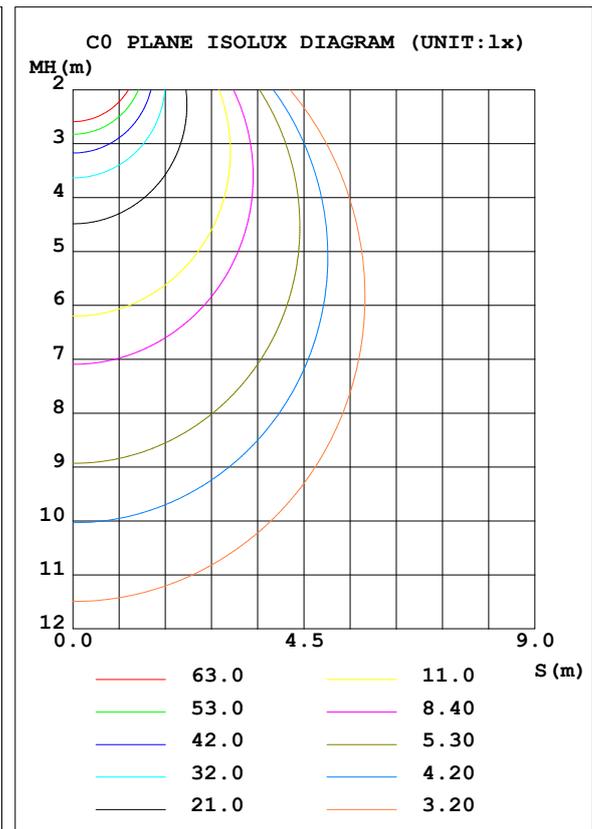
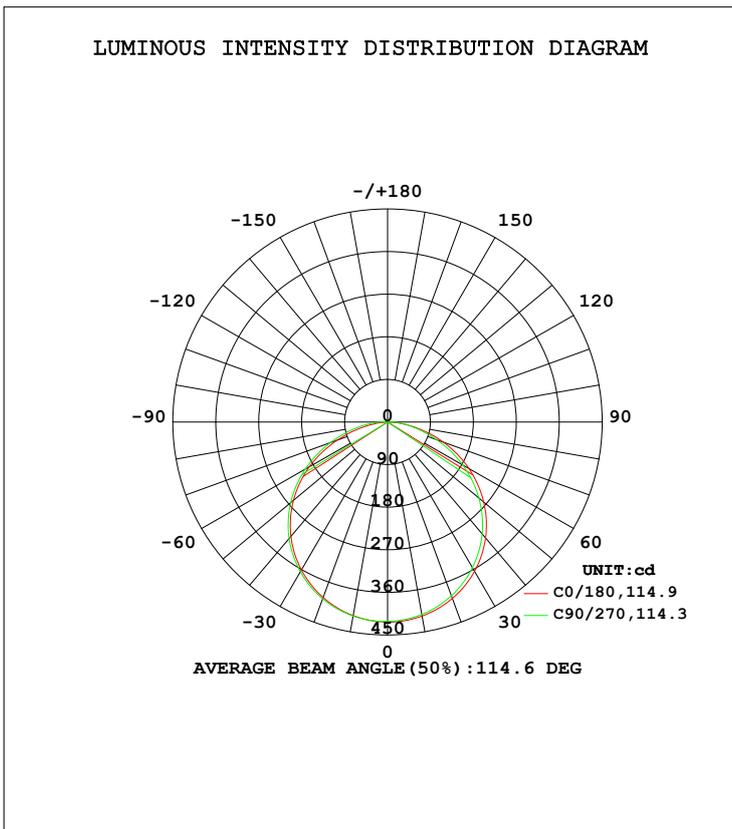


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.001V I:0.5844A P:14.026W PF:1.0000 Freq:0Hz Lamp Flux:1240.3lx1 lm		
NAME: UB-SS-30K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 15.1W	DIM.: 1000*4*1.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.02*1	Shielding Angle: 120

DATA OF LAMP		PHOTOMETRIC DATA Eff: 88.43 lm/W			
MODEL		I _{max} (cd)	422.5	S/MH (C0/180)	1.27
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.29
RATED VOLTAGE (V)		TOTAL FLUX (lm)	1240.3	η UP, DN (C0-180)	0.1,49.5
NOMINAL FLUX (lm)	1240.31	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.1,50.3
LAMPS INSIDE	1	η up (%)	0.2	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)		η down (%)	99.8	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2022-11-11

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:

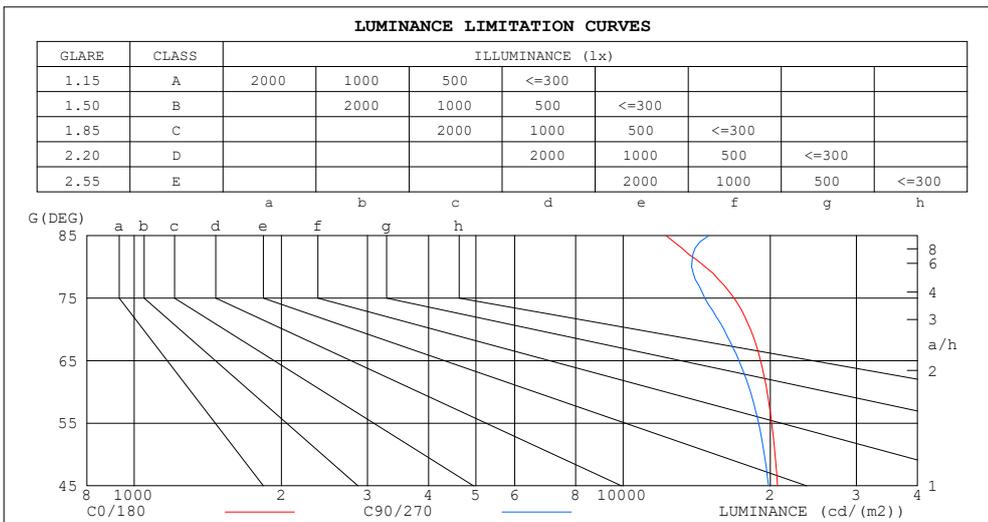
γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum, lamp
10	416.3	412.8	415.4	416.2				0- 10	39.95	39.95	3.22,3.22
20	396.8	390.7	394.7	397.4				10- 20	114.8	154.8	12.5,12.5
30	364.5	355.8	361.1	365.4				20- 30	175.1	329.9	26.6,26.6
40	319.7	308.4	315.2	321.1				30- 40	212.9	542.8	43.8,43.8
50	263.0	250.1	257.7	265.2				40- 50	222.8	765.6	61.7,61.7
60	197.1	182.2	189.4	199.4				50- 60	202.3	967.9	78,78
70	124.6	110.0	112.7	128.0				60- 70	154.0	1122	90.5,90.5
80	51.11	47.97	38.80	61.58				70- 80	87.76	1210	97.5,97.5
90	2.199	11.07	0	16.81				80- 90	27.64	1237	99.8,99.8
100	0	0	0	0				90-100	3.037	1240	100,100
110	0	0	0	0				100-110	0	1240	100,100
120	0	0	0	0				110-120	0	1240	100,100
130	0	0	0	0				120-130	0	1240	100,100
140	0	0	0	0				130-140	0	1240	100,100
150	0	0	0	0				140-150	0	1240	100,100
160	0	0	0	0				150-160	0	1240	100,100
170	0	0	0	0				160-170	0	1240	100,100
180	0	0	0	0				170-180	0	1240	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2022-11-11

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:0.5844A P:14.026W PF:1.0000 Freq:0Hz Lamp Flux:1240.31x1 lm		
NAME: UB-SS-30K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 15.1W	DIM.: 1000*4*1.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.02*1	Shielding Angle: 120



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	12239	14980
80	14718	13812
75	16867	14698
70	18222	16080
65	19104	17252
60	19710	18218
55	20138	18924
50	20456	19456
45	20699	19843

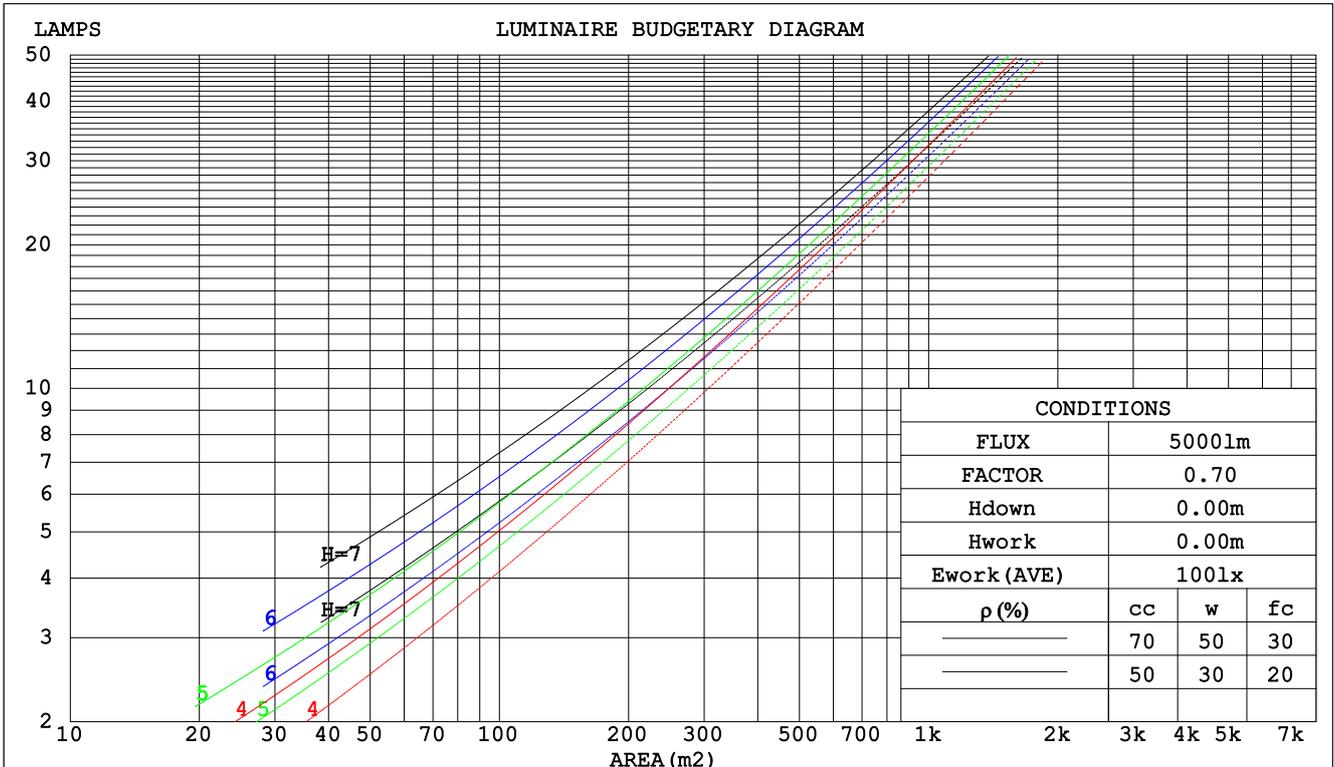
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2022-11-11

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:0.5844A P:14.026W PF:1.0000 Freq:0Hz Lamp Flux:1240.31x1 lm		
NAME: UB-SS-30K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 15.1W	DIM.: 1000*4*1.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs,Inc.	SUR.: 0.02*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	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.04	.99	.95	1.01	.97	.94	.97	.94	.91	.93	.90	.88	.89	.87	.85	.83
2.0	.90	.83	.77	.88	.82	.76	.85	.79	.75	.81	.77	.73	.78	.74	.71	.69
3.0	.79	.71	.64	.77	.70	.63	.74	.68	.62	.71	.66	.61	.69	.64	.60	.58
4.0	.70	.61	.54	.68	.60	.54	.66	.59	.53	.64	.57	.52	.61	.56	.51	.49
5.0	.62	.53	.46	.61	.53	.46	.59	.51	.46	.57	.50	.45	.55	.49	.45	.42
6.0	.56	.47	.40	.55	.47	.40	.53	.46	.40	.51	.45	.40	.50	.44	.39	.37
7.0	.51	.42	.36	.50	.42	.36	.48	.41	.35	.47	.40	.35	.45	.39	.35	.33
8.0	.46	.38	.32	.46	.37	.32	.44	.37	.31	.43	.36	.31	.42	.36	.31	.29
9.0	.42	.34	.29	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.25	.24



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2022-11-11

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:0.5844A P:14.026W PF:1.0000 Freq:0Hz Lamp Flux:1240.31x1 lm								
NAME: UB-SS-30K90C			TYPE: LED Strip			WEIGHT:		
SPEC.: 15.1W			DIM.: 1000*4*1.5 (MM)			SERIAL No.: 001		
MFR.: Flexfire LEDs, Inc.			SUR.: 0.02*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	.315	.179	.057	.307	.175	.056	.294	.169	.054	.282	.162	.052	.270	.157	.051	
2.0	.295	.162	.050	.288	.159	.049	.277	.154	.048	.266	.149	.047	.255	.145	.046	
3.0	.272	.145	.043	.267	.143	.043	.256	.139	.042	.246	.135	.041	.237	.131	.041	
4.0	.251	.130	.038	.246	.129	.038	.237	.126	.037	.228	.122	.037	.220	.120	.036	
5.0	.232	.118	.034	.227	.117	.034	.219	.114	.034	.211	.112	.033	.204	.109	.033	
6.0	.215	.108	.031	.211	.107	.031	.204	.104	.030	.197	.102	.030	.190	.100	.030	
7.0	.200	.099	.028	.196	.098	.028	.190	.096	.028	.184	.094	.027	.178	.092	.027	
8.0	.187	.091	.026	.183	.090	.026	.178	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.175	.085	.024	.172	.084	.024	.167	.082	.023	.162	.081	.023	.157	.080	.023	
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.152	.076	.022	.148	.075	.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	.192	.192	.192	.164	.164	.164	.112	.112	.112	.064	.064	.064	.021	.021	.021	
1.0	.183	.158	.136	.156	.136	.117	.107	.093	.081	.061	.054	.047	.020	.017	.015	
2.0	.175	.134	.100	.149	.115	.086	.102	.080	.060	.059	.046	.035	.019	.015	.011	
3.0	.167	.116	.076	.143	.100	.066	.098	.070	.046	.057	.041	.027	.018	.013	.009	
4.0	.159	.103	.060	.137	.089	.052	.094	.062	.037	.054	.036	.022	.017	.012	.007	
5.0	.152	.093	.049	.130	.080	.043	.090	.056	.030	.052	.033	.018	.017	.011	.006	
6.0	.145	.084	.041	.124	.073	.036	.086	.051	.025	.050	.030	.015	.016	.010	.005	
7.0	.138	.077	.035	.118	.067	.030	.082	.047	.022	.048	.028	.013	.015	.009	.004	
8.0	.131	.072	.031	.113	.062	.027	.078	.044	.019	.045	.026	.011	.015	.008	.004	
9.0	.125	.067	.027	.108	.058	.024	.075	.041	.017	.044	.024	.010	.014	.008	.003	
10.0	.119	.062	.024	.103	.054	.021	.071	.038	.015	.042	.023	.009	.014	.007	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2022-11-11

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:0.5844A P:14.026W PF:1.0000 Freq:0Hz Lamp Flux:1240.31x1 lm										
NAME: UB-SS-30K90C					TYPE: LED Strip			WEIGHT:		
SPEC.: 15.1W					DIM.: 1000*4*1.5 (MM)			SERIAL No.: 001		
MFR.: Flexfire LEDs, Inc.					SUR.: 0.02*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	22.6	24.1	22.8	24.3	24.5	22.3	23.8	22.6	24.0	24.2
3H	24.1	25.5	24.4	25.8	26.0	23.7	25.1	24.0	25.4	25.6
4H	24.7	26.1	25.1	26.4	26.6	24.3	25.6	24.6	25.9	26.1
6H	25.2	26.4	25.5	26.7	27.0	24.7	26.0	25.0	26.2	26.5
8H	25.3	26.5	25.7	26.8	27.1	24.8	26.1	25.2	26.4	26.7
12H	25.4	26.6	25.7	26.9	27.2	25.0	26.2	25.3	26.5	26.8
4H 2H	23.1	24.5	23.5	24.7	25.0	22.9	24.3	23.2	24.5	24.8
3H	24.9	26.1	25.2	26.4	26.7	24.5	25.7	24.9	26.0	26.3
4H	25.6	26.7	26.0	27.0	27.4	25.2	26.3	25.6	26.6	27.0
6H	26.2	27.1	26.6	27.5	27.9	25.8	26.7	26.2	27.1	27.4
8H	26.4	27.3	26.8	27.6	28.0	26.0	26.9	26.4	27.2	27.6
12H	26.5	27.3	26.9	27.7	28.1	26.2	27.0	26.6	27.4	27.8
8H 4H	25.9	26.8	26.3	27.1	27.5	25.5	26.4	25.9	26.8	27.2
6H	26.6	27.3	27.0	27.7	28.2	26.2	26.9	26.6	27.4	27.8
8H	26.8	27.5	27.3	27.9	28.4	26.5	27.2	27.0	27.6	28.1
12H	27.0	27.6	27.5	28.1	28.5	26.8	27.4	27.3	27.8	28.3
12H 4H	25.9	26.7	26.3	27.1	27.5	25.5	26.3	26.0	26.7	27.1
6H	26.6	27.3	27.1	27.7	28.2	26.3	26.9	26.7	27.4	27.8
8H	26.9	27.5	27.4	28.0	28.4	26.6	27.2	27.1	27.6	28.1
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 1240 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.7)
 Area: 0.02 m2

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2022-11-11

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:0.5844A P:14.026W PF:1.0000 Freq:0Hz Lamp Flux:1240.31x1 lm		
NAME: UB-SS-30K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 15.1W	DIM.: 1000*4*1.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.02*1	Shielding Angle: 120

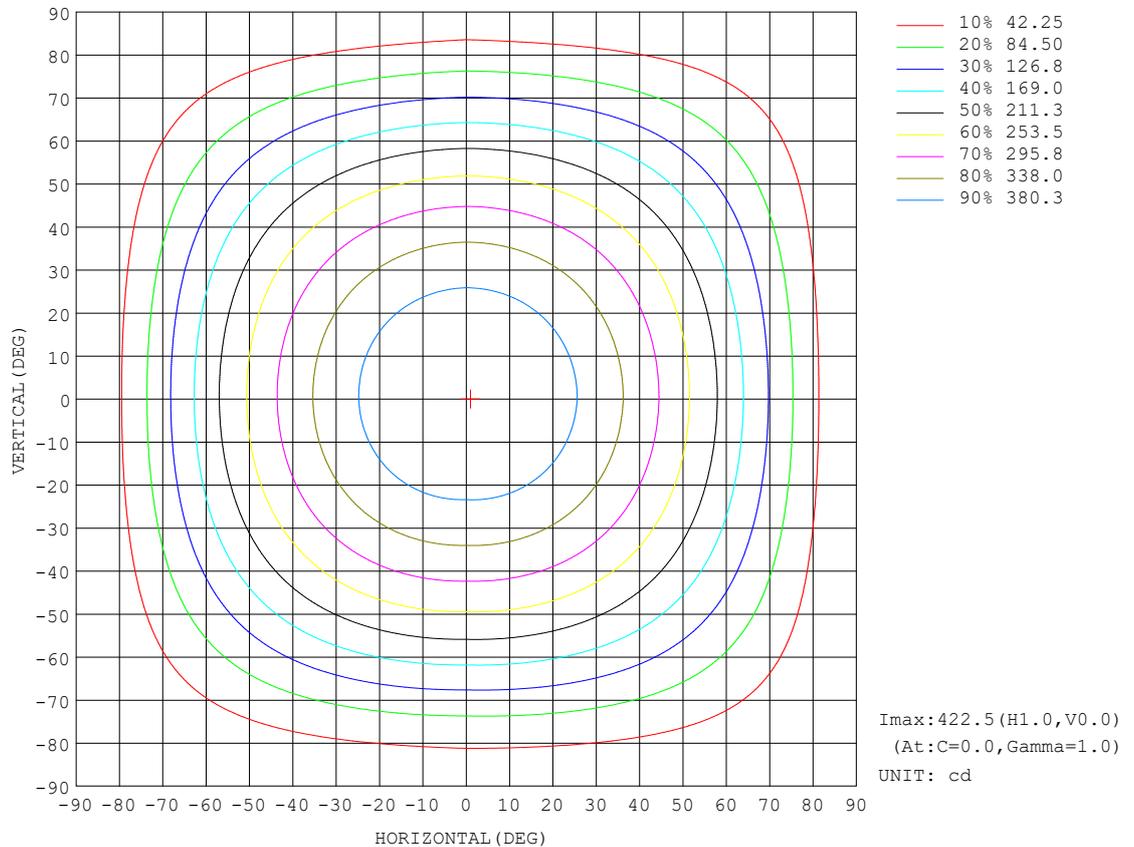
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	57	45	38	56	45	38	55	45	38	31
0.80	67	55	48	66	55	48	64	54	47	40
1.00	75	64	57	74	64	57	72	65	56	49
1.25	83	72	65	81	71	64	78	70	64	56
1.50	88	78	71	86	77	70	83	75	69	61
2.00	95	86	79	93	85	79	89	82	77	69
2.50	98	91	84	96	89	84	93	87	82	73
3.00	102	95	89	100	93	88	96	90	86	77
4.00	106	100	95	104	98	94	99	95	91	82
5.00	108	103	99	106	101	98	101	98	95	85
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:2022-11-11

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:0.5844A P:14.026W PF:1.0000 Freq:0Hz Lamp Flux:1240.3lx1 lm		
NAME: UB-SS-30K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 15.1W	DIM.: 1000*4*1.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.02*1	Shielding Angle: 120

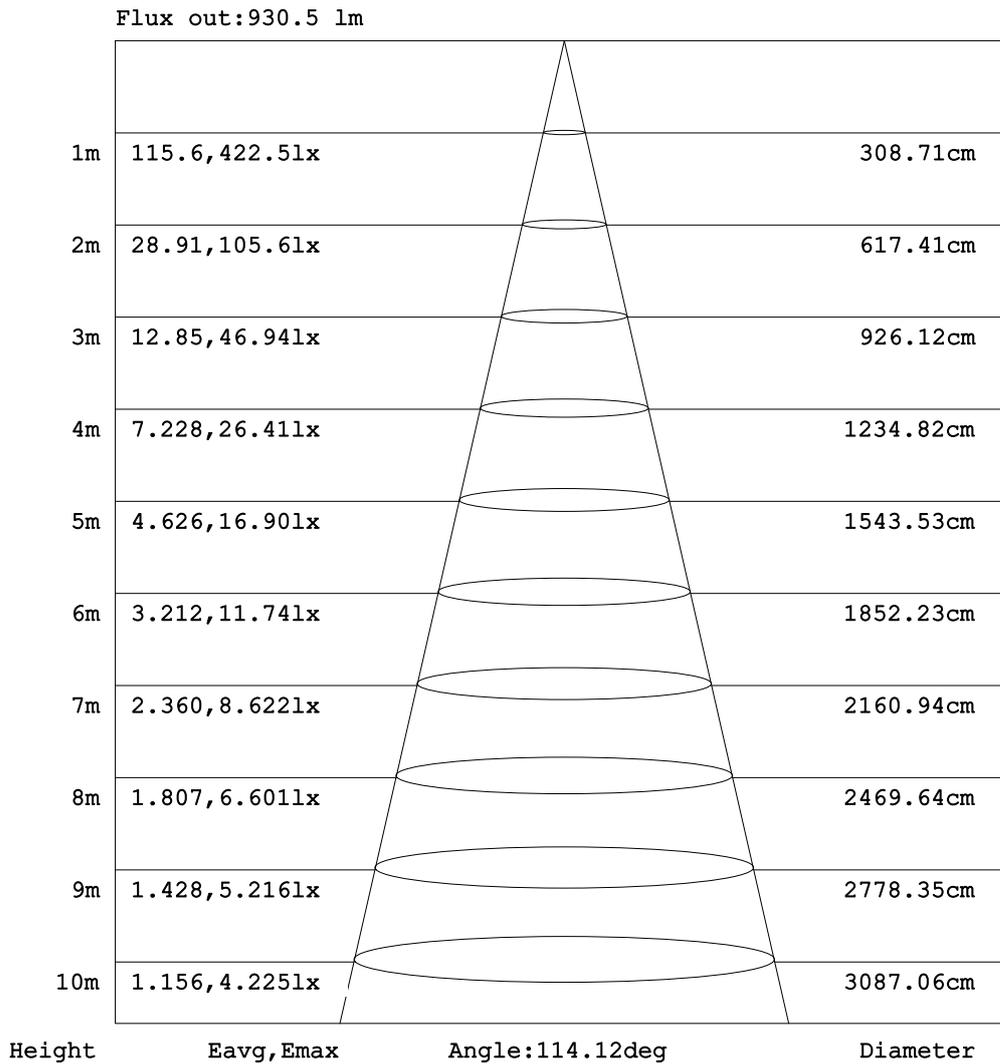


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2022-11-11

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:0.5844A P:14.026W PF:1.0000 Freq:0Hz Lamp Flux:1240.31x1 lm		
NAME: UB-SS-30K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 15.1W	DIM.: 1000*4*1.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.02*1	Shielding Angle: 120



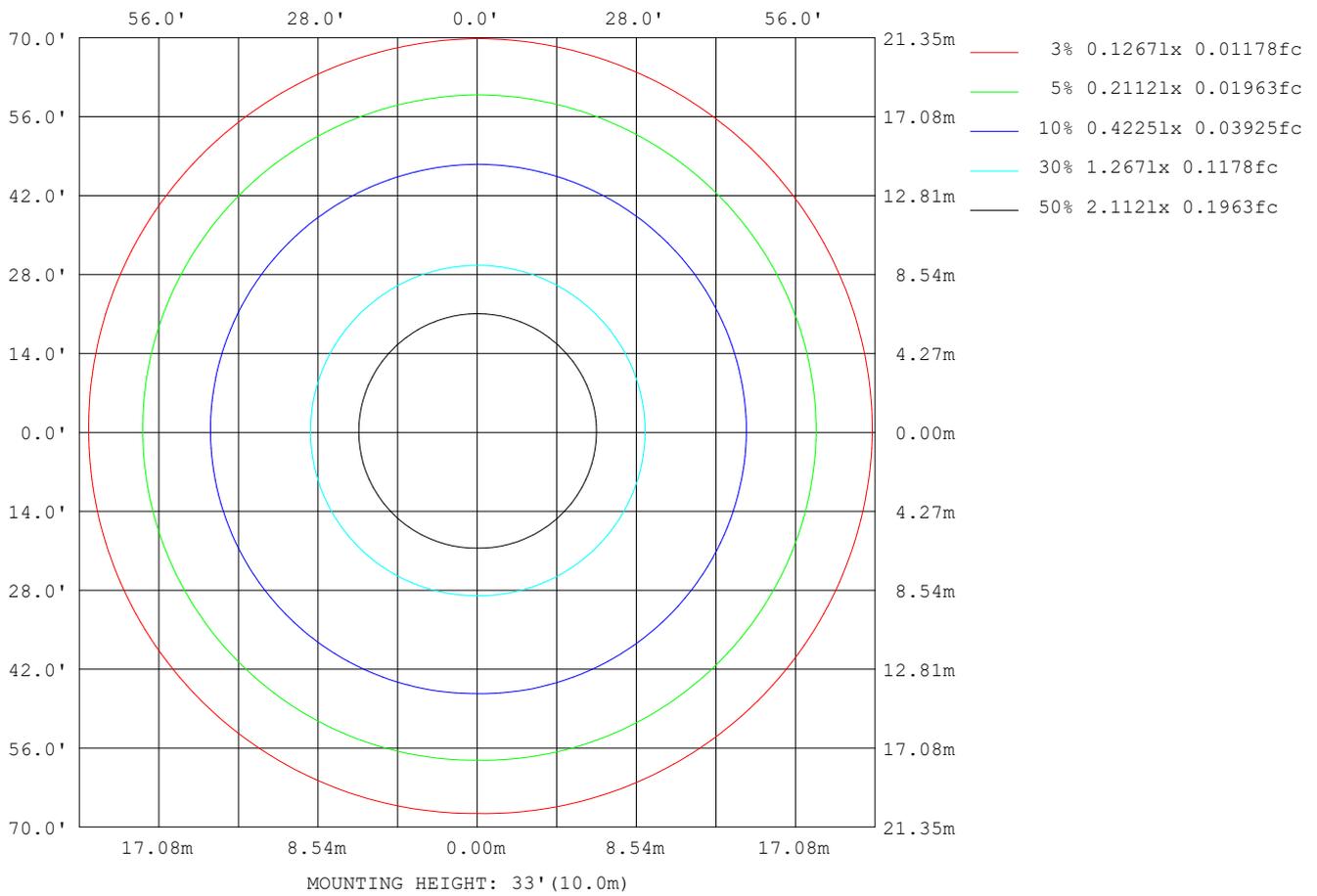
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2022-11-11

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:0.5844A P:14.026W PF:1.0000 Freq:0Hz Lamp Flux:1240.31x1 lm		
NAME: UB-SS-30K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 15.1W	DIM.: 1000*4*1.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.02*1	Shielding Angle: 120



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2022-11-11

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:0.5844A P:14.026W PF:1.0000 Freq:0Hz Lamp Flux:1240.31x1 lm		
NAME: UB-SS-30K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 15.1W	DIM.: 1000*4*1.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.02*1	Shielding Angle: 120

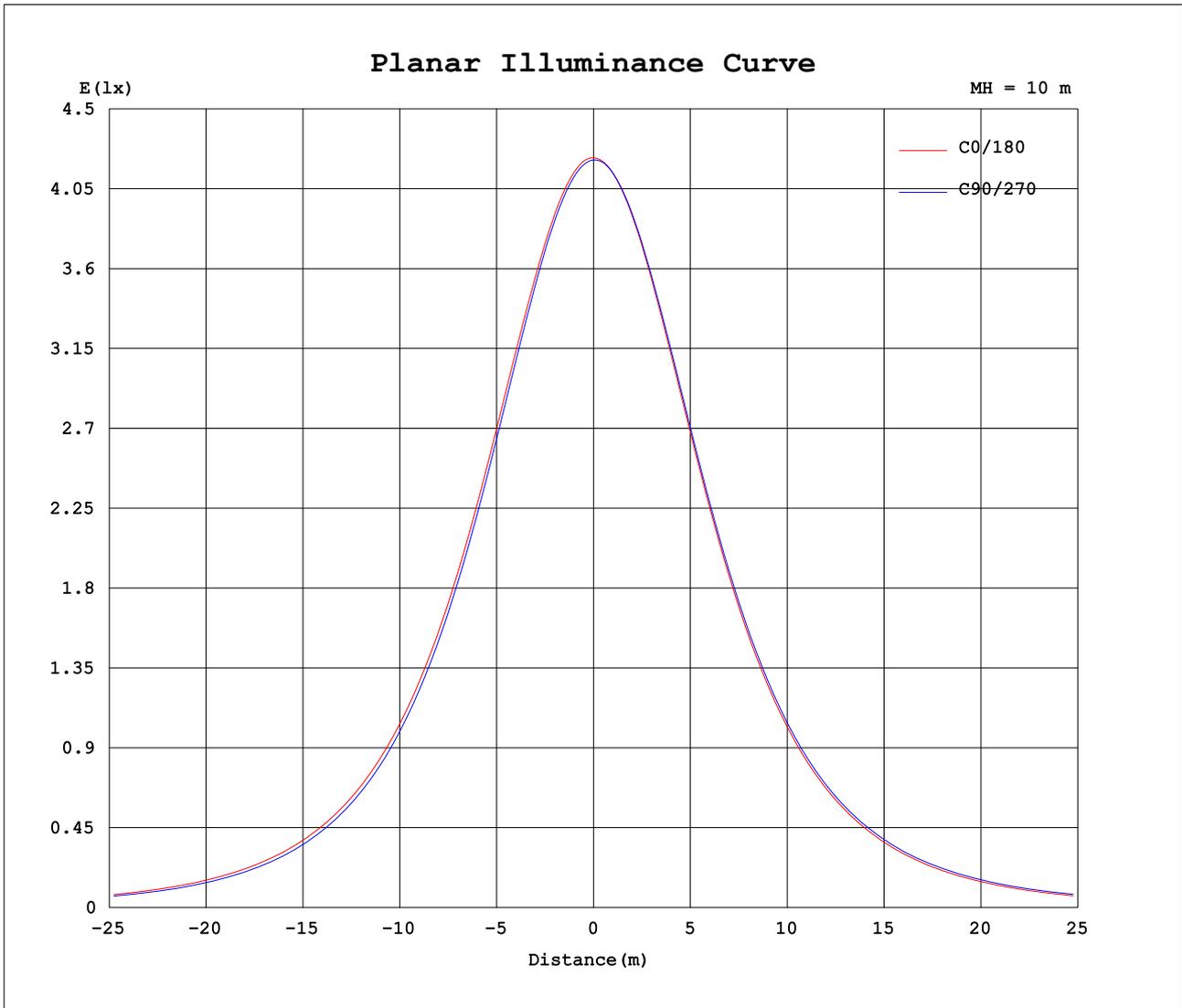
AvgL	cd/m2
L_0~180 (65) av	18517
L_0~180 (75) av	15602
L_0~180 (85) av	9712
L_90~270 (65) av	18325
L_90~270 (75) av	16314
L_90~270 (85) av	17561
L_45 (65) av	18360
L_45 (75) av	15968
L_45 (85) av	14460

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2022-11-11

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: 2022-11-11

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:0.5844A P:14.026W PF:1.0000 Freq:0Hz Lamp Flux:1240.31x1 lm		
NAME: UB-SS-30K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 15.1W	DIM.: 1000*4*1.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.02*1	Shielding Angle: 120

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	422	421	422	421															
5	421	419	421	421															
10	416	413	415	416															
15	408	403	407	408															
20	397	391	395	397															
25	382	375	380	383															
30	364	356	361	365															
35	343	334	340	345															
40	320	308	315	321															
45	293	281	288	294															
50	263	250	258	265															
55	231	217	225	234															
60	197	182	189	199															
65	161	146	152	164															
70	125	110	113	128															
75	87.3	76.1	74.2	92.8															
80	51.1	48.0	38.8	61.6															
85	21.3	26.1	12.5	35.1															
90	2.20	11.1	0.00	16.8															
95	0.00	3.78	0.00	6.24															
100	0.00	0.00	0.00	0.00															
105	0.00	0.00	0.00	0.00															
110	0.00	0.00	0.00	0.00															
115	0.00	0.00	0.00	0.00															
120	0.00	0.00	0.00	0.00															
125	0.00	0.00	0.00	0.00															
130	0.00	0.00	0.00	0.00															
135	0.00	0.00	0.00	0.00															
140	0.00	0.00	0.00	0.00															
145	0.00	0.00	0.00	0.00															
150	0.00	0.00	0.00	0.00															
155	0.00	0.00	0.00	0.00															
160	0.00	0.00	0.00	0.00															
165	0.00	0.00	0.00	0.00															
170	0.00	0.00	0.00	0.00															
175	0.00	0.00	0.00	0.00															
180	0.00	0.00	0.00	0.00															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2022-11-11

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: