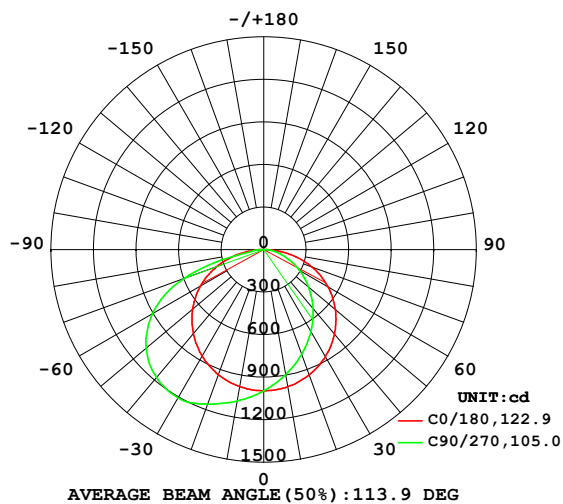


## LUMINAIRE PHOTOMETRIC TEST REPORT

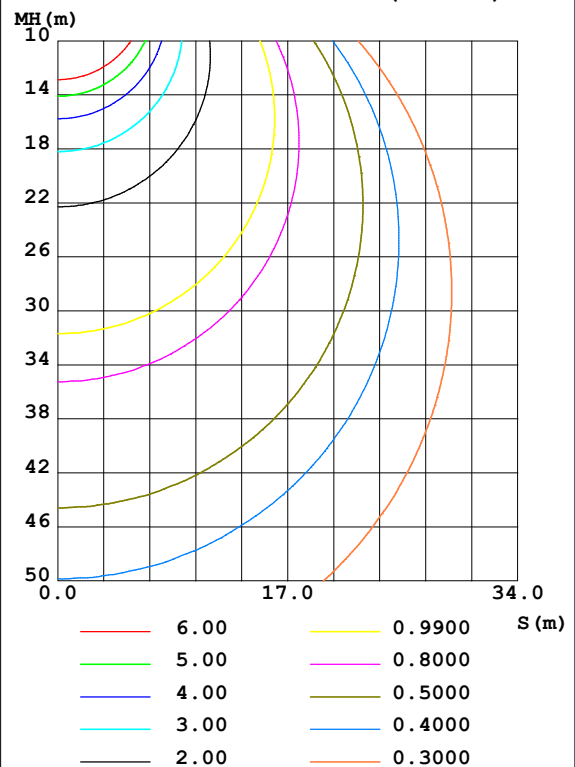
Test:U:239.7V I:0.1631A P:37.50W PF:0.9588 Lamp Flux:3363.39x1 lm		
NAME: WYN_1150_NA_WHT_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 89.69 lm/W			
LED MODEL	1300lm 940 HV ADV6	Imax(cd)	1209	S/MH(C0/180)	1.30
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.76
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	3363.4	$\eta$ UP,DN(C0-180)	0.0,36.0
NOMINAL FLUX(lm)	3363.39	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,64.0
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	230	$\eta$ down(%)	100.0	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:17 October 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	982.5	917.9	895.9	919.9	981.7	1052	1084	1053	0- 10	94.58	94.58	2.81,2.81
20	940.3	823.2	784.9	822.8	938.8	1088	1160	1089	10- 20	275.1	369.7	11,11
30	871.0	712.2	667.3	712.3	868.2	1101	1209	1105	20- 30	431.0	800.7	23.8,23.8
40	776.8	589.1	542.1	588.3	772.4	1080	1178	1083	30- 40	544.2	1345	40,40
50	659.8	458.2	414.5	456.9	655.2	993.7	1083	998.0	40- 50	597.4	1942	57.7,57.7
60	522.9	323.2	290.0	322.4	515.7	850.7	905.1	856.3	50- 60	580.9	2523	75,75
70	363.2	193.7	172.4	193.1	354.4	627.2	602.1	631.1	60- 70	485.0	3008	89.4,89.4
80	177.9	81.46	75.32	81.16	167.1	218.7	107.6	219.5	70- 80	290.8	3299	98.1,98.1
90	2.445	1.501	1.291	1.501	1.105	0.8622	0.8764	0.8638	80- 90	64.45	3363	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): 1641.1 lm

%lum = 48.8%

%lamp = 48.8%

Conical surface Flux(120deg): 2523.2 lm

%lum = 75.0%

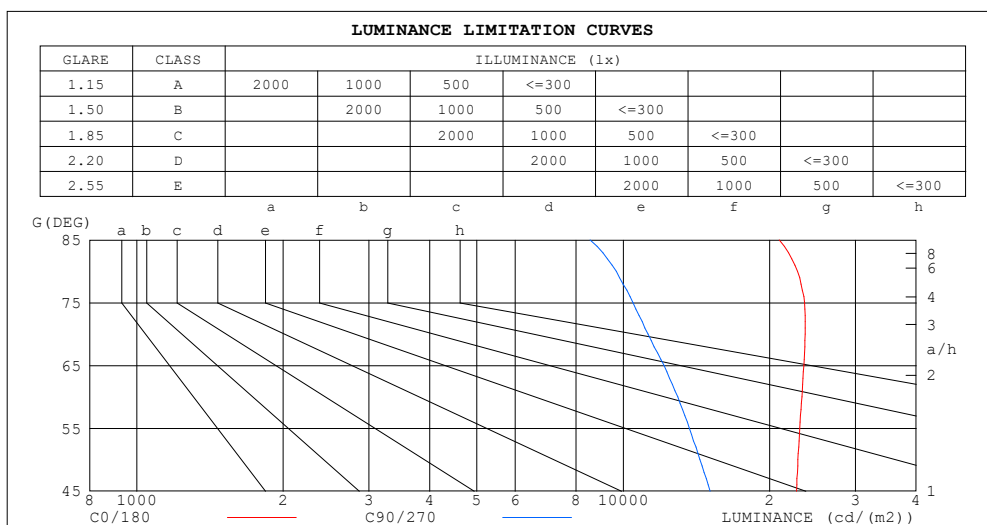
%lamp = 75.0%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JEFF  
 Test Date:17 October 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
 Humidity:65.0%  
 Test Distance:7.888m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:239.7V I:0.1631A P:37.50W PF:0.9588 Lamp Flux:3363.39x1 lm		
NAME: WYN_1150_NA_WHT_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	20935	8551
80	22822	9675
75	23592	10471
70	23655	11243
65	23527	12133
60	23295	12939
55	23068	13683
50	22865	14383
45	22706	15081

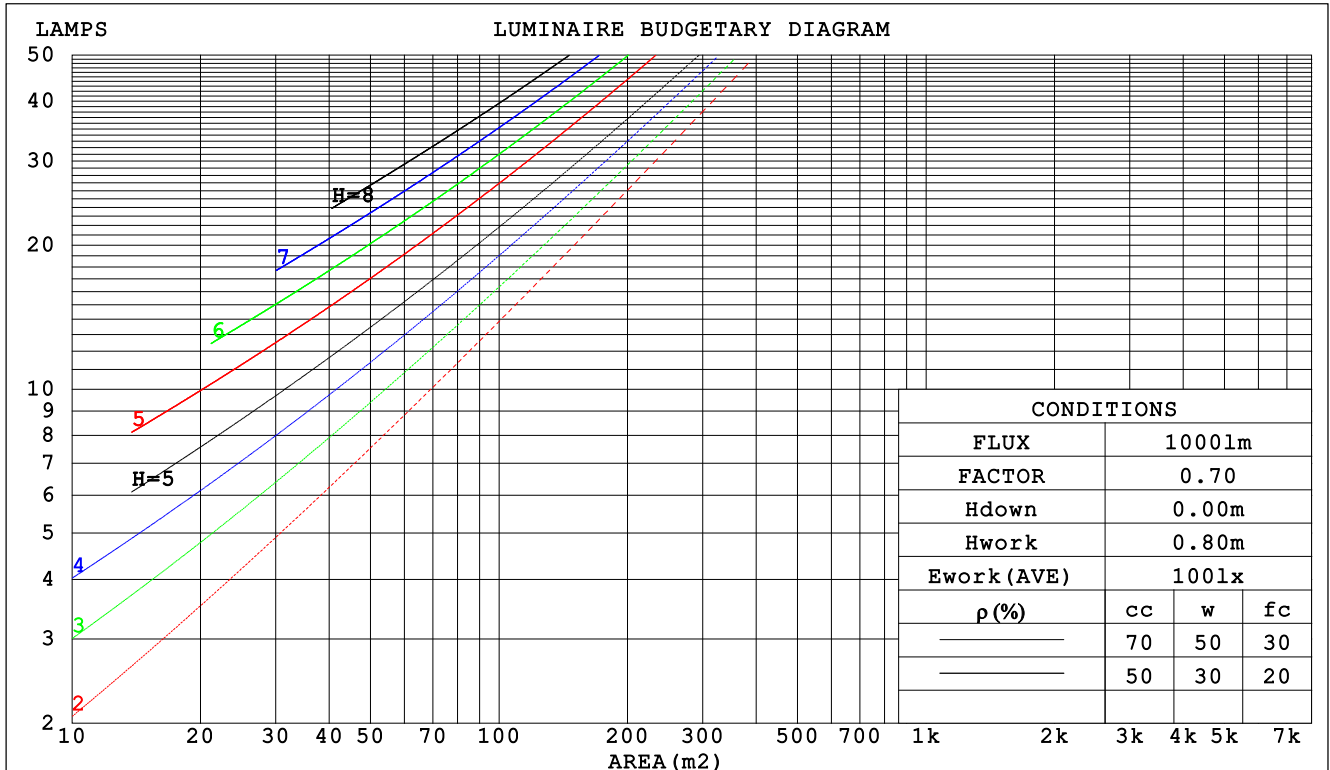
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:17 October 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:239.7V I:0.1631A P:37.50W PF:0.9588 Lamp Flux:3363.39x1 lm		
NAME: WYN_1150_NA_WHT_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	1.03	.98	.94	1.01	.97	.93	.96	.93	.90	.92	.90	.87	.89	.87	.84	.82
2.0	.89	.82	.76	.87	.80	.75	.83	.78	.73	.80	.75	.71	.77	.73	.70	.67
3.0	.77	.69	.62	.76	.68	.61	.73	.66	.60	.70	.64	.59	.67	.62	.58	.56
4.0	.68	.59	.52	.67	.58	.51	.64	.57	.51	.62	.55	.50	.59	.54	.49	.47
5.0	.60	.51	.44	.59	.50	.44	.57	.49	.43	.55	.48	.43	.53	.47	.42	.40
6.0	.54	.45	.38	.53	.44	.38	.51	.43	.38	.50	.43	.37	.48	.42	.37	.35
7.0	.49	.40	.33	.48	.39	.33	.46	.39	.33	.45	.38	.33	.44	.37	.32	.30
8.0	.44	.36	.30	.44	.35	.29	.42	.35	.29	.41	.34	.29	.40	.34	.29	.27
9.0	.41	.32	.26	.40	.32	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.24
10.0	.37	.29	.24	.37	.29	.24	.36	.29	.24	.35	.28	.24	.34	.28	.23	.22



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:17 October 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

**WEC AND CCEC**

Test:U:239.7V I:0.1631A P:37.50W PF:0.9588 Lamp Flux:3363.39x1 lm		
NAME: WYN_1150_NA_WHT_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	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	.326	.186	.059	.319	.182	.058	.306	.176	.056	.294	.169	.054	.282	.164	.053		
2.0	.307	.168	.052	.301	.166	.051	.289	.161	.050	.278	.156	.049	.268	.151	.048		
3.0	.283	.151	.045	.277	.149	.045	.267	.145	.044	.257	.141	.043	.248	.137	.043		
4.0	.260	.135	.040	.255	.133	.039	.246	.130	.039	.237	.127	.038	.229	.124	.038		
5.0	.239	.122	.035	.235	.121	.035	.227	.118	.035	.219	.116	.034	.212	.113	.034		
6.0	.221	.111	.032	.217	.110	.032	.210	.108	.031	.203	.105	.031	.197	.103	.031		
7.0	.205	.101	.029	.202	.101	.029	.195	.099	.028	.189	.097	.028	.183	.095	.028		
8.0	.191	.093	.026	.188	.093	.026	.182	.091	.026	.177	.089	.026	.171	.088	.026		
9.0	.179	.086	.024	.176	.086	.024	.171	.084	.024	.166	.083	.024	.161	.082	.024		
10.0	.168	.080	.022	.165	.080	.022	.160	.079	.022	.156	.077	.022	.152	.076	.022		

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	.181	.156	.133	.155	.134	.115	.106	.092	.079	.061	.053	.046	.020	.017	.015		
2.0	.174	.132	.096	.149	.113	.083	.102	.079	.058	.059	.046	.034	.019	.015	.011		
3.0	.167	.114	.072	.143	.099	.063	.098	.069	.044	.057	.040	.026	.018	.013	.009		
4.0	.160	.101	.057	.137	.087	.049	.094	.061	.035	.054	.036	.021	.018	.012	.007		
5.0	.152	.091	.046	.131	.079	.040	.090	.055	.028	.052	.032	.017	.017	.011	.006		
6.0	.145	.083	.038	.124	.072	.033	.086	.050	.023	.050	.029	.014	.016	.010	.005		
7.0	.138	.076	.032	.119	.066	.028	.082	.046	.020	.048	.027	.012	.015	.009	.004		
8.0	.131	.070	.028	.113	.061	.024	.078	.043	.017	.045	.025	.010	.015	.008	.003		
9.0	.125	.065	.025	.108	.056	.021	.075	.040	.015	.043	.023	.009	.014	.008	.003		
10.0	.119	.061	.022	.103	.053	.019	.071	.037	.014	.042	.022	.008	.013	.007	.003		

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:17 October 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:239.7V I:0.1631A P:37.50W PF:0.9588 Lamp Flux:3363.39x1 lm										
NAME: WYN_1150_NA_WHT_HE_500mA_4000K CRI90					TYPE:LED			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:1		
MFR.: DARKON					SUR.:			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	22.4	24.0	22.7	24.2	24.4	20.3	21.9	20.6	22.1	22.3
3H	24.3	25.8	24.6	26.0	26.3	21.6	23.0	21.9	23.3	23.5
4H	25.2	26.6	25.5	26.9	27.1	22.1	23.5	22.4	23.7	24.0
6H	25.9	27.2	26.3	27.5	27.8	22.5	23.8	22.8	24.1	24.4
8H	26.2	27.5	26.5	27.7	28.0	22.6	23.9	23.0	24.2	24.5
12H	26.4	27.6	26.7	27.9	28.2	22.7	23.9	23.0	24.2	24.5
4H 2H	22.7	24.1	23.0	24.3	24.6	21.0	22.4	21.3	22.6	22.9
3H	24.7	25.9	25.1	26.2	26.5	22.4	23.7	22.8	23.9	24.3
4H	25.7	26.8	26.0	27.1	27.4	23.1	24.2	23.4	24.5	24.8
6H	26.5	27.5	26.9	27.9	28.2	23.6	24.6	24.0	24.9	25.3
8H	26.8	27.8	27.3	28.1	28.5	23.8	24.7	24.2	25.1	25.4
12H	27.1	28.0	27.5	28.3	28.8	23.9	24.7	24.3	25.1	25.5
8H 4H	25.7	26.7	26.2	27.0	27.4	23.4	24.3	23.8	24.7	25.1
6H	26.7	27.4	27.1	27.9	28.3	24.0	24.8	24.5	25.2	25.6
8H	27.1	27.8	27.5	28.2	28.6	24.3	25.0	24.8	25.4	25.9
12H	27.4	28.0	27.9	28.5	28.9	24.5	25.1	25.0	25.6	26.0
12H 4H	25.7	26.6	26.2	27.0	27.4	23.4	24.3	23.8	24.7	25.1
6H	26.7	27.4	27.1	27.8	28.2	24.1	24.8	24.6	25.2	25.7
8H	27.1	27.7	27.6	28.1	28.6	24.4	25.0	24.9	25.5	26.0
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.2 / - 0.2				
1.5H	+ 0.3 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.7 / - 0.7					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 3363 lm Total Lamp Luminous Flux. (8log(F/F0) = 4.2)

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:17 October 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:239.7V I:0.1631A P:37.50W PF:0.9588 Lamp Flux:3363.39x1 lm		
NAME: WYN_1150_NA_WHT_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

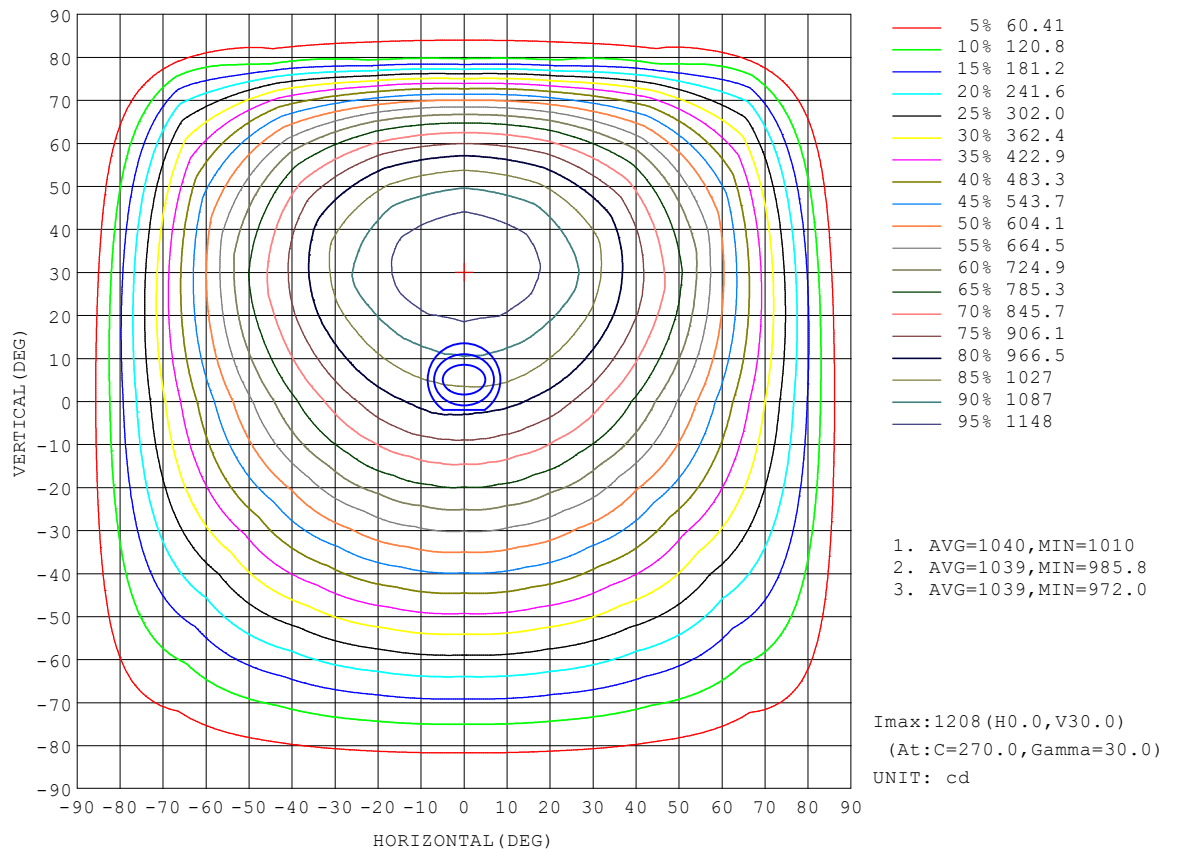
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	55	43	36	54	43	36	53	42	35	29
0.80	65	53	45	64	52	45	62	52	44	37
1.00	73	62	54	72	61	54	70	63	53	46
1.25	81	70	62	79	69	62	76	67	61	53
1.50	86	75	68	84	75	68	81	73	66	59
2.00	93	84	77	91	83	77	88	81	75	67
2.50	97	89	83	95	88	82	91	85	80	71
3.00	101	94	88	99	92	87	95	89	85	76
4.00	105	99	94	103	98	93	99	94	90	81
5.00	108	103	99	106	101	97	101	97	94	85
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:JEFF  
Test Date:17 October 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

# ISOCANDELA DIAGRAM

Test:U:239.7V I:0.1631A P:37.50W PF:0.9588 Lamp Flux:3363.39x1 lm		
NAME: WYN_1150_NA_WHT_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



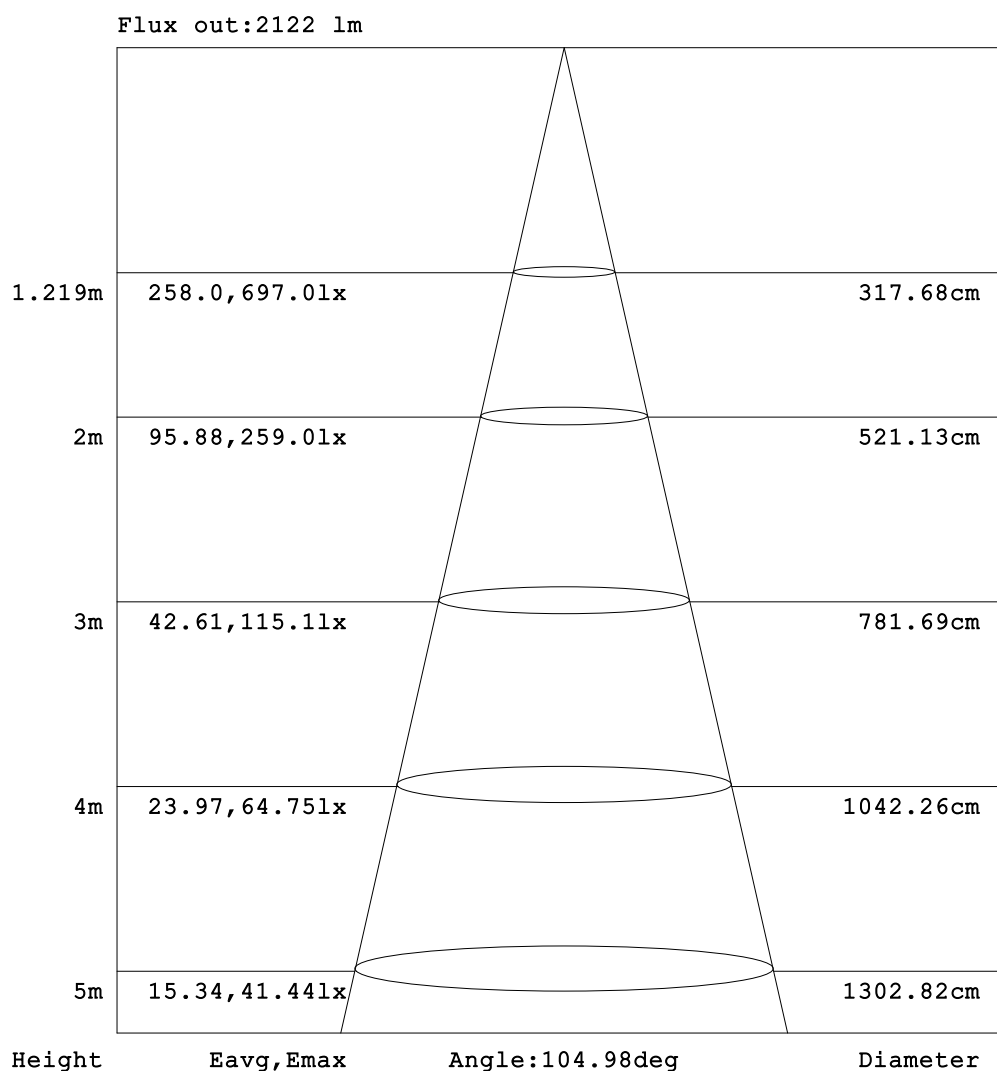
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:17 October 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:



**AAI Figure**

Test:U:239.7V I:0.1631A P:37.50W PF:0.9588 Lamp Flux:3363.39x1 lm		
NAME: WYN_1150_NA_WHT_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



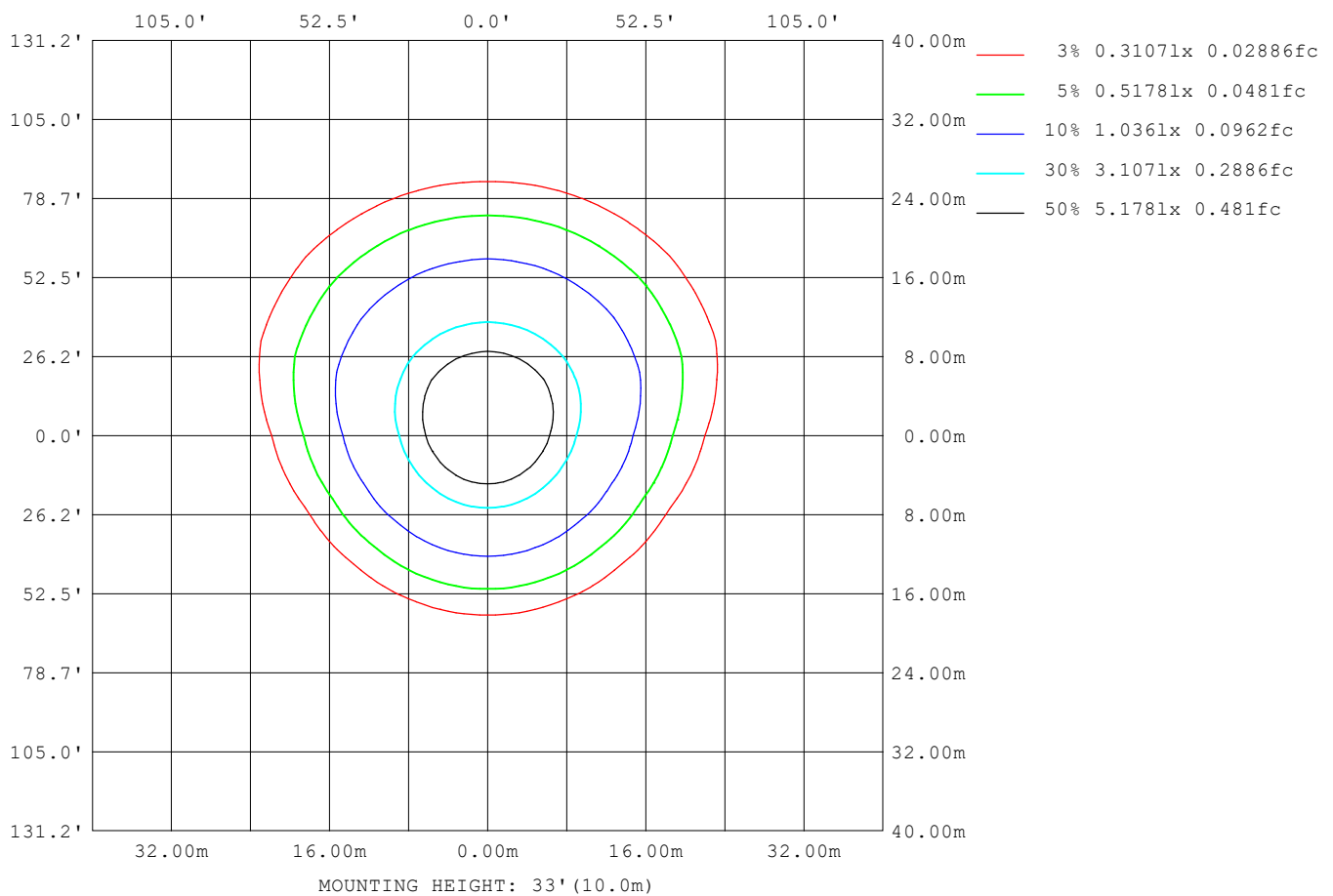
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:17 October 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

Test:U:239.7V I:0.1631A P:37.50W PF:0.9588 Lamp Flux:3363.39x1 lm		
NAME: WYN_1150_NA_WHT_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:17 October 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

### LED Avg.L Report

Test:U:239.7V I:0.1631A P:37.50W PF:0.9588 Lamp Flux:3363.39x1 lm		
NAME: WYN_1150_NA_WHT_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

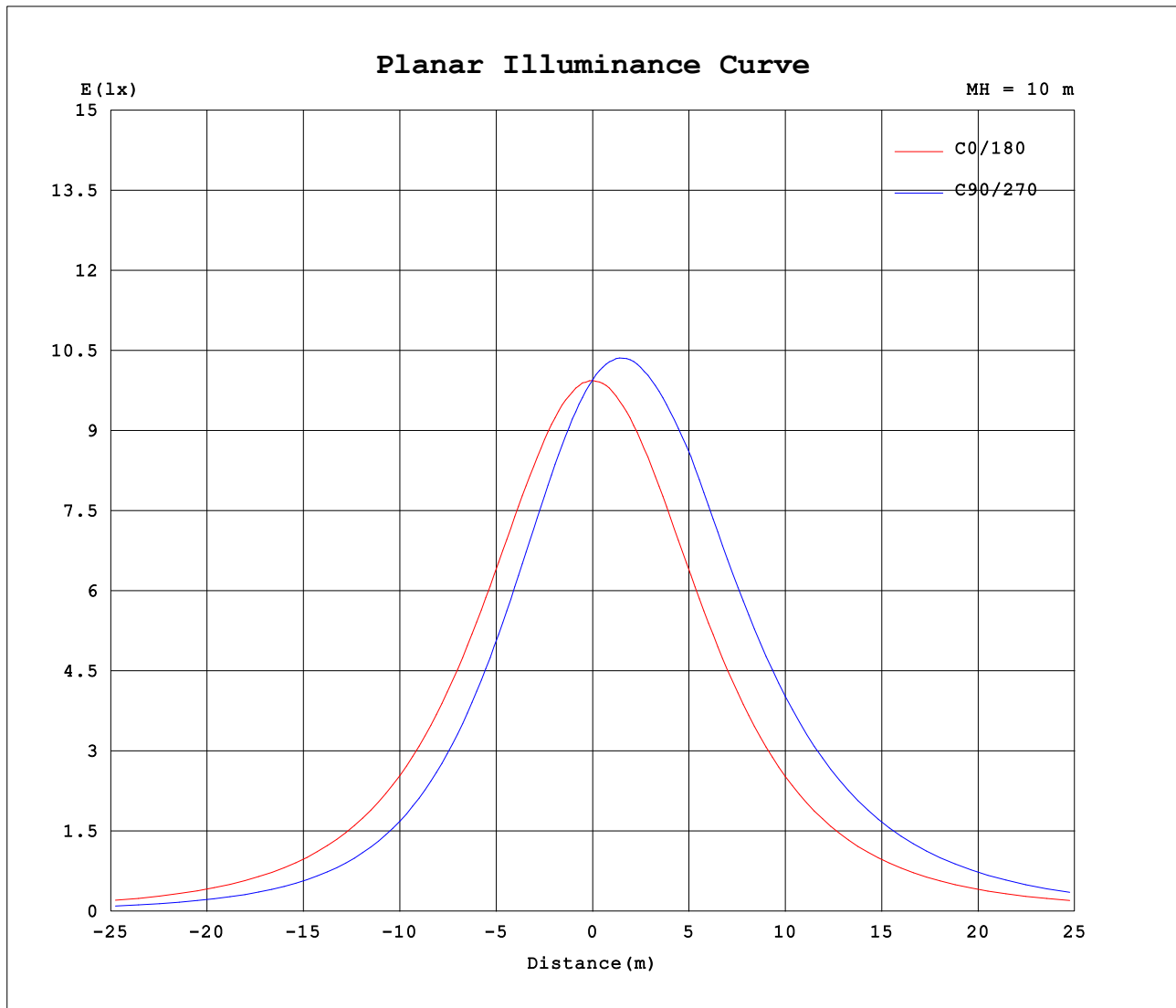
AvgL	cd/m2
L_0~180 (65) av	23369
L_0~180 (75) av	23194
L_0~180 (85) av	19733
L_90~270 (65) av	26592
L_90~270 (75) av	20845
L_90~270 (85) av	10444
L_45 (65) av	26691
L_45 (75) av	25656
L_45 (85) av	11256

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:17 October 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

### Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: JEFF  
Test Date: 17 October 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity: 65.0%  
Test Distance: 7.888m [K=1.0000]  
Remarks:

