









WEC AND CCEC

Test:U:24.000V I:0.4817A P:11.560W PF:1.0000 Freq:0Hz Lamp Flux:872.477x1 lm		
NAME: UB-AT1-DYN276295C	TYPE: LED Strip	WEIGHT: 0.01 Kg
SPEC.: 11.5W	DIM.: 1000*10*2(MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 1000*10(MM)	Shielding Angle: 120

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	.314	.178	.056	.306	.175	.055	.292	.168	.054	.279	.161	.052	.267	.155	.050	
2.0	.294	.161	.049	.288	.158	.049	.275	.153	.048	.264	.148	.046	.253	.143	.045	
3.0	.272	.145	.043	.266	.143	.043	.255	.138	.042	.245	.134	.041	.236	.130	.040	
4.0	.251	.130	.038	.246	.128	.038	.236	.125	.037	.227	.122	.037	.218	.119	.036	
5.0	.232	.118	.034	.227	.117	.034	.218	.114	.033	.210	.111	.033	.203	.108	.033	
6.0	.215	.108	.031	.211	.106	.031	.203	.104	.030	.196	.102	.030	.189	.099	.030	
7.0	.200	.099	.028	.196	.098	.028	.189	.096	.028	.183	.094	.027	.176	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.171	.087	.025	.165	.085	.025	
9.0	.175	.084	.024	.172	.084	.023	.166	.082	.023	.161	.081	.023	.156	.079	.023	
10.0	.164	.079	.022	.161	.078	.022	.156	.077	.022	.152	.075	.021	.147	.074	.021	

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	.200	.200	.200	.171	.171	.171	.116	.116	.116	.067	.067	.067	.021	.021	.021	
1.0	.190	.165	.143	.162	.142	.123	.111	.098	.085	.064	.056	.050	.020	.018	.016	
2.0	.182	.141	.107	.156	.122	.093	.107	.084	.065	.062	.049	.038	.020	.016	.012	
3.0	.174	.124	.083	.149	.107	.072	.103	.074	.051	.059	.043	.030	.019	.014	.010	
4.0	.167	.110	.067	.143	.095	.059	.098	.066	.041	.057	.039	.024	.018	.013	.008	
5.0	.159	.100	.056	.137	.087	.049	.094	.060	.035	.055	.036	.021	.018	.012	.007	
6.0	.152	.092	.048	.131	.079	.042	.090	.056	.030	.052	.033	.018	.017	.011	.006	
7.0	.145	.085	.043	.125	.074	.037	.086	.052	.026	.050	.030	.016	.016	.010	.005	
8.0	.139	.079	.038	.119	.069	.033	.083	.048	.024	.048	.028	.014	.016	.009	.005	
9.0	.133	.074	.035	.114	.064	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004	
10.0	.127	.070	.032	.109	.061	.028	.076	.043	.020	.044	.025	.012	.014	.008	.004	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Test Date:2020-11-18

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.429  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:24.000V I:0.4817A P:11.560W PF:1.0000 Freq:0Hz Lamp Flux:872.477x1 lm										
NAME: UB-AT1-DYN276295C					TYPE: LED Strip			WEIGHT: 0.01 Kg		
SPEC.: 11.5W					DIM.: 1000*10*2(MM)			SERIAL No.: 001		
MFR.: Flexfire LEDs, Inc.					SUR.: 1000*10(MM)			Shielding Angle: 120		
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	23.9	25.6	24.3	25.9	26.3	23.7	25.3	24.1	25.7	26.0
3H	25.7	27.2	26.1	27.6	27.9	25.4	26.8	25.8	27.2	27.6
4H	26.3	27.7	26.7	28.1	28.5	26.0	27.3	26.4	27.7	28.1
6H	26.8	28.0	27.2	28.4	28.8	26.3	27.6	26.8	28.0	28.4
8H	26.9	28.1	27.3	28.5	29.0	26.4	27.7	26.9	28.1	28.5
12H	27.0	28.1	27.4	28.6	29.0	26.5	27.7	26.9	28.1	28.5
4H 2H	24.5	25.9	25.0	26.3	26.7	24.4	25.8	24.8	26.1	26.5
3H	26.5	27.7	27.0	28.1	28.6	26.2	27.4	26.7	27.8	28.2
4H	27.2	28.3	27.6	28.7	29.2	26.9	28.0	27.4	28.4	28.9
6H	27.8	28.7	28.2	29.1	29.6	27.4	28.3	27.9	28.8	29.3
8H	27.9	28.8	28.4	29.3	29.8	27.6	28.4	28.0	28.9	29.4
12H	28.1	28.8	28.6	29.3	29.8	27.6	28.4	28.1	28.9	29.4
8H 4H	27.5	28.3	27.9	28.8	29.3	27.2	28.1	27.7	28.6	29.1
6H	28.1	28.8	28.6	29.4	29.9	27.9	28.6	28.4	29.1	29.6
8H	28.4	29.0	28.9	29.5	30.1	28.1	28.7	28.6	29.2	29.7
12H	28.6	29.1	29.1	29.6	30.2	28.2	28.8	28.7	29.3	29.9
12H 4H	27.5	28.3	28.0	28.8	29.3	27.3	28.1	27.8	28.5	29.0
6H	28.2	28.8	28.7	29.3	29.9	27.9	28.6	28.5	29.0	29.6
8H	28.5	29.0	29.0	29.5	30.1	28.2	28.7	28.7	29.2	29.8
CIE190: 2010										

CIE190: 2010  
Area: 0.01 m2

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.0DEG  
Test Date:2020-11-18

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.429  
Humidity:65.0%  
Test Distance:7.000m [K=1.0000]  
Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:24.000V I:0.4817A P:11.560W PF:1.0000 Freq:0Hz Lamp Flux:872.477x1 lm		
NAME: UB-AT1-DYN276295C	TYPE: LED Strip	WEIGHT: 0.01 Kg
SPEC.: 11.5W	DIM.: 1000*10*2(MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 1000*10(MM)	Shielding Angle: 120

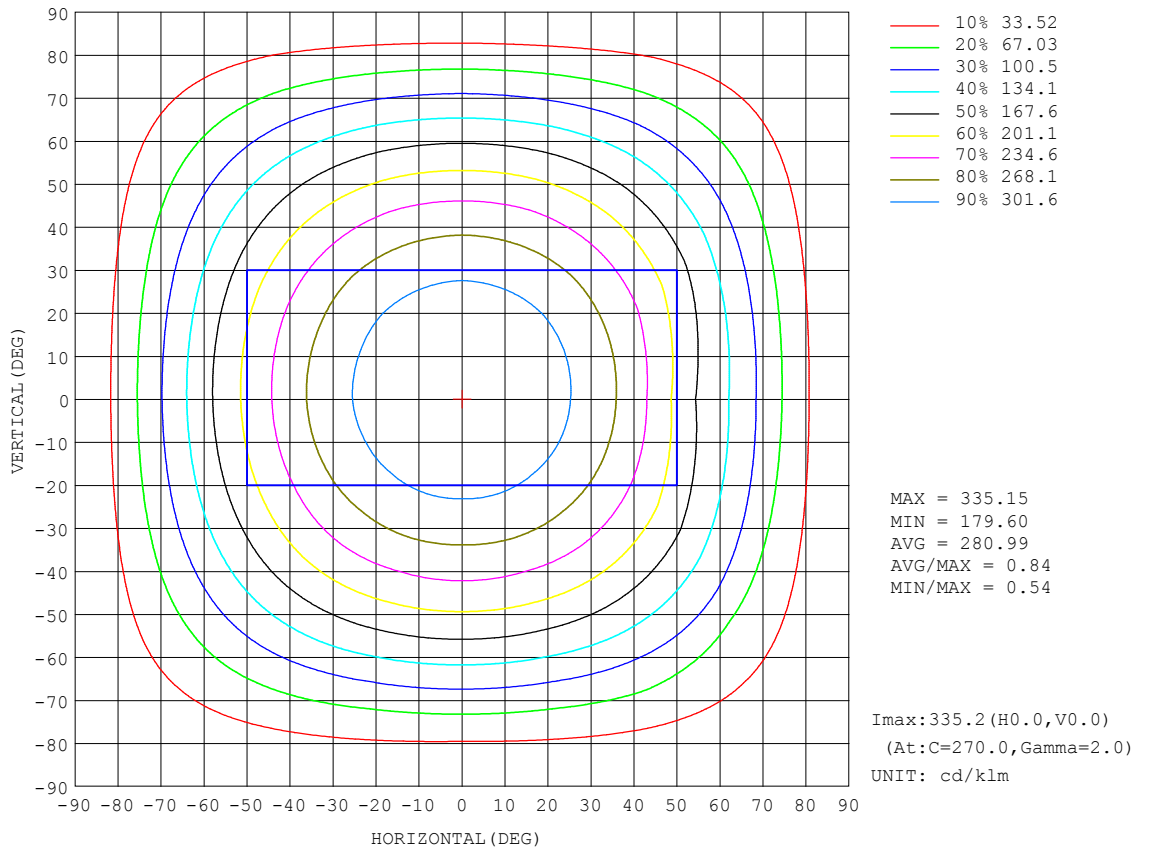
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	57	45	38	56	45	38	55	44	38	31
0.80	67	55	48	66	54	47	64	54	47	40
1.00	75	64	56	74	63	56	71	65	56	48
1.25	82	72	64	81	71	64	78	69	63	56
1.50	87	77	70	86	76	70	82	74	68	61
2.00	94	86	79	92	84	78	89	82	77	68
2.50	98	90	84	96	89	83	92	86	81	73
3.00	102	95	89	99	93	88	95	90	86	77
4.00	106	100	95	103	98	94	99	94	91	82
5.00	108	103	99	106	101	97	101	97	94	85
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Test Date:2020-11-18

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.429  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:24.000V I:0.4817A P:11.560W PF:1.0000 Freq:0Hz Lamp Flux:872.477x1 lm		
NAME: UB-AT1-DYN276295C	TYPE: LED Strip	WEIGHT: 0.01 Kg
SPEC.: 11.5W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 1000*10 (MM)	Shielding Angle: 120



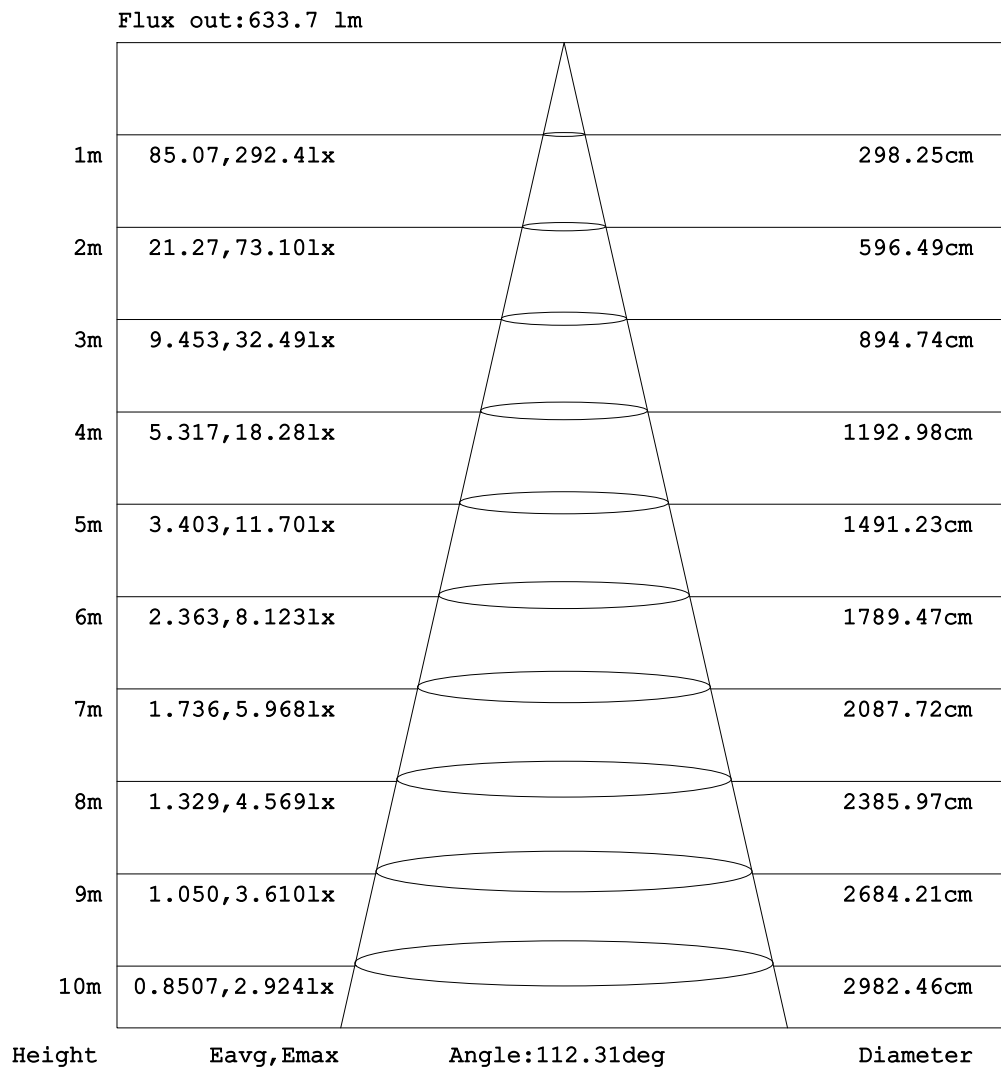
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Test Date:2020-11-18

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.429  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:



**AAI Figure**

Test:U:24.000V I:0.4817A P:11.560W PF:1.0000 Freq:0Hz Lamp Flux:872.477x1 lm		
NAME: UB-AT1-DYN276295C	TYPE: LED Strip	WEIGHT: 0.01 Kg
SPEC.: 11.5W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 1000*10 (MM)	Shielding Angle: 120



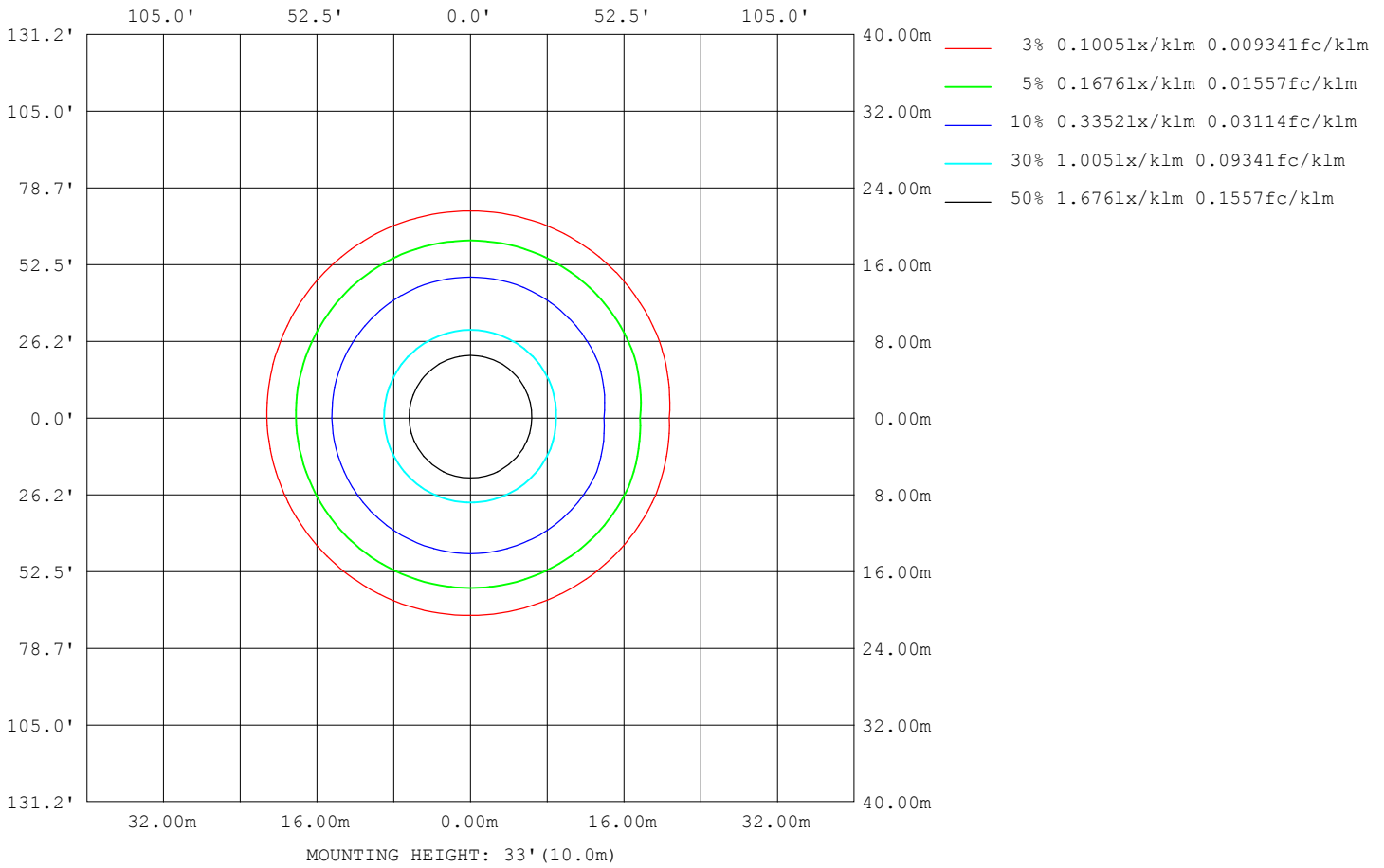
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.0DEG  
 Test Date: 2020-11-18

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.429  
 Humidity: 65.0%  
 Test Distance: 7.000m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

Test:U:24.000V I:0.4817A P:11.560W PF:1.0000 Freq:0Hz Lamp Flux:872.477x1 lm		
NAME: UB-AT1-DYN276295C	TYPE: LED Strip	WEIGHT: 0.01 Kg
SPEC.: 11.5W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 1000*10 (MM)	Shielding Angle: 120



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Test Date:2020-11-18

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.429  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

**LED Avg.L Report**

Test:U:24.000V I:0.4817A P:11.560W PF:1.0000 Freq:0Hz Lamp Flux:872.477x1 lm		
NAME: UB-AT1-DYN276295C	TYPE: LED Strip	WEIGHT: 0.01 Kg
SPEC.: 11.5W	DIM.: 1000*10*2(MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 1000*10(MM)	Shielding Angle: 120

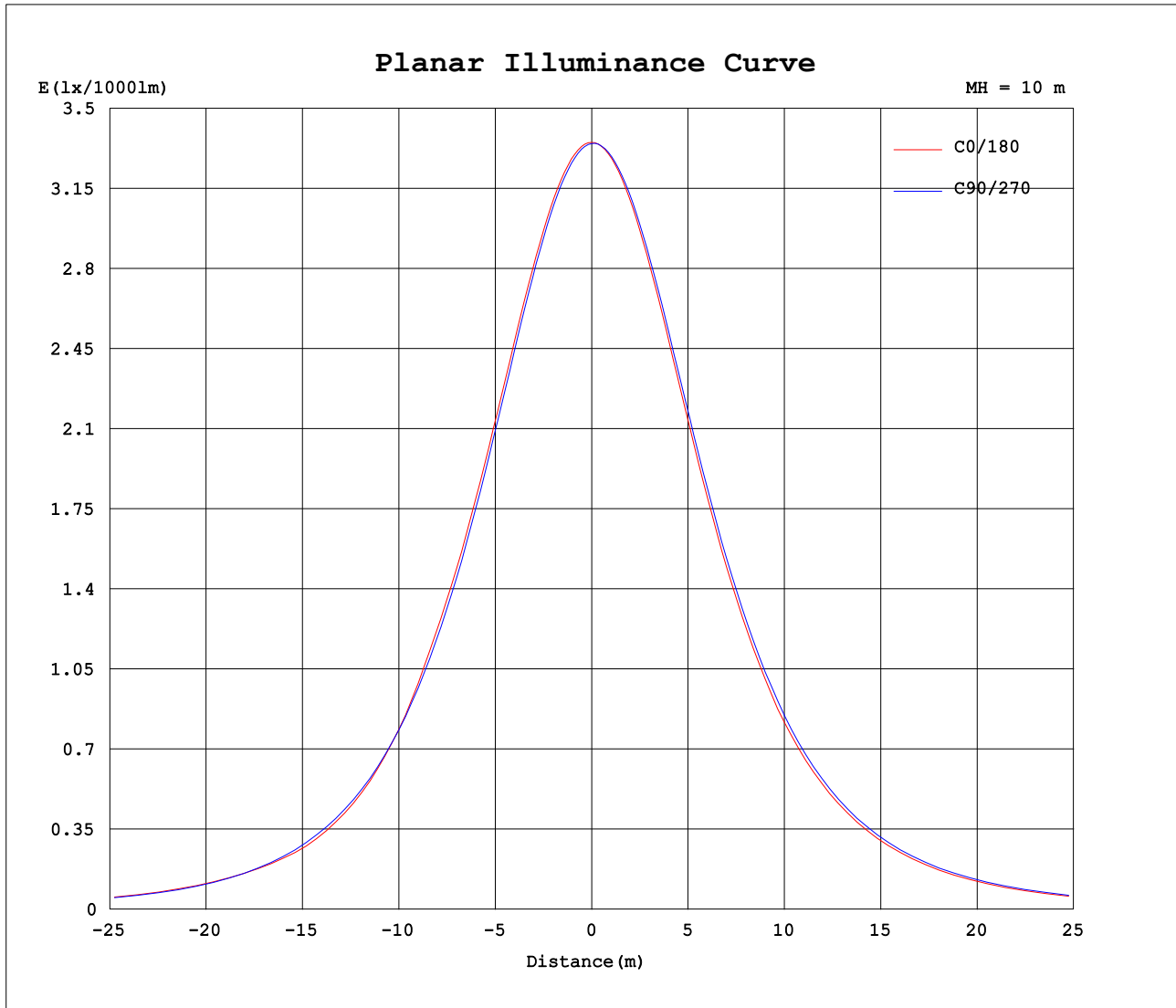
AvgL	cd/m2
L_0~180 (65) av	25480
L_0~180 (75) av	22519
L_0~180 (85) av	16596
L_90~270 (65) av	25876
L_90~270 (75) av	22663
L_90~270 (85) av	16969
L_45 (65) av	26041
L_45 (75) av	22841
L_45 (85) av	18322

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Test Date:2020-11-18

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.429  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Test Date:2020-11-18

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.429  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.000V I:0.4817A P:11.560W PF:1.0000 Freq:0Hz Lamp Flux:872.477x1 lm		
NAME: UB-AT1-DYN276295C	TYPE: LED Strip	WEIGHT: 0.01 Kg
SPEC.: 11.5W	DIM.: 1000*10*2(MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 1000*10(MM)	Shielding Angle: 120

Table--1

UNIT: cd/klm

C (DEG) \ γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335			
5	333	333	333	332	332	332	333	333	334	334	334	334	335	335	334	334			
10	329	329	328	328	327	328	328	329	330	330	331	332	332	332	331	331			
15	323	322	321	320	320	320	320	322	323	324	325	326	327	326	326	324			
20	314	313	311	310	309	310	311	312	314	315	317	318	319	318	318	316			
25	302	301	298	298	297	298	298	300	302	304	306	307	308	308	307	304			
30	288	286	284	283	282	283	283	286	288	290	293	294	295	294	293	291			
35	271	269	266	265	264	265	266	269	272	274	277	278	279	279	278	274			
40	251	250	247	246	244	246	247	250	253	256	259	260	261	260	259	256			
45	222	227	225	223	222	222	225	227	231	235	237	240	240	240	237	235			
50	193	203	201	199	198	199	201	204	208	212	214	217	217	217	214	211			
55	163	178	175	173	172	173	175	178	183	187	190	192	192	192	189	185			
60	142	151	148	145	144	145	148	151	156	160	163	165	165	165	162	158			
65	119	122	118	115	114	116	119	123	128	131	134	136	136	136	134	129			
70	92.0	92.5	88.9	85.5	85.3	84.9	89.4	93.6	99.0	102	105	106	107	105	104	99.3			
75	63.8	55.7	60.2	57.6	57.2	57.9	61.1	64.6	69.8	72.4	75.5	76.5	77.2	75.8	74.2	69.8			
80	37.2	34.7	34.5	32.8	31.2	33.4	35.4	37.8	42.1	44.5	47.8	48.3	48.5	47.4	46.3	42.0			
85	14.5	14.3	13.6	13.2	11.1	13.7	14.5	15.9	18.6	20.8	23.3	23.0	22.8	21.9	21.8	18.1			
90	2.86	2.96	2.80	2.58	0.60	2.73	3.05	3.21	4.40	5.15	6.61	6.80	6.09	6.12	5.70	4.18			
95	1.68	1.53	1.06	0.86	0.76	0.79	1.10	1.47	2.32	2.10	2.33	2.27	0.53	2.25	1.19	1.90			
100	0.98	0.92	0.91	0.97	0.99	0.99	0.94	0.94	1.71	1.23	1.57	1.87	0.69	0.71	1.14	0.86			
105	1.14	1.07	1.08	1.18	1.22	1.22	1.15	1.13	1.72	1.09	1.41	1.56	0.88	0.84	1.16	0.89			
110	1.32	1.26	1.27	1.39	1.42	1.44	1.36	1.35	1.71	1.10	1.40	1.40	1.09	1.04	1.07	1.04			
115	1.53	1.45	1.46	1.58	1.62	1.65	1.58	1.55	1.34	1.27	1.44	1.27	1.29	1.24	1.24	1.22			
120	1.66	1.66	1.62	1.78	1.83	1.86	1.79	1.76	1.42	1.47	1.52	1.48	1.48	1.42	1.43	1.44			
125	1.92	1.86	1.88	1.98	2.03	2.07	2.00	1.97	1.62	1.66	1.72	1.68	1.68	1.62	1.63	1.66			
130	2.17	2.06	2.10	2.17	2.21	2.25	2.20	2.18	1.83	1.88	1.93	1.89	1.88	1.82	1.83	1.86			
135	2.40	2.24	2.25	2.33	2.36	2.41	2.37	2.36	2.05	2.13	2.14	2.09	2.08	2.01	2.03	2.06			
140	2.62	2.41	2.41	2.48	2.51	2.57	2.52	2.53	2.26	2.32	2.33	2.27	2.26	2.20	2.22	2.25			
145	2.81	2.57	2.57	2.62	2.65	2.69	2.67	2.69	2.44	2.50	2.49	2.44	2.43	2.37	2.40	2.43			
150	3.01	2.72	2.70	2.75	2.76	2.81	2.80	2.84	2.62	2.63	2.64	2.58	2.58	2.52	2.55	2.59			
155	3.19	2.86	2.83	2.87	2.89	2.92	2.90	2.96	2.75	2.74	2.76	2.71	2.70	2.65	2.69	2.74			
160	3.34	2.98	2.94	2.96	2.96	3.01	2.99	3.07	2.90	2.87	2.88	2.82	2.81	2.77	2.82	2.88			
165	3.50	3.09	3.02	3.04	3.02	3.07	3.07	3.16	3.03	2.97	2.99	2.93	2.92	2.88	2.94	2.99			
170	3.62	3.13	3.09	3.10	3.07	3.11	3.13	3.22	3.20	3.02	3.05	3.00	2.99	2.96	3.01	3.05			
175	3.62	3.15	3.14	3.11	3.09	3.12	3.14	3.23	3.59	3.08	3.11	3.07	3.06	3.03	3.09	3.13			
180	3.63	3.14	3.15	3.12	3.09	3.11	3.14	3.23	3.60	3.14	3.15	3.12	3.11	3.10	3.15	3.23			

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.0DEG  
 Test Date:2020-11-18

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.429  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks: