

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: P936951

Luminaire Tested: SQ4-FB-050U-125D-930-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

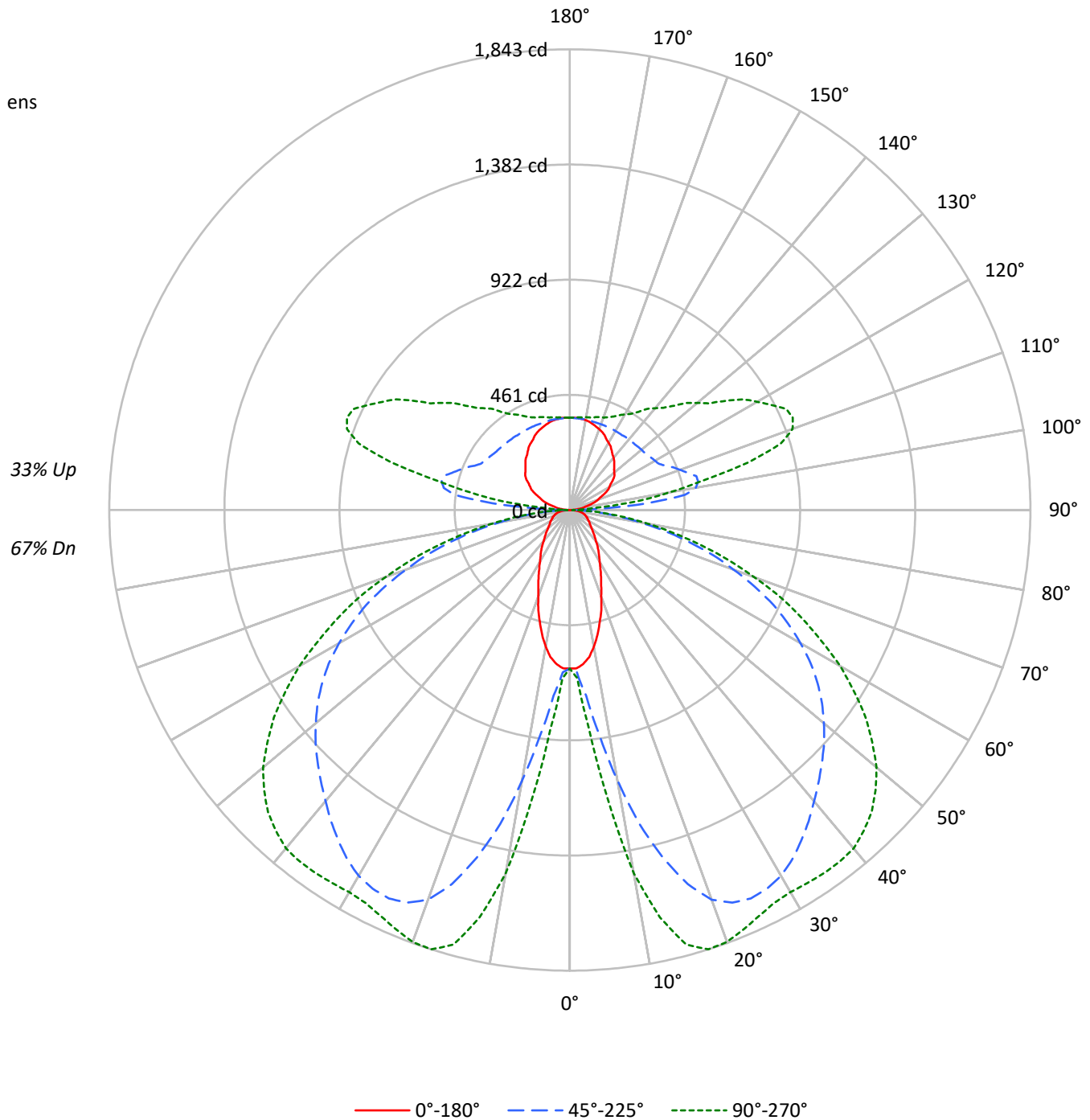
Test Method: LM-79-2019  
Report Number: P936951  
REPORT IS A COMBINATION OF REPORTS P933480 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-125D-930-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7303.4 lumens  
Efficiency: N/A  
Efficacy: 86.9 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 84  
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				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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67	67	67	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55	55	55	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45	45	45	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37	37	37	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31	31	31	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26	26	26	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23	23	23	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20	20	20	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17	17	17	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15	15	15	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14	14	14	14

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

	0°	45°	90°
0°	3921	3921	3921
5°	3830	4531	5271
10°	3472	6604	8739
15°	2950	8626	10552
20°	2401	9993	10754
25°	2002	10454	10535
30°	1687	10518	10516
35°	1491	10341	10787
40°	1299	10111	11068
45°	1175	9941	11112
50°	1077	9789	10928
55°	1030	9566	10444
60°	1053	9142	9679
65°	1095	8499	8628
70°	1164	7407	7289
75°	1285	6034	5688
80°	1393	4180	3833
85°	1216	2213	1962

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11112 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.0	1.1
10°-20°	363.4	5.0
20°-30°	635.7	8.7
30°-40°	818.3	11.2
40°-50°	914.0	12.5
50°-60°	875.4	12.0
60°-70°	693.8	9.5
70°-80°	408.0	5.6
80°-90°	114.8	1.6
90°-100°	180.3	2.5
100°-110°	474.0	6.5
110°-120°	491.5	6.7
120°-130°	394.3	5.4
130°-140°	309.4	4.2
140°-150°	237.4	3.3
150°-160°	171.0	2.3
160°-170°	104.6	1.4
170°-180°	35.3	0.5
0°-30°	1081.1	14.8
0°-40°	1899.4	26.0
0°-60°	3688.9	50.5
0°-90°	4905.4	67.2
90°-120°	1145.9	15.7
90°-150°	2087.0	28.6
90°-180°	2398.0	32.8
0°-180°	7303.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	634	634	634	634	634	
5°	618	662	746	844	874	57
15°	463	854	1439	1745	1800	129
25°	296	968	1714	1790	1792	136
35°	200	925	1614	1706	1773	125
45°	137	738	1427	1635	1708	106
55°	98	469	1211	1406	1445	89
65°	78	249	899	1011	1025	77
75°	57	153	493	542	544	60
85°	20	47	122	134	137	22
90°	2	7	19	9	9	3
95°	24	93	311	160	109	26
105°	85	129	524	796	742	91
115°	152	184	420	837	956	150
125°	211	237	382	645	761	187
135°	252	277	370	521	591	195
145°	292	310	365	444	479	183
155°	330	339	365	401	413	151
165°	356	360	365	380	384	100
175°	370	370	368	372	372	35
180°	370	370	370	370	370	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9
2.5°	633.9	633.9	638.0	640.0	644.1	646.2	650.2	654.3	666.5	668.6	672.7
5°	617.6	625.8	652.3	662.5	691.0	729.7	746.0	772.5	827.6	843.9	854.1
7.5°	593.2	611.5	676.7	693.0	764.4	866.3	909.1	966.2	1053.8	1096.6	1131.3
10°	554.4	593.2	709.3	748.1	864.3	1019.2	1098.7	1178.2	1310.7	1369.8	1392.2
12.5°	511.6	574.8	744.0	797.0	964.1	1190.4	1286.2	1373.8	1524.7	1604.2	1616.4
15°	462.7	548.3	776.6	854.1	1070.1	1333.1	1439.1	1547.1	1687.7	1744.8	1759.1
17.5°	419.9	527.9	807.2	888.7	1151.7	1461.5	1569.5	1659.2	1773.3	1812.0	1822.2
20°	366.9	495.3	827.6	933.6	1237.3	1555.3	1659.2	1728.5	1805.9	1830.4	1834.5
22.5°	328.2	460.7	839.8	949.9	1294.4	1612.3	1700.0	1755.0	1808.0	1816.1	1818.2
25°	295.6	421.9	837.8	968.2	1343.3	1647.0	1714.2	1755.0	1785.6	1789.6	1789.6
27.5°	265.0	379.1	829.6	972.3	1380.0	1655.1	1708.1	1736.6	1750.9	1759.1	1759.1
30°	238.5	338.4	809.2	964.1	1396.3	1647.0	1689.8	1704.0	1718.3	1730.5	1736.6
32.5°	218.1	299.6	778.6	947.8	1398.3	1626.6	1657.2	1665.3	1685.7	1714.2	1724.4
35°	199.8	260.9	744.0	925.4	1386.1	1594.0	1614.4	1622.5	1663.3	1706.1	1720.3
37.5°	181.4	232.4	699.2	886.7	1367.7	1555.3	1569.5	1583.8	1647.0	1697.9	1714.2
40°	163.1	207.9	646.2	843.9	1339.2	1508.4	1520.6	1543.0	1626.6	1685.7	1702.0
42.5°	148.8	187.5	589.1	799.0	1302.5	1455.4	1473.7	1506.3	1602.1	1665.3	1683.7
45°	136.6	167.1	527.9	737.9	1255.6	1400.3	1426.8	1471.7	1573.6	1634.7	1651.0
47.5°	124.3	152.9	464.7	674.7	1204.7	1345.3	1380.0	1430.9	1534.9	1594.0	1608.2
50°	114.1	138.6	401.6	607.4	1149.6	1286.2	1327.0	1380.0	1486.0	1541.0	1559.3
52.5°	106.0	126.4	342.4	540.2	1086.4	1225.0	1271.9	1327.0	1426.8	1479.8	1492.1
55°	97.8	116.2	291.5	468.8	1021.2	1159.8	1210.8	1263.8	1361.6	1406.5	1414.6
57.5°	93.8	108.0	248.7	401.6	951.9	1086.4	1143.5	1192.4	1284.2	1318.8	1327.0
60°	87.6	101.9	216.1	344.5	876.5	1017.1	1066.1	1115.0	1192.4	1221.0	1227.1
62.5°	81.5	97.8	191.6	289.4	799.0	935.6	984.5	1029.4	1094.6	1115.0	1123.1
65°	77.5	93.8	173.3	248.7	719.5	850.0	898.9	937.6	990.6	1011.0	1015.1
67.5°	73.4	89.7	159.0	214.0	640.0	764.4	801.1	837.8	878.5	898.9	901.0
70°	67.3	85.6	146.8	189.6	558.5	666.5	697.1	735.8	768.5	778.6	784.8
72.5°	63.2	79.5	138.6	171.2	474.9	572.8	601.3	623.7	652.3	662.5	662.5
75°	57.1	71.3	130.5	152.9	389.3	468.8	493.3	515.7	538.1	542.2	536.1
77.5°	51.0	63.2	112.1	128.4	303.7	371.0	391.4	403.6	421.9	426.0	428.1
80°	42.8	55.0	87.6	99.9	220.1	273.1	287.4	297.6	313.9	313.9	318.0
82.5°	32.6	42.8	63.2	71.3	148.8	187.5	199.8	205.9	216.1	216.1	216.1
85°	20.4	26.5	40.8	46.9	89.7	114.1	122.3	124.3	132.5	134.5	134.5
87.5°	10.2	14.3	26.5	28.5	46.9	59.1	59.1	63.2	63.2	61.2	59.1
90°	2.5	4.5	6.5	7.0	10.9	16.2	18.9	16.8	12.5	9.4	9.4
92.5°	10.0	26.8	43.7	47.9	67.4	93.3	106.2	93.1	66.8	47.1	45.3
95°	23.8	54.7	85.6	93.3	165.7	262.3	310.6	277.2	210.3	160.1	154.4
97.5°	41.2	68.5	95.7	102.5	223.3	384.3	464.8	443.7	401.3	369.6	358.8
100°	54.6	79.3	104.1	110.3	244.2	422.9	512.2	513.7	516.8	519.1	506.3
102.5°	66.0	89.1	112.2	118.0	253.8	435.0	525.6	552.5	606.3	646.7	635.7
105°	85.4	105.0	124.5	129.4	260.9	436.4	524.0	584.4	705.1	795.7	789.8
107.5°	105.3	123.5	141.6	146.2	262.3	416.9	494.2	578.4	746.8	873.1	874.5
110°	118.7	135.1	151.5	155.6	260.3	399.7	469.4	563.5	751.8	893.0	899.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	131.9	147.5	163.2	167.1	260.3	384.7	446.9	543.2	735.9	880.3	889.8
115°	151.7	166.1	180.6	184.2	262.7	367.5	419.8	512.6	698.2	837.4	850.5
117.5°	171.3	184.4	197.5	200.8	267.6	356.7	401.2	484.9	652.4	778.0	792.6
120°	182.7	195.0	207.4	210.5	271.6	353.0	393.7	470.2	623.3	738.0	752.3
122.5°	193.9	206.4	218.8	221.9	277.3	351.1	388.0	456.9	594.8	698.1	712.1
125°	211.0	222.4	233.8	236.6	285.0	349.5	381.8	440.4	557.4	645.2	658.1
127.5°	224.9	236.4	247.9	250.8	292.7	348.7	376.6	426.9	527.3	602.7	613.6
130°	232.4	244.8	257.1	260.2	298.3	349.1	374.6	419.3	508.9	576.0	586.0
132.5°	240.1	252.5	264.8	267.9	302.9	349.5	372.9	413.0	493.0	553.1	562.1
135°	251.5	262.7	274.0	276.8	307.9	349.2	369.9	403.5	470.6	520.8	528.6
137.5°	263.1	274.3	285.4	288.2	315.3	351.3	369.4	397.7	454.4	497.0	503.3
140°	272.9	283.1	293.3	295.9	319.8	351.7	367.7	392.2	441.2	477.9	483.8
142.5°	280.2	289.7	299.2	301.6	323.6	353.0	367.7	389.2	432.2	464.5	469.6
145°	291.7	300.0	308.3	310.4	328.7	353.0	365.2	382.8	418.0	444.4	448.2
147.5°	303.1	311.2	319.3	321.3	335.9	355.4	365.2	379.0	406.7	427.5	430.7
150°	310.6	317.9	325.1	327.0	339.7	356.7	365.2	376.9	400.3	417.8	420.4
152.5°	318.2	323.8	329.3	330.7	342.2	357.5	365.2	375.2	395.2	410.1	412.0
155°	329.7	333.8	337.8	338.9	347.6	359.3	365.2	373.2	389.1	400.9	402.2
157.5°	338.1	342.1	346.1	347.1	353.1	361.2	365.2	371.4	383.8	393.0	393.9
160°	343.8	346.9	349.9	350.8	355.6	362.0	365.2	370.5	381.1	389.1	389.5
162.5°	349.5	351.9	354.2	354.8	358.2	362.9	365.2	369.7	378.6	385.3	385.8
165°	355.7	357.8	359.9	360.5	362.1	364.2	365.2	368.4	374.8	379.6	380.1
167.5°	361.4	362.4	363.4	363.7	365.0	366.8	367.7	369.8	374.0	377.1	377.3
170°	365.2	366.2	367.2	367.5	367.5	367.6	367.7	369.8	374.0	377.1	377.1
172.5°	367.2	367.5	367.6	367.7	367.7	367.7	367.7	369.3	372.6	375.1	374.9
175°	369.9	369.9	369.9	369.9	369.2	368.2	367.7	368.7	370.8	372.4	372.4
177.5°	369.9	369.9	369.9	369.9	369.4	368.6	368.2	369.0	370.7	371.9	371.6
180°	369.9	369.9	369.9	369.9	369.9	369.9	369.9	369.9	369.9	369.9	369.9



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	633.9	633.9
2.5°	676.7	672.7
5°	870.4	874.5
7.5°	1172.1	1170.0
10°	1457.4	1475.8
12.5°	1665.3	1669.4
15°	1791.7	1799.8
17.5°	1840.6	1842.6
20°	1842.6	1838.5
22.5°	1820.2	1816.1
25°	1793.7	1791.7
27.5°	1769.2	1771.3
30°	1759.1	1765.2
32.5°	1759.1	1769.2
35°	1763.1	1773.3
37.5°	1761.1	1773.3
40°	1752.9	1767.2
42.5°	1730.5	1740.7
45°	1695.9	1708.1
47.5°	1651.0	1659.2
50°	1594.0	1602.1
52.5°	1522.6	1524.7
55°	1437.0	1445.2
57.5°	1345.3	1347.3
60°	1243.4	1249.5
62.5°	1135.4	1135.4
65°	1021.2	1025.3
67.5°	903.0	913.2
70°	782.7	784.8
72.5°	664.5	664.5
75°	542.2	544.2
77.5°	426.0	426.0
80°	315.9	318.0
82.5°	218.1	222.2
85°	136.6	136.6
87.5°	63.2	57.1
90°	9.4	9.4
92.5°	37.7	30.3
95°	131.7	109.0
97.5°	315.6	272.4
100°	454.7	403.2
102.5°	591.6	547.4
105°	766.1	742.3
107.5°	880.2	886.0
110°	923.9	948.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	927.8	965.7
115°	903.1	955.8
117.5°	851.0	909.4
120°	808.9	865.7
122.5°	768.1	824.0
125°	709.6	761.2
127.5°	657.1	700.6
130°	626.2	666.3
132.5°	598.1	634.0
135°	559.6	590.6
137.5°	528.8	554.2
140°	507.5	531.3
142.5°	490.0	510.4
145°	463.7	479.2
147.5°	443.5	456.3
150°	430.8	441.2
152.5°	419.9	427.8
155°	407.4	412.6
157.5°	397.6	401.2
160°	391.6	393.7
162.5°	387.8	389.8
165°	382.2	384.3
167.5°	378.2	379.1
170°	377.1	377.1
172.5°	374.1	373.4
175°	372.4	372.4
177.5°	370.8	369.9
180°	369.9	369.9



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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	7.18	8.27	7.96	9.09	10.09	20.34	21.44	21.13	22.25	23.25
	3H	7.90	8.89	8.70	9.71	10.74	22.19	23.18	22.99	24.00	25.03
	4H	8.21	9.14	9.02	9.98	11.01	22.84	23.78	23.66	24.61	25.65
	6H	8.47	9.34	9.30	10.18	11.23	23.28	24.15	24.11	24.99	26.04
	8H	8.55	9.37	9.38	10.23	11.28	23.41	24.23	24.25	25.09	26.15
	12H	8.57	9.36	9.42	10.21	11.29	23.48	24.27	24.33	25.12	26.20
4H	2H	14.41	15.35	15.23	16.18	17.22	20.64	21.58	21.46	22.41	23.45
	3H	16.00	16.78	16.83	17.65	18.71	22.71	23.49	23.54	24.36	25.41
	4H	16.10	16.82	16.95	17.68	18.77	23.48	24.19	24.32	25.06	26.14
	6H	16.13	16.75	16.99	17.64	18.72	24.03	24.65	24.89	25.54	26.62
	8H	16.11	16.69	16.98	17.58	18.68	24.19	24.78	25.06	25.66	26.76
	12H	16.08	16.61	16.97	17.51	18.61	24.30	24.82	25.18	25.72	26.83
8H	4H	17.57	18.15	18.43	19.03	20.13	23.56	24.14	24.43	25.02	26.12
	6H	17.82	18.30	18.71	19.23	20.33	24.20	24.68	25.09	25.60	26.70
	8H	17.84	18.27	18.75	19.19	20.30	24.42	24.85	25.32	25.76	26.88
	12H	17.82	18.20	18.73	19.11	20.28	24.57	24.95	25.48	25.86	27.03
12H	4H	17.72	18.25	18.61	19.15	20.25	23.52	24.05	24.41	24.95	26.06
	6H	18.08	18.51	18.98	19.43	20.54	24.18	24.61	25.09	25.53	26.65
	8H	18.16	18.54	19.07	19.45	20.62	24.42	24.80	25.33	25.71	26.88