

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: P938360

Luminaire Tested: SQ4-FB-150U-075D-93050-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938360
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-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

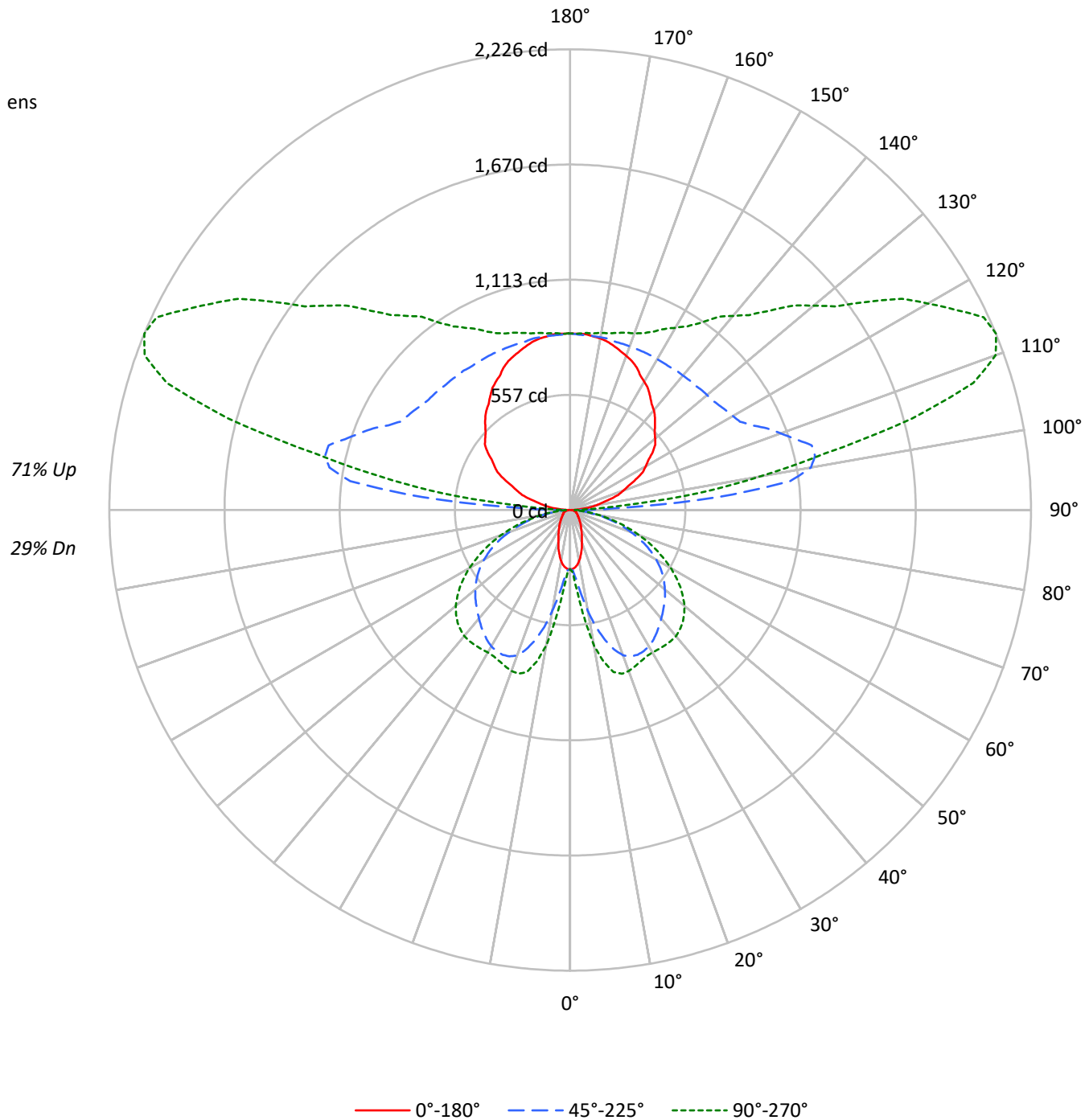
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7739.8 lumens
Efficiency: N/A
Efficacy: 121.7 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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CATALOG NUMBER: SQ4-FB-150U-075D-93050-1D-UNV-STD-W-4-5000K

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°	2648	2648	2648
5°	2585	3059	3560
10°	2342	4455	5901
15°	1988	5817	7126
20°	1617	6735	7263
25°	1347	7043	7115
30°	1134	7082	7101
35°	1001	6959	7285
40°	871	6800	7475
45°	787	6683	7504
50°	721	6575	7380
55°	687	6421	7052
60°	703	6131	6536
65°	727	5693	5827
70°	769	4956	4922
75°	843	4030	3841
80°	903	2785	2589
85°	762	1471	1325

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7504 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.9	0.5
10°-20°	163.6	2.1
20°-30°	286.2	3.7
30°-40°	368.4	4.8
40°-50°	411.5	5.3
50°-60°	394.1	5.1
60°-70°	312.4	4.0
70°-80°	183.7	2.4
80°-90°	54.3	0.7
90°-100°	415.7	5.4
100°-110°	1093.0	14.1
110°-120°	1133.3	14.6
120°-130°	909.0	11.7
130°-140°	713.2	9.2
140°-150°	547.5	7.1
150°-160°	394.3	5.1
160°-170°	241.2	3.1
170°-180°	81.5	1.1
0°-30°	486.7	6.3
0°-40°	855.2	11.0
0°-60°	1660.8	21.5
0°-90°	2211.1	28.6
90°-120°	2642.0	34.1
90°-150°	4811.7	62.2
90°-180°	5529.0	71.4
0°-180°	7739.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	285	285	285	285	285	
5°	278	298	336	380	394	26
15°	208	384	648	786	810	58
25°	133	436	772	806	807	61
35°	90	417	727	768	798	56
45°	62	332	642	736	769	48
55°	44	211	545	633	651	40
65°	35	112	405	455	462	35
75°	26	69	222	244	245	27
85°	9	21	55	61	62	10
90°	6	16	44	22	22	5
95°	55	215	716	369	251	61
105°	197	298	1208	1834	1711	209
115°	350	425	968	1931	2204	345
125°	487	546	880	1488	1755	432
135°	580	638	853	1201	1362	449
145°	673	715	842	1024	1105	421
155°	760	781	842	924	951	349
165°	820	831	842	875	886	231
175°	853	853	848	859	859	81
180°	853	853	853	853	853	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4
2.5°	285.4	285.4	287.2	288.2	290.0	290.9	292.7	294.6	300.1	301.0	302.8
5°	278.1	281.7	293.7	298.3	311.1	328.5	335.9	347.8	372.6	379.9	384.5
7.5°	267.0	275.3	304.7	312.0	344.1	390.0	409.3	435.0	474.4	493.7	509.3
10°	249.6	267.0	319.4	336.8	389.1	458.8	494.6	530.4	590.1	616.7	626.8
12.5°	230.3	258.8	335.0	358.8	434.1	535.9	579.1	618.5	686.4	722.2	727.7
15°	208.3	246.9	349.6	384.5	481.8	600.2	647.9	696.5	759.9	785.5	792.0
17.5°	189.0	237.7	363.4	400.1	518.5	658.0	706.6	747.0	798.4	815.8	820.4
20°	165.2	223.0	372.6	420.3	557.0	700.2	747.0	778.2	813.1	824.1	825.9
22.5°	147.7	207.4	378.1	427.6	582.7	725.9	765.4	790.1	814.0	817.7	818.6
25°	133.1	190.0	377.2	435.9	604.8	741.5	771.8	790.1	803.9	805.7	805.7
27.5°	119.3	170.7	373.5	437.7	621.3	745.2	769.0	781.9	788.3	792.0	792.0
30°	107.4	152.3	364.3	434.1	628.6	741.5	760.8	767.2	773.6	779.1	781.9
32.5°	98.2	134.9	350.6	426.7	629.5	732.3	746.1	749.8	758.9	771.8	776.4
35°	89.9	117.5	335.0	416.6	624.0	717.6	726.8	730.5	748.8	768.1	774.5
37.5°	81.7	104.6	314.8	399.2	615.8	700.2	706.6	713.0	741.5	764.4	771.8
40°	73.4	93.6	290.9	379.9	602.9	679.1	684.6	694.7	732.3	758.9	766.3
42.5°	67.0	84.4	265.2	359.7	586.4	655.2	663.5	678.2	721.3	749.8	758.0
45°	61.5	75.3	237.7	332.2	565.3	630.5	642.4	662.6	708.5	736.0	743.3
47.5°	56.0	68.8	209.2	303.8	542.4	605.7	621.3	644.2	691.0	717.6	724.1
50°	51.4	62.4	180.8	273.5	517.6	579.1	597.4	621.3	669.0	693.8	702.0
52.5°	47.7	56.9	154.2	243.2	489.1	551.5	572.6	597.4	642.4	666.2	671.8
55°	44.0	52.3	131.2	211.1	459.8	522.2	545.1	569.0	613.0	633.2	636.9
57.5°	42.2	48.6	112.0	180.8	428.6	489.1	514.8	536.9	578.1	593.7	597.4
60°	39.5	45.9	97.3	155.1	394.6	457.9	480.0	502.0	536.9	549.7	552.5
62.5°	36.7	44.0	86.3	130.3	359.7	421.2	443.2	463.4	492.8	502.0	505.6
65°	34.9	42.2	78.0	112.0	323.9	382.7	404.7	422.1	446.0	455.2	457.0
67.5°	33.0	40.4	71.6	96.4	288.2	344.1	360.7	377.2	395.5	404.7	405.6
70°	30.3	38.5	66.1	85.3	251.4	300.1	313.9	331.3	346.0	350.6	353.3
72.5°	28.4	35.8	62.4	77.1	213.8	257.9	270.7	280.8	293.7	298.3	298.3
75°	25.7	32.1	58.7	68.8	175.3	211.1	222.1	232.2	242.3	244.1	241.4
77.5°	22.9	28.4	50.5	57.8	136.7	167.0	176.2	181.7	190.0	191.8	192.7
80°	19.3	24.8	39.5	45.0	99.1	123.0	129.4	134.0	141.3	141.3	143.2
82.5°	14.7	19.3	28.4	32.1	67.0	84.4	89.9	92.7	97.3	97.3	97.3
85°	9.2	11.9	18.4	21.1	40.4	51.4	55.1	56.0	59.7	60.6	60.6
87.5°	4.6	6.4	11.9	12.8	21.1	26.6	26.6	28.4	28.4	27.5	26.6
90°	5.7	10.3	14.9	16.1	25.2	37.4	43.5	38.6	29.0	21.7	21.7
92.5°	22.9	61.8	100.8	110.5	155.3	215.0	244.9	214.6	154.2	108.7	104.4
95°	55.0	126.2	197.4	215.2	382.1	604.8	716.1	639.0	484.8	369.2	356.1
97.5°	95.0	157.8	220.7	236.4	514.7	885.9	1071.5	1022.8	925.3	852.3	827.3
100°	125.9	182.9	239.9	254.1	563.0	974.9	1180.8	1184.4	1191.5	1196.9	1167.1
102.5°	152.2	205.5	258.6	271.9	585.2	1002.9	1211.7	1273.8	1397.9	1491.1	1465.7
105°	196.9	242.0	287.0	298.3	601.5	1006.0	1208.2	1347.4	1625.7	1834.5	1820.8
107.5°	242.7	284.7	326.7	337.2	604.7	961.3	1139.6	1333.7	1721.9	2013.1	2016.4
110°	273.6	311.5	349.5	358.9	600.1	921.5	1082.3	1299.4	1733.3	2058.8	2073.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	303.9	340.1	376.3	385.2	600.3	887.0	1030.3	1252.4	1696.5	2029.7	2051.5
115°	349.7	383.0	416.4	424.7	605.8	847.2	967.9	1181.8	1609.7	1930.6	1961.0
117.5°	395.0	425.3	455.5	463.1	617.1	822.3	924.9	1118.0	1504.2	1793.8	1827.5
120°	421.2	449.8	478.2	485.4	626.1	813.9	907.8	1084.2	1437.0	1701.7	1734.4
122.5°	447.0	475.7	504.5	511.7	639.4	809.6	894.7	1053.5	1371.2	1609.5	1641.8
125°	486.6	512.7	539.0	545.5	657.1	805.9	880.3	1015.2	1285.1	1487.6	1517.3
127.5°	518.6	545.0	571.4	578.1	674.8	803.8	868.3	984.2	1215.9	1389.8	1414.8
130°	535.8	564.2	592.6	599.8	687.8	805.1	863.7	966.9	1173.2	1327.9	1351.0
132.5°	553.5	582.0	610.5	617.6	698.3	805.9	859.7	952.0	1136.7	1275.2	1296.0
135°	579.8	605.8	631.6	638.2	709.7	805.1	852.8	930.2	1084.8	1200.8	1218.7
137.5°	606.7	632.4	658.1	664.5	726.9	810.1	851.7	917.1	1047.8	1145.9	1160.5
140°	629.1	652.8	676.4	682.3	737.5	811.0	847.7	904.1	1017.1	1101.8	1115.5
142.5°	646.2	668.1	689.9	695.4	746.2	813.8	847.7	897.3	996.5	1071.0	1082.7
145°	672.6	691.7	710.7	715.4	757.6	813.9	842.0	882.5	963.7	1024.5	1033.4
147.5°	698.8	717.5	736.0	740.7	774.4	819.5	842.0	873.9	937.7	985.6	992.9
150°	716.1	732.9	749.6	753.8	783.2	822.3	842.0	869.0	922.8	963.3	969.3
152.5°	733.8	746.5	759.2	762.4	788.9	824.3	842.0	865.0	911.1	945.6	950.1
155°	760.1	769.6	778.9	781.3	801.5	828.5	842.0	860.3	897.0	924.4	927.4
157.5°	779.6	788.8	797.8	800.1	814.1	832.7	842.0	856.2	884.7	906.0	908.2
160°	792.7	799.9	807.0	808.8	819.9	834.6	842.0	854.2	878.6	896.9	898.1
162.5°	805.9	811.2	816.6	817.9	825.9	836.7	842.0	852.3	872.9	888.3	889.4
165°	820.2	825.0	829.9	831.1	834.7	839.6	842.0	849.3	864.1	875.1	876.3
167.5°	833.4	835.7	837.9	838.5	841.5	845.7	847.7	852.5	862.2	869.4	870.0
170°	842.0	844.3	846.6	847.1	847.3	847.6	847.7	852.5	862.2	869.4	869.4
172.5°	846.6	847.0	847.6	847.7	847.7	847.7	847.7	851.5	859.1	864.8	864.4
175°	852.8	852.8	852.8	852.8	851.1	848.8	847.7	850.1	854.9	858.6	858.6
177.5°	852.8	852.8	852.8	852.8	851.5	849.8	848.9	850.8	854.6	857.4	856.9
180°	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8	852.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	285.4	285.4
2.5°	304.7	302.8
5°	391.9	393.7
7.5°	527.7	526.8
10°	656.2	664.4
12.5°	749.8	751.6
15°	806.7	810.3
17.5°	828.7	829.6
20°	829.6	827.8
22.5°	819.5	817.7
25°	807.6	806.7
27.5°	796.6	797.5
30°	792.0	794.7
32.5°	792.0	796.6
35°	793.8	798.4
37.5°	792.9	798.4
40°	789.2	795.6
42.5°	779.1	783.7
45°	763.5	769.0
47.5°	743.3	747.0
50°	717.6	721.3
52.5°	685.5	686.4
55°	647.0	650.6
57.5°	605.7	606.6
60°	559.8	562.5
62.5°	511.2	511.2
65°	459.8	461.6
67.5°	406.5	411.1
70°	352.4	353.3
72.5°	299.2	299.2
75°	244.1	245.0
77.5°	191.8	191.8
80°	142.2	143.2
82.5°	98.2	100.0
85°	61.5	61.5
87.5°	28.4	25.7
90°	21.7	21.7
92.5°	87.1	69.8
95°	303.7	251.3
97.5°	727.6	627.9
100°	1048.4	929.5
102.5°	1363.9	1262.1
105°	1766.1	1711.4
107.5°	2029.6	2042.8
110°	2130.1	2187.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2139.1	2226.5
115°	2082.3	2203.7
117.5°	1962.0	2096.6
120°	1865.1	1995.9
122.5°	1770.8	1899.7
125°	1636.1	1754.9
127.5°	1515.0	1615.2
130°	1443.6	1536.2
132.5°	1378.8	1461.8
135°	1290.2	1361.7
137.5°	1219.1	1277.5
140°	1170.2	1224.8
142.5°	1129.8	1176.8
145°	1069.1	1104.7
147.5°	1022.5	1052.0
150°	993.2	1017.1
152.5°	968.2	986.2
155°	939.4	951.3
157.5°	916.5	924.9
160°	902.9	907.8
162.5°	894.0	898.6
165°	881.2	886.0
167.5°	872.0	874.0
170°	869.4	869.4
172.5°	862.6	860.9
175°	858.6	858.6
177.5°	854.8	852.8
180°	852.8	852.8



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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	1.99	2.70	3.10	3.82	5.36	15.12	15.84	16.24	16.95	18.50
	3H	2.68	3.32	3.81	4.45	6.01	16.94	17.58	18.06	18.70	20.26
	4H	2.97	3.58	4.11	4.71	6.27	17.56	18.18	18.70	19.30	20.86
	6H	3.22	3.78	4.36	4.90	6.48	17.98	18.54	19.12	19.66	21.24
	8H	3.28	3.81	4.43	4.96	6.53	18.09	18.62	19.23	19.76	21.33
	12H	3.29	3.80	4.44	4.94	6.53	18.14	18.65	19.29	19.78	21.38
4H	2H	9.16	9.77	10.30	10.89	12.46	15.38	15.99	16.52	17.12	18.68
	3H	10.71	11.22	11.86	12.37	13.95	17.40	17.91	18.55	19.06	20.64
	4H	10.80	11.27	11.95	12.41	14.01	18.15	18.62	19.30	19.76	21.35
	6H	10.80	11.21	11.96	12.37	13.96	18.67	19.07	19.82	20.23	21.82
	8H	10.78	11.15	11.93	12.31	13.91	18.82	19.19	19.97	20.35	21.95
	12H	10.73	11.07	11.90	12.23	13.84	18.90	19.24	20.07	20.40	22.01
8H	4H	12.22	12.60	13.38	13.75	15.36	18.20	18.57	19.35	19.73	21.33
	6H	12.46	12.77	13.64	13.97	15.57	18.81	19.12	19.98	20.31	21.92
	8H	12.48	12.75	13.66	13.92	15.54	19.02	19.29	20.20	20.46	22.08
	12H	12.44	12.68	13.62	13.85	15.50	19.15	19.38	20.33	20.55	22.21
12H	4H	12.36	12.70	13.53	13.86	15.47	18.14	18.48	19.32	19.65	21.26
	6H	12.71	12.98	13.90	14.16	15.78	18.79	19.06	19.97	20.23	21.86
	8H	12.77	13.01	13.96	14.18	15.84	19.00	19.24	20.19	20.41	22.07