

Luminaire Property

Luminaire: RH-SPL12 12W 4000K

Report NO.:

Voltage: 220.6 V

Test NO.:

Current: 0.098 A

Lamp:

Power: 11.7 W

Sum Lumens: 960.33 lm

Power Factor: 0.536

Number of Lamps: 1

Ballast Type: EMC300mA

Diameter: mm

Width: 170mm

Length: 170mm

Height: 20mm

Photometric Type: Type C

Remark: PMMA+0.5W SMD2835

Photometric Results

Lumens: 960.33 lm

Angle of maximum intensity: C:225.0 G:2.0

Effective luminous flux: 947.09 lm

Half Peak Side Angle(50%): Left: -54.0 Right:52.5

Efficiency: 82.0795 lm/W

Light Out Rate(LOR) : 100.00%

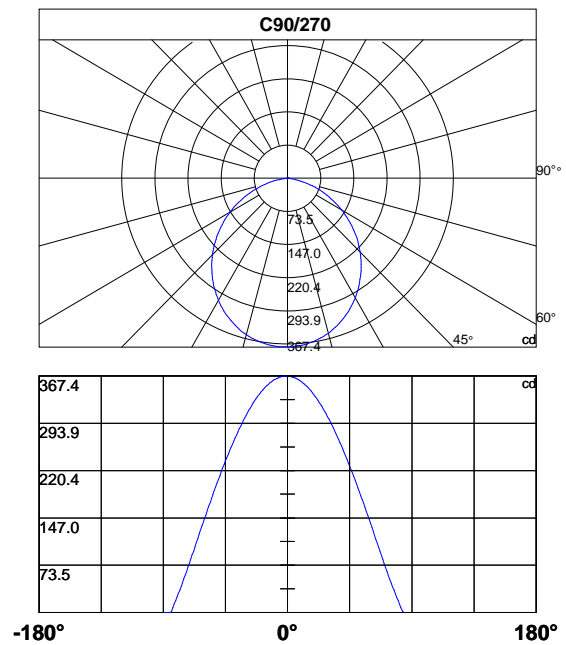
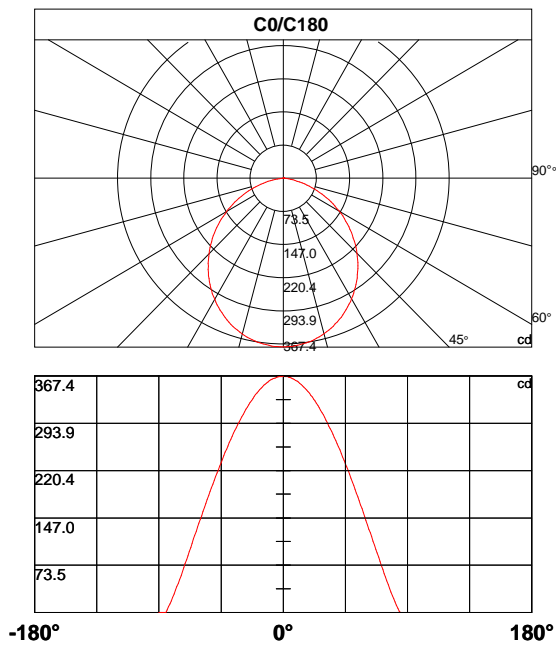
Central Intensity: 367.054cd

Up Flux Rate: 0.0%

Maximum Intensity: 367.417cd

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -77.6 Right:76.6



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	367.1	366.8	366.4	366.4	365.6	364.9	364.4	363.0	362.2	360.5
45.0	367.1	366.9	366.6	366.2	365.4	364.7	363.9	362.6	361.5	360.2
90.0	367.1	366.9	366.6	366.2	365.4	364.7	363.9	362.6	361.5	360.2
135.0	367.1	366.8	366.6	366.5	365.9	365.2	364.3	363.5	362.4	361.3
180.0	367.1	366.8	366.6	366.5	365.9	365.2	364.3	363.5	362.4	361.3
225.0	367.1	367.1	367.4	367.1	366.7	366.0	365.4	364.4	363.5	362.1
270.0	367.1	367.1	367.4	367.1	366.7	366.0	365.4	364.4	363.5	362.1
315.0	367.1	366.8	366.4	366.4	365.6	364.9	364.4	363.0	362.2	360.5
360.0	367.1	366.8	366.4	366.4	365.6	364.9	364.4	363.0	362.2	360.5

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	359.5	357.8	356.1	354.2	352.0	350.0	347.7	345.9	343.0	340.6
45.0	358.6	356.7	355.0	353.3	351.0	349.1	346.6	344.0	341.1	338.8
90.0	358.6	356.7	355.0	353.3	351.0	349.1	346.6	344.0	341.1	338.8
135.0	359.9	358.1	356.4	354.8	353.1	350.8	348.6	346.1	343.6	341.3
180.0	359.9	358.1	356.4	354.8	353.1	350.8	348.6	346.1	343.6	341.3
225.0	361.3	359.6	358.0	356.5	354.2	352.5	350.3	348.3	345.9	343.2
270.0	361.3	359.6	358.0	356.5	354.2	352.5	350.3	348.3	345.9	343.2
315.0	359.5	357.8	356.1	354.2	352.0	350.0	347.7	345.9	343.0	340.6
360.0	359.5	357.8	356.1	354.2	352.0	350.0	347.7	345.9	343.0	340.6

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	337.4	334.7	331.4	328.9	325.2	321.6	318.3	314.6	310.4	307.2
45.0	335.7	332.8	329.6	326.1	322.7	319.7	315.8	311.8	308.1	303.8
90.0	335.7	332.8	329.6	326.1	322.7	319.7	315.8	311.8	308.1	303.8
135.0	338.7	335.5	332.4	329.2	326.3	322.8	319.5	315.6	311.9	307.9
180.0	338.7	335.5	332.4	329.2	326.3	322.8	319.5	315.6	311.9	307.9
225.0	340.2	337.2	334.6	331.5	328.1	325.1	321.5	317.6	314.6	310.4
270.0	340.2	337.2	334.6	331.5	328.1	325.1	321.5	317.6	314.6	310.4
315.0	337.4	334.7	331.4	328.9	325.2	321.6	318.3	314.6	310.4	307.2
360.0	337.4	334.7	331.4	328.9	325.2	321.6	318.3	314.6	310.4	307.2

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	303.2	298.9	294.4	289.8	285.9	281.6	276.9	272.1	267.1	262.1
45.0	300.2	296.1	291.7	286.9	282.5	277.9	272.7	268.5	263.5	258.7
90.0	300.2	296.1	291.7	286.9	282.5	277.9	272.7	268.5	263.5	258.7
135.0	304.0	300.1	296.1	291.3	287.3	282.3	278.6	273.5	268.9	263.9
180.0	304.0	300.1	296.1	291.3	287.3	282.3	278.6	273.5	268.9	263.9
225.0	306.3	302.1	298.2	293.5	289.6	285.4	280.4	275.6	270.8	266.3
270.0	306.3	302.1	298.2	293.5	289.6	285.4	280.4	275.6	270.8	266.3
315.0	303.2	298.9	294.4	289.8	285.9	281.6	276.9	272.1	267.1	262.1
360.0	303.2	298.9	294.4	289.8	285.9	281.6	276.9	272.1	267.1	262.1

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	257.5	252.5	246.9	241.7	236.4	230.9	226.1	220.3	214.7	208.7
45.0	253.7	248.3	243.5	238.1	232.5	227.3	221.4	216.0	211.0	205.1
90.0	253.7	248.3	243.5	238.1	232.5	227.3	221.4	216.0	211.0	205.1
135.0	258.8	253.4	249.2	243.6	238.0	233.0	227.3	221.5	216.8	210.8
180.0	258.8	253.4	249.2	243.6	238.0	233.0	227.3	221.5	216.8	210.8
225.0	261.3	256.3	251.2	245.7	240.3	235.6	229.9	224.4	218.7	212.6
270.0	261.3	256.3	251.2	245.7	240.3	235.6	229.9	224.4	218.7	212.6
315.0	257.5	252.5	246.9	241.7	236.4	230.9	226.1	220.3	214.7	208.7
360.0	257.5	252.5	246.9	241.7	236.4	230.9	226.1	220.3	214.7	208.7

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	202.7	197.4	191.6	185.4	179.6	173.5	167.1	161.8	155.3	149.1
45.0	199.4	193.3	187.1	180.9	176.0	169.6	163.5	157.0	150.7	145.4
90.0	199.4	193.3	187.1	180.9	176.0	169.6	163.5	157.0	150.7	145.4
135.0	204.9	199.2	193.2	188.1	182.0	175.6	169.7	163.4	157.3	150.5
180.0	204.9	199.2	193.2	188.1	182.0	175.6	169.7	163.4	157.3	150.5
225.0	206.6	201.5	195.9	189.7	183.4	177.2	171.0	165.7	159.5	152.9
270.0	206.6	201.5	195.9	189.7	183.4	177.2	171.0	165.7	159.5	152.9
315.0	202.7	197.4	191.6	185.4	179.6	173.5	167.1	161.8	155.3	149.1
360.0	202.7	197.4	191.6	185.4	179.6	173.5	167.1	161.8	155.3	149.1

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	142.6	135.9	129.4	123.9	117.7	111.1	104.6	98.1	92.5	85.9
45.0	139.2	132.3	126.2	119.5	113.3	106.6	101.0	94.8	88.1	81.9
90.0	139.2	132.3	126.2	119.5	113.3	106.6	101.0	94.8	88.1	81.9
135.0	145.4	138.7	132.6	125.9	119.6	114.3	107.6	100.9	94.3	87.9
180.0	145.4	138.7	132.6	125.9	119.6	114.3	107.6	100.9	94.3	87.9
225.0	146.6	140.0	134.8	128.2	121.7	114.9	108.6	101.8	95.0	89.9
270.0	146.6	140.0	134.8	128.2	121.7	114.9	108.6	101.8	95.0	89.9
315.0	142.6	135.9	129.4	123.9	117.7	111.1	104.6	98.1	92.5	85.9
360.0	142.6	135.9	129.4	123.9	117.7	111.1	104.6	98.1	92.5	85.9

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	79.4	73.0	66.9	60.3	55.0	49.2	43.2	37.1	31.6	25.9
45.0	75.7	70.2	63.6	57.4	51.7	45.7	39.5	35.0	28.9	23.8
90.0	75.7	70.2	63.6	57.4	51.7	45.7	39.5	35.0	28.9	23.8
135.0	81.7	76.3	69.6	63.6	57.4	51.3	45.1	40.1	34.6	28.7
180.0	81.7	76.3	69.6	63.6	57.4	51.3	45.1	40.1	34.6	28.7
225.0	83.5	77.0	70.6	63.8	58.6	52.6	46.2	40.3	34.5	29.7
270.0	83.5	77.0	70.6	63.8	58.6	52.6	46.2	40.3	34.5	29.7
315.0	79.4	73.0	66.9	60.3	55.0	49.2	43.2	37.1	31.6	25.9
360.0	79.4	73.0	66.9	60.3	55.0	49.2	43.2	37.1	31.6	25.9

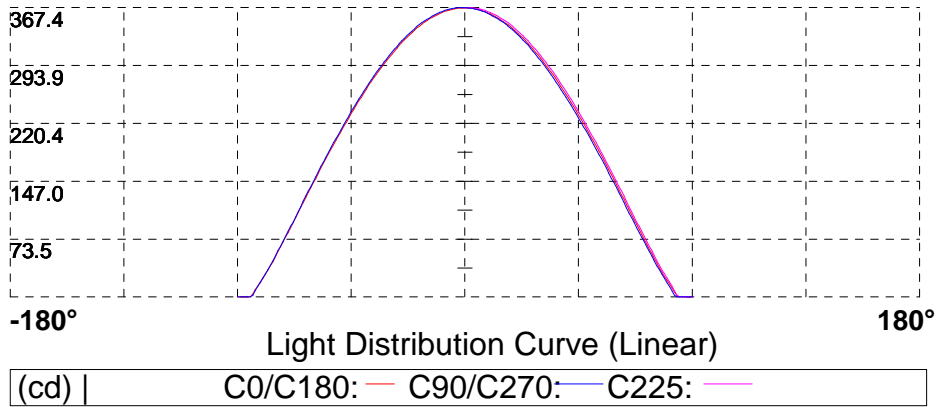
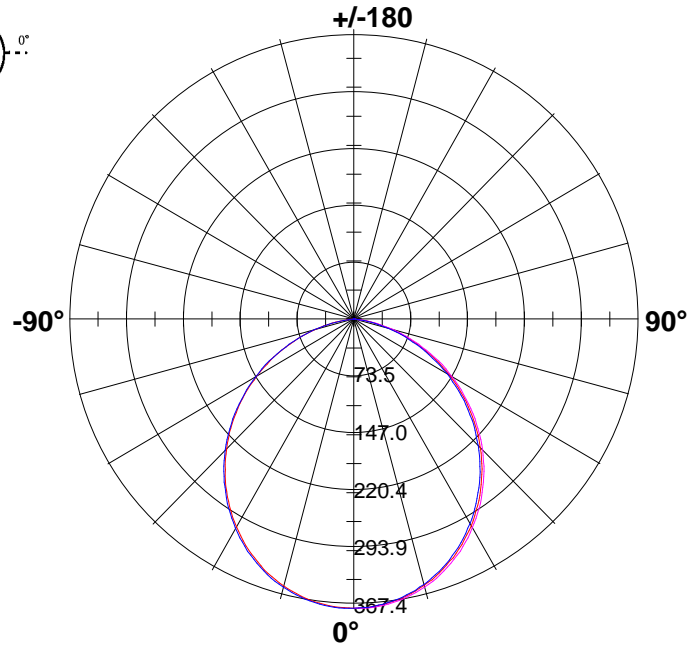
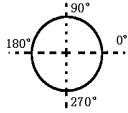
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	21.6	16.5	11.4	6.5	1.7	0.0	0.0	0.0	0.0	0.0
45.0	18.2	13.0	7.6	2.2	0.0	0.0	0.0	0.0	0.0	0.0
90.0	18.2	13.0	7.6	2.2	0.0	0.0	0.0	0.0	0.0	0.0
135.0	23.6	18.0	13.6	8.9	3.9	0.0	0.0	0.0	0.0	0.0
180.0	23.6	18.0	13.6	8.9	3.9	0.0	0.0	0.0	0.0	0.0
225.0	24.2	19.0	13.7	7.8	2.0	0.0	0.0	0.0	0.0	0.0
270.0	24.2	19.0	13.7	7.8	2.0	0.0	0.0	0.0	0.0	0.0
315.0	21.6	16.5	11.4	6.5	1.7	0.0	0.0	0.0	0.0	0.0
360.0	21.6	16.5	11.4	6.5	1.7	0.0	0.0	0.0	0.0	0.0

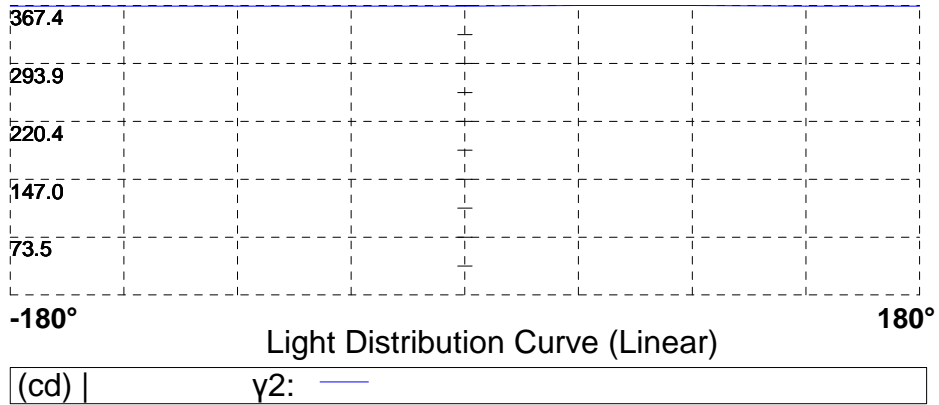
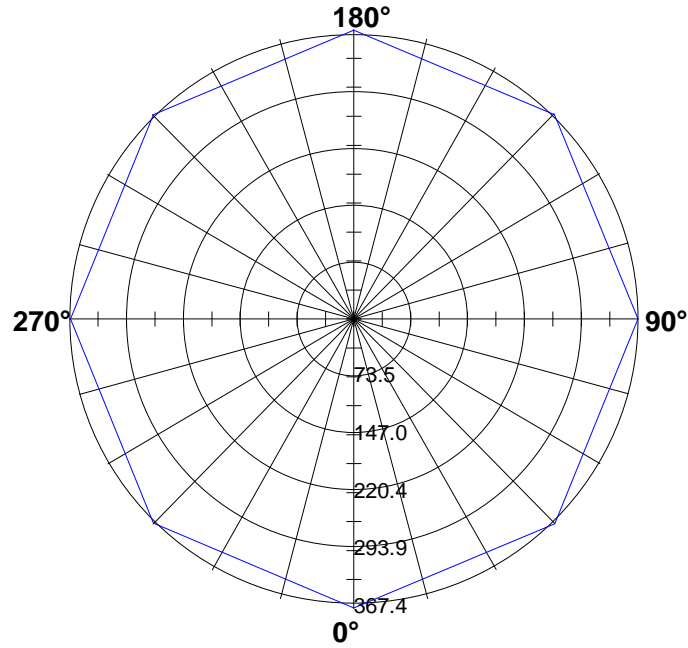
C\G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

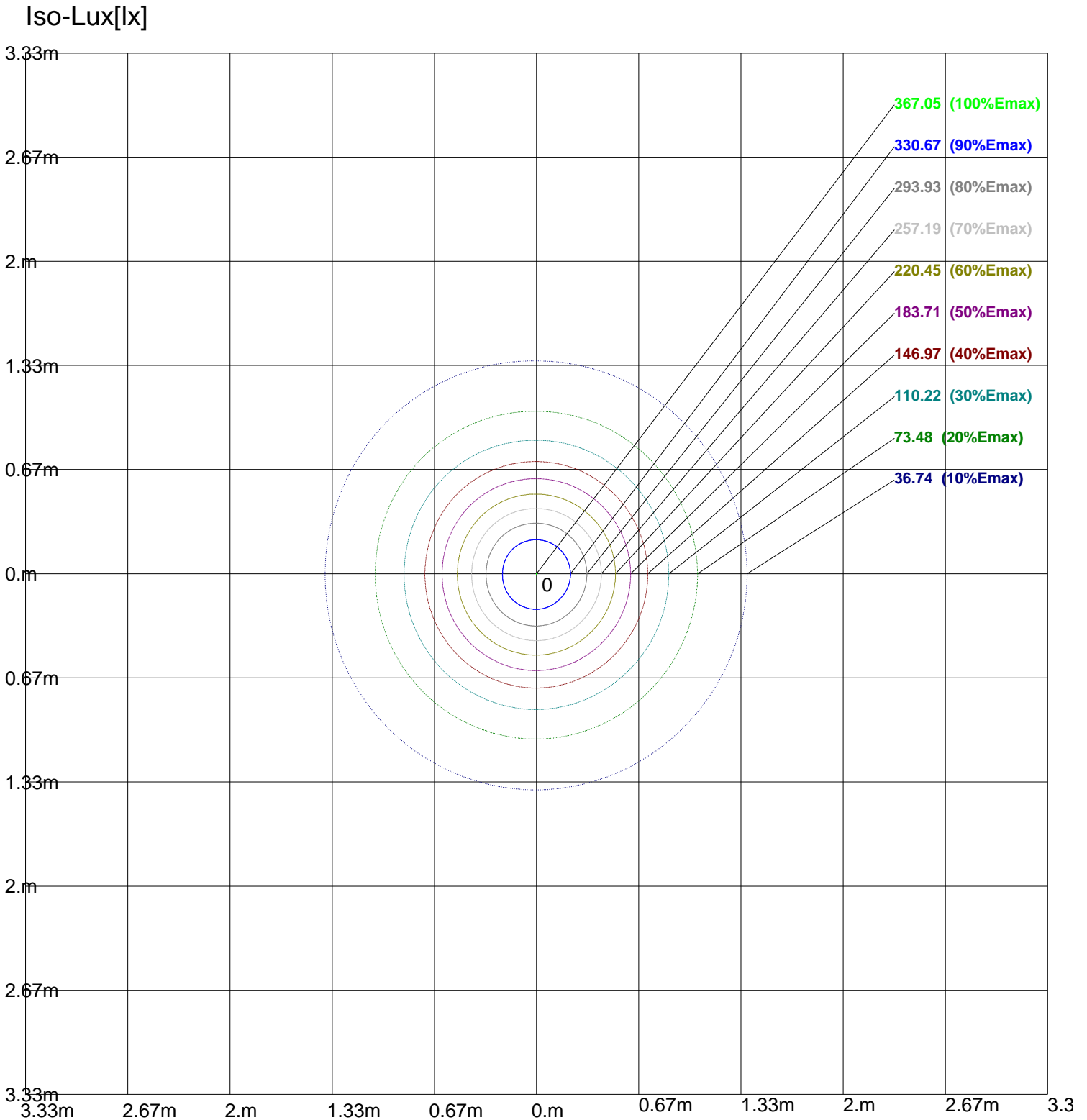
Light Distribution Curve [Unit: cd]

Luminaire



Max Plane Light Distribution Curve [Unit: cd]





Height: 1 m
Max Illuminance : 367.42lx

Luminance Limiting Curve

Diameter: mm

Length: 170mm

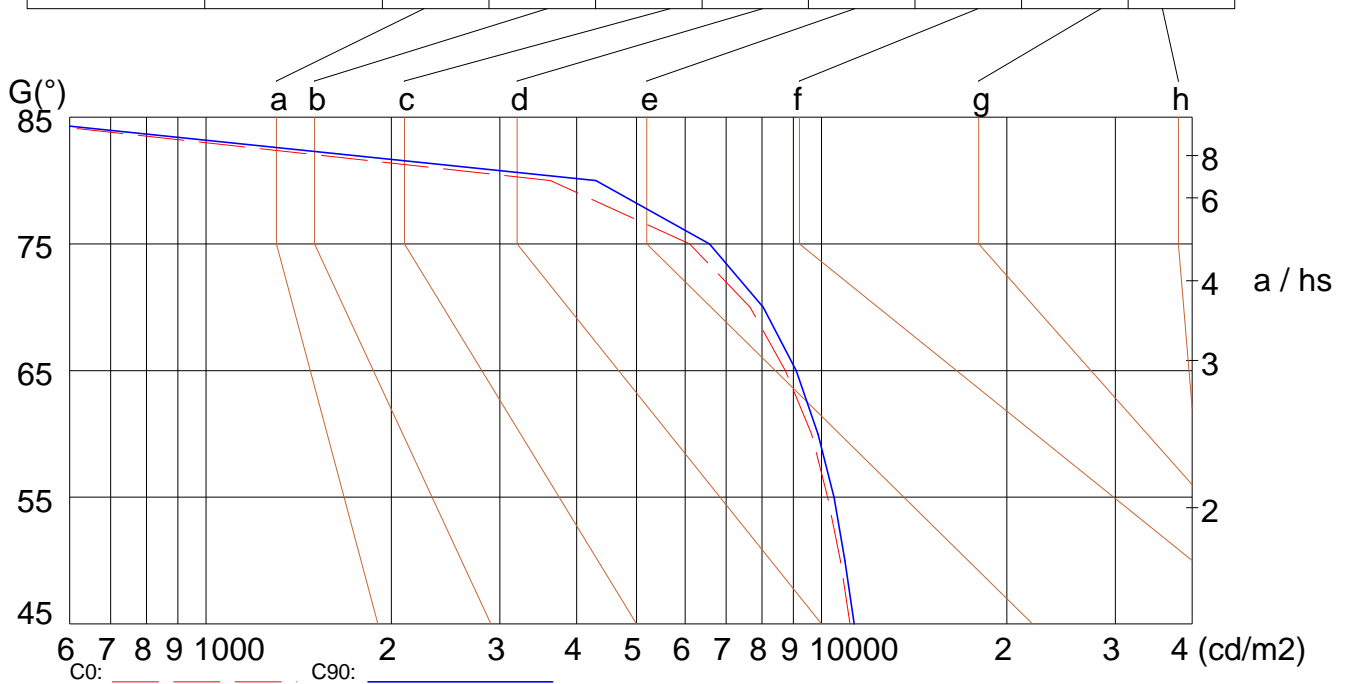
Width: 170mm

Height: 20mm

(cd/m²)

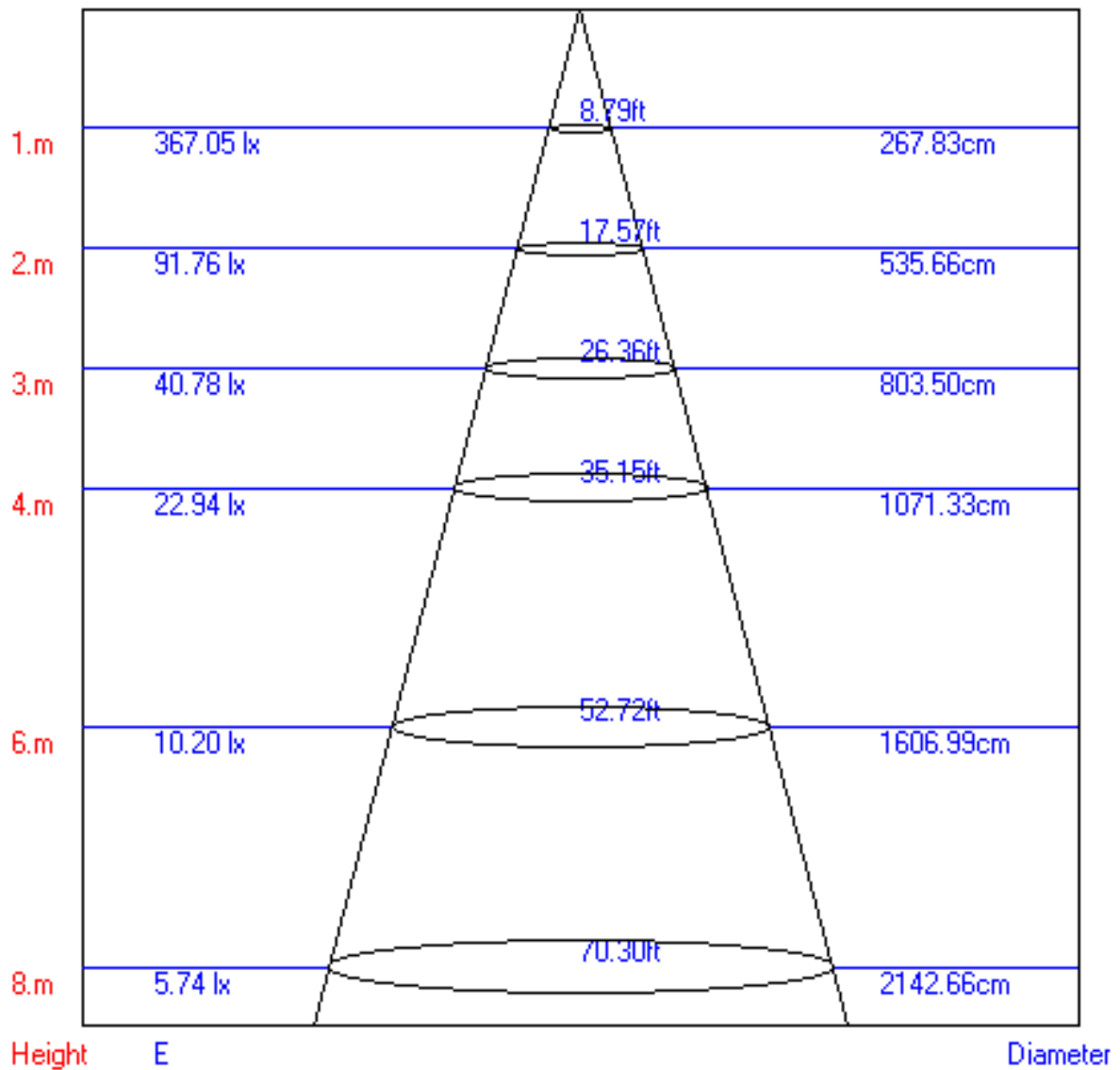
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	11125	10733	10233	9634	8727	7655	6103	3627	
C90	11298	10912	10467	9871	9095	8037	6575	4299	

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)

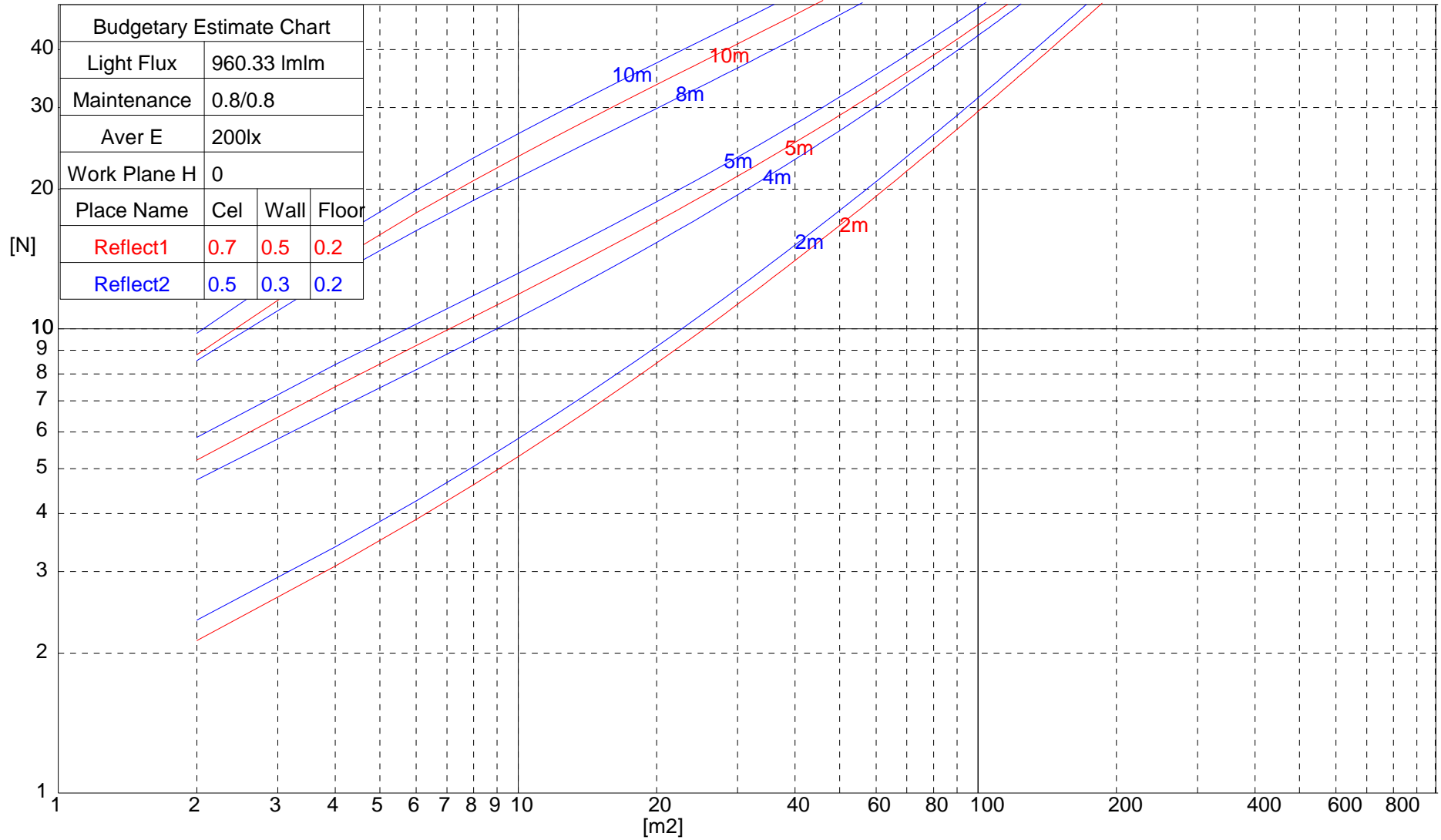
Lux-Distance Curve



Beam Angle:106.50°

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	1.06	1.04	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	0.88	0.87	0.90	0.87	0.85	0.88	0.84	0.81	0.84	0.80	0.77	0.79	0.76	0.72	0.67
3	0.78	0.75	0.73	0.78	0.74	0.72	0.77	0.72	0.69	0.74	0.69	0.66	0.71	0.66	0.62	0.57
4	0.68	0.65	0.63	0.68	0.64	0.62	0.67	0.63	0.59	0.66	0.61	0.56	0.64	0.58	0.53	0.49
5	0.59	0.56	0.55	0.60	0.56	0.54	0.60	0.55	0.51	0.59	0.53	0.49	0.58	0.51	0.46	0.43
6	0.52	0.50	0.48	0.53	0.49	0.47	0.54	0.49	0.45	0.53	0.48	0.43	0.53	0.46	0.41	0.37
7	0.47	0.44	0.42	0.48	0.44	0.42	0.48	0.43	0.40	0.49	0.43	0.38	0.48	0.42	0.36	0.33
8	0.42	0.40	0.38	0.43	0.39	0.37	0.44	0.39	0.36	0.44	0.39	0.34	0.44	0.38	0.33	0.30
9	0.38	0.36	0.34	0.39	0.36	0.34	0.40	0.35	0.32	0.41	0.35	0.31	0.41	0.34	0.30	0.27
10	0.35	0.32	0.31	0.36	0.32	0.30	0.37	0.32	0.29	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	14.7	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	
	12H	17.9	18.8	18.1	19.2	19.5	17.7	18.7	18.1	19.2	19.6	
4H	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	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	
8H	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	20.0	20.4	20.4	20.9	21.1	19.8	20.3	20.3	20.8	21.2	
	12H	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	