

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: P936247

Luminaire Tested: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-8-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936247
REPORT IS A COMBINATION OF REPORTS P933453 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-8-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

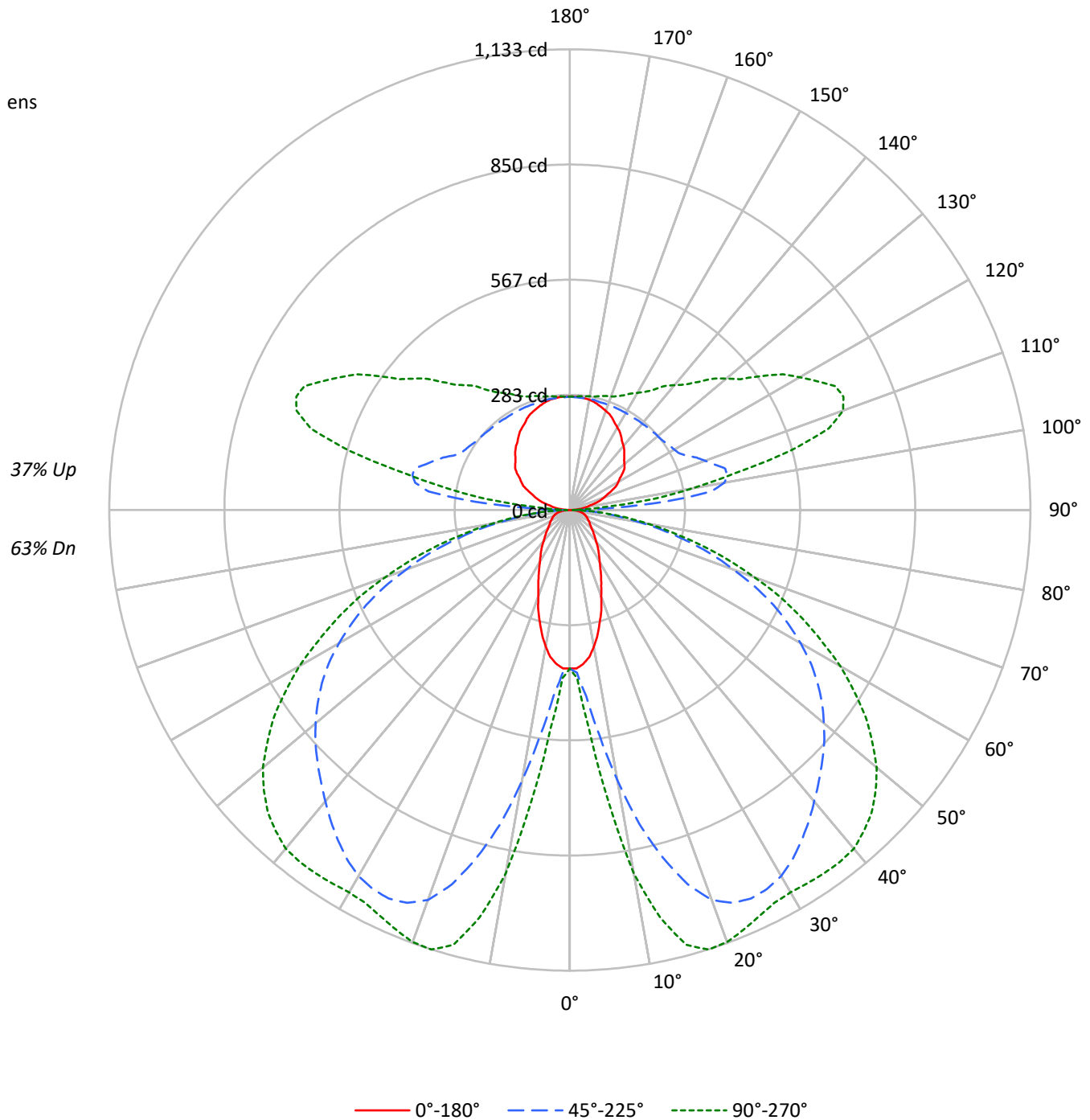
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4825.9 lumens
Efficiency: N/A
Efficacy: 109.7 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-Direct

Input Watts (W): 44
Input Voltage (V): NR
Input Current (A_{in}): 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

TEST NUMBER: P936247
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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	63		
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56	51		
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46	42		
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38	34		
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32	29		
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	28	24		
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24	21		
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21	18		
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18	16		
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16	14		
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	13		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1809	1809	1809
5°	1767	2091	2431
10°	1603	3048	4031
15°	1362	3982	4868
20°	1109	4614	4961
25°	925	4828	4860
30°	780	4859	4851
35°	689	4778	4976
40°	601	4674	5106
45°	544	4597	5126
50°	499	4528	5042
55°	478	4427	4818
60°	490	4232	4465
65°	510	3937	3980
70°	543	3433	3362
75°	601	2799	2624
80°	659	1942	1767
85°	582	1030	905

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5126 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.4	1.0
10°-20°	223.5	4.6
20°-30°	391.0	8.1
30°-40°	503.3	10.4
40°-50°	562.2	11.6
50°-60°	538.5	11.2
60°-70°	426.7	8.8
70°-80°	250.9	5.2
80°-90°	70.8	1.5
90°-100°	136.0	2.8
100°-110°	357.5	7.4
110°-120°	370.7	7.7
120°-130°	297.4	6.2
130°-140°	233.3	4.8
140°-150°	179.1	3.7
150°-160°	129.0	2.7
160°-170°	78.9	1.6
170°-180°	26.7	0.6
0°-30°	665.0	13.8
0°-40°	1168.3	24.2
0°-60°	2268.9	47.0
0°-90°	3017.4	62.5
90°-120°	864.2	17.9
90°-150°	1574.0	32.6
90°-180°	1809.0	37.5
0°-180°	4825.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	390	390	390	390	390	
5°	380	407	459	519	538	35
15°	285	525	885	1073	1107	79
25°	182	596	1054	1101	1102	84
35°	123	569	993	1049	1091	77
45°	84	454	878	1006	1051	65
55°	60	288	745	865	889	55
65°	48	153	553	622	631	47
75°	35	94	303	334	335	37
85°	12	29	75	83	84	13
90°	2	5	14	7	7	2
95°	18	70	234	121	82	20
105°	64	98	395	600	560	68
115°	114	139	317	632	721	113
125°	159	178	288	487	574	141
135°	190	209	279	393	445	147
145°	220	234	276	335	361	138
155°	249	256	276	302	311	114
165°	268	272	276	286	290	76
175°	279	279	277	281	281	26
180°	279	279	279	279	279	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	389.9	389.9	389.9	389.9	389.9	389.9	389.9	389.9	389.9	389.9	389.9
2.5°	389.9	389.9	392.4	393.7	396.1	397.4	400.0	402.5	410.0	411.2	413.7
5°	379.9	384.9	401.2	407.4	425.0	448.8	458.8	475.1	509.0	519.0	525.3
7.5°	364.8	376.1	416.2	426.2	470.2	532.8	559.1	594.3	648.1	674.5	695.8
10°	341.0	364.8	436.3	460.2	531.6	626.8	675.8	724.7	806.1	842.5	856.3
12.5°	314.7	353.5	457.6	490.2	593.0	732.2	791.1	845.0	937.8	986.7	994.2
15°	284.6	337.2	477.6	525.3	658.2	819.9	885.2	951.5	1038.1	1073.1	1081.9
17.5°	258.3	324.7	496.5	546.6	708.3	898.9	965.4	1020.5	1090.7	1114.5	1120.8
20°	225.6	304.6	509.0	574.2	761.0	956.6	1020.5	1063.1	1110.8	1125.9	1128.4
22.5°	201.8	283.3	516.5	584.2	796.1	991.7	1045.6	1079.5	1112.0	1117.1	1118.3
25°	181.8	259.5	515.3	595.5	826.2	1013.0	1054.3	1079.5	1098.3	1100.8	1100.8
27.5°	163.0	233.2	510.3	598.0	848.8	1018.0	1050.6	1068.2	1077.0	1081.9	1081.9
30°	146.7	208.2	497.7	593.0	858.8	1013.0	1039.3	1048.1	1056.9	1064.4	1068.2
32.5°	134.1	184.3	478.9	583.0	860.0	1000.4	1019.3	1024.3	1036.8	1054.3	1060.6
35°	122.8	160.5	457.6	569.1	852.5	980.4	992.9	998.0	1023.0	1049.4	1058.1
37.5°	111.6	142.9	430.1	545.4	841.2	956.6	965.4	974.2	1013.0	1044.3	1054.3
40°	100.3	127.9	397.4	519.0	823.7	927.8	935.3	949.1	1000.4	1036.8	1046.9
42.5°	91.5	115.3	362.3	491.5	801.1	895.2	906.5	926.5	985.5	1024.3	1035.6
45°	84.0	102.8	324.7	453.8	772.3	861.3	877.6	905.2	967.9	1005.5	1015.5
47.5°	76.5	94.0	285.8	415.0	740.9	827.5	848.8	880.1	944.1	980.4	989.2
50°	70.2	85.2	246.9	373.6	707.1	791.1	816.2	848.8	914.0	947.8	959.1
52.5°	65.1	77.8	210.6	332.2	668.2	753.5	782.3	816.2	877.6	910.2	917.7
55°	60.2	71.5	179.3	288.4	628.1	713.4	744.7	777.3	837.5	865.1	870.1
57.5°	57.7	66.5	152.9	246.9	585.5	668.2	703.4	733.5	789.8	811.1	816.2
60°	53.9	62.7	132.9	211.9	539.1	625.6	655.7	685.8	733.5	750.9	754.8
62.5°	50.2	60.2	117.9	178.1	491.5	575.5	605.5	633.2	673.3	685.8	690.8
65°	47.7	57.7	106.6	152.9	442.6	522.8	552.9	576.7	609.3	621.9	624.4
67.5°	45.1	55.1	97.8	131.6	393.7	470.2	492.7	515.3	540.4	552.9	554.1
70°	41.4	52.6	90.3	116.6	343.5	410.0	428.7	452.6	472.7	478.9	482.7
72.5°	38.9	48.9	85.2	105.3	292.1	352.3	369.9	383.6	401.2	407.4	407.4
75°	35.1	43.8	80.2	94.0	239.5	288.4	303.4	317.1	331.0	333.5	329.8
77.5°	31.3	38.9	69.0	79.0	186.8	228.2	240.7	248.3	259.5	262.0	263.3
80°	26.4	33.8	53.9	61.4	135.4	168.0	176.8	183.0	193.1	193.1	195.5
82.5°	20.1	26.4	38.9	43.8	91.5	115.3	122.8	126.7	132.9	132.9	132.9
85°	12.5	16.3	25.1	28.8	55.1	70.2	75.2	76.5	81.5	82.7	82.7
87.5°	6.3	8.8	16.3	17.6	28.8	36.4	36.4	38.9	38.9	37.6	36.4
90°	1.9	3.4	4.9	5.2	8.2	12.2	14.2	12.6	9.4	7.1	7.1
92.5°	7.5	20.2	33.0	36.2	50.8	70.4	80.1	70.2	50.5	35.6	34.2
95°	17.9	41.2	64.6	70.4	125.0	197.8	234.2	209.0	158.6	120.8	116.5
97.5°	31.1	51.7	72.2	77.3	168.3	289.8	350.5	334.6	302.8	278.8	270.7
100°	41.2	59.8	78.4	83.1	184.1	318.8	386.2	387.4	389.8	391.5	381.8
102.5°	49.8	67.2	84.6	88.9	191.4	328.1	396.4	416.7	457.3	487.7	479.4
105°	64.4	79.2	93.9	97.6	196.8	329.1	395.3	440.8	531.8	600.1	595.6
107.5°	79.4	93.1	106.8	110.3	197.8	314.4	372.8	436.2	563.3	658.5	659.6
110°	89.5	101.9	114.3	117.4	196.3	301.4	354.1	425.0	567.0	673.5	678.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	99.5	111.2	123.0	126.0	196.4	290.1	337.1	409.7	554.9	663.9	671.1
115°	114.4	125.3	136.2	138.9	198.2	277.1	316.6	386.6	526.6	631.6	641.5
117.5°	129.2	139.1	149.0	151.5	201.9	269.0	302.6	365.8	492.0	586.8	597.8
120°	137.8	147.1	156.5	158.8	204.9	266.3	297.0	354.6	470.1	556.6	567.3
122.5°	146.2	155.6	165.1	167.4	209.2	264.8	292.7	344.6	448.6	526.5	537.1
125°	159.2	167.8	176.3	178.4	215.0	263.7	288.0	332.1	420.4	486.6	496.3
127.5°	169.6	178.2	186.9	189.1	220.8	262.9	284.1	322.0	397.8	454.6	462.9
130°	175.3	184.6	193.9	196.2	225.0	263.4	282.6	316.3	383.8	434.4	441.9
132.5°	181.1	190.4	199.7	202.0	228.4	263.7	281.3	311.4	371.8	417.2	424.0
135°	189.7	198.2	206.7	208.8	232.2	263.4	279.0	304.3	354.9	392.9	398.7
137.5°	198.4	206.9	215.3	217.4	237.8	265.0	278.6	300.0	342.8	374.8	379.6
140°	205.7	213.5	221.2	223.2	241.2	265.3	277.3	295.8	332.8	360.4	364.9
142.5°	211.4	218.5	225.7	227.5	244.1	266.3	277.3	293.6	326.0	350.3	354.2
145°	220.0	226.3	232.5	234.1	247.9	266.3	275.5	288.7	315.3	335.2	338.1
147.5°	228.6	234.7	240.8	242.3	253.3	268.1	275.5	285.9	306.8	322.4	324.8
150°	234.2	239.8	245.2	246.6	256.2	269.0	275.5	284.2	301.9	315.1	317.1
152.5°	240.0	244.1	248.4	249.4	258.1	269.7	275.5	282.9	298.0	309.3	310.8
155°	248.6	251.7	254.8	255.5	262.2	271.1	275.5	281.4	293.4	302.4	303.3
157.5°	255.0	258.0	261.0	261.7	266.3	272.4	275.5	280.1	289.4	296.4	297.0
160°	259.3	261.6	264.0	264.5	268.2	273.0	275.5	279.5	287.4	293.4	293.8
162.5°	263.6	265.4	267.0	267.5	270.1	273.7	275.5	278.8	285.6	290.6	291.0
165°	268.4	269.9	271.5	271.9	273.1	274.7	275.5	277.9	282.7	286.3	286.7
167.5°	272.7	273.4	274.1	274.3	275.4	276.7	277.3	278.9	282.1	284.4	284.6
170°	275.5	276.2	277.0	277.1	277.2	277.3	277.3	278.9	282.1	284.4	284.4
172.5°	277.0	277.1	277.3	277.3	277.3	277.3	277.3	278.5	281.1	282.9	282.7
175°	279.0	279.0	279.0	279.0	278.4	277.7	277.3	278.1	279.7	280.9	280.9
177.5°	279.0	279.0	279.0	279.0	278.5	278.0	277.7	278.4	279.6	280.5	280.3
180°	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	389.9	389.9
2.5°	416.2	413.7
5°	535.3	537.8
7.5°	720.8	719.6
10°	896.4	907.7
12.5°	1024.3	1026.8
15°	1102.0	1107.1
17.5°	1132.1	1133.3
20°	1133.3	1130.8
22.5°	1119.6	1117.1
25°	1103.2	1102.0
27.5°	1088.2	1089.5
30°	1081.9	1085.8
32.5°	1081.9	1088.2
35°	1084.4	1090.7
37.5°	1083.2	1090.7
40°	1078.2	1087.0
42.5°	1064.4	1070.7
45°	1043.1	1050.6
47.5°	1015.5	1020.5
50°	980.4	985.5
52.5°	936.5	937.8
55°	883.9	888.9
57.5°	827.5	828.7
60°	764.8	768.5
62.5°	698.3	698.3
65°	628.1	630.6
67.5°	555.4	561.7
70°	481.5	482.7
72.5°	408.7	408.7
75°	333.5	334.7
77.5°	262.0	262.0
80°	194.3	195.5
82.5°	134.1	136.7
85°	84.0	84.0
87.5°	38.9	35.1
90°	7.1	7.1
92.5°	28.5	22.8
95°	99.4	82.2
97.5°	238.0	205.4
100°	342.9	304.1
102.5°	446.1	412.9
105°	577.7	559.8
107.5°	663.9	668.2
110°	696.7	715.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	699.7	728.3
115°	681.2	720.8
117.5°	641.9	685.9
120°	610.1	652.9
122.5°	579.2	621.4
125°	535.2	574.1
127.5°	495.6	528.4
130°	472.2	502.5
132.5°	451.1	478.2
135°	422.0	445.4
137.5°	398.7	417.9
140°	382.8	400.7
142.5°	369.6	384.9
145°	349.8	361.4
147.5°	334.4	344.2
150°	324.9	332.8
152.5°	316.7	322.6
155°	307.2	311.2
157.5°	299.9	302.6
160°	295.4	297.0
162.5°	292.5	294.0
165°	288.3	289.9
167.5°	285.3	285.9
170°	284.4	284.4
172.5°	282.2	281.6
175°	280.9	280.9
177.5°	279.7	279.0
180°	279.0	279.0



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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	4.13	5.17	4.96	6.03	7.10	17.31	18.35	18.14	19.21	20.29
	3H	4.85	5.78	5.69	6.65	7.76	19.16	20.10	20.01	20.97	22.07
	4H	5.15	6.04	6.01	6.91	8.03	19.81	20.70	20.68	21.58	22.69
	6H	5.41	6.23	6.29	7.11	8.24	20.25	21.07	21.13	21.96	23.08
	8H	5.49	6.27	6.37	7.17	8.30	20.38	21.16	21.26	22.06	23.19
	12H	5.51	6.25	6.40	7.15	8.30	20.45	21.20	21.34	22.10	23.25
4H	2H	11.37	12.25	12.23	13.13	14.24	17.60	18.49	18.47	19.37	20.48
	3H	12.95	13.69	13.83	14.60	15.73	19.67	20.41	20.54	21.32	22.45
	4H	13.05	13.73	13.94	14.64	15.79	20.44	21.12	21.33	22.02	23.18
	6H	13.07	13.66	13.98	14.59	15.75	20.99	21.58	21.90	22.51	23.66
	8H	13.06	13.60	13.96	14.53	15.70	21.16	21.71	22.07	22.63	23.80
	12H	13.02	13.52	13.95	14.46	15.64	21.26	21.76	22.19	22.70	23.88
8H	4H	14.51	15.06	15.42	15.99	17.16	20.52	21.07	21.42	21.99	23.16
	6H	14.76	15.22	15.70	16.18	17.36	21.15	21.61	22.09	22.58	23.75
	8H	14.78	15.19	15.73	16.14	17.33	21.38	21.78	22.32	22.74	23.93
	12H	14.76	15.12	15.71	16.07	17.30	21.53	21.89	22.48	22.84	24.07
12H	4H	14.66	15.16	15.59	16.10	17.28	20.48	20.97	21.41	21.92	23.09
	6H	15.02	15.43	15.97	16.39	17.57	21.14	21.54	22.08	22.50	23.69
	8H	15.10	15.46	16.05	16.41	17.65	21.38	21.73	22.33	22.68	23.92