

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P937046

Luminaire Tested: SQ4-FB-075U-050D-92765-1D-UNV-STD-W-8-4000K

Issue Date: 12/17/2024

**Test Information**

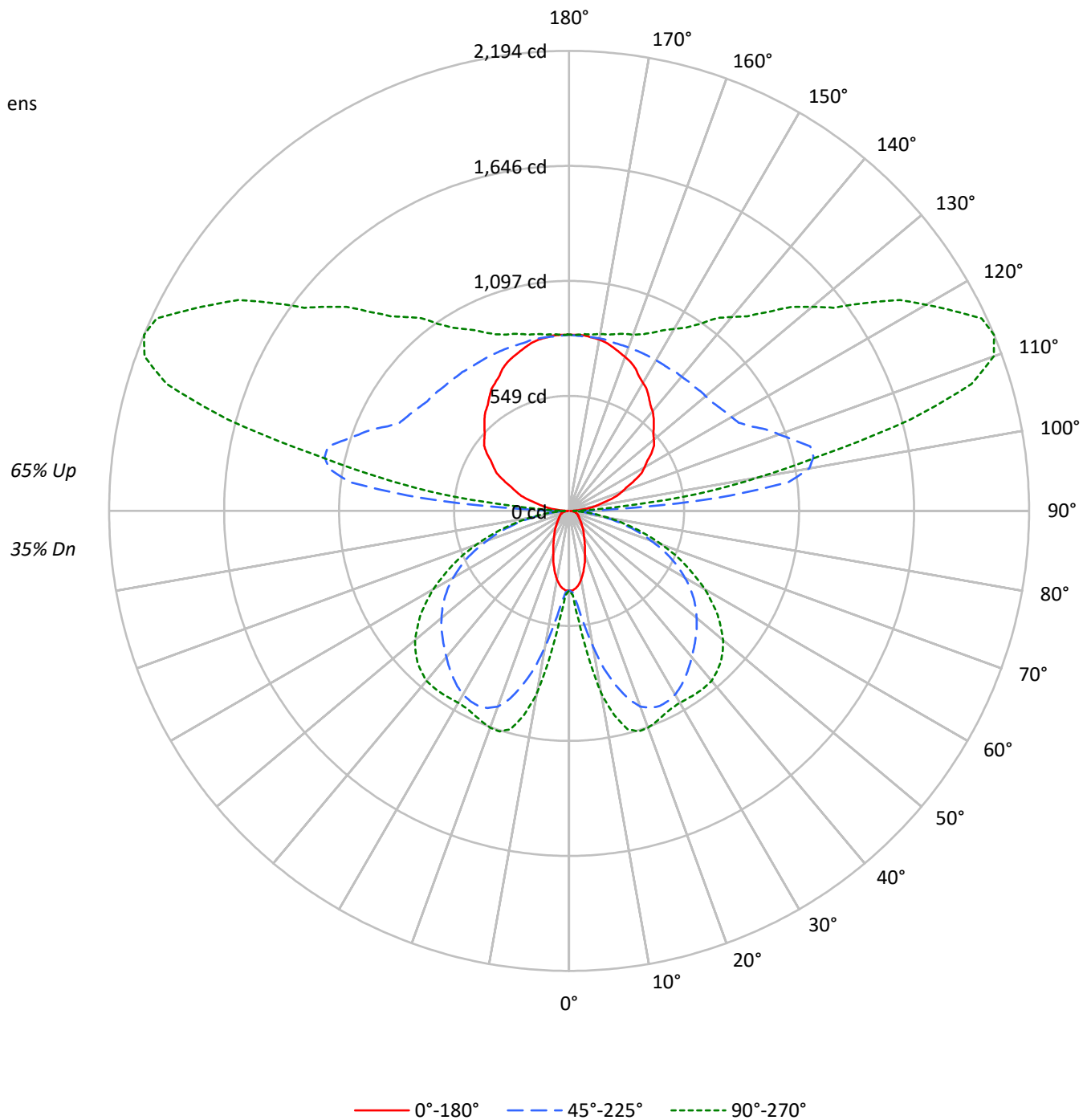
Test Method: LM-79-2019  
Report Number: P937046  
REPORT IS A COMBINATION OF REPORTS P933517 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-050D-92765-1D-UNV-STD-W-8-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8386.0 lumens  
Efficiency: N/A  
Efficacy: 121.9 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 68.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20			
RC	80				70				50				30				10		0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35		
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29		
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23		
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19		
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16		
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14		
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12		
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10		
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9		
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8		
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1760	1760	1760
5°	1720	2035	2366
10°	1560	2966	3923
15°	1326	3875	4737
20°	1079	4490	4828
25°	900	4699	4730
30°	759	4729	4721
35°	671	4650	4843
40°	585	4548	4969
45°	530	4474	4988
50°	486	4406	4906
55°	466	4308	4689
60°	477	4119	4345
65°	496	3831	3873
70°	529	3341	3272
75°	586	2724	2553
80°	641	1889	1720
85°	568	1002	881

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4988 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.1	0.6
10°-20°	217.5	2.6
20°-30°	380.5	4.5
30°-40°	489.8	5.8
40°-50°	547.1	6.5
50°-60°	524.0	6.2
60°-70°	415.3	5.0
70°-80°	244.2	2.9
80°-90°	71.1	0.8
90°-100°	409.6	4.9
100°-110°	1076.9	12.8
110°-120°	1116.6	13.3
120°-130°	895.6	10.7
130°-140°	702.8	8.4
140°-150°	539.4	6.4
150°-160°	388.5	4.6
160°-170°	237.7	2.8
170°-180°	80.3	1.0
0°-30°	647.1	7.7
0°-40°	1137.0	13.6
0°-60°	2208.1	26.3
0°-90°	2938.6	35.0
90°-120°	2603.1	31.0
90°-150°	4740.9	56.5
90°-180°	5447.0	65.0
0°-180°	8386.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	379	379	379	379	379	
5°	370	396	446	505	523	34
15°	277	511	861	1044	1077	77
25°	177	580	1026	1071	1072	81
35°	120	554	966	1021	1062	75
45°	82	442	854	978	1022	63
55°	59	281	725	842	865	53
65°	46	149	538	605	614	46
75°	34	92	295	325	326	36
85°	12	28	73	80	82	13
90°	6	16	43	22	22	5
95°	54	212	706	364	248	60
105°	194	294	1190	1807	1686	206
115°	345	418	954	1902	2171	340
125°	479	537	867	1466	1729	426
135°	571	629	840	1183	1342	442
145°	663	705	830	1010	1088	415
155°	749	770	830	911	937	344
165°	808	819	830	862	873	228
175°	840	840	835	846	846	80
180°	840	840	840	840	840	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4
2.5°	379.4	379.4	381.9	383.1	385.5	386.8	389.2	391.7	399.0	400.1	402.6
5°	369.7	374.6	390.4	396.5	413.6	436.8	446.5	462.4	495.4	505.1	511.2
7.5°	355.0	366.0	405.1	414.8	457.5	518.5	544.1	578.3	630.7	656.4	677.1
10°	331.8	355.0	424.6	447.8	517.3	610.0	657.7	705.2	784.5	819.9	833.3
12.5°	306.3	344.0	445.4	477.0	577.1	712.5	769.9	822.3	912.6	960.2	967.5
15°	277.0	328.2	464.8	511.2	640.6	797.9	861.4	926.0	1010.2	1044.4	1052.9
17.5°	251.3	316.0	483.2	532.0	689.3	874.8	939.5	993.1	1061.5	1084.7	1090.7
20°	219.6	296.5	495.4	558.8	740.6	930.9	993.1	1034.6	1081.0	1095.7	1098.1
22.5°	196.4	275.7	502.7	568.5	774.7	965.1	1017.5	1050.5	1082.2	1087.1	1088.3
25°	176.9	252.5	501.5	579.5	804.0	985.9	1026.1	1050.5	1068.8	1071.3	1071.3
27.5°	158.6	227.0	496.6	582.0	826.0	990.7	1022.4	1039.5	1048.1	1052.9	1052.9
30°	142.7	202.6	484.4	577.1	835.8	985.9	1011.4	1020.0	1028.5	1035.9	1039.5
32.5°	130.5	179.4	466.1	567.3	837.0	973.6	992.0	996.8	1009.0	1026.1	1032.2
35°	119.5	156.2	445.4	553.9	829.7	954.1	966.3	971.2	995.6	1021.2	1029.7
37.5°	108.6	139.1	418.5	530.8	818.7	930.9	939.5	948.0	985.9	1016.3	1026.1
40°	97.6	124.4	386.8	505.1	801.6	902.9	910.2	923.6	973.6	1009.0	1018.8
42.5°	89.1	112.2	352.6	478.3	779.6	871.2	882.2	901.6	959.0	996.8	1007.8
45°	81.8	100.1	316.0	441.6	751.5	838.2	854.1	880.9	941.9	978.5	988.2
47.5°	74.4	91.5	278.2	403.9	721.1	805.3	826.0	856.5	918.7	954.1	962.7
50°	68.3	83.0	240.3	363.6	688.1	769.9	794.3	826.0	889.4	922.4	933.4
52.5°	63.4	75.7	204.9	323.3	650.3	733.3	761.4	794.3	854.1	885.8	893.1
55°	58.6	69.6	174.5	280.6	611.3	694.2	724.7	756.5	815.0	841.9	846.8
57.5°	56.1	64.7	148.8	240.3	569.8	650.3	684.5	713.8	768.6	789.4	794.3
60°	52.5	61.0	129.4	206.2	524.7	608.8	638.1	667.4	713.8	730.8	734.5
62.5°	48.8	58.6	114.7	173.3	478.3	560.1	589.3	616.2	655.2	667.4	672.3
65°	46.4	56.1	103.7	148.8	430.7	508.8	538.1	561.2	593.0	605.2	607.6
67.5°	43.9	53.7	95.1	128.1	383.1	457.5	479.5	501.5	525.9	538.1	539.2
70°	40.3	51.2	87.9	113.4	334.3	399.0	417.3	440.4	460.0	466.1	469.7
72.5°	37.8	47.6	83.0	102.5	284.3	342.8	359.9	373.3	390.4	396.5	396.5
75°	34.2	42.7	78.0	91.5	233.0	280.6	295.3	308.6	322.1	324.6	320.9
77.5°	30.5	37.8	67.1	76.9	181.8	222.0	234.2	241.6	252.5	255.0	256.2
80°	25.7	32.9	52.5	59.8	131.8	163.5	172.0	178.1	187.9	187.9	190.3
82.5°	19.6	25.7	37.8	42.7	89.1	112.2	119.5	123.3	129.4	129.4	129.4
85°	12.2	15.8	24.4	28.0	53.7	68.3	73.2	74.4	79.3	80.5	80.5
87.5°	6.1	8.6	15.8	17.1	28.0	35.4	35.4	37.8	37.8	36.6	35.4
90°	5.6	10.2	14.7	15.8	24.8	36.8	42.8	38.1	28.6	21.5	21.5
92.5°	22.6	60.9	99.3	108.9	153.1	211.9	241.4	211.6	151.9	107.2	102.9
95°	54.1	124.3	194.5	212.0	376.5	595.8	705.5	629.6	477.7	363.8	350.8
97.5°	93.6	155.5	217.5	233.0	507.2	872.9	1055.7	1007.7	911.7	839.8	815.2
100°	124.1	180.2	236.4	250.4	554.8	960.6	1163.4	1167.0	1174.0	1179.3	1150.0
102.5°	150.0	202.4	254.8	267.9	576.5	988.1	1193.9	1255.0	1377.4	1469.2	1444.0
105°	194.0	238.4	282.7	293.8	592.7	991.2	1190.5	1327.6	1601.8	1807.4	1794.0
107.5°	239.1	280.5	321.8	332.2	595.7	947.1	1122.9	1314.1	1696.6	1983.5	1986.7
110°	269.6	306.9	344.2	353.6	591.2	908.0	1066.5	1280.2	1707.8	2028.6	2042.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	299.5	335.0	370.6	379.5	591.4	873.9	1015.2	1234.0	1671.6	1999.8	2021.4
115°	344.6	377.4	410.2	418.4	596.8	834.7	953.7	1164.4	1586.0	1902.2	1932.2
117.5°	389.1	419.0	448.8	456.3	608.0	810.2	911.4	1101.6	1482.1	1767.4	1800.5
120°	415.1	443.1	471.2	478.2	616.9	801.9	894.4	1068.3	1415.9	1676.6	1708.8
122.5°	440.4	468.8	497.1	504.2	629.9	797.6	881.4	1038.0	1351.1	1585.9	1617.6
125°	479.4	505.2	531.0	537.4	647.4	794.0	867.3	1000.3	1266.2	1465.7	1495.0
127.5°	510.9	537.0	563.1	569.6	664.9	792.0	855.5	969.7	1198.0	1369.3	1393.9
130°	527.9	555.9	584.0	591.0	677.7	793.3	851.1	952.7	1156.0	1308.4	1331.3
132.5°	545.3	573.4	601.5	608.5	688.0	794.0	847.1	938.0	1120.0	1256.5	1276.9
135°	571.3	596.8	622.5	628.8	699.3	793.3	840.3	916.6	1068.9	1183.2	1200.8
137.5°	597.8	623.1	648.4	654.8	716.2	798.2	839.1	903.5	1032.4	1129.0	1143.4
140°	619.8	643.1	666.4	672.2	726.5	799.0	835.2	890.9	1002.1	1085.7	1099.1
142.5°	636.7	658.3	679.9	685.2	735.3	801.9	835.2	884.1	981.9	1055.2	1066.7
145°	662.7	681.5	700.2	705.0	746.5	801.9	829.6	869.6	949.6	1009.5	1018.2
147.5°	688.6	706.9	725.3	729.8	763.1	807.4	829.6	861.1	923.9	971.1	978.4
150°	705.5	722.1	738.6	742.7	771.6	810.3	829.6	856.2	909.3	949.1	955.0
152.5°	723.0	735.5	748.1	751.2	777.3	812.1	829.6	852.2	897.6	931.7	936.1
155°	748.9	758.2	767.5	769.8	789.7	816.3	829.6	847.6	883.7	910.8	913.7
157.5°	768.1	777.1	786.1	788.4	802.1	820.4	829.6	843.6	871.7	892.7	894.8
160°	781.1	788.1	795.1	796.8	807.8	822.3	829.6	841.6	865.7	883.7	884.9
162.5°	794.0	799.3	804.6	805.9	813.9	824.3	829.6	839.8	860.1	875.3	876.3
165°	808.1	812.9	817.7	818.9	822.4	827.2	829.6	836.9	851.4	862.3	863.5
167.5°	821.1	823.4	825.7	826.2	829.2	833.2	835.2	840.0	849.5	856.7	857.2
170°	829.6	831.9	834.1	834.7	834.9	835.1	835.2	840.0	849.5	856.7	856.7
172.5°	834.1	834.6	835.1	835.2	835.2	835.2	835.2	839.0	846.5	852.1	851.7
175°	840.3	840.3	840.3	840.3	838.6	836.3	835.2	837.6	842.4	846.0	846.0
177.5°	840.3	840.3	840.3	840.3	839.0	837.2	836.3	838.2	842.0	844.8	844.3
180°	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	379.4	379.4
2.5°	405.1	402.6
5°	520.9	523.4
7.5°	701.5	700.3
10°	872.3	883.3
12.5°	996.8	999.2
15°	1072.5	1077.4
17.5°	1101.8	1102.9
20°	1102.9	1100.5
22.5°	1089.6	1087.1
25°	1073.6	1072.5
27.5°	1059.0	1060.3
30°	1052.9	1056.6
32.5°	1052.9	1059.0
35°	1055.4	1061.5
37.5°	1054.2	1061.5
40°	1049.3	1057.8
42.5°	1035.9	1042.0
45°	1015.2	1022.4
47.5°	988.2	993.1
50°	954.1	959.0
52.5°	911.4	912.6
55°	860.2	865.1
57.5°	805.3	806.5
60°	744.3	747.9
62.5°	679.6	679.6
65°	611.3	613.7
67.5°	540.5	546.6
70°	468.6	469.7
72.5°	397.8	397.8
75°	324.6	325.7
77.5°	255.0	255.0
80°	189.1	190.3
82.5°	130.5	133.0
85°	81.8	81.8
87.5°	37.8	34.2
90°	21.5	21.5
92.5°	85.9	68.8
95°	299.3	247.6
97.5°	716.9	618.6
100°	1033.0	915.9
102.5°	1343.8	1243.6
105°	1740.0	1686.2
107.5°	1999.7	2012.8
110°	2098.8	2154.9





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2107.5	2193.8
115°	2051.7	2171.2
117.5°	1933.2	2065.8
120°	1837.7	1966.5
122.5°	1744.7	1871.8
125°	1612.1	1729.1
127.5°	1492.7	1591.5
130°	1422.4	1513.6
132.5°	1358.6	1440.3
135°	1271.2	1341.6
137.5°	1201.1	1258.8
140°	1153.1	1206.9
142.5°	1113.1	1159.5
145°	1053.4	1088.5
147.5°	1007.4	1036.5
150°	978.6	1002.1
152.5°	953.8	971.7
155°	925.6	937.3
157.5°	903.1	911.4
160°	889.7	894.4
162.5°	880.9	885.4
165°	868.2	873.0
167.5°	859.2	861.2
170°	856.7	856.7
172.5°	850.0	848.2
175°	846.0	846.0
177.5°	842.3	840.3
180°	840.3	840.3



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	1.42	2.18	2.49	3.26	4.73	14.60	15.36	15.67	16.44	17.91
	3H	2.12	2.80	3.19	3.89	5.37	16.43	17.12	17.51	18.20	19.69
	4H	2.41	3.06	3.50	4.15	5.64	17.07	17.72	18.16	18.81	20.30
	6H	2.66	3.26	3.75	4.35	5.85	17.50	18.10	18.60	19.19	20.69
	8H	2.72	3.29	3.82	4.40	5.90	17.61	18.19	18.72	19.29	20.79
	12H	2.74	3.28	3.84	4.38	5.90	17.68	18.22	18.79	19.32	20.84
4H	2H	8.62	9.28	9.72	10.36	11.85	14.86	15.51	15.96	16.60	18.09
	3H	10.18	10.73	11.29	11.84	13.34	16.90	17.44	18.00	18.56	20.06
	4H	10.27	10.77	11.38	11.88	13.40	17.66	18.16	18.77	19.26	20.79
	6H	10.28	10.71	11.39	11.83	13.35	18.19	18.62	19.31	19.75	21.27
	8H	10.25	10.65	11.37	11.77	13.31	18.35	18.76	19.47	19.87	21.41
	12H	10.20	10.57	11.34	11.70	13.24	18.44	18.81	19.58	19.94	21.48
8H	4H	11.71	12.11	12.82	13.23	14.76	17.71	18.11	18.83	19.23	20.77
	6H	11.95	12.28	13.08	13.44	14.97	18.34	18.67	19.48	19.83	21.36
	8H	11.96	12.25	13.11	13.39	14.94	18.56	18.85	19.70	19.99	21.54
	12H	11.93	12.18	13.08	13.32	14.91	18.70	18.95	19.84	20.09	21.67
12H	4H	11.85	12.21	12.98	13.34	14.88	17.66	18.03	18.79	19.15	20.69
	6H	12.20	12.50	13.35	13.64	15.19	18.32	18.61	19.46	19.75	21.30
	8H	12.27	12.52	13.42	13.66	15.25	18.54	18.80	19.69	19.94	21.52