

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: P937437

Luminaire Tested: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937437
REPORT IS A COMBINATION OF REPORTS P933573 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

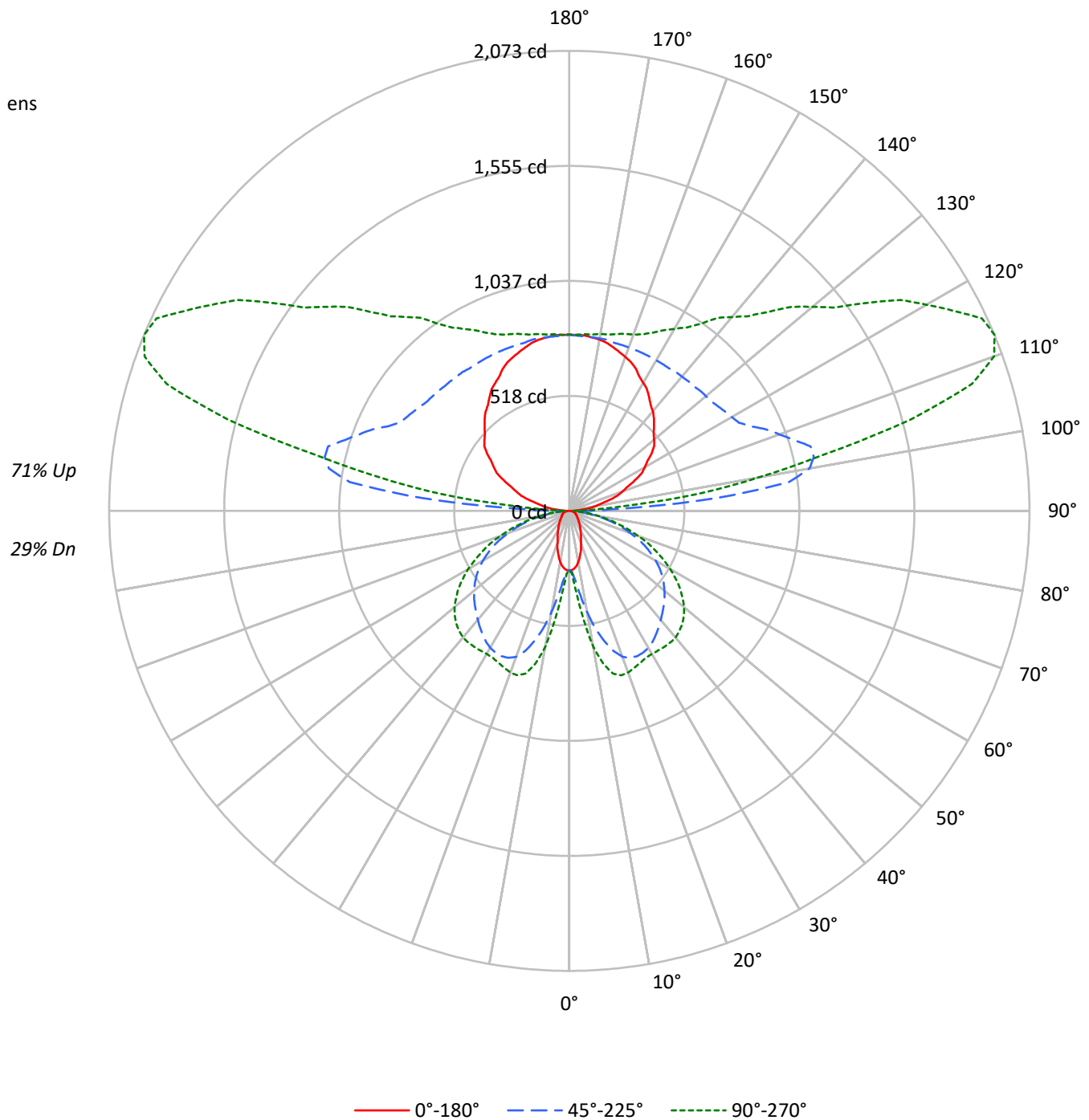
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7217.4 lumens
Efficiency: N/A
Efficacy: 116.8 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: Semi-Indirect

Input Watts (W): 61.8
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

TEST NUMBER: P937437
CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P937437

CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-2700K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1653	1653	1653
5°	1614	1910	2222
10°	1464	2784	3683
15°	1243	3635	4447
20°	1012	4212	4533
25°	844	4406	4441
30°	711	4434	4432
35°	629	4358	4547
40°	548	4262	4665
45°	496	4190	4683
50°	454	4126	4606
55°	435	4032	4402
60°	445	3854	4080
65°	461	3582	3636
70°	491	3122	3072
75°	542	2543	2398
80°	586	1761	1615
85°	513	934	827

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4683 cd/sqm



TEST NUMBER: P937437

CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.6	0.5
10°-20°	153.2	2.1
20°-30°	267.9	3.7
30°-40°	344.9	4.8
40°-50°	385.3	5.3
50°-60°	369.0	5.1
60°-70°	292.4	4.1
70°-80°	171.9	2.4
80°-90°	50.8	0.7
90°-100°	387.0	5.4
100°-110°	1017.6	14.1
110°-120°	1055.1	14.6
120°-130°	846.3	11.7
130°-140°	664.1	9.2
140°-150°	509.7	7.1
150°-160°	367.1	5.1
160°-170°	224.6	3.1
170°-180°	75.9	1.1
0°-30°	455.7	6.3
0°-40°	800.6	11.1
0°-60°	1554.8	21.5
0°-90°	2070.0	28.7
90°-120°	2459.7	34.1
90°-150°	4479.8	62.1
90°-180°	5147.0	71.3
0°-180°	7217.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	267	267	267	267	267	
5°	260	279	314	356	369	24
15°	195	360	606	735	759	54
25°	125	408	722	754	755	57
35°	84	390	680	719	747	53
45°	58	311	601	689	720	45
55°	41	198	510	593	609	38
65°	33	105	379	426	432	32
75°	24	64	208	229	229	25
85°	9	20	52	57	58	9
90°	5	15	40	20	20	5
95°	51	200	667	344	234	57
105°	183	278	1125	1708	1593	194
115°	326	395	901	1798	2052	322
125°	453	508	820	1385	1634	402
135°	540	594	794	1118	1268	418
145°	626	666	784	954	1028	392
155°	708	727	784	861	886	325
165°	764	774	784	815	825	216
175°	794	794	789	799	799	75
180°	794	794	794	794	794	



TEST NUMBER: P937437

CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-2700K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2
2.5°	267.2	267.2	268.9	269.7	271.5	272.4	274.1	275.8	280.9	281.8	283.5
5°	260.3	263.8	274.9	279.2	291.3	307.6	314.4	325.6	348.8	355.7	360.0
7.5°	250.0	257.8	285.2	292.1	322.2	365.1	383.2	407.2	444.1	462.3	476.9
10°	233.7	250.0	298.9	315.3	364.3	429.5	463.1	496.6	552.4	577.3	586.8
12.5°	215.7	242.3	313.6	335.9	406.4	501.7	542.1	579.1	642.6	676.1	681.3
15°	195.0	231.1	327.3	360.0	451.1	561.8	606.5	652.1	711.4	735.4	741.5
17.5°	177.0	222.5	340.2	374.6	485.4	616.0	661.5	699.4	747.4	763.8	768.0
20°	154.7	208.7	348.8	393.5	521.5	655.5	699.4	728.6	761.2	771.5	773.2
22.5°	138.3	194.1	354.0	400.3	545.5	679.5	716.5	739.7	762.1	765.5	766.3
25°	124.6	177.8	353.1	408.1	566.2	694.1	722.5	739.7	752.6	754.3	754.3
27.5°	111.7	159.8	349.7	409.8	581.7	697.7	719.9	732.0	738.0	741.5	741.5
30°	100.5	142.6	341.1	406.4	588.5	694.1	712.3	718.2	724.2	729.4	732.0
32.5°	91.9	126.3	328.2	399.5	589.3	685.6	698.5	701.9	710.5	722.5	726.9
35°	84.2	110.0	313.6	390.1	584.2	671.9	680.4	683.9	701.1	719.1	725.1
37.5°	76.4	98.0	294.7	373.8	576.5	655.5	661.5	667.6	694.1	715.7	722.5
40°	68.8	87.6	272.4	355.7	564.5	635.7	640.9	650.3	685.6	710.5	717.4
42.5°	62.7	79.0	248.3	336.8	548.9	613.4	621.1	634.9	675.3	701.9	709.6
45°	57.6	70.5	222.5	311.0	529.2	590.2	601.4	620.3	663.2	689.0	695.9
47.5°	52.4	64.4	195.9	284.3	507.8	567.1	581.7	603.1	646.9	671.9	677.8
50°	48.1	58.4	169.3	256.0	484.5	542.1	559.3	581.7	626.3	649.5	657.3
52.5°	44.7	53.3	144.3	227.7	457.9	516.3	536.1	559.3	601.4	623.8	628.9
55°	41.3	48.9	122.8	197.6	430.4	488.8	510.3	532.6	573.9	592.8	596.3
57.5°	39.5	45.5	104.8	169.3	401.2	457.9	482.0	502.6	541.3	555.9	559.3
60°	37.0	43.0	91.1	145.2	369.4	428.7	449.4	469.9	502.6	514.6	517.2
62.5°	34.3	41.3	80.8	122.0	336.8	394.4	414.9	433.9	461.3	469.9	473.4
65°	32.6	39.5	73.0	104.8	303.3	358.2	378.9	395.2	417.5	426.1	427.8
67.5°	30.9	37.8	67.0	90.2	269.7	322.2	337.6	353.1	370.3	378.9	379.7
70°	28.4	36.0	61.8	79.9	235.4	280.9	293.8	310.1	323.9	328.2	330.8
72.5°	26.6	33.5	58.4	72.2	200.2	241.4	253.4	262.9	274.9	279.2	279.2
75°	24.1	30.1	55.0	64.4	164.1	197.6	207.9	217.4	226.8	228.6	225.9
77.5°	21.4	26.6	47.2	54.2	128.0	156.4	164.9	170.1	177.8	179.5	180.4
80°	18.0	23.2	37.0	42.1	92.8	115.1	121.1	125.5	132.3	132.3	134.0
82.5°	13.8	18.0	26.6	30.1	62.7	79.0	84.2	86.8	91.1	91.1	91.1
85°	8.6	11.2	17.2	19.7	37.8	48.1	51.6	52.4	55.9	56.7	56.7
87.5°	4.3	6.0	11.2	12.0	19.7	24.9	24.9	26.6	26.6	25.8	24.9
90°	5.3	9.6	13.8	14.9	23.5	34.8	40.5	36.0	27.0	20.2	20.2
92.5°	21.4	57.6	93.8	102.8	144.6	200.2	228.1	199.9	143.5	101.2	97.2
95°	51.2	117.4	183.8	200.4	355.8	563.0	666.6	594.9	451.3	343.7	331.5
97.5°	88.5	147.0	205.5	220.1	479.3	824.8	997.6	952.3	861.6	793.5	770.3
100°	117.3	170.3	223.4	236.6	524.2	907.6	1099.3	1102.7	1109.3	1114.3	1086.6
102.5°	141.8	191.3	240.8	253.2	544.8	933.7	1128.1	1186.0	1301.5	1388.2	1364.6
105°	183.3	225.2	267.2	277.7	560.1	936.7	1125.0	1254.5	1513.6	1707.9	1695.2
107.5°	225.9	265.0	304.2	313.9	563.0	895.0	1061.0	1241.7	1603.1	1874.2	1877.3
110°	254.7	290.0	325.3	334.1	558.7	858.1	1007.7	1209.7	1613.8	1916.8	1930.1



TEST NUMBER: P937437

CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-2700K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	283.0	316.6	350.3	358.6	558.9	825.8	959.2	1166.0	1579.5	1889.7	1910.0
115°	325.6	356.6	387.6	395.4	564.0	788.7	901.1	1100.3	1498.7	1797.5	1825.8
117.5°	367.7	395.9	424.1	431.1	574.4	765.6	861.1	1040.9	1400.4	1670.1	1701.4
120°	392.2	418.8	445.3	451.9	583.0	757.8	845.2	1009.4	1337.9	1584.3	1614.7
122.5°	416.2	443.0	469.8	476.4	595.2	753.7	832.9	980.9	1276.7	1498.5	1528.5
125°	452.9	477.4	501.8	507.9	611.8	750.4	819.6	945.3	1196.5	1385.1	1412.7
127.5°	482.8	507.4	532.1	538.3	628.3	748.4	808.4	916.3	1132.1	1293.9	1317.2
130°	498.8	525.4	551.9	558.5	640.4	749.6	804.2	900.2	1092.3	1236.4	1257.9
132.5°	515.3	541.9	568.3	575.0	650.2	750.4	800.4	886.4	1058.4	1187.3	1206.6
135°	539.8	564.0	588.2	594.2	660.8	749.6	794.0	866.0	1010.0	1118.1	1134.7
137.5°	564.8	588.8	612.8	618.7	676.8	754.3	793.0	853.9	975.6	1066.9	1080.5
140°	585.7	607.7	629.7	635.2	686.5	755.0	789.2	841.8	947.0	1025.8	1038.5
142.5°	601.6	622.1	642.4	647.5	694.7	757.7	789.2	835.4	927.8	997.0	1008.0
145°	626.2	643.9	661.7	666.1	705.4	757.8	783.9	821.7	897.3	953.9	962.2
147.5°	650.7	667.9	685.2	689.5	721.0	762.9	783.9	813.6	873.1	917.7	924.5
150°	666.6	682.3	697.9	701.8	729.2	765.6	783.9	809.0	859.2	896.8	902.4
152.5°	683.2	695.1	706.9	709.9	734.6	767.4	783.9	805.4	848.2	880.3	884.5
155°	707.7	716.4	725.2	727.4	746.3	771.4	783.9	801.0	835.1	860.6	863.4
157.5°	725.8	734.4	742.8	745.0	758.0	775.3	783.9	797.2	823.7	843.6	845.6
160°	738.1	744.7	751.4	753.0	763.3	777.1	783.9	795.3	818.0	835.1	836.2
162.5°	750.4	755.3	760.3	761.5	769.0	779.0	783.9	793.5	812.7	827.1	828.1
165°	763.7	768.1	772.6	773.8	777.2	781.7	783.9	790.8	804.5	814.8	815.9
167.5°	775.9	778.0	780.2	780.7	783.5	787.3	789.2	793.7	802.7	809.5	810.0
170°	783.9	786.1	788.2	788.7	788.9	789.1	789.2	793.7	802.7	809.5	809.5
172.5°	788.2	788.6	789.1	789.2	789.2	789.2	789.2	792.8	799.9	805.2	804.8
175°	794.0	794.0	794.0	794.0	792.4	790.2	789.2	791.4	796.0	799.4	799.4
177.5°	794.0	794.0	794.0	794.0	792.8	791.2	790.3	792.1	795.6	798.3	797.8
180°	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0



TEST NUMBER: P937437

CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	267.2	267.2
2.5°	285.2	283.5
5°	366.8	368.6
7.5°	494.0	493.2
10°	614.3	622.0
12.5°	701.9	703.6
15°	755.2	758.6
17.5°	775.8	776.7
20°	776.7	775.0
22.5°	767.2	765.5
25°	756.1	755.2
27.5°	745.7	746.6
30°	741.5	744.0
32.5°	741.5	745.7
35°	743.2	747.4
37.5°	742.3	747.4
40°	738.8	744.9
42.5°	729.4	733.7
45°	714.8	719.9
47.5°	695.9	699.4
50°	671.9	675.3
52.5°	641.8	642.6
55°	605.7	609.2
57.5°	567.1	567.9
60°	524.1	526.7
62.5°	478.6	478.6
65°	430.4	432.1
67.5°	380.6	384.9
70°	329.9	330.8
72.5°	280.1	280.1
75°	228.6	229.4
77.5°	179.5	179.5
80°	133.2	134.0
82.5°	91.9	93.6
85°	57.6	57.6
87.5°	26.6	24.1
90°	20.2	20.2
92.5°	81.1	65.0
95°	282.7	233.9
97.5°	677.4	584.6
100°	976.0	865.4
102.5°	1269.7	1175.0
105°	1644.3	1593.4
107.5°	1889.7	1902.0
110°	1983.2	2036.2



TEST NUMBER: P937437

CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1991.5	2073.0
115°	1938.7	2051.7
117.5°	1826.7	1952.0
120°	1736.5	1858.2
122.5°	1648.6	1768.7
125°	1523.3	1633.9
127.5°	1410.6	1503.9
130°	1344.1	1430.3
132.5°	1283.8	1361.1
135°	1201.2	1267.8
137.5°	1135.0	1189.5
140°	1089.5	1140.4
142.5°	1051.9	1095.7
145°	995.4	1028.5
147.5°	952.0	979.5
150°	924.7	947.0
152.5°	901.4	918.2
155°	874.5	885.6
157.5°	853.4	861.1
160°	840.7	845.2
162.5°	832.3	836.6
165°	820.5	824.9
167.5°	811.8	813.7
170°	809.5	809.5
172.5°	803.1	801.5
175°	799.4	799.4
177.5°	795.9	794.0
180°	794.0	794.0



TEST NUMBER: P937437
 CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-2700K

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	0.37	1.09	1.49	2.20	3.75	13.54	14.26	14.65	15.37	16.91
	3H	1.07	1.71	2.19	2.83	4.39	15.36	16.00	16.48	17.13	18.69
	4H	1.36	1.97	2.49	3.09	4.66	16.00	16.61	17.13	17.73	19.30
	6H	1.60	2.16	2.74	3.29	4.86	16.41	16.98	17.56	18.10	19.68
	8H	1.66	2.20	2.81	3.34	4.91	16.53	17.06	17.67	18.20	19.78
	12H	1.68	2.18	2.83	3.32	4.91	16.59	17.10	17.74	18.23	19.83
4H	2H	7.56	8.17	8.70	9.30	10.86	13.80	14.41	14.94	15.53	17.09
	3H	9.12	9.63	10.26	10.78	12.35	15.82	16.33	16.97	17.48	19.06
	4H	9.20	9.68	10.36	10.81	12.41	16.58	17.05	17.73	18.19	19.78
	6H	9.21	9.61	10.36	10.77	12.36	17.11	17.51	18.26	18.67	20.26
	8H	9.18	9.56	10.34	10.71	12.31	17.26	17.64	18.42	18.79	20.39
	12H	9.13	9.47	10.30	10.63	12.24	17.34	17.69	18.52	18.85	20.46
8H	4H	10.63	11.01	11.79	12.16	13.77	16.63	17.00	17.78	18.16	19.76
	6H	10.87	11.18	12.04	12.37	13.98	17.24	17.56	18.42	18.75	20.35
	8H	10.88	11.16	12.07	12.33	13.95	17.46	17.73	18.64	18.90	20.53
	12H	10.85	11.09	12.03	12.25	13.91	17.59	17.83	18.78	19.00	20.66
12H	4H	10.77	11.11	11.94	12.27	13.88	16.57	16.91	17.74	18.08	19.69
	6H	11.12	11.40	12.31	12.57	14.19	17.23	17.50	18.41	18.67	20.29
	8H	11.19	11.43	12.37	12.60	14.25	17.45	17.69	18.63	18.85	20.51