

Luminaire Property

Luminaire: RH-SPL18 18W 4000K

Report NO.:

Voltage: 219.6 V

Test NO.:

Current: 0.142 A

Lamp:

Power: 16.9 W

Sum Lumens: 1556.21 lm

Power Factor: 0.541

Number of Lamps: 1

Ballast Type: EMC300mA

Diameter: mm

Width: 225mm

Length: 225mm

Height: 20mm

Photometric Type: Type C

Remark: PMMA+0.5WSMD2835

Photometric Results

Lumens: 1556.21 lm

Angle of maximum intensity: C:135.0 G:1.0

Effective luminous flux: 1532.42 lm

Half Peak Side Angle(50%): Left: -53.6 Right:54.1

Efficiency: 92.0834 lm/W

Light Out Rate(LOR) : 100.00%

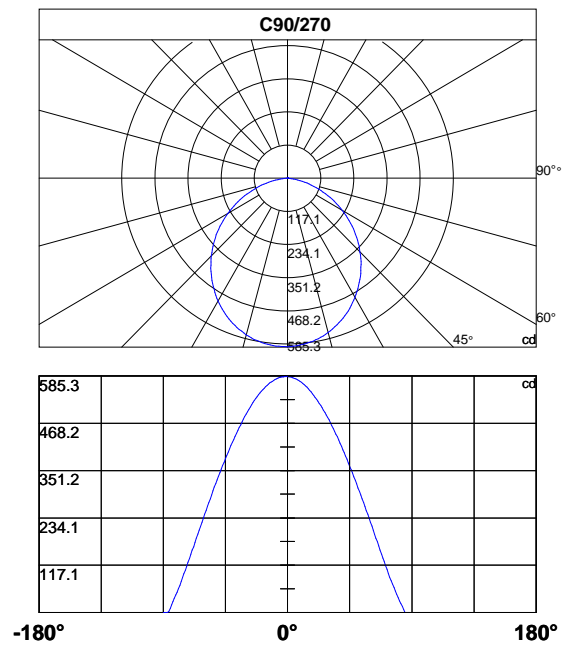
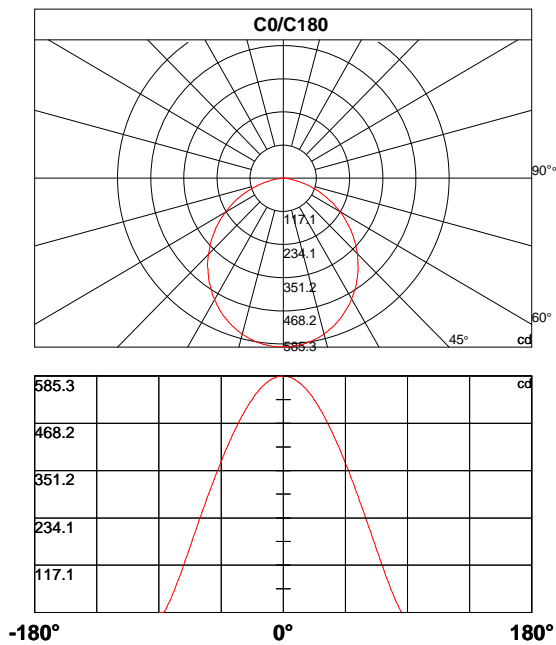
Central Intensity: 584.592cd

Up Flux Rate: 0.0%

Maximum Intensity: 585.25cd

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -77.9 Right:78.4



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	584.6	585.2	584.7	583.9	583.3	582.0	581.0	579.4	577.5	575.2
45.0	584.6	583.4	582.8	581.9	580.8	579.4	578.0	576.0	574.1	572.0
90.0	584.6	583.4	582.8	581.9	580.8	579.4	578.0	576.0	574.1	572.0
135.0	584.6	585.3	585.0	584.5	583.6	582.4	581.1	580.0	578.2	575.9
180.0	584.6	585.3	585.0	584.5	583.6	582.4	581.1	580.0	578.2	575.9
225.0	584.6	583.8	583.8	583.4	583.3	582.4	581.3	580.0	578.6	576.7
270.0	584.6	583.8	583.8	583.4	583.3	582.4	581.3	580.0	578.6	576.7
315.0	584.6	585.2	584.7	583.9	583.3	582.0	581.0	579.4	577.5	575.2
360.0	584.6	585.2	584.7	583.9	583.3	582.0	581.0	579.4	577.5	575.2

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	572.9	570.7	567.9	565.1	561.9	558.1	554.6	551.5	547.1	543.0
45.0	569.2	566.5	564.0	560.9	557.5	553.7	549.9	545.7	541.2	537.4
90.0	569.2	566.5	564.0	560.9	557.5	553.7	549.9	545.7	541.2	537.4
135.0	573.8	571.1	568.8	565.9	562.8	559.7	556.0	552.2	548.1	544.4
180.0	573.8	571.1	568.8	565.9	562.8	559.7	556.0	552.2	548.1	544.4
225.0	574.7	572.5	570.9	568.0	564.9	561.9	558.6	554.8	551.6	547.6
270.0	574.7	572.5	570.9	568.0	564.9	561.9	558.6	554.8	551.6	547.6
315.0	572.9	570.7	567.9	565.1	561.9	558.1	554.6	551.5	547.1	543.0
360.0	572.9	570.7	567.9	565.1	561.9	558.1	554.6	551.5	547.1	543.0

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	538.3	533.6	528.4	524.0	518.5	512.9	507.3	501.5	495.9	489.6
45.0	532.7	527.7	522.7	517.6	512.8	507.1	501.2	495.1	488.9	483.0
90.0	532.7	527.7	522.7	517.6	512.8	507.1	501.2	495.1	488.9	483.0
135.0	540.1	535.3	530.1	524.9	520.6	515.3	509.6	503.6	497.3	491.1
180.0	540.1	535.3	530.1	524.9	520.6	515.3	509.6	503.6	497.3	491.1
225.0	543.3	538.9	533.9	529.9	524.8	519.7	514.0	508.5	502.5	497.2
270.0	543.3	538.9	533.9	529.9	524.8	519.7	514.0	508.5	502.5	497.2
315.0	538.3	533.6	528.4	524.0	518.5	512.9	507.3	501.5	495.9	489.6
360.0	538.3	533.6	528.4	524.0	518.5	512.9	507.3	501.5	495.9	489.6

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	483.2	476.5	469.5	462.4	456.5	449.2	441.7	433.9	426.3	418.3
45.0	476.5	469.7	462.8	455.9	448.4	441.0	434.8	427.0	419.0	411.0
90.0	476.5	469.7	462.8	455.9	448.4	441.0	434.8	427.0	419.0	411.0
135.0	485.7	479.2	472.5	465.4	458.3	450.9	444.5	437.2	429.2	421.6
180.0	485.7	479.2	472.5	465.4	458.3	450.9	444.5	437.2	429.2	421.6
225.0	491.1	484.5	478.2	471.2	464.1	458.1	450.7	443.5	435.8	427.9
270.0	491.1	484.5	478.2	471.2	464.1	458.1	450.7	443.5	435.8	427.9
315.0	483.2	476.5	469.5	462.4	456.5	449.2	441.7	433.9	426.3	418.3
360.0	483.2	476.5	469.5	462.4	456.5	449.2	441.7	433.9	426.3	418.3

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	411.5	402.9	394.8	386.6	377.8	369.0	361.4	352.7	343.7	334.4
45.0	402.8	395.7	387.6	379.2	370.3	361.7	353.0	345.2	336.1	327.0
90.0	402.8	395.7	387.6	379.2	370.3	361.7	353.0	345.2	336.1	327.0
135.0	413.5	406.7	398.7	389.9	381.5	372.8	364.0	355.7	347.8	338.9
180.0	413.5	406.7	398.7	389.9	381.5	372.8	364.0	355.7	347.8	338.9
225.0	421.5	413.3	404.9	396.8	388.6	380.0	371.3	363.7	354.9	345.8
270.0	421.5	413.3	404.9	396.8	388.6	380.0	371.3	363.7	354.9	345.8
315.0	411.5	402.9	394.8	386.6	377.8	369.0	361.4	352.7	343.7	334.4
360.0	411.5	402.9	394.8	386.6	377.8	369.0	361.4	352.7	343.7	334.4

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	325.1	317.4	307.9	298.1	288.7	279.0	269.5	260.7	250.9	241.2
45.0	318.1	308.4	299.4	291.2	281.5	272.0	262.0	252.1	243.6	233.7
90.0	318.1	308.4	299.4	291.2	281.5	272.0	262.0	252.1	243.6	233.7
135.0	329.5	320.4	311.3	302.9	293.8	284.1	274.5	264.7	254.8	246.5
180.0	329.5	320.4	311.3	302.9	293.8	284.1	274.5	264.7	254.8	246.5
225.0	336.4	327.6	319.5	310.2	300.5	290.7	281.3	271.5	263.1	252.9
270.0	336.4	327.6	319.5	310.2	300.5	290.7	281.3	271.5	263.1	252.9
315.0	325.1	317.4	307.9	298.1	288.7	279.0	269.5	260.7	250.9	241.2
360.0	325.1	317.4	307.9	298.1	288.7	279.0	269.5	260.7	250.9	241.2

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	231.2	221.1	210.9	202.0	192.2	181.5	171.6	161.3	151.1	142.3
45.0	223.8	213.8	203.6	193.5	183.4	175.0	164.6	154.6	144.4	134.5
90.0	223.8	213.8	203.6	193.5	183.4	175.0	164.6	154.6	144.4	134.5
135.0	236.1	226.3	216.1	206.4	196.0	187.5	177.1	166.9	156.7	146.5
180.0	236.1	226.3	216.1	206.4	196.0	187.5	177.1	166.9	156.7	146.5
225.0	242.9	232.7	223.0	212.6	203.8	193.9	183.6	173.2	162.8	154.1
270.0	242.9	232.7	223.0	212.6	203.8	193.9	183.6	173.2	162.8	154.1
315.0	231.2	221.1	210.9	202.0	192.2	181.5	171.6	161.3	151.1	142.3
360.0	231.2	221.1	210.9	202.0	192.2	181.5	171.6	161.3	151.1	142.3

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	132.2	122.5	112.6	102.8	92.9	84.9	75.8	66.5	57.4	48.9
45.0	126.4	116.2	106.7	96.9	87.4	78.1	70.5	61.8	52.8	44.7
90.0	126.4	116.2	106.7	96.9	87.4	78.1	70.5	61.8	52.8	44.7
135.0	138.2	127.9	117.9	108.3	98.6	88.7	80.7	71.5	62.3	53.3
180.0	138.2	127.9	117.9	108.3	98.6	88.7	80.7	71.5	62.3	53.3
225.0	144.1	133.9	123.9	114.1	104.3	95.9	86.4	77.1	67.7	58.7
270.0	144.1	133.9	123.9	114.1	104.3	95.9	86.4	77.1	67.7	58.7
315.0	132.2	122.5	112.6	102.8	92.9	84.9	75.8	66.5	57.4	48.9
360.0	132.2	122.5	112.6	102.8	92.9	84.9	75.8	66.5	57.4	48.9

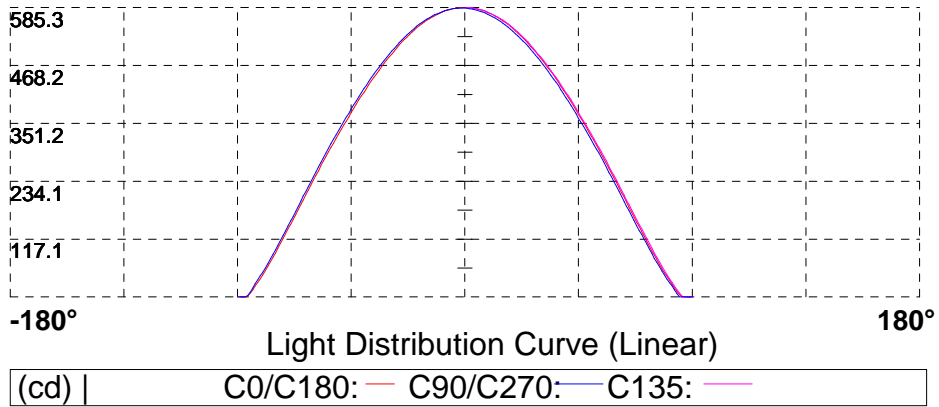
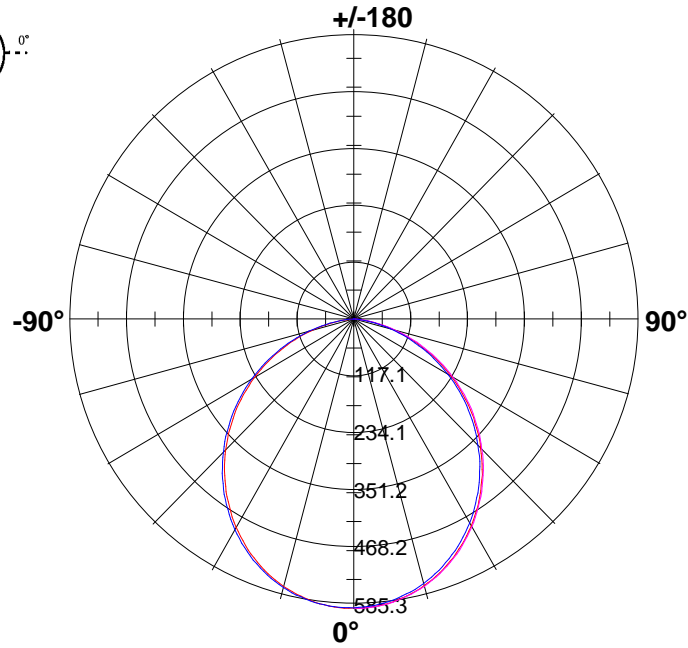
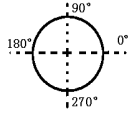
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	41.6	33.2	25.6	18.3	11.0	4.6	0.0	0.0	0.0	0.0
45.0	36.2	28.6	22.1	14.8	7.1	0.0	0.0	0.0	0.0	0.0
90.0	36.2	28.6	22.1	14.8	7.1	0.0	0.0	0.0	0.0	0.0
135.0	44.7	36.7	29.7	22.3	14.7	7.9	1.9	0.0	0.0	0.0
180.0	44.7	36.7	29.7	22.3	14.7	7.9	1.9	0.0	0.0	0.0
225.0	50.0	43.0	34.9	26.8	18.7	10.1	2.7	0.0	0.0	0.0
270.0	50.0	43.0	34.9	26.8	18.7	10.1	2.7	0.0	0.0	0.0
315.0	41.6	33.2	25.6	18.3	11.0	4.6	0.0	0.0	0.0	0.0
360.0	41.6	33.2	25.6	18.3	11.0	4.6	0.0	0.0	0.0	0.0

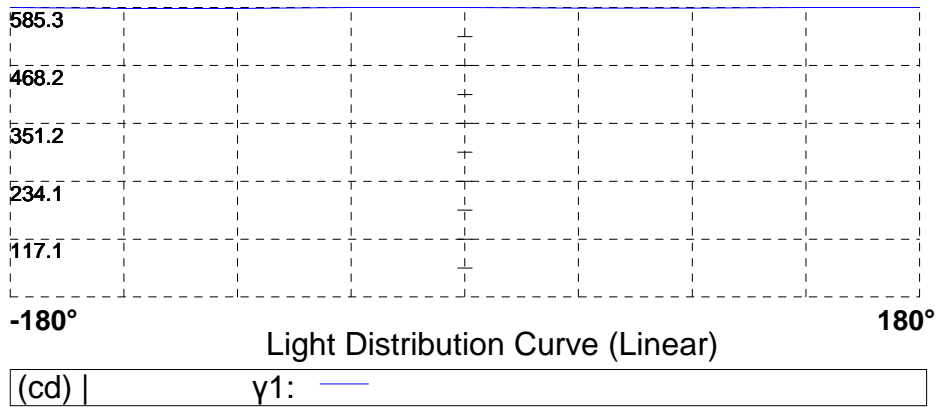
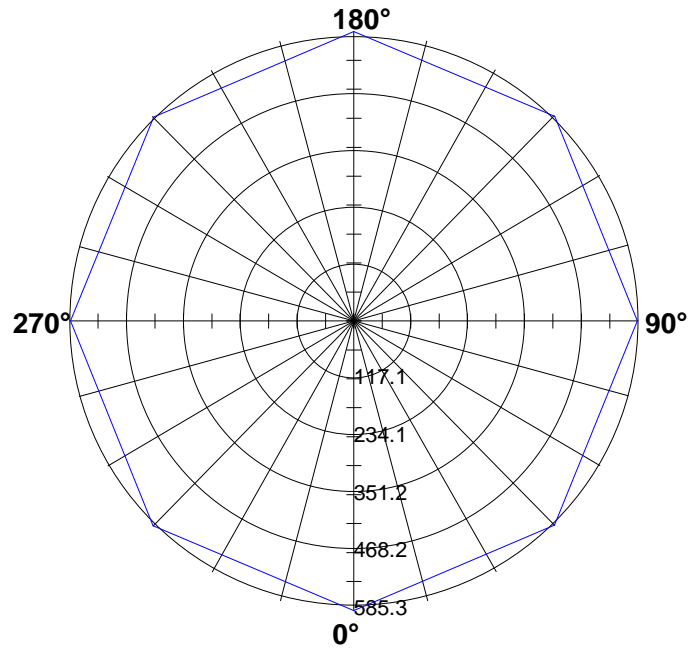
C\G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

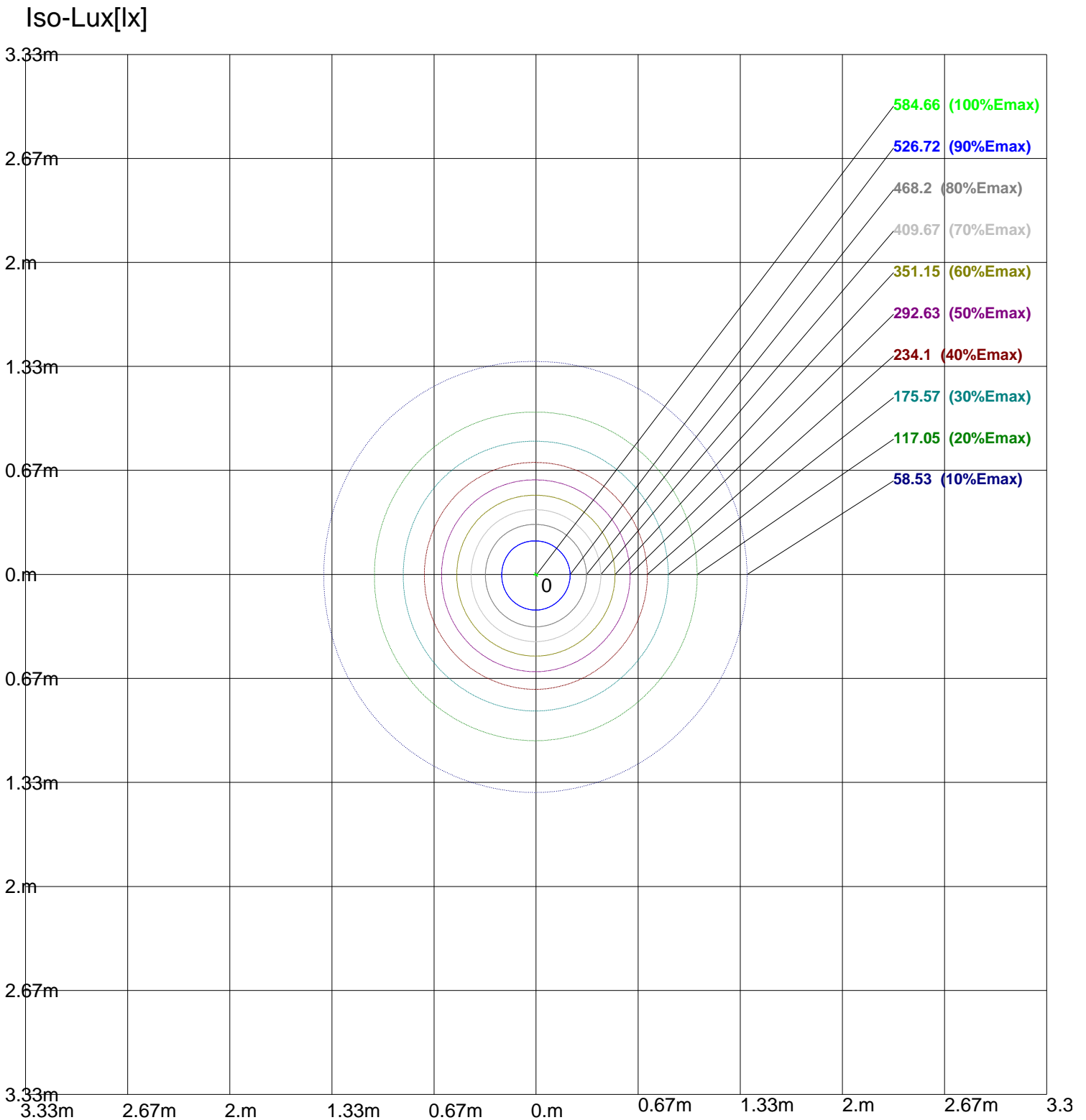
Light Distribution Curve [Unit: cd]

Luminaire



Max Plane Light Distribution Curve [Unit: cd]





Height: 1 m
Max Illuminance : 585.25lx

Luminance Limiting Curve

Diameter: mm

Length: 225mm

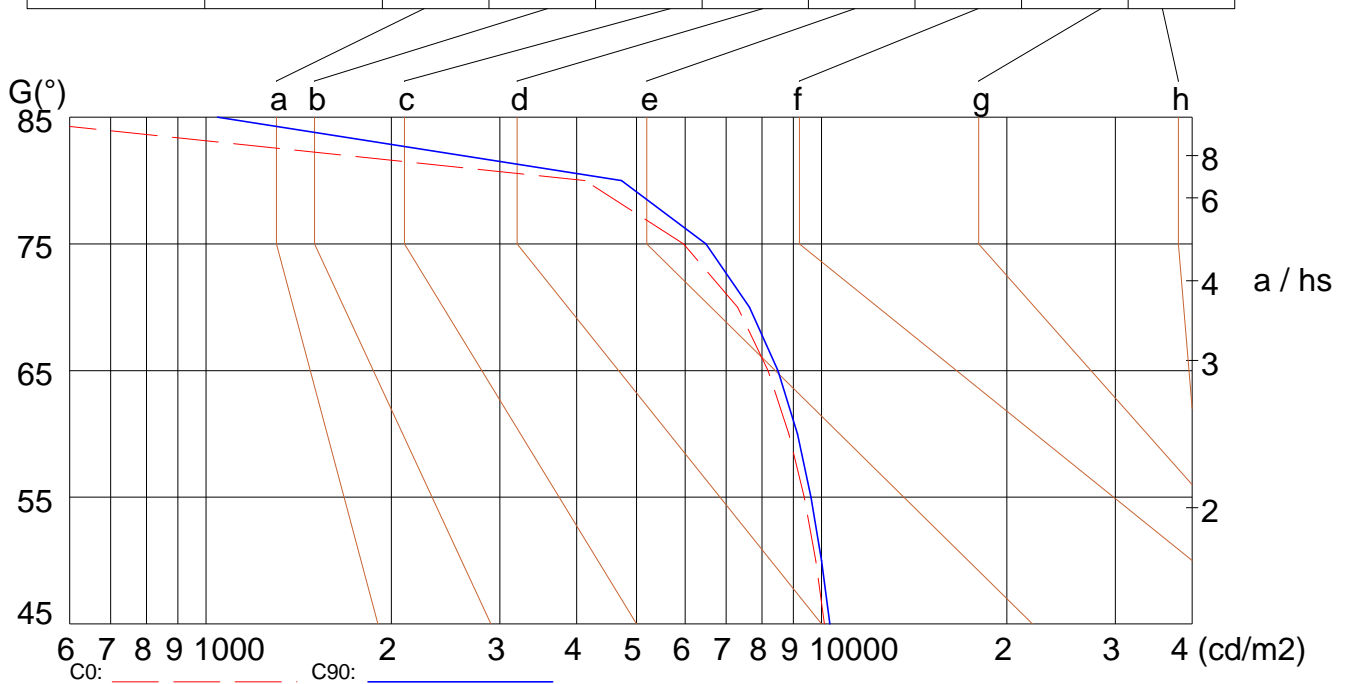
Width: 225mm

Height: 20mm

(cd/m²)

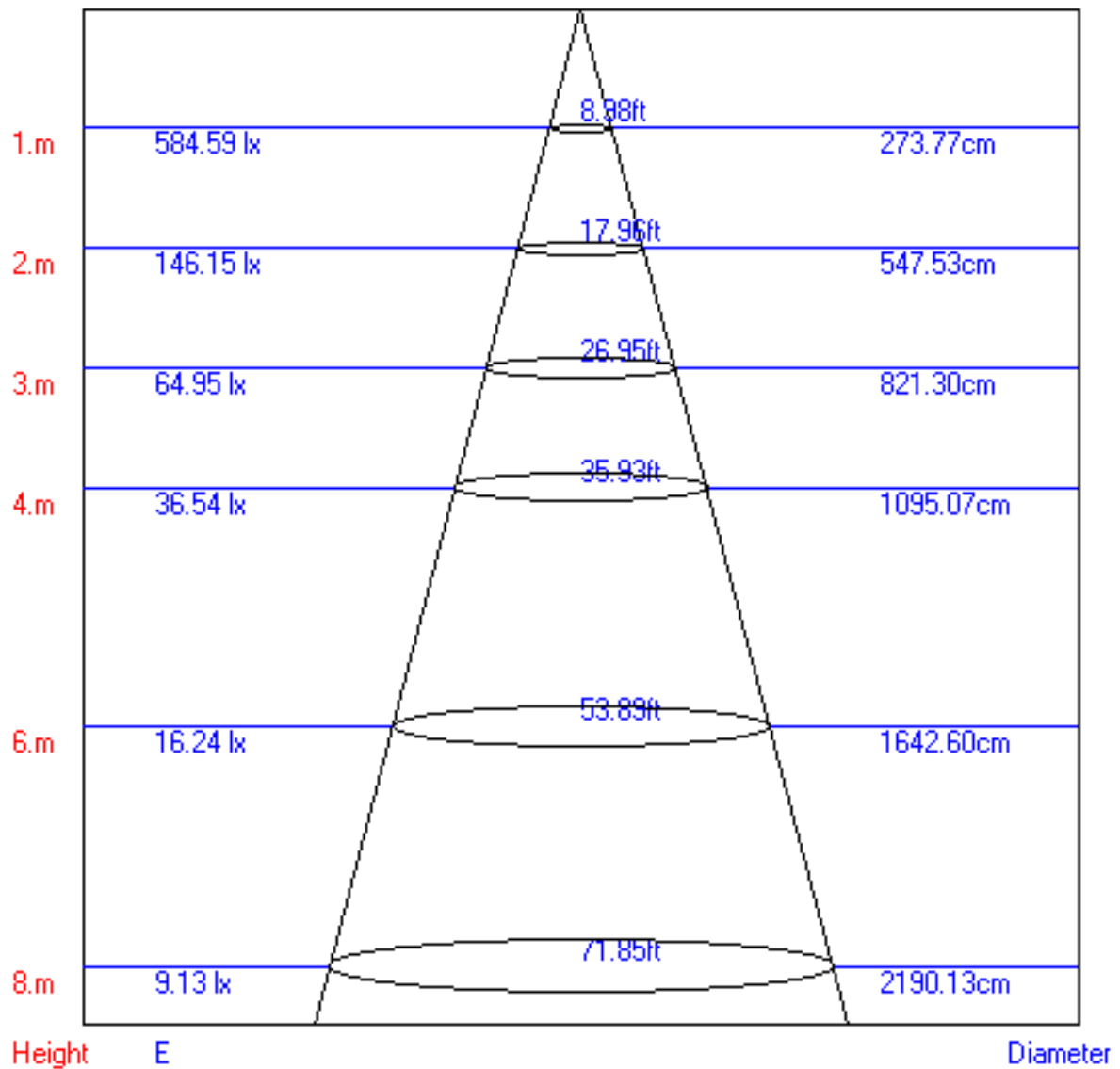
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	10109	9780	9373	8844	8183	7302	5965	4125	0
C90	10312	9995	9612	9137	8489	7639	6484	4730	1043

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)

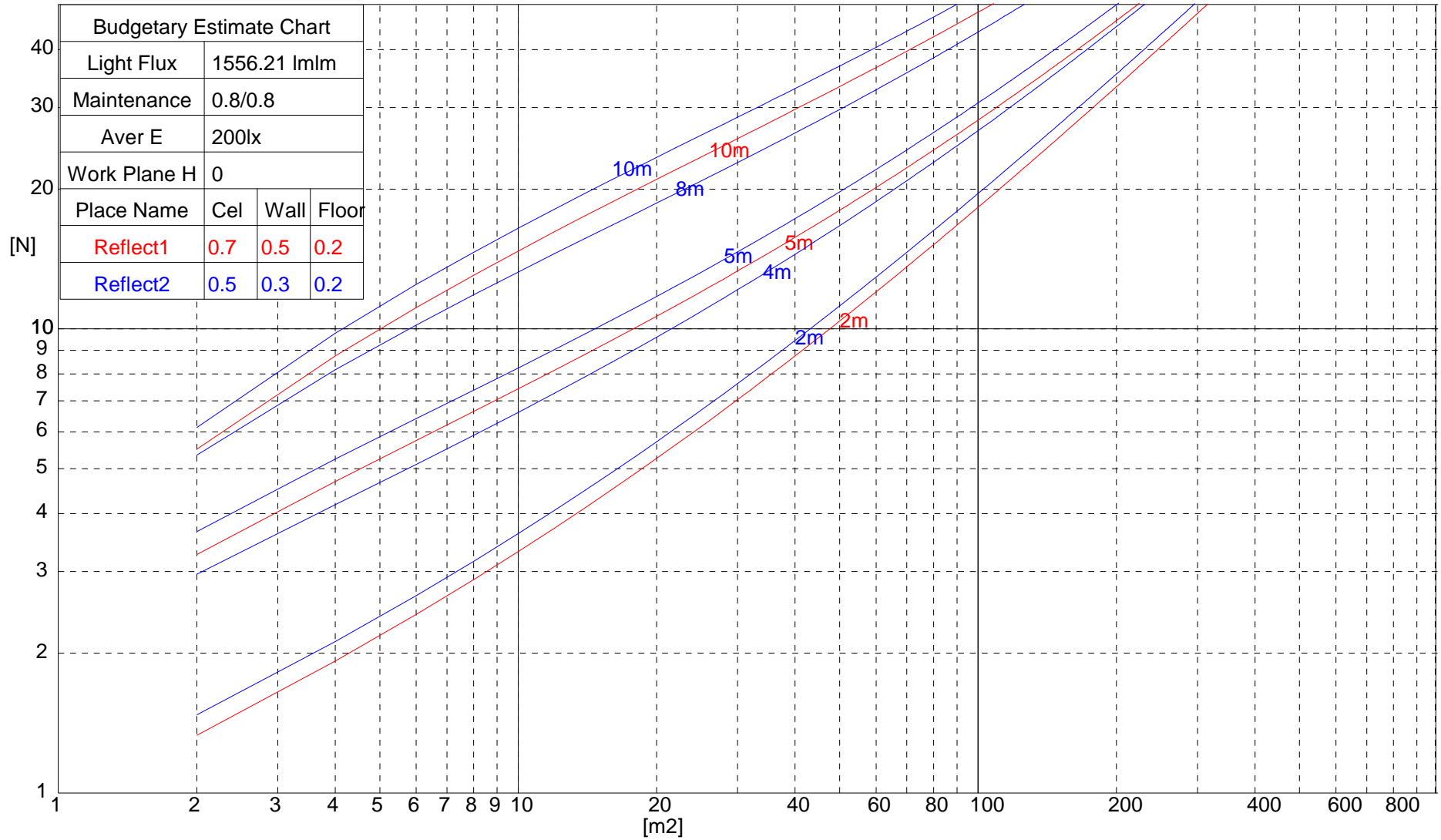
Lux-Distance Curve



Beam Angle:107.70°

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	1.04	1.02	1.01	1.01	0.98	0.97	0.96	0.93	0.91	0.89	0.87	0.85	0.80
2	0.90	0.88	0.86	0.89	0.87	0.84	0.87	0.84	0.81	0.84	0.80	0.77	0.79	0.75	0.72	0.67
3	0.77	0.75	0.73	0.77	0.74	0.71	0.76	0.72	0.68	0.74	0.69	0.65	0.70	0.65	0.61	0.57
4	0.67	0.64	0.62	0.67	0.64	0.61	0.67	0.62	0.59	0.65	0.60	0.56	0.63	0.57	0.53	0.48
5	0.59	0.56	0.54	0.59	0.55	0.53	0.59	0.54	0.51	0.59	0.53	0.48	0.57	0.51	0.46	0.42
6	0.52	0.49	0.47	0.52	0.49	0.46	0.53	0.48	0.45	0.53	0.47	0.43	0.52	0.46	0.40	0.37
7	0.46	0.44	0.42	0.47	0.43	0.41	0.48	0.43	0.39	0.48	0.42	0.38	0.48	0.41	0.36	0.33
8	0.41	0.39	0.37	0.42	0.39	0.37	0.44	0.39	0.35	0.44	0.38	0.34	0.44	0.37	0.32	0.29
9	0.38	0.35	0.34	0.38	0.35	0.33	0.40	0.35	0.32	0.40	0.35	0.31	0.41	0.34	0.29	0.26
10	0.34	0.32	0.31	0.35	0.32	0.30	0.37	0.32	0.29	0.37	0.32	0.28	0.38	0.31	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	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