

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: P937884

Luminaire Tested: SQ4-FB-125U-050D-B2750-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937884
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-B2750-1D-UNV-STD-W-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

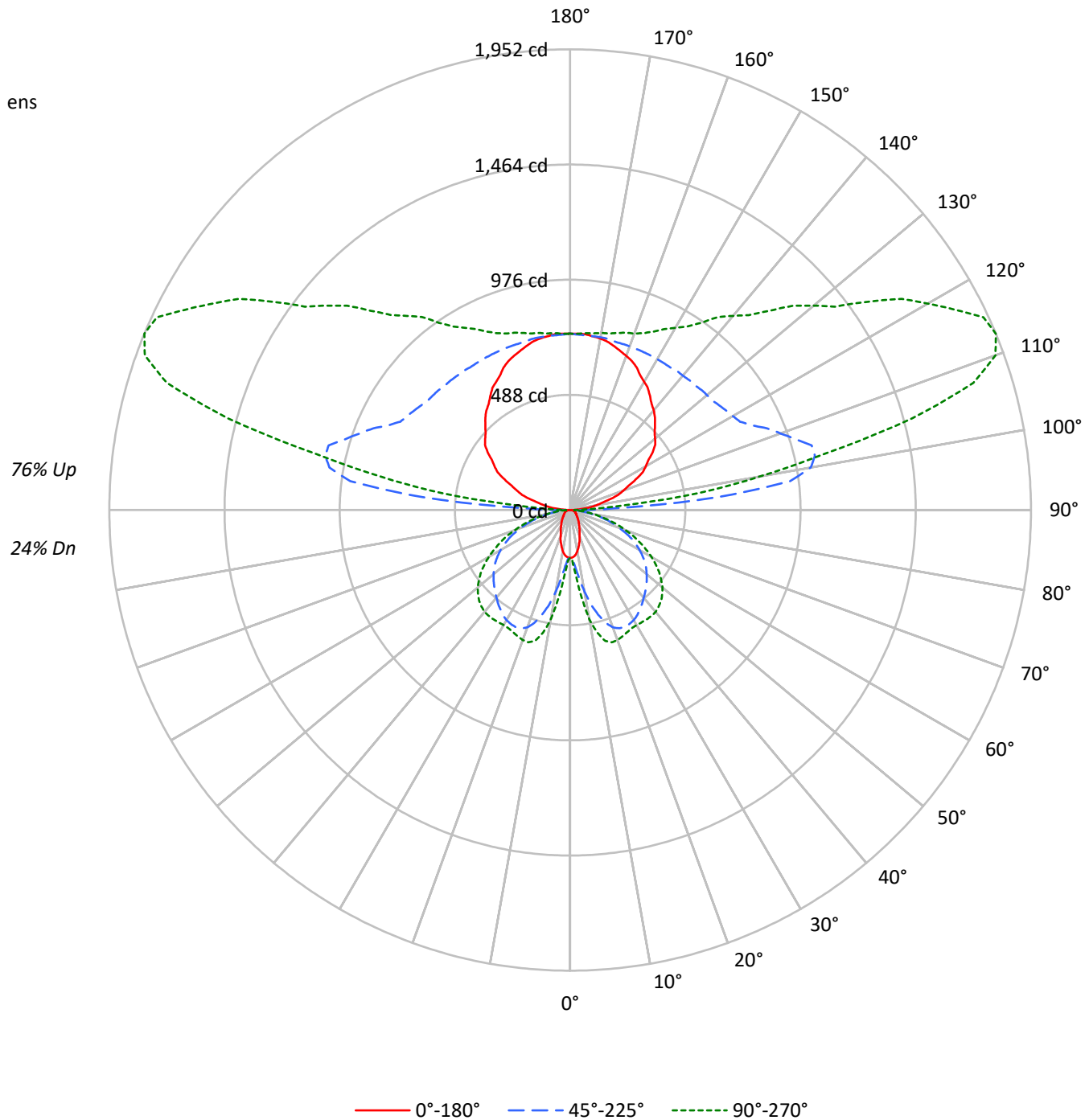
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6412.9 lumens
Efficiency: N/A
Efficacy: 134.7 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: 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				
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24			24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20			20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16			16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	22	20	19	13			13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11			11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10			10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8			8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7			7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6			6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6			6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5			5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1875	1875	1875
5°	1831	2166	2522
10°	1659	3156	4180
15°	1408	4120	5048
20°	1146	4772	5144
25°	954	4989	5040
30°	804	5017	5031
35°	709	4929	5160
40°	617	4818	5295
45°	557	4733	5316
50°	510	4658	5228
55°	487	4548	4996
60°	496	4343	4630
65°	515	4032	4126
70°	543	3510	3487
75°	597	2854	2720
80°	641	1973	1835
85°	538	1044	937

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5316 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.2	0.4
10°-20°	115.9	1.8
20°-30°	202.7	3.2
30°-40°	261.0	4.1
40°-50°	291.5	4.5
50°-60°	279.2	4.4
60°-70°	221.2	3.5
70°-80°	130.1	2.0
80°-90°	39.0	0.6
90°-100°	364.4	5.7
100°-110°	958.0	14.9
110°-120°	993.4	15.5
120°-130°	796.8	12.4
130°-140°	625.2	9.7
140°-150°	479.9	7.5
150°-160°	345.6	5.4
160°-170°	211.4	3.3
170°-180°	71.4	1.1
0°-30°	344.8	5.4
0°-40°	605.8	9.4
0°-60°	1176.5	18.3
0°-90°	1566.8	24.4
90°-120°	2315.8	36.1
90°-150°	4217.6	65.8
90°-180°	4846.0	75.6
0°-180°	6412.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	202	202	202	202	202	
5°	197	211	238	269	279	18
15°	148	272	459	556	574	41
25°	94	309	547	571	571	43
35°	64	295	515	544	566	40
45°	44	235	455	521	545	34
55°	31	150	386	449	461	28
65°	25	79	287	322	327	24
75°	18	49	157	173	174	19
85°	6	15	39	43	44	7
90°	5	14	38	19	19	5
95°	48	189	628	324	220	53
105°	173	261	1059	1608	1500	183
115°	306	372	848	1692	1932	303
125°	426	478	772	1304	1538	379
135°	508	559	748	1053	1194	393
145°	590	627	738	898	968	369
155°	666	685	738	810	834	306
165°	719	728	738	767	777	203
175°	748	748	743	752	752	71
180°	748	748	748	748	748	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	202.1	202.1	202.1	202.1	202.1	202.1	202.1	202.1	202.1	202.1	202.1
2.5°	202.1	202.1	203.5	204.1	205.4	206.1	207.4	208.6	212.6	213.2	214.5
5°	197.0	199.6	208.0	211.2	220.4	232.8	237.9	246.4	264.0	269.1	272.4
7.5°	189.1	195.1	215.8	221.0	243.8	276.3	289.9	308.1	336.0	349.7	360.8
10°	176.8	189.1	226.3	238.6	275.6	325.0	350.4	375.8	418.0	436.8	444.0
12.5°	163.2	183.3	237.3	254.2	307.5	379.7	410.2	438.2	486.2	511.6	515.5
15°	147.6	174.9	247.7	272.4	341.3	425.1	458.9	493.4	538.3	556.4	561.0
17.5°	133.9	168.4	257.5	283.4	367.3	466.1	500.6	529.2	565.5	577.9	581.1
20°	117.1	157.9	264.0	297.8	394.6	496.0	529.2	551.3	576.0	583.7	585.1
22.5°	104.7	146.9	267.8	302.9	412.8	514.2	542.2	559.7	576.6	579.2	579.8
25°	94.3	134.6	267.2	308.8	428.4	525.2	546.7	559.7	569.5	570.7	570.7
27.5°	84.5	120.9	264.5	310.1	440.1	527.8	544.8	553.9	558.4	561.0	561.0
30°	76.1	107.9	258.0	307.5	445.3	525.2	538.9	543.4	548.0	551.9	553.9
32.5°	69.6	95.5	248.4	302.2	445.9	518.7	528.5	531.1	537.6	546.7	549.9
35°	63.7	83.2	237.3	295.2	442.1	508.3	514.8	517.4	530.4	544.1	548.6
37.5°	57.8	74.1	223.0	282.8	436.1	496.0	500.6	505.1	525.2	541.5	546.7
40°	52.0	66.3	206.1	269.1	427.1	481.0	485.0	492.1	518.7	537.6	542.8
42.5°	47.5	59.8	187.9	254.8	415.4	464.2	470.0	480.4	511.0	531.1	536.9
45°	43.5	53.3	168.4	235.3	400.4	446.6	455.0	469.4	501.8	521.3	526.6
47.5°	39.6	48.7	148.3	215.2	384.2	429.1	440.1	456.3	489.5	508.3	512.9
50°	36.4	44.2	128.1	193.7	366.7	410.2	423.2	440.1	473.9	491.5	497.3
52.5°	33.8	40.3	109.2	172.3	346.5	390.7	405.6	423.2	455.0	471.9	475.9
55°	31.2	37.0	92.9	149.5	325.7	369.9	386.1	403.0	434.2	448.6	451.2
57.5°	29.9	34.5	79.3	128.1	303.6	346.5	364.6	380.2	409.5	420.5	423.2
60°	27.9	32.5	68.9	109.9	279.6	324.4	340.0	355.6	380.2	389.3	391.4
62.5°	26.0	31.2	61.1	92.3	254.8	298.4	314.0	328.3	349.0	355.6	358.1
65°	24.7	29.9	55.2	79.3	229.5	271.0	286.6	299.0	315.9	322.4	323.7
67.5°	23.4	28.6	50.7	68.2	204.1	243.8	255.4	267.2	280.1	286.6	287.3
70°	21.4	27.3	46.8	60.5	178.1	212.6	222.3	234.7	245.1	248.4	250.3
72.5°	20.2	25.4	44.2	54.7	151.5	182.7	191.8	198.9	208.0	211.2	211.2
75°	18.2	22.8	41.6	48.7	124.1	149.5	157.3	164.4	171.6	172.9	170.9
77.5°	16.3	20.2	35.8	41.0	96.9	118.3	124.8	128.7	134.6	135.9	136.5
80°	13.7	17.5	27.9	31.9	70.3	87.1	91.7	94.9	100.1	100.1	101.5
82.5°	10.4	13.7	20.2	22.8	47.5	59.8	63.7	65.7	68.9	68.9	68.9
85°	6.5	8.4	13.0	14.9	28.6	36.4	39.1	39.6	42.2	42.9	42.9
87.5°	3.3	4.6	8.4	9.1	14.9	18.9	18.9	20.2	20.2	19.5	18.9
90°	5.0	9.0	13.1	14.1	22.1	32.8	38.1	33.8	25.4	19.1	19.1
92.5°	20.1	54.2	88.3	96.8	136.1	188.6	214.7	188.2	135.2	95.3	91.6
95°	48.2	110.6	173.1	188.7	335.0	530.0	627.6	560.1	425.0	323.6	312.1
97.5°	83.2	138.3	193.4	207.2	451.2	776.5	939.2	896.4	811.1	747.0	725.2
100°	110.4	160.4	210.3	222.8	493.5	854.5	1035.0	1038.1	1044.4	1049.0	1023.0
102.5°	133.4	180.0	226.6	238.3	512.9	879.1	1062.1	1116.6	1225.4	1307.0	1284.7
105°	172.6	212.1	251.6	261.4	527.3	881.9	1059.1	1181.1	1425.0	1608.0	1595.9
107.5°	212.7	249.5	286.3	295.5	530.0	842.6	998.9	1169.1	1509.3	1764.5	1767.4
110°	239.8	273.1	306.2	314.5	526.0	807.9	948.7	1139.0	1519.4	1804.7	1817.2



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	266.4	298.1	329.7	337.6	526.1	777.4	903.1	1097.8	1487.1	1779.1	1798.3
115°	306.5	335.8	365.0	372.3	531.0	742.5	848.4	1035.9	1411.0	1692.3	1718.8
117.5°	346.2	372.8	399.3	405.9	540.9	720.8	810.8	979.9	1318.4	1572.3	1601.8
120°	369.3	394.3	419.3	425.5	548.9	713.5	795.7	950.4	1259.6	1491.6	1520.3
122.5°	391.9	417.1	442.3	448.6	560.5	709.6	784.2	923.5	1201.9	1410.8	1439.1
125°	426.5	449.4	472.4	478.1	576.0	706.4	771.6	889.9	1126.5	1303.9	1330.0
127.5°	454.6	477.7	500.9	506.7	591.5	704.6	761.1	862.6	1065.8	1218.1	1240.1
130°	469.6	494.6	519.6	525.8	602.9	705.7	757.1	847.5	1028.3	1164.0	1184.2
132.5°	485.2	510.2	535.2	541.4	612.1	706.4	753.6	834.5	996.4	1117.8	1136.0
135°	508.2	531.0	553.7	559.4	622.1	705.7	747.6	815.4	951.0	1052.6	1068.3
137.5°	531.8	554.3	576.8	582.5	637.1	710.1	746.5	803.8	918.4	1004.4	1017.2
140°	551.4	572.1	592.8	598.1	646.4	710.9	743.0	792.5	891.6	965.8	977.8
142.5°	566.4	585.6	604.8	609.6	654.1	713.4	743.0	786.5	873.5	938.7	948.9
145°	589.5	606.2	623.0	627.1	664.1	713.4	738.0	773.6	844.7	898.1	905.9
147.5°	612.6	628.9	645.2	649.2	678.8	718.2	738.0	766.0	822.0	864.0	870.5
150°	627.6	642.4	657.1	660.8	686.5	720.8	738.0	761.6	808.9	844.4	849.6
152.5°	643.2	654.4	665.5	668.3	691.6	722.5	738.0	758.1	798.6	828.8	832.8
155°	666.3	674.5	682.8	684.8	702.5	726.2	738.0	754.1	786.1	810.3	812.9
157.5°	683.3	691.4	699.3	701.4	713.6	729.9	738.0	750.5	775.5	794.2	796.0
160°	694.9	701.1	707.4	708.9	718.6	731.5	738.0	748.6	770.1	786.1	787.2
162.5°	706.4	711.1	715.8	717.0	723.9	733.3	738.0	747.0	765.1	778.7	779.7
165°	718.9	723.2	727.4	728.5	731.7	735.9	738.0	744.5	757.4	767.1	768.1
167.5°	730.5	732.5	734.5	735.0	737.7	741.3	743.0	747.3	755.7	762.1	762.6
170°	738.0	740.0	742.1	742.5	742.7	742.9	743.0	747.3	755.7	762.1	762.1
172.5°	742.1	742.4	742.9	743.0	743.0	743.0	743.0	746.3	753.0	758.0	757.7
175°	747.6	747.6	747.6	747.6	746.0	744.0	743.0	745.2	749.3	752.5	752.5
177.5°	747.6	747.6	747.6	747.6	746.4	744.8	744.0	745.6	749.0	751.6	751.1
180°	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	202.1	202.1
2.5°	215.8	214.5
5°	277.6	278.9
7.5°	373.7	373.2
10°	464.8	470.6
12.5°	531.1	532.4
15°	571.4	574.0
17.5°	587.0	587.7
20°	587.7	586.3
22.5°	580.5	579.2
25°	572.1	571.4
27.5°	564.2	564.9
30°	561.0	563.0
32.5°	561.0	564.2
35°	562.3	565.5
37.5°	561.6	565.5
40°	559.0	563.6
42.5°	551.9	555.1
45°	540.8	544.8
47.5°	526.6	529.2
50°	508.3	511.0
52.5°	485.6	486.2
55°	458.3	460.9
57.5°	429.1	429.7
60°	396.5	398.5
62.5°	362.1	362.1
65°	325.7	326.9
67.5°	288.0	291.2
70°	249.6	250.3
72.5°	211.9	211.9
75°	172.9	173.5
77.5°	135.9	135.9
80°	100.8	101.5
82.5°	69.6	70.8
85°	43.5	43.5
87.5°	20.2	18.2
90°	19.1	19.1
92.5°	76.4	61.2
95°	266.2	220.3
97.5°	637.8	550.4
100°	918.9	814.7
102.5°	1195.5	1106.3
105°	1548.1	1500.1
107.5°	1779.0	1790.6
110°	1867.1	1917.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1874.9	1951.7
115°	1825.2	1931.6
117.5°	1719.8	1837.7
120°	1634.8	1749.4
122.5°	1552.0	1665.1
125°	1434.0	1538.2
127.5°	1327.9	1415.8
130°	1265.4	1346.6
132.5°	1208.6	1281.3
135°	1130.9	1193.5
137.5°	1068.5	1119.8
140°	1025.7	1073.7
142.5°	990.2	1031.5
145°	937.1	968.3
147.5°	896.2	922.1
150°	870.6	891.6
152.5°	848.6	864.4
155°	823.4	833.8
157.5°	803.4	810.8
160°	791.5	795.7
162.5°	783.7	787.7
165°	772.4	776.7
167.5°	764.3	766.1
170°	762.1	762.1
172.5°	756.1	754.6
175°	752.5	752.5
177.5°	749.3	747.6
180°	747.6	747.6



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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	0.16	0.85	1.31	1.99	3.58	13.30	13.99	14.45	15.13	16.72
	3H	0.86	1.47	2.01	2.62	4.22	15.11	15.73	16.27	16.87	18.48
	4H	1.15	1.73	2.31	2.88	4.49	15.74	16.32	16.90	17.47	19.08
	6H	1.39	1.93	2.56	3.08	4.70	16.15	16.69	17.32	17.83	19.46
	8H	1.45	1.97	2.63	3.13	4.75	16.26	16.77	17.43	17.93	19.55
	12H	1.46	1.95	2.64	3.11	4.75	16.31	16.80	17.49	17.96	19.59
4H	2H	7.33	7.92	8.50	9.06	10.67	13.56	14.14	14.73	15.29	16.90
	3H	8.88	9.37	10.06	10.54	12.17	15.57	16.06	16.74	17.23	18.86
	4H	8.97	9.42	10.15	10.58	12.23	16.32	16.77	17.50	17.93	19.57
	6H	8.97	9.36	10.15	10.54	12.17	16.84	17.22	18.02	18.40	20.04
	8H	8.95	9.31	10.13	10.48	12.13	16.99	17.35	18.17	18.52	20.17
	12H	8.89	9.22	10.09	10.40	12.06	17.06	17.39	18.26	18.57	20.23
8H	4H	10.39	10.75	11.57	11.93	13.58	16.37	16.73	17.55	17.90	19.55
	6H	10.63	10.92	11.83	12.14	13.79	16.97	17.27	18.17	18.49	20.13
	8H	10.64	10.90	11.85	12.09	13.76	17.18	17.44	18.39	18.64	20.30
	12H	10.60	10.83	11.81	12.02	13.72	17.31	17.54	18.52	18.73	20.43
12H	4H	10.52	10.85	11.72	12.03	13.69	16.31	16.64	17.51	17.82	19.48
	6H	10.88	11.14	12.08	12.33	14.00	16.95	17.21	18.16	18.41	20.07
	8H	10.94	11.17	12.15	12.36	14.06	17.17	17.40	18.38	18.59	20.29