

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: P937160

Luminaire Tested: SQ4-FB-075U-075D-93050-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937160  
REPORT IS A COMBINATION OF REPORTS P933502 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-075D-93050-1D-UNV-STD-W-4-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

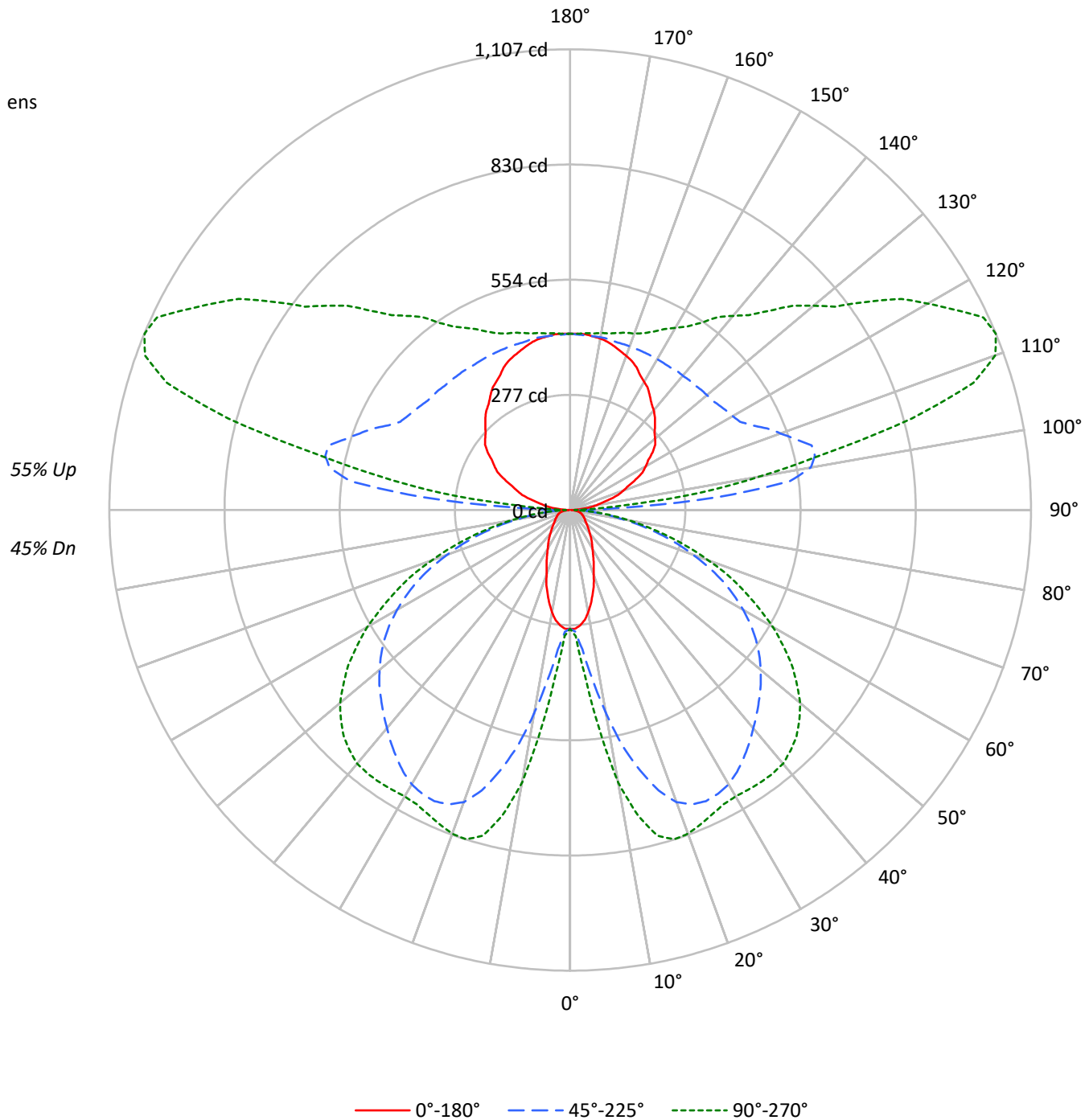
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4957.3 lumens  
Efficiency: N/A  
Efficacy: 116.9 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): 42.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	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	80	77	70	67	65	57	55	53	44	43	42	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	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	65	56	49	43	46	41	37	38	34	31	30	27	24	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	17
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	24	21	25	20	17	20	16	14	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11	9

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

	0°	45°	90°
0°	2648	2648	2648
5°	2585	3059	3560
10°	2342	4455	5901
15°	1988	5817	7126
20°	1617	6735	7263
25°	1347	7043	7115
30°	1134	7082	7101
35°	1001	6959	7285
40°	871	6800	7475
45°	787	6683	7504
50°	721	6575	7380
55°	687	6421	7052
60°	703	6131	6536
65°	727	5693	5827
70°	769	4956	4922
75°	843	4030	3841
80°	903	2785	2589
85°	762	1471	1325

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7504 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.9	0.7
10°-20°	163.6	3.3
20°-30°	286.2	5.8
30°-40°	368.4	7.4
40°-50°	411.5	8.3
50°-60°	394.1	8.0
60°-70°	312.4	6.3
70°-80°	183.7	3.7
80°-90°	52.6	1.1
90°-100°	206.6	4.2
100°-110°	543.2	11.0
110°-120°	563.2	11.4
120°-130°	451.8	9.1
130°-140°	354.5	7.2
140°-150°	272.1	5.5
150°-160°	195.9	4.0
160°-170°	119.9	2.4
170°-180°	40.5	0.8
0°-30°	486.7	9.8
0°-40°	855.2	17.3
0°-60°	1660.8	33.5
0°-90°	2209.5	44.6
90°-120°	1313.1	26.5
90°-150°	2391.5	48.2
90°-180°	2748.0	55.4
0°-180°	4957.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	285	285	285	285	285	
5°	278	298	336	380	394	26
15°	208	384	648	786	810	58
25°	133	436	772	806	807	61
35°	90	417	727	768	798	56
45°	62	332	642	736	769	48
55°	44	211	545	633	651	40
65°	35	112	405	455	462	35
75°	26	69	222	244	245	27
85°	9	21	55	61	62	10
90°	3	8	22	11	11	3
95°	27	107	356	183	125	30
105°	98	148	600	912	851	104
115°	174	211	481	960	1095	172
125°	242	271	438	739	872	215
135°	288	317	424	597	677	223
145°	334	356	418	509	549	209
155°	378	388	418	459	473	174
165°	408	413	418	435	440	115
175°	424	424	421	427	427	40
180°	424	424	424	424	424	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4
2.5°	285.4	285.4	287.2	288.2	290.0	290.9	292.7	294.6	300.1	301.0	302.8
5°	278.1	281.7	293.7	298.3	311.1	328.5	335.9	347.8	372.6	379.9	384.5
7.5°	267.0	275.3	304.7	312.0	344.1	390.0	409.3	435.0	474.4	493.7	509.3
10°	249.6	267.0	319.4	336.8	389.1	458.8	494.6	530.4	590.1	616.7	626.8
12.5°	230.3	258.8	335.0	358.8	434.1	535.9	579.1	618.5	686.4	722.2	727.7
15°	208.3	246.9	349.6	384.5	481.8	600.2	647.9	696.5	759.9	785.5	792.0
17.5°	189.0	237.7	363.4	400.1	518.5	658.0	706.6	747.0	798.4	815.8	820.4
20°	165.2	223.0	372.6	420.3	557.0	700.2	747.0	778.2	813.1	824.1	825.9
22.5°	147.7	207.4	378.1	427.6	582.7	725.9	765.4	790.1	814.0	817.7	818.6
25°	133.1	190.0	377.2	435.9	604.8	741.5	771.8	790.1	803.9	805.7	805.7
27.5°	119.3	170.7	373.5	437.7	621.3	745.2	769.0	781.9	788.3	792.0	792.0
30°	107.4	152.3	364.3	434.1	628.6	741.5	760.8	767.2	773.6	779.1	781.9
32.5°	98.2	134.9	350.6	426.7	629.5	732.3	746.1	749.8	758.9	771.8	776.4
35°	89.9	117.5	335.0	416.6	624.0	717.6	726.8	730.5	748.8	768.1	774.5
37.5°	81.7	104.6	314.8	399.2	615.8	700.2	706.6	713.0	741.5	764.4	771.8
40°	73.4	93.6	290.9	379.9	602.9	679.1	684.6	694.7	732.3	758.9	766.3
42.5°	67.0	84.4	265.2	359.7	586.4	655.2	663.5	678.2	721.3	749.8	758.0
45°	61.5	75.3	237.7	332.2	565.3	630.5	642.4	662.6	708.5	736.0	743.3
47.5°	56.0	68.8	209.2	303.8	542.4	605.7	621.3	644.2	691.0	717.6	724.1
50°	51.4	62.4	180.8	273.5	517.6	579.1	597.4	621.3	669.0	693.8	702.0
52.5°	47.7	56.9	154.2	243.2	489.1	551.5	572.6	597.4	642.4	666.2	671.8
55°	44.0	52.3	131.2	211.1	459.8	522.2	545.1	569.0	613.0	633.2	636.9
57.5°	42.2	48.6	112.0	180.8	428.6	489.1	514.8	536.9	578.1	593.7	597.4
60°	39.5	45.9	97.3	155.1	394.6	457.9	480.0	502.0	536.9	549.7	552.5
62.5°	36.7	44.0	86.3	130.3	359.7	421.2	443.2	463.4	492.8	502.0	505.6
65°	34.9	42.2	78.0	112.0	323.9	382.7	404.7	422.1	446.0	455.2	457.0
67.5°	33.0	40.4	71.6	96.4	288.2	344.1	360.7	377.2	395.5	404.7	405.6
70°	30.3	38.5	66.1	85.3	251.4	300.1	313.9	331.3	346.0	350.6	353.3
72.5°	28.4	35.8	62.4	77.1	213.8	257.9	270.7	280.8	293.7	298.3	298.3
75°	25.7	32.1	58.7	68.8	175.3	211.1	222.1	232.2	242.3	244.1	241.4
77.5°	22.9	28.4	50.5	57.8	136.7	167.0	176.2	181.7	190.0	191.8	192.7
80°	19.3	24.8	39.5	45.0	99.1	123.0	129.4	134.0	141.3	141.3	143.2
82.5°	14.7	19.3	28.4	32.1	67.0	84.4	89.9	92.7	97.3	97.3	97.3
85°	9.2	11.9	18.4	21.1	40.4	51.4	55.1	56.0	59.7	60.6	60.6
87.5°	4.6	6.4	11.9	12.8	21.1	26.6	26.6	28.4	28.4	27.5	26.6
90°	2.8	5.1	7.4	8.0	12.6	18.6	21.7	19.3	14.4	10.8	10.8
92.5°	11.4	30.7	50.0	54.9	77.2	106.9	121.8	106.7	76.6	54.1	51.9
95°	27.3	62.8	98.2	107.0	190.0	300.5	355.9	317.5	240.9	183.4	176.9
97.5°	47.3	78.5	109.7	117.5	255.9	440.3	532.5	508.3	459.9	423.6	411.2
100°	62.6	90.9	119.2	126.3	279.8	484.5	586.9	588.6	592.2	594.8	580.1
102.5°	75.7	102.1	128.5	135.1	290.8	498.5	602.3	633.1	694.8	741.0	728.4
105°	97.8	120.2	142.6	148.2	299.0	500.1	600.5	669.7	808.0	911.7	904.9
107.5°	120.6	141.5	162.3	167.6	300.5	477.8	566.4	662.9	855.8	1000.5	1002.1
110°	136.0	154.8	173.7	178.4	298.3	458.0	538.0	645.8	861.4	1023.2	1030.3



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	151.1	169.0	186.9	191.4	298.3	440.9	512.1	622.5	843.2	1008.7	1019.7
115°	173.8	190.3	206.9	211.1	301.1	421.0	481.1	587.4	800.0	959.5	974.6
117.5°	196.3	211.3	226.4	230.2	306.7	408.6	459.7	555.7	747.6	891.5	908.2
120°	209.4	223.6	237.7	241.3	311.2	404.5	451.1	538.9	714.2	845.7	862.0
122.5°	222.2	236.5	250.7	254.3	317.7	402.3	444.6	523.5	681.5	800.0	816.0
125°	241.8	254.8	267.9	271.1	326.6	400.6	437.6	504.6	638.8	739.4	754.2
127.5°	257.8	270.9	284.0	287.3	335.4	399.6	431.6	489.2	604.4	690.7	703.2
130°	266.3	280.4	294.6	298.2	341.8	400.1	429.3	480.6	583.1	660.0	671.5
132.5°	275.1	289.3	303.4	307.0	347.1	400.6	427.3	473.2	565.0	633.9	644.1
135°	288.2	301.0	313.9	317.2	352.8	400.2	423.9	462.3	539.2	596.9	605.8
137.5°	301.6	314.3	327.1	330.3	361.3	402.7	423.3	455.8	520.8	569.5	576.8
140°	312.7	324.4	336.2	339.1	366.5	403.1	421.3	449.4	505.5	547.6	554.4
142.5°	321.2	332.0	342.9	345.6	370.8	404.5	421.3	446.0	495.3	532.3	538.1
145°	334.2	343.8	353.2	355.6	376.5	404.5	418.5	438.7	478.9	509.2	513.6
147.5°	347.3	356.5	365.8	368.1	384.9	407.3	418.5	434.3	466.1	489.9	493.5
150°	355.9	364.2	372.6	374.7	389.3	408.7	418.5	431.9	458.7	478.8	481.7
152.5°	364.7	371.0	377.4	378.9	392.1	409.7	418.5	429.9	452.8	470.0	472.2
155°	377.8	382.5	387.1	388.3	398.4	411.8	418.5	427.6	445.7	459.4	460.9
157.5°	387.5	392.0	396.6	397.7	404.6	413.9	418.5	425.5	439.7	450.3	451.3
160°	394.0	397.5	401.0	402.0	407.5	414.8	418.5	424.5	436.7	445.8	446.4
162.5°	400.6	403.2	405.9	406.5	410.5	415.8	418.5	423.6	433.8	441.5	442.1
165°	407.6	410.0	412.4	413.1	414.9	417.3	418.5	422.1	429.5	435.0	435.6
167.5°	414.2	415.3	416.4	416.7	418.3	420.3	421.3	423.7	428.6	432.1	432.4
170°	418.5	419.6	420.8	421.0	421.1	421.2	421.3	423.7	428.6	432.1	432.1
172.5°	420.8	421.0	421.2	421.3	421.3	421.3	421.3	423.2	427.0	429.8	429.7
175°	423.9	423.9	423.9	423.9	423.1	421.9	421.3	422.5	424.9	426.7	426.7
177.5°	423.9	423.9	423.9	423.9	423.2	422.3	421.9	422.8	424.7	426.2	425.9
180°	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	285.4	285.4
2.5°	304.7	302.8
5°	391.9	393.7
7.5°	527.7	526.8
10°	656.2	664.4
12.5°	749.8	751.6
15°	806.7	810.3
17.5°	828.7	829.6
20°	829.6	827.8
22.5°	819.5	817.7
25°	807.6	806.7
27.5°	796.6	797.5
30°	792.0	794.7
32.5°	792.0	796.6
35°	793.8	798.4
37.5°	792.9	798.4
40°	789.2	795.6
42.5°	779.1	783.7
45°	763.5	769.0
47.5°	743.3	747.0
50°	717.6	721.3
52.5°	685.5	686.4
55°	647.0	650.6
57.5°	605.7	606.6
60°	559.8	562.5
62.5°	511.2	511.2
65°	459.8	461.6
67.5°	406.5	411.1
70°	352.4	353.3
72.5°	299.2	299.2
75°	244.1	245.0
77.5°	191.8	191.8
80°	142.2	143.2
82.5°	98.2	100.0
85°	61.5	61.5
87.5°	28.4	25.7
90°	10.8	10.8
92.5°	43.3	34.7
95°	151.0	124.9
97.5°	361.7	312.1
100°	521.1	462.0
102.5°	677.8	627.2
105°	877.8	850.6
107.5°	1008.7	1015.3
110°	1058.7	1087.0





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1063.1	1106.6
115°	1035.0	1095.3
117.5°	975.1	1042.0
120°	927.0	991.9
122.5°	880.1	944.2
125°	813.2	872.2
127.5°	753.0	802.8
130°	717.5	763.5
132.5°	685.3	726.5
135°	641.3	676.8
137.5°	605.9	635.0
140°	581.6	608.8
142.5°	561.4	584.8
145°	531.3	549.1
147.5°	508.2	522.9
150°	493.6	505.6
152.5°	481.1	490.1
155°	466.8	472.8
157.5°	455.5	459.7
160°	448.8	451.1
162.5°	444.3	446.6
165°	438.0	440.4
167.5°	433.4	434.4
170°	432.1	432.1
172.5°	428.7	427.8
175°	426.7	426.7
177.5°	424.9	423.9
180°	423.9	423.9



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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	3.86	4.71	4.85	5.72	7.06	17.00	17.84	17.99	18.86	20.20
	3H	4.56	5.33	5.57	6.35	7.71	18.82	19.58	19.82	20.60	21.97
	4H	4.86	5.58	5.88	6.61	7.98	19.45	20.18	20.47	21.20	22.57
	6H	5.11	5.78	6.14	6.81	8.19	19.87	20.54	20.90	21.57	22.95
	8H	5.18	5.81	6.21	6.86	8.24	19.99	20.62	21.02	21.66	23.04
	12H	5.20	5.80	6.24	6.84	8.24	20.05	20.65	21.09	21.69	23.09
4H	2H	11.05	11.77	12.07	12.79	14.16	17.27	17.99	18.29	19.02	20.39
	3H	12.62	13.22	13.65	14.27	15.66	19.30	19.90	20.33	20.96	22.34
	4H	12.71	13.26	13.75	14.31	15.71	20.06	20.61	21.10	21.65	23.06
	6H	12.72	13.20	13.77	14.26	15.67	20.58	21.06	21.63	22.13	23.53
	8H	12.70	13.14	13.75	14.20	15.62	20.74	21.18	21.79	22.24	23.66
	12H	12.65	13.06	13.72	14.13	15.56	20.82	21.23	21.89	22.30	23.72
8H	4H	14.14	14.59	15.20	15.65	17.07	20.12	20.56	21.17	21.62	23.04
	6H	14.38	14.76	15.46	15.86	17.27	20.73	21.10	21.81	22.20	23.62
	8H	14.40	14.73	15.49	15.81	17.25	20.94	21.27	22.03	22.35	23.79
	12H	14.37	14.66	15.46	15.74	17.21	21.08	21.37	22.17	22.45	23.92
12H	4H	14.28	14.69	15.35	15.76	17.19	20.07	20.47	21.14	21.55	22.97
	6H	14.64	14.97	15.72	16.05	17.49	20.72	21.04	21.80	22.13	23.56
	8H	14.71	14.99	15.80	16.08	17.55	20.94	21.22	22.02	22.30	23.78