

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: P936675

Luminaire Tested: SQ4-FB-050U-050D-940-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936675
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-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

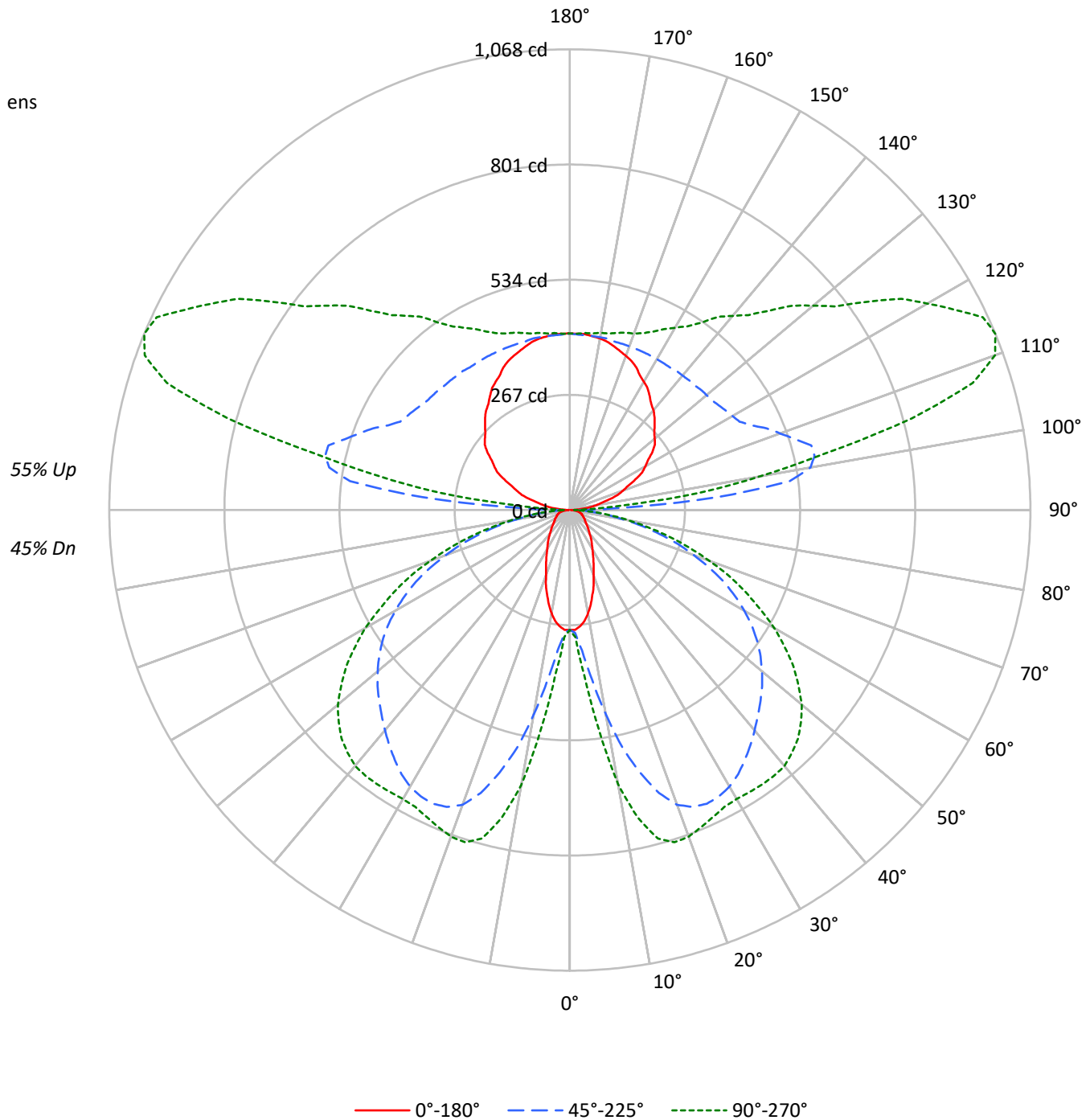
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4802.3 lumens
Efficiency: N/A
Efficacy: 112.7 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 (A_{in}): 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	45	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42	37	37	37	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	24	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	18	18	18	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1719	1719	1719
5°	1679	1986	2310
10°	1522	2894	3829
15°	1292	3780	4624
20°	1052	4379	4713
25°	878	4581	4617
30°	739	4609	4608
35°	654	4531	4727
40°	569	4431	4850
45°	515	4356	4869
50°	472	4290	4789
55°	452	4192	4577
60°	463	4007	4241
65°	479	3724	3780
70°	510	3246	3194
75°	563	2643	2493
80°	609	1831	1679
85°	537	970	860

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4869 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.9	0.7
10°-20°	159.3	3.3
20°-30°	278.6	5.8
30°-40°	358.6	7.5
40°-50°	400.5	8.3
50°-60°	383.6	8.0
60°-70°	304.0	6.3
70°-80°	178.8	3.7
80°-90°	51.2	1.1
90°-100°	199.4	4.2
100°-110°	524.2	10.9
110°-120°	543.6	11.3
120°-130°	436.0	9.1
130°-140°	342.1	7.1
140°-150°	262.6	5.5
150°-160°	189.1	3.9
160°-170°	115.7	2.4
170°-180°	39.1	0.8
0°-30°	473.8	9.9
0°-40°	832.4	17.3
0°-60°	1616.5	33.7
0°-90°	2150.5	44.8
90°-120°	1267.2	26.4
90°-150°	2307.9	48.1
90°-180°	2652.0	55.2
0°-180°	4802.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	278	278	278	278	278	
5°	271	290	327	370	383	25
15°	203	374	631	765	789	56
25°	130	424	751	784	785	60
35°	88	406	707	748	777	55
45°	60	323	625	716	748	46
55°	43	205	531	616	633	39
65°	34	109	394	443	449	34
75°	25	67	216	238	238	26
85°	9	20	54	59	60	9
90°	3	8	21	10	10	3
95°	26	103	344	177	120	29
105°	94	143	580	880	821	100
115°	168	204	464	926	1057	166
125°	233	262	422	714	842	207
135°	278	306	409	576	653	215
145°	323	343	404	491	530	202
155°	365	375	404	443	456	168
165°	393	399	404	420	425	111
175°	409	409	407	412	412	39
180°	409	409	409	409	409	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8
2.5°	277.8	277.8	279.5	280.4	282.3	283.2	285.0	286.7	292.1	293.0	294.7
5°	270.7	274.2	285.8	290.3	302.8	319.8	326.9	338.5	362.7	369.8	374.3
7.5°	259.9	268.0	296.5	303.7	335.0	379.6	398.4	423.4	461.8	480.6	495.8
10°	243.0	259.9	310.8	327.8	378.7	446.6	481.5	516.3	574.4	600.2	610.1
12.5°	224.2	251.9	326.0	349.3	422.5	521.6	563.6	602.1	668.1	702.9	708.3
15°	202.7	240.3	340.3	374.3	469.0	584.1	630.6	678.0	739.6	764.6	770.9
17.5°	184.0	231.3	353.7	389.5	504.7	640.4	687.8	727.1	777.1	794.0	798.5
20°	160.8	217.0	362.7	409.1	542.2	681.5	727.1	757.5	791.4	802.1	803.9
22.5°	143.8	201.8	368.0	416.2	567.2	706.5	744.9	769.0	792.3	795.8	796.7
25°	129.6	184.9	367.1	424.3	588.7	721.7	751.2	769.0	782.4	784.2	784.2
27.5°	116.2	166.1	363.5	426.1	604.7	725.3	748.5	761.0	767.2	770.9	770.9
30°	104.5	148.3	354.6	422.5	611.8	721.7	740.5	746.7	752.9	758.4	761.0
32.5°	95.5	131.3	341.2	415.3	612.7	712.8	726.2	729.8	738.6	751.2	755.7
35°	87.6	114.4	326.0	405.5	607.4	698.5	707.4	711.0	728.9	747.6	753.8
37.5°	79.5	101.9	306.4	388.6	599.3	681.5	687.8	694.1	721.7	744.1	751.2
40°	71.5	91.1	283.2	369.8	586.9	660.9	666.4	676.1	712.8	738.6	745.8
42.5°	65.2	82.1	258.1	350.1	570.7	637.8	645.8	660.1	702.1	729.8	737.8
45°	59.9	73.3	231.3	323.3	550.2	613.6	625.2	644.9	689.5	716.3	723.5
47.5°	54.5	67.0	203.6	295.6	527.9	589.5	604.7	627.0	672.6	698.5	704.7
50°	50.0	60.7	176.0	266.1	503.8	563.6	581.5	604.7	651.2	675.2	683.3
52.5°	46.4	55.4	150.1	236.7	476.1	536.8	557.4	581.5	625.2	648.5	653.8
55°	42.9	50.9	127.7	205.4	447.5	508.2	530.6	553.8	596.6	616.3	619.9
57.5°	41.1	47.3	109.0	176.0	417.1	476.1	501.1	522.5	562.7	577.9	581.5
60°	38.5	44.7	94.7	151.0	384.1	445.7	467.2	488.6	522.5	535.0	537.7
62.5°	35.7	42.9	84.0	126.8	350.1	410.0	431.4	451.1	479.6	488.6	492.1
65°	33.9	41.1	75.9	109.0	315.3	372.4	393.9	410.9	434.1	443.0	444.8
67.5°	32.1	39.3	69.7	93.8	280.4	335.0	351.0	367.1	384.9	393.9	394.8
70°	29.5	37.5	64.3	83.0	244.7	292.1	305.5	322.4	336.7	341.2	343.9
72.5°	27.7	34.8	60.7	75.0	208.1	250.9	263.5	273.3	285.8	290.3	290.3
75°	25.0	31.3	57.2	67.0	170.6	205.4	216.1	226.0	235.8	237.6	234.9
77.5°	22.3	27.7	49.1	56.3	133.1	162.6	171.5	176.9	184.9	186.7	187.5
80°	18.7	24.2	38.5	43.8	96.4	119.7	125.9	130.4	137.6	137.6	139.3
82.5°	14.3	18.7	27.7	31.3	65.2	82.1	87.6	90.2	94.7	94.7	94.7
85°	9.0	11.6	17.8	20.5	39.3	50.0	53.6	54.5	58.1	59.0	59.0
87.5°	4.4	6.2	11.6	12.5	20.5	25.9	25.9	27.7	27.7	26.8	25.9
90°	2.8	5.0	7.2	7.7	12.1	17.9	20.9	18.6	13.9	10.4	10.4
92.5°	11.0	29.7	48.3	53.0	74.5	103.2	117.5	102.9	73.9	52.1	50.1
95°	26.4	60.5	94.7	103.2	183.3	290.1	343.5	306.5	232.6	177.1	170.8
97.5°	45.6	75.7	105.8	113.4	247.0	425.0	514.0	490.6	443.8	408.7	396.8
100°	60.4	87.7	115.1	121.9	270.0	467.6	566.4	568.1	571.5	574.1	559.9
102.5°	73.0	98.6	124.1	130.4	280.7	481.0	581.2	610.9	670.5	715.2	703.0
105°	94.5	116.1	137.6	143.1	288.5	482.5	579.5	646.3	779.8	879.9	873.3
107.5°	116.4	136.6	156.6	161.7	290.0	461.0	546.6	639.6	825.8	965.5	967.1
110°	131.2	149.4	167.6	172.1	287.8	442.0	519.1	623.2	831.4	987.5	994.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	145.8	163.1	180.4	184.8	287.9	425.4	494.2	600.7	813.8	973.5	984.0
115°	167.7	183.7	199.7	203.7	290.6	406.3	464.2	566.9	772.1	926.0	940.6
117.5°	189.4	204.0	218.4	222.1	296.0	394.4	443.6	536.3	721.5	860.4	876.5
120°	202.0	215.7	229.4	232.8	300.3	390.4	435.4	520.0	689.3	816.2	831.9
122.5°	214.5	228.2	242.0	245.4	306.6	388.2	429.1	505.3	657.7	772.0	787.5
125°	233.4	245.9	258.5	261.6	315.2	386.5	422.2	487.0	616.4	713.5	727.7
127.5°	248.7	261.4	274.1	277.3	323.7	385.6	416.5	472.1	583.1	666.5	678.5
130°	257.0	270.7	284.3	287.7	329.9	386.1	414.3	463.7	562.7	637.0	648.1
132.5°	265.5	279.2	292.9	296.2	335.0	386.5	412.4	456.7	545.2	611.7	621.6
135°	278.1	290.6	303.0	306.1	340.5	386.2	409.1	446.2	520.4	576.0	584.6
137.5°	291.0	303.3	315.6	318.7	348.6	388.5	408.5	439.8	502.5	549.6	556.6
140°	301.7	313.1	324.4	327.2	353.7	388.9	406.6	433.7	487.9	528.4	535.0
142.5°	309.9	320.4	330.9	333.5	357.9	390.4	406.6	430.4	477.9	513.6	519.3
145°	322.6	331.8	340.9	343.2	363.5	390.4	403.9	423.3	462.2	491.4	495.7
147.5°	335.2	344.1	353.1	355.3	371.5	393.0	403.9	419.1	449.8	472.8	476.3
150°	343.5	351.6	359.6	361.6	375.7	394.4	403.9	416.8	442.7	462.0	464.9
152.5°	351.9	358.0	364.2	365.7	378.4	395.3	403.9	414.9	437.0	453.5	455.6
155°	364.6	369.1	373.6	374.7	384.4	397.4	403.9	412.7	430.2	443.4	444.8
157.5°	373.9	378.3	382.7	383.8	390.5	399.4	403.9	410.7	424.4	434.6	435.6
160°	380.2	383.6	387.0	387.9	393.2	400.3	403.9	409.7	421.4	430.2	430.8
162.5°	386.5	389.1	391.7	392.3	396.1	401.3	403.9	408.8	418.7	426.1	426.6
165°	393.4	395.7	398.0	398.6	400.4	402.7	403.9	407.4	414.4	419.8	420.4
167.5°	399.7	400.8	401.9	402.2	403.7	405.6	406.6	408.9	413.5	417.0	417.3
170°	403.9	404.9	406.1	406.3	406.4	406.5	406.6	408.9	413.5	417.0	417.0
172.5°	406.1	406.3	406.5	406.6	406.6	406.6	406.6	408.4	412.0	414.8	414.6
175°	409.1	409.1	409.1	409.1	408.3	407.1	406.6	407.8	410.1	411.8	411.8
177.5°	409.1	409.1	409.1	409.1	408.5	407.6	407.1	408.0	409.9	411.2	411.0
180°	409.1	409.1	409.1	409.1	409.1	409.1	409.1	409.1	409.1	409.1	409.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	277.8	277.8
2.5°	296.5	294.7
5°	381.4	383.2
7.5°	513.6	512.7
10°	638.6	646.6
12.5°	729.8	731.5
15°	785.2	788.7
17.5°	806.6	807.5
20°	807.5	805.7
22.5°	797.6	795.8
25°	786.1	785.2
27.5°	775.3	776.2
30°	770.9	773.5
32.5°	770.9	775.3
35°	772.6	777.1
37.5°	771.8	777.1
40°	768.1	774.4
42.5°	758.4	762.8
45°	743.2	748.5
47.5°	723.5	727.1
50°	698.5	702.1
52.5°	667.2	668.1
55°	629.7	633.3
57.5°	589.5	590.4
60°	544.9	547.5
62.5°	497.5	497.5
65°	447.5	449.2
67.5°	395.7	400.1
70°	343.0	343.9
72.5°	291.2	291.2
75°	237.6	238.5
77.5°	186.7	186.7
80°	138.4	139.3
82.5°	95.5	97.3
85°	59.9	59.9
87.5°	27.7	25.0
90°	10.4	10.4
92.5°	41.7	33.5
95°	145.6	120.5
97.5°	349.0	301.2
100°	502.9	445.9
102.5°	654.2	605.3
105°	847.2	820.9
107.5°	973.4	979.8
110°	1021.6	1049.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1026.0	1067.9
115°	998.7	1057.0
117.5°	941.1	1005.7
120°	894.6	957.4
122.5°	849.4	911.2
125°	784.7	841.7
127.5°	726.7	774.8
130°	692.5	736.9
132.5°	661.4	701.2
135°	618.8	653.1
137.5°	584.7	612.8
140°	561.2	587.5
142.5°	541.9	564.4
145°	512.8	529.9
147.5°	490.4	504.6
150°	476.4	487.9
152.5°	464.3	473.0
155°	450.6	456.3
157.5°	439.6	443.6
160°	433.1	435.4
162.5°	428.8	431.0
165°	422.7	425.0
167.5°	418.2	419.2
170°	417.0	417.0
172.5°	413.7	412.9
175°	411.8	411.8
177.5°	410.1	409.1
180°	409.1	409.1



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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	2.39	3.24	3.38	4.25	5.59	15.55	16.40	16.54	17.41	18.75
	3H	3.09	3.85	4.09	4.87	6.23	17.38	18.15	18.39	19.17	20.53
	4H	3.39	4.11	4.41	5.14	6.50	18.03	18.75	19.04	19.77	21.14
	6H	3.64	4.31	4.67	5.33	6.71	18.45	19.12	19.48	20.14	21.53
	8H	3.71	4.34	4.74	5.39	6.76	18.57	19.21	19.60	20.25	21.63
	12H	3.72	4.33	4.76	5.37	6.77	18.63	19.24	19.67	20.28	21.68
4H	2H	9.59	10.32	10.61	11.34	12.71	15.82	16.55	16.85	17.57	18.94
	3H	11.16	11.76	12.19	12.81	14.20	17.86	18.47	18.90	19.52	20.90
	4H	11.25	11.81	12.29	12.85	14.25	18.63	19.18	19.67	20.22	21.63
	6H	11.26	11.74	12.31	12.81	14.21	19.16	19.64	20.21	20.71	22.11
	8H	11.24	11.69	12.29	12.75	14.16	19.32	19.77	20.37	20.83	22.24
	12H	11.20	11.60	12.26	12.67	14.10	19.41	19.82	20.48	20.89	22.31
8H	4H	12.69	13.14	13.74	14.20	15.61	18.69	19.13	19.74	20.19	21.61
	6H	12.93	13.31	14.01	14.40	15.82	19.31	19.68	20.38	20.78	22.19
	8H	12.95	13.28	14.03	14.36	15.79	19.53	19.85	20.61	20.94	22.37
	12H	12.92	13.21	14.01	14.29	15.76	19.67	19.96	20.75	21.03	22.51
12H	4H	12.83	13.24	13.90	14.31	15.73	18.64	19.04	19.71	20.12	21.54
	6H	13.19	13.52	14.27	14.60	16.03	19.29	19.62	20.38	20.70	22.14
	8H	13.26	13.55	14.35	14.63	16.10	19.52	19.81	20.61	20.89	22.36