

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: P936440

Luminaire Tested: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

**Test Information**

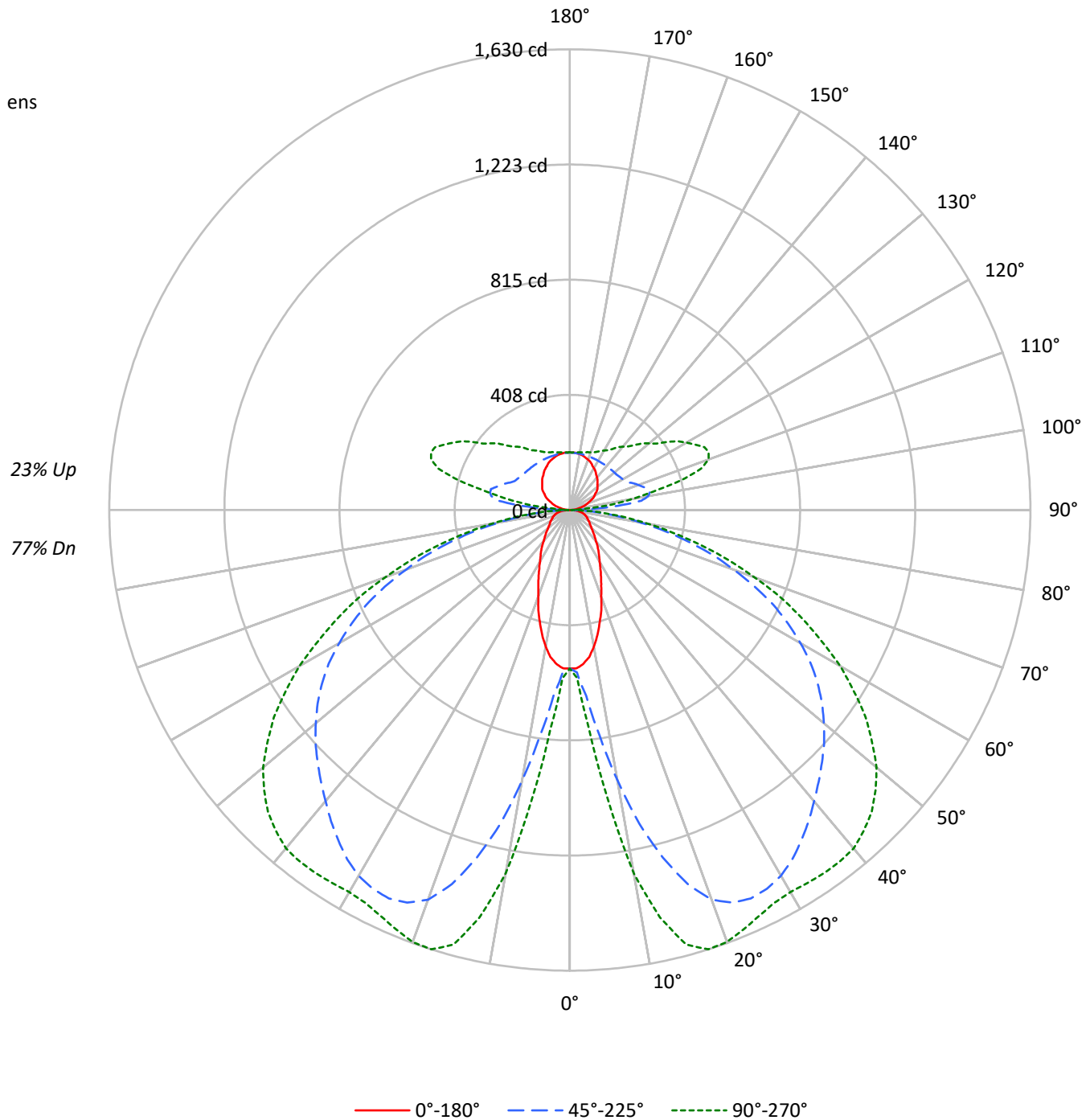
Test Method: LM-79-2019  
Report Number: P936440  
REPORT IS A COMBINATION OF REPORTS P933447 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-6-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5657.9 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: 6' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 58.2  
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

TEST NUMBER: P936440  
CATALOG NUMBER: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-6-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P936440

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

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

	0°	45°	90°
0°	3468	3468	3468
5°	3387	4008	4662
10°	3071	5841	7728
15°	2609	7629	9332
20°	2123	8838	9511
25°	1770	9246	9318
30°	1492	9302	9300
35°	1319	9146	9541
40°	1148	8942	9789
45°	1039	8792	9827
50°	953	8657	9665
55°	911	8460	9236
60°	932	8085	8559
65°	968	7517	7630
70°	1029	6551	6447
75°	1136	5337	5030
80°	1230	3697	3391
85°	1073	1958	1735

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9827 cd/sqm



TEST NUMBER: P936440

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.5	1.3
10°-20°	321.4	5.7
20°-30°	562.2	9.9
30°-40°	723.7	12.8
40°-50°	808.4	14.3
50°-60°	774.2	13.7
60°-70°	613.6	10.8
70°-80°	360.8	6.4
80°-90°	101.0	1.8
90°-100°	99.2	1.8
100°-110°	260.9	4.6
110°-120°	270.6	4.8
120°-130°	217.0	3.8
130°-140°	170.3	3.0
140°-150°	130.7	2.3
150°-160°	94.1	1.7
160°-170°	57.6	1.0
170°-180°	19.5	0.3
0°-30°	956.2	16.9
0°-40°	1679.9	29.7
0°-60°	3262.5	57.7
0°-90°	4337.9	76.7
90°-120°	630.8	11.1
90°-150°	1148.8	20.3
90°-180°	1320.0	23.3
0°-180°	5657.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	561	561	561	561	561	
5°	546	586	660	746	773	50
15°	409	755	1273	1543	1592	114
25°	261	856	1516	1583	1585	120
35°	177	818	1428	1509	1568	110
45°	121	653	1262	1446	1511	93
55°	86	415	1071	1244	1278	79
65°	68	220	795	894	907	68
75°	50	135	436	480	481	53
85°	18	42	108	119	121	19
90°	1	4	10	5	5	2
95°	13	51	171	88	60	15
105°	47	71	288	438	409	50
115°	84	101	231	461	526	82
125°	116	130	210	355	419	103
135°	138	152	204	287	325	107
145°	161	171	201	245	264	101
155°	182	187	201	221	227	83
165°	196	198	201	209	212	55
175°	204	204	202	205	205	19
180°	204	204	204	204	204	



TEST NUMBER: P936440

CATALOG NUMBER: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-6-400K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	560.6	560.6	560.6	560.6	560.6	560.6	560.6	560.6	560.6	560.6	560.6
2.5°	560.6	560.6	564.2	566.1	569.6	571.4	575.1	578.7	589.4	591.3	594.9
5°	546.2	553.4	576.9	585.9	611.1	645.4	659.8	683.2	731.9	746.4	755.4
7.5°	524.6	540.8	598.5	612.9	676.0	766.2	804.0	854.5	932.0	969.9	1000.5
10°	490.3	524.6	627.4	661.6	764.4	901.4	971.7	1042.0	1159.2	1211.5	1231.3
12.5°	452.5	508.4	658.0	704.9	852.7	1052.8	1137.5	1215.0	1348.4	1418.8	1429.6
15°	409.2	484.9	686.9	755.4	946.4	1179.0	1272.8	1368.3	1492.6	1543.1	1555.8
17.5°	371.4	466.9	713.9	786.0	1018.5	1292.6	1388.1	1467.4	1568.4	1602.6	1611.6
20°	324.5	438.1	731.9	825.7	1094.3	1375.5	1467.4	1528.7	1597.2	1618.9	1622.4
22.5°	290.3	407.4	742.7	840.0	1144.7	1425.9	1503.4	1552.1	1599.1	1606.2	1608.1
25°	261.4	373.1	740.9	856.3	1188.0	1456.6	1516.1	1552.1	1579.2	1582.8	1582.8
27.5°	234.3	335.3	733.7	859.9	1220.5	1463.8	1510.6	1535.9	1548.6	1555.8	1555.8
30°	210.9	299.3	715.7	852.7	1234.8	1456.6	1494.4	1507.1	1519.7	1530.5	1535.9
32.5°	192.9	265.0	688.6	838.2	1236.7	1438.6	1465.6	1472.8	1490.8	1516.1	1525.1
35°	176.7	230.8	658.0	818.4	1225.8	1409.8	1427.8	1435.0	1471.0	1508.9	1521.5
37.5°	160.5	205.5	618.4	784.2	1209.6	1375.5	1388.1	1400.8	1456.6	1501.6	1516.1
40°	144.2	183.8	571.4	746.4	1184.3	1334.0	1344.8	1364.6	1438.6	1490.8	1505.3
42.5°	131.6	165.8	520.9	706.7	1152.0	1287.1	1303.3	1332.2	1416.9	1472.8	1489.1
45°	120.8	147.8	466.9	652.6	1110.5	1238.5	1261.9	1301.6	1391.7	1445.8	1460.2
47.5°	110.0	135.2	411.1	596.7	1065.4	1189.8	1220.5	1265.5	1357.5	1409.8	1422.3
50°	101.0	122.6	355.1	537.2	1016.7	1137.5	1173.6	1220.5	1314.2	1362.8	1379.1
52.5°	93.8	111.8	302.8	477.7	960.8	1083.5	1124.9	1173.6	1261.9	1308.8	1319.6
55°	86.5	102.8	257.8	414.6	903.2	1025.7	1070.8	1117.7	1204.2	1243.8	1251.1
57.5°	83.0	95.5	220.0	355.1	841.9	960.8	1011.3	1054.6	1135.7	1166.3	1173.6
60°	77.5	90.1	191.1	304.6	775.2	899.5	942.8	986.0	1054.6	1079.8	1085.2
62.5°	72.1	86.5	169.5	256.0	706.7	827.4	870.7	910.4	968.0	986.0	993.3
65°	68.5	83.0	153.3	220.0	636.4	751.7	795.0	829.2	876.2	894.2	897.7
67.5°	64.9	79.3	140.6	189.3	566.1	676.0	708.4	740.9	777.0	795.0	796.8
70°	59.5	75.7	129.8	167.6	493.9	589.4	616.6	650.8	679.6	688.6	694.1
72.5°	55.9	70.3	122.6	151.5	420.1	506.6	531.8	551.6	576.9	585.9	585.9
75°	50.5	63.1	115.3	135.2	344.3	414.6	436.3	456.1	475.9	479.6	474.1
77.5°	45.0	55.9	99.2	113.6	268.6	328.1	346.1	356.9	373.1	376.8	378.6
80°	37.8	48.7	77.5	88.3	194.7	241.6	254.2	263.2	277.6	277.6	281.3
82.5°	28.8	37.8	55.9	63.1	131.6	165.8	176.7	182.1	191.1	191.1	191.1
85°	18.0	23.5	36.0	41.5	79.3	101.0	108.2	110.0	117.2	119.0	119.0
87.5°	9.0	12.6	23.5	25.2	41.5	52.3	52.3	55.9	55.9	54.1	52.3
90°	1.4	2.5	3.5	3.8	6.0	8.9	10.4	9.2	6.9	5.2	5.2
92.5°	5.5	14.7	24.0	26.4	37.1	51.4	58.5	51.2	36.7	25.9	24.9
95°	13.1	30.1	47.1	51.4	91.2	144.4	170.9	152.5	115.7	88.1	85.1
97.5°	22.6	37.7	52.7	56.4	122.9	211.5	255.8	244.1	221.0	203.5	197.6
100°	30.1	43.7	57.3	60.7	134.4	232.8	281.9	282.7	284.4	285.7	278.6
102.5°	36.4	49.1	61.8	64.9	139.7	239.4	289.3	304.1	333.7	356.0	349.9
105°	47.0	57.8	68.5	71.2	143.6	240.1	288.4	321.6	388.1	438.0	434.7
107.5°	57.9	67.9	78.0	80.5	144.4	229.5	272.1	318.5	411.2	480.7	481.5
110°	65.3	74.4	83.4	85.7	143.3	220.0	258.4	310.3	413.9	491.6	494.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	72.6	81.2	89.8	92.0	143.3	211.8	246.0	299.0	405.1	484.6	489.7
115°	83.5	91.5	99.4	101.4	144.6	202.2	231.0	282.2	384.3	460.9	468.2
117.5°	94.3	101.5	108.7	110.5	147.3	196.3	220.9	267.0	359.1	428.3	436.3
120°	100.6	107.4	114.2	115.9	149.5	194.4	216.8	258.9	343.1	406.3	414.2
122.5°	106.7	113.6	120.4	122.2	152.6	193.3	213.6	251.5	327.4	384.3	392.1
125°	116.2	122.4	128.7	130.3	156.9	192.5	210.2	242.4	306.9	355.2	362.3
127.5°	123.8	130.1	136.4	138.0	161.1	191.9	207.3	235.0	290.4	331.8	337.8
130°	127.9	134.7	141.4	143.2	164.2	192.2	206.2	230.9	280.1	317.0	322.6
132.5°	132.2	139.0	145.7	147.5	166.7	192.5	205.3	227.3	271.4	304.5	309.4
135°	138.4	144.6	150.8	152.4	169.5	192.3	203.7	222.1	259.1	286.7	291.0
137.5°	144.9	151.0	157.1	158.6	173.6	193.5	203.4	219.0	250.2	273.6	277.1
140°	150.2	155.8	161.5	162.9	176.1	193.7	202.4	215.9	242.9	263.1	266.3
142.5°	154.3	159.5	164.7	166.0	178.1	194.3	202.4	214.2	238.0	255.7	258.5
145°	160.6	165.1	169.6	170.8	180.9	194.3	201.0	210.7	230.0	244.6	246.7
147.5°	166.8	171.3	175.7	176.8	184.9	195.7	201.0	208.7	223.9	235.3	237.1
150°	170.9	174.9	179.0	180.0	187.0	196.4	201.0	207.5	220.3	230.0	231.4
152.5°	175.2	178.2	181.3	182.0	188.4	196.8	201.0	206.5	217.5	225.8	226.9
155°	181.5	183.7	186.0	186.6	191.4	197.8	201.0	205.4	214.1	220.7	221.4
157.5°	186.1	188.3	190.5	191.0	194.4	198.8	201.0	204.4	211.2	216.3	216.9
160°	189.3	191.0	192.7	193.1	195.8	199.3	201.0	203.9	209.8	214.1	214.4
162.5°	192.4	193.7	194.9	195.3	197.2	199.8	201.0	203.5	208.4	212.1	212.4
165°	195.8	196.9	198.1	198.4	199.3	200.5	201.0	202.8	206.3	208.9	209.2
167.5°	198.9	199.5	200.0	200.2	200.9	201.9	202.4	203.6	205.9	207.6	207.7
170°	201.0	201.6	202.1	202.2	202.3	202.4	202.4	203.6	205.9	207.6	207.6
172.5°	202.1	202.2	202.4	202.4	202.4	202.4	202.4	203.3	205.1	206.5	206.4
175°	203.7	203.7	203.7	203.7	203.2	202.7	202.4	202.9	204.1	205.0	205.0
177.5°	203.7	203.7	203.7	203.7	203.3	202.8	202.7	203.1	204.0	204.8	204.7
180°	203.7	203.7	203.7	203.7	203.7	203.7	203.7	203.7	203.7	203.7	203.7



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	560.6	560.6
2.5°	598.5	594.9
5°	769.7	773.4
7.5°	1036.5	1034.8
10°	1289.0	1305.1
12.5°	1472.8	1476.4
15°	1584.6	1591.8
17.5°	1627.9	1629.6
20°	1629.6	1626.1
22.5°	1609.8	1606.2
25°	1586.4	1584.6
27.5°	1564.8	1566.6
30°	1555.8	1561.1
32.5°	1555.8	1564.8
35°	1559.4	1568.4
37.5°	1557.6	1568.4
40°	1550.3	1562.9
42.5°	1530.5	1539.6
45°	1499.9	1510.6
47.5°	1460.2	1467.4
50°	1409.8	1416.9
52.5°	1346.6	1348.4
55°	1270.9	1278.1
57.5°	1189.8	1191.6
60°	1099.7	1105.0
62.5°	1004.1	1004.1
65°	903.2	906.7
67.5°	798.6	807.6
70°	692.2	694.1
72.5°	587.7	587.7
75°	479.6	481.3
77.5°	376.8	376.8
80°	279.4	281.3
82.5°	192.9	196.5
85°	120.8	120.8
87.5°	55.9	50.5
90°	5.2	5.2
92.5°	20.7	16.6
95°	72.5	60.0
97.5°	173.7	149.9
100°	250.3	222.0
102.5°	325.7	301.4
105°	421.7	408.6
107.5°	484.6	487.7
110°	508.6	522.2





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	510.7	531.6
115°	497.1	526.1
117.5°	468.5	500.6
120°	445.4	476.6
122.5°	422.8	453.5
125°	390.6	419.0
127.5°	361.8	385.7
130°	344.7	366.8
132.5°	329.2	349.0
135°	308.0	325.1
137.5°	291.1	305.0
140°	279.3	292.4
142.5°	269.7	281.0
145°	255.2	263.8
147.5°	244.1	251.2
150°	237.1	242.9
152.5°	231.1	235.5
155°	224.2	227.1
157.5°	218.9	220.9
160°	215.6	216.8
162.5°	213.5	214.6
165°	210.4	211.6
167.5°	208.2	208.7
170°	207.6	207.6
172.5°	205.9	205.6
175°	205.0	205.0
177.5°	204.1	203.7
180°	203.7	203.7



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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	7.45	8.69	8.13	9.39	10.22	20.62	21.85	21.30	22.56	23.38
	3H	8.19	9.30	8.88	10.01	10.88	22.48	23.59	23.17	24.31	25.17
	4H	8.50	9.55	9.21	10.28	11.15	23.14	24.19	23.85	24.92	25.79
	6H	8.77	9.75	9.50	10.48	11.37	23.58	24.56	24.31	25.29	26.18
	8H	8.85	9.78	9.59	10.54	11.43	23.71	24.64	24.45	25.40	26.29
	12H	8.88	9.77	9.62	10.52	11.44	23.79	24.68	24.53	25.43	26.35
4H	2H	14.70	15.76	15.42	16.48	17.35	20.94	21.99	21.65	22.71	23.59
	3H	16.30	17.19	17.03	17.95	18.84	23.01	23.89	23.74	24.66	25.55
	4H	16.41	17.22	17.16	17.98	18.90	23.79	24.60	24.53	25.36	26.28
	6H	16.45	17.15	17.21	17.94	18.87	24.35	25.05	25.11	25.84	26.76
	8H	16.44	17.09	17.20	17.88	18.82	24.52	25.17	25.28	25.96	26.90
	12H	16.41	17.00	17.20	17.81	18.76	24.63	25.22	25.41	26.02	26.97
8H	4H	17.89	18.55	18.66	19.33	20.27	23.88	24.54	24.65	25.32	26.26
	6H	18.15	18.69	18.95	19.52	20.46	24.52	25.07	25.32	25.90	26.84
	8H	18.17	18.66	18.98	19.48	20.44	24.75	25.23	25.56	26.06	27.02
	12H	18.16	18.59	18.97	19.40	20.42	24.91	25.34	25.72	26.15	27.17
12H	4H	18.05	18.64	18.84	19.45	20.40	23.85	24.45	24.64	25.25	26.20
	6H	18.41	18.90	19.22	19.72	20.68	24.51	25.00	25.32	25.82	26.78
	8H	18.50	18.93	19.31	19.74	20.76	24.76	25.19	25.57	26.00	27.02