

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: P937483

Luminaire Tested: SQ4-FB-100U-050D-B2750-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

**Test Information**

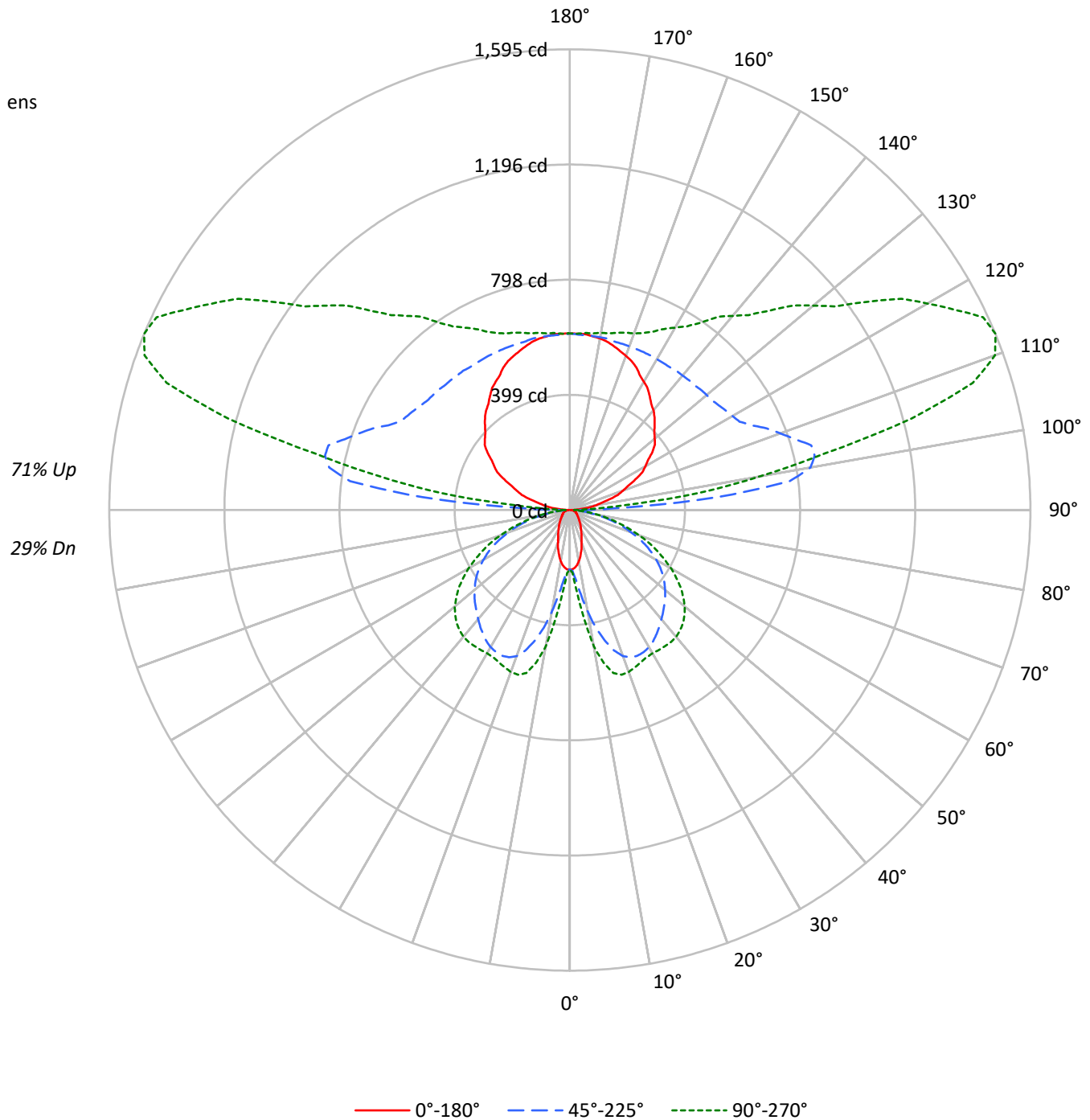
Test Method: LM-79-2019  
Report Number: P937483  
REPORT IS A COMBINATION OF REPORTS P933565 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-100U-050D-B2750-1D-UNV-STD-W-4-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5555.1 lumens  
Efficiency: N/A  
Efficacy: 134.8 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<sub>in</sub>): 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: P937483  
CATALOG NUMBER: SQ4-FB-100U-050D-B2750-1D-UNV-STD-W-4-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P937483

CATALOG NUMBER: SQ4-FB-100U-050D-B2750-1D-UNV-STD-W-4-3000K

**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	0
RCR																		
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	6

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1909	1909	1909
5°	1864	2205	2566
10°	1688	3211	4254
15°	1433	4192	5137
20°	1165	4855	5234
25°	971	5077	5128
30°	818	5104	5119
35°	721	5016	5250
40°	628	4902	5388
45°	567	4816	5409
50°	520	4739	5319
55°	495	4628	5083
60°	505	4419	4710
65°	523	4103	4199
70°	553	3571	3548
75°	607	2903	2769
80°	651	2008	1866
85°	547	1060	954

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5409 cd/sqm



TEST NUMBER: P937483

CATALOG NUMBER: SQ4-FB-100U-050D-B2750-1D-UNV-STD-W-4-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	26.6	0.5
10°-20°	117.9	2.1
20°-30°	206.3	3.7
30°-40°	265.6	4.8
40°-50°	296.6	5.3
50°-60°	284.1	5.1
60°-70°	225.1	4.1
70°-80°	132.4	2.4
80°-90°	39.1	0.7
90°-100°	297.9	5.4
100°-110°	783.1	14.1
110°-120°	812.0	14.6
120°-130°	651.3	11.7
130°-140°	511.1	9.2
140°-150°	392.3	7.1
150°-160°	282.5	5.1
160°-170°	172.8	3.1
170°-180°	58.4	1.1
0°-30°	350.8	6.3
0°-40°	616.4	11.1
0°-60°	1197.1	21.5
0°-90°	1593.7	28.7
90°-120°	1893.0	34.1
90°-150°	3447.6	62.1
90°-180°	3961.0	71.3
0°-180°	5555.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	206	206	206	206	206	
5°	200	215	242	274	284	19
15°	150	277	467	566	584	42
25°	96	314	556	581	581	44
35°	65	300	524	554	575	40
45°	44	239	463	530	554	34
55°	32	152	393	456	469	29
65°	25	81	292	328	333	25
75°	18	50	160	176	177	19
85°	7	15	40	44	44	7
90°	4	11	31	16	16	4
95°	39	154	513	264	180	44
105°	141	214	866	1314	1226	150
115°	250	304	694	1383	1579	247
125°	349	391	631	1066	1257	309
135°	416	457	611	860	976	321
145°	482	513	603	734	792	302
155°	545	560	603	662	682	250
165°	588	595	603	627	635	166
175°	611	611	607	615	615	58
180°	611	611	611	611	611	



TEST NUMBER: P937483

CATALOG NUMBER: SQ4-FB-100U-050D-B2750-1D-UNV-STD-W-4-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7
2.5°	205.7	205.7	207.1	207.7	209.0	209.7	211.0	212.3	216.3	216.9	218.3
5°	200.5	203.1	211.7	214.9	224.2	236.8	242.1	250.7	268.6	273.8	277.2
7.5°	192.5	198.5	219.6	224.9	248.1	281.1	295.0	313.5	341.9	355.8	367.1
10°	179.9	192.5	230.2	242.8	280.4	330.7	356.5	382.4	425.4	444.5	451.8
12.5°	166.0	186.6	241.5	258.6	312.9	386.3	417.4	445.9	494.8	520.6	524.6
15°	150.2	178.0	252.0	277.2	347.3	432.6	467.0	502.1	547.7	566.2	570.8
17.5°	136.3	171.4	262.0	288.4	373.7	474.3	509.4	538.5	575.4	588.1	591.3
20°	119.1	160.7	268.6	303.0	401.5	504.7	538.5	560.9	586.1	594.0	595.3
22.5°	106.5	149.5	272.5	308.2	420.0	523.2	551.7	569.5	586.7	589.3	590.0
25°	95.9	137.0	271.8	314.2	435.9	534.4	556.3	569.5	579.5	580.8	580.8
27.5°	86.0	123.1	269.2	315.5	447.8	537.1	554.3	563.6	568.2	570.8	570.8
30°	77.4	109.8	262.6	312.9	453.1	534.4	548.3	552.9	557.6	561.6	563.6
32.5°	70.8	97.2	252.7	307.5	453.8	527.8	537.8	540.4	547.0	556.3	559.6
35°	64.8	84.7	241.5	300.3	449.8	517.3	523.9	526.5	539.7	553.6	558.3
37.5°	58.9	75.4	226.9	287.7	443.8	504.7	509.4	514.0	534.4	551.0	556.3
40°	52.9	67.4	209.7	273.8	434.6	489.5	493.5	500.7	527.8	547.0	552.4
42.5°	48.3	60.8	191.2	259.3	422.7	472.3	478.2	488.9	519.9	540.4	546.3
45°	44.3	54.2	171.4	239.4	407.4	454.4	463.0	477.6	510.6	530.5	535.8
47.5°	40.3	49.6	150.9	219.0	390.9	436.6	447.8	464.3	498.1	517.3	521.9
50°	37.1	45.0	130.3	197.1	373.1	417.4	430.6	447.8	482.3	500.1	506.0
52.5°	34.4	41.0	111.1	175.3	352.6	397.6	412.7	430.6	463.0	480.2	484.2
55°	31.7	37.7	94.6	152.1	331.4	376.4	392.9	410.1	441.8	456.4	459.1
57.5°	30.5	35.1	80.7	130.3	308.9	352.6	371.0	386.9	416.7	427.9	430.6
60°	28.4	33.0	70.1	111.8	284.5	330.1	346.0	361.9	386.9	396.2	398.2
62.5°	26.4	31.7	62.2	94.0	259.3	303.6	319.5	334.1	355.2	361.9	364.4
65°	25.1	30.5	56.2	80.7	233.5	275.8	291.7	304.3	321.4	328.0	329.4
67.5°	23.9	29.1	51.6	69.4	207.7	248.1	259.9	271.8	285.1	291.7	292.3
70°	21.8	27.8	47.6	61.5	181.2	216.3	226.2	238.8	249.4	252.7	254.7
72.5°	20.5	25.8	45.0	55.6	154.1	185.9	195.1	202.4	211.7	214.9	214.9
75°	18.5	23.2	42.3	49.6	126.3	152.1	160.0	167.3	174.6	175.9	173.9
77.5°	16.6	20.5	36.4	41.7	98.6	120.4	127.0	130.9	137.0	138.2	138.9
80°	13.9	17.8	28.4	32.4	71.5	88.6	93.3	96.5	101.9	101.9	103.2
82.5°	10.6	13.9	20.5	23.2	48.3	60.8	64.8	66.9	70.1	70.1	70.1
85°	6.6	8.6	13.2	15.2	29.1	37.1	39.7	40.3	43.0	43.7	43.7
87.5°	3.4	4.6	8.6	9.3	15.2	19.2	19.2	20.5	20.5	19.8	19.2
90°	4.1	7.4	10.6	11.4	18.0	26.8	31.2	27.7	20.8	15.6	15.6
92.5°	16.4	44.3	72.2	79.2	111.3	154.1	175.5	153.8	110.4	77.9	74.8
95°	39.3	90.4	141.5	154.2	273.8	433.2	513.0	457.8	347.4	264.5	255.2
97.5°	68.0	113.1	158.2	169.4	368.9	634.8	767.7	732.8	663.0	610.6	592.8
100°	90.2	131.0	171.9	182.1	403.5	698.6	846.1	848.7	853.7	857.5	836.2
102.5°	109.1	147.2	185.3	194.8	419.3	718.6	868.3	912.7	1001.7	1068.3	1050.1
105°	141.1	173.3	205.6	213.7	431.1	720.9	865.8	965.5	1164.9	1314.4	1304.7
107.5°	173.9	204.0	234.1	241.6	433.2	688.7	816.5	955.6	1233.8	1442.4	1444.8
110°	196.0	223.2	250.3	257.1	429.9	660.3	775.5	931.0	1242.0	1475.2	1485.4



TEST NUMBER: P937483

CATALOG NUMBER: SQ4-FB-100U-050D-B2750-1D-UNV-STD-W-4-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	217.8	243.6	269.5	276.0	430.1	635.5	738.2	897.4	1215.5	1454.3	1469.9
115°	250.5	274.4	298.3	304.3	434.0	607.1	693.6	846.9	1153.4	1383.4	1405.0
117.5°	283.0	304.7	326.4	331.8	442.1	589.2	662.8	801.1	1077.8	1285.3	1309.4
120°	301.8	322.2	342.6	347.8	448.6	583.2	650.5	776.9	1029.7	1219.3	1242.8
122.5°	320.4	341.0	361.6	366.7	458.1	580.1	641.0	754.8	982.5	1153.2	1176.3
125°	348.6	367.4	386.1	390.9	470.8	577.4	630.7	727.5	920.8	1065.9	1087.2
127.5°	371.5	390.5	409.5	414.2	483.5	575.9	622.2	705.2	871.2	995.8	1013.7
130°	383.8	404.3	424.7	429.8	492.8	576.9	618.9	692.9	840.7	951.5	968.1
132.5°	396.6	417.0	437.4	442.5	500.3	577.4	616.0	682.1	814.4	913.7	928.6
135°	415.5	434.0	452.7	457.3	508.6	576.9	611.1	666.5	777.3	860.4	873.2
137.5°	434.7	453.2	471.5	476.1	520.8	580.5	610.2	657.1	750.7	821.0	831.5
140°	450.7	467.7	484.6	488.9	528.4	581.0	607.4	647.8	728.8	789.5	799.3
142.5°	463.0	478.7	494.4	498.3	534.7	583.1	607.4	642.9	714.0	767.3	775.8
145°	481.9	495.6	509.2	512.6	542.9	583.2	603.3	632.4	690.5	734.1	740.5
147.5°	500.8	514.1	527.3	530.7	554.9	587.2	603.3	626.2	672.0	706.3	711.6
150°	513.0	525.0	537.1	540.1	561.2	589.3	603.3	622.7	661.2	690.2	694.4
152.5°	525.7	534.8	544.0	546.2	565.3	590.6	603.3	619.8	652.7	677.5	680.7
155°	544.7	551.4	558.2	559.9	574.3	593.7	603.3	616.4	642.7	662.3	664.5
157.5°	558.6	565.2	571.7	573.4	583.3	596.6	603.3	613.5	633.9	649.2	650.7
160°	568.0	573.2	578.2	579.5	587.5	598.0	603.3	612.1	629.6	642.7	643.6
162.5°	577.4	581.2	585.1	586.1	591.8	599.5	603.3	610.7	625.4	636.5	637.3
165°	587.7	591.1	594.6	595.4	598.1	601.6	603.3	608.7	619.2	627.1	628.0
167.5°	597.1	598.8	600.5	600.9	603.0	605.9	607.4	610.8	617.7	623.0	623.3
170°	603.3	604.9	606.6	607.0	607.1	607.3	607.4	610.8	617.7	623.0	623.0
172.5°	606.6	607.0	607.3	607.4	607.4	607.4	607.4	610.1	615.6	619.7	619.4
175°	611.1	611.1	611.1	611.1	609.8	608.2	607.4	609.2	612.6	615.2	615.2
177.5°	611.1	611.1	611.1	611.1	610.1	608.9	608.2	609.5	612.3	614.4	614.0
180°	611.1	611.1	611.1	611.1	611.1	611.1	611.1	611.1	611.1	611.1	611.1



TEST NUMBER: P937483

CATALOG NUMBER: SQ4-FB-100U-050D-B2750-1D-UNV-STD-W-4-3000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	205.7	205.7
2.5°	219.6	218.3
5°	282.5	283.8
7.5°	380.3	379.7
10°	473.0	478.9
12.5°	540.4	541.7
15°	581.4	584.1
17.5°	597.3	598.0
20°	598.0	596.6
22.5°	590.7	589.3
25°	582.1	581.4
27.5°	574.1	574.8
30°	570.8	572.9
32.5°	570.8	574.1
35°	572.2	575.4
37.5°	571.5	575.4
40°	568.8	573.5
42.5°	561.6	564.9
45°	550.3	554.3
47.5°	535.8	538.5
50°	517.3	519.9
52.5°	494.1	494.8
55°	466.4	468.9
57.5°	436.6	437.2
60°	403.5	405.4
62.5°	368.5	368.5
65°	331.4	332.7
67.5°	293.0	296.3
70°	254.0	254.7
72.5°	215.6	215.6
75°	175.9	176.6
77.5°	138.2	138.2
80°	102.5	103.2
82.5°	70.8	72.1
85°	44.3	44.3
87.5°	20.5	18.5
90°	15.6	15.6
92.5°	62.4	50.0
95°	217.6	180.0
97.5°	521.3	449.9
100°	751.1	666.0
102.5°	977.2	904.4
105°	1265.4	1226.3
107.5°	1454.3	1463.7
110°	1526.2	1567.0





TEST NUMBER: P937483

CATALOG NUMBER: SQ4-FB-100U-050D-B2750-1D-UNV-STD-W-4-3000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1532.6	1595.3
115°	1492.0	1579.0
117.5°	1405.8	1502.3
120°	1336.4	1430.1
122.5°	1268.8	1361.2
125°	1172.3	1257.4
127.5°	1085.6	1157.4
130°	1034.4	1100.8
132.5°	988.0	1047.4
135°	924.4	975.6
137.5°	873.5	915.4
140°	838.5	877.6
142.5°	809.5	843.2
145°	766.0	791.6
147.5°	732.7	753.8
150°	711.6	728.8
152.5°	693.7	706.7
155°	673.0	681.6
157.5°	656.8	662.8
160°	647.0	650.5
162.5°	640.6	643.9
165°	631.4	634.9
167.5°	624.7	626.2
170°	623.0	623.0
172.5°	618.1	616.8
175°	615.2	615.2
177.5°	612.6	611.1
180°	611.1	611.1



TEST NUMBER: P937483  
 CATALOG NUMBER: SQ4-FB-100U-050D-B2750-1D-UNV-STD-W-4-3000K

**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	0.87	1.58	1.98	2.70	4.24	14.00	14.72	15.12	15.83	17.38
	3H	1.56	2.20	2.68	3.33	4.89	15.82	16.46	16.94	17.58	19.14
	4H	1.85	2.46	2.99	3.59	5.15	16.44	17.06	17.58	18.18	19.74
	6H	2.10	2.66	3.24	3.78	5.36	16.85	17.42	18.00	18.54	20.12
	8H	2.16	2.70	3.31	3.84	5.41	16.96	17.50	18.11	18.64	20.21
	12H	2.17	2.68	3.32	3.82	5.41	17.02	17.53	18.17	18.66	20.26
4H	2H	8.04	8.65	9.18	9.77	11.34	14.26	14.87	15.40	15.99	17.56
	3H	9.59	10.10	10.74	11.25	12.83	16.28	16.79	17.43	17.94	19.52
	4H	9.68	10.15	10.83	11.29	12.89	17.03	17.50	18.18	18.64	20.23
	6H	9.68	10.09	10.84	11.25	12.84	17.55	17.95	18.70	19.11	20.70
	8H	9.66	10.03	10.81	11.19	12.79	17.70	18.07	18.85	19.23	20.83
	12H	9.61	9.95	10.78	11.11	12.72	17.78	18.12	18.95	19.28	20.89
8H	4H	11.10	11.48	12.26	12.63	14.24	17.08	17.45	18.23	18.61	20.21
	6H	11.34	11.65	12.52	12.84	14.45	17.69	18.00	18.86	19.19	20.79
	8H	11.36	11.63	12.54	12.80	14.42	17.90	18.17	19.08	19.34	20.96
	12H	11.32	11.56	12.50	12.73	14.38	18.03	18.26	19.21	19.43	21.09
12H	4H	11.24	11.58	12.41	12.74	14.35	17.02	17.36	18.19	18.53	20.14
	6H	11.59	11.86	12.77	13.04	14.66	17.67	17.94	18.85	19.11	20.73
	8H	11.65	11.89	12.84	13.06	14.72	17.88	18.12	19.07	19.29	20.95