

**Luminaire**

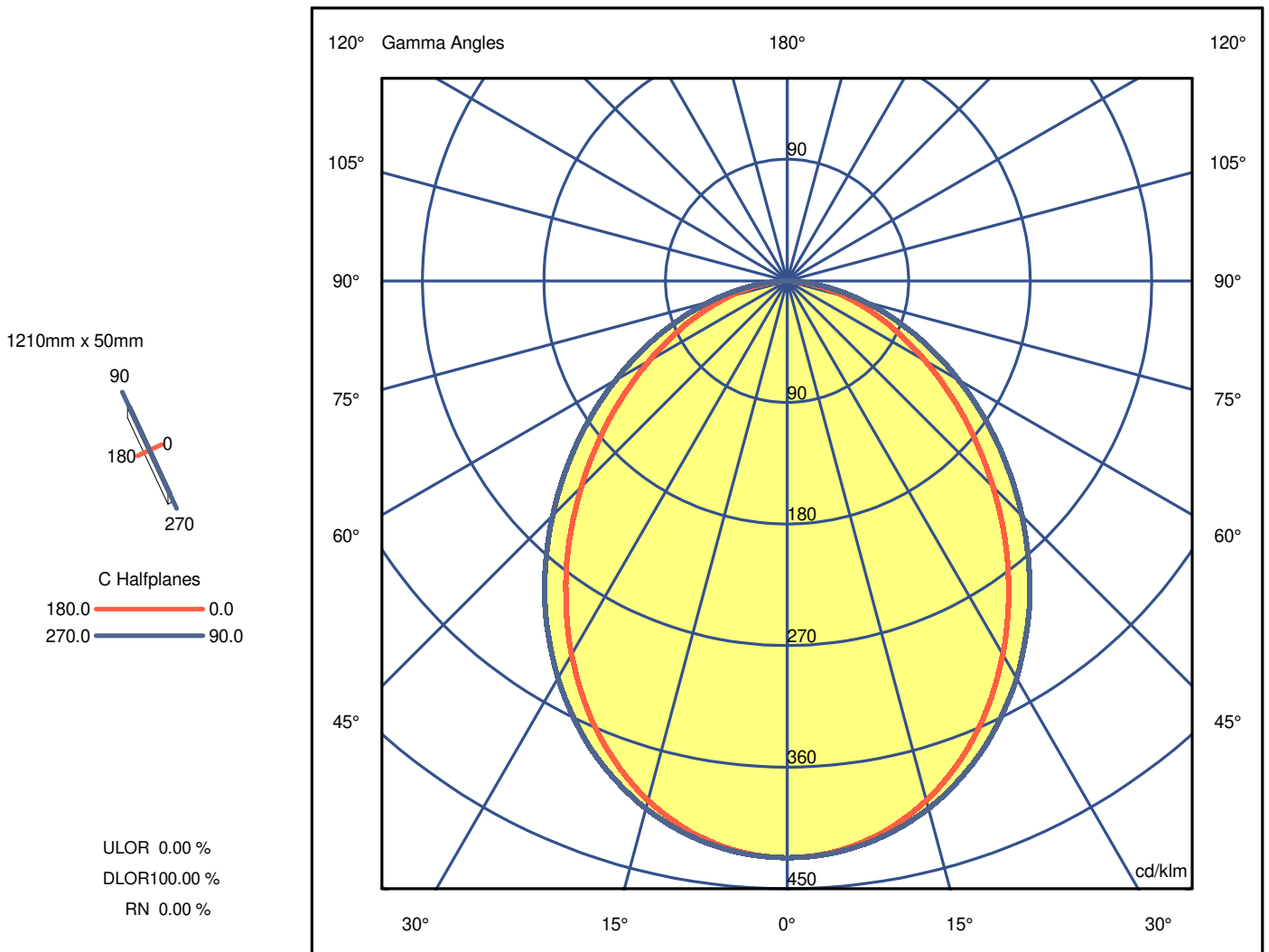
Code 5987  
Name SPA 5987 3500K  
Line SPA

**Measurement**

Code SPA 5987 3500K  
Name SPA 5987 (1200mm)  
Date 15-12-2022

Luminaire Flux	686 lm	Luminaire Power	10.6 W	Efficacy	64.739 lm/W	Efficiency	100.00%
Source Flux	686 lm	Maximum value	427.04 cd/klm	Position	C=0.00 G=0.00	CG	Double Symmetrical
Rectangular Luminaire		Length	1210 mm	Width	50 mm	Height	25 mm
Rectangular Luminous Area		Length	1200 mm	Width	40 mm	Height	0 mm
Horizontal Luminous Area		0.048000 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°		0.011612 m2	
Coordinate system		CG		Symmetry Type		Double Symmetrical	
Date		15-12-2022		Maximum Gamma Angle		90	
Measurement Distance		0.00		Measurement Flux		686 lm	
Operator				Rated Voltage			
Temperature				Rated Current			
Humidity				Photocell			
Notes							

Luminaire Sources						
Line	Code	Name	Flux [lm]	Pow. [W]	Q.ty	
LED	LED		686.23	10.60	1	
C.I.E.	53 83 96 100 100	D DIN 5040	A40			
F UTE	1.00 D	B NBN	BZ 4			



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**Luminous Intensity Table cd/klm 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	427.04	427.04	427.04	427.04	427.04	427.04	427.04
G 2.5	426.18	426.19	426.24	426.30	426.45	426.40	426.37
G 5.0	423.64	423.73	423.83	424.15	424.33	424.49	424.49
G 7.5	419.52	419.68	420.01	420.43	420.91	421.15	421.32
G 10.0	413.91	414.08	414.55	415.45	416.21	416.75	416.89
G 12.5	406.55	407.06	407.76	408.97	410.08	411.02	411.24
G 15.0	398.07	398.49	399.56	401.21	402.80	404.08	404.40
G 17.5	387.93	388.46	389.85	391.93	394.09	395.70	396.20
G 20.0	376.46	377.19	378.89	381.55	384.17	386.47	386.96
G 22.5	363.86	364.69	366.74	369.96	373.15	375.92	376.69
G 25.0	350.09	350.97	353.32	357.24	360.87	364.06	365.19
G 27.5	334.98	336.39	339.01	343.56	347.86	351.63	352.64
G 30.0	319.18	320.51	323.60	328.67	333.78	337.80	339.66
G 32.5	302.97	304.46	307.68	313.18	318.75	323.72	325.04
G 35.0	285.68	287.63	290.80	297.24	303.16	308.60	310.41
G 37.5	268.72	270.14	274.34	280.43	287.16	292.79	295.06
G 40.0	251.03	252.84	256.76	263.68	270.40	277.07	278.73
G 42.5	233.14	235.42	239.08	246.36	253.39	260.36	262.16
G 45.0	215.58	217.57	221.83	228.98	236.57	243.43	245.65
G 47.5	198.18	200.55	204.53	212.06	219.38	226.80	229.09
G 50.0	180.95	183.24	187.43	194.98	202.66	210.15	212.05
G 52.5	164.55	166.80	170.57	178.59	186.18	193.33	195.69
G 55.0	148.13	150.36	154.79	162.30	169.97	176.98	179.12
G 57.5	132.63	135.18	138.65	146.60	153.95	160.85	162.62
G 60.0	117.92	119.96	124.06	131.08	138.35	145.02	146.66
G 62.5	103.93	106.04	109.40	116.50	123.47	129.70	131.04
G 65.0	90.46	92.59	95.70	102.46	108.72	114.82	115.66
G 67.5	78.22	79.88	83.06	88.70	94.99	99.83	101.17
G 70.0	66.16	67.98	70.59	76.12	81.02	86.10	86.39
G 72.5	55.27	56.81	59.19	63.93	68.35	72.66	72.90
G 75.0	44.81	46.28	48.34	52.52	55.97	59.76	59.31
G 77.5	35.40	36.46	37.98	41.44	44.41	47.52	46.80
G 80.0	25.92	26.87	28.12	31.06	33.14	35.62	34.85
G 82.5	17.57	18.23	19.14	21.45	23.21	25.20	24.32
G 85.0	9.27	10.30	10.72	12.55	13.96	15.63	15.05
G 87.5	2.70	4.10	3.74	5.97	5.82	7.68	7.12
G 90.0	0.89	1.10	1.37	1.88	2.63	3.37	3.68

**Luminaire**

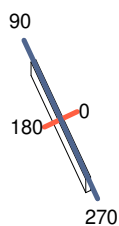
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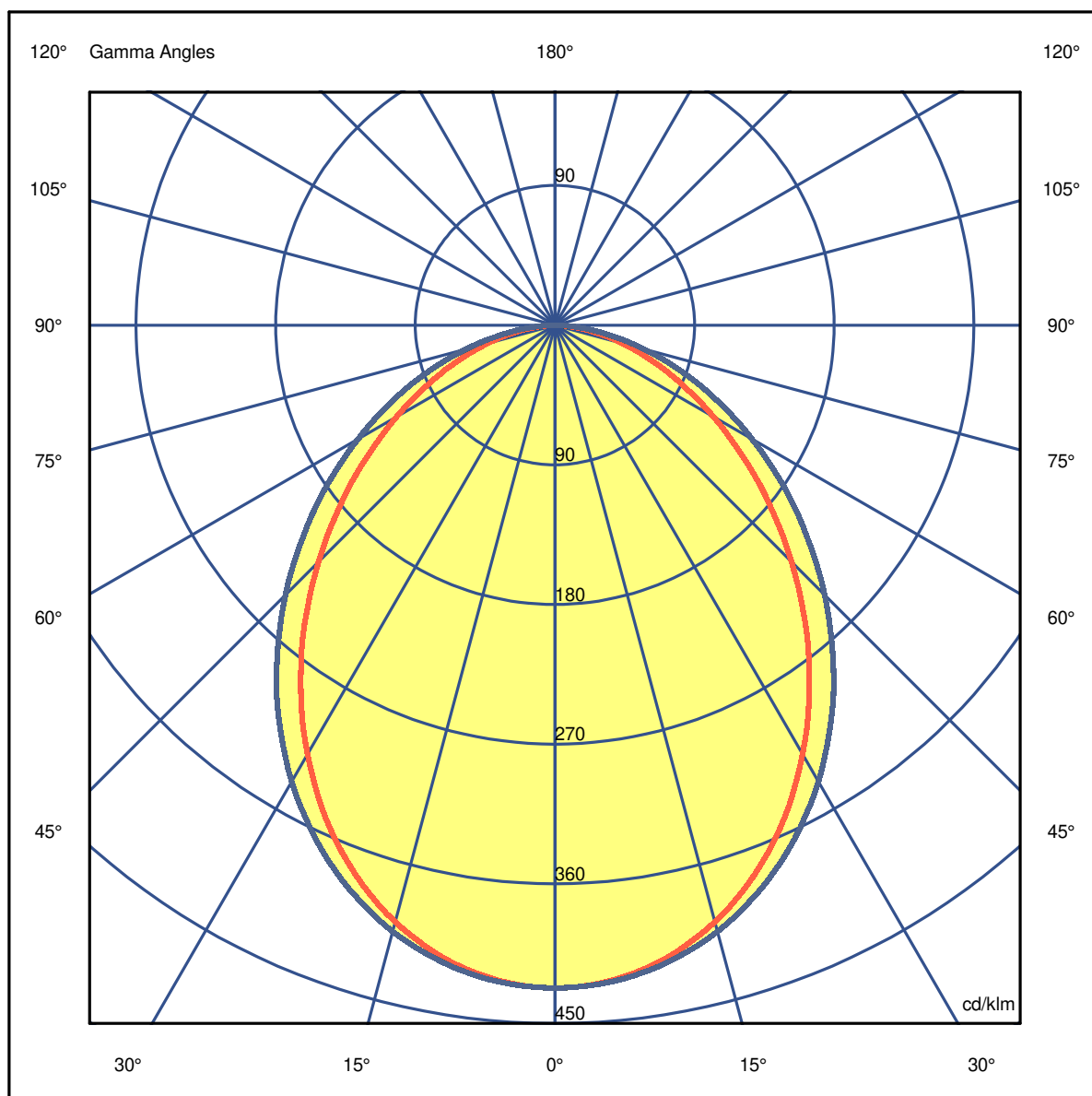
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Source Flux	686 lm	Maximum value	427.04 cd/klm	Position	C=0.00 G=0.00	CG	Double Symmetrical

1210mm x 50mm



C Halfplanes

180.0 — 0.0  
270.0 — 90.0



#### Luminaire

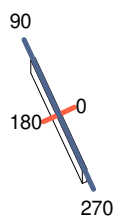
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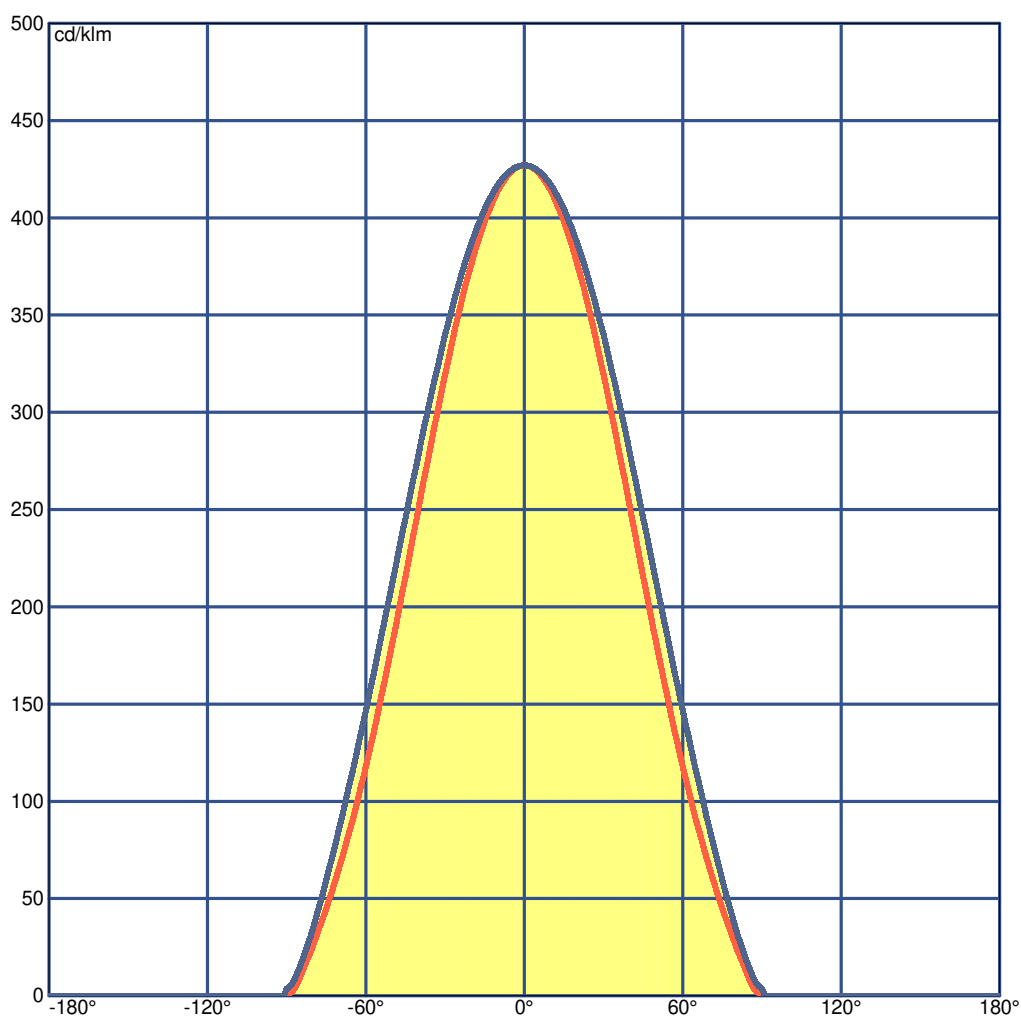
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**UGR**  
S = 0.250

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										
Room Dimensions	Lateral View					Viewed Endwise				
	x=2H y=2H	x=2H y=3H	x=2H y=4H	x=2H y=6H	x=2H y=8H	x=2H y=12H	x=4H y=2H	x=4H y=3H	x=4H y=4H	x=4H y=6H
	16.8	18.0	17.0	18.2	18.4	17.7	18.9	18.0	19.1	19.4
	17.9	19.1	18.3	19.3	19.6	19.1	20.2	19.4	20.5	20.7
	18.4	19.4	18.7	19.7	20.0	19.7	20.7	20.0	21.0	21.3
	18.7	19.7	19.1	20.0	20.3	20.1	21.0	20.4	21.3	21.7
	18.8	19.8	19.2	20.1	20.4	20.2	21.1	20.6	21.5	21.8
	18.8	19.8	19.2	20.1	20.4	20.3	21.2	20.6	21.5	21.8
	17.4	18.5	17.8	18.8	19.0	18.2	19.2	18.5	19.5	19.8
	18.8	19.7	19.1	20.0	20.3	19.8	20.7	20.1	21.0	21.3
	19.4	20.2	19.7	20.5	20.9	20.5	21.3	20.9	21.6	22.0
	19.8	20.5	20.2	20.9	21.3	21.0	21.7	21.4	22.1	22.5
	19.9	20.6	20.4	21.0	21.4	21.2	21.9	21.7	22.3	22.7
	20.0	20.6	20.4	21.0	21.4	21.4	21.9	21.8	22.3	22.8
	19.7	20.3	20.1	20.7	21.1	20.7	21.3	21.1	21.7	22.1
	20.2	20.7	20.7	21.2	21.6	21.3	21.9	21.8	22.3	22.8
	20.4	20.9	20.9	21.3	21.8	21.6	22.1	22.1	22.5	23.0
	20.5	20.9	21.0	21.4	21.9	21.8	22.2	22.3	22.7	23.2
	19.7	20.3	20.1	20.7	21.1	20.7	21.3	21.1	21.7	22.1
	20.3	20.7	20.8	21.2	21.7	21.4	21.8	21.9	22.3	22.8
	20.5	20.9	21.0	21.4	21.9	21.7	22.1	22.2	22.5	23.0

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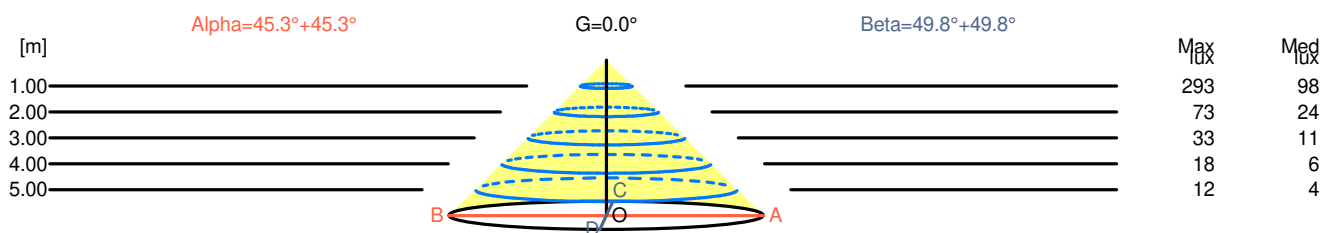
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Source Flux	686 lm	Maximum value	427.04 cd/klm	Position	C=0.00 G=0.00	CG	Double Symmetrical

Width at 50.00 % of Max Intensity

H[m]	1.00	2.00	3.00	4.00	5.00	H[m]	1.00	2.00	3.00	4.00	5.00
OA	1.01	2.02	3.03	4.04	5.05	OC	1.18	2.37	3.55	4.73	5.91
OB	1.01	2.02	3.03	4.04	5.05	OD	1.18	2.37	3.55	4.73	5.91

	Luminous Intensities [ cd/klm]									
	0	5	15	25	35	45	55	65	75	85
OA	293.05	290.71	273.17	240.24	196.04	147.94	101.65	62.08	30.75	6.36
OB	293.05	290.71	273.17	240.24	196.04	147.94	101.65	62.08	30.75	6.36
OC	293.05	291.30	277.51	250.60	213.01	168.57	122.91	79.37	40.70	10.33
OD	293.05	291.30	277.51	250.60	213.01	168.57	122.91	79.37	40.70	10.33



H[m]	D[m]	Max lux	Med lux	Alpha=45.3°+45.3°	G=0.0	
1.00	2.02	293	98			
2.00	4.04	73	24			
3.00	6.06	33	11			
4.00	8.08	18	6			
5.00	10.10	12	4			

H[m]	D[m]	Max lux	Med lux	Beta=49.8°+49.8°	G=0.0	
1.00	2.37	293	98			
2.00	4.73	73	24			
3.00	7.10	33	11			
4.00	9.46	18	6			
5.00	11.83	12	4			

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Source Flux	686 lm	Maximum value	427.04 cd/klm	Position	C=0.00 G=0.00	CG	Double Symmetrical

Total Flux=686.23 Luminaire Flux=686.23

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	0.35	0.43	0.51	0.58	0.63	0.71	0.77	0.80	0.85	0.88	0.94	0.97
RC	4	4	4	4	4	4	4	4	4	4	4	4

Zonal Flux per 1000 Lumen

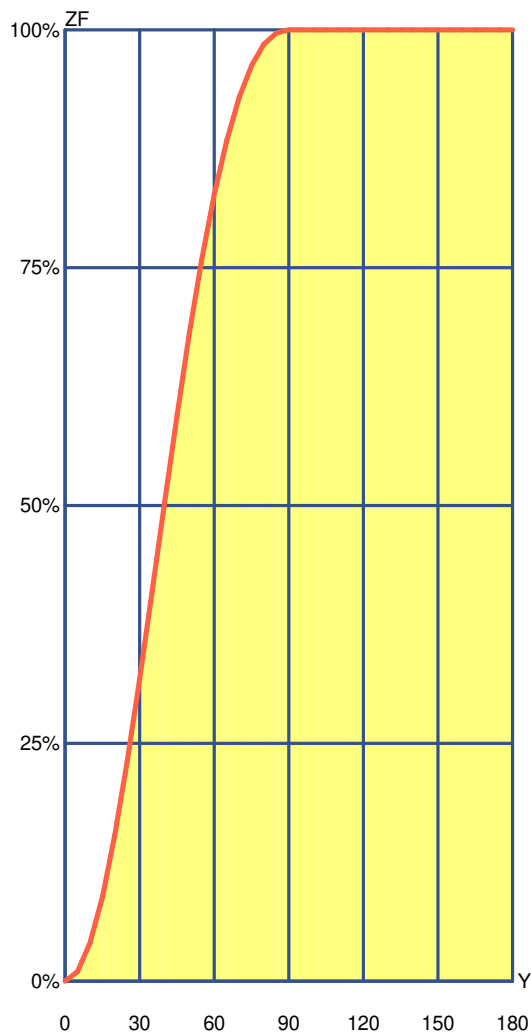
Y°	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
ZF(Y)	40	153	318	503	681	827	929	985	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

CIE Flux Codes

53 83 96 100 100

C.I.E. 4  
D DIN 5040 A40  
F UTE 1.00 D  
B NBN BZ 4  
RN 0.00000 %  
BLF 1.0

LOR 100.00000 %  
ULOR 0.00000 %  
DLOR 100.00000 %  
UFF 0.00000 %  
DFF 100.00000 %  
FFR 0.00000 %



Zonal Flux				
Gamma °	Flux	Sum lm	Flux [%]	Sum [%]
0°	0.00	0.00	0.00 %	0.00 %
5°	10.18	10.18	1.02 %	1.02 %
10°	30.03	40.21	3.00 %	4.02 %
15°	48.44	88.64	4.84 %	8.86 %
20°	64.51	153.16	6.45 %	15.32 %
25°	77.51	230.66	7.75 %	23.07 %
30°	86.85	317.51	8.68 %	31.75 %
35°	92.24	409.75	9.22 %	40.97 %
40°	93.69	503.44	9.37 %	50.34 %
45°	91.41	594.85	9.14 %	59.49 %
50°	85.94	680.80	8.59 %	68.08 %
55°	77.93	758.73	7.79 %	75.87 %
60°	68.03	826.76	6.80 %	82.68 %
65°	56.95	883.71	5.70 %	88.37 %
70°	45.29	929.00	4.53 %	92.90 %
75°	33.59	962.59	3.36 %	96.26 %
80°	22.24	984.83	2.22 %	98.48 %
85°	11.70	996.52	1.17 %	99.65 %
90°	3.48	1000.00	0.35 %	100.00 %
95°	0.00	1000.00	0.00 %	100.00 %
100°	0.00	1000.00	0.00 %	100.00 %
105°	0.00	1000.00	0.00 %	100.00 %
110°	0.00	1000.00	0.00 %	100.00 %
115°	0.00	1000.00	0.00 %	100.00 %
120°	0.00	1000.00	0.00 %	100.00 %
125°	0.00	1000.00	0.00 %	100.00 %
130°	0.00	1000.00	0.00 %	100.00 %
135°	0.00	1000.00	0.00 %	100.00 %
140°	0.00	1000.00	0.00 %	100.00 %
145°	0.00	1000.00	0.00 %	100.00 %
150°	0.00	1000.00	0.00 %	100.00 %
155°	0.00	1000.00	0.00 %	100.00 %
160°	0.00	1000.00	0.00 %	100.00 %
165°	0.00	1000.00	0.00 %	100.00 %
170°	0.00	1000.00	0.00 %	100.00 %
175°	0.00	1000.00	0.00 %	100.00 %
180°	0.00	1000.00	0.00 %	100.00 %

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Isolux (Floor)

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

