Luminaire Property

Luminaire: RH-LPS16 20W 4000K

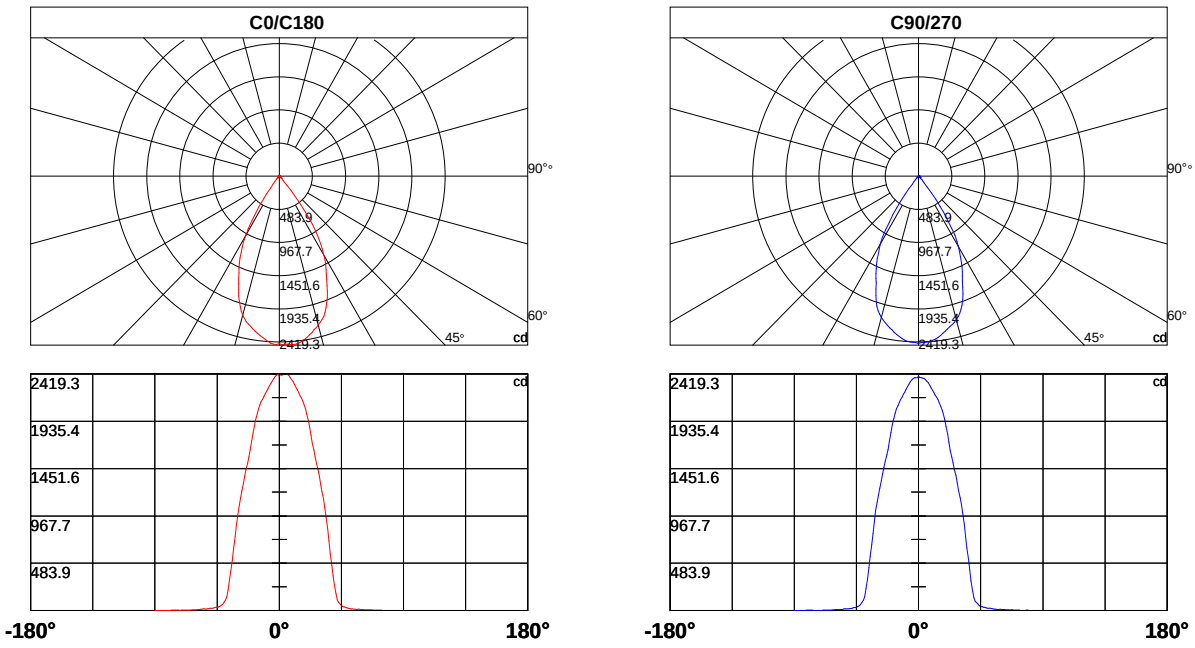
Report NO.:
Test NO.:
Lamp:
Sum Lumens: 1927.86 lm
Number of Lamps: 1
Diameter: 80mm
Length: mm
Photometric Type: Type C

Voltage: 219.7 V
Current: 0.098 A
Power: 20.1 W
Power Factor: 0.933
Ballast Type: OSRAM 500mA
Width: 80mm
Height: 168mm
Remark: CXA1820 60°

Photometric Results

Lumens: 1927.86 lm
Effective luminous flux: 1850.95 lm
Efficiency: 95.9134 lm/W
Central Intensity: 2398.299cd
Maximum Intensity: 2419.27cd
Beam Angle(10%): Left: -36.7 Right:40.2

Angle of maximum intensity: C:0.0 G:5.0
Half Peak Side Angle(50%): Left: -27.2 Right:31.1
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	2398.3	2414.5	2408.2	2412.3	2415.6	2419.3	2415.3	2404.2	2385.1	2365.5
45.0	2398.3	2383.3	2382.9	2378.5	2375.3	2360.2	2345.7	2328.7	2306.0	2278.3
90.0	2398.3	2383.3	2382.9	2378.5	2375.3	2360.2	2345.7	2328.7	2306.0	2278.3
135.0	2398.3	2411.9	2406.2	2394.4	2372.2	2348.9	2324.3	2300.8	2271.6	2247.2
180.0	2398.3	2411.9	2406.2	2394.4	2372.2	2348.9	2324.3	2300.8	2271.6	2247.2
225.0	2398.3	2382.0	2379.4	2379.7	2370.5	2358.5	2339.1	2314.1	2291.6	2263.8
270.0	2398.3	2382.0	2379.4	2379.7	2370.5	2358.5	2339.1	2314.1	2291.6	2263.8
315.0	2398.3	2414.5	2408.2	2412.3	2415.6	2419.3	2415.3	2404.2	2385.1	2365.5
360.0	2398.3	2414.5	2408.2	2412.3	2415.6	2419.3	2415.3	2404.2	2385.1	2365.5

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	2341.1	2314.9	2289.5	2259.4	2233.7	2202.6	2172.9	2145.3	2109.3	2059.9
45.0	2252.0	2230.4	2204.7	2183.6	2156.6	2123.7	2091.7	2051.2	2002.4	1952.3
90.0	2252.0	2230.4	2204.7	2183.6	2156.6	2123.7	2091.7	2051.2	2002.4	1952.3
135.0	2217.6	2190.1	2162.5	2139.0	2101.7	2061.4	2010.9	1952.5	1885.4	1814.6
180.0	2217.6	2190.1	2162.5	2139.0	2101.7	2061.4	2010.9	1952.5	1885.4	1814.6
225.0	2232.4	2212.8	2182.9	2156.6	2126.5	2096.0	2062.1	2017.9	1963.0	1898.5
270.0	2232.4	2212.8	2182.9	2156.6	2126.5	2096.0	2062.1	2017.9	1963.0	1898.5
315.0	2341.1	2314.9	2289.5	2259.4	2233.7	2202.6	2172.9	2145.3	2109.3	2059.9
360.0	2341.1	2314.9	2289.5	2259.4	2233.7	2202.6	2172.9	2145.3	2109.3	2059.9

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	2003.4	1937.2	1871.9	1791.5	1710.9	1639.9	1569.6	1504.2	1441.3	1376.4
45.0	1881.7	1807.4	1717.1	1635.8	1567.4	1510.1	1442.4	1381.6	1305.2	1228.1
90.0	1881.7	1807.4	1717.1	1635.8	1567.4	1510.1	1442.4	1381.6	1305.2	1228.1
135.0	1726.8	1645.4	1572.0	1504.9	1445.0	1377.4	1304.5	1224.1	1152.5	1076.4
180.0	1726.8	1645.4	1572.0	1504.9	1445.0	1377.4	1304.5	1224.1	1152.5	1076.4
225.0	1819.9	1733.0	1648.4	1590.3	1524.9	1463.7	1401.2	1329.1	1249.0	1180.8
270.0	1819.9	1733.0	1648.4	1590.3	1524.9	1463.7	1401.2	1329.1	1249.0	1180.8
315.0	2003.4	1937.2	1871.9	1791.5	1710.9	1639.9	1569.6	1504.2	1441.3	1376.4
360.0	2003.4	1937.2	1871.9	1791.5	1710.9	1639.9	1569.6	1504.2	1441.3	1376.4

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	1292.3	1216.3	1142.0	1050.5	955.8	837.3	708.8	582.6	462.2	354.0
45.0	1155.3	1088.7	999.3	882.4	761.7	638.6	531.0	413.8	301.5	200.6
90.0	1155.3	1088.7	999.3	882.4	761.7	638.6	531.0	413.8	301.5	200.6
135.0	973.6	877.8	755.6	631.9	511.4	397.9	306.2	210.0	139.6	102.1
180.0	973.6	877.8	755.6	631.9	511.4	397.9	306.2	210.0	139.6	102.1
225.0	1108.7	1024.4	909.0	785.2	677.4	552.4	437.4	326.5	226.3	142.7
270.0	1108.7	1024.4	909.0	785.2	677.4	552.4	437.4	326.5	226.3	142.7
315.0	1292.3	1216.3	1142.0	1050.5	955.8	837.3	708.8	582.6	462.2	354.0
360.0	1292.3	1216.3	1142.0	1050.5	955.8	837.3	708.8	582.6	462.2	354.0

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	261.6	172.3	108.7	85.8	67.1	52.0	40.3	36.6	31.1	27.2
45.0	128.7	94.3	81.4	64.9	48.8	40.5	37.3	32.9	30.5	27.5
90.0	128.7	94.3	81.4	64.9	48.8	40.5	37.3	32.9	30.5	27.5
135.0	83.0	62.9	51.8	43.4	36.6	32.3	31.4	28.3	23.1	23.7
180.0	83.0	62.9	51.8	43.4	36.6	32.3	31.4	28.3	23.1	23.7
225.0	103.9	80.6	61.0	50.5	38.1	32.7	28.5	27.7	22.4	20.2
270.0	103.9	80.6	61.0	50.5	38.1	32.7	28.5	27.7	22.4	20.2
315.0	261.6	172.3	108.7	85.8	67.1	52.0	40.3	36.6	31.1	27.2
360.0	261.6	172.3	108.7	85.8	67.1	52.0	40.3	36.6	31.1	27.2

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	22.0	19.7	17.4	15.6	13.7	12.4	10.9	12.8	11.8	10.5
45.0	22.2	22.9	21.0	19.2	17.4	13.5	12.4	11.1	10.0	11.6
90.0	22.2	22.9	21.0	19.2	17.4	13.5	12.4	11.1	10.0	11.6
135.0	21.6	19.6	15.5	13.7	15.7	14.2	12.6	11.8	10.8	9.8
180.0	21.6	19.6	15.5	13.7	15.7	14.2	12.6	11.8	10.8	9.8
225.0	18.3	16.4	17.2	15.9	14.2	10.2	10.0	8.9	7.8	9.2
270.0	18.3	16.4	17.2	15.9	14.2	10.2	10.0	8.9	7.8	9.2
315.0	22.0	19.7	17.4	15.6	13.7	12.4	10.9	12.8	11.8	10.5
360.0	22.0	19.7	17.4	15.6	13.7	12.4	10.9	12.8	11.8	10.5

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	9.8	8.9	8.1	7.4	6.7	5.9	5.0	4.8	4.2	3.7
45.0	10.8	10.0	8.7	5.5	5.0	4.5	3.9	4.5	5.0	2.2
90.0	10.8	10.0	8.7	5.5	5.0	4.5	3.9	4.5	5.0	2.2
135.0	6.5	5.7	5.0	4.3	3.8	3.3	2.8	2.6	2.2	1.7
180.0	6.5	5.7	5.0	4.3	3.8	3.3	2.8	2.6	2.2	1.7
225.0	8.5	5.5	4.5	4.1	3.7	3.3	2.8	2.4	2.2	1.7
270.0	8.5	5.5	4.5	4.1	3.7	3.3	2.8	2.4	2.2	1.7
315.0	9.8	8.9	8.1	7.4	6.7	5.9	5.0	4.8	4.2	3.7
360.0	9.8	8.9	8.1	7.4	6.7	5.9	5.0	4.8	4.2	3.7

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	3.5	2.8	2.6	2.4	2.2	1.1	0.0	0.0	0.0	0.0
45.0	1.7	1.7	2.6	1.7	0.9	0.7	0.7	1.5	1.9	2.2
90.0	1.7	1.7	2.6	1.7	0.9	0.7	0.7	1.5	1.9	2.2
135.0	2.6	1.7	1.4	2.1	2.3	2.4	2.4	2.1	1.7	1.5
180.0	2.6	1.7	1.4	2.1	2.3	2.4	2.4	2.1	1.7	1.5
225.0	1.5	1.3	1.2	1.1	0.7	0.7	1.4	2.2	2.1	1.9
270.0	1.5	1.3	1.2	1.1	0.7	0.7	1.4	2.2	2.1	1.9
315.0	3.5	2.8	2.6	2.4	2.2	1.1	0.0	0.0	0.0	0.0
360.0	3.5	2.8	2.6	2.4	2.2	1.1	0.0	0.0	0.0	0.0

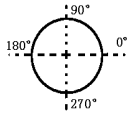
Photometric Data Table [cd]

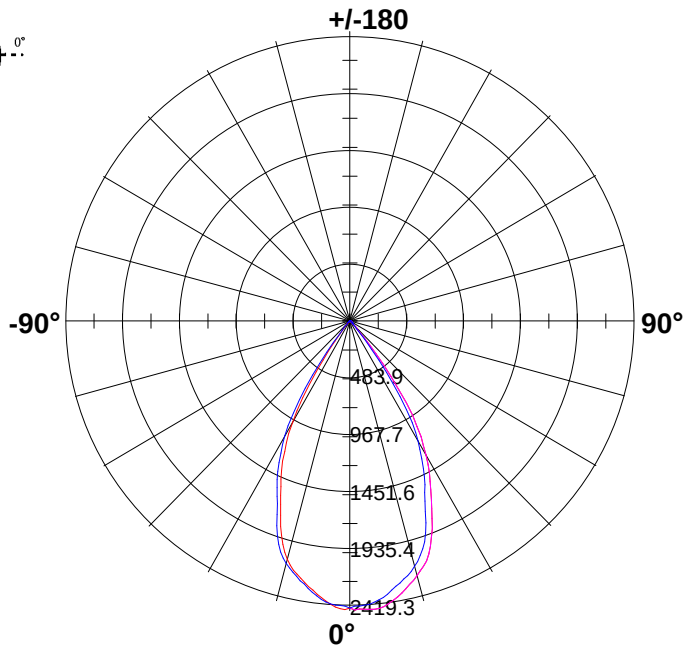
C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	0.0	0.9	0.9	0.9	0.9	0.9	1.1	1.1	1.1	1.1
45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135.0	1.3	0.9	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.4
180.0	1.3	0.9	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.4
225.0	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
270.0	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
315.0	0.0	0.9	0.9	0.9	0.9	0.9	1.1	1.1	1.1	1.1
360.0	0.0	0.9	0.9	0.9	0.9	0.9	1.1	1.1	1.1	1.1

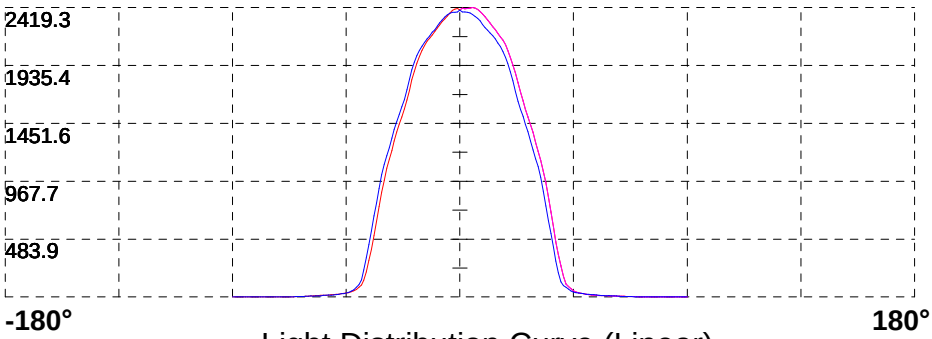
C\G	90.0
0.0	1.1
45.0	1.5
90.0	1.5
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	1.1
360.0	1.1

Light Distribution Curve [Unit: cd]

Luminaire



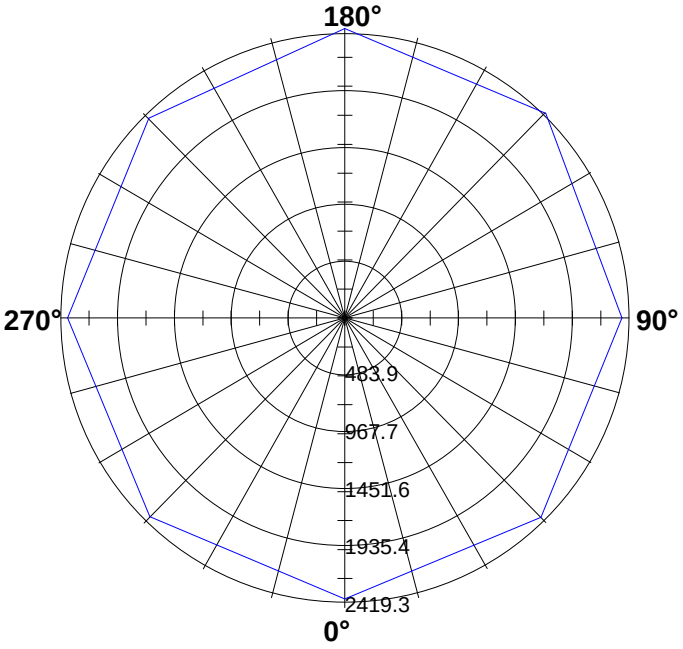


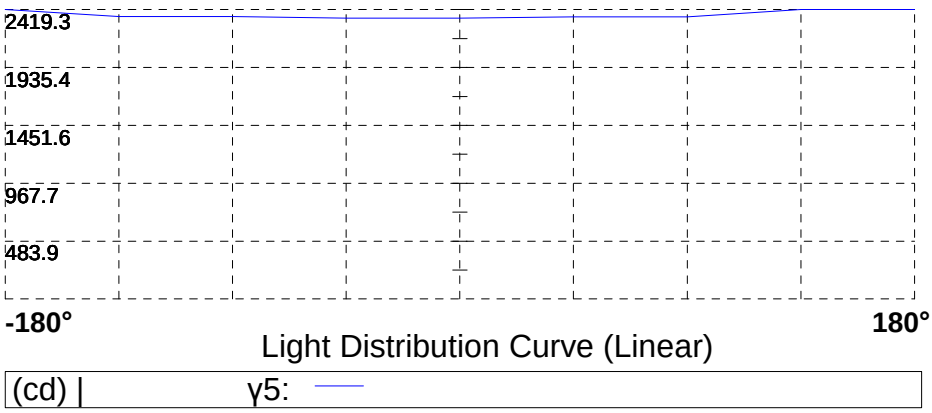


Light Distribution Curve (Linear)

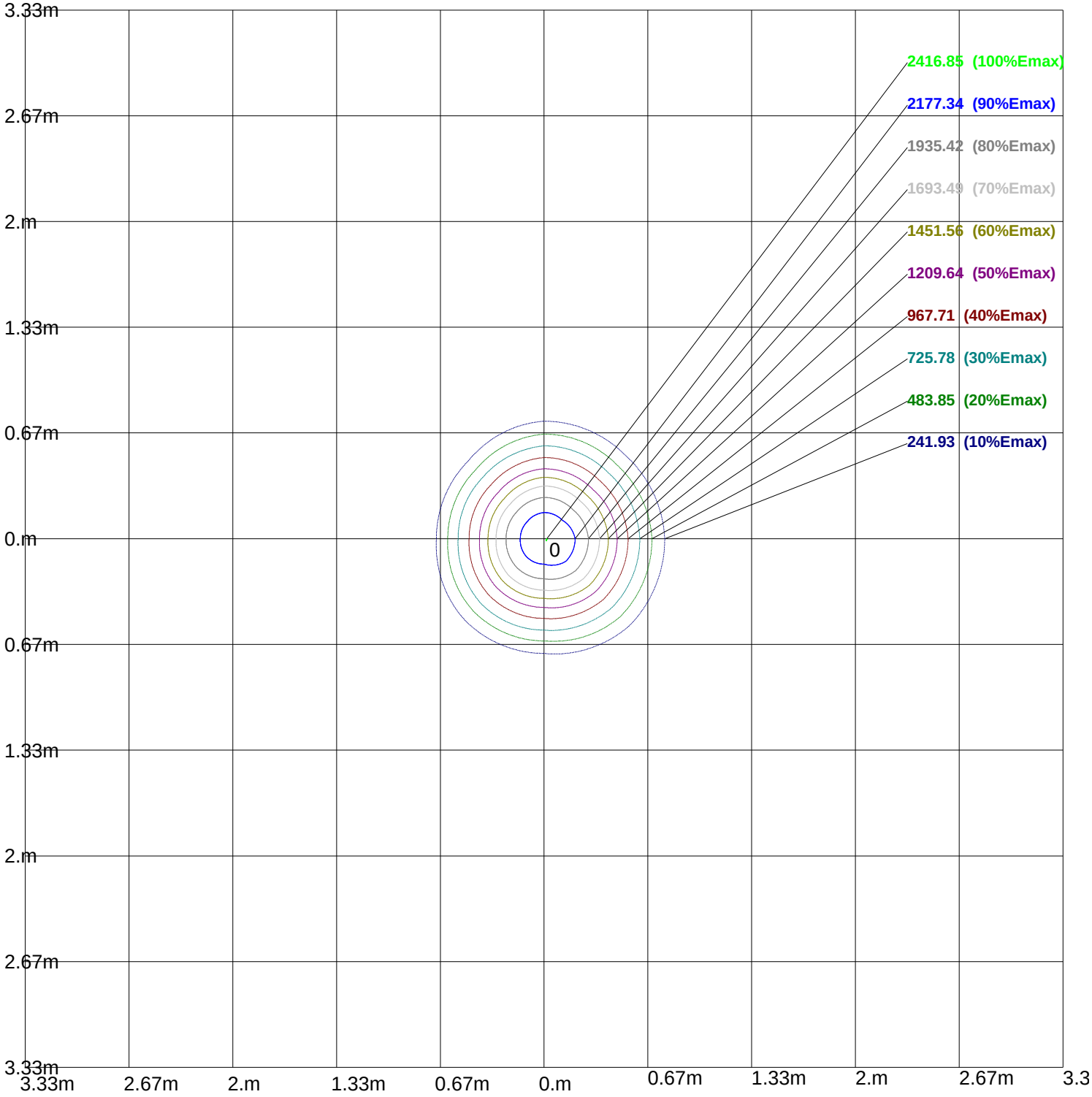
(cd) | C0/C180: C90/C270: C0:

Max Plane Light Distribution Curve [Unit: cd]





Iso-Lux[lx]



Height: 1 m
Max Illuminance : 2419.27lx

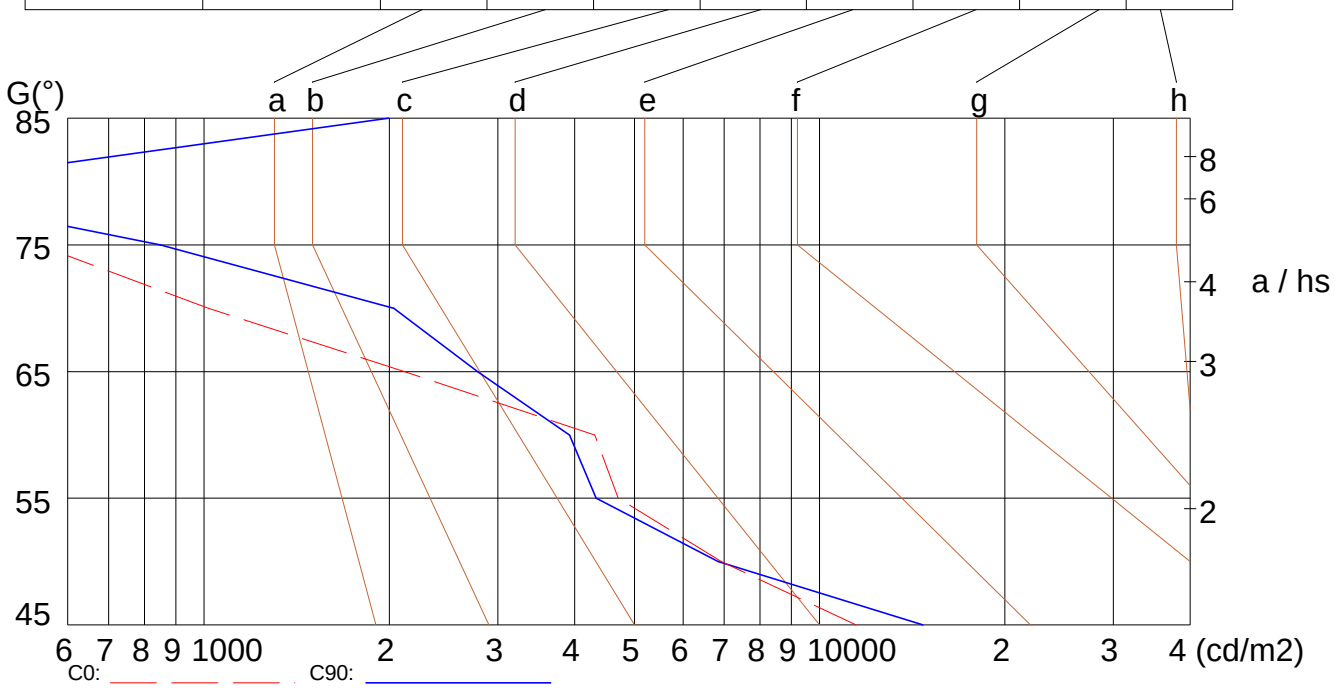
Luminance Limitting Curve

Diameter: 80mm
Length: mm
Width: 80mm
Height: 168mm

(cd/m2)

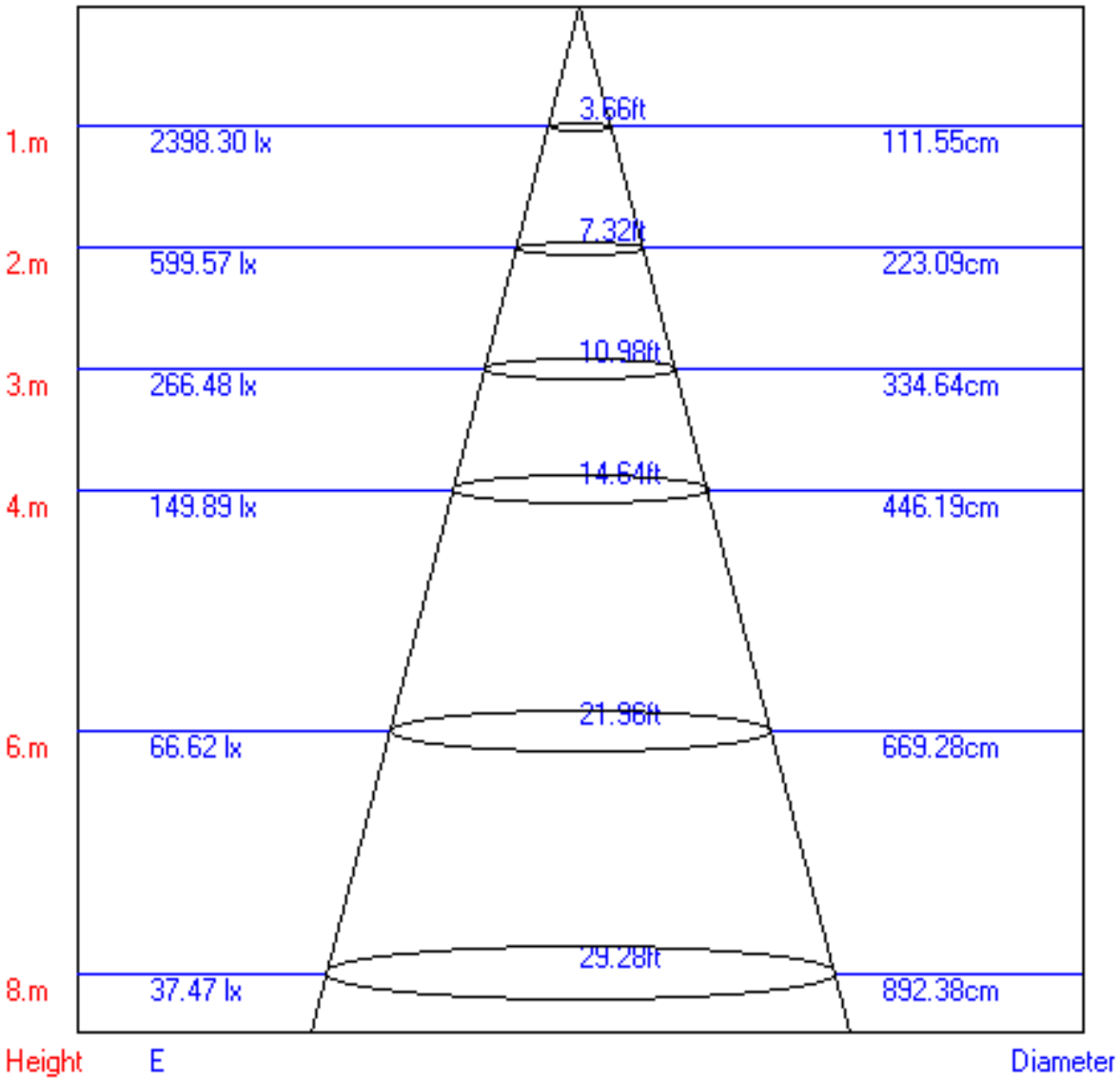
γ		45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	0	11452	6919	4706	4315	2117	1016	514		
C90	1994	14720	6840	4332	3926	2782	2033	849		

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

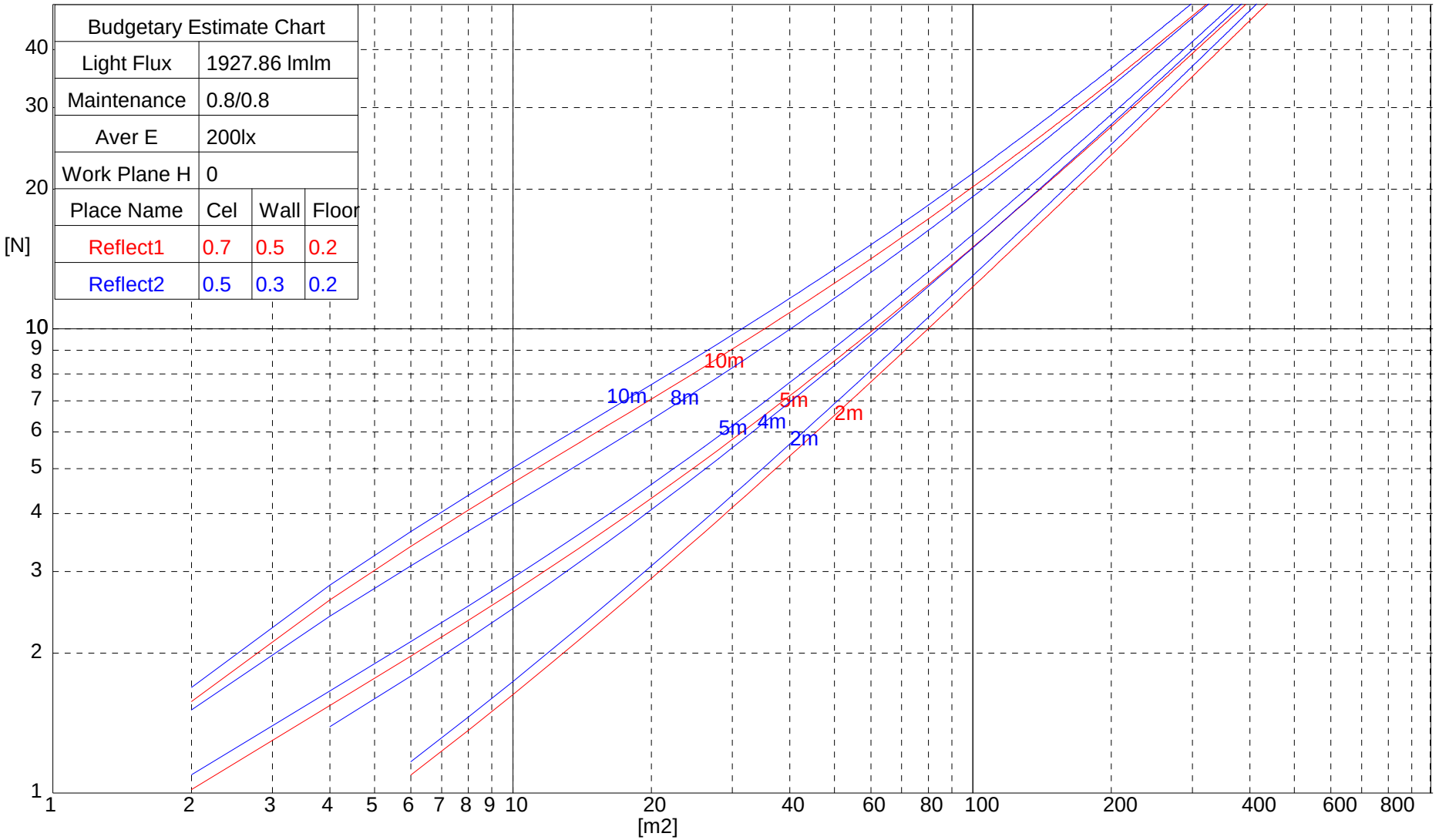


Beam Angle:58.30°

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	1.15	1.14	1.13	1.13	1.12	1.11	1.08	1.07	1.06	1.03	1.02	1.01	0.96	0.94	0.93	0.88
2	1.08	1.06	1.06	1.06	1.05	1.03	1.02	1.00	0.99	0.97	0.95	0.94	0.91	0.89	0.87	0.83
3	1.01	1.00	0.99	1.00	0.98	0.97	0.96	0.94	0.92	0.92	0.90	0.87	0.87	0.84	0.82	0.77
4	0.95	0.93	0.92	0.94	0.92	0.90	0.91	0.88	0.86	0.87	0.84	0.82	0.83	0.79	0.77	0.72
5	0.89	0.88	0.87	0.88	0.86	0.85	0.86	0.83	0.81	0.82	0.79	0.76	0.79	0.75	0.72	0.68
6	0.84	0.82	0.81	0.83	0.81	0.79	0.81	0.78	0.76	0.78	0.74	0.72	0.75	0.71	0.68	0.64
7	0.79	0.77	0.76	0.78	0.76	0.75	0.76	0.73	0.71	0.74	0.70	0.67	0.71	0.67	0.64	0.60
8	0.74	0.73	0.72	0.74	0.72	0.70	0.72	0.69	0.67	0.70	0.66	0.64	0.68	0.63	0.60	0.57
9	0.70	0.69	0.68	0.70	0.68	0.66	0.68	0.65	0.63	0.67	0.63	0.60	0.65	0.60	0.57	0.53
10	0.67	0.65	0.64	0.66	0.64	0.63	0.65	0.62	0.60	0.63	0.59	0.57	0.62	0.57	0.54	0.51

Budgetary Estimate Chart			
Light Flux	1927.86 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



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	14.1	13.4	14.1	14.6	12.9	14.1	13.2	14.3	14.5
	3H	14.4	15.5	14.7	15.7	16.0	14.4	15.4	14.7	15.8	16.0
	4H	15.1	16.1	15.4	16.4	16.6	15.0	16.0	15.3	16.5	16.8
	6H	15.6	16.4	16.0	16.8	16.9	15.5	16.4	15.8	16.8	16.9
	8H	15.8	16.7	16.1	16.9	17.2	15.9	16.7	15.9	16.8	17.2
	12H	15.8	16.7	16.1	17.0	17.4	15.9	16.5	16.1	17.2	17.2
4H	2H	13.9	14.7	14.1	14.9	15.1	13.8	14.7	13.9	14.9	15.1
	3H	15.4	16.4	15.7	16.3	16.6	15.4	16.3	15.6	16.3	16.7
	4H	16.2	16.8	16.5	16.9	17.2	16.0	16.8	16.3	17.0	17.3
	6H	16.7	17.3	16.9	17.6	17.8	16.6	17.3	16.9	17.5	17.9
	8H	17.0	17.5	17.2	17.7	18.1	16.9	17.4	17.2	17.6	17.9
	12H	17.0	17.7	17.3	17.9	18.1	17.1	17.5	17.3	17.9	18.3
8H	4H	16.4	17.1	16.8	17.2	17.7	16.3	17.0	16.6	17.3	17.7
	6H	17.2	17.6	17.7	18.0	18.2	17.1	17.6	17.4	17.9	18.3
	8H	17.4	17.9	17.9	18.2	18.6	17.4	17.9	17.7	18.1	18.6
	12H	17.8	18.1	18.2	18.4	18.8	17.6	18.0	18.0	18.5	18.8
12H	4H	16.5	17.1	16.8	17.2	17.6	16.4	17.0	16.7	17.3	17.7
	6H	17.3	17.8	17.6	17.9	18.4	17.3	17.6	17.5	17.9	18.4
	8H	17.6	18.1	18.1	18.2	18.6	17.6	17.8	17.9	18.3	18.6