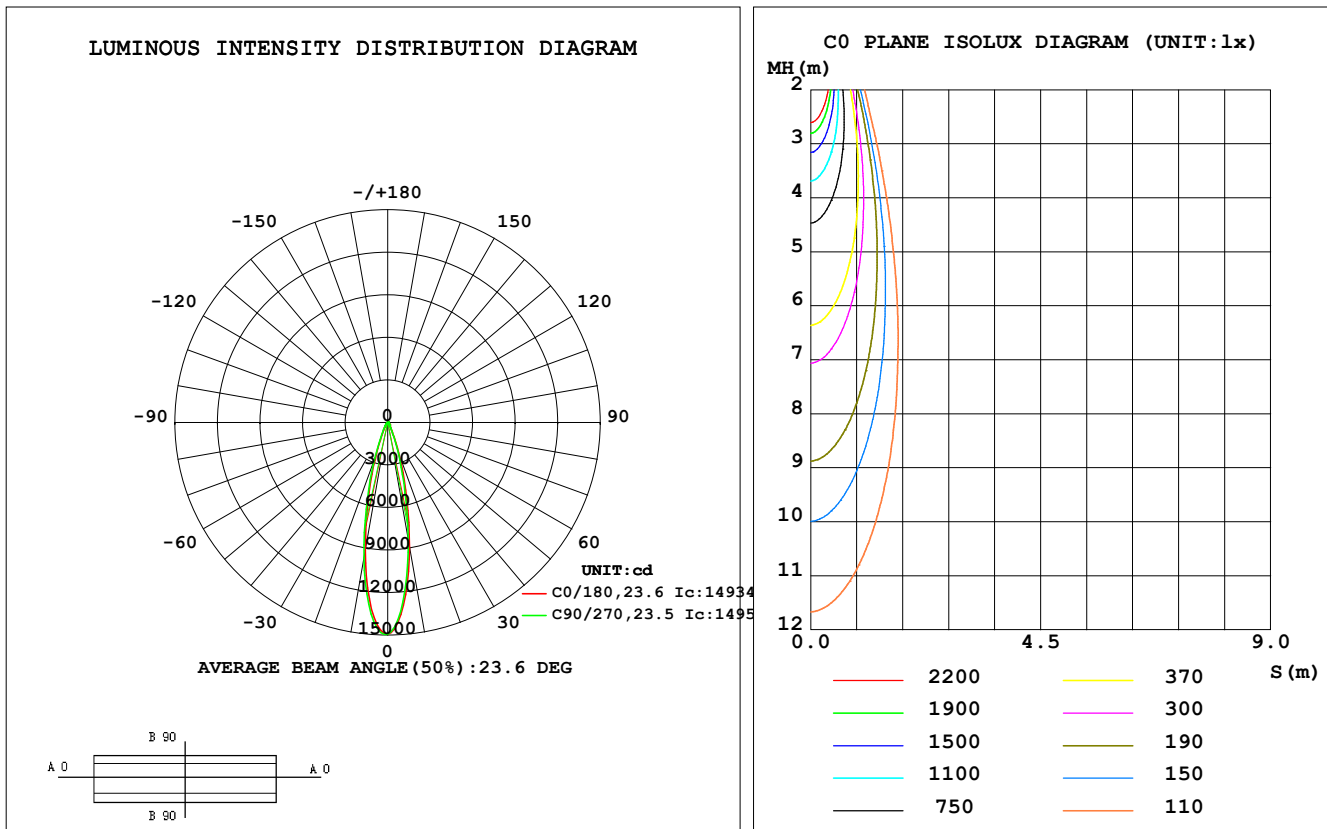


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:224.9V I:0.1820A P:40.10W PF:0.9780 Freq:50.00Hz Lamp Flux:3485.68x1 lm					
NAME: DP165RW-M01-40G30		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:155		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 86.92 lm/W
MODEL	3000K CRI90	I <sub>max</sub> (cd)	15046	S/MH(C0/180)	0.40	
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	0.43	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	3485.7	η UP,DN(C0-180)	0.0,45.8	
NOMINAL FLUX(lm)	3485.68	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,54.2	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE(V)	36	η down(%)	100.0	CIBSE SHR MAX	1.00	



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	890.3	859.9	836.5	789.2	914.9	952.3	967.4	1017	0- 10	1115	1115	32,32
20	227.1	216.7	198.9	176.3	233.9	262.1	267.3	290.1	10- 20	1387	2502	71.8,71.8
30	48.32	47.79	43.11	40.63	50.98	59.53	59.65	63.50	20- 30	504.4	3006	86.2,86.2
40	21.35	20.69	19.42	18.32	24.27	26.52	27.24	28.43	30- 40	213.2	3219	92.4,92.4
50	5.961	5.791	5.645	5.395	8.660	8.964	9.114	10.03	40- 50	108.2	3327	95.5,95.5
60	3.957	3.941	3.912	3.840	5.793	5.795	5.801	6.031	50- 60	53.38	3381	97,97
70	3.165	3.152	3.111	3.074	4.319	4.310	4.311	4.415	60- 70	42.27	3423	98.2,98.2
80	2.607	2.539	2.368	2.455	3.288	3.240	3.144	3.299	70- 80	34.65	3458	99.2,99.2
90	2.233	2.214	2.203	2.203	2.591	2.570	2.560	2.579	80- 90	27.94	3486	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:×10cd									UNIT:lm		

Conical surface Flux(90deg): 3284.4 lm

%lum = 94.2%

%lamp = 94.2%

Conical surface Flux(120deg): 3380.8 lm

%lum = 97.0%

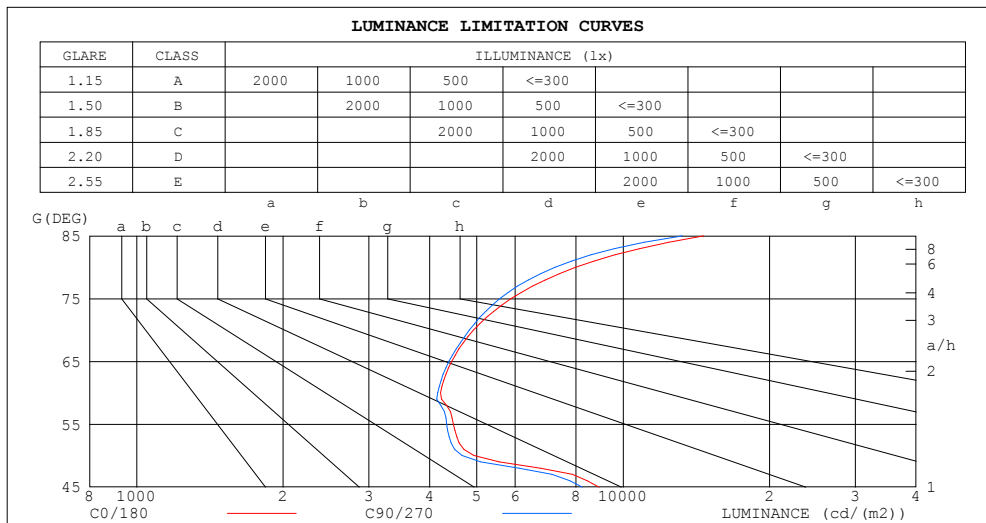
%lamp = 97.0%

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:224.9V I:0.1820A P:40.10W PF:0.9780 Freq:50.00Hz Lamp Flux:3485.68x1 lm		
NAME: DP165RW-M01-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	14646	13242
80	7988	7244
75	5884	5573
70	4924	4831
65	4441	4384
60	4210	4156
55	4476	4338
50	4934	4664
45	8913	8246

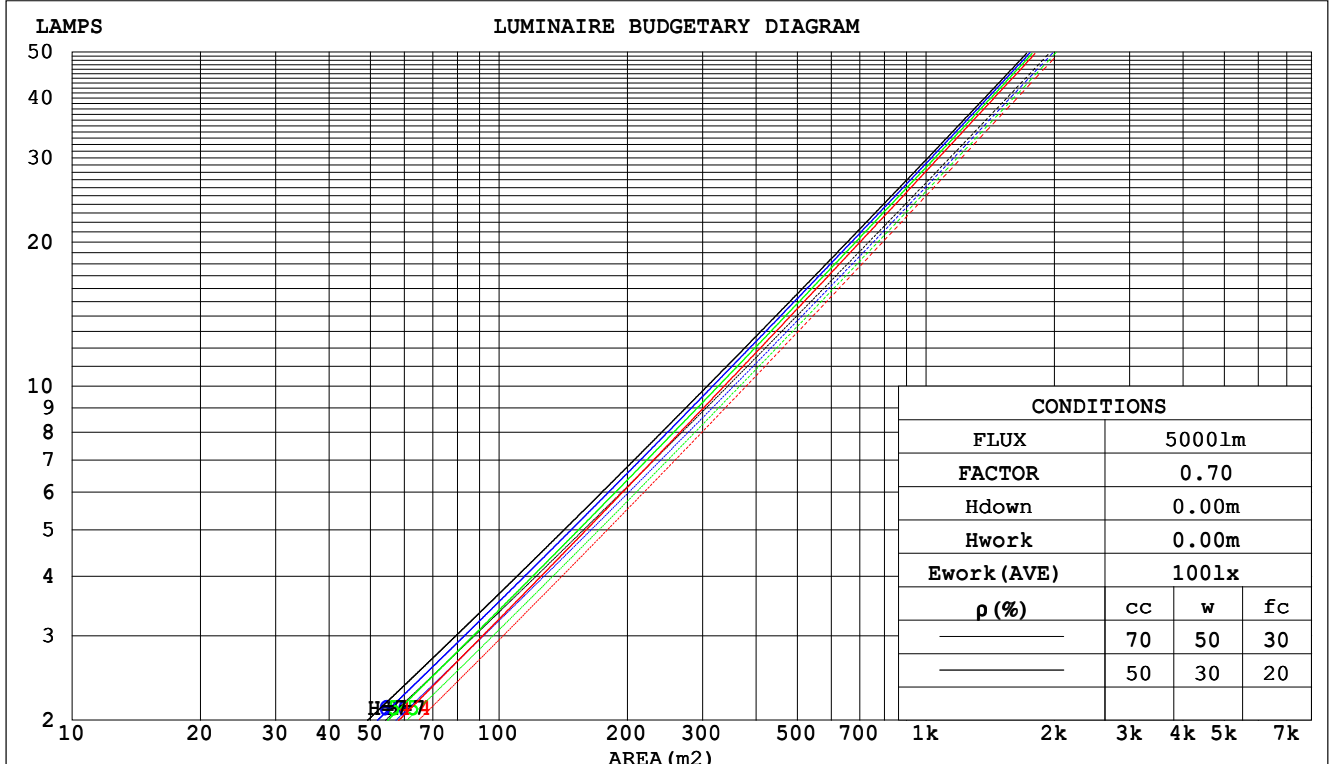
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZR  
Test Date:2021-07-16

$\gamma$  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:224.9V I:0.1820A P:40.10W PF:0.9780 Freq:50.00Hz Lamp Flux:3485.68x1 lm		
NAME: DP165RW-M01-40G30	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	1.00
1.0	1.12	1.09	1.07	1.09	1.07	1.06	1.05	1.04	1.02	1.02	1.00	.99	.98	.97	.96	.95
2.0	1.05	1.02	.99	1.04	1.01	.98	1.01	.98	.96	.98	.96	.94	.95	.93	.92	.90
3.0	1.00	.96	.93	.99	.95	.92	.96	.93	.90	.94	.91	.89	.92	.90	.88	.86
4.0	.95	.91	.87	.94	.90	.87	.92	.89	.86	.90	.87	.85	.89	.86	.84	.83
5.0	.91	.87	.83	.91	.86	.83	.89	.85	.82	.87	.84	.82	.86	.83	.81	.80
6.0	.88	.83	.80	.87	.83	.79	.86	.82	.79	.84	.81	.78	.83	.80	.78	.77
7.0	.85	.80	.77	.84	.80	.76	.83	.79	.76	.82	.78	.76	.81	.78	.75	.74
8.0	.82	.77	.74	.81	.77	.74	.80	.76	.73	.79	.76	.73	.78	.75	.73	.72
9.0	.79	.74	.71	.79	.74	.71	.78	.74	.71	.77	.73	.71	.76	.73	.71	.70
10.0	.77	.72	.69	.76	.72	.69	.76	.72	.69	.75	.71	.69	.74	.71	.69	.68



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:224.9V I:0.1820A P:40.10W PF:0.9780 Freq:50.00Hz Lamp Flux:3485.68x1 lm					
NAME: DP165RW-M01-40G30			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	.162	.092	.029	.156	.089	.028	.143	.082	.026	.132	.076	.024	.121	.070	.023	
2.0	.149	.081	.025	.143	.079	.024	.133	.074	.023	.123	.069	.022	.114	.065	.020	
3.0	.137	.073	.022	.133	.071	.021	.124	.067	.020	.116	.063	.019	.108	.060	.019	
4.0	.128	.066	.020	.124	.065	.019	.116	.062	.018	.109	.059	.018	.103	.056	.017	
5.0	.120	.061	.018	.116	.060	.017	.110	.057	.017	.104	.055	.016	.098	.053	.016	
6.0	.113	.056	.016	.110	.055	.016	.104	.053	.016	.099	.051	.015	.094	.050	.015	
7.0	.106	.053	.015	.104	.052	.015	.099	.050	.014	.094	.048	.014	.090	.047	.014	
8.0	.101	.049	.014	.099	.049	.014	.094	.047	.013	.090	.046	.013	.087	.045	.013	
9.0	.096	.046	.013	.094	.046	.013	.090	.045	.013	.087	.043	.012	.083	.042	.012	
10.0	.092	.044	.012	.090	.043	.012	.087	.042	.012	.083	.041	.012	.080	.040	.012	

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	.170	.157	.146	.146	.135	.126	.100	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.153	.133	.115	.131	.114	.100	.090	.079	.070	.052	.046	.041	.017	.015	.013	
3.0	.139	.113	.093	.119	.098	.081	.082	.068	.057	.047	.040	.033	.015	.013	.011	
4.0	.127	.098	.076	.109	.085	.066	.075	.059	.047	.043	.035	.028	.014	.011	.009	
5.0	.117	.086	.064	.100	.075	.055	.069	.052	.039	.040	.031	.023	.013	.010	.008	
6.0	.108	.076	.054	.093	.066	.047	.064	.046	.033	.037	.027	.020	.012	.009	.006	
7.0	.100	.068	.046	.086	.059	.040	.060	.042	.028	.035	.024	.017	.011	.008	.006	
8.0	.094	.062	.040	.081	.054	.034	.056	.038	.024	.033	.022	.015	.011	.007	.005	
9.0	.088	.056	.034	.076	.049	.030	.053	.034	.021	.031	.020	.013	.010	.007	.004	
10.0	.083	.051	.030	.072	.045	.026	.050	.031	.019	.029	.019	.011	.009	.006	.004	

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:224.9V I:0.1820A P:40.10W PF:0.9780 Freq:50.00Hz Lamp Flux:3485.68x1 lm											
NAME: DP165RW-M01-40G30					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	7.7	8.5	7.9	8.6	8.8	7.5	8.2	7.7	8.4	8.5	
	3H	8.8	9.5	9.0	9.6	9.8	8.5	9.2	8.8	9.4	9.6
	4H	9.5	10.2	9.8	10.4	10.6	9.3	10.0	9.6	10.2	10.4
	6H	10.5	11.2	10.8	11.4	11.6	10.2	10.9	10.5	11.1	11.3
	8H	11.2	11.8	11.5	12.0	12.3	10.8	11.4	11.1	11.7	11.9
	12H	12.0	12.6	12.3	12.8	13.1	11.5	12.1	11.8	12.4	12.6
4H	2H	8.0	8.7	8.3	8.9	9.1	7.8	8.4	8.0	8.6	8.8
	3H	9.4	9.9	9.7	10.2	10.5	9.2	9.8	9.5	10.0	10.3
	4H	10.4	10.9	10.7	11.2	11.5	10.2	10.7	10.5	11.0	11.3
	6H	11.7	12.1	12.0	12.5	12.8	11.4	11.8	11.7	12.2	12.5
	8H	12.4	12.9	12.8	13.2	13.6	12.1	12.5	12.5	12.9	13.2
	12H	13.4	13.8	13.8	14.2	14.6	12.9	13.4	13.3	13.7	14.1
8H	4H	10.8	11.2	11.2	11.6	12.0	10.6	11.1	11.0	11.4	11.8
	6H	12.4	12.7	12.8	13.1	13.6	12.1	12.5	12.5	12.9	13.3
	8H	13.4	13.7	13.8	14.1	14.6	13.0	13.3	13.4	13.8	14.2
	12H	14.6	14.9	15.0	15.3	15.8	14.1	14.4	14.6	14.8	15.3
12H	4H	10.9	11.3	11.3	11.7	12.1	10.7	11.1	11.1	11.5	11.9
	6H	12.6	12.9	13.0	13.3	13.8	12.3	12.7	12.8	13.1	13.5
	8H	13.7	14.0	14.1	14.4	14.9	13.3	13.6	13.8	14.1	14.5
Variations with the observer position at spacings:											
S = 1.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.4					
1.5H	+ 0.7 / - 0.3					+ 0.7 / - 0.4					
2.0H	+ 0.5 / - 0.3					+ 0.4 / - 0.3					

CIE Pub.117, 3486 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.3)

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:224.9V I:0.1820A P:40.10W PF:0.9780 Freq:50.00Hz Lamp Flux:3485.68x1 lm		
NAME: DP165RW-M01-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:

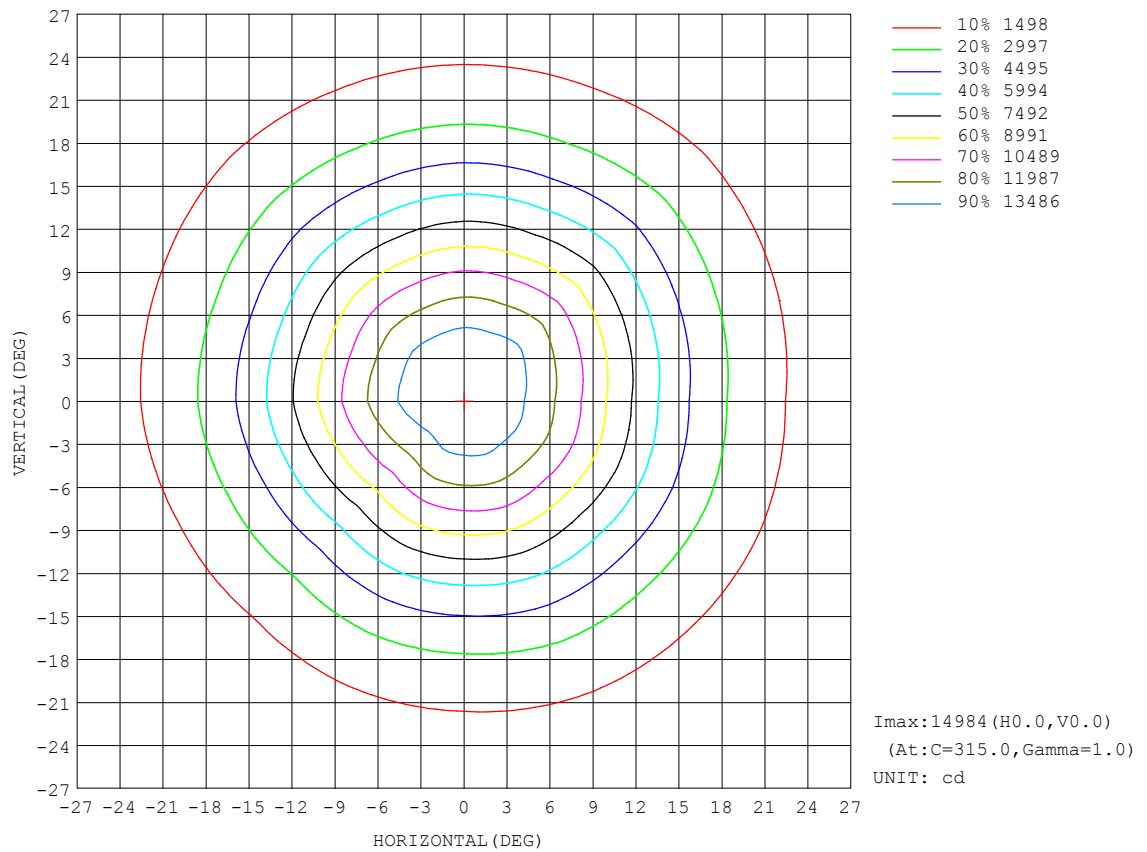
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	80	77	86	80	77	86	80	76	73
0.80	94	88	84	94	88	84	92	87	84	80
1.00	98	93	89	98	92	89	96	92	88	84
1.25	102	97	93	101	96	93	99	95	92	88
1.50	105	100	97	104	99	96	102	98	95	91
2.00	108	103	100	106	102	99	104	100	98	92
2.50	110	106	102	108	104	102	105	102	100	94
3.00	111	108	105	109	106	104	106	103	101	95
4.00	113	110	108	111	109	107	108	106	104	97
5.00	115	112	110	112	110	109	108	107	106	98
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:224.9V I:0.1820A P:40.10W PF:0.9780 Freq:50.00Hz Lamp Flux:3485.68x1 lm		
NAME: DP165RW-M01-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:



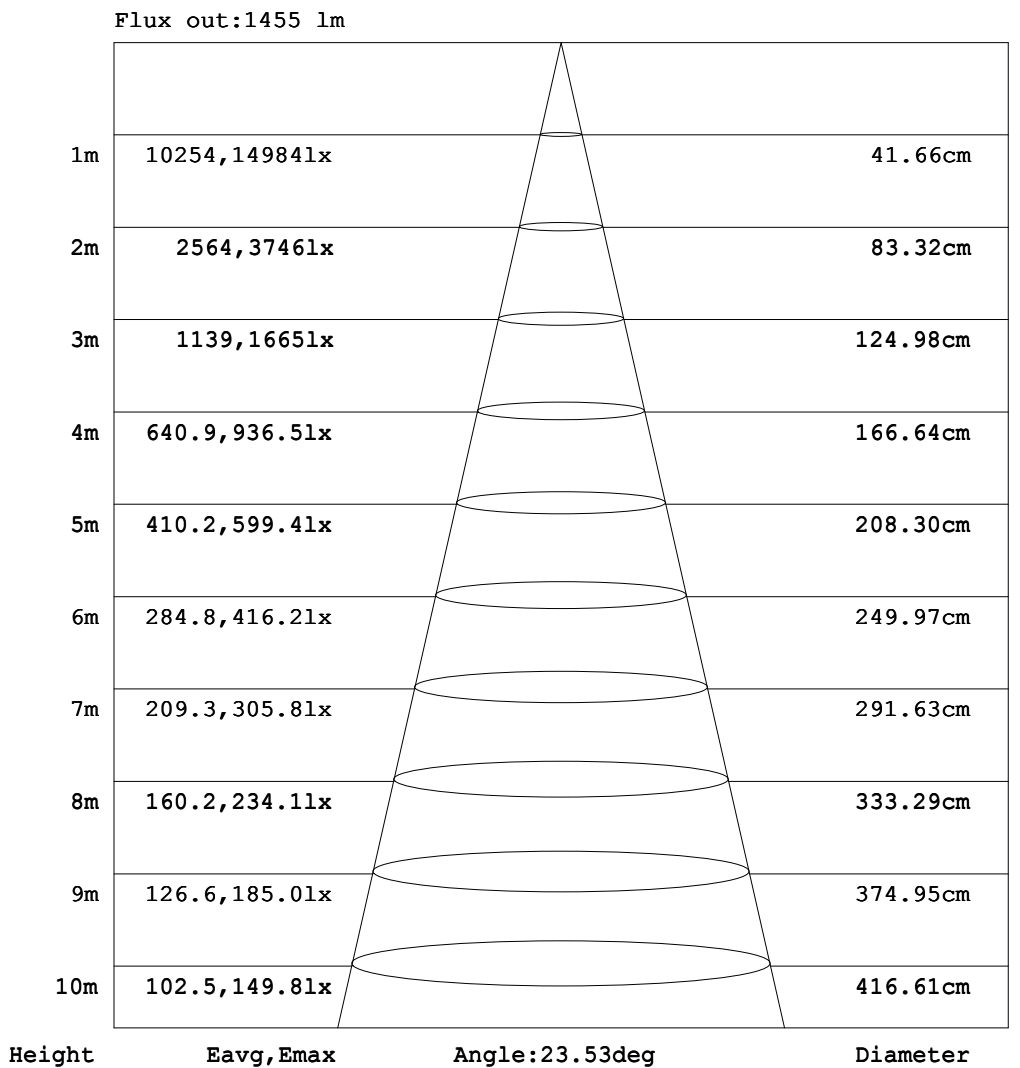
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZR  
Test Date:2021-07-16

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:224.9V I:0.1820A P:40.10W PF:0.9780 Freq:50.00Hz Lamp Flux:3485.68x1 lm		
NAME: DP165RW-M01-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:



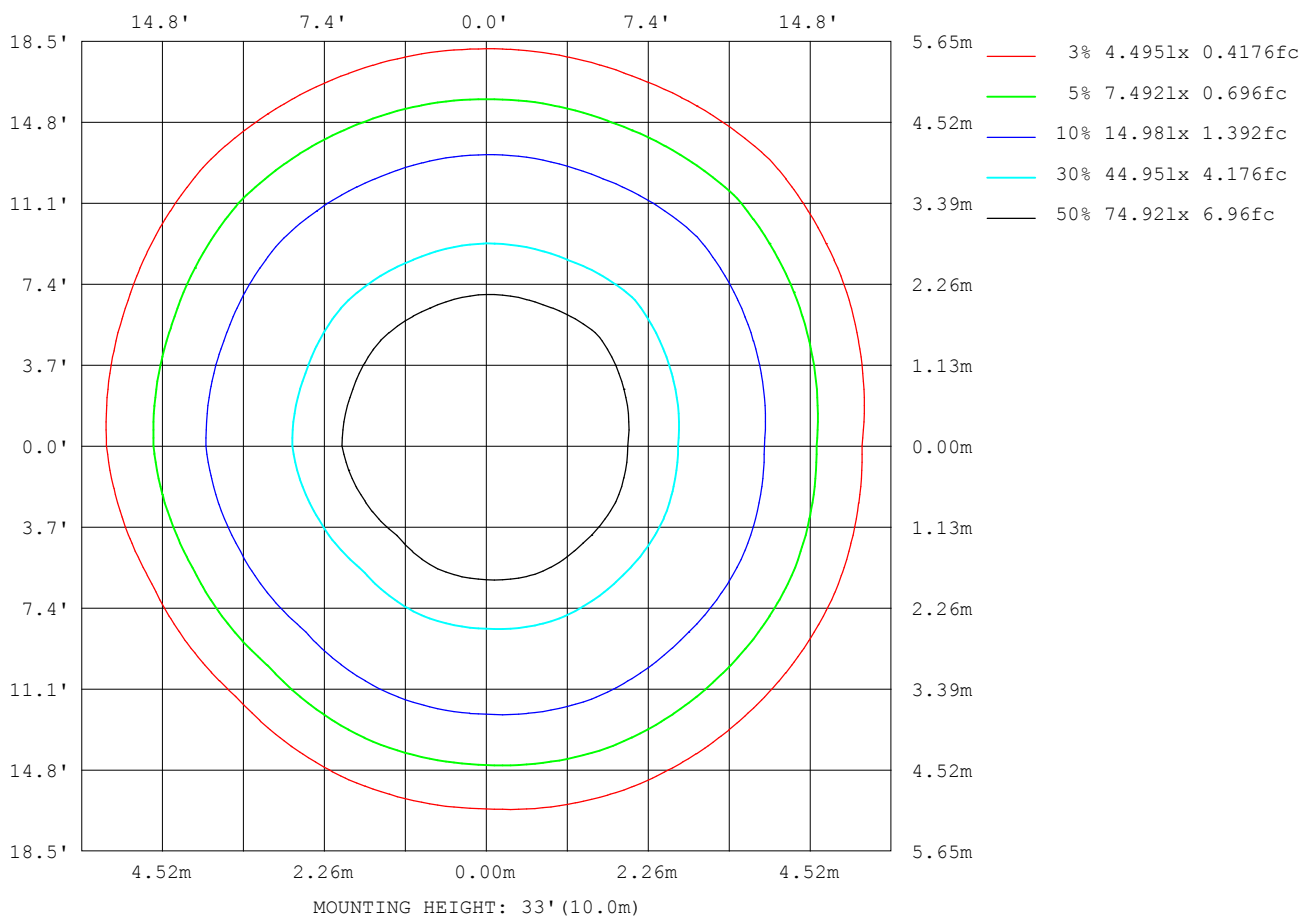
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:224.9V I:0.1820A P:40.10W PF:0.9780 Freq:50.00Hz Lamp Flux:3485.68x1 lm		
NAME: DP165RW-M01-40G30	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:224.9V I:0.1820A P:40.10W PF:0.9780 Freq:50.00Hz Lamp Flux:3485.68x1 lm		
NAME: DP165RW-M01-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:

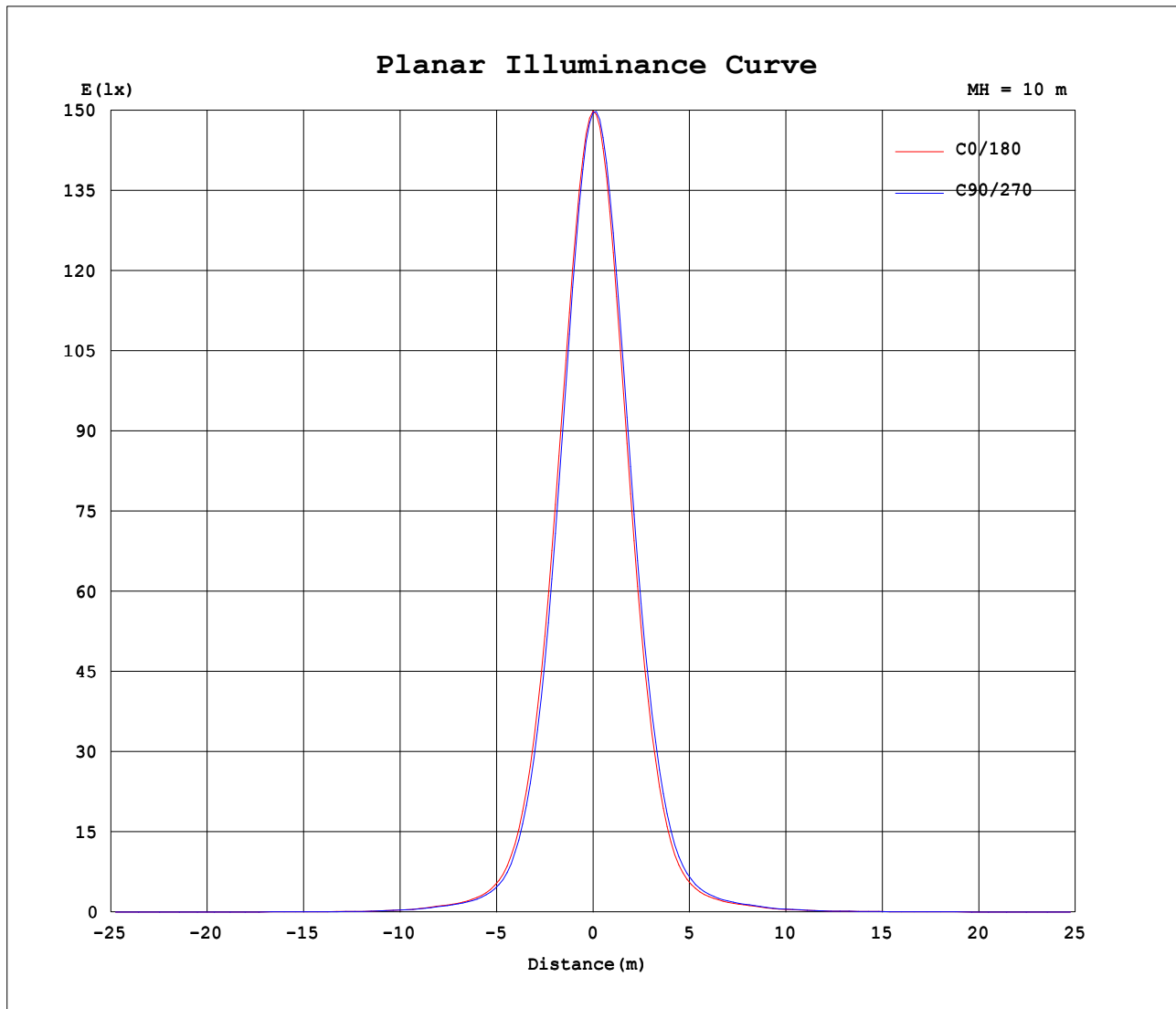
AvgL	cd/m2
L_0~180 (65) av	5347
L_0~180 (75) av	6782
L_0~180 (85) av	16121
L_90~270 (65) av	5322
L_90~270 (75) av	6573
L_90~270 (85) av	14828
L_45 (65) av	5350
L_45 (75) av	6758
L_45 (85) av	15209

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:

```