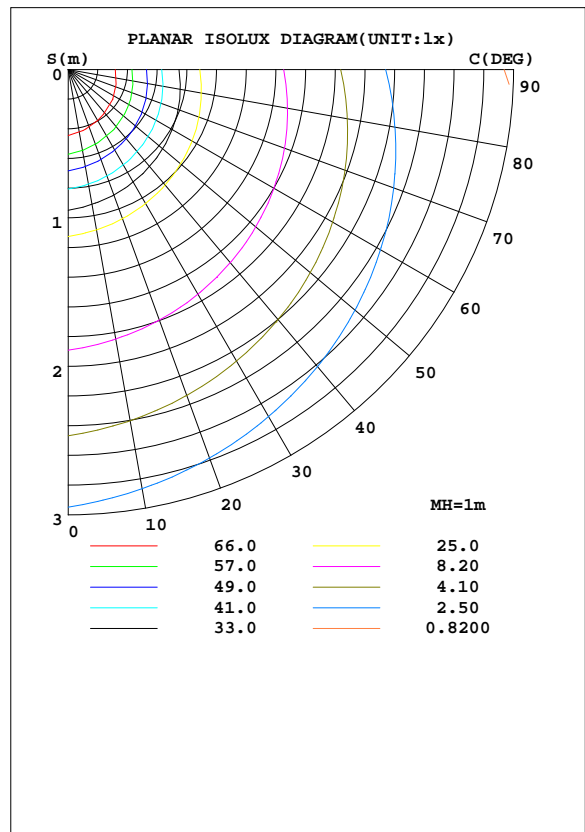
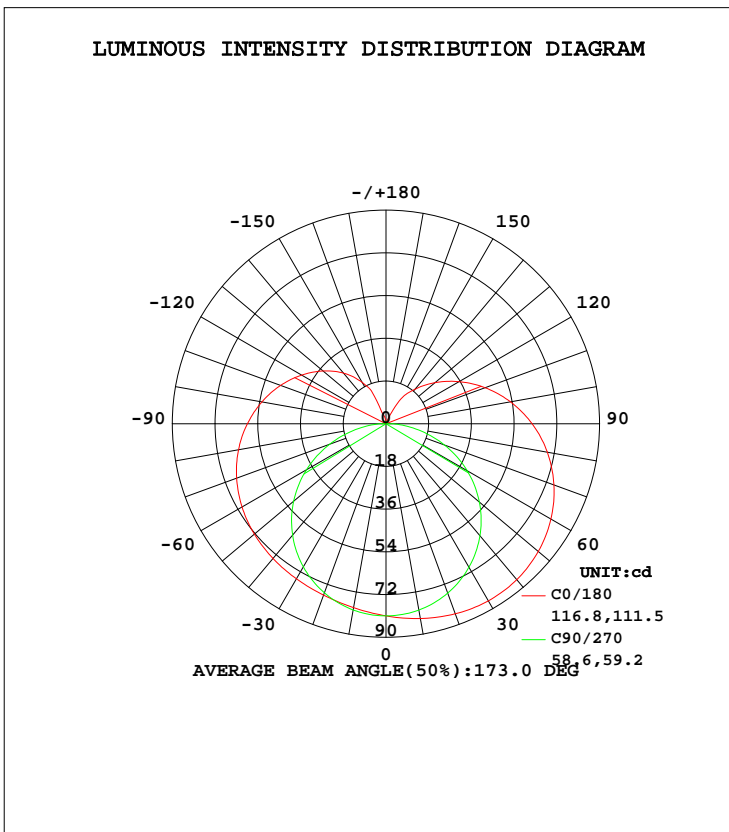


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.000V I:0.4000A P:9.6000W PF:1.0000 Freq:0Hz Lamp Flux:473.263x1 lm		
NAME: LUC-S-50K	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 Eff: 49.30 lm/W			
MODEL		I _{max} (cd)	86.20	S/MH(C0/180)	1.43
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)		TOTAL FLUX(lm)	473.27	η UP, DN(C0-180)	11.6, 39.2
NOMINAL FLUX(lm)	473.263	CIE CLASS	SEMI-D.	η UP, DN(C180-360)	13.1, 36.1
LAMPS INSIDE	1	η up(%)	24.7	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)		η down(%)	75.3	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

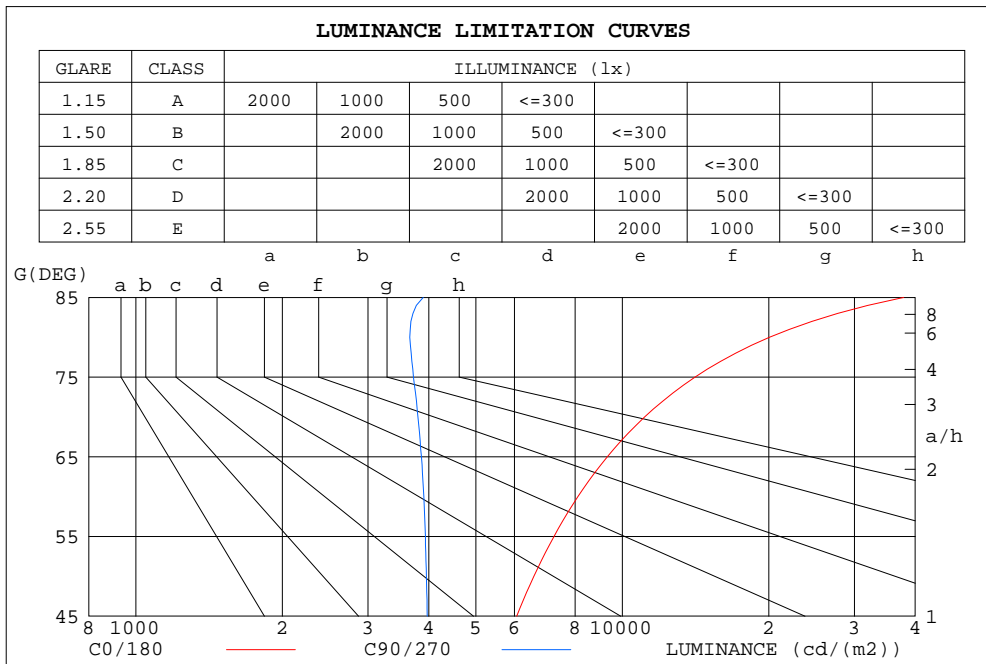
ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270				γ	Φ zone	Φ total	Φ lum,lamp
10	83.32	79.73	78.70	79.68				0- 10	7.700	7.700	1.63,1.63
20	85.23	75.96	76.85	75.84				10- 20	22.51	30.21	6.38,6.38
30	86.18	69.84	75.47	69.65				20- 30	35.61	65.83	13.9,13.9
40	85.73	61.58	74.09	61.23				30- 40	45.91	111.7	23.6,23.6
50	83.75	51.37	72.40	50.82				40- 50	52.48	164.2	34.7,34.7
60	80.25	39.47	70.05	38.66				50- 60	54.75	219.0	46.3,46.3
70	75.27	26.24	66.96	25.26				60- 70	52.60	271.6	57.4,57.4
80	69.01	12.82	63.08	11.80				70- 80	46.58	318.1	67.2,67.2
90	61.59	2.438	58.40	2.052				80- 90	38.38	356.5	75.3,75.3
100	53.28	0.4776	53.11	0.8950				90-100	31.79	388.3	82,82
110	44.47	0.5600	47.29	0.8069				100-110	26.85	415.2	87.7,87.7
120	35.54	0.6203	41.06	0.8124				110-120	21.47	436.6	92.3,92.3
130	26.98	0.6697	34.65	0.8199				120-130	16.01	452.6	95.6,95.6
140	18.96	0.7147	27.90	0.8453				130-140	10.95	463.6	98,98
150	11.07	0.7454	20.18	0.8700				140-150	6.570	470.1	99.3,99.3
160	1.009	0.7817	5.194	0.8903				150-160	2.567	472.7	99.9,99.9
170	0.7354	0.8454	2.612	0.9175				160-170	0.4538	473.2	100,100
180	0.7697	0.9002	0.7751	0.9112				170-180	0.1001	473.3	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



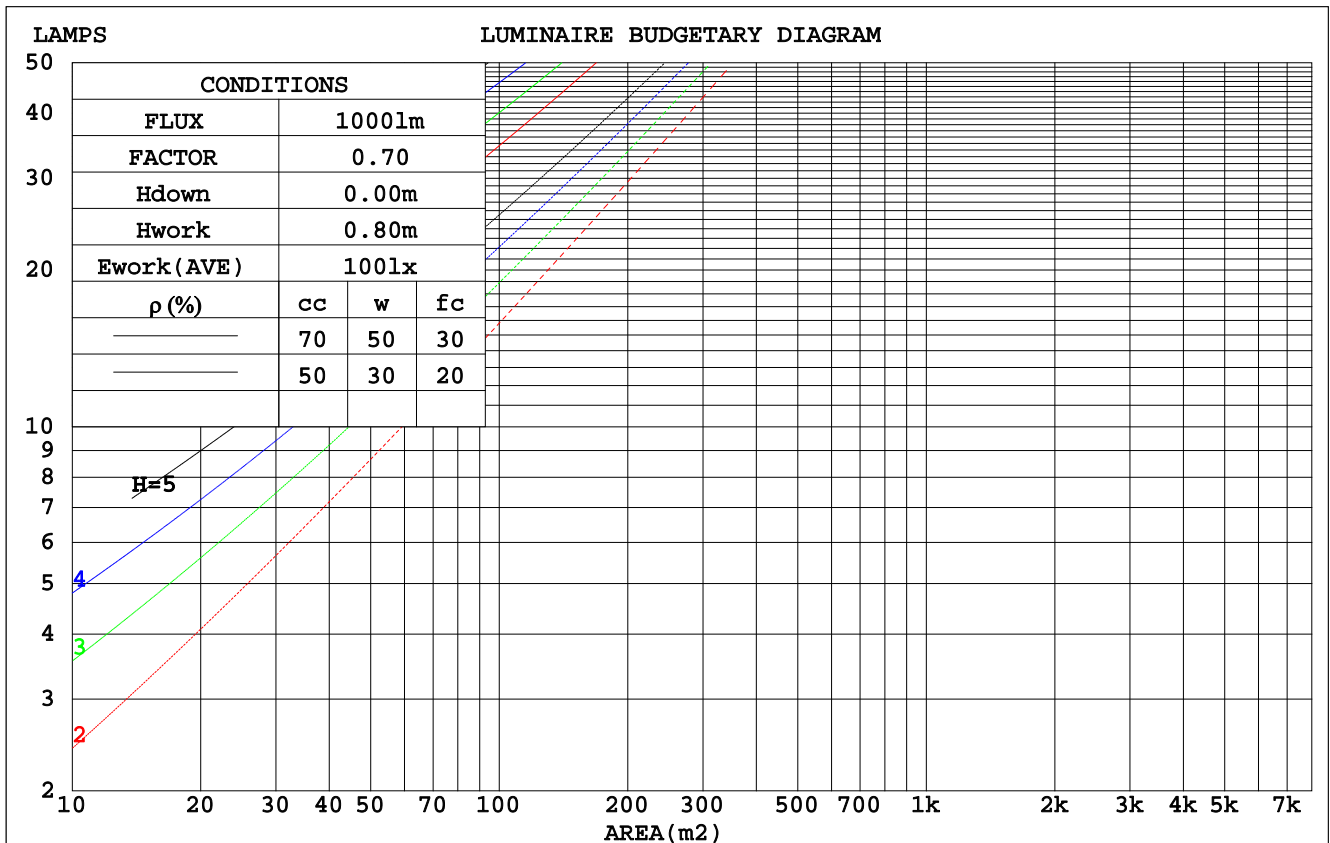
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	37895	3895
80	20066	3656
75	14104	3722
70	11112	3799
65	9314	3866
60	8103	3909
55	7235	3937
50	6579	3957
45	6064	3970

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

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						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	.89	.84	.79	.80	.76	.72	.72	.69	.66	.64	.62	.59	.56
2.0	.79	.71	.65	.75	.68	.62	.68	.62	.57	.61	.56	.52	.54	.50	.47	.43
3.0	.69	.60	.52	.65	.57	.50	.59	.52	.46	.52	.47	.42	.47	.42	.38	.35
4.0	.60	.51	.43	.57	.48	.42	.51	.44	.38	.46	.40	.35	.41	.36	.32	.29
5.0	.53	.44	.37	.51	.42	.35	.46	.38	.33	.41	.35	.30	.37	.32	.27	.25
6.0	.47	.38	.31	.45	.37	.30	.41	.33	.28	.37	.31	.26	.33	.28	.24	.21
7.0	.43	.34	.27	.41	.32	.26	.37	.30	.24	.33	.27	.23	.30	.25	.21	.18
8.0	.39	.30	.24	.37	.29	.23	.34	.27	.22	.30	.24	.20	.27	.22	.18	.16
9.0	.35	.27	.21	.34	.26	.21	.31	.24	.19	.28	.22	.18	.25	.20	.16	.14
10.0	.32	.24	.19	.31	.23	.18	.28	.22	.17	.26	.20	.16	.23	.18	.15	.13



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:

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	.396	.225	.071	.381	.217	.069	.354	.203	.065	.328	.189	.061	.305	.177	.057	
2.0	.340	.186	.057	.326	.180	.055	.301	.167	.052	.278	.156	.049	.257	.145	.046	
3.0	.300	.160	.048	.288	.154	.046	.265	.144	.044	.244	.134	.041	.225	.124	.038	
4.0	.269	.140	.041	.258	.135	.040	.237	.126	.038	.218	.117	.035	.200	.109	.033	
5.0	.244	.124	.036	.234	.120	.035	.215	.112	.033	.197	.104	.031	.181	.097	.029	
6.0	.223	.112	.032	.214	.108	.031	.197	.101	.029	.180	.094	.028	.165	.087	.026	
7.0	.205	.102	.029	.197	.098	.028	.181	.092	.026	.166	.085	.025	.152	.079	.023	
8.0	.190	.093	.026	.183	.090	.025	.168	.084	.024	.154	.078	.023	.141	.073	.021	
9.0	.177	.086	.024	.170	.083	.023	.156	.077	.022	.144	.072	.021	.132	.067	.019	
10.0	.166	.079	.022	.159	.077	.021	.146	.072	.020	.135	.067	.019	.123	.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	.378	.378	.378	.323	.323	.323	.221	.221	.221	.127	.127	.127	.041	.041	.041	
1.0	.376	.345	.317	.322	.296	.273	.220	.204	.189	.127	.118	.110	.041	.038	.035	
2.0	.369	.322	.283	.316	.278	.245	.217	.192	.171	.125	.112	.100	.040	.036	.033	
3.0	.362	.306	.262	.310	.264	.227	.213	.184	.159	.123	.107	.094	.040	.035	.031	
4.0	.354	.294	.248	.304	.254	.215	.209	.177	.152	.121	.104	.090	.039	.034	.030	
5.0	.347	.284	.238	.298	.246	.207	.205	.172	.146	.119	.101	.087	.038	.033	.029	
6.0	.339	.277	.232	.292	.240	.202	.201	.168	.143	.117	.099	.085	.038	.032	.028	
7.0	.332	.270	.227	.286	.234	.198	.197	.164	.140	.115	.097	.083	.037	.032	.028	
8.0	.326	.265	.223	.280	.230	.194	.194	.161	.138	.113	.095	.082	.036	.031	.027	
9.0	.319	.260	.220	.275	.226	.192	.191	.159	.136	.111	.094	.081	.036	.031	.027	
10.0	.313	.256	.218	.270	.222	.190	.187	.156	.135	.109	.092	.080	.035	.030	.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	17.2	18.5	17.9	19.2	20.1	14.6	15.9	15.3	16.6	17.4
3H	20.6	21.8	21.3	22.6	23.4	16.6	17.8	17.3	18.5	19.4
4H	22.4	23.6	23.2	24.3	25.2	17.4	18.6	18.2	19.3	20.2
6H	24.5	25.5	25.2	26.3	27.2	18.1	19.2	18.8	19.9	20.8
8H	25.6	26.6	26.3	27.4	28.3	18.4	19.4	19.1	20.2	21.1
12H	26.9	27.8	27.6	28.6	29.5	18.6	19.6	19.3	20.3	21.3
4H 2H	17.6	18.8	18.4	19.5	20.4	15.9	17.0	16.6	17.7	18.6
3H	21.2	22.2	22.0	23.0	23.9	18.2	19.2	19.0	20.0	20.9
4H	23.2	24.1	24.0	24.9	25.8	19.3	20.2	20.0	20.9	21.9
6H	25.5	26.3	26.2	27.1	28.0	20.1	20.9	20.9	21.7	22.7
8H	26.7	27.5	27.5	28.3	29.2	20.5	21.2	21.2	22.0	23.0
12H	28.2	28.9	29.0	29.7	30.7	20.8	21.4	21.5	22.3	23.2
8H 4H	23.4	24.2	24.2	25.0	25.9	20.5	21.3	21.3	22.1	23.0
6H	25.9	26.5	26.7	27.3	28.3	21.7	22.4	22.5	23.2	24.2
8H	27.3	27.9	28.1	28.7	29.7	22.3	22.9	23.1	23.7	24.7
12H	29.0	29.5	29.8	30.4	31.4	22.7	23.3	23.6	24.1	25.1
12H 4H	23.4	24.1	24.2	24.9	25.9	21.0	21.7	21.7	22.5	23.4
6H	25.9	26.5	26.7	27.3	28.3	22.4	23.0	23.2	23.8	24.8
8H	27.4	27.9	28.2	28.8	29.8	23.1	23.6	23.9	24.5	25.5
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:

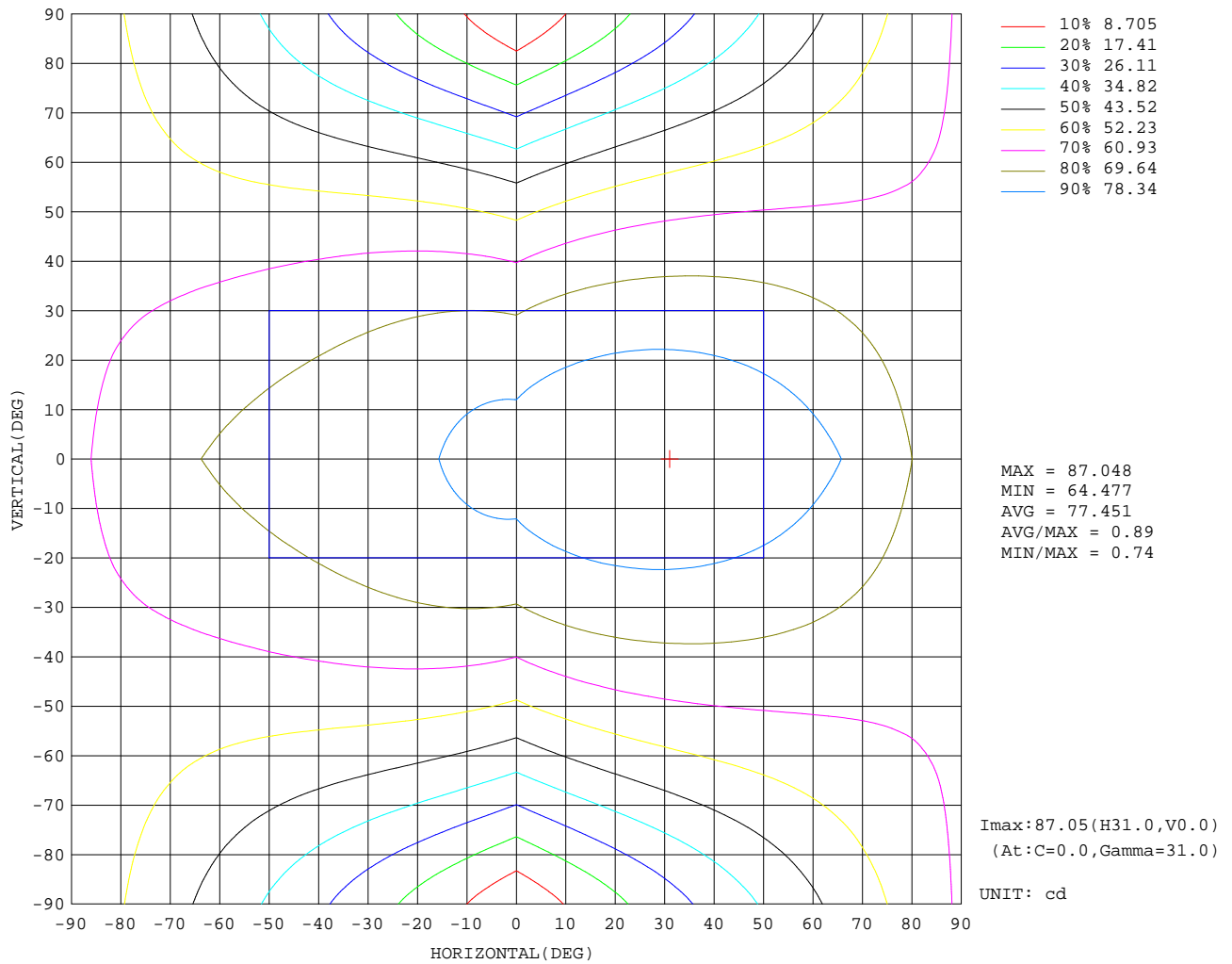
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	45	32	25	43	31	24	41	30	24	17
0.80	54	40	32	52	39	32	49	38	31	22
1.00	61	48	39	59	47	38	55	47	37	28
1.25	68	55	46	65	53	45	61	50	43	33
1.50	73	61	52	70	59	50	65	55	48	36
2.00	81	69	60	77	67	59	71	62	55	42
2.50	86	75	66	82	72	64	74	67	60	46
3.00	89	80	72	85	76	69	78	70	65	49
4.00	94	86	79	90	82	76	82	75	70	54
5.00	97	90	84	93	86	81	84	79	74	57
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:

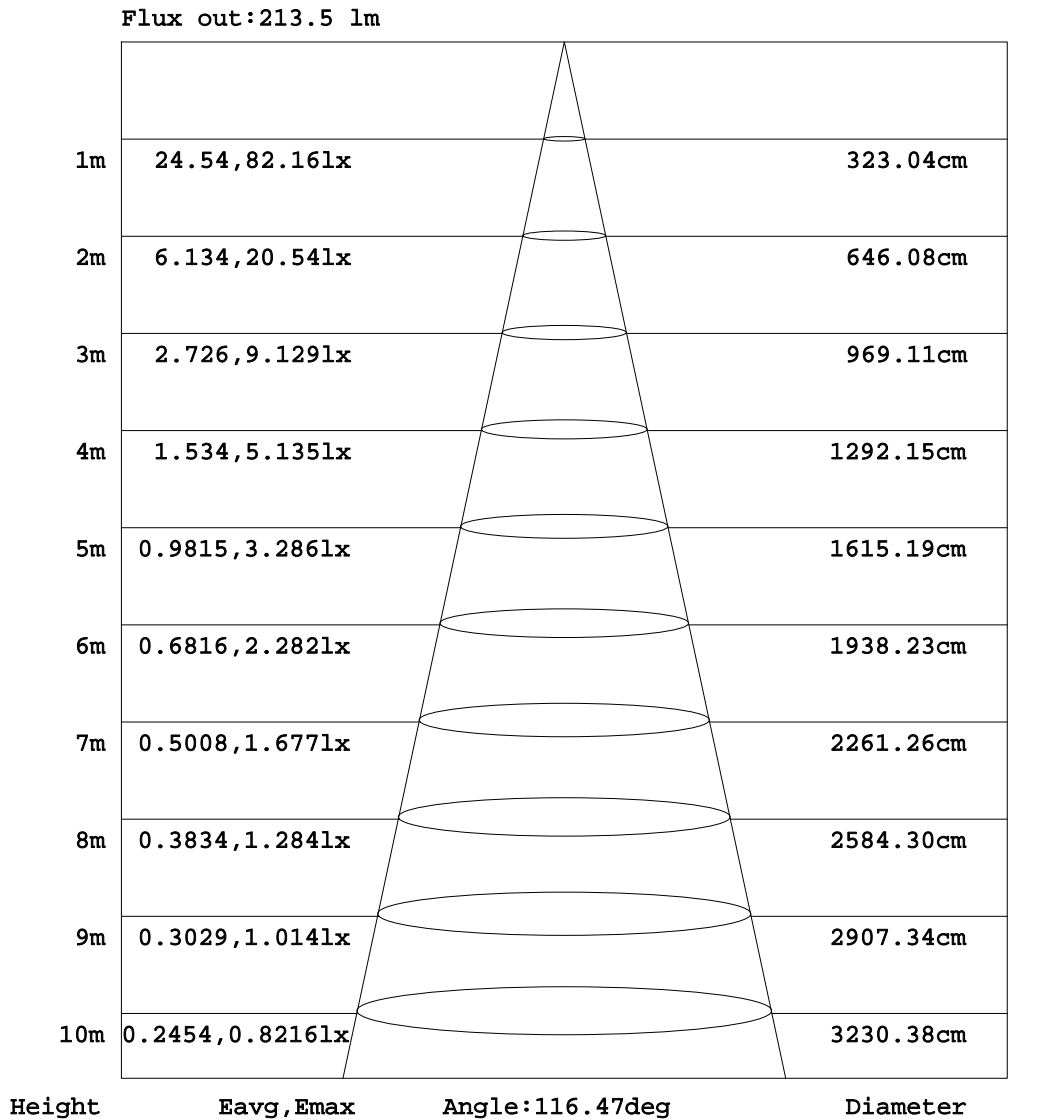
ISOCANDELA DIAGRAM



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

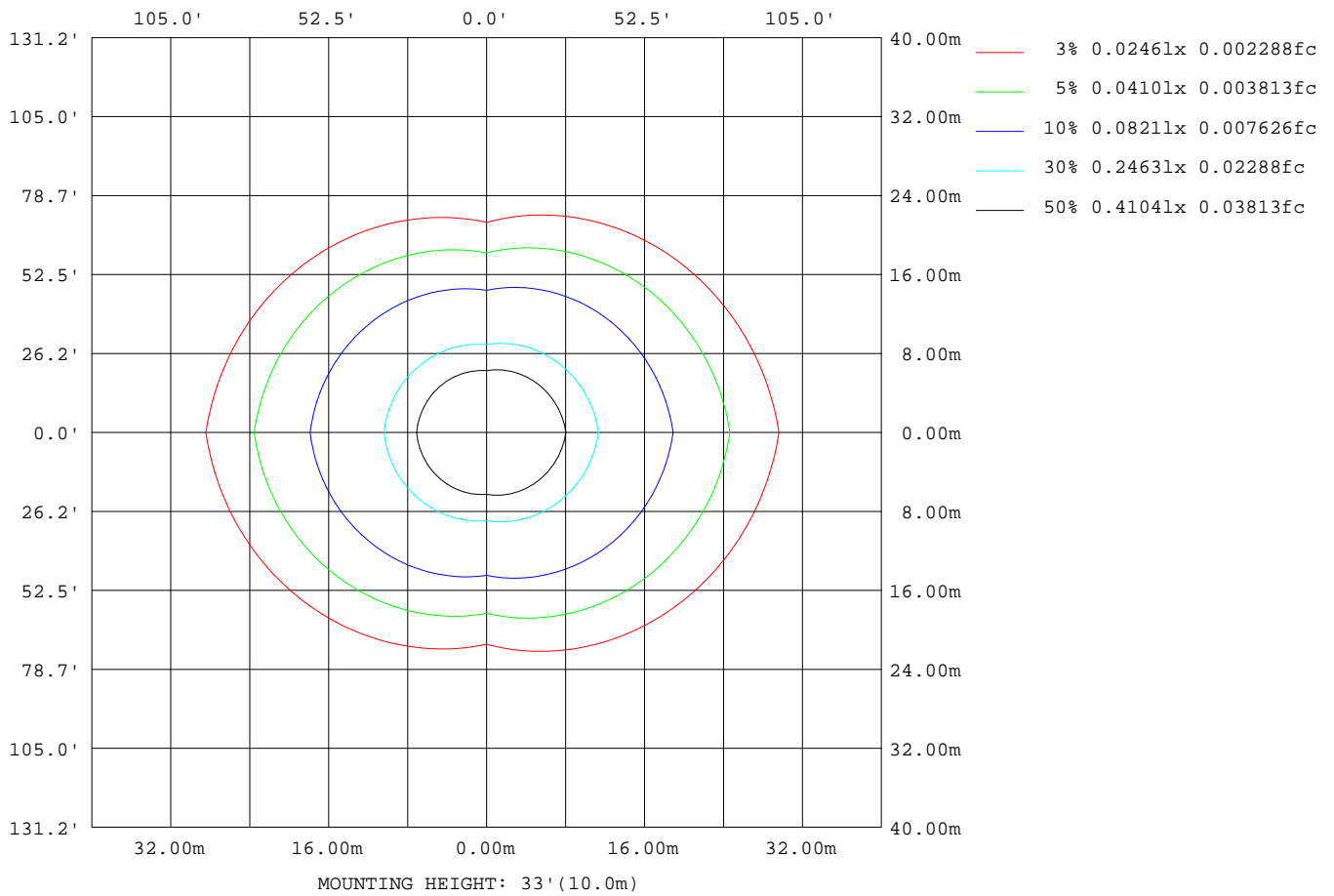


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.4000A P:9.6000W PF:1.0000 Freq:0Hz Lamp Flux:473.263x1 lm		
NAME: GD11719 NS-200	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.02*1	Shielding Angle:

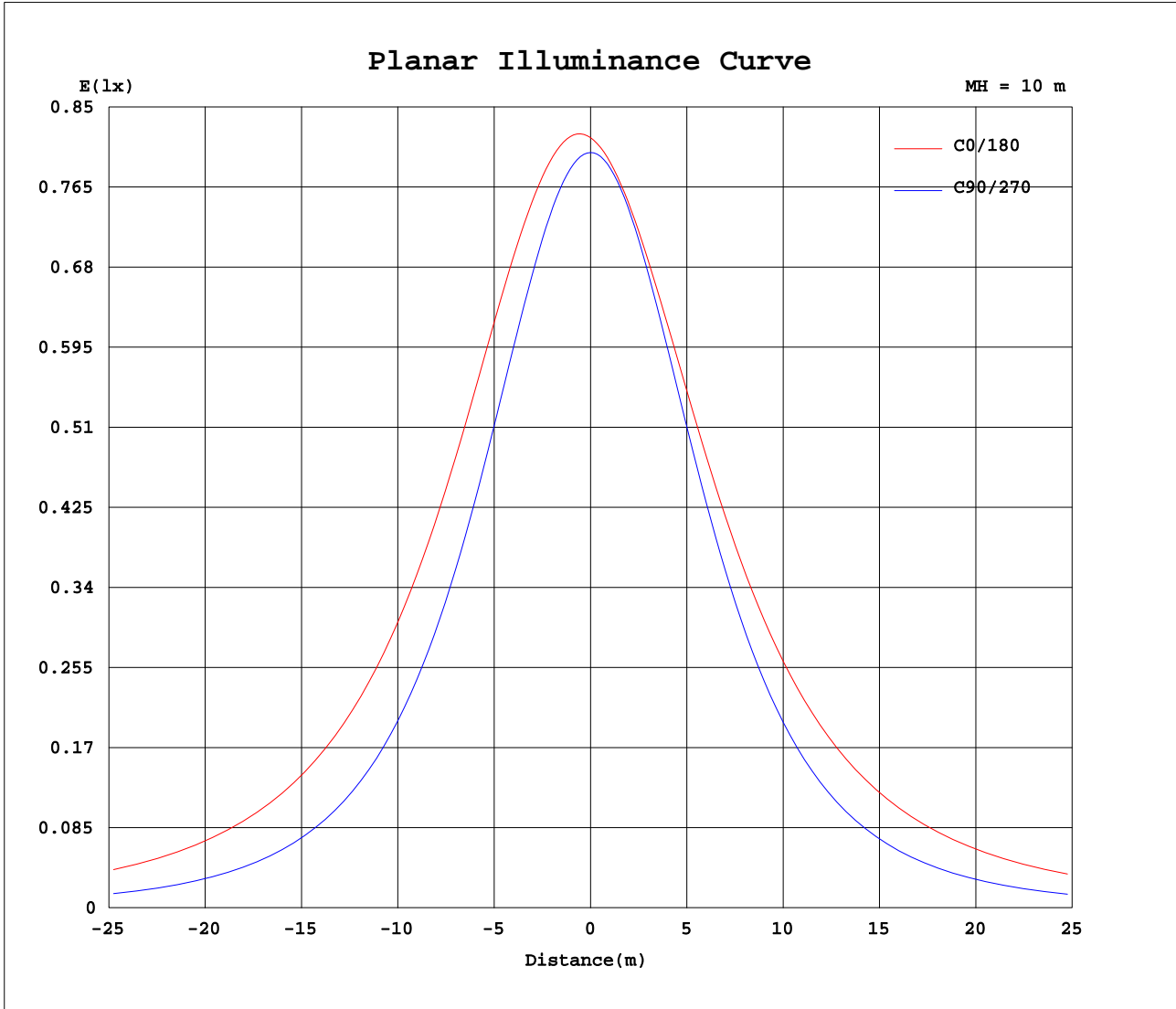
AvgL	cd/m2
L_0~180(65)av	8669
L_0~180(75)av	13274
L_0~180(85)av	36217
L_90~270(65)av	3849
L_90~270(75)av	3657
L_90~270(85)av	3698
L_45(65)av	5643
L_45(75)av	7262
L_45(85)av	15951

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	81.0	81.0	81.0	81.0															
5	82.2	80.6	79.8	80.7															
10	83.3	79.7	78.7	79.7															
15	84.3	78.1	77.7	78.1															
20	85.2	76.0	76.9	75.8															
25	85.9	73.2	76.1	73.0															
30	86.2	69.8	75.5	69.7															
35	86.1	66.0	74.8	65.7															
40	85.7	61.6	74.1	61.2															
45	84.9	56.7	73.3	56.3															
50	83.8	51.4	72.4	50.8															
55	82.2	45.6	71.3	44.9															
60	80.2	39.5	70.1	38.7															
65	78.0	33.0	68.6	32.1															
70	75.3	26.2	67.0	25.3															
75	72.3	19.5	65.1	18.4															
80	69.0	12.8	63.1	11.8															
85	65.4	6.86	60.8	6.04															
90	61.6	2.44	58.4	2.05															
95	57.5	0.79	55.8	0.99															
100	53.3	0.48	53.1	0.89															
105	48.9	0.53	50.3	0.82															
110	44.5	0.56	47.3	0.81															
115	40.0	0.59	44.2	0.81															
120	35.5	0.62	41.1	0.81															
125	31.2	0.64	37.9	0.82															
130	27.0	0.67	34.6	0.82															
135	23.0	0.69	31.4	0.83															
140	19.0	0.71	27.9	0.85															
145	15.6	0.73	24.2	0.86															
150	11.1	0.75	20.2	0.87															
155	3.97	0.76	16.3	0.88															
160	1.01	0.78	5.19	0.89															
165	0.75	0.81	3.73	0.91															
170	0.74	0.85	2.61	0.92															
175	0.74	0.88	1.13	0.92															
180	0.77	0.90	0.78	0.91															

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: