

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: P936688

Luminaire Tested: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936688
REPORT IS A COMBINATION OF REPORTS P933477 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

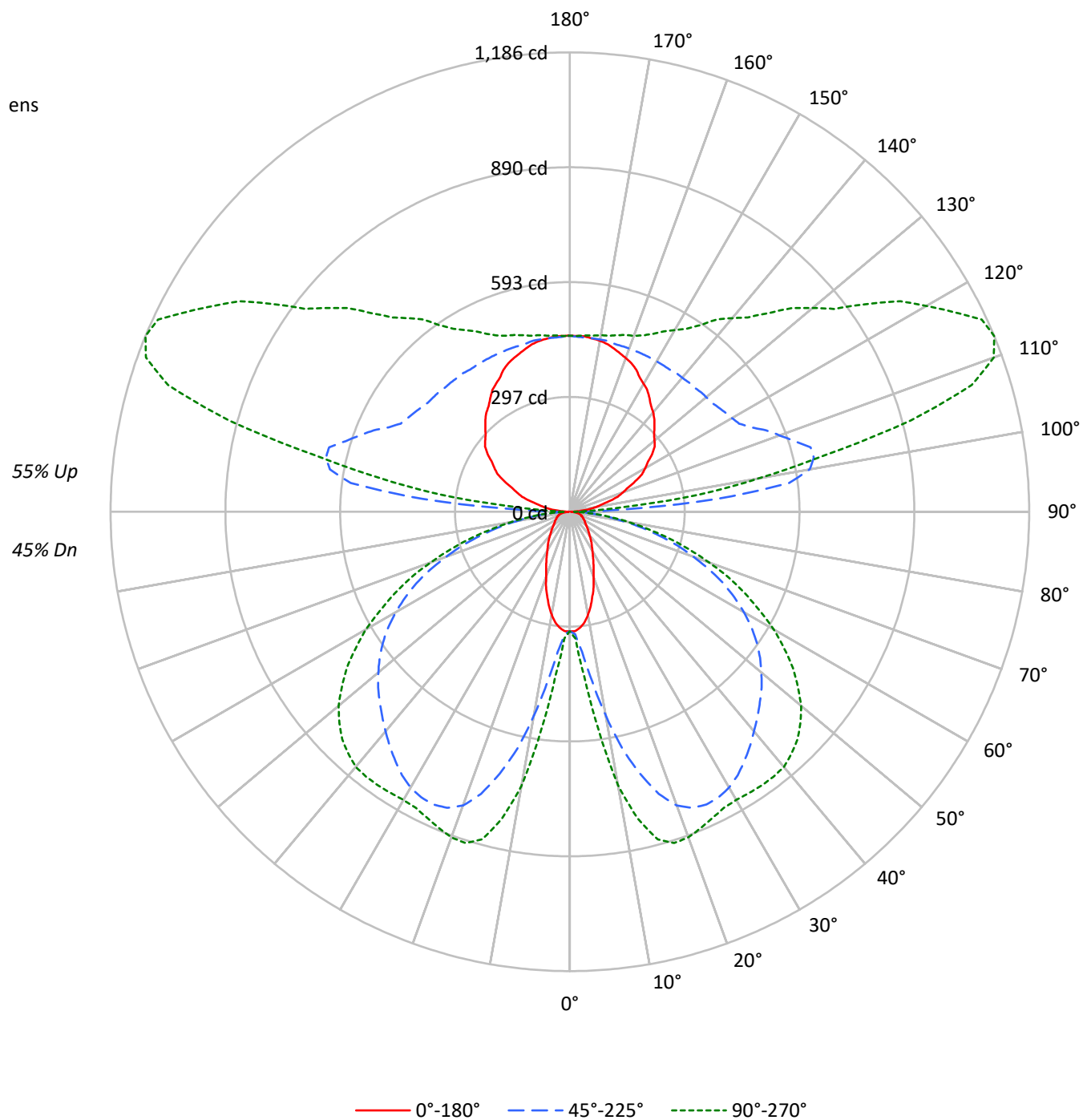
Lumens per Lamp: N/A
Luminaire Lumens: 5332.3 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 42.6
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: P936688

CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-3000K

Luminous Intensity Polar Plot



TEST NUMBER: P936688

CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-3000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	24
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1908	1908	1908
5°	1863	2204	2565
10°	1690	3213	4252
15°	1435	4197	5135
20°	1169	4862	5233
25°	975	5087	5126
30°	821	5118	5117
35°	726	5031	5249
40°	632	4920	5386
45°	572	4837	5407
50°	524	4762	5317
55°	501	4654	5082
60°	513	4448	4710
65°	533	4136	4197
70°	566	3604	3547
75°	626	2936	2768
80°	677	2033	1865
85°	596	1079	955

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5407 cd/sqm

TEST NUMBER: P936688

CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.9	0.7
10°-20°	176.8	3.3
20°-30°	309.3	5.8
30°-40°	398.2	7.5
40°-50°	444.7	8.3
50°-60°	426.0	8.0
60°-70°	337.6	6.3
70°-80°	198.5	3.7
80°-90°	56.9	1.1
90°-100°	221.4	4.2
100°-110°	582.1	10.9
110°-120°	603.6	11.3
120°-130°	484.1	9.1
130°-140°	379.9	7.1
140°-150°	291.6	5.5
150°-160°	210.0	3.9
160°-170°	128.5	2.4
170°-180°	43.4	0.8
0°-30°	526.0	9.9
0°-40°	924.2	17.3
0°-60°	1794.9	33.7
0°-90°	2387.8	44.8
90°-120°	1407.0	26.4
90°-150°	2562.6	48.1
90°-180°	2944.0	55.2
0°-180°	5332.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	308	308	308	308	308	
5°	300	322	363	411	426	28
15°	225	416	700	849	876	63
25°	144	471	834	871	872	66
35°	97	450	785	830	863	61
45°	66	359	694	795	831	51
55°	48	228	589	684	703	43
65°	38	121	437	492	499	37
75°	28	74	240	264	265	29
85°	10	23	60	66	66	11
90°	3	9	23	12	12	3
95°	29	115	381	197	134	32
105°	105	159	644	977	912	111
115°	186	226	516	1028	1174	184
125°	259	290	469	792	935	230
135°	309	340	454	640	725	239
145°	358	381	448	546	588	224
155°	405	416	448	492	507	186
165°	437	443	448	466	472	123
175°	454	454	452	457	457	43
180°	454	454	454	454	454	

TEST NUMBER: P936688

CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-3000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	308.4	308.4	308.4	308.4	308.4	308.4	308.4	308.4	308.4	308.4	308.4
2.5°	308.4	308.4	310.4	311.4	313.4	314.4	316.4	318.4	324.3	325.3	327.3
5°	300.5	304.5	317.4	322.3	336.2	355.1	362.9	375.9	402.7	410.6	415.6
7.5°	288.6	297.6	329.2	337.2	371.9	421.5	442.3	470.1	512.7	533.6	550.5
10°	269.8	288.6	345.1	364.0	420.5	495.9	534.6	573.3	637.7	666.4	677.4
12.5°	249.0	279.7	362.0	387.8	469.1	579.2	625.8	668.5	741.9	780.5	786.4
15°	225.1	266.8	377.8	415.6	520.7	648.6	700.2	752.8	821.2	848.9	855.9
17.5°	204.3	256.9	392.7	432.5	560.3	711.1	763.7	807.3	862.8	881.7	886.6
20°	178.6	241.0	402.7	454.3	602.1	756.8	807.3	841.1	878.7	890.7	892.6
22.5°	159.6	224.1	408.6	462.1	629.8	784.5	827.2	853.9	879.7	883.7	884.6
25°	143.9	205.3	407.6	471.1	653.6	801.3	834.1	853.9	868.8	870.7	870.7
27.5°	129.0	184.5	403.7	473.1	671.5	805.4	831.1	845.0	851.9	855.9	855.9
30°	116.1	164.7	393.7	469.1	679.4	801.3	822.2	829.1	836.0	842.0	845.0
32.5°	106.1	145.8	378.8	461.2	680.3	791.5	806.4	810.3	820.2	834.1	839.1
35°	97.2	127.0	362.0	450.3	674.4	775.6	785.4	789.5	809.3	830.1	837.0
37.5°	88.2	113.1	340.2	431.5	665.5	756.8	763.7	770.7	801.3	826.2	834.1
40°	79.4	101.2	314.4	410.6	651.6	733.9	739.9	750.7	791.5	820.2	828.1
42.5°	72.4	91.2	286.6	388.8	633.7	708.1	717.0	732.9	779.5	810.3	819.2
45°	66.5	81.3	256.9	359.0	610.9	681.3	694.2	716.0	765.6	795.4	803.3
47.5°	60.5	74.3	226.1	328.2	586.2	654.6	671.5	696.2	746.8	775.6	782.5
50°	55.5	67.4	195.4	295.5	559.4	625.8	645.6	671.5	723.0	749.8	758.7
52.5°	51.6	61.5	166.6	262.9	528.6	596.0	618.9	645.6	694.2	720.1	726.0
55°	47.6	56.5	141.8	228.1	496.8	564.3	589.1	614.9	662.5	684.3	688.3
57.5°	45.7	52.6	121.0	195.4	463.1	528.6	556.4	580.2	624.8	641.7	645.6
60°	42.7	49.6	105.1	167.6	426.4	494.9	518.7	542.5	580.2	594.1	597.0
62.5°	39.6	47.6	93.3	140.8	388.8	455.2	479.0	500.9	532.5	542.5	546.4
65°	37.7	45.7	84.3	121.0	350.1	413.5	437.4	456.2	482.0	491.9	493.9
67.5°	35.7	43.7	77.4	104.1	311.4	371.9	389.8	407.6	427.4	437.4	438.4
70°	32.7	41.6	71.4	92.2	271.7	324.3	339.2	358.0	373.9	378.8	381.9
72.5°	30.8	38.7	67.4	83.3	231.1	278.6	292.5	303.5	317.4	322.3	322.3
75°	27.8	34.7	63.5	74.3	189.4	228.1	240.0	250.9	261.8	263.9	260.8
77.5°	24.7	30.8	54.5	62.5	147.8	180.5	190.4	196.4	205.3	207.3	208.2
80°	20.8	26.8	42.7	48.6	107.1	132.9	139.8	144.8	152.7	152.7	154.7
82.5°	15.9	20.8	30.8	34.7	72.4	91.2	97.2	100.2	105.1	105.1	105.1
85°	10.0	12.9	19.8	22.8	43.7	55.5	59.6	60.5	64.5	65.5	65.5
87.5°	4.9	6.9	12.9	13.9	22.8	28.8	28.8	30.8	30.8	29.8	28.8
90°	3.1	5.5	8.0	8.6	13.4	19.9	23.2	20.6	15.4	11.5	11.5
92.5°	12.2	32.9	53.6	58.9	82.7	114.6	130.4	114.3	82.0	57.9	55.6
95°	29.3	67.1	105.1	114.6	203.5	322.1	381.4	340.4	258.2	196.6	189.6
97.5°	50.6	84.1	117.5	125.9	274.2	471.9	570.7	544.8	492.8	453.9	440.5
100°	67.0	97.4	127.8	135.4	299.8	519.2	628.9	630.7	634.6	637.4	621.7
102.5°	81.0	109.4	137.7	144.8	311.7	534.1	645.3	678.4	744.5	794.1	780.6
105°	104.9	128.9	152.8	158.8	320.4	535.8	643.5	717.6	865.8	977.0	969.7
107.5°	129.3	151.6	173.9	179.6	322.0	511.9	606.9	710.2	917.0	1072.1	1073.9
110°	145.7	165.8	186.1	191.1	319.6	490.8	576.4	692.0	923.2	1096.5	1104.1

TEST NUMBER: P936688

CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-3000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	161.9	181.1	200.4	205.2	319.7	472.4	548.7	667.0	903.6	1081.0	1092.6
115°	186.3	204.0	221.8	226.2	322.6	451.2	515.5	629.5	857.3	1028.2	1044.4
117.5°	210.3	226.5	242.6	246.6	328.6	438.0	492.6	595.4	801.1	955.3	973.3
120°	224.3	239.5	254.7	258.5	333.5	433.4	483.4	577.4	765.3	906.2	923.7
122.5°	238.1	253.4	268.7	272.5	340.5	431.1	476.4	561.0	730.3	857.2	874.4
125°	259.1	273.0	287.0	290.5	349.9	429.2	468.8	540.7	684.5	792.3	808.0
127.5°	276.2	290.3	304.4	307.9	359.4	428.1	462.4	524.2	647.5	740.1	753.4
130°	285.3	300.5	315.7	319.5	366.3	428.7	460.0	514.9	624.8	707.3	719.6
132.5°	294.8	310.0	325.2	328.9	371.9	429.2	457.9	507.1	605.4	679.2	690.2
135°	308.8	322.6	336.4	339.9	378.0	428.8	454.3	495.5	577.8	639.5	649.1
137.5°	323.1	336.8	350.4	353.9	387.1	431.4	453.6	488.4	558.0	610.2	618.0
140°	335.0	347.7	360.2	363.3	392.7	431.9	451.5	481.6	541.7	586.8	594.1
142.5°	344.1	355.7	367.4	370.3	397.4	433.4	451.5	477.9	530.7	570.3	576.6
145°	358.2	368.4	378.5	381.1	403.6	433.4	448.4	470.0	513.2	545.7	550.4
147.5°	372.2	382.1	392.0	394.5	412.4	436.4	448.4	465.4	499.4	524.9	528.9
150°	381.4	390.4	399.2	401.5	417.2	438.0	448.4	462.8	491.5	513.0	516.2
152.5°	390.8	397.6	404.4	406.0	420.1	439.0	448.4	460.7	485.2	503.6	505.9
155°	404.9	409.9	414.8	416.1	426.8	441.2	448.4	458.2	477.7	492.3	493.9
157.5°	415.2	420.0	425.0	426.1	433.5	443.5	448.4	456.0	471.2	482.5	483.6
160°	422.2	426.0	429.7	430.7	436.6	444.5	448.4	454.9	468.0	477.7	478.3
162.5°	429.2	432.1	434.9	435.6	439.9	445.6	448.4	454.0	464.9	473.1	473.7
165°	436.8	439.4	441.9	442.6	444.6	447.2	448.4	452.4	460.2	466.1	466.8
167.5°	443.8	445.0	446.3	446.6	448.2	450.4	451.5	454.1	459.2	463.0	463.3
170°	448.4	449.6	450.9	451.2	451.3	451.4	451.5	454.1	459.2	463.0	463.0
172.5°	450.9	451.2	451.4	451.5	451.5	451.5	451.5	453.5	457.5	460.6	460.4
175°	454.3	454.3	454.3	454.3	453.4	452.1	451.5	452.8	455.3	457.2	457.2
177.5°	454.3	454.3	454.3	454.3	453.6	452.6	452.1	453.1	455.1	456.6	456.3
180°	454.3	454.3	454.3	454.3	454.3	454.3	454.3	454.3	454.3	454.3	454.3

TEST NUMBER: P936688

CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-3000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	308.4	308.4
2.5°	329.2	327.3
5°	423.5	425.5
7.5°	570.3	569.3
10°	709.1	718.0
12.5°	810.3	812.3
15°	871.8	875.8
17.5°	895.6	896.6
20°	896.6	894.6
22.5°	885.6	883.7
25°	872.8	871.8
27.5°	860.9	861.9
30°	855.9	858.9
32.5°	855.9	860.9
35°	857.9	862.8
37.5°	856.9	862.8
40°	852.9	859.9
42.5°	842.0	847.0
45°	825.2	831.1
47.5°	803.3	807.3
50°	775.6	779.5
52.5°	740.9	741.9
55°	699.2	703.2
57.5°	654.6	655.6
60°	605.0	608.0
62.5°	552.5	552.5
65°	496.8	498.8
67.5°	439.4	444.3
70°	380.9	381.9
72.5°	323.3	323.3
75°	263.9	264.8
77.5°	207.3	207.3
80°	153.7	154.7
82.5°	106.1	108.1
85°	66.5	66.5
87.5°	30.8	27.8
90°	11.5	11.5
92.5°	46.3	37.2
95°	161.7	133.8
97.5°	387.5	334.5
100°	558.4	495.1
102.5°	726.4	672.2
105°	940.6	911.5
107.5°	1080.9	1088.0
110°	1134.4	1164.8

TEST NUMBER: P936688

CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-3000K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1139.2	1185.8
115°	1109.0	1173.6
117.5°	1045.0	1116.6
120°	993.3	1063.0
122.5°	943.1	1011.7
125°	871.3	934.6
127.5°	806.8	860.3
130°	768.9	818.2
132.5°	734.4	778.5
135°	687.1	725.2
137.5°	649.3	680.4
140°	623.2	652.3
142.5°	601.7	626.7
145°	569.4	588.3
147.5°	544.6	560.2
150°	529.0	541.7
152.5°	515.6	525.2
155°	500.3	506.6
157.5°	488.2	492.6
160°	480.9	483.4
162.5°	476.1	478.6
165°	469.3	471.9
167.5°	464.4	465.5
170°	463.0	463.0
172.5°	459.4	458.5
175°	457.2	457.2
177.5°	455.3	454.3
180°	454.3	454.3

TEST NUMBER: P936688

CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-3000K

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	2.75	3.60	3.74	4.61	5.95	15.91	16.76	16.91	17.77	19.11
	3H	3.45	4.22	4.46	5.24	6.60	17.75	18.51	18.75	19.53	20.89
	4H	3.75	4.48	4.77	5.50	6.87	18.39	19.11	19.41	20.14	21.50
	6H	4.00	4.67	5.03	5.70	7.08	18.82	19.48	19.84	20.51	21.89
	8H	4.07	4.71	5.10	5.75	7.13	18.93	19.57	19.97	20.61	21.99
	12H	4.09	4.69	5.13	5.73	7.13	19.00	19.60	20.04	20.64	22.04
4H	2H	9.96	10.68	10.98	11.70	13.07	16.19	16.91	17.21	17.93	19.30
	3H	11.52	12.13	12.55	13.18	14.56	18.23	18.83	19.26	19.88	21.27
	4H	11.62	12.17	12.66	13.21	14.62	18.99	19.55	20.03	20.59	21.99
	6H	11.63	12.11	12.68	13.17	14.57	19.52	20.00	20.57	21.07	22.47
	8H	11.60	12.05	12.65	13.11	14.53	19.68	20.13	20.73	21.19	22.61
	12H	11.56	11.96	12.63	13.04	14.46	19.77	20.18	20.84	21.25	22.67
8H	4H	13.06	13.50	14.11	14.56	15.98	19.05	19.50	20.10	20.56	21.97
	6H	13.30	13.67	14.37	14.77	16.18	19.67	20.05	20.75	21.14	22.56
	8H	13.32	13.64	14.40	14.73	16.16	19.89	20.22	20.97	21.30	22.73
	12H	13.28	13.57	14.37	14.65	16.12	20.03	20.32	21.12	21.40	22.87
12H	4H	13.20	13.60	14.27	14.68	16.10	19.00	19.41	20.07	20.48	21.90
	6H	13.56	13.88	14.64	14.97	16.40	19.66	19.98	20.74	21.07	22.50
	8H	13.62	13.91	14.71	14.99	16.46	19.88	20.17	20.97	21.25	22.72