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Test Report

Manufacturer	OxyTech
Sample Description	321.654
Report Issue Date	22-3-2023
Photometric Test Code	321.654



	
Stefano Borsani	Fabio Ragni
Laboratory Manager (DLAB)	Laboratory Technician

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Instrument Data

Instrumentation Data		
Instrument Type	Description	Registration Number
Custom	OxyTech T2	OX-048
Luxmeter	C&G Labolux - [lux]	OX-049
Wattmeter	Newtons Ppa 5530 - [W]	OX-031
Ammeter	Newtons Ppa 5530 - [A]	OX-031
Voltmeter	Newtons Ppa 5530 - [V]	OX-031
Anemometer	Delta Ohm HD2001.2 - [m/sec]	OX-039
Thermometer	Delta Ohm HD2001.2 - [°C]	OX-039
Spectrometer	Jeti 1201 Focus - [W/m ²]+[W/m ² *sr]	OX-030
PSU	Elettrotest TPS-M6000	OX-037



Electrical Test Parameters	
Source Type	via Mains
Supply Voltage	230 V $\pm$ 0.2%
Harmonic Distorsion	< 0,5%
Source Frequency	50 Hz $\pm$ 0.1%

Enviromental Conditions	
Laboratory Temperature	25°C $\pm$ 1°C
Relative Humidity	60%
Air movement	< 0,2 m/s

The data in this Report correspond to those collected in the manner mentioned above

This Report concerns only the sample under test

The extension of this Report to other specimens goes beyond the limits of the report itself

This Report was automatically generated with LITESTAR 4D Pv Report Plus

Measurement Data

Measurement Data	
Test Data	22-3-2023
Measurement Type	C-Gamma Asymmetrical
Reference Standards	- EN 13032-4-2015 Light and lighting - Measurement and presentation of photometric data of lamps and luminaires 2015 - CIE S-025 2015 Test Method for LED Lamps, Luminaires and Modules 2015
Internal Reference	Procedura:PT1006a Istruzione:IS1006
Stabilization Time	45 min

Photometric References



Laboratory Uncertainties

Luminous Flux	< 2,5%
Color Coordinates x,y	x +-0.003 - y +-0.004
CCT	+/- 50 K
CRI	+/-2%

Test Data

Manufacturer Data	
Manufacturer	OxyTech
Address	Via G.B.Vico 54 / 56 - I - 20007 Cornaredo MI Italia EU

Test Sample (DUT) Data	
Product Name	INTERNAL 123
Model	321.654
Pictures	
Dimensions [mm]	Length: 600 Width: 50 Height: 65
Luminous Area [mm]	Length: 600 Width: 50 Height: 0
Device Power Supply	230.06V 0.06A 8.99W 50.00Hz
LED Power Supply	0.00V 0.00A 0.00W 0.00Hz
Remarks	Power 8.99210 PF 0.66069

Luminaire

Code 321.654
Name INTERNAL 123
Line INTERNAL

Measurem.

Code 321.654
Name INTERNAL 123

Source Data

Code	321.654	Correlated Color Temperature (CCT)	3926K	Q.ty	1
Name	INTERNAL 123	Color rendering index (CRI)	84		
Line					

Measurement data

Coordinate system	CG	Symmetry Type	Asymmetrical
Date	22-03-2023	Maximum Gamma Angle	90°
Measurement Distance	9.11m	Measurement Flux	639.0 lm
Maximum	367.29 cd/klm	Position	C=240.0° G=2.0°
Remarks	Power 8.99210PF 0.66069		

Electrical Parameters

Channel 1		Channel 2	
Voltage	230.06 V	Voltage	0.00 V
Current	0.06 A	Current	0.00 A
Power	8.99 W	Power	0.00 W
Frequency	50 Hz	Frequency	0 Hz
Power Factor	0.66	Power Factor	0.00

Environmental Parameters

Temperature	24.7 °C	Air Speed	0.0 m/s
Humidity	33.8 %		

Luminaire Dimensions

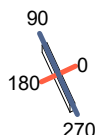
Rectangular Luminaire	Length	600 mm	Width	50 mm	Height	65 mm
Rectangular Luminous Area	Length	600 mm	Width	50 mm	Height	0 mm
Horizontal Luminous Area	0.030000 m2		Emitting area on Plane 180°	0.000000 m2		
Emitting area on Plane 0°	0.000000 m2		Emitting area on Plane 270°	0.000000 m2		
Emitting area on Plane 90°	0.000000 m2		Glare area at 76°	0.007258 m2		

Photometric Assessment

Luminaire Flux	639.0 lm	Source Flux	639.0 lm
Efficacy	71.077 lm/W	Efficiency	100.0 %
CIE Flux Codes	48 80 96 100 100	D DIN 5040	A30
F UTE	1.00 E	B NBN	BZ 4

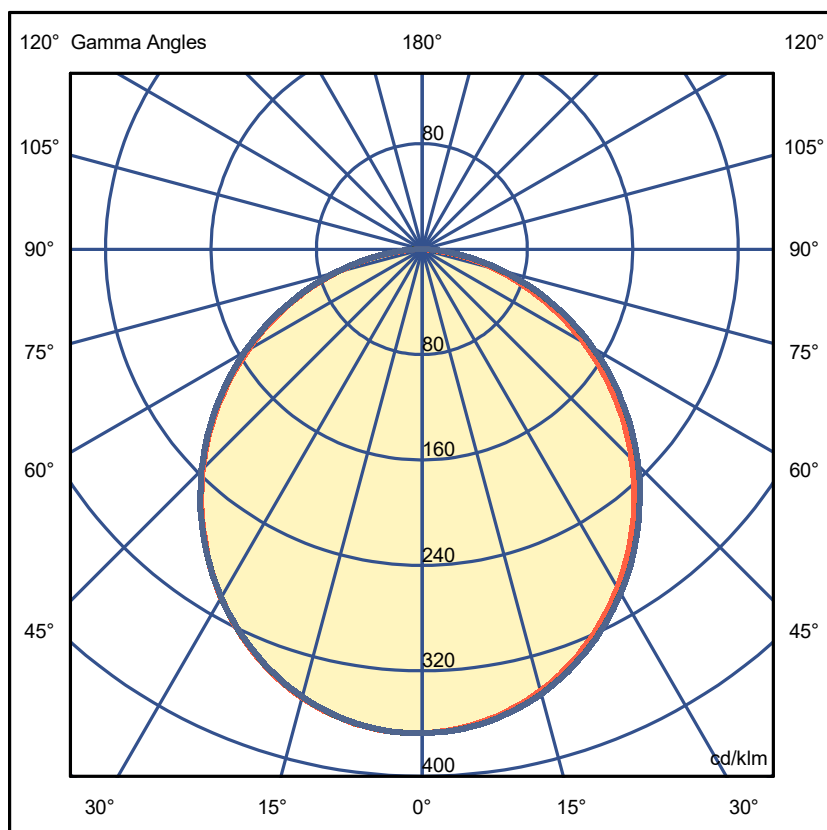


600mm x 50mm



C Halfplanes
180.0 0.0
270.0 90.0

ULOR 0.00 %
DLOR 100.00 %
RN 0.00 %



Luminaire

Code 321.654
Name INTERNAL 123

Measurement

Code 321.654
Name INTERNAL 123

Luminaire Flux	639 lm	Luminaire Power	9.0 W	Efficacy	71.077 lm/W	Efficiency	100.00%
Source Flux	639 lm	Maximum value	367.29 cd/klm	Position	C=240.00 G=2.00	CG Asymmetrical	

Spectral Data

Std.: IES LM79 08

CIE1931 $x=0.383368$ $y=0.377484$
CIE1960 $u=0.226742$ $v=0.334893$
CIE1976 $u'=0.226742$ $v'=0.502339$
D(u,v) 0.00050
Delta(u',v') 0.05172

Relief distance = 6.00 m

Color rendering index (CRI)
Color Rendering Components

CCT = 3926 K

CRI8(Ra) 84.7

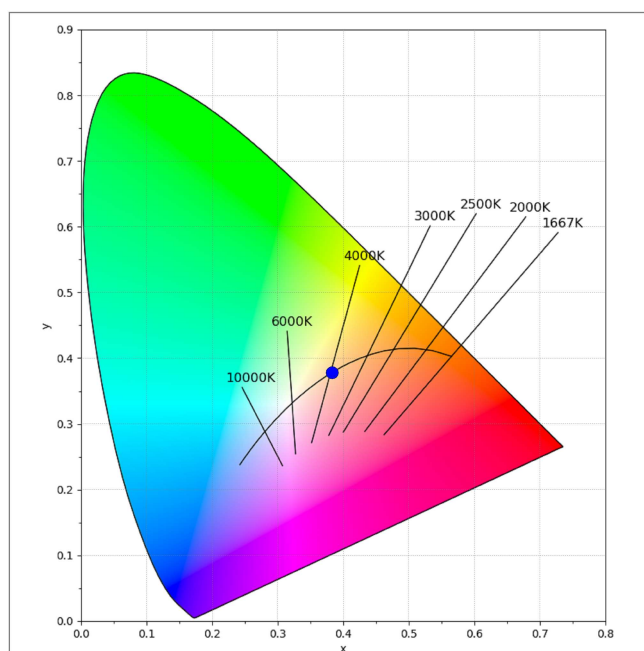
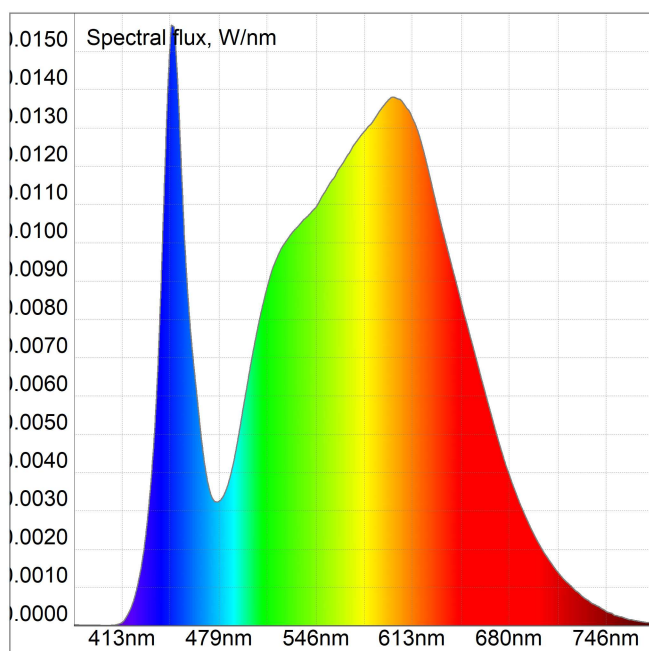
CRI15(Rav) 78.8

R 1: 84.2 R 2: 88.8 R 3: 92.3 R 4: 85.5 R 5: 83.9
R 6: 84.6 R 7: 87.9 R 8: 70.3 R 9: 21.9 R 10: 73.3
R 11: 85.3 R 12: 64.0 R 13: 85.1 R 14: 95.5 R 15: 78.8

Spectral Distribution

l(nm)	Spectral flux, W/nm	l(nm)	Spectral flux, W/nm	l(nm)	Spectral flux, W/nm
380.0	0.000017	386.0	0.000016	392.0	0.000011
398.0	0.000009	404.0	0.000007	410.0	0.000036
416.0	0.000227	422.0	0.000794	428.0	0.001945
434.0	0.004274	440.0	0.008953	446.0	0.015076
452.0	0.013756	458.0	0.008890	464.0	0.006259
470.0	0.004226	476.0	0.003286	482.0	0.003333
488.0	0.003947	494.0	0.005094	500.0	0.006430
506.0	0.007663	512.0	0.008676	518.0	0.009437
524.0	0.009921	530.0	0.010248	536.0	0.010498
542.0	0.010731	548.0	0.011004	554.0	0.011393
560.0	0.011737	566.0	0.012118	572.0	0.012502
578.0	0.012815	584.0	0.013076	590.0	0.013402
596.0	0.013698	602.0	0.013780	608.0	0.013598
614.0	0.013205	620.0	0.012545	626.0	0.011629
632.0	0.010668	638.0	0.009769	644.0	0.008899
650.0	0.008012	656.0	0.007169	662.0	0.006309
668.0	0.005473	674.0	0.004665	680.0	0.003963
686.0	0.003342	692.0	0.002800	698.0	0.002323
704.0	0.001915	710.0	0.001584	716.0	0.001291
722.0	0.001064	728.0	0.000860	734.0	0.000673
740.0	0.000530	746.0	0.000404	752.0	0.000291
758.0	0.000225	764.0	0.000152	770.0	0.000110
776.0	0.000078				

Spectrum Graph



Luminaire

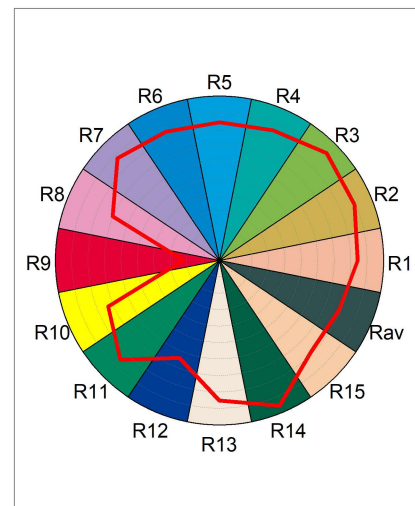
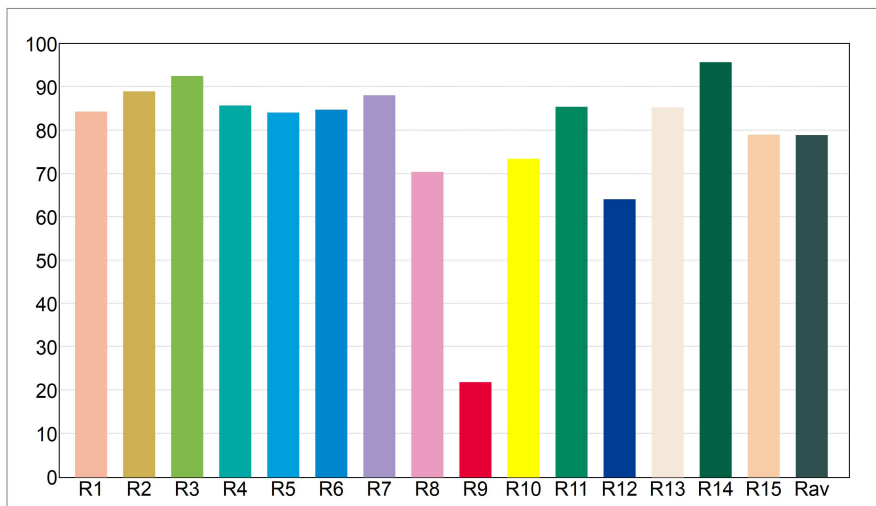
Code 321.654
Name INTERNAL 123

Measurem.

Code 321.654
Name INTERNAL 123

Luminaire Flux	639 lm	Luminaire Power	9.0 W	Efficacy	71.077 lm/W	Efficiency	100.00%
Source Flux	639 lm	Maximum value	367.29 cd/klm	Position	C=240.00 G=2.00	CG	Asymmetrical

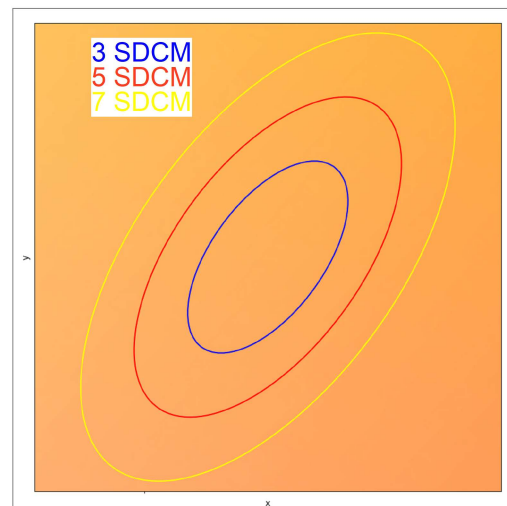
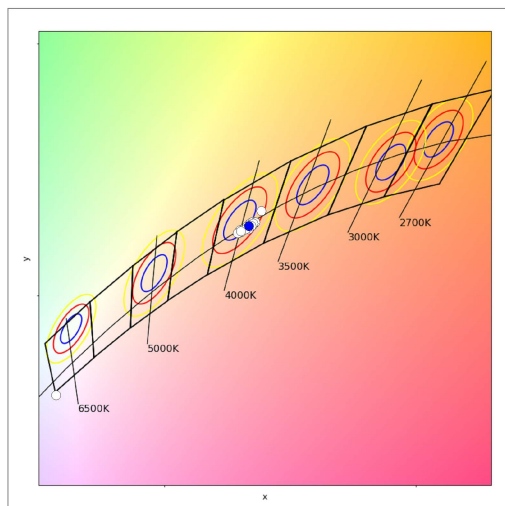
CRI Graphs



McAdam's Diagram

Analisi di MacAdams
ANSI C78-376

- Step 3: 0 / 40
- Step 5: 0 / 40
- Step 7: 0 / 40
- Step outside: 40 / 40
- Int. Spec. in 4-step: NO
- 95% in 5-step: NO



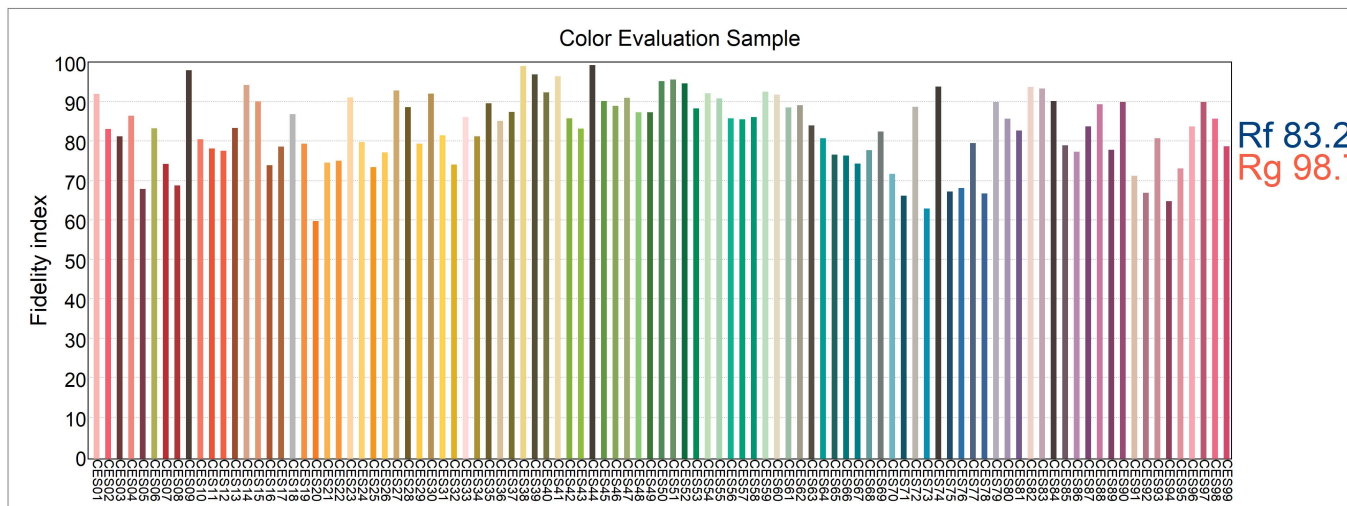
Luminaire

Code 321.654
Name INTERNAL 123

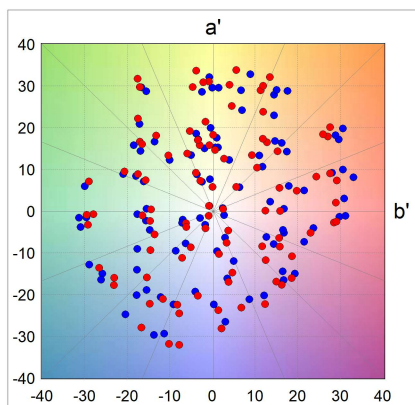
Measurement

Code 321.654
Name INTERNAL 123

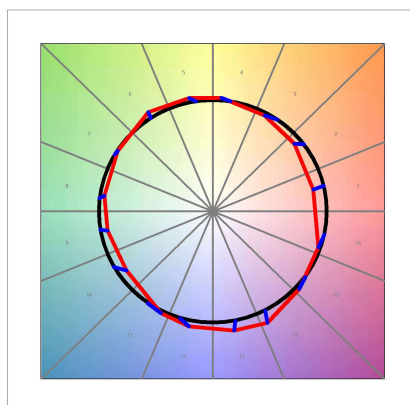
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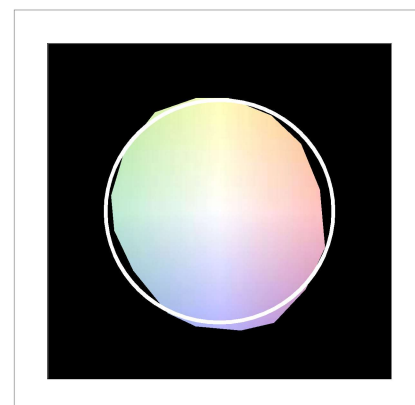
Chromatic Coordinates (a', b') 99 CES



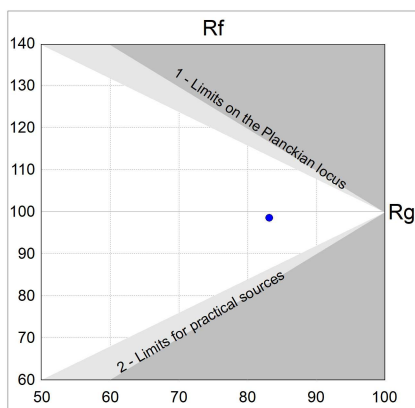
Color Vector Graphic



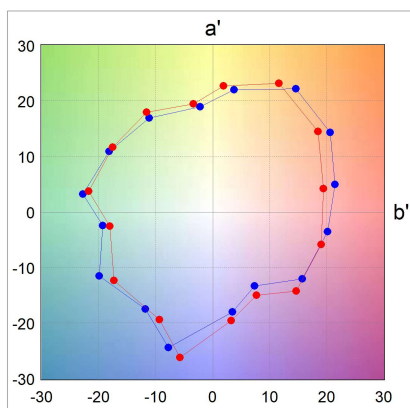
Color Distorsion Graphic



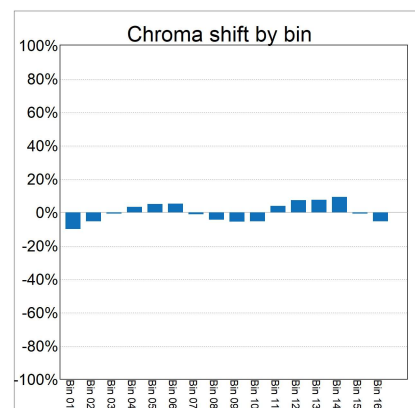
Rg vs Rf Plot



Gamut Polygon



Bin Deviation



Luminaire

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Name INTERNAL 123

Measurem.

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Source Flux	639 lm	Maximum value	367.29 cd/klm	Position	C=240.00 G=2.00	CG	Asymmetrical

Standard	UE 20192015
Produttore	
Total Flux	639.0 lm
Angolo del Fascio Originale	0.00°
	Non Directional
Flusso Luminoso Utile	639.0 lm
Potenza Caratteristica	9.0 W
	On mains (MLS)
Indice di Efficienza Energetica	71.1
Tipo Sorgente	LFL_T5_HE
	None
eta=98.9 lm/W L=1.9 W C=1.08	
Ponmax = 9.30	



PASS



ENERGY

OxyTech

321.654

A

B

C

D

E

F

G

G

9

kWh/1000h

Luminaire

Code 321.654
Name INTERNAL 123

Measurem.

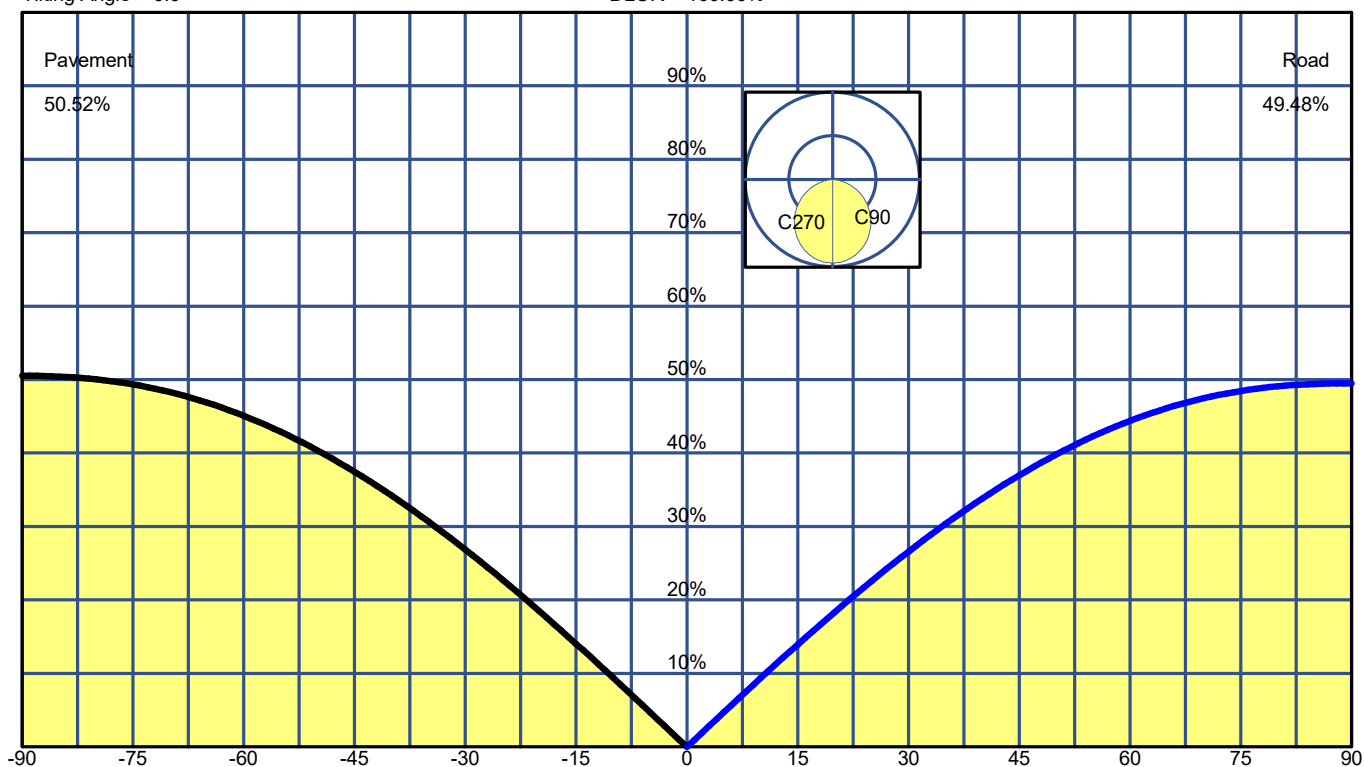
Code 321.654
Name INTERNAL 123

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Source Flux	639 lm	Maximum value	367.29 cd/klm	Position	C=240.00 G=2.00	CG	Asymmetrical

Pavement			Road		
Angle	0	0.00%	Angle	0	0.00%
Angle	-5	4.73%	Angle	5	4.71%
Angle	-10	9.42%	Angle	10	9.36%
Angle	-15	14.02%	Angle	15	13.92%
Angle	-20	18.49%	Angle	20	18.33%
Angle	-25	22.78%	Angle	25	22.56%
Angle	-30	26.85%	Angle	30	26.58%
Angle	-35	30.67%	Angle	35	30.33%
Angle	-40	34.21%	Angle	40	33.81%
Angle	-45	37.44%	Angle	45	36.97%
Angle	-50	40.34%	Angle	50	39.79%
Angle	-55	42.89%	Angle	55	42.27%
Angle	-60	45.07%	Angle	60	44.38%
Angle	-65	46.87%	Angle	65	46.11%
Angle	-70	48.29%	Angle	70	47.47%
Angle	-75	49.34%	Angle	75	48.45%
Angle	-80	50.03%	Angle	80	49.08%
Angle	-85	50.41%	Angle	85	49.40%
Angle	-90	50.52%	Angle	90	49.48%

Tilting Angle = 0.0

DLOR = 100.00%



Spread	21.9° Narrow	DLOR	100.00000 %
Throw	11.6° Short	ULOR	0.00000 %
SLI	8.1 Tight	Efficiency	100.00000 %
CIE Cutoff	Semi-Cutoff - Max: C=240.0° Gamma=2.0°	RN	0.00000 %
Iesna Cutoff	Cutoff	Luminous Intensity Class	G*6
DIN5044	KB2	Glare Index	D6
IESNA Type V Very Short Quadrilateral Symmetry			

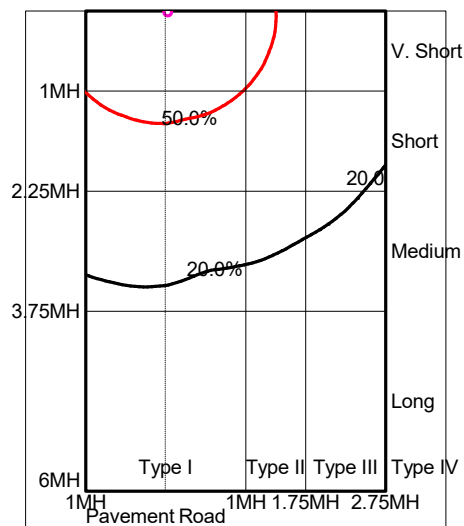
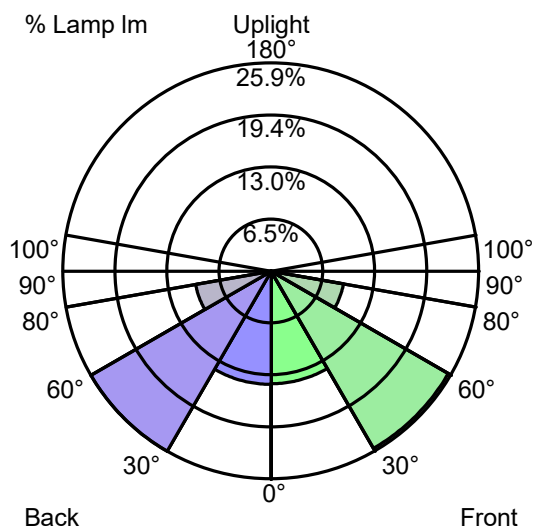
Luminaire

Code 321.654
Name INTERNAL 123

Measurem.

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US ROAD STANDARDS


Luminaire Classification System (LCS)				
LCS Zone		Lumens	%Lamp	%Lum
FL	0° -- 30°	89.6 lm	14.0 %	14.0 %
FM	30° -- 60°	162.9 lm	25.5 %	25.5 %
FH	60° -- 80°	58.5 lm	9.2 %	9.2 %
FVH	80° -- 90°	5.2 lm	0.8 %	0.8 %
BL	0° -- 30°	90.2 lm	14.1 %	14.1 %
BM	30° -- 60°	165.6 lm	25.9 %	25.9 %
BH	60° -- 80°	60.9 lm	9.5 %	9.5 %
BVH	80° -- 90°	6.1 lm	1.0 %	1.0 %
UL	90° -- 100°	0.0 lm	0.0 %	0.0 %
UH	100° -- 180°	0.0 lm	0.0 %	0.0 %
TOTALS		639.0 lm	100.0 %	100.0 %
BUG B0 U0 G0 Type V Very Short Quadrilateral Symmetry				

Luminaire

Code 321.654
Name INTERNAL 123

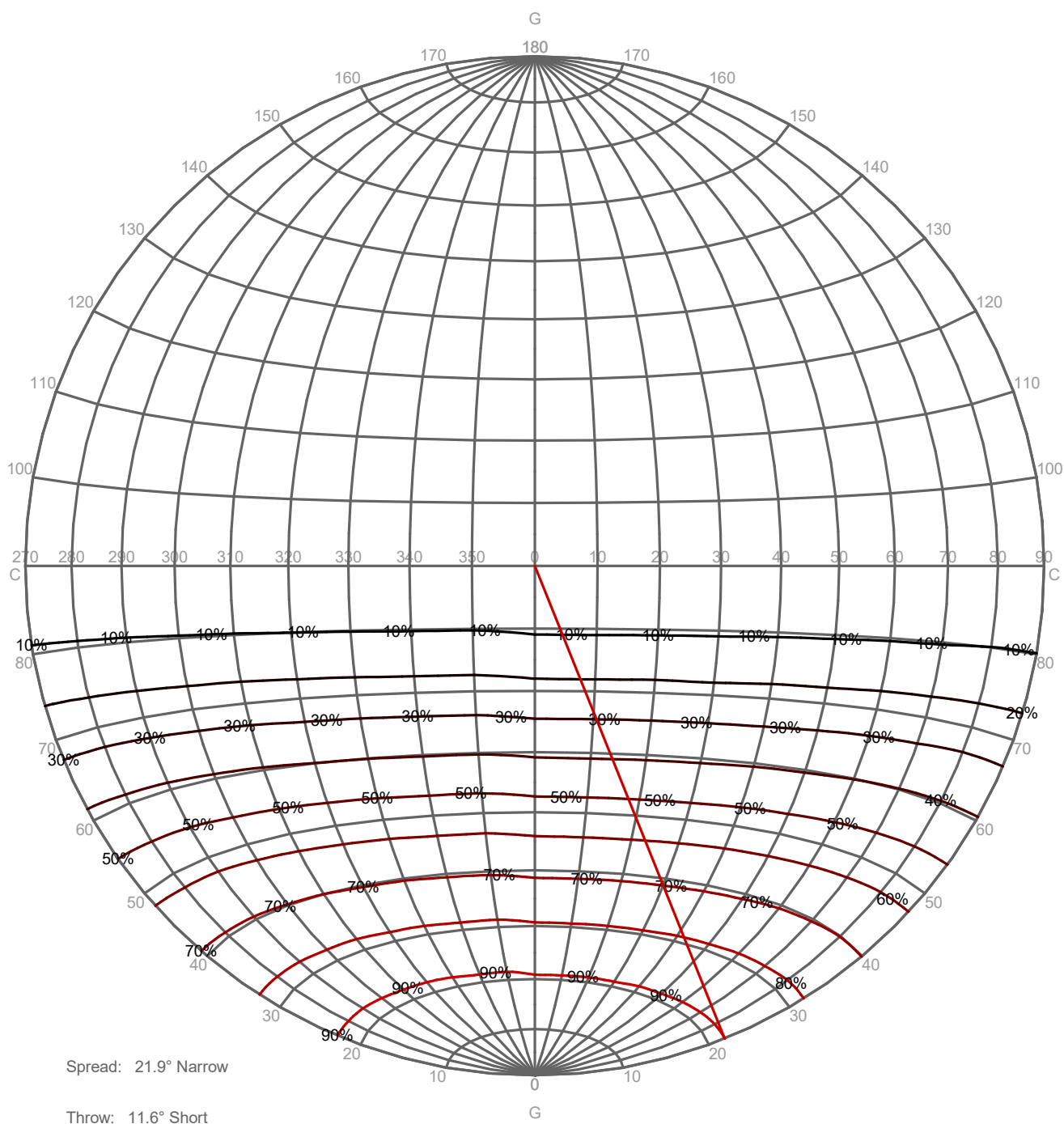
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PERCENTAGE ISOCANDLES

Projection: Equal Area SLI 8.1 Tight Tilting Angle:0°



Luminaire

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Name INTERNAL 123

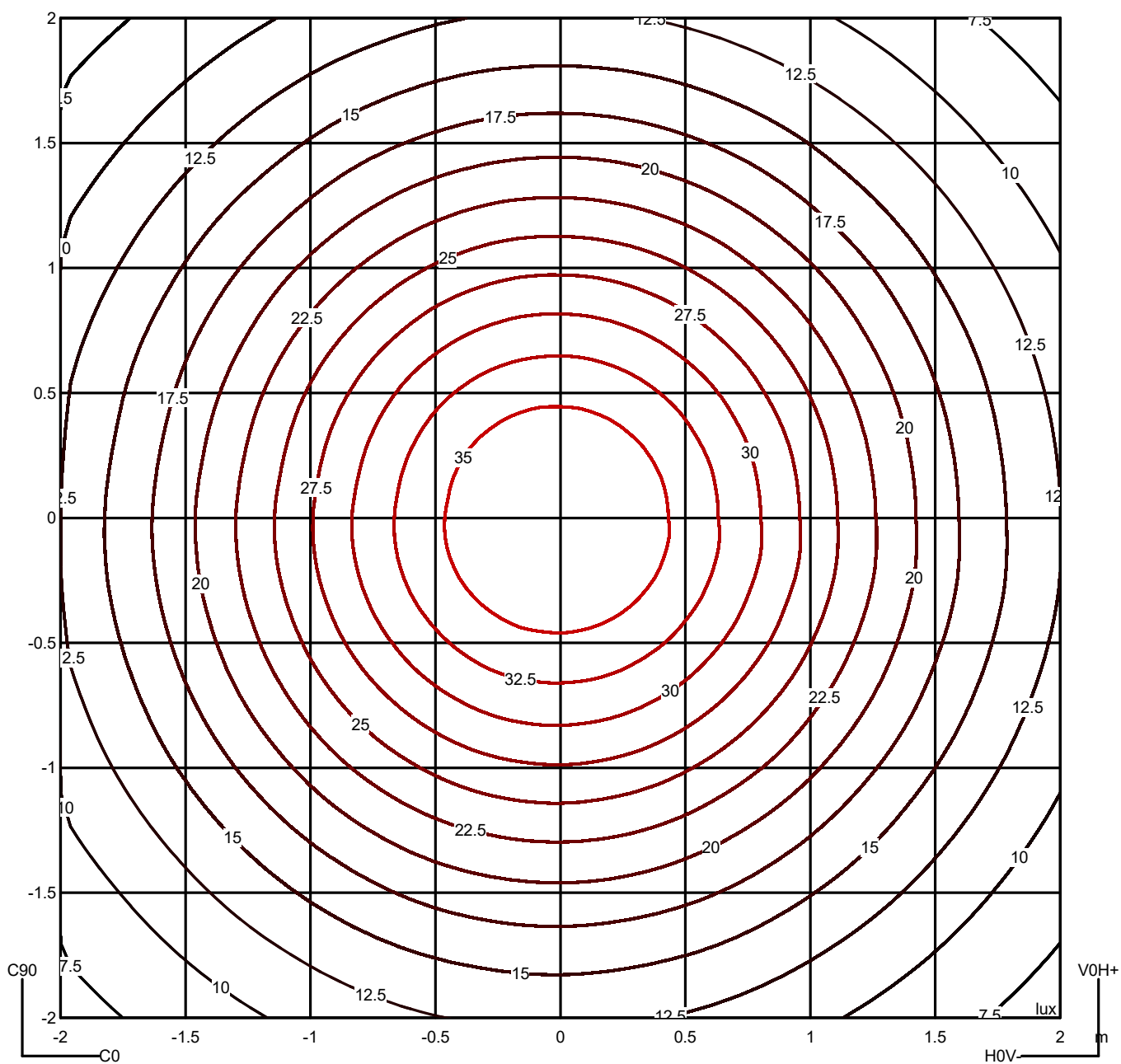
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Source Flux	639 lm	Maximum value	367.29 cd/klm	Position	C=240.00 G=2.00	CG	Asymmetrical

Isolux (Floor)

Luminaire position X=0.00m Y=0.00m Z=2.50m



Luminaire

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Measurement

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Source Flux	639 lm		Maximum value		367.29 cd/klm		Position		C=240.00 G=2.00		CG Asymmetrical			
Luminous Intensity Table cd/klm Table 1/6														
	C 0.00	C 10.00	C 20.00	C 30.00	C 40.00	C 50.00	C 60.00	C 70.00	C 80.00	C 90.00	C 100.00	C 110.00	C 120.00	
G 0.0	367	367	367	367	367	367	367	367	367	367	367	367	367	
G 1.0	367	367	367	367	367	367	367	367	367	367	367	367	367	
G 2.0	366	366	367	367	367	367	367	367	367	367	367	367	367	
G 3.0	366	366	366	366	366	366	366	366	366	366	367	367	367	
G 4.0	365	365	365	365	365	365	366	366	366	366	366	366	366	
G 5.0	364	364	364	364	365	365	365	365	365	365	365	365	366	
G 6.0	363	363	363	363	364	364	364	364	364	364	364	365	365	
G 7.0	362	362	362	362	362	363	363	363	363	363	363	363	364	
G 8.0	361	361	361	361	361	361	361	362	362	362	362	362	363	
G 9.0	359	359	359	359	360	360	360	360	360	361	361	361	361	
G 10.0	358	358	358	358	358	358	358	359	359	359	359	360	360	
G 11.0	356	356	356	356	356	356	356	357	357	357	358	358	358	
G 12.0	354	354	354	354	354	354	355	355	355	356	356	356	356	
G 13.0	352	352	352	352	352	352	353	353	353	354	354	355	355	
G 14.0	349	349	350	350	350	350	351	351	351	352	352	352	353	
G 15.0	347	347	347	347	348	348	348	349	349	349	350	350	351	
G 16.0	345	344	345	345	345	345	346	346	347	347	348	348	348	
G 17.0	342	342	342	342	343	343	343	343	344	344	345	345	346	
G 18.0	339	339	340	340	340	340	341	341	341	342	343	343	343	
G 19.0	336	336	337	336	337	337	338	338	339	339	340	340	341	
G 20.0	333	333	334	333	334	334	335	335	336	336	337	337	338	
G 21.0	330	330	331	330	331	331	332	332	333	333	334	334	335	
G 22.0	327	327	327	327	328	328	329	329	330	330	331	331	332	
G 23.0	323	323	324	324	324	324	325	326	327	327	328	328	329	
G 24.0	320	320	320	320	321	321	322	323	323	324	325	325	325	
G 25.0	316	316	317	317	317	318	319	319	320	320	321	321	322	
G 26.0	312	312	313	313	313	314	314	315	316	317	317	318	318	
G 27.0	309	308	309	309	310	310	311	312	312	313	314	314	315	
G 28.0	305	305	305	305	305	306	307	308	309	309	310	311	311	
G 29.0	301	301	301	301	302	302	303	304	305	305	306	307	307	
G 30.0	297	296	297	297	298	298	299	300	301	301	302	303	303	
G 31.0	292	292	292	293	293	294	295	296	297	298	298	299	299	
G 32.0	288	288	288	289	289	290	291	292	293	293	295	294	295	
G 33.0	283	283	284	284	285	285	287	288	289	289	290	290	291	
G 34.0	279	279	279	279	280	281	282	283	284	285	286	286	286	
G 35.0	275	274	275	275	275	276	278	279	279	280	282	282	282	
G 36.0	270	270	270	270	272	272	273	274	275	275	277	277	278	
G 37.0	265	265	266	266	267	268	269	269	270	271	272	273	274	
G 38.0	260	260	261	261	262	262	264	265	266	266	267	268	268	
G 39.0	256	255	256	256	257	258	259	260	261	262	263	263	264	
G 40.0	250	251	251	251	252	253	255	255	256	257	258	259	259	
G 41.0	246	245	246	246	247	248	249	250	251	252	253	253	254	
G 42.0	240	240	240	241	242	243	245	245	246	247	248	249	249	
G 43.0	235	235	236	236	237	238	239	241	241	242	243	244	244	
G 44.0	230	230	231	231	232	233	234	235	237	237	238	238	239	
G 45.0	225	224	225	226	227	227	229	229	231	232	233	234	234	
G 46.0	220	220	220	221	222	222	224	225	226	227	228	228	229	
G 47.0	214	214	215	215	216	217	219	220	221	222	223	223	224	
G 48.0	209	209	209	209	211	212	213	214	216	216	217	217	218	
G 49.0	204	203	204	205	206	207	208	209	210	211	212	212	213	
G 50.0	199	198	199	199	200	201	203	204	205	206	207	207	207	
G 51.0	193	192	193	193	195	196	197	198	200	200	201	201	202	
G 52.0	187	187	187	188	189	190	192	193	194	195	196	196	196	
G 53.0	181	181	182	182	184	184	186	187	189	189	190	191	191	
G 54.0	176	176	176	177	178	179	181	182	183	184	185	185	185	
G 55.0	170	170	171	171	173	173	175	176	178	178	179	180	180	
G 56.0	165	164	165	166	167	168	169	170	172	173	174	174	174	
G 57.0	160	159	160	159	160	162	163	165	166	167	168	168	168	
G 58.0	153	153	154	154	155	156	158	160	161	162	162	162	163	
G 59.0	148	148	148	148	149	151	152	153	155	155	157	157	157	
G 60.0	142	141	142	143	144	145	146	148	149	149	150	151	151	
G 61.0	137	135	136	137	139	139	141	142	143	144	146	145	146	
G 62.0	130	130	131	131	132	133	135	136	138	139	139	139	140	
G 63.0	125	124	125	125	127	127	129	130	132	132	133	134	134	
G 64.0	119	118	119	120	121	121	123	124	126	126	128	128	128	
G 65.0	113	113	113	113	115	116	117	118	120	121	122	122	122	
G 66.0	107	107	108	108	108	110	112	113	115	115	116	116	117	
G 67.0	102	101	102	102	103	104	106	106	108	109	110	110	110	
G 68.0	96	95	96	97	98	98	100	101	103	103	105	105	105	
G 69.0	90	90	90	90	92	92	94	95	97	98	99	98	99	
G 70.0	85	84	85	85	86	87	88	89	91	92	92	93	93	
G 71.0	79	78	79	79	80	81	83	84	85	87	87	87	87	
G 72.0	73	73	74	73	75	75	77	78	79	79	81	81	82	

Luminaire

Code 321.654
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Measurement

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Name INTERNAL 123

Luminaire Flux		639 lm	Luminaire Power			9.0 W	Efficacy		71.077 lm/W		Efficiency		100.00%
Source Flux		639 lm	Maximum value			367.29 cd/klm	Position		C=240.00 G=2.00		CG	Asymmetrical	
Luminous Intensity Table cd/klm Table 2/6													
	C 130.00	C 140.00	C 150.00	C 160.00	C 170.00	C 180.00	C 190.00	C 200.00	C 210.00	C 220.00	C 230.00	C 240.00	C 250.00
G 0.0	367	367	367	367	367	367	367	367	367	367	367	367	367
G 1.0	367	367	367	367	367	367	367	367	367	367	367	367	367
G 2.0	367	367	367	367	367	367	367	367	367	367	367	367	367
G 3.0	367	367	367	367	367	367	367	367	367	367	367	367	367
G 4.0	366	366	366	366	366	366	367	367	367	367	367	367	367
G 5.0	366	366	366	366	365	366	366	366	366	366	366	366	366
G 6.0	365	365	365	365	365	365	366	365	366	366	366	366	366
G 7.0	364	364	364	364	364	364	365	365	365	365	365	365	365
G 8.0	363	363	363	363	363	364	364	364	364	364	364	364	364
G 9.0	362	362	362	362	361	362	363	363	363	363	363	363	363
G 10.0	360	360	360	360	360	361	361	362	362	362	362	361	361
G 11.0	358	359	359	359	359	359	360	360	360	360	360	360	360
G 12.0	357	357	357	357	357	358	358	358	358	358	358	358	358
G 13.0	355	355	355	355	355	356	356	357	357	357	357	356	356
G 14.0	353	353	353	353	353	354	355	355	355	355	355	354	354
G 15.0	351	351	351	351	351	352	353	353	353	353	353	353	352
G 16.0	349	349	349	349	349	350	350	351	350	350	351	350	350
G 17.0	346	346	346	346	346	348	348	348	348	348	348	348	348
G 18.0	343	344	344	344	344	345	346	346	346	346	346	345	345
G 19.0	341	341	341	341	341	342	343	343	343	343	343	343	343
G 20.0	338	338	338	338	338	340	340	340	340	340	341	340	340
G 21.0	335	335	335	336	335	337	337	338	338	338	338	337	337
G 22.0	332	332	332	332	332	334	335	334	335	335	334	334	334
G 23.0	329	329	329	329	329	330	331	331	332	331	331	331	331
G 24.0	326	325	326	325	325	327	328	328	328	328	328	328	327
G 25.0	322	322	322	322	322	324	325	324	325	325	325	324	325
G 26.0	318	319	319	318	318	320	321	321	322	321	321	321	321
G 27.0	315	315	315	315	315	317	318	317	318	318	318	318	317
G 28.0	311	311	311	311	311	313	313	314	314	314	314	314	314
G 29.0	307	307	307	307	307	309	310	310	310	310	311	310	310
G 30.0	303	304	303	303	303	305	306	306	307	306	306	306	306
G 31.0	299	299	299	299	299	301	302	302	302	302	302	302	302
G 32.0	295	295	295	295	294	297	297	297	298	298	299	298	298
G 33.0	290	291	291	290	290	293	293	293	294	294	294	294	294
G 34.0	286	287	286	286	286	288	289	289	289	289	289	290	289
G 35.0	282	282	282	282	281	284	284	285	285	285	286	285	285
G 36.0	277	278	277	277	276	279	280	280	281	281	281	281	281
G 37.0	273	273	272	272	272	274	276	275	276	276	276	277	276
G 38.0	268	268	268	268	267	270	271	271	272	271	272	271	272
G 39.0	263	263	263	263	262	265	266	266	267	266	267	267	267
G 40.0	259	259	258	258	258	260	261	261	262	262	263	262	263
G 41.0	253	254	253	253	253	256	256	257	257	257	257	258	258
G 42.0	249	249	248	248	247	250	251	251	252	252	252	252	253
G 43.0	244	244	244	243	243	245	246	247	247	247	248	247	248
G 44.0	239	239	238	238	237	240	242	241	242	242	243	243	243
G 45.0	234	234	233	232	232	235	236	236	237	237	238	237	238
G 46.0	228	228	228	228	227	230	231	231	232	232	232	232	232
G 47.0	223	224	223	222	222	225	226	225	226	227	227	227	228
G 48.0	217	218	217	217	216	220	221	221	221	221	222	221	222
G 49.0	213	213	212	211	211	215	215	215	216	216	216	217	217
G 50.0	207	207	207	207	206	209	209	209	210	211	211	211	211
G 51.0	202	202	201	201	200	203	204	204	204	205	206	205	206
G 52.0	197	196	195	195	194	198	199	199	200	199	200	201	201
G 53.0	190	190	190	189	189	193	193	193	194	194	194	195	195
G 54.0	185	185	185	184	183	186	187	187	188	188	189	189	190
G 55.0	180	180	179	179	178	181	182	182	183	183	184	184	184
G 56.0	174	174	173	173	172	176	176	177	177	177	178	178	178
G 57.0	168	168	168	167	166	170	171	170	172	172	172	172	173
G 58.0	162	162	162	162	161	164	164	165	165	166	167	167	167
G 59.0	157	157	156	156	155	158	159	159	160	160	161	161	161
G 60.0	151	151	150	150	149	153	154	154	155	154	156	155	156
G 61.0	145	145	145	144	143	147	147	147	148	149	149	149	150
G 62.0	140	139	139	139	138	141	142	142	143	143	144	144	145
G 63.0	133	133	133	132	132	136	136	136	137	137	138	138	138
G 64.0	128	128	127	127	126	129	130	130	131	131	132	132	133
G 65.0	122	122	122	121	120	124	124	124	125	126	126	126	126
G 66.0	116	116	115	115	115	117	118	119	120	119	120	120	121
G 67.0	110	110	109	109	109	112	113	112	114	114	115	114	115
G 68.0	104	104	103	104	103	107	107	107	107	108	108	109	108
G 69.0	99	99	98	97	97	100	101	101	102	102	103	103	103
G 70.0	92	92	92	92	91	95	95	95	96	96	97	97	97
G 71.0	87	87	86	86	86	89	89	89	90	90	91	91	91
G 72.0	82	81	80	81	80	83	84	84	85	85	86	85	86

Luminaire

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Measurem.

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Luminaire Flux	639 lm	Luminaire Power			9.0 W	Efficacy	71.077 lm/W		Efficiency		100.00%
Source Flux	639 lm	Maximum value			367.29 cd/klm	Position	C=240.00 G=2.00		CG Asymmetrical		
Luminous Intensity Table cd/klm Table 3/6											
	C 260.00	C 270.00	C 280.00	C 290.00	C 300.00	C 310.00	C 320.00	C 330.00	C 340.00	C 350.00	
G 0.0	367	367	367	367	367	367	367	367	367	367	
G 1.0	367	367	367	367	367	367	367	367	367	367	
G 2.0	367	367	367	367	367	367	367	367	367	367	
G 3.0	367	367	367	367	366	366	367	366	366	366	
G 4.0	367	366	366	366	366	366	366	366	366	366	
G 5.0	366	366	366	366	365	365	365	365	365	365	
G 6.0	365	365	365	365	365	365	364	364	364	364	
G 7.0	364	364	364	364	364	363	363	363	363	363	
G 8.0	363	363	363	363	362	362	362	362	362	362	
G 9.0	362	362	362	361	361	361	361	361	360	360	
G 10.0	361	361	360	360	360	360	359	359	359	359	
G 11.0	359	359	359	358	358	358	358	358	357	357	
G 12.0	358	357	357	357	356	356	356	356	356	355	
G 13.0	356	356	355	355	354	354	354	354	353	353	
G 14.0	354	354	353	353	352	352	352	352	351	351	
G 15.0	352	351	351	351	350	350	349	349	349	349	
G 16.0	349	349	349	348	348	348	347	347	347	347	
G 17.0	347	347	346	346	345	345	345	345	344	344	
G 18.0	345	344	344	343	343	342	342	342	341	341	
G 19.0	342	342	341	341	340	340	339	339	339	338	
G 20.0	339	339	338	338	337	337	336	336	336	335	
G 21.0	336	336	335	335	334	334	333	333	332	333	
G 22.0	334	333	332	332	331	331	330	330	329	329	
G 23.0	330	330	329	329	328	328	327	327	326	326	
G 24.0	327	327	326	325	324	324	323	323	323	322	
G 25.0	324	323	322	322	321	320	320	320	319	319	
G 26.0	320	320	319	319	318	317	316	316	315	316	
G 27.0	317	316	316	315	314	314	313	312	312	311	
G 28.0	313	313	312	311	310	310	308	308	308	307	
G 29.0	309	309	308	308	307	306	305	304	303	303	
G 30.0	306	305	304	303	302	302	301	300	300	300	
G 31.0	301	301	300	300	298	298	297	296	296	295	
G 32.0	298	297	296	295	294	294	292	292	291	291	
G 33.0	293	293	292	291	290	289	288	288	287	287	
G 34.0	289	288	288	287	286	285	284	283	282	282	
G 35.0	284	284	283	282	281	281	279	279	278	278	
G 36.0	280	280	278	278	277	276	274	274	273	273	
G 37.0	275	275	274	273	272	271	270	269	268	269	
G 38.0	271	270	270	269	268	267	265	265	264	263	
G 39.0	266	266	265	264	263	262	261	260	259	259	
G 40.0	262	261	260	259	258	257	255	255	254	254	
G 41.0	257	257	255	255	253	252	251	250	249	249	
G 42.0	252	251	250	250	248	247	246	245	244	244	
G 43.0	247	246	245	245	243	242	241	240	240	239	
G 44.0	242	241	240	239	238	237	235	235	234	233	
G 45.0	237	237	236	235	233	232	230	230	228	229	
G 46.0	232	231	230	229	228	227	226	225	223	223	
G 47.0	227	226	225	224	222	221	220	219	218	218	
G 48.0	222	221	220	219	217	216	214	214	213	213	
G 49.0	216	216	215	214	212	211	209	208	208	207	
G 50.0	211	210	210	208	207	206	204	203	202	202	
G 51.0	206	205	203	203	201	200	198	197	196	196	
G 52.0	200	200	198	197	195	195	193	192	191	191	
G 53.0	195	194	193	192	190	189	187	187	185	185	
G 54.0	188	188	187	186	185	183	182	181	180	180	
G 55.0	184	183	182	181	179	178	176	176	175	174	
G 56.0	178	178	176	176	174	172	170	170	168	169	
G 57.0	172	172	171	170	168	167	165	164	163	163	
G 58.0	167	166	165	163	162	161	160	159	157	158	
G 59.0	160	160	159	158	156	156	153	153	152	151	
G 60.0	156	155	154	153	151	149	147	146	145	145	
G 61.0	149	149	148	147	145	143	143	141	139	140	
G 62.0	143	144	142	141	139	138	136	135	134	134	
G 63.0	138	137	136	135	133	132	130	130	128	129	
G 64.0	132	132	130	129	127	126	124	123	122	122	
G 65.0	126	126	125	123	122	120	119	118	117	117	
G 66.0	120	120	118	117	115	115	113	112	111	111	
G 67.0	115	114	113	112	109	108	106	106	105	106	
G 68.0	108	108	107	106	104	103	101	100	99	99	
G 69.0	103	102	101	100	98	97	96	95	94	94	
G 70.0	96	96	95	94	92	91	89	89	87	88	
G 71.0	91	91	89	88	86	85	84	83	82	83	
G 72.0	85	85	84	82	81	80	79	78	77	77	

Luminaire

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Measurem.

Code 321.654
Name INTERNAL 123

Luminaire Flux	639 lm	Luminaire Power	9.0 W	Efficacy	71.077 lm/W	Efficiency	100.00%
Source Flux	639 lm	Maximum value	367.29 cd/klm	Position	C=240.00 G=2.00	CG	Asymmetrical

Luminous Intensity Table cd/klm Table 4/6

	C 0.00	C 10.00	C 20.00	C 30.00	C 40.00	C 50.00	C 60.00	C 70.00	C 80.00	C 90.00	C 100.00	C 110.00	C 120.00
G 73.0	68	67	68	68	69	70	71	72	74	74	76	76	76
G 74.0	62	62	63	63	64	64	66	67	68	69	69	70	70
G 75.0	57	56	57	57	58	59	60	61	63	63	64	64	65
G 76.0	52	52	52	52	53	54	55	56	57	58	59	59	59
G 77.0	47	47	47	47	48	49	50	51	52	53	53	54	54
G 78.0	42	41	42	42	43	44	45	46	47	47	49	48	49
G 79.0	37	37	37	37	38	38	40	40	41	42	43	43	44
G 80.0	32	32	32	33	33	34	35	35	37	37	38	38	39
G 81.0	27	27	28	28	29	29	30	31	32	33	33	34	34
G 82.0	23	23	23	23	24	25	26	26	28	28	29	29	29
G 83.0	19	18	19	19	20	20	22	22	23	24	24	24	25
G 84.0	14	14	14	15	16	17	18	18	19	20	20	20	21
G 85.0	10	10	10	10	12	12	14	14	15	16	17	16	17
G 86.0	7	6	7	7	8	9	10	11	11	12	13	12	12
G 87.0	4	4	4	4	4	5	6	7	8	9	9	9	8
G 88.0	1	1	1	1	2	2	3	3	5	5	6	5	5
G 89.0	0	0	0	0	0	0	1	1	1	1	2	2	2
G 90.0	0	0	0	0	0	0	0	0	0	0	0	0	0

Luminaire

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Measurement

Code 321.654
Name INTERNAL 123

Luminaire Flux	639 lm		Luminaire Power		9.0 W		Efficacy		71.077 lm/W		Efficiency		100.00%	
Source Flux	639 lm		Maximum value		367.29 cd/klm		Position		C=240.00 G=2.00		CG		Asymmetrical	
Luminous Intensity Table cd/klm														Table 5/6
	C 130.00	C 140.00	C 150.00	C 160.00	C 170.00	C 180.00	C 190.00	C 200.00	C 210.00	C 220.00	C 230.00	C 240.00	C 250.00	
G 73.0	75	76	75	75	74	78	78	78	79	79	79	79	80	
G 74.0	70	70	69	69	69	72	73	72	74	74	74	74	74	
G 75.0	65	65	64	64	63	67	67	67	68	67	69	68	68	
G 76.0	59	59	58	59	58	61	61	62	62	62	63	63	63	
G 77.0	53	54	53	53	52	56	56	57	57	57	57	58	58	
G 78.0	48	49	48	49	47	50	51	51	52	52	52	52	52	
G 79.0	43	44	43	43	42	45	46	46	47	47	47	46	47	
G 80.0	38	39	38	38	37	40	41	40	42	42	42	42	42	
G 81.0	33	34	33	33	32	35	36	36	37	36	37	37	37	
G 82.0	29	29	28	28	28	30	31	31	31	32	32	33	33	
G 83.0	24	24	24	23	23	26	26	26	27	27	28	28	28	
G 84.0	20	20	19	19	18	21	22	21	22	22	23	23	24	
G 85.0	16	16	15	15	14	16	17	17	17	18	19	19	20	
G 86.0	12	11	11	10	10	12	12	13	13	14	15	15	16	
G 87.0	8	7	7	6	6	8	9	9	9	9	10	11	12	
G 88.0	4	4	4	4	3	5	5	5	6	6	7	7	8	
G 89.0	1	2	1	1	1	2	2	3	3	3	3	3	4	
G 90.0	0	0	0	0	0	1	1	1	1	1	1	1	1	

Luminaire

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Name INTERNAL 123

Measurem.

Code 321.654
Name INTERNAL 123

Luminaire Flux	639 lm	Luminaire Power	9.0 W	Efficacy	71.077 lm/W	Efficiency	100.00%
Source Flux	639 lm	Maximum value	367.29 cd/klm	Position	C=240.00 G=2.00	CG	Asymmetrical

Luminous Intensity Table cd/klm Table 6/6

	C 260.00	C 270.00	C 280.00	C 290.00	C 300.00	C 310.00	C 320.00	C 330.00	C 340.00	C 350.00
G 73.0	79	79	77	77	75	74	73	72	72	71
G 74.0	74	74	72	71	69	69	68	67	66	66
G 75.0	68	67	67	66	64	63	62	61	60	61
G 76.0	62	62	61	60	59	58	56	56	55	55
G 77.0	57	57	56	55	53	53	52	51	50	51
G 78.0	52	51	50	50	48	48	47	46	45	46
G 79.0	47	46	45	45	43	43	41	41	40	40
G 80.0	41	41	40	39	38	38	37	36	35	35
G 81.0	37	36	35	35	34	33	32	31	31	31
G 82.0	32	32	31	31	29	28	27	27	26	26
G 83.0	28	28	27	26	25	24	23	22	21	22
G 84.0	23	23	22	22	21	20	19	18	17	17
G 85.0	19	19	18	18	17	15	15	14	13	13
G 86.0	15	15	15	14	12	11	10	9	9	9
G 87.0	12	12	11	10	8	8	7	6	5	5
G 88.0	8	8	7	6	5	4	3	3	3	3
G 89.0	4	5	3	2	2	1	1	1	1	1
G 90.0	1	1	0	0	0	0	0	0	0	0