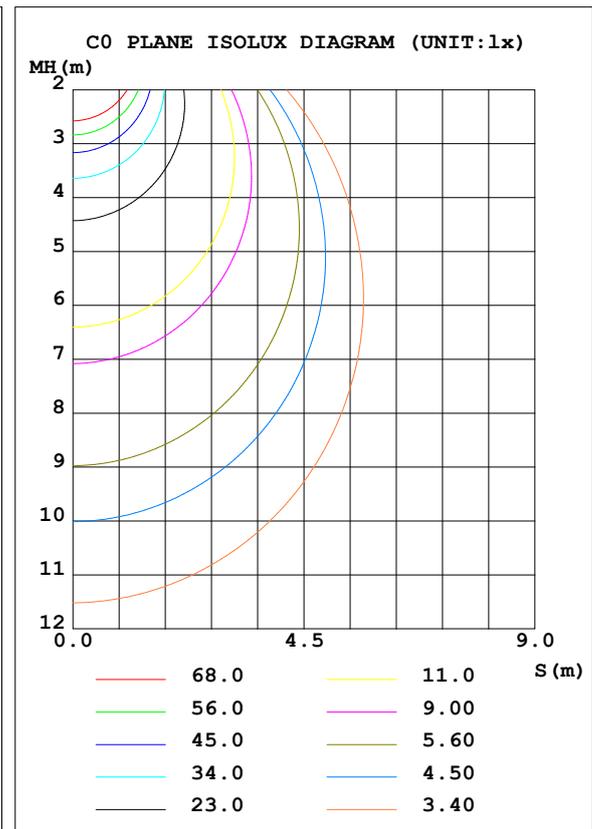
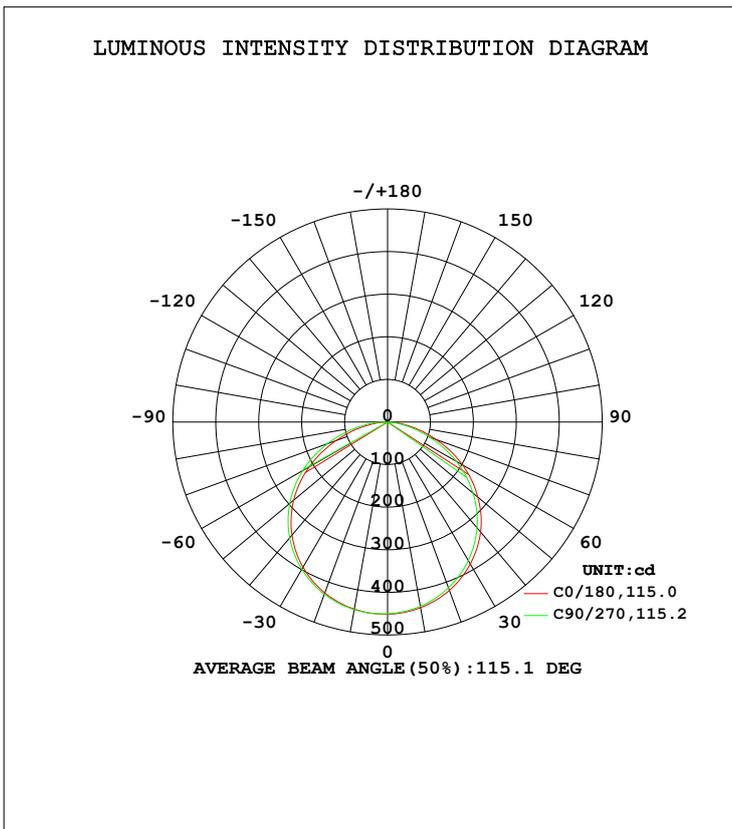


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.001V I:0.5967A P:14.321W PF:1.0000 Freq:0Hz Lamp Flux:1324.66x1 lm		
NAME: UB-SS-50K90C	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: 92.50 lm/W			
MODEL		I _{max} (cd)	451.2	S/MH (C0/180)	1.30
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.32
RATED VOLTAGE (V)		TOTAL FLUX (lm)	1324.7	η UP, DN (C0-180)	0.0, 47.6
NOMINAL FLUX (lm)	1324.66	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.1, 52.3
LAMPS INSIDE	1	η up (%)	0.1	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)		η down (%)	99.9	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2022-11-10

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:

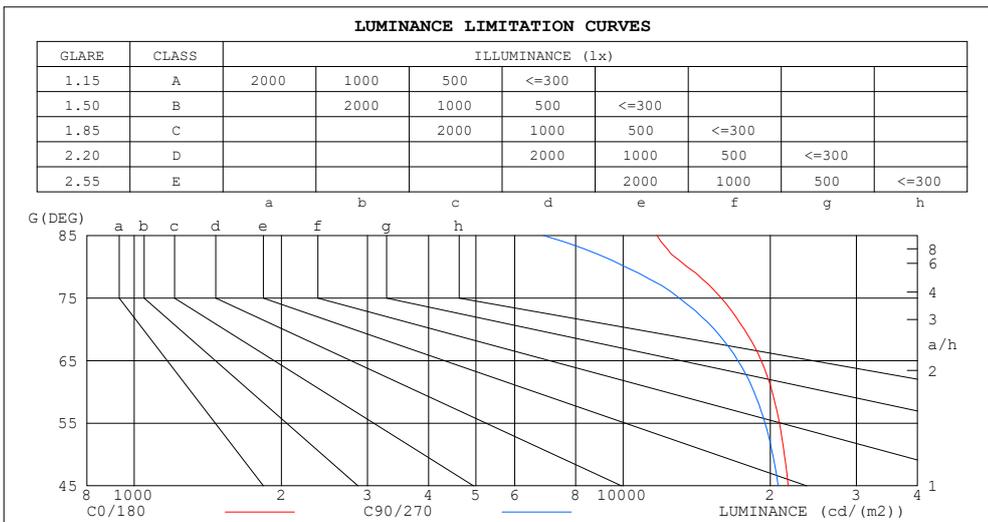
γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum, lamp
10	442.6	439.4	446.1	447.2				0- 10	42.69	42.69	3.22,3.22
20	420.6	414.4	427.0	430.0				10- 20	122.9	165.5	12.5,12.5
30	385.1	376.0	393.8	399.2				20- 30	187.9	353.4	26.7,26.7
40	337.0	324.1	346.5	354.8				30- 40	229.1	582.5	44,44
50	274.7	260.2	285.5	297.4				40- 50	240.3	822.8	62.1,62.1
60	201.9	185.3	210.8	228.1				50- 60	218.1	1041	78.6,78.6
70	121.1	105.2	128.0	149.5				60- 70	164.7	1206	91,91
80	46.95	35.07	50.88	70.08				70- 80	91.91	1298	97.9,97.9
90	3.300	1.026	0	13.18				80- 90	26.02	1324	99.9,99.9
100	0	0	0	0				90-100	1.129	1325	100,100
110	0	0	0	0				100-110	0	1325	100,100
120	0	0	0	0				110-120	0	1325	100,100
130	0	0	0	0				120-130	0	1325	100,100
140	0	0	0	0				130-140	0	1325	100,100
150	0	0	0	0				140-150	0	1325	100,100
160	0	0.0123	0	0				150-160	0.0001	1325	100,100
170	0	0.0739	0.0246	0				160-170	0.0044	1325	100,100
180	0.0493	0.0739	0.0246	0.0616				170-180	0.0030	1325	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2022-11-10

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:0.5967A P:14.321W PF:1.0000 Freq:0Hz Lamp Flux:1324.66x1 lm		
NAME: UB-SS-50K90C	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	11733	6878
80	13518	10097
75	15885	13027
70	17704	15377
65	19161	17171
60	20185	18534
55	20885	19511
50	21368	20238
45	21763	20769

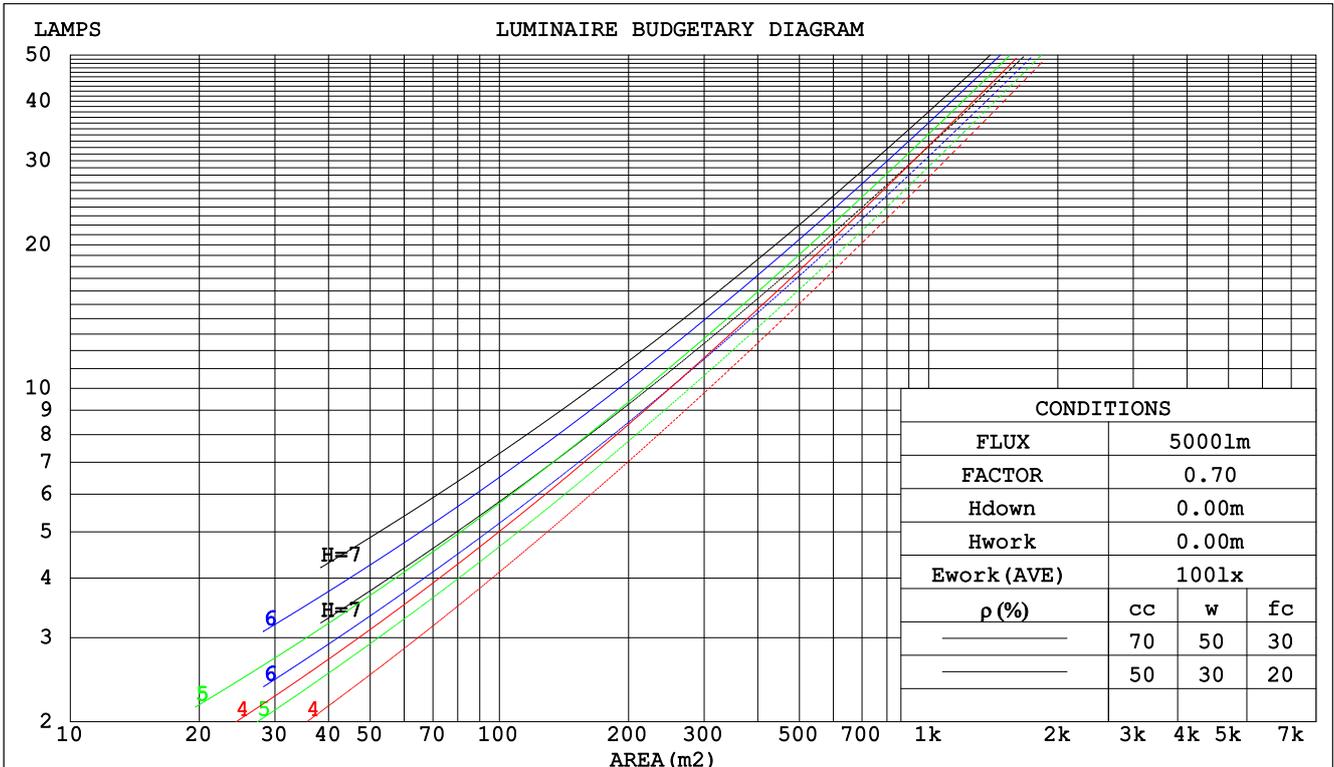
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2022-11-10

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:0.5967A P:14.321W PF:1.0000 Freq:0Hz Lamp Flux:1324.66x1 lm		
NAME: UB-SS-50K90C	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	.96	1.01	.98	.94	.97	.94	.91	.93	.91	.88	.90	.88	.86	.83
2.0	.90	.83	.78	.88	.82	.77	.85	.79	.75	.82	.77	.73	.78	.75	.71	.69
3.0	.79	.71	.64	.78	.70	.64	.75	.68	.63	.72	.66	.61	.69	.64	.60	.58
4.0	.70	.61	.54	.69	.60	.54	.66	.59	.53	.64	.58	.52	.62	.56	.52	.50
5.0	.62	.53	.47	.61	.53	.46	.59	.52	.46	.57	.51	.45	.55	.50	.45	.43
6.0	.56	.47	.41	.55	.47	.40	.53	.46	.40	.52	.45	.40	.50	.44	.39	.37
7.0	.51	.42	.36	.50	.42	.36	.48	.41	.35	.47	.40	.35	.46	.40	.35	.33
8.0	.46	.38	.32	.46	.37	.32	.44	.37	.32	.43	.36	.31	.42	.36	.31	.29
9.0	.43	.34	.29	.42	.34	.29	.41	.34	.28	.40	.33	.28	.39	.33	.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:2022-11-10

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:0.5967A P:14.321W PF:1.0000 Freq:0Hz Lamp Flux:1324.66x1 lm								
NAME: UB-SS-50K90C			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	.311	.177	.056	.304	.174	.055	.291	.167	.053	.279	.161	.052	.267	.155	.050	
2.0	.293	.161	.049	.287	.158	.049	.275	.153	.047	.264	.148	.046	.254	.144	.045	
3.0	.271	.144	.043	.266	.142	.043	.255	.138	.042	.246	.135	.041	.237	.131	.041	
4.0	.250	.130	.038	.245	.128	.038	.236	.125	.037	.228	.122	.037	.220	.119	.036	
5.0	.231	.118	.034	.227	.117	.034	.219	.114	.034	.211	.111	.033	.204	.109	.033	
6.0	.214	.108	.031	.211	.106	.031	.203	.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	.186	.091	.026	.183	.090	.026	.177	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.175	.084	.024	.172	.084	.024	.167	.082	.023	.162	.081	.023	.157	.080	.023	
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.153	.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	.191	.191	.191	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.181	.157	.135	.155	.135	.116	.106	.093	.080	.061	.054	.047	.020	.017	.015	
2.0	.173	.133	.099	.148	.114	.085	.102	.079	.059	.059	.046	.035	.019	.015	.011	
3.0	.165	.115	.075	.142	.099	.065	.097	.069	.045	.056	.040	.027	.018	.013	.009	
4.0	.158	.102	.059	.135	.088	.051	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.048	.129	.079	.041	.089	.055	.029	.052	.032	.017	.017	.011	.006	
6.0	.143	.083	.040	.123	.072	.035	.085	.050	.024	.049	.030	.015	.016	.010	.005	
7.0	.136	.076	.034	.117	.066	.029	.081	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.029	.112	.061	.026	.077	.043	.018	.045	.025	.011	.015	.008	.004	
9.0	.124	.065	.026	.107	.057	.023	.074	.040	.016	.043	.024	.010	.014	.008	.003	
10.0	.118	.061	.023	.102	.053	.020	.071	.037	.014	.041	.022	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2022-11-10

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:0.5967A P:14.321W PF:1.0000 Freq:0Hz Lamp Flux:1324.66x1 lm										
NAME: UB-SS-50K90C				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	22.3	23.9	22.6	24.1	24.3	22.0	23.6	22.3	23.8	24.0
3H	23.8	25.2	24.1	25.4	25.6	23.3	24.7	23.6	25.0	25.2
4H	24.3	25.6	24.6	25.9	26.2	23.8	25.1	24.1	25.4	25.6
6H	24.6	25.9	25.0	26.2	26.5	24.0	25.3	24.3	25.5	25.8
8H	24.7	26.0	25.1	26.3	26.5	24.1	25.3	24.4	25.6	25.9
12H	24.8	26.0	25.2	26.3	26.6	24.1	25.2	24.4	25.5	25.8
4H 2H	22.9	24.2	23.2	24.5	24.7	22.6	24.0	22.9	24.2	24.5
3H	24.5	25.6	24.8	25.9	26.2	24.1	25.3	24.4	25.6	25.9
4H	25.1	26.2	25.5	26.5	26.8	24.6	25.7	25.0	26.0	26.4
6H	25.6	26.5	26.0	26.9	27.3	25.0	25.9	25.4	26.3	26.7
8H	25.7	26.6	26.1	27.0	27.4	25.1	26.0	25.5	26.3	26.7
12H	25.8	26.6	26.2	27.0	27.4	25.1	25.9	25.5	26.3	26.7
8H 4H	25.3	26.2	25.7	26.6	26.9	24.9	25.8	25.3	26.1	26.5
6H	25.9	26.6	26.3	27.0	27.5	25.3	26.1	25.8	26.5	26.9
8H	26.1	26.7	26.6	27.2	27.6	25.5	26.1	25.9	26.6	27.0
12H	26.3	26.8	26.7	27.3	27.8	25.6	26.1	26.0	26.6	27.1
12H 4H	25.3	26.1	25.7	26.5	26.9	24.9	25.7	25.3	26.1	26.5
6H	25.9	26.6	26.4	27.0	27.4	25.4	26.0	25.8	26.5	26.9
8H	26.1	26.7	26.6	27.2	27.6	25.6	26.1	26.0	26.6	27.0
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 1325 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.0)
 Area: 0.02 m2

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2022-11-10

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:0.5967A P:14.321W PF:1.0000 Freq:0Hz Lamp Flux:1324.66x1 lm		
NAME: UB-SS-50K90C	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

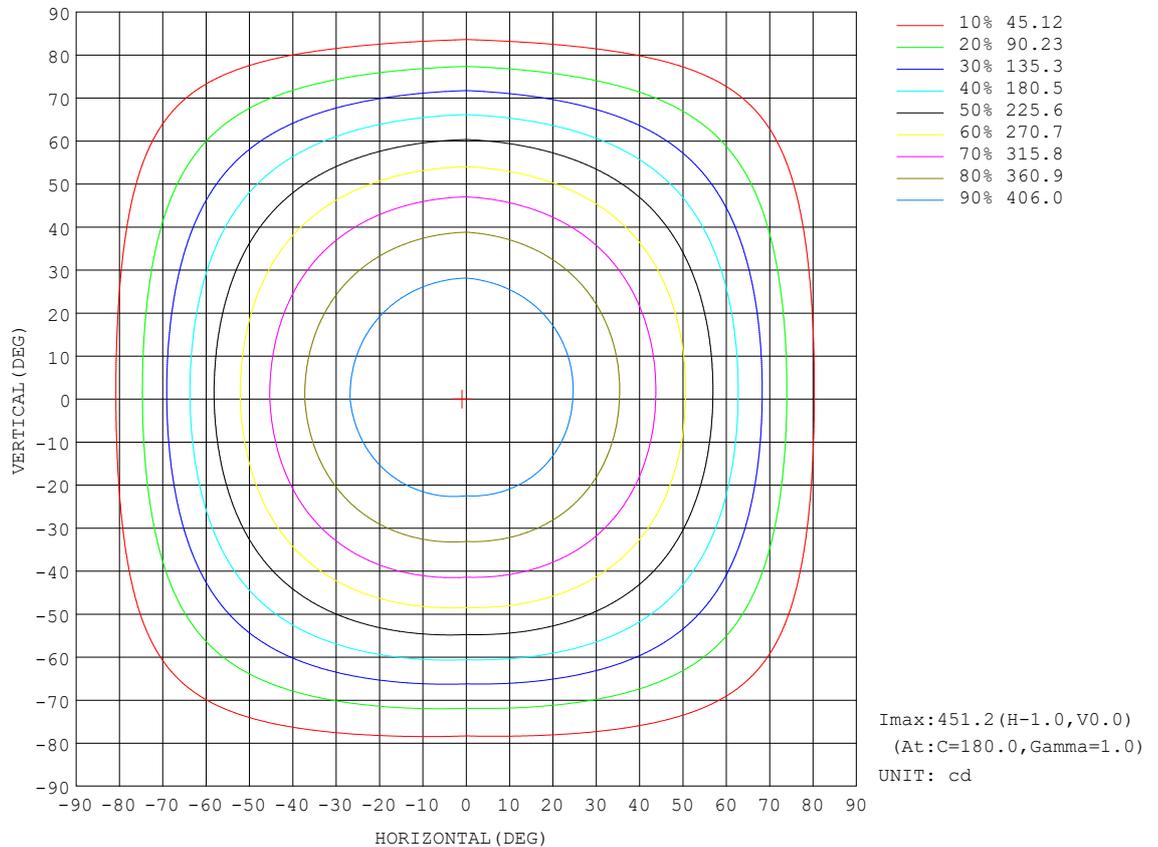
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	57	45	38	56	45	38	55	45	38	32
0.80	67	55	48	66	55	48	64	54	47	41
1.00	76	64	57	74	64	57	72	65	56	49
1.25	83	72	65	81	72	65	79	70	64	56
1.50	88	78	71	86	77	70	83	75	69	62
2.00	95	86	80	93	85	79	89	83	77	69
2.50	99	91	85	97	89	84	93	87	82	74
3.00	102	95	90	100	94	89	96	91	86	78
4.00	106	100	96	104	99	94	99	95	92	83
5.00	109	104	100	106	102	98	102	98	95	86
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:2022-11-10

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:0.5967A P:14.321W PF:1.0000 Freq:0Hz Lamp Flux:1324.66x1 lm		
NAME: UB-SS-50K90C	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



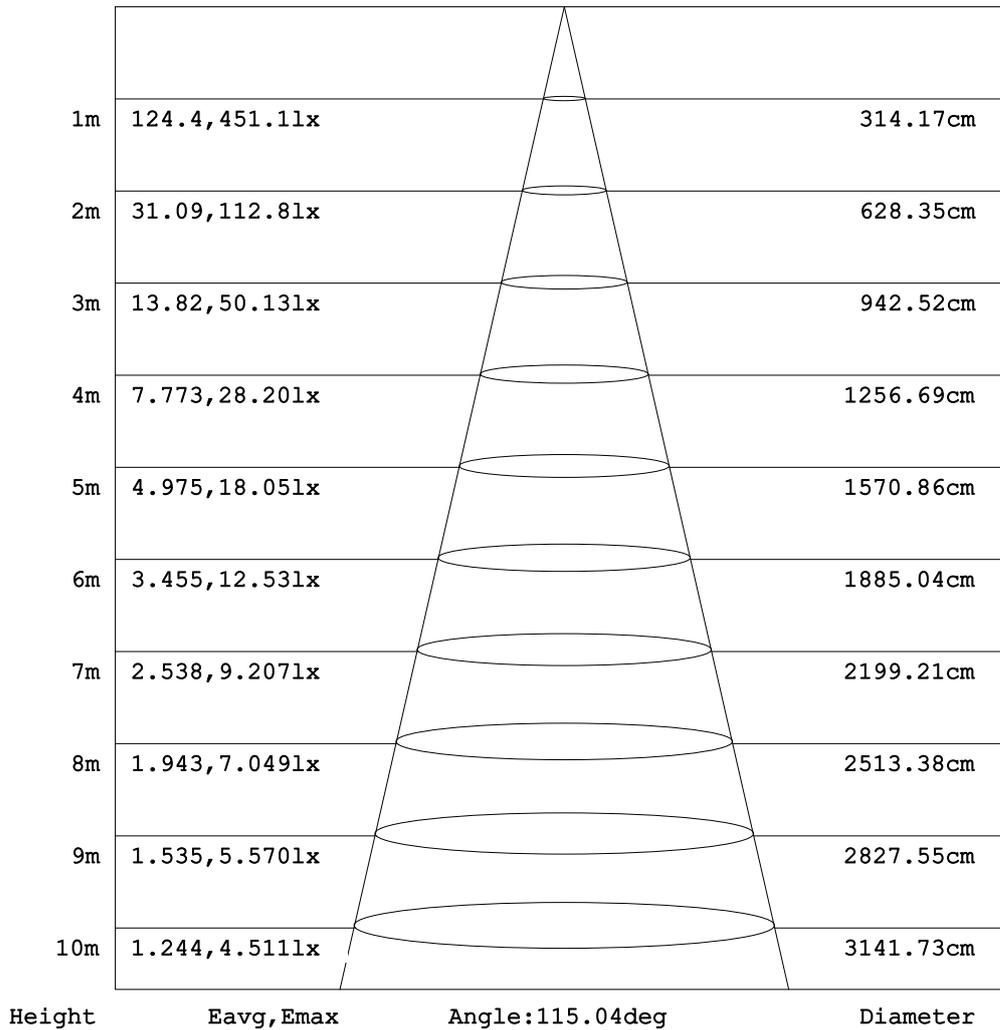
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2022-11-10

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:0.5967A P:14.321W PF:1.0000 Freq:0Hz Lamp Flux:1324.66x1 lm		
NAME: UB-SS-50K90C	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

Flux out:1001 lm



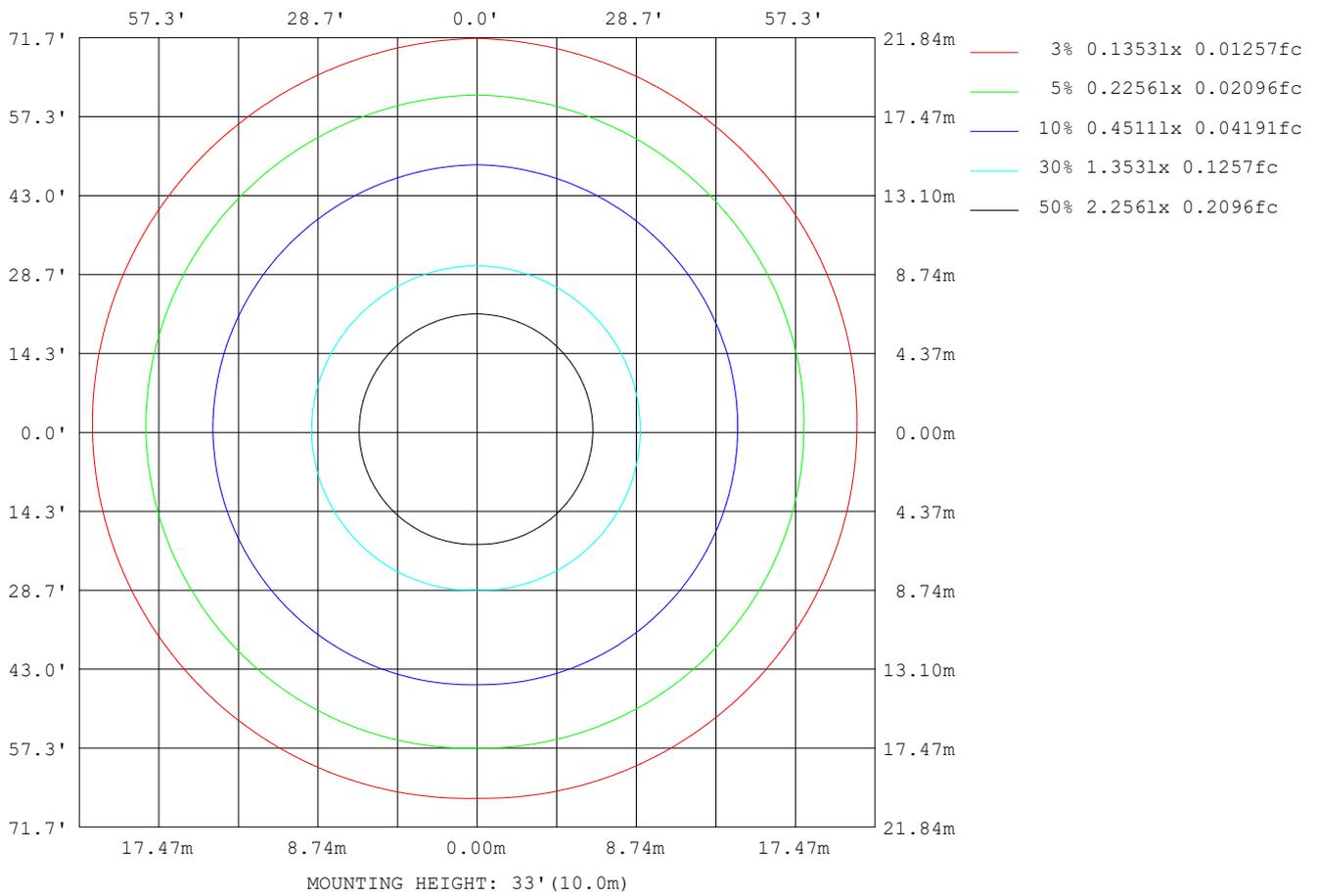
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2022-11-10

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:0.5967A P:14.321W PF:1.0000 Freq:0Hz Lamp Flux:1324.66x1 lm		
NAME: UB-SS-50K90C	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:2022-11-10

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:0.5967A P:14.321W PF:1.0000 Freq:0Hz Lamp Flux:1324.66x1 lm		
NAME: UB-SS-50K90C	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

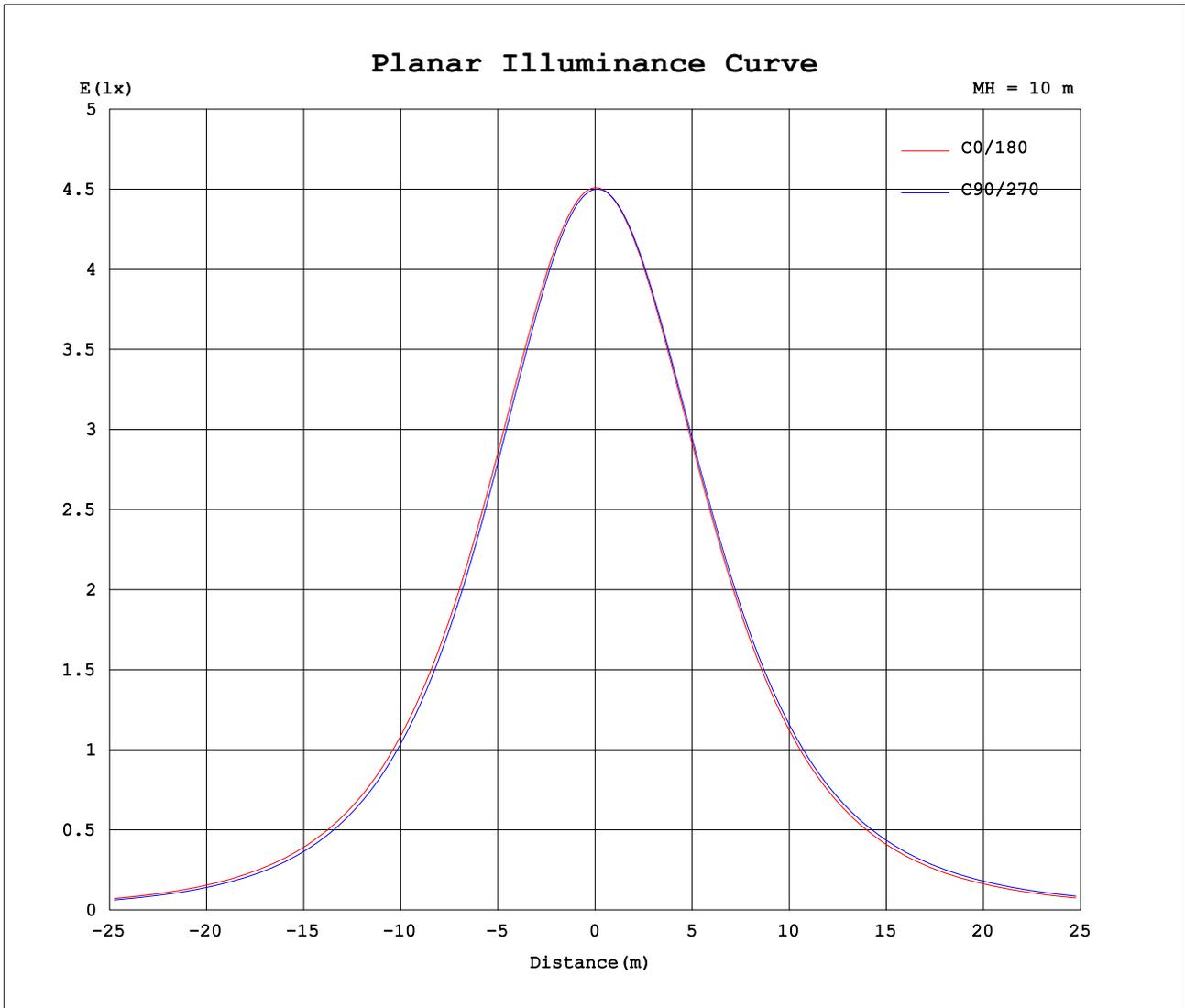
AvgL	cd/m2
L_0~180 (65) av	19614
L_0~180 (75) av	16433
L_0~180 (85) av	11507
L_90~270 (65) av	19806
L_90~270 (75) av	17003
L_90~270 (85) av	13825
L_45 (65) av	19762
L_45 (75) av	16823
L_45 (85) av	12942

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2022-11-10

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:2022-11-10

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:0.5967A P:14.321W PF:1.0000 Freq:0Hz Lamp Flux:1324.66x1 lm		
NAME: UB-SS-50K90C	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	451	450	451	450															
5	449	446	450	450															
10	443	439	446	447															
15	433	429	438	440															
20	421	414	427	430															
25	405	397	412	416															
30	385	376	394	399															
35	363	352	372	379															
40	337	324	347	355															
45	308	294	318	328															
50	275	260	286	297															
55	240	224	250	264															
60	202	185	211	228															
65	162	145	170	190															
70	121	105	128	149															
75	82.2	67.4	87.9	109															
80	46.9	35.1	50.9	70.1															
85	20.5	12.0	19.7	36.2															
90	3.30	1.03	0.00	13.2															
95	0.00	0.00	0.00	2.56															
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	0.01	0.00	0.00															
165	0.00	0.07	0.00	0.00															
170	0.00	0.07	0.02	0.00															
175	0.00	0.07	0.02	0.04															
180	0.05	0.07	0.02	0.06															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2022-11-10

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: