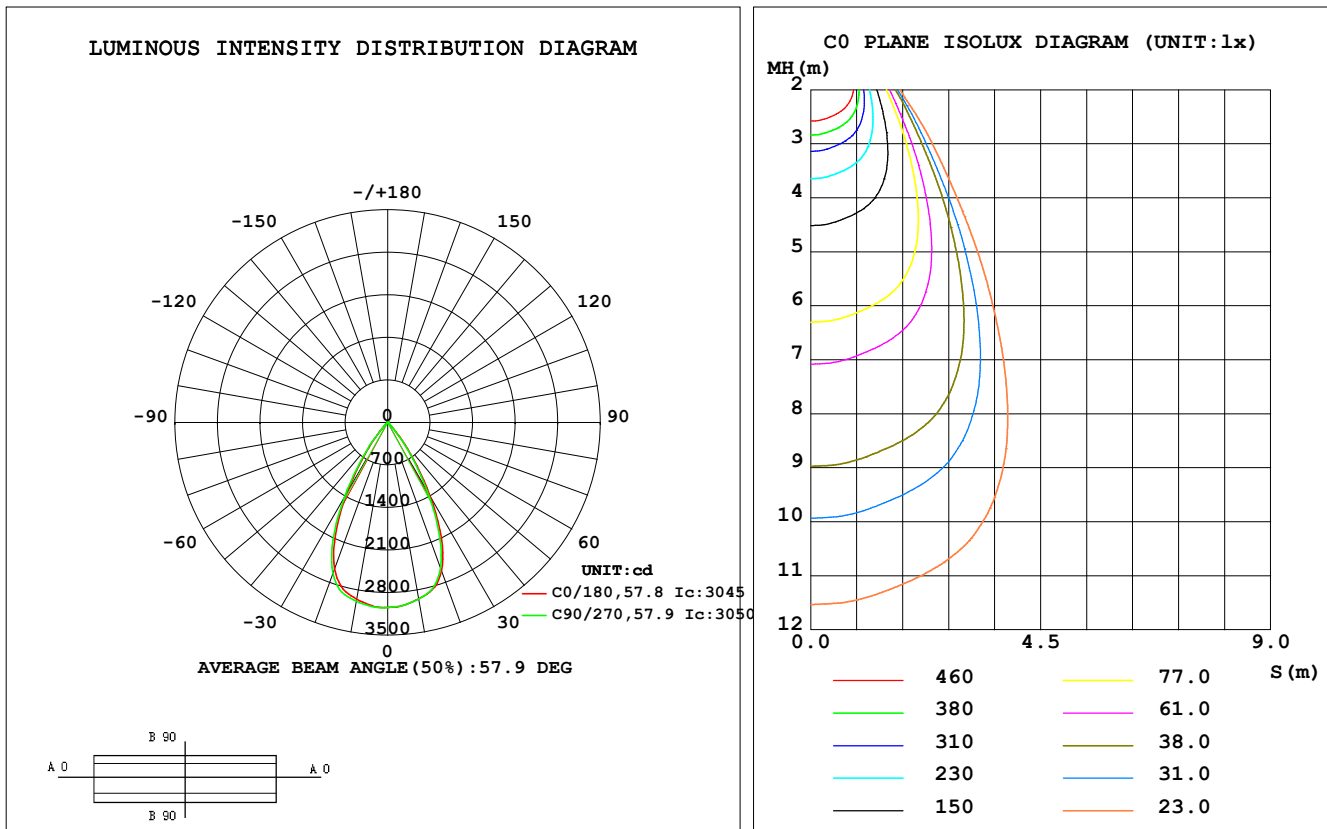


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:224.8V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2591.19x1 lm					
NAME: DP145RW-WF02-32G30		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:140		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 81.23 lm/W
MODEL	3000K CRI90	I _{max} (cd)	3051	S/MH (C0/180)	0.85	
NOMINAL POWER (W)	32	LOR (%)	100.0	S/MH (C90/270)	0.87	
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	2591.2	η UP, DN (C0-180)	0.0, 48.8	
NOMINAL FLUX (lm)	2591.19	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 51.2	
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	2947	2952	2947	2934	2952	2966	2987	2983	0- 10	286.5	286.5	11.1,11.1
20	2597	2594	2546	2507	2560	2608	2638	2654	10- 20	795.6	1082	41.8,41.8
30	1400	1370	1305	1273	1342	1392	1442	1466	20- 30	926.2	2008	77.5,77.5
40	304.4	293.9	261.7	231.9	267.7	273.7	310.4	332.4	30- 40	469.1	2477	95.6,95.6
50	26.99	28.19	27.14	23.34	42.24	42.30	44.96	47.50	40- 50	74.98	2552	98.5,98.5
60	2.790	2.711	2.674	2.641	17.41	17.59	17.85	18.14	50- 60	15.24	2568	99.1,99.1
70	2.909	2.924	2.944	2.939	12.94	13.04	13.20	13.31	60- 70	8.966	2577	99.4,99.4
80	3.495	3.534	3.539	3.552	9.726	9.802	9.911	9.979	70- 80	7.724	2584	99.7,99.7
90	4.513	4.524	4.606	4.632	7.491	7.527	7.587	7.645	80- 90	6.881	2591	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): 2531.5 lm

%lum = 97.7%

%lamp = 97.7%

Conical surface Flux(120deg): 2567.6 lm

%lum = 99.1%

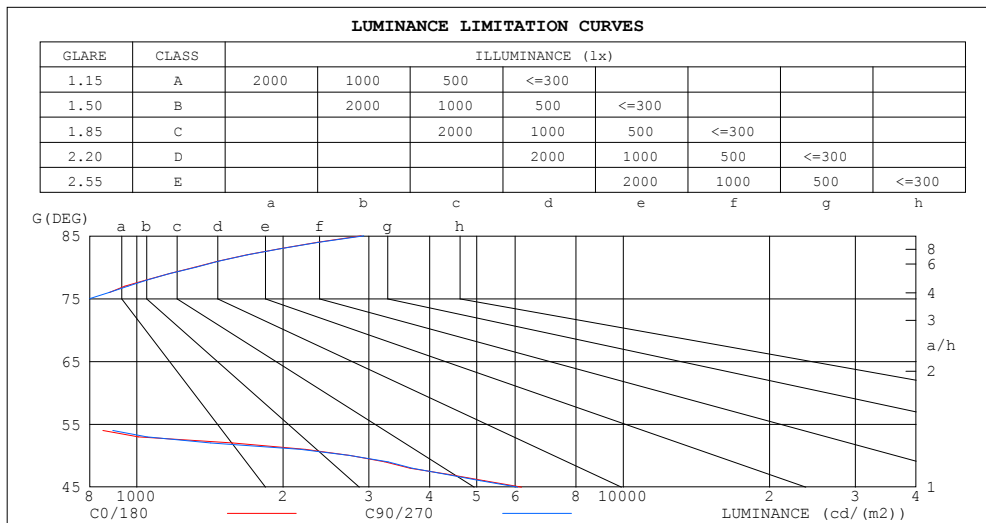
%lamp = 99.1%

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:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2591.19x1 lm		
NAME: DP145RW-WF02-32G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2896	2927
80	1315	1323
75	799	801
70	556	559
65	421	425
60	365	347
55	723	771
50	2744	2741
45	6181	6073

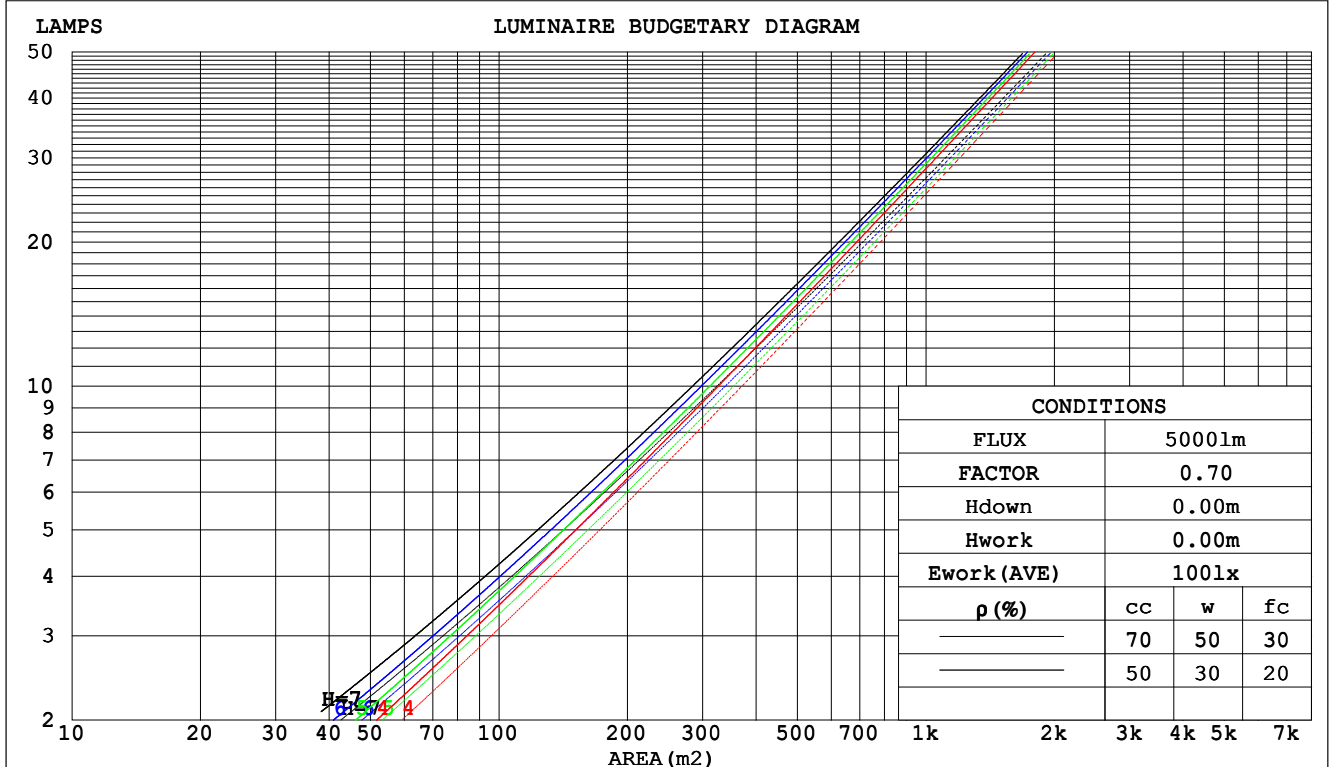
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZR
Test Date:2021-07-16

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:2591.19x1 lm		
NAME: DP145RW-WF02-32G30	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	.00
1.0	1.11	1.08	1.06	1.09	1.07	1.05	1.05	1.03	1.01	1.01	.00	.98	.98	.96	.95	.94
2.0	1.03	.00	.96	1.02	.98	.95	.99	.96	.93	.96	.93	.91	.93	.91	.89	.88
3.0	.97	.92	.88	.95	.91	.88	.93	.89	.86	.90	.87	.85	.88	.86	.83	.82
4.0	.91	.86	.81	.90	.85	.81	.88	.83	.80	.86	.82	.79	.84	.81	.78	.77
5.0	.85	.80	.76	.84	.79	.75	.83	.78	.75	.81	.77	.74	.80	.76	.73	.72
6.0	.80	.75	.71	.80	.74	.70	.78	.73	.70	.77	.73	.69	.76	.72	.69	.68
7.0	.76	.70	.66	.75	.70	.66	.74	.69	.66	.73	.68	.65	.72	.68	.65	.64
8.0	.72	.66	.62	.71	.66	.62	.70	.65	.62	.69	.65	.61	.68	.64	.61	.60
9.0	.68	.62	.58	.67	.62	.58	.67	.62	.58	.66	.61	.58	.65	.61	.58	.56
10.0	.64	.59	.55	.64	.59	.55	.63	.58	.55	.62	.58	.55	.62	.58	.55	.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:224.8V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2591.19x1 lm					
NAME: DP145RW-WF02-32G30			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	.176	.100	.032	.169	.096	.031	.156	.090	.029	.145	.084	.027	.134	.078	.025	
2.0	.166	.091	.028	.161	.089	.027	.150	.084	.026	.140	.079	.025	.131	.074	.023	
3.0	.158	.084	.025	.153	.082	.025	.144	.078	.024	.136	.074	.023	.128	.071	.022	
4.0	.150	.078	.023	.146	.076	.023	.138	.073	.022	.131	.070	.021	.124	.067	.021	
5.0	.143	.073	.021	.139	.072	.021	.133	.069	.020	.126	.067	.020	.120	.064	.019	
6.0	.136	.068	.020	.133	.067	.019	.127	.065	.019	.122	.063	.019	.117	.061	.018	
7.0	.130	.064	.018	.128	.064	.018	.122	.062	.018	.118	.060	.018	.113	.059	.017	
8.0	.125	.061	.017	.122	.060	.017	.118	.059	.017	.113	.057	.017	.109	.056	.016	
9.0	.120	.058	.016	.118	.057	.016	.113	.056	.016	.110	.055	.016	.106	.054	.016	
10.0	.115	.055	.015	.113	.055	.015	.109	.054	.015	.106	.053	.015	.102	.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	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.133	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.143	.114	.090	.122	.098	.078	.084	.068	.055	.049	.040	.032	.016	.013	.011	
4.0	.132	.099	.073	.114	.085	.063	.078	.059	.045	.045	.035	.026	.015	.011	.009	
5.0	.124	.087	.060	.106	.075	.052	.073	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.116	.078	.050	.100	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.110	.070	.043	.094	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.104	.064	.036	.089	.055	.032	.062	.039	.023	.036	.023	.013	.012	.008	.004	
9.0	.099	.059	.032	.085	.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:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2591.19x1 lm										
NAME: DP145RW-WF02-32G30					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	13.7	14.6	13.9	14.8	14.9	13.3	14.2	13.5	14.4	14.5
3H	13.5	14.3	13.8	14.5	14.7	13.1	13.9	13.4	14.1	14.3
4H	13.4	14.2	13.7	14.4	14.7	13.0	13.8	13.3	14.0	14.3
6H	13.3	14.1	13.6	14.3	14.6	12.9	13.7	13.2	13.9	14.2
8H	13.3	14.0	13.6	14.3	14.5	12.9	13.6	13.2	13.9	14.2
12H	13.3	14.0	13.6	14.3	14.5	12.9	13.6	13.2	13.9	14.1
4H 2H	13.4	14.2	13.7	14.4	14.6	13.0	13.8	13.3	14.0	14.2
3H	13.2	13.9	13.6	14.2	14.5	12.8	13.5	13.2	13.8	14.1
4H	13.2	13.8	13.5	14.1	14.4	12.8	13.4	13.1	13.7	14.0
6H	13.1	13.6	13.5	14.0	14.3	12.7	13.2	13.1	13.6	13.9
8H	13.1	13.6	13.5	13.9	14.3	12.7	13.2	13.1	13.5	13.9
12H	13.1	13.5	13.5	13.9	14.3	12.7	13.1	13.1	13.5	13.9
8H 4H	13.0	13.5	13.4	13.9	14.2	12.6	13.1	13.0	13.5	13.8
6H	13.0	13.4	13.4	13.8	14.2	12.6	13.0	13.0	13.4	13.8
8H	12.9	13.3	13.4	13.7	14.2	12.6	12.9	13.0	13.3	13.8
12H	13.0	13.3	13.5	13.7	14.2	12.6	12.9	13.1	13.4	13.8
12H 4H	13.0	13.4	13.4	13.8	14.2	12.6	13.0	13.0	13.4	13.8
6H	12.9	13.3	13.4	13.7	14.1	12.5	12.9	13.0	13.3	13.7
8H	12.9	13.2	13.4	13.7	14.1	12.5	12.8	13.0	13.3	13.8
Variations with the observer position at spacings:										
S = 1.0H	+ 3.7 / -10.2					+ 3.5 / - 9.7				
1.5H	+ 6.3 / -10.1					+ 6.1 / - 9.6				
2.0H	+ 4.7 / - 1.9					+ 4.7 / - 1.9				

CIE Pub.117, 2591 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.3)

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:224.8V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2591.19x1 lm		
NAME: DP145RW-WF02-32G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

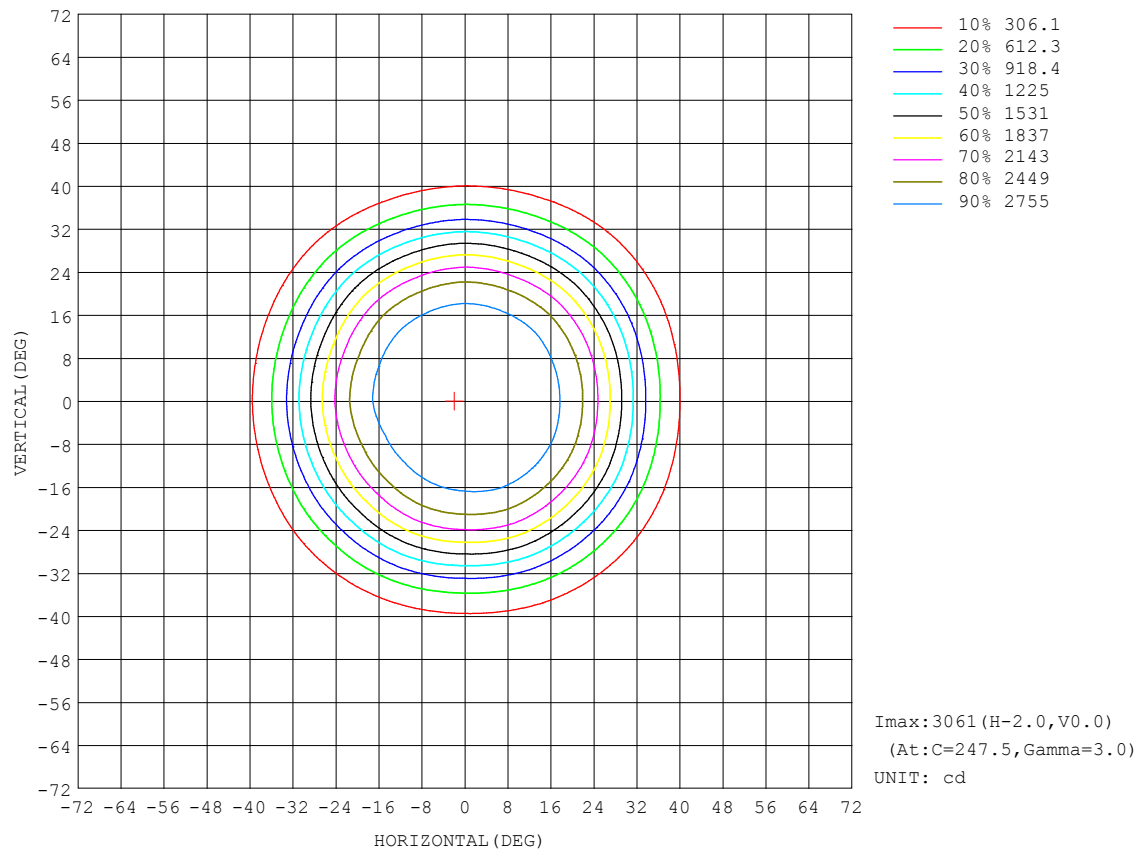
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	79	88	83	79	88	82	79	76
0.80	96	90	87	95	90	87	94	90	86	83
1.00	100	95	91	99	94	91	98	94	91	87
1.25	104	99	96	103	98	95	101	97	94	90
1.50	107	102	99	105	101	98	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	94
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	96
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:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2591.19x1 lm		
NAME: DP145RW-WF02-32G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

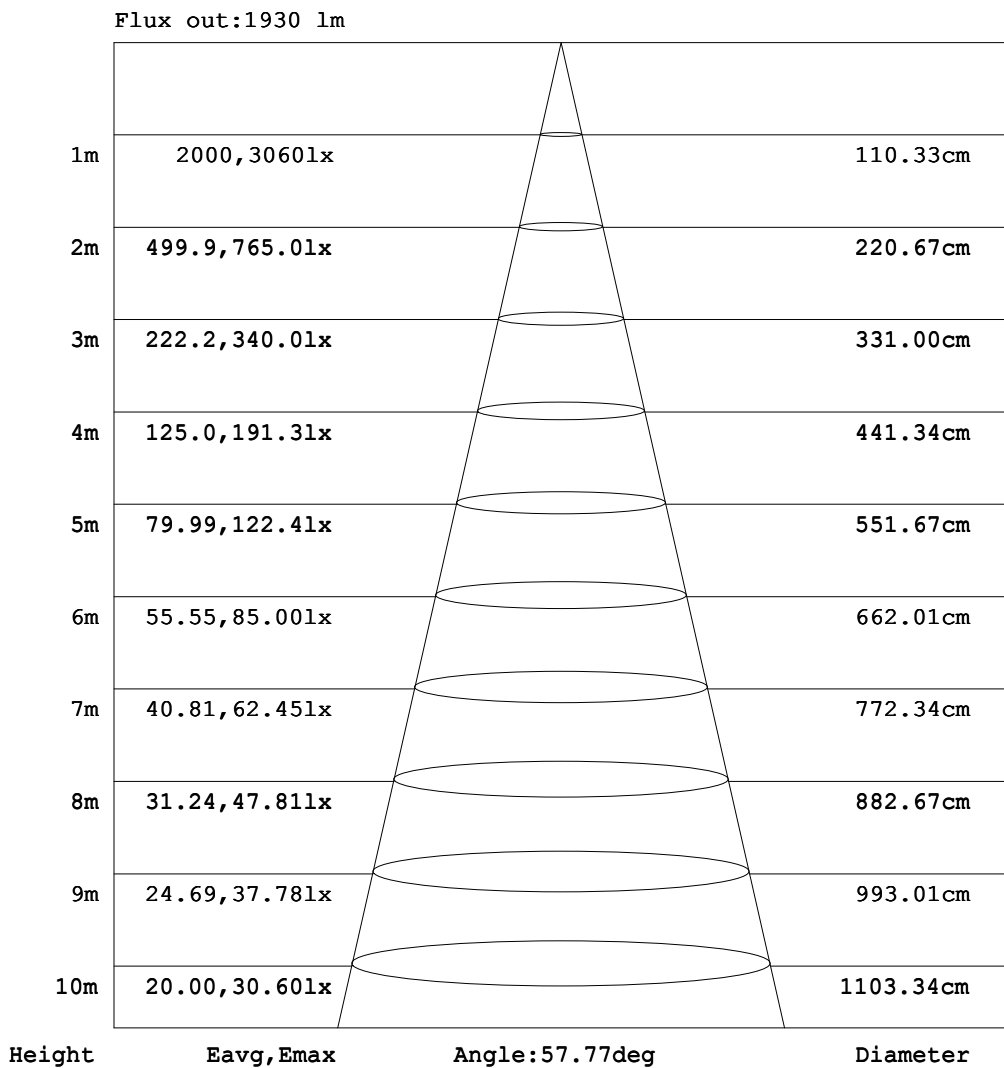


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ZR
Test Date: 2021-07-16

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:224.8V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2591.19x1 lm		
NAME: DP145RW-WF02-32G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:



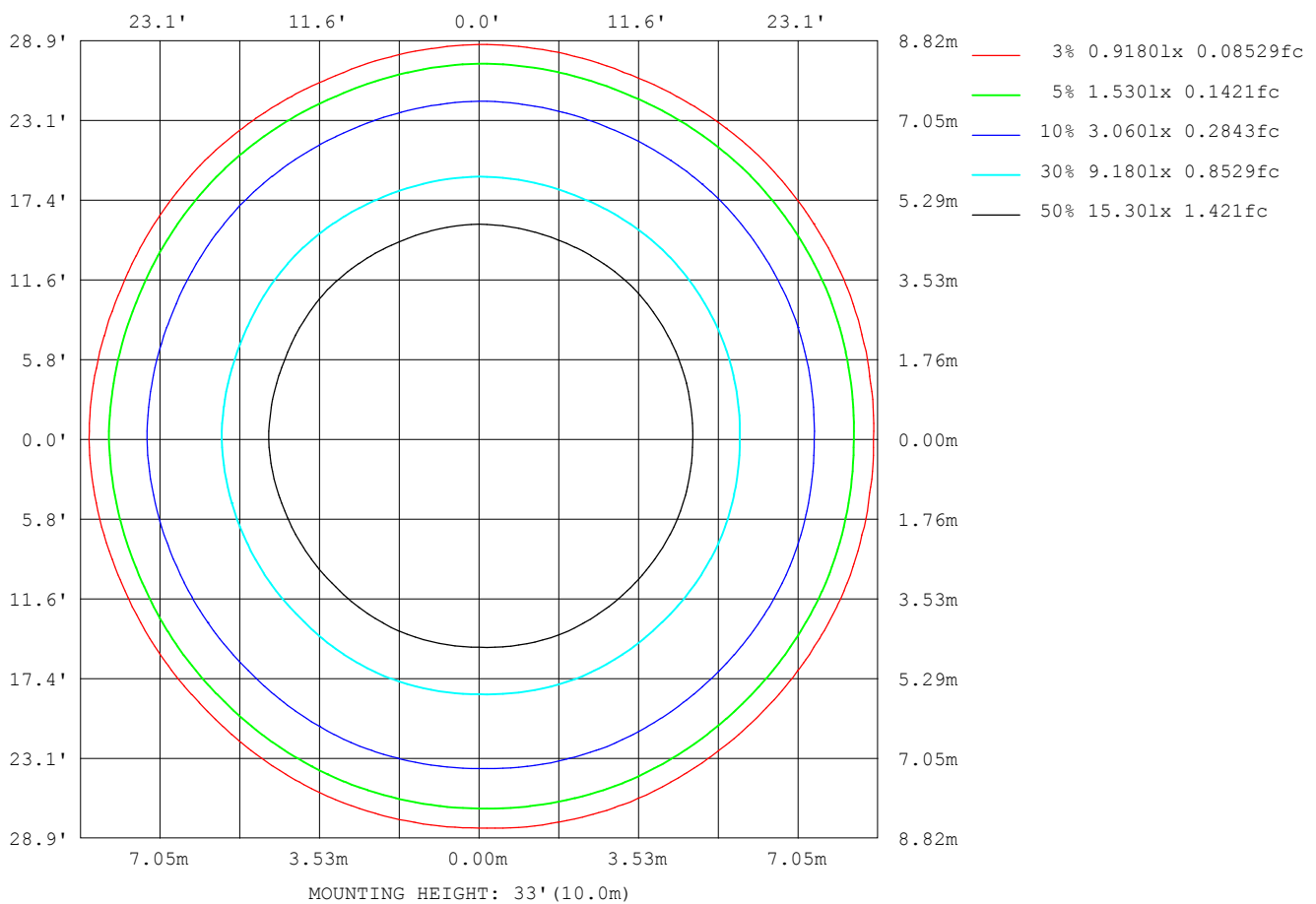
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:224.8V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2591.19x1 lm		
NAME: DP145RW-WF02-32G30	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:224.8V I:0.1480A P:31.90W PF:0.9570 Freq:50.00Hz Lamp Flux:2591.19x1 lm		
NAME: DP145RW-WF02-32G30	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:140	Shielding Angle:

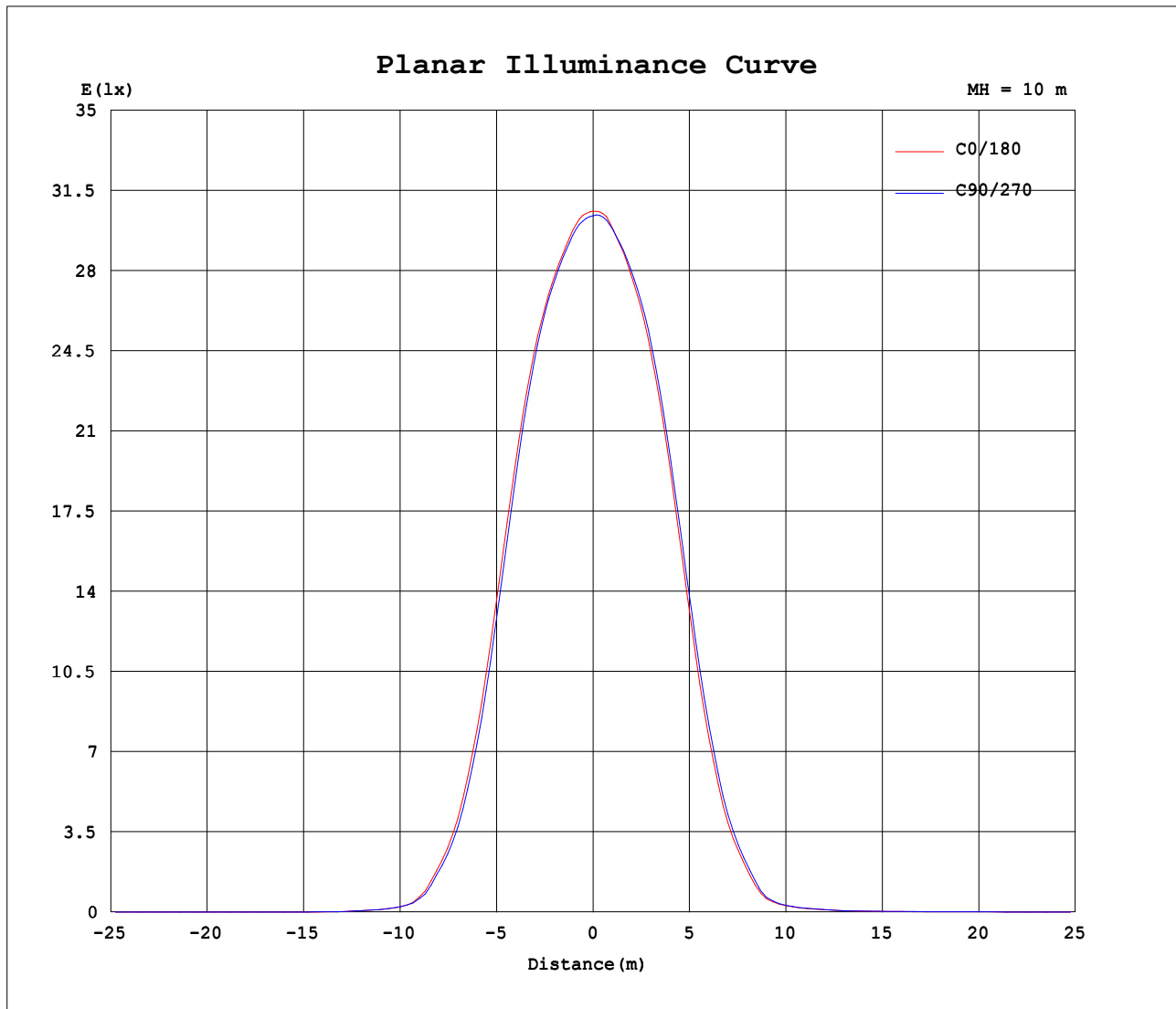
AvgL	cd/m2
L_0~180 (65) av	1367
L_0~180 (75) av	1801
L_0~180 (85) av	4601
L_90~270 (65) av	1396
L_90~270 (75) av	1831
L_90~270 (85) av	4688
L_45 (65) av	1391
L_45 (75) av	1827
L_45 (85) av	4670

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:

```