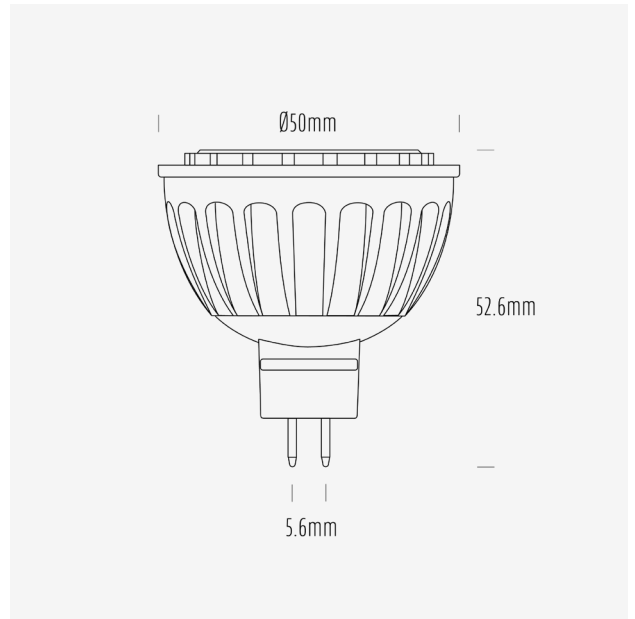


AGL 300 Series

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	24VDC	24VAC
Rated Power	3.6	2.9	3.4	3.6
Operating Frequency	-	50Hz	-	50Hz

Max. no. of lamps on AQD24-040	9	-	9	-
Max. no. of lamps on AQD24-100	>22	-	>22	-
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	24VDC	24VAC
Input Power (W)	3.6	2.9	3.4	3.6
Rated Flux (lm)	458	361	463	466
Efficacy (lm/W)	128	126	136	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°

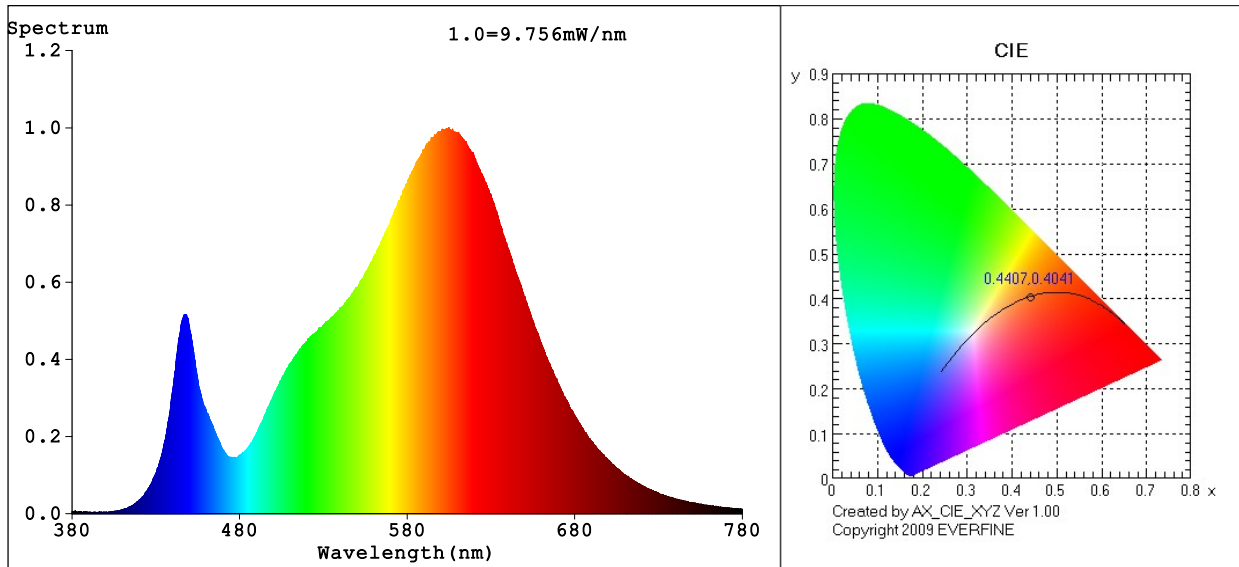
Lifespan Data

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

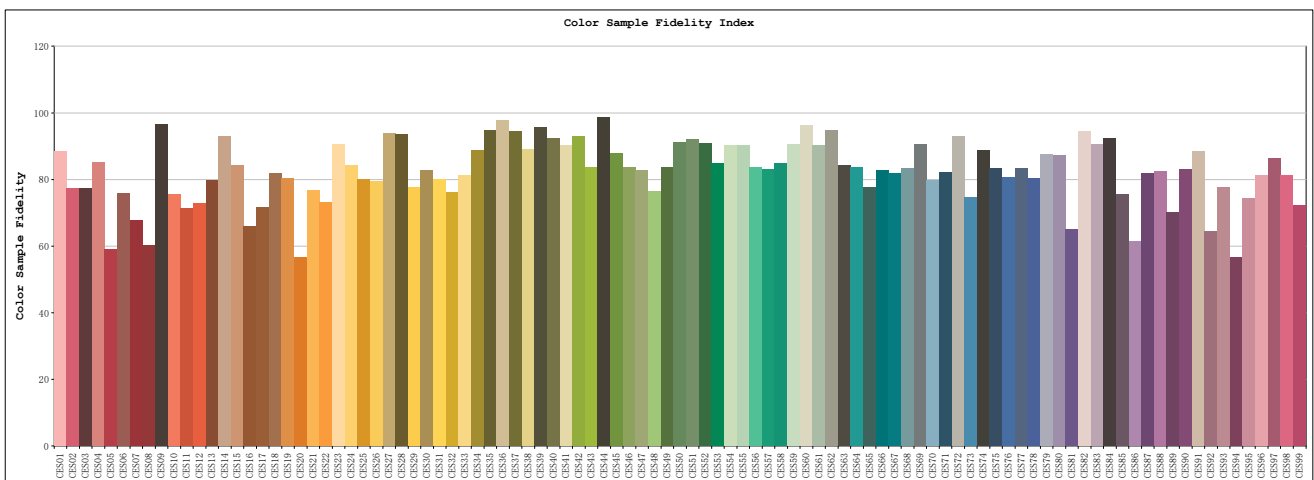
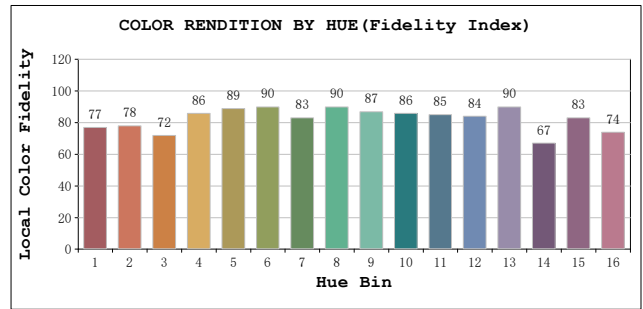
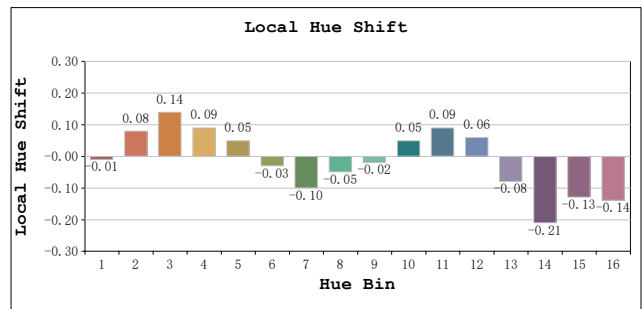
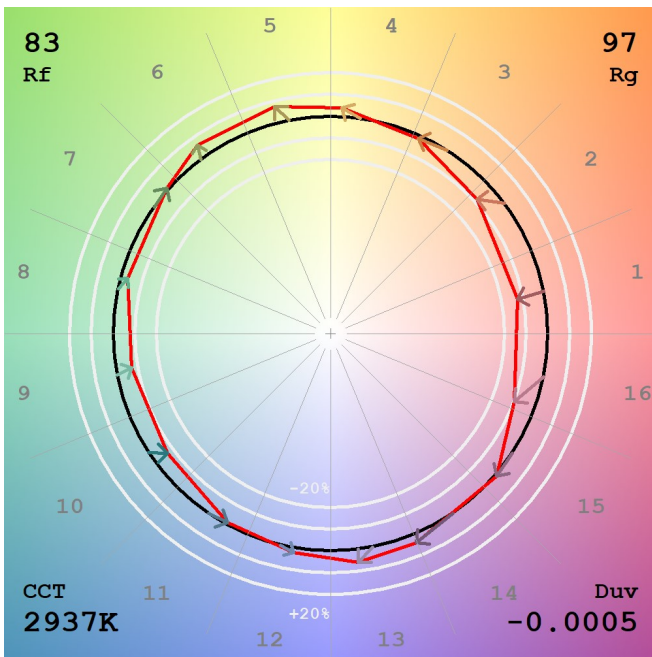
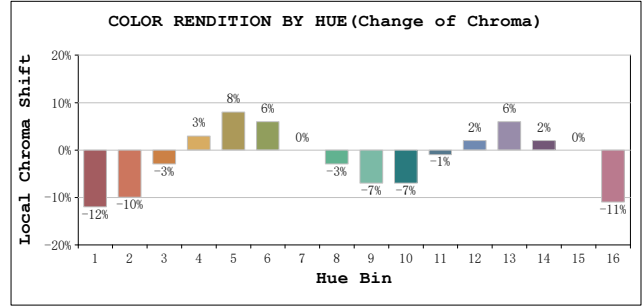
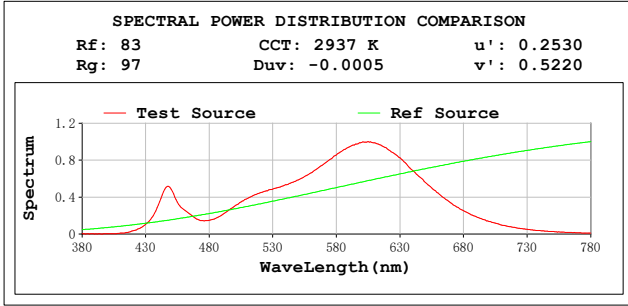
Electrical parameters:

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

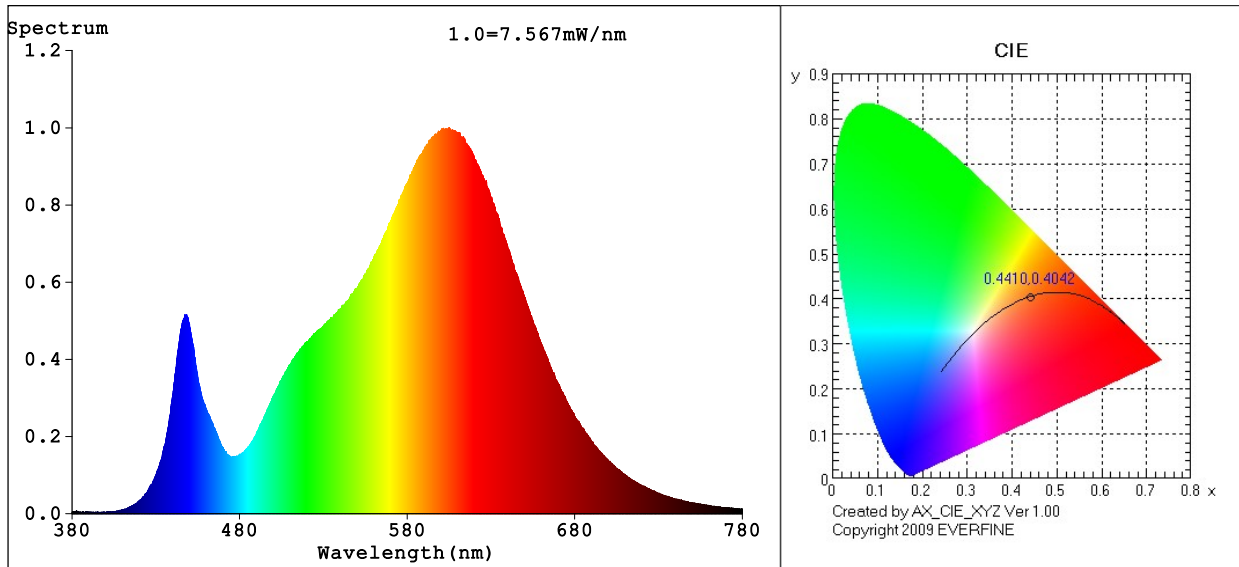
View Angle:2 Deg



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

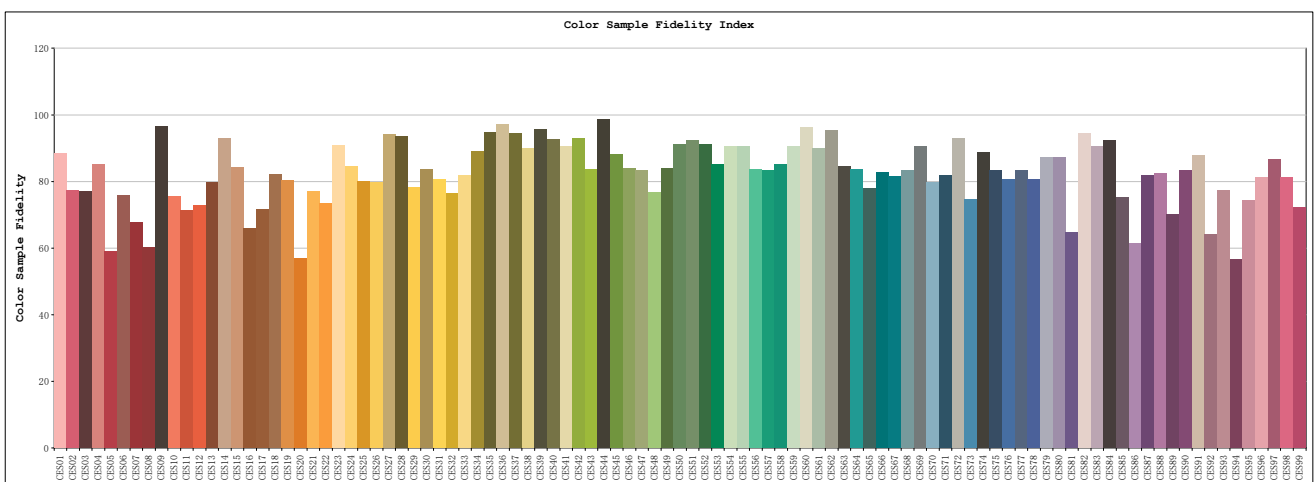
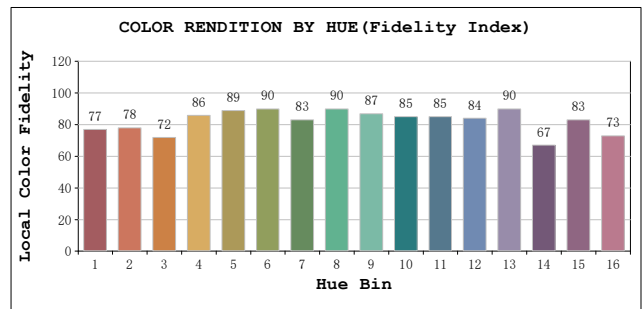
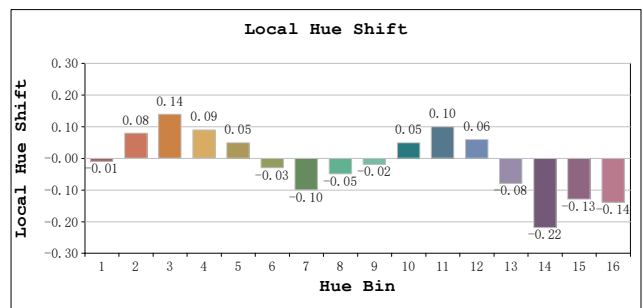
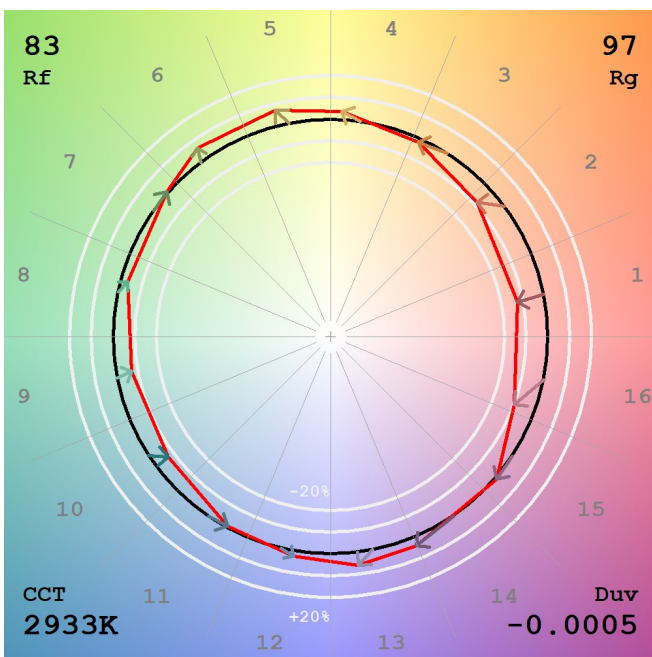
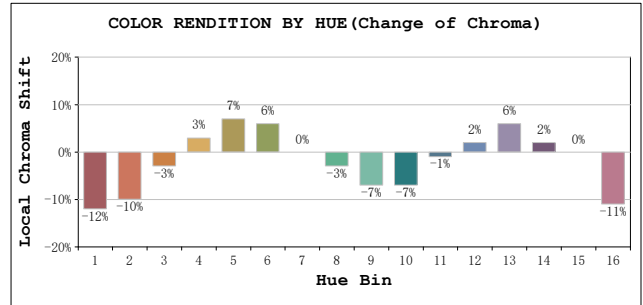
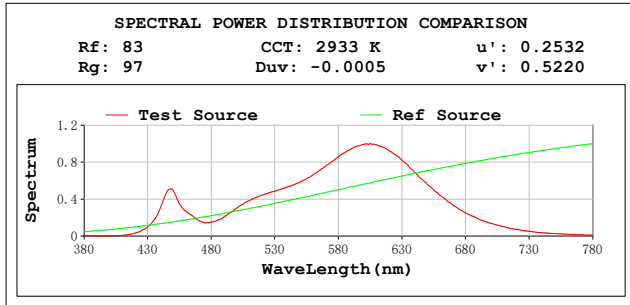
LEVEL:OUT WHITE:ANSI_3000K

Status: Integral T = 281 ms Ip = 37144 (57%)

GBT5702

TM30

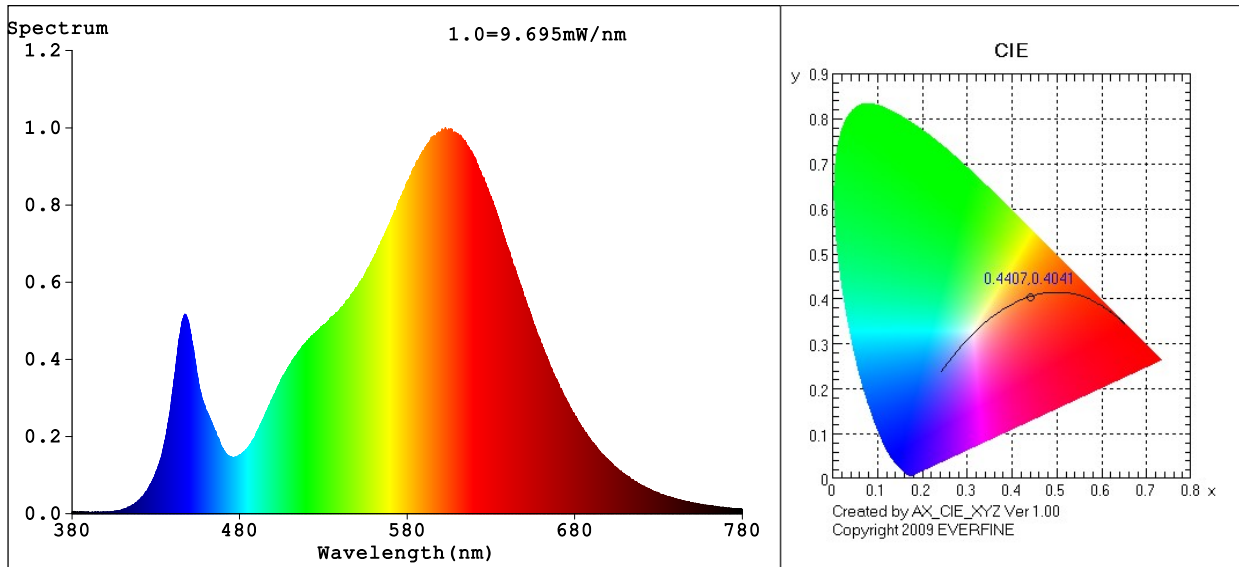
View Angle:2 Deg



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

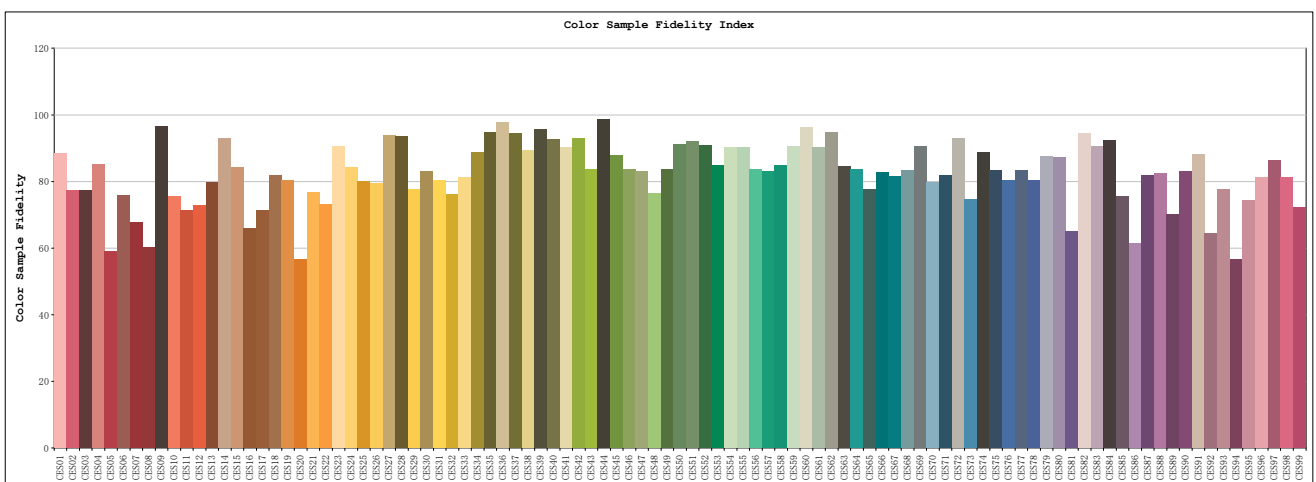
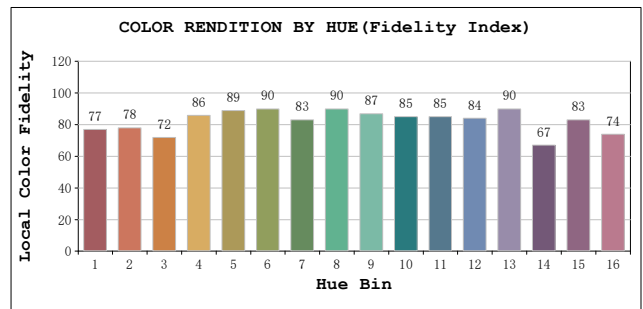
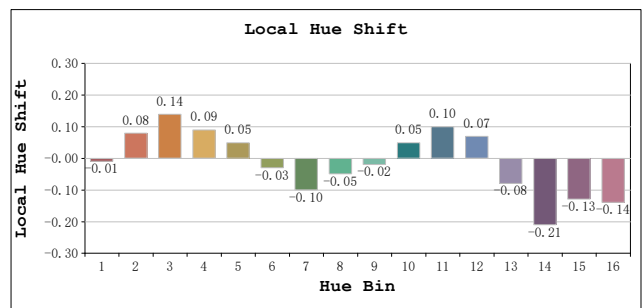
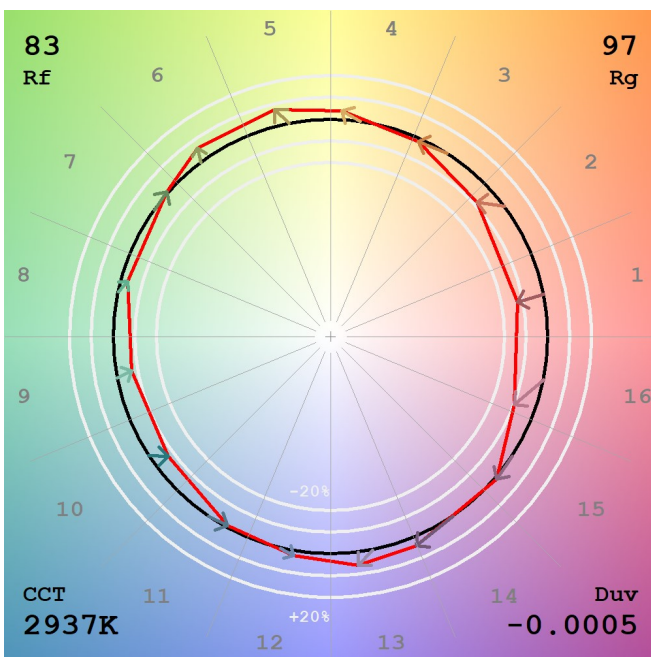
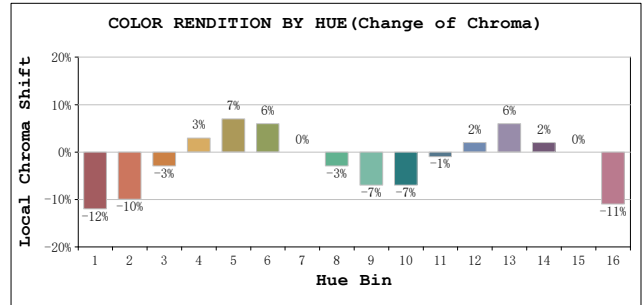
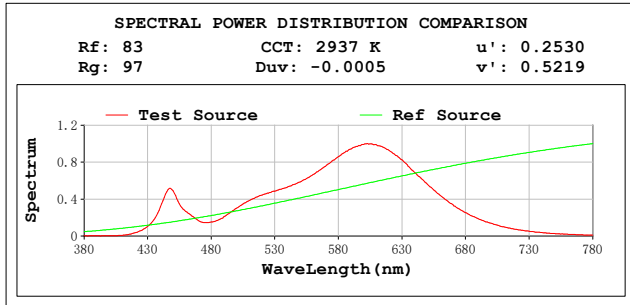
Electrical parameters:

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

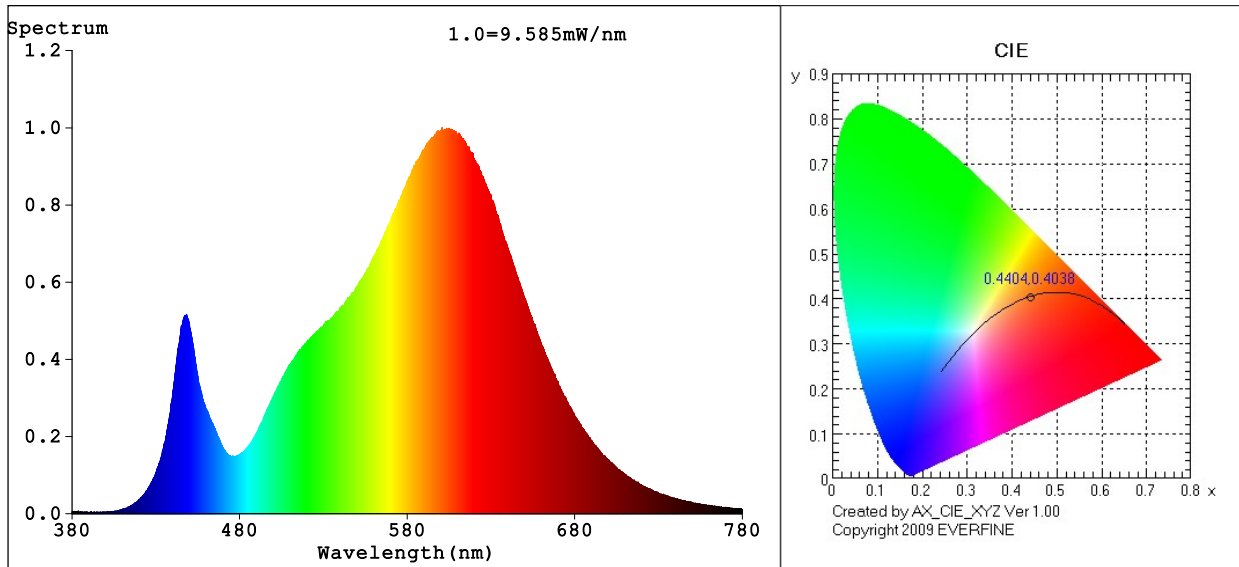
View Angle:2 Deg



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

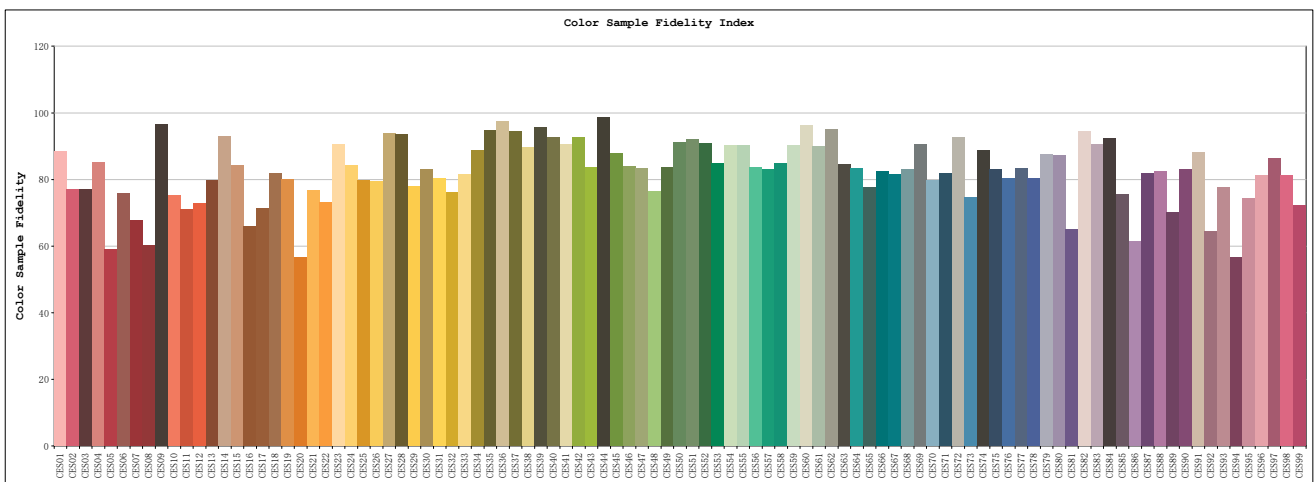
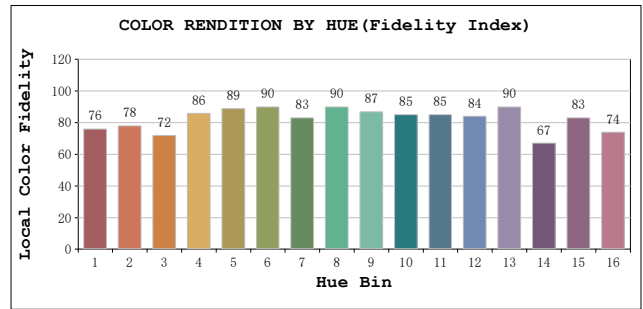
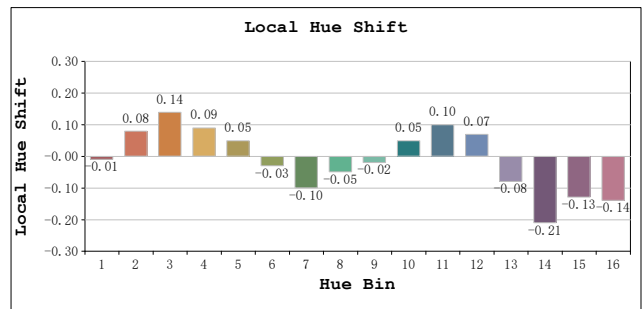
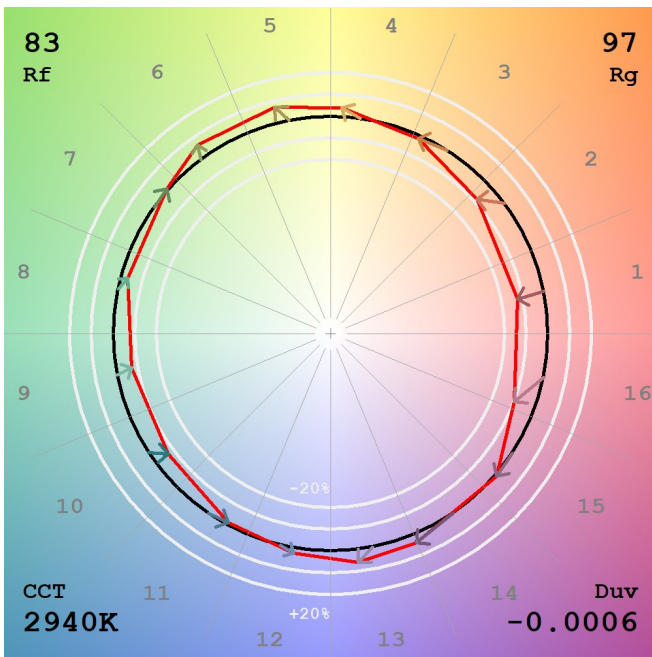
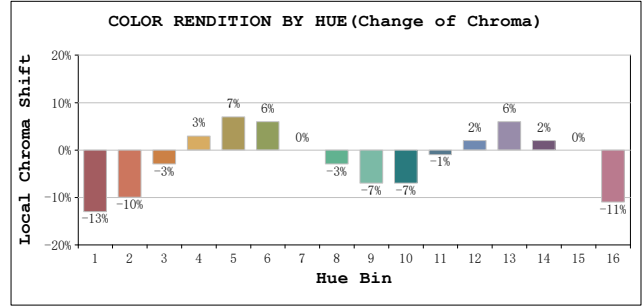
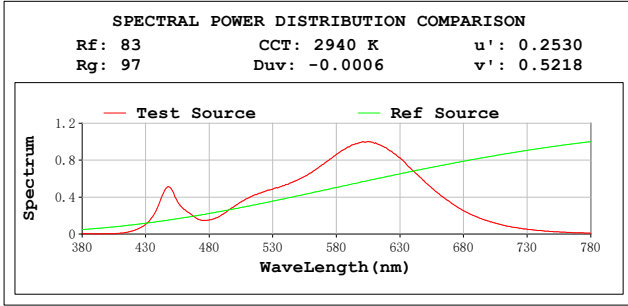
Electrical parameters:

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



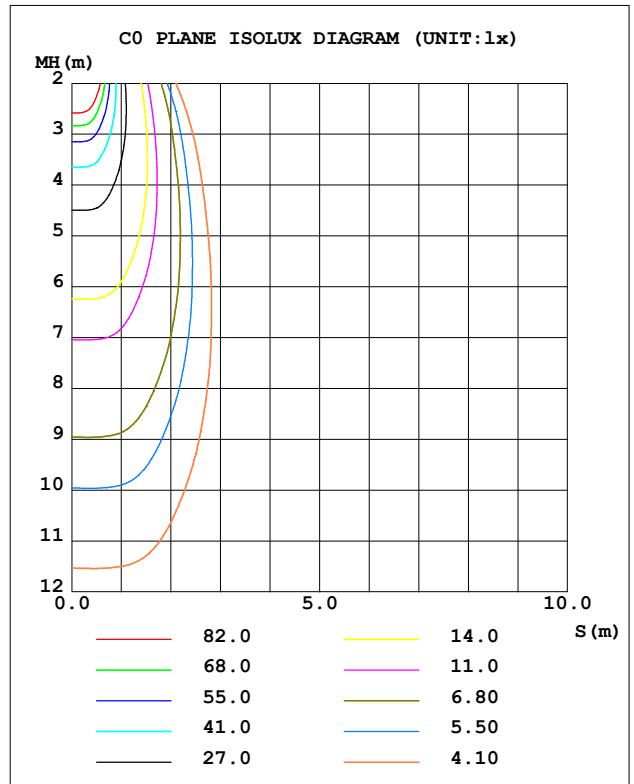
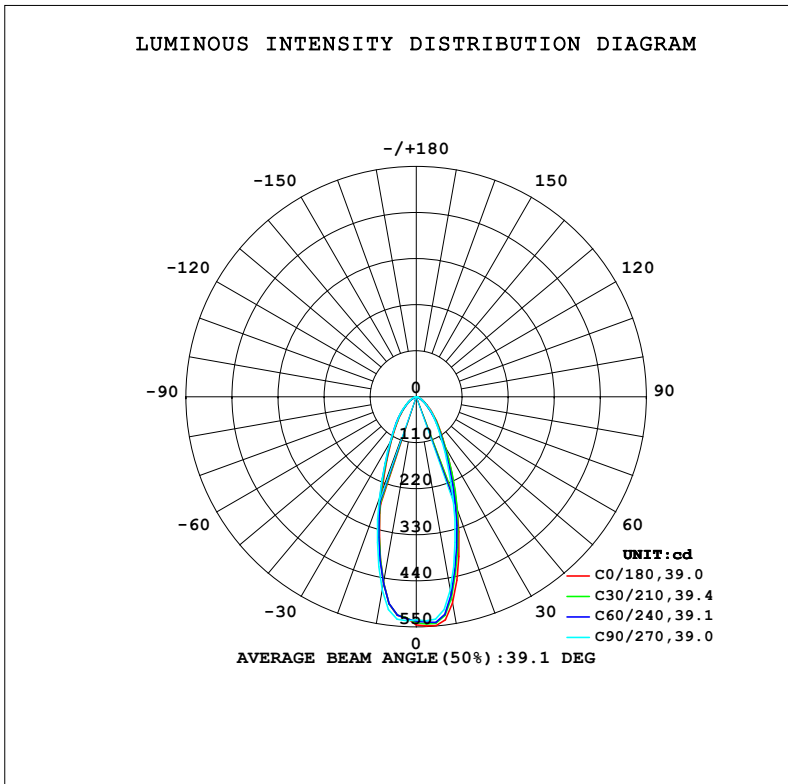
Model:AGL-300-30X40
 Tester:NC
 Temperature:25.3Deg
 Manufacturer:AQUALUX

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 _{max} (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:

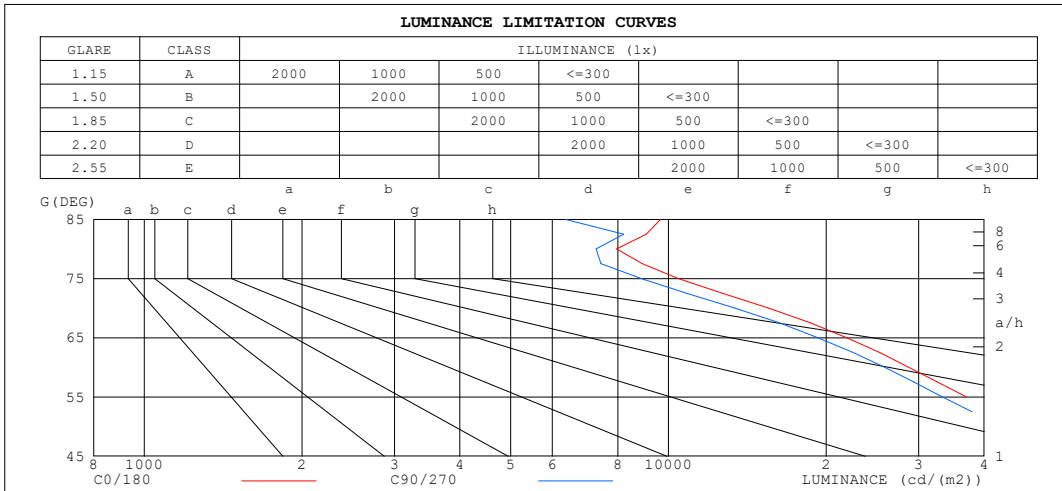
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	∅ zone	∅ total	%lum, lamp
10	501.0	481.4	469.5	451.9	451.0	451.9	469.5	481.4	0- 10	48.86	48.86	13.3,13.3
20	287.5	281.6	258.1	250.2	242.5	250.2	258.1	281.6	10- 20	100.2	149.0	40.7,40.7
30	140.5	136.2	125.1	121.5	117.6	121.5	125.1	136.2	20- 30	85.36	234.4	64,64
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

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

LUMINANCE LIMITATION 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:



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

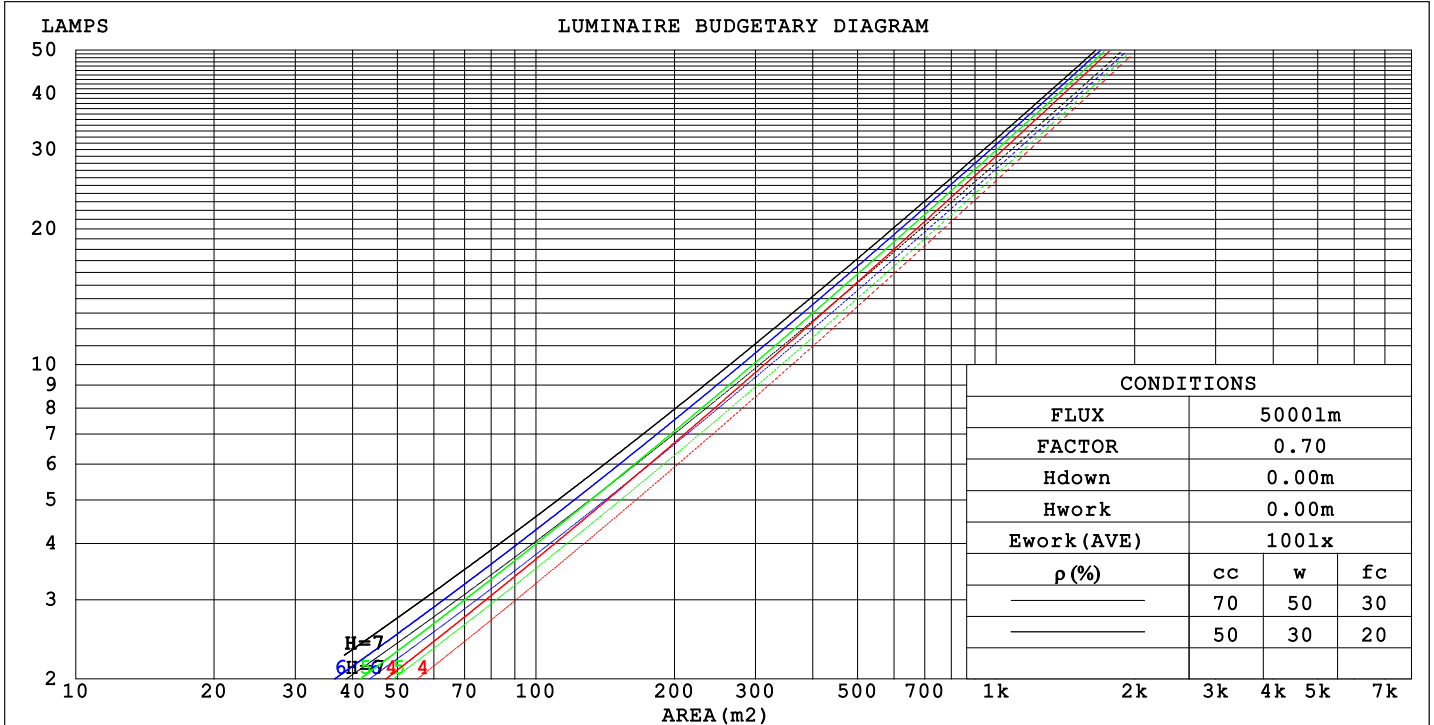
C Range: 0 - 180DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:20°C
 Operators:NICK
 Test Date:12 October 2023

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

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%	
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	1.10	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:

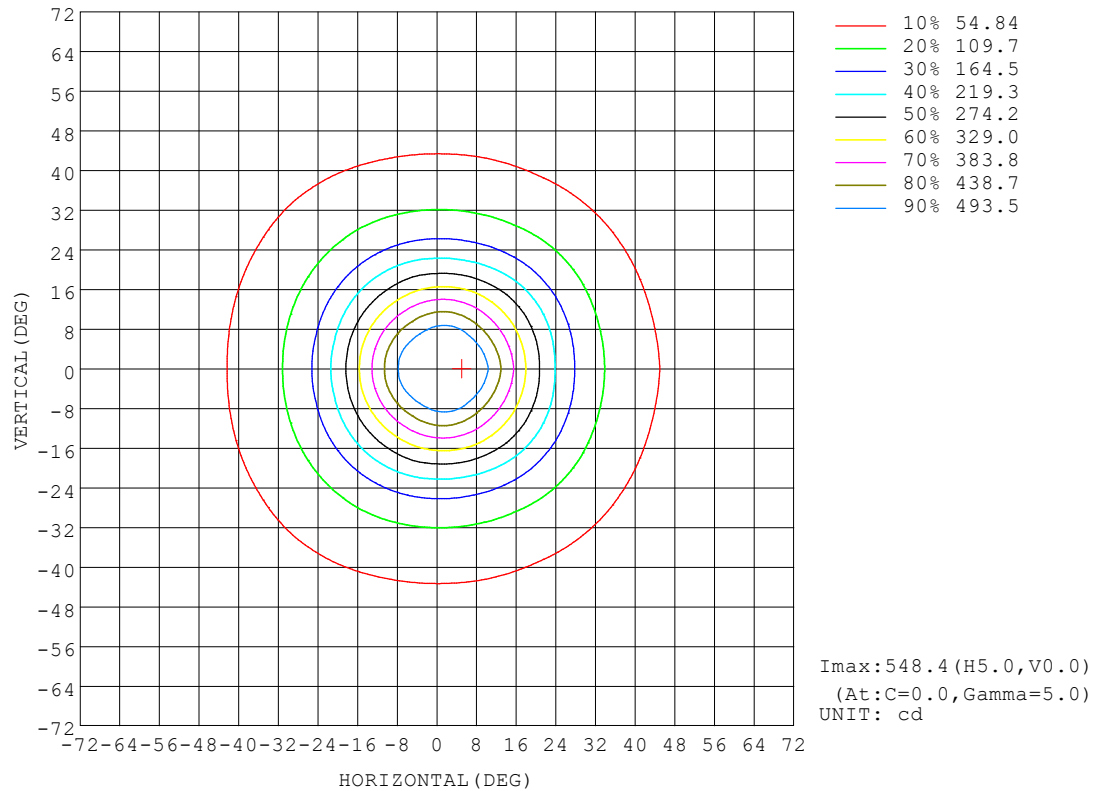
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	79	71	66	78	71	66	77	70	66	62
0.80	87	80	75	87	80	75	85	79	75	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:

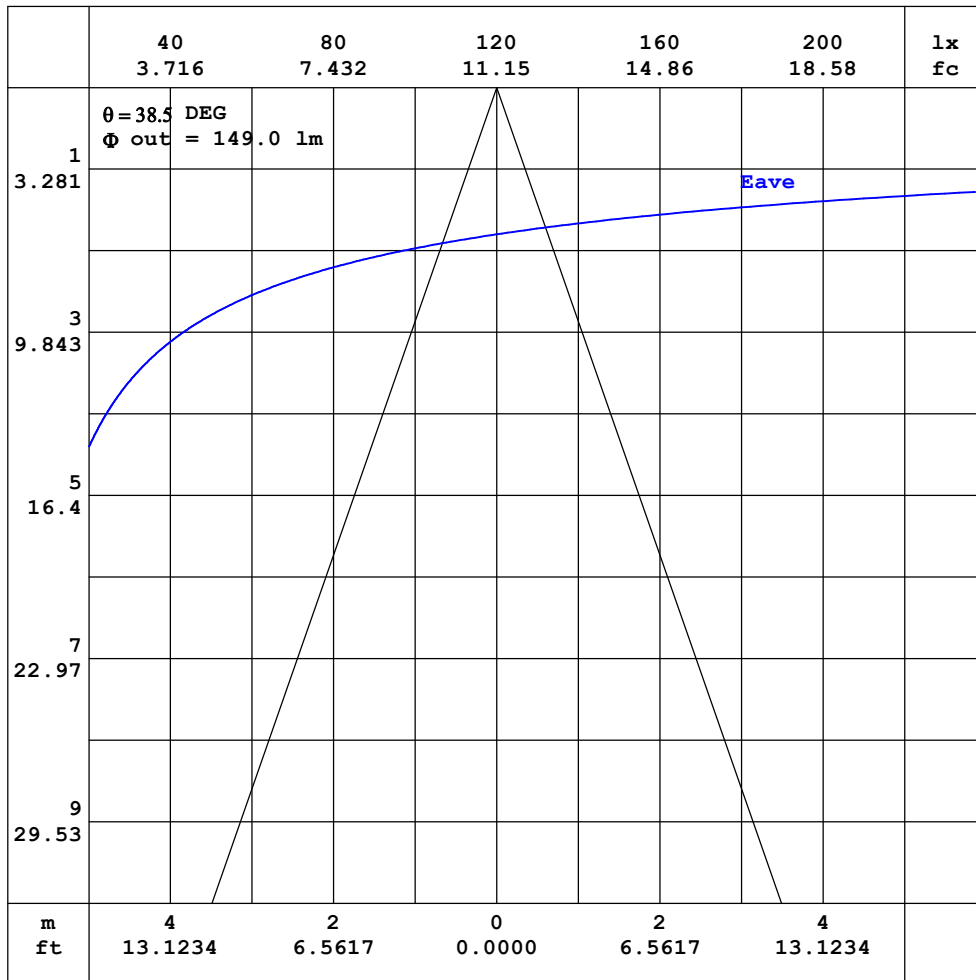


C Range: 0 - 180DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:20°C
 Operators:NICK
 Test Date:12 October 2023

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:



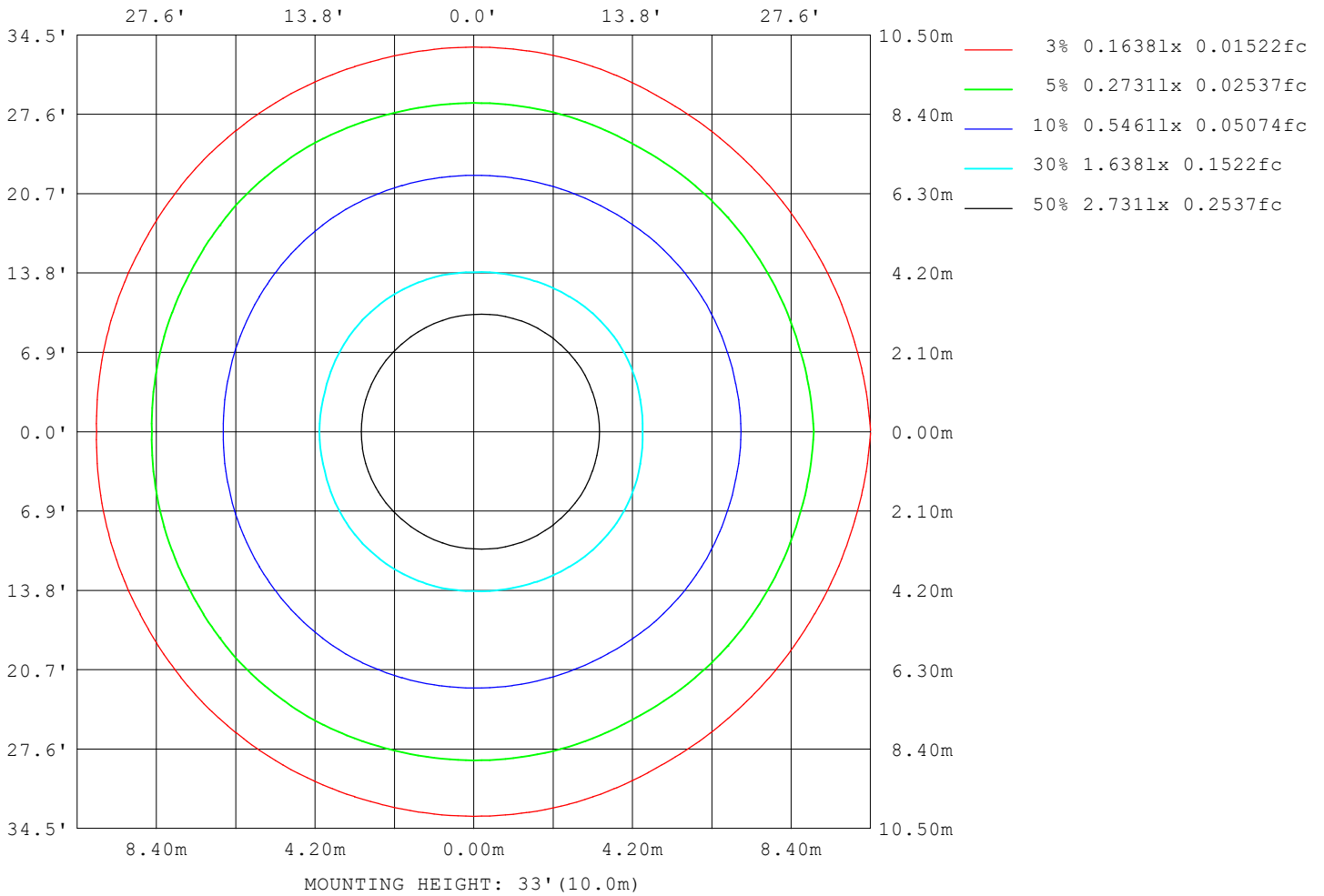
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

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

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:

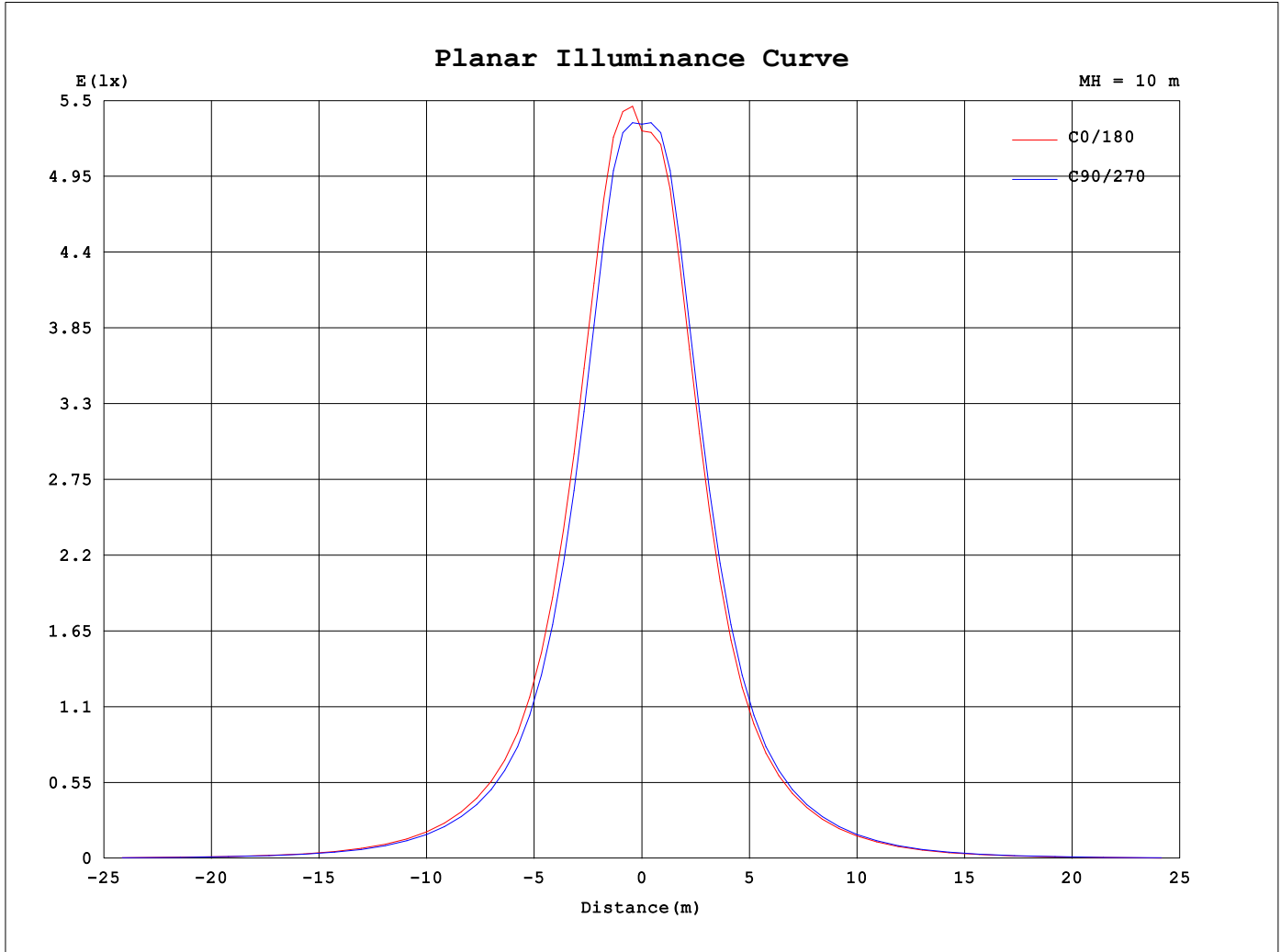
AvgL	cd/m2
L_0~180 (65) av	19677
L_0~180 (75) av	9185
L_0~180 (85) av	6946
L_90~270 (65) av	19293
L_90~270 (75) av	8880
L_90~270 (85) av	6364
L_45 (65) av	17182
L_45 (75) av	8334
L_45 (85) av	6789

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

LUMINOUS DISTRIBUTION INTENSITY DATA

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:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	545	540	539	536	536	533	533	531	531	530	529	528	528	528	529	530	531	531	533
5	548	545	543	541	541	537	533	527	524	523	523	524	524	524	523	523	524	527	533
10	501	494	487	481	480	475	470	460	453	452	451	452	451	452	451	452	453	460	470
15	395	388	382	377	373	367	360	354	348	345	343	343	342	343	343	345	348	354	360
20	288	288	286	282	273	264	258	259	253	250	247	243	242	243	247	250	253	259	258
25	201	204	203	198	189	182	179	178	177	174	171	167	167	167	171	174	177	178	179
30	141	140	140	136	130	127	125	125	123	121	120	118	118	118	120	121	123	125	125
35	102	101	99.7	97.3	93.8	92.0	91.1	91.4	91.7	90.4	88.4	87.1	85.8	87.1	88.4	90.4	91.7	91.4	91.1
40	75.2	73.0	71.5	70.0	67.9	67.9	67.5	67.5	68.3	67.6	65.5	64.5	63.5	64.5	65.5	67.6	68.3	67.5	67.5
45	54.7	52.0	50.1	48.9	48.4	49.2	49.1	48.9	49.1	48.6	47.4	46.8	46.0	46.8	47.4	48.6	49.1	48.9	49.1
50	38.8	36.0	33.7	33.0	33.3	34.5	34.8	34.2	33.6	33.4	33.1	33.1	32.3	33.1	33.1	33.4	33.6	34.2	34.8
55	26.7	24.6	22.1	21.6	22.2	24.1	24.0	23.2	22.4	22.4	22.4	23.0	22.2	23.0	22.4	22.4	22.4	23.2	24.0
60	18.0	16.0	14.6	14.2	14.7	16.0	16.2	15.5	14.8	14.8	14.9	15.5	14.9	15.5	14.9	14.8	14.8	15.5	16.2
65	11.6	10.3	9.33	9.06	9.32	10.1	10.2	9.66	9.24	9.18	9.27	9.68	9.27	9.68	9.27	9.18	9.24	9.66	10.2
70	6.67	5.86	5.31	5.15	5.25	5.67	5.75	5.35	5.06	4.99	5.01	5.29	5.10	5.29	5.01	4.99	5.06	5.35	5.75
75	3.40	3.07	2.87	2.81	2.79	2.89	2.89	2.73	2.64	2.61	2.54	2.61	2.57	2.61	2.54	2.61	2.64	2.73	2.89
80	1.74	1.69	1.65	1.68	1.61	1.60	1.59	1.58	1.54	1.54	1.50	1.49	1.48	1.49	1.50	1.54	1.54	1.58	1.59
85	1.06	1.01	0.99	0.96	0.83	0.78	0.70	0.63	0.57	0.53	0.48	0.47	0.46	0.47	0.48	0.53	0.57	0.63	0.70
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

LUMINOUS DISTRIBUTION INTENSITY DATA

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:

Table--2

UNIT: cd

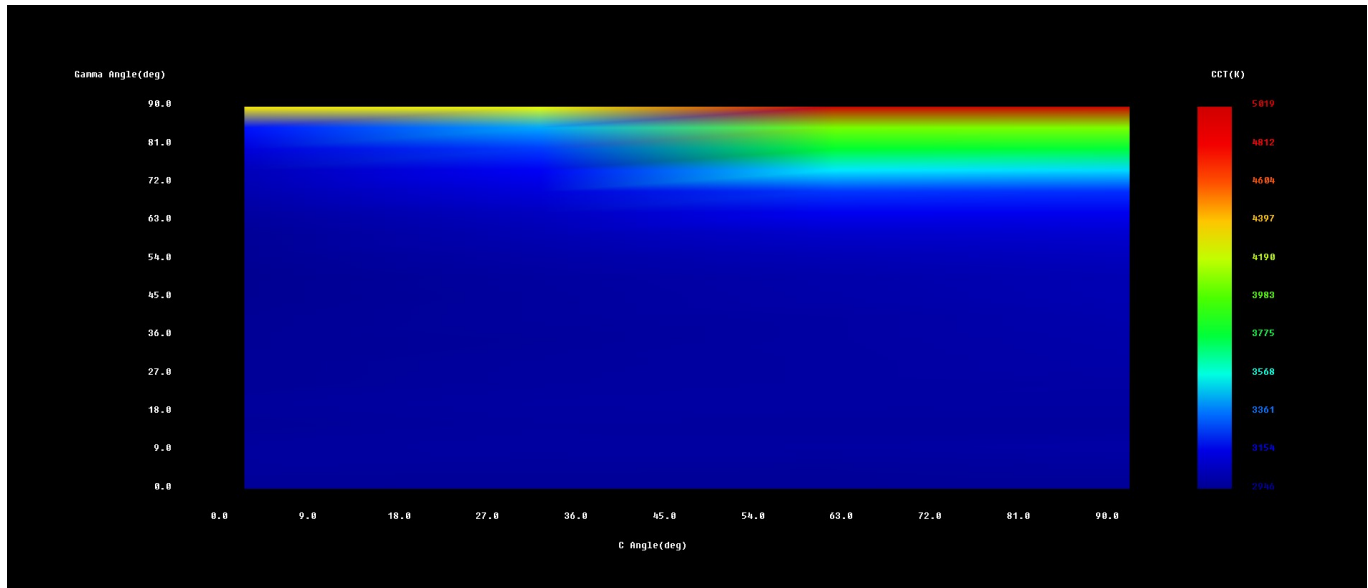
C (DEG) \ γ (DEG)	285	300	315	330	345													
0	533	536	536	539	540													
5	537	541	541	543	545													
10	475	480	481	487	494													
15	367	373	377	382	388													
20	264	273	282	286	288													
25	182	189	198	203	204													
30	127	130	136	140	140													
35	92.0	93.8	97.3	99.7	101													
40	67.9	67.9	70.0	71.5	73.0													
45	49.2	48.4	48.9	50.1	52.0													
50	34.5	33.3	33.0	33.7	36.0													
55	24.1	22.2	21.6	22.1	24.6													
60	16.0	14.7	14.2	14.6	16.0													
65	10.1	9.32	9.06	9.33	10.3													
70	5.67	5.25	5.15	5.31	5.86													
75	2.89	2.79	2.81	2.87	3.07													
80	1.60	1.61	1.68	1.65	1.69													
85	0.78	0.83	0.96	0.99	1.01													
90	0.00	0.00	0.00	0.00	0.00													

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

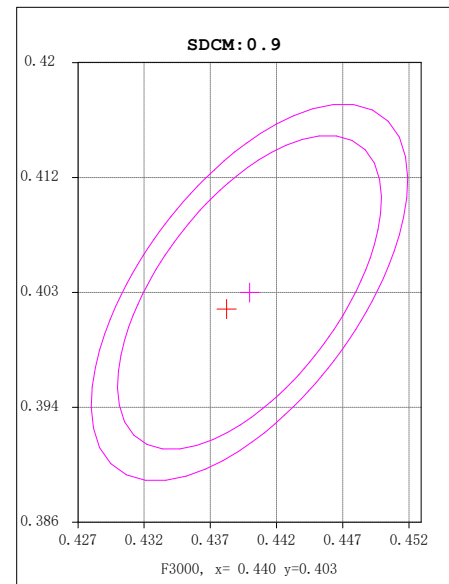
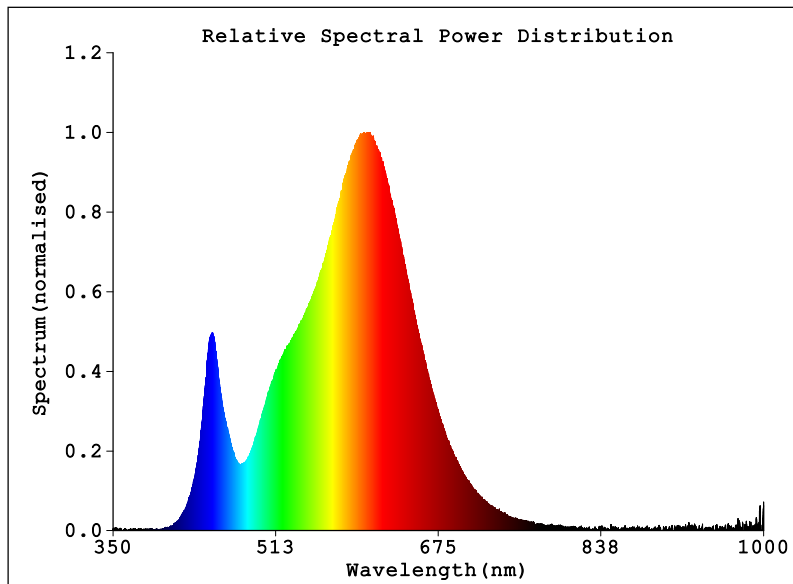
Tester: NICK
Temperature: 20°C
Manufacturer: AQUALUX

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/m²

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

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

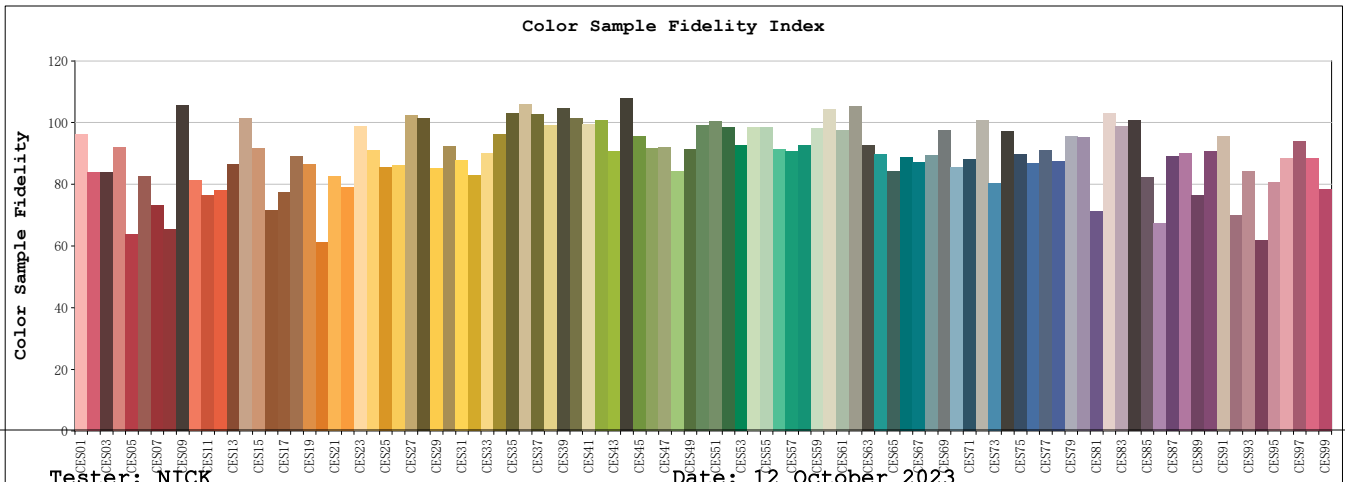
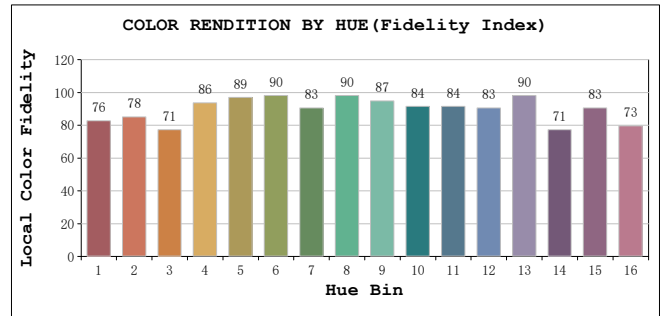
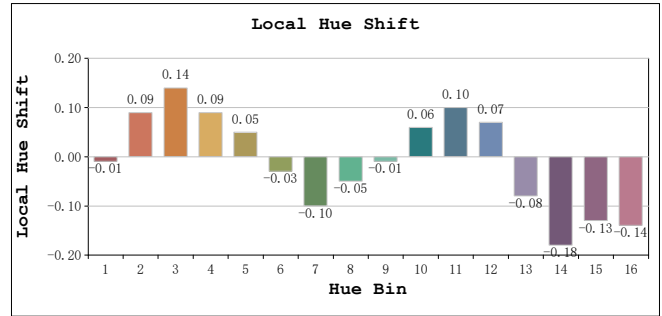
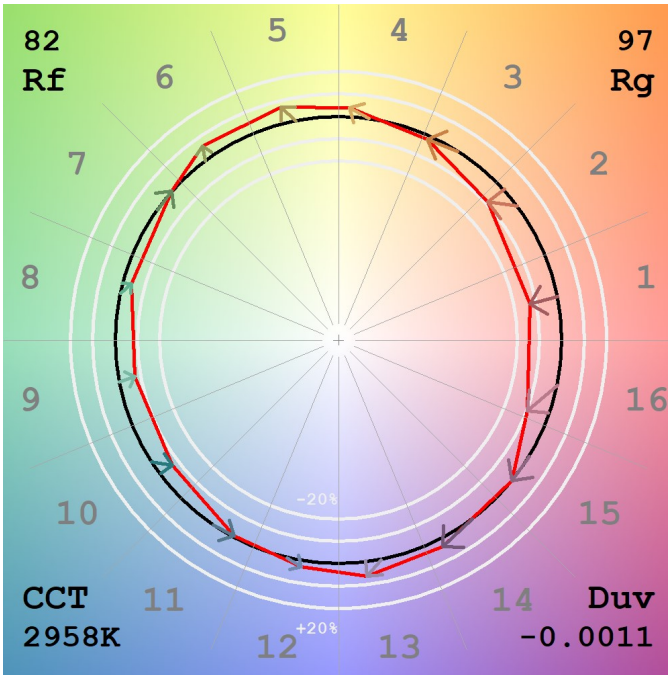
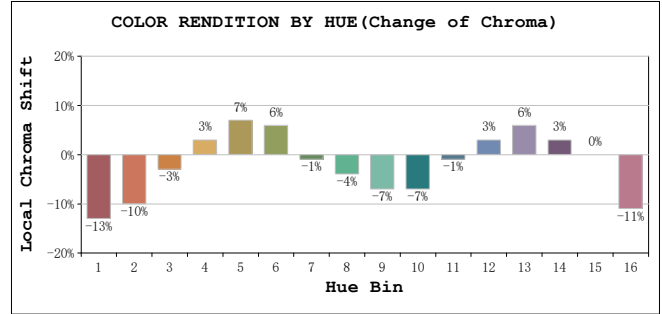
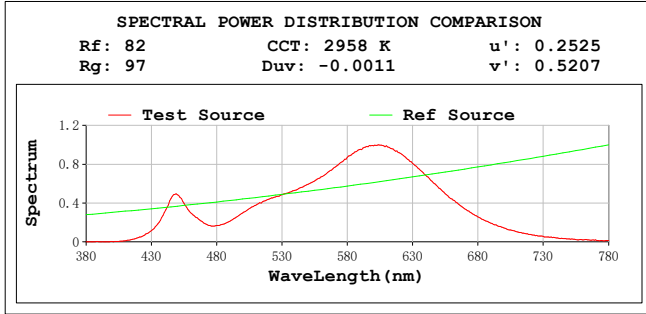
Test position: Center

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



Tester: NICK
 Temperature: 20°C
 Manufacturer: AQUALUX
 System: GO-SPEX500_V1

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

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

Gamma\C	C0			CCT (K)	Ra	du'v'	Rf, Rg	Ip
	I (%)	CIE x, y	u', v'					
0.0	100.00	0.4383, 0.4017	0.2525, 0.5207	2958	81.2	0.0000	82, 97	51717
10.0	86.90	0.4370, 0.4011	0.2519, 0.5202	2974	81.3	0.0008	82, 96	45491
20.0	47.14	0.4368, 0.4006	0.2520, 0.5200	2974	81.4	0.0009	82, 97	27013
30.0	22.77	0.4379, 0.4012	0.2525, 0.5204	2960	81.3	0.0003	82, 97	32093
40.0	12.28	0.4387, 0.4022	0.2525, 0.5209	2955	81.2	0.0002	82, 96	22550
50.0	6.26	0.4402, 0.4041	0.2527, 0.5219	2946	81.3	0.0012	83, 96	32391
60.0	2.91	0.4390, 0.4034	0.2522, 0.5214	2960	81.6	0.0008	83, 96	29350
70.0	1.05	0.4351, 0.4026	0.2500, 0.5205	3019	82.6	0.0025	84, 96	29465
80.0	0.34	0.4250, 0.3938	0.2472, 0.5155	3126	86.9	0.0074	86, 99	29623
90.0	0.07	0.3602, 0.3348	0.2288, 0.4785	4326	83.8	0.0484	87, 110	29605
	C90							
0.0	99.88	0.4383, 0.4017	0.2525, 0.5207	2958	81.2	0.0000	82, 97	51717
10.0	91.92	0.4352, 0.3998	0.2513, 0.5194	2994	81.6	0.0018	82, 96	47767
20.0	51.11	0.4357, 0.3997	0.2516, 0.5195	2985	81.6	0.0015	82, 97	28857
30.0	25.33	0.4342, 0.3986	0.2512, 0.5188	3002	81.8	0.0023	82, 97	34512
40.0	14.09	0.4330, 0.3977	0.2508, 0.5183	3015	82.1	0.0029	82, 96	24230
50.0	7.59	0.4315, 0.3963	0.2504, 0.5175	3029	82.9	0.0038	83, 96	34748
60.0	3.82	0.4252, 0.3913	0.2485, 0.5145	3101	84.7	0.0074	83, 96	29637
70.0	1.63	0.4102, 0.3771	0.2447, 0.5062	3275	89.1	0.0165	84, 96	29471
80.0	0.69	0.3814, 0.3527	0.2358, 0.4906	3774	95.4	0.0344	86, 99	29710
90.0	0.34	0.3412, 0.3122	0.2251, 0.4634	5019	83.0	0.0635	87, 110	29591

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

Gamma\C	C30	CIE x,y	u',v'	CCT (K)	Ra	du'v'	Rf, Rg	Ip
0.0	99.91	0.4383,0.4017	0.2525,0.5207	2958	81.2	0.0000	82, 97	51717
10.0	87.25	0.4363,0.4005	0.2517,0.5199	2982	81.5	0.0011	83, 97	45793
20.0	49.54	0.4354,0.3992	0.2517,0.5192	2986	81.5	0.0017	82, 97	28280
30.0	23.88	0.4365,0.4002	0.2520,0.5198	2976	81.5	0.0010	83, 97	33043
40.0	12.58	0.4368,0.4010	0.2519,0.5201	2976	81.6	0.0008	83, 97	23120
50.0	5.98	0.4368,0.4013	0.2517,0.5203	2980	81.9	0.0009	83, 96	31898
60.0	2.64	0.4330,0.3994	0.2501,0.5189	3028	82.9	0.0030	84, 97	29621
70.0	1.00	0.4246,0.3928	0.2474,0.5150	3126	85.4	0.0076	85, 98	29418
80.0	0.38	0.4128,0.3849	0.2431,0.5099	3289	90.1	0.0143	88, 100	29478
90.0	0.08	0.3580,0.3187	0.2344,0.4695	4275	80.7	0.0543	83, 114	29603
	C0							
0.0	100.00	0.4383,0.4017	0.2525,0.5207	2958	81.2	0.0000	82, 97	51717
10.0	86.90	0.4370,0.4011	0.2519,0.5202	2974	81.3	0.0008	83, 97	45491
20.0	47.14	0.4368,0.4006	0.2520,0.5200	2974	81.4	0.0009	82, 97	27013
30.0	22.77	0.4379,0.4012	0.2525,0.5204	2960	81.3	0.0003	83, 97	32093
40.0	12.28	0.4387,0.4022	0.2525,0.5209	2955	81.2	0.0002	83, 97	22550
50.0	6.26	0.4402,0.4041	0.2527,0.5219	2946	81.3	0.0012	83, 96	32391
60.0	2.91	0.4390,0.4034	0.2522,0.5214	2960	81.6	0.0008	84, 97	29350
70.0	1.05	0.4351,0.4026	0.2500,0.5205	3019	82.6	0.0025	85, 98	29465
80.0	0.34	0.4250,0.3938	0.2472,0.5155	3126	86.9	0.0074	88, 100	29623
90.0	0.07	0.3602,0.3348	0.2288,0.4785	4326	83.8	0.0484	83, 114	29605

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