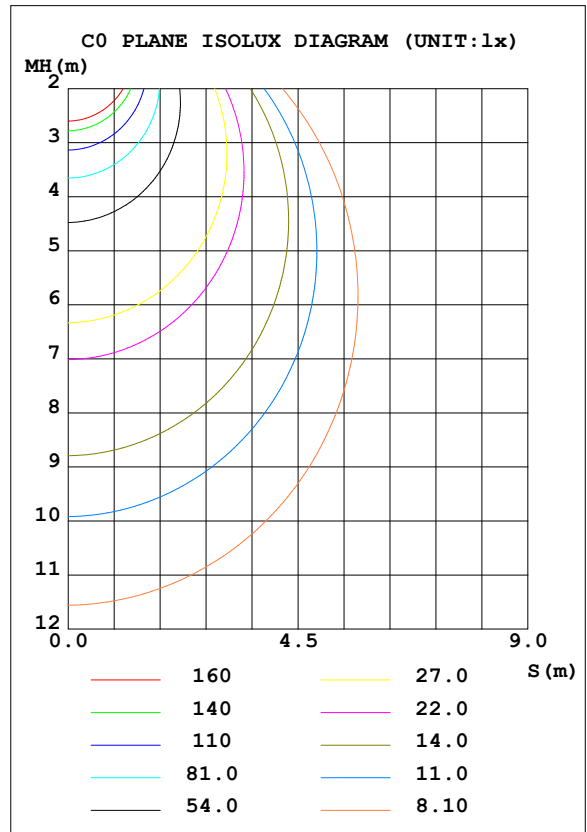
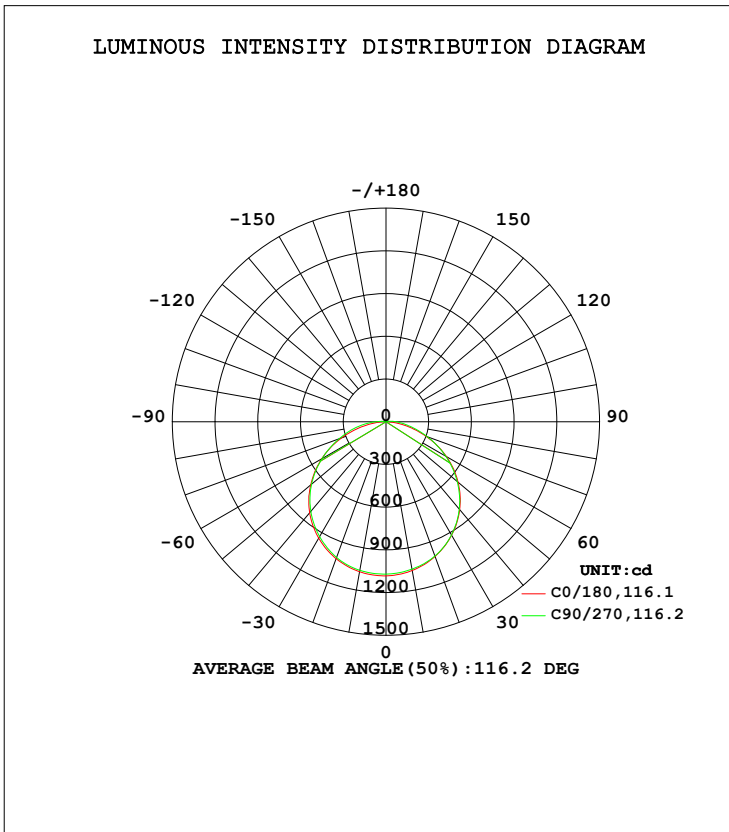


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.001V I:0.9833A P:23.600W PF:1.0000 Freq:0Hz Lamp Flux:3301.26x1 lm		
NAME: UB-IS-30K90C	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: 139.88 lm/W			
MODEL		I _{max} (cd)	1082	S/MH (C0/180)	1.30
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.29
RATED VOLTAGE (V)		TOTAL FLUX (lm)	3301.3	η UP, DN (C0-180)	0.7, 48.1
NOMINAL FLUX (lm)	3301.26	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.7, 50.6
LAMPS INSIDE	1	η up (%)	1.4	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)		η down (%)	98.6	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:

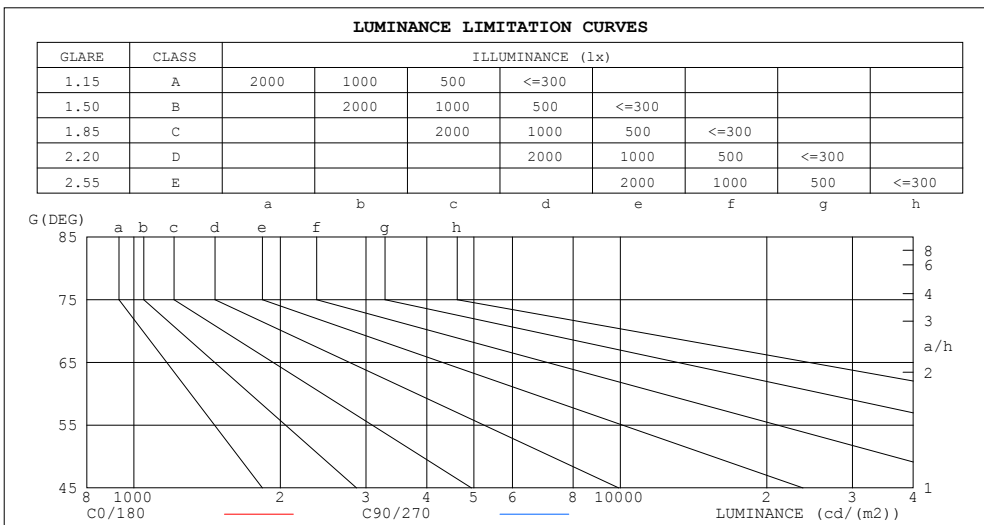
γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum, lamp
10	1061	1051	1069	1059				0- 10	102.0	102.0	3.09,3.09
20	1007	1004	1024	1014				10- 20	293.8	395.8	12,12
30	921.1	919.4	944.7	931.8				20- 30	449.4	845.2	25.6,25.6
40	805.5	801.1	834.1	821.2				30- 40	548.1	1393	42.2,42.2
50	661.3	653.1	690.6	682.1				40- 50	576.2	1969	59.7,59.7
60	491.2	485.0	521.9	519.2				50- 60	527.7	2497	75.6,75.6
70	300.6	309.6	332.4	350.7				60- 70	410.0	2907	88.1,88.1
80	116.1	162.0	142.5	201.0				70- 80	250.0	3157	95.6,95.6
90	3.622	71.88	11.61	72.54				80- 90	99.19	3256	98.6,98.6
100	1.354	22.71	1.565	17.23				90-100	24.60	3281	99.4,99.4
110	1.934	3.619	2.033	4.683				100-110	5.566	3287	99.6,99.6
120	2.745	3.326	2.710	2.524				110-120	2.767	3289	99.6,99.6
130	3.313	3.461	3.351	3.103				120-130	2.734	3292	99.7,99.7
140	3.866	3.905	3.930	3.682				130-140	2.771	3295	99.8,99.8
150	4.335	4.348	4.373	4.126				140-150	2.555	3297	99.9,99.9
160	4.655	4.742	4.730	4.557				150-160	2.071	3299	99.9,99.9
170	4.941	5.062	5.013	4.939				160-170	1.368	3301	100,100
180	5.111	5.160	5.099	5.136				170-180	0.4824	3301	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:0.9833A P:23.600W PF:1.0000 Freq:0Hz Lamp Flux:3301.26x1 lm		
NAME: UB-IS-30K90C	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	53464	124862
80	66854	93287
75	78991	89287
70	87887	90523
65	94012	93770
60	98234	96998
55	101038	99639
50	102873	101604
45	104205	103231

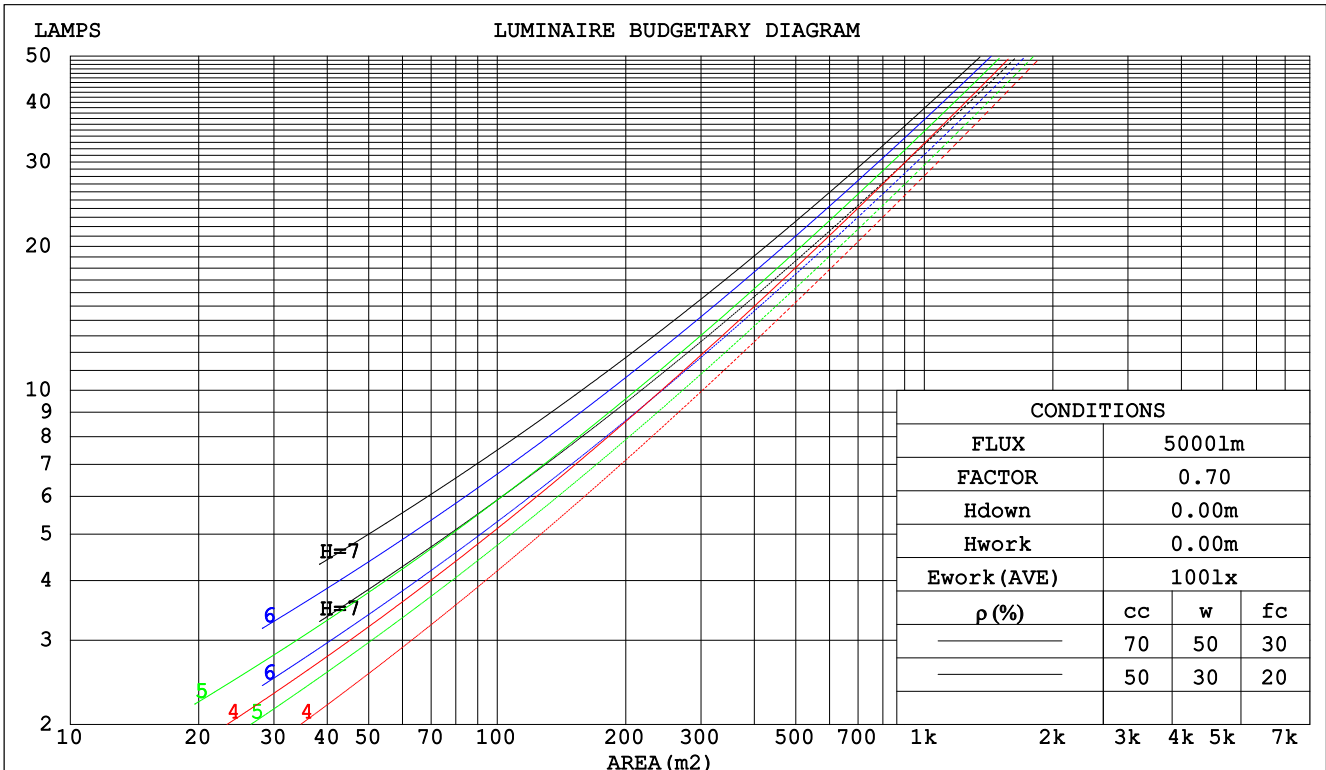
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-07-25

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:0.9833A P:23.600W PF:1.0000 Freq:0Hz Lamp Flux:3301.26x1 lm		
NAME: UB-IS-30K90C	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	.99
1.0	1.03	.98	.94	1.00	.96	.92	.96	.92	.89	.92	.89	.86	.88	.86	.83	.81
2.0	.89	.82	.76	.87	.81	.75	.83	.78	.73	.80	.75	.71	.77	.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	.57	.52	.62	.56	.51	.60	.54	.50	.48
5.0	.61	.52	.45	.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	.47	.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	.33	.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:0.9833A P:23.600W PF:1.0000 Freq:0Hz Lamp Flux:3301.26x1 lm														
NAME: UB-IS-30K90C					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	.326	.185	.059	.318	.181	.058	.304	.174	.056	.291	.168	.054	.279	.162	.052	
2.0	.301	.165	.051	.295	.162	.050	.282	.157	.049	.271	.152	.048	.260	.147	.046	
3.0	.277	.147	.044	.271	.145	.044	.260	.141	.043	.249	.137	.042	.240	.133	.041	
4.0	.254	.132	.039	.249	.130	.038	.239	.127	.038	.230	.123	.037	.221	.120	.037	
5.0	.234	.119	.035	.229	.118	.034	.221	.115	.034	.212	.112	.033	.205	.109	.033	
6.0	.216	.109	.031	.212	.107	.031	.204	.105	.030	.197	.102	.030	.190	.100	.030	
7.0	.201	.099	.028	.197	.098	.028	.190	.096	.028	.184	.094	.027	.178	.092	.027	
8.0	.188	.092	.026	.184	.091	.026	.178	.089	.025	.172	.087	.025	.166	.085	.025	
9.0	.176	.085	.024	.173	.084	.024	.167	.083	.023	.162	.081	.023	.156	.079	.023	
10.0	.165	.079	.022	.162	.078	.022	.157	.077	.022	.152	.076	.021	.148	.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	.201	.201	.201	.172	.172	.172	.117	.117	.117	.067	.067	.067	.022	.022	.022	
1.0	.192	.166	.144	.164	.143	.124	.112	.098	.085	.065	.057	.050	.021	.018	.016	
2.0	.184	.142	.107	.158	.123	.093	.108	.085	.065	.062	.049	.038	.020	.016	.012	
3.0	.176	.125	.084	.151	.108	.073	.104	.075	.051	.060	.044	.030	.019	.014	.010	
4.0	.169	.112	.068	.145	.097	.059	.100	.067	.042	.058	.039	.025	.019	.013	.008	
5.0	.161	.101	.057	.138	.088	.050	.095	.061	.035	.055	.036	.021	.018	.012	.007	
6.0	.154	.093	.049	.132	.081	.043	.091	.056	.030	.053	.033	.018	.017	.011	.006	
7.0	.147	.086	.044	.126	.075	.038	.087	.052	.027	.051	.031	.016	.016	.010	.005	
8.0	.140	.080	.039	.121	.070	.034	.084	.049	.024	.049	.029	.014	.016	.009	.005	
9.0	.134	.075	.036	.116	.066	.031	.080	.046	.022	.047	.027	.013	.015	.009	.004	
10.0	.129	.071	.033	.111	.062	.029	.077	.044	.020	.045	.026	.012	.015	.008	.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:0.9833A P:23.600W PF:1.0000 Freq:0Hz Lamp Flux:3301.26x1 lm										
NAME: UB-IS-30K90C					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	24.6	26.1	24.9	26.3	26.6	24.5	26.1	24.8	26.3	26.5
3H	26.1	27.5	26.4	27.8	28.0	26.1	27.5	26.4	27.8	28.0
4H	26.7	28.0	27.0	28.3	28.6	26.8	28.1	27.1	28.4	28.7
6H	27.0	28.3	27.4	28.6	28.9	27.4	28.6	27.7	28.9	29.2
8H	27.1	28.4	27.5	28.7	29.0	27.6	28.9	28.0	29.2	29.5
12H	27.2	28.4	27.6	28.7	29.0	27.9	29.1	28.3	29.4	29.7
4H 2H	25.2	26.5	25.5	26.8	27.1	25.2	26.5	25.5	26.8	27.1
3H	26.9	28.0	27.2	28.4	28.7	26.9	28.1	27.3	28.4	28.7
4H	27.6	28.6	28.0	29.0	29.4	27.7	28.8	28.1	29.1	29.5
6H	28.1	29.0	28.5	29.4	29.8	28.4	29.4	28.8	29.8	30.2
8H	28.2	29.1	28.7	29.5	29.9	28.8	29.7	29.2	30.1	30.5
12H	28.3	29.1	28.8	29.6	30.0	29.1	30.0	29.6	30.4	30.8
8H 4H	27.8	28.7	28.3	29.1	29.6	28.0	28.9	28.4	29.3	29.7
6H	28.5	29.3	29.0	29.7	30.2	28.9	29.6	29.3	30.0	30.5
8H	28.8	29.4	29.2	29.9	30.4	29.3	30.0	29.8	30.4	30.9
12H	28.9	29.5	29.4	30.0	30.5	29.8	30.4	30.3	30.9	31.4
12H 4H	27.9	28.7	28.3	29.1	29.5	28.0	28.8	28.4	29.2	29.6
6H	28.6	29.3	29.1	29.7	30.2	28.9	29.6	29.4	30.0	30.5
8H	28.9	29.5	29.4	29.9	30.5	29.4	30.0	29.9	30.5	31.0
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 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 3301 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.1)
 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:0.9833A P:23.600W PF:1.0000 Freq:0Hz Lamp Flux:3301.26x1 lm		
NAME: UB-IS-30K90C	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

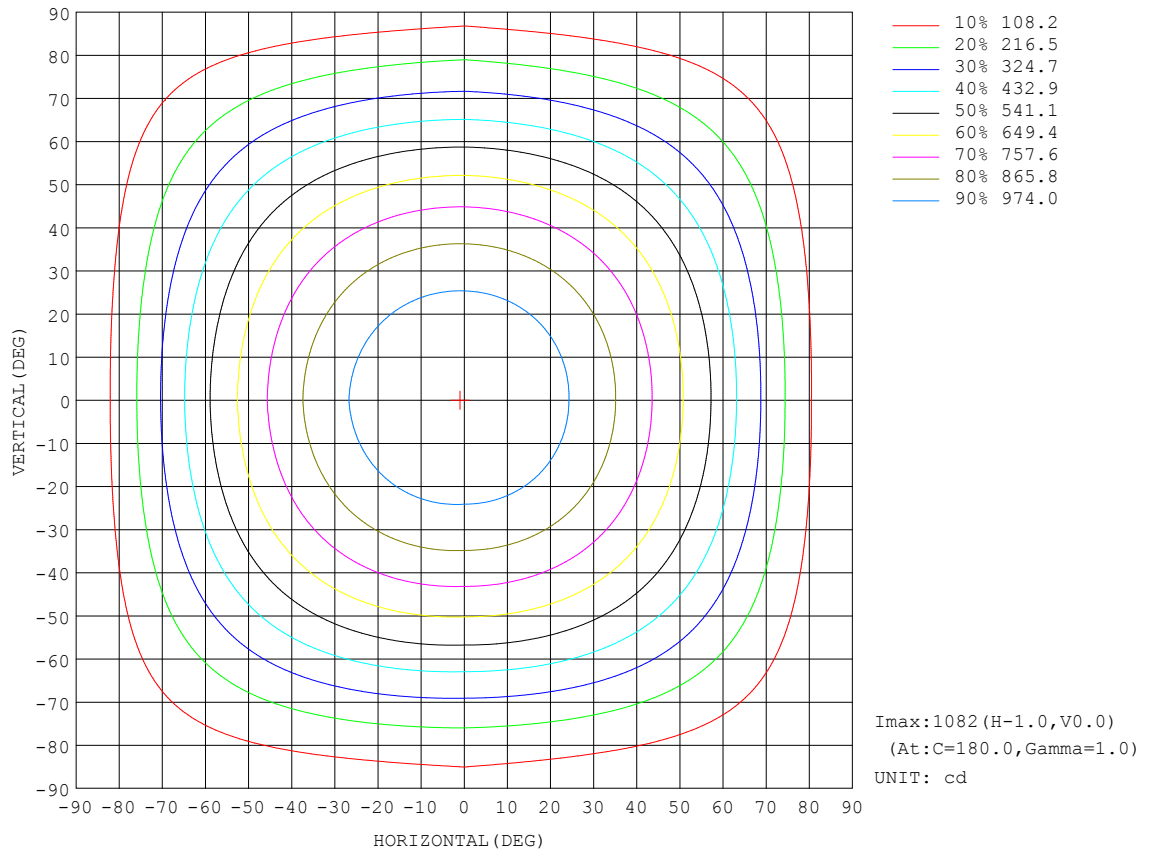
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	44	37	55	44	37	54	44	37	30
0.80	66	54	47	65	54	46	63	53	46	39
1.00	74	63	55	73	62	55	71	64	55	47
1.25	81	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:0.9833A P:23.600W PF:1.0000 Freq:0Hz Lamp Flux:3301.26x1 lm		
NAME: UB-IS-30K90C	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

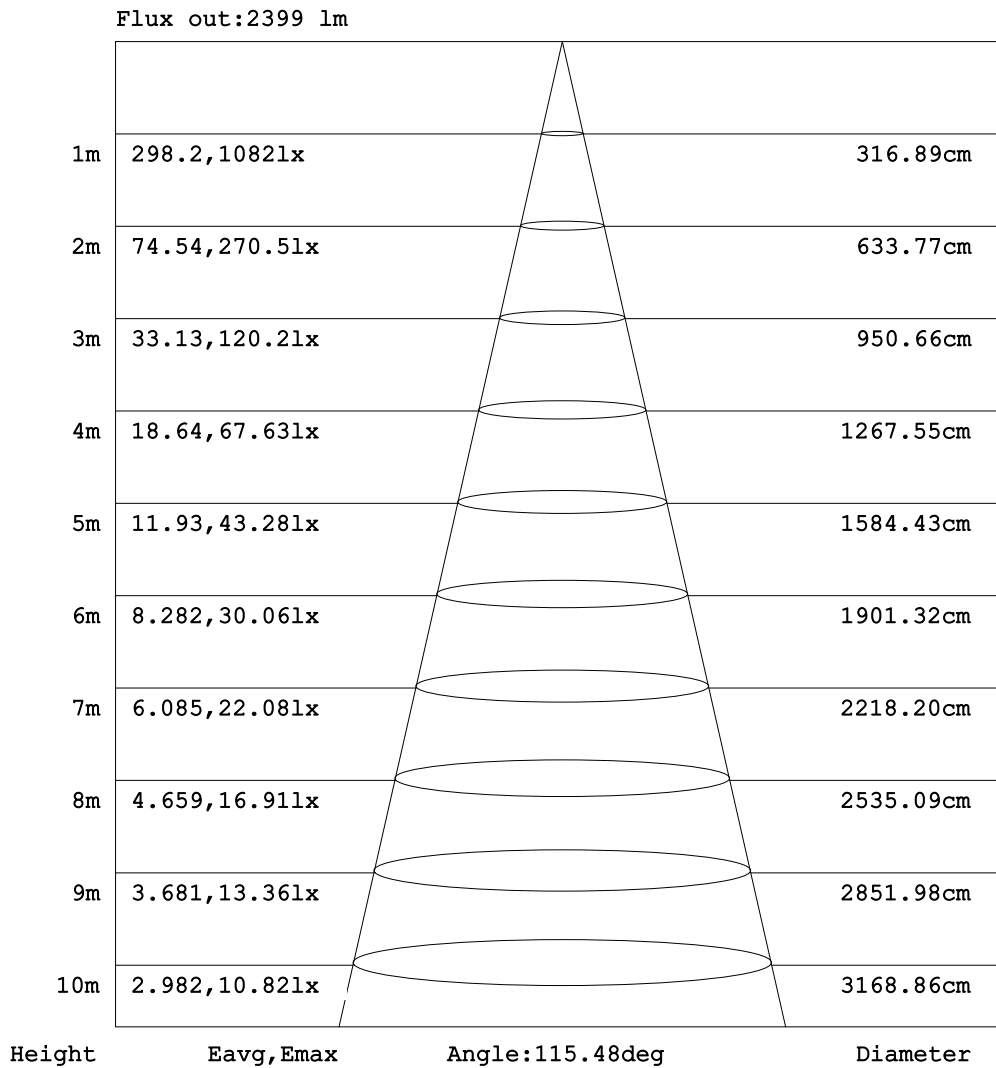


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-07-25

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:0.9833A P:23.600W PF:1.0000 Freq:0Hz Lamp Flux:3301.26x1 lm		
NAME: UB-IS-30K90C	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



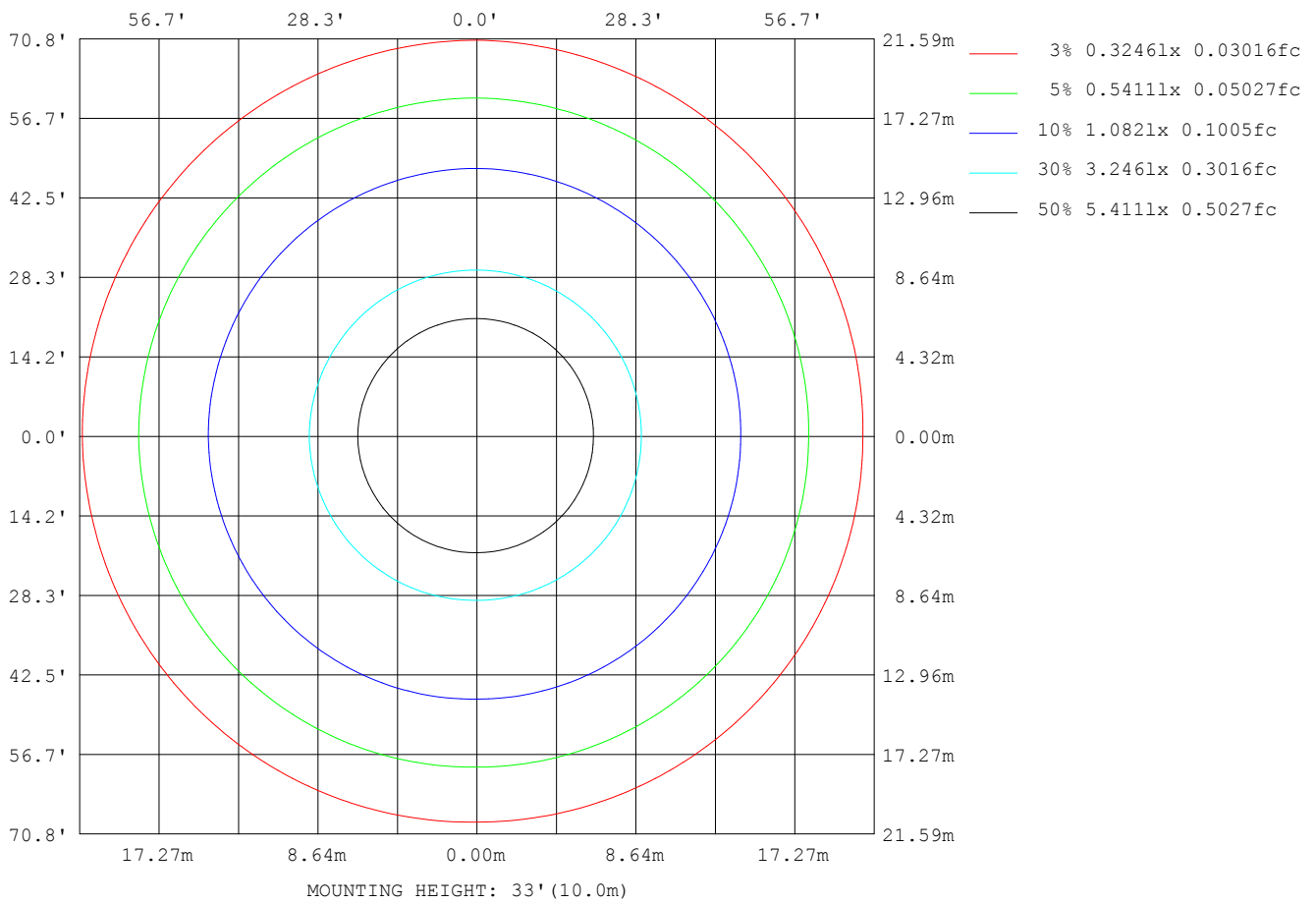
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.9833A P:23.600W PF:1.0000 Freq:0Hz Lamp Flux:3301.26x1 lm		
NAME: UB-IS-30K90C	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:0.9833A P:23.600W PF:1.0000 Freq:0Hz Lamp Flux:3301.26x1 lm		
NAME: UB-IS-30K90C	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

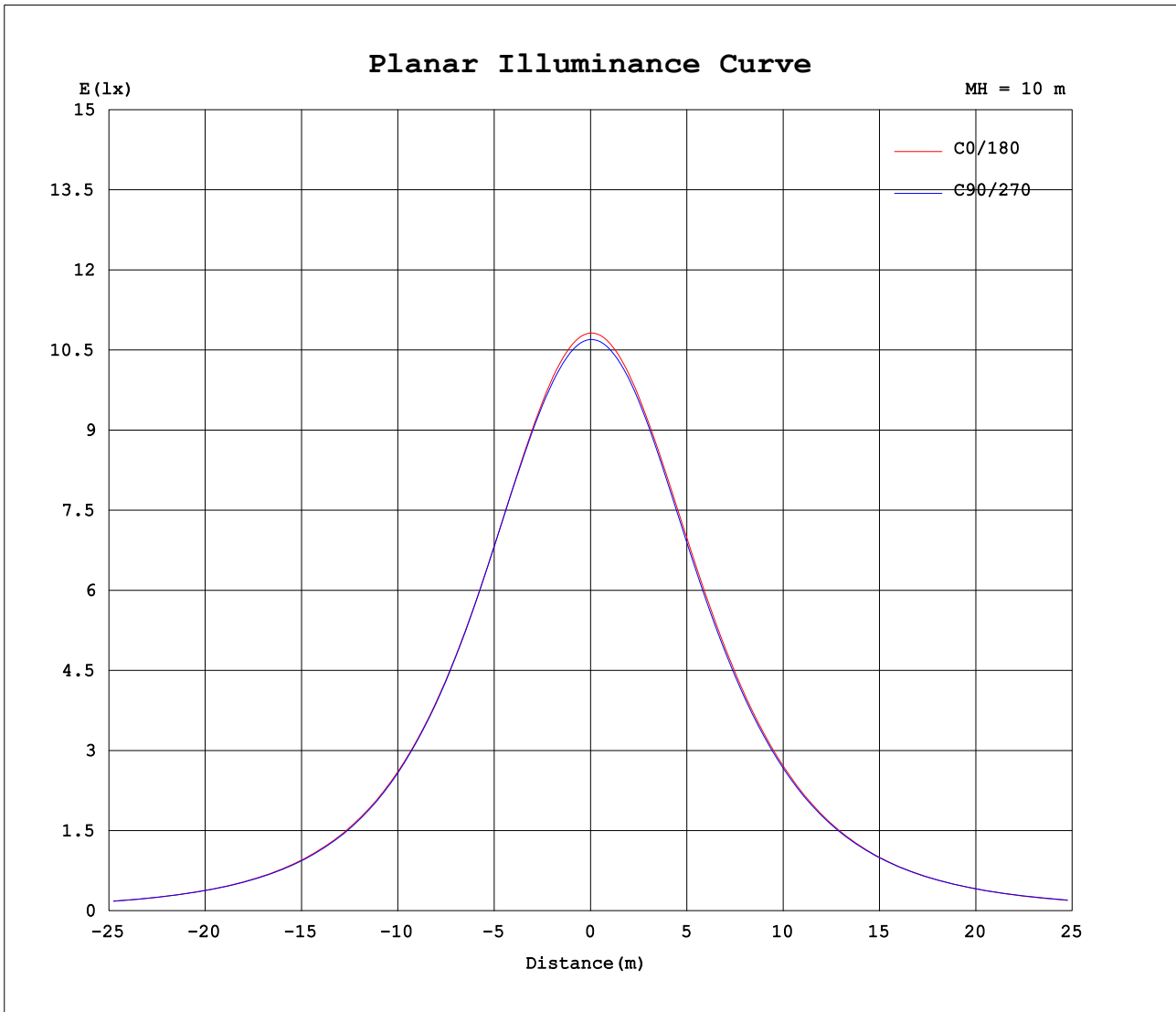
AvgL	cd/m2
L_0~180 (65) av	97860
L_0~180 (75) av	84632
L_0~180 (85) av	63212
L_90~270 (65) av	98322
L_90~270 (75) av	97495
L_90~270 (85) av	137867
L_45 (65) av	98389
L_45 (75) av	93024
L_45 (85) av	110481

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:0.9833A P:23.600W PF:1.0000 Freq:0Hz Lamp Flux:3301.26x1 lm		
NAME: UB-IS-30K90C	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	1082	1070	1082	1070															
5	1076	1064	1080	1068															
10	1061	1051	1069	1059															
15	1038	1032	1050	1042															
20	1007	1004	1024	1014															
25	968	967	988	977															
30	921	919	945	932															
35	867	864	893	880															
40	806	801	834	821															
45	737	730	767	755															
50	661	653	691	682															
55	580	572	609	603															
60	491	485	522	519															
65	397	396	430	435															
70	301	310	332	351															
75	204	231	234	274															
80	116	162	142	201															
85	46.6	109	63.6	131															
90	3.62	71.9	11.6	72.5															
95	1.24	45.6	1.39	37.8															
100	1.35	22.7	1.56	17.2															
105	1.64	7.38	1.79	6.81															
110	1.93	3.62	2.03	4.68															
115	2.36	3.20	2.39	2.46															
120	2.75	3.33	2.71	2.52															
125	2.98	3.40	3.06	2.73															
130	3.31	3.46	3.35	3.10															
135	3.58	3.68	3.65	3.42															
140	3.87	3.90	3.93	3.68															
145	4.10	4.15	4.14	3.90															
150	4.34	4.35	4.37	4.13															
155	4.50	4.56	4.57	4.38															
160	4.66	4.74	4.73	4.56															
165	4.83	4.91	4.89	4.77															
170	4.94	5.06	5.01	4.94															
175	5.05	5.14	5.10	5.07															
180	5.11	5.16	5.10	5.14															

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: