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Nata

Client: NT

LumCAT: 2-3122-LM

Luminaire: 92.70.412.00 LED HOLDER

Report No: 20251226-B009

Ballast type: DC

Test No: 20251226-C009

Voltage(V): 34.430

LampCAT: PHILIPS SLM 1208 L15 1919 G8N

Current(A): 0.576

Lamp flux(lm): 3373.1

Power (W): 19.790

Number of Lamps: 1

PF: 0.000

Length(mm): 69

Width(mm): 69

Phm Type: C

Height(mm): 35

Photometric Results

Lumens(lm): 3307.77, Efficiency(%): 98.06% , Luminous Efficacy(lm/W): 167.14

Central intensity(cd): 16162.140, Maximum intensity(cd): 16162.140

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=19.2

[C90/270]Total=19.2

Field angle(10%Imax): [C0/180]Total=41.0

[C90/270]Total=41.0

Maximum s/h(1/2): C0_180=0.33 C90_270=0.33

Maximum s/h(1/4): C0_180=0.32 C90_270=0.32

Up flux rate of lamp(%): 0.00%

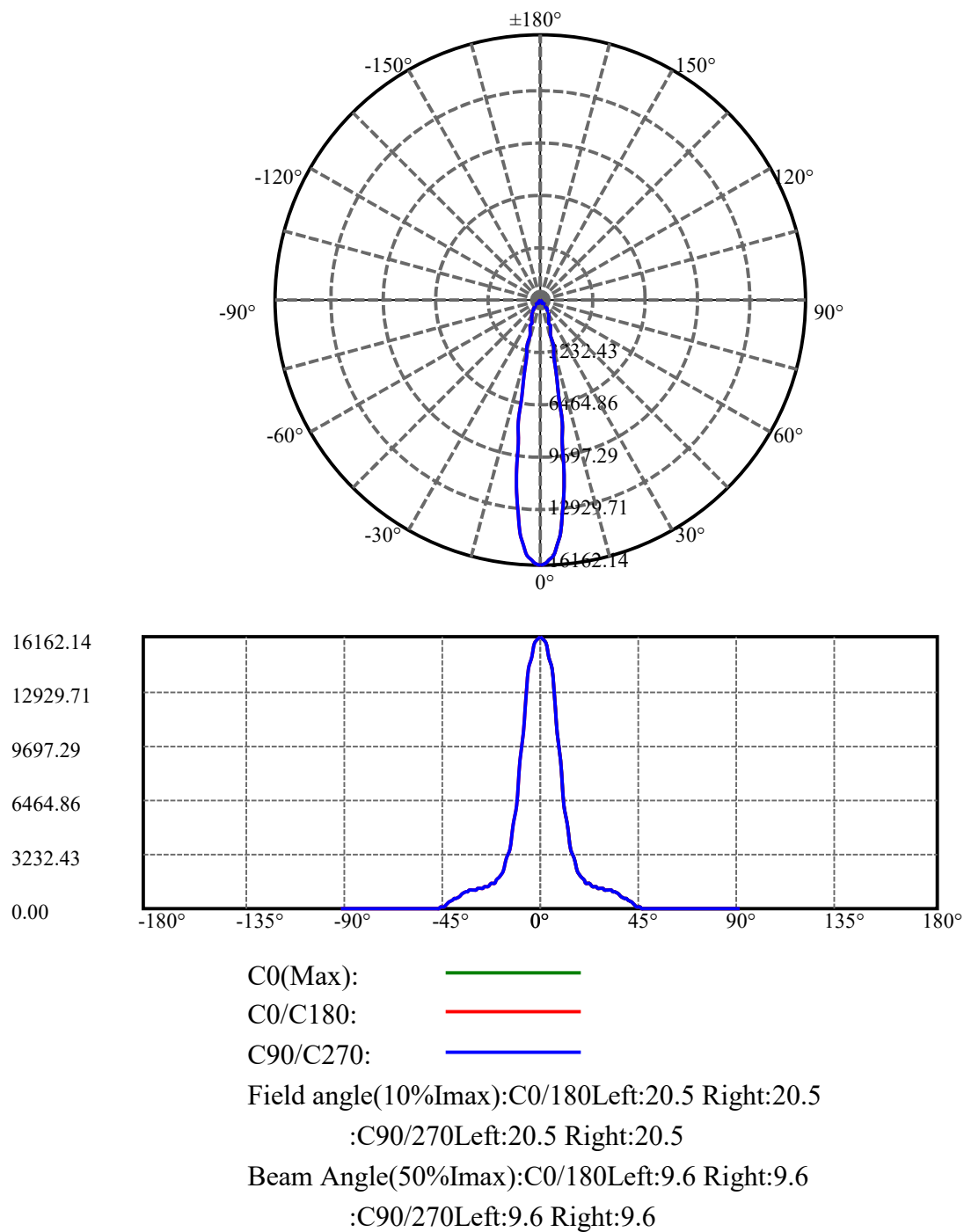
Down flux rate of lamp(%): 98.06%

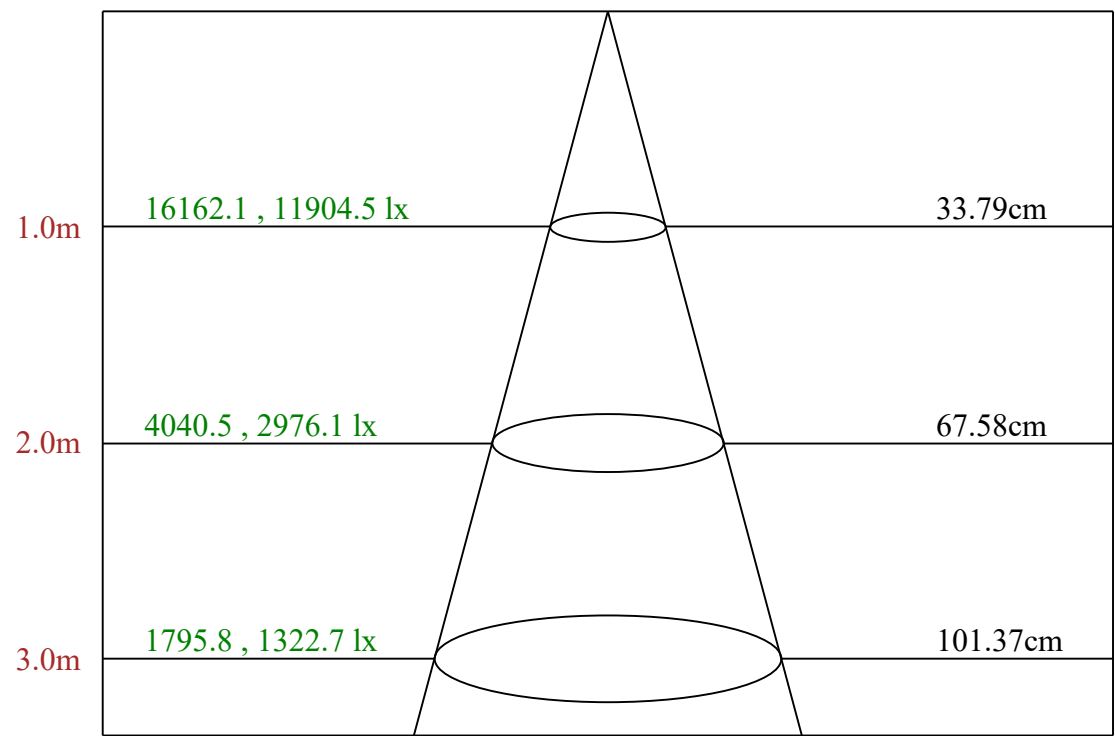
Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

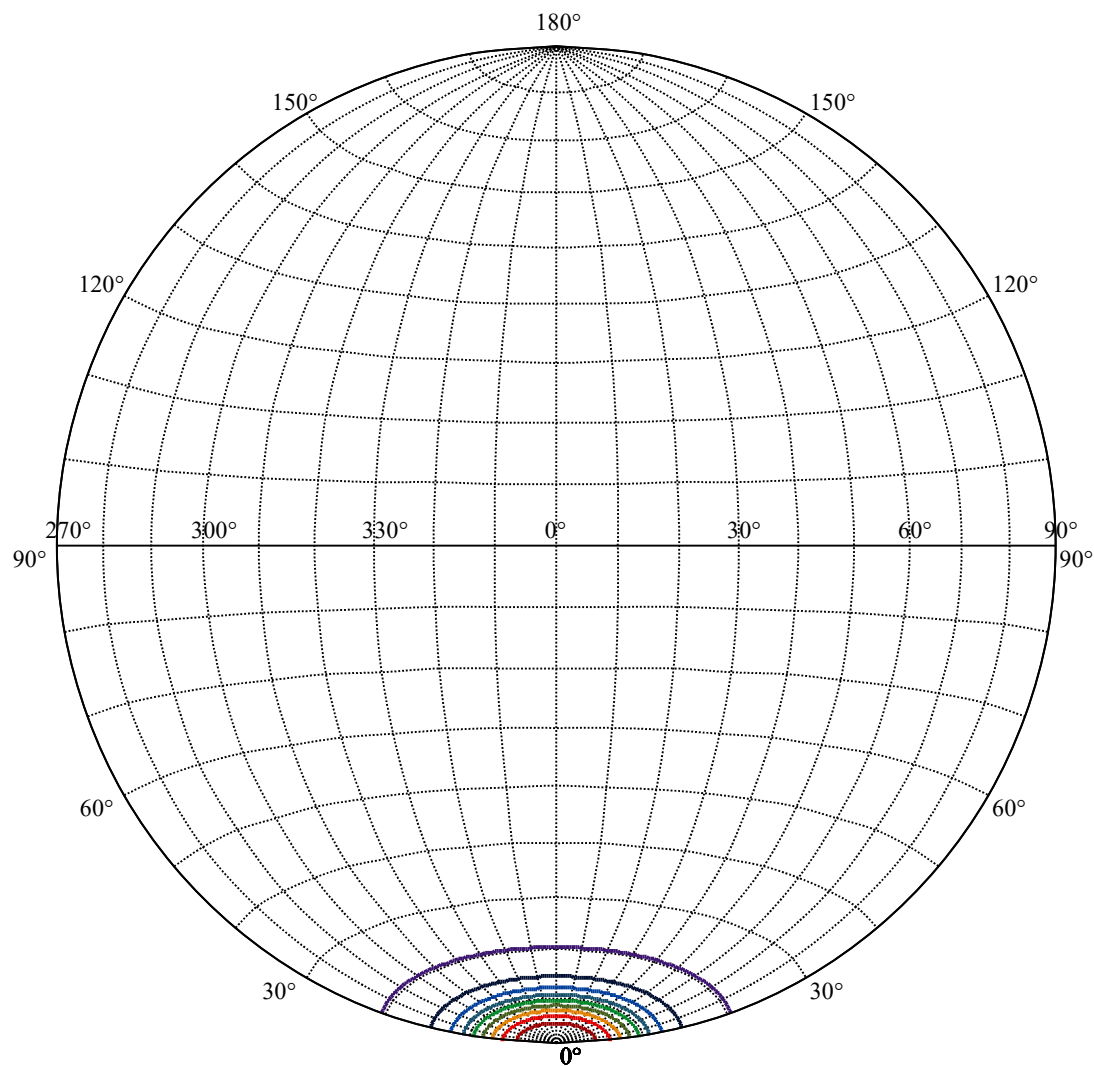
CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.333%





Max , Ave Beam angle of C0 plane 19.18

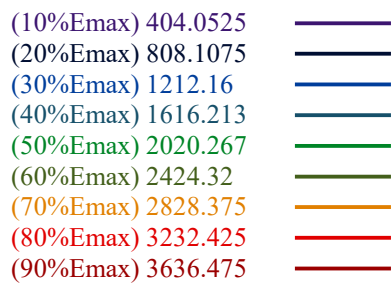


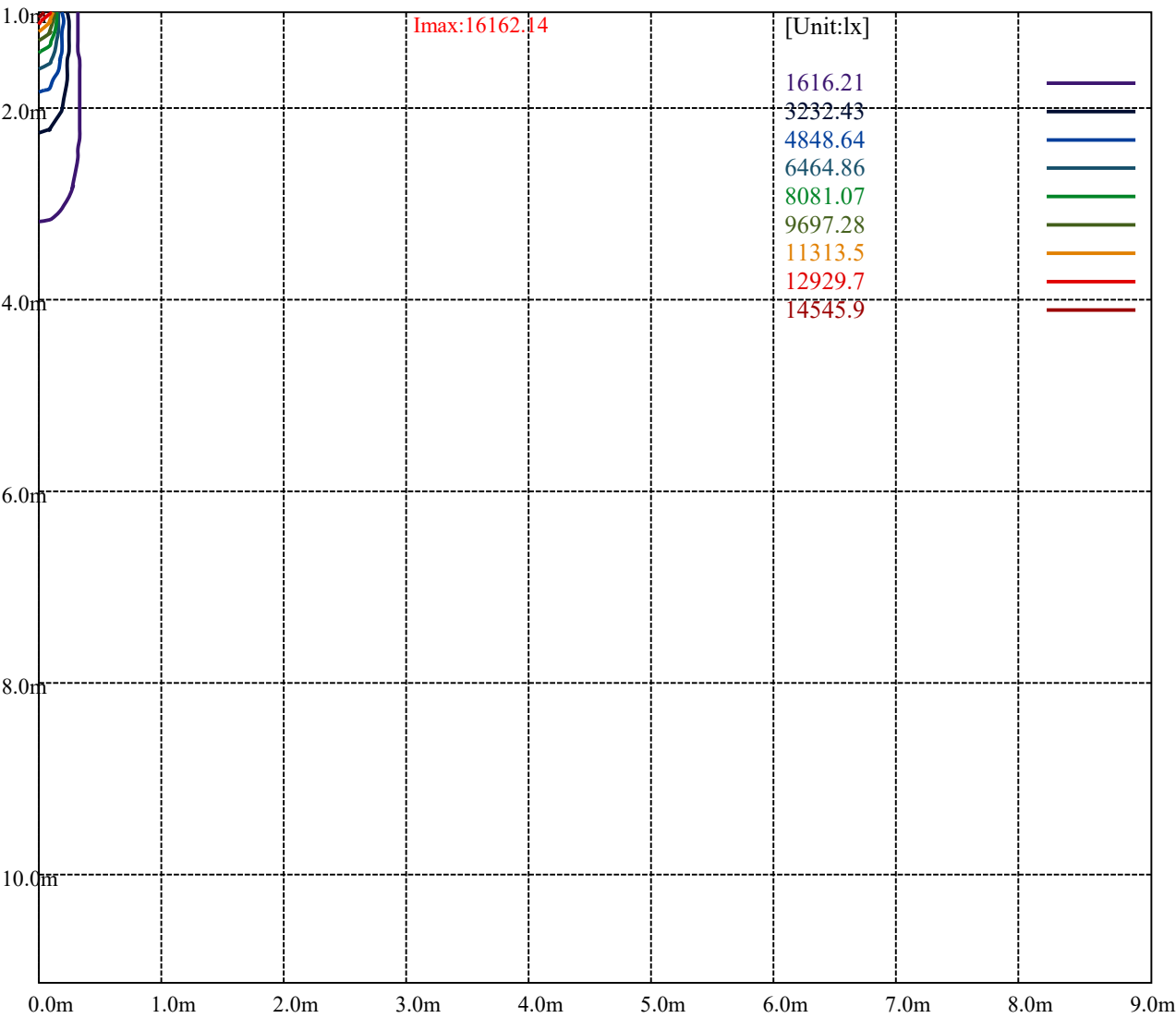
House

[Unit:cd]

Road

Imax:16162.14	
(10%Imax)	1616.21
(20%Imax)	3232.43
(30%Imax)	4848.64
(40%Imax)	6464.86
(50%Imax)	8081.07
(60%Imax)	9697.28
(70%Imax)	11313.5
(80%Imax)	12929.7
(90%Imax)	14545.9





Luminance Table

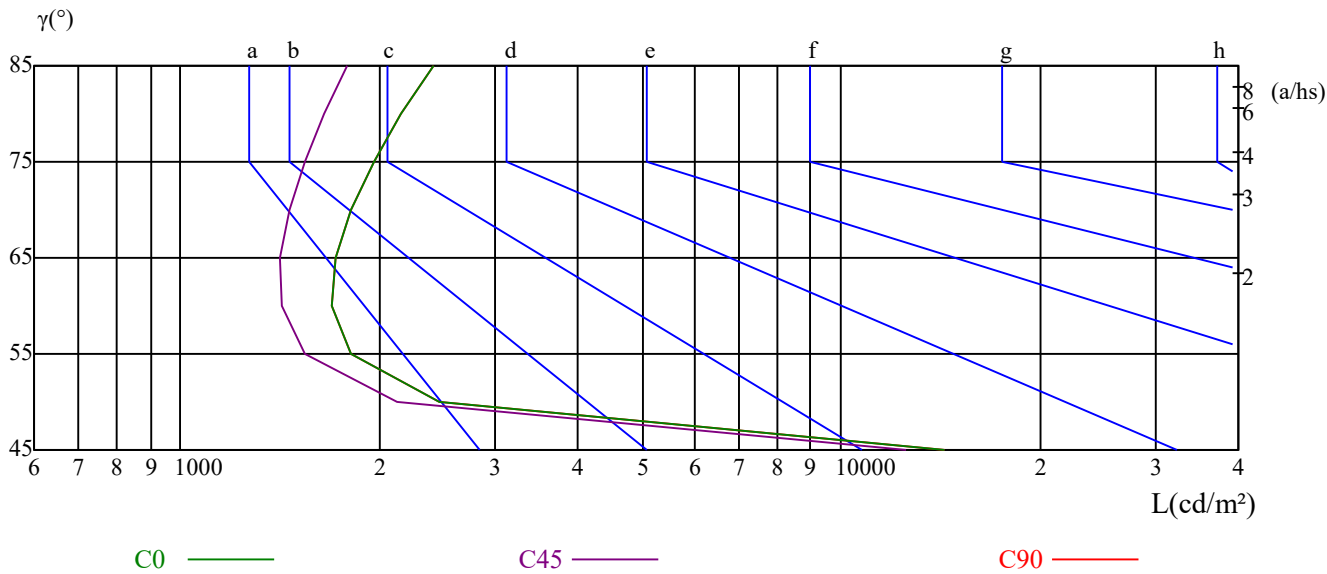
γ	45	50	55	60	65	70	75	80	85
C0	14309	2458	1815	1697	1722	1812	1960	2160	2420
C45	12559	2126	1546	1422	1416	1460	1542	1652	1788
C90	14309	2458	1815	1697	1722	1812	1960	2160	2420

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3595	3595	3595	5670	5670	5670	16448	16448	16448

Glare Table

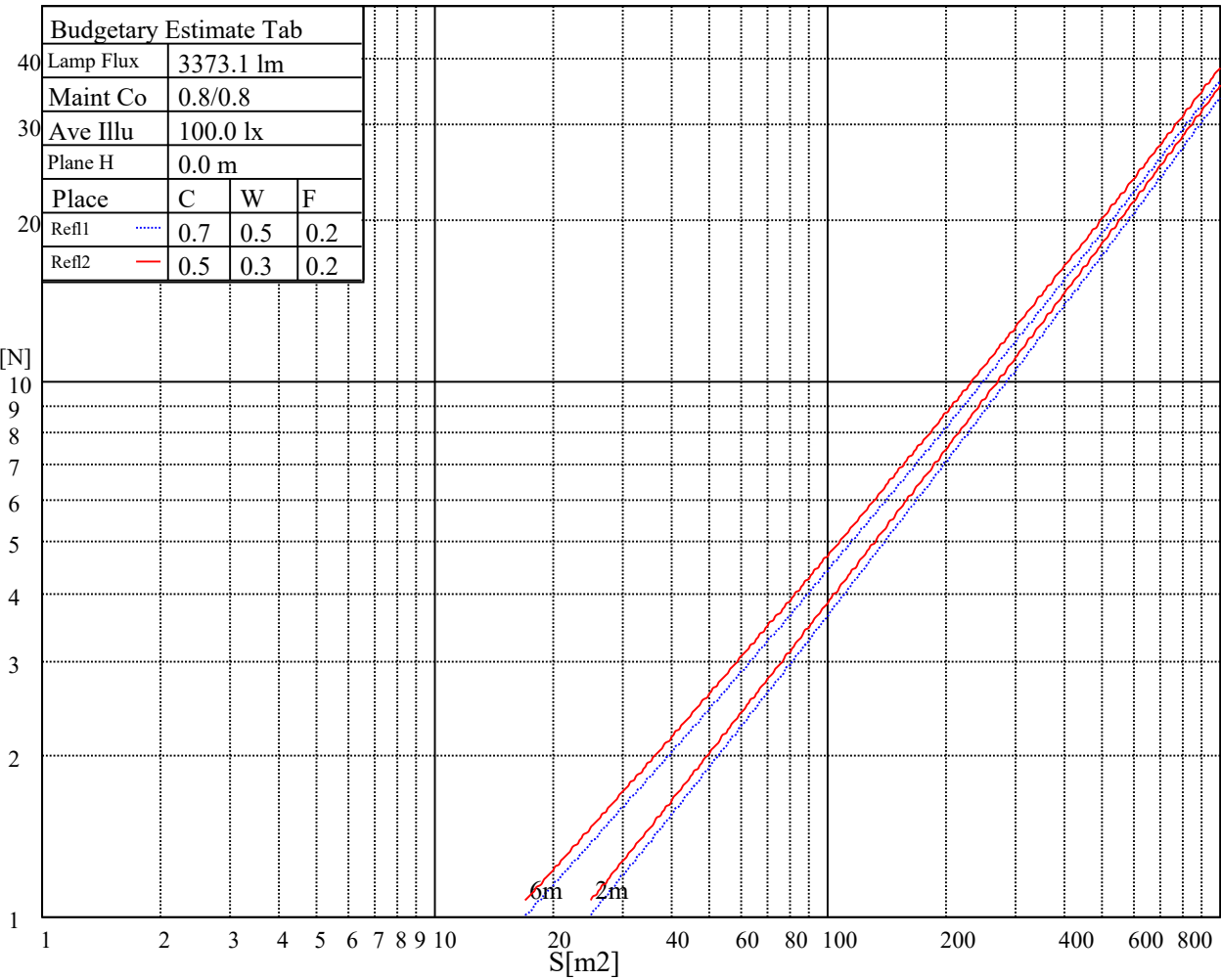
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

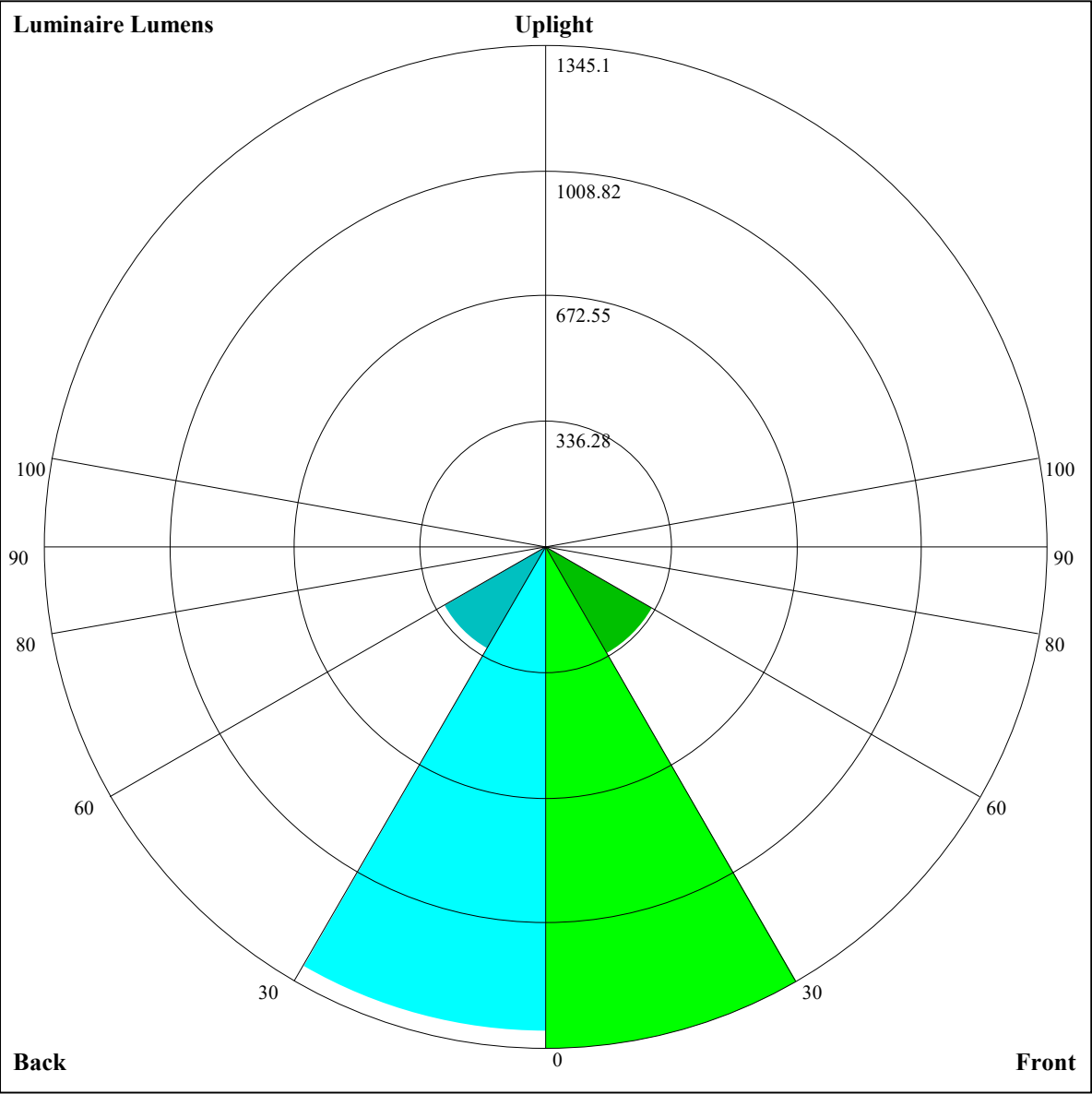


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	20.03	20.96	20.39	21.27	21.59	19.76	20.70	20.12	21.01	21.32
	3H	19.82	20.65	20.21	20.99	21.34	19.56	20.39	19.94	20.72	21.07
	4H	19.73	20.49	20.13	20.85	21.22	19.46	20.23	19.86	20.58	20.95
	6H	19.65	20.35	20.07	20.73	21.13	19.39	20.09	19.81	20.47	20.87
	8H	19.59	20.26	20.01	20.65	21.05	19.33	20.00	19.75	20.38	20.79
	12H	19.54	20.17	19.97	20.56	20.98	19.28	19.91	19.70	20.30	20.72
4H	2H	19.71	20.47	20.11	20.83	21.19	19.44	20.21	19.84	20.56	20.93
	3H	19.47	20.11	19.89	20.50	20.92	19.20	19.84	19.63	20.24	20.66
	4H	19.41	19.96	19.84	20.38	20.83	19.14	19.69	19.58	20.12	20.57
	6H	19.29	19.78	19.77	20.23	20.69	19.03	19.52	19.51	19.97	20.43
	8H	19.26	19.71	19.75	20.17	20.64	19.00	19.45	19.49	19.91	20.38
	12H	19.24	19.66	19.73	20.11	20.63	18.98	19.40	19.47	19.85	20.37
8H	4H	19.21	19.66	19.69	20.12	20.59	18.94	19.39	19.43	19.85	20.33
	6H	19.10	19.47	19.60	19.95	20.46	18.84	19.21	19.34	19.69	20.20
	8H	19.12	19.43	19.66	19.95	20.45	18.86	19.17	19.40	19.70	20.19
	12H	19.12	19.36	19.67	19.88	20.40	18.87	19.10	19.42	19.62	20.15
12H	4H	19.15	19.57	19.65	20.02	20.54	18.89	19.31	19.38	19.76	20.28
	6H	19.09	19.39	19.62	19.92	20.42	18.83	19.14	19.36	19.66	20.16
	8H	19.08	19.31	19.62	19.83	20.36	18.82	19.06	19.37	19.58	20.10
Variation with the observer position at spacings:											
S = 1.0H		4.5/-14.1					4.5/-14.1				
S = 1.5H		7.3/-12.1					7.3/-12.1				
S = 2.0H		9.2/-10.8					9.2/-10.8				
Standard tables:		BK0					BK0				
Uncorrected UGR		0.3					0.3				

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	1.17	1.17	1.17	1.14	1.14	1.14	1.09	1.09	1.09	1.04	1.04	1.04	1.00	1.00	1.00	0.98
1	1.10	1.08	1.06	1.08	1.06	1.04	1.04	1.02	1.01	1.00	0.99	0.98	0.97	0.96	0.95	0.93
2	1.04	1.00	0.98	1.02	0.99	0.97	0.99	0.97	0.94	0.96	0.94	0.92	0.94	0.92	0.91	0.89
3	0.98	0.94	0.91	0.97	0.93	0.90	0.95	0.92	0.89	0.92	0.90	0.88	0.90	0.88	0.86	0.85
4	0.94	0.89	0.86	0.93	0.89	0.85	0.91	0.87	0.84	0.89	0.86	0.83	0.87	0.85	0.82	0.81
5	0.89	0.85	0.81	0.89	0.84	0.81	0.87	0.83	0.80	0.85	0.82	0.80	0.84	0.81	0.79	0.78
6	0.86	0.81	0.77	0.85	0.80	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.81	0.78	0.76	0.75
7	0.82	0.77	0.74	0.82	0.77	0.74	0.80	0.76	0.74	0.79	0.76	0.73	0.78	0.75	0.73	0.72
8	0.79	0.74	0.71	0.79	0.74	0.71	0.78	0.74	0.71	0.77	0.73	0.70	0.76	0.73	0.70	0.69
9	0.76	0.72	0.68	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.71	0.68	0.73	0.70	0.68	0.67
10	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.65	0.64



Luminaire Lumens:

FL=1345.1,FM=331.4,FH=7.31,FVH=3.73

BL=1299.78,BM=315.94,BH=7.29,BVH=3.72

UL=0,UH=0

BUG Rating:B3-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	16184.32	16151.59	16006.91	15741.67	15301.60	14504.15	13635.21	12528.59	11185.14
45.0	16130.06	16185.18	16148.15	15955.24	15652.11	15174.15	14497.26	13351.88	12175.51
90.0	16181.73	16113.70	15844.15	15472.12	14917.52	14142.45	12871.34	11571.82	10134.50
135.0	16152.45	16182.59	16122.31	15923.38	15479.87	14923.54	14137.28	12815.37	11516.70
180.0	16184.32	16104.23	15834.68	15441.12	14709.97	13878.07	12775.75	11456.42	9634.15
225.0	16130.06	15885.49	15549.62	15039.80	14114.03	13119.36	11499.48	10016.52	8521.50
270.0	16181.73	16158.48	16060.31	15740.81	15319.69	14700.50	13620.57	12503.62	11142.08
315.0	16152.45	16012.94	15640.91	15166.40	14485.20	13596.46	12143.64	10735.61	9241.45
360.0	16184.32	16151.59	16006.91	15741.67	15301.60	14504.15	13635.21	12528.59	11185.14
C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	9369.77	7941.92	6650.15	5526.30	4403.32	3727.29	3207.14	2693.01	2374.37
45.0	10798.47	9349.96	7595.73	6365.10	5305.84	4233.67	3586.92	2972.03	2587.08
90.0	8315.68	6994.62	5571.09	4635.84	3894.36	3329.42	2787.74	2444.13	2174.58
135.0	10068.19	8633.46	6962.76	5809.63	4835.63	4060.57	3452.57	2876.44	2514.74
180.0	8189.08	6855.97	5711.46	4541.97	3817.71	3262.25	2829.94	2407.10	2140.13
225.0	7150.50	5968.95	4761.57	4007.18	3416.40	2953.09	2504.41	2220.22	1696.19
270.0	9285.37	7842.89	6551.11	5206.80	4357.68	3694.57	3184.74	2681.81	2369.20
315.0	7798.11	6232.47	5201.64	4359.40	3561.94	3080.54	2689.56	2298.59	1905.89
360.0	9369.77	7941.92	6650.15	5526.30	4403.32	3727.29	3207.14	2693.01	2374.37
C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1923.11	1716.25	1716.25	1593.97	1475.64	1400.63	1339.23	1290.31	1239.42
45.0	2289.11	2053.15	1829.24	1693.17	1578.64	1485.63	1390.90	1332.34	1284.97
90.0	1692.74	1692.74	1633.58	1530.50	1446.19	1359.47	1304.87	1250.53	1214.10
135.0	2166.83	1957.56	1790.49	1627.72	1526.10	1442.57	1359.90	1307.36	1262.58
180.0	1879.19	1724.18	1601.03	1480.46	1402.95	1338.37	1287.56	1235.02	1198.85
225.0	1696.19	1633.41	1528.95	1423.19	1356.02	1288.59	1245.19	1208.33	1178.27
270.0	2115.15	1913.64	1723.32	1601.03	1503.71	1404.68	1341.81	1277.22	1235.89
315.0	1702.56	1668.97	1554.70	1465.39	1391.24	1315.98	1268.87	1228.82	1194.29
360.0	1923.11	1716.25	1716.25	1593.97	1475.64	1400.63	1339.23	1290.31	1239.42
C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1204.19	1173.28	1148.04	1121.26	1100.59	1075.53	1053.83	1016.28	941.70
45.0	1244.50	1199.72	1171.30	1141.15	1120.49	1099.82	1073.98	1050.73	1011.12
90.0	1182.92	1149.42	1126.69	1106.02	1080.27	1059.34	1028.25	977.10	893.39
135.0	1224.69	1185.08	1157.52	1134.27	1113.60	1086.04	1065.37	1026.62	969.78
180.0	1169.57	1144.60	1115.32	1092.07	1071.40	1047.29	1006.81	943.94	857.83
225.0	1145.72	1122.55	1101.11	1079.06	1053.57	1020.33	969.35	905.10	810.12
270.0	1201.44	1165.27	1140.29	1117.90	1097.23	1071.40	1045.56	1003.37	942.22
315.0	1158.98	1134.44	1111.53	1084.23	1063.73	1039.19	980.89	918.97	825.70
360.0	1204.19	1173.28	1148.04	1121.26	1100.59	1075.53	1053.83	1016.28	941.70
C/ γ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	869.11	789.28	703.76	591.55	505.34	417.42	313.64	234.24	162.25
45.0	932.75	858.69	777.74	689.03	565.02	474.60	450.49	450.49	192.99
90.0	814.34	728.99	639.34	523.51	434.73	347.40	245.27	170.77	94.99
135.0	900.02	802.71	720.04	628.75	536.60	452.21	452.21	259.39	182.48
180.0	783.76	695.06	593.44	510.77	447.90	447.90	232.43	160.61	96.97
225.0	725.98	615.57	526.70	437.05	329.75	249.05	175.77	112.30	55.37
270.0	869.02	767.40	680.42	568.47	478.04	455.65	349.55	202.21	135.03
315.0	744.92	661.04	574.84	491.22	386.76	307.27	231.31	160.18	85.43
360.0	869.11	789.28	703.76	591.55	505.34	417.42	313.64	234.24	162.25

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	100.24	53.65	27.47	22.99	16.97	13.00	10.42	9.47	9.21
45.0	126.68	74.66	36.00	25.75	21.19	15.67	12.14	10.08	9.56
90.0	52.70	30.92	24.63	18.77	14.55	11.45	9.99	9.56	9.21
135.0	103.43	55.72	30.74	24.54	18.43	14.21	10.59	9.65	9.39
180.0	52.10	28.33	23.60	18.60	13.26	10.51	9.47	9.13	8.87
225.0	32.29	25.58	20.58	14.81	11.45	9.65	9.21	8.96	8.70
270.0	68.98	38.49	26.70	22.05	16.10	12.31	9.99	9.39	9.04
315.0	44.44	27.21	21.53	16.79	11.97	9.73	9.21	8.87	8.70
360.0	100.24	53.65	27.47	22.99	16.97	13.00	10.42	9.47	9.21
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	8.96	8.61	8.35	8.10	7.92	7.75	7.66	7.49	7.49
45.0	9.21	8.96	8.70	8.35	8.10	7.92	7.75	7.58	7.49
90.0	8.96	8.70	8.35	8.10	7.84	7.75	7.58	7.49	7.41
135.0	8.96	8.78	8.44	8.18	7.92	7.75	7.66	7.49	7.41
180.0	8.61	8.35	8.18	7.92	7.75	7.66	7.58	7.49	7.41
225.0	8.44	8.18	8.01	7.84	7.66	7.58	7.49	7.41	7.32
270.0	8.78	8.61	8.27	8.10	7.92	7.66	7.58	7.49	7.41
315.0	8.44	8.18	7.92	7.75	7.66	7.58	7.41	7.32	7.23
360.0	8.96	8.61	8.35	8.10	7.92	7.75	7.66	7.49	7.49
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	7.41	7.32	7.32	7.32	7.23	7.15	7.15	7.15	7.15
45.0	7.49	7.41	7.32	7.23	7.23	7.15	7.15	7.06	7.06
90.0	7.32	7.32	7.23	7.15	7.15	7.15	7.06	7.06	7.06
135.0	7.41	7.32	7.23	7.23	7.15	7.15	7.06	7.06	6.98
180.0	7.32	7.32	7.23	7.23	7.23	7.15	7.15	7.15	7.06
225.0	7.23	7.23	7.15	7.15	7.15	7.06	7.06	7.06	7.06
270.0	7.32	7.32	7.23	7.15	7.15	7.15	7.06	6.98	6.98
315.0	7.23	7.15	7.15	7.15	7.06	6.98	7.06	6.98	6.98
360.0	7.41	7.32	7.32	7.32	7.23	7.15	7.15	7.15	7.15
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	7.15	7.06	7.06	7.06	6.98	7.06	7.06	6.98	6.98
45.0	7.06	7.06	7.06	7.06	7.06	7.06	7.06	6.98	6.98
90.0	6.98	6.98	6.98	6.89	6.89	6.89	6.89	6.89	6.89
135.0	6.98	6.98	6.98	6.89	6.98	6.98	6.98	6.89	6.89
180.0	7.15	7.06	7.06	7.06	6.98	6.98	6.98	6.89	6.98
225.0	6.98	7.06	6.98	6.98	6.98	6.98	6.98	6.89	6.89
270.0	6.98	6.98	6.98	6.98	6.98	6.89	6.89	6.89	6.89
315.0	6.98	6.98	6.89	6.98	6.89	6.98	6.89	6.89	6.89
360.0	7.15	7.06	7.06	7.06	6.98	7.06	7.06	6.98	6.98
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	6.98	6.89	6.89	6.89	6.89	6.89	6.89	6.80	6.80
45.0	6.98	6.89	6.89	6.89	6.89	6.80	6.80	6.80	6.80
90.0	6.89	6.80	6.89	6.80	6.80	6.80	6.80	6.80	6.72
135.0	6.89	6.89	6.89	6.89	6.80	6.80	6.72	6.80	6.80
180.0	6.89	6.89	6.89	6.89	6.80	6.80	6.80	6.80	6.80
225.0	6.89	6.89	6.80	6.80	6.80	6.80	6.80	6.72	6.80
270.0	6.89	6.89	6.80	6.80	6.80	6.80	6.80	6.72	6.72
315.0	6.89	6.80	6.80	6.80	6.80	6.80	6.80	6.80	6.72
360.0	6.98	6.89	6.89	6.89	6.89	6.89	6.89	6.80	6.80

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	6.80
45.0	6.80
90.0	6.72
135.0	6.72
180.0	6.80
225.0	6.80
270.0	6.72
315.0	6.72
360.0	6.80