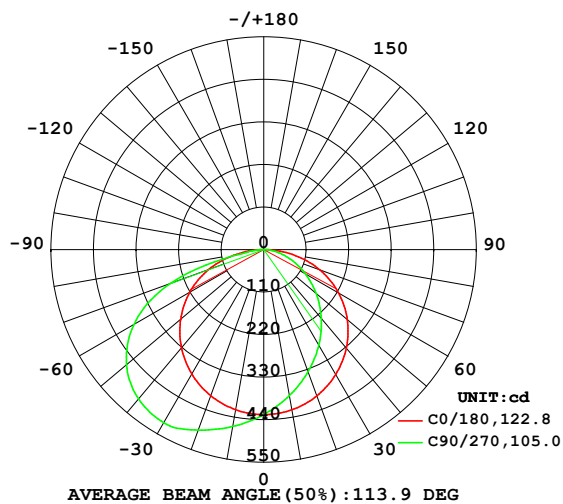


LUMINAIRE PHOTOMETRIC TEST REPORT

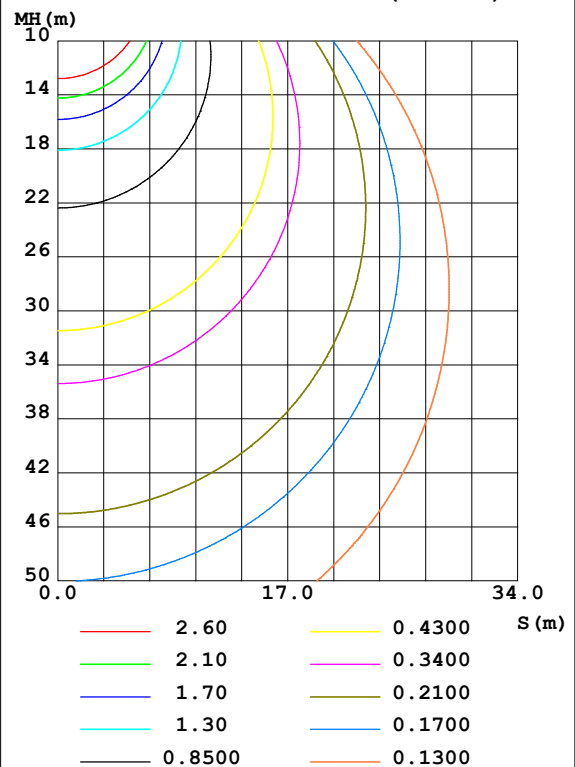
Test:U:239.9V I:0.0762A P:15.15W PF:0.8286 Lamp Flux:1439.2x1 lm		
NAME: WYN_1150_NA_WHT_HE_200mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 94.97 lm/W			
LED MODEL	1300lm 940 HV ADV6	Imax(cd)	517.1	S/MH(C0/180)	1.30
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.75
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	1439.2	η UP,DN(C0-180)	0.0,36.0
NOMINAL FLUX(lm)	1439.2	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,64.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	230	η 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

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:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	420.6	393.5	383.4	393.5	420.4	450.7	464.4	450.8	0- 10	40.51	40.51	2.81,2.81
20	402.4	352.5	336.0	352.3	401.9	465.6	496.7	466.0	10- 20	117.8	158.3	11,11
30	372.8	305.0	285.3	304.8	371.9	471.9	517.1	472.8	20- 30	184.6	342.9	23.8,23.8
40	332.4	252.3	231.9	252.0	331.2	462.5	503.9	463.2	30- 40	233.0	575.9	40,40
50	282.3	195.8	177.3	195.6	280.7	425.7	463.3	426.7	40- 50	255.7	831.7	57.8,57.8
60	223.2	138.3	123.9	138.0	221.2	364.1	387.5	365.5	50- 60	248.6	1080	75.1,75.1
70	155.1	83.01	73.81	82.83	152.1	268.1	257.6	269.2	60- 70	207.4	1288	89.5,89.5
80	75.97	34.96	32.20	34.87	71.83	92.66	45.96	93.03	70- 80	124.1	1412	98.1,98.1
90	1.025	0.6058	0.5170	0.6069	0.4407	0.3267	0.3263	0.3071	80- 90	27.41	1439	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): 702.73 lm

%lum = 48.8%

%lamp = 48.8%

Conical surface Flux(120deg): 1080.3 lm

%lum = 75.1%

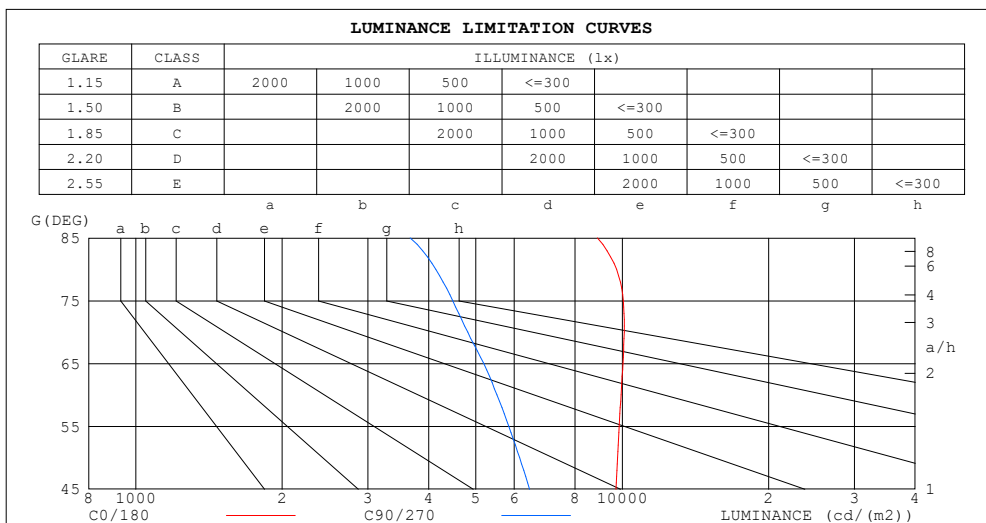
%lamp = 75.1%

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:

LUMINANCE LIMITATION CURVES

Test:U:239.9V I:0.0762A P:15.15W PF:0.8286 Lamp Flux:1439.2x1 lm		
NAME: WYN_1150_NA_WHT_HE_200mA_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	8895	3662
80	9742	4136
75	10046	4483
70	10096	4814
65	10032	5190
60	9943	5527
55	9855	5846
50	9779	6152
45	9714	6452

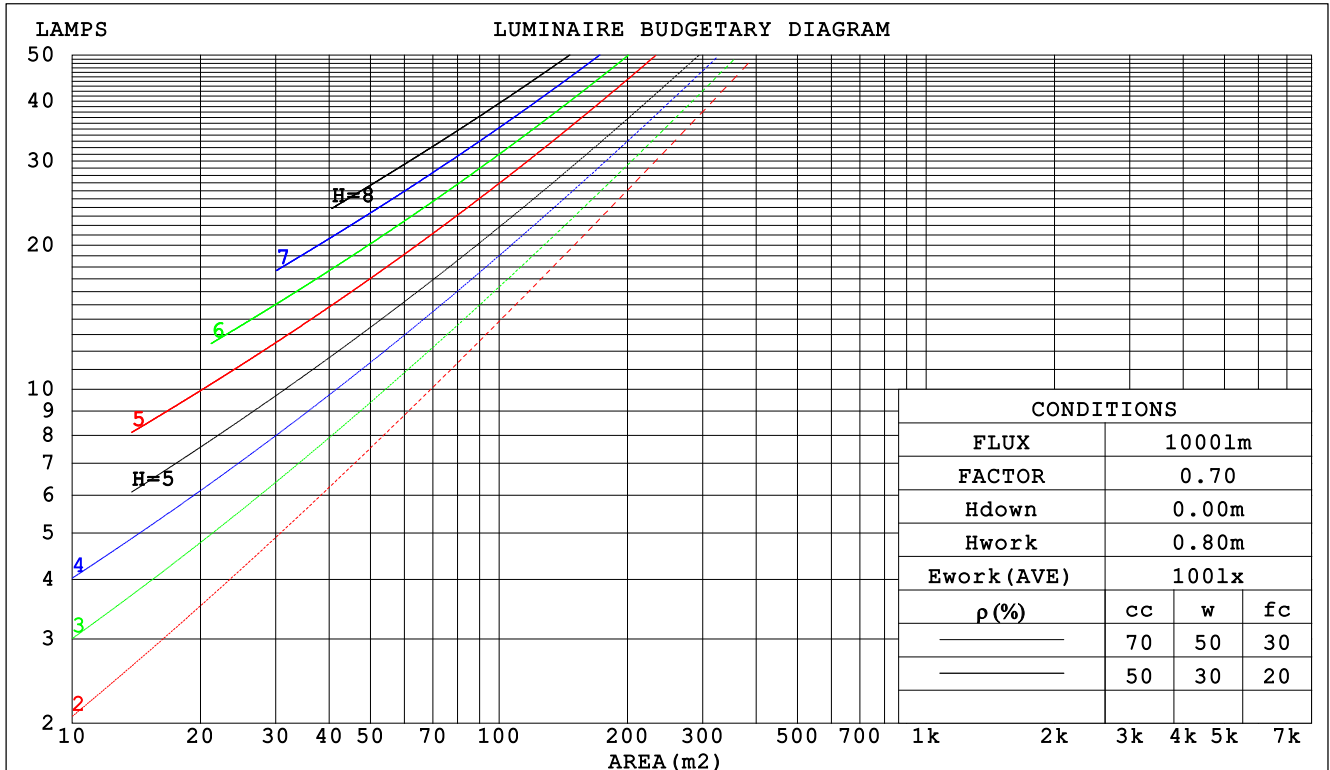
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:23 October 2024

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:239.9V I:0.0762A P:15.15W PF:0.8286 Lamp Flux:1439.2x1 lm		
NAME: WYN_1150_NA_WHT_HE_200mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	Coefficients of Utilization(CU)															
RCR:Room Cavity Ratio																
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	.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	.60	.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

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:

WEC AND CCEC

Test:U:239.9V I:0.0762A P:15.15W PF:0.8286 Lamp Flux:1439.2x1 lm		
NAME: WYN_1150_NA_WHT_HE_200mA_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	.175	.056	.293	.169	.054	.282	.164	.053		
2.0	.307	.168	.052	.300	.166	.051	.289	.161	.050	.278	.156	.049	.268	.151	.048		
3.0	.283	.151	.045	.277	.148	.045	.267	.145	.044	.257	.141	.043	.248	.137	.042		
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	.100	.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	.159	.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:0.0762A P:15.15W PF:0.8286 Lamp Flux:1439.2x1 lm										
NAME: WYN_1150_NA_WHT_HE_200mA_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	19.5	21.0	19.7	21.3	21.5	17.3	18.9	17.6	19.1	19.3
3H	21.4	22.8	21.7	23.1	23.3	18.6	20.1	18.9	20.3	20.6
4H	22.2	23.6	22.6	23.9	24.2	19.1	20.5	19.5	20.8	21.1
6H	23.0	24.3	23.3	24.5	24.8	19.5	20.9	19.9	21.1	21.4
8H	23.2	24.5	23.6	24.8	25.1	19.7	20.9	20.0	21.2	21.5
12H	23.4	24.6	23.8	24.9	25.2	19.7	21.0	20.1	21.3	21.6
4H 2H	19.7	21.1	20.0	21.4	21.6	18.0	19.4	18.3	19.7	19.9
3H	21.7	23.0	22.1	23.3	23.6	19.5	20.7	19.8	21.0	21.3
4H	22.7	23.8	23.1	24.2	24.5	20.1	21.2	20.5	21.6	21.9
6H	23.5	24.5	23.9	24.9	25.3	20.6	21.6	21.0	22.0	22.3
8H	23.9	24.8	24.3	25.2	25.6	20.8	21.7	21.2	22.1	22.5
12H	24.1	25.0	24.6	25.4	25.8	20.9	21.8	21.4	22.2	22.6
8H 4H	22.8	23.7	23.2	24.1	24.5	20.4	21.4	20.8	21.7	22.1
6H	23.7	24.5	24.2	24.9	25.3	21.1	21.9	21.5	22.3	22.7
8H	24.1	24.8	24.6	25.2	25.7	21.4	22.1	21.8	22.5	22.9
12H	24.5	25.0	24.9	25.5	26.0	21.6	22.2	22.0	22.6	23.1
12H 4H	22.8	23.6	23.2	24.0	24.4	20.5	21.3	20.9	21.7	22.1
6H	23.7	24.4	24.2	24.8	25.3	21.2	21.9	21.6	22.3	22.7
8H	24.1	24.7	24.6	25.2	25.7	21.5	22.1	22.0	22.5	23.0
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 1439 lm Total Lamp Luminous Flux. (8log(F/F0) = 1.3)

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:0.0762A P:15.15W PF:0.8286 Lamp Flux:1439.2x1 lm		
NAME: WYN_1150_NA_WHT_HE_200mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

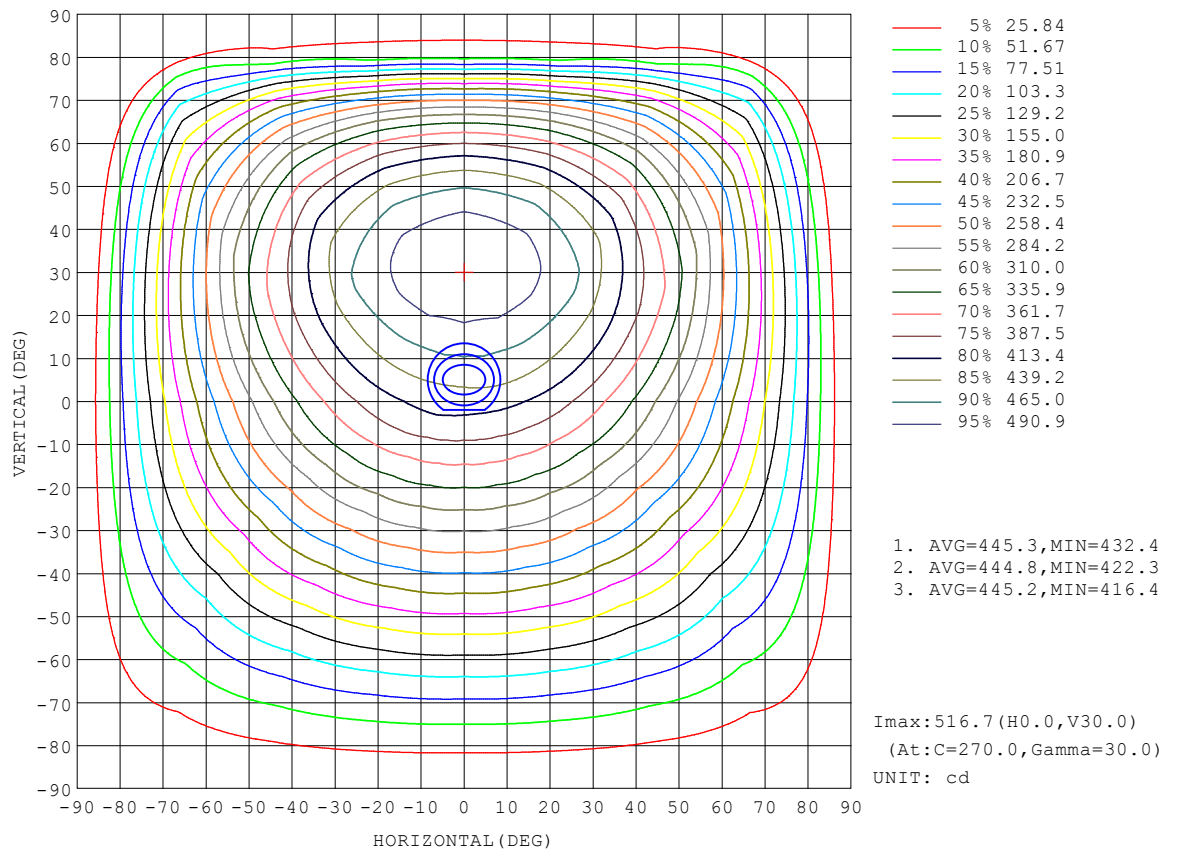
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	55	43	36	54	43	36	53	42	35	29
0.80	65	53	45	64	52	45	62	52	45	37
1.00	73	62	54	72	61	54	70	63	53	46
1.25	81	70	62	79	69	62	77	67	61	53
1.50	86	75	68	84	75	68	81	73	67	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

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:

ISOCANDELA DIAGRAM

Test:U:239.9V I:0.0762A P:15.15W PF:0.8286 Lamp Flux:1439.2x1 lm		
NAME: WYN_1150_NA_WHT_HE_200mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

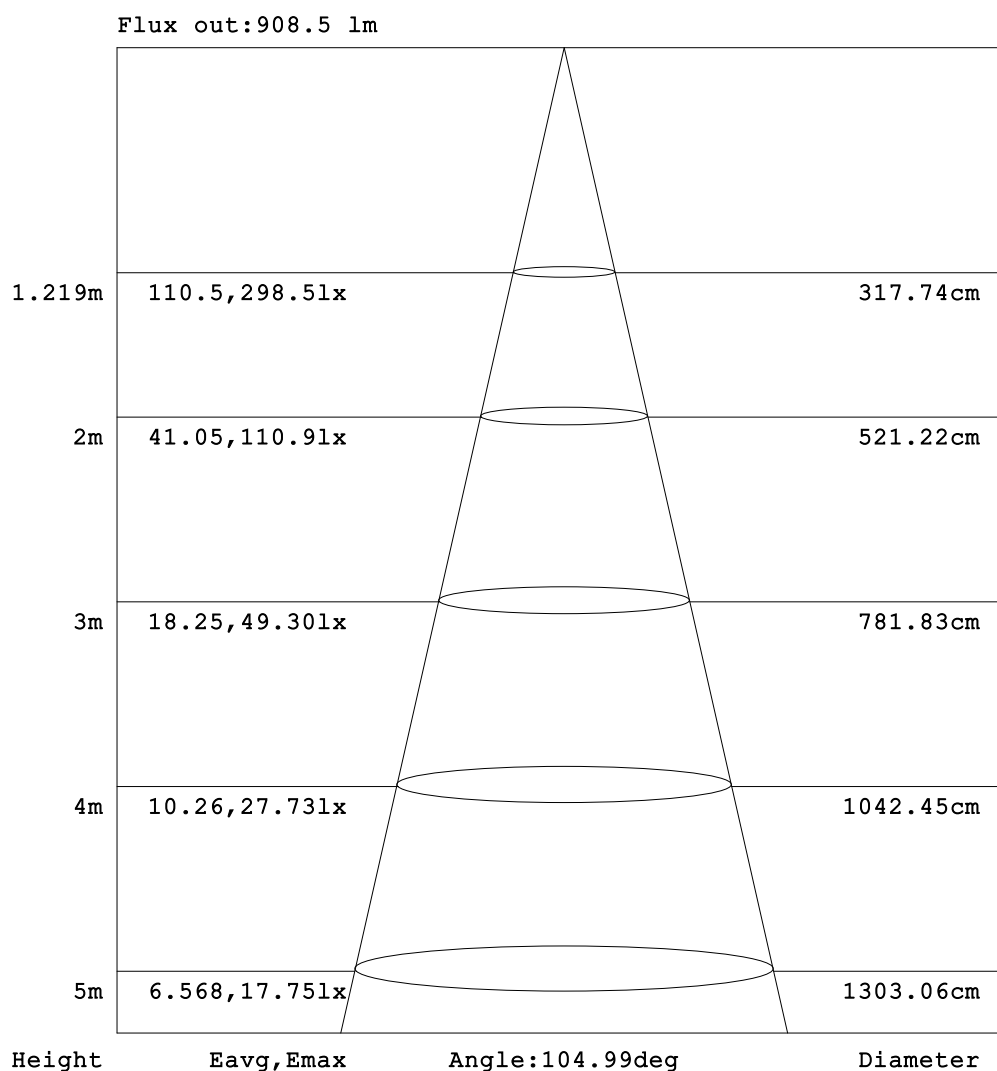


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:23 October 2024

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:0.0762A P:15.15W PF:0.8286 Lamp Flux:1439.2x1 lm		
NAME: WYN_1150_NA_WHT_HE_200mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



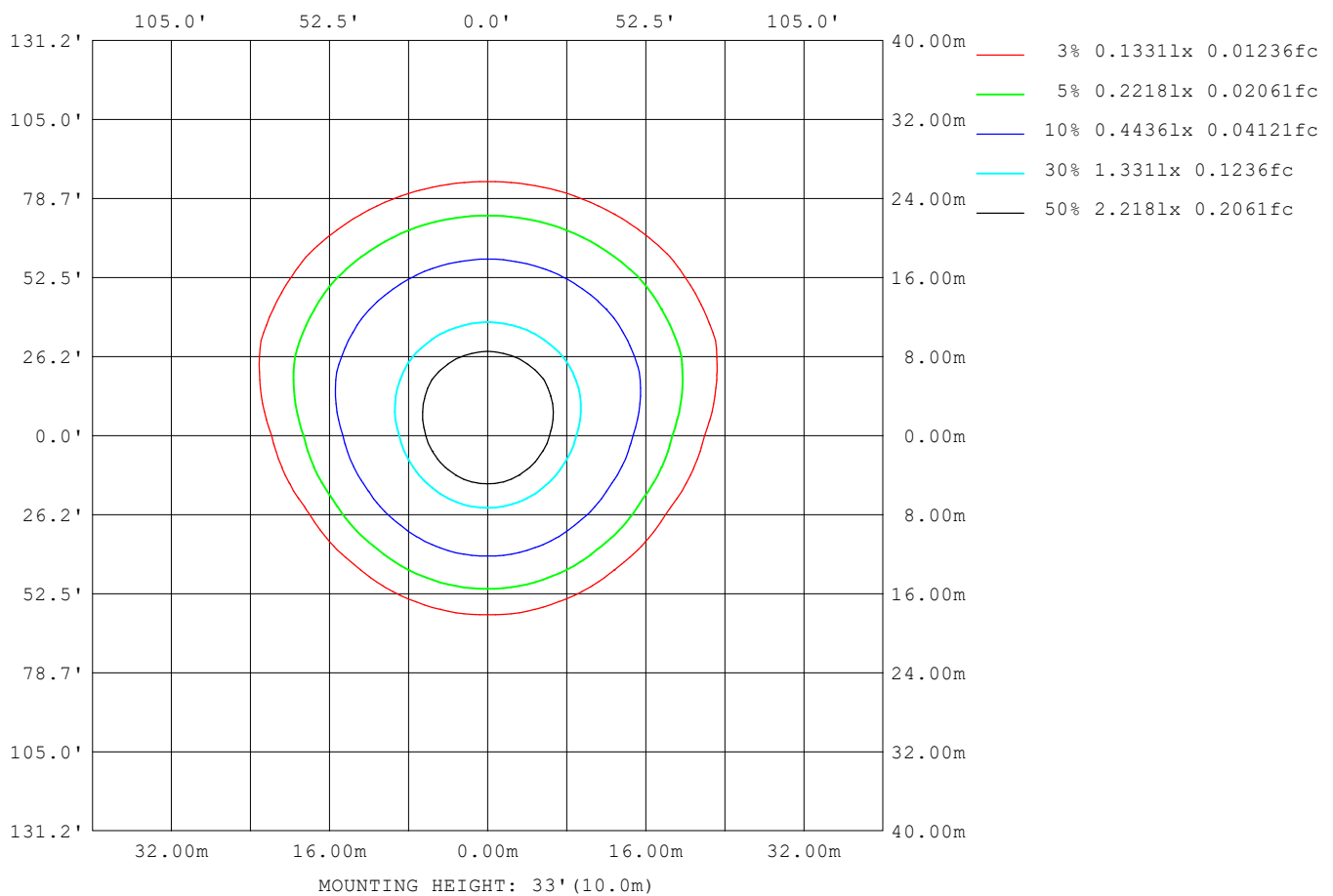
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.0762A P:15.15W PF:0.8286 Lamp Flux:1439.2x1 lm		
NAME: WYN_1150_NA_WHT_HE_200mA_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:0.0762A P:15.15W PF:0.8286 Lamp Flux:1439.2x1 lm		
NAME: WYN_1150_NA_WHT_HE_200mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

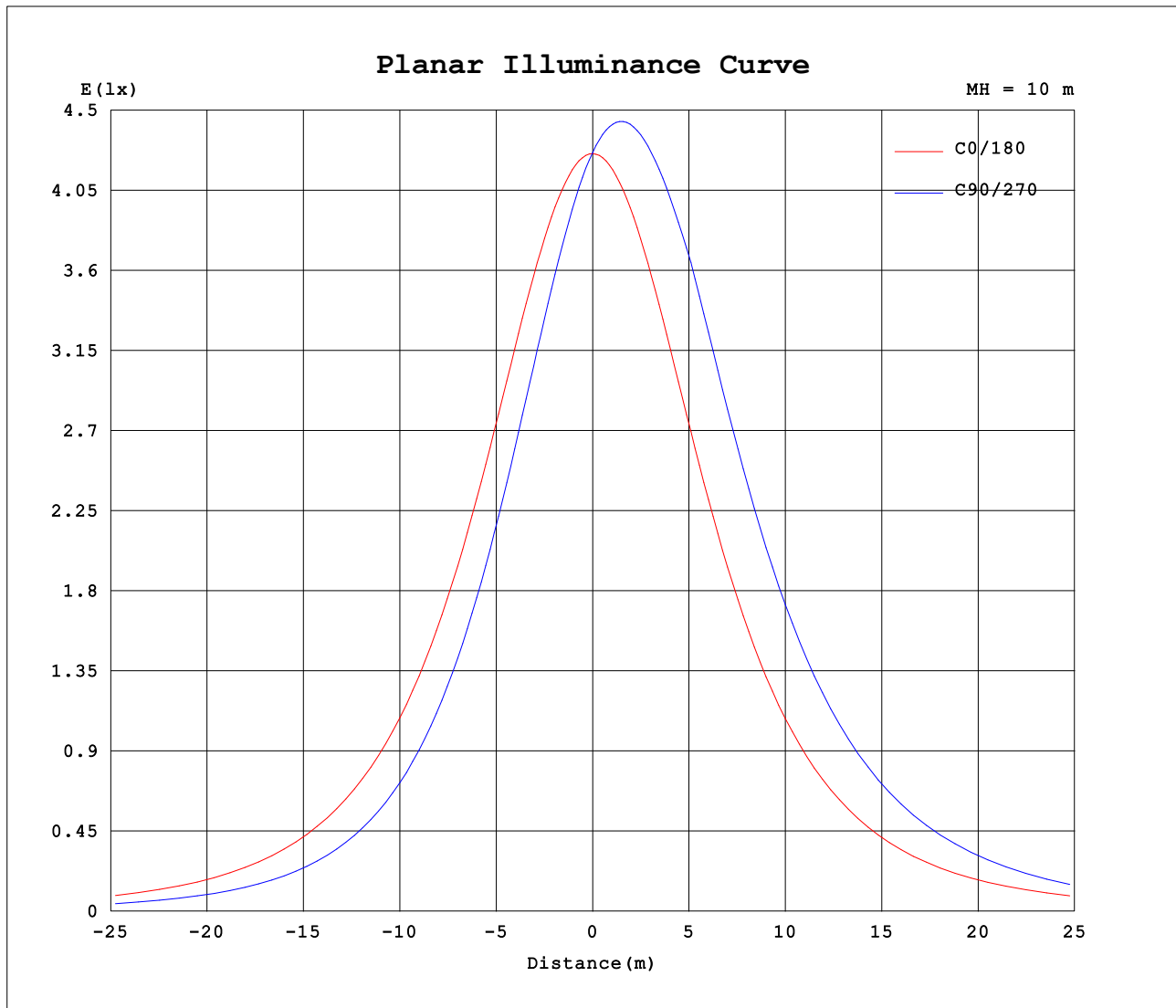
AvgL	cd/m2
L_0~180 (65) av	9993
L_0~180 (75) av	9915
L_0~180 (85) av	8434
L_90~270 (65) av	11373
L_90~270 (75) av	8908
L_90~270 (85) av	4463
L_45 (65) av	11408
L_45 (75) av	10949
L_45 (85) av	4806

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

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:

