

Luminaire Property

Luminaire: RH-CL3182 30W 3000K

Report NO.:

Test NO.:

Lamp:

Sum Lumens: 2527.04 lm

Number of Lamps: 1

Diameter: 190mm

Length: mm

Photometric Type: Type C

Voltage: 220.5 V

Current: 0.138 A

Power: 28.2 W

Power Factor: 0.925

Ballast Type: osram 800mA

Width: 190mm

Height: 140mm

Remark:

Photometric Results

Lumens: 2527.04 lm

Effective luminous flux: 1310.24 lm

Efficiency: 89.6113 lm/W

Central Intensity: 18767.91cd

Maximum Intensity: 19006.579cd

Beam Angle(10%): Left: -13.4 Right:14.2

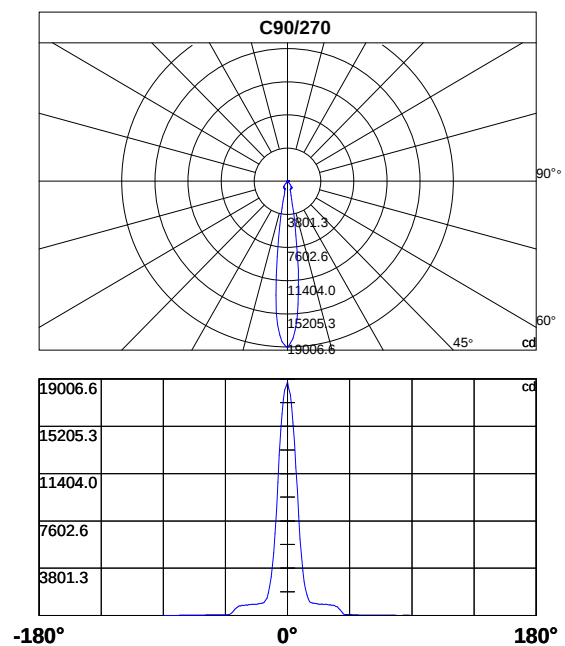
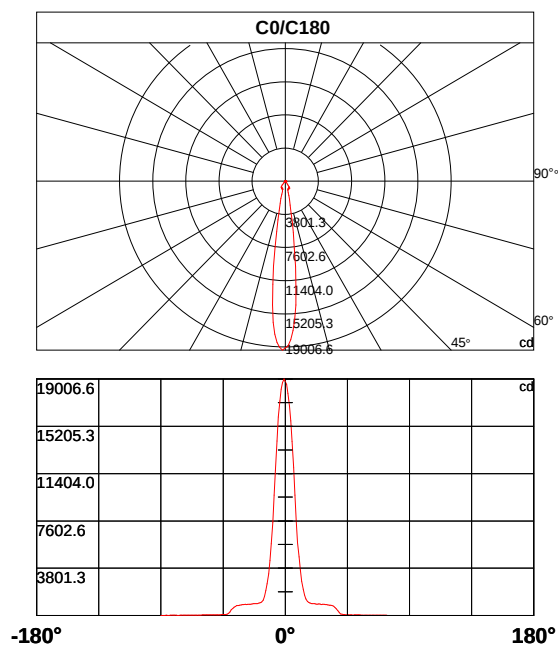
Angle of maximum intensity: C:135.0 G:1.0

Half Peak Side Angle(50%): Left: -7.1 Right:8.1

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	18767.9	18583.5	17847.1	16823.6	15651.1	13996.3	11885.7	9665.5	7611.8	5862.8
45.0	18767.9	18219.8	17739.8	16788.5	15486.6	13869.2	11898.8	10070.9	7960.3	6145.6
90.0	18767.9	18219.8	17739.8	16788.5	15486.6	13869.2	11898.8	10070.9	7960.3	6145.6
135.0	18767.9	19006.6	18693.1	18175.9	17251.0	15949.1	14035.7	11679.7	9674.2	7511.0
180.0	18767.9	19006.6	18693.1	18175.9	17251.0	15949.1	14035.7	11679.7	9674.2	7511.0
225.0	18767.9	18432.3	18105.7	17334.3	16205.5	14894.9	12898.3	10684.6	8523.6	6577.3
270.0	18767.9	18432.3	18105.7	17334.3	16205.5	14894.9	12898.3	10684.6	8523.6	6577.3
315.0	18767.9	18583.5	17847.1	16823.6	15651.1	13996.3	11885.7	9665.5	7611.8	5862.8
360.0	18767.9	18583.5	17847.1	16823.6	15651.1	13996.3	11885.7	9665.5	7611.8	5862.8

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	4714.4	3644.8	2744.1	2108.4	1643.8	1321.6	1135.3	1045.5	999.4	953.4
45.0	4721.0	3574.7	2682.7	2130.3	1650.3	1337.0	1109.0	1014.8	1001.6	984.1
90.0	4721.0	3574.7	2682.7	2130.3	1650.3	1337.0	1109.0	1014.8	1001.6	984.1
135.0	5766.4	4436.1	3344.5	2538.0	1998.8	1532.0	1238.3	1080.5	1030.1	995.0
180.0	5766.4	4436.1	3344.5	2538.0	1998.8	1532.0	1238.3	1080.5	1030.1	995.0
225.0	5043.1	4045.9	3083.8	2318.8	1792.8	1383.0	1205.5	1045.5	1003.8	970.9
270.0	5043.1	4045.9	3083.8	2318.8	1792.8	1383.0	1205.5	1045.5	1003.8	970.9
315.0	4714.4	3644.8	2744.1	2108.4	1643.8	1321.6	1135.3	1045.5	999.4	953.4
360.0	4714.4	3644.8	2744.1	2108.4	1643.8	1321.6	1135.3	1045.5	999.4	953.4

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	964.4	953.4	918.3	907.4	924.9	914.0	881.0	900.8	889.8	878.9
45.0	968.7	953.4	920.5	905.2	896.4	916.1	878.9	898.6	889.8	878.9
90.0	968.7	953.4	920.5	905.2	896.4	916.1	878.9	898.6	889.8	878.9
135.0	955.6	944.6	935.8	949.0	933.7	898.6	887.6	903.0	872.3	887.6
180.0	955.6	944.6	935.8	949.0	933.7	898.6	887.6	903.0	872.3	887.6
225.0	955.6	944.6	903.0	896.4	883.2	896.4	885.4	874.5	865.7	828.5
270.0	955.6	944.6	903.0	896.4	883.2	896.4	885.4	874.5	865.7	828.5
315.0	964.4	953.4	918.3	907.4	924.9	914.0	881.0	900.8	889.8	878.9
360.0	964.4	953.4	918.3	907.4	924.9	914.0	881.0	900.8	889.8	878.9

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	867.9	857.0	815.3	817.5	789.0	740.8	653.1	530.4	387.9	247.7
45.0	843.8	854.8	811.0	815.3	784.6	723.3	692.6	580.8	453.7	315.6
90.0	843.8	854.8	811.0	815.3	784.6	723.3	692.6	580.8	453.7	315.6
135.0	878.9	870.1	857.0	813.1	786.8	789.0	723.3	666.3	561.1	455.9
180.0	878.9	870.1	857.0	813.1	786.8	789.0	723.3	666.3	561.1	455.9
225.0	850.4	811.0	800.0	817.5	762.7	760.5	694.8	604.9	517.3	379.2
270.0	850.4	811.0	800.0	817.5	762.7	760.5	694.8	604.9	517.3	379.2
315.0	867.9	857.0	815.3	817.5	789.0	740.8	653.1	530.4	387.9	247.7
360.0	867.9	857.0	815.3	817.5	789.0	740.8	653.1	530.4	387.9	247.7

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	129.3	99.7	70.1	67.9	39.5	39.5	38.4	37.3	35.1	32.9
45.0	168.8	85.5	85.5	78.9	74.5	70.1	67.9	63.5	60.3	57.0
90.0	168.8	85.5	85.5	78.9	74.5	70.1	67.9	63.5	60.3	57.0
135.0	280.6	192.9	105.2	81.1	74.5	67.9	66.8	65.7	60.3	54.8
180.0	280.6	192.9	105.2	81.1	74.5	67.9	66.8	65.7	60.3	54.8
225.0	263.0	149.0	83.3	72.3	61.3	61.3	61.3	59.2	54.8	50.4
270.0	263.0	149.0	83.3	72.3	61.3	61.3	61.3	59.2	54.8	50.4
315.0	129.3	99.7	70.1	67.9	39.5	39.5	38.4	37.3	35.1	32.9
360.0	129.3	99.7	70.1	67.9	39.5	39.5	38.4	37.3	35.1	32.9

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	35.6	38.3	46.0	43.8	39.5	19.7	19.7	15.3	15.3	17.5
45.0	52.6	52.6	28.5	28.5	26.3	24.1	21.9	19.7	17.5	15.3
90.0	52.6	52.6	28.5	28.5	26.3	24.1	21.9	19.7	17.5	15.3
135.0	52.6	51.5	50.4	47.1	43.8	42.7	41.7	38.4	35.1	35.1
180.0	52.6	51.5	50.4	47.1	43.8	42.7	41.7	38.4	35.1	35.1
225.0	48.2	46.0	46.0	44.9	43.8	41.6	39.5	37.3	35.1	35.1
270.0	48.2	46.0	46.0	44.9	43.8	41.6	39.5	37.3	35.1	35.1
315.0	35.6	38.3	46.0	43.8	39.5	19.7	19.7	15.3	15.3	17.5
360.0	35.6	38.3	46.0	43.8	39.5	19.7	19.7	15.3	15.3	17.5

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	16.4	15.3	15.3	30.7	30.7	28.5	28.5	26.3	26.3	26.3
45.0	15.3	17.5	16.4	15.3	15.3	30.7	32.9	30.7	30.7	30.7
90.0	15.3	17.5	16.4	15.3	15.3	30.7	32.9	30.7	30.7	30.7
135.0	35.1	32.9	15.3	15.3	30.7	30.7	29.6	28.5	25.2	21.9
180.0	35.1	32.9	15.3	15.3	30.7	30.7	29.6	28.5	25.2	21.9
225.0	34.0	32.9	30.7	30.7	30.7	30.7	30.7	30.7	30.7	28.5
270.0	34.0	32.9	30.7	30.7	30.7	30.7	30.7	30.7	30.7	28.5
315.0	16.4	15.3	15.3	30.7	30.7	28.5	28.5	26.3	26.3	26.3
360.0	16.4	15.3	15.3	30.7	30.7	28.5	28.5	26.3	26.3	26.3

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	25.2	24.1	28.5	26.3	10.9	10.9	10.9	10.9	10.9	10.9
45.0	30.7	30.7	29.6	28.5	28.5	28.5	28.5	28.5	13.1	10.9
90.0	30.7	30.7	29.6	28.5	28.5	28.5	28.5	28.5	13.1	10.9
135.0	28.5	28.5	28.5	28.5	28.5	26.3	28.5	10.9	10.9	18.6
180.0	28.5	28.5	28.5	28.5	28.5	26.3	28.5	10.9	10.9	18.6
225.0	21.9	25.2	28.5	27.4	26.3	26.3	26.3	13.1	13.1	10.9
270.0	21.9	25.2	28.5	27.4	26.3	26.3	26.3	13.1	13.1	10.9
315.0	25.2	24.1	28.5	26.3	10.9	10.9	10.9	10.9	10.9	10.9
360.0	25.2	24.1	28.5	26.3	10.9	10.9	10.9	10.9	10.9	10.9

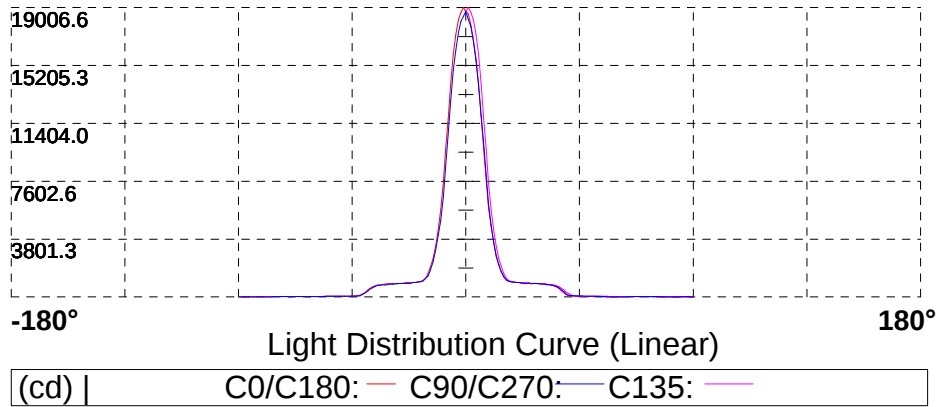
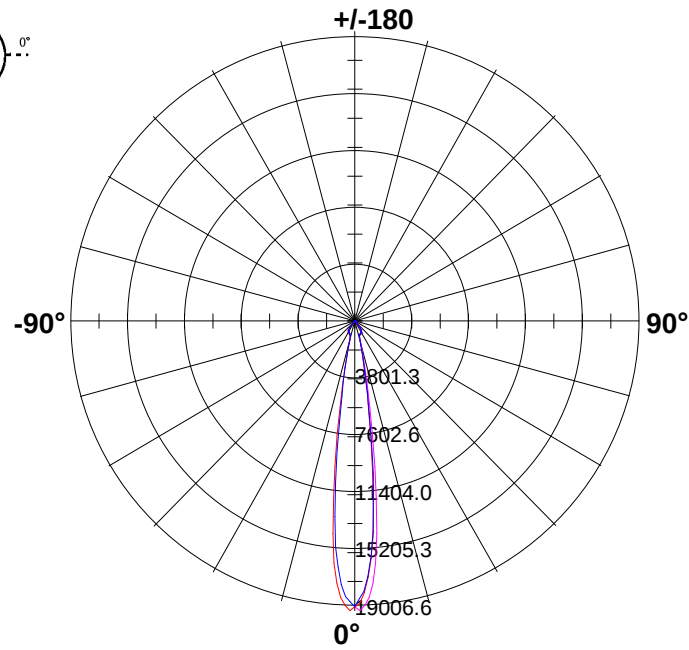
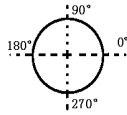
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.9	11.5	12.0	10.4	8.7	7.7	6.6	7.7	8.7	8.7
45.0	10.9	9.8	8.7	10.9	13.1	21.9	24.1	24.1	24.1	10.9
90.0	10.9	9.8	8.7	10.9	13.1	21.9	24.1	24.1	24.1	10.9
135.0	26.3	26.3	26.3	13.1	10.9	12.0	13.1	8.7	8.7	8.7
180.0	26.3	26.3	26.3	13.1	10.9	12.0	13.1	8.7	8.7	8.7
225.0	10.9	10.9	10.9	10.9	9.8	8.7	8.7	8.7	8.7	8.7
270.0	10.9	10.9	10.9	10.9	9.8	8.7	8.7	8.7	8.7	8.7
315.0	10.9	11.5	12.0	10.4	8.7	7.7	6.6	7.7	8.7	8.7
360.0	10.9	11.5	12.0	10.4	8.7	7.7	6.6	7.7	8.7	8.7

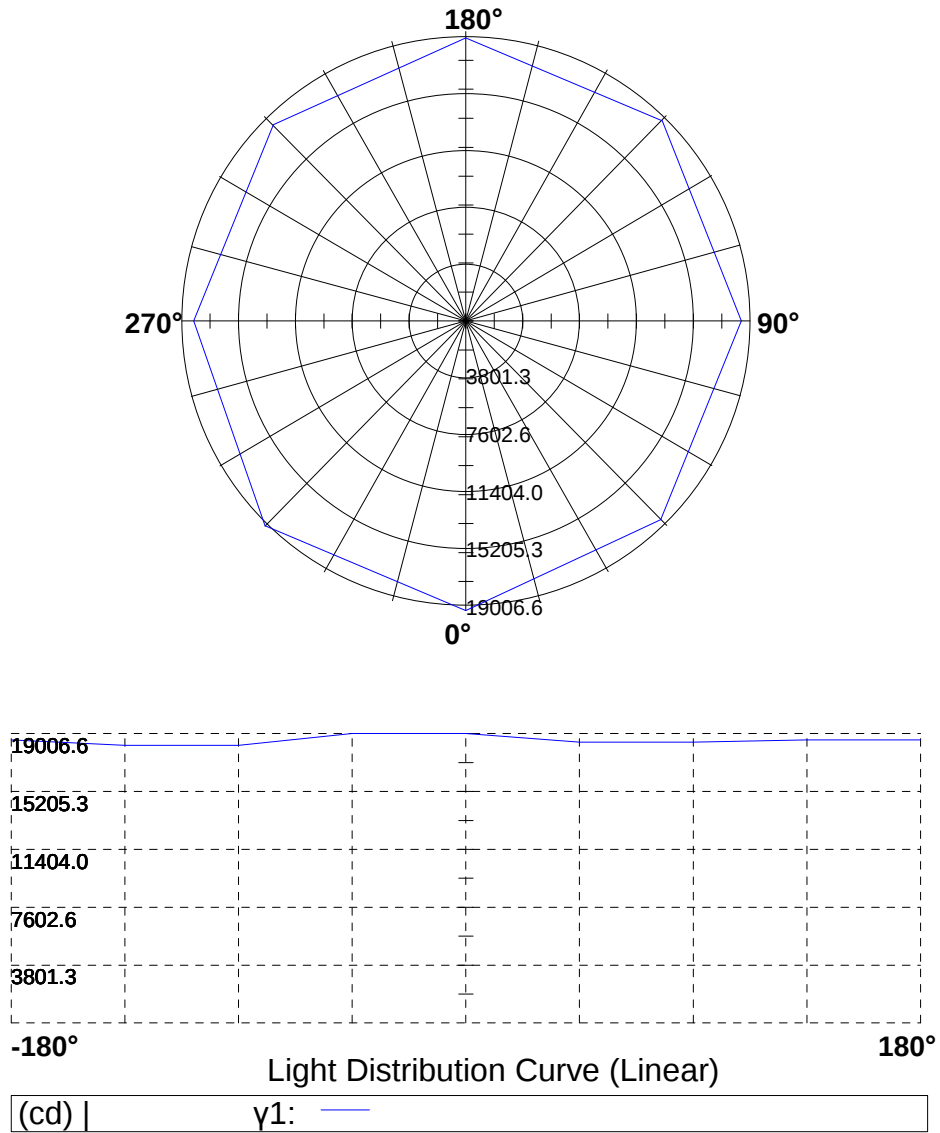
C\G	90.0
0.0	6.6
45.0	10.9
90.0	10.9
135.0	10.9
180.0	10.9
225.0	13.1
270.0	13.1
315.0	6.6
360.0	6.6

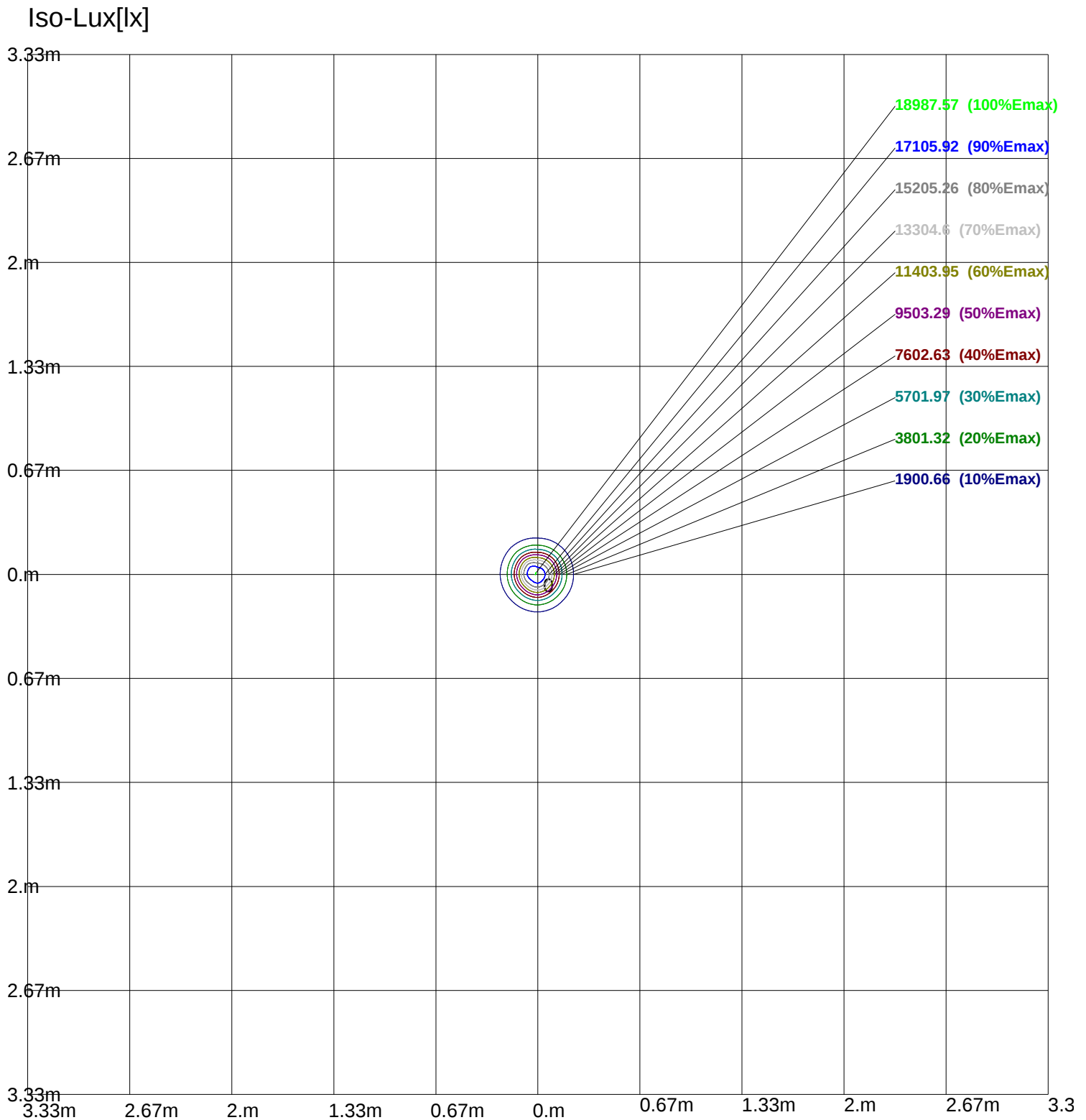
Light Distribution Curve [Unit: cd]

Luminaire



Max Plane Light Distribution Curve [Unit: cd]





Height: 1 m
Max Illuminance : 19006.58lx

Luminance Limiting Curve

Diameter: 190mm

Length: mm

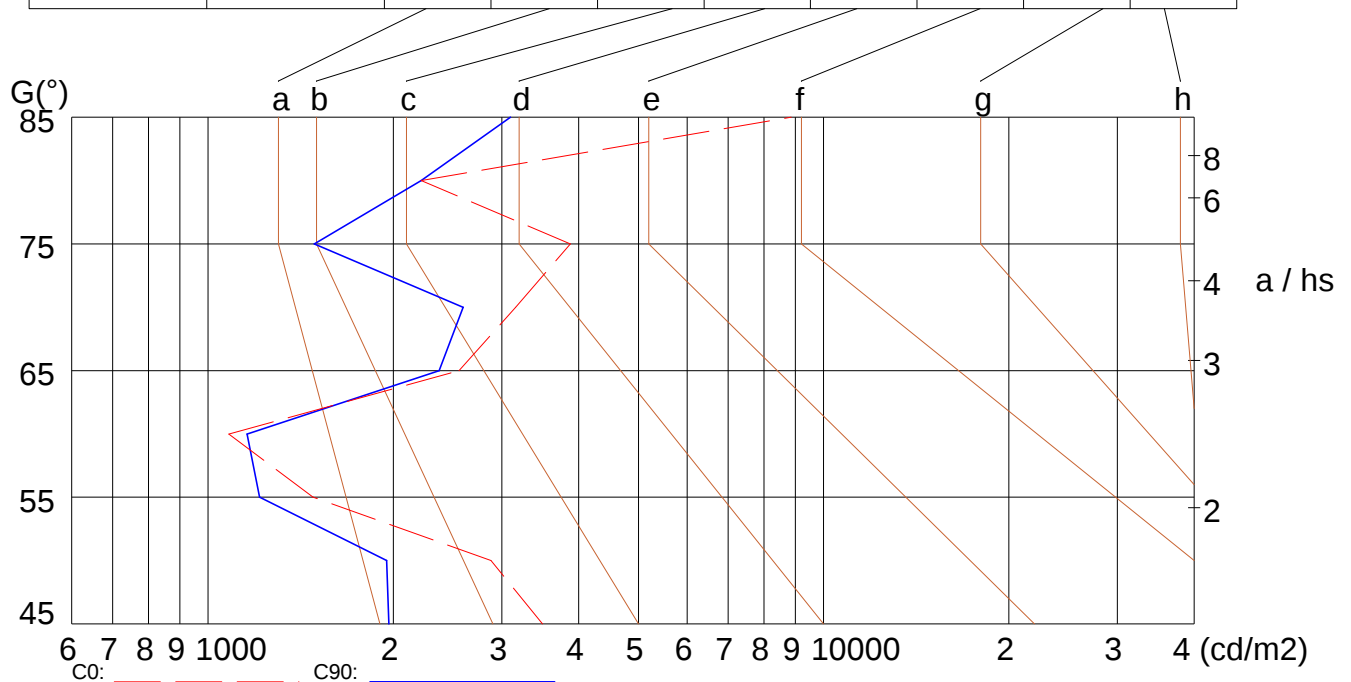
Width: 190mm

Height: 140mm

(cd/m²)

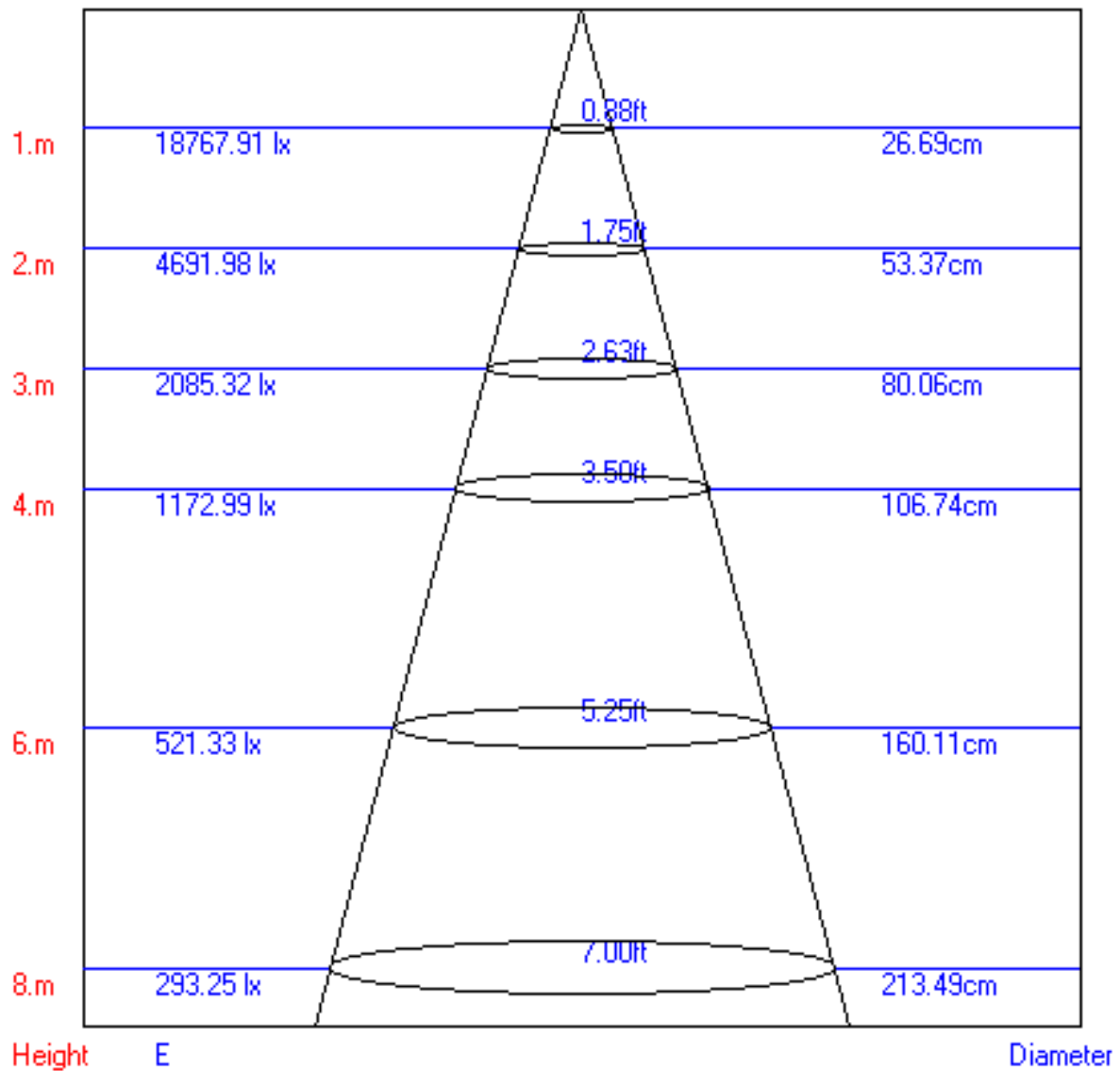
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	3493	2882	1480	1080	2556	3158	3874	2218	8860
C90	1965	1951	1211	1157	2372	2595	1488	2218	3098

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)

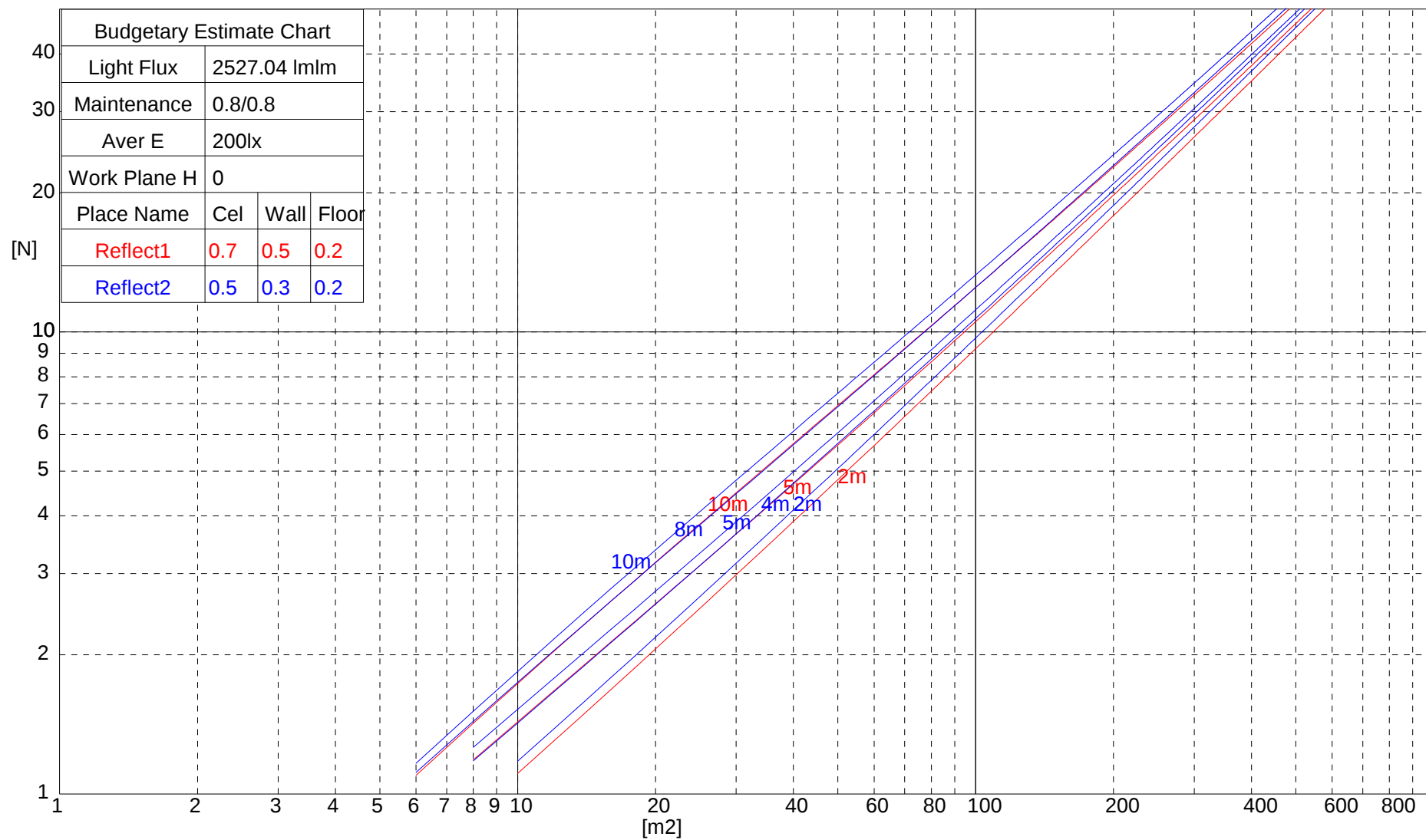
Lux-Distance Curve



Beam Angle:15.20°

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	COEFFCIENTS 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	1.15	1.15	1.14	1.14	1.13	1.12	1.09	1.08	1.07	1.04	1.02	1.01	0.96	0.95	0.94	0.89
2	1.10	1.09	1.08	1.08	1.07	1.06	1.04	1.03	1.01	0.99	0.97	0.96	0.93	0.91	0.89	0.85
3	1.05	1.04	1.03	1.03	1.02	1.01	1.00	0.98	0.96	0.95	0.93	0.91	0.90	0.87	0.85	0.81
4	1.00	0.99	0.98	0.99	0.97	0.96	0.96	0.93	0.92	0.92	0.89	0.87	0.87	0.84	0.81	0.77
5	0.96	0.95	0.95	0.95	0.93	0.92	0.92	0.90	0.88	0.88	0.85	0.83	0.84	0.81	0.78	0.74
6	0.93	0.92	0.91	0.92	0.90	0.89	0.89	0.86	0.84	0.85	0.82	0.80	0.82	0.78	0.75	0.72
7	0.90	0.88	0.88	0.88	0.87	0.86	0.86	0.83	0.81	0.83	0.79	0.77	0.79	0.75	0.73	0.69
8	0.87	0.86	0.85	0.85	0.84	0.83	0.83	0.80	0.79	0.80	0.77	0.75	0.77	0.73	0.70	0.67
9	0.84	0.83	0.82	0.83	0.81	0.80	0.80	0.78	0.76	0.78	0.74	0.72	0.75	0.71	0.68	0.65
10	0.82	0.81	0.80	0.81	0.79	0.78	0.78	0.76	0.74	0.75	0.72	0.70	0.73	0.69	0.66	0.63



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	10.8	11.5	11.0	11.5	11.8	10.7	11.5	10.8	11.5	11.8
	3H	11.7	12.6	12.1	12.8	13.0	11.8	12.6	11.9	13.0	13.1
	4H	12.3	13.2	12.6	13.4	13.6	12.3	13.1	12.5	13.4	13.6
	6H	12.7	13.4	13.0	13.7	13.8	12.5	13.3	12.9	13.6	13.9
	8H	13.0	13.7	13.2	13.7	13.9	12.9	13.5	13.0	13.8	14.0
4H	12H	13.1	13.7	13.2	14.0	14.2	12.9	13.5	13.0	13.9	14.2
	2H	11.3	12.1	11.5	12.3	12.4	11.3	12.0	11.5	12.1	12.3
	3H	12.8	13.4	12.9	13.3	13.5	12.6	13.2	12.7	13.3	13.6
	4H	13.3	13.8	13.4	13.8	14.2	13.0	13.7	13.3	13.9	14.1
	6H	13.6	14.2	14.0	14.3	14.5	13.6	14.0	13.7	14.2	14.5
8H	8H	13.8	14.4	14.2	14.4	14.8	13.8	14.2	13.9	14.4	14.7
	12H	14.0	14.4	14.3	14.7	14.8	13.9	14.2	14.2	14.6	14.9
	4H	13.5	13.9	13.7	14.0	14.4	13.3	13.8	13.6	14.1	14.3
	6H	14.1	14.4	14.3	14.7	15.0	13.9	14.4	14.3	14.6	14.9
	8H	14.4	14.7	14.6	14.8	15.1	14.2	14.4	14.5	14.9	15.2
12H	12H	14.4	14.9	14.8	15.0	15.4	14.5	14.8	14.6	15.0	15.3
	4H	13.5	13.9	13.7	14.1	14.4	13.3	13.7	13.6	14.2	14.4
	6H	14.2	14.5	14.4	14.7	14.9	14.0	14.4	14.3	14.6	15.0
	8H	14.4	14.8	14.7	15.0	15.3	14.4	14.7	14.6	15.0	15.3