

Luminaire Property

Luminaire: PL RD 24W 6500K

Report NO.:

Voltage: 220.3 V

Test NO.:

Current: 0.104 A

Lamp: SMD2835

Power: 22.4 W

Sum Lumens: 2189.46 lm

Power Factor: 0.980

Number of Lamps: 144

Ballast Type:

Diameter: 175mm

Width: 175mm

Length: 175mm

Height: 27mm

Photometric Type: Type C

Remark:

Photometric Results

Lumens: 2189.46 lm

Angle of maximum intensity: C:135.0 G:1.0

Effective luminous flux: 2149.31 lm

Half Peak Side Angle(50%): Left: -52.2 Right:52.0

Efficiency: N.A

Light Out Rate(LOR) : 100.00%

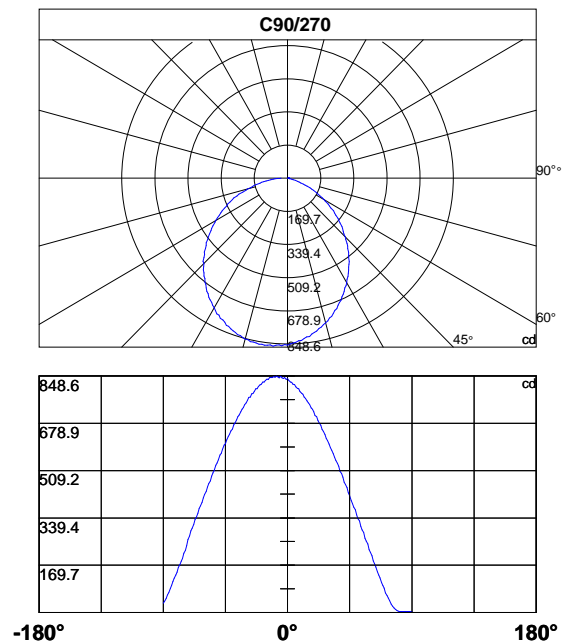
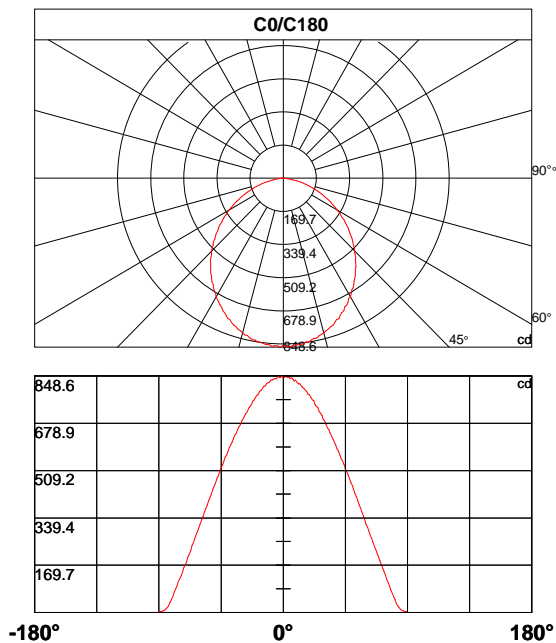
Central Intensity: 839.886cd

Up Flux Rate: 0.0%

Maximum Intensity: 848.612cd

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -77.6 Right:77.7



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	839.9	845.5	846.6	844.2	844.3	839.6	841.7	836.9	831.0	833.7
45.0	839.9	833.0	827.6	825.8	819.0	817.5	810.3	803.7	803.0	792.7
90.0	839.9	833.0	827.6	825.8	819.0	817.5	810.3	803.7	803.0	792.7
135.0	839.9	848.6	843.3	844.1	846.0	839.0	840.0	837.4	833.7	833.5
180.0	839.9	848.6	843.3	844.1	846.0	839.0	840.0	837.4	833.7	833.5
225.0	839.9	836.0	842.6	839.4	841.9	847.6	842.4	845.9	847.5	844.1
270.0	839.9	836.0	842.6	839.4	841.9	847.6	842.4	845.9	847.5	844.1
315.0	839.9	845.5	846.6	844.2	844.3	839.6	841.7	836.9	831.0	833.7
360.0	839.9	845.5	846.6	844.2	844.3	839.6	841.7	836.9	831.0	833.7

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	826.0	820.2	821.9	813.2	808.3	803.6	798.8	792.0	783.6	781.6
45.0	786.8	783.2	773.3	768.1	759.6	752.6	746.0	733.8	729.8	719.7
90.0	786.8	783.2	773.3	768.1	759.6	752.6	746.0	733.8	729.8	719.7
135.0	825.6	825.0	821.7	812.0	811.7	804.6	797.2	793.8	784.1	780.1
180.0	825.6	825.0	821.7	812.0	811.7	804.6	797.2	793.8	784.1	780.1
225.0	847.0	842.9	842.6	842.6	836.2	837.4	832.6	827.4	826.4	819.5
270.0	847.0	842.9	842.6	842.6	836.2	837.4	832.6	827.4	826.4	819.5
315.0	826.0	820.2	821.9	813.2	808.3	803.6	798.8	792.0	783.6	781.6
360.0	826.0	820.2	821.9	813.2	808.3	803.6	798.8	792.0	783.6	781.6

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	771.5	762.2	761.1	747.1	740.0	734.8	719.7	715.7	706.3	691.3
45.0	707.0	702.5	689.5	679.3	671.8	657.6	649.7	638.3	624.8	617.6
90.0	707.0	702.5	689.5	679.3	671.8	657.6	649.7	638.3	624.8	617.6
135.0	771.6	762.2	759.0	747.6	739.1	734.1	721.7	714.3	705.2	696.0
180.0	771.6	762.2	759.0	747.6	739.1	734.1	721.7	714.3	705.2	696.0
225.0	817.0	811.2	803.2	803.0	792.4	785.8	784.3	773.1	771.8	761.4
270.0	817.0	811.2	803.2	803.0	792.4	785.8	784.3	773.1	771.8	761.4
315.0	771.5	762.2	761.1	747.1	740.0	734.8	719.7	715.7	706.3	691.3
360.0	771.5	762.2	761.1	747.1	740.0	734.8	719.7	715.7	706.3	691.3

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	688.0	675.5	662.1	656.8	644.6	631.7	622.8	613.1	599.2	587.3
45.0	604.4	592.1	582.1	569.8	557.4	544.9	534.8	525.3	506.3	498.2
90.0	604.4	592.1	582.1	569.8	557.4	544.9	534.8	525.3	506.3	498.2
135.0	687.3	674.5	667.8	656.2	642.8	636.4	622.5	611.2	602.1	591.3
180.0	687.3	674.5	667.8	656.2	642.8	636.4	622.5	611.2	602.1	591.3
225.0	752.0	745.6	735.0	729.2	720.3	708.2	703.0	690.8	680.1	673.0
270.0	752.0	745.6	735.0	729.2	720.3	708.2	703.0	690.8	680.1	673.0
315.0	688.0	675.5	662.1	656.8	644.6	631.7	622.8	613.1	599.2	587.3
360.0	688.0	675.5	662.1	656.8	644.6	631.7	622.8	613.1	599.2	587.3

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	579.7	563.8	551.7	544.3	529.2	515.4	505.8	492.3	478.7	466.4
45.0	486.2	468.2	459.8	447.2	429.7	419.5	401.4	390.4	378.2	368.8
90.0	486.2	468.2	459.8	447.2	429.7	419.5	401.4	390.4	378.2	368.8
135.0	577.7	565.4	557.2	542.3	527.9	521.1	504.3	490.1	483.1	464.2
180.0	577.7	565.4	557.2	542.3	527.9	521.1	504.3	490.1	483.1	464.2
225.0	658.6	651.1	640.2	632.1	618.9	605.8	600.4	585.2	571.3	565.8
270.0	658.6	651.1	640.2	632.1	618.9	605.8	600.4	585.2	571.3	565.8
315.0	579.7	563.8	551.7	544.3	529.2	515.4	505.8	492.3	478.7	466.4
360.0	579.7	563.8	551.7	544.3	529.2	515.4	505.8	492.3	478.7	466.4

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	454.8	440.1	426.1	416.2	399.6	386.3	375.8	358.6	346.5	334.4
45.0	350.3	337.0	328.0	308.7	296.7	286.7	266.7	256.2	245.3	225.3
90.0	350.3	337.0	328.0	308.7	296.7	286.7	266.7	256.2	245.3	225.3
135.0	452.8	443.2	424.2	414.1	402.3	384.2	373.9	361.4	344.3	332.5
180.0	452.8	443.2	424.2	414.1	402.3	384.2	373.9	361.4	344.3	332.5
225.0	548.2	536.7	528.2	510.1	500.7	489.4	471.9	463.4	450.5	434.0
270.0	548.2	536.7	528.2	510.1	500.7	489.4	471.9	463.4	450.5	434.0
315.0	454.8	440.1	426.1	416.2	399.6	386.3	375.8	358.6	346.5	334.4
360.0	454.8	440.1	426.1	416.2	399.6	386.3	375.8	358.6	346.5	334.4

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	317.0	306.5	292.7	276.2	266.4	251.5	236.3	225.2	211.8	197.0
45.0	216.1	203.4	184.5	174.8	163.0	145.1	134.9	124.1	106.9	96.6
90.0	216.1	203.4	184.5	174.8	163.0	145.1	134.9	124.1	106.9	96.6
135.0	320.8	304.3	290.5	280.8	263.4	249.5	240.4	222.7	209.0	199.8
180.0	320.8	304.3	290.5	280.8	263.4	249.5	240.4	222.7	209.0	199.8
225.0	423.3	411.5	395.4	382.7	372.7	356.4	341.8	333.4	315.7	301.8
270.0	423.3	411.5	395.4	382.7	372.7	356.4	341.8	333.4	315.7	301.8
315.0	317.0	306.5	292.7	276.2	266.4	251.5	236.3	225.2	211.8	197.0
360.0	317.0	306.5	292.7	276.2	266.4	251.5	236.3	225.2	211.8	197.0

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	184.5	172.4	157.9	145.5	133.9	118.4	106.5	94.3	78.9	67.6
45.0	87.1	70.3	60.9	52.3	41.8	29.5	23.1	16.3	10.7	7.4
90.0	87.1	70.3	60.9	52.3	41.8	29.5	23.1	16.3	10.7	7.4
135.0	182.4	170.0	160.0	143.0	131.6	121.1	111.1	93.0	82.0	72.4
180.0	182.4	170.0	160.0	143.0	131.6	121.1	111.1	93.0	82.0	72.4
225.0	293.4	274.0	262.3	240.0	222.7	212.1	193.9	183.7	172.3	161.8
270.0	293.4	274.0	262.3	240.0	222.7	212.1	193.9	183.7	172.3	161.8
315.0	184.5	172.4	157.9	145.5	133.9	118.4	106.5	94.3	78.9	67.6
360.0	184.5	172.4	157.9	145.5	133.9	118.4	106.5	94.3	78.9	67.6

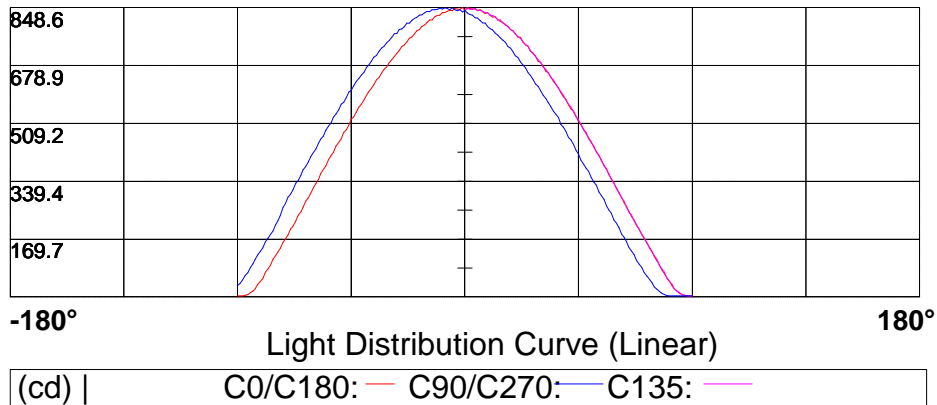
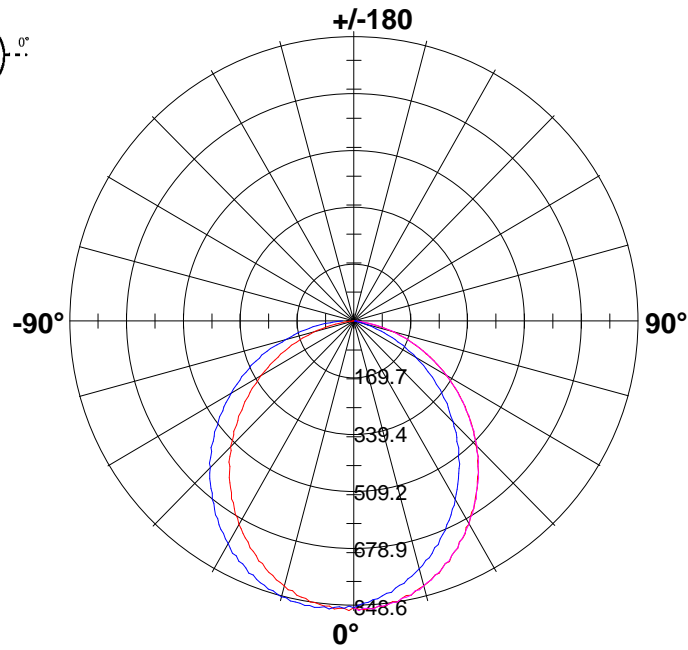
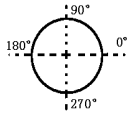
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	55.6	45.5	32.0	22.6	17.7	11.0	7.0	5.1	3.8	3.0
45.0	4.5	3.6	3.8	3.6	3.5	3.5	3.4	3.2	3.4	3.2
90.0	4.5	3.6	3.8	3.6	3.5	3.5	3.4	3.2	3.4	3.2
135.0	54.5	45.4	37.0	23.5	17.6	12.6	6.6	5.1	3.8	3.6
180.0	54.5	45.4	37.0	23.5	17.6	12.6	6.6	5.1	3.8	3.6
225.0	144.3	134.0	123.3	110.9	97.3	86.3	70.5	63.3	50.1	40.4
270.0	144.3	134.0	123.3	110.9	97.3	86.3	70.5	63.3	50.1	40.4
315.0	55.6	45.5	32.0	22.6	17.7	11.0	7.0	5.1	3.8	3.0
360.0	55.6	45.5	32.0	22.6	17.7	11.0	7.0	5.1	3.8	3.0

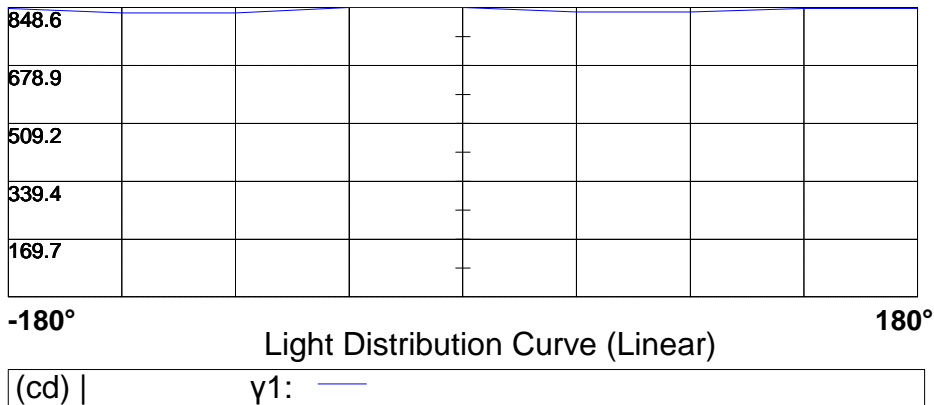
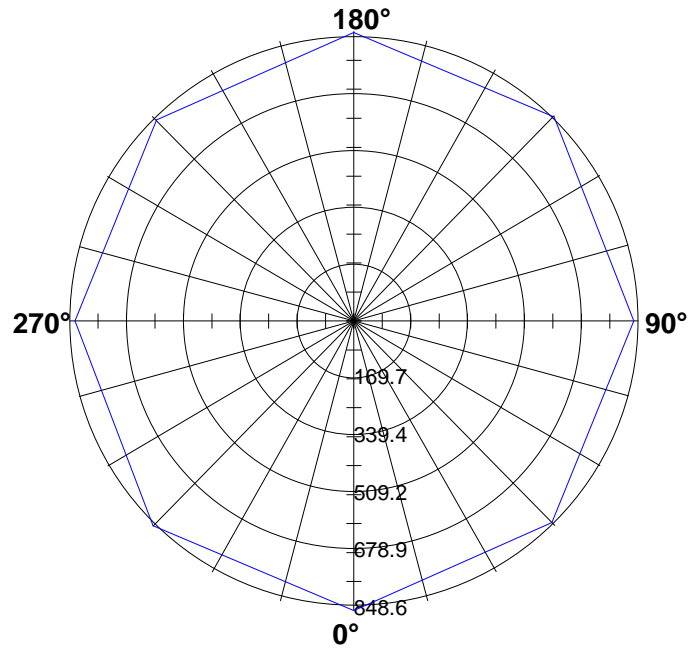
C\G	90.0
0.0	3.5
45.0	3.4
90.0	3.4
135.0	3.4
180.0	3.4
225.0	33.5
270.0	33.5
315.0	3.5
360.0	3.5

Light Distribution Curve [Unit: cd]

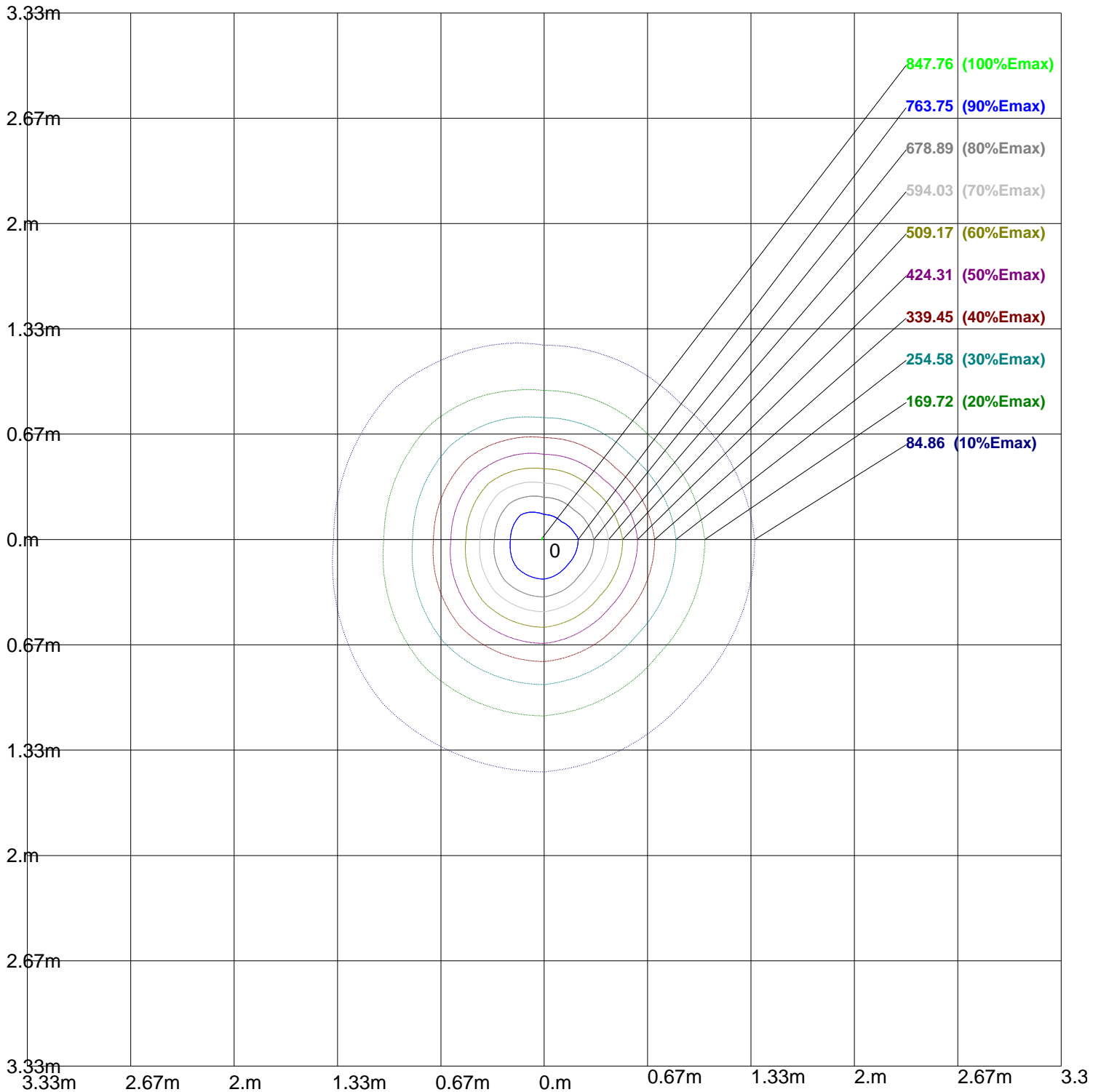
Luminaire



Max Plane Light Distribution Curve [Unit: cd]



Iso-Lux[lx]



Height: 1 m
Max Illuminance : 848.61lx

Luminance Limiting Curve

Diameter: 175mm

Length: 175mm

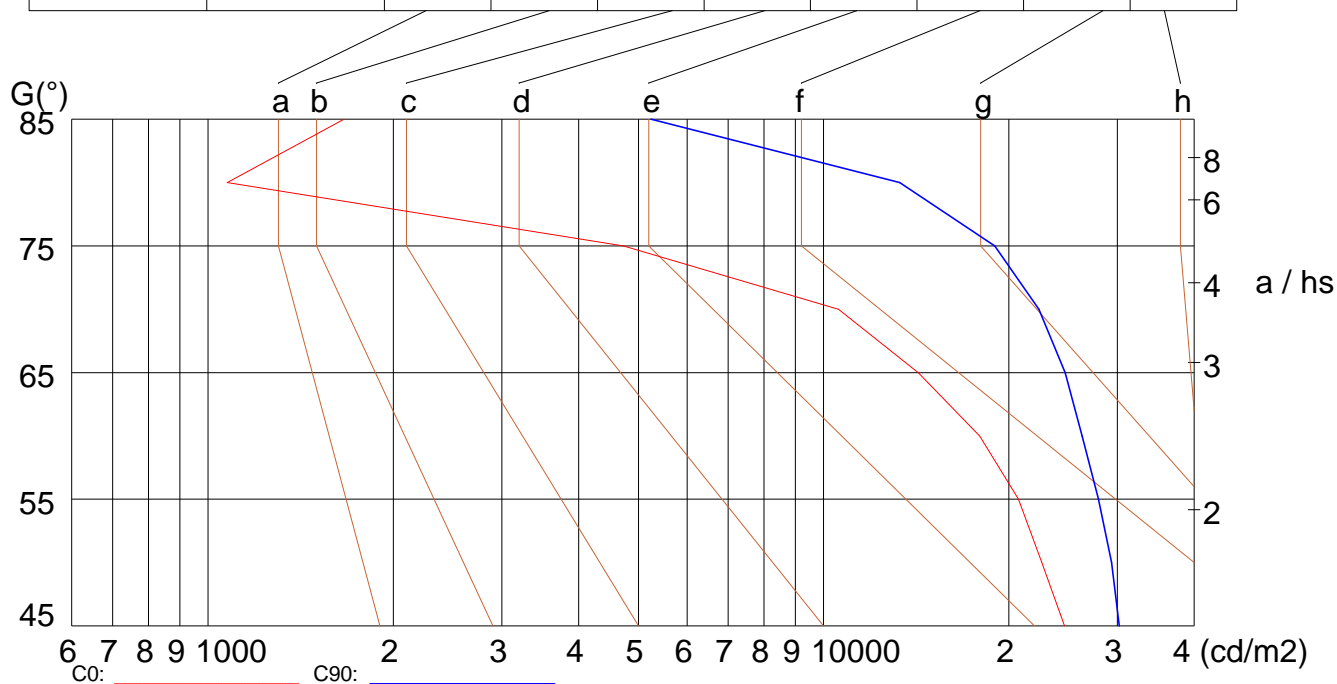
Width: 175mm

Height: 27mm

(cd/m²)

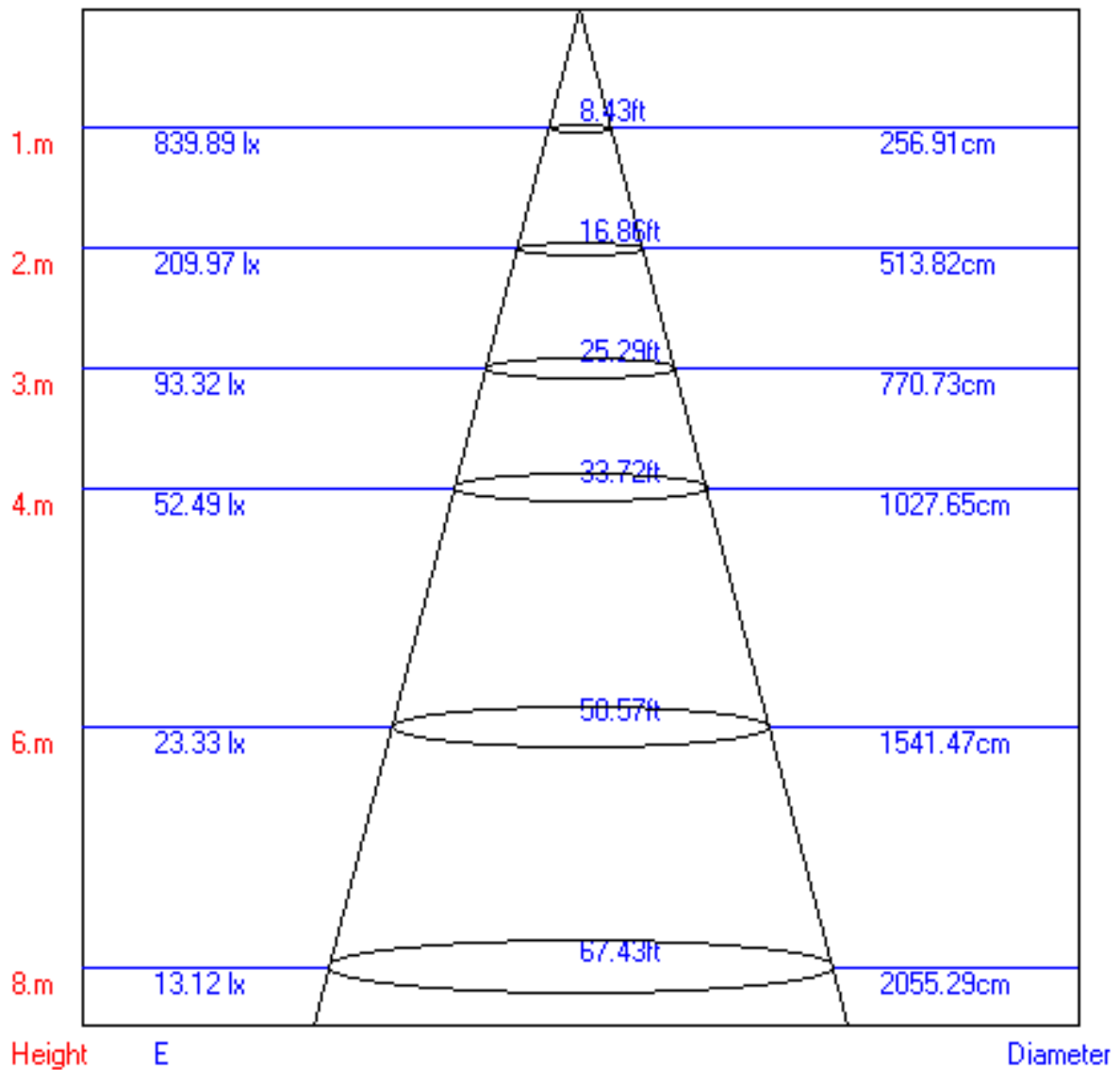
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	24620	22613	20738	17937	14250	10570	4731	1074	1663
C90	30246	29360	27946	26310	24695	22386	18980	13295	5240

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)

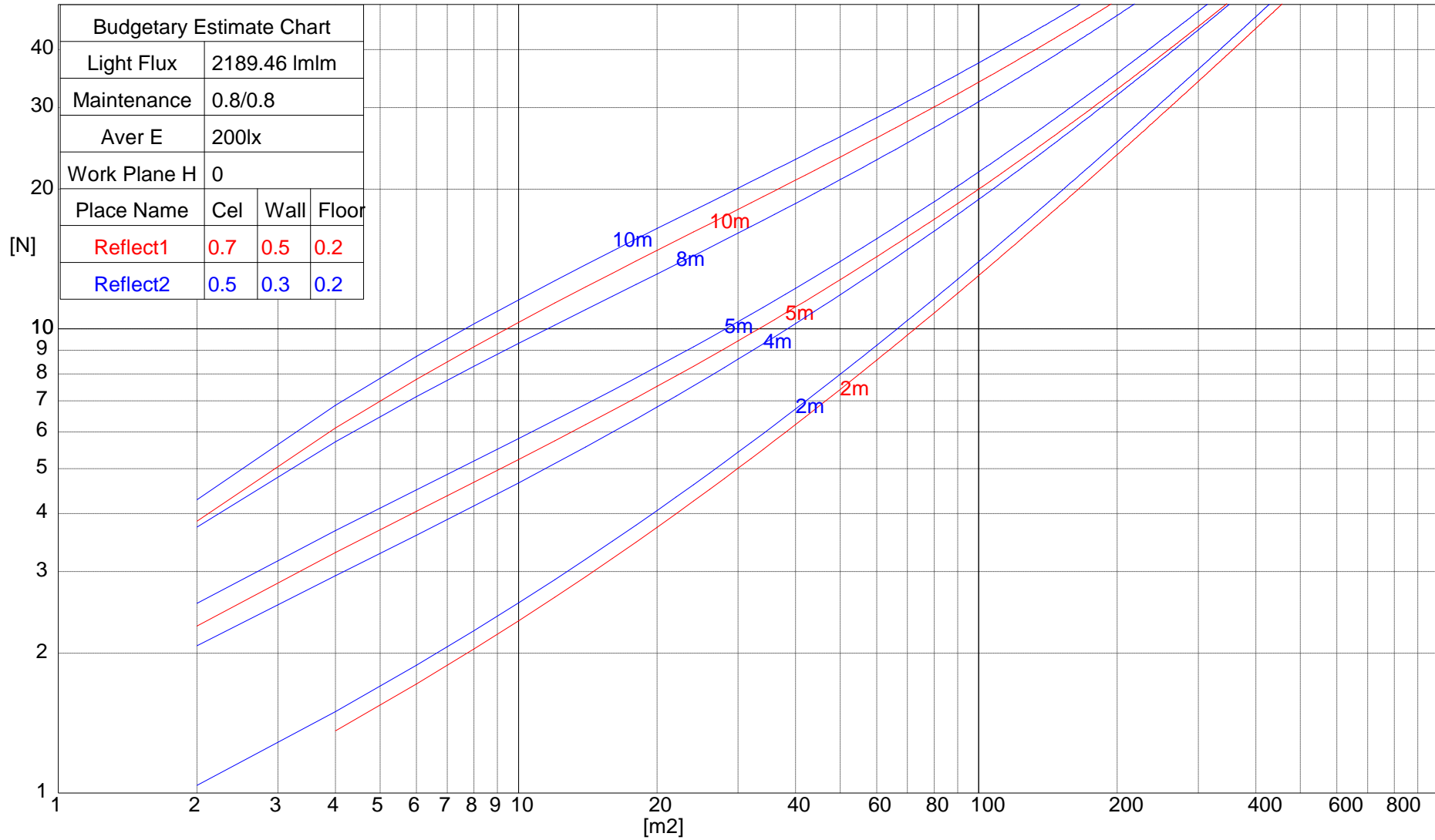
Lux-Distance Curve



Beam Angle:104.20°

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
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	1.05	1.03	1.02	1.04	1.02	1.00	1.00	0.98	0.96	0.95	0.93	0.91	0.89	0.87	0.84	0.79
2	0.90	0.87	0.86	0.89	0.86	0.84	0.87	0.83	0.80	0.83	0.80	0.76	0.79	0.75	0.71	0.67
3	0.77	0.74	0.72	0.77	0.74	0.71	0.76	0.72	0.68	0.74	0.69	0.65	0.70	0.65	0.61	0.56
4	0.67	0.64	0.62	0.67	0.64	0.61	0.67	0.62	0.58	0.65	0.60	0.56	0.63	0.57	0.52	0.48
5	0.59	0.56	0.54	0.59	0.55	0.53	0.59	0.54	0.51	0.59	0.53	0.48	0.57	0.51	0.46	0.42
6	0.52	0.49	0.47	0.53	0.49	0.47	0.53	0.48	0.45	0.53	0.47	0.43	0.52	0.46	0.40	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	0.35	0.44	0.38	0.34	0.44	0.37	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	0.31	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