

## Luminaire Property

Luminaire: RH-PL3030 18W 4000K

Report NO.:

Voltage: 219.8 V

Test NO.:

Current: 0.095 A

Lamp:

Power: 20.3 W

Sum Lumens: 1538.95 lm

Power Factor: 0.964

Number of Lamps: 1

Ballast Type:

Diameter: mm

Width: 295mm

Length: 295mm

Height: mm

Photometric Type: Type C

Remark:

## Photometric Results

Lumens: 1538.95 lm

Angle of maximum intensity: C:0.0 G:1.0

Effective luminous flux: 1515.1 lm

Half Peak Side Angle(50%): Left: -55.2 Right:55.4

Efficiency: 75.8103 lm/W

Light Out Rate(LOR) : 100.00%

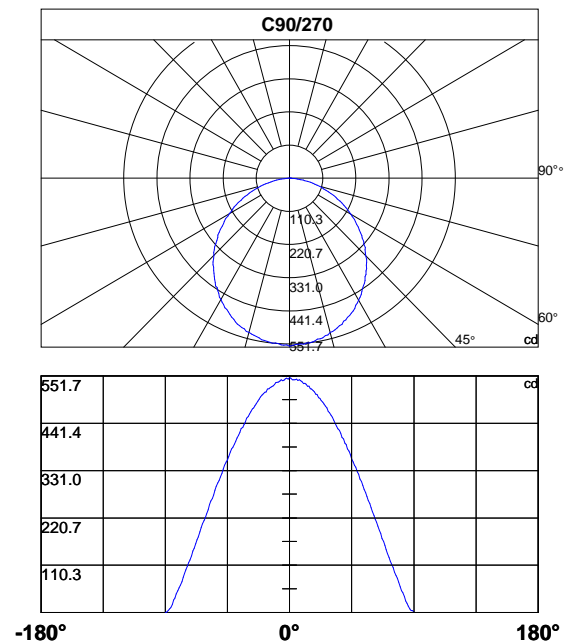
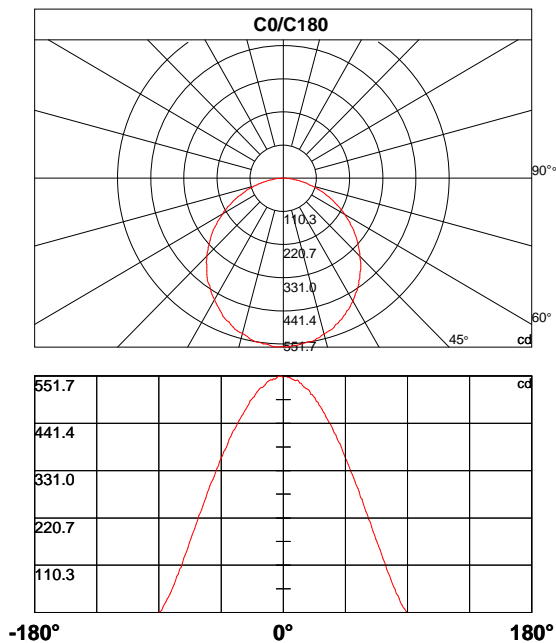
Central Intensity: 548.351cd

Up Flux Rate: 0.0%

Maximum Intensity: 551.714cd

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -80.3 Right:80.9



### 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>	548.4	551.7	551.5	548.6	548.4	547.4	545.6	543.7	542.5	540.8
<b>45.0</b>	548.4	546.8	543.3	543.1	543.1	544.6	541.6	542.7	540.6	538.6
<b>90.0</b>	548.4	546.8	543.3	543.1	543.1	544.6	541.6	542.7	540.6	538.6
<b>135.0</b>	548.4	550.5	551.5	551.3	550.1	546.8	544.6	545.4	542.1	543.1
<b>180.0</b>	548.4	550.5	551.5	551.3	550.1	546.8	544.6	545.4	542.1	543.1
<b>225.0</b>	548.4	544.6	546.6	545.0	542.1	540.6	542.7	540.0	538.0	536.7
<b>270.0</b>	548.4	544.6	546.6	545.0	542.1	540.6	542.7	540.0	538.0	536.7
<b>315.0</b>	548.4	551.7	551.5	548.6	548.4	547.4	545.6	543.7	542.5	540.8
<b>360.0</b>	548.4	551.7	551.5	548.6	548.4	547.4	545.6	543.7	542.5	540.8

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>	542.5	540.6	535.1	534.7	529.1	526.7	523.8	521.7	520.3	516.4
<b>45.0</b>	534.1	534.7	532.8	528.3	527.9	522.1	521.1	517.6	514.3	509.4
<b>90.0</b>	534.1	534.7	532.8	528.3	527.9	522.1	521.1	517.6	514.3	509.4
<b>135.0</b>	541.4	539.0	536.1	531.0	527.7	525.2	524.8	521.7	518.2	514.3
<b>180.0</b>	541.4	539.0	536.1	531.0	527.7	525.2	524.8	521.7	518.2	514.3
<b>225.0</b>	536.1	531.4	528.9	526.7	524.8	521.7	521.1	514.8	513.7	510.0
<b>270.0</b>	536.1	531.4	528.9	526.7	524.8	521.7	521.1	514.8	513.7	510.0
<b>315.0</b>	542.5	540.6	535.1	534.7	529.1	526.7	523.8	521.7	520.3	516.4
<b>360.0</b>	542.5	540.6	535.1	534.7	529.1	526.7	523.8	521.7	520.3	516.4

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>	509.2	507.3	503.0	499.9	493.1	490.3	482.9	480.2	474.2	467.5
<b>45.0</b>	508.6	501.2	499.5	494.6	490.7	486.4	482.0	476.9	469.3	465.6
<b>90.0</b>	508.6	501.2	499.5	494.6	490.7	486.4	482.0	476.9	469.3	465.6
<b>135.0</b>	509.6	503.2	500.9	497.1	493.5	485.6	480.6	474.6	469.5	463.7
<b>180.0</b>	509.6	503.2	500.9	497.1	493.5	485.6	480.6	474.6	469.5	463.7
<b>225.0</b>	506.9	502.6	497.1	492.7	487.0	482.2	477.3	474.8	468.1	463.1
<b>270.0</b>	506.9	502.6	497.1	492.7	487.0	482.2	477.3	474.8	468.1	463.1
<b>315.0</b>	509.2	507.3	503.0	499.9	493.1	490.3	482.9	480.2	474.2	467.5
<b>360.0</b>	509.2	507.3	503.0	499.9	493.1	490.3	482.9	480.2	474.2	467.5

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>	464.3	456.4	450.6	444.2	440.5	433.7	427.4	418.7	414.2	405.6
<b>45.0</b>	460.1	455.1	448.8	440.7	434.3	428.8	424.7	418.1	408.7	404.3
<b>90.0</b>	460.1	455.1	448.8	440.7	434.3	428.8	424.7	418.1	408.7	404.3
<b>135.0</b>	458.2	453.7	447.9	441.1	434.3	426.8	424.7	418.3	411.1	404.7
<b>180.0</b>	458.2	453.7	447.9	441.1	434.3	426.8	424.7	418.3	411.1	404.7
<b>225.0</b>	457.2	453.5	444.2	438.5	431.9	429.6	420.8	413.8	406.6	399.2
<b>270.0</b>	457.2	453.5	444.2	438.5	431.9	429.6	420.8	413.8	406.6	399.2
<b>315.0</b>	464.3	456.4	450.6	444.2	440.5	433.7	427.4	418.7	414.2	405.6
<b>360.0</b>	464.3	456.4	450.6	444.2	440.5	433.7	427.4	418.7	414.2	405.6

### 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	398.6	393.2	385.8	378.1	368.2	360.6	354.0	345.3	337.5	328.5
45.0	395.3	391.6	381.7	376.6	368.8	358.3	351.1	343.1	339.2	327.8
90.0	395.3	391.6	381.7	376.6	368.8	358.3	351.1	343.1	339.2	327.8
135.0	394.9	386.8	379.7	375.5	365.5	360.6	352.3	342.1	336.9	326.0
180.0	394.9	386.8	379.7	375.5	365.5	360.6	352.3	342.1	336.9	326.0
225.0	393.0	385.6	381.3	373.9	363.8	355.4	350.9	343.1	334.9	324.8
270.0	393.0	385.6	381.3	373.9	363.8	355.4	350.9	343.1	334.9	324.8
315.0	398.6	393.2	385.8	378.1	368.2	360.6	354.0	345.3	337.5	328.5
360.0	398.6	393.2	385.8	378.1	368.2	360.6	354.0	345.3	337.5	328.5

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	320.9	313.9	305.0	296.4	290.1	281.2	269.1	264.4	252.9	243.8
45.0	322.5	311.0	305.5	296.2	287.2	279.1	269.9	261.1	254.3	243.8
90.0	322.5	311.0	305.5	296.2	287.2	279.1	269.9	261.1	254.3	243.8
135.0	317.4	310.0	303.6	296.2	287.6	278.3	267.2	260.7	249.3	240.5
180.0	317.4	310.0	303.6	296.2	287.6	278.3	267.2	260.7	249.3	240.5
225.0	315.9	307.9	302.6	294.2	285.1	273.8	265.6	260.1	251.2	239.5
270.0	315.9	307.9	302.6	294.2	285.1	273.8	265.6	260.1	251.2	239.5
315.0	320.9	313.9	305.0	296.4	290.1	281.2	269.1	264.4	252.9	243.8
360.0	320.9	313.9	305.0	296.4	290.1	281.2	269.1	264.4	252.9	243.8

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	234.8	228.2	216.5	210.5	199.2	189.5	180.7	171.2	164.5	153.8
45.0	235.6	226.5	217.5	210.9	201.7	190.9	184.2	172.5	165.9	157.0
90.0	235.6	226.5	217.5	210.9	201.7	190.9	184.2	172.5	165.9	157.0
135.0	232.7	226.1	214.0	207.2	195.3	187.9	181.1	172.1	162.4	150.9
180.0	232.7	226.1	214.0	207.2	195.3	187.9	181.1	172.1	162.4	150.9
225.0	230.2	221.2	214.2	206.8	197.5	188.5	176.2	169.4	160.1	149.6
270.0	230.2	221.2	214.2	206.8	197.5	188.5	176.2	169.4	160.1	149.6
315.0	234.8	228.2	216.5	210.5	199.2	189.5	180.7	171.2	164.5	153.8
360.0	234.8	228.2	216.5	210.5	199.2	189.5	180.7	171.2	164.5	153.8

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	146.8	137.9	126.2	119.6	112.0	100.5	91.9	85.5	77.1	66.6
45.0	146.4	137.1	128.1	119.4	112.9	104.2	93.8	85.7	79.5	71.3
90.0	146.4	137.1	128.1	119.4	112.9	104.2	93.8	85.7	79.5	71.3
135.0	142.9	133.4	126.8	115.7	106.3	100.5	89.2	84.1	73.6	65.6
180.0	142.9	133.4	126.8	115.7	106.3	100.5	89.2	84.1	73.6	65.6
225.0	143.5	131.9	122.5	116.4	107.9	99.3	90.6	82.2	71.7	63.3
270.0	143.5	131.9	122.5	116.4	107.9	99.3	90.6	82.2	71.7	63.3
315.0	146.8	137.9	126.2	119.6	112.0	100.5	91.9	85.5	77.1	66.6
360.0	146.8	137.9	126.2	119.6	112.0	100.5	91.9	85.5	77.1	66.6

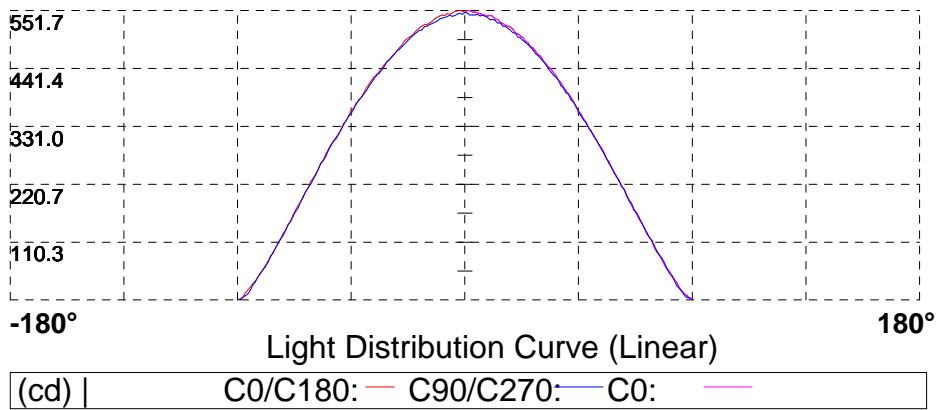
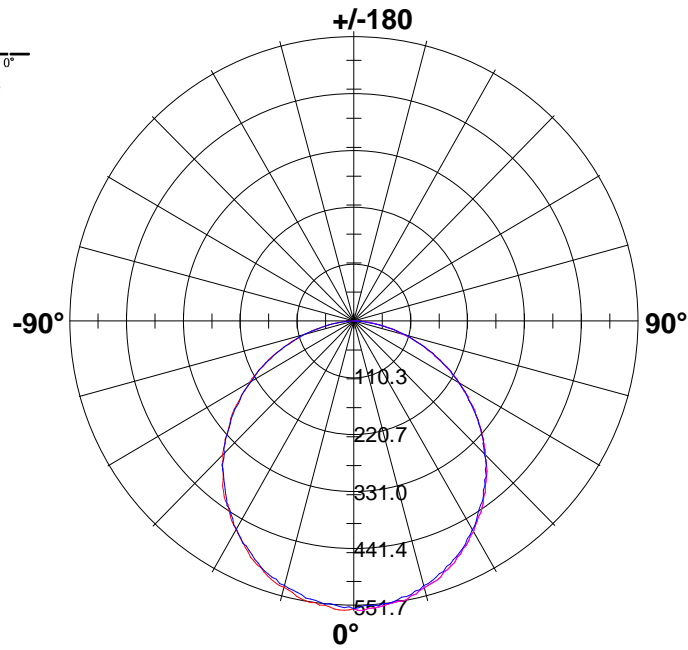
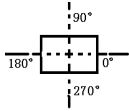
### Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	59.6	54.5	44.2	39.5	32.5	23.2	16.9	11.3	8.2	2.2
45.0	59.8	50.6	45.9	37.2	26.5	21.8	15.2	8.4	4.5	4.3
90.0	59.8	50.6	45.9	37.2	26.5	21.8	15.2	8.4	4.5	4.3
135.0	57.8	49.5	43.4	35.8	31.4	24.7	18.5	12.9	5.4	2.0
180.0	57.8	49.5	43.4	35.8	31.4	24.7	18.5	12.9	5.4	2.0
225.0	57.8	51.0	43.4	33.7	28.8	18.3	11.3	8.4	4.3	0.6
270.0	57.8	51.0	43.4	33.7	28.8	18.3	11.3	8.4	4.3	0.6
315.0	59.6	54.5	44.2	39.5	32.5	23.2	16.9	11.3	8.2	2.2
360.0	59.6	54.5	44.2	39.5	32.5	23.2	16.9	11.3	8.2	2.2

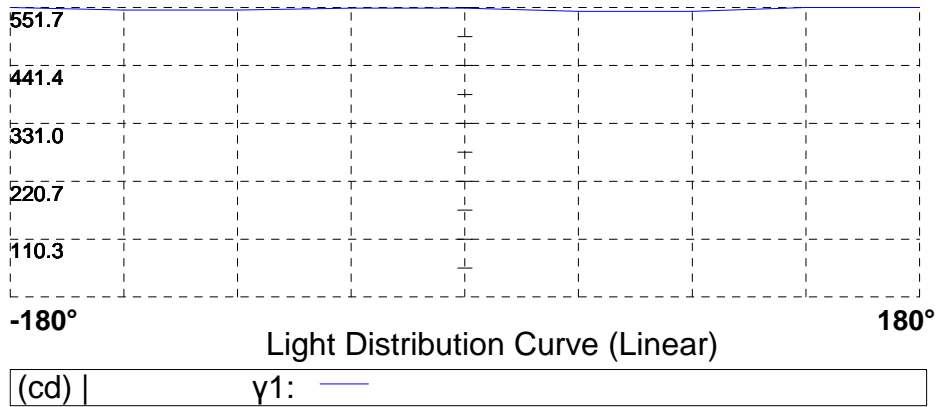
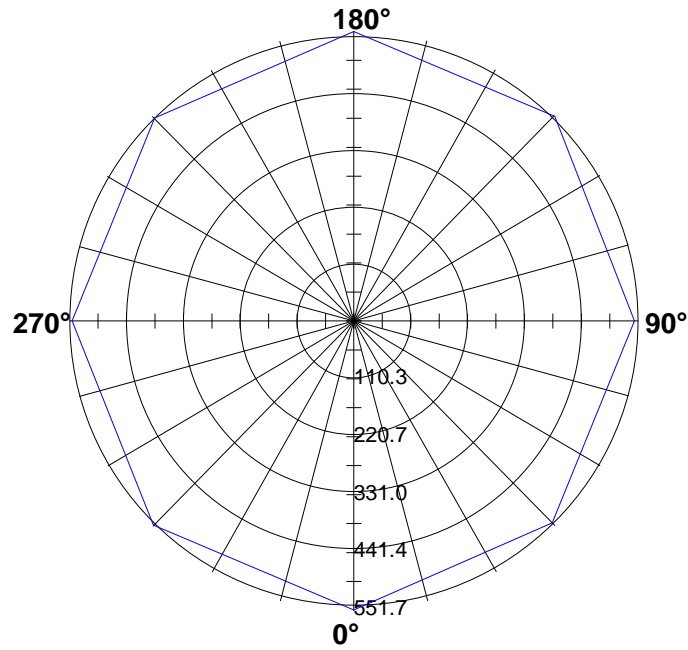
C\G	90.0
0.0	0.0
45.0	0.8
90.0	0.8
135.0	1.0
180.0	1.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

### Light Distribution Curve [Unit: cd]

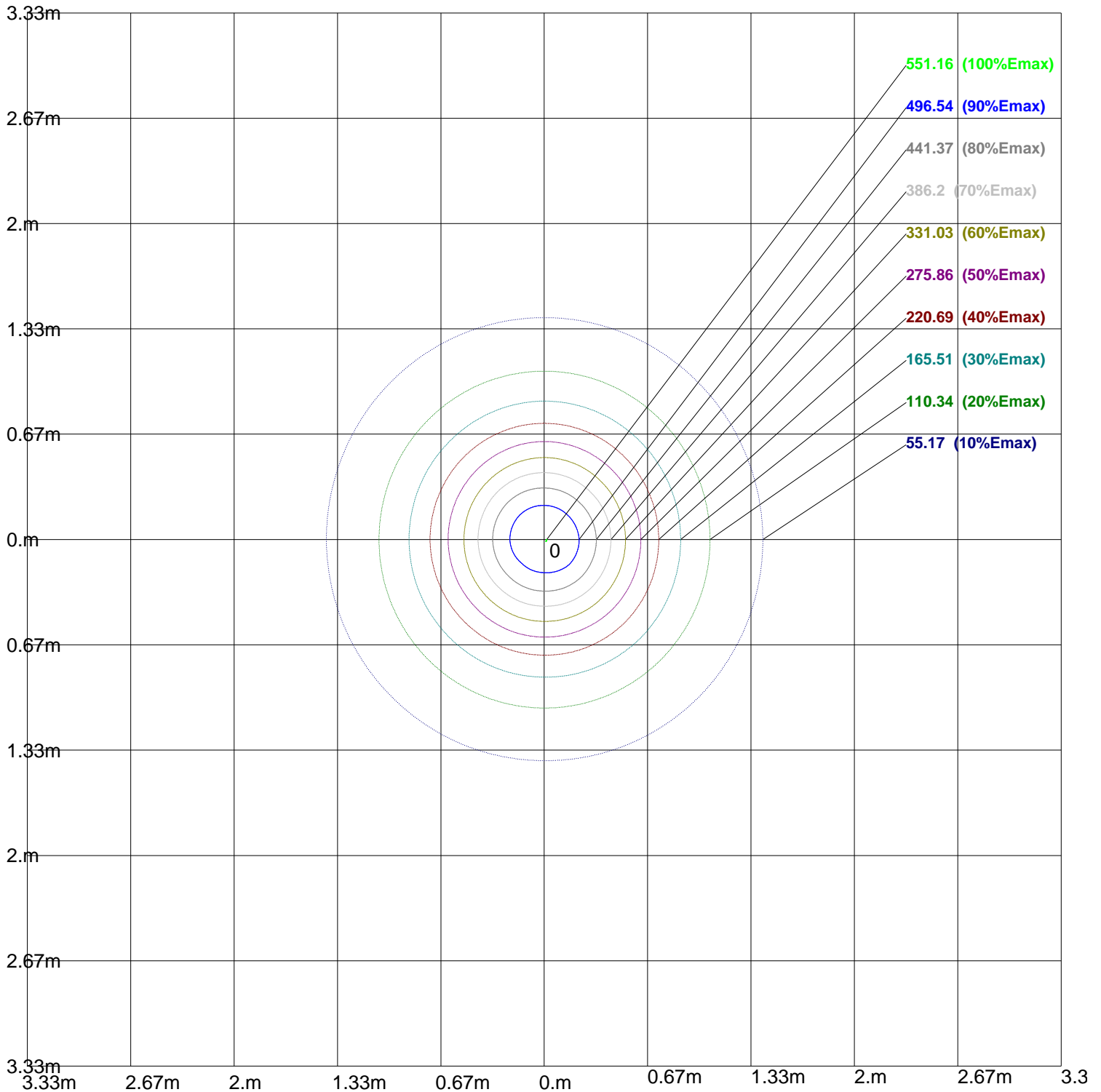
Luminaire



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



### Iso-Lux[lx]



Height: 1 m  
Max Illuminance : 551.71lx

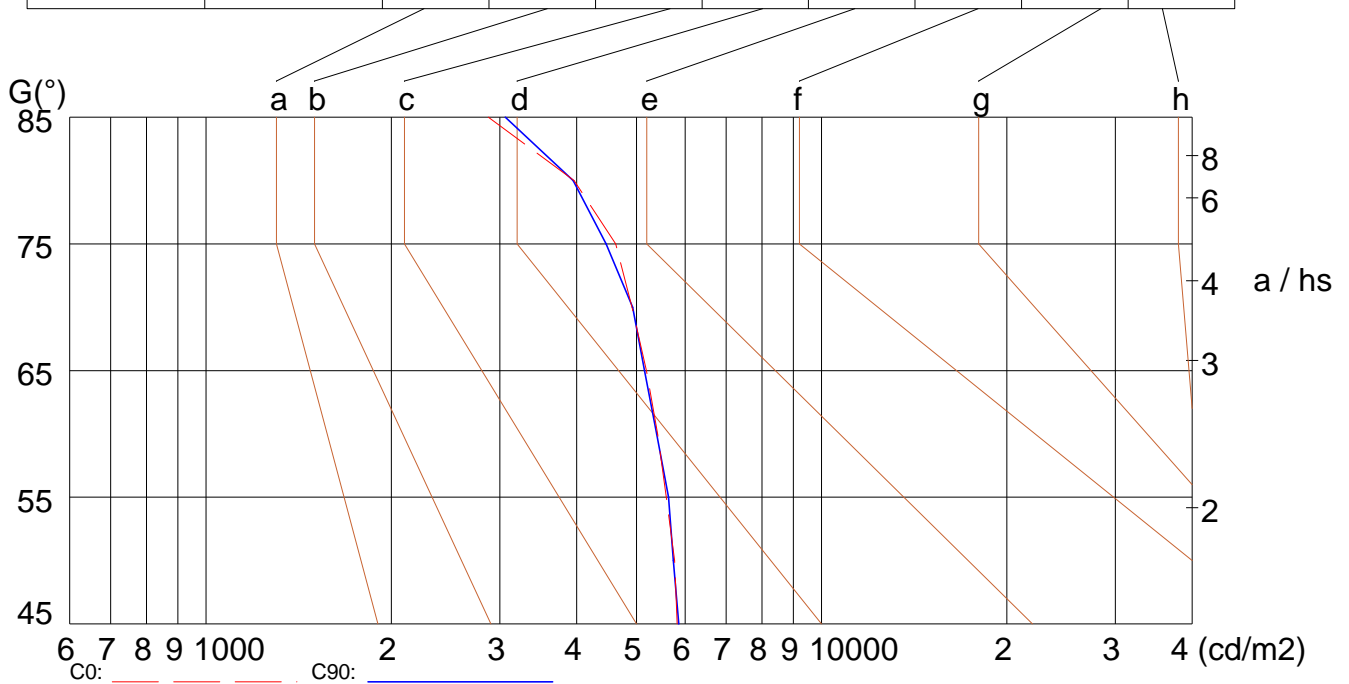
## Luminance Limiting Curve

Diameter: mm  
Length: 295mm  
Width: 295mm  
Height: mm

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

$\gamma$	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	5825	5767	5594	5415	5193	4919	4629	3959	2872
C90	5861	5738	5636	5397	5154	4933	4464	3946	3061

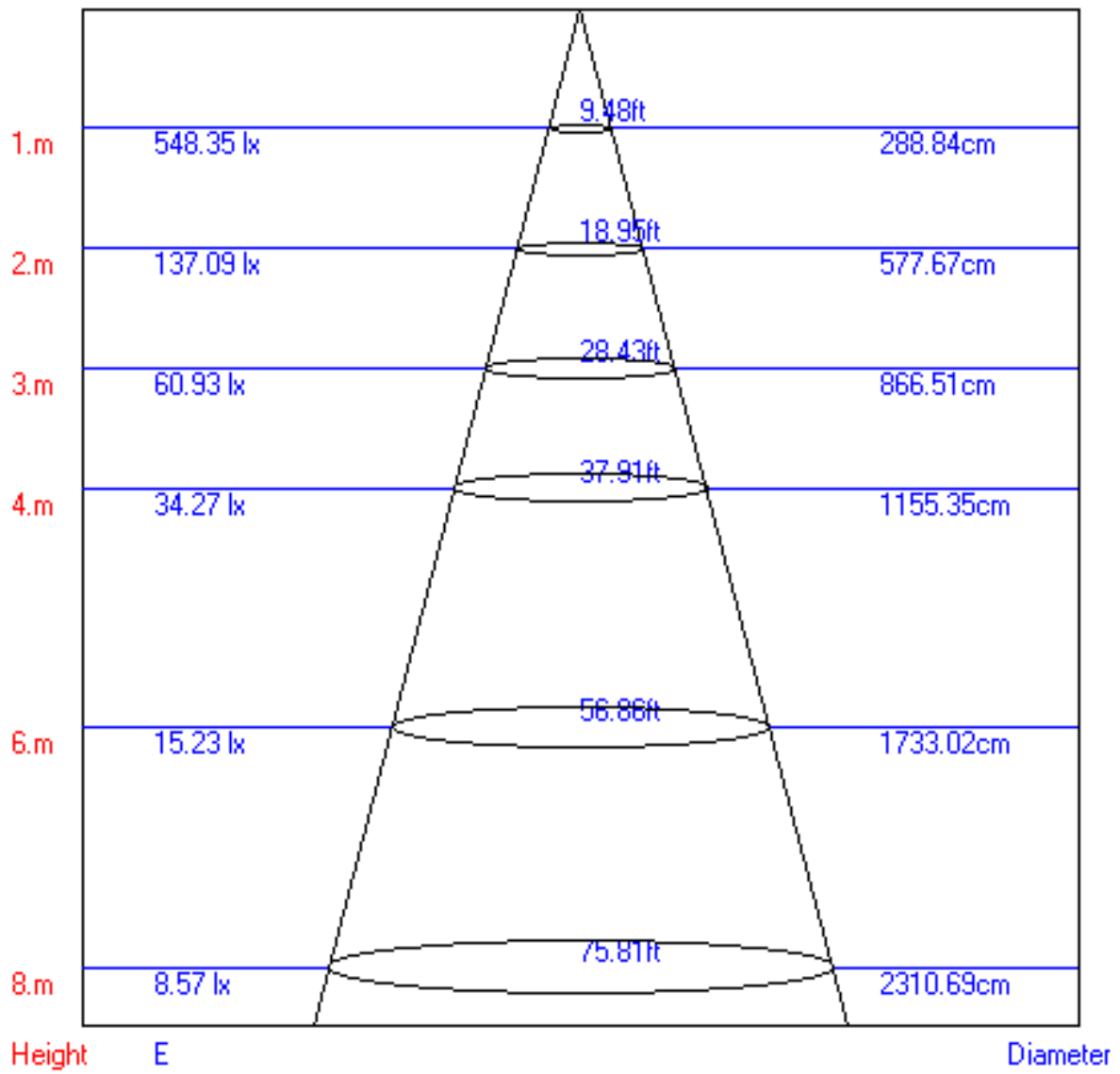
Glare	Quality	Service Values Illuminance (lx)							
1.15	A	2000	1000	500	≤300				
1.5	B		2000	1000	500	≤300			
1.85	C			2000	1000	500	≤300		
2.2	D				2000	1000	500	≤300	
2.55	E					2000	1000	500	≤300



Lum. Limiting Curve (C0/C90)



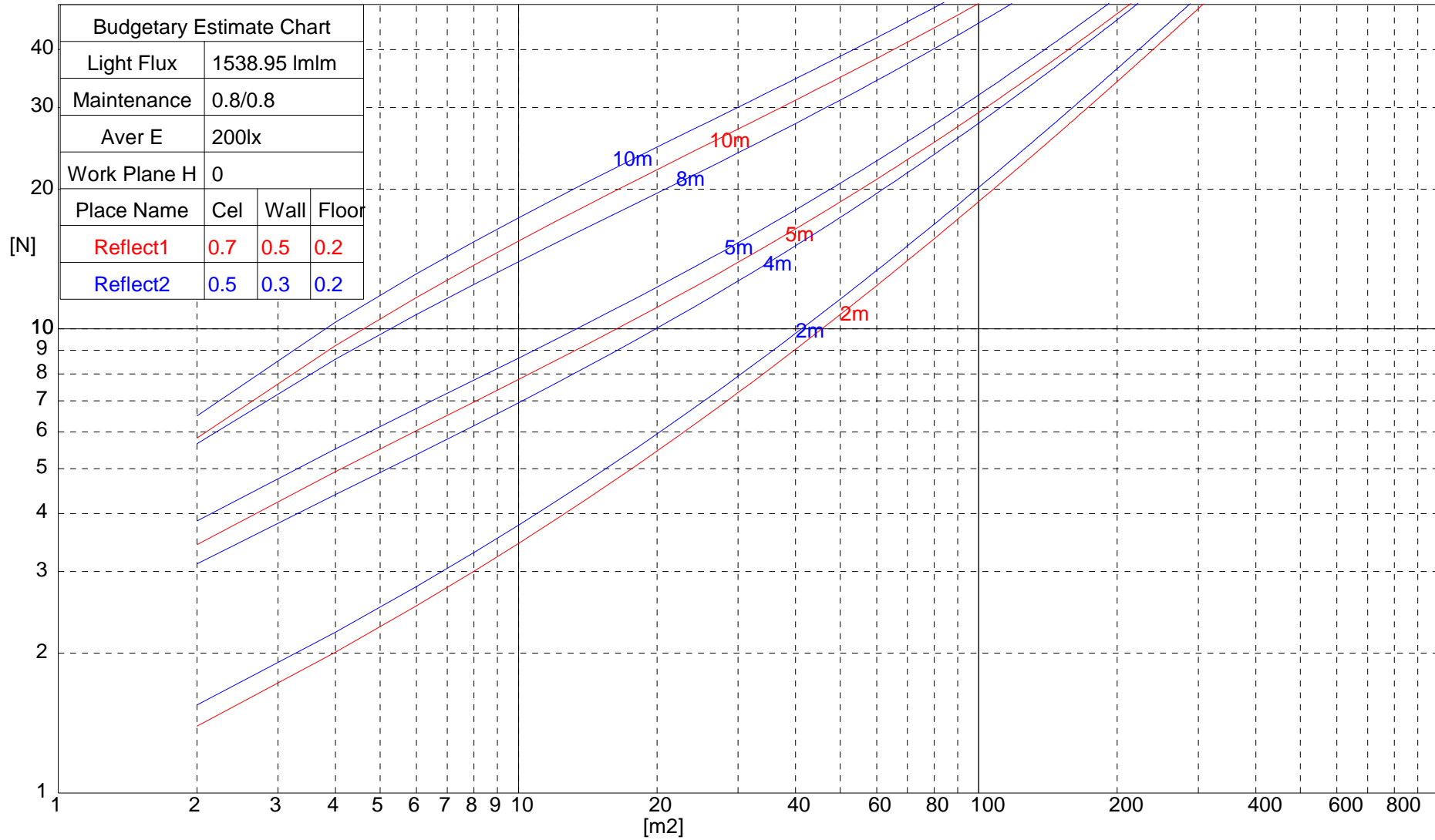
### Lux-Distance Curve



Beam Angle:110.60°

### 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	1.04	1.03	1.01	1.03	1.01	0.99	0.99	0.97	0.95	0.95	0.92	0.90	0.88	0.86	0.84	0.79
2	0.89	0.86	0.84	0.88	0.85	0.83	0.86	0.82	0.79	0.82	0.78	0.75	0.78	0.74	0.70	0.65
3	0.76	0.73	0.71	0.76	0.72	0.69	0.74	0.70	0.67	0.72	0.67	0.63	0.69	0.64	0.59	0.55
4	0.65	0.62	0.60	0.66	0.62	0.59	0.65	0.61	0.57	0.64	0.59	0.54	0.62	0.56	0.51	0.47
5	0.57	0.54	0.52	0.58	0.54	0.51	0.58	0.53	0.49	0.57	0.51	0.47	0.56	0.50	0.44	0.41
6	0.50	0.47	0.46	0.51	0.47	0.45	0.52	0.47	0.43	0.52	0.46	0.41	0.51	0.44	0.39	0.36
7	0.45	0.42	0.40	0.46	0.42	0.40	0.47	0.42	0.38	0.47	0.41	0.36	0.47	0.40	0.35	0.31
8	0.40	0.38	0.36	0.41	0.38	0.35	0.42	0.37	0.34	0.43	0.37	0.33	0.43	0.36	0.31	0.28
9	0.36	0.34	0.32	0.37	0.34	0.32	0.39	0.34	0.31	0.39	0.34	0.29	0.40	0.33	0.28	0.25
10	0.33	0.31	0.29	0.34	0.31	0.29	0.36	0.31	0.28	0.36	0.31	0.27	0.37	0.30	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	14.6	16.0	15.0	16.0	16.4	14.6	15.8	14.9	15.9	16.3
	3H	16.3	17.4	16.6	17.8	18.0	16.1	17.3	16.4	17.7	17.9
	4H	17.1	18.0	17.4	18.5	18.8	16.9	17.9	17.3	18.6	18.7
	6H	17.5	18.6	17.9	18.8	19.1	17.5	18.3	17.8	18.9	19.1
	8H	17.9	18.9	18.0	18.9	19.4	17.9	18.8	18.0	19.0	19.3
4H	12H	17.8	18.9	18.2	19.3	19.5	17.7	18.8	18.1	19.2	19.5
	2H	15.8	16.6	15.9	16.7	17.0	15.6	16.5	15.8	16.9	17.1
	3H	17.4	18.4	17.8	18.4	18.8	17.4	18.2	17.6	18.4	18.7
	4H	18.2	19.0	18.5	19.2	19.6	18.1	18.8	18.4	19.2	19.5
	6H	18.8	19.5	19.1	19.7	20.2	18.8	19.3	19.1	19.9	20.0
8H	8H	19.1	19.7	19.5	19.9	20.3	19.0	19.6	19.3	20.0	20.3
	12H	19.2	19.9	19.7	20.1	20.5	19.1	19.8	19.4	20.1	20.5
	4H	18.5	19.1	18.9	19.4	19.8	18.4	19.1	18.8	19.3	20.0
	6H	19.3	19.9	19.8	20.3	20.6	19.3	19.8	19.7	20.2	20.6
	8H	19.7	20.1	20.2	20.5	21.0	19.5	20.1	20.1	20.5	20.9
12H	12H	20.0	20.4	20.3	20.8	21.3	19.9	20.4	20.2	20.8	21.3
	4H	18.6	19.2	19.0	19.6	19.9	18.5	19.0	18.8	19.6	19.8
	6H	19.5	20.0	19.9	20.2	20.7	19.3	19.8	19.8	20.3	20.6
	8H	20.0	20.4	20.4	20.6	21.0	19.8	20.2	20.1	20.6	21.0