

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: P936758

Luminaire Tested: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

**Test Information**

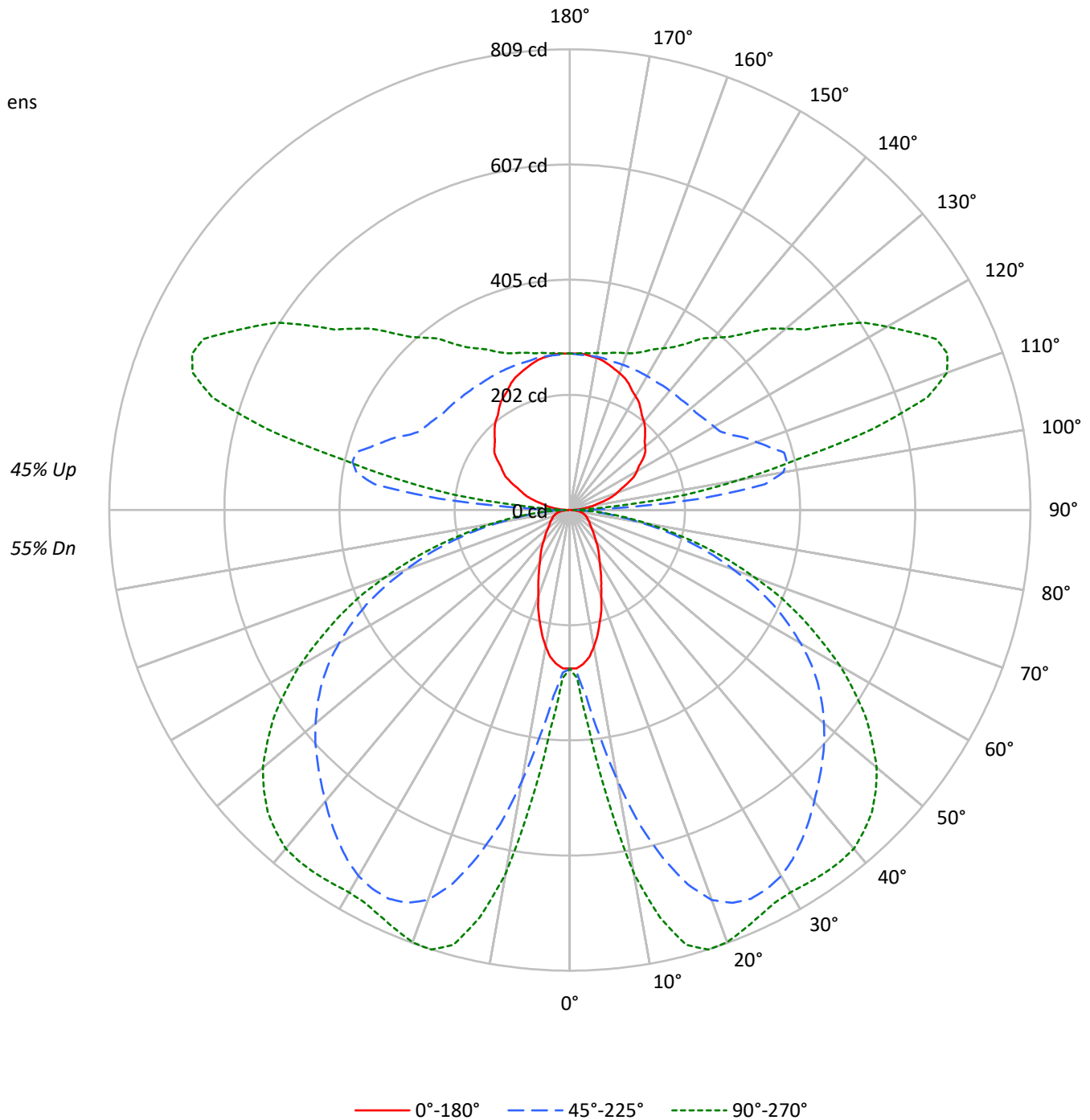
Test Method: LM-79-2019  
Report Number: P936758  
REPORT IS A COMBINATION OF REPORTS P933470 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-4-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3937.5 lumens  
Efficiency: N/A  
Efficacy: 108.2 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')  
CIE Type: General Diffuse  
  
Input Watts (W): 36.4  
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





TEST NUMBER: P936758

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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	0
RCR																		
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11

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

	0°	45°	90°
0°	2583	2583	2583
5°	2522	2984	3473
10°	2284	4347	5758
15°	1939	5675	6953
20°	1577	6571	7086
25°	1314	6872	6942
30°	1107	6909	6928
35°	976	6789	7107
40°	849	6635	7292
45°	768	6519	7321
50°	702	6414	7200
55°	672	6264	6881
60°	685	5980	6376
65°	709	5554	5684
70°	749	4834	4802
75°	823	3932	3747
80°	880	2716	2526
85°	745	1433	1293

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7321 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.0	0.9
10°-20°	159.6	4.1
20°-30°	279.2	7.1
30°-40°	359.4	9.1
40°-50°	401.5	10.2
50°-60°	384.5	9.8
60°-70°	304.7	7.7
70°-80°	179.2	4.6
80°-90°	50.8	1.3
90°-100°	134.0	3.4
100°-110°	352.4	8.9
110°-120°	365.4	9.3
120°-130°	293.1	7.4
130°-140°	230.0	5.8
140°-150°	176.5	4.5
150°-160°	127.1	3.2
160°-170°	77.8	2.0
170°-180°	26.3	0.7
0°-30°	474.9	12.1
0°-40°	834.3	21.2
0°-60°	1620.3	41.2
0°-90°	2155.1	54.7
90°-120°	851.7	21.6
90°-150°	1551.3	39.4
90°-180°	1782.0	45.3
0°-180°	3937.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	278	278	278	278	278	
5°	271	291	328	371	384	25
15°	203	375	632	766	791	57
25°	130	425	753	786	787	60
35°	88	406	709	749	779	55
45°	60	324	627	718	750	46
55°	43	206	532	618	635	39
65°	34	109	395	444	450	34
75°	25	67	217	238	239	26
85°	9	21	54	59	60	10
90°	2	5	14	7	7	2
95°	18	69	231	119	81	20
105°	64	96	390	591	552	67
115°	113	137	312	622	710	111
125°	157	176	284	480	566	139
135°	187	206	275	387	439	145
145°	217	231	272	330	356	136
155°	245	252	272	298	307	113
165°	264	268	272	282	286	75
175°	275	275	273	277	277	26
180°	275	275	275	275	275	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4
2.5°	278.4	278.4	280.2	281.1	282.9	283.8	285.6	287.4	292.8	293.7	295.5
5°	271.3	274.9	286.5	291.0	303.5	320.5	327.7	339.3	363.5	370.7	375.1
7.5°	260.5	268.6	297.2	304.4	335.7	380.5	399.3	424.4	462.9	481.7	496.9
10°	243.5	260.5	311.6	328.6	379.6	447.7	482.6	517.5	575.7	601.6	611.5
12.5°	224.7	252.5	326.8	350.1	423.5	522.9	564.9	603.4	669.7	704.6	710.0
15°	203.2	240.8	341.1	375.1	470.0	585.5	632.1	679.5	741.3	766.4	772.7
17.5°	184.4	231.9	354.5	390.4	505.9	641.9	689.4	728.8	778.9	795.9	800.4
20°	161.2	217.6	363.5	410.1	543.5	683.1	728.8	759.2	793.2	804.0	805.8
22.5°	144.1	202.3	368.9	417.2	568.5	708.2	746.7	770.9	794.1	797.7	798.6
25°	129.8	185.3	368.0	425.3	590.0	723.4	753.0	770.9	784.3	786.1	786.1
27.5°	116.4	166.5	364.4	427.1	606.1	727.0	750.3	762.8	769.1	772.7	772.7
30°	104.8	148.6	355.4	423.5	613.3	723.4	742.2	748.5	754.7	760.1	762.8
32.5°	95.8	131.6	342.0	416.3	614.2	714.5	727.9	731.5	740.4	753.0	757.4
35°	87.7	114.6	326.8	406.5	608.8	700.1	709.1	712.7	730.6	749.4	755.6
37.5°	79.7	102.1	307.1	389.5	600.8	683.1	689.4	695.7	723.4	745.8	753.0
40°	71.6	91.3	283.8	370.7	588.2	662.5	667.9	677.8	714.5	740.4	747.6
42.5°	65.4	82.4	258.7	351.0	572.1	639.3	647.3	661.6	703.7	731.5	739.5
45°	60.0	73.4	231.9	324.1	551.5	615.1	626.7	646.4	691.2	718.0	725.2
47.5°	54.6	67.1	204.1	296.3	529.1	590.9	606.1	628.5	674.2	700.1	706.4
50°	50.1	60.9	176.4	266.8	505.0	564.9	582.8	606.1	652.7	676.9	684.9
52.5°	46.6	55.5	150.4	237.3	477.2	538.1	558.7	582.8	626.7	650.0	655.4
55°	43.0	51.0	128.0	205.9	448.6	509.4	531.8	555.1	598.1	617.8	621.3
57.5°	41.2	47.5	109.2	176.4	418.1	477.2	502.3	523.8	564.0	579.3	582.8
60°	38.5	44.8	94.9	151.3	385.0	446.8	468.2	489.7	523.8	536.3	539.0
62.5°	35.8	43.0	84.2	127.1	351.0	410.9	432.4	452.1	480.8	489.7	493.3
65°	34.0	41.2	76.1	109.2	316.0	373.3	394.8	411.8	435.1	444.1	445.9
67.5°	32.2	39.4	69.8	94.0	281.1	335.7	351.9	368.0	385.9	394.8	395.7
70°	29.5	37.6	64.5	83.3	245.3	292.8	306.2	323.2	337.5	342.0	344.7
72.5°	27.8	34.9	60.9	75.2	208.6	251.6	264.1	274.0	286.5	291.0	291.0
75°	25.1	31.3	57.3	67.1	171.0	205.9	216.7	226.5	236.4	238.2	235.5
77.5°	22.4	27.8	49.2	56.4	133.4	162.9	171.9	177.3	185.3	187.1	188.0
80°	18.8	24.2	38.5	43.9	96.7	120.0	126.2	130.7	137.9	137.9	139.7
82.5°	14.3	18.8	27.8	31.3	65.4	82.4	87.7	90.4	94.9	94.9	94.9
85°	9.0	11.6	17.9	20.6	39.4	50.1	53.7	54.6	58.2	59.1	59.1
87.5°	4.5	6.3	11.6	12.5	20.6	26.0	26.0	27.8	27.8	26.9	26.0
90°	1.9	3.3	4.8	5.2	8.1	12.1	14.1	12.4	9.3	7.0	7.0
92.5°	7.3	19.9	32.5	35.6	50.0	69.3	79.0	69.2	49.7	35.1	33.7
95°	17.7	40.6	63.7	69.4	123.2	194.9	230.8	205.9	156.2	119.0	114.8
97.5°	30.6	50.9	71.1	76.2	165.9	285.6	345.4	329.7	298.3	274.8	266.7
100°	40.6	58.9	77.4	81.9	181.5	314.3	380.7	381.9	384.2	385.9	376.3
102.5°	49.1	66.3	83.4	87.7	188.6	323.3	390.6	410.7	450.7	480.7	472.5
105°	63.5	78.0	92.5	96.2	193.9	324.4	389.6	434.4	524.1	591.4	587.1
107.5°	78.3	91.8	105.3	108.7	194.9	310.0	367.4	430.0	555.2	649.0	650.1
110°	88.2	100.4	112.6	115.7	193.5	297.2	349.0	418.9	558.9	663.8	668.4



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	97.9	109.6	121.2	124.2	193.5	286.0	332.2	403.8	546.9	654.4	661.5
115°	112.7	123.5	134.2	136.9	195.3	273.1	312.0	381.0	518.9	622.4	632.2
117.5°	127.3	137.1	146.8	149.2	198.9	265.1	298.2	360.5	484.9	578.3	589.1
120°	135.8	145.0	154.2	156.5	201.9	262.4	292.7	349.5	463.3	548.6	559.2
122.5°	144.1	153.5	162.7	165.0	206.1	261.0	288.4	339.6	442.1	518.9	529.3
125°	156.9	165.3	173.7	175.8	211.8	259.8	283.8	327.3	414.4	479.6	489.2
127.5°	167.2	175.7	184.3	186.4	217.6	259.2	280.0	317.3	392.0	448.0	456.1
130°	172.7	181.9	191.1	193.4	221.8	259.6	278.4	311.7	378.3	428.1	435.6
132.5°	178.4	187.7	196.8	199.1	225.2	259.8	277.2	306.9	366.5	411.1	417.8
135°	186.9	195.3	203.7	205.7	228.8	259.6	275.0	299.8	349.7	387.1	392.9
137.5°	195.6	203.9	212.2	214.2	234.4	261.2	274.6	295.6	337.8	369.4	374.2
140°	202.8	210.4	218.1	220.0	237.7	261.4	273.2	291.5	328.0	355.3	359.6
142.5°	208.3	215.4	222.4	224.2	240.6	262.3	273.2	289.3	321.2	345.2	349.0
145°	216.8	222.9	229.1	230.6	244.2	262.4	271.5	284.5	310.7	330.3	333.1
147.5°	225.4	231.3	237.3	238.8	249.7	264.2	271.5	281.8	302.3	317.7	320.2
150°	230.8	236.2	241.6	243.0	252.5	265.1	271.5	280.1	297.5	310.6	312.6
152.5°	236.5	240.7	244.8	245.8	254.4	265.7	271.5	278.9	293.8	304.9	306.3
155°	245.0	248.1	251.1	251.9	258.4	267.1	271.5	277.4	289.2	298.0	299.0
157.5°	251.3	254.3	257.2	257.9	262.4	268.4	271.5	276.0	285.2	292.1	292.9
160°	255.6	257.8	260.2	260.7	264.3	269.0	271.5	275.4	283.3	289.2	289.5
162.5°	259.8	261.5	263.2	263.7	266.3	269.8	271.5	274.8	281.4	286.4	286.8
165°	264.5	266.0	267.6	268.0	269.1	270.7	271.5	273.8	278.5	282.1	282.5
167.5°	268.7	269.4	270.1	270.3	271.3	272.6	273.2	274.9	278.0	280.3	280.5
170°	271.5	272.2	272.9	273.1	273.2	273.2	273.2	274.9	278.0	280.3	280.3
172.5°	272.9	273.1	273.2	273.2	273.2	273.2	273.2	274.5	276.9	278.8	278.6
175°	275.0	275.0	275.0	275.0	274.4	273.6	273.2	274.1	275.7	276.8	276.8
177.5°	275.0	275.0	275.0	275.0	274.5	274.0	273.7	274.3	275.6	276.5	276.3
180°	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	278.4	278.4
2.5°	297.2	295.5
5°	382.3	384.1
7.5°	514.8	513.9
10°	640.1	648.2
12.5°	731.5	733.3
15°	787.0	790.6
17.5°	808.5	809.4
20°	809.4	807.6
22.5°	799.5	797.7
25°	787.9	787.0
27.5°	777.1	778.0
30°	772.7	775.3
32.5°	772.7	777.1
35°	774.4	778.9
37.5°	773.5	778.9
40°	770.0	776.2
42.5°	760.1	764.6
45°	744.9	750.3
47.5°	725.2	728.8
50°	700.1	703.7
52.5°	668.8	669.7
55°	631.2	634.8
57.5°	590.9	591.8
60°	546.1	548.8
62.5°	498.7	498.7
65°	448.6	450.3
67.5°	396.6	401.1
70°	343.8	344.7
72.5°	291.9	291.9
75°	238.2	239.0
77.5°	187.1	187.1
80°	138.8	139.7
82.5°	95.8	97.6
85°	60.0	60.0
87.5°	27.8	25.1
90°	7.0	7.0
92.5°	28.1	22.5
95°	97.9	81.0
97.5°	234.6	202.4
100°	338.0	299.7
102.5°	439.7	406.9
105°	569.4	551.8
107.5°	654.3	658.6
110°	686.7	705.1





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	689.7	717.9
115°	671.3	710.4
117.5°	632.5	676.0
120°	601.3	643.5
122.5°	570.9	612.5
125°	527.4	565.7
127.5°	488.4	520.7
130°	465.5	495.3
132.5°	444.5	471.3
135°	416.0	439.0
137.5°	393.0	411.8
140°	377.3	394.9
142.5°	364.2	379.4
145°	344.7	356.2
147.5°	329.7	339.1
150°	320.3	328.0
152.5°	312.1	317.9
155°	302.9	306.7
157.5°	295.5	298.2
160°	291.2	292.7
162.5°	288.3	289.7
165°	284.1	285.7
167.5°	281.1	281.8
170°	280.3	280.3
172.5°	278.1	277.5
175°	276.8	276.8
177.5°	275.7	275.0
180°	275.0	275.0



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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	4.71	5.66	5.62	6.59	7.79	17.85	18.80	18.75	19.73	20.93
	3H	5.42	6.27	6.34	7.22	8.44	19.68	20.53	20.60	21.47	22.70
	4H	5.72	6.53	6.66	7.48	8.71	20.32	21.13	21.25	22.07	23.30
	6H	5.98	6.73	6.93	7.68	8.92	20.74	21.49	21.69	22.44	23.68
	8H	6.05	6.76	7.00	7.73	8.98	20.86	21.57	21.81	22.54	23.78
	12H	6.07	6.75	7.03	7.71	8.98	20.92	21.60	21.88	22.56	23.83
4H	2H	11.91	12.72	12.85	13.67	14.90	18.13	18.94	19.07	19.89	21.12
	3H	13.49	14.17	14.44	15.14	16.39	20.17	20.85	21.12	21.83	23.07
	4H	13.59	14.21	14.55	15.18	16.45	20.93	21.55	21.89	22.52	23.79
	6H	13.60	14.14	14.58	15.13	16.40	21.47	22.00	22.44	23.00	24.26
	8H	13.58	14.08	14.56	15.07	16.36	21.62	22.12	22.60	23.11	24.40
	12H	13.54	14.00	14.54	15.00	16.29	21.71	22.17	22.71	23.17	24.46
8H	4H	15.03	15.53	16.00	16.52	17.80	21.00	21.50	21.98	22.49	23.78
	6H	15.28	15.69	16.28	16.72	18.00	21.62	22.04	22.62	23.07	24.35
	8H	15.30	15.66	16.31	16.68	17.98	21.84	22.20	22.85	23.22	24.52
	12H	15.27	15.59	16.28	16.60	17.95	21.98	22.30	22.99	23.31	24.66
12H	4H	15.17	15.63	16.17	16.63	17.92	20.96	21.41	21.95	22.42	23.71
	6H	15.53	15.90	16.54	16.92	18.22	21.61	21.98	22.62	22.99	24.29
	8H	15.61	15.93	16.62	16.94	18.29	21.84	22.16	22.85	23.17	24.52