

Luminaire Property

Luminaire: RH-MRD36 36W 4000K

Report NO.:

Voltage: 220.5 V

Test NO.:

Current: 0.166 A

Lamp:

Power: 35.7 W

Sum Lumens: 3279.94 lm

Power Factor: 0.971

Number of Lamps: 1

Ballast Type: 25-42V 900mA

Diameter: 400mm

Width: 400mm

Length: mm

Height: 38mm

Photometric Type: Type C

Remark: PMMA+0.5w SMD2835

Photometric Results

Lumens: 3279.94 lm

Angle of maximum intensity: C:135.0 G:2.0

Effective luminous flux: 3234.66 lm

Half Peak Side Angle(50%): Left: -56.4 Right:56.3

Efficiency: 91.8751 lm/W

Light Out Rate(LOR) : 100.00%

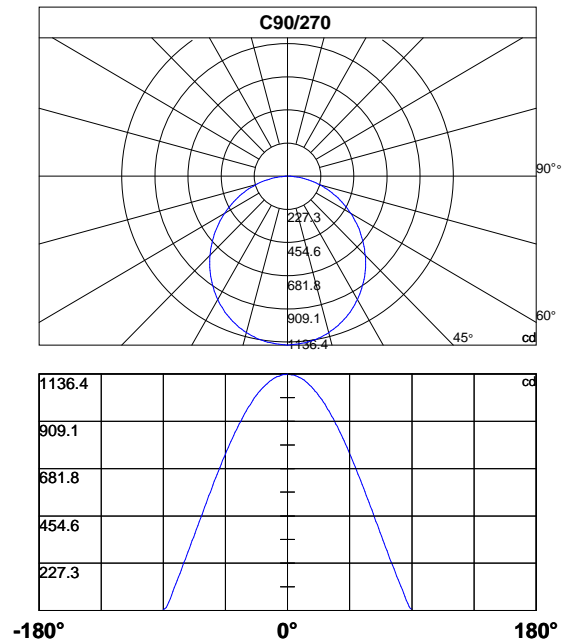
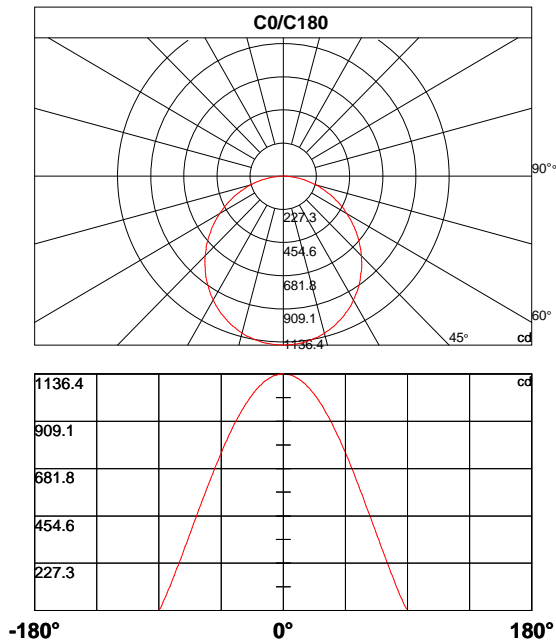
Central Intensity: 1136.181cd

Up Flux Rate: 0.0%

Maximum Intensity: 1136.351cd

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -82.1 Right:82.2



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	1136.2	1136.2	1136.2	1134.7	1133.5	1132.3	1130.8	1127.4	1124.2	1121.0
45.0	1136.2	1134.1	1133.5	1131.8	1131.5	1129.7	1127.4	1124.5	1121.4	1117.7
90.0	1136.2	1134.1	1133.5	1131.8	1131.5	1129.7	1127.4	1124.5	1121.4	1117.7
135.0	1136.2	1136.3	1136.4	1134.4	1133.7	1131.1	1129.7	1127.2	1124.3	1120.4
180.0	1136.2	1136.3	1136.4	1134.4	1133.7	1131.1	1129.7	1127.2	1124.3	1120.4
225.0	1136.2	1134.6	1133.9	1133.1	1131.5	1129.2	1126.8	1124.8	1122.4	1118.8
270.0	1136.2	1134.6	1133.9	1133.1	1131.5	1129.2	1126.8	1124.8	1122.4	1118.8
315.0	1136.2	1136.2	1136.2	1134.7	1133.5	1132.3	1130.8	1127.4	1124.2	1121.0
360.0	1136.2	1136.2	1136.2	1134.7	1133.5	1132.3	1130.8	1127.4	1124.2	1121.0

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	1116.6	1113.3	1108.9	1104.5	1098.6	1093.6	1086.9	1080.8	1073.5	1067.0
45.0	1114.2	1109.8	1106.8	1100.8	1095.1	1089.7	1082.8	1076.8	1069.2	1062.9
90.0	1114.2	1109.8	1106.8	1100.8	1095.1	1089.7	1082.8	1076.8	1069.2	1062.9
135.0	1116.9	1112.5	1107.1	1103.6	1098.5	1092.5	1085.3	1079.5	1071.8	1066.0
180.0	1116.9	1112.5	1107.1	1103.6	1098.5	1092.5	1085.3	1079.5	1071.8	1066.0
225.0	1114.9	1110.8	1105.5	1101.2	1095.0	1089.1	1083.2	1077.0	1071.2	1062.4
270.0	1114.9	1110.8	1105.5	1101.2	1095.0	1089.1	1083.2	1077.0	1071.2	1062.4
315.0	1116.6	1113.3	1108.9	1104.5	1098.6	1093.6	1086.9	1080.8	1073.5	1067.0
360.0	1116.6	1113.3	1108.9	1104.5	1098.6	1093.6	1086.9	1080.8	1073.5	1067.0

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	1058.7	1050.1	1042.8	1034.0	1025.2	1014.8	1005.3	994.9	986.0	974.1
45.0	1054.4	1047.2	1037.6	1029.1	1020.5	1011.7	1001.0	991.3	979.5	968.0
90.0	1054.4	1047.2	1037.6	1029.1	1020.5	1011.7	1001.0	991.3	979.5	968.0
135.0	1057.3	1050.0	1041.1	1031.8	1022.6	1013.8	1003.7	993.4	983.2	971.8
180.0	1057.3	1050.0	1041.1	1031.8	1022.6	1013.8	1003.7	993.4	983.2	971.8
225.0	1054.7	1047.0	1037.9	1030.1	1021.0	1011.5	1000.5	989.8	980.6	970.7
270.0	1054.7	1047.0	1037.9	1030.1	1021.0	1011.5	1000.5	989.8	980.6	970.7
315.0	1058.7	1050.1	1042.8	1034.0	1025.2	1014.8	1005.3	994.9	986.0	974.1
360.0	1058.7	1050.1	1042.8	1034.0	1025.2	1014.8	1005.3	994.9	986.0	974.1

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	962.9	950.5	938.8	928.5	915.9	902.6	889.1	875.2	860.3	846.2
45.0	958.5	946.4	934.4	922.0	909.7	895.5	884.2	869.7	856.7	842.0
90.0	958.5	946.4	934.4	922.0	909.7	895.5	884.2	869.7	856.7	842.0
135.0	961.8	949.5	937.6	924.8	912.4	899.3	887.8	874.0	859.6	845.3
180.0	961.8	949.5	937.6	924.8	912.4	899.3	887.8	874.0	859.6	845.3
225.0	958.1	946.7	934.1	921.0	908.3	897.2	883.4	869.5	856.0	841.0
270.0	958.1	946.7	934.1	921.0	908.3	897.2	883.4	869.5	856.0	841.0
315.0	962.9	950.5	938.8	928.5	915.9	902.6	889.1	875.2	860.3	846.2
360.0	962.9	950.5	938.8	928.5	915.9	902.6	889.1	875.2	860.3	846.2

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	834.2	819.4	803.8	788.9	773.0	759.5	742.8	727.1	710.3	693.6
45.0	827.4	814.7	799.2	784.0	768.2	752.9	736.5	720.8	705.8	689.5
90.0	827.4	814.7	799.2	784.0	768.2	752.9	736.5	720.8	705.8	689.5
135.0	830.4	815.8	802.9	787.6	772.2	755.8	739.7	723.2	709.3	693.0
180.0	830.4	815.8	802.9	787.6	772.2	755.8	739.7	723.2	709.3	693.0
225.0	828.2	812.9	798.6	782.4	766.9	750.9	737.2	720.8	703.4	687.2
270.0	828.2	812.9	798.6	782.4	766.9	750.9	737.2	720.8	703.4	687.2
315.0	834.2	819.4	803.8	788.9	773.0	759.5	742.8	727.1	710.3	693.6
360.0	834.2	819.4	803.8	788.9	773.0	759.5	742.8	727.1	710.3	693.6

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	676.9	661.7	644.5	626.7	609.1	591.5	573.7	558.3	539.6	521.6
45.0	672.1	655.5	637.6	623.6	605.8	588.0	570.1	552.4	534.4	518.9
90.0	672.1	655.5	637.6	623.6	605.8	588.0	570.1	552.4	534.4	518.9
135.0	676.1	658.7	641.7	623.9	609.0	590.8	573.9	555.5	538.0	521.7
180.0	676.1	658.7	641.7	623.9	609.0	590.8	573.9	555.5	538.0	521.7
225.0	669.9	653.2	637.9	621.0	602.6	585.1	567.5	552.0	533.8	515.4
270.0	669.9	653.2	637.9	621.0	602.6	585.1	567.5	552.0	533.8	515.4
315.0	676.9	661.7	644.5	626.7	609.1	591.5	573.7	558.3	539.6	521.6
360.0	676.9	661.7	644.5	626.7	609.1	591.5	573.7	558.3	539.6	521.6

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	503.7	485.1	470.0	450.3	432.5	413.3	395.0	376.2	357.9	342.4
45.0	500.7	482.4	464.4	445.9	427.5	411.8	393.4	375.2	356.8	338.6
90.0	500.7	482.4	464.4	445.9	427.5	411.8	393.4	375.2	356.8	338.6
135.0	504.0	485.6	467.2	449.1	430.5	414.8	396.4	377.7	359.2	341.5
180.0	504.0	485.6	467.2	449.1	430.5	414.8	396.4	377.7	359.2	341.5
225.0	497.3	478.5	460.1	442.1	426.2	407.8	389.1	370.6	352.0	336.6
270.0	497.3	478.5	460.1	442.1	426.2	407.8	389.1	370.6	352.0	336.6
315.0	503.7	485.1	470.0	450.3	432.5	413.3	395.0	376.2	357.9	342.4
360.0	503.7	485.1	470.0	450.3	432.5	413.3	395.0	376.2	357.9	342.4

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	323.4	305.2	286.6	268.4	253.0	234.8	216.9	199.1	181.2	166.5
45.0	323.1	304.3	286.7	268.5	250.7	232.7	217.9	199.9	182.8	165.3
90.0	323.1	304.3	286.7	268.5	250.7	232.7	217.9	199.9	182.8	165.3
135.0	322.9	307.5	288.8	270.8	252.9	234.8	217.3	202.1	184.7	167.3
180.0	322.9	307.5	288.8	270.8	252.9	234.8	217.3	202.1	184.7	167.3
225.0	317.7	300.0	281.4	263.6	245.3	230.1	211.9	194.3	176.9	159.5
270.0	317.7	300.0	281.4	263.6	245.3	230.1	211.9	194.3	176.9	159.5
315.0	323.4	305.2	286.6	268.4	253.0	234.8	216.9	199.1	181.2	166.5
360.0	323.4	305.2	286.6	268.4	253.0	234.8	216.9	199.1	181.2	166.5

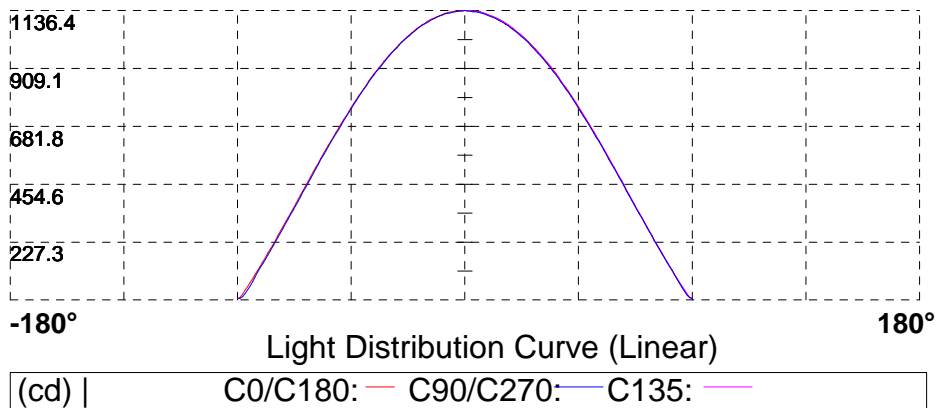
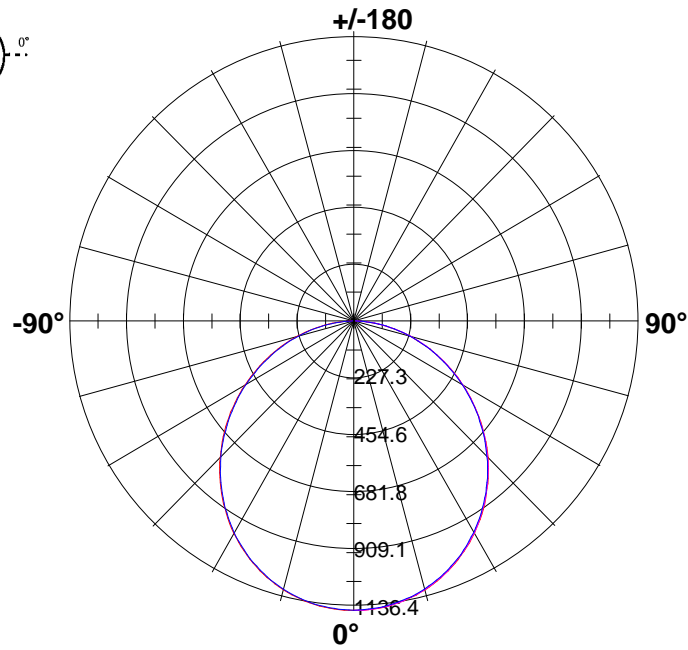
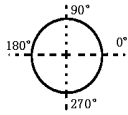
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	149.3	131.9	115.1	98.6	82.1	66.2	52.9	36.6	22.3	10.1
45.0	147.8	131.5	117.1	100.4	83.3	65.9	49.0	33.6	18.4	9.5
90.0	147.8	131.5	117.1	100.4	83.3	65.9	49.0	33.6	18.4	9.5
135.0	150.1	132.8	116.1	101.5	85.0	69.4	53.5	39.4	23.8	10.9
180.0	150.1	132.8	116.1	101.5	85.0	69.4	53.5	39.4	23.8	10.9
225.0	142.6	127.3	109.5	91.4	73.8	56.2	40.4	25.7	14.0	6.7
270.0	142.6	127.3	109.5	91.4	73.8	56.2	40.4	25.7	14.0	6.7
315.0	149.3	131.9	115.1	98.6	82.1	66.2	52.9	36.6	22.3	10.1
360.0	149.3	131.9	115.1	98.6	82.1	66.2	52.9	36.6	22.3	10.1

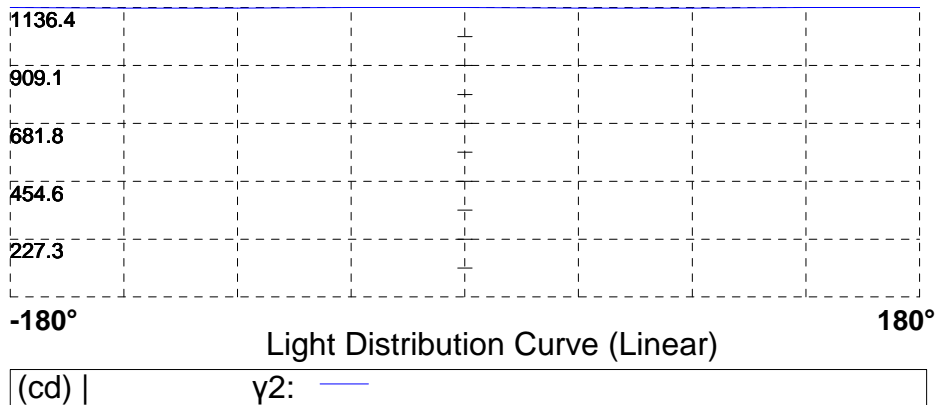
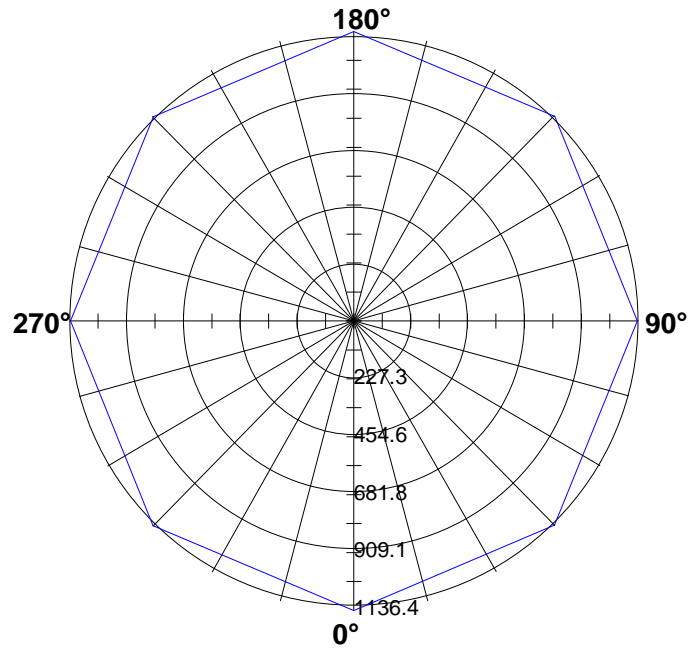
C\G	90.0
0.0	5.6
45.0	5.7
90.0	5.7
135.0	5.9
180.0	5.9
225.0	4.1
270.0	4.1
315.0	5.6
360.0	5.6

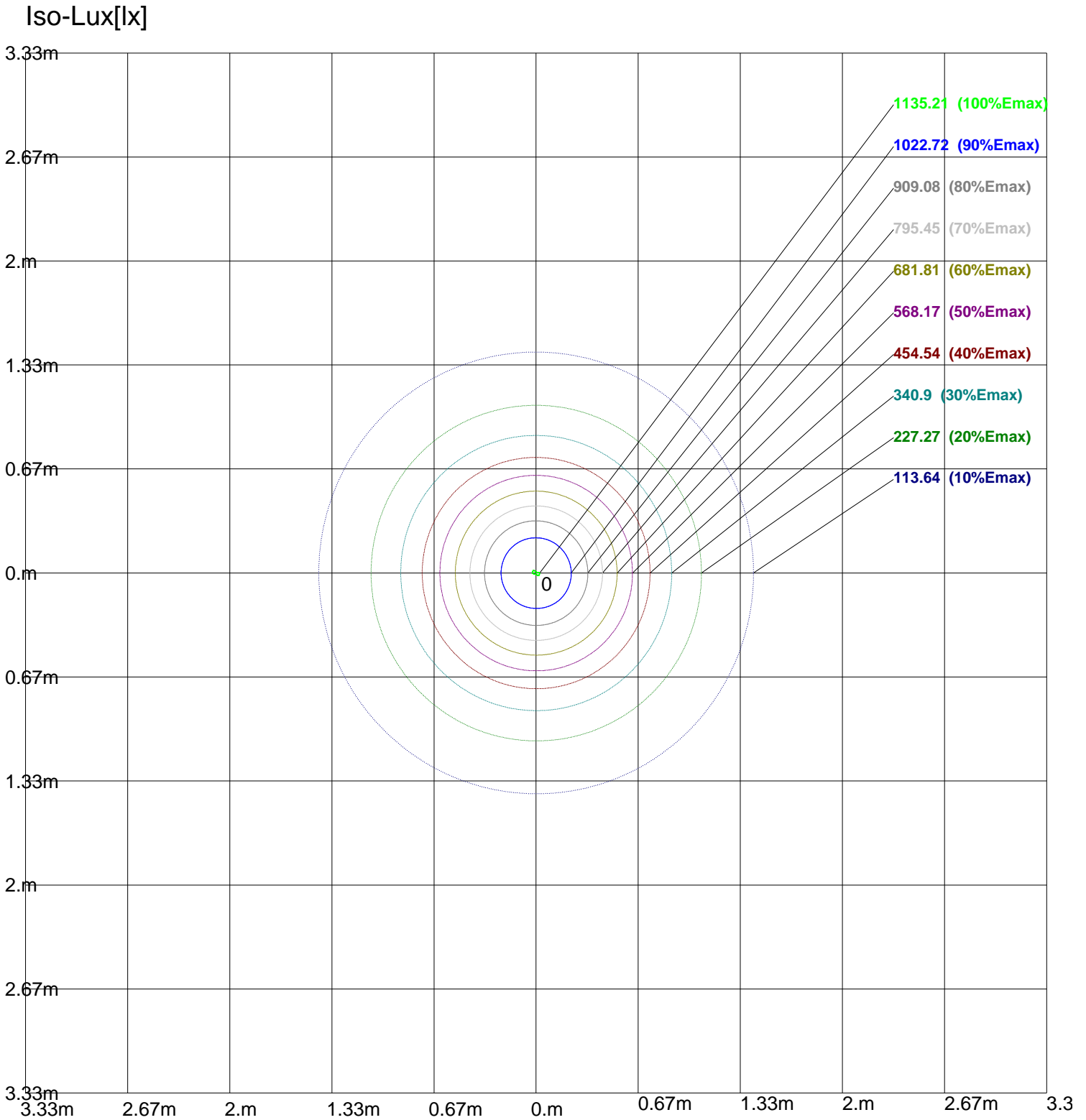
Light Distribution Curve [Unit: cd]

Luminaire



Max Plane Light Distribution Curve [Unit: cd]





Height: 1 m
Max Illuminance : 1136.35lx

Luminance Limiting Curve

Diameter: 400mm

Length: mm

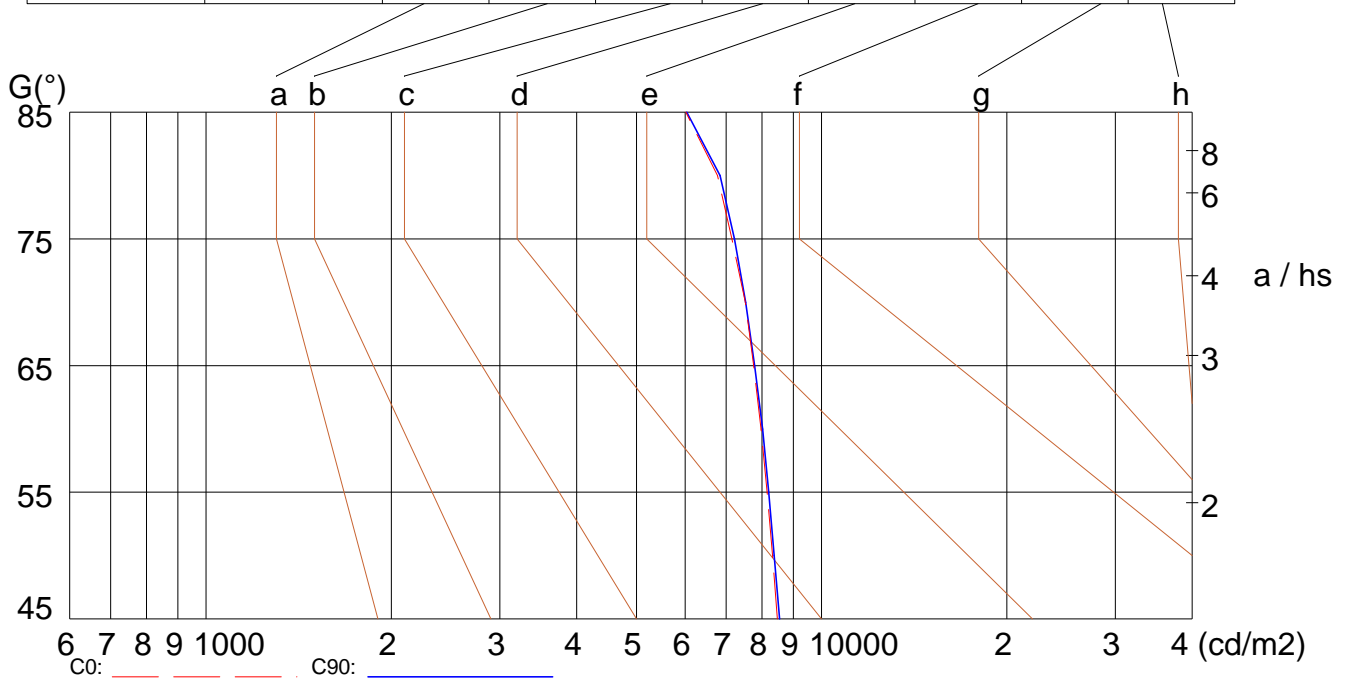
Width: 400mm

Height: 38mm

(cd/m²)

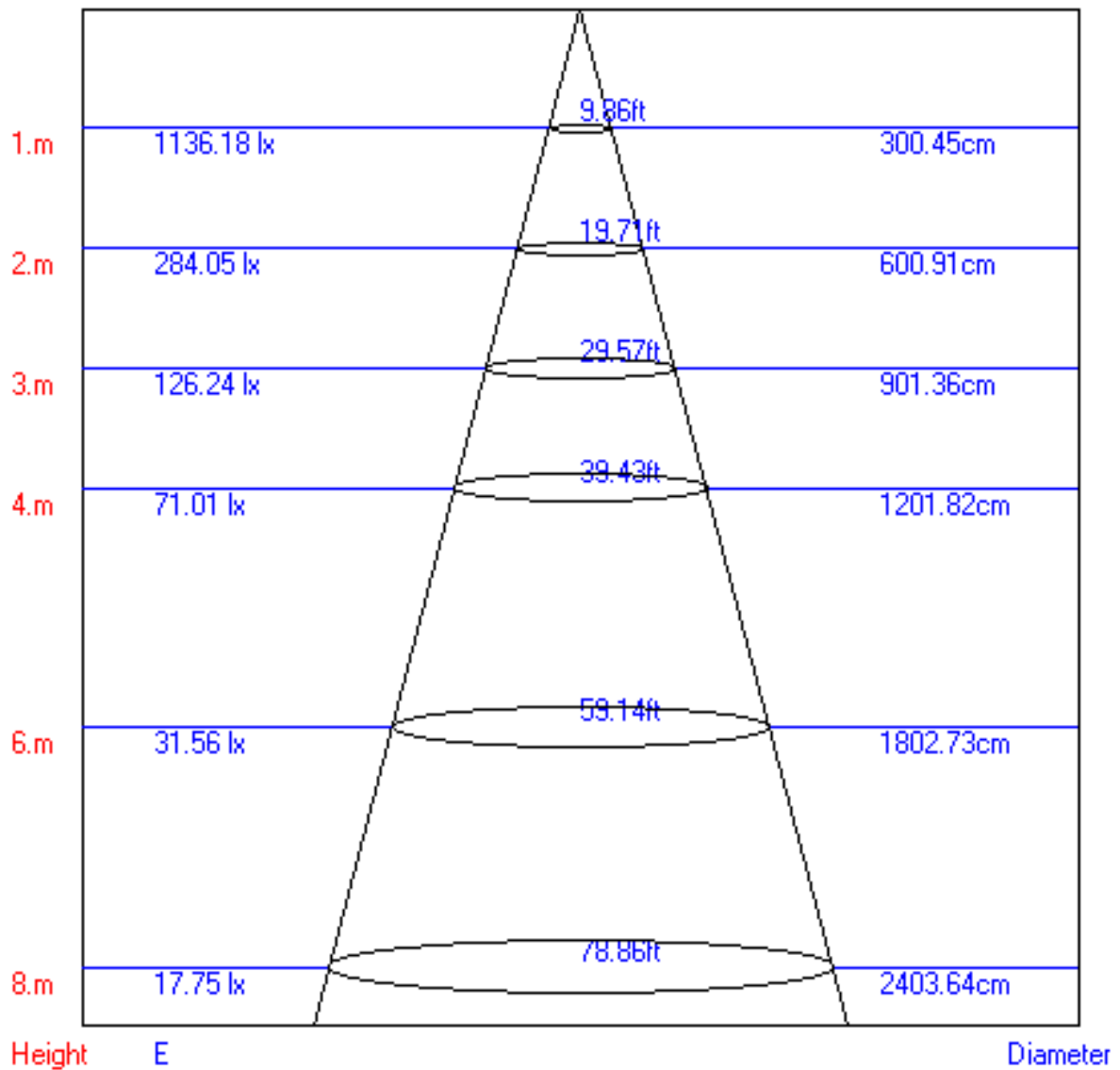
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	8470	8318	8156	7967	7753	7516	7151	6773	6015
C90	8545	8377	8204	8014	7781	7522	7216	6841	6038

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)

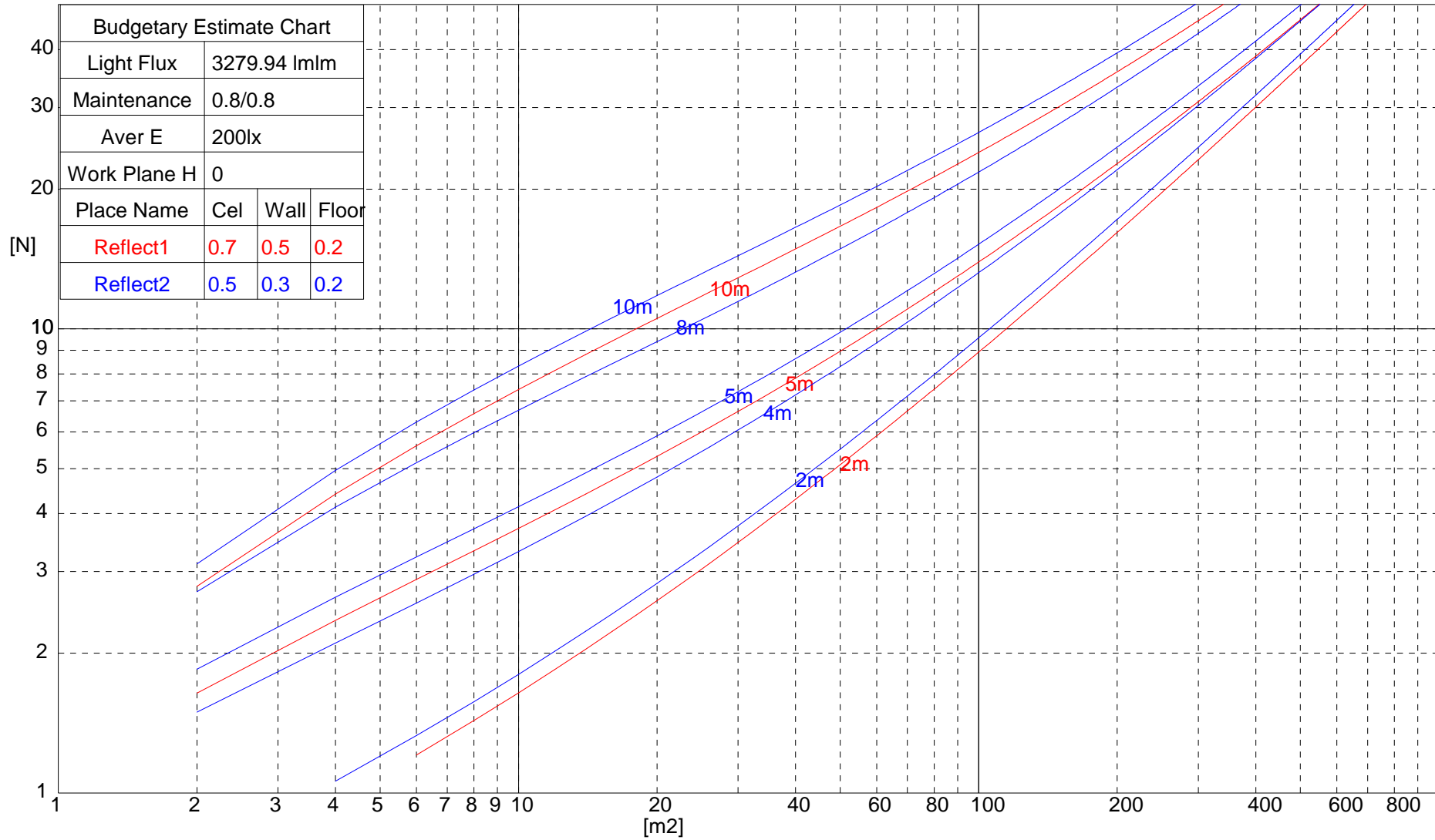
Lux-Distance Curve



Beam Angle:112.70°

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	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	1.04	1.02	1.00	1.02	1.00	0.99	0.99	0.97	0.95	0.94	0.92	0.90	0.88	0.85	0.83	0.78
2	0.88	0.85	0.83	0.87	0.84	0.82	0.85	0.81	0.78	0.82	0.78	0.74	0.77	0.73	0.69	0.65
3	0.75	0.72	0.70	0.75	0.71	0.68	0.74	0.69	0.66	0.72	0.67	0.62	0.69	0.63	0.59	0.54
4	0.64	0.61	0.59	0.65	0.61	0.58	0.65	0.60	0.56	0.63	0.58	0.53	0.61	0.55	0.50	0.46
5	0.56	0.53	0.51	0.57	0.53	0.50	0.57	0.52	0.48	0.57	0.51	0.46	0.55	0.49	0.44	0.40
6	0.49	0.47	0.45	0.50	0.46	0.44	0.51	0.46	0.42	0.51	0.45	0.40	0.50	0.44	0.38	0.35
7	0.44	0.41	0.40	0.45	0.41	0.39	0.46	0.41	0.37	0.46	0.40	0.36	0.46	0.39	0.34	0.31
8	0.39	0.37	0.35	0.40	0.37	0.35	0.42	0.37	0.33	0.42	0.36	0.32	0.43	0.36	0.31	0.27
9	0.36	0.33	0.32	0.37	0.33	0.31	0.38	0.33	0.30	0.39	0.33	0.29	0.39	0.33	0.28	0.25
10	0.32	0.30	0.29	0.33	0.30	0.28	0.35	0.30	0.27	0.36	0.30	0.26	0.37	0.30	0.25	0.22



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	
	12H	17.9	18.8	18.1	19.2	19.5	17.7	18.7	18.1	19.2	19.6	
4H	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	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	
8H	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	20.0	20.4	20.4	20.9	21.1	19.8	20.3	20.3	20.8	21.2	
	12H	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	