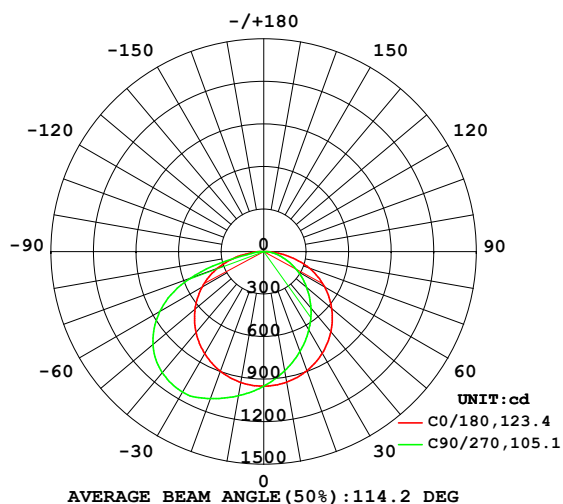


LUMINAIRE PHOTOMETRIC TEST REPORT

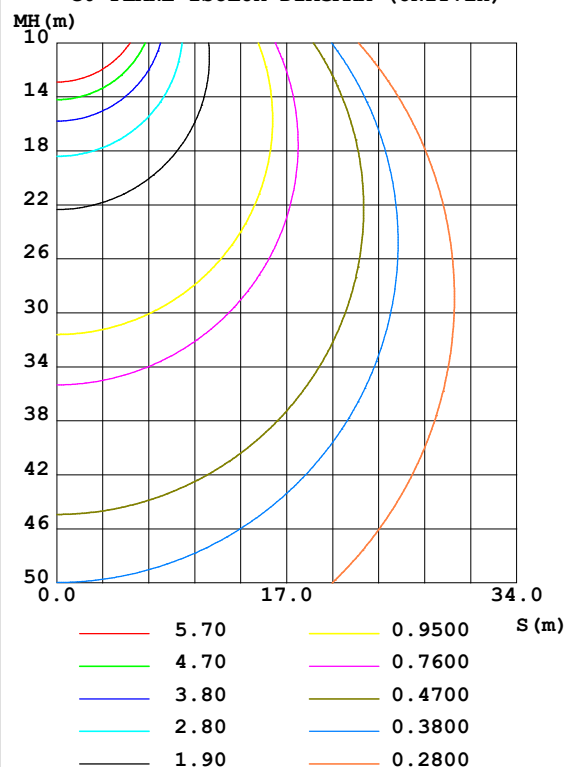
Test:U:240.0V I:0.1618A P:37.20W PF:0.9579 Lamp Flux:3192.37x1 lm		
NAME: WYN RT_1146_NA_WHT_HE_500mA_4000K CRI90		
MFR.: DARKON		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 85.82 lm/W			
MODEL	1300lm 940 HV ADV5	I _{max} (cd)	1145	S/MH(C0/180)	1.30
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.74
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	3192.4	η UP,DN(C0-180)	0.0,36.3
NOMINAL FLUX(lm)	3192.37	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,63.7
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:10 March 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [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	935.1	876.0	854.2	878.0	937.0	1004	1032	1001	0- 10	90.17	90.17	2.82,2.82
20	894.0	784.6	749.9	788.4	897.5	1037	1103	1033	10- 20	262.3	352.4	11,11
30	827.6	679.2	637.9	684.2	832.4	1051	1145	1044	20- 30	410.7	763.2	23.9,23.9
40	737.6	561.7	519.0	567.6	743.8	1029	1114	1019	30- 40	518.2	1281	40.1,40.1
50	626.6	435.7	397.4	442.2	633.5	946.8	1020	934.5	40- 50	568.3	1850	57.9,57.9
60	495.6	306.8	278.5	313.3	502.7	808.7	847.0	794.8	50- 60	551.4	2401	75.2,75.2
70	341.9	183.1	166.5	188.9	348.6	592.9	554.3	579.8	60- 70	458.6	2860	89.6,89.6
80	160.6	76.57	73.73	80.80	167.2	205.1	98.59	189.1	70- 80	272.3	3132	98.1,98.1
90	1.049	1.239	1.049	1.331	1.847	0.8492	0.6809	0.6948	80- 90	60.43	3192	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): 1563.2 lm

%lum = 49.0%

%lamp = 49.0%

Conical surface Flux(120deg): 2401.1 lm

%lum = 75.2%

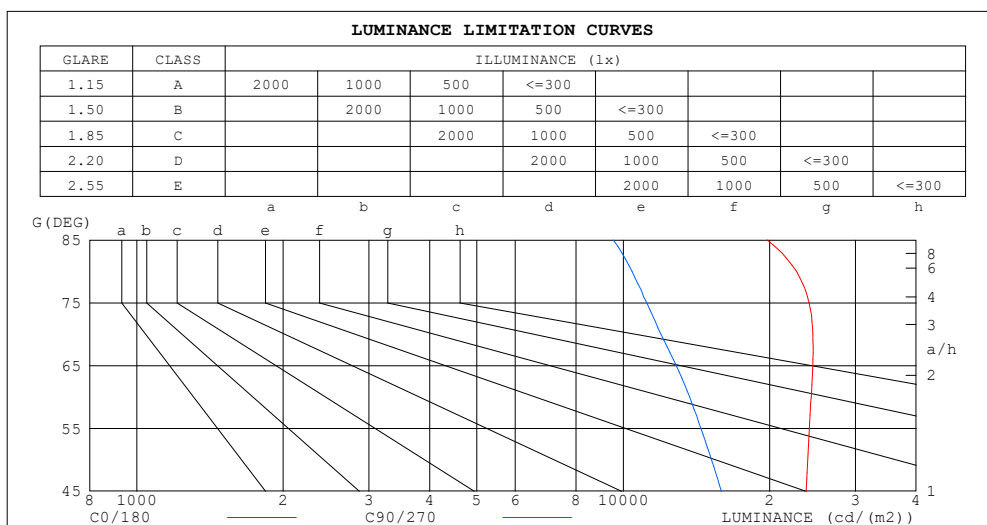
%lamp = 75.2%

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:10 March 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:240.0V I:0.1618A P:37.20W PF:0.9579 Lamp Flux:3192.37x1 lm		
NAME: WYN RT_1146_NA_WHT_HE_500mA_4000K CRI90		
MFR.: DARKON		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	19753	9532
80	22704	10432
75	24103	11185
70	24544	11957
65	24522	12852
60	24337	13684
55	24124	14448
50	23933	15189
45	23771	15920

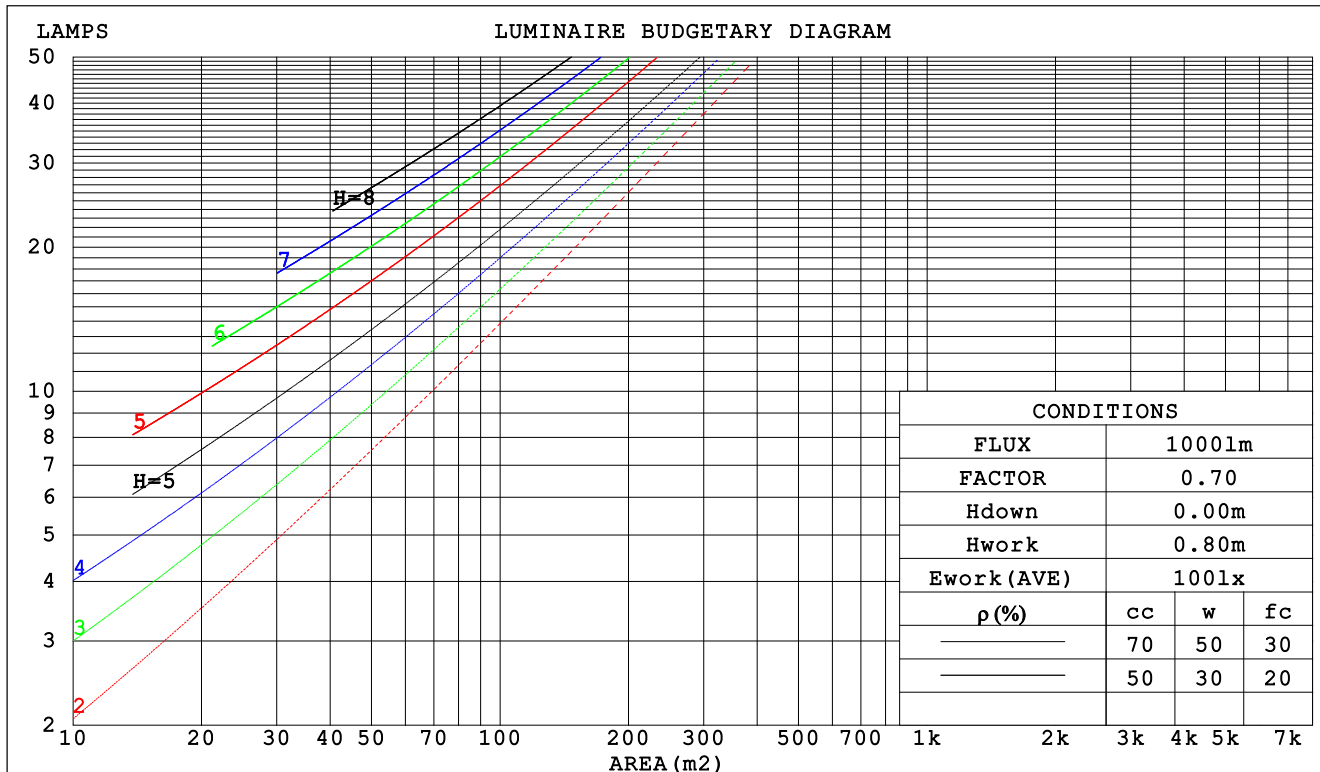
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JEFF
Test Date: 10 March 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.995m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.0V I:0.1618A P:37.20W PF:0.9579 Lamp Flux:3192.37x1 lm		
NAME: WYN RT_1146_NA_WHT_HE_500mA_4000K CRI90		
MFR.: DARKON		

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	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	.99	.94	1.01	.97	.93	.96	.93	.90	.93	.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	.51	.44	.57	.49	.43	.55	.48	.43	.53	.47	.42	.40
6.0	.54	.45	.38	.53	.44	.38	.51	.44	.38	.50	.43	.37	.48	.42	.37	.35
7.0	.49	.40	.33	.48	.39	.33	.47	.39	.33	.45	.38	.33	.44	.37	.33	.31
8.0	.45	.36	.30	.44	.35	.30	.42	.35	.29	.41	.34	.29	.40	.34	.29	.27
9.0	.41	.32	.27	.40	.32	.26	.39	.32	.26	.38	.31	.26	.37	.31	.26	.24
10.0	.37	.29	.24	.37	.29	.24	.36	.29	.24	.35	.28	.24	.34	.28	.24	.22



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:10 March 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:240.0V I:0.1618A P:37.20W PF:0.9579 Lamp Flux:3192.37x1 lm		
NAME: WYN RT_1146_NA_WHT_HE_500mA_4000K CRI90		
MFR.: DARKON		

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	.325	.185	.059	.318	.182	.058	.305	.175	.056	.293	.169	.054	.281	.163	.053	
2.0	.306	.168	.051	.300	.165	.051	.288	.160	.050	.277	.155	.049	.267	.151	.048	
3.0	.282	.150	.045	.277	.148	.045	.266	.144	.044	.257	.141	.043	.248	.137	.042	
4.0	.260	.135	.040	.255	.133	.039	.245	.130	.039	.237	.127	.038	.229	.124	.038	
5.0	.239	.122	.035	.235	.120	.035	.226	.118	.035	.219	.115	.034	.211	.113	.034	
6.0	.221	.111	.032	.217	.110	.032	.210	.107	.031	.203	.105	.031	.196	.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	.176	.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	.073	.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	.118	.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	.022	.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:10 March 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:240.0V I:0.1618A P:37.20W PF:0.9579 Lamp Flux:3192.37x1 lm										
NAME: WYN RT_1146_NA_WHT_HE_500mA_4000K CRI90										
MFR.: DARKON										
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	22.6	24.2	22.8	24.4	24.6	20.5	22.1	20.8	22.3	22.5
3H	24.5	25.9	24.8	26.2	26.4	21.8	23.2	22.1	23.5	23.7
4H	25.3	26.7	25.6	27.0	27.2	22.3	23.7	22.6	24.0	24.2
6H	26.0	27.3	26.3	27.6	27.9	22.7	24.0	23.1	24.3	24.6
8H	26.2	27.5	26.6	27.8	28.1	22.9	24.1	23.2	24.4	24.7
12H	26.4	27.6	26.7	27.9	28.2	22.9	24.2	23.3	24.5	24.8
4H 2H	22.8	24.2	23.2	24.5	24.8	21.2	22.6	21.5	22.8	23.1
3H	24.8	26.1	25.2	26.4	26.7	22.6	23.9	23.0	24.1	24.5
4H	25.8	26.9	26.1	27.2	27.6	23.3	24.4	23.6	24.7	25.0
6H	26.6	27.6	27.0	27.9	28.3	23.8	24.8	24.2	25.1	25.5
8H	26.9	27.8	27.3	28.2	28.6	24.0	24.9	24.4	25.3	25.7
12H	27.1	27.9	27.5	28.3	28.7	24.1	25.0	24.6	25.4	25.8
8H 4H	25.8	26.8	26.3	27.1	27.5	23.6	24.5	24.0	24.9	25.3
6H	26.7	27.5	27.2	27.9	28.3	24.2	25.0	24.7	25.4	25.9
8H	27.1	27.8	27.6	28.2	28.7	24.5	25.2	25.0	25.6	26.1
12H	27.4	28.0	27.9	28.4	28.9	24.8	25.3	25.2	25.8	26.3
12H 4H	25.8	26.7	26.3	27.1	27.5	23.6	24.5	24.0	24.8	25.3
6H	26.7	27.4	27.2	27.9	28.3	24.3	25.0	24.8	25.4	25.9
8H	27.1	27.7	27.6	28.2	28.6	24.6	25.2	25.1	25.7	26.2
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 / - 0.8					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 3192 lm Total Lamp Luminous Flux. (8log(F/F0) = 4.0)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:10 March 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.0V I:0.1618A P:37.20W PF:0.9579 Lamp Flux:3192.37x1 lm		
NAME: WYN RT_1146_NA_WHT_HE_500mA_4000K CRI90		
MFR.: DARKON		

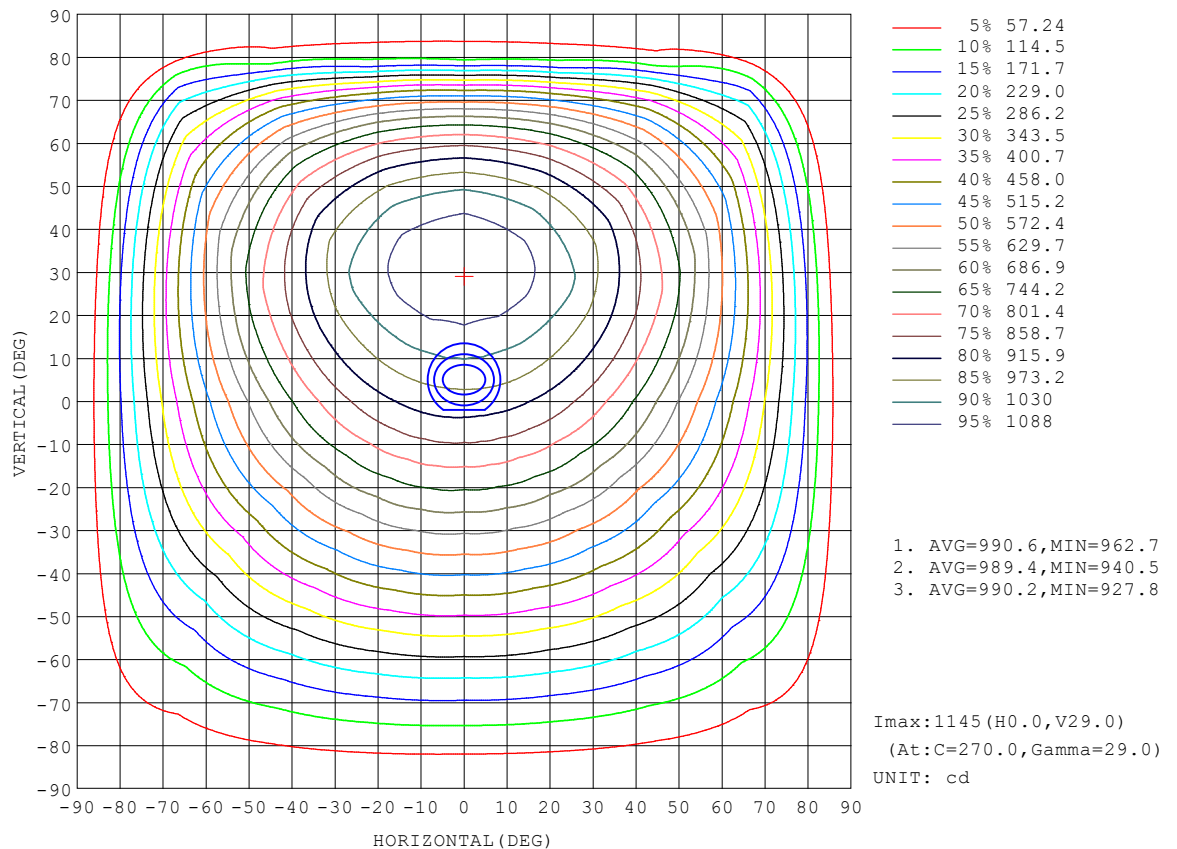
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	55	43	36	54	43	36	53	42	35	29
0.80	65	53	45	64	52	45	62	52	45	37
1.00	74	62	54	72	61	54	70	63	53	46
1.25	81	70	62	79	69	62	77	68	61	53
1.50	86	76	68	84	75	68	81	73	67	59
2.00	93	84	77	91	83	77	88	81	75	67
2.50	98	89	83	95	88	82	92	85	80	72
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: 10 March 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.995m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:240.0V I:0.1618A P:37.20W PF:0.9579 Lamp Flux:3192.37x1 lm		
NAME: WYN RT_1146_NA_WHT_HE_500mA_4000K CRI90		
MFR.: DARKON		

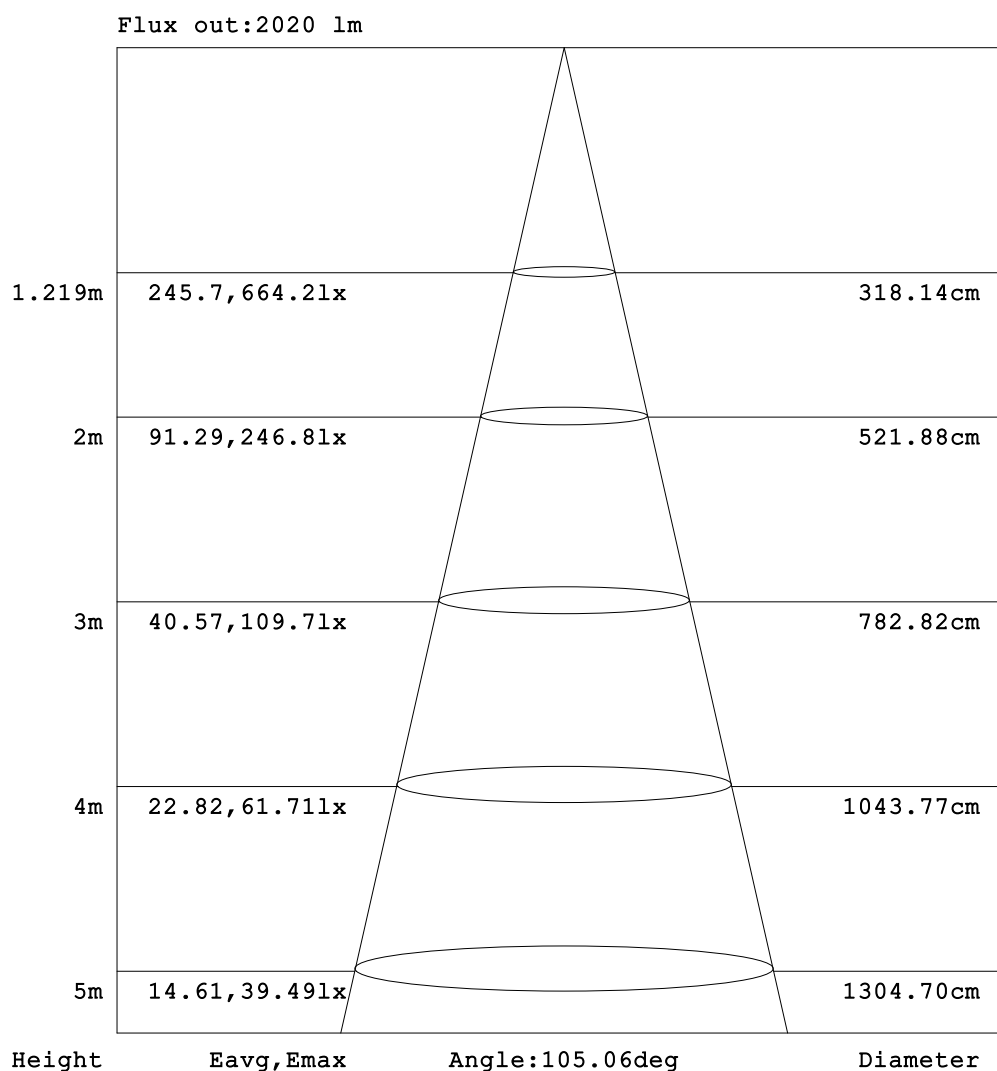


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:10 March 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

AAI Figure

Test:U:240.0V I:0.1618A P:37.20W PF:0.9579 Lamp Flux:3192.37x1 lm		
NAME: WYN RT_1146_NA_WHT_HE_500mA_4000K CRI90		
MFR.: DARKON		



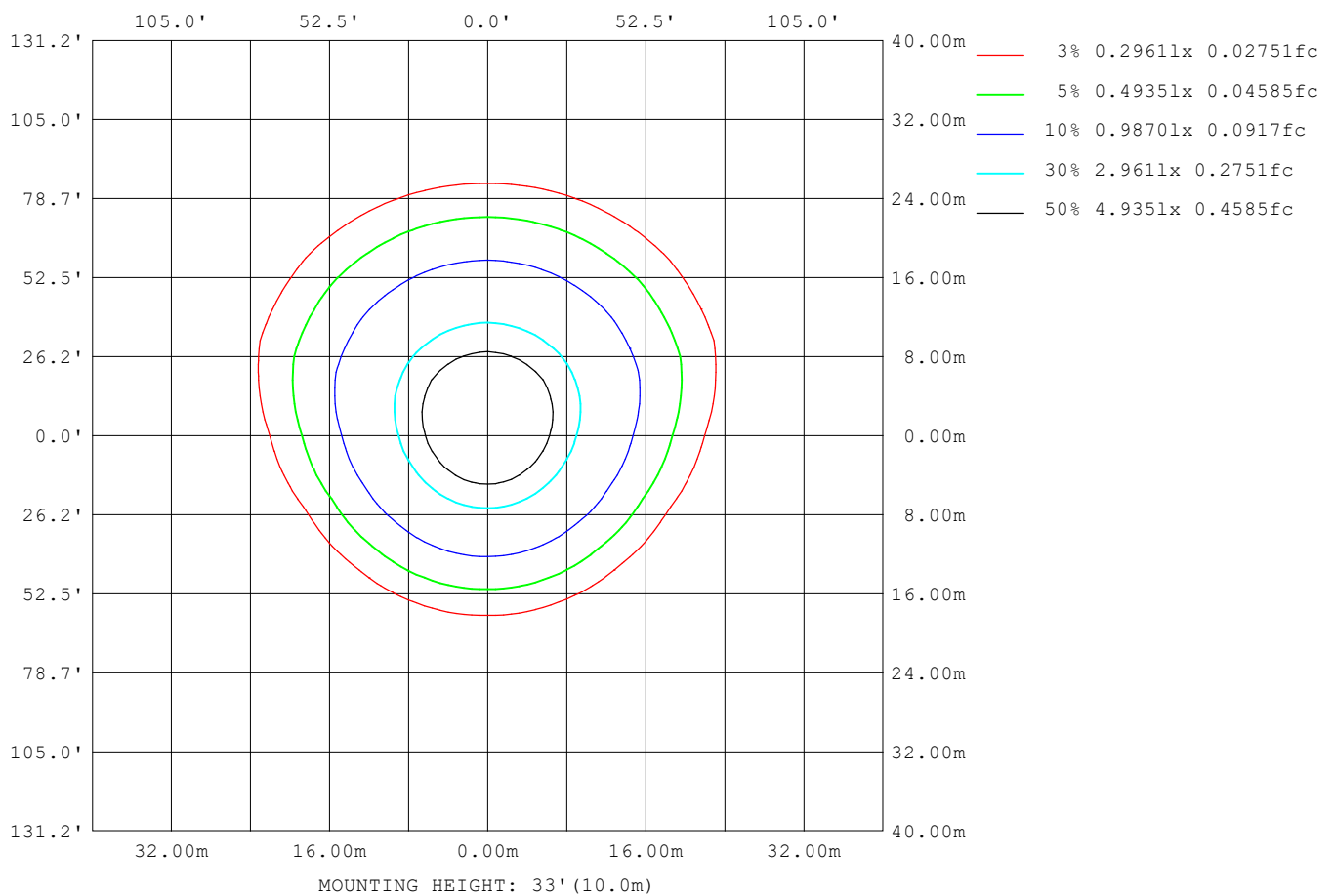
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JEFF
Test Date: 10 March 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.995m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:240.0V I:0.1618A P:37.20W PF:0.9579 Lamp Flux:3192.37x1 lm		
NAME: WYN RT_1146_NA_WHT_HE_500mA_4000K CRI90		
MFR.: DARKON		



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:10 March 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:240.0V I:0.1618A P:37.20W PF:0.9579 Lamp Flux:3192.37x1 lm		
NAME: WYN RT_1146_NA_WHT_HE_500mA_4000K CRI90		
MFR.: DARKON		

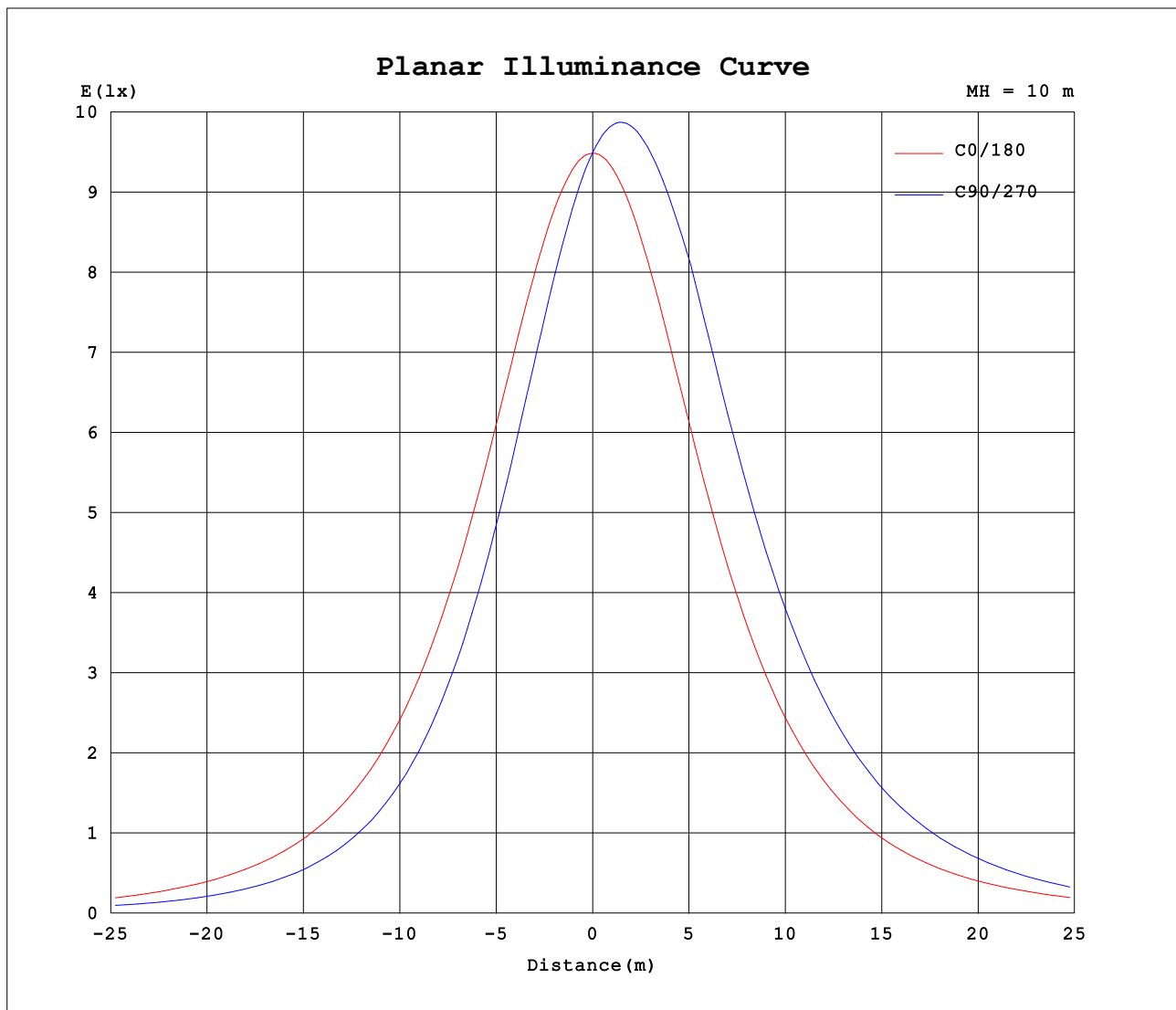
AvgL	cd/m2
L_0~180 (65) av	24738
L_0~180 (75) av	24451
L_0~180 (85) av	20537
L_90~270 (65) av	27434
L_90~270 (75) av	20979
L_90~270 (85) av	10779
L_45 (65) av	27664
L_45 (75) av	26391
L_45 (85) av	11704

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:10 March 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [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: 10 March 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.995m [K=1.0000]
Remarks:

