.044	.024	.009	.014	.008	.003		
10.0	.119	.061	.022	.103	.053	.019	.071	.037	.014	.042	.022	.008	.014	.007	.003		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-04-09

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.3000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

Test:U:276.88V I:0.1137A P:30.236W PF:0.9600 Freq:60.01Hz Lamp Flux:3909.22x1 lm		
NAME: ASD-LTR-22A 30 277V 30W 5000K		
MFR.: EVERFINE		

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) $k(RI) \times RCR = 5$									
$k = 0.60$	55	43	36	54	43	36	53	42	36	29
0.80	65	53	45	64	52	45	62	52	45	37
1.00	73	62	54	72	61	53	70	62	53	45
1.25	80	69	62	79	68	61	76	67	60	53
1.50	86	75	67	84	74	67	81	72	66	58
2.00	93	83	76	91	82	76	87	80	74	66
2.50	97	88	82	95	87	81	91	84	79	70
3.00	101	93	87	98	91	86	94	88	84	75
4.00	105	99	93	102	97	92	98	93	89	80
5.00	107	102	98	105	100	96	100	97	93	84
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

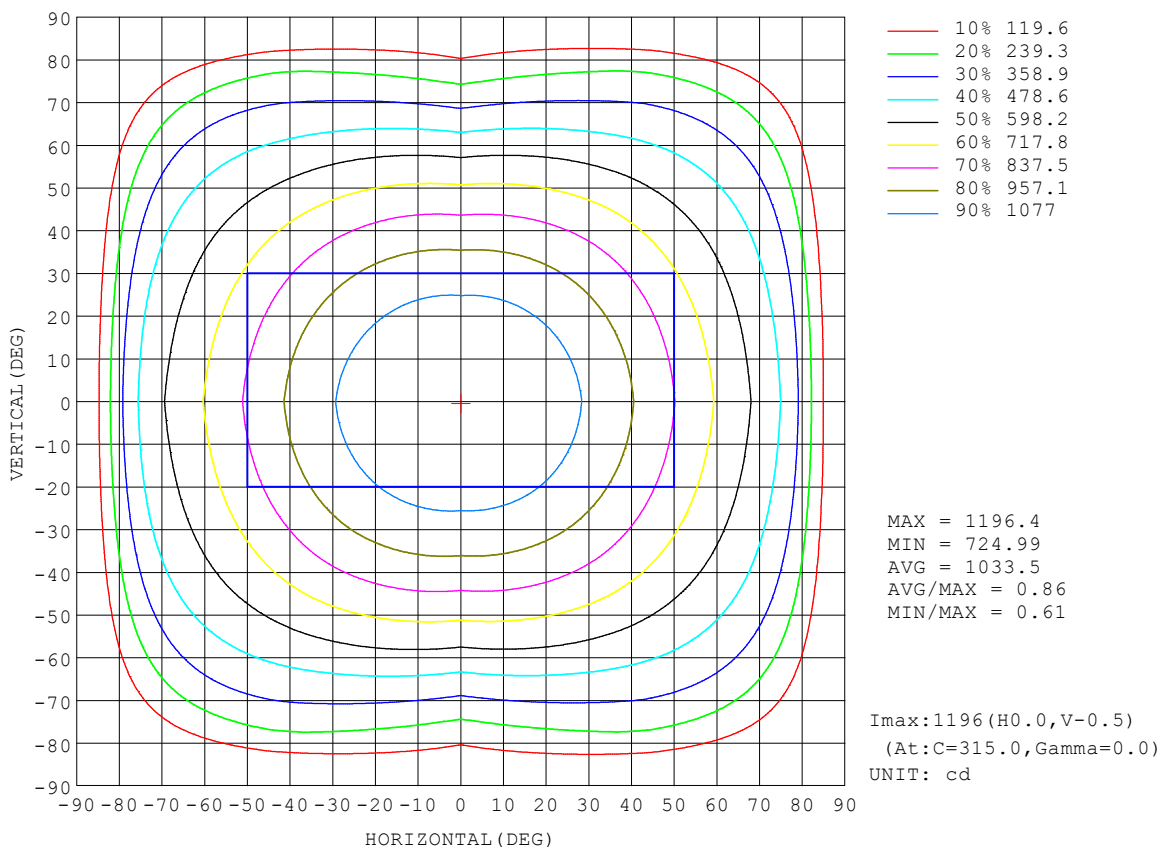
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: DAMIN
 Test Date: 2024-04-09

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 γ Interval: 5.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.464
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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Test:U:276.88V I:0.1137A P:30.236W PF:0.9600 Freq:60.01Hz Lamp Flux:3909.22x1 lm		
NAME: ASD-LTR-22A 30 277V 30W 5000K		
MFR.: EVERFINE		



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3°C
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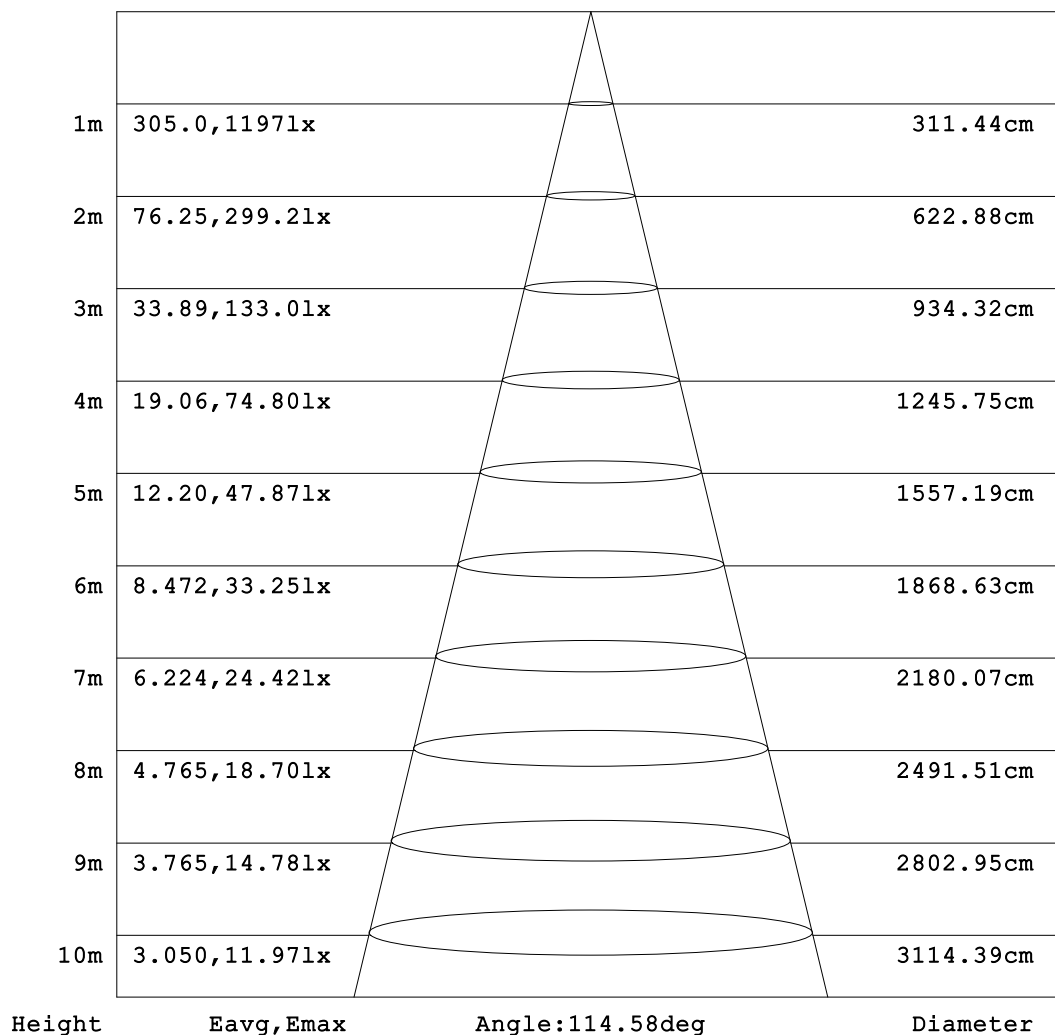
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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:276.88V I:0.1137A P:30.236W PF:0.9600 Freq:60.01Hz Lamp Flux:3909.22x1 lm		
NAME: ASD-LTR-22A 30 277V 30W 5000K		
MFR.: EVERFINE		

Flux out:2874 lm



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

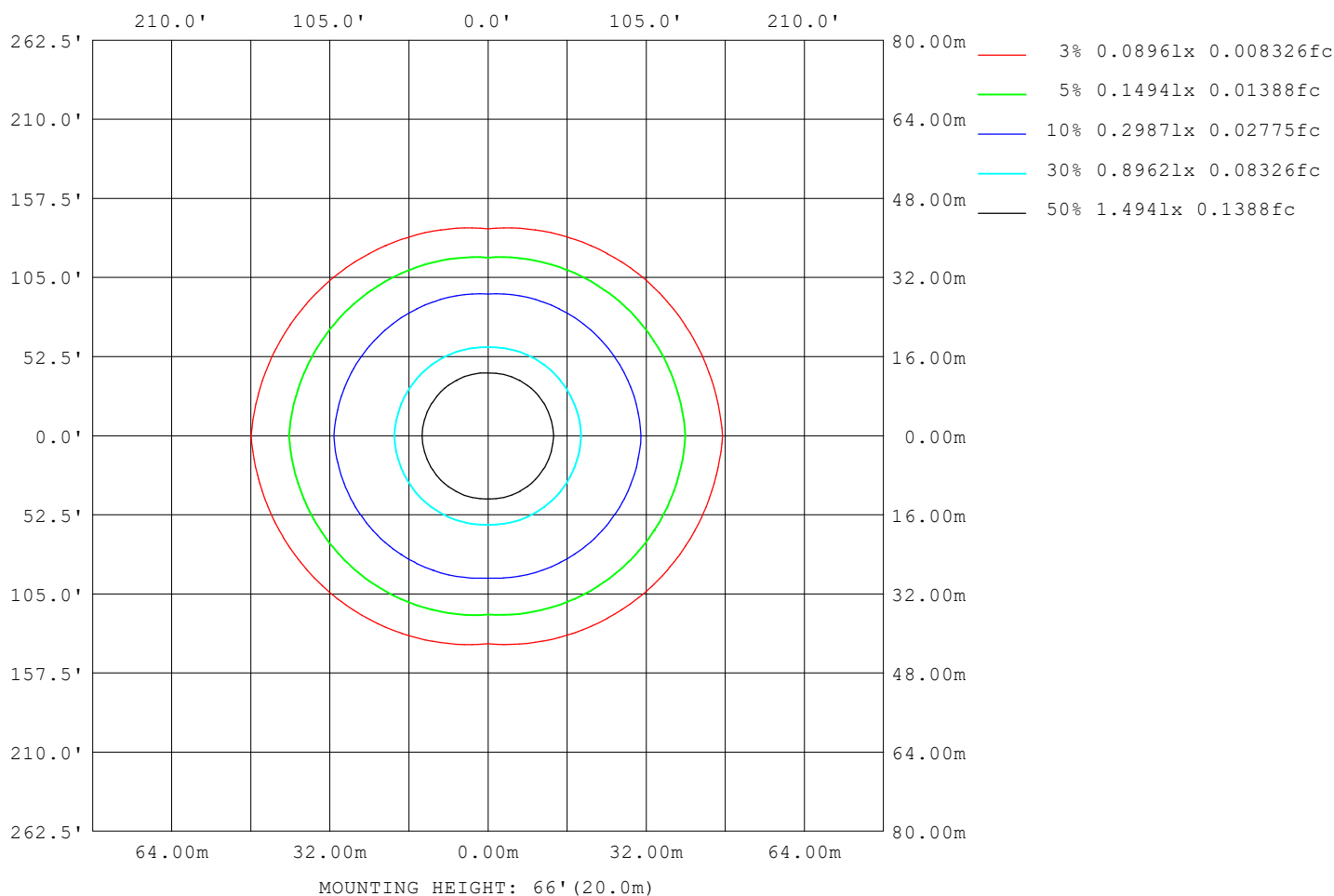
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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Test:U:276.88V I:0.1137A P:30.236W PF:0.9600 Freq:60.01Hz Lamp Flux:3909.22x1 lm		
NAME: ASD-LTR-22A 30 277V 30W 5000K		
MFR.: EVERFINE		



C Range: 0 - 360DEG
C Interval: 45.0DEG
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Temperature:25.3°C
Operators:DAMIN
Test Date:2024-04-09

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.3000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LED Avg.L Report

Test:U:276.88V I:0.1137A P:30.236W PF:0.9600 Freq:60.01Hz Lamp Flux:3909.22x1 lm		
NAME: ASD-LTR-22A 30 277V 30W 5000K		
MFR.: EVERFINE		

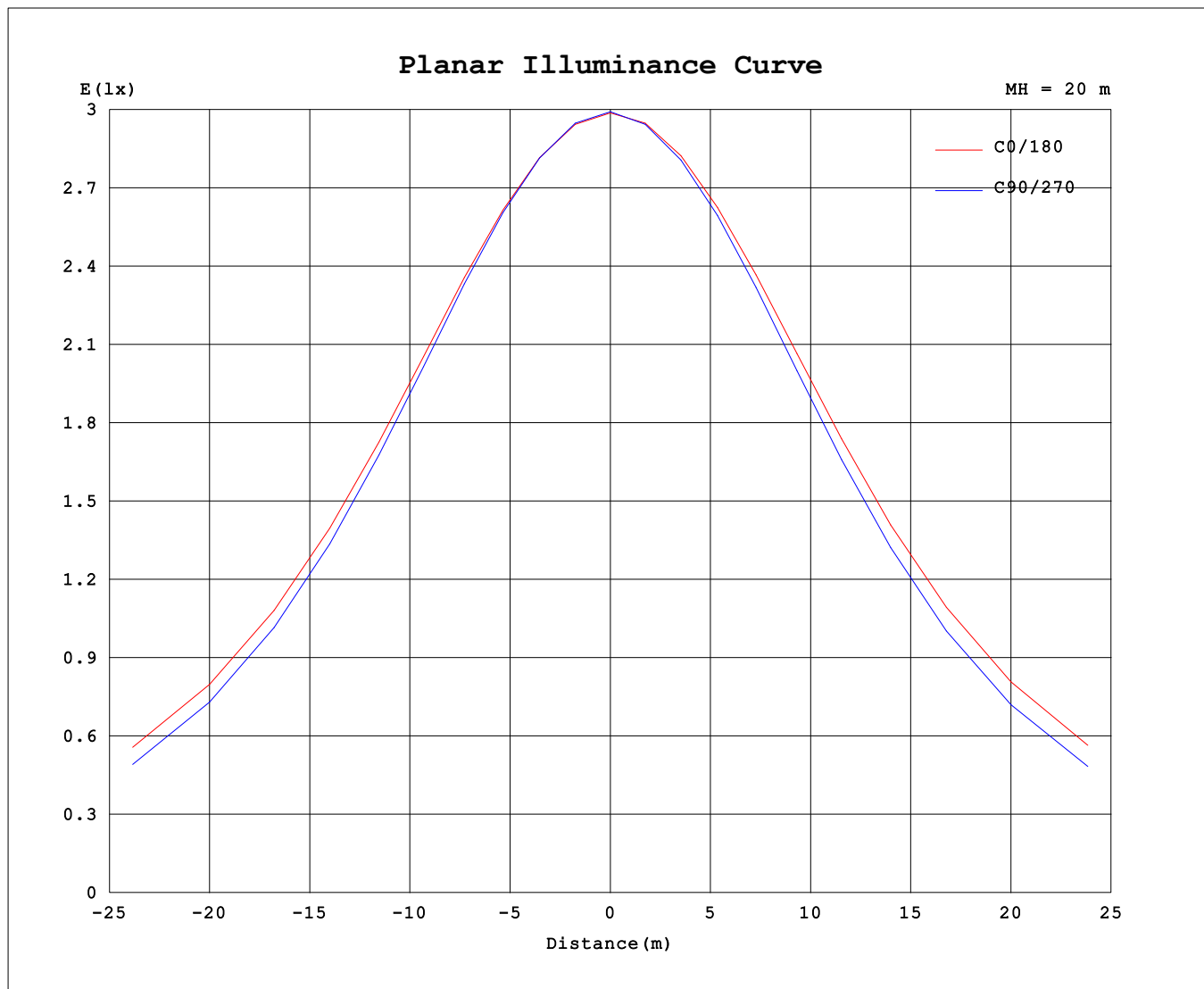
AvgL	cd/m2
L_0~180 (65) av	15807
L_0~180 (75) av	19318
L_0~180 (85) av	13293
L_90~270 (65) av	10666
L_90~270 (75) av	8887
L_90~270 (85) av	5260
L_45 (65) av	13296
L_45 (75) av	14574
L_45 (85) av	11677

Standard: GB/T 29293-2012

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Remarks:

Planar Illuminance Curve



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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

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Lamp Flux:3909.22x1 lm		
NAME: ASD-LTR-22A 30 277V 30W 5000K		
MFR.: EVERFINE		

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	45	90	135	180	225	270	315										
0	1196	1196	1196	1196	1196	1196	1196	1196										
5	1192	1192	1192	1193	1194	1191	1190	1191										
10	1180	1179	1178	1181	1183	1178	1174	1177										
15	1162	1159	1155	1162	1166	1158	1151	1156										
20	1137	1131	1124	1134	1142	1129	1117	1126										
25	1104	1094	1082	1098	1111	1092	1074	1089										
30	1064	1050	1032	1055	1072	1046	1021	1043										
35	1017	997	972	1002	1026	994	961	990										
40	964	936	903	943	974	933	892	930										
45	905	869	825	876	915	865	814	863										
50	840	795	740	802	853	791	729	789										
55	775	716	648	723	787	711	638	711										
60	709	634	549	640	723	629	540	629										
65	642	548	444	555	660	544	435	545										
70	569	461	335	467	590	457	328	458										
75	478	367	226	373	497	365	222	366										
80	333	261	126	263	332	259	124	261										
85	118	103	45.2	95.3	108	95.7	44.2	103										
90	4.07	3.33	1.55	2.93	2.02	1.26	0.11	2.11										
95	1.95	1.54	0.57	1.30	0.16	0.00	0.00	0.00										
100	1.06	0.65	0.16	0.65	0.08	0.00	0.00	0.00										
105	0.57	0.41	0.00	0.24	0.08	0.00	0.00	0.00										
110	0.49	0.24	0.00	0.16	0.08	0.00	0.00	0.00										
115	0.49	0.24	0.00	0.16	0.08	0.00	0.00	0.00										
120	0.49	0.32	0.00	0.16	0.08	0.00	0.00	0.00										
125	0.49	0.16	0.00	0.16	0.08	0.00	0.00	0.00										
130	0.49	0.16	0.00	0.16	0.08	0.00	0.00	0.08										
135	0.49	0.08	0.00	0.08	0.08	0.00	0.00	0.00										
140	0.49	0.00	0.00	0.00	0.08	0.00	0.00	0.00										
145	0.41	0.00	0.00	0.00	0.08	0.08	0.00	0.00										
150	0.41	0.00	0.00	0.00	0.08	0.16	0.00	0.00										
155	0.41	0.00	0.00	0.00	0.16	0.16	0.00	0.00										
160	0.41	0.00	0.00	0.00	0.24	0.16	0.00	0.00										
165	0.41	0.00	0.00	0.00	0.32	0.41	0.00	0.00										
170	0.41	0.00	0.00	0.00	0.32	0.41	0.00	0.00										
175	0.41	0.00	0.00	0.00	0.32	0.41	0.00	0.00										
180	0.41	0.00	0.00	0.00	0.32	0.41	0.00	0.00										

C Range: 0 - 360DEG
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