

Luminaire Property

Luminaire: RH-RPL24 24W 4000K

Report NO.:

Voltage: 220.8 V

Test NO.:

Current: 0.177 A

Lamp:

Power: 22.1 W

Sum Lumens: 2214.63 lm

Power Factor: 0.564

Number of Lamps: 1

Ballast Type: EMC300mA

Diameter: 300mm

Width: 300mm

Length: mm

Height: 25mm

Photometric Type: Type C

Remark: PMMA+0.5wSMD2835

Photometric Results

Lumens: 2214.63 lm

Angle of maximum intensity: C:0.0 G:1.0

Effective luminous flux: 2179.96 lm

Half Peak Side Angle(50%): Left: -54.4 Right:54.1

Efficiency: 100.2095 lm/W

Light Out Rate(LOR) : 100.00%

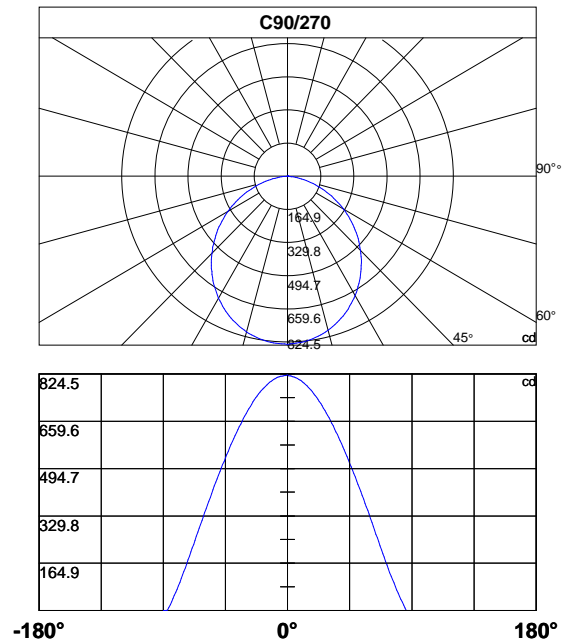
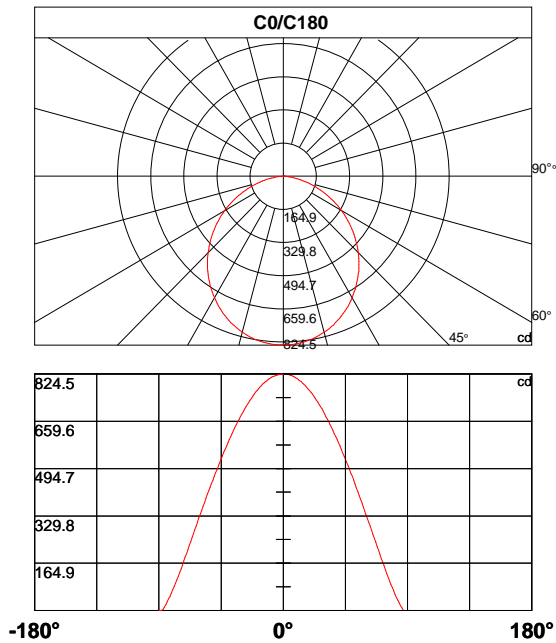
Central Intensity: 822.147cd

Up Flux Rate: 0.0%

Maximum Intensity: 824.453cd

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -79.1 Right:78.7



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	822.1	824.5	823.9	823.2	822.2	820.6	819.0	816.7	814.2	811.4
45.0	822.1	818.5	817.9	816.6	814.9	813.5	811.3	809.1	806.3	803.1
90.0	822.1	818.5	817.9	816.6	814.9	813.5	811.3	809.1	806.3	803.1
135.0	822.1	824.4	823.7	823.1	821.8	820.6	818.6	816.2	814.3	811.4
180.0	822.1	824.4	823.7	823.1	821.8	820.6	818.6	816.2	814.3	811.4
225.0	822.1	819.1	818.7	818.3	817.6	816.4	815.1	813.2	810.9	808.1
270.0	822.1	819.1	818.7	818.3	817.6	816.4	815.1	813.2	810.9	808.1
315.0	822.1	824.5	823.9	823.2	822.2	820.6	819.0	816.7	814.2	811.4
360.0	822.1	824.5	823.9	823.2	822.2	820.6	819.0	816.7	814.2	811.4

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	808.6	805.1	801.8	797.5	792.9	788.6	784.1	778.5	772.8	767.2
45.0	799.8	795.8	792.4	788.0	783.2	778.5	773.2	767.7	762.1	756.1
90.0	799.8	795.8	792.4	788.0	783.2	778.5	773.2	767.7	762.1	756.1
135.0	808.2	804.9	800.9	796.9	793.0	788.4	783.1	778.0	772.2	766.2
180.0	808.2	804.9	800.9	796.9	793.0	788.4	783.1	778.0	772.2	766.2
225.0	805.4	802.2	799.0	795.6	791.5	786.7	781.8	777.0	772.1	766.4
270.0	805.4	802.2	799.0	795.6	791.5	786.7	781.8	777.0	772.1	766.4
315.0	808.6	805.1	801.8	797.5	792.9	788.6	784.1	778.5	772.8	767.2
360.0	808.6	805.1	801.8	797.5	792.9	788.6	784.1	778.5	772.8	767.2

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	760.8	754.1	748.3	741.1	733.8	726.2	718.1	711.1	702.5	693.8
45.0	749.8	743.0	735.9	728.6	721.7	714.3	705.7	697.5	688.8	681.2
90.0	749.8	743.0	735.9	728.6	721.7	714.3	705.7	697.5	688.8	681.2
135.0	761.0	754.3	747.3	740.5	733.3	725.1	718.5	710.1	701.5	692.8
180.0	761.0	754.3	747.3	740.5	733.3	725.1	718.5	710.1	701.5	692.8
225.0	760.5	754.4	747.8	741.9	734.5	727.2	719.0	711.4	703.2	695.8
270.0	760.5	754.4	747.8	741.9	734.5	727.2	719.0	711.4	703.2	695.8
315.0	760.8	754.1	748.3	741.1	733.8	726.2	718.1	711.1	702.5	693.8
360.0	760.8	754.1	748.3	741.1	733.8	726.2	718.1	711.1	702.5	693.8

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	684.9	675.4	666.3	657.8	647.8	637.4	627.2	616.3	605.6	596.3
45.0	672.2	662.7	653.0	643.3	633.1	623.1	614.1	603.2	592.4	581.5
90.0	672.2	662.7	653.0	643.3	633.1	623.1	614.1	603.2	592.4	581.5
135.0	683.9	676.1	666.5	656.9	647.2	636.8	626.6	617.7	606.8	596.0
180.0	683.9	676.1	666.5	656.9	647.2	636.8	626.6	617.7	606.8	596.0
225.0	686.9	677.8	669.0	659.0	649.6	640.8	630.8	620.2	609.6	598.7
270.0	686.9	677.8	669.0	659.0	649.6	640.8	630.8	620.2	609.6	598.7
315.0	684.9	675.4	666.3	657.8	647.8	637.4	627.2	616.3	605.6	596.3
360.0	684.9	675.4	666.3	657.8	647.8	637.4	627.2	616.3	605.6	596.3

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	585.3	573.6	562.0	550.6	538.3	528.4	515.8	503.3	490.9	478.0
45.0	570.0	560.4	548.7	537.0	525.2	513.0	500.5	490.1	477.4	465.1
90.0	570.0	560.4	548.7	537.0	525.2	513.0	500.5	490.1	477.4	465.1
135.0	585.0	573.7	561.8	552.0	540.2	528.2	515.9	503.7	491.2	480.4
180.0	585.0	573.7	561.8	552.0	540.2	528.2	515.9	503.7	491.2	480.4
225.0	589.5	578.4	567.0	555.1	543.6	531.5	519.3	509.1	496.6	484.2
270.0	589.5	578.4	567.0	555.1	543.6	531.5	519.3	509.1	496.6	484.2
315.0	585.3	573.6	562.0	550.6	538.3	528.4	515.8	503.3	490.9	478.0
360.0	585.3	573.6	562.0	550.6	538.3	528.4	515.8	503.3	490.9	478.0

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	467.1	453.8	440.6	427.2	414.0	400.5	388.9	374.8	361.0	347.1
45.0	452.1	439.3	426.3	414.6	401.7	388.2	374.5	361.2	349.3	335.4
90.0	452.1	439.3	426.3	414.6	401.7	388.2	374.5	361.2	349.3	335.4
135.0	467.7	454.7	441.6	428.4	417.2	403.7	390.0	376.7	362.7	349.2
180.0	467.7	454.7	441.6	428.4	417.2	403.7	390.0	376.7	362.7	349.2
225.0	471.3	458.4	447.5	434.2	420.8	407.8	394.3	380.7	368.6	355.1
270.0	471.3	458.4	447.5	434.2	420.8	407.8	394.3	380.7	368.6	355.1
315.0	467.1	453.8	440.6	427.2	414.0	400.5	388.9	374.8	361.0	347.1
360.0	467.1	453.8	440.6	427.2	414.0	400.5	388.9	374.8	361.0	347.1

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	333.3	319.2	307.0	292.9	278.3	263.9	249.6	237.6	223.0	208.9
45.0	321.5	307.5	293.9	279.7	265.4	253.3	239.5	225.3	211.2	197.6
90.0	321.5	307.5	293.9	279.7	265.4	253.3	239.5	225.3	211.2	197.6
135.0	337.3	323.1	309.3	294.9	281.0	266.7	254.5	240.8	226.3	212.5
180.0	337.3	323.1	309.3	294.9	281.0	266.7	254.5	240.8	226.3	212.5
225.0	341.1	327.3	313.3	299.2	286.9	272.6	258.6	244.3	230.2	217.9
270.0	341.1	327.3	313.3	299.2	286.9	272.6	258.6	244.3	230.2	217.9
315.0	333.3	319.2	307.0	292.9	278.3	263.9	249.6	237.6	223.0	208.9
360.0	333.3	319.2	307.0	292.9	278.3	263.9	249.6	237.6	223.0	208.9

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	195.0	181.1	167.3	155.3	141.8	128.2	115.2	102.2	90.0	79.5
45.0	185.8	171.7	158.1	144.7	131.5	118.7	107.8	95.5	83.0	71.3
90.0	185.8	171.7	158.1	144.7	131.5	118.7	107.8	95.5	83.0	71.3
135.0	198.6	186.5	172.6	159.0	145.4	131.9	118.9	106.2	95.3	83.6
180.0	198.6	186.5	172.6	159.0	145.4	131.9	118.9	106.2	95.3	83.6
225.0	204.1	189.8	176.2	162.3	148.8	136.8	123.7	111.0	98.3	86.0
270.0	204.1	189.8	176.2	162.3	148.8	136.8	123.7	111.0	98.3	86.0
315.0	195.0	181.1	167.3	155.3	141.8	128.2	115.2	102.2	90.0	79.5
360.0	195.0	181.1	167.3	155.3	141.8	128.2	115.2	102.2	90.0	79.5

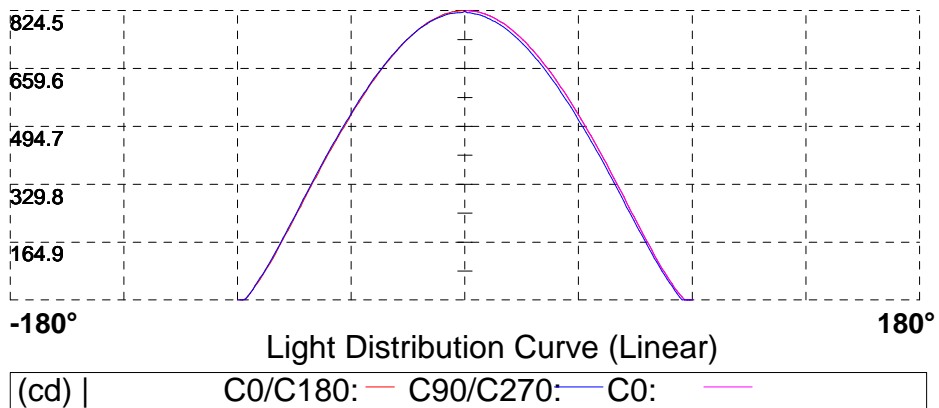
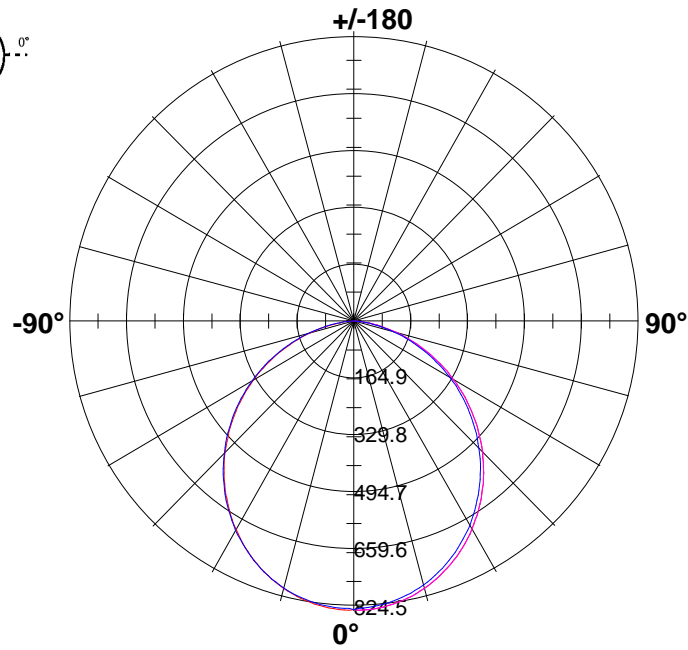
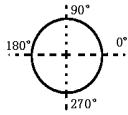
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	67.9	56.2	45.6	35.2	26.3	16.9	8.7	0.0	0.0	0.0
45.0	60.0	49.1	39.5	28.9	18.9	8.5	0.0	0.0	0.0	0.0
90.0	60.0	49.1	39.5	28.9	18.9	8.5	0.0	0.0	0.0	0.0
135.0	71.6	60.0	49.2	39.8	29.8	20.3	11.5	3.5	0.0	0.0
180.0	71.6	60.0	49.2	39.8	29.8	20.3	11.5	3.5	0.0	0.0
225.0	73.8	64.1	52.3	41.0	30.2	19.9	10.1	1.2	0.0	0.0
270.0	73.8	64.1	52.3	41.0	30.2	19.9	10.1	1.2	0.0	0.0
315.0	67.9	56.2	45.6	35.2	26.3	16.9	8.7	0.0	0.0	0.0
360.0	67.9	56.2	45.6	35.2	26.3	16.9	8.7	0.0	0.0	0.0

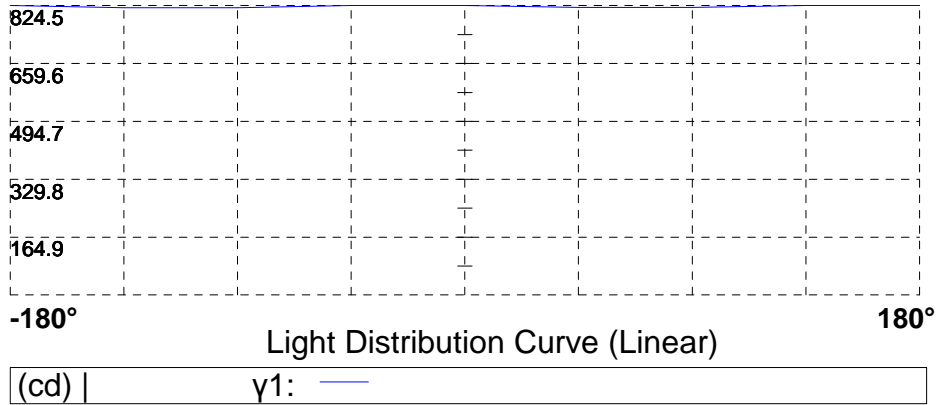
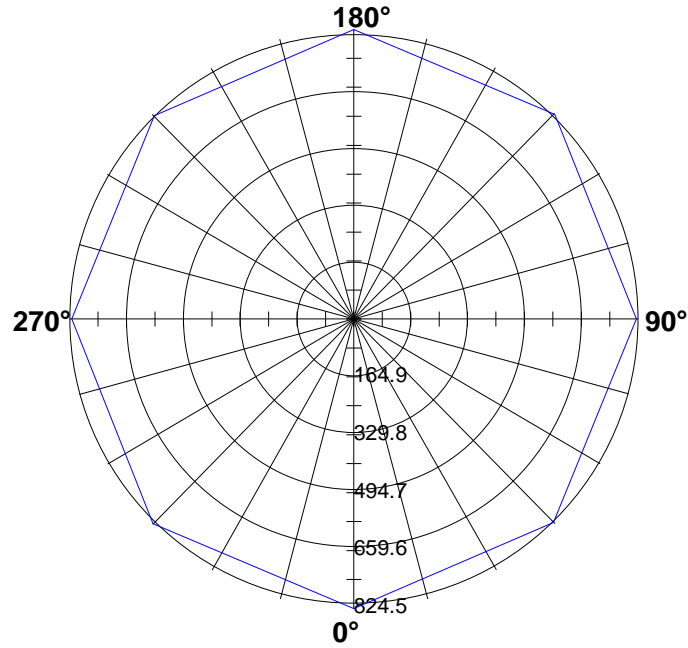
C\G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

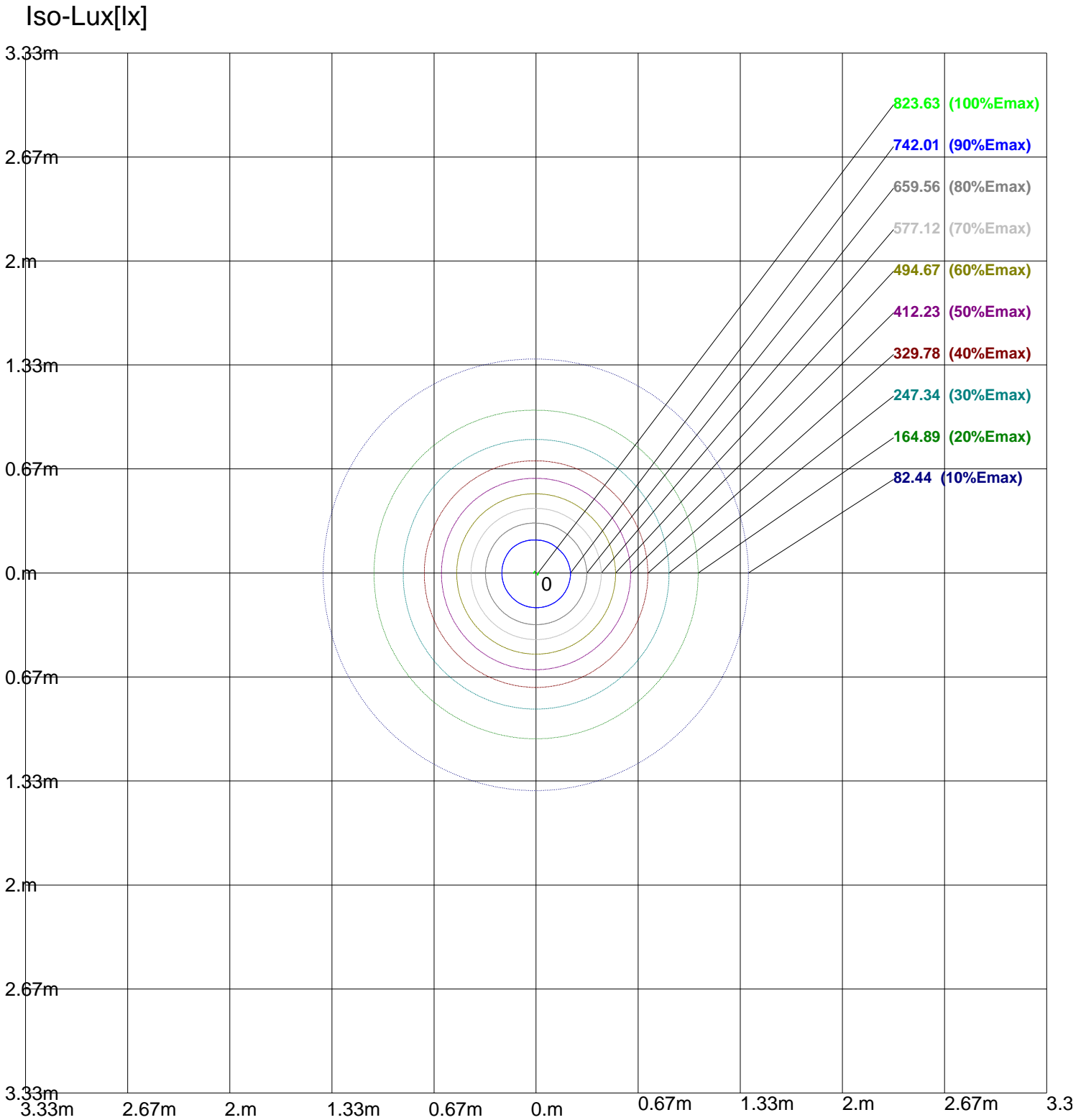
Light Distribution Curve [Unit: cd]

Luminaire



Max Plane Light Distribution Curve [Unit: cd]





Height: 1 m
Max Illuminance : 824.45lx

Luminance Limiting Curve

Diameter: 300mm

Length: mm

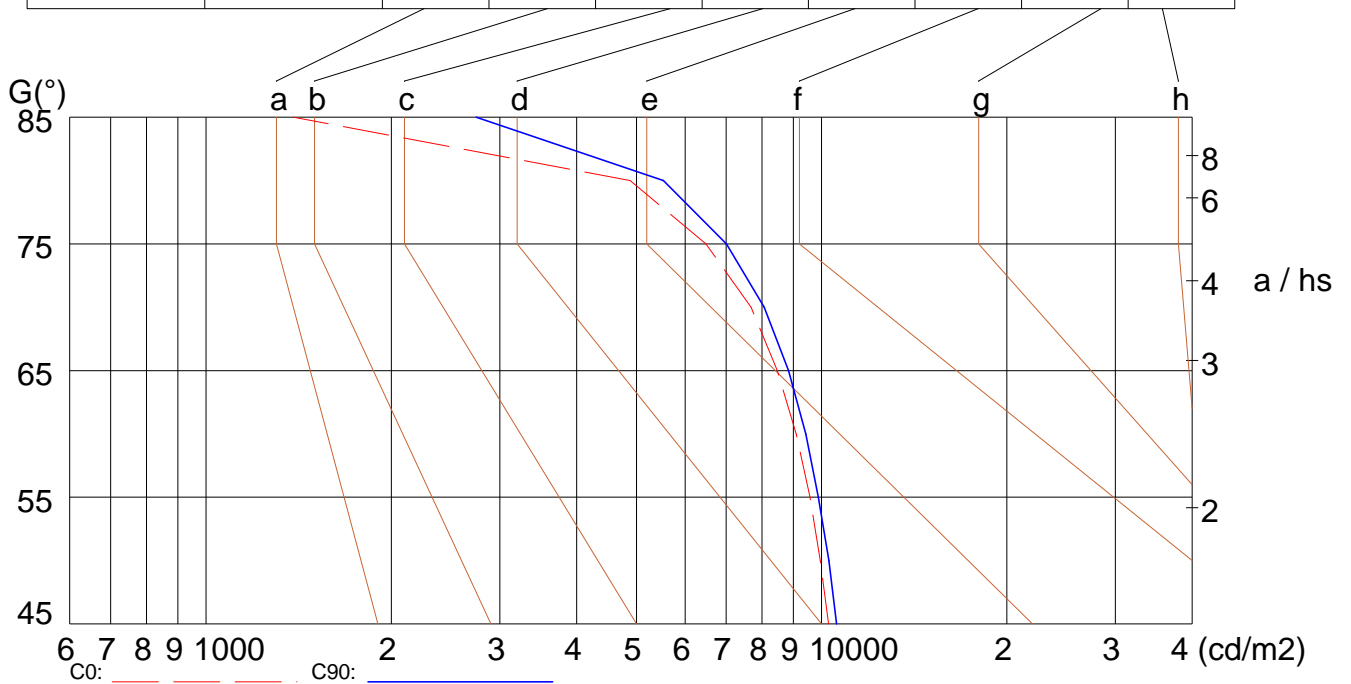
Width: 300mm

Height: 25mm

(cd/m²)

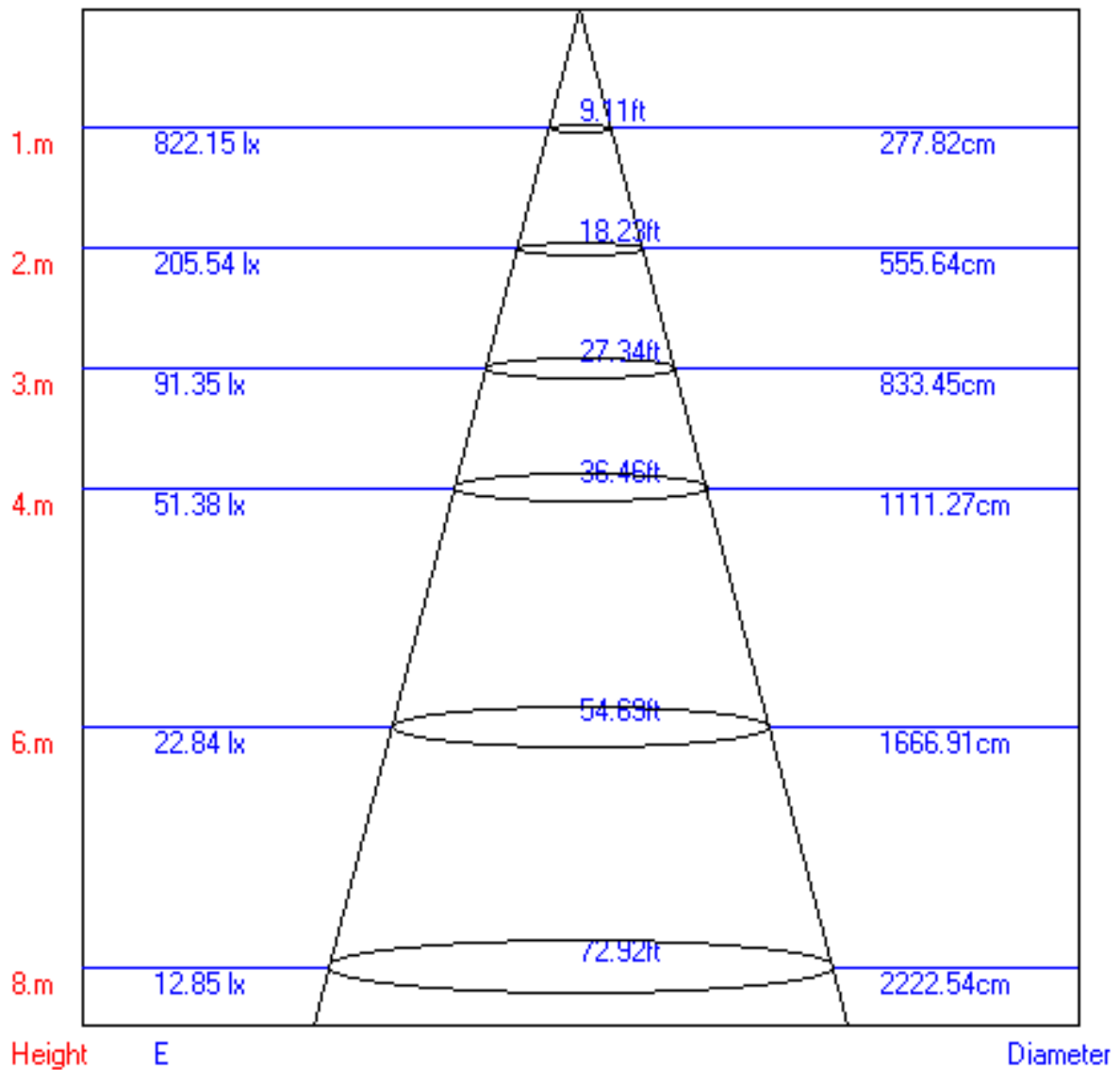
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	10261	9948	9574	9094	8478	7685	6487	4885	1386
C90	10569	10278	9876	9429	8832	8066	7004	5534	2746

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)

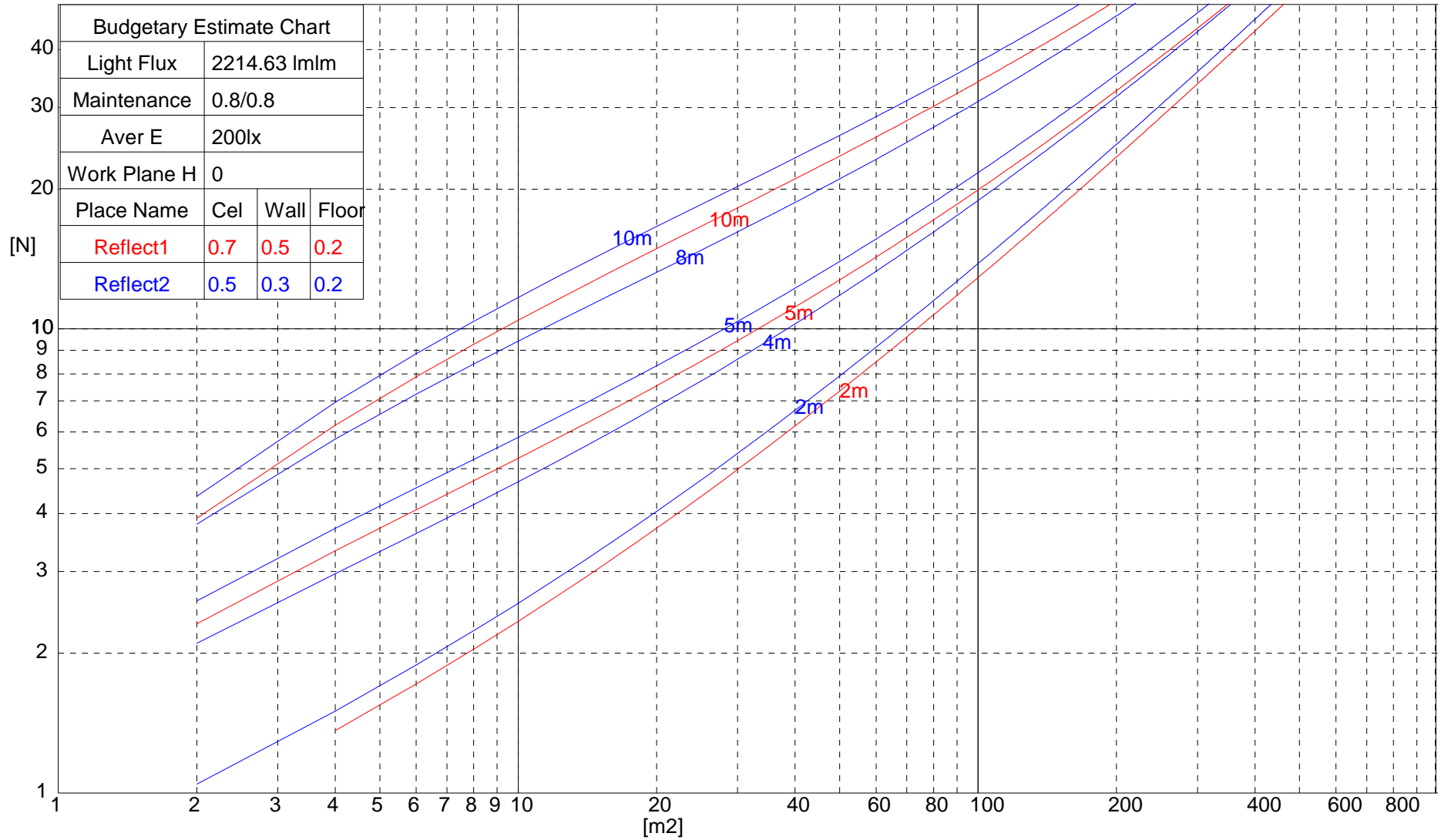
Lux-Distance Curve



Beam Angle:108.50°

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	0.85	0.89	0.86	0.84	0.87	0.83	0.80	0.83	0.80	0.76	0.79	0.75	0.71	0.66
3	0.77	0.74	0.72	0.77	0.73	0.71	0.76	0.71	0.68	0.73	0.68	0.65	0.70	0.65	0.61	0.56
4	0.67	0.64	0.62	0.67	0.63	0.61	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	0.54	0.59	0.55	0.53	0.59	0.54	0.50	0.58	0.53	0.48	0.57	0.51	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	0.42	0.47	0.43	0.41	0.48	0.43	0.39	0.48	0.42	0.37	0.48	0.41	0.36	0.32
8	0.41	0.39	0.37	0.42	0.39	0.36	0.43	0.38	0.35	0.44	0.38	0.34	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	0.32	0.40	0.34	0.30	0.41	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	0.24



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