Luminaire Property

Luminaire: RH-MSD06 6W 4000K

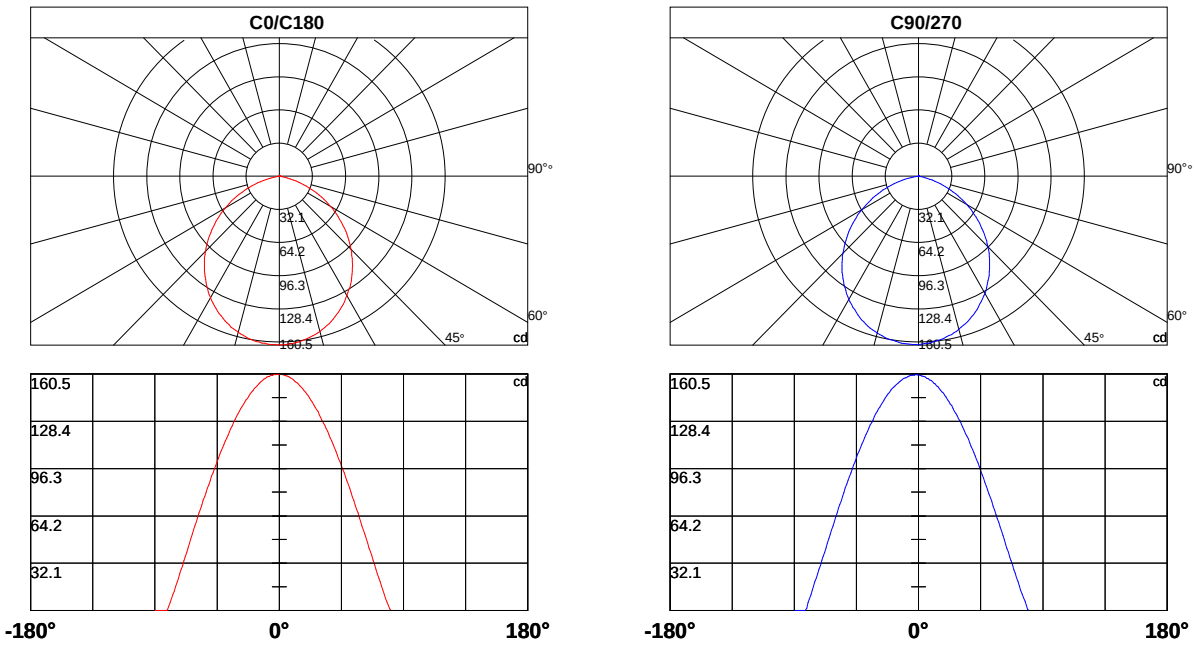
Report NO.:
Test NO.:
Lamp:
Sum Lumens: 400.72 lm
Number of Lamps: 1
Diameter: mm
Length: 120mm
Photometric Type: Type C

Voltage: 220.0 V
Current: 0.056 A
Power: 6.6 W
Power Factor: 0.531
Ballast Type: EMC300mA
Width: 120mm
Height: 38mm
Remark: PMMA+0.5W SMD2835

Photometric Results

Lumens: 400.72 lm
Effective luminous flux: 395.58 lm
Efficiency: 60.7152 lm/W
Central Intensity: 160.246cd
Maximum Intensity: 160.474cd
Beam Angle(10%): Left: -75.1 Right:74.3

Angle of maximum intensity: C:0.0 G:1.0
Half Peak Side Angle(50%): Left: -52.9 Right:52.0
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	160.2	160.5	160.3	159.9	159.8	159.3	159.0	158.7	157.9	157.5
45.0	160.2	159.7	159.2	158.9	158.8	158.3	157.6	157.2	156.5	156.1
90.0	160.2	159.7	159.2	158.9	158.8	158.3	157.6	157.2	156.5	156.1
135.0	160.2	160.3	160.1	160.2	160.1	159.5	159.6	158.8	158.8	158.3
180.0	160.2	160.3	160.1	160.2	160.1	159.5	159.6	158.8	158.8	158.3
225.0	160.2	160.0	160.1	159.7	159.6	159.7	159.5	159.0	158.6	158.1
270.0	160.2	160.0	160.1	159.7	159.6	159.7	159.5	159.0	158.6	158.1
315.0	160.2	160.5	160.3	159.9	159.8	159.3	159.0	158.7	157.9	157.5
360.0	160.2	160.5	160.3	159.9	159.8	159.3	159.0	158.7	157.9	157.5

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	156.7	155.9	155.2	154.4	153.6	152.6	151.4	150.6	149.4	148.3
45.0	155.2	154.2	153.8	152.7	151.9	150.6	149.4	148.3	147.4	146.1
90.0	155.2	154.2	153.8	152.7	151.9	150.6	149.4	148.3	147.4	146.1
135.0	157.5	157.1	156.2	155.2	154.5	153.5	152.5	151.5	150.8	149.2
180.0	157.5	157.1	156.2	155.2	154.5	153.5	152.5	151.5	150.8	149.2
225.0	157.8	157.5	156.6	155.8	155.1	154.2	153.3	152.5	151.7	150.8
270.0	157.8	157.5	156.6	155.8	155.1	154.2	153.3	152.5	151.7	150.8
315.0	156.7	155.9	155.2	154.4	153.6	152.6	151.4	150.6	149.4	148.3
360.0	156.7	155.9	155.2	154.4	153.6	152.6	151.4	150.6	149.4	148.3

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	146.9	145.5	144.0	142.5	141.4	139.5	138.1	136.5	135.0	132.7
45.0	144.8	142.9	141.9	140.2	139.0	137.1	135.2	133.6	132.0	130.1
90.0	144.8	142.9	141.9	140.2	139.0	137.1	135.2	133.6	132.0	130.1
135.0	148.2	147.1	145.5	144.1	143.0	141.4	139.8	138.2	136.8	135.0
180.0	148.2	147.1	145.5	144.1	143.0	141.4	139.8	138.2	136.8	135.0
225.0	149.6	148.0	147.2	145.7	144.3	142.8	141.3	139.8	138.1	136.8
270.0	149.6	148.0	147.2	145.7	144.3	142.8	141.3	139.8	138.1	136.8
315.0	146.9	145.5	144.0	142.5	141.4	139.5	138.1	136.5	135.0	132.7
360.0	146.9	145.5	144.0	142.5	141.4	139.5	138.1	136.5	135.0	132.7

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	131.0	129.1	127.0	125.8	123.5	121.5	119.3	117.1	114.9	112.7
45.0	128.5	126.5	124.6	122.1	120.0	118.5	116.4	113.7	111.5	109.3
90.0	128.5	126.5	124.6	122.1	120.0	118.5	116.4	113.7	111.5	109.3
135.0	133.2	131.6	129.6	127.4	125.5	123.4	121.3	119.1	117.1	114.9
180.0	133.2	131.6	129.6	127.4	125.5	123.4	121.3	119.1	117.1	114.9
225.0	135.2	133.4	131.6	129.3	127.4	125.9	123.7	121.6	119.4	117.5
270.0	135.2	133.4	131.6	129.3	127.4	125.9	123.7	121.6	119.4	117.5
315.0	131.0	129.1	127.0	125.8	123.5	121.5	119.3	117.1	114.9	112.7
360.0	131.0	129.1	127.0	125.8	123.5	121.5	119.3	117.1	114.9	112.7

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	110.6	107.9	105.6	103.0	100.8	98.3	95.9	93.3	90.6	87.9
45.0	107.1	105.0	102.5	100.1	97.5	94.9	92.1	90.0	87.1	84.3
90.0	107.1	105.0	102.5	100.1	97.5	94.9	92.1	90.0	87.1	84.3
135.0	112.7	110.5	108.2	106.1	103.4	101.2	98.3	96.1	93.3	91.1
180.0	112.7	110.5	108.2	106.1	103.4	101.2	98.3	96.1	93.3	91.1
225.0	115.2	113.0	110.5	108.3	106.1	103.6	101.1	98.6	96.1	93.4
270.0	115.2	113.0	110.5	108.3	106.1	103.6	101.1	98.6	96.1	93.4
315.0	110.6	107.9	105.6	103.0	100.8	98.3	95.9	93.3	90.6	87.9
360.0	110.6	107.9	105.6	103.0	100.8	98.3	95.9	93.3	90.6	87.9

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	85.4	83.0	80.2	77.1	74.5	71.4	68.9	66.2	63.0	60.4
45.0	81.6	79.0	76.4	74.1	70.9	68.0	65.1	62.4	59.8	56.7
90.0	81.6	79.0	76.4	74.1	70.9	68.0	65.1	62.4	59.8	56.7
135.0	88.1	85.5	82.9	79.9	77.3	74.8	71.8	69.1	66.3	63.2
180.0	88.1	85.5	82.9	79.9	77.3	74.8	71.8	69.1	66.3	63.2
225.0	90.7	88.3	85.9	83.3	80.1	77.6	74.5	71.8	69.4	66.3
270.0	90.7	88.3	85.9	83.3	80.1	77.6	74.5	71.8	69.4	66.3
315.0	85.4	83.0	80.2	77.1	74.5	71.4	68.9	66.2	63.0	60.4
360.0	85.4	83.0	80.2	77.1	74.5	71.4	68.9	66.2	63.0	60.4

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	57.4	54.4	51.8	48.5	45.8	42.4	39.7	37.1	34.0	30.8
45.0	54.2	50.8	48.2	45.0	42.2	39.4	36.4	33.8	30.7	27.6
90.0	54.2	50.8	48.2	45.0	42.2	39.4	36.4	33.8	30.7	27.6
135.0	60.4	57.4	54.7	51.6	48.4	45.3	42.5	39.5	36.5	33.9
180.0	60.4	57.4	54.7	51.6	48.4	45.3	42.5	39.5	36.5	33.9
225.0	63.3	60.1	57.3	54.5	51.5	48.9	45.6	42.4	39.6	36.8
270.0	63.3	60.1	57.3	54.5	51.5	48.9	45.6	42.4	39.6	36.8
315.0	57.4	54.4	51.8	48.5	45.8	42.4	39.7	37.1	34.0	30.8
360.0	57.4	54.4	51.8	48.5	45.8	42.4	39.7	37.1	34.0	30.8

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	27.8	24.8	21.9	19.5	16.8	14.0	10.9	8.1	5.8	3.2
45.0	25.4	22.4	19.6	16.6	13.6	11.0	8.7	6.2	3.4	0.7
90.0	25.4	22.4	19.6	16.6	13.6	11.0	8.7	6.2	3.4	0.7
135.0	30.5	27.8	25.2	21.9	19.3	16.4	13.2	10.5	8.1	5.5
180.0	30.5	27.8	25.2	21.9	19.3	16.4	13.2	10.5	8.1	5.5
225.0	34.1	30.7	28.1	25.0	22.1	19.6	16.5	13.8	10.5	7.8
270.0	34.1	30.7	28.1	25.0	22.1	19.6	16.5	13.8	10.5	7.8
315.0	27.8	24.8	21.9	19.5	16.8	14.0	10.9	8.1	5.8	3.2
360.0	27.8	24.8	21.9	19.5	16.8	14.0	10.9	8.1	5.8	3.2

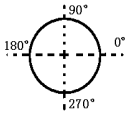
Photometric Data Table [cd]

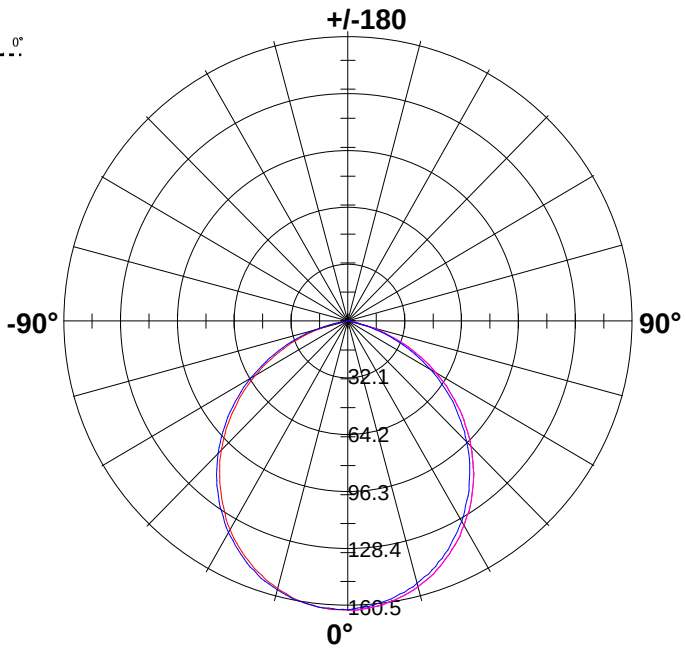
C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135.0	2.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.0	2.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
225.0	5.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
270.0	5.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
315.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
360.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

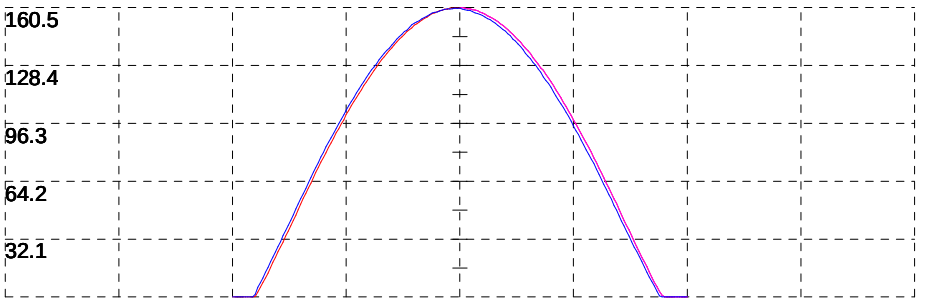
C\G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

Light Distribution Curve [Unit: cd]

Luminaire



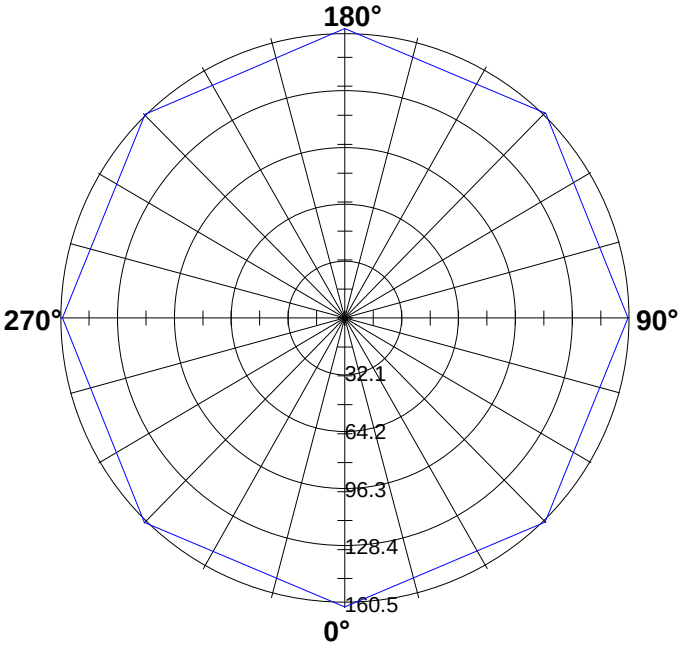


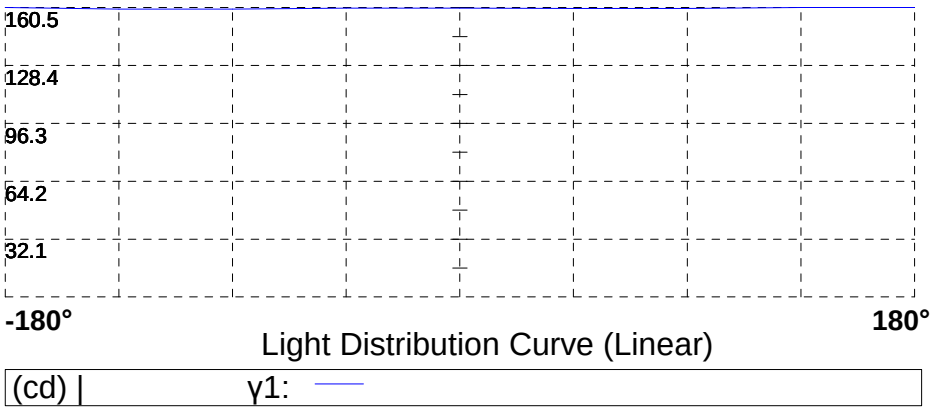


Light Distribution Curve (Linear)

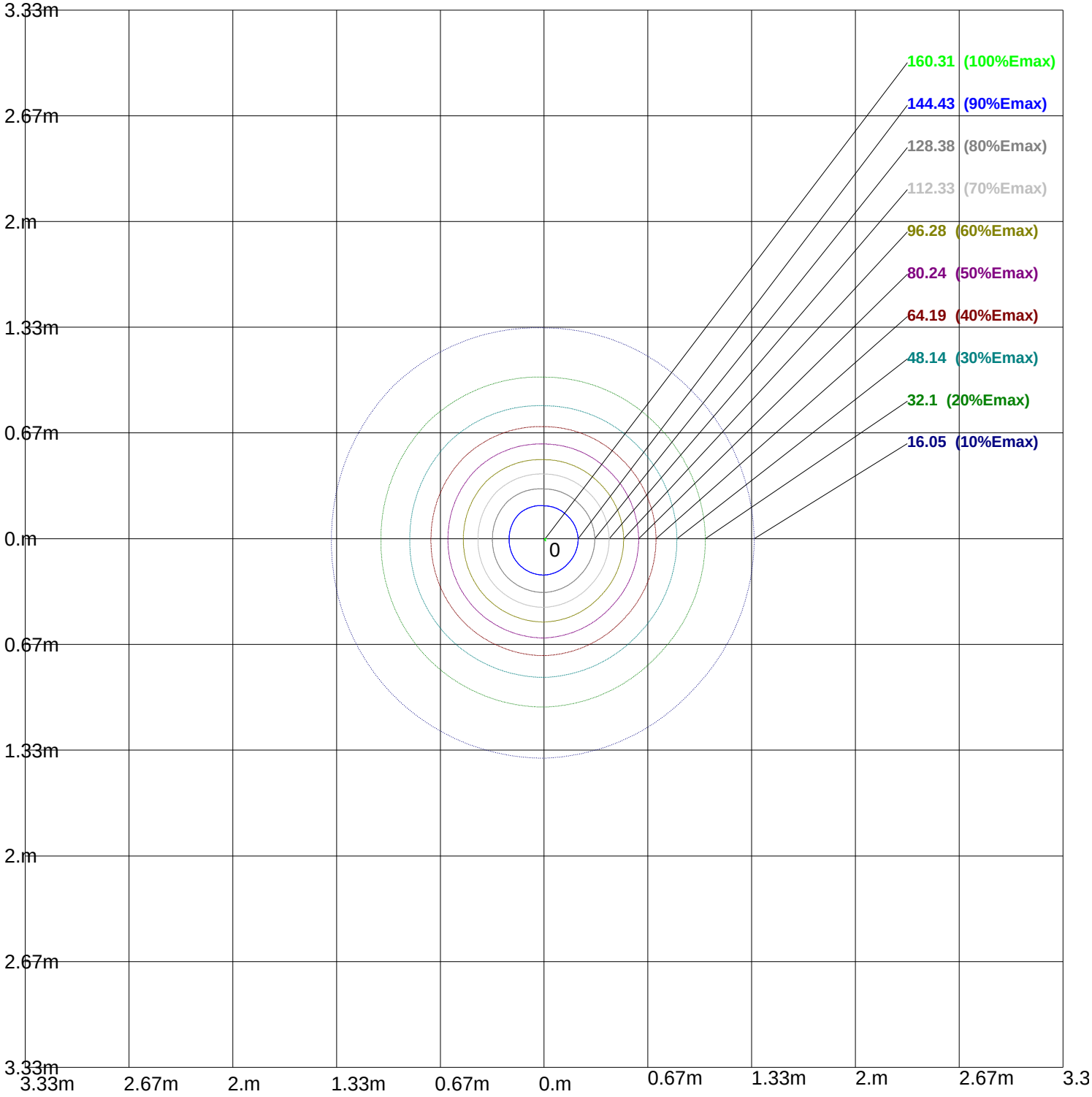
(cd) | C0/C180: C90/C270: C0:

Max Plane Light Distribution Curve [Unit: cd]





Iso-Lux[lx]



Height: 1 m
Max Illuminance : 160.47lx

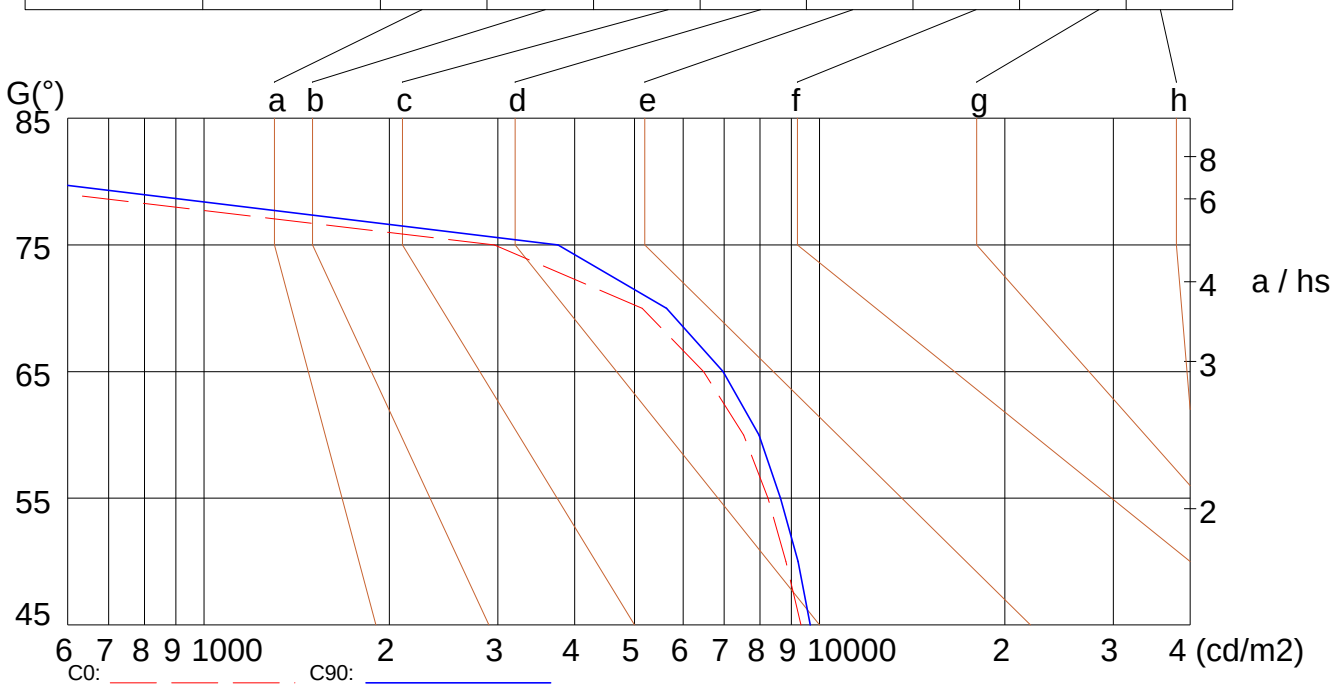
Luminance Limitting Curve

Diameter: mm
Length: 120mm
Width: 120mm
Height: 38mm

(cd/m2)

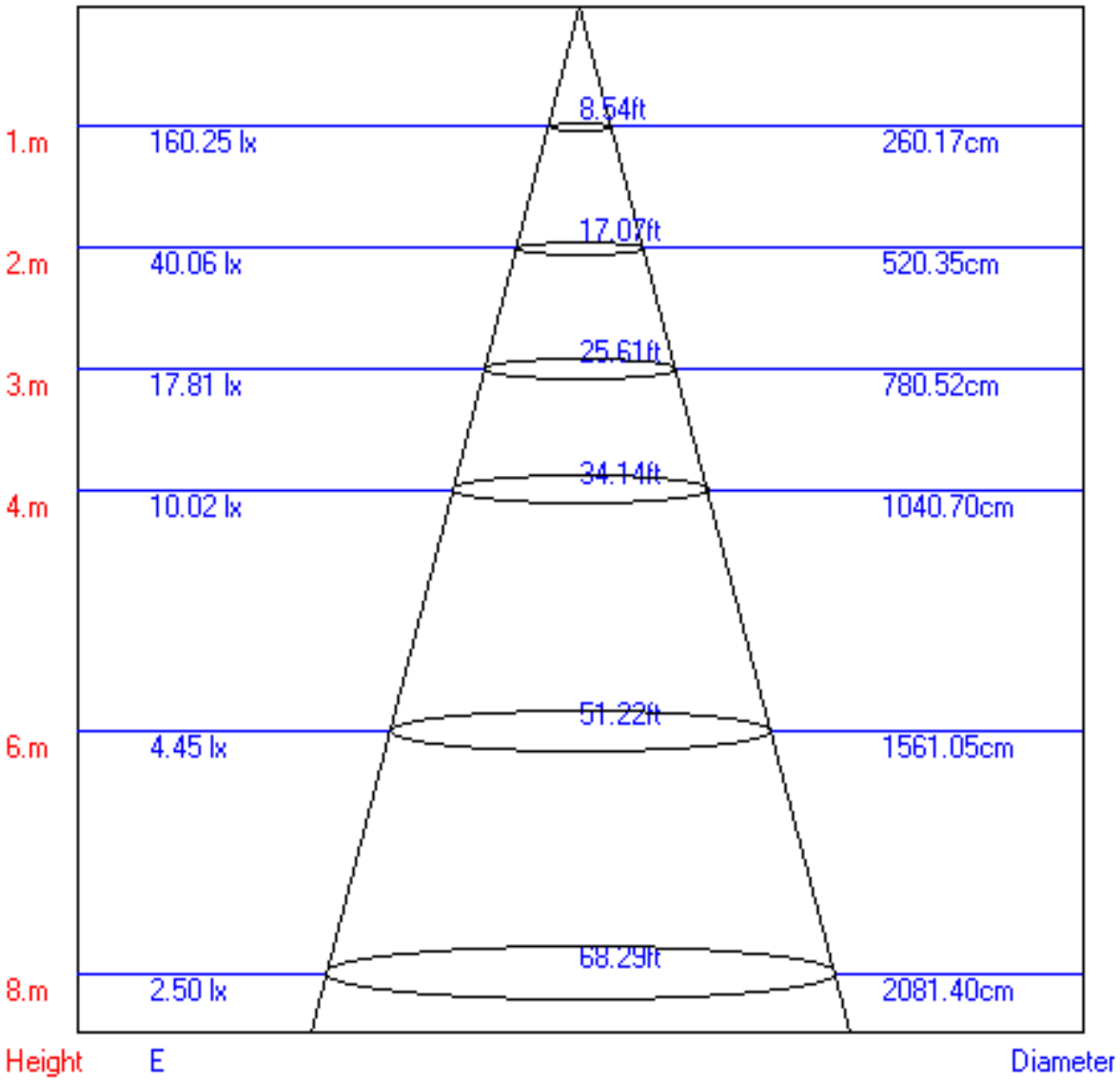
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	9318	8815	8238	7526	6477	5148	2963	0	
C90	9655	9229	8641	7974	6972	5636	3758	388	

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. Limitting Curve (C0/C90)

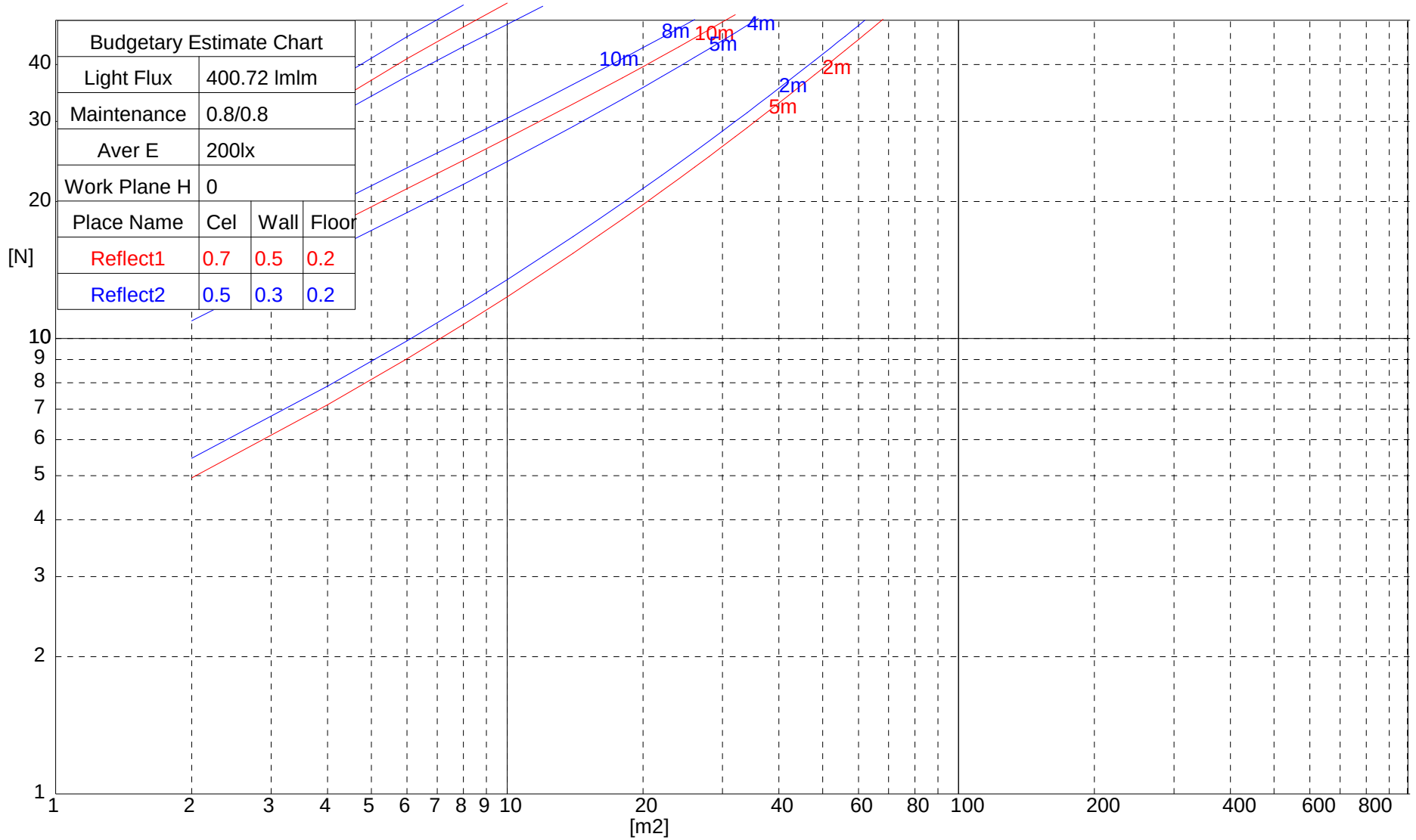
Lux-Distance Curve



Beam Angle:104.90°

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	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	1.07	1.06	1.04	1.06	1.04	1.02	1.02	1.00	0.98	0.97	0.95	0.93	0.90	0.88	0.86	0.81
2	0.92	0.90	0.88	0.92	0.89	0.87	0.89	0.86	0.83	0.85	0.82	0.79	0.81	0.77	0.74	0.69
3	0.80	0.77	0.75	0.80	0.76	0.74	0.78	0.74	0.71	0.76	0.71	0.67	0.72	0.67	0.63	0.59
4	0.69	0.67	0.65	0.70	0.66	0.64	0.69	0.64	0.61	0.67	0.62	0.58	0.65	0.59	0.55	0.51
5	0.61	0.58	0.56	0.61	0.58	0.55	0.61	0.57	0.53	0.60	0.55	0.51	0.59	0.53	0.48	0.44
6	0.54	0.51	0.50	0.55	0.51	0.49	0.55	0.50	0.47	0.55	0.49	0.45	0.54	0.47	0.42	0.39
7	0.48	0.46	0.44	0.49	0.45	0.43	0.50	0.45	0.41	0.50	0.44	0.40	0.49	0.43	0.38	0.34
8	0.43	0.41	0.39	0.44	0.41	0.39	0.45	0.40	0.37	0.46	0.40	0.36	0.45	0.39	0.34	0.31
9	0.39	0.37	0.36	0.40	0.37	0.35	0.41	0.37	0.34	0.42	0.36	0.32	0.42	0.35	0.31	0.28
10	0.36	0.34	0.32	0.37	0.34	0.32	0.38	0.33	0.30	0.39	0.33	0.29	0.39	0.33	0.28	0.25


Budgetary Estimate Chart
Light Flux 400.72 lmlm
Maintenance 0.8/0.8
Aver E 200lx
Work Plane H 0
Place Name Cel Wall Floor
Reflect1 0.7 0.5 0.2
Reflect2 0.5 0.3 0.2
8m
10m
5m
4m
10m
2m
5m
2m
[N]
40
30
20
10
9
8
7
6
5
4
3
2
1
1 2 3 4 5 6 7 8 9 10 20 40 60 80 100 200 400 600 800
[m2]

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	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	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