

## Luminaire Property

Luminaire: RH-RPL18 18W 4000K

Report NO.:

Voltage: 221.5 V

Test NO.:

Current: 0.144 A

Lamp:

Power: 18.7 W

Sum Lumens: 1734.8 lm

Power Factor: 0.586

Number of Lamps: 1

Ballast Type: EMC300mA

Diameter: 225mm

Width: 225mm

Length: mm

Height: 25mm

Photometric Type: Type C

Remark: PMMA+0.5W SMD2835

## Photometric Results

Lumens: 1734.80 lm

Angle of maximum intensity: C:135.0 G:2.0

Effective luminous flux: 1706.42 lm

Half Peak Side Angle(50%): Left: -51.6 Right:54.4

Efficiency: 92.7701 lm/W

Light Out Rate(LOR) : 100.00%

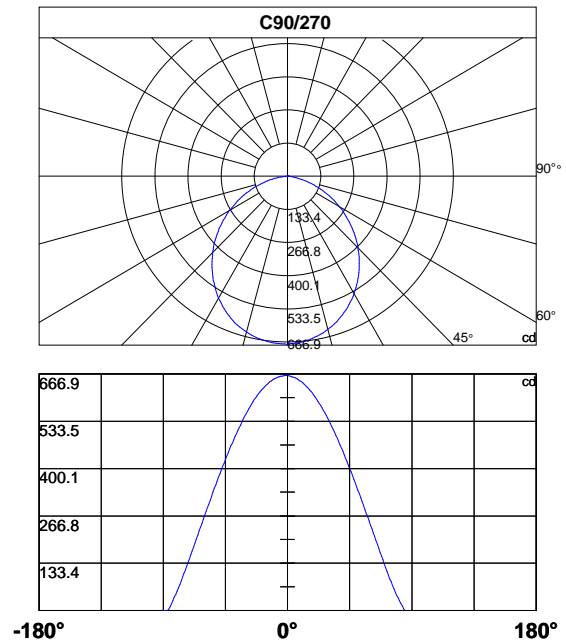
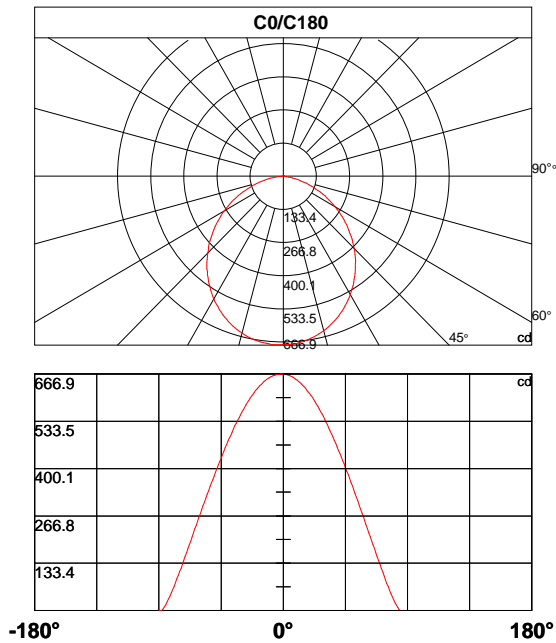
Central Intensity: 664.525cd

Up Flux Rate: 0.0%

Maximum Intensity: 666.944cd

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -76.1 Right:79.1



### 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
<b>0.0</b>	664.5	666.4	665.5	664.5	663.1	661.6	659.7	657.8	655.1	652.5
<b>45.0</b>	664.5	661.5	660.9	659.5	658.3	656.9	655.2	653.0	650.5	647.8
<b>90.0</b>	664.5	661.5	660.9	659.5	658.3	656.9	655.2	653.0	650.5	647.8
<b>135.0</b>	664.5	666.7	666.9	666.3	665.9	665.1	664.0	662.4	660.7	658.8
<b>180.0</b>	664.5	666.7	666.9	666.3	665.9	665.1	664.0	662.4	660.7	658.8
<b>225.0</b>	664.5	662.3	662.3	661.8	661.2	660.5	659.2	658.2	656.2	654.6
<b>270.0</b>	664.5	662.3	662.3	661.8	661.2	660.5	659.2	658.2	656.2	654.6
<b>315.0</b>	664.5	666.4	665.5	664.5	663.1	661.6	659.7	657.8	655.1	652.5
<b>360.0</b>	664.5	666.4	665.5	664.5	663.1	661.6	659.7	657.8	655.1	652.5

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
<b>0.0</b>	649.6	646.4	643.7	639.5	635.8	631.3	626.8	622.0	616.6	612.2
<b>45.0</b>	644.9	641.8	638.3	634.6	630.5	626.5	621.6	617.7	612.7	607.3
<b>90.0</b>	644.9	641.8	638.3	634.6	630.5	626.5	621.6	617.7	612.7	607.3
<b>135.0</b>	656.5	654.5	651.6	648.5	645.1	641.2	637.7	633.4	629.4	625.1
<b>180.0</b>	656.5	654.5	651.6	648.5	645.1	641.2	637.7	633.4	629.4	625.1
<b>225.0</b>	652.4	649.8	647.5	644.1	641.3	637.4	633.6	629.4	625.8	620.9
<b>270.0</b>	652.4	649.8	647.5	644.1	641.3	637.4	633.6	629.4	625.8	620.9
<b>315.0</b>	649.6	646.4	643.7	639.5	635.8	631.3	626.8	622.0	616.6	612.2
<b>360.0</b>	649.6	646.4	643.7	639.5	635.8	631.3	626.8	622.0	616.6	612.2

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
<b>0.0</b>	606.9	601.1	594.9	588.7	582.6	576.2	569.1	561.9	554.3	547.8
<b>45.0</b>	601.7	595.9	589.9	584.0	577.9	571.2	564.2	557.0	550.3	542.9
<b>90.0</b>	601.7	595.9	589.9	584.0	577.9	571.2	564.2	557.0	550.3	542.9
<b>135.0</b>	620.1	614.7	609.3	604.3	598.8	592.2	586.2	579.2	572.5	566.1
<b>180.0</b>	620.1	614.7	609.3	604.3	598.8	592.2	586.2	579.2	572.5	566.1
<b>225.0</b>	616.6	611.0	605.8	600.0	595.1	588.7	582.3	575.9	568.9	561.9
<b>270.0</b>	616.6	611.0	605.8	600.0	595.1	588.7	582.3	575.9	568.9	561.9
<b>315.0</b>	606.9	601.1	594.9	588.7	582.6	576.2	569.1	561.9	554.3	547.8
<b>360.0</b>	606.9	601.1	594.9	588.7	582.6	576.2	569.1	561.9	554.3	547.8

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
<b>0.0</b>	539.6	531.6	523.2	515.0	506.2	497.3	489.5	480.5	471.1	461.5
<b>45.0</b>	534.8	526.9	518.7	510.2	502.8	494.4	485.4	476.2	466.8	457.3
<b>90.0</b>	534.8	526.9	518.7	510.2	502.8	494.4	485.4	476.2	466.8	457.3
<b>135.0</b>	559.1	551.5	543.5	535.8	527.5	520.5	512.2	503.2	494.3	485.5
<b>180.0</b>	559.1	551.5	543.5	535.8	527.5	520.5	512.2	503.2	494.3	485.5
<b>225.0</b>	555.6	547.9	540.4	532.5	524.0	515.6	508.5	499.5	490.6	481.6
<b>270.0</b>	555.6	547.9	540.4	532.5	524.0	515.6	508.5	499.5	490.6	481.6
<b>315.0</b>	539.6	531.6	523.2	515.0	506.2	497.3	489.5	480.5	471.1	461.5
<b>360.0</b>	539.6	531.6	523.2	515.0	506.2	497.3	489.5	480.5	471.1	461.5

### 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	451.6	443.2	433.4	423.5	413.2	402.8	392.5	383.3	372.8	361.6
45.0	449.3	439.2	429.8	420.0	409.9	399.6	390.6	380.5	370.0	359.1
90.0	449.3	439.2	429.8	420.0	409.9	399.6	390.6	380.5	370.0	359.1
135.0	477.6	468.2	458.9	449.0	439.1	429.2	419.3	410.9	400.5	390.0
180.0	477.6	468.2	458.9	449.0	439.1	429.2	419.3	410.9	400.5	390.0
225.0	472.3	464.6	454.8	444.9	435.2	425.4	415.3	406.6	396.3	385.4
270.0	472.3	464.6	454.8	444.9	435.2	425.4	415.3	406.6	396.3	385.4
315.0	451.6	443.2	433.4	423.5	413.2	402.8	392.5	383.3	372.8	361.6
360.0	451.6	443.2	433.4	423.5	413.2	402.8	392.5	383.3	372.8	361.6

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	350.9	340.0	329.0	319.7	308.6	297.1	286.0	274.4	264.9	253.7
45.0	348.8	337.9	328.4	317.7	306.6	295.7	284.3	273.3	263.7	252.6
90.0	348.8	337.9	328.4	317.7	306.6	295.7	284.3	273.3	263.7	252.6
135.0	379.5	369.1	359.7	349.2	338.2	327.6	316.4	305.6	295.8	284.7
180.0	379.5	369.1	359.7	349.2	338.2	327.6	316.4	305.6	295.8	284.7
225.0	375.1	364.3	353.8	344.5	333.6	322.6	311.6	300.2	291.1	279.8
270.0	375.1	364.3	353.8	344.5	333.6	322.6	311.6	300.2	291.1	279.8
315.0	350.9	340.0	329.0	319.7	308.6	297.1	286.0	274.4	264.9	253.7
360.0	350.9	340.0	329.0	319.7	308.6	297.1	286.0	274.4	264.9	253.7

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	241.8	230.6	218.8	207.6	195.7	185.8	174.2	162.7	151.3	140.2
45.0	241.2	229.9	218.7	209.1	197.8	186.3	175.5	164.1	152.8	143.3
90.0	241.2	229.9	218.7	209.1	197.8	186.3	175.5	164.1	152.8	143.3
135.0	273.8	262.3	250.9	239.8	229.8	218.7	207.3	196.3	184.8	175.1
180.0	273.8	262.3	250.9	239.8	229.8	218.7	207.3	196.3	184.8	175.1
225.0	268.6	257.2	245.7	234.3	224.9	213.2	201.6	190.3	179.1	167.6
270.0	268.6	257.2	245.7	234.3	224.9	213.2	201.6	190.3	179.1	167.6
315.0	241.8	230.6	218.8	207.6	195.7	185.8	174.2	162.7	151.3	140.2
360.0	241.8	230.6	218.8	207.6	195.7	185.8	174.2	162.7	151.3	140.2

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	130.4	119.4	108.1	97.2	86.4	75.8	67.3	57.1	47.8	38.4
45.0	132.3	121.5	110.3	100.0	89.3	80.7	70.5	60.9	51.6	42.6
90.0	132.3	121.5	110.3	100.0	89.3	80.7	70.5	60.9	51.6	42.6
135.0	163.6	152.3	141.1	130.3	119.0	110.0	99.1	88.9	78.1	68.0
180.0	163.6	152.3	141.1	130.3	119.0	110.0	99.1	88.9	78.1	68.0
225.0	157.8	146.7	135.4	124.5	113.5	104.1	93.6	83.1	73.3	63.2
270.0	157.8	146.7	135.4	124.5	113.5	104.1	93.6	83.1	73.3	63.2
315.0	130.4	119.4	108.1	97.2	86.4	75.8	67.3	57.1	47.8	38.4
360.0	130.4	119.4	108.1	97.2	86.4	75.8	67.3	57.1	47.8	38.4

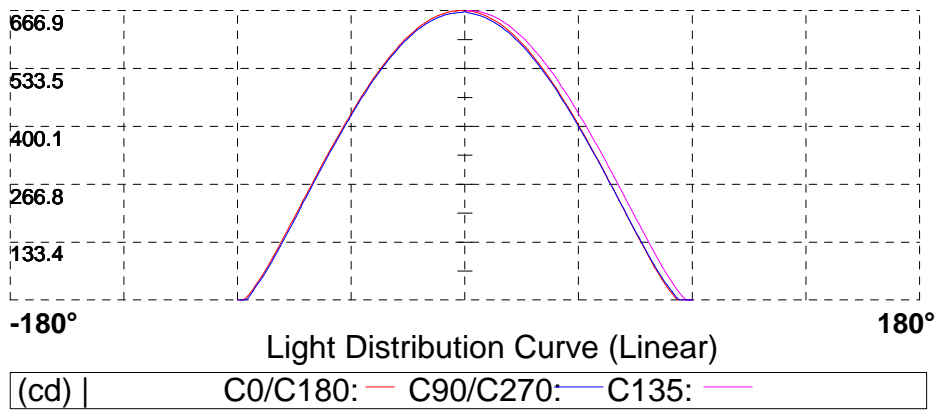
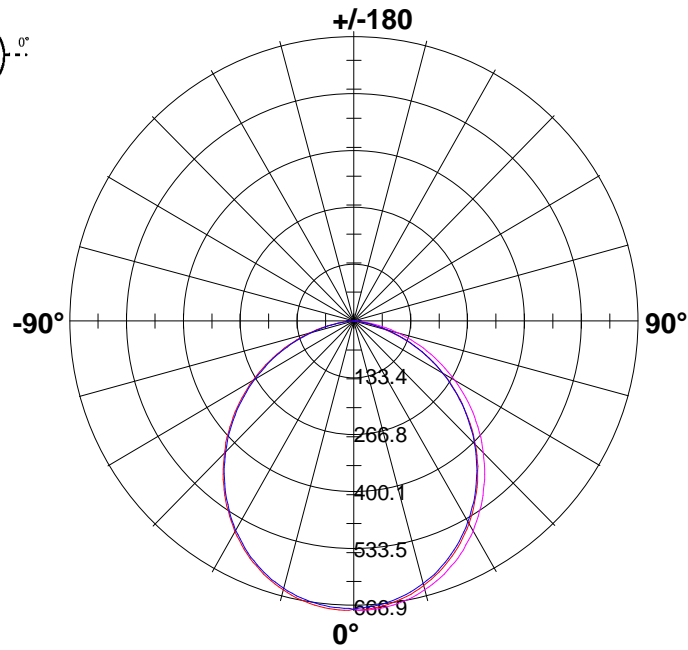
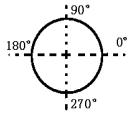
### Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	29.8	21.7	15.2	8.1	1.8	0.0	0.0	0.0	0.0	0.0
45.0	35.2	27.2	19.5	12.2	4.9	0.0	0.0	0.0	0.0	0.0
90.0	35.2	27.2	19.5	12.2	4.9	0.0	0.0	0.0	0.0	0.0
135.0	58.4	49.9	40.9	32.5	24.0	16.3	9.7	3.4	0.0	0.0
180.0	58.4	49.9	40.9	32.5	24.0	16.3	9.7	3.4	0.0	0.0
225.0	53.8	44.6	37.3	28.2	19.9	11.6	3.4	0.0	0.0	0.0
270.0	53.8	44.6	37.3	28.2	19.9	11.6	3.4	0.0	0.0	0.0
315.0	29.8	21.7	15.2	8.1	1.8	0.0	0.0	0.0	0.0	0.0
360.0	29.8	21.7	15.2	8.1	1.8	0.0	0.0	0.0	0.0	0.0

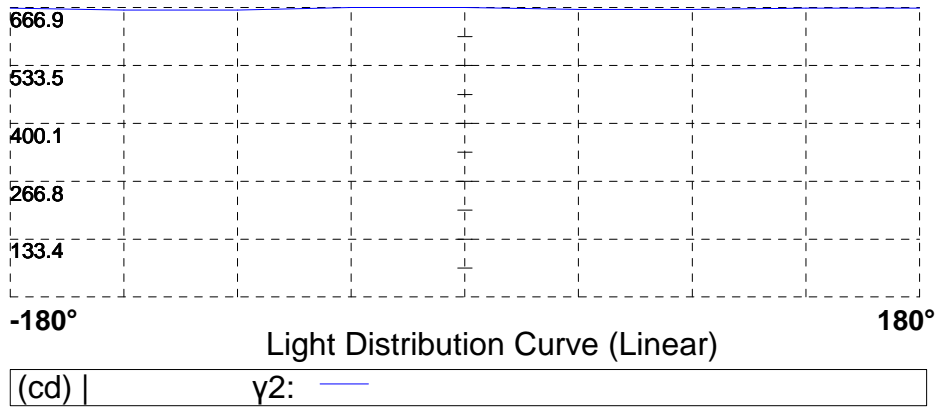
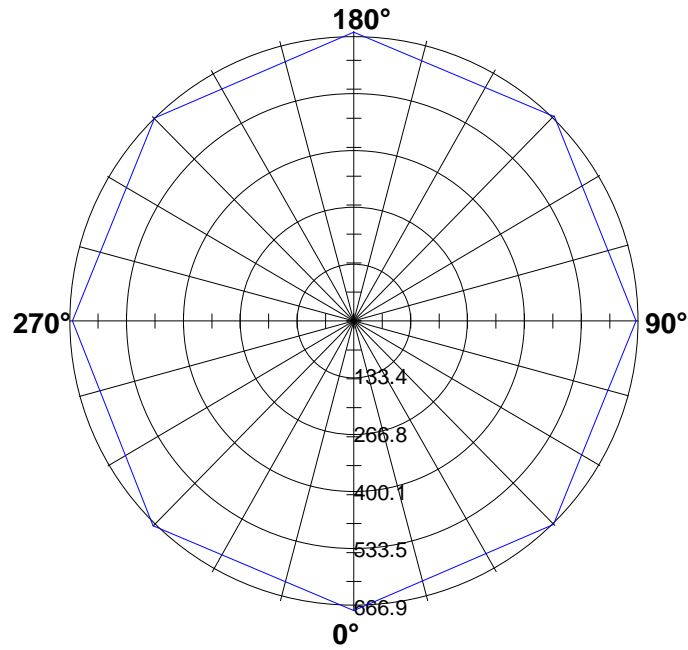
C\G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

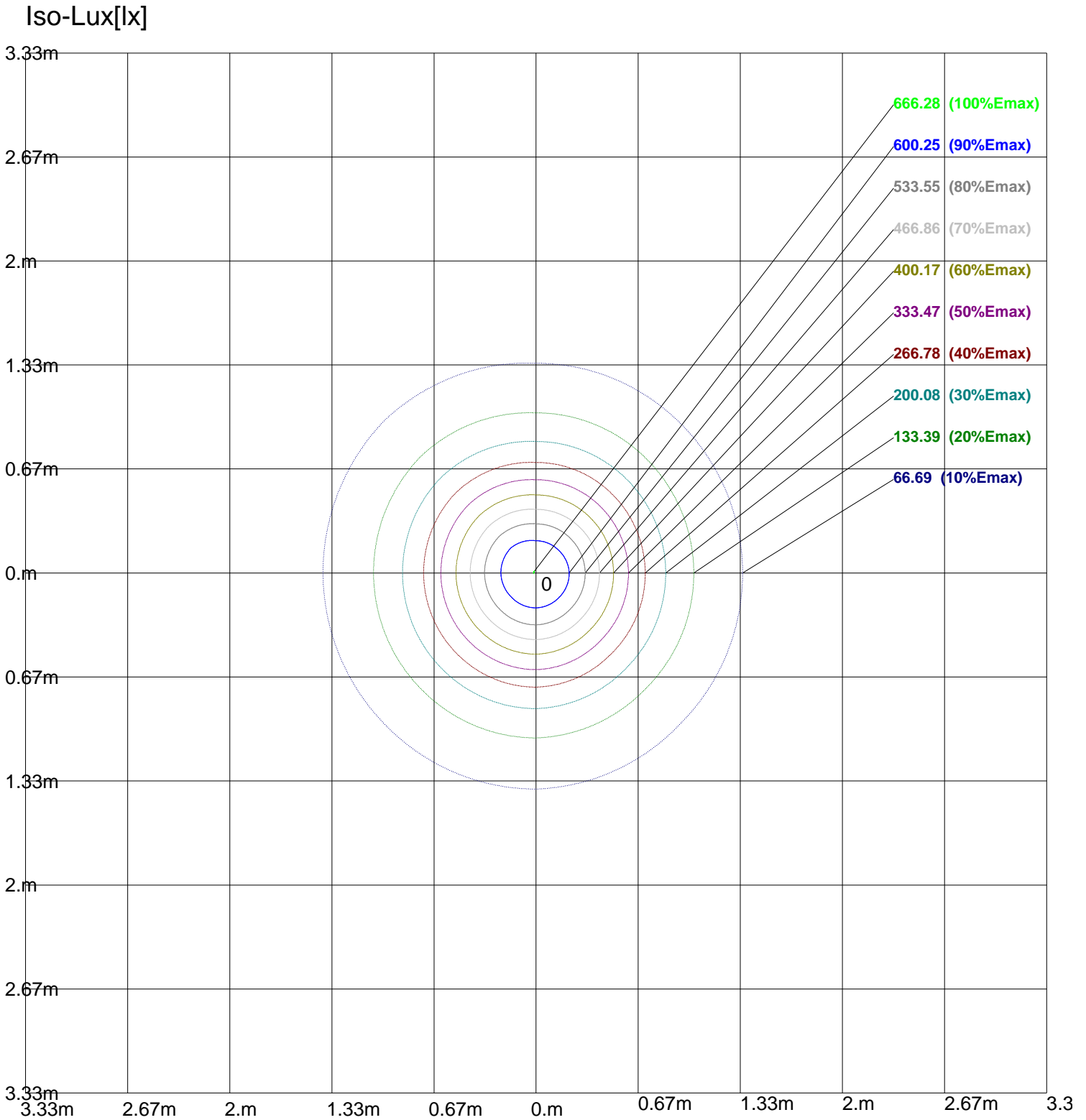
Light Distribution Curve [Unit: cd]

Luminaire



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





Height: 1 m  
Max Illuminance : 666.94lx

## Luminance Limiting Curve

Diameter: 225mm

Length: mm

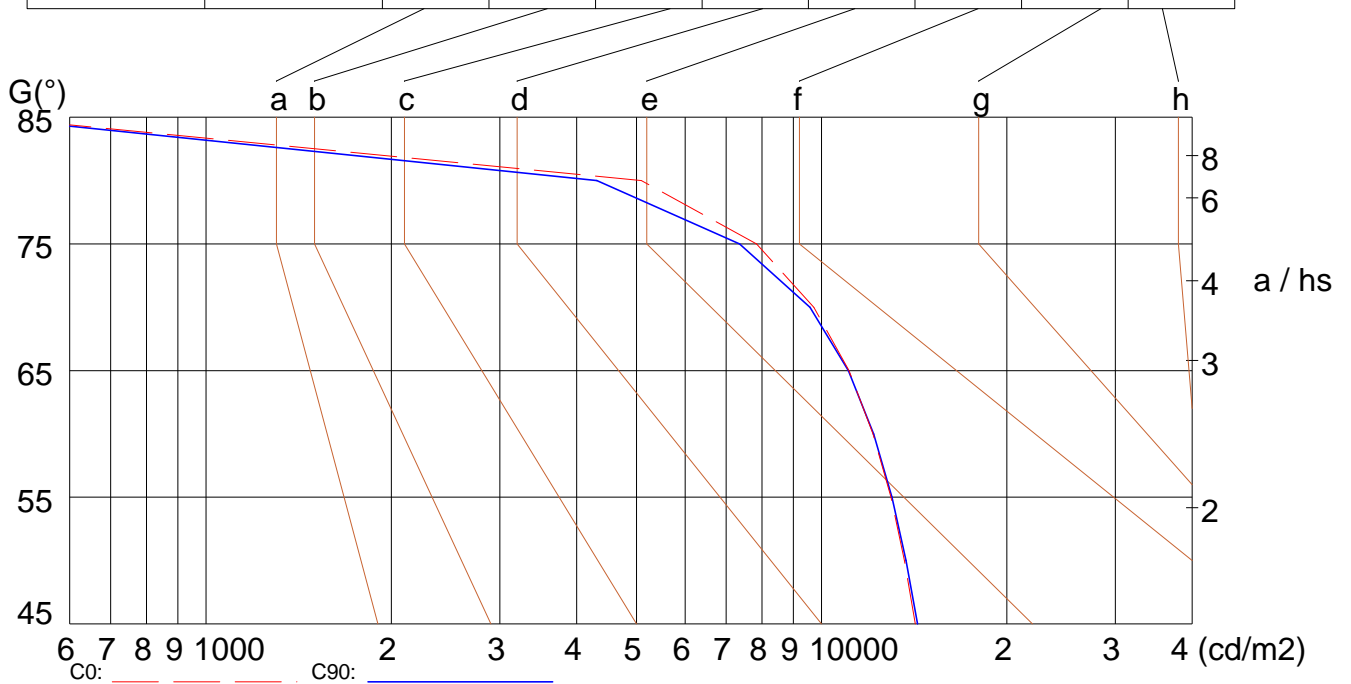
Width: 225mm

Height: 25mm

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

$\gamma$	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	14200	13632	12955	12123	11078	9716	7836	5097	
C90	14312	13716	13013	12151	11048	9577	7360	4312	

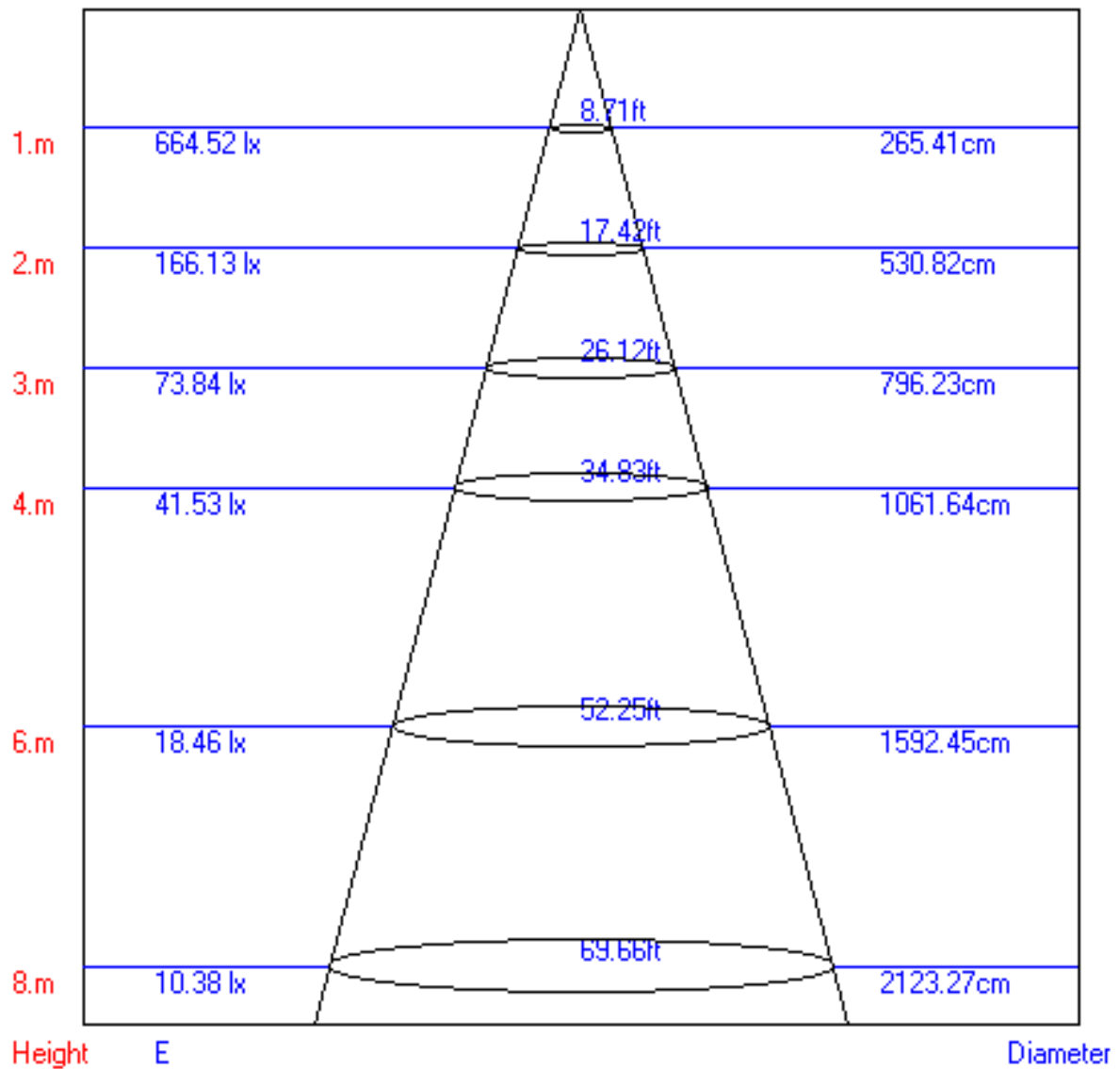
Glare	Quality	Service Values Illuminance (lx)							
1.15	A	2000	1000	500	≤300				
1.5	B		2000	1000	500	≤300			
1.85	C			2000	1000	500	≤300		
2.2	D				2000	1000	500	≤300	
2.55	E					2000	1000	500	≤300



Lum. Limiting Curve (C0/C90)



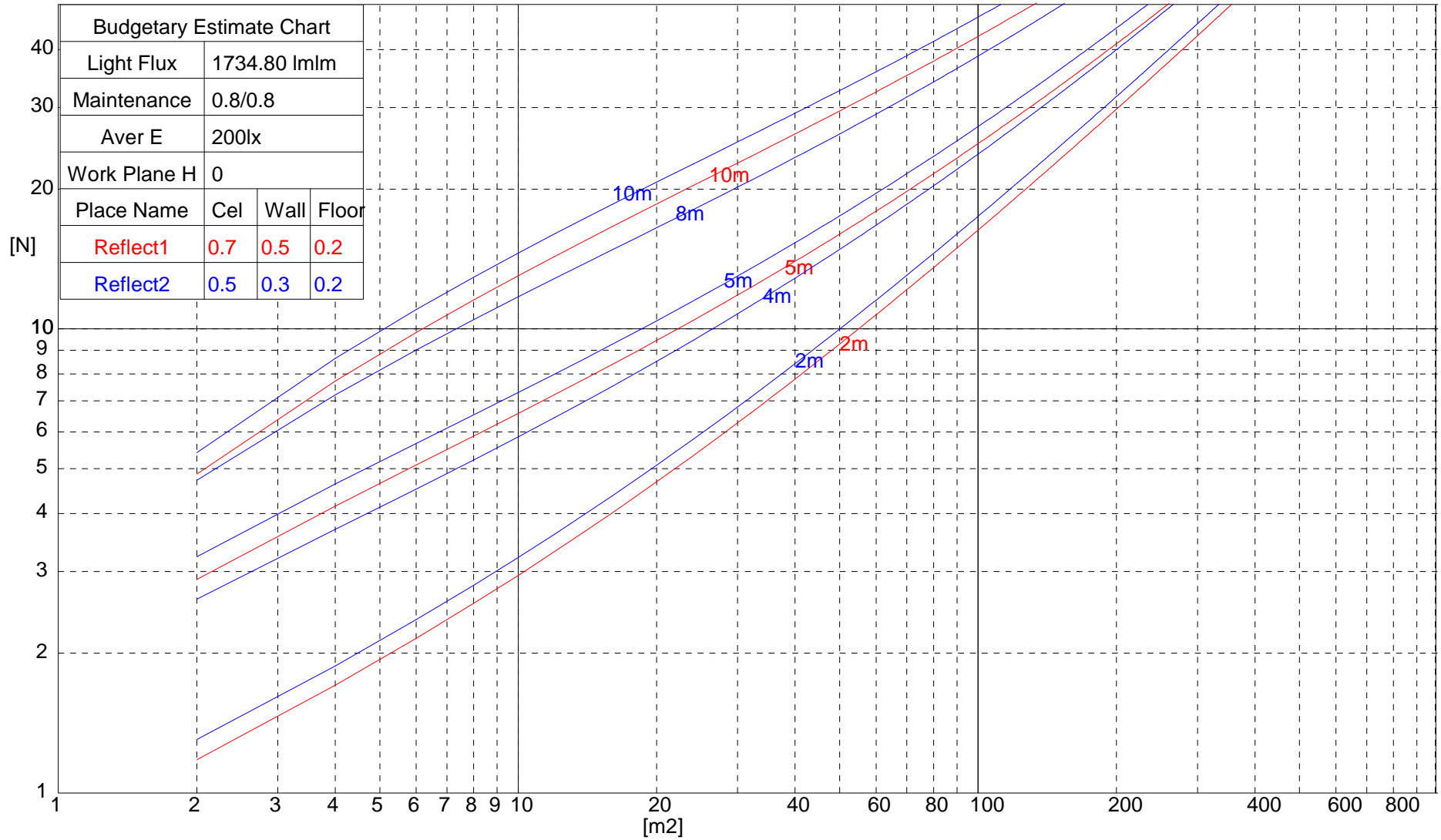
### Lux-Distance Curve



Beam Angle:106.00°

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	1.06	1.04	1.03	1.04	1.03	1.01	1.01	0.99	0.97	0.96	0.94	0.92	0.89	0.87	0.85	0.80
2	0.91	0.88	0.86	0.90	0.87	0.85	0.87	0.84	0.81	0.84	0.80	0.77	0.79	0.75	0.72	0.67
3	0.78	0.75	0.73	0.78	0.74	0.72	0.76	0.72	0.69	0.74	0.69	0.65	0.71	0.66	0.61	0.57
4	0.67	0.65	0.63	0.68	0.64	0.62	0.67	0.63	0.59	0.66	0.60	0.56	0.64	0.58	0.53	0.49
5	0.59	0.56	0.55	0.60	0.56	0.53	0.60	0.55	0.51	0.59	0.53	0.49	0.58	0.51	0.46	0.42
6	0.52	0.50	0.48	0.53	0.49	0.47	0.54	0.49	0.45	0.53	0.47	0.43	0.52	0.46	0.41	0.37
7	0.47	0.44	0.42	0.47	0.44	0.42	0.48	0.43	0.40	0.48	0.43	0.38	0.48	0.41	0.36	0.33
8	0.42	0.39	0.38	0.43	0.39	0.37	0.44	0.39	0.36	0.44	0.38	0.34	0.44	0.38	0.33	0.29
9	0.38	0.36	0.34	0.39	0.36	0.34	0.40	0.35	0.32	0.41	0.35	0.31	0.41	0.34	0.29	0.27
10	0.35	0.32	0.31	0.36	0.32	0.30	0.37	0.32	0.29	0.38	0.32	0.28	0.38	0.32	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	14.8	15.9	15.1	15.9	16.3	14.7	15.9	14.9	15.9	16.3	
	3H	16.2	17.4	16.7	17.7	18.0	16.2	17.4	16.5	17.9	18.0	
	4H	16.9	18.1	17.4	18.6	18.7	17.0	18.0	17.3	18.6	18.8	
	6H	17.5	18.5	18.0	18.9	19.0	17.3	18.3	17.8	18.8	19.1	
	8H	17.9	18.9	18.2	18.9	19.3	17.8	18.7	18.0	19.0	19.3	
	12H	18.0	18.8	18.2	19.3	19.5	17.8	18.6	18.0	19.2	19.5	
4H	2H	15.6	16.6	15.9	16.9	17.1	15.6	16.6	15.8	16.8	17.0	
	3H	17.5	18.4	17.8	18.3	18.7	17.3	18.2	17.5	18.4	18.8	
	4H	18.2	19.0	18.5	19.1	19.5	18.0	18.9	18.4	19.2	19.5	
	6H	18.8	19.5	19.2	19.8	20.1	18.8	19.4	19.0	19.7	20.1	
	8H	19.0	19.8	19.5	19.9	20.4	19.0	19.6	19.2	19.9	20.3	
	12H	19.3	19.9	19.7	20.2	20.4	19.2	19.7	19.6	20.2	20.5	
8H	4H	18.6	19.2	18.8	19.4	19.9	18.4	19.0	18.8	19.4	19.8	
	6H	19.4	19.8	19.7	20.2	20.7	19.2	19.9	19.7	20.2	20.6	
	8H	19.8	20.2	20.1	20.5	20.9	19.6	20.0	20.0	20.5	20.9	
	12H	19.9	20.5	20.4	20.7	21.3	19.9	20.4	20.2	20.7	21.1	
	12H	4H	18.6	19.1	18.9	19.5	19.9	18.4	19.0	18.8	19.6	19.9
		6H	19.6	20.0	19.9	20.2	20.6	19.3	19.8	19.8	20.2	20.7
8H		19.9	20.4	20.3	20.7	21.1	19.9	20.3	20.2	20.6	21.1	