

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: P937850

Luminaire Tested: SQ4-FB-125U-050D-930-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937850
REPORT IS A COMBINATION OF REPORTS P933597 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

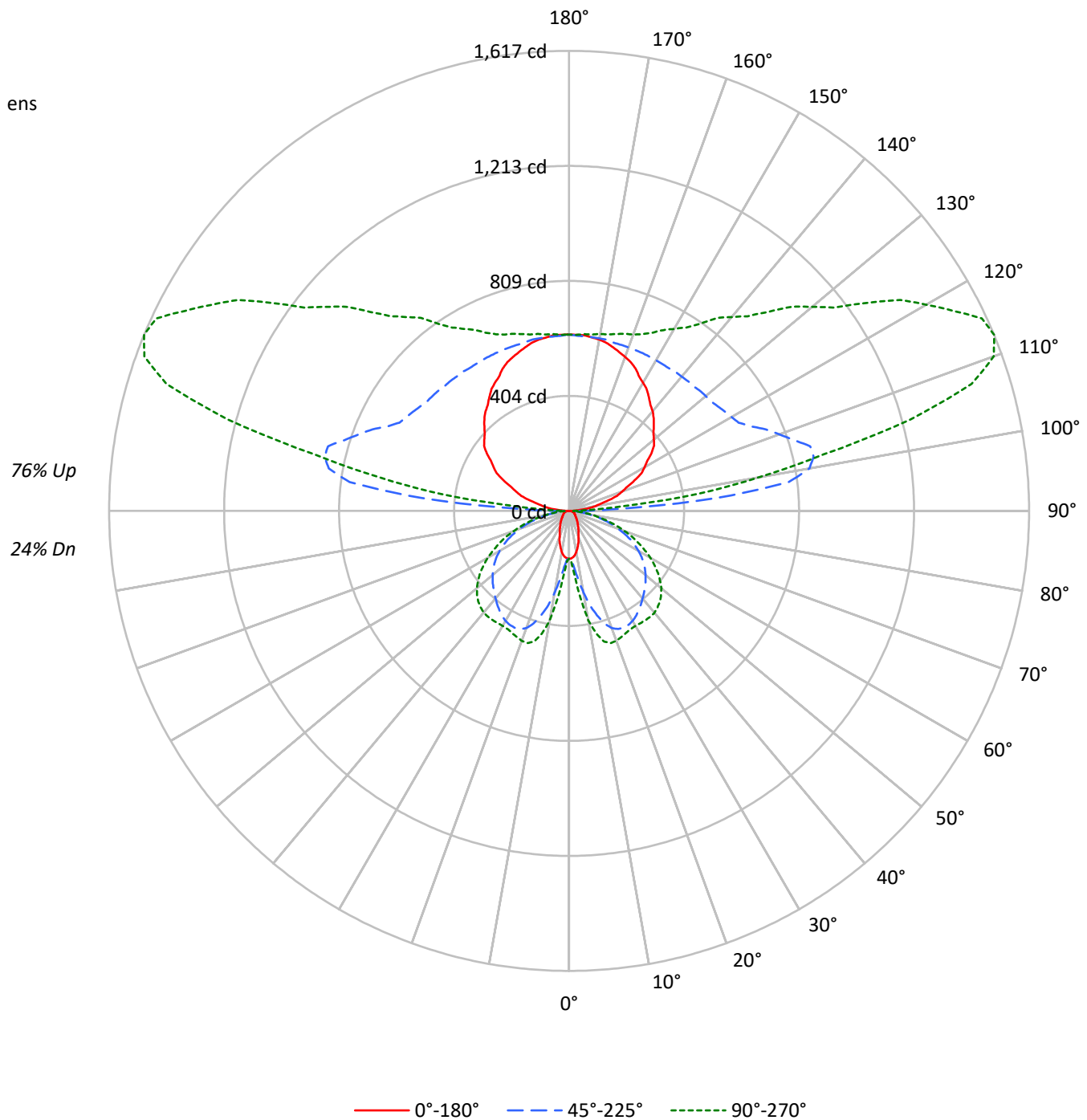
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5314.3 lumens
Efficiency: N/A
Efficacy: 111.6 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-Indirect

Input Watts (W): 47.6
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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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24				24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20				20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16				16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	22	20	19	13				13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11				11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10				10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8				8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7				7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6				6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6				6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5				5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1554	1554	1554
5°	1517	1795	2090
10°	1374	2616	3464
15°	1167	3414	4183
20°	949	3954	4263
25°	790	4135	4176
30°	665	4157	4169
35°	588	4085	4276
40°	511	3992	4387
45°	462	3923	4405
50°	423	3860	4332
55°	405	3769	4140
60°	411	3599	3837
65°	427	3341	3419
70°	449	2908	2889
75°	495	2364	2254
80°	529	1636	1521
85°	447	865	778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4405 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.7	0.4
10°-20°	96.0	1.8
20°-30°	168.0	3.2
30°-40°	216.3	4.1
40°-50°	241.6	4.5
50°-60°	231.4	4.4
60°-70°	183.4	3.5
70°-80°	107.8	2.0
80°-90°	32.3	0.6
90°-100°	302.0	5.7
100°-110°	793.9	14.9
110°-120°	823.2	15.5
120°-130°	660.3	12.4
130°-140°	518.1	9.7
140°-150°	397.7	7.5
150°-160°	286.4	5.4
160°-170°	175.2	3.3
170°-180°	59.2	1.1
0°-30°	285.7	5.4
0°-40°	502.0	9.4
0°-60°	974.9	18.3
0°-90°	1298.4	24.4
90°-120°	1919.0	36.1
90°-150°	3495.1	65.8
90°-180°	4016.0	75.6
0°-180°	5314.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	168	168	168	168	168	
5°	163	175	197	223	231	15
15°	122	226	380	461	476	34
25°	78	256	453	473	474	36
35°	53	245	427	451	469	33
45°	36	195	377	432	451	28
55°	26	124	320	372	382	24
65°	20	66	238	267	271	20
75°	15	40	130	143	144	16
85°	5	12	32	36	36	6
90°	4	12	32	16	16	4
95°	40	156	520	268	182	44
105°	143	217	878	1332	1243	152
115°	254	308	703	1402	1601	251
125°	353	396	639	1080	1275	314
135°	421	464	620	872	989	326
145°	488	520	612	744	802	306
155°	552	568	612	672	691	254
165°	596	604	612	636	644	168
175°	620	620	616	624	624	59
180°	620	620	620	620	620	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5
2.5°	167.5	167.5	168.6	169.1	170.2	170.8	171.8	172.9	176.2	176.7	177.8
5°	163.2	165.4	172.4	175.1	182.6	192.9	197.1	204.2	218.7	223.0	225.7
7.5°	156.7	161.6	178.8	183.2	202.0	228.9	240.3	255.4	278.5	289.8	299.0
10°	146.5	156.7	187.5	197.7	228.4	269.3	290.4	311.4	346.4	362.0	367.9
12.5°	135.2	151.9	196.7	210.6	254.8	314.6	339.9	363.1	402.9	424.0	427.2
15°	122.3	144.9	205.2	225.7	282.8	352.3	380.3	408.9	446.1	461.1	464.9
17.5°	111.0	139.6	213.4	234.9	304.3	386.2	414.8	438.5	468.6	478.9	481.6
20°	97.0	130.9	218.7	246.8	327.0	411.1	438.5	456.8	477.3	483.7	484.9
22.5°	86.7	121.7	221.9	251.0	342.1	426.1	449.3	463.8	477.8	480.0	480.5
25°	78.1	111.5	221.4	255.9	355.0	435.2	453.1	463.8	471.9	473.0	473.0
27.5°	70.0	100.2	219.2	257.0	364.7	437.4	451.4	459.0	462.8	464.9	464.9
30°	63.0	89.5	213.8	254.8	369.0	435.2	446.5	450.3	454.1	457.4	459.0
32.5°	57.7	79.2	205.8	250.5	369.5	429.8	438.0	440.1	445.5	453.1	455.7
35°	52.8	69.0	196.7	244.6	366.3	421.3	426.6	428.8	439.6	450.9	454.7
37.5°	47.9	61.4	184.8	234.3	361.4	411.1	414.8	418.6	435.2	448.7	453.1
40°	43.1	54.9	170.8	223.0	354.0	398.6	401.9	407.8	429.8	445.5	449.8
42.5°	39.3	49.5	155.7	211.2	344.2	384.6	389.5	398.1	423.4	440.1	444.9
45°	36.1	44.2	139.6	195.0	331.8	370.1	377.1	389.0	415.9	432.0	436.4
47.5°	32.8	40.4	122.9	178.3	318.4	355.6	364.7	378.1	405.7	421.3	425.0
50°	30.2	36.6	106.2	160.5	303.9	339.9	350.7	364.7	392.7	407.3	412.1
52.5°	28.0	33.4	90.5	142.8	287.2	323.8	336.1	350.7	377.1	391.1	394.4
55°	25.9	30.7	77.0	123.9	269.9	306.5	320.0	334.0	359.8	371.7	373.9
57.5°	24.8	28.6	65.7	106.2	251.6	287.2	302.2	315.1	339.3	348.5	350.7
60°	23.1	26.9	57.1	91.1	231.7	268.8	281.8	294.7	315.1	322.6	324.3
62.5°	21.5	25.9	50.7	76.5	211.2	247.2	260.2	272.1	289.2	294.7	296.8
65°	20.5	24.8	45.8	65.7	190.2	224.6	237.5	247.8	261.8	267.2	268.3
67.5°	19.4	23.7	42.0	56.5	169.1	202.0	211.7	221.4	232.1	237.5	238.1
70°	17.7	22.6	38.8	50.1	147.6	176.2	184.2	194.5	203.1	205.8	207.4
72.5°	16.7	21.0	36.6	45.3	125.5	151.4	158.9	164.9	172.4	175.1	175.1
75°	15.1	18.9	34.4	40.4	102.9	123.9	130.3	136.3	142.2	143.3	141.6
77.5°	13.5	16.7	29.6	34.0	80.3	98.0	103.4	106.6	111.5	112.6	113.1
80°	11.3	14.5	23.1	26.4	58.2	72.2	76.0	78.6	82.9	82.9	84.1
82.5°	8.6	11.3	16.7	18.9	39.3	49.5	52.8	54.4	57.1	57.1	57.1
85°	5.4	7.0	10.8	12.4	23.7	30.2	32.4	32.8	35.0	35.6	35.6
87.5°	2.7	3.8	7.0	7.5	12.4	15.7	15.7	16.7	16.7	16.1	15.7
90°	4.2	7.5	10.8	11.6	18.3	27.1	31.6	28.0	21.0	15.8	15.8
92.5°	16.6	44.9	73.2	80.2	112.8	156.3	177.9	155.9	112.0	79.0	75.9
95°	39.9	91.6	143.4	156.3	277.6	439.2	520.1	464.1	352.2	268.2	258.6
97.5°	69.0	114.6	160.3	171.7	373.9	643.4	778.3	742.9	672.1	619.0	601.0
100°	91.5	132.9	174.3	184.6	409.0	708.1	857.7	860.3	865.5	869.3	847.7
102.5°	110.6	149.2	187.8	197.5	425.0	728.5	880.2	925.3	1015.5	1083.1	1064.6
105°	143.0	175.8	208.5	216.6	437.0	730.8	877.7	978.8	1180.9	1332.5	1322.5
107.5°	176.3	206.8	237.3	244.9	439.2	698.3	827.8	968.8	1250.8	1462.2	1464.6
110°	198.7	226.3	253.7	260.7	435.9	669.5	786.2	943.8	1259.1	1495.5	1505.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	220.7	247.0	273.2	279.8	435.9	644.2	748.4	909.7	1232.4	1474.3	1490.2
115°	254.0	278.2	302.5	308.5	440.0	615.3	703.0	858.4	1169.2	1402.4	1424.4
117.5°	286.9	308.9	330.9	336.4	448.2	597.4	671.9	812.1	1092.6	1302.9	1327.4
120°	306.0	326.7	347.5	352.6	454.9	591.2	659.4	787.6	1043.8	1236.1	1259.8
122.5°	324.7	345.6	366.5	371.7	464.5	588.0	649.9	765.3	996.0	1169.1	1192.5
125°	353.4	372.4	391.5	396.2	477.3	585.4	639.4	737.5	933.5	1080.5	1102.1
127.5°	376.7	395.9	415.1	419.9	490.2	583.9	630.7	714.8	883.2	1009.5	1027.7
130°	389.1	409.9	430.6	435.7	499.6	584.8	627.4	702.3	852.1	964.6	981.3
132.5°	402.1	422.8	443.5	448.6	507.3	585.4	624.5	691.5	825.7	926.3	941.4
135°	421.2	440.0	458.8	463.6	515.5	584.8	619.5	675.7	788.1	872.3	885.3
137.5°	440.7	459.3	478.0	482.7	528.0	588.4	618.6	666.1	761.1	832.3	842.9
140°	456.9	474.1	491.3	495.6	535.7	589.1	615.7	656.8	738.8	800.4	810.3
142.5°	469.4	485.3	501.2	505.2	542.0	591.2	615.7	651.8	723.8	777.9	786.4
145°	488.5	502.4	516.2	519.7	550.3	591.2	611.6	641.0	700.0	744.2	750.7
147.5°	507.7	521.1	534.6	538.0	562.5	595.2	611.6	634.8	681.2	716.0	721.3
150°	520.1	532.3	544.5	547.6	568.9	597.4	611.6	631.2	670.3	699.7	704.1
152.5°	533.0	542.3	551.5	553.8	573.1	598.7	611.6	628.3	661.8	686.8	690.1
155°	552.1	559.0	565.8	567.5	582.2	601.8	611.6	624.9	651.5	671.5	673.6
157.5°	566.3	572.9	579.5	581.2	591.3	604.8	611.6	621.9	642.6	658.1	659.7
160°	575.8	581.0	586.2	587.5	595.5	606.2	611.6	620.4	638.1	651.5	652.4
162.5°	585.4	589.2	593.2	594.1	599.9	607.7	611.6	619.0	634.0	645.3	646.1
165°	595.7	599.3	602.8	603.7	606.3	609.8	611.6	616.9	627.6	635.7	636.5
167.5°	605.4	607.0	608.7	609.1	611.3	614.3	615.7	619.3	626.3	631.6	632.0
170°	611.6	613.3	614.9	615.3	615.5	615.7	615.7	619.3	626.3	631.6	631.6
172.5°	614.9	615.3	615.7	615.7	615.7	615.7	615.7	618.5	624.0	628.2	627.9
175°	619.5	619.5	619.5	619.5	618.2	616.5	615.7	617.5	621.0	623.6	623.6
177.5°	619.5	619.5	619.5	619.5	618.6	617.2	616.5	617.9	620.7	622.8	622.4
180°	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	167.5	167.5
2.5°	178.8	177.8
5°	230.1	231.1
7.5°	309.7	309.2
10°	385.2	390.0
12.5°	440.1	441.2
15°	473.5	475.7
17.5°	486.5	487.0
20°	487.0	485.9
22.5°	481.1	480.0
25°	474.1	473.5
27.5°	467.6	468.1
30°	464.9	466.5
32.5°	464.9	467.6
35°	466.0	468.6
37.5°	465.4	468.6
40°	463.3	467.0
42.5°	457.4	460.0
45°	448.2	451.4
47.5°	436.4	438.5
50°	421.3	423.4
52.5°	402.4	402.9
55°	379.8	381.9
57.5°	355.6	356.1
60°	328.6	330.2
62.5°	300.1	300.1
65°	269.9	270.9
67.5°	238.7	241.3
70°	206.9	207.4
72.5°	175.6	175.6
75°	143.3	143.8
77.5°	112.6	112.6
80°	83.5	84.1
82.5°	57.7	58.7
85°	36.1	36.1
87.5°	16.7	15.1
90°	15.8	15.8
92.5°	63.3	50.7
95°	220.6	182.5
97.5°	528.5	456.1
100°	761.5	675.2
102.5°	990.7	916.8
105°	1282.9	1243.1
107.5°	1474.2	1483.9
110°	1547.2	1588.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1553.7	1617.3
115°	1512.5	1600.7
117.5°	1425.2	1522.9
120°	1354.7	1449.7
122.5°	1286.2	1379.9
125°	1188.4	1274.7
127.5°	1100.4	1173.3
130°	1048.6	1115.9
132.5°	1001.6	1061.8
135°	937.2	989.1
137.5°	885.5	927.9
140°	850.0	889.7
142.5°	820.6	854.8
145°	776.6	802.4
147.5°	742.7	764.1
150°	721.5	738.8
152.5°	703.2	716.4
155°	682.3	691.0
157.5°	665.8	671.9
160°	655.9	659.4
162.5°	649.5	652.8
165°	640.1	643.6
167.5°	633.4	634.9
170°	631.6	631.6
172.5°	626.6	625.3
175°	623.6	623.6
177.5°	621.0	619.5
180°	619.5	619.5



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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	0.00	0.20	0.65	1.33	2.93	12.65	13.34	13.79	14.47	16.07
	3H	0.20	0.82	1.35	1.96	3.57	14.46	15.08	15.61	16.22	17.83
	4H	0.49	1.08	1.65	2.22	3.84	15.09	15.67	16.25	16.82	18.43
	6H	0.73	1.27	1.90	2.42	4.05	15.50	16.03	16.67	17.18	18.81
	8H	0.80	1.31	1.97	2.47	4.09	15.61	16.12	16.78	17.28	18.90
	12H	0.81	1.30	1.98	2.45	4.09	15.66	16.15	16.84	17.30	18.94
4H	2H	6.68	7.26	7.85	8.41	10.02	12.90	13.49	14.07	14.63	16.25
	3H	8.23	8.72	9.41	9.89	11.52	14.92	15.41	16.09	16.58	18.20
	4H	8.32	8.77	9.50	9.93	11.57	15.67	16.12	16.84	17.28	18.92
	6H	8.32	8.71	9.50	9.89	11.52	16.18	16.57	17.36	17.75	19.38
	8H	8.29	8.65	9.47	9.83	11.48	16.33	16.69	17.51	17.87	19.52
	12H	8.24	8.57	9.44	9.75	11.41	16.41	16.74	17.61	17.92	19.58
8H	4H	9.74	10.10	10.92	11.27	12.92	15.71	16.07	16.89	17.25	18.90
	6H	9.97	10.27	11.17	11.49	13.13	16.32	16.62	17.52	17.83	19.48
	8H	9.99	10.25	11.19	11.44	13.11	16.53	16.79	17.74	17.98	19.65
	12H	9.95	10.18	11.16	11.37	13.07	16.66	16.89	17.87	18.08	19.78
12H	4H	9.87	10.20	11.07	11.38	13.04	15.66	15.98	16.85	17.17	18.82
	6H	10.23	10.48	11.43	11.68	13.34	16.30	16.56	17.51	17.75	19.42
	8H	10.29	10.51	11.49	11.70	13.40	16.52	16.74	17.72	17.93	19.63