

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: P937102

Luminaire Tested: SQ4-FB-075U-050D-B40-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937102
REPORT IS A COMBINATION OF REPORTS P933501 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-050D-B40-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

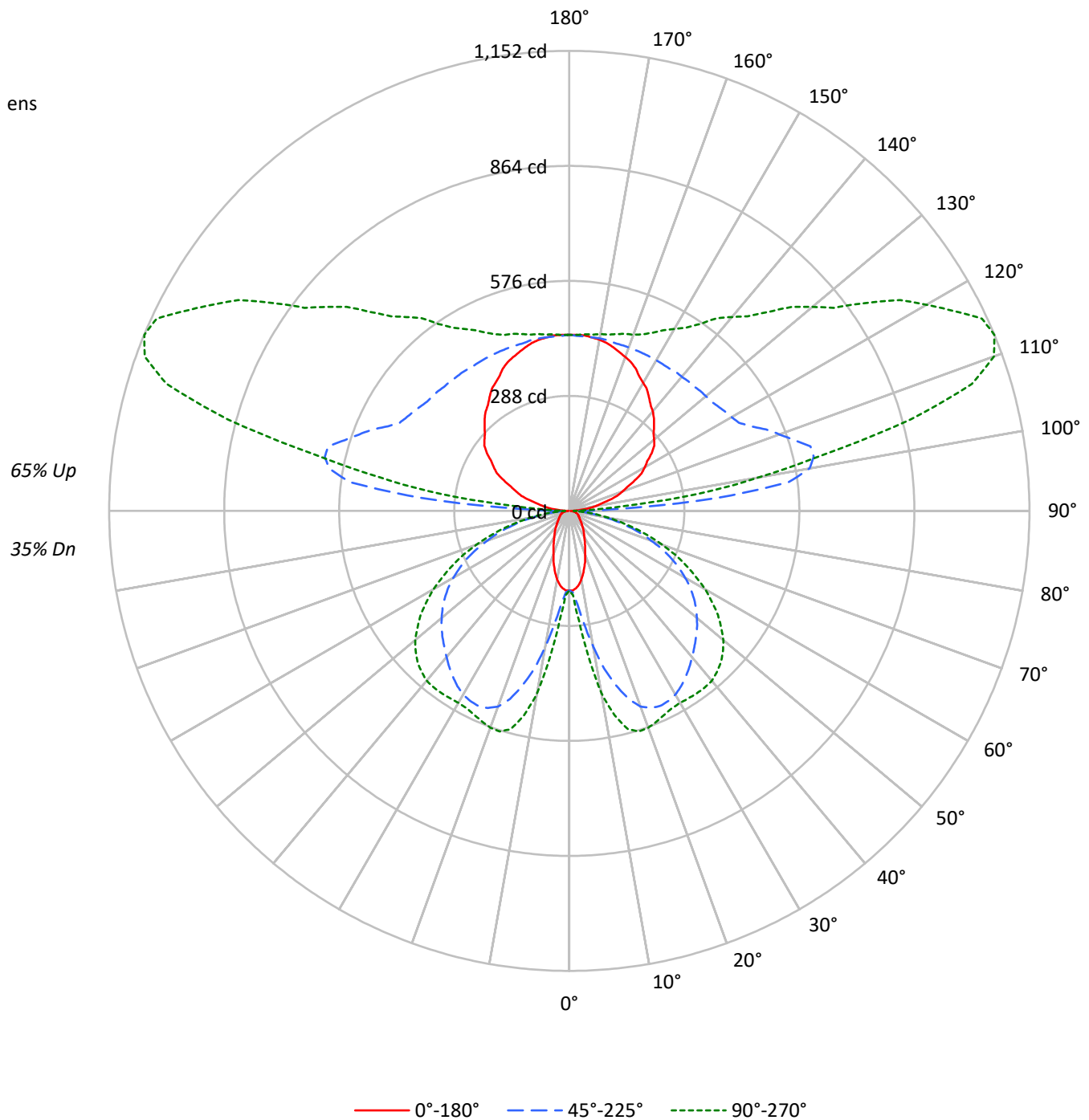
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4402.6 lumens
Efficiency: N/A
Efficacy: 128.0 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): 34.4
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35				35
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29				29
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23				23
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19				19
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16				16
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14				14
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12				12
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10				10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9				9
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8				8
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7				7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1848	1848	1848
5°	1805	2135	2485
10°	1635	3110	4120
15°	1388	4061	4975
20°	1129	4702	5070
25°	940	4917	4968
30°	792	4944	4958
35°	698	4858	5085
40°	609	4748	5218
45°	549	4666	5239
50°	503	4589	5153
55°	481	4483	4923
60°	489	4280	4563
65°	508	3974	4067
70°	536	3459	3437
75°	590	2812	2681
80°	632	1943	1808
85°	530	1028	924

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5239 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.8	0.6
10°-20°	114.2	2.6
20°-30°	199.8	4.5
30°-40°	257.2	5.8
40°-50°	287.3	6.5
50°-60°	275.2	6.2
60°-70°	218.1	5.0
70°-80°	128.2	2.9
80°-90°	37.3	0.8
90°-100°	215.0	4.9
100°-110°	565.3	12.8
110°-120°	586.1	13.3
120°-130°	470.2	10.7
130°-140°	368.9	8.4
140°-150°	283.1	6.4
150°-160°	203.9	4.6
160°-170°	124.8	2.8
170°-180°	42.2	1.0
0°-30°	339.8	7.7
0°-40°	597.0	13.6
0°-60°	1159.5	26.3
0°-90°	1543.1	35.0
90°-120°	1366.5	31.0
90°-150°	2488.7	56.5
90°-180°	2860.0	65.0
0°-180°	4402.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	199	199	199	199	199	
5°	194	208	234	265	275	18
15°	145	268	452	548	566	40
25°	93	304	539	562	563	43
35°	63	291	507	536	557	39
45°	43	232	448	514	537	33
55°	31	147	381	442	454	28
65°	24	78	282	318	322	24
75°	18	48	155	170	171	19
85°	6	15	38	42	43	7
90°	3	8	22	11	11	3
95°	28	111	370	191	130	32
105°	102	154	625	949	885	108
115°	181	220	501	998	1140	179
125°	252	282	455	769	908	223
135°	300	330	441	621	704	232
145°	348	370	436	530	571	218
155°	393	404	436	478	492	181
165°	424	430	436	453	458	120
175°	441	441	438	444	444	42
180°	441	441	441	441	441	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	199.2	199.2	199.2	199.2	199.2	199.2	199.2	199.2	199.2	199.2	199.2
2.5°	199.2	199.2	200.5	201.1	202.5	203.1	204.4	205.6	209.5	210.1	211.4
5°	194.2	196.7	205.0	208.2	217.2	229.4	234.5	242.9	260.1	265.2	268.5
7.5°	186.4	192.2	212.7	217.8	240.3	272.3	285.7	303.7	331.2	344.7	355.5
10°	174.3	186.4	223.0	235.1	271.6	320.3	345.3	370.3	412.0	430.5	437.6
12.5°	160.8	180.7	233.9	250.5	303.0	374.2	404.3	431.9	479.2	504.2	508.1
15°	145.4	172.4	244.1	268.5	336.4	419.0	452.3	486.3	530.5	548.4	552.8
17.5°	132.0	166.0	253.7	279.3	361.9	459.4	493.4	521.5	557.3	569.6	572.7
20°	115.4	155.7	260.1	293.5	388.9	488.9	521.5	543.3	567.7	575.3	576.6
22.5°	103.1	144.8	264.0	298.5	406.8	506.7	534.3	551.6	568.2	570.8	571.5
25°	92.9	132.6	263.3	304.4	422.2	517.6	538.8	551.6	561.3	562.5	562.5
27.5°	83.3	119.2	260.7	305.6	433.8	520.2	536.9	545.9	550.4	552.8	552.8
30°	75.0	106.4	254.3	303.0	438.8	517.6	531.1	535.6	540.1	544.0	545.9
32.5°	68.6	94.2	244.8	297.9	439.5	511.2	520.9	523.4	529.8	538.8	542.0
35°	62.7	82.0	233.9	290.9	435.7	501.0	507.4	510.0	522.8	536.2	540.7
37.5°	57.0	73.1	219.7	278.7	429.8	488.9	493.4	497.8	517.6	533.7	538.8
40°	51.3	65.3	203.1	265.2	421.0	474.1	478.0	484.9	511.2	529.8	535.0
42.5°	46.8	58.9	185.2	251.2	409.4	457.4	463.2	473.5	503.6	523.4	529.2
45°	42.9	52.5	166.0	231.9	394.6	440.2	448.5	462.6	494.6	513.8	518.9
47.5°	39.1	48.0	146.1	212.1	378.7	422.9	433.8	449.7	482.5	501.0	505.5
50°	35.9	43.5	126.3	190.9	361.4	404.3	417.0	433.8	467.1	484.4	490.1
52.5°	33.3	39.7	107.6	169.8	341.5	385.1	399.8	417.0	448.5	465.1	469.0
55°	30.8	36.5	91.6	147.4	321.0	364.5	380.6	397.2	427.9	442.1	444.6
57.5°	29.5	34.0	78.1	126.3	299.2	341.5	359.4	374.7	403.6	414.5	417.0
60°	27.5	32.0	67.9	108.3	275.5	319.7	335.1	350.5	374.7	383.7	385.7
62.5°	25.6	30.8	60.3	91.0	251.2	294.0	309.4	323.6	344.0	350.5	353.0
65°	24.4	29.5	54.4	78.1	226.1	267.1	282.5	294.7	311.3	317.7	319.1
67.5°	23.1	28.2	49.9	67.2	201.1	240.3	251.7	263.3	276.1	282.5	283.2
70°	21.1	26.9	46.1	59.6	175.5	209.5	219.1	231.3	241.5	244.8	246.7
72.5°	19.9	25.0	43.5	53.9	149.3	180.0	189.0	196.1	205.0	208.2	208.2
75°	18.0	22.4	41.0	48.0	122.3	147.4	155.0	162.1	169.1	170.4	168.5
77.5°	16.0	19.9	35.2	40.4	95.5	116.6	123.0	126.8	132.6	133.9	134.6
80°	13.5	17.3	27.5	31.4	69.2	85.9	90.3	93.5	98.7	98.7	100.0
82.5°	10.2	13.5	19.9	22.4	46.8	58.9	62.7	64.7	67.9	67.9	67.9
85°	6.4	8.3	12.8	14.7	28.2	35.9	38.5	39.1	41.6	42.3	42.3
87.5°	3.2	4.5	8.3	9.0	14.7	18.6	18.6	19.9	19.9	19.2	18.6
90°	3.0	5.3	7.7	8.3	13.1	19.4	22.5	20.1	15.0	11.3	11.3
92.5°	11.8	32.0	52.0	57.1	80.3	111.3	126.7	111.1	79.7	56.2	54.1
95°	28.5	65.3	102.2	111.4	197.7	312.8	370.3	330.4	250.7	190.9	184.1
97.5°	49.2	81.7	114.1	122.2	266.3	458.2	554.2	529.0	478.6	440.8	427.9
100°	65.1	94.5	124.1	131.4	291.2	504.2	610.7	612.5	616.3	619.0	603.7
102.5°	78.8	106.3	133.7	140.6	302.6	518.8	626.8	658.9	723.0	771.2	758.0
105°	101.8	125.1	148.4	154.2	311.1	520.4	625.0	697.0	840.9	948.8	941.7
107.5°	125.5	147.3	168.9	174.4	312.8	497.2	589.4	689.8	890.5	1041.1	1042.9
110°	141.5	161.1	180.8	185.7	310.4	476.6	559.8	672.0	896.5	1064.8	1072.2



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	157.2	175.9	194.5	199.2	310.5	458.8	532.9	647.8	877.5	1049.7	1061.1
115°	180.9	198.1	215.4	219.6	313.3	438.2	500.6	611.3	832.6	998.5	1014.2
117.5°	204.3	219.9	235.6	239.5	319.2	425.3	478.4	578.3	777.9	927.8	945.2
120°	217.9	232.6	247.3	251.1	323.8	421.0	469.5	560.8	743.3	880.1	897.0
122.5°	231.2	246.1	260.9	264.6	330.6	418.7	462.7	544.8	709.2	832.5	849.2
125°	251.6	265.2	278.8	282.1	339.9	416.9	455.3	525.2	664.8	769.4	784.8
127.5°	268.3	281.9	295.6	299.0	349.1	415.8	449.1	509.1	629.0	718.8	731.8
130°	277.1	291.8	306.6	310.3	355.7	416.4	446.7	500.1	606.8	686.8	698.8
132.5°	286.3	301.0	315.7	319.4	361.2	416.9	444.6	492.4	588.0	659.6	670.3
135°	299.9	313.2	326.7	330.0	367.1	416.5	441.1	481.1	561.2	621.1	630.4
137.5°	313.8	327.1	340.4	343.7	376.0	419.1	440.5	474.3	542.0	592.7	600.2
140°	325.4	337.6	349.8	352.9	381.4	419.4	438.4	467.7	526.0	569.8	576.9
142.5°	334.2	345.5	356.8	359.7	385.9	421.0	438.4	464.1	515.4	553.9	560.0
145°	347.8	357.7	367.6	370.1	391.8	421.0	435.5	456.5	498.4	529.9	534.5
147.5°	361.5	371.0	380.7	383.1	400.5	423.8	435.5	452.0	485.0	509.8	513.6
150°	370.3	379.0	387.7	389.9	405.1	425.4	435.5	449.4	477.3	498.2	501.3
152.5°	379.5	386.1	392.7	394.3	408.1	426.3	435.5	447.4	471.2	489.1	491.3
155°	393.2	398.0	402.8	404.1	414.6	428.5	435.5	444.9	463.8	478.1	479.6
157.5°	403.2	408.0	412.8	413.9	421.1	430.7	435.5	442.8	457.5	468.6	469.7
160°	410.0	413.7	417.3	418.3	424.0	431.7	435.5	441.8	454.5	463.9	464.5
162.5°	416.9	419.6	422.4	423.1	427.2	432.7	435.5	440.8	451.4	459.5	460.0
165°	424.2	426.7	429.2	429.8	431.8	434.2	435.5	439.3	446.9	452.7	453.3
167.5°	431.0	432.1	433.4	433.7	435.3	437.4	438.4	440.9	446.0	449.7	450.0
170°	435.5	436.6	437.9	438.2	438.2	438.3	438.4	440.9	446.0	449.7	449.7
172.5°	437.9	438.2	438.3	438.4	438.4	438.4	438.4	440.4	444.4	447.3	447.1
175°	441.1	441.1	441.1	441.1	440.3	439.0	438.4	439.7	442.2	444.1	444.1
177.5°	441.1	441.1	441.1	441.1	440.4	439.5	439.0	440.0	442.0	443.5	443.2
180°	441.1	441.1	441.1	441.1	441.1	441.1	441.1	441.1	441.1	441.1	441.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	199.2	199.2
2.5°	212.7	211.4
5°	273.6	274.8
7.5°	368.3	367.8
10°	458.1	463.8
12.5°	523.4	524.7
15°	563.2	565.7
17.5°	578.5	579.2
20°	579.2	577.9
22.5°	572.1	570.8
25°	563.8	563.2
27.5°	556.1	556.8
30°	552.8	554.9
32.5°	552.8	556.1
35°	554.2	557.3
37.5°	553.5	557.3
40°	550.9	555.4
42.5°	544.0	547.1
45°	533.0	536.9
47.5°	518.9	521.5
50°	501.0	503.6
52.5°	478.6	479.2
55°	451.7	454.2
57.5°	422.9	423.4
60°	390.8	392.7
62.5°	356.9	356.9
65°	321.0	322.2
67.5°	283.8	287.0
70°	246.0	246.7
72.5°	208.9	208.9
75°	170.4	171.0
77.5°	133.9	133.9
80°	99.3	100.0
82.5°	68.6	69.8
85°	42.9	42.9
87.5°	19.9	18.0
90°	11.3	11.3
92.5°	45.1	36.1
95°	157.1	130.0
97.5°	376.4	324.8
100°	542.2	480.7
102.5°	705.4	652.7
105°	913.5	885.2
107.5°	1049.7	1056.6
110°	1101.7	1131.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1106.4	1151.6
115°	1077.0	1139.8
117.5°	1014.8	1084.4
120°	964.6	1032.3
122.5°	915.8	982.6
125°	846.2	907.6
127.5°	783.6	835.4
130°	746.7	794.6
132.5°	713.2	756.1
135°	667.4	704.3
137.5°	630.5	660.8
140°	605.3	633.5
142.5°	584.3	608.6
145°	552.9	571.4
147.5°	528.9	544.2
150°	513.7	526.1
152.5°	500.7	510.1
155°	485.8	492.0
157.5°	474.1	478.4
160°	467.0	469.5
162.5°	462.4	464.8
165°	455.8	458.3
167.5°	451.0	452.1
170°	449.7	449.7
172.5°	446.2	445.2
175°	444.1	444.1
177.5°	442.2	441.1
180°	441.1	441.1



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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	1.57	2.34	2.64	3.41	4.88	14.71	15.48	15.78	16.55	18.02
	3H	2.27	2.96	3.35	4.04	5.53	16.53	17.22	17.61	18.30	19.79
	4H	2.57	3.22	3.66	4.30	5.80	17.16	17.81	18.25	18.90	20.39
	6H	2.81	3.41	3.91	4.50	6.01	17.58	18.18	18.67	19.26	20.77
	8H	2.88	3.45	3.98	4.56	6.05	17.69	18.26	18.79	19.36	20.86
	12H	2.89	3.44	4.00	4.54	6.06	17.74	18.29	18.85	19.39	20.91
4H	2H	8.75	9.41	9.85	10.49	11.98	14.98	15.63	16.07	16.72	18.21
	3H	10.32	10.86	11.42	11.97	13.48	17.00	17.55	18.10	18.66	20.16
	4H	10.41	10.91	11.51	12.01	13.53	17.75	18.25	18.86	19.36	20.88
	6H	10.41	10.84	11.53	11.97	13.48	18.27	18.71	19.39	19.83	21.35
	8H	10.39	10.79	11.50	11.91	13.44	18.43	18.83	19.54	19.95	21.48
	12H	10.34	10.70	11.47	11.83	13.37	18.51	18.87	19.64	20.00	21.54
8H	4H	11.83	12.23	12.95	13.35	14.89	17.81	18.21	18.92	19.33	20.86
	6H	12.07	12.40	13.21	13.56	15.09	18.42	18.75	19.56	19.91	21.44
	8H	12.09	12.38	13.23	13.52	15.07	18.63	18.92	19.77	20.06	21.61
	12H	12.05	12.31	13.20	13.44	15.03	18.76	19.02	19.91	20.15	21.74
12H	4H	11.97	12.33	13.10	13.46	15.00	17.75	18.12	18.89	19.25	20.79
	6H	12.32	12.62	13.47	13.76	15.31	18.40	18.69	19.54	19.83	21.38
	8H	12.39	12.65	13.54	13.78	15.37	18.62	18.87	19.77	20.01	21.60