

## Luminaire Property

Luminaire: PL RD 18W 6500K

Report NO.:

Voltage: 220.4 V

Test NO.:

Current: 0.076 A

Lamp: SMD2835

Power: 16.0 W

Sum Lumens: 1470.91 lm

Power Factor: 0.957

Number of Lamps: 108

Ballast Type:

Diameter: 145mm

Width: 145mm

Length: 145mm

Height: 27mm

Photometric Type: Type C

Remark:

## Photometric Results

Lumens: 1470.91 lm

Angle of maximum intensity: C:135.0 G:5.0

Effective luminous flux: 1441.92 lm

Half Peak Side Angle(50%): Left: -45.8 Right:57.4

Efficiency: N.A

Light Out Rate(LOR) : 100.00%

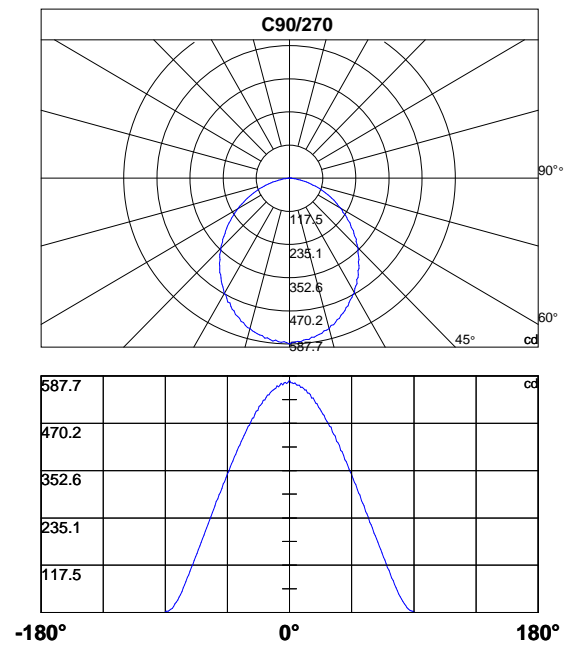
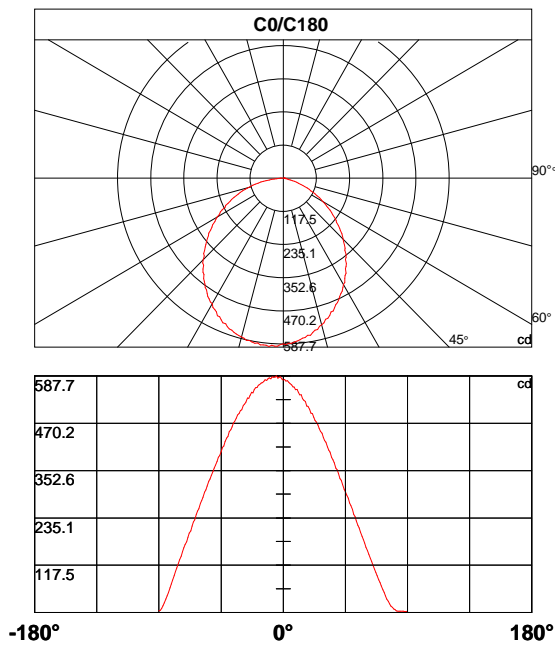
Central Intensity: 577.249cd

Up Flux Rate: 0.0%

Maximum Intensity: 587.704cd

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -71.8 Right:82.2



### 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	577.2	579.2	574.9	575.7	571.8	569.1	565.4	560.7	560.1	553.4
45.0	577.2	571.1	570.2	568.3	570.2	565.3	564.6	564.9	559.6	559.7
90.0	577.2	571.1	570.2	568.3	570.2	565.3	564.6	564.9	559.6	559.7
135.0	577.2	579.6	585.3	585.1	582.1	587.7	584.6	584.3	585.7	581.2
180.0	577.2	579.6	585.3	585.1	582.1	587.7	584.6	584.3	585.7	581.2
225.0	577.2	572.4	569.2	571.9	570.6	565.7	569.4	565.2	561.1	563.2
270.0	577.2	572.4	569.2	571.9	570.6	565.7	569.4	565.2	561.1	563.2
315.0	577.2	579.2	574.9	575.7	571.8	569.1	565.4	560.7	560.1	553.4
360.0	577.2	579.2	574.9	575.7	571.8	569.1	565.4	560.7	560.1	553.4

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	554.9	547.1	541.1	540.9	531.4	527.7	524.3	513.4	512.6	505.2
45.0	556.4	553.3	552.4	545.4	544.6	541.5	532.7	533.2	526.9	520.2
90.0	556.4	553.3	552.4	545.4	544.6	541.5	532.7	533.2	526.9	520.2
135.0	583.5	580.7	577.1	578.8	574.2	571.6	570.3	566.9	564.3	559.3
180.0	583.5	580.7	577.1	578.8	574.2	571.6	570.3	566.9	564.3	559.3
225.0	556.8	555.3	553.3	549.6	546.8	541.3	540.3	534.8	528.4	527.8
270.0	556.8	555.3	553.3	549.6	546.8	541.3	540.3	534.8	528.4	527.8
315.0	554.9	547.1	541.1	540.9	531.4	527.7	524.3	513.4	512.6	505.2
360.0	554.9	547.1	541.1	540.9	531.4	527.7	524.3	513.4	512.6	505.2

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	495.6	494.3	485.7	477.2	473.6	466.3	457.6	450.1	445.7	435.6
45.0	518.8	510.2	506.1	500.6	492.7	489.8	481.7	474.8	470.4	462.8
90.0	518.8	510.2	506.1	500.6	492.7	489.8	481.7	474.8	470.4	462.8
135.0	558.4	553.4	545.8	547.1	539.7	532.4	532.6	522.4	518.1	514.6
180.0	558.4	553.4	545.8	547.1	539.7	532.4	532.6	522.4	518.1	514.6
225.0	519.4	515.1	511.9	501.7	500.2	492.8	483.7	482.9	473.2	465.1
270.0	519.4	515.1	511.9	501.7	500.2	492.8	483.7	482.9	473.2	465.1
315.0	495.6	494.3	485.7	477.2	473.6	466.3	457.6	450.1	445.7	435.6
360.0	495.6	494.3	485.7	477.2	473.6	466.3	457.6	450.1	445.7	435.6

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	426.9	423.3	411.1	403.2	398.7	384.9	379.4	372.7	358.8	354.8
45.0	460.8	448.7	442.8	438.4	425.6	422.6	414.8	402.7	400.0	390.7
90.0	460.8	448.7	442.8	438.4	425.6	422.6	414.8	402.7	400.0	390.7
135.0	503.9	502.1	494.9	491.3	482.6	474.7	471.3	461.1	454.3	449.4
180.0	503.9	502.1	494.9	491.3	482.6	474.7	471.3	461.1	454.3	449.4
225.0	462.7	453.4	446.1	439.8	432.9	424.8	416.3	411.4	401.6	392.9
270.0	462.7	453.4	446.1	439.8	432.9	424.8	416.3	411.4	401.6	392.9
315.0	426.9	423.3	411.1	403.2	398.7	384.9	379.4	372.7	358.8	354.8
360.0	426.9	423.3	411.1	403.2	398.7	384.9	379.4	372.7	358.8	354.8

### 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	345.8	332.3	328.3	318.3	306.7	300.3	292.3	284.4	271.8	265.7
45.0	379.9	375.2	367.0	356.5	349.2	343.2	331.9	322.8	318.3	305.2
90.0	379.9	375.2	367.0	356.5	349.2	343.2	331.9	322.8	318.3	305.2
135.0	437.2	433.3	424.9	413.2	410.5	400.3	389.4	385.7	375.4	365.7
180.0	437.2	433.3	424.9	413.2	410.5	400.3	389.4	385.7	375.4	365.7
225.0	387.9	376.3	369.5	362.3	350.0	344.8	335.8	324.3	319.9	308.9
270.0	387.9	376.3	369.5	362.3	350.0	344.8	335.8	324.3	319.9	308.9
315.0	345.8	332.3	328.3	318.3	306.7	300.3	292.3	284.4	271.8	265.7
360.0	345.8	332.3	328.3	318.3	306.7	300.3	292.3	284.4	271.8	265.7

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	255.7	243.7	238.2	227.7	216.1	209.8	199.5	189.1	181.4	172.3
45.0	297.0	291.8	277.7	271.3	264.9	250.1	245.3	236.8	223.7	218.1
90.0	297.0	291.8	277.7	271.3	264.9	250.1	245.3	236.8	223.7	218.1
135.0	358.8	350.4	340.3	332.2	325.9	313.9	304.9	298.8	286.0	278.7
180.0	358.8	350.4	340.3	332.2	325.9	313.9	304.9	298.8	286.0	278.7
225.0	298.5	292.8	282.2	276.2	264.9	255.9	248.0	236.8	229.3	219.9
270.0	298.5	292.8	282.2	276.2	264.9	255.9	248.0	236.8	229.3	219.9
315.0	255.7	243.7	238.2	227.7	216.1	209.8	199.5	189.1	181.4	172.3
360.0	255.7	243.7	238.2	227.7	216.1	209.8	199.5	189.1	181.4	172.3

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	162.2	153.5	145.1	134.4	126.4	118.0	107.6	99.8	91.6	81.3
45.0	209.7	197.2	191.0	183.0	174.9	163.5	156.8	147.8	136.5	130.4
90.0	209.7	197.2	191.0	183.0	174.9	163.5	156.8	147.8	136.5	130.4
135.0	271.2	257.8	252.0	243.2	229.8	224.9	214.8	202.9	197.2	187.1
180.0	271.2	257.8	252.0	243.2	229.8	224.9	214.8	202.9	197.2	187.1
225.0	209.7	202.0	192.0	182.8	174.0	165.6	155.9	146.3	138.9	129.0
270.0	209.7	202.0	192.0	182.8	174.0	165.6	155.9	146.3	138.9	129.0
315.0	162.2	153.5	145.1	134.4	126.4	118.0	107.6	99.8	91.6	81.3
360.0	162.2	153.5	145.1	134.4	126.4	118.0	107.6	99.8	91.6	81.3

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	74.5	66.1	56.4	50.1	41.8	33.4	27.8	21.0	16.0	12.6
45.0	120.8	110.9	104.6	95.3	85.9	79.1	70.1	61.4	54.1	46.4
90.0	120.8	110.9	104.6	95.3	85.9	79.1	70.1	61.4	54.1	46.4
135.0	175.9	168.8	160.5	151.4	140.3	131.5	122.0	110.1	101.9	91.5
180.0	175.9	168.8	160.5	151.4	140.3	131.5	122.0	110.1	101.9	91.5
225.0	119.5	113.0	102.8	93.3	87.0	76.5	68.1	61.3	51.1	43.9
270.0	119.5	113.0	102.8	93.3	87.0	76.5	68.1	61.3	51.1	43.9
315.0	74.5	66.1	56.4	50.1	41.8	33.4	27.8	21.0	16.0	12.6
360.0	74.5	66.1	56.4	50.1	41.8	33.4	27.8	21.0	16.0	12.6

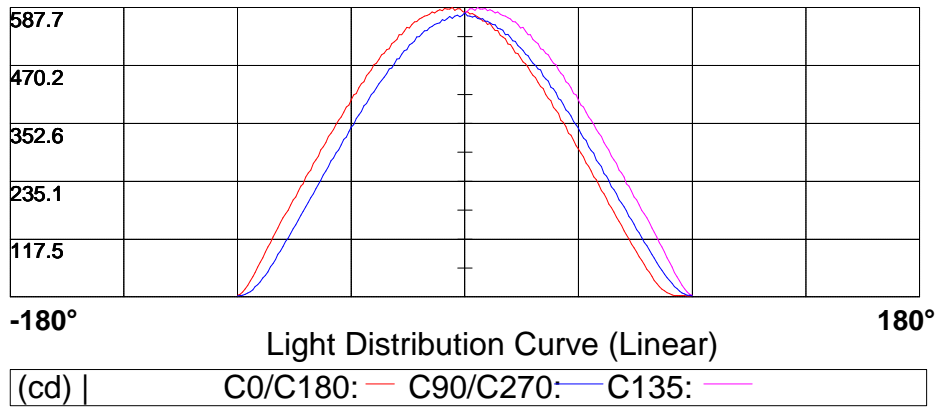
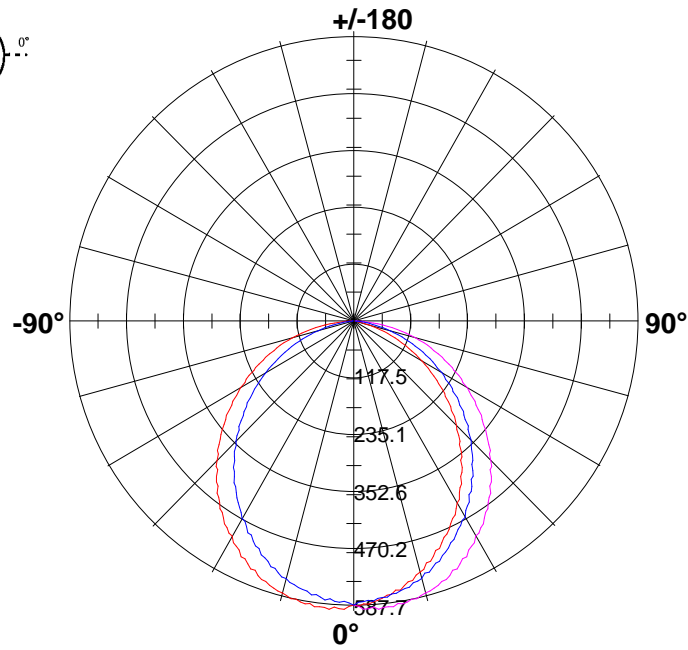
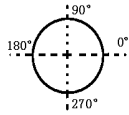
### Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	9.0	6.8	4.2	2.8	2.8	3.1	2.9	2.8	2.6	2.5
45.0	39.0	33.4	27.5	21.4	17.0	12.3	8.5	6.0	3.5	3.2
90.0	39.0	33.4	27.5	21.4	17.0	12.3	8.5	6.0	3.5	3.2
135.0	80.0	70.4	61.0	49.6	41.1	33.1	23.9	16.7	10.0	5.9
180.0	80.0	70.4	61.0	49.6	41.1	33.1	23.9	16.7	10.0	5.9
225.0	38.4	31.1	25.3	21.0	15.0	10.6	8.3	5.4	3.2	2.9
270.0	38.4	31.1	25.3	21.0	15.0	10.6	8.3	5.4	3.2	2.9
315.0	9.0	6.8	4.2	2.8	2.8	3.1	2.9	2.8	2.6	2.5
360.0	9.0	6.8	4.2	2.8	2.8	3.1	2.9	2.8	2.6	2.5

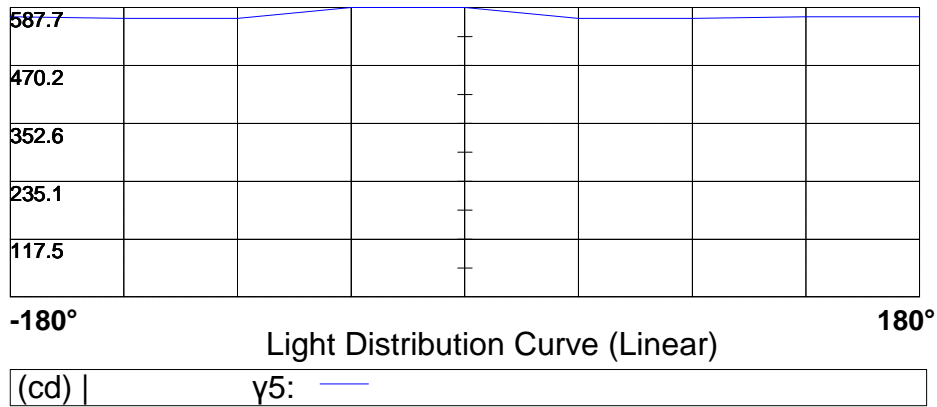
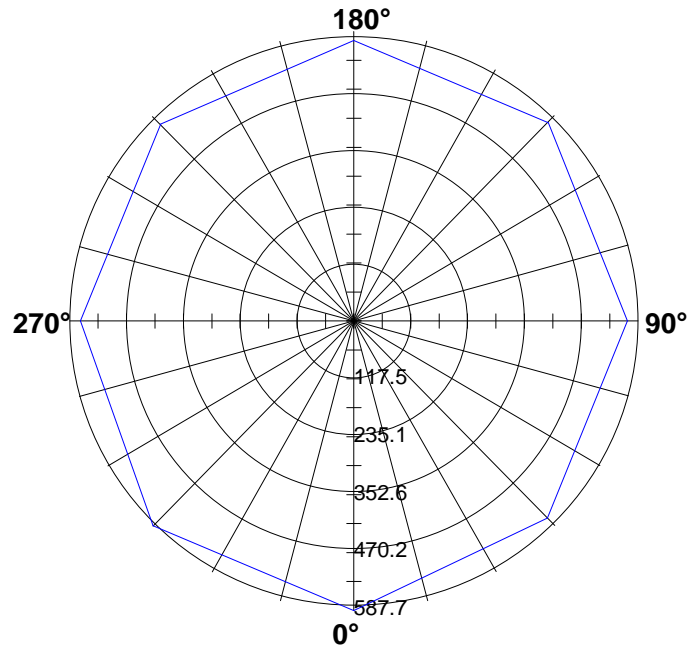
C\G	90.0
0.0	3.0
45.0	2.5
90.0	2.5
135.0	3.4
180.0	3.4
225.0	2.6
270.0	2.6
315.0	3.0
360.0	3.0

### Light Distribution Curve [Unit: cd]

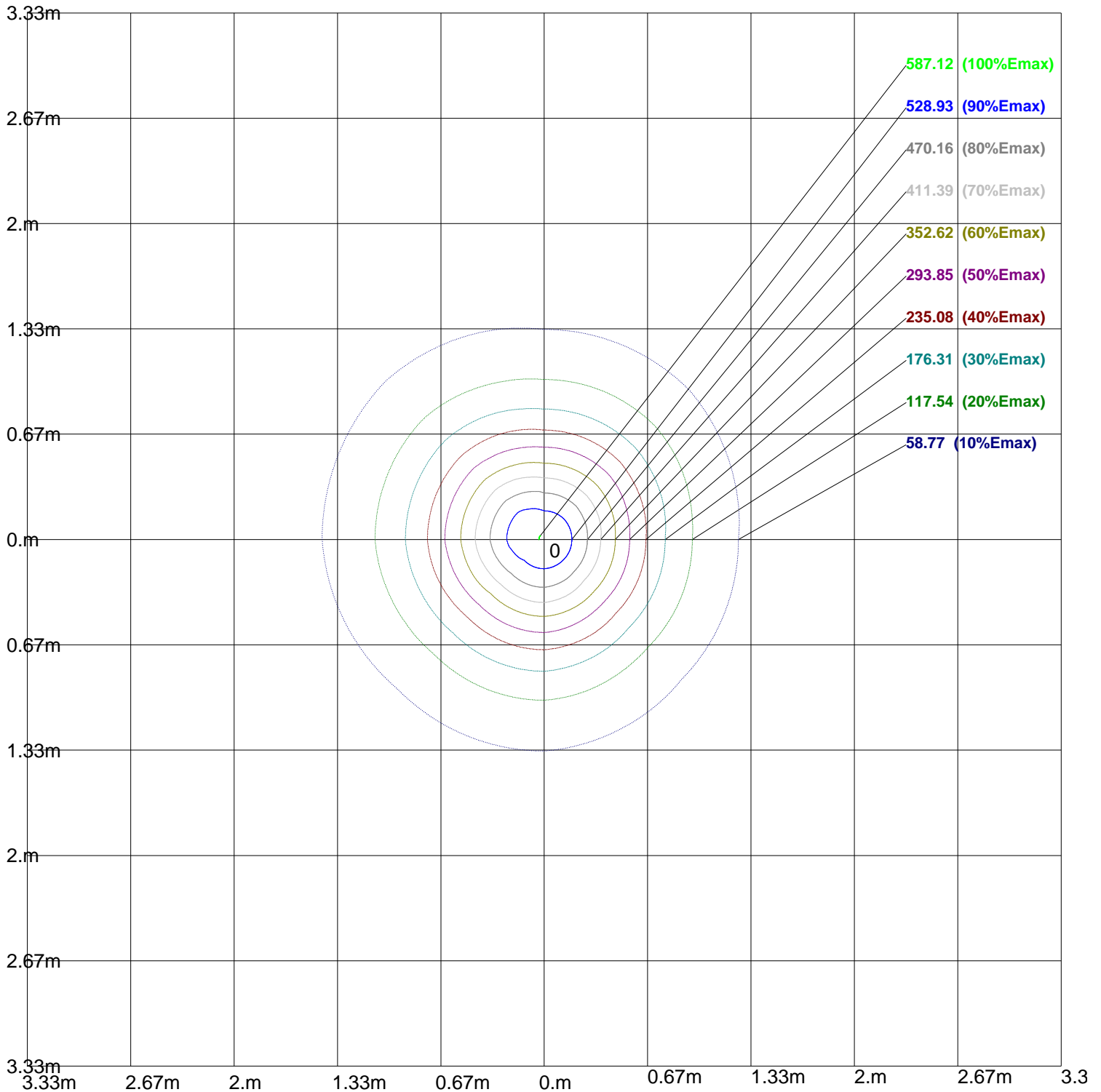
Luminaire



**Max Plane Light Distribution Curve [Unit: cd]**



### Iso-Lux[lx]



Height: 1 m  
Max Illuminance : 587.7lx

## Luminance Limiting Curve

Diameter: 145mm

Length: 145mm

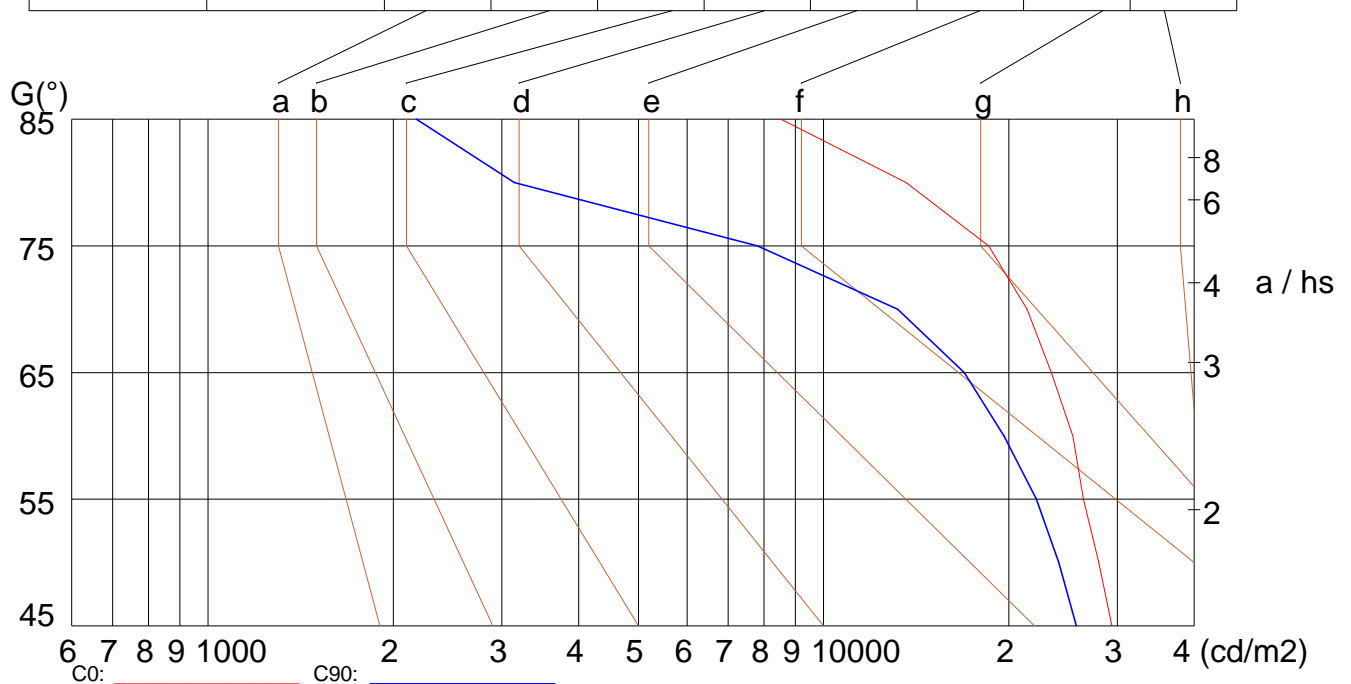
Width: 145mm

Height: 27mm

(cd/m<sup>2</sup>)

$\gamma$	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	29413	28007	26431	25412	23449	21400	18532	13613	8520
C90	25738	24105	22166	19655	16924	13204	7816	3143	2179

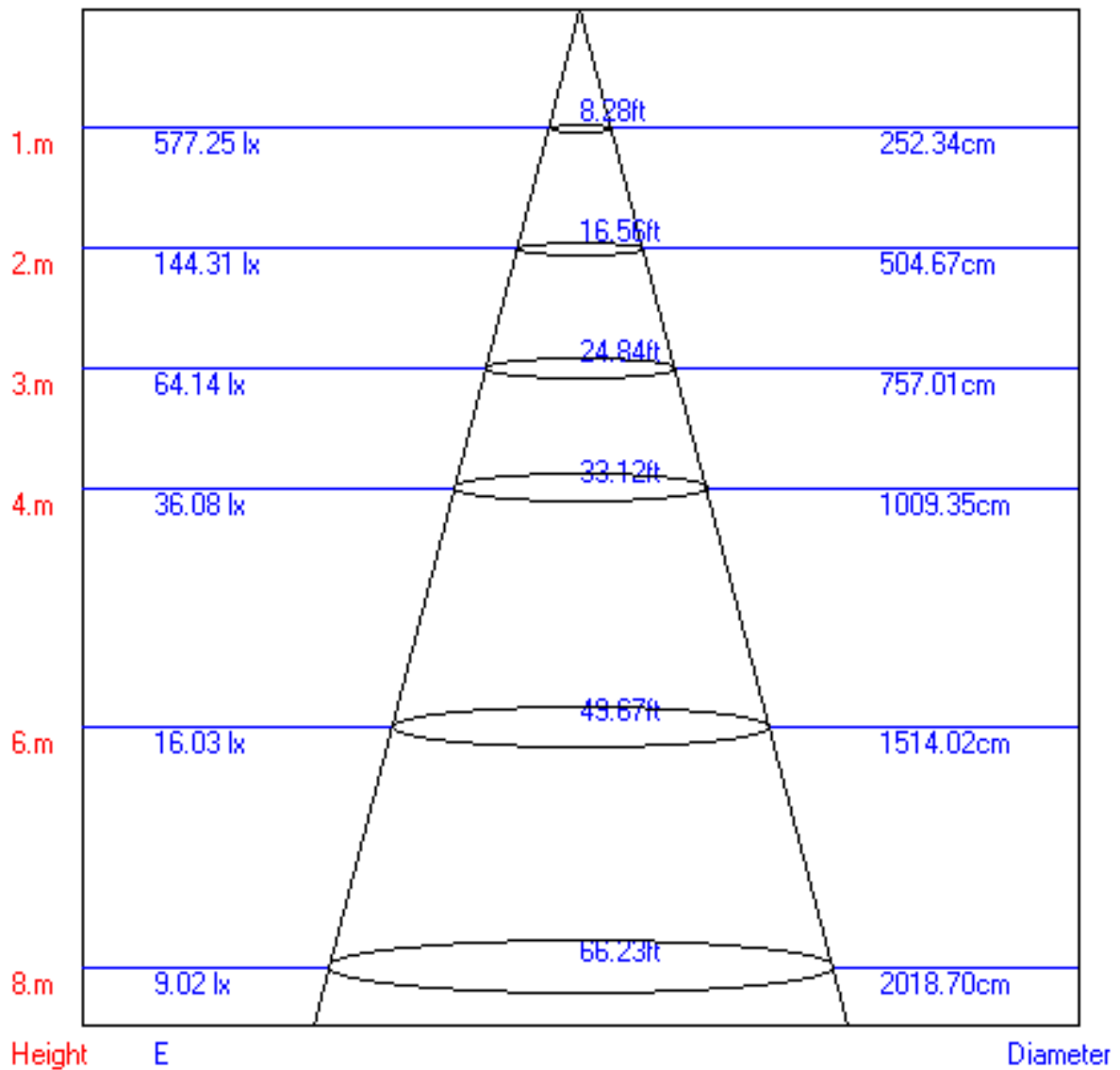
Glare	Quality	Service Values Illuminance (lx)							
1.15	A	2000	1000	500	≤300				
1.5	B		2000	1000	500	≤300			
1.85	C			2000	1000	500	≤300		
2.2	D				2000	1000	500	≤300	
2.55	E					2000	1000	500	≤300



Lum. Limiting Curve (C0/C90)



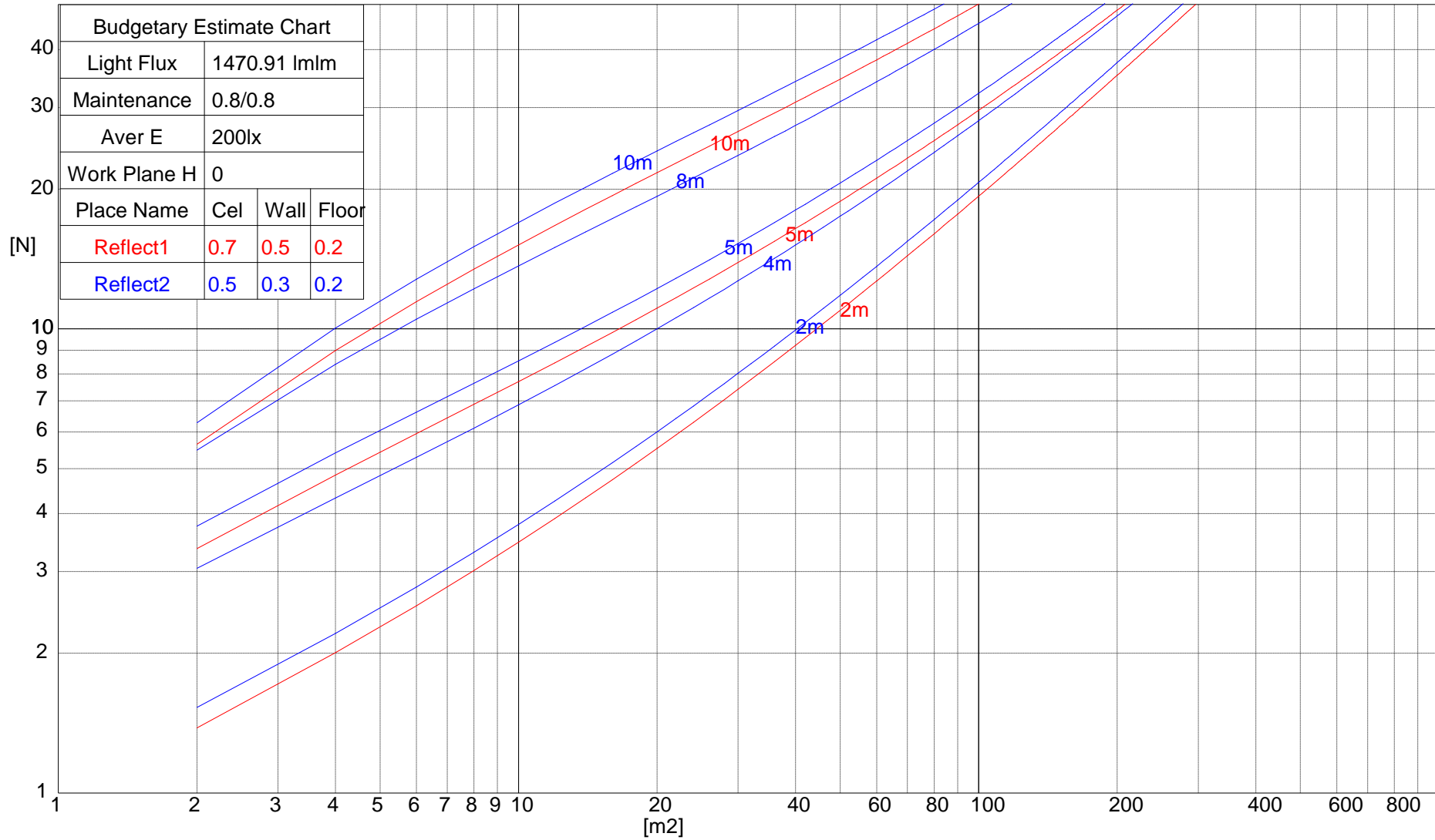
### Lux-Distance Curve



Beam Angle:103.20°

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	1.01	1.00	0.98	0.96	0.96	0.93	0.91	0.89	0.87	0.85	0.80
2	0.90	0.88	0.86	0.90	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	0.78	0.75	0.73	0.77	0.74	0.72	0.76	0.72	0.69	0.74	0.69	0.65	0.71	0.66	0.61	0.57
4	0.67	0.65	0.63	0.68	0.64	0.61	0.67	0.62	0.59	0.66	0.60	0.56	0.63	0.58	0.53	0.49
5	0.59	0.56	0.54	0.60	0.56	0.53	0.60	0.55	0.51	0.59	0.53	0.49	0.58	0.51	0.46	0.42
6	0.52	0.50	0.48	0.53	0.49	0.47	0.54	0.49	0.45	0.53	0.47	0.43	0.52	0.46	0.41	0.37
7	0.47	0.44	0.42	0.47	0.44	0.42	0.48	0.43	0.40	0.49	0.43	0.38	0.48	0.41	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	0.36	0.32	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	0.32	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
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