

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: P937123

Luminaire Tested: SQ4-FB-075U-075D-927-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

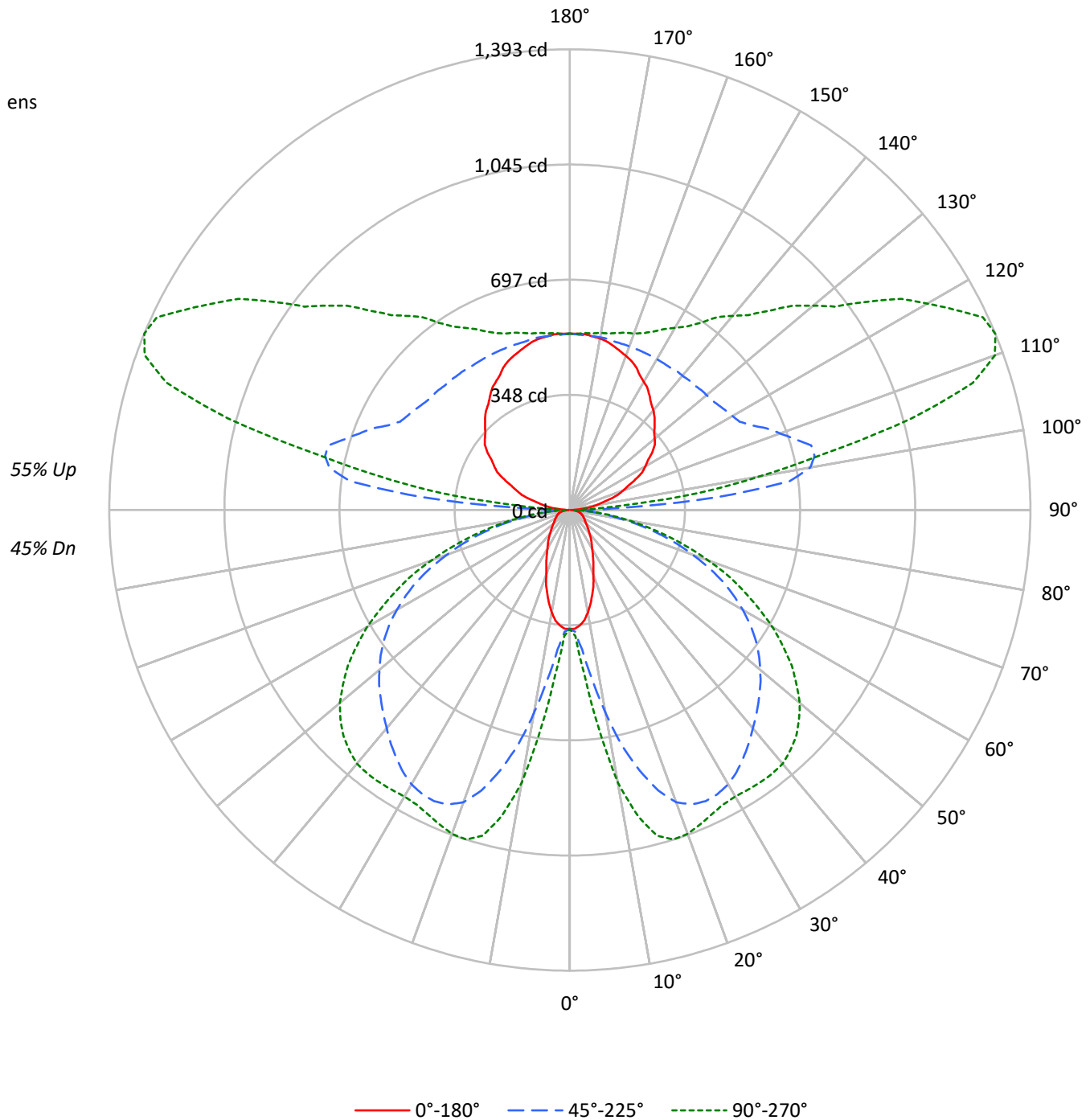
Test Method: LM-79-2019  
Report Number: P937123  
REPORT IS A COMBINATION OF REPORTS P933510 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-075D-927-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6239.3 lumens  
Efficiency: N/A  
Efficacy: 98.1 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')  
CIE Type: General Diffuse  
  
Input Watts (W): 63.6  
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45			45
1	96	92	88	84	88	84	80	77	70	67	65	57	55	53	44	43	42	37			37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30			30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25			25
4	72	61	53	47	65	56	49	43	46	41	37	38	34	31	30	27	24	21			21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	17			17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15			15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13			13
8	51	39	31	26	47	36	29	24	30	24	21	25	20	17	20	16	14	11			11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10			10
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11	9			9

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2222	2222	2222
5°	2170	2567	2987
10°	1968	3742	4952
15°	1672	4887	5979
20°	1360	5663	6094
25°	1134	5924	5970
30°	956	5961	5959
35°	845	5860	6113
40°	736	5729	6273
45°	666	5633	6297
50°	611	5547	6193
55°	584	5421	5918
60°	598	5181	5484
65°	620	4816	4889
70°	659	4197	4130
75°	727	3419	3223
80°	791	2369	2172
85°	692	1254	1112

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6297 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.5	0.7
10°-20°	205.9	3.3
20°-30°	360.2	5.8
30°-40°	463.7	7.4
40°-50°	517.9	8.3
50°-60°	496.1	8.0
60°-70°	393.1	6.3
70°-80°	231.2	3.7
80°-90°	66.3	1.1
90°-100°	260.0	4.2
100°-110°	683.7	11.0
110°-120°	708.9	11.4
120°-130°	568.6	9.1
130°-140°	446.2	7.2
140°-150°	342.4	5.5
150°-160°	246.6	4.0
160°-170°	150.9	2.4
170°-180°	51.0	0.8
0°-30°	612.6	9.8
0°-40°	1076.4	17.3
0°-60°	2090.4	33.5
0°-90°	2780.9	44.6
90°-120°	1652.6	26.5
90°-150°	3009.8	48.2
90°-180°	3458.0	55.4
0°-180°	6239.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	359	359	359	359	359	
5°	350	375	423	478	496	32
15°	262	484	815	989	1020	73
25°	168	549	971	1014	1015	77
35°	113	524	915	967	1005	71
45°	77	418	808	926	968	60
55°	55	266	686	797	819	51
65°	44	141	509	573	581	44
75°	32	87	280	307	308	34
85°	12	27	69	76	77	12
90°	4	10	27	14	14	4
95°	34	135	448	231	157	38
105°	123	187	756	1148	1070	131
115°	219	266	606	1208	1378	216
125°	304	341	551	930	1098	270
135°	363	399	534	751	852	281
145°	421	448	527	641	691	264
155°	476	489	527	578	595	218
165°	513	520	527	548	554	145
175°	534	534	530	537	537	51
180°	534	534	534	534	534	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2
2.5°	359.2	359.2	361.5	362.7	365.0	366.1	368.4	370.8	377.7	378.8	381.2
5°	350.0	354.6	369.6	375.4	391.5	413.5	422.7	437.7	468.9	478.2	483.9
7.5°	336.1	346.5	383.5	392.7	433.1	490.9	515.1	547.5	597.1	621.4	641.0
10°	314.2	336.1	401.9	423.9	489.7	577.5	622.5	667.6	742.7	776.2	788.9
12.5°	289.9	325.7	421.6	451.6	546.3	674.5	728.8	778.5	863.9	909.1	916.0
15°	262.2	310.7	440.1	483.9	606.4	755.4	815.4	876.7	956.4	988.8	996.8
17.5°	237.9	299.1	457.4	503.6	652.6	828.1	889.4	940.2	1004.9	1026.9	1032.6
20°	207.9	280.7	468.9	529.0	701.1	881.3	940.2	979.5	1023.4	1037.3	1039.6
22.5°	186.0	261.0	475.9	538.2	733.4	913.7	963.3	994.5	1024.6	1029.2	1030.3
25°	167.5	239.1	474.7	548.6	761.1	933.3	971.4	994.5	1011.9	1014.2	1014.2
27.5°	150.2	214.8	470.1	550.9	781.9	937.9	968.0	984.1	992.2	996.8	996.8
30°	135.1	191.7	458.5	546.3	791.2	933.3	957.6	965.7	973.7	980.7	984.1
32.5°	123.6	169.8	441.2	537.1	792.3	921.8	939.1	943.7	955.3	971.4	977.2
35°	113.2	147.8	421.6	524.4	785.4	903.3	914.8	919.5	942.6	966.8	974.9
37.5°	102.8	131.7	396.2	502.4	775.0	881.3	889.4	897.5	933.3	962.2	971.4
40°	92.4	117.8	366.1	478.2	758.8	854.7	861.6	874.3	921.8	955.3	964.5
42.5°	84.3	106.3	333.8	452.8	738.0	824.7	835.1	853.5	907.9	943.7	954.1
45°	77.4	94.7	299.1	418.1	711.5	793.5	808.5	833.9	891.7	926.4	935.6
47.5°	70.5	86.6	263.3	382.3	682.6	762.3	781.9	810.8	869.7	903.3	911.4
50°	64.7	78.5	227.5	344.2	651.4	728.8	751.9	781.9	842.0	873.2	883.7
52.5°	60.1	71.6	194.0	306.1	615.6	694.2	720.7	751.9	808.5	838.5	845.5
55°	55.4	65.8	165.2	265.7	578.7	657.2	686.1	716.1	771.5	797.0	801.6
57.5°	53.1	61.2	140.9	227.5	539.4	615.6	648.0	675.7	727.6	747.3	751.9
60°	49.7	57.8	122.4	195.2	496.6	576.3	604.1	631.8	675.7	691.8	695.3
62.5°	46.2	55.4	108.6	164.0	452.8	530.1	557.9	583.3	620.2	631.8	636.4
65°	43.9	53.1	98.2	140.9	407.7	481.6	509.4	531.3	561.3	572.9	575.2
67.5°	41.6	50.8	90.1	121.3	362.7	433.1	453.9	474.7	497.8	509.4	510.5
70°	38.1	48.5	83.2	107.4	316.5	377.7	395.0	417.0	435.4	441.2	444.7
72.5°	35.8	45.0	78.5	97.0	269.1	324.6	340.7	353.4	369.6	375.4	375.4
75°	32.3	40.4	73.9	86.6	220.6	265.7	279.5	292.2	304.9	307.2	303.8
77.5°	28.9	35.8	63.5	72.8	172.1	210.2	221.8	228.7	239.1	241.4	242.6
80°	24.3	31.2	49.7	56.6	124.7	154.8	162.9	168.6	177.9	177.9	180.2
82.5°	18.5	24.3	35.8	40.4	84.3	106.3	113.2	116.7	122.4	122.4	122.4
85°	11.6	15.0	23.1	26.6	50.8	64.7	69.3	70.5	75.1	76.2	76.2
87.5°	5.8	8.1	15.0	16.2	26.6	33.5	33.5	35.8	35.8	34.6	33.5
90°	3.5	6.4	9.3	10.0	15.7	23.3	27.2	24.2	18.2	13.6	13.6
92.5°	14.3	38.7	63.0	69.1	97.1	134.5	153.2	134.3	96.4	68.0	65.3
95°	34.3	78.9	123.4	134.6	239.0	378.3	447.9	399.7	303.2	230.9	222.8
97.5°	59.4	98.7	138.0	147.8	322.0	554.2	670.3	639.8	578.9	533.1	517.5
100°	78.8	114.4	150.1	159.0	352.2	609.8	738.7	740.9	745.4	748.7	730.1
102.5°	95.2	128.5	161.8	170.1	366.1	627.3	758.0	796.8	874.5	932.7	916.8
105°	123.2	151.4	179.6	186.6	376.3	629.3	755.8	842.8	1016.9	1147.5	1139.0
107.5°	151.8	178.1	204.4	210.9	378.2	601.3	712.9	834.3	1077.2	1259.3	1261.3
110°	171.2	194.9	218.5	224.5	375.3	576.5	677.1	812.8	1084.3	1287.9	1296.8



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	190.1	212.7	235.3	240.9	375.5	554.8	644.5	783.4	1061.2	1269.6	1283.3
115°	218.8	239.6	260.4	265.7	378.9	529.9	605.5	739.3	1006.9	1207.7	1226.6
117.5°	247.0	266.0	284.9	289.7	386.0	514.4	578.6	699.4	940.9	1122.1	1143.1
120°	263.5	281.4	299.1	303.6	391.7	509.1	567.9	678.2	898.9	1064.4	1084.9
122.5°	279.7	297.6	315.6	320.1	399.9	506.4	559.6	659.0	857.7	1006.8	1026.9
125°	304.3	320.7	337.1	341.2	411.0	504.1	550.7	635.1	804.0	930.5	949.1
127.5°	324.4	341.0	357.4	361.6	422.1	502.8	543.2	615.6	760.6	869.3	885.0
130°	335.1	353.0	370.8	375.2	430.3	503.7	540.3	604.8	733.9	830.7	845.2
132.5°	346.2	364.1	381.8	386.3	436.8	504.1	537.8	595.5	711.1	797.7	810.7
135°	362.7	378.9	395.2	399.2	444.0	503.7	533.5	581.8	678.6	751.1	762.3
137.5°	379.5	395.5	411.6	415.6	454.7	506.7	532.8	573.6	655.4	716.8	726.0
140°	393.5	408.3	423.1	426.8	461.3	507.3	530.2	565.6	636.3	689.2	697.8
142.5°	404.2	418.0	431.7	435.0	466.8	509.0	530.2	561.3	623.3	669.9	677.3
145°	420.7	432.7	444.5	447.5	473.9	509.1	526.7	552.1	602.8	640.9	646.4
147.5°	437.1	448.8	460.4	463.3	484.4	512.6	526.7	546.6	586.6	616.5	621.2
150°	447.9	458.4	468.9	471.5	490.0	514.4	526.7	543.5	577.3	602.6	606.4
152.5°	459.0	467.0	474.9	476.9	493.5	515.6	526.7	541.1	569.9	591.5	594.4
155°	475.5	481.3	487.3	488.7	501.3	518.2	526.7	538.2	561.1	578.3	580.1
157.5°	487.6	493.4	499.1	500.6	509.3	520.9	526.7	535.6	553.4	566.8	568.1
160°	495.9	500.3	504.8	505.9	512.8	522.1	526.7	534.3	549.5	561.0	561.8
162.5°	504.1	507.5	510.8	511.7	516.7	523.4	526.7	533.1	546.0	555.7	556.4
165°	513.1	516.1	519.1	519.9	522.1	525.1	526.7	531.3	540.5	547.5	548.2
167.5°	521.3	522.8	524.1	524.5	526.4	529.0	530.2	533.2	539.3	543.9	544.2
170°	526.7	528.1	529.5	529.9	530.0	530.1	530.2	533.2	539.3	543.9	543.9
172.5°	529.5	529.8	530.1	530.2	530.2	530.2	530.2	532.6	537.4	541.0	540.7
175°	533.5	533.5	533.5	533.5	532.4	530.9	530.2	531.8	534.8	537.1	537.1
177.5°	533.5	533.5	533.5	533.5	532.6	531.5	531.0	532.2	534.6	536.4	536.1
180°	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	359.2	359.2
2.5°	383.5	381.2
5°	493.2	495.5
7.5°	664.1	663.0
10°	825.8	836.2
12.5°	943.7	946.0
15°	1015.3	1019.9
17.5°	1043.0	1044.2
20°	1044.2	1041.9
22.5°	1031.5	1029.2
25°	1016.5	1015.3
27.5°	1002.6	1003.8
30°	996.8	1000.3
32.5°	996.8	1002.6
35°	999.2	1004.9
37.5°	998.0	1004.9
40°	993.4	1001.5
42.5°	980.7	986.4
45°	961.0	968.0
47.5°	935.6	940.2
50°	903.3	907.9
52.5°	862.8	863.9
55°	814.3	818.9
57.5°	762.3	763.5
60°	704.6	708.0
62.5°	643.3	643.3
65°	578.7	581.0
67.5°	511.7	517.4
70°	443.5	444.7
72.5°	376.5	376.5
75°	307.2	308.4
77.5°	241.4	241.4
80°	179.0	180.2
82.5°	123.6	125.9
85°	77.4	77.4
87.5°	35.8	32.3
90°	13.6	13.6
92.5°	54.4	43.7
95°	190.0	157.2
97.5°	455.1	392.8
100°	655.7	581.4
102.5°	853.2	789.5
105°	1104.7	1070.5
107.5°	1269.6	1277.8
110°	1332.4	1368.1





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1338.0	1392.8
115°	1302.5	1378.5
117.5°	1227.3	1311.5
120°	1166.7	1248.5
122.5°	1107.6	1188.3
125°	1023.5	1097.8
127.5°	947.7	1010.4
130°	903.1	961.0
132.5°	862.6	914.5
135°	807.0	851.8
137.5°	762.5	799.2
140°	732.0	766.2
142.5°	706.7	736.1
145°	668.7	691.0
147.5°	639.6	658.0
150°	621.3	636.3
152.5°	605.6	616.9
155°	587.6	595.1
157.5°	573.3	578.6
160°	564.8	567.9
162.5°	559.3	562.1
165°	551.2	554.2
167.5°	545.5	546.7
170°	543.9	543.9
172.5°	539.6	538.5
175°	537.1	537.1
177.5°	534.8	533.5
180°	533.5	533.5



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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	3.26	4.10	4.25	5.12	6.46	16.42	17.27	17.42	18.28	19.63
	3H	3.96	4.72	4.97	5.74	7.11	18.26	19.02	19.26	20.04	21.40
	4H	4.26	4.98	5.28	6.00	7.38	18.90	19.62	19.92	20.64	22.01
	6H	4.51	5.18	5.54	6.20	7.59	19.32	19.99	20.35	21.02	22.40
	8H	4.58	5.21	5.61	6.26	7.64	19.44	20.08	20.48	21.12	22.50
	12H	4.59	5.20	5.63	6.24	7.64	19.51	20.11	20.55	21.15	22.55
4H	2H	10.46	11.19	11.49	12.21	13.58	16.70	17.42	17.72	18.44	19.81
	3H	12.03	12.64	13.06	13.69	15.07	18.74	19.34	19.77	20.39	21.78
	4H	12.12	12.68	13.17	13.72	15.13	19.50	20.05	20.54	21.10	22.50
	6H	12.13	12.61	13.19	13.68	15.08	20.03	20.51	21.08	21.58	22.98
	8H	12.11	12.56	13.16	13.62	15.04	20.19	20.64	21.24	21.70	23.12
	12H	12.07	12.47	13.14	13.55	14.97	20.28	20.69	21.35	21.76	23.18
8H	4H	13.56	14.01	14.62	15.07	16.49	19.56	20.00	20.61	21.06	22.48
	6H	13.81	14.18	14.88	15.28	16.69	20.18	20.55	21.26	21.65	23.07
	8H	13.82	14.15	14.91	15.23	16.67	20.40	20.72	21.48	21.81	23.24
	12H	13.79	14.08	14.88	15.16	16.63	20.54	20.83	21.63	21.91	23.38
12H	4H	13.71	14.11	14.78	15.18	16.61	19.51	19.91	20.58	20.99	22.41
	6H	14.06	14.39	15.15	15.47	16.91	20.17	20.49	21.25	21.58	23.01
	8H	14.13	14.42	15.22	15.50	16.97	20.39	20.68	21.48	21.76	23.23