

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: P937470

Luminaire Tested: SQ4-FB-100U-050D-935-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937470
REPORT IS A COMBINATION OF REPORTS P933565 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

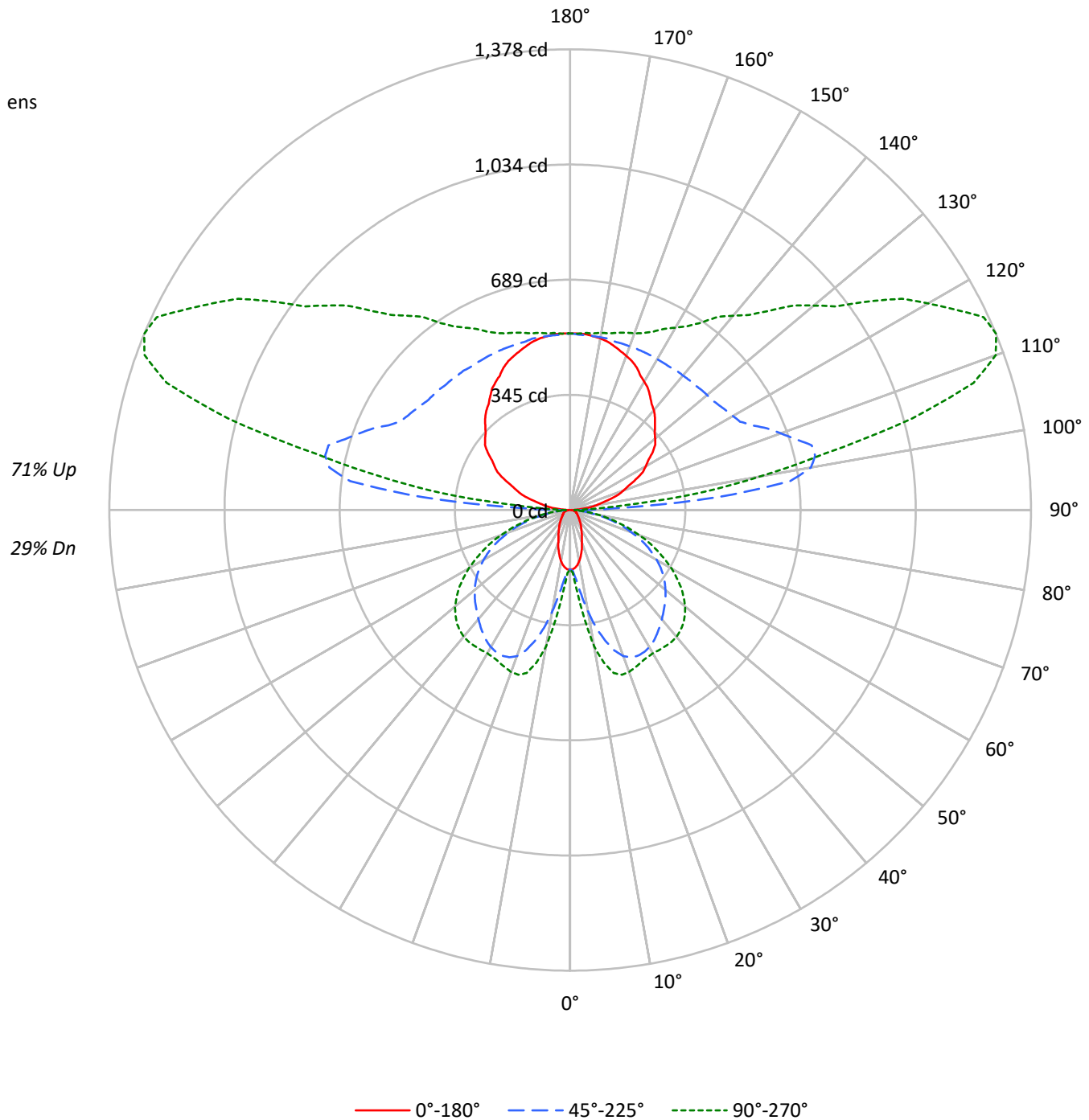
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4800.1 lumens
Efficiency: N/A
Efficacy: 116.5 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): 41.2
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29				29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	23				23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	19				19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16				16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	13				13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11				11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10				10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8				8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7				7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	7				7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	6				6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1649	1649	1649
5°	1610	1905	2217
10°	1459	2775	3676
15°	1239	3622	4438
20°	1007	4195	4523
25°	839	4387	4431
30°	707	4411	4423
35°	623	4334	4537
40°	543	4236	4655
45°	490	4162	4674
50°	449	4095	4597
55°	428	3999	4392
60°	436	3819	4070
65°	452	3545	3629
70°	477	3085	3066
75°	525	2509	2392
80°	562	1735	1613
85°	472	915	825

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4674 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.0	0.5
10°-20°	101.9	2.1
20°-30°	178.3	3.7
30°-40°	229.5	4.8
40°-50°	256.3	5.3
50°-60°	245.5	5.1
60°-70°	194.5	4.1
70°-80°	114.4	2.4
80°-90°	33.8	0.7
90°-100°	257.4	5.4
100°-110°	676.7	14.1
110°-120°	701.7	14.6
120°-130°	562.8	11.7
130°-140°	441.6	9.2
140°-150°	339.0	7.1
150°-160°	244.1	5.1
160°-170°	149.4	3.1
170°-180°	50.5	1.1
0°-30°	303.2	6.3
0°-40°	532.6	11.1
0°-60°	1034.4	21.5
0°-90°	1377.1	28.7
90°-120°	1635.7	34.1
90°-150°	2979.1	62.1
90°-180°	3423.0	71.3
0°-180°	4800.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	178	178	178	178	178	
5°	173	186	209	237	245	16
15°	130	240	404	489	505	36
25°	83	272	481	502	502	38
35°	56	260	453	478	497	35
45°	38	207	400	458	479	30
55°	27	132	340	394	405	25
65°	22	70	252	284	288	21
75°	16	43	138	152	153	17
85°	6	13	34	38	38	6
90°	4	10	27	14	14	3
95°	34	133	443	229	156	38
105°	122	185	748	1136	1060	129
115°	216	263	599	1195	1364	214
125°	301	338	545	921	1087	267
135°	359	395	528	744	843	278
145°	416	443	521	634	684	261
155°	471	484	521	572	589	216
165°	508	514	521	542	549	143
175°	528	528	525	532	532	50
180°	528	528	528	528	528	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7
2.5°	177.7	177.7	178.9	179.4	180.6	181.2	182.3	183.4	186.9	187.4	188.6
5°	173.2	175.5	182.9	185.7	193.7	204.7	209.2	216.7	232.1	236.6	239.5
7.5°	166.3	171.5	189.7	194.3	214.4	242.9	254.9	270.9	295.5	307.5	317.2
10°	155.5	166.3	198.9	209.8	242.3	285.8	308.1	330.4	367.6	384.1	390.4
12.5°	143.5	161.2	208.7	223.5	270.3	333.8	360.7	385.3	427.5	449.9	453.3
15°	129.8	153.8	217.8	239.5	300.1	373.8	403.5	433.8	473.3	489.2	493.2
17.5°	117.7	148.1	226.4	249.2	322.9	409.8	440.1	465.3	497.2	508.1	510.9
20°	102.9	138.9	232.1	261.8	346.9	436.1	465.3	484.7	506.4	513.2	514.4
22.5°	92.0	129.2	235.5	266.3	363.0	452.1	476.7	492.1	506.9	509.2	509.8
25°	82.9	118.3	234.9	271.5	376.7	461.8	480.7	492.1	500.7	501.8	501.8
27.5°	74.3	106.3	232.6	272.6	387.0	464.1	479.0	487.0	491.0	493.2	493.2
30°	66.9	94.9	226.9	270.3	391.5	461.8	473.8	477.8	481.8	485.3	487.0
32.5°	61.2	84.0	218.4	265.7	392.1	456.1	464.7	467.0	472.7	480.7	483.5
35°	56.0	73.2	208.7	259.5	388.7	447.0	452.7	455.0	466.4	478.4	482.4
37.5°	50.9	65.2	196.0	248.6	383.5	436.1	440.1	444.1	461.8	476.1	480.7
40°	45.8	58.3	181.2	236.6	375.6	422.9	426.4	432.6	456.1	472.7	477.3
42.5°	41.7	52.6	165.2	224.1	365.3	408.1	413.2	422.4	449.3	467.0	472.1
45°	38.3	46.9	148.1	206.9	352.0	392.7	400.1	412.7	441.3	458.4	463.0
47.5°	34.8	42.9	130.4	189.2	337.8	377.3	387.0	401.2	430.4	447.0	451.0
50°	32.0	38.9	112.6	170.3	322.4	360.7	372.1	387.0	416.7	432.1	437.2
52.5°	29.7	35.4	96.0	151.5	304.7	343.5	356.6	372.1	400.1	414.9	418.4
55°	27.4	32.5	81.7	131.5	286.4	325.2	339.5	354.3	381.8	394.4	396.7
57.5°	26.3	30.3	69.7	112.6	266.9	304.7	320.6	334.3	360.1	369.8	372.1
60°	24.5	28.5	60.6	96.6	245.8	285.2	299.0	312.7	334.3	342.3	344.1
62.5°	22.8	27.4	53.8	81.2	224.1	262.3	276.0	288.7	306.9	312.7	314.9
65°	21.7	26.3	48.6	69.7	201.8	238.3	252.0	262.9	277.8	283.5	284.7
67.5°	20.6	25.1	44.6	60.0	179.4	214.4	224.6	234.9	246.3	252.0	252.6
70°	18.8	24.0	41.2	53.2	156.6	186.9	195.4	206.4	215.5	218.4	220.1
72.5°	17.7	22.3	38.9	48.1	133.2	160.6	168.6	174.9	182.9	185.7	185.7
75°	16.0	20.0	36.6	42.9	109.1	131.5	138.3	144.6	150.9	152.0	150.3
77.5°	14.3	17.7	31.4	36.0	85.2	104.0	109.7	113.1	118.3	119.5	120.0
80°	12.0	15.4	24.5	28.0	61.8	76.6	80.6	83.4	88.0	88.0	89.2
82.5°	9.1	12.0	17.7	20.0	41.7	52.6	56.0	57.8	60.6	60.6	60.6
85°	5.7	7.4	11.4	13.1	25.1	32.0	34.3	34.8	37.1	37.7	37.7
87.5°	2.9	4.0	7.4	8.0	13.1	16.6	16.6	17.7	17.7	17.1	16.6
90°	3.6	6.4	9.2	9.9	15.6	23.2	26.9	23.9	18.0	13.5	13.5
92.5°	14.1	38.3	62.4	68.4	96.2	133.2	151.7	132.9	95.4	67.3	64.7
95°	34.0	78.1	122.3	133.3	236.6	374.4	443.3	395.6	300.2	228.6	220.5
97.5°	58.8	97.7	136.7	146.4	318.7	548.5	663.4	633.2	572.9	527.6	512.2
100°	78.0	113.2	148.5	157.4	348.6	603.6	731.1	733.3	737.7	741.0	722.6
102.5°	94.2	127.2	160.1	168.4	362.4	620.9	750.3	788.7	865.5	923.1	907.4
105°	121.9	149.8	177.6	184.6	372.5	622.9	748.1	834.3	1006.6	1135.8	1127.4
107.5°	150.3	176.3	202.3	208.7	374.4	595.1	705.5	825.8	1066.1	1246.4	1248.4
110°	169.4	192.9	216.3	222.2	371.5	570.6	670.1	804.5	1073.2	1274.7	1283.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	188.2	210.5	232.9	238.5	371.6	549.1	637.9	775.4	1050.3	1256.6	1270.2
115°	216.5	237.1	257.7	262.9	375.1	524.6	599.3	731.8	996.7	1195.4	1214.1
117.5°	244.5	263.3	282.0	286.7	382.0	509.2	572.7	692.2	931.3	1110.7	1131.5
120°	260.8	278.4	296.1	300.5	387.7	504.0	562.1	671.3	889.7	1053.6	1073.9
122.5°	276.8	294.6	312.4	316.9	395.8	501.2	553.9	652.2	848.9	996.5	1016.4
125°	301.3	317.5	333.6	337.7	406.8	498.9	545.0	628.6	795.7	921.0	939.4
127.5°	321.0	337.4	353.8	357.9	417.8	497.7	537.6	609.4	752.8	860.4	875.9
130°	331.7	349.3	367.0	371.4	425.8	498.5	534.8	598.7	726.4	822.2	836.5
132.5°	342.7	360.3	377.9	382.4	432.3	498.9	532.2	589.4	703.8	789.5	802.4
135°	359.0	375.1	391.2	395.2	439.5	498.5	528.1	576.0	671.6	743.5	754.5
137.5°	375.6	391.6	407.4	411.4	450.0	501.6	527.3	567.8	648.7	709.5	718.5
140°	389.4	404.1	418.8	422.4	456.6	502.1	524.8	559.8	629.7	682.2	690.6
142.5°	400.1	413.6	427.2	430.6	462.0	503.9	524.8	555.5	616.9	663.0	670.4
145°	416.4	428.2	440.0	443.0	469.1	504.0	521.3	546.5	596.7	634.3	639.9
147.5°	432.7	444.2	455.6	458.5	479.5	507.4	521.3	541.1	580.6	610.3	614.9
150°	443.3	453.7	464.1	466.7	485.0	509.2	521.3	538.0	571.4	596.4	600.1
152.5°	454.3	462.1	470.0	472.0	488.5	510.3	521.3	535.6	564.0	585.4	588.2
155°	470.6	476.4	482.3	483.8	496.3	513.0	521.3	532.7	555.3	572.3	574.2
157.5°	482.7	488.4	494.0	495.4	504.0	515.5	521.3	530.1	547.8	561.0	562.2
160°	490.8	495.3	499.6	500.7	507.6	516.7	521.3	528.9	544.0	555.3	556.1
162.5°	498.9	502.3	505.6	506.4	511.4	518.0	521.3	527.7	540.4	550.0	550.6
165°	507.8	510.8	513.8	514.5	516.8	519.8	521.3	525.9	535.1	541.9	542.6
167.5°	516.0	517.4	518.9	519.2	521.1	523.6	524.8	527.8	533.8	538.3	538.6
170°	521.3	522.7	524.2	524.5	524.6	524.7	524.8	527.8	533.8	538.3	538.3
172.5°	524.2	524.5	524.7	524.8	524.8	524.8	524.8	527.2	531.9	535.5	535.2
175°	528.1	528.1	528.1	528.1	527.0	525.5	524.8	526.4	529.3	531.6	531.6
177.5°	528.1	528.1	528.1	528.1	527.2	526.1	525.5	526.7	529.1	530.9	530.5
180°	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	177.7	177.7
2.5°	189.7	188.6
5°	244.1	245.2
7.5°	328.6	328.1
10°	408.7	413.8
12.5°	467.0	468.1
15°	502.4	504.7
17.5°	516.1	516.7
20°	516.7	515.5
22.5°	510.4	509.2
25°	503.0	502.4
27.5°	496.1	496.7
30°	493.2	495.0
32.5°	493.2	496.1
35°	494.4	497.2
37.5°	493.8	497.2
40°	491.5	495.5
42.5°	485.3	488.1
45°	475.5	479.0
47.5°	463.0	465.3
50°	447.0	449.3
52.5°	426.9	427.5
55°	403.0	405.2
57.5°	377.3	377.8
60°	348.6	350.3
62.5°	318.4	318.4
65°	286.4	287.5
67.5°	253.2	256.0
70°	219.5	220.1
72.5°	186.3	186.3
75°	152.0	152.6
77.5°	119.5	119.5
80°	88.6	89.2
82.5°	61.2	62.3
85°	38.3	38.3
87.5°	17.7	16.0
90°	13.5	13.5
92.5°	53.9	43.2
95°	188.0	155.6
97.5°	450.5	388.8
100°	649.1	575.5
102.5°	844.4	781.5
105°	1093.5	1059.6
107.5°	1256.6	1264.8
110°	1318.8	1354.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1324.3	1378.5
115°	1289.2	1364.4
117.5°	1214.8	1298.1
120°	1154.8	1235.7
122.5°	1096.4	1176.2
125°	1012.9	1086.6
127.5°	938.1	1000.1
130°	893.8	951.2
132.5°	853.7	905.1
135°	798.8	843.1
137.5°	754.8	791.0
140°	724.5	758.4
142.5°	699.5	728.6
145°	661.9	684.0
147.5°	633.1	651.4
150°	614.9	629.7
152.5°	599.4	610.6
155°	581.6	589.0
157.5°	567.5	572.7
160°	559.1	562.1
162.5°	553.5	556.4
165°	545.6	548.6
167.5°	539.8	541.1
170°	538.3	538.3
172.5°	534.1	533.0
175°	531.6	531.6
177.5°	529.3	528.1
180°	528.1	528.1



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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	0.36	1.07	1.47	2.18	3.73	13.50	14.21	14.61	15.33	16.87
	3H	1.05	1.69	2.17	2.81	4.37	15.31	15.95	16.43	17.07	18.63
	4H	1.34	1.95	2.47	3.07	4.64	15.94	16.55	17.07	17.67	19.24
	6H	1.58	2.15	2.73	3.27	4.85	16.35	16.91	17.49	18.04	19.61
	8H	1.65	2.18	2.79	3.32	4.89	16.46	16.99	17.60	18.13	19.70
	12H	1.66	2.17	2.81	3.30	4.90	16.51	17.02	17.66	18.16	19.75
4H	2H	7.53	8.14	8.67	9.26	10.83	13.75	14.37	14.90	15.49	17.05
	3H	9.09	9.60	10.23	10.74	12.32	15.77	16.28	16.92	17.43	19.01
	4H	9.17	9.64	10.32	10.78	12.38	16.52	16.99	17.67	18.13	19.73
	6H	9.18	9.58	10.33	10.74	12.33	17.04	17.44	18.20	18.60	20.19
	8H	9.15	9.53	10.30	10.68	12.28	17.19	17.57	18.35	18.72	20.32
	12H	9.10	9.44	10.27	10.60	12.21	17.27	17.61	18.44	18.77	20.38
8H	4H	10.60	10.97	11.75	12.12	13.73	16.57	16.95	17.72	18.10	19.70
	6H	10.83	11.14	12.01	12.34	13.94	17.18	17.49	18.36	18.68	20.29
	8H	10.85	11.12	12.03	12.29	13.91	17.39	17.66	18.57	18.83	20.46
	12H	10.81	11.05	12.00	12.22	13.87	17.52	17.76	18.70	18.93	20.58
12H	4H	10.73	11.07	11.90	12.23	13.84	16.51	16.86	17.69	18.02	19.63
	6H	11.08	11.36	12.27	12.53	14.15	17.16	17.43	18.34	18.61	20.23
	8H	11.15	11.39	12.33	12.56	14.21	17.38	17.62	18.56	18.78	20.44