

Luminaire Property

Luminaire: RH-LPS16 20W 3000K

Report NO.:

Voltage: 220.5 V

Test NO.:

Current: 0.097 A

Lamp:

Power: 20.0 W

Sum Lumens: 1986.69 lm

Power Factor: 0.932

Number of Lamps: 1

Ballast Type: OSRAM 500mA

Diameter: 80mm

Width: 80mm

Length: mm

Height: 168mm

Photometric Type: Type C

Remark: CXA1820 40°

Photometric Results

Lumens: 1986.69 lm

Angle of maximum intensity: C:0.0 G:3.0

Effective luminous flux: 1834.62 lm

Half Peak Side Angle(50%): Left: -14.8 Right:18.8

Efficiency: 99.3345 lm/W

Light Out Rate(LOR) : 100.00%

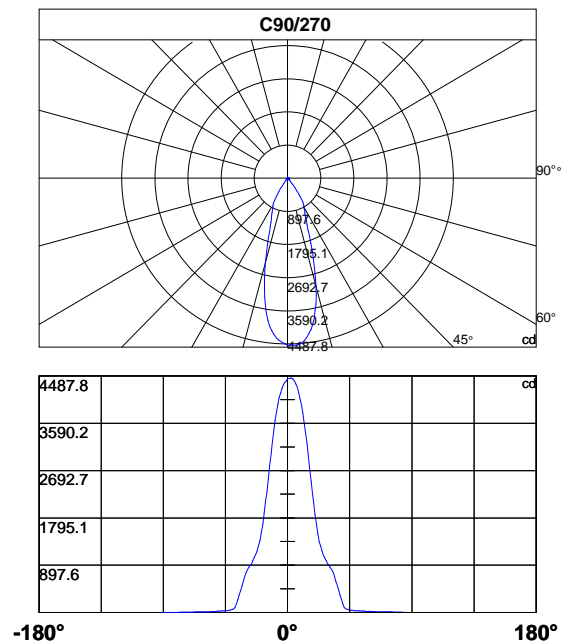
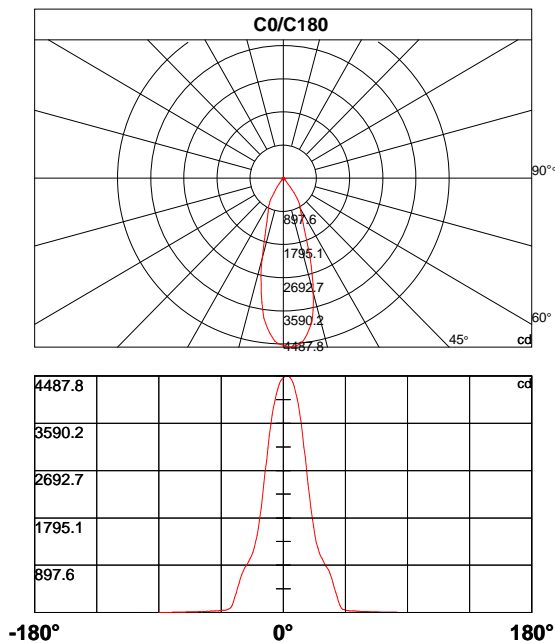
Central Intensity: 4442.965cd

Up Flux Rate: 0.0%

Maximum Intensity: 4487.84cd

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -33.2 Right:37.2



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	4443.0	4476.7	4481.8	4487.8	4477.0	4457.2	4419.2	4364.4	4286.6	4184.4
45.0	4443.0	4439.7	4445.6	4448.7	4426.6	4390.5	4337.8	4270.3	4167.9	4058.3
90.0	4443.0	4439.7	4445.6	4448.7	4426.6	4390.5	4337.8	4270.3	4167.9	4058.3
135.0	4443.0	4426.9	4391.6	4332.8	4244.8	4143.5	4022.2	3888.0	3750.8	3564.1
180.0	4443.0	4426.9	4391.6	4332.8	4244.8	4143.5	4022.2	3888.0	3750.8	3564.1
225.0	4443.0	4394.2	4362.0	4316.9	4256.8	4172.5	4079.7	3956.2	3816.1	3639.7
270.0	4443.0	4394.2	4362.0	4316.9	4256.8	4172.5	4079.7	3956.2	3816.1	3639.7
315.0	4443.0	4476.7	4481.8	4487.8	4477.0	4457.2	4419.2	4364.4	4286.6	4184.4
360.0	4443.0	4476.7	4481.8	4487.8	4477.0	4457.2	4419.2	4364.4	4286.6	4184.4

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	4064.6	3947.9	3779.9	3591.6	3375.1	3139.6	2934.0	2685.0	2441.7	2207.3
45.0	3929.4	3776.7	3597.6	3427.1	3205.6	2972.5	2732.7	2492.7	2261.6	2064.2
90.0	3929.4	3776.7	3597.6	3427.1	3205.6	2972.5	2732.7	2492.7	2261.6	2064.2
135.0	3353.9	3122.8	2883.0	2674.8	2441.3	2205.8	1984.3	1780.0	1595.7	1458.1
180.0	3353.9	3122.8	2883.0	2674.8	2441.3	2205.8	1984.3	1780.0	1595.7	1458.1
225.0	3439.7	3248.1	3013.3	2775.0	2530.6	2295.3	2097.6	1882.6	1678.0	1509.4
270.0	3439.7	3248.1	3013.3	2775.0	2530.6	2295.3	2097.6	1882.6	1678.0	1509.4
315.0	4064.6	3947.9	3779.9	3591.6	3375.1	3139.6	2934.0	2685.0	2441.7	2207.3
360.0	4064.6	3947.9	3779.9	3591.6	3375.1	3139.6	2934.0	2685.0	2441.7	2207.3

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	1986.1	1773.2	1613.6	1451.7	1325.6	1226.7	1141.6	1072.1	1025.3	969.7
45.0	1852.5	1654.1	1480.5	1342.6	1248.5	1163.1	1088.2	1027.9	981.2	929.4
90.0	1852.5	1654.1	1480.5	1342.6	1248.5	1163.1	1088.2	1027.9	981.2	929.4
135.0	1327.8	1228.3	1144.0	1079.7	1020.5	968.2	924.6	881.0	841.4	791.1
180.0	1327.8	1228.3	1144.0	1079.7	1020.5	968.2	924.6	881.0	841.4	791.1
225.0	1369.8	1261.6	1168.1	1107.0	1041.4	989.3	931.8	889.8	856.3	813.8
270.0	1369.8	1261.6	1168.1	1107.0	1041.4	989.3	931.8	889.8	856.3	813.8
315.0	1986.1	1773.2	1613.6	1451.7	1325.6	1226.7	1141.6	1072.1	1025.3	969.7
360.0	1986.1	1773.2	1613.6	1451.7	1325.6	1226.7	1141.6	1072.1	1025.3	969.7

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	922.0	877.4	838.8	803.1	735.8	653.0	562.6	471.6	378.1	299.7
45.0	884.3	850.8	815.3	756.5	678.7	587.9	509.9	418.2	332.1	242.4
90.0	884.3	850.8	815.3	756.5	678.7	587.9	509.9	418.2	332.1	242.4
135.0	717.7	647.1	556.9	464.4	371.1	284.4	200.8	136.5	90.6	69.5
180.0	717.7	647.1	556.9	464.4	371.1	284.4	200.8	136.5	90.6	69.5
225.0	759.7	683.5	593.8	502.3	425.6	335.0	247.2	168.1	97.8	67.3
270.0	759.7	683.5	593.8	502.3	425.6	335.0	247.2	168.1	97.8	67.3
315.0	922.0	877.4	838.8	803.1	735.8	653.0	562.6	471.6	378.1	299.7
360.0	922.0	877.4	838.8	803.1	735.8	653.0	562.6	471.6	378.1	299.7

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	210.2	134.2	81.9	61.0	51.8	46.2	36.8	34.0	32.0	30.5
45.0	157.7	96.5	74.5	61.2	51.2	46.0	41.8	39.6	35.1	33.3
90.0	157.7	96.5	74.5	61.2	51.2	46.0	41.8	39.6	35.1	33.3
135.0	57.9	48.4	44.2	41.8	39.4	35.1	35.7	30.9	32.7	30.9
180.0	57.9	48.4	44.2	41.8	39.4	35.1	35.7	30.9	32.7	30.9
225.0	57.5	47.7	42.3	34.4	34.9	30.7	32.3	27.9	26.4	24.8
270.0	57.5	47.7	42.3	34.4	34.9	30.7	32.3	27.9	26.4	24.8
315.0	210.2	134.2	81.9	61.0	51.8	46.2	36.8	34.0	32.0	30.5
360.0	210.2	134.2	81.9	61.0	51.8	46.2	36.8	34.0	32.0	30.5

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	29.4	27.5	28.7	24.4	22.9	21.8	20.4	19.0	17.6	16.8
45.0	34.4	29.9	30.5	29.4	24.6	26.6	25.1	20.7	19.4	20.9
90.0	34.4	29.9	30.5	29.4	24.6	26.6	25.1	20.7	19.4	20.9
135.0	29.2	25.1	26.1	21.8	20.7	22.2	18.3	16.8	18.7	15.0
180.0	29.2	25.1	26.1	21.8	20.7	22.2	18.3	16.8	18.7	15.0
225.0	26.1	21.8	20.2	18.7	17.5	16.4	15.6	14.8	13.5	15.0
270.0	26.1	21.8	20.2	18.7	17.5	16.4	15.6	14.8	13.5	15.0
315.0	29.4	27.5	28.7	24.4	22.9	21.8	20.4	19.0	17.6	16.8
360.0	29.4	27.5	28.7	24.4	22.9	21.8	20.4	19.0	17.6	16.8

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	15.9	17.2	16.4	15.3	14.2	13.7	12.8	9.4	8.9	8.5
45.0	17.6	16.4	18.3	17.2	13.5	12.6	14.6	11.6	10.9	12.6
90.0	17.6	16.4	18.3	17.2	13.5	12.6	14.6	11.6	10.9	12.6
135.0	16.8	16.1	12.4	11.6	10.7	10.5	12.4	12.0	8.9	8.1
180.0	16.8	16.1	12.4	11.6	10.7	10.5	12.4	12.0	8.9	8.1
225.0	14.4	13.1	12.8	12.4	11.1	10.6	10.0	9.4	6.5	6.3
270.0	14.4	13.1	12.8	12.4	11.1	10.6	10.0	9.4	6.5	6.3
315.0	15.9	17.2	16.4	15.3	14.2	13.7	12.8	9.4	8.9	8.5
360.0	15.9	17.2	16.4	15.3	14.2	13.7	12.8	9.4	8.9	8.5

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	7.8	7.2	6.4	5.7	5.8	5.9	5.5	5.9	6.4	6.9
45.0	11.8	11.6	11.0	10.5	10.1	9.8	9.6	6.7	6.3	6.9
90.0	11.8	11.6	11.0	10.5	10.1	9.8	9.6	6.7	6.3	6.9
135.0	8.1	7.8	7.2	6.7	7.0	6.7	6.1	5.2	4.3	5.2
180.0	8.1	7.8	7.2	6.7	7.0	6.7	6.1	5.2	4.3	5.2
225.0	7.1	7.8	7.6	7.2	5.0	4.8	4.5	3.9	3.3	1.9
270.0	7.1	7.8	7.6	7.2	5.0	4.8	4.5	3.9	3.3	1.9
315.0	7.8	7.2	6.4	5.7	5.8	5.9	5.5	5.9	6.4	6.9
360.0	7.8	7.2	6.4	5.7	5.8	5.9	5.5	5.9	6.4	6.9

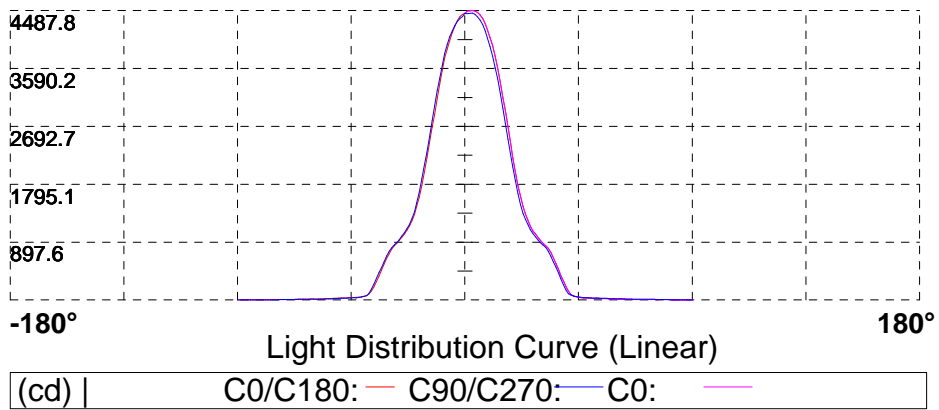
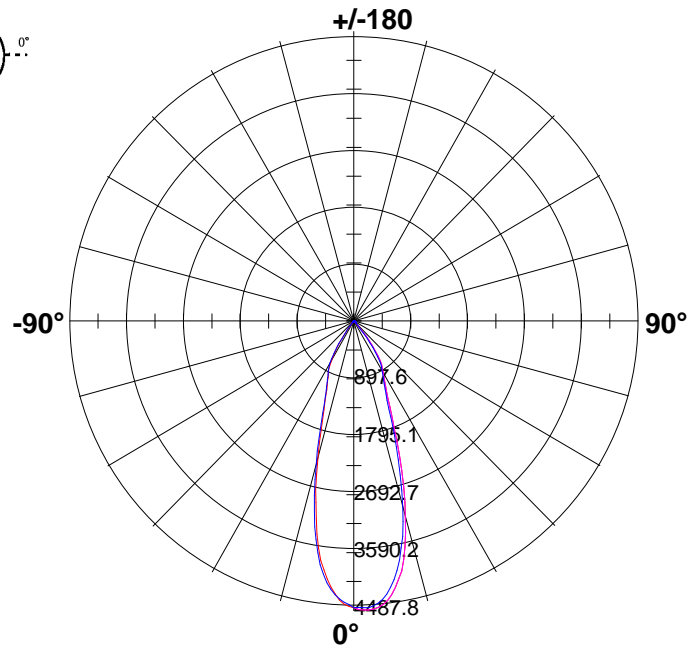
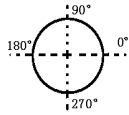
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	6.5	6.5	5.2	1.9	1.7	1.5	1.0	0.7	0.9	1.1
45.0	7.4	4.3	3.7	3.9	2.2	1.9	1.7	1.5	0.0	0.0
90.0	7.4	4.3	3.7	3.9	2.2	1.9	1.7	1.5	0.0	0.0
135.0	3.2	2.3	1.9	1.5	1.3	1.1	1.0	0.9	0.8	0.7
180.0	3.2	2.3	1.9	1.5	1.3	1.1	1.0	0.9	0.8	0.7
225.0	1.8	1.6	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
270.0	1.8	1.6	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
315.0	6.5	6.5	5.2	1.9	1.7	1.5	1.0	0.7	0.9	1.1
360.0	6.5	6.5	5.2	1.9	1.7	1.5	1.0	0.7	0.9	1.1

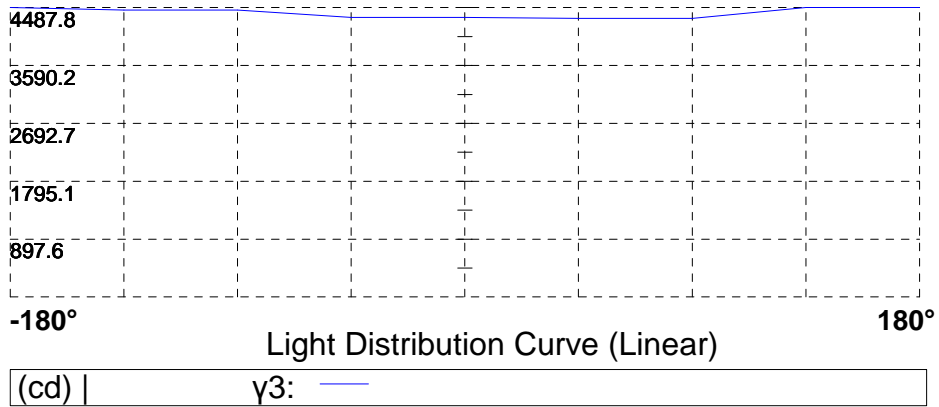
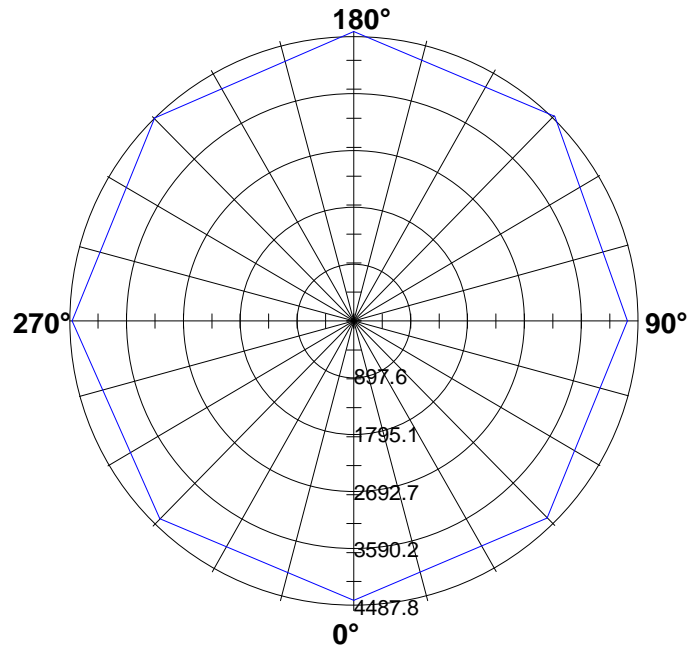
C\G	90.0
0.0	1.3
45.0	1.3
90.0	1.3
135.0	0.0
180.0	0.0
225.0	0.5
270.0	0.5
315.0	1.3
360.0	1.3

Light Distribution Curve [Unit: cd]

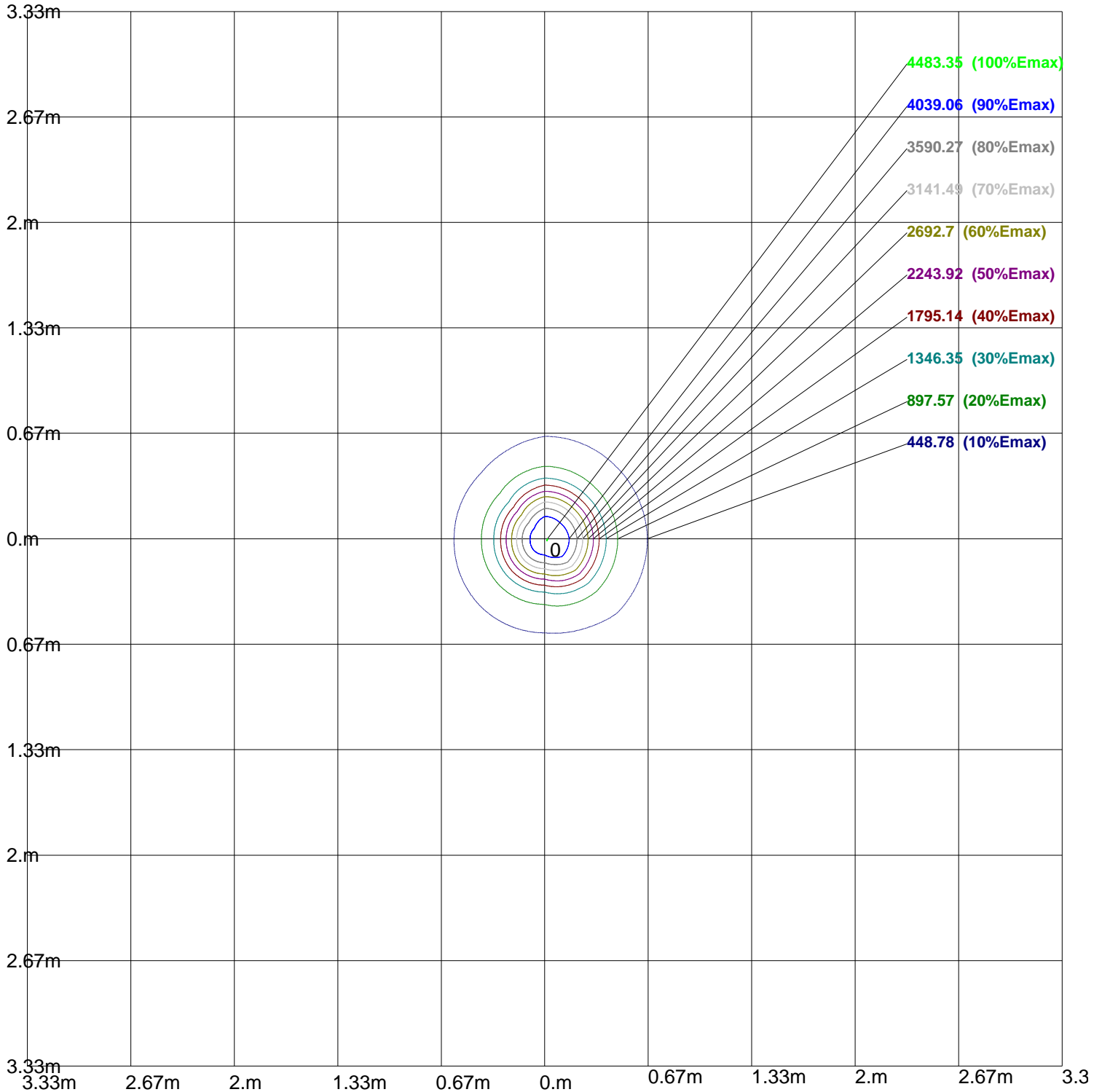
Luminaire



Max Plane Light Distribution Curve [Unit: cd]



Iso-Lux[lx]



Height: 1 m
Max Illuminance : 4487.84lx

Luminance Limiting Curve

Diameter: 80mm

Length: mm

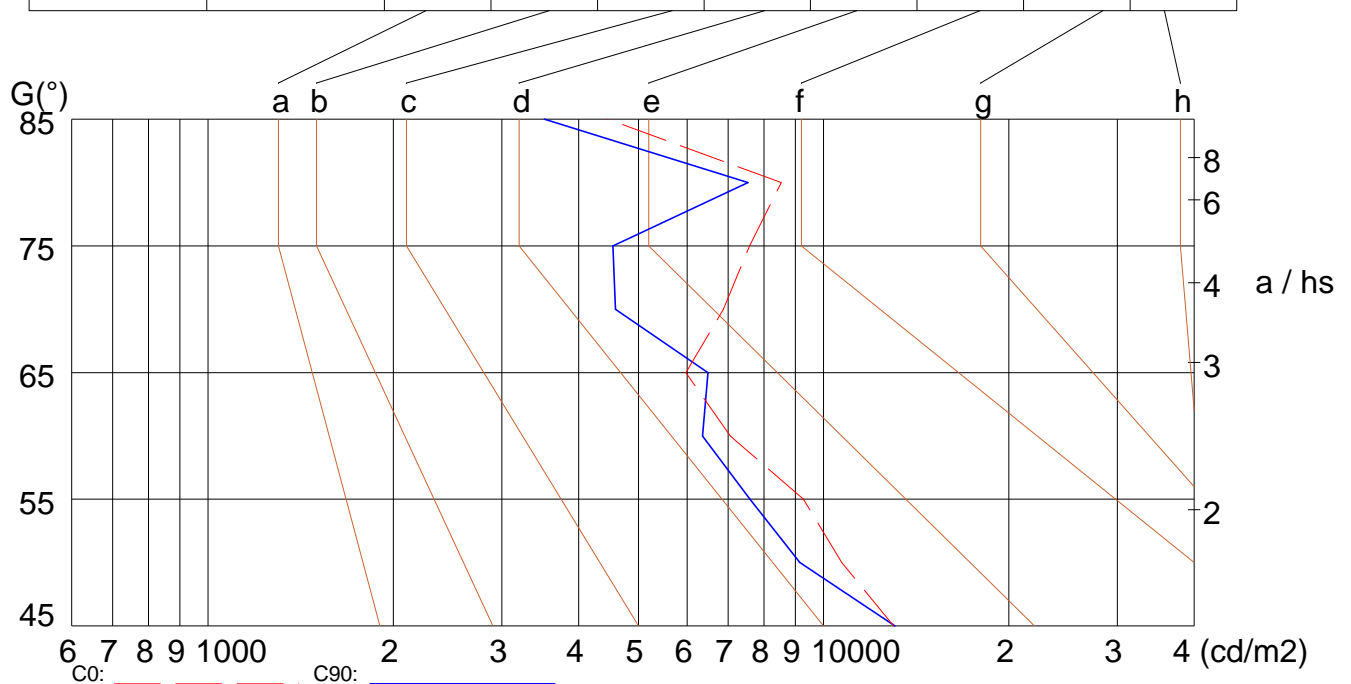
Width: 80mm

Height: 168mm

(cd/m²)

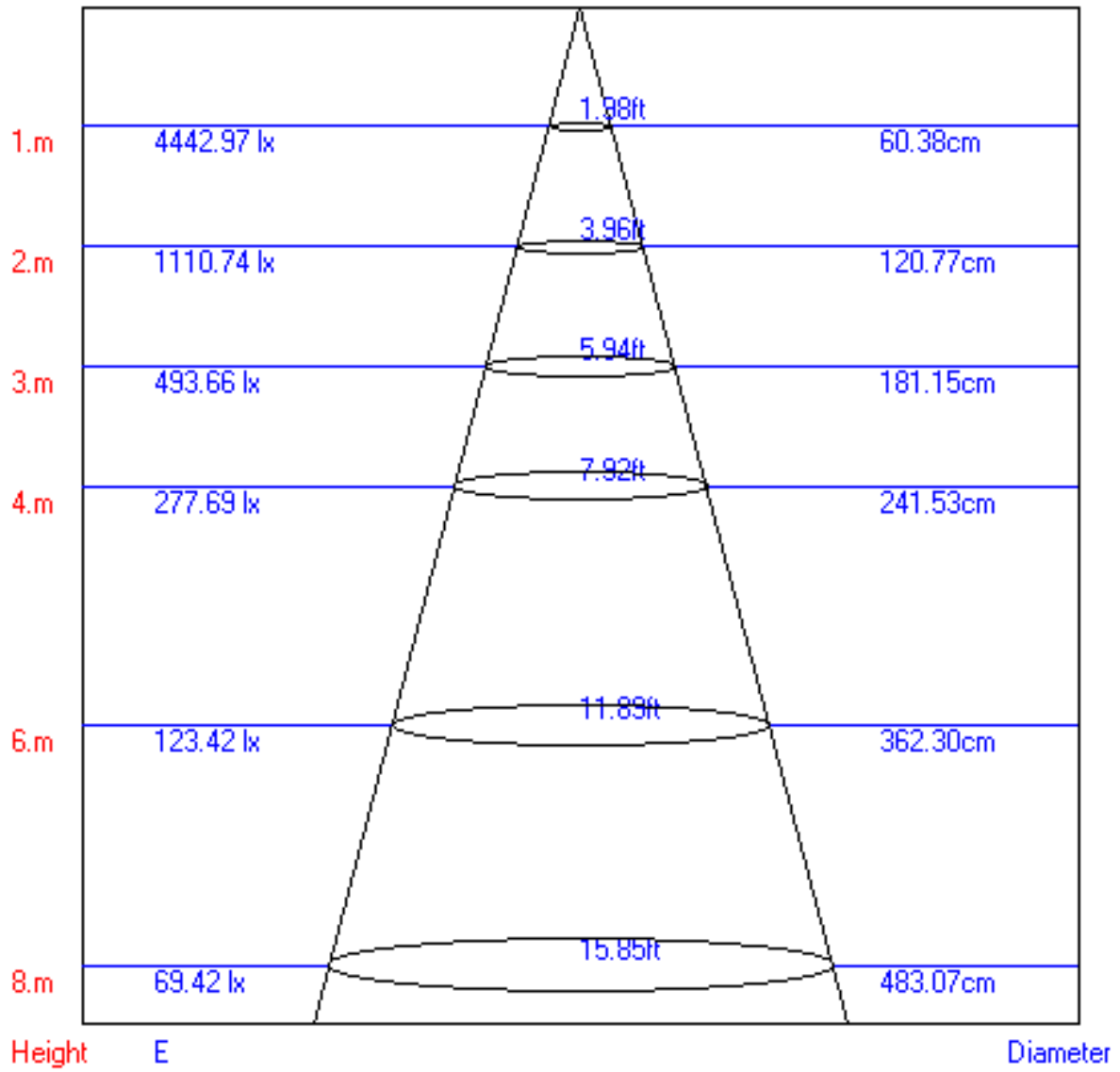
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	12999	10705	9269	7055	5976	6876	7585	8538	4458
C90	13057	9146	7594	6360	6484	4589	4543	7537	3519

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)

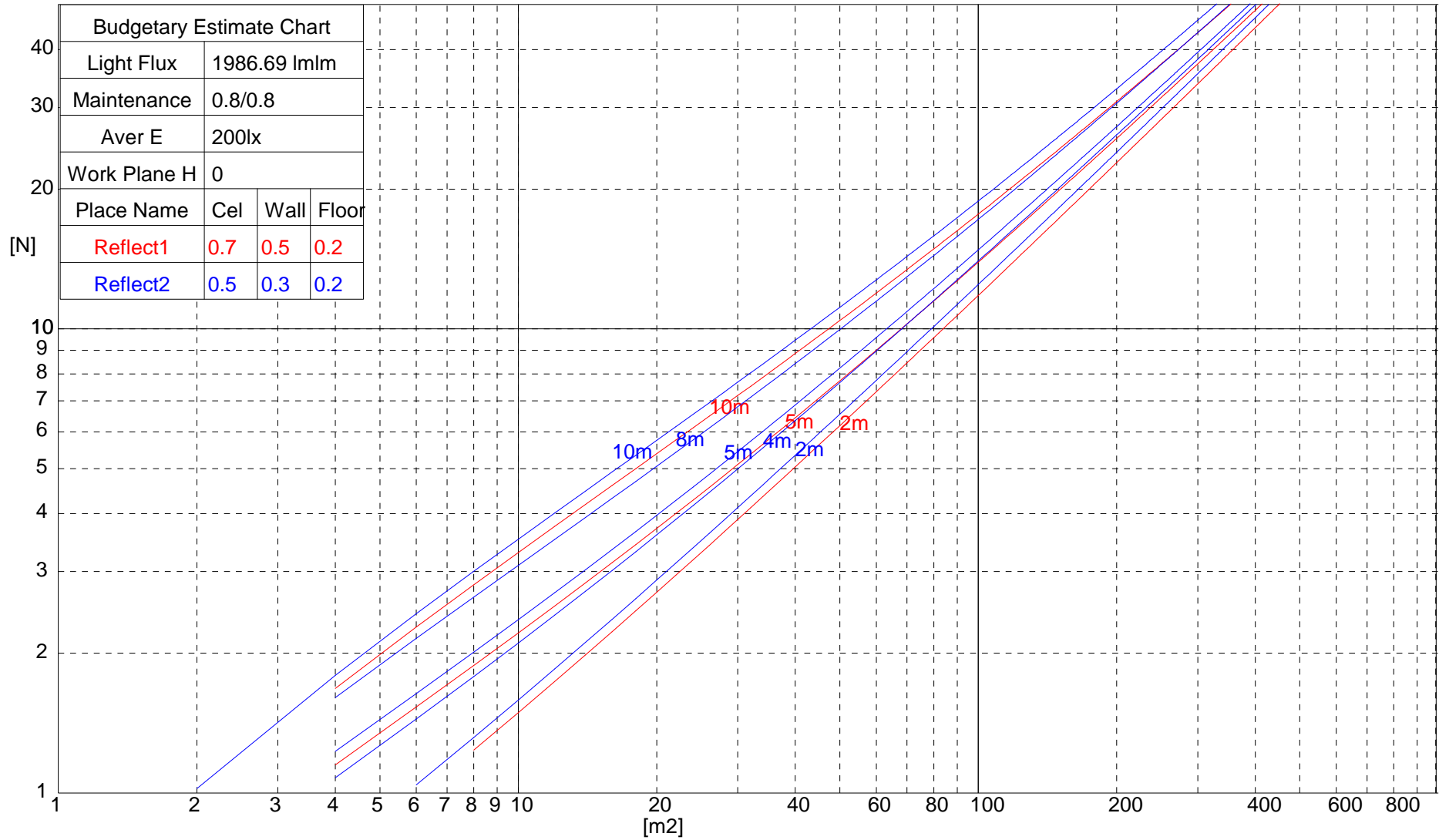
Lux-Distance Curve



Beam Angle:33.60°

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
RRCR	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	1.15	1.14	1.14	1.13	1.12	1.12	1.09	1.08	1.07	1.03	1.02	1.01	0.96	0.95	0.94	0.89
2	1.09	1.08	1.07	1.07	1.06	1.05	1.03	1.02	1.00	0.98	0.97	0.95	0.92	0.90	0.89	0.84
3	1.03	1.02	1.01	1.02	1.00	0.99	0.98	0.96	0.94	0.94	0.91	0.89	0.89	0.86	0.84	0.79
4	0.98	0.97	0.96	0.96	0.95	0.94	0.93	0.91	0.89	0.90	0.87	0.84	0.85	0.82	0.79	0.75
5	0.93	0.92	0.91	0.92	0.90	0.89	0.89	0.86	0.84	0.86	0.82	0.80	0.82	0.78	0.75	0.71
6	0.88	0.87	0.86	0.87	0.85	0.84	0.85	0.82	0.80	0.82	0.78	0.76	0.78	0.75	0.72	0.68
7	0.84	0.83	0.82	0.83	0.81	0.80	0.81	0.78	0.76	0.78	0.75	0.72	0.75	0.71	0.68	0.65
8	0.81	0.79	0.78	0.80	0.78	0.77	0.77	0.75	0.73	0.75	0.72	0.69	0.72	0.68	0.65	0.62
9	0.77	0.76	0.75	0.76	0.74	0.73	0.74	0.71	0.70	0.72	0.68	0.66	0.69	0.65	0.62	0.59
10	0.74	0.73	0.72	0.73	0.71	0.70	0.71	0.68	0.67	0.69	0.66	0.63	0.67	0.63	0.60	0.56



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		Weft to light axis direction of observation					Direction of light axis parallel observation				
X	Y										
2H	2H	13.1	14.2	13.3	14.1	14.6	13.0	14.1	13.1	14.2	14.7
	3H	14.5	15.5	14.8	15.9	15.9	14.3	15.4	14.6	15.8	15.9
	4H	15.0	16.1	15.4	16.6	16.7	15.0	16.0	15.4	16.4	16.7
	6H	15.7	16.4	16.0	16.8	16.8	15.5	16.3	15.8	16.8	16.9
	8H	15.8	16.7	16.0	16.9	17.1	15.7	16.6	15.9	16.8	17.1
4H	12H	15.9	16.7	16.1	17.0	17.3	15.7	16.6	16.1	17.0	17.4
	2H	13.9	14.7	14.1	14.9	15.1	13.9	14.7	14.0	15.0	15.0
	3H	15.5	16.4	15.7	16.3	16.7	15.4	16.2	15.6	16.3	16.6
	4H	16.2	16.8	16.4	16.9	17.3	16.0	16.8	16.3	16.9	17.4
	6H	16.7	17.3	17.0	17.5	17.9	16.6	17.3	16.8	17.5	17.8
8H	8H	16.8	17.5	17.2	17.7	18.0	16.9	17.3	17.1	17.7	18.0
	12H	17.1	17.6	17.4	17.8	18.2	17.0	17.5	17.3	17.8	18.1
	4H	16.4	17.0	16.7	17.2	17.6	16.4	17.0	16.6	17.3	17.6
	6H	17.1	17.6	17.5	17.9	18.3	17.0	17.5	17.4	17.9	18.2
	8H	17.6	17.9	17.9	18.2	18.5	17.4	17.8	17.9	18.1	18.7
12H	12H	17.8	18.1	18.1	18.5	18.7	17.5	18.0	18.0	18.5	18.8
	4H	16.5	17.1	16.9	17.4	17.6	16.4	16.9	16.8	17.2	17.6
	6H	17.3	17.8	17.7	17.9	18.4	17.2	17.7	17.6	17.9	18.3
	8H	17.6	18.0	18.1	18.2	18.7	17.5	17.9	18.0	18.3	18.7