

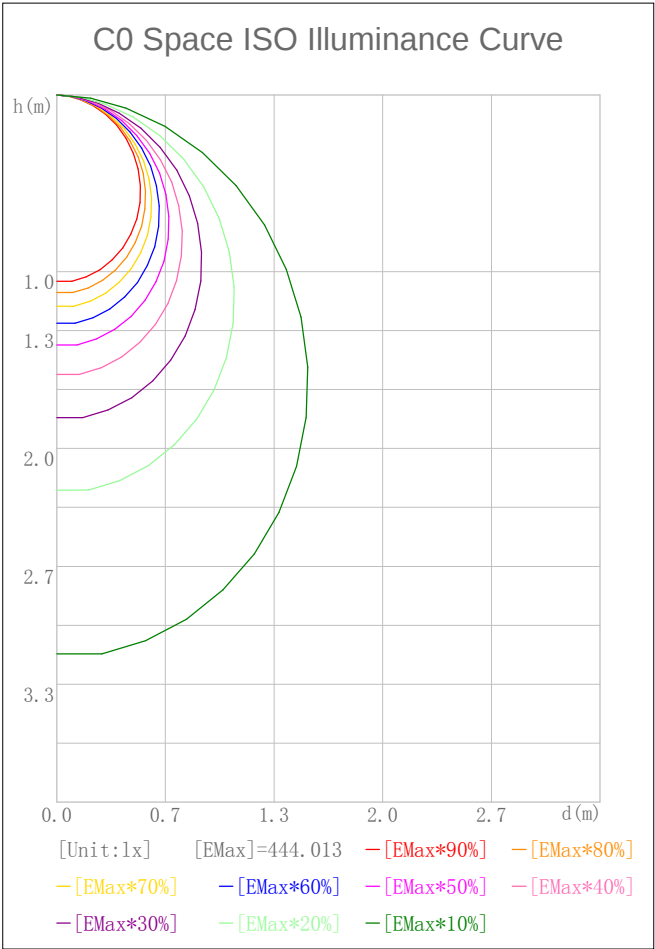
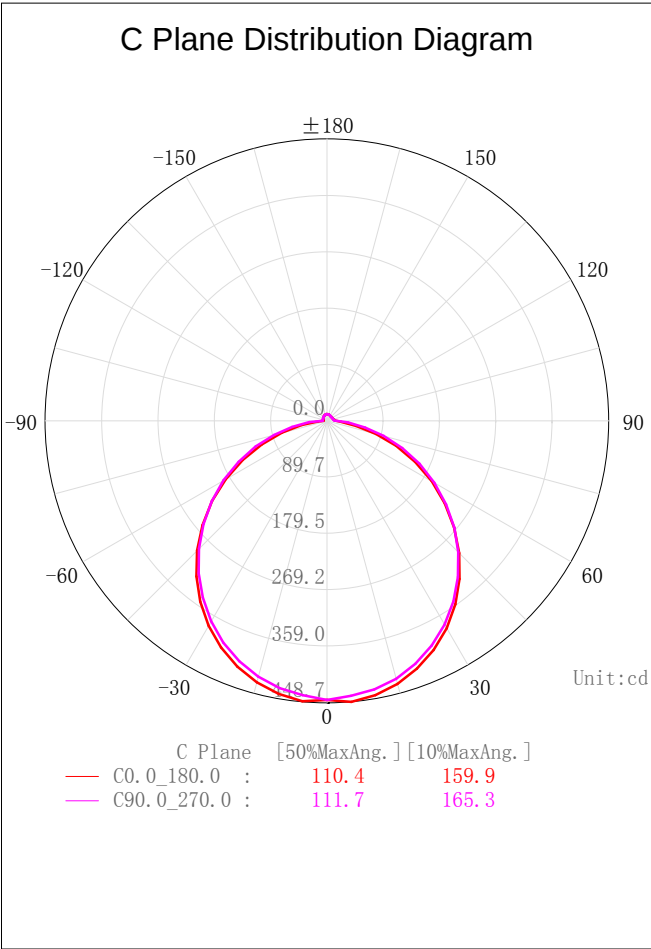
Indoor Luminaire Photometric Data

Description Information

Luminary Name: Rillo mini cross		Lum. Catalog: Recessed 18WR	Test ID:
Lamp Name:		Lamp Catalog:	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):0.220m*0.220m*0.000m		Lum. Area (m2):0.048	Lum. W (kg): 1.000
Test System: C, γ	Test Step: C=30.0 γ=5.0	Temp. (°C): 30	Humidity (%): 50.0

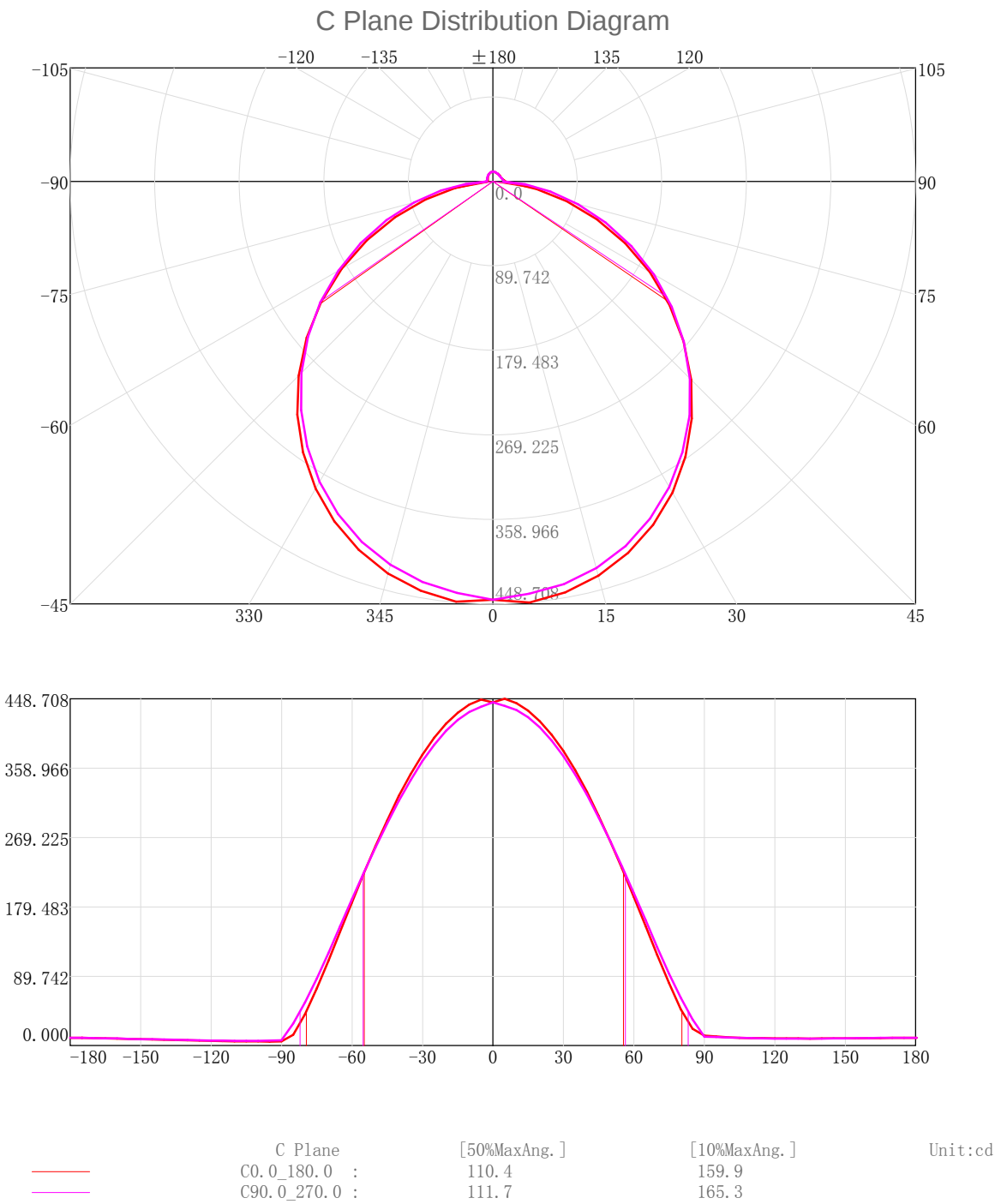
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 1400.000	Luminary Flux(lm): 1314.770	Field Angle(10%Imax): 159.9(°)	
Rated Power(W):	Luminary Efficiency: 93.91%	Down Lumens&Percent: 1261.033lm 95.91%	
Rated Voltage(V):	Luminary EER(lm/W): 73.864	Up Lumens&Percent: 53.737lm 4.09%	
Tested Power(W): 17.800	Max. Candela(cd): 448.708	S/MH: C0_a180=1.266 C90_270=1.245	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=5.0	CIE Type: Semi-Direct	
Tested Electrics(V, A, pf):219.9, 0.133, 0.604	Beam Angle(50%Imax): 110.4(°)	ErP Φuse(120°): 987.882lm	
Lamp Size (W*L*H):0.220m*0.220m*0.000m	Left=-54.8°, Right=55.6°	IRF (%): 109.820	



2D Plane Light Intensity Distribution Curve

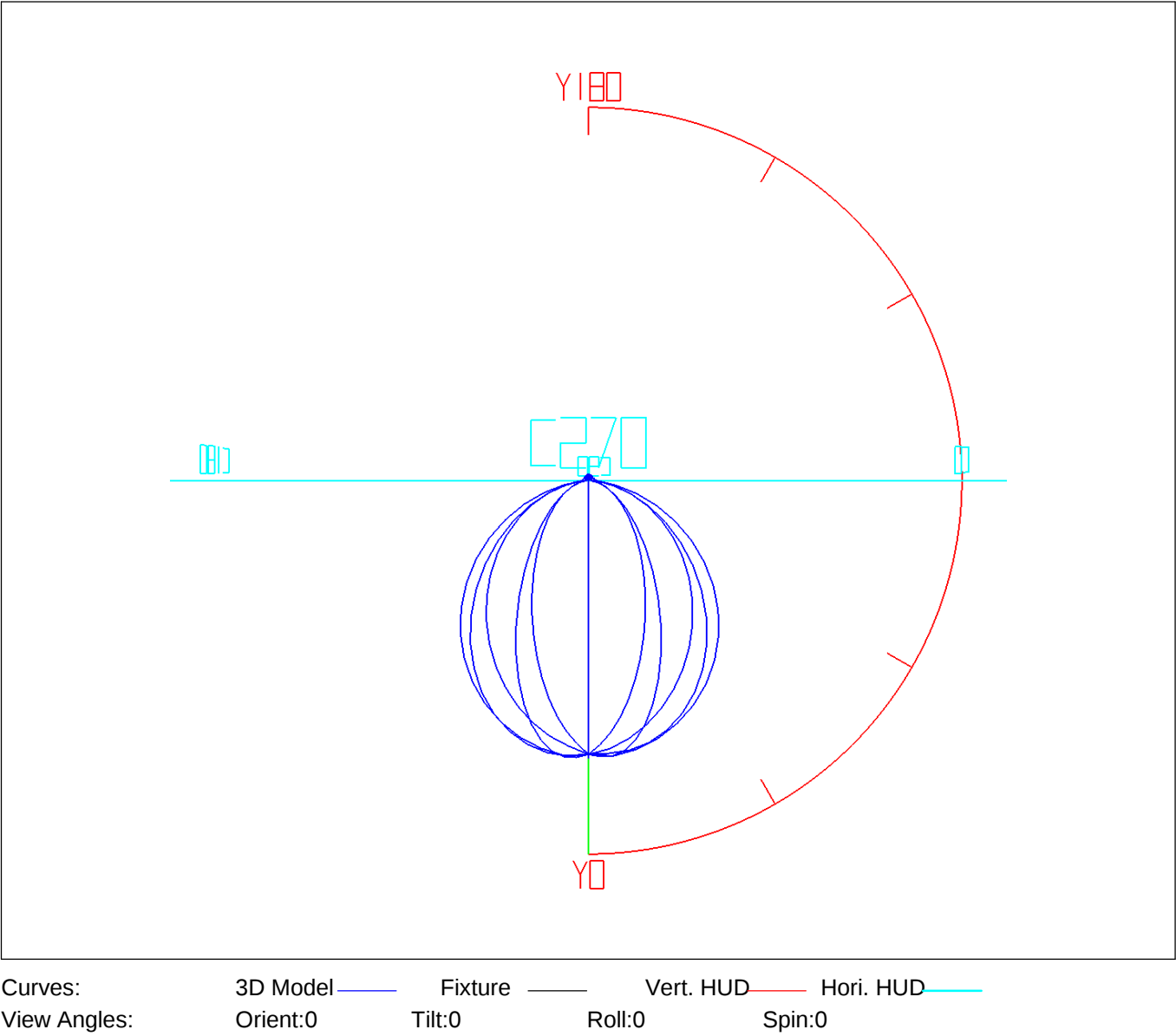
Lum. Name: Rillo mini cross	Lum. Catalog: Recessed 18WR	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26



3D Light Intensity Distribution Modal

Lum. Name: Rillo mini cross	Lum. Catelog: Recessed 18WR	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26

3D Light Intensity Distribution Modal

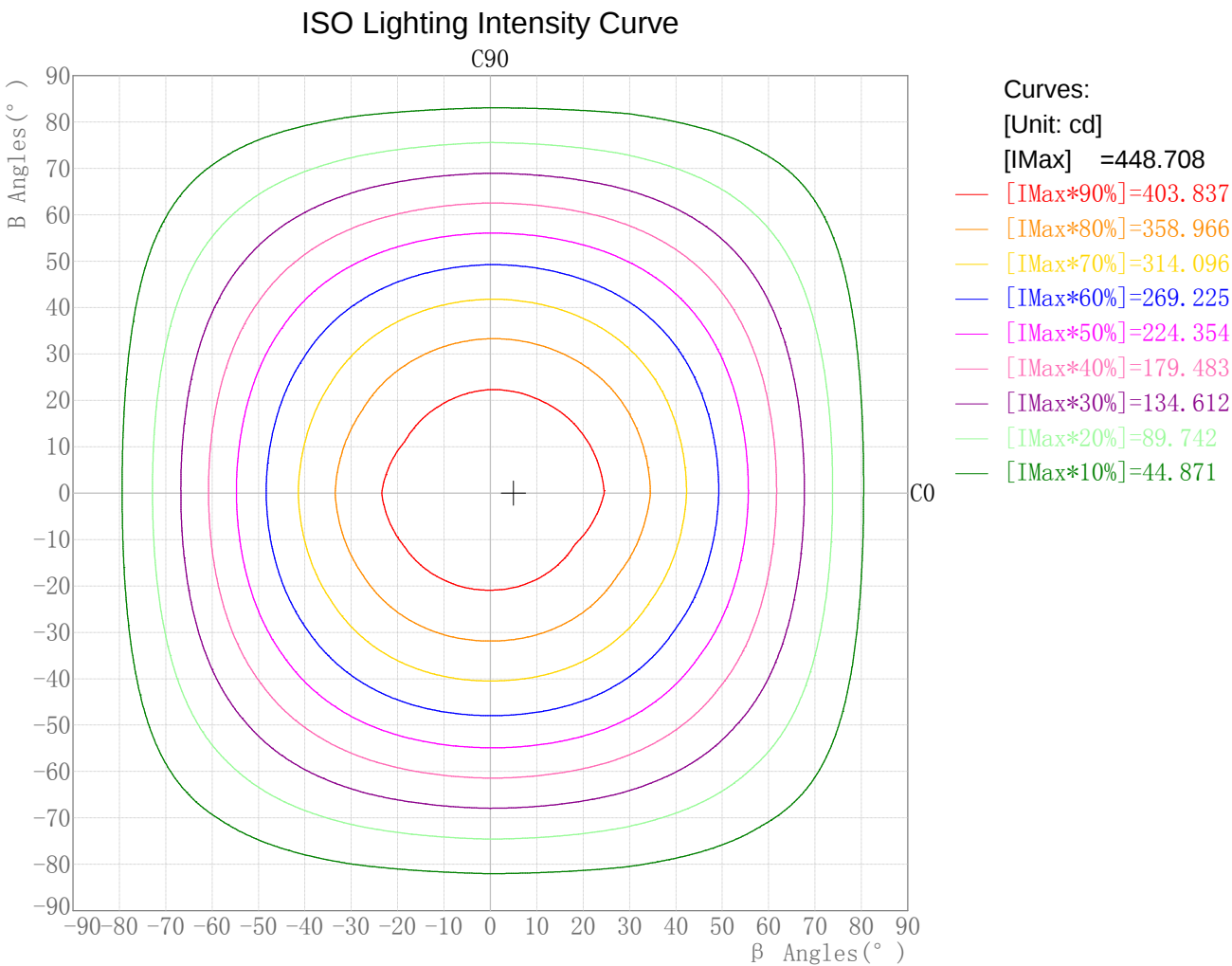


Zonal Flux Tabulation

Zone (γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0. 0-5. 0	10. 58	10. 58	0. 76	0. 76
5. 0-10. 0	31. 34	41. 92	2. 24	2. 99
10. 0-15. 0	51. 01	92. 93	3. 64	6. 64
15. 0-20. 0	68. 92	161. 85	4. 92	11. 56
20. 0-25. 0	84. 44	246. 28	6. 03	17. 59
25. 0-30. 0	97. 04	343. 32	6. 93	24. 52
30. 0-35. 0	106. 27	449. 59	7. 59	32. 11
35. 0-40. 0	111. 85	561. 44	7. 99	40. 10
40. 0-45. 0	113. 59	675. 03	8. 11	48. 22
45. 0-50. 0	111. 45	786. 49	7. 96	56. 18
50. 0-55. 0	105. 58	892. 07	7. 54	63. 72
55. 0-60. 0	96. 21	988. 28	6. 87	70. 59
60. 0-65. 0	83. 83	1072. 11	5. 99	76. 58
65. 0-70. 0	69. 12	1141. 23	4. 94	81. 52
70. 0-75. 0	52. 83	1194. 06	3. 77	85. 29
75. 0-80. 0	36. 17	1230. 23	2. 58	87. 87
80. 0-85. 0	21. 07	1251. 31	1. 51	89. 38
85. 0-90. 0	9. 73	1261. 03	0. 69	90. 07
90. 0-95. 0	5. 03	1266. 06	0. 36	90. 43
95. 0-100. 0	4. 68	1270. 74	0. 33	90. 77
100. 0-105. 0	4. 45	1275. 19	0. 32	91. 09
105. 0-110. 0	4. 25	1279. 44	0. 30	91. 39
110. 0-115. 0	4. 07	1283. 52	0. 29	91. 68
115. 0-120. 0	3. 90	1287. 42	0. 28	91. 96
120. 0-125. 0	3. 73	1291. 15	0. 27	92. 22
125. 0-130. 0	3. 55	1294. 69	0. 25	92. 48
130. 0-135. 0	3. 35	1298. 05	0. 24	92. 72
135. 0-140. 0	3. 14	1301. 19	0. 22	92. 94
140. 0-145. 0	2. 91	1304. 10	0. 21	93. 15
145. 0-150. 0	2. 63	1306. 73	0. 19	93. 34
150. 0-155. 0	2. 32	1309. 05	0. 17	93. 50
155. 0-160. 0	1. 98	1311. 03	0. 14	93. 65
160. 0-165. 0	1. 60	1312. 63	0. 11	93. 76
165. 0-170. 0	1. 17	1313. 80	0. 08	93. 84
170. 0-175. 0	0. 72	1314. 52	0. 05	93. 89
175. 0-180. 0	0. 25	1314. 77	0. 02	93. 91

Rectangle ISO Lighting Intensity Diagram

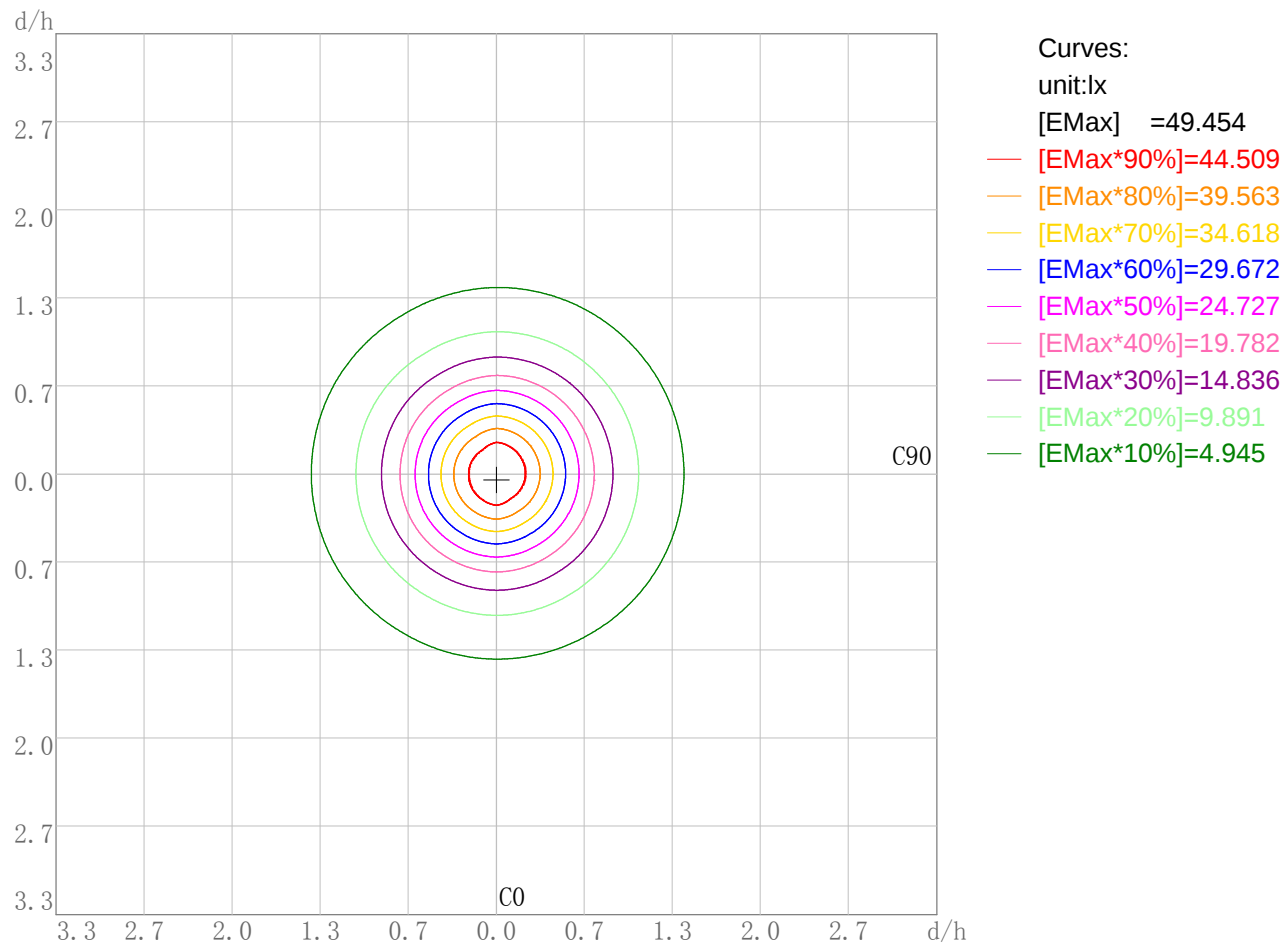
Lum. Name: Rillo mini cross	Lum. Catelog: Recessed 18WR	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26



Plane ISO-Illuminance Diagram

Lum. Name: Rillo mini cross	Lum. Catelog: Recessed 18WR	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26

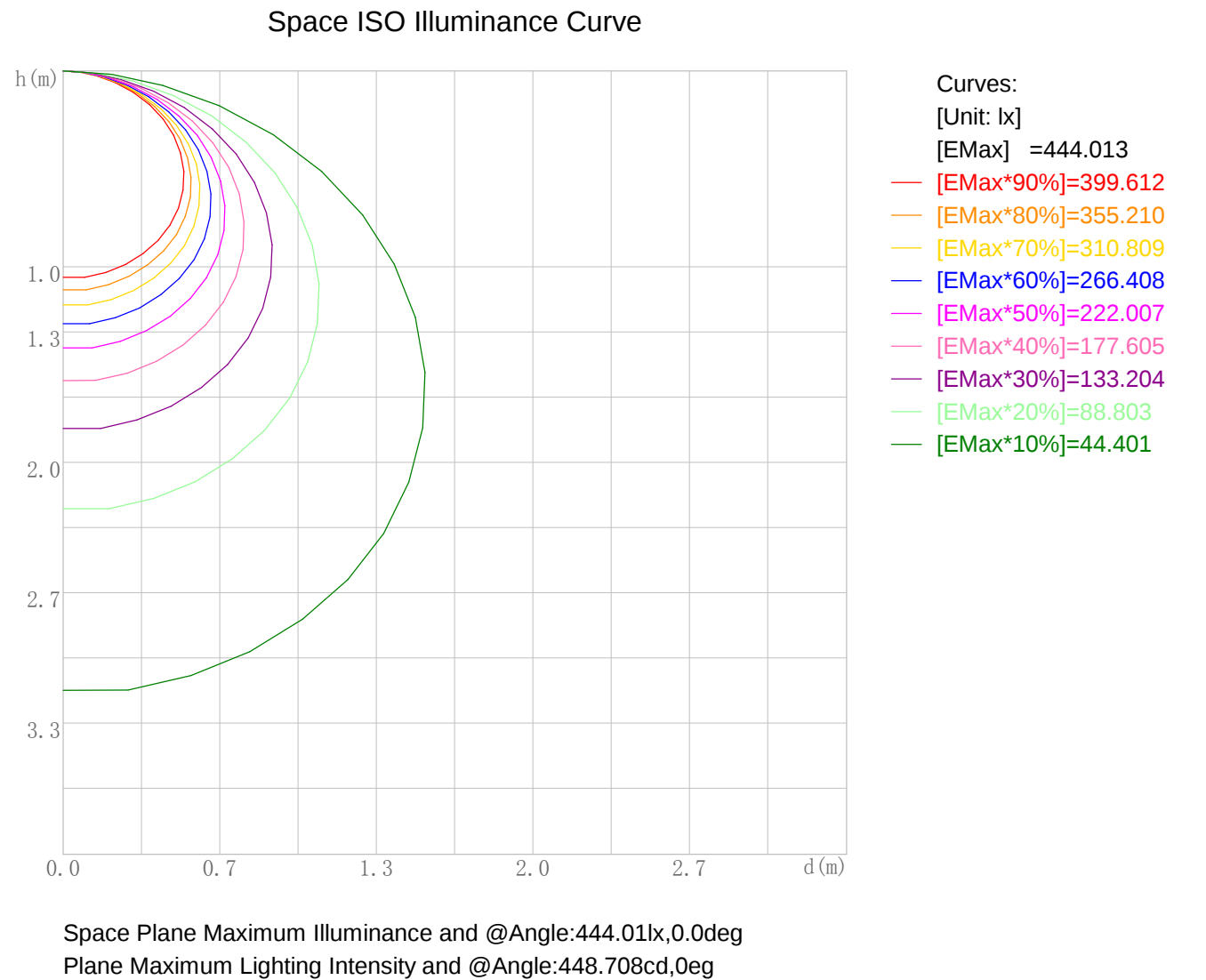
Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 49.45
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

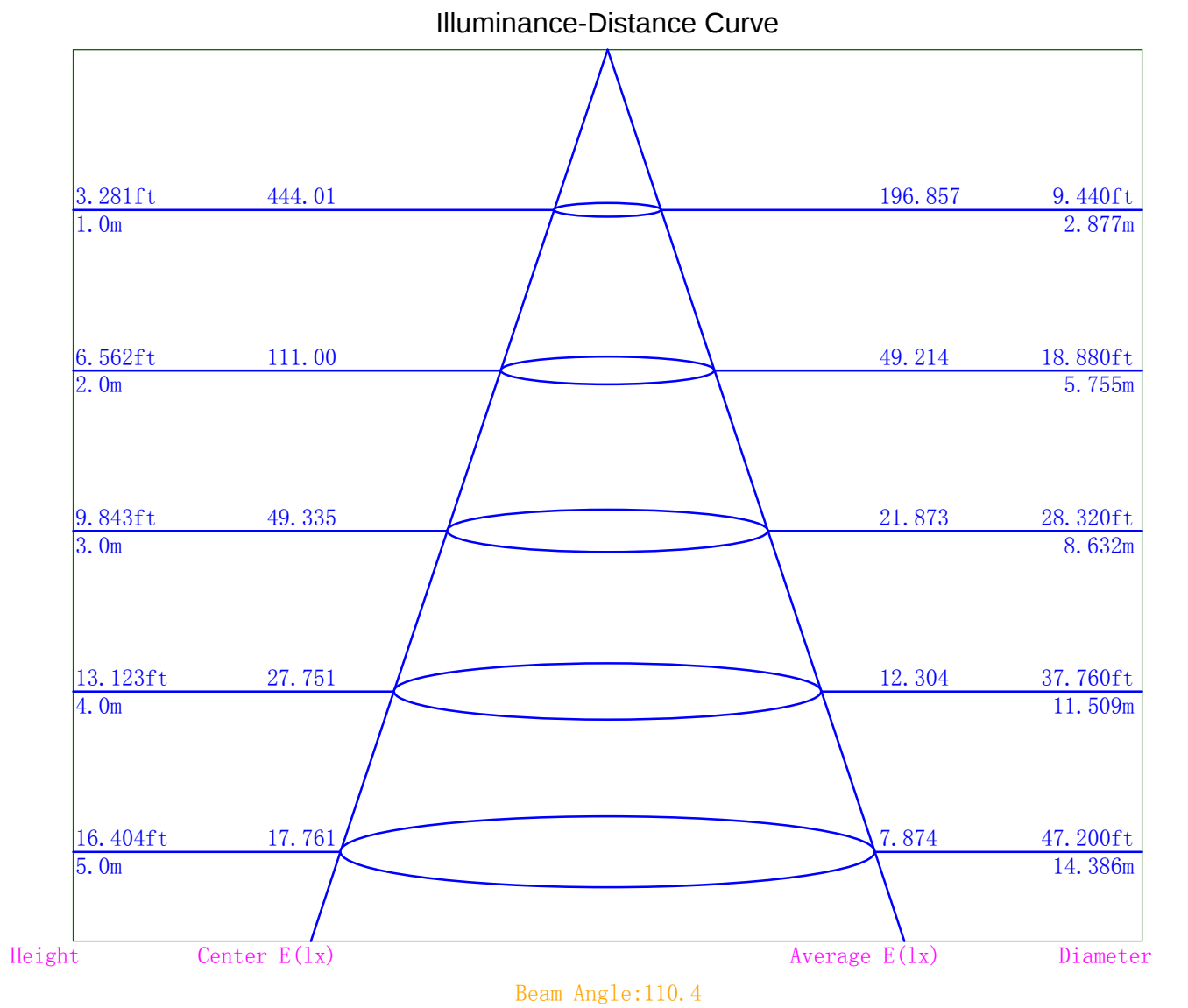
Space ISO Illuminance Diagram

Lum. Name: Rillo mini cross	Lum. Catalog: Recessed 18WR	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26



Illuminance-Distance Diagram

Lum. Name: Rillo mini cross	Lum. Catalog: Recessed 18WR	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26



Indoor Luminance Limiting Curves

Lum. Name: Rillo mini cross	Lum. Catalog: Recessed 18WR	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26

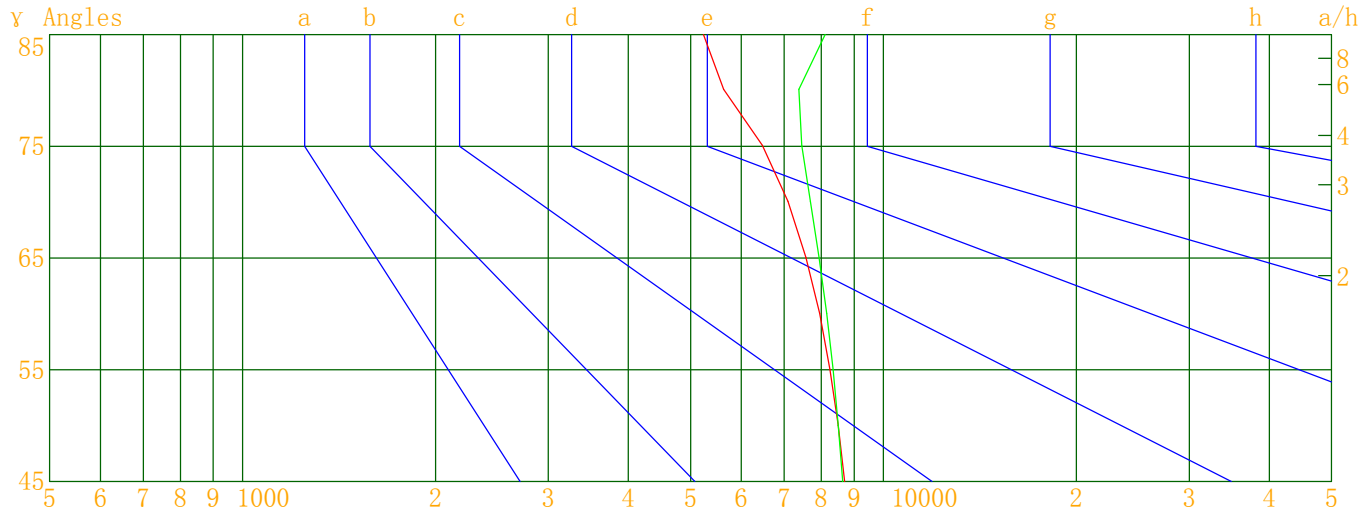
Glare Grade Table

GI	Quality	Using Illuminance							
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	8694	8495	8248	7948	7568	7093	6473	5629	5240
C90	8638	8505	8349	8155	7936	7694	7457	7379	8111

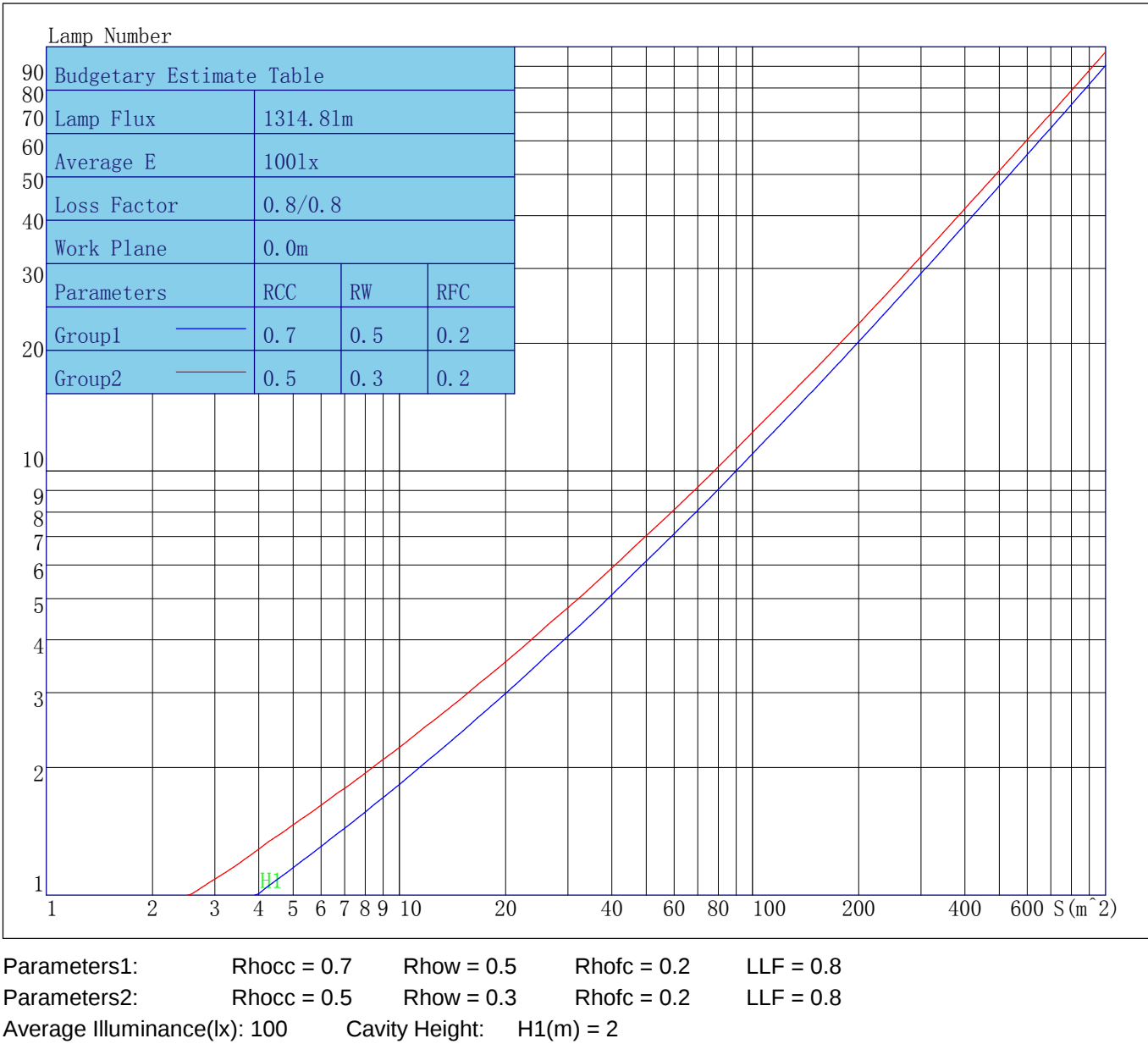
Luminance Limiting Curve



Luminous Size: Length(m)=0.220 Width(m)=0.220 Height(m)=0.000 Area(m^2)=0.048400
Luminous Type: Without Luminous Side
Luminous Curves: C0-C180 Color: — C90-C270 Color: —

Indoor Budgetary Estimate Table

Lum. Name: Rillo mini cross	Lum. Catalog: Recessed 18WR	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2015/11/26



Indoor Coefficient of Utilization Table

Lum. Name: Rillo mini cross	Lum. Catelog: Recessed 18WR	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	102	102	102	97	97	97	92	92	92	90
1	101	96	92	89	98	94	90	87	89	86	83	85	82	80	81	79	77	75
2	92	84	78	72	89	82	76	71	78	73	69	74	70	67	71	68	65	62
3	84	74	66	60	81	72	65	59	69	63	58	65	60	56	63	58	55	52
4	77	65	57	51	74	64	56	50	61	54	49	58	53	48	56	51	47	45
5	70	58	50	44	68	57	49	43	55	48	42	52	46	42	50	45	41	39
6	65	52	44	38	63	51	43	38	49	42	37	47	41	36	45	40	36	34
7	60	48	39	34	58	47	39	33	45	38	33	43	37	32	42	36	32	30
8	56	43	35	30	54	43	35	30	41	34	29	39	33	29	38	33	28	27
9	52	40	32	27	51	39	32	27	38	31	26	36	30	26	35	30	26	24
10	49	37	29	24	48	36	29	24	35	28	24	34	28	24	33	27	23	22

Unified Glare Rating Table

Lum. Name: Rillo mini cross	Lum. Catalog: Recessed 18WR	Test ID:
Lamp Name:	Lamp Catalog:	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 Y=3H Y=4H Y=6H Y=8H Y=12H	21.1	22.6	20.2	21.4	21.8	21.3	22.8	20.3	21.6	21.9
	22.7	24.0	21.9	23.0	23.4	23.0	24.3	22.1	23.3	23.7
	23.3	24.6	22.6	23.7	24.1	23.7	25.0	23.0	24.1	24.5
	23.8	24.9	23.1	24.2	24.6	24.4	25.5	23.7	24.7	25.1
	23.9	25.1	23.3	24.3	24.7	24.6	25.7	24.0	25.0	25.4
	24.0	25.1	23.5	24.4	24.9	24.8	25.9	24.3	25.2	25.7
X=4H Y=2H Y=3H Y=4H Y=6H Y=8H Y=12H	20.9	22.1	20.2	21.2	21.6	21.0	22.3	20.3	21.4	21.7
	22.5	23.6	22.0	22.9	23.4	22.8	23.8	22.2	23.2	23.6
	23.2	24.2	22.8	23.7	24.1	23.6	24.5	23.2	24.0	24.5
	23.8	24.6	23.5	24.3	24.7	24.4	25.2	24.1	24.8	25.3
	24.0	24.8	23.8	24.5	25.0	24.7	25.5	24.5	25.2	25.7
	24.2	24.8	24.0	24.7	25.2	25.0	25.7	24.9	25.5	26.0
X=8H Y=4H Y=6H Y=8H Y=12H	25.3	26.0	25.0	25.7	26.2	25.6	26.3	25.4	26.1	26.6
	25.8	26.4	25.7	26.3	26.8	26.3	26.9	26.2	26.8	27.3
	26.0	26.5	26.0	26.5	27.1	26.6	27.1	26.6	27.1	27.7
	26.1	26.6	26.2	26.7	27.3	26.9	27.4	27.0	27.5	28.1
X=12H Y=4H Y=6H Y=8H	25.4	26.1	25.3	25.9	26.4	25.7	26.4	25.6	26.2	26.7
	26.0	26.6	26.1	26.6	27.1	26.5	27.0	26.6	27.0	27.6
	26.3	26.8	26.4	26.8	27.4	26.9	27.4	27.0	27.5	28.1
Variations with the objverver position at spacings										
S=1.0H	0.8/−0.8					0.7/−0.8				
S=1.5H	1.5/−1.5					1.4/−1.4				
S=2.0H	1.5/−1.7					1.3/−1.4				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	3.6					3.9				

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

IES Indoor Report
Photometric Filename:Recessed 18W.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	444.01	444.01	444.01	444.01	444.01	444.01	444.01	444.01	444.01	444.01	444.01	444.01
Y 5.0	448.71	443.32	440.79	439.40	438.40	438.11	447.80	441.92	439.47	438.33	437.93	437.71
Y 10.0	442.99	438.09	435.23	434.05	432.71	432.28	441.11	435.23	432.81	431.74	431.61	431.75
Y 15.0	433.33	428.72	425.82	424.82	423.05	422.31	430.70	424.59	422.25	421.23	421.36	421.87
Y 20.0	419.52	415.61	412.63	411.67	409.60	408.78	416.29	410.13	407.93	407.04	407.36	408.12
Y 25.0	402.26	398.86	395.76	394.73	392.54	391.71	398.17	392.10	390.17	389.25	389.76	390.67
Y 30.0	381.33	378.39	375.49	374.47	372.08	371.06	376.46	370.59	368.83	368.11	368.80	369.92
Y 35.0	356.53	354.42	352.07	350.95	348.47	347.05	351.25	345.45	344.52	343.47	344.70	345.92
Y 40.0	328.33	327.30	325.33	324.57	322.04	319.86	322.98	317.89	317.66	316.82	318.26	318.82
Y 45.0	297.55	297.39	296.17	295.64	292.80	290.00	291.74	287.41	288.07	287.61	289.04	288.45
Y 50.0	264.30	264.77	264.70	264.59	261.39	257.71	258.20	254.75	256.38	256.34	257.64	256.28
Y 55.0	228.97	230.31	231.40	231.77	228.15	223.47	222.68	220.13	222.83	223.61	224.42	222.30
Y 60.0	192.35	194.37	196.62	197.34	193.51	187.70	185.32	184.19	187.65	189.31	189.44	186.98
Y 65.0	154.80	157.56	161.28	162.33	158.20	151.28	147.60	147.80	152.29	154.76	154.21	150.94
Y 70.0	117.42	120.60	125.64	127.36	122.81	114.89	110.39	111.35	117.29	120.35	119.48	115.01
Y 75.0	81.08	84.52	91.03	93.42	88.27	79.55	74.11	76.08	82.96	86.90	85.26	79.81
Y 80.0	47.31	52.06	59.62	62.01	56.88	47.51	40.80	43.79	51.64	56.00	54.09	47.60
Y 85.0	22.10	27.04	33.86	34.22	31.14	23.86	14.16	19.60	25.96	28.58	28.02	22.75
Y 90.0	13.05	12.42	13.40	11.85	12.74	11.27	5.60	6.85	6.03	7.09	6.91	7.80
Y 95.0	11.91	11.10	12.07	11.20	11.72	10.70	5.47	6.38	5.66	6.63	5.82	6.81
Y 100.0	11.05	10.46	11.32	10.71	11.09	10.30	5.61	6.30	5.60	6.45	5.77	6.46
Y 105.0	10.45	9.98	10.69	10.25	10.56	9.95	5.79	6.27	5.71	6.45	5.86	6.48
Y 110.0	9.99	9.60	10.21	9.98	10.17	9.60	5.81	6.41	5.87	6.56	6.13	6.44
Y 115.0	9.76	9.34	9.96	9.60	9.84	9.39	6.19	6.57	6.10	6.73	6.30	6.54
Y 120.0	9.56	9.19	9.68	9.32	9.58	9.20	6.47	6.78	6.33	6.88	6.53	6.82
Y 125.0	9.48	9.03	9.57	9.30	9.41	9.10	6.74	6.96	6.55	7.14	6.88	7.03
Y 130.0	9.42	8.99	9.45	9.25	9.38	9.03	7.10	7.31	6.89	7.36	7.16	7.22
Y 135.0	9.35	9.08	9.35	9.31	9.38	9.07	7.46	7.66	7.25	7.69	7.50	7.55
Y 140.0	9.42	9.12	9.43	9.40	9.35	9.12	7.86	7.97	7.65	8.08	7.76	7.95
Y 145.0	9.47	9.31	9.64	9.50	9.47	9.26	8.20	8.31	7.97	8.41	8.17	8.11
Y 150.0	9.59	9.39	9.71	9.61	9.69	9.40	8.61	8.57	8.40	8.64	8.55	8.47
Y 155.0	9.72	9.63	9.88	9.78	9.82	9.54	8.86	8.93	8.71	8.98	8.85	8.90
Y 160.0	9.79	9.85	10.06	9.99	9.93	9.72	9.29	9.32	9.09	9.48	9.14	9.20
Y 165.0	10.06	9.95	10.19	10.12	10.04	9.78	9.75	9.57	9.44	9.69	9.46	9.51
Y 170.0	10.20	10.09	10.24	10.21	10.11	10.01	10.03	9.83	9.82	10.00	9.76	9.78
Y 175.0	10.26	10.26	10.23	10.34	10.23	10.07	10.26	10.09	10.01	10.22	10.17	10.11
Y 180.0	10.34	10.34	10.34	10.34	10.34	10.34	10.34	10.34	10.34	10.34	10.34	10.34