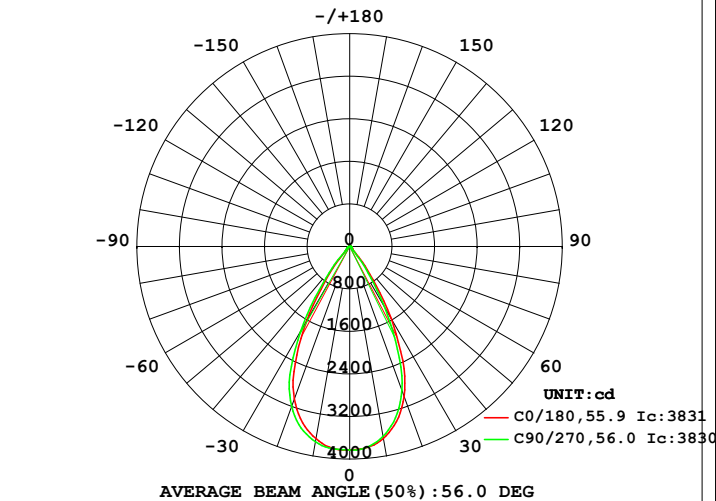


## LUMINAIRE PHOTOMETRIC TEST REPORT

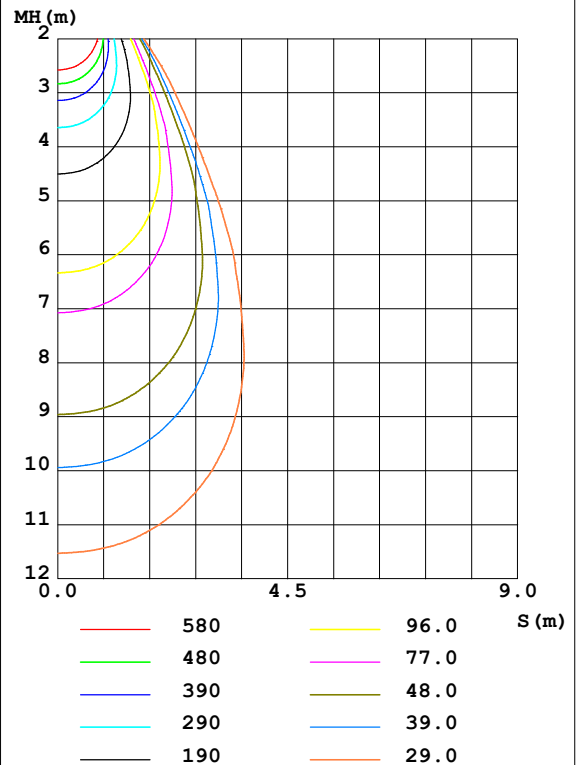
Test:U:224.8V I:0.1810A P:39.70W PF:0.9760 Freq:50.00Hz Lamp Flux:3105.86x1 lm					
NAME: DP165RW-WF01-40G30		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:155		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 78.23 lm/W
MODEL	3000K CRI90	I <sub>max</sub> (cd)	3833	S/MH(C0/180)	0.84	
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	0.88	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	3105.9	η UP,DN(C0-180)	0.0,46.3	
NOMINAL FLUX(lm)	3105.86	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,53.7	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	36	η down(%)	100.0	CIBSE SHR MAX	0.85	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZR  
 Test Date:2021-07-16

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
 Humidity:65.0%  
 Test Distance:8.402m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	3666	3630	3626	3627	3668	3718	3731	3724	0- 10	359.0	359.0	11.6,11.6
20	2996	2908	2872	2909	3052	3156	3197	3142	10- 20	954.5	1313	42.3,42.3
30	1564	1375	1317	1389	1634	1785	1858	1789	20- 30	1074	2387	76.9,76.9
40	266.2	183.9	169.6	172.0	315.9	408.3	454.1	447.0	30- 40	523.7	2911	93.7,93.7
50	57.38	48.90	43.59	44.87	78.65	87.21	88.33	87.19	40- 50	93.02	3004	96.7,96.7
60	27.14	25.93	25.09	24.96	43.64	45.20	47.57	46.93	50- 60	42.67	3047	98.1,98.1
70	18.05	17.01	16.25	16.14	28.80	30.10	31.09	31.21	60- 70	29.15	3076	99.99
80	10.68	9.626	7.785	8.925	17.38	17.68	16.91	18.50	70- 80	19.40	3095	99.7,99.7
90	5.755	5.944	6.019	5.922	9.378	9.566	9.638	9.616	80- 90	10.59	3106	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): 2970.9 lm

%lum = 95.7%

%lamp = 95.7%

Conical surface Flux(120deg): 3046.7 lm

%lum = 98.1%

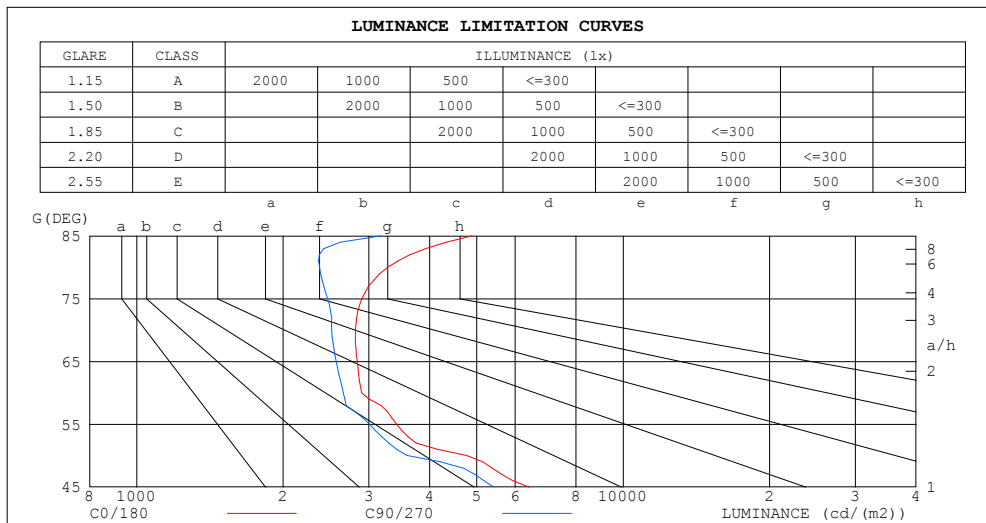
%lamp = 98.1%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZR  
 Test Date:2021-07-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
 Humidity:65.0%  
 Test Distance:8.402m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:224.8V I:0.1810A P:39.70W PF:0.9760 Freq:50.00Hz Lamp Flux:3105.86x1 lm		
NAME: DP165RW-WF01-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4887	3174
80	3283	2375
75	2904	2469
70	2817	2516
65	2840	2571
60	2897	2658
55	3418	3009
50	4764	3592
45	6412	5417

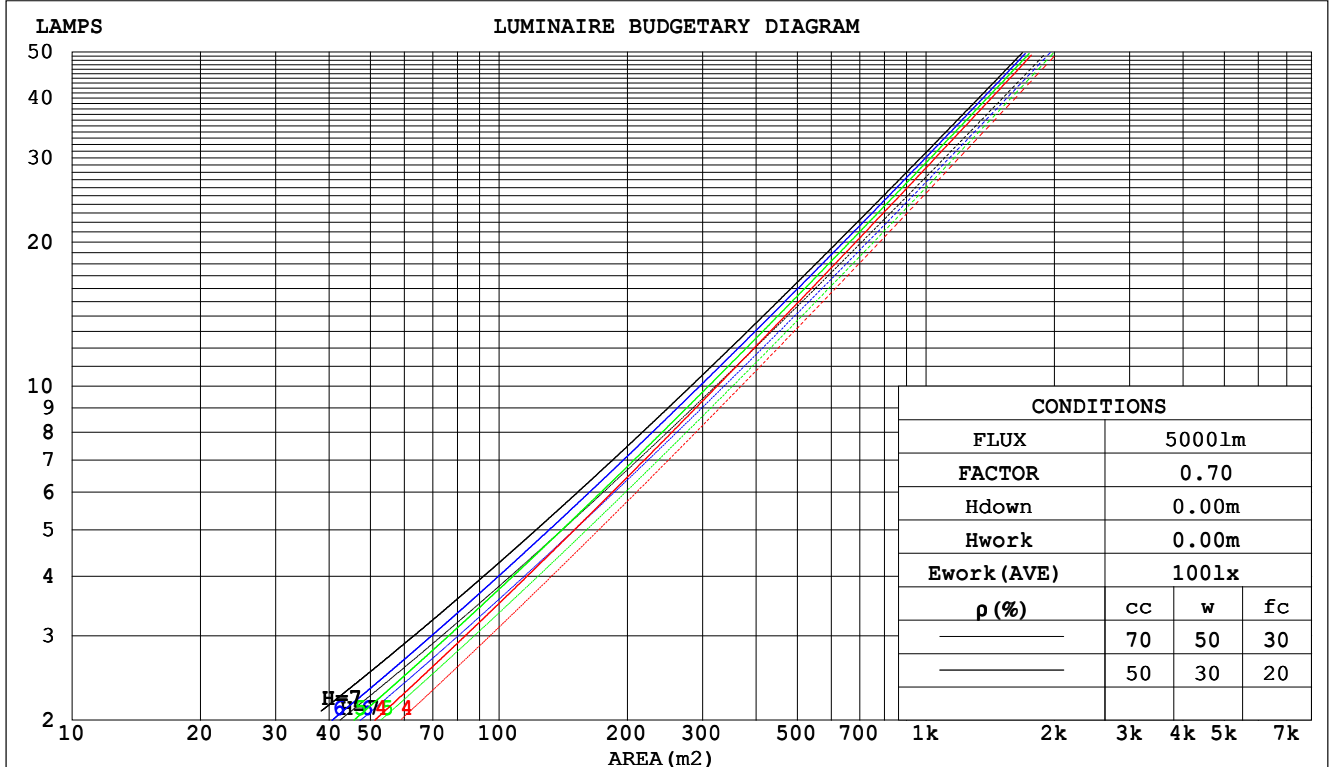
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZR  
Test Date:2021-07-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
Humidity:65.0%  
Test Distance:8.402m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:224.8V I:0.1810A P:39.70W PF:0.9760 Freq:50.00Hz Lamp Flux:3105.86x1 lm		
NAME: DP165RW-WF01-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	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	.00
1.0	1.11	1.08	1.06	1.08	1.06	1.04	1.04	1.03	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.96	1.01	.98	.95	.98	.95	.93	.95	.93	.91	.92	.90	.89	.87
3.0	.96	.91	.88	.95	.90	.87	.92	.89	.85	.90	.87	.84	.88	.85	.83	.81
4.0	.90	.85	.81	.89	.84	.80	.87	.83	.79	.85	.81	.78	.83	.80	.78	.76
5.0	.85	.79	.75	.84	.79	.75	.82	.78	.74	.81	.77	.73	.79	.76	.73	.71
6.0	.80	.74	.70	.79	.74	.70	.78	.73	.69	.76	.72	.69	.75	.71	.68	.67
7.0	.75	.70	.66	.75	.69	.65	.74	.69	.65	.72	.68	.65	.71	.67	.64	.63
8.0	.71	.66	.62	.71	.65	.61	.70	.65	.61	.69	.64	.61	.68	.64	.61	.59
9.0	.68	.62	.58	.67	.62	.58	.66	.61	.58	.65	.61	.58	.65	.60	.57	.56
10.0	.64	.59	.55	.64	.58	.55	.63	.58	.55	.62	.58	.54	.62	.57	.54	.53



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZR  
 Test Date:2021-07-16

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
 Humidity:65.0%  
 Test Distance:8.402m [K=1.0000]  
 Remarks:

### WEC AND CCEC

Test:U:224.8V I:0.1810A P:39.70W PF:0.9760 Freq:50.00Hz Lamp Flux:3105.86x1 lm								
NAME: DP165RW-WF01-40G30				TYPE:			WEIGHT:	
SPEC.:				DIM.:			SERIAL No.:	
MFR.:				SUR.:155			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	.180	.102	.032	.173	.099	.031	.161	.092	.029	.149	.086	.028	.138	.080	.026	
2.0	.170	.093	.029	.165	.091	.028	.154	.086	.027	.144	.081	.025	.135	.076	.024	
3.0	.161	.086	.026	.156	.084	.025	.147	.080	.024	.139	.076	.023	.131	.073	.022	
4.0	.152	.079	.023	.148	.078	.023	.141	.075	.022	.133	.072	.022	.127	.069	.021	
5.0	.145	.074	.021	.141	.073	.021	.134	.070	.021	.128	.068	.020	.122	.065	.020	
6.0	.138	.069	.020	.135	.068	.020	.129	.066	.019	.123	.064	.019	.118	.062	.018	
7.0	.132	.065	.018	.129	.064	.018	.124	.062	.018	.119	.061	.018	.114	.059	.017	
8.0	.126	.061	.017	.123	.061	.017	.119	.059	.017	.114	.058	.017	.110	.057	.016	
9.0	.121	.058	.016	.118	.058	.016	.114	.056	.016	.110	.055	.016	.106	.054	.016	
10.0	.116	.055	.015	.114	.055	.015	.110	.054	.015	.106	.053	.015	.103	.052	.015	

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	.171	.157	.145	.147	.135	.124	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.132	.113	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.143	.114	.090	.123	.098	.078	.084	.068	.055	.049	.040	.032	.016	.013	.011	
4.0	.133	.099	.073	.114	.085	.063	.078	.060	.044	.045	.035	.026	.015	.011	.009	
5.0	.124	.087	.060	.107	.075	.052	.073	.053	.037	.043	.031	.022	.014	.010	.007	
6.0	.117	.078	.050	.100	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.110	.070	.042	.095	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.104	.064	.036	.090	.056	.032	.062	.039	.022	.036	.023	.013	.012	.008	.004	
9.0	.099	.059	.032	.085	.051	.027	.059	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.095	.054	.028	.082	.047	.024	.057	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZR  
Test Date:2021-07-16

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
Humidity:65.0%  
Test Distance:8.402m [K=1.0000]  
Remarks:

UGR(Unified Glare Rating) Table

Test:U:224.8V I:0.1810A P:39.70W PF:0.9760 Freq:50.00Hz Lamp Flux:3105.86x1 lm										
NAME: DP165RW-WF01-40G30					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:					SUR.:155			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	11.8	12.8	12.0	12.9	13.1	10.9	11.8	11.1	11.9	12.1
3H	11.8	12.7	12.1	12.9	13.1	10.9	11.7	11.1	11.9	12.1
4H	11.9	12.7	12.1	12.9	13.1	10.9	11.7	11.2	12.0	12.2
6H	11.9	12.7	12.2	12.9	13.2	11.0	11.7	11.3	12.0	12.2
8H	12.0	12.7	12.3	13.0	13.2	11.0	11.7	11.3	11.9	12.2
12H	12.0	12.7	12.4	13.0	13.3	11.0	11.7	11.3	11.9	12.2
4H 2H	11.6	12.5	11.9	12.7	12.9	10.7	11.5	11.0	11.7	11.9
3H	11.7	12.4	12.0	12.7	13.0	10.8	11.5	11.1	11.8	12.1
4H	11.8	12.5	12.2	12.8	13.1	10.9	11.6	11.3	11.9	12.2
6H	12.0	12.5	12.3	12.9	13.2	11.0	11.6	11.4	11.9	12.3
8H	12.1	12.6	12.5	12.9	13.3	11.1	11.6	11.5	11.9	12.3
12H	12.2	12.7	12.6	13.1	13.4	11.1	11.6	11.5	12.0	12.4
8H 4H	11.8	12.3	12.2	12.6	13.0	10.9	11.4	11.3	11.8	12.1
6H	12.0	12.4	12.4	12.8	13.2	11.1	11.5	11.5	11.9	12.3
8H	12.2	12.6	12.6	13.0	13.4	11.2	11.6	11.6	12.0	12.4
12H	12.4	12.7	12.9	13.2	13.7	11.3	11.6	11.8	12.1	12.5
12H 4H	11.7	12.2	12.2	12.6	13.0	10.9	11.4	11.3	11.7	12.1
6H	12.0	12.4	12.4	12.8	13.2	11.1	11.5	11.6	11.9	12.3
8H	12.2	12.5	12.7	13.0	13.4	11.2	11.5	11.7	12.0	12.5
Variations with the observer position at spacings:										
S = 1.0H	+ 3.0 / - 3.0					+ 2.9 / - 2.5				
1.5H	+ 5.2 / - 2.8					+ 5.1 / - 2.3				
2.0H	+ 1.1 / - 0.4					+ 1.1 / - 0.6				

CIE Pub.117, 3106 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.9)

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZR  
Test Date:2021-07-16

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
Humidity:65.0%  
Test Distance:8.402m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:224.8V I:0.1810A P:39.70W PF:0.9760 Freq:50.00Hz Lamp Flux:3105.86x1 lm		
NAME: DP165RW-WF01-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:

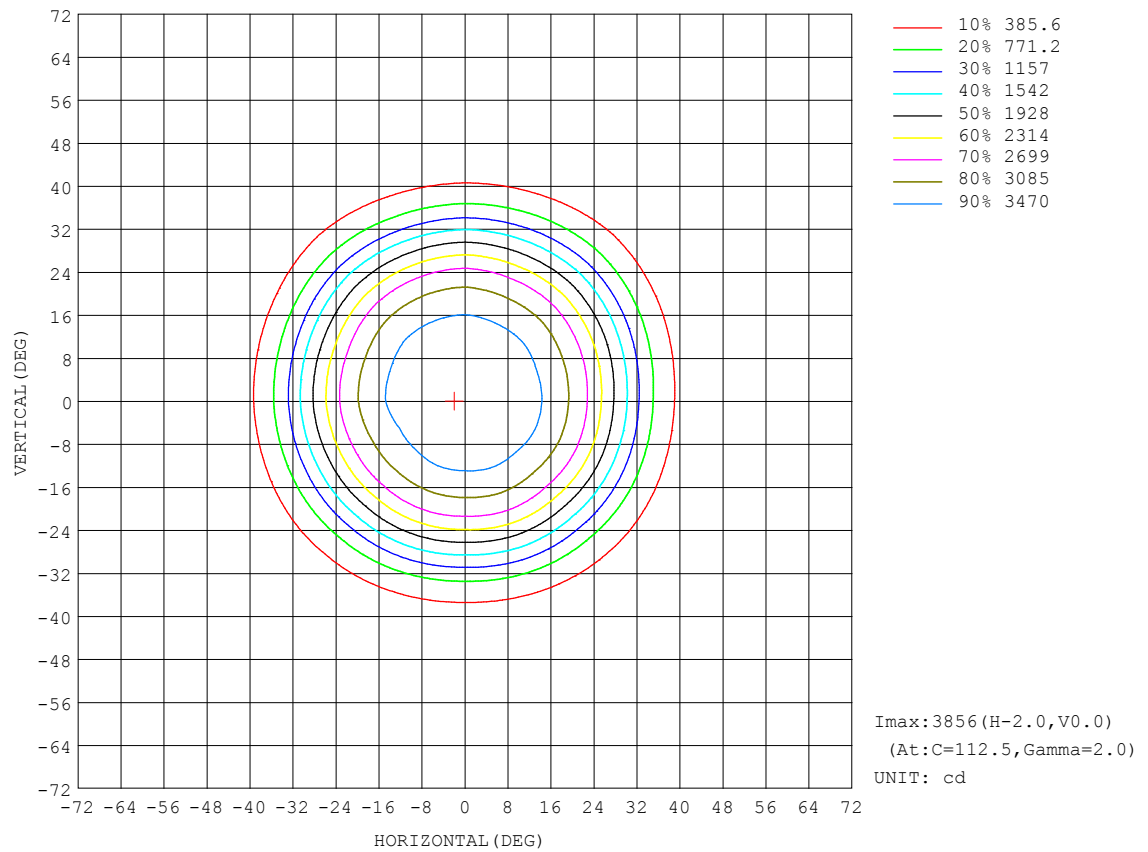
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	81	78	87	81	78	86	81	77	74
0.80	95	89	85	94	89	85	93	88	85	81
1.00	99	94	90	98	93	90	97	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	98	105	100	97	102	99	96	92
2.00	108	104	101	107	103	100	104	101	99	93
2.50	110	106	103	108	105	102	105	103	100	95
3.00	112	108	105	110	107	104	106	104	102	96
4.00	114	111	109	112	109	107	108	106	105	97
5.00	115	113	111	113	111	109	109	107	106	99
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZR  
Test Date:2021-07-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
Humidity:65.0%  
Test Distance:8.402m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:224.8V I:0.1810A P:39.70W PF:0.9760 Freq:50.00Hz Lamp Flux:3105.86x1 lm		
NAME: DP165RW-WF01-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:



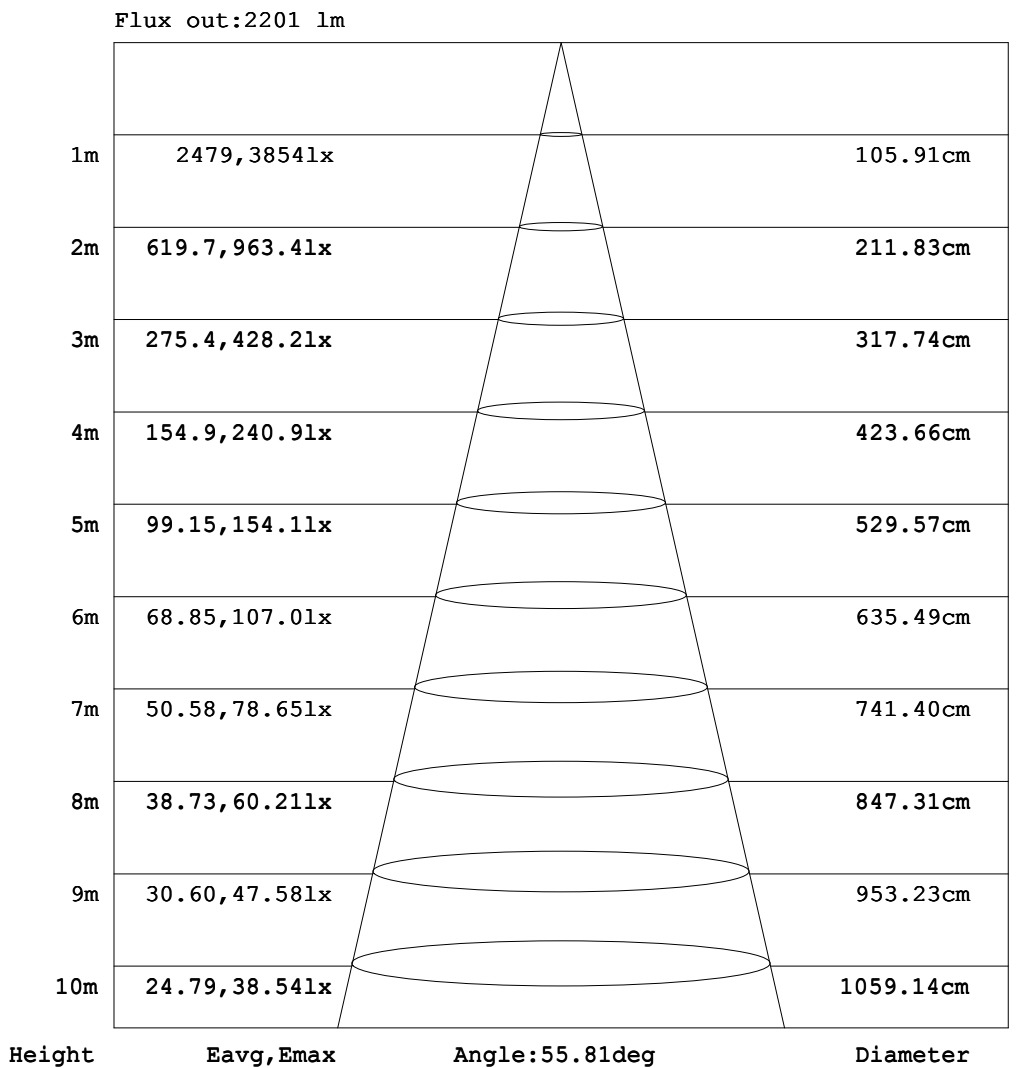
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZR  
Test Date:2021-07-16

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
Humidity:65.0%  
Test Distance:8.402m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:224.8V I:0.1810A P:39.70W PF:0.9760 Freq:50.00Hz Lamp Flux:3105.86x1 lm		
NAME: DP165RW-WF01-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:



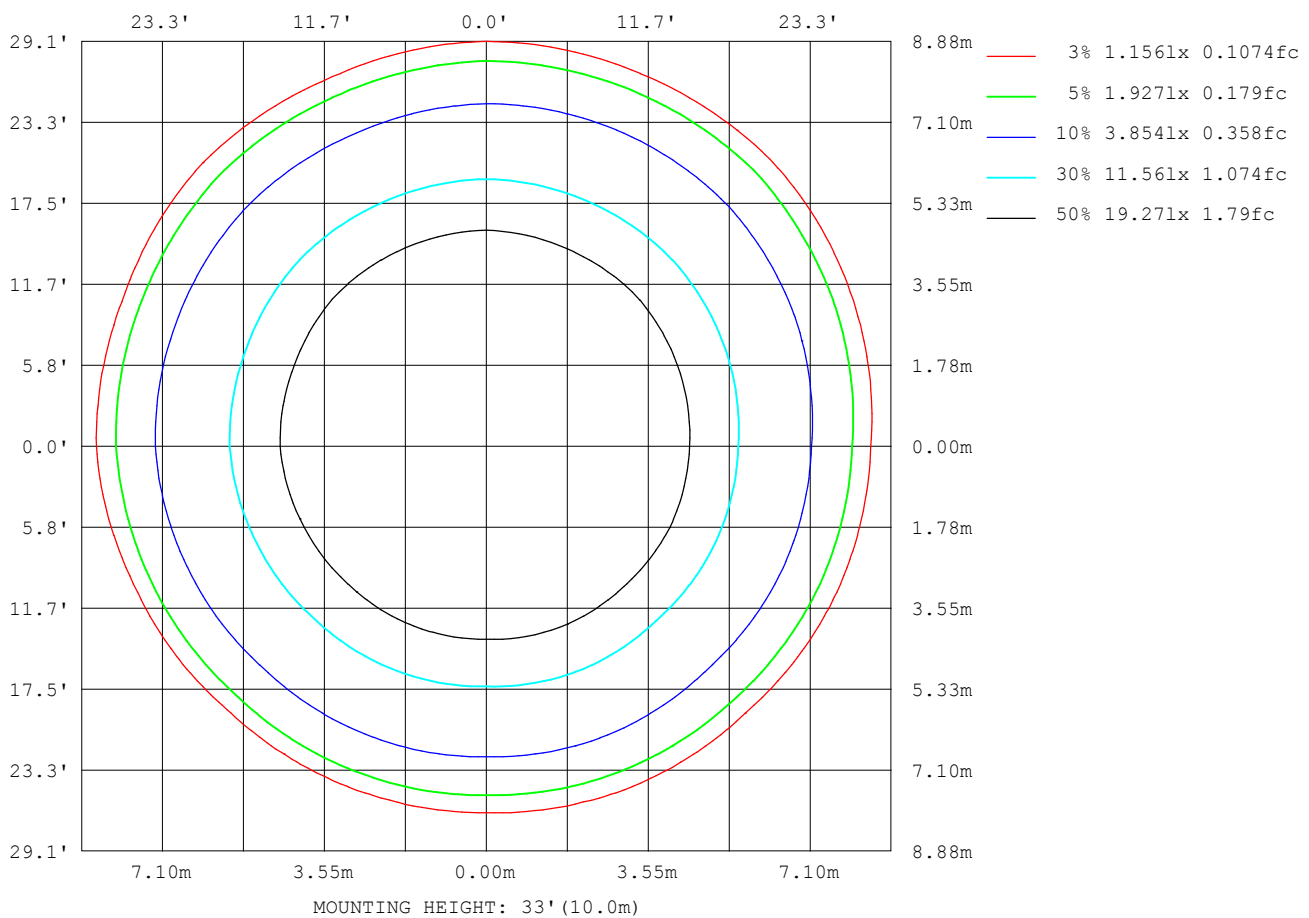
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZR  
Test Date:2021-07-16

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
Humidity:65.0%  
Test Distance:8.402m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

Test:U:224.8V I:0.1810A P:39.70W PF:0.9760 Freq:50.00Hz Lamp Flux:3105.86x1 lm		
NAME: DP165RW-WF01-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZR  
 Test Date:2021-07-16

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
 Humidity:65.0%  
 Test Distance:8.402m [K=1.0000]  
 Remarks:

## LED Avg.L Report

Test:U:224.8V I:0.1810A P:39.70W PF:0.9760 Freq:50.00Hz Lamp Flux:3105.86x1 lm		
NAME: DP165RW-WF01-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:

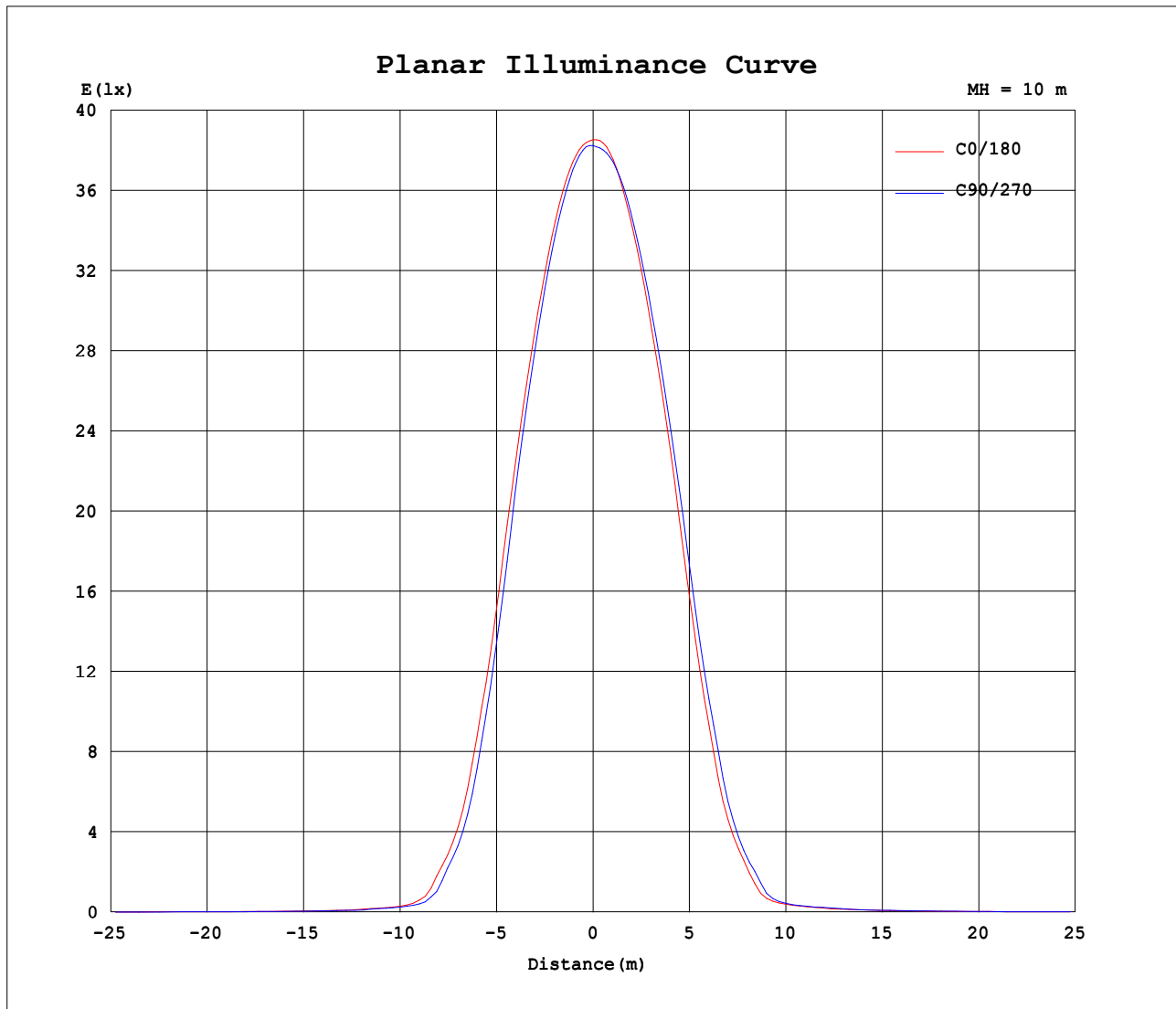
AvgL	cd/m2
L_0~180 (65) av	3665
L_0~180 (75) av	3765
L_0~180 (85) av	6340
L_90~270 (65) av	3704
L_90~270 (75) av	3664
L_90~270 (85) av	5001
L_45 (65) av	3693
L_45 (75) av	3799
L_45 (85) av	5389

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZR  
 Test Date:2021-07-16

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
 Humidity:65.0%  
 Test Distance:8.402m [K=1.0000]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: ZR  
Test Date: 2021-07-16

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
Humidity: 65.0%  
Test Distance: 8.402m [K=1.0000]  
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:8.402m [K=1.0000]
Remarks:

```