

## Luminaire Property

Luminaire: PL SQ 32W

Report NO.:

Test NO.:

Lamp: PL SQ 32W

Sum Lumens: 3027.08 lm

Number of Lamps: 168

Diameter: 220mm

Length: 220mm

Photometric Type: Type C

Voltage: 220.1 V

Current: 0.138 A

Power: 29.8 W

Power Factor: 0.981

Ballast Type:

Width: 220mm

Height: 30mm

Remark:

## Photometric Results

Lumens: 3027.08 lm

Effective luminous flux: 2978.92 lm

Efficiency: N.A

Central Intensity: 1163.157cd

Maximum Intensity: 1179.014cd

Beam Angle(10%): Left: -77.7 Right:79.7

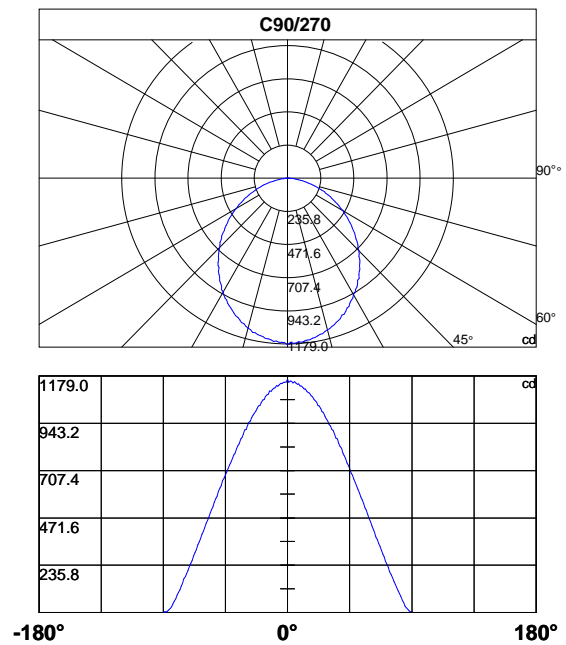
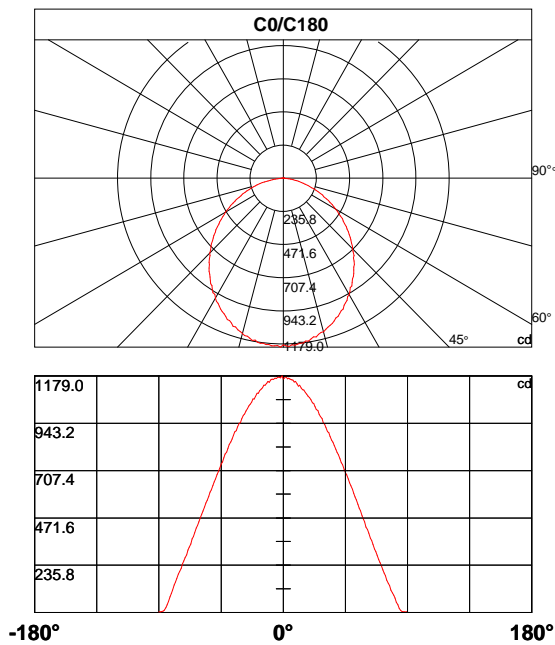
Angle of maximum intensity: C:135.0 G:1.0

Half Peak Side Angle(50%): Left: -51.3 Right:53.5

Light Out Rate(LOR) : 100.00%

Up Flux Rate: 0.0%

Down Flux Rate: 100.0%



## Photometric Data Table [cd]

C\G	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
0.0	1163.2	1170.0	1175.9	1165.9	1169.3	1163.6	1159.6	1159.3	1148.5	1151.4
45.0	1163.2	1146.9	1154.3	1153.1	1143.5	1150.8	1143.9	1138.5	1140.0	1129.9
90.0	1163.2	1146.9	1154.3	1153.1	1143.5	1150.8	1143.9	1138.5	1140.0	1129.9
135.0	1163.2	1179.0	1169.9	1172.3	1173.4	1167.0	1168.4	1161.6	1163.3	1159.6
180.0	1163.2	1179.0	1169.9	1172.3	1173.4	1167.0	1168.4	1161.6	1163.3	1159.6
225.0	1163.2	1148.8	1147.0	1147.9	1140.5	1142.6	1134.8	1129.3	1131.0	1119.6
270.0	1163.2	1148.8	1147.0	1147.9	1140.5	1142.6	1134.8	1129.3	1131.0	1119.6
315.0	1163.2	1170.0	1175.9	1165.9	1169.3	1163.6	1159.6	1159.3	1148.5	1151.4
360.0	1163.2	1170.0	1175.9	1165.9	1169.3	1163.6	1159.6	1159.3	1148.5	1151.4

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	1139.8	1129.0	1132.8	1118.6	1110.5	1109.3	1096.6	1088.0	1079.4	1071.4
45.0	1129.1	1122.5	1114.3	1114.5	1101.8	1095.6	1092.4	1080.8	1075.1	1064.9
90.0	1129.1	1122.5	1114.3	1114.5	1101.8	1095.6	1092.4	1080.8	1075.1	1064.9
135.0	1147.8	1152.8	1143.1	1132.5	1132.6	1120.4	1113.8	1106.6	1093.4	1093.3
180.0	1147.8	1152.8	1143.1	1132.5	1132.6	1120.4	1113.8	1106.6	1093.4	1093.3
225.0	1117.4	1113.1	1103.4	1104.0	1088.5	1084.5	1076.5	1061.8	1059.9	1046.3
270.0	1117.4	1113.1	1103.4	1104.0	1088.5	1084.5	1076.5	1061.8	1059.9	1046.3
315.0	1139.8	1129.0	1132.8	1118.6	1110.5	1109.3	1096.6	1088.0	1079.4	1071.4
360.0	1139.8	1129.0	1132.8	1118.6	1110.5	1109.3	1096.6	1088.0	1079.4	1071.4

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	1060.6	1045.9	1042.1	1026.2	1011.6	1007.5	987.1	976.7	966.9	944.6
45.0	1057.5	1049.5	1031.6	1029.8	1016.9	1000.1	997.0	978.9	965.9	957.9
90.0	1057.5	1049.5	1031.6	1029.8	1016.9	1000.1	997.0	978.9	965.9	957.9
135.0	1077.8	1065.4	1064.4	1047.7	1036.4	1028.6	1016.4	1003.3	988.8	982.5
180.0	1077.8	1065.4	1064.4	1047.7	1036.4	1028.6	1016.4	1003.3	988.8	982.5
225.0	1033.2	1030.0	1015.7	1004.1	993.6	983.5	971.1	955.1	948.4	932.5
270.0	1033.2	1030.0	1015.7	1004.1	993.6	983.5	971.1	955.1	948.4	932.5
315.0	1060.6	1045.9	1042.1	1026.2	1011.6	1007.5	987.1	976.7	966.9	944.6
360.0	1060.6	1045.9	1042.1	1026.2	1011.6	1007.5	987.1	976.7	966.9	944.6

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	938.5	922.6	900.9	896.2	877.4	858.7	848.5	832.7	814.5	798.0
45.0	937.6	929.9	914.7	906.9	888.6	869.9	864.8	843.0	827.6	818.9
90.0	937.6	929.9	914.7	906.9	888.6	869.9	864.8	843.0	827.6	818.9
135.0	965.6	946.9	943.0	925.1	906.2	899.6	882.5	864.6	850.2	837.1
180.0	965.6	946.9	943.0	925.1	906.2	899.6	882.5	864.6	850.2	837.1
225.0	913.9	909.2	888.6	872.7	865.7	841.6	831.0	817.7	794.1	785.7
270.0	913.9	909.2	888.6	872.7	865.7	841.6	831.0	817.7	794.1	785.7
315.0	938.5	922.6	900.9	896.2	877.4	858.7	848.5	832.7	814.5	798.0
360.0	938.5	922.6	900.9	896.2	877.4	858.7	848.5	832.7	814.5	798.0

## Photometric Data Table [cd]

C\G	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0
0.0	786.2	765.8	747.0	738.1	714.3	696.6	686.1	665.7	645.5	631.4
45.0	795.1	781.9	768.3	744.7	734.7	717.3	694.7	684.1	666.2	645.3
90.0	795.1	781.9	768.3	744.7	734.7	717.3	694.7	684.1	666.2	645.3
135.0	819.0	799.0	790.2	771.1	750.0	741.0	717.7	701.5	688.0	665.2
180.0	819.0	799.0	790.2	771.1	750.0	741.0	717.7	701.5	688.0	665.2
225.0	768.2	747.7	736.0	719.1	700.2	684.3	670.5	657.5	631.4	620.8
270.0	768.2	747.7	736.0	719.1	700.2	684.3	670.5	657.5	631.4	620.8
315.0	786.2	765.8	747.0	738.1	714.3	696.6	686.1	665.7	645.5	631.4
360.0	786.2	765.8	747.0	738.1	714.3	696.6	686.1	665.7	645.5	631.4

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	613.6	594.4	575.7	562.1	539.1	520.6	507.6	482.9	466.2	451.9
45.0	630.6	614.8	594.7	575.5	563.3	541.8	521.1	510.4	486.4	467.8
90.0	630.6	614.8	594.7	575.5	563.3	541.8	521.1	510.4	486.4	467.8
135.0	650.7	633.3	610.9	599.7	579.1	558.0	546.3	527.1	505.2	489.7
180.0	650.7	633.3	610.9	599.7	579.1	558.0	546.3	527.1	505.2	489.7
225.0	603.3	578.9	568.7	549.1	526.8	514.1	497.3	474.8	458.8	444.9
270.0	603.3	578.9	568.7	549.1	526.8	514.1	497.3	474.8	458.8	444.9
315.0	613.6	594.4	575.7	562.1	539.1	520.6	507.6	482.9	466.2	451.9
360.0	613.6	594.4	575.7	562.1	539.1	520.6	507.6	482.9	466.2	451.9

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	426.3	412.9	395.8	370.3	358.4	340.2	315.9	303.5	286.0	263.2
45.0	455.2	431.0	415.5	399.4	375.9	362.2	343.7	331.0	308.4	290.2
90.0	455.2	431.0	415.5	399.4	375.9	362.2	343.7	331.0	308.4	290.2
135.0	474.3	451.9	433.3	421.2	396.6	378.5	366.8	341.0	324.8	311.0
180.0	474.3	451.9	433.3	421.2	396.6	378.5	366.8	341.0	324.8	311.0
225.0	421.4	403.9	391.6	366.5	350.3	338.2	312.4	297.5	283.9	259.4
270.0	421.4	403.9	391.6	366.5	350.3	338.2	312.4	297.5	283.9	259.4
315.0	426.3	412.9	395.8	370.3	358.4	340.2	315.9	303.5	286.0	263.2
360.0	426.3	412.9	395.8	370.3	358.4	340.2	315.9	303.5	286.0	263.2

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	248.7	234.0	211.7	196.2	182.9	160.5	145.5	133.8	111.5	97.4
45.0	277.5	255.3	238.8	225.0	202.9	188.6	173.3	153.5	140.0	124.6
90.0	277.5	255.3	238.8	225.0	202.9	188.6	173.3	153.5	140.0	124.6
135.0	287.2	272.8	256.4	243.3	220.5	204.2	191.9	169.4	152.1	136.9
180.0	287.2	272.8	256.4	243.3	220.5	204.2	191.9	169.4	152.1	136.9
225.0	245.5	230.8	208.8	195.0	179.5	167.6	145.5	131.4	112.9	99.0
270.0	245.5	230.8	208.8	195.0	179.5	167.6	145.5	131.4	112.9	99.0
315.0	248.7	234.0	211.7	196.2	182.9	160.5	145.5	133.8	111.5	97.4
360.0	248.7	234.0	211.7	196.2	182.9	160.5	145.5	133.8	111.5	97.4

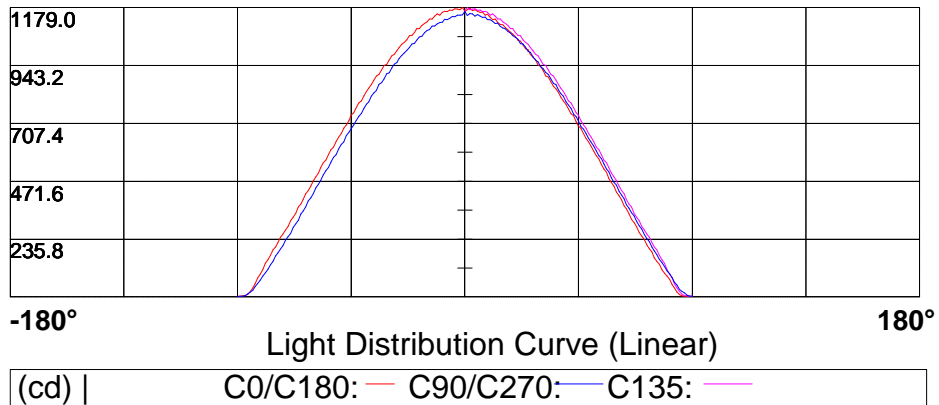
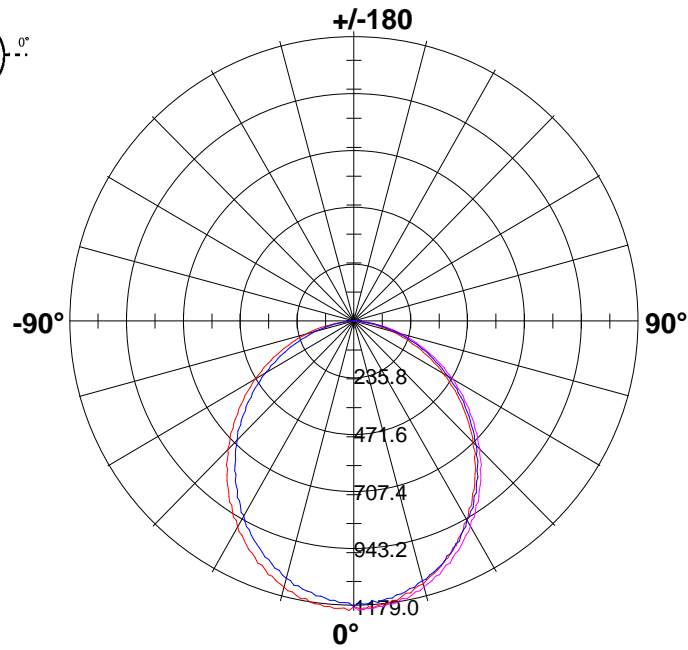
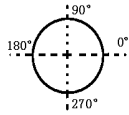
### Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	85.3	72.0	50.4	37.8	20.3	10.5	4.5	2.9	2.8	2.6
45.0	106.3	94.1	79.0	61.0	49.3	31.1	23.1	16.6	7.9	3.6
90.0	106.3	94.1	79.0	61.0	49.3	31.1	23.1	16.6	7.9	3.6
135.0	111.0	93.6	77.5	53.9	37.5	23.0	11.3	5.8	4.5	3.2
180.0	111.0	93.6	77.5	53.9	37.5	23.0	11.3	5.8	4.5	3.2
225.0	85.5	68.3	54.9	43.3	28.6	20.1	12.3	5.5	3.1	2.8
270.0	85.5	68.3	54.9	43.3	28.6	20.1	12.3	5.5	3.1	2.8
315.0	85.3	72.0	50.4	37.8	20.3	10.5	4.5	2.9	2.8	2.6
360.0	85.3	72.0	50.4	37.8	20.3	10.5	4.5	2.9	2.8	2.6

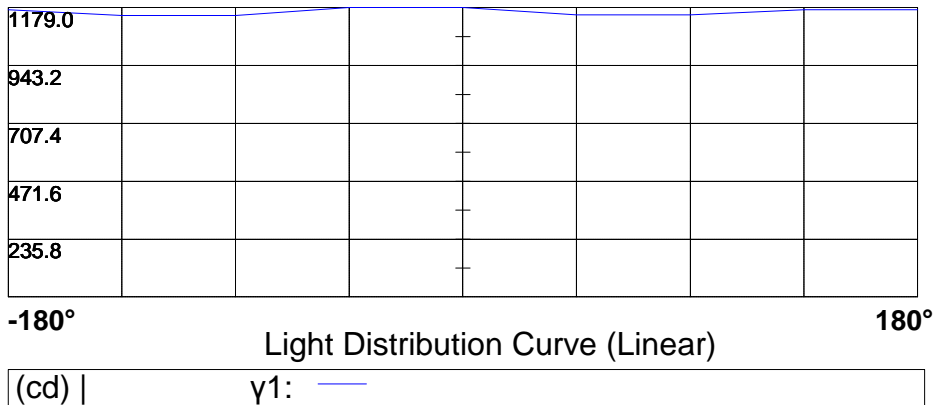
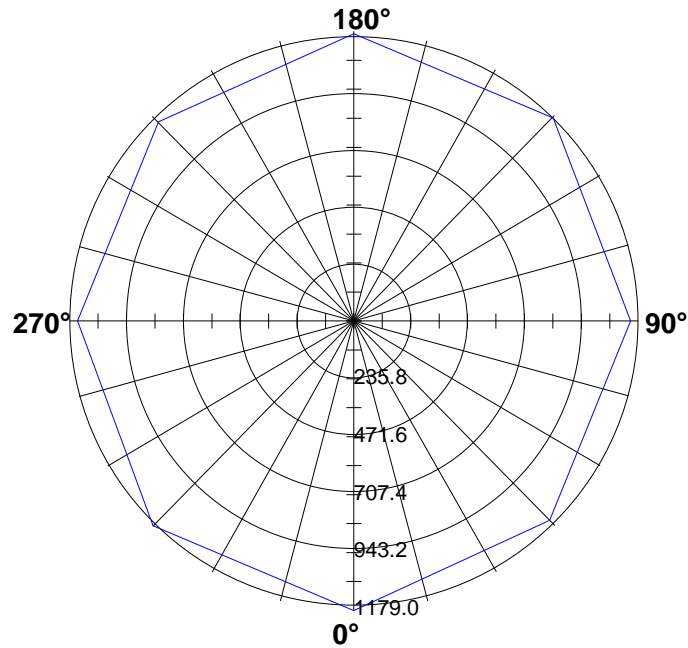
C\G	90.0
0.0	3.1
45.0	3.0
90.0	3.0
135.0	2.8
180.0	2.8
225.0	2.4
270.0	2.4
315.0	3.1
360.0	3.1

### Light Distribution Curve [Unit: cd]

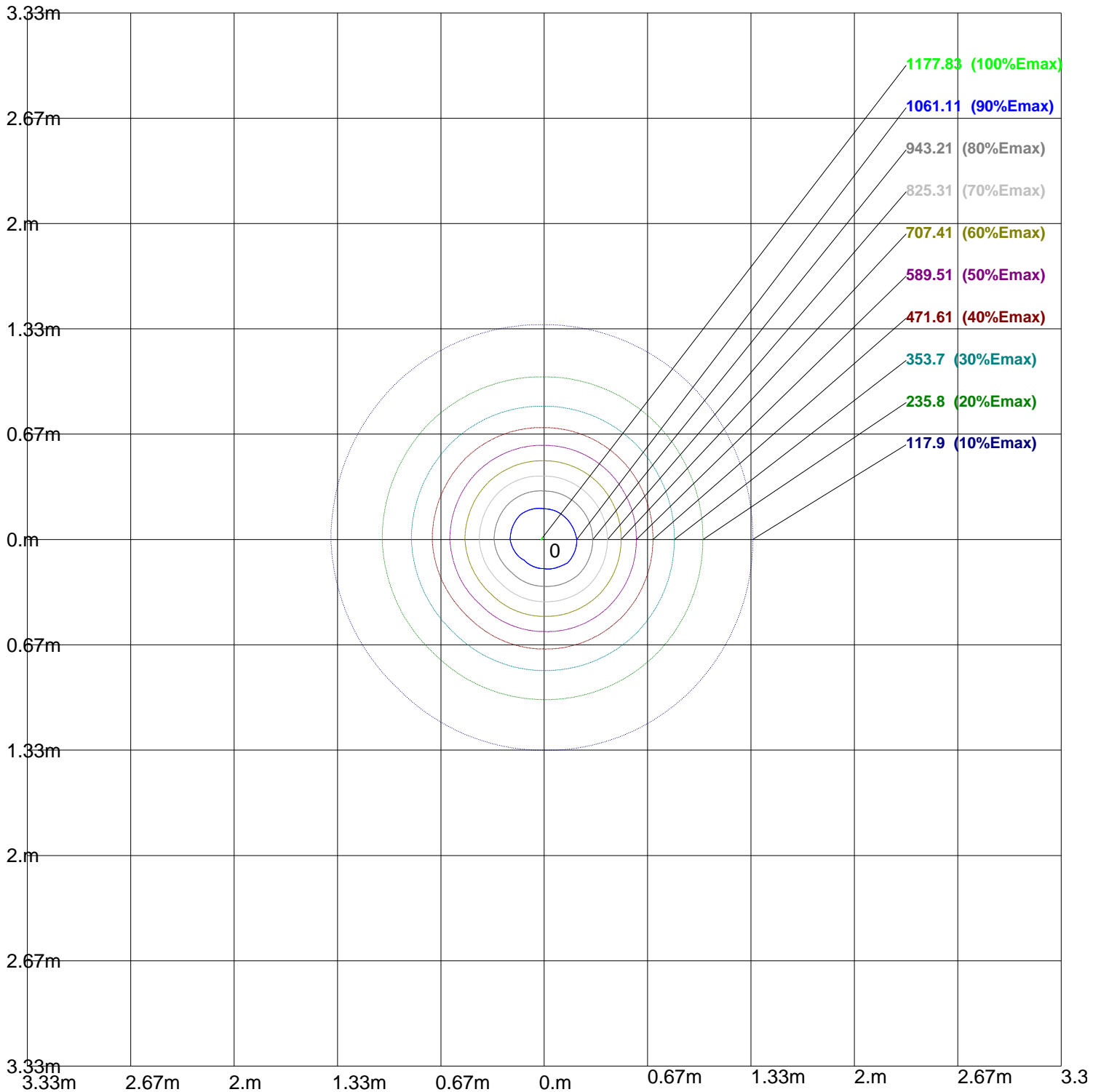
Luminaire



**Max Plane Light Distribution Curve [Unit: cd]**



### Iso-Lux[lx]



Height: 1 m  
Max Illuminance : 1179.01lx

## Luminance Limiting Curve

Diameter: 220mm

Length: 220mm

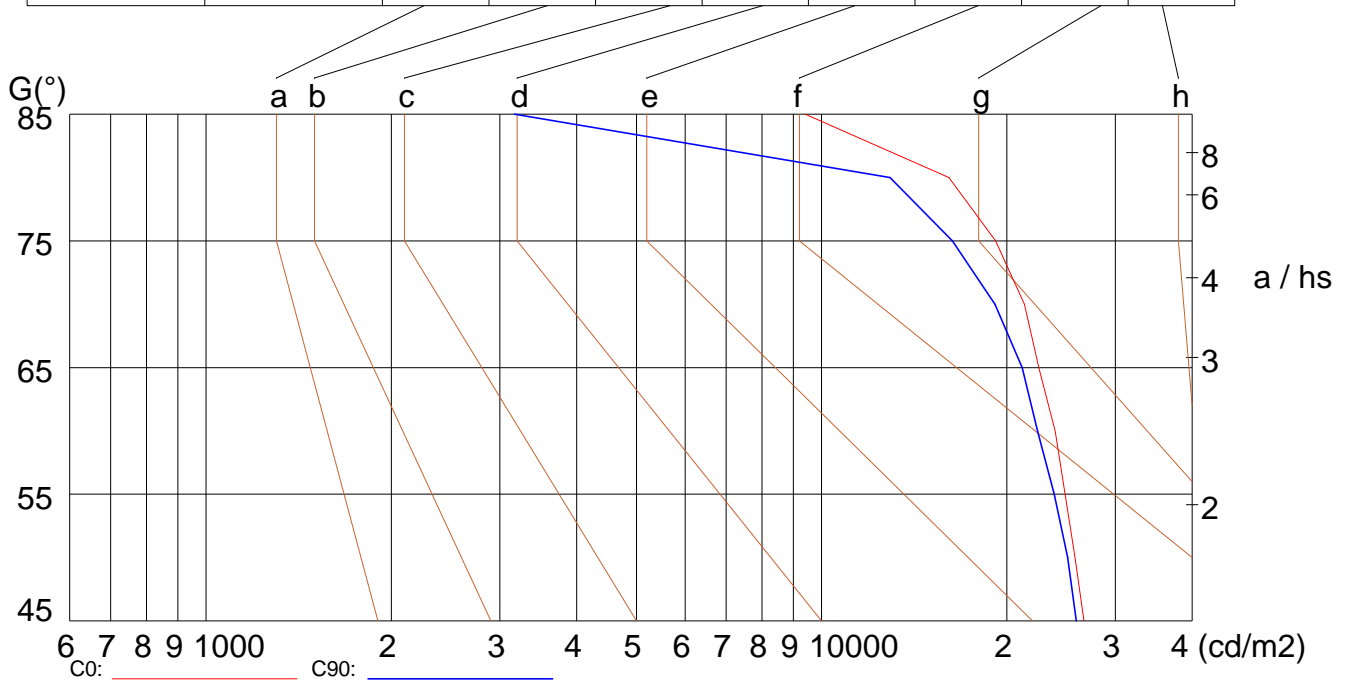
Width: 220mm

Height: 30mm

(cd/m<sup>2</sup>)

$\gamma$	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	26697	25816	24858	23956	22552	21355	19180	16105	9400
C90	25924	25120	23884	22437	21181	19132	16322	12921	3169

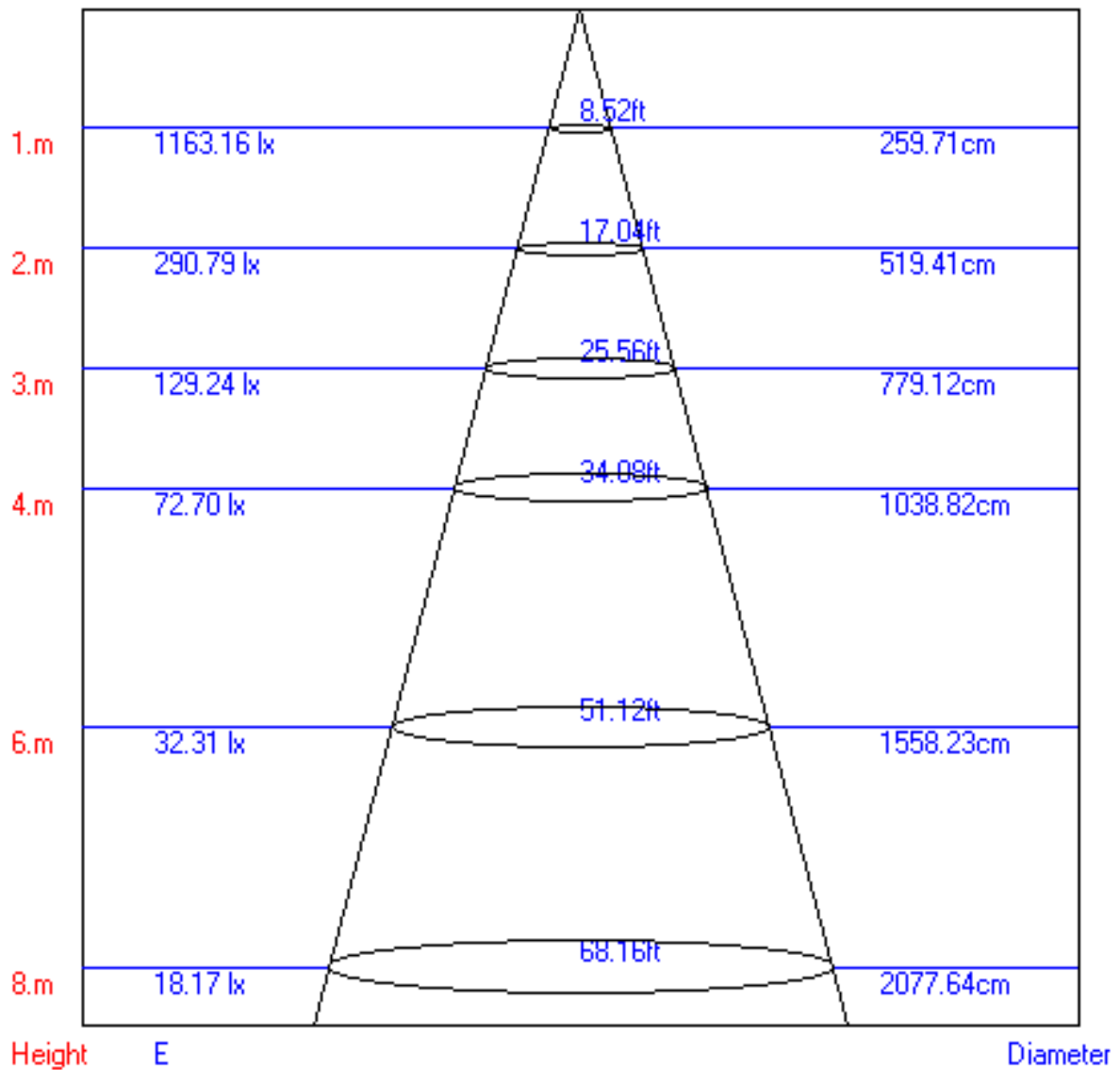
Glare	Quality	Service Values Illuminance (lx)							
1.15	A	2000	1000	500	≤300				
1.5	B		2000	1000	500	≤300			
1.85	C			2000	1000	500	≤300		
2.2	D				2000	1000	500	≤300	
2.55	E					2000	1000	500	≤300



Lum. Limiting Curve (C0/C90)



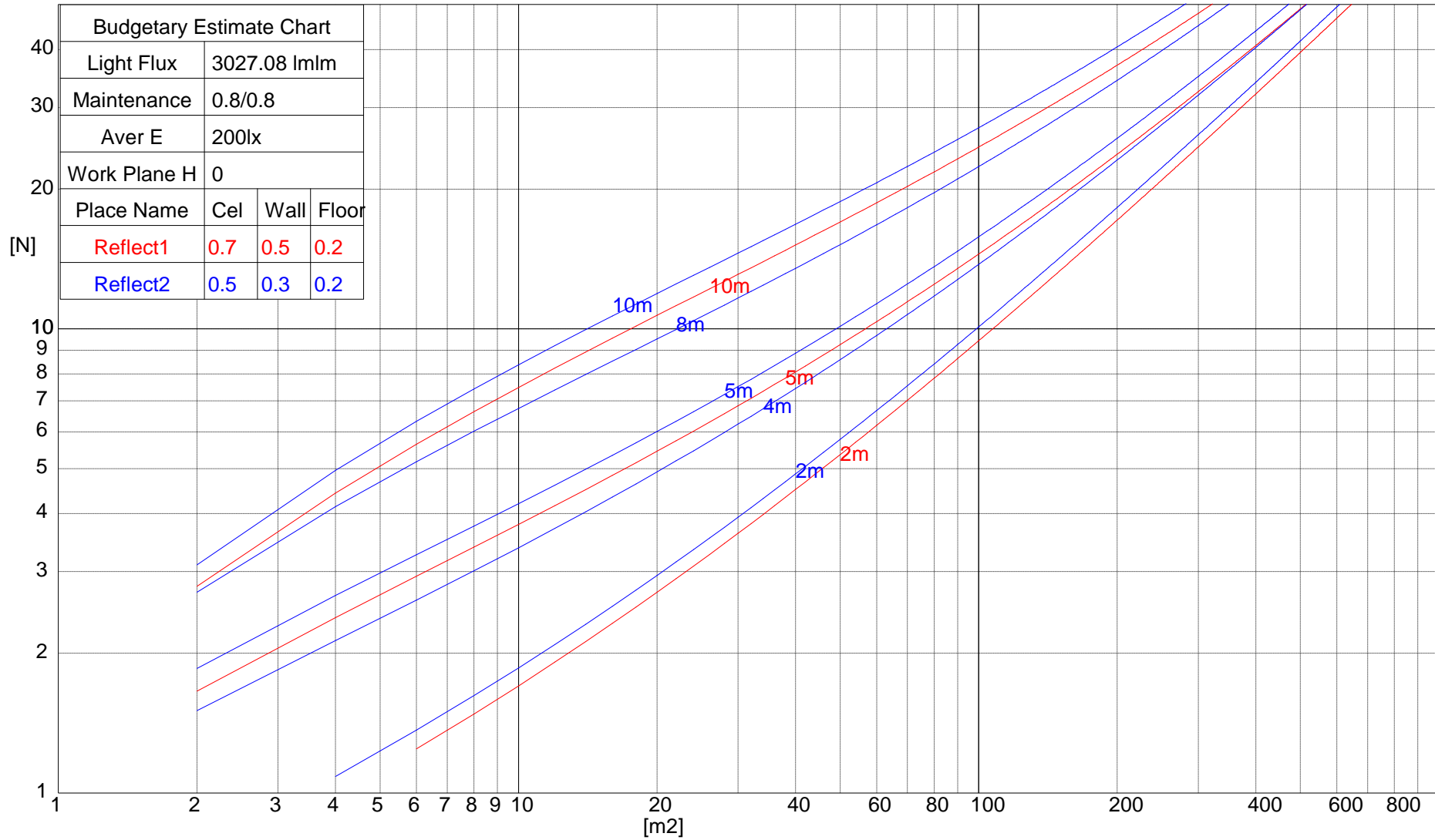
### Lux-Distance Curve



Beam Angle:104.80°

Utilization Coefficient Table

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 FOR RHOFC=20															
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	1.00
1	1.05	1.04	1.02	1.04	1.02	1.00	1.00	0.98	0.96	0.95	0.93	0.91	0.89	0.87	0.85	0.79
2	0.90	0.87	0.86	0.89	0.86	0.84	0.87	0.83	0.80	0.83	0.80	0.76	0.79	0.75	0.71	0.67
3	0.77	0.74	0.72	0.77	0.74	0.71	0.76	0.71	0.68	0.73	0.69	0.65	0.70	0.65	0.61	0.56
4	0.67	0.64	0.62	0.67	0.63	0.61	0.67	0.62	0.58	0.65	0.60	0.56	0.63	0.57	0.52	0.48
5	0.59	0.56	0.54	0.59	0.55	0.53	0.59	0.54	0.51	0.59	0.53	0.48	0.57	0.51	0.46	0.42
6	0.52	0.49	0.47	0.52	0.49	0.46	0.53	0.48	0.45	0.53	0.47	0.43	0.52	0.46	0.40	0.37
7	0.46	0.44	0.42	0.47	0.43	0.41	0.48	0.43	0.40	0.48	0.42	0.38	0.48	0.41	0.36	0.33
8	0.42	0.39	0.38	0.42	0.39	0.37	0.44	0.39	0.35	0.44	0.38	0.34	0.44	0.37	0.32	0.29
9	0.38	0.35	0.34	0.39	0.35	0.33	0.40	0.35	0.32	0.41	0.35	0.31	0.41	0.34	0.29	0.26
10	0.34	0.32	0.31	0.35	0.32	0.30	0.37	0.32	0.29	0.38	0.32	0.28	0.38	0.31	0.27	0.24



## UGR Glare Index

Ceiling	70	70	50	50	30	70	70	50	50	30	
Wall	50	30	50	30	30	50	30	50	30	30	
Floor	20	20	20	20	20	20	20	20	20	20	
Room Size X      Y	Weft to light axis direction of observation					Direction of light axis parallel observation					
2H	2H	14.7	16.0	14.9	15.9	16.5	14.7	15.9	14.8	16.0	16.5
	3H	16.3	17.4	16.7	17.9	17.9	16.2	17.4	16.4	17.8	18.0
	4H	16.9	18.1	17.4	18.7	18.8	16.9	18.1	17.3	18.5	18.8
	6H	17.6	18.5	18.0	18.9	18.9	17.4	18.3	17.8	18.9	19.0
	8H	17.8	18.9	18.1	19.0	19.3	17.7	18.7	17.9	19.0	19.3
4H	12H	17.9	18.8	18.1	19.2	19.5	17.7	18.7	18.1	19.2	19.6
	2H	15.7	16.6	15.9	16.8	17.0	15.6	16.6	15.8	16.9	17.0
	3H	17.5	18.4	17.7	18.4	18.8	17.3	18.2	17.6	18.3	18.7
	4H	18.3	18.9	18.5	19.1	19.5	18.0	18.9	18.4	19.1	19.6
	6H	18.8	19.5	19.1	19.8	20.2	18.7	19.5	18.9	19.7	20.0
8H	8H	19.0	19.7	19.4	20.0	20.3	19.0	19.5	19.3	20.0	20.3
	12H	19.2	19.8	19.7	20.0	20.5	19.1	19.8	19.5	20.1	20.5
	4H	18.5	19.2	18.8	19.4	19.8	18.5	19.1	18.7	19.4	19.8
	6H	19.3	19.8	19.8	20.2	20.6	19.2	19.7	19.6	20.2	20.5
	8H	19.8	20.2	20.2	20.5	20.9	19.6	20.0	20.1	20.4	21.0
12H	12H	20.0	20.4	20.4	20.9	21.1	19.8	20.3	20.3	20.8	21.2
	4H	18.6	19.2	19.1	19.6	19.8	18.5	19.0	18.9	19.4	19.8
	6H	19.5	20.0	19.9	20.2	20.7	19.4	19.9	19.8	20.2	20.6
	8H	19.9	20.3	20.4	20.5	21.1	19.8	20.2	20.3	20.6	21.0