

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: P937650

Luminaire Tested: SQ4-FB-100U-100D-930-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937650
REPORT IS A COMBINATION OF REPORTS P933567 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-100D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

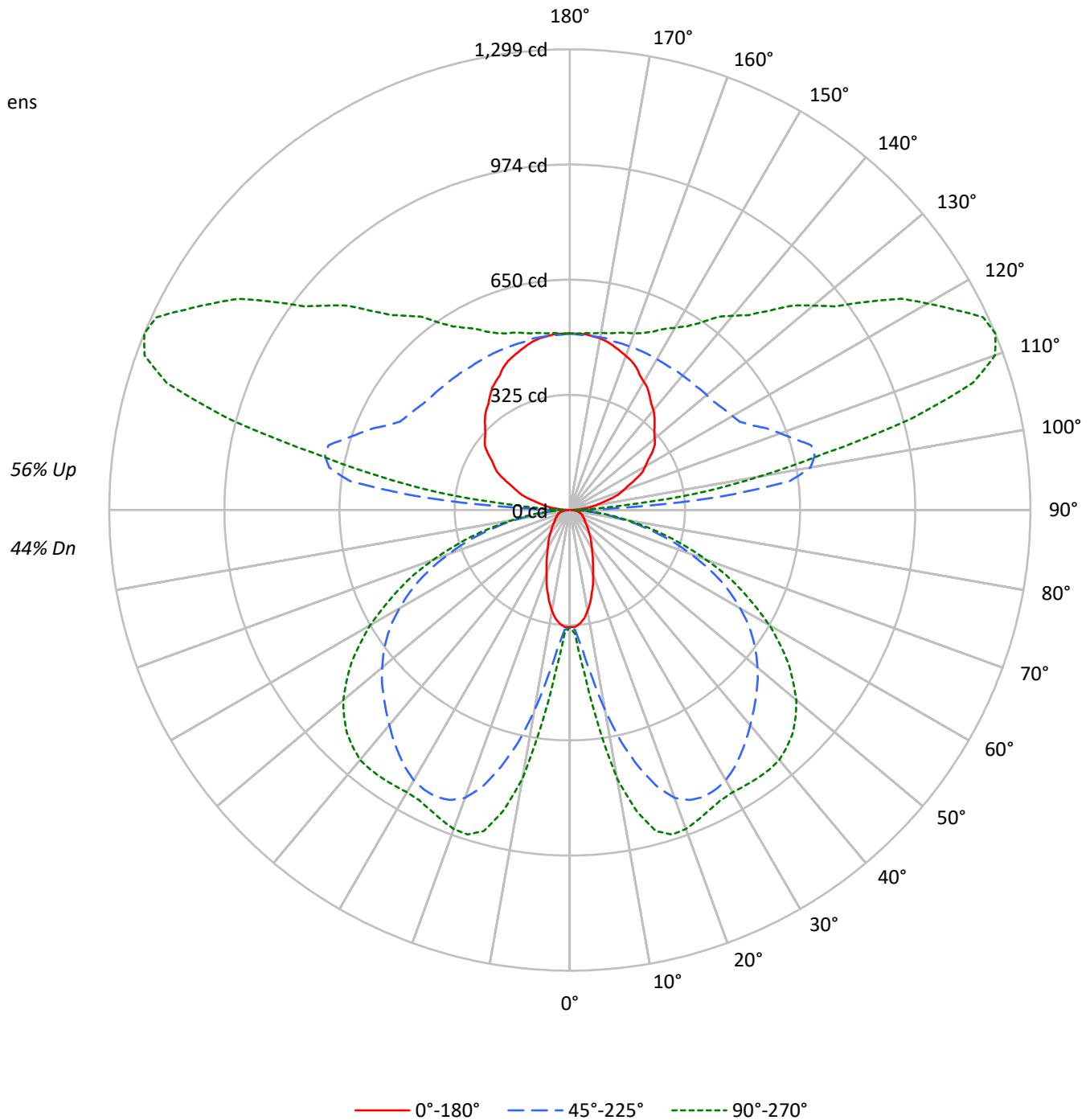
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5780.8 lumens
Efficiency: N/A
Efficacy: 99.7 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: General Diffuse

Input Watts (W): 58
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	44	44	44	44
1	96	91	87	84	88	84	80	77	69	67	65	56	55	53	44	43	42	36	36	36	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	43	38	36	34	30	30	30	30
3	79	69	62	56	72	63	57	52	53	48	44	43	39	36	33	31	29	24	24	24	24
4	72	61	53	46	65	56	49	43	46	41	37	38	34	30	29	27	24	20	20	20	20
5	66	54	46	39	60	49	42	37	41	36	31	33	29	26	26	23	21	17	17	17	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	20	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	21	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	24	20	25	20	17	19	16	14	11	11	11	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10	10	10	10
10	44	32	25	20	41	30	23	19	25	20	16	21	16	14	16	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3062	3062	3062
5°	2988	3536	4116
10°	2707	5151	6823
15°	2298	6725	8239
20°	1869	7788	8396
25°	1558	8143	8227
30°	1311	8188	8211
35°	1158	8046	8423
40°	1007	7862	8642
45°	910	7726	8677
50°	833	7602	8533
55°	795	7424	8155
60°	811	7089	7557
65°	840	6582	6737
70°	889	5729	5691
75°	974	4659	4441
80°	1039	3219	2992
85°	878	1700	1532

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8677 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.7	0.7
10°-20°	189.2	3.3
20°-30°	330.9	5.7
30°-40°	426.0	7.4
40°-50°	475.8	8.2
50°-60°	455.7	7.9
60°-70°	361.2	6.2
70°-80°	212.4	3.7
80°-90°	60.9	1.1
90°-100°	242.6	4.2
100°-110°	637.8	11.0
110°-120°	661.3	11.4
120°-130°	530.4	9.2
130°-140°	416.2	7.2
140°-150°	319.5	5.5
150°-160°	230.1	4.0
160°-170°	140.8	2.4
170°-180°	47.6	0.8
0°-30°	562.8	9.7
0°-40°	988.7	17.1
0°-60°	1920.2	33.2
0°-90°	2554.7	44.2
90°-120°	1541.7	26.7
90°-150°	2807.8	48.6
90°-180°	3226.0	55.8
0°-180°	5780.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	330	330	330	330	330	
5°	322	345	388	439	455	30
15°	241	444	749	908	937	67
25°	154	504	892	932	933	71
35°	104	482	840	888	923	65
45°	71	384	743	851	889	55
55°	51	244	630	732	752	46
65°	40	129	468	526	534	40
75°	30	80	257	282	283	31
85°	11	24	64	70	71	11
90°	3	9	25	13	13	3
95°	32	126	418	215	147	36
105°	115	174	705	1070	999	122
115°	204	248	565	1127	1286	202
125°	284	318	514	868	1024	252
135°	338	372	498	701	795	262
145°	392	418	491	598	645	246
155°	444	456	491	539	555	204
165°	479	485	491	511	517	135
175°	498	498	495	501	501	47
180°	498	498	498	498	498	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0
2.5°	330.0	330.0	332.1	333.2	335.3	336.4	338.5	340.6	347.0	348.0	350.1
5°	321.5	325.8	339.5	344.8	359.7	379.8	388.3	402.1	430.8	439.2	444.5
7.5°	308.8	318.3	352.3	360.8	397.9	451.0	473.2	502.9	548.5	570.9	588.8
10°	288.6	308.8	369.2	389.4	449.8	530.5	571.9	613.3	682.2	713.0	724.7
12.5°	266.4	299.2	387.3	414.8	501.9	619.7	669.5	715.2	793.7	835.0	841.4
15°	240.8	285.4	404.2	444.5	557.0	694.0	749.1	805.3	878.6	908.3	915.7
17.5°	218.6	274.8	420.1	462.6	599.5	760.8	817.0	863.7	923.1	943.3	948.6
20°	191.0	257.8	430.8	486.0	644.1	809.6	863.7	899.8	940.1	952.8	954.9
22.5°	170.8	239.8	437.2	494.4	673.7	839.3	884.9	913.6	941.1	945.4	946.4
25°	153.9	219.6	436.1	504.0	699.3	857.3	892.3	913.6	929.5	931.6	931.6
27.5°	138.0	197.4	431.9	506.1	718.3	861.5	889.2	904.0	911.4	915.7	915.7
30°	124.1	176.1	421.3	501.9	726.8	857.3	879.6	887.0	894.5	900.8	904.0
32.5°	113.5	155.9	405.4	493.4	727.8	846.7	862.6	866.8	877.4	892.3	897.7
35°	104.0	135.8	387.3	481.7	721.5	829.7	840.3	844.6	865.8	888.1	895.5
37.5°	94.4	120.9	363.9	461.6	711.9	809.6	817.0	824.4	857.3	883.9	892.3
40°	84.9	108.2	336.4	439.2	697.1	785.2	791.5	803.2	846.7	877.4	885.9
42.5°	77.5	97.6	306.7	416.0	678.0	757.6	767.1	784.1	834.0	866.8	876.4
45°	71.1	87.0	274.8	384.1	653.6	729.0	742.7	766.1	819.1	850.9	859.5
47.5°	64.7	79.6	241.9	351.2	627.1	700.3	718.3	744.9	799.0	829.7	837.1
50°	59.4	72.2	209.0	316.2	598.4	669.5	690.7	718.3	773.5	802.1	811.7
52.5°	55.2	65.8	178.3	281.2	565.6	637.7	662.1	690.7	742.7	770.3	776.7
55°	50.9	60.5	151.8	244.0	531.6	603.7	630.3	657.8	708.8	732.1	736.4
57.5°	48.8	56.2	129.4	209.0	495.5	565.6	595.3	620.7	668.4	686.5	690.7
60°	45.6	53.1	112.5	179.3	456.3	529.4	555.0	580.4	620.7	635.6	638.7
62.5°	42.5	50.9	99.7	150.6	416.0	487.0	512.5	535.8	569.8	580.4	584.7
65°	40.3	48.8	90.2	129.4	374.5	442.5	467.9	488.1	515.7	526.3	528.4
67.5°	38.2	46.7	82.8	111.4	333.2	397.9	417.0	436.1	457.3	467.9	469.0
70°	35.0	44.6	76.4	98.7	290.7	347.0	362.9	383.0	400.0	405.4	408.5
72.5°	32.9	41.4	72.2	89.1	247.2	298.2	313.0	324.7	339.5	344.8	344.8
75°	29.7	37.1	67.9	79.6	202.7	244.0	256.8	268.4	280.1	282.3	279.0
77.5°	26.5	32.9	58.4	66.8	158.1	193.1	203.7	210.1	219.6	221.8	222.8
80°	22.2	28.7	45.6	52.0	114.6	142.2	149.6	154.9	163.4	163.4	165.5
82.5°	16.9	22.2	32.9	37.1	77.5	97.6	104.0	107.2	112.5	112.5	112.5
85°	10.6	13.8	21.2	24.4	46.7	59.4	63.7	64.7	69.0	70.0	70.0
87.5°	5.3	7.4	13.8	14.9	24.4	30.8	30.8	32.9	32.9	31.8	30.8
90°	3.4	6.0	8.7	9.3	14.7	21.8	25.4	22.6	16.9	12.7	12.7
92.5°	13.3	36.1	58.8	64.5	90.7	125.5	142.9	125.3	89.9	63.4	60.9
95°	32.0	73.6	115.2	125.6	223.0	352.8	417.8	372.8	282.9	215.4	207.8
97.5°	55.4	92.1	128.8	138.0	300.4	517.0	625.2	596.8	539.9	497.3	482.8
100°	73.5	106.7	140.0	148.3	328.6	568.9	689.1	691.1	695.2	698.4	681.0
102.5°	88.8	119.9	150.9	158.7	341.5	585.2	707.1	743.3	815.8	870.1	855.2
105°	114.9	141.2	167.4	174.0	351.1	587.1	705.1	786.3	948.7	1070.5	1062.5
107.5°	141.6	166.1	190.6	196.7	352.8	560.9	665.0	778.3	1004.8	1174.7	1176.6
110°	159.6	181.8	203.9	209.4	350.1	537.8	631.6	758.2	1011.5	1201.4	1209.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	177.4	198.4	219.5	224.8	350.3	517.5	601.2	730.8	989.9	1184.3	1197.1
115°	204.0	223.5	242.9	247.8	353.5	494.4	564.8	689.7	939.3	1126.6	1144.3
117.5°	230.5	248.1	265.8	270.2	360.1	479.9	539.8	652.4	877.8	1046.8	1066.4
120°	245.8	262.4	279.0	283.2	365.4	475.0	529.7	632.7	838.6	993.0	1012.1
122.5°	260.9	277.7	294.5	298.6	373.1	472.4	522.0	614.7	800.1	939.2	958.0
125°	283.9	299.2	314.5	318.3	383.4	470.2	513.7	592.5	749.9	868.0	885.4
127.5°	302.6	318.0	333.5	337.3	393.8	469.0	506.7	574.3	709.5	810.9	825.6
130°	312.6	329.2	345.9	350.0	401.3	469.8	504.0	564.3	684.6	774.9	788.4
132.5°	323.0	339.6	356.2	360.4	407.4	470.2	501.6	555.5	663.3	744.1	756.3
135°	338.4	353.5	368.7	372.4	414.2	469.8	497.7	542.8	633.0	700.7	711.1
137.5°	354.0	369.1	384.0	387.8	424.1	472.7	497.0	535.1	611.4	668.7	677.2
140°	367.1	380.9	394.7	398.1	430.3	473.2	494.6	527.6	593.5	643.0	650.9
142.5°	377.1	389.9	402.6	405.8	435.5	474.9	494.6	523.6	581.5	624.9	631.8
145°	392.4	403.6	414.7	417.5	442.1	475.0	491.4	515.0	562.3	597.8	603.1
147.5°	407.8	418.7	429.4	432.2	451.9	478.2	491.4	510.0	547.2	575.2	579.5
150°	417.8	427.6	437.4	439.9	457.1	480.0	491.4	507.1	538.5	562.1	565.6
152.5°	428.2	435.5	443.0	444.9	460.4	481.0	491.4	504.8	531.6	551.7	554.4
155°	443.6	449.0	454.6	455.9	467.7	483.5	491.4	502.0	523.4	539.4	541.1
157.5°	454.9	460.3	465.6	466.9	475.1	485.9	491.4	499.6	516.2	528.7	529.9
160°	462.6	466.8	470.9	471.9	478.4	487.0	491.4	498.5	512.7	523.4	524.1
162.5°	470.2	473.4	476.5	477.3	482.0	488.2	491.4	497.4	509.3	518.3	519.0
165°	478.6	481.4	484.2	484.9	487.1	489.9	491.4	495.7	504.3	510.7	511.4
167.5°	486.3	487.7	489.0	489.3	491.1	493.4	494.6	497.5	503.1	507.3	507.7
170°	491.4	492.6	494.0	494.3	494.4	494.6	494.6	497.5	503.1	507.3	507.3
172.5°	494.0	494.3	494.6	494.6	494.6	494.6	494.6	496.9	501.3	504.7	504.4
175°	497.7	497.7	497.7	497.7	496.7	495.3	494.6	496.1	498.9	501.0	501.0
177.5°	497.7	497.7	497.7	497.7	496.9	495.9	495.3	496.4	498.7	500.3	500.0
180°	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	330.0	330.0
2.5°	352.3	350.1
5°	453.1	455.2
7.5°	610.1	609.0
10°	758.7	768.1
12.5°	866.8	869.0
15°	932.7	936.9
17.5°	958.1	959.2
20°	959.2	957.0
22.5°	947.5	945.4
25°	933.7	932.7
27.5°	921.0	922.0
30°	915.7	918.9
32.5°	915.7	921.0
35°	917.8	923.1
37.5°	916.7	923.1
40°	912.5	919.9
42.5°	900.8	906.1
45°	882.8	889.2
47.5°	859.5	863.7
50°	829.7	834.0
52.5°	792.6	793.7
55°	748.0	752.3
57.5°	700.3	701.3
60°	647.2	650.4
62.5°	591.0	591.0
65°	531.6	533.7
67.5°	470.1	475.4
70°	407.4	408.5
72.5°	345.9	345.9
75°	282.3	283.3
77.5°	221.8	221.8
80°	164.5	165.5
82.5°	113.5	115.6
85°	71.1	71.1
87.5°	32.9	29.7
90°	12.7	12.7
92.5°	50.8	40.7
95°	177.2	146.6
97.5°	424.5	366.4
100°	611.7	542.4
102.5°	795.9	736.5
105°	1030.6	998.7
107.5°	1184.3	1192.1
110°	1243.0	1276.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1248.2	1299.3
115°	1215.1	1285.9
117.5°	1144.9	1223.5
120°	1088.4	1164.7
122.5°	1033.3	1108.5
125°	954.7	1024.1
127.5°	884.1	942.6
130°	842.4	896.5
132.5°	804.6	853.0
135°	752.8	794.6
137.5°	711.4	745.5
140°	682.9	714.8
142.5°	659.3	686.7
145°	623.9	644.6
147.5°	596.7	613.9
150°	579.5	593.5
152.5°	564.9	575.5
155°	548.1	555.1
157.5°	534.9	539.8
160°	526.9	529.7
162.5°	521.7	524.4
165°	514.2	517.1
167.5°	508.8	510.0
170°	507.3	507.3
172.5°	503.4	502.4
175°	501.0	501.0
177.5°	498.9	497.7
180°	497.7	497.7



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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	4.32	5.17	5.32	6.18	7.53	17.46	18.31	18.46	19.32	20.67
	3H	5.03	5.79	6.04	6.81	8.18	19.29	20.04	20.29	21.07	22.44
	4H	5.33	6.05	6.35	7.07	8.45	19.92	20.64	20.94	21.67	23.04
	6H	5.58	6.24	6.61	7.27	8.66	20.34	21.00	21.37	22.03	23.42
	8H	5.64	6.27	6.68	7.32	8.71	20.45	21.08	21.49	22.13	23.52
	12H	5.66	6.26	6.70	7.30	8.71	20.51	21.11	21.55	22.15	23.56
4H	2H	11.51	12.23	12.54	13.26	14.63	17.74	18.46	18.76	19.48	20.86
	3H	13.08	13.68	14.12	14.74	16.13	19.77	20.37	20.80	21.42	22.81
	4H	13.18	13.73	14.22	14.77	16.19	20.52	21.07	21.57	22.12	23.53
	6H	13.19	13.66	14.24	14.73	16.14	21.05	21.52	22.10	22.59	24.00
	8H	13.16	13.61	14.22	14.67	16.09	21.20	21.65	22.26	22.71	24.13
	12H	13.12	13.52	14.19	14.60	16.03	21.29	21.69	22.36	22.77	24.19
8H	4H	14.61	15.05	15.66	16.11	17.54	20.58	21.03	21.64	22.09	23.51
	6H	14.85	15.22	15.93	16.32	17.74	21.20	21.57	22.28	22.67	24.09
	8H	14.87	15.19	15.95	16.28	17.72	21.41	21.73	22.50	22.82	24.26
	12H	14.84	15.12	15.93	16.20	17.68	21.54	21.83	22.64	22.91	24.39
12H	4H	14.75	15.15	15.82	16.23	17.66	20.53	20.94	21.61	22.01	23.44
	6H	15.11	15.43	16.19	16.52	17.96	21.18	21.51	22.27	22.59	24.03
	8H	15.17	15.46	16.26	16.54	18.02	21.40	21.69	22.49	22.77	24.25