Luminaire
Code 21402013179
Name HELIOS A/02
Measurem.
Code CL092A22D030GP
Name HELIOS A/02

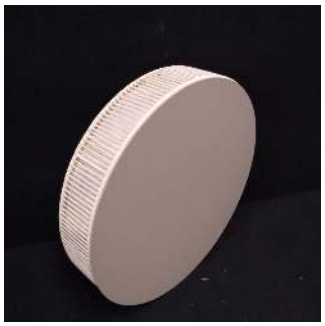
Luminaire Flux	830.39 lm	Luminaire Power	16.47 W	Efficacy	50.43 lm/W	Efficiency	100.00%
Sources Flux	830.39 lm	Maximum value	116.84 cd	Position	C=60.00 G=137.50	CG	Double Symmetrical

Round Luminaire	Diam. 390 mm	Height	80 mm
Round Luminous Area	Diam. 390 mm	Height	80 mm
Horizontal Luminous Area	0.119459 m2	Emitting area on Plane 180°	0.031200 m2
Emitting area on Plane 0°	0.031200 m2	Emitting area on Plane 270°	0.031200 m2
Emitting area on Plane 90°	0.031200 m2	Glare area at 76°	0.059173 m2
Coordinate system	CG	Symmetry Type	Double Symmetrical
Date	13-12-2022	Maximum Gamma Angle	180
Measurement Distance	6.44	Measurement Flux	830.39 lm
Operator	Asselum T2	Rated Voltage	33.03 V
Temperature	24.90 °C	Rated Current	0.50 A
Humidity	31.30 %	Photocell	Czibula Grundmann
Notes	RM22120202		

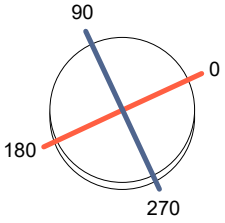
Luminaire Sources

Line	Code	Name	Flux [lm]	Pow. [W]	Q.ty
	MP 2835 LM281B	SPMWHI28MD[illegible]WAVMRK	830.39	16.50	1

C.I.E.	11	36	68	44	100	D DIN 5040	C12
F UTE	--					B NBN	BZ 10



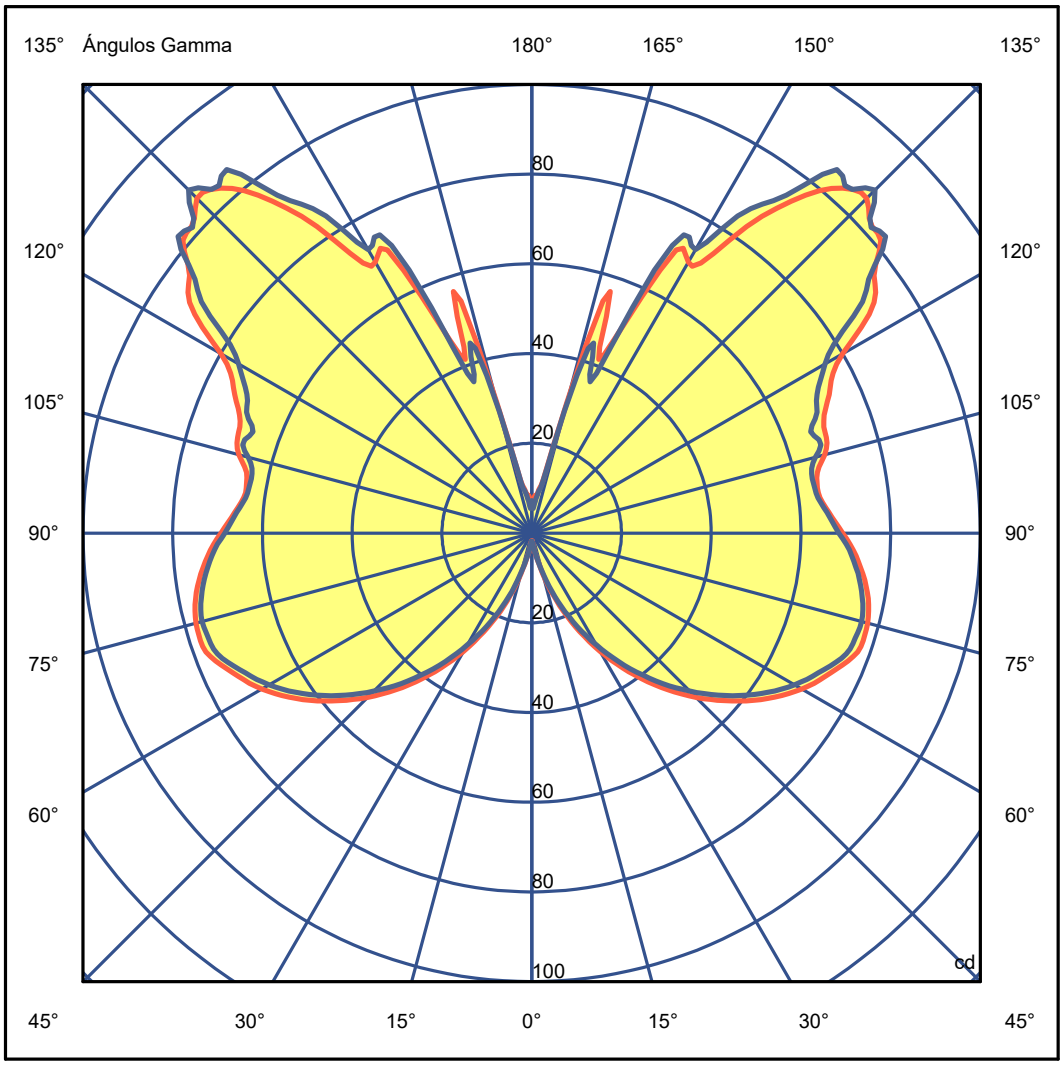
Diam=390mm



Semiplanos C

180.0 — 0.0
270.0 — 90.0

ULOR 56.38 %
DLOR 43.62 %
RN 56.38 %



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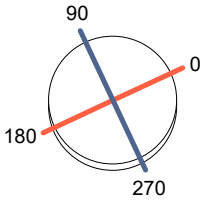
Luminous Intensity Table cd **Table 1/1**

	C 0.00	C 15.00	C 30.00	C 45.00	C 60.00	C 75.00	C 90.00
G 0.0	1.82	1.82	1.82	1.82	1.82	1.82	1.82
G 2.5	1.76	2.10	1.83	2.07	1.84	2.10	1.85
G 5.0	2.22	2.67	2.26	2.65	2.27	2.72	2.26
G 7.5	3.46	3.51	3.38	3.55	3.33	3.56	3.36
G 10.0	4.89	4.81	4.82	4.83	4.73	4.79	4.71
G 12.5	6.65	6.77	6.51	6.80	6.37	6.78	6.32
G 15.0	9.39	9.26	9.13	9.14	8.94	9.20	8.83
G 17.5	12.59	12.20	12.33	12.04	12.01	12.23	11.81
G 20.0	15.95	15.47	15.69	15.32	15.32	15.40	15.02
G 22.5	19.46	18.81	19.14	18.67	18.77	18.68	18.39
G 25.0	23.02	22.34	22.76	22.26	22.27	22.08	21.79
G 27.5	26.64	25.91	26.32	25.77	25.84	25.53	25.28
G 30.0	30.37	29.47	30.02	29.33	29.35	28.99	28.78
G 32.5	34.02	33.07	33.57	32.97	32.94	32.44	32.32
G 35.0	37.69	36.67	37.25	36.51	36.54	35.90	35.97
G 37.5	41.25	40.29	40.76	40.04	39.97	39.41	39.44
G 40.0	44.91	43.76	44.31	43.50	43.48	42.74	43.04
G 42.5	48.27	47.16	47.77	46.88	46.84	46.08	46.44
G 45.0	51.78	50.55	51.12	50.23	50.20	49.35	49.77
G 47.5	54.98	53.80	54.41	53.52	53.42	52.57	53.12
G 50.0	58.21	56.96	57.61	56.70	56.56	55.67	56.30
G 52.5	61.30	59.96	60.68	59.66	59.58	58.63	59.42
G 55.0	64.24	62.95	63.62	62.56	62.42	61.49	62.32
G 57.5	66.97	65.61	66.32	65.20	65.16	64.12	65.12
G 60.0	69.47	68.10	68.76	67.63	67.61	66.51	67.59
G 62.5	71.64	70.31	71.06	69.84	69.74	68.69	69.83
G 65.0	73.55	72.37	72.99	72.06	71.71	70.79	71.85
G 67.5	75.59	74.28	75.02	73.74	73.74	72.62	74.04
G 70.0	77.31	75.41	76.57	74.90	75.30	73.94	75.45
G 72.5	77.62	76.22	77.10	75.70	75.80	74.50	75.85
G 75.0	77.47	76.40	77.24	75.67	75.81	74.56	76.09
G 77.5	76.88	75.87	76.76	75.15	75.51	74.21	75.58
G 80.0	75.93	75.10	75.90	74.33	74.56	73.46	74.59
G 82.5	74.61	73.89	74.60	73.07	73.40	72.31	73.48
G 85.0	73.07	72.45	73.12	71.68	72.00	70.96	72.04
G 87.5	71.34	70.79	71.40	70.00	70.30	69.29	70.49
G 90.0	69.29	69.02	69.31	68.22	68.27	67.55	68.43
G 92.5	67.38	67.28	67.51	66.53	66.42	65.85	66.81
G 95.0	65.77	65.80	66.00	65.06	64.91	64.43	65.33
G 97.5	64.53	64.84	65.05	63.93	63.79	63.43	64.11
G100.0	64.56	64.36	64.67	63.77	63.64	63.21	63.76
G102.5	65.31	64.64	65.44	65.09	64.31	63.73	63.83
G105.0	67.60	65.96	66.80	66.75	66.24	64.69	65.47
G107.5	68.89	65.45	67.67	67.16	68.52	65.49	67.46
G110.0	69.27	66.17	67.61	68.94	68.08	67.62	66.14
G112.5	70.66	66.48	69.34	69.89	70.80	67.61	68.63
G115.0	73.09	67.38	70.63	71.48	73.03	68.99	69.95
G117.5	75.42	68.66	73.09	73.81	76.08	71.34	72.27
G120.0	80.02	73.51	76.03	79.27	80.65	74.24	75.50
G122.5	88.18	77.58	81.65	83.51	88.76	79.39	80.78
G125.0	93.57	83.71	87.30	88.89	97.37	84.10	89.93
G127.5	96.23	87.66	92.98	93.72	103.26	92.26	95.30
G130.0	101.51	93.35	95.58	95.49	107.59	97.80	102.91
G132.5	102.31	98.75	100.53	98.60	111.80	103.13	102.00
G135.0	105.51	100.14	103.36	101.53	115.20	102.48	108.13
G137.5	104.19	101.15	102.96	101.39	116.84	103.94	104.12
G140.0	99.67	100.88	101.08	99.28	113.65	103.69	105.79
G142.5	92.29	98.51	97.22	93.79	108.82	102.97	96.11
G145.0	83.42	91.11	91.53	92.14	102.19	96.24	89.52
G147.5	72.48	87.08	81.43	88.45	91.34	91.84	82.35
G150.0	69.76	82.19	73.02	85.62	80.87	89.34	72.96
G152.5	72.44	69.58	74.84	72.54	74.99	81.71	75.05
G155.0	58.30	62.08	62.05	62.06	60.90	60.99	64.69
G157.5	44.64	57.69	42.98	54.92	36.96	55.55	41.17
G160.0	44.15	50.63	44.25	48.89	35.01	45.60	37.64
G162.5	56.71	37.19	46.49	34.72	45.29	39.45	44.55
G165.0	30.25	26.92	32.41	27.68	36.20	20.91	28.20
G167.5	13.22	17.57	13.03	19.65	12.94	16.51	12.75
G170.0	10.31	10.88	10.10	10.54	9.70	10.16	9.82
G172.5	8.72	8.60	8.09	8.22	7.73	7.89	8.11
G175.0	8.47	7.63	6.87	7.08	6.60	6.73	6.53
G177.5	7.53	7.27	6.16	6.39	5.53	6.05	5.50
G180.0	7.19	7.19	7.19	7.19	7.19	7.19	7.19

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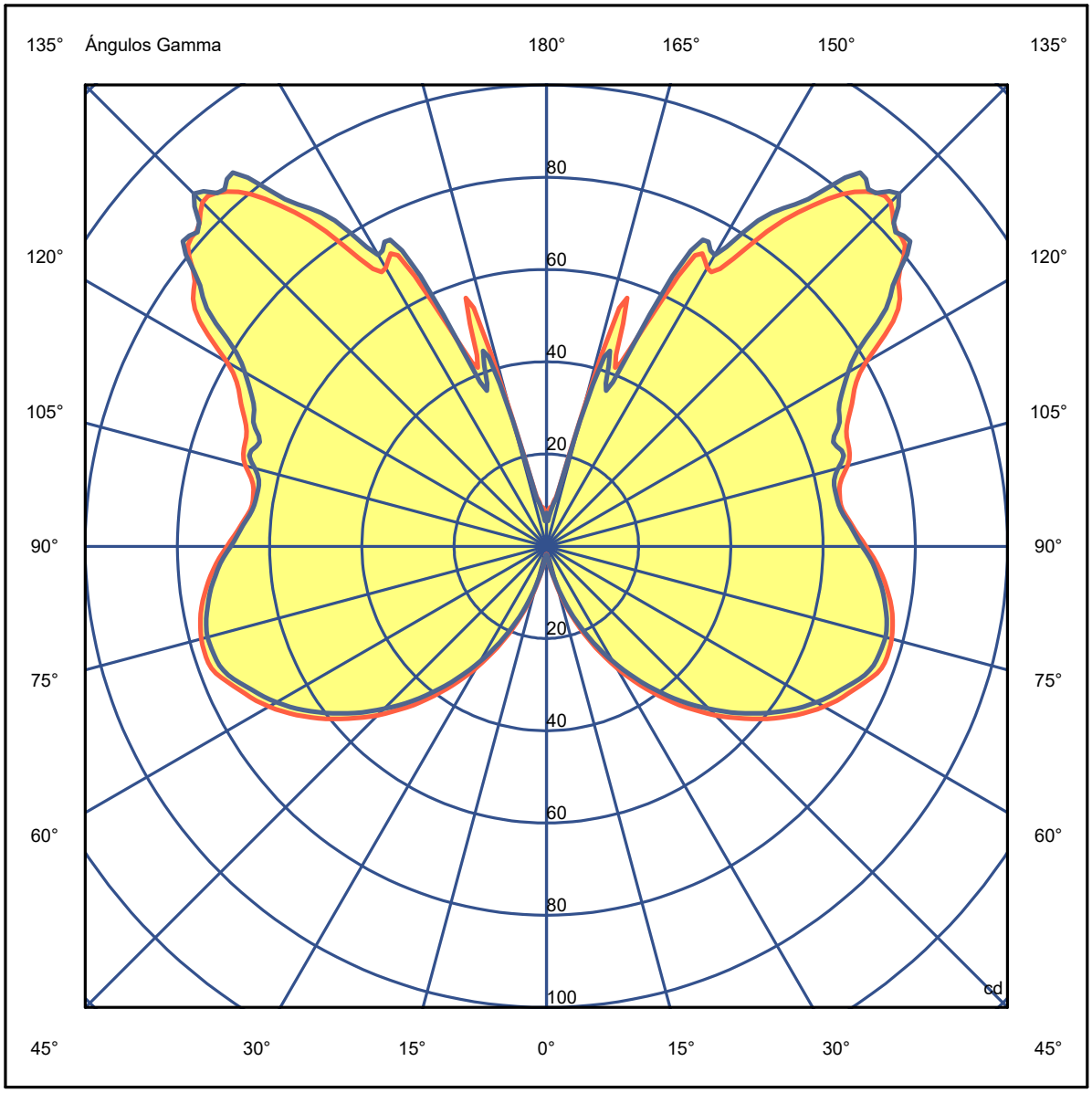
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Diam=390mm



Semiplanos C

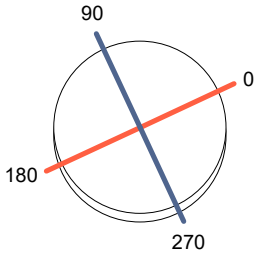
180.0 0.0
270.0 90.0



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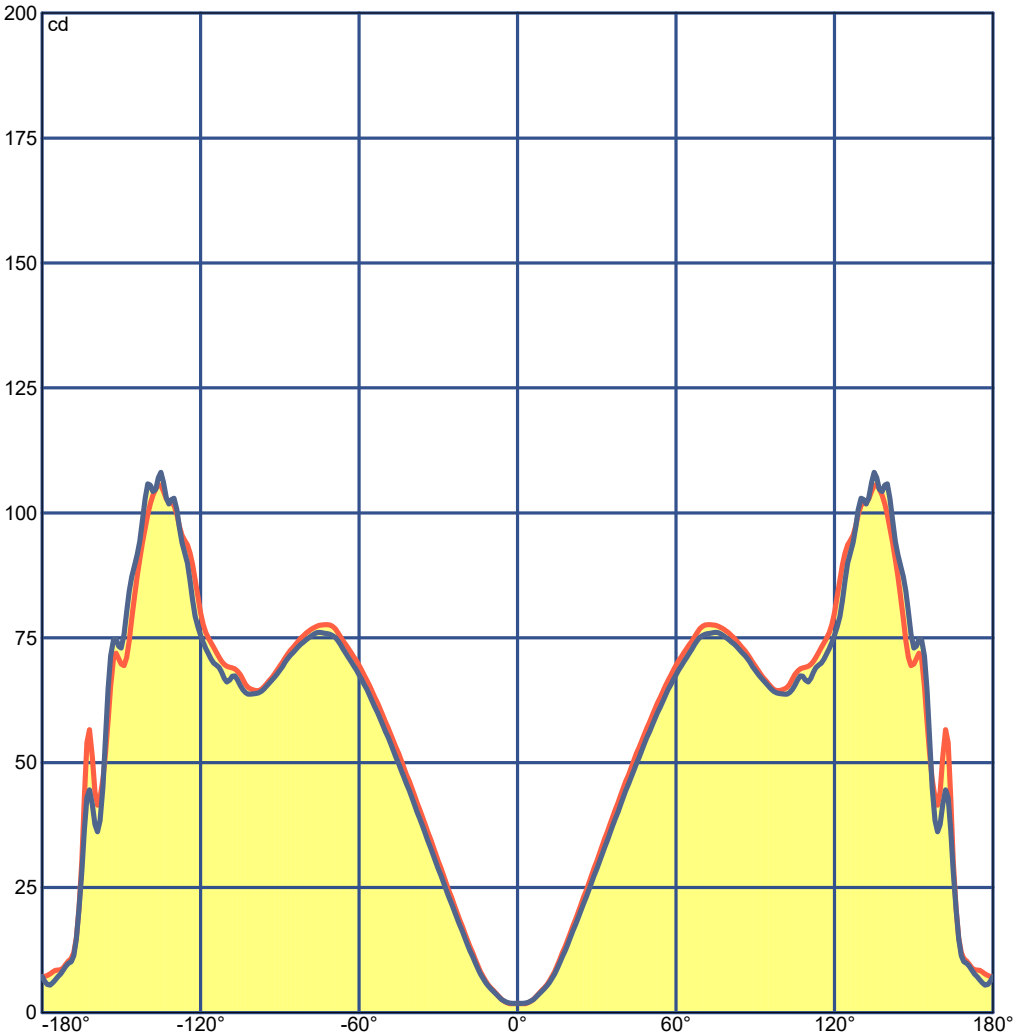
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UGR
S = 0.250

Reflectancies										
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	Lateral View					Viewed Endwise				
x=2H y=2H	7.7	8.6	8.6	9.6	10.9	7.5	8.5	8.5	9.5	10.8
x=2H y=3H	11.1	12.0	12.1	13.0	14.3	11.0	11.8	12.0	12.8	14.2
x=2H y=4H	12.9	13.7	13.8	14.7	16.0	12.7	13.5	13.7	14.5	15.9
x=2H y=6H	14.5	15.3	15.5	16.3	17.7	14.4	15.1	15.4	16.2	17.5
x=2H y=8H	15.3	16.1	16.3	17.1	18.5	15.2	15.9	16.2	16.9	18.3
x=2H y=12H	16.1	16.8	17.2	17.9	19.2	16.0	16.7	17.0	17.7	19.1
x=4H y=2H	8.8	9.6	9.8	10.6	11.9	8.7	9.5	9.7	10.5	11.8
x=4H y=3H	12.3	13.0	13.3	14.0	15.4	12.2	12.9	13.2	13.9	15.3
x=4H y=4H	14.2	14.8	15.2	15.8	17.2	14.0	14.6	15.0	15.7	17.1
x=4H y=6H	16.0	16.5	17.0	17.6	19.0	15.8	16.4	16.9	17.4	18.8
x=4H y=8H	16.8	17.4	17.9	18.4	19.8	16.7	17.2	17.7	18.3	19.7
x=4H y=12H	17.7	18.2	18.8	19.2	20.7	17.6	18.1	18.6	19.1	20.5
x=8H y=4H	14.8	15.3	15.8	16.4	17.8	14.7	15.2	15.7	16.3	17.7
x=8H y=6H	16.8	17.3	17.9	18.3	19.8	16.7	17.2	17.8	18.2	19.7
x=8H y=8H	17.9	18.3	18.9	19.3	20.8	17.7	18.1	18.8	19.2	20.7
x=8H y=12H	18.9	19.3	20.0	20.4	21.8	18.8	19.1	19.9	20.2	21.7
x=12H y=4H	15.9	16.4	17.0	17.5	18.9	15.9	16.4	16.9	17.4	18.9
x=12H y=6H	17.6	18.0	18.7	19.1	20.5	17.5	17.9	18.6	19.0	20.5
x=12H y=8H	18.6	18.9	19.7	20.0	21.5	18.5	18.9	19.6	19.9	21.4

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Flujo Total=830.39 Flujo Luminaria=830.39

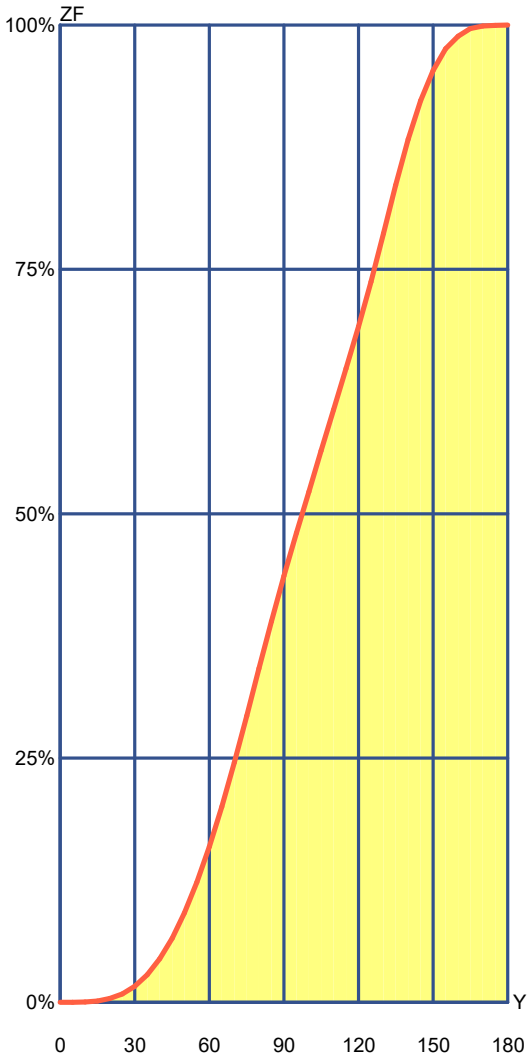
RI	0.60	0.80	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	10.00	20.00
DRR	0.06	0.11	0.16	0.22	0.27	0.36	0.42	0.48	0.56	0.61	0.75	0.85
RC	-	-	-	-	-	-	-	-	-	-	-	10

Flujo Zonal por 1000 Lúmenes

Y°	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
ZF(Y)	0	4	17	44	91	159	245	342	436	522	606	691	787	883	954	989	999	1000

Códigos de Flujo C.I.E.
11 36 68 44 100

C.I.E.	-/-/-/-/-/-/-/-/-/-/10	LOR	100.00000 %
D DIN 5040	C12	ULOR	56.37696 %
F UTE	--	DLOR	43.62304 %
B NBN	BZ 10	UFF	56.37696 %
RN	56.37696 %	DFF	43.62304 %
BLF	1.0	FFR	129.23665 %



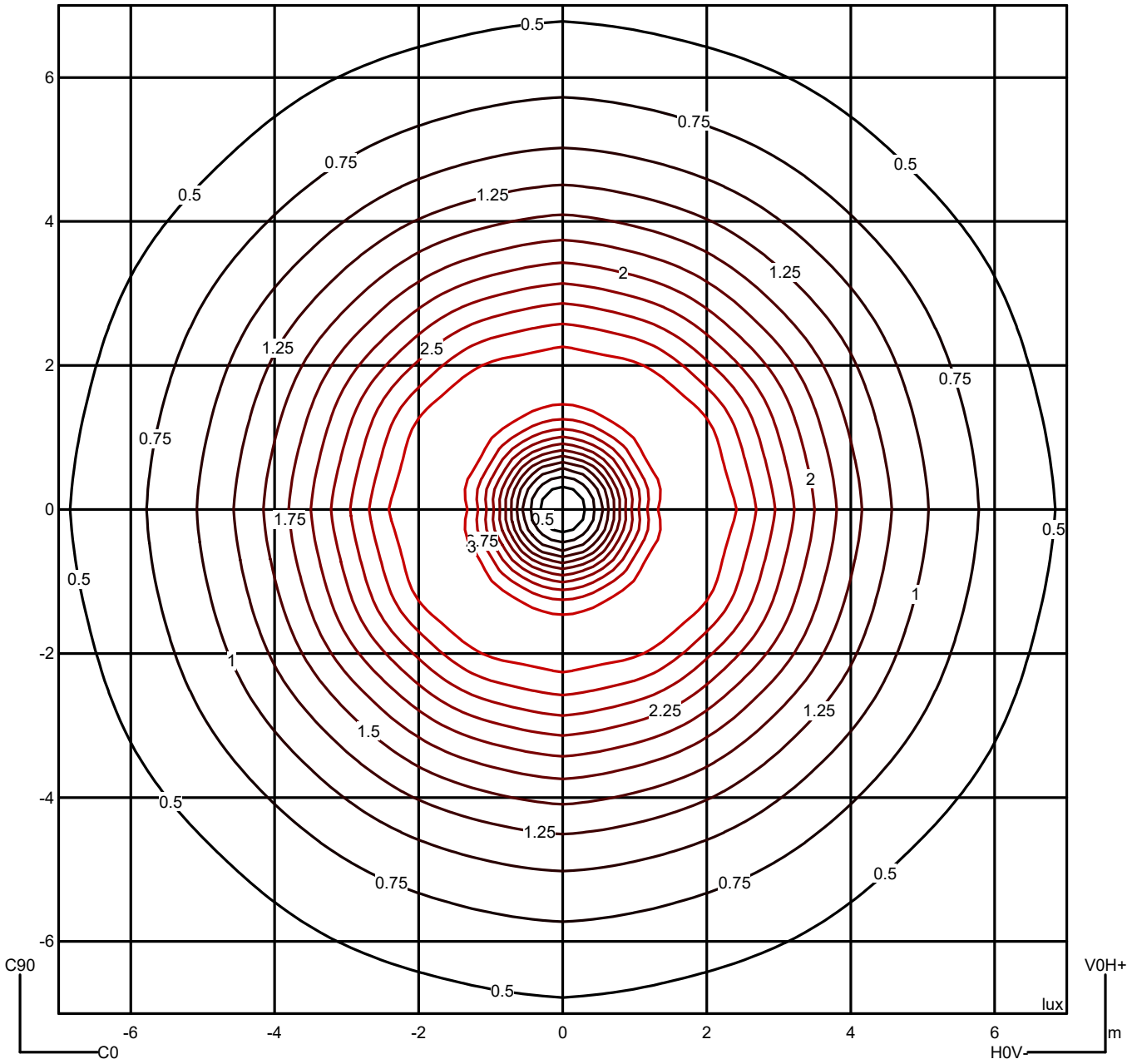
Flujo Zonal				
Gamma °	Flujo	Suma lm	Flujo [%]	Suma [%]
0°	0.00	0.00	0.00%	0.00 %
5°	0.06	0.06	0.01 %	0.01 %
10°	0.31	0.38	0.03 %	0.04 %
15°	0.99	1.36	0.10 %	0.14 %
20°	2.45	3.81	0.24 %	0.38 %
25°	4.79	8.60	0.48 %	0.86 %
30°	7.92	16.51	0.79 %	1.65 %
35°	11.74	28.25	1.17 %	2.83 %
40°	16.15	44.40	1.61 %	4.44 %
45°	20.98	65.38	2.10 %	6.54 %
50°	26.10	91.48	2.61 %	9.15 %
55°	31.32	122.80	3.13 %	12.28 %
60°	36.39	159.19	3.64 %	15.92 %
65°	41.00	200.20	4.10 %	20.02 %
70°	45.07	245.27	4.51 %	24.53 %
75°	47.77	293.04	4.78 %	29.30 %
80°	48.67	341.71	4.87 %	34.17 %
85°	48.10	389.81	4.81 %	38.98 %
90°	46.42	436.23	4.64 %	43.62 %
95°	44.08	480.31	4.41 %	48.03 %
100°	42.17	522.48	4.22 %	52.25 %
105°	41.79	564.27	4.18 %	56.43 %
110°	42.18	606.45	4.22 %	60.64 %
115°	42.09	648.54	4.21 %	64.85 %
120°	42.88	691.42	4.29 %	69.14 %
125°	46.03	737.45	4.60 %	73.75 %
130°	49.21	786.67	4.92 %	78.67 %
135°	49.70	836.36	4.97 %	83.64 %
140°	46.67	883.04	4.67 %	88.30 %
145°	39.74	922.78	3.97 %	92.28 %
150°	30.74	953.52	3.07 %	95.35 %
155°	22.24	975.76	2.22 %	97.58 %
160°	12.87	988.63	1.29 %	98.86 %
165°	7.88	996.50	0.79 %	99.65 %
170°	2.57	999.07	0.26 %	99.91 %
175°	0.74	999.81	0.07 %	99.98 %
180°	0.19	1000.00	0.02 %	100.00 %

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Isolux (Floor)

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



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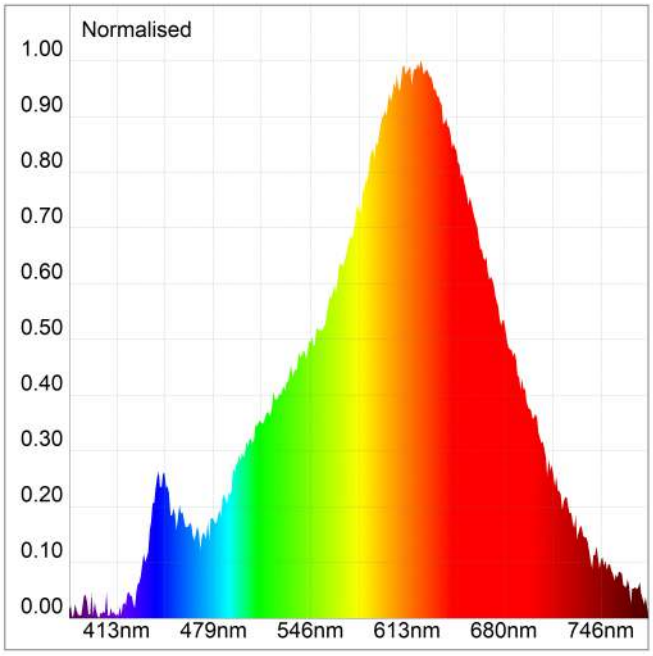
Spectral Data

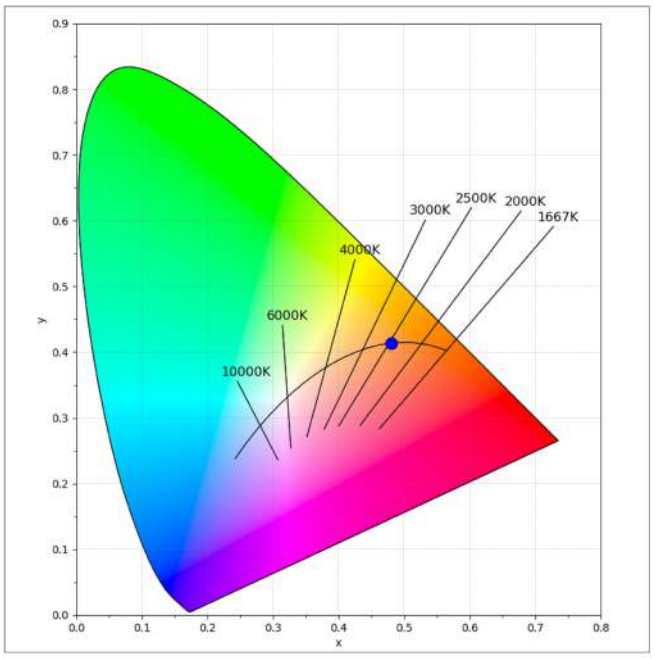
CIE1931	x =0.481411	y =0.412800	Color rendering index (CRI)	CRI8(Ra) 92.0			CRI15(Rav) 89.6		
CIE1960	u =0.275455	v =0.354295	Color Rendering Components	R 1: 92.4	R 2: 97.4		R 3: 98.1	R 4: 92.3	R 5: 92.8
CIE1976	u'=0.275455	v'=0.531443		R 6: 97.4	R 7: 88.8		R 8: 76.5	R 9: 51.6	R10: 93.4
D(u,v)	0.00048		S/P ratio = 1.15917	R11: 94.6	R12: 88.1		R13: 94.0	R14: 99.7	R15: 86.7
			CCT = 2441 K	M/P Well = 0.42342					

Spectral Distribution

l(nm)	Normalised	l(nm)	Normalised	l(nm)	Normalised
380.0	0.014412	386.0	0.006961	392.0	0.040294
398.0	0.045196	404.0	0.002956	410.0	0.009608
416.0	0.045490	422.0	0.004377	428.0	0.027941
434.0	0.026520	440.0	0.094118	446.0	0.171569
452.0	0.235784	458.0	0.225000	464.0	0.179412
470.0	0.163235	476.0	0.150490	482.0	0.148039
488.0	0.175490	494.0	0.213725	500.0	0.228431
506.0	0.282353	512.0	0.320098	518.0	0.349510
524.0	0.370588	530.0	0.392157	536.0	0.407843
542.0	0.442647	548.0	0.478431	554.0	0.504902
560.0	0.519608	566.0	0.578431	572.0	0.627451
578.0	0.666667	584.0	0.735294	590.0	0.784314
596.0	0.823529	602.0	0.901961	608.0	0.941176
614.0	0.970588	620.0	0.990196	626.0	0.985294
632.0	0.980392	638.0	0.936275	644.0	0.897059
650.0	0.843137	656.0	0.784314	662.0	0.730392
668.0	0.661765	674.0	0.612745	680.0	0.539216
686.0	0.485294	692.0	0.435784	698.0	0.389706
704.0	0.366176	710.0	0.303922	716.0	0.255882
722.0	0.194608	728.0	0.189216	734.0	0.165196
740.0	0.123529	746.0	0.109804	752.0	0.086275
758.0	0.078431	764.0	0.056863	770.0	0.052941
776.0	0.034118	782.0	0.041324	788.0	0.041324

Spectrum Graph

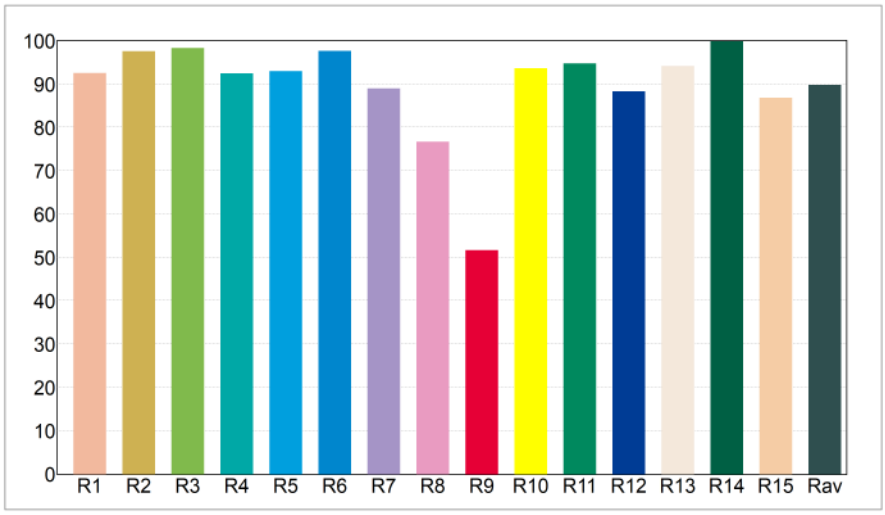


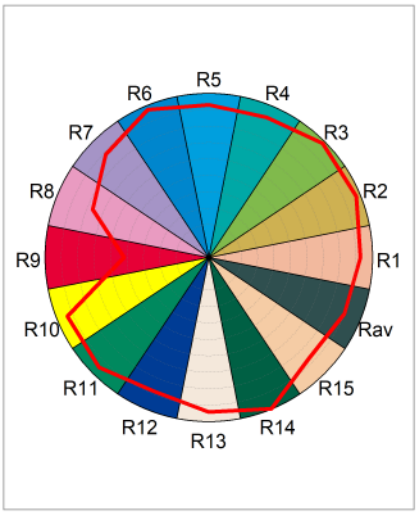


Luminaire
Code 21402013179
Name HELIOS A/02
Measurem.
Code CL092A22D030GP
Name HELIOS A/02

Luminaire Flux	830.39 lm	Luminaire Power	16.47 W	Efficacy	50.43 lm/W	Efficiency	100.00%
Sources Flux	830.39 lm	Maximum value	116.84 cd	Position	C=60.00 G=137.50	CG	Double Symmetrical

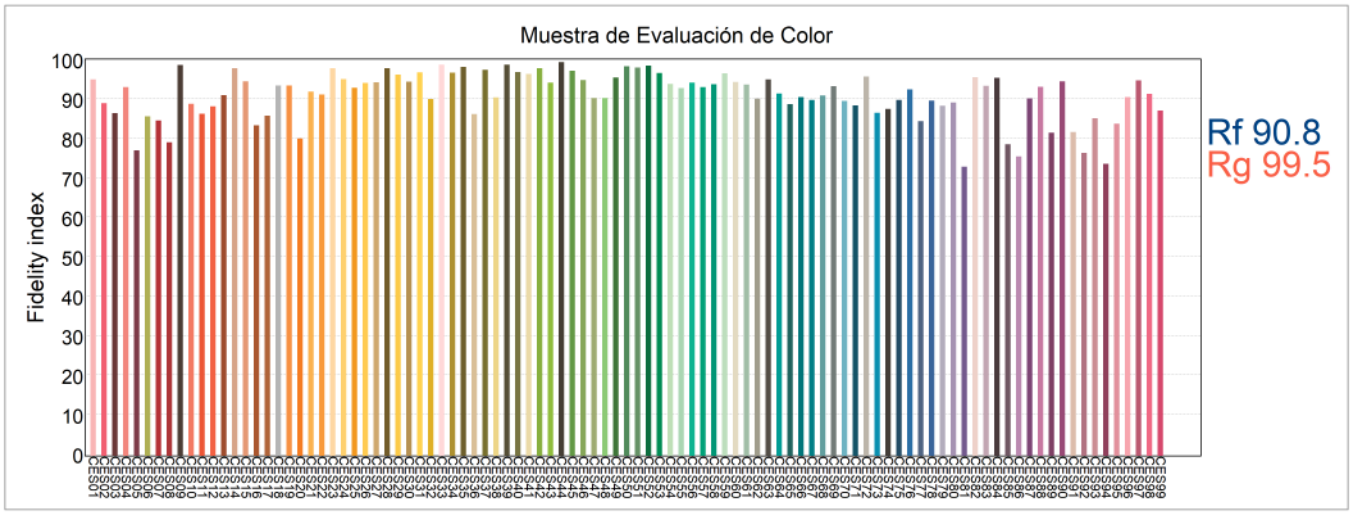
CRI Graphs



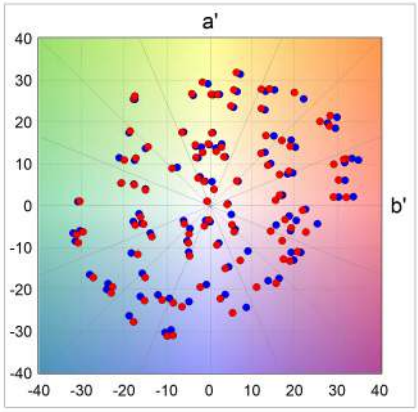


Luminaire
Code 21402013179
Name HELIOS A/02
Measurem.
Code CL092A22D030GP
Name HELIOS A/02

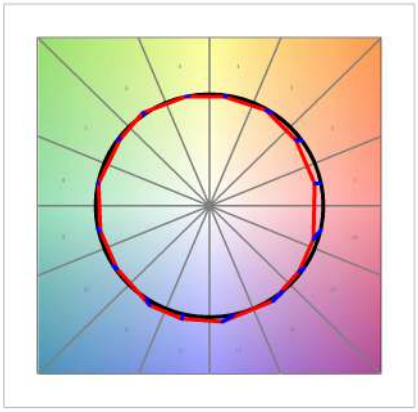
Luminaire Flux	830.39 lm	Luminaire Power	16.47 W	Efficacy	50.43 lm/W	Efficiency	100.00%
Sources Flux	830.39 lm	Maximum value	116.84 cd	Position	C=60.00 G=137.50	CG	Double Symmetrical



Chromatic Coordinates (a', b') 99 CES



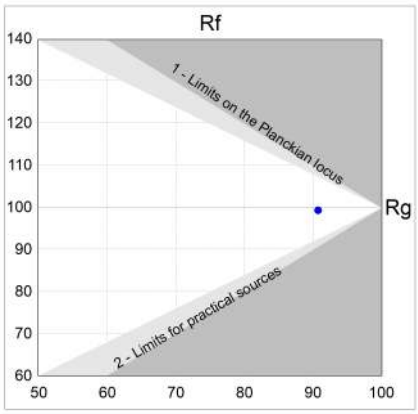
Color Vector Graphic



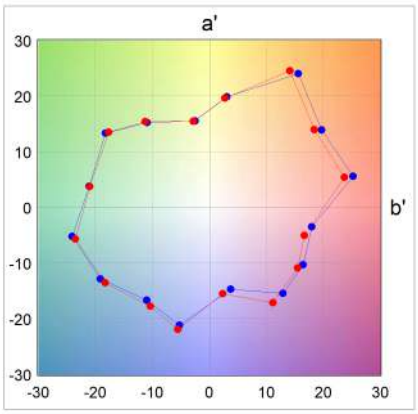
Color Distorsion Graphic



Rg vs Rf Plot



Gamut Polygon



Bin Deviation

