

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: P936651

Luminaire Tested: SQ4-FB-050U-050D-930-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936651
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-930-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

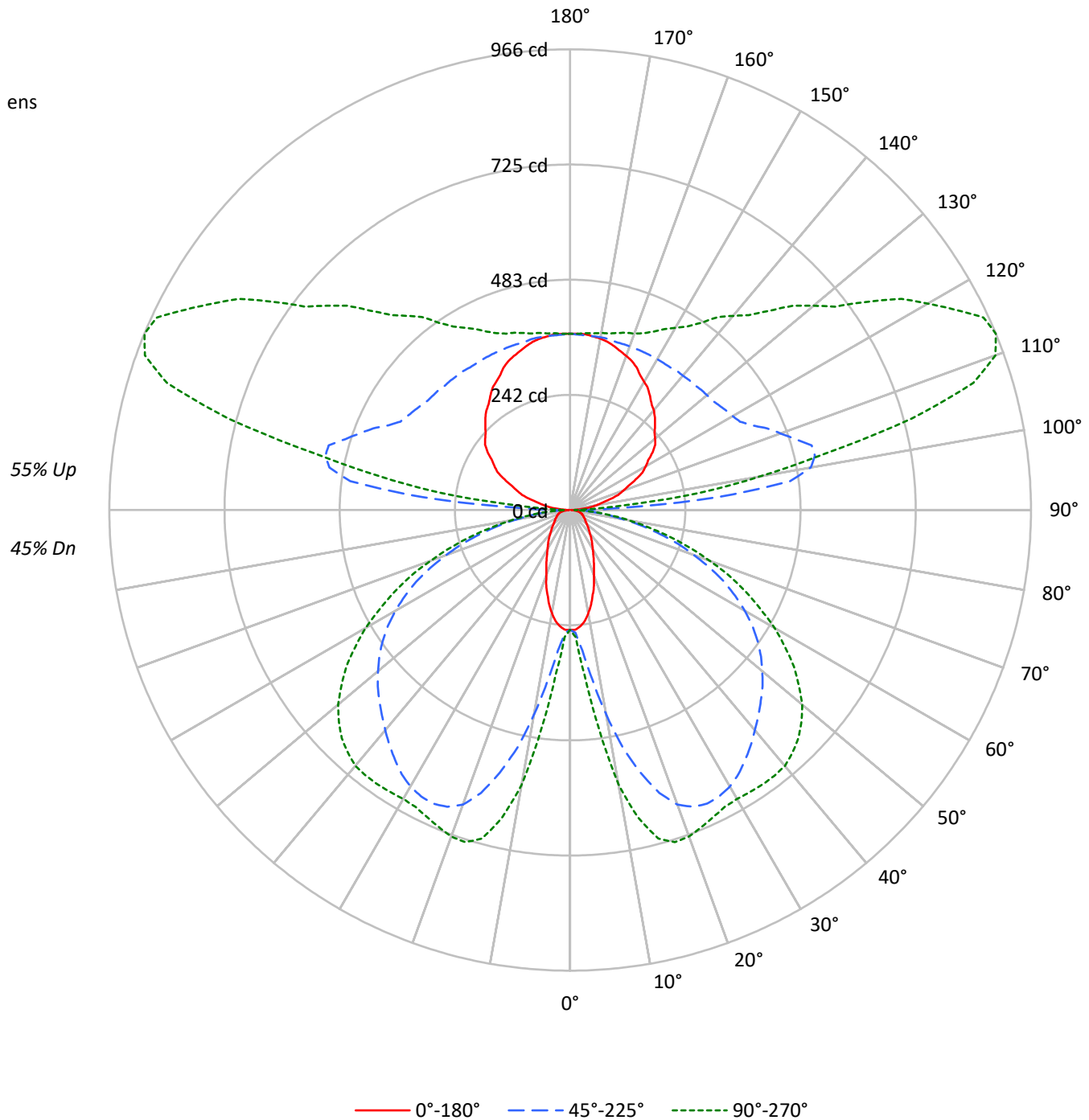
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4342.6 lumens
Efficiency: N/A
Efficacy: 101.9 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): 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

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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°	1554	1554	1554
5°	1518	1795	2089
10°	1376	2617	3462
15°	1169	3418	4181
20°	951	3960	4262
25°	794	4143	4175
30°	669	4168	4167
35°	591	4098	4275
40°	514	4007	4386
45°	466	3939	4403
50°	427	3879	4331
55°	409	3791	4139
60°	418	3623	3835
65°	434	3368	3418
70°	462	2935	2889
75°	509	2391	2254
80°	550	1656	1519
85°	483	878	777

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4403 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.5	0.7
10°-20°	144.0	3.3
20°-30°	251.9	5.8
30°-40°	324.3	7.5
40°-50°	362.2	8.3
50°-60°	346.9	8.0
60°-70°	274.9	6.3
70°-80°	161.7	3.7
80°-90°	46.3	1.1
90°-100°	180.3	4.2
100°-110°	474.0	10.9
110°-120°	491.5	11.3
120°-130°	394.3	9.1
130°-140°	309.4	7.1
140°-150°	237.4	5.5
150°-160°	171.0	3.9
160°-170°	104.6	2.4
170°-180°	35.3	0.8
0°-30°	428.4	9.9
0°-40°	752.7	17.3
0°-60°	1461.8	33.7
0°-90°	1944.7	44.8
90°-120°	1145.9	26.4
90°-150°	2087.0	48.1
90°-180°	2398.0	55.2
0°-180°	4342.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	251	251	251	251	251	
5°	245	262	296	334	346	23
15°	183	338	570	691	713	51
25°	117	384	679	709	710	54
35°	79	367	640	676	703	49
45°	54	292	565	648	677	42
55°	39	186	480	557	573	35
65°	31	98	356	401	406	30
75°	23	60	196	215	216	24
85°	8	18	48	53	54	9
90°	2	7	19	9	9	3
95°	24	93	311	160	109	26
105°	85	129	524	796	742	91
115°	152	184	420	837	956	150
125°	211	237	382	645	761	187
135°	252	277	370	521	591	195
145°	292	310	365	444	479	183
155°	330	339	365	401	413	151
165°	356	360	365	380	384	100
175°	370	370	368	372	372	35
180°	370	370	370	370	370	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2
2.5°	251.2	251.2	252.8	253.6	255.3	256.1	257.7	259.3	264.1	264.9	266.5
5°	244.8	248.0	258.5	262.5	273.8	289.2	295.6	306.1	327.9	334.4	338.5
7.5°	235.0	242.3	268.1	274.6	302.9	343.3	360.2	382.9	417.6	434.6	448.3
10°	219.7	235.0	281.0	296.5	342.5	403.8	435.4	466.9	519.4	542.7	551.7
12.5°	202.8	227.8	294.8	315.8	382.1	471.7	509.7	544.4	604.2	635.7	640.5
15°	183.3	217.3	307.7	338.5	424.1	528.2	570.2	613.1	668.8	691.4	697.1
17.5°	166.4	209.2	319.8	352.2	456.3	579.1	621.9	657.5	702.7	718.0	722.1
20°	145.4	196.3	327.9	369.9	490.3	616.3	657.5	685.0	715.6	725.3	727.0
22.5°	130.0	182.5	332.8	376.4	512.9	638.9	673.6	695.4	716.4	719.6	720.5
25°	117.2	167.2	332.0	383.7	532.3	652.6	679.3	695.4	707.5	709.1	709.1
27.5°	105.0	150.2	328.7	385.3	546.8	655.9	676.8	688.2	693.8	697.1	697.1
30°	94.5	134.1	320.6	382.1	553.3	652.6	669.6	675.2	680.9	685.8	688.2
32.5°	86.4	118.8	308.5	375.6	554.1	644.6	656.7	659.9	667.9	679.3	683.4
35°	79.2	103.4	294.8	366.7	549.3	631.6	639.7	643.0	659.1	676.0	681.7
37.5°	71.9	92.1	277.0	351.4	541.9	616.3	621.9	627.6	652.6	672.8	679.3
40°	64.6	82.4	256.1	334.4	530.7	597.7	602.6	611.4	644.6	667.9	674.4
42.5°	58.9	74.3	233.4	316.6	516.1	576.7	583.9	596.9	634.9	659.9	667.1
45°	54.1	66.2	209.2	292.4	497.5	554.9	565.4	583.1	623.5	647.8	654.2
47.5°	49.3	60.5	184.1	267.3	477.4	533.1	546.8	567.0	608.2	631.6	637.3
50°	45.2	54.9	159.2	240.7	455.5	509.7	525.8	546.8	588.8	610.6	617.9
52.5°	42.0	50.1	135.7	214.1	430.5	485.4	504.0	525.8	565.4	586.4	591.2
55°	38.8	46.0	115.5	185.7	404.6	459.6	479.8	500.8	539.5	557.3	560.6
57.5°	37.2	42.8	98.5	159.2	377.2	430.5	453.1	472.5	508.9	522.6	525.8
60°	34.8	40.4	85.6	136.5	347.3	403.0	422.5	441.8	472.5	483.8	486.2
62.5°	32.3	38.8	76.0	114.7	316.6	370.7	390.1	407.9	433.7	441.8	445.0
65°	30.7	37.2	68.7	98.5	285.1	336.8	356.2	371.5	392.5	400.6	402.2
67.5°	29.1	35.6	63.0	84.8	253.6	302.9	317.4	332.0	348.1	356.2	357.0
70°	26.7	33.9	58.1	75.1	221.3	264.1	276.2	291.6	304.5	308.5	311.0
72.5°	25.1	31.5	54.9	67.9	188.2	226.9	238.3	247.2	258.5	262.5	262.5
75°	22.6	28.3	51.7	60.5	154.3	185.7	195.5	204.4	213.2	214.9	212.4
77.5°	20.2	25.1	44.4	50.9	120.4	147.0	155.1	160.0	167.2	168.8	169.6
80°	16.9	21.8	34.8	39.6	87.2	108.2	113.9	118.0	124.4	124.4	126.0
82.5°	12.9	16.9	25.1	28.3	58.9	74.3	79.2	81.6	85.6	85.6	85.6
85°	8.1	10.5	16.1	18.5	35.6	45.2	48.5	49.3	52.5	53.3	53.3
87.5°	4.0	5.6	10.5	11.3	18.5	23.4	23.4	25.1	25.1	24.3	23.4
90°	2.5	4.5	6.5	7.0	10.9	16.2	18.9	16.8	12.5	9.4	9.4
92.5°	10.0	26.8	43.7	47.9	67.4	93.3	106.2	93.1	66.8	47.1	45.3
95°	23.8	54.7	85.6	93.3	165.7	262.3	310.6	277.2	210.3	160.1	154.4
97.5°	41.2	68.5	95.7	102.5	223.3	384.3	464.8	443.7	401.3	369.6	358.8
100°	54.6	79.3	104.1	110.3	244.2	422.9	512.2	513.7	516.8	519.1	506.3
102.5°	66.0	89.1	112.2	118.0	253.8	435.0	525.6	552.5	606.3	646.7	635.7
105°	85.4	105.0	124.5	129.4	260.9	436.4	524.0	584.4	705.1	795.7	789.8
107.5°	105.3	123.5	141.6	146.2	262.3	416.9	494.2	578.4	746.8	873.1	874.5
110°	118.7	135.1	151.5	155.6	260.3	399.7	469.4	563.5	751.8	893.0	899.2



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	131.9	147.5	163.2	167.1	260.3	384.7	446.9	543.2	735.9	880.3	889.8
115°	151.7	166.1	180.6	184.2	262.7	367.5	419.8	512.6	698.2	837.4	850.5
117.5°	171.3	184.4	197.5	200.8	267.6	356.7	401.2	484.9	652.4	778.0	792.6
120°	182.7	195.0	207.4	210.5	271.6	353.0	393.7	470.2	623.3	738.0	752.3
122.5°	193.9	206.4	218.8	221.9	277.3	351.1	388.0	456.9	594.8	698.1	712.1
125°	211.0	222.4	233.8	236.6	285.0	349.5	381.8	440.4	557.4	645.2	658.1
127.5°	224.9	236.4	247.9	250.8	292.7	348.7	376.6	426.9	527.3	602.7	613.6
130°	232.4	244.8	257.1	260.2	298.3	349.1	374.6	419.3	508.9	576.0	586.0
132.5°	240.1	252.5	264.8	267.9	302.9	349.5	372.9	413.0	493.0	553.1	562.1
135°	251.5	262.7	274.0	276.8	307.9	349.2	369.9	403.5	470.6	520.8	528.6
137.5°	263.1	274.3	285.4	288.2	315.3	351.3	369.4	397.7	454.4	497.0	503.3
140°	272.9	283.1	293.3	295.9	319.8	351.7	367.7	392.2	441.2	477.9	483.8
142.5°	280.2	289.7	299.2	301.6	323.6	353.0	367.7	389.2	432.2	464.5	469.6
145°	291.7	300.0	308.3	310.4	328.7	353.0	365.2	382.8	418.0	444.4	448.2
147.5°	303.1	311.2	319.3	321.3	335.9	355.4	365.2	379.0	406.7	427.5	430.7
150°	310.6	317.9	325.1	327.0	339.7	356.7	365.2	376.9	400.3	417.8	420.4
152.5°	318.2	323.8	329.3	330.7	342.2	357.5	365.2	375.2	395.2	410.1	412.0
155°	329.7	333.8	337.8	338.9	347.6	359.3	365.2	373.2	389.1	400.9	402.2
157.5°	338.1	342.1	346.1	347.1	353.1	361.2	365.2	371.4	383.8	393.0	393.9
160°	343.8	346.9	349.9	350.8	355.6	362.0	365.2	370.5	381.1	389.1	389.5
162.5°	349.5	351.9	354.2	354.8	358.2	362.9	365.2	369.7	378.6	385.3	385.8
165°	355.7	357.8	359.9	360.5	362.1	364.2	365.2	368.4	374.8	379.6	380.1
167.5°	361.4	362.4	363.4	363.7	365.0	366.8	367.7	369.8	374.0	377.1	377.3
170°	365.2	366.2	367.2	367.5	367.5	367.6	367.7	369.8	374.0	377.1	377.1
172.5°	367.2	367.5	367.6	367.7	367.7	367.7	367.7	369.3	372.6	375.1	374.9
175°	369.9	369.9	369.9	369.9	369.2	368.2	367.7	368.7	370.8	372.4	372.4
177.5°	369.9	369.9	369.9	369.9	369.4	368.6	368.2	369.0	370.7	371.9	371.6
180°	369.9	369.9	369.9	369.9	369.9	369.9	369.9	369.9	369.9	369.9	369.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	251.2	251.2
2.5°	268.1	266.5
5°	344.9	346.5
7.5°	464.5	463.7
10°	577.5	584.7
12.5°	659.9	661.5
15°	710.0	713.2
17.5°	729.4	730.2
20°	730.2	728.6
22.5°	721.3	719.6
25°	710.8	710.0
27.5°	701.1	701.9
30°	697.1	699.5
32.5°	697.1	701.1
35°	698.7	702.7
37.5°	697.9	702.7
40°	694.6	700.3
42.5°	685.8	689.8
45°	672.0	676.8
47.5°	654.2	657.5
50°	631.6	634.9
52.5°	603.4	604.2
55°	569.4	572.7
57.5°	533.1	533.9
60°	492.7	495.1
62.5°	449.9	449.9
65°	404.6	406.2
67.5°	357.8	361.8
70°	310.2	311.0
72.5°	263.3	263.3
75°	214.9	215.7
77.5°	168.8	168.8
80°	125.2	126.0
82.5°	86.4	88.0
85°	54.1	54.1
87.5°	25.1	22.6
90°	9.4	9.4
92.5°	37.7	30.3
95°	131.7	109.0
97.5°	315.6	272.4
100°	454.7	403.2
102.5°	591.6	547.4
105°	766.1	742.3
107.5°	880.2	886.0
110°	923.9	948.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	927.8	965.7
115°	903.1	955.8
117.5°	851.0	909.4
120°	808.9	865.7
122.5°	768.1	824.0
125°	709.6	761.2
127.5°	657.1	700.6
130°	626.2	666.3
132.5°	598.1	634.0
135°	559.6	590.6
137.5°	528.8	554.2
140°	507.5	531.3
142.5°	490.0	510.4
145°	463.7	479.2
147.5°	443.5	456.3
150°	430.8	441.2
152.5°	419.9	427.8
155°	407.4	412.6
157.5°	397.6	401.2
160°	391.6	393.7
162.5°	387.8	389.8
165°	382.2	384.3
167.5°	378.2	379.1
170°	377.1	377.1
172.5°	374.1	373.4
175°	372.4	372.4
177.5°	370.8	369.9
180°	369.9	369.9



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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	2.03	2.88	3.03	3.89	5.23	15.20	16.05	16.19	17.06	18.40
	3H	2.74	3.50	3.74	4.52	5.88	17.03	17.80	18.04	18.82	20.18
	4H	3.04	3.76	4.05	4.78	6.15	17.68	18.40	18.69	19.42	20.79
	6H	3.29	3.96	4.32	4.98	6.36	18.10	18.77	19.13	19.80	21.18
	8H	3.36	3.99	4.39	5.03	6.41	18.22	18.86	19.25	19.90	21.28
	12H	3.37	3.98	4.41	5.01	6.42	18.28	18.89	19.32	19.93	21.33
4H	2H	9.24	9.97	10.26	10.99	12.36	15.47	16.20	16.50	17.22	18.59
	3H	10.81	11.41	11.84	12.46	13.85	17.51	18.12	18.55	19.17	20.55
	4H	10.90	11.46	11.94	12.50	13.91	18.28	18.83	19.32	19.87	21.28
	6H	10.91	11.39	11.96	12.46	13.86	18.81	19.29	19.86	20.36	21.76
	8H	10.89	11.34	11.94	12.40	13.81	18.97	19.42	20.02	20.48	21.89
	12H	10.85	11.25	11.91	12.32	13.75	19.06	19.47	20.13	20.54	21.96
8H	4H	12.34	12.79	13.39	13.85	15.27	18.34	18.78	19.39	19.84	21.26
	6H	12.59	12.96	13.66	14.06	15.47	18.96	19.33	20.04	20.43	21.85
	8H	12.60	12.93	13.68	14.01	15.45	19.18	19.50	20.26	20.59	22.02
	12H	12.57	12.86	13.66	13.94	15.41	19.32	19.61	20.41	20.69	22.16
12H	4H	12.49	12.89	13.55	13.96	15.38	18.29	18.69	19.36	19.77	21.19
	6H	12.84	13.17	13.92	14.25	15.69	18.94	19.27	20.03	20.35	21.79
	8H	12.91	13.20	14.00	14.28	15.75	19.17	19.46	20.26	20.54	22.01