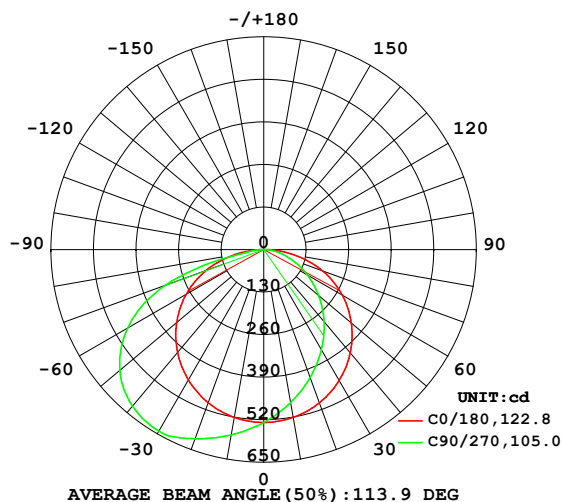


## LUMINAIRE PHOTOMETRIC TEST REPORT

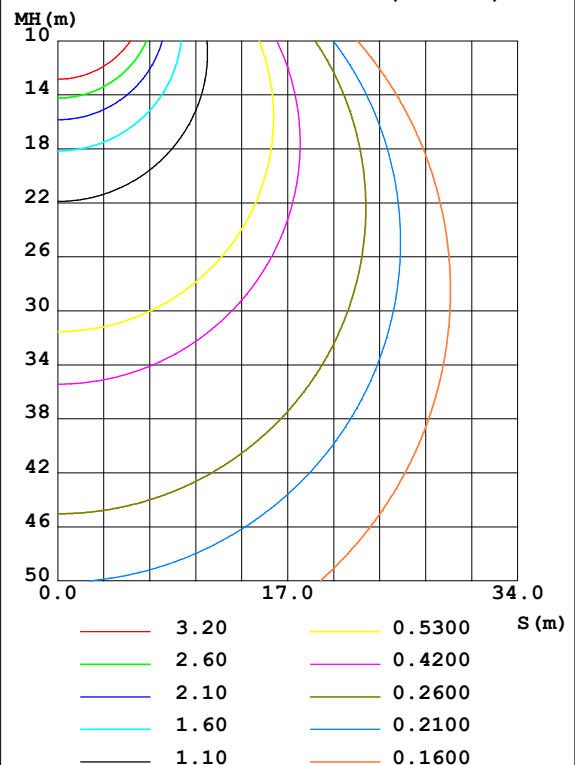
Test:U:239.9V I:0.0889A P:18.74W PF:0.8790 Lamp Flux:1783.01x1 lm		
NAME: WYN_1150_NA_WHT_HE_250mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 95.14 lm/W			
LED MODEL	1300lm 940 HV ADV6	Imax(cd)	640.5	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)	1783.0	$\eta$ UP,DN(C0-180)	0.0,36.0
NOMINAL FLUX(lm)	1783.01	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:23 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	520.7	487.3	474.6	487.2	520.5	558.1	574.9	558.3	0- 10	50.16	50.16	2.81,2.81
20	498.3	436.4	415.9	436.2	497.7	576.6	615.0	577.2	10- 20	145.9	196.0	11,11
30	461.6	377.7	353.1	377.3	460.6	584.4	640.5	585.7	20- 30	228.5	424.6	23.8,23.8
40	411.6	312.4	286.9	311.9	410.1	572.8	624.3	574.2	30- 40	288.6	713.1	40,40
50	349.5	242.5	219.3	242.0	347.6	527.2	574.1	529.1	40- 50	316.7	1030	57.8,57.8
60	276.5	171.2	153.3	170.6	273.9	451.1	480.4	453.6	50- 60	307.9	1338	75,75
70	192.0	102.7	91.19	102.2	188.3	332.2	319.7	334.4	60- 70	257.0	1595	89.4,89.4
80	94.03	43.22	39.70	42.89	88.88	115.2	57.19	117.0	70- 80	154.1	1749	98.1,98.1
90	1.285	0.7633	0.6524	0.7535	0.5581	0.4183	0.4325	0.4316	80- 90	34.09	1783	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): 870.16 lm

%lum = 48.8%

%lamp = 48.8%

Conical surface Flux(120deg): 1337.8 lm

%lum = 75.0%

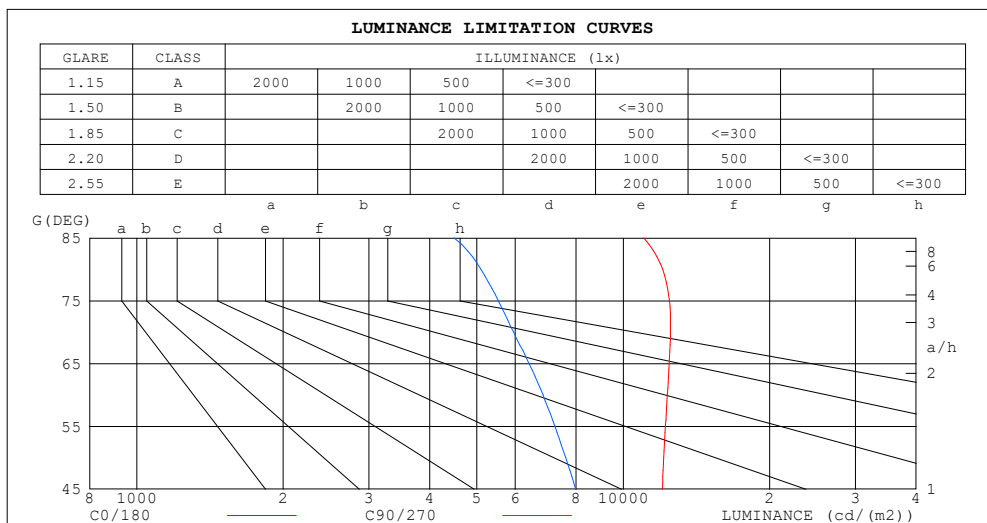
%lamp = 75.0%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JEFF  
 Test Date:23 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:239.9V I:0.0889A P:18.74W PF:0.8790 Lamp Flux:1783.01x1 lm		
NAME: WYN_1150_NA_WHT_HE_250mA_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	11022	4492
80	12063	5101
75	12440	5538
70	12508	5949
65	12436	6402
60	12321	6840
55	12211	7236
50	12112	7614
45	12032	7989

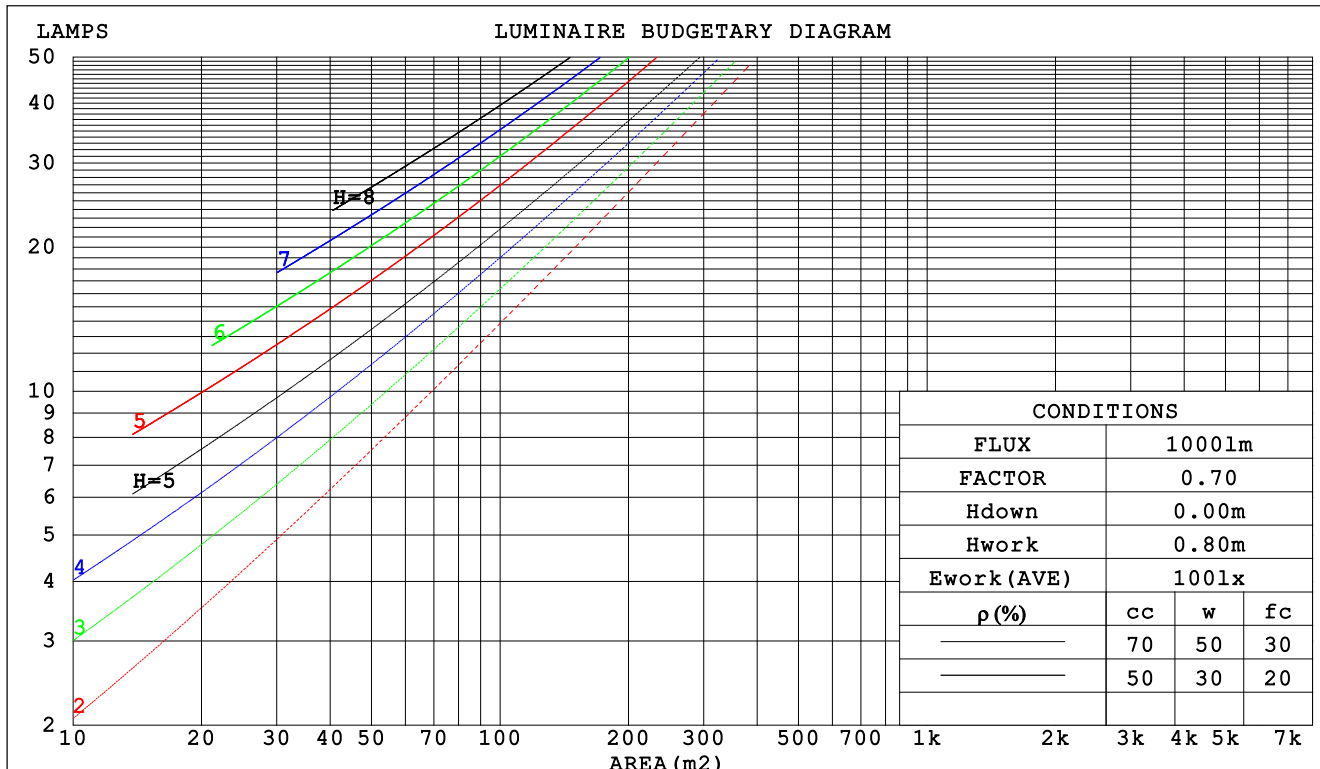
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:23 October 2024

$\gamma$  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:239.9V I:0.0889A P:18.74W PF:0.8790 Lamp Flux:1783.01x1 lm		
NAME: WYN_1150_NA_WHT_HE_250mA_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	.00
1.0	1.03	.98	.94	1.01	.97	.93	.96	.93	.90	.92	.90	.87	.89	.87	.85	.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	.31	.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:23 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:239.9V I:0.0889A P:18.74W PF:0.8790 Lamp Flux:1783.01x1 lm		
NAME: WYN_1150_NA_WHT_HE_250mA_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:23 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:239.9V I:0.0889A P:18.74W PF:0.8790 Lamp Flux:1783.01x1 lm										
NAME: WYN_1150_NA_WHT_HE_250mA_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	20.2	21.8	20.5	22.0	22.2	18.1	19.7	18.3	19.9	20.1
3H	22.1	23.6	22.4	23.8	24.1	19.4	20.8	19.7	21.1	21.3
4H	23.0	24.4	23.3	24.6	24.9	19.9	21.3	20.2	21.5	21.8
6H	23.7	25.0	24.0	25.3	25.6	20.3	21.6	20.6	21.9	22.1
8H	24.0	25.2	24.3	25.5	25.8	20.4	21.7	20.7	22.0	22.3
12H	24.1	25.4	24.5	25.7	26.0	20.5	21.7	20.8	22.0	22.3
4H 2H	20.5	21.9	20.8	22.1	22.4	18.8	20.2	19.1	20.4	20.7
3H	22.5	23.7	22.8	24.0	24.3	20.2	21.4	20.6	21.7	22.0
4H	23.4	24.6	23.8	24.9	25.2	20.8	22.0	21.2	22.3	22.6
6H	24.3	25.3	24.7	25.6	26.0	21.4	22.4	21.8	22.7	23.1
8H	24.6	25.6	25.0	25.9	26.3	21.5	22.5	22.0	22.8	23.2
12H	24.9	25.7	25.3	26.1	26.5	21.7	22.5	22.1	22.9	23.3
8H 4H	23.5	24.5	23.9	24.8	25.2	21.2	22.1	21.6	22.5	22.9
6H	24.5	25.2	24.9	25.6	26.1	21.8	22.6	22.3	23.0	23.4
8H	24.9	25.5	25.3	26.0	26.4	22.1	22.8	22.6	23.2	23.7
12H	25.2	25.8	25.7	26.2	26.7	22.3	22.9	22.8	23.3	23.8
12H 4H	23.5	24.4	23.9	24.8	25.2	21.2	22.1	21.6	22.4	22.9
6H	24.5	25.2	24.9	25.6	26.0	21.9	22.6	22.4	23.0	23.5
8H	24.9	25.5	25.4	25.9	26.4	22.2	22.8	22.7	23.3	23.7
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 1783 lm Total Lamp Luminous Flux. (8log(F/F0) = 2.0)

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:23 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:239.9V I:0.0889A P:18.74W PF:0.8790 Lamp Flux:1783.01x1 lm		
NAME: WYN_1150_NA_WHT_HE_250mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

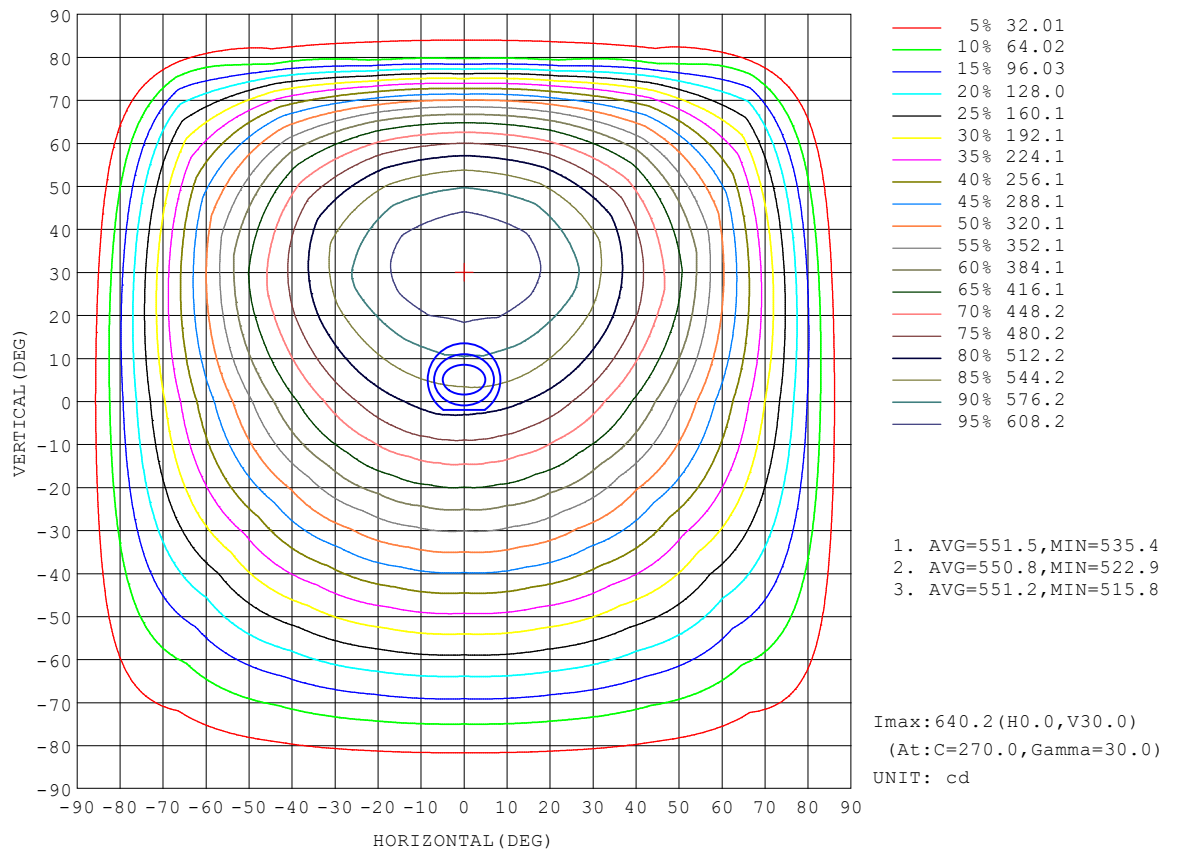
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	55	43	36	54	43	36	53	42	35	29
0.80	65	53	45	64	52	45	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:23 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:239.9V I:0.0889A P:18.74W PF:0.8790 Lamp Flux:1783.01x1 lm		
NAME: WYN_1150_NA_WHT_HE_250mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



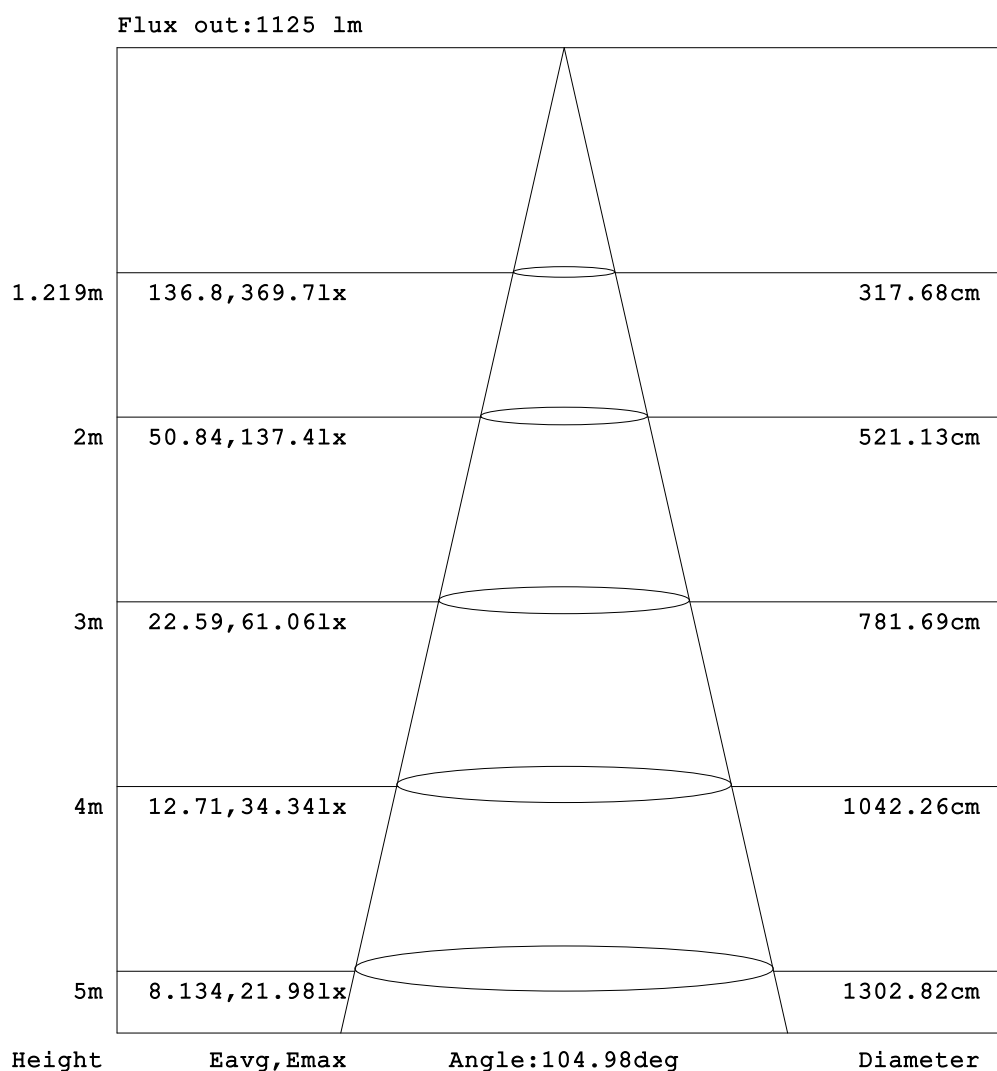
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:23 October 2024

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:239.9V I:0.0889A P:18.74W PF:0.8790 Lamp Flux:1783.01x1 lm		
NAME: WYN_1150_NA_WHT_HE_250mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



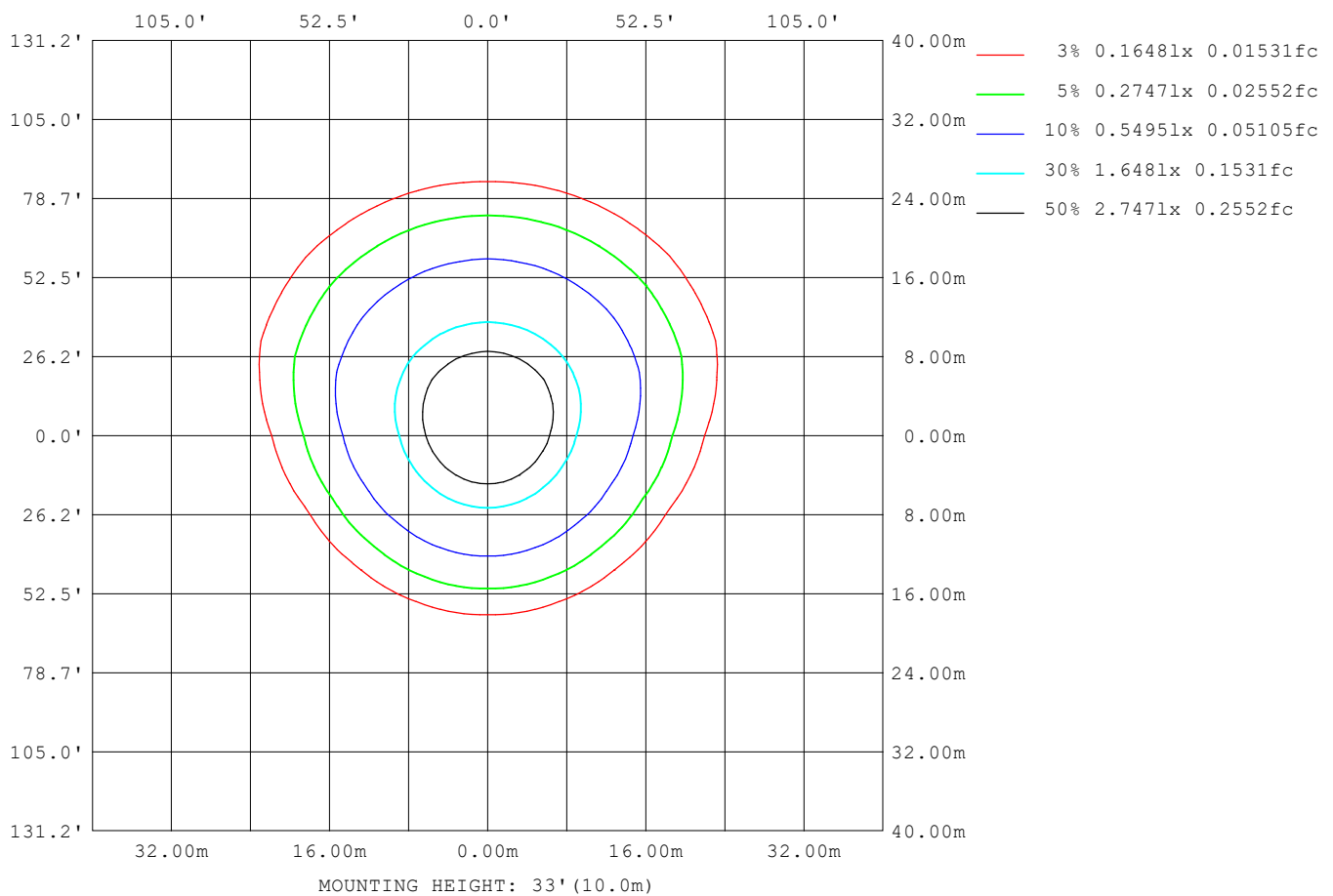
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:23 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:239.9V I:0.0889A P:18.74W PF:0.8790 Lamp Flux:1783.01x1 lm		
NAME: WYN_1150_NA_WHT_HE_250mA_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:23 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:239.9V I:0.0889A P:18.74W PF:0.8790 Lamp Flux:1783.01x1 lm		
NAME: WYN_1150_NA_WHT_HE_250mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

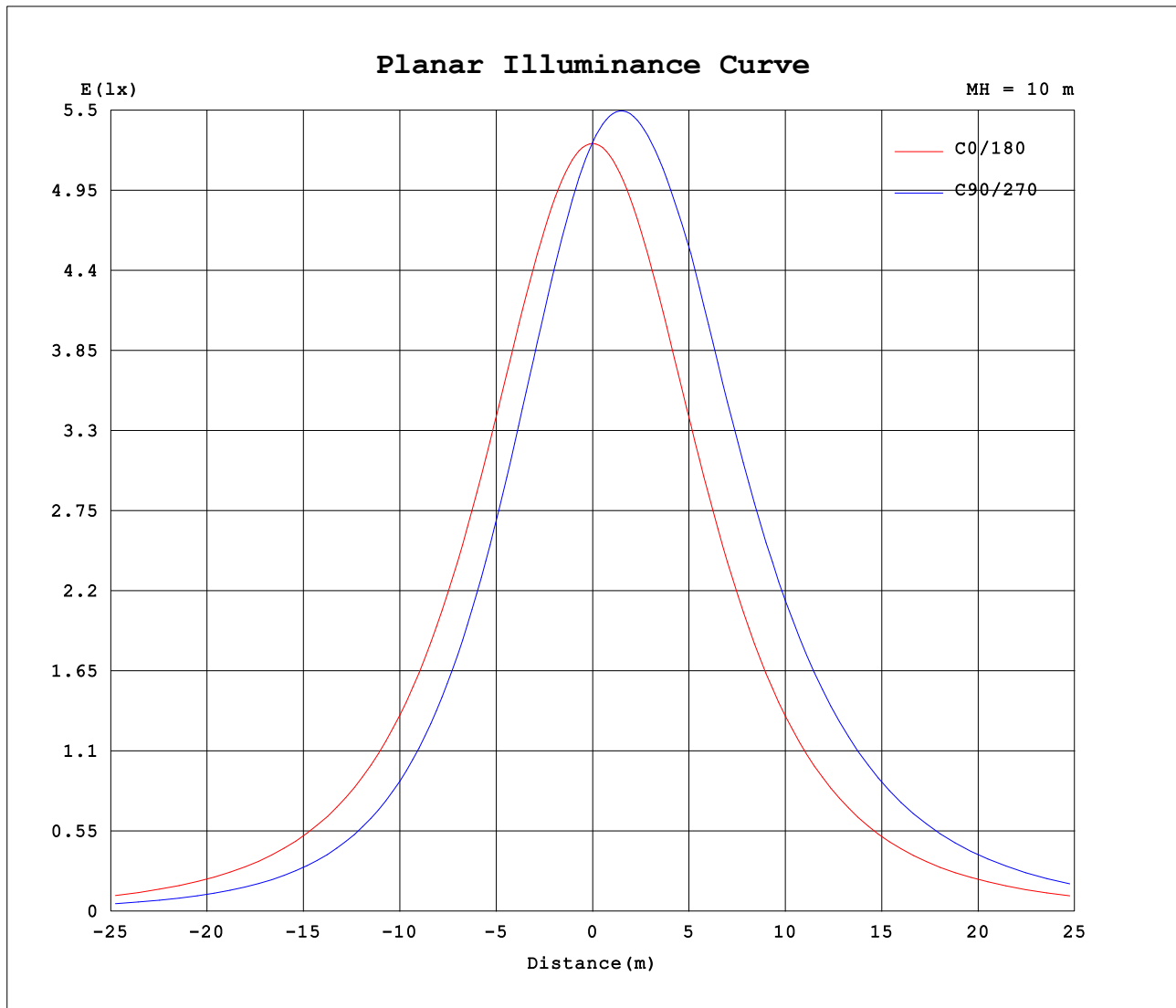
AvgL	cd/m2
L_0~180 (65) av	12378
L_0~180 (75) av	12273
L_0~180 (85) av	10448
L_90~270 (65) av	14088
L_90~270 (75) av	11070
L_90~270 (85) av	5534
L_45 (65) av	14132
L_45 (75) av	13595
L_45 (85) av	5962

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:23 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: 23 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:

