

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: P937874

Luminaire Tested: SQ4-FB-125U-050D-940-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937874
REPORT IS A COMBINATION OF REPORTS P933597 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

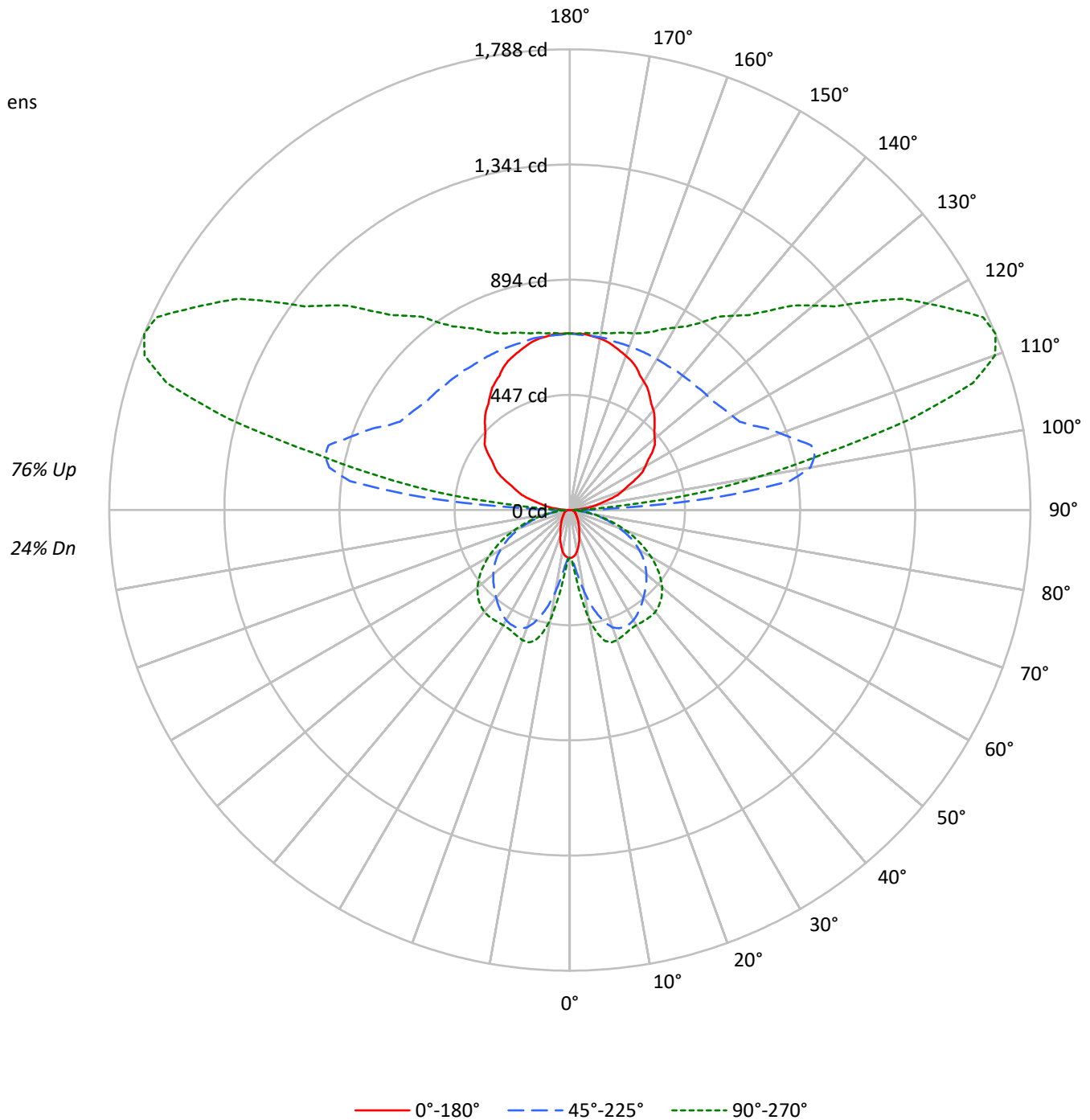
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5876.8 lumens
Efficiency: N/A
Efficacy: 123.5 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: Semi-Indirect

Input Watts (W): 47.6
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		0
RCR																			
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33		24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27		20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22		16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	22	20	19		13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16		11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13		10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12		8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10		7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9		6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8		6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7		5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1719	1719	1719
5°	1678	1985	2311
10°	1521	2892	3831
15°	1290	3776	4627
20°	1050	4372	4714
25°	874	4572	4619
30°	736	4597	4610
35°	649	4517	4728
40°	566	4414	4852
45°	511	4338	4871
50°	468	4268	4790
55°	447	4169	4578
60°	455	3980	4242
65°	471	3696	3782
70°	498	3216	3196
75°	548	2615	2493
80°	585	1808	1681
85°	489	955	860

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4871 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.0	0.4
10°-20°	106.2	1.8
20°-30°	185.8	3.2
30°-40°	239.2	4.1
40°-50°	267.1	4.5
50°-60°	255.9	4.4
60°-70°	202.8	3.5
70°-80°	119.2	2.0
80°-90°	35.7	0.6
90°-100°	333.9	5.7
100°-110°	877.9	14.9
110°-120°	910.3	15.5
120°-130°	730.2	12.4
130°-140°	572.9	9.7
140°-150°	439.7	7.5
150°-160°	316.7	5.4
160°-170°	193.8	3.3
170°-180°	65.5	1.1
0°-30°	316.0	5.4
0°-40°	555.1	9.4
0°-60°	1078.1	18.3
0°-90°	1435.8	24.4
90°-120°	2122.2	36.1
90°-150°	3865.0	65.8
90°-180°	4441.0	75.6
0°-180°	5876.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	185	185	185	185	185	
5°	180	194	218	247	256	17
15°	135	250	421	510	526	38
25°	86	283	501	523	524	40
35°	58	270	472	499	518	36
45°	40	216	417	478	499	31
55°	29	137	354	411	422	26
65°	23	73	263	295	300	22
75°	17	45	144	158	159	17
85°	6	14	36	39	40	6
90°	5	13	35	18	18	4
95°	44	173	575	297	202	49
105°	158	240	971	1474	1375	168
115°	281	341	777	1551	1770	277
125°	391	438	707	1195	1410	347
135°	466	513	685	965	1094	360
145°	540	575	676	823	887	338
155°	611	628	676	742	764	281
165°	659	668	676	703	712	186
175°	685	685	681	690	690	65
180°	685	685	685	685	685	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2
2.5°	185.2	185.2	186.5	187.0	188.3	188.9	190.0	191.2	194.8	195.4	196.6
5°	180.5	182.9	190.7	193.6	201.9	213.3	218.0	225.8	241.9	246.6	249.6
7.5°	173.3	178.8	197.8	202.6	223.4	253.2	265.7	282.4	308.0	320.5	330.6
10°	162.1	173.3	207.3	218.6	252.5	297.8	321.1	344.4	383.1	400.3	406.9
12.5°	149.5	168.0	217.5	232.9	281.8	347.9	375.9	401.6	445.6	468.9	472.4
15°	135.2	160.3	227.0	249.6	312.8	389.6	420.6	452.2	493.3	509.9	514.1
17.5°	122.7	154.3	235.9	259.7	336.6	427.1	458.7	484.9	518.2	529.6	532.5
20°	107.3	144.7	241.9	272.9	361.6	454.6	484.9	505.2	527.8	534.9	536.2
22.5°	95.9	134.6	245.4	277.6	378.3	471.2	496.8	512.9	528.4	530.8	531.4
25°	86.4	123.3	244.8	283.0	392.6	481.3	501.0	512.9	521.9	523.0	523.0
27.5°	77.4	110.8	242.4	284.2	403.3	483.7	499.2	507.6	511.8	514.1	514.1
30°	69.7	98.9	236.5	281.8	408.0	481.3	493.8	498.0	502.2	505.8	507.6
32.5°	63.8	87.6	227.6	277.0	408.7	475.3	484.3	486.7	492.7	501.0	503.9
35°	58.3	76.3	217.5	270.5	405.1	465.8	471.8	474.2	486.1	498.6	502.8
37.5°	53.0	67.9	204.3	259.1	399.7	454.6	458.7	462.9	481.3	496.2	501.0
40°	47.7	60.7	188.9	246.6	391.4	440.8	444.4	450.9	475.3	492.7	497.5
42.5°	43.5	54.8	172.2	233.5	380.7	425.4	430.7	440.3	468.2	486.7	492.0
45°	39.9	48.8	154.3	215.6	366.9	409.3	417.0	430.1	459.9	477.7	482.5
47.5°	36.3	44.7	135.9	197.2	352.1	393.2	403.3	418.2	448.6	465.8	470.0
50°	33.4	40.5	117.4	177.5	336.0	375.9	387.8	403.3	434.3	450.4	455.7
52.5°	31.0	36.9	100.1	157.9	317.5	358.0	371.7	387.8	417.0	432.5	436.1
55°	28.6	33.9	85.2	137.0	298.5	338.9	353.9	369.3	397.9	411.1	413.5
57.5°	27.4	31.6	72.6	117.4	278.2	317.5	334.2	348.5	375.3	385.4	387.8
60°	25.6	29.7	63.1	100.7	256.2	297.3	311.6	325.9	348.5	356.8	358.7
62.5°	23.8	28.6	56.0	84.6	233.5	273.4	287.7	300.9	319.9	325.9	328.2
65°	22.6	27.4	50.6	72.6	210.3	248.4	262.7	274.0	289.5	295.4	296.7
67.5°	21.5	26.2	46.4	62.5	187.0	223.4	234.1	244.8	256.7	262.7	263.3
70°	19.6	25.0	42.9	55.4	163.2	194.8	203.7	215.1	224.6	227.6	229.4
72.5°	18.5	23.3	40.5	50.1	138.8	167.4	175.7	182.3	190.7	193.6	193.6
75°	16.7	20.9	38.1	44.7	113.8	137.0	144.1	150.7	157.3	158.4	156.6
77.5°	14.9	18.5	32.8	37.6	88.8	108.4	114.4	117.9	123.3	124.5	125.1
80°	12.5	16.1	25.6	29.2	64.4	79.8	84.0	86.9	91.7	91.7	93.0
82.5°	9.5	12.5	18.5	20.9	43.5	54.8	58.3	60.2	63.1	63.1	63.1
85°	5.9	7.7	11.9	13.7	26.2	33.4	35.8	36.3	38.7	39.3	39.3
87.5°	3.0	4.2	7.7	8.3	13.7	17.3	17.3	18.5	18.5	17.8	17.3
90°	4.6	8.3	12.0	12.9	20.2	30.0	34.9	31.0	23.3	17.5	17.5
92.5°	18.4	49.6	80.9	88.7	124.8	172.8	196.8	172.4	123.9	87.4	83.9
95°	44.1	101.3	158.6	172.9	307.0	485.7	575.2	513.3	389.5	296.6	286.0
97.5°	76.3	126.7	177.2	189.9	413.5	711.6	860.6	821.5	743.3	684.6	664.6
100°	101.1	147.0	192.7	204.2	452.3	783.0	948.5	951.3	957.1	961.3	937.5
102.5°	122.3	165.0	207.7	218.4	470.0	805.6	973.3	1023.2	1123.0	1197.7	1177.3
105°	158.2	194.4	230.5	239.6	483.2	808.2	970.6	1082.4	1305.9	1473.5	1462.5
107.5°	194.9	228.7	262.4	270.8	485.7	772.2	915.4	1071.4	1383.1	1617.0	1619.6
110°	219.8	250.2	280.6	288.2	482.0	740.3	869.4	1043.8	1392.4	1653.8	1665.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	244.1	273.1	302.1	309.4	482.1	712.4	827.6	1006.0	1362.8	1630.4	1648.0
115°	280.9	307.7	334.5	341.2	486.6	680.5	777.4	949.3	1293.0	1550.8	1575.1
117.5°	317.3	341.6	365.9	372.0	495.7	660.6	743.0	898.0	1208.2	1440.9	1467.9
120°	338.4	361.3	384.2	389.9	503.1	653.8	729.2	871.0	1154.3	1366.9	1393.2
122.5°	359.1	382.2	405.3	411.1	513.6	650.3	718.7	846.3	1101.5	1292.8	1318.8
125°	390.8	411.9	432.9	438.1	527.8	647.4	707.1	815.5	1032.3	1194.9	1218.8
127.5°	416.6	437.8	459.0	464.3	542.0	645.7	697.4	790.5	976.7	1116.3	1136.5
130°	430.3	453.2	476.1	481.8	552.5	646.7	693.8	776.6	942.3	1066.7	1085.2
132.5°	444.6	467.5	490.4	496.1	560.9	647.4	690.6	764.7	913.1	1024.4	1041.0
135°	465.8	486.6	507.4	512.6	570.1	646.7	685.1	747.3	871.5	964.6	979.0
137.5°	487.3	507.9	528.6	533.8	583.9	650.7	684.1	736.6	841.6	920.4	932.1
140°	505.3	524.3	543.3	548.1	592.4	651.4	680.9	726.3	817.0	885.1	896.1
142.5°	519.0	536.6	554.2	558.6	599.4	653.7	680.9	720.8	800.4	860.2	869.6
145°	540.3	555.5	570.9	574.7	608.5	653.7	676.3	708.9	774.1	823.0	830.2
147.5°	561.4	576.3	591.2	595.0	622.0	658.2	676.3	702.0	753.3	791.7	797.7
150°	575.2	588.7	602.2	605.5	629.1	660.6	676.3	698.0	741.3	773.8	778.6
152.5°	589.5	599.7	609.9	612.5	633.8	662.1	676.3	694.8	731.8	759.5	763.1
155°	610.6	618.1	625.7	627.5	643.8	665.5	676.3	691.0	720.4	742.5	744.9
157.5°	626.2	633.6	640.9	642.7	653.9	668.8	676.3	687.8	710.7	727.8	729.5
160°	636.8	642.5	648.2	649.7	658.5	670.4	676.3	686.1	705.7	720.4	721.4
162.5°	647.4	651.6	656.0	657.0	663.4	672.0	676.3	684.6	701.2	713.6	714.5
165°	658.8	662.7	666.6	667.6	670.5	674.3	676.3	682.3	694.1	702.9	703.9
167.5°	669.5	671.2	673.1	673.5	676.0	679.3	680.9	684.8	692.6	698.4	698.9
170°	676.3	678.2	680.0	680.5	680.7	680.8	680.9	684.8	692.6	698.4	698.4
172.5°	680.0	680.4	680.8	680.9	680.9	680.9	680.9	683.9	690.1	694.7	694.3
175°	685.1	685.1	685.1	685.1	683.7	681.8	680.9	682.9	686.7	689.6	689.6
177.5°	685.1	685.1	685.1	685.1	684.0	682.5	681.8	683.3	686.4	688.7	688.3
180°	685.1	685.1	685.1	685.1	685.1	685.1	685.1	685.1	685.1	685.1	685.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	185.2	185.2
2.5°	197.8	196.6
5°	254.4	255.6
7.5°	342.5	342.0
10°	426.0	431.3
12.5°	486.7	487.9
15°	523.7	526.1
17.5°	538.0	538.6
20°	538.6	537.3
22.5°	532.0	530.8
25°	524.3	523.7
27.5°	517.1	517.7
30°	514.1	515.9
32.5°	514.1	517.1
35°	515.3	518.2
37.5°	514.7	518.2
40°	512.3	516.5
42.5°	505.8	508.7
45°	495.6	499.2
47.5°	482.5	484.9
50°	465.8	468.2
52.5°	445.0	445.6
55°	420.0	422.3
57.5°	393.2	393.7
60°	363.4	365.1
62.5°	331.8	331.8
65°	298.5	299.6
67.5°	263.9	266.8
70°	228.7	229.4
72.5°	194.2	194.2
75°	158.4	159.0
77.5°	124.5	124.5
80°	92.4	93.0
82.5°	63.8	64.9
85°	39.9	39.9
87.5°	18.5	16.7
90°	17.5	17.5
92.5°	70.0	56.1
95°	243.9	201.8
97.5°	584.5	504.4
100°	842.1	746.6
102.5°	1095.5	1013.8
105°	1418.7	1374.7
107.5°	1630.3	1640.9
110°	1711.0	1756.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1718.2	1788.5
115°	1672.6	1770.1
117.5°	1576.0	1684.1
120°	1498.1	1603.2
122.5°	1422.3	1525.9
125°	1314.2	1409.6
127.5°	1216.9	1297.5
130°	1159.6	1234.1
132.5°	1107.6	1174.2
135°	1036.4	1093.7
137.5°	979.2	1026.2
140°	939.9	983.9
142.5°	907.4	945.3
145°	858.8	887.4
147.5°	821.3	845.0
150°	797.9	817.0
152.5°	777.6	792.2
155°	754.5	764.1
157.5°	736.2	743.0
160°	725.3	729.2
162.5°	718.2	721.9
165°	707.8	711.7
167.5°	700.5	702.1
170°	698.4	698.4
172.5°	692.9	691.5
175°	689.6	689.6
177.5°	686.7	685.1
180°	685.1	685.1



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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	0.00	0.54	1.00	1.68	3.27	13.00	13.69	14.14	14.82	16.42
	3H	0.55	1.16	1.70	2.31	3.92	14.81	15.42	15.96	16.57	18.18
	4H	0.84	1.43	2.00	2.57	4.18	15.44	16.02	16.60	17.17	18.78
	6H	1.08	1.62	2.25	2.77	4.39	15.84	16.38	17.01	17.53	19.16
	8H	1.14	1.66	2.32	2.82	4.44	15.95	16.47	17.13	17.63	19.25
	12H	1.16	1.64	2.33	2.80	4.44	16.01	16.50	17.18	17.65	19.29
4H	2H	7.03	7.61	8.20	8.76	10.37	13.25	13.84	14.42	14.98	16.60
	3H	8.58	9.07	9.76	10.24	11.87	15.27	15.76	16.44	16.93	18.55
	4H	8.67	9.12	9.85	10.28	11.92	16.02	16.47	17.19	17.63	19.27
	6H	8.67	9.06	9.85	10.24	11.87	16.53	16.92	17.71	18.10	19.73
	8H	8.64	9.00	9.82	10.18	11.83	16.68	17.04	17.86	18.22	19.87
	12H	8.59	8.92	9.79	10.10	11.76	16.76	17.09	17.96	18.27	19.93
8H	4H	10.09	10.45	11.27	11.62	13.27	16.06	16.42	17.24	17.59	19.25
	6H	10.32	10.62	11.52	11.84	13.48	16.67	16.97	17.87	18.18	19.83
	8H	10.34	10.60	11.54	11.79	13.46	16.88	17.14	18.08	18.33	20.00
	12H	10.30	10.53	11.51	11.72	13.42	17.01	17.24	18.22	18.43	20.12
12H	4H	10.22	10.55	11.42	11.73	13.39	16.01	16.33	17.20	17.52	19.17
	6H	10.58	10.83	11.78	12.03	13.70	16.65	16.91	17.86	18.10	19.77
	8H	10.64	10.86	11.85	12.05	13.75	16.86	17.09	18.07	18.28	19.98