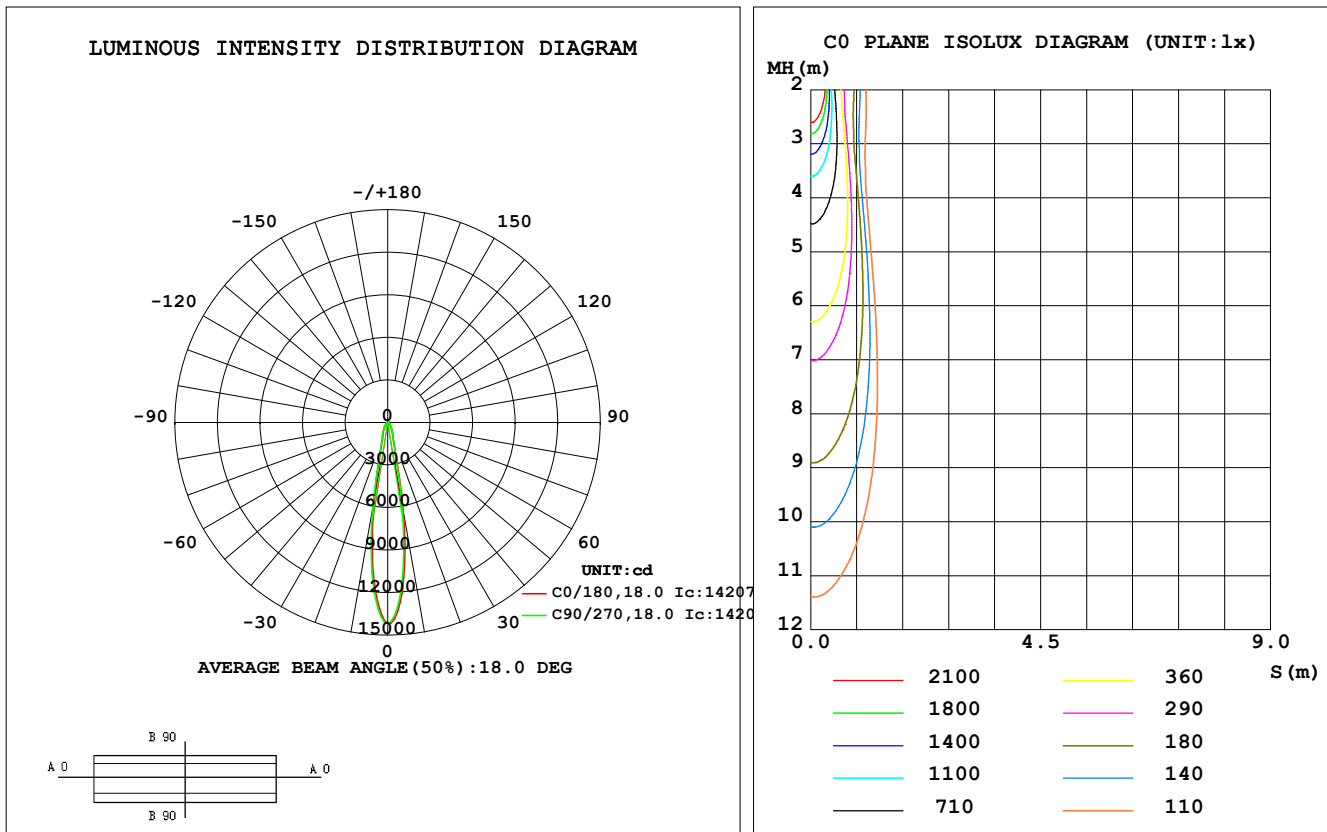


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:224.9V I:0.1470A P:31.70W PF:0.9560 Freq:50.00Hz Lamp Flux:2417.84x1 lm					
NAME: DP145RW-S01-32G30		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:140		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 76.27 lm/W
MODEL	3000K CRI90	I _{max} (cd)	14207	S/MH(C0/180)	0.30	
NOMINAL POWER(W)	32	LOR(%)	100.0	S/MH(C90/270)	0.31	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	2417.8	η UP,DN(C0-180)	0.0,49.5	
NOMINAL FLUX(lm)	2417.84	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.5	
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	632.0	621.4	576.5	529.3	546.2	561.8	603.3	647.2	0- 10	916.7	916.7	37.9, 37.9
20	113.9	118.5	114.3	107.0	108.5	113.0	116.6	117.4	10- 20	646.5	1563	64.7, 64.7
30	56.84	59.27	58.00	53.43	55.64	58.20	60.29	60.60	20- 30	374.0	1937	80.1, 80.1
40	28.52	29.24	28.74	26.34	28.00	28.93	30.30	31.23	30- 40	260.4	2198	90.9, 90.9
50	6.687	6.623	6.281	5.697	7.472	7.582	8.044	8.605	40- 50	124.0	2322	96, 96
60	2.999	2.985	2.957	2.880	4.096	4.137	4.213	4.304	50- 60	41.46	2363	97.7, 97.7
70	1.852	1.850	1.826	1.785	2.570	2.593	2.650	2.699	60- 70	28.46	2392	98.9, 98.9
80	1.008	0.9715	0.7520	0.8897	1.437	1.433	1.320	1.504	70- 80	17.75	2409	99.7, 99.7
90	0.4409	0.4458	0.4475	0.4470	0.6881	0.6905	0.6934	0.7054	80- 90	8.434	2418	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): 2277.7 lm

%lum = 94.2%

%lamp = 94.2%

Conical surface Flux(120deg): 2363.2 lm

%lum = 97.7%

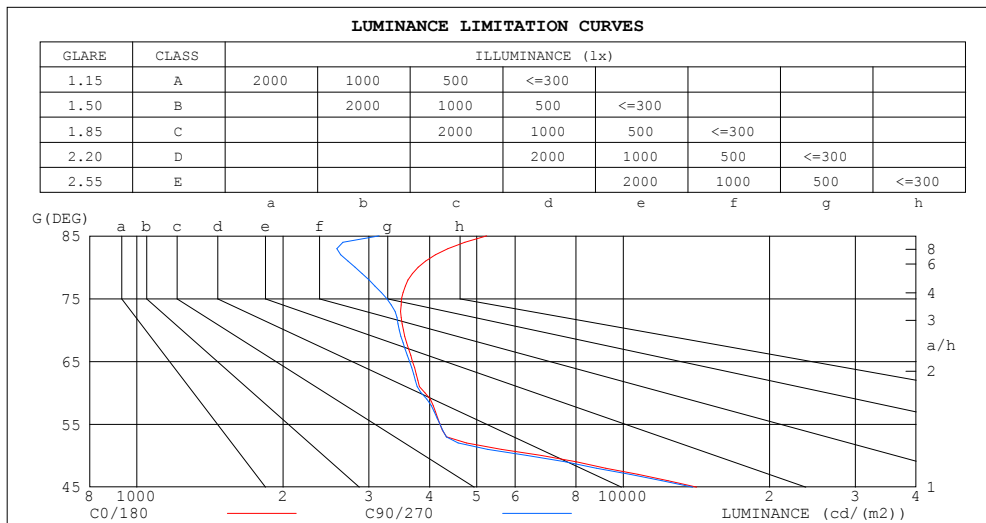
%lamp = 97.7%

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:

LUMINANCE LIMITATION CURVES

Test:U:224.9V I:0.1470A P:31.70W PF:0.9560 Freq:50.00Hz Lamp Flux:2417.84x1 lm		
NAME: DP145RW-S01-32G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	5240	3148
80	3788	2811
75	3504	3268
70	3533	3466
65	3690	3636
60	3915	3839
55	4202	4198
50	6789	6343
45	14163	13895

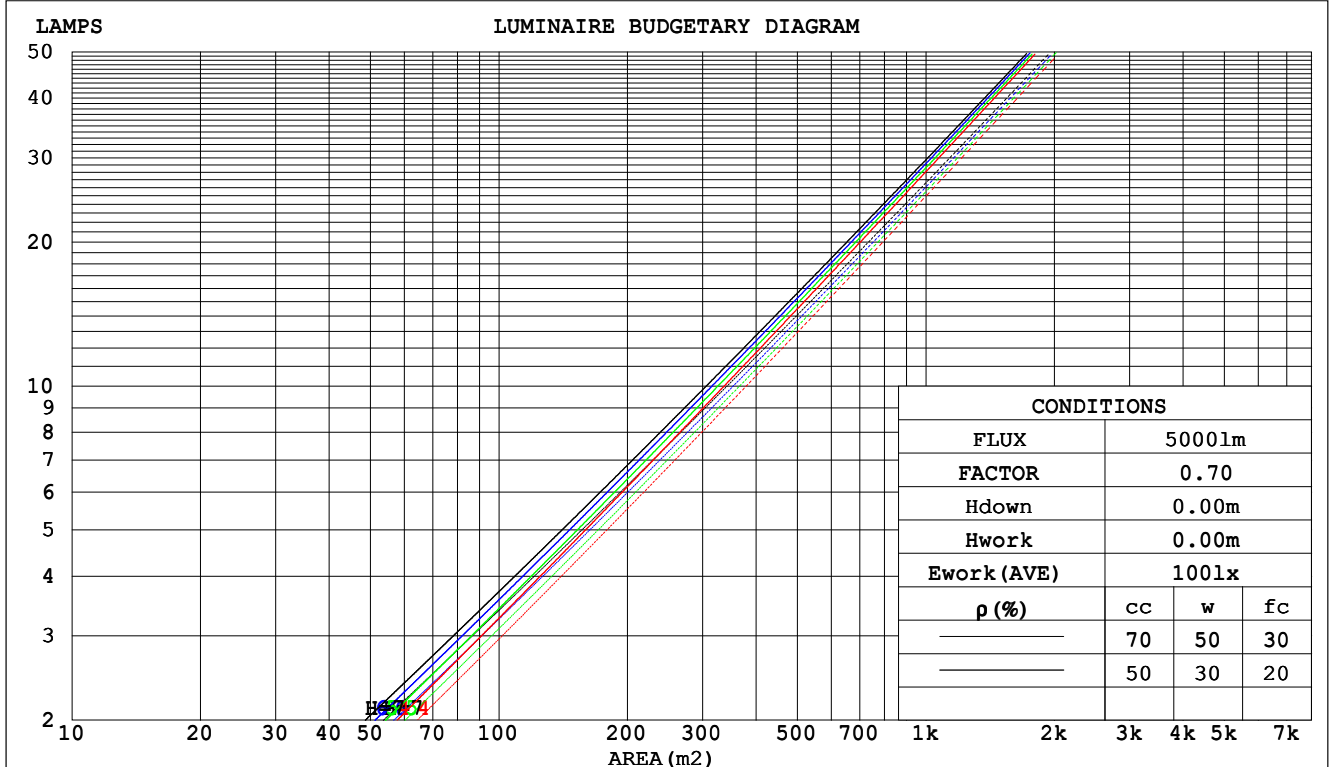
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZR
Test Date:2021-07-16

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:0.1470A P:31.70W PF:0.9560 Freq:50.00Hz Lamp Flux:2417.84x1 lm		
NAME: DP145RW-S01-32G30	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	1.06	1.06	1.04	1.03	1.02	1.01	.00	.98	.98	.97	.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	.00	.96	.92	.99	.95	.92	.96	.93	.90	.94	.91	.89	.92	.89	.87	.86
4.0	.95	.91	.87	.94	.90	.87	.92	.88	.86	.90	.87	.85	.88	.86	.84	.82
5.0	.91	.86	.83	.90	.86	.82	.88	.85	.82	.87	.83	.81	.85	.83	.80	.79
6.0	.87	.82	.79	.86	.82	.79	.85	.81	.78	.84	.80	.78	.83	.80	.77	.76
7.0	.84	.79	.76	.83	.79	.76	.82	.78	.75	.81	.77	.75	.80	.77	.74	.73
8.0	.81	.76	.73	.80	.76	.73	.79	.75	.73	.79	.75	.72	.78	.74	.72	.71
9.0	.78	.74	.70	.78	.73	.70	.77	.73	.70	.76	.73	.70	.75	.72	.70	.69
10.0	.76	.71	.68	.75	.71	.68	.75	.71	.68	.74	.70	.68	.73	.70	.68	.67



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:0.1470A P:31.70W PF:0.9560 Freq:50.00Hz Lamp Flux:2417.84x1 lm					
NAME: DP145RW-S01-32G30			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	.159	.090	.029	.152	.087	.028	.140	.080	.026	.128	.074	.024	.118	.068	.022		
2.0	.148	.081	.025	.143	.079	.024	.132	.074	.023	.123	.069	.022	.114	.064	.020		
3.0	.138	.074	.022	.134	.072	.022	.125	.068	.021	.117	.064	.020	.109	.061	.019		
4.0	.129	.067	.020	.125	.066	.019	.118	.063	.019	.111	.060	.018	.105	.057	.017		
5.0	.122	.062	.018	.118	.061	.018	.112	.058	.017	.106	.056	.017	.100	.054	.016		
6.0	.115	.057	.016	.112	.056	.016	.106	.054	.016	.101	.052	.015	.096	.051	.015		
7.0	.108	.054	.015	.106	.053	.015	.101	.051	.015	.096	.049	.014	.092	.048	.014		
8.0	.103	.050	.014	.101	.049	.014	.096	.048	.014	.092	.047	.013	.088	.045	.013		
9.0	.098	.047	.013	.096	.047	.013	.092	.045	.013	.088	.044	.013	.085	.043	.012		
10.0	.093	.045	.012	.091	.044	.012	.088	.043	.012	.085	.042	.012	.082	.041	.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	.145	.135	.126	.099	.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	.063	.101	.075	.055	.069	.052	.039	.040	.031	.023	.013	.010	.008	
6.0	.109	.077	.053	.093	.066	.047	.064	.046	.033	.037	.027	.020	.012	.009	.006	
7.0	.101	.069	.046	.087	.059	.040	.060	.042	.028	.035	.025	.017	.011	.008	.006	
8.0	.095	.062	.039	.082	.054	.034	.056	.038	.024	.033	.022	.014	.011	.007	.005	
9.0	.089	.056	.034	.077	.049	.030	.053	.034	.021	.031	.020	.013	.010	.007	.004	
10.0	.084	.052	.030	.072	.045	.026	.050	.032	.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:0.1470A P:31.70W PF:0.9560 Freq:50.00Hz Lamp Flux:2417.84x1 lm										
NAME: DP145RW-S01-32G30					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	12.1	12.8	12.3	13.0	13.1	12.1	12.8	12.3	13.0	13.2
3H	12.3	13.0	12.5	13.2	13.4	12.3	13.0	12.5	13.2	13.4
4H	12.4	13.1	12.7	13.3	13.5	12.4	13.1	12.7	13.3	13.5
6H	12.6	13.2	12.8	13.4	13.7	12.5	13.1	12.8	13.4	13.6
8H	12.6	13.3	12.9	13.5	13.8	12.5	13.1	12.8	13.4	13.6
12H	12.7	13.3	13.1	13.6	13.9	12.5	13.1	12.8	13.4	13.6
4H 2H	12.0	12.7	12.3	12.9	13.1	12.0	12.7	12.3	12.9	13.1
3H	12.3	12.9	12.6	13.2	13.5	12.3	12.9	12.7	13.2	13.5
4H	12.6	13.1	12.9	13.4	13.7	12.6	13.1	12.9	13.4	13.7
6H	12.8	13.3	13.2	13.7	14.0	12.7	13.2	13.1	13.5	13.9
8H	13.0	13.4	13.4	13.8	14.2	12.8	13.2	13.2	13.6	13.9
12H	13.2	13.6	13.6	14.0	14.4	12.8	13.2	13.2	13.6	14.0
8H 4H	12.6	13.1	13.0	13.4	13.8	12.6	13.0	13.0	13.4	13.8
6H	13.0	13.4	13.4	13.8	14.2	12.9	13.2	13.3	13.6	14.0
8H	13.2	13.6	13.7	14.0	14.4	12.9	13.3	13.4	13.7	14.1
12H	13.5	13.8	14.0	14.3	14.7	13.0	13.3	13.5	13.8	14.2
12H 4H	12.6	13.0	13.0	13.4	13.7	12.6	13.0	13.0	13.4	13.7
6H	13.0	13.3	13.4	13.8	14.2	12.9	13.2	13.3	13.6	14.1
8H	13.3	13.6	13.8	14.0	14.5	13.0	13.3	13.5	13.7	14.2
Variations with the observer position at spacings:										
S = 1.0H	+ 1.5 / - 2.3					+ 1.6 / - 2.6				
1.5H	+ 2.7 / - 2.4					+ 3.0 / - 2.8				
2.0H	+ 3.1 / - 1.0					+ 3.4 / - 1.2				

CIE Pub.117, 2418 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 3.1$)

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:0.1470A P:31.70W PF:0.9560 Freq:50.00Hz Lamp Flux:2417.84x1 lm		
NAME: DP145RW-S01-32G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

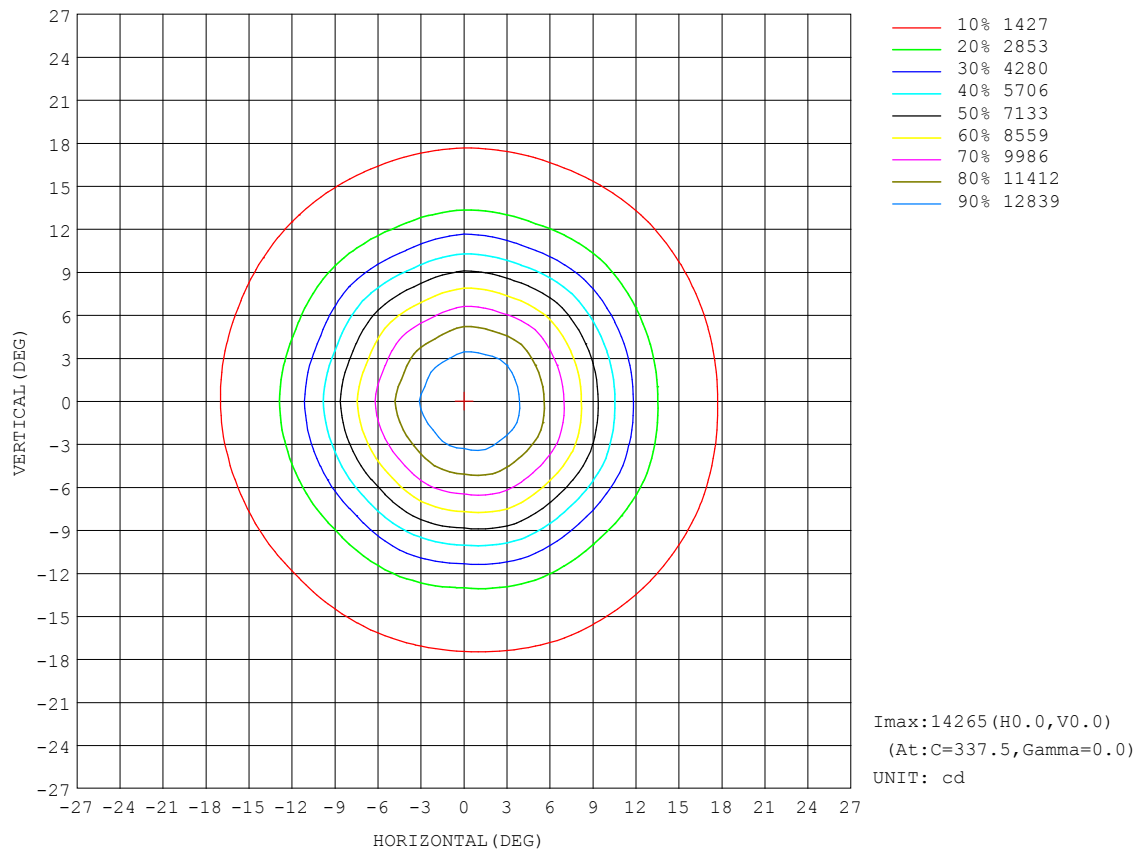
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	86	79	75	85	79	75	85	79	75	71
0.80	93	87	83	93	87	83	92	86	83	79
1.00	98	92	88	97	92	88	96	92	88	84
1.25	102	97	93	101	96	93	99	95	92	88
1.50	105	100	96	104	99	96	101	98	95	90
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	104	101	95
4.00	113	110	108	111	109	107	108	106	104	97
5.00	115	112	110	113	110	109	109	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

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:0.1470A P:31.70W PF:0.9560 Freq:50.00Hz Lamp Flux:2417.84x1 lm		
NAME: DP145RW-S01-32G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

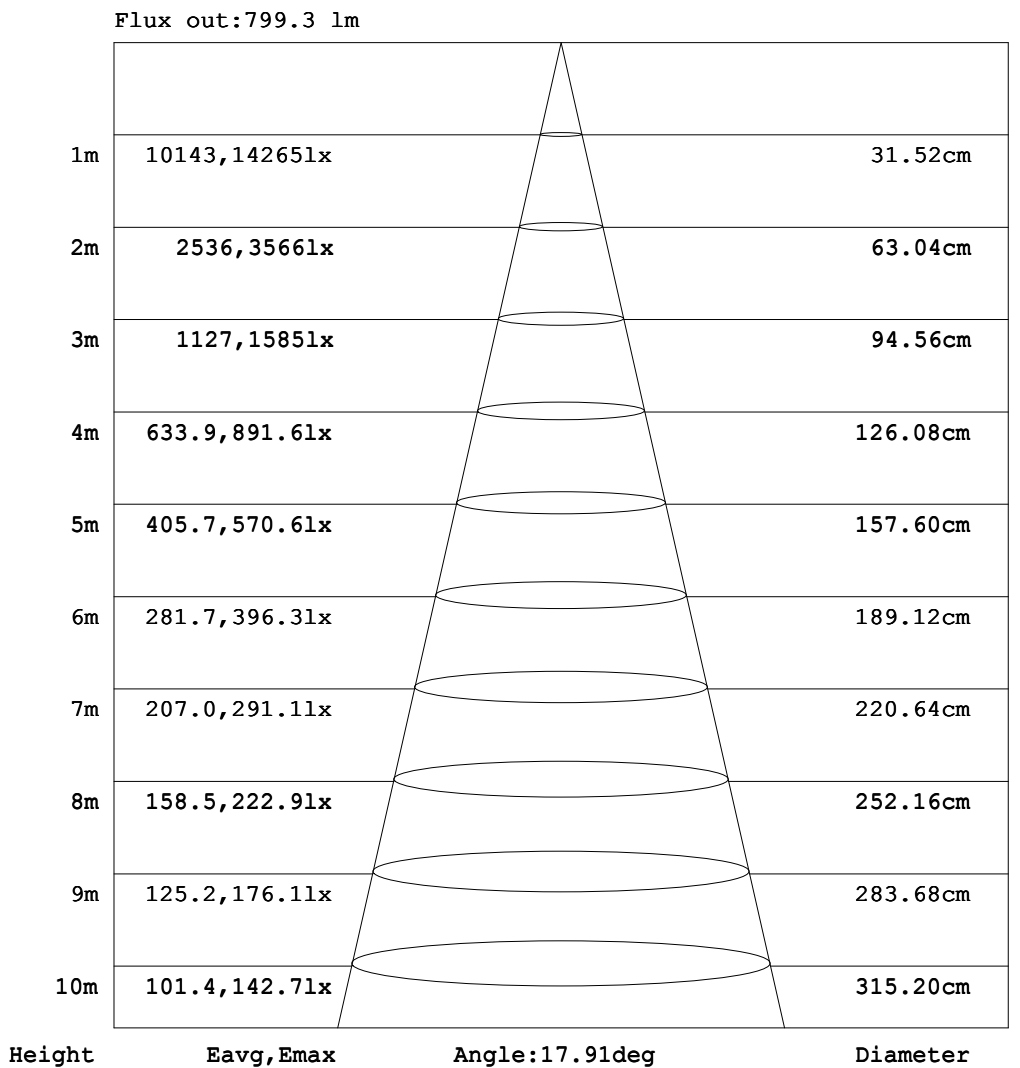


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZR
Test Date:2021-07-16

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:0.1470A P:31.70W PF:0.9560 Freq:50.00Hz Lamp Flux:2417.84x1 lm		
NAME: DP145RW-S01-32G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:



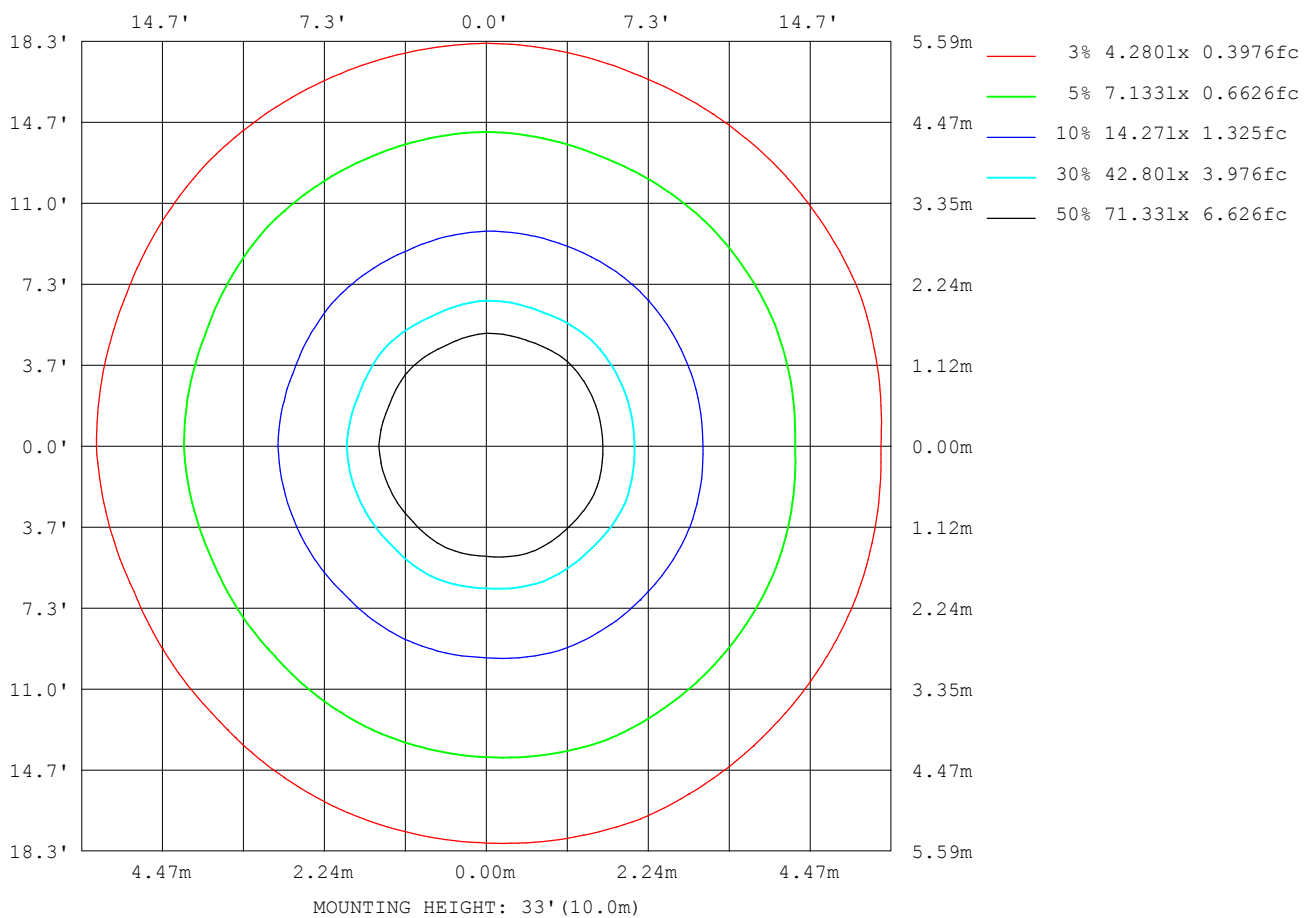
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.1470A P:31.70W PF:0.9560 Freq:50.00Hz Lamp Flux:2417.84x1 lm		
NAME: DP145RW-S01-32G30	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:0.1470A P:31.70W PF:0.9560 Freq:50.00Hz Lamp Flux:2417.84x1 lm		
NAME: DP145RW-S01-32G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

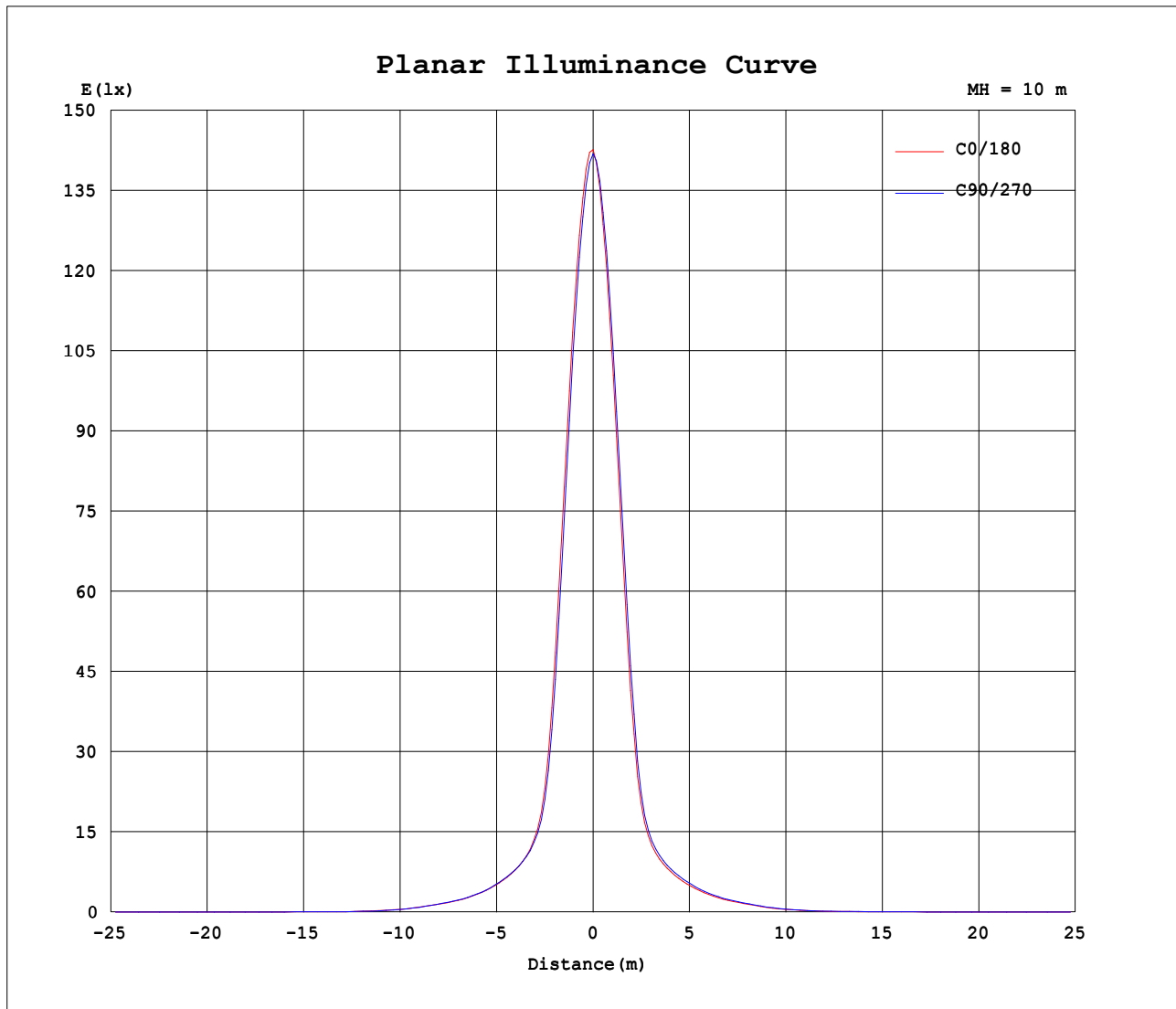
AvgL	cd/m2
L_0~180 (65) av	4377
L_0~180 (75) av	4198
L_0~180 (85) av	6379
L_90~270 (65) av	4431
L_90~270 (75) av	4149
L_90~270 (85) av	4519
L_45 (65) av	4419
L_45 (75) av	4238
L_45 (85) av	5053

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:

```