

## Luminaire Property

Luminaire: RH-SPL24 24W 3000K

Report NO.:

Voltage: 219.5 V

Test NO.:

Current: 0.175 A

Lamp:

Power: 21.9 W

Sum Lumens: 1925.71 lm

Power Factor: 0.567

Number of Lamps: 1

Ballast Type: EMC300mA

Diameter: mm

Width: 300mm

Length: 300mm

Height: 20mm

Photometric Type: Type C

Remark: PMMA+0.5W SMD2835

## Photometric Results

Lumens: 1925.71 lm

Angle of maximum intensity: C:135.0 G:2.0

Effective luminous flux: 1896.55 lm

Half Peak Side Angle(50%): Left: -53.6 Right:55.5

Efficiency: 87.932 lm/W

Light Out Rate(LOR) : 100.00%

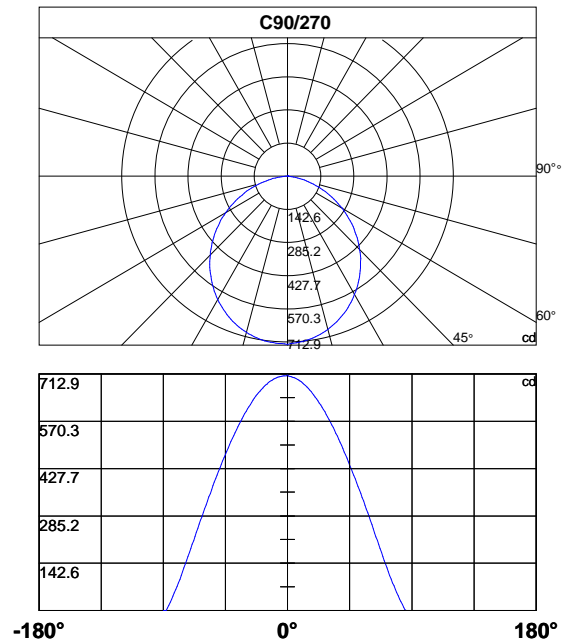
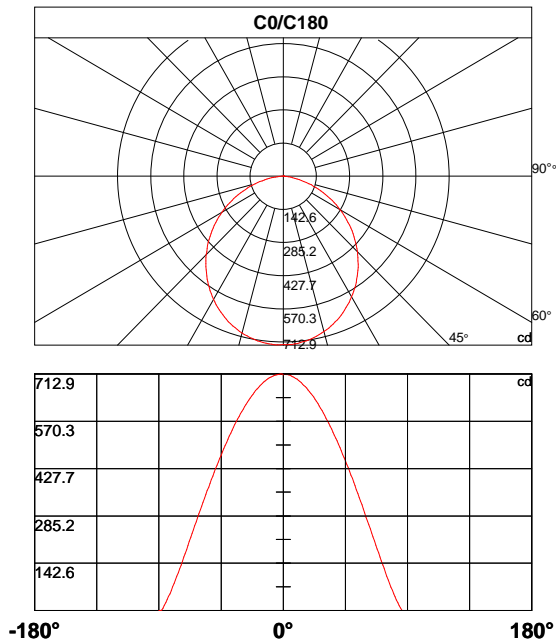
Central Intensity: 710.387cd

Up Flux Rate: 0.0%

Maximum Intensity: 712.852cd

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -77.9 Right:80.0



### 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	710.4	712.6	711.5	710.9	709.9	708.8	706.5	704.4	702.5	699.7
45.0	710.4	706.1	705.6	704.3	702.8	701.1	699.1	697.1	694.5	691.6
90.0	710.4	706.1	705.6	704.3	702.8	701.1	699.1	697.1	694.5	691.6
135.0	710.4	712.8	712.9	712.0	711.5	710.4	709.3	707.6	705.5	703.6
180.0	710.4	712.8	712.9	712.0	711.5	710.4	709.3	707.6	705.5	703.6
225.0	710.4	707.2	707.2	707.3	706.6	705.8	704.7	703.8	701.6	699.8
270.0	710.4	707.2	707.2	707.3	706.6	705.8	704.7	703.8	701.6	699.8
315.0	710.4	712.6	711.5	710.9	709.9	708.8	706.5	704.4	702.5	699.7
360.0	710.4	712.6	711.5	710.9	709.9	708.8	706.5	704.4	702.5	699.7

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	697.4	693.8	690.6	686.6	682.7	678.7	674.6	670.3	664.8	659.5
45.0	688.8	685.2	681.7	678.2	673.8	669.4	664.8	659.9	654.7	649.8
90.0	688.8	685.2	681.7	678.2	673.8	669.4	664.8	659.9	654.7	649.8
135.0	701.3	698.4	695.5	691.7	689.2	685.3	681.1	676.6	672.0	668.1
180.0	701.3	698.4	695.5	691.7	689.2	685.3	681.1	676.6	672.0	668.1
225.0	697.7	694.9	692.7	689.5	686.5	682.6	678.9	675.4	671.1	666.3
270.0	697.7	694.9	692.7	689.5	686.5	682.6	678.9	675.4	671.1	666.3
315.0	697.4	693.8	690.6	686.6	682.7	678.7	674.6	670.3	664.8	659.5
360.0	697.4	693.8	690.6	686.6	682.7	678.7	674.6	670.3	664.8	659.5

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	654.4	649.1	643.2	636.9	630.7	624.0	616.8	609.5	603.0	595.7
45.0	644.1	638.0	632.3	625.7	619.8	613.0	606.1	598.8	591.2	583.3
90.0	644.1	638.0	632.3	625.7	619.8	613.0	606.1	598.8	591.2	583.3
135.0	662.5	657.4	651.8	646.1	639.7	633.5	628.0	620.9	614.2	606.9
180.0	662.5	657.4	651.8	646.1	639.7	633.5	628.0	620.9	614.2	606.9
225.0	661.3	656.2	650.8	646.0	640.2	634.0	627.5	620.8	614.0	607.7
270.0	661.3	656.2	650.8	646.0	640.2	634.0	627.5	620.8	614.0	607.7
315.0	654.4	649.1	643.2	636.9	630.7	624.0	616.8	609.5	603.0	595.7
360.0	654.4	649.1	643.2	636.9	630.7	624.0	616.8	609.5	603.0	595.7

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	588.1	579.7	571.3	564.1	555.5	546.7	538.0	528.7	519.3	511.0
45.0	575.2	568.4	560.1	551.6	543.0	534.0	525.8	516.6	507.5	497.9
90.0	575.2	568.4	560.1	551.6	543.0	534.0	525.8	516.6	507.5	497.9
135.0	599.6	593.0	584.9	576.9	568.7	560.3	551.5	543.7	534.8	525.4
180.0	599.6	593.0	584.9	576.9	568.7	560.3	551.5	543.7	534.8	525.4
225.0	600.5	593.1	585.6	577.7	570.2	562.2	553.8	545.0	535.9	526.8
270.0	600.5	593.1	585.6	577.7	570.2	562.2	553.8	545.0	535.9	526.8
315.0	588.1	579.7	571.3	564.1	555.5	546.7	538.0	528.7	519.3	511.0
360.0	588.1	579.7	571.3	564.1	555.5	546.7	538.0	528.7	519.3	511.0

### 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	501.5	491.3	481.3	471.1	460.6	451.9	440.8	430.0	419.4	408.2
45.0	488.0	478.2	469.5	459.3	448.9	438.2	427.7	417.1	407.3	396.7
90.0	488.0	478.2	469.5	459.3	448.9	438.2	427.7	417.1	407.3	396.7
135.0	516.1	506.4	496.8	488.6	478.4	468.3	458.0	447.6	438.2	427.6
180.0	516.1	506.4	496.8	488.6	478.4	468.3	458.0	447.6	438.2	427.6
225.0	519.0	509.4	499.8	490.4	480.2	470.2	461.1	450.8	440.2	429.8
270.0	519.0	509.4	499.8	490.4	480.2	470.2	461.1	450.8	440.2	429.8
315.0	501.5	491.3	481.3	471.1	460.6	451.9	440.8	430.0	419.4	408.2
360.0	501.5	491.3	481.3	471.1	460.6	451.9	440.8	430.0	419.4	408.2

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	398.4	387.1	375.7	363.6	352.3	340.4	330.1	317.9	305.9	293.9
45.0	385.2	374.3	362.5	353.0	341.0	329.5	317.6	305.5	293.7	283.3
90.0	385.2	374.3	362.5	353.0	341.0	329.5	317.6	305.5	293.7	283.3
135.0	416.4	405.7	394.3	383.2	371.6	362.0	350.2	338.3	326.5	314.4
180.0	416.4	405.7	394.3	383.2	371.6	362.0	350.2	338.3	326.5	314.4
225.0	418.9	407.9	398.4	387.1	375.9	364.0	352.4	342.7	330.6	318.9
270.0	418.9	407.9	398.4	387.1	375.9	364.0	352.4	342.7	330.6	318.9
315.0	398.4	387.1	375.7	363.6	352.3	340.4	330.1	317.9	305.9	293.9
360.0	398.4	387.1	375.7	363.6	352.3	340.4	330.1	317.9	305.9	293.9

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	281.5	268.9	258.3	246.2	233.9	221.4	209.2	196.7	185.7	173.3
45.0	270.9	258.6	246.5	234.0	221.8	211.4	199.1	186.8	174.2	162.3
90.0	270.9	258.6	246.5	234.0	221.8	211.4	199.1	186.8	174.2	162.3
135.0	304.2	292.0	280.0	267.6	255.4	243.1	232.8	220.5	208.2	195.8
180.0	304.2	292.0	280.0	267.6	255.4	243.1	232.8	220.5	208.2	195.8
225.0	306.9	295.0	282.9	272.3	259.9	247.8	235.4	222.6	210.5	199.6
270.0	306.9	295.0	282.9	272.3	259.9	247.8	235.4	222.6	210.5	199.6
315.0	281.5	268.9	258.3	246.2	233.9	221.4	209.2	196.7	185.7	173.3
360.0	281.5	268.9	258.3	246.2	233.9	221.4	209.2	196.7	185.7	173.3

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	161.3	149.2	137.1	126.8	114.9	103.4	91.7	80.8	70.1	61.2
45.0	150.6	140.5	128.6	117.0	105.4	94.5	83.3	74.3	63.6	53.7
90.0	150.6	140.5	128.6	117.0	105.4	94.5	83.3	74.3	63.6	53.7
135.0	183.6	171.2	160.7	148.7	137.0	125.1	113.6	103.5	92.7	81.6
180.0	183.6	171.2	160.7	148.7	137.0	125.1	113.6	103.5	92.7	81.6
225.0	187.4	175.2	163.1	150.9	140.8	128.4	117.1	105.3	94.0	83.0
270.0	187.4	175.2	163.1	150.9	140.8	128.4	117.1	105.3	94.0	83.0
315.0	161.3	149.2	137.1	126.8	114.9	103.4	91.7	80.8	70.1	61.2
360.0	161.3	149.2	137.1	126.8	114.9	103.4	91.7	80.8	70.1	61.2

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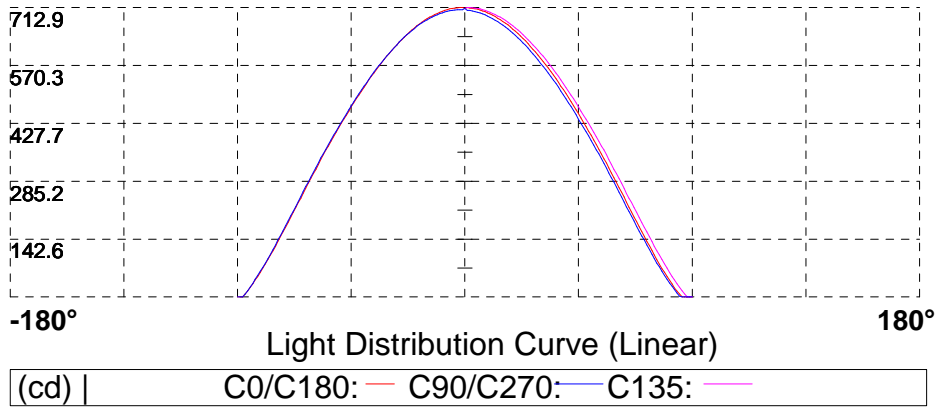
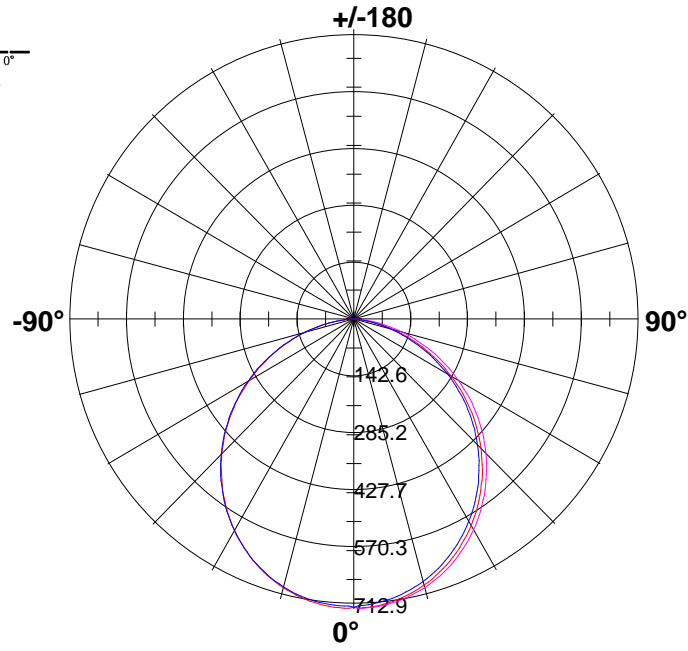
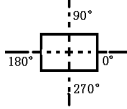
### Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	50.7	41.3	31.9	22.9	14.5	7.5	0.3	0.0	0.0	0.0
45.0	44.1	34.3	26.6	18.4	10.0	2.2	0.0	0.0	0.0	0.0
90.0	44.1	34.3	26.6	18.4	10.0	2.2	0.0	0.0	0.0	0.0
135.0	71.0	60.3	50.4	42.0	33.0	24.1	15.6	7.2	0.5	0.0
180.0	71.0	60.3	50.4	42.0	33.0	24.1	15.6	7.2	0.5	0.0
225.0	72.5	63.6	53.5	43.7	34.0	25.1	15.6	7.4	0.0	0.0
270.0	72.5	63.6	53.5	43.7	34.0	25.1	15.6	7.4	0.0	0.0
315.0	50.7	41.3	31.9	22.9	14.5	7.5	0.3	0.0	0.0	0.0
360.0	50.7	41.3	31.9	22.9	14.5	7.5	0.3	0.0	0.0	0.0

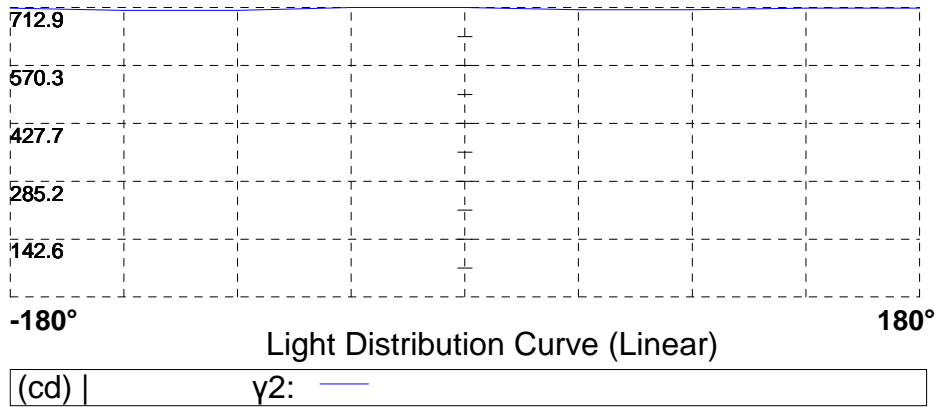
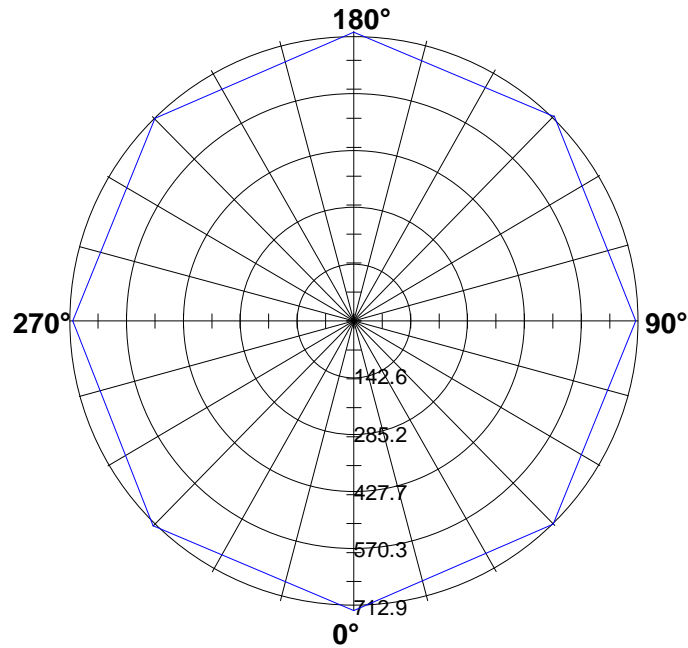
C\G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

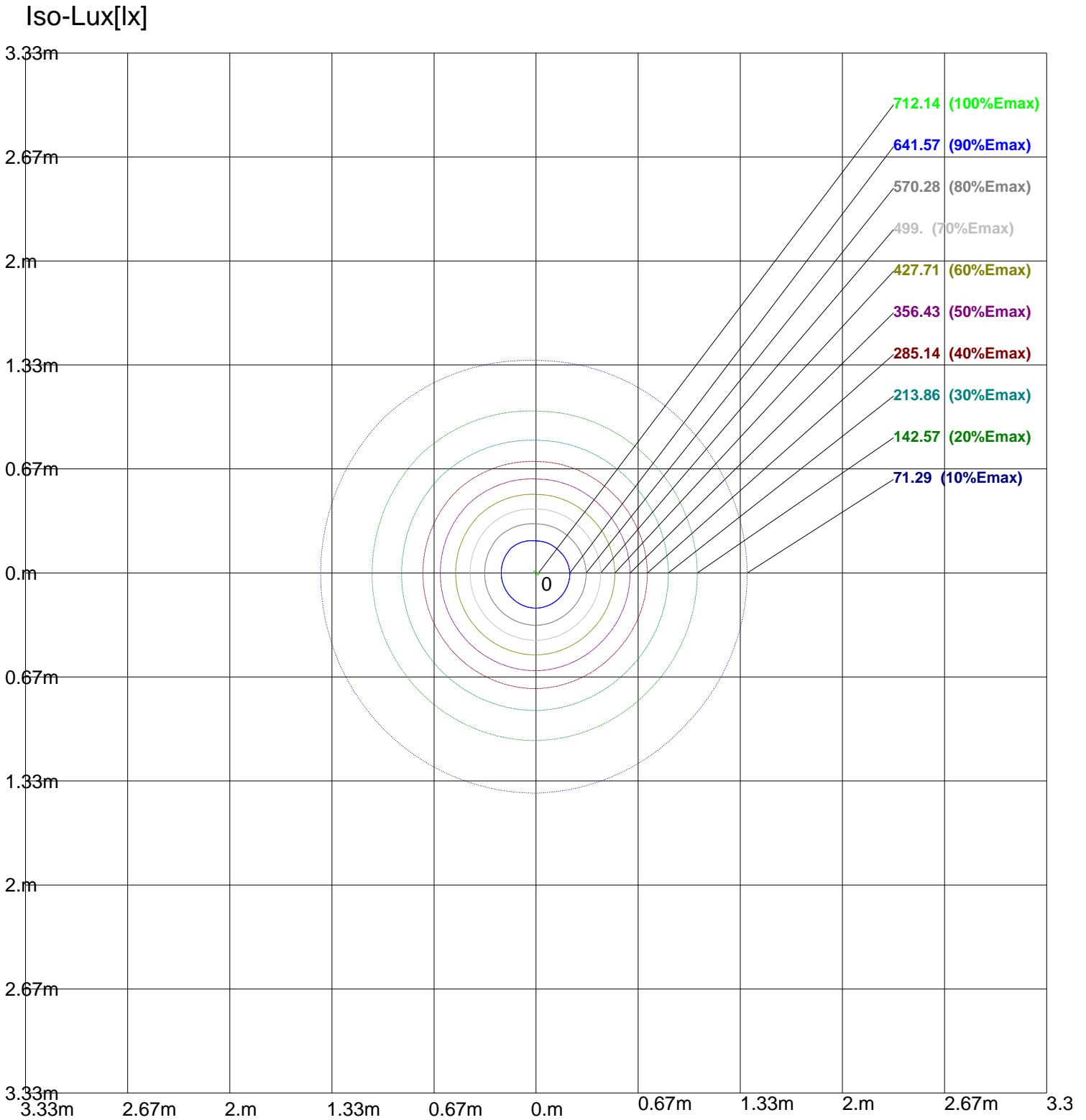
### Light Distribution Curve [Unit: cd]

Luminaire



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





Height: 1 m  
Max Illuminance : 712.85lx

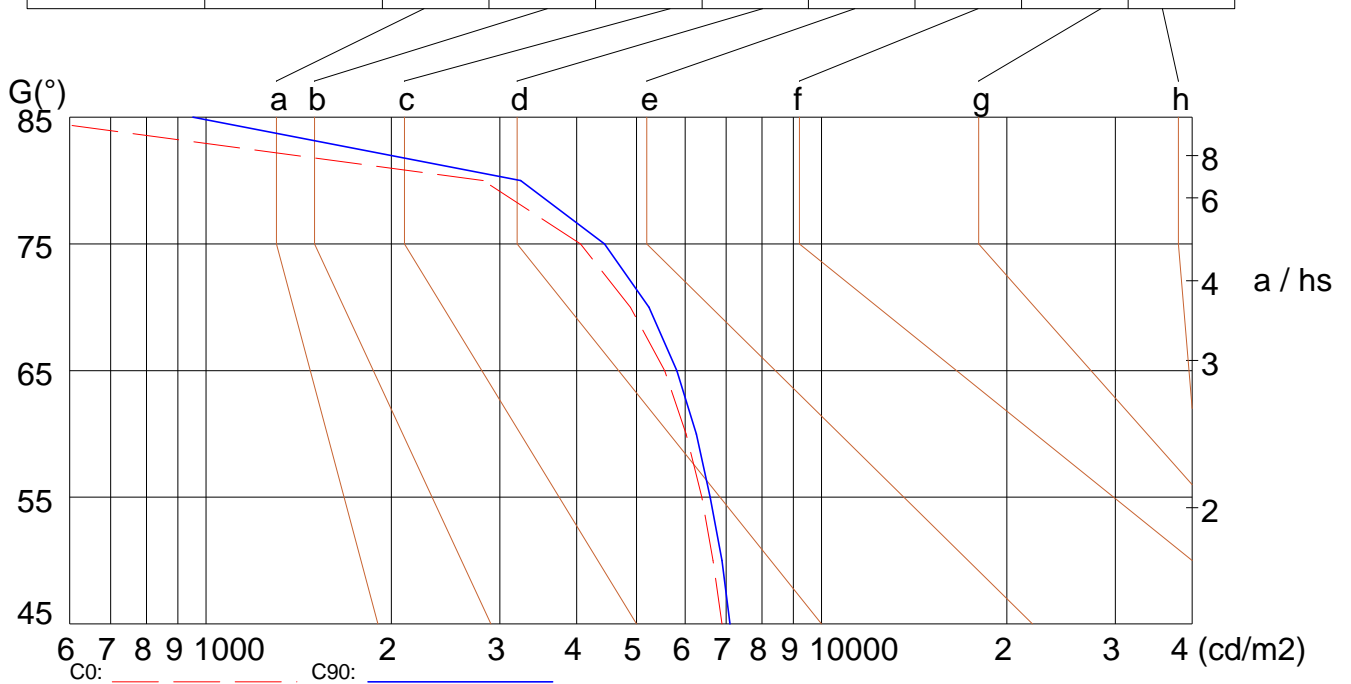
## Luminance Limiting Curve

Diameter: mm  
 Length: 300mm  
 Width: 300mm  
 Height: 20mm

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

$\gamma$	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	6886	6658	6384	6020	5558	4893	4058	2820	287
C90	7101	6887	6594	6255	5820	5241	4440	3245	952

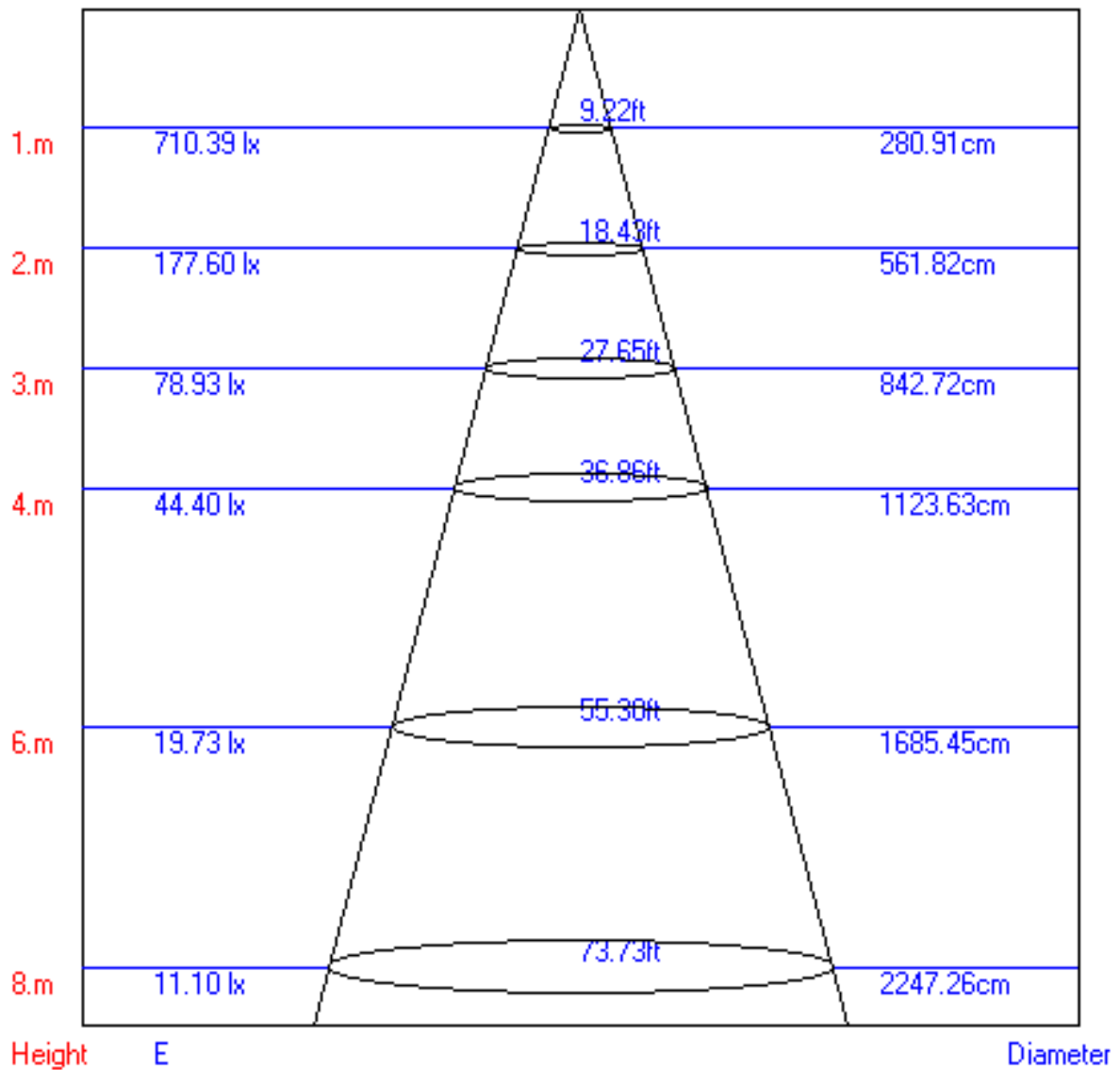
Glare	Quality	Service Values Illuminance (lx)							
1.15	A	2000	1000	500	≤300				
1.5	B		2000	1000	500	≤300			
1.85	C			2000	1000	500	≤300		
2.2	D				2000	1000	500	≤300	
2.55	E					2000	1000	500	≤300



Lum. Limiting Curve (C0/C90)



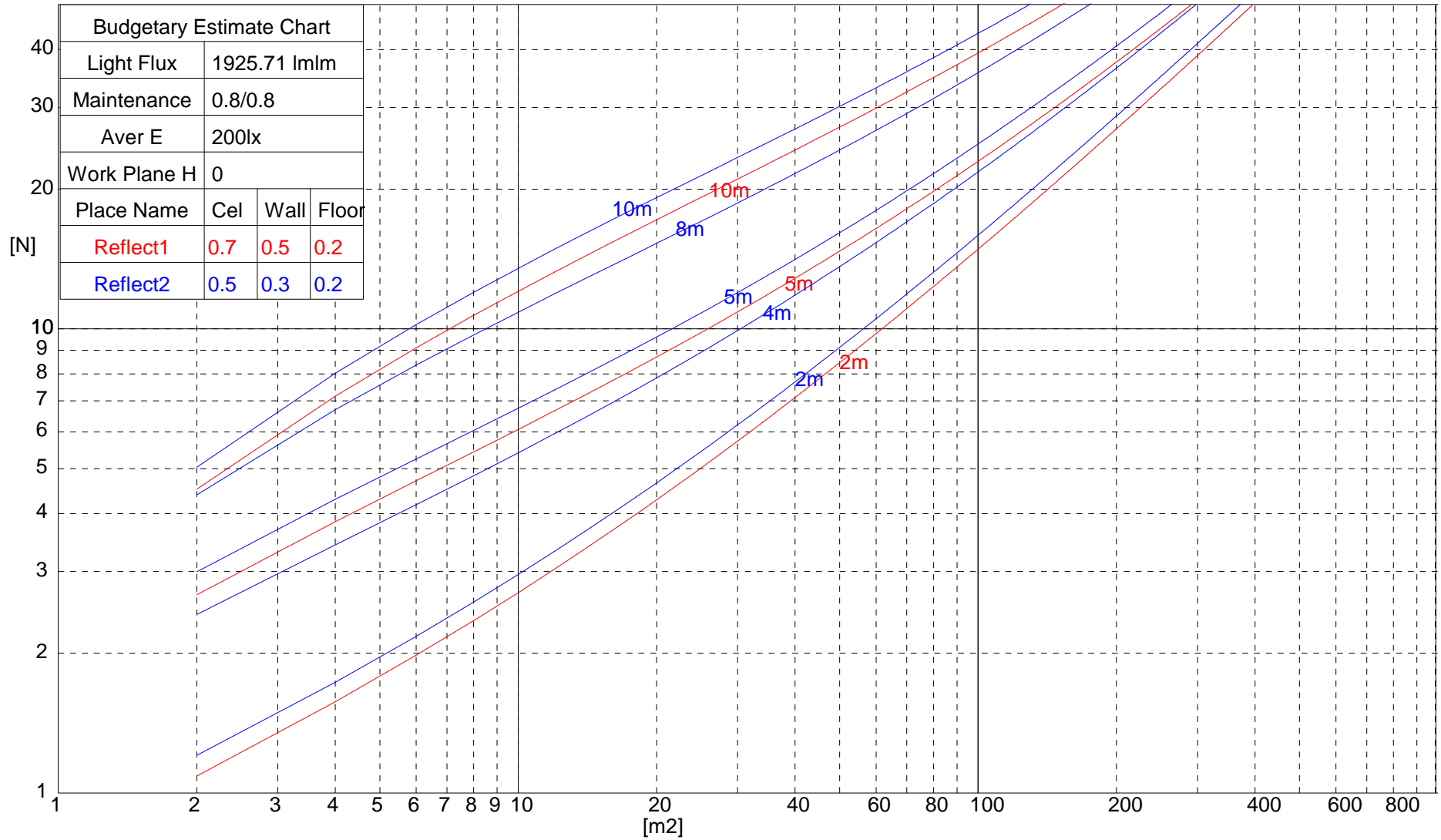
### Lux-Distance Curve



Beam Angle:109.10°

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	1.03	1.02	1.04	1.02	1.00	1.00	0.98	0.96	0.95	0.93	0.91	0.89	0.87	0.84	0.79
2	0.90	0.87	0.85	0.89	0.86	0.84	0.87	0.83	0.80	0.83	0.79	0.76	0.79	0.75	0.71	0.66
3	0.77	0.74	0.72	0.77	0.73	0.71	0.75	0.71	0.68	0.73	0.68	0.64	0.70	0.65	0.60	0.56
4	0.66	0.64	0.62	0.67	0.63	0.60	0.66	0.62	0.58	0.65	0.60	0.55	0.63	0.57	0.52	0.48
5	0.58	0.55	0.53	0.59	0.55	0.52	0.59	0.54	0.50	0.58	0.52	0.48	0.57	0.50	0.45	0.42
6	0.51	0.49	0.47	0.52	0.48	0.46	0.53	0.48	0.44	0.53	0.47	0.42	0.52	0.45	0.40	0.36
7	0.46	0.43	0.41	0.47	0.43	0.41	0.47	0.43	0.39	0.48	0.42	0.37	0.47	0.41	0.36	0.32
8	0.41	0.39	0.37	0.42	0.38	0.36	0.43	0.38	0.35	0.44	0.38	0.33	0.44	0.37	0.32	0.29
9	0.37	0.35	0.33	0.38	0.35	0.33	0.39	0.35	0.31	0.40	0.34	0.30	0.40	0.34	0.29	0.26
10	0.34	0.32	0.30	0.35	0.32	0.30	0.36	0.32	0.29	0.37	0.31	0.27	0.38	0.31	0.26	0.23



## 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	15.9	15.0	16.0	16.3	14.5	15.8	14.9	16.0	16.4	
	3H	16.2	17.5	16.6	17.8	17.9	16.2	17.4	16.5	17.9	18.0	
	4H	17.0	18.0	17.4	18.7	18.7	16.9	18.0	17.2	18.6	18.7	
	6H	17.5	18.6	18.0	18.8	19.0	17.5	18.5	17.8	18.9	19.0	
	8H	17.8	18.9	18.1	19.0	19.4	17.8	18.8	18.0	18.9	19.2	
	12H	17.9	18.7	18.1	19.2	19.5	17.7	18.7	18.0	19.2	19.5	
4H	2H	15.7	16.6	15.8	16.8	17.0	15.7	16.4	15.6	16.7	17.1	
	3H	17.5	18.3	17.8	18.5	18.8	17.3	18.3	17.7	18.5	18.8	
	4H	18.1	19.0	18.6	19.0	19.5	18.1	18.9	18.3	19.0	19.5	
	6H	18.8	19.5	19.2	19.7	20.0	18.7	19.4	19.1	19.8	20.2	
	8H	19.1	19.7	19.5	20.0	20.2	19.0	19.5	19.3	20.0	20.4	
	12H	19.2	19.8	19.6	20.1	20.5	19.2	19.8	19.5	20.1	20.6	
8H	4H	18.6	19.2	18.8	19.4	19.8	18.4	19.1	18.7	19.3	19.9	
	6H	19.4	19.9	19.8	20.3	20.6	19.2	19.8	19.7	20.2	20.5	
	8H	19.7	20.2	20.1	20.5	20.9	19.6	20.1	20.0	20.5	20.9	
	12H	19.9	20.4	20.4	20.8	21.2	19.9	20.3	20.4	20.7	21.2	
	12H	4H	18.5	19.2	19.0	19.5	19.8	18.5	19.1	18.9	19.6	19.9
		6H	19.5	20.0	19.8	20.2	20.7	19.5	19.9	19.8	20.3	20.6
8H		19.9	20.4	20.4	20.5	21.1	19.8	20.2	20.2	20.5	21.0	