

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: P936433

Luminaire Tested: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

**Test Information**

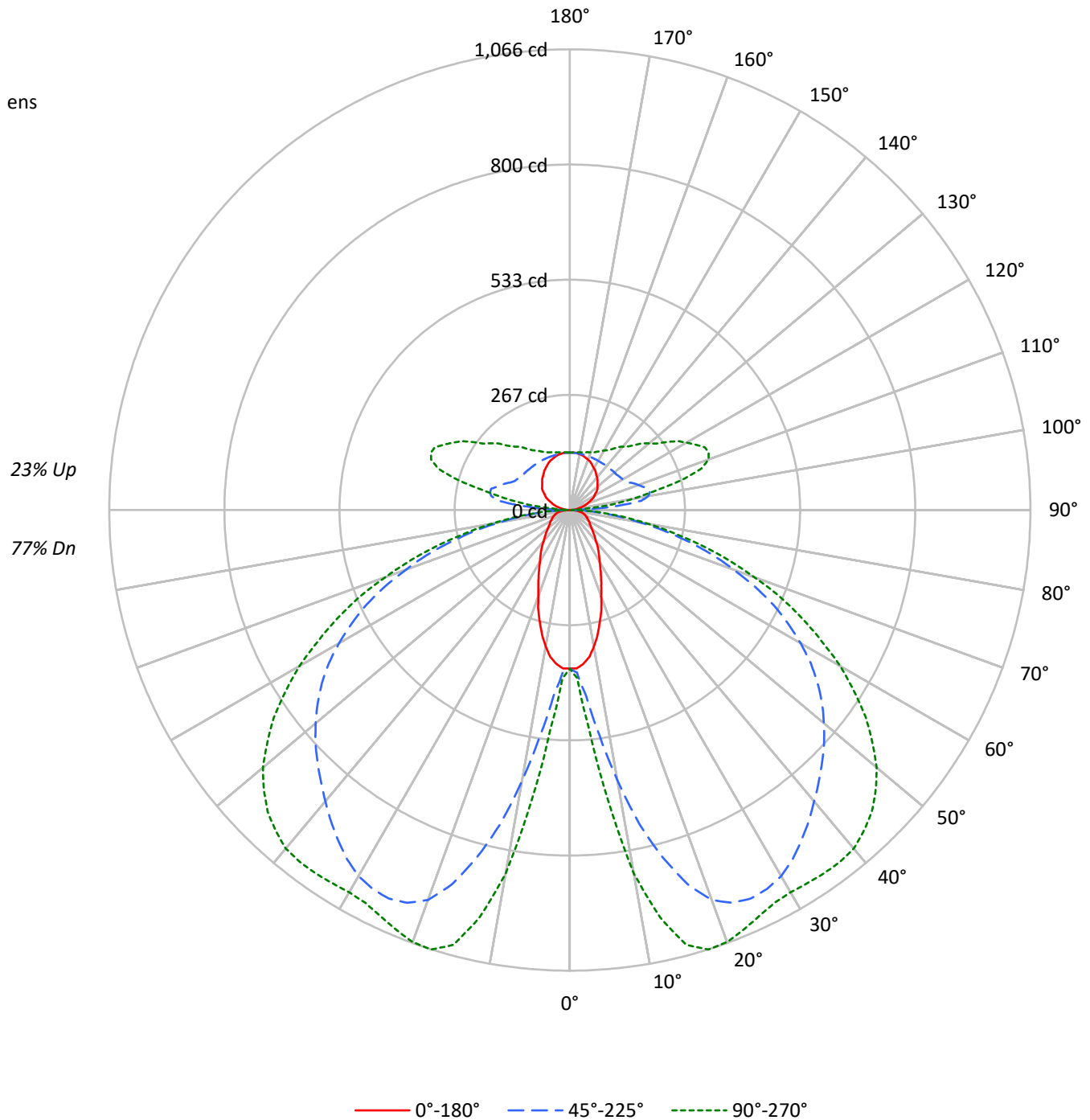
Test Method: LM-79-2019  
Report Number: P936433  
REPORT IS A COMBINATION OF REPORTS P933439 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-4-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3701.7 lumens  
Efficiency: N/A  
Efficacy: 95.4 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: Semi-Direct  
  
Input Watts (W): 38.8  
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





TEST NUMBER: P936433

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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	0
RCR																					
0	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77			77
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66	63			63
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55	51			51
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45	42			42
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38	35			35
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33	30			30
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28	26			26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25	22			22
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22	20			20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	20	17			17
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17	16			16

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

	0°	45°	90°
0°	3404	3404	3404
5°	3322	3931	4575
10°	3009	5726	7585
15°	2555	7476	9158
20°	2078	8657	9333
25°	1731	9052	9145
30°	1458	9103	9127
35°	1287	8944	9364
40°	1119	8740	9607
45°	1011	8588	9645
50°	927	8450	9485
55°	884	8252	9064
60°	902	7880	8401
65°	934	7316	7488
70°	988	6369	6326
75°	1082	5180	4937
80°	1156	3579	3327
85°	977	1890	1702

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9645 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.4	1.3
10°-20°	210.3	5.7
20°-30°	367.8	9.9
30°-40°	473.5	12.8
40°-50°	528.9	14.3
50°-60°	506.6	13.7
60°-70°	401.4	10.8
70°-80°	236.1	6.4
80°-90°	66.1	1.8
90°-100°	64.9	1.8
100°-110°	170.7	4.6
110°-120°	177.0	4.8
120°-130°	142.0	3.8
130°-140°	111.4	3.0
140°-150°	85.5	2.3
150°-160°	61.6	1.7
160°-170°	37.7	1.0
170°-180°	12.7	0.3
0°-30°	625.6	16.9
0°-40°	1099.1	29.7
0°-60°	2134.5	57.7
0°-90°	2838.1	76.7
90°-120°	412.7	11.1
90°-150°	751.6	20.3
90°-180°	864.0	23.3
0°-180°	3701.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	367	367	367	367	367	
5°	357	383	432	488	506	33
15°	268	494	833	1010	1041	75
25°	171	560	992	1036	1037	79
35°	116	536	934	987	1026	72
45°	79	427	826	946	988	61
55°	57	271	701	814	836	52
65°	45	144	520	585	593	44
75°	33	88	286	314	315	35
85°	12	27	71	78	79	12
90°	1	2	7	3	3	2
95°	9	34	112	58	39	10
105°	31	47	189	286	267	33
115°	55	66	151	302	344	54
125°	76	85	138	232	274	67
135°	91	100	133	188	213	70
145°	105	112	132	160	172	66
155°	119	122	132	144	149	55
165°	128	130	132	137	138	36
175°	133	133	132	134	134	13
180°	133	133	133	133	133	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	366.8	366.8	366.8	366.8	366.8	366.8	366.8	366.8	366.8	366.8	366.8
2.5°	366.8	366.8	369.2	370.3	372.7	373.9	376.2	378.6	385.7	386.9	389.2
5°	357.4	362.1	377.4	383.3	399.8	422.2	431.7	447.0	478.9	488.3	494.2
7.5°	343.2	353.8	391.6	401.1	442.3	501.3	526.0	559.0	609.7	634.6	654.6
10°	320.8	343.2	410.4	432.8	500.0	589.8	635.7	681.7	758.4	792.6	805.6
12.5°	296.1	332.6	430.5	461.1	557.9	688.8	744.3	795.0	882.3	928.2	935.3
15°	267.7	317.2	449.3	494.2	619.2	771.4	832.7	895.2	976.6	1009.6	1017.9
17.5°	243.0	305.5	467.0	514.2	666.4	845.7	908.2	960.1	1026.2	1048.6	1054.5
20°	212.3	286.6	478.9	540.2	716.0	899.9	960.1	1000.2	1045.0	1059.2	1061.5
22.5°	189.9	266.5	485.9	549.6	748.9	933.0	983.7	1015.5	1046.2	1050.9	1052.0
25°	171.0	244.1	484.8	560.2	777.3	953.0	991.9	1015.5	1033.2	1035.5	1035.5
27.5°	153.4	219.4	480.1	562.6	798.4	957.7	988.4	1004.9	1013.1	1017.9	1017.9
30°	138.0	195.8	468.3	557.9	807.9	953.0	977.8	986.0	994.3	1001.3	1004.9
32.5°	126.2	173.3	450.6	548.4	809.1	941.2	958.9	963.6	975.4	991.9	997.9
35°	115.6	150.9	430.5	535.5	802.0	922.3	934.1	938.9	962.4	987.2	995.4
37.5°	105.0	134.4	404.5	513.1	791.4	899.9	908.2	916.5	953.0	982.5	991.9
40°	94.3	120.3	373.9	488.3	774.9	872.8	879.9	892.9	941.2	975.4	984.8
42.5°	86.1	108.5	340.9	462.4	753.6	842.1	852.7	871.6	927.1	963.6	974.2
45°	79.0	96.7	305.5	426.9	726.5	810.3	825.6	851.6	910.6	945.9	955.4
47.5°	71.9	88.5	268.9	390.4	697.0	778.5	798.4	828.0	888.2	922.3	930.6
50°	66.1	80.2	232.3	351.5	665.2	744.3	767.8	798.4	859.9	891.6	902.3
52.5°	61.3	73.1	198.2	312.6	628.7	708.8	736.0	767.8	825.6	856.3	863.3
55°	56.6	67.2	168.7	271.3	590.9	671.1	700.6	731.2	787.9	813.8	818.5
57.5°	54.3	62.5	143.9	232.3	550.8	628.7	661.7	690.0	743.0	763.1	767.8
60°	50.7	59.0	125.1	199.3	507.2	588.5	616.9	645.2	690.0	706.5	710.0
62.5°	47.2	56.6	110.9	167.5	462.4	541.4	569.7	595.6	633.4	645.2	649.9
65°	44.8	54.3	100.2	143.9	416.3	491.8	520.1	542.5	573.2	585.0	587.3
67.5°	42.5	51.9	92.0	123.8	370.3	442.3	463.5	484.8	508.3	520.1	521.3
70°	38.9	49.5	84.9	109.7	323.1	385.7	403.4	425.8	444.6	450.6	454.1
72.5°	36.6	46.0	80.2	99.1	274.8	331.4	347.9	360.9	377.4	383.3	383.3
75°	33.0	41.2	75.5	88.5	225.3	271.3	285.5	298.4	311.3	313.8	310.2
77.5°	29.5	36.6	64.9	74.3	175.8	214.7	226.5	233.5	244.1	246.5	247.7
80°	24.7	31.9	50.7	57.8	127.4	158.1	166.3	172.2	181.6	181.6	184.0
82.5°	18.8	24.7	36.6	41.2	86.1	108.5	115.6	119.2	125.1	125.1	125.1
85°	11.8	15.4	23.6	27.1	51.9	66.1	70.8	71.9	76.7	77.8	77.8
87.5°	5.9	8.2	15.4	16.5	27.1	34.2	34.2	36.6	36.6	35.3	34.2
90°	0.9	1.6	2.3	2.5	3.9	5.8	6.8	6.1	4.6	3.4	3.4
92.5°	3.6	9.6	15.7	17.2	24.3	33.7	38.3	33.6	24.1	17.0	16.2
95°	8.6	19.7	30.9	33.7	59.7	94.4	111.8	99.8	75.7	57.7	55.6
97.5°	14.8	24.6	34.5	37.0	80.4	138.4	167.4	159.8	144.5	133.1	129.2
100°	19.6	28.6	37.5	39.7	87.9	152.3	184.4	185.0	186.1	186.9	182.3
102.5°	23.7	32.0	40.4	42.5	91.4	156.7	189.2	199.0	218.3	232.9	228.9
105°	30.8	37.8	44.8	46.6	94.0	157.1	188.7	210.5	254.0	286.5	284.4
107.5°	37.9	44.5	51.1	52.7	94.4	150.1	178.0	208.3	268.9	314.5	315.0
110°	42.8	48.6	54.5	56.1	93.7	144.0	169.1	203.0	270.7	321.6	323.8



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	47.5	53.1	58.7	60.2	93.7	138.5	160.9	195.7	265.0	317.1	320.5
115°	54.6	59.8	65.0	66.3	94.6	132.4	151.2	184.6	251.5	301.5	306.3
117.5°	61.7	66.4	71.1	72.3	96.4	128.4	144.5	174.7	234.9	280.2	285.5
120°	65.8	70.2	74.7	75.8	97.7	127.1	141.7	169.3	224.5	265.8	270.9
122.5°	69.8	74.3	78.7	79.9	99.8	126.4	139.7	164.5	214.1	251.4	256.4
125°	76.0	80.1	84.2	85.2	102.7	125.9	137.5	158.5	200.8	232.3	237.0
127.5°	81.0	85.2	89.3	90.3	105.4	125.5	135.6	153.7	189.9	217.1	221.0
130°	83.6	88.1	92.6	93.7	107.5	125.8	134.9	151.0	183.3	207.4	211.0
132.5°	86.5	91.0	95.4	96.5	109.1	125.9	134.3	148.7	177.5	199.2	202.4
135°	90.6	94.6	98.7	99.7	110.9	125.8	133.2	145.2	169.4	187.5	190.3
137.5°	94.8	98.8	102.8	103.8	113.5	126.5	133.0	143.2	163.6	179.0	181.3
140°	98.3	101.9	105.7	106.6	115.1	126.7	132.4	141.2	158.9	172.1	174.2
142.5°	101.0	104.3	107.7	108.6	116.6	127.1	132.4	140.1	155.7	167.3	169.2
145°	105.1	108.0	111.0	111.8	118.4	127.1	131.5	137.8	150.5	160.0	161.5
147.5°	109.2	112.0	115.0	115.7	121.0	128.0	131.5	136.5	146.5	154.0	155.1
150°	111.8	114.4	117.1	117.7	122.3	128.4	131.5	135.7	144.2	150.5	151.4
152.5°	114.6	116.6	118.5	119.1	123.2	128.7	131.5	135.1	142.3	147.7	148.4
155°	118.7	120.1	121.7	122.0	125.1	129.3	131.5	134.3	140.1	144.4	144.9
157.5°	121.8	123.2	124.6	125.0	127.1	130.1	131.5	133.7	138.2	141.5	141.8
160°	123.8	124.9	126.0	126.3	128.0	130.3	131.5	133.4	137.2	140.1	140.2
162.5°	125.9	126.7	127.6	127.7	129.0	130.7	131.5	133.1	136.3	138.7	138.9
165°	128.1	128.8	129.6	129.8	130.3	131.1	131.5	132.6	135.0	136.7	136.8
167.5°	130.1	130.5	130.9	130.9	131.4	132.0	132.4	133.1	134.6	135.8	135.9
170°	131.5	131.8	132.2	132.3	132.3	132.4	132.4	133.1	134.6	135.8	135.8
172.5°	132.2	132.3	132.4	132.4	132.4	132.4	132.4	133.0	134.2	135.1	135.0
175°	133.2	133.2	133.2	133.2	132.9	132.6	132.4	132.7	133.5	134.1	134.1
177.5°	133.2	133.2	133.2	133.2	133.0	132.7	132.6	132.8	133.4	133.9	133.8
180°	133.2	133.2	133.2	133.2	133.2	133.2	133.2	133.2	133.2	133.2	133.2



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	366.8	366.8
2.5°	391.6	389.2
5°	503.6	506.0
7.5°	678.2	677.0
10°	843.3	853.9
12.5°	963.6	966.0
15°	1036.8	1041.4
17.5°	1065.1	1066.2
20°	1066.2	1063.8
22.5°	1053.3	1050.9
25°	1037.9	1036.8
27.5°	1023.7	1024.9
30°	1017.9	1021.4
32.5°	1017.9	1023.7
35°	1020.3	1026.2
37.5°	1019.0	1026.2
40°	1014.4	1022.6
42.5°	1001.3	1007.2
45°	981.3	988.4
47.5°	955.4	960.1
50°	922.3	927.1
52.5°	881.0	882.3
55°	831.5	836.2
57.5°	778.5	779.6
60°	719.5	723.0
62.5°	657.0	657.0
65°	590.9	593.2
67.5°	522.5	528.4
70°	452.9	454.1
72.5°	384.5	384.5
75°	313.8	314.9
77.5°	246.5	246.5
80°	182.8	184.0
82.5°	126.2	128.5
85°	79.0	79.0
87.5°	36.6	33.0
90°	3.4	3.4
92.5°	13.6	10.9
95°	47.5	39.3
97.5°	113.6	98.1
100°	163.8	145.2
102.5°	213.0	197.1
105°	275.9	267.3
107.5°	317.1	319.1
110°	332.7	341.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	334.1	347.8
115°	325.3	344.2
117.5°	306.4	327.5
120°	291.4	311.7
122.5°	276.5	296.7
125°	255.6	274.1
127.5°	236.6	252.3
130°	225.5	239.9
132.5°	215.4	228.3
135°	201.6	212.7
137.5°	190.4	199.6
140°	182.7	191.3
142.5°	176.5	183.8
145°	167.0	172.5
147.5°	159.7	164.3
150°	155.1	158.9
152.5°	151.2	154.1
155°	146.7	148.6
157.5°	143.2	144.5
160°	141.0	141.7
162.5°	139.6	140.3
165°	137.6	138.4
167.5°	136.1	136.5
170°	135.8	135.8
172.5°	134.7	134.4
175°	134.1	134.1
177.5°	133.5	133.2
180°	133.2	133.2



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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	7.38	8.61	8.06	9.32	10.15	20.52	21.75	21.20	22.46	23.28
	3H	8.11	9.22	8.80	9.94	10.80	22.37	23.48	23.06	24.20	25.06
	4H	8.42	9.48	9.14	10.20	11.08	23.02	24.07	23.73	24.80	25.67
	6H	8.70	9.67	9.42	10.41	11.29	23.46	24.43	24.18	25.17	26.05
	8H	8.77	9.71	9.51	10.46	11.35	23.58	24.51	24.32	25.27	26.16
	12H	8.80	9.69	9.55	10.44	11.36	23.65	24.54	24.40	25.29	26.21
4H	2H	14.61	15.66	15.33	16.39	17.26	20.83	21.89	21.55	22.61	23.49
	3H	16.21	17.10	16.94	17.86	18.75	22.90	23.78	23.63	24.55	25.44
	4H	16.33	17.13	17.07	17.90	18.82	23.67	24.48	24.42	25.24	26.16
	6H	16.36	17.06	17.12	17.85	18.78	24.22	24.92	24.98	25.71	26.64
	8H	16.35	17.00	17.11	17.79	18.73	24.39	25.04	25.15	25.83	26.77
	12H	16.32	16.91	17.11	17.72	18.67	24.49	25.08	25.28	25.89	26.84
8H	4H	17.79	18.45	18.56	19.23	20.17	23.77	24.42	24.53	25.21	26.15
	6H	18.05	18.60	18.85	19.42	20.37	24.40	24.95	25.20	25.77	26.71
	8H	18.08	18.56	18.89	19.39	20.35	24.62	25.10	25.43	25.93	26.89
	12H	18.06	18.49	18.88	19.31	20.32	24.77	25.20	25.58	26.02	27.03
12H	4H	17.95	18.54	18.74	19.35	20.30	23.74	24.33	24.53	25.14	26.08
	6H	18.31	18.80	19.12	19.62	20.58	24.39	24.88	25.20	25.70	26.66
	8H	18.40	18.83	19.21	19.65	20.66	24.63	25.06	25.44	25.87	26.89