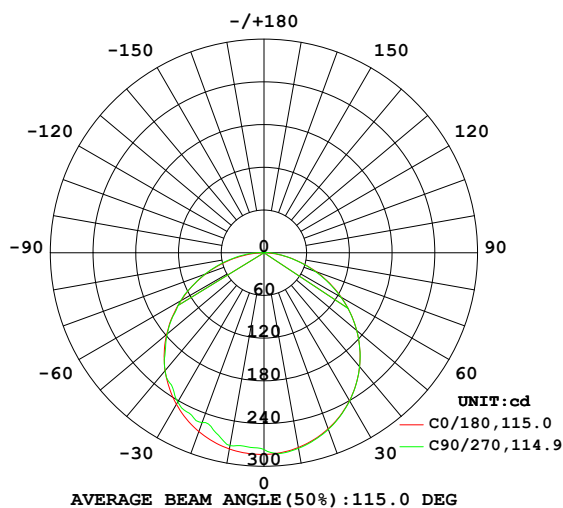


LUMINAIRE PHOTOMETRIC TEST REPORT

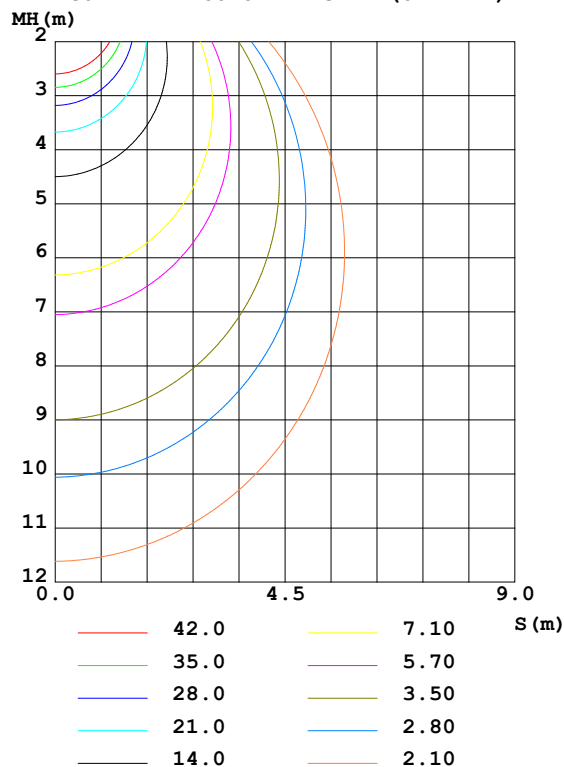
Test:U:24.001V I:0.3002A P:7.2051W PF:1.0000 Freq:0Hz Lamp Flux:844.019x1 lm		
NAME: UB-AS-DYN276290C	TYPE: LED Strip	WEIGHT:
SPEC.: 15W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1	Shielding Angle: 120

DATA OF LAMP		PHOTOMETRIC DATA Eff: 117.14 lm/W			
MODEL		I _{max} (cd)	283.3	S/MH (C0/180)	1.29
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.29
RATED VOLTAGE (V)		TOTAL FLUX (lm)	844.04	η UP, DN (C0-180)	0.5, 48.3
NOMINAL FLUX (lm)	844.019	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.4, 50.8
LAMPS INSIDE	1	η up (%)	0.9	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)		η down (%)	99.1	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2023-07-04

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:

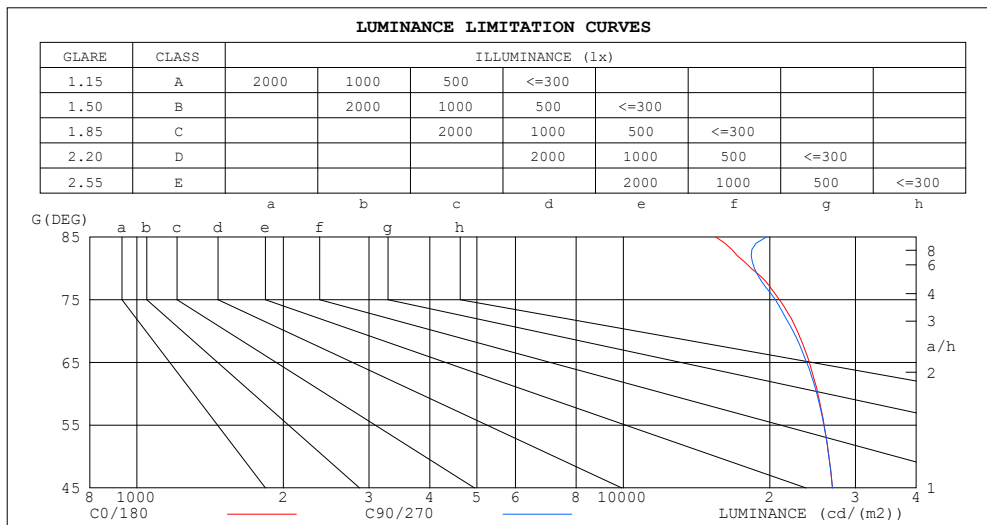
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	277.7	279.0	279.8	275.0					0- 10	26.66	26.66	3.16,3.16
20	263.2	264.0	267.4	253.8					10- 20	76.28	102.9	12.2,12.2
30	240.2	240.6	245.8	242.2					20- 30	116.8	219.8	26,26
40	208.8	208.9	216.2	216.2					30- 40	142.6	362.4	42.9,42.9
50	170.1	170.0	178.6	177.4					40- 50	149.6	512.0	60.7,60.7
60	125.6	125.0	134.6	135.3					50- 60	136.3	648.3	76.8,76.8
70	77.96	76.38	87.39	88.40					60- 70	105.3	753.6	89.3,89.3
80	31.82	32.31	38.87	43.12					70- 80	62.26	815.8	96.7,96.7
90	0.3158	8.453	1.964	10.84					80- 90	20.69	836.5	99.1,99.1
100	0.3086	2.609	0.3818	1.284					90-100	2.770	839.3	99.4,99.4
110	0.4188	0.9012	0.5300	0.6037					100-110	0.8014	840.1	99.5,99.5
120	0.6157	0.9485	0.7146	0.7512					110-120	0.6814	840.8	99.6,99.6
130	0.7881	1.096	0.8989	0.9399					120-130	0.7634	841.5	99.7,99.7
140	0.9378	1.098	1.035	1.120					130-140	0.7633	842.3	99.8,99.8
150	1.059	1.143	1.170	1.280					140-150	0.6876	843.0	99.9,99.9
160	1.148	1.232	1.244	1.313					150-160	0.5546	843.6	99.9,99.9
170	1.232	1.318	1.289	1.330					160-170	0.3586	843.9	100,100
180	1.330	1.355	1.318	1.342					170-180	0.1252	844.0	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-07-04

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:0.3002A P:7.2051W PF:1.0000 Freq:0Hz Lamp Flux:844.019x1 lm		
NAME: UB-AS-DYN276290C	TYPE: LED Strip	WEIGHT:
SPEC.: 15W	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	15493	19688
80	18326	18608
75	20931	20540
70	22794	22332
65	24128	23818
60	25117	25005
55	25870	25836
50	26465	26449
45	26910	26920

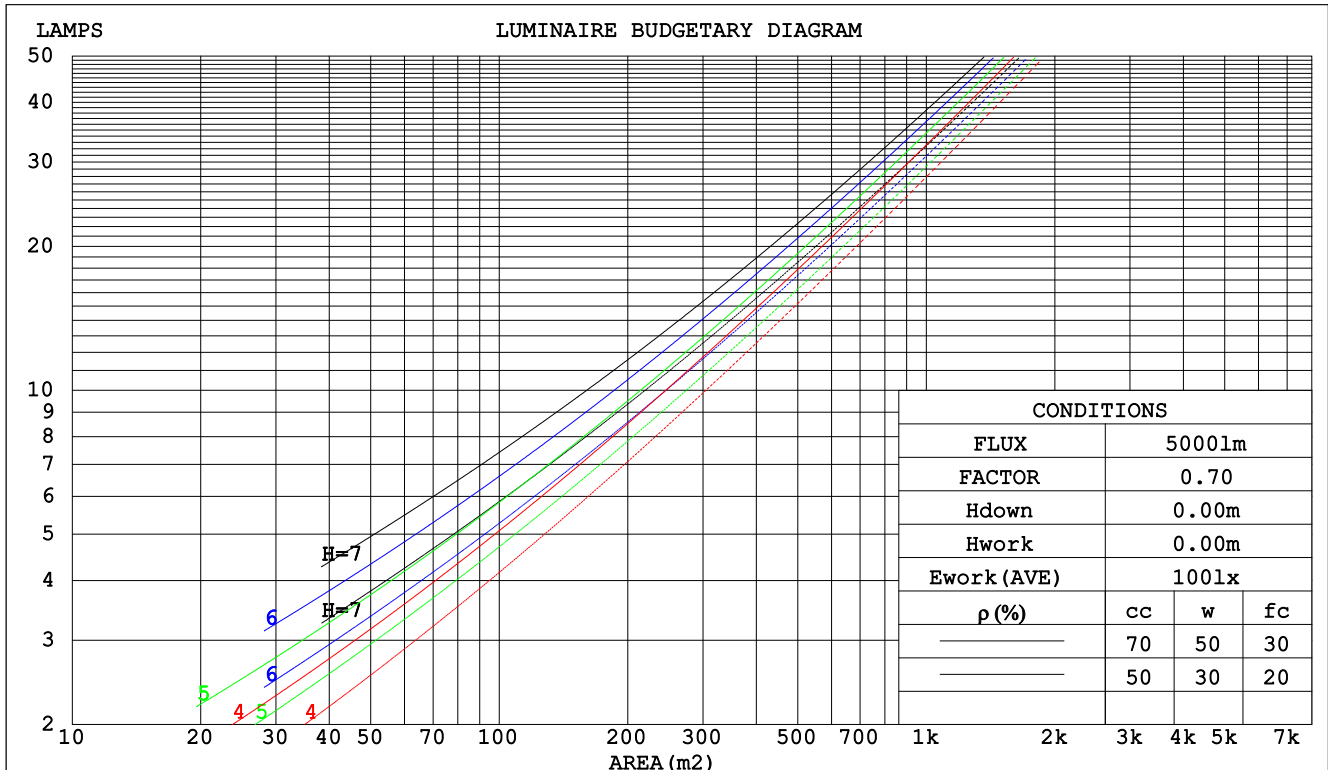
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2023-07-04

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:0.3002A P:7.2051W PF:1.0000 Freq:0Hz Lamp Flux:844.019x1 lm		
NAME: UB-AS-DYN276290C	TYPE: LED Strip	WEIGHT:
SPEC.: 15W	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	1.11	1.11	1.11	1.06	1.06	1.06	1.01	1.01	1.01	.99
1.0	1.03	.99	.95	1.01	.97	.93	.96	.93	.90	.92	.90	.87	.89	.86	.84	.82
2.0	.90	.83	.77	.88	.81	.76	.84	.79	.74	.80	.76	.72	.77	.74	.70	.68
3.0	.79	.70	.63	.77	.69	.63	.74	.67	.62	.71	.65	.60	.68	.63	.59	.57
4.0	.69	.60	.54	.68	.60	.53	.65	.58	.52	.63	.57	.51	.61	.55	.51	.48
5.0	.62	.53	.46	.61	.52	.46	.58	.51	.45	.56	.50	.45	.54	.49	.44	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.39	.51	.44	.39	.49	.43	.39	.36
7.0	.50	.42	.35	.50	.41	.35	.48	.40	.35	.46	.40	.34	.45	.39	.34	.32
8.0	.46	.37	.31	.45	.37	.31	.44	.36	.31	.42	.36	.31	.41	.35	.31	.29
9.0	.42	.34	.28	.41	.34	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.26
10.0	.39	.31	.26	.38	.31	.25	.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: 2023-07-04

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:0.3002A P:7.2051W PF:1.0000 Freq:0Hz Lamp Flux:844.019x1 lm					
NAME: UB-AS-DYN276290C			TYPE: LED Strip		WEIGHT:
SPEC.: 15W			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						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.319	.181	.057	.312	.178	.056	.298	.171	.055	.285	.164	.053	.273	.158	.051	
2.0	.297	.163	.050	.291	.160	.049	.279	.155	.048	.267	.150	.047	.257	.145	.046	
3.0	.274	.146	.044	.268	.144	.043	.258	.140	.042	.248	.136	.042	.238	.132	.041	
4.0	.252	.131	.039	.247	.129	.038	.238	.126	.038	.229	.123	.037	.220	.120	.036	
5.0	.233	.119	.034	.228	.117	.034	.220	.114	.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	.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	.166	.085	.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	.021	.148	.074	.021	

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						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.197	.197	.197	.169	.169	.169	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.188	.163	.140	.161	.140	.121	.110	.096	.084	.063	.056	.049	.020	.018	.016	
2.0	.180	.139	.104	.154	.119	.090	.106	.083	.063	.061	.048	.037	.020	.016	.012	
3.0	.172	.121	.081	.148	.105	.070	.101	.073	.049	.059	.042	.029	.019	.014	.009	
4.0	.165	.108	.065	.141	.093	.056	.097	.065	.040	.056	.038	.023	.018	.012	.008	
5.0	.157	.098	.054	.135	.084	.047	.093	.059	.033	.054	.035	.020	.017	.011	.006	
6.0	.150	.089	.046	.129	.077	.040	.089	.054	.028	.052	.032	.017	.017	.010	.006	
7.0	.143	.082	.040	.123	.071	.035	.085	.050	.025	.049	.030	.015	.016	.010	.005	
8.0	.137	.077	.036	.118	.066	.031	.081	.047	.022	.047	.028	.013	.015	.009	.004	
9.0	.130	.072	.032	.112	.062	.028	.078	.044	.020	.045	.026	.012	.015	.008	.004	
10.0	.125	.067	.029	.107	.059	.026	.075	.041	.018	.043	.024	.011	.014	.008	.004	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2023-07-04

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:0.3002A P:7.2051W PF:1.0000 Freq:0Hz Lamp Flux:844.019x1 lm										
NAME: UB-AS-DYN276290C					TYPE: LED Strip			WEIGHT:		
SPEC.: 15W					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	26.2	24.9	26.4	26.6	24.6	26.1	24.9	26.4	26.6
3H	26.1	27.5	26.4	27.8	28.1	26.1	27.5	26.4	27.8	28.0
4H	26.7	28.1	27.0	28.3	28.6	26.7	28.0	27.0	28.3	28.6
6H	27.1	28.4	27.5	28.7	29.0	27.1	28.3	27.4	28.6	28.9
8H	27.2	28.5	27.6	28.8	29.1	27.2	28.4	27.6	28.7	29.0
12H	27.3	28.5	27.7	28.8	29.1	27.3	28.5	27.7	28.8	29.1
4H 2H	25.2	26.6	25.6	26.8	27.1	25.2	26.6	25.5	26.8	27.1
3H	26.9	28.1	27.3	28.4	28.7	26.9	28.0	27.2	28.4	28.7
4H	27.6	28.7	28.0	29.0	29.4	27.6	28.6	28.0	29.0	29.3
6H	28.1	29.1	28.6	29.5	29.9	28.1	29.1	28.5	29.4	29.8
8H	28.3	29.2	28.7	29.6	30.0	28.3	29.2	28.7	29.6	30.0
12H	28.4	29.3	28.9	29.7	30.1	28.5	29.3	28.9	29.7	30.1
8H 4H	27.9	28.8	28.3	29.1	29.5	27.8	28.7	28.2	29.1	29.5
6H	28.5	29.3	29.0	29.7	30.2	28.5	29.2	29.0	29.7	30.1
8H	28.8	29.5	29.3	29.9	30.4	28.8	29.4	29.3	29.9	30.4
12H	29.0	29.6	29.5	30.0	30.5	29.1	29.6	29.5	30.1	30.6
12H 4H	27.9	28.7	28.3	29.1	29.5	27.8	28.7	28.3	29.1	29.5
6H	28.6	29.3	29.1	29.7	30.2	28.6	29.2	29.0	29.7	30.1
8H	28.9	29.5	29.4	29.9	30.4	28.9	29.5	29.4	29.9	30.4
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 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 844.0 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.6)
Area: 0.01 m2

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2023-07-04

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:0.3002A P:7.2051W PF:1.0000 Freq:0Hz Lamp Flux:844.019x1 lm		
NAME: UB-AS-DYN276290C	TYPE: LED Strip	WEIGHT:
SPEC.: 15W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1	Shielding Angle: 120

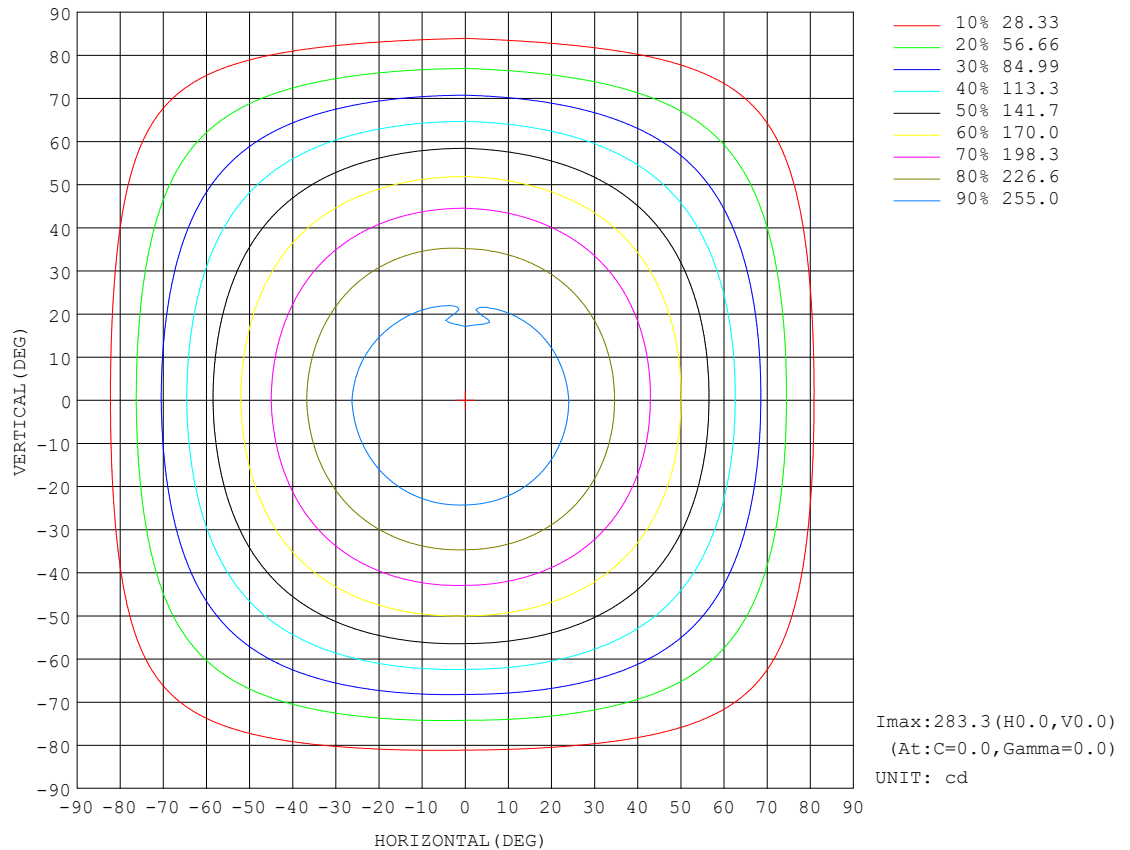
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	45	38	56	45	38	55	44	37	31
0.80	67	55	47	65	54	47	64	53	47	40
1.00	75	64	56	74	63	56	71	64	55	48
1.25	82	71	64	81	71	64	78	69	63	55
1.50	87	77	70	85	76	69	82	74	68	60
2.00	94	85	79	92	84	78	88	82	76	68
2.50	98	90	84	96	89	83	92	86	81	72
3.00	101	94	89	99	93	88	95	90	85	76
4.00	106	100	95	103	98	93	99	94	91	81
5.00	108	103	99	105	101	97	101	97	94	84
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: 2023-07-04

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:0.3002A P:7.2051W PF:1.0000 Freq:0Hz Lamp Flux:844.019x1 lm		
NAME: UB-AS-DYN276290C	TYPE: LED Strip	WEIGHT:
SPEC.: 15W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1	Shielding Angle: 120

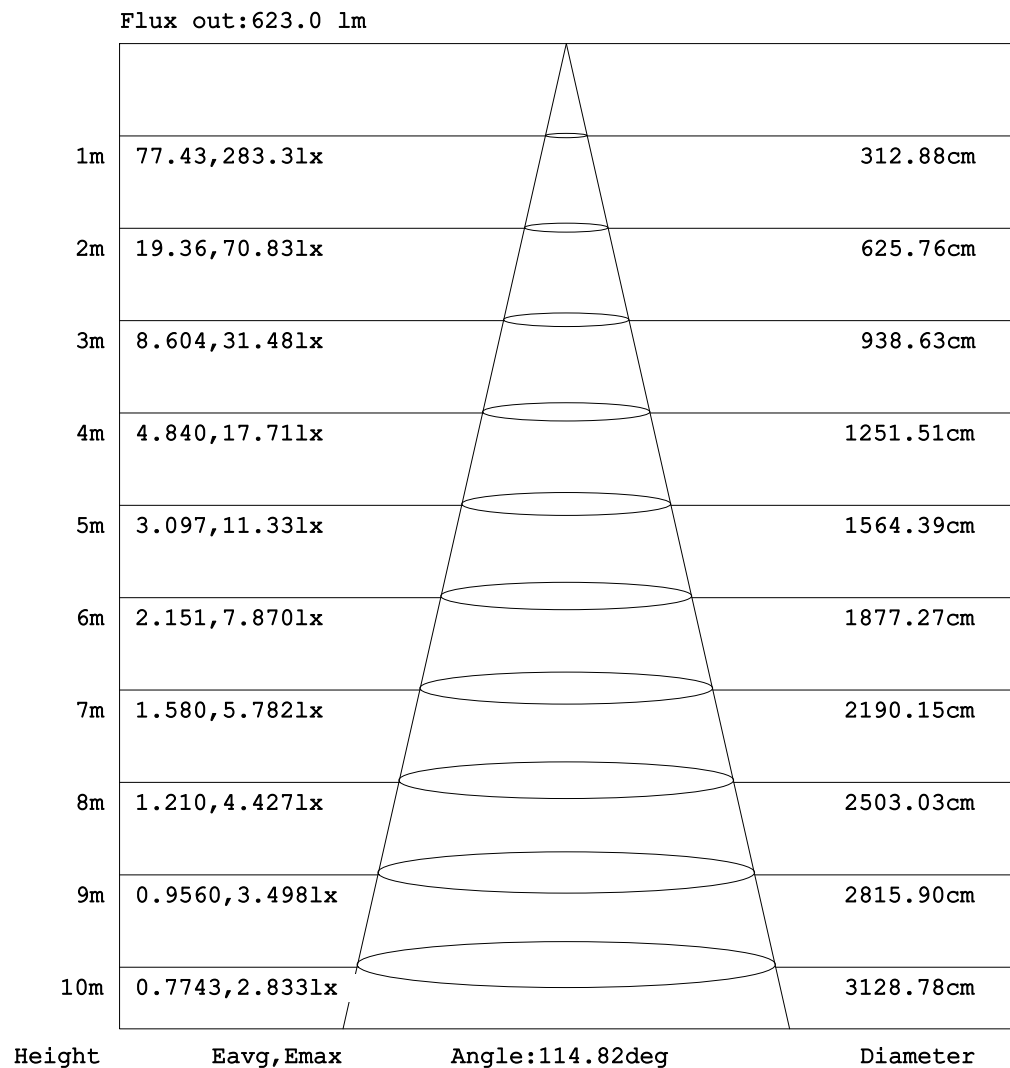


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2023-07-04

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:0.3002A P:7.2051W PF:1.0000 Freq:0Hz Lamp Flux:844.019x1 lm		
NAME: UB-AS-DYN276290C	TYPE: LED Strip	WEIGHT:
SPEC.: 15W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1	Shielding Angle: 120



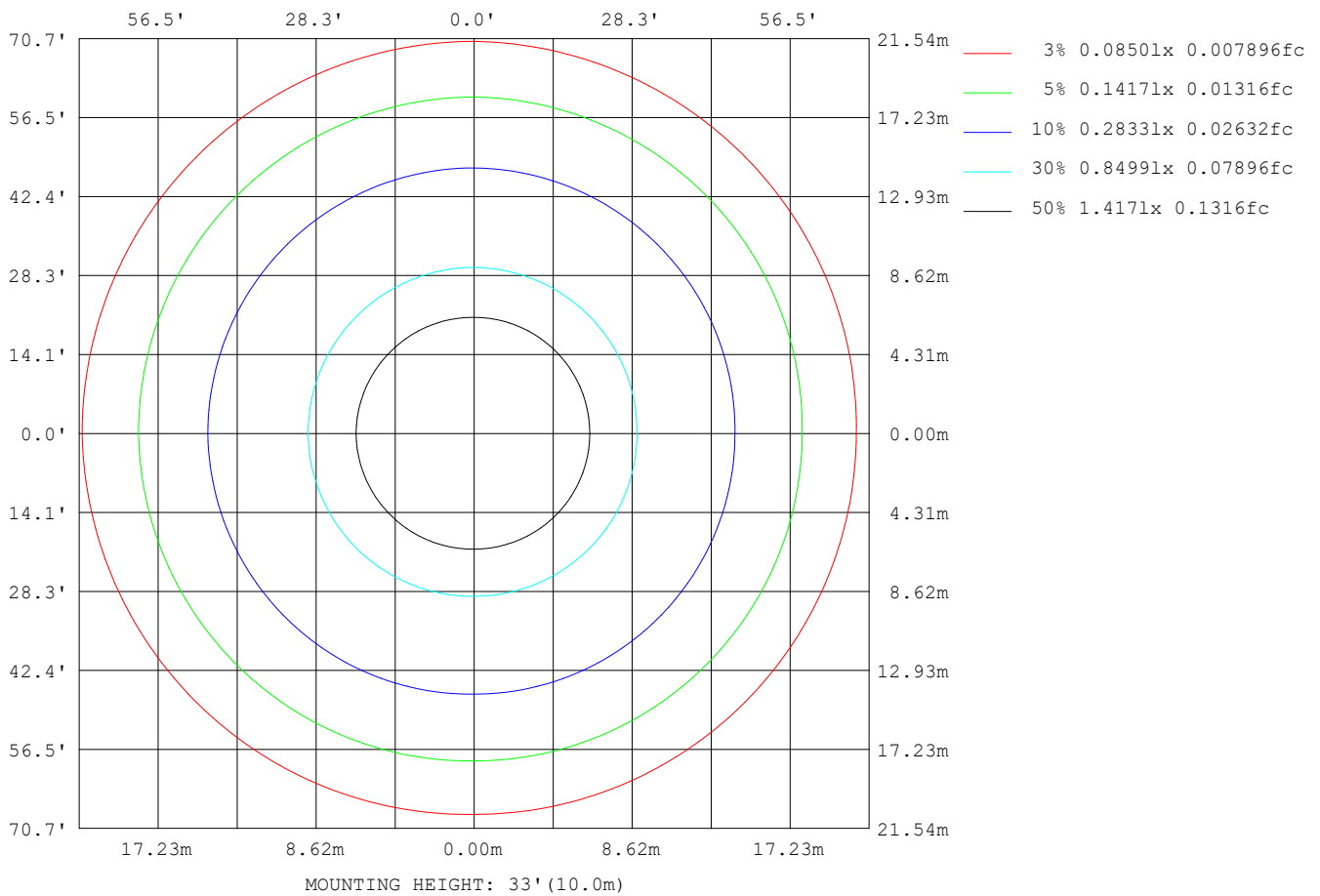
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-07-04

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:0.3002A P:7.2051W PF:1.0000 Freq:0Hz Lamp Flux:844.019x1 lm		
NAME: UB-AS-DYN276290C	TYPE: LED Strip	WEIGHT:
SPEC.: 15W	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: 2023-07-04

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:0.3002A P:7.2051W PF:1.0000 Freq:0Hz Lamp Flux:844.019x1 lm		
NAME: UB-AS-DYN276290C	TYPE: LED Strip	WEIGHT:
SPEC.: 15W	DIM.: 1000*10*2 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.01*1	Shielding Angle: 120

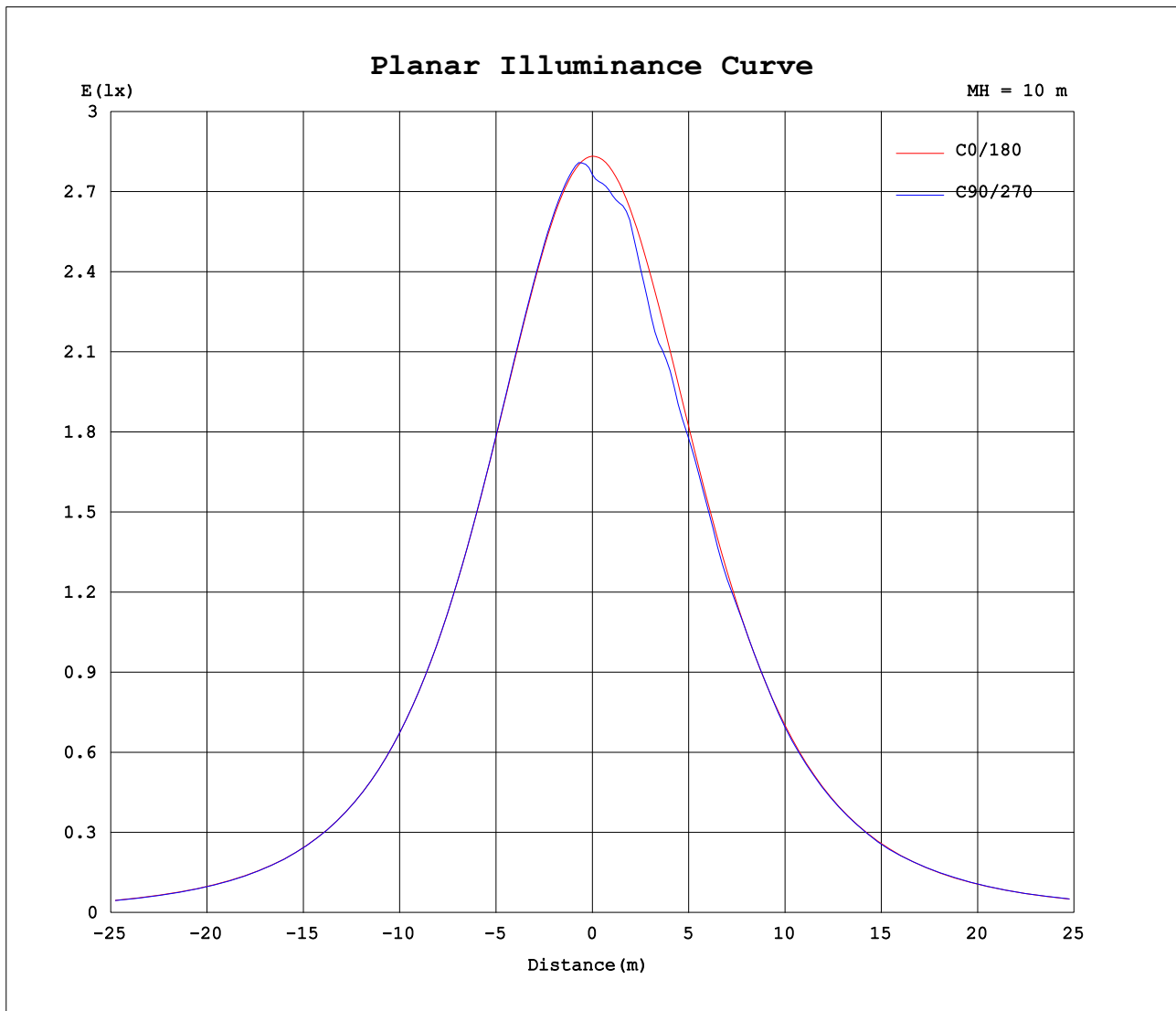
AvgL	cd/m2
L_0~180 (65) av	25238
L_0~180 (75) av	22584
L_0~180 (85) av	17450
L_90~270 (65) av	25107
L_90~270 (75) av	22876
L_90~270 (85) av	23965
L_45 (65) av	25226
L_45 (75) av	22870
L_45 (85) av	21644

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2023-07-04

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: 2023-07-04

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:0.3002A P:7.2051W PF:1.0000 Freq:0Hz Lamp Flux:844.019x1 lm		
NAME: UB-AS-DYN276290C	TYPE: LED Strip	WEIGHT:
SPEC.: 15W	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	283	276	283	276															
5	282	283	283	274															
10	278	279	280	275															
15	272	273	275	262															
20	263	264	267	254															
25	253	253	258	249															
30	240	241	246	242															
35	225	226	232	227															
40	209	209	216	216															
45	190	190	198	196															
50	170	170	179	177															
55	148	148	157	156															
60	126	125	135	135															
65	102	101	111	112															
70	78.0	76.4	87.4	88.4															
75	54.2	53.2	62.7	65.3															
80	31.8	32.3	38.9	43.1															
85	13.5	17.2	16.9	24.6															
90	0.32	8.45	1.96	10.8															
95	0.31	4.49	0.31	3.84															
100	0.31	2.61	0.38	1.28															
105	0.36	1.32	0.46	0.60															
110	0.42	0.90	0.53	0.60															
115	0.54	0.90	0.63	0.63															
120	0.62	0.95	0.71	0.75															
125	0.75	1.03	0.80	0.84															
130	0.79	1.10	0.90	0.94															
135	0.91	1.10	0.96	1.00															
140	0.94	1.10	1.03	1.12															
145	0.99	1.12	1.10	1.18															
150	1.06	1.14	1.17	1.28															
155	1.11	1.17	1.22	1.30															
160	1.15	1.23	1.24	1.31															
165	1.18	1.29	1.28	1.33															
170	1.23	1.32	1.29	1.33															
175	1.28	1.35	1.32	1.35															
180	1.33	1.35	1.32	1.34															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2023-07-04

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: