

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: P936770

Luminaire Tested: SQ4-FB-050U-075D-935-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936770
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-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

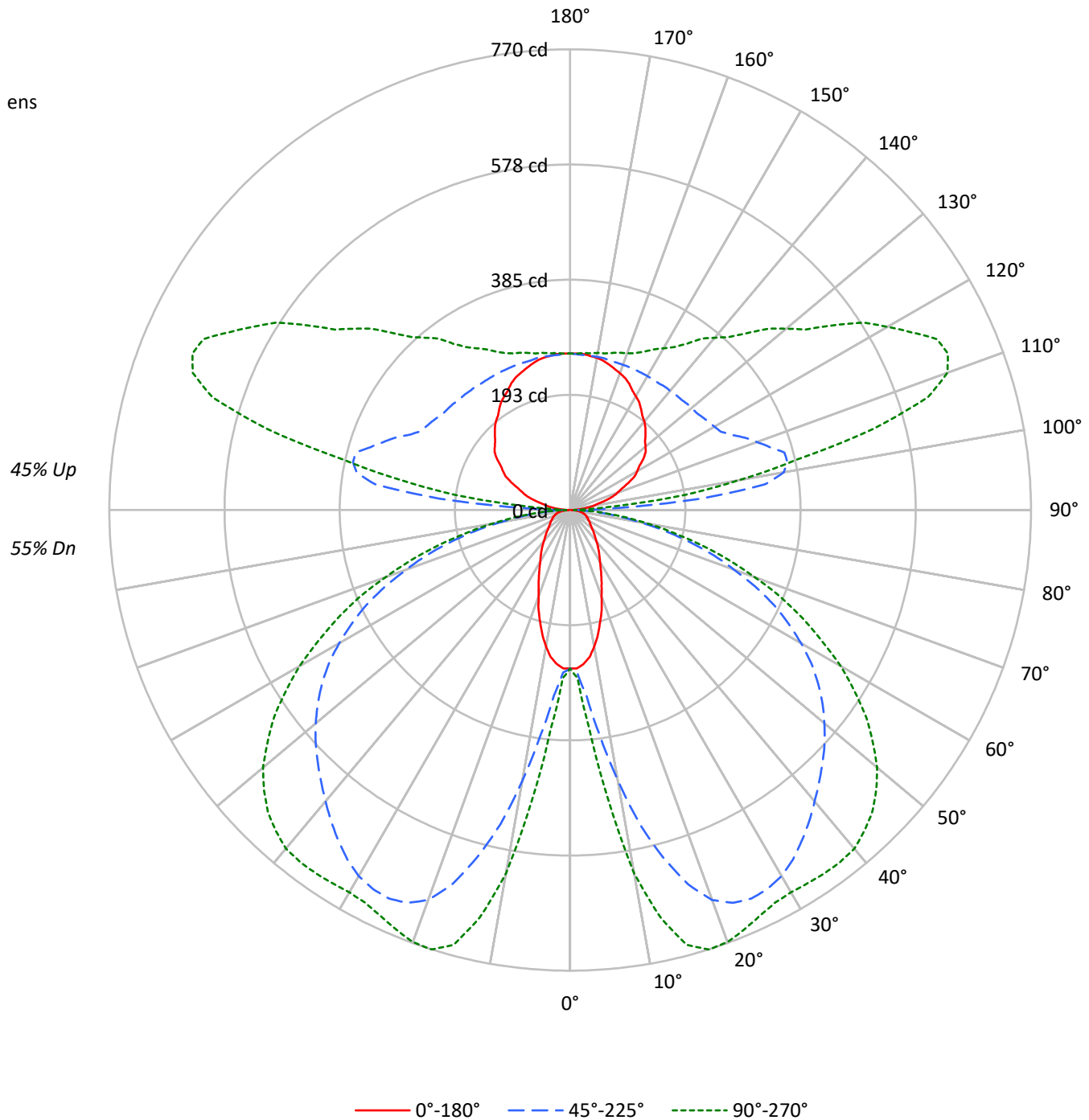
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3747.0 lumens
Efficiency: N/A
Efficacy: 102.9 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				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	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°	2459	2459	2459
5°	2400	2839	3305
10°	2174	4136	5479
15°	1846	5400	6616
20°	1501	6253	6743
25°	1250	6539	6605
30°	1053	6575	6593
35°	930	6461	6763
40°	809	6314	6940
45°	731	6204	6967
50°	669	6105	6852
55°	639	5961	6548
60°	651	5692	6069
65°	675	5285	5410
70°	713	4600	4570
75°	784	3741	3567
80°	838	2585	2403
85°	704	1364	1230

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6967 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.3	0.9
10°-20°	151.9	4.1
20°-30°	265.7	7.1
30°-40°	342.0	9.1
40°-50°	382.1	10.2
50°-60°	365.9	9.8
60°-70°	290.0	7.7
70°-80°	170.5	4.6
80°-90°	48.4	1.3
90°-100°	127.5	3.4
100°-110°	335.3	8.9
110°-120°	347.7	9.3
120°-130°	278.9	7.4
130°-140°	218.8	5.8
140°-150°	168.0	4.5
150°-160°	121.0	3.2
160°-170°	74.0	2.0
170°-180°	25.0	0.7
0°-30°	451.9	12.1
0°-40°	793.9	21.2
0°-60°	1541.9	41.2
0°-90°	2050.8	54.7
90°-120°	810.5	21.6
90°-150°	1476.2	39.4
90°-180°	1696.0	45.3
0°-180°	3747.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	265	265	265	265	265	
5°	258	277	312	353	366	24
15°	193	357	602	729	752	54
25°	124	405	716	748	749	57
35°	84	387	675	713	741	52
45°	57	308	596	683	714	44
55°	41	196	506	588	604	37
65°	32	104	376	423	429	32
75°	24	64	206	227	228	25
85°	8	20	51	56	57	9
90°	2	5	13	7	7	2
95°	17	66	220	113	77	19
105°	60	92	371	563	525	64
115°	107	130	297	592	676	106
125°	149	167	270	456	538	133
135°	178	196	262	368	418	138
145°	206	220	258	314	339	129
155°	233	240	258	284	292	107
165°	252	255	258	268	272	71
175°	262	262	260	263	263	25
180°	262	262	262	262	262	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	265.0	265.0	265.0	265.0	265.0	265.0	265.0	265.0	265.0	265.0	265.0
2.5°	265.0	265.0	266.7	267.5	269.2	270.1	271.8	273.5	278.6	279.5	281.2
5°	258.2	261.6	272.6	276.9	288.8	305.0	311.8	322.9	345.9	352.7	357.0
7.5°	247.9	255.6	282.9	289.7	319.5	362.1	380.0	403.8	440.5	458.4	472.9
10°	231.7	247.9	296.5	312.7	361.2	426.0	459.2	492.5	547.8	572.5	581.9
12.5°	213.9	240.3	311.0	333.1	403.0	497.6	537.6	574.2	637.3	670.5	675.6
15°	193.4	229.2	324.6	357.0	447.3	557.2	601.5	646.7	705.5	729.3	735.3
17.5°	175.5	220.7	337.4	371.5	481.4	610.9	656.0	693.5	741.2	757.4	761.7
20°	153.4	207.0	345.9	390.2	517.2	650.1	693.5	722.5	754.9	765.1	766.8
22.5°	137.2	192.6	351.0	397.0	541.0	673.9	710.6	733.6	755.7	759.1	760.0
25°	123.5	176.4	350.2	404.7	561.5	688.4	716.5	733.6	746.4	748.1	748.1
27.5°	110.8	158.5	346.8	406.4	576.8	691.8	714.0	725.9	731.9	735.3	735.3
30°	99.7	141.4	338.2	403.0	583.6	688.4	706.3	712.3	718.2	723.3	725.9
32.5°	91.2	125.2	325.5	396.2	584.5	679.9	692.7	696.1	704.6	716.5	720.8
35°	83.5	109.1	311.0	386.8	579.4	666.3	674.8	678.2	695.2	713.1	719.1
37.5°	75.8	97.1	292.2	370.6	571.7	650.1	656.0	662.0	688.4	709.7	716.5
40°	68.2	86.9	270.1	352.7	559.8	630.5	635.6	645.0	679.9	704.6	711.4
42.5°	62.2	78.4	246.2	334.0	544.4	608.3	616.0	629.6	669.7	696.1	703.8
45°	57.1	69.9	220.7	308.4	524.8	585.3	596.4	615.1	657.7	683.3	690.1
47.5°	52.0	63.9	194.3	282.0	503.5	562.3	576.8	598.1	641.6	666.3	672.2
50°	47.7	57.9	167.8	253.9	480.5	537.6	554.7	576.8	621.1	644.1	651.8
52.5°	44.3	52.8	143.1	225.8	454.1	512.1	531.6	554.7	596.4	618.6	623.7
55°	40.9	48.6	121.8	196.0	426.9	484.8	506.1	528.2	569.1	587.9	591.3
57.5°	39.2	45.2	103.9	167.8	397.9	454.1	478.0	498.4	536.8	551.2	554.7
60°	36.6	42.6	90.3	144.0	366.4	425.1	445.6	466.0	498.4	510.3	512.9
62.5°	34.1	40.9	80.1	121.0	334.0	391.1	411.5	430.3	457.5	466.0	469.5
65°	32.4	39.2	72.4	103.9	300.8	355.3	375.7	391.9	414.1	422.6	424.3
67.5°	30.7	37.5	66.5	89.5	267.5	319.5	334.8	350.2	367.2	375.7	376.6
70°	28.1	35.8	61.3	79.2	233.4	278.6	291.4	307.6	321.2	325.5	328.0
72.5°	26.4	33.2	57.9	71.6	198.5	239.4	251.3	260.7	272.6	276.9	276.9
75°	23.9	29.8	54.5	63.9	162.7	196.0	206.2	215.6	224.9	226.6	224.1
77.5°	21.3	26.4	46.9	53.7	126.9	155.1	163.6	168.7	176.4	178.1	178.9
80°	17.9	23.0	36.6	41.7	92.0	114.2	120.1	124.4	131.2	131.2	132.9
82.5°	13.6	17.9	26.4	29.8	62.2	78.4	83.5	86.1	90.3	90.3	90.3
85°	8.5	11.1	17.0	19.6	37.5	47.7	51.1	52.0	55.4	56.2	56.2
87.5°	4.3	6.0	11.1	11.9	19.6	24.7	24.7	26.4	26.4	25.6	24.7
90°	1.8	3.2	4.6	4.9	7.8	11.5	13.4	11.8	8.9	6.6	6.6
92.5°	7.0	18.9	30.9	33.9	47.6	65.9	75.1	65.9	47.3	33.4	32.0
95°	16.9	38.7	60.6	66.0	117.2	185.5	219.6	196.0	148.7	113.2	109.2
97.5°	29.1	48.4	67.6	72.5	157.9	271.8	328.7	313.8	283.9	261.5	253.8
100°	38.6	56.1	73.6	78.0	172.7	299.1	362.3	363.4	365.6	367.2	358.1
102.5°	46.7	63.0	79.3	83.4	179.5	307.7	371.7	390.8	428.9	457.4	449.6
105°	60.4	74.2	88.0	91.5	184.5	308.7	370.7	413.4	498.8	562.8	558.7
107.5°	74.5	87.3	100.2	103.4	185.5	295.0	349.7	409.2	528.3	617.6	618.6
110°	83.9	95.5	107.2	110.1	184.1	282.8	332.1	398.7	531.8	631.7	636.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	93.2	104.3	115.4	118.2	184.1	272.1	316.1	384.3	520.5	622.7	629.5
115°	107.3	117.5	127.7	130.3	185.8	259.9	296.9	362.5	493.8	592.3	601.6
117.5°	121.2	130.4	139.7	142.0	189.3	252.3	283.8	343.0	461.4	550.3	560.6
120°	129.2	138.0	146.7	148.9	192.1	249.7	278.5	332.6	440.9	522.1	532.2
122.5°	137.2	146.0	154.8	157.0	196.1	248.4	274.4	323.2	420.7	493.8	503.7
125°	149.3	157.3	165.3	167.3	201.6	247.3	270.1	311.5	394.3	456.4	465.5
127.5°	159.1	167.2	175.3	177.4	207.0	246.7	266.4	301.9	373.0	426.3	434.0
130°	164.4	173.1	181.8	184.0	211.0	247.0	265.0	296.7	360.0	407.4	414.5
132.5°	169.8	178.6	187.3	189.5	214.3	247.3	263.8	292.1	348.7	391.2	397.6
135°	177.9	185.8	193.8	195.8	217.8	247.0	261.6	285.3	332.8	368.4	373.9
137.5°	186.2	194.0	201.9	203.9	223.1	248.5	261.3	281.3	321.5	351.5	356.1
140°	193.0	200.2	207.5	209.3	226.2	248.8	260.0	277.4	312.1	338.1	342.2
142.5°	198.3	205.0	211.6	213.3	228.9	249.6	260.0	275.3	305.7	328.5	332.1
145°	206.4	212.1	218.0	219.5	232.4	249.7	258.3	270.8	295.6	314.3	317.0
147.5°	214.4	220.2	225.8	227.2	237.6	251.4	258.3	268.1	287.7	302.4	304.7
150°	219.6	224.8	230.0	231.2	240.3	252.3	258.3	266.6	283.1	295.6	297.4
152.5°	225.1	229.0	232.9	233.9	242.1	252.9	258.3	265.4	279.5	290.1	291.5
155°	233.2	236.1	239.0	239.7	245.9	254.2	258.3	263.9	275.2	283.6	284.6
157.5°	239.2	242.0	244.8	245.5	249.7	255.4	258.3	262.7	271.4	278.0	278.7
160°	243.2	245.4	247.6	248.1	251.5	256.0	258.3	262.1	269.6	275.2	275.5
162.5°	247.3	248.9	250.5	250.9	253.4	256.7	258.3	261.5	267.8	272.6	272.9
165°	251.7	253.1	254.7	255.0	256.1	257.6	258.3	260.5	265.1	268.5	268.8
167.5°	255.7	256.4	257.0	257.2	258.2	259.4	260.0	261.6	264.5	266.8	266.9
170°	258.3	259.0	259.7	259.9	259.9	260.0	260.0	261.6	264.5	266.8	266.8
172.5°	259.7	259.9	260.0	260.0	260.0	260.0	260.0	261.2	263.5	265.3	265.1
175°	261.6	261.6	261.6	261.6	261.1	260.4	260.0	260.8	262.3	263.4	263.4
177.5°	261.6	261.6	261.6	261.6	261.2	260.7	260.5	261.1	262.2	263.1	262.9
180°	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	265.0	265.0
2.5°	282.9	281.2
5°	363.8	365.5
7.5°	489.9	489.0
10°	609.2	616.8
12.5°	696.1	697.8
15°	748.9	752.3
17.5°	769.4	770.2
20°	770.2	768.5
22.5°	760.8	759.1
25°	749.8	748.9
27.5°	739.5	740.4
30°	735.3	737.8
32.5°	735.3	739.5
35°	737.0	741.2
37.5°	736.1	741.2
40°	732.7	738.7
42.5°	723.3	727.6
45°	708.9	714.0
47.5°	690.1	693.5
50°	666.3	669.7
52.5°	636.4	637.3
55°	600.7	604.1
57.5°	562.3	563.2
60°	519.7	522.3
62.5°	474.6	474.6
65°	426.9	428.6
67.5°	377.4	381.7
70°	327.2	328.0
72.5°	277.8	277.8
75°	226.6	227.5
77.5°	178.1	178.1
80°	132.1	132.9
82.5°	91.2	92.9
85°	57.1	57.1
87.5°	26.4	23.9
90°	6.6	6.6
92.5°	26.8	21.4
95°	93.1	77.1
97.5°	223.2	192.6
100°	321.6	285.2
102.5°	418.4	387.2
105°	541.9	525.1
107.5°	622.6	626.7
110°	653.5	670.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	656.3	683.1
115°	638.8	676.1
117.5°	601.9	643.3
120°	572.2	612.3
122.5°	543.3	582.9
125°	501.9	538.4
127.5°	464.8	495.5
130°	443.0	471.3
132.5°	423.0	448.5
135°	395.8	417.7
137.5°	373.9	391.9
140°	359.0	375.8
142.5°	346.6	361.1
145°	328.0	338.9
147.5°	313.7	322.7
150°	304.8	312.1
152.5°	297.0	302.5
155°	288.2	291.9
157.5°	281.2	283.8
160°	277.1	278.5
162.5°	274.3	275.7
165°	270.3	271.9
167.5°	267.5	268.1
170°	266.8	266.8
172.5°	264.6	264.1
175°	263.4	263.4
177.5°	262.3	261.6
180°	261.6	261.6



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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	4.54	5.48	5.44	6.42	7.61	17.68	18.62	18.58	19.56	20.76
	3H	5.25	6.10	6.17	7.04	8.27	19.51	20.36	20.43	21.30	22.52
	4H	5.55	6.36	6.48	7.31	8.54	20.15	20.95	21.08	21.90	23.13
	6H	5.81	6.55	6.75	7.51	8.75	20.57	21.32	21.51	22.27	23.51
	8H	5.88	6.59	6.83	7.56	8.80	20.69	21.40	21.64	22.37	23.61
	12H	5.90	6.58	6.86	7.54	8.81	20.75	21.43	21.71	22.39	23.66
4H	2H	11.74	12.55	12.68	13.49	14.72	17.96	18.77	18.90	19.72	20.95
	3H	13.32	13.99	14.27	14.97	16.22	20.00	20.68	20.95	21.66	22.90
	4H	13.41	14.03	14.37	15.01	16.28	20.76	21.38	21.72	22.35	23.62
	6H	13.43	13.97	14.40	14.96	16.23	21.29	21.83	22.27	22.82	24.09
	8H	13.41	13.91	14.39	14.90	16.18	21.45	21.95	22.43	22.94	24.22
	12H	13.37	13.82	14.37	14.83	16.12	21.54	21.99	22.54	23.00	24.29
8H	4H	14.86	15.36	15.83	16.35	17.63	20.83	21.33	21.81	22.32	23.60
	6H	15.10	15.52	16.10	16.55	17.83	21.45	21.87	22.45	22.90	24.18
	8H	15.12	15.49	16.13	16.51	17.81	21.67	22.03	22.67	23.05	24.35
	12H	15.10	15.42	16.11	16.43	17.78	21.81	22.13	22.82	23.14	24.49
12H	4H	15.00	15.45	16.00	16.46	17.75	20.79	21.24	21.78	22.25	23.54
	6H	15.36	15.73	16.37	16.74	18.05	21.44	21.80	22.45	22.82	24.12
	8H	15.43	15.76	16.45	16.77	18.11	21.66	21.99	22.68	23.00	24.34