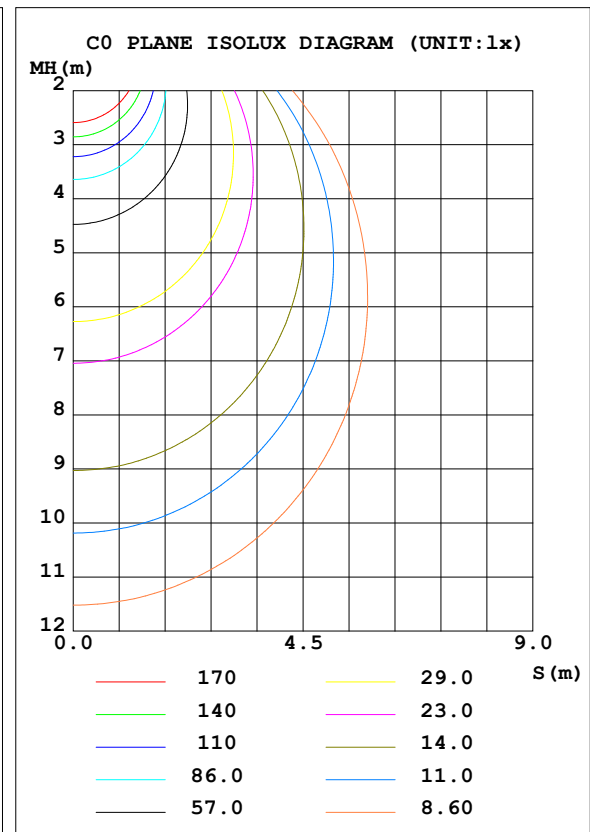
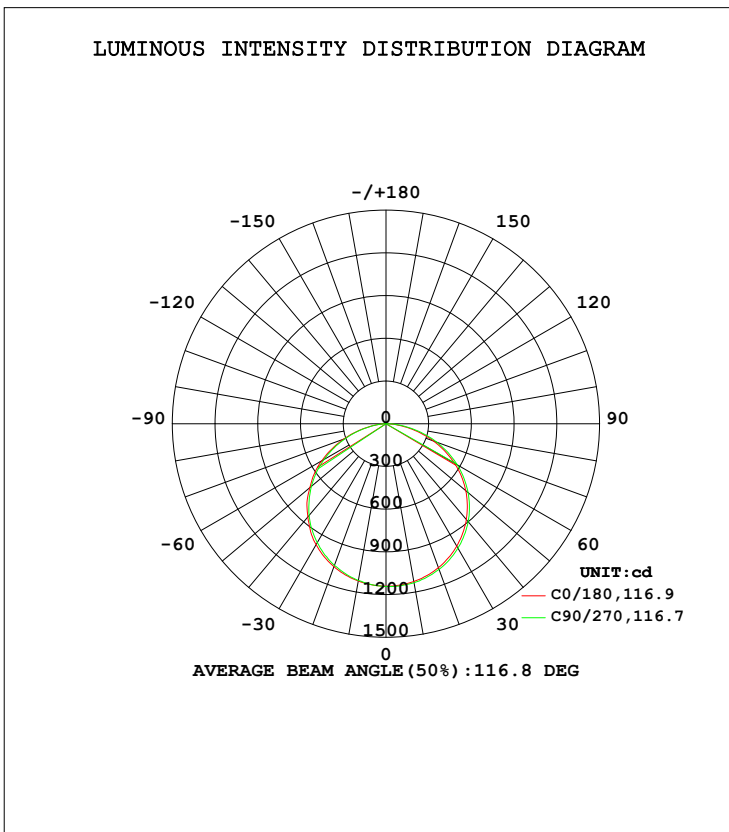


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.001V I:0.9628A P:23.108W PF:1.0000 Freq:0Hz Lamp Flux:3430.1lx1 lm		
NAME: UB-IS-50K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1.073	Shielding Angle: 120

DATA OF LAMP		PHOTOMETRIC DATA Eff: 148.44 lm/W			
MODEL		I _{max} (cd)	1144	S/MH (C0/180)	1.28
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.26
RATED VOLTAGE (V)		TOTAL FLUX (lm)	3430.1	η UP, DN (C0-180)	0.3, 51.6
NOMINAL FLUX (lm)	3430.11	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.3, 47.8
LAMPS INSIDE	1	η up (%)	0.6	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)		η down (%)	99.4	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2023-08-07

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:

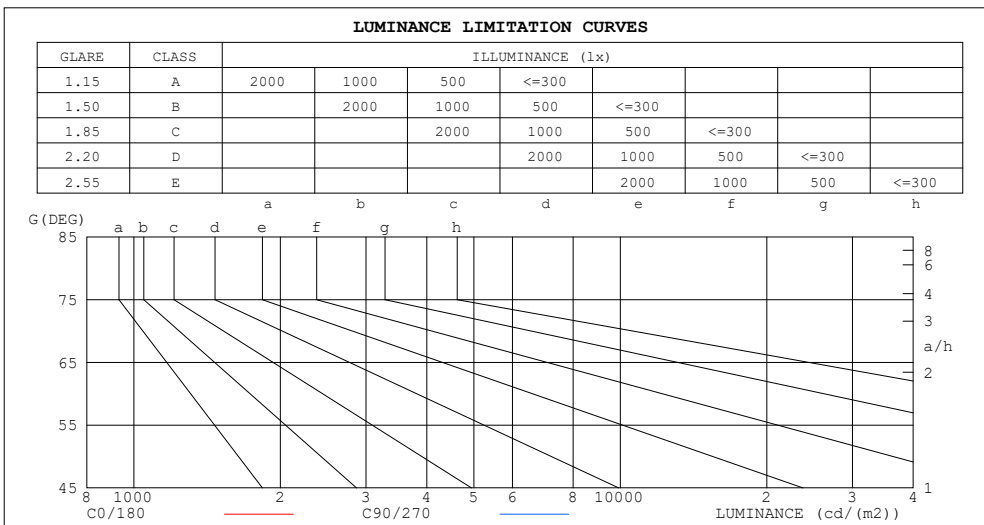
γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum, lamp
10	1126	1133	1122	1117				0- 10	108.2	108.2	3.15,3.15
20	1076	1089	1068	1058				10- 20	311.4	419.6	12.2,12.2
30	993.5	1009	981.9	964.4				20- 30	476.9	896.5	26.1,26.1
40	878.3	897.8	854.3	839.3				30- 40	582.9	1479	43.1,43.1
50	731.5	753.7	699.2	684.1				40- 50	613.9	2093	61,61
60	557.0	577.7	521.5	502.9				50- 60	564.7	2658	77.5,77.5
70	356.1	379.2	317.8	304.0				60- 70	435.7	3094	90.2,90.2
80	148.4	171.4	117.5	109.2				70- 80	248.9	3343	97.4,97.4
90	6.233	23.90	1.503	5.112				80- 90	67.27	3410	99.4,99.4
100	1.342	1.822	1.577	1.540				90-100	3.532	3413	99.5,99.5
110	1.970	1.922	2.279	2.044				100-110	1.876	3415	99.6,99.6
120	2.721	2.538	3.006	2.770				110-120	2.382	3418	99.6,99.6
130	3.447	3.252	3.683	3.460				120-130	2.786	3420	99.7,99.7
140	4.039	3.880	4.225	4.027				130-140	2.908	3423	99.8,99.8
150	4.520	4.410	4.705	4.532				140-150	2.693	3426	99.9,99.9
160	4.938	4.939	5.087	4.951				150-160	2.196	3428	99.9,99.9
170	5.271	5.345	5.345	5.296				160-170	1.457	3430	100,100
180	5.407	5.468	5.407	5.468				170-180	0.5126	3430	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-08-07

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:0.9628A P:23.108W PF:1.0000 Freq:0Hz Lamp Flux:3430.11x1 lm		
NAME: UB-IS-50K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1.073	Shielding Angle: 120



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	65866	87763
80	79648	91970
75	89101	98761
70	97023	103332
65	100912	106102
60	103829	107683
55	105285	108679
50	106053	109282
45	106458	109314

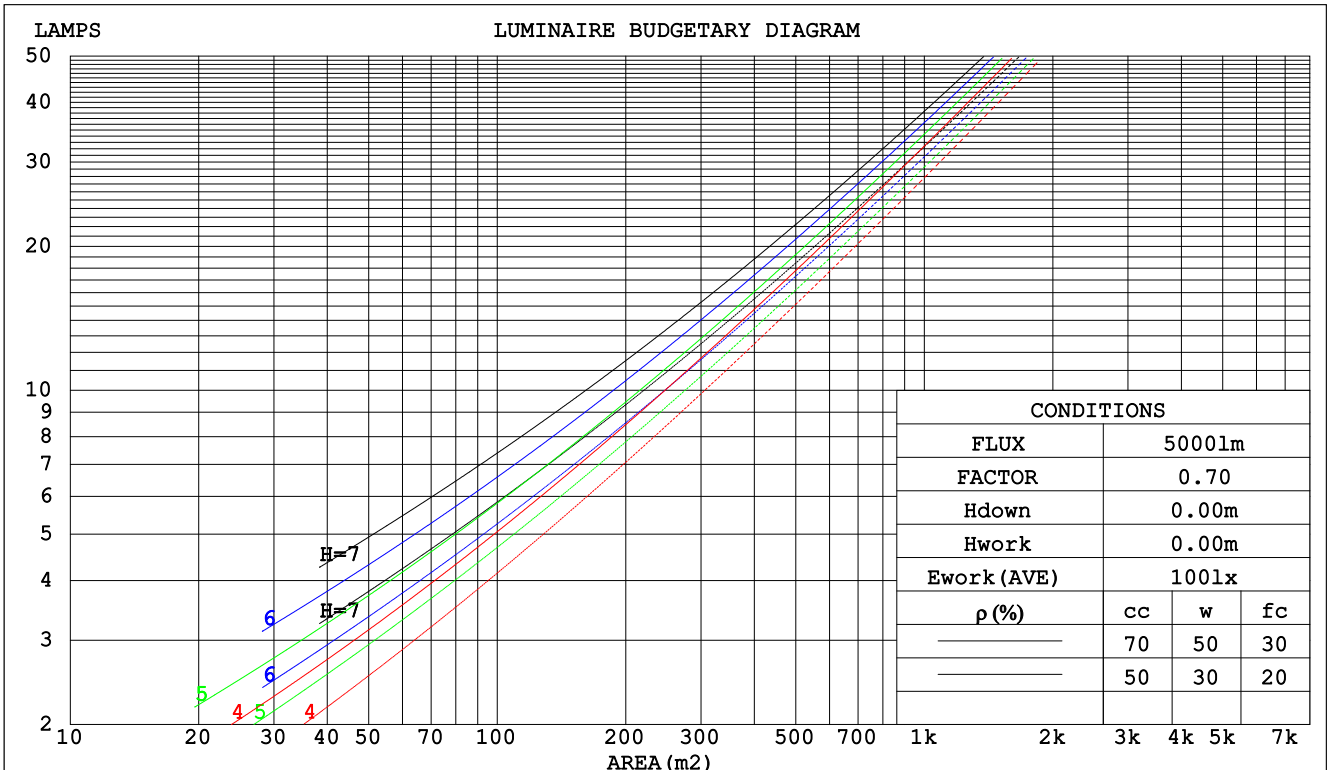
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-08-07

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:0.9628A P:23.108W PF:1.0000 Freq:0Hz Lamp Flux:3430.1lx1 lm		
NAME: UB-IS-50K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1.073	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	1.01	1.01	1.01	.99
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	.84	.79	.74	.81	.76	.72	.78	.74	.71	.69
3.0	.79	.70	.64	.77	.69	.63	.74	.67	.62	.71	.66	.61	.69	.64	.60	.57
4.0	.70	.61	.54	.68	.60	.53	.66	.58	.53	.63	.57	.52	.61	.56	.51	.49
5.0	.62	.53	.46	.61	.52	.46	.59	.51	.45	.57	.50	.45	.55	.49	.44	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.40	.51	.44	.39	.49	.43	.39	.37
7.0	.50	.42	.35	.50	.41	.35	.48	.40	.35	.47	.40	.35	.45	.39	.34	.32
8.0	.46	.37	.31	.45	.37	.31	.44	.36	.31	.43	.36	.31	.41	.35	.31	.29
9.0	.42	.34	.28	.42	.34	.28	.40	.33	.28	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.31	.26	.38	.31	.26	.37	.30	.25	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-08-07

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:0.9628A P:23.108W PF:1.0000 Freq:0Hz Lamp Flux:3430.11x1 lm								
NAME: UB-IS-50K90C			TYPE: LED Strip			WEIGHT:		
SPEC.: 21.7W			DIM.: 1000*10*2 (MM)			SERIAL No.: 001		
MFR.: Flexfire LEDs, Inc.			SUR.: 0.01*1.073			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	.314	.179	.057	.307	.175	.056	.293	.168	.054	.281	.162	.052	.269	.156	.050	
2.0	.295	.162	.050	.289	.159	.049	.277	.154	.048	.266	.149	.047	.255	.144	.046	
3.0	.273	.145	.044	.267	.143	.043	.257	.139	.042	.247	.135	.041	.238	.132	.041	
4.0	.252	.131	.038	.247	.129	.038	.237	.126	.038	.228	.123	.037	.220	.120	.036	
5.0	.232	.118	.034	.228	.117	.034	.220	.114	.034	.212	.112	.033	.204	.109	.033	
6.0	.215	.108	.031	.211	.107	.031	.204	.105	.030	.197	.102	.030	.190	.100	.030	
7.0	.200	.099	.028	.197	.098	.028	.190	.096	.028	.184	.094	.027	.178	.092	.027	
8.0	.187	.091	.026	.184	.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	.165	.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	.195	.195	.195	.167	.167	.167	.114	.114	.114	.065	.065	.065	.021	.021	.021	
1.0	.185	.161	.139	.158	.138	.119	.108	.095	.082	.062	.055	.048	.020	.018	.016	
2.0	.177	.136	.102	.152	.117	.088	.104	.081	.062	.060	.047	.036	.019	.015	.012	
3.0	.170	.119	.078	.145	.103	.068	.100	.071	.048	.058	.042	.028	.019	.014	.009	
4.0	.162	.106	.063	.139	.091	.054	.096	.064	.038	.055	.037	.023	.018	.012	.007	
5.0	.155	.095	.052	.133	.082	.045	.091	.058	.032	.053	.034	.019	.017	.011	.006	
6.0	.148	.087	.044	.127	.075	.038	.087	.053	.027	.051	.031	.016	.016	.010	.005	
7.0	.141	.080	.038	.121	.069	.033	.084	.049	.023	.049	.029	.014	.016	.009	.005	
8.0	.134	.074	.033	.115	.064	.029	.080	.045	.021	.046	.027	.012	.015	.009	.004	
9.0	.128	.069	.030	.110	.060	.026	.076	.042	.018	.045	.025	.011	.014	.008	.004	
10.0	.122	.065	.027	.105	.057	.024	.073	.040	.017	.043	.024	.010	.014	.008	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-08-07

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:0.9628A P:23.108W PF:1.0000 Freq:0Hz Lamp Flux:3430.11x1 lm										
NAME: UB-IS-50K90C					TYPE: LED Strip			WEIGHT:		
SPEC.: 21.7W					DIM.: 1000*10*2 (MM)			SERIAL No.: 001		
MFR.: Flexfire LEDs, Inc.					SUR.: 0.01*1.073			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	24.9	26.5	25.2	26.7	26.9	25.1	26.6	25.4	26.8	27.1
3H	26.6	28.0	26.9	28.2	28.5	26.8	28.2	27.1	28.4	28.7
4H	27.2	28.5	27.5	28.8	29.1	27.5	28.8	27.8	29.1	29.3
6H	27.6	28.9	28.0	29.2	29.5	28.0	29.3	28.3	29.5	29.8
8H	27.8	29.0	28.1	29.3	29.6	28.2	29.4	28.5	29.7	30.0
12H	27.8	29.0	28.2	29.3	29.6	28.3	29.5	28.7	29.8	30.1
4H 2H	25.6	27.0	25.9	27.2	27.5	25.7	27.1	26.1	27.3	27.6
3H	27.4	28.6	27.8	28.9	29.2	27.6	28.8	28.0	29.1	29.4
4H	28.2	29.2	28.6	29.6	29.9	28.4	29.5	28.8	29.8	30.2
6H	28.7	29.7	29.1	30.1	30.4	29.1	30.0	29.5	30.4	30.8
8H	28.9	29.8	29.4	30.2	30.6	29.3	30.2	29.7	30.6	31.0
12H	29.0	29.9	29.5	30.3	30.7	29.5	30.3	29.9	30.7	31.1
8H 4H	28.5	29.4	28.9	29.7	30.1	28.7	29.6	29.1	30.0	30.4
6H	29.2	29.9	29.7	30.4	30.8	29.5	30.2	30.0	30.7	31.1
8H	29.5	30.1	29.9	30.6	31.0	29.8	30.5	30.3	30.9	31.4
12H	29.7	30.2	30.2	30.7	31.2	30.1	30.7	30.6	31.1	31.6
12H 4H	28.5	29.3	28.9	29.7	30.1	28.7	29.5	29.1	29.9	30.3
6H	29.3	29.9	29.7	30.4	30.8	29.6	30.2	30.0	30.7	31.1
8H	29.6	30.2	30.1	30.6	31.1	29.9	30.5	30.4	31.0	31.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.4					+ 0.1 / - 0.3				

CIE Pub.117, 3430 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.3)
 Area: 0.01073 m2

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-08-07

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:0.9628A P:23.108W PF:1.0000 Freq:0Hz Lamp Flux:3430.11x1 lm		
NAME: UB-IS-50K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1.073	Shielding Angle: 120

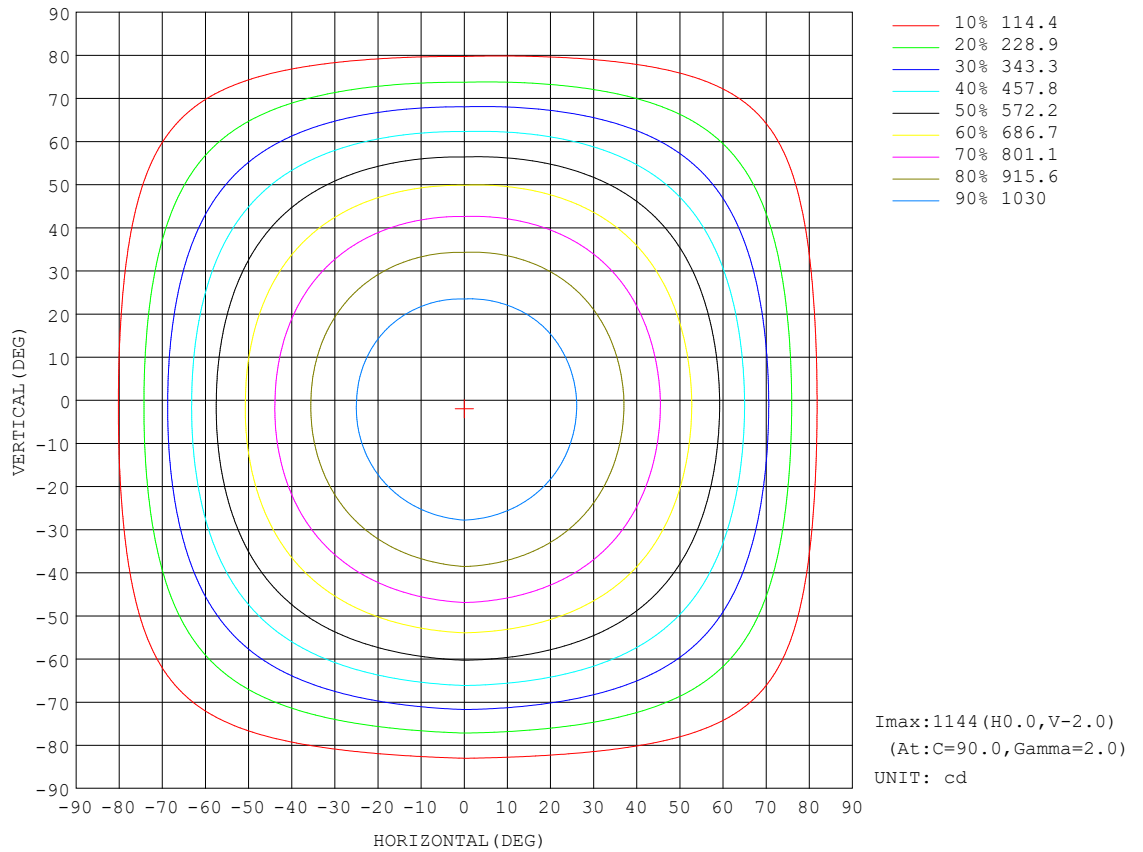
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	57	45	38	56	45	38	55	44	38	31
0.80	67	55	47	66	54	47	64	54	47	40
1.00	75	64	56	74	63	56	72	65	56	48
1.25	82	72	64	81	71	64	78	69	63	56
1.50	87	77	70	86	76	70	83	75	69	61
2.00	94	86	79	92	84	78	89	82	77	69
2.50	98	90	84	96	89	83	92	86	81	73
3.00	102	95	89	100	93	88	95	90	86	77
4.00	106	100	95	103	98	94	99	95	91	82
5.00	108	103	99	106	101	98	101	98	94	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:2023-08-07

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:0.9628A P:23.108W PF:1.0000 Freq:0Hz Lamp Flux:3430.1lx1 lm		
NAME: UB-IS-50K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1.073	Shielding Angle: 120

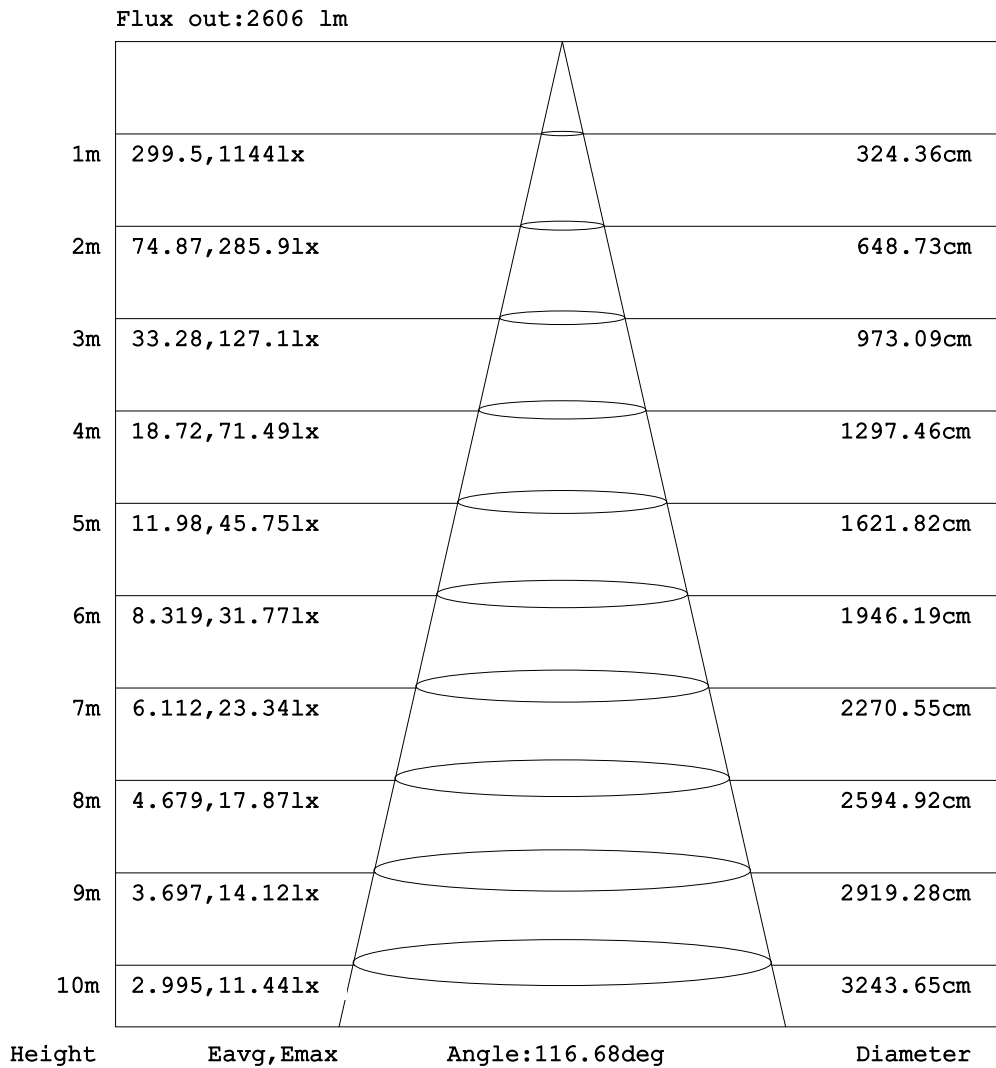


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2023-08-07

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:0.9628A P:23.108W PF:1.0000 Freq:0Hz Lamp Flux:3430.1lx1 lm		
NAME: UB-IS-50K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1.073	Shielding Angle: 120



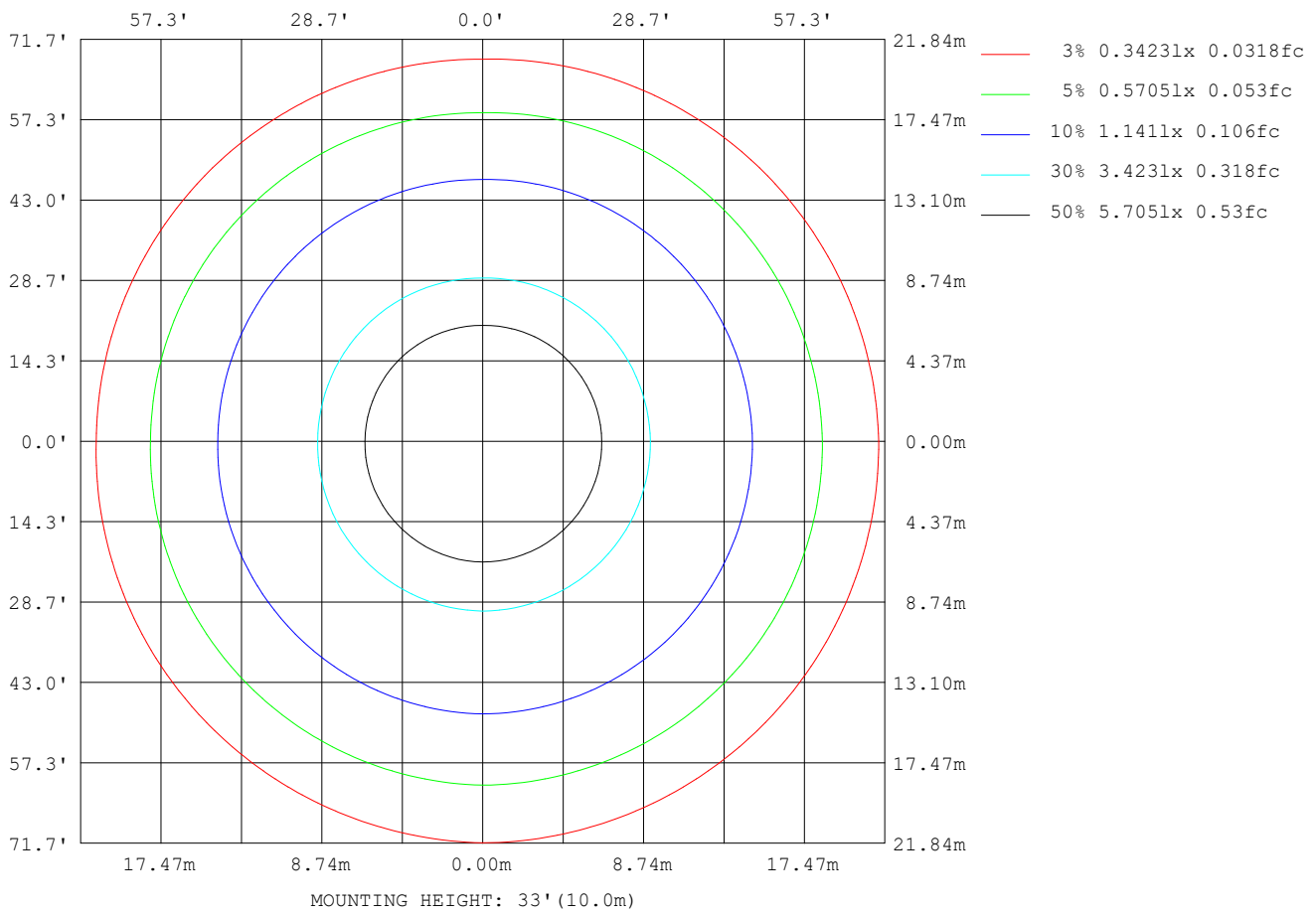
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-08-07

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:0.9628A P:23.108W PF:1.0000 Freq:0Hz Lamp Flux:3430.1lx1 lm		
NAME: UB-IS-50K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1.073	Shielding Angle: 120



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-08-07

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:0.9628A P:23.108W PF:1.0000 Freq:0Hz Lamp Flux:3430.1lx1 lm		
NAME: UB-IS-50K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1.073	Shielding Angle: 120

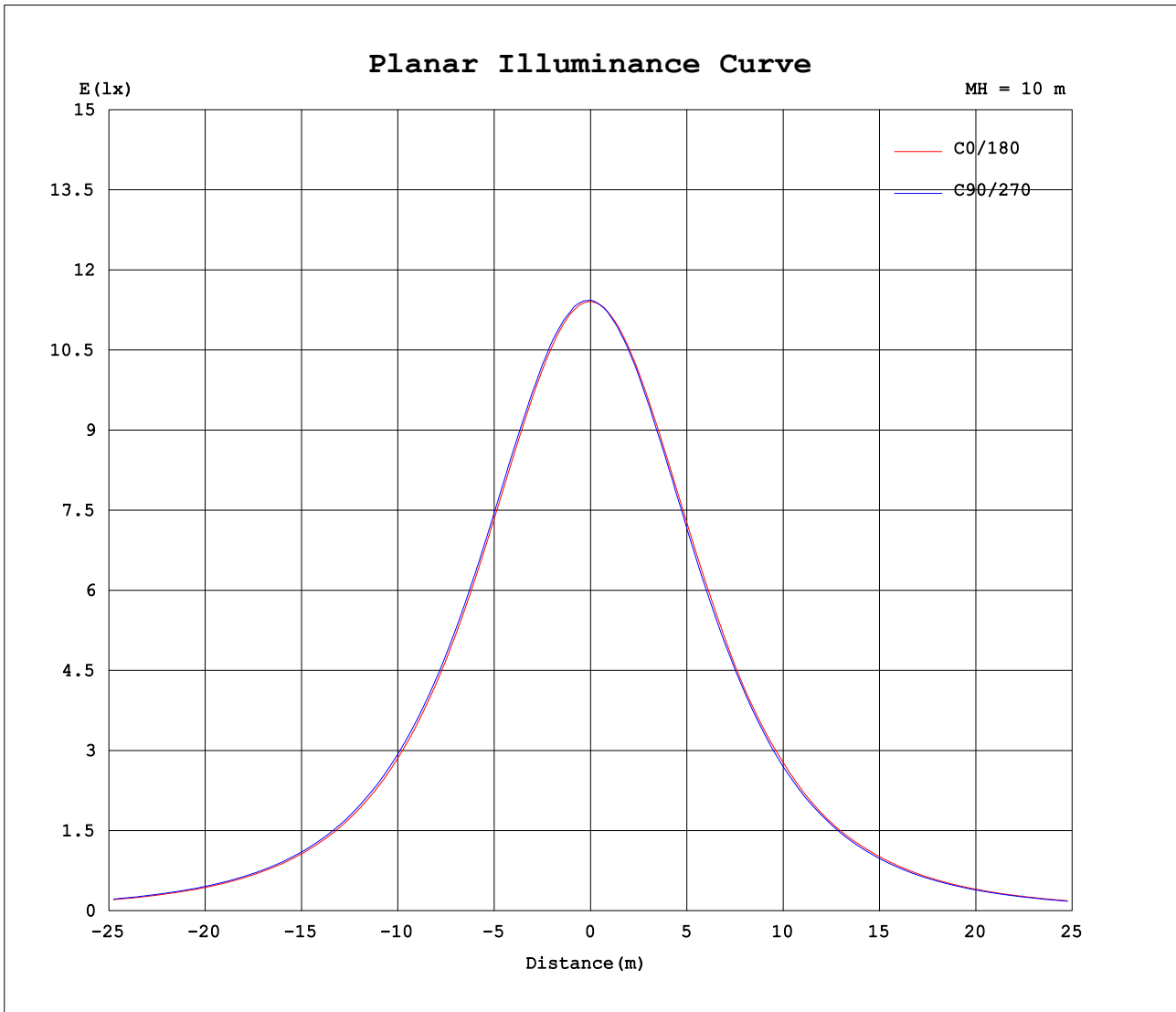
AvgL	cd/m2
L_0~180 (65) av	96781
L_0~180 (75) av	83007
L_0~180 (85) av	54785
L_90~270 (65) av	97614
L_90~270 (75) av	86019
L_90~270 (85) av	64565
L_45 (65) av	97043
L_45 (75) av	84508
L_45 (85) av	60205

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-08-07

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:2023-08-07

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:0.9628A P:23.108W PF:1.0000 Freq:0Hz Lamp Flux:3430.11x1 lm		
NAME: UB-IS-50K90C	TYPE: LED Strip	WEIGHT:
SPEC.: 21.7W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1.073	Shielding Angle: 120

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	90	180	270															
0	1141	1144	1141	1144															
5	1137	1143	1135	1135															
10	1126	1133	1122	1117															
15	1105	1115	1100	1092															
20	1076	1089	1068	1058															
25	1039	1054	1030	1017															
30	993	1009	982	964															
35	939	957	923	906															
40	878	898	854	839															
45	808	829	785	763															
50	731	754	699	684															
55	648	669	617	597															
60	557	578	521	503															
65	458	481	420	404															
70	356	379	318	304															
75	247	274	214	203															
80	148	171	118	109															
85	61.6	82.1	40.9	38.7															
90	6.23	23.9	1.50	5.11															
95	1.11	5.80	1.55	1.64															
100	1.34	1.82	1.58	1.54															
105	1.66	1.75	1.91	1.72															
110	1.97	1.92	2.28	2.04															
115	2.33	2.22	2.62	2.40															
120	2.72	2.54	3.01	2.77															
125	3.08	2.91	3.35	3.10															
130	3.45	3.25	3.68	3.46															
135	3.76	3.56	3.98	3.76															
140	4.04	3.88	4.23	4.03															
145	4.27	4.14	4.48	4.27															
150	4.52	4.41	4.71	4.53															
155	4.73	4.68	4.88	4.73															
160	4.94	4.94	5.09	4.95															
165	5.15	5.15	5.19	5.15															
170	5.27	5.35	5.35	5.30															
175	5.31	5.46	5.41	5.43															
180	5.41	5.47	5.41	5.47															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-08-07

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: