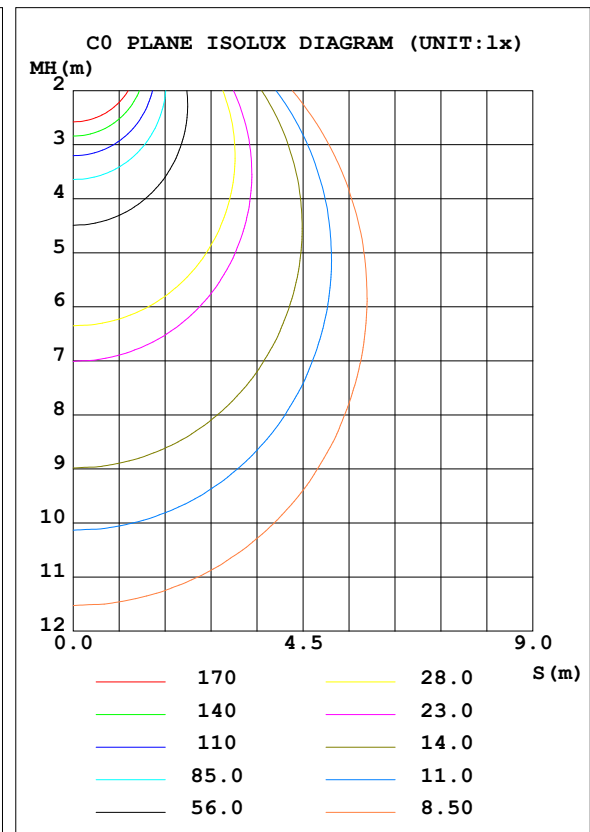
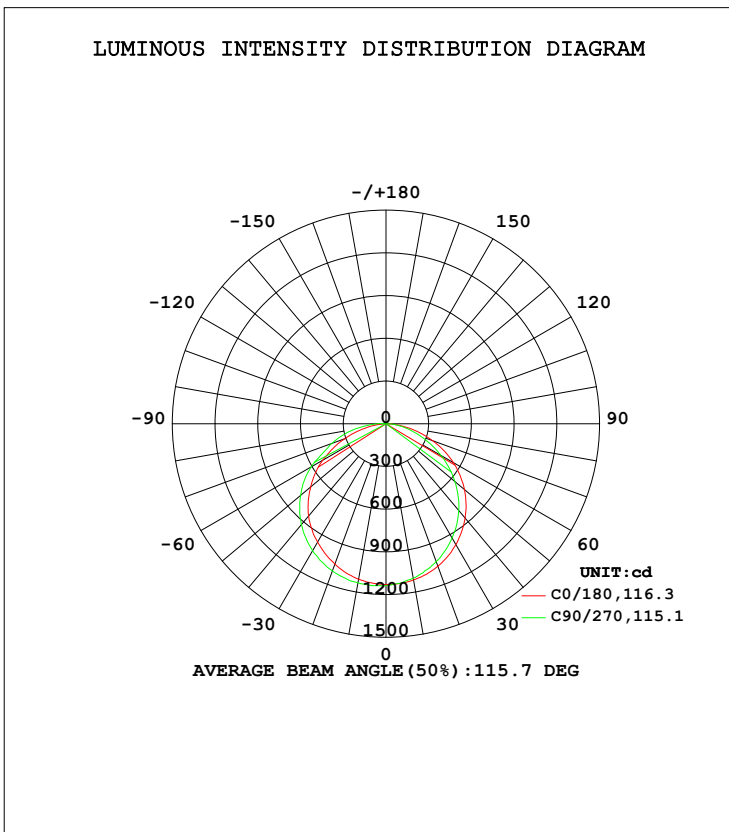


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.001V I:0.9663A P:23.192W PF:1.0000 Freq:0Hz Lamp Flux:3410.68x1 lm		
NAME: UB-IS-40K90C	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: 147.06 lm/W			
MODEL		I _{max} (cd)	1141	S/MH (C0/180)	1.27
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.34
RATED VOLTAGE (V)		TOTAL FLUX (lm)	3410.7	η UP, DN (C0-180)	0.3, 47.5
NOMINAL FLUX (lm)	3410.68	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.5, 51.7
LAMPS INSIDE	1	η up (%)	0.8	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)		η down (%)	99.2	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:

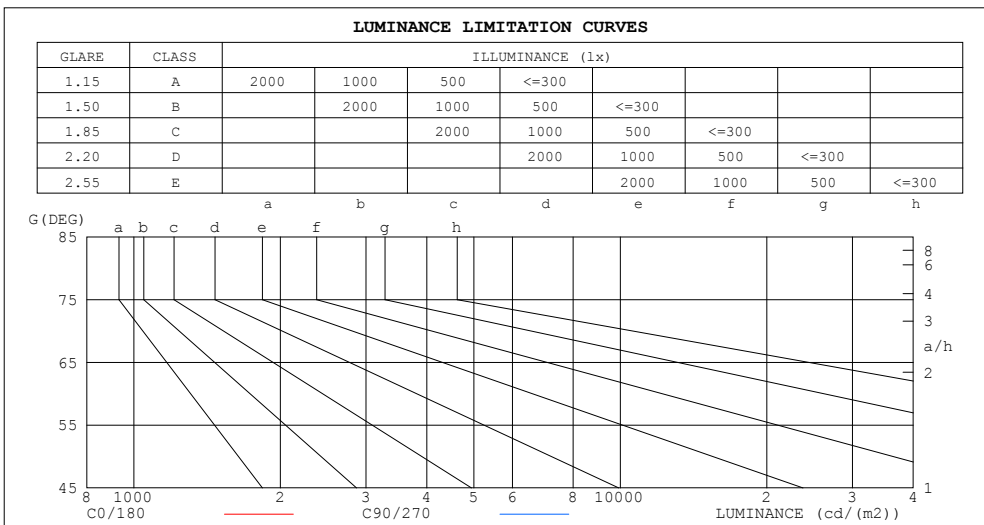
γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum, lamp
10	1113	1101	1109	1134				0- 10	107.2	107.2	3.14,3.14
20	1065	1031	1049	1100				10- 20	308.5	415.7	12.2,12.2
30	980.3	927.3	960.3	1030				20- 30	471.2	886.8	26,26
40	865.2	793.8	845.5	924.7				30- 40	575.6	1462	42.9,42.9
50	720.9	631.6	690.7	782.1				40- 50	605.7	2068	60.6,60.6
60	546.5	447.4	514.6	606.1				50- 60	555.0	2623	76.9,76.9
70	348.8	261.4	309.5	405.2				60- 70	423.8	3047	89.3,89.3
80	148.8	109.3	115.5	224.9				70- 80	252.3	3299	96.7,96.7
90	9.693	14.07	1.219	63.05				80- 90	82.52	3382	99.2,99.2
100	1.280	3.521	1.565	10.22				90-100	10.75	3393	99.5,99.5
110	1.908	2.463	2.218	2.628				100-110	3.276	3396	99.6,99.6
120	2.574	3.030	2.920	2.450				110-120	2.412	3398	99.6,99.6
130	3.324	3.646	3.573	3.091				120-130	2.766	3401	99.7,99.7
140	3.879	4.188	4.151	3.732				130-140	2.874	3404	99.8,99.8
150	4.413	4.681	4.570	4.311				140-150	2.659	3407	99.9,99.9
160	4.766	5.099	4.952	4.827				150-160	2.170	3409	99.9,99.9
170	5.074	5.395	5.222	5.234				160-170	1.436	3410	100,100
180	5.321	5.481	5.321	5.456				170-180	0.5053	3411	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:0.9663A P:23.192W PF:1.0000 Freq:0Hz Lamp Flux:3410.68x1 lm		
NAME: UB-IS-40K90C	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	70825	54052
80	79877	58672
75	88718	65191
70	95047	71238
65	99418	77684
60	101857	83395
55	103476	87937
50	104517	91573
45	104850	94353

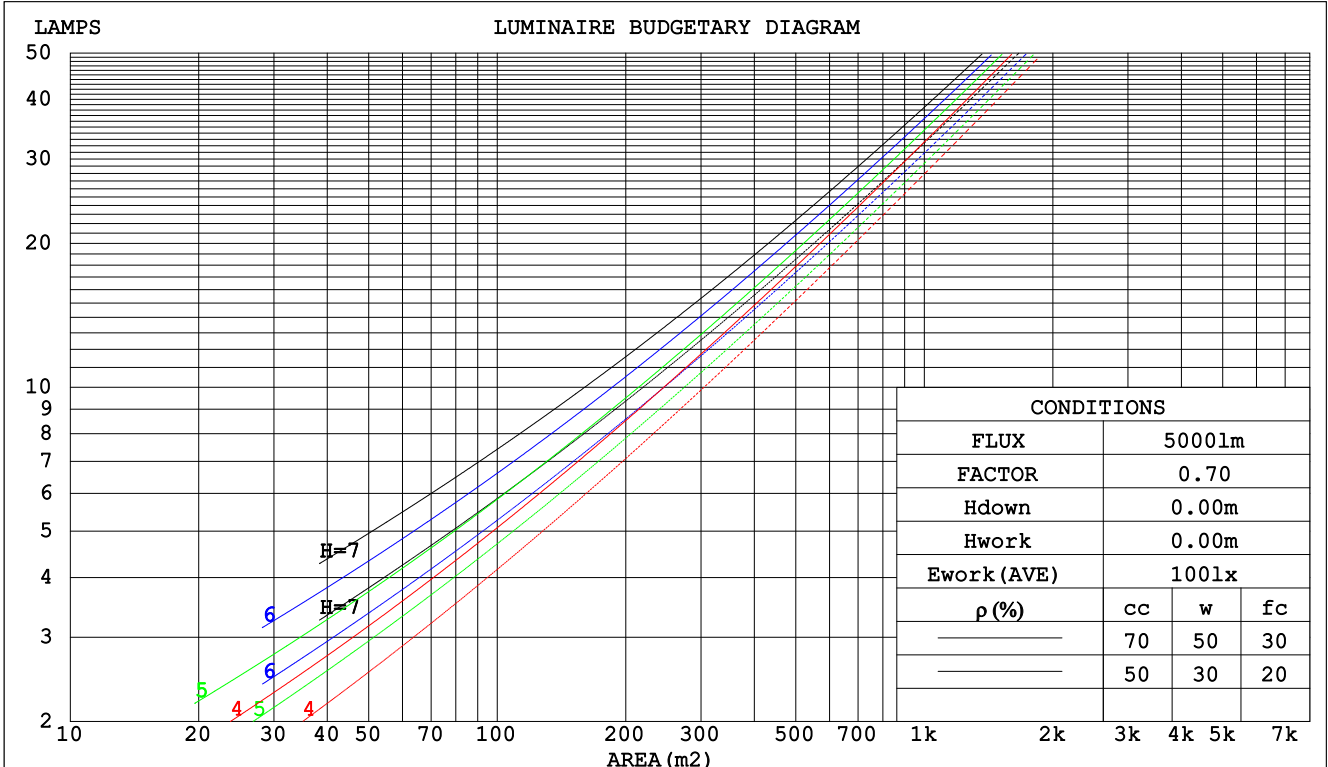
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-08-07

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:0.9663A P:23.192W PF:1.0000 Freq:0Hz Lamp Flux:3410.68x1 lm		
NAME: UB-IS-40K90C	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	1.03	.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	.81	.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	.41	.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	.30	.29
9.0	.42	.34	.28	.41	.34	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.26
10.0	.39	.31	.25	.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:2023-08-07

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:0.9663A P:23.192W PF:1.0000 Freq:0Hz Lamp Flux:3410.68x1 lm								
NAME: UB-IS-40K90C			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	.319	.181	.057	.311	.178	.056	.298	.171	.055	.285	.164	.053	.273	.158	.051	
2.0	.297	.163	.050	.291	.160	.049	.279	.155	.048	.268	.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	.091	.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	.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	.197	.197	.197	.168	.168	.168	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.187	.163	.140	.160	.140	.121	.110	.096	.083	.063	.056	.049	.020	.018	.016	
2.0	.180	.138	.104	.154	.119	.090	.105	.082	.063	.061	.048	.037	.019	.016	.012	
3.0	.172	.121	.080	.147	.104	.070	.101	.072	.049	.058	.042	.029	.019	.014	.009	
4.0	.164	.108	.064	.141	.093	.056	.097	.065	.039	.056	.038	.023	.018	.012	.008	
5.0	.157	.097	.053	.135	.084	.046	.093	.059	.033	.054	.035	.019	.017	.011	.006	
6.0	.150	.089	.045	.129	.077	.040	.089	.054	.028	.051	.032	.017	.017	.010	.006	
7.0	.143	.082	.040	.123	.071	.035	.085	.050	.024	.049	.029	.015	.016	.010	.005	
8.0	.136	.076	.035	.117	.066	.031	.081	.046	.022	.047	.027	.013	.015	.009	.004	
9.0	.130	.071	.032	.112	.062	.028	.078	.044	.020	.045	.026	.012	.015	.008	.004	
10.0	.124	.067	.029	.107	.058	.025	.074	.041	.018	.043	.024	.011	.014	.008	.004	

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

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:0.9663A P:23.192W PF:1.0000 Freq:0Hz Lamp Flux:3410.68x1 lm										
NAME: UB-IS-40K90C					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	24.6	26.1	24.9	26.3	26.6	23.9	25.4	24.2	25.7	25.9
3H	26.2	27.6	26.5	27.9	28.1	25.2	26.7	25.6	26.9	27.2
4H	26.9	28.2	27.2	28.5	28.7	25.7	27.1	26.1	27.4	27.6
6H	27.3	28.6	27.7	28.9	29.2	26.1	27.4	26.5	27.7	28.0
8H	27.5	28.7	27.8	29.0	29.3	26.2	27.5	26.6	27.8	28.1
12H	27.6	28.8	27.9	29.1	29.4	26.3	27.5	26.7	27.8	28.1
4H 2H	25.1	26.5	25.4	26.7	27.0	24.6	25.9	24.9	26.2	26.5
3H	26.9	28.1	27.3	28.4	28.7	26.1	27.3	26.5	27.6	27.9
4H	27.7	28.8	28.1	29.1	29.5	26.7	27.8	27.1	28.2	28.5
6H	28.3	29.2	28.7	29.6	30.0	27.2	28.2	27.6	28.6	28.9
8H	28.5	29.4	28.9	29.8	30.2	27.4	28.3	27.8	28.7	29.1
12H	28.6	29.5	29.1	29.9	30.3	27.5	28.3	27.9	28.7	29.2
8H 4H	27.9	28.8	28.3	29.2	29.6	27.1	28.0	27.5	28.3	28.7
6H	28.6	29.4	29.1	29.8	30.3	27.7	28.4	28.2	28.9	29.3
8H	28.9	29.6	29.4	30.0	30.5	27.9	28.6	28.4	29.0	29.5
12H	29.2	29.7	29.7	30.2	30.7	28.1	28.7	28.6	29.2	29.7
12H 4H	27.9	28.7	28.3	29.1	29.5	27.1	27.9	27.5	28.3	28.7
6H	28.7	29.3	29.2	29.8	30.3	27.8	28.4	28.2	28.9	29.3
8H	29.0	29.6	29.5	30.1	30.5	28.1	28.6	28.6	29.1	29.6
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.1 / - 0.3					+ 0.2 / - 0.4				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117, 3411 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:0.9663A P:23.192W PF:1.0000 Freq:0Hz Lamp Flux:3410.68x1 lm		
NAME: UB-IS-40K90C	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

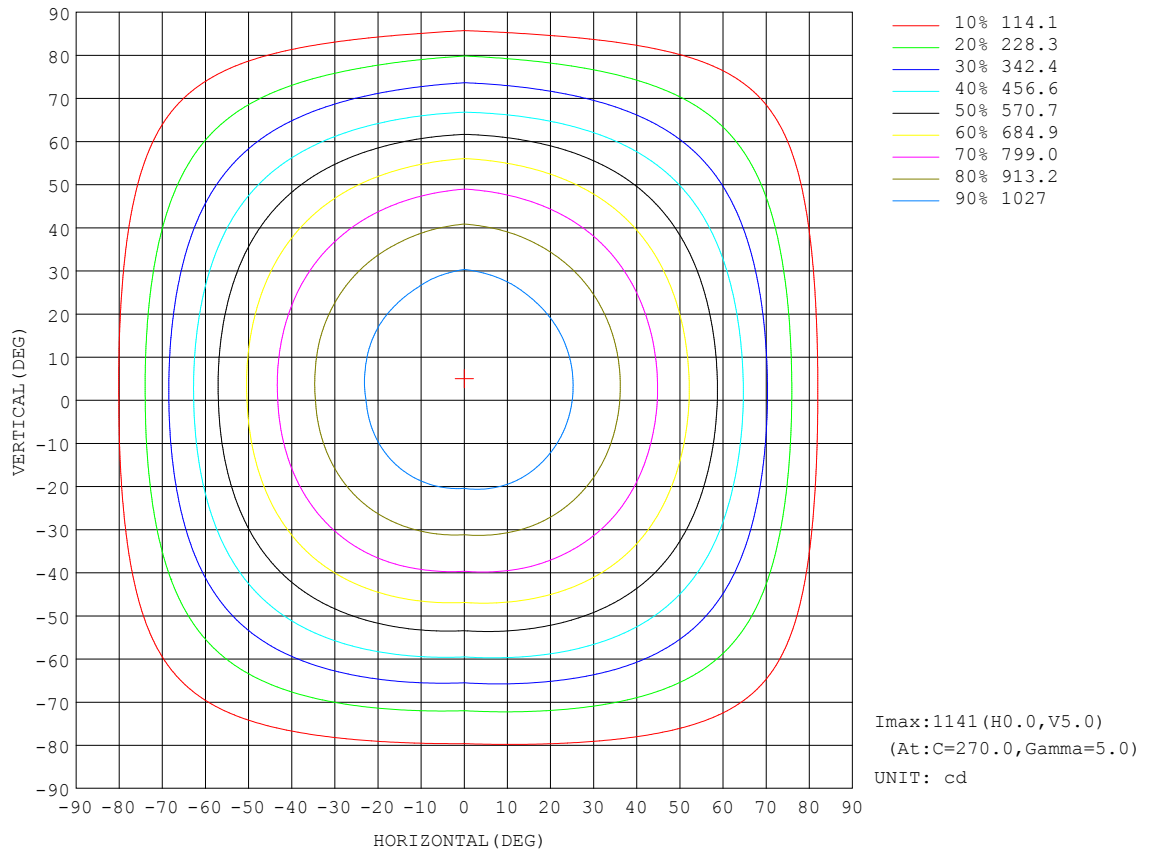
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	45	38	56	44	38	54	44	37	31
0.80	66	55	47	65	54	47	64	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	89	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:2023-08-07

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:0.9663A P:23.192W PF:1.0000 Freq:0Hz Lamp Flux:3410.68x1 lm		
NAME: UB-IS-40K90C	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

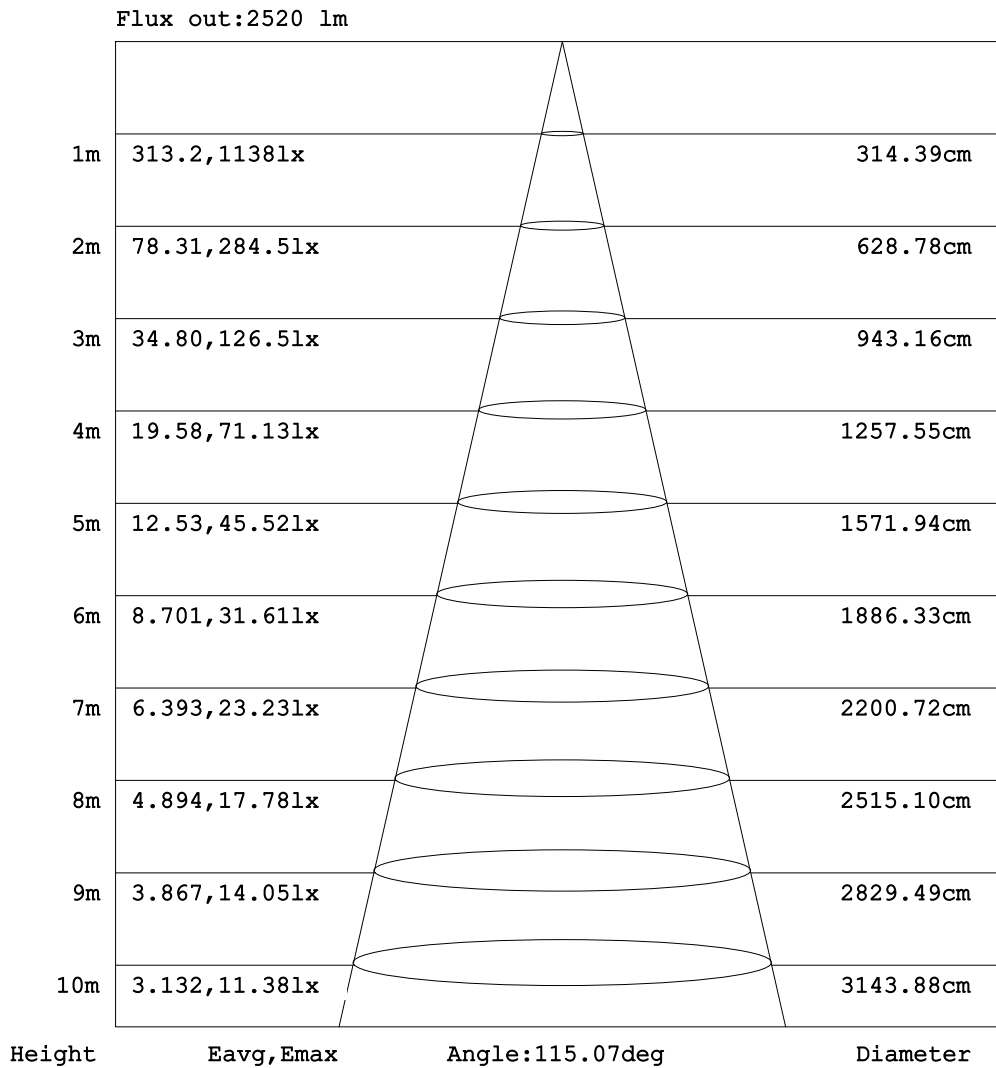


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2023-08-07

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:0.9663A P:23.192W PF:1.0000 Freq:0Hz Lamp Flux:3410.68x1 lm		
NAME: UB-IS-40K90C	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



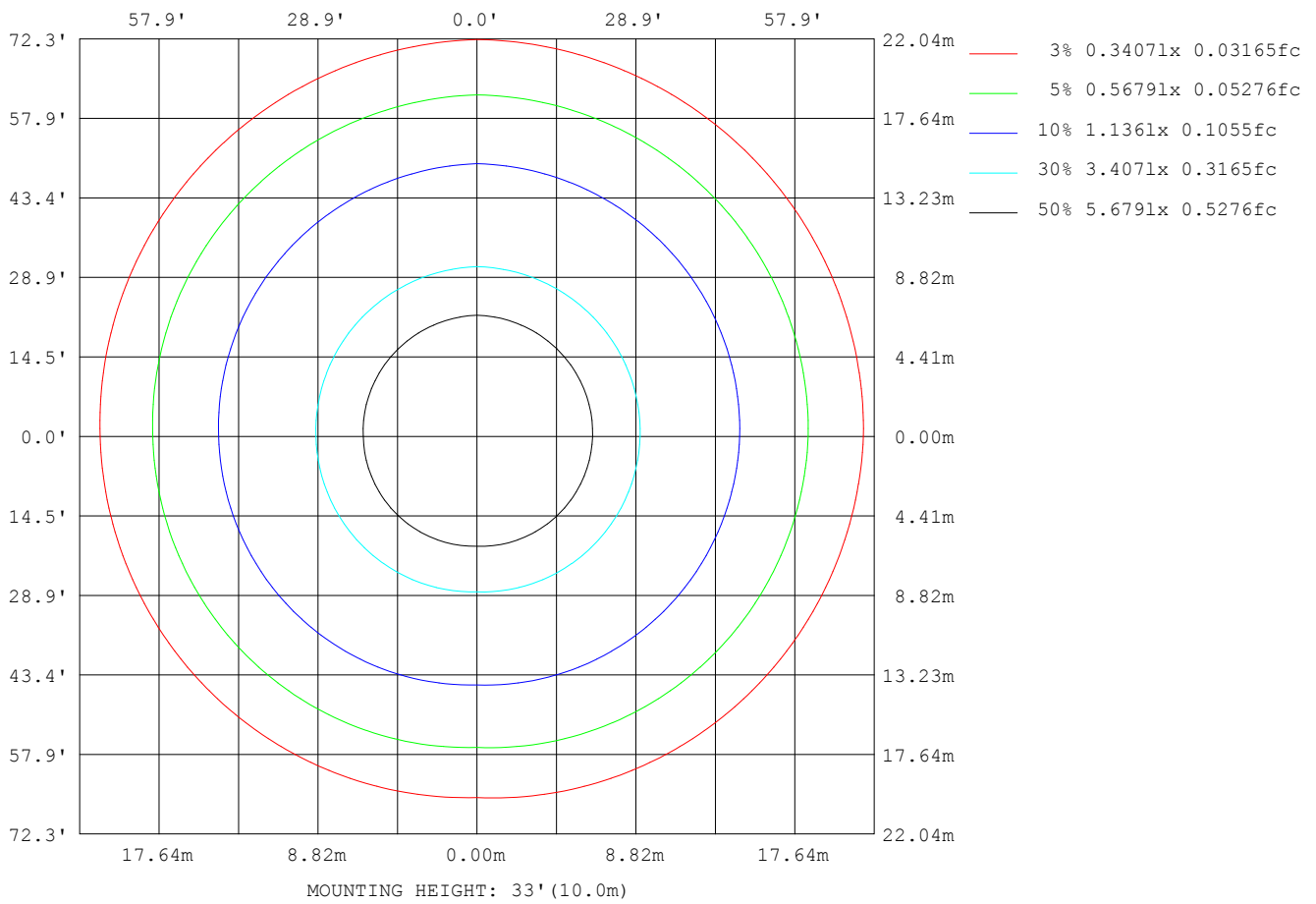
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.9663A P:23.192W PF:1.0000 Freq:0Hz Lamp Flux:3410.68x1 lm		
NAME: UB-IS-40K90C	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:0.9663A P:23.192W PF:1.0000 Freq:0Hz Lamp Flux:3410.68x1 lm		
NAME: UB-IS-40K90C	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

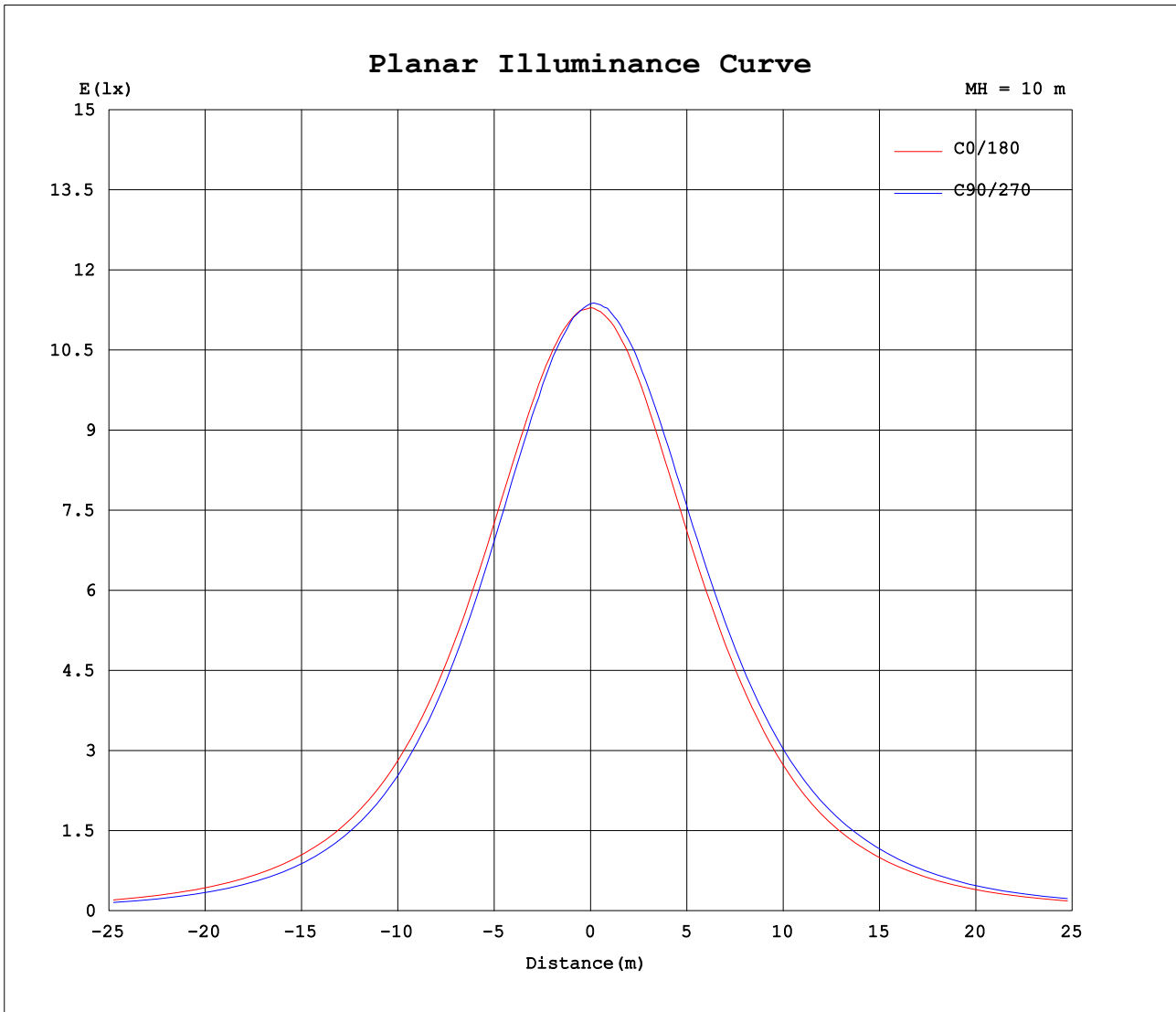
AvgL	cd/m2
L_0~180 (65) av	95160
L_0~180 (75) av	81844
L_0~180 (85) av	57505
L_90~270 (65) av	93076
L_90~270 (75) av	89511
L_90~270 (85) av	94204
L_45 (65) av	93591
L_45 (75) av	86206
L_45 (85) av	79609

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:0.9663A P:23.192W PF:1.0000 Freq:0Hz Lamp Flux:3410.68x1 lm		
NAME: UB-IS-40K90C	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	1130	1137	1130	1137															
5	1126	1124	1122	1141															
10	1113	1101	1109	1134															
15	1095	1067	1085	1121															
20	1065	1031	1049	1100															
25	1028	984	1009	1070															
30	980	927	960	1030															
35	926	866	907	981															
40	865	794	845	925															
45	796	716	772	857															
50	721	632	691	782															
55	637	541	607	704															
60	546	447	515	606															
65	451	352	412	492															
70	349	261	310	405															
75	246	181	208	316															
80	149	109	116	225															
85	66.2	50.5	41.3	126															
90	9.69	14.1	1.22	63.0															
95	1.19	5.02	1.31	25.3															
100	1.28	3.52	1.56	10.2															
105	1.55	2.57	1.89	6.43															
110	1.91	2.46	2.22	2.63															
115	2.22	2.69	2.54	2.13															
120	2.57	3.03	2.92	2.45															
125	2.94	3.38	3.25	2.78															
130	3.32	3.65	3.57	3.09															
135	3.62	3.95	3.88	3.48															
140	3.88	4.19	4.15	3.73															
145	4.13	4.43	4.35	4.01															
150	4.41	4.68	4.57	4.31															
155	4.58	4.89	4.77	4.53															
160	4.77	5.10	4.95	4.83															
165	4.96	5.27	5.10	5.05															
170	5.07	5.39	5.22	5.23															
175	5.23	5.46	5.31	5.33															
180	5.32	5.48	5.32	5.46															

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: