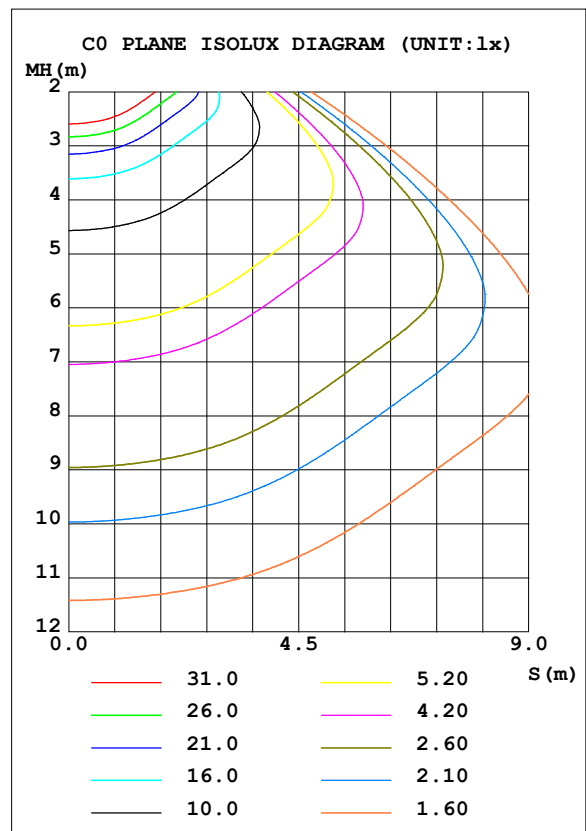
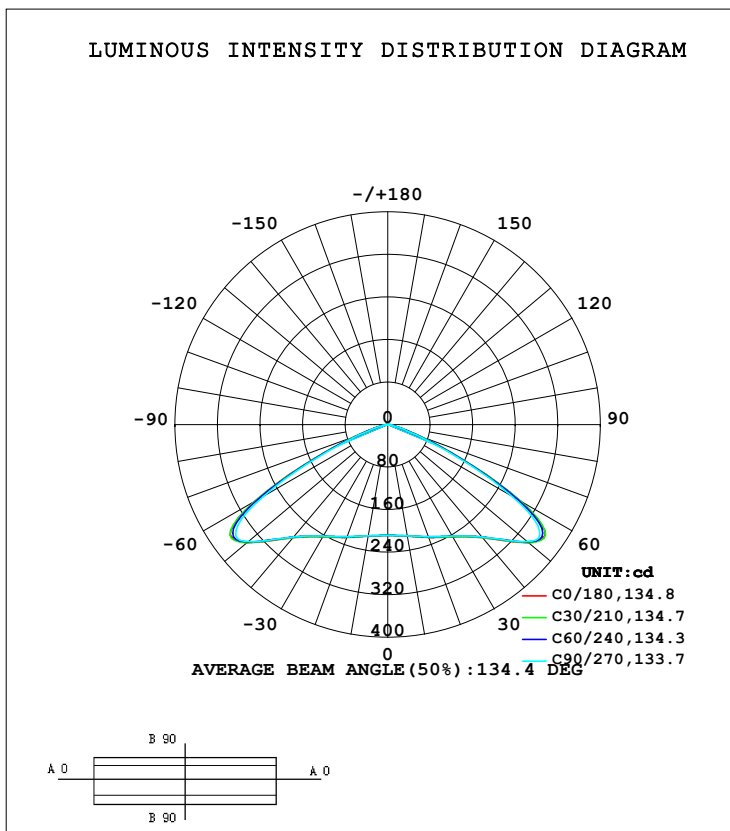


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.3358A P:8.0600W PF:1.000 Freq:0Hz Lamp Flux:1093.81x1 lm		
Name: Lumatree Table Wash	Type: LED	
MFR.:		

DATA OF LAMP			PHOTOMETRIC DATA Eff: 135.71 lm/W			
MODEL			Imax (cd)	363.4	S/MH (C0/180)	2.23
NOMINAL POWER (W)	8		LOR (%)	100.0	S/MH (C90/270)	2.19
RATED VOLTAGE (V)	24		TOTAL FLUX (lm)	1093.8	η UP, DN (C0-180)	0.3, 49.7
NOMINAL FLUX (lm)	1093.81		CIE CLASS	DIRECT	η UP, DN (C180-360)	0.3, 49.7
LAMPS INSIDE	1		η up (%)	0.5	CIBSE SHR NOM	2.00
TEST VOLTAGE (V)	24		η down (%)	99.5	CIBSE SHR MAX	2.00



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2026-06-03

```

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

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ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	213.0	212.7	212.4	212.7	213.0	212.7	212.4	212.7	0- 10	20.11	20.11	1.84,1.84
20	225.9	225.0	224.4	225.0	225.9	225.0	224.4	225.0	10- 20	62.08	82.19	7.51,7.51
30	244.1	242.8	242.2	242.8	244.1	242.8	242.2	242.8	20- 30	108.3	190.5	17.4,17.4
40	278.0	276.7	276.3	276.7	278.0	276.7	276.3	276.7	30- 40	162.3	352.8	32.3,32.3
50	345.3	344.2	342.4	344.2	345.3	344.2	342.4	344.2	40- 50	239.5	592.3	54.2,54.2
60	288.6	285.6	270.9	285.6	288.6	285.6	270.9	285.6	50- 60	306.5	898.8	82.2,82.2
70	66.23	62.11	57.84	62.11	66.23	62.11	57.84	62.11	60- 70	157.1	1056	96.5,96.5
80	8.970	7.895	7.154	7.895	8.970	7.895	7.154	7.895	70- 80	28.36	1084	99.1,99.1
90	1.092	1.167	1.182	1.167	1.092	1.167	1.182	1.167	80- 90	3.596	1088	99.5,99.5
100	0.8015	0.7882	0.7756	0.7882	0.8015	0.7882	0.7756	0.7882	90-100	0.9810	1089	99.5,99.5
110	0.8179	0.8279	0.8246	0.8279	0.8179	0.8279	0.8246	0.8279	100-110	0.8441	1090	99.6,99.6
120	0.8900	0.9178	0.9262	0.9178	0.8900	0.9178	0.9262	0.9178	110-120	0.8631	1091	99.7,99.7
130	0.9432	0.9895	1.002	0.9895	0.9432	0.9895	1.002	0.9895	120-130	0.8544	1091	99.8,99.8
140	0.9740	1.007	1.014	1.007	0.9740	1.007	1.014	1.007	130-140	0.7715	1092	99.9,99.9
150	1.047	1.065	1.064	1.065	1.047	1.065	1.064	1.065	140-150	0.6451	1093	99.9,99.9
160	1.150	1.167	1.163	1.167	1.150	1.167	1.163	1.167	150-160	0.5119	1093	100,100
170	1.317	1.307	1.296	1.307	1.317	1.307	1.296	1.307	160-170	0.3458	1094	100,100
180	1.437	1.438	1.416	1.438	1.437	1.438	1.416	1.438	170-180	0.1302	1094	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 460.67 lm

%lum = 42.1%

%lamp = 42.1%

Conical surface Flux(120deg): 898.85 lm

%lum = 82.2%

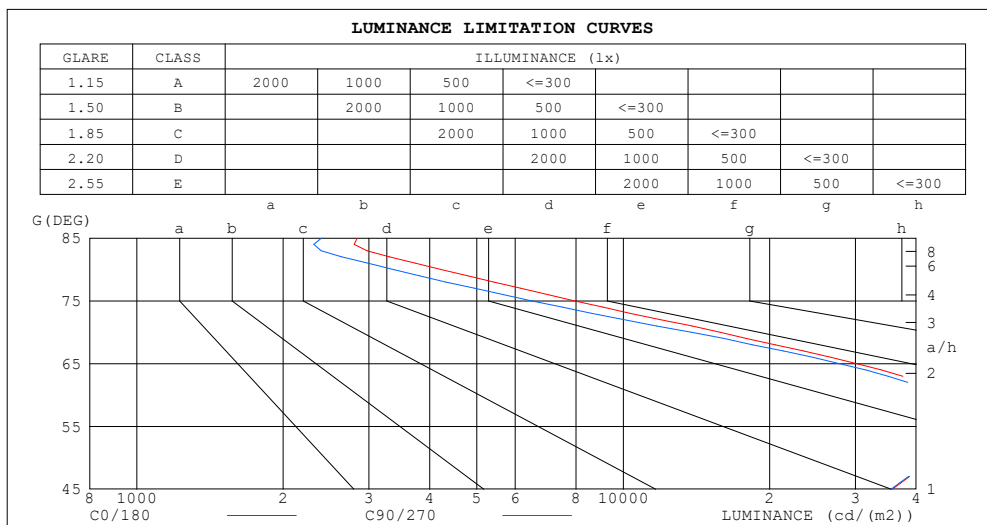
%lamp = 82.2%

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2026-06-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 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:0.3358A P:8.0600W PF:1.000 Freq:0Hz Lamp Flux:1093.81x1 lm		
Name: Lumatree Table Wash	Type: LED	
MFR.:		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2838	2395
80	4234	3377
75	7959	6502
70	15873	13861
65	30232	27889
60	47305	44403
55	51655	49817
50	44032	43658
45	35741	35495

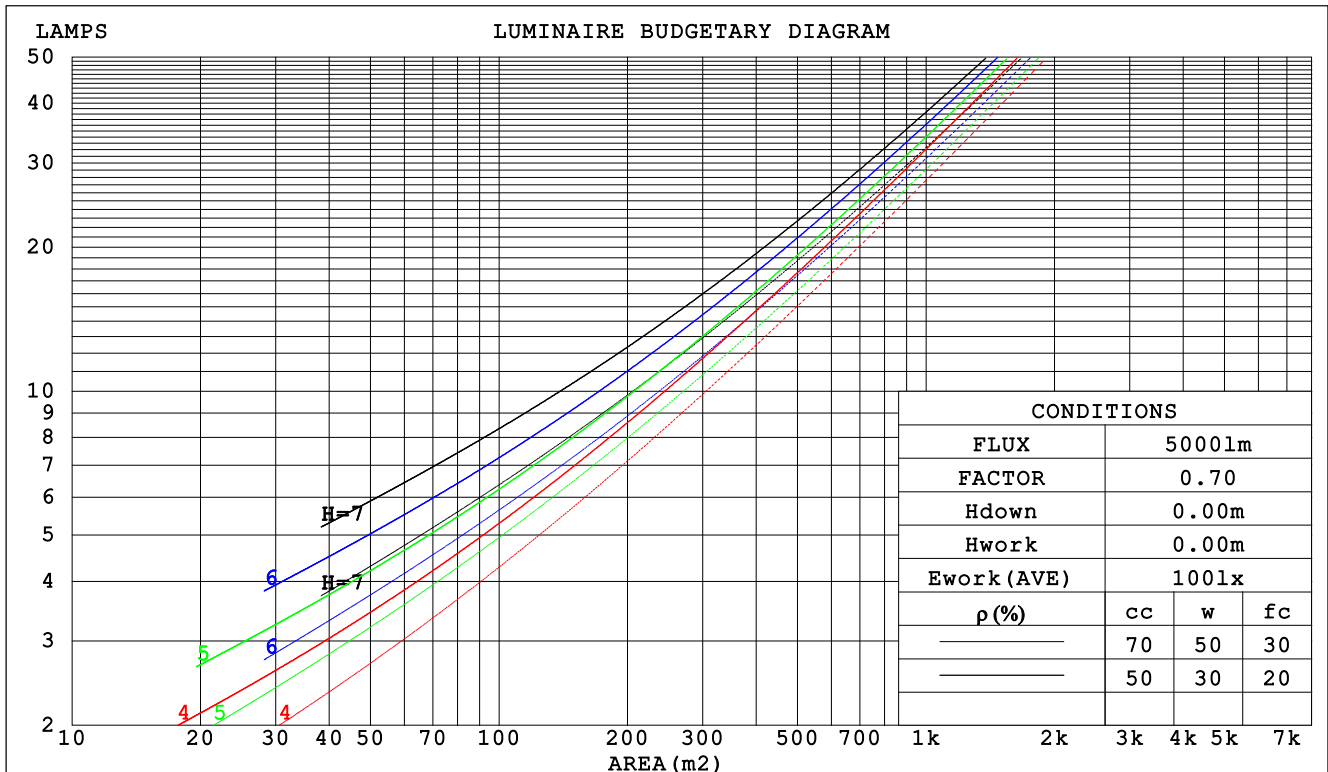
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2026-06-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
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:0.3358A P:8.0600W PF:1.000 Freq:0Hz		
Lamp Flux:1093.81x1 lm		
Name: Lumatree Table Wash	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	1.19	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	1.04	1.00	.97	1.02	.98	.95	.98	.95	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.90	.83	.78	.88	.82	.77	.85	.79	.75	.81	.77	.73	.78	.74	.71	.69
3.0	.78	.69	.63	.76	.68	.62	.73	.66	.61	.70	.65	.60	.68	.63	.59	.56
4.0	.68	.59	.51	.66	.58	.51	.64	.56	.50	.61	.55	.49	.59	.53	.49	.46
5.0	.59	.50	.43	.58	.49	.42	.56	.48	.42	.54	.47	.41	.52	.46	.41	.39
6.0	.52	.43	.36	.51	.42	.36	.49	.41	.35	.48	.41	.35	.46	.40	.35	.32
7.0	.47	.37	.31	.46	.37	.31	.44	.36	.30	.43	.35	.30	.41	.35	.30	.28
8.0	.42	.33	.27	.41	.33	.27	.40	.32	.26	.38	.31	.26	.37	.31	.26	.24
9.0	.38	.29	.23	.37	.29	.23	.36	.28	.23	.35	.28	.23	.34	.27	.23	.21
10.0	.35	.26	.21	.34	.26	.21	.33	.26	.20	.32	.25	.20	.31	.25	.20	.18



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2026-06-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
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:0.3358A P:8.0600W PF:1.000 Freq:0Hz		
Lamp Flux:1093.81x1 lm		
Name: Lumatree Table Wash	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	.297	.169	.053	.289	.165	.052	.276	.158	.051	.264	.152	.049	.252	.146	.047	
2.0	.293	.160	.049	.286	.158	.049	.274	.153	.047	.263	.148	.046	.253	.143	.045	
3.0	.278	.148	.044	.272	.146	.044	.262	.142	.043	.252	.138	.042	.243	.134	.042	
4.0	.261	.135	.040	.256	.134	.040	.246	.130	.039	.237	.127	.038	.229	.124	.038	
5.0	.243	.124	.036	.238	.122	.036	.230	.120	.035	.222	.117	.035	.214	.115	.034	
6.0	.226	.113	.032	.222	.112	.032	.215	.110	.032	.207	.108	.032	.201	.106	.031	
7.0	.211	.104	.030	.207	.103	.029	.200	.101	.029	.194	.099	.029	.188	.098	.029	
8.0	.197	.096	.027	.194	.095	.027	.187	.094	.027	.182	.092	.027	.176	.090	.026	
9.0	.184	.089	.025	.181	.088	.025	.176	.087	.025	.171	.085	.024	.166	.084	.024	
10.0	.173	.083	.023	.170	.082	.023	.165	.081	.023	.161	.080	.023	.156	.078	.023	

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	.195	.195	.195	.166	.166	.166	.114	.114	.114	.065	.065	.065	.021	.021	.021		
1.0	.184	.160	.140	.157	.138	.120	.107	.095	.083	.062	.055	.048	.020	.018	.016		
2.0	.177	.136	.102	.151	.117	.088	.104	.081	.062	.060	.047	.036	.019	.015	.012		
3.0	.170	.119	.077	.146	.102	.067	.100	.071	.047	.058	.042	.028	.019	.013	.009		
4.0	.164	.105	.061	.141	.091	.053	.097	.064	.037	.056	.037	.022	.018	.012	.007		
5.0	.157	.095	.050	.135	.082	.043	.093	.058	.030	.054	.034	.018	.017	.011	.006		
6.0	.151	.087	.042	.130	.076	.036	.089	.053	.026	.052	.031	.015	.017	.010	.005		
7.0	.144	.081	.036	.124	.070	.031	.086	.049	.022	.050	.029	.013	.016	.009	.004		
8.0	.138	.075	.032	.119	.065	.028	.082	.046	.020	.048	.027	.012	.015	.009	.004		
9.0	.132	.070	.028	.113	.061	.025	.079	.043	.018	.046	.025	.010	.015	.008	.003		
10.0	.126	.066	.026	.109	.057	.022	.075	.040	.016	.044	.024	.010	.014	.008	.003		

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2026-06-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 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:0.3358A P:8.0600W PF:1.000 Freq:0Hz										
Lamp Flux:1093.81x1 lm										
Name: Lumatree Table Wash					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	27.6	29.2	27.9	29.5	29.7	27.4	29.0	27.7	29.3	29.5
3H	28.0	29.4	28.3	29.7	30.0	27.7	29.2	28.0	29.5	29.7
4H	27.9	29.3	28.2	29.6	29.9	27.7	29.1	28.0	29.3	29.6
6H	27.8	29.1	28.2	29.4	29.7	27.6	28.9	27.9	29.2	29.5
8H	27.8	29.0	28.1	29.3	29.6	27.5	28.8	27.9	29.1	29.4
12H	27.7	28.9	28.1	29.2	29.6	27.5	28.7	27.8	29.0	29.3
4H 2H	28.0	29.4	28.3	29.7	29.9	27.8	29.2	28.1	29.5	29.8
3H	28.3	29.6	28.7	29.9	30.2	28.1	29.3	28.5	29.7	30.0
4H	28.3	29.4	28.7	29.8	30.1	28.1	29.2	28.5	29.5	29.9
6H	28.3	29.2	28.7	29.6	30.0	28.0	29.0	28.4	29.4	29.7
8H	28.2	29.1	28.6	29.5	29.9	28.0	28.9	28.4	29.3	29.7
12H	28.2	29.0	28.6	29.4	29.8	27.9	28.8	28.4	29.2	29.6
8H 4H	28.2	29.1	28.7	29.5	29.9	28.0	28.9	28.4	29.3	29.7
6H	28.2	28.9	28.6	29.3	29.8	28.0	28.7	28.4	29.1	29.5
8H	28.2	28.8	28.6	29.2	29.7	27.9	28.6	28.4	29.0	29.5
12H	28.1	28.7	28.6	29.1	29.6	27.9	28.4	28.4	28.9	29.4
12H 4H	28.2	29.0	28.6	29.4	29.8	28.0	28.8	28.4	29.2	29.6
6H	28.2	28.8	28.6	29.2	29.7	27.9	28.6	28.4	29.0	29.5
8H	28.1	28.7	28.6	29.1	29.6	27.9	28.4	28.4	28.9	29.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4				
1.5H	+ 1.7 / - 1.7					+ 1.7 / - 1.8				
2.0H	+ 1.1 / - 2.6					+ 1.0 / - 2.6				

CIE Pub.117, 1094 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 0.3)
Area: 0.0122 m2

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2026-06-03

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
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:0.3358A P:8.0600W PF:1.000 Freq:0Hz		
Lamp Flux:1093.81x1 lm		
Name: Lumatree Table Wash	Type: LED	
MFR.:		

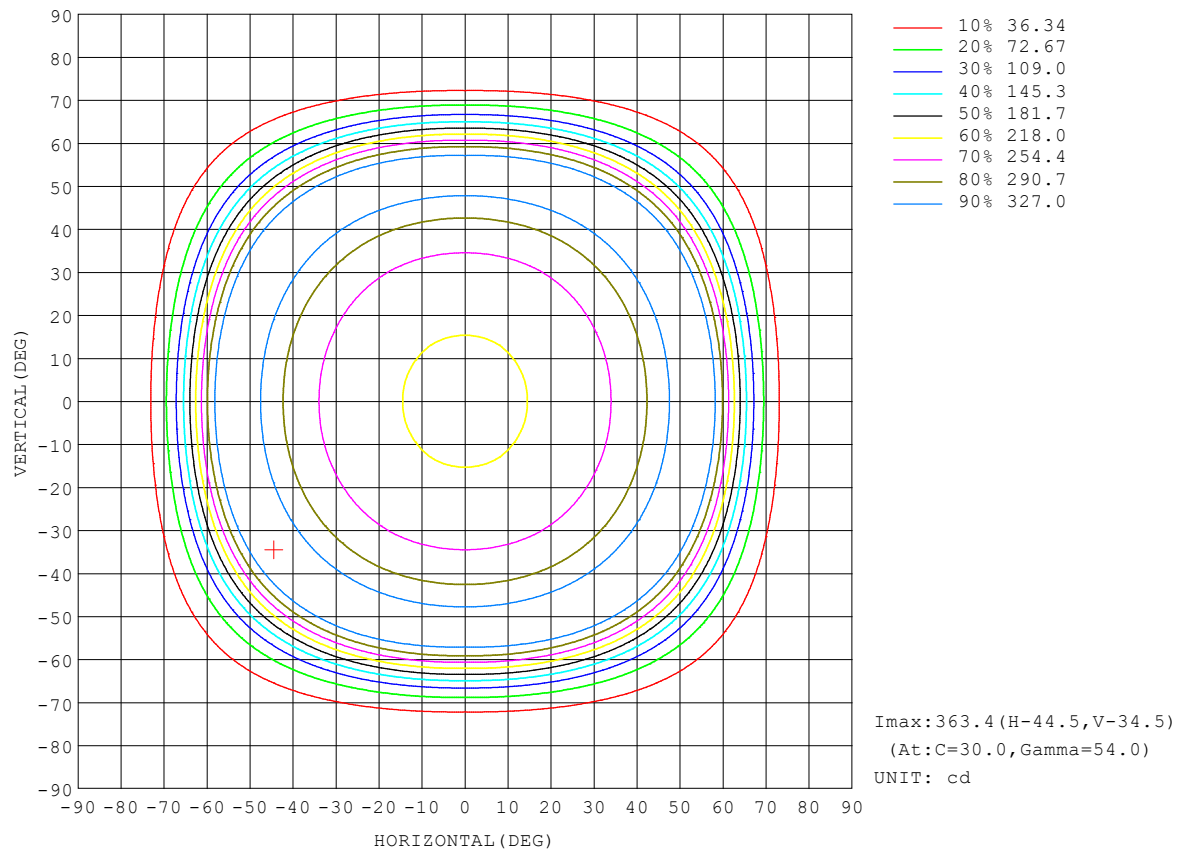
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	48	35	27	47	35	27	46	34	27	20
0.80	60	47	39	59	47	39	57	46	38	30
1.00	71	59	51	70	58	51	67	60	50	42
1.25	80	68	61	78	68	60	75	66	59	51
1.50	85	75	67	84	74	67	81	72	66	58
2.00	94	85	78	92	84	77	88	81	76	68
2.50	98	90	84	96	89	83	92	86	81	72
3.00	102	95	89	100	93	88	95	90	86	77
4.00	106	100	95	103	98	94	99	95	91	82
5.00	108	103	99	106	101	98	101	98	94	85
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2026-06-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 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:0.3358A P:8.0600W PF:1.000 Freq:0Hz		
Lamp Flux:1093.81x1 lm		
Name: Lumatree Table Wash	Type: LED	
MFR.:		

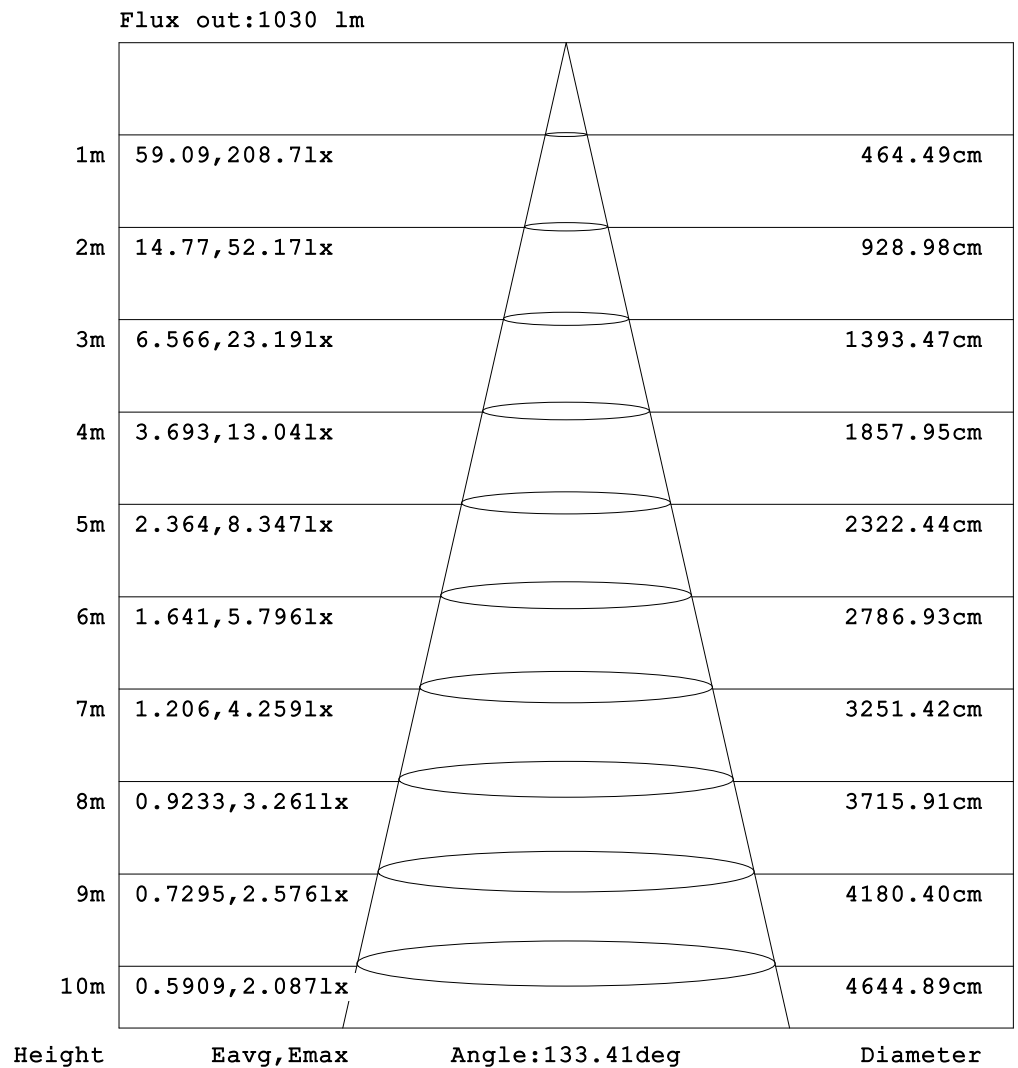


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2026-06-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
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:0.3358A P:8.0600W PF:1.000 Freq:0Hz		
Lamp Flux:1093.81x1 lm		
Name: Lumatree Table Wash	Type: LED	
MFR.:		



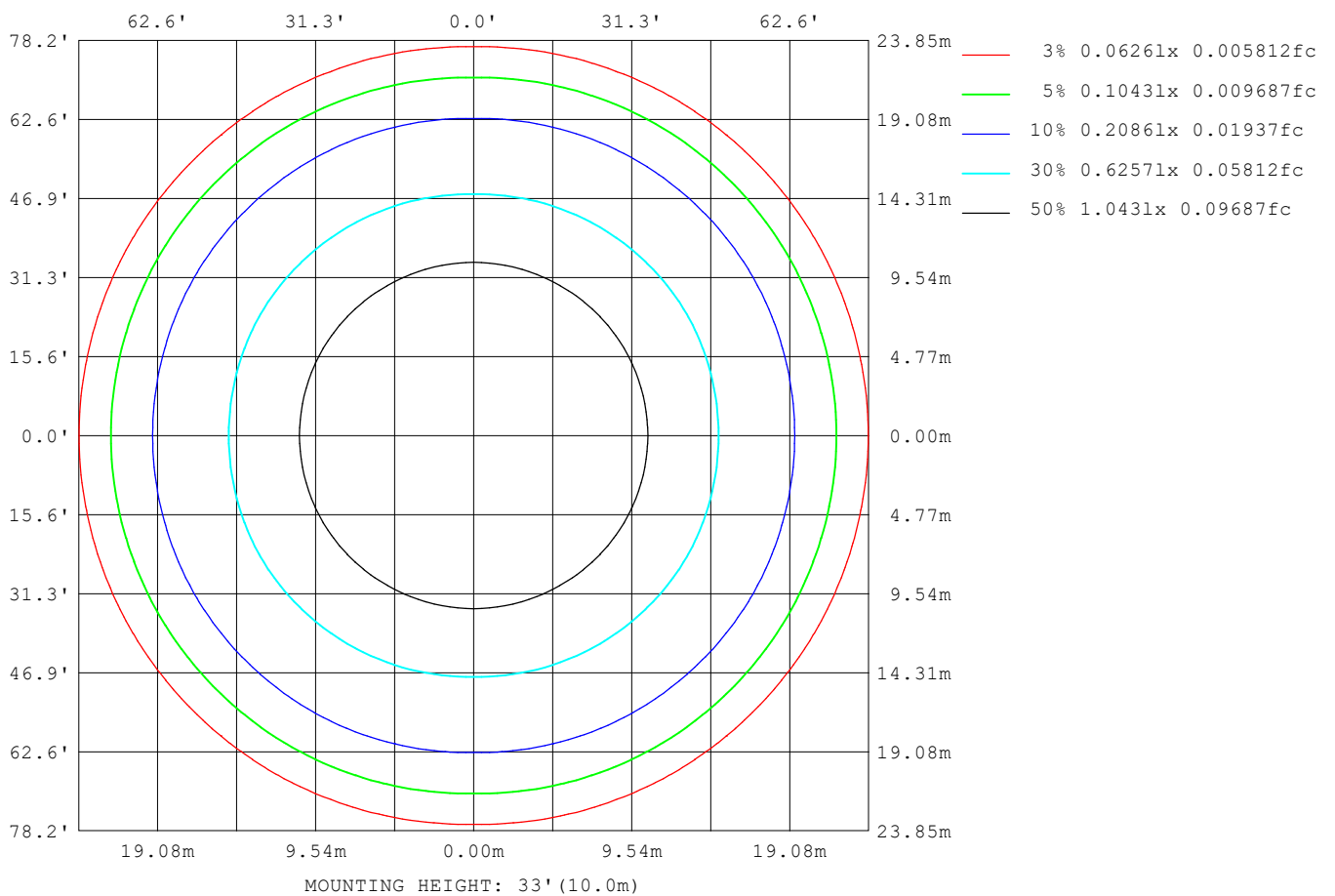
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2026-06-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity:65.0%
 Test Distance:8.000m [K=0.7125]
 Remarks:

ISOLUX DIAGRAM

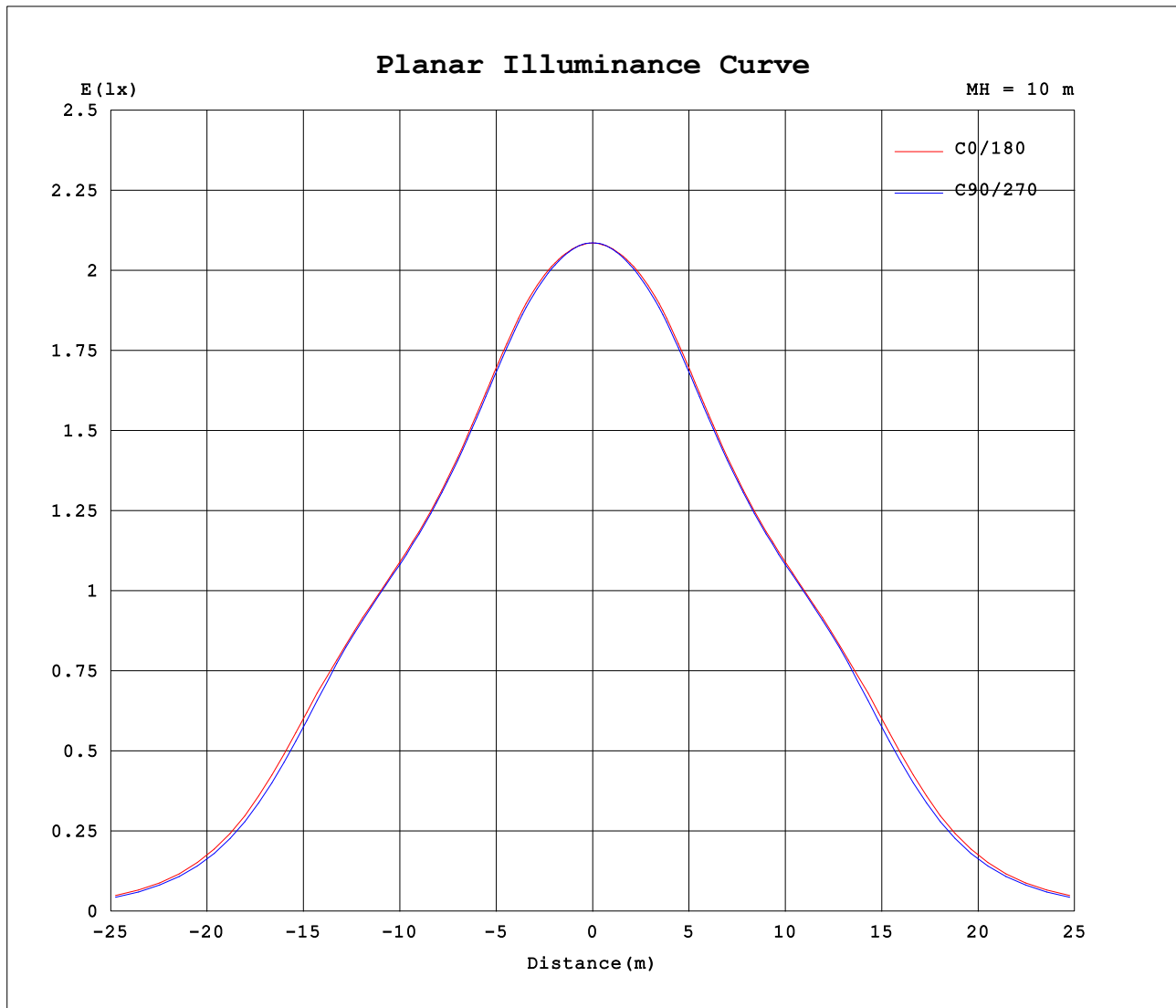
Test:U:24.00V I:0.3358A P:8.0600W PF:1.000 Freq:0Hz		
Lamp Flux:1093.81x1 lm		
Name: Lumatree Table Wash	Type: LED	
MFR.:		



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2026-06-03

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
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 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2026-06-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
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:0.3358A P:8.0600W PF:1.000 Freq:0Hz																	
Lamp Flux:1093.81x1 lm																	
Name: Lumatree Table Wash									Type: LED								
MFR.:																	

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	209	209	209	209	209	209	209	209	209	209	209	209						
5	210	210	210	210	210	210	210	210	210	210	210	210						
10	213	213	213	212	213	213	213	213	213	212	213	213						
15	219	218	218	218	218	218	219	218	218	218	218	218						
20	226	226	225	224	225	226	226	226	225	224	225	226						
25	234	234	232	232	232	234	234	234	232	232	232	234						
30	244	244	242	242	242	244	244	244	242	242	242	244						
35	258	257	256	256	256	257	258	257	256	256	256	257						
40	278	277	276	276	276	277	278	277	276	276	276	277						
45	308	307	306	306	306	307	308	307	306	306	306	307						
50	345	345	343	342	343	345	345	345	343	342	343	345						
55	361	362	356	349	356	362	361	362	356	349	356	362						
60	289	289	282	271	282	289	289	289	282	271	282	289						
65	156	154	151	144	151	154	156	154	151	144	151	154						
70	66.2	63.8	60.4	57.8	60.4	63.8	66.2	63.8	60.4	57.8	60.4	63.8						
75	25.1	24.3	22.2	20.5	22.2	24.3	25.1	24.3	22.2	20.5	22.2	24.3						
80	8.97	8.57	7.22	7.15	7.22	8.57	8.97	8.57	7.22	7.15	7.22	8.57						
85	3.02	2.83	2.56	2.55	2.56	2.83	3.02	2.83	2.56	2.55	2.56	2.83						
90	1.09	1.12	1.21	1.18	1.21	1.12	1.09	1.12	1.21	1.18	1.21	1.12						
95	0.88	0.87	0.85	0.83	0.85	0.87	0.88	0.87	0.85	0.83	0.85	0.87						
100	0.80	0.79	0.78	0.78	0.78	0.79	0.80	0.79	0.78	0.78	0.78	0.79						
105	0.79	0.80	0.79	0.79	0.79	0.80	0.79	0.80	0.79	0.79	0.79	0.80						
110	0.82	0.83	0.83	0.82	0.83	0.83	0.82	0.83	0.83	0.82	0.83	0.83						
115	0.86	0.87	0.87	0.87	0.87	0.87	0.86	0.87	0.87	0.87	0.87	0.87						
120	0.89	0.92	0.92	0.93	0.92	0.92	0.89	0.92	0.92	0.93	0.92	0.92						
125	0.92	0.95	0.96	0.97	0.96	0.95	0.92	0.95	0.96	0.97	0.96	0.95						
130	0.94	0.98	1.00	1.00	1.00	0.98	0.94	0.98	1.00	1.00	1.00	0.98						
135	0.96	1.00	1.01	1.02	1.01	1.00	0.96	1.00	1.01	1.02	1.01	1.00						
140	0.97	1.01	1.01	1.01	1.01	1.01	0.97	1.01	1.01	1.01	1.01	1.01						
145	1.00	1.03	1.03	1.03	1.03	1.03	1.00	1.03	1.03	1.03	1.03	1.03						
150	1.05	1.07	1.06	1.06	1.06	1.07	1.05	1.07	1.06	1.06	1.06	1.07						
155	1.09	1.11	1.11	1.11	1.11	1.11	1.09	1.11	1.11	1.11	1.11	1.11						
160	1.15	1.17	1.16	1.16	1.16	1.17	1.15	1.17	1.16	1.16	1.16	1.17						
165	1.22	1.23	1.22	1.22	1.22	1.23	1.22	1.23	1.22	1.22	1.22	1.23						
170	1.32	1.31	1.30	1.30	1.30	1.31	1.32	1.31	1.30	1.30	1.30	1.31						
175	1.40	1.40	1.39	1.37	1.39	1.40	1.40	1.40	1.39	1.37	1.39	1.40						
180	1.44	1.45	1.43	1.42	1.43	1.45	1.44	1.45	1.43	1.42	1.43	1.45						

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2026-06-03

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks: