

Luminaire Property

Luminaire: PL SQ 12w 6500K

Report NO.:

Voltage: 221.0 V

Test NO.:

Current: 0.054 A

Lamp: SMD2835

Power: 11.3 W

Sum Lumens: 828.98 lm

Power Factor: 0.952

Number of Lamps: 72

Ballast Type:

Diameter: 125mm

Width: 125mm

Length: 125mm

Height: 17mm

Photometric Type: Type C

Remark:

Photometric Results

Lumens: 828.98 lm

Angle of maximum intensity: C:0.0 G:2.0

Effective luminous flux: 810.95 lm

Half Peak Side Angle(50%): Left: -47.6 Right:54.9

Efficiency: N.A

Light Out Rate(LOR) : 100.00%

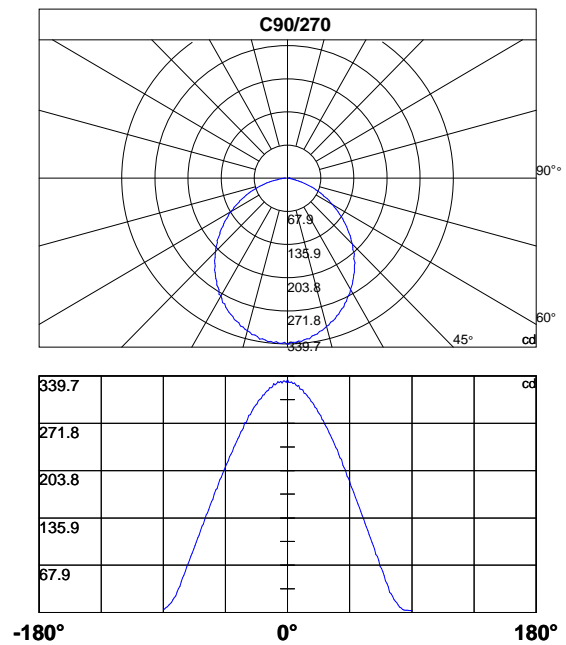
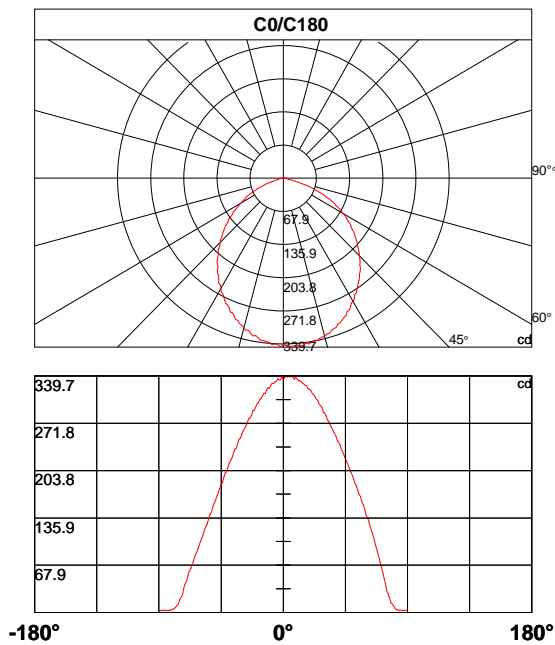
Central Intensity: 334.813cd

Up Flux Rate: 0.0%

Maximum Intensity: 339.671cd

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -72.1 Right:74.8



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	334.8	336.9	339.7	338.5	339.5	338.3	339.2	338.5	334.9	337.4
45.0	334.8	330.7	330.4	330.8	328.5	329.5	327.0	325.2	326.0	321.2
90.0	334.8	330.7	330.4	330.8	328.5	329.5	327.0	325.2	326.0	321.2
135.0	334.8	339.2	334.5	333.8	335.5	332.0	330.9	329.0	329.2	326.2
180.0	334.8	339.2	334.5	333.8	335.5	332.0	330.9	329.0	329.2	326.2
225.0	334.8	330.4	332.4	332.5	329.8	331.8	330.0	331.4	328.9	326.8
270.0	334.8	330.4	332.4	332.5	329.8	331.8	330.0	331.4	328.9	326.8
315.0	334.8	336.9	339.7	338.5	339.5	338.3	339.2	338.5	334.9	337.4
360.0	334.8	336.9	339.7	338.5	339.5	338.3	339.2	338.5	334.9	337.4

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	335.5	332.7	333.5	331.0	329.7	328.3	325.8	325.8	321.4	320.3
45.0	320.3	319.7	314.9	314.5	311.9	308.8	307.4	303.2	301.7	298.7
90.0	320.3	319.7	314.9	314.5	311.9	308.8	307.4	303.2	301.7	298.7
135.0	321.9	323.0	319.8	314.5	315.2	311.0	307.9	305.5	301.4	300.0
180.0	321.9	323.0	319.8	314.5	315.2	311.0	307.9	305.5	301.4	300.0
225.0	328.8	324.4	322.8	323.0	319.2	318.0	315.9	312.9	312.3	307.5
270.0	328.8	324.4	322.8	323.0	319.2	318.0	315.9	312.9	312.3	307.5
315.0	335.5	332.7	333.5	331.0	329.7	328.3	325.8	325.8	321.4	320.3
360.0	335.5	332.7	333.5	331.0	329.7	328.3	325.8	325.8	321.4	320.3

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	318.7	314.2	313.2	309.8	306.3	304.4	298.8	297.5	294.3	287.0
45.0	294.7	293.0	288.4	285.4	282.9	277.4	275.5	270.0	266.5	263.9
90.0	294.7	293.0	288.4	285.4	282.9	277.4	275.5	270.0	266.5	263.9
135.0	294.8	290.3	290.0	283.8	279.5	278.2	273.3	267.9	264.3	261.7
180.0	294.8	290.3	290.0	283.8	279.5	278.2	273.3	267.9	264.3	261.7
225.0	306.3	304.7	299.8	298.0	295.0	291.9	288.5	284.0	283.4	277.3
270.0	306.3	304.7	299.8	298.0	295.0	291.9	288.5	284.0	283.4	277.3
315.0	318.7	314.2	313.2	309.8	306.3	304.4	298.8	297.5	294.3	287.0
360.0	318.7	314.2	313.2	309.8	306.3	304.4	298.8	297.5	294.3	287.0

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	286.9	282.8	276.3	274.7	270.2	265.5	261.5	257.8	254.0	247.8
45.0	257.8	254.5	250.4	246.0	241.5	236.9	233.5	227.2	222.1	219.8
90.0	257.8	254.5	250.4	246.0	241.5	236.9	233.5	227.2	222.1	219.8
135.0	255.7	250.1	249.0	242.2	236.0	234.5	229.2	222.5	218.8	214.8
180.0	255.7	250.1	249.0	242.2	236.0	234.5	229.2	222.5	218.8	214.8
225.0	273.2	272.3	265.0	261.7	259.4	252.8	249.9	245.4	240.4	237.4
270.0	273.2	272.3	265.0	261.7	259.4	252.8	249.9	245.4	240.4	237.4
315.0	286.9	282.8	276.3	274.7	270.2	265.5	261.5	257.8	254.0	247.8
360.0	286.9	282.8	276.3	274.7	270.2	265.5	261.5	257.8	254.0	247.8

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	245.0	241.0	234.4	231.3	225.7	220.8	216.5	210.7	206.3	201.4
45.0	211.5	207.8	204.8	196.0	192.9	188.3	180.8	177.1	172.4	165.6
90.0	211.5	207.8	204.8	196.0	192.9	188.3	180.8	177.1	172.4	165.6
135.0	208.9	202.5	199.8	194.2	187.0	183.7	178.0	172.4	167.8	161.0
180.0	208.9	202.5	199.8	194.2	187.0	183.7	178.0	172.4	167.8	161.0
225.0	231.3	227.3	223.8	218.0	213.4	209.1	204.5	199.0	193.9	191.2
270.0	231.3	227.3	223.8	218.0	213.4	209.1	204.5	199.0	193.9	191.2
315.0	245.0	241.0	234.4	231.3	225.7	220.8	216.5	210.7	206.3	201.4
360.0	245.0	241.0	234.4	231.3	225.7	220.8	216.5	210.7	206.3	201.4

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	196.3	191.2	185.9	181.5	174.6	169.4	166.4	158.3	153.8	149.5
45.0	160.9	155.9	150.5	144.5	139.8	134.5	128.1	123.4	117.6	111.9
90.0	160.9	155.9	150.5	144.5	139.8	134.5	128.1	123.4	117.6	111.9
135.0	157.1	151.5	143.7	141.0	135.1	126.9	123.5	118.9	111.0	106.0
180.0	157.1	151.5	143.7	141.0	135.1	126.9	123.5	118.9	111.0	106.0
225.0	184.4	178.0	176.1	170.0	162.8	159.6	155.1	148.1	143.1	140.4
270.0	184.4	178.0	176.1	170.0	162.8	159.6	155.1	148.1	143.1	140.4
315.0	196.3	191.2	185.9	181.5	174.6	169.4	166.4	158.3	153.8	149.5
360.0	196.3	191.2	185.9	181.5	174.6	169.4	166.4	158.3	153.8	149.5

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	140.4	136.1	131.1	121.9	116.9	111.0	102.5	95.4	88.9	80.5
45.0	107.0	100.8	96.1	90.9	83.3	80.3	74.9	66.5	63.0	58.4
90.0	107.0	100.8	96.1	90.9	83.3	80.3	74.9	66.5	63.0	58.4
135.0	102.0	95.0	89.0	85.5	79.4	73.3	68.6	63.3	58.8	52.9
180.0	102.0	95.0	89.0	85.5	79.4	73.3	68.6	63.3	58.8	52.9
225.0	132.8	126.8	124.1	117.4	111.0	107.5	101.3	96.1	91.1	85.3
270.0	132.8	126.8	124.1	117.4	111.0	107.5	101.3	96.1	91.1	85.3
315.0	140.4	136.1	131.1	121.9	116.9	111.0	102.5	95.4	88.9	80.5
360.0	140.4	136.1	131.1	121.9	116.9	111.0	102.5	95.4	88.9	80.5

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	73.1	65.3	56.9	48.9	41.3	31.6	26.1	20.6	14.3	11.7
45.0	53.0	45.6	41.4	36.6	29.0	26.5	23.5	18.1	16.1	14.1
90.0	53.0	45.6	41.4	36.6	29.0	26.5	23.5	18.1	16.1	14.1
135.0	45.5	40.9	35.0	25.5	21.7	17.7	11.7	9.5	7.4	5.5
180.0	45.5	40.9	35.0	25.5	21.7	17.7	11.7	9.5	7.4	5.5
225.0	81.0	75.3	69.5	65.1	59.1	53.4	49.5	44.0	37.9	34.0
270.0	81.0	75.3	69.5	65.1	59.1	53.4	49.5	44.0	37.9	34.0
315.0	73.1	65.3	56.9	48.9	41.3	31.6	26.1	20.6	14.3	11.7
360.0	73.1	65.3	56.9	48.9	41.3	31.6	26.1	20.6	14.3	11.7

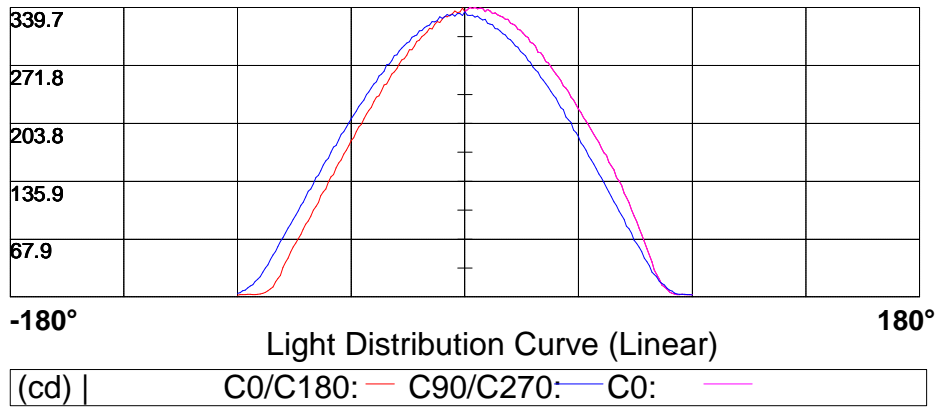
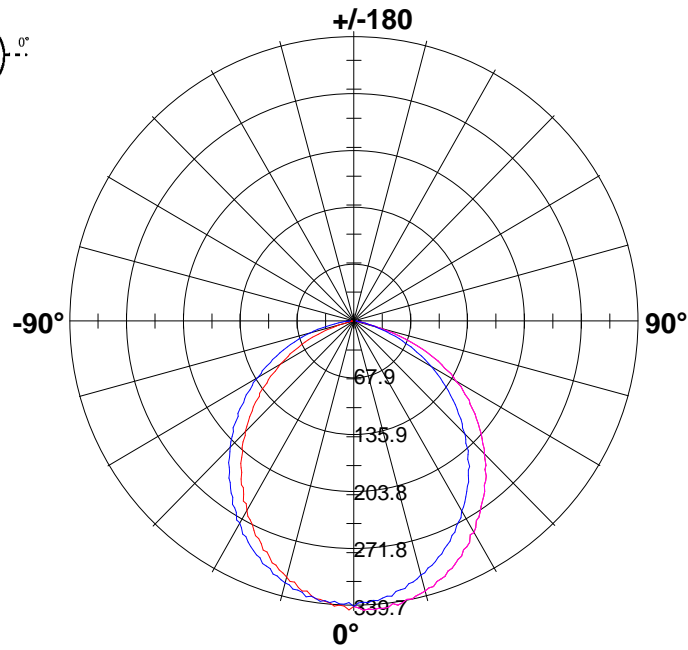
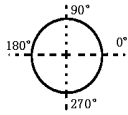
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	9.1	5.9	4.2	3.5	3.0	3.1	3.1	2.9	2.9	3.0
45.0	10.4	8.0	7.1	4.8	3.6	3.2	3.1	3.1	2.8	2.9
90.0	10.4	8.0	7.1	4.8	3.6	3.2	3.1	3.1	2.8	2.9
135.0	4.5	3.5	3.2	2.9	2.6	3.1	3.1	3.0	2.9	2.6
180.0	4.5	3.5	3.2	2.9	2.6	3.1	3.1	3.0	2.9	2.6
225.0	29.3	23.9	21.0	18.4	14.5	13.0	10.7	8.1	7.2	5.1
270.0	29.3	23.9	21.0	18.4	14.5	13.0	10.7	8.1	7.2	5.1
315.0	9.1	5.9	4.2	3.5	3.0	3.1	3.1	2.9	2.9	3.0
360.0	9.1	5.9	4.2	3.5	3.0	3.1	3.1	2.9	2.9	3.0

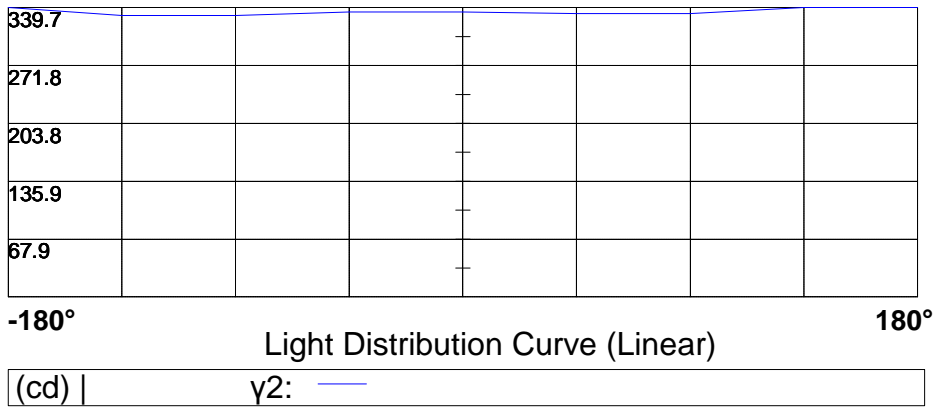
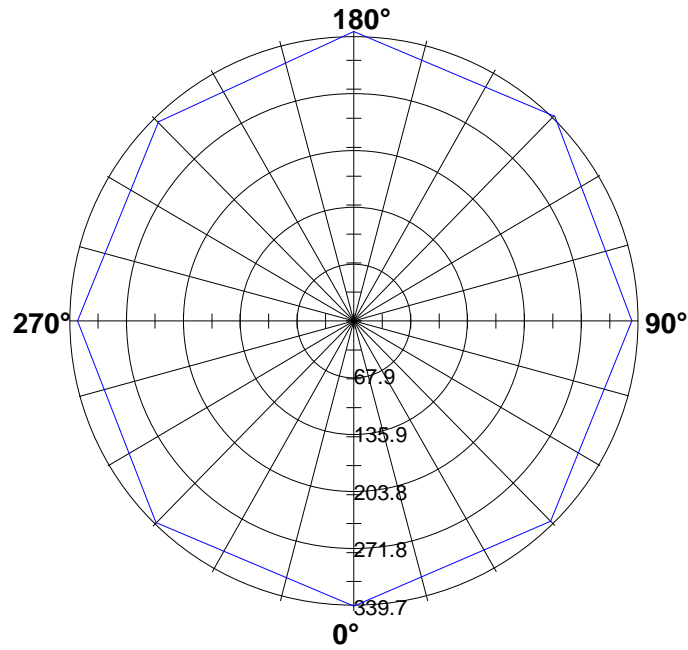
C\G	90.0
0.0	2.9
45.0	2.5
90.0	2.5
135.0	2.1
180.0	2.1
225.0	4.2
270.0	4.2
315.0	2.9
360.0	2.9

Light Distribution Curve [Unit: cd]

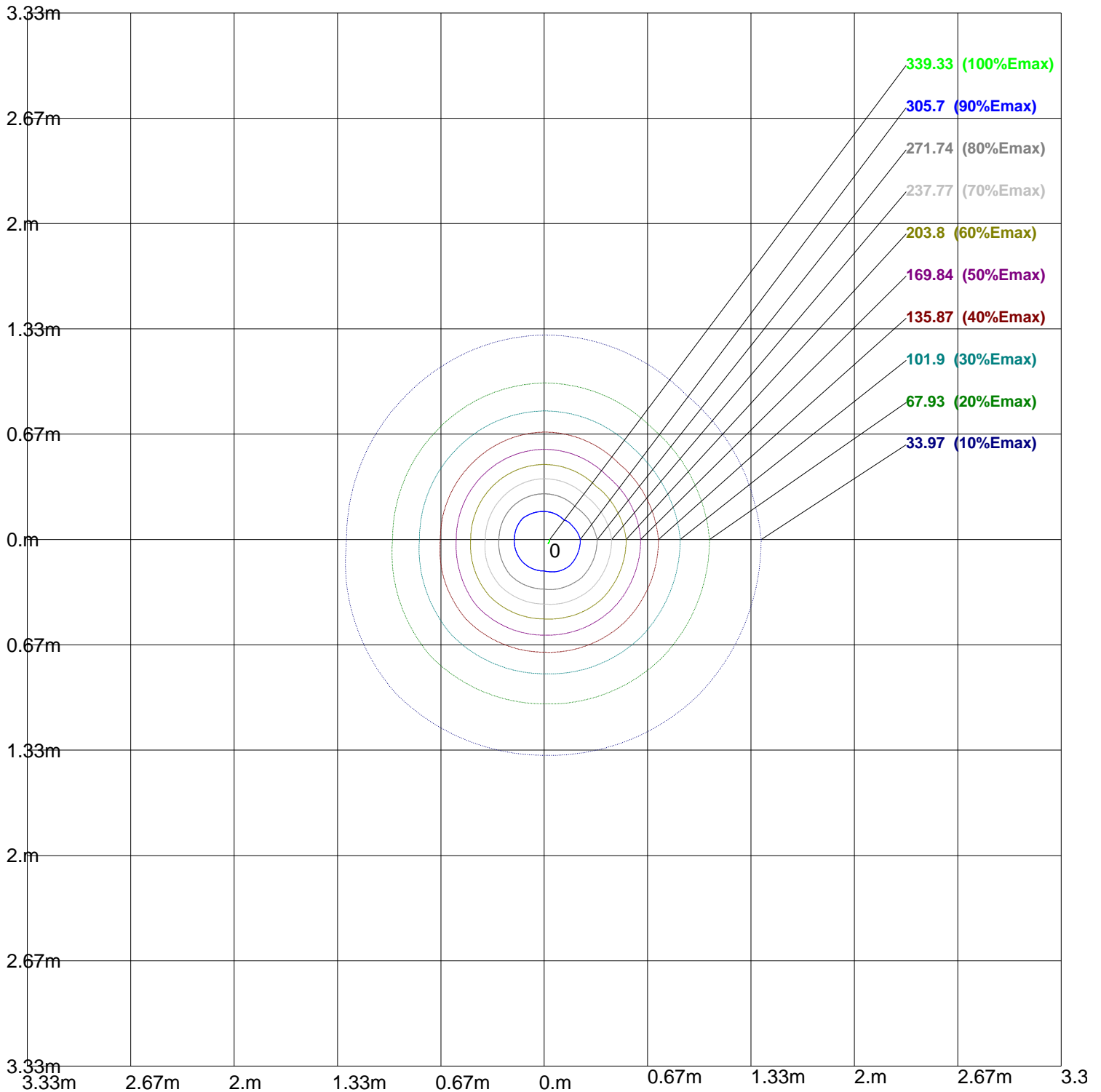
Luminaire



Max Plane Light Distribution Curve [Unit: cd]



Iso-Lux[lx]



Height: 1 m
Max Illuminance : 339.67lx

Luminance Limiting Curve

Diameter: 125mm

Length: 125mm

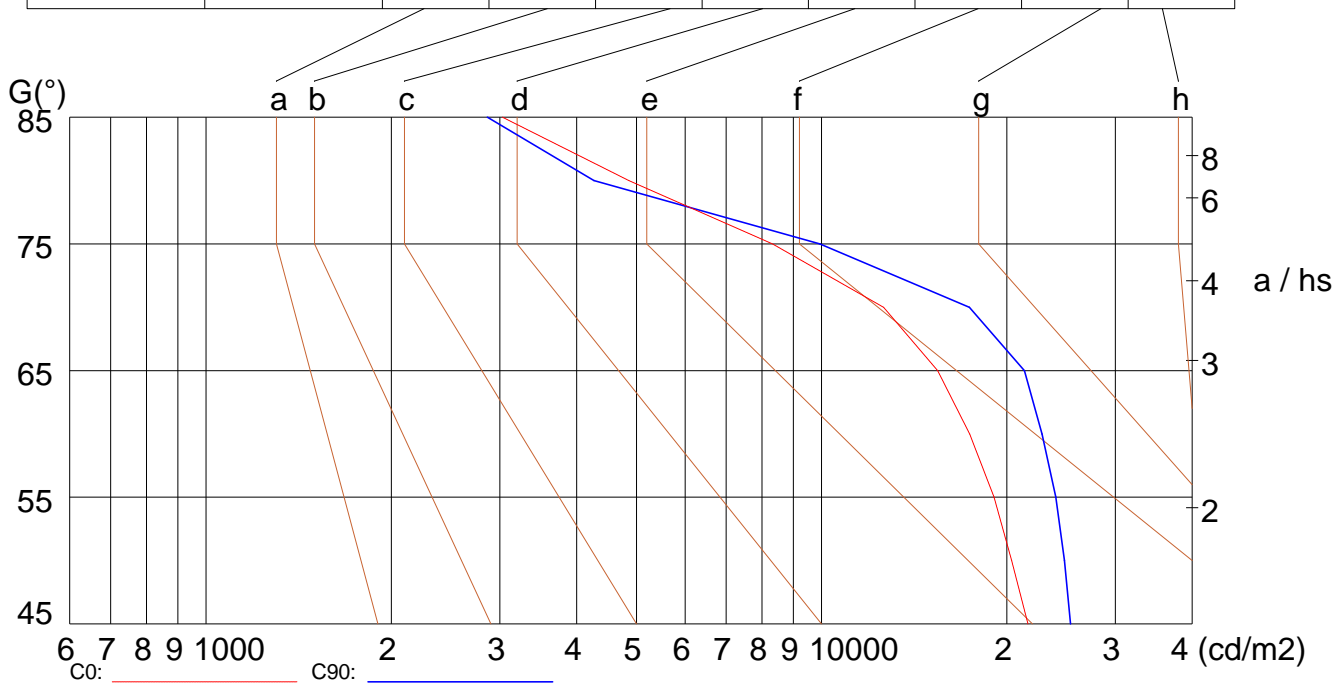
Width: 125mm

Height: 17mm

(cd/m²)

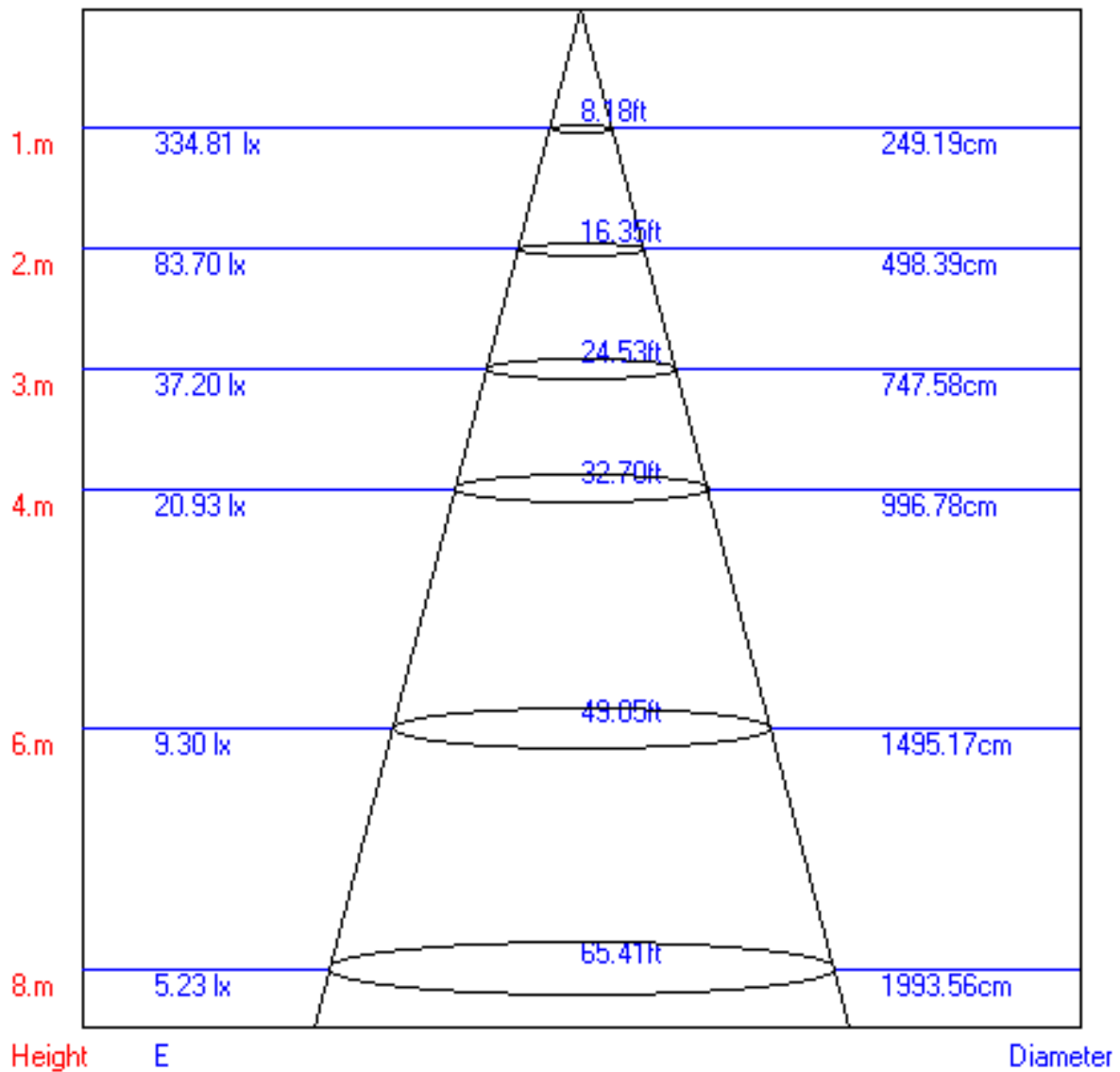
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	21648	20349	19066	17399	15439	12601	8326	4861	3029
C90	25384	24824	24012	22827	21355	17385	9933	4269	2862

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)

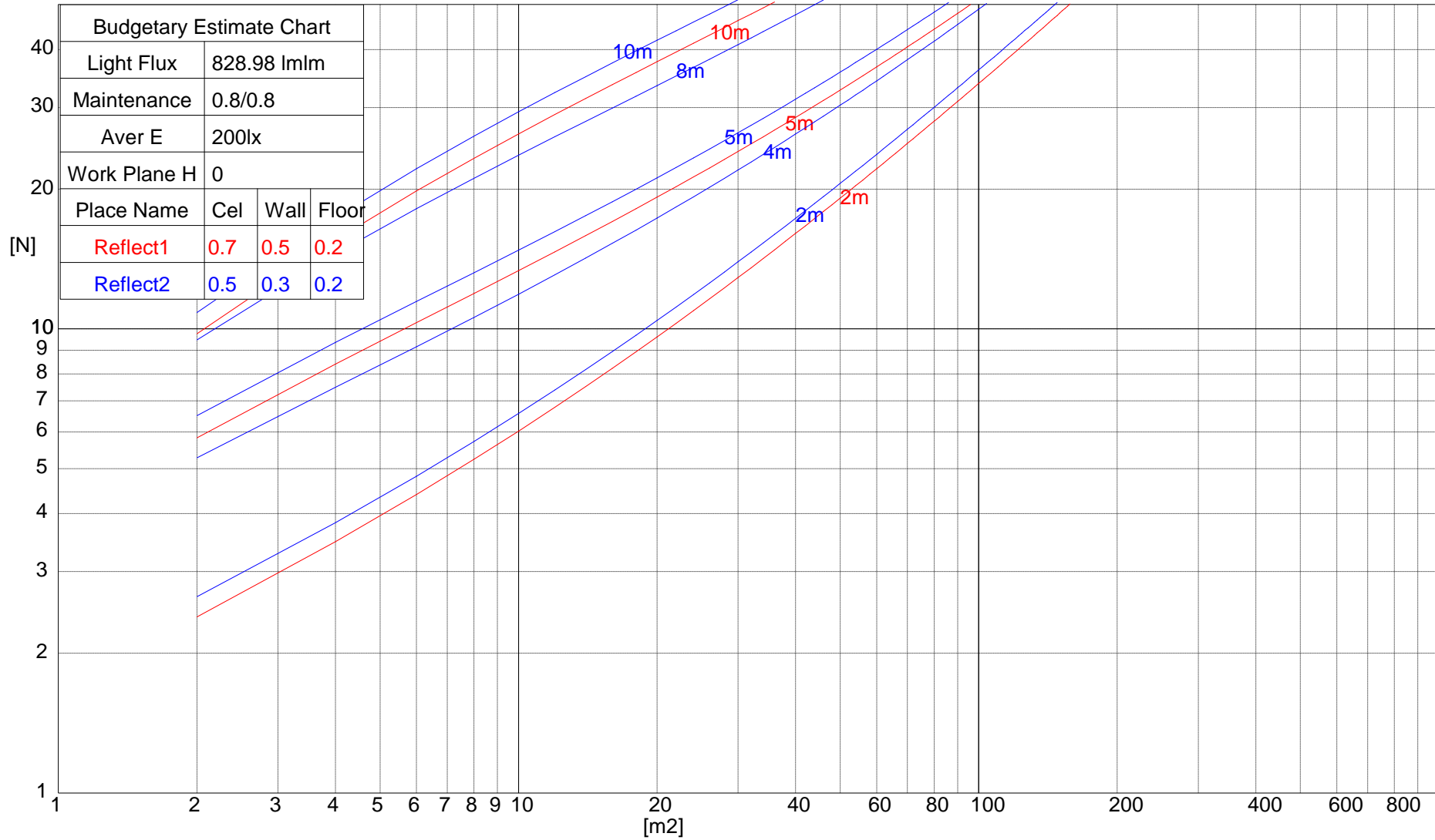
Lux-Distance Curve



Beam Angle:102.50°

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
RRCR	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	1.05	1.03	1.05	1.03	1.02	1.01	0.99	0.97	0.96	0.94	0.92	0.90	0.88	0.86	0.80
2	0.92	0.89	0.87	0.91	0.88	0.86	0.88	0.85	0.82	0.85	0.81	0.78	0.80	0.76	0.73	0.68
3	0.79	0.76	0.74	0.79	0.75	0.73	0.77	0.73	0.70	0.75	0.70	0.67	0.72	0.67	0.62	0.58
4	0.69	0.66	0.64	0.69	0.65	0.63	0.68	0.64	0.60	0.67	0.62	0.57	0.64	0.59	0.54	0.50
5	0.60	0.58	0.56	0.61	0.57	0.55	0.61	0.56	0.53	0.60	0.54	0.50	0.58	0.52	0.47	0.44
6	0.53	0.51	0.49	0.54	0.51	0.48	0.55	0.50	0.46	0.54	0.48	0.44	0.53	0.47	0.42	0.38
7	0.48	0.45	0.44	0.49	0.45	0.43	0.49	0.44	0.41	0.49	0.44	0.39	0.49	0.42	0.37	0.34
8	0.43	0.41	0.39	0.44	0.40	0.38	0.45	0.40	0.37	0.45	0.39	0.35	0.45	0.39	0.34	0.30
9	0.39	0.37	0.35	0.40	0.37	0.35	0.41	0.36	0.33	0.42	0.36	0.32	0.42	0.35	0.30	0.27
10	0.36	0.33	0.32	0.36	0.33	0.31	0.38	0.33	0.30	0.39	0.33	0.29	0.39	0.32	0.28	0.25



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