
PQL 55178 LED 2 X 4 PANEL- 50W/40K- 120-277V/DIMMABLE/V4- SUPERIOR LIFE®

LumCAT: 55178

Report No: SENSING20100322s001

Test No:

LampCAT: 2835 4000K

Lamp flux(lm): 4847.0

Number of Lamps:1

Length(mm): 1200

Phm Type:C

Voltage(V): 0.000

Current(A): 0.000

Power (W): 49.300

PF:0.000

Ballast type:

Width(mm): 600

Height(mm): 9

Photometric Results

Lumens(lm): 4846.97

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 98.32

Central intensity(cd): 1662.619

Maximum intensity(cd): 1675.665

Angle of maximum intensity: C=30.0 γ =0.0

Beam Angle(50%lmax): [V]Left=53.8 Right=60.5

[H]Left=53.9 Right=58.2

Field angle(10%lmax): [V]Left=78.1 Right=84.7

[H]Left=78.9 Right=83.0

Maximum s/h: C0_180=0.63 C90_270=0.64

Up flux rate of lamp(%): 0.52%

Down flux rate of lamp(%): 99.48%

Up flux rate of luminaire(%):0.52%

Down flux rate of luminaire(%):99.48%

CIE Type : Direct lighting

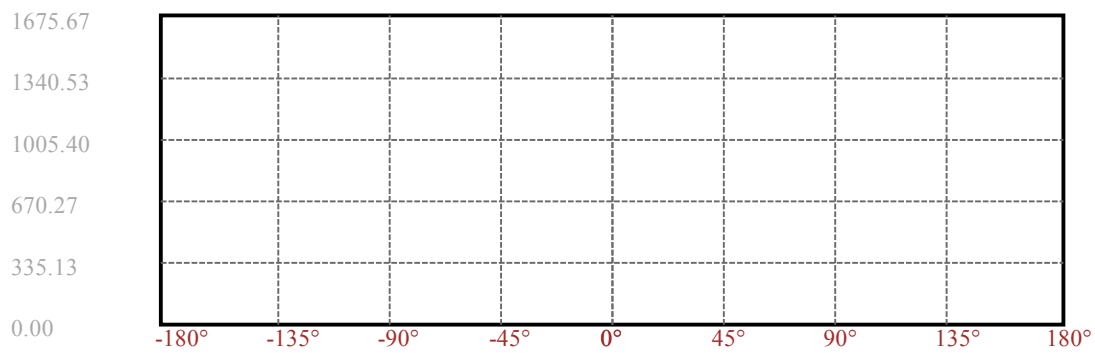
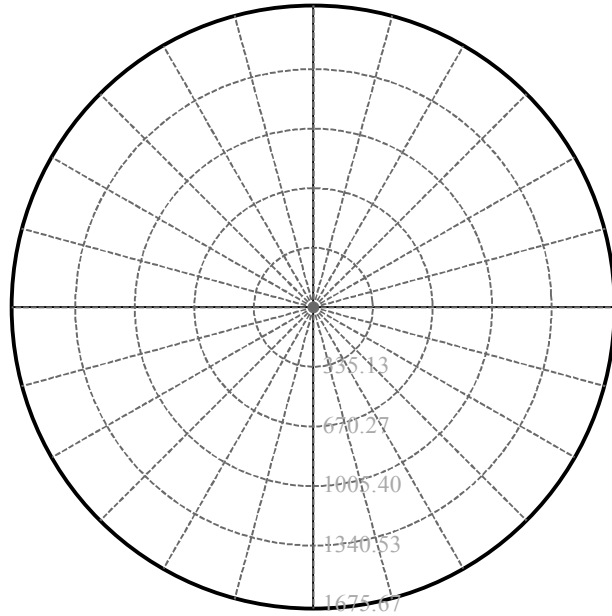
Output flux ratio in π solid angle : 77.993%

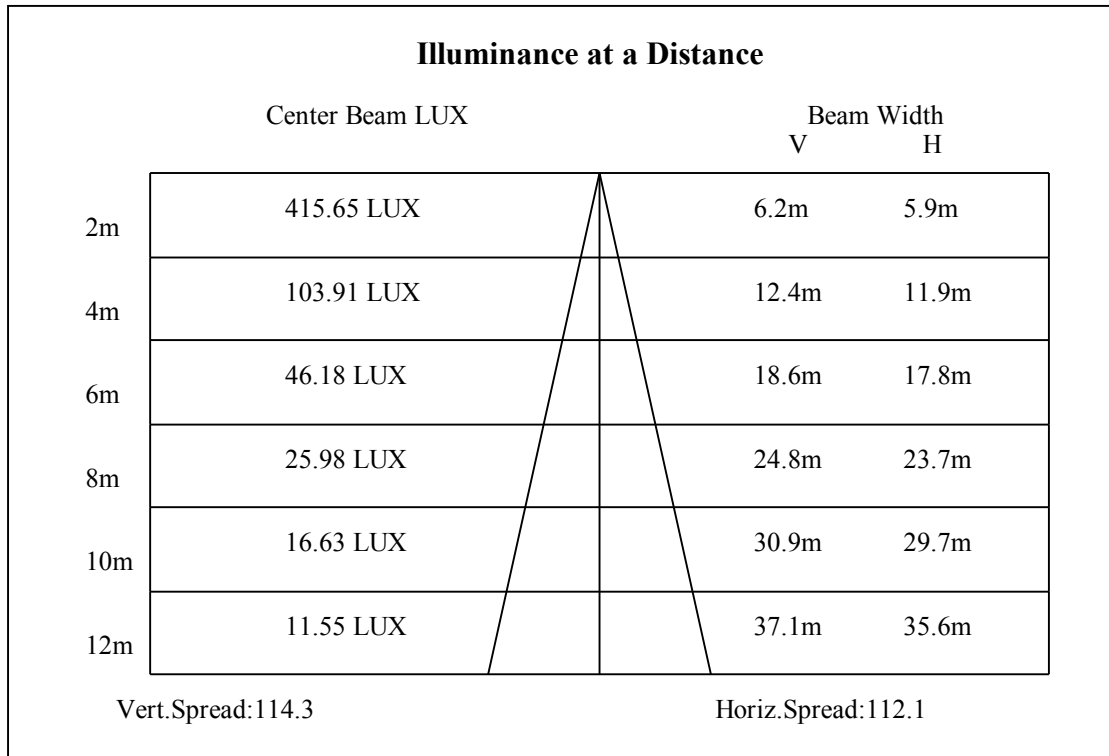
γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(lm)	Eff Sum(lm)
0.0	1667.104	.000	.000	.000%	.000%
5.0	1660.580	39.782	39.782	.821%	.821%
10.0	1635.336	117.905	157.687	2.433%	3.253%
15.0	1603.094	192.102	349.788	3.963%	7.217%
20.0	1555.141	260.283	610.071	5.370%	12.587%
25.0	1490.798	319.463	929.534	6.591%	19.178%
30.0	1417.289	368.021	1297.555	7.593%	26.770%
35.0	1331.209	404.736	1702.291	8.350%	35.121%
40.0	1230.296	427.368	2129.659	8.817%	43.938%
45.0	1121.296	435.416	2565.075	8.983%	52.921%
50.0	1006.561	429.965	2995.040	8.871%	61.792%
55.0	878.746	409.929	3404.968	8.457%	70.249%
60.0	744.951	375.313	3780.281	7.743%	77.992%
65.0	604.945	328.162	4108.443	6.770%	84.763%
70.0	464.192	270.712	4379.155	5.585%	90.348%
75.0	319.593	204.869	4584.024	4.227%	94.574%
80.0	194.081	137.445	4721.469	2.836%	97.410%
85.0	84.204	75.617	4797.085	1.560%	98.970%
90.0	5.762	24.634	4821.719	.508%	99.478%
95.0	1.712	2.047	4823.766	.042%	99.521%
100.0	1.971	1.001	4824.766	.021%	99.541%
105.0	2.324	1.149	4825.915	.024%	99.565%
110.0	2.732	1.321	4827.236	.027%	99.592%
115.0	3.139	1.487	4828.723	.031%	99.623%
120.0	3.622	1.644	4830.367	.034%	99.657%
125.0	4.070	1.778	4832.145	.037%	99.694%
130.0	4.546	1.873	4834.018	.039%	99.732%
135.0	4.988	1.926	4835.944	.040%	99.772%
140.0	5.348	1.914	4837.858	.039%	99.811%
145.0	5.735	1.849	4839.707	.038%	99.850%
150.0	6.102	1.743	4841.450	.036%	99.886%
155.0	6.408	1.583	4843.033	.033%	99.918%
160.0	6.618	1.366	4844.399	.028%	99.946%
165.0	6.802	1.106	4845.505	.023%	99.969%
170.0	6.870	.811	4846.316	.017%	99.986%
175.0	6.883	.492	4846.809	.010%	99.996%
180.0	6.931	.165	4846.974	.003%	99.999%

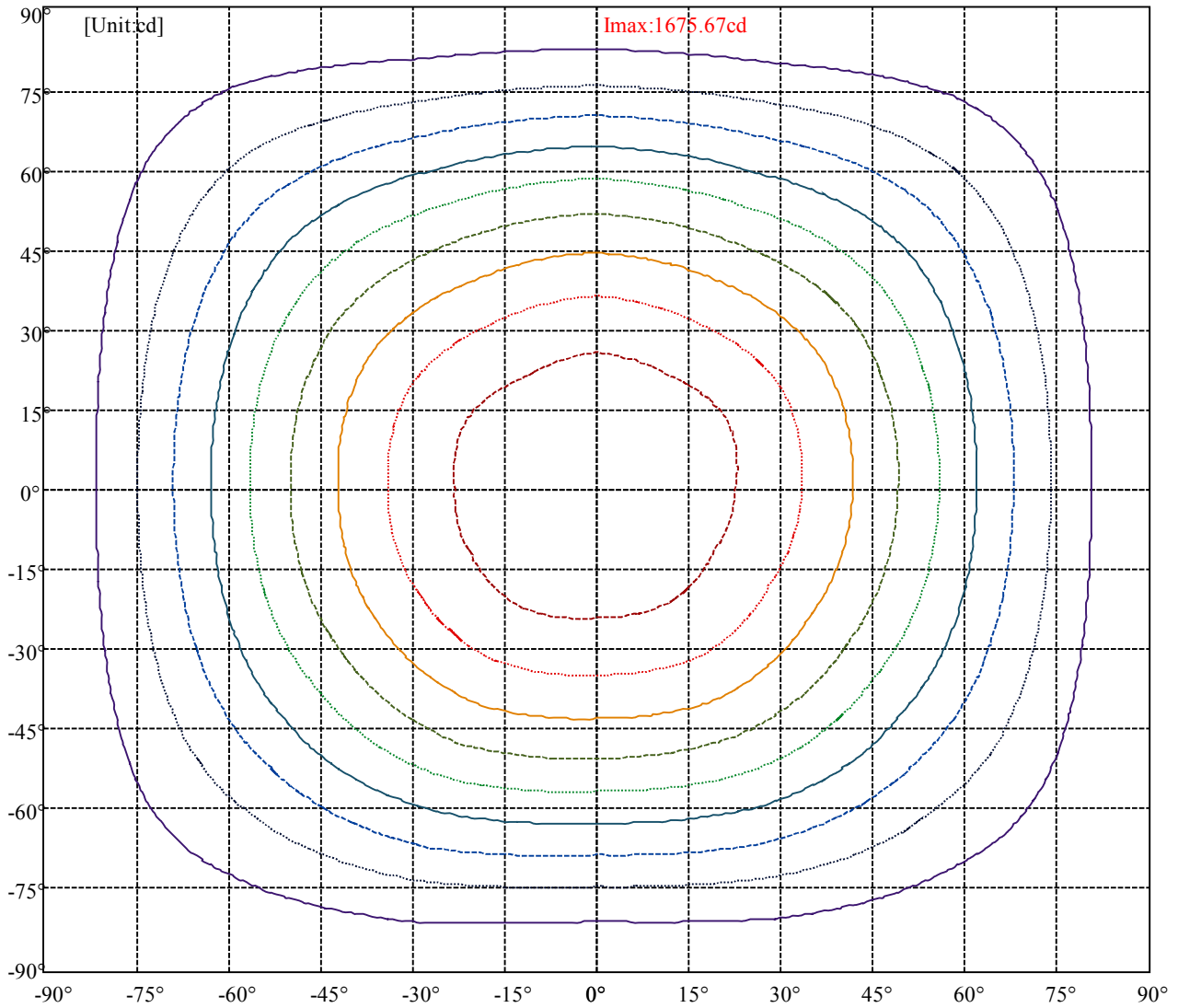
ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	1297.555	26.770%	26.770%
0-40	2129.659	43.938%	43.938%
0-60	3780.281	77.992%	77.993%
0-90	4821.719	99.478%	99.479%
90-120	8.648	.178%	.178%
90-130	12.300	.254%	.254%
90-150	19.732	.407%	.407%
90-180	25.090	.518%	.518%
0-180	4846.974	99.999%	100.000%

ZONAL LUMEN SUMMARY

0-10	157.687
10-20	452.385
20-30	687.484
30-40	832.104
40-50	865.381
50-60	785.241
60-70	598.875
70-80	342.314
80-90	100.251
90-100	3.047
100-110	2.471
110-120	3.130
120-130	3.651
130-140	3.840
140-150	3.592
150-160	2.949
160-170	1.917
170-180	.492





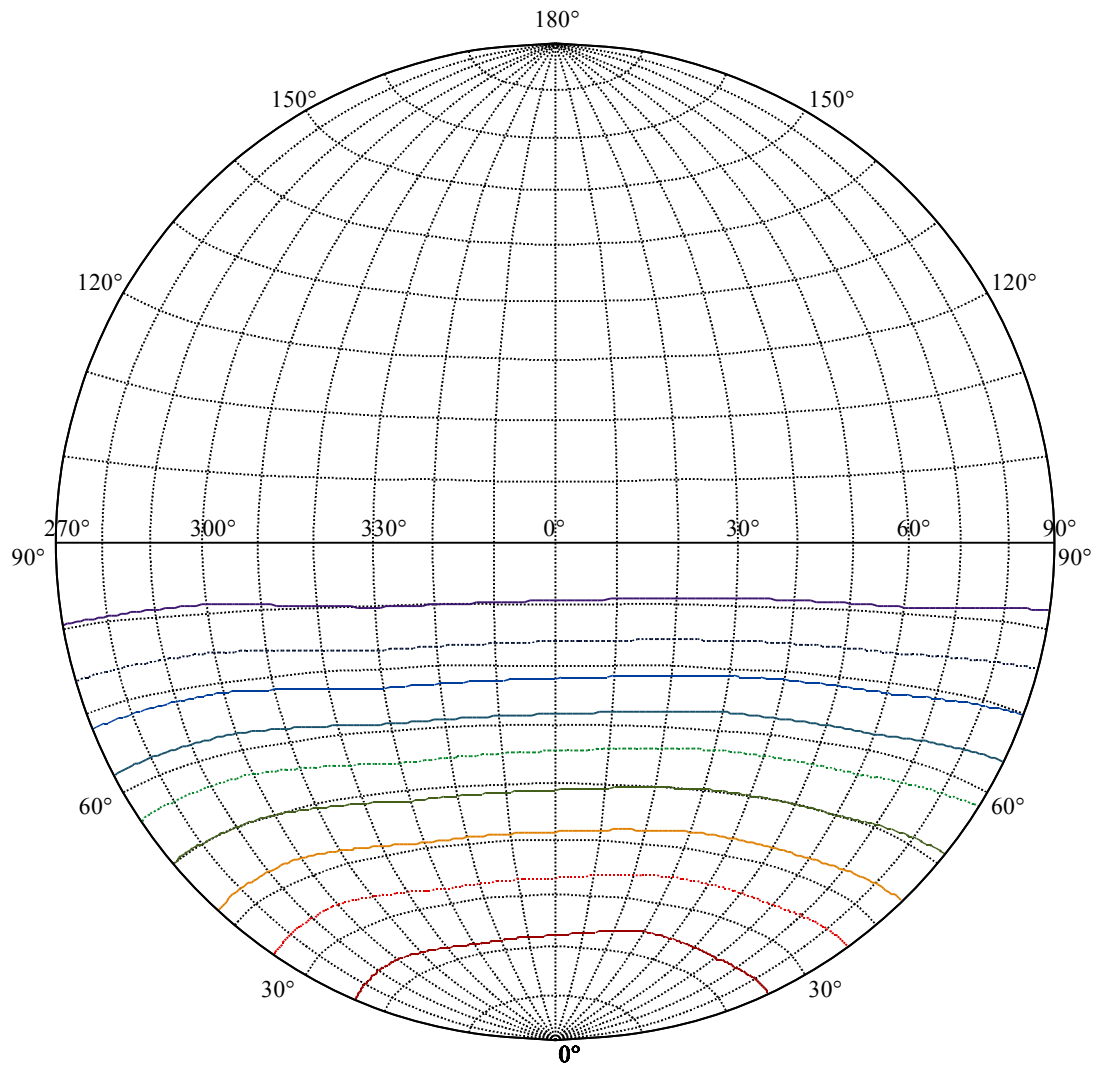


(10%Imax) 167.161	—
(20%Imax) 334.321	·····
(30%Imax) 501.482	- - - - -
(40%Imax) 668.642	—
(50%Imax) 835.803	·····
(60%Imax) 1002.96	- - - - -
(70%Imax) 1170.12	—
(80%Imax) 1337.28	·····
(90%Imax) 1504.44	- - - - -

Equipment: GMS2200
 Temperature(°C): 25

Date:
 Humidity(%): 60%

Operator:
 Distance(m): 13.72

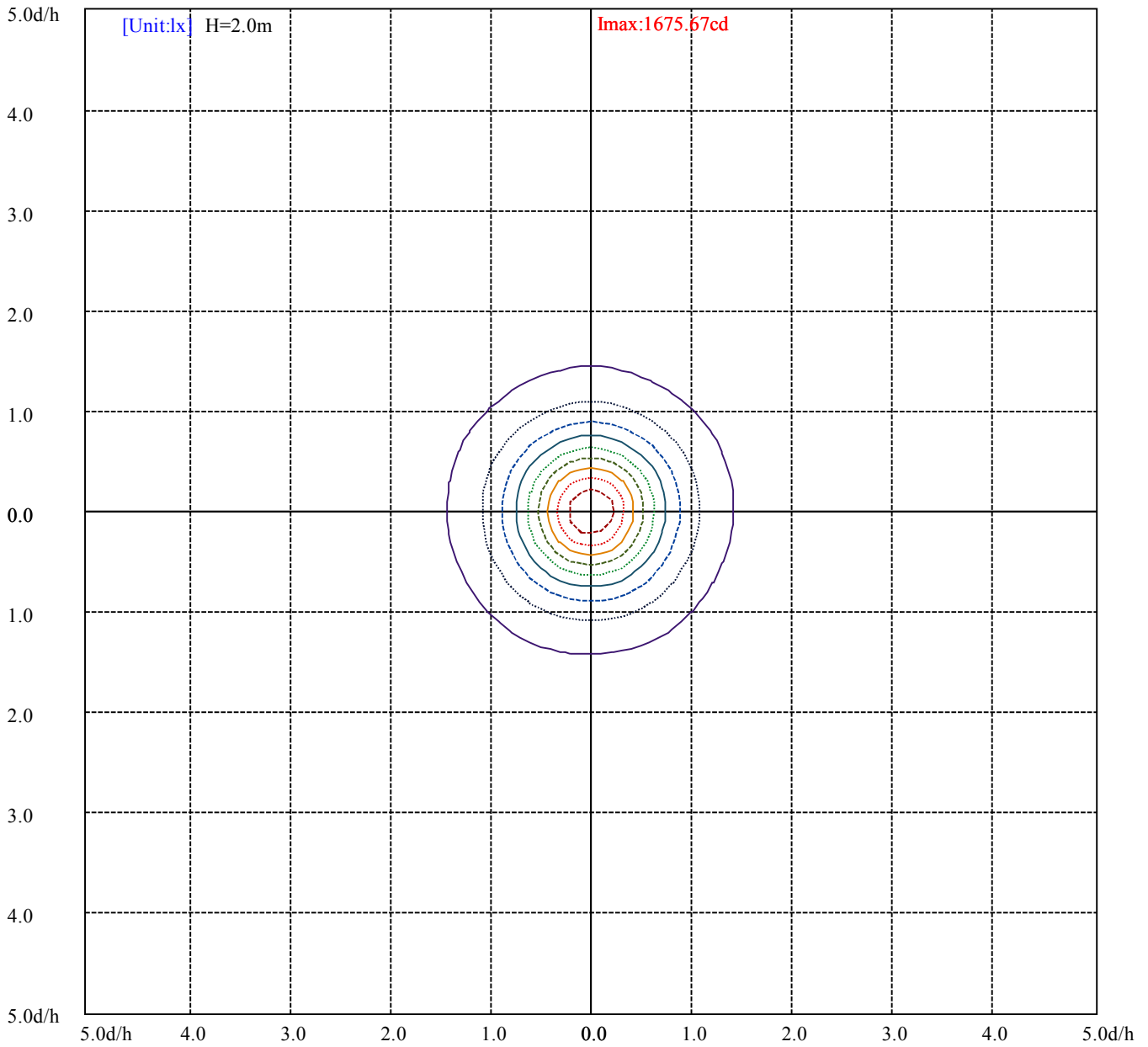


House

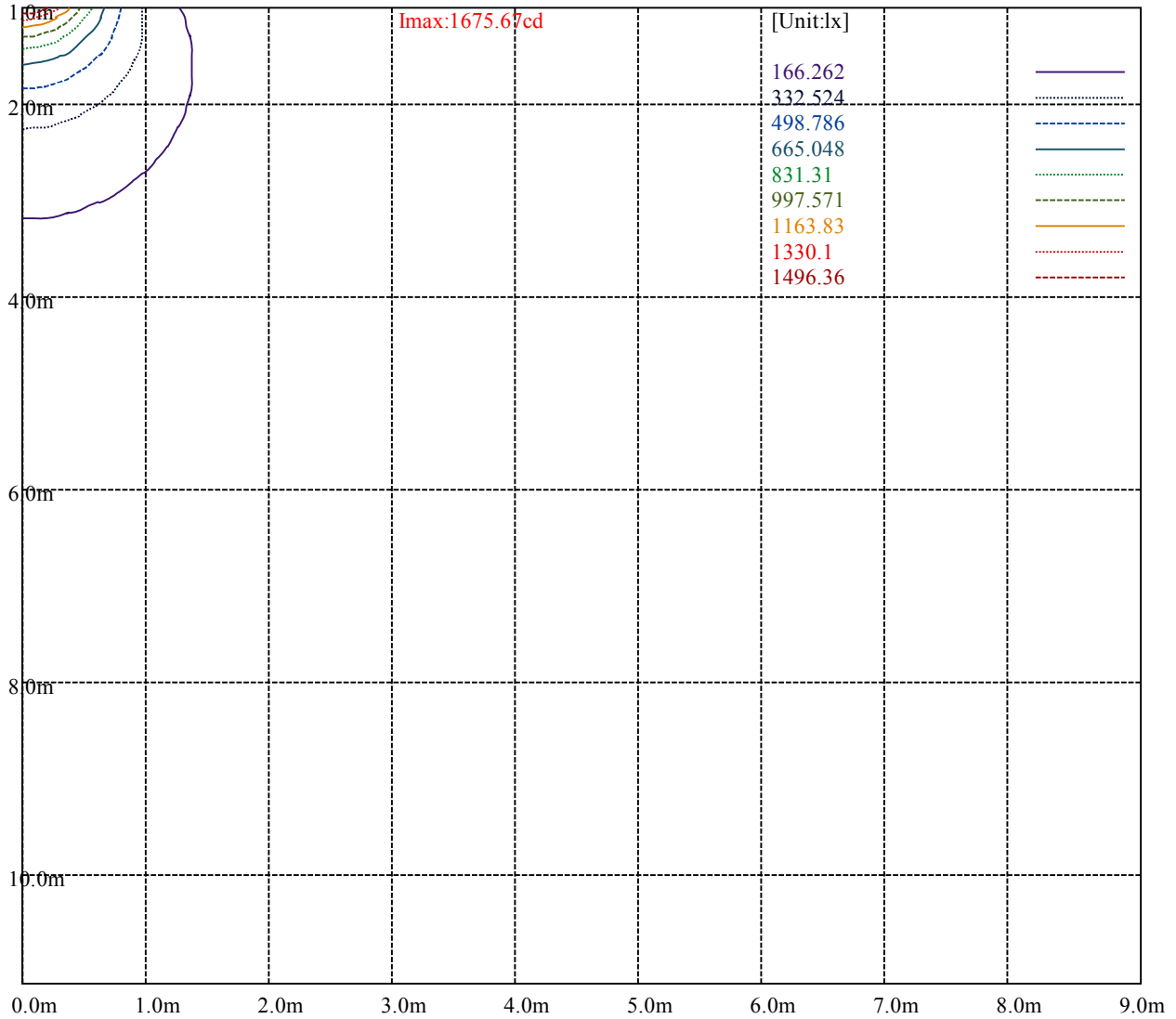
Road

Imax:1675.67cd

(10%Imax) 167.566	—
(20%Imax) 335.133	---
(30%Imax) 502.7	- - - -
(40%Imax) 670.266	—
(50%Imax) 837.833	---
(60%Imax) 1005.4	- - - -
(70%Imax) 1172.97	—
(80%Imax) 1340.53	---
(90%Imax) 1508.1	- - - -



(10%Emax) 41.8305	———
(20%Emax) 83.661
(30%Emax) 125.4912	- - - - -
(40%Emax) 167.3217	———
(50%Emax) 209.1523
(60%Emax) 250.9825	- - - - -
(70%Emax) 292.8125	———
(80%Emax) 334.6425
(90%Emax) 376.475	- - - - -

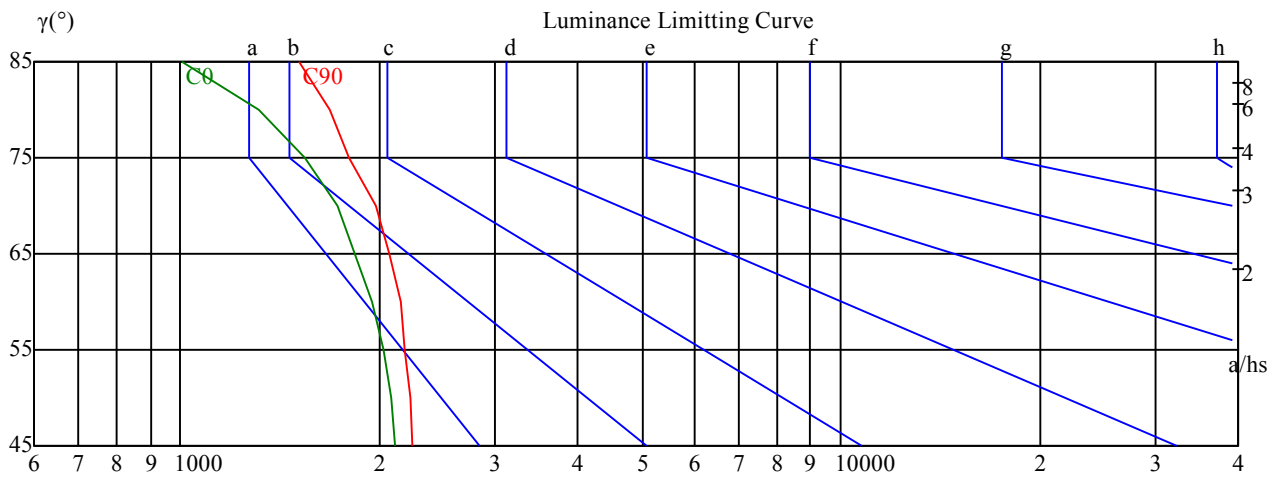


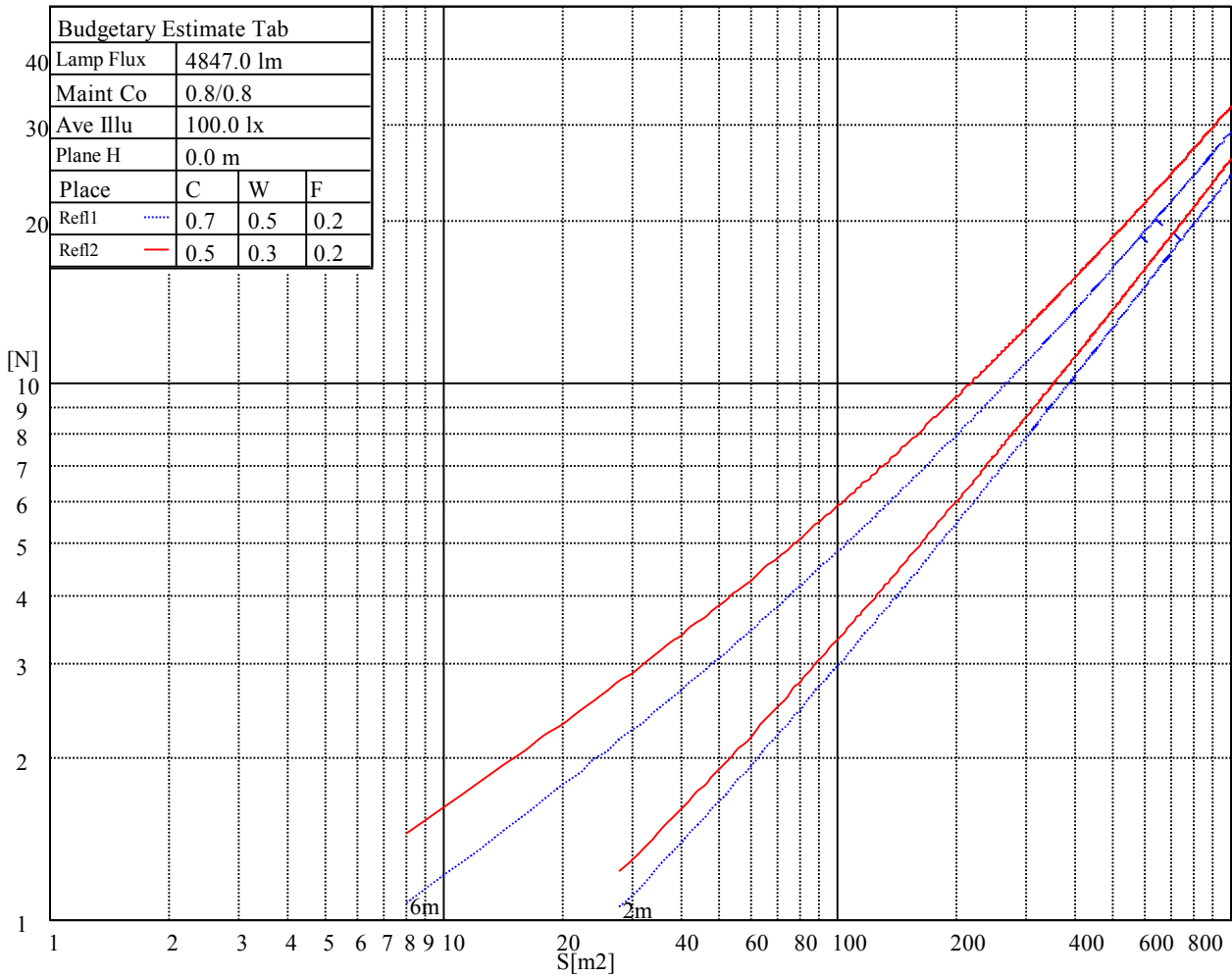
Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	2114	2082	2026	1956	1836	1730	1546	1318	1008
C45	0	0	0	0	0	0	0	0	0
C90	2245	2228	2190	2160	2070	1973	1798	1680	1515

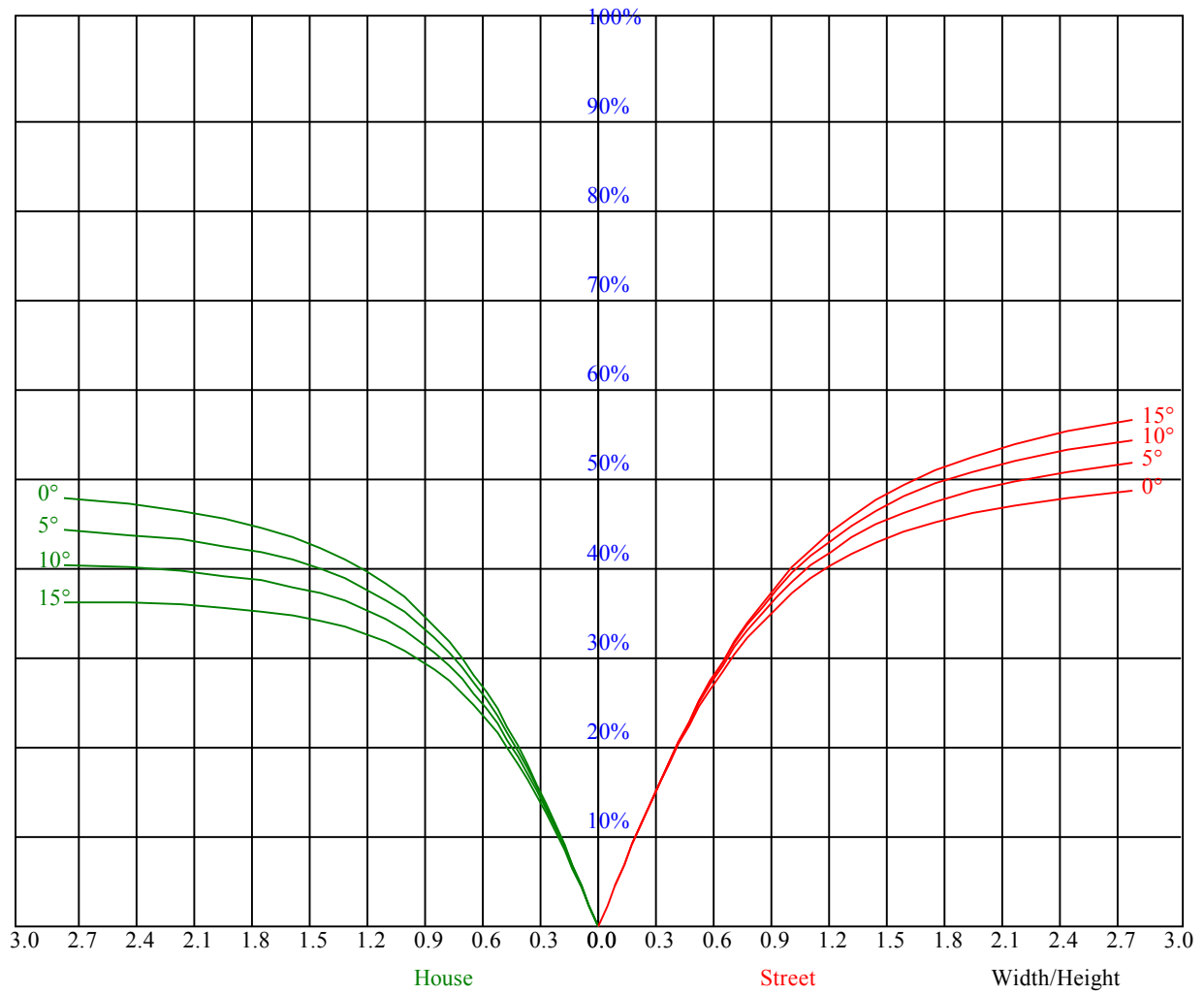
Glare Table

Glare	Quality	Service Values Illuminance(lx)							
		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





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	COEFFICIENTS OF UTILIZATION RHOFC=20 CU															
0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	0.99
1	1.04	0.99	0.95	1.01	0.97	0.94	0.97	0.94	0.91	0.93	0.90	0.88	0.89	0.87	0.85	0.83
2	0.90	0.83	0.77	0.88	0.82	0.76	0.85	0.79	0.75	0.81	0.77	0.73	0.78	0.74	0.71	0.69
3	0.79	0.71	0.64	0.77	0.70	0.64	0.74	0.68	0.62	0.71	0.66	0.61	0.69	0.64	0.60	0.58
4	0.70	0.61	0.54	0.69	0.60	0.54	0.66	0.59	0.53	0.64	0.57	0.52	0.61	0.56	0.51	0.49
5	0.62	0.53	0.47	0.61	0.53	0.46	0.59	0.52	0.46	0.57	0.50	0.45	0.55	0.49	0.45	0.43
6	0.56	0.47	0.41	0.55	0.47	0.40	0.53	0.46	0.40	0.52	0.45	0.40	0.50	0.44	0.39	0.37
7	0.51	0.42	0.36	0.50	0.42	0.36	0.48	0.41	0.35	0.47	0.40	0.35	0.46	0.39	0.35	0.33
8	0.46	0.38	0.32	0.46	0.38	0.32	0.44	0.37	0.32	0.43	0.36	0.31	0.42	0.36	0.31	0.29
9	0.43	0.34	0.29	0.42	0.34	0.29	0.41	0.33	0.28	0.40	0.33	0.28	0.39	0.33	0.28	0.26
10	0.39	0.31	0.26	0.39	0.31	0.26	0.38	0.31	0.26	0.37	0.30	0.26	0.36	0.30	0.25	0.24



PQL 55178 LED 2 X 4 PANEL- 50W/40K- 120-277V/DIMMABLE/V4- SUPERIOR LIFE®

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Intensity data(cd)									
C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	1662.62	1655.28	1632.45	1592.49	1539.49	1470.18	1396.80	1307.10	1207.62
30.0	1675.67	1669.96	1649.57	1611.25	1564.77	1501.98	1426.15	1338.90	1240.24
60.0	1670.77	1664.25	1627.23	1605.95	1558.00	1494.81	1419.63	1332.87	1233.39
90.0	1666.70	1663.43	1643.86	1612.88	1568.85	1512.58	1441.64	1358.47	1263.88
120.0	1664.25	1656.10	1628.13	1602.36	1555.31	1490.32	1422.16	1336.78	1228.66
150.0	1662.62	1659.36	1638.97	1606.36	1561.51	1501.98	1424.52	1345.43	1250.02
180.0	1662.62	1656.10	1626.33	1596.41	1546.51	1479.56	1403.07	1319.82	1215.78
210.0	1675.67	1668.33	1644.68	1606.60	1555.72	1485.68	1413.51	1324.71	1217.73
240.0	1670.77	1666.70	1645.50	1615.33	1568.85	1505.25	1432.67	1347.06	1250.84
270.0	1666.70	1657.73	1625.76	1601.14	1553.11	1490.40	1415.71	1328.14	1228.74
300.0	1664.25	1657.73	1635.71	1600.65	1555.80	1491.38	1425.34	1335.64	1232.90
330.0	1662.62	1652.02	1625.84	1585.73	1533.78	1465.45	1386.28	1299.60	1193.76
360.0	1662.62	1655.28	1632.45	1592.49	1539.49	1470.18	1396.80	1307.10	1207.62
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	1092.65	980.94	854.55	722.45	576.49	443.58	304.31	178.74	74.12
30.0	1125.26	1013.55	887.98	754.25	615.63	472.94	322.98	193.90	90.18
60.0	1123.47	1003.93	875.34	739.33	597.78	462.26	314.01	185.26	76.32
90.0	1151.36	1040.46	914.07	787.69	640.10	495.77	344.43	218.94	103.23
120.0	1132.44	1014.86	888.31	754.09	614.41	472.04	324.37	202.14	90.18
150.0	1138.31	1023.34	907.55	770.56	633.57	493.32	345.82	221.95	107.15
180.0	1103.00	999.85	876.16	737.46	609.60	470.49	325.19	197.17	93.69
210.0	1115.24	996.51	861.72	735.74	596.55	447.25	308.88	188.20	74.94
240.0	1142.39	1031.49	905.10	763.22	622.97	487.62	337.25	206.46	99.81
270.0	1118.25	1005.24	868.25	731.34	589.13	445.46	306.11	178.58	65.31
300.0	1130.16	1005.40	878.20	742.84	602.59	467.23	318.17	196.84	81.05
330.0	1083.03	963.16	827.72	700.44	560.51	412.35	283.60	160.80	54.47
360.0	1092.65	980.94	854.55	722.45	576.49	443.58	304.31	178.74	74.12
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	3.75	1.79	2.04	2.45	2.85	3.18	3.67	4.16	4.57
30.0	6.12	1.71	1.88	2.28	2.69	3.10	3.51	3.91	4.40
60.0	1.55	1.71	1.96	2.28	2.69	3.18	3.59	4.00	4.40
90.0	7.67	1.63	1.88	2.20	2.61	3.02	3.51	3.91	4.40
120.0	4.40	1.63	1.96	2.20	2.69	3.02	3.59	4.08	4.57
150.0	19.49	1.71	1.96	2.28	2.61	3.02	3.51	4.00	4.49
180.0	9.79	1.71	1.96	2.28	2.69	3.10	3.59	4.08	4.57
210.0	3.18	1.71	2.04	2.45	2.85	3.26	3.75	4.24	4.81
240.0	7.34	1.71	1.96	2.28	2.69	3.18	3.67	4.08	4.57
270.0	1.55	1.71	2.04	2.37	2.85	3.18	3.75	4.16	4.65
300.0	2.69	1.71	1.96	2.28	2.69	3.18	3.59	4.08	4.57
330.0	1.63	1.79	2.04	2.53	2.85	3.26	3.75	4.16	4.57
360.0	3.75	1.79	2.04	2.45	2.85	3.18	3.67	4.16	4.57
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	4.97	5.38	5.71	6.12	6.36	6.52	6.69	6.77	6.85
30.0	4.89	5.14	5.55	5.95	6.28	6.52	6.69	6.85	6.85
60.0	4.89	5.22	5.63	5.95	6.28	6.61	6.85	6.93	6.93
90.0	4.81	5.22	5.63	6.03	6.36	6.61	6.85	6.85	6.85
120.0	4.97	5.38	5.71	6.20	6.44	6.69	6.85	6.93	6.93
150.0	4.97	5.30	5.71	6.03	6.36	6.52	6.69	6.77	6.85
180.0	4.97	5.38	5.71	6.03	6.28	6.52	6.69	6.77	6.77
210.0	5.22	5.63	5.95	6.28	6.52	6.69	6.85	6.93	6.93
240.0	5.06	5.38	5.87	6.28	6.61	6.77	6.93	6.93	6.93
270.0	5.06	5.46	5.95	6.28	6.61	6.77	6.93	6.93	6.93
300.0	4.97	5.30	5.71	6.03	6.36	6.61	6.85	6.93	6.93
330.0	5.06	5.38	5.71	6.03	6.44	6.61	6.77	6.85	6.85
360.0	4.97	5.38	5.71	6.12	6.36	6.52	6.69	6.77	6.85

Equipment: GMS2200
 Temperature(°C): 25

Date:
 Humidity(%): 60%

Operator:
 Distance(m): 13.72

Intensity data(cd)

C/γ(°)	180.0
0.0	6.85
30.0	6.93
60.0	7.01
90.0	6.93
120.0	7.01
150.0	6.85
180.0	6.85
210.0	6.93
240.0	7.01
270.0	6.93
300.0	7.01
330.0	6.85
360.0	6.85