

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: P937242

Luminaire Tested: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-6-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937242
REPORT IS A COMBINATION OF REPORTS P933511 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-6-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

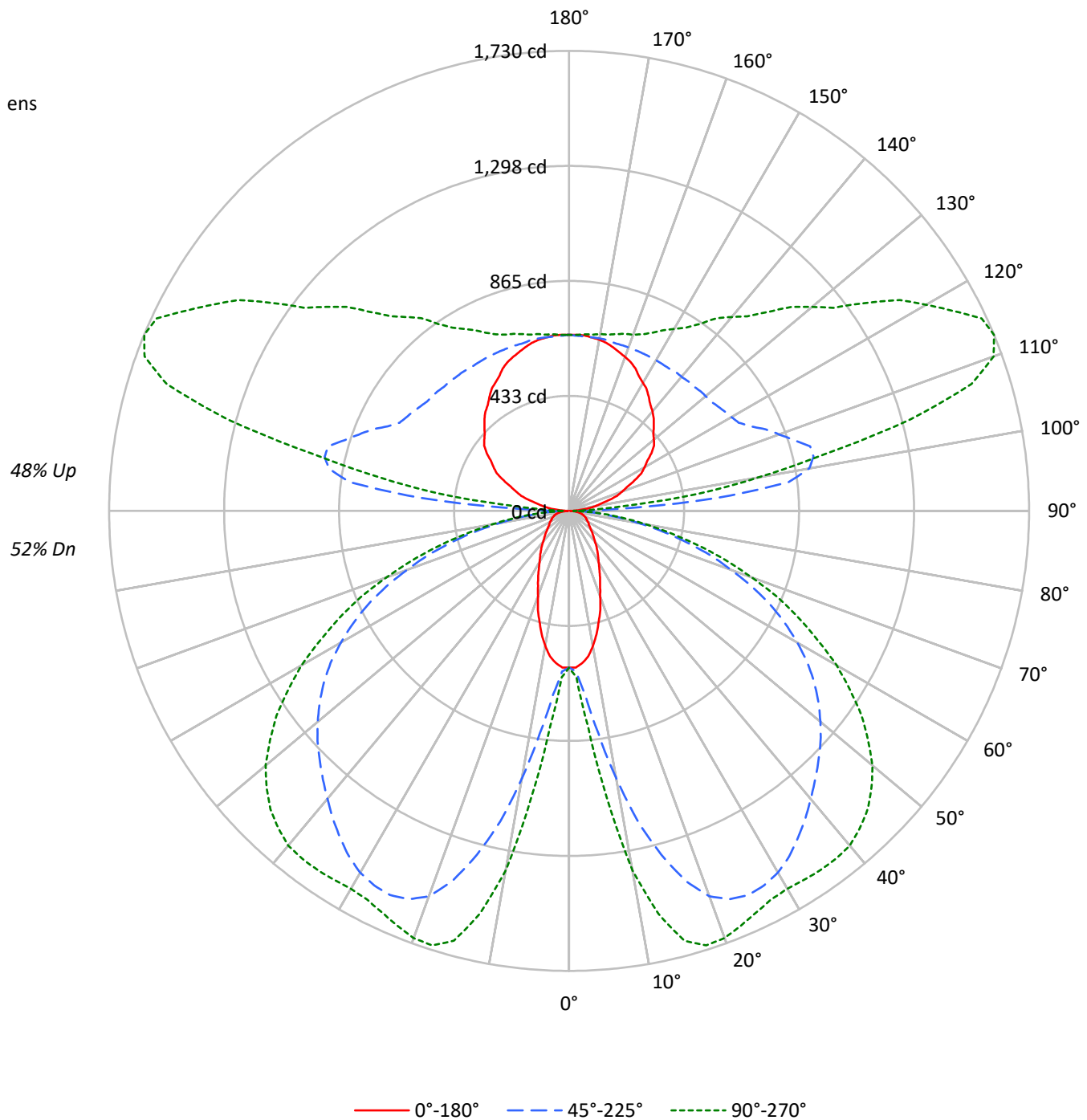
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8856.3 lumens
Efficiency: N/A
Efficacy: 115.3 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: General Diffuse

Input Watts (W): 76.8
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-075U-100D-92765-1D-UNV-STD-W-6-6500K

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	0
RCR																		
0	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3646	3646	3646
5°	3560	4212	4901
10°	3228	6139	8124
15°	2743	8019	9809
20°	2232	9290	9998
25°	1861	9720	9795
30°	1569	9778	9776
35°	1386	9613	10029
40°	1207	9399	10290
45°	1093	9242	10330
50°	1001	9101	10160
55°	958	8893	9709
60°	980	8499	8998
65°	1018	7901	8020
70°	1081	6886	6776
75°	1195	5610	5287
80°	1295	3886	3564
85°	1127	2058	1824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10330 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.2	0.9
10°-20°	337.9	3.8
20°-30°	591.0	6.7
30°-40°	760.8	8.6
40°-50°	849.8	9.6
50°-60°	813.9	9.2
60°-70°	645.0	7.3
70°-80°	379.3	4.3
80°-90°	107.9	1.2
90°-100°	322.9	3.6
100°-110°	849.0	9.6
110°-120°	880.3	9.9
120°-130°	706.1	8.0
130°-140°	554.0	6.3
140°-150°	425.3	4.8
150°-160°	306.3	3.5
160°-170°	187.4	2.1
170°-180°	63.3	0.7
0°-30°	1005.1	11.3
0°-40°	1765.9	19.9
0°-60°	3429.5	38.7
0°-90°	4561.7	51.5
90°-120°	2052.2	23.2
90°-150°	3737.6	42.2
90°-180°	4295.0	48.5
0°-180°	8856.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	574	616	694	785	813	53
15°	430	794	1338	1622	1673	120
25°	275	900	1594	1664	1666	127
35°	186	860	1501	1586	1649	116
45°	127	686	1326	1520	1588	98
55°	91	436	1126	1308	1344	83
65°	72	231	836	940	953	71
75°	53	142	459	504	506	56
85°	19	44	114	125	127	20
90°	4	12	34	17	17	5
95°	43	167	556	287	195	47
105°	153	232	939	1425	1329	162
115°	272	330	752	1500	1712	268
125°	378	424	684	1156	1363	336
135°	450	496	662	933	1058	348
145°	522	556	654	796	858	327
155°	590	607	654	718	739	271
165°	637	646	654	680	688	180
175°	662	662	658	667	667	63
180°	662	662	662	662	662	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3
2.5°	589.3	589.3	593.1	595.0	598.8	600.7	604.5	608.3	619.6	621.5	625.4
5°	574.2	581.7	606.4	615.9	642.4	678.4	693.5	718.2	769.4	784.6	794.0
7.5°	551.4	568.5	629.2	644.3	710.6	805.4	845.2	898.2	979.7	1019.5	1051.7
10°	515.4	551.4	659.5	695.4	803.5	947.5	1021.4	1095.3	1218.5	1273.5	1294.3
12.5°	475.6	534.4	691.7	741.0	896.3	1106.7	1195.7	1277.2	1417.5	1491.4	1502.8
15°	430.2	509.7	722.0	794.0	994.8	1239.3	1337.9	1438.3	1569.0	1622.1	1635.4
17.5°	390.4	490.8	750.4	826.2	1070.6	1358.8	1459.2	1542.5	1648.7	1684.6	1694.1
20°	341.1	460.5	769.4	867.9	1150.3	1445.9	1542.5	1607.0	1679.0	1701.7	1705.5
22.5°	305.1	428.3	780.7	883.0	1203.3	1498.9	1580.4	1631.6	1680.9	1688.4	1690.4
25°	274.8	392.2	778.8	900.2	1248.8	1531.2	1593.7	1631.6	1660.0	1663.8	1663.8
27.5°	246.3	352.5	771.3	903.9	1282.9	1538.7	1587.9	1614.5	1627.8	1635.4	1635.4
30°	221.7	314.6	752.3	896.3	1298.0	1531.2	1570.9	1584.2	1597.5	1608.8	1614.5
32.5°	202.8	278.5	723.8	881.1	1299.9	1512.2	1540.6	1548.2	1567.1	1593.7	1603.2
35°	185.7	242.6	691.7	860.3	1288.6	1481.9	1500.8	1508.4	1546.3	1586.1	1599.3
37.5°	168.7	216.0	650.0	824.3	1271.5	1445.9	1459.2	1472.4	1531.2	1578.5	1593.7
40°	151.6	193.2	600.7	784.6	1245.0	1402.3	1413.6	1434.5	1512.2	1567.1	1582.3
42.5°	138.4	174.3	547.6	742.9	1210.9	1353.0	1370.0	1400.3	1489.5	1548.2	1565.3
45°	127.0	155.4	490.8	686.0	1167.3	1301.9	1326.5	1368.2	1462.9	1519.8	1535.0
47.5°	115.6	142.1	432.1	627.3	1119.9	1250.7	1282.9	1330.3	1426.9	1481.9	1495.1
50°	106.1	128.9	373.3	564.7	1068.7	1195.7	1233.7	1282.9	1381.4	1432.6	1449.7
52.5°	98.6	117.5	318.3	502.2	1010.0	1138.9	1182.4	1233.7	1326.5	1375.8	1387.1
55°	90.9	108.0	271.0	435.8	949.4	1078.2	1125.6	1174.9	1265.8	1307.5	1315.1
57.5°	87.2	100.4	231.2	373.3	885.0	1010.0	1063.1	1108.6	1193.8	1226.0	1233.7
60°	81.5	94.8	200.9	320.2	814.9	945.6	991.1	1036.5	1108.6	1135.1	1140.7
62.5°	75.8	90.9	178.1	269.1	742.9	869.8	915.3	957.0	1017.6	1036.5	1044.2
65°	72.0	87.2	161.1	231.2	669.0	790.2	835.7	871.7	921.0	939.9	943.7
67.5°	68.2	83.4	147.8	199.0	595.0	710.6	744.7	778.8	816.8	835.7	837.6
70°	62.5	79.6	136.4	176.2	519.2	619.6	648.1	684.1	714.4	723.8	729.6
72.5°	58.7	73.9	128.9	159.2	441.6	532.5	559.0	579.8	606.4	615.9	615.9
75°	53.1	66.4	121.2	142.1	361.9	435.8	458.6	479.4	500.3	504.1	498.4
77.5°	47.3	58.7	104.2	119.4	282.4	344.9	363.8	375.2	392.2	396.1	398.0
80°	39.8	51.2	81.5	92.8	204.6	254.0	267.2	276.6	291.8	291.8	295.7
82.5°	30.3	39.8	58.7	66.4	138.4	174.3	185.7	191.4	200.9	200.9	200.9
85°	18.9	24.7	37.9	43.6	83.4	106.1	113.7	115.6	123.2	125.1	125.1
87.5°	9.5	13.3	24.7	26.5	43.6	55.0	55.0	58.7	58.7	56.9	55.0
90°	4.4	7.9	11.6	12.4	19.5	29.0	33.8	30.0	22.6	16.9	16.9
92.5°	17.8	48.0	78.2	85.8	120.6	167.0	190.3	166.8	119.7	84.4	81.1
95°	42.6	98.0	153.3	167.1	296.8	469.8	556.2	496.4	376.5	286.8	276.6
97.5°	73.8	122.6	171.3	183.6	399.9	688.2	832.4	794.5	718.9	662.1	642.7
100°	97.8	142.1	186.4	197.5	437.4	757.3	917.3	920.0	925.6	929.7	906.7
102.5°	118.3	159.6	200.9	211.2	454.6	779.0	941.3	989.5	1085.9	1158.2	1138.4
105°	153.0	188.0	223.0	231.7	467.3	781.5	938.6	1046.6	1262.8	1425.0	1414.4
107.5°	188.6	221.2	253.8	261.9	469.7	746.7	885.2	1036.0	1337.6	1563.8	1566.3
110°	212.6	242.0	271.4	278.7	466.0	715.9	840.8	1009.4	1346.5	1599.3	1610.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	236.1	264.1	292.2	299.2	466.2	688.9	800.3	972.8	1317.8	1576.6	1593.6
115°	271.7	297.6	323.4	329.9	470.5	658.1	751.9	918.0	1250.4	1499.7	1523.2
117.5°	306.7	330.3	353.8	359.7	479.3	638.7	718.5	868.5	1168.5	1393.5	1419.6
120°	327.2	349.4	371.5	377.0	486.4	632.2	705.2	842.2	1116.3	1321.8	1347.3
122.5°	347.3	369.6	391.9	397.5	496.6	628.9	695.0	818.3	1065.1	1250.2	1275.3
125°	377.9	398.3	418.6	423.7	510.4	626.0	683.9	788.7	998.4	1155.6	1178.6
127.5°	402.8	423.4	443.9	449.0	524.2	624.4	674.5	764.5	944.5	1079.5	1099.0
130°	416.1	438.3	460.4	466.0	534.3	625.4	671.0	751.1	911.3	1031.5	1049.5
132.5°	429.9	452.1	474.2	479.7	542.4	626.0	667.8	739.5	883.0	990.6	1006.7
135°	450.4	470.5	490.7	495.8	551.3	625.4	662.5	722.5	842.7	932.8	946.6
137.5°	471.3	491.2	511.2	516.2	564.6	629.3	661.6	712.4	813.9	890.1	901.5
140°	488.6	507.0	525.4	530.0	572.9	629.9	658.4	702.3	790.1	855.9	866.5
142.5°	502.0	519.0	536.0	540.2	579.6	632.1	658.4	697.0	774.0	831.9	841.1
145°	522.5	537.3	552.0	555.7	588.5	632.2	654.0	685.6	748.6	795.8	802.7
147.5°	542.8	557.3	571.7	575.3	601.5	636.5	654.0	678.8	728.4	765.6	771.4
150°	556.2	569.2	582.3	585.6	608.4	638.8	654.0	675.0	716.9	748.3	753.0
152.5°	570.0	579.9	589.8	592.3	612.8	640.3	654.0	671.9	707.7	734.5	738.1
155°	590.4	597.7	605.1	606.9	622.6	643.5	654.0	668.3	696.8	718.1	720.4
157.5°	605.6	612.7	619.8	621.6	632.4	646.9	654.0	665.1	687.2	703.9	705.5
160°	615.8	621.3	626.9	628.2	636.8	648.3	654.0	663.5	682.4	696.7	697.6
162.5°	626.0	630.2	634.3	635.4	641.6	649.9	654.0	662.1	678.0	690.1	690.9
165°	637.1	640.9	644.7	645.6	648.4	652.1	654.0	659.8	671.2	679.9	680.8
167.5°	647.3	649.2	650.9	651.4	653.7	656.9	658.4	662.2	669.7	675.4	675.7
170°	654.0	655.9	657.6	658.1	658.1	658.3	658.4	662.2	669.7	675.4	675.4
172.5°	657.6	658.0	658.3	658.4	658.4	658.4	658.4	661.4	667.3	671.8	671.4
175°	662.5	662.5	662.5	662.5	661.1	659.3	658.4	660.3	664.1	666.9	666.9
177.5°	662.5	662.5	662.5	662.5	661.4	660.1	659.4	660.9	663.9	666.1	665.7
180°	662.5	662.5	662.5	662.5	662.5	662.5	662.5	662.5	662.5	662.5	662.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	589.3	589.3
2.5°	629.2	625.4
5°	809.1	813.0
7.5°	1089.6	1087.8
10°	1354.9	1371.9
12.5°	1548.2	1552.0
15°	1665.7	1673.2
17.5°	1711.2	1713.0
20°	1713.0	1709.3
22.5°	1692.2	1688.4
25°	1667.6	1665.7
27.5°	1644.8	1646.8
30°	1635.4	1641.0
32.5°	1635.4	1644.8
35°	1639.2	1648.7
37.5°	1637.3	1648.7
40°	1629.6	1642.9
42.5°	1608.8	1618.4
45°	1576.7	1587.9
47.5°	1535.0	1542.5
50°	1481.9	1489.5
52.5°	1415.5	1417.5
55°	1336.0	1343.5
57.5°	1250.7	1252.6
60°	1155.9	1161.6
62.5°	1055.5	1055.5
65°	949.4	953.1
67.5°	839.4	848.9
70°	727.7	729.6
72.5°	617.8	617.8
75°	504.1	505.9
77.5°	396.1	396.1
80°	293.7	295.7
82.5°	202.8	206.5
85°	127.0	127.0
87.5°	58.7	53.1
90°	16.9	16.9
92.5°	67.6	54.2
95°	235.9	195.2
97.5°	565.2	487.8
100°	814.3	722.0
102.5°	1059.5	980.4
105°	1371.9	1329.4
107.5°	1576.6	1586.8
110°	1654.6	1698.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1661.6	1729.6
115°	1617.5	1711.8
117.5°	1524.1	1628.6
120°	1448.8	1550.4
122.5°	1375.5	1475.7
125°	1271.0	1363.2
127.5°	1176.9	1254.7
130°	1121.4	1193.3
132.5°	1071.1	1135.6
135°	1002.2	1057.7
137.5°	946.9	992.4
140°	909.1	951.5
142.5°	877.6	914.1
145°	830.5	858.1
147.5°	794.2	817.2
150°	771.6	790.1
152.5°	752.0	766.1
155°	729.7	738.9
157.5°	712.0	718.5
160°	701.4	705.2
162.5°	694.5	698.0
165°	684.5	688.3
167.5°	677.4	678.9
170°	675.4	675.4
172.5°	670.1	668.7
175°	666.9	666.9
177.5°	664.1	662.5
180°	662.5	662.5



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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	5.63	6.55	6.57	7.51	8.75	18.80	19.71	19.73	20.67	21.92
	3H	6.34	7.16	7.29	8.13	9.40	20.64	21.46	21.58	22.43	23.69
	4H	6.64	7.42	7.60	8.40	9.67	21.28	22.06	22.24	23.03	24.31
	6H	6.90	7.62	7.87	8.59	9.88	21.71	22.43	22.68	23.41	24.70
	8H	6.97	7.65	7.95	8.65	9.93	21.83	22.51	22.81	23.51	24.80
	12H	6.99	7.64	7.97	8.63	9.94	21.90	22.55	22.88	23.54	24.85
4H	2H	12.85	13.63	13.81	14.60	15.87	19.08	19.86	20.05	20.83	22.11
	3H	14.42	15.07	15.40	16.07	17.37	21.12	21.78	22.10	22.78	24.07
	4H	14.52	15.11	15.50	16.11	17.42	21.89	22.49	22.88	23.48	24.80
	6H	14.53	15.05	15.53	16.07	17.38	22.43	22.94	23.43	23.96	25.28
	8H	14.51	14.99	15.51	16.00	17.33	22.59	23.07	23.59	24.08	25.41
	12H	14.47	14.90	15.49	15.93	17.27	22.68	23.12	23.70	24.15	25.48
8H	4H	15.96	16.44	16.96	17.46	18.79	21.96	22.44	22.96	23.45	24.78
	6H	16.21	16.61	17.23	17.66	18.99	22.58	22.98	23.61	24.04	25.36
	8H	16.23	16.58	17.26	17.62	18.96	22.80	23.15	23.83	24.19	25.54
	12H	16.20	16.51	17.24	17.54	18.93	22.95	23.26	23.98	24.29	25.68
12H	4H	16.11	16.54	17.13	17.57	18.91	21.91	22.35	22.93	23.37	24.71
	6H	16.47	16.82	17.50	17.86	19.20	22.57	22.92	23.60	23.96	25.30
	8H	16.54	16.85	17.58	17.88	19.27	22.80	23.11	23.84	24.14	25.53