IES Indoor Report
Photometric Filename:Recessed 12WR.IES

Indoor Luminaire Photometric Data

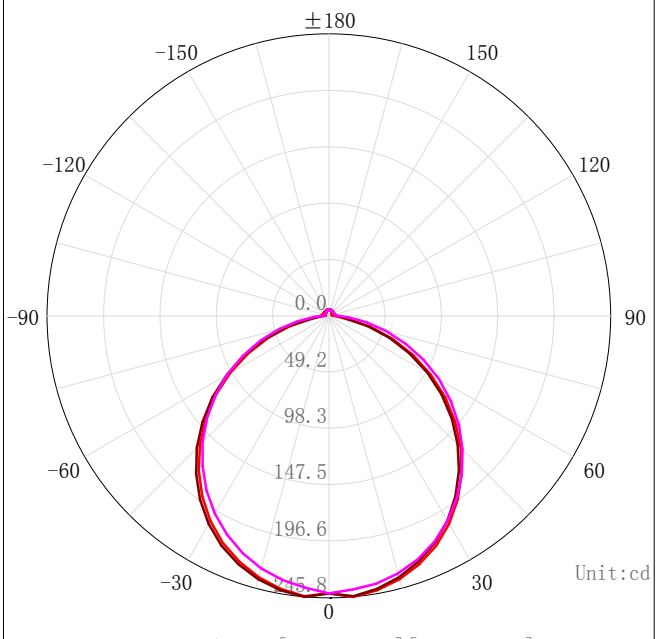
Description Information

Luminary Name: Rillo mini cross		Lum. Catelog: Recessed 12WR	Test ID:
Lamp Name:		Lamp Catelog:	Test Date: 2015/11/26
Manufacture:		Shld.Ang(°):	Test Machine:GON-2000
Test Lab:		Frequency(Hz):	Lamp CCT(K): Ra:
Lum.Size(W*L*H):0.170m*0.170m*0.000m		Lum.Area(m2):0.029	Lum.W(kg): 1.000
Test System: C, γ	Test Step: C=30.0 γ=5.0	Temp.(℃): 30	Humidity(%): 50.0

Character Parameter

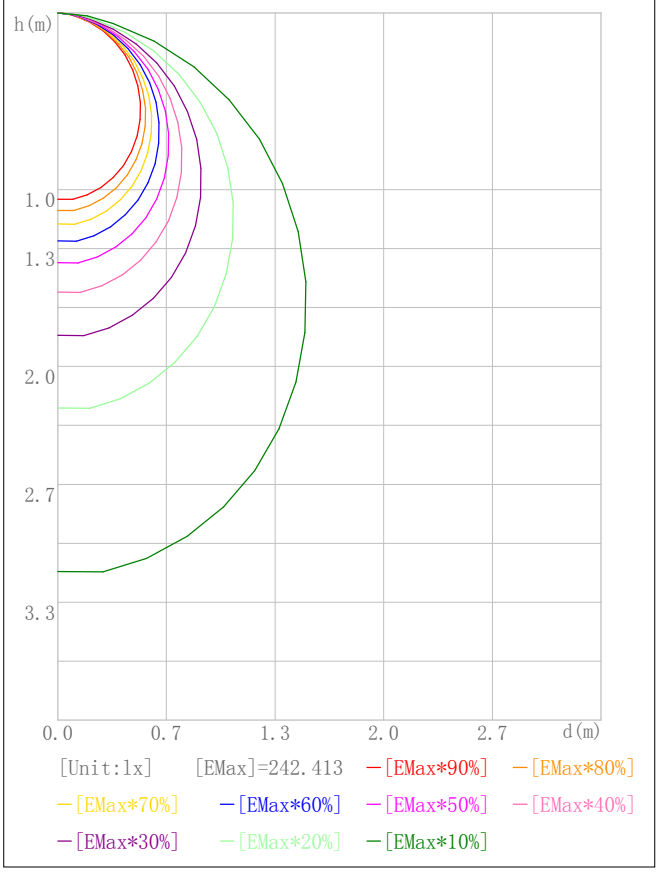
Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 750.000	Luminary Flux(lm): 706.631	Field Angle(10%Imax): 156.1(°)
Rated Power(W):	Luminary Efficiency: 94.22%	Down Lumens&Percent: 679.476lm 96.16%
Rated Voltage(V):	Luminary EER(lm/W): 56.666	Up Lumens&Percent: 27.155lm 3.84%
Tested Power(W): 12.470	Max.Candela(cd): 245.775	S/MH: C0_a180=1.272 C90_270=1.248
Lamps' Inside: 1	Max Cand@Ang.(°): C=180.0 γ=5.0	CIE Type: Semi-Direct
Tested Electrics(V,A,pf):219.7,0.096,0.586	Beam Angle(50%Imax): 109.4(°)	ErP Φuse(120°): 539.520lm
Lamp Size(W*L*H):0.170m*0.170m*0.000m	Left=-54.2°,Right=55.2°	IRF(%): 111.373

C Plane Distribution Diagram



C Plane	[50%MaxAng.]	[10%MaxAng.]
C180.0_360.0:	109.4	156.1
C0.0_180.0 :	109.4	156.1
C90.0_270.0 :	112.2	164.0

C0 Space ISO Illuminance Curve



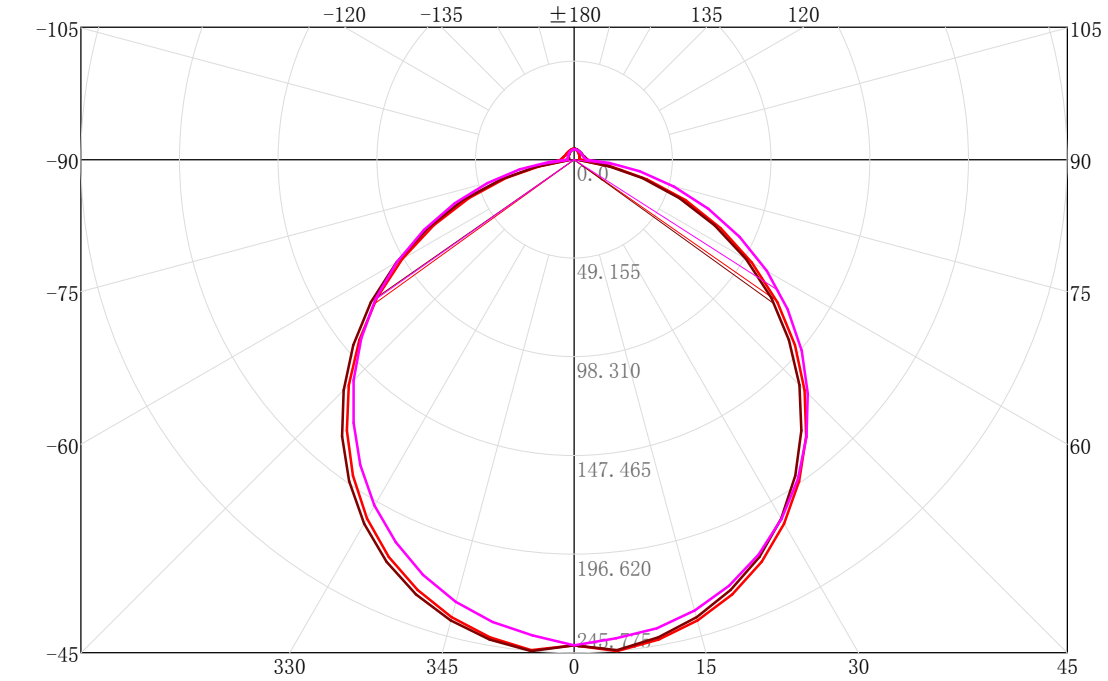
[Unit:lx] [EMax]=242.413 —[EMax*90%] —[EMax*80%] —[EMax*70%] —[EMax*60%] —[EMax*50%] —[EMax*40%] —[EMax*30%] —[EMax*20%] —[EMax*10%]

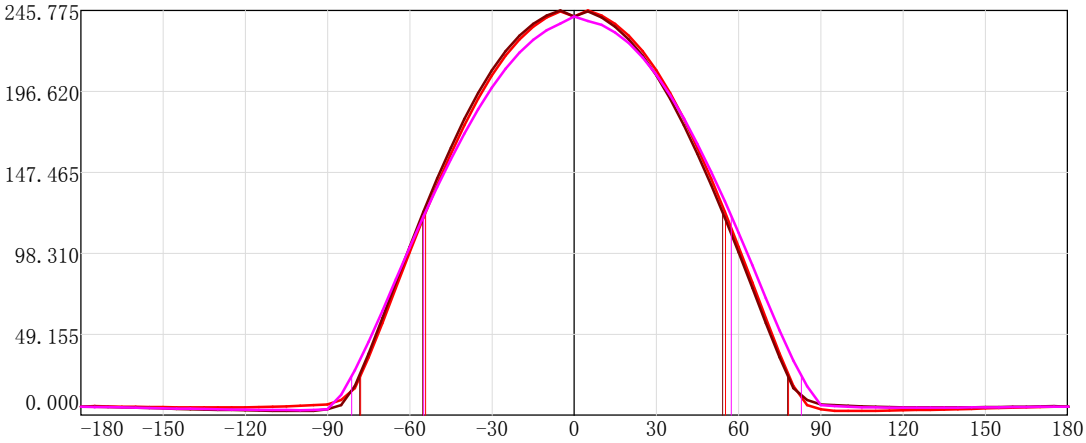
IES Indoor Report
Photometric Filename:Recessed 12WR.IES

2D Plane Light Intensity Distribution Curve

Lum.Name: Rillo mini cross	Lum.Catelog: Recessed 12WR	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26

C Plane Distribution Diagram





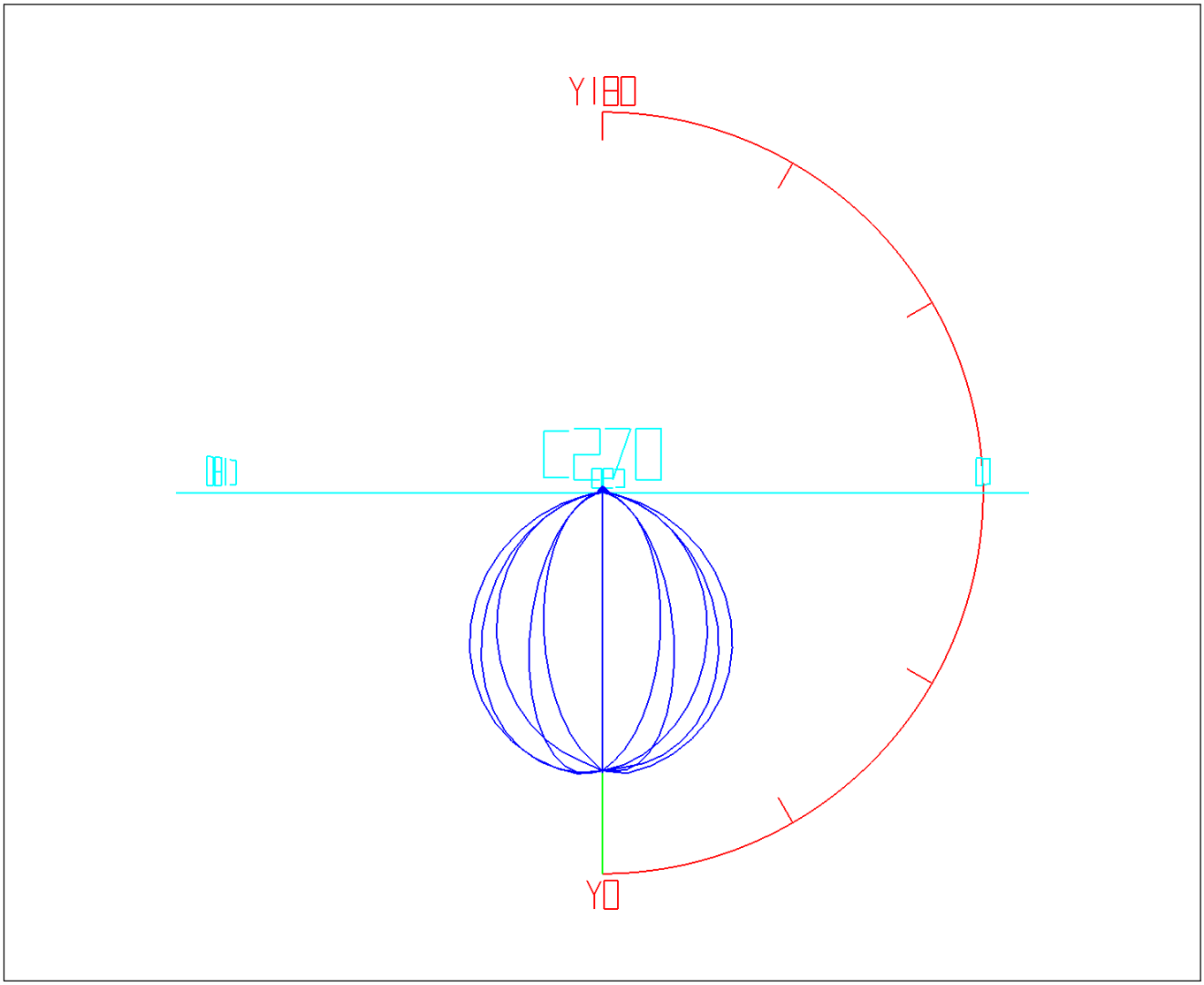
C Plane	[50%MaxAng.]	[10%MaxAng.]	Unit:cd
C180.0_360.0:	109.4	156.1	
C0.0_180.0 :	109.4	156.1	
C90.0_270.0 :	112.2	164.0	

IES Indoor Report
Photometric Filename:Recessed 12WR.IES

3D Light Intensity Distribution Modal

Lum.Name: Rillo mini cross	Lum.Catelog: Recessed 12WR	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26

3D Light Intensity Distribution Modal



Curves: 3D Model Fixture Vert. HUD Hori. HUD

View Angles: Orient:0 Tilt:0 Roll:0 Spin:0

IES Indoor Report
Photometric Filename:Recessed 12WR.IES

Zonal Flux Tabulation

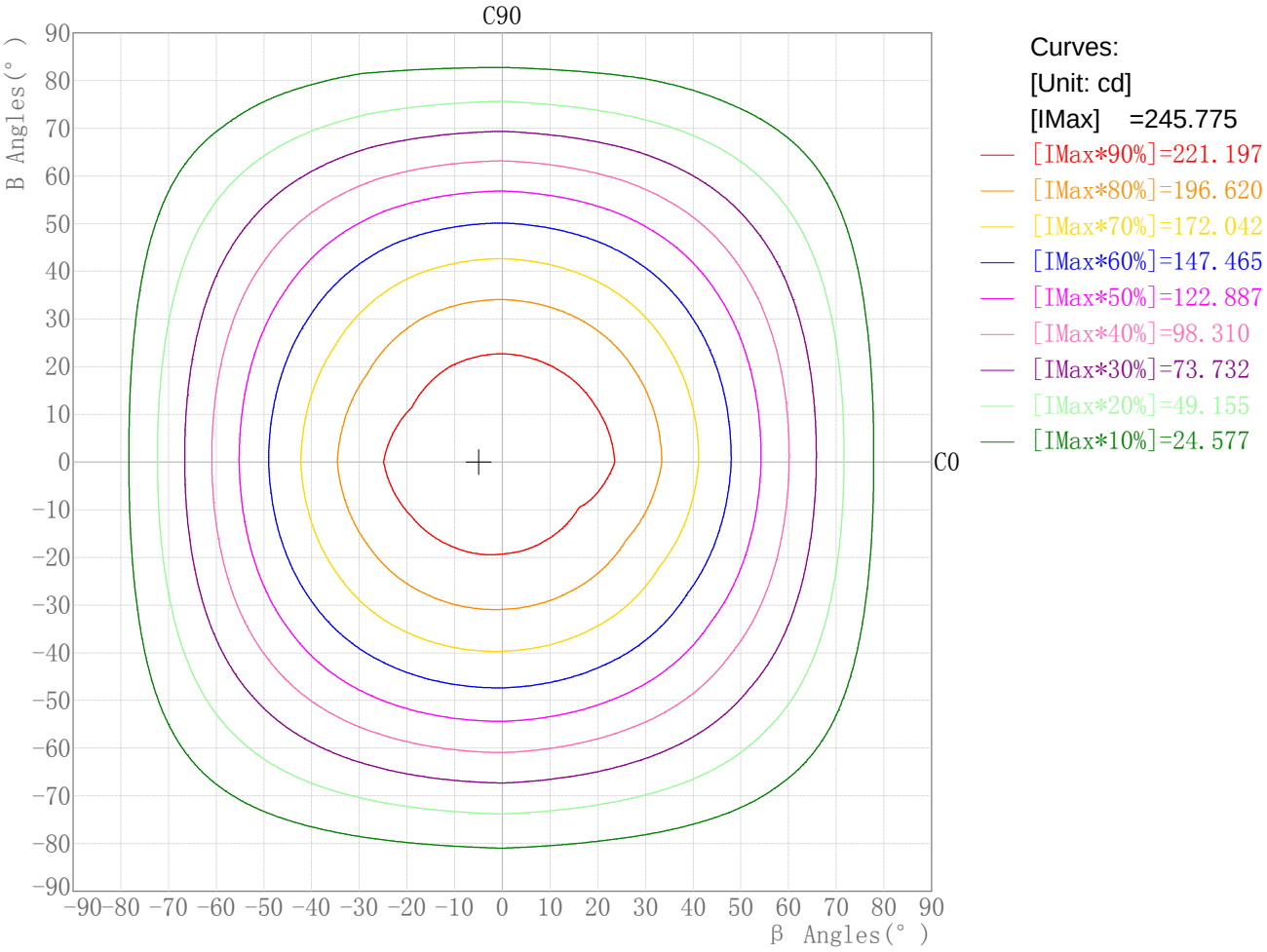
Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	5.76	5.76	0.77	0.77
5.0-10.0	17.06	22.83	2.28	3.04
10.0-15.0	27.79	50.62	3.71	6.75
15.0-20.0	37.58	88.20	5.01	11.76
20.0-25.0	46.08	134.28	6.14	17.90
25.0-30.0	53.00	187.29	7.07	24.97
30.0-35.0	58.06	245.35	7.74	32.71
35.0-40.0	61.09	306.44	8.14	40.86
40.0-45.0	61.99	368.43	8.27	49.12
45.0-50.0	60.75	429.18	8.10	57.22
50.0-55.0	57.40	486.58	7.65	64.88
55.0-60.0	52.06	538.64	6.94	71.82
60.0-65.0	44.94	583.58	5.99	77.81
65.0-70.0	36.47	620.05	4.86	82.67
70.0-75.0	27.15	647.20	3.62	86.29
75.0-80.0	17.74	664.94	2.36	88.66
80.0-85.0	9.87	674.80	1.32	89.97
85.0-90.0	4.67	679.48	0.62	90.60
90.0-95.0	2.59	682.07	0.35	90.94
95.0-100.0	2.36	684.43	0.32	91.26
100.0-105.0	2.23	686.66	0.30	91.55
105.0-110.0	2.12	688.78	0.28	91.84
110.0-115.0	2.04	690.82	0.27	92.11
115.0-120.0	1.96	692.78	0.26	92.37
120.0-125.0	1.88	694.66	0.25	92.62
125.0-130.0	1.79	696.45	0.24	92.86
130.0-135.0	1.69	698.15	0.23	93.09
135.0-140.0	1.58	699.73	0.21	93.30
140.0-145.0	1.46	701.19	0.20	93.49
145.0-150.0	1.33	702.52	0.18	93.67
150.0-155.0	1.18	703.70	0.16	93.83
155.0-160.0	1.01	704.71	0.13	93.96
160.0-165.0	0.82	705.53	0.11	94.07
165.0-170.0	0.61	706.13	0.08	94.15
170.0-175.0	0.37	706.51	0.05	94.20
175.0-180.0	0.13	706.63	0.02	94.22

IES Indoor Report
Photometric Filename:Recessed 12WR.IES

Rectangle ISO Lighting Intensity Diagram

Lum.Name: Rillo mini cross	Lum.Catelog: Recessed 12WR	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26

ISO Lighting Intensity Curve



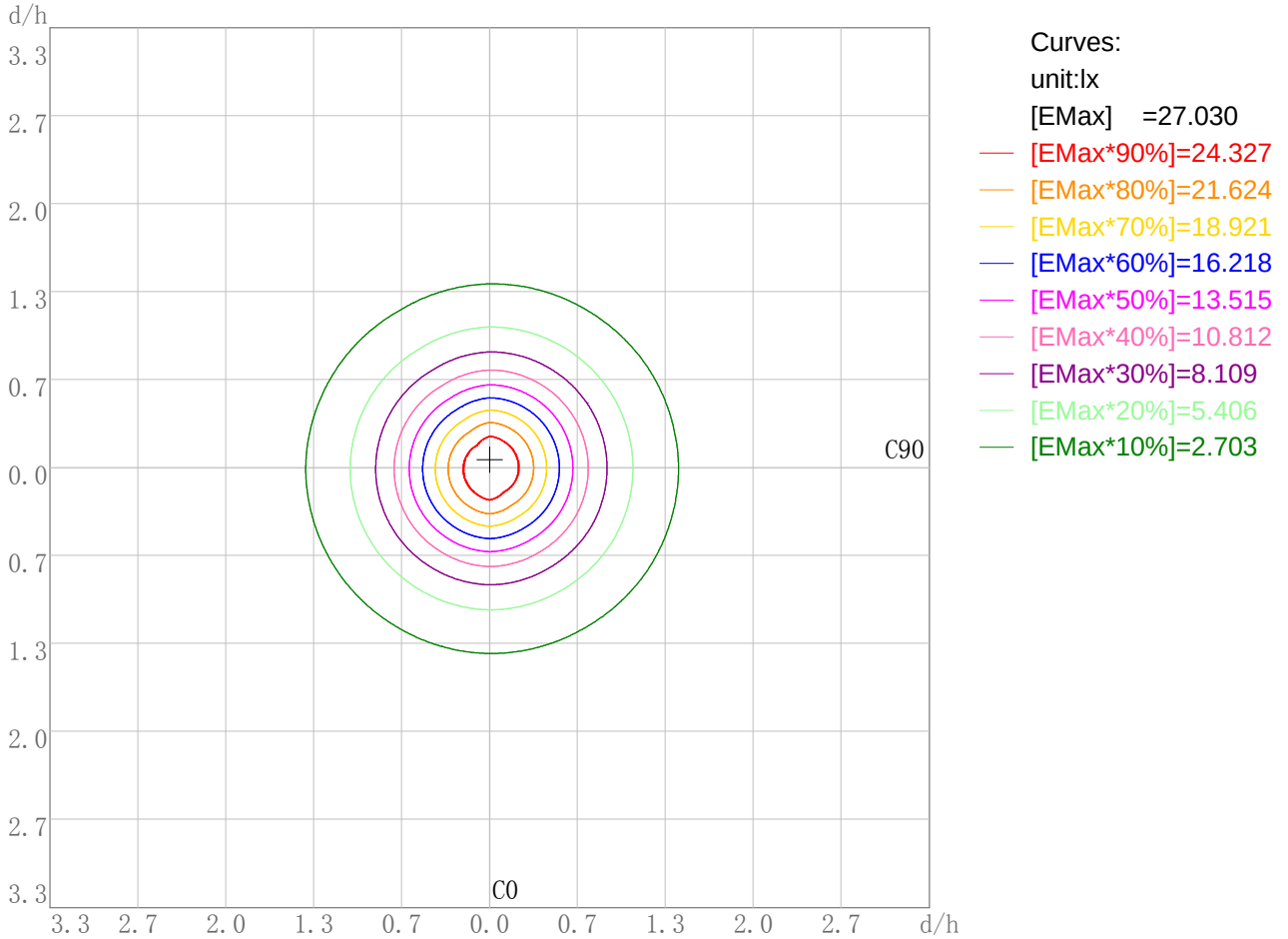
Maximum Light Intensity(cd): 245.77
Maximum Cand.@Angle: H=-5.0°,V=0.0°

IES Indoor Report
Photometric Filename:Recessed 12WR.IES

Plane ISO-Illuminance Diagram

Lum.Name: Rillo mini cross	Lum.Catelog: Recessed 12WR	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26

Plane ISO-Illuminance Curve



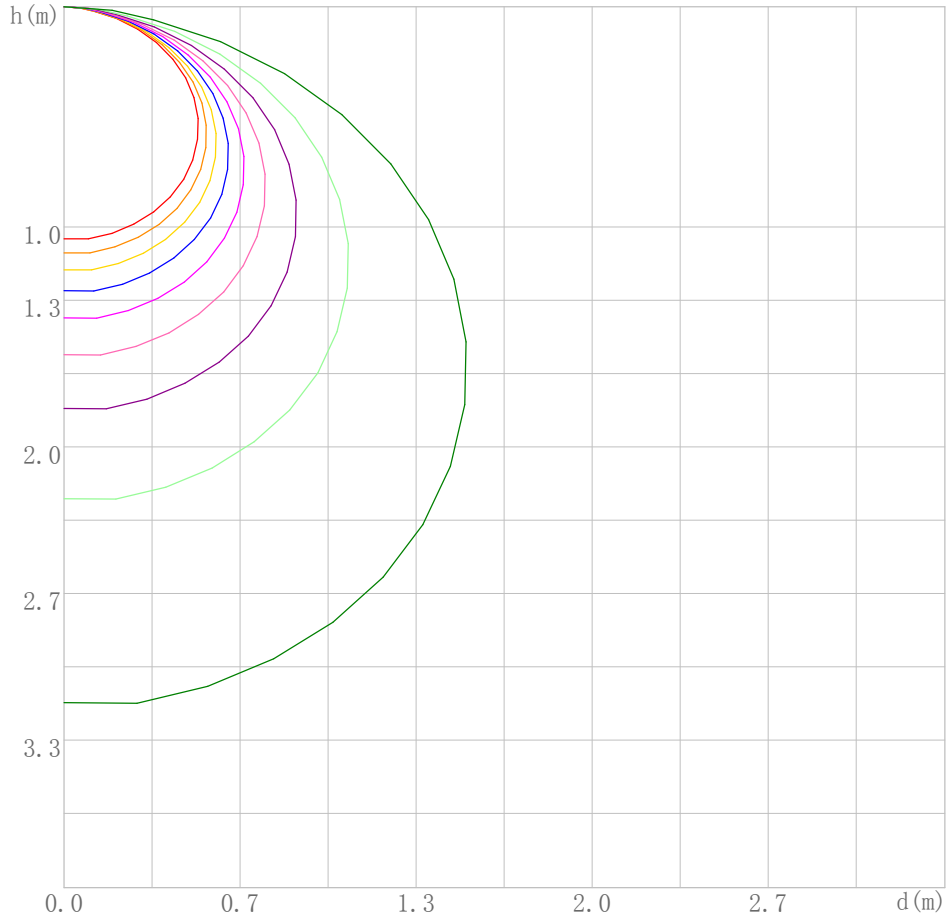
Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 27.03
Working Plane Maximum Illuminance Position(d/h):H0.0 V-0.1

IES Indoor Report
Photometric Filename:Recessed 12WR.IES

Space ISO Illuminance Diagram

Lum.Name: Rillo mini cross	Lum.Catelog: Recessed 12WR	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26

Space ISO Illuminance Curve



Curves:
[Unit: lx]
[EMax] =242.413
[EMax*90%]=218.172
[EMax*80%]=193.931
[EMax*70%]=169.689
[EMax*60%]=145.448
[EMax*50%]=121.207
[EMax*40%]=96.965
[EMax*30%]=72.724
[EMax*20%]=48.483
[EMax*10%]=24.241

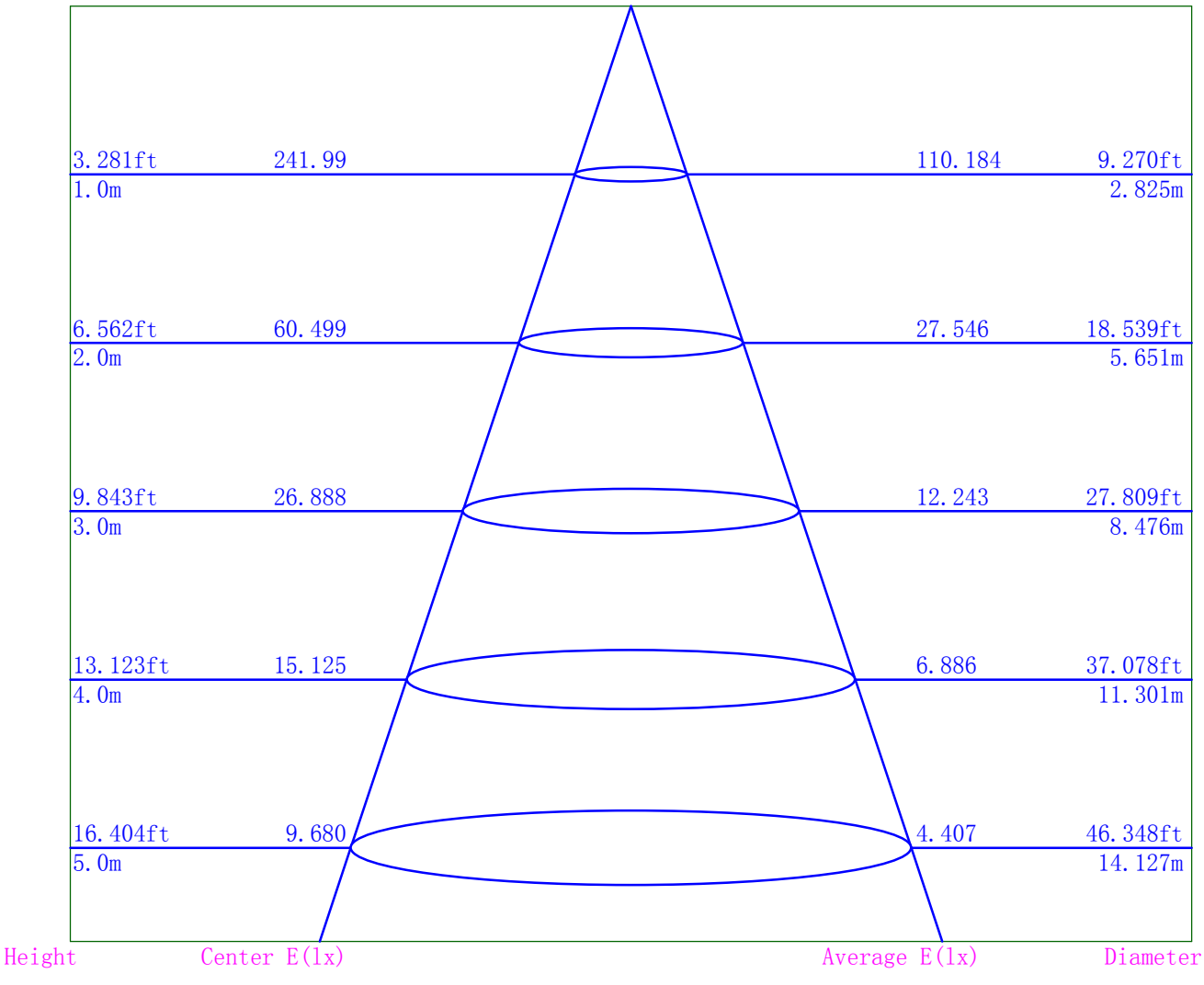
Space Plane Maximum Illuminance and @Angle:242.41lx,5.0deg
Plane Maximum Lighting Intensity and @Angle:245.202cd,0eg

IES Indoor Report
Photometric Filename:Recessed 12WR.IES

Illuminance-Distance Diagram

Lum.Name: Rillo mini cross	Lum.Catelog: Recessed 12WR	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26

Illuminance-Distance Curve



Beam Angle:109.4

IES Indoor Report
Photometric Filename:Recessed 12WR.IES

Indoor Luminance Limiting Curves

Lum.Name: Rillo mini cross	Lum.Catelog: Recessed 12WR	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26

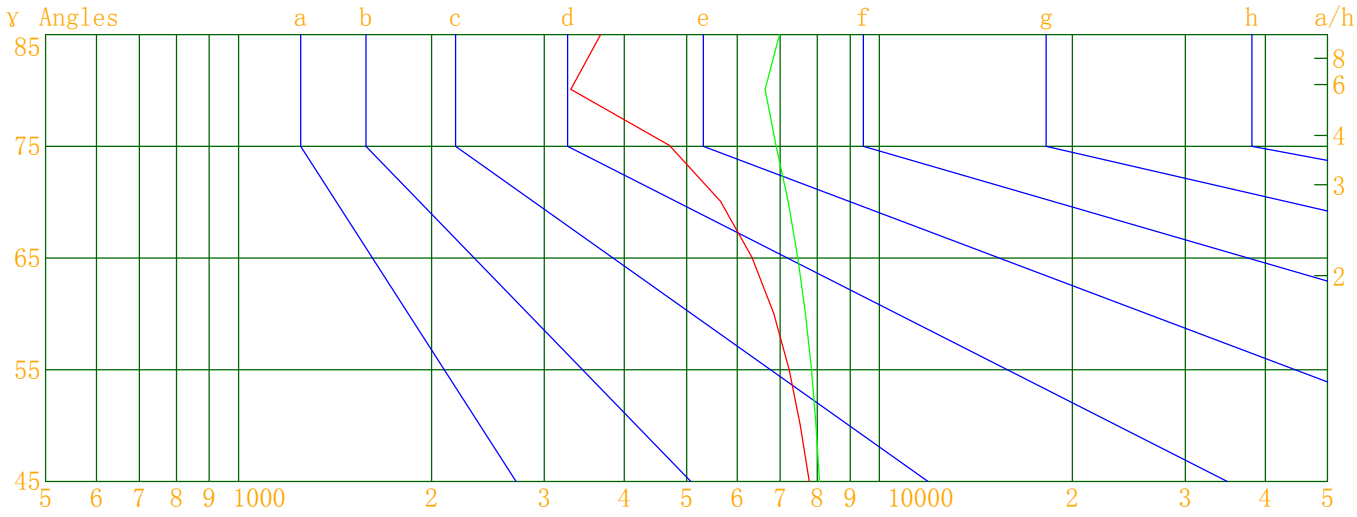
Glare Grade Table

GI	Quality	Using Illuminace							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E	a				2000	1000	500	<=300
			b	c	d	e	f	g	h

Luminance Table

Gama(deg)	45	50	55	60	65	70	75	80	85
C0	7767	7526	7230	6844	6326	5654	4704	3299	3672
C90	8061	7964	7837	7669	7454	7200	6894	6629	6981

Luminance Limiting Curve



Luminous Size: Length(m)=0.170 Width(m)=0.170 Height(m)=0.000 Area(m^2)=0.028900

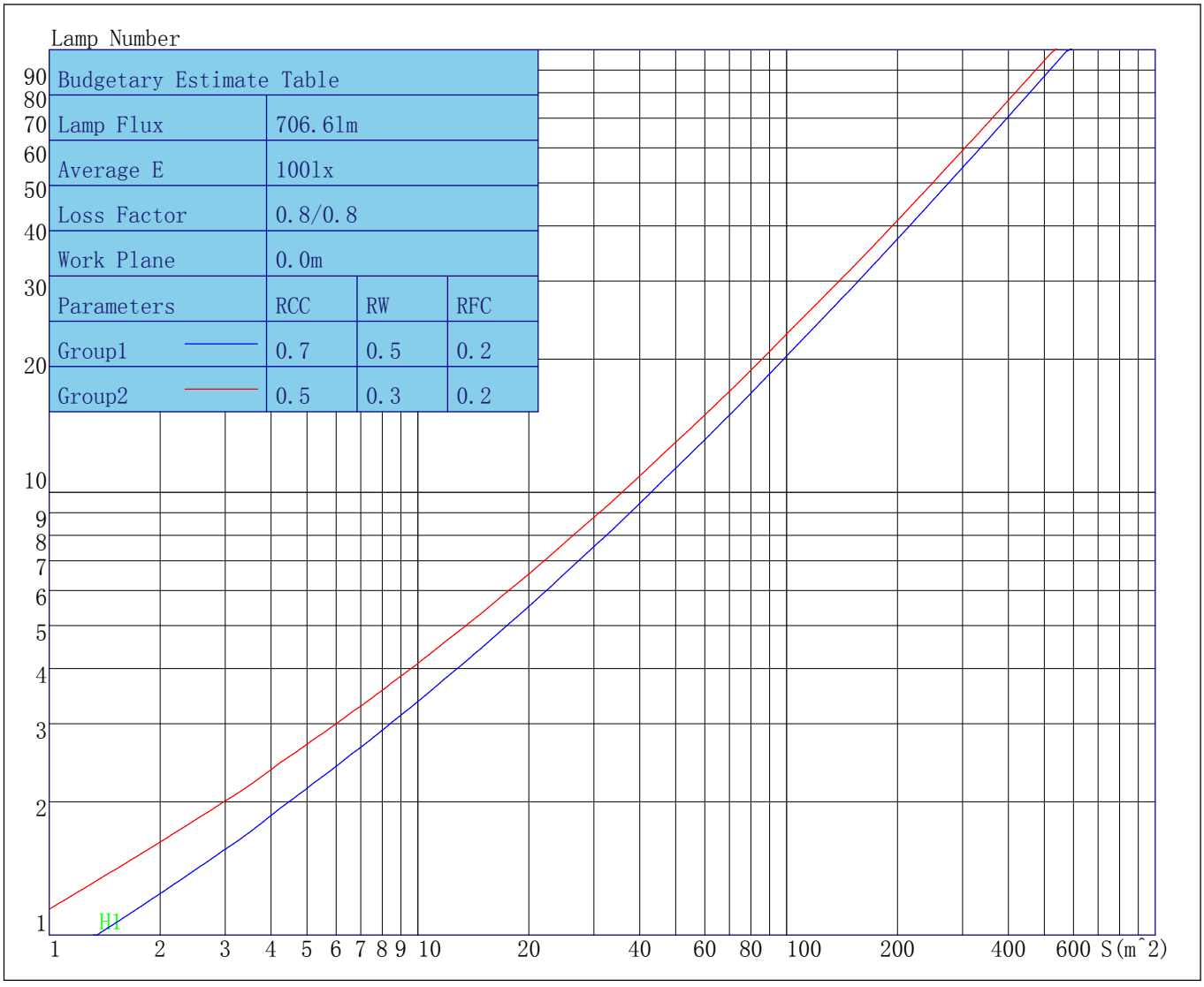
Luminous Type: Without Luminous Side

Luminous Curves: C0-C180 Color: C90-C270 Color:

IES Indoor Report
Photometric Filename:Recessed 12WR.IES

Indoor Budgetary Estimate Table

Lum.Name: Rillo mini cross	Lum.Catelog: Recessed 12WR	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26



Parameters1: Rhocc = 0.7 Rhow = 0.5 Rhofc = 0.2 LLF = 0.8
Parameters2: Rhocc = 0.5 Rhow = 0.3 Rhofc = 0.2 LLF = 0.8
Average Illuminance(lx): 100 Cavity Height: H1(m) = 2

IES Indoor Report
Photometric Filename:Recessed 12WR.IES

Indoor Coefficient of Utilization Table

Lum.Name: Rillo mini cross	Lum.Catelog: Recessed 12WR	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26

Coefficients of Utilization - Zonal Cavity Method																		
Coef.	Effective Floor Cavity Reflectance RFC=0.20																	
RhoCC(%)	80				70				50			30			10			0
RhoW(%)	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	Coefficient of Utilization(%)																	
0	111	111	111	111	108	108	108	108	103	103	103	98	98	98	93	93	93	91
1	102	97	93	89	99	95	91	88	90	87	84	86	83	81	82	80	78	76
2	92	85	78	73	90	83	77	72	79	74	70	75	71	67	72	68	65	63
3	84	74	67	61	82	73	66	60	69	63	58	66	61	57	63	59	55	53
4	77	66	58	51	75	64	57	51	62	55	50	59	53	49	56	52	48	45
5	71	59	50	44	69	58	50	44	55	48	43	53	47	42	51	46	41	39
6	65	53	45	39	63	52	44	38	50	43	38	48	42	37	46	41	36	34
7	61	48	40	34	59	47	39	34	45	38	33	44	37	33	42	37	32	30
8	56	44	36	30	55	43	35	30	41	35	30	40	34	29	39	33	29	27
9	53	40	32	27	51	39	32	27	38	31	27	37	31	26	36	30	26	24
10	49	37	30	25	48	36	29	25	35	29	24	34	28	24	33	28	24	22

IES Indoor Report
Photometric Filename:Recessed 12WR.IES

Unified Glare Rating Table

Lum.Name: Rillo mini cross	Lum.Catelog: Recessed 12WR	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26

Unified Glare Rating Table

Ceiling RCC		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
Wall RW		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
Floor RFC		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Room Size		Vewed crosswise					Vewed endwise				
X=2H	Y=2H	22.6	24.1	21.6	22.9	23.2	23.4	24.8	22.4	23.7	24.0
	Y=3H	24.0	25.3	23.2	24.3	24.7	25.0	26.4	24.2	25.4	25.7
	Y=4H	24.5	25.7	23.8	24.8	25.2	25.8	27.0	25.1	26.1	26.5
	Y=6H	24.7	25.9	24.1	25.1	25.5	26.4	27.5	25.7	26.8	27.2
	Y=8H	24.8	25.9	24.2	25.2	25.6	26.6	27.7	26.0	27.0	27.4
	Y=12H	24.9	25.9	24.3	25.3	25.7	26.8	27.9	26.3	27.2	27.6
X=4H	Y=2H	22.4	23.6	21.6	22.7	23.1	23.1	24.3	22.3	23.4	23.8
	Y=3H	23.8	24.9	23.3	24.2	24.6	24.8	25.9	24.3	25.2	25.7
	Y=4H	24.3	25.3	23.9	24.8	25.2	25.6	26.6	25.2	26.1	26.5
	Y=6H	24.7	25.5	24.4	25.1	25.6	26.4	27.2	26.1	26.8	27.3
	Y=8H	24.8	25.5	24.6	25.3	25.8	26.7	27.5	26.5	27.2	27.7
	Y=12H	24.9	25.6	24.8	25.4	25.9	27.0	27.7	26.9	27.5	28.0
X=8H	Y=4H	26.5	27.2	26.2	26.9	27.4	27.5	28.3	27.3	28.0	28.5
	Y=6H	26.7	27.3	26.7	27.3	27.8	28.2	28.8	28.2	28.7	29.3
	Y=8H	26.8	27.4	26.9	27.4	27.9	28.5	29.0	28.6	29.0	29.6
	Y=12H	26.9	27.4	27.0	27.5	28.1	28.8	29.3	28.9	29.3	29.9
X=12H	Y=4H	26.6	27.3	26.5	27.1	27.6	27.6	28.3	27.5	28.1	28.6
	Y=6H	27.0	27.5	27.0	27.5	28.1	28.4	28.9	28.4	28.9	29.5
	Y=8H	27.1	27.6	27.3	27.7	28.3	28.7	29.2	28.9	29.3	29.9
Variations with the objerver position at spacings											
S=1.0H		0.8/-0.9					0.8/-0.8				
S=1.5H		1.6/-1.6					1.5/-1.5				
S=2.0H		1.8/-2.0					1.4/-1.5				
Reduced UGR Table:											
Nordic Standard Table:		BK0					BK0				
Correction Value		3.2					3.8				

ble is calculated according to the document STD.CIE 117-199

IES Indoor Report
Photometric Filename:Recessed 12WR.IES

Candela Tabulation

V/H	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0	C300.0	C330.0
Y 0.0	241.99	241.99	241.99	241.99	241.99	241.99	241.99	241.99	241.99	241.99	241.99	241.99
Y 5.0	245.20	241.47	240.07	239.43	239.03	238.25	245.77	241.16	239.17	237.83	237.22	236.74
Y 10.0	241.59	238.48	237.38	237.09	236.77	235.76	242.72	237.85	235.36	233.81	233.16	232.79
Y 15.0	235.89	233.27	232.55	232.46	232.35	231.29	237.68	232.47	229.68	227.96	227.14	226.93
Y 20.0	228.13	226.10	225.62	225.88	225.79	224.70	230.41	225.06	222.01	220.05	219.10	219.02
Y 25.0	218.42	216.86	216.70	217.19	217.32	216.20	221.03	215.78	212.30	210.34	209.31	209.43
Y 30.0	206.36	205.36	205.91	206.68	206.85	205.35	209.39	204.11	200.93	198.95	197.65	197.62
Y 35.0	192.13	192.08	193.29	194.32	194.49	192.57	195.55	190.33	187.50	185.83	184.34	183.84
Y 40.0	176.11	176.78	178.82	180.24	180.26	177.95	179.90	175.27	172.77	171.04	169.54	168.63
Y 45.0	158.72	159.94	162.70	164.72	164.47	161.61	162.50	158.44	156.54	155.39	153.35	152.12
Y 50.0	139.80	141.61	145.32	147.94	147.20	143.90	143.75	140.20	139.06	138.47	135.97	134.07
Y 55.0	119.85	122.20	126.73	129.92	128.77	124.60	123.63	120.89	120.63	120.64	117.59	115.21
Y 60.0	98.89	101.74	107.33	110.81	109.46	104.64	102.26	100.61	100.96	101.87	98.07	95.25
Y 65.0	77.26	80.69	86.96	91.04	89.32	83.83	80.64	79.78	80.91	82.55	78.56	74.97
Y 70.0	55.89	59.72	66.68	71.17	69.05	62.81	58.98	58.95	61.20	63.36	59.14	55.03
Y 75.0	35.19	39.71	46.61	51.57	49.18	42.54	37.52	38.95	41.87	44.71	40.41	36.08
Y 80.0	16.56	21.83	29.16	33.27	31.64	24.25	17.80	21.17	24.82	27.48	23.81	19.32
Y 85.0	9.25	10.98	15.76	17.58	17.94	12.52	6.26	9.81	11.78	12.52	11.21	9.07
Y 90.0	6.68	5.79	6.86	6.26	7.15	6.39	3.74	3.99	2.96	3.66	2.65	3.90
Y 95.0	6.20	5.45	6.32	5.61	6.13	5.46	2.67	3.32	2.79	3.40	2.64	3.51
Y 100.0	5.76	5.17	5.86	5.24	5.80	5.18	2.63	3.18	2.76	3.20	2.67	3.43
Y 105.0	5.38	4.94	5.57	4.91	5.36	4.87	2.69	3.25	2.88	3.25	2.72	3.25
Y 110.0	5.22	4.72	5.34	4.85	5.15	4.71	2.71	3.27	2.97	3.29	2.88	3.32
Y 115.0	4.98	4.70	5.20	4.75	4.95	4.58	2.92	3.36	3.13	3.34	2.91	3.42
Y 120.0	4.82	4.53	5.08	4.69	4.81	4.56	3.14	3.59	3.24	3.50	3.10	3.53
Y 125.0	4.93	4.49	4.84	4.62	4.70	4.52	3.23	3.67	3.42	3.57	3.24	3.69
Y 130.0	4.89	4.57	4.91	4.61	4.68	4.46	3.39	3.72	3.62	3.68	3.43	3.91
Y 135.0	4.79	4.58	4.81	4.69	4.78	4.51	3.52	3.90	3.65	3.88	3.68	3.93
Y 140.0	4.88	4.54	4.90	4.74	4.75	4.47	3.68	4.09	3.91	4.06	3.72	4.10
Y 145.0	4.90	4.70	4.97	4.89	4.81	4.61	3.96	4.13	4.12	4.16	3.84	4.34
Y 150.0	5.00	4.84	5.07	4.84	4.88	4.60	4.18	4.36	4.23	4.26	4.13	4.45
Y 155.0	5.05	5.03	5.14	4.91	5.01	4.76	4.39	4.70	4.53	4.50	4.34	4.61
Y 160.0	5.34	5.11	5.09	4.98	5.08	4.94	4.61	4.82	4.68	4.68	4.48	4.83
Y 165.0	5.34	5.22	5.32	5.11	5.19	4.99	4.79	5.00	4.88	4.82	4.72	4.97
Y 170.0	5.39	5.30	5.27	5.17	5.32	5.11	5.11	5.10	5.09	5.10	4.90	5.23
Y 175.0	5.54	5.34	5.35	5.17	5.36	5.11	5.21	5.15	5.16	5.14	5.01	5.32
Y 180.0	5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.29