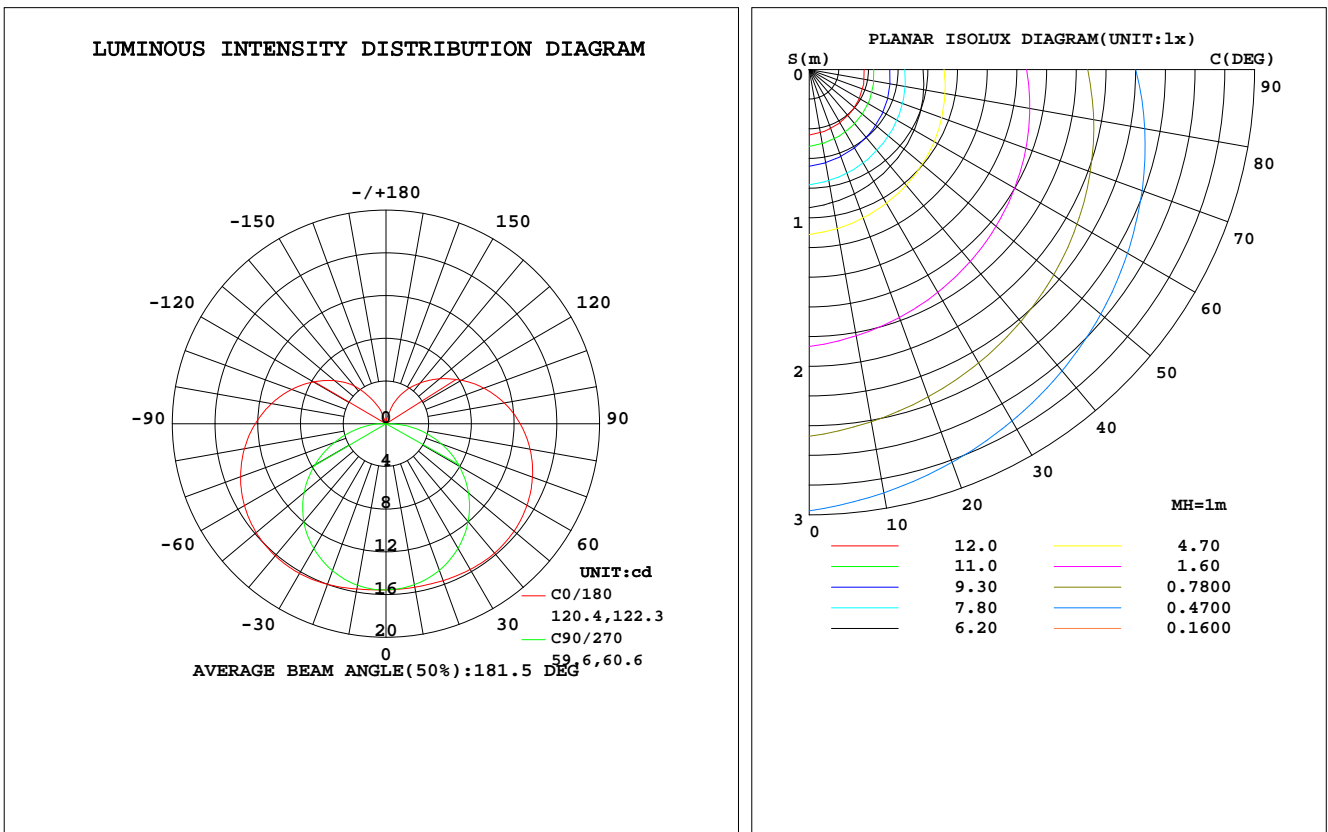


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.000V I:0.4100A P:9.8400W PF:1.0000 Freq:0Hz Lamp Flux:95.0937x1 lm		
NAME: LUC-S-RGB	TYPE:LED Strip	WEIGHT:
SPEC.: 9W	DIM.: 1000*10*9(MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.02*1	Shielding Angle:120

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		Imax(cd)	16.20	S/MH(C0/180)	1.59
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)		TOTAL FLUX(lm)	95.094	η UP, DN(C0-180)	12.8, 37.6
NOMINAL FLUX(lm)	95.0937	CIE CLASS	SEMI-D.	η UP, DN(C180-360)	12.1, 37.5
LAMPS INSIDE	1	η up(%)	24.9	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)		η down(%)	75.1	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2021-10-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity:65.0%
 Test Distance:8.270m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

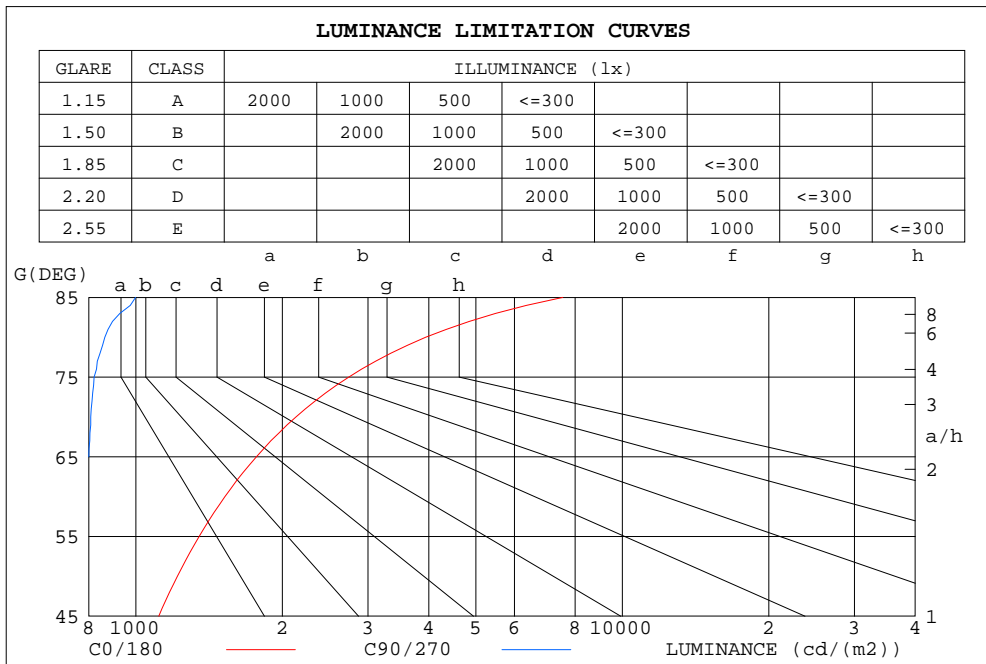
ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270				γ	Φ zone	Φ total	Φ lum,lamp
10	15.54	15.30	15.71	15.36				0- 10	1.481	1.481	1.56,1.56
20	15.64	14.61	16.00	14.64				10- 20	4.351	5.833	6.13,6.13
30	15.75	13.47	16.19	13.51				20- 30	6.935	12.77	13.4,13.4
40	15.81	11.95	16.13	11.97				30- 40	9.022	21.79	22.9,22.9
50	15.65	10.08	15.86	10.01				40- 50	10.41	32.20	33.9,33.9
60	15.24	7.921	15.30	7.686				50- 60	10.97	43.17	45.4,45.4
70	14.59	5.525	14.48	5.143				60- 70	10.67	53.84	56.6,56.6
80	13.68	2.998	13.45	2.627				70- 80	9.588	63.42	66.7,66.7
90	12.58	0.3085	12.23	0.6425				80- 90	7.964	71.39	75.1,75.1
100	11.25	0.0163	10.88	0.0055				90-100	6.492	77.88	81.9,81.9
110	9.755	0.0272	9.403	0.0109				100-110	5.475	83.36	87.7,87.7
120	8.157	0.0380	7.848	0.0163				110-120	4.384	87.74	92.3,92.3
130	6.553	0.0489	6.272	0.0217				120-130	3.252	90.99	95.7,95.7
140	5.003	0.0598	4.613	0.0326				130-140	2.201	93.19	98,98
150	3.481	0.0652	2.613	0.0380				140-150	1.260	94.45	99.3,99.3
160	1.916	0.0706	0.1898	0.0434				150-160	0.5345	94.99	99.9,99.9
170	0.5339	0.0707	0.0435	0.0489				160-170	0.0957	95.08	100,100
180	0.0544	0.0706	0.0435	0.0652				170-180	0.0107	95.09	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2021-10-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.429
Humidity:65.0%
Test Distance:8.270m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES



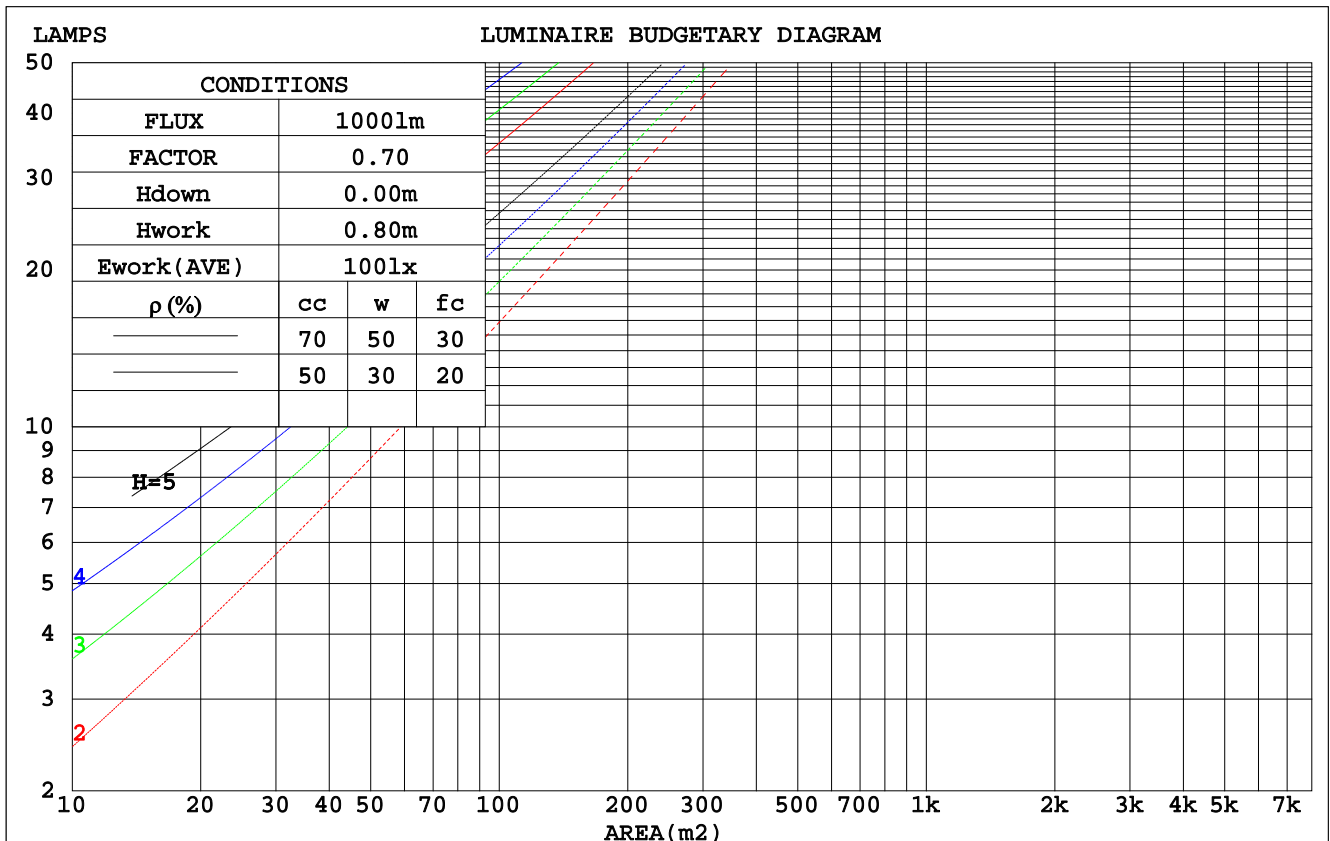
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	7547	999
80	3940	863
75	2739	821
70	2133	808
65	1769	800
60	1524	792
55	1349	788
50	1217	785
45	1114	782

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-10-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity: 65.0%
 Test Distance: 8.270m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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						Coefficients of Utilization(CU)									
0.0	1.13	1.13	1.13	1.08	1.08	1.08	.97	.97	.97	.88	.88	.88	.79	.79	.79	.75
1.0	.93	.88	.83	.88	.83	.79	.79	.75	.72	.71	.68	.65	.64	.61	.59	.55
2.0	.79	.71	.64	.75	.68	.62	.67	.61	.56	.60	.55	.51	.54	.50	.47	.43
3.0	.68	.59	.52	.65	.56	.50	.58	.51	.46	.52	.46	.42	.46	.42	.38	.34
4.0	.60	.50	.43	.57	.48	.41	.51	.44	.38	.46	.40	.35	.41	.36	.32	.28
5.0	.53	.43	.36	.50	.41	.35	.45	.38	.32	.41	.34	.29	.36	.31	.27	.24
6.0	.47	.38	.31	.45	.36	.30	.40	.33	.28	.36	.30	.25	.33	.27	.23	.21
7.0	.42	.33	.27	.40	.32	.26	.37	.29	.24	.33	.27	.22	.30	.24	.20	.18
8.0	.38	.30	.24	.37	.28	.23	.33	.26	.21	.30	.24	.20	.27	.22	.18	.16
9.0	.35	.27	.21	.33	.26	.20	.30	.24	.19	.28	.22	.17	.25	.20	.16	.14
10.0	.32	.24	.19	.31	.23	.18	.28	.21	.17	.25	.20	.16	.23	.18	.14	.12



CC Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-10-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity: 65.0%
 Test Distance: 8.270m [K=1.0000]
 Remarks:

WEC AND CCEC

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.401	.228	.072	.386	.220	.070	.358	.205	.066	.332	.192	.062	.309	.179	.058	
2.0	.343	.188	.058	.329	.181	.056	.304	.169	.052	.281	.157	.049	.259	.146	.046	
3.0	.302	.161	.048	.290	.155	.047	.267	.145	.044	.246	.135	.041	.226	.125	.039	
4.0	.271	.141	.041	.260	.136	.040	.239	.127	.038	.219	.118	.036	.201	.109	.033	
5.0	.245	.125	.036	.235	.121	.035	.216	.112	.033	.198	.105	.031	.182	.097	.029	
6.0	.224	.112	.032	.215	.109	.031	.197	.101	.029	.181	.094	.028	.166	.087	.026	
7.0	.206	.102	.029	.198	.099	.028	.182	.092	.026	.167	.085	.025	.153	.079	.023	
8.0	.191	.093	.026	.183	.090	.025	.168	.084	.024	.155	.078	.023	.142	.073	.021	
9.0	.178	.086	.024	.170	.083	.023	.157	.078	.022	.144	.072	.021	.132	.067	.019	
10.0	.166	.080	.022	.159	.077	.021	.147	.072	.020	.135	.067	.019	.124	.062	.018	

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.380	.380	.380	.325	.325	.325	.222	.222	.222	.127	.127	.127	.041	.041	.041	
1.0	.378	.347	.319	.324	.298	.274	.221	.205	.190	.127	.119	.110	.041	.038	.036	
2.0	.372	.324	.285	.318	.279	.246	.218	.193	.172	.126	.112	.101	.040	.036	.033	
3.0	.364	.308	.264	.312	.266	.229	.215	.185	.160	.124	.108	.094	.040	.035	.031	
4.0	.357	.296	.250	.306	.256	.217	.211	.178	.153	.122	.104	.090	.039	.034	.030	
5.0	.349	.287	.240	.300	.248	.209	.207	.173	.148	.120	.102	.088	.039	.033	.029	
6.0	.342	.279	.234	.294	.241	.203	.203	.169	.144	.118	.099	.086	.038	.032	.028	
7.0	.335	.272	.229	.288	.236	.199	.199	.165	.141	.116	.097	.084	.037	.032	.028	
8.0	.328	.267	.225	.282	.231	.196	.195	.162	.139	.114	.096	.083	.037	.031	.027	
9.0	.322	.262	.222	.277	.227	.194	.192	.160	.137	.112	.094	.082	.036	.031	.027	
10.0	.316	.258	.220	.272	.224	.192	.189	.158	.136	.110	.093	.081	.036	.031	.027	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-10-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity: 65.0%
 Test Distance: 8.270m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

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	11.2	12.5	11.9	13.2	14.1	9.2	10.5	9.9	11.2	12.1
3H	14.7	15.9	15.4	16.6	17.5	11.4	12.5	12.1	13.3	14.2
4H	16.5	17.7	17.3	18.4	19.3	12.2	13.4	13.0	14.1	15.0
6H	18.6	19.7	19.4	20.4	21.4	13.0	14.1	13.8	14.8	15.7
8H	19.8	20.8	20.5	21.6	22.5	13.3	14.4	14.1	15.1	16.0
12H	21.1	22.1	21.8	22.8	23.8	13.6	14.6	14.4	15.4	16.3
4H 2H	11.6	12.8	12.4	13.5	14.4	10.6	11.7	11.3	12.5	13.4
3H	15.3	16.3	16.1	17.1	18.0	13.0	14.0	13.8	14.8	15.7
4H	17.4	18.3	18.1	19.0	20.0	14.1	15.0	14.9	15.8	16.8
6H	19.7	20.5	20.4	21.3	22.2	15.1	15.9	15.9	16.7	17.6
8H	21.0	21.7	21.7	22.5	23.5	15.5	16.3	16.3	17.1	18.0
12H	22.5	23.2	23.3	24.0	24.9	15.9	16.6	16.6	17.4	18.3
8H 4H	17.6	18.4	18.4	19.2	20.1	15.4	16.2	16.2	17.0	17.9
6H	20.1	20.8	20.9	21.6	22.5	16.7	17.4	17.5	18.2	19.2
8H	21.6	22.2	22.4	23.0	24.0	17.3	17.9	18.1	18.7	19.7
12H	23.3	23.9	24.1	24.7	25.7	17.8	18.4	18.7	19.2	20.2
12H 4H	17.6	18.3	18.4	19.1	20.1	15.9	16.6	16.6	17.4	18.3
6H	20.2	20.8	21.0	21.6	22.6	17.4	18.0	18.2	18.8	19.8
8H	21.7	22.2	22.5	23.1	24.1	18.1	18.7	18.9	19.5	20.5
CIE190: 2010										

CIE190: 2010
Area: 0.02 m2

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Test Date: 2021-10-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
Humidity: 65.0%
Test Distance: 8.270m [K=1.0000]
Remarks:

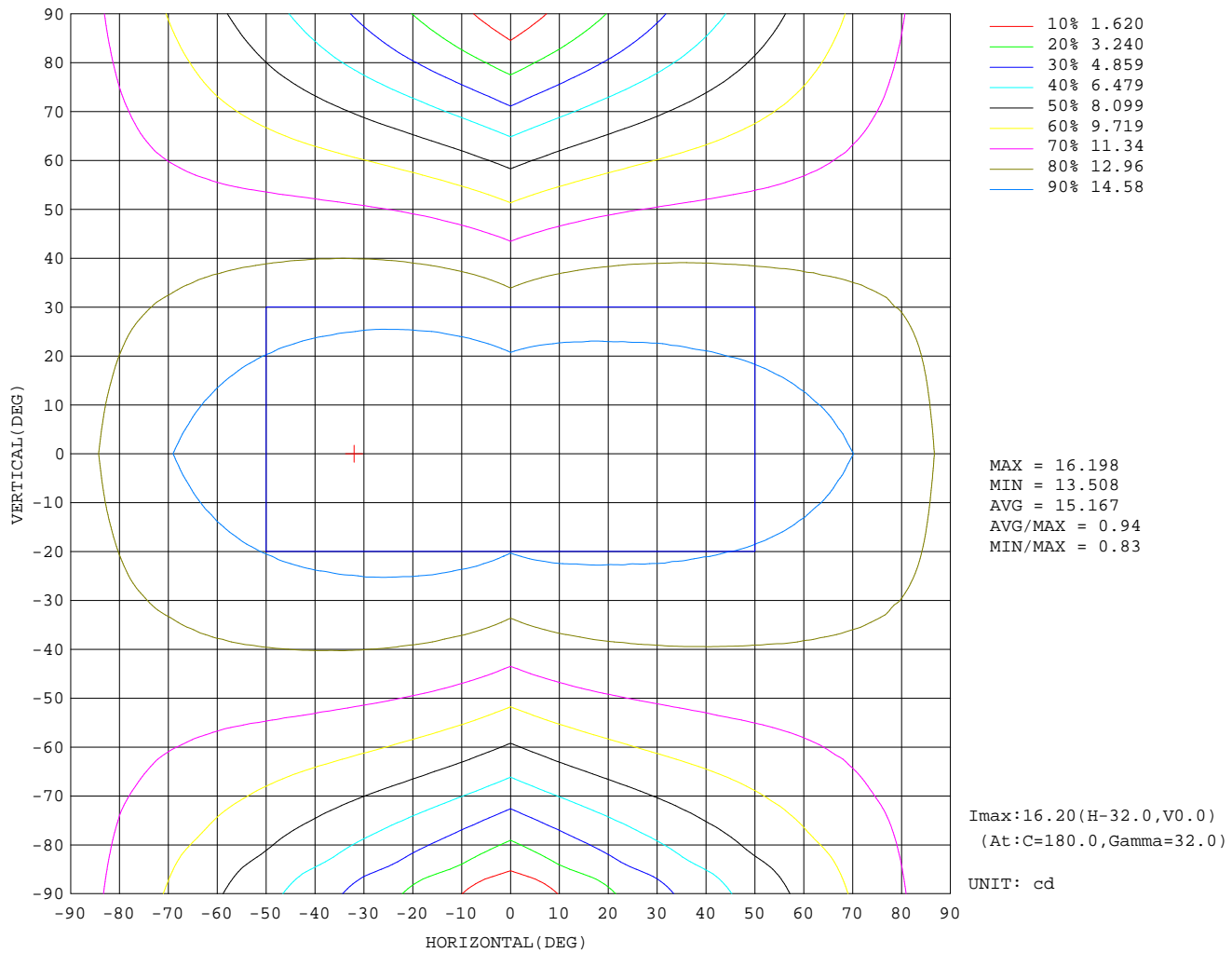
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	44	32	24	43	31	24	41	30	23	16
0.80	53	40	32	51	39	31	48	37	30	22
1.00	61	47	39	59	46	38	54	46	36	27
1.25	68	54	46	65	53	44	60	50	42	32
1.50	73	60	51	70	58	50	64	54	47	36
2.00	80	69	60	77	66	58	70	62	55	42
2.50	85	74	66	81	71	64	74	66	60	45
3.00	89	79	71	85	76	69	77	70	64	49
4.00	94	85	78	89	82	75	81	75	70	53
5.00	97	90	83	92	86	80	84	78	74	56
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: 2021-10-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity: 65.0%
 Test Distance: 8.270m [K=1.0000]
 Remarks:

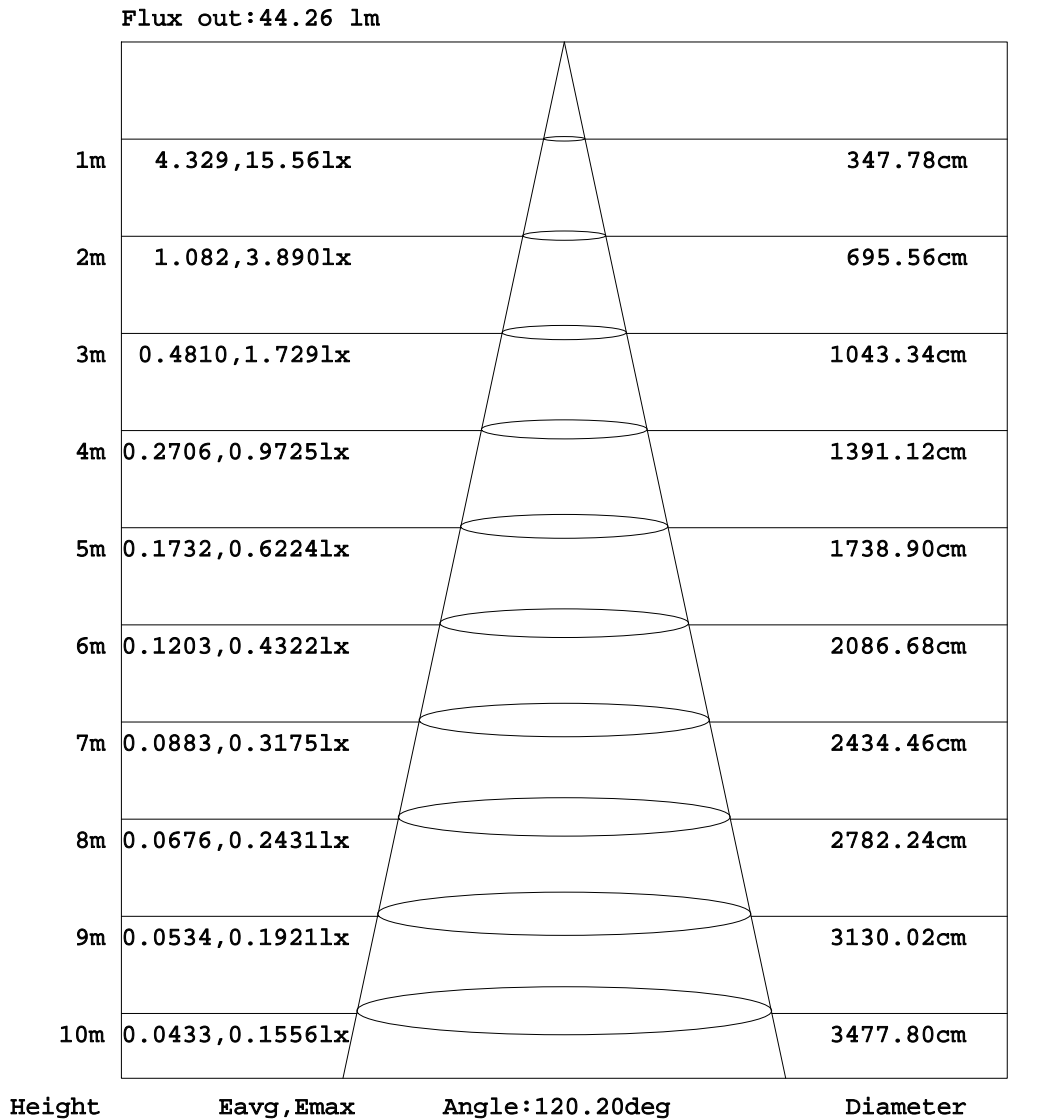
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-10-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity: 65.0%
 Test Distance: 8.270m [K=1.0000]
 Remarks:

AAI Figure

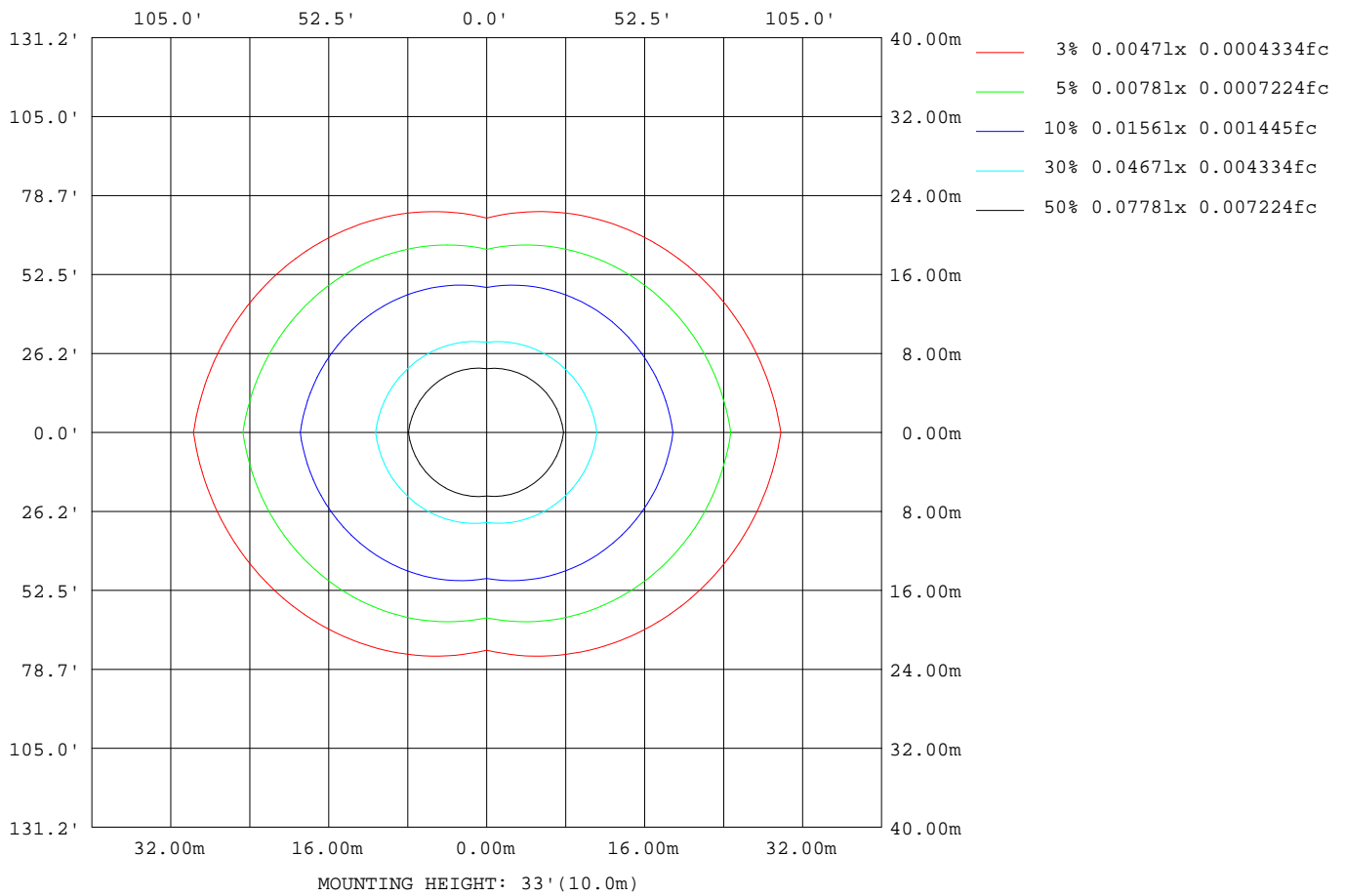


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2021-10-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity:65.0%
 Test Distance:8.270m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-10-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity: 65.0%
 Test Distance: 8.270m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:24.000V I:0.4100A P:9.8400W PF:1.0000 Freq:0Hz Lamp Flux:95.0937x1 lm		
NAME: LUC-S-RGB	TYPE:LED Strip	WEIGHT:
SPEC.: 9W	DIM.: 1000*10*9(MM)	SERIAL No.: 001
MFR.: Flexfire LEDs, Inc.	SUR.: 0.02*1	Shielding Angle:120

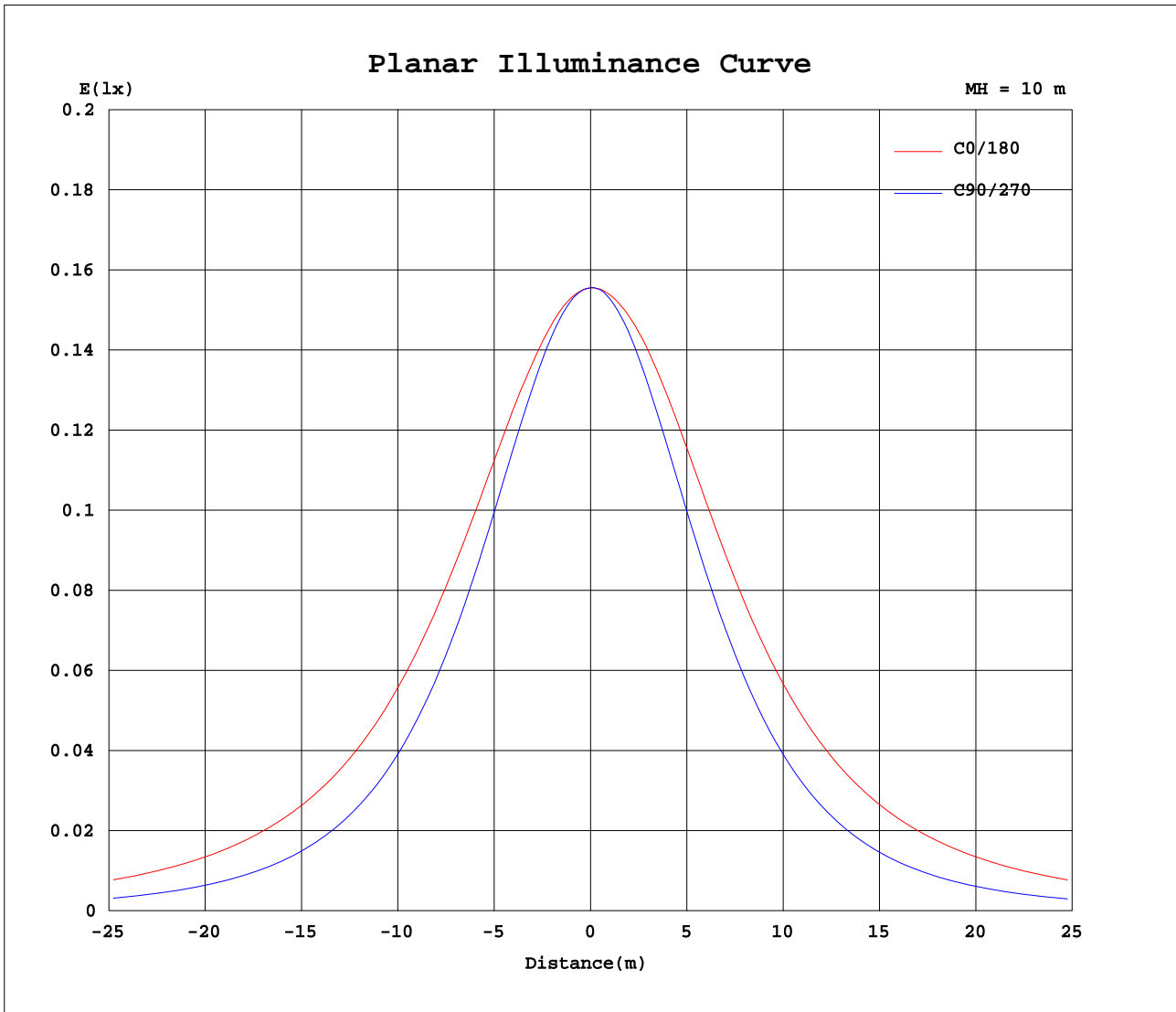
AvgL	cd/m2
L_0~180(65)av	1768
L_0~180(75)av	2722
L_0~180(85)av	7468
L_90~270(65)av	781
L_90~270(75)av	784
L_90~270(85)av	936
L_45(65)av	1151
L_45(75)av	1509
L_45(85)av	3380

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2021-10-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.429
Humidity:65.0%
Test Distance:8.270m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-10-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity: 65.0%
 Test Distance: 8.270m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	90	180	270																
0	15.6	15.6	15.6	15.6																
5	15.5	15.5	15.6	15.5																
10	15.5	15.3	15.7	15.4																
15	15.6	15.0	15.9	15.1																
20	15.6	14.6	16.0	14.6																
25	15.7	14.1	16.1	14.1																
30	15.8	13.5	16.2	13.5																
35	15.8	12.8	16.2	12.8																
40	15.8	12.0	16.1	12.0																
45	15.8	11.1	16.0	11.0																
50	15.7	10.1	15.9	10.0																
55	15.5	9.04	15.6	8.88																
60	15.2	7.92	15.3	7.69																
65	15.0	6.76	14.9	6.43																
70	14.6	5.52	14.5	5.14																
75	14.2	4.25	14.0	3.87																
80	13.7	3.00	13.5	2.63																
85	13.2	1.74	12.9	1.52																
90	12.6	0.31	12.2	0.64																
95	11.9	0.01	11.6	0.27																
100	11.2	0.02	10.9	0.01																
105	10.5	0.02	10.2	0.01																
110	9.75	0.03	9.40	0.01																
115	8.98	0.03	8.63	0.01																
120	8.16	0.04	7.85	0.02																
125	7.34	0.05	7.06	0.02																
130	6.55	0.05	6.27	0.02																
135	5.78	0.05	5.48	0.02																
140	5.00	0.06	4.61	0.03																
145	4.25	0.06	3.61	0.03																
150	3.48	0.07	2.61	0.04																
155	2.72	0.07	1.77	0.04																
160	1.92	0.07	0.19	0.04																
165	1.00	0.07	0.07	0.04																
170	0.53	0.07	0.04	0.05																
175	0.15	0.07	0.04	0.05																
180	0.05	0.07	0.04	0.07																

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2021-10-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.429
 Humidity: 65.0%
 Test Distance: 8.270m [K=1.0000]
 Remarks: