

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: P937558

Luminaire Tested: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937558
REPORT IS A COMBINATION OF REPORTS P933566 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

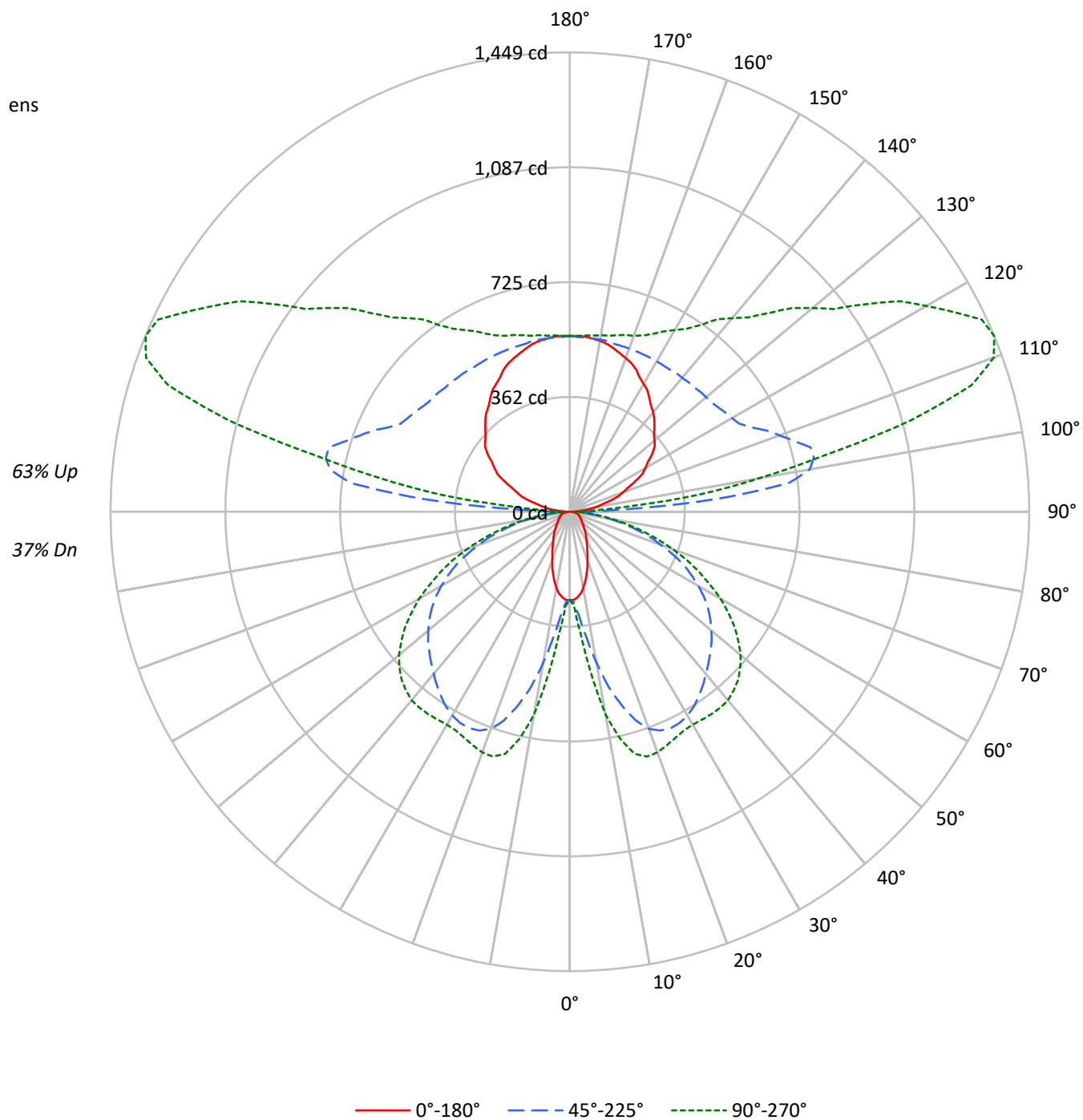
Lumens per Lamp: N/A
Luminaire Lumens: 5753.2 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 49.2
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: P937558

CATALOG NUMBER: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-4-3500K

Luminous Intensity Polar Plot



TEST NUMBER: P937558

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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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2583	2583	2583
5°	2522	2984	3473
10°	2284	4347	5758
15°	1939	5675	6953
20°	1577	6571	7086
25°	1314	6872	6942
30°	1107	6909	6928
35°	976	6789	7107
40°	849	6635	7292
45°	768	6519	7321
50°	702	6414	7200
55°	672	6264	6881
60°	685	5980	6376
65°	709	5554	5684
70°	749	4834	4802
75°	823	3932	3747
80°	880	2716	2526
85°	745	1433	1293

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7321 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.0	0.6
10°-20°	159.6	2.8
20°-30°	279.2	4.9
30°-40°	359.4	6.2
40°-50°	401.5	7.0
50°-60°	384.5	6.7
60°-70°	304.7	5.3
70°-80°	179.2	3.1
80°-90°	51.9	0.9
90°-100°	270.5	4.7
100°-110°	711.1	12.4
110°-120°	737.3	12.8
120°-130°	591.4	10.3
130°-140°	464.0	8.1
140°-150°	356.2	6.2
150°-160°	256.5	4.5
160°-170°	156.9	2.7
170°-180°	53.0	0.9
0°-30°	474.9	8.3
0°-40°	834.3	14.5
0°-60°	1620.3	28.2
0°-90°	2156.2	37.5
90°-120°	1718.9	29.9
90°-150°	3130.5	54.4
90°-180°	3597.0	62.5
0°-180°	5753.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	278	278	278	278	278	
5°	271	291	328	371	384	25
15°	203	375	632	766	791	57
25°	130	425	753	786	787	60
35°	88	406	709	749	779	55
45°	60	324	627	718	750	46
55°	43	206	532	618	635	39
65°	34	109	395	444	450	34
75°	25	67	217	238	239	26
85°	9	21	54	59	60	10
90°	4	10	28	14	14	4
95°	36	140	466	240	164	40
105°	128	194	786	1194	1114	136
115°	228	276	630	1256	1434	225
125°	317	355	573	968	1142	281
135°	377	415	555	781	886	292
145°	438	466	548	667	719	274
155°	495	508	548	601	619	227
165°	534	541	548	569	576	151
175°	555	555	552	559	559	53
180°	555	555	555	555	555	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4
2.5°	278.4	278.4	280.2	281.1	282.9	283.8	285.6	287.4	292.8	293.7	295.5
5°	271.3	274.9	286.5	291.0	303.5	320.5	327.7	339.3	363.5	370.7	375.1
7.5°	260.5	268.6	297.2	304.4	335.7	380.5	399.3	424.4	462.9	481.7	496.9
10°	243.5	260.5	311.6	328.6	379.6	447.7	482.6	517.5	575.7	601.6	611.5
12.5°	224.7	252.5	326.8	350.1	423.5	522.9	564.9	603.4	669.7	704.6	710.0
15°	203.2	240.8	341.1	375.1	470.0	585.5	632.1	679.5	741.3	766.4	772.7
17.5°	184.4	231.9	354.5	390.4	505.9	641.9	689.4	728.8	778.9	795.9	800.4
20°	161.2	217.6	363.5	410.1	543.5	683.1	728.8	759.2	793.2	804.0	805.8
22.5°	144.1	202.3	368.9	417.2	568.5	708.2	746.7	770.9	794.1	797.7	798.6
25°	129.8	185.3	368.0	425.3	590.0	723.4	753.0	770.9	784.3	786.1	786.1
27.5°	116.4	166.5	364.4	427.1	606.1	727.0	750.3	762.8	769.1	772.7	772.7
30°	104.8	148.6	355.4	423.5	613.3	723.4	742.2	748.5	754.7	760.1	762.8
32.5°	95.8	131.6	342.0	416.3	614.2	714.5	727.9	731.5	740.4	753.0	757.4
35°	87.7	114.6	326.8	406.5	608.8	700.1	709.1	712.7	730.6	749.4	755.6
37.5°	79.7	102.1	307.1	389.5	600.8	683.1	689.4	695.7	723.4	745.8	753.0
40°	71.6	91.3	283.8	370.7	588.2	662.5	667.9	677.8	714.5	740.4	747.6
42.5°	65.4	82.4	258.7	351.0	572.1	639.3	647.3	661.6	703.7	731.5	739.5
45°	60.0	73.4	231.9	324.1	551.5	615.1	626.7	646.4	691.2	718.0	725.2
47.5°	54.6	67.1	204.1	296.3	529.1	590.9	606.1	628.5	674.2	700.1	706.4
50°	50.1	60.9	176.4	266.8	505.0	564.9	582.8	606.1	652.7	676.9	684.9
52.5°	46.6	55.5	150.4	237.3	477.2	538.1	558.7	582.8	626.7	650.0	655.4
55°	43.0	51.0	128.0	205.9	448.6	509.4	531.8	555.1	598.1	617.8	621.3
57.5°	41.2	47.5	109.2	176.4	418.1	477.2	502.3	523.8	564.0	579.3	582.8
60°	38.5	44.8	94.9	151.3	385.0	446.8	468.2	489.7	523.8	536.3	539.0
62.5°	35.8	43.0	84.2	127.1	351.0	410.9	432.4	452.1	480.8	489.7	493.3
65°	34.0	41.2	76.1	109.2	316.0	373.3	394.8	411.8	435.1	444.1	445.9
67.5°	32.2	39.4	69.8	94.0	281.1	335.7	351.9	368.0	385.9	394.8	395.7
70°	29.5	37.6	64.5	83.3	245.3	292.8	306.2	323.2	337.5	342.0	344.7
72.5°	27.8	34.9	60.9	75.2	208.6	251.6	264.1	274.0	286.5	291.0	291.0
75°	25.1	31.3	57.3	67.1	171.0	205.9	216.7	226.5	236.4	238.2	235.5
77.5°	22.4	27.8	49.2	56.4	133.4	162.9	171.9	177.3	185.3	187.1	188.0
80°	18.8	24.2	38.5	43.9	96.7	120.0	126.2	130.7	137.9	137.9	139.7
82.5°	14.3	18.8	27.8	31.3	65.4	82.4	87.7	90.4	94.9	94.9	94.9
85°	9.0	11.6	17.9	20.6	39.4	50.1	53.7	54.6	58.2	59.1	59.1
87.5°	4.5	6.3	11.6	12.5	20.6	26.0	26.0	27.8	27.8	26.9	26.0
90°	3.8	6.7	9.7	10.4	16.4	24.4	28.3	25.2	18.9	14.1	14.1
92.5°	14.9	40.2	65.5	71.9	101.1	139.9	159.4	139.7	100.3	70.7	68.0
95°	35.7	82.1	128.5	140.0	248.6	393.4	465.8	415.7	315.4	240.2	231.7
97.5°	61.8	102.7	143.6	153.8	334.9	576.4	697.1	665.4	602.0	554.5	538.3
100°	81.9	119.0	156.1	165.4	366.4	634.3	768.3	770.6	775.2	778.7	759.3
102.5°	99.0	133.7	168.2	176.9	380.8	652.5	788.4	828.8	909.5	970.1	953.5
105°	128.1	157.4	186.7	194.0	391.4	654.6	786.2	876.7	1057.7	1193.5	1184.7
107.5°	157.9	185.2	212.5	219.4	393.4	625.4	741.4	867.7	1120.3	1309.8	1311.9
110°	178.0	202.7	227.3	233.5	390.4	599.6	704.2	845.4	1127.7	1339.5	1348.8

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	197.8	221.2	244.7	250.6	390.5	577.0	670.3	814.8	1103.7	1320.5	1334.7
115°	227.5	249.2	270.8	276.3	394.1	551.2	629.8	769.0	1047.3	1256.1	1275.8
117.5°	257.0	276.7	296.3	301.3	401.5	535.0	601.8	727.4	978.7	1167.1	1189.0
120°	274.1	292.6	311.1	315.8	407.4	529.6	590.6	705.4	935.0	1107.1	1128.5
122.5°	290.9	309.6	328.3	333.0	416.0	526.7	582.0	685.4	892.1	1047.2	1068.1
125°	316.6	333.6	350.6	354.9	427.5	524.3	572.7	660.6	836.1	967.8	987.2
127.5°	337.4	354.5	371.8	376.1	439.1	523.0	564.9	640.3	791.1	904.2	920.5
130°	348.5	367.1	385.6	390.3	447.5	523.8	562.0	629.1	763.3	864.0	879.0
132.5°	360.1	378.6	397.2	401.8	454.3	524.3	559.3	619.4	739.5	829.7	843.2
135°	377.3	394.1	411.0	415.2	461.8	523.8	554.9	605.2	705.8	781.2	792.9
137.5°	394.7	411.5	428.1	432.3	472.9	527.1	554.1	596.6	681.7	745.5	755.0
140°	409.2	424.6	440.0	443.9	479.8	527.6	551.5	588.2	661.7	716.9	725.7
142.5°	420.4	434.7	448.9	452.5	485.5	529.5	551.5	583.7	648.3	696.7	704.4
145°	437.5	450.0	462.3	465.5	493.0	529.6	547.8	574.3	627.0	666.6	672.4
147.5°	454.7	466.8	478.8	481.9	503.9	533.2	547.8	568.6	610.2	641.3	646.1
150°	465.8	476.8	487.7	490.5	509.6	535.1	547.8	565.4	600.4	626.7	630.6
152.5°	477.4	485.6	493.9	496.0	513.3	536.3	547.8	562.8	592.7	615.2	618.1
155°	494.6	500.7	506.8	508.4	521.5	539.1	547.8	559.7	583.6	601.4	603.4
157.5°	507.2	513.2	519.1	520.6	529.7	541.8	547.8	557.1	575.6	589.5	590.8
160°	515.8	520.4	525.0	526.2	533.4	543.0	547.8	555.8	571.7	583.6	584.4
162.5°	524.3	527.8	531.3	532.2	537.4	544.3	547.8	554.6	567.9	577.9	578.6
165°	533.6	536.7	539.9	540.7	543.1	546.2	547.8	552.7	562.3	569.4	570.2
167.5°	542.2	543.7	545.2	545.6	547.6	550.2	551.5	554.6	560.9	565.7	566.0
170°	547.8	549.3	550.8	551.2	551.2	551.4	551.5	554.6	560.9	565.7	565.7
172.5°	550.8	551.2	551.4	551.5	551.5	551.5	551.5	554.0	558.9	562.7	562.4
175°	554.9	554.9	554.9	554.9	553.8	552.2	551.5	553.1	556.3	558.6	558.6
177.5°	554.9	554.9	554.9	554.9	554.0	552.9	552.2	553.5	556.0	557.9	557.5
180°	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	278.4	278.4
2.5°	297.2	295.5
5°	382.3	384.1
7.5°	514.8	513.9
10°	640.1	648.2
12.5°	731.5	733.3
15°	787.0	790.6
17.5°	808.5	809.4
20°	809.4	807.6
22.5°	799.5	797.7
25°	787.9	787.0
27.5°	777.1	778.0
30°	772.7	775.3
32.5°	772.7	777.1
35°	774.4	778.9
37.5°	773.5	778.9
40°	770.0	776.2
42.5°	760.1	764.6
45°	744.9	750.3
47.5°	725.2	728.8
50°	700.1	703.7
52.5°	668.8	669.7
55°	631.2	634.8
57.5°	590.9	591.8
60°	546.1	548.8
62.5°	498.7	498.7
65°	448.6	450.3
67.5°	396.6	401.1
70°	343.8	344.7
72.5°	291.9	291.9
75°	238.2	239.0
77.5°	187.1	187.1
80°	138.8	139.7
82.5°	95.8	97.6
85°	60.0	60.0
87.5°	27.8	25.1
90°	14.1	14.1
92.5°	56.7	45.4
95°	197.6	163.5
97.5°	473.4	408.5
100°	682.0	604.8
102.5°	887.3	821.2
105°	1149.0	1113.5
107.5°	1320.5	1329.1
110°	1385.9	1422.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1391.7	1448.6
115°	1354.8	1433.8
117.5°	1276.5	1364.1
120°	1213.5	1298.6
122.5°	1152.1	1236.0
125°	1064.4	1141.8
127.5°	985.7	1050.9
130°	939.3	999.5
132.5°	897.1	951.1
135°	839.4	885.9
137.5°	793.2	831.2
140°	761.4	796.9
142.5°	735.1	765.7
145°	695.6	718.8
147.5°	665.3	684.5
150°	646.1	661.7
152.5°	629.9	641.7
155°	611.1	618.9
157.5°	596.4	601.8
160°	587.5	590.6
162.5°	581.7	584.6
165°	573.4	576.5
167.5°	567.3	568.6
170°	565.7	565.7
172.5°	561.3	560.1
175°	558.6	558.6
177.5°	556.3	554.9
180°	554.9	554.9

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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	3.02	3.81	4.07	4.87	6.30	16.16	16.94	17.21	18.00	19.44
	3H	3.72	4.43	4.78	5.49	6.95	17.98	18.68	19.04	19.75	21.21
	4H	4.02	4.69	5.09	5.76	7.22	18.61	19.28	19.68	20.35	21.81
	6H	4.26	4.88	5.35	5.95	7.43	19.02	19.64	20.11	20.71	22.19
	8H	4.33	4.92	5.42	6.01	7.48	19.14	19.72	20.22	20.81	22.28
	12H	4.34	4.90	5.44	5.99	7.48	19.19	19.75	20.29	20.84	22.33
4H	2H	10.20	10.87	11.28	11.94	13.40	16.43	17.10	17.50	18.17	19.63
	3H	11.76	12.33	12.85	13.42	14.90	18.45	19.01	19.54	20.11	21.58
	4H	11.86	12.37	12.95	13.46	14.95	19.20	19.72	20.30	20.81	22.30
	6H	11.86	12.31	12.96	13.42	14.91	19.73	20.17	20.83	21.28	22.77
	8H	11.84	12.25	12.94	13.36	14.86	19.88	20.29	20.98	21.40	22.90
	12H	11.79	12.17	12.91	13.28	14.79	19.96	20.33	21.08	21.45	22.96
8H	4H	13.28	13.70	14.39	14.80	16.31	19.26	19.67	20.36	20.77	22.28
	6H	13.52	13.87	14.65	15.01	16.51	19.87	20.21	20.99	21.36	22.86
	8H	13.54	13.84	14.67	14.97	16.49	20.08	20.38	21.21	21.51	23.03
	12H	13.51	13.77	14.64	14.89	16.45	20.21	20.48	21.35	21.60	23.16
12H	4H	13.42	13.80	14.54	14.91	16.42	19.21	19.58	20.33	20.70	22.21
	6H	13.78	14.08	14.91	15.20	16.73	19.85	20.15	20.98	21.28	22.80
	8H	13.84	14.11	14.98	15.23	16.79	20.07	20.34	21.21	21.46	23.02