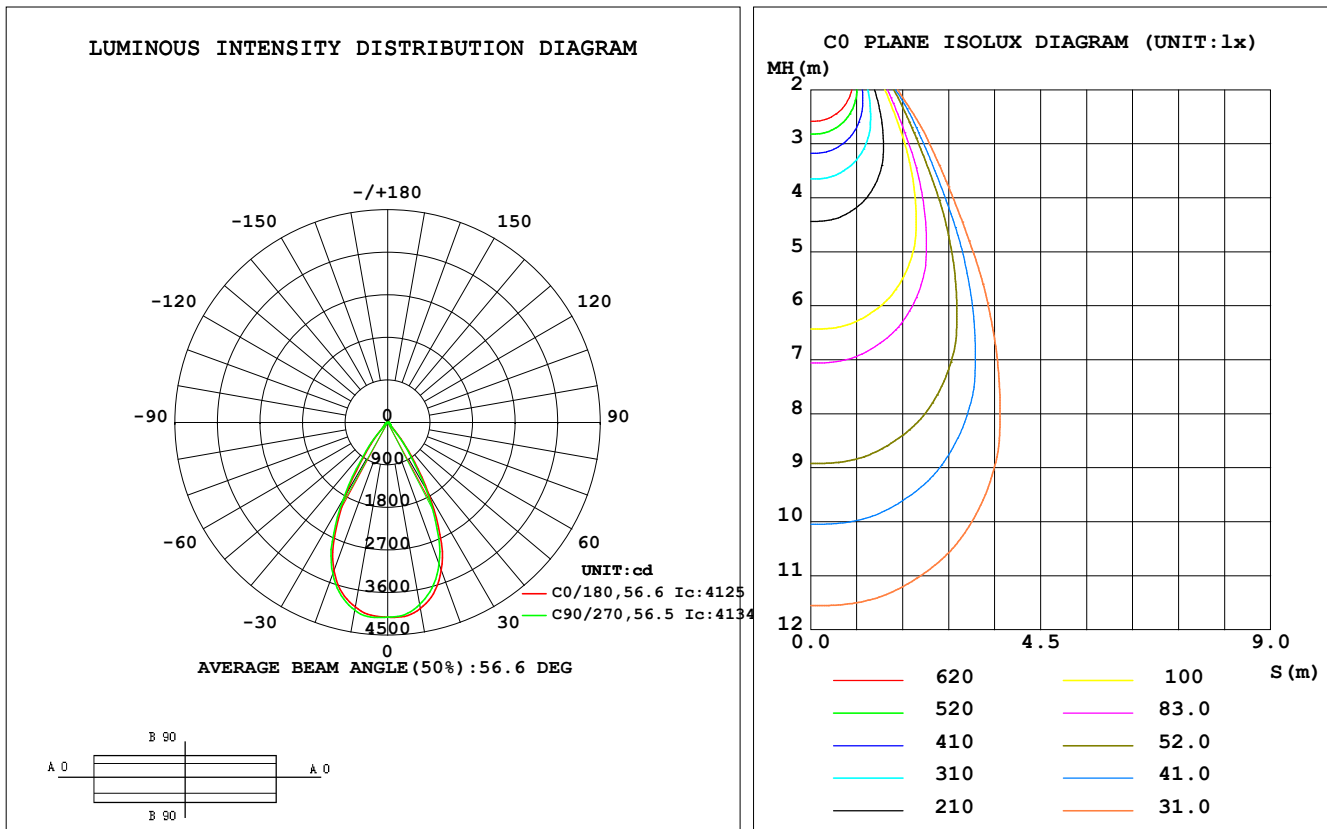


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:224.9V I:0.1820A P:40.20W PF:0.9770 Freq:50.00Hz Lamp Flux:3424.33x1 lm					
NAME: DP165RW-WF01-40G40		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:155		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 85.18 lm/W
MODEL	4000K CRI90	I _{max} (cd)	4140	S/MH(C0/180)	0.85	
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	0.87	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	3424.3	η UP,DN(C0-180)	0.0,47.7	
NOMINAL FLUX(lm)	3424.33	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,52.3	
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	3996	3954	3909	3885	3964	3991	4031	4060	0- 10	387.8	387.8	11.3,11.3
20	3322	3252	3184	3200	3334	3375	3402	3453	10- 20	1038	1426	41.6,41.6
30	1730	1671	1619	1611	1781	1834	1907	1979	20- 30	1185	2611	76.3,76.3
40	318.4	288.1	250.1	226.4	361.7	384.8	454.3	500.4	30- 40	591.6	3203	93.5,93.5
50	64.28	62.19	60.50	57.19	93.19	93.26	92.32	95.89	40- 50	107.6	3310	96.7,96.7
60	29.78	29.32	28.94	28.63	49.27	49.78	50.37	51.60	50- 60	48.20	3359	98.1,98.1
70	19.74	19.33	18.84	18.60	32.69	33.16	33.77	34.37	60- 70	32.50	3391	99,99
80	11.65	10.70	8.407	9.723	19.74	19.51	18.44	20.41	70- 80	21.56	3413	99.7,99.7
90	6.466	6.483	6.546	6.664	10.40	10.43	10.53	10.63	80- 90	11.64	3424	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): 3272.3 lm

%lum = 95.6%

%lamp = 95.6%

Conical surface Flux(120deg): 3358.6 lm

%lum = 98.1%

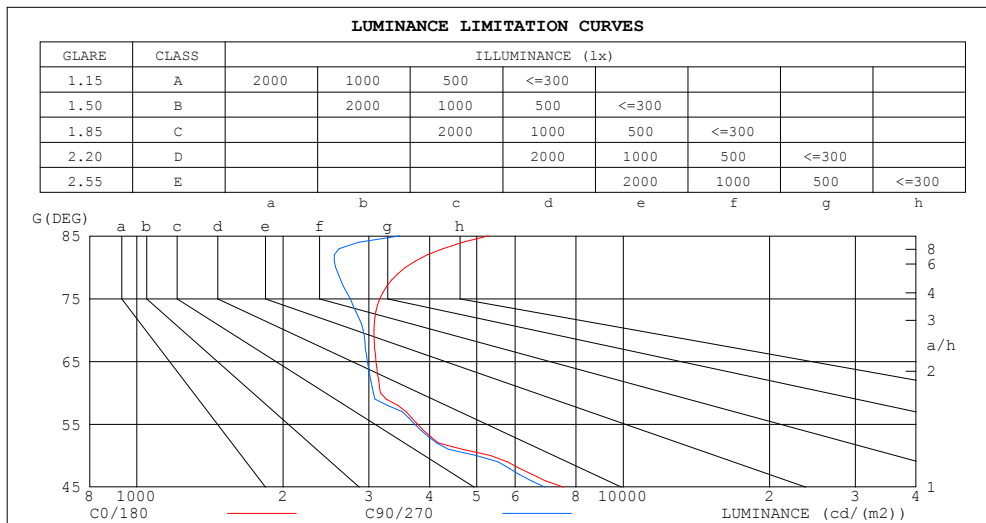
%lamp = 98.1%

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:224.9V I:0.1820A P:40.20W PF:0.9770 Freq:50.00Hz Lamp Flux:3424.33x1 lm		
NAME: DP165RW-WF01-40G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	5291	3475
80	3572	2565
75	3160	2746
70	3073	2919
65	3103	2980
60	3171	3066
55	3777	3726
50	5324	4987
45	7535	6906

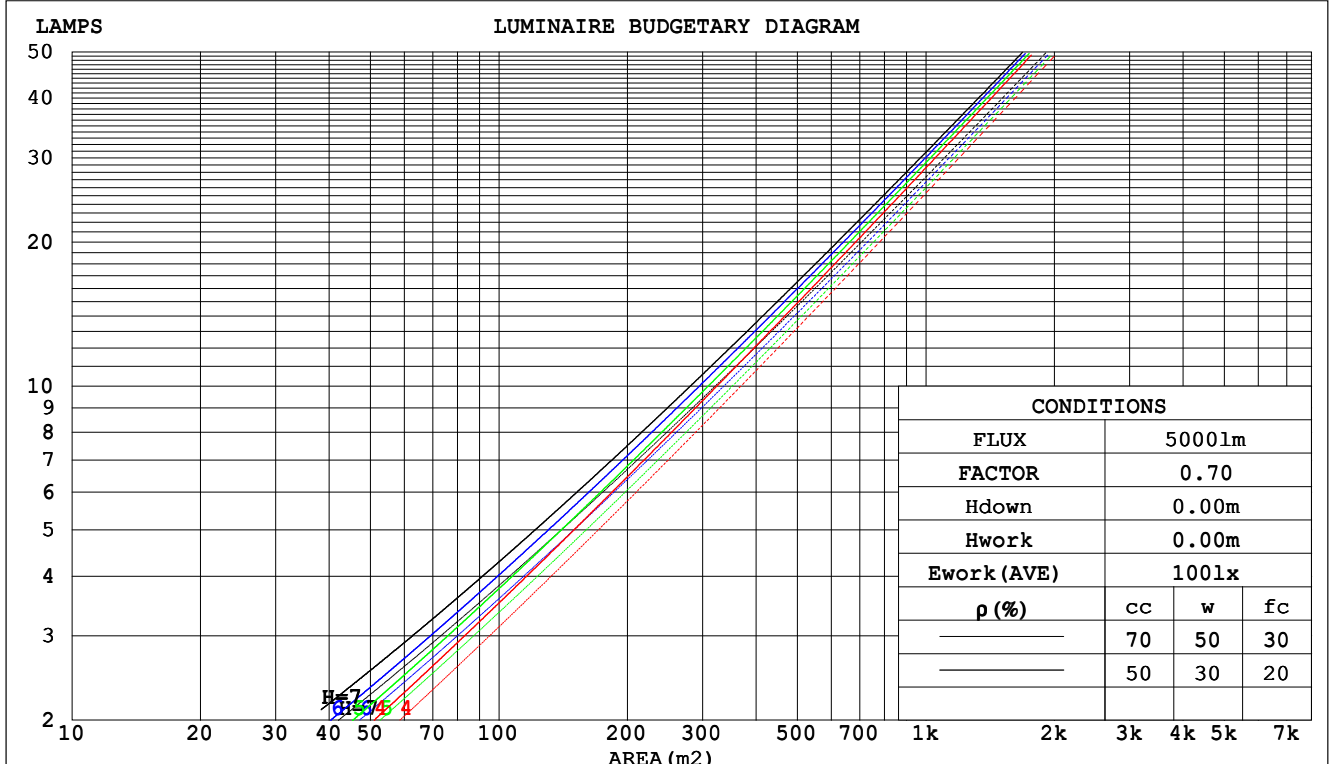
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZR
Test Date:2021-07-16

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:0.1820A P:40.20W PF:0.9770 Freq:50.00Hz Lamp Flux:3424.33x1 lm		
NAME: DP165RW-WF01-40G40	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	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	.96	1.01	.98	.95	.98	.95	.92	.95	.93	.90	.92	.90	.89	.87
3.0	.96	.91	.87	.95	.90	.87	.92	.88	.85	.90	.87	.84	.88	.85	.83	.81
4.0	.90	.85	.81	.89	.84	.80	.87	.83	.79	.85	.81	.78	.83	.80	.77	.76
5.0	.85	.79	.75	.84	.78	.74	.82	.77	.74	.80	.76	.73	.79	.75	.72	.71
6.0	.80	.74	.70	.79	.73	.69	.77	.73	.69	.76	.72	.69	.75	.71	.68	.67
7.0	.75	.69	.65	.75	.69	.65	.73	.68	.65	.72	.68	.64	.71	.67	.64	.63
8.0	.71	.65	.61	.71	.65	.61	.69	.64	.61	.68	.64	.61	.68	.63	.60	.59
9.0	.67	.62	.58	.67	.61	.58	.66	.61	.57	.65	.61	.57	.64	.60	.57	.56
10.0	.64	.58	.55	.63	.58	.54	.63	.58	.54	.62	.57	.54	.61	.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:224.9V I:0.1820A P:40.20W PF:0.9770 Freq:50.00Hz Lamp Flux:3424.33x1 lm					
NAME: DP165RW-WF01-40G40			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	.181	.103	.033	.174	.099	.032	.161	.093	.030	.150	.086	.028	.139	.081	.026	
2.0	.171	.094	.029	.165	.091	.028	.155	.086	.027	.145	.081	.025	.136	.077	.024	
3.0	.162	.086	.026	.157	.084	.025	.148	.080	.024	.140	.076	.023	.132	.073	.023	
4.0	.153	.080	.023	.149	.078	.023	.141	.075	.022	.134	.072	.022	.127	.069	.021	
5.0	.146	.074	.021	.142	.073	.021	.135	.070	.021	.129	.068	.020	.123	.066	.020	
6.0	.139	.070	.020	.136	.068	.020	.130	.066	.019	.124	.064	.019	.119	.063	.019	
7.0	.132	.065	.019	.130	.065	.018	.124	.063	.018	.119	.061	.018	.115	.060	.018	
8.0	.127	.062	.017	.124	.061	.017	.119	.060	.017	.115	.058	.017	.111	.057	.017	
9.0	.121	.059	.016	.119	.058	.016	.115	.057	.016	.111	.056	.016	.107	.054	.016	
10.0	.116	.056	.015	.114	.055	.015	.110	.054	.015	.107	.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	.147	.135	.124	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.132	.113	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.090	.123	.098	.078	.085	.068	.054	.049	.040	.032	.016	.013	.011	
4.0	.133	.099	.073	.114	.085	.063	.079	.060	.044	.045	.035	.026	.015	.011	.009	
5.0	.124	.087	.060	.107	.075	.052	.074	.053	.037	.043	.031	.022	.014	.010	.007	
6.0	.117	.078	.050	.100	.067	.043	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.110	.070	.042	.095	.061	.037	.066	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.105	.064	.036	.090	.056	.032	.062	.039	.022	.036	.023	.013	.012	.008	.004	
9.0	.099	.059	.031	.086	.051	.027	.059	.036	.019	.035	.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:224.9V I:0.1820A P:40.20W PF:0.9770 Freq:50.00Hz Lamp Flux:3424.33x1 lm										
NAME: DP165RW-WF01-40G40					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	12.4	13.3	12.6	13.5	13.6	11.9	12.8	12.1	13.0	13.2
3H	12.4	13.2	12.6	13.4	13.6	11.9	12.8	12.2	13.0	13.2
4H	12.4	13.2	12.7	13.4	13.6	11.9	12.7	12.2	12.9	13.2
6H	12.4	13.2	12.7	13.4	13.7	11.9	12.7	12.2	12.9	13.2
8H	12.4	13.2	12.8	13.4	13.7	11.9	12.6	12.2	12.9	13.2
12H	12.5	13.2	12.8	13.5	13.7	11.9	12.6	12.2	12.9	13.2
4H 2H	12.2	13.0	12.5	13.2	13.4	11.7	12.5	12.0	12.8	13.0
3H	12.2	12.9	12.6	13.2	13.5	11.8	12.5	12.1	12.8	13.0
4H	12.3	12.9	12.7	13.2	13.6	11.9	12.5	12.2	12.8	13.1
6H	12.4	13.0	12.8	13.3	13.7	11.9	12.5	12.3	12.8	13.2
8H	12.5	13.0	12.9	13.4	13.7	11.9	12.5	12.3	12.8	13.2
12H	12.6	13.1	13.0	13.5	13.9	12.0	12.4	12.4	12.8	13.2
8H 4H	12.3	12.8	12.6	13.1	13.5	11.8	12.3	12.2	12.7	13.1
6H	12.4	12.9	12.9	13.3	13.7	11.9	12.4	12.4	12.8	13.2
8H	12.6	13.0	13.0	13.4	13.8	12.0	12.4	12.4	12.8	13.2
12H	12.8	13.1	13.3	13.6	14.0	12.1	12.4	12.5	12.8	13.3
12H 4H	12.2	12.7	12.6	13.1	13.5	11.8	12.3	12.2	12.6	13.0
6H	12.4	12.8	12.9	13.2	13.7	11.9	12.3	12.4	12.7	13.2
8H	12.6	12.9	13.1	13.4	13.8	12.0	12.3	12.5	12.8	13.3
Variations with the observer position at spacings:										
S = 1.0H	+ 2.7 / - 3.4					+ 2.8 / - 3.4				
1.5H	+ 5.0 / - 3.2					+ 5.1 / - 3.2				
2.0H	+ 1.3 / - 0.5					+ 1.3 / - 0.7				

CIE Pub.117, 3424 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 4.3$)

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:0.1820A P:40.20W PF:0.9770 Freq:50.00Hz Lamp Flux:3424.33x1 lm		
NAME: DP165RW-WF01-40G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:

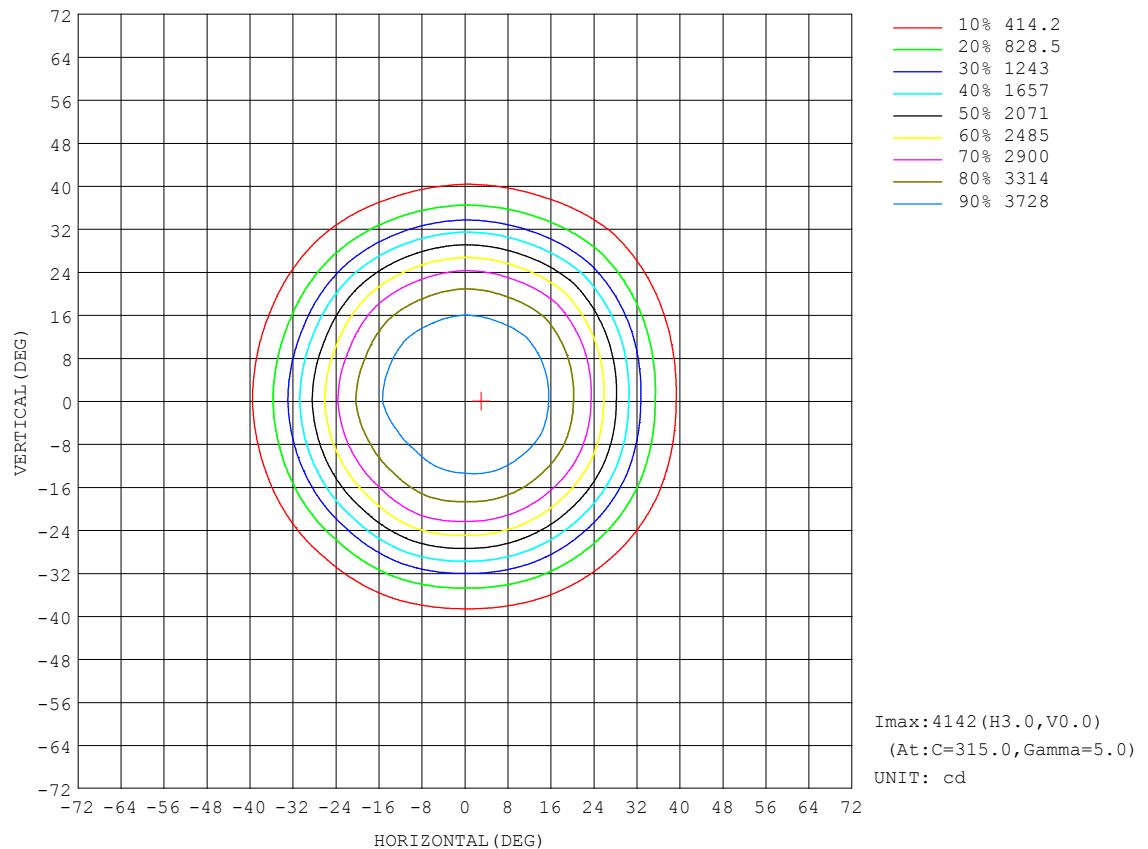
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	81	78	87	81	77	86	81	77	74
0.80	95	89	85	94	89	85	93	88	85	81
1.00	99	94	90	98	93	90	97	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	98	105	100	97	102	99	96	92
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	105	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:224.9V I:0.1820A P:40.20W PF:0.9770 Freq:50.00Hz Lamp Flux:3424.33x1 lm		
NAME: DP165RW-WF01-40G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:

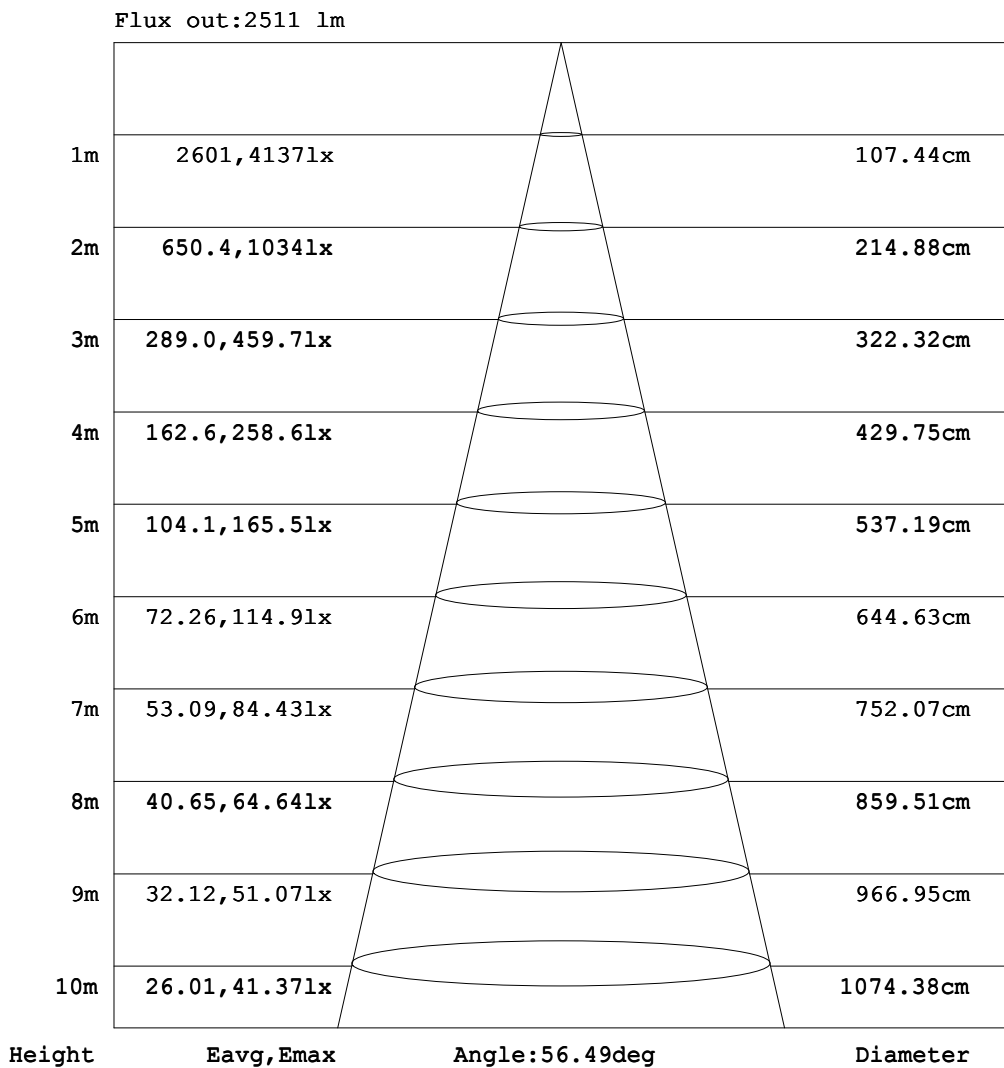


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZR
Test Date:2021-07-16

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:224.9V I:0.1820A P:40.20W PF:0.9770 Freq:50.00Hz Lamp Flux:3424.33x1 lm		
NAME: DP165RW-WF01-40G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:



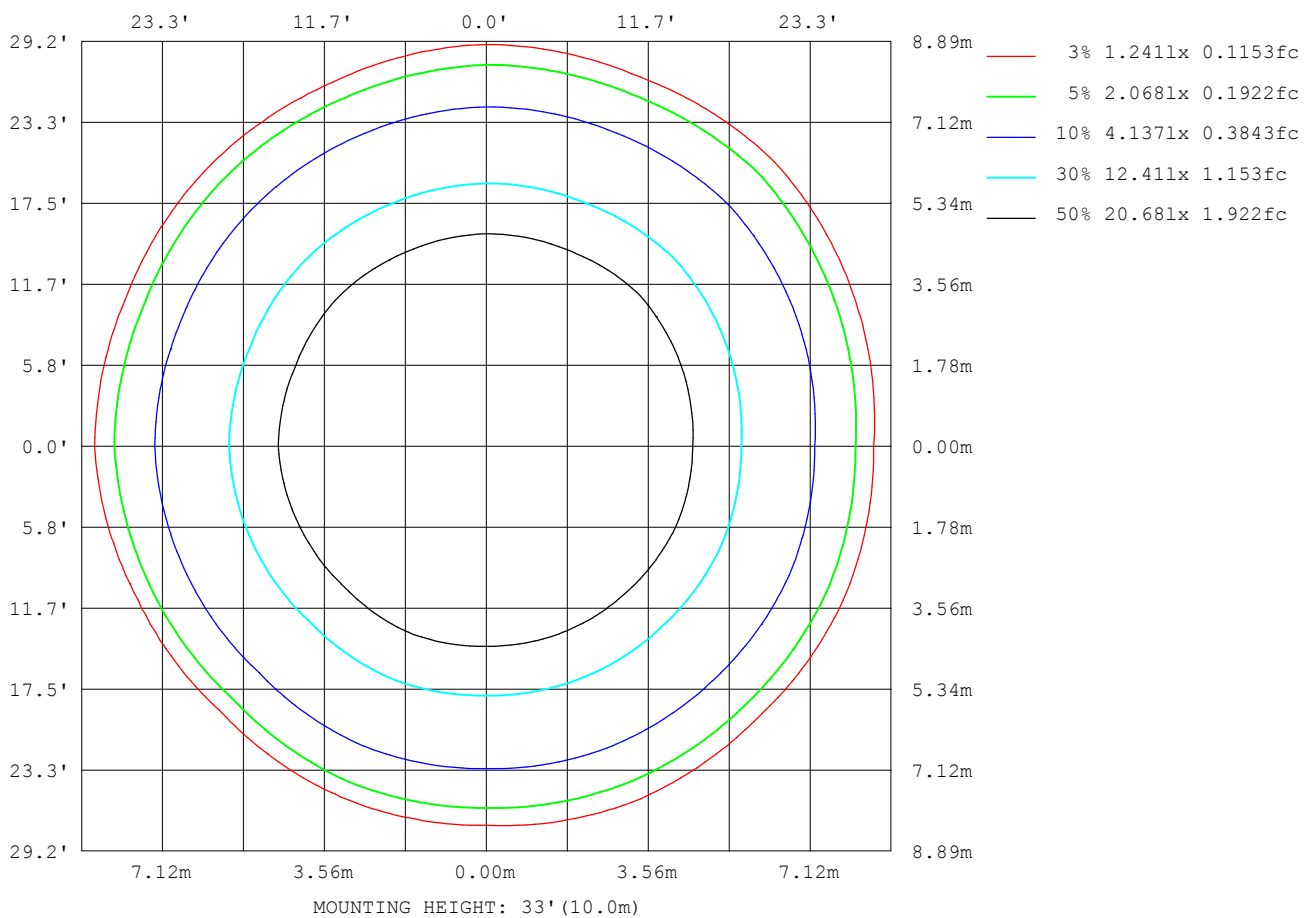
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:224.9V I:0.1820A P:40.20W PF:0.9770 Freq:50.00Hz Lamp Flux:3424.33x1 lm		
NAME: DP165RW-WF01-40G40	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:224.9V I:0.1820A P:40.20W PF:0.9770 Freq:50.00Hz Lamp Flux:3424.33x1 lm		
NAME: DP165RW-WF01-40G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:155	Shielding Angle:

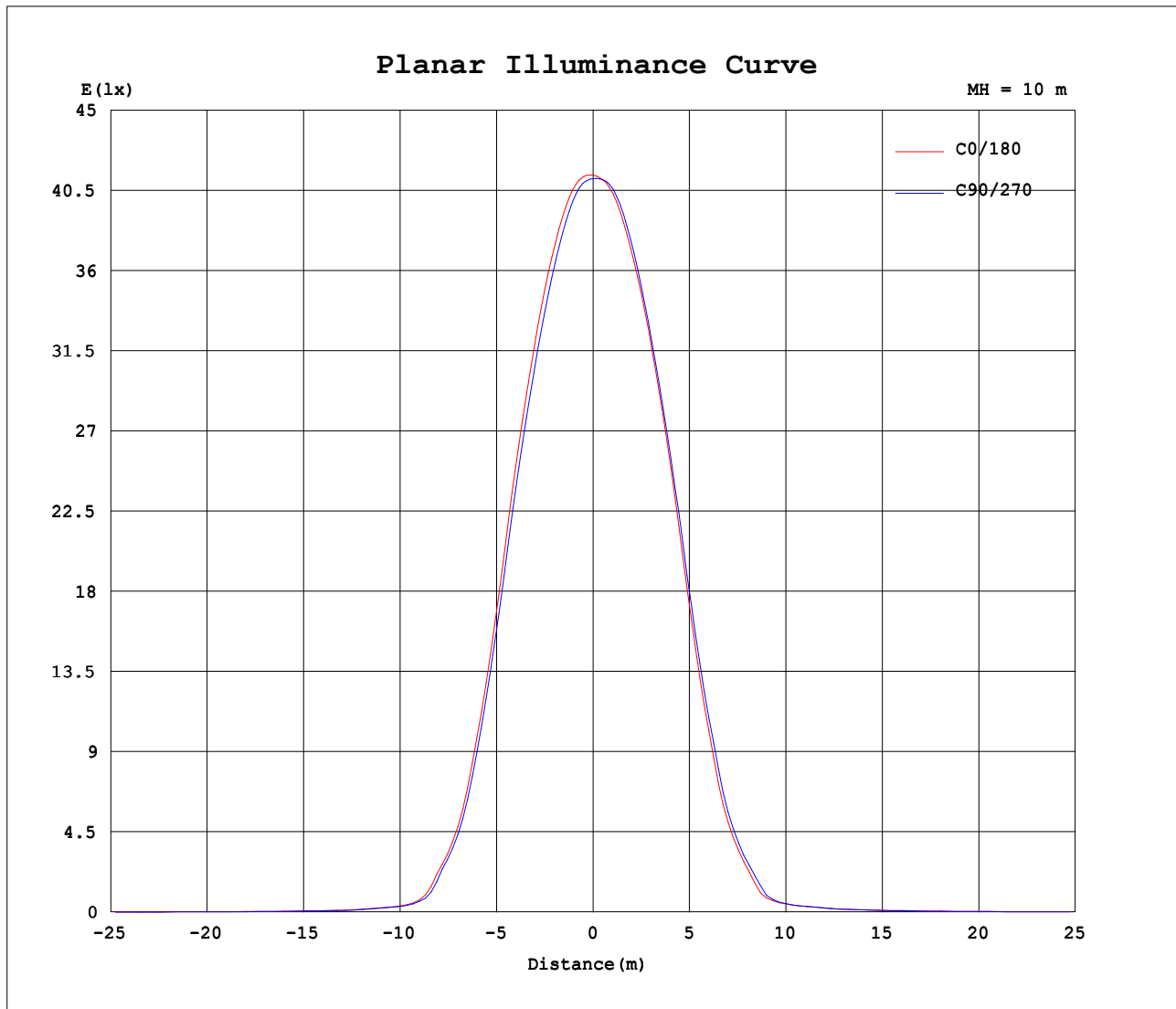
AvgL	cd/m2
L_0~180 (65) av	4099
L_0~180 (75) av	4210
L_0~180 (85) av	7062
L_90~270 (65) av	4118
L_90~270 (75) av	4032
L_90~270 (85) av	5415
L_45 (65) av	4118
L_45 (75) av	4233
L_45 (85) av	5904

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:

```