

Luminaire Property

Luminaire: RH-RPL15 15W 4000K

Report NO.:

Test NO.:

Lamp:

Sum Lumens: 1433.11 lm

Number of Lamps: 1

Diameter: 190mm

Length: mm

Photometric Type: Type C

Voltage: 220.4 V

Current: 0.123 A

Power: 15.6 W

Power Factor: 0.574

Ballast Type: EMC300mA

Width: 190mm

Height: 25mm

Remark: PMMA+0.5W SMD2835

Photometric Results

Lumens: 1433.11 lm

Effective luminous flux: 1411.27 lm

Efficiency: 91.866 lm/W

Central Intensity: 546.591cd

Maximum Intensity: 547.88cd

Beam Angle(10%): Left: -77.7 Right:78.8

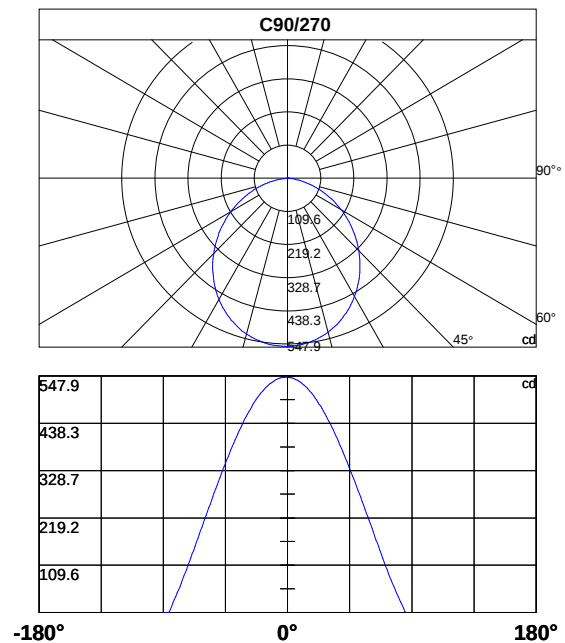
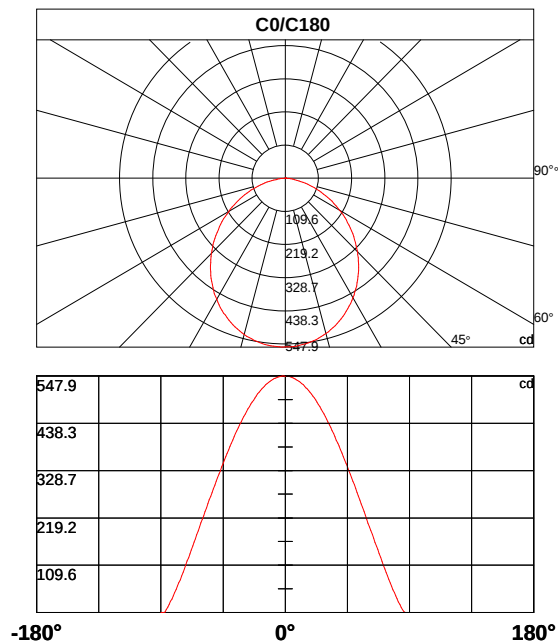
Angle of maximum intensity: C:135.0 G:1.0

Half Peak Side Angle(50%): Left: -52.5 Right:53.4

Light Out Rate(LOR) : 100.00%

Up Flux Rate: 0.0%

Down Flux Rate: 100.0%



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	546.6	547.8	547.2	546.4	545.8	544.6	543.1	541.7	539.5	537.9
45.0	546.6	544.6	544.5	543.6	542.8	541.4	539.6	538.5	536.4	534.1
90.0	546.6	544.6	544.5	543.6	542.8	541.4	539.6	538.5	536.4	534.1
135.0	546.6	547.9	547.8	547.2	546.9	545.8	544.4	543.3	542.1	540.2
180.0	546.6	547.9	547.8	547.2	546.9	545.8	544.4	543.3	542.1	540.2
225.0	546.6	545.3	545.1	544.6	544.5	543.4	542.7	541.5	539.9	538.4
270.0	546.6	545.3	545.1	544.6	544.5	543.4	542.7	541.5	539.9	538.4
315.0	546.6	547.8	547.2	546.4	545.8	544.6	543.1	541.7	539.5	537.9
360.0	546.6	547.8	547.2	546.4	545.8	544.6	543.1	541.7	539.5	537.9

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	535.9	533.5	530.5	527.6	524.4	520.9	517.9	513.9	510.2	505.9
45.0	531.9	529.0	526.3	523.9	520.5	517.1	513.2	509.4	505.4	501.7
90.0	531.9	529.0	526.3	523.9	520.5	517.1	513.2	509.4	505.4	501.7
135.0	537.9	535.7	533.1	530.4	528.0	524.8	521.5	517.9	514.2	510.5
180.0	537.9	535.7	533.1	530.4	528.0	524.8	521.5	517.9	514.2	510.5
225.0	535.9	534.1	532.1	529.7	526.4	523.4	520.5	517.2	513.6	509.3
270.0	535.9	534.1	532.1	529.7	526.4	523.4	520.5	517.2	513.6	509.3
315.0	535.9	533.5	530.5	527.6	524.4	520.9	517.9	513.9	510.2	505.9
360.0	535.9	533.5	530.5	527.6	524.4	520.9	517.9	513.9	510.2	505.9

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	501.3	497.2	492.4	487.3	482.3	476.9	471.1	465.6	460.2	454.1
45.0	497.2	492.6	487.5	482.1	477.9	472.3	466.6	460.8	455.0	448.5
90.0	497.2	492.6	487.5	482.1	477.9	472.3	466.6	460.8	455.0	448.5
135.0	506.4	501.6	497.1	492.0	486.8	482.9	476.9	471.7	465.7	459.4
180.0	506.4	501.6	497.1	492.0	486.8	482.9	476.9	471.7	465.7	459.4
225.0	505.5	500.7	496.6	492.1	487.5	481.9	476.5	471.2	465.1	460.0
270.0	505.5	500.7	496.6	492.1	487.5	481.9	476.5	471.2	465.1	460.0
315.0	501.3	497.2	492.4	487.3	482.3	476.9	471.1	465.6	460.2	454.1
360.0	501.3	497.2	492.4	487.3	482.3	476.9	471.1	465.6	460.2	454.1

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	447.7	441.3	434.5	428.6	421.4	414.3	406.8	399.3	392.1	385.4
45.0	442.1	436.6	430.0	423.3	416.0	409.1	402.9	395.5	387.6	380.2
90.0	442.1	436.6	430.0	423.3	416.0	409.1	402.9	395.5	387.6	380.2
135.0	453.5	447.9	441.5	434.3	427.5	420.6	414.3	406.9	399.8	391.9
180.0	453.5	447.9	441.5	434.3	427.5	420.6	414.3	406.9	399.8	391.9
225.0	453.6	447.6	440.9	434.6	428.4	421.6	414.3	407.2	399.4	392.2
270.0	453.6	447.6	440.9	434.6	428.4	421.6	414.3	407.2	399.4	392.2
315.0	447.7	441.3	434.5	428.6	421.4	414.3	406.8	399.3	392.1	385.4
360.0	447.7	441.3	434.5	428.6	421.4	414.3	406.8	399.3	392.1	385.4

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	377.4	369.4	361.6	353.4	345.2	338.0	329.2	320.7	312.2	303.8
45.0	372.0	364.5	357.4	349.2	341.4	332.9	324.5	316.2	308.8	300.2
90.0	372.0	364.5	357.4	349.2	341.4	332.9	324.5	316.2	308.8	300.2
135.0	384.5	376.6	368.4	361.5	353.6	345.3	336.9	328.2	321.2	312.2
180.0	384.5	376.6	368.4	361.5	353.6	345.3	336.9	328.2	321.2	312.2
225.0	385.5	377.3	369.4	361.3	353.5	344.9	337.9	329.2	321.0	312.1
270.0	385.5	377.3	369.4	361.3	353.5	344.9	337.9	329.2	321.0	312.1
315.0	377.4	369.4	361.6	353.4	345.2	338.0	329.2	320.7	312.2	303.8
360.0	377.4	369.4	361.6	353.4	345.2	338.0	329.2	320.7	312.2	303.8

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	295.8	287.2	278.5	269.6	260.3	251.4	243.7	234.3	225.3	216.1
45.0	291.3	282.9	273.9	266.7	257.5	248.6	239.8	230.8	221.8	213.7
90.0	291.3	282.9	273.9	266.7	257.5	248.6	239.8	230.8	221.8	213.7
135.0	303.8	295.1	286.0	277.2	269.4	260.9	251.9	242.9	233.4	224.4
180.0	303.8	295.1	286.0	277.2	269.4	260.9	251.9	242.9	233.4	224.4
225.0	303.5	294.8	287.0	278.3	269.4	260.1	251.0	243.4	234.4	225.2
270.0	303.5	294.8	287.0	278.3	269.4	260.1	251.0	243.4	234.4	225.2
315.0	295.8	287.2	278.5	269.6	260.3	251.4	243.7	234.3	225.3	216.1
360.0	295.8	287.2	278.5	269.6	260.3	251.4	243.7	234.3	225.3	216.1

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	207.0	197.7	190.0	181.1	171.6	162.5	153.4	145.8	136.3	127.5
45.0	205.1	195.6	187.0	177.4	168.7	160.6	151.6	142.9	133.6	124.8
90.0	205.1	195.6	187.0	177.4	168.7	160.6	151.6	142.9	133.6	124.8
135.0	216.6	207.5	198.3	189.2	180.0	171.0	163.3	154.1	144.8	136.0
180.0	216.6	207.5	198.3	189.2	180.0	171.0	163.3	154.1	144.8	136.0
225.0	216.1	206.8	197.8	189.6	180.4	171.4	162.0	152.8	143.9	136.1
270.0	216.1	206.8	197.8	189.6	180.4	171.4	162.0	152.8	143.9	136.1
315.0	207.0	197.7	190.0	181.1	171.6	162.5	153.4	145.8	136.3	127.5
360.0	207.0	197.7	190.0	181.1	171.6	162.5	153.4	145.8	136.3	127.5

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	118.7	109.9	101.0	92.3	85.2	76.8	68.4	60.3	52.8	46.2
45.0	116.4	108.5	99.9	91.2	83.2	74.9	66.4	59.7	52.1	44.2
90.0	116.4	108.5	99.9	91.2	83.2	74.9	66.4	59.7	52.1	44.2
135.0	126.7	119.4	110.5	101.5	93.2	84.5	76.0	69.1	61.4	53.2
180.0	126.7	119.4	110.5	101.5	93.2	84.5	76.0	69.1	61.4	53.2
225.0	126.9	118.2	108.9	100.2	92.6	84.4	76.1	67.6	59.6	51.2
270.0	126.9	118.2	108.9	100.2	92.6	84.4	76.1	67.6	59.6	51.2
315.0	118.7	109.9	101.0	92.3	85.2	76.8	68.4	60.3	52.8	46.2
360.0	118.7	109.9	101.0	92.3	85.2	76.8	68.4	60.3	52.8	46.2

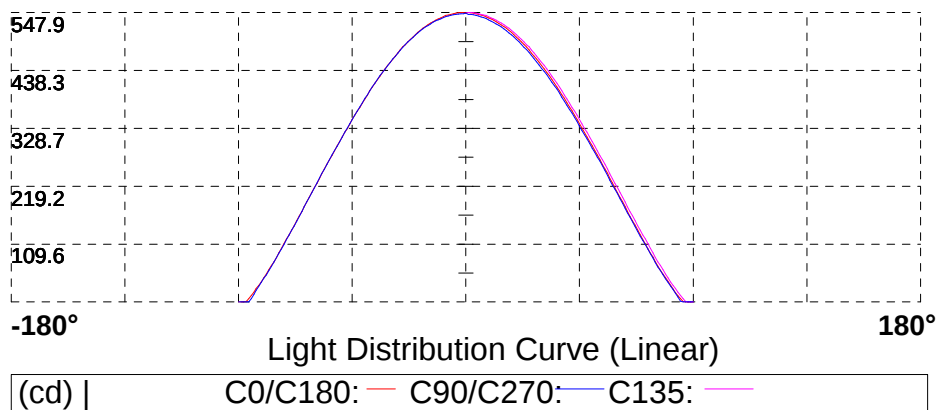
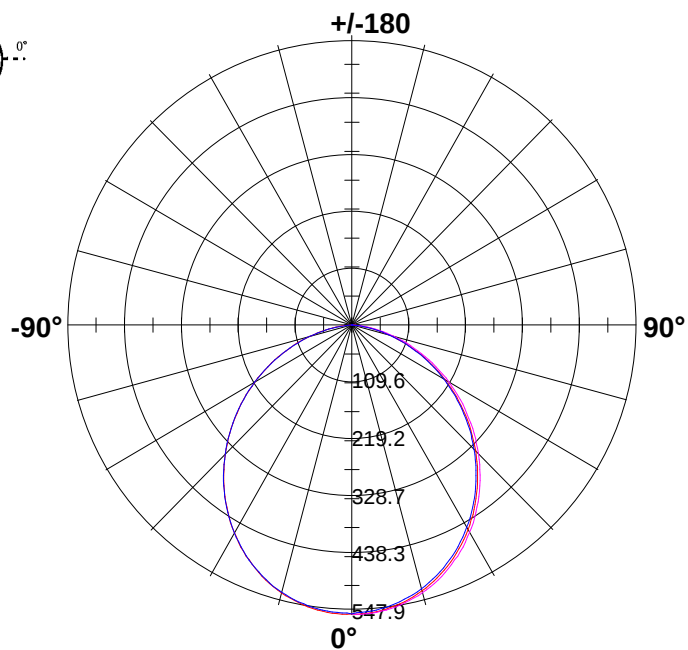
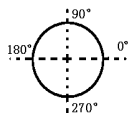
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	38.9	31.6	24.5	18.0	11.7	6.7	1.1	0.0	0.0	0.0
45.0	37.1	29.8	23.5	16.5	9.0	1.6	0.0	0.0	0.0	0.0
90.0	37.1	29.8	23.5	16.5	9.0	1.6	0.0	0.0	0.0	0.0
135.0	45.8	38.2	31.1	25.5	18.8	12.5	6.5	0.8	0.0	0.0
180.0	45.8	38.2	31.1	25.5	18.8	12.5	6.5	0.8	0.0	0.0
225.0	45.1	37.3	29.6	21.9	14.3	6.4	0.0	0.0	0.0	0.0
270.0	45.1	37.3	29.6	21.9	14.3	6.4	0.0	0.0	0.0	0.0
315.0	38.9	31.6	24.5	18.0	11.7	6.7	1.1	0.0	0.0	0.0
360.0	38.9	31.6	24.5	18.0	11.7	6.7	1.1	0.0	0.0	0.0

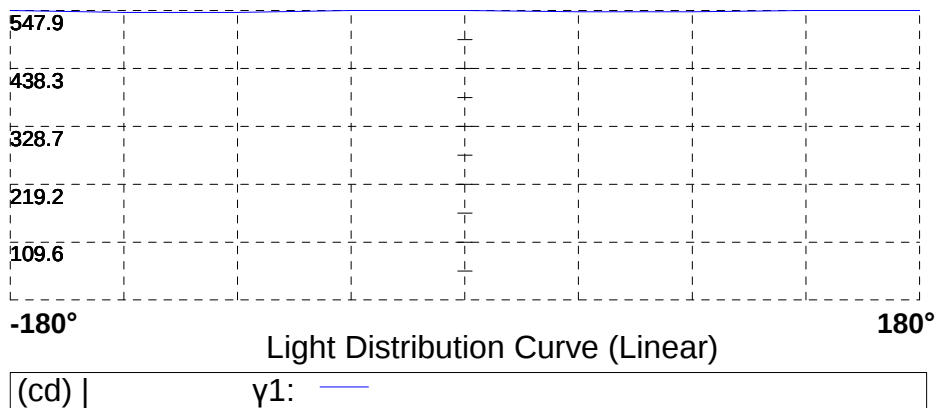
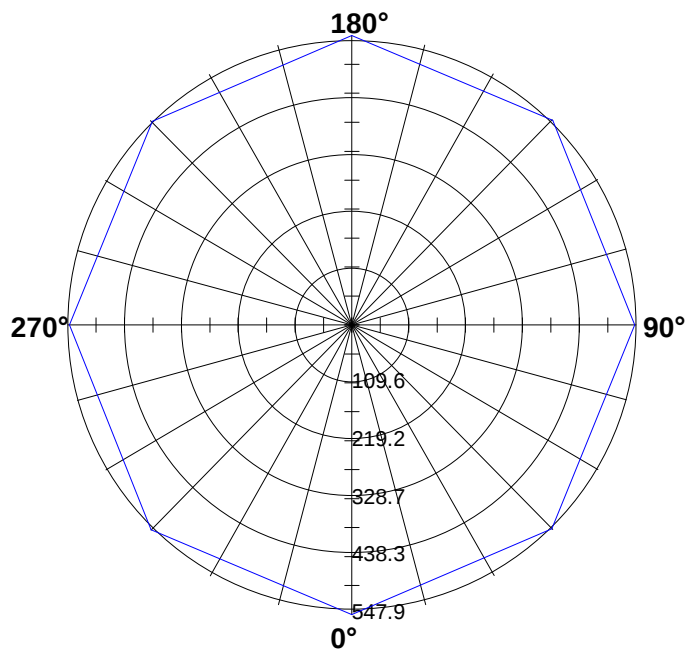
C\G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

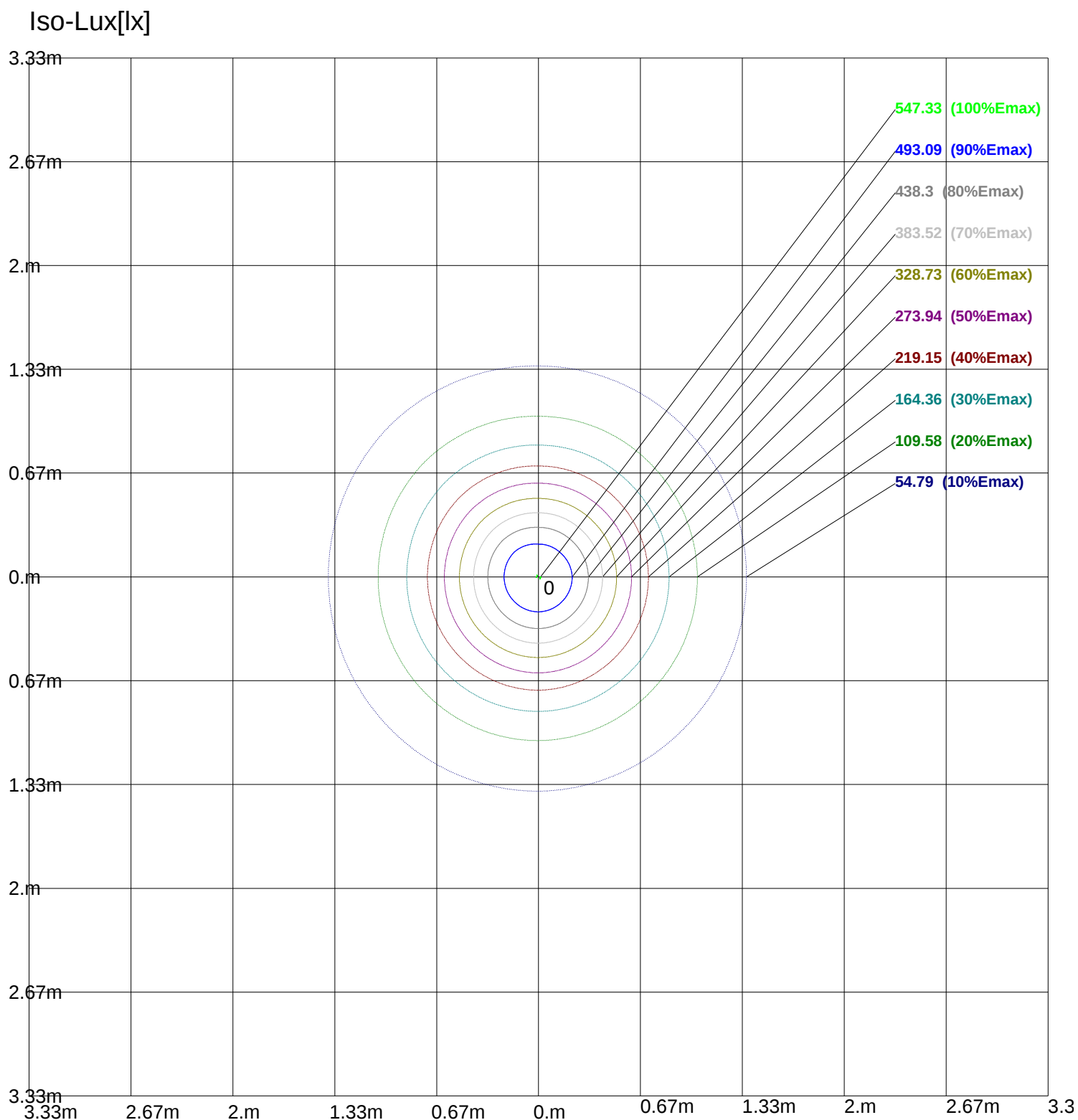
Light Distribution Curve [Unit: cd]

Luminaire



Max Plane Light Distribution Curve [Unit: cd]





Height: 1 m
Max Illuminance : 547.88lx

Luminance Limiting Curve

Diameter: 190mm

Length: mm

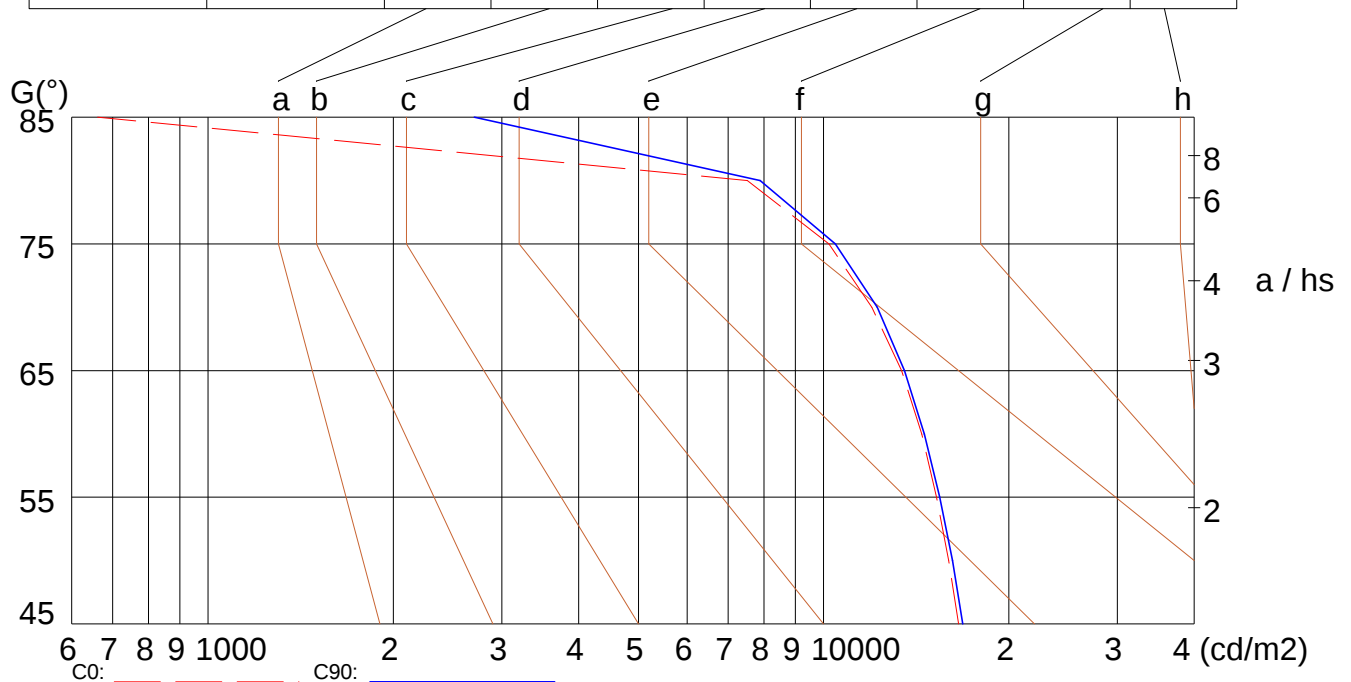
Width: 190mm

Height: 25mm

(cd/m²)

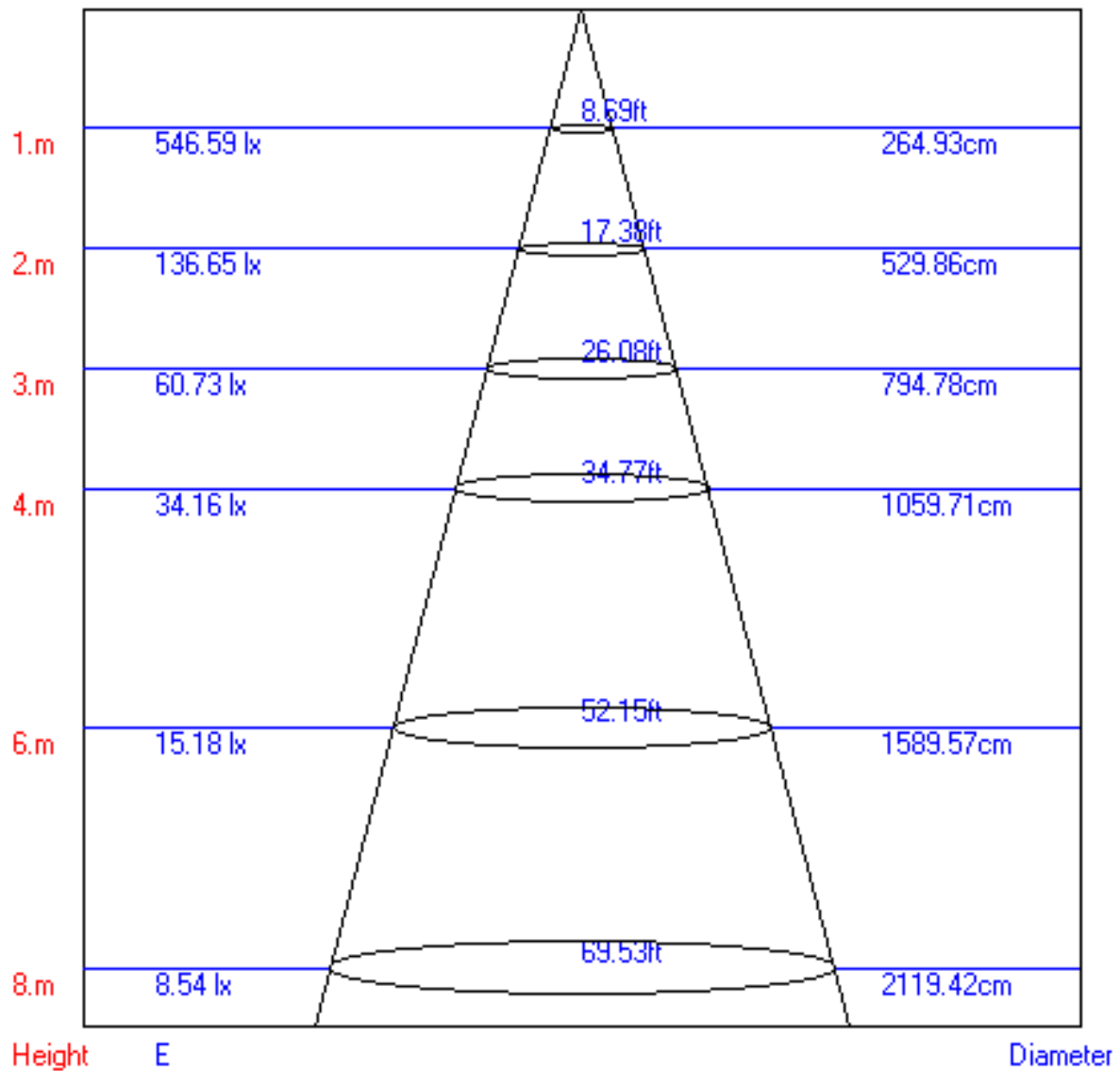
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	16578	15960	15259	14440	13383	11979	10196	7516	661
C90	16832	16203	15431	14581	13536	12221	10453	7889	2706

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)

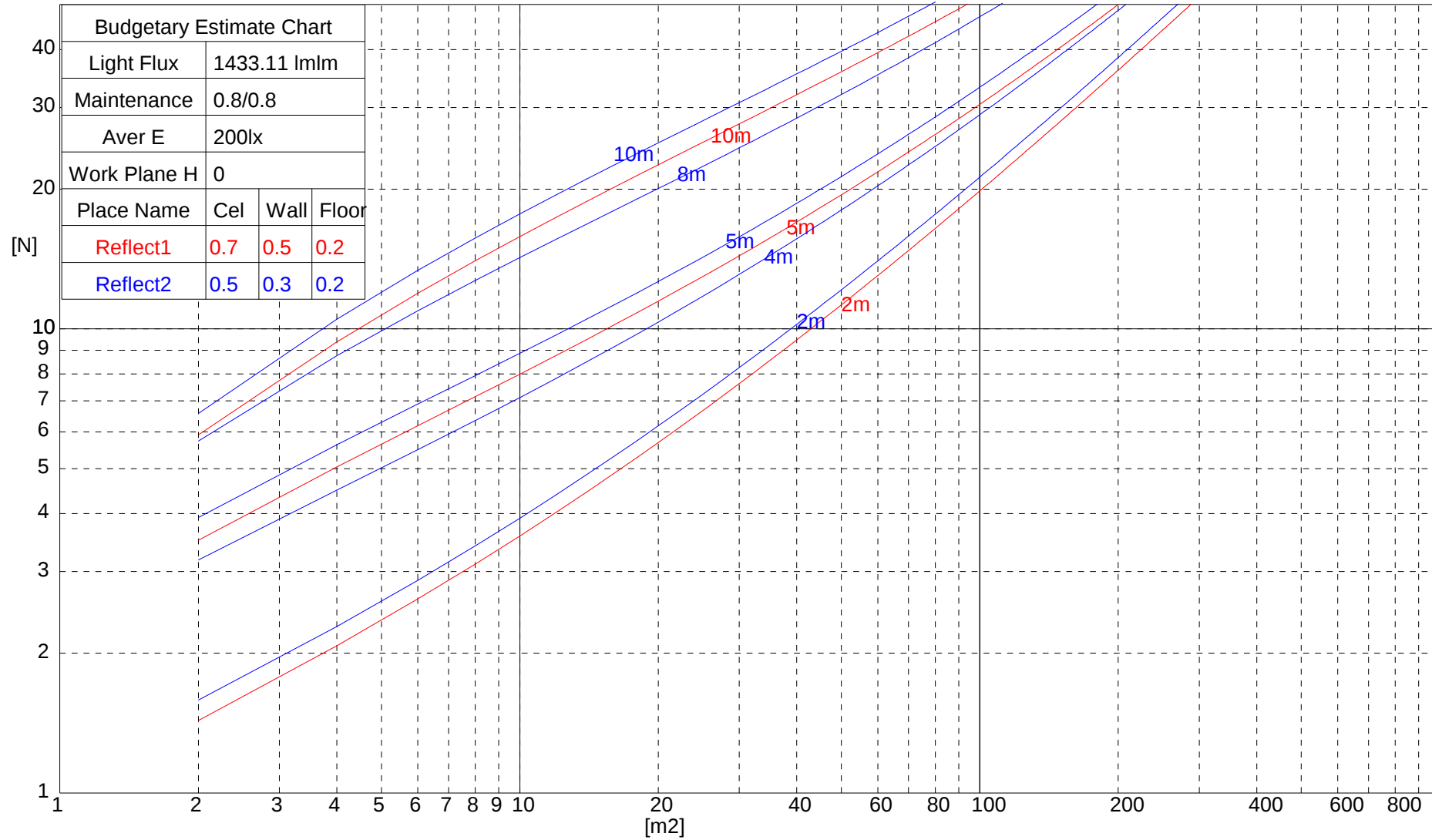
Lux-Distance Curve



Beam Angle:105.90°

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	1.04	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	0.90	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	0.71	0.76	0.72	0.68	0.74	0.69	0.65	0.71	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	0.66	0.60	0.56	0.63	0.58	0.53	0.49
5	0.59	0.56	0.54	0.59	0.56	0.53	0.60	0.55	0.51	0.59	0.53	0.49	0.57	0.51	0.46	0.42
6	0.52	0.49	0.48	0.53	0.49	0.47	0.53	0.48	0.45	0.53	0.47	0.43	0.52	0.46	0.41	0.37
7	0.46	0.44	0.42	0.47	0.44	0.41	0.48	0.43	0.40	0.48	0.42	0.38	0.48	0.41	0.36	0.33
8	0.42	0.39	0.38	0.43	0.39	0.37	0.44	0.39	0.36	0.44	0.38	0.34	0.44	0.38	0.32	0.29
9	0.38	0.35	0.34	0.39	0.35	0.33	0.40	0.35	0.32	0.41	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	0.38	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