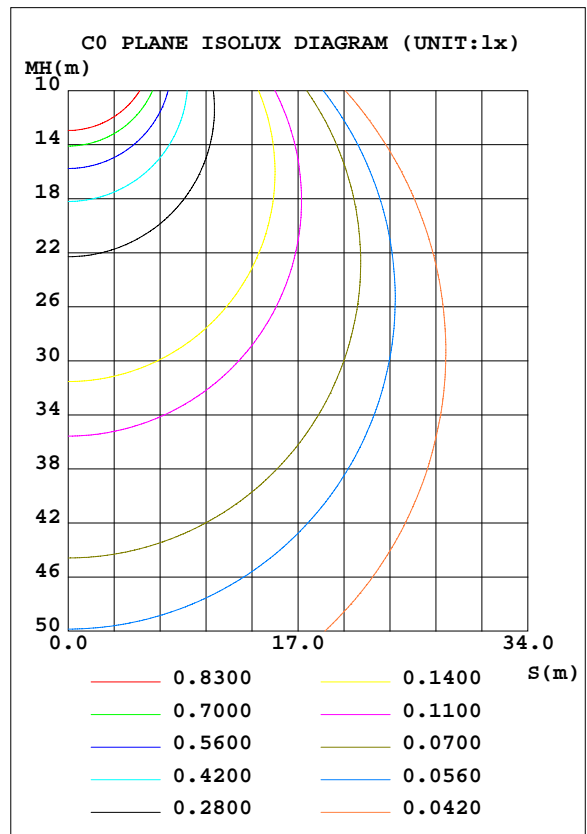
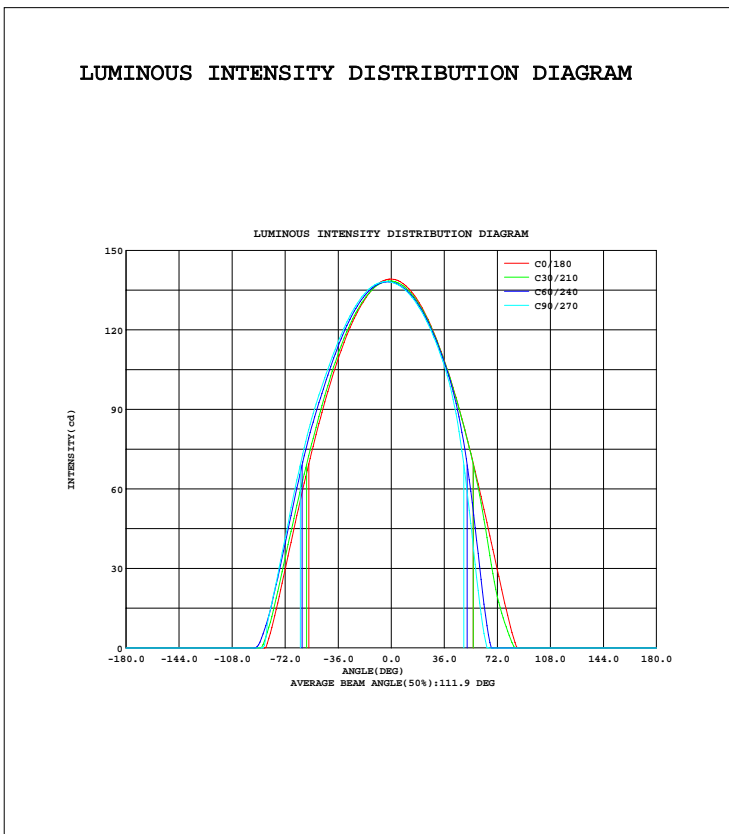


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.2527A P:6.066W PF:1.0000 Lamp Flux:376.11x1 lm		
NAME: LED Strip	TYPE:Indoor lighting	WEIGHT:25g
SPEC.:2016+5050 180LED	DIM.: 1000*14*1MM	SERIAL No.:201601025005
MFR.: Dilux	SUR.:1000*14mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 62.01 lm/W			
MODEL	FLS103T58FD180B-24(WCP)-UR	Imax(cd)	139.3	S/MH(C0/180)	1.26
NOMINAL POWER(W)	6.02	LOR(%)	100.0	S/MH(C90/270)	1.32
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	376.11	η UP, DN(C0-180)	0.0,43.9
NOMINAL FLUX(lm)	376.11	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,56.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	η down(%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2016-10-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:4.950m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

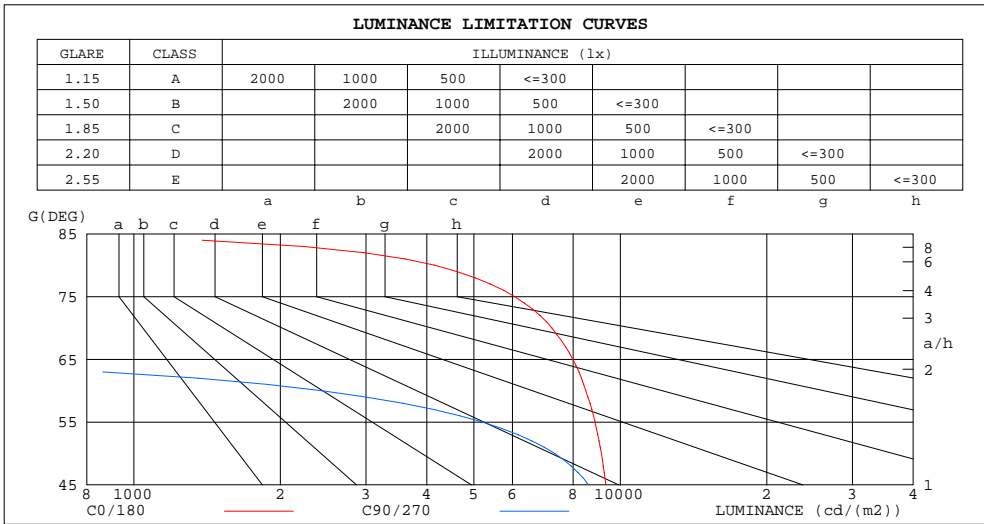
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum, lamp
10	136.6	135.5	134.8	135.4	136.8	136.8	137.3	137.9	0- 10	13.12	13.12	3.49,3.49
20	129.3	128.4	127.4	127.7	129.6	130.9	132.4	132.5	10- 20	37.71	50.83	13.5,13.5
30	117.5	117.0	115.8	115.7	118.1	120.5	123.1	122.8	20- 30	57.52	108.3	28.8,28.8
40	101.8	101.3	98.67	99.47	102.1	106.0	109.7	108.9	30- 40	69.85	178.2	47.4,47.4
50	82.27	80.18	65.95	77.71	82.57	87.76	93.71	91.21	40- 50	72.29	250.5	66.6,66.6
60	59.46	46.11	17.01	44.43	59.85	66.83	73.15	70.61	50- 60	61.79	312.3	83,83
70	34.63	5.084	0	9.212	34.67	42.30	46.63	45.84	60- 70	40.03	352.3	93.7,93.7
80	10.10	0	0	0	9.907	16.72	19.68	19.74	70- 80	19.62	371.9	98.9,98.9
90	0	0	0	0	0	0.2737	0	0.9026	80- 90	4.145	376.1	100,100
100	0	0	0	0	0	0	0	0	90-100	0.0225	376.1	100,100
110	0	0	0	0	0	0	0	0	100-110	0	376.1	100,100
120	0	0	0	0	0	0	0	0	110-120	0	376.1	100,100
130	0	0	0	0	0	0	0	0	120-130	0	376.1	100,100
140	0	0	0	0	0	0	0	0	130-140	0	376.1	100,100
150	0	0	0	0	0	0	0	0	140-150	0	376.1	100,100
160	0	0	0	0	0	0	0	0	150-160	0	376.1	100,100
170	0	0	0	0	0	0	0	0	160-170	0	376.1	100,100
180	0	0	0	0	0	0	0	0	170-180	0	376.1	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2016-10-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:4.950m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.2527A P:6.066W PF:1.0000 Lamp Flux:376.11x1 lm		
NAME: LED Strip	TYPE:Indoor lighting	WEIGHT:25g
SPEC.:2016+5050 180LED	DIM.: 1000*14*1MM	SERIAL No.:201601025005
MFR.: Dilux	SUR.:1000*14mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	309	0
80	4154	0
75	6063	0
70	7231	0
65	7983	18
60	8494	2430
55	8869	5208
50	9142	7328
45	9336	8601

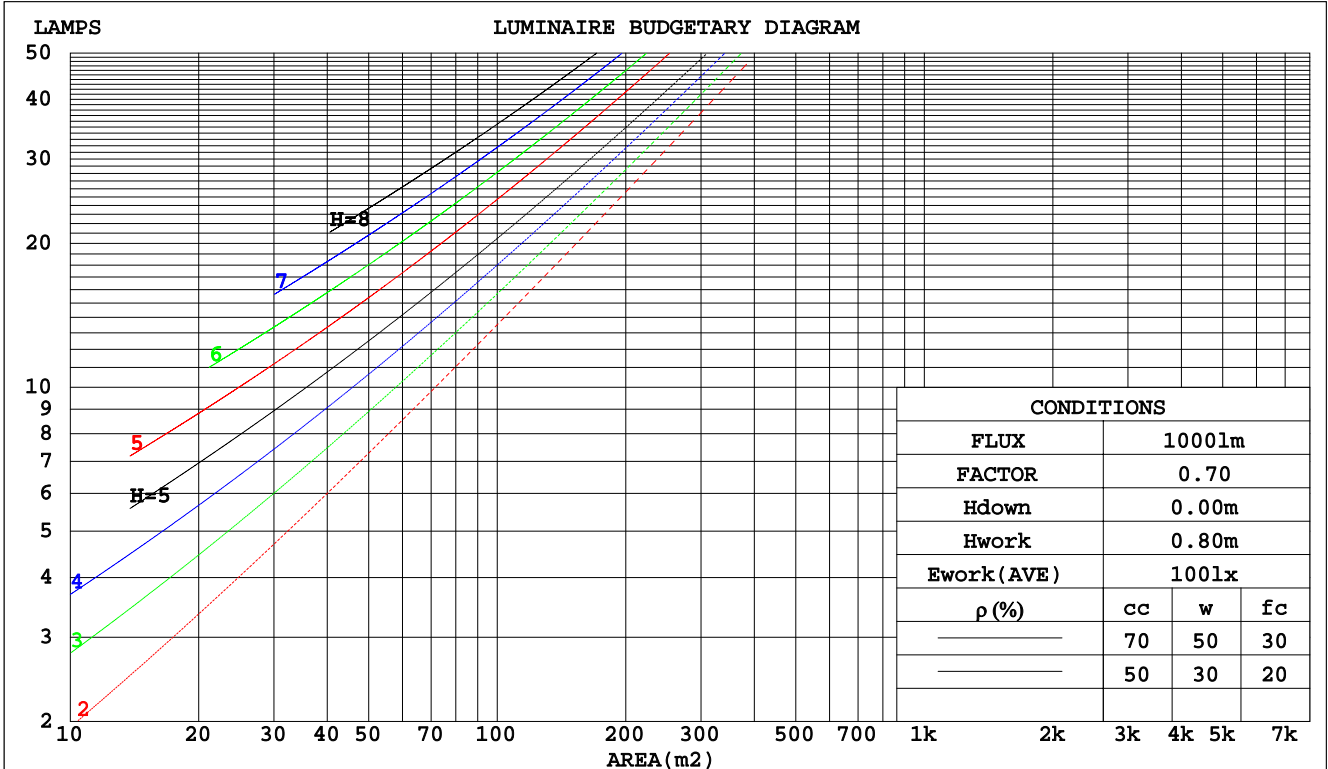
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2016-10-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:4.950m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.2527A P:6.066W PF:1.0000 Lamp Flux:376.11x1 lm		
NAME: LED Strip	TYPE:Indoor lighting	WEIGHT:25g
SPEC.:2016+5050 180LED	DIM.: 1000*14*1MM	SERIAL No.:201601025005
MFR.: Dilux	SUR.:1000*14mm	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
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	.00
1.0	1.05	1.01	.97	1.03	.99	.96	.98	.95	.93	.95	.92	.90	.91	.89	.87	.85
2.0	.92	.86	.80	.90	.84	.79	.87	.82	.77	.83	.79	.76	.80	.77	.74	.72
3.0	.81	.73	.67	.80	.72	.66	.77	.70	.65	.74	.69	.64	.71	.67	.63	.61
4.0	.72	.64	.57	.71	.63	.57	.68	.61	.56	.66	.60	.55	.64	.59	.54	.52
5.0	.64	.56	.49	.63	.55	.49	.61	.54	.48	.59	.53	.48	.57	.52	.47	.45
6.0	.58	.49	.43	.57	.49	.43	.55	.48	.42	.54	.47	.42	.52	.46	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.38	.49	.42	.37	.48	.42	.37	.35
8.0	.48	.40	.34	.47	.39	.34	.46	.39	.34	.45	.38	.33	.44	.38	.33	.31
9.0	.44	.36	.31	.44	.36	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2016-10-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:4.950m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:24.00V I:0.2527A P:6.066W PF:1.0000 Lamp Flux:376.11x1 lm		
NAME: LED Strip	TYPE:Indoor lighting	WEIGHT:25g
SPEC.:2016+5050 180LED	DIM.: 1000*14*1MM	SERIAL No.:201601025005
MFR.: Dilux	SUR.:1000*14mm	Shielding Angle:

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	.289	.164	.052	.282	.161	.051	.268	.154	.049	.256	.148	.047	.245	.142	.046	
2.0	.276	.151	.046	.270	.149	.046	.258	.144	.045	.248	.139	.044	.238	.135	.042	
3.0	.258	.138	.041	.253	.135	.041	.243	.132	.040	.233	.128	.039	.225	.124	.038	
4.0	.240	.125	.037	.236	.123	.036	.227	.120	.036	.218	.117	.035	.210	.114	.035	
5.0	.224	.114	.033	.219	.113	.033	.211	.110	.032	.204	.108	.032	.197	.105	.032	
6.0	.208	.104	.030	.205	.103	.030	.197	.101	.029	.191	.099	.029	.184	.097	.029	
7.0	.195	.096	.027	.191	.095	.027	.185	.093	.027	.179	.092	.027	.173	.090	.026	
8.0	.182	.089	.025	.179	.088	.025	.174	.087	.025	.168	.085	.025	.163	.084	.024	
9.0	.171	.083	.023	.169	.082	.023	.163	.081	.023	.159	.079	.023	.154	.078	.023	
10.0	.161	.077	.021	.159	.077	.021	.154	.076	.021	.150	.074	.021	.146	.073	.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																
1.0	.191	.191	.191	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
2.0	.179	.156	.136	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015	
3.0	.170	.132	.100	.146	.114	.086	.100	.079	.060	.058	.046	.035	.018	.015	.012	
4.0	.162	.114	.076	.139	.099	.066	.096	.068	.046	.055	.040	.027	.018	.013	.009	
5.0	.155	.101	.060	.133	.087	.052	.091	.061	.037	.053	.036	.022	.017	.012	.007	
6.0	.147	.090	.048	.127	.078	.042	.087	.055	.030	.051	.032	.018	.016	.010	.006	
7.0	.141	.082	.040	.121	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005	
8.0	.134	.075	.034	.115	.065	.029	.080	.046	.021	.046	.027	.012	.015	.009	.004	
9.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
10.0	.122	.064	.026	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2016-10-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:4.950m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.2527A P:6.066W PF:1.0000 Lamp Flux:376.11x1 lm		
NAME: LED Strip	TYPE:Indoor lighting	WEIGHT:25g
SPEC.:2016+5050 180LED	DIM.: 1000*14*1MM	SERIAL No.:201601025005
MFR.: Dilux	SUR.:1000*14mm	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	20.5	22.0	20.8	22.2	22.4	17.7	19.2	18.0	19.4	19.6
3H	21.9	23.2	22.2	23.5	23.7	17.5	18.9	17.8	19.1	19.4
4H	22.4	23.6	22.7	23.9	24.1	17.4	18.7	17.7	19.0	19.2
6H	22.6	23.8	22.9	24.1	24.3	17.3	18.5	17.6	18.8	19.1
8H	22.6	23.8	22.9	24.0	24.3	17.3	18.4	17.6	18.7	19.0
12H	22.5	23.7	22.9	24.0	24.3	17.2	18.3	17.6	18.6	18.9
4H 2H	20.6	21.9	20.9	22.2	22.4	18.2	19.5	18.5	19.8	20.0
3H	22.1	23.2	22.5	23.5	23.8	18.0	19.1	18.4	19.4	19.7
4H	22.7	23.7	23.1	24.0	24.4	17.9	18.9	18.3	19.3	19.6
6H	23.0	24.0	23.4	24.3	24.7	17.8	18.7	18.2	19.1	19.4
8H	23.1	23.9	23.5	24.3	24.7	17.8	18.6	18.2	19.0	19.4
12H	23.1	23.8	23.5	24.2	24.6	17.7	18.5	18.2	18.9	19.3
8H 4H	22.6	23.4	23.0	23.8	24.2	18.0	18.8	18.4	19.2	19.6
6H	23.0	23.7	23.4	24.1	24.5	17.9	18.6	18.3	19.0	19.4
8H	23.0	23.6	23.5	24.1	24.5	17.8	18.5	18.3	18.9	19.3
12H	23.0	23.5	23.5	24.0	24.5	17.8	18.3	18.3	18.8	19.3
12H 4H	22.5	23.3	23.0	23.7	24.1	18.0	18.7	18.4	19.1	19.5
6H	22.9	23.5	23.4	24.0	24.4	17.9	18.5	18.3	18.9	19.4
8H	23.0	23.5	23.5	24.0	24.4	17.8	18.4	18.3	18.8	19.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.9 / - 1.3				
1.5H	+ 0.4 / - 0.7					+ 0.6 / - 1.1				
2.0H	+ 0.3 / - 0.5					+ 1.9 / - 5.4				

CIE Pub.117 Corrected 376.1 lm Total Lamp Luminous Flux. (8log(F/F0) = -3.4)

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2016-10-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:4.950m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.2527A P:6.066W PF:1.0000 Lamp Flux:376.11x1 lm		
NAME: LED Strip	TYPE:Indoor lighting	WEIGHT:25g
SPEC.:2016+5050 180LED	DIM.: 1000*14*1MM	SERIAL No.:201601025005
MFR.: Dilux	SUR.:1000*14mm	Shielding Angle:

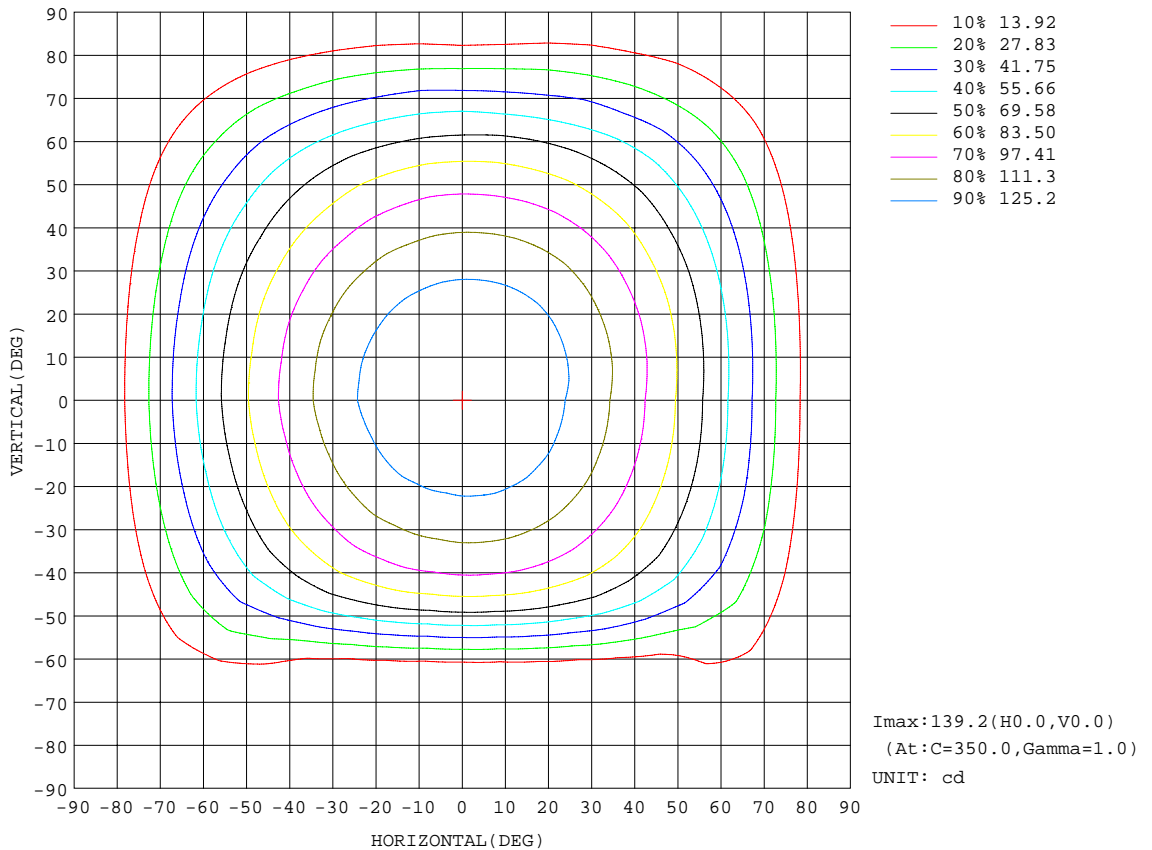
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	47	41	58	47	40	57	47	40	34
0.80	69	58	51	68	57	51	66	57	50	43
1.00	78	67	60	77	67	60	74	68	59	52
1.25	85	75	68	83	74	68	81	73	67	60
1.50	90	80	74	88	80	73	85	78	72	65
2.00	97	88	82	95	87	82	91	85	80	73
2.50	100	93	87	98	92	86	94	89	84	76
3.00	103	97	92	101	95	91	97	93	89	80
4.00	107	102	97	105	100	96	101	97	93	85
5.00	109	105	101	107	103	99	103	99	96	87
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2016-10-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:4.950m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.2527A P:6.066W PF:1.0000 Lamp Flux:376.11x1 lm		
NAME: LED Strip	TYPE:Indoor lighting	WEIGHT:25g
SPEC.:2016+5050 180LED	DIM.: 1000*14*1MM	SERIAL No.:201601025005
MFR.: Dilux	SUR.:1000*14mm	Shielding Angle:

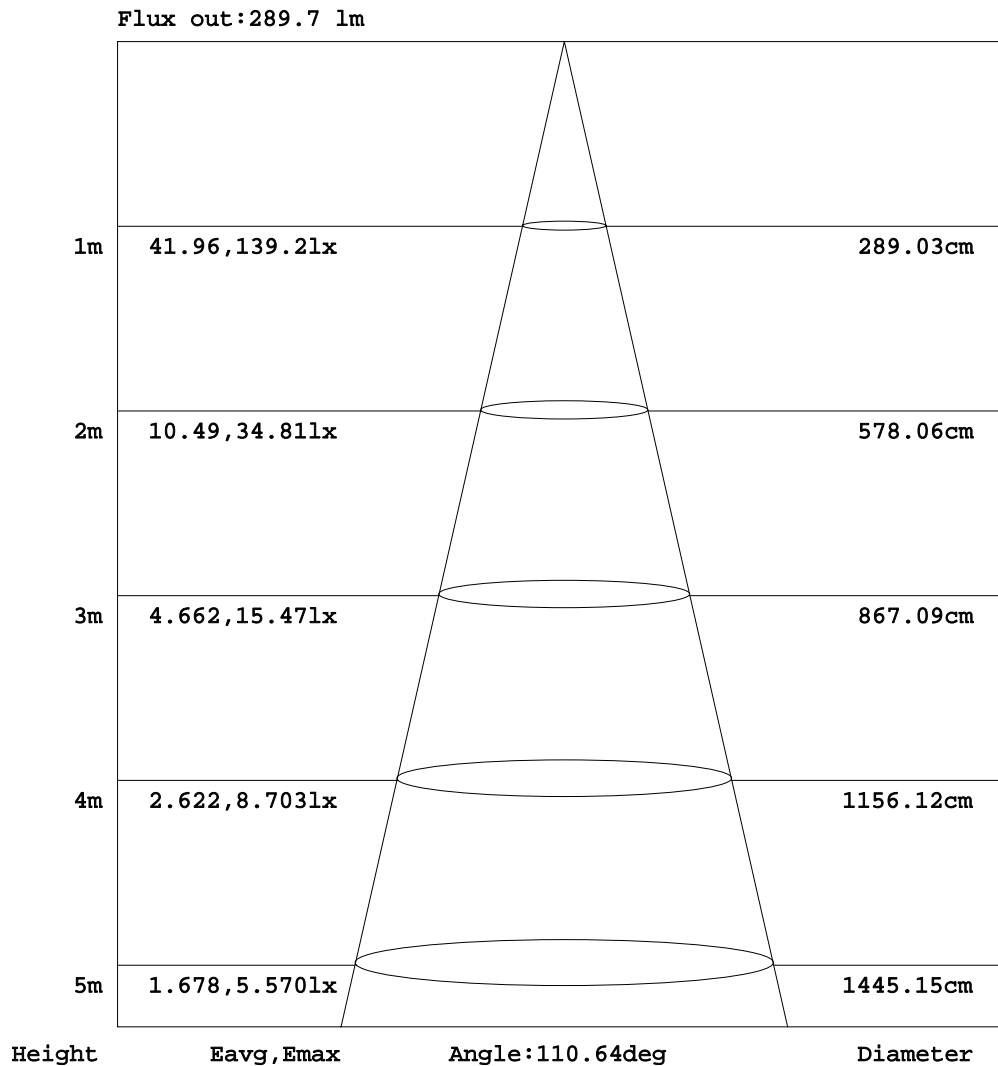


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2016-10-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.351
 Humidity: 65.0%
 Test Distance: 4.950m [K=1.0000]
 Remarks:

AAI Figure

Test:U:24.00V I:0.2527A P:6.066W PF:1.0000 Lamp Flux:376.11x1 lm		
NAME: LED Strip	TYPE:Indoor lighting	WEIGHT:25g
SPEC.:2016+5050 180LED	DIM.: 1000*14*1MM	SERIAL No.:201601025005
MFR.: Dilux	SUR.:1000*14mm	Shielding Angle:



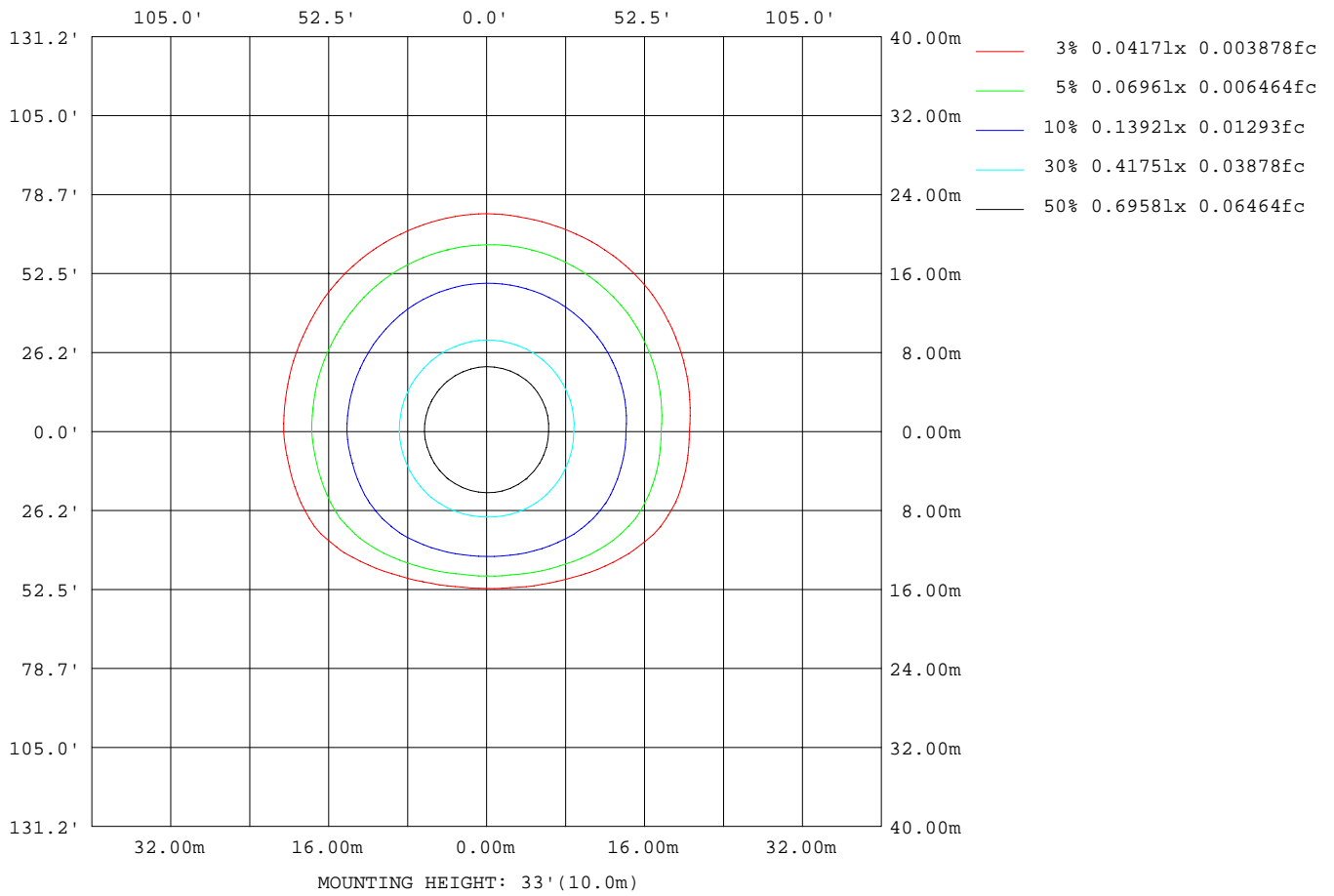
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2016-10-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:4.950m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:24.00V I:0.2527A P:6.066W PF:1.0000 Lamp Flux:376.11x1 lm		
NAME: LED Strip	TYPE:Indoor lighting	WEIGHT:25g
SPEC.:2016+5050 180LED	DIM.: 1000*14*1MM	SERIAL No.:201601025005
MFR.: Dilux	SUR.:1000*14mm	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2016-10-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:4.950m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:24.00V I:0.2527A P:6.066W PF:1.0000 Lamp Flux:376.11x1 lm		
NAME: LED Strip	TYPE:Indoor lighting	WEIGHT:25g
SPEC.:2016+5050 180LED	DIM.: 1000*14*1MM	SERIAL No.:201601025005
MFR.: Dilux	SUR.:1000*14mm	Shielding Angle:

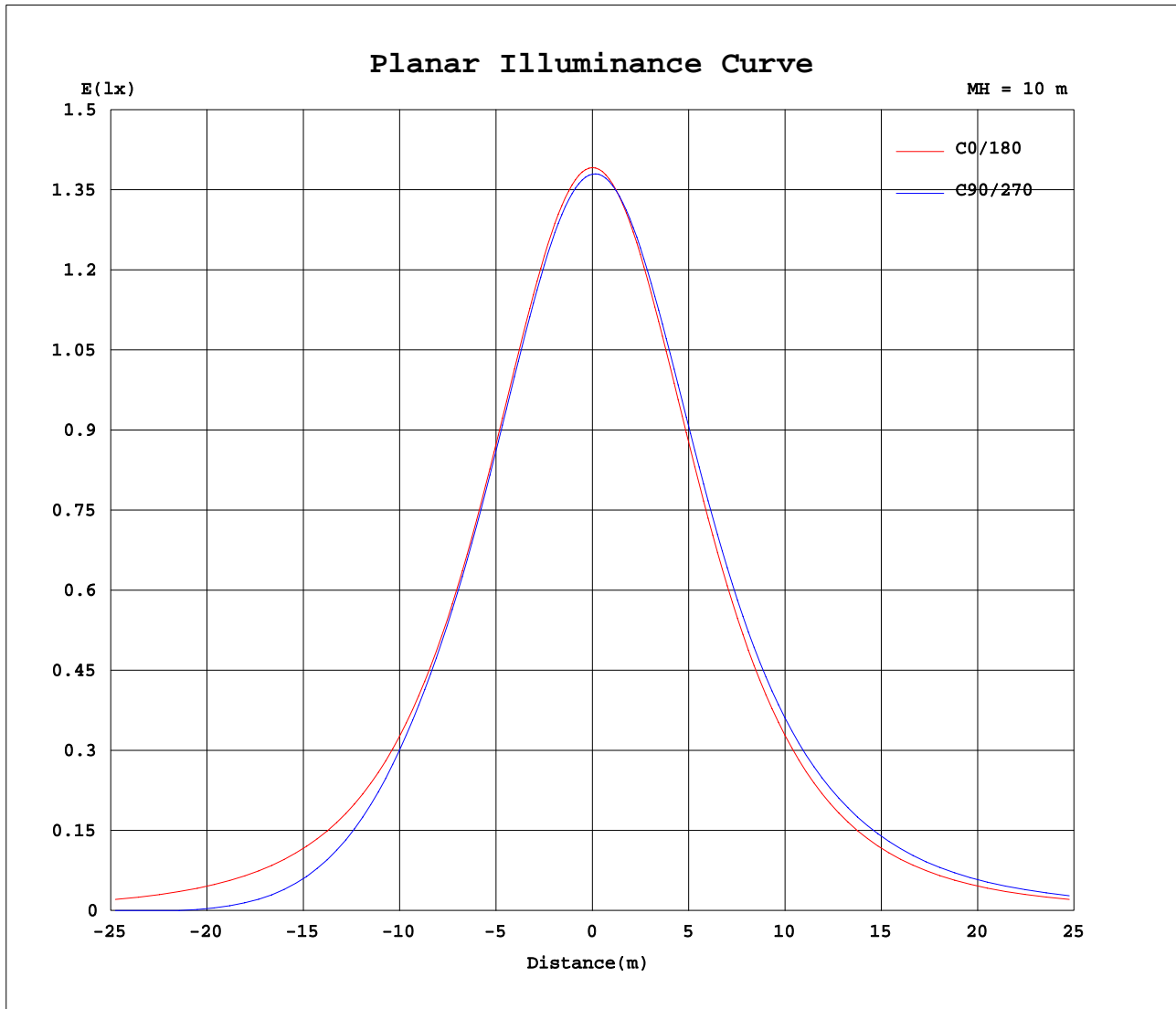
AvgL	cd/m2
L_0~180(65)av	8000
L_0~180(75)av	6058
L_0~180(85)av	228
L_90~270(65)av	5150
L_90~270(75)av	4570
L_90~270(85)av	1689
L_45(65)av	6858
L_45(75)av	4262
L_45(85)av	3146

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2016-10-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:4.950m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2016-10-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.351
 Humidity: 65.0%
 Test Distance: 4.950m [K=1.0000]
 Remarks:

