

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: P936624

Luminaire Tested: SQ4-FB-050U-050D-927-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936624
REPORT IS A COMBINATION OF REPORTS P933485 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-927-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

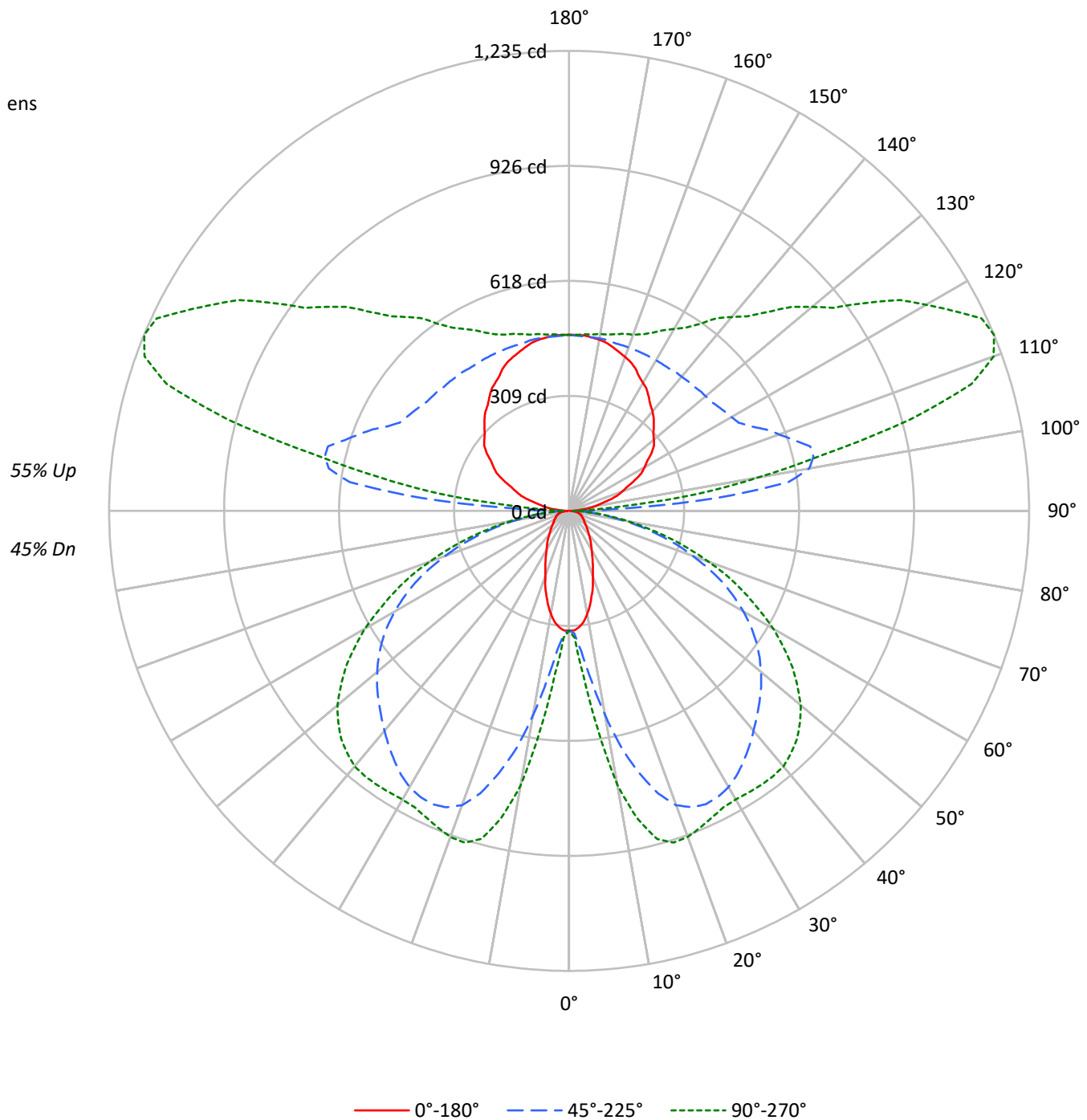
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5552.5 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 56.8
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				
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45	45	45	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42	37	37	37	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	24	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	18	18	18	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1490	1490	1490
5°	1456	1722	2003
10°	1320	2511	3321
15°	1123	3280	4010
20°	914	3801	4086
25°	762	3978	4004
30°	643	4003	3996
35°	568	3937	4099
40°	495	3850	4206
45°	448	3787	4223
50°	411	3730	4153
55°	394	3647	3969
60°	403	3487	3678
65°	420	3243	3279
70°	447	2828	2770
75°	497	2306	2161
80°	541	1599	1456
85°	480	849	745

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4223 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.5	0.7
10°-20°	184.1	3.3
20°-30°	322.1	5.8
30°-40°	414.6	7.5
40°-50°	463.1	8.3
50°-60°	443.6	8.0
60°-70°	351.5	6.3
70°-80°	206.7	3.7
80°-90°	59.2	1.1
90°-100°	230.5	4.2
100°-110°	606.1	10.9
110°-120°	628.5	11.3
120°-130°	504.1	9.1
130°-140°	395.5	7.1
140°-150°	303.6	5.5
150°-160°	218.6	3.9
160°-170°	133.8	2.4
170°-180°	45.2	0.8
0°-30°	547.8	9.9
0°-40°	962.4	17.3
0°-60°	1869.1	33.7
0°-90°	2486.6	44.8
90°-120°	1465.1	26.4
90°-150°	2668.3	48.1
90°-180°	3066.0	55.2
0°-180°	5552.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	321	321	321	321	321	
5°	313	336	378	428	443	29
15°	234	433	729	884	912	65
25°	150	491	869	907	908	69
35°	101	469	818	864	898	63
45°	69	374	723	828	866	54
55°	50	238	614	713	732	45
65°	39	126	456	512	520	39
75°	29	78	250	275	276	30
85°	10	24	62	68	69	11
90°	3	9	24	12	12	3
95°	30	119	397	205	139	34
105°	109	165	670	1017	949	116
115°	194	236	537	1071	1222	192
125°	270	302	488	825	973	240
135°	322	354	473	666	755	249
145°	373	397	467	568	613	234
155°	422	433	467	513	528	194
165°	455	461	467	485	491	128
175°	473	473	470	476	476	45
180°	473	473	473	473	473	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2
2.5°	321.2	321.2	323.2	324.3	326.3	327.4	329.5	331.6	337.7	338.7	340.8
5°	312.9	317.1	330.5	335.6	350.1	369.8	378.0	391.4	419.3	427.6	432.7
7.5°	300.5	309.8	342.9	351.1	387.3	438.9	460.6	489.6	533.9	555.6	573.2
10°	280.9	300.5	359.4	379.1	437.9	516.4	556.7	597.0	664.0	694.0	705.4
12.5°	259.3	291.2	377.0	403.8	488.5	603.1	651.7	696.1	772.5	812.8	819.0
15°	234.5	277.8	393.5	432.7	542.2	675.4	729.2	783.9	855.2	884.0	891.3
17.5°	212.8	267.5	409.0	450.3	583.5	740.5	795.3	840.7	898.5	918.1	923.3
20°	185.9	250.9	419.3	473.0	626.9	788.0	840.7	875.8	915.1	927.5	929.5
22.5°	166.2	233.4	425.5	481.2	655.8	817.0	861.3	889.3	916.1	920.2	921.2
25°	149.8	213.8	424.5	490.6	680.6	834.5	868.6	889.3	904.8	906.8	906.8
27.5°	134.3	192.1	420.3	492.6	699.2	838.6	865.5	880.0	887.2	891.3	891.3
30°	120.8	171.5	410.0	488.5	707.5	834.5	856.2	863.4	870.6	876.9	880.0
32.5°	110.5	151.8	394.5	480.2	708.5	824.1	839.7	843.8	854.1	868.6	873.7
35°	101.2	132.2	377.0	468.9	702.3	807.7	818.0	822.1	842.8	864.5	871.6
37.5°	91.9	117.7	354.3	449.3	693.0	788.0	795.3	802.5	834.5	860.3	868.6
40°	82.6	105.3	327.4	427.6	678.5	764.3	770.5	781.9	824.1	854.1	862.4
42.5°	75.4	95.0	298.5	404.9	660.0	737.4	746.7	763.2	811.8	843.8	853.1
45°	69.2	84.7	267.5	373.8	636.2	709.6	723.0	745.7	797.3	828.3	836.5
47.5°	63.0	77.5	235.5	341.9	610.4	681.7	699.2	725.0	777.7	807.7	814.9
50°	57.8	70.2	203.4	307.8	582.5	651.7	672.4	699.2	752.9	780.8	790.1
52.5°	53.7	64.1	173.5	273.7	550.5	620.7	644.5	672.4	723.0	749.8	756.0
55°	49.6	58.9	147.7	237.5	517.4	587.7	613.5	640.3	689.9	712.6	716.8
57.5°	47.5	54.7	126.0	203.4	482.3	550.5	579.4	604.2	650.6	668.2	672.4
60°	44.4	51.7	109.5	174.6	444.1	515.4	540.2	564.9	604.2	618.6	621.8
62.5°	41.3	49.6	97.1	146.7	404.9	474.1	498.8	521.6	554.6	564.9	569.1
65°	39.3	47.5	87.8	126.0	364.6	430.7	455.5	475.1	502.0	512.3	514.4
67.5°	37.2	45.4	80.5	108.4	324.3	387.3	405.9	424.5	445.1	455.5	456.5
70°	34.1	43.4	74.4	96.0	283.0	337.7	353.2	372.8	389.4	394.5	397.6
72.5°	32.0	40.3	70.2	86.8	240.6	290.2	304.7	316.0	330.5	335.6	335.6
75°	29.0	36.1	66.1	77.5	197.3	237.5	249.9	261.3	272.7	274.7	271.7
77.5°	25.8	32.0	56.8	65.1	153.9	188.0	198.3	204.5	213.8	215.8	216.9
80°	21.7	27.9	44.4	50.6	111.6	138.4	145.6	150.8	159.1	159.1	161.1
82.5°	16.6	21.7	32.0	36.1	75.4	95.0	101.2	104.3	109.5	109.5	109.5
85°	10.3	13.4	20.6	23.7	45.4	57.8	62.0	63.0	67.1	68.1	68.1
87.5°	5.2	7.2	13.4	14.5	23.7	30.0	30.0	32.0	32.0	31.0	30.0
90°	3.2	5.7	8.2	8.9	13.9	20.7	24.1	21.4	16.1	12.1	12.1
92.5°	12.7	34.3	55.9	61.3	86.2	119.3	135.8	119.0	85.5	60.3	57.9
95°	30.5	70.0	109.5	119.4	211.9	335.3	397.1	354.4	268.9	204.7	197.5
97.5°	52.7	87.5	122.4	131.1	285.4	491.3	594.2	567.2	513.1	472.6	458.8
100°	69.8	101.4	133.0	140.9	312.2	540.6	654.8	656.8	660.7	663.7	647.2
102.5°	84.5	114.0	143.4	150.8	324.5	556.2	672.0	706.4	775.2	826.8	812.7
105°	109.2	134.1	159.2	165.4	333.6	557.9	670.1	747.2	901.6	1017.3	1009.7
107.5°	134.6	157.8	181.1	187.0	335.3	533.1	631.9	739.6	954.9	1116.3	1118.2
110°	151.7	172.7	193.8	199.0	332.8	511.0	600.2	720.6	961.2	1141.7	1149.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	168.6	188.6	208.6	213.6	332.9	491.9	571.3	694.5	940.8	1125.5	1137.7
115°	194.0	212.4	230.9	235.5	336.0	469.9	536.8	655.4	892.7	1070.6	1087.4
117.5°	219.0	235.8	252.6	256.8	342.2	456.0	512.9	620.0	834.1	994.8	1013.4
120°	233.6	249.4	265.3	269.2	347.3	451.4	503.4	601.2	796.9	943.6	961.7
122.5°	247.9	263.8	279.7	283.7	354.5	448.9	496.1	584.2	760.5	892.6	910.4
125°	269.8	284.3	298.8	302.5	364.4	446.9	488.2	563.0	712.7	825.0	841.5
127.5°	287.6	302.2	316.9	320.6	374.2	445.8	481.5	545.8	674.3	770.7	784.6
130°	297.1	312.9	328.7	332.6	381.4	446.4	478.9	536.2	650.6	736.4	749.2
132.5°	306.9	322.7	338.6	342.5	387.2	446.9	476.8	528.0	630.4	707.2	718.6
135°	321.6	336.0	350.3	353.9	393.5	446.4	472.9	515.8	601.6	665.9	675.8
137.5°	336.5	350.7	365.0	368.5	403.1	449.2	472.3	508.6	581.1	635.5	643.6
140°	348.8	362.0	375.1	378.4	408.9	449.7	470.1	501.4	564.0	611.0	618.5
142.5°	358.4	370.4	382.6	385.6	413.8	451.3	470.1	497.6	552.6	593.9	600.4
145°	373.0	383.5	394.2	396.8	420.2	451.4	466.9	489.4	534.5	568.2	573.1
147.5°	387.5	397.9	408.2	410.7	429.4	454.5	466.9	484.6	520.0	546.5	550.6
150°	397.1	406.4	415.7	418.0	434.4	456.1	466.9	481.9	511.8	534.2	537.5
152.5°	406.9	414.0	421.0	422.8	437.5	457.1	466.9	479.7	505.2	524.4	526.9
155°	421.5	426.7	432.0	433.3	444.5	459.5	466.9	477.1	497.3	512.6	514.3
157.5°	432.3	437.4	442.4	443.8	451.5	461.8	466.9	474.8	490.6	502.4	503.6
160°	439.6	443.6	447.5	448.5	454.7	462.8	466.9	473.7	487.2	497.3	498.0
162.5°	446.9	449.9	452.8	453.6	458.1	464.0	466.9	472.6	484.1	492.6	493.3
165°	454.8	457.5	460.2	460.8	462.8	465.5	466.9	471.0	479.2	485.3	486.0
167.5°	462.2	463.4	464.7	465.0	466.7	468.9	470.1	472.8	478.2	482.2	482.5
170°	466.9	468.2	469.5	469.8	469.9	470.0	470.1	472.8	478.2	482.2	482.2
172.5°	469.5	469.8	470.0	470.1	470.1	470.1	470.1	472.2	476.5	479.6	479.4
175°	472.9	472.9	472.9	472.9	472.0	470.7	470.1	471.4	474.1	476.1	476.1
177.5°	472.9	472.9	472.9	472.9	472.2	471.2	470.7	471.8	473.9	475.5	475.2
180°	472.9	472.9	472.9	472.9	472.9	472.9	472.9	472.9	472.9	472.9	472.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	321.2	321.2
2.5°	342.9	340.8
5°	441.0	443.1
7.5°	593.8	592.8
10°	738.4	747.7
12.5°	843.8	845.8
15°	907.8	912.0
17.5°	932.6	933.6
20°	933.6	931.5
22.5°	922.3	920.2
25°	908.8	907.8
27.5°	896.4	897.5
30°	891.3	894.4
32.5°	891.3	896.4
35°	893.4	898.5
37.5°	892.4	898.5
40°	888.2	895.4
42.5°	876.9	882.0
45°	859.3	865.5
47.5°	836.5	840.7
50°	807.7	811.8
52.5°	771.5	772.5
55°	728.1	732.3
57.5°	681.7	682.7
60°	630.0	633.1
62.5°	575.3	575.3
65°	517.4	519.5
67.5°	457.5	462.7
70°	396.6	397.6
72.5°	336.7	336.7
75°	274.7	275.7
77.5°	215.8	215.8
80°	160.1	161.1
82.5°	110.5	112.6
85°	69.2	69.2
87.5°	32.0	29.0
90°	12.1	12.1
92.5°	48.3	38.7
95°	168.4	139.4
97.5°	403.5	348.2
100°	581.4	515.4
102.5°	756.3	699.9
105°	979.4	949.0
107.5°	1125.5	1132.8
110°	1181.2	1212.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1186.2	1234.7
115°	1154.7	1222.0
117.5°	1088.1	1162.7
120°	1034.3	1106.8
122.5°	982.0	1053.5
125°	907.3	973.2
127.5°	840.1	895.7
130°	800.6	851.9
132.5°	764.7	810.7
135°	715.5	755.1
137.5°	676.1	708.5
140°	648.9	679.2
142.5°	626.5	652.6
145°	592.9	612.6
147.5°	567.0	583.4
150°	550.8	564.0
152.5°	536.9	546.9
155°	520.9	527.5
157.5°	508.3	512.9
160°	500.7	503.4
162.5°	495.8	498.3
165°	488.6	491.3
167.5°	483.6	484.7
170°	482.2	482.2
172.5°	478.4	477.4
175°	476.1	476.1
177.5°	474.1	472.9
180°	472.9	472.9



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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	1.90	2.74	2.89	3.75	5.10	15.07	15.92	16.07	16.93	18.27
	3H	2.60	3.36	3.60	4.38	5.74	16.91	17.68	17.92	18.69	20.06
	4H	2.90	3.62	3.91	4.64	6.01	17.56	18.28	18.57	19.30	20.67
	6H	3.15	3.81	4.17	4.84	6.22	17.99	18.65	19.01	19.68	21.06
	8H	3.21	3.85	4.25	4.89	6.27	18.11	18.74	19.14	19.79	21.16
	12H	3.23	3.84	4.27	4.87	6.28	18.18	18.78	19.21	19.82	21.22
4H	2H	9.11	9.83	10.13	10.86	12.22	15.35	16.07	16.37	17.09	18.46
	3H	10.68	11.28	11.71	12.33	13.71	17.39	18.00	18.42	19.05	20.43
	4H	10.77	11.33	11.81	12.37	13.77	18.16	18.71	19.20	19.76	21.16
	6H	10.78	11.26	11.83	12.32	13.72	18.70	19.18	19.75	20.24	21.64
	8H	10.76	11.20	11.81	12.26	13.68	18.86	19.31	19.91	20.36	21.78
	12H	10.71	11.12	11.78	12.19	13.61	18.95	19.36	20.02	20.43	21.85
8H	4H	12.21	12.66	13.26	13.72	15.14	18.22	18.66	19.27	19.72	21.14
	6H	12.46	12.83	13.53	13.93	15.34	18.85	19.22	19.92	20.32	21.73
	8H	12.47	12.80	13.56	13.88	15.32	19.07	19.39	20.15	20.48	21.91
	12H	12.44	12.73	13.53	13.81	15.28	19.21	19.50	20.30	20.58	22.05
12H	4H	12.36	12.76	13.43	13.83	15.26	18.17	18.57	19.24	19.65	21.07
	6H	12.71	13.04	13.80	14.12	15.56	18.83	19.16	19.91	20.24	21.67
	8H	12.78	13.07	13.87	14.15	15.62	19.06	19.35	20.14	20.42	21.90