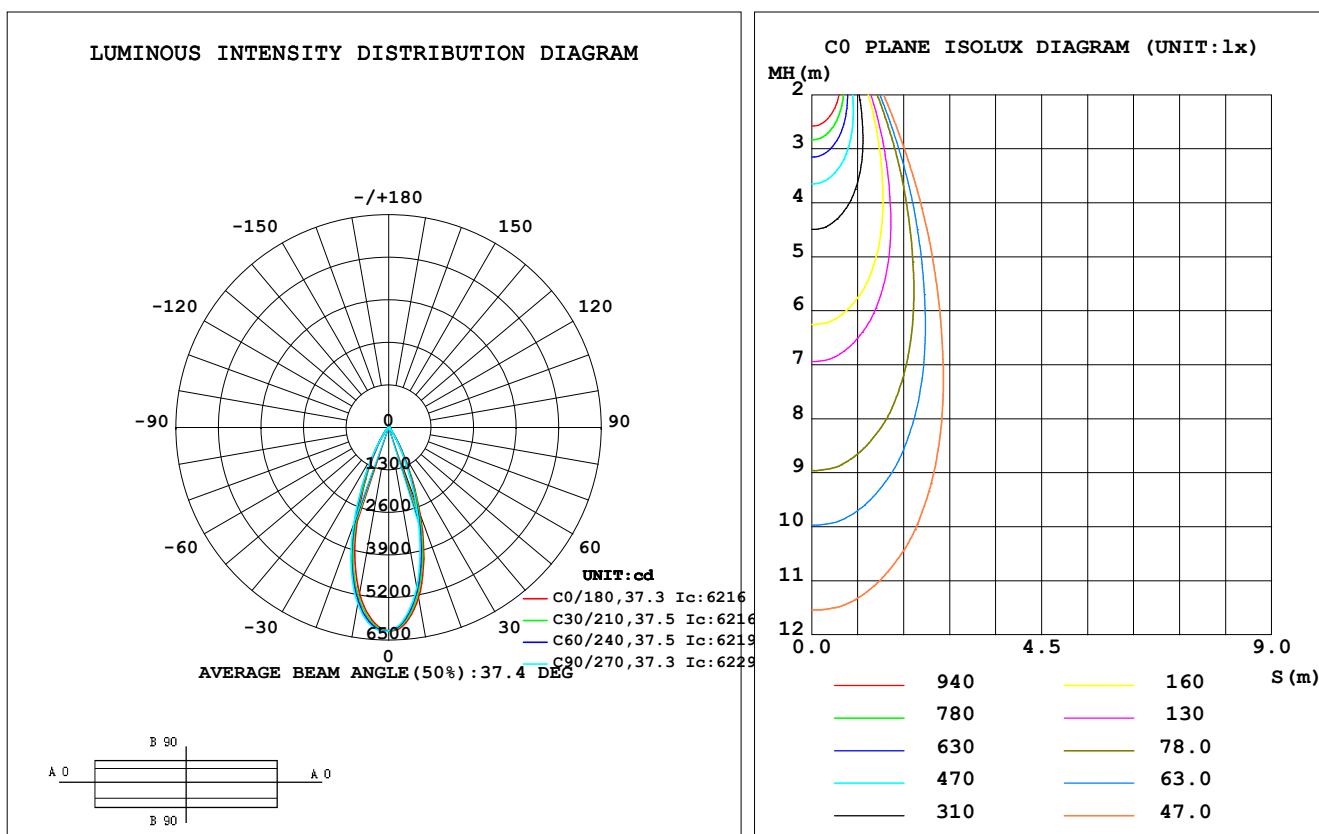


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:224.9V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2787.2x1 lm					
NAME: DP145RW-F01-32G40			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.:140		Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 87.37 lm/W
MODEL	4000K CRI90	I _{max} (cd)	6236	S/MH (C0/180)	0.60	
NOMINAL POWER (W)	32	LOR (%)	100.0	S/MH (C90/270)	0.64	
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	2787.2	η UP, DN (C0-180)	0.0, 46.4	
NOMINAL FLUX (lm)	2787.2	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 53.6	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50	
TEST VOLTAGE (V)	36	η down (%)	100.0	CIBSE SHR MAX	0.60	



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 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	5280	5133	4970	4982	5157	5305	5463	5437	0- 10	544.7	544.7	19.5,19.5
20	2817	2631	2401	2440	2681	2912	3127	3047	10- 20	1111	1655	59.4,59.4
30	806.9	726.9	641.1	673.7	781.6	874.3	940.5	923.8	20- 30	739.3	2395	85.9,85.9
40	164.3	148.9	139.1	141.1	183.2	196.3	211.7	202.3	30- 40	243.9	2639	94.7,94.7
50	49.38	47.06	40.34	38.83	66.24	71.95	75.34	73.26	40- 50	76.54	2715	97.4,97.4
60	16.39	15.26	14.56	14.29	30.03	31.31	33.14	33.44	50- 60	31.69	2747	98.6,98.6
70	10.61	10.35	9.903	9.741	20.02	20.49	21.21	21.26	60- 70	18.91	2766	99.2,99.2
80	7.105	6.719	5.532	6.125	12.74	13.00	12.73	13.43	70- 80	13.16	2779	99.7,99.7
90	4.930	5.013	5.026	4.981	7.961	8.106	8.188	8.190	80- 90	8.343	2787	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): 2685.2 lm

%lum = 96.3%

%lamp = 96.3%

Conical surface Flux(120deg): 2746.8 lm

%lum = 98.6%

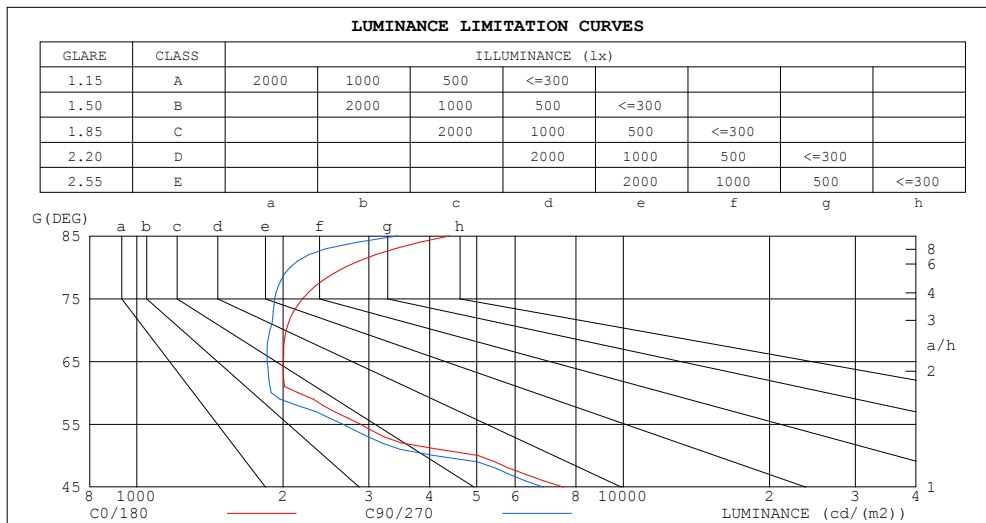
%lamp = 98.6%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 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:2787.2x1 lm		
NAME: DP145RW-F01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4404	3438
80	2678	2067
75	2191	1923
70	2030	1879
65	2002	1854
60	2145	1889
55	2879	2648
50	5028	4072
45	7541	6847

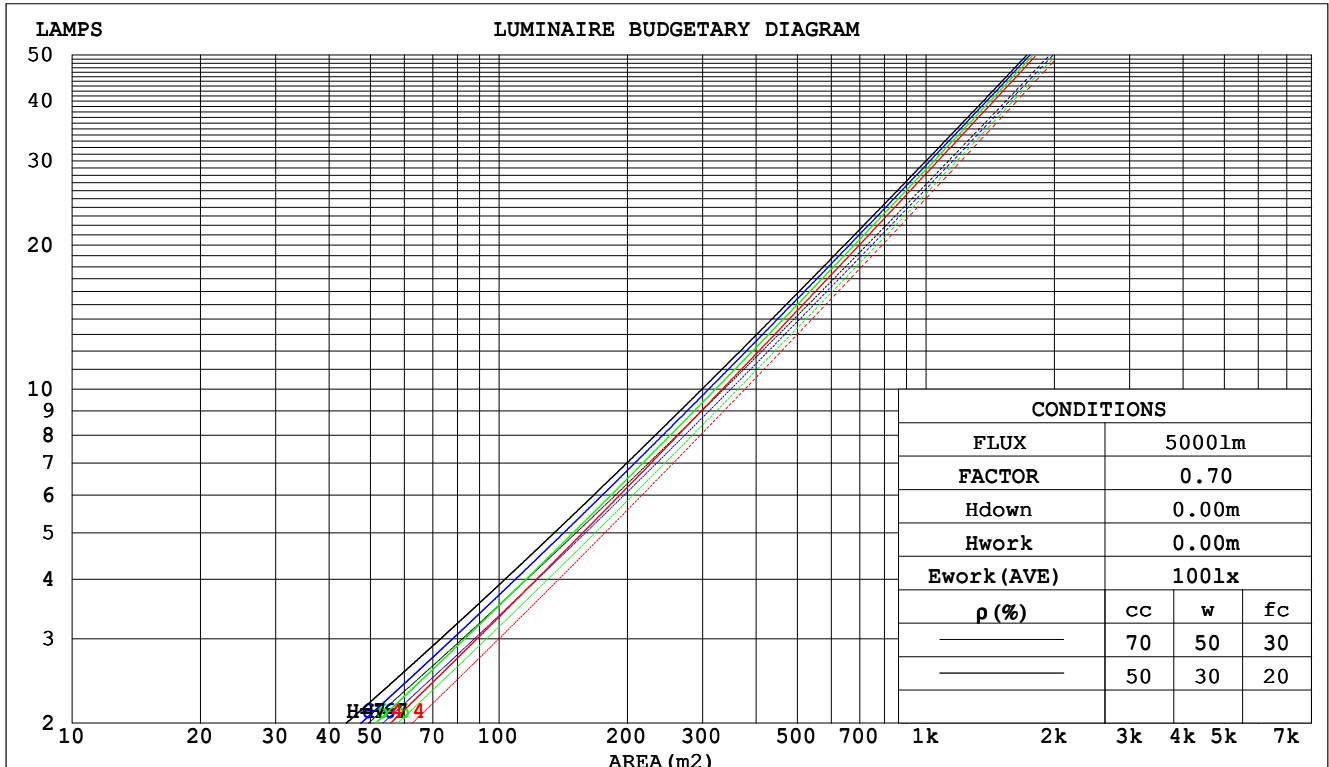
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZR
Test Date:2021-07-16

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:2787.2x1 lm		
NAME: DP145RW-F01-32G40	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	1.09	1.07	1.09	1.07	1.05	1.05	1.04	1.02	1.02	1.00	.99	.98	.97	.96	.95
2.0	1.05	1.01	.98	1.03	.90	.97	.90	.97	.95	.97	.95	.93	.94	.93	.91	.89
3.0	.99	.95	.91	.98	.94	.90	.95	.92	.89	.93	.90	.88	.91	.88	.86	.85
4.0	.94	.89	.85	.93	.88	.85	.91	.87	.84	.89	.85	.83	.87	.84	.82	.81
5.0	.89	.84	.80	.88	.83	.80	.86	.82	.79	.85	.81	.79	.83	.80	.78	.77
6.0	.85	.80	.76	.84	.79	.76	.83	.78	.75	.81	.78	.75	.80	.77	.74	.73
7.0	.81	.76	.72	.80	.76	.72	.79	.75	.72	.78	.74	.71	.77	.74	.71	.70
8.0	.77	.72	.69	.77	.72	.69	.76	.72	.68	.75	.71	.68	.74	.71	.68	.67
9.0	.74	.69	.66	.74	.69	.66	.73	.69	.65	.72	.68	.65	.71	.68	.65	.64
10.0	.71	.66	.63	.71	.66	.63	.70	.66	.63	.69	.65	.63	.69	.65	.62	.61



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 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:2787.2x1 lm					
NAME: DP145RW-F01-32G40			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	.164	.093	.030	.157	.090	.029	.145	.083	.027	.133	.077	.025	.123	.071	.023	
2.0	.154	.084	.026	.148	.082	.025	.138	.076	.024	.128	.072	.022	.119	.067	.021	
3.0	.144	.077	.023	.140	.075	.022	.131	.071	.022	.123	.067	.021	.115	.064	.020	
4.0	.136	.071	.021	.132	.069	.020	.124	.066	.020	.117	.063	.019	.111	.060	.018	
5.0	.129	.066	.019	.125	.064	.019	.119	.062	.018	.113	.059	.018	.107	.057	.017	
6.0	.122	.061	.018	.119	.060	.017	.114	.058	.017	.108	.056	.017	.103	.054	.016	
7.0	.116	.058	.016	.114	.057	.016	.109	.055	.016	.104	.053	.016	.100	.052	.015	
8.0	.111	.054	.015	.109	.054	.015	.104	.052	.015	.100	.051	.015	.096	.049	.014	
9.0	.106	.051	.014	.104	.051	.014	.100	.050	.014	.097	.048	.014	.093	.047	.014	
10.0	.102	.049	.014	.100	.048	.013	.097	.047	.013	.093	.046	.013	.090	.045	.013	

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	.146	.135	.126	.100	.093	.087	.057	.054	.050	.018	.017	.016	
2.0	.154	.133	.115	.132	.114	.099	.090	.079	.069	.052	.046	.041	.017	.015	.013	
3.0	.140	.113	.092	.120	.098	.080	.083	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.129	.098	.075	.111	.085	.065	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.119	.087	.062	.103	.075	.054	.071	.052	.038	.041	.031	.023	.013	.010	.007	
6.0	.111	.077	.052	.096	.067	.046	.066	.047	.032	.038	.027	.019	.012	.009	.006	
7.0	.104	.069	.044	.090	.060	.039	.062	.042	.027	.036	.025	.016	.012	.008	.005	
8.0	.098	.063	.038	.085	.054	.033	.058	.038	.024	.034	.023	.014	.011	.007	.005	
9.0	.093	.057	.033	.080	.050	.029	.055	.035	.021	.032	.021	.012	.010	.007	.004	
10.0	.088	.053	.029	.076	.046	.025	.053	.032	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
C Interval: 15.0DEG
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:2787.2x1 lm											
NAME: DP145RW-F01-32G40						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	9.0	9.8	9.2	9.9	10.1	8.1	9.0	8.4	9.1	9.3	
	3H	9.0	9.8	9.3	10.0	10.2	8.2	9.0	8.5	9.2	9.4
	4H	9.1	9.8	9.4	10.0	10.2	8.3	9.0	8.6	9.2	9.5
	6H	9.2	9.9	9.5	10.1	10.4	8.4	9.1	8.7	9.3	9.6
	8H	9.3	10.0	9.6	10.2	10.5	8.5	9.1	8.8	9.4	9.6
	12H	9.5	10.1	9.8	10.3	10.6	8.5	9.2	8.9	9.4	9.7
4H	2H	8.8	9.5	9.1	9.7	10.0	8.0	8.7	8.3	9.0	9.2
	3H	8.9	9.6	9.3	9.8	10.1	8.2	8.8	8.5	9.1	9.4
	4H	9.1	9.7	9.4	10.0	10.3	8.4	8.9	8.7	9.2	9.5
	6H	9.3	9.9	9.7	10.2	10.5	8.6	9.1	8.9	9.4	9.8
	8H	9.5	10.0	9.9	10.3	10.7	8.7	9.2	9.1	9.5	9.9
	12H	9.8	10.2	10.2	10.6	11.0	8.9	9.3	9.3	9.7	10.0
8H	4H	9.1	9.6	9.5	9.9	10.3	8.4	8.9	8.8	9.2	9.6
	6H	9.5	9.9	9.9	10.2	10.7	8.7	9.1	9.1	9.5	9.9
	8H	9.8	10.1	10.2	10.5	11.0	8.9	9.3	9.4	9.7	10.1
	12H	10.2	10.5	10.6	10.9	11.4	9.2	9.5	9.7	9.9	10.4
12H	4H	9.1	9.5	9.5	9.9	10.3	8.4	8.8	8.8	9.2	9.6
	6H	9.5	9.8	9.9	10.2	10.7	8.8	9.1	9.2	9.5	10.0
	8H	9.8	10.1	10.3	10.6	11.0	9.0	9.3	9.5	9.7	10.2
Variations with the observer position at spacings:											
S = 1.0H	+ 2.0 / - 2.1					+ 1.7 / - 2.2					
1.5H	+ 3.6 / - 2.0					+ 3.2 / - 2.1					
2.0H	+ 2.3 / - 0.9					+ 2.4 / - 1.2					

UTILIZATION FACTORS TABLE

Test:U:224.9V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2787.2x1 lm		
NAME: DP145RW-F01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

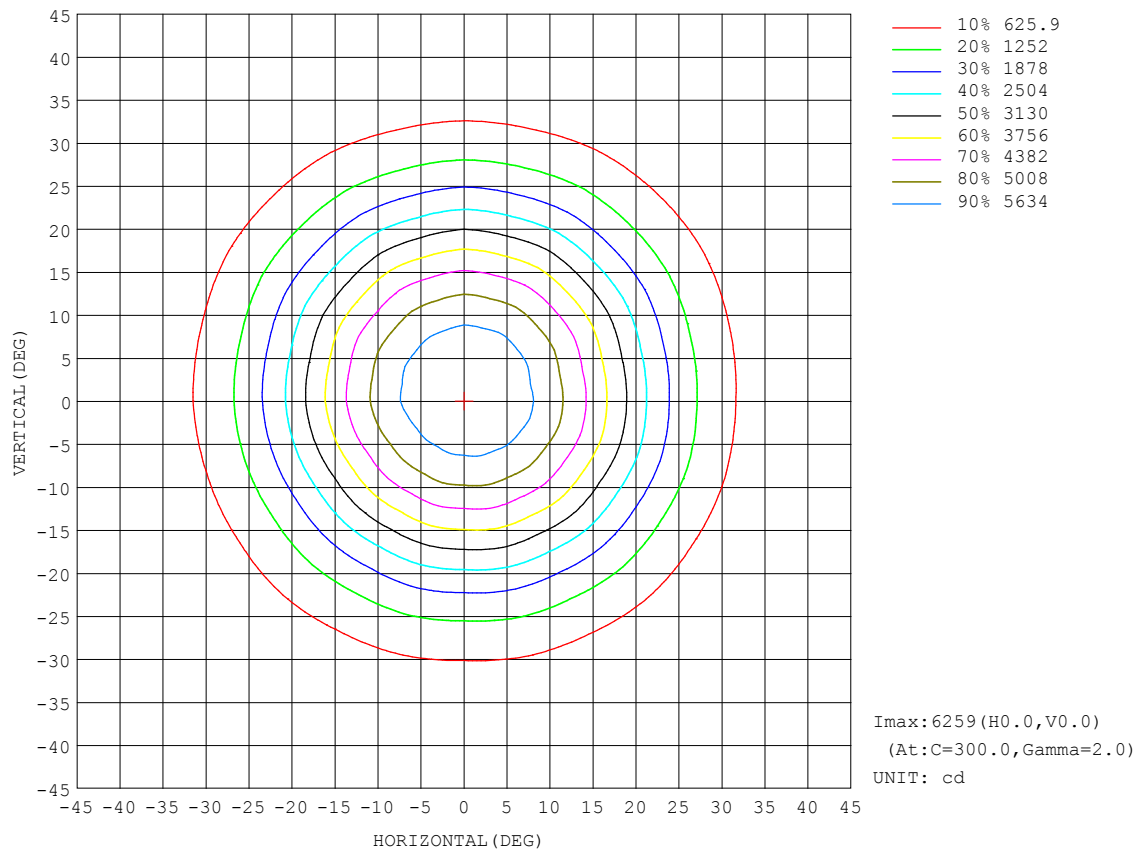
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	82	78	88	82	78	87	82	78	75
0.80	96	90	86	95	89	86	94	89	86	82
1.00	100	94	91	99	94	90	97	94	90	86
1.25	104	98	95	102	98	95	101	97	94	90
1.50	106	101	98	105	101	98	103	99	97	92
2.00	109	105	101	107	104	101	105	102	99	94
2.50	110	107	104	109	105	103	106	103	101	95
3.00	112	108	106	110	107	105	107	104	102	96
4.00	114	111	109	112	109	108	108	106	105	98
5.00	115	113	111	113	111	109	109	108	106	99
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
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:2787.2x1 lm		
NAME: DP145RW-F01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

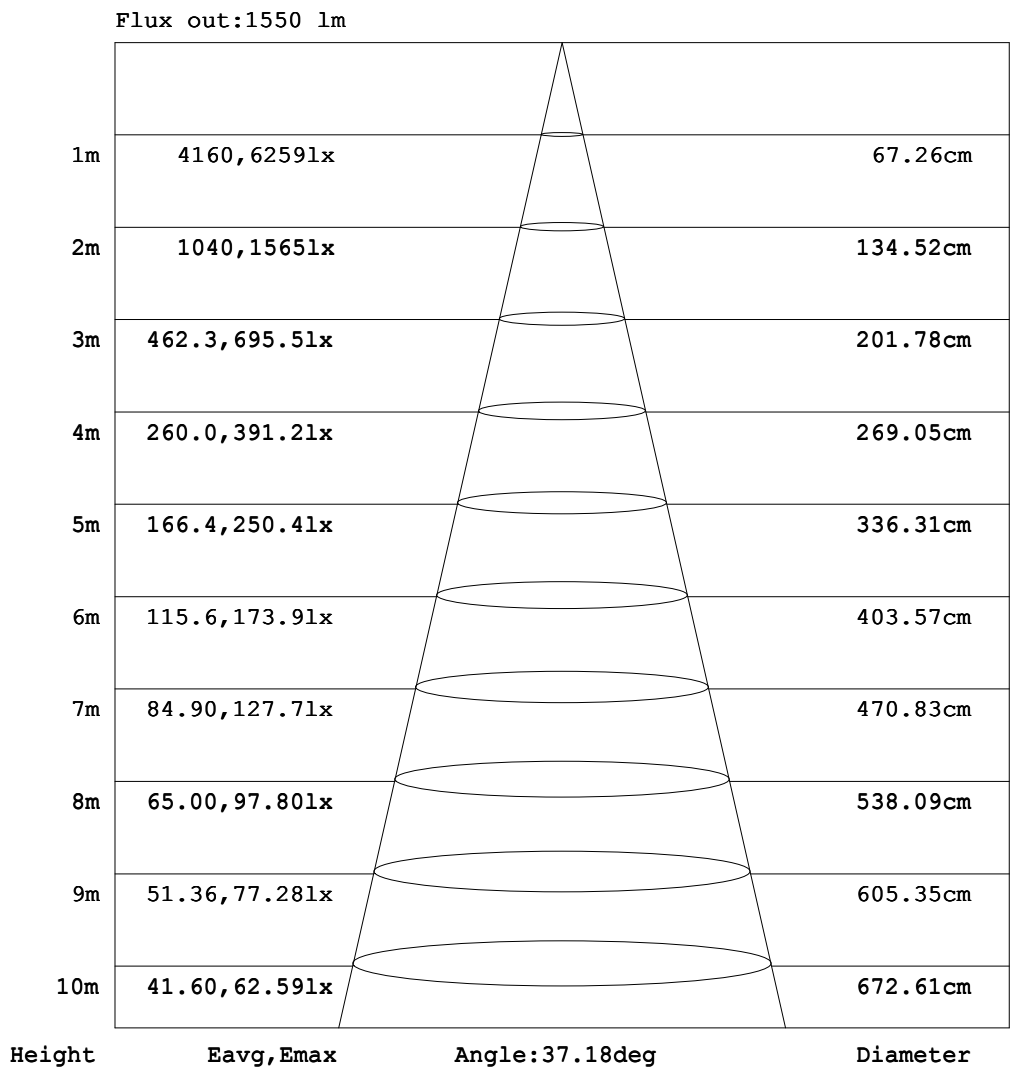


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ZR
Test Date: 2021-07-16

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:2787.2x1 lm		
NAME: DP145RW-F01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:



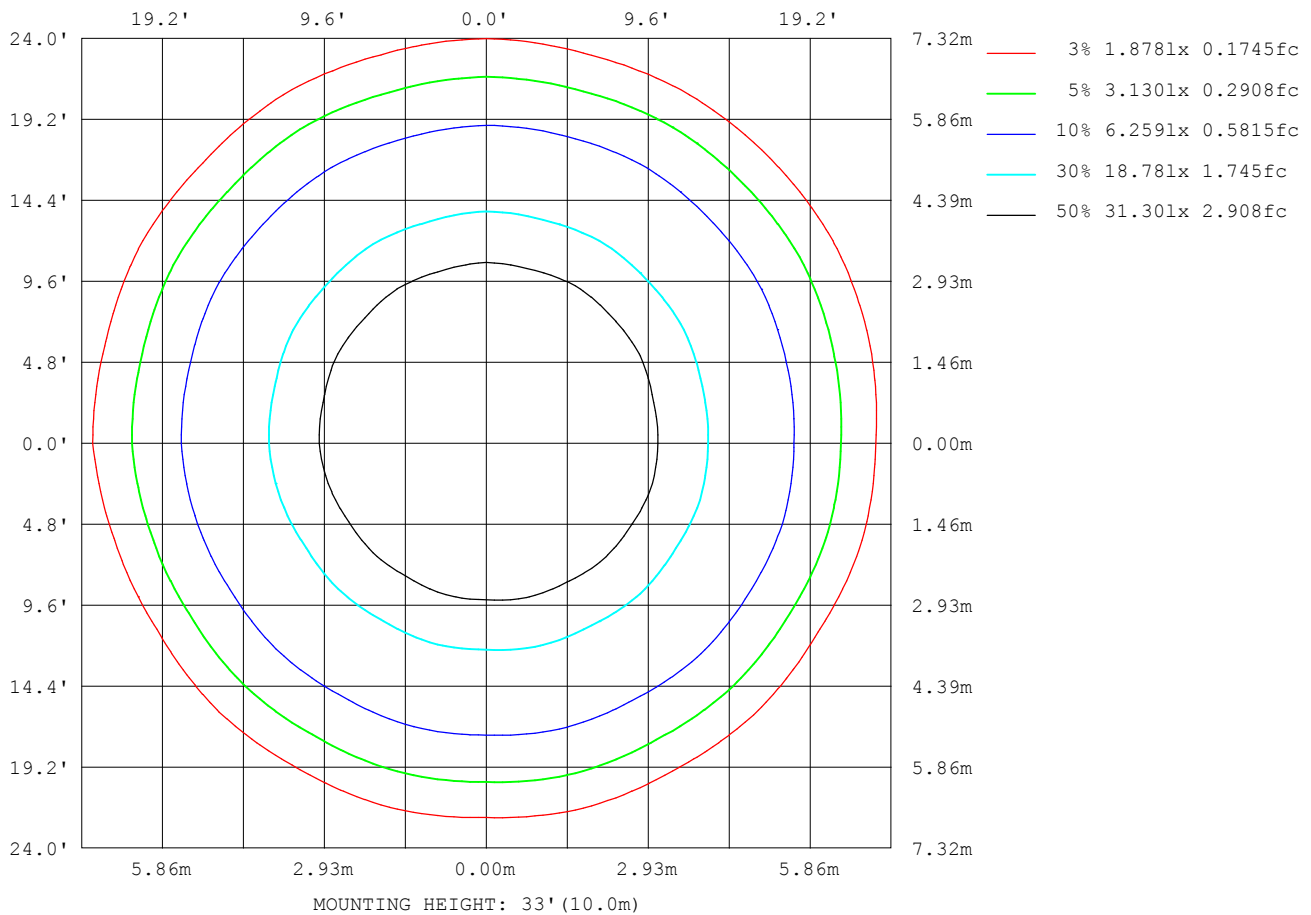
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 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:2787.2x1 lm		
NAME: DP145RW-F01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
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:2787.2x1 lm		
NAME: DP145RW-F01-32G40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

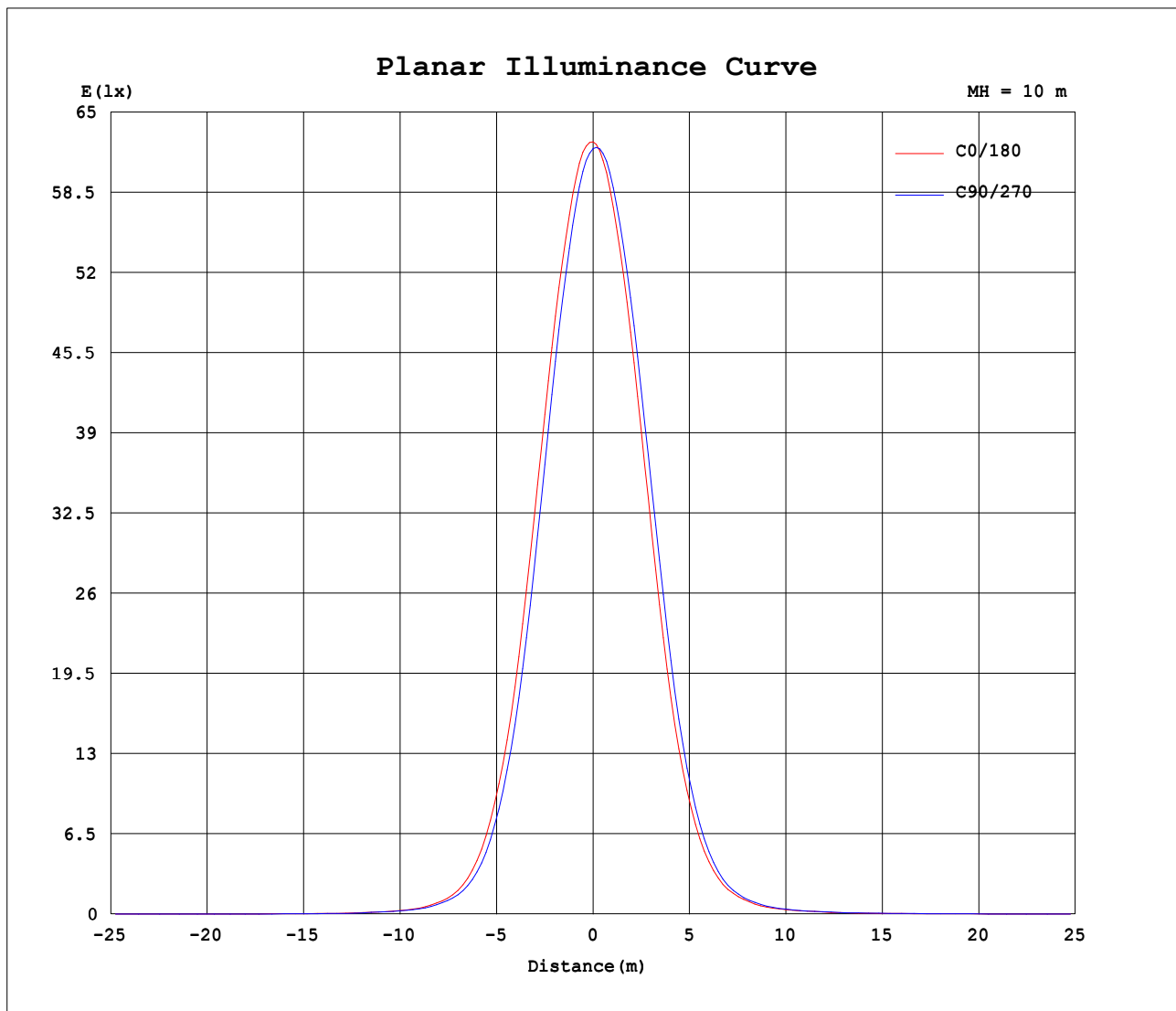
AvgL	cd/m2
L_0~180 (65) av	2894
L_0~180 (75) av	3103
L_0~180 (85) av	5920
L_90~270 (65) av	2938
L_90~270 (75) av	3092
L_90~270 (85) av	5191
L_45 (65) av	2922
L_45 (75) av	3135
L_45 (85) av	5365

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 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: 15.0DEG
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:

```

```

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:

```