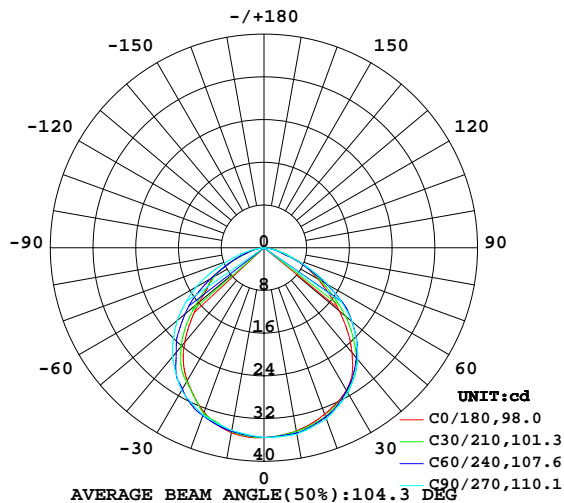


LUMINAIRE PHOTOMETRIC TEST REPORT

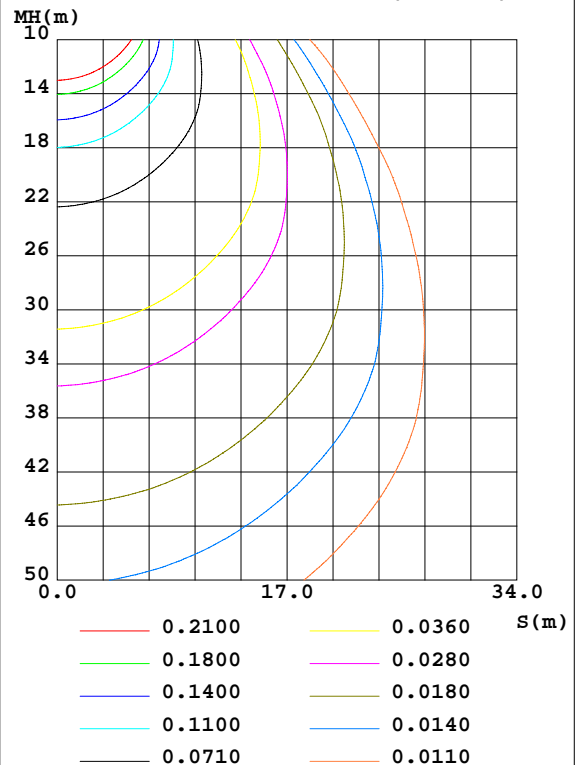
Test:U:119.76V I:0.0146A P:1.4546W PF:0.8346 Freq:59.98Hz Lamp Flux:89.5591x1 lm		
NAME: 3535RGB+2835-120-120V	TYPE:LED Strip LIGHT	WEIGHT:1
SPEC.:609.6*20MM	DIM.: 609.6*20MM	SERIAL No.:1
MFR.: ESTAR	SUR.:609.6*20MM	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 61.57 lm/W			
MODEL	WW	I _{max} (cd)	35.63	S/MH(C0/180)	1.21
NOMINAL POWER(W)	6	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	89.559	η UP,DN(C0-180)	0.0,50.5
NOMINAL FLUX(lm)	89.5591	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H(β) Range:-90 - 90DEG
H(β) Interval: 0.2DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:HW
Test Date:02 September 2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:9.900m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	34.82	35.06	35.45	35.38	35.15	34.93	34.72	34.54	0- 10	3.363	3.363	3.75,3.75
20	33.19	33.57	34.12	33.63	32.81	33.07	33.36	32.88	10- 20	9.681	13.04	14.6,14.6
30	30.83	31.01	31.46	30.52	28.72	29.62	30.87	30.25	20- 30	14.74	27.78	31,31
40	25.64	27.41	27.36	25.57	23.10	25.07	26.66	26.92	30- 40	17.73	45.52	50.8,50.8
50	18.46	21.01	21.56	19.12	15.75	18.01	21.21	20.02	40- 50	17.51	63.03	70.4,70.4
60	11.67	12.83	13.83	10.74	11.03	10.16	14.65	11.99	50- 60	13.97	77.00	86,86
70	5.950	5.699	5.575	5.140	4.544	5.095	6.914	5.439	60- 70	8.599	85.60	95.6,95.6
80	2.020	1.823	1.508	1.299	1.352	1.352	1.631	1.751	70- 80	3.361	88.96	99.3,99.3
90	0.2468	0	0	0	0.1300	0	0	0	80- 90	0.5971	89.56	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 54.533 lm

%lum = 60.9%

%lamp = 60.9%

Conical surface Flux(120deg): 77.001 lm

%lum = 86.0%

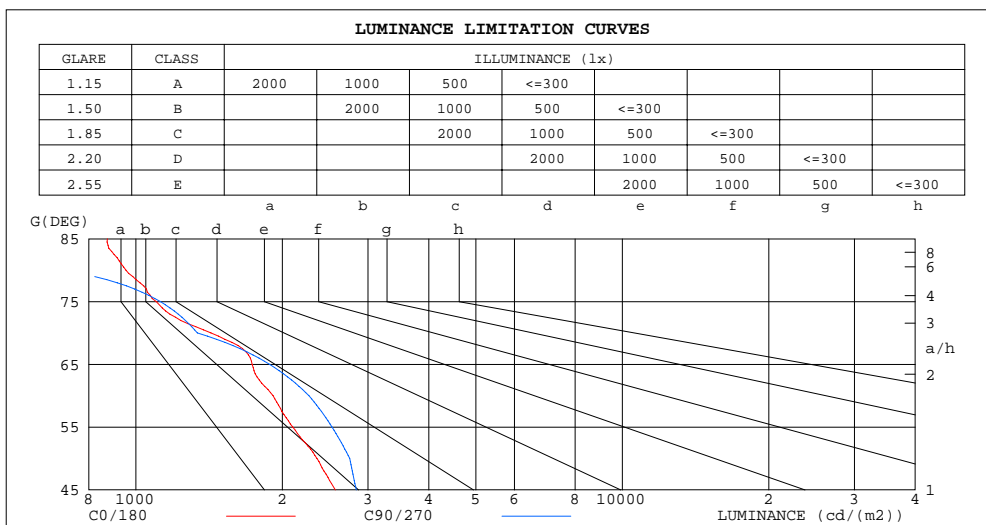
%lamp = 86.0%

H(β) Range:-90 - 90DEG
H(β) Interval: 0.2DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:HW
Test Date:02 September 2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:9.900m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:119.76V I:0.0146A P:1.4546W PF:0.8346 Freq:59.98Hz Lamp Flux:89.5591x1 lm		
NAME: 3535RGB+2835-120-120V	TYPE:LED Strip LIGHT	WEIGHT:1
SPEC.:609.6*20MM	DIM.: 609.6*20MM	SERIAL No.:1
MFR.: ESTAR	SUR.:609.6*20MM	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	874	0
80	954	712
75	1101	1123
70	1427	1337
65	1734	1883
60	1915	2269
55	2101	2531
50	2356	2752
45	2571	2838

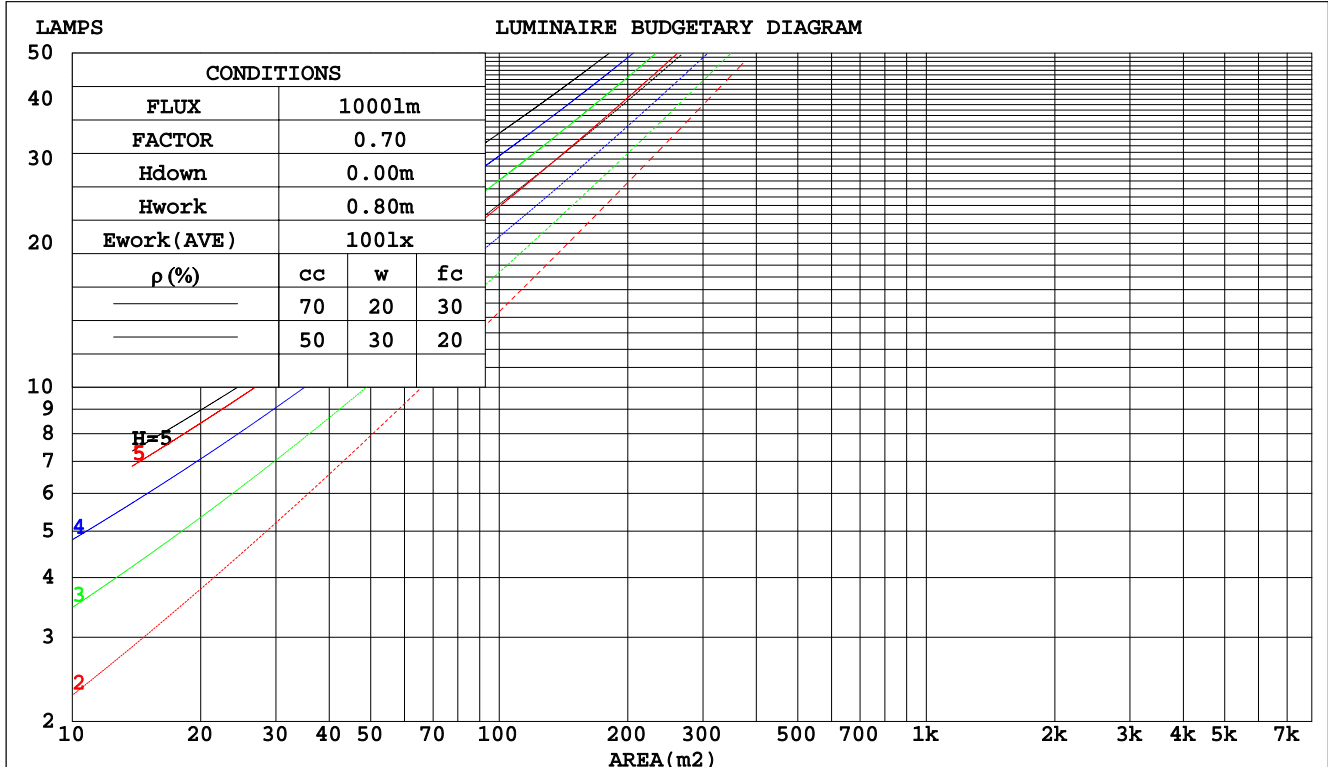
H(β) Range:-90 - 90DEG
 H(β) Interval: 0.2DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:HW
 Test Date:02 September 2020

V(B) Range:-80 - 80DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:9.900m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:119.76V I:0.0146A P:1.4546W PF:0.8346 Freq:59.98Hz Lamp Flux:89.5591x1 lm		
NAME: 3535RGB+2835-120-120V	TYPE:LED Strip LIGHT	WEIGHT:1
SPEC.:609.6*20MM	DIM.: 609.6*20MM	SERIAL No.:1
MFR.: ESTAR	SUR.:609.6*20MM	Shielding Angle:

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	1.02	1.02	1.02	1.00
1.0	1.06	1.02	.99	1.04	1.00	.97	.99	.97	.94	.96	.93	.91	.92	.90	.88	.86
2.0	.93	.87	.82	.92	.86	.81	.88	.83	.79	.85	.81	.77	.82	.79	.76	.74
3.0	.83	.75	.69	.81	.74	.69	.78	.72	.67	.76	.71	.66	.73	.69	.65	.63
4.0	.74	.66	.59	.72	.65	.59	.70	.63	.58	.68	.62	.57	.66	.61	.57	.54
5.0	.66	.58	.51	.65	.57	.51	.63	.56	.51	.61	.55	.50	.59	.54	.50	.48
6.0	.60	.51	.45	.59	.51	.45	.57	.50	.45	.55	.49	.44	.54	.48	.44	.42
7.0	.54	.46	.40	.54	.46	.40	.52	.45	.40	.51	.44	.39	.49	.43	.39	.37
8.0	.50	.41	.36	.49	.41	.36	.48	.41	.35	.46	.40	.35	.45	.39	.35	.33
9.0	.46	.38	.32	.45	.37	.32	.44	.37	.32	.43	.36	.32	.42	.36	.32	.30
10.0	.42	.34	.29	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.29	.27



H(β) Range:-90 - 90DEG
H(β) Interval: 0.2DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:HW
Test Date:02 September 2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:9.900m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:119.76V I:0.0146A P:1.4546W PF:0.8346 Freq:59.98Hz Lamp Flux:89.5591x1 lm		
NAME: 3535RGB+2835-120-120V	TYPE:LED Strip LIGHT	WEIGHT:1
SPEC.:609.6*20MM	DIM.: 609.6*20MM	SERIAL No.:1
MFR.: ESTAR	SUR.:609.6*20MM	Shielding Angle:

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	.272	.155	.049	.265	.151	.048	.252	.145	.046	.240	.139	.044	.229	.133	.043		
2.0	.263	.144	.044	.257	.142	.044	.246	.137	.042	.235	.132	.041	.225	.127	.040		
3.0	.248	.132	.040	.243	.130	.039	.233	.126	.038	.223	.122	.038	.215	.119	.037		
4.0	.232	.121	.035	.227	.119	.035	.219	.116	.035	.210	.113	.034	.202	.110	.034		
5.0	.217	.111	.032	.213	.109	.032	.205	.107	.031	.197	.104	.031	.191	.102	.031		
6.0	.203	.102	.029	.199	.101	.029	.192	.098	.029	.185	.096	.028	.179	.094	.028		
7.0	.190	.094	.027	.187	.093	.027	.180	.091	.026	.174	.089	.026	.169	.088	.026		
8.0	.178	.087	.025	.176	.086	.024	.170	.085	.024	.165	.083	.024	.160	.082	.024		
9.0	.168	.081	.023	.165	.081	.023	.160	.079	.022	.155	.078	.022	.151	.077	.022		
10.0	.159	.076	.021	.156	.075	.021	.152	.074	.021	.147	.073	.021	.143	.072	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.178	.156	.137	.152	.134	.118	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.168	.132	.101	.144	.114	.088	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.160	.114	.077	.137	.098	.067	.094	.068	.047	.054	.040	.028	.018	.013	.009	
4.0	.153	.101	.061	.131	.087	.053	.090	.061	.037	.052	.035	.022	.017	.012	.007	
5.0	.145	.090	.049	.125	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006	
6.0	.139	.082	.041	.119	.071	.035	.082	.049	.025	.048	.029	.015	.015	.010	.005	
7.0	.132	.075	.034	.114	.065	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004	
8.0	.126	.069	.030	.108	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.120	.064	.026	.104	.055	.023	.072	.039	.016	.042	.023	.010	.014	.008	.003	
10.0	.115	.060	.023	.099	.052	.020	.069	.036	.014	.040	.022	.008	.013	.007	.003	

H(β) Range:-90 - 90DEG
H(β) Interval: 0.2DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:HW
Test Date:02 September 2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:9.900m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.76V I:0.0146A P:1.4546W PF:0.8346 Freq:59.98Hz Lamp Flux:89.5591x1 lm										
NAME: 3535RGB+2835-120-120V					TYPE:LED Strip LIGHT			WEIGHT:1		
SPEC.:609.6*20MM					DIM.: 609.6*20MM			SERIAL No.:1		
MFR.: ESTAR					SUR.:609.6*20MM			Shielding Angle:		
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	23.9	25.3	24.2	25.5	25.7	24.5	26.0	24.8	26.2	26.4
3H	24.9	26.2	25.1	26.4	26.6	25.2	26.6	25.5	26.8	27.0
4H	25.1	26.3	25.4	26.6	26.8	25.4	26.7	25.7	26.9	27.2
6H	25.3	26.4	25.6	26.7	27.0	25.5	26.7	25.8	26.9	27.2
8H	25.3	26.4	25.6	26.7	27.0	25.5	26.6	25.8	26.9	27.2
12H	25.3	26.4	25.6	26.7	27.0	25.4	26.5	25.8	26.8	27.1
4H 2H	24.3	25.6	24.7	25.8	26.1	24.9	26.1	25.2	26.3	26.6
3H	25.5	26.5	25.8	26.8	27.1	25.7	26.7	26.0	27.0	27.3
4H	25.8	26.8	26.2	27.1	27.4	25.9	26.9	26.3	27.2	27.5
6H	26.0	26.9	26.4	27.3	27.6	26.0	26.9	26.4	27.3	27.6
8H	26.1	26.9	26.5	27.3	27.7	26.0	26.8	26.4	27.2	27.6
12H	26.1	26.9	26.6	27.3	27.7	26.0	26.7	26.4	27.1	27.5
8H 4H	25.9	26.7	26.3	27.0	27.4	26.0	26.8	26.4	27.1	27.5
6H	26.2	26.9	26.6	27.3	27.7	26.2	26.8	26.6	27.2	27.6
8H	26.3	26.9	26.8	27.3	27.8	26.2	26.8	26.6	27.2	27.6
12H	26.4	26.9	26.9	27.4	27.8	26.2	26.7	26.6	27.1	27.6
12H 4H	25.8	26.6	26.3	27.0	27.4	25.9	26.7	26.4	27.1	27.5
6H	26.2	26.8	26.7	27.2	27.7	26.2	26.7	26.6	27.2	27.6
8H	26.4	26.9	26.8	27.3	27.8	26.2	26.7	26.7	27.1	27.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.4					+ 0.3 / - 0.3				
1.5H	+ 0.2 / - 0.4					+ 0.3 / - 0.4				
2.0H	+ 0.4 / - 0.6					+ 0.7 / - 0.8				

CIE Pub.117, 89.56 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -8.4)
Area: 0.01219 m2

H(β) Range:-90 - 90DEG
H(β) Interval: 0.2DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:HW
Test Date:02 September 2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:9.900m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:119.76V I:0.0146A P:1.4546W PF:0.8346 Freq:59.98Hz Lamp Flux:89.5591x1 lm		
NAME: 3535RGB+2835-120-120V	TYPE:LED Strip LIGHT	WEIGHT:1
SPEC.:609.6*20MM	DIM.: 609.6*20MM	SERIAL No.:1
MFR.: ESTAR	SUR.:609.6*20MM	Shielding Angle:

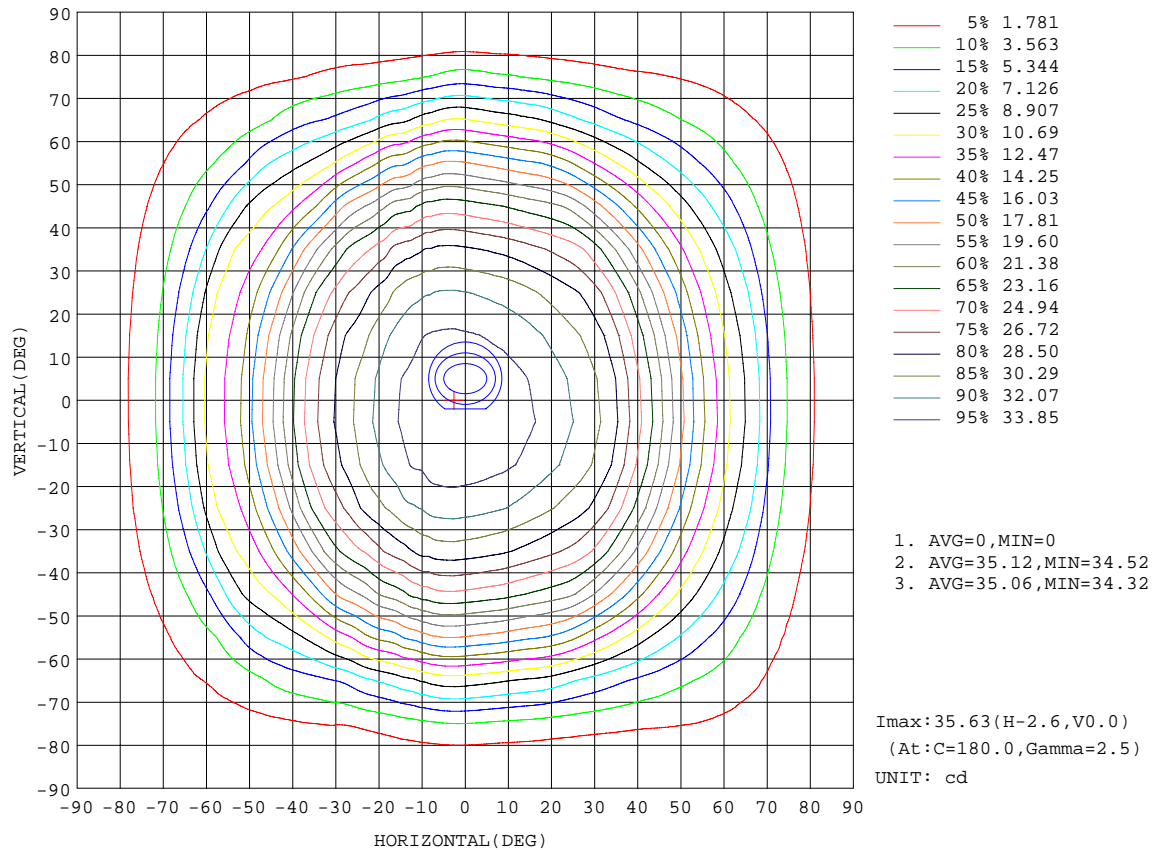
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	61	50	43	60	49	43	59	49	43	37
0.80	71	60	53	70	60	53	68	59	53	46
1.00	80	69	63	79	69	62	76	70	62	55
1.25	87	77	71	85	76	70	83	75	69	63
1.50	91	83	76	90	82	76	87	80	75	68
2.00	98	90	85	96	89	84	93	87	82	75
2.50	101	94	89	99	93	88	96	91	86	79
3.00	104	98	94	102	97	92	98	94	90	82
4.00	108	103	99	106	101	98	102	98	95	86
5.00	110	106	102	108	104	101	103	100	98	89
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 0.2DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:HW
 Test Date:02 September 2020

$V(B)$ Range:-80 - 80DEG
 $V(B)$ Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:9.900m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:119.76V I:0.0146A P:1.4546W PF:0.8346 Freq:59.98Hz Lamp Flux:89.559lx1 lm		
NAME: 3535RGB+2835-120-120V	TYPE:LED Strip LIGHT	WEIGHT:1
SPEC.:609.6*20MM	DIM.: 609.6*20MM	SERIAL No.:1
MFR.: ESTAR	SUR.:609.6*20MM	Shielding Angle:



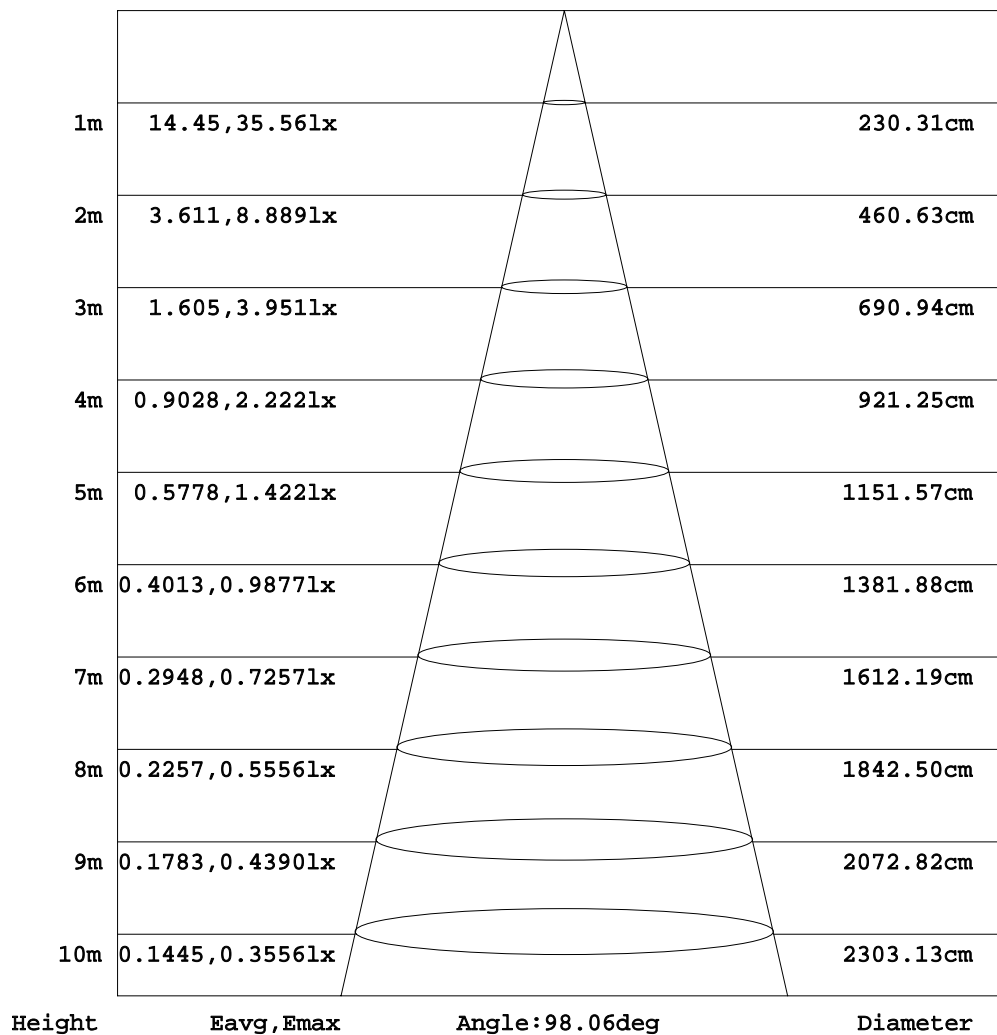
H(β) Range:-90 - 90DEG
H(β) Interval: 0.2DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:HW
Test Date:02 September 2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:9.900m [K=1.0000]
Remarks:

AAI Figure

Test:U:119.76V I:0.0146A P:1.4546W PF:0.8346 Freq:59.98Hz Lamp Flux:89.559lx1 lm		
NAME: 3535RGB+2835-120-120V	TYPE:LED Strip LIGHT	WEIGHT:1
SPEC.:609.6*20MM	DIM.: 609.6*20MM	SERIAL No.:1
MFR.: ESTAR	SUR.:609.6*20MM	Shielding Angle:

Flux out:62.21 lm



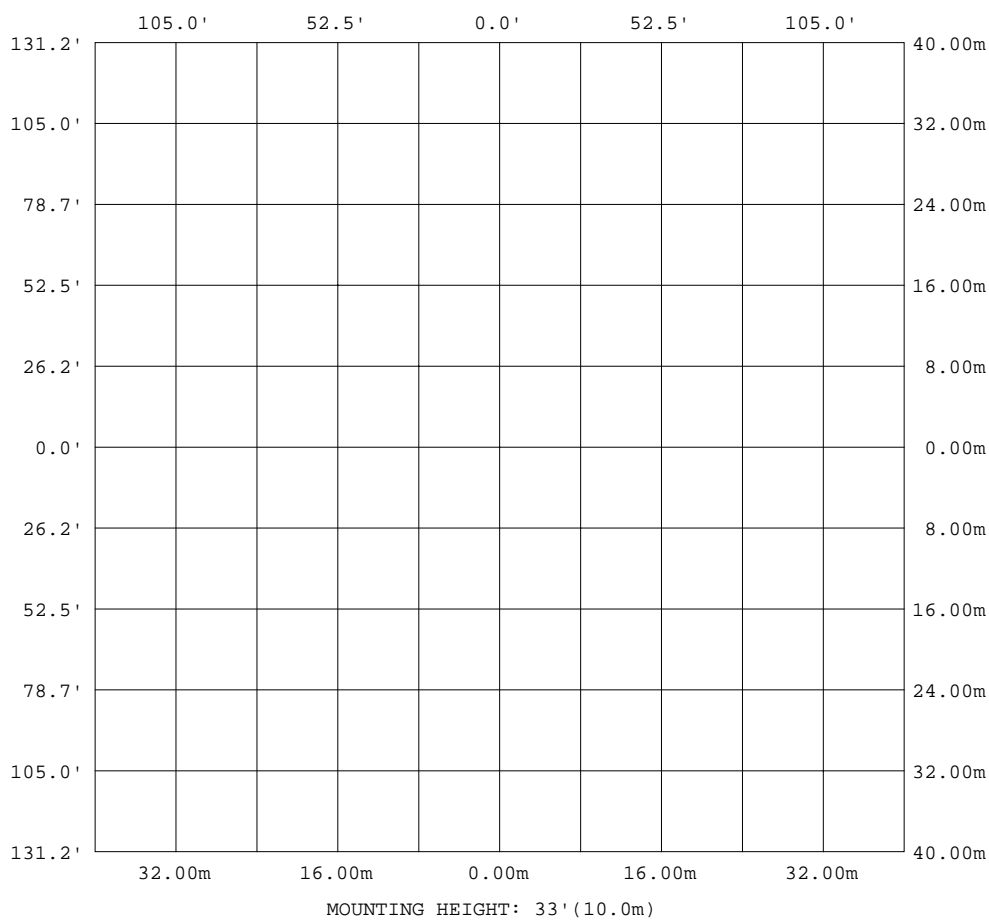
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 0.2DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:HW
Test Date:02 September 2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:9.900m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:119.76V I:0.0146A P:1.4546W PF:0.8346 Freq:59.98Hz Lamp Flux:89.5591x1 lm		
NAME: 3535RGB+2835-120-120V	TYPE:LED Strip LIGHT	WEIGHT:1
SPEC.:609.6*20MM	DIM.: 609.6*20MM	SERIAL No.:1
MFR.: ESTAR	SUR.:609.6*20MM	Shielding Angle:



H(β) Range:-90 - 90DEG
H(β) Interval: 0.2DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:HW
Test Date:02 September 2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:9.900m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:119.76V I:0.0146A P:1.4546W PF:0.8346 Freq:59.98Hz Lamp Flux:89.5591x1 lm		
NAME: 3535RGB+2835-120-120V	TYPE:LED Strip LIGHT	WEIGHT:1
SPEC.:609.6*20MM	DIM.: 609.6*20MM	SERIAL No.:1
MFR.: ESTAR	SUR.:609.6*20MM	Shielding Angle:

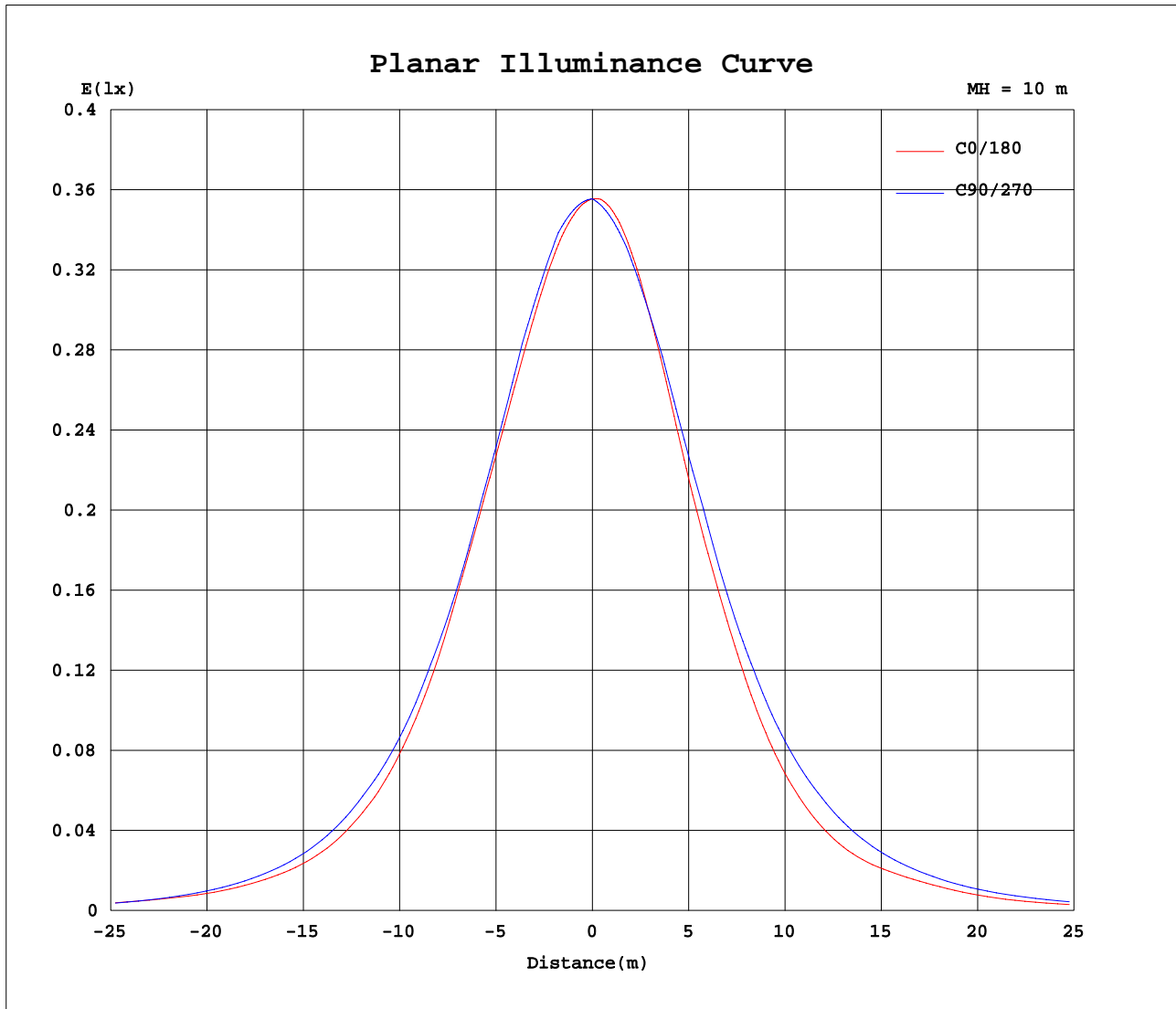
AvgL	cd/m2
L_0~180(65)av	1598
L_0~180(75)av	968
L_0~180(85)av	688
L_90~270(65)av	1988
L_90~270(75)av	1238
L_90~270(85)av	0
L_45(65)av	1594
L_45(75)av	866
L_45(85)av	380

Standard: GB/T 29293-2012

H(β) Range:-90 - 90DEG
H(β) Interval: 0.2DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:HW
Test Date:02 September 2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:9.900m [K=1.0000]
Remarks:

Planar Illuminance Curve



H(β) Range:-90 - 90DEG
H(β) Interval: 0.2DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:HW
Test Date:02 September 2020

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:9.900m [K=1.0000]
Remarks:

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:9.900m [K=1.0000]
Remarks:

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:9.900m [K=1.0000]
Remarks:

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:9.900m [K=1.0000]
Remarks:

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.421
Humidity:65.0%
Test Distance:9.900m [K=1.0000]
Remarks: