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Nata

Client: NT

LumCAT: 1-1767-LM

Luminaire: 92.70.494.00 LED HOLDER

Report No: 20260120-B012

Ballast type: DC

Test No: 20260120-C012

Voltage(V): 34.600

LampCAT: LUMINUS CXM-11 (TC)

Current(A): 0.454

Lamp flux(lm): 2195.5

Power (W): 15.700

Number of Lamps: 1

PF: 0.000

Length(mm): 50

Width(mm): 50

Phm Type: C

Height(mm): 22

Photometric Results

Lumens(lm): 2098.80, Efficiency(%): 95.59% , Luminous Efficacy(lm/W): 133.68

Central intensity(cd): 6225.585, Maximum intensity(cd): 6225.585

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=26.0

[C90/270]Total=26.0

Field angle(10%Imax): [C0/180]Total=70.2

[C90/270]Total=70.2

Maximum s/h(1/2): C0_180=0.44 C90_270=0.44

Maximum s/h(1/4): C0_180=0.43 C90_270=0.43

Up flux rate of lamp(%): 0.00%

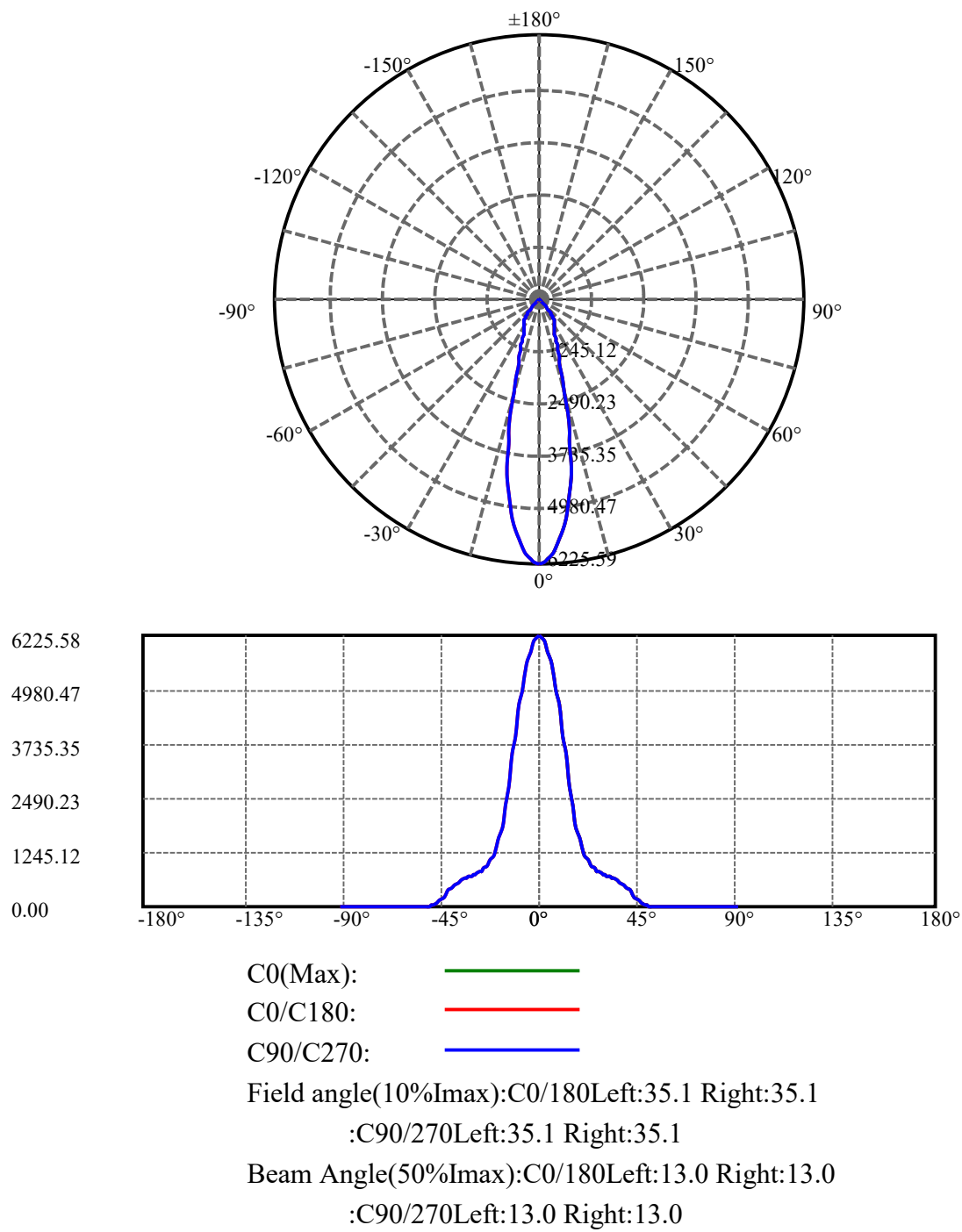
Down flux rate of lamp(%): 95.59%

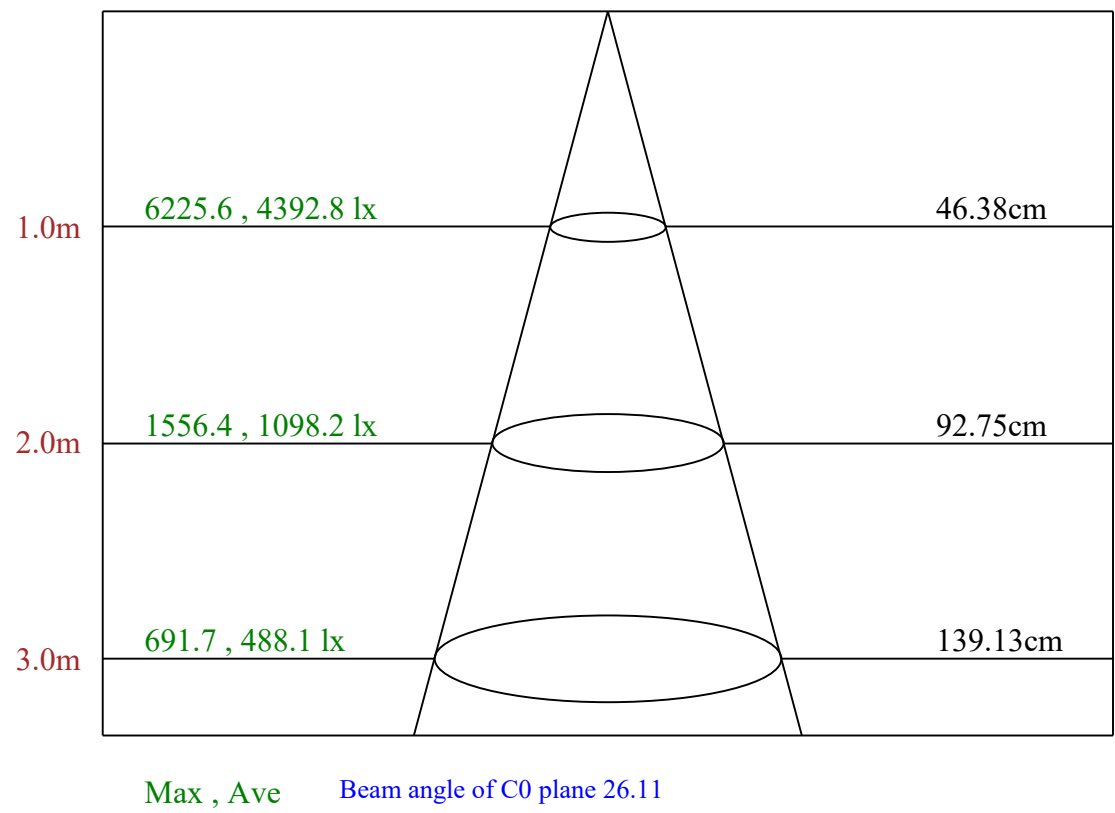
Up flux rate of LUM(%): - -

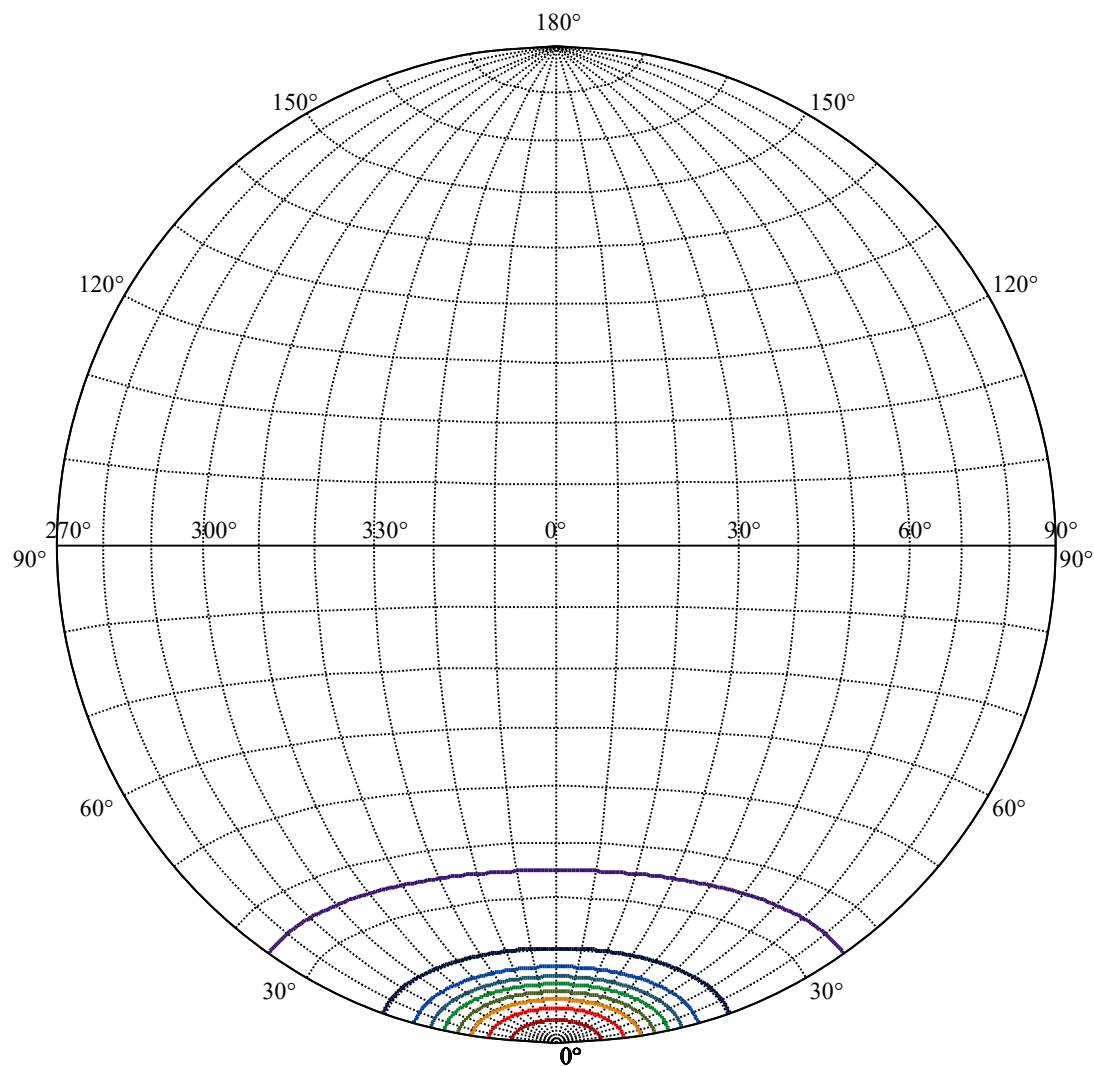
Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.321%





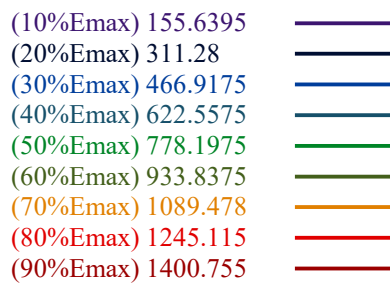


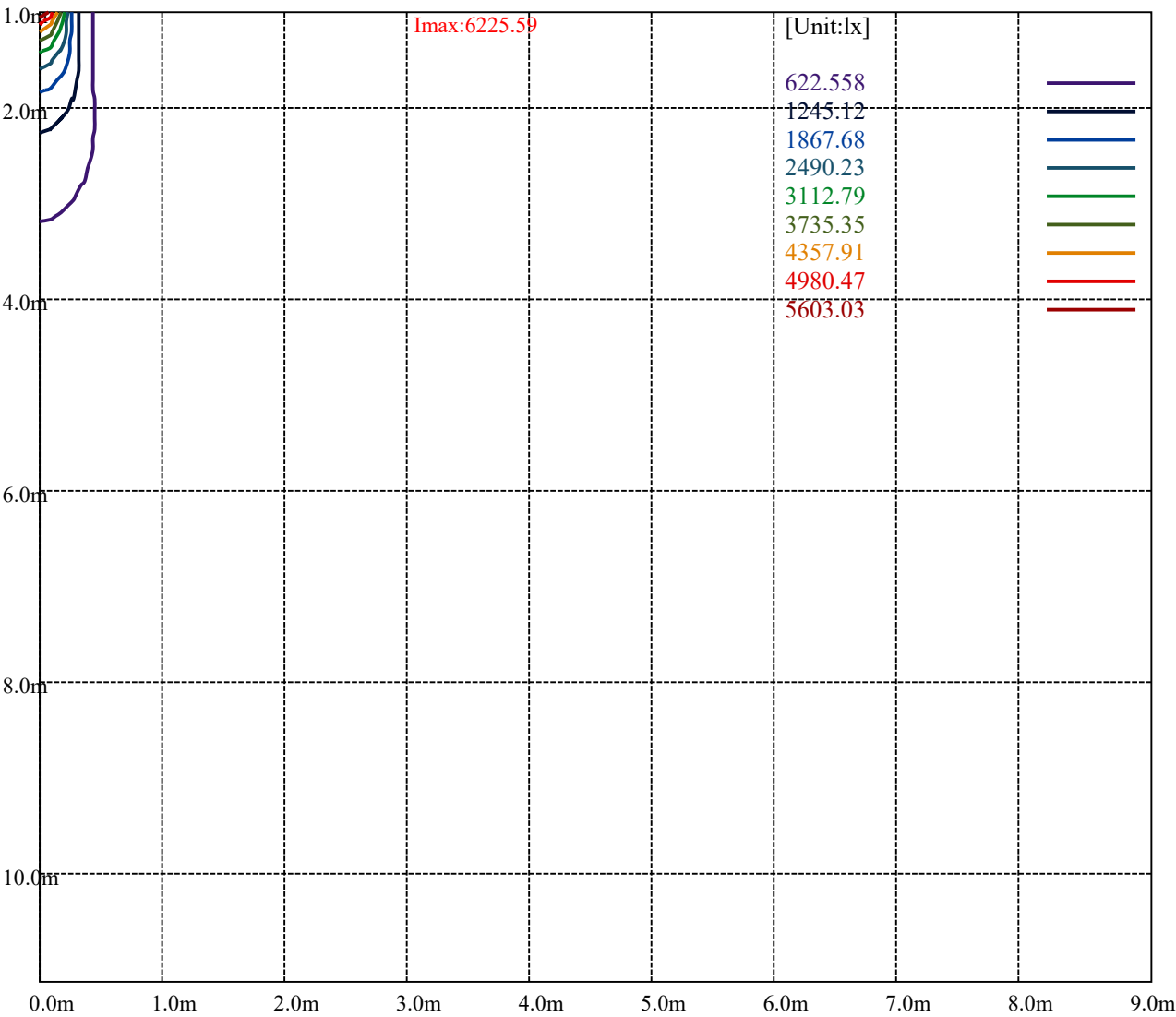
House

[Unit:cd]

Road

Imax:6225.59	
(10%Imax) 622.558	
(20%Imax) 1245.12	
(30%Imax) 1867.68	
(40%Imax) 2490.23	
(50%Imax) 3112.79	
(60%Imax) 3735.35	
(70%Imax) 4357.91	
(80%Imax) 4980.47	
(90%Imax) 5603.03	





Luminance Table

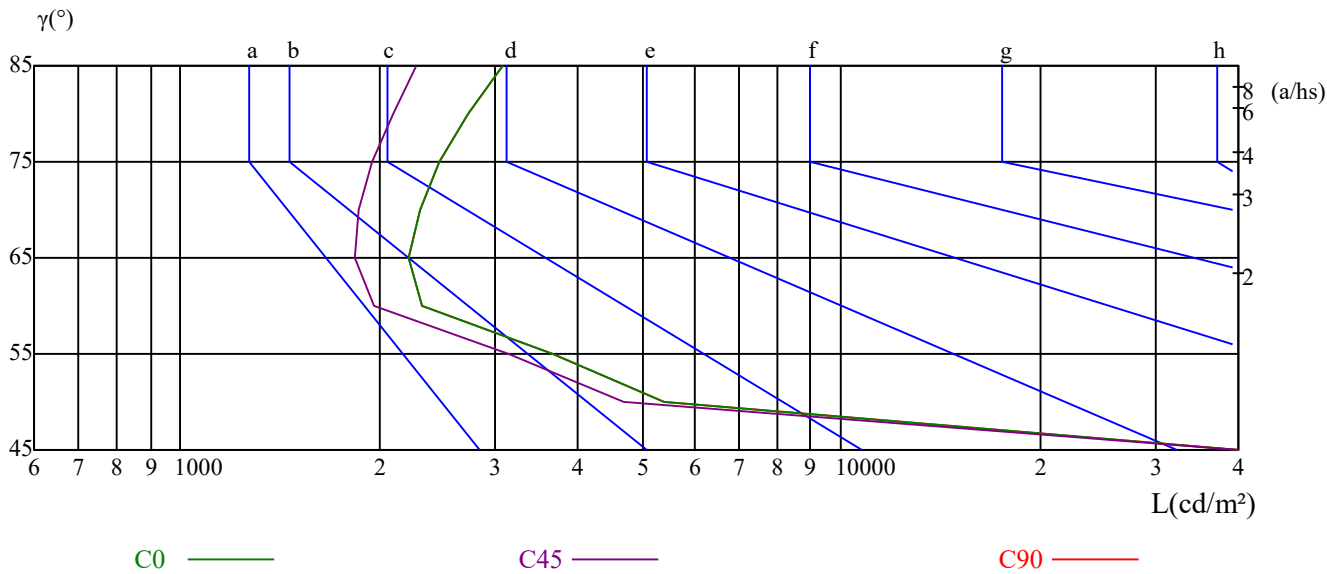
γ	45	50	55	60	65	70	75	80	85
C0	54357	5412	3670	2328	2219	2302	2473	2731	3070
C45	47919	4703	3141	1959	1834	1863	1954	2096	2273
C90	54357	5412	3670	2328	2219	2302	2473	2731	3070

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4503	4503	4503	6904	6904	6904	19910	19910	19910

Glare Table

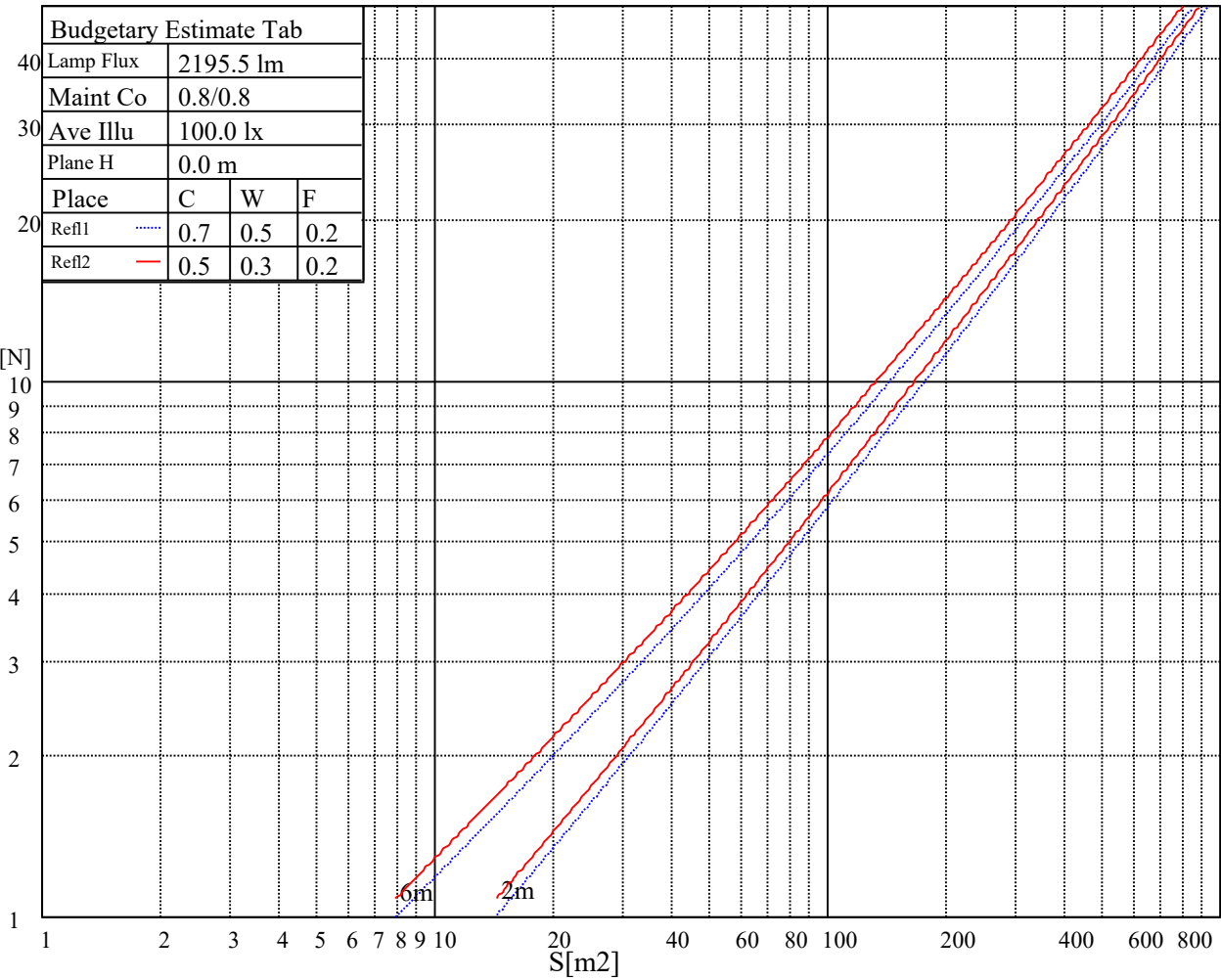
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

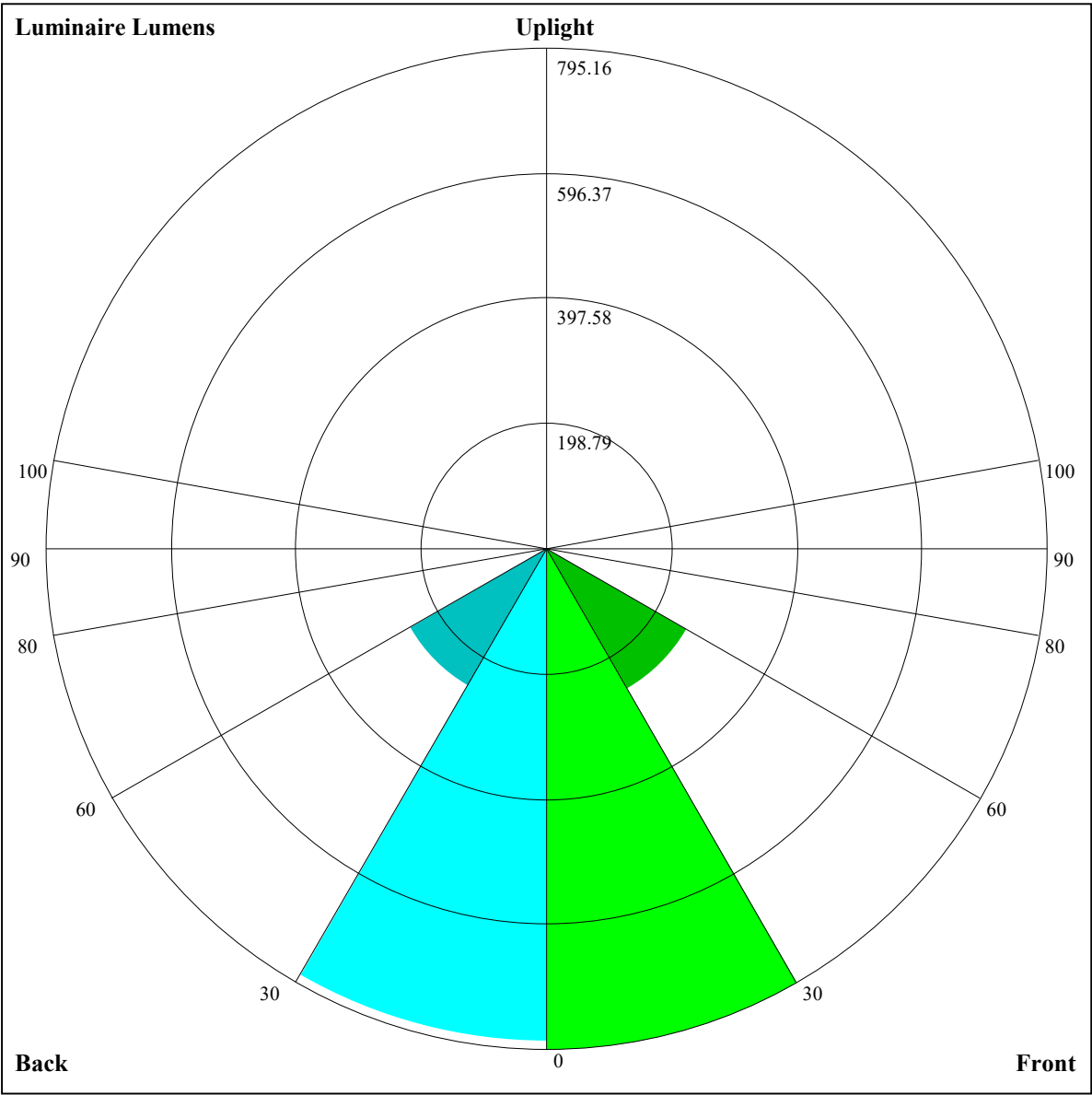


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	22.02	23.00	22.38	23.31	23.62	21.88	22.86	22.24	23.17	23.48
	3H	21.82	22.69	22.21	23.02	23.37	21.68	22.55	22.07	22.88	23.23
	4H	21.73	22.52	22.13	22.88	23.25	21.59	22.38	21.99	22.74	23.11
	6H	21.65	22.38	22.07	22.76	23.16	21.51	22.24	21.93	22.62	23.01
	8H	21.58	22.28	22.01	22.67	23.07	21.44	22.14	21.87	22.53	22.93
	12H	21.53	22.18	21.95	22.58	23.00	21.39	22.04	21.81	22.44	22.86
4H	2H	21.71	22.51	22.11	22.86	23.23	21.57	22.37	21.97	22.72	23.09
	3H	21.48	22.14	21.90	22.54	22.96	21.34	22.00	21.76	22.40	22.81
	4H	21.41	21.99	21.85	22.41	22.86	21.27	21.85	21.71	22.27	22.72
	6H	21.29	21.80	21.77	22.25	22.70	21.15	21.66	21.63	22.11	22.57
	8H	21.25	21.72	21.74	22.18	22.65	21.11	21.58	21.60	22.04	22.51
	12H	21.22	21.66	21.71	22.11	22.63	21.08	21.52	21.57	21.97	22.49
8H	4H	21.21	21.68	21.70	22.14	22.62	21.07	21.54	21.56	22.00	22.48
	6H	21.09	21.47	21.60	21.95	22.47	20.95	21.34	21.46	21.81	22.33
	8H	21.10	21.43	21.64	21.95	22.45	20.97	21.29	21.50	21.81	22.31
	12H	21.09	21.34	21.63	21.86	22.38	20.95	21.20	21.49	21.72	22.24
12H	4H	21.16	21.59	21.65	22.05	22.57	21.02	21.45	21.51	21.91	22.43
	6H	21.08	21.40	21.61	21.92	22.42	20.94	21.26	21.47	21.78	22.28
	8H	21.06	21.31	21.60	21.82	22.35	20.92	21.17	21.46	21.69	22.21
Variation with the observer position at spacings:											
S = 1.0H		3.6/-14.6					3.6/-14.6				
S = 1.5H		6.1/-13.1					6.1/-13.1				
S = 2.0H		8.1/-11.9					8.1/-11.9				
Standard tables:		BK0					BK0				
Uncorrected UGR		2.4					2.4				

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFCIENTS OF UTILIZATION RHOFC=20 CU															
0	1.14	1.14	1.14	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	0.98	0.98	0.98	0.96
1	1.07	1.04	1.02	1.04	1.03	1.01	1.01	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.90
2	1.00	0.97	0.94	0.98	0.95	0.93	0.95	0.93	0.90	0.93	0.90	0.89	0.90	0.88	0.87	0.85
3	0.94	0.90	0.87	0.93	0.89	0.86	0.90	0.87	0.84	0.88	0.85	0.83	0.86	0.84	0.82	0.80
4	0.89	0.84	0.81	0.88	0.84	0.80	0.86	0.82	0.79	0.84	0.81	0.78	0.82	0.80	0.77	0.76
5	0.84	0.79	0.76	0.83	0.79	0.75	0.82	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.73	0.72
6	0.80	0.75	0.71	0.79	0.75	0.71	0.78	0.74	0.71	0.77	0.73	0.70	0.76	0.72	0.70	0.69
7	0.76	0.71	0.68	0.76	0.71	0.67	0.75	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.66	0.65
8	0.73	0.68	0.64	0.72	0.68	0.64	0.71	0.67	0.64	0.70	0.67	0.64	0.70	0.66	0.63	0.62
9	0.70	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.60
10	0.67	0.62	0.59	0.66	0.62	0.59	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.57



Luminaire Lumens:

FL=795.16,FM=257.07,FH=4.76,FVH=2.37

BL=781.38,BM=251.05,BH=4.74,BVH=2.36

UL=0,UH=0

BUG Rating:B2-U0-G0

Intensity data(cd)

C/ γ (°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	6247.98	6223.86	6147.22	6031.82	5900.06	5703.71	5526.30	5276.56	5037.15
45.0	6202.33	6250.56	6246.25	6160.14	6049.04	5905.22	5701.99	5521.14	5264.50
90.0	6250.56	6222.14	6141.19	5981.87	5825.13	5655.48	5410.91	5180.97	4924.34
135.0	6201.47	6244.53	6229.89	6137.74	6019.76	5866.47	5691.65	5457.41	5240.39
180.0	6247.98	6199.75	6105.88	5978.43	5791.55	5622.76	5430.71	5205.08	4887.31
225.0	6202.33	6107.60	5938.81	5788.96	5623.62	5432.43	5158.58	4899.36	4597.09
270.0	6250.56	6208.36	6111.91	5949.15	5799.30	5637.40	5457.41	5193.03	4950.17
315.0	6201.47	6105.88	5951.73	5805.33	5639.12	5407.46	5189.58	4941.56	4580.72
360.0	6247.98	6223.86	6147.22	6031.82	5900.06	5703.71	5526.30	5276.56	5037.15
C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4767.60	4378.35	4025.26	3657.53	3271.72	2809.27	2466.52	1959.28	1688.18
45.0	5018.21	4738.32	4426.57	3996.84	3629.12	3254.50	2882.47	2446.71	2136.68
90.0	4627.23	4213.00	3850.44	3479.27	3102.93	2653.39	2330.45	1686.28	1686.28
135.0	4988.06	4633.26	4311.17	3865.94	3493.91	3120.16	2754.15	2327.87	2031.62
180.0	4590.20	4173.38	3812.55	3440.52	2972.89	2610.33	2279.64	1992.87	1704.37
225.0	4174.24	3819.44	3449.99	2986.67	2631.86	2309.78	1679.22	1679.22	1541.61
270.0	4668.56	4348.20	3900.39	3520.61	3142.55	2701.62	2380.40	2095.35	1797.38
315.0	4252.61	3896.08	3430.18	3061.60	2707.65	2386.43	1694.90	1694.90	1601.37
360.0	4767.60	4378.35	4025.26	3657.53	3271.72	2809.27	2466.52	1959.28	1688.18
C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1640.47	1472.80	1333.89	1193.69	1102.75	1025.84	946.27	895.11	850.68
45.0	1875.74	1617.39	1449.46	1310.81	1172.16	1083.46	992.17	933.61	883.66
90.0	1547.20	1391.93	1232.01	1129.62	1044.87	960.39	905.88	861.01	821.57
135.0	1784.46	1585.53	1385.73	1258.28	1152.35	1066.23	979.25	921.55	865.58
180.0	1512.33	1365.06	1242.77	1118.76	1038.67	969.78	900.88	855.24	807.88
225.0	1351.54	1230.37	1130.56	1049.01	980.89	910.44	862.99	822.09	780.92
270.0	1600.17	1443.43	1283.25	1175.60	1086.04	1011.12	935.33	884.52	841.46
315.0	1400.63	1273.00	1166.82	1079.67	990.53	931.97	882.37	827.60	792.55
360.0	1640.47	1472.80	1333.89	1193.69	1102.75	1025.84	946.27	895.11	850.68
C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	805.81	776.79	751.99	725.98	708.75	693.60	679.90	662.77	643.13
45.0	841.46	798.40	770.85	748.46	729.51	707.98	693.34	679.56	666.64
90.0	782.82	758.36	738.03	720.21	700.83	686.02	672.15	654.76	630.73
135.0	825.10	792.38	759.65	738.98	721.76	706.26	687.31	674.39	660.61
180.0	777.74	751.90	723.48	706.26	689.89	676.98	659.75	642.53	615.83
225.0	754.22	730.89	705.65	688.86	673.96	656.65	640.98	616.44	575.53
270.0	805.29	767.40	742.43	720.90	697.65	681.28	665.78	648.56	628.75
315.0	756.89	732.95	711.85	693.34	673.53	659.67	645.89	626.51	587.93
360.0	805.81	776.79	751.99	725.98	708.75	693.60	679.90	662.77	643.13
C/ γ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	613.51	577.25	523.51	477.10	416.21	367.73	316.92	256.03	207.29
45.0	639.95	608.08	562.44	518.52	471.15	445.32	445.32	304.17	251.90
90.0	586.98	546.51	501.98	453.76	393.22	344.22	294.44	245.27	186.10
135.0	639.08	597.75	558.13	513.35	453.93	441.87	441.87	284.19	235.71
180.0	583.97	529.71	486.66	439.29	439.29	325.44	275.92	217.54	171.12
225.0	536.60	492.68	448.16	398.30	336.55	286.95	239.06	179.73	136.24
270.0	588.27	549.52	505.60	459.96	436.71	436.71	299.69	251.21	205.22
315.0	550.99	509.13	465.04	408.55	359.97	298.83	249.49	201.17	146.14
360.0	613.51	577.25	523.51	477.10	416.21	367.73	316.92	256.03	207.29

Intensity data(cd)

C/ γ (°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	160.52	116.17	68.21	38.41	19.81	13.26	11.97	11.20	10.33
45.0	192.04	147.18	104.81	67.78	33.33	17.31	12.40	11.28	10.51
90.0	140.80	99.29	62.69	28.68	16.36	12.66	11.97	11.11	10.08
135.0	176.03	133.48	92.92	58.04	26.96	15.85	13.26	12.49	11.54
180.0	126.68	78.02	45.73	24.11	14.90	12.66	12.06	11.37	10.85
225.0	87.84	55.29	30.23	14.55	12.31	11.54	10.68	9.65	8.96
270.0	148.64	107.56	70.27	33.50	18.17	13.26	12.49	11.71	10.51
315.0	105.15	68.38	40.05	18.17	13.69	12.83	11.88	10.68	9.82
360.0	160.52	116.17	68.21	38.41	19.81	13.26	11.97	11.20	10.33
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	9.47	8.87	8.10	7.15	5.94	5.77	5.43	5.25	5.17
45.0	9.65	8.87	8.27	7.66	6.72	5.86	5.68	5.43	5.25
90.0	9.30	8.53	7.49	6.54	5.68	5.51	5.25	5.08	4.91
135.0	10.68	9.99	9.30	8.53	7.58	5.68	5.43	5.34	5.08
180.0	10.51	10.33	9.99	7.32	5.68	5.60	5.34	5.25	5.08
225.0	8.35	7.75	6.72	5.68	5.60	5.25	5.08	4.99	4.82
270.0	9.65	8.78	8.01	6.72	5.68	5.51	5.25	5.08	4.99
315.0	8.96	7.84	6.89	5.68	5.51	5.34	5.17	4.99	4.82
360.0	9.47	8.87	8.10	7.15	5.94	5.77	5.43	5.25	5.17
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	4.99	4.91	4.82	4.74	4.74	4.74	4.65	4.65	4.56
45.0	4.99	4.91	4.91	4.74	4.74	4.65	4.65	4.56	4.56
90.0	4.91	4.82	4.65	4.65	4.65	4.56	4.56	4.48	4.48
135.0	4.99	4.82	4.82	4.74	4.74	4.65	4.65	4.65	4.56
180.0	4.91	4.82	4.82	4.74	4.65	4.65	4.65	4.56	4.56
225.0	4.82	4.74	4.74	4.56	4.65	4.56	4.56	4.48	4.48
270.0	4.82	4.82	4.65	4.65	4.65	4.65	4.56	4.56	4.48
315.0	4.82	4.82	4.65	4.65	4.56	4.56	4.56	4.56	4.48
360.0	4.99	4.91	4.82	4.74	4.74	4.74	4.65	4.65	4.56
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	4.56	4.56	4.48	4.48	4.56	4.48	4.48	4.48	4.48
45.0	4.56	4.56	4.56	4.48	4.48	4.48	4.48	4.39	4.48
90.0	4.48	4.48	4.48	4.48	4.48	4.39	4.39	4.39	4.39
135.0	4.56	4.48	4.48	4.48	4.48	4.48	4.39	4.39	4.39
180.0	4.56	4.48	4.48	4.48	4.48	4.48	4.39	4.48	4.39
225.0	4.48	4.48	4.48	4.48	4.39	4.48	4.39	4.39	4.39
270.0	4.48	4.48	4.39	4.39	4.39	4.39	4.39	4.39	4.39
315.0	4.48	4.48	4.48	4.48	4.39	4.39	4.39	4.39	4.39
360.0	4.56	4.56	4.48	4.48	4.56	4.48	4.48	4.48	4.48
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	4.48	4.39	4.48	4.48	4.39	4.31	4.31	4.31	4.22
45.0	4.39	4.48	4.39	4.39	4.39	4.31	4.31	4.31	4.31
90.0	4.39	4.39	4.39	4.31	4.22	4.22	4.31	4.22	4.31
135.0	4.48	4.39	4.39	4.39	4.39	4.31	4.22	4.31	4.31
180.0	4.48	4.39	4.39	4.39	4.31	4.31	4.22	4.31	4.22
225.0	4.39	4.39	4.39	4.31	4.39	4.22	4.22	4.31	4.31
270.0	4.39	4.39	4.39	4.31	4.31	4.31	4.31	4.31	4.22
315.0	4.39	4.39	4.31	4.31	4.31	4.31	4.22	4.31	4.22
360.0	4.48	4.39	4.48	4.48	4.39	4.31	4.31	4.31	4.22

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	4.31
45.0	4.31
90.0	4.22
135.0	4.22
180.0	4.31
225.0	4.22
270.0	4.22
315.0	4.31
360.0	4.31