

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: P937442

Luminaire Tested: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-6500K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937442  
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-6-6500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

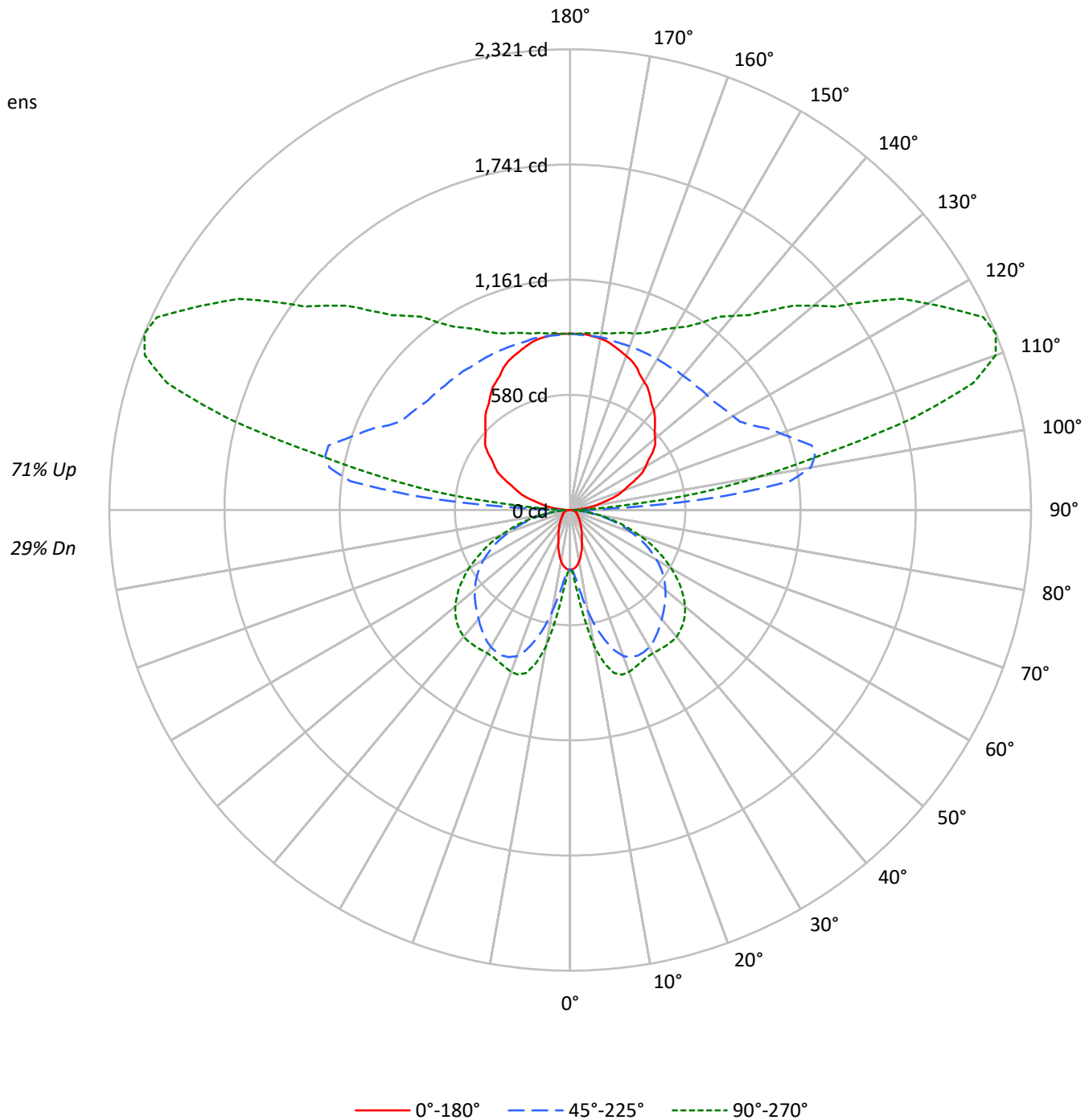
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8079.8 lumens  
Efficiency: N/A  
Efficacy: 130.7 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<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

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CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-6500K

### 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	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°	1850	1850	1850
5°	1807	2138	2487
10°	1638	3116	4123
15°	1392	4070	4979
20°	1133	4715	5075
25°	945	4933	4972
30°	796	4963	4962
35°	704	4879	5090
40°	613	4771	5223
45°	554	4691	5243
50°	508	4619	5157
55°	487	4514	4928
60°	498	4314	4567
65°	516	4011	4070
70°	548	3495	3439
75°	608	2846	2684
80°	657	1972	1808
85°	578	1046	925

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5243 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.7	0.5
10°-20°	171.5	2.1
20°-30°	300.0	3.7
30°-40°	386.1	4.8
40°-50°	431.3	5.3
50°-60°	413.1	5.1
60°-70°	327.4	4.1
70°-80°	192.5	2.4
80°-90°	56.9	0.7
90°-100°	433.3	5.4
100°-110°	1139.2	14.1
110°-120°	1181.2	14.6
120°-130°	947.5	11.7
130°-140°	743.4	9.2
140°-150°	570.6	7.1
150°-160°	410.9	5.1
160°-170°	251.4	3.1
170°-180°	84.9	1.1
0°-30°	510.1	6.3
0°-40°	896.3	11.1
0°-60°	1740.6	21.5
0°-90°	2317.4	28.7
90°-120°	2753.7	34.1
90°-150°	5015.2	62.1
90°-180°	5762.0	71.3
0°-180°	8079.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	299	299	299	299	299	
5°	291	313	352	398	413	27
15°	218	403	679	823	849	61
25°	140	457	809	844	846	64
35°	94	437	762	805	837	59
45°	64	348	673	771	806	50
55°	46	221	571	664	682	42
65°	36	117	424	477	484	36
75°	27	72	233	256	257	28
85°	10	22	58	64	64	10
90°	6	17	45	23	23	6
95°	57	224	746	385	262	64
105°	205	311	1259	1912	1784	218
115°	364	443	1009	2012	2297	360
125°	507	569	918	1551	1829	450
135°	604	665	889	1252	1419	468
145°	701	746	878	1068	1151	439
155°	792	814	878	964	992	364
165°	855	866	878	912	924	241
175°	889	889	884	895	895	84
180°	889	889	889	889	889	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	299.1	299.1	299.1	299.1	299.1	299.1	299.1	299.1	299.1	299.1	299.1
2.5°	299.1	299.1	301.0	302.0	304.0	304.9	306.8	308.8	314.5	315.4	317.4
5°	291.4	295.3	307.8	312.6	326.1	344.3	352.0	364.5	390.5	398.2	403.0
7.5°	279.9	288.6	319.3	327.0	360.7	408.8	428.9	455.9	497.2	517.5	533.8
10°	261.6	279.9	334.7	353.0	407.8	480.9	518.4	555.9	618.5	646.3	656.9
12.5°	241.4	271.3	351.0	376.1	455.0	561.7	606.9	648.3	719.4	756.9	762.7
15°	218.3	258.7	366.4	403.0	505.0	629.0	679.0	730.1	796.4	823.3	830.1
17.5°	198.1	249.1	380.9	419.4	543.4	689.6	740.6	782.9	836.8	855.0	859.8
20°	173.2	233.7	390.5	440.5	583.9	733.9	782.9	815.6	852.2	863.7	865.6
22.5°	154.8	217.3	396.2	448.2	610.7	760.7	802.2	828.1	853.1	856.9	857.9
25°	139.5	199.1	395.3	456.9	633.9	777.1	808.8	828.1	842.5	844.4	844.4
27.5°	125.1	178.9	391.5	458.8	651.2	781.0	806.0	819.5	826.2	830.1	830.1
30°	112.5	159.7	381.8	455.0	658.8	777.1	797.4	804.1	810.8	816.6	819.5
32.5°	102.9	141.4	367.4	447.2	659.8	767.5	782.0	785.8	795.4	808.8	813.7
35°	94.3	123.2	351.0	436.7	654.0	752.1	761.7	765.6	784.8	805.0	811.7
37.5°	85.6	109.7	329.9	418.4	645.3	733.9	740.6	747.4	777.1	801.2	808.8
40°	77.0	98.1	304.9	398.2	631.9	711.7	717.5	728.0	767.5	795.4	803.1
42.5°	70.2	88.4	278.0	377.0	614.5	686.7	695.3	710.7	756.0	785.8	794.4
45°	64.4	78.9	249.1	348.1	592.5	660.7	673.3	694.4	742.5	771.4	779.0
47.5°	58.7	72.1	219.3	318.3	568.5	634.8	651.2	675.2	724.2	752.1	758.8
50°	53.8	65.4	189.5	286.6	542.4	606.9	626.1	651.2	701.2	727.1	735.8
52.5°	50.0	59.7	161.6	254.9	512.6	578.0	600.2	626.1	673.3	698.3	704.0
55°	46.2	54.8	137.5	221.2	481.8	547.2	571.3	596.3	642.5	663.6	667.5
57.5°	44.3	51.0	117.3	189.5	449.1	512.6	539.6	562.6	605.9	622.3	626.1
60°	41.4	48.1	101.9	162.6	413.6	479.9	503.1	526.1	562.6	576.1	579.0
62.5°	38.4	46.2	90.5	136.5	377.0	441.5	464.5	485.7	516.4	526.1	529.9
65°	36.5	44.3	81.8	117.3	339.5	401.0	424.2	442.4	467.4	477.0	479.0
67.5°	34.6	42.4	75.1	101.0	302.0	360.7	378.0	395.3	414.5	424.2	425.1
70°	31.7	40.4	69.2	89.4	263.5	314.5	328.9	347.2	362.6	367.4	370.3
72.5°	29.8	37.5	65.4	80.8	224.1	270.2	283.7	294.3	307.8	312.6	312.6
75°	27.0	33.7	61.6	72.1	183.7	221.2	232.7	243.4	253.9	255.9	252.9
77.5°	24.0	29.8	52.9	60.6	143.3	175.1	184.6	190.5	199.1	201.0	201.9
80°	20.2	26.0	41.4	47.1	103.8	128.9	135.6	140.5	148.1	148.1	150.0
82.5°	15.4	20.2	29.8	33.7	70.2	88.4	94.3	97.1	101.9	101.9	101.9
85°	9.7	12.5	19.2	22.1	42.4	53.8	57.8	58.7	62.5	63.5	63.5
87.5°	4.8	6.7	12.5	13.5	22.1	27.9	27.9	29.8	29.8	28.9	27.9
90°	5.9	10.7	15.5	16.7	26.3	39.0	45.3	40.3	30.2	22.7	22.7
92.5°	23.9	64.4	105.0	115.1	161.9	224.1	255.3	223.7	160.6	113.3	108.8
95°	57.3	131.5	205.8	224.3	398.4	630.3	746.3	666.0	505.3	384.8	371.1
97.5°	99.1	164.6	230.1	246.4	536.5	923.4	1116.8	1066.1	964.5	888.3	862.3
100°	131.3	190.7	250.0	264.9	586.8	1016.1	1230.7	1234.4	1241.9	1247.4	1216.5
102.5°	158.7	214.2	269.6	283.4	610.0	1045.3	1262.9	1327.7	1457.0	1554.1	1527.6
105°	205.2	252.1	299.1	310.9	627.1	1048.7	1259.4	1404.5	1694.5	1912.0	1897.8
107.5°	252.9	296.7	340.5	351.4	630.2	1001.9	1187.8	1390.1	1794.7	2098.2	2101.6
110°	285.1	324.6	364.2	374.1	625.4	960.6	1128.1	1354.3	1806.6	2145.9	2160.7



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	316.8	354.5	392.1	401.5	625.6	924.4	1073.8	1305.3	1768.3	2115.5	2138.2
115°	364.5	399.2	433.9	442.6	631.4	882.9	1008.8	1231.8	1677.8	2012.3	2044.0
117.5°	411.6	443.2	474.7	482.6	643.0	857.0	964.0	1165.3	1567.8	1869.6	1904.7
120°	439.1	468.8	498.5	505.9	652.7	848.3	946.2	1130.0	1497.8	1773.6	1807.7
122.5°	466.0	495.9	525.9	533.4	666.4	843.7	932.5	1098.1	1429.2	1677.5	1711.2
125°	507.1	534.4	561.8	568.6	684.9	840.0	917.6	1058.2	1339.5	1550.6	1581.5
127.5°	540.5	568.1	595.7	602.6	703.4	837.8	905.0	1025.8	1267.3	1448.5	1474.6
130°	558.4	588.2	617.8	625.3	717.0	839.2	900.3	1007.7	1222.8	1384.1	1408.2
132.5°	576.9	606.6	636.3	643.7	727.9	840.0	896.0	992.3	1184.8	1329.2	1350.8
135°	604.3	631.4	658.4	665.2	739.8	839.2	888.9	969.5	1130.7	1251.7	1270.3
137.5°	632.3	659.1	686.0	692.7	757.7	844.4	887.7	955.9	1092.2	1194.4	1209.6
140°	655.7	680.3	705.0	711.1	768.6	845.2	883.5	942.4	1060.1	1148.4	1162.6
142.5°	673.5	696.4	719.2	724.9	777.8	848.2	883.5	935.3	1038.6	1116.2	1128.4
145°	701.0	720.9	740.8	745.7	789.7	848.3	877.6	919.9	1004.5	1067.9	1077.2
147.5°	728.4	747.7	767.1	771.9	807.1	854.1	877.6	910.9	977.4	1027.3	1035.0
150°	746.3	763.8	781.3	785.7	816.3	857.1	877.6	905.7	961.8	1004.0	1010.2
152.5°	764.9	778.1	791.3	794.7	822.3	859.1	877.6	901.6	949.6	985.5	990.2
155°	792.3	802.1	811.8	814.3	835.4	863.5	877.6	896.7	934.9	963.5	966.6
157.5°	812.6	822.1	831.6	834.0	848.5	867.9	877.6	892.4	922.2	944.4	946.6
160°	826.2	833.7	841.2	843.0	854.5	869.9	877.6	890.3	915.7	934.9	936.1
162.5°	840.0	845.6	851.1	852.5	860.9	872.0	877.6	888.3	909.8	925.9	927.0
165°	854.9	859.9	865.0	866.2	870.0	875.1	877.6	885.2	900.6	912.2	913.5
167.5°	868.6	871.0	873.4	874.0	877.1	881.4	883.5	888.6	898.6	906.2	906.8
170°	877.6	880.0	882.4	882.9	883.1	883.4	883.5	888.6	898.6	906.2	906.2
172.5°	882.4	882.9	883.4	883.5	883.5	883.5	883.5	887.5	895.5	901.4	900.9
175°	888.9	888.9	888.9	888.9	887.1	884.7	883.5	886.0	891.1	894.9	894.9
177.5°	888.9	888.9	888.9	888.9	887.5	885.7	884.8	886.8	890.7	893.7	893.1
180°	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	299.1	299.1
2.5°	319.3	317.4
5°	410.7	412.6
7.5°	553.1	552.1
10°	687.7	696.3
12.5°	785.8	787.7
15°	845.5	849.3
17.5°	868.5	869.5
20°	869.5	867.6
22.5°	858.9	856.9
25°	846.4	845.5
27.5°	834.9	835.8
30°	830.1	832.9
32.5°	830.1	834.9
35°	832.0	836.8
37.5°	831.0	836.8
40°	827.1	833.9
42.5°	816.6	821.4
45°	800.2	806.0
47.5°	779.0	782.9
50°	752.1	756.0
52.5°	718.5	719.4
55°	678.0	682.0
57.5°	634.8	635.8
60°	586.7	589.6
62.5°	535.8	535.8
65°	481.8	483.7
67.5°	426.1	430.9
70°	369.4	370.3
72.5°	313.5	313.5
75°	255.9	256.8
77.5°	201.0	201.0
80°	149.1	150.0
82.5°	102.9	104.8
85°	64.4	64.4
87.5°	29.8	27.0
90°	22.7	22.7
92.5°	90.7	72.8
95°	316.5	261.9
97.5°	758.4	654.4
100°	1092.6	968.8
102.5°	1421.5	1315.4
105°	1840.8	1783.8
107.5°	2115.5	2129.3
110°	2220.2	2279.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2229.5	2320.7
115°	2170.4	2296.9
117.5°	2045.0	2185.3
120°	1944.0	2080.3
122.5°	1845.6	1980.1
125°	1705.3	1829.1
127.5°	1579.2	1683.6
130°	1504.8	1601.2
132.5°	1437.3	1523.7
135°	1344.8	1419.3
137.5°	1270.6	1331.6
140°	1219.7	1276.7
142.5°	1177.6	1226.6
145°	1114.3	1151.4
147.5°	1065.8	1096.6
150°	1035.2	1060.1
152.5°	1009.1	1027.9
155°	979.0	991.5
157.5°	955.3	964.0
160°	941.2	946.2
162.5°	931.8	936.6
165°	918.5	923.5
167.5°	908.9	911.0
170°	906.2	906.2
172.5°	899.1	897.3
175°	894.9	894.9
177.5°	891.0	888.9
180°	888.9	888.9



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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	0.76	1.48	1.88	2.59	4.14	13.93	14.65	15.05	15.76	17.30
	3H	1.46	2.10	2.58	3.22	4.78	15.75	16.40	16.88	17.52	19.08
	4H	1.75	2.36	2.89	3.49	5.05	16.39	17.00	17.52	18.12	19.69
	6H	1.99	2.56	3.14	3.68	5.26	16.81	17.37	17.95	18.49	20.07
	8H	2.06	2.59	3.20	3.73	5.30	16.92	17.46	18.07	18.60	20.17
	12H	2.07	2.58	3.22	3.71	5.31	16.98	17.49	18.13	18.62	20.22
4H	2H	7.95	8.57	9.10	9.69	11.25	14.19	14.80	15.33	15.92	17.49
	3H	9.51	10.02	10.66	11.17	12.75	16.21	16.73	17.36	17.87	19.45
	4H	9.60	10.07	10.75	11.20	12.80	16.97	17.44	18.12	18.58	20.18
	6H	9.60	10.00	10.76	11.16	12.75	17.50	17.90	18.65	19.06	20.65
	8H	9.57	9.95	10.73	11.10	12.71	17.65	18.03	18.81	19.18	20.79
	12H	9.52	9.86	10.69	11.03	12.64	17.74	18.08	18.91	19.24	20.85
8H	4H	11.03	11.40	12.18	12.55	14.16	17.02	17.40	18.17	18.55	20.15
	6H	11.26	11.57	12.44	12.77	14.37	17.64	17.95	18.81	19.14	20.74
	8H	11.28	11.55	12.46	12.72	14.34	17.85	18.12	19.03	19.30	20.92
	12H	11.24	11.48	12.42	12.65	14.30	17.99	18.23	19.17	19.40	21.05
12H	4H	11.16	11.50	12.33	12.67	14.28	16.96	17.31	18.14	18.47	20.08
	6H	11.52	11.79	12.70	12.96	14.58	17.62	17.89	18.80	19.06	20.68
	8H	11.58	11.82	12.76	12.99	14.64	17.84	18.08	19.02	19.25	20.90