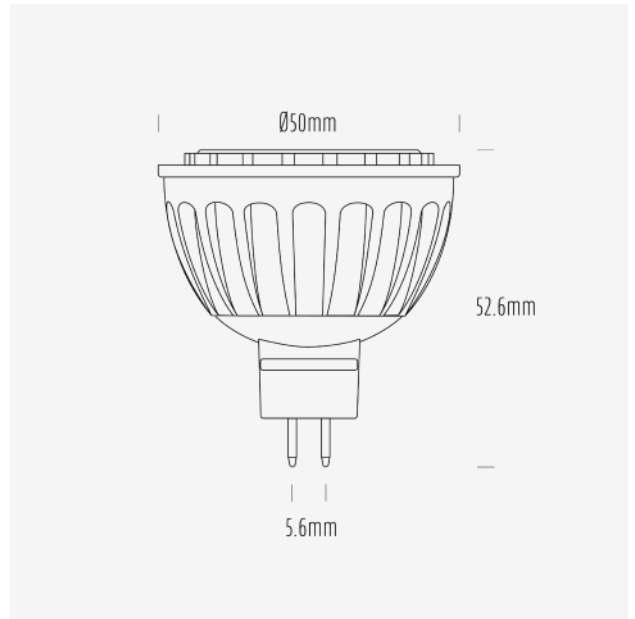


# AGL 300 Series

MR16 LED Globes



## AGL-300-30X60 / 3000K / MR16 / 60°



### Product Data

Product Code	AGL-300-30X60			
Description	Aqualux 300 Series LED Lamp			
Type	MR16 GU5.6			
Construction	Aluminium Heatsink + PMMA Optic			
Warranty	3 Years			

### Electrical Data

Input Voltage Range	12~24V AC/DC			
Nominal Voltage	24VDC			
Nominal Power	3W			
Nominal Current	125mA			
Input Voltage	12VDC	12VAC	<b>24VDC</b>	24VAC
Rated Power	3.6	2.9	<b>3.4</b>	3.6
Operating Frequency	-	50Hz	-	50Hz

Max. no. of lamps on AQD24-040	9	-	<b>9</b>	-
Max. no. of lamps on AQD24-100	>22	-	<b>&gt;22</b>	-
Max. no. of lamps on AQD24-240	-	-	-	-

Dimming Compatibility	Non dimming			
Wiring Scheme	Parallel			
Startup Time	< 0.5s			

### Mechanical & Thermal Data

Overall Length	52.6mm			
Max Diameter	50mm			
Lamp Base	GU5.6			
Weight	55g			
Operating Temp Range	-20° - 45°			
IP Rating	IP20			

### Photometric Data

Nominal Flux (lm)	300			
Input Voltage	12VDC	12VAC	<b>24VDC</b>	24VAC
Input Power (W)	3.6	2.9	<b>3.4</b>	3.6
Rated Flux (lm)	449	353	<b>453</b>	457
Efficacy (lm/W)	125	122	<b>132</b>	126

CCT	3000K			
CCT Description	Warm White			
CRI (Ra)	82			
CRI (R9)	2			
TM-30 (Rf)	82			
TM-30 (Rg)	97			
SDCM	-			
Peak Intensity (cd)	356			
Nominal Beam Angle	60°			
Measured Beam Angle (FWHM)	55°			

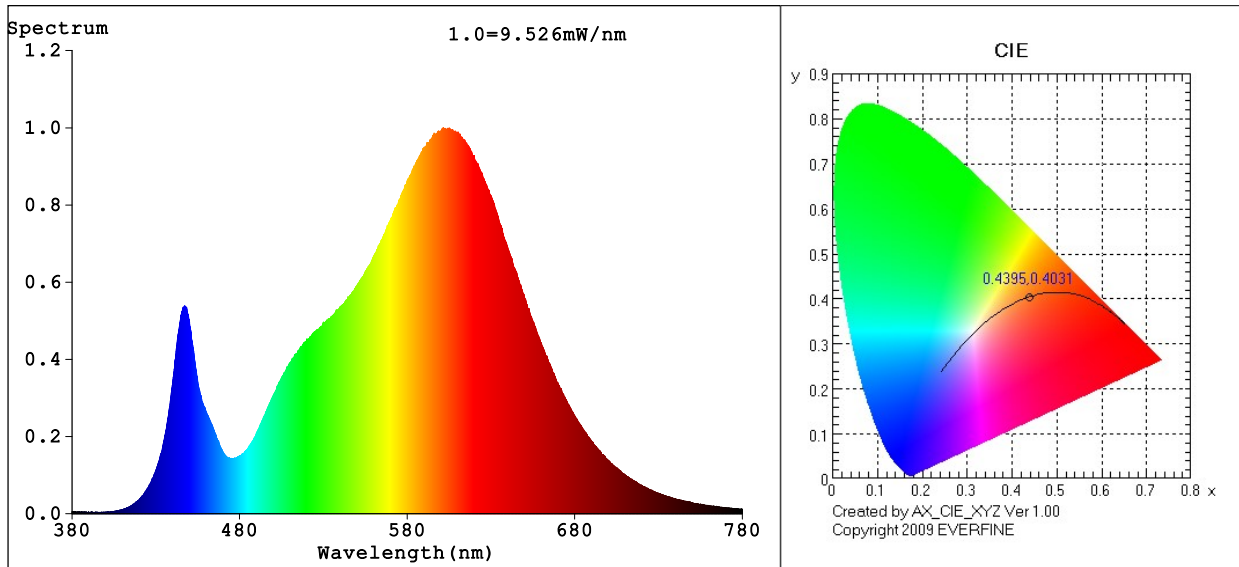
### Lifespan Data

L70	15,000h			
Switching Cycles	15,000			

### Compliance Data

EMI	Yes			
RCM	N/A			
Mercury Content	0mg			

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4395$   $y=0.4031$  /  $u'=0.2526$   $v'=0.5214$   
 CCT=2950K (Duv=-0.0007) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=52.9%  
 Ratio:R=23.1% G=74.6% B=2.3%; Peak WL:Lp=601.5nm FWHM=123.2nm  
 Render Index:Ra=81.6 AvgR=75.7 TM30:Rf=82 Rg=97

R1 =80 R2 =90 R3 =97 R4 =80 R5 =80 R6 =87 R7 =82  
 R8 =57 R9 =2 R10=77 R11=80 R12=72 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 456.8 lm Eff. : 126.22 lm/W Fe = 1.375 W

**Electrical parameters:**

V = 23.961 V I = 0.2333 A P = 3.619 W PF = 0.6474

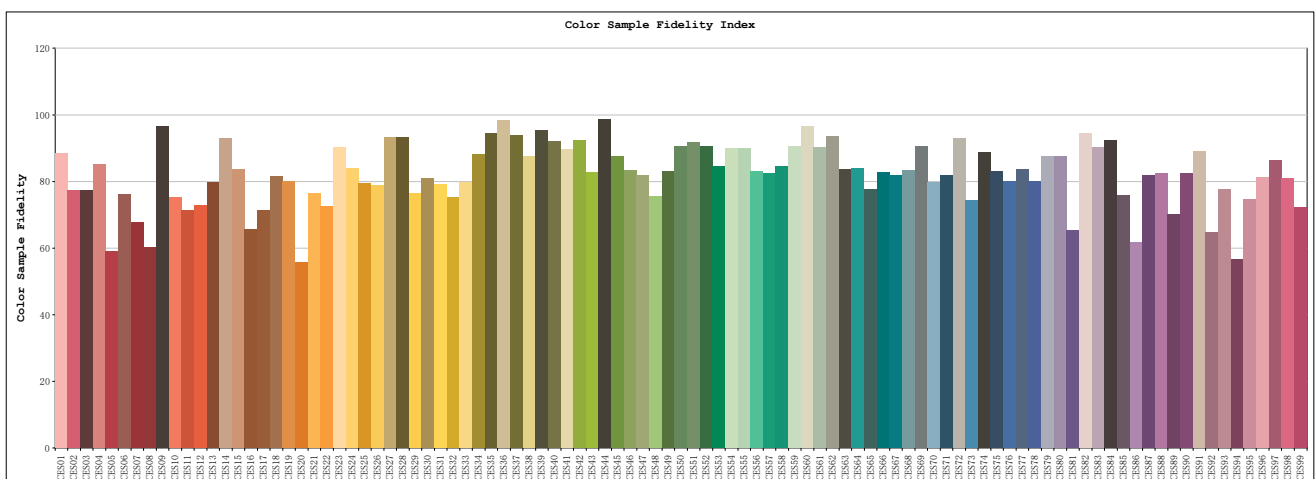
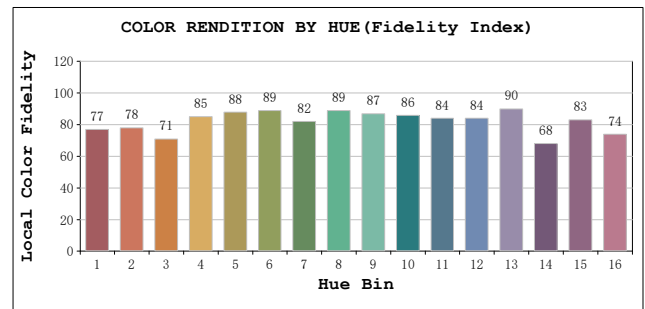
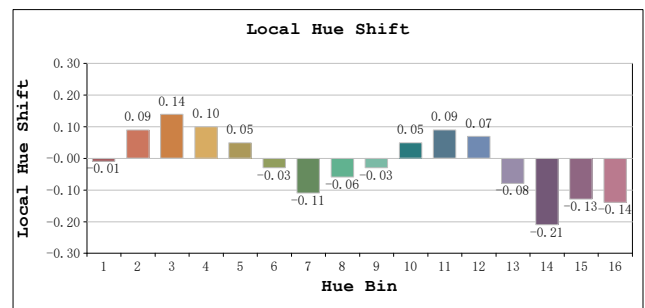
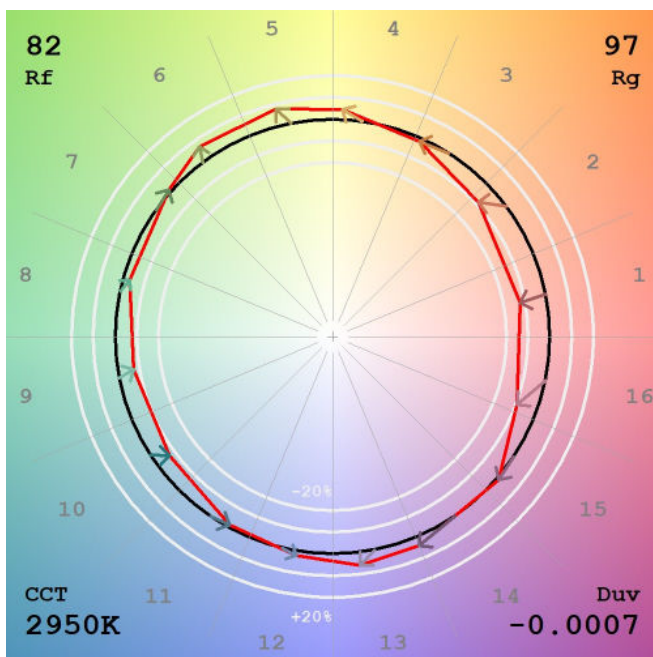
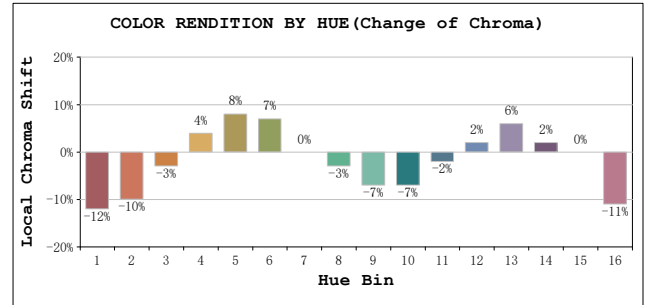
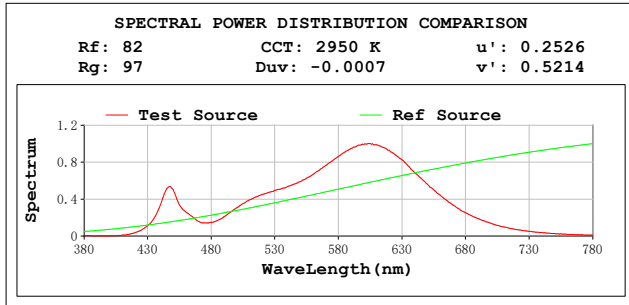
LEVEL:OUT WHITE:ANSI\_3000K

Status: Integral T = 320 ms Ip = 53430 (82%)

**GBT5702**

### TM30

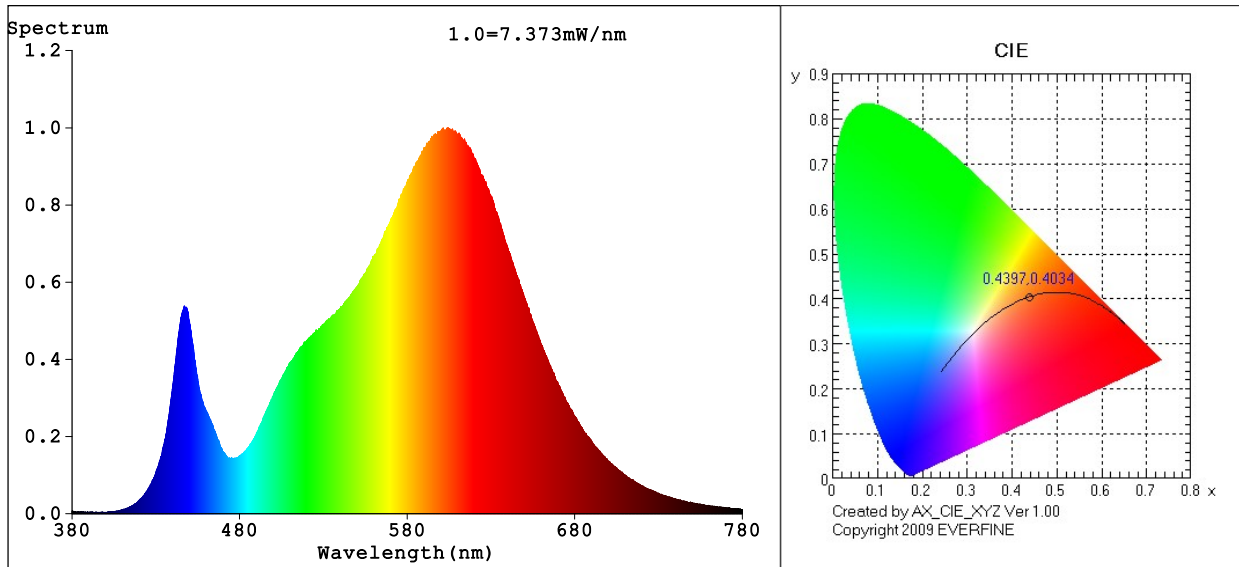
View Angle:2 Deg



Model:AGL-300-30X60  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X60 24VAC  
 Date:2023-10-17 16:09:34  
 Humidity:65.0%  
 Remarks:24VAC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4397$   $y=0.4034$  /  $u'=0.2527$   $v'=0.5215$   
 CCT=2948K (Duv=-0.0007) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=53.1%  
 Ratio:R=23.2% G=74.5% B=2.3%; Peak WL:Lp=604.4nm FWHM=122.9nm  
 Render Index:Ra=81.6 AvgR=75.7 TM30:Rf=82 Rg=97

R1 =80 R2 =90 R3 =97 R4 =80 R5 =80 R6 =88 R7 =82  
 R8 =57 R9 =2 R10=77 R11=80 R12=72 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 352.9 lm Eff. : 122.27 lm/W Fe = 1.062 W

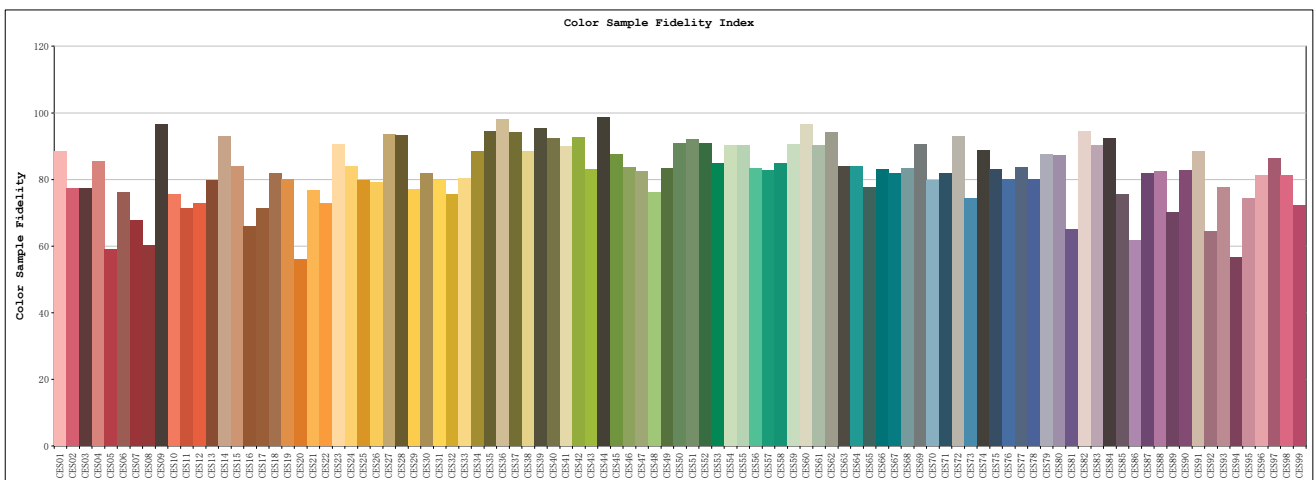
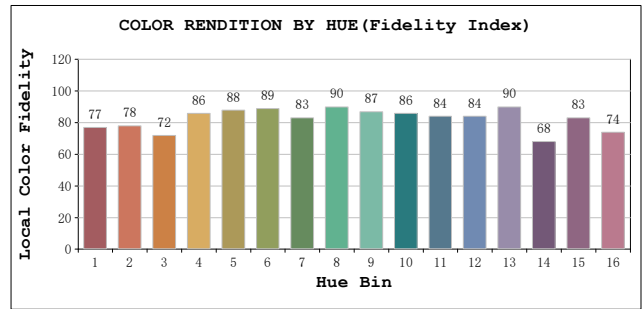
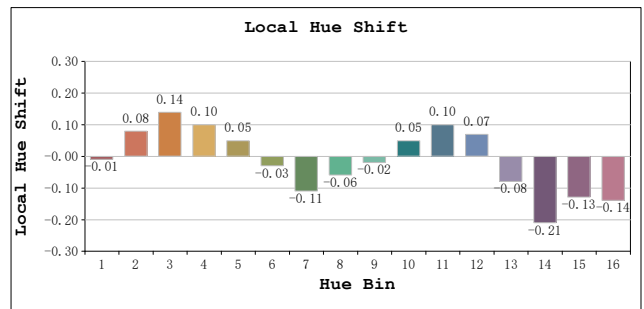
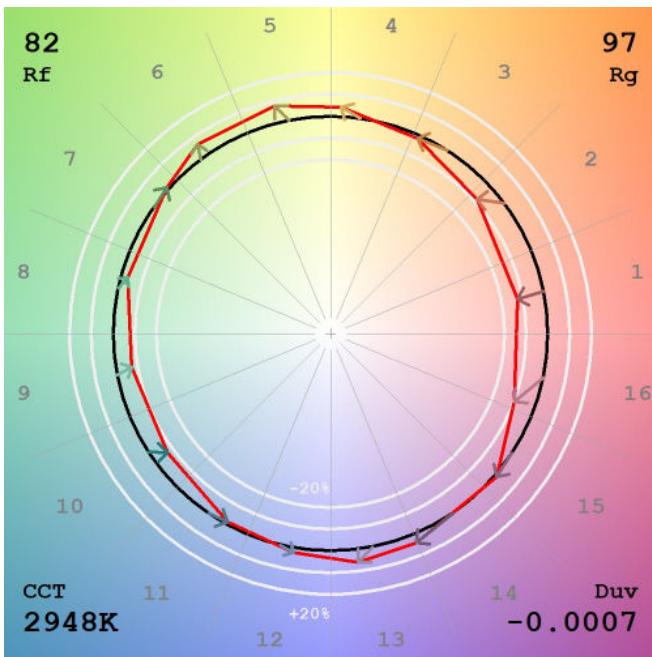
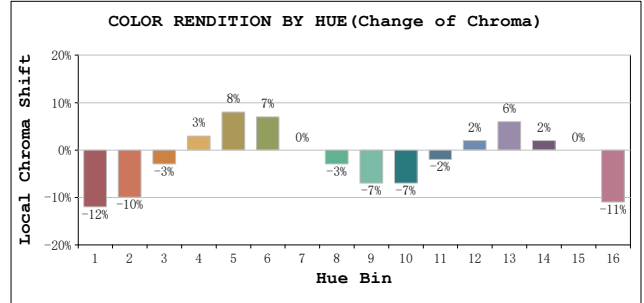
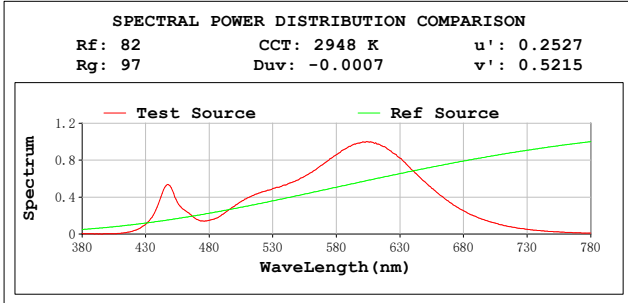
**Electrical parameters:**

V = 11.991 V I = 0.3251 A P = 2.886 W PF = 0.7403  
 LEVEL:OUT WHITE:ANSI\_3000K  
 Status: Integral T = 320 ms Ip = 41262 (63%)

**GBT5702**

TM30

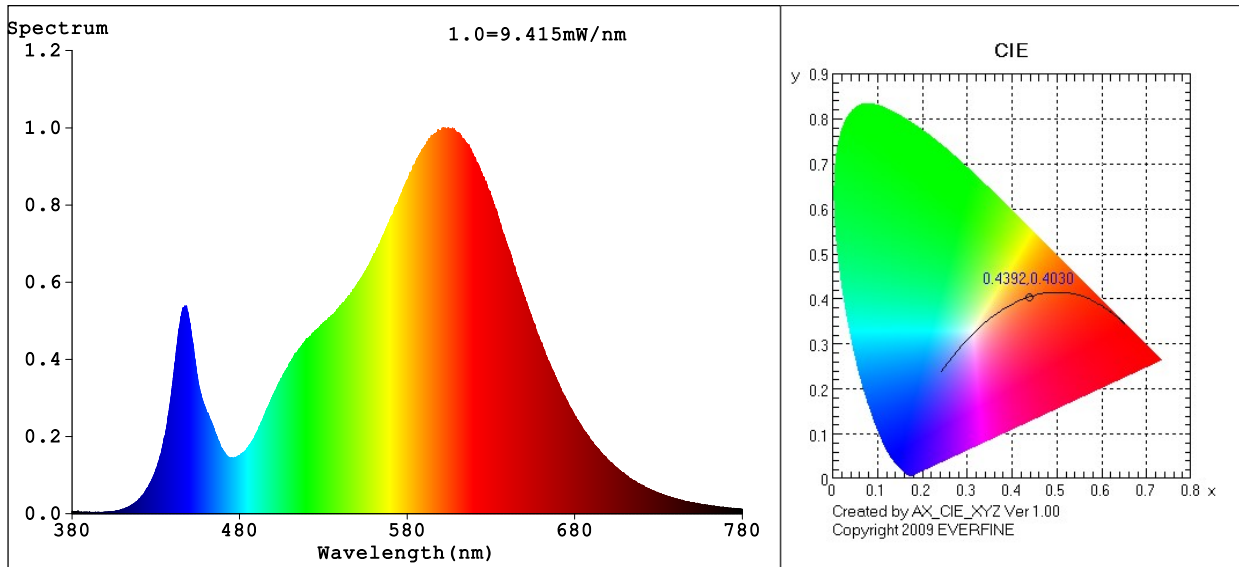
View Angle:2 Deg



Model:AGL-300-30X60  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X60 12VAC  
 Date:2023-10-17 16:10:15  
 Humidity:65.0%  
 Remarks:12VAC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4392$   $y=0.4030$  /  $u'=0.2525$   $v'=0.5213$   
 CCT=2953K (Duv=-0.0007) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=52.8%  
 Ratio:R=23.1% G=74.6% B=2.3%; Peak WL:Lp=601.5nm FWHM=123.4nm  
 Render Index:Ra=81.5 AvgR=75.7 TM30:Rf=82 Rg=97

R1 =80 R2 =89 R3 =97 R4 =80 R5 =80 R6 =87 R7 =82  
 R8 =57 R9 =2 R10=76 R11=80 R12=72 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 452.9 lm Eff. : 132.28 lm/W Fe = 1.364 W

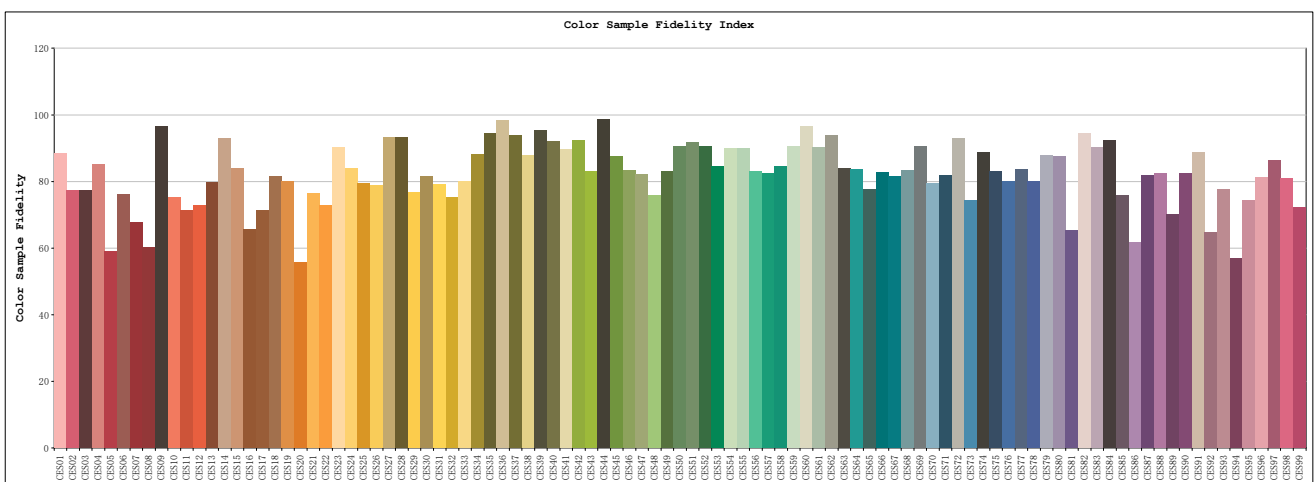
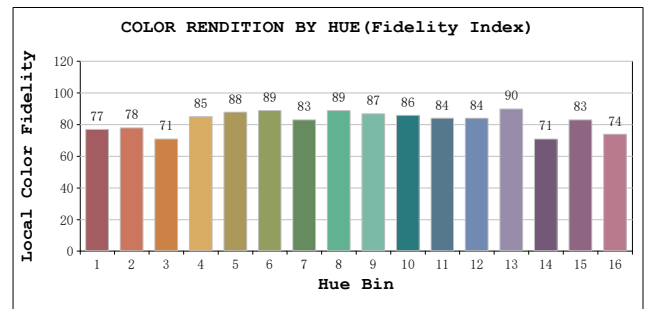
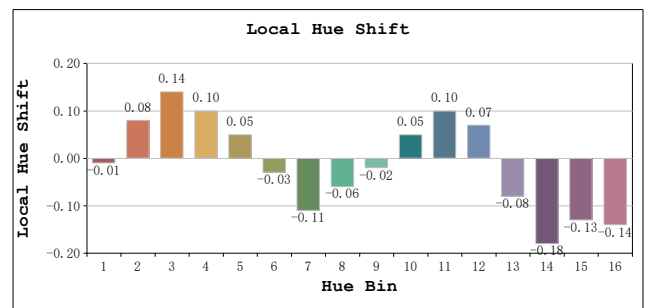
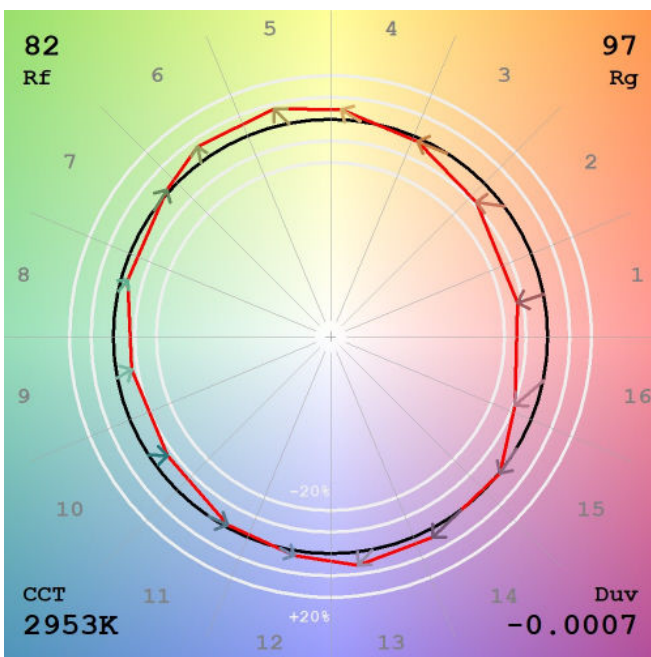
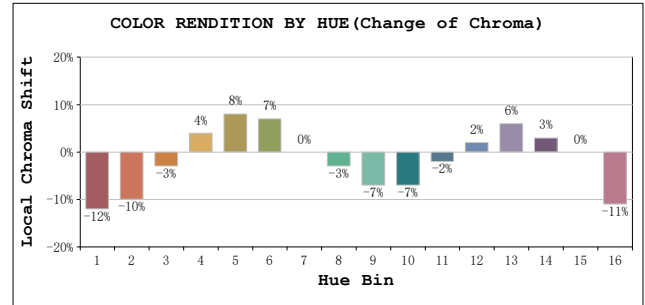
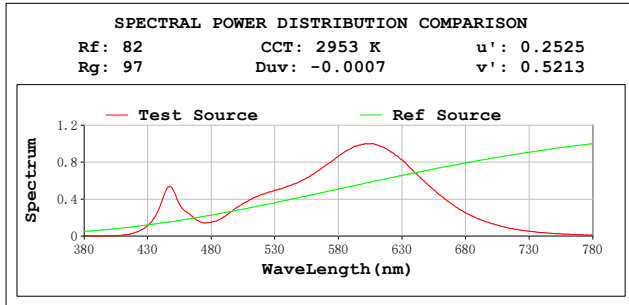
**Electrical parameters:**

V = 23.989 V I = 0.1427 A P = 3.424 W PF = 1.0000  
 LEVEL:OUT WHITE:ANSI\_3000K  
 Status: Integral T = 320 ms Ip = 52890 (81%)

**GBT5702**

# TM30

View Angle:2 Deg

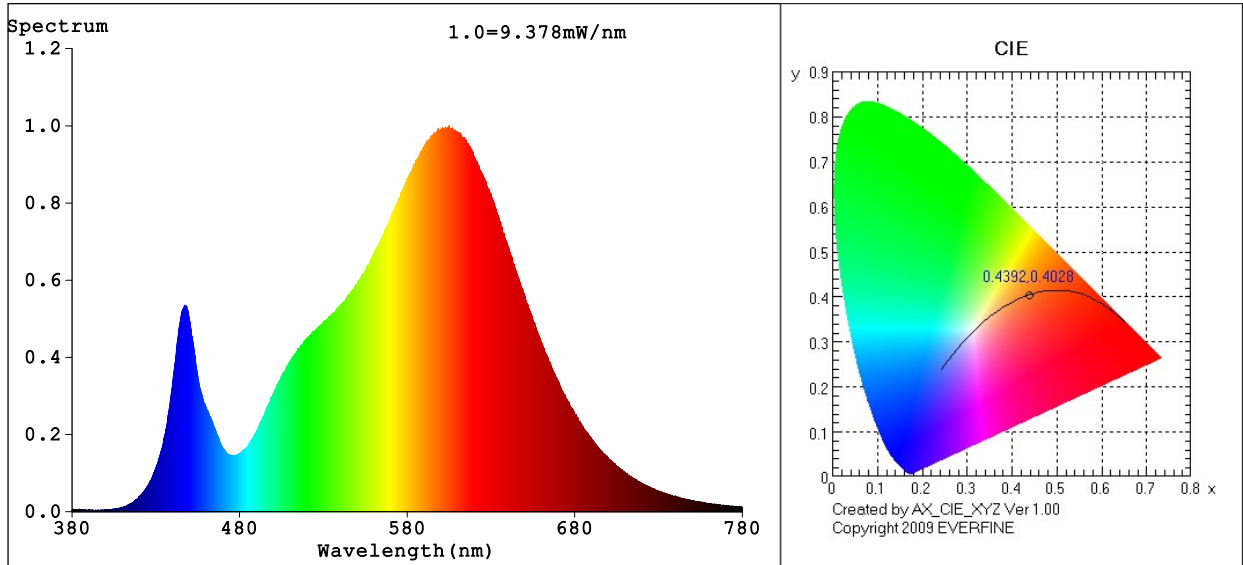


Model:AGL-300-30X60  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X60 24VDC  
 Date:2023-10-17 16:11:34  
 Humidity:65.0%  
 Remarks:24VDC



**Spectrum Test Report**



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4392$   $y=0.4028$  /  $u'=0.2526$   $v'=0.5212$   
 CCT=2952K (Duv=-0.0008) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=52.7%  
 Ratio:R=23.1% G=74.6% B=2.3%; Peak WL:Lp=605.1nm FWHM=122.6nm  
 Render Index:Ra=81.5 AvgR=75.6 TM30:Rf=82 Rg=97

R1 =80 R2 =90 R3 =96 R4 =80 R5 =80 R6 =87 R7 =82  
 R8 =57 R9 =2 R10=77 R11=80 R12=72 R13=82 R14=99 R15=72

**Photo Parameters:**

Flux = 449.0 lm Eff. : 124.91 lm/W Fe = 1.353 W

**Electrical parameters:**

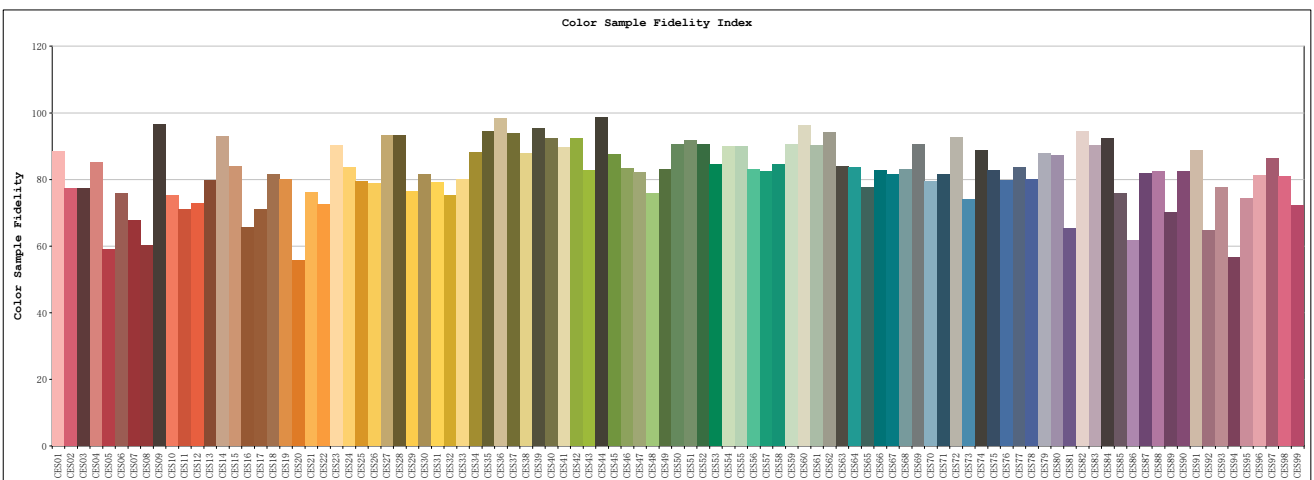
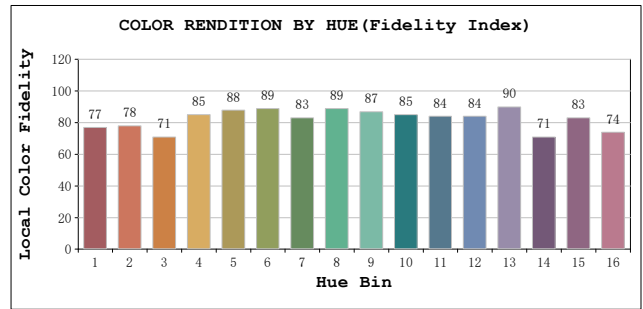
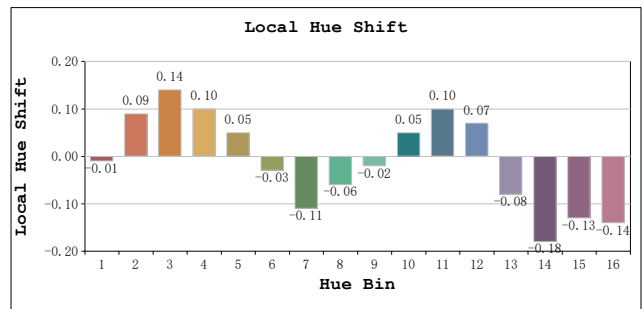
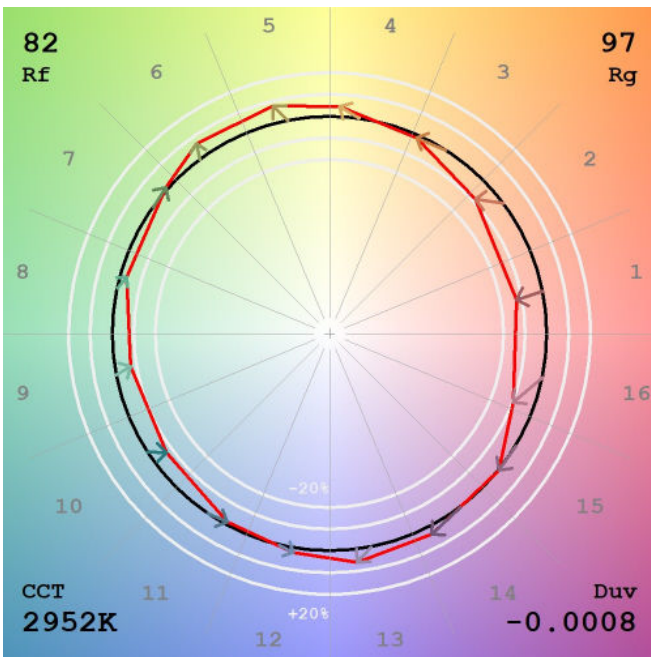
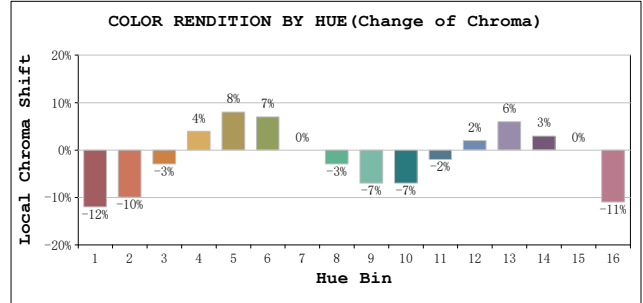
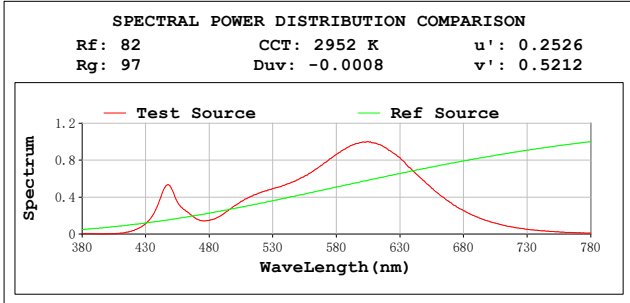
V = 11.971 V I = 0.3002 A P = 3.594 W PF = 1.000  
 LEVEL:OUT WHITE:ANSI\_3000K  
 Status: Integral T = 320 ms Ip = 52386 (80%)

**GBT5702**



TM30

View Angle:2 Deg



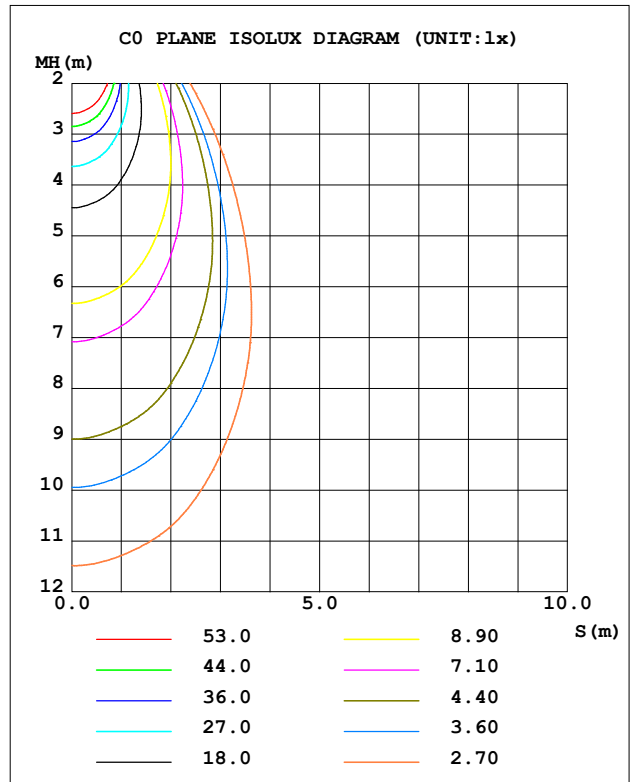
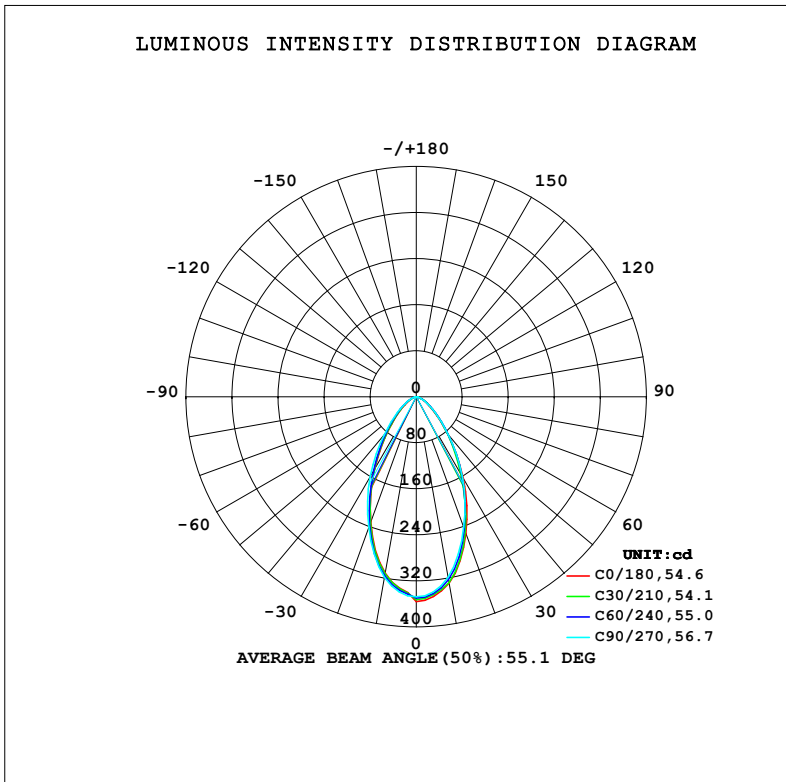
Model:AGL-300-30X60  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X60 12VDC  
 Date:2023-10-17 16:12:13  
 Humidity:65.0%  
 Remarks:12VDC

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm		
NAME: AGL-300-30X60	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X60	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	LED	I <sub>max</sub> (cd)	356.0	S/MH (C0/180)	0.80
NOMINAL POWER (W)	3	LOR (%)	100.0	S/MH (C90/270)	0.83
RATED VOLTAGE (V)	24	TOTAL FLUX (lm)	365.33	η UP, DN (C0-180)	0.0, 50.2
NOMINAL FLUX (lm)	365.327	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.8
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	24	η down (%)	100.0	CIBSE SHR MAX	0.85



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

**ZONAL FLUX DIAGRAM**

ZONAL FLUX DIAGRAM:

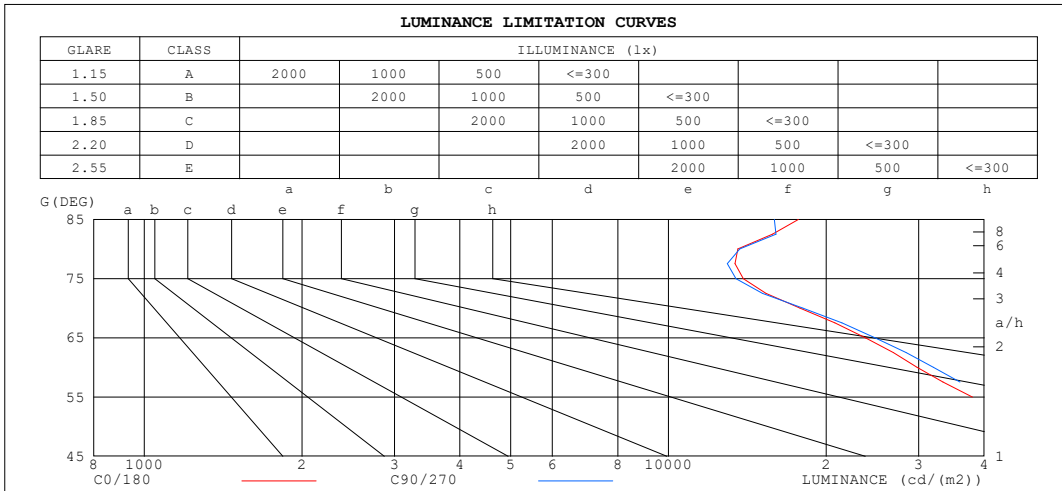
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	∅ zone	∅ total	%lum, lamp
10	329.1	325.4	318.8	314.2	311.1	314.2	318.8	325.4	0- 10	31.83	31.83	8.71,8.71
20	252.6	246.3	241.1	234.5	231.1	234.5	241.1	246.3	10- 20	79.10	110.9	30.4,30.4
30	163.6	156.5	160.3	145.1	145.0	145.1	160.3	156.5	20- 30	90.09	201.0	55,55
40	86.74	86.91	87.91	78.11	75.74	78.11	87.91	86.91	30- 40	72.38	273.4	74.8,74.8
50	40.86	44.04	43.08	39.44	35.99	39.44	43.08	44.04	40- 50	46.23	319.6	87.5,87.5
60	18.72	21.47	20.10	19.23	16.82	19.23	20.10	21.47	50- 60	25.98	345.6	94.6,94.6
70	7.655	8.770	7.752	7.332	6.474	7.332	7.752	8.770	60- 70	13.06	358.7	98.2,98.2
80	2.958	3.090	2.982	2.801	2.908	2.801	2.982	3.090	70- 80	5.008	363.7	99.5,99.5
90	0.0016	0.0020	0	0.0036	0	0.0036	0	0.0020	80- 90	1.658	365.3	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			

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

**LUMINANCE LIMITATION CURVES**

<b>Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz</b> <b>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm</b>		
<b>NAME: AGL-300-30X60</b>	<b>TYPE: MR16 LAMP</b>	<b>WEIGHT: 100GM</b>
<b>SPEC.: AGL-300-30X60</b>	<b>DIM.: 50MM</b>	<b>SERIAL No.: -</b>
<b>MFR.: AQUALUX</b>	<b>SUR.:</b>	<b>Shielding Angle:</b>



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	17680	15924
80	13560	13672
75	13884	13443
70	17820	18045
65	23767	24802
60	29814	32013
55	37986	40698
50	50609	53364
45	67675	69957

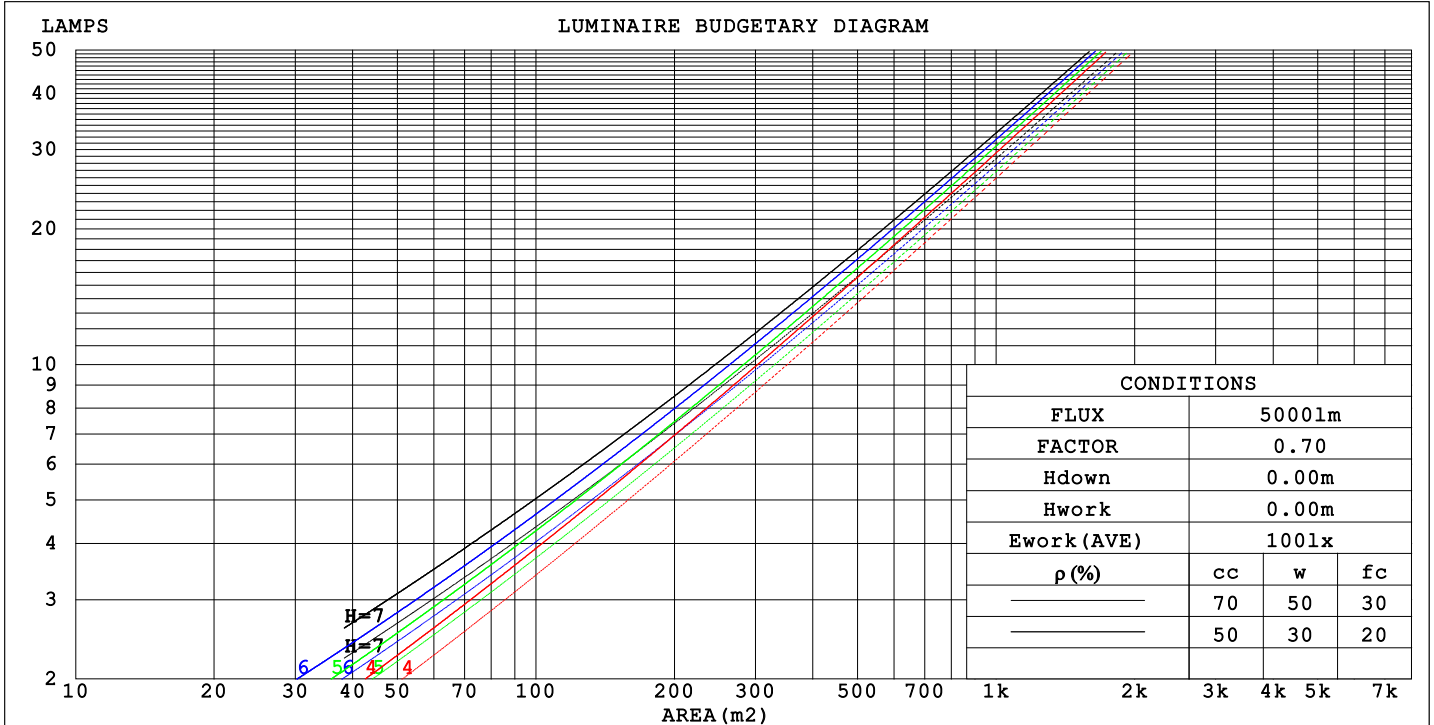
C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operator: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm		
NAME: AGL-300-30X60	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X60	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
pw																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	1.00
1.0	1.09	1.06	1.03	1.07	1.04	1.01	1.03	1.00	.98	.99	.97	.95	.95	.94	.93	.91
2.0	.99	.94	.90	.98	.93	.89	.94	.91	.87	.91	.88	.85	.88	.86	.84	.82
3.0	.91	.85	.80	.89	.84	.80	.87	.82	.78	.84	.80	.77	.82	.79	.76	.74
4.0	.84	.77	.72	.82	.76	.72	.80	.75	.71	.78	.74	.70	.76	.72	.69	.67
5.0	.77	.70	.65	.76	.70	.65	.74	.69	.64	.73	.68	.64	.71	.67	.63	.61
6.0	.72	.65	.60	.71	.64	.59	.69	.63	.59	.68	.62	.59	.66	.62	.58	.56
7.0	.67	.60	.55	.66	.59	.55	.64	.59	.54	.63	.58	.54	.62	.57	.54	.52
8.0	.62	.55	.51	.62	.55	.51	.60	.54	.50	.59	.54	.50	.58	.53	.50	.48
9.0	.58	.52	.47	.58	.51	.47	.57	.51	.47	.56	.50	.47	.55	.50	.46	.45
10.0	.55	.48	.44	.54	.48	.44	.53	.48	.44	.53	.47	.44	.52	.47	.43	.42



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

**WEC AND CCEC**

Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm		
NAME: AGL-300-30X60	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X60	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.215	.122	.039	.208	.119	.038	.195	.112	.036	.184	.106	.034	.173	.100	.032	
2.0	.206	.113	.035	.201	.111	.034	.190	.106	.033	.180	.101	.032	.170	.096	.030	
3.0	.196	.104	.031	.191	.102	.031	.181	.098	.030	.173	.095	.029	.164	.091	.028	
4.0	.185	.096	.028	.181	.094	.028	.172	.091	.027	.165	.088	.027	.157	.086	.026	
5.0	.175	.089	.026	.171	.088	.026	.164	.085	.025	.157	.083	.025	.150	.080	.024	
6.0	.165	.083	.024	.162	.082	.024	.155	.080	.023	.149	.078	.023	.144	.076	.022	
7.0	.156	.077	.022	.153	.076	.022	.148	.075	.021	.142	.073	.021	.137	.071	.021	
8.0	.148	.072	.020	.146	.072	.020	.140	.070	.020	.136	.069	.020	.131	.067	.020	
9.0	.141	.068	.019	.138	.067	.019	.134	.066	.019	.130	.065	.019	.126	.064	.018	
10.0	.134	.064	.018	.132	.064	.018	.128	.063	.018	.124	.062	.017	.120	.060	.017	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.174	.157	.142	.149	.135	.122	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.161	.132	.108	.138	.114	.094	.094	.079	.065	.054	.046	.038	.017	.015	.012	
3.0	.150	.114	.085	.129	.098	.074	.088	.068	.052	.051	.040	.030	.016	.013	.010	
4.0	.141	.100	.068	.121	.086	.059	.083	.060	.042	.048	.035	.025	.015	.011	.008	
5.0	.133	.088	.055	.114	.076	.048	.079	.053	.034	.046	.031	.020	.015	.010	.007	
6.0	.126	.079	.046	.108	.069	.040	.075	.048	.028	.043	.028	.017	.014	.009	.006	
7.0	.119	.072	.039	.103	.063	.034	.071	.044	.024	.041	.026	.014	.013	.008	.005	
8.0	.114	.066	.033	.098	.057	.029	.068	.040	.021	.039	.024	.012	.013	.008	.004	
9.0	.108	.061	.029	.093	.053	.025	.065	.037	.018	.038	.022	.011	.012	.007	.004	
10.0	.103	.057	.026	.089	.049	.022	.062	.035	.016	.036	.020	.009	.012	.007	.003	

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

**UGR(Unified Glare Rating) Table**

Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm		
NAME: AGL-300-30X60	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X60	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	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	27.7	28.8	27.9	29.0	29.2	27.8	28.9	28.0	29.1	29.3
	3H	27.9	29.0	28.2	29.2	29.4	28.1	29.1	28.3	29.3	29.5
	4H	28.0	29.0	28.3	29.2	29.4	28.1	29.1	28.4	29.3	29.6
	6H	28.0	29.0	28.3	29.2	29.5	28.1	29.1	28.4	29.3	29.6
	8H	28.1	29.0	28.4	29.2	29.5	28.2	29.1	28.5	29.3	29.6
	12H	28.1	29.0	28.4	29.2	29.5	28.2	29.1	28.5	29.3	29.6
4H	2H	27.8	28.8	28.1	29.0	29.3	27.9	28.9	28.2	29.2	29.4
	3H	28.2	29.1	28.5	29.3	29.6	28.3	29.2	28.6	29.4	29.7
	4H	28.3	29.1	28.7	29.4	29.7	28.4	29.2	28.7	29.5	29.8
	6H	28.4	29.1	28.8	29.4	29.8	28.5	29.2	28.9	29.5	29.8
	8H	28.5	29.1	28.9	29.5	29.9	28.6	29.2	29.0	29.6	29.9
	12H	28.6	29.2	29.0	29.5	29.9	28.6	29.2	29.0	29.6	30.0
8H	4H	28.3	28.9	28.7	29.3	29.7	28.4	29.0	28.8	29.4	29.7
	6H	28.5	29.0	28.9	29.4	29.8	28.5	29.1	29.0	29.5	29.9
	8H	28.6	29.1	29.1	29.5	30.0	28.7	29.2	29.2	29.6	30.0
	12H	28.8	29.2	29.3	29.6	30.1	28.8	29.2	29.3	29.7	30.1
12H	4H	28.3	28.8	28.7	29.2	29.6	28.3	28.9	28.7	29.3	29.7
	6H	28.5	28.9	28.9	29.4	29.8	28.5	29.0	29.0	29.4	29.9
	8H	28.7	29.1	29.2	29.5	30.0	28.7	29.1	29.2	29.6	30.1

Variations with the observer position at spacings(CIE Pub.117):		
S = 1.0H	+ 0.9 / - 1.4	+ 1.0 / - 1.3
1.5H	+ 1.1 / - 0.9	+ 1.1 / - 0.9
2.0H	+ 1.7 / - 1.4	+ 1.9 / - 1.3

CIE Pub.117, 365.3 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.5)  
 Area: 0.001256 m2

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM



**UTILIZATION FACTORS TABLE**

Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm		
NAME: AGL-300-30X60	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X60	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

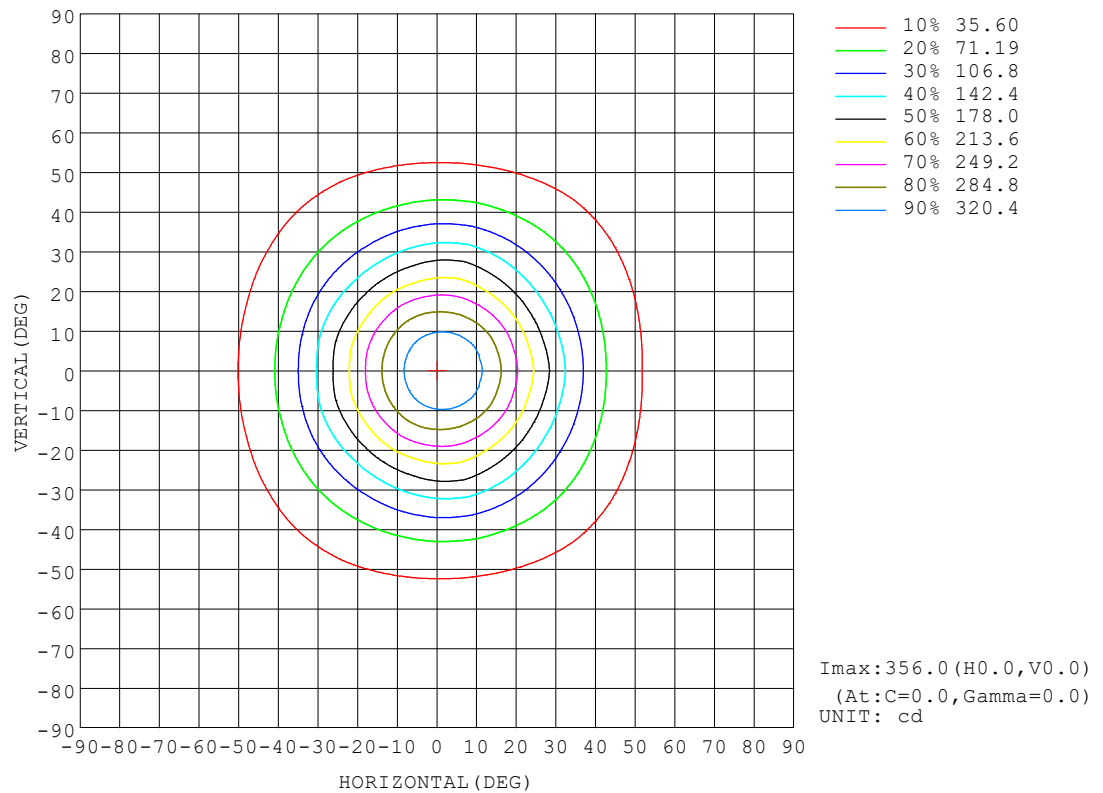
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	76	67	62	75	67	62	74	67	62	57
0.80	85	77	71	84	76	71	82	75	71	66
1.00	91	83	78	90	83	78	88	83	78	73
1.25	96	89	85	95	89	84	93	87	83	78
1.50	100	93	89	99	93	88	96	91	87	82
2.00	104	99	94	103	98	94	100	95	92	86
2.50	107	102	98	105	100	97	102	98	95	88
3.00	109	104	101	107	103	100	103	100	97	90
4.00	111	108	105	109	106	103	105	103	101	93
5.00	113	110	107	111	108	106	107	104	103	94
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

ISOCANDELA DIAGRAM

Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm		
NAME: AGL-300-30X60	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X60	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

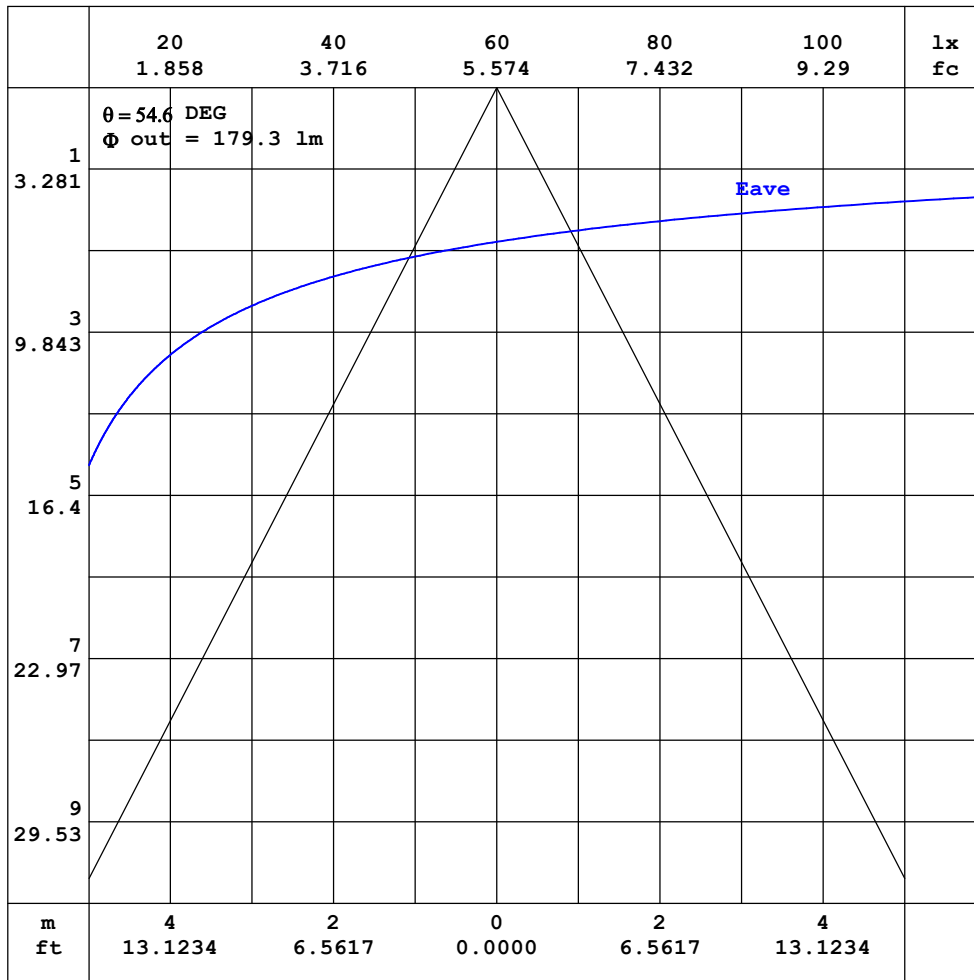


C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

**AAI CURVES**

Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm		
NAME: AGL-300-30X60	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X60	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:



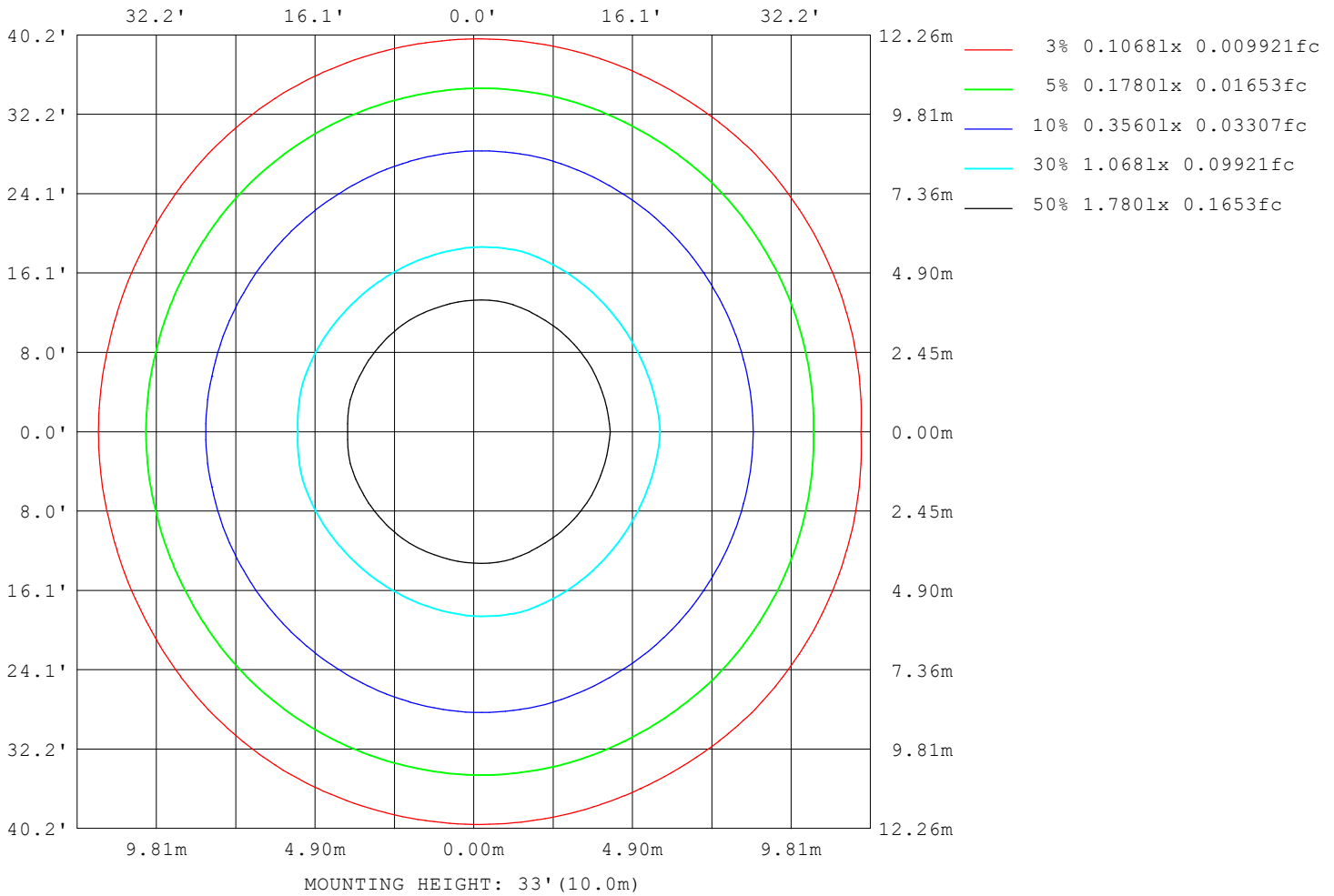
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

**ISOLUX DIAGRAM**

Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm		
NAME: AGL-300-30X60	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X60	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

**LED Avg.L Report**

Test:U:23.872V I:0.1389A P:3.3169W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:365.327x1 lm		
NAME: AGL-300-30X60	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X60	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

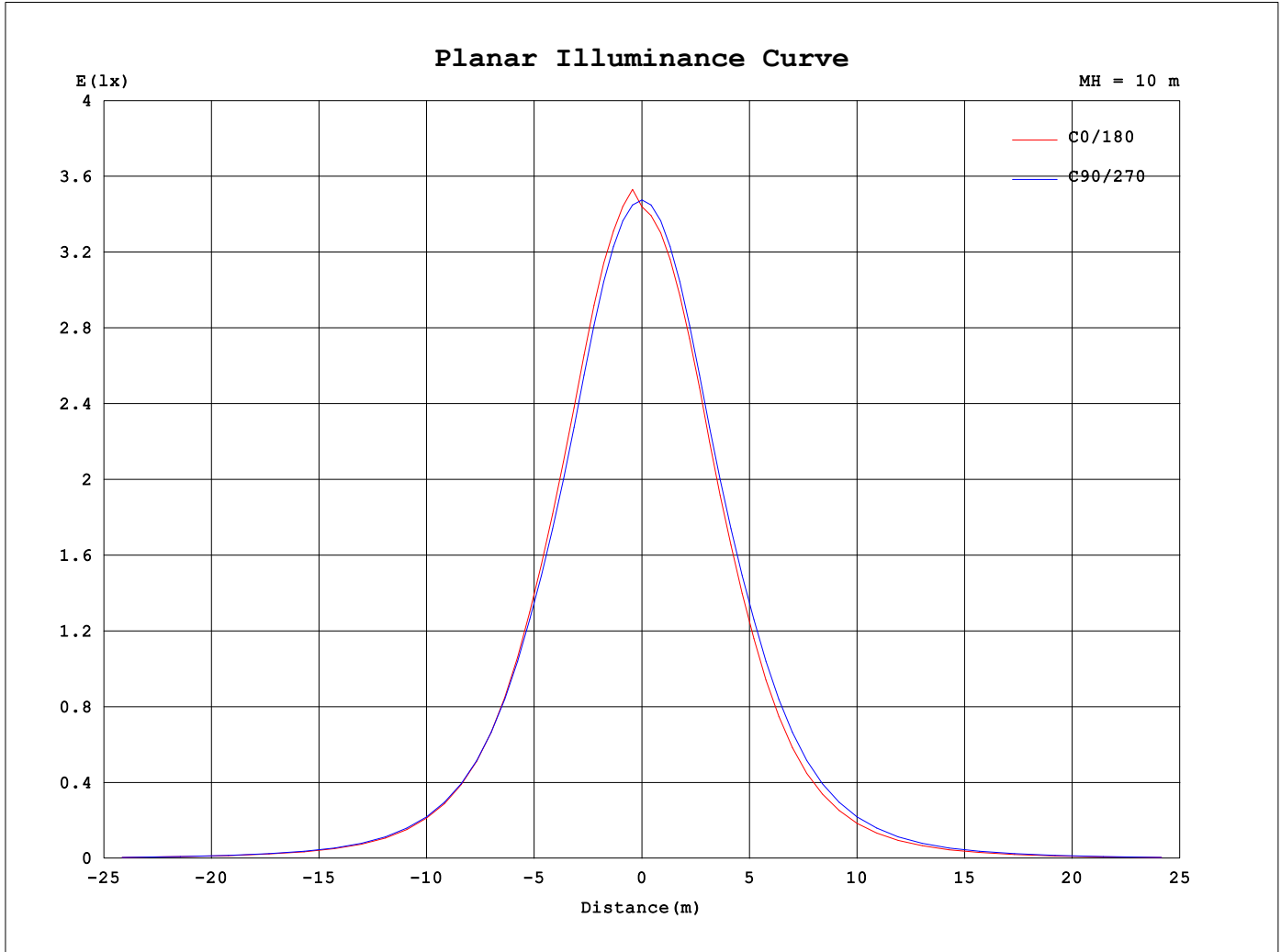
AvgL	cd/m2
L_0~180 (65) av	22236
L_0~180 (75) av	13010
L_0~180 (85) av	14427
L_90~270 (65) av	24802
L_90~270 (75) av	13443
L_90~270 (85) av	15924
L_45 (65) av	25393
L_45 (75) av	13924
L_45 (85) av	15251

Standard: GB/T 29293-2012

C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity:65.0%  
 Test Distance:3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

Planar Illuminance Curve



C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operators: NICK  
 Test Date: 12 October 2023

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X60  
 3W / 3000K / 60D / 300LM

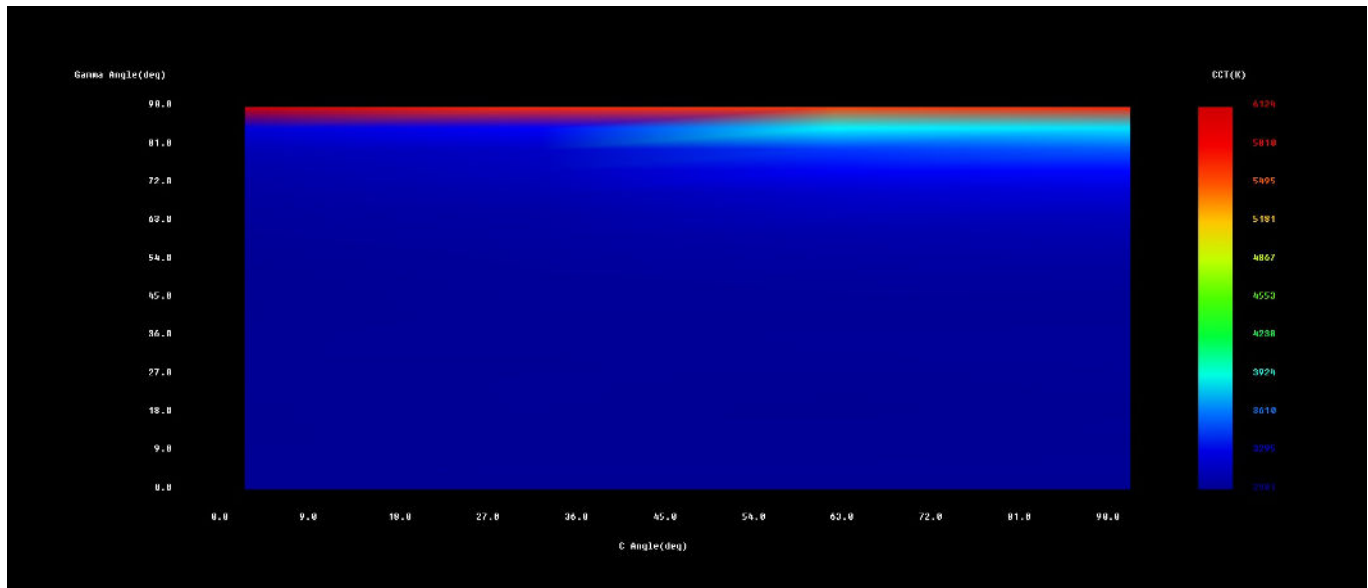






### Spatial Color Distribution Report

NAME: AGL-300-30X60	TYPE: MR16 LAMP	WEIGHT: 100GM
DIM.: 50MM	SPEC.: AGL-300-30X60	SERIAL No.: -
MFR.: AQUALUX		



#### Color Parameters:

Average:  $x=0.4347, y=0.3988$   $u'=0.2514, v'=0.5189$  CCT=2994K Ra=81.7 Rf=83 Rg=97  
Center :  $x=0.4349, y=0.3985$   $u'=0.2517, v'=0.5189$  CCT=2989K Ra=81.4 Rf=82 Rg=97  
IESNA LM-79-2019 Max.  $du'v'$ : 0.0016 / max. $du'v'$ : 0.0000[Set Range]  
GB/T 24824(LB/T 001-2009):: avg. color nonuniformity  $du'v'$ :0.0002  
GB/T 24824(LB/T 001-2009):: max. color nonuniformity  $du'v'$ :0.0007  
Average: R1=80 R2=90 R3=96 R4=80 R5=80 R6=88 R7=82 R8=57 R9=3 R10=78  
R11=79 R12=73 R13=82 R14=98 R15=73

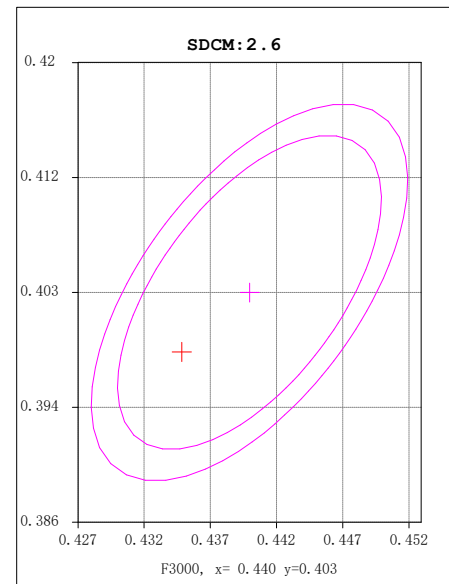
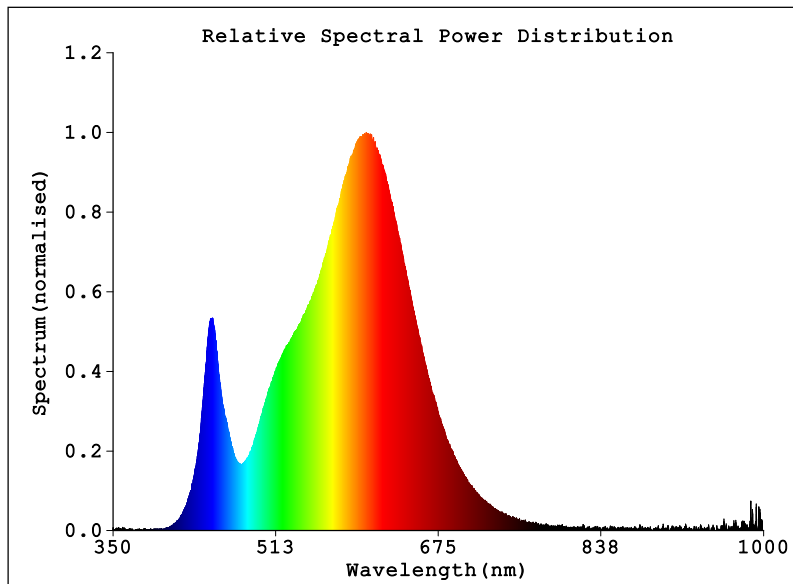
Tester: NICK  
Temperature: 20°C  
Manufacturer: AQUALUX

Date: 12 October 2023  
Humidity: 65.0%  
Remarks: AGL-300-30X603W / 3000K / 60D / 300LM

System: GO-SPEX500\_V1

### Spectral Radiant Test Report

NAME: AGL-300-30X60	TYPE: MR16 LAMP	WEIGHT: 100GM
DIM.: 50MM	SPEC.: AGL-300-30X60	SERIAL No.: -
MFR.: AQUALUX		



#### Photon & Colormetric & Photometric Quantities:

Chromaticity Coordinates: x=0.4349 y=0.3985/u'=0.2517 v'=0.5189 duv=-0.00196

Tc=2989K Dominant WL: Ld=583.6nm Purity=50.1%

Ratio: R=22.9% G=74.6% B=2.4% Peak WL: Lp=603.0nm HWL: 122.6nm

Rendering Index: Ra=81.4 TM-30: Rf=82 Rg=97

R1 =80 R2 =90 R3 =96 R4 =79 R5 =80 R6 =88 R7 =81

R8 =57 R9 =2 R10=77 R11=79 R12=73 R13=82 R14=98 R15=72

E = 35.29 lx Ee = 0.1080 W/m<sup>2</sup>

Status: T=1728.00ms Ip=55935 (85%) [ HAAS-1200(CAN) ]

Electrical: U=23.872V I=0.13861A P=3.309W PF=1.0000

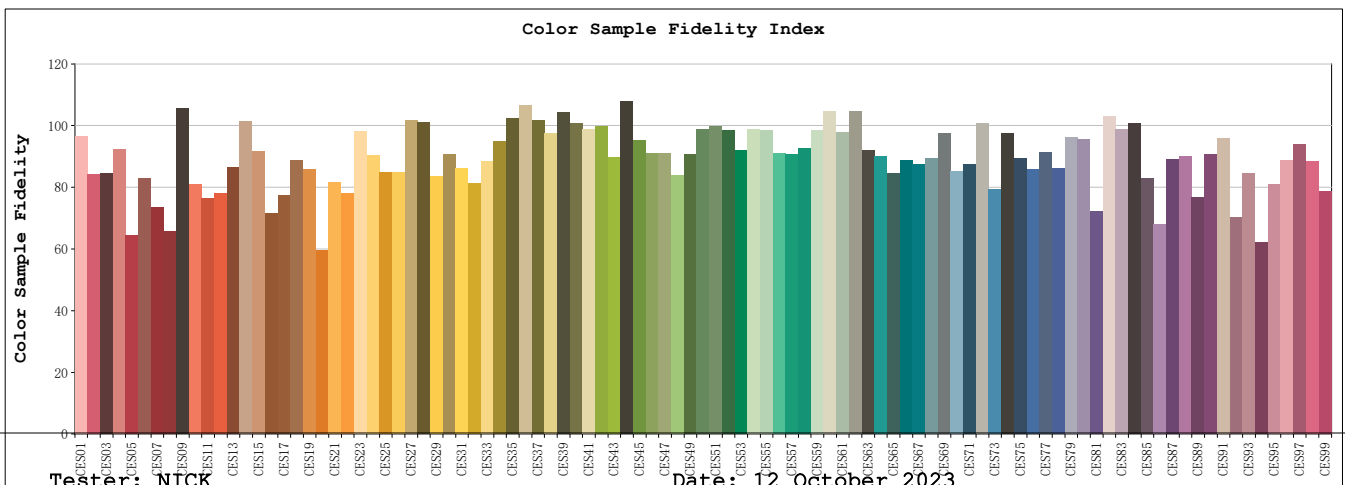
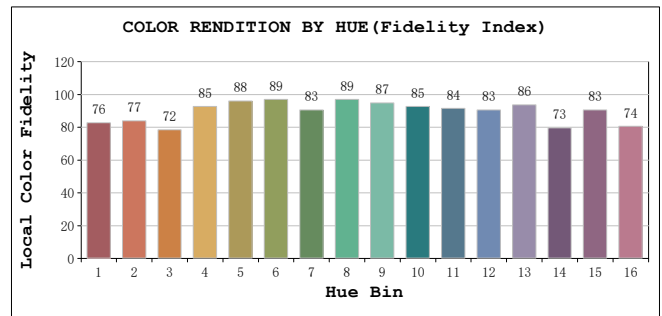
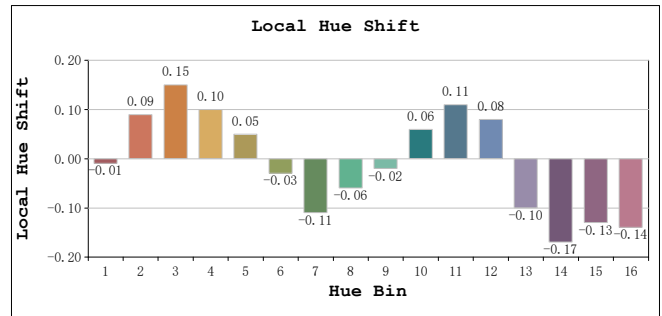
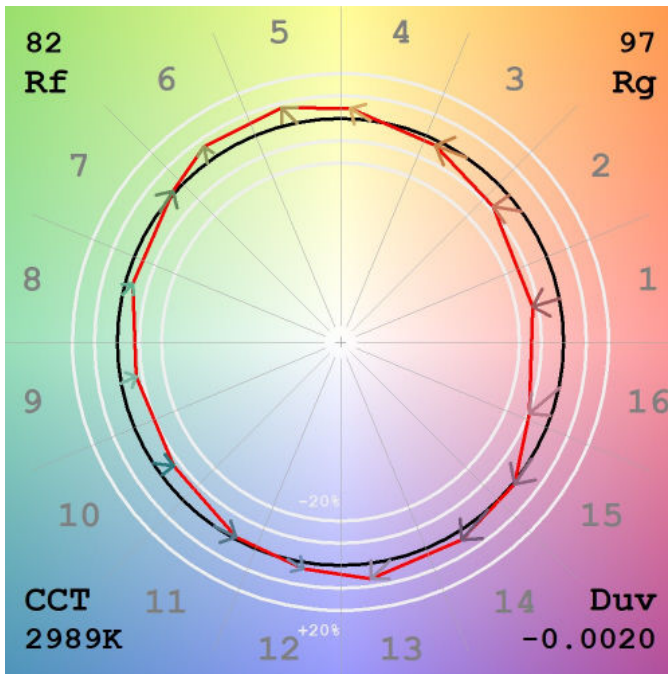
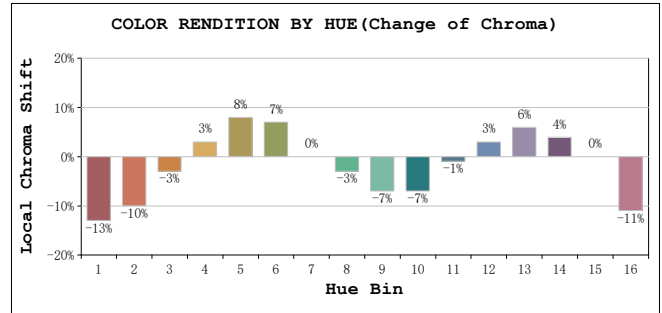
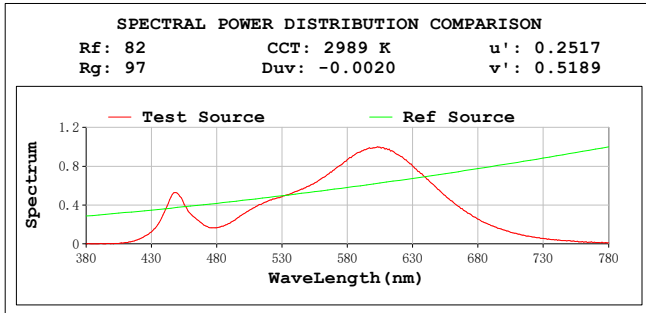
Test position: Center

Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX

Date: 12 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-30X603W / 3000K / 60D / 300LM

System: GO-SPEX500\_V1

# TM30



Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX  
 System: GO-SPEX500\_V1

Date: 12 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-30X603W / 3000K / 60D / 300LM

**All Rf:**

Rf1 = 88.5	Rf2 = 77.2	Rf3 = 77.4
Rf4 = 84.6	Rf5 = 59.0	Rf6 = 75.9
Rf7 = 67.6	Rf8 = 60.4	Rf9 = 96.9
Rf10 = 74.4	Rf11 = 70.0	Rf12 = 71.6
Rf13 = 79.4	Rf14 = 92.9	Rf15 = 84.0
Rf16 = 65.7	Rf17 = 70.8	Rf18 = 81.6
Rf19 = 78.7	Rf20 = 54.7	Rf21 = 75.0
Rf22 = 71.6	Rf23 = 90.1	Rf24 = 82.7
Rf25 = 77.8	Rf26 = 77.9	Rf27 = 93.2
Rf28 = 92.6	Rf29 = 76.6	Rf30 = 83.1
Rf31 = 79.0	Rf32 = 74.7	Rf33 = 81.1
Rf34 = 87.1	Rf35 = 93.8	Rf36 = 97.6
Rf37 = 93.4	Rf38 = 89.5	Rf39 = 95.7
Rf40 = 92.3	Rf41 = 90.5	Rf42 = 91.5
Rf43 = 82.2	Rf44 = 98.8	Rf45 = 87.2
Rf46 = 83.6	Rf47 = 83.4	Rf48 = 76.9
Rf49 = 83.1	Rf50 = 90.6	Rf51 = 91.6
Rf52 = 90.1	Rf53 = 84.5	Rf54 = 90.4
Rf55 = 90.3	Rf56 = 83.5	Rf57 = 83.1
Rf58 = 84.9	Rf59 = 90.2	Rf60 = 95.9
Rf61 = 89.6	Rf62 = 96.0	Rf63 = 84.5
Rf64 = 82.6	Rf65 = 77.6	Rf66 = 81.5
Rf67 = 80.1	Rf68 = 81.9	Rf69 = 89.4
Rf70 = 78.2	Rf71 = 80.3	Rf72 = 92.2
Rf73 = 72.9	Rf74 = 89.4	Rf75 = 81.9
Rf76 = 78.6	Rf77 = 83.8	Rf78 = 79.0
Rf79 = 88.1	Rf80 = 87.5	Rf81 = 66.3
Rf82 = 94.5	Rf83 = 90.6	Rf84 = 92.3
Rf85 = 75.9	Rf86 = 62.4	Rf87 = 81.9
Rf88 = 82.6	Rf89 = 70.4	Rf90 = 83.2
Rf91 = 88.0	Rf92 = 64.6	Rf93 = 77.6
Rf94 = 57.1	Rf95 = 74.4	Rf96 = 81.3
Rf97 = 86.3	Rf98 = 81.3	Rf99 = 72.3

Tester: NICK  
Temperature: 20°C  
Manufacturer: AQUALUX

Date: 12 October 2023  
Humidity: 65.0%  
Remarks: AGL-300-30X603W / 3000K / 60D / 300LM

System: GO-SPEX500\_V1



