

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: P936832

Luminaire Tested: SQ4-FB-050U-100D-92765-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936832
REPORT IS A COMBINATION OF REPORTS P933471 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-100D-92765-1D-UNV-STD-W-4-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

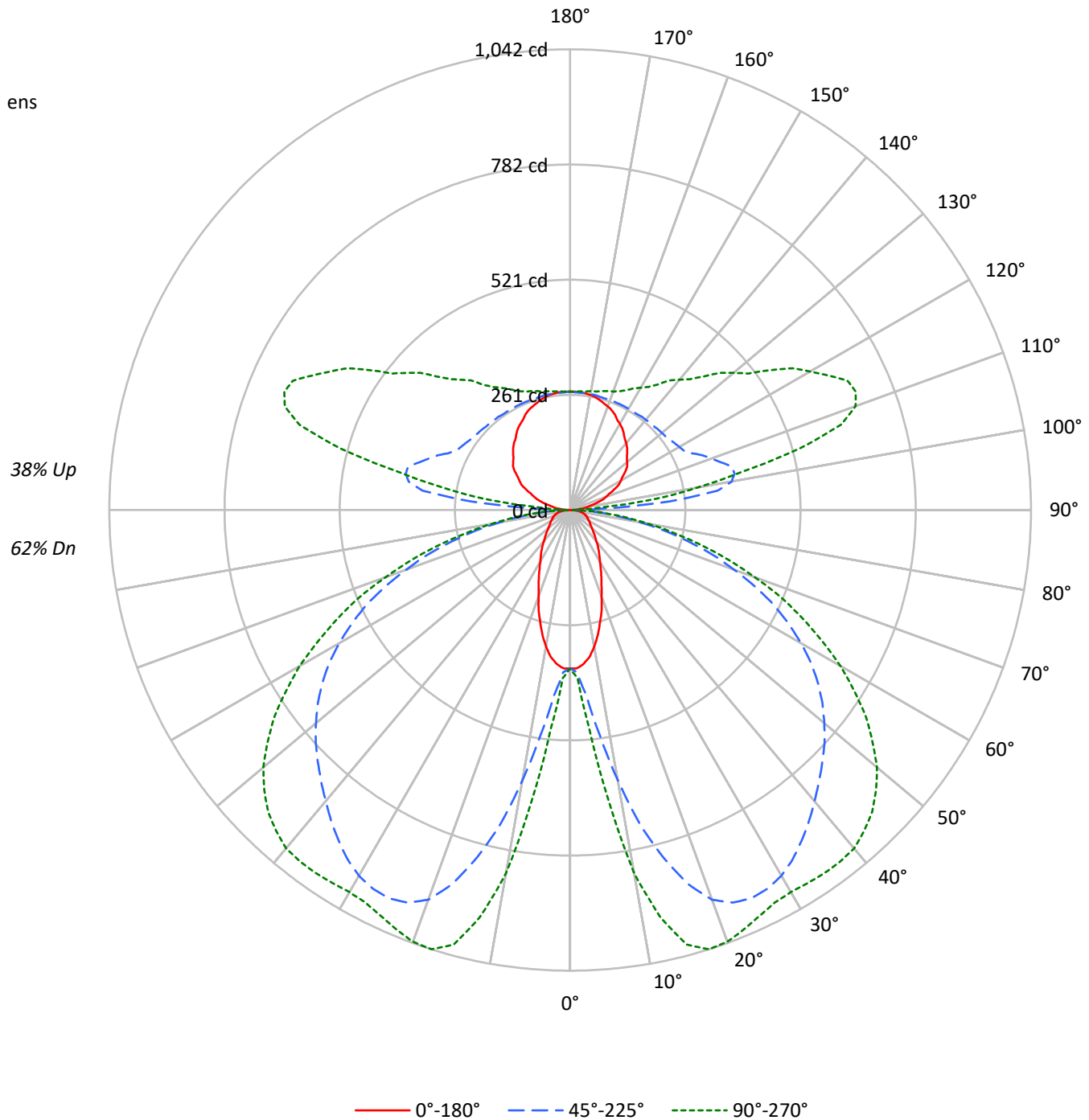
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4509.3 lumens
Efficiency: N/A
Efficacy: 99.8 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): 45.2
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

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CATALOG NUMBER: SQ4-FB-050U-100D-92765-1D-UNV-STD-W-4-3000K

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	67	67	67	62		
1	100	95	91	87	93	89	85	82	78	75	72	67	65	63	58	56	55	50		
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	48	45	41		
3	82	72	64	57	76	67	60	54	59	53	49	51	47	43	44	40	38	34		
4	74	63	54	48	69	59	51	45	52	46	41	45	40	36	39	35	32	28		
5	68	56	47	41	63	52	44	39	46	40	35	40	35	31	34	30	27	24		
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	23	21		
7	58	45	36	30	54	42	34	29	37	31	26	32	27	23	28	24	21	18		
8	53	40	32	26	50	38	30	25	34	27	23	29	24	20	25	21	18	16		
9	50	37	29	23	46	35	27	22	31	24	20	27	22	18	23	19	16	14		
10	46	33	26	21	43	32	25	20	28	22	18	25	20	16	21	17	14	12		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3325	3325	3325
5°	3246	3840	4470
10°	2940	5594	7410
15°	2495	7303	8947
20°	2030	8458	9118
25°	1691	8843	8934
30°	1424	8892	8917
35°	1257	8738	9148
40°	1094	8539	9385
45°	988	8390	9422
50°	904	8256	9267
55°	864	8063	8855
60°	881	7698	8206
65°	913	7148	7316
70°	965	6222	6180
75°	1059	5060	4824
80°	1133	3497	3249
85°	952	1847	1663

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9422 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.4	1.0
10°-20°	205.4	4.6
20°-30°	359.3	8.0
30°-40°	462.6	10.3
40°-50°	516.7	11.5
50°-60°	494.9	11.0
60°-70°	392.2	8.7
70°-80°	230.6	5.1
80°-90°	65.1	1.4
90°-100°	130.5	2.9
100°-110°	343.2	7.6
110°-120°	355.9	7.9
120°-130°	285.4	6.3
130°-140°	224.0	5.0
140°-150°	171.9	3.8
150°-160°	123.8	2.7
160°-170°	75.7	1.7
170°-180°	25.6	0.6
0°-30°	611.1	13.6
0°-40°	1073.7	23.8
0°-60°	2085.3	46.2
0°-90°	2773.2	61.5
90°-120°	829.6	18.4
90°-150°	1510.9	33.5
90°-180°	1736.0	38.5
0°-180°	4509.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	358	358	358	358	358	
5°	349	374	422	477	494	32
15°	262	483	814	986	1017	73
25°	167	547	969	1012	1013	77
35°	113	523	913	964	1002	71
45°	77	417	806	924	966	60
55°	55	265	684	795	817	50
65°	44	141	508	572	580	43
75°	32	86	279	306	308	34
85°	12	26	69	76	77	12
90°	2	5	14	7	7	2
95°	17	68	225	116	79	19
105°	62	94	379	576	537	66
115°	110	133	304	606	692	108
125°	153	171	276	467	551	136
135°	182	200	268	377	428	141
145°	211	225	264	322	347	132
155°	239	245	264	290	299	110
165°	258	261	264	275	278	73
175°	268	268	266	270	270	25
180°	268	268	268	268	268	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	358.3	358.3	358.3	358.3	358.3	358.3	358.3	358.3	358.3	358.3	358.3
2.5°	358.3	358.3	360.7	361.8	364.1	365.3	367.6	369.8	376.8	377.9	380.2
5°	349.2	353.8	368.7	374.5	390.6	412.5	421.7	436.7	467.8	477.0	482.8
7.5°	335.3	345.7	382.6	391.8	432.1	489.7	513.9	546.2	595.7	619.9	639.5
10°	313.4	335.3	401.0	422.8	488.5	576.2	621.1	666.0	740.9	774.3	787.0
12.5°	289.3	324.9	420.6	450.5	545.0	672.9	727.1	776.6	861.9	906.8	913.7
15°	261.5	309.9	439.0	482.8	604.9	753.6	813.5	874.6	954.1	986.4	994.4
17.5°	237.4	298.4	456.2	502.4	651.1	826.2	887.2	938.0	1002.5	1024.4	1030.1
20°	207.4	280.0	467.8	527.8	699.5	879.2	938.0	977.1	1020.9	1034.8	1037.0
22.5°	185.5	260.4	474.7	536.9	731.6	911.4	961.0	992.1	1022.0	1026.6	1027.8
25°	167.1	238.5	473.6	547.3	759.4	931.0	969.0	992.1	1009.4	1011.6	1011.6
27.5°	149.8	214.3	469.0	549.6	780.0	935.6	965.6	981.7	989.8	994.4	994.4
30°	134.8	191.2	457.5	545.0	789.3	931.0	955.2	963.2	971.4	978.2	981.7
32.5°	123.3	169.3	440.2	535.8	790.4	919.5	936.7	941.4	952.9	969.0	974.8
35°	112.9	147.5	420.6	523.1	783.5	901.1	912.6	917.2	940.2	964.5	972.5
37.5°	102.6	131.3	395.2	501.2	773.1	879.2	887.2	895.3	931.0	959.8	969.0
40°	92.2	117.6	365.3	477.0	757.0	852.7	859.6	872.3	919.5	952.9	962.1
42.5°	84.2	106.0	333.0	451.7	736.3	822.7	833.1	851.5	905.7	941.4	951.7
45°	77.2	94.4	298.4	417.1	709.7	791.6	806.5	831.9	889.6	924.1	933.3
47.5°	70.3	86.4	262.7	381.4	681.0	760.5	780.0	808.9	867.7	901.1	909.1
50°	64.5	78.4	227.0	343.4	649.8	727.1	750.1	780.0	840.0	871.1	881.5
52.5°	59.9	71.4	193.6	305.4	614.2	692.5	719.0	750.1	806.5	836.5	843.4
55°	55.3	65.7	164.8	265.0	577.3	655.6	684.5	714.4	769.7	795.0	799.7
57.5°	53.0	61.0	140.6	227.0	538.1	614.2	646.4	674.1	725.9	745.5	750.1
60°	49.5	57.6	122.2	194.7	495.5	574.9	602.7	630.3	674.1	690.2	693.6
62.5°	46.1	55.3	108.3	163.6	451.7	528.9	556.5	581.9	618.8	630.3	634.9
65°	43.8	53.0	97.9	140.6	406.7	480.5	508.1	530.0	560.0	571.5	573.8
67.5°	41.5	50.7	89.9	121.0	361.8	432.1	452.8	473.6	496.6	508.1	509.3
70°	38.0	48.4	82.9	107.2	315.7	376.8	394.1	416.0	434.4	440.2	443.6
72.5°	35.8	44.9	78.4	96.8	268.5	323.8	339.9	352.6	368.7	374.5	374.5
75°	32.3	40.3	73.8	86.4	220.1	265.0	278.9	291.5	304.2	306.5	303.0
77.5°	28.8	35.8	63.4	72.6	171.7	209.7	221.2	228.1	238.5	240.9	242.0
80°	24.2	31.1	49.5	56.4	124.4	154.4	162.5	168.2	177.5	177.5	179.7
82.5°	18.4	24.2	35.8	40.3	84.2	106.0	112.9	116.4	122.2	122.2	122.2
85°	11.5	15.0	23.0	26.5	50.7	64.5	69.2	70.3	74.9	76.0	76.0
87.5°	5.8	8.0	15.0	16.1	26.5	33.4	33.4	35.8	35.8	34.5	33.4
90°	1.8	3.2	4.7	5.1	7.9	11.8	13.7	12.1	9.1	6.8	6.8
92.5°	7.2	19.4	31.7	34.7	48.7	67.5	76.9	67.4	48.4	34.2	32.8
95°	17.3	39.6	62.0	67.6	120.0	189.8	224.8	200.6	152.2	115.9	111.8
97.5°	29.8	49.5	69.2	74.2	161.6	278.2	336.4	321.2	290.6	267.6	259.8
100°	39.5	57.4	75.3	79.8	176.8	306.1	370.8	371.9	374.2	375.8	366.5
102.5°	47.8	64.5	81.2	85.4	183.7	314.9	380.5	400.0	439.0	468.2	460.2
105°	61.8	76.0	90.1	93.7	188.9	315.9	379.4	423.1	510.5	576.1	571.8
107.5°	76.2	89.4	102.6	105.9	189.8	301.9	357.9	418.8	540.7	632.1	633.2
110°	85.9	97.8	109.7	112.7	188.4	289.4	339.9	408.0	544.3	646.5	651.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	95.4	106.7	118.1	121.0	188.4	278.5	323.5	393.3	532.7	637.4	644.3
115°	109.8	120.3	130.7	133.3	190.2	266.0	303.9	371.1	505.4	606.2	615.7
117.5°	124.0	133.5	143.0	145.4	193.8	258.2	290.5	351.1	472.3	563.2	573.8
120°	132.3	141.3	150.2	152.4	196.6	255.6	285.1	340.4	451.3	534.4	544.7
122.5°	140.4	149.5	158.4	160.7	200.7	254.2	280.9	330.8	430.6	505.4	515.5
125°	152.8	161.0	169.2	171.3	206.3	253.1	276.4	318.8	403.6	467.1	476.5
127.5°	162.8	171.2	179.5	181.6	211.9	252.5	272.7	309.0	381.8	436.4	444.2
130°	168.2	177.2	186.1	188.4	216.0	252.8	271.2	303.6	368.4	417.0	424.2
132.5°	173.8	182.8	191.7	193.9	219.3	253.1	270.0	298.9	356.9	400.4	407.0
135°	182.1	190.2	198.4	200.4	222.9	252.8	267.8	292.0	340.6	377.1	382.6
137.5°	190.5	198.6	206.7	208.7	228.3	254.4	267.5	287.9	329.0	359.8	364.4
140°	197.5	204.9	212.4	214.3	231.5	254.6	266.1	283.9	319.4	346.0	350.3
142.5°	202.9	209.8	216.6	218.4	234.3	255.5	266.1	281.8	312.9	336.3	339.9
145°	211.2	217.1	223.2	224.6	237.9	255.6	264.4	277.1	302.6	321.7	324.5
147.5°	219.5	225.3	231.1	232.6	243.2	257.3	264.4	274.4	294.5	309.5	311.8
150°	224.8	230.0	235.4	236.7	245.9	258.2	264.4	272.9	289.8	302.5	304.4
152.5°	230.4	234.4	238.4	239.4	247.7	258.8	264.4	271.6	286.1	296.9	298.3
155°	238.7	241.6	244.6	245.3	251.7	260.1	264.4	270.2	281.7	290.3	291.3
157.5°	244.8	247.7	250.5	251.2	255.6	261.4	264.4	268.8	277.8	284.5	285.2
160°	249.0	251.1	253.4	253.9	257.4	262.0	264.4	268.2	275.9	281.7	282.0
162.5°	253.1	254.7	256.4	256.8	259.3	262.7	264.4	267.6	274.1	279.0	279.3
165°	257.6	259.1	260.7	261.0	262.1	263.6	264.4	266.7	271.3	274.8	275.1
167.5°	261.7	262.4	263.1	263.3	264.2	265.5	266.1	267.7	270.8	273.0	273.2
170°	264.4	265.1	265.8	266.0	266.1	266.1	266.1	267.7	270.8	273.0	273.0
172.5°	265.8	266.0	266.1	266.1	266.1	266.1	266.1	267.4	269.7	271.6	271.4
175°	267.8	267.8	267.8	267.8	267.3	266.5	266.1	266.9	268.5	269.6	269.6
177.5°	267.8	267.8	267.8	267.8	267.4	266.8	266.6	267.2	268.4	269.3	269.1
180°	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8	267.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	358.3	358.3
2.5°	382.6	380.2
5°	492.0	494.4
7.5°	662.6	661.4
10°	823.9	834.2
12.5°	941.4	943.7
15°	1012.9	1017.4
17.5°	1040.5	1041.6
20°	1041.6	1039.3
22.5°	1029.0	1026.6
25°	1014.0	1012.9
27.5°	1000.1	1001.3
30°	994.4	997.9
32.5°	994.4	1000.1
35°	996.7	1002.5
37.5°	995.5	1002.5
40°	991.0	999.0
42.5°	978.2	984.0
45°	958.7	965.6
47.5°	933.3	938.0
50°	901.1	905.7
52.5°	860.7	861.9
55°	812.3	816.9
57.5°	760.5	761.6
60°	702.9	706.3
62.5°	641.8	641.8
65°	577.3	579.6
67.5°	510.5	516.2
70°	442.5	443.6
72.5°	375.7	375.7
75°	306.5	307.7
77.5°	240.9	240.9
80°	178.6	179.7
82.5°	123.3	125.6
85°	77.2	77.2
87.5°	35.8	32.3
90°	6.8	6.8
92.5°	27.4	21.9
95°	95.3	78.9
97.5°	228.5	197.2
100°	329.2	291.9
102.5°	428.3	396.3
105°	554.6	537.4
107.5°	637.3	641.5
110°	668.9	686.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	671.7	699.2
115°	653.9	692.0
117.5°	616.1	658.4
120°	585.7	626.7
122.5°	556.1	596.6
125°	513.7	551.0
127.5°	475.7	507.2
130°	453.4	482.4
132.5°	433.0	459.0
135°	405.1	427.6
137.5°	382.7	401.1
140°	367.5	384.7
142.5°	354.7	369.6
145°	335.7	346.9
147.5°	321.1	330.3
150°	311.9	319.4
152.5°	304.0	309.7
155°	295.0	298.8
157.5°	287.9	290.5
160°	283.6	285.1
162.5°	280.8	282.2
165°	276.7	278.3
167.5°	273.8	274.4
170°	273.0	273.0
172.5°	270.9	270.3
175°	269.6	269.6
177.5°	268.5	267.8
180°	267.8	267.8



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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	6.15	7.17	6.99	8.05	9.14	19.29	20.31	20.13	21.18	22.28
	3H	6.87	7.79	7.72	8.67	9.79	21.12	22.05	21.98	22.93	24.05
	4H	7.17	8.05	8.04	8.94	10.06	21.77	22.64	22.64	23.53	24.66
	6H	7.43	8.24	8.32	9.14	10.28	22.19	23.00	23.08	23.90	25.04
	8H	7.51	8.28	8.40	9.19	10.33	22.31	23.08	23.20	24.00	25.14
	12H	7.53	8.26	8.43	9.17	10.34	22.38	23.11	23.28	24.02	25.19
4H	2H	13.36	14.23	14.23	15.12	16.25	19.58	20.46	20.46	21.34	22.47
	3H	14.94	15.68	15.83	16.60	17.74	21.63	22.36	22.52	23.28	24.43
	4H	15.05	15.72	15.95	16.63	17.80	22.39	23.06	23.29	23.98	25.15
	6H	15.07	15.65	15.98	16.59	17.76	22.93	23.51	23.84	24.45	25.62
	8H	15.05	15.59	15.97	16.52	17.71	23.09	23.63	24.01	24.56	25.75
	12H	15.01	15.50	15.95	16.46	17.65	23.18	23.67	24.12	24.62	25.82
8H	4H	16.50	17.04	17.41	17.97	19.16	22.47	23.01	23.39	23.94	25.13
	6H	16.75	17.20	17.69	18.17	19.36	23.09	23.54	24.04	24.52	25.70
	8H	16.77	17.17	17.72	18.13	19.33	23.31	23.71	24.26	24.67	25.88
	12H	16.74	17.09	17.70	18.05	19.30	23.45	23.80	24.41	24.76	26.01
12H	4H	16.64	17.13	17.58	18.09	19.28	22.43	22.92	23.37	23.87	25.06
	6H	17.00	17.40	17.96	18.37	19.57	23.08	23.48	24.03	24.44	25.65
	8H	17.08	17.43	18.04	18.39	19.64	23.31	23.66	24.27	24.62	25.87