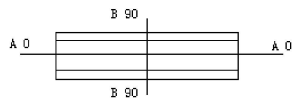
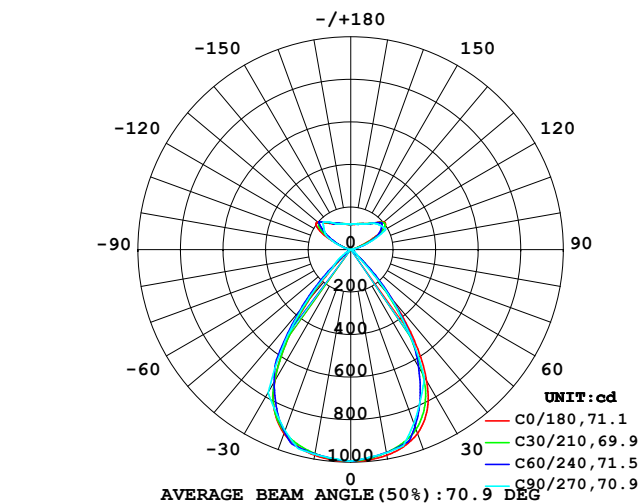


LUMINAIRE PHOTOMETRIC TEST REPORT

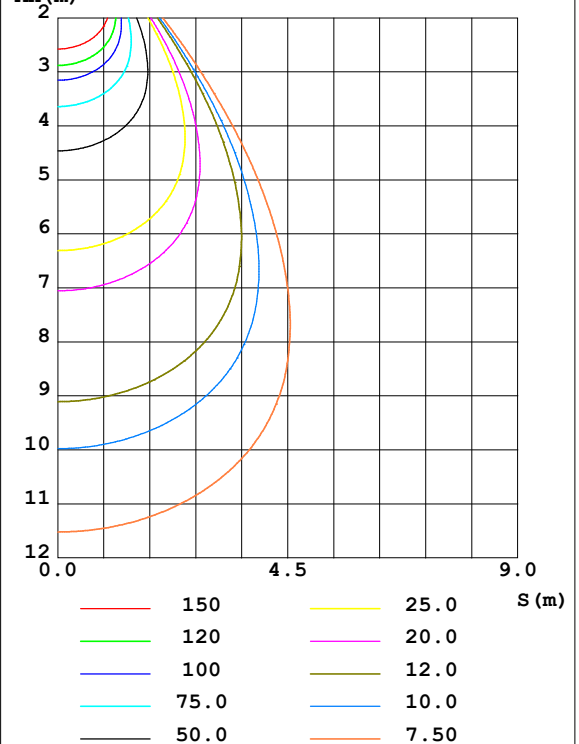
Test:U:24.00V I:0.5020A P:12.000W PF:1.000 Freq:0Hz		
Lamp Flux:1810.23x1 lm		
Name: Lumatree Wall	Type: LED	
MFR.:		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 150.85 lm/W			
MODEL		I _{max} (cd)	995.3	S/MH (C0/180)	1.04
NOMINAL POWER (W)	12	LOR (%)	100.0	S/MH (C90/270)	1.05
RATED VOLTAGE (V)	24	TOTAL FLUX (lm)	1810.2	η UP, DN (C0-180)	18.1, 31.3
NOMINAL FLUX (lm)	1810.23	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	16.6, 34.0
LAMPS INSIDE	1	η up (%)	34.8	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	24	η down (%)	65.2	CIBSE SHR MAX	1.05

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2026-06-03

γ Range: -180 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity: 65.0%
Test Distance: 8.000m [K=0.7125]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	981.2	967.9	969.7	967.9	981.2	973.9	977.0	973.9	0- 10	93.70	93.70	5.18,5.18
20	919.3	908.5	869.1	908.5	919.3	924.5	904.3	924.5	10- 20	267.4	361.1	19.9,19.9
30	715.5	634.5	693.6	634.5	715.5	697.2	777.1	697.2	20- 30	371.5	732.5	40.5,40.5
40	297.5	247.8	272.2	247.8	297.5	339.8	340.6	339.8	30- 40	312.3	1045	57.7,57.7
50	29.60	47.61	42.78	47.61	29.60	72.09	83.53	72.09	40- 50	109.0	1154	63.7,63.7
60	6.132	6.581	5.448	6.581	6.132	8.095	5.905	8.095	50- 60	18.55	1172	64.8,64.8
70	3.003	3.251	3.617	3.251	3.003	2.660	3.173	2.660	60- 70	4.300	1177	65,65
80	1.860	2.175	2.470	2.175	1.860	1.452	1.511	1.452	70- 80	2.470	1179	65.1,65.1
90	2.025	1.879	2.006	1.879	2.025	1.005	0.9178	1.005	80- 90	1.812	1181	65.2,65.2
100	5.421	6.429	11.41	6.429	5.421	3.491	5.822	3.491	90-100	3.799	1185	65.4,65.4
110	40.41	55.46	74.34	55.46	40.41	34.67	50.27	34.67	100-110	22.39	1207	66.7,66.7
120	156.1	160.7	190.8	160.7	156.1	133.6	134.3	133.6	110-120	96.96	1304	72,72
130	202.2	197.8	179.3	197.8	202.2	195.0	167.7	195.0	120-130	160.4	1464	80.9,80.9
140	163.0	159.9	162.0	159.9	163.0	164.3	170.1	164.3	130-140	139.8	1604	88.6,88.6
150	141.6	141.6	139.0	141.6	141.6	143.4	141.5	143.4	140-150	95.65	1700	93.9,93.9
160	130.0	128.9	128.9	128.9	130.0	129.7	130.9	129.7	150-160	62.88	1763	97.4,97.4
170	122.1	123.0	122.6	123.0	122.1	123.1	123.4	123.1	160-170	35.81	1799	99.4,99.4
180	119.4	119.9	119.9	119.9	119.4	118.9	118.9	118.9	170-180	11.59	1810	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1122.6 lm

%lum = 62.0%

%lamp = 62.0%

Conical surface Flux(120deg): 1172.4 lm

%lum = 64.8%

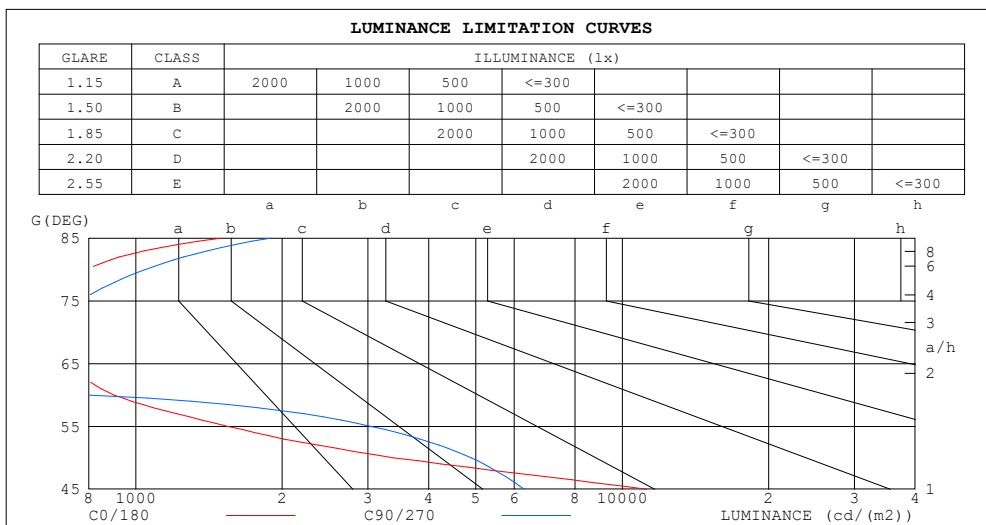
%lamp = 64.8%

C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2026-06-03

γ Range:-180 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity:65.0%
 Test Distance:8.000m [K=0.7125]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.5020A P:12.000W PF:1.000 Freq:0Hz Lamp Flux:1810.23x1 lm		
Name: Lumatree Wall	Type: LED	
MFR.:		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1493	1887
80	788	1046
75	643	767
70	646	778
65	726	787
60	902	801
55	1547	3048
50	3386	4893
45	11214	6286

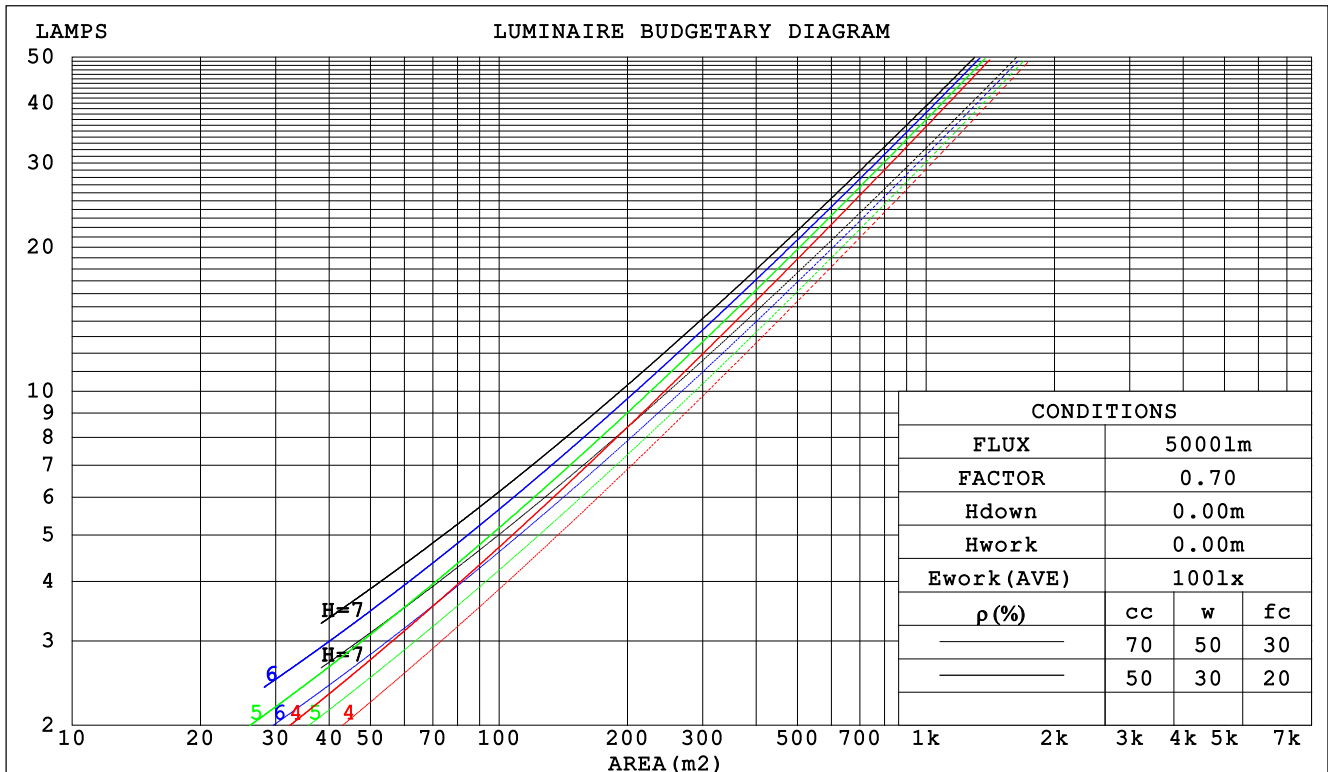
C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2026-06-03

γ Range:-180 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.5020A P:12.000W PF:1.000 Freq:0Hz		
Lamp Flux:1810.23x1 lm		
Name: Lumatree Wall	Type: LED	
MFR.:		

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	1.11	1.11	1.11	1.04	1.04	1.04	.92	.92	.92	.80	.80	.80	.70	.70	.70	.65
1.0	1.01	.98	.95	.95	.92	.90	.85	.83	.81	.75	.74	.73	.66	.65	.65	.60
2.0	.91	.87	.83	.87	.83	.79	.78	.75	.72	.70	.68	.66	.62	.61	.59	.56
3.0	.83	.78	.73	.79	.74	.70	.72	.68	.65	.65	.62	.59	.58	.56	.54	.51
4.0	.76	.70	.65	.73	.67	.63	.66	.62	.58	.60	.57	.54	.54	.52	.50	.47
5.0	.70	.64	.59	.67	.61	.57	.61	.57	.53	.56	.52	.50	.51	.48	.46	.44
6.0	.65	.58	.53	.62	.56	.52	.57	.52	.48	.52	.48	.45	.48	.45	.43	.40
7.0	.60	.53	.48	.57	.51	.47	.53	.48	.44	.49	.45	.42	.45	.42	.39	.37
8.0	.55	.49	.44	.53	.47	.43	.49	.44	.41	.46	.42	.39	.42	.39	.37	.35
9.0	.52	.45	.41	.50	.44	.40	.46	.41	.38	.43	.39	.36	.40	.36	.34	.32
10.0	.48	.42	.38	.46	.41	.37	.43	.38	.35	.40	.36	.33	.37	.34	.32	.30



C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2026-06-03

γ Range:-180 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

WEC AND CCEC

Test:U:24.00V I:0.5020A P:12.000W PF:1.000 Freq:0Hz		
Lamp Flux:1810.23x1 lm		
Name: Lumatree Wall	Type: LED	
MFR.:		

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	.213	.121	.038	.196	.112	.035	.163	.094	.030	.133	.077	.025	.106	.061	.020		
2.0	.201	.110	.034	.186	.102	.031	.156	.087	.027	.130	.073	.023	.105	.059	.019		
3.0	.190	.101	.030	.175	.094	.028	.149	.081	.025	.125	.068	.021	.102	.056	.017		
4.0	.179	.093	.027	.166	.087	.026	.142	.075	.022	.120	.064	.019	.099	.054	.016		
5.0	.169	.086	.025	.157	.081	.024	.135	.070	.021	.115	.061	.018	.096	.051	.015		
6.0	.160	.080	.023	.149	.075	.022	.129	.066	.019	.110	.057	.017	.092	.049	.014		
7.0	.152	.075	.021	.142	.071	.020	.123	.062	.018	.105	.054	.016	.089	.046	.014		
8.0	.144	.070	.020	.135	.066	.019	.117	.059	.017	.101	.051	.015	.086	.044	.013		
9.0	.137	.066	.018	.128	.063	.018	.112	.055	.016	.097	.049	.014	.083	.042	.012		
10.0	.130	.063	.017	.122	.059	.017	.107	.053	.015	.093	.046	.013	.080	.040	.011		

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	.455	.455	.455	.389	.389	.389	.266	.266	.266	.153	.153	.153	.049	.049	.049	
1.0	.441	.424	.409	.377	.364	.352	.258	.250	.243	.148	.145	.142	.048	.047	.046	
2.0	.429	.401	.378	.367	.345	.327	.252	.239	.228	.145	.139	.134	.047	.045	.044	
3.0	.419	.384	.356	.359	.331	.309	.247	.230	.216	.143	.134	.128	.046	.044	.042	
4.0	.411	.371	.340	.353	.320	.296	.243	.223	.208	.140	.131	.123	.045	.043	.040	
5.0	.404	.361	.329	.347	.312	.286	.239	.218	.202	.138	.128	.120	.045	.042	.039	
6.0	.397	.352	.320	.341	.305	.279	.236	.214	.197	.137	.126	.117	.044	.041	.039	
7.0	.391	.346	.314	.337	.300	.273	.233	.210	.194	.135	.124	.115	.044	.041	.038	
8.0	.386	.340	.308	.332	.295	.269	.230	.207	.191	.134	.122	.114	.043	.040	.038	
9.0	.381	.335	.305	.328	.291	.266	.228	.205	.189	.133	.121	.112	.043	.040	.037	
10.0	.377	.332	.301	.325	.288	.263	.225	.203	.187	.131	.120	.111	.043	.039	.037	

C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2026-06-03

γ Range:-180 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity:65.0%
 Test Distance:8.000m [K=0.7125]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.5020A P:12.000W PF:1.000 Freq:0Hz		
Lamp Flux:1810.23x1 lm		
Name: Lumatree Wall	Type: LED	
MFR.:		

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	15.3	16.1	15.9	16.7	17.5	15.5	16.4	16.2	17.0	17.8
3H	15.0	15.7	15.7	16.4	17.2	15.3	16.0	16.0	16.7	17.5
4H	14.8	15.5	15.6	16.3	17.1	15.1	15.8	15.9	16.5	17.4
6H	14.7	15.3	15.5	16.1	17.0	15.0	15.6	15.7	16.4	17.2
8H	14.6	15.2	15.4	16.0	16.9	14.9	15.5	15.7	16.3	17.2
12H	14.6	15.2	15.3	15.9	16.8	14.9	15.5	15.6	16.2	17.1
4H 2H	14.8	15.5	15.6	16.2	17.1	15.1	15.8	15.8	16.5	17.4
3H	14.5	15.1	15.3	15.9	16.8	14.8	15.4	15.6	16.2	17.1
4H	14.4	14.9	15.2	15.7	16.7	14.7	15.2	15.5	16.0	16.9
6H	14.3	14.7	15.1	15.5	16.5	14.5	15.0	15.4	15.8	16.8
8H	14.2	14.6	15.0	15.4	16.4	14.5	14.9	15.3	15.7	16.7
12H	14.1	14.5	15.0	15.3	16.4	14.4	14.8	15.3	15.7	16.7
8H 4H	14.2	14.6	15.0	15.4	16.4	14.4	14.9	15.3	15.7	16.7
6H	14.0	14.4	14.9	15.2	16.3	14.3	14.7	15.2	15.5	16.6
8H	14.0	14.3	14.8	15.1	16.2	14.3	14.6	15.2	15.4	16.5
12H	13.9	14.2	14.8	15.1	16.2	14.2	14.5	15.1	15.4	16.5
12H 4H	14.1	14.5	14.9	15.3	16.3	14.4	14.7	15.2	15.6	16.6
6H	13.9	14.2	14.8	15.1	16.2	14.2	14.5	15.1	15.4	16.5
8H	13.9	14.1	14.8	15.0	16.1	14.2	14.4	15.1	15.3	16.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 3.4 / -11.3					+ 2.6 / - 9.5				
1.5H	+ 5.7 / -10.4					+ 5.2 / - 9.2				
2.0H	+ 6.9 / - 5.4					+ 4.1 / - 3.6				

CIE Pub.117, 1810 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 2.1)
Area: 0.0136 m2

C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2026-06-03

γ Range:-180 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.5020A P:12.000W PF:1.000 Freq:0Hz		
Lamp Flux:1810.23x1 lm		
Name: Lumatree Wall	Type: LED	
MFR.:		

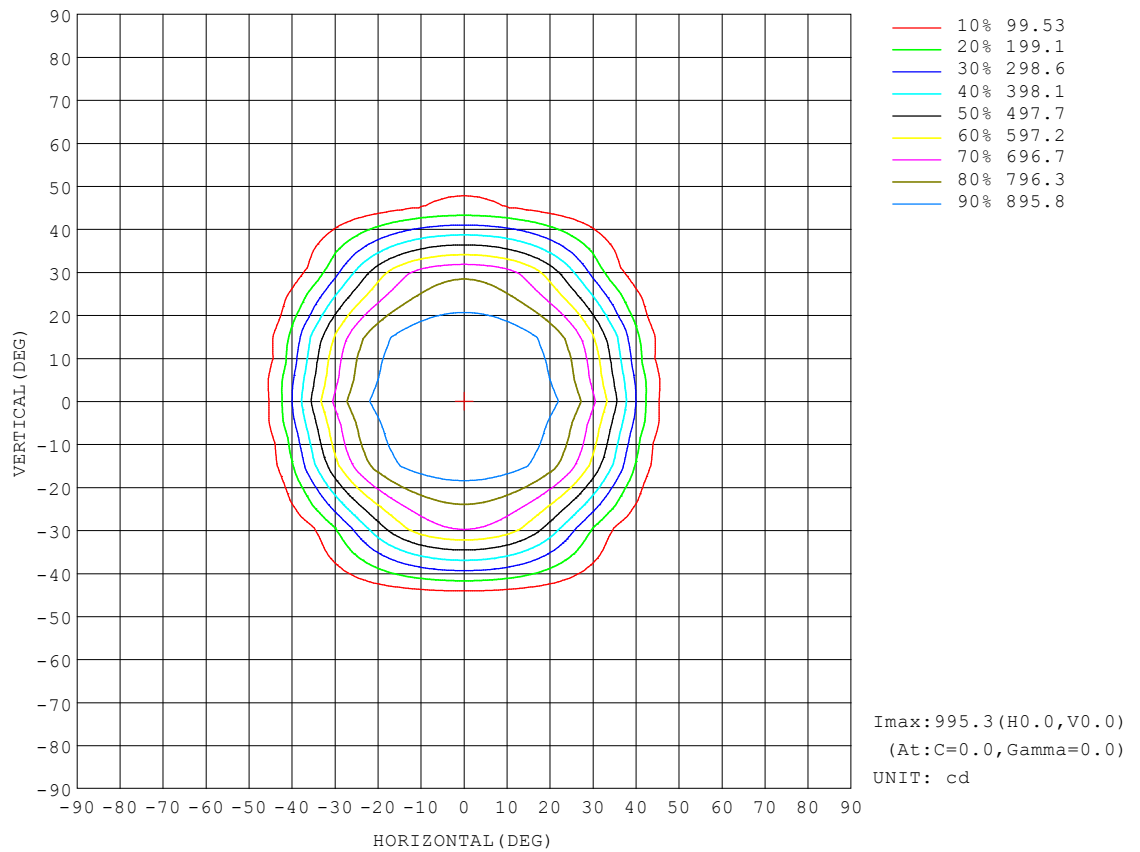
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	65	57	53	64	56	52	60	54	51	45
0.80	74	66	61	71	64	60	67	61	58	50
1.00	80	72	67	77	70	65	71	67	62	54
1.25	85	77	72	82	75	70	75	70	67	57
1.50	89	82	77	85	79	74	78	73	70	59
2.00	93	87	82	89	83	79	81	77	74	60
2.50	96	90	86	91	86	83	83	79	76	61
3.00	98	93	89	93	89	85	84	81	79	62
4.00	101	97	94	96	92	89	86	84	82	63
5.00	103	100	96	98	95	92	87	85	83	64
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2026-06-03

γ Range: -180 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity: 65.0%
 Test Distance: 8.000m [K=0.7125]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.5020A P:12.000W PF:1.000 Freq:0Hz		
Lamp Flux:1810.23x1 lm		
Name: Lumatree Wall	Type: LED	
MFR.:		

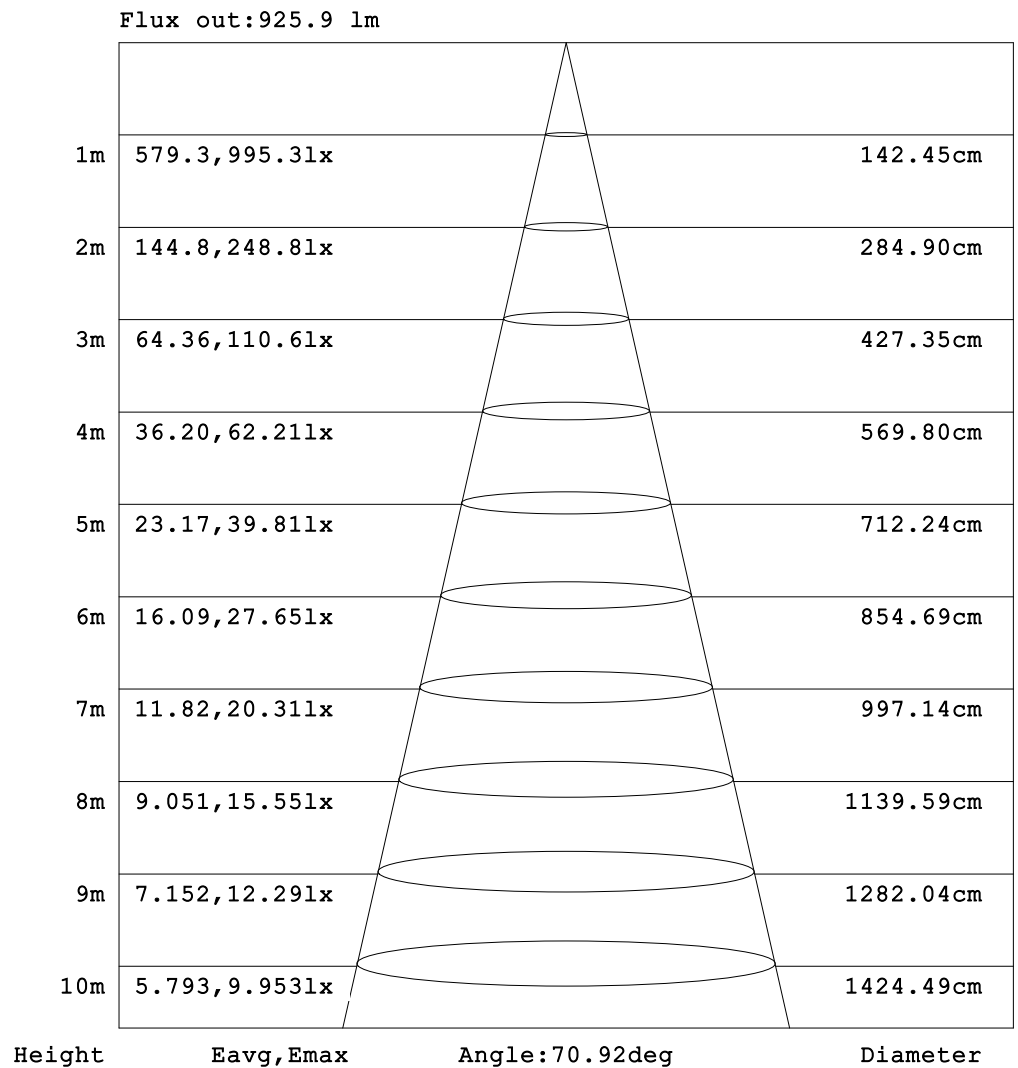


C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2026-06-03

γ Range:-180 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

AAI Figure

Test:U:24.00V I:0.5020A P:12.000W PF:1.000 Freq:0Hz		
Lamp Flux:1810.23x1 lm		
Name: Lumatree Wall	Type: LED	
MFR.:		



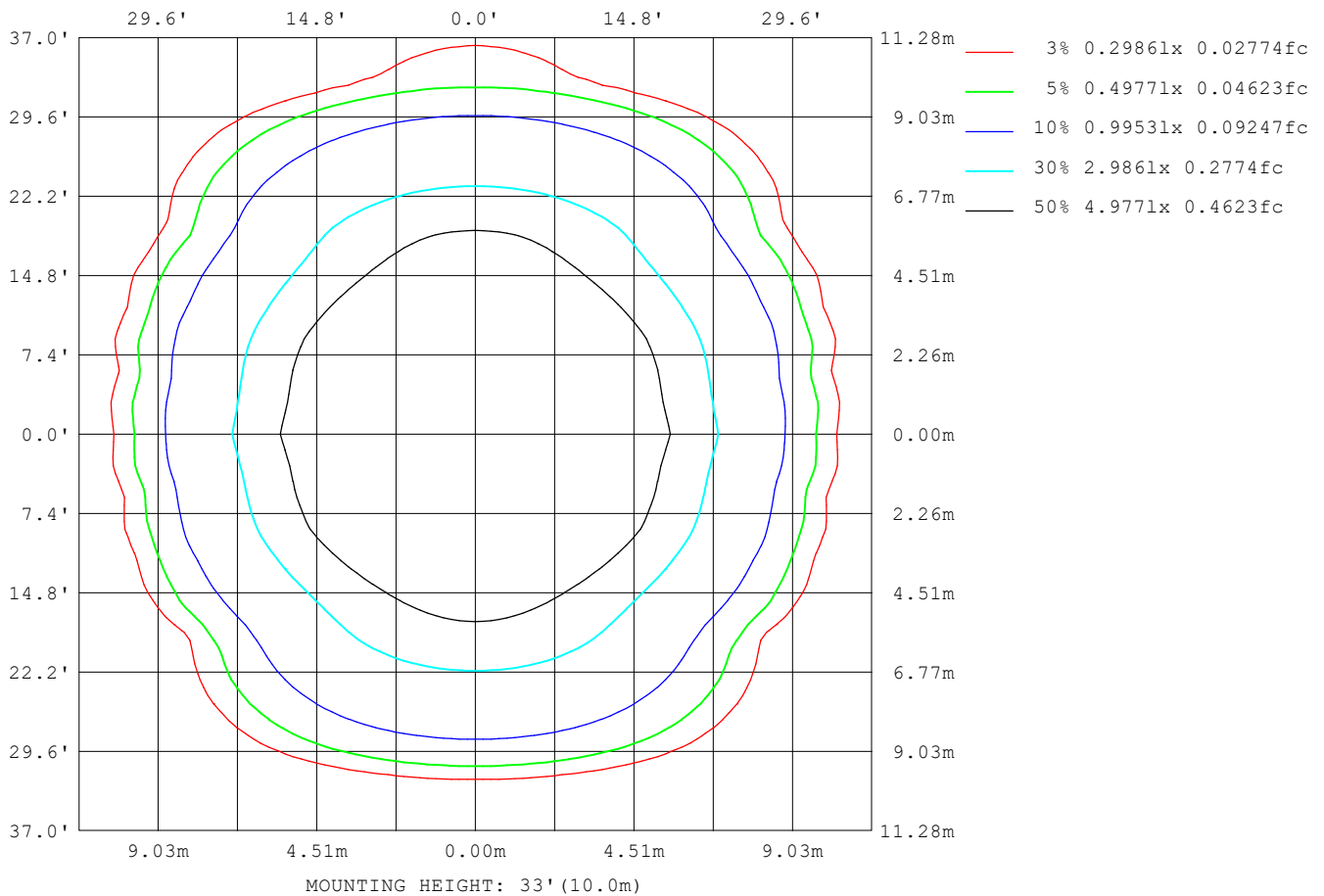
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2026-06-03

γ Range: -180 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity: 65.0%
 Test Distance: 8.000m [K=0.7125]
 Remarks:

ISOLUX DIAGRAM

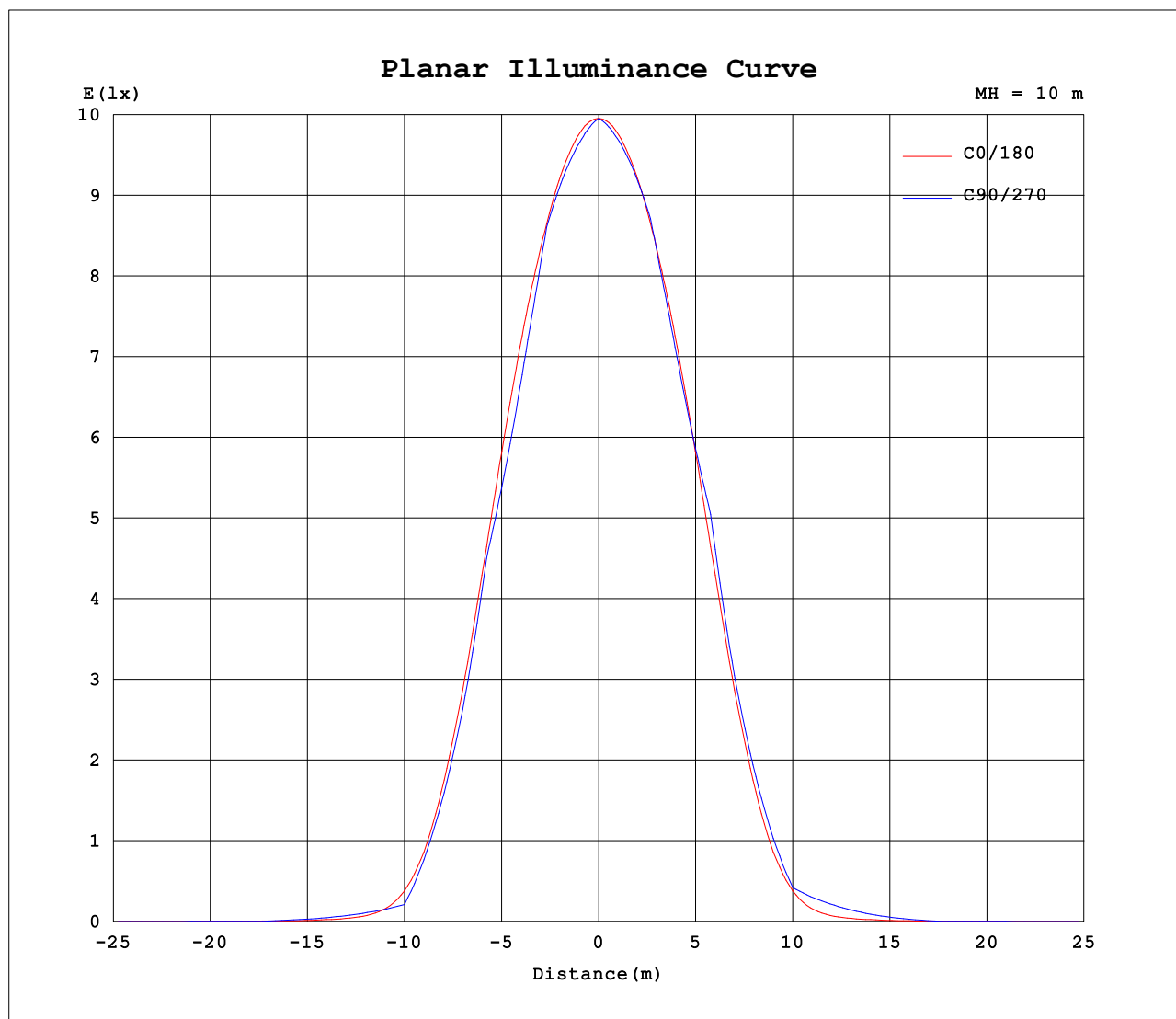
Test:U:24.00V I:0.5020A P:12.000W PF:1.000 Freq:0Hz		
Lamp Flux:1810.23x1 lm		
Name: Lumatree Wall	Type: LED	
MFR.:		



C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2026-06-03

γ Range:-180 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity:65.0%
 Test Distance:8.000m [K=0.7125]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2026-06-03

γ Range: -180 - 180DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity: 65.0%
Test Distance: 8.000m [K=0.7125]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.5020A P:12.000W PF:1.000 Freq:0Hz		
Lamp Flux:1810.23x1 lm		
Name: Lumatree Wall	Type: LED	
MFR.:		

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995
5	992	991	990	988	987	986	986	985	984	983	983	982	982	982	981	981	981	981	981
10	981	978	976	973	971	970	969	968	968	968	968	968	968	969	969	969	969	970	970
15	960	954	949	945	943	942	943	943	945	945	947	948	949	951	952	953	954	955	955
20	919	909	900	894	894	896	899	901	904	909	904	893	885	879	875	872	870	869	869
25	845	826	811	809	812	816	821	829	809	795	785	777	773	771	772	773	775	777	777
30	715	686	668	670	676	682	678	659	646	635	629	631	640	653	665	677	686	692	694
35	523	493	478	479	488	485	469	456	446	443	451	469	482	487	487	485	482	480	479
40	298	287	267	271	283	269	262	251	239	248	274	290	296	296	291	285	278	274	272
45	108	113	94.5	109	106	111	106	81.9	105	129	141	143	137	123	105	87.2	72.8	63.6	60.4
50	29.6	31.4	28.1	31.6	32.2	34.4	25.4	34.6	43.1	47.6	46.2	31.3	23.3	27.3	31.7	36.0	39.6	41.9	42.8
55	12.1	11.7	11.7	11.2	11.8	10.8	12.4	13.0	13.3	9.97	11.4	12.8	14.6	16.8	19.1	21.1	22.6	23.5	23.8
60	6.13	5.91	5.96	5.78	5.32	5.93	6.03	5.29	5.78	6.58	7.32	7.86	8.18	8.28	8.01	7.35	6.48	5.74	5.45
65	4.17	3.99	3.82	3.59	3.72	3.74	3.79	3.96	4.20	4.42	4.37	4.04	4.12	4.21	4.29	4.37	4.45	4.50	4.52
70	3.00	2.80	2.70	2.72	2.78	2.94	3.07	3.15	3.20	3.25	3.31	3.35	3.40	3.44	3.48	3.53	3.57	3.60	3.62
75	2.26	2.12	2.06	2.18	2.34	2.46	2.55	2.60	2.64	2.67	2.69	2.70	2.70	2.69	2.69	2.68	2.69	2.70	2.70
80	1.86	1.71	1.81	2.00	2.11	2.14	2.15	2.16	2.14	2.17	2.22	2.27	2.31	2.34	2.37	2.40	2.43	2.46	2.47
85	1.77	1.71	1.93	1.98	1.96	1.95	1.94	1.97	1.99	2.02	2.06	2.09	2.11	2.13	2.16	2.18	2.21	2.23	2.24
90	2.02	2.17	2.09	2.02	1.93	1.89	1.86	1.85	1.87	1.88	1.90	1.91	1.92	1.93	1.95	1.96	1.98	2.00	2.01
95	2.74	2.38	2.43	2.57	2.41	2.63	2.92	3.26	3.63	4.09	4.58	4.97	5.35	5.71	6.05	6.33	6.56	6.71	6.76
100	5.42	5.19	5.12	5.59	6.03	6.82	7.53	7.47	6.17	6.43	7.35	8.11	8.84	9.53	10.2	10.7	11.1	11.3	11.4
105	13.5	15.5	15.8	15.6	18.2	17.6	18.0	20.8	24.3	27.6	29.4	29.4	28.0	25.6	22.8	20.1	18.0	16.7	16.3
110	40.4	39.1	39.6	43.4	44.7	49.6	52.1	50.4	47.5	55.5	63.0	69.4	73.6	75.6	76.0	75.6	75.0	74.5	74.3
115	94.5	94.5	97.4	101	101	101	108	110	107	104	105	113	122	127	130	132	133	133	133
120	156	158	165	165	167	165	164	179	171	161	154	152	156	163	171	179	185	189	191
125	198	204	208	200	205	203	198	196	205	211	194	182	177	176	177	180	183	185	186
130	202	205	203	201	201	201	198	195	195	198	199	199	192	184	181	179	179	179	179
135	182	183	183	180	181	181	180	178	178	179	180	180	180	178	177	175	174	173	173
140	163	164	164	163	161	163	163	162	160	160	162	163	163	163	163	163	162	162	162
145	150	151	151	151	150	149	151	150	150	149	148	148	149	149	150	150	150	150	150
150	142	143	143	143	142	141	141	142	142	142	141	141	140	140	140	139	139	139	139
155	135	136	136	136	136	136	135	134	135	135	135	135	135	134	134	134	134	134	134
160	130	131	131	131	131	131	131	130	129	129	129	129	129	129	129	129	129	129	129
165	126	126	126	126	126	126	126	126	126	126	125	125	125	125	124	124	124	124	124
170	122	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123
175	120	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121
180	119	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120

C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2026-06-03

γ Range:-180 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.5020A P:12.000W PF:1.000 Freq:0Hz																			
Lamp Flux:1810.23x1 lm																			
Name: Lumatree Wall										Type: LED									
MFR.:																			

Table--2

UNIT: cd

γ (DEG)	C (DEG)																			
	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	
0	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995	
5	981	981	981	981	982	982	982	983	983	984	985	986	986	987	988	990	991	992	991	
10	970	969	969	969	969	968	968	968	968	968	968	969	970	971	973	976	978	981	979	
15	955	954	953	952	951	949	948	947	945	945	943	943	942	943	945	949	954	960	955	
20	869	870	872	875	879	885	893	904	909	904	901	899	896	894	894	900	909	919	911	
25	777	775	773	772	771	773	777	785	795	809	829	821	816	812	809	811	826	845	831	
30	692	686	677	665	653	640	631	629	635	646	659	678	682	676	670	668	686	715	693	
35	480	482	485	487	487	482	469	451	443	446	456	469	485	488	479	478	493	523	503	
40	274	278	285	291	296	296	290	274	248	239	251	262	269	283	271	267	287	298	297	
45	63.6	72.8	87.2	105	123	137	143	141	129	105	81.9	106	111	106	109	94.5	113	108	120	
50	41.9	39.6	36.0	31.7	27.3	23.3	31.3	46.2	47.6	43.1	34.6	25.4	34.4	32.2	31.6	28.1	31.4	29.6	33.2	
55	23.5	22.6	21.1	19.1	16.8	14.6	12.8	11.4	9.97	13.3	13.0	12.4	10.8	11.8	11.2	11.7	11.7	12.1	12.1	
60	5.74	6.48	7.35	8.01	8.28	8.18	7.86	7.32	6.58	5.78	5.29	6.03	5.93	5.32	5.78	5.96	5.91	6.13	6.05	
65	4.50	4.45	4.37	4.29	4.21	4.12	4.04	4.37	4.42	4.20	3.96	3.79	3.74	3.72	3.59	3.82	3.99	4.17	4.05	
70	3.60	3.57	3.53	3.48	3.44	3.40	3.35	3.31	3.25	3.20	3.15	3.07	2.94	2.78	2.72	2.70	2.80	3.00	2.93	
75	2.70	2.69	2.68	2.69	2.69	2.70	2.70	2.69	2.67	2.64	2.60	2.55	2.46	2.34	2.18	2.06	2.12	2.26	2.18	
80	2.46	2.43	2.40	2.37	2.34	2.31	2.27	2.22	2.17	2.14	2.16	2.15	2.14	2.11	2.00	1.81	1.71	1.86	1.72	
85	2.23	2.21	2.18	2.16	2.13	2.11	2.09	2.06	2.02	1.99	1.97	1.94	1.95	1.96	1.98	1.93	1.71	1.77	1.51	
90	2.00	1.98	1.96	1.95	1.93	1.92	1.91	1.90	1.88	1.87	1.85	1.86	1.89	1.93	2.02	2.09	2.17	2.02	1.15	
95	6.71	6.56	6.33	6.05	5.71	5.35	4.97	4.58	4.09	3.63	3.26	2.92	2.63	2.41	2.57	2.43	2.38	2.74	1.94	
100	11.3	11.1	10.7	10.2	9.53	8.84	8.11	7.35	6.43	6.17	7.47	7.53	6.82	6.03	5.59	5.12	5.19	5.42	4.07	
105	16.7	18.0	20.1	22.8	25.6	28.0	29.4	29.4	27.6	24.3	20.8	18.0	17.6	18.2	15.6	15.8	15.5	13.5	12.7	
110	74.5	75.0	75.6	76.0	75.6	73.6	69.4	63.0	55.5	47.5	50.4	52.1	49.6	44.7	43.4	39.6	39.1	40.4	34.6	
115	133	133	132	130	127	122	113	105	104	107	110	108	101	101	101	97.4	94.5	94.5	86.2	
120	189	185	179	171	163	156	152	154	161	171	179	164	165	167	165	165	158	156	149	
125	185	183	180	177	176	177	182	194	211	205	196	198	203	205	200	208	204	198	196	
130	179	179	179	181	184	192	199	199	198	195	195	198	201	201	201	203	205	202	203	
135	173	174	175	177	178	180	180	180	179	178	178	180	181	181	180	183	183	182	182	
140	162	162	163	163	163	163	163	162	160	160	162	163	163	161	163	164	164	163	163	
145	150	150	150	150	149	149	148	148	149	150	150	151	149	150	151	151	151	150	150	
150	139	139	139	140	140	140	141	141	142	142	142	141	141	142	143	143	143	142	142	
155	134	134	134	134	134	135	135	135	135	135	134	135	136	136	136	136	136	135	135	
160	129	129	129	129	129	129	129	129	129	129	130	131	131	131	131	131	131	130	130	
165	124	124	124	124	125	125	125	125	126	126	126	126	126	126	126	126	126	126	125	
170	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	122	122	
175	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	120	120	
180	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	119	119	

C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2026-06-03

γ Range:-180 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.5020A P:12.000W PF:1.000 Freq:0Hz																			
Lamp Flux:1810.23x1 lm																			
Name: Lumatree Wall										Type: LED									
MFR.:																			

Table--3

UNIT: cd

C (DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995
5	990	990	989	988	988	987	987	986	986	986	986	985	985	985	985	985	985	985	985
10	977	976	975	974	973	973	974	974	974	975	975	976	976	976	977	977	977	977	977
15	952	950	948	949	950	952	954	956	957	959	961	963	964	965	966	966	967	966	966
20	905	902	904	908	912	915	919	925	923	916	912	909	907	905	905	904	904	904	905
25	821	823	830	837	844	853	841	833	829	826	825	828	830	833	835	837	838	837	835
30	684	693	705	716	717	707	702	697	699	707	721	736	751	762	770	775	777	775	770
35	499	510	525	529	523	519	519	527	547	575	580	577	572	566	560	557	555	557	560
40	289	305	325	314	314	314	319	340	360	368	369	366	359	352	346	342	341	342	346
45	107	134	132	141	140	128	159	185	194	193	184	169	153	138	128	122	120	122	128
50	32.5	39.3	40.8	45.1	38.0	54.5	67.1	72.1	68.2	49.1	42.7	51.8	61.3	70.1	77.3	81.9	83.5	81.9	77.3
55	13.0	12.7	14.3	13.4	16.6	18.2	19.3	14.0	16.6	19.8	24.4	29.7	34.7	38.9	41.7	43.4	43.9	43.4	41.7
60	6.30	6.24	5.93	6.74	6.80	6.00	6.89	8.09	9.28	10.5	11.5	11.9	11.3	9.93	8.07	6.51	5.90	6.51	8.07
65	3.95	3.81	3.85	3.81	3.72	3.86	4.22	4.47	4.22	3.52	3.64	3.79	3.98	4.18	4.36	4.47	4.52	4.47	4.36
70	2.83	2.80	2.77	2.76	2.77	2.75	2.65	2.66	2.69	2.72	2.78	2.84	2.92	3.00	3.10	3.15	3.17	3.15	3.10
75	2.13	2.15	2.12	2.09	2.07	2.06	2.04	2.01	1.99	1.97	1.96	1.93	1.89	1.85	1.84	1.81	1.81	1.81	1.84
80	1.70	1.63	1.62	1.58	1.56	1.54	1.46	1.45	1.46	1.47	1.49	1.49	1.50	1.49	1.50	1.51	1.51	1.51	1.50
85	1.34	1.28	1.23	1.23	1.24	1.25	1.24	1.23	1.22	1.22	1.22	1.23	1.22	1.21	1.22	1.21	1.21	1.21	1.22
90	1.14	1.12	1.09	1.07	1.06	1.05	1.03	1.01	0.99	0.98	0.96	0.96	0.95	0.94	0.93	0.92	0.92	0.92	0.93
95	1.57	1.54	1.36	1.50	1.68	1.91	2.05	2.23	2.43	2.61	2.80	2.93	3.15	3.26	3.34	3.38	3.40	3.38	3.34
100	3.69	3.77	3.72	4.42	4.83	4.66	3.57	3.49	3.91	4.28	4.66	4.95	5.34	5.54	5.69	5.79	5.82	5.79	5.69
105	12.0	11.1	12.6	12.0	12.2	13.4	15.7	16.8	17.5	17.0	16.3	15.0	13.3	11.4	9.81	8.75	8.38	8.75	9.81
110	32.5	32.8	32.1	35.4	37.9	35.9	31.4	34.7	38.1	41.1	44.7	47.5	48.9	49.6	50.0	50.2	50.3	50.2	50.0
115	83.5	83.3	79.8	78.2	79.7	82.6	81.2	75.6	69.6	67.4	76.0	81.2	85.6	88.8	91.0	92.3	92.8	92.3	91.0
120	149	144	143	139	133	139	140	134	126	120	118	118	121	125	130	133	134	133	130
125	196	188	191	189	178	174	182	194	183	169	159	153	150	149	150	151	151	151	150
130	203	200	198	199	198	190	189	195	200	203	195	183	176	172	169	168	168	168	169
135	184	182	183	184	184	183	180	182	184	186	186	186	186	185	184	184	184	184	184
140	164	164	164	166	166	166	165	164	166	167	168	169	170	170	170	170	170	170	170
145	151	152	151	151	153	153	153	152	151	151	152	153	154	155	155	155	155	155	155
150	142	143	142	142	142	143	143	143	143	143	143	142	142	142	142	142	141	142	142
155	136	136	136	136	135	135	135	136	136	136	136	136	136	136	136	136	136	136	136
160	130	130	131	131	131	130	130	130	130	130	130	130	131	131	131	131	131	131	131
165	126	126	126	126	126	126	126	126	126	126	126	126	125	125	125	125	125	125	125
170	122	122	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123
175	120	120	120	120	120	120	120	121	121	121	121	121	121	121	121	121	121	121	121
180	119	119	119	119	119	119	119	119	119	119	119	119	119	119	119	119	119	119	119

C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2026-06-03

γ Range:-180 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.5020A P:12.000W PF:1.000 Freq:0Hz																	
Lamp Flux:1810.23x1 lm																	
Name: Lumatree Wall									Type: LED								
MFR.:																	

Table--4

UNIT: cd

C (DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	995	995	995	995	995	995	995	995	995	995	995	995	995	995	995				
5	985	985	985	986	986	986	986	987	987	988	988	989	990	990	991				
10	976	976	976	975	975	974	974	974	973	973	974	975	976	977	979				
15	965	964	963	961	959	957	956	954	952	950	949	948	950	952	955				
20	905	907	909	912	916	923	925	919	915	912	908	904	902	905	911				
25	833	830	828	825	826	829	833	841	853	844	837	830	823	821	831				
30	762	751	736	721	707	699	697	702	707	717	716	705	693	684	693				
35	566	572	577	580	575	547	527	519	519	523	529	525	510	499	503				
40	352	359	366	369	368	360	340	319	314	314	314	325	305	289	297				
45	138	153	169	184	193	194	185	159	128	140	141	132	134	107	120				
50	70.1	61.3	51.8	42.7	49.1	68.2	72.1	67.1	54.5	38.0	45.1	40.8	39.3	32.5	33.2				
55	38.9	34.7	29.7	24.4	19.8	16.6	14.0	19.3	18.2	16.6	13.4	14.3	12.7	13.0	12.1				
60	9.93	11.3	11.9	11.5	10.5	9.28	8.09	6.89	6.00	6.80	6.74	5.93	6.24	6.30	6.05				
65	4.18	3.98	3.79	3.64	3.52	4.22	4.47	4.22	3.86	3.72	3.81	3.85	3.81	3.95	4.05				
70	3.00	2.92	2.84	2.78	2.72	2.69	2.66	2.65	2.75	2.77	2.76	2.77	2.80	2.83	2.93				
75	1.85	1.89	1.93	1.96	1.97	1.99	2.01	2.04	2.06	2.07	2.09	2.12	2.15	2.13	2.18				
80	1.49	1.50	1.49	1.49	1.47	1.46	1.45	1.46	1.54	1.56	1.58	1.62	1.63	1.70	1.72				
85	1.21	1.22	1.23	1.22	1.22	1.22	1.23	1.24	1.25	1.24	1.23	1.23	1.28	1.34	1.51				
90	0.94	0.95	0.96	0.96	0.98	0.99	1.01	1.03	1.05	1.06	1.07	1.09	1.12	1.14	1.15				
95	3.26	3.15	2.93	2.80	2.61	2.43	2.23	2.05	1.91	1.68	1.50	1.36	1.54	1.57	1.94				
100	5.54	5.34	4.95	4.66	4.28	3.91	3.49	3.57	4.66	4.83	4.42	3.72	3.77	3.69	4.07				
105	11.4	13.3	15.0	16.3	17.0	17.5	16.8	15.7	13.4	12.2	12.0	12.6	11.1	12.0	12.7				
110	49.6	48.9	47.5	44.7	41.1	38.1	34.7	31.4	35.9	37.9	35.4	32.1	32.8	32.5	34.6				
115	88.8	85.6	81.2	76.0	67.4	69.6	75.6	81.2	82.6	79.7	78.2	79.8	83.3	83.5	86.2				
120	125	121	118	118	120	126	134	140	139	133	139	143	144	149	149				
125	149	150	153	159	169	183	194	182	174	178	189	191	188	196	196				
130	172	176	183	195	203	200	195	189	190	198	199	198	200	203	203				
135	185	186	186	186	186	184	182	180	183	184	184	183	182	184	182				
140	170	170	169	168	167	166	164	165	166	166	166	164	164	164	163				
145	155	154	153	152	151	151	152	153	153	153	151	151	152	151	150				
150	142	142	142	143	143	143	143	143	143	142	142	142	143	142	142				
155	136	136	136	136	136	136	136	135	135	135	136	136	136	136	135				
160	131	131	130	130	130	130	130	130	130	131	131	131	130	130	130				
165	125	125	126	126	126	126	126	126	126	126	126	126	126	126	125				
170	123	123	123	123	123	123	123	123	123	123	123	123	122	122	122				
175	121	121	121	121	121	121	121	120	120	120	120	120	120	120	120				
180	119	119	119	119	119	119	119	119	119	119	119	119	119	119	119				

C Range: 0 - 90DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2026-06-03

γ Range:-180 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks: