

Luminaire Property

Luminaire: RH-SPL24 24W 4000K

Report NO.:

Voltage: 220.8 V

Test NO.:

Current: 0.18 A

Lamp:

Power: 22.4 W

Sum Lumens: 2047.25 lm

Power Factor: 0.565

Number of Lamps: 1

Ballast Type: EMC300mA

Diameter: mm

Width: 300mm

Length: 300mm

Height: 20mm

Photometric Type: Type C

Remark: PMMA+0.5W SMD2835

Photometric Results

Lumens: 2047.25 lm

Angle of maximum intensity: C:0.0 G:1.0

Effective luminous flux: 2016.04 lm

Half Peak Side Angle(50%): Left: -53.9 Right:54.9

Efficiency: 91.3951 lm/W

Light Out Rate(LOR) : 100.00%

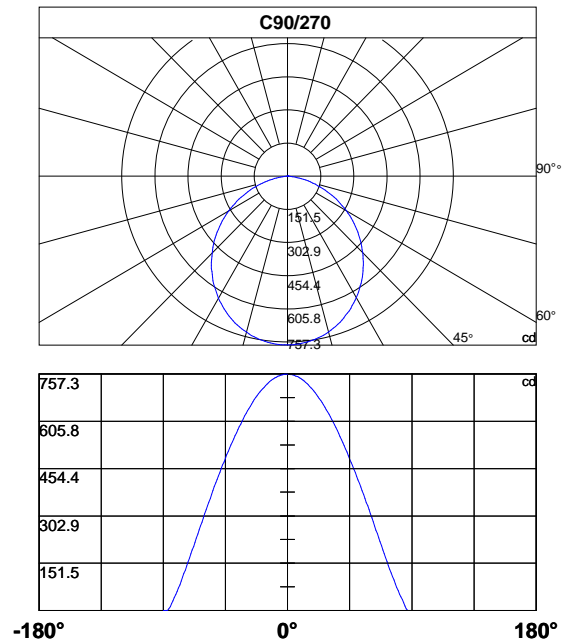
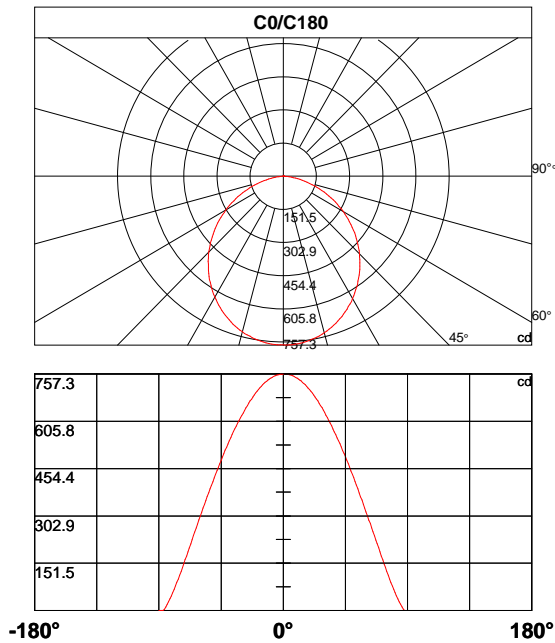
Central Intensity: 757.022cd

Up Flux Rate: 0.0%

Maximum Intensity: 757.329cd

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -78.3 Right:79.2



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	757.0	757.3	757.3	756.7	755.9	754.3	753.2	751.1	748.9	746.5
45.0	757.0	756.6	756.2	755.1	754.2	752.4	750.7	749.1	746.9	743.9
90.0	757.0	756.6	756.2	755.1	754.2	752.4	750.7	749.1	746.9	743.9
135.0	757.0	757.0	756.9	755.8	754.6	753.0	751.2	749.1	746.7	744.3
180.0	757.0	757.0	756.9	755.8	754.6	753.0	751.2	749.1	746.7	744.3
225.0	757.0	756.7	756.5	755.5	754.7	753.5	751.8	750.2	747.6	745.3
270.0	757.0	756.7	756.5	755.5	754.7	753.5	751.8	750.2	747.6	745.3
315.0	757.0	757.3	757.3	756.7	755.9	754.3	753.2	751.1	748.9	746.5
360.0	757.0	757.3	757.3	756.7	755.9	754.3	753.2	751.1	748.9	746.5

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	743.8	741.6	738.2	734.6	730.4	726.3	722.4	717.5	712.9	707.7
45.0	741.3	738.2	734.9	731.1	727.0	722.6	718.1	712.9	708.7	702.9
90.0	741.3	738.2	734.9	731.1	727.0	722.6	718.1	712.9	708.7	702.9
135.0	741.0	737.8	733.8	730.8	726.7	722.1	717.5	712.3	707.0	702.3
180.0	741.0	737.8	733.8	730.8	726.7	722.1	717.5	712.3	707.0	702.3
225.0	742.4	740.1	736.7	733.0	729.1	724.4	720.1	715.2	710.8	705.7
270.0	742.4	740.1	736.7	733.0	729.1	724.4	720.1	715.2	710.8	705.7
315.0	743.8	741.6	738.2	734.6	730.4	726.3	722.4	717.5	712.9	707.7
360.0	743.8	741.6	738.2	734.6	730.4	726.3	722.4	717.5	712.9	707.7

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	702.1	696.0	689.9	684.3	677.5	670.9	663.7	656.3	649.7	642.1
45.0	697.7	691.2	685.1	678.7	672.9	665.9	658.8	650.9	643.2	636.4
90.0	697.7	691.2	685.1	678.7	672.9	665.9	658.8	650.9	643.2	636.4
135.0	696.3	690.3	683.9	677.0	671.2	663.9	656.6	649.2	640.9	632.9
180.0	696.3	690.3	683.9	677.0	671.2	663.9	656.6	649.2	640.9	632.9
225.0	700.1	693.8	687.8	682.4	675.5	668.6	661.6	654.2	646.4	639.6
270.0	700.1	693.8	687.8	682.4	675.5	668.6	661.6	654.2	646.4	639.6
315.0	702.1	696.0	689.9	684.3	677.5	670.9	663.7	656.3	649.7	642.1
360.0	702.1	696.0	689.9	684.3	677.5	670.9	663.7	656.3	649.7	642.1

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	634.0	625.7	616.9	608.1	600.3	591.6	581.8	572.5	562.8	552.7
45.0	628.3	620.1	611.4	602.6	593.9	585.9	576.6	566.8	556.9	546.9
90.0	628.3	620.1	611.4	602.6	593.9	585.9	576.6	566.8	556.9	546.9
135.0	624.4	617.6	608.7	599.5	590.6	581.3	572.8	563.3	553.1	542.9
180.0	624.4	617.6	608.7	599.5	590.6	581.3	572.8	563.3	553.1	542.9
225.0	631.2	623.2	614.2	605.7	596.5	588.4	579.3	569.4	559.5	549.7
270.0	631.2	623.2	614.2	605.7	596.5	588.4	579.3	569.4	559.5	549.7
315.0	634.0	625.7	616.9	608.1	600.3	591.6	581.8	572.5	562.8	552.7
360.0	634.0	625.7	616.9	608.1	600.3	591.6	581.8	572.5	562.8	552.7

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	544.4	533.9	523.4	512.6	502.1	492.8	481.8	470.2	459.0	447.2
45.0	536.7	527.8	517.5	506.9	495.9	484.9	473.8	464.1	452.7	441.4
90.0	536.7	527.8	517.5	506.9	495.9	484.9	473.8	464.1	452.7	441.4
135.0	532.8	522.3	513.6	502.4	491.4	480.7	469.3	457.8	447.8	436.1
180.0	532.8	522.3	513.6	502.4	491.4	480.7	469.3	457.8	447.8	436.1
225.0	540.8	530.3	519.9	509.3	498.6	487.2	475.7	466.4	454.8	442.9
270.0	540.8	530.3	519.9	509.3	498.6	487.2	475.7	466.4	454.8	442.9
315.0	544.4	533.9	523.4	512.6	502.1	492.8	481.8	470.2	459.0	447.2
360.0	544.4	533.9	523.4	512.6	502.1	492.8	481.8	470.2	459.0	447.2

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	435.8	425.6	413.5	401.6	389.2	376.8	364.3	353.9	340.8	328.0
45.0	429.7	418.0	407.5	395.4	383.2	371.1	358.6	345.8	335.4	322.5
90.0	429.7	418.0	407.5	395.4	383.2	371.1	358.6	345.8	335.4	322.5
135.0	424.2	412.7	400.2	389.8	377.6	365.1	352.8	340.3	327.5	314.4
180.0	424.2	412.7	400.2	389.8	377.6	365.1	352.8	340.3	327.5	314.4
225.0	430.9	419.4	408.7	396.6	384.0	371.8	359.1	346.4	335.3	322.3
270.0	430.9	419.4	408.7	396.6	384.0	371.8	359.1	346.4	335.3	322.3
315.0	435.8	425.6	413.5	401.6	389.2	376.8	364.3	353.9	340.8	328.0
360.0	435.8	425.6	413.5	401.6	389.2	376.8	364.3	353.9	340.8	328.0

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	315.6	302.5	289.2	278.3	264.9	251.8	238.7	225.4	213.8	201.0
45.0	309.7	296.5	283.6	270.5	257.7	246.1	233.0	220.2	206.6	194.0
90.0	309.7	296.5	283.6	270.5	257.7	246.1	233.0	220.2	206.6	194.0
135.0	303.3	290.5	277.3	264.4	250.8	240.0	226.4	213.4	200.2	187.2
180.0	303.3	290.5	277.3	264.4	250.8	240.0	226.4	213.4	200.2	187.2
225.0	309.7	296.5	283.1	270.1	258.6	245.1	231.8	218.7	205.1	194.0
270.0	309.7	296.5	283.1	270.1	258.6	245.1	231.8	218.7	205.1	194.0
315.0	315.6	302.5	289.2	278.3	264.9	251.8	238.7	225.4	213.8	201.0
360.0	315.6	302.5	289.2	278.3	264.9	251.8	238.7	225.4	213.8	201.0

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	187.7	174.5	161.6	148.8	137.7	125.2	112.7	100.5	88.7	77.5
45.0	182.7	169.8	156.5	143.9	131.7	119.3	108.6	97.0	85.4	73.8
90.0	182.7	169.8	156.5	143.9	131.7	119.3	108.6	97.0	85.4	73.8
135.0	174.0	163.0	150.0	137.3	124.7	112.4	100.3	89.8	78.7	67.5
180.0	174.0	163.0	150.0	137.3	124.7	112.4	100.3	89.8	78.7	67.5
225.0	180.8	167.9	155.1	142.3	129.1	118.6	106.0	94.0	82.3	71.0
270.0	180.8	167.9	155.1	142.3	129.1	118.6	106.0	94.0	82.3	71.0
315.0	187.7	174.5	161.6	148.8	137.7	125.2	112.7	100.5	88.7	77.5
360.0	187.7	174.5	161.6	148.8	137.7	125.2	112.7	100.5	88.7	77.5

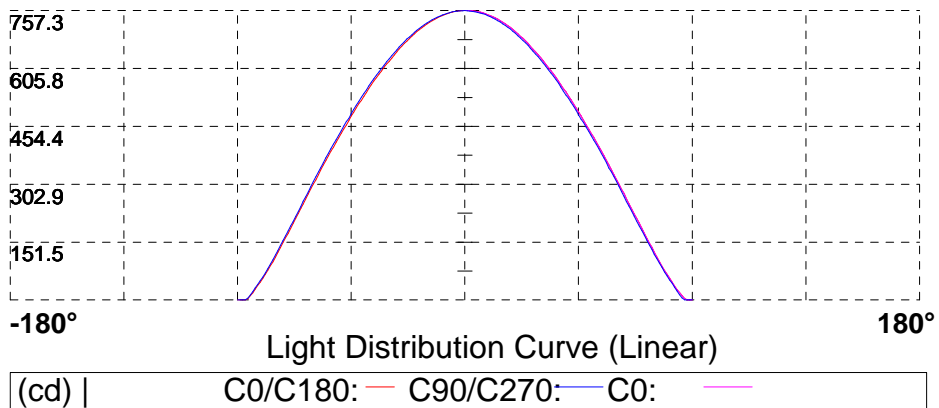
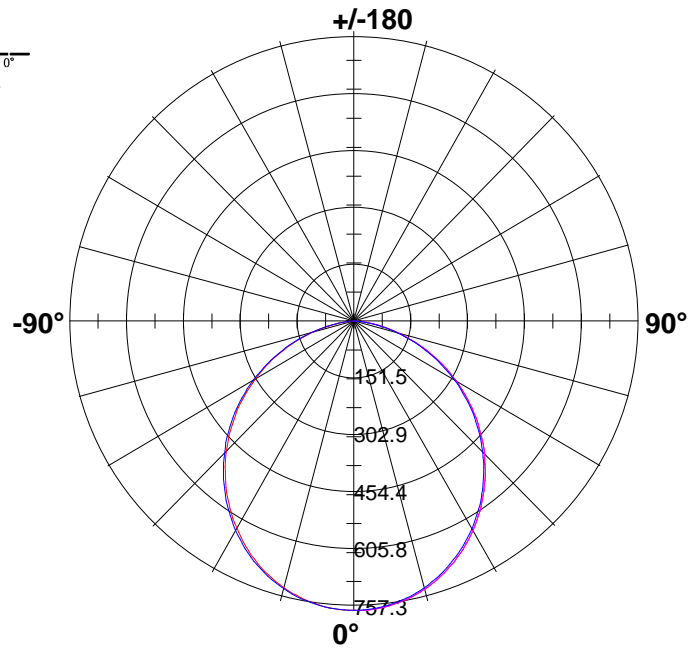
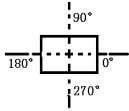
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	67.7	57.3	47.0	37.1	27.6	19.9	11.1	3.7	0.0	0.0
45.0	63.2	52.6	44.0	34.3	24.0	13.9	5.4	0.0	0.0	0.0
90.0	63.2	52.6	44.0	34.3	24.0	13.9	5.4	0.0	0.0	0.0
135.0	56.4	46.1	37.9	28.2	19.3	11.2	3.2	0.0	0.0	0.0
180.0	56.4	46.1	37.9	28.2	19.3	11.2	3.2	0.0	0.0	0.0
225.0	60.1	50.9	40.5	31.0	21.9	12.9	4.7	0.0	0.0	0.0
270.0	60.1	50.9	40.5	31.0	21.9	12.9	4.7	0.0	0.0	0.0
315.0	67.7	57.3	47.0	37.1	27.6	19.9	11.1	3.7	0.0	0.0
360.0	67.7	57.3	47.0	37.1	27.6	19.9	11.1	3.7	0.0	0.0

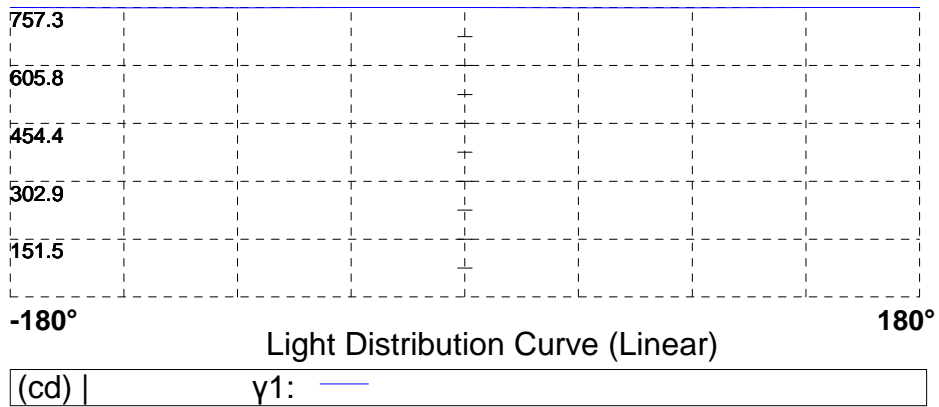
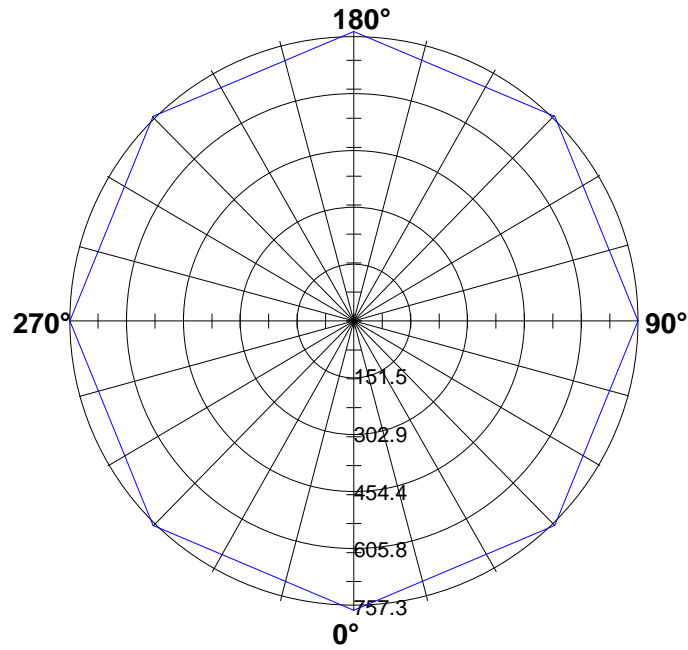
C\G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

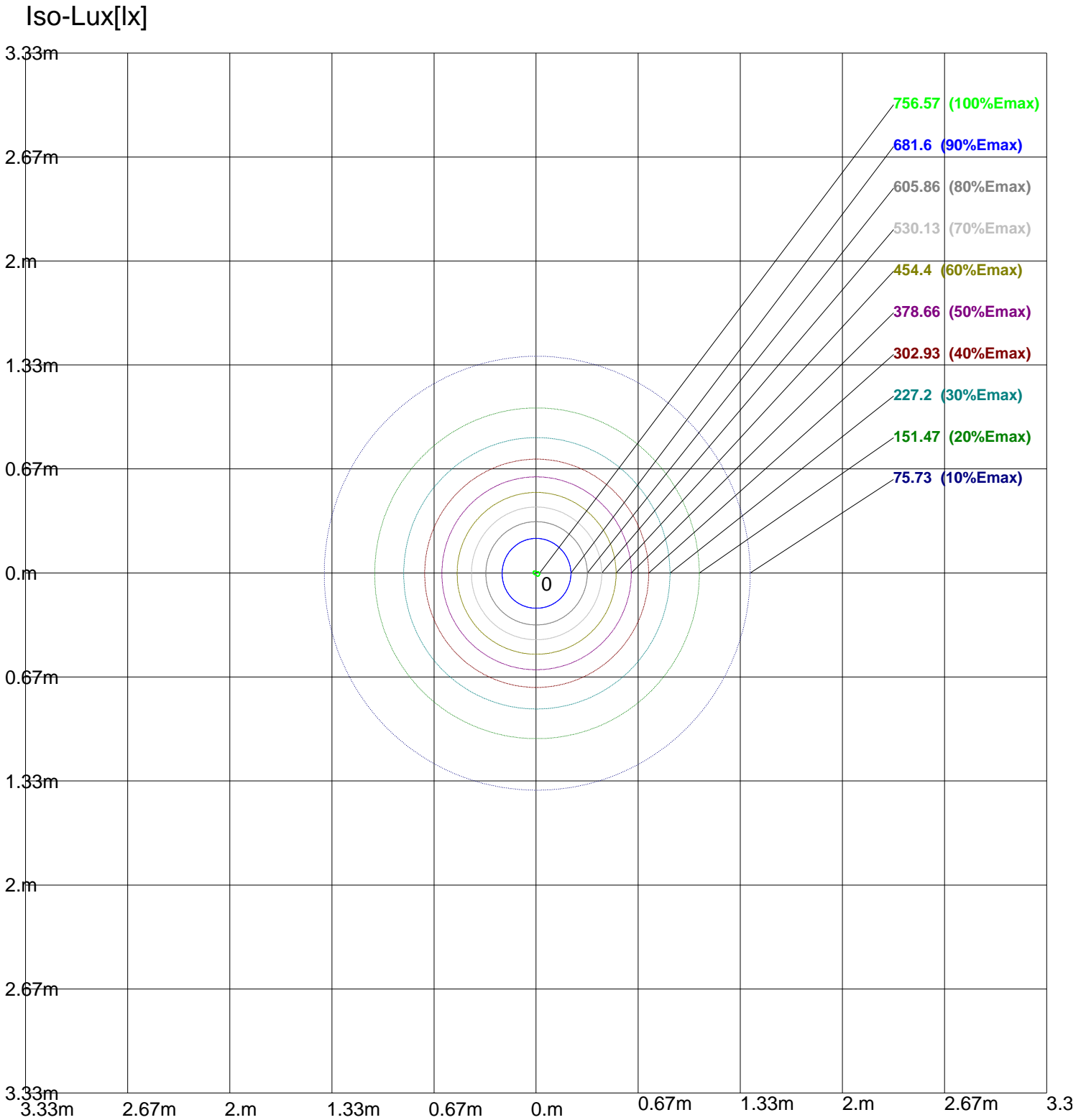
Light Distribution Curve [Unit: cd]

Luminaire



Max Plane Light Distribution Curve [Unit: cd]





Height: 1 m
Max Illuminance : 757.33lx

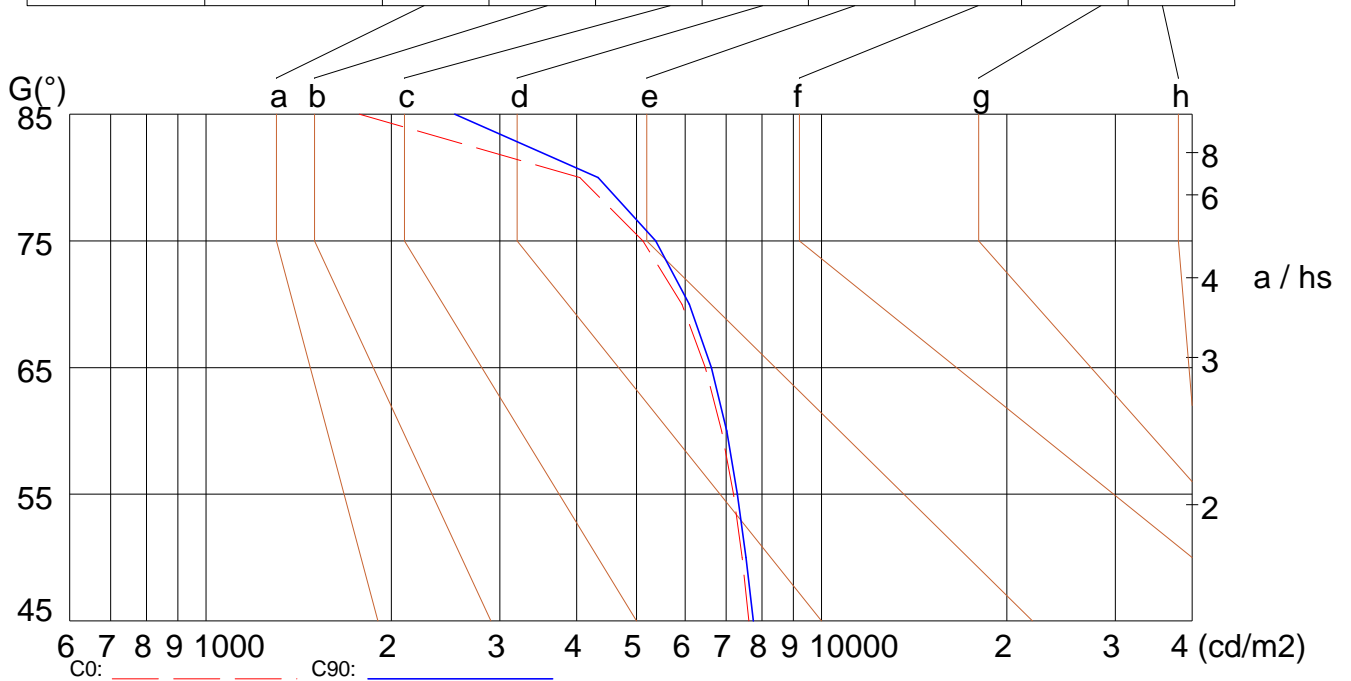
Luminance Limiting Curve

Diameter: mm
 Length: 300mm
 Width: 300mm
 Height: 20mm

(cd/m²)

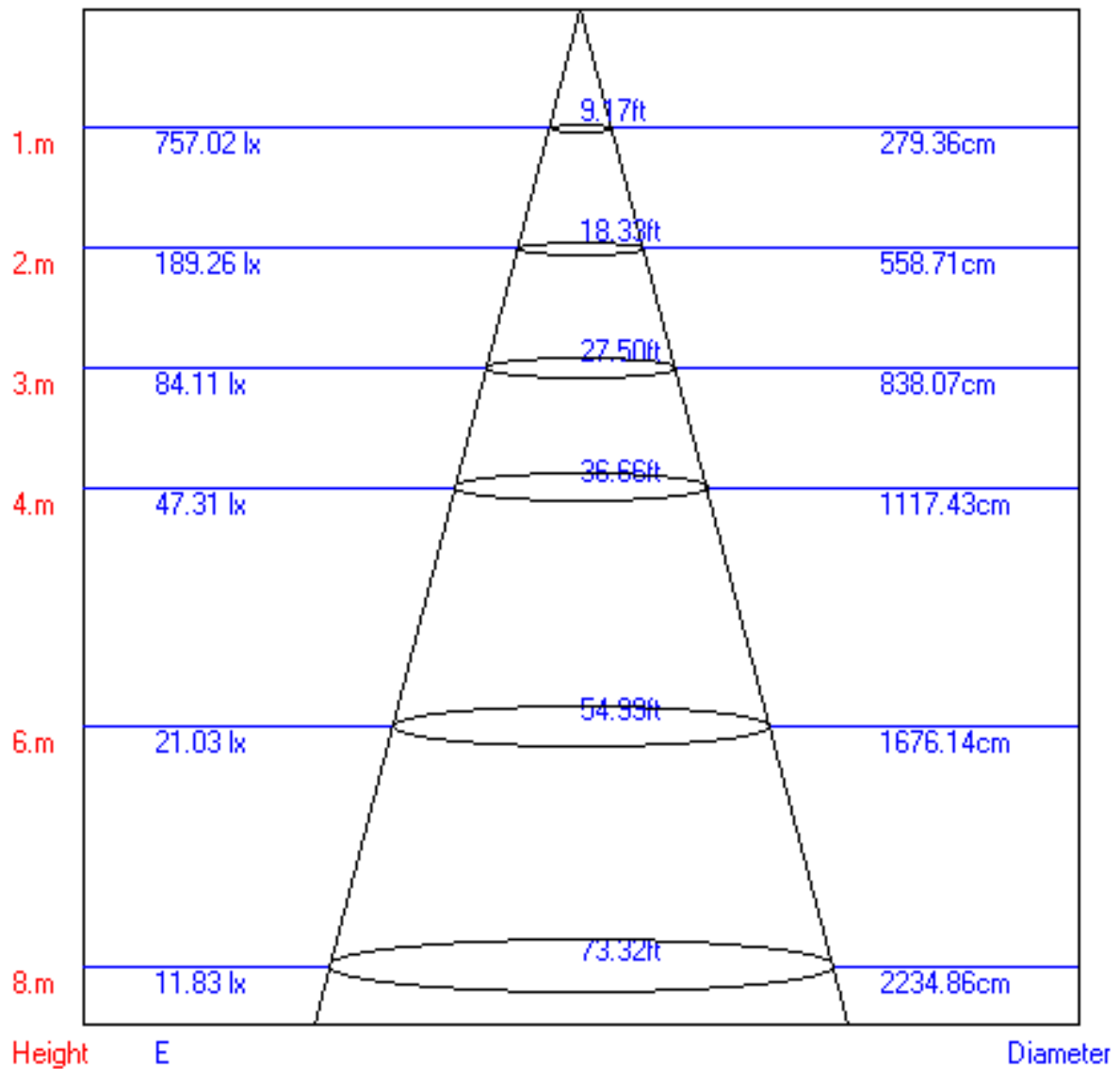
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	7620	7428	7189	6882	6470	5934	5120	4046	1773
C90	7743	7533	7300	7013	6621	6097	5375	4334	2535

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)

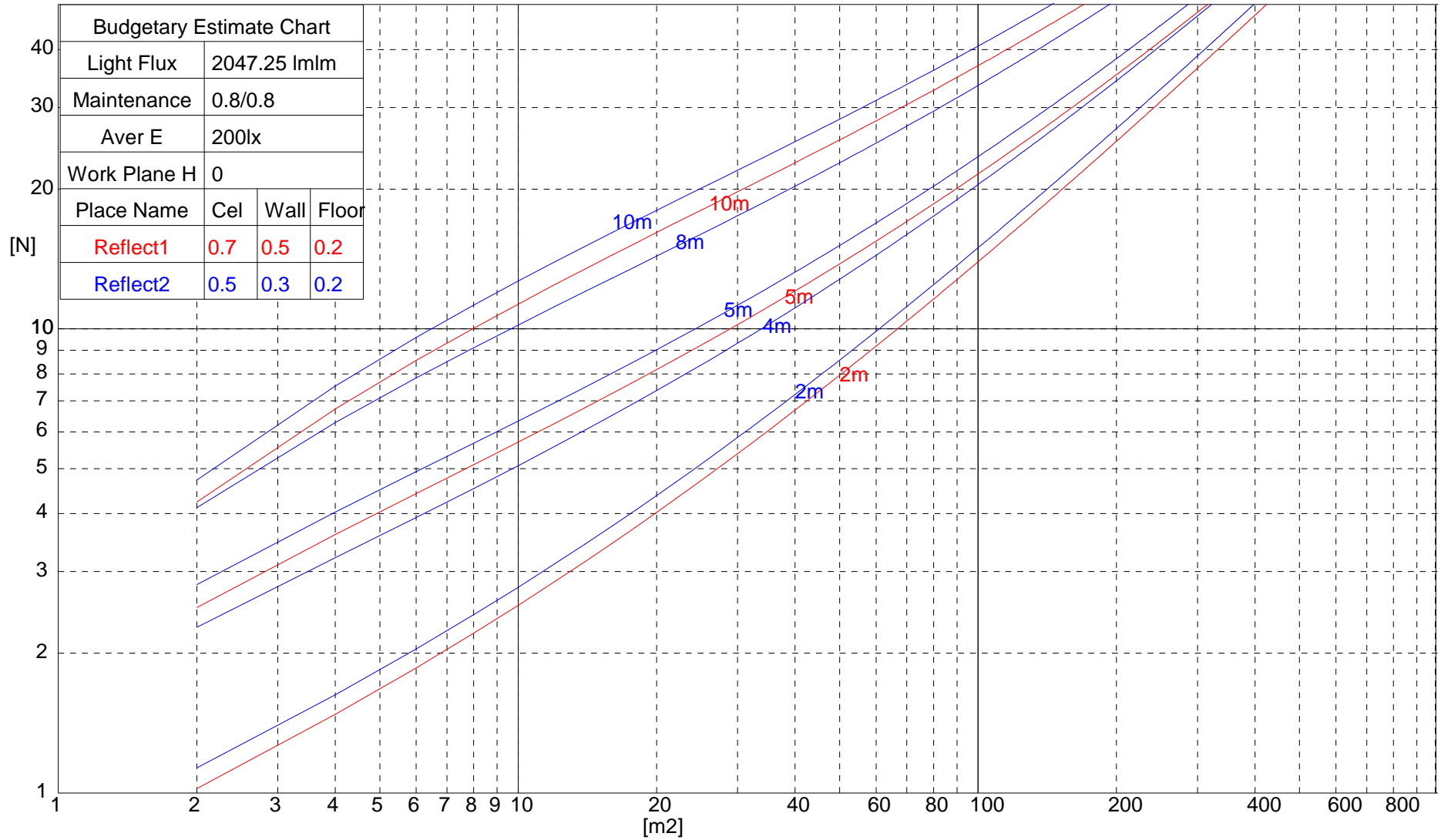
Lux-Distance Curve



Beam Angle:108.80°

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	0.64	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	0.52	0.59	0.54	0.50	0.58	0.52	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	0.41	0.47	0.43	0.41	0.48	0.43	0.39	0.48	0.42	0.37	0.47	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	0.33	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	0.32	0.40	0.34	0.30	0.40	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	0.23



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	14.8	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	