

Luminaire Property

Luminaire: DL RD 18w 6500K

Report NO.:

Voltage: 220.2 V

Test NO.:

Current: 0.076 A

Lamp: SMD 2835

Power: 16.0 W

Sum Lumens: 1201.85 lm

Power Factor: 0.956

Number of Lamps: 108

Ballast Type:

Diameter: 155mm

Width: 155mm

Length: 155mm

Height: 45mm

Photometric Type: Type C

Remark:

Photometric Results

Lumens: 1201.85 lm

Angle of maximum intensity: C:135.0 G:2.0

Effective luminous flux: 1174.95 lm

Half Peak Side Angle(50%): Left: -50.4 Right:50.6

Efficiency: N.A

Light Out Rate(LOR) : 100.00%

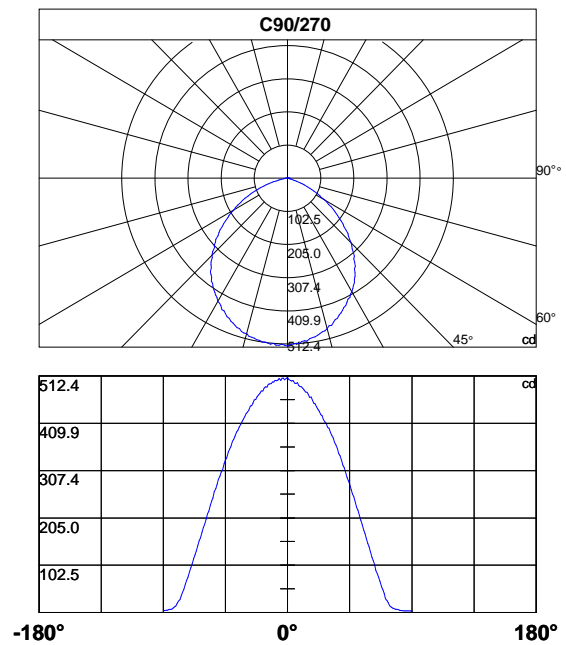
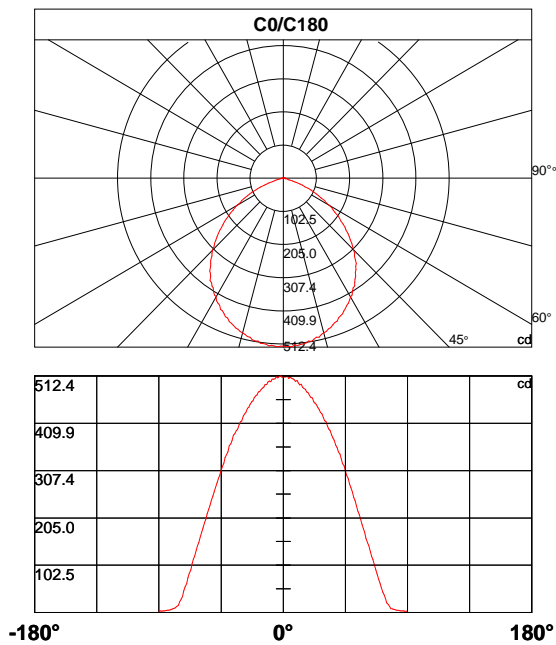
Central Intensity: 509.763cd

Up Flux Rate: 0.0%

Maximum Intensity: 512.433cd

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -71.3 Right:71.5



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	509.8	510.7	510.7	511.8	506.9	509.4	507.3	506.4	504.7	500.6
45.0	509.8	504.8	503.2	501.4	503.1	497.7	496.1	497.9	491.8	489.8
90.0	509.8	504.8	503.2	501.4	503.1	497.7	496.1	497.9	491.8	489.8
135.0	509.8	510.1	512.4	510.9	508.6	510.7	506.3	505.6	505.7	499.9
180.0	509.8	510.1	512.4	510.9	508.6	510.7	506.3	505.6	505.7	499.9
225.0	509.8	507.1	504.3	507.7	507.8	502.9	506.8	503.6	501.9	502.8
270.0	509.8	507.1	504.3	507.7	507.8	502.9	506.8	503.6	501.9	502.8
315.0	509.8	510.7	510.7	511.8	506.9	509.4	507.3	506.4	504.7	500.6
360.0	509.8	510.7	510.7	511.8	506.9	509.4	507.3	506.4	504.7	500.6

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	502.8	497.4	493.3	494.8	488.4	485.2	483.8	478.1	476.2	470.6
45.0	489.3	485.4	482.2	477.9	477.4	472.6	465.9	466.7	459.9	453.4
90.0	489.3	485.4	482.2	477.9	477.4	472.6	465.9	466.7	459.9	453.4
135.0	501.4	499.7	493.6	493.7	488.3	486.4	483.7	478.8	477.6	471.8
180.0	501.4	499.7	493.6	493.7	488.3	486.4	483.7	478.8	477.6	471.8
225.0	499.6	499.4	495.9	495.4	494.6	488.1	489.1	486.1	479.8	480.1
270.0	499.6	499.4	495.9	495.4	494.6	488.1	489.1	486.1	479.8	480.1
315.0	502.8	497.4	493.3	494.8	488.4	485.2	483.8	478.1	476.2	470.6
360.0	502.8	497.4	493.3	494.8	488.4	485.2	483.8	478.1	476.2	470.6

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	466.3	464.8	456.7	453.4	450.5	443.8	439.6	433.6	429.8	422.6
45.0	452.5	445.1	440.8	436.0	428.8	426.7	418.4	412.3	409.9	401.3
90.0	452.5	445.1	440.8	436.0	428.8	426.7	418.4	412.3	409.9	401.3
135.0	468.7	465.6	458.2	456.7	450.5	444.7	442.3	433.0	429.8	425.6
180.0	468.7	465.6	458.2	456.7	450.5	444.7	442.3	433.0	429.8	425.6
225.0	474.7	470.8	467.6	461.7	460.6	453.4	447.8	447.4	438.8	434.0
270.0	474.7	470.8	467.6	461.7	460.6	453.4	447.8	447.4	438.8	434.0
315.0	466.3	464.8	456.7	453.4	450.5	443.8	439.6	433.6	429.8	422.6
360.0	466.3	464.8	456.7	453.4	450.5	443.8	439.6	433.6	429.8	422.6

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	415.7	413.8	403.8	397.4	394.8	384.4	378.3	372.9	362.3	356.9
45.0	398.6	390.7	383.9	378.2	368.4	363.6	354.8	343.9	340.0	329.8
90.0	398.6	390.7	383.9	378.2	368.4	363.6	354.8	343.9	340.0	329.8
135.0	414.9	413.4	406.8	397.2	393.9	386.8	384.2	372.9	365.6	361.6
180.0	414.9	413.4	406.8	397.2	393.9	386.8	384.2	372.9	365.6	361.6
225.0	431.3	423.6	418.8	413.2	408.1	401.6	394.4	391.2	381.9	375.4
270.0	431.3	423.6	418.8	413.2	408.1	401.6	394.4	391.2	381.9	375.4
315.0	415.7	413.8	403.8	397.4	394.8	384.4	378.3	372.9	362.3	356.9
360.0	415.7	413.8	403.8	397.4	394.8	384.4	378.3	372.9	362.3	356.9

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	347.8	343.5	332.7	322.3	317.8	306.7	297.0	289.9	278.3	270.6
45.0	319.0	314.2	304.8	293.0	285.4	278.4	266.5	256.4	250.8	238.5
90.0	319.0	314.2	304.8	293.0	285.4	278.4	266.5	256.4	250.8	238.5
135.0	348.4	342.5	335.5	322.9	317.2	308.5	297.0	290.0	280.7	270.5
180.0	348.4	342.5	335.5	322.9	317.2	308.5	297.0	290.0	280.7	270.5
225.0	371.3	359.3	353.8	347.5	334.8	330.3	322.0	308.8	304.7	295.7
270.0	371.3	359.3	353.8	347.5	334.8	330.3	322.0	308.8	304.7	295.7
315.0	347.8	343.5	332.7	322.3	317.8	306.7	297.0	289.9	278.3	270.6
360.0	347.8	343.5	332.7	322.3	317.8	306.7	297.0	289.9	278.3	270.6

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	260.9	248.8	242.9	232.0	219.3	213.1	203.5	190.3	181.8	174.1
45.0	227.7	221.7	209.0	199.5	191.3	179.1	171.4	161.0	149.3	142.0
90.0	227.7	221.7	209.0	199.5	191.3	179.1	171.4	161.0	149.3	142.0
135.0	261.5	252.7	242.3	232.4	224.3	213.4	202.8	195.0	183.1	173.9
180.0	261.5	252.7	242.3	232.4	224.3	213.4	202.8	195.0	183.1	173.9
225.0	288.8	277.2	268.5	261.2	248.2	241.4	232.4	219.1	213.4	202.9
270.0	288.8	277.2	268.5	261.2	248.2	241.4	232.4	219.1	213.4	202.9
315.0	260.9	248.8	242.9	232.0	219.3	213.1	203.5	190.3	181.8	174.1
360.0	260.9	248.8	242.9	232.0	219.3	213.1	203.5	190.3	181.8	174.1

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	161.0	151.3	144.8	131.9	121.5	114.0	101.9	92.3	83.3	71.5
45.0	131.9	119.0	112.5	103.6	90.9	82.8	75.6	66.9	55.0	49.3
90.0	131.9	119.0	112.5	103.6	90.9	82.8	75.6	66.9	55.0	49.3
135.0	165.2	151.9	145.1	135.1	122.3	115.6	105.4	92.3	85.0	75.5
180.0	165.2	151.9	145.1	135.1	122.3	115.6	105.4	92.3	85.0	75.5
225.0	190.4	184.1	173.9	161.8	155.0	145.3	133.0	125.0	116.9	104.6
270.0	190.4	184.1	173.9	161.8	155.0	145.3	133.0	125.0	116.9	104.6
315.0	161.0	151.3	144.8	131.9	121.5	114.0	101.9	92.3	83.3	71.5
360.0	161.0	151.3	144.8	131.9	121.5	114.0	101.9	92.3	83.3	71.5

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	63.4	54.0	43.9	37.8	30.4	20.9	16.9	13.1	8.4	7.5
45.0	41.5	30.0	25.3	20.7	14.3	11.6	9.9	7.9	6.6	6.6
90.0	41.5	30.0	25.3	20.7	14.3	11.6	9.9	7.9	6.6	6.6
135.0	62.4	55.3	47.0	34.9	29.4	23.0	15.6	12.9	10.5	9.1
180.0	62.4	55.3	47.0	34.9	29.4	23.0	15.6	12.9	10.5	9.1
225.0	96.6	89.0	76.6	69.8	61.6	49.6	43.8	36.1	27.6	24.4
270.0	96.6	89.0	76.6	69.8	61.6	49.6	43.8	36.1	27.6	24.4
315.0	63.4	54.0	43.9	37.8	30.4	20.9	16.9	13.1	8.4	7.5
360.0	63.4	54.0	43.9	37.8	30.4	20.9	16.9	13.1	8.4	7.5

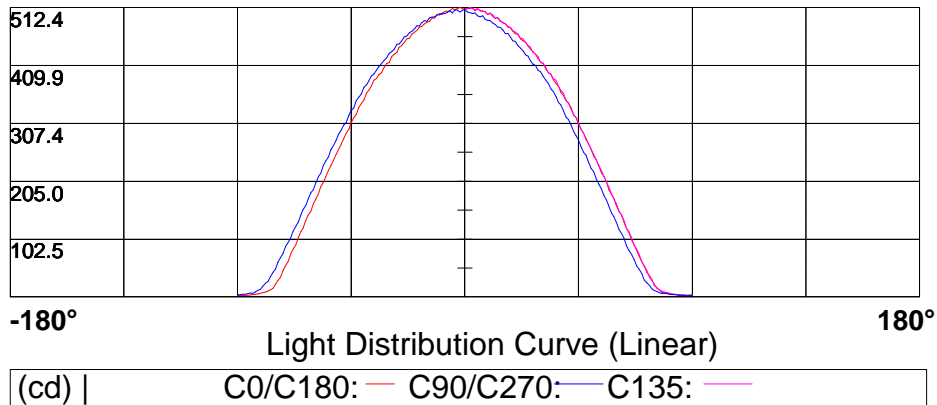
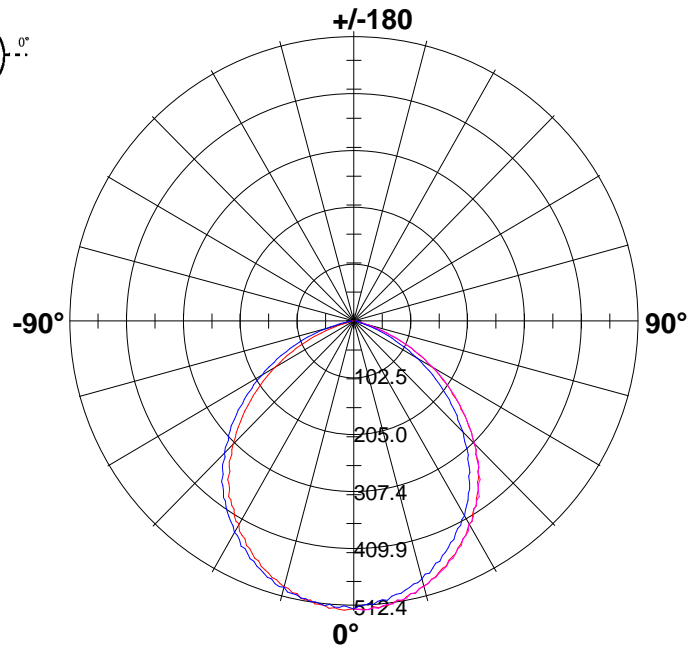
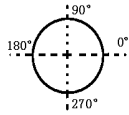
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	6.9	6.0	4.9	4.9	4.4	3.1	3.6	3.1	2.6	2.9
45.0	5.9	4.9	4.4	4.1	3.6	3.3	3.0	3.1	3.1	3.1
90.0	5.9	4.9	4.4	4.1	3.6	3.3	3.0	3.1	3.1	3.1
135.0	7.6	6.8	5.4	5.1	4.5	3.9	3.2	3.2	2.6	3.1
180.0	7.6	6.8	5.4	5.1	4.5	3.9	3.2	3.2	2.6	3.1
225.0	19.3	13.5	11.4	9.1	6.8	6.9	6.2	5.0	5.1	4.4
270.0	19.3	13.5	11.4	9.1	6.8	6.9	6.2	5.0	5.1	4.4
315.0	6.9	6.0	4.9	4.9	4.4	3.1	3.6	3.1	2.6	2.9
360.0	6.9	6.0	4.9	4.9	4.4	3.1	3.6	3.1	2.6	2.9

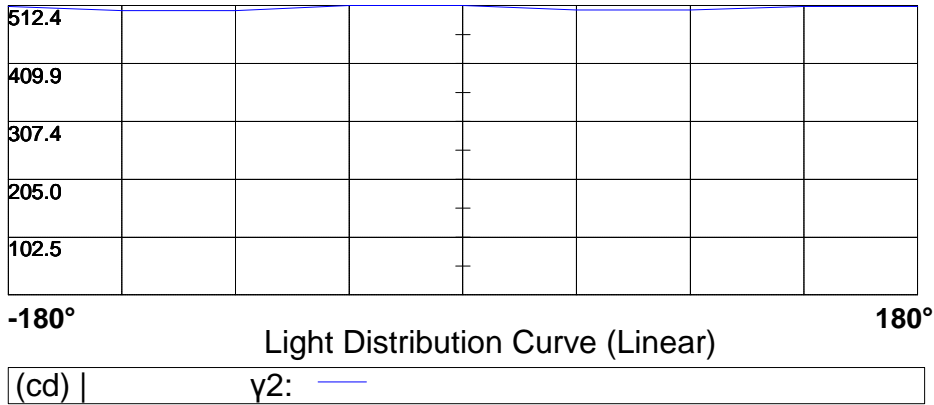
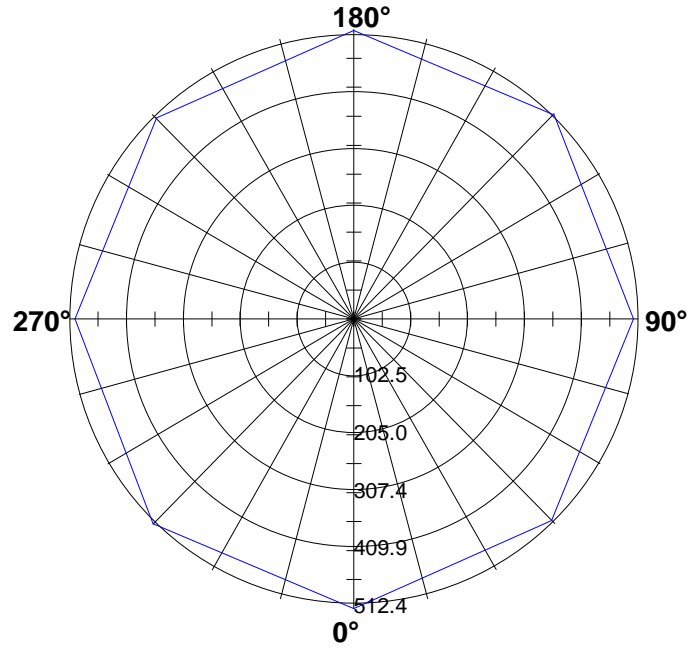
C\G	90.0
0.0	2.9
45.0	2.9
90.0	2.9
135.0	2.8
180.0	2.8
225.0	3.9
270.0	3.9
315.0	2.9
360.0	2.9

Light Distribution Curve [Unit: cd]

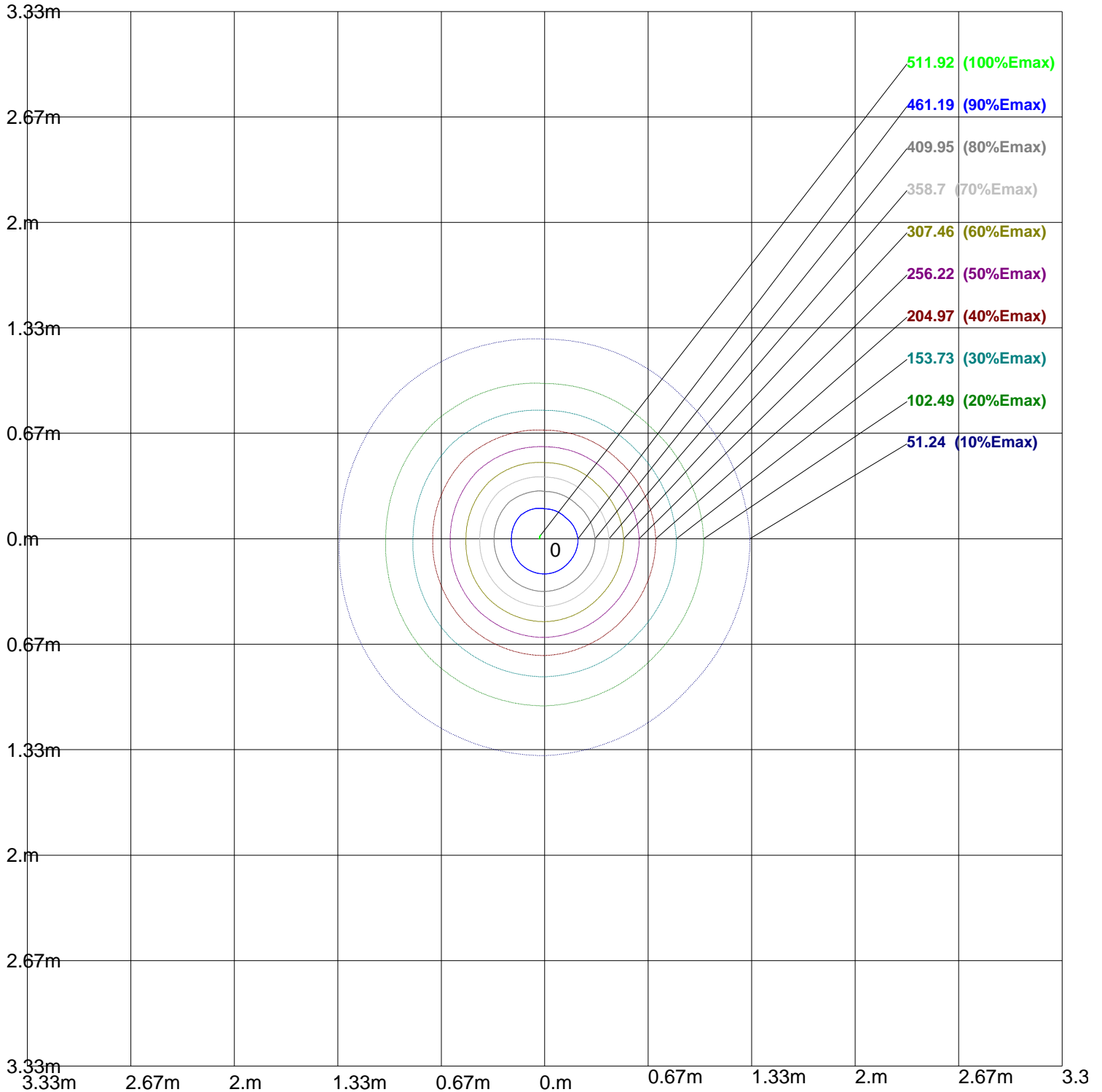
Luminaire



Max Plane Light Distribution Curve [Unit: cd]



Iso-Lux[lx]



Height: 1 m
Max Illuminance : 512.43lx

Luminance Limiting Curve

Diameter: 155mm

Length: 155mm

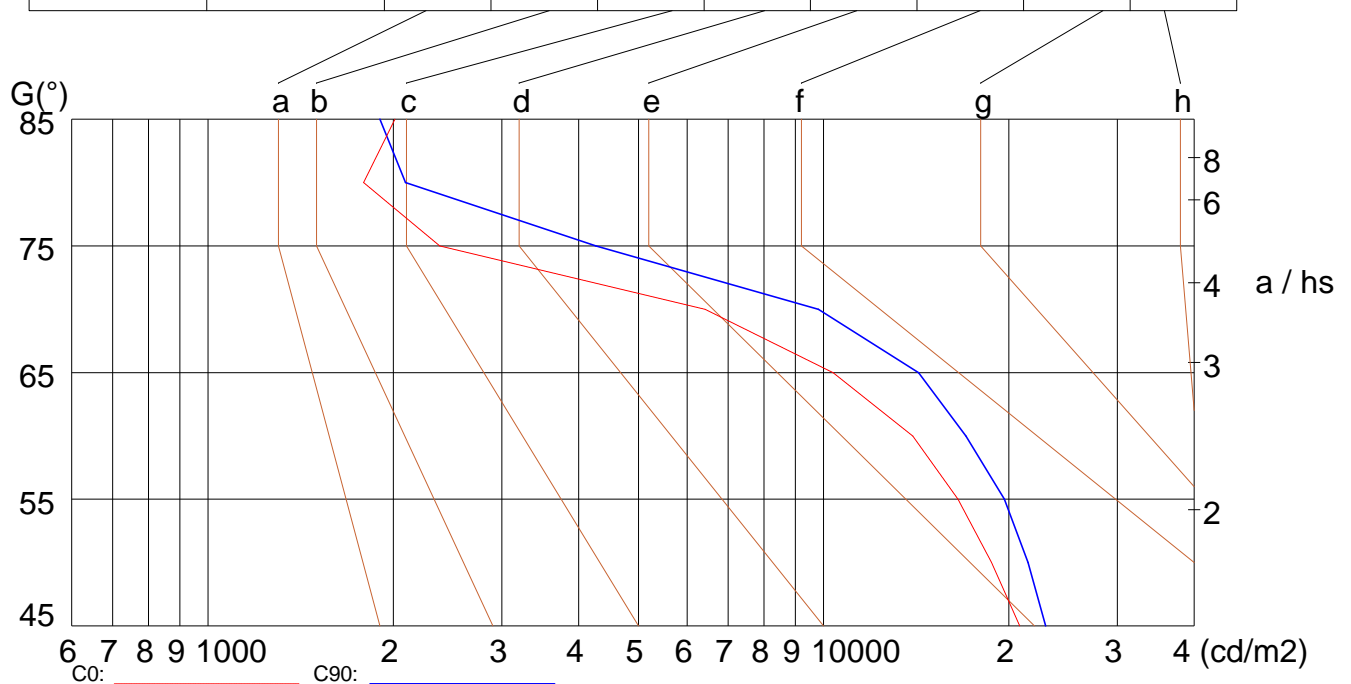
Width: 155mm

Height: 45mm

(cd/m²)

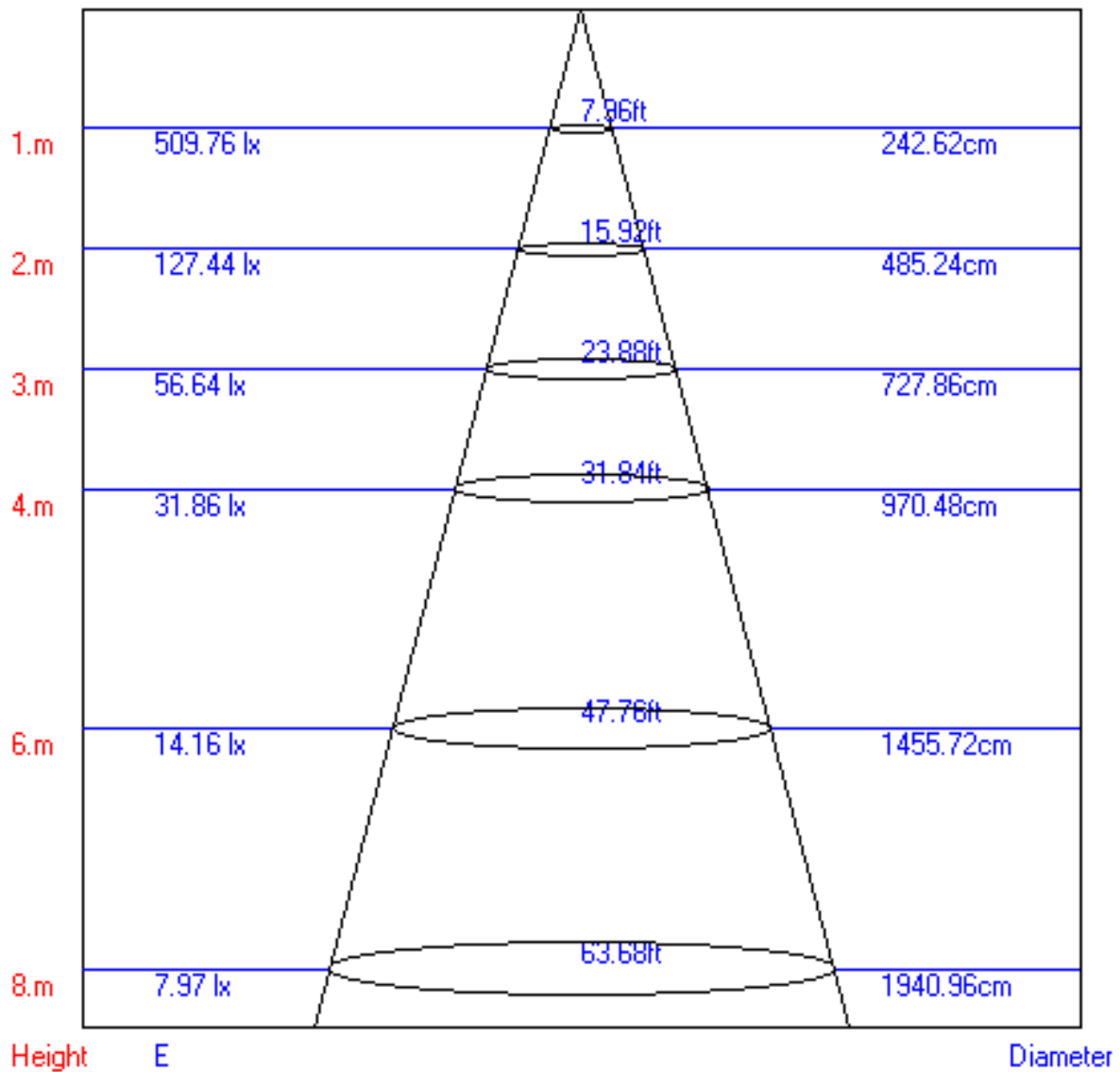
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	20832	18740	16525	13956	10362	6419	2377	1789	2011
C90	22947	21476	19662	17039	14274	9804	4269	2094	1903

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)

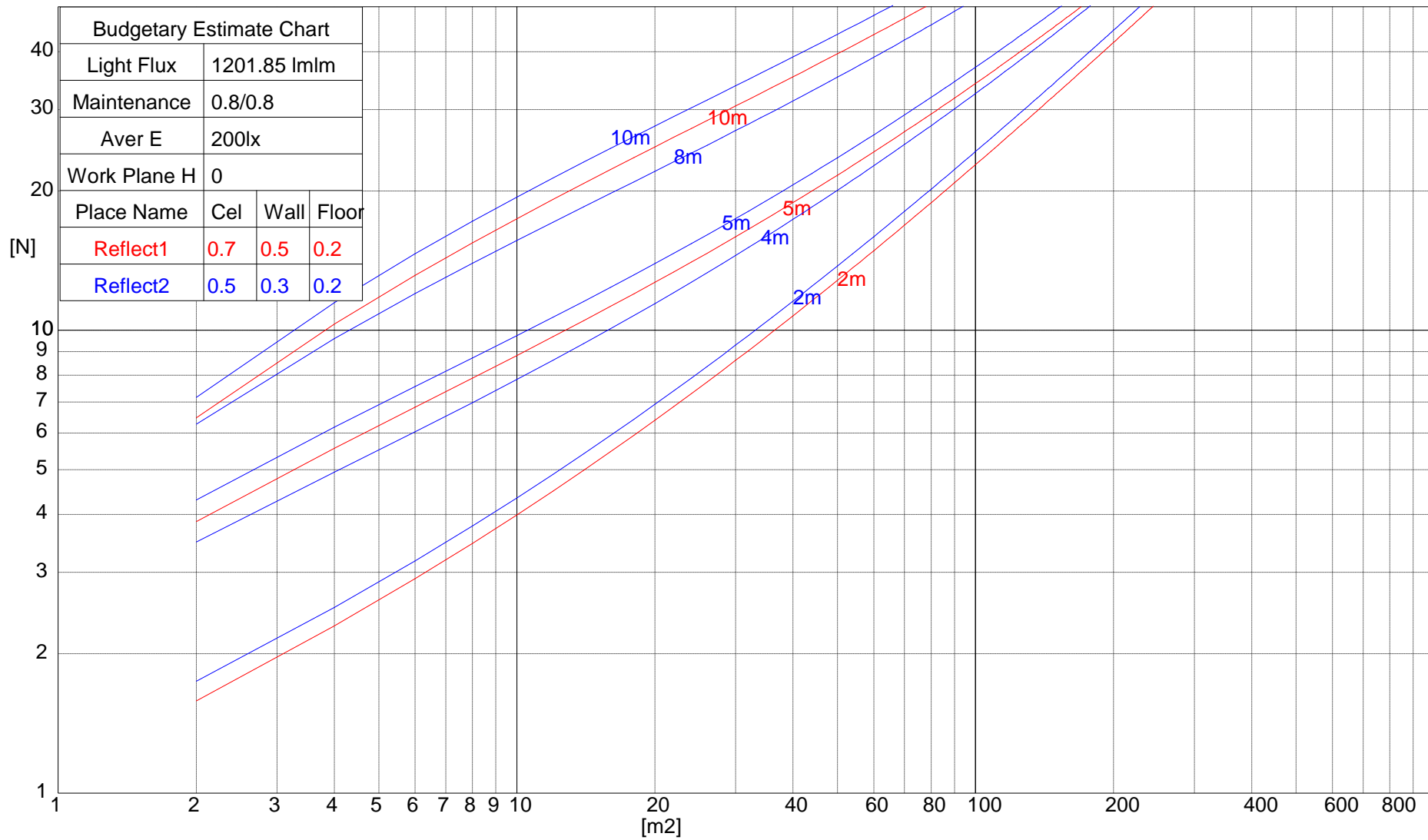
Lux-Distance Curve



Beam Angle:101.00°

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
RRC	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	1.08	1.06	1.05	1.06	1.05	1.03	1.02	1.00	0.99	0.97	0.95	0.94	0.91	0.89	0.87	0.82
2	0.94	0.91	0.90	0.93	0.90	0.88	0.90	0.87	0.84	0.86	0.83	0.80	0.81	0.78	0.75	0.70
3	0.81	0.79	0.77	0.81	0.78	0.76	0.79	0.76	0.72	0.77	0.72	0.69	0.73	0.69	0.65	0.60
4	0.71	0.69	0.67	0.71	0.68	0.66	0.70	0.66	0.63	0.69	0.64	0.60	0.66	0.61	0.56	0.52
5	0.63	0.60	0.58	0.63	0.60	0.57	0.63	0.58	0.55	0.62	0.56	0.52	0.60	0.54	0.49	0.46
6	0.56	0.53	0.52	0.56	0.53	0.51	0.57	0.52	0.48	0.56	0.50	0.46	0.55	0.49	0.44	0.40
7	0.50	0.47	0.46	0.51	0.47	0.45	0.51	0.46	0.43	0.51	0.45	0.41	0.50	0.44	0.39	0.36
8	0.45	0.43	0.41	0.46	0.42	0.40	0.47	0.42	0.39	0.47	0.41	0.37	0.47	0.40	0.35	0.32
9	0.41	0.39	0.37	0.42	0.38	0.36	0.43	0.38	0.35	0.43	0.37	0.33	0.43	0.37	0.32	0.29
10	0.37	0.35	0.34	0.38	0.35	0.33	0.39	0.35	0.32	0.40	0.34	0.30	0.40	0.34	0.29	0.26



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