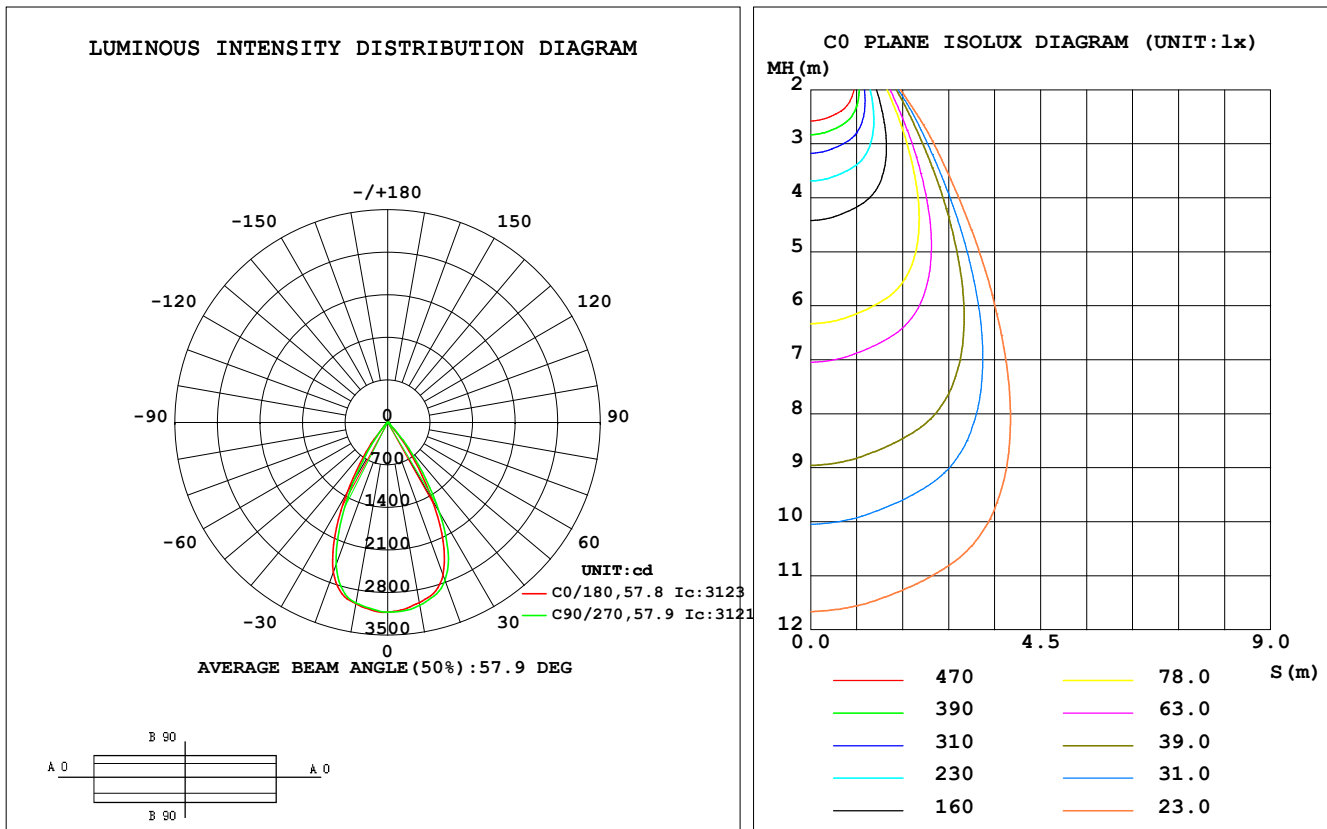


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:224.8V I:0.1480A P:31.80W PF:0.9570 Freq:50.00Hz Lamp Flux:2668.42x1 lm		
NAME: DP145RW-WF02-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 83.91 lm/W			
MODEL	4000K CRI90	I <sub>max</sub> (cd)	3123	S/MH(C0/180)	0.85
NOMINAL POWER(W)	32	LOR(%)	100.0	S/MH(C90/270)	0.80
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	2668.4	η UP,DN(C0-180)	0.0,52.3
NOMINAL FLUX(lm)	2668.42	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,47.7
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	36	η down(%)	100.0	CIBSE SHR MAX	0.90



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	3009	3051	3053	3011	3029	3020	3015	3029	0- 10	293.2	293.2	11,11
20	2668	2786	2761	2599	2618	2493	2481	2698	10- 20	812.2	1105	41.4,41.4
30	1457	1701	1705	1323	1356	1147	1128	1517	20- 30	946.5	2052	76.9,76.9
40	335.7	463.1	468.8	242.8	261.5	160.4	157.4	355.9	30- 40	490.3	2542	95.3,95.3
50	29.77	41.46	40.79	23.43	42.54	30.34	30.50	49.12	40- 50	86.47	2629	98.5,98.5
60	2.823	4.189	4.169	2.731	17.72	17.02	17.03	18.66	50- 60	16.26	2645	99.1,99.1
70	2.927	2.905	2.944	3.041	13.24	12.63	12.63	13.63	60- 70	8.955	2654	99.5,99.5
80	3.510	3.395	3.428	3.611	9.984	9.558	9.541	10.23	70- 80	7.701	2662	99.7,99.7
90	4.583	4.359	4.367	4.795	7.721	7.444	7.406	7.857	80- 90	6.872	2668	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): 2605.6 lm

%lum = 97.6%

%lamp = 97.6%

Conical surface Flux(120deg): 2644.9 lm

%lum = 99.1%

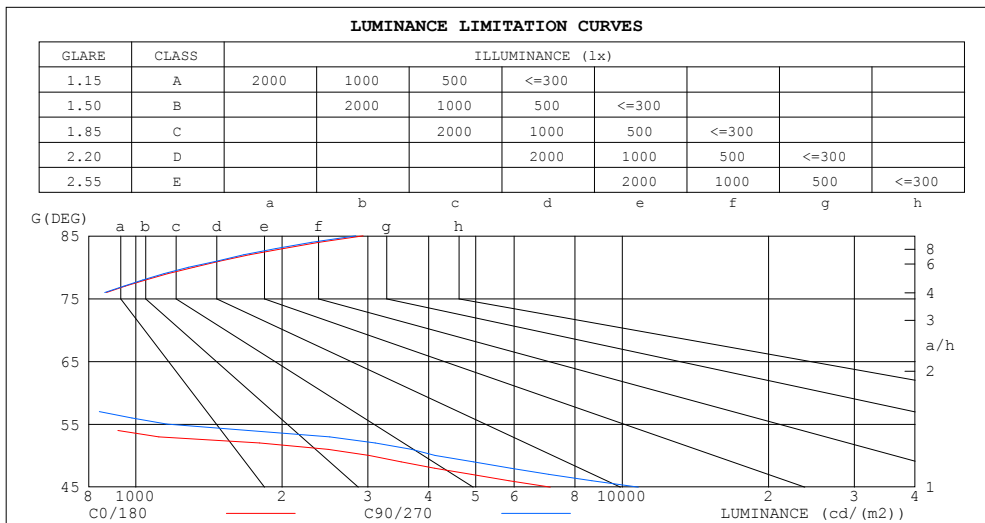
%lamp = 99.1%

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:0.1480A P:31.80W PF:0.9570 Freq:50.00Hz Lamp Flux:2668.42x1 lm		
NAME: DP145RW-WF02-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2935	2833
80	1317	1284
75	799	793
70	558	560
65	414	434
60	368	542
55	784	1158
50	3018	4127
45	7118	10787

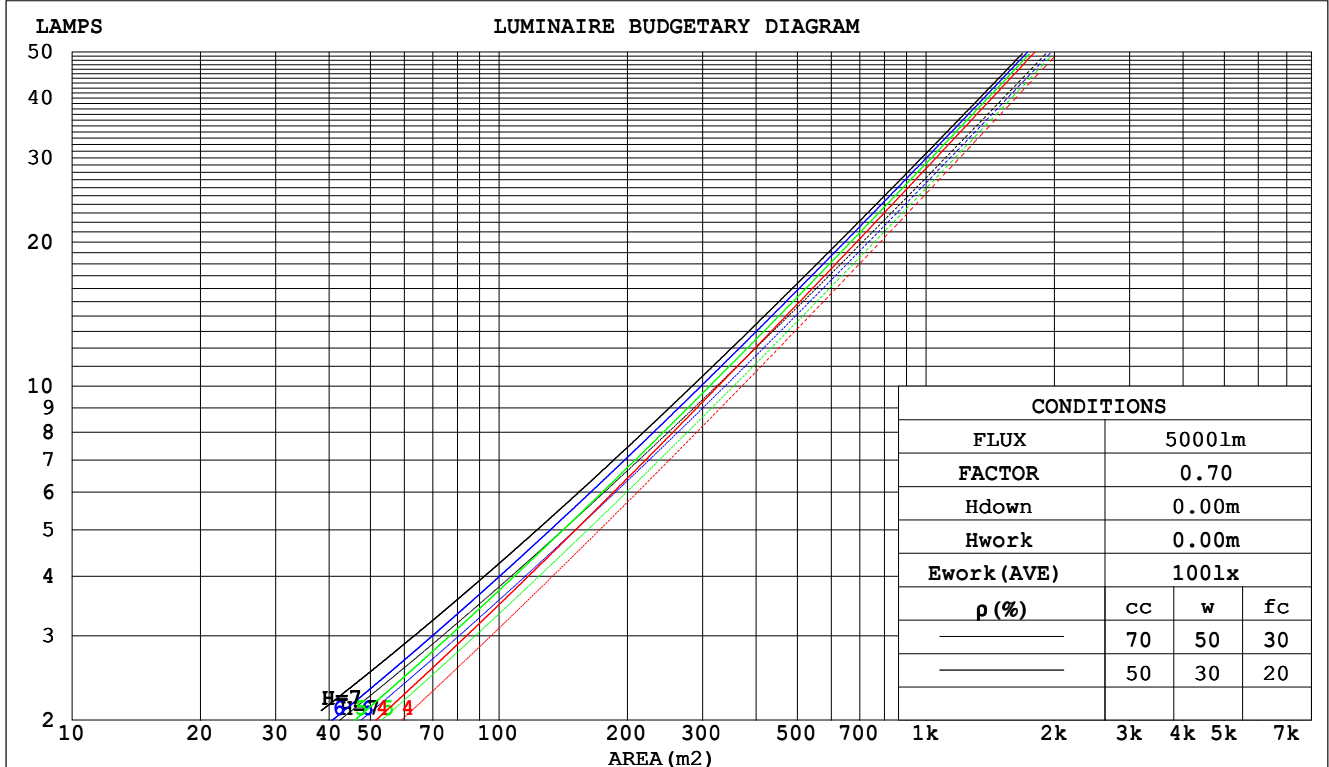
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZR  
Test Date:2021-07-16

$\gamma$  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:0.1480A P:31.80W PF:0.9570 Freq:50.00Hz Lamp Flux:2668.42x1 lm		
NAME: DP145RW-WF02-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	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	1.11	1.08	1.06	1.09	1.06	1.05	1.05	1.03	1.01	1.01	.00	.98	.98	.96	.95	.94
2.0	1.03	.00	.96	1.02	.98	.95	.99	.96	.93	.96	.93	.91	.93	.91	.89	.88
3.0	.97	.92	.88	.95	.91	.87	.93	.89	.86	.90	.87	.85	.88	.86	.83	.82
4.0	.91	.85	.81	.90	.85	.81	.87	.83	.80	.86	.82	.79	.84	.81	.78	.77
5.0	.85	.80	.75	.84	.79	.75	.83	.78	.74	.81	.77	.74	.79	.76	.73	.72
6.0	.80	.75	.70	.80	.74	.70	.78	.73	.70	.77	.72	.69	.75	.72	.69	.67
7.0	.76	.70	.66	.75	.70	.66	.74	.69	.65	.73	.68	.65	.72	.68	.65	.63
8.0	.72	.66	.62	.71	.66	.62	.70	.65	.61	.69	.64	.61	.68	.64	.61	.60
9.0	.68	.62	.58	.67	.62	.58	.66	.61	.58	.65	.61	.58	.65	.61	.58	.56
10.0	.64	.59	.55	.64	.58	.55	.63	.58	.55	.62	.58	.55	.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:0.1480A P:31.80W PF:0.9570 Freq:50.00Hz Lamp Flux:2668.42x1 lm								
NAME: DP145RW-WF02-32G40				TYPE:			WEIGHT:	
SPEC.:				DIM.:			SERIAL No.:	
MFR.:				SUR.:140			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	.176	.100	.032	.169	.097	.031	.157	.090	.029	.145	.084	.027	.135	.078	.025	
2.0	.167	.091	.028	.161	.089	.027	.151	.084	.026	.141	.079	.025	.132	.075	.024	
3.0	.158	.084	.025	.154	.082	.025	.145	.078	.024	.136	.075	.023	.129	.071	.022	
4.0	.151	.078	.023	.146	.077	.023	.139	.074	.022	.131	.071	.021	.125	.068	.021	
5.0	.143	.073	.021	.140	.072	.021	.133	.069	.020	.127	.067	.020	.121	.065	.019	
6.0	.137	.069	.020	.134	.068	.019	.128	.066	.019	.122	.064	.019	.117	.062	.018	
7.0	.131	.065	.018	.128	.064	.018	.123	.062	.018	.118	.060	.018	.113	.059	.017	
8.0	.125	.061	.017	.123	.061	.017	.118	.059	.017	.114	.058	.017	.110	.056	.016	
9.0	.120	.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	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.133	.113	.133	.114	.098	.091	.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	.059	.045	.045	.035	.026	.015	.011	.009	
5.0	.124	.087	.060	.106	.075	.052	.073	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.116	.078	.050	.100	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.110	.070	.042	.094	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.104	.064	.036	.090	.055	.032	.062	.039	.023	.036	.023	.013	.012	.008	.004	
9.0	.099	.059	.032	.085	.051	.028	.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:0.1480A P:31.80W PF:0.9570 Freq:50.00Hz Lamp Flux:2668.42x1 lm											
NAME: DP145RW-WF02-32G40					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.:					SUR.:140			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	14.7	15.6	14.9	15.8	16.0	15.7	16.7	16.0	16.8	17.0	
	3H	14.6	15.4	14.8	15.6	15.8	15.6	16.4	15.8	16.6	16.8
	4H	14.5	15.3	14.7	15.5	15.7	15.5	16.3	15.8	16.5	16.7
	6H	14.4	15.1	14.7	15.4	15.6	15.4	16.1	15.7	16.4	16.6
	8H	14.4	15.1	14.7	15.3	15.6	15.4	16.1	15.7	16.3	16.6
	12H	14.3	15.0	14.6	15.3	15.6	15.3	16.0	15.6	16.3	16.6
4H	2H	14.5	15.3	14.7	15.5	15.7	15.5	16.3	15.7	16.5	16.7
	3H	14.3	15.0	14.6	15.2	15.5	15.3	16.0	15.6	16.3	16.5
	4H	14.2	14.8	14.5	15.1	15.4	15.2	15.8	15.6	16.1	16.4
	6H	14.1	14.7	14.5	15.0	15.4	15.1	15.7	15.5	16.0	16.4
	8H	14.1	14.6	14.5	15.0	15.3	15.1	15.6	15.5	16.0	16.3
	12H	14.1	14.5	14.5	14.9	15.3	15.1	15.5	15.5	15.9	16.3
8H	4H	14.1	14.6	14.5	14.9	15.3	15.1	15.6	15.5	15.9	16.3
	6H	14.0	14.4	14.4	14.8	15.2	15.0	15.4	15.4	15.8	16.2
	8H	14.0	14.3	14.4	14.8	15.2	15.0	15.3	15.4	15.7	16.2
	12H	14.0	14.3	14.4	14.7	15.2	14.9	15.3	15.4	15.7	16.2
12H	4H	14.0	14.5	14.4	14.9	15.2	15.0	15.5	15.4	15.9	16.2
	6H	13.9	14.3	14.4	14.7	15.2	14.9	15.3	15.4	15.7	16.2
	8H	13.9	14.2	14.4	14.7	15.2	14.9	15.2	15.4	15.7	16.1
Variations with the observer position at spacings:											
S = 1.0H	+ 2.9 / -11.5					+ 3.4 / -12.7					
1.5H	+ 5.5 / -11.1					+ 5.9 / -12.3					
2.0H	+ 5.1 / - 2.9					+ 6.1 / - 4.1					

CIE Pub.117, 2668 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.4)

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:0.1480A P:31.80W PF:0.9570 Freq:50.00Hz Lamp Flux:2668.42x1 lm		
NAME: DP145RW-WF02-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

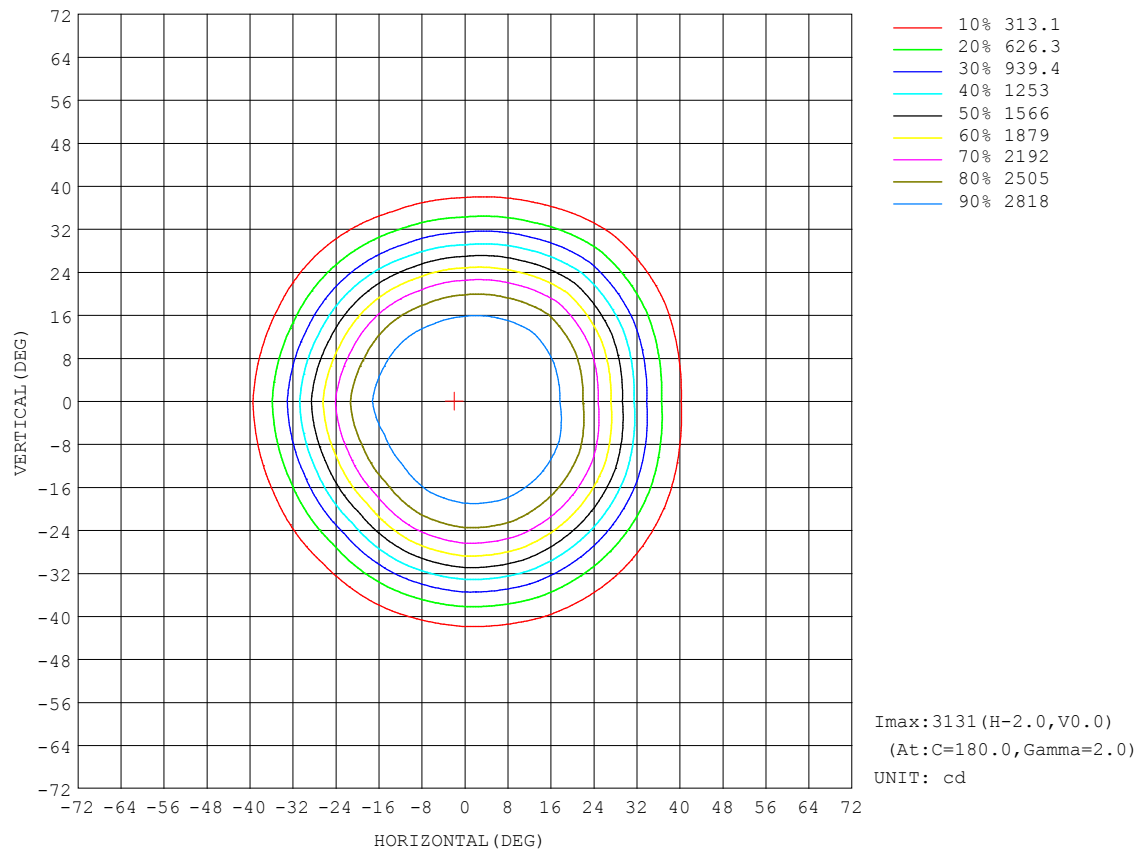
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	79	88	82	79	87	82	79	75
0.80	96	90	87	95	90	87	94	89	86	83
1.00	100	95	91	99	94	91	98	94	90	87
1.25	104	99	96	103	98	95	101	97	94	90
1.50	106	102	99	105	101	98	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	94
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	96
4.00	114	111	109	112	110	108	108	107	105	98
5.00	115	113	111	113	111	110	109	108	107	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:0.1480A P:31.80W PF:0.9570 Freq:50.00Hz Lamp Flux:2668.42x1 lm		
NAME: DP145RW-WF02-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:



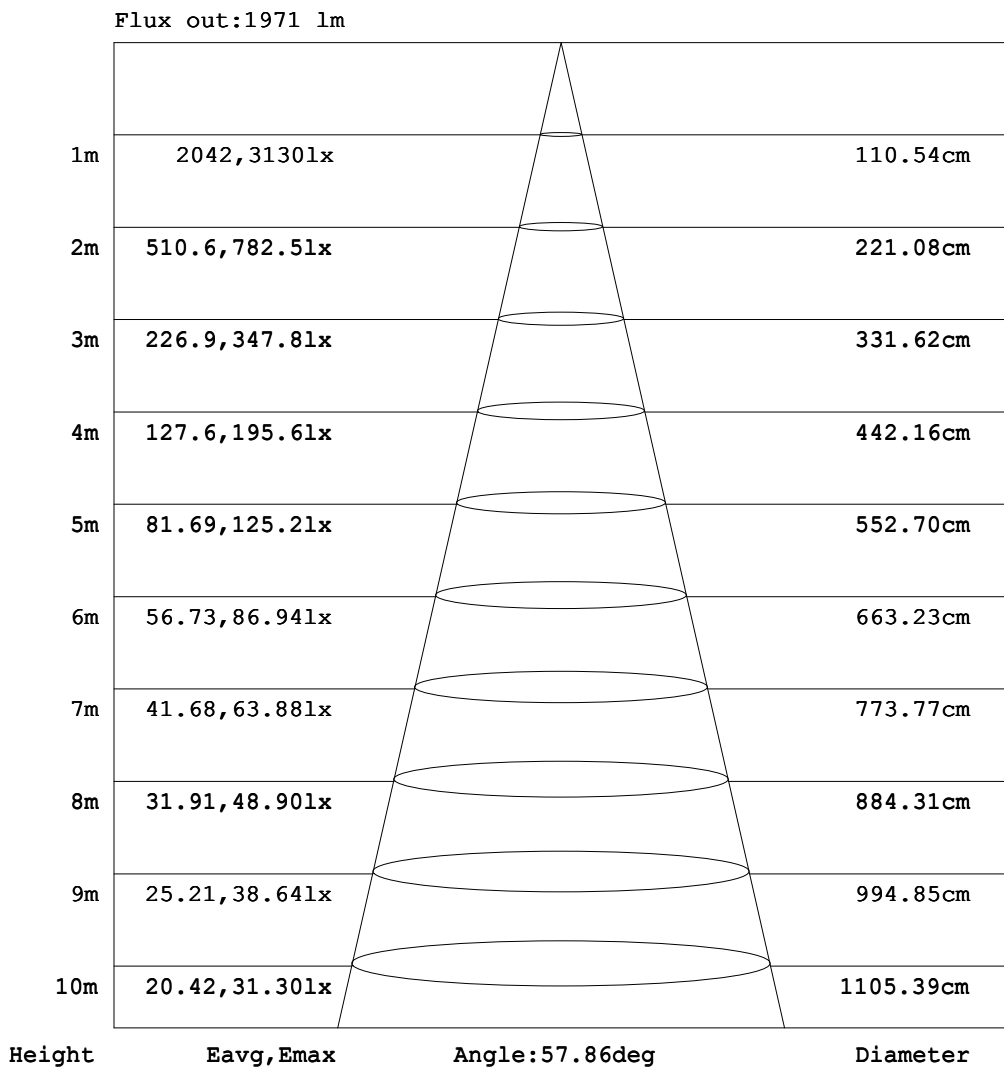
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: ZR  
 Test Date: 2021-07-16

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:0.1480A P:31.80W PF:0.9570 Freq:50.00Hz Lamp Flux:2668.42x1 lm		
NAME: DP145RW-WF02-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:



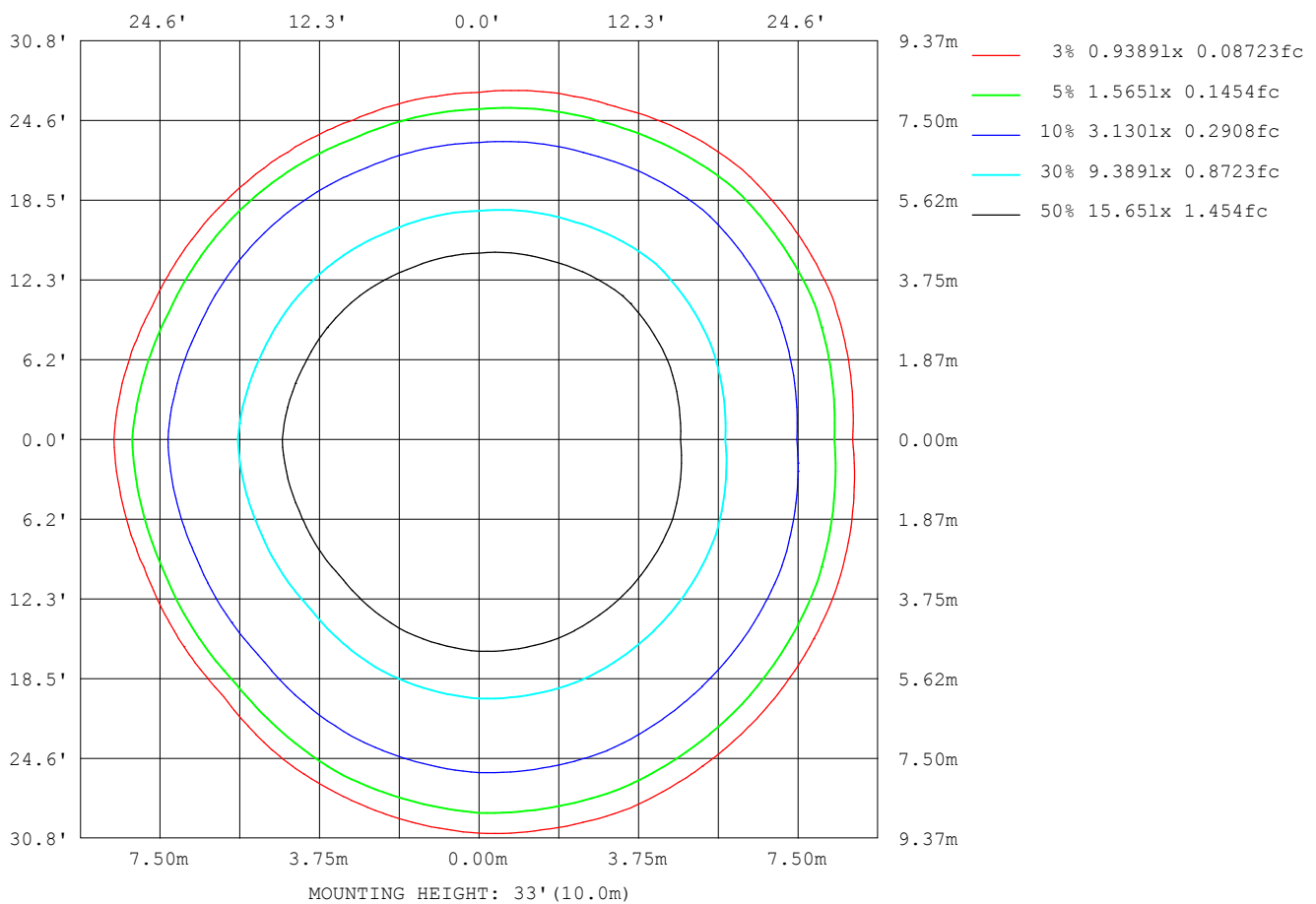
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.1480A P:31.80W PF:0.9570 Freq:50.00Hz Lamp Flux:2668.42x1 lm		
NAME: DP145RW-WF02-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	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:0.1480A P:31.80W PF:0.9570 Freq:50.00Hz Lamp Flux:2668.42x1 lm		
NAME: DP145RW-WF02-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

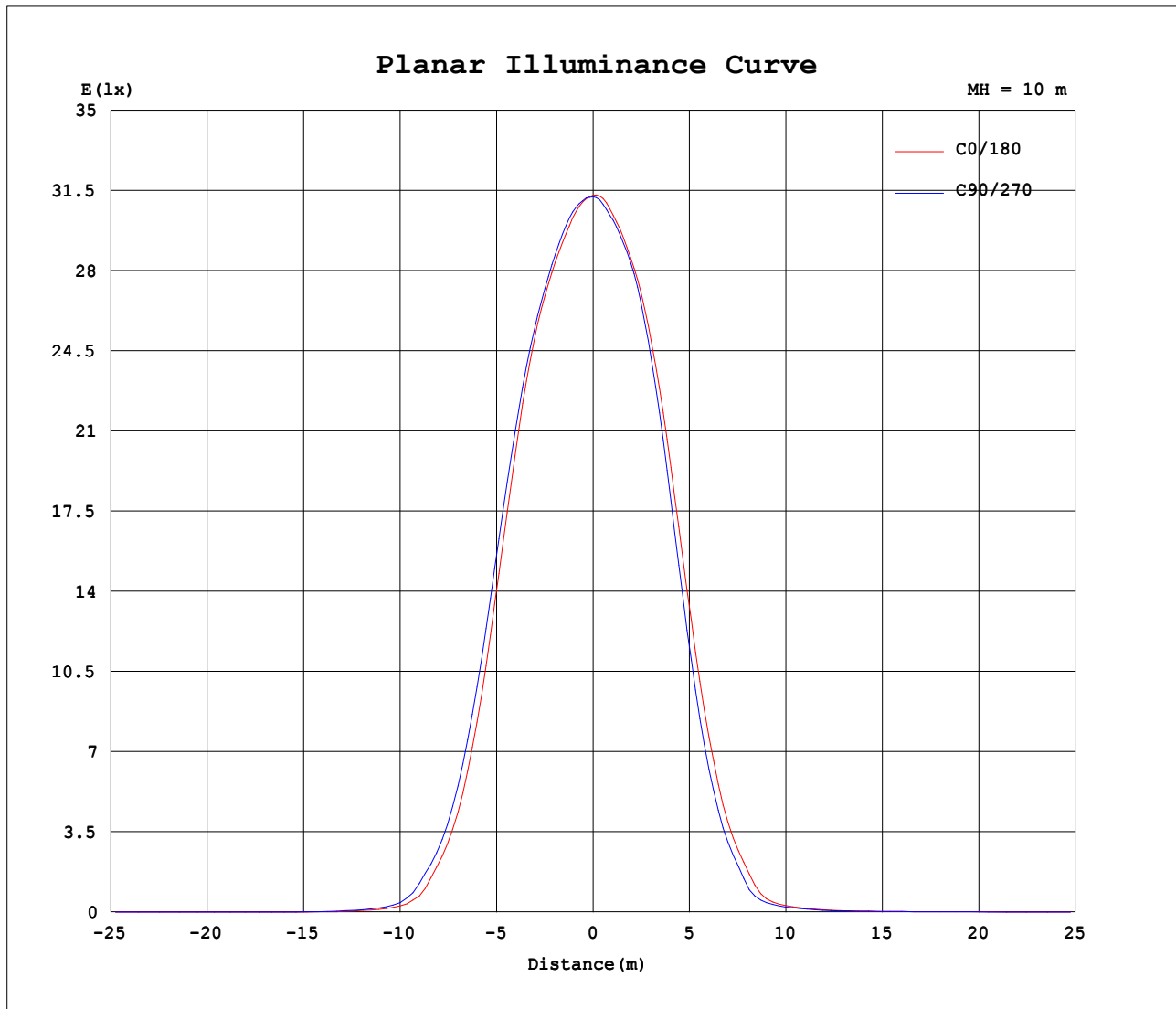
AvgL	cd/m2
L_0~180 (65) av	1387
L_0~180 (75) av	1836
L_0~180 (85) av	4712
L_90~270 (65) av	1345
L_90~270 (75) av	1769
L_90~270 (85) av	4518
L_45 (65) av	1387
L_45 (75) av	1829
L_45 (85) av	4683

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:

```