

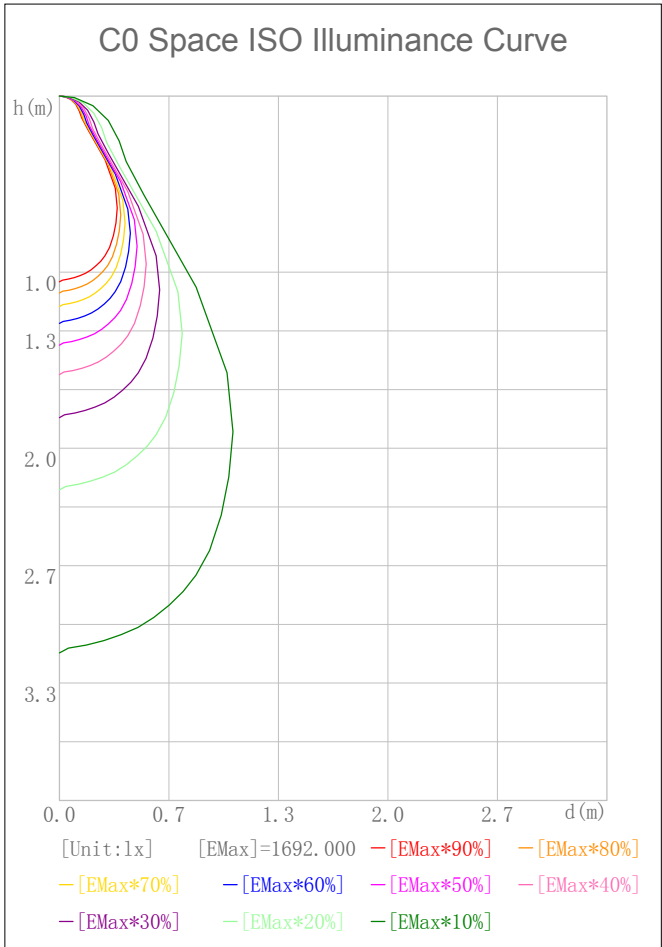
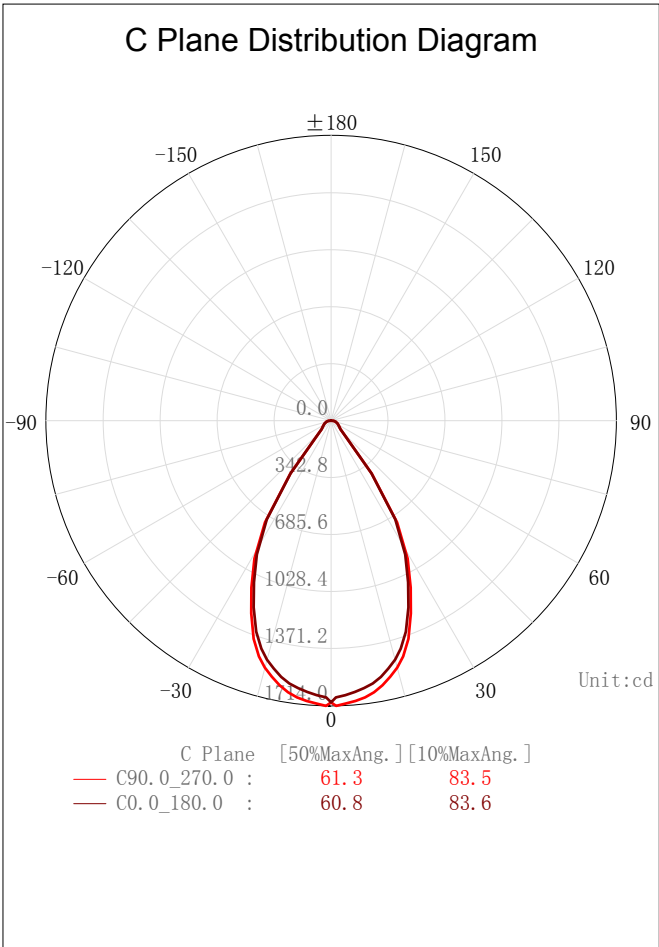
Indoor Luminaire Photometric Data

Description Information

Luminary Name: LED LUMINAIRE		Lum. Catalog: 9022 - 60 deg	Test ID: IESNA:LM-79-08
Lamp Name: 2835(*84)		Lamp Catalog: LED	Test Date: 4/20/2021
Manufacture: Light and Green		Shld.Ang(°):	Test Machine:GON-2000
Test Lab: LIGHT LABORATORY, INC. (www.lightlaboratory.com)		Frequency (Hz):	Lamp CCT (K): Ra:
Lum. Size (W*L*H):0.150m*0.480m*0.000m		Lum. Area (m2):0.072	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=5.0 γ=1.0	Temp. (°C): 25	Humidity (%):

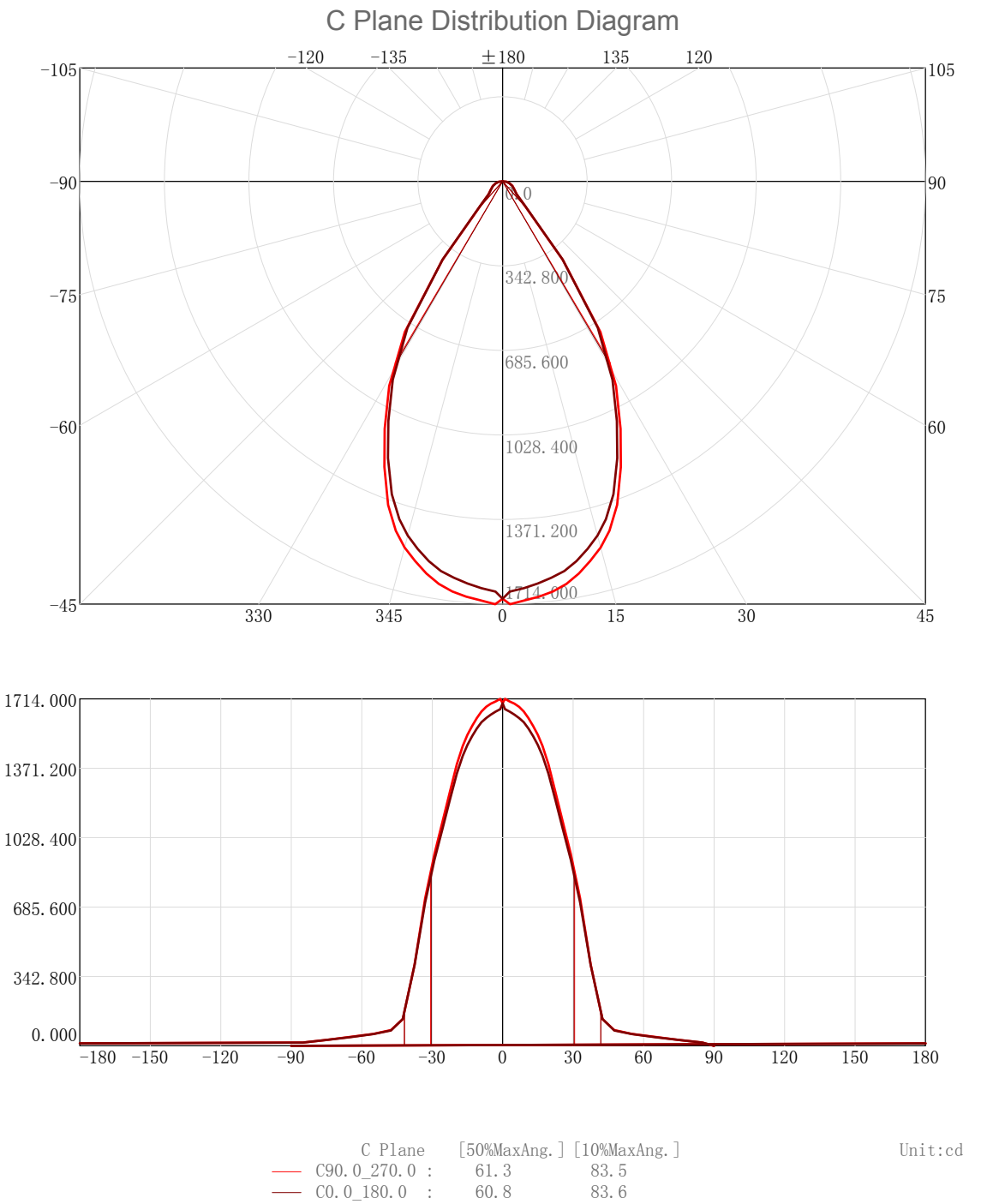
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 1680.848	Luminary Flux(lm): 1680.848	Field Angle(10%Imax): 83.5(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1680.848lm 100.00%	
Rated Voltage(V):	Luminary EER(lm/W): 74.275	Up Lumens&Percent: 0.000lm 0.00%	
Tested Power(W): 22.630	Max. Candela(cd): 1714.000	S/MH: C0_a180=0.912 C90_270=0.932	
Lamps' Inside: 1	Max Cand@Ang. (°): C=90.0 γ=1.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):240.1, 0.042	Beam Angle(50%Imax): 61.3(°)	ErP ϕ use(90°): 1505.034lm	
Lamp Size(W*L*H):0.150m*0.480m*0.000m	Left=-30.7°, Right=30.7°	IRF (%): 229.767	



2D Plane Light Intensity Distribution Curve

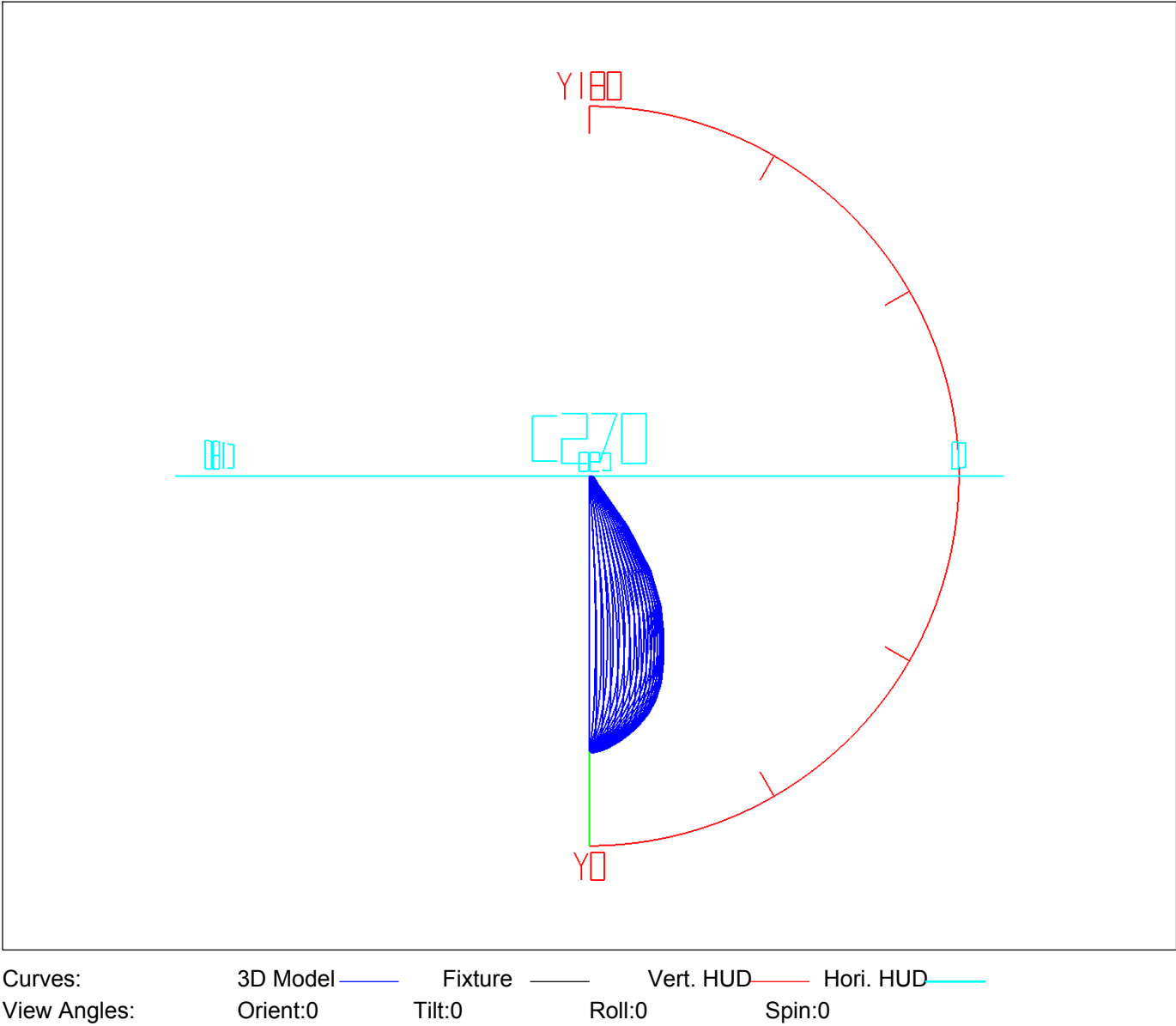
Lum. Name: LED LUMINAIRE	Lum. Catelog: 9022 - 60 deg	Test ID: IESNA:LM-79-08
Lamp Name: 2835(*84)	Lamp Catelog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lig
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 4/20/2021



3D Light Intensity Distribution Modal

Lum. Name: LED LUMINAIRE	Lum. Catalog: 9022 - 60 deg	Test ID: IESNA:LM-79-08
Lamp Name: 2835(*84)	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lig
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 4/20/2021

3D Light Intensity Distribution Modal

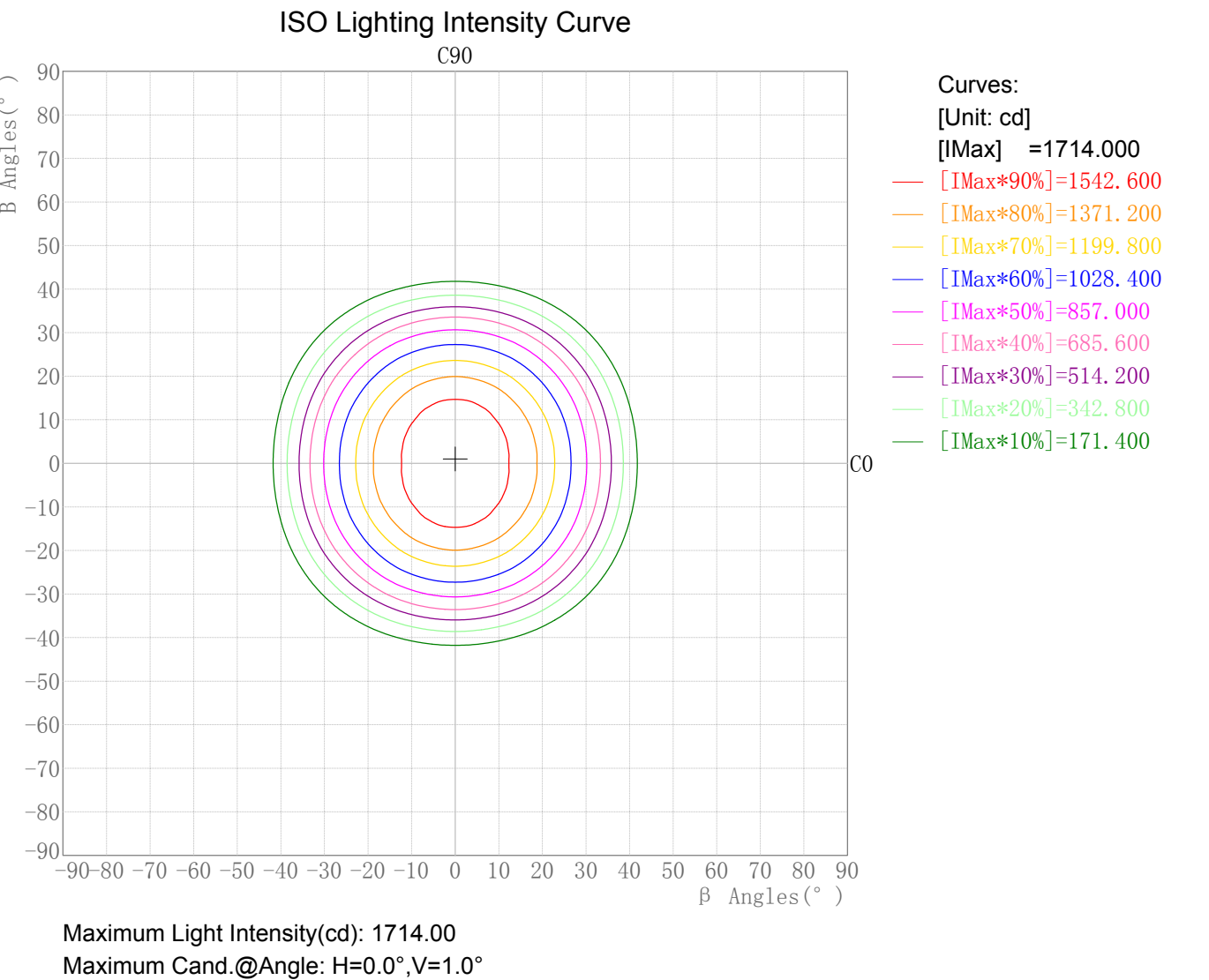


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0. 0-1. 0	1. 62	1. 62	0. 10	0. 10
1. 0-3. 0	12. 88	14. 50	0. 77	0. 86
3. 0-5. 0	25. 56	40. 06	1. 52	2. 38
5. 0-7. 0	37. 99	78. 05	2. 26	4. 64
7. 0-9. 0	49. 99	128. 04	2. 97	7. 62
9. 0-11. 0	61. 34	189. 38	3. 65	11. 27
11. 0-13. 0	71. 82	261. 20	4. 27	15. 54
13. 0-15. 0	81. 42	342. 62	4. 84	20. 38
15. 0-17. 0	89. 84	432. 46	5. 34	25. 73
17. 0-19. 5	121. 41	553. 87	7. 22	32. 95
19. 5-22. 5	153. 55	707. 43	9. 14	42. 09
22. 5-25. 5	155. 96	863. 39	9. 28	51. 37
25. 5-29. 0	178. 55	1041. 94	10. 62	61. 99
29. 0-33. 0	186. 83	1228. 77	11. 12	73. 10
33. 0-37. 5	159. 51	1388. 28	9. 49	82. 59
37. 5-42. 5	94. 23	1482. 51	5. 61	88. 20
42. 5-47. 5	40. 66	1523. 17	2. 42	90. 62
47. 5-55. 0	43. 38	1566. 55	2. 58	93. 20
55. 0-65. 0	48. 29	1614. 85	2. 87	96. 07
65. 0-75. 0	37. 35	1652. 20	2. 22	98. 30
75. 0-85. 0	24. 27	1676. 47	1. 44	99. 74
85. 0-90. 0	4. 38	1680. 85	0. 26	100. 00

Rectangle ISO Lighting Intensity Diagram

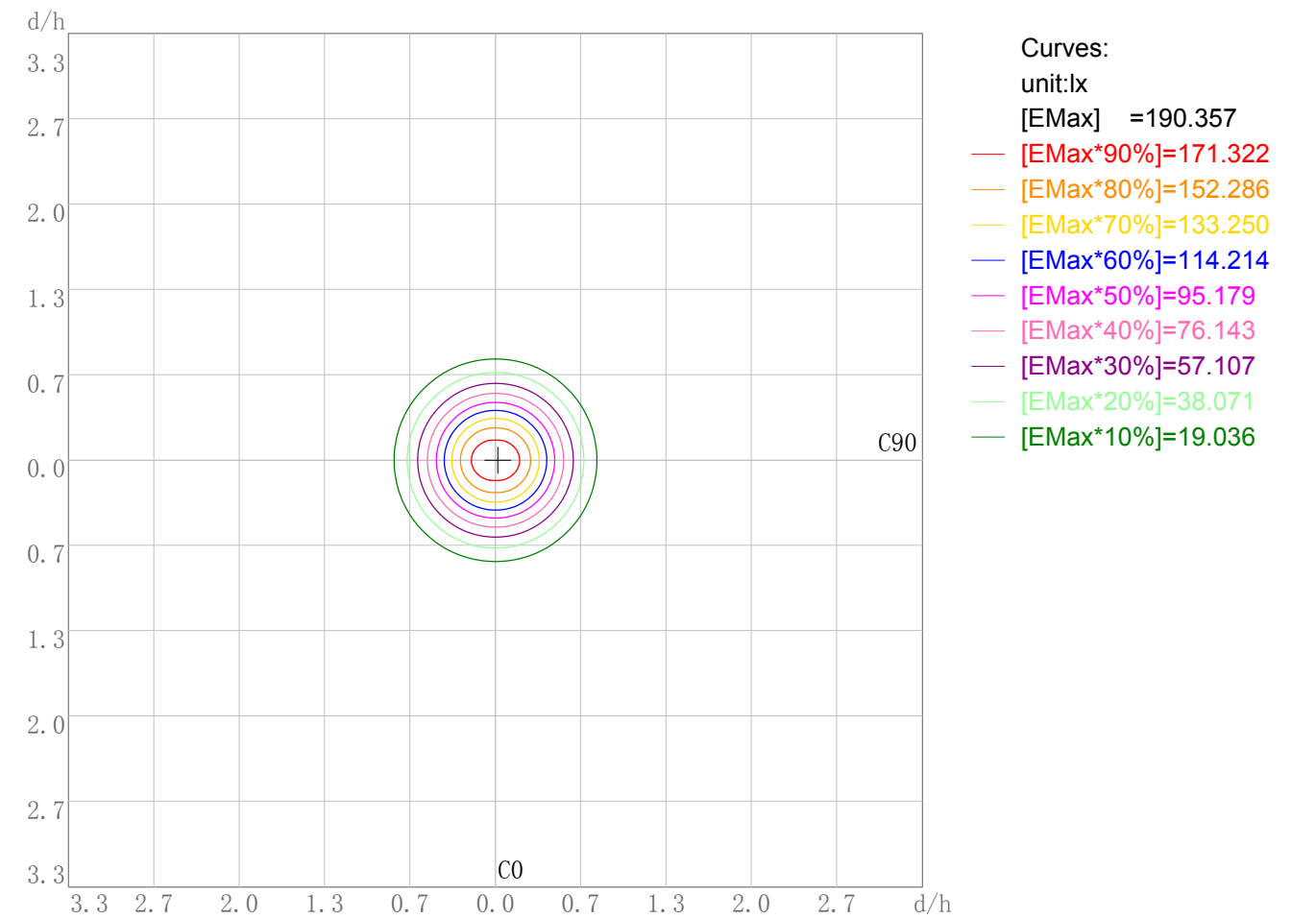
Lum. Name: LED LUMINAIRE	Lum. Catalog: 9022 - 60 deg	Test ID: IESNA:LM-79-08
Lamp Name: 2835(*84)	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lightlab.com)
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 4/20/2021



Plane ISO-Illuminance Diagram

Lum. Name: LED LUMINAIRE	Lum. Catalog: 9022 - 60 deg	Test ID: IESNA:LM-79-08
Lamp Name: 2835(*84)	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lightlab.com)
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 4/20/2021

Plane ISO-Illuminance Curve

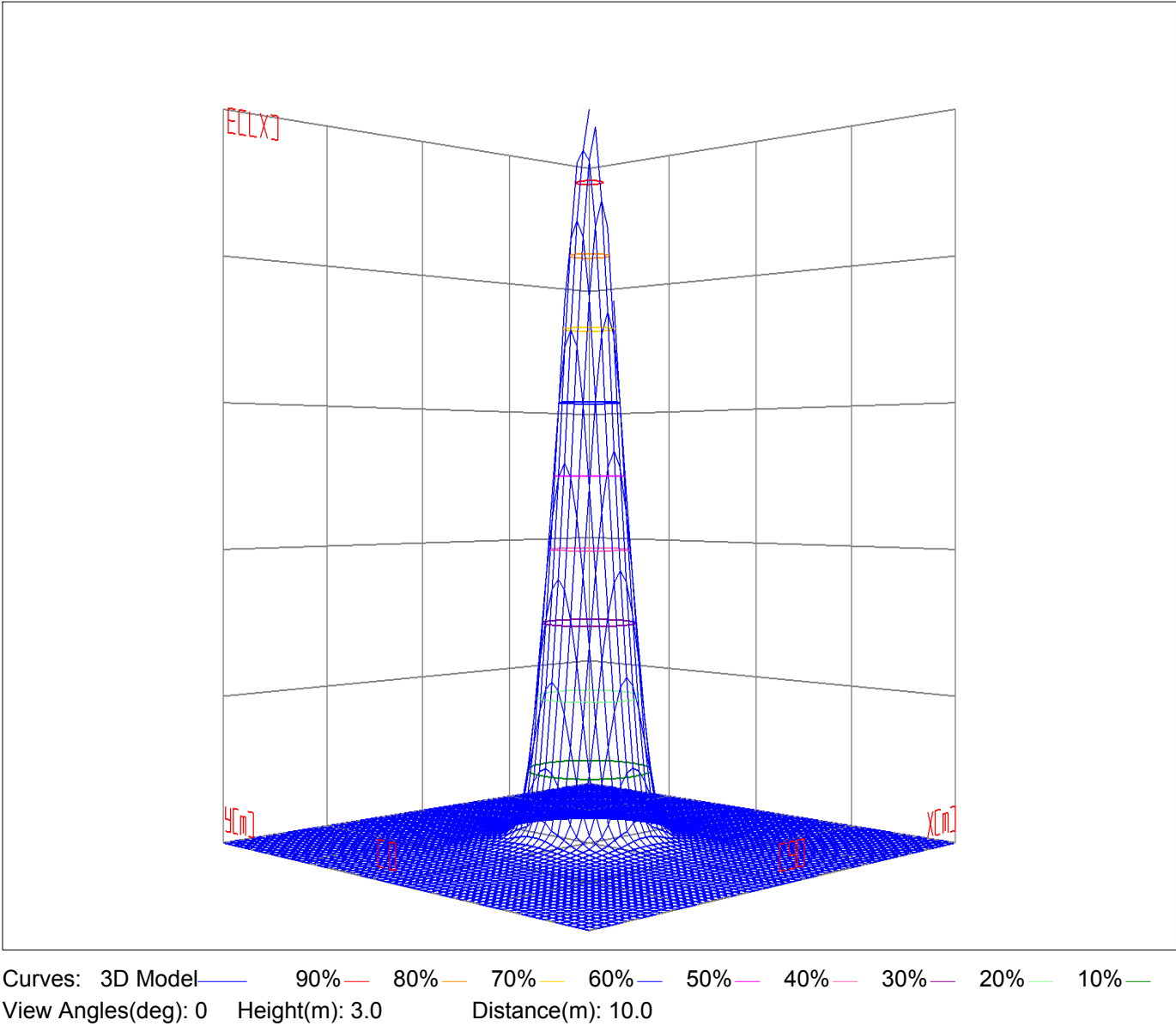


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 190.36
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: LED LUMINAIRE	Lum. Catalog: 9022 - 60 deg	Test ID: IESNA:LM-79-08
Lamp Name: 2835(*84)	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lig
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 4/20/2021

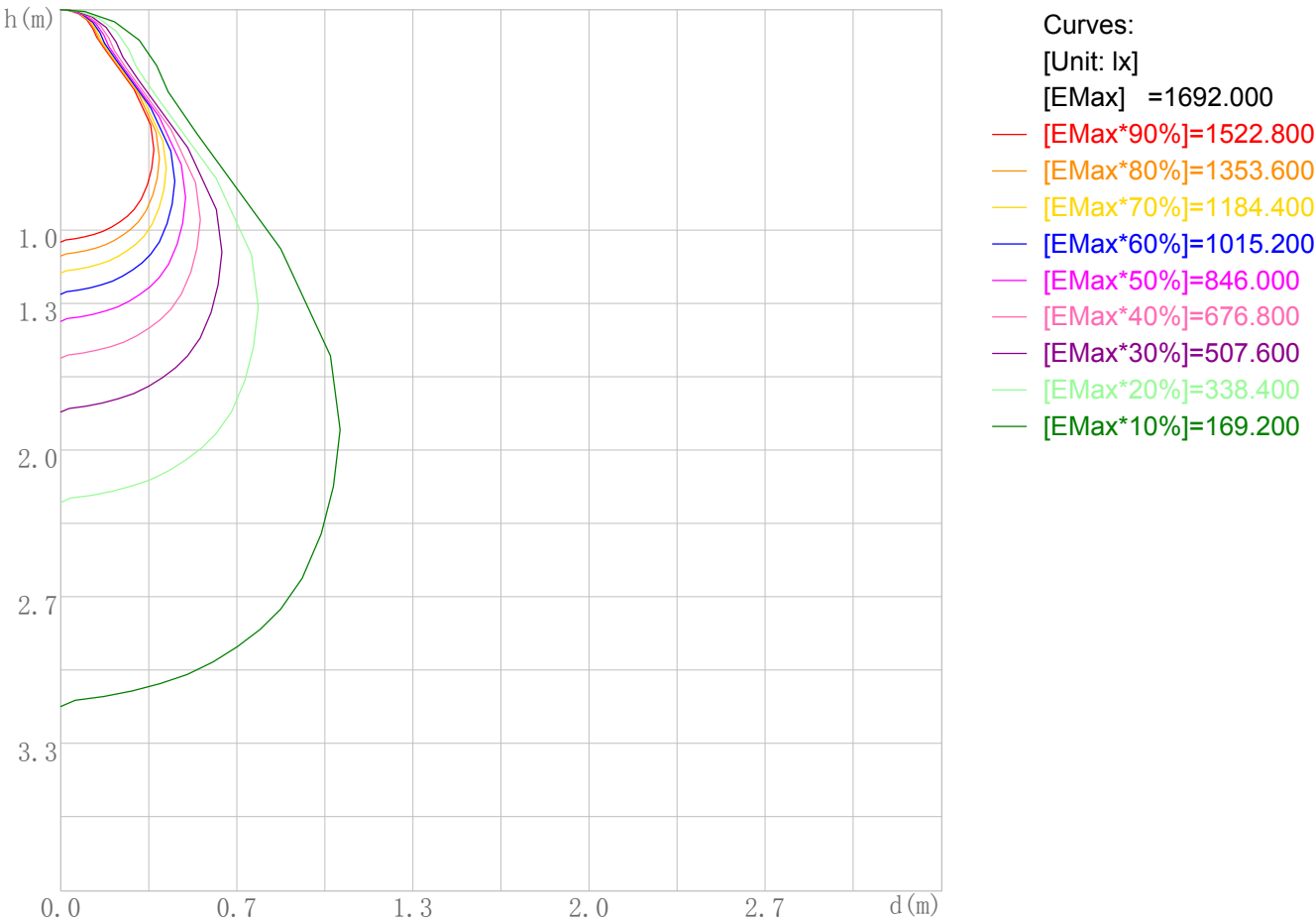
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: LED LUMINAIRE	Lum. Catalog: 9022 - 60 deg	Test ID: IESNA:LM-79-08
Lamp Name: 2835 (*84)	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lightlab.com)
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 4/20/2021

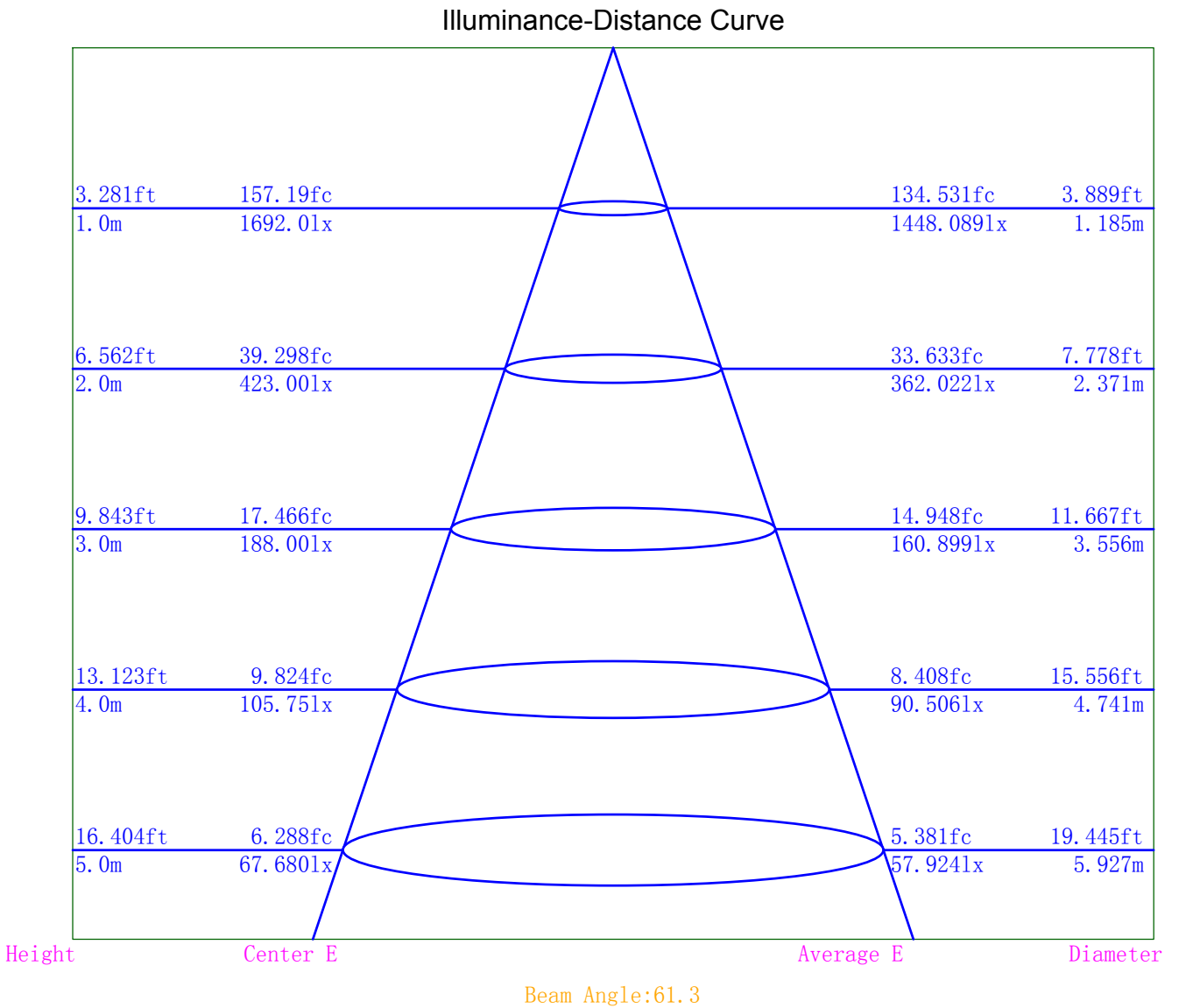
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:1692.00lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:1692.000cd,0eg

Illuminance-Distance Diagram

Lum. Name: LED LUMINAIRE	Lum. Catalog: 9022 - 60 deg	Test ID: IESNA:LM-79-08
Lamp Name: 2835(*84)	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lig
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 4/20/2021



Indoor Luminance Limiting Curves

Lum. Name: LED LUMINAIRE	Lum. Catalog: 9022 - 60 deg	Test ID: IESNA:LM-79-08
Lamp Name: 2835(*84)	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lightlab.com)
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 4/20/2021

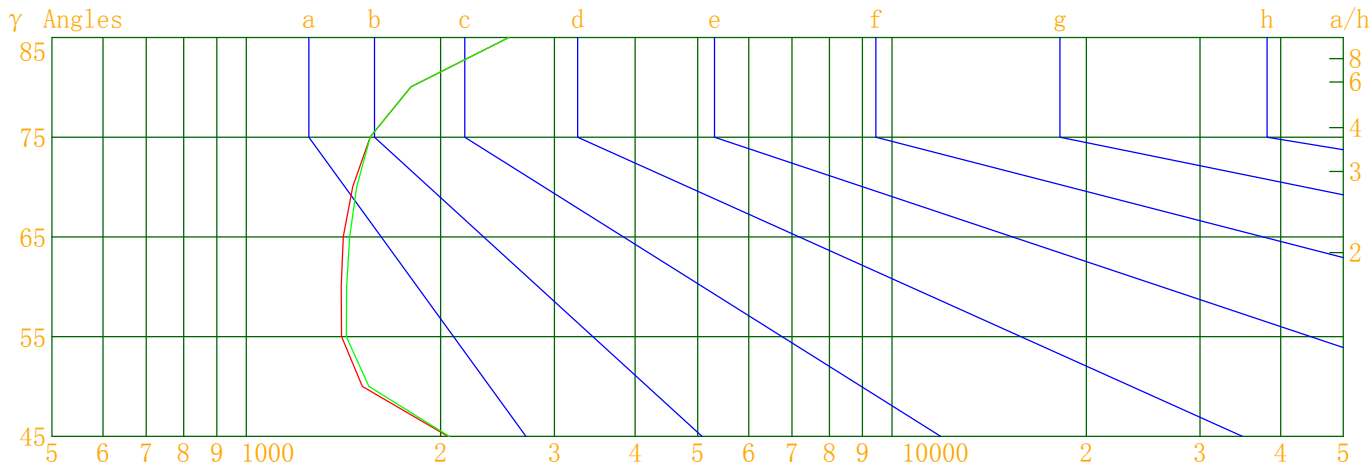
Glare Grade Table

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	2053	1513	1404	1403	1413	1462	1556	1800	2550
C90	2062	1549	1429	1431	1446	1482	1556	1800	2550

Luminance Limiting Curve



Luminous Size: Length(m)=0.480 Width(m)=0.150 Height(m)=0.000 Area(m^2)=0.072000

Luminous Type: Without Luminous Side

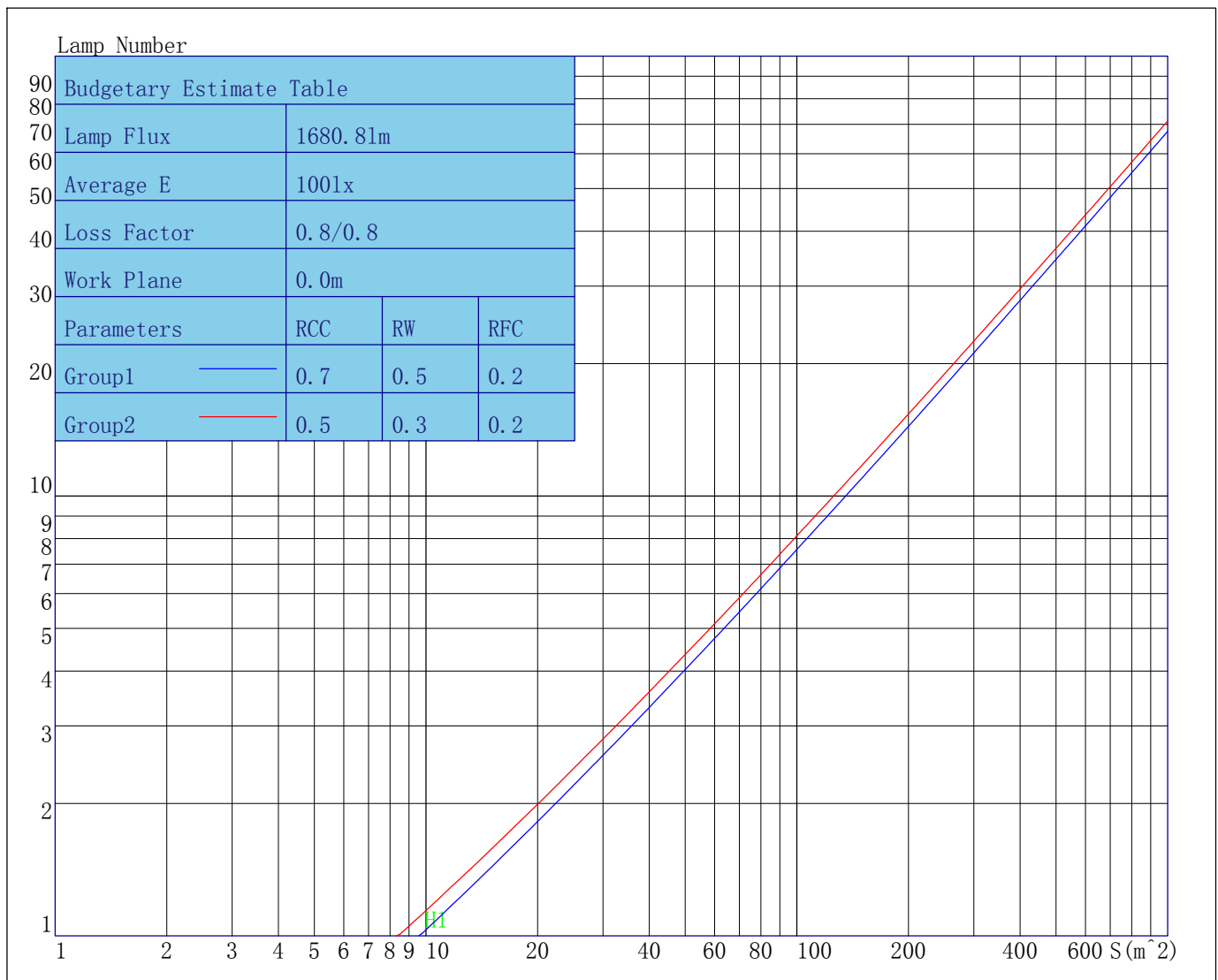
Luminous Curves: C0-C180 Color: — C90-C270 Color: —

IES Indoor Report

Photometric Filename:LG-9022 60° 9W.IES

Indoor Budgetary Estimate Table

Lum. Name: LED LUMINAIRE	Lum. Catalog: 9022 - 60 deg	Test ID: IESNA:LM-79-08
Lamp Name: 2835(*84)	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lightlab.com)
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 4/20/2021



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

Indoor Coefficient of Utilization Table

Lum. Name: LED LUMINAIRE	Lum. Catelog: 9022 - 60 deg	Test ID: IESNA:LM-79-08
Lamp Name: 2835(*84)	Lamp Catelog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lig
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 4/20/2021

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	106	101	96	92	104	99	95	91	96	92	89	92	90	87	90	87	85	84
3	100	93	87	83	98	92	86	82	89	85	81	86	83	80	84	81	78	77
4	95	86	80	76	93	85	79	75	83	78	74	81	77	73	79	75	72	71
5	90	80	74	69	88	79	73	69	78	72	68	76	71	68	74	70	67	66
6	85	75	69	64	83	74	68	64	73	67	63	71	67	63	70	66	62	61
7	80	70	64	59	79	70	64	59	68	63	59	67	62	59	66	62	58	57
8	76	66	60	55	75	66	60	55	64	59	55	63	58	55	62	58	55	53
9	73	62	56	52	71	62	56	52	61	55	52	60	55	51	59	54	51	50
10	69	59	53	49	68	58	52	49	58	52	48	57	52	48	56	51	48	47

Unified Glare Rating Table

Lum. Name: LED LUMINAIRE	Lum. Catelog: 9022 - 60 deg	Test ID: IESNA:LM-79-08
Lamp Name: 2835(*84)	Lamp Catelog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lig
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 4/20/2021

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	12.5	13.6	12.9	13.9	14.3	12.7	13.7	13.0	14.0	14.4
	13.2	14.1	13.6	14.5	14.8	13.3	14.2	13.7	14.6	14.9
	13.6	14.5	14.0	14.8	15.2	13.7	14.6	14.1	14.9	15.3
	14.1	14.9	14.5	15.3	15.7	14.2	15.0	14.6	15.4	15.8
	14.3	15.1	14.8	15.5	15.9	14.4	15.2	14.9	15.6	16.0
	14.6	15.4	15.1	15.8	16.2	14.7	15.4	15.1	15.8	16.3
X=4H Y=2H	12.6	13.5	13.0	13.9	14.3	12.7	13.6	13.1	14.0	14.4
	13.5	14.3	13.9	14.7	15.1	13.6	14.4	14.0	14.8	15.2
	14.1	14.8	14.6	15.2	15.7	14.2	14.9	14.6	15.3	15.7
	14.8	15.4	15.3	15.8	16.3	14.9	15.5	15.4	15.9	16.4
	15.2	15.7	15.7	16.2	16.6	15.2	15.8	15.7	16.2	16.7
	15.6	16.1	16.1	16.6	17.0	15.7	16.1	16.1	16.6	17.1
X=8H Y=4H	14.3	14.9	14.8	15.3	15.8	14.4	14.9	14.9	15.4	15.9
	15.2	15.7	15.8	16.2	16.7	15.3	15.7	15.8	16.2	16.8
	15.8	16.1	16.3	16.7	17.2	15.8	16.2	16.3	16.7	17.2
	16.4	16.7	16.9	17.2	17.8	16.4	16.7	16.9	17.2	17.8
X=12H Y=4H	14.4	14.8	14.9	15.3	15.8	14.4	14.9	14.9	15.4	15.9
	15.3	15.7	15.9	16.2	16.7	15.4	15.8	15.9	16.2	16.8
	15.9	16.3	16.5	16.8	17.3	16.0	16.3	16.5	16.8	17.4
Variations with the objerver position at spacings										
S=1.0H	0.2/-0.2					0.2/-0.2				
S=1.5H	0.4/-0.4					0.4/-0.4				
S=2.0H	0.3/-0.4					0.4/-0.5				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	2.6					2.6				

o the CIE Pub.117, data has been corrected, refers to the lamp's lumens 8.2flm.

IES Indoor Report

Photometric Filename:LG-9022 60° 9W.IES

Candela Tabulation

V/H	C0.0	C5.0	C10.0	C15.0	C20.0	C25.0	C30.0	C35.0	C40.0	C45.0	C50.0	C55.0
γ 0.0	1692.00	1692.00	1692.00	1692.00	1692.00	1692.00	1692.00	1692.00	1692.00	1692.00	1692.00	1692.00
γ 1.0	1663.00	1663.00	1665.00	1667.00	1671.00	1676.00	1678.00	1681.00	1685.00	1689.00	1693.00	1698.00
γ 3.0	1651.00	1652.00	1654.00	1656.00	1660.00	1664.00	1666.00	1669.00	1673.00	1677.00	1681.00	1685.00
γ 5.0	1636.00	1638.00	1640.00	1642.00	1647.00	1651.00	1653.00	1657.00	1662.00	1666.00	1670.00	1675.00
γ 7.0	1619.00	1621.00	1623.00	1625.00	1629.00	1635.00	1637.00	1641.00	1646.00	1650.00	1654.00	1659.00
γ 9.0	1599.00	1600.00	1603.00	1605.00	1608.00	1613.00	1614.00	1618.00	1622.00	1626.00	1630.00	1634.00
γ 11.0	1568.00	1570.00	1573.00	1576.00	1579.00	1582.00	1584.00	1587.00	1591.00	1594.00	1597.00	1602.00
γ 13.0	1529.00	1530.00	1533.00	1534.00	1538.00	1542.00	1544.00	1548.00	1552.00	1554.00	1558.00	1564.00
γ 15.0	1486.00	1488.00	1492.00	1493.00	1496.00	1501.00	1503.00	1507.00	1511.00	1514.00	1516.00	1523.00
γ 17.0	1432.00	1434.00	1437.00	1438.00	1443.00	1447.00	1449.00	1452.00	1456.00	1458.00	1461.00	1466.00
γ 19.5	1345.00	1349.00	1351.00	1352.00	1355.00	1359.00	1360.00	1363.00	1367.00	1369.00	1373.00	1378.00
γ 22.5	1214.00	1216.00	1219.00	1219.00	1223.00	1226.00	1227.00	1230.00	1232.00	1234.00	1238.00	1242.00
γ 25.5	1076.00	1078.00	1080.00	1081.00	1085.00	1089.00	1089.00	1091.00	1094.00	1096.00	1100.00	1104.00
γ 29.0	919.00	920.00	922.00	923.00	926.00	929.00	930.00	932.00	935.00	936.00	939.00	942.00
γ 33.0	708.00	708.00	710.00	711.00	713.00	713.00	715.00	715.00	715.00	717.00	719.00	721.00
γ 37.5	399.00	400.00	400.00	401.00	402.00	402.00	403.00	402.00	401.00	402.00	403.00	404.00
γ 42.5	133.00	133.00	133.00	133.00	133.00	133.00	133.00	133.00	133.00	133.00	132.00	132.00
γ 47.5	76.00	76.00	76.00	76.00	76.00	76.00	77.00	77.00	77.00	77.00	77.00	78.00
γ 55.0	58.00	58.00	58.00	58.00	58.00	58.00	58.00	58.00	58.00	58.00	58.00	58.00
γ 65.0	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	44.00	44.00	44.00	44.00
γ 75.0	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00
γ 85.0	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
γ 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
V/H	C60.0	C65.0	C70.0	C75.0	C80.0	C85.0	C90.0					
γ 0.0	1692.00	1692.00	1692.00	1692.00	1692.00	1692.00	1692.00					
γ 1.0	1701.00	1704.00	1707.00	1710.00	1712.00	1713.00	1714.00					
γ 3.0	1688.00	1691.00	1694.00	1697.00	1699.00	1700.00	1701.00					
γ 5.0	1678.00	1681.00	1684.00	1687.00	1689.00	1690.00	1690.00					
γ 7.0	1663.00	1666.00	1670.00	1672.00	1674.00	1675.00	1675.00					
γ 9.0	1638.00	1642.00	1645.00	1649.00	1650.00	1651.00	1652.00					
γ 11.0	1607.00	1610.00	1612.00	1615.00	1618.00	1619.00	1619.00					
γ 13.0	1568.00	1571.00	1573.00	1576.00	1578.00	1579.00	1579.00					
γ 15.0	1527.00	1528.00	1532.00	1535.00	1536.00	1536.00	1536.00					
γ 17.0	1470.00	1473.00	1475.00	1477.00	1479.00	1480.00	1481.00					
γ 19.5	1382.00	1384.00	1385.00	1387.00	1389.00	1390.00	1391.00					
γ 22.5	1245.00	1247.00	1248.00	1249.00	1251.00	1252.00	1253.00					
γ 25.5	1107.00	1107.00	1108.00	1109.00	1111.00	1111.00	1111.00					
γ 29.0	945.00	946.00	946.00	947.00	948.00	949.00	948.00					
γ 33.0	724.00	725.00	725.00	726.00	726.00	727.00	728.00					
γ 37.5	404.00	404.00	404.00	403.00	402.00	402.00	402.00					
γ 42.5	133.00	133.00	132.00	132.00	132.00	133.00	132.00					
γ 47.5	78.00	78.00	78.00	78.00	78.00	78.00	78.00					
γ 55.0	58.00	58.00	59.00	59.00	59.00	59.00	59.00					
γ 65.0	44.00	44.00	44.00	44.00	44.00	44.00	44.00					
γ 75.0	29.00	29.00	29.00	29.00	29.00	29.00	29.00					
γ 85.0	16.00	16.00	16.00	16.00	16.00	16.00	16.00					
γ 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00					