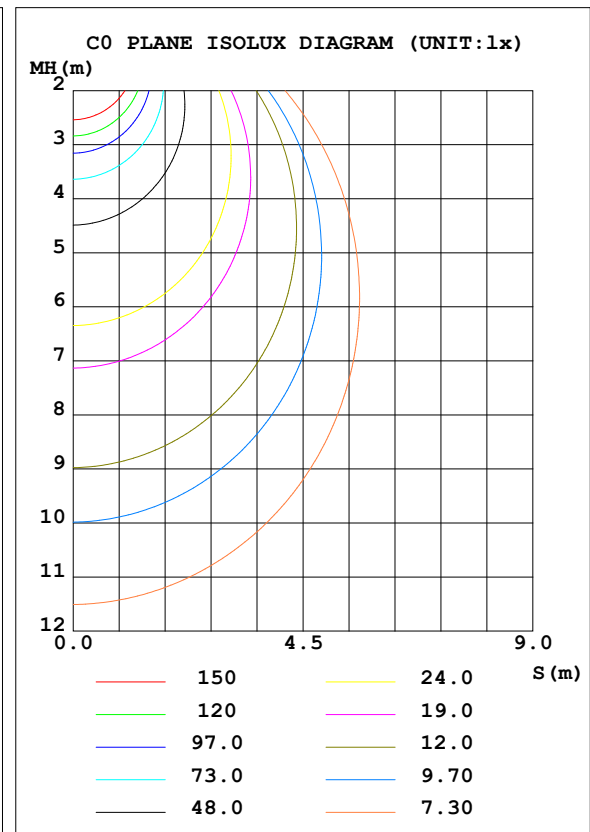
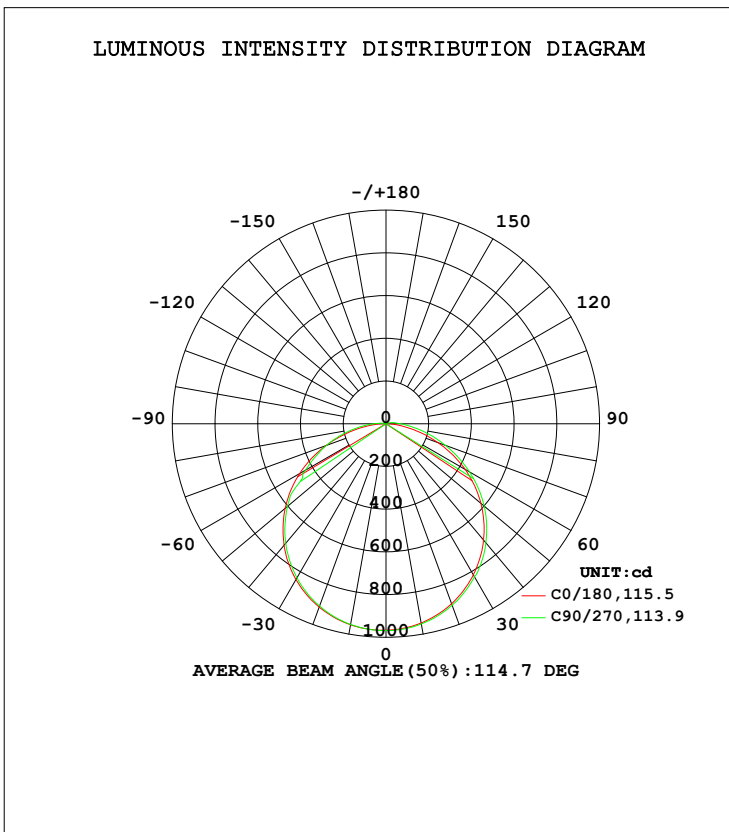


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.001V I:0.9675A P:23.221W PF:1.0000 Freq:0Hz Lamp Flux:2945.94x1 lm		
NAME: UB-RS-30K97C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1	Shielding Angle: 120

DATA OF LAMP		PHOTOMETRIC DATA Eff: 126.87 lm/W			
MODEL		I _{max} (cd)	968.4	S/MH (C0/180)	1.29
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.28
RATED VOLTAGE (V)		TOTAL FLUX (lm)	2946.0	η UP, DN (C0-180)	0.9, 48.5
NOMINAL FLUX (lm)	2945.94	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.6, 50.0
LAMPS INSIDE	1	η up (%)	1.5	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)		η down (%)	98.5	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2023-07-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity: 65.0%
 Test Distance: 8.700m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

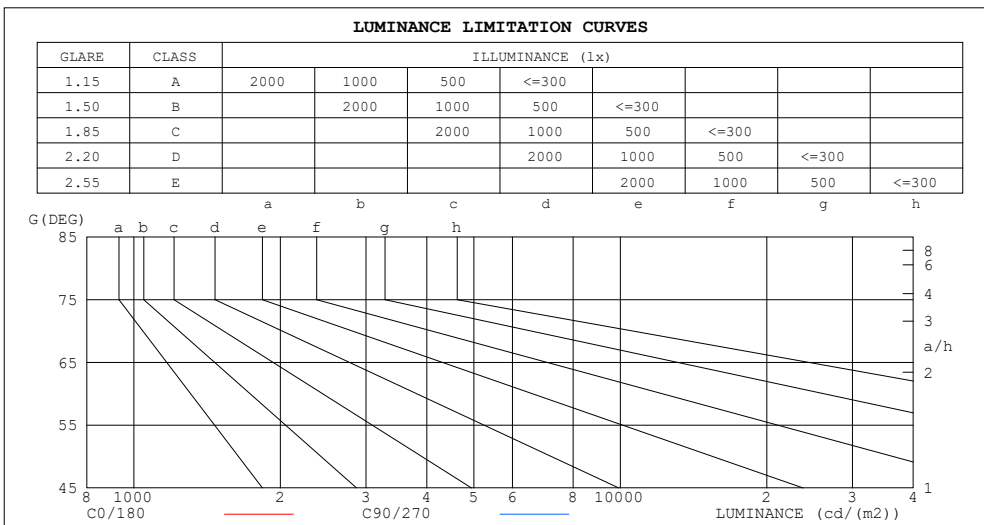
γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum, lamp
10	947.0	951.9	955.6	954.2				0- 10	91.63	91.63	3.11,3.11
20	897.1	904.5	913.9	908.7				10- 20	263.4	355.0	12.1,12.1
30	817.4	828.4	842.6	833.4				20- 30	401.9	756.9	25.7,25.7
40	710.8	727.3	742.4	730.0				30- 40	489.8	1247	42.3,42.3
50	580.1	599.6	616.0	602.1				40- 50	513.9	1761	59.8,59.8
60	428.3	451.5	466.9	435.2				50- 60	467.8	2228	75.6,75.6
70	259.3	295.6	298.4	296.8				60- 70	363.0	2591	88,88
80	99.95	159.0	131.5	159.0				70- 80	222.3	2814	95.5,95.5
90	2.209	68.40	11.66	56.63				80- 90	86.92	2901	98.5,98.5
100	1.278	32.77	1.256	16.78				90-100	23.40	2924	99.3,99.3
110	1.785	10.27	1.750	2.319				100-110	8.346	2932	99.5,99.5
120	2.401	2.365	2.353	2.365				110-120	2.916	2935	99.6,99.6
130	2.968	2.821	2.920	2.931				120-130	2.361	2938	99.7,99.7
140	3.510	3.314	3.449	3.510				130-140	2.452	2940	99.8,99.8
150	3.842	4.052	3.880	3.929				140-150	2.306	2942	99.9,99.9
160	4.126	4.175	4.176	4.335				150-160	1.880	2944	99.9,99.9
170	4.390	4.508	4.434	4.680				160-170	1.236	2946	100,100
180	4.520	4.582	4.508	4.656				170-180	0.4347	2946	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-07-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:8.700m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.001V I:0.9675A P:23.221W PF:1.0000 Freq:0Hz Lamp Flux:2945.94x1 lm		
NAME: UB-RS-30K97C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1	Shielding Angle: 120



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	44421	120069
80	57560	91592
75	67992	86773
70	75806	86415
65	81621	88288
60	85653	90304
55	88347	92013
50	90241	93282
45	91631	94239

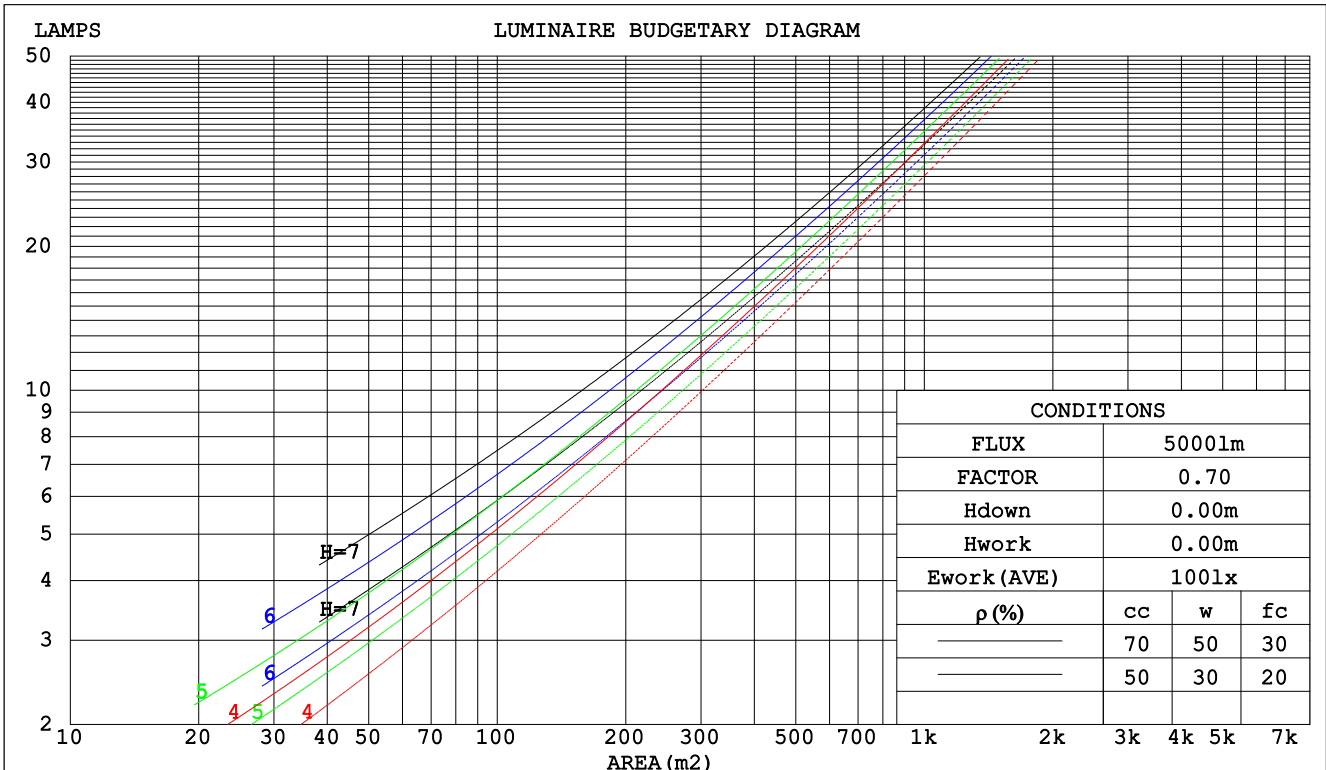
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2023-07-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity: 65.0%
 Test Distance: 8.700m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.001V I:0.9675A P:23.221W PF:1.0000 Freq:0Hz Lamp Flux:2945.94x1 lm		
NAME: UB-RS-30K97C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1	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						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	1.01	1.01	1.01	.98
1.0	1.03	.98	.94	1.00	.96	.92	.96	.92	.89	.92	.89	.86	.88	.85	.83	.81
2.0	.89	.82	.76	.87	.81	.75	.83	.78	.73	.80	.75	.71	.76	.73	.69	.67
3.0	.78	.70	.63	.76	.69	.62	.73	.66	.61	.70	.64	.60	.67	.63	.58	.56
4.0	.69	.60	.53	.68	.59	.53	.65	.58	.52	.62	.56	.51	.60	.55	.50	.48
5.0	.62	.52	.46	.60	.52	.45	.58	.50	.45	.56	.49	.44	.54	.48	.43	.41
6.0	.55	.46	.40	.54	.46	.39	.52	.45	.39	.50	.44	.38	.49	.43	.38	.36
7.0	.50	.41	.35	.49	.41	.35	.48	.40	.34	.46	.39	.34	.44	.38	.34	.32
8.0	.46	.37	.31	.45	.37	.31	.43	.36	.31	.42	.35	.30	.41	.35	.30	.28
9.0	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.27	.38	.32	.27	.25
10.0	.39	.31	.25	.38	.30	.25	.37	.30	.25	.36	.29	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-07-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:8.700m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:24.001V I:0.9675A P:23.221W PF:1.0000 Freq:0Hz Lamp Flux:2945.94x1 lm								
NAME: UB-RS-30K97C			TYPE: LED Strip			WEIGHT:		
SPEC.: 21.7W			DIM.: 1000*10*2 (MM)			SERIAL No.: 001		
MFR.: Flexfire LEDs, Inc.			SUR.: 0.01*1			Shielding Angle: 120		

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	.325	.185	.058	.317	.181	.057	.303	.174	.055	.290	.167	.054	.278	.161	.052	
2.0	.300	.165	.051	.294	.162	.050	.281	.156	.049	.270	.151	.047	.259	.146	.046	
3.0	.276	.147	.044	.270	.145	.044	.259	.140	.043	.248	.136	.042	.239	.132	.041	
4.0	.253	.132	.039	.248	.130	.038	.238	.126	.038	.229	.123	.037	.220	.120	.036	
5.0	.234	.119	.034	.229	.117	.034	.220	.115	.034	.212	.112	.033	.204	.109	.033	
6.0	.216	.108	.031	.212	.107	.031	.204	.105	.030	.197	.102	.030	.190	.100	.030	
7.0	.201	.099	.028	.197	.098	.028	.190	.096	.028	.183	.094	.027	.177	.092	.027	
8.0	.187	.091	.026	.184	.091	.026	.178	.089	.025	.172	.087	.025	.166	.085	.025	
9.0	.175	.085	.024	.172	.084	.024	.167	.082	.023	.161	.081	.023	.156	.079	.023	
10.0	.165	.079	.022	.162	.078	.022	.157	.077	.022	.152	.075	.021	.147	.074	.021	

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	.202	.202	.202	.173	.173	.173	.118	.118	.118	.068	.068	.068	.022	.022	.022	
1.0	.193	.168	.145	.165	.144	.125	.113	.099	.086	.065	.057	.050	.021	.018	.016	
2.0	.185	.144	.109	.159	.124	.094	.109	.086	.066	.063	.050	.038	.020	.016	.013	
3.0	.178	.126	.085	.152	.109	.074	.105	.076	.052	.060	.044	.031	.019	.014	.010	
4.0	.170	.113	.070	.146	.098	.061	.100	.068	.043	.058	.040	.025	.019	.013	.008	
5.0	.162	.103	.059	.139	.089	.051	.096	.062	.036	.056	.036	.021	.018	.012	.007	
6.0	.155	.094	.051	.133	.082	.044	.092	.057	.031	.053	.034	.019	.017	.011	.006	
7.0	.148	.088	.045	.128	.076	.039	.088	.053	.028	.051	.031	.017	.017	.010	.005	
8.0	.142	.082	.041	.122	.071	.035	.084	.050	.025	.049	.029	.015	.016	.010	.005	
9.0	.136	.077	.037	.117	.067	.032	.081	.047	.023	.047	.028	.014	.015	.009	.005	
10.0	.130	.073	.034	.112	.063	.030	.078	.044	.021	.045	.026	.013	.015	.009	.004	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-07-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:8.700m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.001V I:0.9675A P:23.221W PF:1.0000 Freq:0Hz Lamp Flux:2945.94x1 lm										
NAME: UB-RS-30K97C					TYPE: LED Strip			WEIGHT:		
SPEC.: 21.7W					DIM.: 1000*10*2 (MM)			SERIAL No.: 001		
MFR.: Flexfire LEDs, Inc.					SUR.: 0.01*1			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	24.5	26.0	24.8	26.3	26.5	24.7	26.2	25.0	26.5	26.7
3H	26.0	27.4	26.3	27.7	27.9	26.3	27.7	26.7	28.0	28.3
4H	26.5	27.9	26.9	28.2	28.5	27.1	28.4	27.4	28.7	29.0
6H	26.9	28.2	27.3	28.5	28.8	27.7	29.0	28.1	29.3	29.6
8H	27.0	28.2	27.4	28.5	28.9	28.0	29.2	28.4	29.5	29.9
12H	27.1	28.2	27.4	28.6	28.9	28.3	29.5	28.7	29.8	30.1
4H 2H	25.2	26.5	25.5	26.8	27.1	25.3	26.6	25.6	26.9	27.2
3H	26.8	28.0	27.2	28.3	28.7	27.1	28.3	27.5	28.6	29.0
4H	27.5	28.6	27.9	28.9	29.3	28.0	29.0	28.4	29.4	29.8
6H	28.0	29.0	28.4	29.3	29.7	28.8	29.7	29.2	30.1	30.5
8H	28.1	29.0	28.6	29.4	29.9	29.1	30.0	29.6	30.4	30.8
12H	28.2	29.1	28.7	29.5	29.9	29.5	30.3	30.0	30.8	31.2
8H 4H	27.8	28.7	28.3	29.1	29.5	28.2	29.1	28.7	29.5	29.9
6H	28.5	29.2	28.9	29.7	30.1	29.2	30.0	29.7	30.4	30.8
8H	28.7	29.4	29.2	29.8	30.3	29.7	30.4	30.2	30.8	31.3
12H	28.9	29.5	29.4	30.0	30.5	30.2	30.8	30.7	31.3	31.8
12H 4H	27.8	28.7	28.3	29.1	29.5	28.2	29.1	28.7	29.5	29.9
6H	28.6	29.2	29.1	29.7	30.2	29.3	29.9	29.8	30.4	30.9
8H	28.9	29.5	29.4	29.9	30.4	29.8	30.4	30.3	30.9	31.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.2 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 2946 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.8)
 Area: 0.01 m2

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-07-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:8.700m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.001V I:0.9675A P:23.221W PF:1.0000 Freq:0Hz Lamp Flux:2945.94x1 lm		
NAME: UB-RS-30K97C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1	Shielding Angle: 120

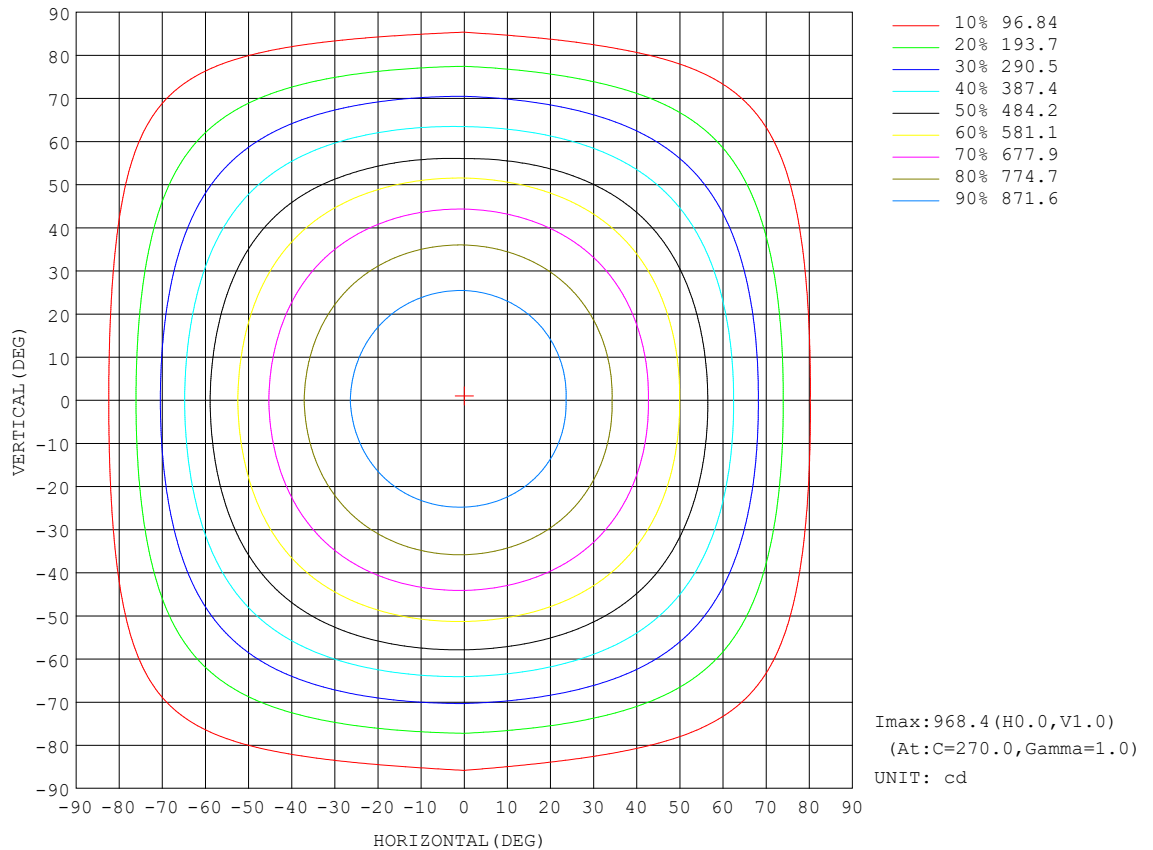
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	44	37	55	44	37	54	44	37	30
0.80	66	54	47	65	54	47	63	53	46	39
1.00	74	63	55	73	62	55	71	64	55	47
1.25	82	71	63	80	70	63	77	68	62	54
1.50	87	76	69	85	75	68	82	73	67	59
2.00	93	85	78	92	83	77	88	81	75	67
2.50	97	89	83	95	88	82	91	85	80	71
3.00	101	94	88	99	92	87	94	89	84	75
4.00	105	99	94	103	97	93	98	94	90	80
5.00	108	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:2023-07-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:8.700m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:24.001V I:0.9675A P:23.221W PF:1.0000 Freq:0Hz Lamp Flux:2945.94x1 lm		
NAME: UB-RS-30K97C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1	Shielding Angle: 120

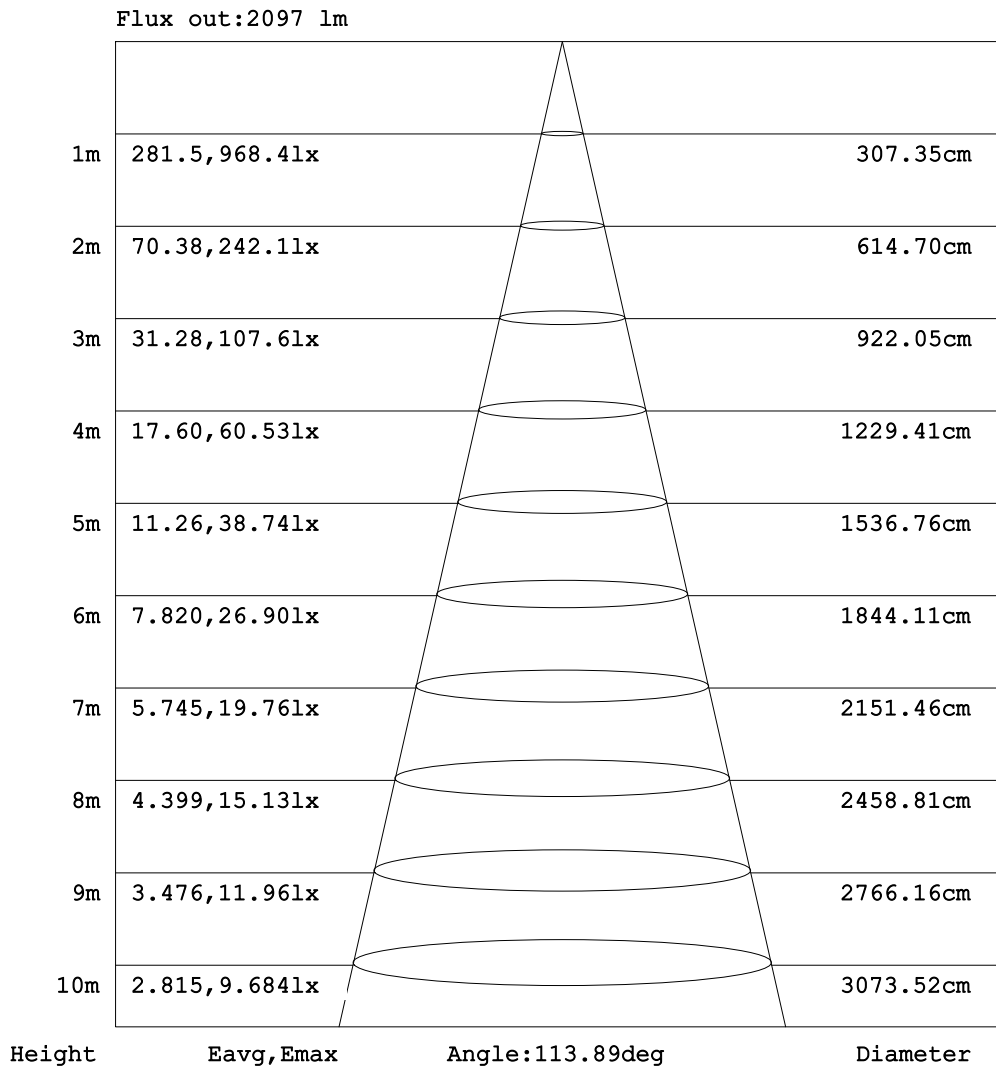


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2023-07-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity: 65.0%
 Test Distance: 8.700m [K=1.0000]
 Remarks:

AAI Figure

Test:U:24.001V I:0.9675A P:23.221W PF:1.0000 Freq:0Hz Lamp Flux:2945.94x1 lm		
NAME: UB-RS-30K97C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1	Shielding Angle: 120



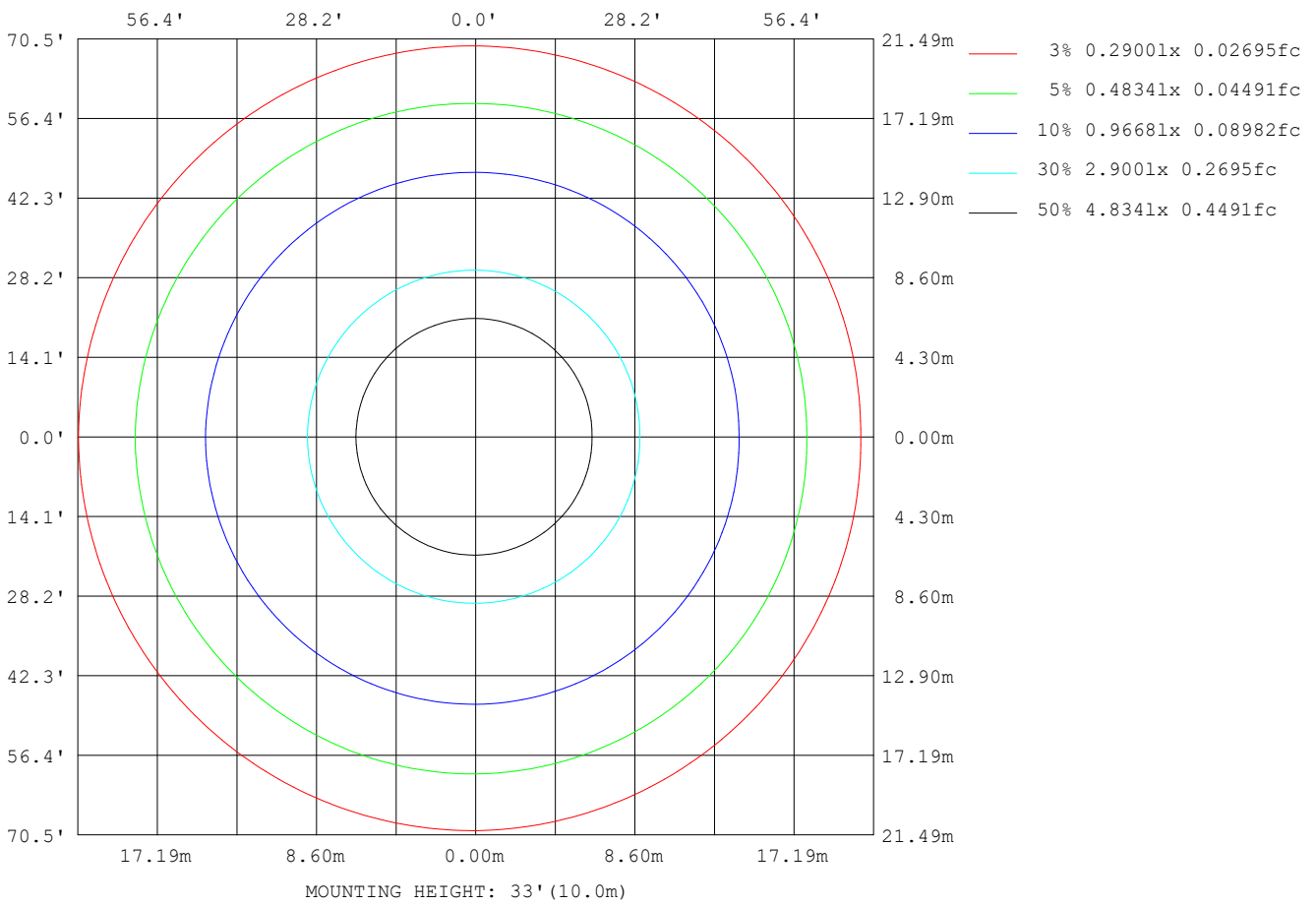
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2023-07-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity: 65.0%
 Test Distance: 8.700m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:24.001V I:0.9675A P:23.221W PF:1.0000 Freq:0Hz Lamp Flux:2945.94x1 lm		
NAME: UB-RS-30K97C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1	Shielding Angle: 120



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-07-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:8.700m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:24.001V I:0.9675A P:23.221W PF:1.0000 Freq:0Hz Lamp Flux:2945.94x1 lm		
NAME: UB-RS-30K97C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1	Shielding Angle: 120

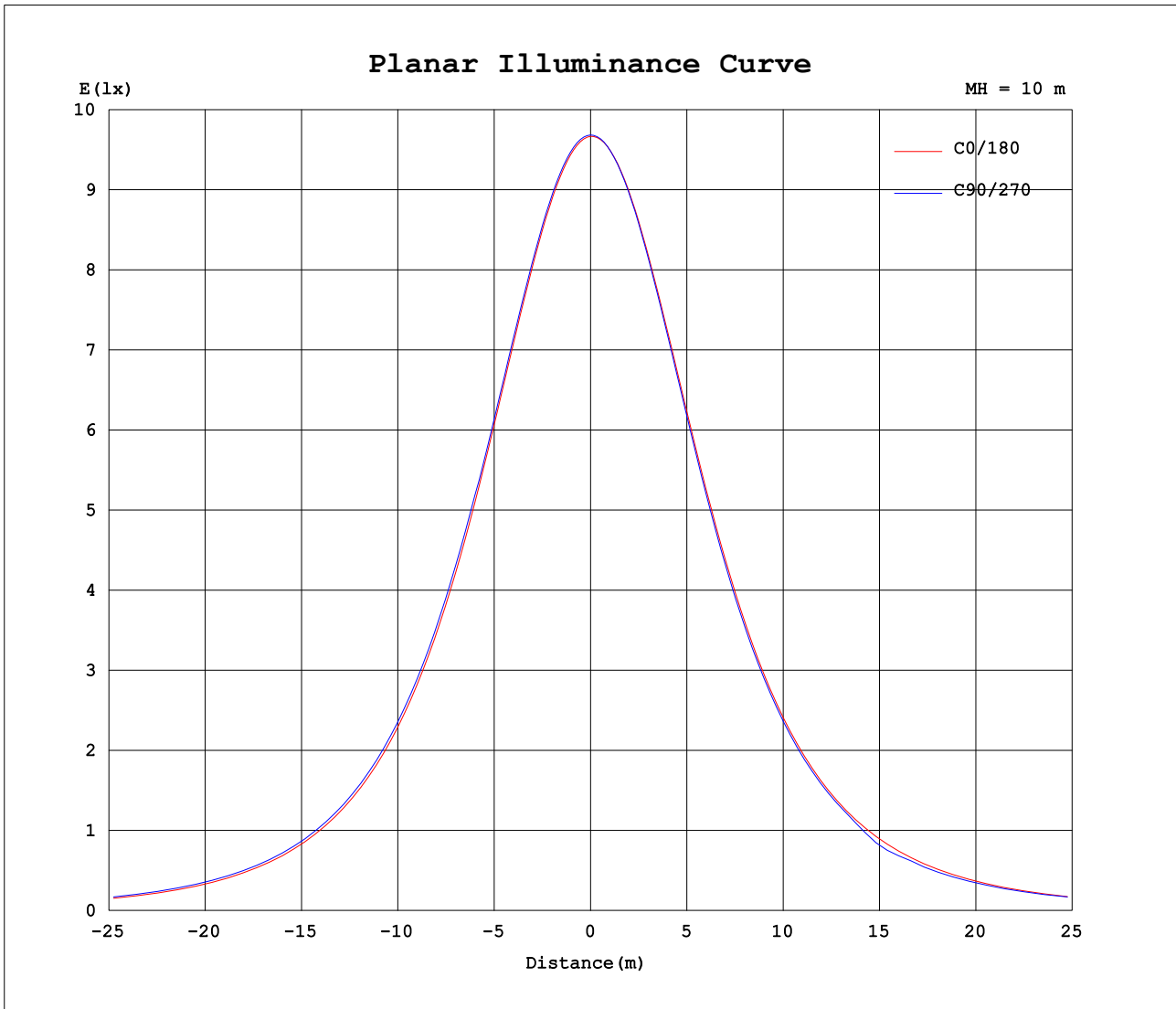
AvgL	cd/m2
L_0~180 (65) av	86306
L_0~180 (75) av	74872
L_0~180 (85) av	57928
L_90~270 (65) av	87251
L_90~270 (75) av	87517
L_90~270 (85) av	117604
L_45 (65) av	87189
L_45 (75) av	83205
L_45 (85) av	96070

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-07-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:8.700m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-07-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:8.700m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.001V I:0.9675A P:23.221W PF:1.0000 Freq:0Hz Lamp Flux:2945.94x1 lm		
NAME: UB-RS-30K97C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1	Shielding Angle: 120

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	90	180	270															
0	967	968	967	968															
5	961	964	965	965															
10	947	952	956	954															
15	926	932	939	935															
20	897	905	914	909															
25	861	870	882	875															
30	817	828	843	833															
35	767	783	796	785															
40	711	727	742	730															
45	648	666	682	669															
50	580	600	616	602															
55	507	528	544	512															
60	428	452	467	435															
65	345	373	385	364															
70	259	296	298	297															
75	176	225	212	228															
80	100.0	159	132	159															
85	38.7	105	62.3	100															
90	2.21	68.4	11.7	56.6															
95	1.15	47.8	1.11	31.8															
100	1.28	32.8	1.26	16.8															
105	1.51	20.6	1.45	6.54															
110	1.79	10.3	1.75	2.32															
115	2.12	4.80	2.03	2.08															
120	2.40	2.36	2.35	2.36															
125	2.72	2.55	2.65	2.70															
130	2.97	2.82	2.92	2.93															
135	3.24	3.07	3.18	3.18															
140	3.51	3.31	3.45	3.51															
145	3.68	3.67	3.65	3.72															
150	3.84	4.05	3.88	3.93															
155	3.97	4.09	4.05	4.11															
160	4.13	4.18	4.18	4.34															
165	4.35	4.35	4.34	4.50															
170	4.39	4.51	4.43	4.68															
175	4.50	4.56	4.51	4.74															
180	4.52	4.58	4.51	4.66															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-07-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:8.700m [K=1.0000]
 Remarks: