

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: P936631

Luminaire Tested: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936631
REPORT IS A COMBINATION OF REPORTS P933469 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-4-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

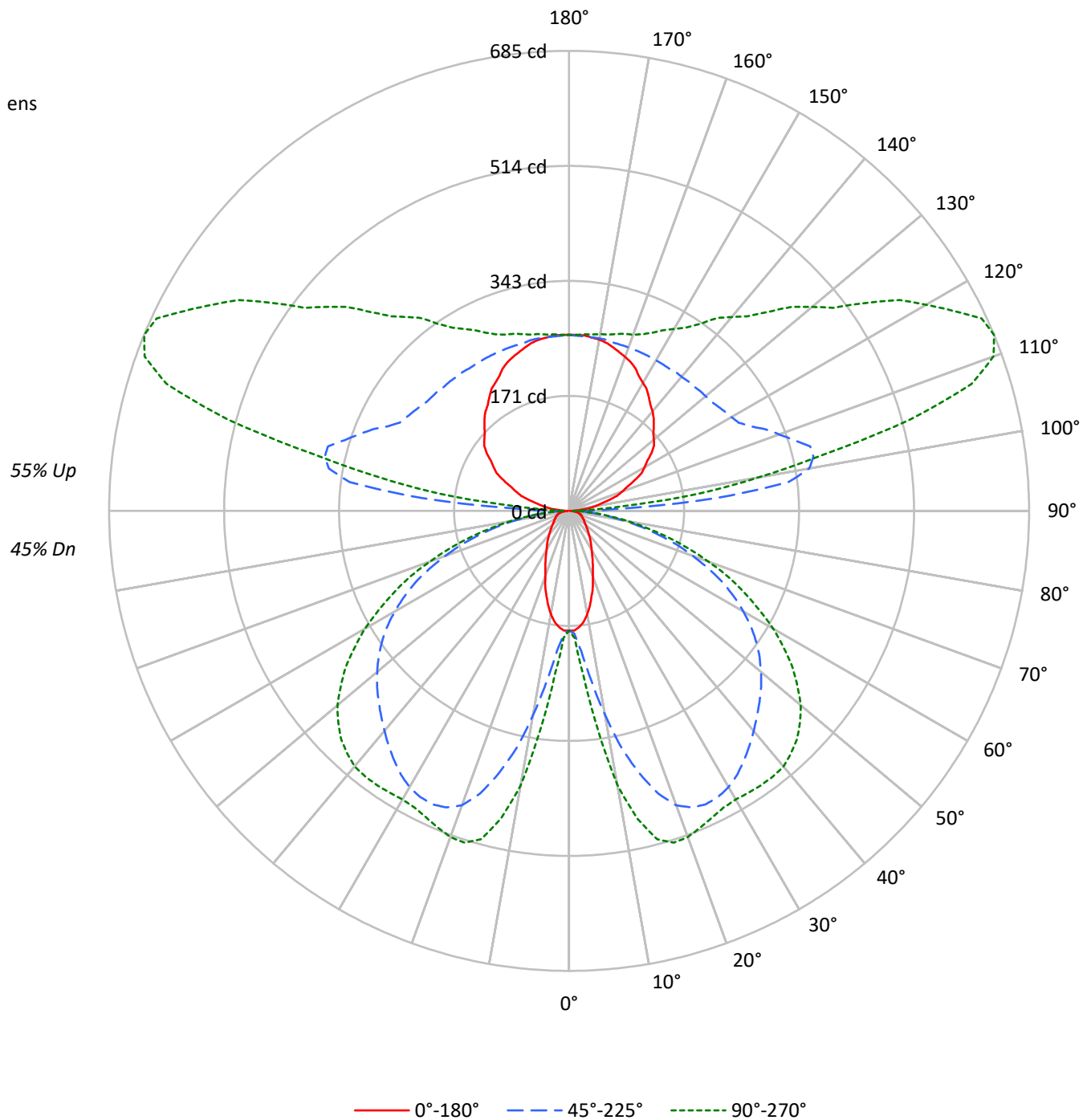
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3080.0 lumens
Efficiency: N/A
Efficacy: 108.4 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): 28.4
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

TEST NUMBER: P936631
CATALOG NUMBER: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-4-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P936631

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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1654	1654	1654
5°	1613	1910	2222
10°	1463	2782	3684
15°	1241	3631	4450
20°	1010	4205	4534
25°	841	4398	4443
30°	708	4422	4434
35°	625	4345	4549
40°	545	4247	4667
45°	492	4172	4686
50°	450	4105	4608
55°	430	4010	4403
60°	438	3828	4081
65°	454	3555	3638
70°	480	3093	3073
75°	528	2515	2399
80°	562	1739	1616
85°	472	918	827

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4686 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.1	0.7
10°-20°	102.2	3.3
20°-30°	178.7	5.8
30°-40°	230.0	7.5
40°-50°	256.9	8.3
50°-60°	246.1	8.0
60°-70°	195.0	6.3
70°-80°	114.7	3.7
80°-90°	32.9	1.1
90°-100°	127.8	4.2
100°-110°	336.1	10.9
110°-120°	348.5	11.3
120°-130°	279.6	9.1
130°-140°	219.4	7.1
140°-150°	168.4	5.5
150°-160°	121.3	3.9
160°-170°	74.2	2.4
170°-180°	25.1	0.8
0°-30°	303.9	9.9
0°-40°	533.9	17.3
0°-60°	1037.0	33.7
0°-90°	1379.6	44.8
90°-120°	812.5	26.4
90°-150°	1479.9	48.0
90°-180°	1700.0	55.2
0°-180°	3080.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	178	178	178	178	178	
5°	174	186	210	237	246	16
15°	130	240	404	490	506	36
25°	83	272	482	503	504	38
35°	56	260	454	480	498	35
45°	38	207	401	460	480	30
55°	28	132	340	395	406	25
65°	22	70	253	284	288	22
75°	16	43	139	152	153	17
85°	6	13	34	38	38	6
90°	2	5	13	7	7	2
95°	17	66	220	114	77	19
105°	61	92	372	564	526	64
115°	108	131	298	594	678	106
125°	150	168	271	458	540	133
135°	178	196	262	369	419	138
145°	207	220	259	315	340	130
155°	234	240	259	284	293	107
165°	252	256	259	269	273	71
175°	262	262	261	264	264	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°	178.2	178.2	178.2	178.2	178.2	178.2	178.2	178.2	178.2	178.2	178.2
2.5°	178.2	178.2	179.4	179.9	181.1	181.7	182.8	183.9	187.4	187.9	189.1
5°	173.6	176.0	183.4	186.2	194.2	205.2	209.7	217.2	232.7	237.2	240.1
7.5°	166.7	171.9	190.2	194.8	214.9	243.5	255.6	271.6	296.2	308.3	318.0
10°	155.9	166.7	199.4	210.3	242.9	286.5	308.9	331.2	368.5	385.0	391.4
12.5°	143.8	161.6	209.2	224.0	271.0	334.6	361.6	386.2	428.6	451.0	454.4
15°	130.1	154.2	218.3	240.1	300.8	374.7	404.5	434.9	474.5	490.4	494.5
17.5°	118.0	148.4	226.9	249.8	323.7	410.8	441.2	466.4	498.5	509.4	512.2
20°	103.2	139.2	232.7	262.5	347.8	437.2	466.4	485.9	507.7	514.5	515.7
22.5°	92.2	129.5	236.1	267.0	363.9	453.2	477.9	493.3	508.2	510.5	511.1
25°	83.1	118.6	235.5	272.2	377.6	462.9	481.9	493.3	502.0	503.1	503.1
27.5°	74.5	106.6	233.2	273.3	387.9	465.2	480.2	488.2	492.2	494.5	494.5
30°	67.0	95.1	227.5	271.0	392.5	462.9	475.0	479.0	483.0	486.5	488.2
32.5°	61.3	84.2	218.9	266.4	393.1	457.2	465.8	468.1	473.9	481.9	484.7
35°	56.1	73.4	209.2	260.2	389.7	448.1	453.8	456.1	467.5	479.6	483.6
37.5°	51.0	65.3	196.5	249.2	384.4	437.2	441.2	445.3	462.9	477.3	481.9
40°	45.9	58.4	181.7	237.2	376.5	424.0	427.5	433.7	457.2	473.9	478.5
42.5°	41.9	52.7	165.6	224.6	366.2	409.1	414.3	423.5	450.4	468.1	473.3
45°	38.4	47.0	148.4	207.4	352.9	393.7	401.1	413.7	442.4	459.5	464.1
47.5°	34.9	43.0	130.7	189.7	338.7	378.2	387.9	402.2	431.5	448.1	452.1
50°	32.1	38.9	112.9	170.7	323.2	361.6	373.0	387.9	417.8	433.2	438.3
52.5°	29.8	35.5	96.3	151.9	305.4	344.4	357.5	373.0	401.1	416.0	419.5
55°	27.5	32.6	81.9	131.8	287.1	326.0	340.4	355.2	382.7	395.4	397.7
57.5°	26.4	30.4	69.9	112.9	267.6	305.4	321.4	335.2	361.0	370.7	373.0
60°	24.6	28.6	60.7	96.9	246.4	286.0	299.7	313.5	335.2	343.2	345.0
62.5°	22.9	27.5	53.9	81.4	224.6	263.0	276.7	289.4	307.7	313.5	315.7
65°	21.8	26.4	48.7	69.9	202.3	238.9	252.7	263.6	278.4	284.2	285.4
67.5°	20.7	25.2	44.7	60.1	179.9	214.9	225.1	235.5	246.9	252.7	253.2
70°	18.9	24.1	41.3	53.3	157.0	187.4	195.9	206.9	216.0	218.9	220.6
72.5°	17.8	22.4	38.9	48.2	133.5	161.0	169.0	175.4	183.4	186.2	186.2
75°	16.1	20.1	36.6	43.0	109.4	131.8	138.6	144.9	151.3	152.4	150.7
77.5°	14.3	17.8	31.5	36.1	85.4	104.3	110.0	113.4	118.6	119.7	120.3
80°	12.0	15.5	24.6	28.1	61.9	76.8	80.8	83.6	88.2	88.2	89.4
82.5°	9.1	12.0	17.8	20.1	41.9	52.7	56.1	57.9	60.7	60.7	60.7
85°	5.7	7.4	11.4	13.2	25.2	32.1	34.4	34.9	37.2	37.8	37.8
87.5°	2.9	4.0	7.4	8.0	13.2	16.7	16.7	17.8	17.8	17.2	16.7
90°	1.8	3.2	4.6	5.0	7.8	11.5	13.4	11.9	8.9	6.7	6.7
92.5°	7.0	19.0	31.0	34.0	47.7	66.1	75.3	66.0	47.4	33.5	32.1
95°	16.9	38.8	60.7	66.2	117.5	185.9	220.2	196.4	149.0	113.5	109.5
97.5°	29.2	48.5	67.8	72.7	158.3	272.5	329.5	314.6	284.6	262.1	254.4
100°	38.7	56.2	73.8	78.2	173.1	299.8	363.2	364.3	366.5	368.1	359.0
102.5°	46.8	63.2	79.5	83.6	180.0	308.4	372.7	391.8	430.0	458.6	450.7
105°	60.6	74.4	88.2	91.7	185.0	309.5	371.6	414.4	500.0	564.2	560.1
107.5°	74.7	87.5	100.4	103.7	185.9	295.7	350.5	410.2	529.6	619.2	620.2
110°	84.1	95.7	107.4	110.4	184.6	283.5	332.9	399.6	533.1	633.3	637.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	93.4	104.5	115.6	118.5	184.6	272.8	316.9	385.2	521.8	624.3	631.0
115°	107.5	117.8	128.0	130.6	186.3	260.5	297.7	363.4	495.1	593.8	603.1
117.5°	121.5	130.8	140.1	142.4	189.8	252.9	284.5	343.9	462.6	551.7	562.0
120°	129.6	138.4	147.1	149.3	192.6	250.3	279.2	333.5	442.0	523.4	533.5
122.5°	137.5	146.4	155.2	157.4	196.6	249.0	275.1	324.0	421.8	495.1	505.0
125°	149.6	157.7	165.7	167.8	202.1	247.9	270.8	312.3	395.3	457.6	466.7
127.5°	159.5	167.7	175.8	177.8	207.6	247.3	267.1	302.7	373.9	427.4	435.1
130°	164.8	173.6	182.3	184.5	211.6	247.6	265.6	297.4	360.9	408.4	415.5
132.5°	170.2	179.0	187.7	190.0	214.8	247.9	264.4	292.8	349.6	392.2	398.6
135°	178.3	186.3	194.3	196.3	218.3	247.6	262.3	286.0	333.6	369.3	374.8
137.5°	186.6	194.5	202.4	204.4	223.6	249.1	262.0	282.0	322.3	352.4	356.9
140°	193.5	200.7	208.1	209.9	226.8	249.4	260.7	278.1	312.9	338.9	343.1
142.5°	198.8	205.5	212.2	213.9	229.5	250.3	260.7	276.0	306.5	329.4	332.9
145°	206.9	212.7	218.6	220.0	233.0	250.3	259.0	271.4	296.4	315.1	317.8
147.5°	215.0	220.7	226.3	227.8	238.2	252.1	259.0	268.8	288.4	303.1	305.4
150°	220.2	225.3	230.5	231.8	240.9	252.9	259.0	267.3	283.8	296.3	298.2
152.5°	225.7	229.6	233.5	234.5	242.7	253.5	259.0	266.1	280.2	290.8	292.2
155°	233.8	236.7	239.6	240.3	246.5	254.8	259.0	264.6	275.9	284.3	285.3
157.5°	239.8	242.6	245.4	246.1	250.3	256.1	259.0	263.3	272.1	278.7	279.4
160°	243.9	246.0	248.2	248.7	252.1	256.7	259.0	262.7	270.2	275.9	276.2
162.5°	247.9	249.5	251.1	251.5	254.0	257.3	259.0	262.1	268.5	273.2	273.6
165°	252.3	253.8	255.3	255.6	256.8	258.2	259.0	261.2	265.7	269.1	269.5
167.5°	256.3	257.0	257.7	257.9	258.8	260.1	260.7	262.2	265.2	267.4	267.6
170°	259.0	259.7	260.3	260.5	260.6	260.7	260.7	262.2	265.2	267.4	267.4
172.5°	260.3	260.5	260.7	260.7	260.7	260.7	260.7	261.9	264.2	266.0	265.8
175°	262.3	262.3	262.3	262.3	261.8	261.0	260.7	261.4	263.0	264.1	264.1
177.5°	262.3	262.3	262.3	262.3	261.9	261.4	261.1	261.7	262.9	263.8	263.6
180°	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3



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CATALOG NUMBER: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	178.2	178.2
2.5°	190.2	189.1
5°	244.7	245.8
7.5°	329.4	328.9
10°	409.7	414.8
12.5°	468.1	469.3
15°	503.7	506.0
17.5°	517.4	518.0
20°	518.0	516.8
22.5°	511.7	510.5
25°	504.3	503.7
27.5°	497.4	498.0
30°	494.5	496.2
32.5°	494.5	497.4
35°	495.7	498.5
37.5°	495.1	498.5
40°	492.7	496.8
42.5°	486.5	489.3
45°	476.7	480.2
47.5°	464.1	466.4
50°	448.1	450.4
52.5°	428.0	428.6
55°	404.0	406.2
57.5°	378.2	378.7
60°	349.5	351.2
62.5°	319.2	319.2
65°	287.1	288.2
67.5°	253.8	256.7
70°	220.0	220.6
72.5°	186.8	186.8
75°	152.4	153.0
77.5°	119.7	119.7
80°	88.8	89.4
82.5°	61.3	62.4
85°	38.4	38.4
87.5°	17.8	16.1
90°	6.7	6.7
92.5°	26.8	21.4
95°	93.4	77.3
97.5°	223.8	193.1
100°	322.4	285.9
102.5°	419.5	388.2
105°	543.2	526.4
107.5°	624.2	628.3
110°	655.1	672.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	657.9	684.8
115°	640.4	677.8
117.5°	603.4	644.9
120°	573.6	613.9
122.5°	544.7	584.3
125°	503.2	539.7
127.5°	465.9	496.8
130°	444.1	472.5
132.5°	424.1	449.6
135°	396.8	418.8
137.5°	374.9	392.9
140°	359.9	376.8
142.5°	347.5	362.0
145°	328.8	339.8
147.5°	314.5	323.5
150°	305.5	312.9
152.5°	297.7	303.3
155°	289.0	292.6
157.5°	281.9	284.5
160°	277.8	279.2
162.5°	275.0	276.4
165°	271.0	272.6
167.5°	268.2	268.8
170°	267.4	267.4
172.5°	265.3	264.8
175°	264.1	264.1
177.5°	263.0	262.3
180°	262.3	262.3



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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	2.24	3.09	3.24	4.10	5.44	15.38	16.23	16.37	17.24	18.58
	3H	2.95	3.71	3.95	4.73	6.09	17.20	17.97	18.21	18.99	20.35
	4H	3.25	3.97	4.27	4.99	6.36	17.84	18.56	18.86	19.59	20.95
	6H	3.50	4.17	4.53	5.19	6.58	18.26	18.92	19.28	19.95	21.33
	8H	3.57	4.20	4.60	5.25	6.62	18.37	19.01	19.40	20.05	21.43
	12H	3.58	4.19	4.62	5.22	6.63	18.43	19.04	19.47	20.07	21.48
4H	2H	9.43	10.16	10.46	11.18	12.55	15.66	16.38	16.68	17.40	18.77
	3H	11.00	11.61	12.03	12.66	14.04	17.69	18.29	18.72	19.34	20.72
	4H	11.10	11.65	12.14	12.69	14.10	18.44	19.00	19.48	20.04	21.44
	6H	11.11	11.59	12.16	12.65	14.05	18.97	19.45	20.02	20.51	21.91
	8H	11.08	11.53	12.13	12.59	14.01	19.12	19.57	20.17	20.63	22.04
	12H	11.04	11.44	12.11	12.52	13.94	19.21	19.61	20.28	20.68	22.11
8H	4H	12.53	12.98	13.58	14.04	15.45	18.50	18.95	19.55	20.01	21.42
	6H	12.77	13.14	13.85	14.24	15.66	19.12	19.49	20.19	20.59	22.00
	8H	12.79	13.12	13.87	14.20	15.63	19.33	19.66	20.41	20.74	22.17
	12H	12.76	13.04	13.84	14.12	15.60	19.47	19.75	20.55	20.83	22.30
12H	4H	12.67	13.07	13.74	14.15	15.57	18.45	18.86	19.52	19.93	21.35
	6H	13.03	13.35	14.11	14.44	15.87	19.10	19.43	20.18	20.51	21.94
	8H	13.10	13.38	14.18	14.46	15.93	19.32	19.61	20.41	20.69	22.16