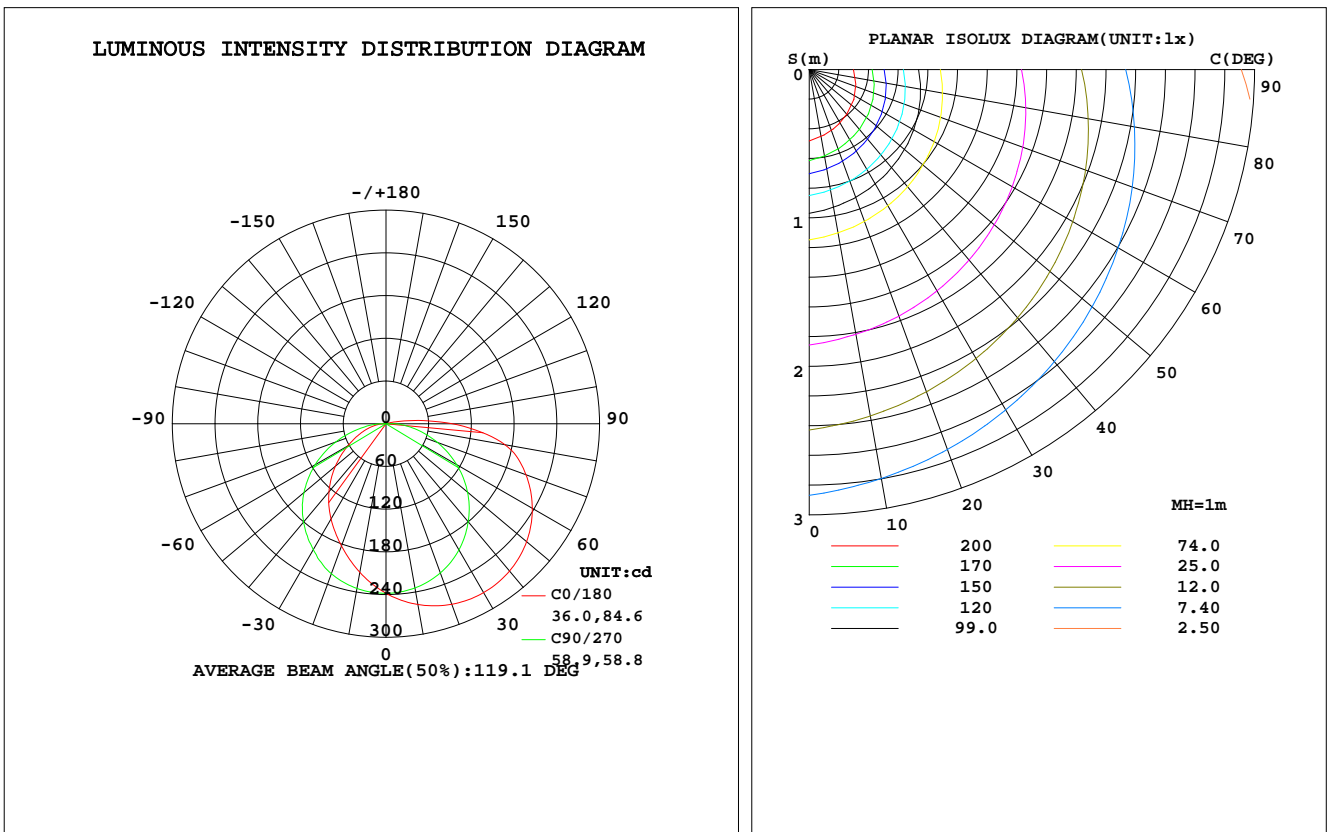


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.000V I:0.4800A P:11.520W PF:1.0000 Freq:0Hz Lamp Flux:864.159x1 lm		
NAME: UB-AT1-40K95C	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)	274.0	S/MH(C0/180)	0.99
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)		TOTAL FLUX(lm)	864.16	η UP, DN(C0-180)	2.5,61.7
NOMINAL FLUX(lm)	864.159	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.7,35.0
LAMPS INSIDE	1	η up(%)	3.3	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)		η down(%)	96.7	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

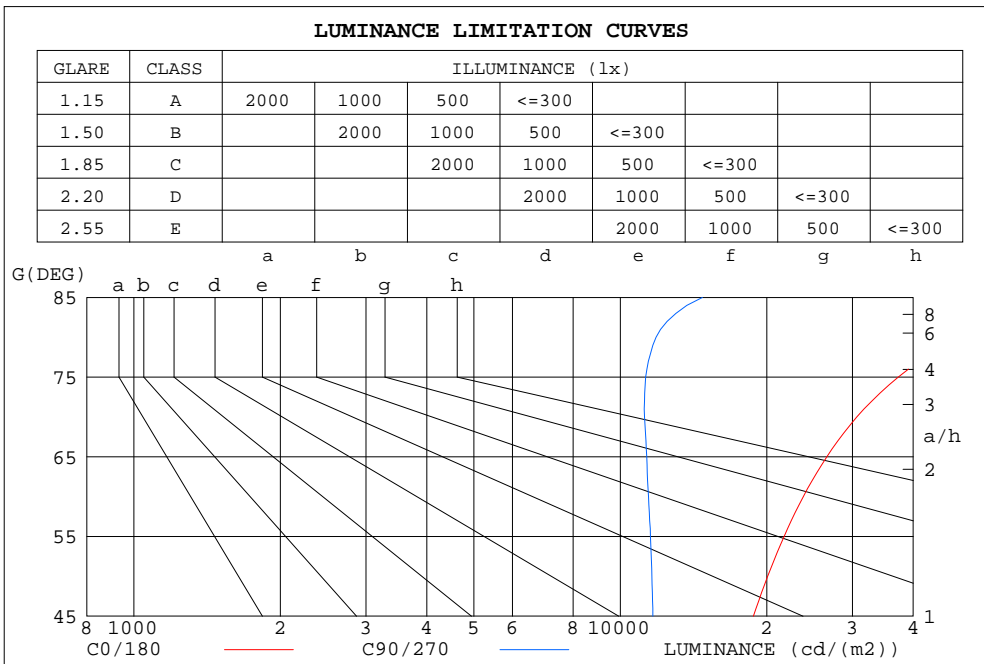
ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270				γ	Φ zone	Φ total	Φ lum,lamp
10	257.7	234.2	212.0	234.9				0- 10	22.57	22.57	2.61,2.61
20	269.8	223.1	182.8	224.3				10- 20	65.13	87.70	10.1,10.1
30	274.0	204.7	154.4	204.4				20- 30	100.5	188.2	21.8,21.8
40	270.0	179.7	124.7	180.3				30- 40	125.0	313.3	36.3,36.3
50	257.7	149.6	92.90	150.2				40- 50	136.1	449.4	52,52
60	237.3	114.5	61.80	114.7				50- 60	132.2	581.6	67.3,67.3
70	209.1	76.83	36.66	75.13				60- 70	114.8	696.4	80.6,80.6
80	169.4	41.20	17.56	35.73				70- 80	87.70	784.1	90.7,90.7
90	93.33	12.99	4.983	6.432				80- 90	51.91	836.0	96.7,96.7
100	21.53	1.024	2.028	0.9965				90-100	17.15	853.2	98.7,98.7
110	3.074	1.264	2.089	1.198				100-110	3.477	856.7	99.1,99.1
120	1.146	1.481	2.262	1.399				110-120	1.685	858.3	99.3,99.3
130	1.161	1.683	2.354	1.596				120-130	1.456	859.8	99.5,99.5
140	1.340	1.857	2.392	1.770				130-140	1.368	861.2	99.7,99.7
150	1.573	2.015	2.408	1.949				140-150	1.199	862.4	99.8,99.8
160	1.817	2.189	2.414	2.124				150-160	0.9504	863.3	99.9,99.9
170	2.088	2.342	2.403	2.298				160-170	0.6242	863.9	100,100
180	2.349	2.429	2.349	2.429				170-180	0.2218	864.2	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



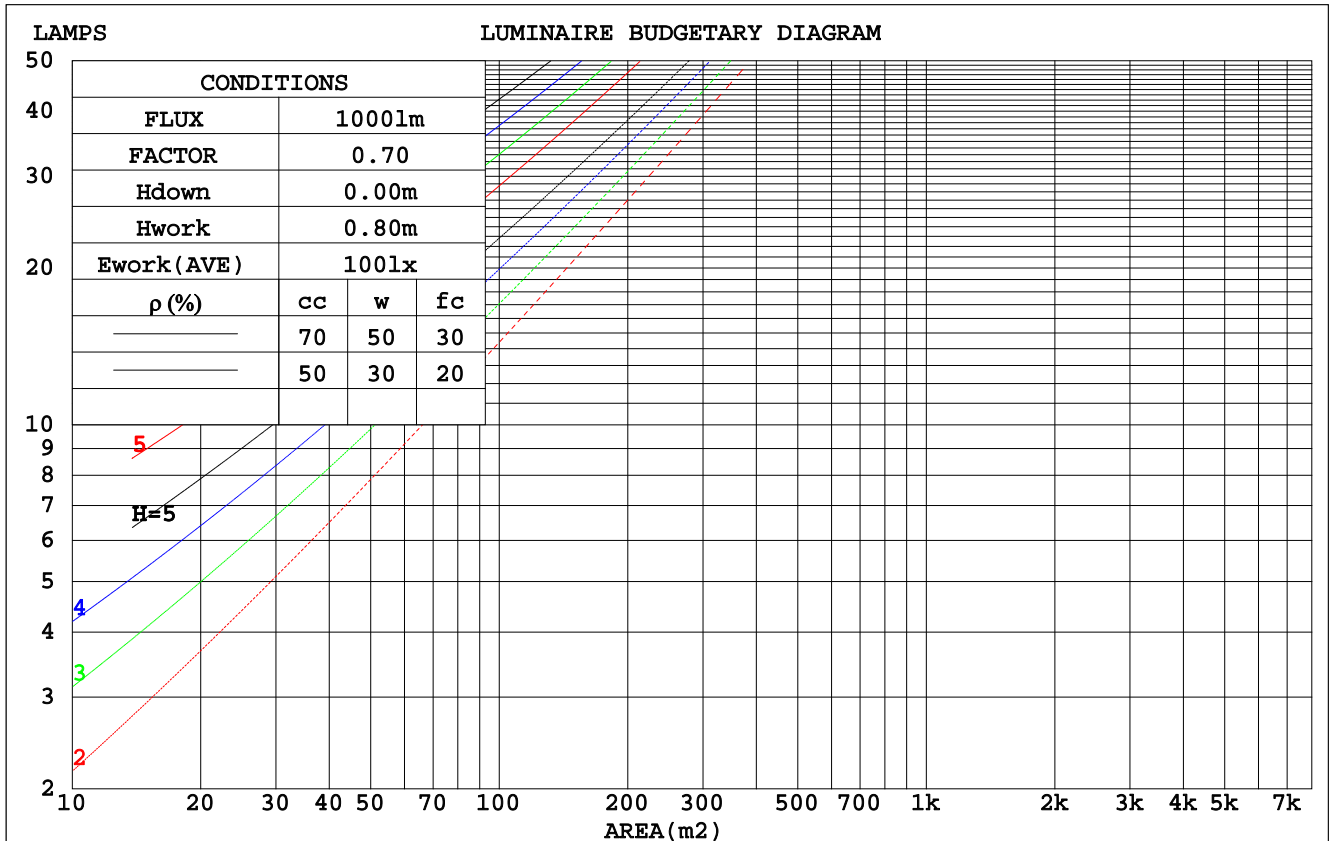
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	77120	14752
80	48885	11840
75	37271	11271
70	30635	11210
65	26571	11333
60	23779	11429
55	21706	11536
50	20088	11614
45	18769	11667

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	1.09	1.09	1.09	1.04	1.04	1.04	.99	.99	.99	.97
1.0	.00	.95	.90	.97	.92	.88	.92	.88	.85	.88	.84	.81	.83	.81	.78	.76
2.0	.86	.78	.71	.83	.76	.70	.79	.73	.68	.75	.70	.66	.72	.68	.64	.61
3.0	.74	.65	.58	.72	.64	.57	.69	.62	.56	.66	.59	.54	.63	.57	.53	.50
4.0	.65	.56	.48	.64	.55	.48	.61	.53	.47	.58	.51	.46	.55	.50	.45	.42
5.0	.58	.48	.41	.57	.48	.41	.54	.46	.40	.52	.45	.39	.49	.43	.39	.36
6.0	.52	.43	.36	.51	.42	.35	.49	.41	.35	.47	.40	.34	.45	.38	.34	.31
7.0	.47	.38	.31	.46	.37	.31	.44	.36	.31	.42	.35	.30	.41	.34	.30	.28
8.0	.43	.34	.28	.42	.33	.28	.40	.33	.27	.39	.32	.27	.37	.31	.26	.24
9.0	.39	.31	.25	.38	.30	.25	.37	.30	.24	.36	.29	.24	.34	.28	.24	.22
10.0	.36	.28	.22	.35	.28	.22	.34	.27	.22	.33	.26	.22	.32	.26	.21	.20



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

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.374	.212	.067	.365	.208	.066	.350	.201	.064	.336	.194	.062	.323	.187	.060	
2.0	.331	.182	.056	.324	.178	.055	.310	.172	.054	.297	.167	.052	.286	.162	.051	
3.0	.297	.158	.047	.291	.156	.047	.279	.151	.046	.267	.146	.045	.257	.142	.044	
4.0	.269	.140	.041	.263	.138	.041	.252	.134	.040	.242	.130	.039	.233	.126	.039	
5.0	.245	.125	.036	.240	.123	.036	.231	.120	.035	.221	.117	.035	.213	.114	.034	
6.0	.225	.113	.032	.221	.112	.032	.212	.109	.032	.204	.106	.031	.196	.103	.031	
7.0	.208	.103	.029	.204	.102	.029	.196	.099	.029	.189	.097	.028	.182	.094	.028	
8.0	.193	.094	.027	.190	.093	.026	.182	.091	.026	.176	.089	.026	.170	.087	.025	
9.0	.180	.087	.024	.177	.086	.024	.170	.084	.024	.164	.082	.024	.159	.081	.023	
10.0	.169	.081	.022	.166	.080	.022	.160	.078	.022	.154	.077	.022	.149	.075	.022	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.215	.215	.215	.184	.184	.184	.126	.126	.126	.072	.072	.072	.023	.023	.023	
1.0	.210	.181	.154	.179	.155	.133	.123	.107	.092	.071	.062	.053	.023	.020	.017	
2.0	.203	.157	.118	.174	.135	.102	.119	.093	.071	.069	.054	.042	.022	.018	.014	
3.0	.195	.140	.096	.167	.121	.083	.115	.084	.058	.066	.049	.034	.021	.016	.011	
4.0	.187	.127	.081	.161	.110	.070	.110	.076	.049	.064	.045	.029	.021	.015	.010	
5.0	.179	.117	.070	.154	.101	.061	.106	.071	.043	.061	.041	.026	.020	.014	.008	
6.0	.172	.108	.063	.148	.094	.055	.102	.066	.039	.059	.039	.023	.019	.013	.008	
7.0	.165	.102	.058	.142	.088	.050	.098	.062	.036	.057	.036	.021	.018	.012	.007	
8.0	.158	.096	.053	.136	.083	.047	.094	.058	.033	.055	.034	.020	.018	.011	.007	
9.0	.151	.091	.050	.130	.079	.044	.090	.056	.031	.053	.033	.019	.017	.011	.006	
10.0	.145	.087	.048	.125	.075	.042	.087	.053	.030	.051	.031	.018	.016	.010	.006	

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	23.7	25.4	24.2	25.8	26.2	18.8	20.5	19.2	20.9	21.3
3H	26.9	28.4	27.3	28.8	29.2	20.9	22.4	21.3	22.8	23.3
4H	28.5	29.9	28.9	30.3	30.8	21.8	23.3	22.3	23.7	24.1
6H	30.2	31.5	30.6	32.0	32.4	22.6	24.0	23.1	24.4	24.9
8H	31.0	32.3	31.5	32.8	33.3	23.0	24.3	23.5	24.7	25.2
12H	31.9	33.2	32.4	33.6	34.1	23.3	24.6	23.8	25.0	25.5
4H 2H	24.3	25.7	24.7	26.1	26.6	19.1	20.6	19.6	21.0	21.4
3H	27.6	28.9	28.1	29.3	29.8	21.4	22.7	21.9	23.1	23.6
4H	29.4	30.6	29.9	31.0	31.5	22.4	23.6	22.9	24.1	24.6
6H	31.3	32.3	31.8	32.8	33.4	23.4	24.4	23.9	24.9	25.4
8H	32.3	33.3	32.8	33.8	34.3	23.9	24.8	24.4	25.3	25.8
12H	33.4	34.2	33.9	34.7	35.3	24.3	25.2	24.8	25.7	26.3
8H 4H	29.7	30.7	30.2	31.2	31.7	22.6	23.5	23.1	24.0	24.6
6H	31.9	32.7	32.4	33.2	33.7	23.7	24.5	24.2	25.0	25.6
8H	33.0	33.7	33.5	34.3	34.8	24.2	24.9	24.8	25.5	26.0
12H	34.3	34.9	34.8	35.4	36.1	24.8	25.4	25.3	26.0	26.6
12H 4H	29.8	30.6	30.3	31.2	31.7	22.6	23.5	23.1	24.0	24.5
6H	31.9	32.7	32.5	33.2	33.8	23.7	24.4	24.3	24.9	25.6
8H	33.2	33.8	33.7	34.4	35.0	24.3	24.9	24.8	25.5	26.1
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:

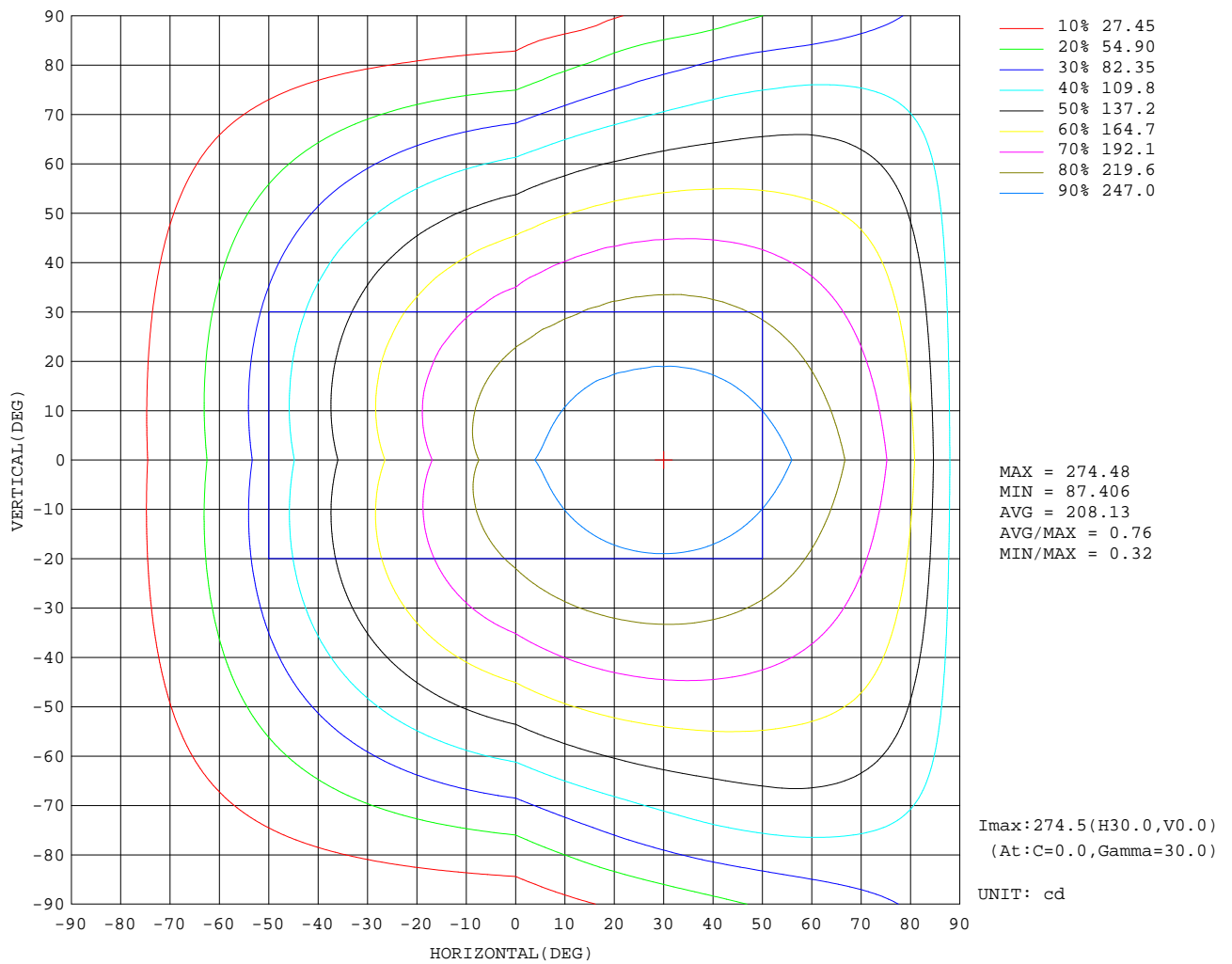
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	53	41	33	52	40	33	51	40	33	26
0.80	62	50	42	61	49	42	59	48	41	34
1.00	70	58	50	69	57	50	67	59	49	41
1.25	77	66	58	76	65	57	73	63	56	48
1.50	83	71	63	81	70	63	77	68	61	53
2.00	90	80	72	88	78	71	84	76	70	61
2.50	94	85	78	92	83	77	87	80	75	65
3.00	98	89	83	95	88	81	91	84	79	69
4.00	102	95	89	99	93	88	95	89	85	75
5.00	105	99	94	102	97	92	97	93	89	78
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:

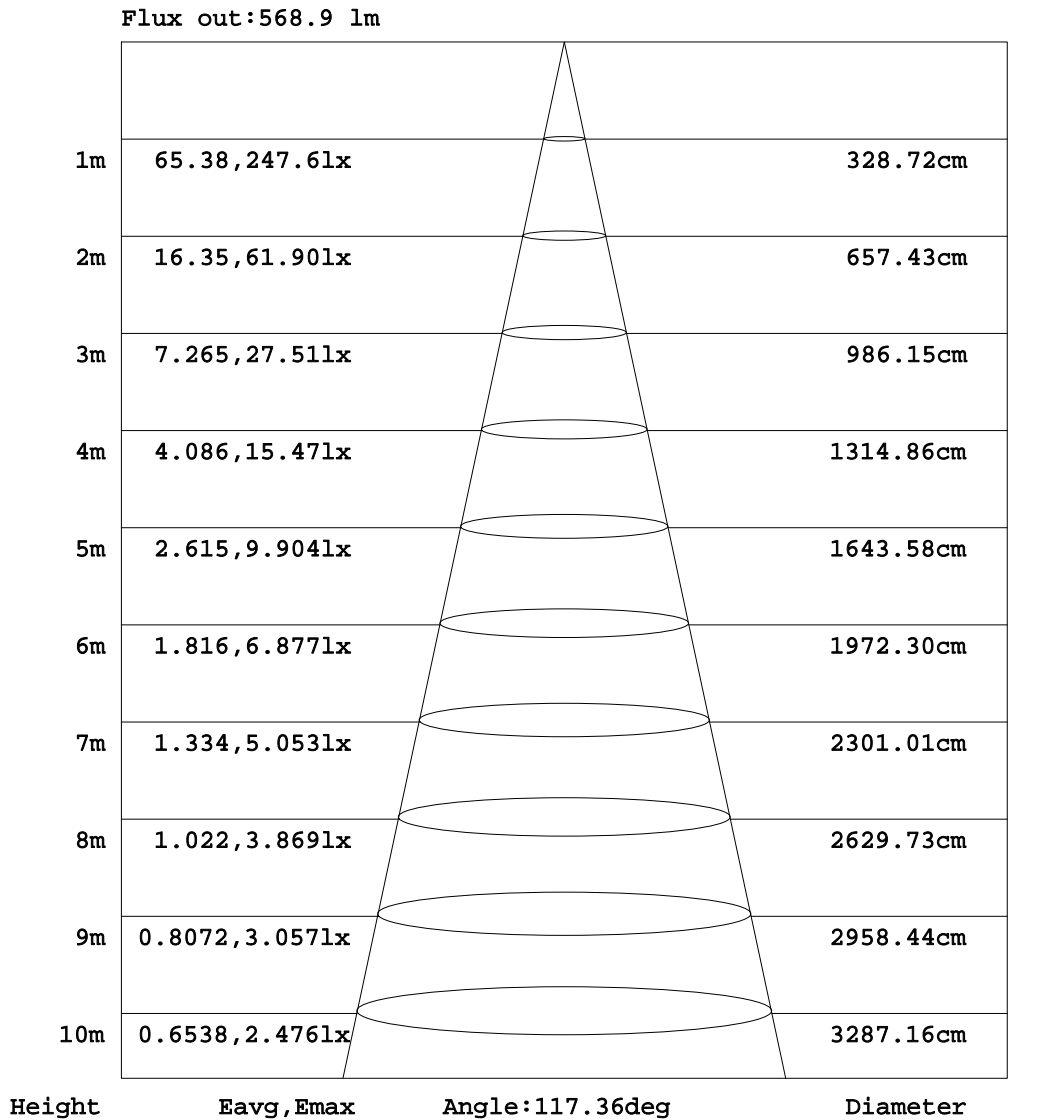
ISOCANDELA DIAGRAM



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

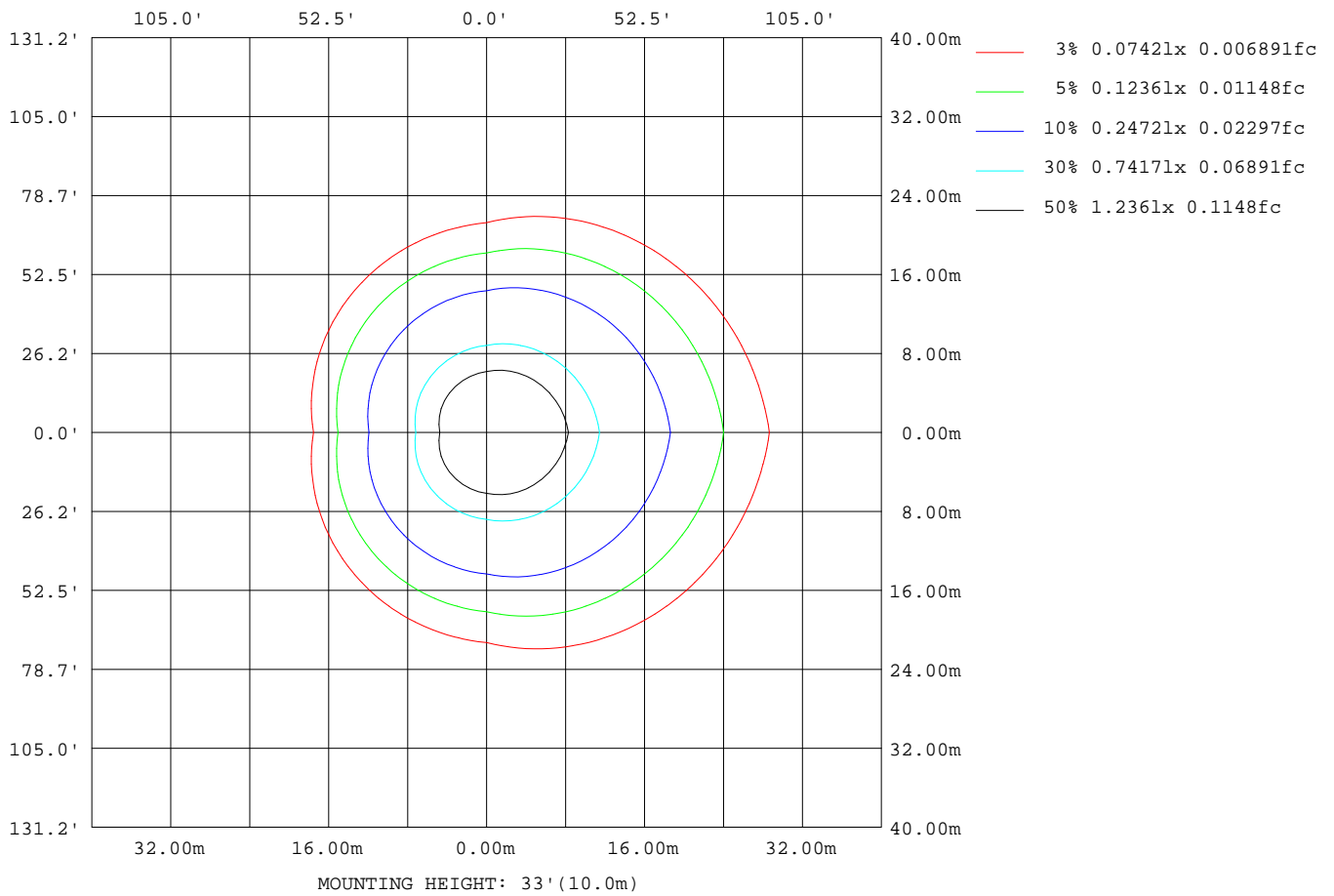


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:864.159x1 lm		
NAME: UB-AT1-40K95C	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

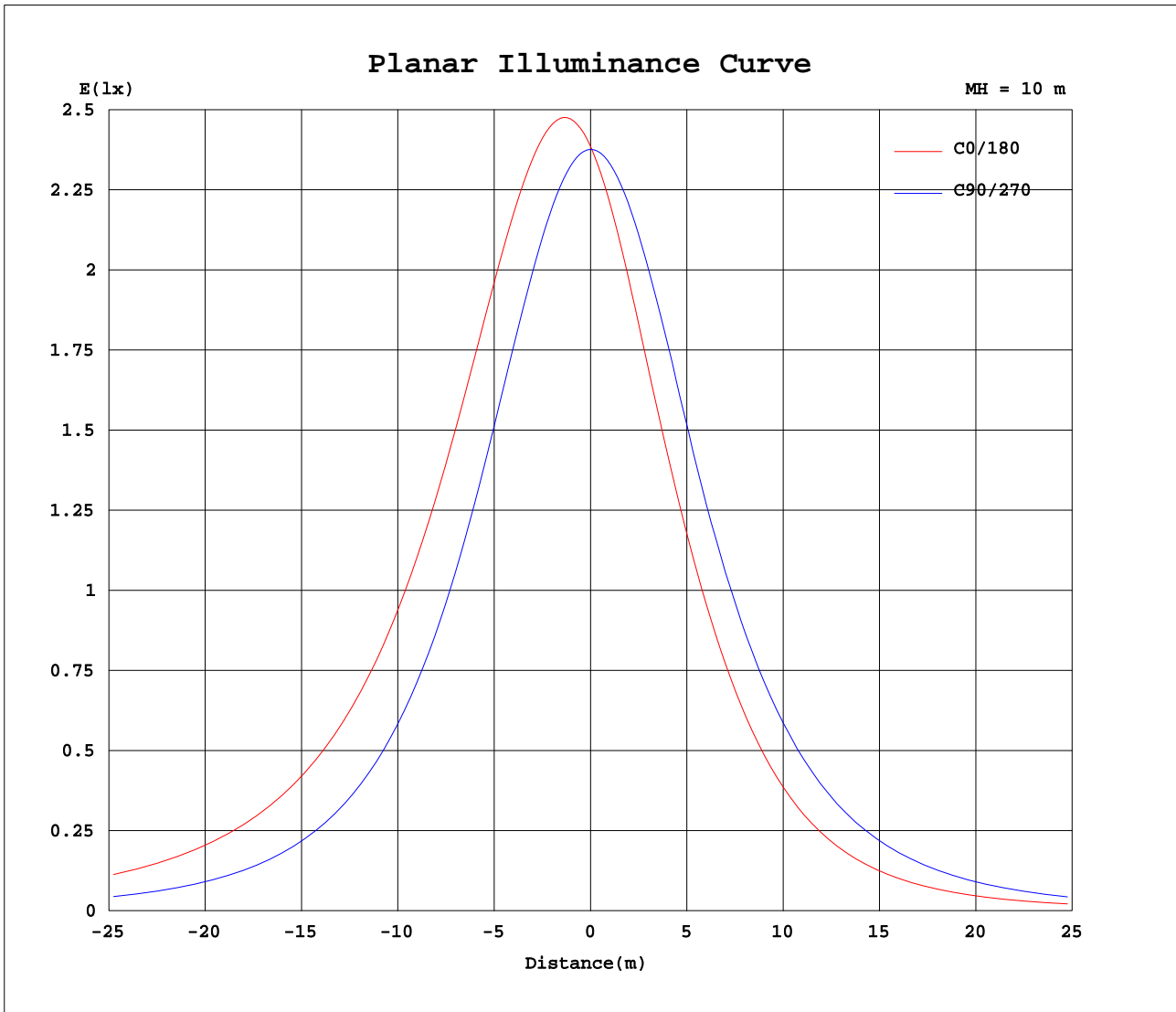
AvgL	cd/m2
L_0~180(65)av	16116
L_0~180(75)av	21156
L_0~180(85)av	41413
L_90~270(65)av	11320
L_90~270(75)av	10923
L_90~270(85)av	13524
L_45(65)av	12473
L_45(75)av	13769
L_45(85)av	21788

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	238	238	238	238															
5	249	237	226	237															
10	258	234	212	235															
15	265	230	197	231															
20	270	223	183	224															
25	273	215	169	215															
30	274	205	154	204															
35	273	193	140	192															
40	270	180	125	180															
45	265	165	109	166															
50	258	150	92.9	150															
55	249	133	76.9	133															
60	237	115	61.8	115															
65	224	96.0	48.3	95.4															
70	209	76.8	36.7	75.1															
75	193	58.5	26.5	54.6															
80	169	41.2	17.6	35.7															
85	134	25.8	10.2	21.4															
90	93.3	13.0	4.98	6.43															
95	52.4	0.91	2.48	0.96															
100	21.5	1.02	2.03	1.00															
105	7.20	1.14	2.01	1.10															
110	3.07	1.26	2.09	1.20															
115	1.83	1.37	2.18	1.30															
120	1.15	1.48	2.26	1.40															
125	1.07	1.59	2.32	1.49															
130	1.16	1.68	2.35	1.60															
135	1.24	1.76	2.38	1.69															
140	1.34	1.86	2.39	1.77															
145	1.47	1.94	2.40	1.86															
150	1.57	2.02	2.41	1.95															
155	1.68	2.10	2.41	2.03															
160	1.82	2.19	2.41	2.12															
165	1.95	2.27	2.41	2.22															
170	2.09	2.34	2.40	2.30															
175	2.22	2.40	2.38	2.37															
180	2.35	2.43	2.35	2.43															

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: