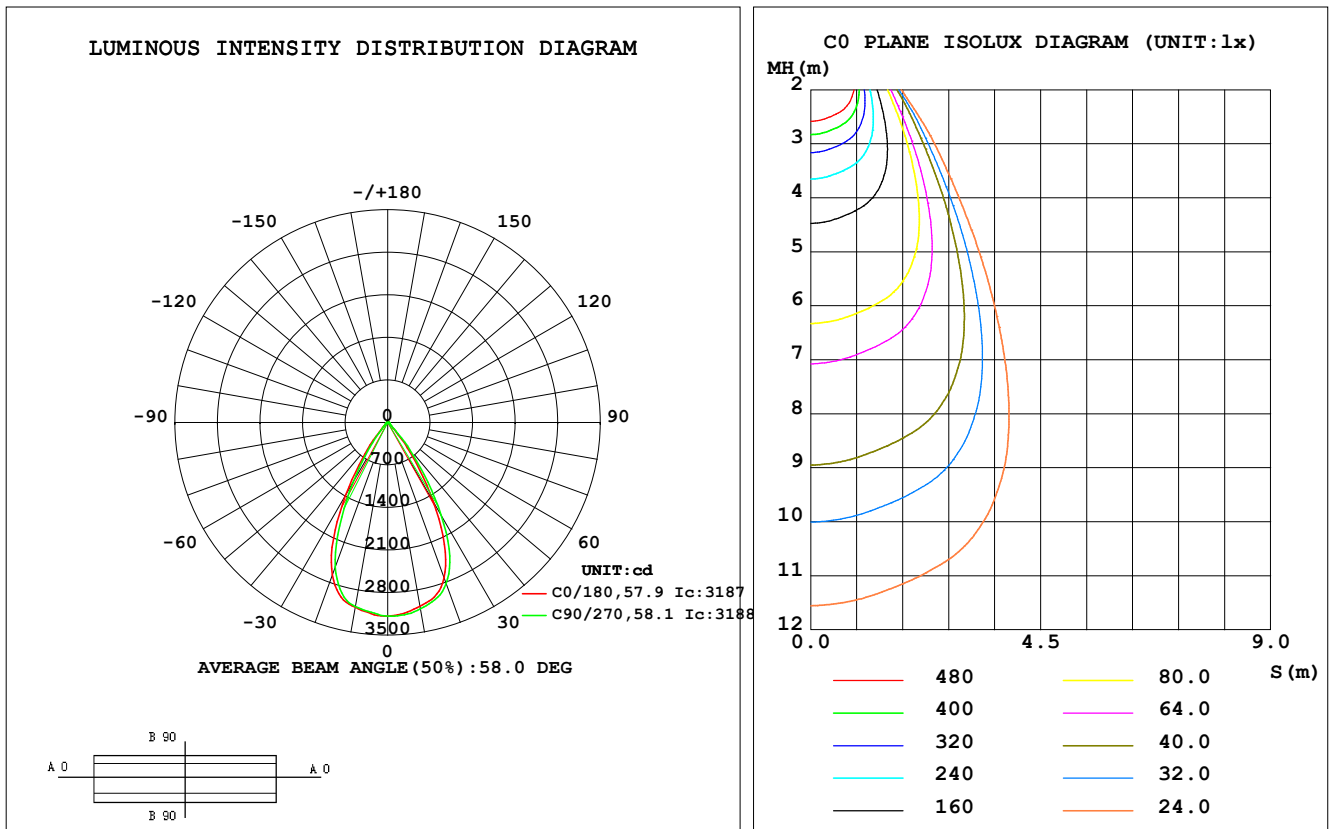


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:224.8V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2804.86x1 lm					
NAME: DP145RW-WF01-32G40		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:140		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 87.93 lm/W
MODEL	4000K CRI90	I _{max} (cd)	3189	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)	2804.9	η UP,DN(C0-180)	0.0,52.5	
NOMINAL FLUX(lm)	2804.86	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,47.5	
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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	3071	3115	3113	3067	3089	3080	3076	3088	0- 10	299.1	299.1	10.7,10.7
20	2718	2848	2817	2648	2668	2535	2527	2751	10- 20	828.1	1127	40.2,40.2
30	1498	1765	1763	1359	1390	1167	1152	1557	20- 30	969.4	2097	74.7,74.7
40	367.5	506.4	507.7	263.9	295.8	185.4	184.1	403.7	30- 40	512.7	2609	93,93
50	56.15	69.08	68.04	48.06	68.28	55.00	55.56	75.99	40- 50	109.3	2719	96.9,96.9
60	22.88	25.95	25.71	20.24	35.82	33.91	34.12	39.13	50- 60	37.08	2756	98.2,98.2
70	15.06	16.15	15.65	13.83	24.40	22.71	22.89	26.00	60- 70	23.95	2780	99.1,99.1
80	9.286	8.977	7.019	7.845	15.12	13.76	13.20	16.11	70- 80	16.34	2796	99.7,99.7
90	4.941	4.834	5.192	5.172	8.306	8.027	8.006	8.451	80- 90	8.950	2805	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): 2684.4 lm

%lum = 95.7%

%lamp = 95.7%

Conical surface Flux(120deg): 2755.6 lm

%lum = 98.2%

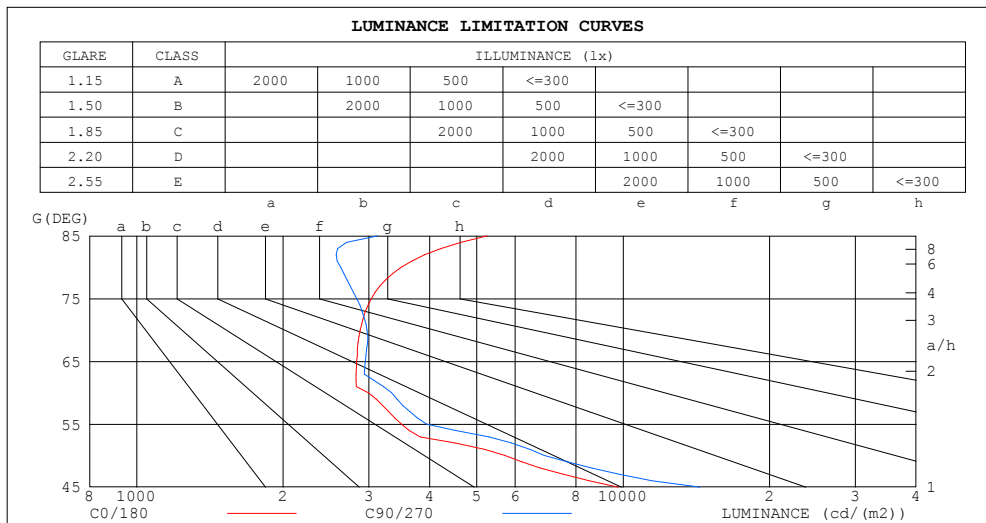
%lamp = 98.2%

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:224.8V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2804.86x1 lm		
NAME: DP145RW-WF01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	5247	3130
80	3495	2627
75	3035	2831
70	2879	2974
65	2832	2949
60	2991	3342
55	3502	3942
50	5710	6879
45	9771	14386

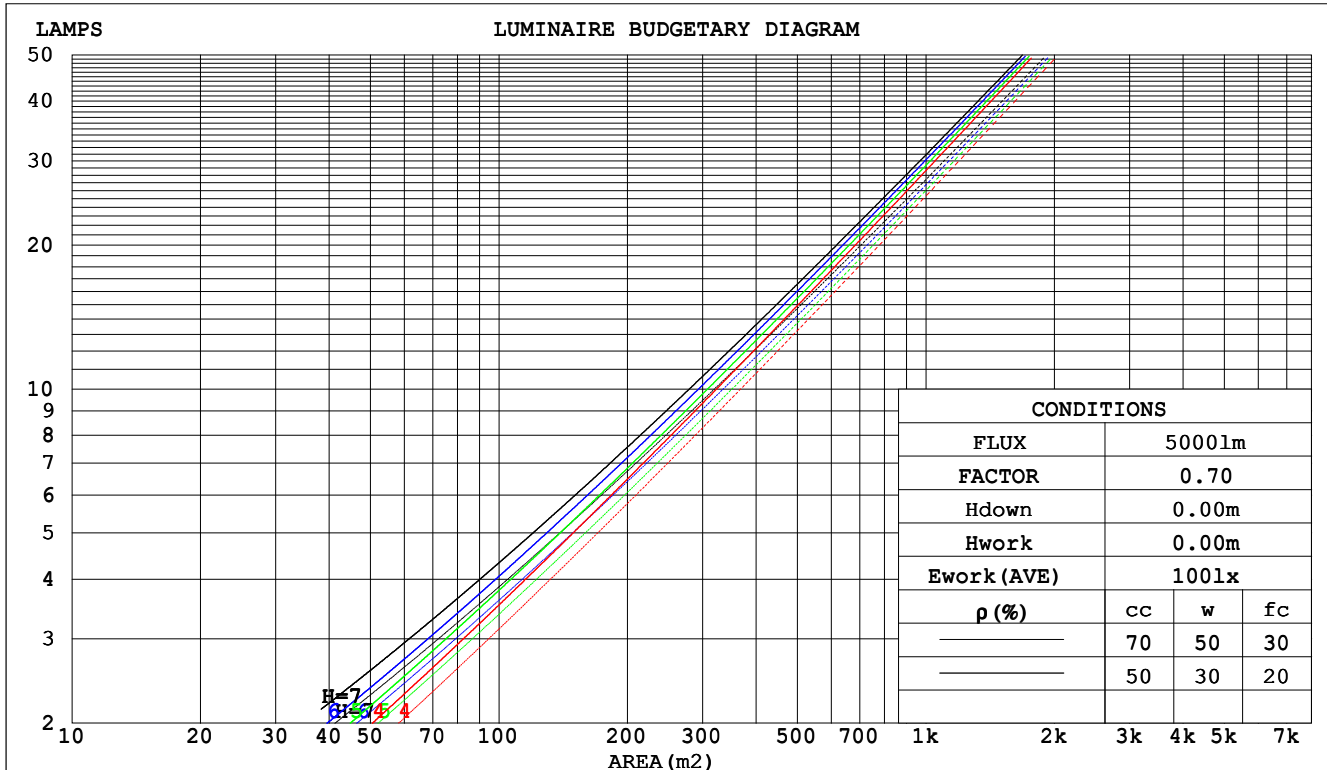
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZR
Test Date:2021-07-16

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:224.8V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2804.86x1 lm		
NAME: DP145RW-WF01-32G40	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	1.08	1.06	1.04	1.04	1.03	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.95	1.01	.97	.94	.98	.95	.92	.95	.92	.90	.92	.90	.88	.87
3.0	.96	.91	.87	.95	.90	.86	.92	.88	.85	.90	.86	.84	.87	.85	.82	.81
4.0	.90	.84	.80	.89	.84	.80	.87	.82	.79	.85	.81	.78	.83	.80	.77	.75
5.0	.84	.79	.74	.83	.78	.74	.82	.77	.73	.80	.76	.73	.78	.75	.72	.71
6.0	.79	.73	.69	.78	.73	.69	.77	.72	.68	.76	.71	.68	.74	.70	.67	.66
7.0	.75	.69	.65	.74	.68	.64	.73	.68	.64	.72	.67	.64	.70	.66	.63	.62
8.0	.70	.65	.61	.70	.64	.60	.69	.64	.60	.68	.63	.60	.67	.63	.60	.58
9.0	.67	.61	.57	.66	.61	.57	.65	.60	.57	.64	.60	.56	.64	.59	.56	.55
10.0	.63	.57	.54	.63	.57	.54	.62	.57	.53	.61	.57	.53	.60	.56	.53	.52



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:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2804.86x1 lm					
NAME: DP145RW-WF01-32G40			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	.182	.103	.033	.175	.100	.032	.162	.093	.030	.151	.087	.028	.140	.081	.026		
2.0	.172	.094	.029	.167	.092	.028	.156	.087	.027	.146	.082	.026	.137	.078	.024		
3.0	.163	.087	.026	.158	.085	.026	.149	.081	.025	.141	.077	.024	.133	.074	.023		
4.0	.155	.080	.024	.151	.079	.023	.143	.076	.023	.136	.073	.022	.129	.070	.021		
5.0	.147	.075	.022	.144	.074	.021	.137	.071	.021	.130	.069	.020	.125	.067	.020		
6.0	.140	.070	.020	.137	.069	.020	.131	.067	.020	.125	.065	.019	.120	.063	.019		
7.0	.134	.066	.019	.131	.065	.019	.126	.064	.018	.121	.062	.018	.116	.060	.018		
8.0	.128	.063	.018	.126	.062	.017	.121	.060	.017	.116	.059	.017	.112	.058	.017		
9.0	.123	.059	.017	.120	.059	.016	.116	.057	.016	.112	.056	.016	.108	.055	.016		
10.0	.118	.056	.016	.116	.056	.016	.112	.055	.015	.108	.054	.015	.105	.053	.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	.144	.147	.135	.124	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.132	.112	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.089	.123	.098	.078	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.134	.099	.072	.115	.085	.063	.079	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.125	.087	.060	.107	.076	.052	.074	.053	.037	.043	.031	.022	.014	.010	.007	
6.0	.117	.078	.050	.101	.068	.043	.070	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.111	.070	.042	.095	.061	.037	.066	.043	.026	.038	.025	.015	.012	.008	.005	
8.0	.105	.064	.036	.091	.056	.031	.063	.039	.022	.036	.023	.013	.012	.008	.004	
9.0	.100	.059	.031	.086	.051	.027	.060	.036	.019	.035	.021	.012	.011	.007	.004	
10.0	.096	.055	.027	.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:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2804.86x1 lm											
NAME: DP145RW-WF01-32G40					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		15.0	15.9	15.2	16.1	16.2	16.0	16.9	16.2	17.1	17.3
	3H	14.9	15.7	15.1	15.9	16.1	15.9	16.7	16.1	16.9	17.1
	4H	14.8	15.7	15.1	15.9	16.1	15.8	16.6	16.1	16.9	17.1
	6H	14.8	15.6	15.1	15.8	16.1	15.8	16.5	16.1	16.8	17.0
	8H	14.8	15.6	15.1	15.8	16.1	15.7	16.5	16.0	16.7	17.0
	12H	14.8	15.5	15.2	15.8	16.1	15.7	16.4	16.0	16.7	17.0
4H	2H	14.7	15.6	15.0	15.8	16.0	15.7	16.6	16.0	16.8	17.0
	3H	14.7	15.4	15.0	15.7	15.9	15.7	16.4	16.0	16.6	16.9
	4H	14.7	15.3	15.0	15.6	15.9	15.6	16.3	16.0	16.6	16.9
	6H	14.7	15.3	15.1	15.6	16.0	15.6	16.2	16.0	16.5	16.9
	8H	14.8	15.3	15.1	15.6	16.0	15.6	16.1	16.0	16.5	16.8
	12H	14.8	15.3	15.2	15.7	16.1	15.6	16.0	16.0	16.4	16.8
8H	4H	14.6	15.1	15.0	15.5	15.8	15.5	16.1	15.9	16.4	16.8
	6H	14.7	15.1	15.1	15.5	15.9	15.5	16.0	16.0	16.4	16.8
	8H	14.8	15.2	15.2	15.6	16.0	15.5	15.9	16.0	16.3	16.8
	12H	14.9	15.2	15.4	15.7	16.1	15.5	15.8	16.0	16.3	16.8
12H	4H	14.6	15.0	15.0	15.4	15.8	15.5	16.0	15.9	16.3	16.7
	6H	14.7	15.0	15.1	15.5	15.9	15.5	15.9	15.9	16.3	16.7
	8H	14.8	15.1	15.2	15.5	16.0	15.5	15.8	16.0	16.3	16.7
Variations with the observer position at spacings:											
S = 1.0H	+ 2.4 / - 4.9					+ 2.9 / - 6.4					
1.5H	+ 4.6 / - 4.6					+ 5.2 / - 6.0					
2.0H	+ 2.3 / - 1.1					+ 3.8 / - 1.6					

CIE Pub.117, 2805 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 3.6$)

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:

UTILIZATION FACTORS TABLE

Test:U:224.8V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2804.86x1 lm		
NAME: DP145RW-WF01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

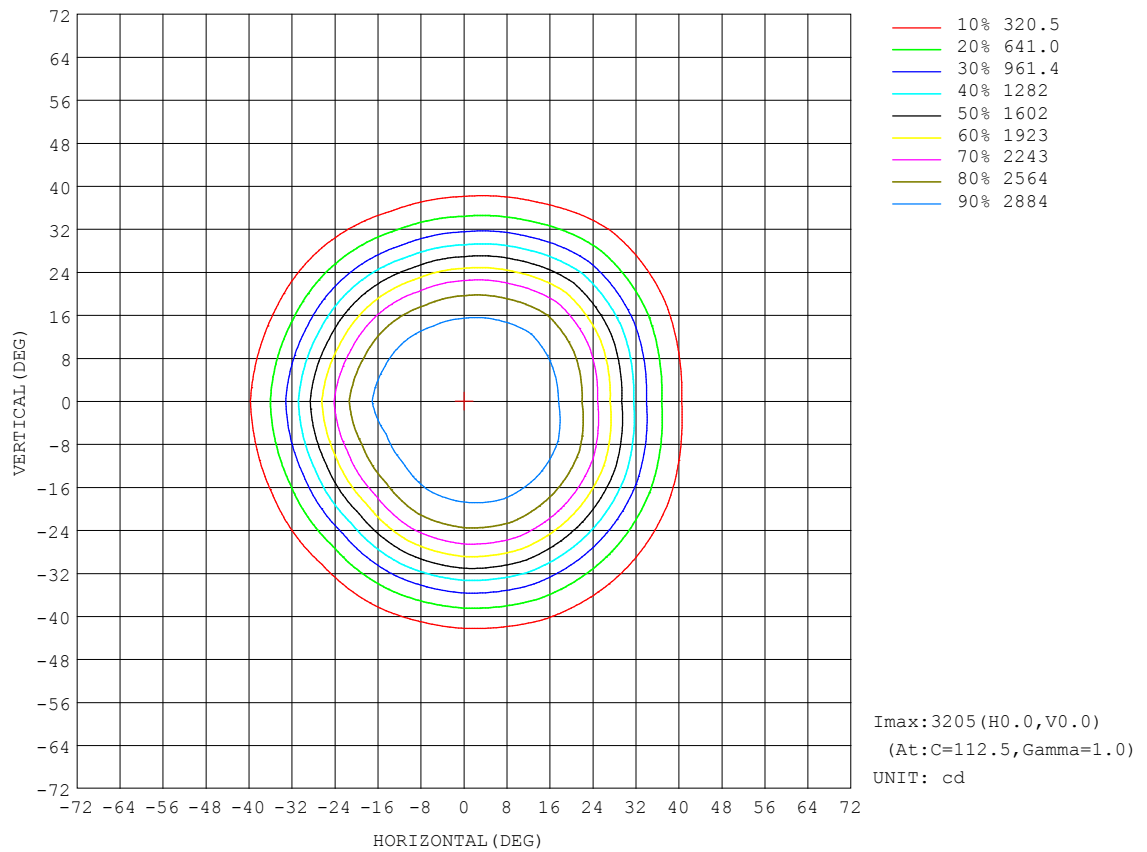
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	81	77	87	81	77	86	80	77	73
0.80	95	89	85	94	88	85	93	88	84	81
1.00	99	93	90	98	93	89	97	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	97	104	100	97	102	99	96	91
2.00	108	104	101	107	103	100	104	101	99	93
2.50	110	106	103	108	105	102	105	103	100	94
3.00	112	108	105	110	107	104	106	104	102	96
4.00	114	111	109	112	109	107	108	106	104	97
5.00	115	113	111	113	111	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:224.8V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2804.86x1 lm		
NAME: DP145RW-WF01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

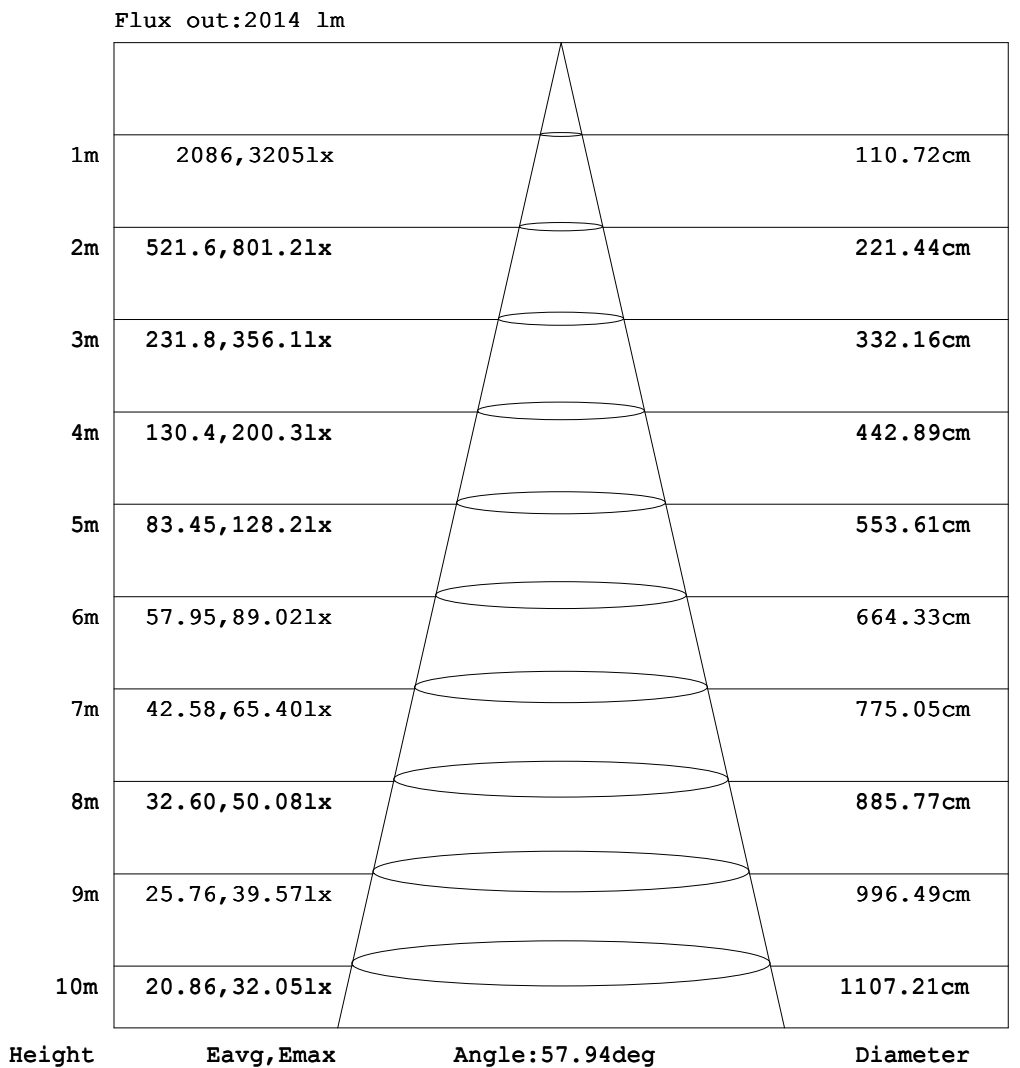


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ZR
Test Date: 2021-07-16

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:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2804.86x1 lm		
NAME: DP145RW-WF01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:



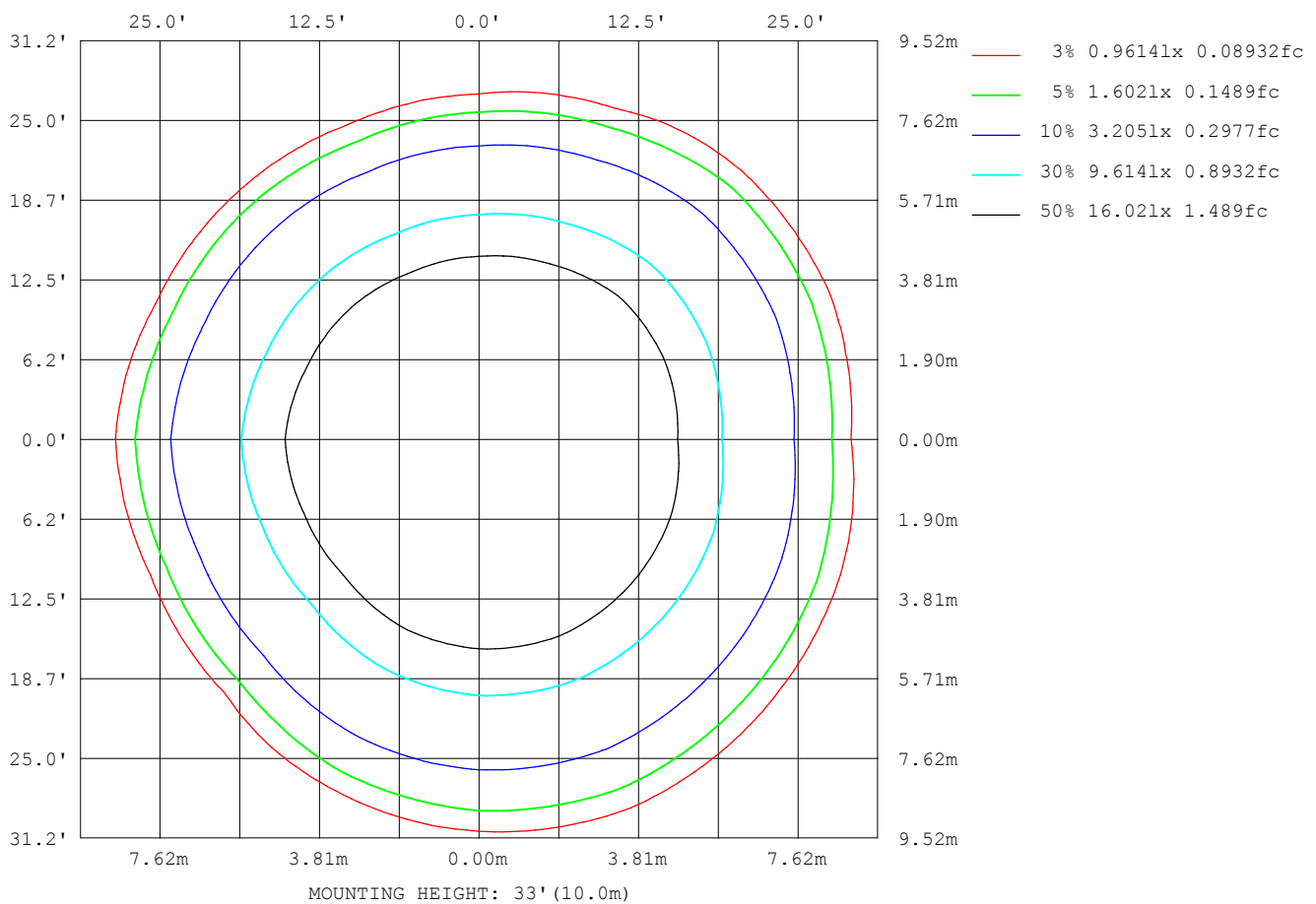
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2804.86x1 lm		
NAME: DP145RW-WF01-32G40	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:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2804.86x1 lm		
NAME: DP145RW-WF01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

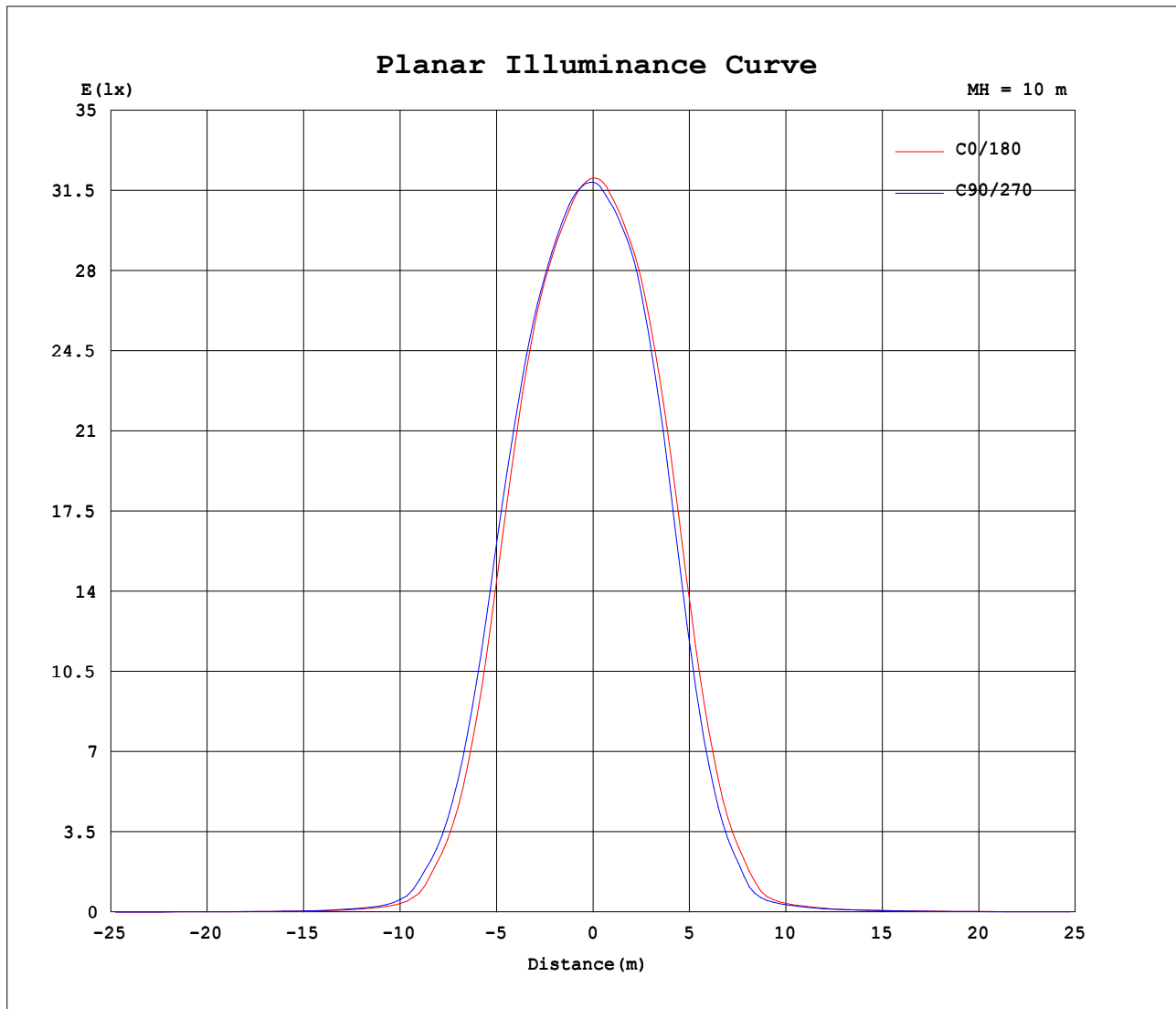
AvgL	cd/m2
L_0~180 (65) av	3707
L_0~180 (75) av	3955
L_0~180 (85) av	6814
L_90~270 (65) av	3651
L_90~270 (75) av	3686
L_90~270 (85) av	4895
L_45 (65) av	3700
L_45 (75) av	3936
L_45 (85) av	5458

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:

```