

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: P936763

Luminaire Tested: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936763
REPORT IS A COMBINATION OF REPORTS P933478 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-6-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

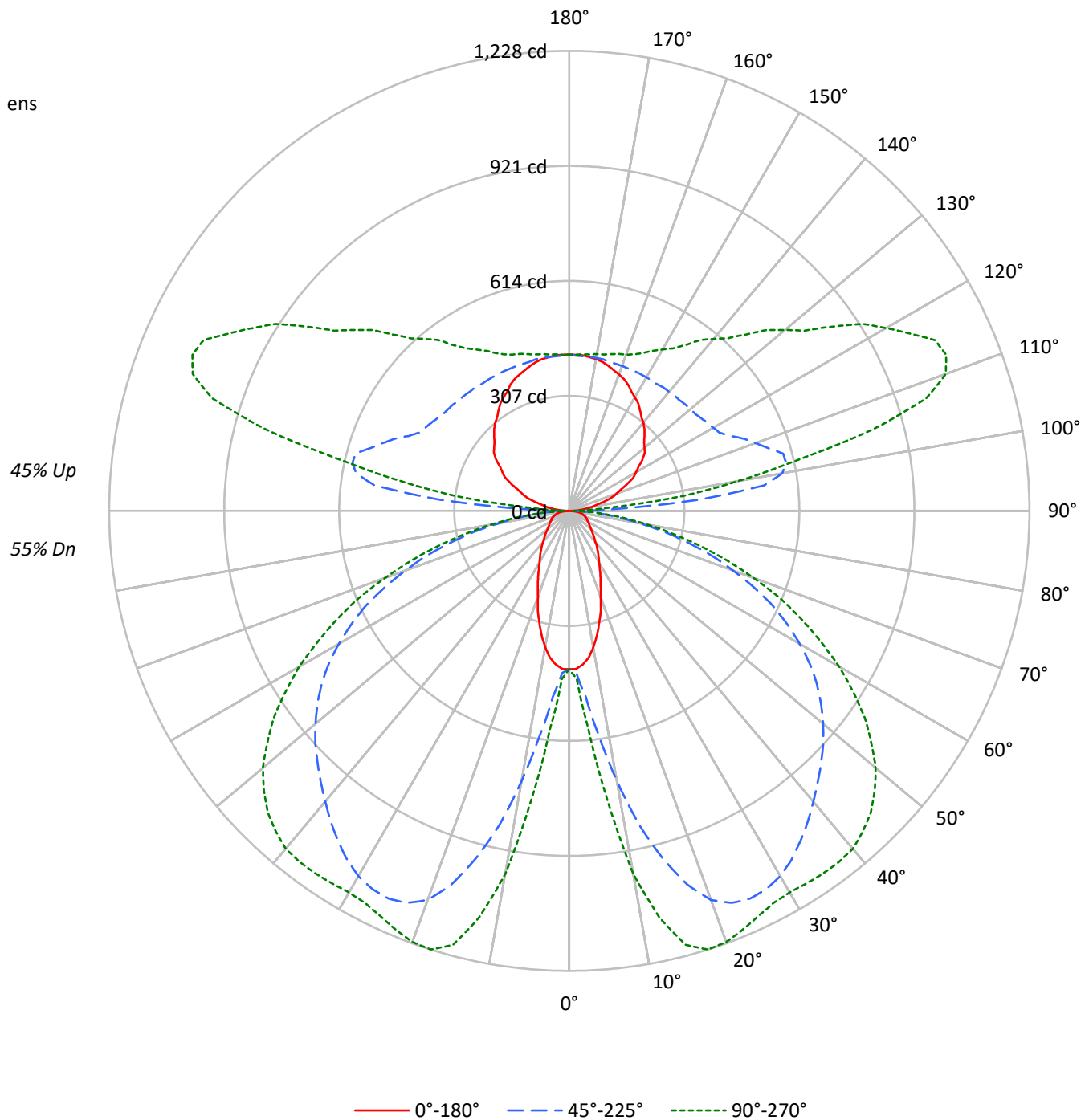
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5971.3 lumens
Efficiency: N/A
Efficacy: 109.4 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): 54.6
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	
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	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°	2612	2612	2612
5°	2551	3018	3511
10°	2313	4399	5821
15°	1965	5746	7029
20°	1599	6657	7164
25°	1334	6965	7018
30°	1124	7007	7005
35°	994	6888	7186
40°	865	6735	7374
45°	783	6622	7402
50°	717	6520	7280
55°	687	6372	6956
60°	702	6090	6447
65°	729	5662	5747
70°	775	4933	4855
75°	855	4020	3789
80°	928	2783	2553
85°	811	1475	1307

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7402 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.6	0.9
10°-20°	242.1	4.1
20°-30°	423.5	7.1
30°-40°	545.1	9.1
40°-50°	608.9	10.2
50°-60°	583.1	9.8
60°-70°	462.1	7.7
70°-80°	271.7	4.6
80°-90°	77.1	1.3
90°-100°	203.2	3.4
100°-110°	534.4	8.9
110°-120°	554.1	9.3
120°-130°	444.4	7.4
130°-140°	348.7	5.8
140°-150°	267.7	4.5
150°-160°	192.8	3.2
160°-170°	117.9	2.0
170°-180°	39.8	0.7
0°-30°	720.2	12.1
0°-40°	1265.3	21.2
0°-60°	2457.3	41.2
0°-90°	3268.3	54.7
90°-120°	1291.7	21.6
90°-150°	2352.5	39.4
90°-180°	2703.0	45.3
0°-180°	5971.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	422	422	422	422	422	
5°	411	441	497	562	582	38
15°	308	569	959	1162	1199	86
25°	197	645	1142	1192	1194	91
35°	133	616	1075	1136	1181	83
45°	91	492	950	1089	1138	70
55°	65	312	806	937	963	59
65°	52	166	599	673	683	51
75°	38	102	329	361	362	40
85°	14	31	82	90	91	14
90°	3	8	21	11	11	3
95°	27	105	350	180	123	30
105°	96	146	591	897	837	102
115°	171	208	473	944	1077	169
125°	238	267	430	727	858	211
135°	284	312	417	587	666	219
145°	329	350	412	501	540	206
155°	372	382	412	452	465	171
165°	401	406	412	428	433	113
175°	417	417	414	420	420	40
180°	417	417	417	417	417	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	422.3	422.3	422.3	422.3	422.3	422.3	422.3	422.3	422.3	422.3	422.3
2.5°	422.3	422.3	425.0	426.3	429.0	430.4	433.1	435.8	444.0	445.3	448.1
5°	411.4	416.8	434.5	441.3	460.3	486.1	496.9	514.6	551.2	562.1	568.9
7.5°	395.1	407.3	450.8	461.6	509.2	577.0	605.6	643.6	702.0	730.5	753.5
10°	369.3	395.1	472.5	498.3	575.7	678.9	731.8	784.8	873.0	912.4	927.3
12.5°	340.8	382.9	495.6	530.9	642.2	792.9	856.7	915.1	1015.6	1068.6	1076.8
15°	308.2	365.2	517.3	568.9	712.8	888.0	958.6	1030.6	1124.3	1162.3	1171.8
17.5°	279.7	351.7	537.7	592.0	767.1	973.5	1045.6	1105.3	1181.3	1207.1	1213.9
20°	244.4	329.9	551.2	621.8	824.1	1036.0	1105.3	1151.5	1203.0	1219.3	1222.1
22.5°	218.6	306.8	559.4	632.7	862.2	1074.1	1132.4	1169.1	1204.4	1209.8	1211.2
25°	196.9	281.1	558.0	644.9	894.8	1097.1	1142.0	1169.1	1189.5	1192.2	1192.2
27.5°	176.5	252.5	552.6	647.6	919.2	1102.6	1137.9	1156.9	1166.4	1171.8	1171.8
30°	158.9	225.4	539.0	642.2	930.1	1097.1	1125.7	1135.2	1144.7	1152.8	1156.9
32.5°	145.3	199.6	518.7	631.3	931.4	1083.6	1103.9	1109.4	1122.9	1142.0	1148.7
35°	133.1	173.8	495.6	616.4	923.3	1061.8	1075.4	1080.9	1108.0	1136.5	1146.0
37.5°	120.8	154.8	465.7	590.6	911.0	1036.0	1045.6	1055.1	1097.1	1131.1	1142.0
40°	108.6	138.5	430.4	562.1	892.0	1004.7	1012.9	1027.8	1083.6	1122.9	1133.8
42.5°	99.1	124.9	392.4	532.2	867.6	969.4	981.6	1003.4	1067.3	1109.4	1121.6
45°	91.0	111.3	351.7	491.5	836.4	932.8	950.4	980.3	1048.3	1089.0	1099.9
47.5°	82.8	101.8	309.6	449.4	802.4	896.1	919.2	953.1	1022.4	1061.8	1071.3
50°	76.0	92.3	267.5	404.6	765.8	856.7	883.9	919.2	989.8	1026.5	1038.8
52.5°	70.6	84.2	228.1	359.8	723.7	816.0	847.2	883.9	950.4	985.7	993.9
55°	65.2	77.4	194.2	312.3	680.2	772.6	806.5	841.8	907.0	936.8	942.3
57.5°	62.5	72.0	165.6	267.5	634.1	723.7	761.7	794.3	855.4	878.5	883.9
60°	58.4	67.9	143.9	229.5	583.8	677.5	710.1	742.7	794.3	813.3	817.4
62.5°	54.3	65.2	127.6	192.8	532.2	623.2	655.8	685.7	729.1	742.7	748.1
65°	51.6	62.5	115.4	165.6	479.3	566.2	598.8	624.6	659.9	673.4	676.2
67.5°	48.9	59.7	105.9	142.6	426.3	509.2	533.6	558.0	585.2	598.8	600.1
70°	44.8	57.0	97.8	126.3	372.0	444.0	464.3	490.1	511.9	518.7	522.7
72.5°	42.1	53.0	92.3	114.1	316.4	381.5	400.5	415.5	434.5	441.3	441.3
75°	38.0	47.5	86.9	101.8	259.3	312.3	328.6	343.5	358.4	361.2	357.1
77.5°	33.9	42.1	74.7	85.5	202.3	247.1	260.7	268.8	281.1	283.8	285.1
80°	28.5	36.7	58.4	66.5	146.6	181.9	191.4	198.2	209.1	209.1	211.8
82.5°	21.7	28.5	42.1	47.5	99.1	124.9	133.1	137.1	143.9	143.9	143.9
85°	13.6	17.7	27.2	31.2	59.7	76.0	81.5	82.8	88.3	89.6	89.6
87.5°	6.8	9.5	17.7	19.0	31.2	39.4	39.4	42.1	42.1	40.7	39.4
90°	2.8	5.1	7.3	7.9	12.3	18.3	21.3	18.9	14.1	10.6	10.6
92.5°	11.2	30.2	49.2	54.0	75.9	105.2	119.8	104.9	75.3	53.1	51.1
95°	26.9	61.6	96.5	105.2	186.8	295.7	350.1	312.5	237.1	180.5	174.1
97.5°	46.4	77.2	107.9	115.6	251.7	433.2	523.9	500.1	452.4	416.6	404.4
100°	61.6	89.4	117.3	124.3	275.3	476.7	577.3	579.0	582.6	585.2	570.7
102.5°	74.4	100.5	126.5	133.0	286.1	490.3	592.4	622.8	683.5	729.0	716.6
105°	96.3	118.3	140.3	145.8	294.1	491.9	590.7	658.8	794.8	896.9	890.2
107.5°	118.7	139.2	159.7	164.8	295.6	470.0	557.1	652.0	841.8	984.2	985.8
110°	133.8	152.2	170.8	175.4	293.4	450.6	529.2	635.2	847.5	1006.6	1013.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	148.6	166.3	183.9	188.4	293.5	433.7	503.7	612.3	829.5	992.3	1003.0
115°	171.0	187.3	203.6	207.6	296.2	414.2	473.2	577.9	787.0	943.9	958.7
117.5°	193.1	207.9	222.7	226.4	301.7	402.1	452.2	546.6	735.4	877.0	893.5
120°	205.9	219.9	233.8	237.3	306.1	397.9	443.8	530.1	702.6	831.9	848.0
122.5°	218.6	232.6	246.7	250.2	312.6	395.7	437.4	515.0	670.5	786.9	802.7
125°	237.9	250.6	263.5	266.7	321.2	394.0	430.4	496.4	628.4	727.3	741.8
127.5°	253.5	266.5	279.4	282.7	329.9	393.0	424.5	481.2	594.4	679.4	691.6
130°	262.0	275.9	289.8	293.3	336.3	393.6	422.3	472.7	573.6	649.3	660.6
132.5°	270.6	284.6	298.5	302.0	341.4	394.0	420.4	465.5	555.8	623.5	633.6
135°	283.5	296.2	308.8	312.0	347.0	393.7	417.0	454.8	530.4	587.1	595.9
137.5°	296.6	309.2	321.7	324.9	355.4	396.0	416.4	448.3	512.2	560.2	567.4
140°	307.6	319.2	330.7	333.6	360.5	396.5	414.5	442.1	497.3	538.7	545.4
142.5°	315.9	326.6	337.3	340.0	364.8	397.9	414.5	438.7	487.2	523.5	529.3
145°	328.8	338.2	347.5	349.8	370.5	397.9	411.7	431.5	471.1	500.9	505.3
147.5°	341.7	350.7	359.9	362.2	378.6	400.6	411.7	427.2	458.5	481.9	485.5
150°	350.1	358.4	366.5	368.6	383.0	402.1	411.7	424.9	451.2	471.0	473.9
152.5°	358.7	365.0	371.2	372.7	385.7	403.0	411.7	422.9	445.4	462.3	464.4
155°	371.7	376.3	380.8	382.0	391.8	405.1	411.7	420.6	438.6	451.9	453.4
157.5°	381.2	385.6	390.1	391.2	398.0	407.1	411.7	418.6	432.6	443.0	444.0
160°	387.6	391.0	394.5	395.4	400.8	408.0	411.7	417.6	429.6	438.6	439.1
162.5°	394.0	396.6	399.3	399.9	403.8	409.0	411.7	416.7	426.8	434.3	434.8
165°	401.0	403.3	405.7	406.3	408.1	410.5	411.7	415.3	422.4	427.9	428.5
167.5°	407.4	408.5	409.7	409.9	411.5	413.5	414.5	416.8	421.5	425.1	425.3
170°	411.7	412.8	413.9	414.2	414.3	414.4	414.5	416.8	421.5	425.1	425.1
172.5°	413.9	414.2	414.4	414.5	414.5	414.5	414.5	416.3	420.0	422.8	422.6
175°	417.0	417.0	417.0	417.0	416.2	415.0	414.5	415.6	418.0	419.7	419.7
177.5°	417.0	417.0	417.0	417.0	416.4	415.5	415.0	415.9	417.8	419.2	418.9
180°	417.0	417.0	417.0	417.0	417.0	417.0	417.0	417.0	417.0	417.0	417.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	422.3	422.3
2.5°	450.8	448.1
5°	579.8	582.5
7.5°	780.7	779.3
10°	970.8	983.0
12.5°	1109.4	1112.1
15°	1193.5	1199.0
17.5°	1226.1	1227.5
20°	1227.5	1224.8
22.5°	1212.6	1209.8
25°	1194.9	1193.5
27.5°	1178.6	1180.0
30°	1171.8	1175.9
32.5°	1171.8	1178.6
35°	1174.5	1181.3
37.5°	1173.2	1181.3
40°	1167.7	1177.3
42.5°	1152.8	1159.6
45°	1129.7	1137.9
47.5°	1099.9	1105.3
50°	1061.8	1067.3
52.5°	1014.2	1015.6
55°	957.2	962.6
57.5°	896.1	897.5
60°	828.2	832.3
62.5°	756.3	756.3
65°	680.2	682.9
67.5°	601.5	608.3
70°	521.4	522.7
72.5°	442.6	442.6
75°	361.2	362.5
77.5°	283.8	283.8
80°	210.4	211.8
82.5°	145.3	148.0
85°	91.0	91.0
87.5°	42.1	38.0
90°	10.6	10.6
92.5°	42.5	34.1
95°	148.4	122.8
97.5°	355.7	307.0
100°	512.6	454.5
102.5°	666.8	617.0
105°	863.5	836.7
107.5°	992.2	998.8
110°	1041.4	1069.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1045.8	1088.5
115°	1018.0	1077.4
117.5°	959.3	1025.1
120°	911.9	975.9
122.5°	865.8	928.8
125°	799.9	858.0
127.5°	740.7	789.8
130°	705.8	751.1
132.5°	674.2	714.7
135°	630.8	665.7
137.5°	596.0	624.7
140°	572.1	598.9
142.5°	552.3	575.3
145°	522.7	540.1
147.5°	499.9	514.3
150°	485.6	497.3
152.5°	473.3	482.2
155°	459.3	465.1
157.5°	448.1	452.2
160°	441.4	443.8
162.5°	437.1	439.4
165°	430.9	433.2
167.5°	426.3	427.3
170°	425.1	425.1
172.5°	421.7	420.9
175°	419.7	419.7
177.5°	418.0	417.0
180°	417.0	417.0



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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	4.76	5.70	5.66	6.64	7.84	17.92	18.87	18.83	19.80	21.00
	3H	5.47	6.32	6.39	7.26	8.48	19.76	20.62	20.68	21.56	22.78
	4H	5.77	6.58	6.70	7.53	8.76	20.41	21.22	21.34	22.16	23.40
	6H	6.03	6.77	6.97	7.72	8.97	20.84	21.59	21.79	22.54	23.78
	8H	6.10	6.81	7.05	7.78	9.02	20.96	21.67	21.91	22.64	23.89
	12H	6.12	6.79	7.08	7.76	9.03	21.03	21.71	21.99	22.67	23.94
4H	2H	11.98	12.78	12.91	13.73	14.96	18.21	19.02	19.15	19.96	21.19
	3H	13.55	14.23	14.50	15.20	16.45	20.26	20.93	21.21	21.91	23.16
	4H	13.65	14.27	14.61	15.24	16.51	21.02	21.64	21.98	22.61	23.88
	6H	13.67	14.20	14.64	15.20	16.47	21.56	22.10	22.54	23.09	24.36
	8H	13.65	14.15	14.62	15.13	16.42	21.73	22.23	22.70	23.21	24.50
	12H	13.61	14.06	14.60	15.06	16.35	21.82	22.27	22.82	23.28	24.57
8H	4H	15.10	15.60	16.07	16.59	17.87	21.09	21.59	22.07	22.58	23.87
	6H	15.35	15.76	16.35	16.79	18.07	21.72	22.14	22.72	23.17	24.45
	8H	15.36	15.73	16.37	16.75	18.05	21.94	22.31	22.95	23.32	24.62
	12H	15.34	15.66	16.35	16.67	18.02	22.09	22.41	23.10	23.42	24.77
12H	4H	15.25	15.70	16.24	16.70	17.99	21.05	21.50	22.04	22.51	23.80
	6H	15.60	15.97	16.61	16.99	18.29	21.71	22.07	22.71	23.09	24.39
	8H	15.68	16.00	16.69	17.01	18.36	21.94	22.26	22.95	23.27	24.62