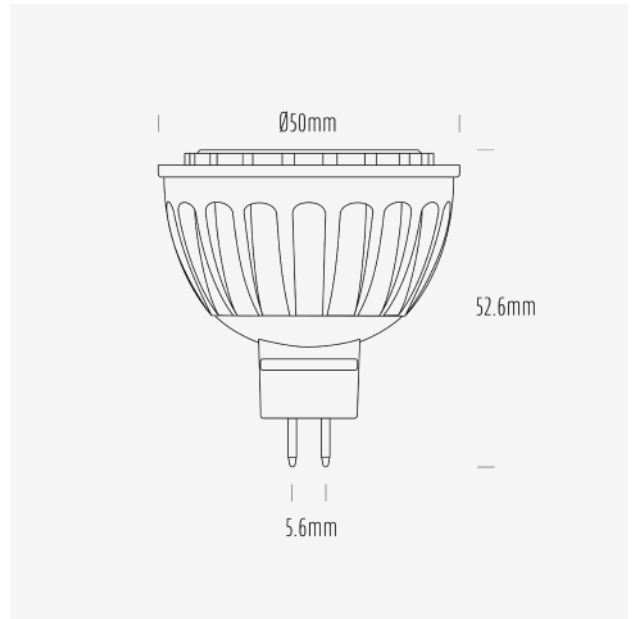


# AGL 300 Series

MR16 LED Globes



## AGL-300-30X40 / 3000K / MR16 / 40°



### Product Data

Product Code	AGL-300-30X40		
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)	458	361	<b>463</b>	466
Efficacy (lm/W)	128	126	<b>136</b>	129

CCT	3000K
CCT Description	Warm White
CRI (Ra)	82
CRI (R9)	2
TM-30 (Rf)	83
TM-30 (Rg)	97
SDCM	-
Peak Intensity (cd)	548
Nominal Beam Angle	40°
Measured Beam Angle (FWHM)	39°

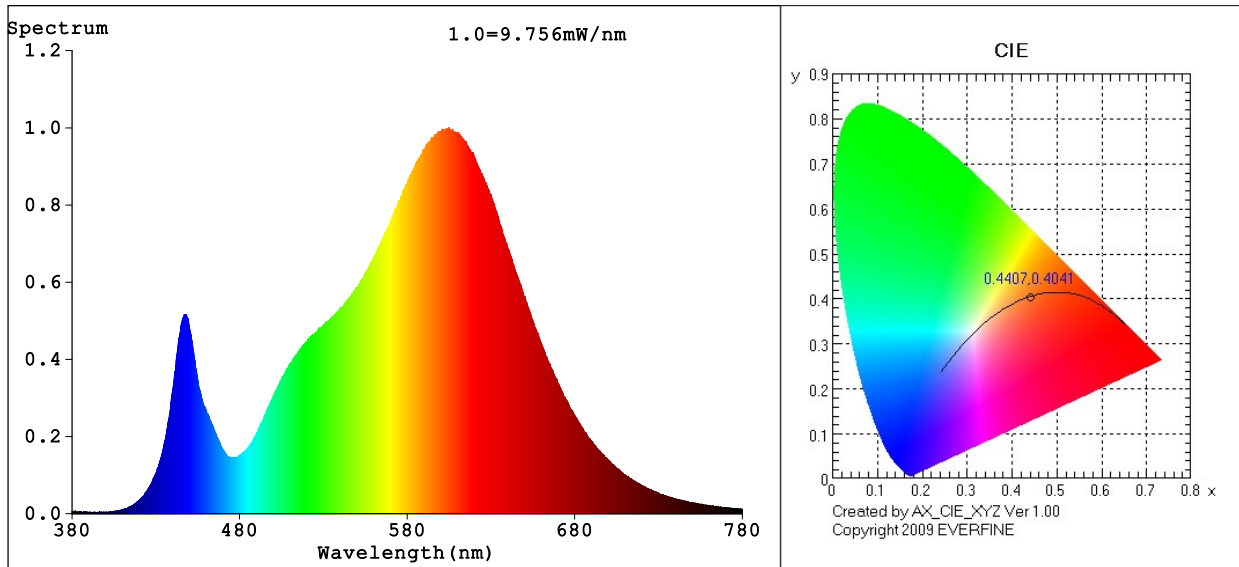
### Lifespan Data

L70	15,000h
Switching Cycles	15,000

### Compliance Data

EMI	Yes
RCM	N/A
Mercury Content	0mg

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4407$   $y=0.4041$  /  $u'=0.2530$   $v'=0.5220$   
 CCT=2937K (Duv=-0.0005) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=53.6%  
 Ratio:R=23.2% G=74.5% B=2.3%; Peak WL:Lp=604.8nm FWHM=121.9nm  
 Render Index:Ra=81.6 AvgR=75.7 TM30:Rf=83 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 = 466.0 lm Eff. : 129.39 lm/W Fe = 1.402 W

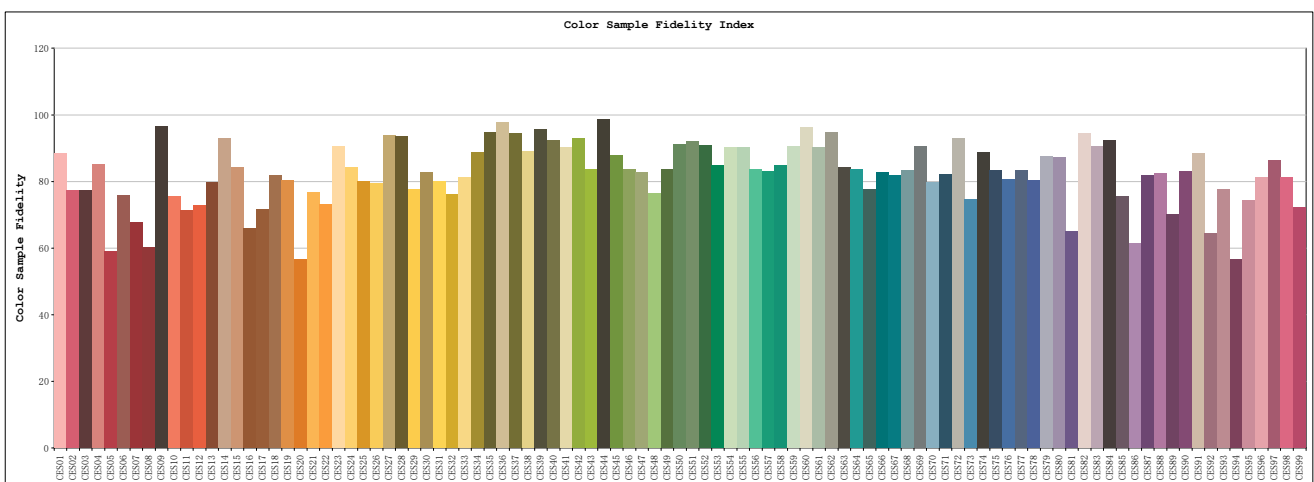
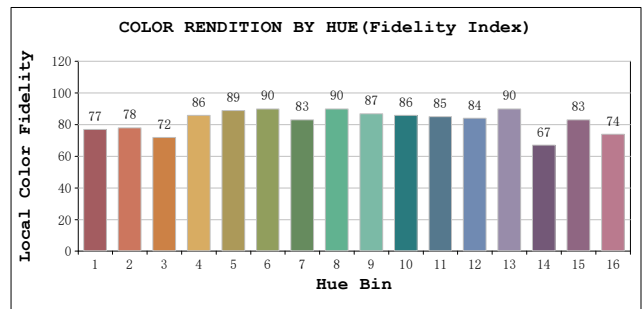
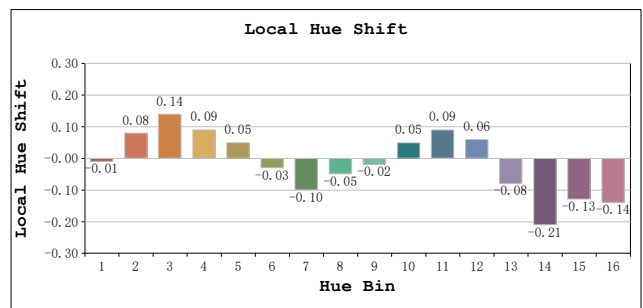
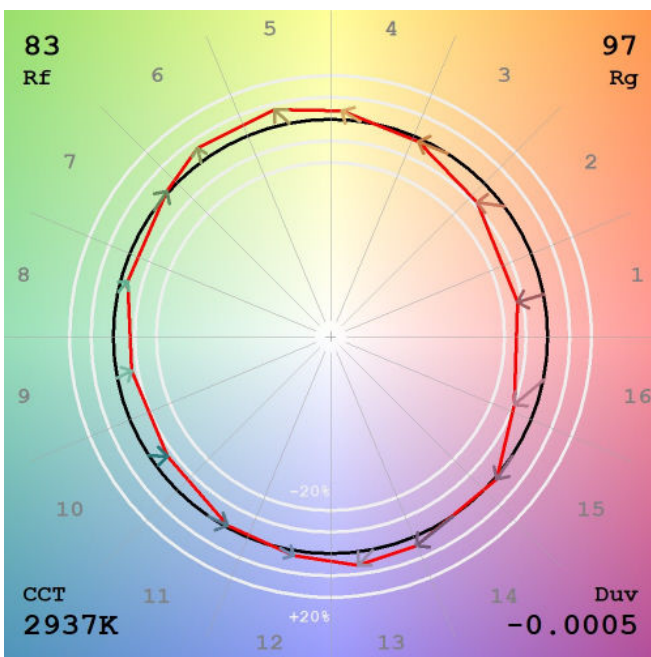
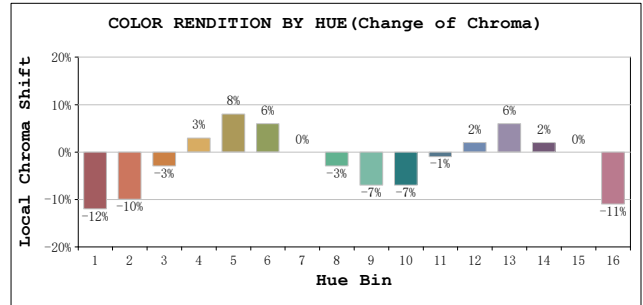
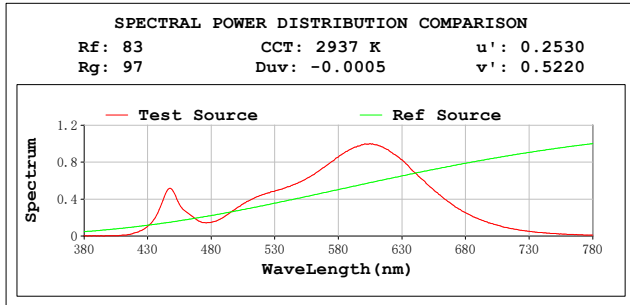
**Electrical parameters:**

V = 23.968 V I = 0.2346 A P = 3.601 W PF = 0.6406  
 LEVEL:OUT WHITE:ANSI\_3000K  
 Status: Integral T = 281 ms Ip = 47801 (73%)

**GBT5702**

# TM30

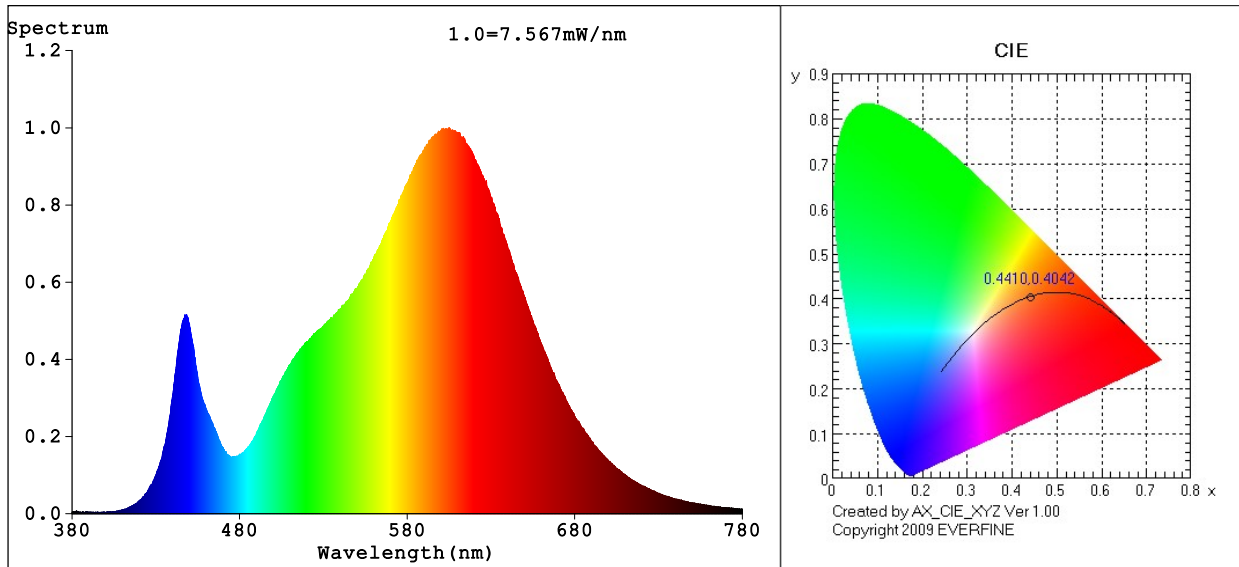
View Angle: 2 Deg



Model: AGL-300-30X40  
 Tester: NC  
 Temperature: 25.3Deg  
 Manufacturer: AQUALUX

Number: AGL-300-30X40 24VAC  
 Date: 2023-10-17 16:20:19  
 Humidity: 65.0%  
 Remarks: 24VAC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4410$   $y=0.4042$  /  $u'=0.2532$   $v'=0.5220$   
 CCT=2933K (Duv=-0.0005) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=53.7%  
 Ratio:R=23.3% G=74.4% B=2.3%; Peak WL:Lp=605.1nm FWHM=122.2nm  
 Render Index:Ra=81.6 AvgR=75.8 TM30:Rf=83 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 = 361.3 lm Eff. : 125.69 lm/W Fe = 1.087 W

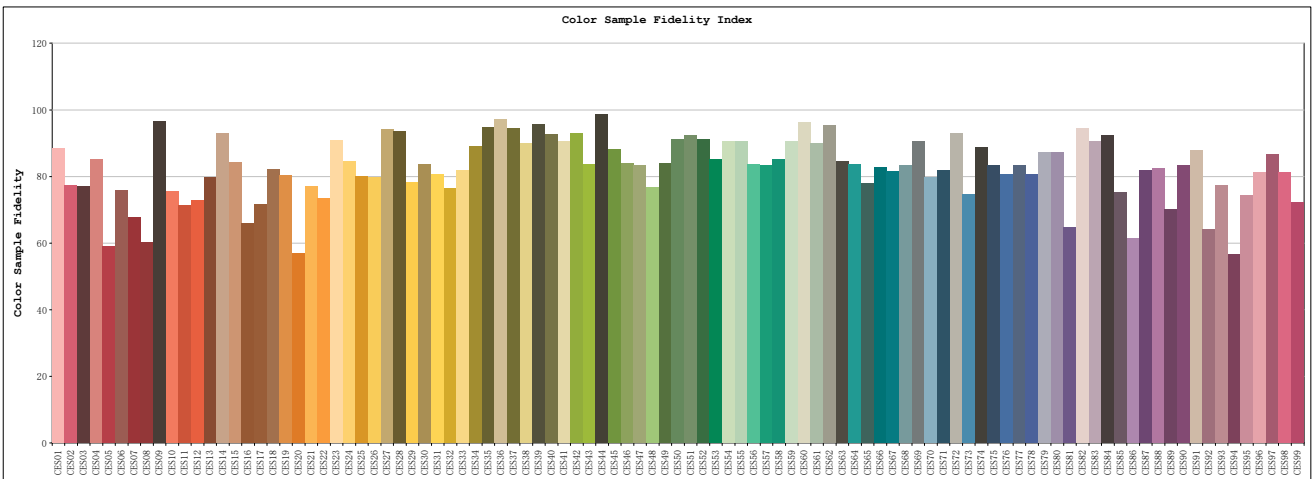
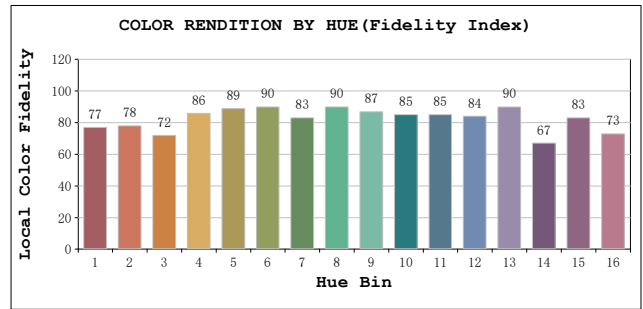
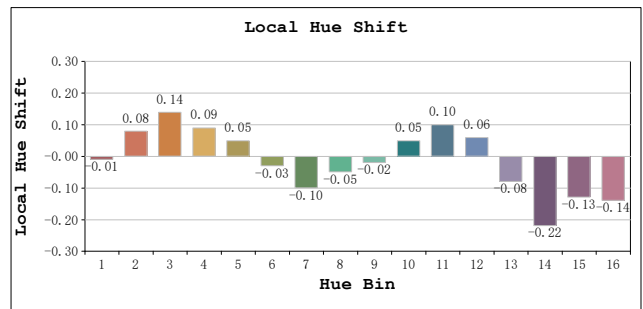
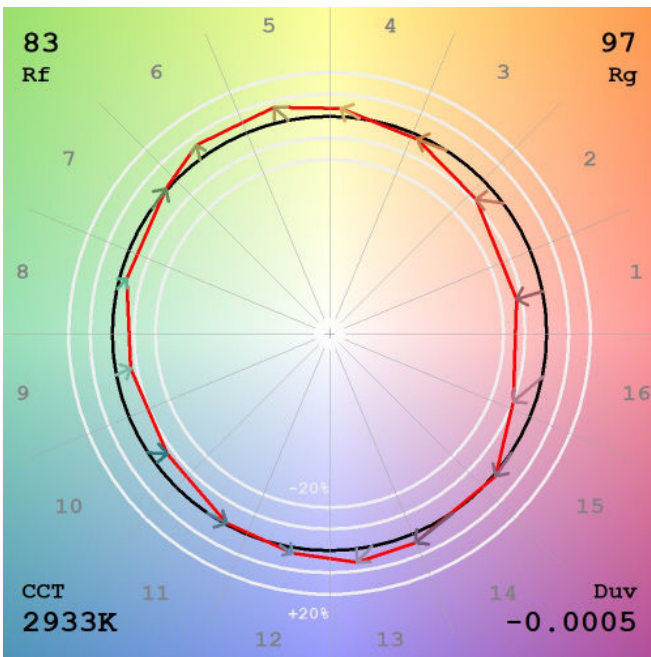
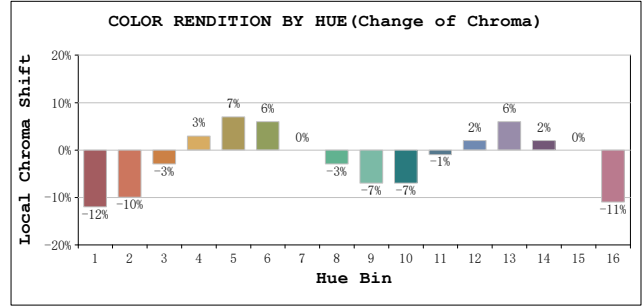
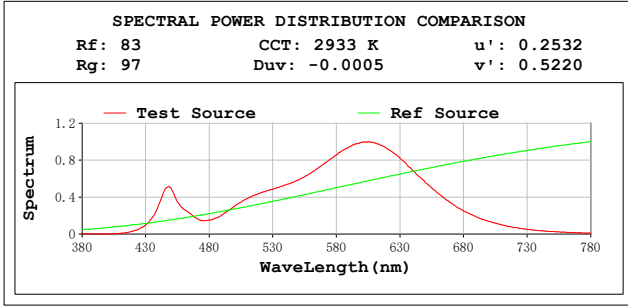
**Electrical parameters:**

V = 11.992 V I = 0.3268 A P = 2.875 W PF = 0.7336  
 LEVEL:OUT WHITE:ANSI\_3000K  
 Status: Integral T = 281 ms Ip = 37144 (57%)

**GBT5702**

TM30

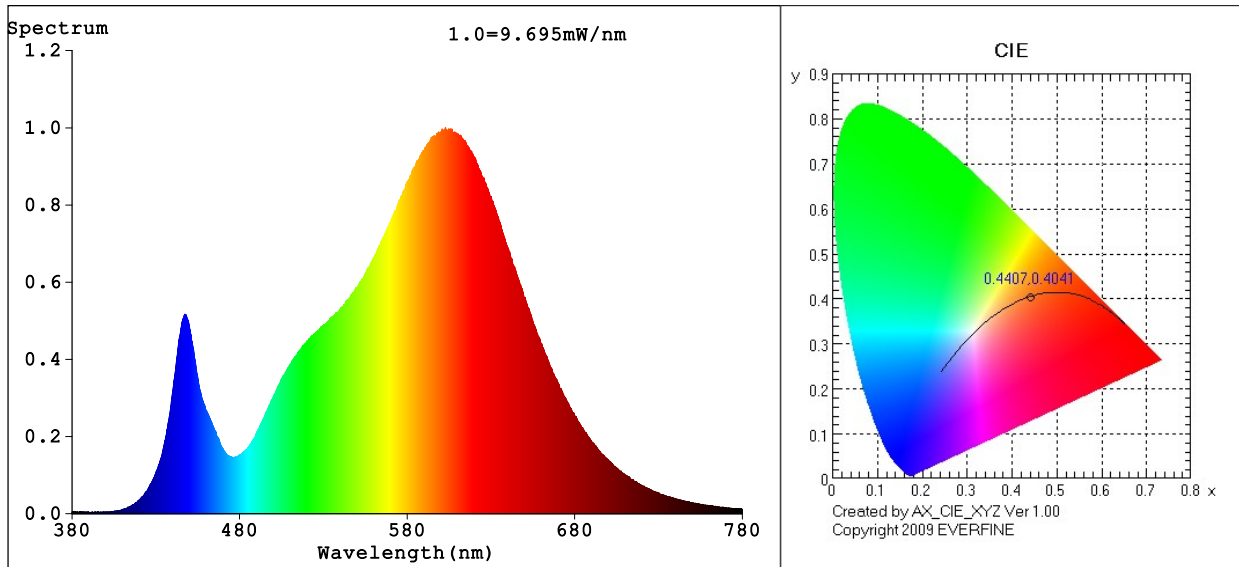
View Angle:2 Deg



Model:AGL-300-30X40  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X40 12VAC  
 Date:2023-10-17 16:20:51  
 Humidity:65.0%  
 Remarks:12VAC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4407$   $y=0.4041$  /  $u'=0.2530$   $v'=0.5219$   
 CCT=2937K (Duv=-0.0005) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=53.6%  
 Ratio:R=23.2% G=74.5% B=2.3%; Peak WL:Lp=602.8nm FWHM=122.2nm  
 Render Index:Ra=81.6 AvgR=75.7 TM30:Rf=83 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 = 462.8 lm Eff. : 135.55 lm/W Fe = 1.393 W

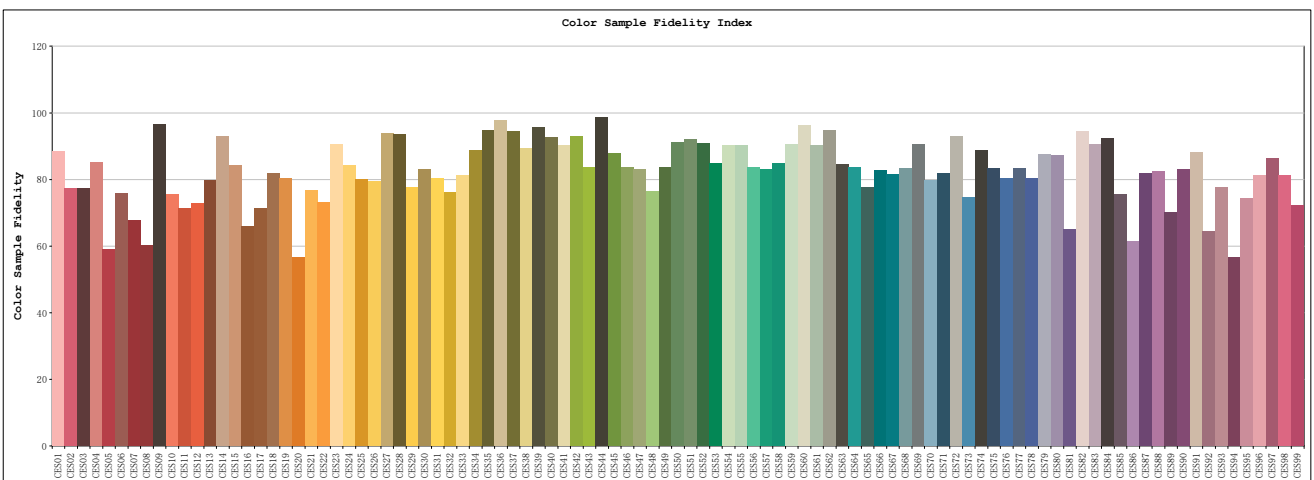
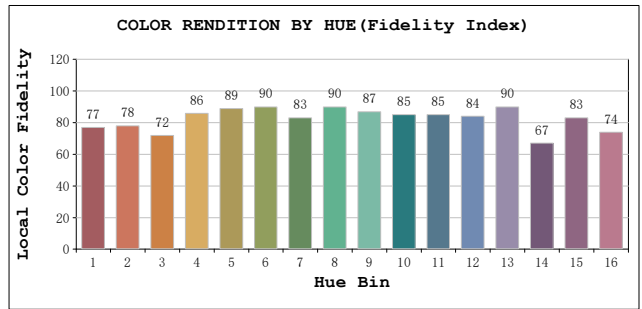
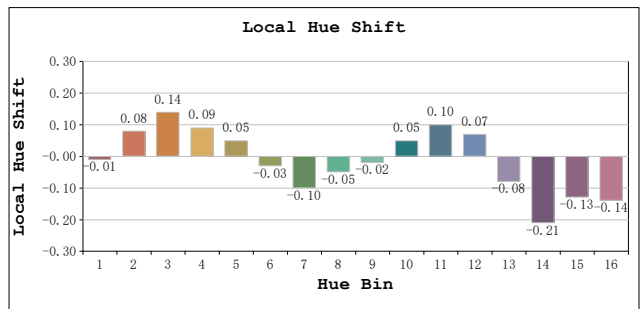
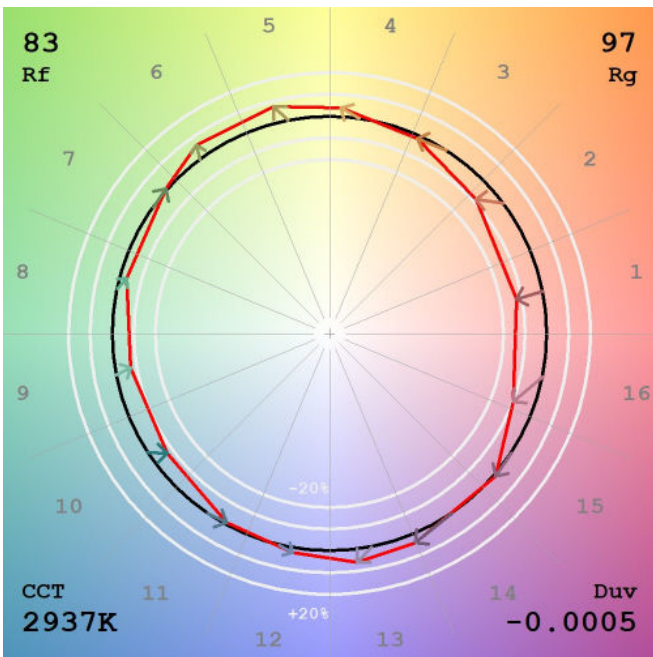
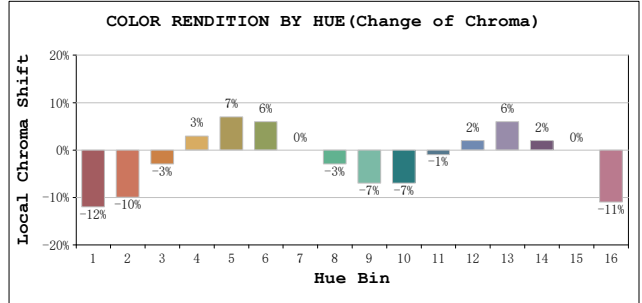
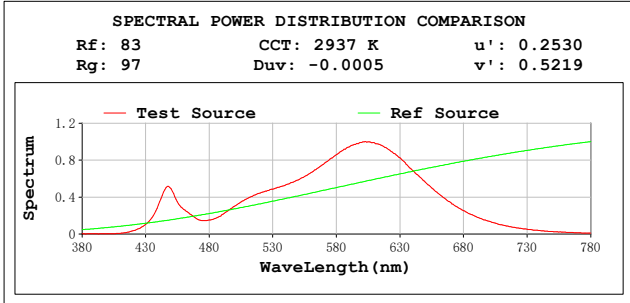
**Electrical parameters:**

V = 23.990 V I = 0.1423 A P = 3.414 W PF = 1.0000  
 LEVEL:OUT WHITE:ANSI\_3000K  
 Status: Integral T = 281 ms Ip = 47672 (73%)

**GBT5702**

# TM30

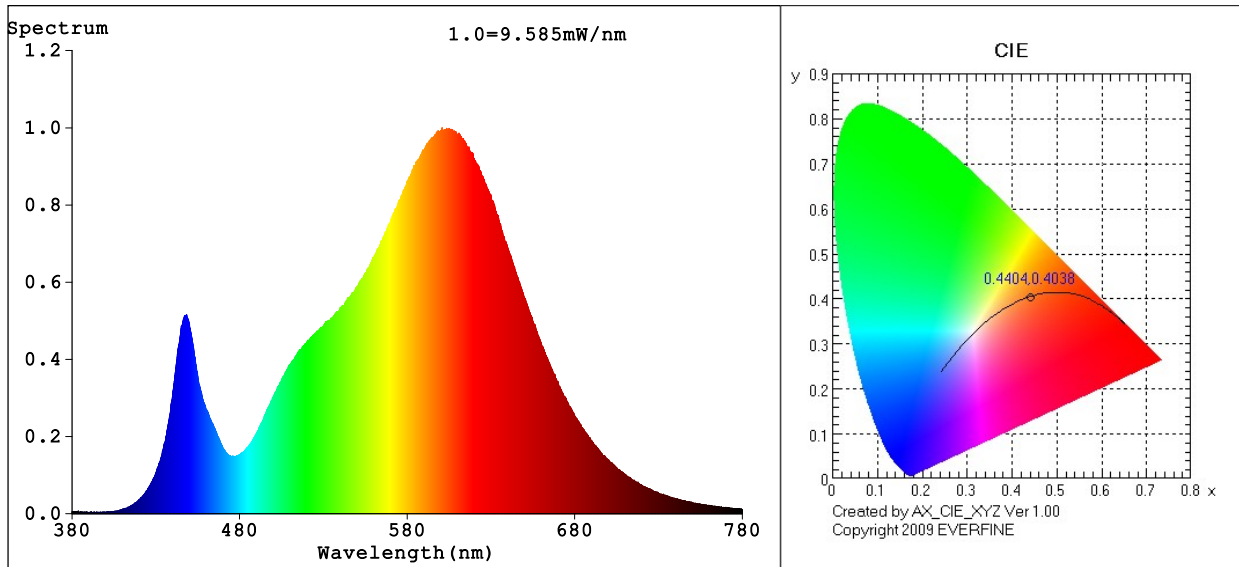
View Angle:2 Deg



Model:AGL-300-30X40  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X40 24VDC  
 Date:2023-10-17 16:21:48  
 Humidity:65.0%  
 Remarks:24VDC

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4404$   $y=0.4038$  /  $u'=0.2530$   $v'=0.5218$   
 CCT=2940K (Duv=-0.0006) Dominant WL:Ld =583.3nm WL:Lc = --nm Purity=53.4%  
 Ratio:R=23.2% G=74.5% B=2.3%; Peak WL:Lp=600.9nm FWHM=122.6nm  
 Render Index:Ra=81.5 AvgR=75.6 TM30:Rf=83 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 = 458.1 lm Eff. : 128.45 lm/W Fe = 1.379 W

**Electrical parameters:**

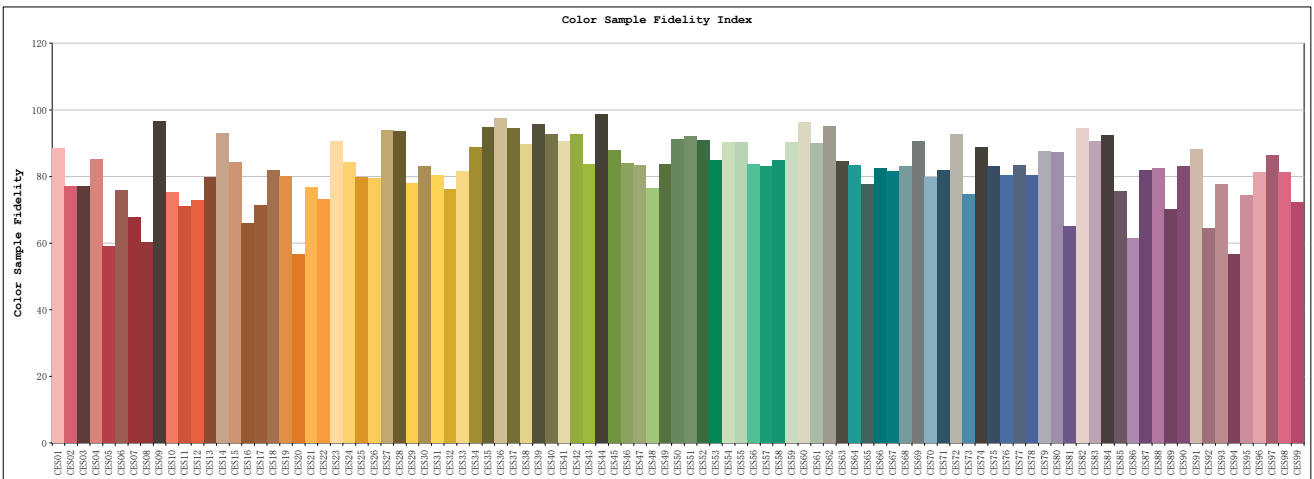
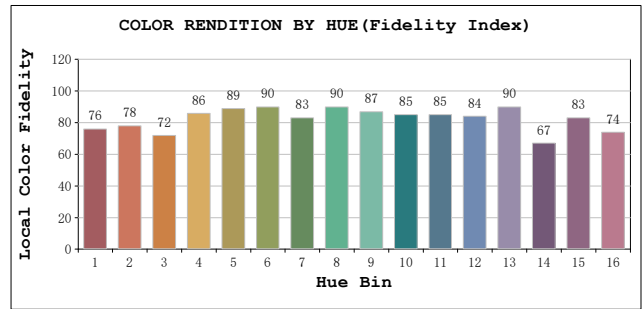
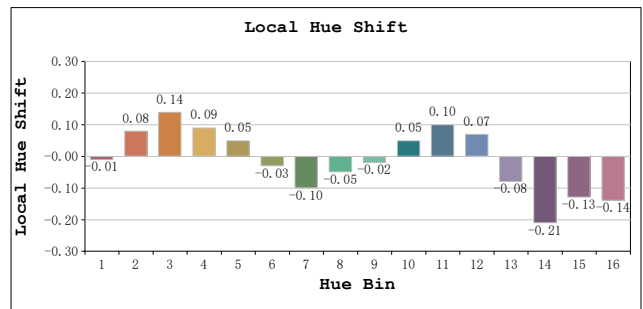
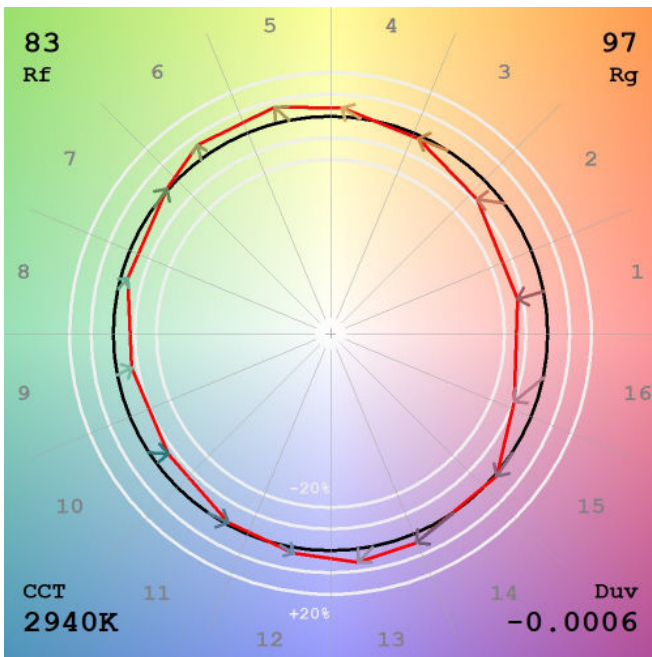
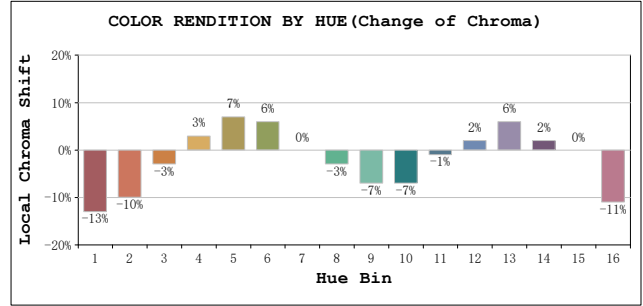
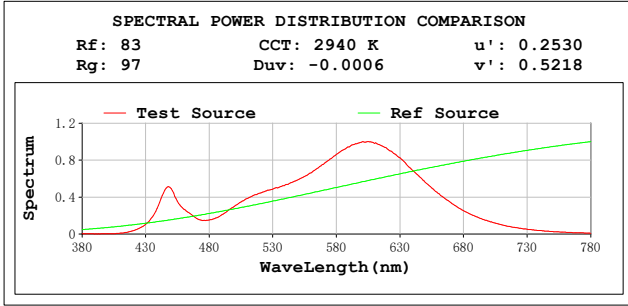
V = 11.977 V I = 0.2978 A P = 3.566 W PF = 1.000  
 LEVEL:OUT WHITE:ANSI\_3000K  
 Status: Integral T = 281 ms Ip = 47012 (72%)

**GBT5702**



TM30

View Angle:2 Deg



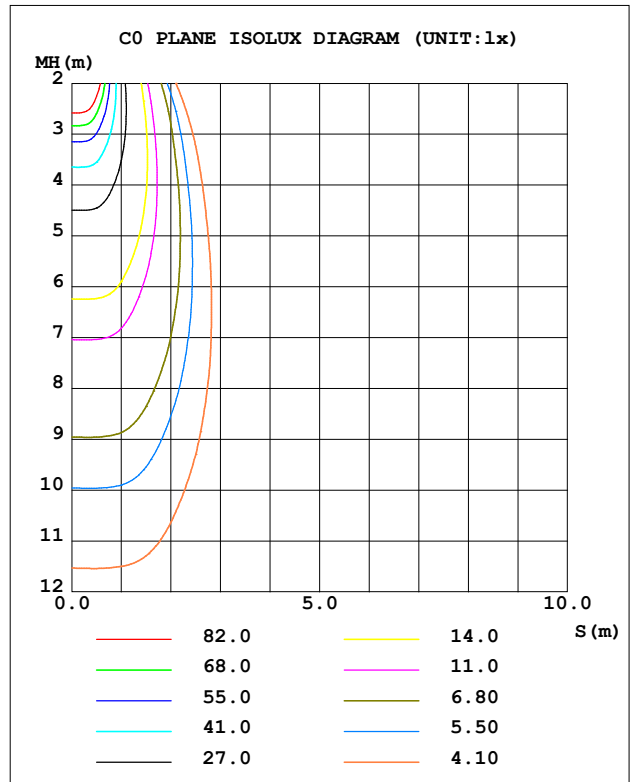
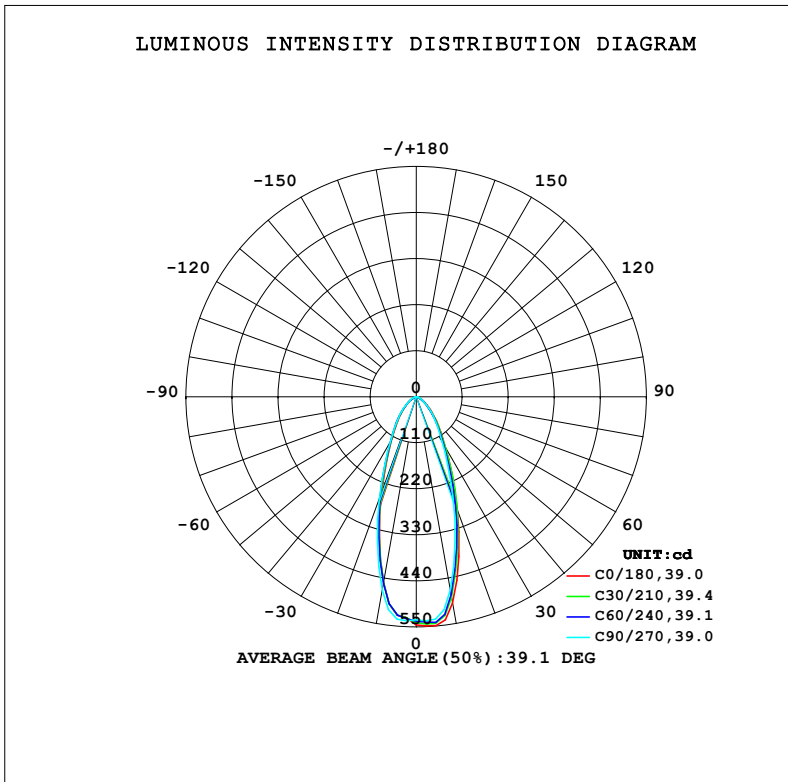
Model:AGL-300-30X40  
 Tester:NC  
 Temperature:25.3Deg  
 Manufacturer:AQUALUX

Number:AGL-300-30X40 12VDC  
 Date:2023-10-17 16:22:18  
 Humidity:65.0%  
 Remarks:12VDC

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm		
NAME: AGL-300-30X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X40	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	LED	I <sub>max</sub> (cd)	548.4	S/MH (C0/180)	0.61
NOMINAL POWER (W)	3	LOR (%)	100.0	S/MH (C90/270)	0.63
RATED VOLTAGE (V)	24	TOTAL FLUX (lm)	366.44	η UP, DN (C0-180)	0.0, 50.3
NOMINAL FLUX (lm)	366.44	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.7
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	24	η down (%)	100.0	CIBSE SHR MAX	0.70



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-300-30X40  
 3W / 3000K / 40D / 300LM

**ZONAL FLUX DIAGRAM**

ZONAL FLUX DIAGRAM:

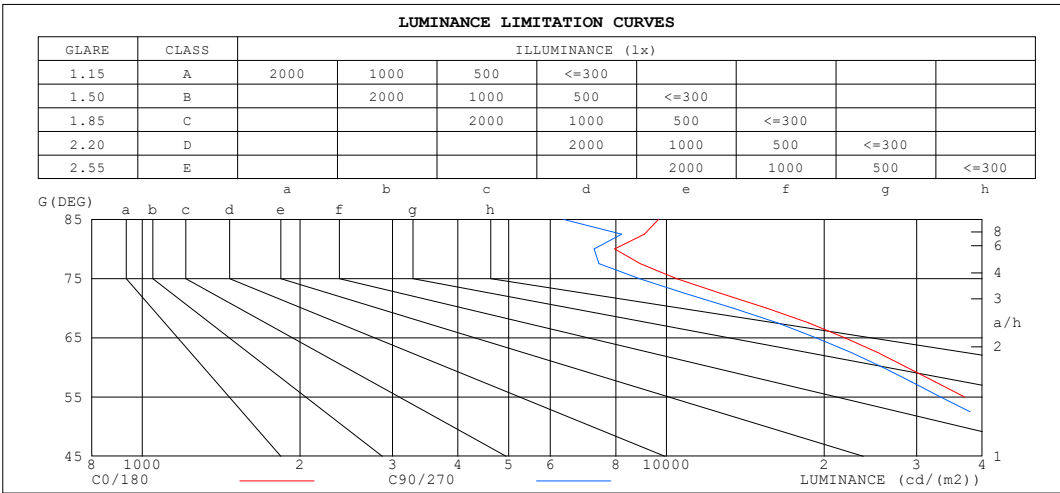
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	∅ zone	∅ total	%lum, lamp
10	501.0	481.4	469.5	451.9	451.0	451.9	469.5	481.4	0- 10	48.86	48.86	13.3,13.3
20	287.5	281.6	258.1	250.2	242.5	250.2	258.1	281.6	10- 20	100.2	149.0	40.7,40.7
30	140.5	136.2	125.1	121.5	117.6	121.5	125.1	136.2	20- 30	85.36	234.4	64,64
40	75.17	69.98	67.53	67.56	63.47	67.56	67.53	69.98	30- 40	58.95	293.4	80.1,80.1
50	38.78	32.97	34.82	33.42	32.31	33.42	34.82	32.97	40- 50	38.25	331.6	90.5,90.5
60	18.03	14.23	16.23	14.79	14.90	14.79	16.23	14.23	50- 60	21.04	352.6	96.2,96.2
70	6.666	5.147	5.749	4.985	5.103	4.985	5.749	5.147	60- 70	9.782	362.4	98.9,98.9
80	1.737	1.677	1.587	1.537	1.481	1.537	1.587	1.677	70- 80	3.198	365.6	99.8,99.8
90	0	0.0004	0	0.0000	0	0.0000	0	0.0004	80- 90	0.8202	366.4	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-300-30X40  
 3W / 3000K / 40D / 300LM

**LUMINANCE LIMITATION CURVES**

<b>Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz</b> <b>UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm</b>		
<b>NAME: AGL-300-30X40</b>	<b>TYPE: MR16 LAMP</b>	<b>WEIGHT: 100GM</b>
<b>SPEC.: AGL-300-30X40</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	9646	6364
80	7965	7278
75	10451	8880
70	15517	13383
65	21892	19293
60	28708	25851
55	37040	33322
50	48032	43123
45	61616	55313

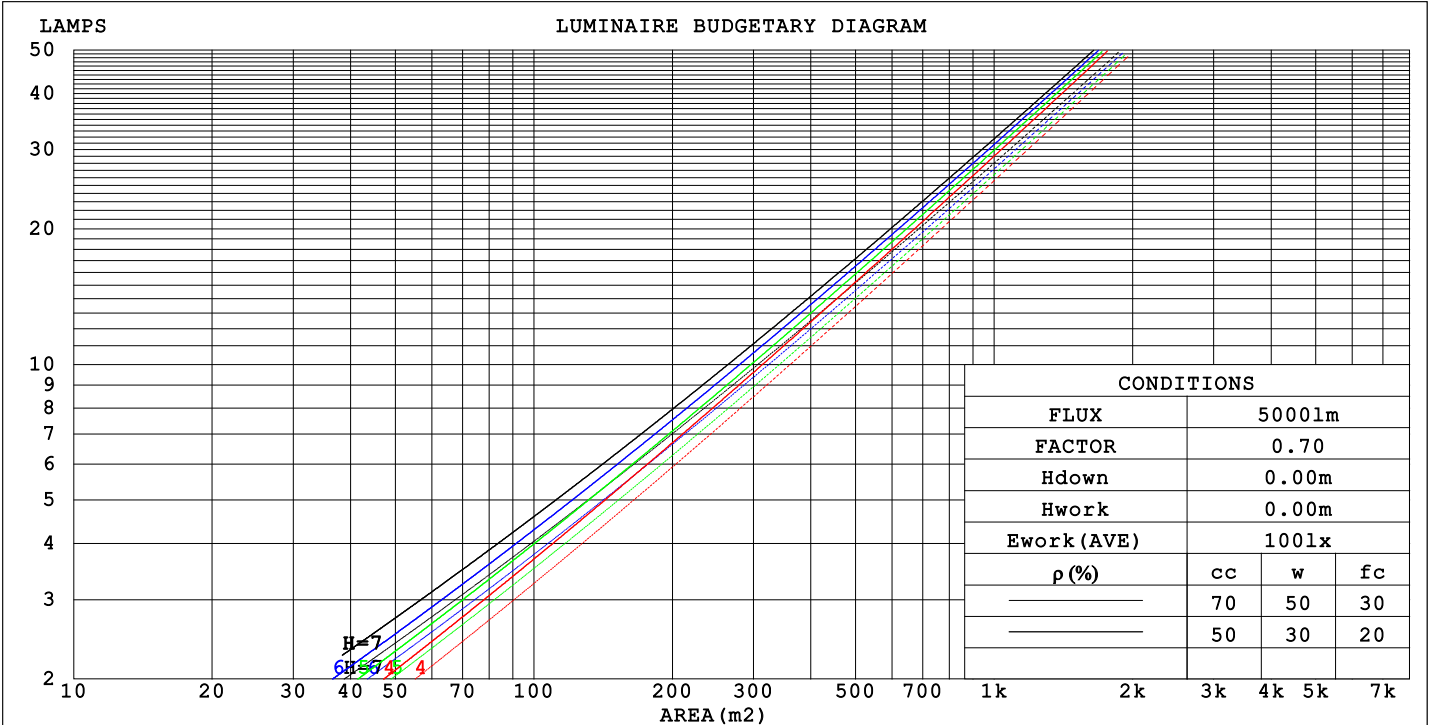
C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 20°C  
 Operator: NICK  
 Test Date: 12 October 2023

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-300-30X40  
 3W / 3000K / 40D / 300LM

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm		
NAME: AGL-300-30X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X40	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%	
p <sub>w</sub>	20%			20%			20%			20%			20%			0
p <sub>fc</sub>	20%			20%			20%			20%			20%			
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	1.10	1.07	1.05	1.08	1.05	1.03	1.04	1.02	.00	.00	.98	.97	.96	.95	.94	.92
2.0	1.01	.97	.93	.99	.95	.92	.96	.93	.90	.93	.90	.88	.90	.88	.86	.84
3.0	.94	.88	.84	.92	.87	.83	.90	.85	.82	.87	.84	.81	.85	.82	.79	.78
4.0	.87	.81	.76	.86	.80	.76	.84	.79	.75	.82	.77	.74	.80	.76	.73	.72
5.0	.81	.75	.70	.80	.74	.70	.78	.73	.69	.77	.72	.69	.75	.71	.68	.66
6.0	.76	.70	.65	.75	.69	.65	.74	.68	.64	.72	.67	.64	.71	.67	.63	.62
7.0	.71	.65	.61	.71	.65	.60	.69	.64	.60	.68	.63	.60	.67	.63	.59	.58
8.0	.67	.61	.57	.67	.61	.57	.66	.60	.56	.64	.60	.56	.63	.59	.56	.54
9.0	.64	.57	.53	.63	.57	.53	.62	.57	.53	.61	.56	.53	.60	.56	.53	.51
10.0	.60	.54	.50	.60	.54	.50	.59	.54	.50	.58	.53	.50	.57	.53	.50	.48



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-300-30X40  
 3W / 3000K / 40D / 300LM

**WEC AND CCEC**

Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm		
NAME: AGL-300-30X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X40	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	.196	.112	.035	.189	.108	.034	.177	.101	.032	.165	.095	.031	.154	.089	.029	
2.0	.188	.103	.032	.182	.101	.031	.172	.095	.030	.162	.091	.028	.153	.086	.027	
3.0	.178	.095	.028	.174	.093	.028	.164	.089	.027	.156	.085	.026	.148	.082	.025	
4.0	.169	.088	.026	.164	.086	.025	.156	.083	.025	.149	.080	.024	.142	.077	.024	
5.0	.160	.081	.024	.156	.080	.023	.149	.077	.023	.142	.075	.022	.136	.073	.022	
6.0	.151	.076	.022	.148	.075	.021	.142	.073	.021	.136	.071	.021	.130	.069	.020	
7.0	.143	.071	.020	.140	.070	.020	.135	.068	.020	.130	.066	.019	.125	.065	.019	
8.0	.136	.066	.019	.133	.066	.019	.129	.064	.018	.124	.063	.018	.120	.061	.018	
9.0	.129	.063	.017	.127	.062	.017	.123	.061	.017	.119	.059	.017	.115	.058	.017	
10.0	.123	.059	.016	.121	.059	.016	.117	.058	.016	.114	.056	.016	.110	.055	.016	

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	.172	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.158	.132	.111	.136	.114	.096	.093	.079	.067	.054	.046	.039	.017	.015	.013	
3.0	.147	.114	.087	.126	.098	.076	.086	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.137	.099	.070	.118	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.129	.088	.058	.110	.076	.050	.076	.053	.035	.044	.031	.021	.014	.010	.007	
6.0	.121	.079	.048	.104	.068	.042	.072	.048	.030	.042	.028	.018	.013	.009	.006	
7.0	.114	.071	.041	.098	.062	.036	.068	.043	.025	.040	.025	.015	.013	.008	.005	
8.0	.108	.065	.035	.093	.056	.031	.065	.040	.022	.038	.023	.013	.012	.008	.004	
9.0	.103	.060	.030	.089	.052	.027	.062	.036	.019	.036	.022	.011	.012	.007	.004	
10.0	.098	.055	.027	.085	.048	.023	.059	.034	.017	.034	.020	.010	.011	.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-300-30X40  
 3W / 3000K / 40D / 300LM

**UGR(Unified Glare Rating) Table**

Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm		
NAME: AGL-300-30X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X40	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	26.3	27.4	26.6	27.5	27.7	26.0	27.0	26.2	27.2	27.4
			3H	26.6	27.5	26.9	27.7	27.9	26.2	27.2	26.5	27.4	27.6
			4H	26.6	27.5	26.9	27.7	28.0	26.2	27.1	26.5	27.4	27.6
			6H	26.6	27.4	26.9	27.7	27.9	26.2	27.1	26.5	27.3	27.6
			8H	26.6	27.4	26.9	27.7	27.9	26.2	27.0	26.5	27.3	27.5
			12H	26.6	27.4	26.9	27.6	27.9	26.2	27.0	26.5	27.2	27.5
	4H		2H	26.4	27.3	26.6	27.5	27.7	26.1	26.9	26.3	27.2	27.4
			3H	26.7	27.4	27.0	27.7	28.0	26.3	27.1	26.7	27.4	27.7
			4H	26.7	27.4	27.1	27.7	28.0	26.4	27.1	26.7	27.4	27.7
			6H	26.7	27.4	27.1	27.7	28.0	26.4	27.0	26.8	27.4	27.7
			8H	26.7	27.3	27.1	27.7	28.0	26.4	27.0	26.8	27.3	27.7
			12H	26.8	27.3	27.2	27.7	28.1	26.4	26.9	26.8	27.3	27.7
	8H		4H	26.6	27.2	27.0	27.6	27.9	26.3	26.9	26.7	27.2	27.6
			6H	26.7	27.2	27.1	27.6	28.0	26.4	26.8	26.8	27.2	27.7
			8H	26.7	27.2	27.2	27.6	28.0	26.4	26.8	26.9	27.3	27.7
			12H	26.8	27.2	27.3	27.6	28.1	26.4	26.8	26.9	27.2	27.7
	12H		4H	26.6	27.1	27.0	27.5	27.9	26.3	26.8	26.7	27.2	27.6
			6H	26.7	27.1	27.1	27.5	27.9	26.3	26.8	26.8	27.2	27.6
			8H	26.7	27.1	27.2	27.5	28.0	26.4	26.8	26.9	27.2	27.7

Variations with the observer position at spacings(CIE Pub.117):		
S = 1.0H	+ 1.1 / - 1.5	+ 1.1 / - 1.6
1.5H	+ 1.5 / - 1.6	+ 1.1 / - 1.3
2.0H	+ 2.6 / - 2.3	+ 2.2 / - 2.1

CIE Pub.117, 366.4 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-300-30X40  
 3W / 3000K / 40D / 300LM

**UTILIZATION FACTORS TABLE**

Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm		
NAME: AGL-300-30X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X40	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	79	71	66	78	71	66	77	70	66	62
0.80	87	80	75	87	80	75	85	79	75	70
1.00	93	86	82	92	86	82	91	86	81	76
1.25	98	92	88	97	91	87	95	90	86	81
1.50	102	96	92	100	95	91	98	93	90	85
2.00	106	100	97	104	99	96	101	97	94	88
2.50	108	103	99	106	102	98	103	99	97	90
3.00	110	106	102	108	104	101	104	101	99	92
4.00	112	109	106	110	107	105	106	104	102	94
5.00	114	111	108	111	109	107	107	105	104	96
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

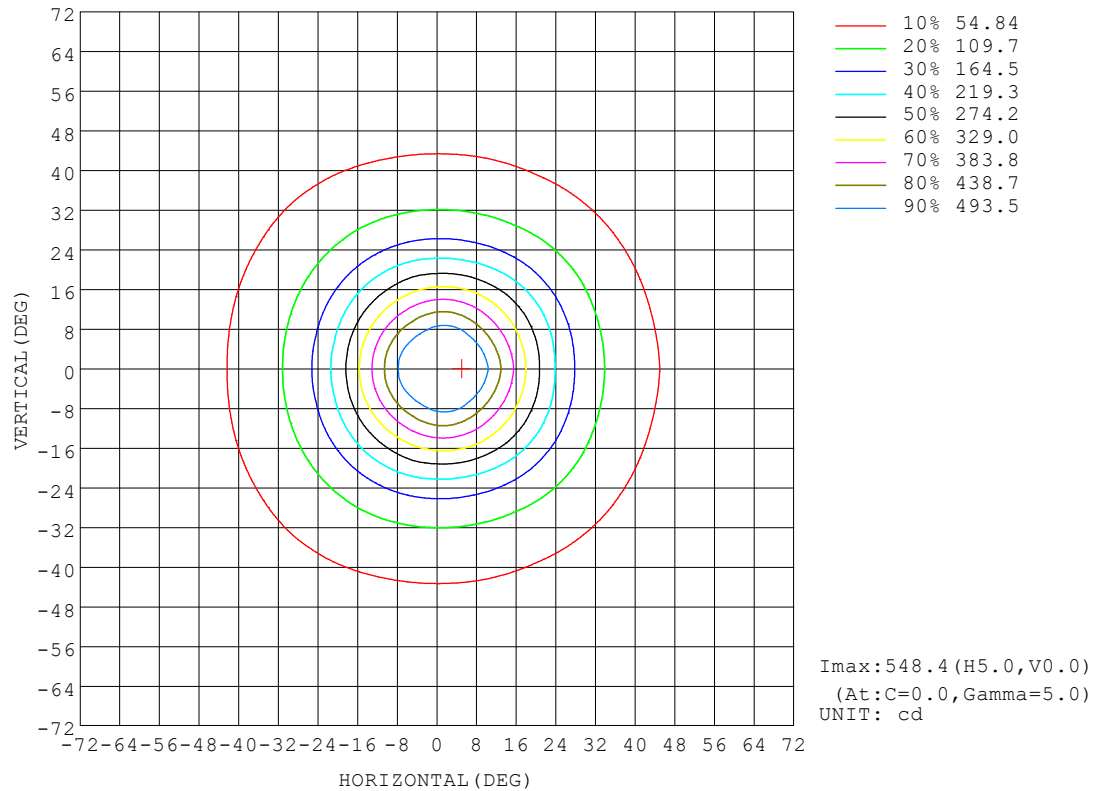
C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

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-300-30X40  
 3W / 3000K / 40D / 300LM



ISOCANDELA DIAGRAM

Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm		
NAME: AGL-300-30X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X40	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

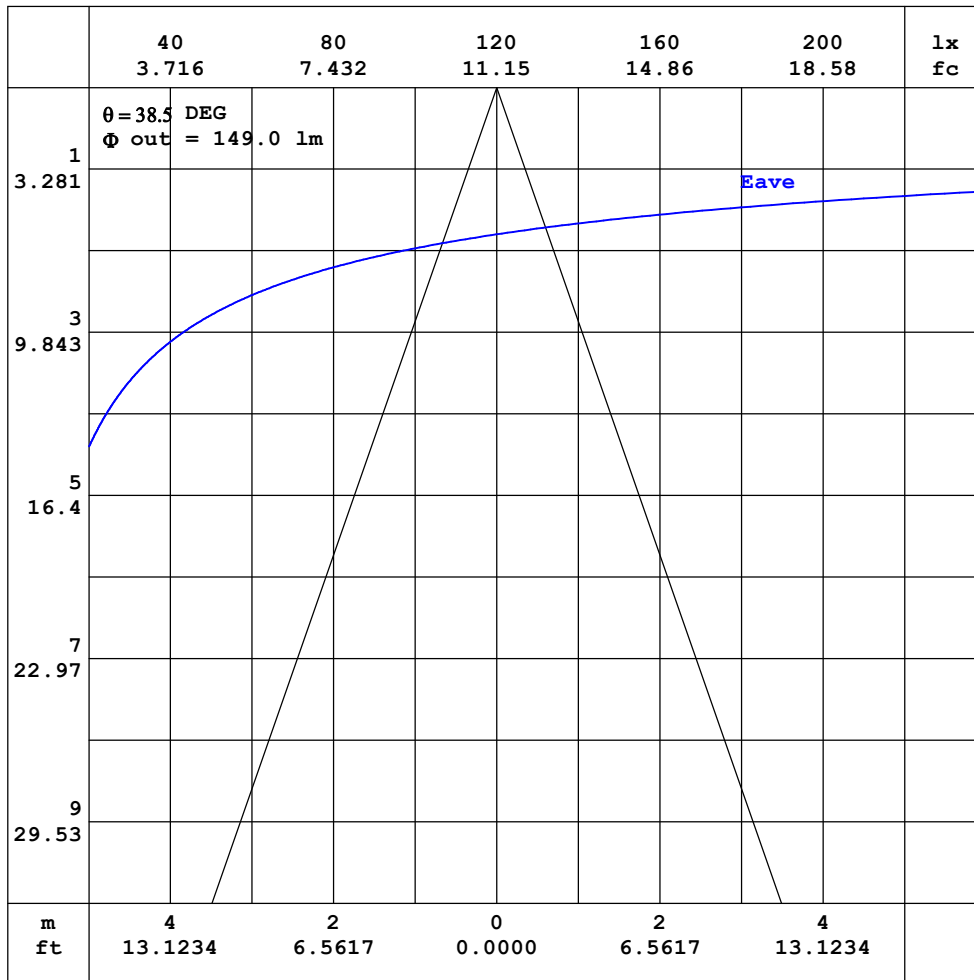


C Range: 0 - 180DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:20°C  
 Operators:NICK  
 Test Date:12 October 2023

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-300-30X40  
 3W / 3000K / 40D / 300LM

**AAI CURVES**

Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm		
NAME: AGL-300-30X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X40	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:



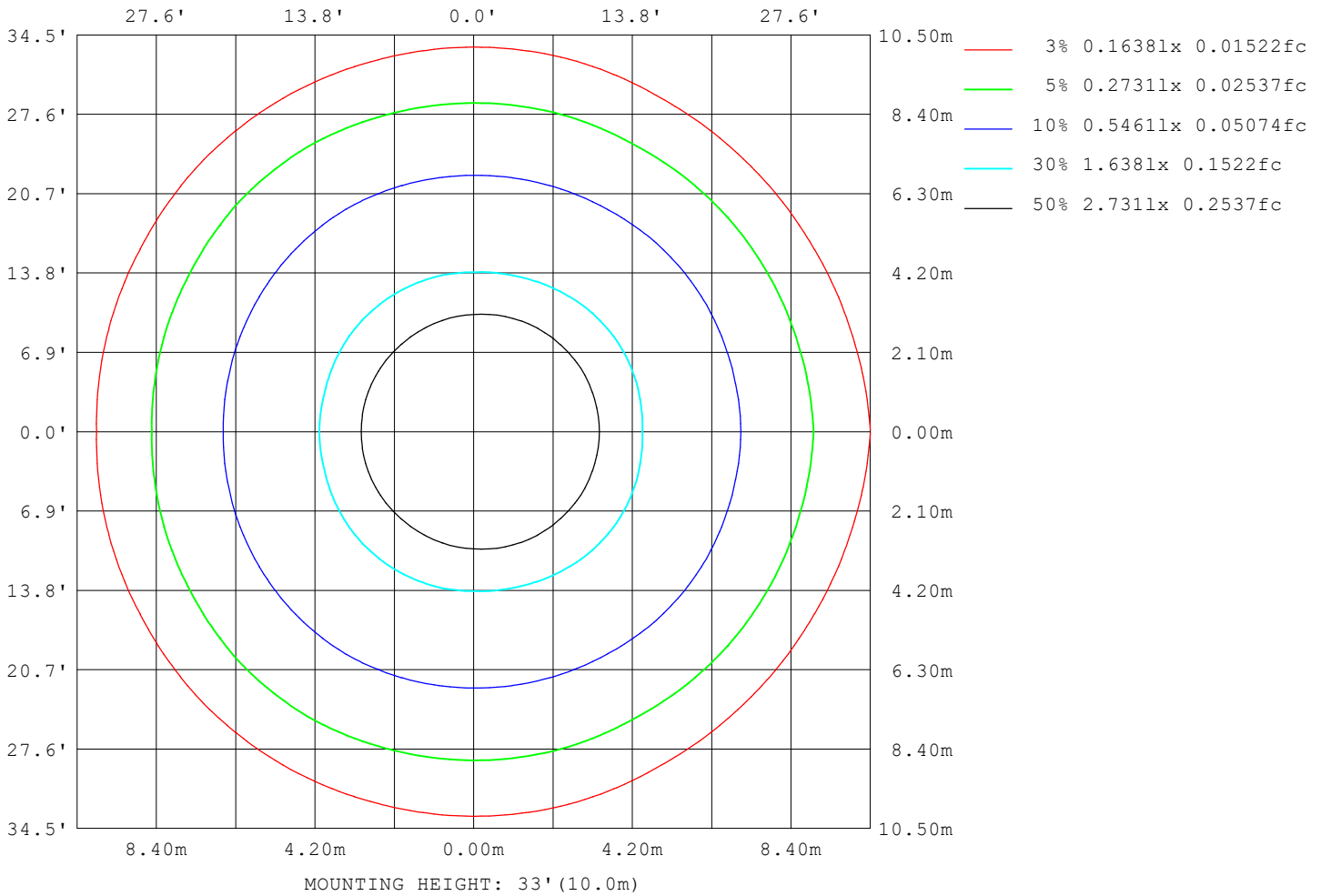
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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-300-30X40  
 3W / 3000K / 40D / 300LM

**ISOLUX DIAGRAM**

Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm		
NAME: AGL-300-30X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X40	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-300-30X40  
 3W / 3000K / 40D / 300LM

**LED Avg.L Report**

Test:U:23.879V I:0.1383A P:3.3031W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:366.44x1 lm		
NAME: AGL-300-30X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-30X40	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

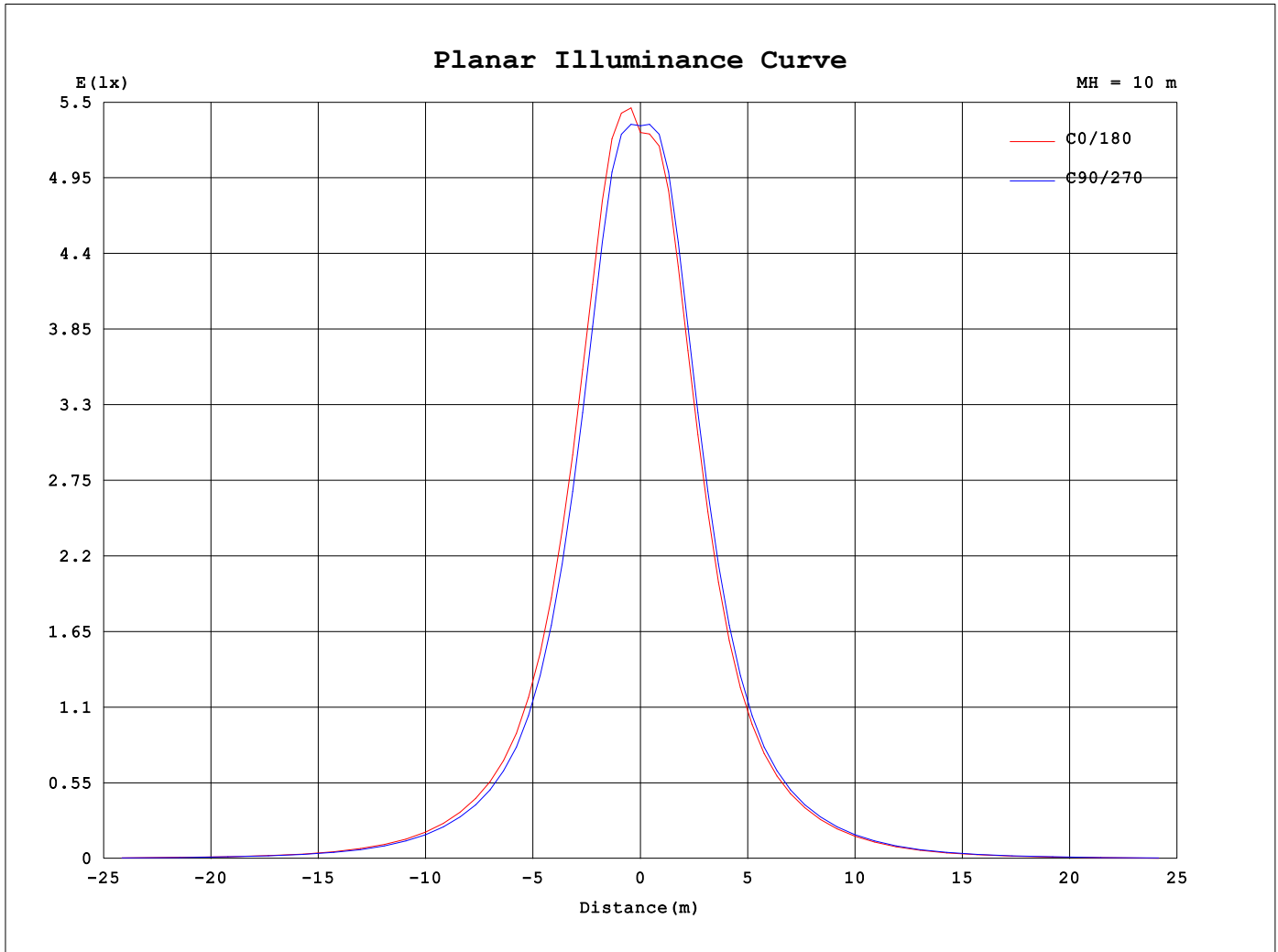
AvgL	cd/m2
L_0~180 (65) av	19677
L_0~180 (75) av	9185
L_0~180 (85) av	6946
L_90~270 (65) av	19293
L_90~270 (75) av	8880
L_90~270 (85) av	6364
L_45 (65) av	17182
L_45 (75) av	8334
L_45 (85) av	6789

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-300-30X40  
 3W / 3000K / 40D / 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

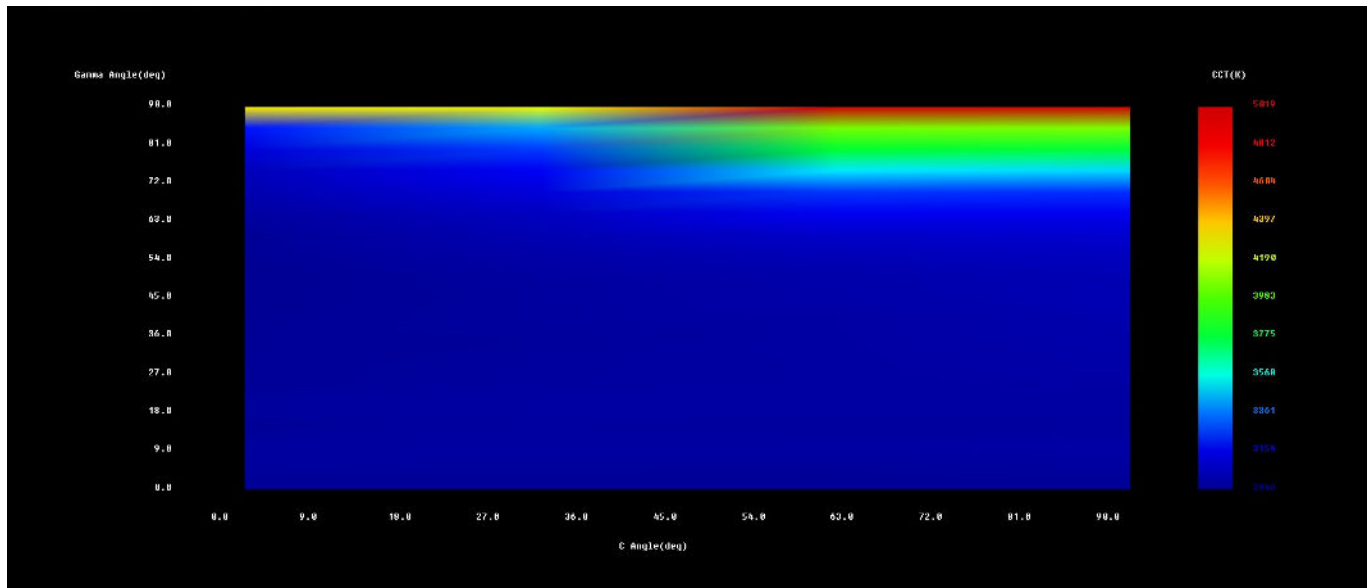
γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.473  
 Humidity: 65.0%  
 Test Distance: 3.100m [K=1.0000]  
 Remarks: AGL-300-30X40  
 3W / 3000K / 40D / 300LM





### Spatial Color Distribution Report

NAME: AGL-300-30X40	TYPE: MR16 LAMP	WEIGHT: 100GM
DIM.: 50MM	SPEC.: AGL-300-30X40	SERIAL No.: -
MFR.: AQUALUX		



#### Color Parameters:

Average:  $x=0.4362, y=0.4002$   $u'=0.2518, v'=0.5197$  CCT=2980K Ra=81.5 Rf=83 Rg=97  
Center :  $x=0.4383, y=0.4017$   $u'=0.2525, v'=0.5207$  CCT=2958K Ra=81.2 Rf=82 Rg=97  
IESNA LM-79-2019 Max.  $du'v'$ : 0.0036 / max. $du'v'$ : 0.0000[Set Range]  
GB/T 24824(LB/T 001-2009):: avg. color nonuniformity  $du'v'$ :0.0012  
GB/T 24824(LB/T 001-2009):: max. color nonuniformity  $du'v'$ :0.0017  
Average: R1=80 R2=90 R3=96 R4=80 R5=80 R6=88 R7=82 R8=57 R9=2 R10=78  
R11=79 R12=73 R13=82 R14=98 R15=72

Tester: NICK  
Temperature: 20°C  
Manufacturer: AQUALUX

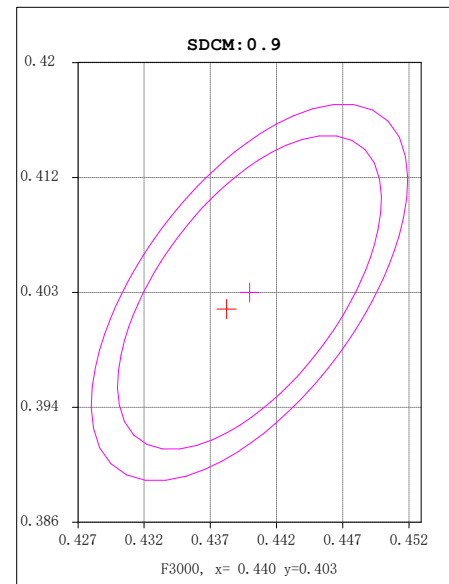
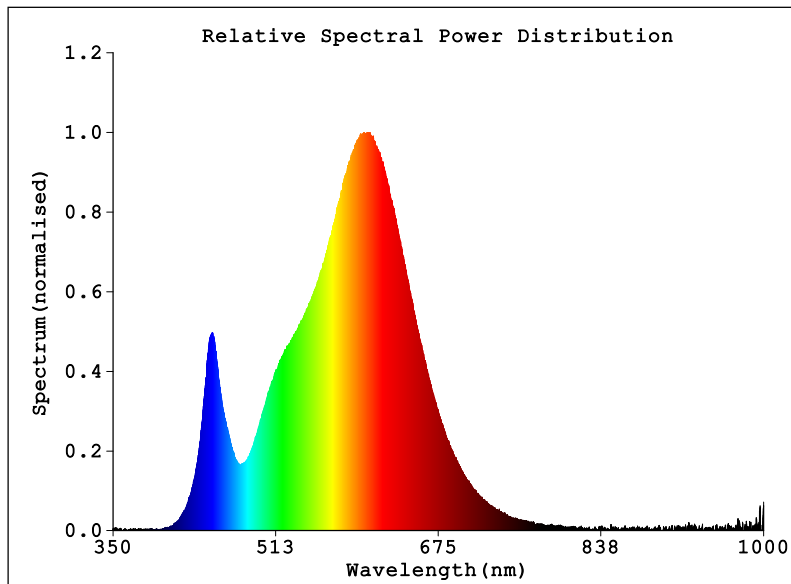
Date: 12 October 2023  
Humidity: 65.0%  
Remarks: AGL-300-30X403W / 3000K / 40D / 300LM

System: GO-SPEX500\_V1



### Spectral Radiant Test Report

NAME: AGL-300-30X40	TYPE: MR16 LAMP	WEIGHT: 100GM
DIM.: 50MM	SPEC.: AGL-300-30X40	SERIAL No.: -
MFR.: AQUALUX		



#### Photon & Colormetric & Photometric Quantities:

Chromaticity Coordinates:  $x=0.4383$   $y=0.4017/u'=0.2525$   $v'=0.5207$   $duv=-0.00112$

Tc=2958K Dominant WL: Ld=583.4nm Purity=52.1%

Ratio: R=23.0% G=74.6% B=2.4% Peak WL: Lp=606.6nm HWL: 121.1nm

Rendering Index: Ra=81.2 TM-30: Rf=82 Rg=97

R1 =79 R2 =90 R3 =96 R4 =79 R5 =80 R6 =88 R7 =82

R8 =56 R9 =1 R10=77 R11=78 R12=72 R13=82 R14=98 R15=72

E = 54.07 lx Ee = 0.1648 W/m<sup>2</sup>

Status: T=1036.80ms Ip=51717 (79%) [ HAAS-1200(CAN) ]

Electrical: U=23.879V I=0.1383A P=3.3021W PF=1.0000

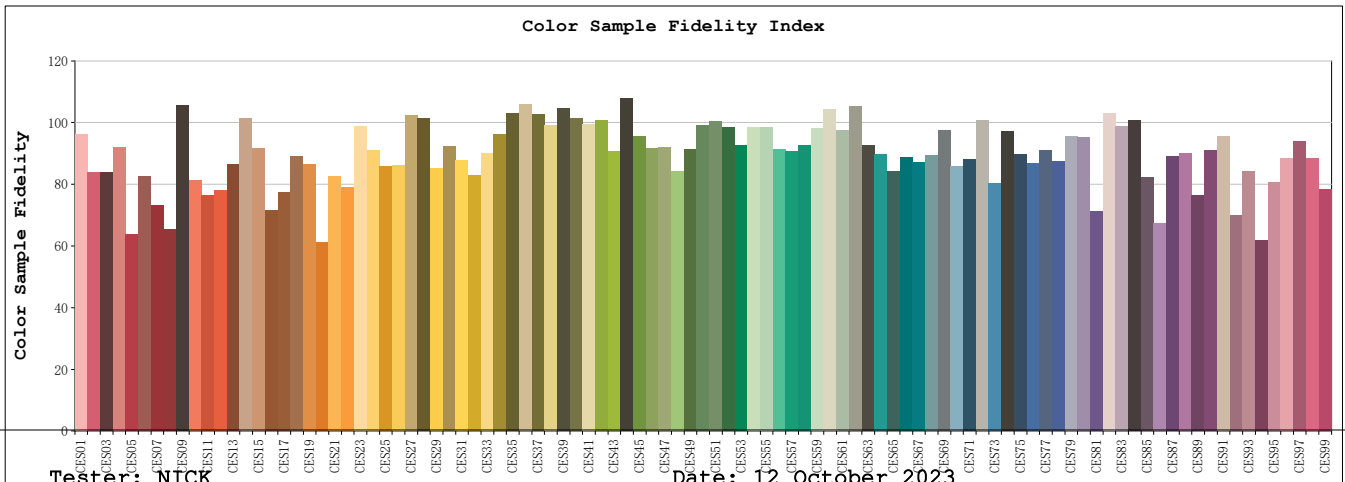
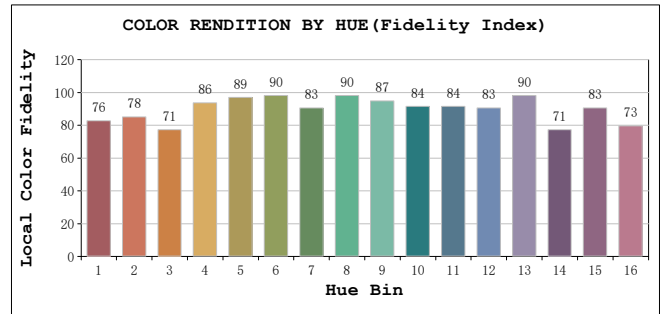
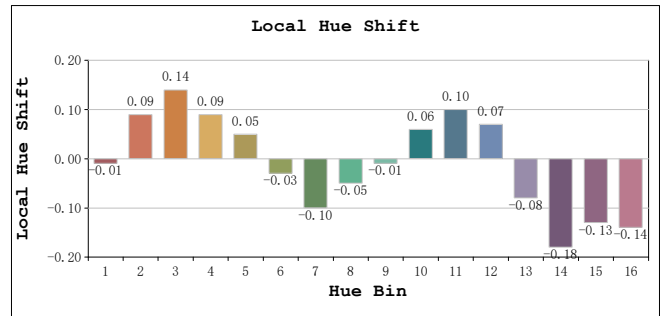
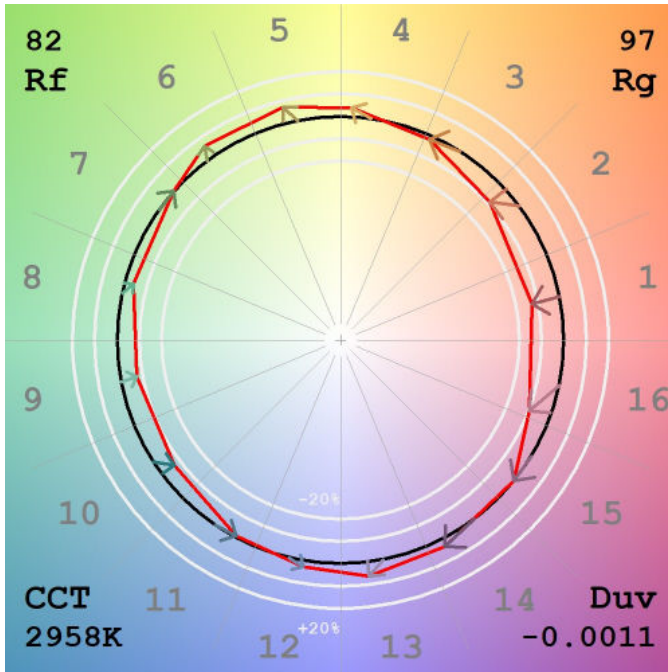
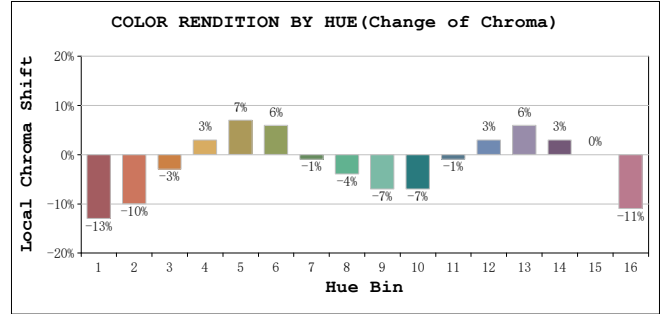
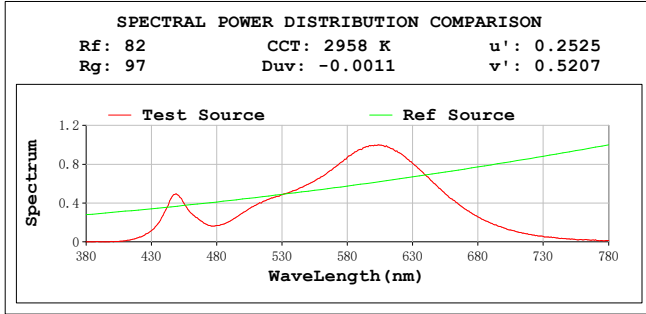
Test position: Center

Tester: NICK  
 Temperature: 20°C  
 Manufacturer: AQUALUX

Date: 12 October 2023  
 Humidity: 65.0%  
 Remarks: AGL-300-30X403W / 3000K / 40D / 300LM

System: GO-SPEX500\_V1

# TM30



**All Rf:**

Rf1 = 88.3	Rf2 = 76.9	Rf3 = 77.1
Rf4 = 84.4	Rf5 = 58.6	Rf6 = 75.6
Rf7 = 67.3	Rf8 = 60.0	Rf9 = 96.9
Rf10 = 74.5	Rf11 = 70.0	Rf12 = 71.7
Rf13 = 79.4	Rf14 = 92.9	Rf15 = 84.2
Rf16 = 65.8	Rf17 = 71.1	Rf18 = 81.8
Rf19 = 79.3	Rf20 = 56.2	Rf21 = 75.6
Rf22 = 72.4	Rf23 = 90.5	Rf24 = 83.5
Rf25 = 78.6	Rf26 = 79.0	Rf27 = 93.8
Rf28 = 93.1	Rf29 = 78.2	Rf30 = 84.6
Rf31 = 80.6	Rf32 = 76.0	Rf33 = 82.6
Rf34 = 88.2	Rf35 = 94.3	Rf36 = 97.1
Rf37 = 94.1	Rf38 = 91.0	Rf39 = 96.0
Rf40 = 92.9	Rf41 = 91.3	Rf42 = 92.4
Rf43 = 83.3	Rf44 = 98.9	Rf45 = 87.7
Rf46 = 84.0	Rf47 = 84.5	Rf48 = 77.2
Rf49 = 83.8	Rf50 = 91.0	Rf51 = 92.0
Rf52 = 90.3	Rf53 = 84.9	Rf54 = 90.4
Rf55 = 90.2	Rf56 = 83.7	Rf57 = 83.2
Rf58 = 85.0	Rf59 = 90.1	Rf60 = 95.8
Rf61 = 89.4	Rf62 = 96.5	Rf63 = 85.0
Rf64 = 82.3	Rf65 = 77.4	Rf66 = 81.3
Rf67 = 80.0	Rf68 = 82.1	Rf69 = 89.5
Rf70 = 78.6	Rf71 = 80.6	Rf72 = 92.4
Rf73 = 73.6	Rf74 = 89.1	Rf75 = 82.4
Rf76 = 79.7	Rf77 = 83.5	Rf78 = 80.1
Rf79 = 87.8	Rf80 = 87.3	Rf81 = 65.4
Rf82 = 94.6	Rf83 = 90.8	Rf84 = 92.3
Rf85 = 75.4	Rf86 = 61.9	Rf87 = 81.8
Rf88 = 82.6	Rf89 = 70.2	Rf90 = 83.3
Rf91 = 87.7	Rf92 = 64.2	Rf93 = 77.3
Rf94 = 56.7	Rf95 = 74.2	Rf96 = 81.2
Rf97 = 86.3	Rf98 = 81.1	Rf99 = 72.0

Tester: NICK  
Temperature: 20°C  
Manufacturer: AQUALUX

Date: 12 October 2023  
Humidity: 65.0%  
Remarks: AGL-300-30X403W / 3000K / 40D / 300LM

System: GO-SPEX500\_V1



