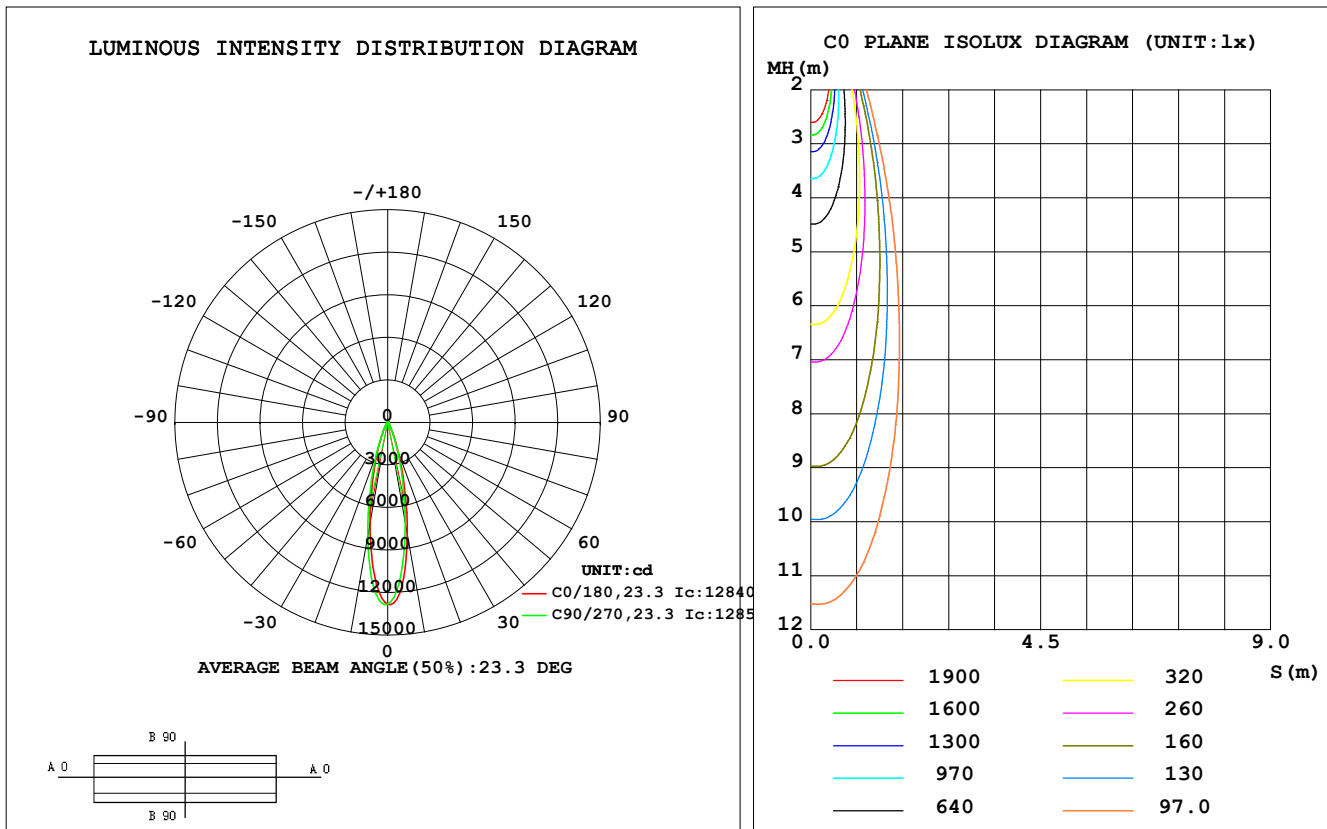


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:224.9V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2925.72x1 lm					
NAME: DP145RW-M01-32G40		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:140		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 91.72 lm/W
MODEL	4000K CRI90	I _{max} (cd)	12902	S/MH(C0/180)	0.38	
NOMINAL POWER(W)	32	LOR(%)	100.0	S/MH(C90/270)	0.42	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	2925.7	η UP,DN(C0-180)	0.0,47.8	
NOMINAL FLUX(lm)	2925.72	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,52.2	
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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	801.9	763.2	717.0	694.8	723.7	759.1	809.9	837.5	0- 10	950.6	950.6	32.5, 32.5
20	221.4	215.2	191.4	184.1	206.6	224.4	231.5	231.2	10- 20	1191	2142	73.2, 73.2
30	46.60	47.67	42.91	43.34	52.41	56.17	52.09	51.44	20- 30	483.4	2625	89.7, 89.7
40	12.46	12.72	11.72	12.01	16.49	17.74	16.27	16.44	30- 40	169.0	2794	95.5, 95.5
50	3.265	3.076	2.718	2.574	5.100	5.548	5.861	6.036	40- 50	63.33	2858	97.7, 97.7
60	1.646	1.560	1.454	1.395	3.031	3.171	3.288	3.349	50- 60	27.57	2885	98.6, 98.6
70	1.066	1.032	0.9828	0.9552	1.965	2.018	2.069	2.102	60- 70	18.67	2904	99.3, 99.3
80	0.7518	0.7098	0.5935	0.6420	1.277	1.301	1.267	1.349	70- 80	13.13	2917	99.7, 99.7
90	0.5264	0.5297	0.5245	0.5218	0.8134	0.8196	0.8287	0.8281	80- 90	8.613	2926	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: $\times 10\text{cd}$									UNIT: lm		

Conical surface Flux(90deg): 2833.9 lm

%lum = 96.9%

%lamp = 96.9%

Conical surface Flux(120deg): 2885.3 lm

%lum = 98.6%

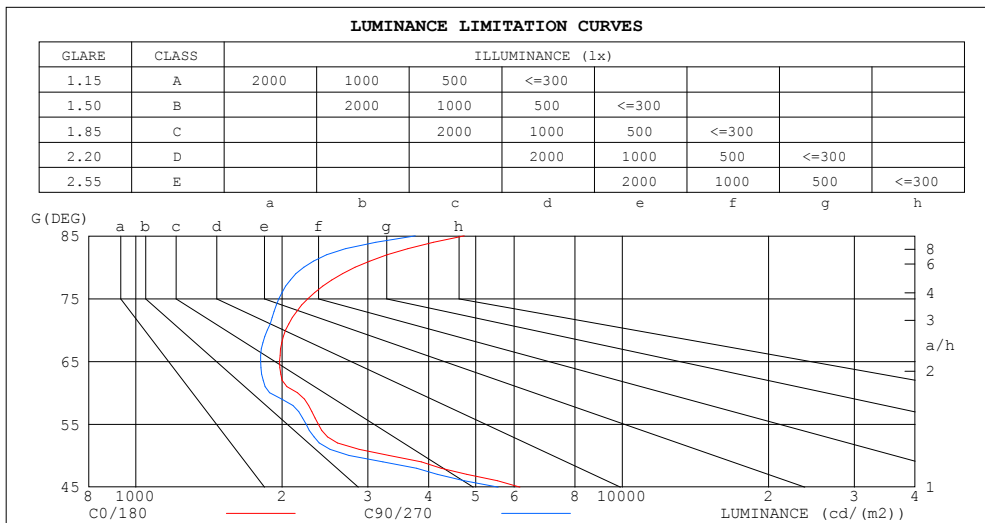
%lamp = 98.6%

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:

LUMINANCE LIMITATION CURVES

Test:U:224.9V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2925.72x1 lm		
NAME: DP145RW-M01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:



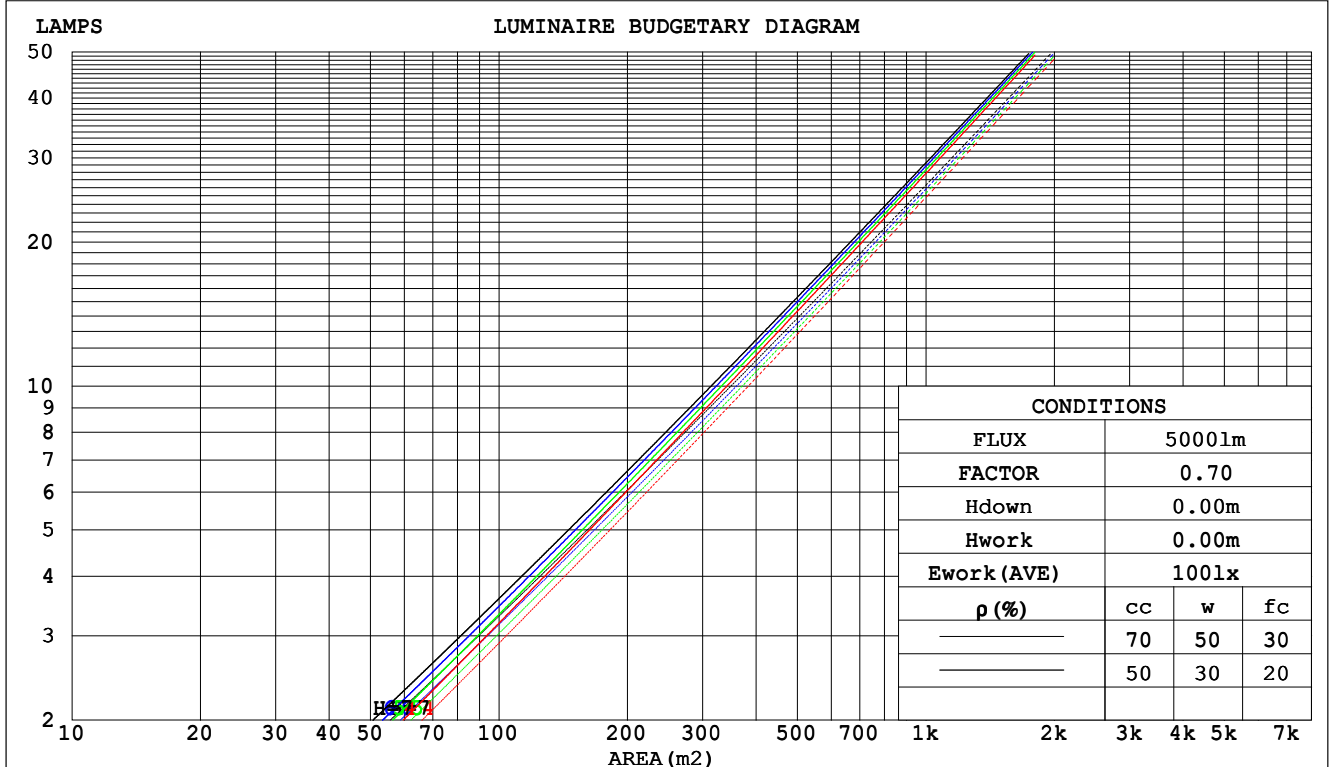
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZR
Test Date:2021-07-16

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:224.9V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2925.72x1 lm		
NAME: DP145RW-M01-32G40	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	1.12	1.10	1.08	1.10	1.08	1.07	1.06	1.05	1.03	1.02	1.01	1.00	.99	.98	.97	.96
2.0	1.06	1.03	1.00	1.05	1.02	.99	1.02	.99	.97	.99	.97	.95	.96	.94	.93	.92
3.0	1.01	.97	.94	.90	.96	.94	.97	.95	.92	.95	.93	.91	.93	.91	.89	.88
4.0	.97	.93	.89	.96	.92	.89	.94	.90	.88	.92	.89	.87	.90	.88	.86	.85
5.0	.93	.88	.85	.92	.88	.85	.90	.87	.84	.89	.86	.83	.87	.85	.83	.82
6.0	.89	.85	.82	.89	.84	.81	.87	.84	.81	.86	.83	.80	.85	.82	.80	.79
7.0	.86	.82	.79	.86	.81	.78	.84	.81	.78	.83	.80	.78	.82	.79	.77	.76
8.0	.83	.79	.76	.83	.79	.76	.82	.78	.75	.81	.78	.75	.80	.77	.75	.74
9.0	.81	.76	.73	.80	.76	.73	.79	.76	.73	.79	.75	.73	.78	.75	.73	.71
10.0	.78	.74	.71	.78	.74	.71	.77	.73	.71	.76	.73	.71	.76	.73	.70	.69



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:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2925.72x1 lm					
NAME: DP145RW-M01-32G40			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	.150	.085	.027	.143	.082	.026	.131	.075	.024	.119	.069	.022	.109	.063	.020	
2.0	.139	.076	.023	.133	.073	.023	.123	.068	.021	.113	.064	.020	.105	.059	.019	
3.0	.129	.069	.021	.125	.067	.020	.116	.063	.019	.108	.059	.018	.101	.056	.017	
4.0	.121	.063	.018	.117	.061	.018	.110	.058	.017	.103	.055	.017	.097	.052	.016	
5.0	.114	.058	.017	.110	.057	.017	.104	.054	.016	.098	.052	.015	.093	.050	.015	
6.0	.108	.054	.015	.105	.053	.015	.099	.051	.015	.094	.049	.014	.089	.047	.014	
7.0	.102	.050	.014	.099	.050	.014	.095	.048	.014	.090	.046	.013	.086	.045	.013	
8.0	.097	.047	.013	.095	.047	.013	.091	.045	.013	.087	.044	.013	.083	.043	.012	
9.0	.093	.045	.013	.091	.044	.012	.087	.043	.012	.084	.042	.012	.080	.041	.012	
10.0	.089	.042	.012	.087	.042	.012	.084	.041	.012	.080	.040	.011	.078	.039	.011	

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	.169	.158	.147	.145	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.016	
2.0	.152	.133	.117	.130	.114	.101	.089	.079	.070	.051	.046	.041	.016	.015	.013	
3.0	.137	.113	.094	.118	.098	.082	.081	.068	.057	.047	.040	.034	.015	.013	.011	
4.0	.125	.098	.077	.107	.085	.067	.074	.059	.047	.043	.035	.028	.014	.011	.009	
5.0	.115	.086	.065	.099	.074	.056	.068	.052	.040	.039	.031	.024	.013	.010	.008	
6.0	.106	.076	.054	.091	.066	.047	.063	.046	.034	.037	.027	.020	.012	.009	.007	
7.0	.099	.068	.046	.085	.059	.040	.059	.041	.029	.034	.024	.017	.011	.008	.006	
8.0	.092	.061	.040	.080	.053	.035	.055	.037	.025	.032	.022	.015	.010	.007	.005	
9.0	.087	.056	.035	.075	.048	.030	.052	.034	.022	.030	.020	.013	.010	.007	.004	
10.0	.082	.051	.031	.071	.044	.027	.049	.031	.019	.029	.018	.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:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2925.72x1 lm											
NAME: DP145RW-M01-32G40					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	6.4	7.2	6.7	7.3	7.5	6.0	6.7	6.2	6.9	7.0	
	3H	6.7	7.4	6.9	7.5	7.7	6.3	6.9	6.5	7.1	7.3
	4H	6.9	7.5	7.2	7.7	8.0	6.4	7.1	6.7	7.3	7.5
	6H	7.2	7.8	7.5	8.0	8.3	6.7	7.3	7.0	7.5	7.7
	8H	7.4	8.0	7.7	8.2	8.5	6.8	7.4	7.1	7.6	7.9
	12H	7.7	8.3	8.0	8.5	8.8	7.0	7.6	7.3	7.8	8.1
4H	2H	6.4	7.0	6.6	7.2	7.4	6.0	6.6	6.2	6.8	7.0
	3H	6.8	7.3	7.1	7.6	7.9	6.4	6.9	6.7	7.2	7.5
	4H	7.1	7.6	7.5	7.9	8.2	6.7	7.2	7.0	7.5	7.8
	6H	7.6	8.1	8.0	8.4	8.7	7.1	7.5	7.4	7.9	8.2
	8H	7.9	8.4	8.3	8.7	9.1	7.3	7.7	7.7	8.1	8.4
	12H	8.4	8.8	8.8	9.2	9.5	7.6	8.0	8.0	8.4	8.7
8H	4H	7.2	7.6	7.6	8.0	8.3	6.8	7.2	7.2	7.6	7.9
	6H	7.9	8.2	8.3	8.6	9.0	7.4	7.7	7.8	8.1	8.5
	8H	8.4	8.7	8.8	9.1	9.5	7.7	8.0	8.1	8.4	8.9
	12H	9.0	9.3	9.5	9.7	10.2	8.2	8.5	8.7	8.9	9.4
12H	4H	7.2	7.6	7.6	8.0	8.3	6.8	7.2	7.2	7.6	8.0
	6H	8.0	8.3	8.4	8.7	9.1	7.4	7.8	7.9	8.2	8.6
	8H	8.5	8.8	9.0	9.2	9.7	7.9	8.1	8.3	8.6	9.0
Variations with the observer position at spacings:											
S = 1.0H	+ 1.1 / - 1.3					+ 1.2 / - 1.5					
1.5H	+ 2.4 / - 1.4					+ 2.5 / - 1.6					
2.0H	+ 1.7 / - 0.5					+ 1.7 / - 0.6					

CIE Pub.117, 2926 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 3.7$)

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:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2925.72x1 lm		
NAME: DP145RW-M01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

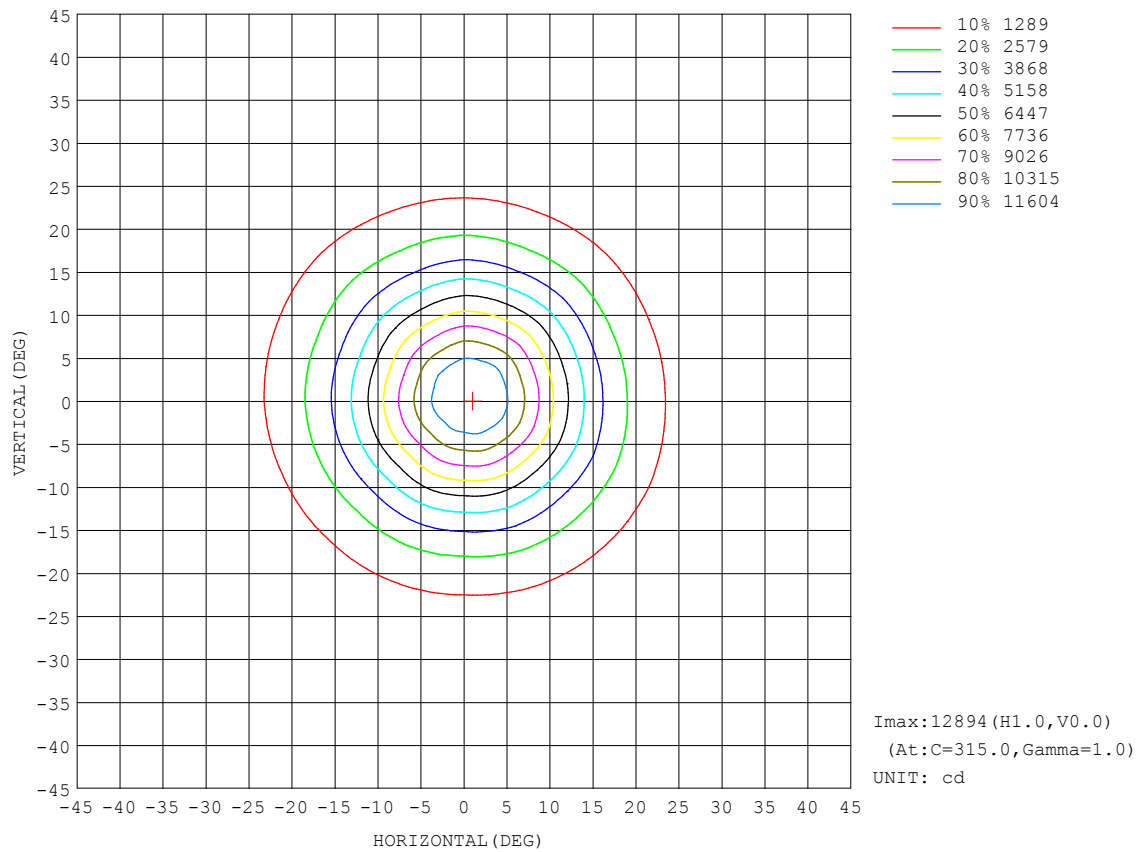
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	79	88	83	79	88	82	79	75
0.80	96	90	87	95	90	87	94	89	86	83
1.00	100	95	91	99	94	91	98	94	90	87
1.25	104	99	95	103	98	95	101	97	94	90
1.50	106	102	99	105	101	98	103	100	97	93
2.00	109	105	102	107	104	101	105	102	99	94
2.50	110	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	106	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

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:

ISOCANDELA DIAGRAM

Test:U:224.9V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2925.72x1 lm		
NAME: DP145RW-M01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

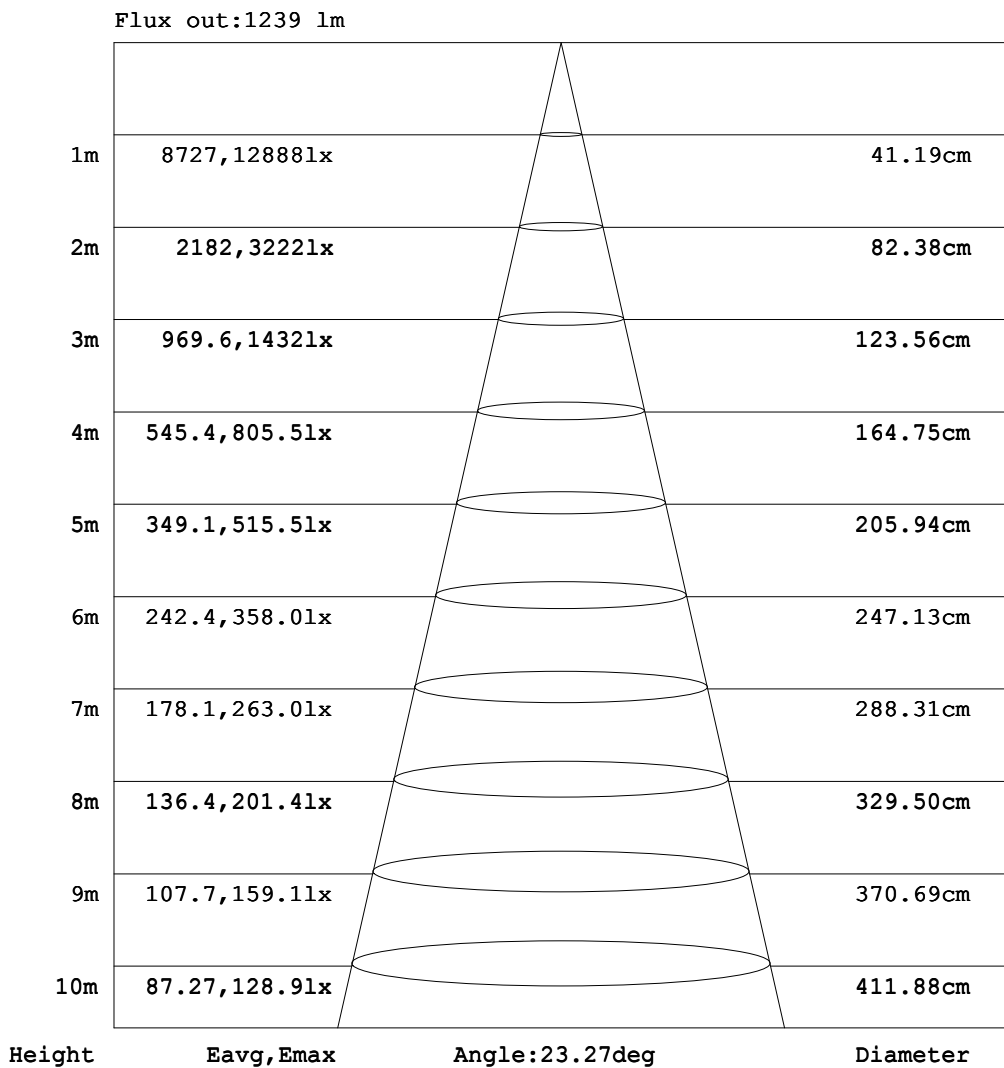


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:ZR
 Test Date:2021-07-16

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:224.9V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2925.72x1 lm		
NAME: DP145RW-M01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:



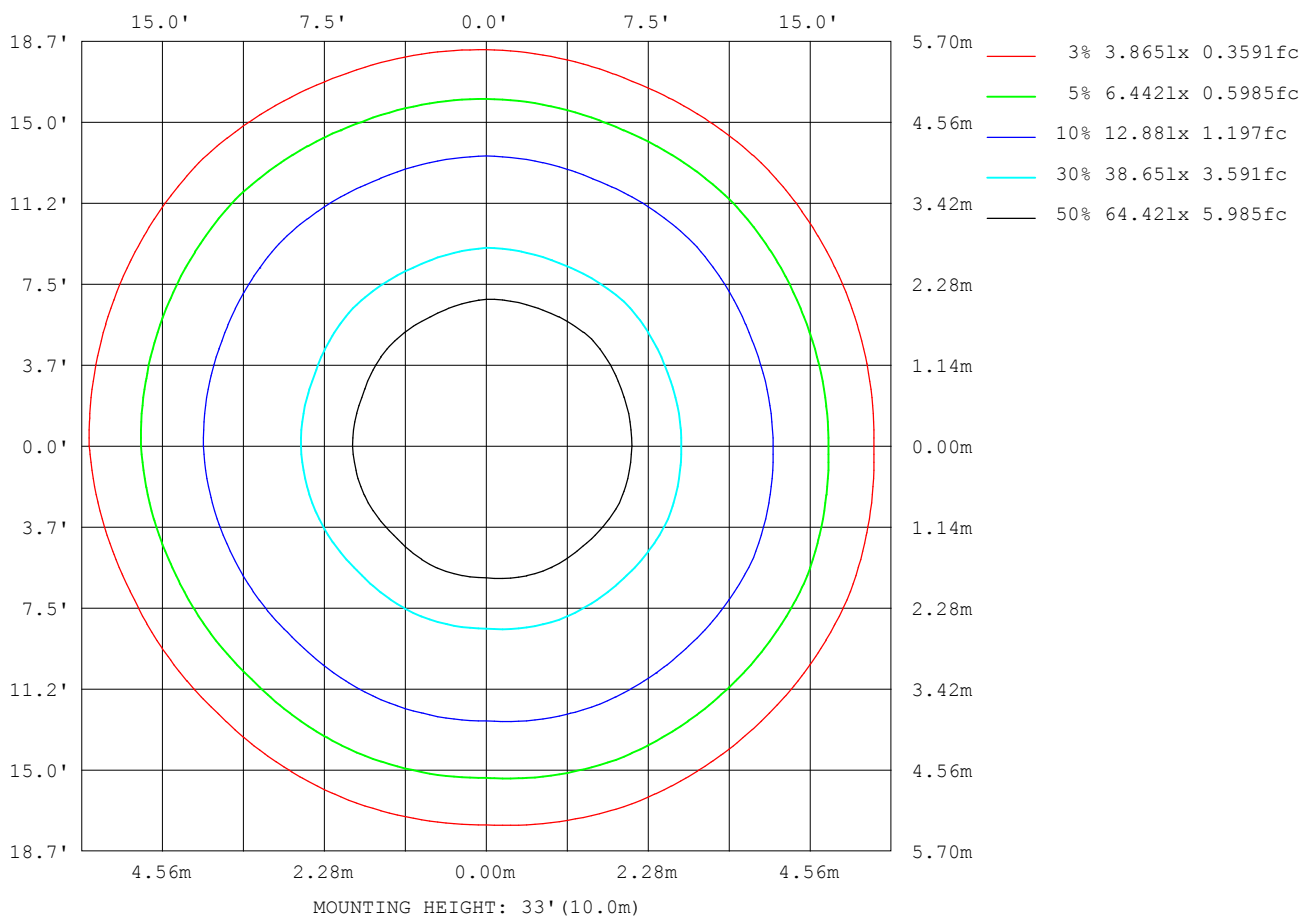
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:224.9V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2925.72x1 lm		
NAME: DP145RW-M01-32G40	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:224.9V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2925.72x1 lm		
NAME: DP145RW-M01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

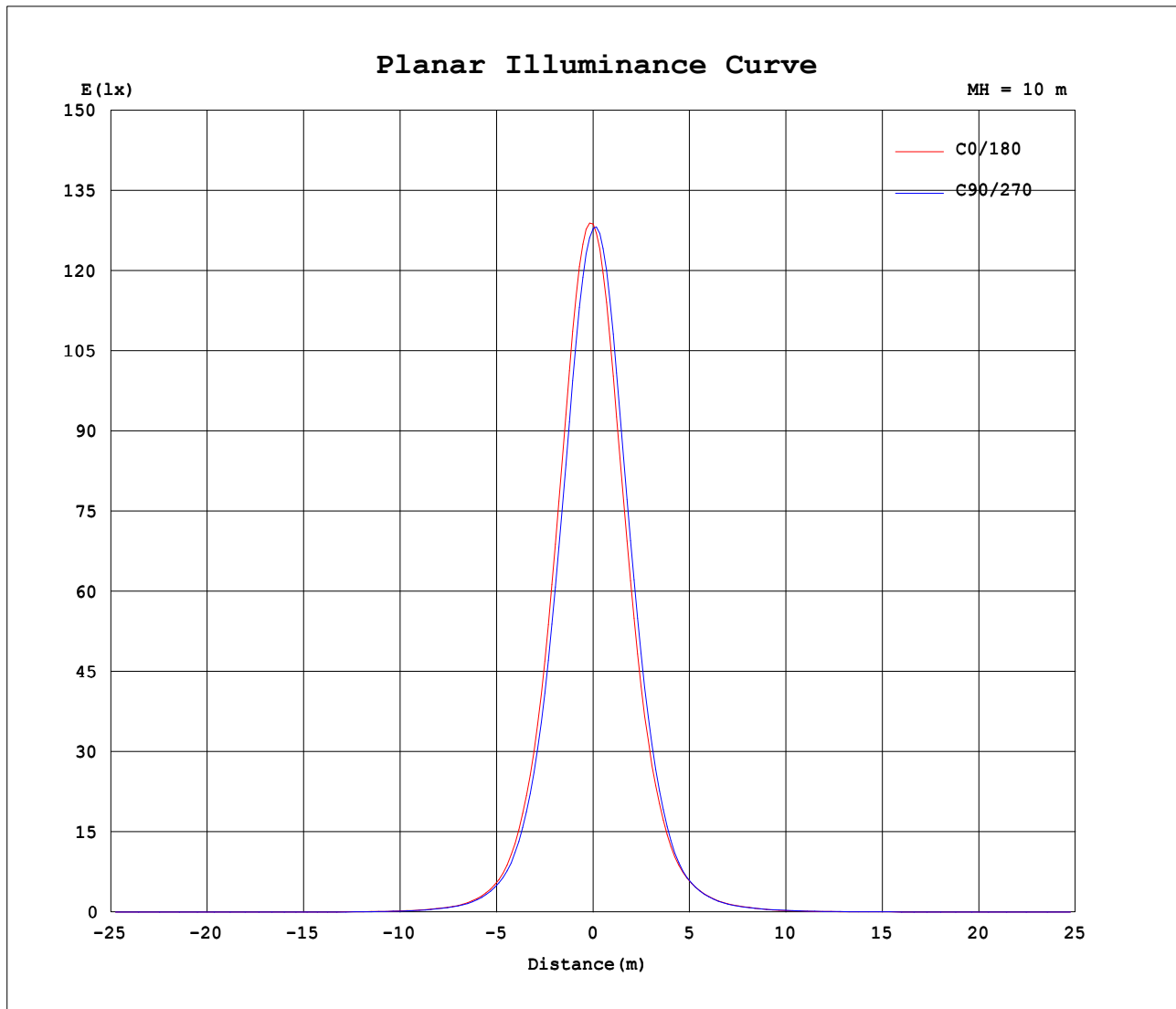
AvgL	cd/m2
L_0~180 (65) av	2856
L_0~180 (75) av	3117
L_0~180 (85) av	6145
L_90~270 (65) av	2880
L_90~270 (75) av	3074
L_90~270 (85) av	5403
L_45 (65) av	2880
L_45 (75) av	3138
L_45 (85) av	5596

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

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:

```

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:

```