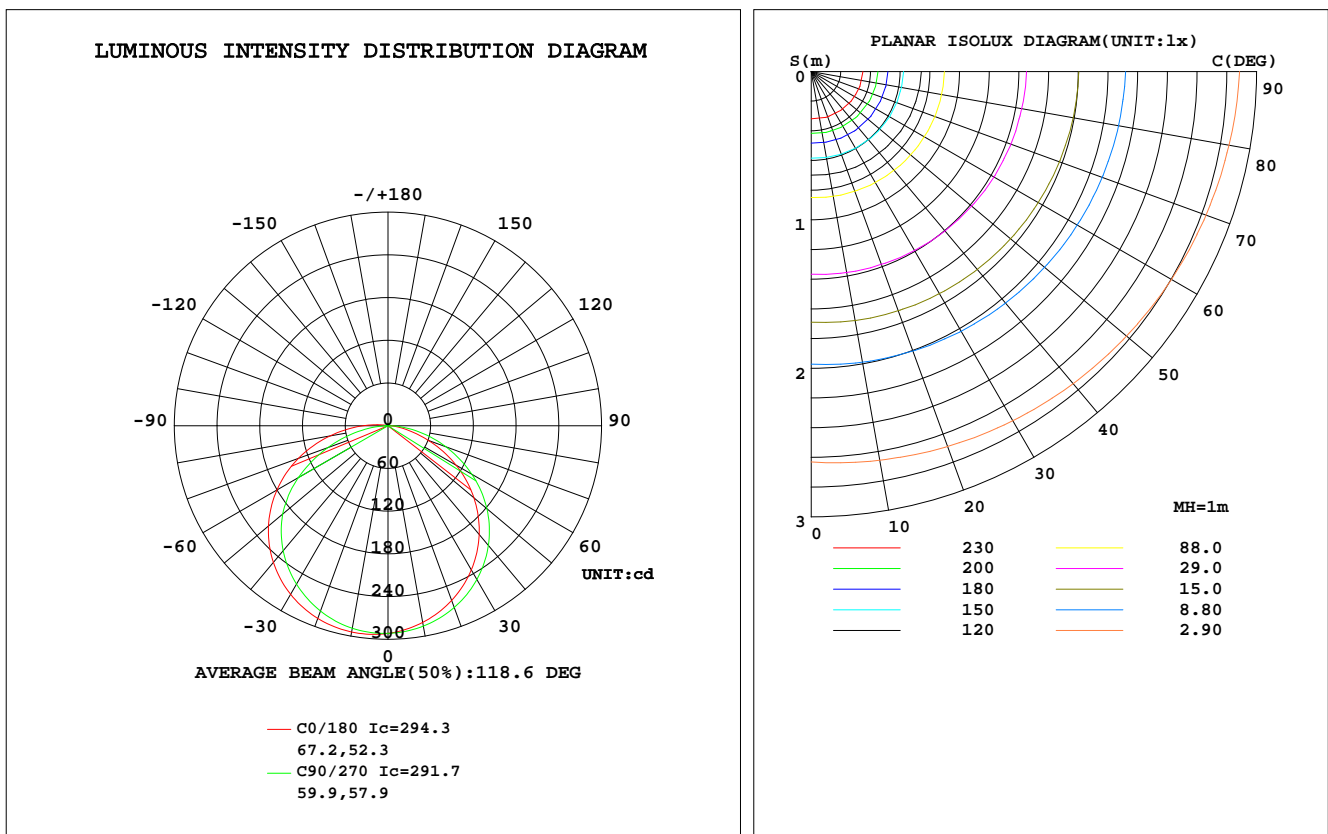


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.000V I:0.4800A P:11.520W PF:1.0000 Freq:0Hz Lamp Flux:921.262x1 lm		
NAME: UB-AT1-35K97C	TYPE: LED Strip	WEIGHT:
SPEC.: 11.5W	DIM.: 1000*10*2(MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 1000*10(MM)	Shielding Angle: 120

DATA OF LAMP		PHOTOMETRIC DATA Eff: 79.97 lm/W			
MODEL		I _{max} (cd)	294.3	S/MH(C0/180)	1.40
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.31
RATED VOLTAGE(V)		TOTAL FLUX(lm)	921.26	η UP, DN(C0-180)	0.7,43.9
NOMINAL FLUX(lm)	921.262	CIE CLASS	DIRECT	η UP, DN(C180-360)	1.1,54.3
LAMPS INSIDE	1	η up(%)	1.8	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)		η down(%)	98.2	CIBSE SHR MAX	1.50



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2021-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity:65.0%
 Test Distance:8.270m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

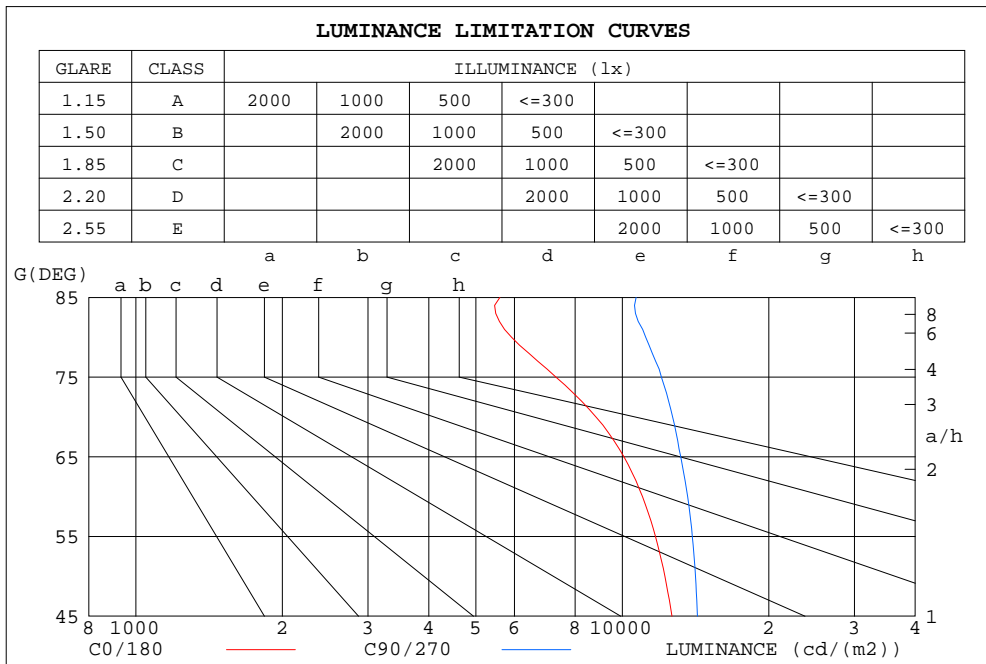
ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270				γ	Φ zone	Φ total	Φ lum,lamp
10	280.6	285.8	294.2	288.8				0- 10	27.63	27.63	3,3
20	261.2	271.7	288.1	277.0				10- 20	79.63	107.3	11.6,11.6
30	234.0	249.6	273.5	256.9				20- 30	122.2	229.5	24.9,24.9
40	199.3	219.4	250.4	229.0				30- 40	150.2	379.6	41.2,41.2
50	157.5	181.4	219.2	193.1				40- 50	159.7	539.4	58.5,58.5
60	110.3	135.9	180.0	145.1				50- 60	148.4	687.8	74.7,74.7
70	60.49	86.59	133.8	89.90				60- 70	116.7	804.5	87.3,87.3
80	20.61	38.71	82.87	37.53				70- 80	71.99	876.5	95.1,95.1
90	4.153	1.863	35.25	4.218				80- 90	28.31	904.8	98.2,98.2
100	1.513	1.156	6.656	1.047				90-100	6.389	911.2	98.9,98.9
110	1.628	1.460	1.296	1.356				100-110	1.796	913.0	99.1,99.1
120	1.884	1.742	1.427	1.638				110-120	1.534	914.5	99.3,99.3
130	2.135	1.975	1.689	1.893				120-130	1.608	916.2	99.4,99.4
140	2.320	2.186	1.944	2.099				130-140	1.570	917.7	99.6,99.6
150	2.483	2.382	2.195	2.311				140-150	1.407	919.1	99.8,99.8
160	2.641	2.561	2.451	2.501				150-160	1.126	920.3	99.9,99.9
170	2.788	2.712	2.691	2.663				160-170	0.7421	921.0	100,100
180	2.843	2.772	2.837	2.778				170-180	0.2629	921.3	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2021-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.429
Humidity:65.0%
Test Distance:8.270m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES



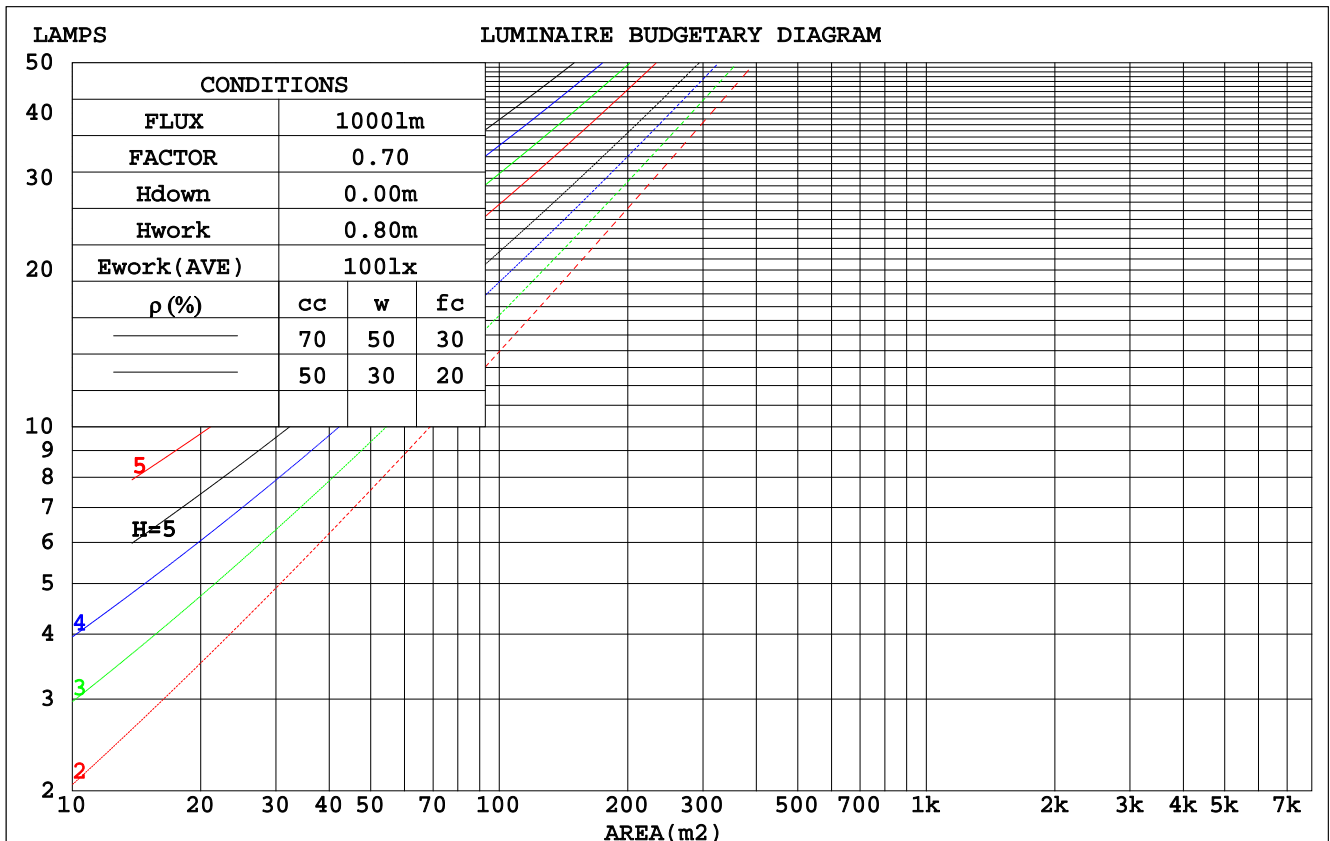
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	5599	10673
80	5922	11169
75	7301	12030
70	8826	12683
65	10075	13190
60	11006	13620
55	11697	13931
50	12230	14137
45	12646	14267

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity: 65.0%
 Test Distance: 8.270m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	.98
1.0	1.02	.98	.94	.90	.96	.92	.95	.92	.89	.91	.88	.86	.87	.85	.83	.81
2.0	.89	.82	.76	.87	.80	.75	.83	.77	.72	.79	.75	.71	.76	.72	.69	.66
3.0	.78	.69	.62	.76	.68	.62	.73	.66	.60	.70	.64	.59	.67	.62	.58	.55
4.0	.68	.59	.52	.67	.59	.52	.64	.57	.51	.62	.55	.50	.59	.54	.49	.47
5.0	.61	.52	.45	.60	.51	.45	.57	.50	.44	.55	.49	.43	.53	.47	.43	.40
6.0	.55	.46	.39	.54	.45	.39	.52	.44	.38	.50	.43	.38	.48	.42	.37	.35
7.0	.50	.41	.34	.49	.40	.34	.47	.39	.34	.45	.38	.33	.44	.38	.33	.31
8.0	.45	.36	.31	.44	.36	.30	.43	.35	.30	.41	.35	.30	.40	.34	.29	.28
9.0	.41	.33	.27	.41	.33	.27	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25
10.0	.38	.30	.25	.38	.30	.25	.36	.29	.24	.35	.29	.24	.34	.28	.24	.22



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity: 65.0%
 Test Distance: 8.270m [K=1.0000]
 Remarks:

WEC AND CCEC

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	.329	.187	.059	.321	.183	.058	.307	.176	.056	.294	.169	.054	.281	.163	.053	
2.0	.304	.167	.051	.297	.164	.050	.284	.158	.049	.273	.153	.048	.262	.148	.047	
3.0	.279	.148	.044	.273	.146	.044	.261	.142	.043	.251	.137	.042	.241	.133	.041	
4.0	.256	.133	.039	.250	.131	.039	.240	.127	.038	.231	.124	.037	.222	.121	.037	
5.0	.235	.120	.035	.231	.118	.034	.222	.115	.034	.213	.113	.033	.205	.110	.033	
6.0	.218	.109	.031	.213	.108	.031	.205	.105	.031	.198	.103	.030	.191	.100	.030	
7.0	.202	.100	.028	.198	.099	.028	.191	.097	.028	.184	.094	.027	.178	.092	.027	
8.0	.188	.092	.026	.185	.091	.026	.178	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.176	.085	.024	.173	.084	.024	.167	.083	.023	.162	.081	.023	.157	.080	.023	
10.0	.165	.079	.022	.163	.079	.022	.157	.077	.022	.152	.076	.022	.148	.074	.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	.204	.204	.204	.174	.174	.174	.119	.119	.119	.068	.068	.068	.022	.022	.022	
1.0	.195	.170	.147	.167	.146	.126	.114	.100	.087	.066	.058	.051	.021	.019	.016	
2.0	.188	.146	.110	.161	.125	.095	.110	.087	.067	.064	.050	.039	.020	.016	.013	
3.0	.180	.128	.087	.154	.111	.075	.106	.077	.053	.061	.045	.031	.020	.015	.010	
4.0	.172	.115	.071	.148	.099	.062	.102	.069	.044	.059	.041	.026	.019	.013	.008	
5.0	.165	.105	.060	.142	.091	.053	.098	.063	.037	.057	.037	.022	.018	.012	.007	
6.0	.158	.096	.053	.135	.084	.046	.093	.058	.032	.054	.034	.019	.017	.011	.006	
7.0	.151	.090	.047	.130	.078	.041	.090	.054	.029	.052	.032	.017	.017	.011	.006	
8.0	.144	.084	.042	.124	.073	.037	.086	.051	.026	.050	.030	.016	.016	.010	.005	
9.0	.138	.079	.039	.119	.068	.034	.082	.048	.024	.048	.028	.014	.016	.009	.005	
10.0	.132	.075	.036	.114	.065	.032	.079	.046	.023	.046	.027	.013	.015	.009	.004	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity: 65.0%
 Test Distance: 8.270m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

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	20.0	21.6	20.3	21.9	22.3	21.5	23.2	21.9	23.5	23.9
3H	21.4	22.9	21.8	23.3	23.7	23.4	24.9	23.8	25.3	25.7
4H	21.9	23.3	22.3	23.7	24.1	24.2	25.6	24.6	25.9	26.4
6H	22.2	23.5	22.6	23.9	24.3	24.7	26.0	25.2	26.4	26.9
8H	22.3	23.5	22.7	23.9	24.4	24.9	26.2	25.4	26.6	27.0
12H	22.3	23.5	22.8	23.9	24.4	25.0	26.2	25.5	26.7	27.1
4H 2H	20.6	22.0	21.1	22.4	22.8	22.4	23.8	22.9	24.2	24.7
3H	22.3	23.5	22.8	23.9	24.4	24.6	25.8	25.0	26.2	26.7
4H	22.9	24.0	23.3	24.4	24.9	25.5	26.6	26.0	27.0	27.5
6H	23.3	24.2	23.7	24.7	25.2	26.2	27.2	26.7	27.6	28.1
8H	23.4	24.3	23.9	24.7	25.2	26.5	27.3	26.9	27.8	28.3
12H	23.5	24.3	24.0	24.8	25.3	26.7	27.5	27.2	28.0	28.5
8H 4H	23.2	24.1	23.7	24.6	25.1	26.1	27.0	26.6	27.5	28.0
6H	23.7	24.4	24.2	25.0	25.5	27.0	27.8	27.5	28.3	28.8
8H	23.9	24.5	24.4	25.1	25.6	27.4	28.1	27.9	28.6	29.1
12H	24.0	24.6	24.5	25.1	25.7	27.7	28.3	28.3	28.8	29.4
12H 4H	23.3	24.1	23.8	24.6	25.1	26.2	27.0	26.8	27.6	28.1
6H	23.8	24.4	24.3	24.9	25.5	27.3	27.9	27.8	28.4	29.0
8H	24.0	24.6	24.5	25.1	25.7	27.7	28.3	28.3	28.8	29.4
CIE190: 2010										

CIE190: 2010
Area: 0.02 m2

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Test Date: 2021-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
Humidity: 65.0%
Test Distance: 8.270m [K=1.0000]
Remarks:

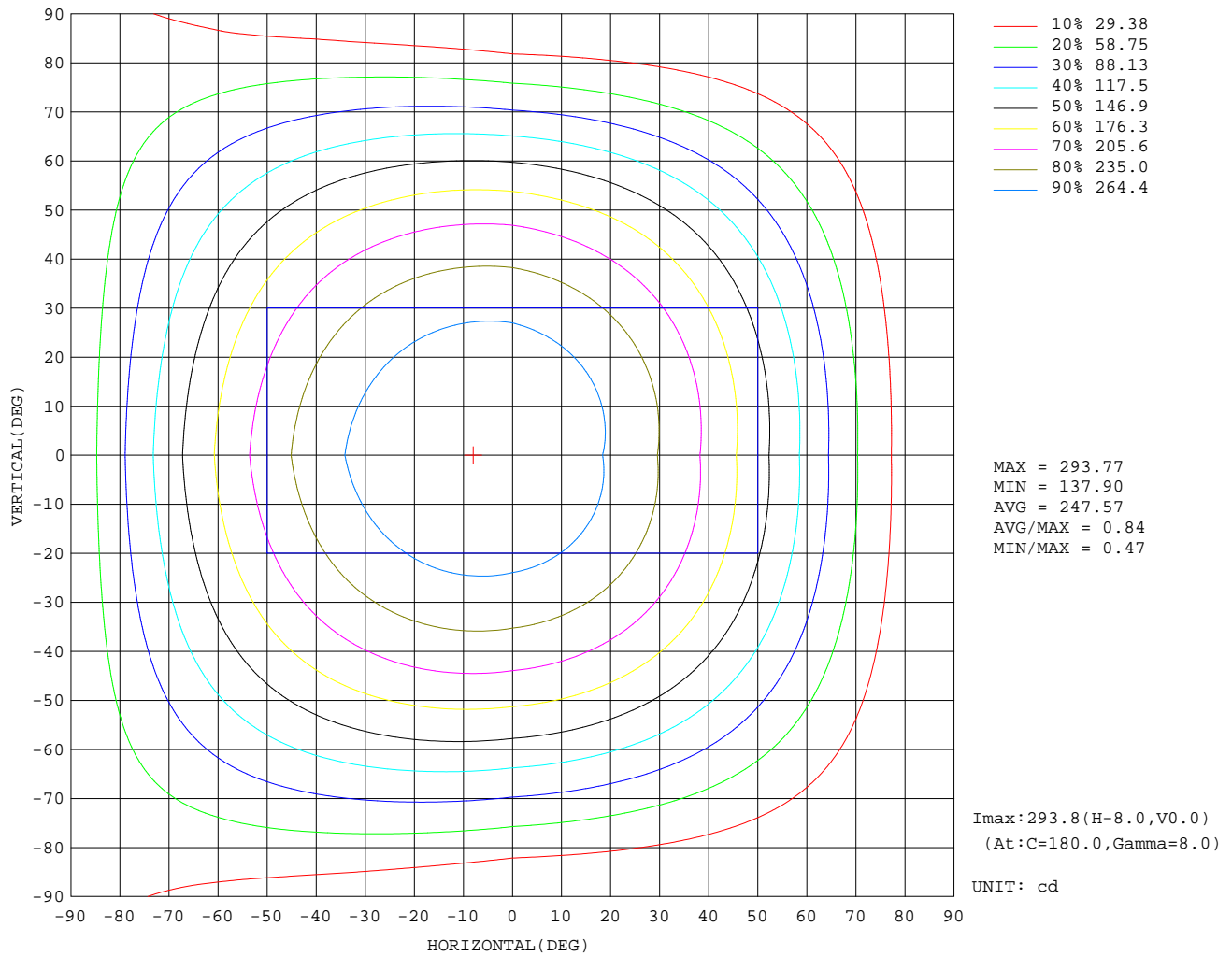
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	56	44	37	55	43	36	53	43	36	30
0.80	65	53	46	64	53	46	62	52	45	38
1.00	74	62	55	73	62	54	70	63	54	46
1.25	81	70	63	79	69	62	77	68	61	53
1.50	86	76	68	84	75	68	81	73	67	59
2.00	93	84	77	91	83	76	87	80	75	66
2.50	97	89	82	95	87	81	91	84	79	71
3.00	101	93	87	98	92	86	94	88	84	75
4.00	105	99	94	102	97	92	98	93	89	80
5.00	107	102	98	105	100	96	100	96	93	83
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
 Test Date: 2021-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity: 65.0%
 Test Distance: 8.270m [K=1.0000]
 Remarks:

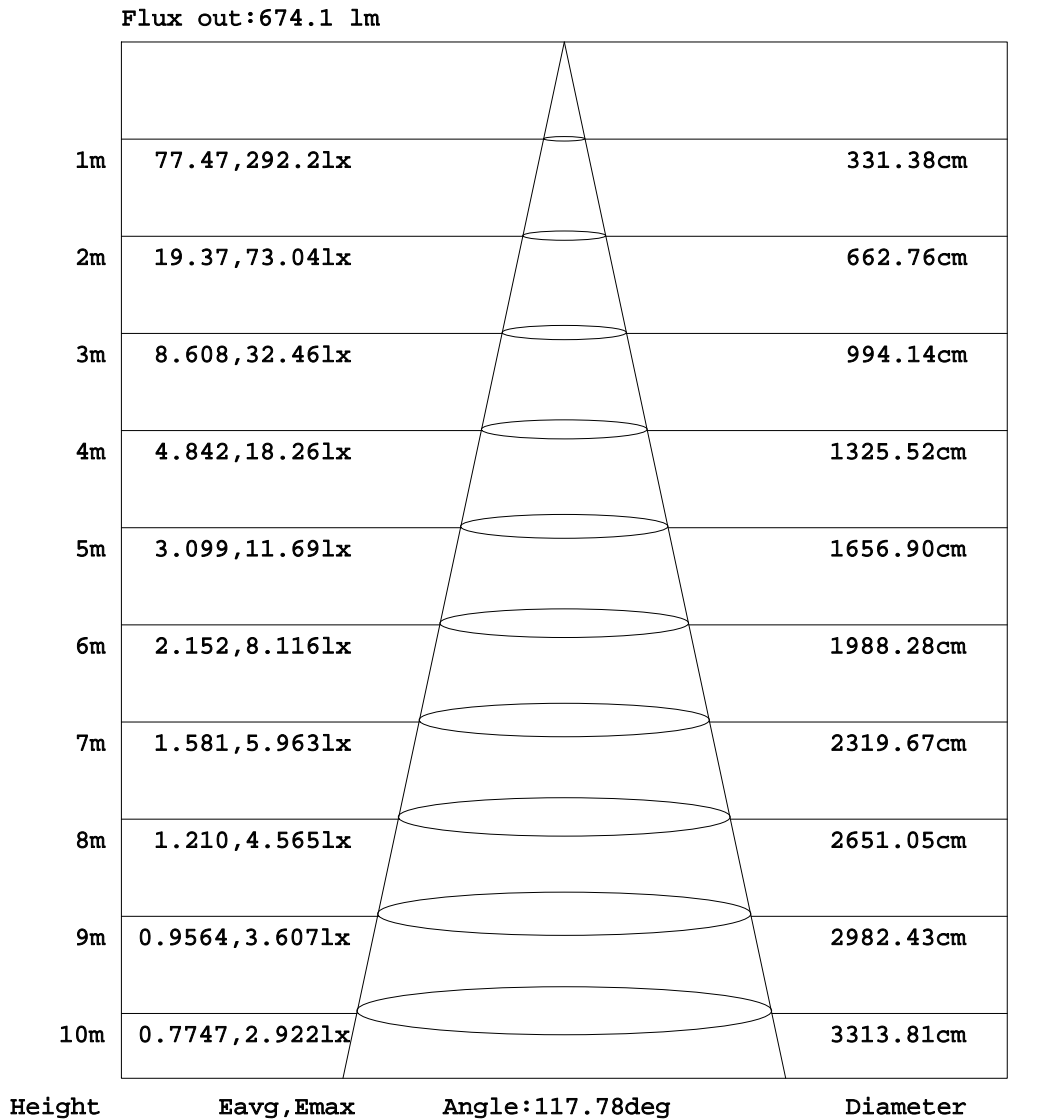
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity: 65.0%
 Test Distance: 8.270m [K=1.0000]
 Remarks:

AAI Figure

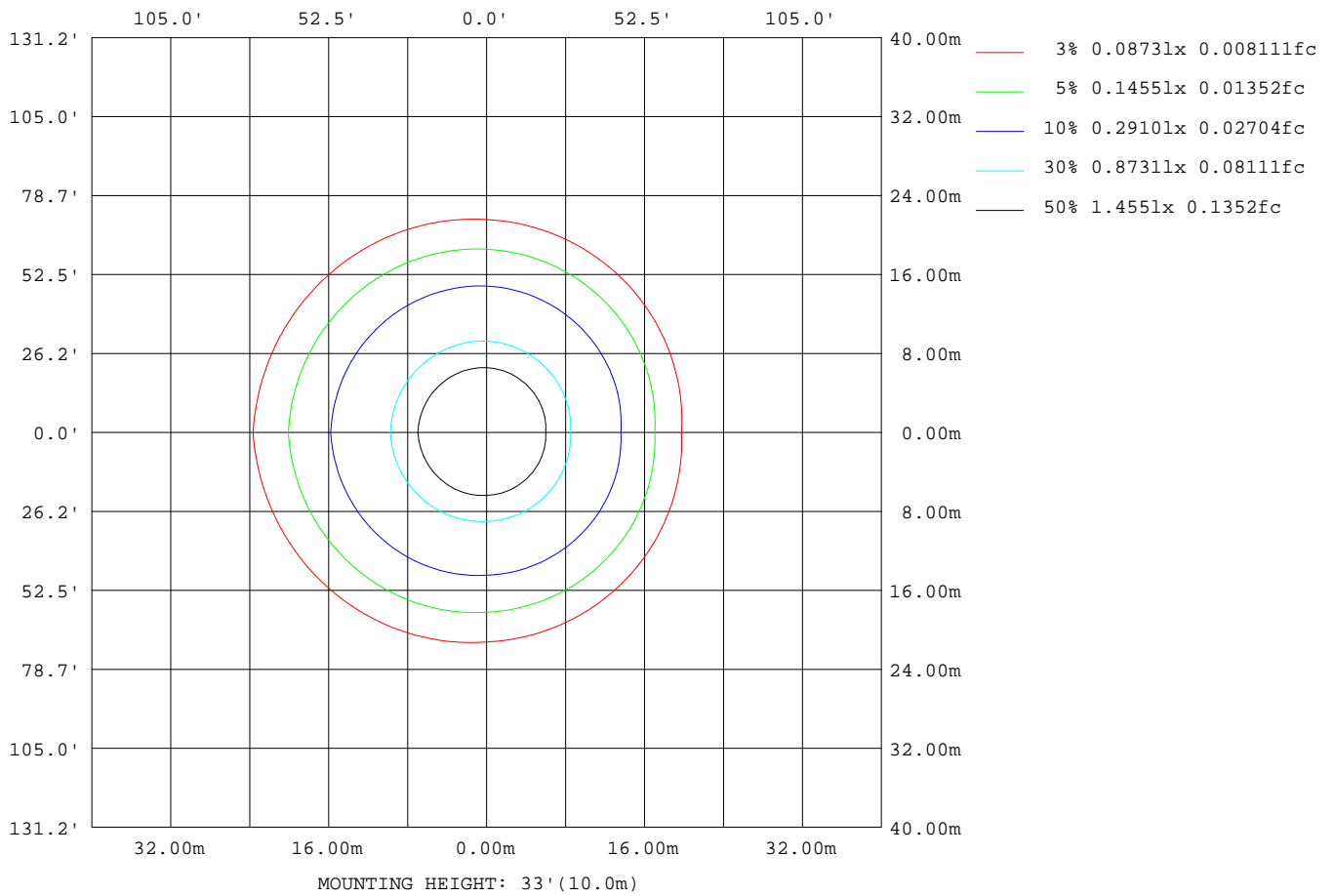


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2021-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity:65.0%
 Test Distance:8.270m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity: 65.0%
 Test Distance: 8.270m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:24.000V I:0.4800A P:11.520W PF:1.0000 Freq:0Hz Lamp Flux:921.262x1 lm		
NAME: UB-AT1-35K97C	TYPE: LED Strip	WEIGHT:
SPEC.: 11.5W	DIM.: 1000*10*2(MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 1000*10(MM)	Shielding Angle: 120

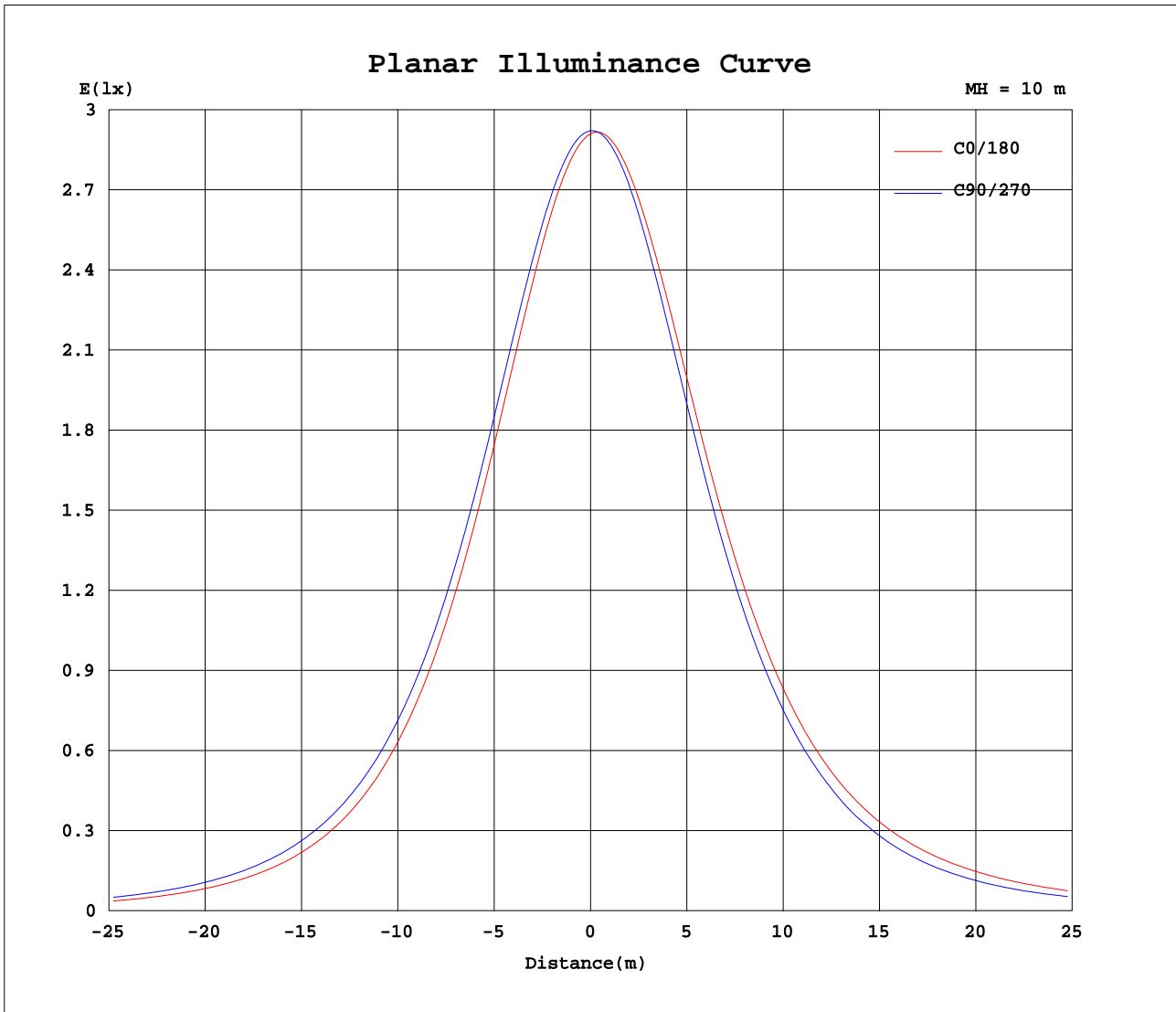
AvgL	cd/m2
L_0~180(65)av	14379
L_0~180(75)av	14151
L_0~180(85)av	19332
L_90~270(65)av	13547
L_90~270(75)av	12084
L_90~270(85)av	9475
L_45(65)av	14126
L_45(75)av	13286
L_45(85)av	14022

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2021-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.429
Humidity:65.0%
Test Distance:8.270m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity: 65.0%
 Test Distance: 8.270m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	90	180	270															
0	292	292	292	292															
5	287	290	294	291															
10	281	286	294	289															
15	272	280	292	284															
20	261	272	288	277															
25	249	262	282	268															
30	234	250	273	257															
35	218	235	263	244															
40	199	219	250	229															
45	179	201	236	212															
50	158	181	219	193															
55	134	159	201	171															
60	110	136	180	145															
65	85.3	111	158	118															
70	60.5	86.6	134	89.9															
75	37.9	62.2	109	63.0															
80	20.6	38.7	82.9	37.5															
85	9.78	18.6	57.6	14.5															
90	4.15	1.86	35.3	4.22															
95	1.90	0.99	17.7	0.90															
100	1.51	1.16	6.66	1.05															
105	1.53	1.30	2.03	1.20															
110	1.63	1.46	1.30	1.36															
115	1.75	1.61	1.30	1.50															
120	1.88	1.74	1.43	1.64															
125	2.01	1.86	1.55	1.75															
130	2.13	1.97	1.69	1.89															
135	2.24	2.08	1.81	2.00															
140	2.32	2.19	1.94	2.10															
145	2.41	2.30	2.07	2.20															
150	2.48	2.38	2.20	2.31															
155	2.55	2.46	2.33	2.40															
160	2.64	2.56	2.45	2.50															
165	2.72	2.64	2.58	2.58															
170	2.79	2.71	2.69	2.66															
175	2.83	2.76	2.79	2.72															
180	2.84	2.77	2.84	2.78															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2021-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity:65.0%
 Test Distance:8.270m [K=1.0000]
 Remarks: