

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: P936446

Luminaire Tested: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-8-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936446
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-92765-1D-UNV-STD-W-8-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

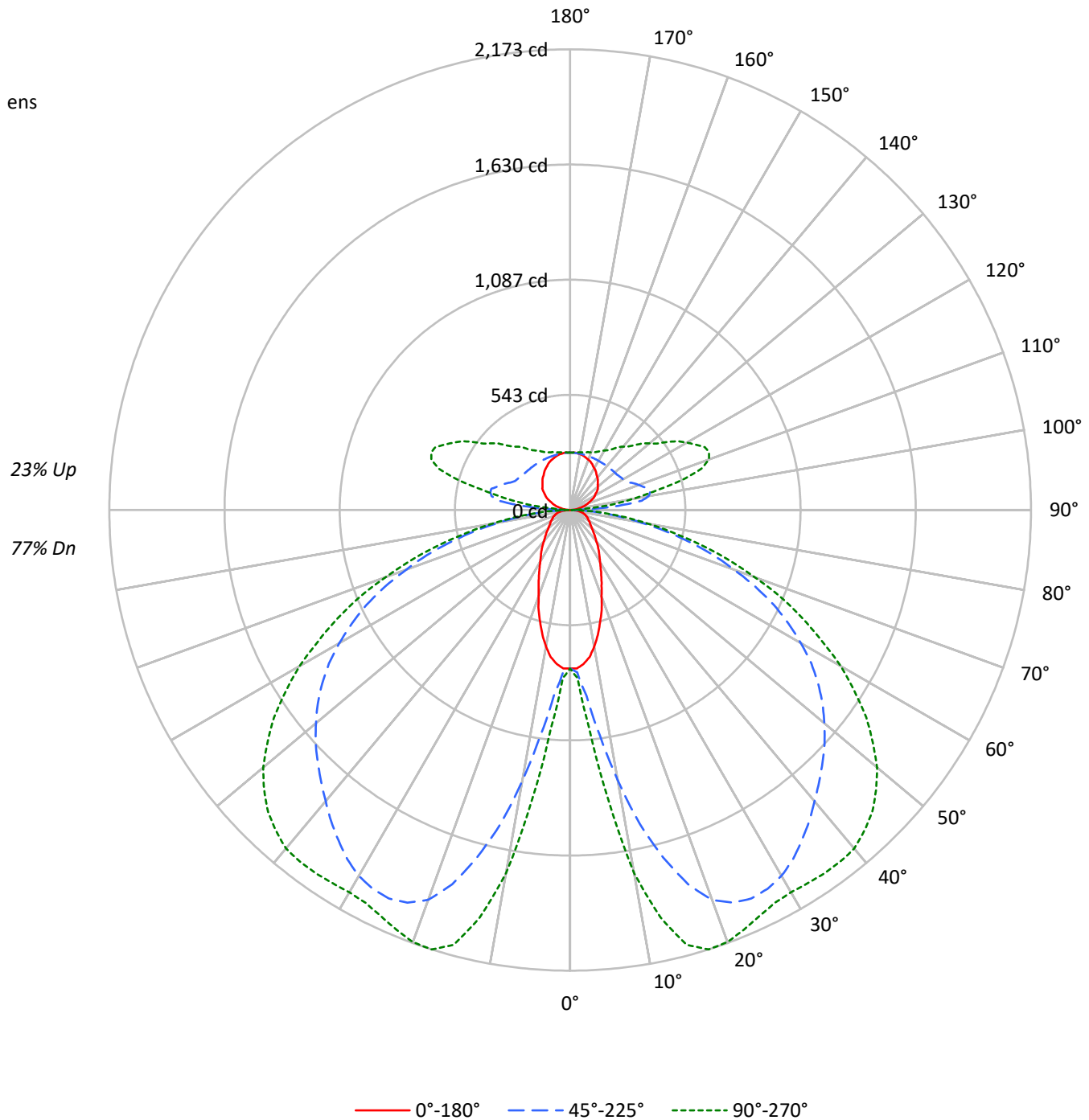
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7544.6 lumens
Efficiency: N/A
Efficacy: 97.2 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 (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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77			77
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66	63			63
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55	51			51
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45	42			42
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38	35			35
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33	30			30
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28	26			26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25	22			22
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22	20			20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	20	17			17
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17	16			16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3469	3469	3469
5°	3388	4009	4662
10°	3073	5844	7729
15°	2612	7635	9333
20°	2127	8847	9512
25°	1774	9259	9319
30°	1496	9317	9301
35°	1323	9163	9541
40°	1153	8961	9790
45°	1044	8814	9829
50°	957	8681	9666
55°	916	8487	9238
60°	938	8115	8561
65°	976	7548	7632
70°	1040	6582	6447
75°	1153	5367	5031
80°	1260	3722	3390
85°	1118	1976	1736

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9829 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.7	1.3
10°-20°	428.6	5.7
20°-30°	749.7	9.9
30°-40°	965.1	12.8
40°-50°	1078.0	14.3
50°-60°	1032.4	13.7
60°-70°	818.2	10.8
70°-80°	481.1	6.4
80°-90°	134.7	1.8
90°-100°	132.3	1.8
100°-110°	347.9	4.6
110°-120°	360.8	4.8
120°-130°	289.4	3.8
130°-140°	227.1	3.0
140°-150°	174.3	2.3
150°-160°	125.5	1.7
160°-170°	76.8	1.0
170°-180°	25.9	0.3
0°-30°	1275.0	16.9
0°-40°	2240.1	29.7
0°-60°	4350.5	57.7
0°-90°	5784.5	76.7
90°-120°	841.0	11.1
90°-150°	1531.8	20.3
90°-180°	1760.0	23.3
0°-180°	7544.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	748	748	748	748	748	
5°	728	781	880	995	1031	67
15°	546	1007	1697	2058	2123	152
25°	349	1142	2022	2111	2113	161
35°	236	1091	1904	2012	2091	147
45°	161	870	1683	1928	2014	125
55°	115	553	1428	1659	1704	105
65°	91	293	1060	1192	1209	90
75°	67	180	582	640	642	70
85°	24	55	144	159	161	25
90°	2	5	14	7	7	3
95°	18	68	228	118	80	19
105°	63	95	385	584	545	66
115°	111	135	308	615	702	110
125°	155	174	280	474	559	138
135°	185	203	272	382	433	143
145°	214	228	268	326	352	134
155°	242	249	268	294	303	111
165°	261	265	268	279	282	74
175°	272	272	270	273	273	26
180°	272	272	272	272	272	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6
2.5°	747.6	747.6	752.5	754.8	759.6	762.0	766.8	771.6	786.1	788.5	793.3
5°	728.3	738.0	769.3	781.3	814.9	860.6	879.8	911.1	975.9	995.2	1007.2
7.5°	699.5	721.2	798.1	817.3	901.5	1021.6	1072.1	1139.4	1242.8	1293.3	1334.2
10°	653.8	699.5	836.6	882.3	1019.2	1201.9	1295.7	1389.5	1545.7	1615.4	1641.8
12.5°	603.4	677.9	877.4	939.9	1137.0	1403.8	1516.8	1620.2	1798.1	1891.9	1906.2
15°	545.7	646.7	915.9	1007.2	1262.0	1572.1	1697.1	1824.5	1990.4	2057.7	2074.5
17.5°	495.2	622.6	951.9	1048.1	1358.2	1723.6	1851.0	1956.7	2091.3	2137.0	2149.1
20°	432.7	584.2	975.9	1100.9	1459.1	1834.2	1956.7	2038.5	2129.8	2158.7	2163.5
22.5°	387.1	543.2	990.4	1120.2	1526.5	1901.5	2004.8	2069.7	2132.3	2141.8	2144.3
25°	348.6	497.6	988.0	1141.9	1584.1	1942.3	2021.7	2069.7	2105.8	2110.6	2110.6
27.5°	312.5	447.1	978.4	1146.7	1627.4	1952.0	2014.5	2048.1	2065.0	2074.5	2074.5
30°	281.3	399.1	954.3	1137.0	1646.6	1942.3	1992.8	2009.7	2026.5	2040.9	2048.1
32.5°	257.2	353.4	918.3	1117.8	1649.1	1918.3	1954.4	1964.0	1988.0	2021.7	2033.7
35°	235.6	307.7	877.4	1091.4	1634.6	1879.9	1903.9	1913.5	1961.5	2012.0	2028.9
37.5°	213.9	274.1	824.5	1045.7	1613.0	1834.2	1851.0	1867.8	1942.3	2002.4	2021.7
40°	192.3	245.2	762.0	995.2	1579.3	1778.9	1793.3	1819.7	1918.3	1988.0	2007.2
42.5°	175.5	221.1	694.7	942.3	1536.1	1716.4	1738.0	1776.4	1889.4	1964.0	1985.6
45°	161.1	197.1	622.6	870.2	1480.8	1651.4	1682.7	1735.6	1855.8	1927.9	1947.2
47.5°	146.6	180.3	548.1	795.7	1420.7	1586.6	1627.4	1687.6	1810.1	1879.9	1896.7
50°	134.6	163.5	473.6	716.3	1355.8	1516.8	1564.9	1627.4	1752.4	1817.4	1838.9
52.5°	125.0	149.0	403.9	637.0	1281.2	1444.7	1500.0	1564.9	1682.7	1745.2	1759.6
55°	115.3	137.0	343.8	552.9	1204.4	1367.8	1427.9	1490.4	1605.8	1658.6	1668.3
57.5°	110.6	127.4	293.3	473.6	1122.6	1281.2	1348.5	1406.3	1514.5	1555.3	1564.9
60°	103.3	120.2	254.8	406.2	1033.7	1199.5	1257.2	1314.9	1406.3	1440.0	1447.1
62.5°	96.1	115.3	226.0	341.4	942.3	1103.4	1161.1	1214.0	1290.9	1314.9	1324.5
65°	91.3	110.6	204.3	293.3	848.6	1002.4	1060.1	1105.8	1168.2	1192.4	1197.2
67.5°	86.5	105.8	187.5	252.4	754.8	901.5	944.7	988.0	1036.1	1060.1	1062.5
70°	79.3	101.0	173.1	223.6	658.7	786.1	822.1	867.8	906.3	918.3	925.5
72.5°	74.5	93.8	163.5	201.9	560.1	675.5	709.2	735.6	769.3	781.3	781.3
75°	67.3	84.1	153.8	180.3	459.2	552.9	581.7	608.2	634.7	639.5	632.2
77.5°	60.1	74.5	132.2	151.5	358.2	437.5	461.5	475.9	497.6	502.4	504.8
80°	50.5	64.9	103.3	117.8	259.6	322.1	338.9	350.9	370.2	370.2	375.0
82.5°	38.5	50.5	74.5	84.1	175.5	221.1	235.6	242.8	254.8	254.8	254.8
85°	24.0	31.3	48.1	55.3	105.8	134.6	144.3	146.6	156.3	158.6	158.6
87.5°	12.0	16.8	31.3	33.7	55.3	69.7	69.7	74.5	74.5	72.1	69.7
90°	1.8	3.3	4.7	5.1	8.0	11.9	13.8	12.3	9.2	6.9	6.9
92.5°	7.3	19.6	32.1	35.2	49.5	68.5	78.0	68.3	49.1	34.7	33.3
95°	17.5	40.1	62.9	68.5	121.6	192.5	228.0	203.4	154.4	117.5	113.3
97.5°	30.3	50.3	70.2	75.2	163.8	282.0	341.1	325.7	294.6	271.3	263.4
100°	40.1	58.2	76.3	80.9	179.2	310.3	375.9	377.0	379.3	381.0	371.6
102.5°	48.5	65.4	82.3	86.5	186.3	319.3	385.8	405.5	445.0	474.6	466.6
105°	62.7	77.0	91.4	95.0	191.6	320.3	384.7	429.0	517.6	584.0	579.6
107.5°	77.2	90.6	104.0	107.3	192.5	306.0	362.8	424.5	548.1	640.8	641.9
110°	87.1	99.2	111.2	114.3	191.0	293.4	344.6	413.6	551.8	655.4	659.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	96.8	108.2	119.7	122.6	191.1	282.4	328.0	398.7	540.1	646.1	653.1
115°	111.3	121.9	132.5	135.2	192.8	269.7	308.1	376.2	512.5	614.6	624.3
117.5°	125.7	135.4	145.0	147.5	196.5	261.8	294.4	355.9	478.8	571.1	581.8
120°	134.1	143.2	152.3	154.5	199.4	259.2	289.0	345.1	457.5	541.7	552.1
122.5°	142.3	151.5	160.6	162.9	203.6	257.7	284.8	335.4	436.5	512.4	522.7
125°	154.9	163.3	171.6	173.6	209.2	256.6	280.3	323.2	409.2	473.6	483.0
127.5°	165.1	173.5	181.9	184.0	214.9	255.9	276.4	313.4	387.1	442.4	450.5
130°	170.6	179.7	188.7	190.9	218.9	256.3	275.0	307.8	373.5	422.7	430.1
132.5°	176.2	185.3	194.3	196.6	222.3	256.6	273.7	303.1	361.9	406.0	412.6
135°	184.6	192.8	201.1	203.2	226.0	256.3	271.5	296.2	345.4	382.3	388.0
137.5°	193.1	201.3	209.5	211.6	231.4	257.9	271.2	292.0	333.6	364.8	369.4
140°	200.2	207.8	215.3	217.2	234.8	258.2	269.9	287.9	323.8	350.8	355.1
142.5°	205.8	212.7	219.7	221.4	237.6	259.2	269.9	285.7	317.3	340.9	344.7
145°	214.1	220.2	226.2	227.8	241.2	259.2	268.1	281.0	306.8	326.2	329.0
147.5°	222.5	228.4	234.3	235.8	246.5	260.9	268.1	278.3	298.5	313.7	316.1
150°	228.0	233.3	238.6	240.0	249.3	261.8	268.1	276.6	293.8	306.6	308.5
152.5°	233.6	237.6	241.7	242.7	251.2	262.4	268.1	275.3	290.0	301.0	302.5
155°	242.0	245.0	248.0	248.7	255.2	263.8	268.1	273.9	285.5	294.3	295.2
157.5°	248.1	251.1	254.0	254.7	259.2	265.1	268.1	272.6	281.6	288.4	289.1
160°	252.3	254.6	256.9	257.4	261.0	265.7	268.1	272.0	279.7	285.5	285.9
162.5°	256.5	258.2	259.9	260.3	262.9	266.3	268.1	271.3	277.9	282.8	283.2
165°	261.2	262.7	264.2	264.6	265.8	267.3	268.1	270.4	275.1	278.6	279.0
167.5°	265.3	266.1	266.8	267.0	268.0	269.3	269.9	271.4	274.5	276.8	277.0
170°	268.1	268.8	269.5	269.7	269.8	269.9	269.9	271.4	274.5	276.8	276.8
172.5°	269.5	269.7	269.9	269.9	269.9	269.9	269.9	271.1	273.5	275.3	275.2
175°	271.5	271.5	271.5	271.5	271.0	270.3	269.9	270.6	272.2	273.3	273.3
177.5°	271.5	271.5	271.5	271.5	271.1	270.5	270.3	270.9	272.1	273.0	272.8
180°	271.5	271.5	271.5	271.5	271.5	271.5	271.5	271.5	271.5	271.5	271.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	747.6	747.6
2.5°	798.1	793.3
5°	1026.4	1031.3
7.5°	1382.2	1379.8
10°	1718.8	1740.4
12.5°	1964.0	1968.8
15°	2113.0	2122.6
17.5°	2170.7	2173.1
20°	2173.1	2168.3
22.5°	2146.7	2141.8
25°	2115.5	2113.0
27.5°	2086.5	2089.0
30°	2074.5	2081.8
32.5°	2074.5	2086.5
35°	2079.3	2091.3
37.5°	2077.0	2091.3
40°	2067.3	2084.2
42.5°	2040.9	2052.9
45°	2000.0	2014.5
47.5°	1947.2	1956.7
50°	1879.9	1889.4
52.5°	1795.7	1798.1
55°	1694.7	1704.4
57.5°	1586.6	1589.0
60°	1466.3	1473.6
62.5°	1339.0	1339.0
65°	1204.4	1209.2
67.5°	1064.9	1076.9
70°	923.1	925.5
72.5°	783.7	783.7
75°	639.5	641.8
77.5°	502.4	502.4
80°	372.6	375.0
82.5°	257.2	262.1
85°	161.1	161.1
87.5°	74.5	67.3
90°	6.9	6.9
92.5°	27.7	22.2
95°	96.7	80.0
97.5°	231.6	199.8
100°	333.7	295.9
102.5°	434.2	401.8
105°	562.2	544.8
107.5°	646.1	650.3
110°	678.0	696.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	681.0	708.8
115°	662.9	701.5
117.5°	624.6	667.5
120°	593.7	635.4
122.5°	563.7	604.7
125°	520.9	558.7
127.5°	482.3	514.2
130°	459.5	489.0
132.5°	439.0	465.4
135°	410.7	433.4
137.5°	388.1	406.7
140°	372.5	390.0
142.5°	359.7	374.6
145°	340.4	351.7
147.5°	325.5	334.9
150°	316.2	323.8
152.5°	308.2	313.9
155°	299.0	302.8
157.5°	291.8	294.4
160°	287.4	289.0
162.5°	284.6	286.1
165°	280.5	282.1
167.5°	277.6	278.3
170°	276.8	276.8
172.5°	274.6	274.1
175°	273.3	273.3
177.5°	272.2	271.5
180°	271.5	271.5



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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	7.46	8.69	8.14	9.40	10.23	20.64	21.87	21.32	22.58	23.40
	3H	8.19	9.30	8.88	10.02	10.88	22.50	23.62	23.20	24.33	25.19
	4H	8.50	9.56	9.22	10.28	11.16	23.16	24.22	23.88	24.94	25.82
	6H	8.77	9.75	9.50	10.48	11.37	23.61	24.59	24.34	25.32	26.21
	8H	8.85	9.78	9.59	10.54	11.43	23.75	24.68	24.48	25.43	26.32
	12H	8.88	9.77	9.63	10.52	11.44	23.83	24.72	24.57	25.47	26.38
4H	2H	14.72	15.77	15.43	16.50	17.37	20.95	22.01	21.67	22.73	23.61
	3H	16.32	17.20	17.05	17.96	18.86	23.03	23.92	23.76	24.68	25.57
	4H	16.43	17.23	17.17	18.00	18.92	23.82	24.62	24.56	25.39	26.31
	6H	16.46	17.16	17.22	17.95	18.88	24.38	25.08	25.14	25.87	26.79
	8H	16.45	17.10	17.22	17.89	18.83	24.55	25.21	25.32	25.99	26.93
	12H	16.42	17.02	17.21	17.82	18.77	24.66	25.25	25.45	26.06	27.01
8H	4H	17.90	18.56	18.67	19.35	20.29	23.91	24.56	24.68	25.35	26.29
	6H	18.16	18.71	18.96	19.54	20.48	24.55	25.10	25.35	25.93	26.87
	8H	18.19	18.67	19.00	19.50	20.46	24.78	25.27	25.59	26.09	27.05
	12H	18.17	18.60	18.99	19.42	20.43	24.94	25.37	25.76	26.19	27.20
12H	4H	18.07	18.66	18.86	19.47	20.41	23.88	24.47	24.67	25.28	26.23
	6H	18.43	18.92	19.24	19.74	20.70	24.54	25.03	25.35	25.86	26.81
	8H	18.52	18.95	19.33	19.76	20.78	24.79	25.22	25.60	26.04	27.05