

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: P938332

Luminaire Tested: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938332  
REPORT IS A COMBINATION OF REPORTS P933630 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

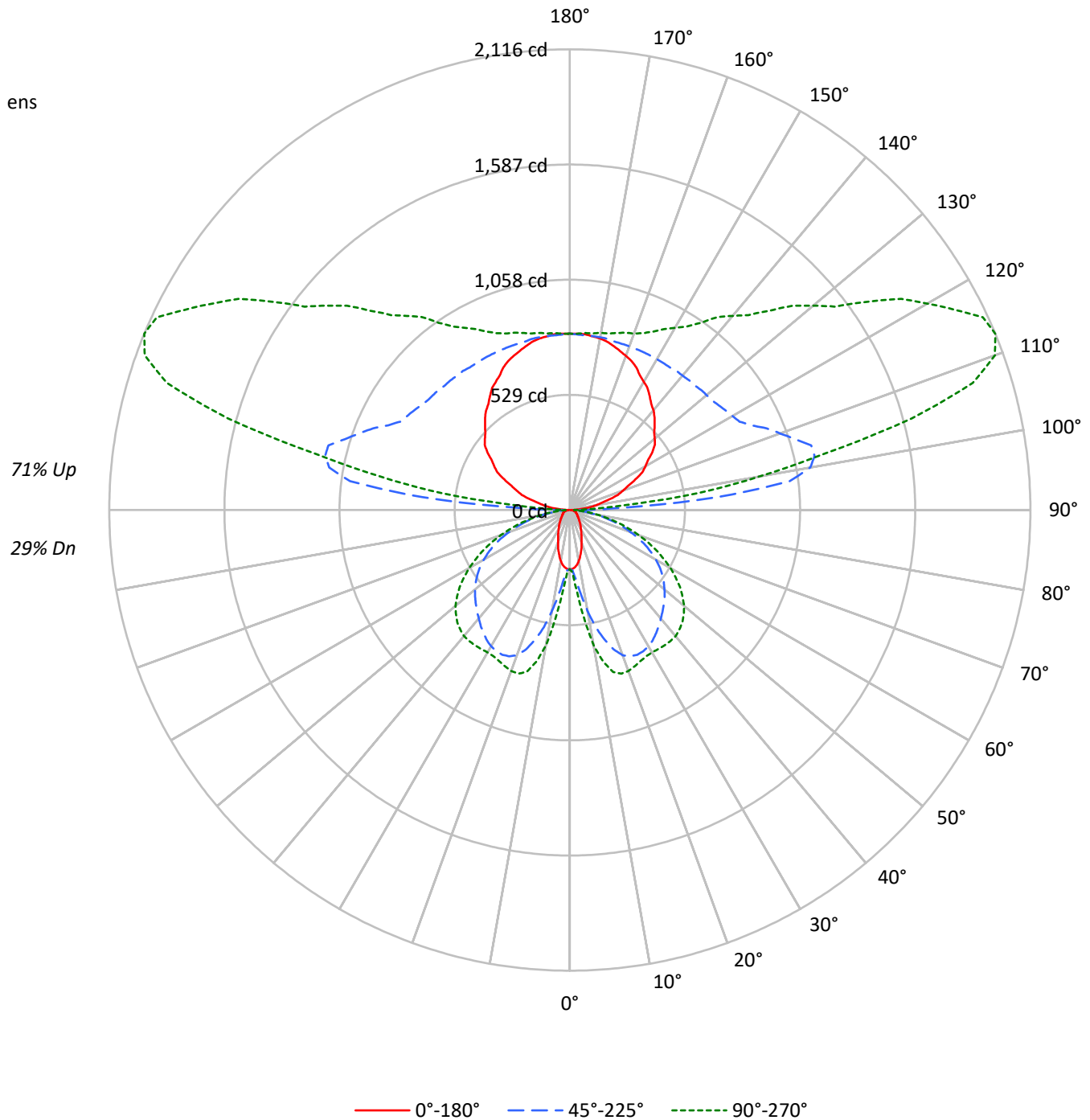
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7354.7 lumens  
Efficiency: N/A  
Efficacy: 115.6 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): 63.6  
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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### 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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29			29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23			23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	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	17	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	10	9	6			6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6			6

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

	0°	45°	90°
0°	2517	2517	2517
5°	2456	2907	3383
10°	2225	4233	5608
15°	1889	5527	6771
20°	1536	6400	6901
25°	1279	6693	6761
30°	1077	6730	6748
35°	952	6613	6923
40°	828	6462	7103
45°	748	6350	7131
50°	684	6248	7013
55°	654	6101	6702
60°	667	5826	6211
65°	690	5410	5536
70°	731	4708	4677
75°	800	3828	3650
80°	856	2647	2459
85°	720	1396	1258

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7131 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.1	0.5
10°-20°	155.5	2.1
20°-30°	272.0	3.7
30°-40°	350.1	4.8
40°-50°	391.0	5.3
50°-60°	374.5	5.1
60°-70°	296.8	4.0
70°-80°	174.5	2.4
80°-90°	51.6	0.7
90°-100°	395.0	5.4
100°-110°	1038.6	14.1
110°-120°	1076.9	14.6
120°-130°	863.8	11.7
130°-140°	677.8	9.2
140°-150°	520.2	7.1
150°-160°	374.6	5.1
160°-170°	229.2	3.1
170°-180°	77.4	1.1
0°-30°	462.5	6.3
0°-40°	812.6	11.0
0°-60°	1578.2	21.5
0°-90°	2101.1	28.6
90°-120°	2510.5	34.1
90°-150°	4572.2	62.2
90°-180°	5254.0	71.4
0°-180°	7354.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	271	271	271	271	271	
5°	264	283	319	361	374	24
15°	198	365	616	746	770	55
25°	126	414	733	766	766	58
35°	86	396	691	730	759	53
45°	58	316	610	699	731	45
55°	42	201	518	602	618	38
65°	33	106	385	432	439	33
75°	24	65	211	232	233	26
85°	9	20	52	58	58	9
90°	5	15	41	21	21	5
95°	52	204	680	351	239	58
105°	187	283	1148	1743	1626	198
115°	332	404	920	1835	2094	328
125°	462	518	836	1414	1668	410
135°	551	606	810	1141	1294	426
145°	639	680	800	974	1050	400
155°	722	742	800	878	904	332
165°	779	790	800	832	842	220
175°	810	810	806	816	816	77
180°	810	810	810	810	810	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2
2.5°	271.2	271.2	272.9	273.8	275.6	276.4	278.2	279.9	285.2	286.0	287.8
5°	264.2	267.7	279.1	283.4	295.6	312.2	319.2	330.5	354.0	361.0	365.4
7.5°	253.8	261.6	289.5	296.5	327.0	370.6	388.9	413.3	450.8	469.2	484.0
10°	237.2	253.8	303.5	320.0	369.7	436.0	470.0	504.0	560.7	586.0	595.6
12.5°	218.9	245.9	318.3	341.0	412.5	509.3	550.3	587.8	652.3	686.3	691.5
15°	198.0	234.6	332.2	365.4	457.8	570.3	615.7	661.9	722.0	746.5	752.6
17.5°	179.6	225.9	345.3	380.2	492.7	625.2	671.5	709.8	758.7	775.2	779.6
20°	157.0	211.9	354.0	399.4	529.3	665.4	709.8	739.5	772.6	783.1	784.8
22.5°	140.4	197.1	359.3	406.4	553.7	689.8	727.3	750.8	773.5	777.0	777.9
25°	126.4	180.5	358.4	414.2	574.7	704.6	733.4	750.8	763.9	765.6	765.6
27.5°	113.4	162.2	354.9	416.0	590.4	708.1	730.8	743.0	749.1	752.6	752.6
30°	102.0	144.8	346.2	412.5	597.3	704.6	722.9	729.0	735.1	740.4	743.0
32.5°	93.3	128.2	333.1	405.5	598.2	695.9	709.0	712.5	721.2	733.4	737.7
35°	85.5	111.6	318.3	395.9	593.0	681.9	690.7	694.1	711.6	729.9	736.0
37.5°	77.6	99.4	299.1	379.3	585.1	665.4	671.5	677.6	704.6	726.4	733.4
40°	69.8	88.9	276.4	361.0	572.9	645.3	650.5	660.1	695.9	721.2	728.1
42.5°	63.7	80.2	252.0	341.8	557.2	622.6	630.5	644.4	685.4	712.5	720.3
45°	58.4	71.5	225.9	315.7	537.2	599.1	610.4	629.6	673.2	699.4	706.3
47.5°	53.2	65.4	198.8	288.6	515.4	575.5	590.4	612.2	656.6	681.9	688.0
50°	48.8	59.3	171.8	259.9	491.8	550.3	567.7	590.4	635.7	659.3	667.1
52.5°	45.3	54.1	146.5	231.1	464.8	524.1	544.1	567.7	610.4	633.1	638.3
55°	41.9	49.7	124.7	200.6	436.9	496.2	518.0	540.7	582.5	601.7	605.2
57.5°	40.1	46.2	106.4	171.8	407.2	464.8	489.2	510.1	549.4	564.2	567.7
60°	37.5	43.6	92.4	147.4	375.0	435.1	456.1	477.0	510.1	522.3	525.0
62.5°	34.9	41.9	82.0	123.8	341.8	400.3	421.2	440.4	468.3	477.0	480.5
65°	33.1	40.1	74.1	106.4	307.8	363.6	384.6	401.1	423.8	432.5	434.3
67.5°	31.4	38.4	68.0	91.6	273.8	327.0	342.7	358.4	375.8	384.6	385.4
70°	28.8	36.6	62.8	81.1	238.9	285.2	298.2	314.8	328.8	333.1	335.7
72.5°	27.0	34.0	59.3	73.3	203.2	245.0	257.3	266.8	279.1	283.4	283.4
75°	24.4	30.5	55.8	65.4	166.6	200.6	211.0	220.6	230.2	232.0	229.3
77.5°	21.8	27.0	48.0	54.9	129.9	158.7	167.4	172.7	180.5	182.3	183.1
80°	18.3	23.5	37.5	42.7	94.2	116.9	123.0	127.3	134.3	134.3	136.0
82.5°	14.0	18.3	27.0	30.5	63.7	80.2	85.5	88.1	92.4	92.4	92.4
85°	8.7	11.3	17.4	20.1	38.4	48.8	52.3	53.2	56.7	57.6	57.6
87.5°	4.4	6.1	11.3	12.2	20.1	25.3	25.3	27.0	27.0	26.2	25.3
90°	5.4	9.8	14.1	15.3	24.0	35.6	41.3	36.7	27.6	20.7	20.7
92.5°	21.7	58.7	95.7	105.0	147.5	204.3	232.7	204.0	146.5	103.3	99.2
95°	52.2	119.9	187.6	204.5	363.1	574.7	680.4	607.2	460.7	350.8	338.3
97.5°	90.3	150.0	209.7	224.6	489.1	841.9	1018.2	971.9	879.3	809.9	786.1
100°	119.6	173.8	227.9	241.5	535.0	926.4	1122.0	1125.4	1132.2	1137.3	1109.1
102.5°	144.7	195.2	245.7	258.4	556.1	953.0	1151.4	1210.4	1328.4	1416.9	1392.7
105°	187.1	230.0	272.7	283.4	571.6	955.9	1148.1	1280.3	1544.8	1743.2	1730.2
107.5°	230.7	270.5	310.4	320.4	574.6	913.5	1082.9	1267.3	1636.2	1912.9	1916.0
110°	260.0	296.0	332.1	341.1	570.2	875.7	1028.5	1234.7	1647.1	1956.4	1969.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	288.8	323.2	357.5	366.1	570.4	842.8	979.0	1190.1	1612.1	1928.7	1949.4
115°	332.3	364.0	395.6	403.6	575.6	805.1	919.7	1123.0	1529.6	1834.6	1863.4
117.5°	375.3	404.1	432.9	440.0	586.4	781.4	878.9	1062.4	1429.4	1704.6	1736.6
120°	400.3	427.4	454.4	461.2	595.0	773.4	862.6	1030.2	1365.5	1617.0	1648.1
122.5°	424.8	452.1	479.4	486.2	607.5	769.3	850.1	1001.1	1303.0	1529.5	1560.1
125°	462.4	487.2	512.1	518.3	624.4	765.8	836.5	964.7	1221.2	1413.6	1441.8
127.5°	492.8	517.9	543.0	549.3	641.2	763.8	825.1	935.3	1155.4	1320.6	1344.4
130°	509.1	536.1	563.2	570.0	653.6	765.0	820.8	918.8	1114.8	1261.8	1283.8
132.5°	525.9	553.0	580.1	586.9	663.5	765.8	816.9	904.6	1080.2	1211.8	1231.5
135°	551.0	575.6	600.2	606.4	674.4	765.0	810.4	883.9	1030.8	1141.1	1158.1
137.5°	576.5	600.9	625.3	631.4	690.7	769.8	809.3	871.4	995.7	1088.9	1102.8
140°	597.8	620.3	642.8	648.4	700.8	770.6	805.5	859.1	966.5	1047.0	1060.0
142.5°	614.1	634.8	655.6	660.8	709.1	773.3	805.5	852.7	946.9	1017.7	1028.8
145°	639.1	657.3	675.3	679.8	720.0	773.4	800.1	838.6	915.7	973.5	982.0
147.5°	664.1	681.8	699.4	703.8	735.9	778.7	800.1	830.4	891.0	936.6	943.5
150°	680.4	696.4	712.3	716.3	744.2	781.4	800.1	825.7	876.9	915.4	921.0
152.5°	697.3	709.4	721.4	724.5	749.7	783.3	800.1	822.0	865.8	898.5	902.8
155°	722.3	731.3	740.2	742.4	761.6	787.3	800.1	817.5	852.3	878.4	881.3
157.5°	740.8	749.5	758.1	760.3	773.6	791.3	800.1	813.6	840.6	861.0	863.0
160°	753.3	760.1	766.9	768.5	779.1	793.1	800.1	811.7	834.9	852.2	853.4
162.5°	765.8	770.9	775.9	777.2	784.8	795.0	800.1	809.9	829.5	844.1	845.2
165°	779.4	784.0	788.6	789.7	793.2	797.8	800.1	807.1	821.1	831.6	832.7
167.5°	791.9	794.1	796.3	796.8	799.7	803.6	805.5	810.1	819.3	826.2	826.7
170°	800.1	802.3	804.5	805.0	805.1	805.4	805.5	810.1	819.3	826.2	826.2
172.5°	804.5	804.9	805.4	805.5	805.5	805.5	805.5	809.2	816.4	821.8	821.4
175°	810.4	810.4	810.4	810.4	808.7	806.5	805.5	807.8	812.4	815.9	815.9
177.5°	810.4	810.4	810.4	810.4	809.2	807.5	806.6	808.5	812.0	814.7	814.2
180°	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	271.2	271.2
2.5°	289.5	287.8
5°	372.4	374.1
7.5°	501.4	500.5
10°	623.5	631.4
12.5°	712.5	714.2
15°	766.5	770.0
17.5°	787.4	788.3
20°	788.3	786.6
22.5°	778.7	777.0
25°	767.4	766.5
27.5°	756.9	757.8
30°	752.6	755.2
32.5°	752.6	756.9
35°	754.3	758.7
37.5°	753.4	758.7
40°	749.9	756.1
42.5°	740.4	744.7
45°	725.5	730.8
47.5°	706.3	709.8
50°	681.9	685.4
52.5°	651.4	652.3
55°	614.8	618.3
57.5°	575.5	576.4
60°	531.9	534.6
62.5°	485.7	485.7
65°	436.9	438.6
67.5°	386.3	390.7
70°	334.9	335.7
72.5°	284.3	284.3
75°	232.0	232.8
77.5°	182.3	182.3
80°	135.2	136.0
82.5°	93.3	95.1
85°	58.4	58.4
87.5°	27.0	24.4
90°	20.7	20.7
92.5°	82.8	66.4
95°	288.6	238.8
97.5°	691.4	596.6
100°	996.2	883.3
102.5°	1296.0	1199.3
105°	1678.2	1626.3
107.5°	1928.6	1941.1
110°	2024.1	2078.2





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2032.6	2115.7
115°	1978.7	2094.0
117.5°	1864.4	1992.2
120°	1772.3	1896.6
122.5°	1682.7	1805.2
125°	1554.7	1667.6
127.5°	1439.6	1534.9
130°	1371.8	1459.8
132.5°	1310.2	1389.1
135°	1226.0	1293.9
137.5°	1158.4	1214.0
140°	1111.9	1163.9
142.5°	1073.6	1118.2
145°	1015.9	1049.8
147.5°	971.6	999.7
150°	943.8	966.5
152.5°	920.0	937.1
155°	892.6	904.0
157.5°	870.9	878.9
160°	858.0	862.6
162.5°	849.5	853.9
165°	837.3	841.9
167.5°	828.6	830.5
170°	826.2	826.2
172.5°	819.7	818.1
175°	815.9	815.9
177.5°	812.3	810.4
180°	810.4	810.4



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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	1.81	2.52	2.92	3.64	5.18	14.95	15.66	16.06	16.78	18.32
	3H	2.50	3.15	3.63	4.27	5.83	16.76	17.40	17.88	18.52	20.09
	4H	2.79	3.41	3.93	4.53	6.09	17.39	18.00	18.52	19.12	20.69
	6H	3.04	3.60	4.18	4.72	6.30	17.80	18.36	18.94	19.49	21.06
	8H	3.10	3.64	4.25	4.78	6.35	17.91	18.44	19.05	19.58	21.16
	12H	3.11	3.62	4.26	4.76	6.35	17.96	18.47	19.11	19.61	21.20
4H	2H	8.98	9.59	10.12	10.71	12.28	15.20	15.82	16.35	16.94	18.50
	3H	10.54	11.05	11.68	12.20	13.78	17.22	17.73	18.37	18.88	20.46
	4H	10.63	11.10	11.78	12.23	13.83	17.97	18.44	19.12	19.58	21.18
	6H	10.63	11.03	11.78	12.19	13.78	18.49	18.89	19.65	20.05	21.64
	8H	10.60	10.98	11.76	12.13	13.74	18.64	19.02	19.80	20.17	21.78
	12H	10.55	10.89	11.72	12.06	13.67	18.72	19.06	19.89	20.22	21.84
8H	4H	12.05	12.42	13.20	13.58	15.18	18.02	18.40	19.18	19.55	21.16
	6H	12.28	12.59	13.46	13.79	15.39	18.63	18.94	19.81	20.14	21.74
	8H	12.30	12.57	13.48	13.74	15.37	18.84	19.11	20.02	20.28	21.91
	12H	12.26	12.50	13.45	13.67	15.33	18.97	19.21	20.16	20.38	22.03
12H	4H	12.18	12.52	13.35	13.69	15.30	17.97	18.31	19.14	19.47	21.08
	6H	12.54	12.81	13.72	13.98	15.60	18.61	18.88	19.79	20.06	21.68
	8H	12.60	12.84	13.78	14.01	15.66	18.83	19.07	20.01	20.24	21.89