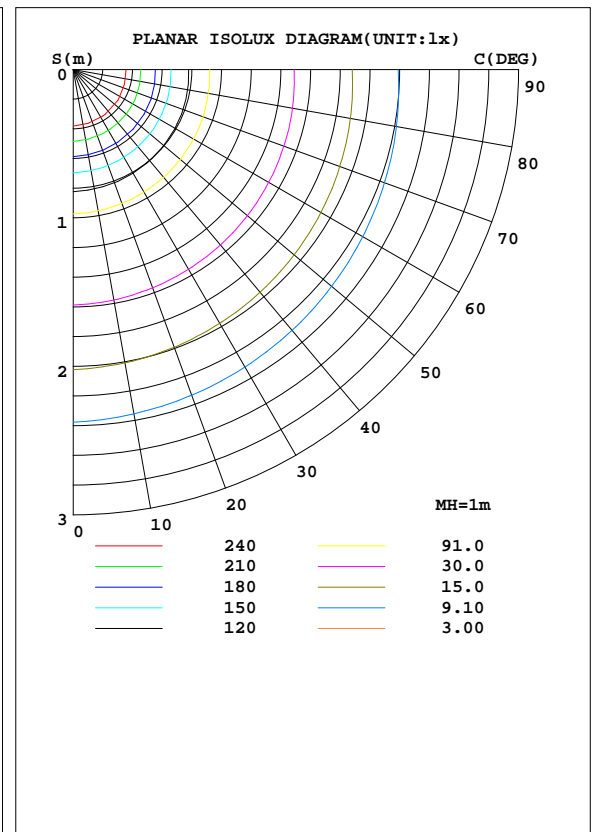
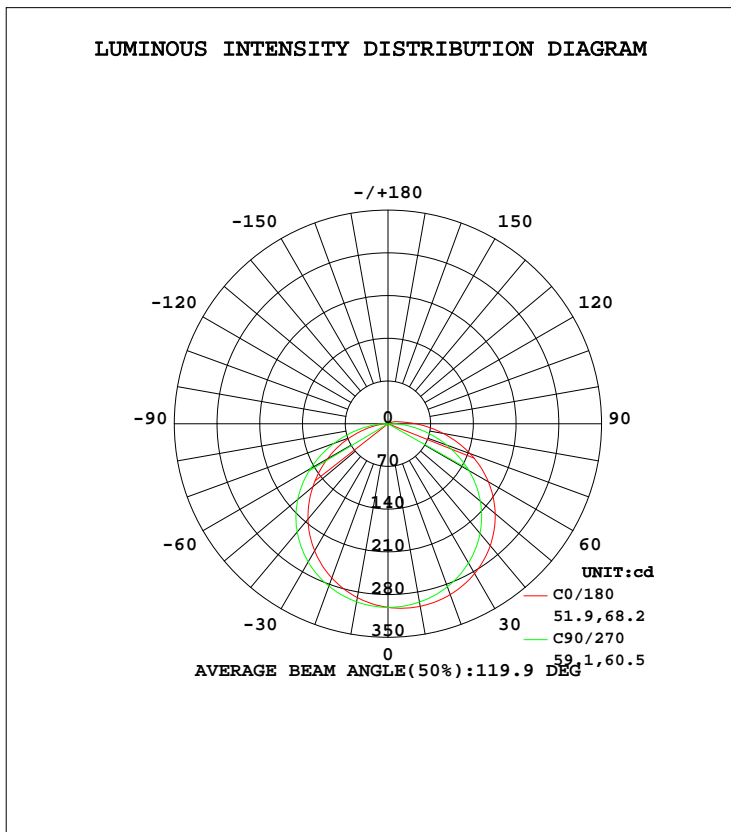


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.000V I:0.4800A P:11.520W PF:1.0000 Freq:0Hz Lamp Flux:980.178x1 lm		
NAME: UB-AT1-50K95C	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			
MODEL		Imax(cd)	303.9	S/MH(C0/180)	1.20
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)		TOTAL FLUX(lm)	980.18	η UP, DN(C0-180)	1.8,54.0
NOMINAL FLUX(lm)	980.178	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.6,43.5
LAMPS INSIDE	1	η up(%)	2.5	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)		η down(%)	97.5	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2021-12-04

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

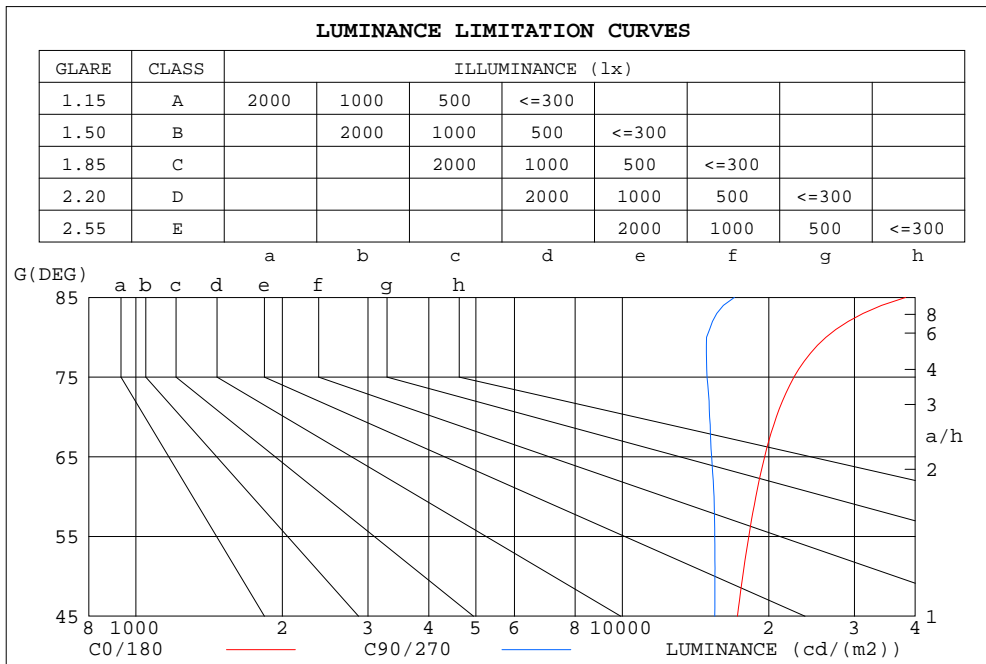
ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270				γ	Φ zone	Φ total	Φ lum, lamp
10	303.8	296.8	289.3	296.3				0- 10	28.51	28.51	2.91,2.91
20	298.0	284.3	269.0	283.1				10- 20	82.22	110.7	11.3,11.3
30	283.6	263.6	240.5	261.4				20- 30	126.3	237.1	24.2,24.2
40	260.6	234.6	204.0	231.4				30- 40	155.5	392.6	40.1,40.1
50	229.2	197.5	160.8	193.1				40- 50	165.7	558.3	57,57
60	189.8	153.0	114.4	146.0				50- 60	155.3	713.5	72.8,72.8
70	143.0	102.5	67.00	94.17				60- 70	125.2	838.7	85.6,85.6
80	91.85	51.28	24.90	43.47				70- 80	81.15	919.9	93.8,93.8
90	45.73	9.529	5.092	3.716				80- 90	36.05	955.9	97.5,97.5
100	19.04	1.159	1.667	1.153				90-100	9.994	965.9	98.5,98.5
110	9.490	1.482	1.766	1.471				100-110	4.786	970.7	99,99
120	2.070	1.762	2.002	1.740				110-120	2.427	973.2	99.3,99.3
130	1.711	2.032	2.232	2.010				120-130	1.707	974.9	99.5,99.5
140	2.001	2.263	2.418	2.231				130-140	1.634	976.5	99.6,99.6
150	2.253	2.457	2.583	2.441				140-150	1.464	978.0	99.8,99.8
160	2.517	2.657	2.758	2.635				150-160	1.173	979.1	99.9,99.9
170	2.774	2.829	2.912	2.796				160-170	0.7735	979.9	100,100
180	2.961	2.920	2.966	2.926				170-180	0.2742	980.2	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2021-12-04

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



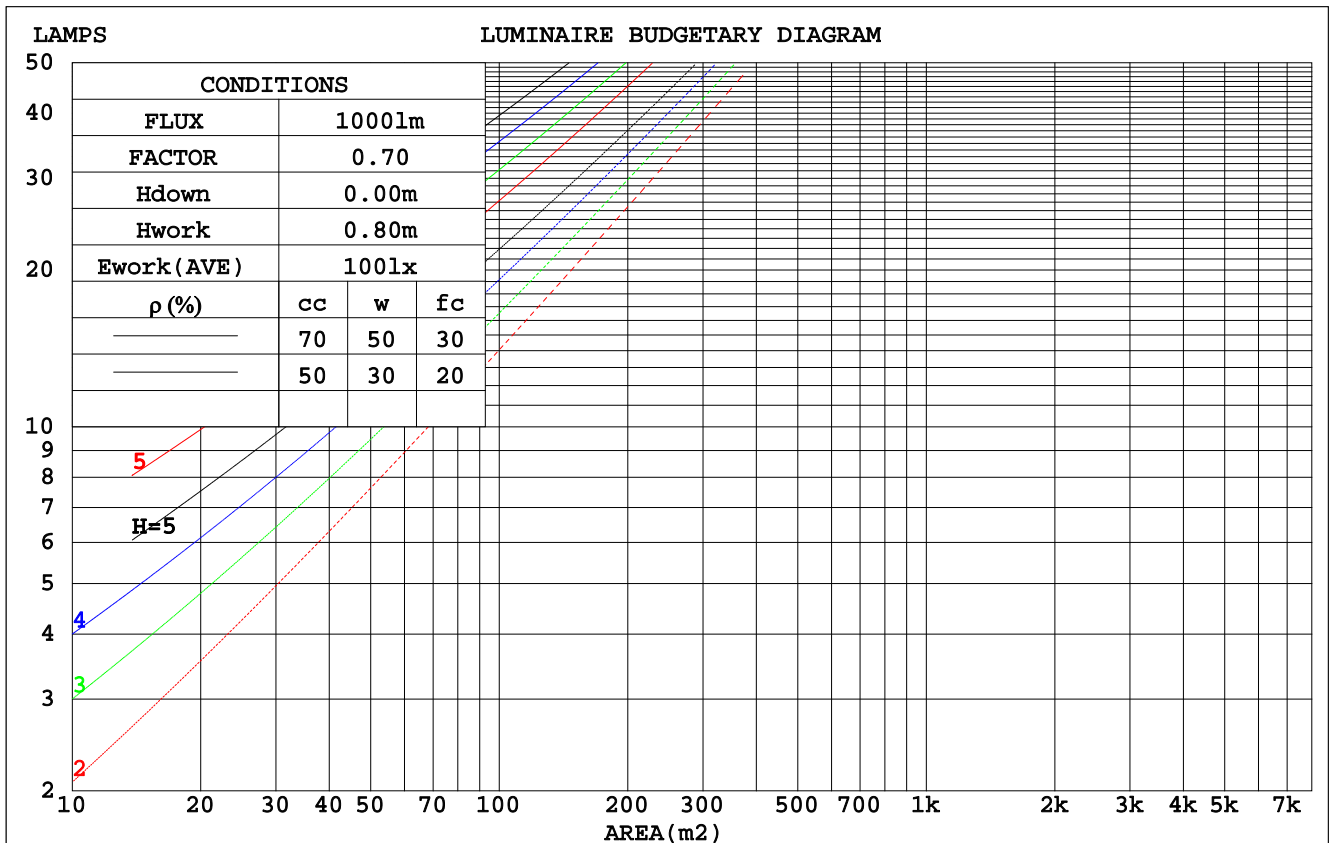
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	38228	17001
80	26215	14893
75	22527	14936
70	20722	15116
65	19616	15260
60	18818	15433
55	18191	15487
50	17676	15500
45	17243	15485

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-12-04

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	1.18	1.18	1.18	1.15	1.15	1.15	1.10	1.10	1.10	1.05	1.05	1.05	.00	.00	.00	.98
1.0	1.02	.97	.93	.99	.95	.91	.95	.91	.88	.90	.87	.85	.86	.84	.82	.79
2.0	.88	.81	.75	.86	.79	.74	.82	.76	.71	.78	.73	.69	.75	.71	.67	.65
3.0	.77	.68	.61	.75	.67	.61	.72	.65	.59	.69	.63	.58	.66	.61	.57	.54
4.0	.68	.59	.52	.66	.58	.51	.63	.56	.50	.61	.54	.49	.58	.53	.48	.46
5.0	.60	.51	.44	.59	.50	.44	.57	.49	.43	.54	.48	.42	.52	.46	.42	.39
6.0	.54	.45	.38	.53	.44	.38	.51	.43	.38	.49	.42	.37	.47	.41	.36	.34
7.0	.49	.40	.34	.48	.40	.33	.46	.39	.33	.45	.38	.33	.43	.37	.32	.30
8.0	.45	.36	.30	.44	.36	.30	.42	.35	.29	.41	.34	.29	.39	.33	.29	.27
9.0	.41	.33	.27	.40	.32	.27	.39	.32	.26	.38	.31	.26	.36	.30	.26	.24
10.0	.38	.30	.24	.37	.29	.24	.36	.29	.24	.35	.28	.24	.34	.28	.23	.22



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-12-04

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	.338	.192	.061	.330	.188	.060	.315	.181	.058	.302	.174	.056	.289	.168	.054	
2.0	.309	.170	.052	.302	.167	.051	.289	.161	.050	.277	.155	.049	.266	.150	.047	
3.0	.282	.150	.045	.276	.148	.045	.264	.143	.044	.254	.139	.043	.243	.135	.042	
4.0	.258	.134	.039	.253	.132	.039	.242	.128	.038	.233	.125	.038	.224	.121	.037	
5.0	.237	.121	.035	.232	.119	.035	.223	.116	.034	.214	.113	.034	.206	.110	.033	
6.0	.219	.110	.031	.215	.108	.031	.206	.106	.031	.199	.103	.030	.191	.101	.030	
7.0	.203	.100	.028	.199	.099	.028	.192	.097	.028	.185	.095	.028	.178	.093	.027	
8.0	.189	.092	.026	.186	.091	.026	.179	.089	.026	.173	.087	.025	.167	.086	.025	
9.0	.177	.086	.024	.174	.085	.024	.168	.083	.023	.162	.081	.023	.156	.079	.023	
10.0	.166	.080	.022	.163	.079	.022	.158	.077	.022	.152	.076	.022	.147	.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	.209	.209	.209	.179	.179	.179	.122	.122	.122	.070	.070	.070	.022	.022	.022	
1.0	.201	.175	.151	.172	.150	.130	.118	.103	.090	.068	.060	.052	.022	.019	.017	
2.0	.194	.151	.115	.166	.130	.099	.114	.090	.069	.066	.052	.041	.021	.017	.013	
3.0	.186	.134	.092	.160	.115	.080	.110	.080	.056	.063	.047	.033	.020	.015	.011	
4.0	.178	.120	.076	.153	.104	.066	.105	.073	.047	.061	.043	.028	.020	.014	.009	
5.0	.171	.110	.066	.147	.095	.057	.101	.067	.040	.059	.039	.024	.019	.013	.008	
6.0	.164	.102	.058	.141	.088	.050	.097	.062	.036	.056	.036	.021	.018	.012	.007	
7.0	.157	.095	.052	.135	.082	.045	.093	.058	.032	.054	.034	.019	.017	.011	.006	
8.0	.150	.089	.048	.129	.078	.042	.089	.054	.030	.052	.032	.018	.017	.011	.006	
9.0	.144	.084	.044	.124	.073	.039	.086	.052	.028	.050	.030	.016	.016	.010	.005	
10.0	.138	.080	.042	.119	.070	.036	.082	.049	.026	.048	.029	.015	.016	.010	.005	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2021-12-04

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	22.7	24.3	23.1	24.7	25.0	21.2	22.8	21.6	23.2	23.5
3H	25.1	26.6	25.5	26.9	27.4	23.2	24.7	23.6	25.1	25.5
4H	26.2	27.6	26.6	28.0	28.4	24.1	25.5	24.5	25.9	26.3
6H	27.3	28.6	27.7	29.0	29.4	24.8	26.1	25.2	26.5	26.9
8H	27.8	29.0	28.2	29.5	29.9	25.1	26.3	25.5	26.8	27.2
12H	28.3	29.5	28.8	30.0	30.4	25.3	26.5	25.8	27.0	27.4
4H 2H	23.3	24.7	23.8	25.1	25.6	21.7	23.1	22.1	23.5	23.9
3H	26.0	27.2	26.4	27.6	28.1	23.9	25.1	24.4	25.6	26.0
4H	27.2	28.3	27.7	28.8	29.3	24.9	26.0	25.4	26.5	26.9
6H	28.5	29.4	29.0	29.9	30.4	25.8	26.7	26.3	27.2	27.7
8H	29.1	30.0	29.6	30.5	31.0	26.1	27.0	26.6	27.5	28.0
12H	29.8	30.6	30.3	31.1	31.6	26.5	27.3	27.0	27.8	28.3
8H 4H	27.6	28.5	28.1	29.0	29.5	25.1	26.0	25.6	26.5	27.0
6H	29.1	29.8	29.6	30.3	30.9	26.1	26.9	26.6	27.4	27.9
8H	29.8	30.5	30.3	31.0	31.6	26.6	27.2	27.1	27.8	28.3
12H	30.6	31.2	31.2	31.8	32.4	27.0	27.6	27.6	28.1	28.8
12H 4H	27.7	28.5	28.2	29.0	29.5	25.1	26.0	25.7	26.5	27.0
6H	29.2	29.8	29.7	30.3	30.9	26.2	26.8	26.7	27.3	27.9
8H	30.0	30.6	30.5	31.1	31.7	26.6	27.2	27.2	27.8	28.4
CIE190: 2010										

CIE190: 2010
Area: 0.02 m2

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Test Date: 2021-12-04

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:

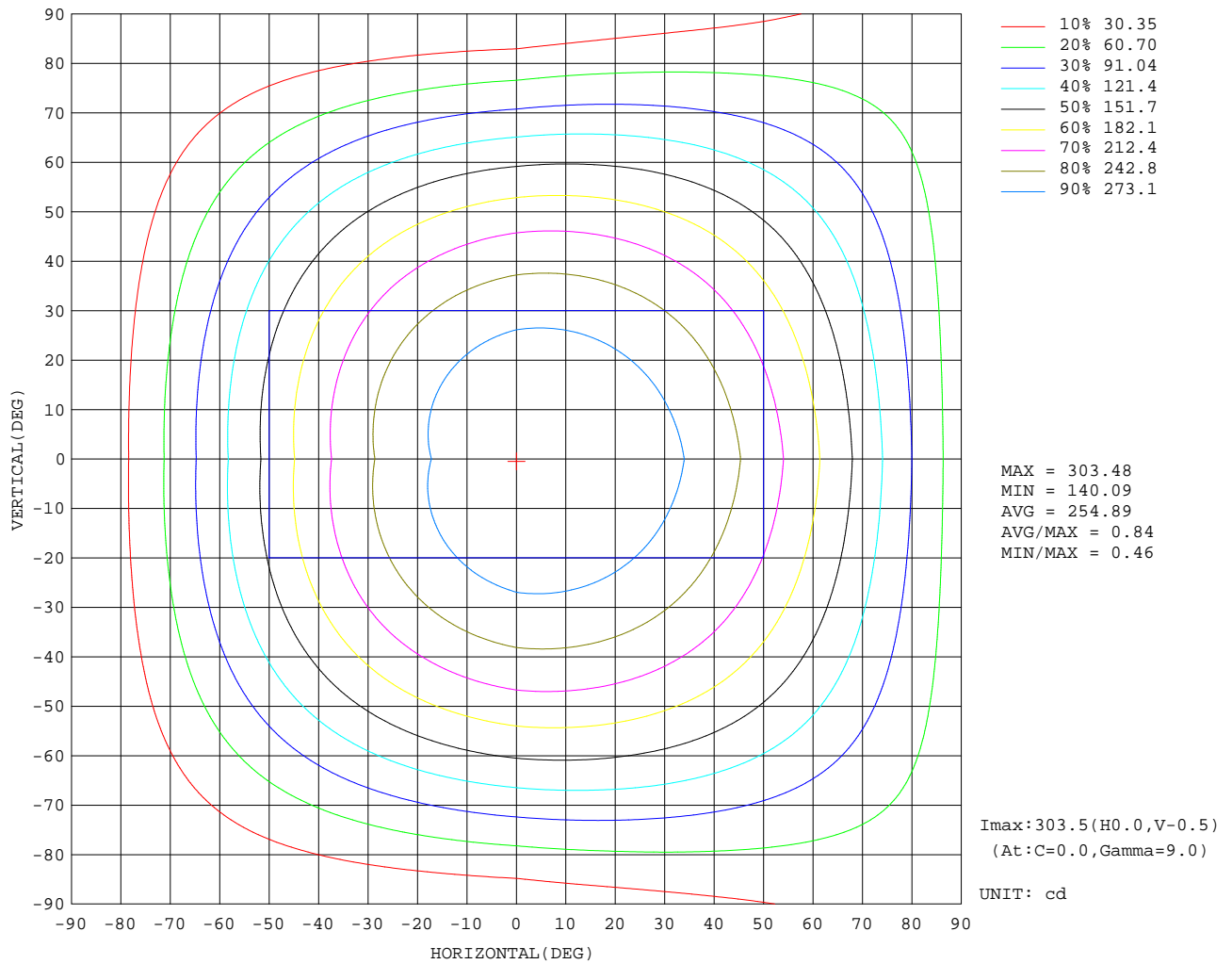
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	55	43	36	54	43	36	53	42	35	29
0.80	65	53	45	64	52	45	62	51	44	37
1.00	73	61	54	72	61	53	69	62	53	45
1.25	80	69	61	79	68	61	76	67	60	52
1.50	85	75	67	83	74	67	80	72	65	57
2.00	92	83	76	90	82	75	86	79	73	65
2.50	96	88	81	94	86	80	90	83	78	69
3.00	100	92	86	97	91	85	93	87	83	73
4.00	104	98	93	101	96	91	97	92	88	78
5.00	107	101	97	104	99	95	99	95	92	82
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: 2021-12-04

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:

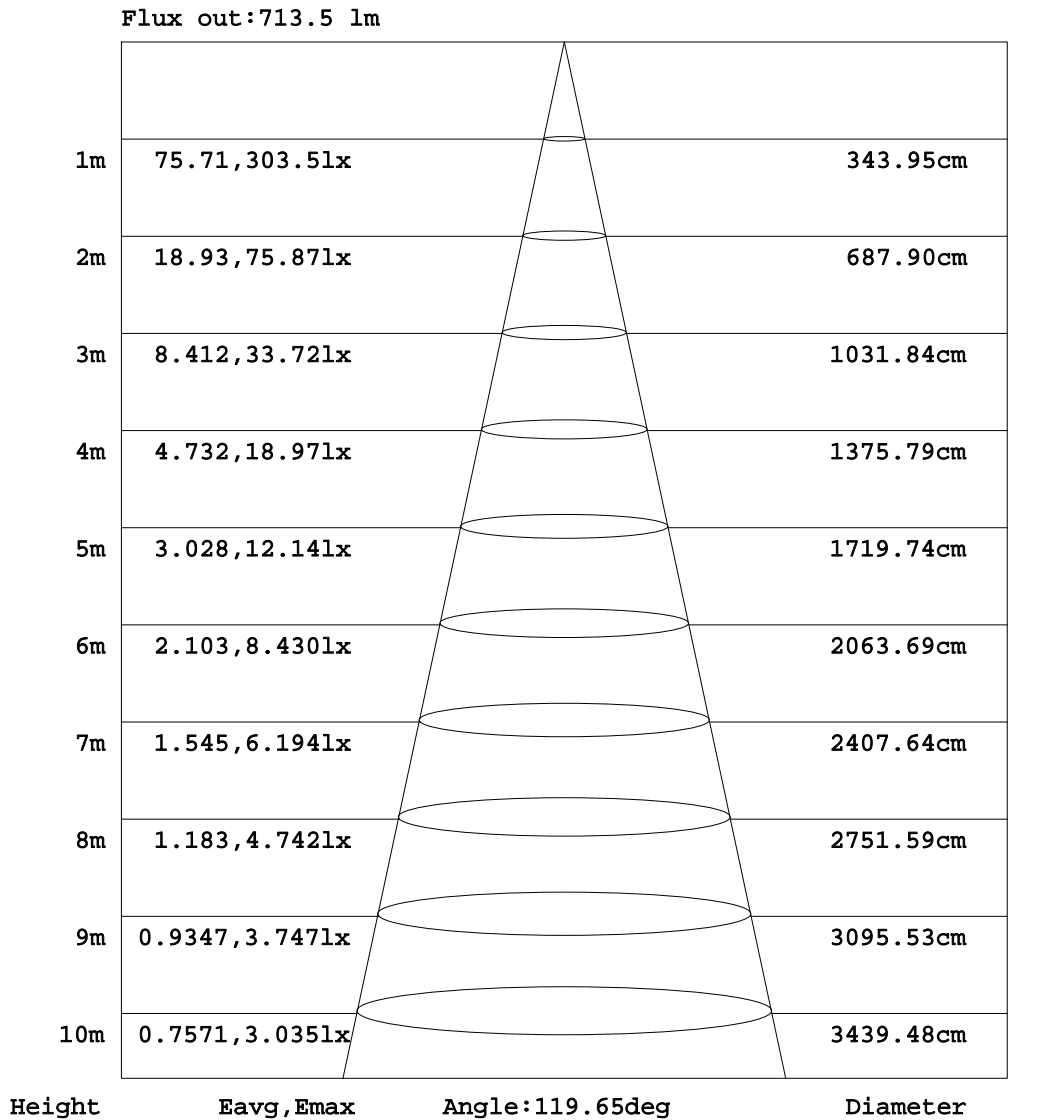
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-12-04

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

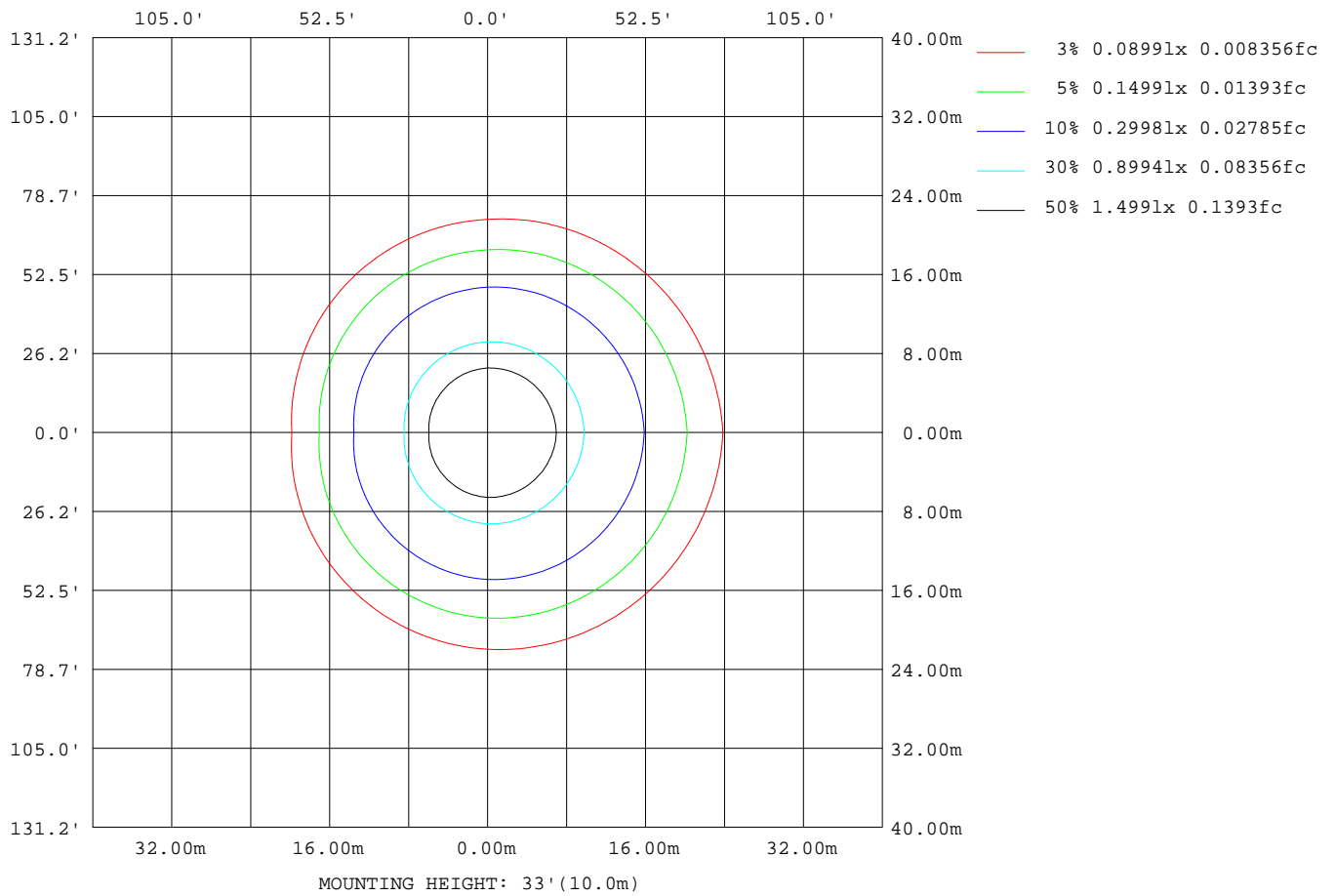


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2021-12-04

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: 2021-12-04

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:980.178x1 lm		
NAME: UB-AT1-50K95C	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

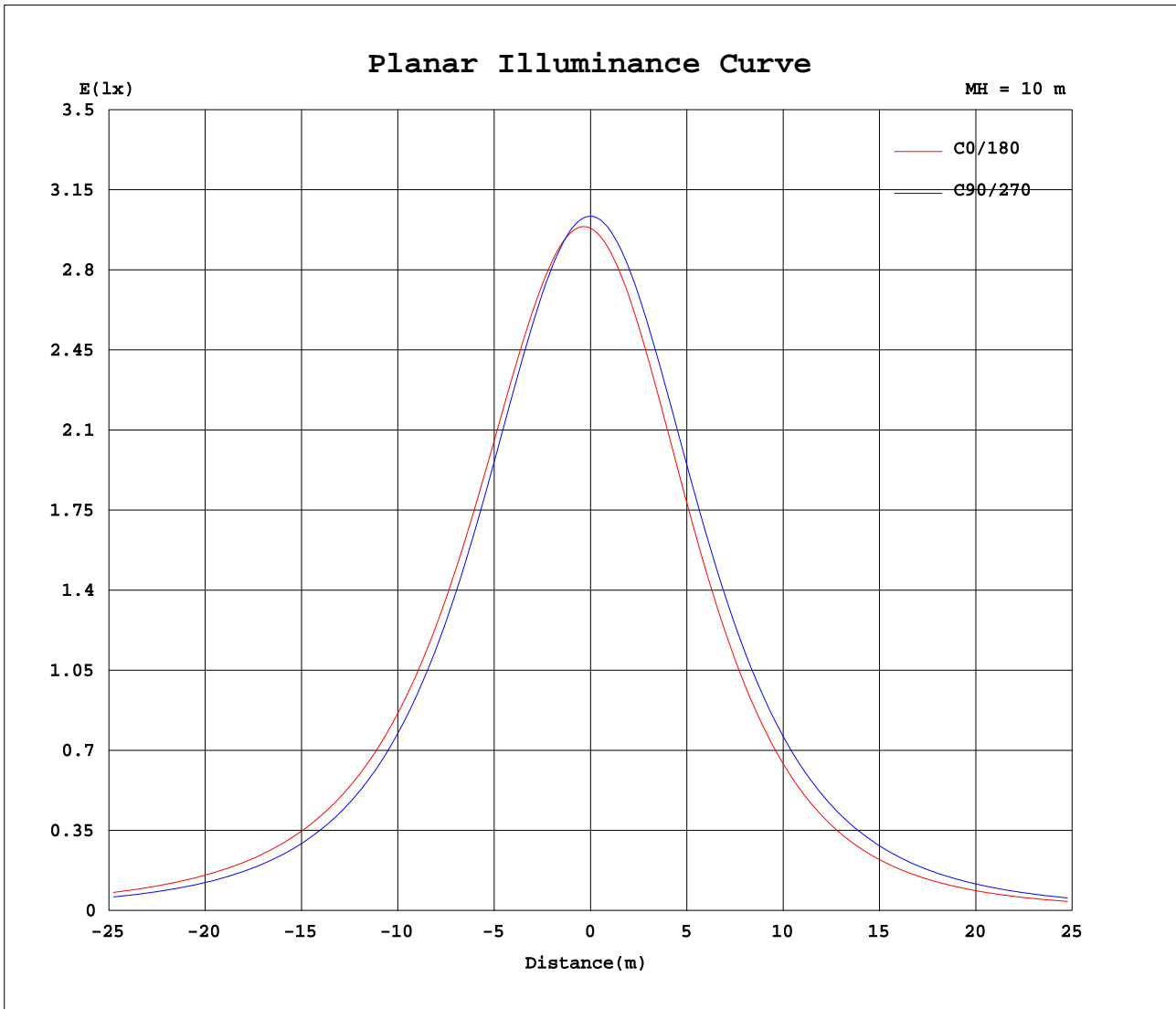
AvgL	cd/m2
L_0~180(65)av	15260
L_0~180(75)av	15653
L_0~180(85)av	22584
L_90~270(65)av	14704
L_90~270(75)av	13986
L_90~270(85)av	14583
L_45(65)av	14625
L_45(75)av	14159
L_45(85)av	16545

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2021-12-04

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: 2021-12-04

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	301	301	301	301															
5	303	300	296	300															
10	304	297	289	296															
15	302	292	280	291															
20	298	284	269	283															
25	292	275	256	273															
30	284	264	240	261															
35	273	250	223	247															
40	261	235	204	231															
45	246	217	183	213															
50	229	198	161	193															
55	211	176	138	171															
60	190	153	114	146															
65	167	128	90.7	121															
70	143	103	67.0	94.2															
75	118	76.6	44.4	68.1															
80	91.8	51.3	24.9	43.5															
85	67.2	29.4	11.5	21.5															
90	45.7	9.53	5.09	3.72															
95	29.1	1.00	2.35	1.00															
100	19.0	1.16	1.67	1.15															
105	13.6	1.33	1.69	1.31															
110	9.49	1.48	1.77	1.47															
115	4.01	1.64	1.86	1.62															
120	2.07	1.76	2.00	1.74															
125	1.66	1.90	2.12	1.87															
130	1.71	2.03	2.23	2.01															
135	1.85	2.14	2.33	2.12															
140	2.00	2.26	2.42	2.23															
145	2.12	2.37	2.51	2.34															
150	2.25	2.46	2.58	2.44															
155	2.39	2.56	2.68	2.54															
160	2.52	2.66	2.76	2.63															
165	2.66	2.75	2.84	2.72															
170	2.77	2.83	2.91	2.80															
175	2.88	2.89	2.96	2.86															
180	2.96	2.92	2.97	2.93															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2021-12-04

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: