

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: P936741

Luminaire Tested: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-6-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936741
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-92765-1D-UNV-STD-W-6-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

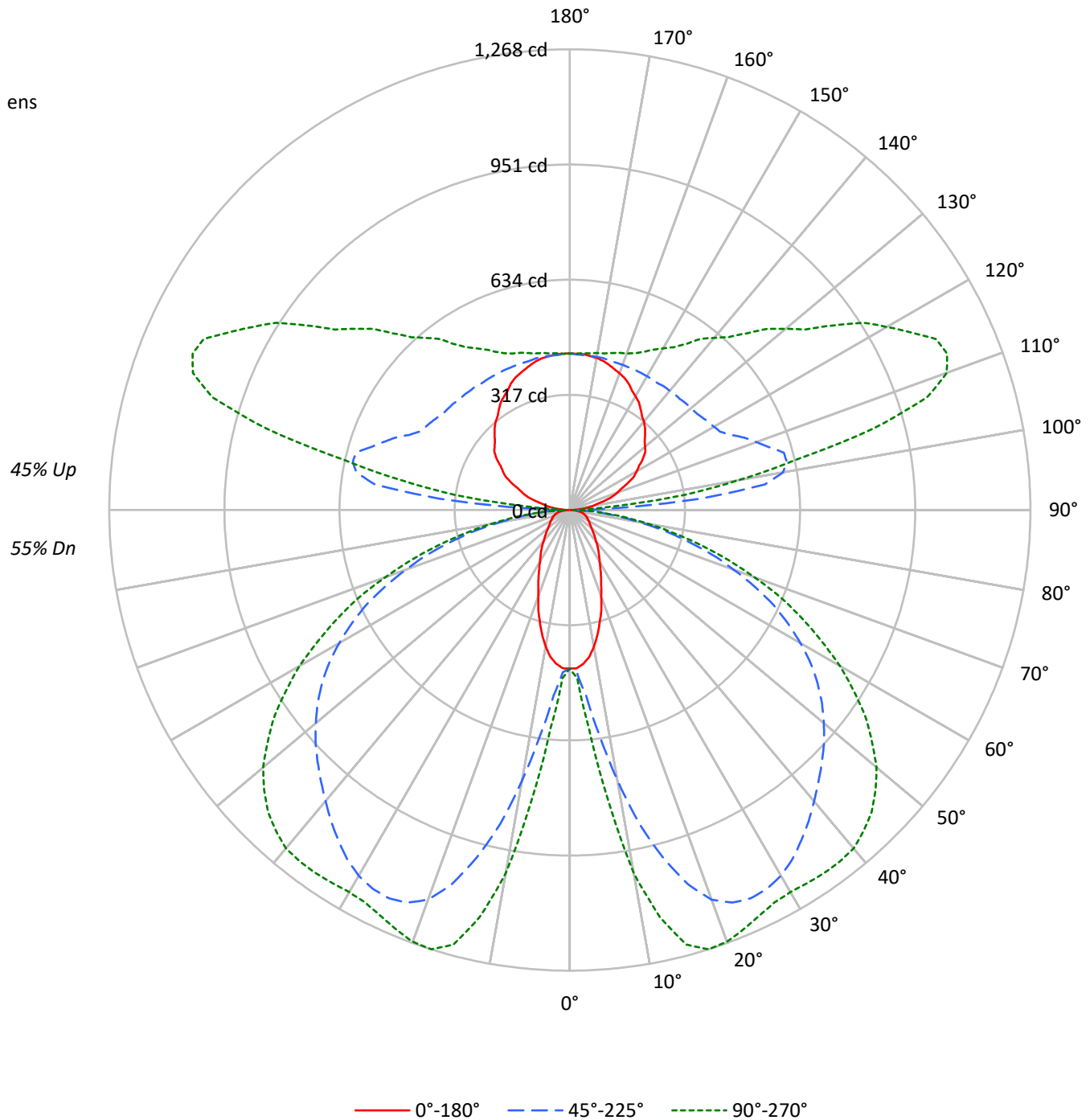
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6166.2 lumens
Efficiency: N/A
Efficacy: 112.9 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

TEST NUMBER: P936741
CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-6-5000K

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°	2697	2697	2697
5°	2634	3117	3626
10°	2389	4542	6011
15°	2029	5933	7259
20°	1652	6874	7398
25°	1377	7192	7247
30°	1160	7235	7234
35°	1026	7113	7421
40°	894	6954	7614
45°	808	6838	7644
50°	741	6733	7517
55°	709	6580	7184
60°	725	6288	6658
65°	753	5846	5934
70°	801	5095	5014
75°	884	4150	3912
80°	957	2875	2636
85°	835	1522	1349

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7644 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	0.9
10°-20°	250.0	4.1
20°-30°	437.3	7.1
30°-40°	562.9	9.1
40°-50°	628.7	10.2
50°-60°	602.2	9.8
60°-70°	477.2	7.7
70°-80°	280.6	4.6
80°-90°	79.6	1.3
90°-100°	209.9	3.4
100°-110°	551.8	8.9
110°-120°	572.2	9.3
120°-130°	458.9	7.4
130°-140°	360.1	5.8
140°-150°	276.4	4.5
150°-160°	199.1	3.2
160°-170°	121.8	2.0
170°-180°	41.1	0.7
0°-30°	743.7	12.1
0°-40°	1306.6	21.2
0°-60°	2537.5	41.2
0°-90°	3374.9	54.7
90°-120°	1333.8	21.6
90°-150°	2429.3	39.4
90°-180°	2791.0	45.3
0°-180°	6166.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	436	436	436	436	436	
5°	425	456	513	580	602	39
15°	318	588	990	1200	1238	89
25°	203	666	1179	1231	1232	94
35°	137	636	1110	1174	1220	86
45°	94	508	981	1124	1175	73
55°	67	322	833	967	994	61
65°	53	171	618	695	705	53
75°	39	105	339	373	374	41
85°	14	32	84	92	94	15
90°	3	8	22	11	11	3
95°	28	109	362	186	127	31
105°	100	151	610	926	864	105
115°	177	214	489	975	1113	174
125°	246	275	444	751	886	218
135°	293	322	431	606	688	226
145°	340	361	425	517	558	213
155°	384	394	425	467	480	176
165°	414	420	425	442	447	117
175°	431	431	428	433	433	41
180°	431	431	431	431	431	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0
2.5°	436.0	436.0	438.8	440.2	443.1	444.5	447.3	450.1	458.5	459.9	462.7
5°	424.8	430.4	448.7	455.7	475.3	501.9	513.2	531.4	569.2	580.5	587.5
7.5°	408.0	420.6	465.5	476.7	525.8	595.9	625.3	664.6	724.9	754.3	778.1
10°	381.4	408.0	487.9	514.6	594.5	701.0	755.7	810.4	901.5	942.2	957.6
12.5°	351.9	395.4	511.8	548.2	663.2	818.8	884.7	945.0	1048.7	1103.5	1111.9
15°	318.3	377.2	534.2	587.5	736.1	916.9	989.9	1064.3	1161.0	1200.3	1210.1
17.5°	288.8	363.1	555.2	611.3	792.2	1005.3	1079.7	1141.4	1219.9	1246.5	1253.5
20°	252.4	340.7	569.2	642.1	851.0	1069.9	1141.4	1189.0	1242.3	1259.1	1261.9
22.5°	225.7	316.9	577.6	653.4	890.3	1109.1	1169.4	1207.3	1243.7	1249.3	1250.7
25°	203.3	290.2	576.2	666.0	924.0	1133.0	1179.2	1207.3	1228.3	1231.1	1231.1
27.5°	182.3	260.8	570.6	668.8	949.2	1138.6	1175.0	1194.6	1204.5	1210.1	1210.1
30°	164.0	232.7	556.6	663.2	960.4	1133.0	1162.4	1172.2	1182.0	1190.4	1194.6
32.5°	150.0	206.1	535.6	652.0	961.8	1118.9	1140.0	1145.6	1159.6	1179.2	1186.2
35°	137.4	179.5	511.8	636.5	953.4	1096.5	1110.5	1116.1	1144.2	1173.6	1183.4
37.5°	124.8	159.8	480.9	609.9	940.8	1069.9	1079.7	1089.5	1133.0	1168.0	1179.2
40°	112.2	143.0	444.5	580.5	921.2	1037.5	1045.9	1061.4	1118.9	1159.6	1170.8
42.5°	102.4	129.0	405.2	549.6	895.9	1001.1	1013.7	1036.1	1102.1	1145.6	1158.2
45°	93.9	115.0	363.1	507.5	863.7	963.2	981.4	1012.3	1082.5	1124.5	1135.8
47.5°	85.5	105.2	319.7	464.1	828.6	925.4	949.2	984.2	1055.8	1096.5	1106.3
50°	78.5	95.3	276.2	417.8	790.8	884.7	912.7	949.2	1022.1	1060.0	1072.7
52.5°	72.9	86.9	235.5	371.5	747.3	842.6	874.9	912.7	981.4	1017.9	1026.3
55°	67.3	79.9	200.5	322.5	702.4	797.8	832.8	869.3	936.6	967.4	973.0
57.5°	64.5	74.3	171.1	276.2	654.8	747.3	786.6	820.2	883.3	907.1	912.7
60°	60.3	70.1	148.6	236.9	602.9	699.6	733.3	766.9	820.2	839.8	844.0
62.5°	56.1	67.3	131.8	199.1	549.6	643.5	677.2	708.0	752.9	766.9	772.5
65°	53.3	64.5	119.2	171.1	494.9	584.7	618.3	644.9	681.4	695.4	698.2
67.5°	50.5	61.7	109.4	147.2	440.2	525.8	551.0	576.2	604.3	618.3	619.7
70°	46.3	58.9	100.9	130.4	384.2	458.5	479.5	506.1	528.6	535.6	539.8
72.5°	43.5	54.7	95.3	117.8	326.7	394.0	413.6	429.0	448.7	455.7	455.7
75°	39.3	49.1	89.7	105.2	267.8	322.5	339.3	354.7	370.1	372.9	368.7
77.5°	35.1	43.5	77.1	88.3	208.9	255.2	269.2	277.6	290.2	293.0	294.4
80°	29.4	37.9	60.3	68.7	151.4	187.9	197.7	204.7	215.9	215.9	218.7
82.5°	22.4	29.4	43.5	49.1	102.4	129.0	137.4	141.6	148.6	148.6	148.6
85°	14.0	18.2	28.0	32.2	61.7	78.5	84.1	85.5	91.1	92.5	92.5
87.5°	7.0	9.8	18.2	19.6	32.2	40.7	40.7	43.5	43.5	42.1	40.7
90°	2.9	5.2	7.6	8.1	12.7	18.9	22.0	19.5	14.6	10.9	10.9
92.5°	11.6	31.2	50.8	55.8	78.4	108.6	123.7	108.3	77.8	54.9	52.7
95°	27.8	63.7	99.6	108.6	192.9	305.4	361.5	322.7	244.8	186.4	179.7
97.5°	48.0	79.7	111.4	119.4	259.9	447.4	541.0	516.4	467.2	430.2	417.6
100°	63.6	92.3	121.1	128.3	284.2	492.2	596.2	597.9	601.6	604.3	589.3
102.5°	76.8	103.8	130.6	137.3	295.5	506.3	611.8	643.1	705.8	752.8	740.0
105°	99.5	122.2	144.9	150.6	303.7	507.9	610.0	680.3	820.8	926.2	919.3
107.5°	122.5	143.8	164.9	170.2	305.3	485.3	575.3	673.3	869.3	1016.3	1018.0
110°	138.1	157.2	176.4	181.1	302.9	465.3	546.4	656.0	875.2	1039.5	1046.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	153.5	171.7	189.9	194.5	303.0	447.8	520.2	632.3	856.6	1024.7	1035.7
115°	176.6	193.4	210.2	214.4	305.8	427.7	488.7	596.7	812.7	974.7	990.0
117.5°	199.4	214.7	229.9	233.8	311.5	415.2	467.0	564.5	759.4	905.6	922.6
120°	212.6	227.0	241.4	245.1	316.1	410.9	458.3	547.4	725.5	859.1	875.6
122.5°	225.7	240.2	254.7	258.4	322.8	408.7	451.6	531.8	692.3	812.6	828.9
125°	245.6	258.8	272.1	275.4	331.7	406.9	444.5	512.6	648.9	751.0	766.0
127.5°	261.8	275.2	288.5	291.9	340.7	405.8	438.4	496.9	613.8	701.6	714.2
130°	270.5	284.9	299.3	302.8	347.2	406.4	436.0	488.1	592.3	670.5	682.1
132.5°	279.5	293.9	308.3	311.8	352.6	406.9	434.1	480.7	573.9	643.8	654.3
135°	292.7	305.8	318.9	322.2	358.4	406.5	430.6	469.7	547.7	606.3	615.3
137.5°	306.3	319.3	332.2	335.5	367.0	408.9	430.0	463.0	529.0	578.5	585.9
140°	317.6	329.6	341.4	344.4	372.3	409.4	428.0	456.5	513.5	556.2	563.2
142.5°	326.2	337.2	348.3	351.1	376.7	410.9	428.0	453.1	503.1	540.6	546.6
145°	339.6	349.2	358.8	361.3	382.6	410.9	425.1	445.6	486.5	517.3	521.8
147.5°	352.9	362.2	371.6	374.0	391.0	413.7	425.1	441.2	473.4	497.6	501.4
150°	361.5	370.1	378.5	380.6	395.5	415.2	425.1	438.8	466.0	486.3	489.3
152.5°	370.4	376.9	383.3	384.9	398.3	416.1	425.1	436.7	460.0	477.4	479.6
155°	383.8	388.6	393.2	394.4	404.6	418.3	425.1	434.4	452.9	466.7	468.2
157.5°	393.6	398.2	402.9	404.0	411.0	420.4	425.1	432.3	446.7	457.4	458.5
160°	400.2	403.8	407.3	408.3	413.9	421.4	425.1	431.3	443.6	452.9	453.4
162.5°	406.9	409.6	412.3	413.0	417.0	422.4	425.1	430.3	440.7	448.5	449.0
165°	414.1	416.5	418.9	419.6	421.5	423.9	425.1	428.8	436.2	441.8	442.5
167.5°	420.7	421.8	423.0	423.3	424.9	427.0	428.0	430.4	435.3	438.9	439.2
170°	425.1	426.2	427.4	427.7	427.8	427.9	428.0	430.4	435.3	438.9	438.9
172.5°	427.4	427.7	427.9	428.0	428.0	428.0	428.0	429.9	433.7	436.6	436.4
175°	430.6	430.6	430.6	430.6	429.8	428.6	428.0	429.2	431.6	433.4	433.4
177.5°	430.6	430.6	430.6	430.6	430.0	429.0	428.6	429.5	431.5	432.9	432.6
180°	430.6	430.6	430.6	430.6	430.6	430.6	430.6	430.6	430.6	430.6	430.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	436.0	436.0
2.5°	465.5	462.7
5°	598.7	601.5
7.5°	806.2	804.8
10°	1002.5	1015.1
12.5°	1145.6	1148.4
15°	1232.5	1238.1
17.5°	1266.2	1267.6
20°	1267.6	1264.8
22.5°	1252.1	1249.3
25°	1233.9	1232.5
27.5°	1217.1	1218.5
30°	1210.1	1214.3
32.5°	1210.1	1217.1
35°	1212.9	1219.9
37.5°	1211.5	1219.9
40°	1205.9	1215.7
42.5°	1190.4	1197.5
45°	1166.6	1175.0
47.5°	1135.8	1141.4
50°	1096.5	1102.1
52.5°	1047.3	1048.7
55°	988.5	994.1
57.5°	925.4	926.8
60°	855.3	859.5
62.5°	780.9	780.9
65°	702.4	705.2
67.5°	621.1	628.1
70°	538.4	539.8
72.5°	457.1	457.1
75°	372.9	374.3
77.5°	293.0	293.0
80°	217.3	218.7
82.5°	150.0	152.8
85°	93.9	93.9
87.5°	43.5	39.3
90°	10.9	10.9
92.5°	43.9	35.2
95°	153.3	126.8
97.5°	367.3	317.1
100°	529.3	469.3
102.5°	688.6	637.2
105°	891.7	864.0
107.5°	1024.6	1031.4
110°	1075.4	1104.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1080.0	1124.1
115°	1051.3	1112.6
117.5°	990.6	1058.6
120°	941.6	1007.7
122.5°	894.0	959.1
125°	826.0	886.0
127.5°	764.9	815.5
130°	728.9	775.6
132.5°	696.2	738.0
135°	651.4	687.5
137.5°	615.5	645.0
140°	590.7	618.4
142.5°	570.4	594.1
145°	539.8	557.7
147.5°	516.2	531.1
150°	501.5	513.5
152.5°	488.8	497.9
155°	474.3	480.3
157.5°	462.8	467.0
160°	455.9	458.3
162.5°	451.4	453.7
165°	444.9	447.4
167.5°	440.2	441.3
170°	438.9	438.9
172.5°	435.5	434.6
175°	433.4	433.4
177.5°	431.6	430.6
180°	430.6	430.6



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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	4.87	5.82	5.78	6.75	7.95	18.03	18.98	18.94	19.91	21.11
	3H	5.58	6.44	6.50	7.38	8.60	19.87	20.73	20.79	21.67	22.89
	4H	5.89	6.69	6.82	7.64	8.87	20.52	21.33	21.45	22.28	23.51
	6H	6.14	6.89	7.09	7.84	9.08	20.95	21.70	21.90	22.65	23.89
	8H	6.21	6.92	7.16	7.89	9.14	21.07	21.78	22.02	22.75	24.00
	12H	6.23	6.91	7.19	7.87	9.14	21.14	21.82	22.10	22.78	24.05
4H	2H	12.09	12.89	13.03	13.84	15.07	18.32	19.13	19.26	20.07	21.31
	3H	13.66	14.34	14.61	15.32	16.56	20.37	21.05	21.32	22.02	23.27
	4H	13.76	14.38	14.72	15.35	16.62	21.13	21.75	22.09	22.73	24.00
	6H	13.78	14.31	14.75	15.31	16.58	21.68	22.21	22.65	23.21	24.47
	8H	13.76	14.26	14.73	15.25	16.53	21.84	22.34	22.81	23.33	24.61
	12H	13.72	14.17	14.71	15.18	16.47	21.93	22.39	22.93	23.39	24.68
8H	4H	15.21	15.71	16.19	16.70	17.98	21.20	21.70	22.18	22.69	23.98
	6H	15.46	15.87	16.46	16.90	18.18	21.83	22.25	22.83	23.28	24.56
	8H	15.48	15.84	16.49	16.86	18.16	22.05	22.42	23.06	23.43	24.74
	12H	15.45	15.77	16.46	16.78	18.13	22.20	22.52	23.21	23.53	24.88
12H	4H	15.36	15.81	16.35	16.81	18.10	21.16	21.61	22.16	22.62	23.91
	6H	15.72	16.08	16.72	17.10	18.40	21.82	22.18	22.83	23.20	24.50
	8H	15.79	16.11	16.80	17.12	18.47	22.05	22.37	23.06	23.38	24.73