

Description Information(From Photometric File)

Photometric File: STREAM 18W 230V.IES

IES Format: IESNA:LM-63-2002

[TEST] ELMARK

[TESTLAB] ELMARK

[ISSUEDATE] 2015/03/10

[MANUFAC] ELMARK

[LUMCAT] 98STREAM18

[LUMINAIRE]

[LAMPCAT] LED

[LAMP] LED HIGH POWER - 18pcs

[BALLASTCAT]

[BALLAST]

[OTHER] GON-1800

[MORE] Temperature:25, Humidity:40

[More] Frequency:50.0 Voltage:230.5 Current:0.089 Power:19.5 PF:0.953

Character

Lamp Power (w):	19.5
Total Rated Lamp Lumens(lm):	1800.00
Luminair Lumens(lm):	1184.95
Total Luminair Efficiency:	65.83%
Luminaire Efficacy Rating(LER):	60.77
Maximum Intensity(cd):	2937.41
Max Cd Angle(deg):	C=0.0 γ =1.0
Downward Lumens(lm):	1184.62
Downward Total Efficiency:	99.97%
Spacing Criteria:	C0_180=0.23 C90_270=0.23
CIE Type:	Semi-Direct
Beam Angle(50%Imax):	Left=-13.8 Right=13.5
Field Angle(10%Imax):	64.1
ErP ϕ use(90deg):	1002.38lm

Candela Tabulation

	<u>C0.0</u>	<u>C30.0</u>	<u>C60.0</u>	<u>C90.0</u>	<u>C120.0</u>	<u>C150.0</u>	<u>C180.0</u>
<u>Y0.0</u>	2930.69	2930.69	2930.69	2930.69	2930.69	2930.69	2930.69
<u>Y1.0</u>	2937.41	2924.12	2922.91	2914.76	2915.45	2913.58	2916.11
<u>Y2.0</u>	2909.01	2899.20	2897.77	2891.04	2893.64	2891.07	2902.27
<u>Y3.0</u>	2868.49	2853.75	2861.32	2854.31	2857.00	2855.60	2872.29
<u>Y4.0</u>	2815.33	2802.57	2812.53	2798.43	2803.73	2809.16	2828.93
<u>Y5.0</u>	2736.35	2721.20	2735.50	2719.01	2730.24	2731.50	2761.98
<u>Y6.0</u>	2648.92	2633.15	2643.36	2617.18	2634.81	2642.75	2680.50
<u>Y7.0</u>	2546.45	2522.73	2529.82	2494.04	2526.32	2530.70	2581.57
<u>Y8.0</u>	2427.35	2394.84	2391.89	2356.71	2391.61	2411.44	2463.04
<u>Y9.0</u>	2297.07	2247.64	2235.58	2200.31	2236.80	2269.36	2324.97
<u>Y10.0</u>	2135.06	2070.79	2067.83	2035.73	2074.72	2109.45	2173.38
<u>Y11.0</u>	1960.41	1896.84	1897.39	1868.51	1898.07	1935.85	2011.50
<u>Y12.0</u>	1761.97	1704.13	1718.97	1693.92	1716.80	1745.35	1829.91
<u>Y13.0</u>	1555.37	1506.90	1545.12	1530.52	1545.83	1550.70	1626.93
<u>Y14.0</u>	1373.80	1338.78	1389.28	1375.46	1386.33	1368.07	1430.65
<u>Y15.0</u>	1205.53	1187.26	1241.90	1244.28	1239.74	1215.76	1245.08
<u>Y16.0</u>	1061.97	1050.67	1118.00	1125.07	1119.20	1082.89	1086.38
<u>Y17.0</u>	933.75	930.39	1003.92	1008.43	1005.88	960.18	950.07
<u>Y18.0</u>	813.81	824.22	892.35	907.42	906.95	861.23	826.80
<u>Y19.0</u>	718.47	731.56	801.90	814.60	823.85	767.50	728.78
<u>Y20.0</u>	643.52	663.06	725.48	733.24	750.36	692.18	653.55
<u>Y21.0</u>	580.32	607.43	658.01	670.63	688.75	635.60	586.09
<u>Y22.0</u>	536.54	556.13	608.32	617.58	637.04	582.66	536.18
<u>Y23.0</u>	492.38	519.91	556.59	564.90	586.05	537.89	496.51
<u>Y24.0</u>	464.09	486.84	518.04	523.15	548.15	502.84	458.29
<u>Y25.0</u>	441.52	452.19	482.85	485.30	507.25	467.47	431.72
<u>Y26.0</u>	412.91	428.28	443.45	442.90	467.64	434.84	407.05
<u>Y27.0</u>	394.79	401.09	414.85	410.90	435.77	409.56	379.93
<u>Y28.0</u>	370.86	375.19	380.85	377.39	396.66	381.58	361.84
<u>Y29.0</u>	349.96	355.82	349.61	340.61	366.96	352.59	340.75
<u>Y30.0</u>	338.31	335.40	325.68	314.45	340.53	334.69	319.04
<u>Y31.0</u>	323.51	316.04	296.28	288.13	310.42	315.66	310.30
<u>Y32.0</u>	310.57	302.34	275.95	264.59	291.87	298.19	295.40
<u>Y33.0</u>	293.76	281.89	258.02	247.72	269.85	279.91	276.59
<u>Y34.0</u>	269.33	259.03	235.10	229.24	246.55	256.37	260.74
<u>Y35.0</u>	252.02	245.06	221.33	209.43	232.96	238.02	236.29
<u>Y36.0</u>	230.08	223.10	203.90	198.06	210.91	222.74	219.76
<u>Y37.0</u>	208.96	206.89	187.76	183.29	196.67	204.31	204.04
<u>Y38.0</u>	196.03	196.57	179.77	167.94	187.10	188.36	184.14
<u>Y39.0</u>	177.51	179.79	166.28	161.78	170.69	179.08	172.94
<u>Y40.0</u>	165.54	170.48	158.37	149.81	166.19	163.41	160.62
<u>Y41.0</u>	157.21	163.41	152.79	141.73	155.02	153.84	147.67
<u>Y42.0</u>	143.01	149.65	143.41	139.74	147.15	148.21	141.69
<u>Y43.0</u>	136.28	143.06	140.23	132.30	145.79	135.57	132.16
<u>Y44.0</u>	128.07	136.51	135.36	126.72	136.91	129.29	122.58
<u>Y45.0</u>	118.39	126.46	128.50	125.76	133.88	124.79	119.88
<u>Y46.0</u>	115.01	120.76	127.88	120.85	131.08	114.65	111.03

Candela Tabulation - (Cont.)

	<u>C0.0</u>	<u>C30.0</u>	<u>C60.0</u>	<u>C90.0</u>	<u>C120.0</u>	<u>C150.0</u>	<u>C180.0</u>
<u>Y 47.0</u>	107.69	115.58	122.46	115.54	122.17	109.04	104.50
<u>Y 48.0</u>	100.83	105.94	118.15	116.45	121.23	105.74	102.53
<u>Y 49.0</u>	99.08	104.61	117.62	108.56	115.98	96.42	93.40
<u>Y 50.0</u>	91.07	98.27	111.08	105.98	109.62	92.80	90.32
<u>Y 51.0</u>	87.29	90.30	108.53	107.01	110.24	91.36	88.70
<u>Y 52.0</u>	85.29	90.12	107.27	99.95	103.23	83.43	80.51
<u>Y 53.0</u>	77.65	82.42	99.60	97.87	99.87	82.42	81.43
<u>Y 54.0</u>	76.84	77.66	98.55	96.67	98.50	80.09	77.04
<u>Y 55.0</u>	73.81	78.44	96.18	90.00	91.00	71.85	70.10
<u>Y 56.0</u>	67.93	70.39	88.88	85.77	88.49	70.58	71.59
<u>Y 57.0</u>	69.09	69.42	89.40	84.62	85.32	68.18	63.82
<u>Y 58.0</u>	63.74	68.14	83.68	78.49	78.16	62.58	63.48
<u>Y 59.0</u>	58.47	60.47	77.07	73.03	76.71	59.32	61.65
<u>Y 60.0</u>	58.83	58.88	76.53	72.12	71.91	58.55	53.61
<u>Y 61.0</u>	50.73	56.26	67.98	63.96	64.91	51.10	54.18
<u>Y 62.0</u>	49.33	49.54	66.79	62.90	64.81	51.72	48.49
<u>Y 63.0</u>	48.90	48.97	62.97	60.46	57.53	48.68	43.03
<u>Y 64.0</u>	41.11	45.94	53.75	52.79	52.08	40.97	44.76
<u>Y 65.0</u>	42.38	39.73	52.33	50.83	50.57	41.21	37.92
<u>Y 66.0</u>	35.88	41.00	46.18	48.51	41.52	37.47	36.26
<u>Y 67.0</u>	31.90	36.03	39.65	42.51	39.21	32.09	35.89
<u>Y 68.0</u>	33.78	30.77	39.30	39.69	37.61	31.37	28.83
<u>Y 69.0</u>	26.76	32.09	32.74	37.89	29.76	28.98	28.79
<u>Y 70.0</u>	26.81	24.44	28.07	30.55	30.75	23.34	25.57
<u>Y 71.0</u>	25.18	22.31	27.65	28.85	25.88	22.65	20.27
<u>Y 72.0</u>	18.72	23.73	21.75	28.45	20.27	21.46	21.97
<u>Y 73.0</u>	19.49	15.59	18.47	21.10	21.53	15.29	16.90
<u>Y 74.0</u>	15.55	17.90	18.71	21.60	14.29	17.10	14.34
<u>Y 75.0</u>	11.05	16.19	13.47	20.76	12.44	13.99	15.08
<u>Y 76.0</u>	12.55	8.49	10.90	13.76	13.91	8.04	9.11
<u>Y 77.0</u>	8.04	10.81	11.59	14.08	6.77	10.74	8.70
<u>Y 78.0</u>	5.66	6.05	5.34	11.88	9.44	5.55	7.70
<u>Y 79.0</u>	6.95	4.87	7.84	6.99	5.09	4.55	2.88
<u>Y 80.0</u>	2.48	6.06	6.51	6.88	1.48	5.46	4.16
<u>Y 81.0</u>	1.73	0.44	0.68	6.09	4.67	1.20	2.93
<u>Y 82.0</u>	2.84	1.30	3.30	1.48	0.30	0.49	0.00
<u>Y 83.0</u>	0.00	1.27	0.00	4.05	0.00	1.79	3.01
<u>Y 84.0</u>	0.00	0.00	0.00	2.10	1.60	0.00	0.00
<u>Y 85.0</u>	0.51	0.00	0.55	0.00	0.00	0.00	0.00
<u>Y 86.0</u>	0.00	0.00	0.00	0.78	0.00	0.41	0.72
<u>Y 87.0</u>	0.61	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 88.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 89.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 90.0</u>	0.40	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 91.0</u>	0.00	0.00	0.00	0.00	0.00	0.14	0.27
<u>Y 92.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 93.0</u>	0.20	0.00	0.00	0.00	0.00	0.00	0.00

Candela Tabulation - (Cont.)

	<u>C0.0</u>	<u>C30.0</u>	<u>C60.0</u>	<u>C90.0</u>	<u>C120.0</u>	<u>C150.0</u>	<u>C180.0</u>
<u>Y 94.0</u>	0.00	0.00	0.16	0.00	0.00	0.32	0.51
<u>Y 95.0</u>	0.00	0.00	0.00	0.09	0.00	0.00	0.00
<u>Y 96.0</u>	0.32	0.42	0.00	0.00	0.00	0.00	0.00
<u>Y 97.0</u>	0.00	0.00	0.28	0.00	0.00	0.46	0.56
<u>Y 98.0</u>	0.00	0.00	0.00	0.31	0.12	0.00	0.00
<u>Y 99.0</u>	0.00	0.46	0.00	0.00	0.00	0.00	0.00
<u>Y 100.0</u>	0.00	0.00	0.00	0.00	0.17	0.00	0.00
<u>Y 101.0</u>	0.00	0.00	0.00	0.29	0.00	0.00	0.00
<u>Y 102.0</u>	0.00	0.42	0.00	0.00	0.00	0.00	0.00
<u>Y 103.0</u>	0.00	0.00	0.00	0.00	0.23	0.00	0.00
<u>Y 104.0</u>	0.05	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 105.0</u>	0.00	0.19	0.00	0.00	0.00	0.05	0.13
<u>Y 106.0</u>	0.00	0.00	0.00	0.00	0.28	0.00	0.00
<u>Y 107.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 108.0</u>	0.00	0.00	0.02	0.00	0.00	0.00	0.00
<u>Y 109.0</u>	0.00	0.00	0.00	0.00	0.08	0.00	0.00
<u>Y 110.0</u>	0.01	0.53	0.00	0.00	0.00	0.00	0.00
<u>Y 111.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 112.0</u>	0.00	0.00	0.00	0.51	0.00	0.00	0.00
<u>Y 113.0</u>	0.00	0.00	0.00	0.00	0.00	0.26	0.23
<u>Y 114.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 115.0</u>	0.00	0.00	0.00	0.14	0.00	0.00	0.00
<u>Y 116.0</u>	0.00	0.00	0.00	0.00	0.00	0.42	0.25
<u>Y 117.0</u>	0.00	0.00	0.00	0.00	0.22	0.00	0.00
<u>Y 118.0</u>	0.06	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 119.0</u>	0.00	0.00	0.00	0.00	0.00	0.18	0.36
<u>Y 120.0</u>	0.00	0.00	0.04	0.00	0.25	0.00	0.00
<u>Y 121.0</u>	0.00	0.00	0.00	0.00	0.00	0.09	0.00
<u>Y 122.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.28
<u>Y 123.0</u>	0.00	0.00	0.00	0.00	0.24	0.00	0.00
<u>Y 124.0</u>	0.00	0.00	0.00	0.00	0.00	0.33	0.00
<u>Y 125.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 126.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 127.0</u>	0.00	0.00	0.00	0.00	0.00	0.81	0.00
<u>Y 128.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 129.0</u>	0.00	0.00	0.16	0.00	0.00	0.00	0.00
<u>Y 130.0</u>	0.19	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 131.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 132.0</u>	0.00	0.00	0.18	0.30	0.00	0.05	0.00
<u>Y 133.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.42
<u>Y 134.0</u>	0.00	0.70	0.00	0.00	0.33	0.00	0.00
<u>Y 135.0</u>	0.00	0.00	0.00	0.27	0.00	0.17	0.00
<u>Y 136.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.38
<u>Y 137.0</u>	0.00	0.24	0.00	0.00	0.29	0.00	0.00
<u>Y 138.0</u>	0.20	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 139.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.36
<u>Y 140.0</u>	0.00	0.00	0.00	0.00	0.02	0.00	0.00

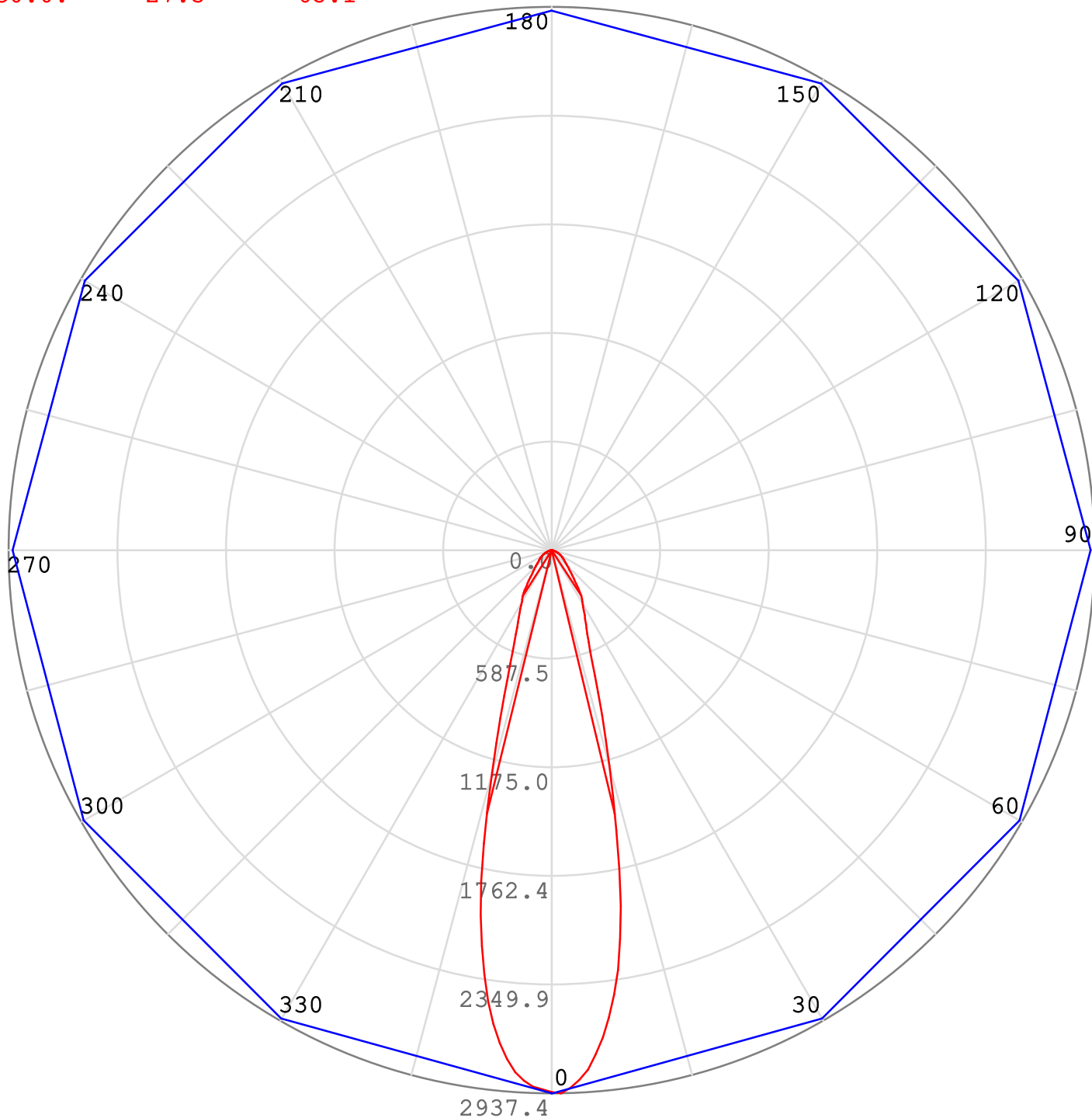
Candela Tabulation - (Cont.)

	<u>C0.0</u>	<u>C30.0</u>	<u>C60.0</u>	<u>C90.0</u>	<u>C120.0</u>	<u>C150.0</u>	<u>C180.0</u>
<u>Y 141.0</u>	0.15	0.00	0.21	0.00	0.00	0.00	0.00
<u>Y 142.0</u>	0.00	0.34	0.00	0.00	0.00	0.00	0.00
<u>Y 143.0</u>	0.00	0.00	0.00	0.00	0.19	0.40	0.00
<u>Y 144.0</u>	0.00	0.00	0.05	0.00	0.00	0.00	0.00
<u>Y 145.0</u>	0.00	0.57	0.00	0.00	0.00	0.00	0.00
<u>Y 146.0</u>	0.00	0.00	0.00	0.06	0.00	0.00	0.00
<u>Y 147.0</u>	0.00	0.00	0.51	0.00	0.00	0.00	0.00
<u>Y 148.0</u>	0.00	0.39	0.00	0.00	0.00	0.00	0.00
<u>Y 149.0</u>	0.00	0.00	0.00	0.17	0.00	0.00	0.00
<u>Y 150.0</u>	0.05	0.00	0.00	0.00	0.00	0.00	0.21
<u>Y 151.0</u>	0.00	0.00	0.00	0.00	0.43	0.54	0.00
<u>Y 152.0</u>	0.00	0.00	0.00	0.06	0.00	0.00	0.00
<u>Y 153.0</u>	0.31	0.26	0.00	0.00	0.00	0.00	0.26
<u>Y 154.0</u>	0.00	0.00	0.00	0.00	0.32	0.61	0.00
<u>Y 155.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 156.0</u>	0.20	0.78	0.00	0.00	0.00	0.00	0.28
<u>Y 157.0</u>	0.00	0.00	0.00	0.00	0.11	0.57	0.00
<u>Y 158.0</u>	0.00	0.00	0.26	0.00	0.00	0.00	0.00
<u>Y 159.0</u>	0.10	0.00	0.00	0.00	0.00	0.31	0.00
<u>Y 160.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 161.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 162.0</u>	0.22	0.00	0.00	0.00	0.00	0.64	0.04
<u>Y 163.0</u>	0.00	0.00	0.00	0.61	0.63	0.00	0.00
<u>Y 164.0</u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 165.0</u>	0.70	0.00	0.00	0.00	0.00	0.37	0.19
<u>Y 166.0</u>	0.00	0.00	0.00	0.79	0.77	0.00	0.00
<u>Y 167.0</u>	0.00	0.00	0.49	0.00	0.00	0.00	0.18
<u>Y 168.0</u>	0.15	0.00	0.00	0.00	0.00	0.00	0.00
<u>Y 169.0</u>	0.00	0.00	0.00	0.49	0.57	0.00	0.00
<u>Y 170.0</u>	0.00	0.00	0.48	0.00	0.00	0.00	0.20
<u>Y 171.0</u>	0.00	0.00	0.00	0.34	0.00	0.00	0.00
<u>Y 172.0</u>	0.27	0.00	0.00	0.30	0.00	0.00	0.26
<u>Y 173.0</u>	0.00	0.00	0.00	0.43	0.11	0.00	0.00
<u>Y 174.0</u>	0.48	0.00	0.00	0.76	0.00	0.00	0.00
<u>Y 175.0</u>	0.00	0.00	0.39	0.00	0.00	0.00	0.00
<u>Y 176.0</u>	0.30	0.00	0.00	1.04	0.00	0.00	0.00
<u>Y 177.0</u>	0.00	0.00	0.35	0.00	0.00	0.00	0.00
<u>Y 178.0</u>	0.00	0.25	0.00	0.00	0.63	0.00	0.00
<u>Y 179.0</u>	0.00	0.00	0.33	0.93	0.00	0.00	1.08
<u>Y 180.0</u>	0.05	0.05	0.05	0.05	0.05	0.05	0.05

2D Light Intensity Distribution Curve

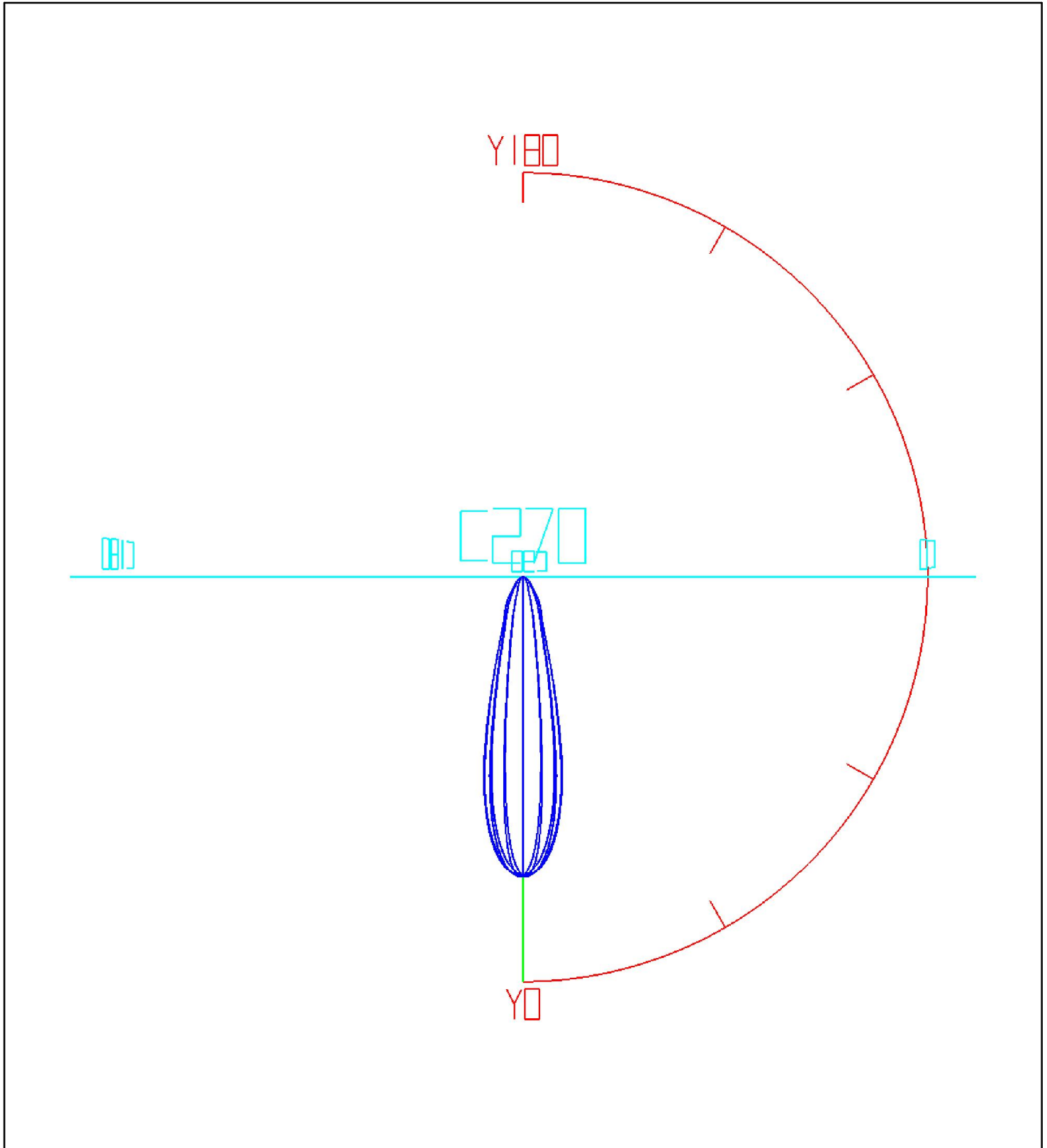
Plane [50%Ang.] [10%Ang.]
C0.0: 27.3 65.1

Polar Graph



C Plane: C0.0 ———
γ Cone: γ1.0 ———

3D Light Intensity Distribution Curve



Curves: 3D Model — Fixture — Vert. HUD — Hori. HUD —
View Angles: Orient:0 Tilt:0 Roll:0 Spin:0

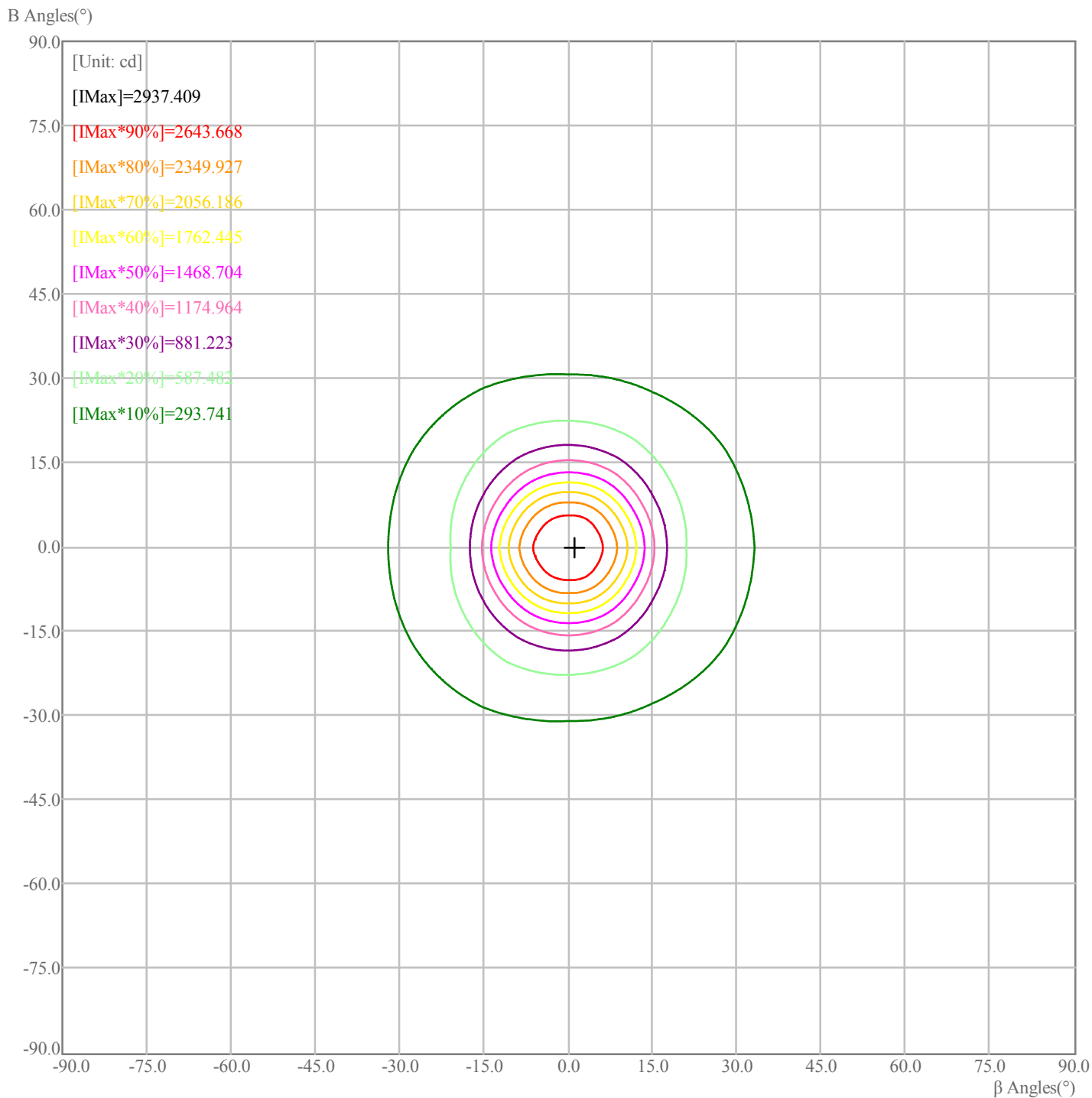
Zonal Liumens Tabulation

Zone (γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp	Zone (γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-1.0	2.80	2.80	0.24	0.24	47.0-48.0	9.16	9.16	0.77	0.77
1.0-2.0	8.35	11.15	0.70	0.94	48.0-49.0	8.96	18.12	0.76	1.53
2.0-3.0	13.76	24.91	1.16	2.10	49.0-50.0	8.67	26.79	0.73	2.26
3.0-4.0	18.97	43.88	1.60	3.70	50.0-51.0	8.49	35.28	0.72	2.98
4.0-5.0	23.83	67.71	2.01	5.71	51.0-52.0	8.31	43.59	0.70	3.68
5.0-6.0	28.22	95.93	2.38	8.10	52.0-53.0	8.04	51.63	0.68	4.36
6.0-7.0	32.07	128.01	2.71	10.80	53.0-54.0	7.86	59.49	0.66	5.02
7.0-8.0	35.26	163.26	2.98	13.78	54.0-55.0	7.65	67.14	0.65	5.67
8.0-9.0	37.68	200.94	3.18	16.96	55.0-56.0	7.33	74.47	0.62	6.28
9.0-10.0	39.24	240.17	3.31	20.27	56.0-57.0	7.14	81.61	0.60	6.89
10.0-11.0	39.96	280.13	3.37	23.64	57.0-58.0	6.92	88.53	0.58	7.47
11.0-12.0	39.82	319.96	3.36	27.00	58.0-59.0	6.56	95.09	0.55	8.02
12.0-13.0	38.86	358.81	3.28	30.28	59.0-60.0	6.31	101.39	0.53	8.56
13.0-14.0	37.40	396.21	3.16	33.44	60.0-61.0	5.97	107.37	0.50	9.06
14.0-15.0	35.73	431.94	3.02	36.45	61.0-62.0	5.63	113.00	0.48	9.54
15.0-16.0	34.00	465.94	2.87	39.32	62.0-63.0	5.42	118.42	0.46	9.99
16.0-17.0	32.24	498.18	2.72	42.04	63.0-64.0	5.01	123.44	0.42	10.42
17.0-18.0	30.40	528.58	2.57	44.61	64.0-65.0	4.65	128.08	0.39	10.81
18.0-19.0	28.64	557.22	2.42	47.02	65.0-66.0	4.37	132.45	0.37	11.18
19.0-20.0	27.08	584.29	2.28	49.31	66.0-67.0	3.97	136.43	0.34	11.51
20.0-21.0	25.78	610.08	2.18	51.49	67.0-68.0	3.66	140.09	0.31	11.82
21.0-22.0	24.72	634.80	2.09	53.57	68.0-69.0	3.40	143.48	0.29	12.11
22.0-23.0	23.77	658.57	2.01	55.58	69.0-70.0	3.02	146.50	0.25	12.36
23.0-24.0	22.96	681.53	1.94	57.52	70.0-71.0	2.70	149.20	0.23	12.59
24.0-25.0	22.25	703.78	1.88	59.39	71.0-72.0	2.48	151.68	0.21	12.80
25.0-26.0	21.48	725.26	1.81	61.21	72.0-73.0	2.15	153.82	0.18	12.98
26.0-27.0	20.74	746.00	1.75	62.96	73.0-74.0	1.88	155.71	0.16	13.14
27.0-28.0	19.99	765.99	1.69	64.64	74.0-75.0	1.71	157.42	0.14	13.28
28.0-29.0	19.14	785.13	1.62	66.26	75.0-76.0	1.38	158.80	0.12	13.40
29.0-30.0	18.41	803.53	1.55	67.81	76.0-77.0	1.14	159.94	0.10	13.50
30.0-31.0	17.73	821.27	1.50	69.31	77.0-78.0	0.96	160.89	0.08	13.58
31.0-32.0	17.09	838.36	1.44	70.75	78.0-79.0	0.71	161.60	0.06	13.64
32.0-33.0	16.49	854.85	1.39	72.14	79.0-80.0	0.57	162.18	0.05	13.69
33.0-34.0	15.71	870.55	1.33	73.47	80.0-81.0	0.41	162.58	0.03	13.72
34.0-35.0	14.92	885.47	1.26	74.73	81.0-82.0	0.21	162.80	0.02	13.74
35.0-36.0	14.19	899.66	1.20	75.92	82.0-83.0	0.15	162.95	0.01	13.75
36.0-37.0	13.42	913.09	1.13	77.06	83.0-84.0	0.11	163.06	0.01	13.76
37.0-38.0	12.77	925.85	1.08	78.13	84.0-85.0	0.04	163.10	0.00	13.76
38.0-39.0	12.19	938.04	1.03	79.16	85.0-86.0	0.02	163.13	0.00	13.77
39.0-40.0	11.65	949.69	0.98	80.15	86.0-87.0	0.02	163.14	0.00	13.77
40.0-41.0	11.22	960.91	0.95	81.09	87.0-88.0	0.00	163.15	0.00	13.77
41.0-42.0	10.84	971.75	0.91	82.01	88.0-89.0	0.00	163.15	0.00	13.77
42.0-43.0	10.51	982.26	0.89	82.89	89.0-90.0	0.00	163.15	0.00	13.77
43.0-44.0	10.20	992.46	0.86	83.76	90.0-91.0	0.00	163.15	0.00	13.77
44.0-45.0	9.92	1002.38	0.84	84.59	91.0-92.0	0.00	163.15	0.00	13.77
45.0-46.0	9.69	1012.07	0.82	85.41	92.0-93.0	0.00	163.16	0.00	13.77
46.0-47.0	9.41	1021.47	0.79	86.20	93.0-94.0	0.01	163.16	0.00	13.77

Zonal Liumens Tabulation - (Cont.)

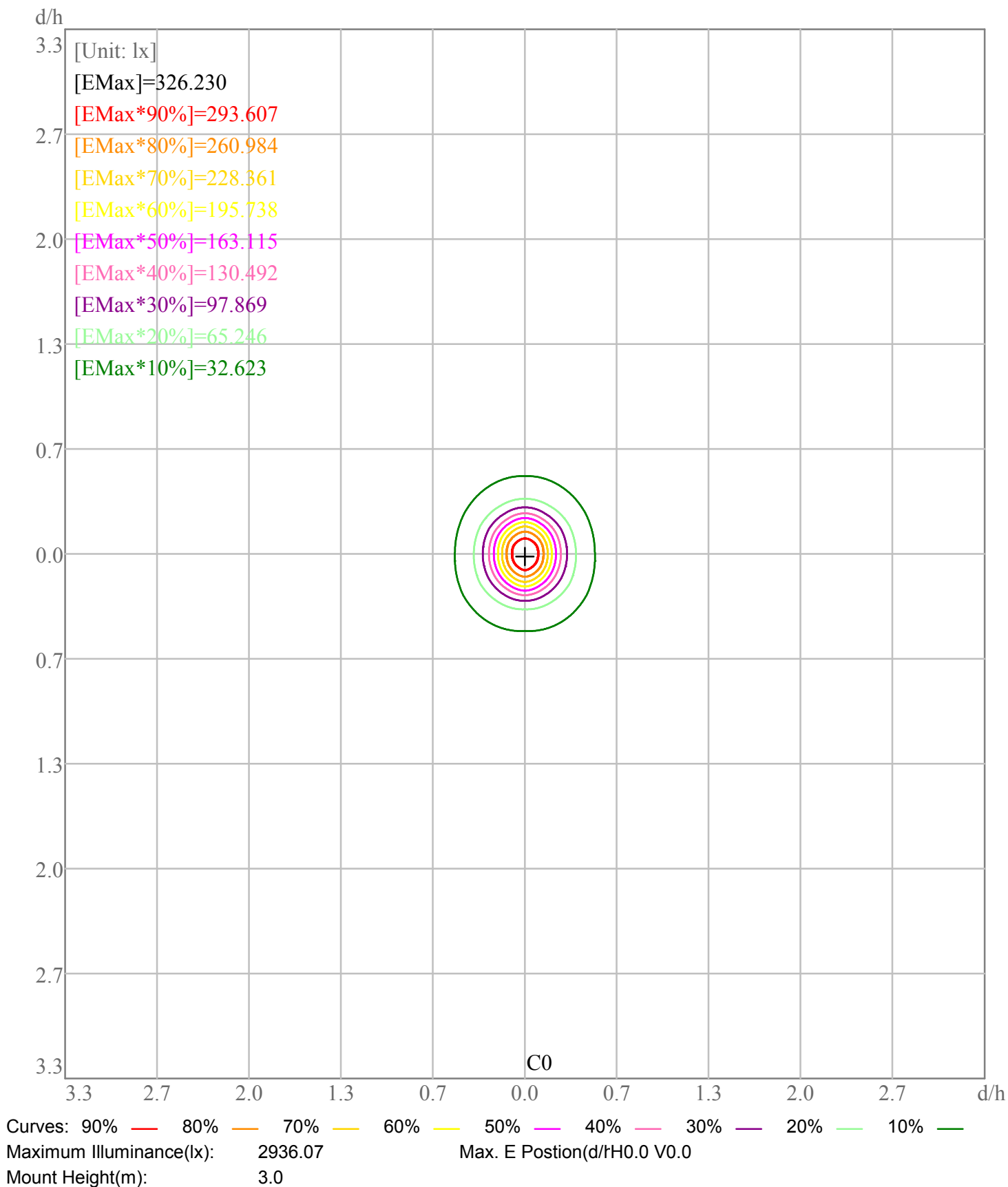
Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp	Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
94.0-95.0	0.01	0.01	0.00	0.00	141.0-142.0	0.00	0.00	0.00	0.00
95.0-96.0	0.01	0.01	0.00	0.00	142.0-143.0	0.01	0.01	0.00	0.00
96.0-97.0	0.01	0.03	0.00	0.00	143.0-144.0	0.00	0.01	0.00	0.00
97.0-98.0	0.01	0.04	0.00	0.00	144.0-145.0	0.00	0.02	0.00	0.00
98.0-99.0	0.01	0.05	0.00	0.00	145.0-146.0	0.00	0.02	0.00	0.00
99.0-100.0	0.01	0.05	0.00	0.00	146.0-147.0	0.00	0.02	0.00	0.00
100.0-101.0	0.00	0.06	0.00	0.00	147.0-148.0	0.00	0.03	0.00	0.00
101.0-102.0	0.01	0.07	0.00	0.01	148.0-149.0	0.00	0.03	0.00	0.00
102.0-103.0	0.01	0.07	0.00	0.01	149.0-150.0	0.00	0.03	0.00	0.00
103.0-104.0	0.00	0.07	0.00	0.01	150.0-151.0	0.00	0.04	0.00	0.00
104.0-105.0	0.00	0.08	0.00	0.01	151.0-152.0	0.00	0.04	0.00	0.00
105.0-106.0	0.01	0.08	0.00	0.01	152.0-153.0	0.00	0.04	0.00	0.00
106.0-107.0	0.00	0.08	0.00	0.01	153.0-154.0	0.01	0.05	0.00	0.00
107.0-108.0	0.00	0.08	0.00	0.01	154.0-155.0	0.00	0.05	0.00	0.00
108.0-109.0	0.00	0.09	0.00	0.01	155.0-156.0	0.00	0.06	0.00	0.00
109.0-110.0	0.01	0.09	0.00	0.01	156.0-157.0	0.01	0.06	0.00	0.01
110.0-111.0	0.00	0.09	0.00	0.01	157.0-158.0	0.00	0.07	0.00	0.01
111.0-112.0	0.00	0.10	0.00	0.01	158.0-159.0	0.00	0.07	0.00	0.01
112.0-113.0	0.01	0.11	0.00	0.01	159.0-160.0	0.00	0.07	0.00	0.01
113.0-114.0	0.00	0.11	0.00	0.01	160.0-161.0	0.00	0.07	0.00	0.01
114.0-115.0	0.00	0.11	0.00	0.01	161.0-162.0	0.00	0.07	0.00	0.01
115.0-116.0	0.01	0.12	0.00	0.01	162.0-163.0	0.01	0.08	0.00	0.01
116.0-117.0	0.01	0.12	0.00	0.01	163.0-164.0	0.00	0.08	0.00	0.01
117.0-118.0	0.00	0.13	0.00	0.01	164.0-165.0	0.00	0.08	0.00	0.01
118.0-119.0	0.00	0.13	0.00	0.01	165.0-166.0	0.01	0.09	0.00	0.01
119.0-120.0	0.01	0.13	0.00	0.01	166.0-167.0	0.00	0.09	0.00	0.01
120.0-121.0	0.00	0.14	0.00	0.01	167.0-168.0	0.00	0.09	0.00	0.01
121.0-122.0	0.00	0.14	0.00	0.01	168.0-169.0	0.00	0.09	0.00	0.01
122.0-123.0	0.00	0.14	0.00	0.01	169.0-170.0	0.00	0.10	0.00	0.01
123.0-124.0	0.00	0.15	0.00	0.01	170.0-171.0	0.00	0.10	0.00	0.01
124.0-125.0	0.00	0.15	0.00	0.01	171.0-172.0	0.00	0.10	0.00	0.01
125.0-126.0	0.00	0.15	0.00	0.01	172.0-173.0	0.00	0.10	0.00	0.01
126.0-127.0	0.01	0.15	0.00	0.01	173.0-174.0	0.00	0.10	0.00	0.01
127.0-128.0	0.01	0.16	0.00	0.01	174.0-175.0	0.00	0.10	0.00	0.01
128.0-129.0	0.00	0.16	0.00	0.01	175.0-176.0	0.00	0.11	0.00	0.01
129.0-130.0	0.00	0.16	0.00	0.01	176.0-177.0	0.00	0.11	0.00	0.01
130.0-131.0	0.00	0.16	0.00	0.01	177.0-178.0	0.00	0.11	0.00	0.01
131.0-132.0	0.00	0.17	0.00	0.01	178.0-179.0	0.00	0.11	0.00	0.01
132.0-133.0	0.01	0.17	0.00	0.01	179.0-180.0	0.00	0.11	0.00	0.01
133.0-134.0	0.01	0.18	0.00	0.02					
134.0-135.0	0.01	0.19	0.00	0.02					
135.0-136.0	0.00	0.19	0.00	0.02					
136.0-137.0	0.00	0.20	0.00	0.02					
137.0-138.0	0.00	0.20	0.00	0.02					
138.0-139.0	0.00	0.20	0.00	0.02					
139.0-140.0	0.00	0.21	0.00	0.02					
140.0-141.0	0.00	0.21	0.00	0.02					

Rectangle ISO Light Intensity Curve

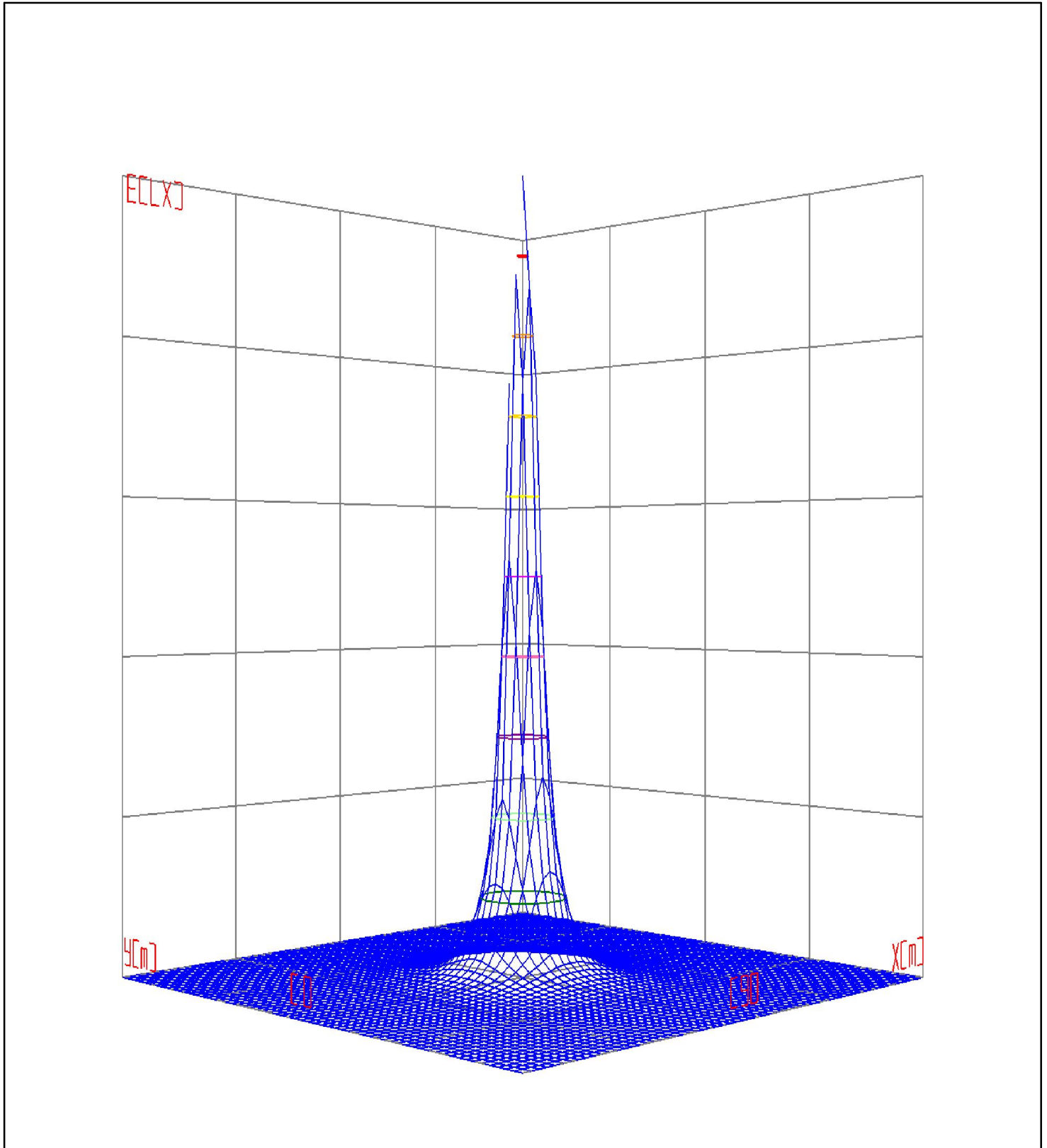


Curves: 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
Maximum Light Intensity(cd): 2937.41 Maximum Cd. Angles: H1.0 V0.0

Plane ISO-Illuminance Curve

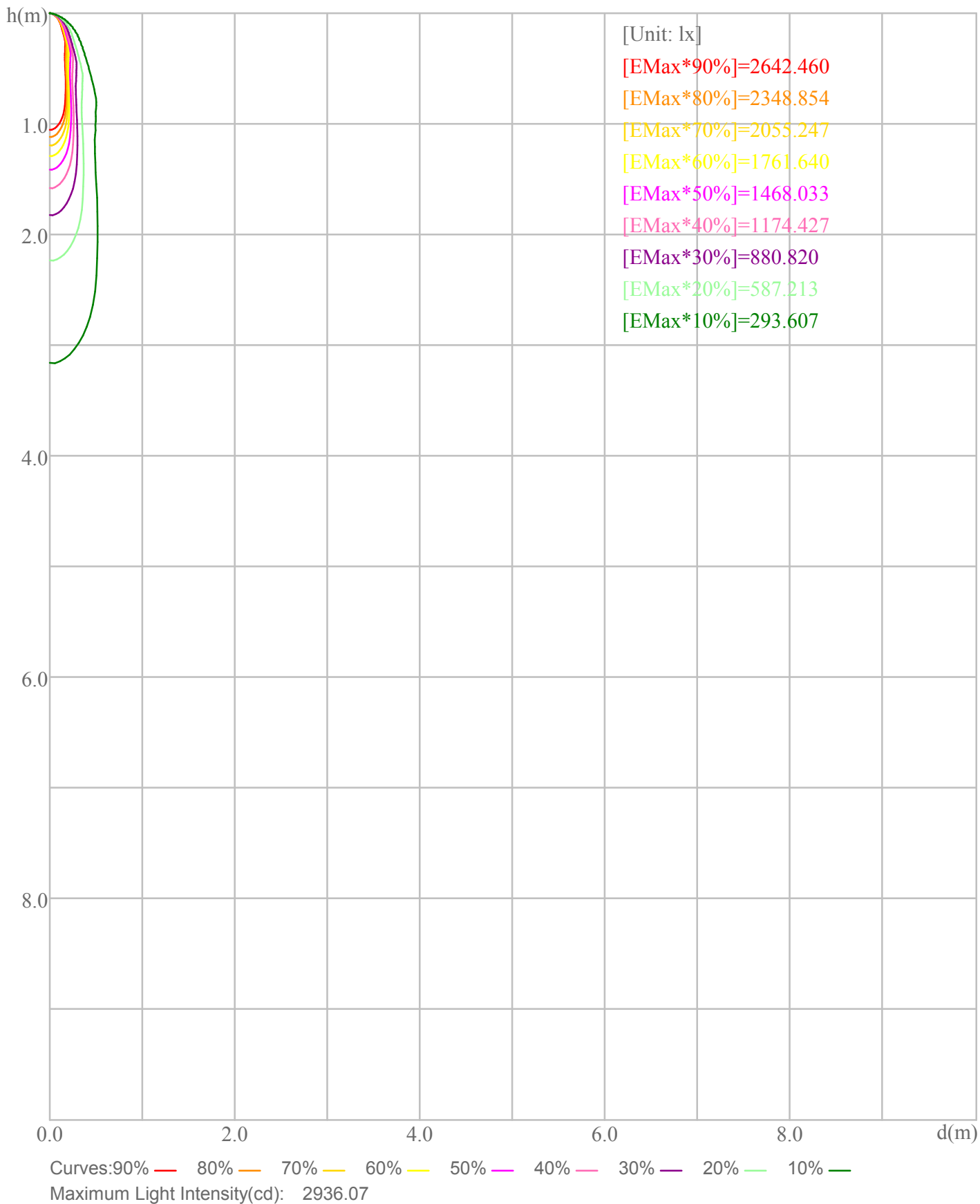


3D Plane ISO Illuminance Curve

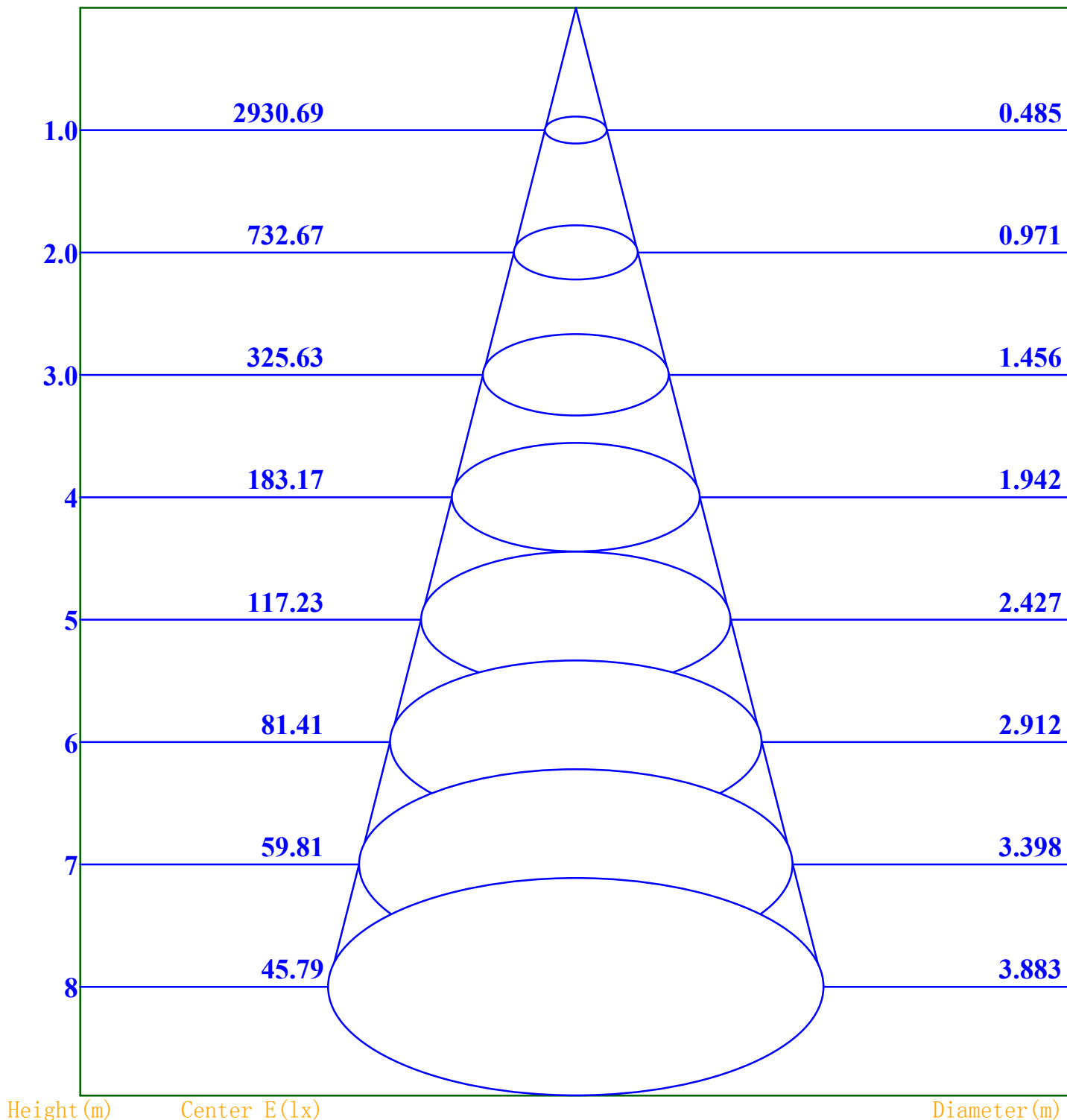


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10%
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Curve



Illuminance-Distance Curve



Beam Angle:27.3

Indoor Luminance Limiting Curve

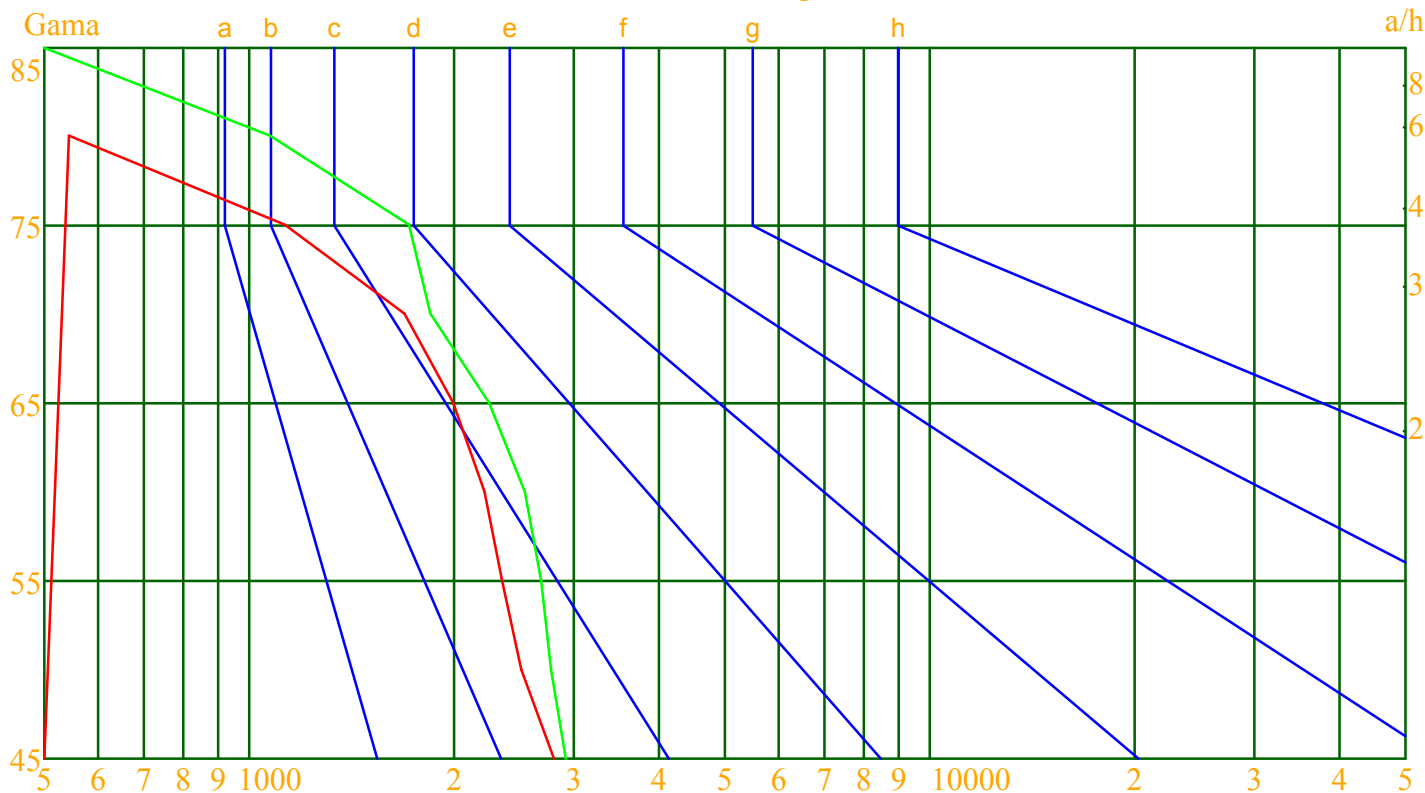
Glare Grade Table

GI	Quality	Using Illuminance							
		a	b	c	d	e	f	g	h
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					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Table

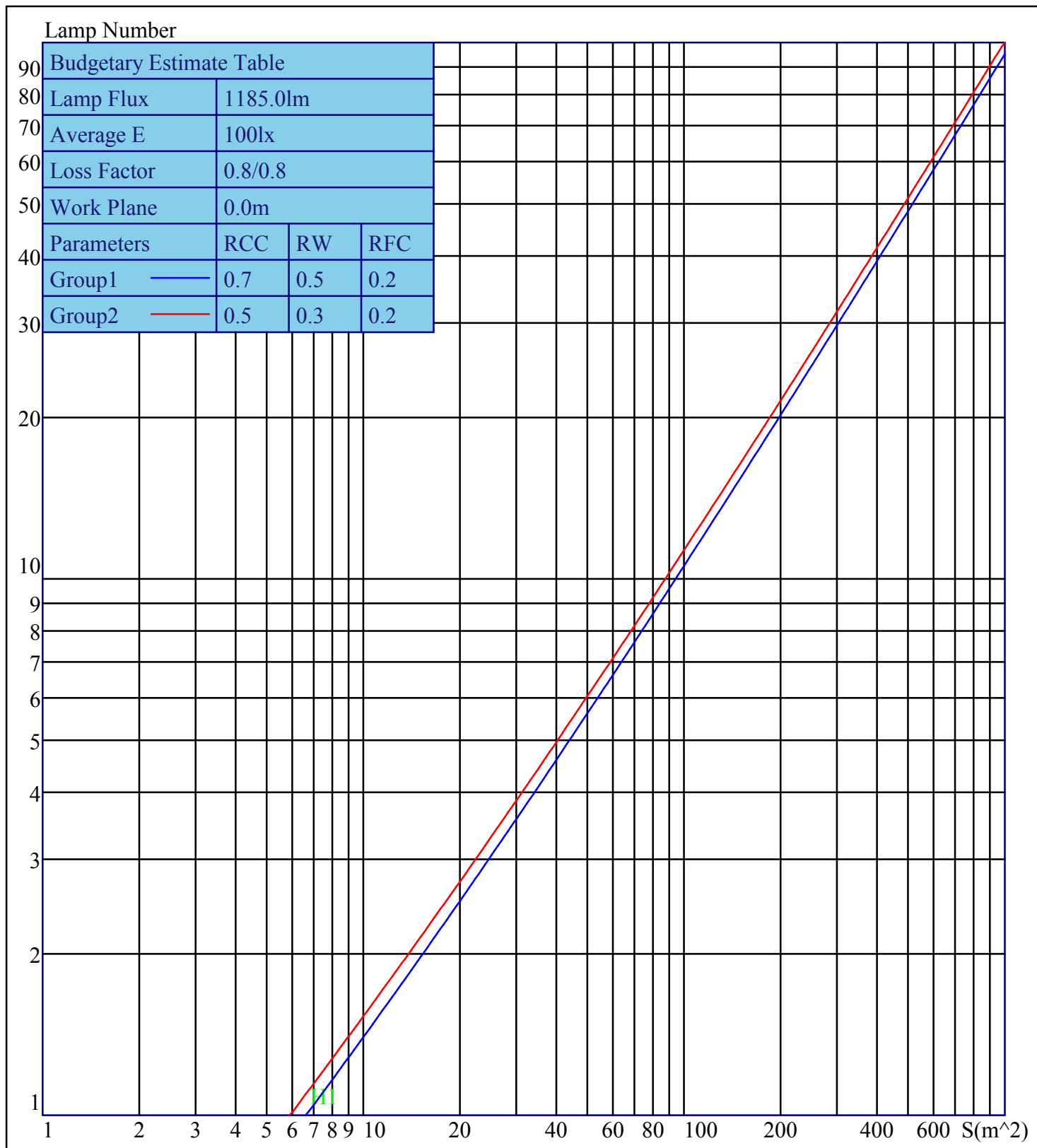
Gama(deg)	45	50	55	60	65	70	75	80	85
C0	6644	5622	5107	4669	3979	3111	1694	566	234
C90	7058	6543	6227	5724	4773	3544	3183	1571	0

Luminance Limiting Curve



Luminous Size: Length(m)=0.560 Width(m)=0.045 Height(m)=0.000 Area(m^2)=0.025200
 Luminous Type: Without Luminous Side
 Luminous Curves: C0-C180 Color: — C90-C270 Color: —

Indoor Budgetary Estimate Table



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

Coefficients of Utilization - Zonal Cavity Method																		
Coefficient	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	78	78	78	78	77	77	77	77	73	73	73	70	70	70	67	67	67	66
1	74	72	71	69	73	71	69	68	68	67	66	66	65	64	64	63	62	61
2	70	67	64	62	69	66	63	61	64	62	60	62	60	58	60	58	57	56
3	67	62	59	56	65	61	58	56	60	57	55	58	56	54	56	55	53	52
4	63	58	54	51	62	57	54	51	56	53	51	55	52	50	53	51	49	48
5	60	55	51	48	59	54	50	48	53	50	47	52	49	47	51	48	46	45
6	57	52	48	45	56	51	47	45	50	47	44	49	46	44	48	46	44	43
7	55	49	45	42	54	48	45	42	47	44	42	47	44	41	46	43	41	40
8	53	46	42	40	52	46	42	40	45	42	40	45	42	39	44	41	39	38
9	50	44	40	38	50	44	40	38	43	40	38	43	40	37	42	39	37	37
10	48	42	39	36	48	42	38	36	41	38	36	41	38	36	40	38	36	35

Unified Glare Rating

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	23.5	25.8	24.3	26.5	27.0	24.8	27.1	25.5	27.7	28.3
	Y=3H	25.3	27.7	26.1	28.3	28.9	27.0	29.3	27.7	29.9	30.5
	Y=4H	26.3	28.3	27.0	28.9	29.5	28.1	30.1	28.8	30.7	31.3
	Y=6H	26.4	28.4	27.1	29.0	29.6	28.3	30.3	29.1	30.9	31.5
	Y=8H	26.4	28.3	27.1	28.9	29.5	28.3	30.3	29.0	30.9	31.5
	Y=12H	26.3	28.2	27.0	28.9	29.4	28.2	30.2	29.0	30.8	31.4
X=4H	Y=2H	24.1	26.1	24.8	26.7	27.3	25.1	27.1	25.8	27.7	28.3
	Y=3H	26.0	28.0	26.7	28.7	29.2	27.4	29.5	28.2	30.1	30.7
	Y=4H	25.0	26.2	26.0	27.0	27.8	26.6	27.8	27.5	28.6	29.4
	Y=6H	25.3	26.4	26.2	27.2	28.0	27.0	28.1	27.9	28.9	29.7
	Y=8H	25.2	26.3	26.2	27.1	27.9	27.0	28.0	27.9	28.9	29.6
	Y=12H	24.3	25.1	25.3	26.1	26.9	26.0	26.9	27.1	27.8	28.7
X=8H	Y=4H	25.0	26.0	25.9	26.9	27.6	26.5	27.6	27.4	28.4	29.2
	Y=6H	24.3	25.1	25.4	26.1	26.9	26.0	26.8	27.1	27.7	28.6
	Y=8H	23.8	24.4	24.9	25.5	26.4	25.5	26.1	26.6	27.2	28.1
	Y=12H	23.8	24.3	24.9	25.4	26.3	25.5	26.1	26.6	27.1	28.0
X=12H	Y=4H	24.0	24.8	25.1	25.8	26.7	25.5	26.4	26.6	27.3	28.2
	Y=6H	23.8	24.4	24.9	25.4	26.3	25.5	26.1	26.6	27.1	28.0
	Y=8H	23.8	24.3	24.9	25.4	26.3	25.5	26.1	26.6	27.1	28.0
Variations with the objerver position at spacings											
	S=1.0H	2.1/-1.5					2.5/-2.4				
	S=1.5H	-1.2/-22.8					-2.4/-24.3				
	S=2.0H	-1.2/-22.8					-2.4/-24.3				