

Luminaire Property

Luminaire: RH-RPL09 9W 4000K

Report NO.:

Voltage: 219.2 V

Test NO.:

Current: 0.081 A

Lamp:

Power: 9.2 W

Sum Lumens: 718.99 lm

Power Factor: 0.518

Number of Lamps: 1

Ballast Type: EMC300mA

Diameter: mm

Width: 145mm

Length: 145mm

Height: 25mm

Photometric Type: Type C

Remark: PMMA+0.5WSMD2835

Photometric Results

Lumens: 718.99 lm

Angle of maximum intensity: C:0.0 G:1.0

Effective luminous flux: 708.12 lm

Half Peak Side Angle(50%): Left: -53.9 Right:54.0

Efficiency: 78.1511 lm/W

Light Out Rate(LOR) : 100.00%

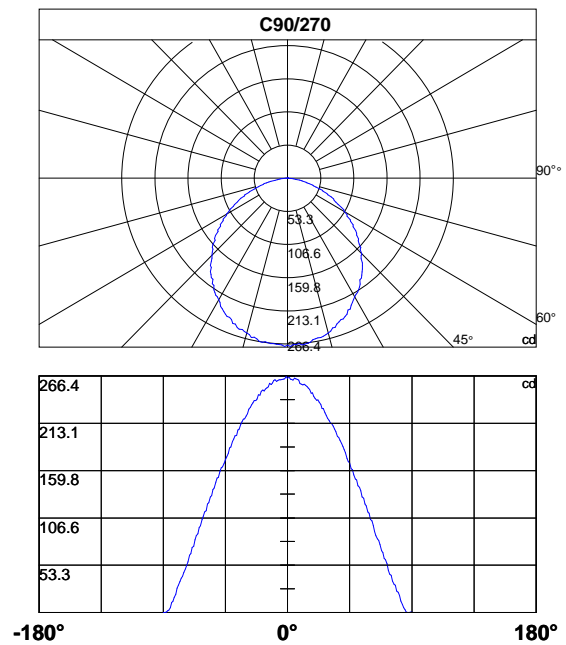
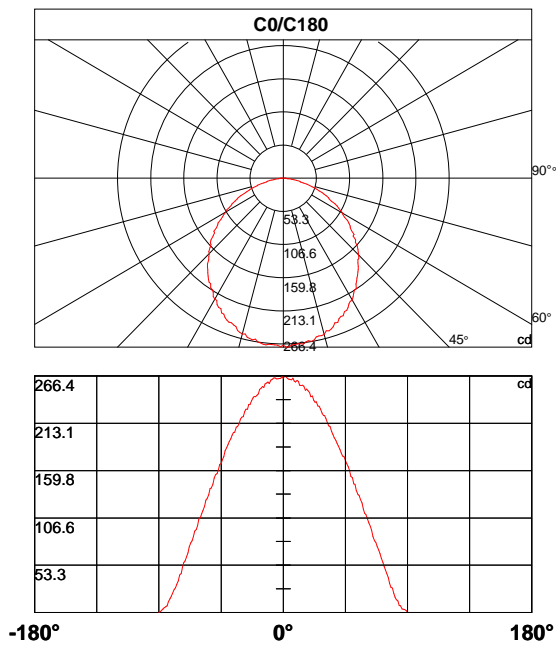
Central Intensity: 263.696cd

Up Flux Rate: 0.0%

Maximum Intensity: 266.399cd

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -78.6 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
0.0	263.7	266.4	266.0	263.5	262.9	262.5	262.1	263.9	260.7	259.6
45.0	263.7	265.6	262.9	262.5	261.9	263.9	263.3	262.5	261.7	258.0
90.0	263.7	265.6	262.9	262.5	261.9	263.9	263.3	262.5	261.7	258.0
135.0	263.7	266.0	263.5	263.5	263.1	263.1	264.4	263.9	262.5	261.9
180.0	263.7	266.0	263.5	263.5	263.1	263.1	264.4	263.9	262.5	261.9
225.0	263.7	265.6	263.3	262.9	262.5	262.1	262.1	261.3	260.5	262.3
270.0	263.7	265.6	263.3	262.9	262.5	262.1	262.1	261.3	260.5	262.3
315.0	263.7	266.4	266.0	263.5	262.9	262.5	262.1	263.9	260.7	259.6
360.0	263.7	266.4	266.0	263.5	262.9	262.5	262.1	263.9	260.7	259.6

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	261.3	260.3	256.1	255.5	256.1	255.1	250.2	251.6	250.0	247.7
45.0	257.1	256.3	257.1	255.9	254.5	252.9	251.2	246.9	247.5	243.6
90.0	257.1	256.3	257.1	255.9	254.5	252.9	251.2	246.9	247.5	243.6
135.0	258.0	259.6	258.6	257.4	253.5	254.5	252.9	251.2	246.3	244.8
180.0	258.0	259.6	258.6	257.4	253.5	254.5	252.9	251.2	246.3	244.8
225.0	261.3	258.4	256.7	258.2	254.3	253.1	251.6	249.5	250.8	249.1
270.0	261.3	258.4	256.7	258.2	254.3	253.1	251.6	249.5	250.8	249.1
315.0	261.3	260.3	256.1	255.5	256.1	255.1	250.2	251.6	250.0	247.7
360.0	261.3	260.3	256.1	255.5	256.1	255.1	250.2	251.6	250.0	247.7

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	243.0	243.8	239.0	237.0	237.2	232.5	232.1	229.4	224.7	222.0
45.0	241.1	239.0	239.5	236.8	234.6	229.8	229.8	224.9	222.0	218.9
90.0	241.1	239.0	239.5	236.8	234.6	229.8	229.8	224.9	222.0	218.9
135.0	243.0	243.4	241.6	238.8	234.6	234.3	229.0	229.0	226.1	220.8
180.0	243.0	243.4	241.6	238.8	234.6	234.3	229.0	229.0	226.1	220.8
225.0	244.8	245.2	240.3	238.6	238.8	236.4	234.1	231.3	229.2	224.1
270.0	244.8	245.2	240.3	238.6	238.8	236.4	234.1	231.3	229.2	224.1
315.0	243.0	243.8	239.0	237.0	237.2	232.5	232.1	229.4	224.7	222.0
360.0	243.0	243.8	239.0	237.0	237.2	232.5	232.1	229.4	224.7	222.0

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	221.8	218.5	213.4	210.3	209.7	203.9	200.6	196.9	194.1	190.5
45.0	216.2	213.6	212.8	209.9	206.6	203.7	198.2	197.1	194.1	190.3
90.0	216.2	213.6	212.8	209.9	206.6	203.7	198.2	197.1	194.1	190.3
135.0	220.1	217.9	212.8	209.4	208.8	202.9	202.5	199.8	195.9	192.4
180.0	220.1	217.9	212.8	209.4	208.8	202.9	202.5	199.8	195.9	192.4
225.0	221.4	218.3	217.9	215.0	212.2	206.6	205.6	199.6	199.0	195.3
270.0	221.4	218.3	217.9	215.0	212.2	206.6	205.6	199.6	199.0	195.3
315.0	221.8	218.5	213.4	210.3	209.7	203.9	200.6	196.9	194.1	190.5
360.0	221.8	218.5	213.4	210.3	209.7	203.9	200.6	196.9	194.1	190.5

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	187.5	183.6	179.6	176.2	175.1	171.2	167.7	164.1	159.9	153.4
45.0	187.1	183.4	179.8	173.5	170.0	168.8	162.0	160.9	155.0	150.5
90.0	187.1	183.4	179.8	173.5	170.0	168.8	162.0	160.9	155.0	150.5
135.0	188.9	185.8	182.1	175.6	172.3	167.9	166.7	160.5	156.4	155.2
180.0	188.9	185.8	182.1	175.6	172.3	167.9	166.7	160.5	156.4	155.2
225.0	192.6	186.6	185.2	179.4	175.1	172.1	167.9	164.3	162.8	158.9
270.0	192.6	186.6	185.2	179.4	175.1	172.1	167.9	164.3	162.8	158.9
315.0	187.5	183.6	179.6	176.2	175.1	171.2	167.7	164.1	159.9	153.4
360.0	187.5	183.6	179.6	176.2	175.1	171.2	167.7	164.1	159.9	153.4

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	151.7	144.9	144.3	137.5	133.0	131.5	127.2	123.4	116.4	111.8
45.0	149.2	142.9	141.0	137.1	130.3	128.7	122.1	120.0	113.1	111.6
90.0	149.2	142.9	141.0	137.1	130.3	128.7	122.1	120.0	113.1	111.6
135.0	151.3	144.7	140.2	139.4	132.8	128.5	126.6	119.6	115.1	111.4
180.0	151.3	144.7	140.2	139.4	132.8	128.5	126.6	119.6	115.1	111.4
225.0	152.3	151.3	146.8	140.2	138.5	131.7	130.3	123.6	122.1	114.7
270.0	152.3	151.3	146.8	140.2	138.5	131.7	130.3	123.6	122.1	114.7
315.0	151.7	144.9	144.3	137.5	133.0	131.5	127.2	123.4	116.4	111.8
360.0	151.7	144.9	144.3	137.5	133.0	131.5	127.2	123.4	116.4	111.8

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	110.4	105.5	100.9	97.0	92.3	85.3	80.8	78.9	74.4	70.1
45.0	104.9	103.2	98.3	91.3	86.6	82.8	81.0	76.3	69.5	67.4
90.0	104.9	103.2	98.3	91.3	86.6	82.8	81.0	76.3	69.5	67.4
135.0	106.9	105.3	97.8	93.3	91.5	85.3	80.8	78.5	73.8	67.0
180.0	106.9	105.3	97.8	93.3	91.5	85.3	80.8	78.5	73.8	67.0
225.0	113.1	108.5	104.4	97.8	95.4	88.6	86.3	81.8	74.8	73.2
270.0	113.1	108.5	104.4	97.8	95.4	88.6	86.3	81.8	74.8	73.2
315.0	110.4	105.5	100.9	97.0	92.3	85.3	80.8	78.9	74.4	70.1
360.0	110.4	105.5	100.9	97.0	92.3	85.3	80.8	78.9	74.4	70.1

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	66.2	61.2	56.7	51.8	48.1	44.0	39.3	32.7	28.4	27.4
45.0	60.8	59.4	54.7	47.7	43.4	41.7	35.4	31.8	30.4	24.2
90.0	60.8	59.4	54.7	47.7	43.4	41.7	35.4	31.8	30.4	24.2
135.0	62.9	58.2	56.3	51.2	44.0	42.3	35.8	31.8	27.6	25.9
180.0	62.9	58.2	56.3	51.2	44.0	42.3	35.8	31.8	27.6	25.9
225.0	66.2	64.4	57.0	53.0	48.9	44.8	40.7	38.6	34.8	30.4
270.0	66.2	64.4	57.0	53.0	48.9	44.8	40.7	38.6	34.8	30.4
315.0	66.2	61.2	56.7	51.8	48.1	44.0	39.3	32.7	28.4	27.4
360.0	66.2	61.2	56.7	51.8	48.1	44.0	39.3	32.7	28.4	27.4

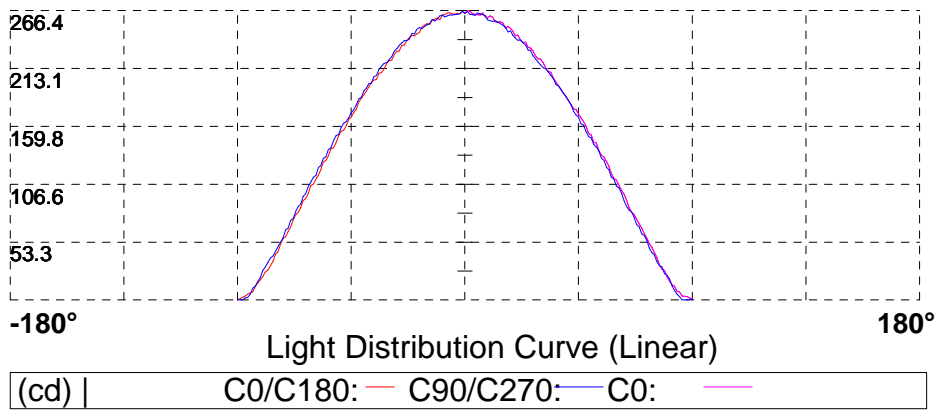
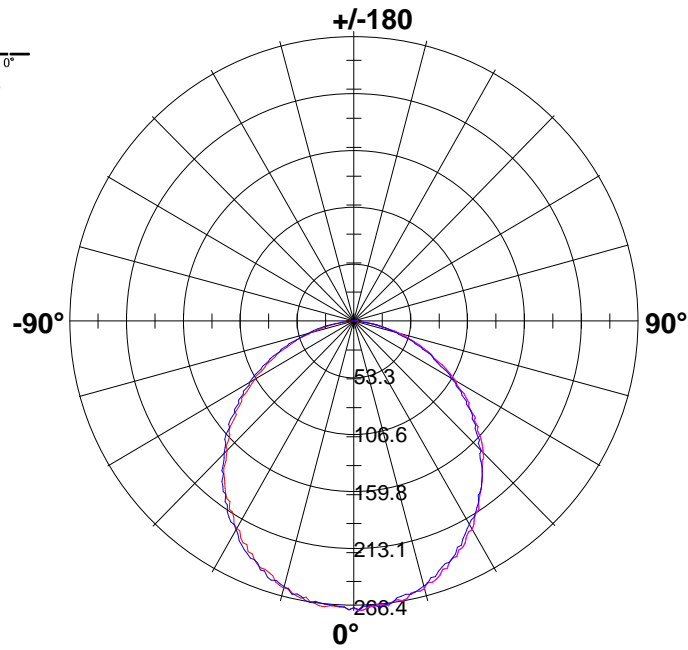
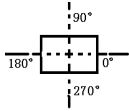
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	21.4	17.3	14.2	12.9	8.0	7.6	3.9	3.5	3.1	2.0
45.0	22.8	19.1	12.9	9.0	5.6	3.1	0.2	0.0	0.0	0.4
90.0	22.8	19.1	12.9	9.0	5.6	3.1	0.2	0.0	0.0	0.4
135.0	21.8	18.5	15.4	12.1	7.4	6.5	5.6	3.9	2.7	1.2
180.0	21.8	18.5	15.4	12.1	7.4	6.5	5.6	3.9	2.7	1.2
225.0	27.4	20.6	16.9	12.5	11.1	5.6	2.7	1.8	0.2	0.1
270.0	27.4	20.6	16.9	12.5	11.1	5.6	2.7	1.8	0.2	0.1
315.0	21.4	17.3	14.2	12.9	8.0	7.6	3.9	3.5	3.1	2.0
360.0	21.4	17.3	14.2	12.9	8.0	7.6	3.9	3.5	3.1	2.0

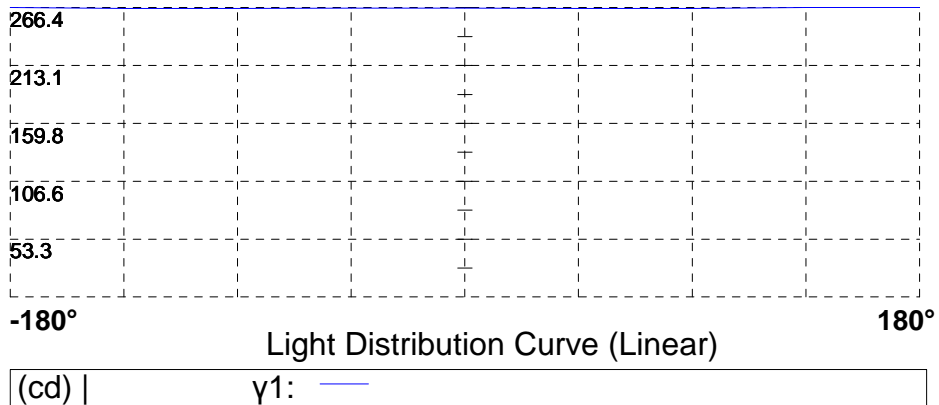
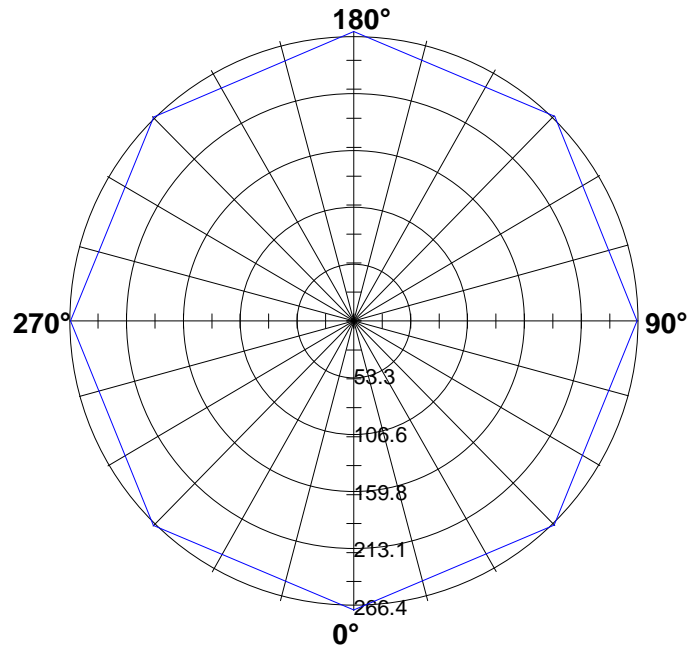
C\G	90.0
0.0	0.0
45.0	0.8
90.0	0.8
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

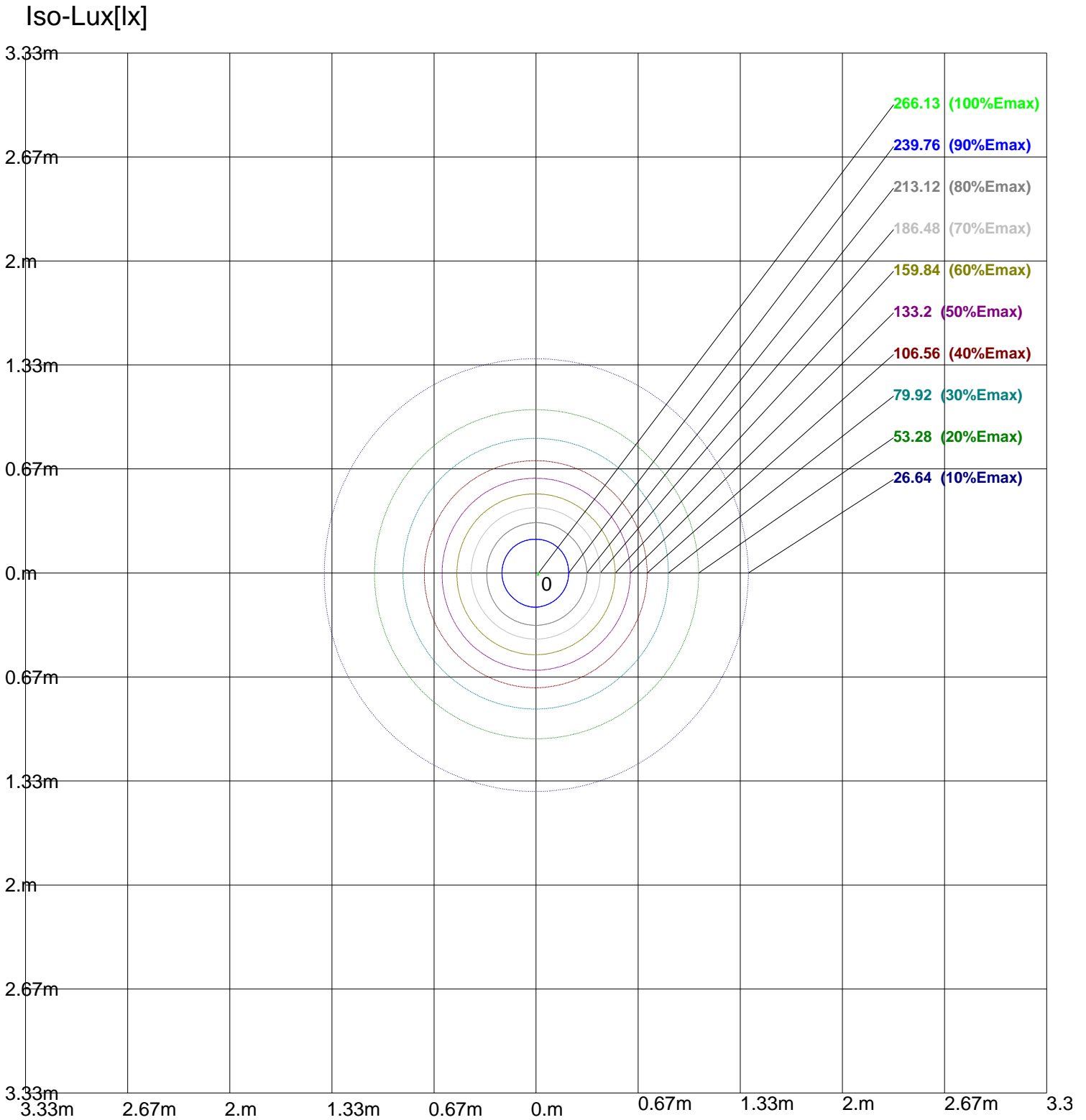
Light Distribution Curve [Unit: cd]

Luminaire



Max Plane Light Distribution Curve [Unit: cd]





Height: 1 m
Max Illuminance : 266.4lx

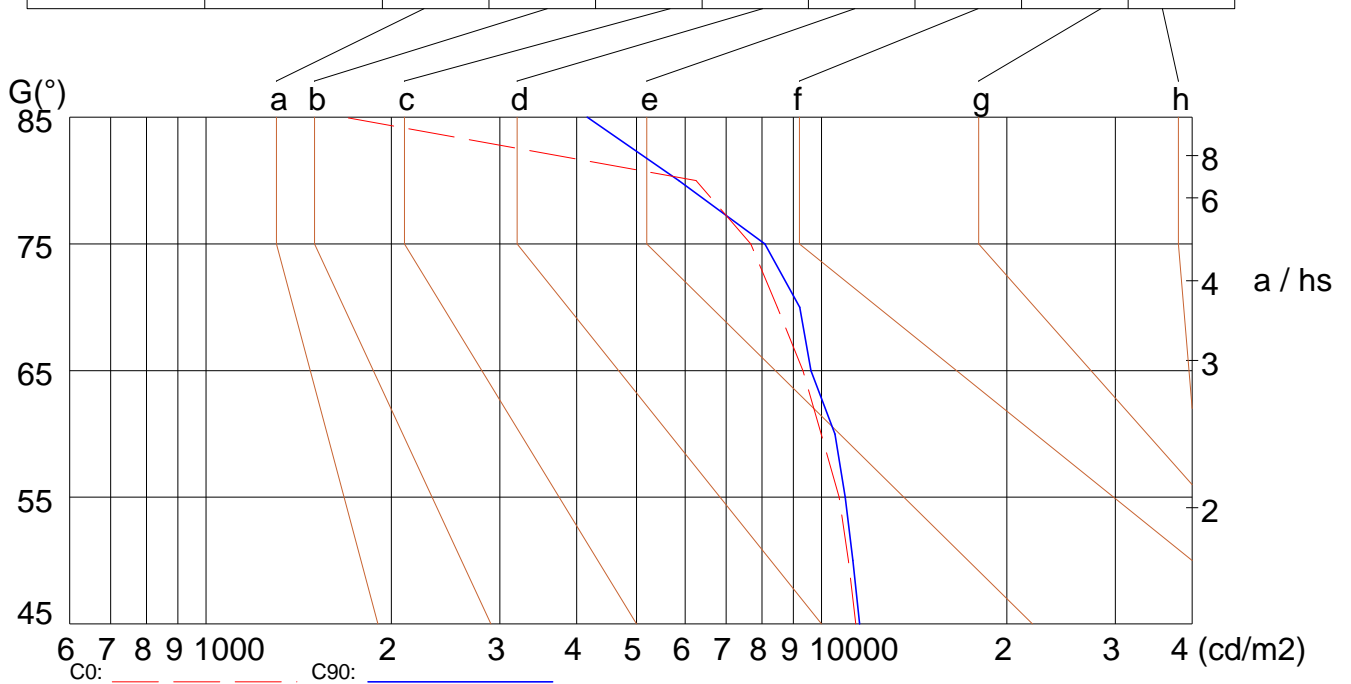
Luminance Limiting Curve

Diameter: mm
 Length: 145mm
 Width: 145mm
 Height: 25mm

(cd/m²)

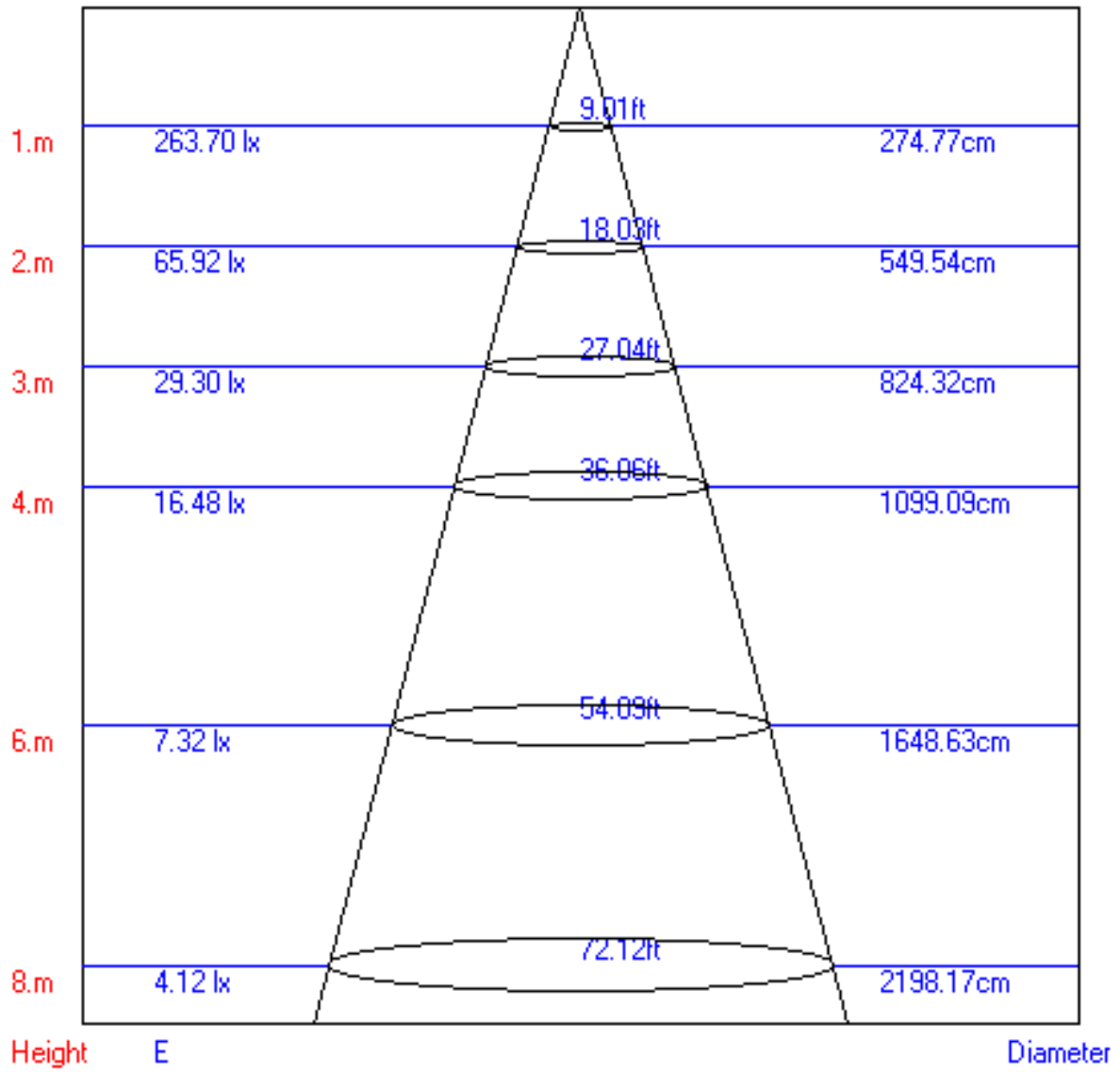
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	11365	11055	10683	9986	9332	8470	7675	6253	1676
C90	11530	11237	10920	10512	9614	9217	8089	5860	4162

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)

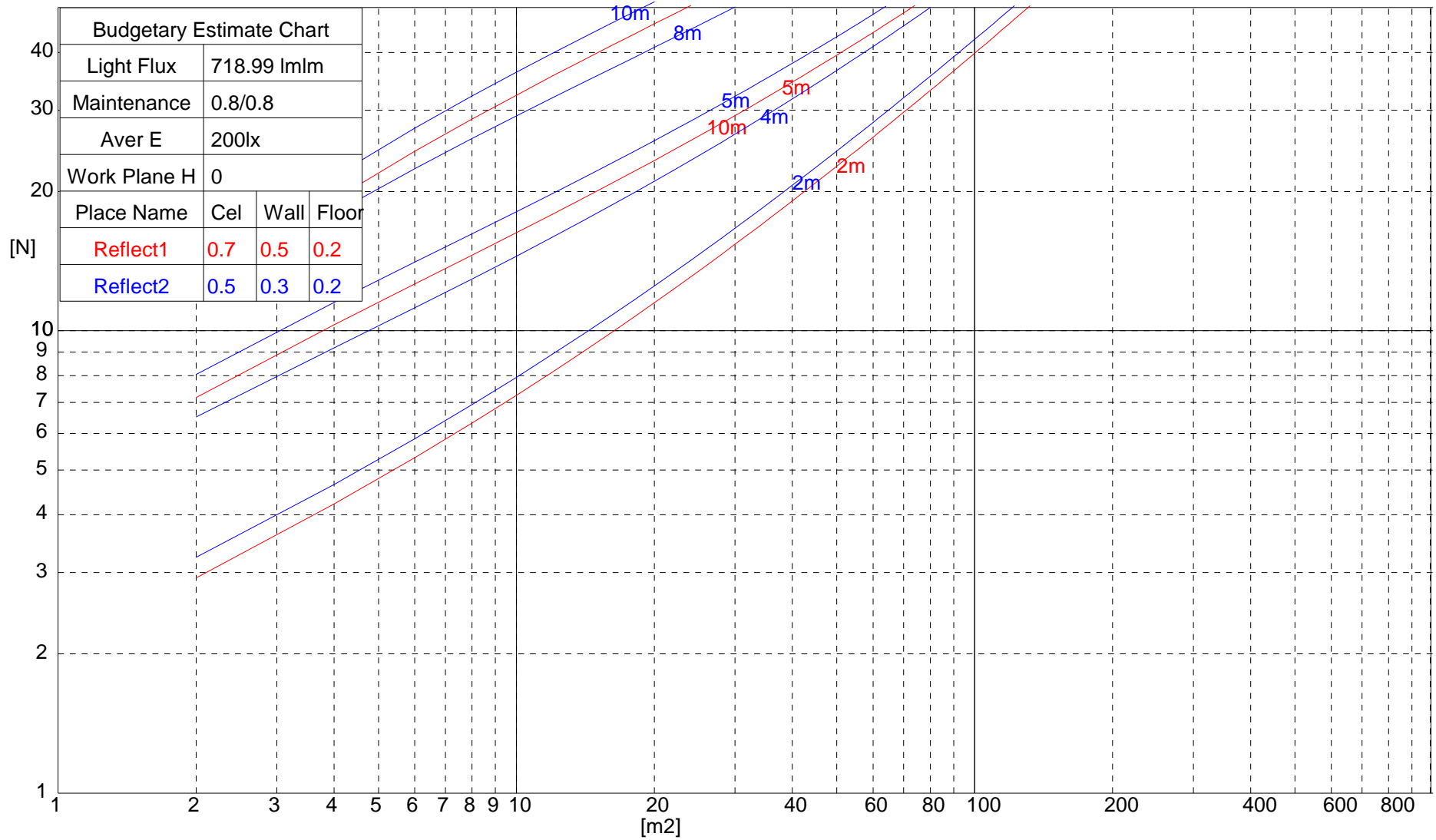
Lux-Distance Curve



Beam Angle:107.90°

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	0.63	0.62	0.67	0.63	0.60	0.66	0.61	0.58	0.65	0.59	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	0.41
6	0.51	0.48	0.47	0.52	0.48	0.46	0.53	0.48	0.44	0.52	0.46	0.42	0.52	0.45	0.40	0.36
7	0.46	0.43	0.41	0.46	0.43	0.41	0.47	0.42	0.39	0.48	0.42	0.37	0.47	0.41	0.35	0.32
8	0.41	0.38	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	0.31	0.30	0.35	0.32	0.30	0.36	0.32	0.28	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	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