

Luminaire Property

Luminaire: RH-RPL12 12W 4000K

Report NO.:

Voltage: 110.6 V

Test NO.:

Current: 0.208 A

Lamp:

Power: 14.2 W

Sum Lumens: 1178.53 lm

Power Factor: 0.618

Number of Lamps: 1

Ballast Type: EMC300mA

Diameter: 170mm

Width: 170mm

Length: mm

Height: 25mm

Photometric Type: Type C

Remark: PMMA+0.5w SMD2835

Photometric Results

Lumens: 1178.53 lm

Angle of maximum intensity: C:135.0 G:1.0

Effective luminous flux: 1161.05 lm

Half Peak Side Angle(50%): Left: -52.2 Right:52.7

Efficiency: 82.9951 lm/W

Light Out Rate(LOR) : 100.00%

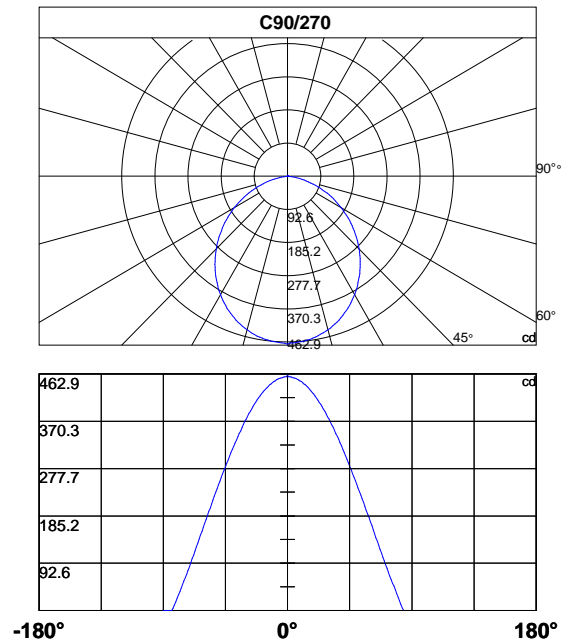
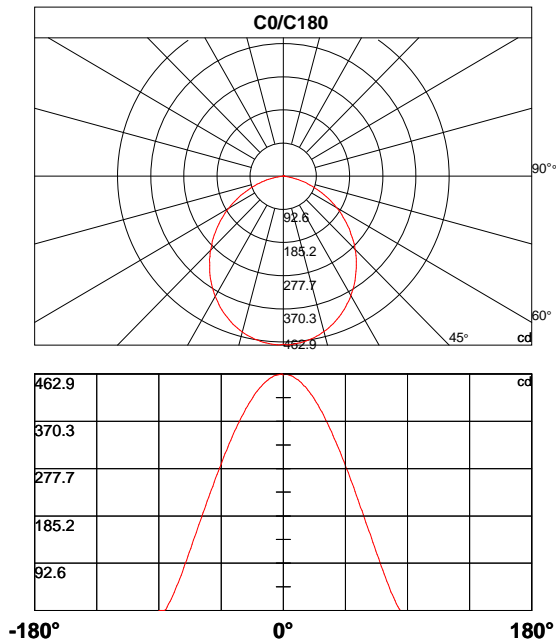
Central Intensity: 460.341cd

Up Flux Rate: 0.0%

Maximum Intensity: 462.863cd

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -76.6 Right:77.3



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	460.3	462.6	462.5	462.1	461.0	460.1	459.2	458.0	456.4	454.3
45.0	460.3	457.2	457.3	456.5	455.8	455.1	454.1	452.6	451.5	449.5
90.0	460.3	457.2	457.3	456.5	455.8	455.1	454.1	452.6	451.5	449.5
135.0	460.3	462.9	462.5	462.0	461.2	460.8	459.7	458.4	456.9	455.2
180.0	460.3	462.9	462.5	462.0	461.2	460.8	459.7	458.4	456.9	455.2
225.0	460.3	457.4	457.2	456.9	455.8	455.1	454.1	452.8	451.7	449.6
270.0	460.3	457.4	457.2	456.9	455.8	455.1	454.1	452.8	451.7	449.6
315.0	460.3	462.6	462.5	462.1	461.0	460.1	459.2	458.0	456.4	454.3
360.0	460.3	462.6	462.5	462.1	461.0	460.1	459.2	458.0	456.4	454.3

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	452.4	450.8	448.6	446.2	443.2	440.2	437.7	434.8	431.2	427.6
45.0	447.7	445.7	443.2	441.5	438.6	436.0	433.0	429.5	426.2	423.4
90.0	447.7	445.7	443.2	441.5	438.6	436.0	433.0	429.5	426.2	423.4
135.0	453.6	451.4	449.2	447.0	444.4	441.9	438.7	435.6	432.3	429.2
180.0	453.6	451.4	449.2	447.0	444.4	441.9	438.7	435.6	432.3	429.2
225.0	447.8	446.2	443.9	441.6	438.7	436.3	433.0	430.1	427.1	423.4
270.0	447.8	446.2	443.9	441.6	438.7	436.3	433.0	430.1	427.1	423.4
315.0	452.4	450.8	448.6	446.2	443.2	440.2	437.7	434.8	431.2	427.6
360.0	452.4	450.8	448.6	446.2	443.2	440.2	437.7	434.8	431.2	427.6

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	423.7	419.7	416.1	412.0	407.2	403.0	397.8	392.8	388.4	383.6
45.0	419.8	415.4	411.7	407.4	403.5	399.1	394.3	389.8	384.5	379.1
90.0	419.8	415.4	411.7	407.4	403.5	399.1	394.3	389.8	384.5	379.1
135.0	425.5	421.6	417.3	413.1	408.9	404.8	400.0	395.3	389.9	384.8
180.0	425.5	421.6	417.3	413.1	408.9	404.8	400.0	395.3	389.9	384.8
225.0	419.9	416.1	412.1	408.2	403.7	399.4	394.3	389.6	385.2	379.9
270.0	419.9	416.1	412.1	408.2	403.7	399.4	394.3	389.6	385.2	379.9
315.0	423.7	419.7	416.1	412.0	407.2	403.0	397.8	392.8	388.4	383.6
360.0	423.7	419.7	416.1	412.0	407.2	403.0	397.8	392.8	388.4	383.6

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	378.0	372.2	366.4	360.8	355.5	349.8	343.0	336.8	330.4	323.7
45.0	374.8	369.2	363.6	358.2	352.0	346.3	341.0	334.9	328.5	322.1
90.0	374.8	369.2	363.6	358.2	352.0	346.3	341.0	334.9	328.5	322.1
135.0	379.7	374.9	369.0	363.3	357.4	351.5	345.9	339.7	333.3	326.9
180.0	379.7	374.9	369.0	363.3	357.4	351.5	345.9	339.7	333.3	326.9
225.0	374.9	369.3	363.8	358.0	351.7	346.7	340.4	334.2	327.7	321.3
270.0	374.9	369.3	363.8	358.0	351.7	346.7	340.4	334.2	327.7	321.3
315.0	378.0	372.2	366.4	360.8	355.5	349.8	343.0	336.8	330.4	323.7
360.0	378.0	372.2	366.4	360.8	355.5	349.8	343.0	336.8	330.4	323.7

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	318.2	311.2	304.6	297.7	290.5	283.4	277.0	269.9	262.4	255.1
45.0	315.2	309.6	303.2	296.1	289.2	282.5	275.3	268.3	262.0	254.5
90.0	315.2	309.6	303.2	296.1	289.2	282.5	275.3	268.3	262.0	254.5
135.0	320.1	313.5	307.9	300.5	293.7	286.4	279.6	272.2	265.9	258.7
180.0	320.1	313.5	307.9	300.5	293.7	286.4	279.6	272.2	265.9	258.7
225.0	315.5	308.9	302.3	295.2	288.2	281.0	275.1	267.6	260.5	253.3
270.0	315.5	308.9	302.3	295.2	288.2	281.0	275.1	267.6	260.5	253.3
315.0	318.2	311.2	304.6	297.7	290.5	283.4	277.0	269.9	262.4	255.1
360.0	318.2	311.2	304.6	297.7	290.5	283.4	277.0	269.9	262.4	255.1

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	247.1	241.0	233.4	225.3	217.7	210.1	202.1	195.3	187.4	179.5
45.0	247.5	239.8	232.4	226.0	218.7	210.8	203.2	195.6	187.7	181.3
90.0	247.5	239.8	232.4	226.0	218.7	210.8	203.2	195.6	187.7	181.3
135.0	251.3	243.4	236.1	229.4	221.7	213.9	206.2	198.8	191.0	183.0
180.0	251.3	243.4	236.1	229.4	221.7	213.9	206.2	198.8	191.0	183.0
225.0	245.4	237.9	231.8	223.8	216.4	208.8	200.8	194.1	186.3	178.5
270.0	245.4	237.9	231.8	223.8	216.4	208.8	200.8	194.1	186.3	178.5
315.0	247.1	241.0	233.4	225.3	217.7	210.1	202.1	195.3	187.4	179.5
360.0	247.1	241.0	233.4	225.3	217.7	210.1	202.1	195.3	187.4	179.5

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	171.6	163.5	155.9	149.0	140.7	132.9	124.6	116.7	109.8	102.1
45.0	173.5	165.7	157.9	150.1	142.4	135.5	127.5	119.7	112.1	104.1
90.0	173.5	165.7	157.9	150.1	142.4	135.5	127.5	119.7	112.1	104.1
135.0	176.2	168.0	160.2	152.1	144.2	137.8	129.5	121.6	113.6	106.1
180.0	176.2	168.0	160.2	152.1	144.2	137.8	129.5	121.6	113.6	106.1
225.0	170.4	162.6	154.7	148.0	139.8	132.1	123.9	116.4	108.2	101.5
270.0	170.4	162.6	154.7	148.0	139.8	132.1	123.9	116.4	108.2	101.5
315.0	171.6	163.5	155.9	149.0	140.7	132.9	124.6	116.7	109.8	102.1
360.0	171.6	163.5	155.9	149.0	140.7	132.9	124.6	116.7	109.8	102.1

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	94.0	86.2	78.9	71.3	64.9	57.4	50.5	43.6	36.5	30.4
45.0	97.9	90.2	82.3	74.8	67.8	60.3	53.3	47.4	40.6	33.3
90.0	97.9	90.2	82.3	74.8	67.8	60.3	53.3	47.4	40.6	33.3
135.0	98.0	91.5	83.9	76.0	69.0	61.6	54.4	48.4	41.6	35.1
180.0	98.0	91.5	83.9	76.0	69.0	61.6	54.4	48.4	41.6	35.1
225.0	93.8	86.1	78.4	70.9	64.6	57.4	50.6	43.7	36.9	30.0
270.0	93.8	86.1	78.4	70.9	64.6	57.4	50.6	43.7	36.9	30.0
315.0	94.0	86.2	78.9	71.3	64.9	57.4	50.5	43.6	36.5	30.4
360.0	94.0	86.2	78.9	71.3	64.9	57.4	50.5	43.6	36.5	30.4

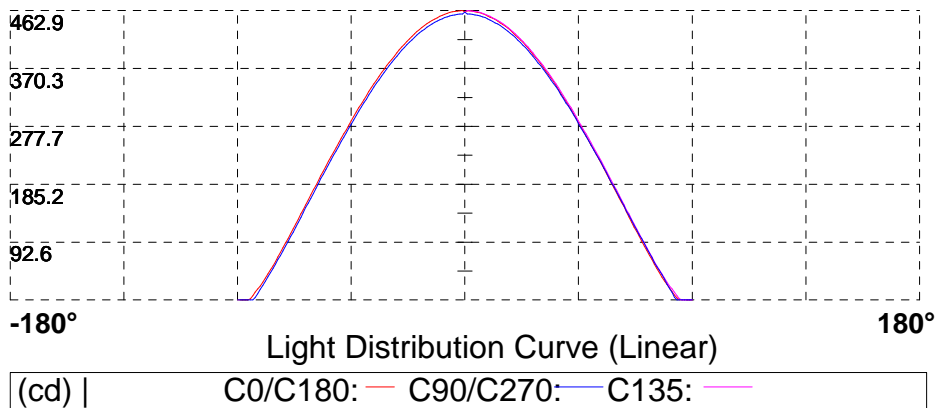
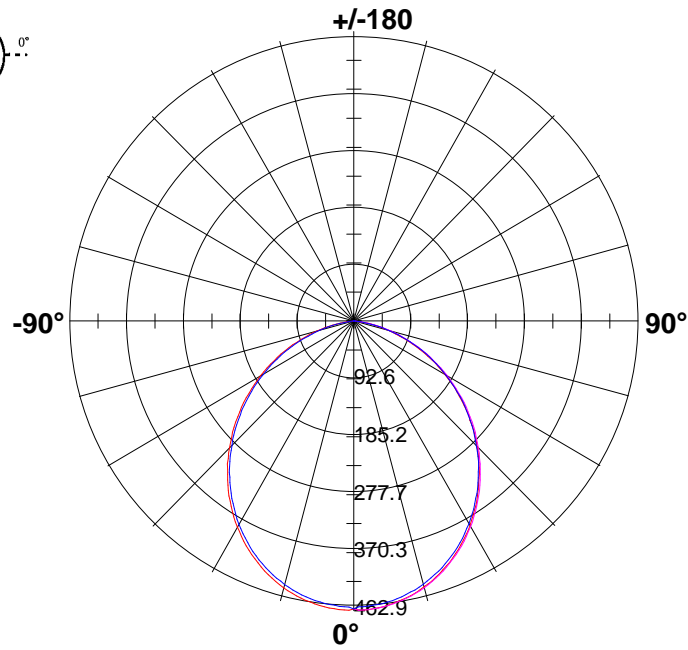
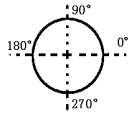
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	25.1	19.1	13.1	7.9	3.2	0.0	0.0	0.0	0.0	0.0
45.0	25.5	18.4	11.9	4.5	0.0	0.0	0.0	0.0	0.0	0.0
90.0	25.5	18.4	11.9	4.5	0.0	0.0	0.0	0.0	0.0	0.0
135.0	28.4	22.4	17.5	12.3	7.0	2.0	0.0	0.0	0.0	0.0
180.0	28.4	22.4	17.5	12.3	7.0	2.0	0.0	0.0	0.0	0.0
225.0	23.6	17.1	10.2	3.6	0.0	0.0	0.0	0.0	0.0	0.0
270.0	23.6	17.1	10.2	3.6	0.0	0.0	0.0	0.0	0.0	0.0
315.0	25.1	19.1	13.1	7.9	3.2	0.0	0.0	0.0	0.0	0.0
360.0	25.1	19.1	13.1	7.9	3.2	0.0	0.0	0.0	0.0	0.0

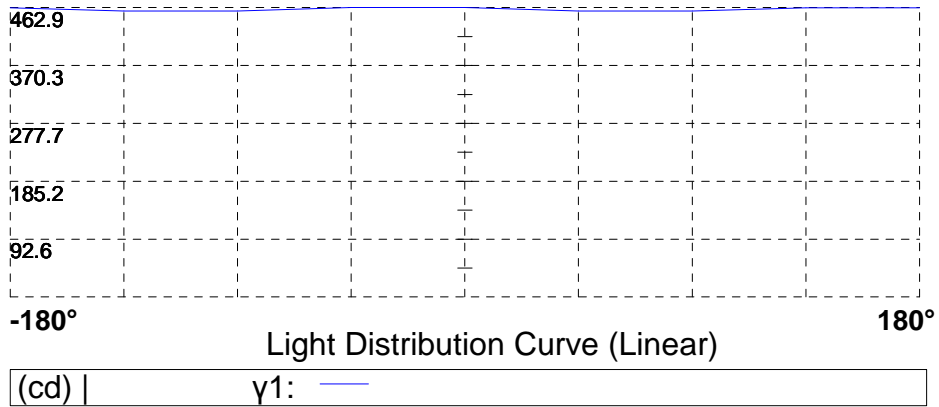
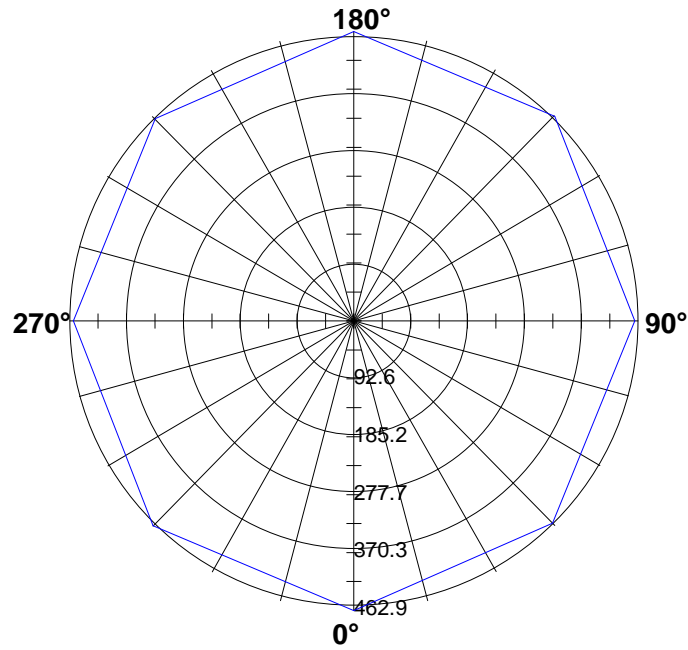
C\G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

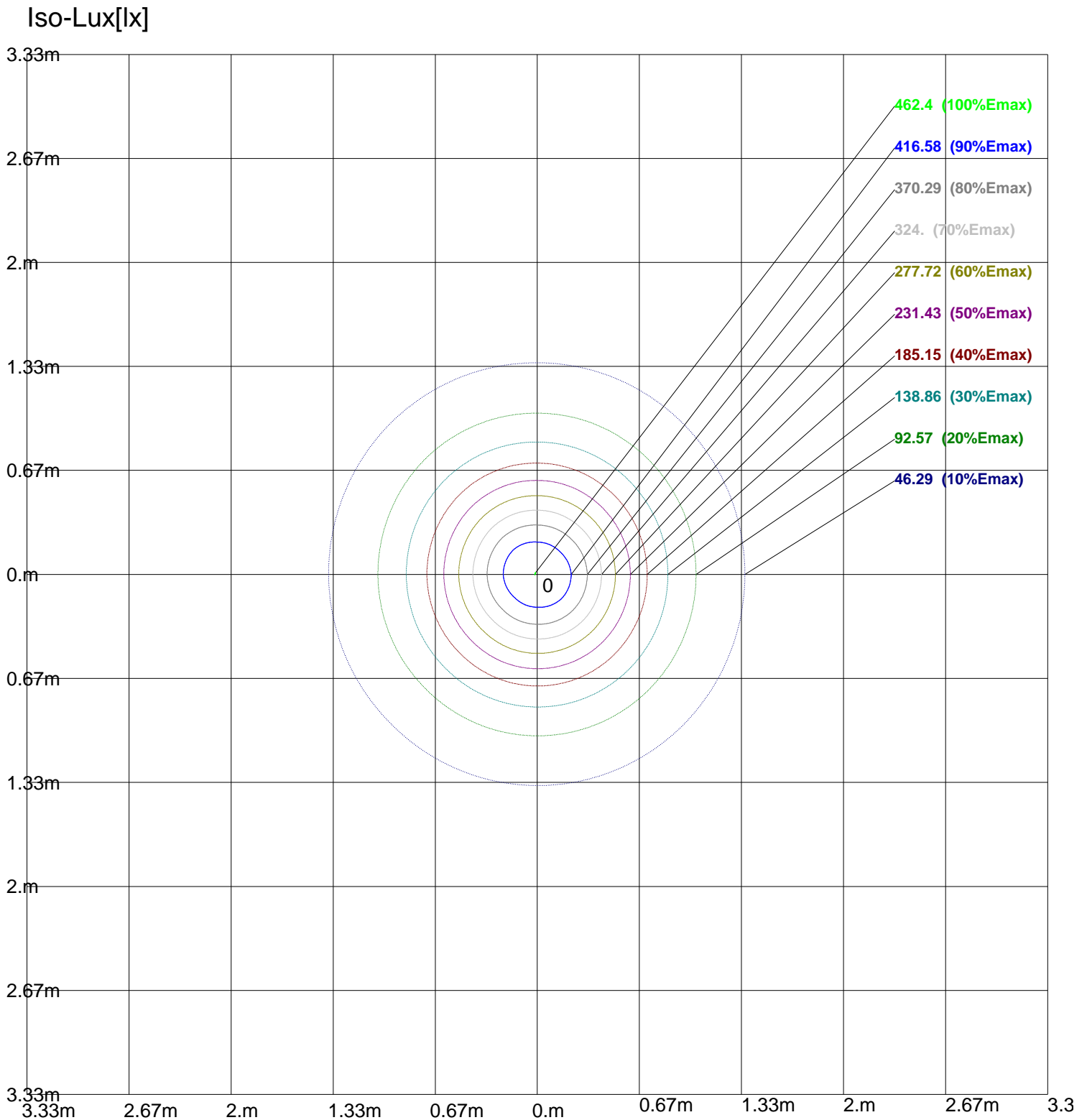
Light Distribution Curve [Unit: cd]

Luminaire



Max Plane Light Distribution Curve [Unit: cd]





Height: 1 m
Max Illuminance : 462.86lx

Luminance Limiting Curve

Diameter: 170mm

Length: mm

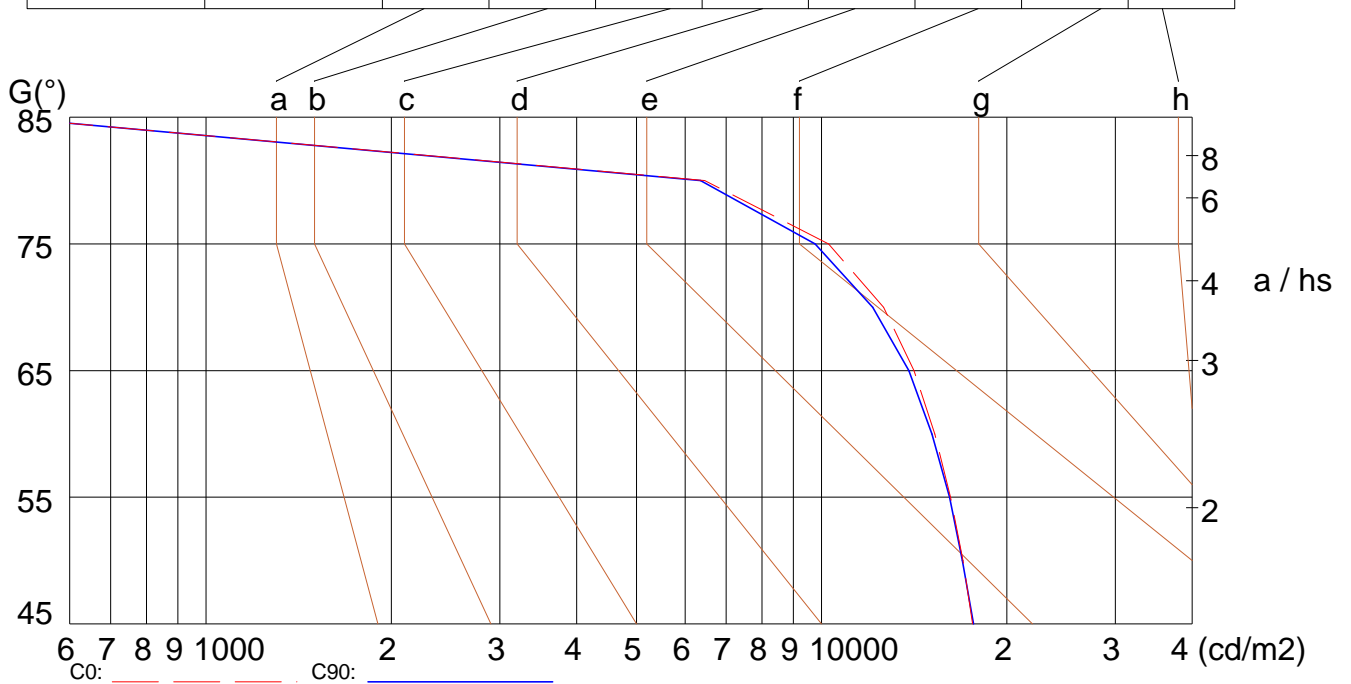
Width: 170mm

Height: 25mm

(cd/m²)

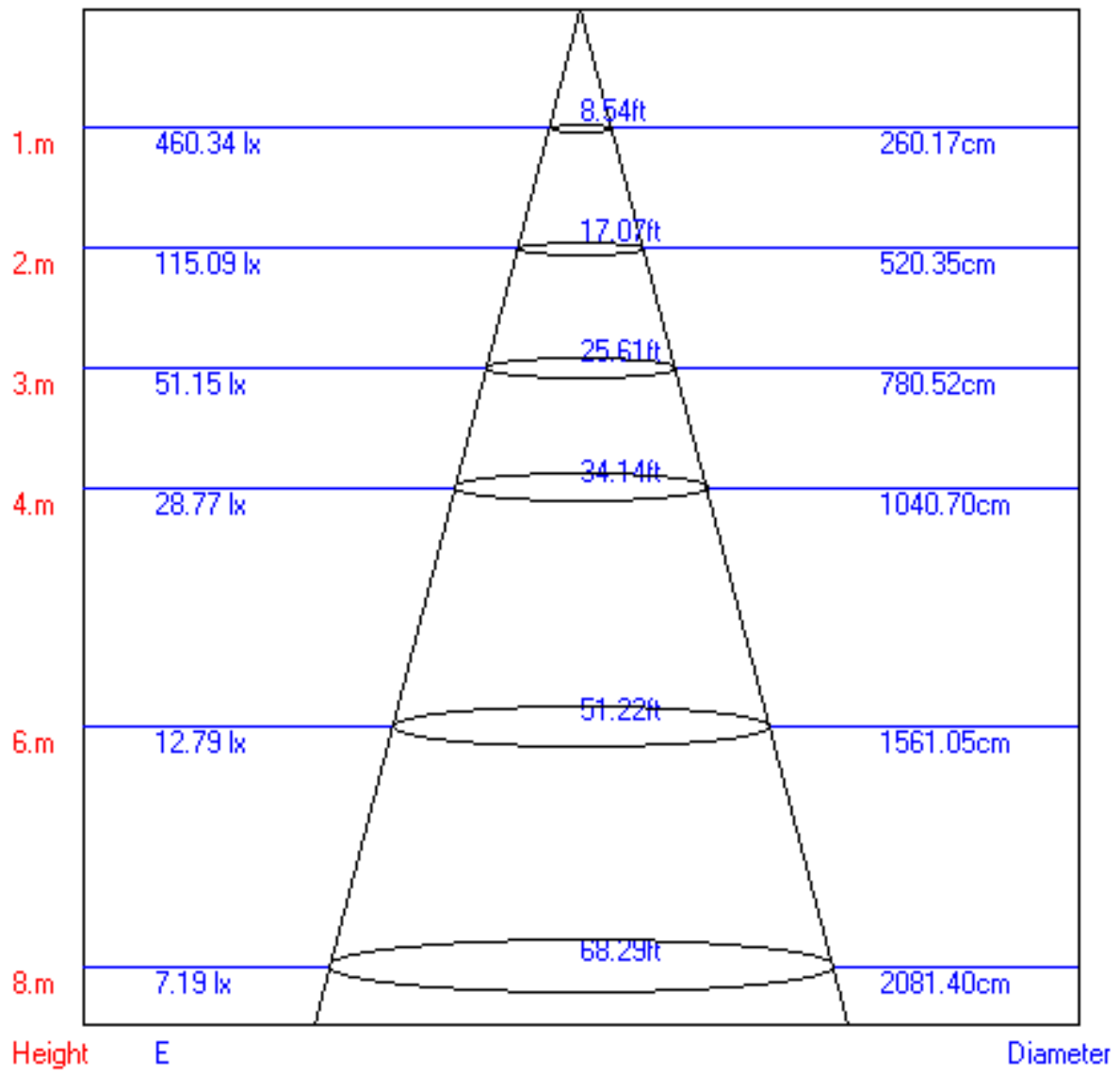
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	17597	16961	16192	15283	14127	12610	10259	6459	
C90	17654	16933	16138	15116	13855	12109	9763	6355	

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)

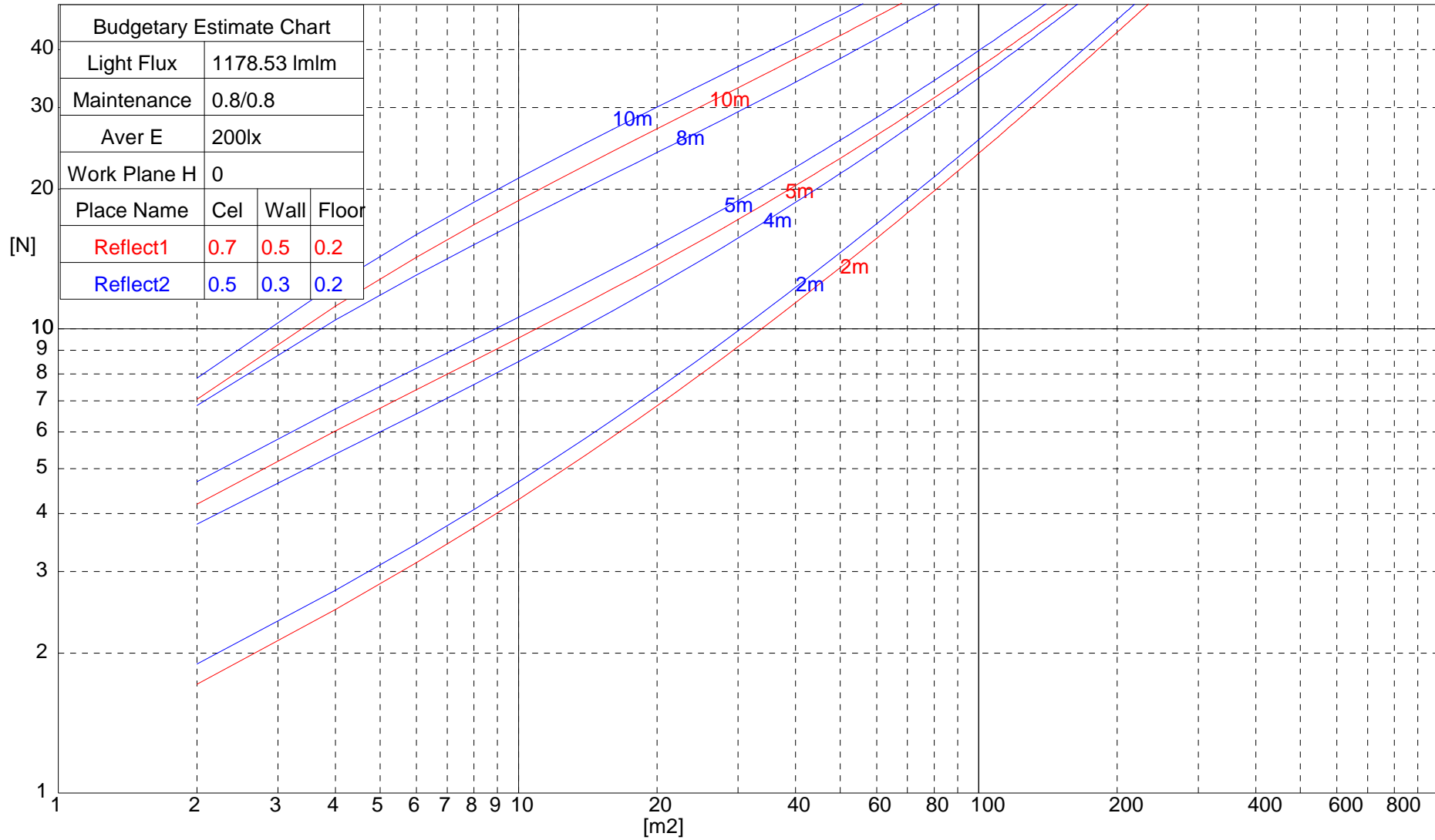
Lux-Distance Curve



Beam Angle:104.90°

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	1.06	1.05	1.03	1.05	1.03	1.01	1.01	0.99	0.97	0.96	0.94	0.92	0.90	0.87	0.85	0.80
2	0.91	0.89	0.87	0.90	0.87	0.85	0.88	0.85	0.82	0.84	0.81	0.78	0.80	0.76	0.72	0.68
3	0.78	0.76	0.74	0.78	0.75	0.72	0.77	0.73	0.69	0.74	0.70	0.66	0.71	0.66	0.62	0.57
4	0.68	0.65	0.63	0.68	0.65	0.62	0.68	0.63	0.60	0.66	0.61	0.57	0.64	0.58	0.53	0.49
5	0.60	0.57	0.55	0.60	0.57	0.54	0.60	0.55	0.52	0.59	0.54	0.49	0.58	0.52	0.47	0.43
6	0.53	0.50	0.48	0.53	0.50	0.47	0.54	0.49	0.46	0.54	0.48	0.43	0.53	0.46	0.41	0.38
7	0.47	0.45	0.43	0.48	0.44	0.42	0.49	0.44	0.40	0.49	0.43	0.39	0.48	0.42	0.37	0.33
8	0.42	0.40	0.38	0.43	0.40	0.38	0.44	0.40	0.36	0.45	0.39	0.35	0.45	0.38	0.33	0.30
9	0.38	0.36	0.35	0.39	0.36	0.34	0.41	0.36	0.33	0.41	0.35	0.31	0.41	0.35	0.30	0.27
10	0.35	0.33	0.31	0.36	0.33	0.31	0.37	0.33	0.30	0.38	0.32	0.28	0.38	0.32	0.27	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	14.8	15.9	15.1	15.9	16.3	14.7	15.9	14.9	15.9	16.3
	3H	16.2	17.4	16.7	17.7	18.0	16.2	17.4	16.5	17.9	18.0
	4H	16.9	18.1	17.4	18.6	18.7	17.0	18.0	17.3	18.6	18.8
	6H	17.5	18.5	18.0	18.9	19.0	17.3	18.3	17.8	18.8	19.1
	8H	17.9	18.9	18.2	18.9	19.3	17.8	18.7	18.0	19.0	19.3
	12H	18.0	18.8	18.2	19.3	19.5	17.8	18.6	18.0	19.2	19.5
4H	2H	15.6	16.6	15.9	16.9	17.1	15.6	16.6	15.8	16.8	17.0
	3H	17.5	18.4	17.8	18.3	18.7	17.3	18.2	17.5	18.4	18.8
	4H	18.2	19.0	18.5	19.1	19.5	18.0	18.9	18.4	19.2	19.5
	6H	18.8	19.5	19.2	19.8	20.1	18.8	19.4	19.0	19.7	20.1
	8H	19.0	19.8	19.5	19.9	20.4	19.0	19.6	19.2	19.9	20.3
	12H	19.3	19.9	19.7	20.2	20.4	19.2	19.7	19.6	20.2	20.5
8H	4H	18.6	19.2	18.8	19.4	19.9	18.4	19.0	18.8	19.4	19.8
	6H	19.4	19.8	19.7	20.2	20.7	19.2	19.9	19.7	20.2	20.6
	8H	19.8	20.2	20.1	20.5	20.9	19.6	20.0	20.0	20.5	20.9
	12H	19.9	20.5	20.4	20.7	21.3	19.9	20.4	20.2	20.7	21.1
12H	4H	18.6	19.1	18.9	19.5	19.9	18.4	19.0	18.8	19.6	19.9
	6H	19.6	20.0	19.9	20.2	20.6	19.3	19.8	19.8	20.2	20.7
	8H	19.9	20.4	20.3	20.7	21.1	19.9	20.3	20.2	20.6	21.1