

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: P936759

Luminaire Tested: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936759
REPORT IS A COMBINATION OF REPORTS P933470 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

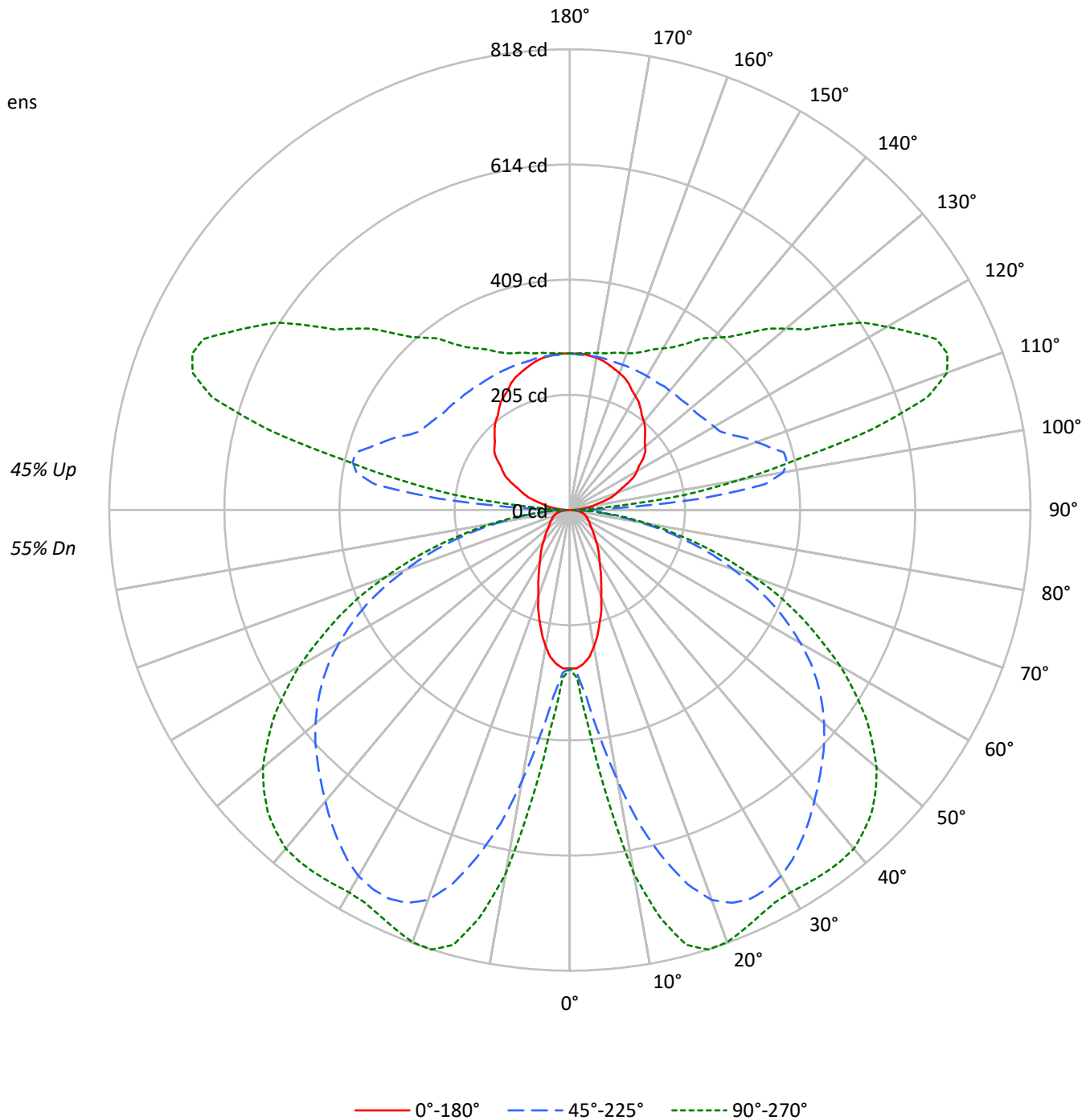
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3980.8 lumens
Efficiency: N/A
Efficacy: 109.4 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: General Diffuse

Input Watts (W): 36.4
Input Voltage (V): NR
Input Current (Ain): 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	
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	0
RCR																		
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2612	2612	2612
5°	2549	3017	3511
10°	2310	4395	5821
15°	1961	5737	7029
20°	1594	6643	7164
25°	1328	6946	7017
30°	1119	6986	7005
35°	987	6864	7186
40°	859	6708	7373
45°	776	6591	7401
50°	711	6486	7280
55°	678	6333	6957
60°	692	6047	6447
65°	717	5616	5747
70°	759	4888	4855
75°	830	3974	3789
80°	889	2746	2553
85°	754	1449	1306

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7401 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.4	0.9
10°-20°	161.4	4.1
20°-30°	282.3	7.1
30°-40°	363.4	9.1
40°-50°	405.9	10.2
50°-60°	388.8	9.8
60°-70°	308.1	7.7
70°-80°	181.2	4.6
80°-90°	51.4	1.3
90°-100°	135.5	3.4
100°-110°	356.2	8.9
110°-120°	369.4	9.3
120°-130°	296.3	7.4
130°-140°	232.5	5.8
140°-150°	178.4	4.5
150°-160°	128.5	3.2
160°-170°	78.6	2.0
170°-180°	26.6	0.7
0°-30°	480.1	12.1
0°-40°	843.5	21.2
0°-60°	1638.1	41.2
0°-90°	2178.8	54.7
90°-120°	861.1	21.6
90°-150°	1568.3	39.4
90°-180°	1802.0	45.3
0°-180°	3980.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	282	282	282	282	282	
5°	274	294	331	375	388	25
15°	206	379	639	775	799	57
25°	131	430	761	795	796	60
35°	89	411	717	758	788	55
45°	61	328	634	726	758	47
55°	43	208	538	625	642	40
65°	34	110	399	449	455	34
75°	25	68	219	241	242	27
85°	9	21	54	60	61	10
90°	2	5	14	7	7	2
95°	18	70	233	120	82	20
105°	64	97	394	598	558	68
115°	114	138	315	629	718	113
125°	159	178	287	485	572	141
135°	189	208	278	391	444	146
145°	219	233	274	334	360	137
155°	248	255	274	301	310	114
165°	267	271	274	285	289	75
175°	278	278	276	280	280	26
180°	278	278	278	278	278	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5
2.5°	281.5	281.5	283.3	284.2	286.0	286.9	288.7	290.6	296.0	296.9	298.7
5°	274.3	277.9	289.7	294.2	306.8	324.0	331.3	343.1	367.5	374.7	379.3
7.5°	263.4	271.5	300.5	307.8	339.4	384.7	403.7	429.0	468.0	487.0	502.4
10°	246.2	263.4	315.0	332.2	383.8	452.6	487.9	523.2	582.0	608.3	618.2
12.5°	227.2	255.3	330.4	353.9	428.1	528.6	571.2	610.1	677.1	712.4	717.8
15°	205.5	243.5	344.9	379.3	475.2	592.0	639.0	687.0	749.5	774.8	781.2
17.5°	186.5	234.4	358.4	394.7	511.4	649.0	697.0	736.8	787.5	804.7	809.2
20°	162.9	220.0	367.5	414.6	549.4	690.6	736.8	767.6	802.0	812.8	814.6
22.5°	145.7	204.6	372.9	421.8	574.8	716.0	754.9	779.3	802.9	806.5	807.4
25°	131.2	187.4	372.0	430.0	596.5	731.4	761.2	779.3	792.9	794.7	794.7
27.5°	117.7	168.4	368.4	431.8	612.8	735.0	758.5	771.2	777.5	781.2	781.2
30°	105.9	150.3	359.3	428.1	620.0	731.4	750.4	756.7	763.1	768.5	771.2
32.5°	96.9	133.1	345.8	420.9	620.9	722.3	735.9	739.5	748.6	761.2	765.8
35°	88.7	115.9	330.4	410.9	615.5	707.8	716.9	720.5	738.6	757.6	764.0
37.5°	80.6	103.2	310.5	393.7	607.4	690.6	697.0	703.3	731.4	754.0	761.2
40°	72.4	92.3	286.9	374.7	594.7	669.8	675.3	685.2	722.3	748.6	755.8
42.5°	66.1	83.3	261.6	354.8	578.4	646.3	654.4	668.9	711.5	739.5	747.7
45°	60.6	74.2	234.4	327.7	557.6	621.8	633.6	653.5	698.8	725.9	733.2
47.5°	55.2	67.9	206.4	299.6	535.0	597.4	612.8	635.4	681.6	707.8	714.2
50°	50.7	61.6	178.3	269.7	510.5	571.2	589.3	612.8	659.9	684.3	692.4
52.5°	47.1	56.1	152.1	239.9	482.5	544.0	564.8	589.3	633.6	657.1	662.6
55°	43.4	51.6	129.4	208.2	453.5	515.0	537.7	561.2	604.6	624.6	628.2
57.5°	41.6	48.0	110.4	178.3	422.7	482.5	507.8	529.5	570.3	585.6	589.3
60°	38.9	45.3	95.9	153.0	389.2	451.7	473.4	495.1	529.5	542.2	544.9
62.5°	36.2	43.4	85.1	128.5	354.8	415.5	437.2	457.1	486.1	495.1	498.7
65°	34.4	41.6	76.9	110.4	319.5	377.5	399.2	416.4	439.9	449.0	450.8
67.5°	32.6	39.8	70.6	95.0	284.2	339.4	355.7	372.0	390.1	399.2	400.1
70°	29.9	38.0	65.2	84.2	248.0	296.0	309.6	326.8	341.2	345.8	348.5
72.5°	28.1	35.3	61.6	76.0	210.9	254.4	267.0	277.0	289.7	294.2	294.2
75°	25.3	31.7	57.9	67.9	172.9	208.2	219.0	229.0	239.0	240.8	238.1
77.5°	22.6	28.1	49.8	57.0	134.9	164.7	173.8	179.2	187.4	189.2	190.1
80°	19.0	24.4	38.9	44.4	97.8	121.3	127.6	132.2	139.4	139.4	141.2
82.5°	14.5	19.0	28.1	31.7	66.1	83.3	88.7	91.4	95.9	95.9	95.9
85°	9.1	11.8	18.1	20.8	39.8	50.7	54.3	55.2	58.8	59.7	59.7
87.5°	4.5	6.3	11.8	12.7	20.8	26.2	26.2	28.1	28.1	27.2	26.2
90°	1.9	3.3	4.9	5.2	8.2	12.2	14.2	12.6	9.4	7.1	7.1
92.5°	7.4	20.1	32.9	36.0	50.6	70.1	79.8	70.0	50.2	35.5	34.0
95°	17.9	41.1	64.4	70.1	124.6	197.1	233.4	208.2	158.0	120.3	116.0
97.5°	31.0	51.4	71.9	77.0	167.7	288.7	349.2	333.4	301.6	277.8	269.6
100°	41.0	59.6	78.2	82.8	183.5	317.7	384.9	386.1	388.4	390.1	380.4
102.5°	49.6	67.0	84.3	88.6	190.7	326.9	394.9	415.2	455.7	486.0	477.7
105°	64.2	78.8	93.5	97.2	196.1	327.9	393.8	439.2	529.9	597.9	593.5
107.5°	79.1	92.8	106.4	109.9	197.1	313.4	371.5	434.7	561.3	656.2	657.2
110°	89.2	101.5	113.9	116.9	195.6	300.4	352.8	423.5	565.0	671.1	675.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	99.0	110.8	122.6	125.5	195.6	289.1	335.8	408.2	553.0	661.6	668.7
115°	114.0	124.8	135.7	138.4	197.4	276.1	315.4	385.1	524.6	629.3	639.1
117.5°	128.7	138.6	148.4	150.9	201.1	268.0	301.5	364.4	490.2	584.6	595.6
120°	137.3	146.6	155.9	158.2	204.1	265.3	295.9	353.4	468.4	554.7	565.4
122.5°	145.7	155.1	164.5	166.8	208.4	263.9	291.6	343.3	447.0	524.6	535.1
125°	158.6	167.1	175.6	177.8	214.2	262.7	286.9	330.9	418.9	484.9	494.6
127.5°	169.0	177.7	186.3	188.5	220.0	262.0	283.0	320.8	396.3	452.9	461.1
130°	174.6	183.9	193.2	195.5	224.2	262.4	281.5	315.2	382.4	432.8	440.4
132.5°	180.4	189.7	199.0	201.3	227.6	262.7	280.2	310.3	370.5	415.6	422.4
135°	189.0	197.4	205.9	208.0	231.4	262.4	278.0	303.1	353.6	391.4	397.2
137.5°	197.8	206.1	214.5	216.6	237.0	264.0	277.6	298.9	341.5	373.5	378.3
140°	205.0	212.7	220.5	222.4	240.3	264.3	276.3	294.7	331.6	359.2	363.6
142.5°	210.6	217.8	224.8	226.7	243.2	265.2	276.3	292.5	324.8	349.0	352.8
145°	219.2	225.4	231.6	233.2	246.9	265.3	274.4	287.7	314.1	333.9	336.8
147.5°	227.8	233.9	239.9	241.4	252.4	267.1	274.4	284.9	305.7	321.2	323.7
150°	233.4	238.8	244.3	245.7	255.3	268.0	274.4	283.2	300.8	314.0	316.0
152.5°	239.1	243.3	247.5	248.5	257.2	268.7	274.4	282.0	297.0	308.2	309.7
155°	247.7	250.8	253.9	254.6	261.2	270.0	274.4	280.4	292.4	301.3	302.3
157.5°	254.1	257.1	260.1	260.8	265.3	271.4	274.4	279.1	288.4	295.4	296.1
160°	258.4	260.7	263.0	263.6	267.2	272.0	274.4	278.4	286.4	292.4	292.7
162.5°	262.7	264.4	266.1	266.6	269.2	272.7	274.4	277.8	284.5	289.6	289.9
165°	267.4	268.9	270.6	270.9	272.1	273.6	274.4	276.8	281.6	285.2	285.6
167.5°	271.6	272.4	273.1	273.3	274.3	275.6	276.3	277.9	281.1	283.4	283.6
170°	274.4	275.2	275.9	276.1	276.2	276.3	276.3	277.9	281.1	283.4	283.4
172.5°	275.9	276.1	276.3	276.3	276.3	276.3	276.3	277.5	280.0	281.9	281.7
175°	278.0	278.0	278.0	278.0	277.4	276.6	276.3	277.1	278.7	279.9	279.9
177.5°	278.0	278.0	278.0	278.0	277.5	277.0	276.7	277.3	278.6	279.5	279.3
180°	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	281.5	281.5
2.5°	300.5	298.7
5°	386.5	388.3
7.5°	520.5	519.6
10°	647.2	655.3
12.5°	739.5	741.3
15°	795.6	799.3
17.5°	817.4	818.3
20°	818.3	816.5
22.5°	808.3	806.5
25°	796.5	795.6
27.5°	785.7	786.6
30°	781.2	783.9
32.5°	781.2	785.7
35°	783.0	787.5
37.5°	782.1	787.5
40°	778.4	784.8
42.5°	768.5	773.0
45°	753.1	758.5
47.5°	733.2	736.8
50°	707.8	711.5
52.5°	676.2	677.1
55°	638.1	641.8
57.5°	597.4	598.3
60°	552.1	554.9
62.5°	504.2	504.2
65°	453.5	455.3
67.5°	401.0	405.5
70°	347.6	348.5
72.5°	295.1	295.1
75°	240.8	241.7
77.5°	189.2	189.2
80°	140.3	141.2
82.5°	96.9	98.7
85°	60.6	60.6
87.5°	28.1	25.3
90°	7.1	7.1
92.5°	28.4	22.7
95°	98.9	81.9
97.5°	237.2	204.7
100°	341.7	303.0
102.5°	444.5	411.4
105°	575.7	557.9
107.5°	661.5	665.8
110°	694.3	712.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	697.2	725.8
115°	678.7	718.2
117.5°	639.5	683.4
120°	607.9	650.5
122.5°	577.2	619.2
125°	533.2	572.0
127.5°	493.8	526.4
130°	470.6	500.7
132.5°	449.4	476.5
135°	420.5	443.8
137.5°	397.3	416.4
140°	381.4	399.3
142.5°	368.2	383.6
145°	348.5	360.1
147.5°	333.3	342.9
150°	323.8	331.6
152.5°	315.5	321.4
155°	306.2	310.1
157.5°	298.8	301.5
160°	294.4	295.9
162.5°	291.5	292.9
165°	287.2	288.8
167.5°	284.2	284.9
170°	283.4	283.4
172.5°	281.1	280.6
175°	279.9	279.9
177.5°	278.7	278.0
180°	278.0	278.0



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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	4.75	5.69	5.65	6.63	7.83	17.89	18.83	18.79	19.77	20.97
	3H	5.46	6.31	6.38	7.25	8.48	19.72	20.57	20.64	21.51	22.73
	4H	5.76	6.57	6.69	7.52	8.75	20.36	21.16	21.29	22.11	23.34
	6H	6.02	6.76	6.96	7.72	8.96	20.78	21.53	21.72	22.48	23.72
	8H	6.09	6.80	7.04	7.77	9.01	20.90	21.61	21.85	22.58	23.82
	12H	6.11	6.79	7.07	7.75	9.02	20.96	21.64	21.92	22.60	23.87
4H	2H	11.95	12.76	12.89	13.70	14.94	18.17	18.98	19.11	19.93	21.16
	3H	13.53	14.20	14.48	15.18	16.43	20.21	20.89	21.16	21.87	23.11
	4H	13.63	14.25	14.59	15.22	16.49	20.97	21.59	21.93	22.56	23.83
	6H	13.64	14.18	14.62	15.17	16.44	21.50	22.04	22.48	23.03	24.30
	8H	13.62	14.12	14.60	15.11	16.40	21.66	22.16	22.64	23.15	24.44
	12H	13.58	14.04	14.58	15.04	16.33	21.75	22.20	22.75	23.21	24.50
8H	4H	15.07	15.57	16.04	16.56	17.84	21.04	21.54	22.02	22.53	23.81
	6H	15.31	15.73	16.32	16.76	18.04	21.66	22.08	22.66	23.11	24.39
	8H	15.33	15.70	16.34	16.72	18.02	21.88	22.24	22.88	23.26	24.56
	12H	15.31	15.63	16.32	16.64	17.99	22.02	22.34	23.03	23.35	24.70
12H	4H	15.21	15.67	16.21	16.67	17.96	21.00	21.45	21.99	22.46	23.75
	6H	15.57	15.94	16.58	16.96	18.26	21.65	22.01	22.66	23.03	24.33
	8H	15.64	15.97	16.66	16.98	18.33	21.87	22.20	22.89	23.21	24.55