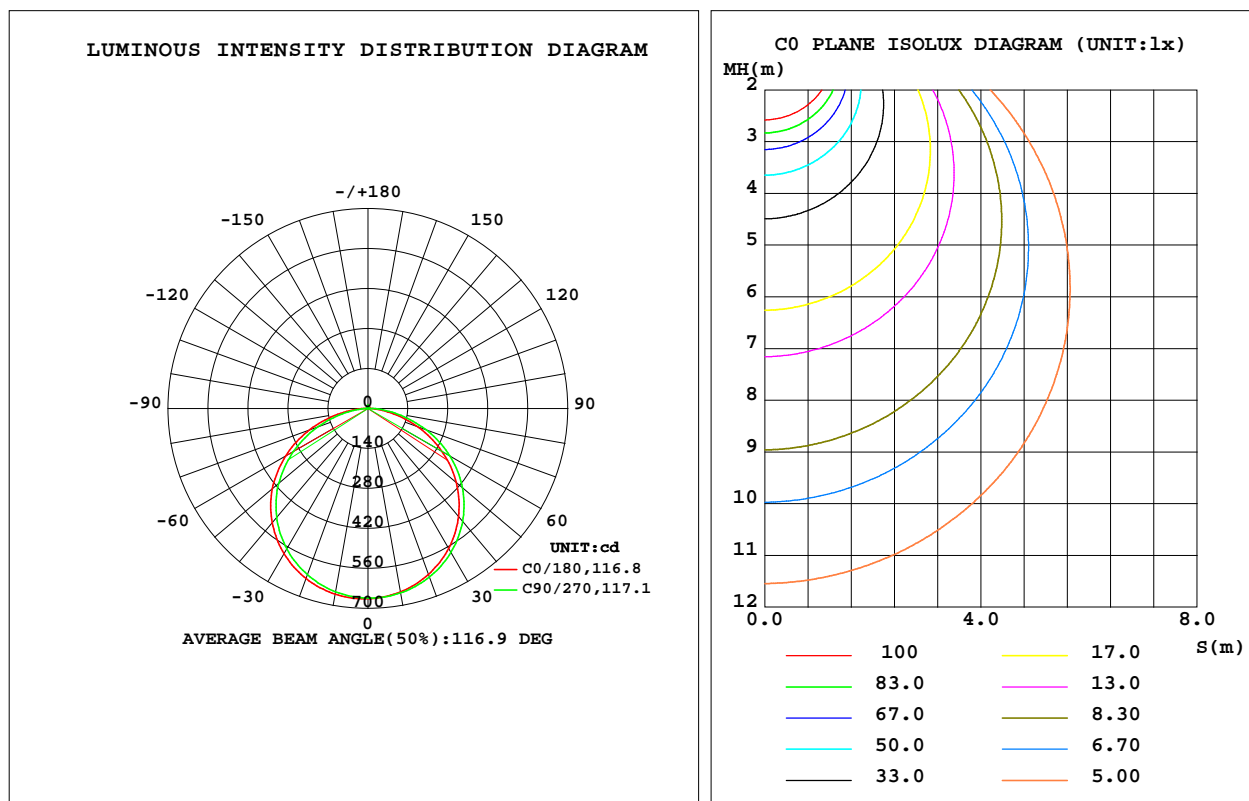


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.4319A P:10.36W PF:1.000 Freq:0Hz Lamp Flux:2041.6x1 lm		
NAME: D81802410NO	TYPE:	WEIGHT:
SPEC.:D81802410NO-8WWNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 196.98 lm/W			
MODEL	D81802410NO	I _{max} (cd)	666.8	S/MH(C0/180)	1.26
NOMINAL POWER(W)	9.6	LOR(%)	100.0	S/MH(C90/270)	1.27
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	2041.6	h UP,DN(C0-180)	1.0,49.7
NOMINAL FLUX(lm)	2041.6	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.8,48.5
LAMPS INSIDE	1	h up(%)	1.9	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	h down(%)	98.1	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-29

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

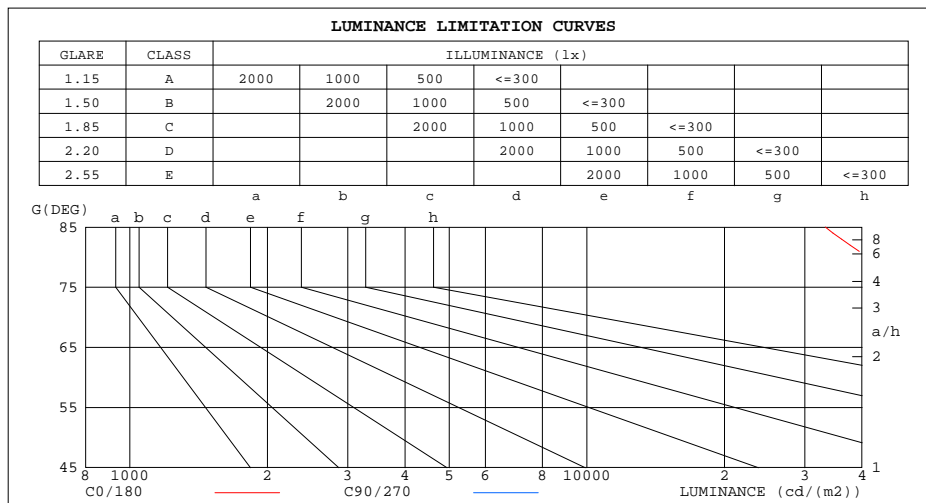
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	652.6	652.2	656.0	661.5	660.2	656.2	652.0	650.0	0- 10	63.00	63.00	3.09,3.09
20	618.6	620.3	628.3	637.6	633.9	627.8	619.6	614.3	10- 20	181.5	244.5	12,12
30	565.8	569.7	581.7	593.9	587.8	579.8	568.3	559.5	20- 30	277.9	522.4	25.6,25.6
40	493.7	500.1	515.9	531.0	522.1	512.4	497.8	486.3	30- 40	340.3	862.7	42.3,42.3
50	403.7	411.4	432.0	449.6	437.8	426.0	408.2	395.1	40- 50	359.5	1222	59.9,59.9
60	298.2	306.5	330.5	347.2	333.4	322.0	301.4	289.7	50- 60	330.4	1553	76,76
70	181.4	191.8	215.1	232.8	217.0	204.5	184.8	172.6	60- 70	256.2	1809	88.6,88.6
80	71.42	80.52	95.83	112.2	97.54	88.28	71.09	61.79	70- 80	148.8	1958	95.9,95.9
90	6.626	12.20	15.74	26.68	13.90	15.08	2.637	3.547	80- 90	45.86	2003	98.1,98.1
100	2.657	3.348	2.431	10.56	4.125	3.220	1.954	2.298	90-100	6.684	2010	98.5,98.5
110	4.303	3.982	3.203	6.519	3.310	3.158	3.568	3.801	100-110	3.899	2014	98.7,98.7
120	6.039	5.304	4.588	5.504	4.898	4.468	4.899	5.326	110-120	4.498	2019	98.9,98.9
130	7.445	6.241	5.807	6.394	6.316	5.818	5.992	6.384	120-130	5.122	2024	99.1,99.1
140	8.415	6.995	6.798	7.476	7.468	7.156	6.801	7.154	130-140	5.261	2029	99.4,99.4
150	9.091	7.495	8.272	8.598	8.163	8.335	7.926	7.648	140-150	4.839	2034	99.6,99.6
160	9.798	8.611	9.618	9.847	8.858	9.470	9.647	8.655	150-160	4.025	2038	99.8,99.8
170	9.712	10.21	10.85	11.00	9.385	10.55	10.85	10.46	160-170	2.784	2041	100,100
180	9.739	11.74	11.79	12.28	9.739	11.74	11.84	12.29	170-180	1.020	2042	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2021-01-29

g Range: 0 - 180DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.950m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.4319A P:10.36W PF:1.000 Freq:0Hz Lamp Flux:2041.6x1 lm		
NAME: D81802410NO	TYPE:	WEIGHT:
SPEC.:D81802410NO-8WWNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:



LUMINANCE cd/(m2)		
G(180)	C0/180	C90/270
85	33278	54284
80	41127	55184
75	48007	59245
70	53048	62895
65	57005	64906
60	59633	66096
55	61549	66833
50	62809	67202
45	63764	67333

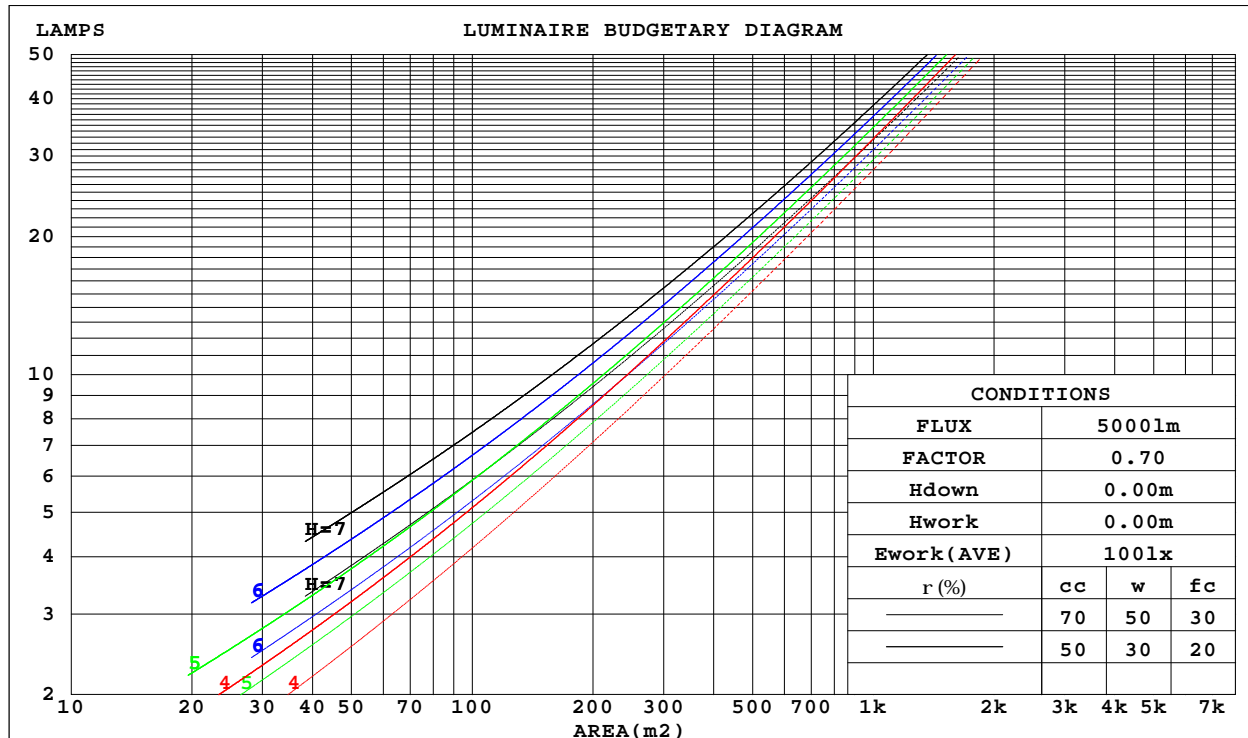
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2021-01-29

g Range: 0 - 180DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.950m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.4319A P:10.36W PF:1.000 Freq:0Hz Lamp Flux:2041.6x1 lm		
NAME: D81802410NO	TYPE:	WEIGHT:
SPEC.:D81802410NO-8WWNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:

r _{cc}	80%			70%			50%			30%			10%			0
r _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r _{fc}	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	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	.98
1.0	1.03	.99	.95	1.01	.97	.93	.96	.93	.90	.92	.89	.87	.88	.86	.84	.81
2.0	.89	.82	.77	.87	.81	.76	.84	.78	.73	.80	.75	.72	.77	.73	.70	.67
3.0	.78	.70	.63	.77	.69	.63	.73	.67	.61	.70	.65	.60	.67	.63	.59	.56
4.0	.69	.60	.53	.68	.59	.53	.65	.58	.52	.62	.56	.51	.60	.55	.50	.48
5.0	.62	.53	.46	.60	.52	.45	.58	.51	.45	.56	.49	.44	.54	.48	.43	.41
6.0	.55	.46	.40	.54	.46	.40	.52	.45	.39	.50	.44	.39	.49	.43	.38	.36
7.0	.50	.41	.35	.49	.41	.35	.48	.40	.34	.46	.39	.34	.44	.38	.34	.32
8.0	.46	.37	.31	.45	.37	.31	.43	.36	.31	.42	.35	.30	.41	.35	.30	.28
9.0	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.27	.38	.32	.27	.25
10.0	.39	.31	.25	.38	.30	.25	.37	.30	.25	.36	.29	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-29

g Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:24.00V I:0.4319A P:10.36W PF:1.000 Freq:0Hz Lamp Flux:2041.6x1 lm		
NAME: D81802410NO	TYPE:	WEIGHT:
SPEC.:D81802410NO-8WWNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.205	.205	.205	.175	.175	.175	.119	.119	.119	.069	.069	.069	.022	.022	.022	
1.0	.195	.170	.148	.167	.146	.127	.114	.101	.088	.066	.058	.051	.021	.019	.017	
2.0	.187	.146	.112	.160	.126	.097	.110	.087	.067	.063	.051	.040	.020	.016	.013	
3.0	.180	.129	.088	.154	.111	.077	.106	.077	.054	.061	.045	.032	.020	.015	.010	
4.0	.172	.116	.072	.148	.100	.063	.102	.070	.044	.059	.041	.026	.019	.013	.009	
5.0	.165	.105	.061	.141	.091	.053	.097	.064	.038	.056	.037	.022	.018	.012	.007	
6.0	.158	.097	.054	.135	.084	.047	.093	.059	.033	.054	.035	.020	.017	.011	.006	
7.0	.151	.090	.048	.130	.078	.042	.090	.055	.029	.052	.032	.018	.017	.011	.006	
8.0	.144	.084	.043	.124	.073	.038	.086	.051	.027	.050	.030	.016	.016	.010	.005	
9.0	.138	.079	.040	.119	.069	.035	.082	.048	.025	.048	.029	.015	.016	.009	.005	
10.0	.132	.075	.037	.114	.065	.032	.079	.046	.023	.046	.027	.014	.015	.009	.005	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.4319A P:10.36W PF:1.000 Freq:0Hz Lamp Flux:2041.6x1 lm										
NAME: D81802410NO					TYPE:			WEIGHT:		
SPEC.:D81802410NO-8WWNSA012WC0100					DIM.: 1000*10*1.5mm			SERIAL No.:01		
MFR.: COLORS					SUR.:1000*10			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	24.6	26.1	24.8	26.3	26.5	24.9	26.4	25.2	26.7	26.9
	26.0	27.4	26.4	27.7	28.0	26.6	28.0	26.9	28.2	28.5
	26.6	27.9	26.9	28.2	28.5	27.2	28.6	27.6	28.9	29.2
	27.0	28.2	27.3	28.5	28.8	27.7	29.0	28.1	29.3	29.6
	27.1	28.3	27.4	28.6	28.9	27.9	29.1	28.3	29.4	29.8
	27.1	28.3	27.5	28.6	28.9	28.0	29.2	28.4	29.5	29.9
4H	25.2	26.5	25.5	26.8	27.1	25.5	26.8	25.8	27.1	27.4
	26.8	28.0	27.2	28.3	28.7	27.3	28.5	27.7	28.8	29.1
	27.5	28.6	27.9	28.9	29.3	28.1	29.2	28.5	29.5	29.9
	28.0	29.0	28.4	29.3	29.7	28.7	29.7	29.2	30.1	30.5
	28.2	29.0	28.6	29.4	29.9	29.0	29.8	29.4	30.2	30.7
	28.2	29.1	28.7	29.5	29.9	29.1	30.0	29.6	30.4	30.8
8H	27.8	28.7	28.2	29.1	29.5	28.3	29.2	28.8	29.6	30.0
	28.4	29.2	28.9	29.6	30.1	29.1	29.8	29.6	30.3	30.7
	28.7	29.3	29.2	29.8	30.3	29.4	30.1	29.9	30.5	31.0
	28.8	29.4	29.3	29.9	30.4	29.7	30.3	30.2	30.7	31.3
12H	27.8	28.6	28.3	29.1	29.5	28.3	29.1	28.8	29.5	30.0
	28.5	29.2	29.0	29.6	30.1	29.1	29.8	29.6	30.2	30.7
	28.8	29.3	29.3	29.8	30.3	29.5	30.1	30.0	30.5	31.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2				+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.3				+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3				+ 0.2 / - 0.3					

CIE Pub.117, 2042 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.5)

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.4319A P:10.36W PF:1.000 Freq:0Hz Lamp Flux:2041.6x1 lm		
NAME: D81802410NO	TYPE:	WEIGHT:
SPEC.:D81802410NO-8WWNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:

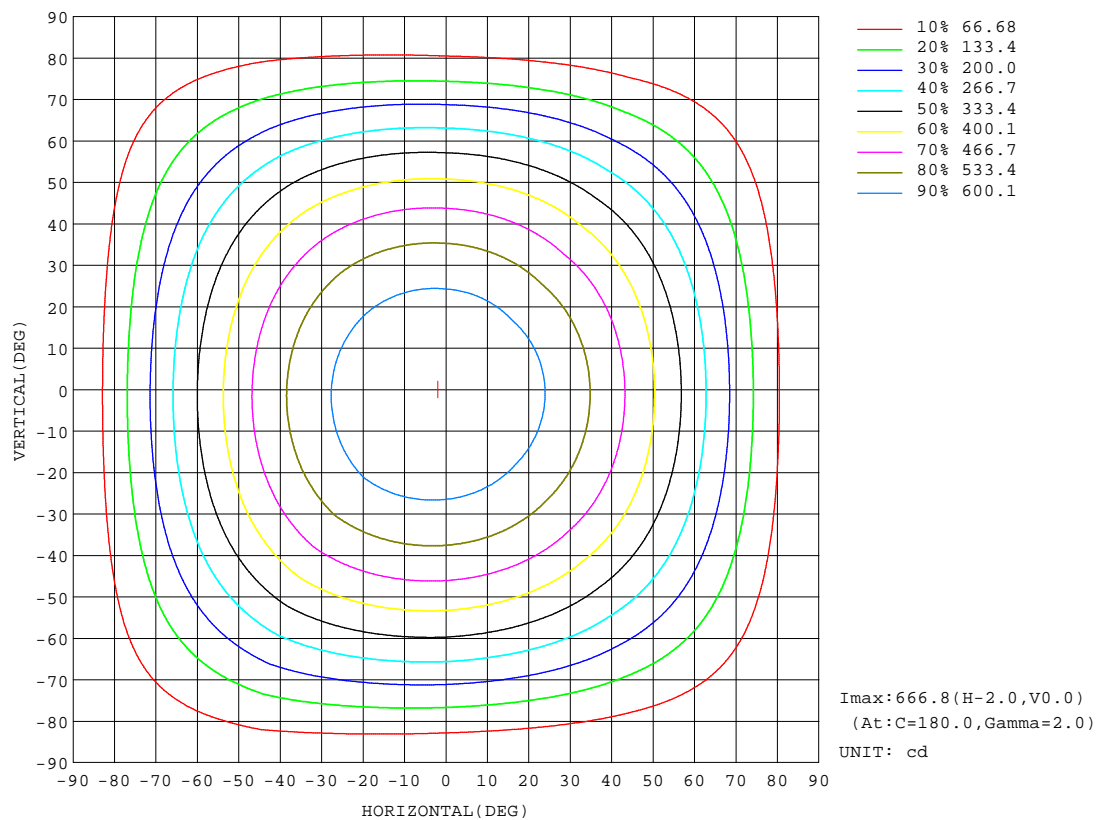
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	44	37	55	44	37	54	43	37	30
0.80	66	54	47	65	54	47	63	53	46	39
1.00	75	63	56	73	63	55	71	64	55	47
1.25	82	71	64	80	70	63	77	69	62	55
1.50	87	77	69	85	76	69	82	74	68	60
2.00	94	85	78	92	84	77	88	81	76	67
2.50	98	90	83	96	88	82	91	85	80	72
3.00	101	94	88	99	92	87	94	89	85	76
4.00	105	99	95	103	97	93	98	94	90	81
5.00	108	103	99	105	101	97	100	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: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2021-01-29

g Range: 0 - 180DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.950m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.4319A P:10.36W PF:1.000 Freq:0Hz Lamp Flux:2041.6x1 lm		
NAME: D81802410NO	TYPE:	WEIGHT:
SPEC.:D81802410NO-8WWNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:



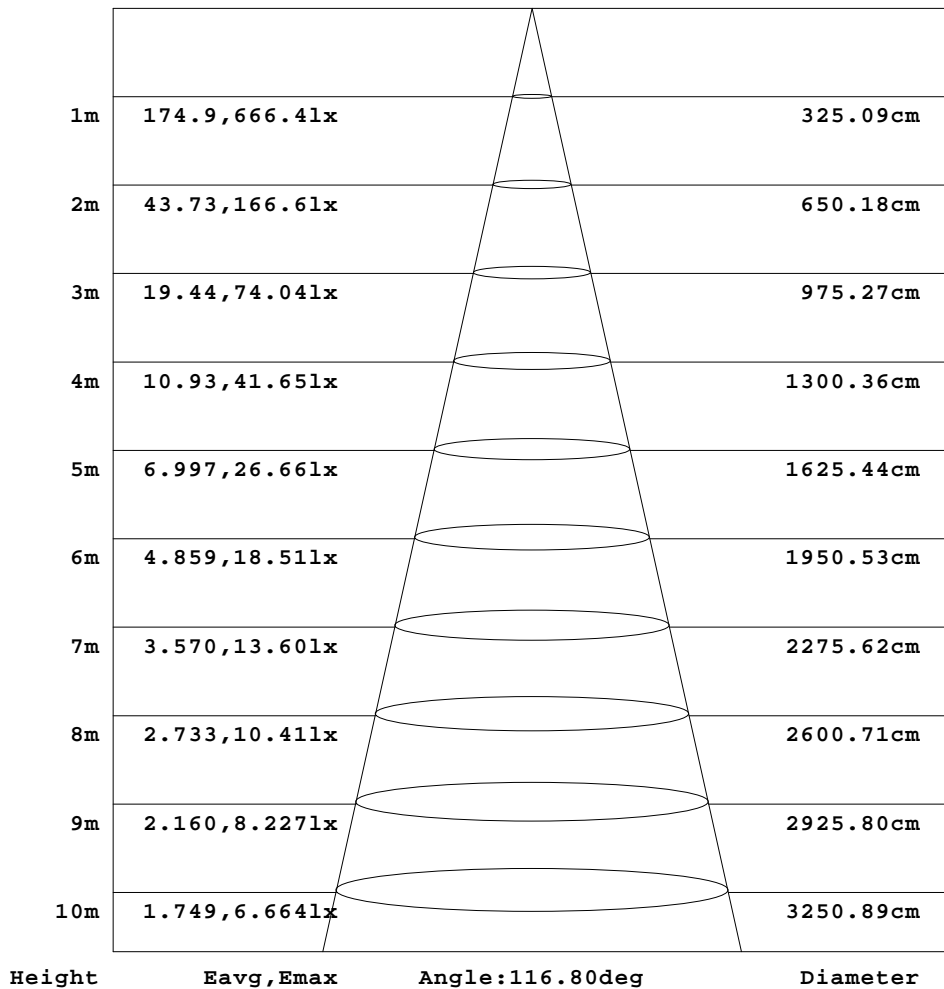
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2021-01-29

deg Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.950m [K=1.0000]
 Remarks:

AAI Figure

Test:U:24.00V I:0.4319A P:10.36W PF:1.000 Freq:0Hz Lamp Flux:2041.6x1 lm		
NAME: D81802410NO	TYPE:	WEIGHT:
SPEC.:D81802410NO-8WWNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:

Flux out:1522 lm



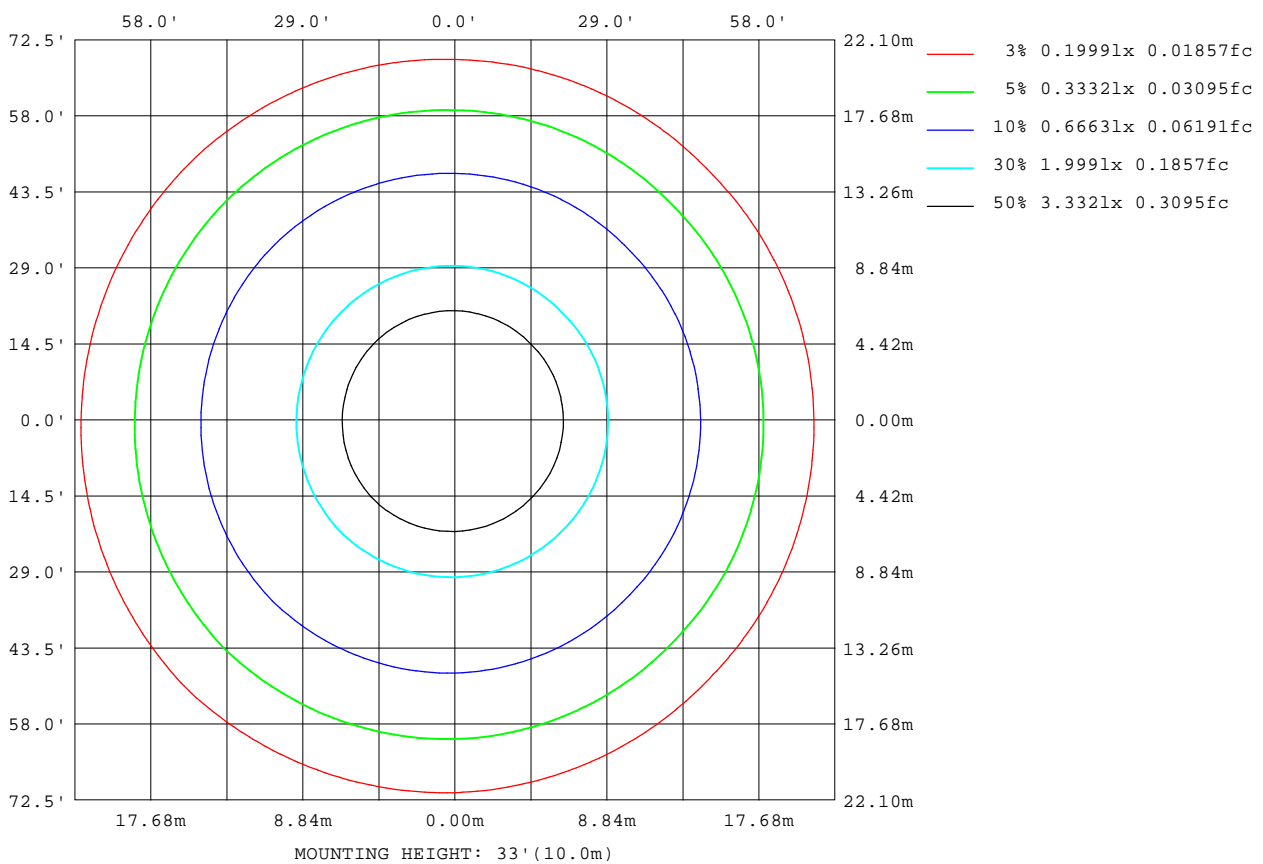
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:24.00V I:0.4319A P:10.36W PF:1.000 Freq:0Hz Lamp Flux:2041.6x1 lm		
NAME: D81802410NO	TYPE:	WEIGHT:
SPEC.:D81802410NO-8WWNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2021-01-29

g Range: 0 - 180DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.950m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:24.00V I:0.4319A P:10.36W PF:1.000 Freq:0Hz Lamp Flux:2041.6x1 lm		
NAME: D81802410NO	TYPE:	WEIGHT:
SPEC.:D81802410NO-8WWNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:

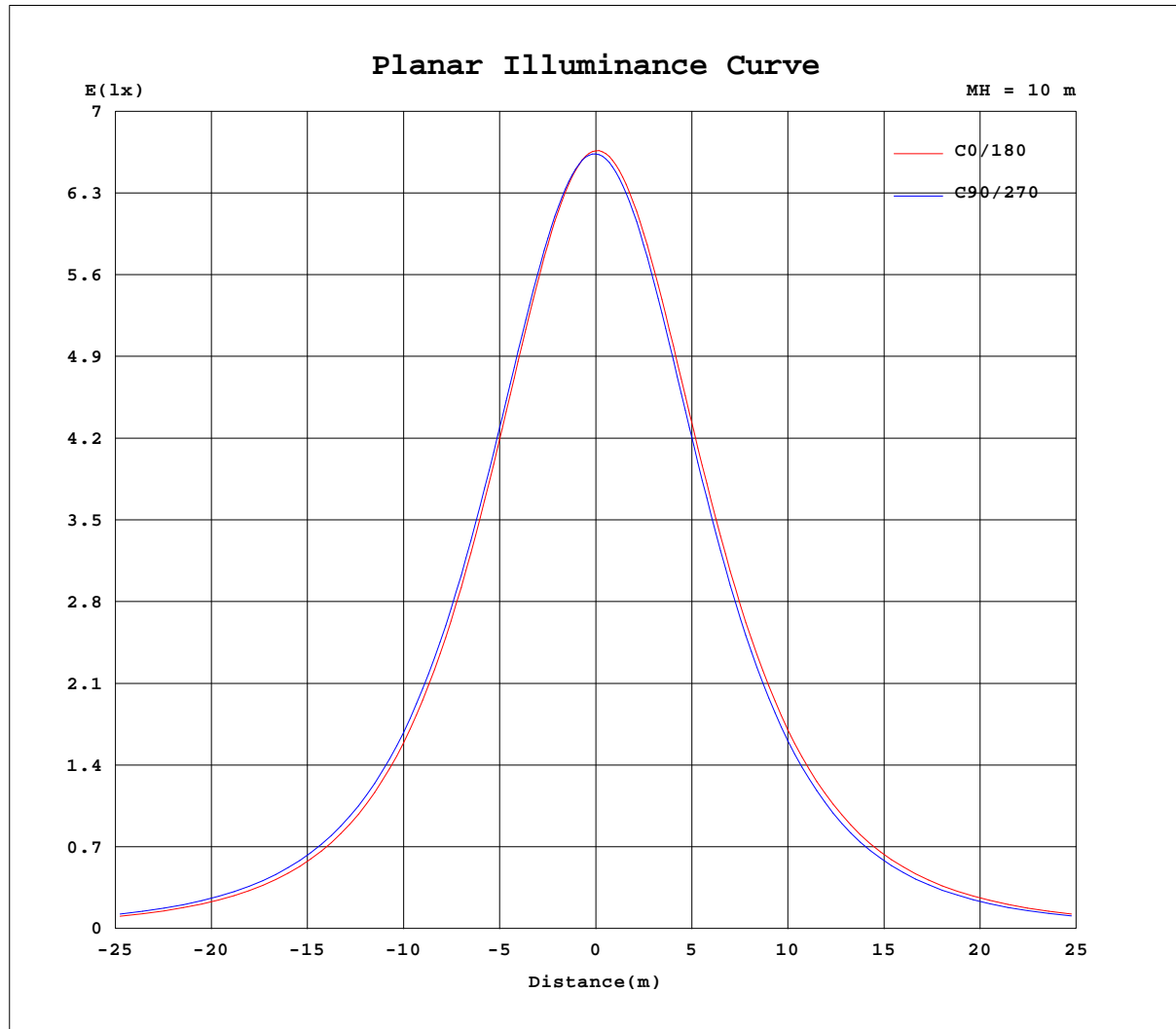
AvgL	cd/m2
L_0~180(65)av	61231
L_0~180(75)av	54176
L_0~180(85)av	42950
L_90~270(65)av	61306
L_90~270(75)av	53900
L_90~270(85)av	42333
L_45(65)av	61495
L_45(75)av	54500
L_45(85)av	46160

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2021-01-29

Range: 0 - 180DEG
Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.950m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.4319A P:10.36W PF:1.000 Freq:0Hz Lamp Flux:2041.6x1 lm		
NAME: D81802410NO	TYPE:	WEIGHT:
SPEC.:D81802410NO-8WWNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	45	90	135	180	225	270	315										
0	666	664	664	666	666	664	664	666										
5	662	661	662	666	666	663	660	660										
10	653	652	656	662	660	656	652	650										
15	638	639	645	652	650	645	638	635										
20	619	620	628	638	634	628	620	614										
25	595	597	607	618	613	606	596	589										
30	566	570	582	594	588	580	568	559										
35	532	537	551	565	557	548	535	525										
40	494	500	516	531	522	512	498	486										
45	451	458	476	492	482	471	456	442										
50	404	411	432	450	438	426	408	395										
55	353	360	383	400	386	376	356	344										
60	298	306	330	347	333	322	301	290										
65	241	250	274	292	277	265	244	233										
70	181	192	215	233	217	204	185	173										
75	124	134	153	172	156	143	126	115										
80	71.4	80.5	95.8	112	97.5	88.3	71.1	61.8										
85	29.0	36.6	47.3	60.7	45.9	42.6	26.5	21.0										
90	6.63	12.2	15.7	26.7	13.9	15.1	2.64	3.55										
95	2.55	5.34	6.43	15.1	5.82	5.85	1.20	1.71										
100	2.66	3.35	2.43	10.6	4.13	3.22	1.95	2.30										
105	3.42	3.29	2.68	8.22	2.58	2.89	2.83	2.96										
110	4.30	3.98	3.20	6.52	3.31	3.16	3.57	3.80										
115	5.19	4.72	3.91	5.63	4.11	3.80	4.27	4.64										
120	6.04	5.30	4.59	5.50	4.90	4.47	4.90	5.33										
125	6.80	5.77	5.22	5.84	5.64	5.18	5.49	5.89										
130	7.44	6.24	5.81	6.39	6.32	5.82	5.99	6.38										
135	7.99	6.65	6.30	6.94	6.93	6.46	6.43	6.82										
140	8.41	6.99	6.80	7.48	7.47	7.16	6.80	7.15										
145	8.73	7.24	7.42	8.02	7.90	7.73	7.21	7.42										
150	9.09	7.50	8.27	8.60	8.16	8.34	7.93	7.65										
155	9.48	7.91	8.94	9.23	8.47	8.91	8.80	8.00										
160	9.80	8.61	9.62	9.85	8.86	9.47	9.65	8.66										
165	10.1	9.39	10.3	10.4	9.25	9.92	10.3	9.56										
170	9.71	10.2	10.8	11.0	9.38	10.5	10.8	10.5										
175	9.38	11.0	11.4	11.6	9.24	11.1	11.4	11.4										
180	9.74	11.7	11.8	12.3	9.74	11.7	11.8	12.3										

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks: