

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: P938357

Luminaire Tested: SQ4-FB-150U-075D-93050-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938357
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-93050-1D-UNV-STD-W-4-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

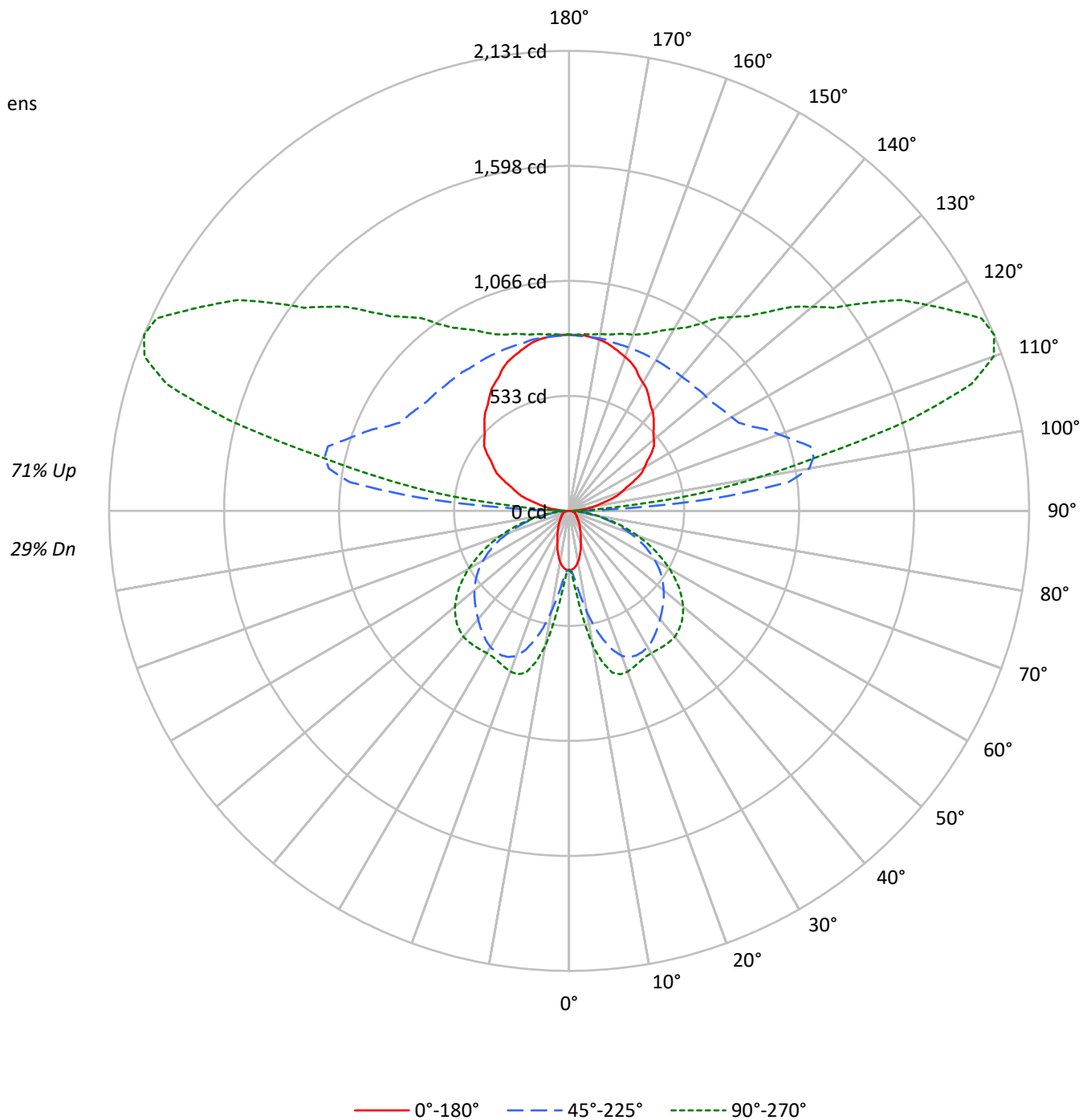
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7407.5 lumens
Efficiency: N/A
Efficacy: 116.5 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_{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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	36	36	36	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	27	26	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	24	22	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	21	19	17	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	19	17	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	17	15	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	15	13	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	14	12	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	13	10	9	6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	12	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2535	2535	2535
5°	2473	2928	3407
10°	2241	4264	5648
15°	1903	5567	6820
20°	1547	6446	6950
25°	1289	6741	6809
30°	1086	6778	6797
35°	959	6660	6972
40°	834	6508	7154
45°	753	6395	7182
50°	690	6293	7063
55°	659	6145	6750
60°	672	5868	6256
65°	696	5448	5577
70°	736	4743	4710
75°	807	3856	3676
80°	861	2664	2477
85°	729	1407	1267

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7182 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.3	0.5
10°-20°	156.6	2.1
20°-30°	273.9	3.7
30°-40°	352.6	4.8
40°-50°	393.8	5.3
50°-60°	377.2	5.1
60°-70°	298.9	4.0
70°-80°	175.8	2.4
80°-90°	51.9	0.7
90°-100°	397.9	5.4
100°-110°	1046.0	14.1
110°-120°	1084.6	14.6
120°-130°	870.0	11.7
130°-140°	682.6	9.2
140°-150°	523.9	7.1
150°-160°	377.3	5.1
160°-170°	230.9	3.1
170°-180°	78.0	1.1
0°-30°	465.8	6.3
0°-40°	818.5	11.0
0°-60°	1589.5	21.5
0°-90°	2116.2	28.6
90°-120°	2528.5	34.1
90°-150°	4605.1	62.2
90°-180°	5291.0	71.4
0°-180°	7407.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	273	273	273	273	273	
5°	266	285	322	364	377	25
15°	199	368	620	752	776	55
25°	127	417	739	771	772	59
35°	86	399	696	735	764	54
45°	59	318	615	704	736	46
55°	42	202	522	606	623	38
65°	33	107	387	436	442	33
75°	25	66	212	234	234	26
85°	9	20	53	58	59	9
90°	5	15	42	21	21	5
95°	53	206	685	353	240	58
105°	188	285	1156	1756	1638	200
115°	335	406	926	1848	2109	331
125°	466	522	843	1424	1680	413
135°	555	611	816	1149	1303	429
145°	644	685	806	980	1057	403
155°	728	748	806	885	910	334
165°	785	795	806	838	848	222
175°	816	816	811	822	822	77
180°	816	816	816	816	816	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	273.2	273.2	273.2	273.2	273.2	273.2	273.2	273.2	273.2	273.2	273.2
2.5°	273.2	273.2	274.9	275.8	277.5	278.4	280.2	281.9	287.2	288.1	289.8
5°	266.1	269.6	281.1	285.4	297.7	314.4	321.5	332.9	356.6	363.6	368.0
7.5°	255.6	263.5	291.6	298.6	329.4	373.3	391.7	416.3	454.1	472.5	487.5
10°	238.9	255.6	305.6	322.3	372.4	439.2	473.4	507.7	564.7	590.2	599.9
12.5°	220.5	247.7	320.6	343.4	415.4	512.9	554.2	592.0	657.0	691.2	696.5
15°	199.4	236.3	334.6	368.0	461.1	574.4	620.1	666.6	727.2	751.8	758.0
17.5°	180.9	227.5	347.8	382.9	496.2	629.7	676.3	714.9	764.1	780.8	785.2
20°	158.1	213.4	356.6	402.3	533.1	670.1	714.9	744.8	778.2	788.7	790.5
22.5°	141.4	198.5	361.9	409.3	557.7	694.7	732.5	756.2	779.1	782.6	783.4
25°	127.4	181.8	361.0	417.2	578.8	709.7	738.7	756.2	769.4	771.1	771.1
27.5°	114.2	163.4	357.5	418.9	594.6	713.2	736.0	748.3	754.5	758.0	758.0
30°	102.8	145.8	348.7	415.4	601.6	709.7	728.1	734.3	740.4	745.7	748.3
32.5°	94.0	129.1	335.5	408.4	602.5	700.9	714.1	717.6	726.4	738.7	743.0
35°	86.1	112.4	320.6	398.7	597.2	686.8	695.6	699.1	716.7	735.1	741.3
37.5°	78.2	100.1	301.3	382.1	589.3	670.1	676.3	682.4	709.7	731.6	738.7
40°	70.3	89.6	278.4	363.6	577.0	649.9	655.2	664.9	700.9	726.4	733.4
42.5°	64.1	80.8	253.8	344.3	561.2	627.1	635.0	649.1	690.3	717.6	725.5
45°	58.8	72.0	227.5	317.9	541.0	603.4	614.8	634.1	678.0	704.4	711.4
47.5°	53.6	65.9	200.3	290.7	519.1	579.7	594.6	616.6	661.4	686.8	693.0
50°	49.2	59.7	173.0	261.7	495.4	554.2	571.8	594.6	640.3	664.0	671.9
52.5°	45.7	54.5	147.6	232.7	468.1	527.9	548.1	571.8	614.8	637.6	642.9
55°	42.2	50.1	125.6	202.0	440.0	499.8	521.7	544.5	586.7	606.0	609.5
57.5°	40.4	46.5	107.2	173.0	410.2	468.1	492.7	513.8	553.3	568.3	571.8
60°	37.8	43.9	93.1	148.4	377.7	438.3	459.4	480.4	513.8	526.1	528.7
62.5°	35.1	42.2	82.6	124.7	344.3	403.1	424.2	443.5	471.6	480.4	483.9
65°	33.4	40.4	74.7	107.2	310.0	366.3	387.3	404.0	426.9	435.6	437.4
67.5°	31.6	38.6	68.5	92.2	275.8	329.4	345.2	361.0	378.5	387.3	388.2
70°	29.0	36.9	63.2	81.7	240.7	287.2	300.4	317.1	331.1	335.5	338.1
72.5°	27.2	34.3	59.7	73.8	204.6	246.8	259.1	268.8	281.1	285.4	285.4
75°	24.6	30.7	56.2	65.9	167.8	202.0	212.5	222.2	231.9	233.6	231.0
77.5°	22.0	27.2	48.3	55.3	130.9	159.9	168.6	173.9	181.8	183.6	184.4
80°	18.4	23.7	37.8	43.0	94.9	117.7	123.8	128.2	135.3	135.3	137.0
82.5°	14.1	18.4	27.2	30.7	64.1	80.8	86.1	88.7	93.1	93.1	93.1
85°	8.8	11.4	17.6	20.2	38.6	49.2	52.7	53.6	57.1	58.0	58.0
87.5°	4.4	6.1	11.4	12.3	20.2	25.5	25.5	27.2	27.2	26.3	25.5
90°	5.4	9.8	14.2	15.4	24.2	35.8	41.6	37.0	27.8	20.8	20.8
92.5°	21.9	59.1	96.4	105.7	148.6	205.8	234.4	205.4	147.6	104.1	100.0
95°	52.6	120.8	188.9	206.0	365.7	578.8	685.3	611.6	464.0	353.3	340.8
97.5°	90.9	151.1	211.2	226.3	492.6	847.9	1025.5	978.9	885.6	815.7	791.8
100°	120.5	175.0	229.6	243.2	538.8	933.0	1130.1	1133.5	1140.4	1145.5	1117.0
102.5°	145.7	196.7	247.5	260.2	560.1	959.8	1159.7	1219.1	1337.9	1427.1	1402.7
105°	188.5	231.6	274.6	285.4	575.7	962.8	1156.4	1289.5	1555.9	1755.7	1742.6
107.5°	232.3	272.4	312.7	322.7	578.7	920.0	1090.7	1276.4	1648.0	1926.6	1929.8
110°	261.8	298.1	334.5	343.5	574.3	882.0	1035.9	1243.6	1658.9	1970.5	1984.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	290.9	325.5	360.1	368.7	574.5	848.9	986.1	1198.6	1623.7	1942.5	1963.4
115°	334.7	366.6	398.5	406.5	579.8	810.8	926.3	1131.1	1540.6	1847.8	1876.8
117.5°	378.0	407.0	436.0	443.2	590.6	787.0	885.2	1070.0	1439.6	1716.8	1749.0
120°	403.1	430.5	457.7	464.5	599.3	779.0	868.8	1037.6	1375.3	1628.6	1659.9
122.5°	427.8	455.3	482.9	489.7	611.9	774.8	856.3	1008.3	1312.4	1540.5	1571.3
125°	465.7	490.7	515.8	522.1	628.9	771.3	842.6	971.7	1230.0	1423.7	1452.2
127.5°	496.3	521.6	546.9	553.2	645.8	769.3	831.0	942.0	1163.7	1330.1	1354.1
130°	512.8	540.0	567.2	574.1	658.3	770.5	826.7	925.4	1122.8	1270.9	1293.0
132.5°	529.7	557.0	584.2	591.1	668.3	771.3	822.8	911.1	1088.0	1220.5	1240.3
135°	554.9	579.8	604.5	610.8	679.3	770.5	816.2	890.2	1038.2	1149.3	1166.4
137.5°	580.6	605.2	629.8	636.0	695.7	775.4	815.2	877.7	1002.8	1096.7	1110.7
140°	602.1	624.7	647.4	653.0	705.8	776.2	811.3	865.3	973.4	1054.5	1067.6
142.5°	618.5	639.4	660.3	665.6	714.1	778.9	811.3	858.8	953.7	1025.0	1036.2
145°	643.7	662.0	680.2	684.7	725.1	779.0	805.8	844.7	922.3	980.5	989.1
147.5°	668.8	686.7	704.4	708.9	741.2	784.3	805.8	836.4	897.4	943.3	950.3
150°	685.3	701.4	717.4	721.4	749.5	787.0	805.8	831.7	883.2	922.0	927.7
152.5°	702.3	714.5	726.6	729.7	755.1	788.9	805.8	827.9	872.0	905.0	909.3
155°	727.5	736.5	745.5	747.8	767.1	792.9	805.8	823.4	858.5	884.7	887.6
157.5°	746.1	754.9	763.6	765.8	779.1	797.0	805.8	819.5	846.7	867.1	869.2
160°	758.7	765.5	772.4	774.0	784.7	798.8	805.8	817.5	840.9	858.4	859.5
162.5°	771.3	776.4	781.5	782.8	790.5	800.7	805.8	815.7	835.4	850.2	851.2
165°	785.0	789.6	794.2	795.4	798.9	803.6	805.8	812.9	827.0	837.5	838.7
167.5°	797.6	799.8	802.0	802.5	805.4	809.4	811.3	815.9	825.2	832.1	832.6
170°	805.8	808.0	810.2	810.8	810.9	811.2	811.3	815.9	825.2	832.1	832.1
172.5°	810.2	810.7	811.2	811.3	811.3	811.3	811.3	815.0	822.3	827.7	827.3
175°	816.2	816.2	816.2	816.2	814.5	812.3	811.3	813.6	818.2	821.7	821.7
177.5°	816.2	816.2	816.2	816.2	815.0	813.3	812.4	814.3	817.9	820.6	820.1
180°	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	273.2	273.2
2.5°	291.6	289.8
5°	375.0	376.8
7.5°	505.0	504.1
10°	628.0	635.9
12.5°	717.6	719.3
15°	772.0	775.5
17.5°	793.1	794.0
20°	794.0	792.2
22.5°	784.3	782.6
25°	772.9	772.0
27.5°	762.4	763.2
30°	758.0	760.6
32.5°	758.0	762.4
35°	759.7	764.1
37.5°	758.9	764.1
40°	755.3	761.5
42.5°	745.7	750.1
45°	730.7	736.0
47.5°	711.4	714.9
50°	686.8	690.3
52.5°	656.1	657.0
55°	619.2	622.7
57.5°	579.7	580.6
60°	535.8	538.4
62.5°	489.2	489.2
65°	440.0	441.8
67.5°	389.1	393.5
70°	337.3	338.1
72.5°	286.3	286.3
75°	233.6	234.5
77.5°	183.6	183.6
80°	136.1	137.0
82.5°	94.0	95.7
85°	58.8	58.8
87.5°	27.2	24.6
90°	20.8	20.8
92.5°	83.4	66.8
95°	290.6	240.5
97.5°	696.4	600.9
100°	1003.4	889.6
102.5°	1305.3	1207.9
105°	1690.3	1637.9
107.5°	1942.5	1955.1
110°	2038.6	2093.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2047.2	2130.9
115°	1993.0	2109.1
117.5°	1877.8	2006.6
120°	1785.1	1910.2
122.5°	1694.8	1818.2
125°	1565.8	1679.6
127.5°	1450.0	1545.9
130°	1381.7	1470.3
132.5°	1319.6	1399.0
135°	1234.8	1303.2
137.5°	1166.7	1222.7
140°	1119.9	1172.3
142.5°	1081.3	1126.2
145°	1023.2	1057.3
147.5°	978.6	1006.9
150°	950.6	973.4
152.5°	926.6	943.8
155°	899.0	910.4
157.5°	877.2	885.2
160°	864.2	868.8
162.5°	855.6	860.0
165°	843.3	848.0
167.5°	834.6	836.5
170°	832.1	832.1
172.5°	825.6	823.9
175°	821.7	821.7
177.5°	818.1	816.2
180°	816.2	816.2



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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	1.84	2.55	2.95	3.66	5.21	14.97	15.69	16.09	16.80	18.35
	3H	2.53	3.17	3.65	4.29	5.85	16.78	17.43	17.91	18.55	20.11
	4H	2.82	3.43	3.95	4.55	6.12	17.41	18.02	18.55	19.15	20.71
	6H	3.06	3.62	4.21	4.75	6.33	17.82	18.39	18.97	19.51	21.09
	8H	3.13	3.66	4.27	4.80	6.37	17.93	18.47	19.08	19.61	21.18
	12H	3.14	3.65	4.29	4.78	6.38	17.99	18.50	19.14	19.63	21.23
4H	2H	9.01	9.62	10.15	10.74	12.31	15.23	15.84	16.37	16.96	18.53
	3H	10.56	11.07	11.71	12.22	13.80	17.25	17.76	18.39	18.91	20.49
	4H	10.65	11.12	11.80	12.26	13.86	18.00	18.47	19.15	19.60	21.20
	6H	10.65	11.06	11.81	12.22	13.81	18.51	18.92	19.67	20.08	21.67
	8H	10.63	11.00	11.78	12.15	13.76	18.67	19.04	19.82	20.19	21.80
	12H	10.57	10.92	11.75	12.08	13.69	18.74	19.09	19.92	20.25	21.86
8H	4H	12.07	12.45	13.23	13.60	15.21	18.05	18.42	19.20	19.57	21.18
	6H	12.31	12.62	13.48	13.81	15.42	18.65	18.97	19.83	20.16	21.76
	8H	12.32	12.60	13.51	13.77	15.39	18.86	19.14	20.05	20.31	21.93
	12H	12.29	12.52	13.47	13.69	15.35	18.99	19.23	20.18	20.40	22.06
12H	4H	12.20	12.55	13.38	13.71	15.32	17.99	18.33	19.16	19.50	21.11
	6H	12.56	12.83	13.74	14.00	15.63	18.64	18.91	19.82	20.08	21.70
	8H	12.62	12.86	13.81	14.03	15.69	18.85	19.09	20.04	20.26	21.92