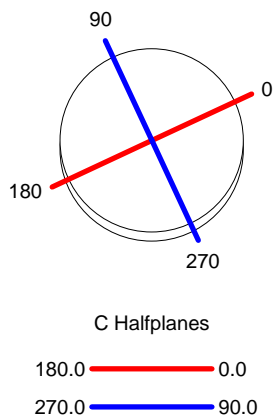


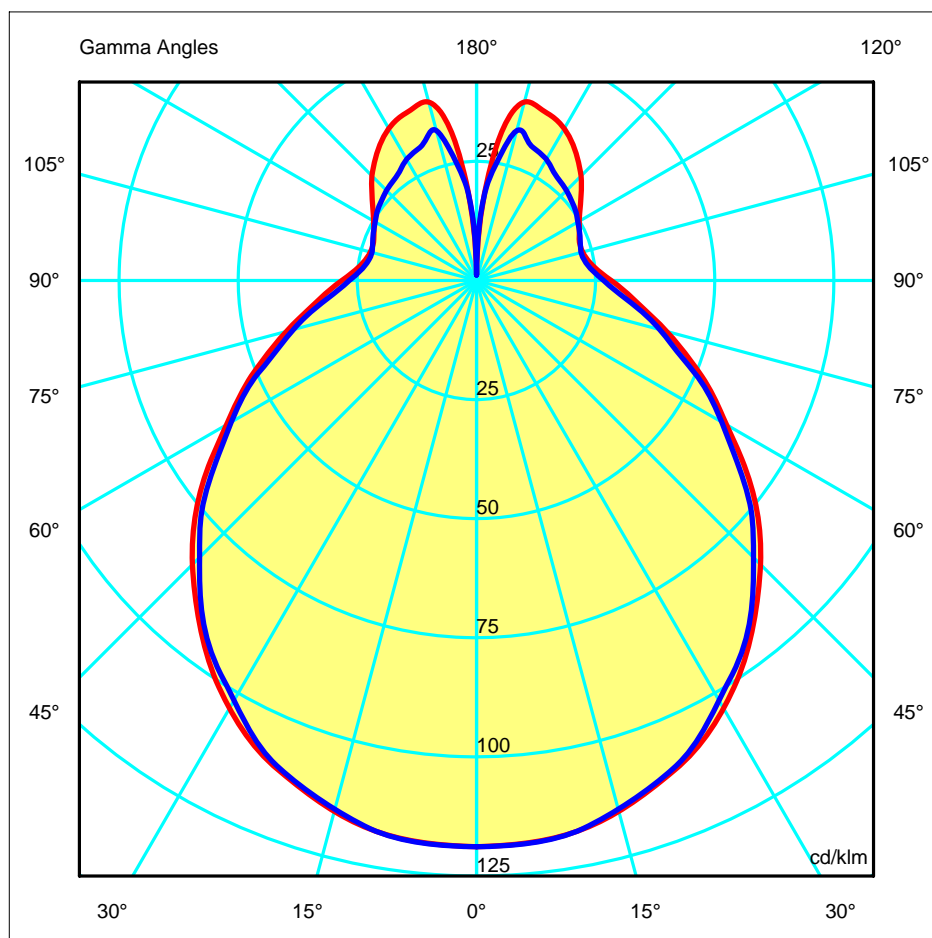
Luminaire			Measurem.			Lamp				
Code	5400		Code	5400		Code	65940			
Name	Single wall lamp d/16 hal.		Name	Single wall lamp d/16 hal.		Number	1			
Line	VIBIA-Puck		Date	30-05-2012		Position	Universal			
Efficiency			57.34%		Coordinate system		C-G			
Total Flux			420.00 lm		Maximum value			119.25 cd/klm		
Position			C=15.00 G=5.00		Double Symmetrical					
Round Luminaire			Diam.		160 mm		Height		60 mm	
Round Luminous Area			Diam.		160 mm		Height		45 mm	
Horizontal Luminous Area			0.020106 m2		Emitting area on Plane 180°		0.007200 m2			
Emitting area on Plane 0°			0.007200 m2		Emitting area on Plane 270°		0.007200 m2			
Emitting area on Plane 90°			0.007200 m2		Glare area at 76°		0.011850 m2			
Symmetry Type			Double Symmetrical		Maximum Gamma Angle		180			
Measurement Distance			6.44		Measurement Flux		400.00 lm			
Operator			Asselum T2		Source voltage		230.00 V			
Temperature			23.00 °C		Source current		PRC			
Humidity			54.00 %		Photocell					
Notes										

Line		Code	Luminaire Lamps		Fluxlm	Pow.W	Qta
OSRAM 2006 HS, HM, HD, HR		65940	Name	HALOPIN® 40W G9	420.00	40.00	1
C.I.E.	40 68 87 71 57		D DIN 5040	B21			
F UTE	0.41 G + 0.17 T		B NBN	BZ 5 / 1.25 / BZ 6			

Diam=160mm



ULOR 16.77 %
 DLOR 40.57 %
 RN 29.25 %



Luminaire		Measurem.				Lamp	
Code	5400	Code	5400			Code	65940
Name	Single wall lamp d/16 hal.	Name	Single wall lamp d/16 hal.			Number	1
Line	VIBIA-Puck	Date	30-05-2012			Position	Universal
Efficiency	57.34%	Coordinate system	C-G			Total Flux	420.00 lm
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	118.85	118.85	118.85	118.85	118.85	118.85	118.85
G 5.0	118.53	119.25	119.14	118.49	118.35	118.46	118.64
G 10.0	117.63	116.98	117.86	116.93	117.18	117.41	117.63
G 15.0	115.37	114.54	115.66	114.47	114.58	115.01	114.87
G 20.0	112.14	112.23	111.85	111.33	111.22	111.23	111.78
G 25.0	108.68	106.47	107.47	106.70	107.05	106.90	107.76
G 30.0	103.66	101.38	103.87	102.09	101.83	102.21	101.77
G 35.0	97.82	96.95	97.28	95.84	96.32	96.39	96.41
G 40.0	91.04	89.43	90.84	89.63	89.95	89.77	89.82
G 45.0	84.31	81.78	82.44	83.19	82.09	82.63	82.19
G 50.0	77.08	75.16	75.30	73.91	75.13	75.65	75.24
G 55.0	68.90	67.45	67.72	66.85	66.72	67.44	66.90
G 60.0	60.59	59.14	59.21	59.36	59.15	59.44	59.38
G 65.0	54.00	52.30	52.32	51.50	52.33	52.13	52.77
G 70.0	47.30	45.68	46.24	45.49	45.31	46.16	45.34
G 75.0	41.34	39.97	40.59	39.28	39.71	39.86	39.84
G 80.0	35.93	34.72	34.85	34.17	34.56	34.34	34.60
G 85.0	31.87	30.51	30.90	30.56	29.92	30.05	29.87
G 90.0	28.25	27.49	27.38	26.64	26.95	26.83	26.70
G 95.0	25.46	24.96	24.99	24.59	24.52	24.44	24.38
G100.0	23.81	23.49	23.67	23.27	23.18	23.14	23.15
G105.0	23.08	22.97	23.14	22.55	22.71	22.71	22.71
G110.0	23.00	22.85	23.12	22.79	22.90	22.96	23.19
G115.0	23.80	23.96	24.18	23.27	23.48	23.67	23.88
G120.0	24.90	25.19	25.45	24.36	24.34	24.56	24.55
G125.0	26.55	27.12	27.13	25.65	25.32	25.45	25.42
G130.0	28.69	29.07	28.93	27.12	26.16	26.36	26.03
G135.0	31.04	31.24	31.24	29.08	27.07	27.02	26.72
G140.0	33.10	33.34	32.84	30.64	28.61	27.64	27.23
G145.0	35.10	34.62	34.30	32.16	29.93	28.43	28.06
G150.0	36.84	36.17	35.43	32.86	30.95	29.62	29.36
G155.0	37.87	37.17	35.95	33.62	31.67	30.55	30.06
G160.0	38.55	36.96	36.26	33.94	32.50	31.89	31.29
G165.0	38.77	35.97	33.09	32.57	32.73	32.17	32.56
G170.0	32.53	30.08	27.83	25.03	27.02	26.91	25.54
G175.0	17.48	16.68	12.21	15.89	16.19	19.42	17.54
G180.0	1.19	1.20	1.16	1.14	1.21	1.21	1.17

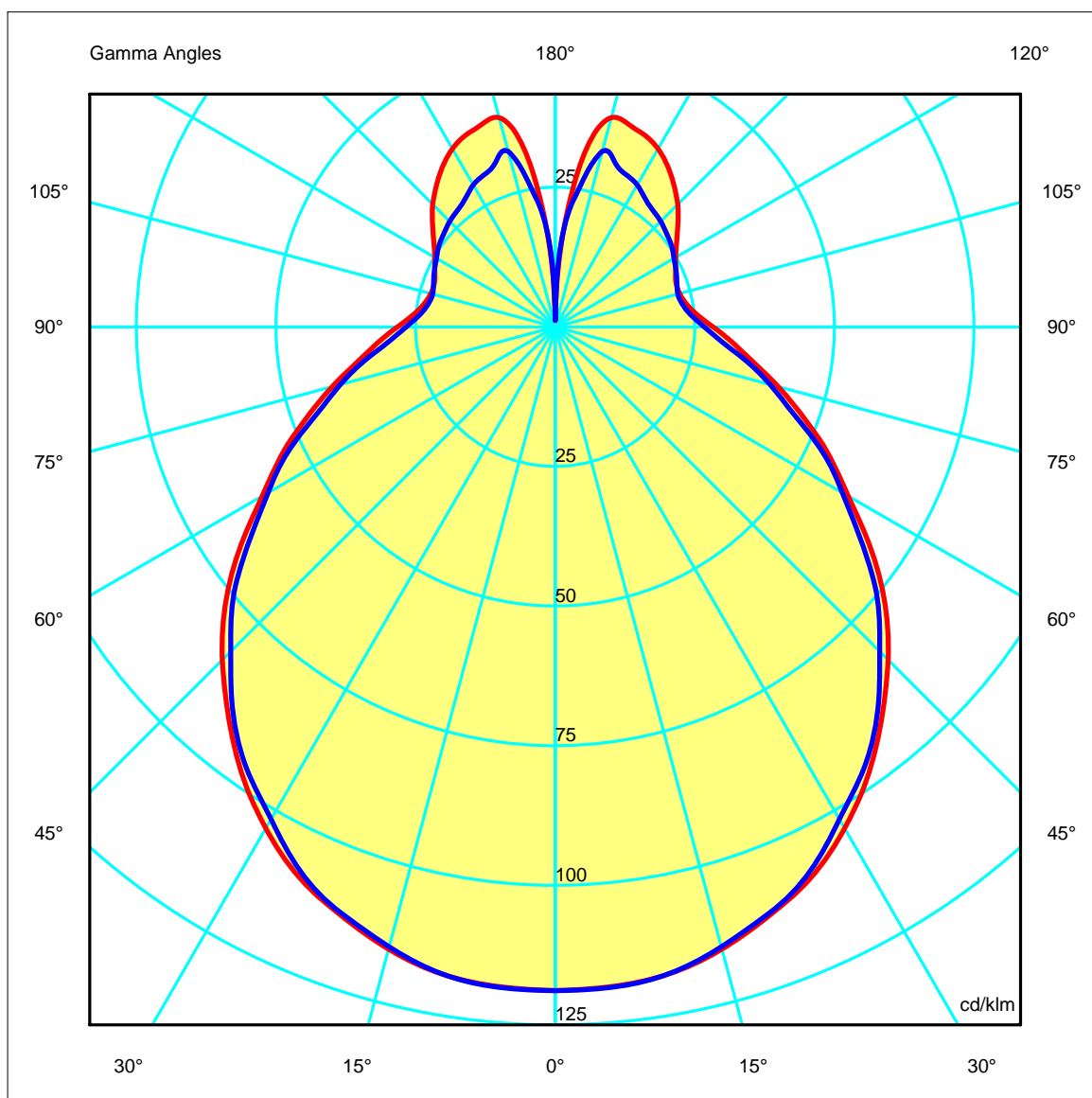
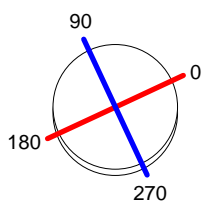
Luminaire		Measur.		Lamp	
Code	5400	Code	5400	Code	65940
Name	Single wall lamp d/16 hal.	Name	Single wall lamp d/16 hal.	Number	1
Line	VIBIA-Puck	Date	30-05-2012	Position	Universal
Efficiency	57.34%	Coordinate system	C-G	Total Flux	420.00 lm

Diam=160mm

C Halfplanes

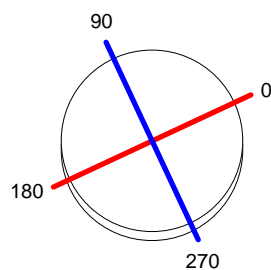
180.0 ————— 0.0

270.0 ————— 90.0



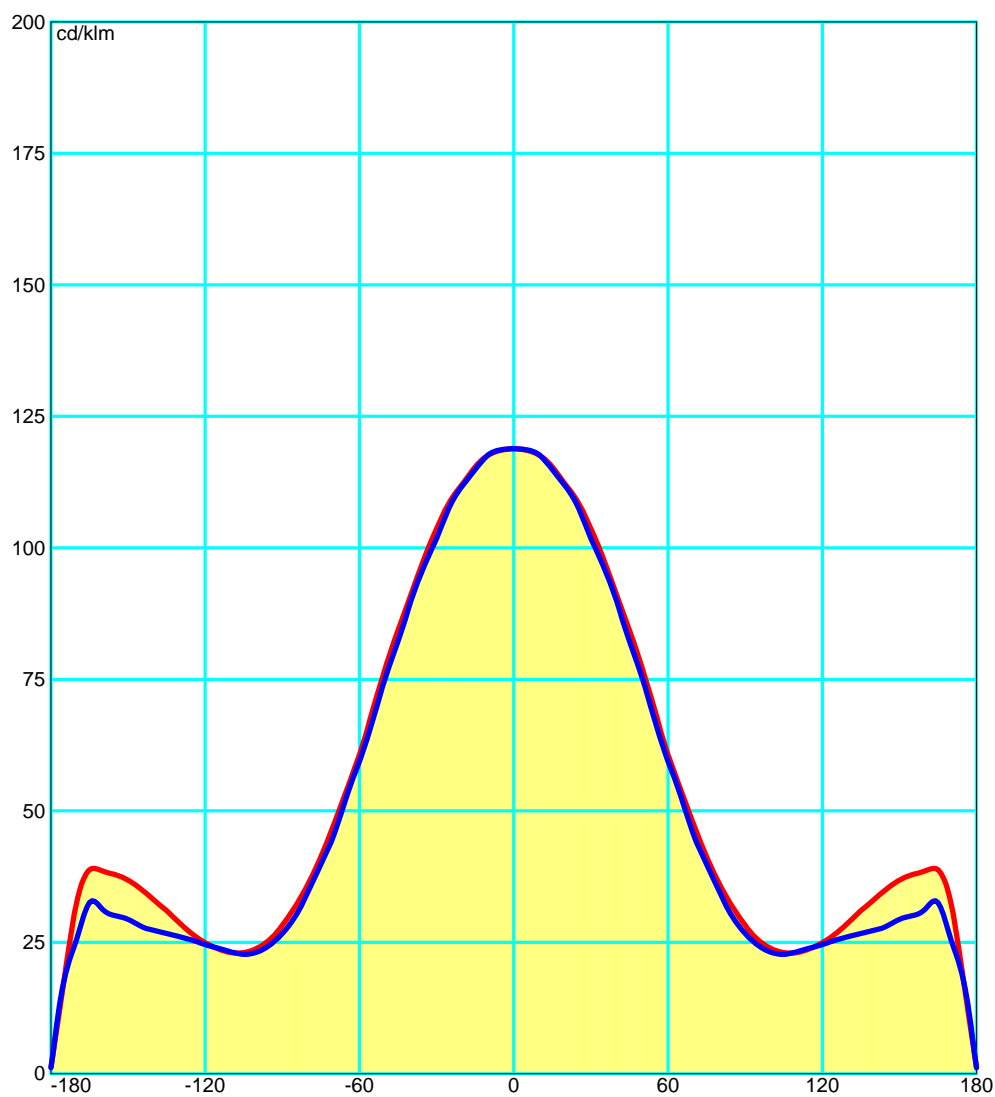
Luminaire		Measurem.		Lamp	
Code	5400	Code	5400	Code	65940
Name	Single wall lamp d/16 hal.	Name	Single wall lamp d/16 hal.	Number	1
Line	VIBIA-Puck	Date	30-05-2012	Position	Universal
Efficiency	57.34%	Coordinate system	C-G	Total Flux	420.00 lm

Diam=160mm



C Halfplanes

180.0 ————— 0.0
 270.0 ————— 90.0

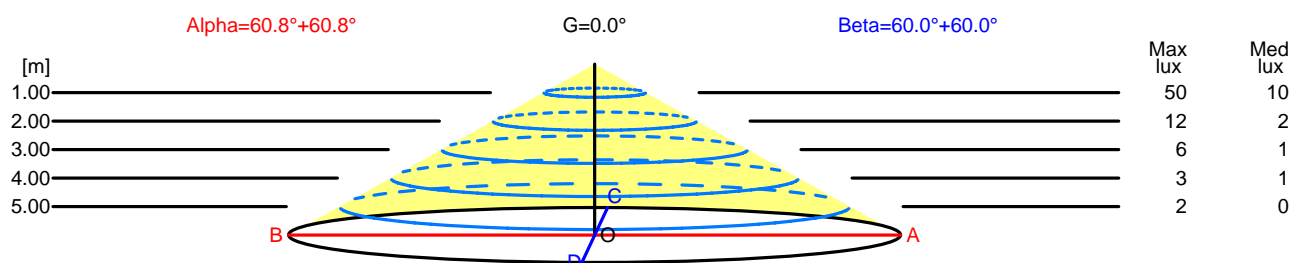


Luminaire		Measurem.		Lamp	
Code	5400	Code	5400	Code	65940
Name	Single wall lamp d/16 hal.	Name	Single wall lamp d/16 hal.	Number	1
Line	VIBIA-Puck	Date	30-05-2012	Position	Universal
Efficiency	57.34%	Coordinate system	C-G	Total Flux	420.00 lm

Width at 50.00 % of MaxLux

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	1.79	3.58	5.37	7.16	8.95	OC	1.73	3.46	5.19	6.92	8.65
OB	1.79	3.58	5.37	7.16	8.95	OD	1.73	3.46	5.19	6.92	8.65

	Luminous Intensities [cd/klm]									
	0	5	15	25	35	45	55	65	75	85
OA	118.85	118.53	115.37	108.68	97.82	84.31	68.90	54.00	41.34	31.87
OB	118.85	118.53	115.37	108.68	97.82	84.31	68.90	54.00	41.34	31.87
OC	118.85	118.64	114.87	107.76	96.41	82.19	66.90	52.77	39.84	29.87
OD	118.85	118.64	114.87	107.76	96.41	82.19	66.90	52.77	39.84	29.87



H[m]	D[m]	Max lux	Med lux	Alpha=60.8°+60.8°	G=0.0
1.00	3.58	50	10		
2.00	7.16	12	2		
3.00	10.74	6	1		
4.00	14.32	3	1		
5.00	17.90	2	0		

H[m]	D[m]	Max lux	Med lux	Beta=60.0°+60.0°	G=0.0
1.00	3.46	50	10		
2.00	6.92	12	2		
3.00	10.38	6	1		
4.00	13.84	3	1		
5.00	17.30	2	0		

Luminaire		Measur.		Lamp	
Code	5400	Code	5400	Code	65940
Name	Single wall lamp d/16 hal.	Name	Single wall lamp d/16 hal.	Number	1
Line	VIBIA-Puck	Date	30-05-2012	Position	Universal
Efficiency	57.34%	Coordinate system	C-G	Total Flux	420.00 lm

Total Flux=420.00 Luminaire Flux=240.82

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	0.26	0.33	0.40	0.47	0.52	0.60	0.66	0.70	0.76	0.79	0.88	0.93
RC	6	6	6	6	7	7	7	7	7	7	7	7

Zonal Flux per 1000 Lumen

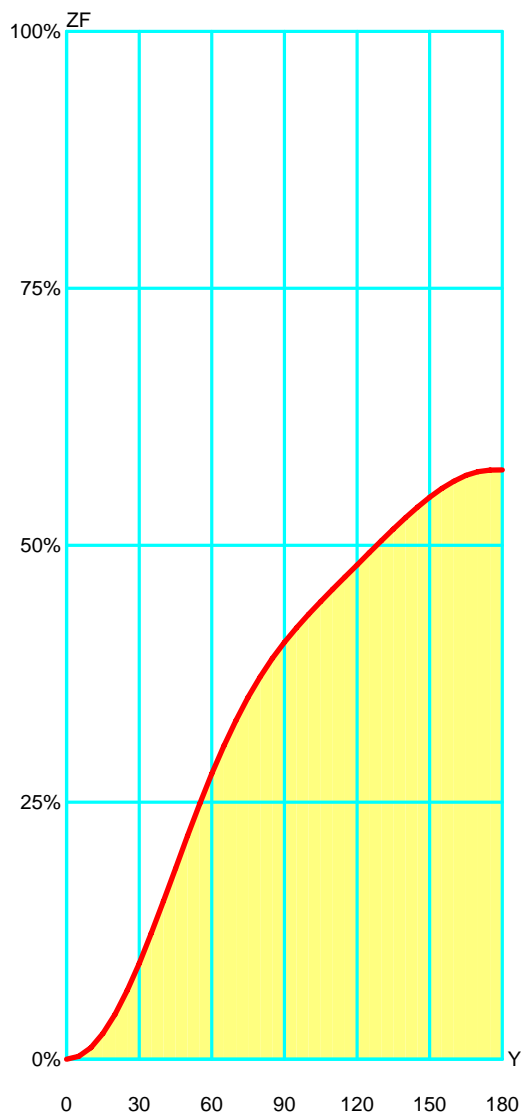
Y°	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
ZF(Y)	11	44	93	154	217	278	330	372	406	433	457	481	504	527	547	562	572	573

CIE Flux Codes

40 68 87 71 57

C.I.E. 6/6/6/6/7/7/7/7/7/7/7
D DIN 5040 B21
F UTE 0.41 G + 0.17 T
B NBN BZ 5 / 1.25 / BZ 6
RN 29.25021 %
BLF 1.0

LOR 57.33733 %
ULOR 16.77129 %
DLOR 40.56604 %
UFF 29.25021 %
DFF 70.74979 %
FFR 41.34318 %



Zonal Flux				
Gamma °	Flux	Sum lm	Flux [%]	Sum [%]
0°	0.00	0.00	0.00 %	0.00 %
5°	2.84	2.84	0.50 %	0.50 %
10°	8.44	11.28	1.47 %	1.97 %
15°	13.78	25.06	2.40 %	4.37 %
20°	18.67	43.73	3.26 %	7.63 %
25°	22.95	66.67	4.00 %	11.63 %
30°	26.51	93.19	4.62 %	16.25 %
35°	29.30	122.49	5.11 %	21.36 %
40°	31.14	153.63	5.43 %	26.79 %
45°	31.95	185.58	5.57 %	32.37 %
50°	31.88	217.47	5.56 %	37.93 %
55°	31.00	248.46	5.41 %	43.33 %
60°	29.29	277.76	5.11 %	48.44 %
65°	27.16	304.91	4.74 %	53.18 %
70°	24.86	329.78	4.34 %	57.52 %
75°	22.44	352.22	3.91 %	61.43 %
80°	19.97	372.20	3.48 %	64.91 %
85°	17.69	389.89	3.09 %	68.00 %
90°	15.77	405.66	2.75 %	70.75 %
95°	14.20	419.86	2.48 %	73.23 %
100°	13.07	432.93	2.28 %	75.51 %
105°	12.36	445.29	2.16 %	77.66 %
110°	11.97	457.26	2.09 %	79.75 %
115°	11.82	469.08	2.06 %	81.81 %
120°	11.79	480.87	2.06 %	83.87 %
125°	11.76	492.63	2.05 %	85.92 %
130°	11.66	504.29	2.03 %	87.95 %
135°	11.43	515.73	1.99 %	89.95 %
140°	11.04	526.77	1.93 %	91.87 %
145°	10.41	537.17	1.82 %	93.69 %
150°	9.55	546.72	1.67 %	95.35 %
155°	8.46	555.18	1.48 %	96.83 %
160°	7.16	562.34	1.25 %	98.08 %
165°	5.61	567.95	0.98 %	99.05 %
170°	3.64	571.59	0.63 %	99.69 %
175°	1.57	573.16	0.27 %	99.96 %
180°	0.21	573.37	0.04 %	100.00 %

Luminaire		Measurem.		Lamp	
Code	5400	Code	5400	Code	65940
Name	Single wall lamp d/16 hal.	Name	Single wall lamp d/16 hal.	Number	1
Line	VIBIA-Puck	Date	30-05-2012	Position	Universal
Efficiency	57.34%	Coordinate system	C-G	Total Flux	420.00 lm

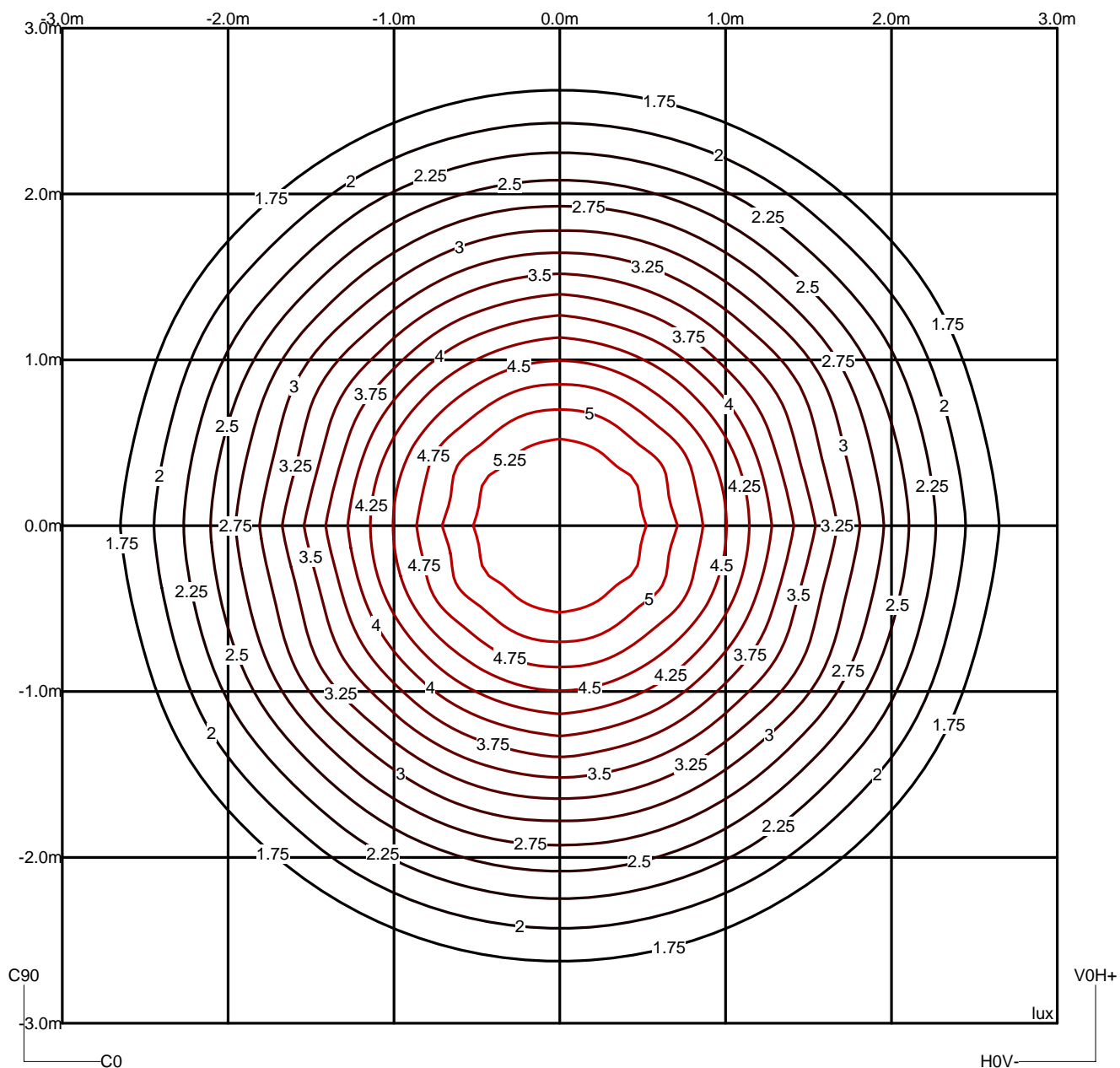
UGR
S = 0.250

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
WorkingPlane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
RoomDimensions	ViewedCrosswise					ViewedEndwise				
x=2H y=2H	11.8	12.9	12.5	13.6	14.3	11.8	12.9	12.5	13.5	14.3
x=2H y=3H	13.7	14.6	14.4	15.3	16.1	13.6	14.6	14.3	15.3	16.1
x=2H y=4H	14.6	15.5	15.3	16.2	17.0	14.5	15.4	15.2	16.1	17.0
x=2H y=6H	15.5	16.3	16.2	17.0	17.8	15.4	16.2	16.1	17.0	17.8
x=2H y=8H	15.9	16.7	16.7	17.5	18.3	15.8	16.6	16.6	17.4	18.3
x=2H y=12H	16.4	17.2	17.2	17.9	18.7	16.3	17.0	17.0	17.8	18.7
x=4H y=2H	12.5	13.4	13.2	14.1	14.9	12.5	13.3	13.2	14.1	14.9
x=4H y=3H	14.5	15.2	15.2	16.0	16.9	14.4	15.2	15.2	15.9	16.9
x=4H y=4H	15.5	16.2	16.3	17.0	17.9	15.5	16.1	16.2	16.9	17.9
x=4H y=6H	16.6	17.2	17.4	18.0	18.8	16.5	17.1	17.3	17.9	18.8
x=4H y=8H	17.1	17.7	17.9	18.5	19.4	17.0	17.6	17.8	18.4	19.4
x=4H y=12H	17.7	18.2	18.5	19.0	19.8	17.5	18.0	18.4	18.9	19.8
x=8H y=4H	15.9	16.4	16.7	17.2	18.2	15.8	16.4	16.6	17.2	18.2
x=8H y=6H	17.1	17.6	18.0	18.4	19.4	17.1	17.5	17.9	18.4	19.4
x=8H y=8H	17.8	18.2	18.7	19.1	20.0	17.7	18.1	18.6	19.0	20.0
x=8H y=12H	18.5	18.9	19.4	19.7	20.7	18.4	18.7	19.2	19.6	20.7
x=12H y=4H	15.9	16.4	16.7	17.2	18.2	15.9	16.4	16.7	17.2	18.2
x=12H y=6H	17.3	17.7	18.1	18.5	19.5	17.2	17.6	18.1	18.5	19.5
x=12H y=8H	18.0	18.3	18.8	19.2	20.2	17.9	18.3	18.8	19.1	20.2

Luminaire		Measurem.		Lamp	
Code	5400	Code	5400	Code	65940
Name	Single wall lamp d/16 hal.	Name	Single wall lamp d/16 hal.	Number	1
Line	VIBIA-Puck	Date	30-05-2012	Position	Universal
Efficiency	57.34%	Coordinate system	C-G	Total Flux	420.00 lm

Isolux (Floor)

Luminaire position X=0.00m Y=0.00m Z=3.00m



Luminaire		Measurem.		Lamp	
Code	5400	Code	5400	Code	65940
Name	Single wall lamp d/16 hal.	Name	Single wall lamp d/16 hal.	Number	1
Line	VIBIA-Puck	Date	30-05-2012	Position	Universal
Efficiency	57.34%	Coordinate system	C-G	Total Flux	420.00 lm

Utilizations CIE

Mounting	Direct				114-Norm type Normalised								Suspension Ratio 3								Standard CIE Settings							
	Ceiling																											
K	8873	8773	8871	8771	7773	7771	7753	7553	7751	7551	7731	7331	7711	7111	5551	5531	5331	5511	5111	3331	3311	1111	0000					
0.60	239	215	217	196	204	187	167	142	156	133	135	102	120	82	124	109	96	98	78	91	82	71	63					
0.80	268	245	234	216	233	206	192	168	174	153	151	120	133	97	143	125	113	112	93	107	97	85	75					
1.00	287	267	243	227	254	218	211	189	186	167	162	133	143	110	156	138	126	123	105	120	108	96	84					
1.25	304	286	248	235	272	226	230	209	195	179	172	146	153	122	168	149	139	134	117	132	119	108	93					
1.50	316	300	251	239	286	231	245	225	202	187	179	156	160	132	176	158	148	143	127	141	129	117	101					
2.00	331	318	251	243	304	234	266	249	209	198	189	169	171	147	187	170	162	155	142	155	142	132	112					
2.50	341	330	250	243	315	236	281	266	214	204	195	179	179	158	194	178	171	165	152	164	152	142	120					
3.00	348	338	248	243	323	236	292	279	217	208	199	185	184	166	199	184	178	171	160	171	160	150	126					
4.00	356	349	246	242	334	236	308	297	220	213	205	194	192	177	205	192	187	181	172	181	171	162	134					
5.00	362	356	244	241	341	235	318	308	222	216	209	200	197	185	208	197	193	187	179	187	178	169	140					
10.00	372	369	238	237	354	233	340	335	224	222	217	212	209	202	215	208	206	201	197	200	194	187	152					
20.00	377	376	233	233	361	229	353	350	225	224	220	218	216	212	218	214	212	210	207	207	204	198	160					

Wall

K	8873	8773	8871	8771	7773	7771	7753	7553	7751	7551	7731	7331	7711	7111	5551	5531	5331	5511	5111	3331	3311	1111	0000										
0.60	248	235	220	209	228	204	179	168	164	154	138	125	119	105	149	127	122	110	103	119	104	100	90										
0.80	286	273	248	237	263	230	214	201	192	181	165	150	144	129	174	151	146	133	126	141	126	120	108										
1.00	314	301	266	257	289	248	241	228	212	202	185	171	164	148	192	169	164	152	144	158	143	135	122										
1.25	340	328	283	274	313	264	267	254	231	221	205	191	184	168	209	188	182	170	162	175	160	151	135										
1.50	361	349	295	287	333	277	289	276	246	236	221	207	201	185	223	203	197	186	177	188	174	164	147										
2.00	387	377	309	303	358	292	319	307	265	257	243	230	224	209	241	223	218	207	199	206	193	181	162										
2.50	406	397	319	314	376	302	341	330	279	272	259	247	241	227	254	237	233	223	215	220	208	194	173										
3.00	420	412	327	322	390	310	358	347	289	283	271	260	255	241	264	249	245	235	228	230	219	204	182										
4.00	443	436	340	337	412	324	384	376	307	301	291	282	277	265	281	268	264	256	250	248	238	222	198										
5.00	460	454	351	349	429	335	405	397	320	316	307	299	294	284	295	283	280	273	267	262	254	236	211										
10.00	507	504	385	384	476	371	461	456	361	359	353	348	344	338	335	328	326	321	317	305	299	279	251										
20.00	546	545	417	416	515	403	506	503	397	396	392	389	387	383	371	367	365	362	360	343	339	317	288										

Working Pl.

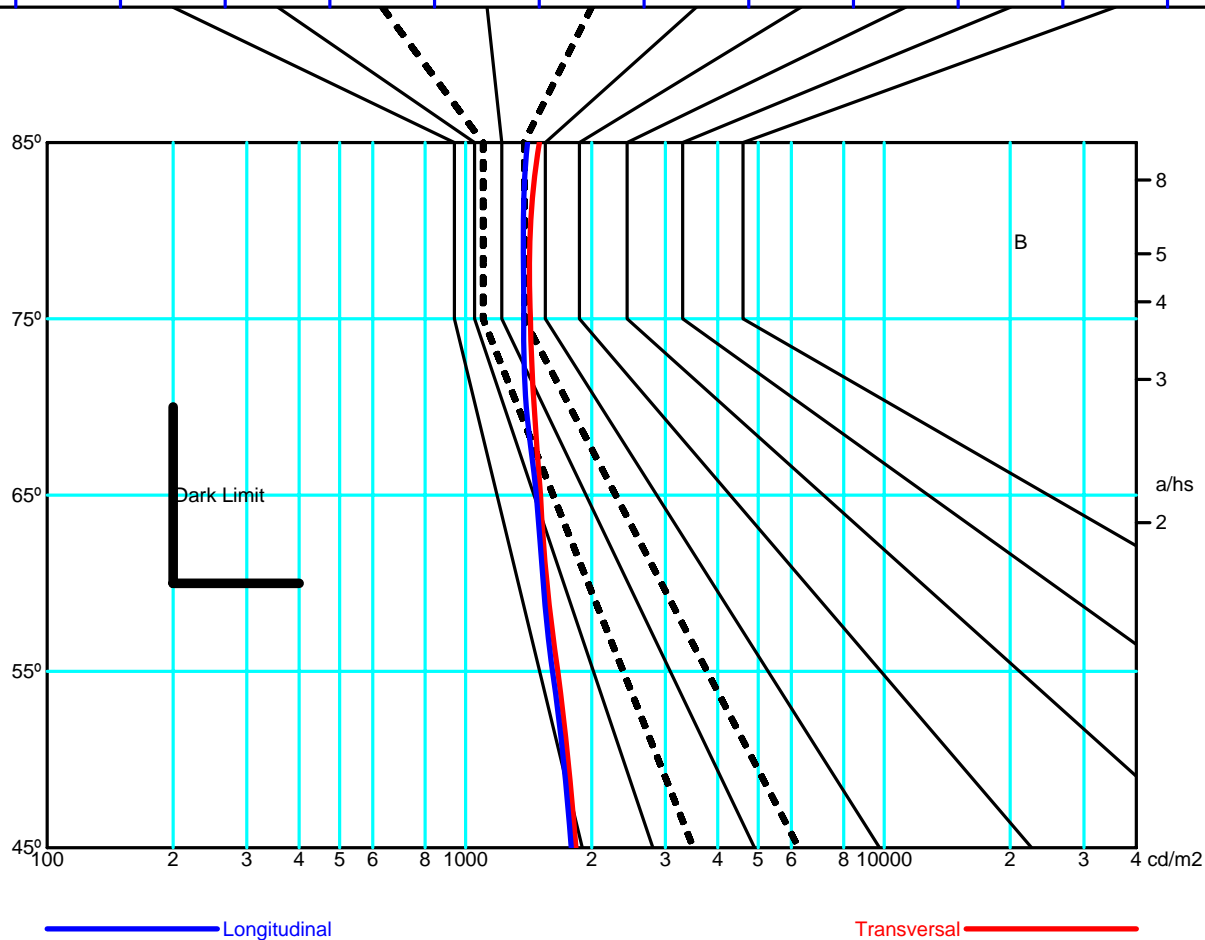
K	8873	8773	8871	8771	7773	7771	7753	7553	7751	7551	7731	7331	7711	7111	5551	5531	5331	5511	5111	3331	3311	1111	0000										
0.60	283	269	264	252	260	245	202	190	194	184	160	147	135	123	177	147	143	126	120	139	119	115	105										
0.80	341	325	314	301	312	291	252	238	240	228	204	188	177	160	217	187	181	163	155	174	154	146	136										
1.00	386	370	352	340	354	327	294	278	278	265	242	224	213	194	251	220	214	197	187	205	184	174	162										
1.25	429	414	387	376	394	361	336	320	315	302	279	260	251	229	283	254	247	230	219	235	215	202	189										
1.50	463	448	413	403	425	386	369	353	343	330	309	290	280	259	309	281	273	257	246	259	239	224	210										
2.00	511	498	450	442	470	423	420	404	385	374	354	336	328	306	347	322	315	300	289	296	278	259	244										
2.50	543	532	474	467	501	446	456	441	413	403	385	368	361	340	373	351	344	331	319	321	305	283	267										
3.00	567	556	491	484	523	463	482	468	434	425	408	392	385	366	392	372	365	353	343	340	325	301	284										
4.00	597	588	512	507	552	485	517	505	460	453	438	425	419	401	417	399	394	383	374	365	352	324	307										
5.00	616	609	525	521	570	498	540	530	477	471	458	446	440	425	433	417	413	403	395	381	370	339	321										
10.00	659	655	553	551	611	527	593	586	515	511	503	496	492	482	468	459	456	450	444	418	411	375	355										
20.00	683	680	569	568	635	543	624	621	536	534	529	526	523	517	489	484	482	479	475	441	437	397	377										

LM53 SHR C0-C180: 1.286 SHR C90-C270: 1.274 SHR Square: 1.408

Luminaire		Measurem.		Lamp	
Code	5400	Code	5400	Code	65940
Name	Single wall lamp d/16 hal.	Name	Single wall lamp d/16 hal.	Number	1
Line	VIBIA-Puck	Date	30-05-2012	Position	Universal
Efficiency	57.34%	Coordinate system	C-G	Total Flux	420.00 lm

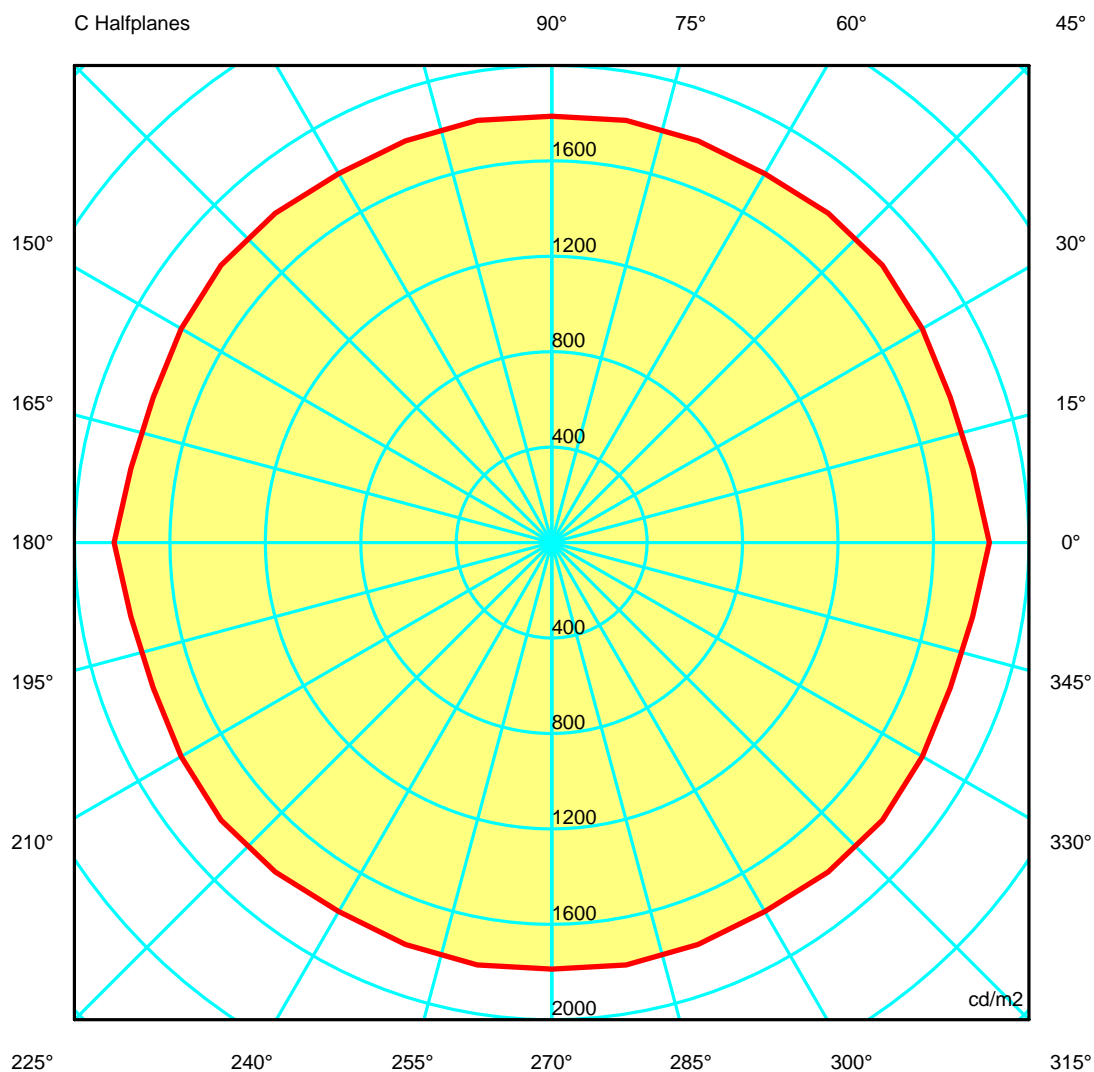
	Average Luminance [cd/m ²]									
	45°	50°	55°	60°	65°	70°	75°	80°	85°	
0°	1833.8	1755.7	1660.3	1562.2	1509.8	1456.1	1428.1	1426.1	1499.7	---
90°	1787.7	1713.8	1612.0	1531.1	1475.4	1395.9	1376.3	1373.5	1405.6	---

Flush mounted or transversal view												
		Illumination(lx)										
A	A	2000	1000	750	500		<300					1.15
B	1		2000	1500	1000	750	500	<300				1.5
C					2000		1000	500	<300			1.85
D	2						2000	1000	500	<300		2.2
E	3							2000	1000	500	<300	2.55



Luminaire		Measur.		Lamp	
Code	5400	Code	5400	Code	65940
Name	Single wall lamp d/16 hal.	Name	Single wall lamp d/16 hal.	Number	1
Line	VIBIA-Puck	Date	30-05-2012	Position	Universal
Efficiency	57.34%	Coordinate system	C-G	Total Flux	420.00 lm

Luminance												
G/C	0	30	60	90	120	150	180	210	240	270	300	330
0°	2482.73	2482.73	2482.73	2482.73	2482.73	2482.73	2482.73	2482.73	2482.73	2482.73	2482.73	2482.73
5°	2409.93	2422.42	2406.38	2412.20	2406.38	2422.42	2409.93	2422.42	2406.38	2412.20	2406.38	2422.42
10°	2346.93	2351.57	2338.02	2347.02	2338.02	2351.57	2346.93	2351.57	2338.02	2347.02	2338.02	2351.57
15°	2276.47	2282.37	2261.00	2266.68	2261.00	2282.37	2276.47	2282.37	2261.00	2266.68	2261.00	2282.37
20°	2205.38	2199.78	2187.28	2198.28	2187.28	2199.78	2205.38	2199.78	2187.28	2198.28	2187.28	2199.78
25°	2146.43	2122.69	2114.26	2128.35	2114.26	2122.69	2146.43	2122.69	2114.26	2128.35	2114.26	2122.69
30°	2072.03	2076.18	2035.32	2034.14	2035.32	2076.18	2072.03	2076.18	2035.32	2034.14	2035.32	2076.18
35°	1994.42	1983.44	1963.94	1965.62	1963.94	1983.44	1994.42	1983.44	1963.94	1965.62	1963.94	1983.44
40°	1908.87	1904.66	1886.15	1883.33	1886.15	1904.66	1908.87	1904.66	1886.15	1883.33	1886.15	1904.66
45°	1833.85	1793.35	1785.60	1787.73	1785.60	1793.35	1833.85	1793.35	1785.60	1787.73	1785.60	1793.35
50°	1755.74	1715.22	1711.33	1713.83	1711.33	1715.22	1755.74	1715.22	1711.33	1713.83	1711.33	1715.22
55°	1660.34	1631.73	1607.76	1611.95	1607.76	1631.73	1660.34	1631.73	1607.76	1611.95	1607.76	1631.73
60°	1562.22	1526.82	1525.14	1531.14	1525.14	1526.82	1562.22	1526.82	1525.14	1531.14	1525.14	1526.82
65°	1509.79	1462.69	1462.97	1475.38	1462.97	1509.79	1462.69	1462.97	1475.38	1462.97	1462.69	1462.97
70°	1456.08	1423.64	1394.86	1395.94	1394.86	1423.64	1456.08	1423.64	1394.86	1395.94	1394.86	1423.64
75°	1428.15	1402.29	1371.72	1376.34	1371.72	1402.29	1428.15	1402.29	1371.72	1376.34	1371.72	1402.29
80°	1426.15	1383.07	1371.60	1373.47	1371.60	1383.07	1426.15	1383.07	1371.60	1373.47	1371.60	1383.07
85°	1499.74	1454.35	1407.83	1405.58	1407.83	1454.35	1499.74	1454.35	1407.83	1405.58	1407.83	1454.35
90°	1648.13	1597.41	1571.98	1557.42	1571.98	1597.41	1648.13	1597.41	1571.98	1557.42	1571.98	1597.41



45.0°