

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: P936494

Luminaire Tested: SQ4-FB-025U-100D-B2750-1D-UNV-W2A-W-8-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936494
REPORT IS A COMBINATION OF REPORTS P933455 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-100D-B2750-1D-UNV-W2A-W-8-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

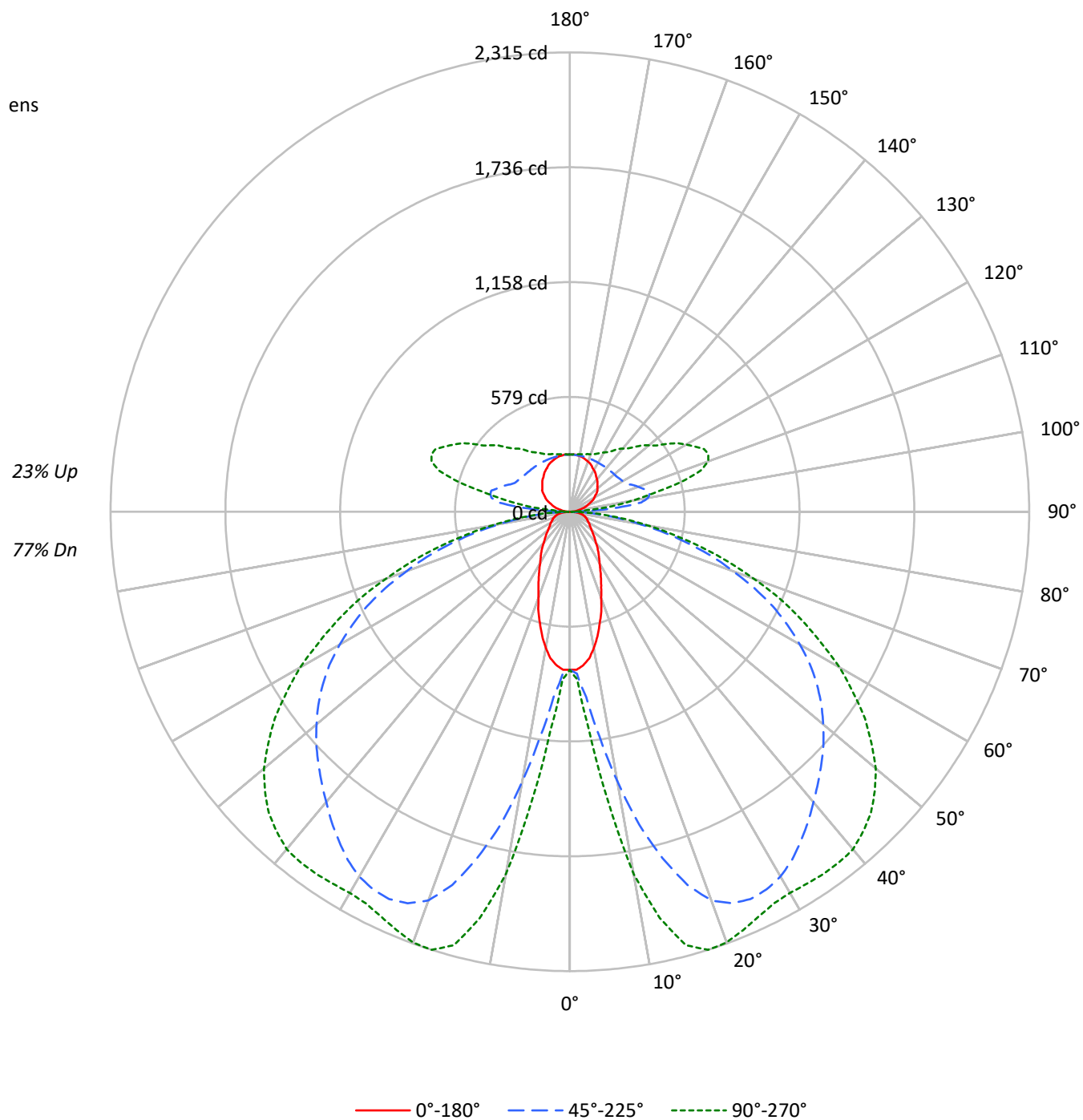
Lumens per Lamp: N/A
Luminaire Lumens: 8036.9 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 77.6
Input Voltage (V): NR
Input Current (Ain): 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: P936494

CATALOG NUMBER: SQ4-FB-025U-100D-B2750-1D-UNV-W2A-W-8-3500K

Luminous Intensity Polar Plot



TEST NUMBER: P936494

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	20
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3695	3695	3695
5°	3610	4270	4967
10°	3274	6225	8234
15°	2783	8133	9943
20°	2266	9425	10133
25°	1890	9863	9927
30°	1594	9925	9908
35°	1409	9760	10164
40°	1228	9546	10429
45°	1112	9390	10470
50°	1020	9248	10296
55°	977	9041	9840
60°	1000	8645	9120
65°	1040	8041	8129
70°	1108	7012	6868
75°	1228	5717	5359
80°	1342	3964	3611
85°	1192	2104	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10470 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	1.3
10°-20°	456.6	5.7
20°-30°	798.6	9.9
30°-40°	1028.1	12.8
40°-50°	1148.3	14.3
50°-60°	1099.8	13.7
60°-70°	871.6	10.8
70°-80°	512.5	6.4
80°-90°	143.5	1.8
90°-100°	141.0	1.8
100°-110°	370.6	4.6
110°-120°	384.3	4.8
120°-130°	308.3	3.8
130°-140°	241.9	3.0
140°-150°	185.7	2.3
150°-160°	133.7	1.7
160°-170°	81.8	1.0
170°-180°	27.6	0.3
0°-30°	1358.2	16.9
0°-40°	2386.3	29.7
0°-60°	4634.4	57.7
0°-90°	6162.0	76.7
90°-120°	895.9	11.1
90°-150°	1631.8	20.3
90°-180°	1875.0	23.3
0°-180°	8036.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	796	796	796	796	796	
5°	776	832	937	1060	1099	72
15°	581	1073	1808	2192	2261	162
25°	371	1216	2154	2248	2251	171
35°	251	1163	2028	2143	2228	157
45°	172	927	1793	2054	2146	133
55°	123	589	1521	1767	1816	112
65°	97	312	1129	1270	1288	96
75°	72	192	620	681	684	75
85°	26	59	154	169	172	27
90°	2	5	15	7	7	3
95°	19	73	243	125	85	21
105°	67	101	410	622	580	71
115°	119	144	328	655	747	117
125°	165	185	298	504	595	146
135°	197	216	289	407	462	152
145°	228	243	286	348	375	143
155°	258	265	286	314	323	118
165°	278	282	286	297	300	79
175°	289	289	288	291	291	27
180°	289	289	289	289	289	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4
2.5°	796.4	796.4	801.6	804.1	809.2	811.7	816.9	822.0	837.4	839.9	845.1
5°	775.9	786.1	819.5	832.3	868.1	916.8	937.2	970.6	1039.6	1060.2	1073.0
7.5°	745.2	768.2	850.2	870.6	960.3	1088.3	1142.1	1213.8	1323.9	1377.7	1421.2
10°	696.5	745.2	891.2	939.8	1085.8	1280.3	1380.2	1480.1	1646.5	1720.8	1748.9
12.5°	642.7	722.1	934.7	1001.3	1211.2	1495.5	1615.8	1726.0	1915.4	2015.3	2030.6
15°	581.3	688.9	975.7	1073.0	1344.4	1674.7	1807.9	1943.6	2120.3	2192.0	2209.9
17.5°	527.5	663.3	1014.1	1116.5	1446.8	1836.1	1971.8	2084.4	2227.8	2276.5	2289.4
20°	461.0	622.3	1039.6	1172.8	1554.4	1953.9	2084.4	2171.5	2268.8	2299.5	2304.7
22.5°	412.3	578.7	1055.0	1193.3	1626.1	2025.6	2135.7	2204.8	2271.4	2281.6	2284.2
25°	371.3	530.0	1052.4	1216.4	1687.5	2069.1	2153.6	2204.8	2243.2	2248.4	2248.4
27.5°	332.9	476.3	1042.3	1221.5	1733.6	2079.4	2145.9	2181.8	2199.7	2209.9	2209.9
30°	299.6	425.1	1016.6	1211.2	1754.1	2069.1	2122.9	2140.8	2158.7	2174.0	2181.8
32.5°	274.0	376.5	978.2	1190.7	1756.7	2043.5	2081.9	2092.2	2117.7	2153.6	2166.4
35°	251.0	327.8	934.7	1162.6	1741.3	2002.5	2028.1	2038.4	2089.6	2143.3	2161.3
37.5°	227.9	292.0	878.3	1114.0	1718.2	1953.9	1971.8	1989.7	2069.1	2133.1	2153.6
40°	204.8	261.2	811.7	1060.2	1682.4	1895.0	1910.3	1938.5	2043.5	2117.7	2138.2
42.5°	186.9	235.6	740.0	1003.8	1636.4	1828.4	1851.5	1892.4	2012.7	2092.2	2115.2
45°	171.6	210.0	663.3	926.9	1577.4	1759.2	1792.6	1848.9	1976.9	2053.7	2074.2
47.5°	156.2	192.1	583.8	847.6	1513.4	1690.1	1733.6	1797.7	1928.2	2002.5	2020.5
50°	143.4	174.1	504.5	763.1	1444.3	1615.8	1667.1	1733.6	1866.8	1936.0	1958.9
52.5°	133.1	158.7	430.2	678.6	1364.8	1539.0	1597.9	1667.1	1792.6	1859.1	1874.4
55°	122.9	145.9	366.2	589.0	1283.0	1457.1	1521.0	1587.7	1710.6	1766.9	1777.1
57.5°	117.8	135.8	312.4	504.5	1195.8	1364.8	1436.5	1498.1	1613.3	1656.8	1667.1
60°	110.1	128.0	271.4	432.8	1101.2	1277.8	1339.3	1400.7	1498.1	1533.9	1541.6
62.5°	102.4	122.9	240.7	363.7	1003.8	1175.4	1236.8	1293.2	1375.1	1400.7	1411.0
65°	97.3	117.8	217.6	312.4	904.0	1067.8	1129.3	1177.9	1244.5	1270.2	1275.3
67.5°	92.2	112.7	199.7	268.9	804.1	960.3	1006.4	1052.4	1103.7	1129.3	1131.9
70°	84.5	107.6	184.4	238.2	701.7	837.4	875.8	924.4	965.4	978.2	985.9
72.5°	79.4	99.9	174.1	215.1	596.6	719.6	755.4	783.6	819.5	832.3	832.3
75°	71.7	89.6	163.9	192.1	489.2	589.0	619.7	647.9	676.1	681.2	673.5
77.5°	64.1	79.4	140.8	161.3	381.6	466.1	491.7	507.0	530.0	535.2	537.8
80°	53.8	69.2	110.1	125.5	276.6	343.1	361.0	373.8	394.4	394.4	399.5
82.5°	41.0	53.8	79.4	89.6	186.9	235.6	251.0	258.6	271.4	271.4	271.4
85°	25.6	33.3	51.3	58.9	112.7	143.4	153.7	156.2	166.5	169.0	169.0
87.5°	12.8	17.9	33.3	35.9	58.9	74.2	74.2	79.4	79.4	76.8	74.2
90°	1.9	3.5	5.0	5.4	8.5	12.7	14.7	13.1	9.8	7.4	7.4
92.5°	7.8	20.9	34.2	37.5	52.7	73.0	83.0	72.8	52.3	36.9	35.5
95°	18.6	42.7	67.0	73.0	129.6	205.0	242.8	216.7	164.4	125.2	120.7
97.5°	32.3	53.6	74.8	80.1	174.5	300.4	363.4	346.9	313.9	289.1	280.6
100°	42.7	62.0	81.3	86.1	190.9	330.5	400.4	401.7	404.1	405.9	395.8
102.5°	51.6	69.7	87.7	92.2	198.5	340.1	411.0	432.0	474.0	505.6	497.0
105°	66.8	82.1	97.4	101.2	204.1	341.2	409.8	457.0	551.4	622.1	617.4
107.5°	82.3	96.5	110.8	114.3	205.0	326.0	386.4	452.2	583.9	682.7	683.8
110°	92.8	105.6	118.5	121.7	203.5	312.5	367.1	440.6	587.8	698.2	703.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	103.1	115.3	127.5	130.6	203.6	300.8	349.4	424.7	575.3	688.3	695.7
115°	118.6	129.8	141.2	144.0	205.4	287.3	328.2	400.8	545.9	654.8	665.0
117.5°	133.9	144.2	154.5	157.1	209.3	278.9	313.7	379.2	510.1	608.3	619.8
120°	142.8	152.5	162.2	164.6	212.4	276.1	307.9	367.6	487.3	577.0	588.1
122.5°	151.6	161.3	171.1	173.5	216.9	274.5	303.4	357.3	465.0	545.8	556.8
125°	165.0	173.9	182.8	185.0	222.9	273.4	298.5	344.3	435.9	504.5	514.5
127.5°	175.9	184.8	193.8	196.0	228.9	272.6	294.5	333.8	412.4	471.3	479.8
130°	181.7	191.4	201.0	203.4	233.2	273.1	292.9	327.9	397.9	450.3	458.1
132.5°	187.7	197.4	207.0	209.4	236.8	273.4	291.6	322.9	385.5	432.5	439.5
135°	196.6	205.4	214.2	216.5	240.7	273.1	289.2	315.5	367.9	407.3	413.3
137.5°	205.7	214.4	223.2	225.4	246.5	274.7	288.9	311.0	355.3	388.6	393.5
140°	213.3	221.3	229.4	231.4	250.1	275.0	287.5	306.7	345.0	373.6	378.3
142.5°	219.2	226.6	234.0	235.9	253.1	276.1	287.5	304.4	338.0	363.2	367.2
145°	228.1	234.6	241.0	242.6	257.0	276.1	285.6	299.3	326.8	347.5	350.5
147.5°	237.0	243.3	249.6	251.2	262.6	277.9	285.6	296.4	318.0	334.2	336.7
150°	242.8	248.5	254.2	255.6	265.6	278.9	285.6	294.7	313.0	326.6	328.7
152.5°	248.8	253.1	257.5	258.5	267.5	279.6	285.6	293.3	308.9	320.6	322.2
155°	257.8	261.0	264.1	264.9	271.8	281.0	285.6	291.8	304.2	313.5	314.4
157.5°	264.3	267.4	270.5	271.3	276.1	282.4	285.6	290.4	300.0	307.3	307.9
160°	268.8	271.2	273.6	274.2	278.0	283.0	285.6	289.7	298.0	304.2	304.6
162.5°	273.3	275.1	276.8	277.3	280.0	283.7	285.6	289.1	296.0	301.3	301.6
165°	278.2	279.8	281.5	281.9	283.1	284.8	285.6	288.1	293.0	296.8	297.2
167.5°	282.7	283.4	284.2	284.4	285.5	286.8	287.5	289.1	292.4	294.9	295.1
170°	285.6	286.3	287.1	287.3	287.4	287.5	287.5	289.1	292.4	294.9	294.9
172.5°	287.1	287.3	287.5	287.5	287.5	287.5	287.5	288.8	291.4	293.3	293.1
175°	289.2	289.2	289.2	289.2	288.7	287.9	287.5	288.3	289.9	291.2	291.2
177.5°	289.2	289.2	289.2	289.2	288.8	288.2	287.9	288.6	289.8	290.8	290.6
180°	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	796.4	796.4
2.5°	850.2	845.1
5°	1093.4	1098.6
7.5°	1472.4	1469.9
10°	1830.9	1854.0
12.5°	2092.2	2097.3
15°	2250.9	2261.2
17.5°	2312.3	2314.9
20°	2314.9	2309.8
22.5°	2286.7	2281.6
25°	2253.5	2250.9
27.5°	2222.7	2225.3
30°	2209.9	2217.7
32.5°	2209.9	2222.7
35°	2215.0	2227.8
37.5°	2212.5	2227.8
40°	2202.2	2220.2
42.5°	2174.0	2186.8
45°	2130.5	2145.9
47.5°	2074.2	2084.4
50°	2002.5	2012.7
52.5°	1912.9	1915.4
55°	1805.3	1815.6
57.5°	1690.1	1692.6
60°	1562.0	1569.8
62.5°	1426.4	1426.4
65°	1283.0	1288.1
67.5°	1134.4	1147.2
70°	983.3	985.9
72.5°	834.8	834.8
75°	681.2	683.7
77.5°	535.2	535.2
80°	396.9	399.5
82.5°	274.0	279.2
85°	171.6	171.6
87.5°	79.4	71.7
90°	7.4	7.4
92.5°	29.6	23.6
95°	103.0	85.2
97.5°	246.7	212.9
100°	355.5	315.2
102.5°	462.5	428.0
105°	598.9	580.3
107.5°	688.3	692.7
110°	722.3	741.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	725.4	755.0
115°	706.2	747.3
117.5°	665.4	711.1
120°	632.5	676.8
122.5°	600.5	644.2
125°	554.8	595.2
127.5°	513.8	547.8
130°	489.5	520.9
132.5°	467.6	495.7
135°	437.5	461.7
137.5°	413.4	433.2
140°	396.8	415.4
142.5°	383.1	399.0
145°	362.6	374.6
147.5°	346.7	356.8
150°	336.8	345.0
152.5°	328.3	334.4
155°	318.5	322.6
157.5°	310.9	313.7
160°	306.2	307.9
162.5°	303.2	304.8
165°	298.8	300.5
167.5°	295.7	296.4
170°	294.9	294.9
172.5°	292.5	292.0
175°	291.2	291.2
177.5°	289.9	289.2
180°	289.2	289.2

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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	7.68	8.91	8.36	9.62	10.44	20.86	22.09	21.54	22.80	23.62
	3H	8.41	9.52	9.10	10.24	11.10	22.72	23.84	23.42	24.55	25.41
	4H	8.72	9.78	9.44	10.50	11.38	23.38	24.44	24.10	25.16	26.04
	6H	8.99	9.97	9.72	10.70	11.59	23.83	24.81	24.56	25.54	26.43
	8H	9.07	10.00	9.81	10.76	11.65	23.96	24.90	24.70	25.65	26.54
	12H	9.10	9.99	9.85	10.74	11.66	24.05	24.94	24.79	25.69	26.60
4H	2H	14.94	15.99	15.65	16.72	17.59	21.17	22.23	21.89	22.95	23.83
	3H	16.54	17.42	17.27	18.18	19.08	23.25	24.14	23.98	24.90	25.79
	4H	16.65	17.45	17.39	18.22	19.14	24.03	24.84	24.78	25.60	26.52
	6H	16.68	17.38	17.44	18.17	19.10	24.60	25.30	25.36	26.09	27.01
	8H	16.67	17.32	17.44	18.11	19.05	24.77	25.43	25.54	26.21	27.15
	12H	16.64	17.24	17.43	18.04	18.99	24.88	25.47	25.67	26.28	27.23
8H	4H	18.12	18.78	18.89	19.57	20.51	24.13	24.78	24.90	25.57	26.51
	6H	18.38	18.93	19.18	19.76	20.70	24.77	25.32	25.57	26.15	27.09
	8H	18.41	18.89	19.22	19.72	20.68	25.00	25.49	25.81	26.31	27.27
	12H	18.39	18.82	19.21	19.64	20.65	25.16	25.59	25.98	26.41	27.42
12H	4H	18.29	18.88	19.08	19.69	20.63	24.10	24.69	24.89	25.50	26.45
	6H	18.65	19.14	19.46	19.96	20.92	24.76	25.25	25.57	26.07	27.03
	8H	18.74	19.17	19.55	19.98	21.00	25.01	25.44	25.82	26.26	27.27