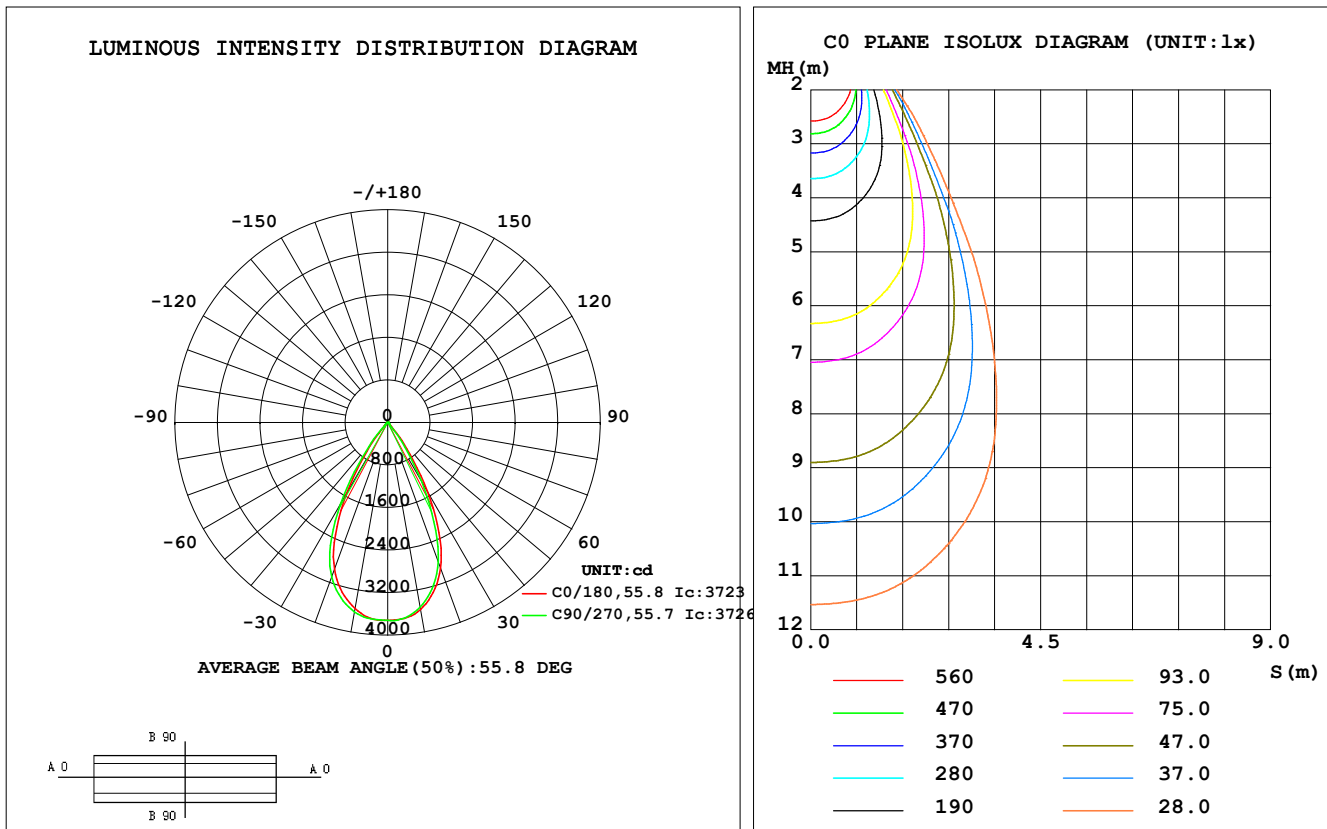


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:224.8V I:0.1800A P:39.60W PF:0.9760 Freq:50.00Hz Lamp Flux:2915.93x1 lm					
NAME: DP165RW-WF02-40G30			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.:155		Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 73.63 lm/W
MODEL	3000K CRI90	I _{max} (cd)	3728	S/MH(C0/180)	0.84	
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	0.87	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	2915.9	η UP,DN(C0-180)	0.0,46.3	
NOMINAL FLUX(lm)	2915.93	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,53.7	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	36	η down(%)	100.0	CIBSE SHR MAX	0.85	



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	3572	3536	3526	3520	3550	3600	3618	3620	0- 10	349.0	349.0	12,12
20	2915	2829	2782	2808	2935	3031	3085	3044	10- 20	924.3	1273	43.7,43.7
30	1497	1333	1264	1322	1556	1699	1781	1728	20- 30	1034	2308	79.1,79.1
40	254.7	173.2	138.6	157.9	262.0	352.6	413.6	418.3	30- 40	494.9	2803	96.1,96.1
50	26.09	18.30	14.02	16.46	48.68	55.54	55.53	54.24	40- 50	68.41	2871	98.5,98.5
60	3.125	3.202	3.088	3.006	20.02	20.53	21.52	21.04	50- 60	17.53	2889	99.1,99.1
70	3.464	3.517	3.515	3.465	14.76	15.15	15.39	15.28	60- 70	10.40	2899	99.4,99.4
80	4.049	4.128	4.142	4.108	11.13	11.40	11.55	11.48	70- 80	8.962	2908	99.7,99.7
90	5.197	5.377	5.476	5.406	8.525	8.732	8.833	8.781	80- 90	7.995	2916	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): 2850.9 lm

%lum = 97.8%

%lamp = 97.8%

Conical surface Flux(120deg): 2888.6 lm

%lum = 99.1%

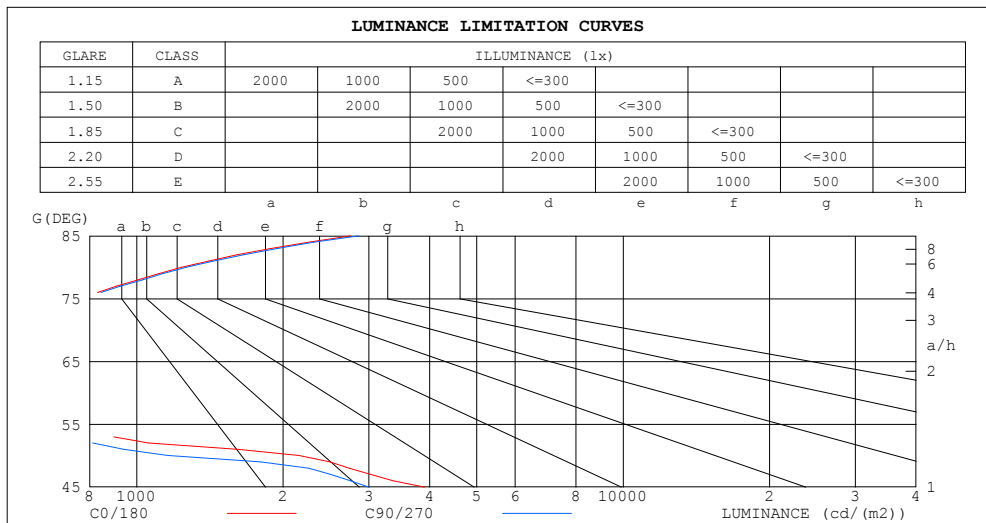
%lamp = 99.1%

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

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:0.1800A P:39.60W PF:0.9760 Freq:50.00Hz Lamp Flux:2915.93x1 lm		
NAME: DP165RW-WF02-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2750	2859
80	1237	1265
75	764	776
70	538	545
65	406	409
60	332	327
55	674	520
50	2154	1156
45	3905	3001

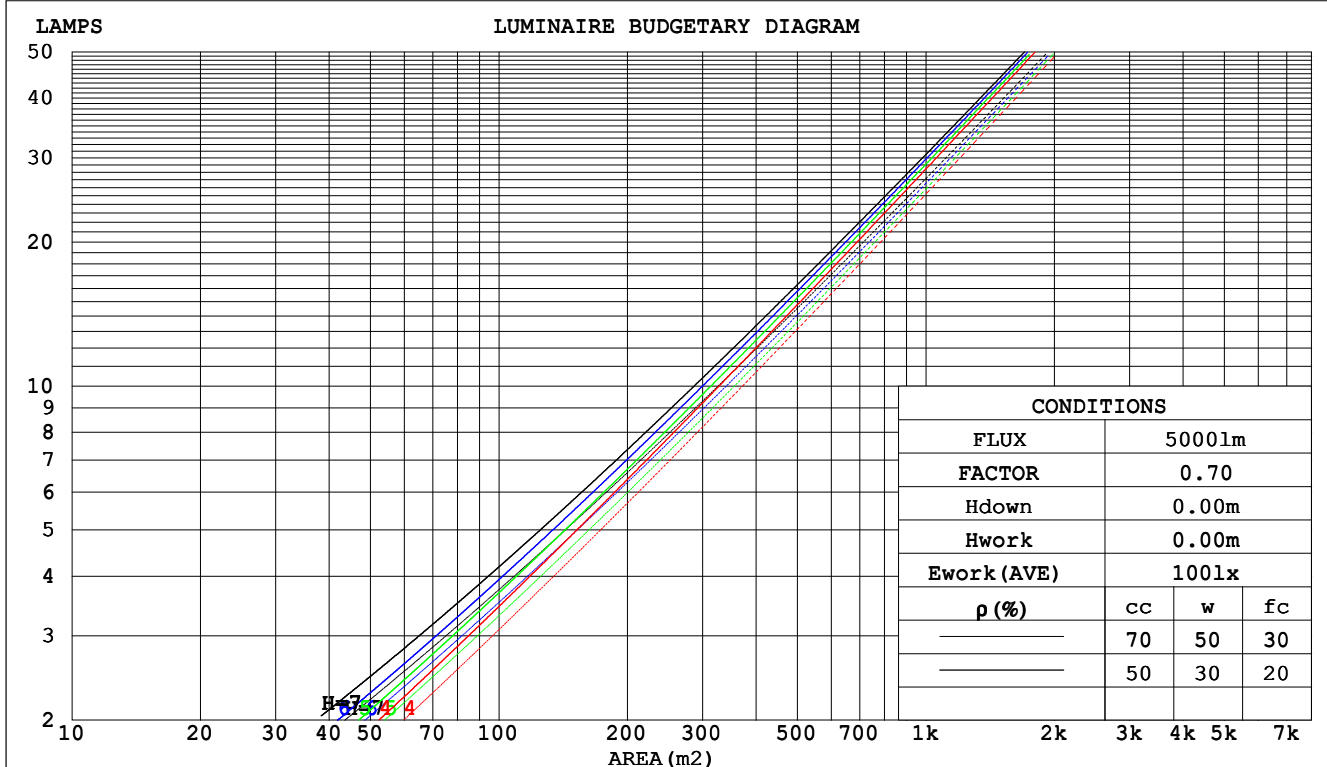
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZR
Test Date:2021-07-16

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:0.1800A P:39.60W PF:0.9760 Freq:50.00Hz Lamp Flux:2915.93x1 lm		
NAME: DP165RW-WF02-40G30	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	.00
1.0	1.11	1.09	1.06	1.09	1.07	1.05	1.05	1.03	1.01	1.01	.98	.98	.98	.97	.96	.94
2.0	1.04	.99	.97	1.02	.98	.96	.99	.96	.93	.96	.93	.91	.93	.91	.90	.88
3.0	.97	.92	.89	.96	.91	.88	.93	.90	.87	.91	.88	.85	.89	.86	.84	.82
4.0	.91	.86	.82	.90	.85	.82	.88	.84	.81	.86	.83	.80	.84	.81	.79	.77
5.0	.86	.80	.76	.85	.80	.76	.83	.79	.75	.82	.78	.75	.80	.77	.74	.73
6.0	.81	.75	.71	.80	.75	.71	.79	.74	.71	.77	.73	.70	.76	.73	.70	.68
7.0	.77	.71	.67	.76	.71	.67	.75	.70	.66	.74	.69	.66	.72	.69	.66	.64
8.0	.73	.67	.63	.72	.67	.63	.71	.66	.63	.70	.66	.62	.69	.65	.62	.61
9.0	.69	.63	.59	.68	.63	.59	.67	.63	.59	.67	.62	.59	.66	.62	.59	.58
10.0	.65	.60	.56	.65	.60	.56	.64	.59	.56	.63	.59	.56	.63	.59	.56	.54



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:0.1800A P:39.60W PF:0.9760 Freq:50.00Hz Lamp Flux:2915.93x1 lm					
NAME: DP165RW-WF02-40G30			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	.174	.099	.031	.167	.095	.030	.155	.089	.028	.143	.082	.026	.132	.077	.025	
2.0	.164	.090	.028	.159	.087	.027	.148	.082	.026	.138	.078	.024	.129	.073	.023	
3.0	.156	.083	.025	.151	.081	.024	.142	.077	.023	.134	.073	.022	.126	.070	.022	
4.0	.148	.077	.023	.144	.075	.022	.136	.072	.022	.129	.069	.021	.122	.066	.020	
5.0	.141	.072	.021	.137	.070	.021	.130	.068	.020	.124	.066	.019	.118	.063	.019	
6.0	.134	.067	.019	.131	.066	.019	.125	.064	.019	.120	.062	.018	.115	.060	.018	
7.0	.128	.063	.018	.126	.063	.018	.120	.061	.018	.116	.059	.017	.111	.058	.017	
8.0	.123	.060	.017	.121	.059	.017	.116	.058	.017	.112	.057	.016	.107	.055	.016	
9.0	.118	.057	.016	.116	.056	.016	.112	.055	.016	.108	.054	.015	.104	.053	.015	
10.0	.113	.054	.015	.111	.054	.015	.108	.053	.015	.104	.052	.015	.101	.051	.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	.155	.133	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.142	.114	.090	.122	.098	.078	.084	.068	.055	.048	.040	.032	.016	.013	.011	
4.0	.132	.099	.073	.113	.085	.064	.078	.059	.045	.045	.035	.027	.014	.011	.009	
5.0	.123	.087	.061	.106	.075	.053	.073	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.115	.078	.051	.099	.067	.044	.068	.047	.031	.040	.028	.019	.013	.009	.006	
7.0	.109	.070	.043	.094	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.103	.064	.037	.089	.055	.032	.061	.039	.023	.036	.023	.014	.012	.008	.004	
9.0	.098	.059	.032	.084	.051	.028	.059	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.094	.054	.028	.081	.047	.024	.056	.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:0.1800A P:39.60W PF:0.9760 Freq:50.00Hz Lamp Flux:2915.93x1 lm										
NAME: DP165RW-WF02-40G30					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	11.6	12.5	11.8	12.7	12.8	10.5	11.4	10.7	11.6	11.7
3H	11.4	12.3	11.7	12.5	12.7	10.3	11.2	10.6	11.4	11.6
4H	11.4	12.1	11.6	12.4	12.6	10.3	11.0	10.5	11.3	11.5
6H	11.3	12.0	11.6	12.3	12.5	10.2	10.9	10.5	11.2	11.4
8H	11.3	12.0	11.6	12.2	12.5	10.2	10.9	10.5	11.1	11.4
12H	11.3	12.0	11.6	12.2	12.5	10.2	10.9	10.5	11.1	11.4
4H 2H	11.3	12.1	11.6	12.3	12.6	10.2	11.0	10.5	11.2	11.5
3H	11.2	11.9	11.5	12.1	12.4	10.1	10.7	10.4	11.0	11.3
4H	11.1	11.7	11.4	12.0	12.3	10.0	10.6	10.3	10.9	11.2
6H	11.0	11.6	11.4	11.9	12.3	10.0	10.5	10.3	10.8	11.2
8H	11.0	11.5	11.4	11.9	12.3	10.0	10.5	10.4	10.8	11.2
12H	11.1	11.5	11.5	11.9	12.3	10.0	10.5	10.5	10.9	11.3
8H 4H	11.0	11.5	11.4	11.8	12.2	9.9	10.4	10.3	10.7	11.1
6H	10.9	11.3	11.4	11.7	12.2	9.9	10.3	10.3	10.7	11.1
8H	11.0	11.3	11.4	11.7	12.2	9.9	10.3	10.4	10.7	11.1
12H	11.0	11.4	11.5	11.8	12.3	10.1	10.4	10.5	10.8	11.3
12H 4H	10.9	11.4	11.3	11.8	12.1	9.8	10.3	10.2	10.7	11.0
6H	10.9	11.3	11.3	11.7	12.1	9.8	10.2	10.3	10.6	11.1
8H	10.9	11.2	11.4	11.7	12.2	9.9	10.2	10.4	10.7	11.1
Variations with the observer position at spacings:										
S = 1.0H	+ 4.1 / - 8.4					+ 4.3 / - 6.4				
1.5H	+ 6.8 / - 8.2					+ 6.9 / - 6.3				
2.0H	+ 3.4 / - 1.0					+ 2.3 / - 0.8				

CIE Pub.117, 2916 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:224.8V I:0.1800A P:39.60W PF:0.9760 Freq:50.00Hz Lamp Flux:2915.93x1 lm		
NAME: DP165RW-WF02-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:

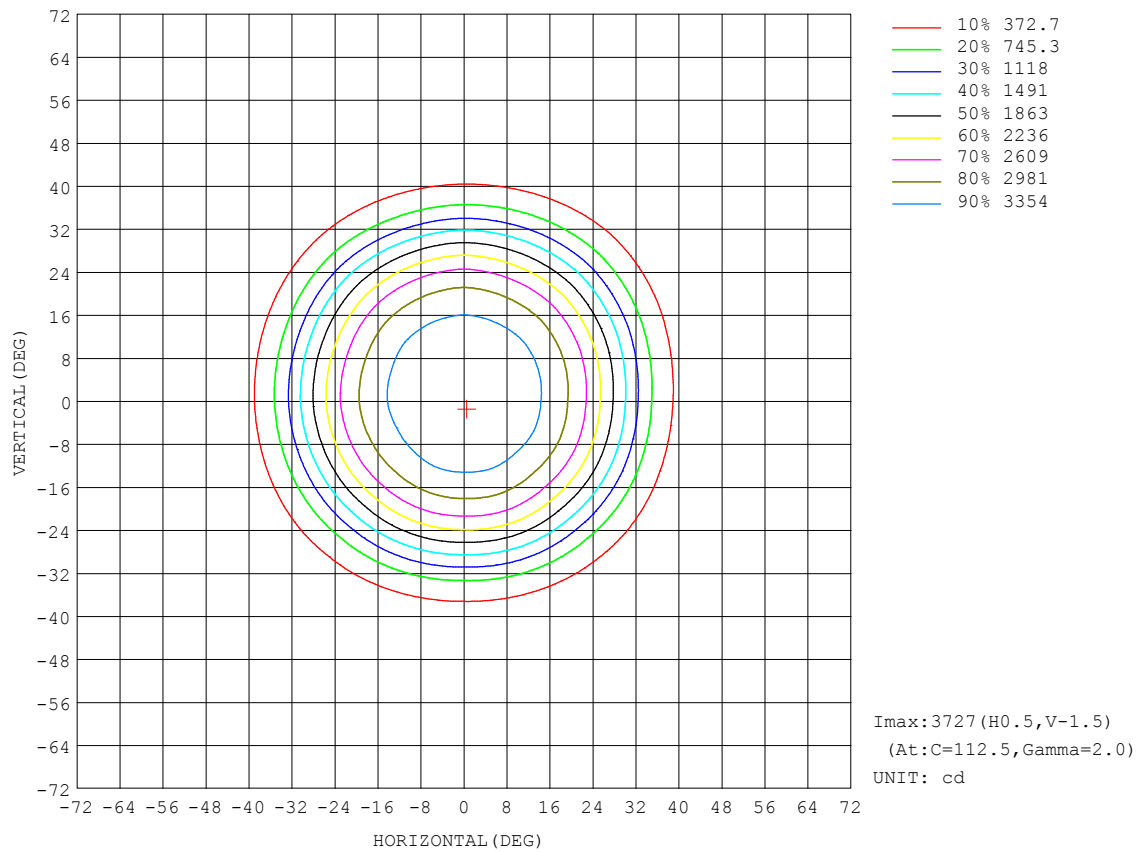
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	80	89	83	79	88	83	79	76
0.80	96	91	87	96	90	87	95	90	87	83
1.00	100	95	92	100	95	91	98	94	91	87
1.25	104	99	96	103	99	95	101	97	95	91
1.50	107	102	99	105	101	99	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	95
2.50	111	107	104	109	106	103	106	103	101	96
3.00	112	109	106	110	107	105	107	105	103	97
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

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:0.1800A P:39.60W PF:0.9760 Freq:50.00Hz Lamp Flux:2915.93x1 lm		
NAME: DP165RW-WF02-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:

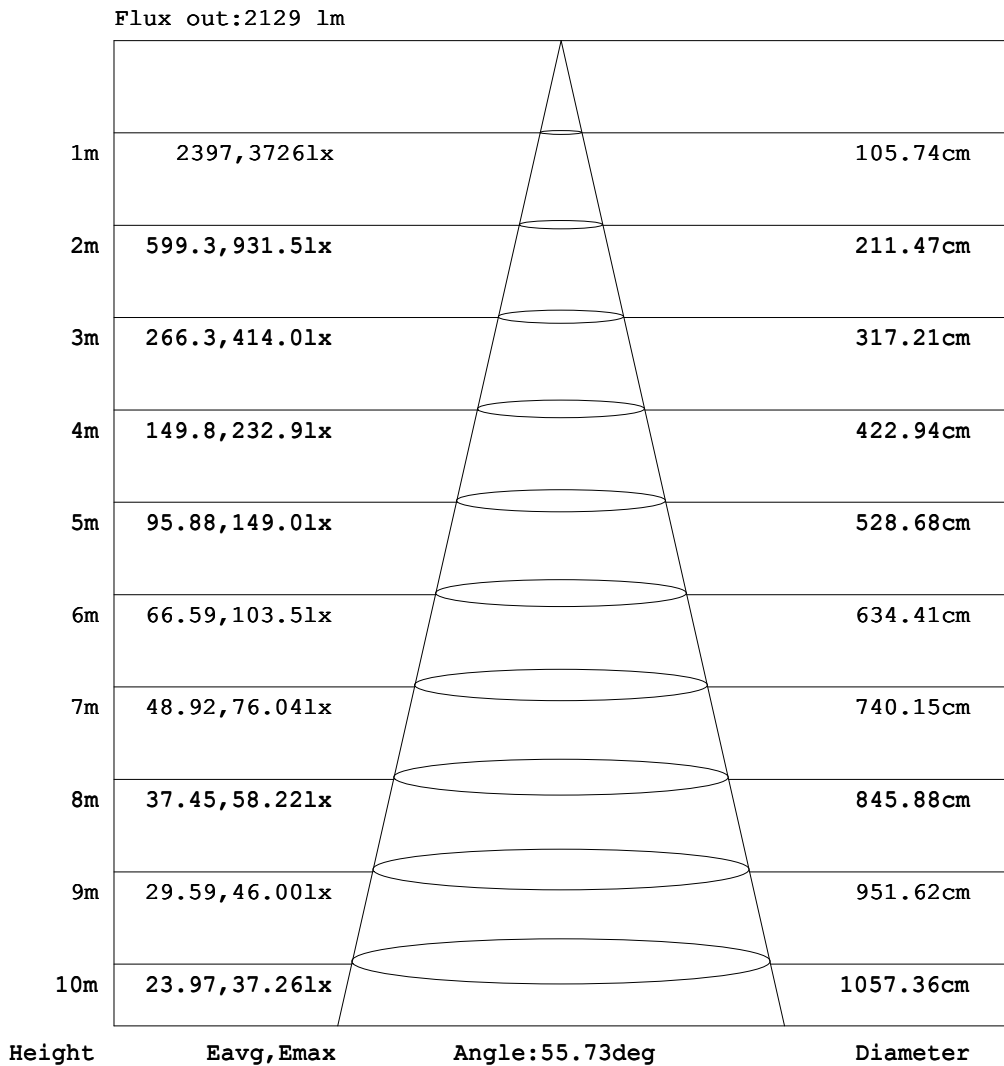


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ZR
Test Date: 2021-07-16

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:224.8V I:0.1800A P:39.60W PF:0.9760 Freq:50.00Hz Lamp Flux:2915.93x1 lm		
NAME: DP165RW-WF02-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:



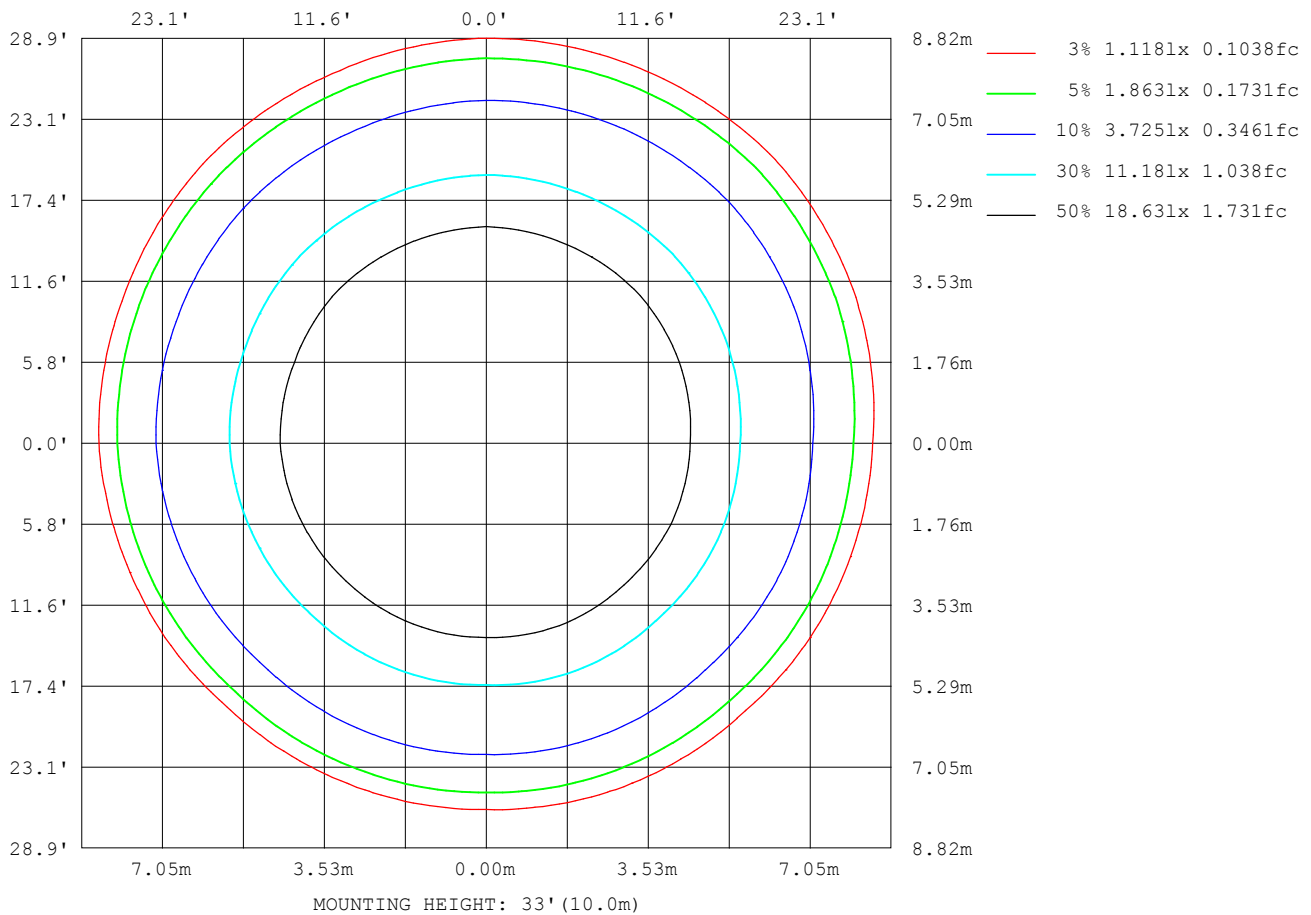
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:224.8V I:0.1800A P:39.60W PF:0.9760 Freq:50.00Hz Lamp Flux:2915.93x1 lm		
NAME: DP165RW-WF02-40G30	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:224.8V I:0.1800A P:39.60W PF:0.9760 Freq:50.00Hz Lamp Flux:2915.93x1 lm		
NAME: DP165RW-WF02-40G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:

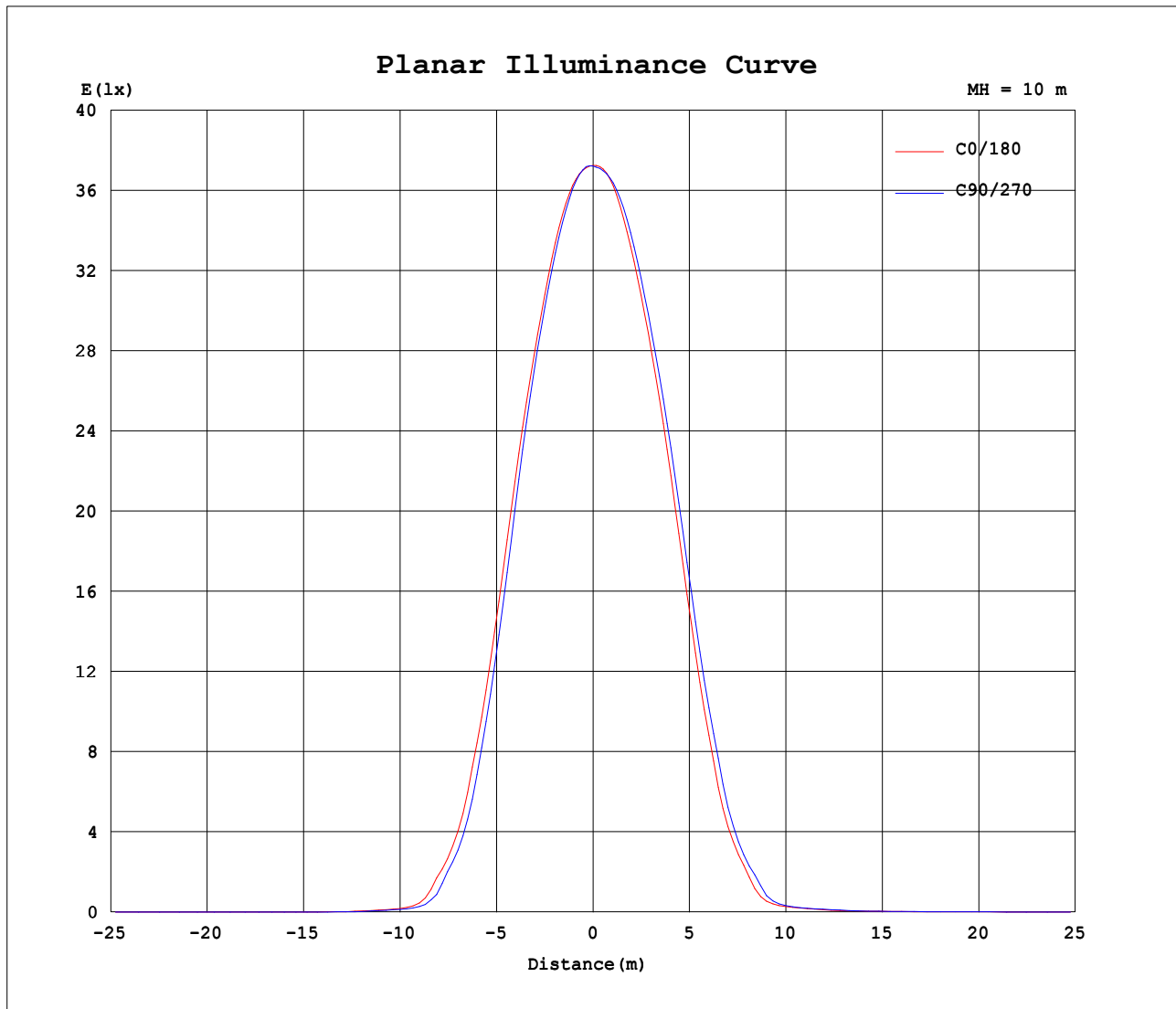
AvgL	cd/m2
L_0~180 (65) av	1284
L_0~180 (75) av	1691
L_0~180 (85) av	4317
L_90~270 (65) av	1332
L_90~270 (75) av	1750
L_90~270 (85) av	4491
L_45 (65) av	1318
L_45 (75) av	1735
L_45 (85) av	4439

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:

```