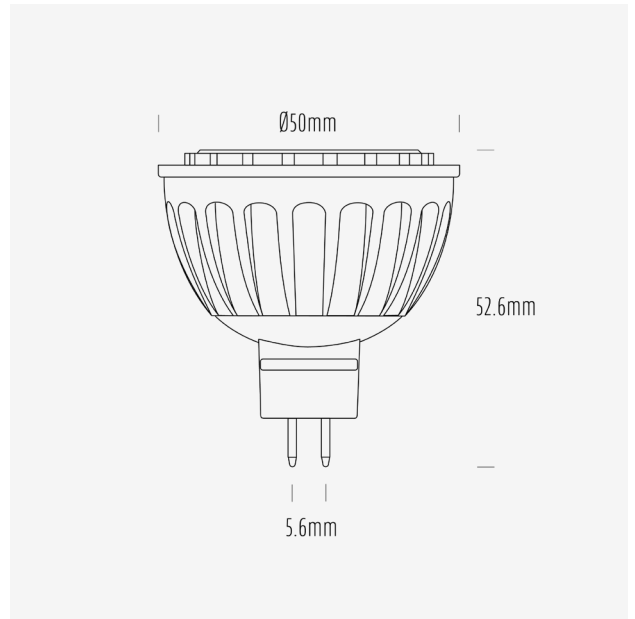


AGL 300 Series

MR16 LED Globes



AGL-300-27X40 / 2700K / MR16 / 40°



Product Data

Product Code	AGL-300-27X40			
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	3.5	2.8	3.3	3.5
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)	3.5	2.8	3.3	3.5
Rated Flux (lm)	421	331	419	418
Efficacy (lm/W)	119	116	126	121

CCT	2700K
CCT Description	Warm White
CRI (Ra)	82
CRI (R9)	6
TM-30 (Rf)	85
TM-30 (Rg)	93
SDCM	-
Peak Intensity (cd)	493
Nominal Beam Angle	40°
Measured Beam Angle (FWHM)	42°

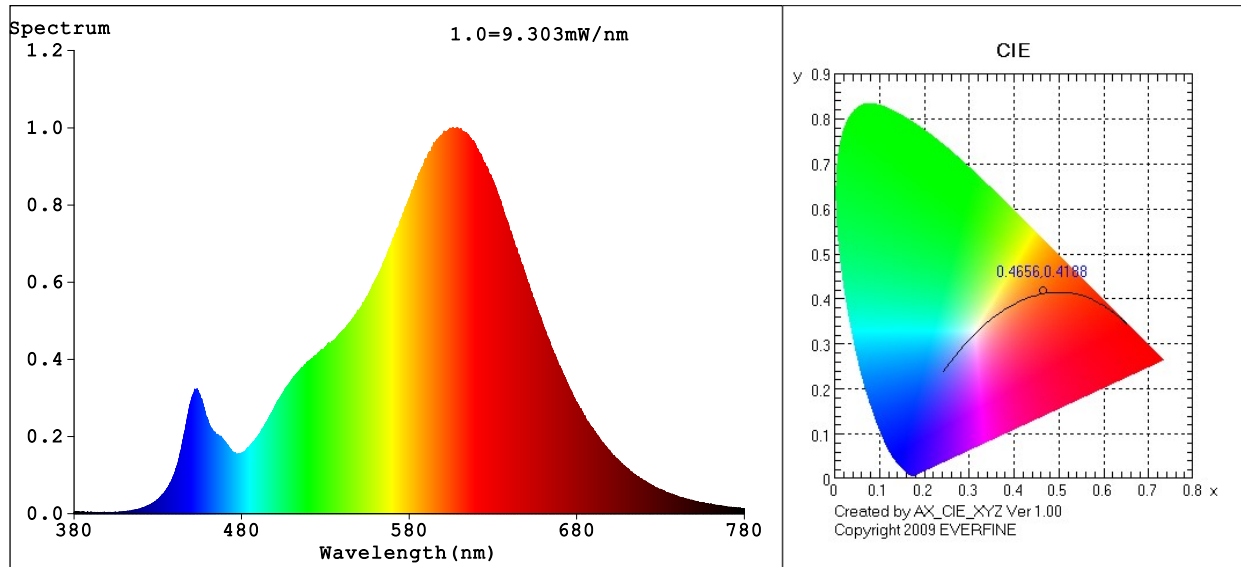
Lifespan Data

L70	15,000h
Switching Cycles	15,000

Compliance Data

EMI	Yes
RCM	N/A
Mercury Content	0mg

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.4656$ $y=0.4188$ / $u'=0.2625$ $v'=0.5313$
 CCT=2684K (Duv=0.0025) Dominant WL:Ld =583.5nm WL:Lc = --nm Purity=65.5%
 Ratio:R=25.2% G=72.7% B=2.2%; Peak WL:Lp=606.1nm FWHM=113.7nm
 Render Index:Ra=82.4 AvgR=77.0 TM30:Rf=85 Rg=93

R1 =81 R2 =92 R3 =95 R4 =80 R5 =81 R6 =91 R7 =82
 R8 =57 R9 =6 R10=82 R11=80 R12=75 R13=83 R14=98 R15=72

Photo Parameters:

Flux = 421.3 lm Eff. : 119.00 lm/W Fe = 1.283 W

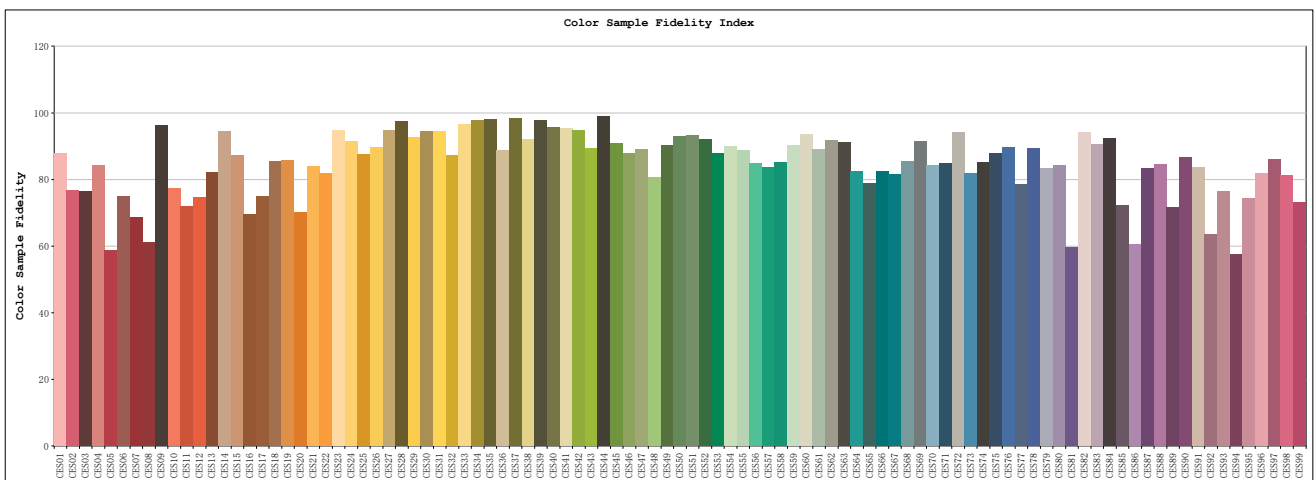
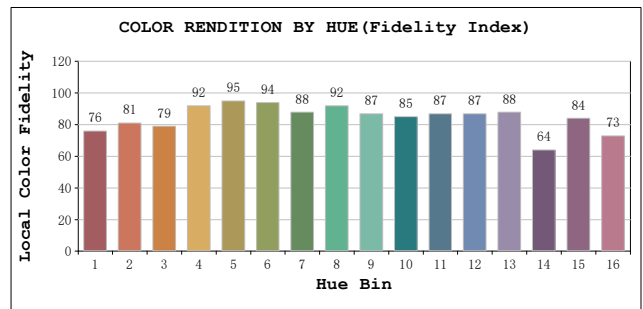
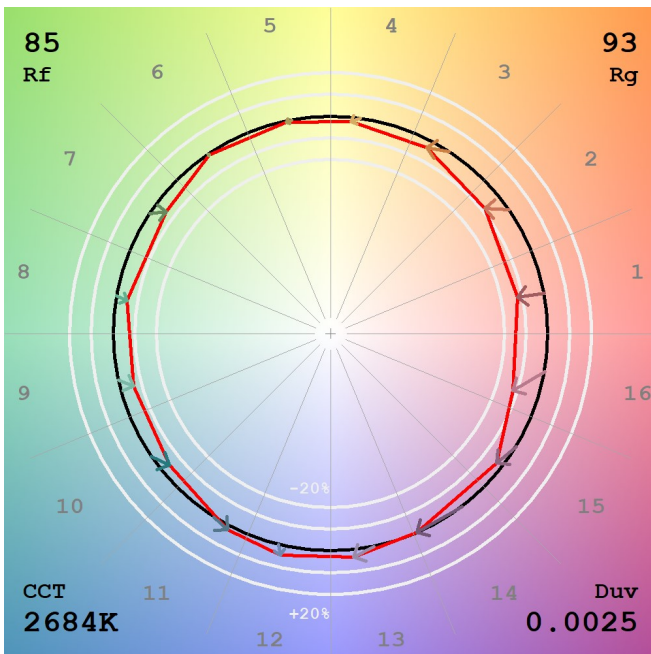
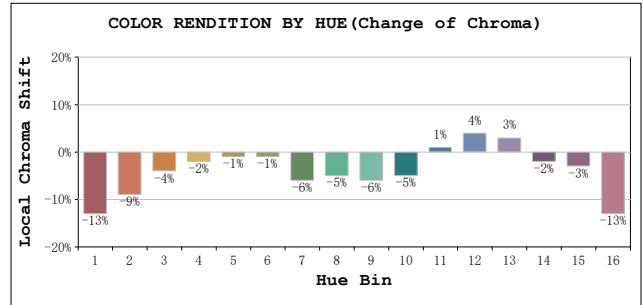
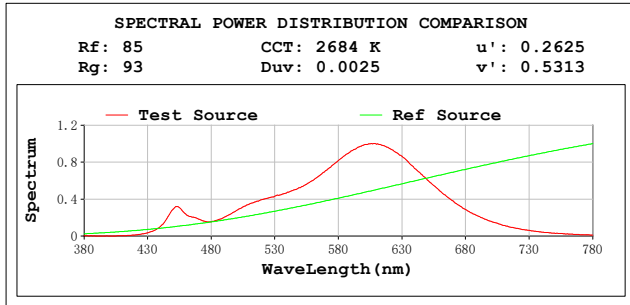
Electrical parameters:

V = 11.972 V I = 0.2957 A P = 3.540 W PF = 1.0000
 LEVEL:OUT WHITE:ANSI_2700K
 Status: Integral T = 320 ms Ip = 51171 (78%)

GBT5702

TM30

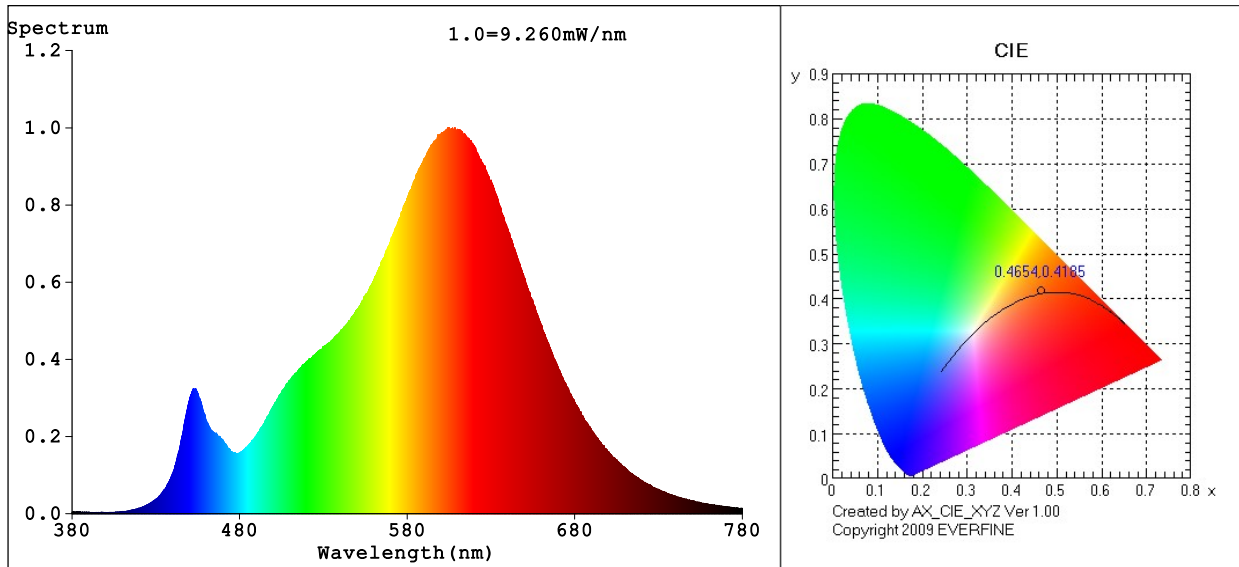
View Angle: 2 Deg



Model:AGL-300-27X40
 Tester:NC
 Temperature:25.3Deg
 Manufacturer:AQUALUX

Number:AGL-300-27X40 12VDC
 Date:2023-10-17 16:03:05
 Humidity:65.0%
 Remarks:12VDC

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.4654$ $y=0.4185$ / $u'=0.2625$ $v'=0.5312$
 CCT=2685K (Duv=0.0024) Dominant WL:Ld =583.5nm WL:Lc = --nm Purity=65.3%
 Ratio:R=25.1% G=72.7% B=2.2%; Peak WL:Lp=605.1nm FWHM=113.4nm
 Render Index:Ra=82.3 AvgR=76.9 TM30:Rf=85 Rg=93

R1 =81 R2 =92 R3 =95 R4 =80 R5 =81 R6 =91 R7 =82
 R8 =57 R9 =6 R10=82 R11=80 R12=75 R13=83 R14=98 R15=72

Photo Parameters:

Flux = 419.4 lm Eff. : 125.91 lm/W Fe = 1.278 W

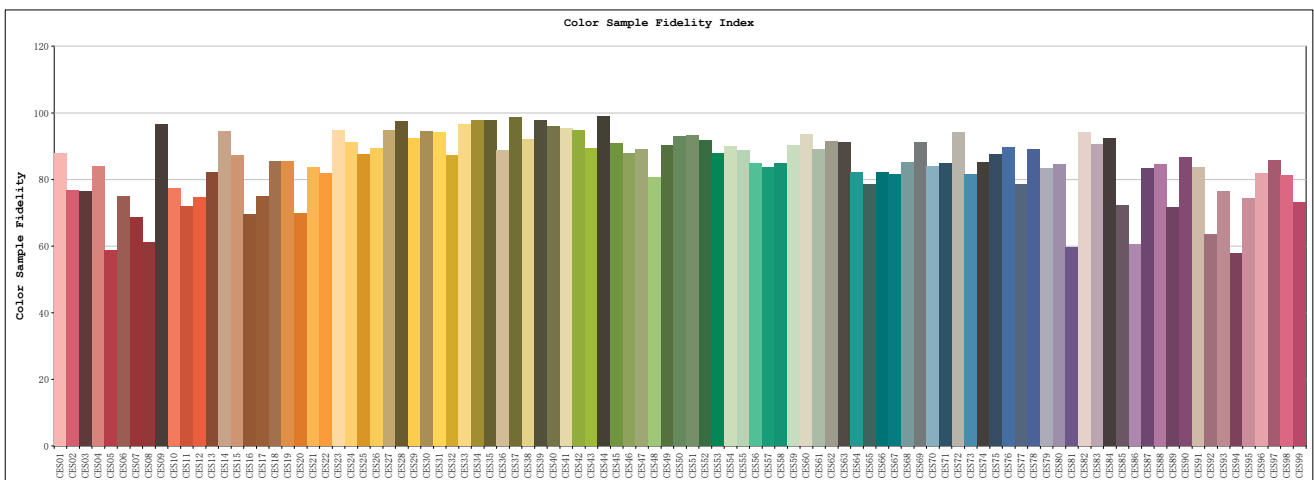
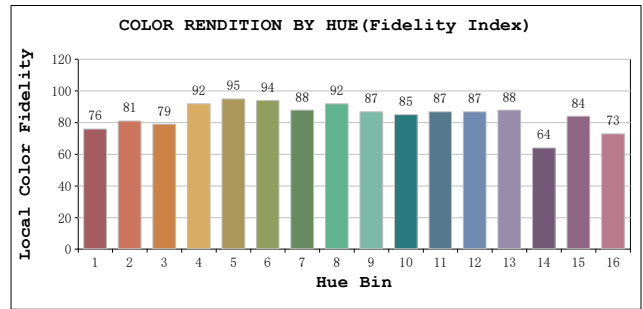
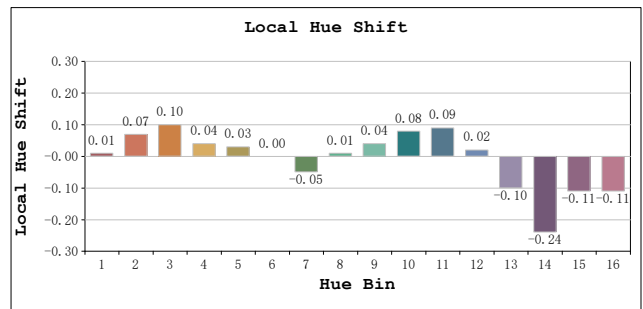
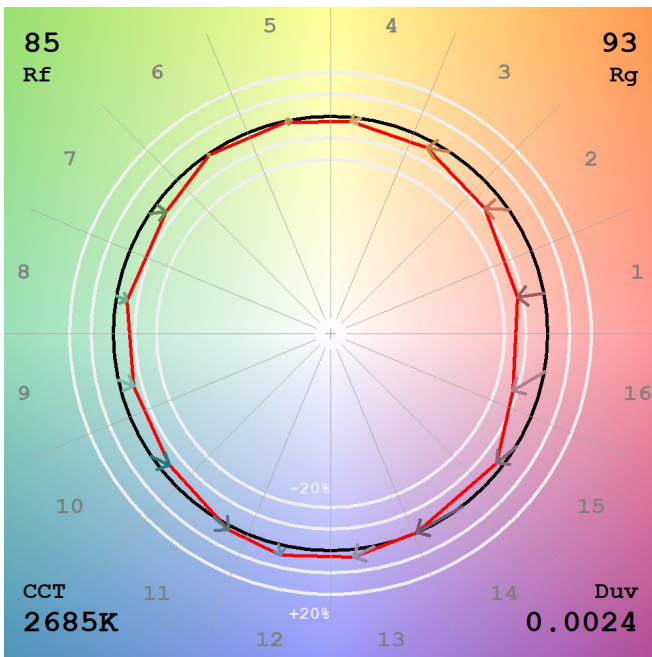
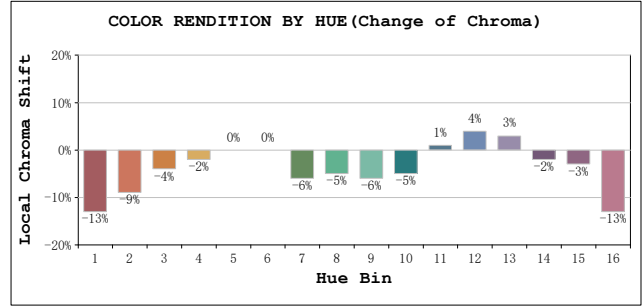
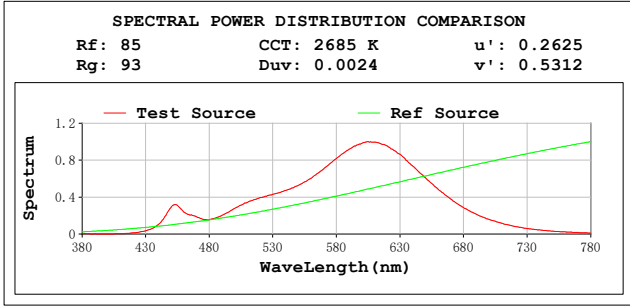
Electrical parameters:

V = 23.991 V I = 0.1388 A P = 3.331 W PF = 1.0000
 LEVEL:OUT WHITE:ANSI_2700K
 Status: Integral T = 320 ms Ip = 50911 (78%)

GBT5702

TM30

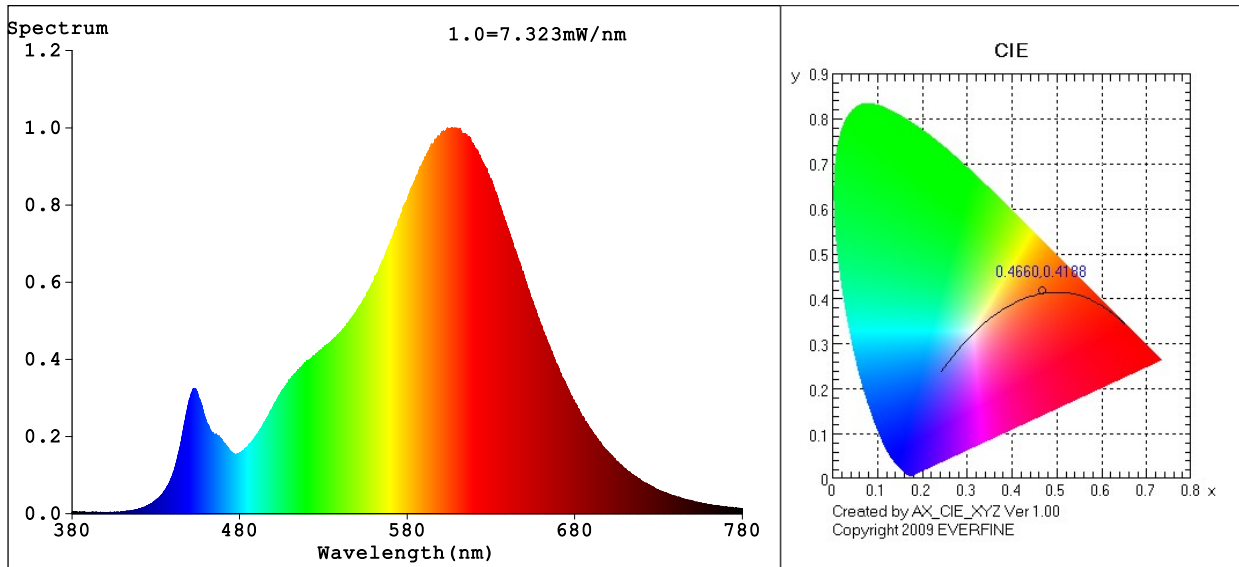
View Angle: 2 Deg



Model: AGL-300-27X40
 Tester: NC
 Temperature: 25.3Deg
 Manufacturer: AQUALUX

Number: AGL-300-27X40 24VDC
 Date: 2023-10-17 16:03:57
 Humidity: 65.0%
 Remarks: 24VDC

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.4660$ $y=0.4188$ / $u'=0.2627$ $v'=0.5314$
 CCT=2680K (Duv=0.0025) Dominant WL:Ld =583.5nm WL:Lc = --nm Purity=65.6%
 Ratio:R=25.2% G=72.6% B=2.2%; Peak WL:Lp=606.7nm FWHM=113.1nm
 Render Index:Ra=82.4 AvgR=77.0 TM30:Rf=85 Rg=93

R1 =81 R2 =92 R3 =95 R4 =80 R5 =81 R6 =92 R7 =82
 R8 =57 R9 =6 R10=82 R11=80 R12=75 R13=83 R14=98 R15=72

Photo Parameters:

Flux = 331.1 lm Eff. : 116.33 lm/W Fe = 1.009 W

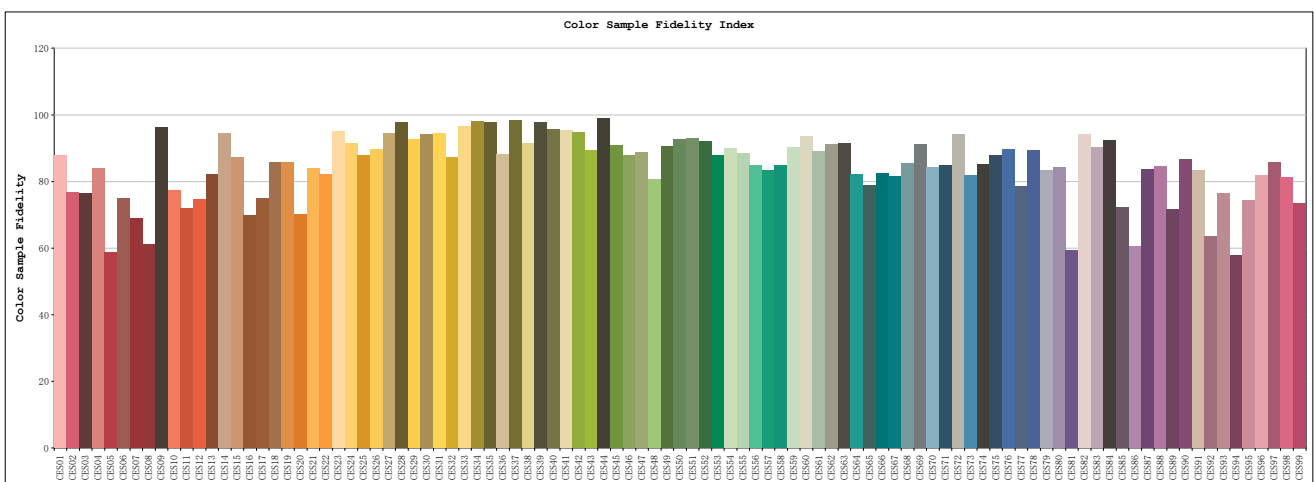
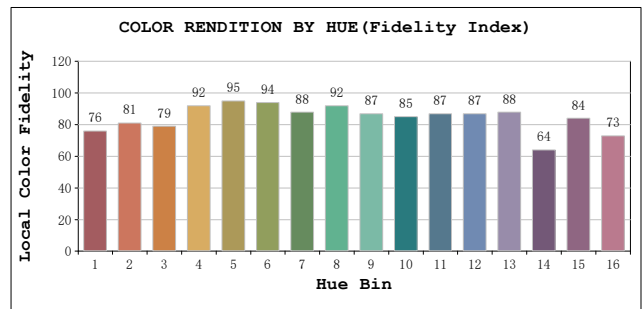
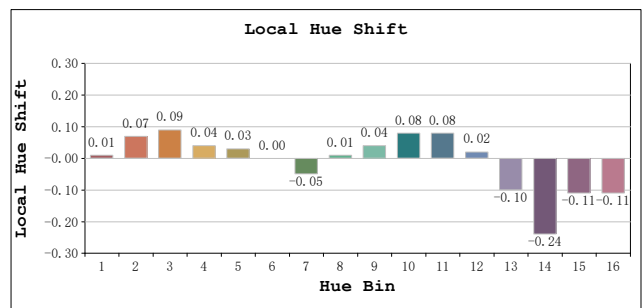
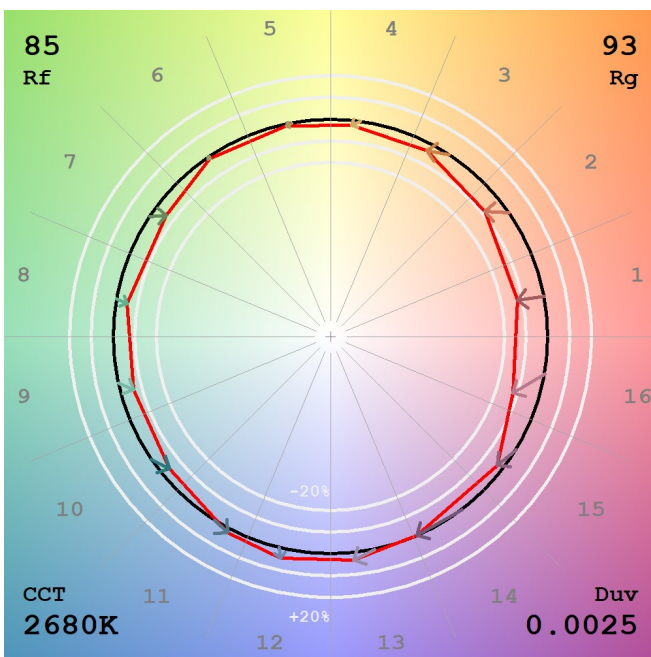
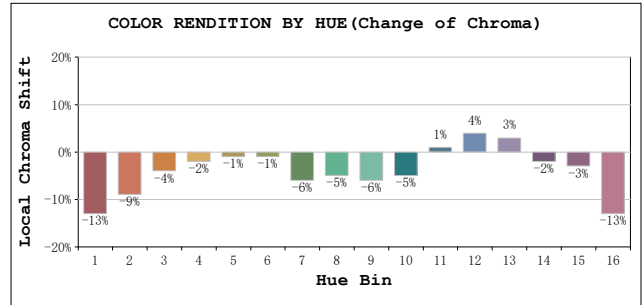
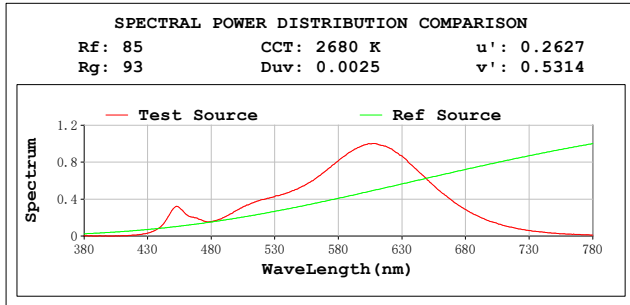
Electrical parameters:

V = 11.988 V I = 0.3200 A P = 2.846 W PF = 0.7419
 LEVEL:OUT WHITE:ANSI_2700K
 Status: Integral T = 320 ms Ip = 40270 (61%)

GBT5702

TM30

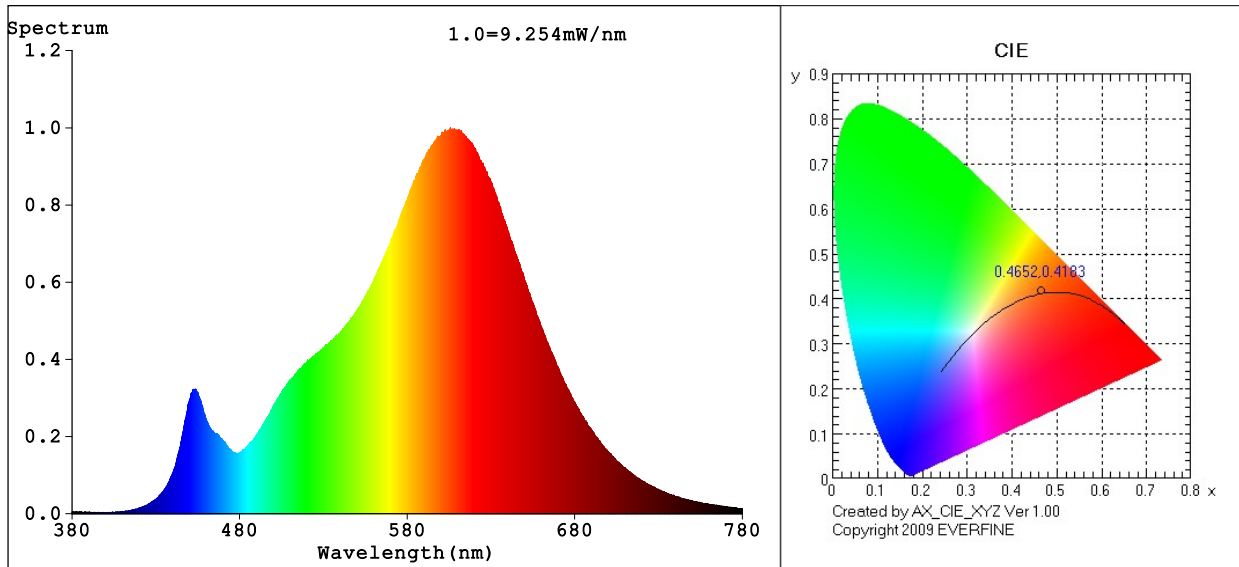
View Angle: 2 Deg



Model:AGL-300-27X40
 Tester:NC
 Temperature:25.3Deg
 Manufacturer:AQUALUX

Number:AGL-300-27X40 12VAC
 Date:2023-10-17 16:06:30
 Humidity:65.0%
 Remarks:12VAC

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.4652$ $y=0.4183$ / $u'=0.2625$ $v'=0.5310$
 CCT=2686K (Duv=0.0024) Dominant WL:Ld =583.5nm WL:Lc = --nm Purity=65.2%
 Ratio:R=25.1% G=72.7% B=2.2%; Peak WL:Lp=605.8nm FWHM=113.3nm
 Render Index:Ra=82.3 AvgR=76.9 TM30:Rf=85 Rg=93

R1 =81 R2 =92 R3 =95 R4 =80 R5 =81 R6 =91 R7 =82
 R8 =57 R9 =5 R10=82 R11=80 R12=75 R13=83 R14=98 R15=72

Photo Parameters:

Flux = 417.9 lm Eff. : 120.83 lm/W Fe = 1.274 W

Electrical parameters:

V = 23.965 V I = 0.2331 A P = 3.459 W PF = 0.6192

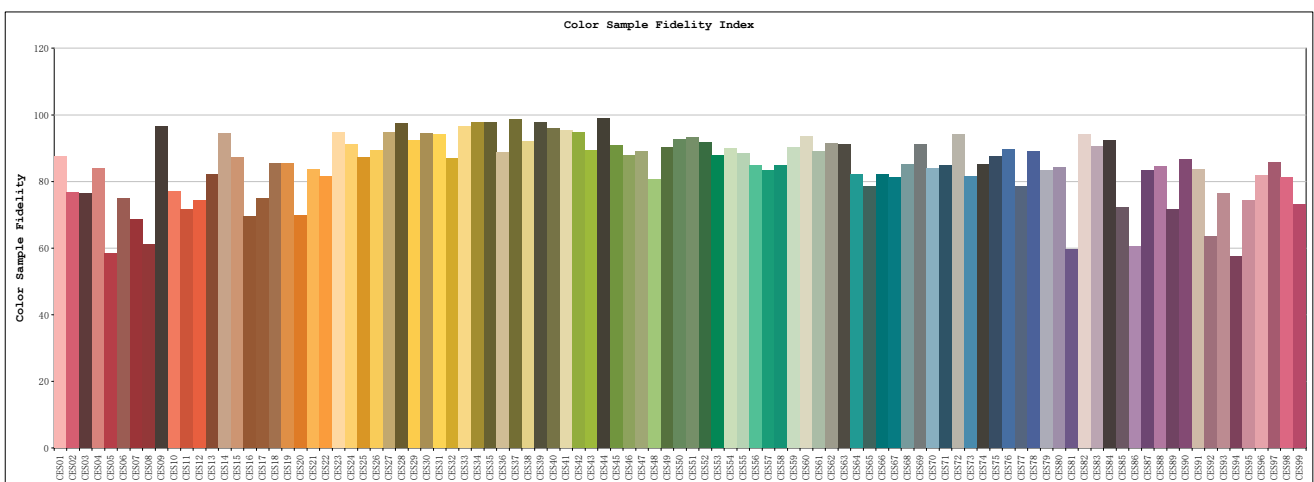
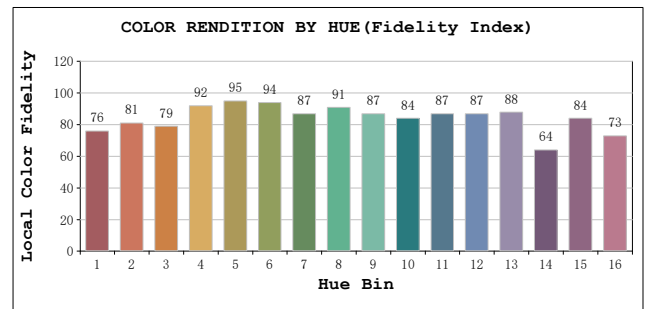
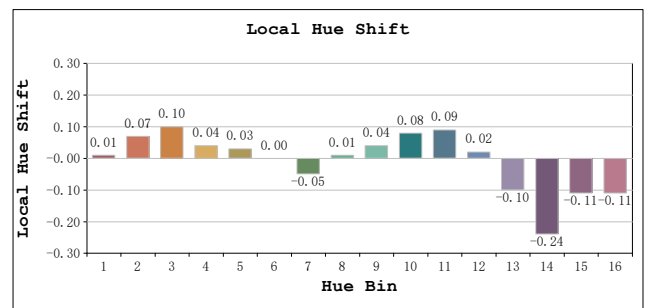
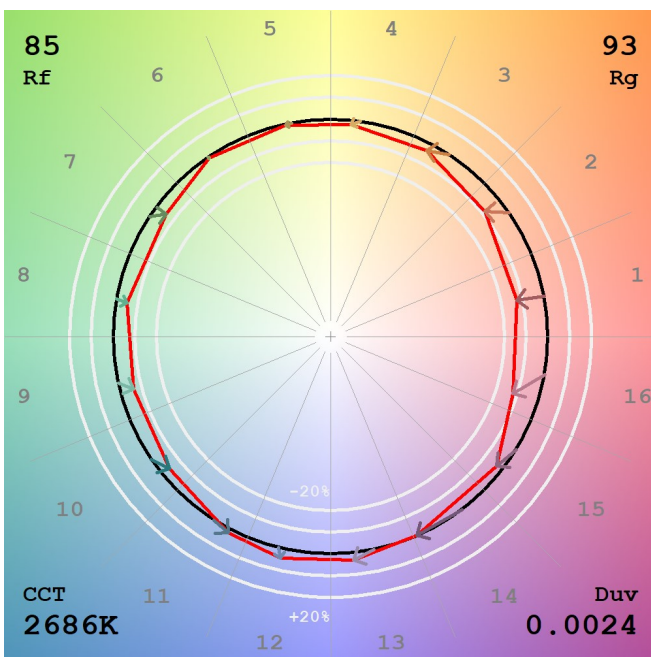
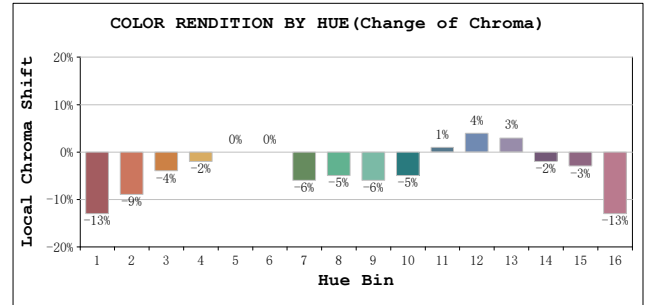
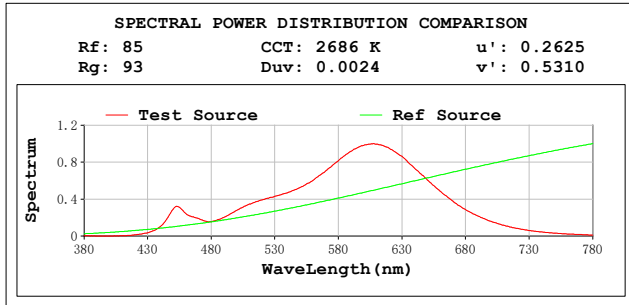
LEVEL:OUT WHITE:ANSI_2700K

Status: Integral T = 320 ms Ip = 50831 (78%)

GBT5702

TM30

View Angle: 2 Deg



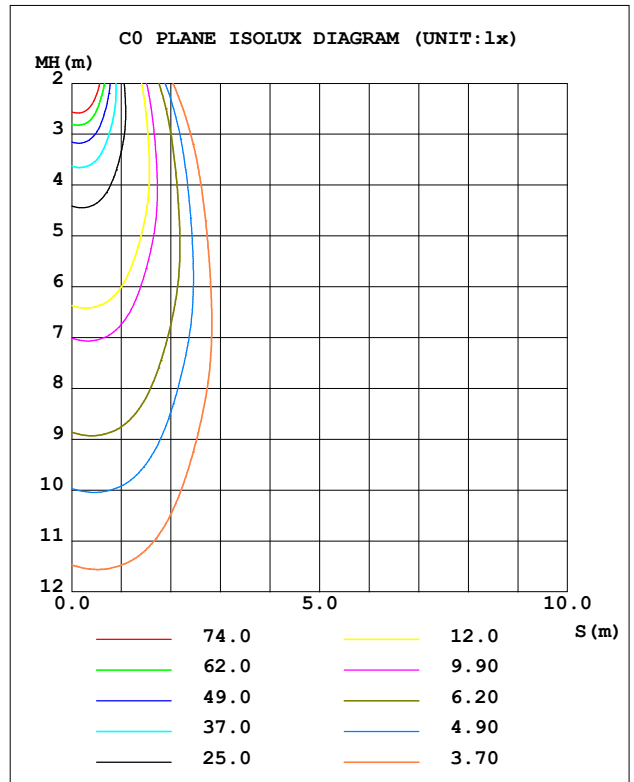
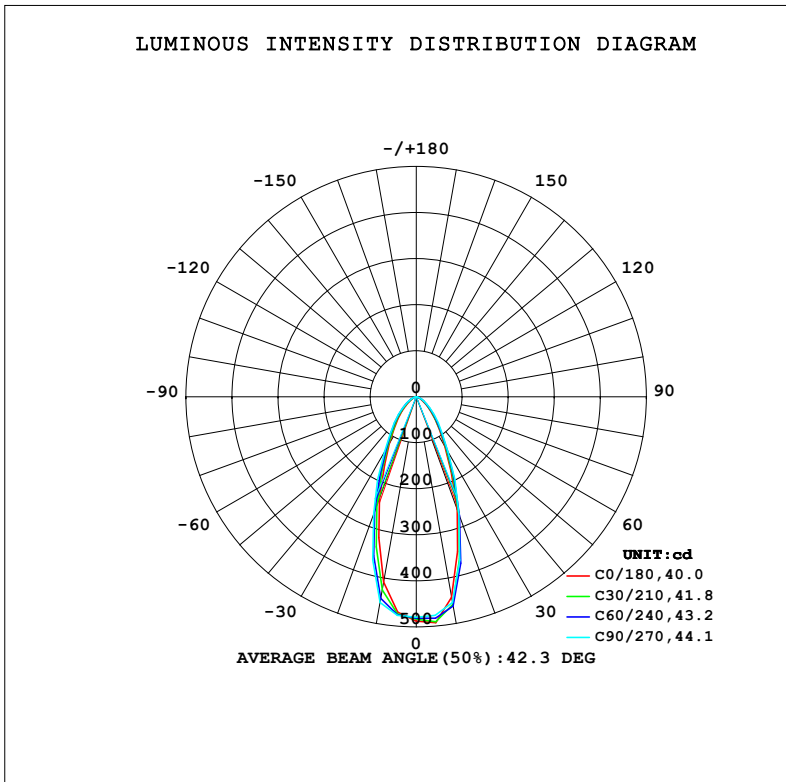
Model:AGL-300-27X40
 Tester:NC
 Temperature:25.3Deg
 Manufacturer:AQUALUX

Number:AGL-300-27X40 24VAC
 Date:2023-10-17 16:07:13
 Humidity:65.0%
 Remarks:24VAC

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm		
NAME: AGL-300-27X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-27X40	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 113.99 lm/W
MODEL	LED	I _{max} (cd)	492.6	S/MH (C0/180)	0.63	
NOMINAL POWER (W)	3	LOR (%)	100.0	S/MH (C90/270)	0.70	
RATED VOLTAGE (V)	24	TOTAL FLUX (lm)	370.16	η UP, DN (C0-180)	0.0, 50.1	
NOMINAL FLUX (lm)	370.16	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.9	
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: HIGH
 Temperature: 20°C
 Operators: NICK
 Test Date: 12 October 2023

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.473
 Humidity: 65.0%
 Test Distance: 3.100m [K=1.0000]
 Remarks: AGL-300-27X40
 3W / 2700K / 40D / 300LM

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

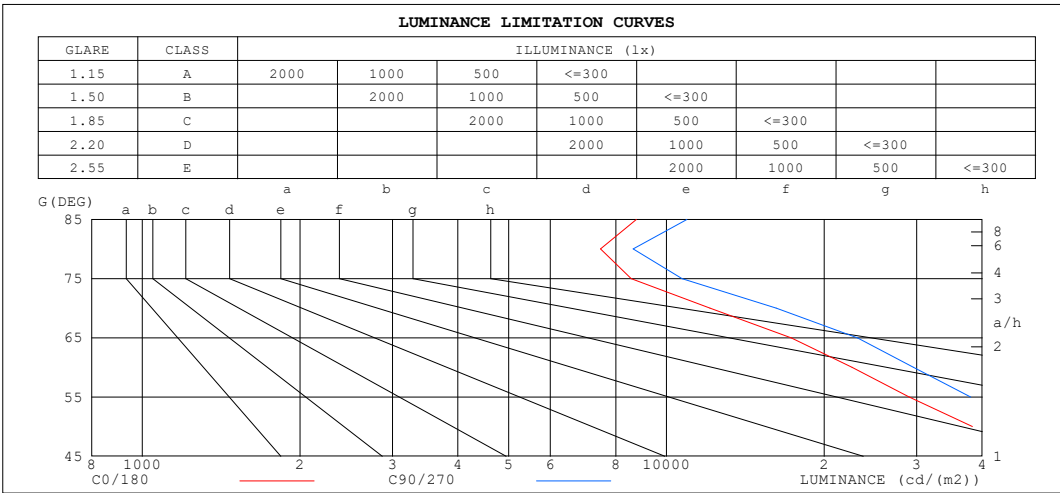
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	∅ zone	∅ total	%lum, lamp
10	442.2	464.1	454.0	436.4	408.7	436.4	454.0	464.1	0- 10	44.57	44.57	12,12
20	260.1	275.1	271.0	259.4	234.4	259.4	271.0	275.1	10- 20	98.69	143.3	38.7,38.7
30	124.3	133.5	138.7	126.8	116.9	126.8	138.7	133.5	20- 30	87.41	230.7	62.3,62.3
40	63.80	69.88	75.00	69.26	61.86	69.26	75.00	69.88	30- 40	60.15	290.8	78.6,78.6
50	30.96	36.75	39.71	37.72	30.63	37.72	39.71	36.75	40- 50	39.74	330.5	89.3,89.3
60	14.19	18.19	18.57	18.77	14.07	18.77	18.57	18.19	50- 60	23.23	353.8	95.6,95.6
70	5.200	7.096	6.954	6.854	4.701	6.854	6.954	7.096	60- 70	11.47	365.2	98.7,98.7
80	1.631	1.830	1.885	1.704	1.453	1.704	1.885	1.830	70- 80	3.871	369.1	99.7,99.7
90	0	0.0484	0.0301	0	0	0	0.0301	0.0484	80- 90	1.042	370.2	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: HIGH
 Temperature:20°C
 Operators:NICK
 Test Date:12 October 2023

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:3.100m [K=1.0000]
 Remarks: AGL-300-27X40
 3W / 2700K / 40D / 300LM

LUMINANCE LIMITATION CURVES

Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm		
NAME: AGL-300-27X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-27X40	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	8754	10937
80	7480	8642
75	8565	10713
70	12106	16189
65	17301	23124
60	22602	29571
55	29062	38074
50	38342	49186
45	50702	62500

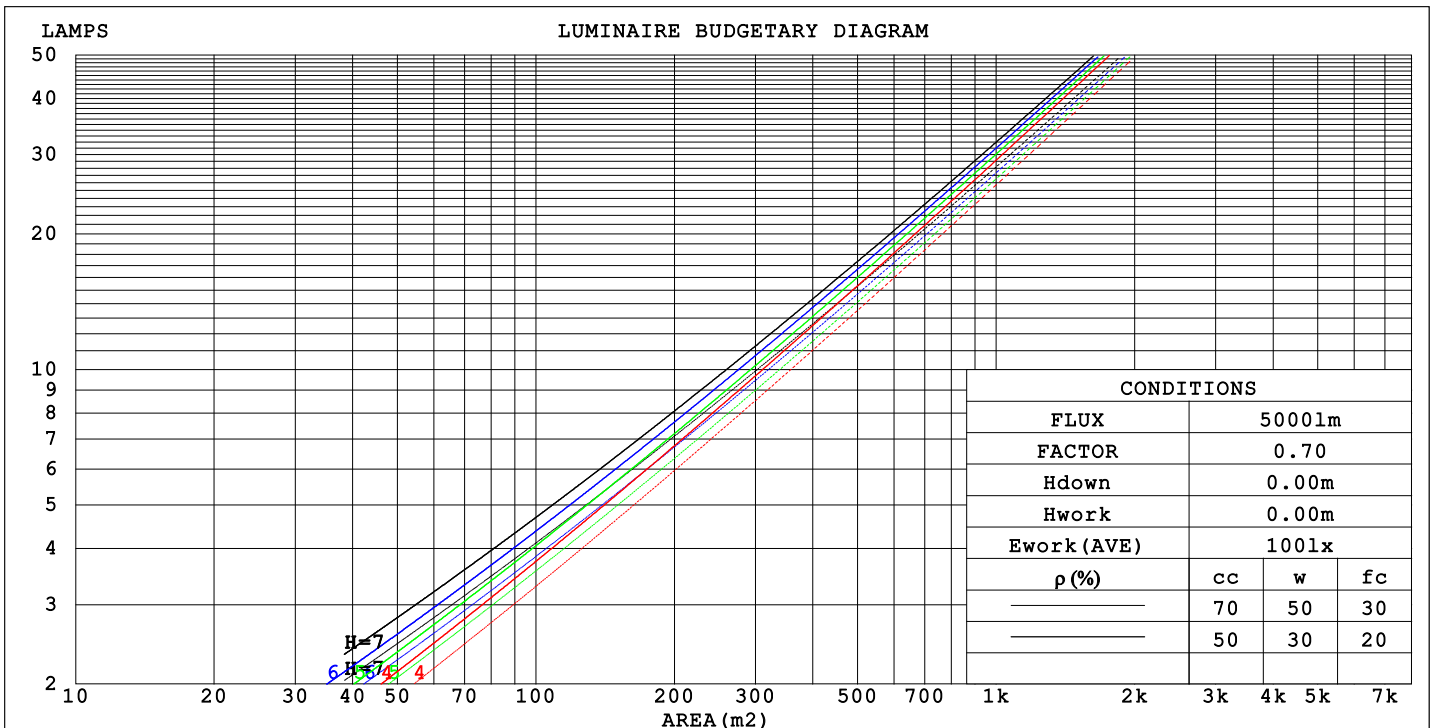
C Range: 0 - 180DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:20°C
 Operator:NICK
 Test Date:12 October 2023

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:3.100m [K=1.0000]
 Remarks: AGL-300-27X40
 3W / 2700K / 40D / 300LM

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz		
UTHdi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm		
NAME: AGL-300-27X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-27X40	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																
pfc	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	1.04	1.07	1.05	1.03	1.03	1.01	.99	.90	.98	.96	.96	.95	.94	.92
2.0	1.01	.96	.92	.99	.95	.91	.96	.92	.89	.93	.90	.87	.90	.88	.85	.84
3.0	.93	.87	.83	.92	.86	.82	.89	.84	.81	.86	.83	.80	.84	.81	.78	.77
4.0	.86	.80	.75	.85	.79	.75	.83	.78	.74	.81	.76	.73	.79	.75	.72	.71
5.0	.80	.74	.69	.79	.73	.69	.77	.72	.68	.76	.71	.67	.74	.70	.67	.65
6.0	.75	.68	.64	.74	.68	.63	.72	.67	.63	.71	.66	.63	.70	.65	.62	.61
7.0	.70	.64	.59	.69	.63	.59	.68	.63	.59	.67	.62	.58	.66	.61	.58	.56
8.0	.66	.60	.55	.65	.59	.55	.64	.59	.55	.63	.58	.55	.62	.58	.54	.53
9.0	.62	.56	.52	.62	.56	.52	.61	.55	.52	.60	.55	.51	.59	.54	.51	.50
10.0	.59	.53	.49	.59	.53	.49	.58	.52	.49	.57	.52	.48	.56	.52	.48	.47



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

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.473
 Humidity: 65.0%
 Test Distance: 3.100m [K=1.0000]
 Remarks: AGL-300-27X40
 3W / 2700K / 40D / 300LM

WEC AND CCEC

Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm		
NAME: AGL-300-27X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-27X40	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	.201	.115	.036	.195	.111	.035	.182	.104	.033	.170	.098	.032	.159	.092	.030	
2.0	.193	.106	.032	.187	.103	.032	.177	.098	.030	.167	.093	.029	.157	.089	.028	
3.0	.183	.097	.029	.178	.095	.029	.169	.091	.028	.160	.088	.027	.152	.084	.026	
4.0	.173	.090	.026	.169	.088	.026	.161	.085	.025	.153	.082	.025	.146	.079	.024	
5.0	.163	.083	.024	.160	.082	.024	.152	.079	.023	.146	.077	.023	.140	.075	.022	
6.0	.154	.077	.022	.151	.076	.022	.145	.074	.022	.139	.072	.021	.134	.070	.021	
7.0	.146	.072	.021	.143	.071	.020	.138	.070	.020	.133	.068	.020	.128	.066	.020	
8.0	.139	.068	.019	.136	.067	.019	.131	.066	.019	.127	.064	.019	.122	.063	.018	
9.0	.132	.064	.018	.130	.063	.018	.125	.062	.018	.121	.061	.017	.117	.060	.017	
10.0	.126	.060	.017	.124	.060	.017	.120	.059	.017	.116	.058	.016	.112	.057	.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	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.049	.019	.017	.016	
2.0	.159	.132	.110	.136	.114	.095	.093	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.148	.114	.087	.127	.098	.075	.087	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.138	.099	.070	.118	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.130	.088	.057	.111	.076	.050	.077	.053	.035	.044	.031	.021	.014	.010	.007	
6.0	.122	.079	.048	.105	.068	.042	.072	.048	.029	.042	.028	.017	.014	.009	.006	
7.0	.116	.071	.040	.099	.062	.035	.069	.043	.025	.040	.026	.015	.013	.008	.005	
8.0	.110	.065	.035	.094	.057	.030	.065	.040	.021	.038	.023	.013	.012	.008	.004	
9.0	.104	.060	.030	.090	.052	.026	.062	.037	.019	.036	.022	.011	.012	.007	.004	
10.0	.099	.056	.027	.086	.048	.023	.059	.034	.016	.035	.020	.010	.011	.007	.003	

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

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:3.100m [K=1.0000]
 Remarks: AGL-300-27X40
 3W / 2700K / 40D / 300LM

UGR(Unified Glare Rating) Table

Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm		
NAME: AGL-300-27X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-27X40	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	25.7	26.7	25.9	26.9	27.1	26.6	27.7	26.9	27.8	28.0
	3H	25.8	26.8	26.1	27.0	27.2	26.9	27.9	27.1	28.1	28.3
	4H	25.8	26.8	26.1	27.0	27.2	26.9	27.8	27.2	28.0	28.3
	6H	25.8	26.7	26.1	26.9	27.2	26.9	27.7	27.2	28.0	28.2
	8H	25.8	26.7	26.1	26.9	27.2	26.9	27.7	27.2	28.0	28.2
	12H	25.8	26.6	26.1	26.9	27.2	26.9	27.7	27.2	27.9	28.2
4H	2H	25.9	26.8	26.2	27.0	27.3	26.7	27.6	27.0	27.9	28.1
	3H	26.1	26.9	26.5	27.2	27.5	27.1	27.9	27.4	28.1	28.4
	4H	26.2	26.9	26.5	27.2	27.5	27.1	27.8	27.5	28.1	28.4
	6H	26.2	26.8	26.6	27.2	27.5	27.1	27.8	27.5	28.1	28.5
	8H	26.2	26.8	26.6	27.2	27.5	27.2	27.8	27.6	28.1	28.5
	12H	26.2	26.8	26.6	27.1	27.5	27.2	27.7	27.6	28.1	28.5
8H	4H	26.1	26.7	26.5	27.1	27.4	27.0	27.6	27.4	28.0	28.4
	6H	26.2	26.7	26.6	27.1	27.5	27.1	27.6	27.5	28.0	28.4
	8H	26.3	26.7	26.7	27.1	27.6	27.2	27.6	27.6	28.0	28.5
	12H	26.3	26.7	26.8	27.1	27.6	27.2	27.6	27.7	28.1	28.5
12H	4H	26.1	26.6	26.5	27.0	27.4	27.0	27.5	27.4	27.9	28.3
	6H	26.2	26.6	26.6	27.0	27.5	27.1	27.5	27.5	27.9	28.4
	8H	26.3	26.7	26.8	27.1	27.6	27.2	27.6	27.7	28.0	28.5

Variations with the observer position at spacings(CIE Pub.117):		
S = 1.0H	+ 1.0 / - 1.5	+ 0.9 / - 1.2
1.5H	+ 1.1 / - 1.2	+ 1.0 / - 1.0
2.0H	+ 1.8 / - 1.8	+ 2.1 / - 1.4

CIE Pub.117, 370.2 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: HIGH
 Temperature:20°C
 Operators:NICK
 Test Date:12 October 2023

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:3.100m [K=1.0000]
 Remarks: AGL-300-27X40
 3W / 2700K / 40D / 300LM

UTILIZATION FACTORS TABLE

Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm		
NAME: AGL-300-27X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-27X40	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

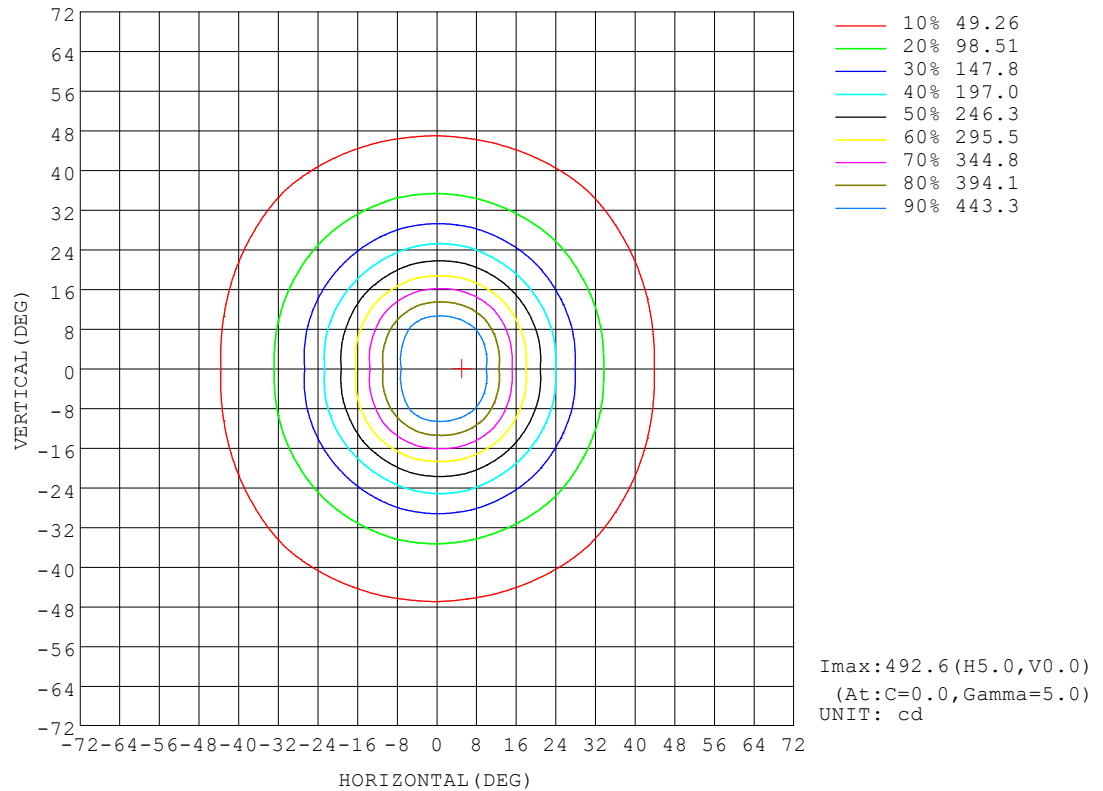
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	78	70	65	77	70	65	77	69	65	60
0.80	87	79	74	86	79	74	84	78	74	69
1.00	93	86	81	92	85	81	90	85	80	75
1.25	98	91	87	97	91	86	94	89	85	80
1.50	101	95	91	100	94	90	97	93	89	84
2.00	105	100	96	104	99	95	101	97	94	88
2.50	107	103	99	106	101	98	102	99	96	90
3.00	109	105	102	108	104	101	104	101	98	92
4.00	112	108	106	110	107	104	106	104	101	94
5.00	113	110	108	111	109	106	107	105	103	95
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: HIGH
 Temperature:20°C
 Operators:NICK
 Test Date:12 October 2023

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:3.100m [K=1.0000]
 Remarks: AGL-300-27X40
 3W / 2700K / 40D / 300LM

ISOCANDELA DIAGRAM

Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm		
NAME: AGL-300-27X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-27X40	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

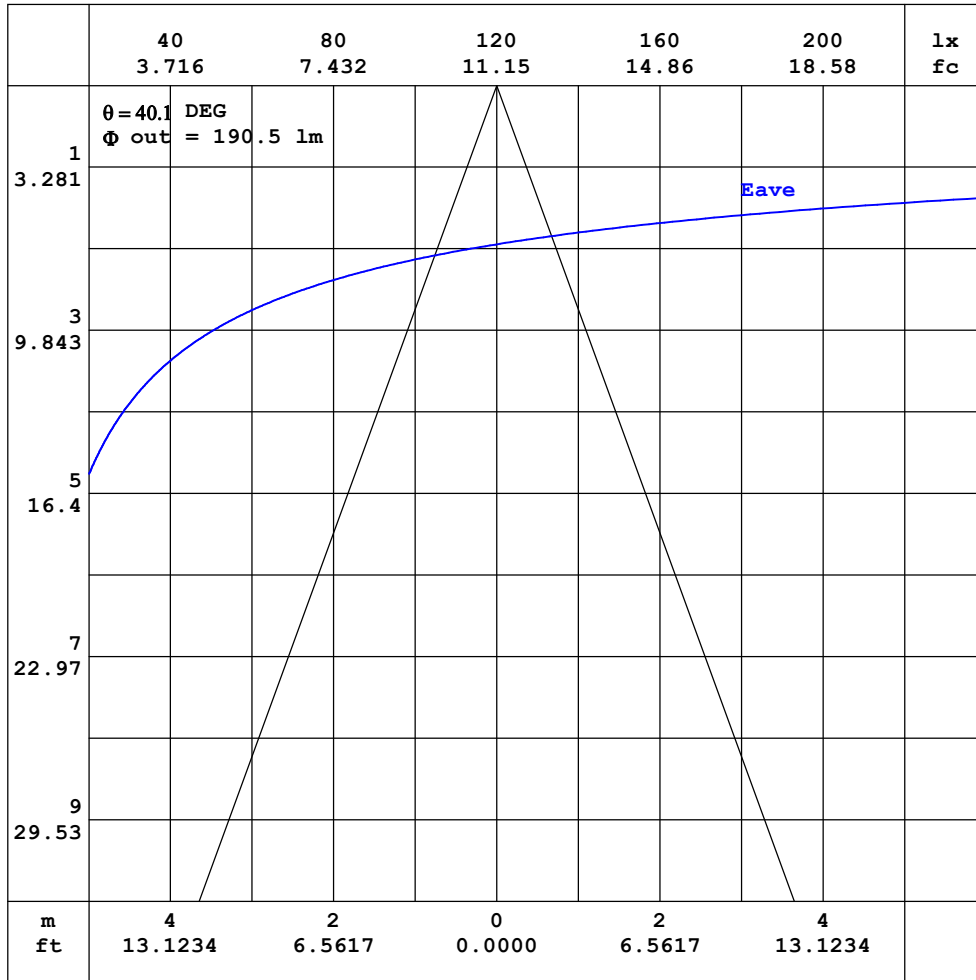


C Range: 0 - 180DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:20°C
 Operators:NICK
 Test Date:12 October 2023

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:3.100m [K=1.0000]
 Remarks: AGL-300-27X40
 3W / 2700K / 40D / 300LM

AAI CURVES

Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm		
NAME: AGL-300-27X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-27X40	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:



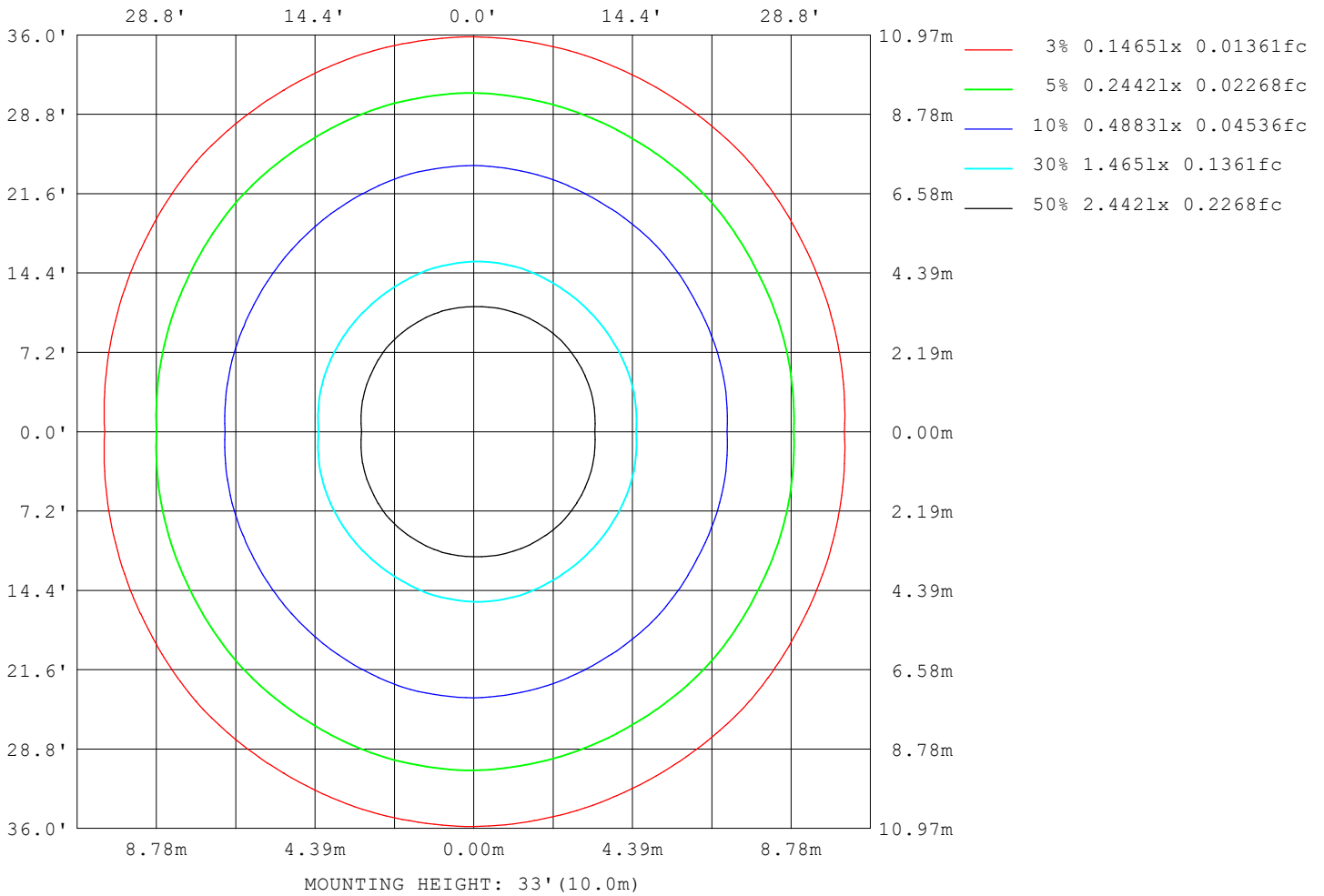
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.473
 Humidity: 65.0%
 Test Distance: 3.100m [K=1.0000]
 Remarks: AGL-300-27X40
 3W / 2700K / 40D / 300LM

ISOLUX DIAGRAM

Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm		
NAME: AGL-300-27X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-27X40	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:



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

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:3.100m [K=1.0000]
 Remarks: AGL-300-27X40
 3W / 2700K / 40D / 300LM

LED Avg.L Report

Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm		
NAME: AGL-300-27X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-27X40	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

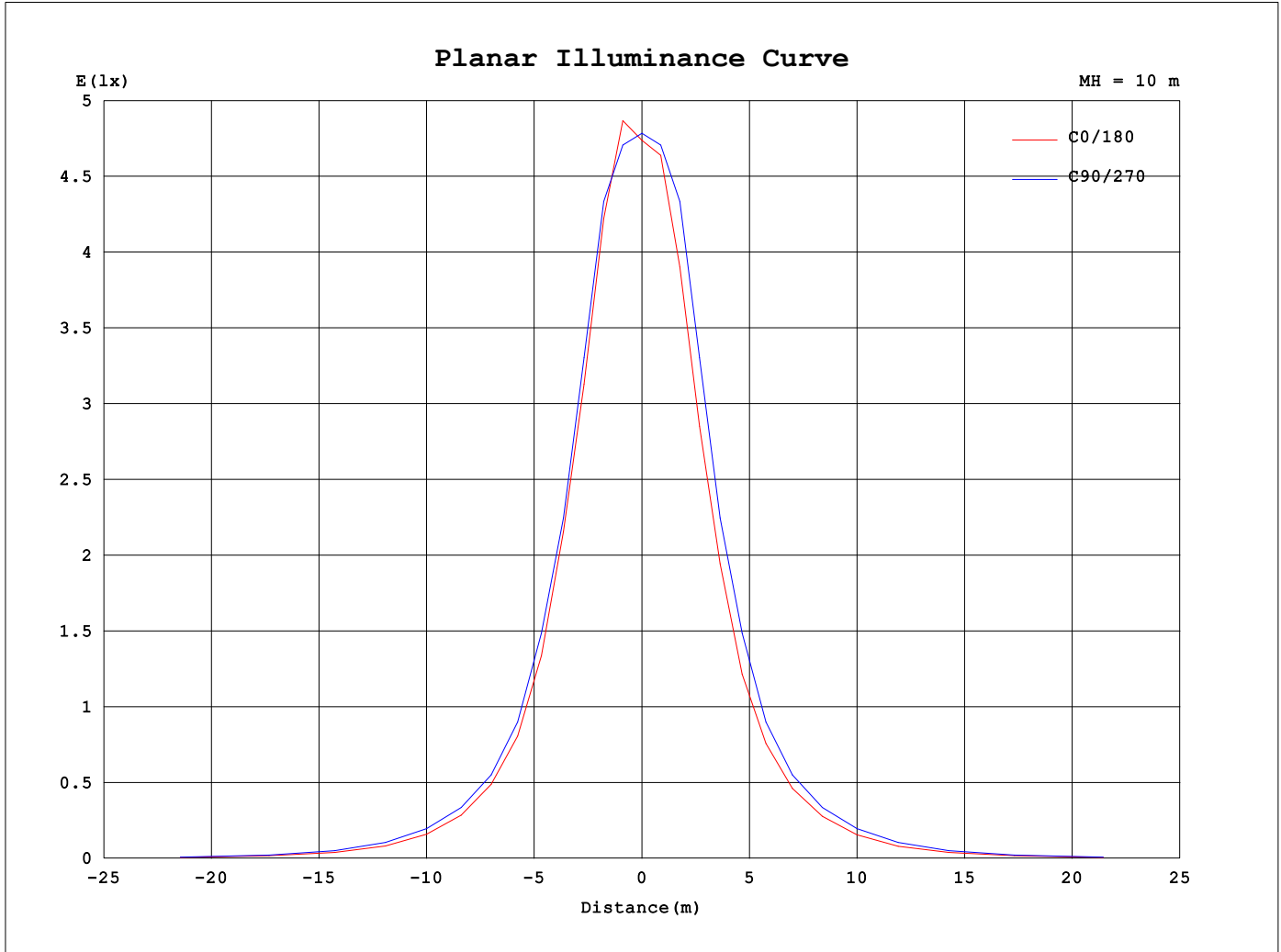
AvgL	cd/m2
L_0~180 (65) av	16897
L_0~180 (75) av	8177
L_0~180 (85) av	6680
L_90~270 (65) av	23124
L_90~270 (75) av	10713
L_90~270 (85) av	10937
L_45 (65) av	22776
L_45 (75) av	10778
L_45 (85) av	9903

Standard: GB/T 29293-2012

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

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:3.100m [K=1.0000]
 Remarks: AGL-300-27X40
 3W / 2700K / 40D / 300LM

Planar Illuminance Curve



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

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.473
 Humidity: 65.0%
 Test Distance: 3.100m [K=1.0000]
 Remarks: AGL-300-27X40
 3W / 2700K / 40D / 300LM

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm		
NAME: AGL-300-27X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-27X40	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	487	484	483	481	481	479	479	477	477	476	475	474	474	474	475	476	477	477	479
5	493	491	491	487	483	478	476	475	475	475	473	471	469	471	473	475	475	475	476
10	442	451	458	464	461	457	454	452	445	436	426	418	409	418	426	436	445	452	454
15	347	355	364	373	374	371	367	364	358	351	337	327	317	327	337	351	358	364	367
20	260	268	272	275	275	275	271	270	264	259	250	243	234	243	250	259	264	270	271
25	180	187	189	191	195	200	200	195	186	180	176	171	163	171	176	180	186	195	200
30	124	128	130	133	135	138	139	137	132	127	123	119	117	119	123	127	132	137	139
35	88.9	91.1	92.2	95.3	96.5	98.9	100	99.6	95.7	92.4	89.1	87.1	84.1	87.1	89.1	92.4	95.7	99.6	100
40	63.8	65.7	66.9	69.9	71.2	73.3	75.0	74.3	71.5	69.3	66.1	64.0	61.9	64.0	66.1	69.3	71.5	74.3	75.0
45	45.0	46.7	48.4	51.2	52.5	54.1	55.5	54.9	53.1	51.7	48.6	46.4	44.3	46.4	48.6	51.7	53.1	54.9	55.5
50	31.0	32.5	34.4	36.8	38.0	39.2	39.7	39.4	38.6	37.7	35.0	32.5	30.6	32.5	35.0	37.7	38.6	39.4	39.7
55	20.9	22.1	23.9	26.0	26.9	27.4	27.4	27.5	27.4	26.9	24.5	22.4	20.8	22.4	24.5	26.9	27.4	27.5	27.4
60	14.2	15.1	16.4	18.2	18.7	18.8	18.6	18.9	19.0	18.8	16.8	15.2	14.1	15.2	16.8	18.8	19.0	18.9	18.6
65	9.18	9.82	10.8	12.1	12.5	12.3	12.3	12.2	12.5	12.1	10.7	9.52	8.75	9.52	10.7	12.1	12.5	12.2	12.3
70	5.20	5.63	6.24	7.10	7.27	7.11	6.95	6.96	7.01	6.85	5.92	5.18	4.70	5.18	5.92	6.85	7.01	6.96	6.95
75	2.78	2.97	3.24	3.66	3.72	3.58	3.48	3.44	3.42	3.34	2.95	2.70	2.53	2.70	2.95	3.34	3.42	3.44	3.48
80	1.63	1.67	1.73	1.83	1.88	1.88	1.88	1.81	1.75	1.70	1.61	1.52	1.45	1.52	1.61	1.70	1.75	1.81	1.88
85	0.96	1.08	1.14	1.21	1.24	1.23	1.20	1.13	1.05	0.96	0.81	0.66	0.50	0.66	0.81	0.96	1.05	1.13	1.20
90	0.00	0.00	0.01	0.05	0.07	0.06	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03

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

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.473
 Humidity: 65.0%
 Test Distance: 3.100m [K=1.0000]
 Remarks: AGL-300-27X40
 3W / 2700K / 40D / 300LM

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:23.868V I:0.1361A P:3.2472W PF:1.0000 Freq:0Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:370.16x1 lm		
NAME: AGL-300-27X40	TYPE: MR16 LAMP	WEIGHT: 100GM
SPEC.: AGL-300-27X40	DIM.: 50MM	SERIAL No.: -
MFR.: AQUALUX	SUR.:	Shielding Angle:

Table--2

UNIT: cd

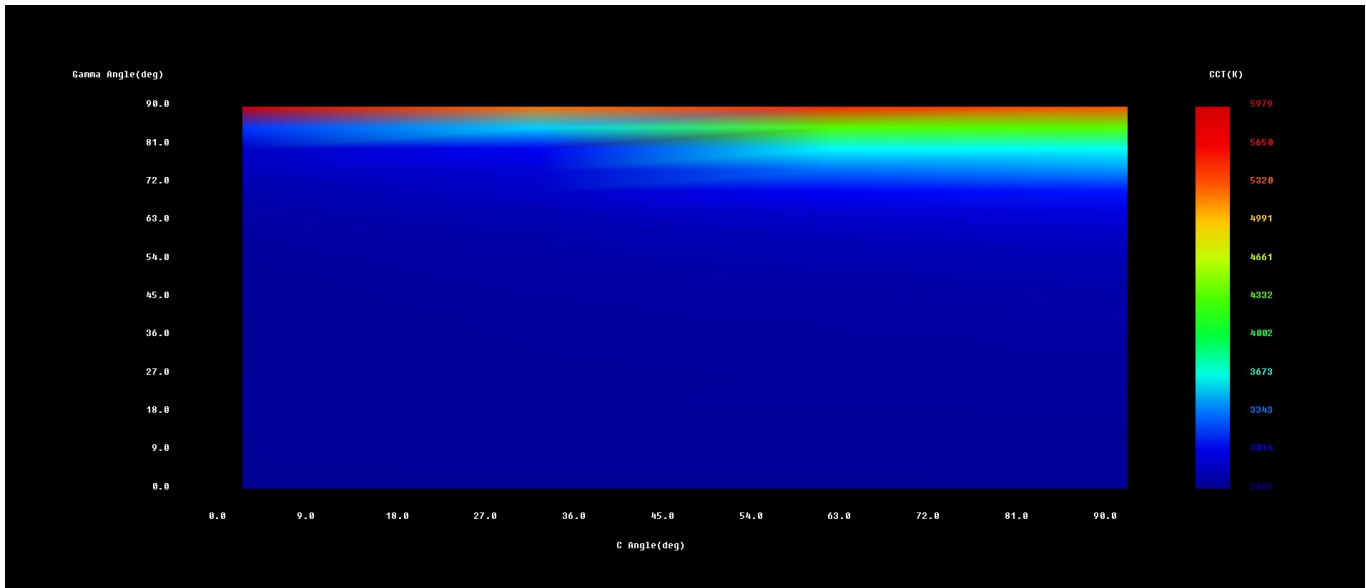
C (DEG)	285	300	315	330	345													
0	479	481	481	483	484													
5	478	483	487	491	491													
10	457	461	464	458	451													
15	371	374	373	364	355													
20	275	275	275	272	268													
25	200	195	191	189	187													
30	138	135	133	130	128													
35	98.9	96.5	95.3	92.2	91.1													
40	73.3	71.2	69.9	66.9	65.7													
45	54.1	52.5	51.2	48.4	46.7													
50	39.2	38.0	36.8	34.4	32.5													
55	27.4	26.9	26.0	23.9	22.1													
60	18.8	18.7	18.2	16.4	15.1													
65	12.3	12.5	12.1	10.8	9.82													
70	7.11	7.27	7.10	6.24	5.63													
75	3.58	3.72	3.66	3.24	2.97													
80	1.88	1.88	1.83	1.73	1.67													
85	1.23	1.24	1.21	1.14	1.08													
90	0.06	0.07	0.05	0.01	0.00													

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

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.473
 Humidity: 65.0%
 Test Distance: 3.100m [K=1.0000]
 Remarks: AGL-300-27X40
 3W / 2700K / 40D / 300LM

Spatial Color Distribution Report

NAME: AGL-300-27X40	TYPE: MR16 LAMP	WEIGHT: 100GM
DIM.: 50MM	SPEC.: AGL-300-27X40	SERIAL No.: -
MFR.: AQUALUX		



Color Parameters:

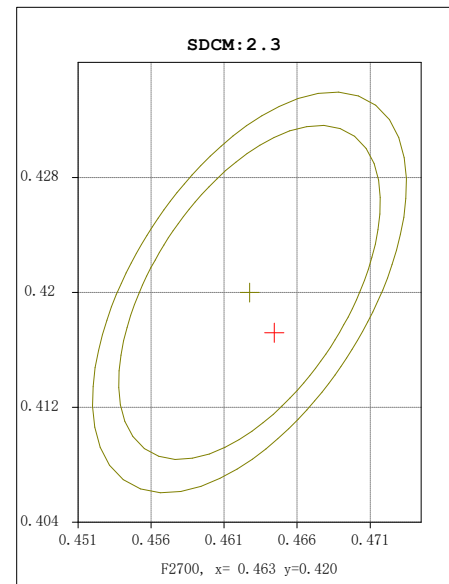
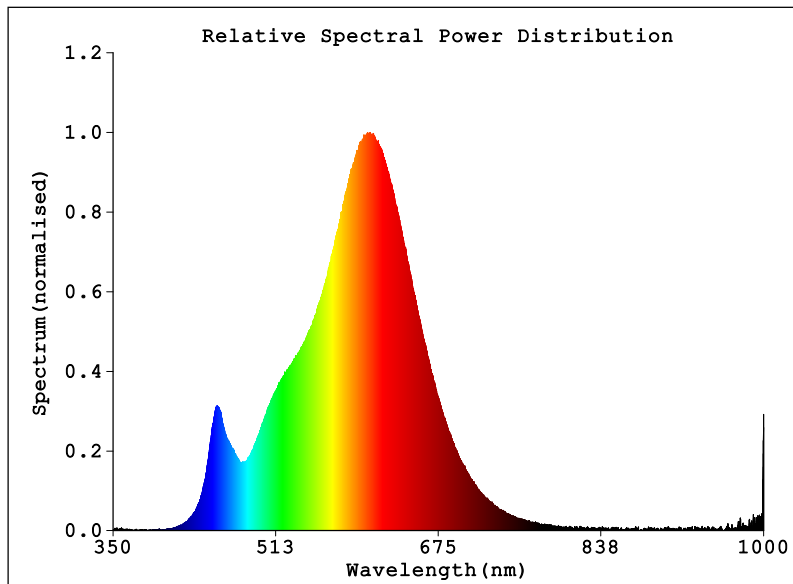
Average: x=0.4615,y=0.4156 u'=0.2613,v'=0.5295 CCT=2716K Ra=82.3 Rf=85 Rg=94
Center : x=0.4647,y=0.4172 u'=0.2626,v'=0.5306 CCT=2685K Ra=82.0 Rf=85 Rg=93
IESNA LM-79-2019 Max. du'v': 0.0043 / max.du'v': 0.0000[Set Range]
GB/T 24824(LB/T 001-2009):: avg. color nonuniformity du'v':0.0017
GB/T 24824(LB/T 001-2009):: max. color nonuniformity du'v':0.0017
Average: R1=81 R2=92 R3=95 R4=80 R5=81 R6=92 R7=81 R8=57 R9=6 R10=83
R11=79 R12=76 R13=83 R14=98 R15=72

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

Date: 12 October 2023
Humidity: 65.0%
Remarks: AGL-300-27X403W / 2700K / 40D / 300LM

Spectral Radiant Test Report

NAME: AGL-300-27X40	TYPE: MR16 LAMP	WEIGHT: 100GM
DIM.: 50MM	SPEC.: AGL-300-27X40	SERIAL No.: -
MFR.: AQUALUX		



Photon & Colormetric & Photometric Quantities:

Chromaticity Coordinates: x=0.4647 y=0.4172/u'=0.2626 v'=0.5306 duv=0.00203

Tc=2685K Dominant WL: Ld=583.7nm Purity=64.7%

Ratio: R=25.1% G=72.6% B=2.2% Peak WL: Lp=606.9nm HWL: 112.3nm

Rendering Index: Ra=82.0 TM-30: Rf=85 Rg=93

R1 =80 R2 =92 R3 =95 R4 =79 R5 =81 R6 =92 R7 =81

R8 =56 R9 =4 R10=82 R11=79 R12=75 R13=83 R14=98 R15=72

E = 48.66 lx Ee = 0.1501 W/m²

Status: T=1152.00ms Ip=52487 (80%) [HAAS-1200(CAN)]

Electrical: U=23.868V I=0.13567A P=3.2382W PF=1.0000

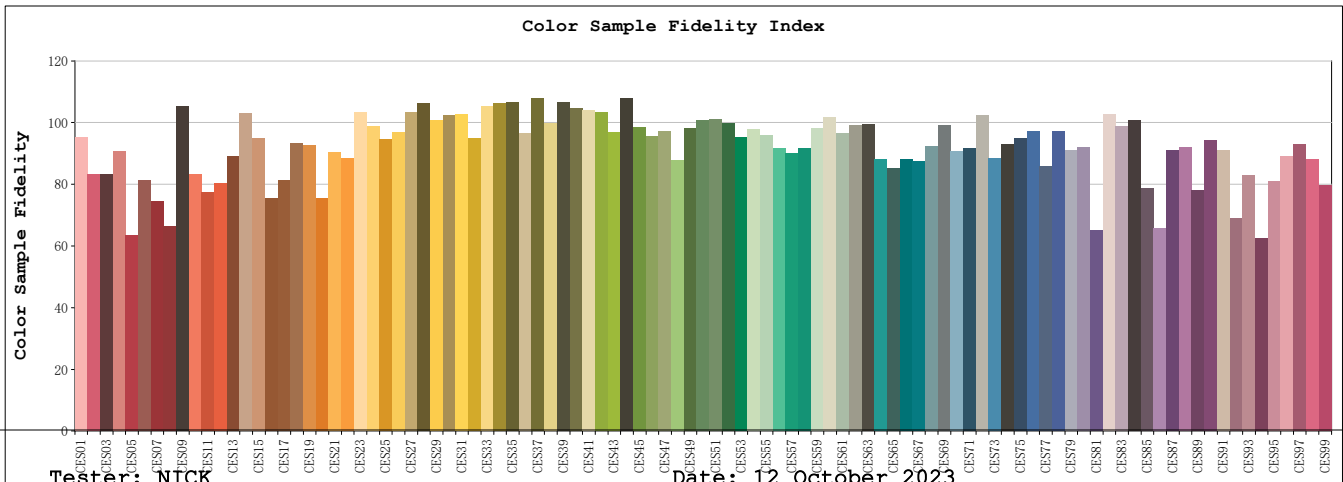
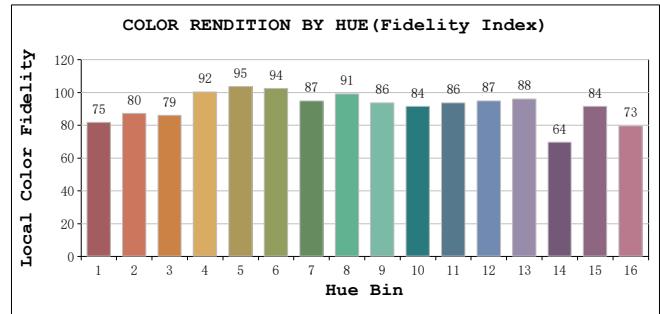
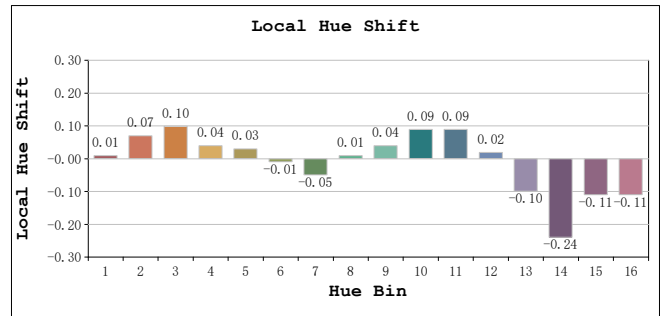
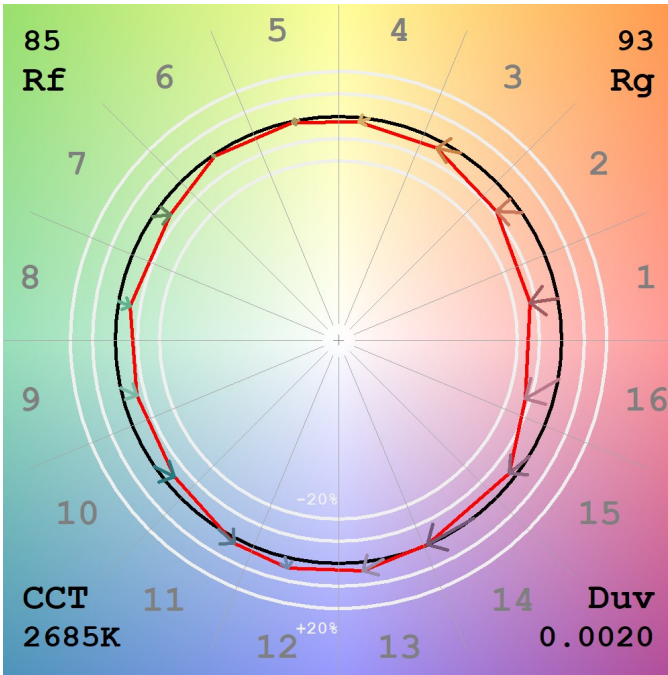
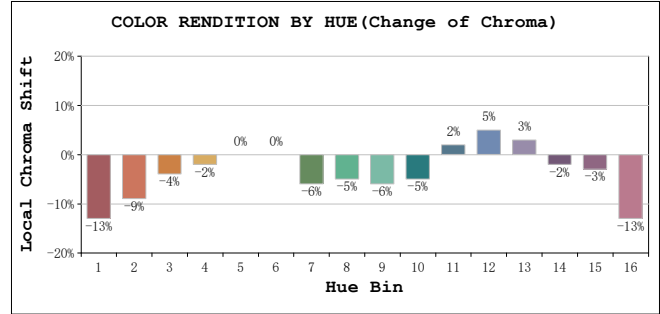
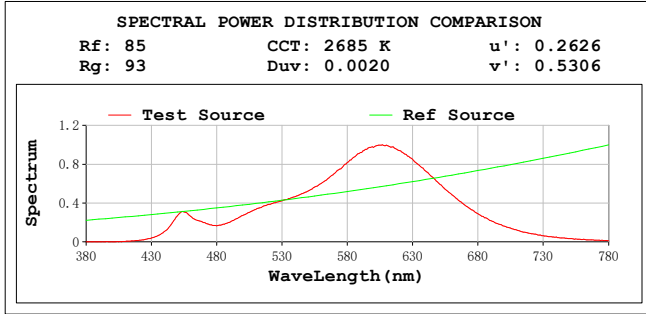
Test position: Center

Tester: NICK
 Temperature: 20°C
 Manufacturer: AQUALUX

Date: 12 October 2023
 Humidity: 65.0%
 Remarks: AGL-300-27X403W / 2700K / 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-300-27X403W / 2700K / 40D / 300LM

All Rf:

Rf1 = 87.4	Rf2 = 76.3	Rf3 = 76.3
Rf4 = 83.2	Rf5 = 58.1	Rf6 = 74.6
Rf7 = 68.3	Rf8 = 60.9	Rf9 = 96.5
Rf10 = 76.5	Rf11 = 70.9	Rf12 = 73.6
Rf13 = 81.8	Rf14 = 94.4	Rf15 = 87.1
Rf16 = 69.3	Rf17 = 74.5	Rf18 = 85.4
Rf19 = 84.9	Rf20 = 69.4	Rf21 = 82.9
Rf22 = 81.1	Rf23 = 94.8	Rf24 = 90.7
Rf25 = 86.7	Rf26 = 88.9	Rf27 = 94.9
Rf28 = 97.4	Rf29 = 92.5	Rf30 = 93.8
Rf31 = 94.2	Rf32 = 86.9	Rf33 = 96.6
Rf34 = 97.5	Rf35 = 97.8	Rf36 = 88.6
Rf37 = 98.8	Rf38 = 91.4	Rf39 = 97.9
Rf40 = 96.1	Rf41 = 95.3	Rf42 = 94.6
Rf43 = 88.9	Rf44 = 98.9	Rf45 = 90.4
Rf46 = 87.7	Rf47 = 89.2	Rf48 = 80.5
Rf49 = 90.1	Rf50 = 92.5	Rf51 = 92.8
Rf52 = 91.4	Rf53 = 87.3	Rf54 = 89.7
Rf55 = 88.0	Rf56 = 84.2	Rf57 = 82.7
Rf58 = 84.1	Rf59 = 90.0	Rf60 = 93.2
Rf61 = 88.6	Rf62 = 90.8	Rf63 = 91.3
Rf64 = 81.0	Rf65 = 78.2	Rf66 = 81.0
Rf67 = 80.2	Rf68 = 84.5	Rf69 = 90.8
Rf70 = 83.4	Rf71 = 84.0	Rf72 = 93.8
Rf73 = 81.2	Rf74 = 85.4	Rf75 = 87.1
Rf76 = 89.2	Rf77 = 78.7	Rf78 = 89.0
Rf79 = 83.5	Rf80 = 84.3	Rf81 = 59.7
Rf82 = 94.1	Rf83 = 90.5	Rf84 = 92.4
Rf85 = 72.1	Rf86 = 60.4	Rf87 = 83.4
Rf88 = 84.4	Rf89 = 71.6	Rf90 = 86.5
Rf91 = 83.5	Rf92 = 63.4	Rf93 = 76.1
Rf94 = 57.5	Rf95 = 74.2	Rf96 = 81.7
Rf97 = 85.3	Rf98 = 80.8	Rf99 = 73.0

Tester: NICK
Temperature: 20°C
Manufacturer: AQUALUX

Date: 12 October 2023
Humidity: 65.0%
Remarks: AGL-300-27X403W / 2700K / 40D / 300LM

System: GO-SPEX500_V1

Gamma\C	C0	CIE x,y	u',v'	CCT (K)	Ra	du'v'	Rf, Rg	Ip
0.0	100.00	0.4647,0.4172	0.2626,0.5306	2685	82.0	0.0000	85, 93	52487
10.0	87.31	0.4635,0.4172	0.2619,0.5304	2701	82.0	0.0007	85, 93	46327
20.0	50.37	0.4620,0.4162	0.2614,0.5298	2713	82.2	0.0014	85, 93	28217
30.0	24.61	0.4630,0.4163	0.2620,0.5300	2700	82.1	0.0008	85, 93	31474
40.0	13.27	0.4627,0.4161	0.2619,0.5298	2703	82.1	0.0011	85, 93	20279
50.0	6.60	0.4626,0.4169	0.2615,0.5301	2710	82.1	0.0012	85, 93	26841
60.0	3.05	0.4603,0.4159	0.2604,0.5294	2735	82.5	0.0025	85, 93	26715
70.0	1.07	0.4554,0.4135	0.2583,0.5278	2786	83.2	0.0051	86, 94	26881
80.0	0.36	0.4412,0.3986	0.2558,0.5198	2884	85.9	0.0128	86, 98	26792
90.0	0.07	0.3241,0.3080	0.2143,0.4583	5979	87.2	0.0869	86, 110	26627
	C90							
0.0	99.57	0.4647,0.4172	0.2626,0.5306	2685	82.0	0.0000	85, 93	52487
10.0	83.62	0.4623,0.4163	0.2615,0.5299	2711	82.2	0.0013	85, 93	44370
20.0	46.86	0.4606,0.4151	0.2609,0.5292	2725	82.3	0.0022	85, 93	26430
30.0	22.83	0.4595,0.4138	0.2608,0.5285	2730	82.6	0.0028	85, 93	29364
40.0	13.12	0.4565,0.4123	0.2596,0.5275	2760	83.1	0.0043	85, 93	20284
50.0	6.77	0.4524,0.4091	0.2583,0.5256	2796	83.8	0.0066	85, 93	27135
60.0	3.31	0.4416,0.4004	0.2552,0.5206	2892	85.6	0.0124	85, 93	27071
70.0	1.37	0.4172,0.3797	0.2482,0.5084	3154	90.3	0.0265	86, 94	27129
80.0	0.71	0.3865,0.3529	0.2393,0.4915	3628	94.7	0.0455	86, 98	27109
90.0	0.36	0.3354,0.3106	0.2215,0.4616	5322	85.5	0.0803	86, 110	27165

Tester: NICK
 Temperature: 20°C
 Manufacturer: AQUALUX

Date: 12 October 2023
 Humidity: 65.0%
 Remarks: AGL-300-27X403W / 2700K / 40D / 300LM

System: GO-SPEX500_V1

