

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: P936583

Luminaire Tested: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

**Test Information**

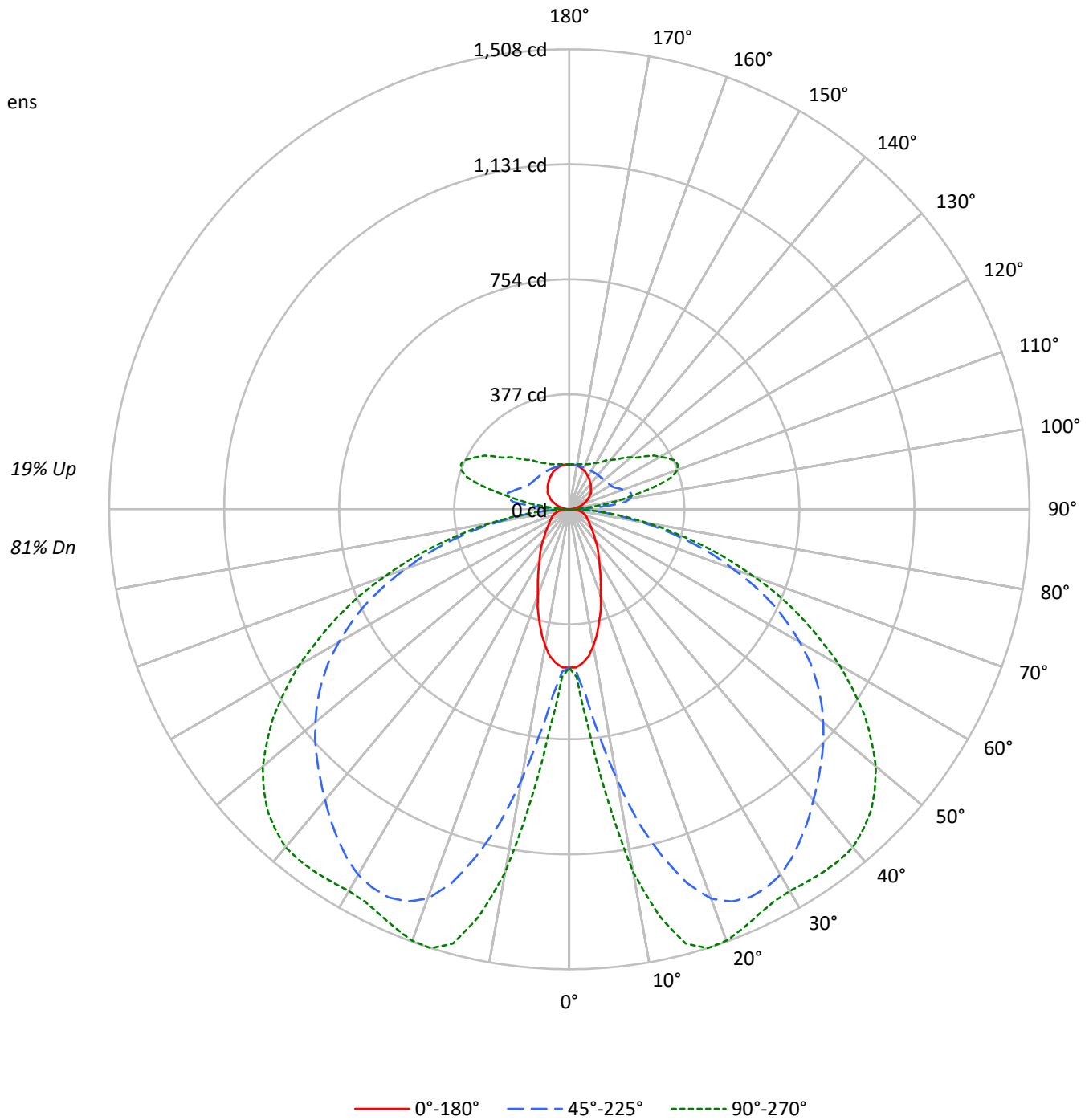
Test Method: LM-79-2019  
Report Number: P936583  
REPORT IS A COMBINATION OF REPORTS P933440 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-4-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4968.5 lumens  
Efficiency: N/A  
Efficacy: 100.2 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 49.6  
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				
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	114	114	114	114	110	110	110	110	100	100	100	92	92	92	84	84	84	84	84	84	81
1	104	99	94	90	99	95	91	87	87	84	81	80	77	75	73	71	70	70	70	70	66
2	94	85	78	72	89	82	75	70	75	70	66	69	65	61	63	60	57	57	57	57	54
3	85	74	66	59	81	71	64	58	65	59	54	60	55	51	55	51	48	48	48	48	45
4	77	65	56	49	74	63	54	48	58	51	45	53	47	43	49	44	40	40	40	40	37
5	71	58	49	42	67	55	47	41	51	44	39	47	41	36	43	38	34	34	34	34	32
6	65	51	42	36	62	49	41	35	46	39	33	42	36	31	39	34	30	30	30	30	27
7	60	46	37	31	57	45	36	30	41	34	29	38	32	27	35	30	26	26	26	26	24
8	55	42	33	27	53	40	32	27	37	30	25	35	29	24	32	27	23	23	23	23	21
9	52	38	30	24	49	37	29	24	34	27	23	32	26	22	29	24	20	20	20	20	18
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	18	18	18	16

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

	0°	45°	90°
0°	4814	4814	4814
5°	4698	5560	6471
10°	4257	8099	10729
15°	3614	10575	12955
20°	2939	12245	13203
25°	2449	12805	12936
30°	2062	12876	12911
35°	1820	12651	13244
40°	1584	12363	13590
45°	1431	12149	13643
50°	1311	11955	13417
55°	1251	11673	12822
60°	1277	11146	11884
65°	1321	10351	10593
70°	1396	9008	8950
75°	1531	7327	6984
80°	1638	5064	4706
85°	1383	2672	2409

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13643 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.1	1.4
10°-20°	297.5	6.0
20°-30°	520.3	10.5
30°-40°	669.8	13.5
40°-50°	748.2	15.1
50°-60°	716.6	14.4
60°-70°	567.9	11.4
70°-80°	333.9	6.7
80°-90°	93.3	1.9
90°-100°	71.7	1.4
100°-110°	188.6	3.8
110°-120°	195.5	3.9
120°-130°	156.8	3.2
130°-140°	123.1	2.5
140°-150°	94.5	1.9
150°-160°	68.0	1.4
160°-170°	41.6	0.8
170°-180°	14.1	0.3
0°-30°	884.9	17.8
0°-40°	1554.7	31.3
0°-60°	3019.5	60.8
0°-90°	4014.6	80.8
90°-120°	455.8	9.2
90°-150°	830.2	16.7
90°-180°	954.0	19.2
0°-180°	4968.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	519	519	519	519	519	
5°	506	542	611	691	716	47
15°	379	699	1178	1428	1473	105
25°	242	792	1403	1465	1467	111
35°	164	757	1321	1396	1452	102
45°	112	604	1168	1338	1398	86
55°	80	384	991	1151	1183	73
65°	63	204	736	828	839	63
75°	47	125	404	444	446	49
85°	17	38	100	110	112	18
90°	1	3	8	4	4	2
95°	10	37	124	64	43	11
105°	34	52	208	316	295	36
115°	60	73	167	333	380	60
125°	84	94	152	257	303	74
135°	100	110	147	207	235	77
145°	116	123	145	177	191	73
155°	131	135	145	160	164	60
165°	142	143	145	151	153	40
175°	147	147	146	148	148	14
180°	147	147	147	147	147	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	518.8	518.8	518.8	518.8	518.8	518.8	518.8	518.8	518.8	518.8	518.8
2.5°	518.8	518.8	522.2	523.9	527.2	528.9	532.2	535.6	545.6	547.2	550.6
5°	505.5	512.2	533.9	542.2	565.6	597.3	610.6	632.3	677.4	690.7	699.1
7.5°	485.5	500.5	553.9	567.2	625.6	709.0	744.1	790.9	862.6	897.6	926.0
10°	453.8	485.5	580.6	612.3	707.4	834.2	899.2	964.3	1072.8	1121.2	1139.5
12.5°	418.8	470.5	609.0	652.3	789.2	974.4	1052.8	1124.5	1248.0	1313.1	1323.0
15°	378.7	448.8	635.7	699.1	875.9	1091.1	1177.9	1266.3	1381.5	1428.1	1439.9
17.5°	343.7	432.2	660.7	727.5	942.6	1196.2	1284.7	1358.1	1451.5	1483.2	1491.5
20°	300.3	405.4	677.4	764.2	1012.7	1273.0	1358.1	1414.8	1478.2	1498.2	1501.6
22.5°	268.6	377.0	687.3	777.5	1059.5	1319.7	1391.4	1436.5	1479.9	1486.6	1488.2
25°	242.0	345.4	685.8	792.4	1099.5	1348.1	1403.2	1436.5	1461.5	1464.9	1464.9
27.5°	216.9	310.3	679.1	795.8	1129.5	1354.8	1398.1	1421.5	1433.2	1439.9	1439.9
30°	195.2	277.0	662.4	789.2	1142.9	1348.1	1383.1	1394.8	1406.4	1416.5	1421.5
32.5°	178.6	245.2	637.4	775.8	1144.5	1331.4	1356.4	1363.0	1379.8	1403.2	1411.5
35°	163.5	213.6	609.0	757.4	1134.5	1304.7	1321.3	1328.0	1361.4	1396.5	1408.1
37.5°	148.5	190.2	572.3	725.8	1119.5	1273.0	1284.7	1296.4	1348.1	1389.8	1403.2
40°	133.5	170.2	528.9	690.7	1096.1	1234.6	1244.6	1263.0	1331.4	1379.8	1393.1
42.5°	121.8	153.5	482.2	654.0	1066.1	1191.3	1206.3	1233.0	1311.4	1363.0	1378.1
45°	111.8	136.9	432.2	603.9	1027.7	1146.2	1167.9	1204.6	1288.0	1338.1	1351.4
47.5°	101.8	125.1	380.4	552.3	986.0	1101.2	1129.5	1171.3	1256.3	1304.7	1316.4
50°	93.5	113.5	328.6	497.1	940.9	1052.8	1086.2	1129.5	1216.2	1261.3	1276.4
52.5°	86.8	103.4	280.3	442.1	889.3	1002.7	1041.1	1086.2	1167.9	1211.3	1221.3
55°	80.1	95.1	238.6	383.8	835.8	949.3	991.0	1034.4	1114.5	1151.2	1157.9
57.5°	76.7	88.4	203.5	328.6	779.1	889.3	936.0	976.0	1051.1	1079.5	1086.2
60°	71.8	83.4	176.9	282.0	717.4	832.6	872.6	912.6	976.0	999.4	1004.3
62.5°	66.8	80.1	156.9	236.9	654.0	765.8	805.9	842.5	896.0	912.6	919.2
65°	63.4	76.7	141.8	203.5	588.9	695.7	735.8	767.5	810.9	827.5	830.9
67.5°	60.0	73.5	130.2	175.2	523.9	625.6	655.7	685.8	719.1	735.8	737.4
70°	55.0	70.1	120.1	155.2	457.1	545.6	570.6	602.2	629.0	637.4	642.4
72.5°	51.8	65.1	113.5	140.1	388.8	468.8	492.2	510.6	533.9	542.2	542.2
75°	46.7	58.4	106.8	125.1	318.7	383.8	403.8	422.1	440.4	443.8	438.8
77.5°	41.7	51.8	91.8	105.1	248.6	303.7	320.4	330.3	345.4	348.6	350.3
80°	35.0	45.1	71.8	81.7	180.1	223.5	235.3	243.5	257.0	257.0	260.3
82.5°	26.7	35.0	51.8	58.4	121.8	153.5	163.5	168.5	176.9	176.9	176.9
85°	16.7	21.7	33.3	38.4	73.5	93.5	100.1	101.8	108.5	110.1	110.1
87.5°	8.4	11.6	21.7	23.4	38.4	48.4	48.4	51.8	51.8	50.1	48.4
90°	1.0	1.8	2.6	2.8	4.3	6.4	7.5	6.7	5.0	3.7	3.7
92.5°	3.9	10.6	17.4	19.0	26.8	37.2	42.3	37.1	26.6	18.7	17.9
95°	9.5	21.8	34.1	37.2	66.0	104.3	123.5	110.2	83.6	63.7	61.4
97.5°	16.4	27.2	38.1	40.8	88.8	152.8	184.9	176.5	159.6	147.0	142.7
100°	21.7	31.6	41.4	43.9	97.1	168.2	203.7	204.3	205.6	206.5	201.3
102.5°	26.2	35.4	44.7	46.9	101.0	173.0	209.0	219.8	241.2	257.2	252.8
105°	34.0	41.8	49.5	51.5	103.8	173.5	208.4	232.5	280.5	316.5	314.1
107.5°	41.9	49.1	56.4	58.2	104.3	165.8	196.6	230.1	297.1	347.4	348.0
110°	47.2	53.7	60.2	61.9	103.5	159.0	186.7	224.2	299.1	355.3	357.7



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	52.5	58.7	64.9	66.5	103.5	153.0	177.8	216.1	292.7	350.2	354.0
115°	60.3	66.1	71.8	73.3	104.5	146.2	167.0	203.9	277.8	333.1	338.3
117.5°	68.1	73.4	78.6	79.9	106.5	141.9	159.6	193.0	259.5	309.5	315.3
120°	72.7	77.6	82.5	83.7	108.0	140.4	156.6	187.0	248.0	293.6	299.3
122.5°	77.1	82.0	87.0	88.2	110.2	139.6	154.3	181.7	236.5	277.7	283.2
125°	83.9	88.4	93.0	94.2	113.4	139.0	151.8	175.1	221.8	256.7	261.8
127.5°	89.4	94.1	98.6	99.8	116.4	138.6	149.8	169.8	209.8	239.8	244.1
130°	92.4	97.3	102.2	103.5	118.7	138.9	149.0	166.8	202.4	229.1	233.1
132.5°	95.5	100.5	105.4	106.6	120.5	139.0	148.3	164.3	196.1	220.1	223.6
135°	100.1	104.5	109.1	110.1	122.5	138.9	147.1	160.4	187.1	207.2	210.2
137.5°	104.7	109.2	113.6	114.7	125.4	139.7	146.9	158.2	180.7	197.7	200.3
140°	108.6	112.6	116.7	117.7	127.2	139.9	146.2	156.0	175.5	190.1	192.5
142.5°	111.5	115.3	119.0	120.0	128.8	140.4	146.2	154.8	172.0	184.8	186.8
145°	116.1	119.3	122.7	123.4	130.7	140.4	145.2	152.2	166.2	176.8	178.4
147.5°	120.6	123.7	127.0	127.8	133.6	141.4	145.2	150.8	161.8	170.1	171.4
150°	123.5	126.4	129.4	130.1	135.1	141.9	145.2	149.9	159.2	166.2	167.2
152.5°	126.6	128.8	130.9	131.5	136.1	142.2	145.2	149.2	157.2	163.2	164.0
155°	131.1	132.7	134.4	134.8	138.2	142.9	145.2	148.4	154.8	159.5	160.0
157.5°	134.5	136.1	137.6	138.0	140.4	143.7	145.2	147.7	152.6	156.3	156.7
160°	136.8	137.9	139.2	139.5	141.4	144.0	145.2	147.3	151.5	154.7	154.9
162.5°	139.0	139.9	140.9	141.1	142.5	144.4	145.2	147.0	150.6	153.2	153.4
165°	141.5	142.3	143.2	143.4	144.0	144.8	145.2	146.5	149.1	151.0	151.2
167.5°	143.8	144.2	144.5	144.6	145.1	145.8	146.2	147.0	148.7	150.0	150.1
170°	145.2	145.6	146.0	146.1	146.1	146.2	146.2	147.0	148.7	150.0	150.0
172.5°	146.0	146.1	146.2	146.2	146.2	146.2	146.2	146.9	148.2	149.2	149.1
175°	147.1	147.1	147.1	147.1	146.8	146.4	146.2	146.6	147.5	148.1	148.1
177.5°	147.1	147.1	147.1	147.1	146.9	146.6	146.4	146.7	147.4	147.9	147.8
180°	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	518.8	518.8
2.5°	553.9	550.6
5°	712.4	715.7
7.5°	959.4	957.7
10°	1192.9	1207.9
12.5°	1363.0	1366.4
15°	1466.6	1473.2
17.5°	1506.6	1508.3
20°	1508.3	1504.9
22.5°	1489.8	1486.6
25°	1468.2	1466.6
27.5°	1448.1	1449.8
30°	1439.9	1444.9
32.5°	1439.9	1448.1
35°	1443.2	1451.5
37.5°	1441.5	1451.5
40°	1434.8	1446.5
42.5°	1416.5	1424.8
45°	1388.1	1398.1
47.5°	1351.4	1358.1
50°	1304.7	1311.4
52.5°	1246.3	1248.0
55°	1176.2	1182.9
57.5°	1101.2	1102.8
60°	1017.7	1022.8
62.5°	929.3	929.3
65°	835.8	839.2
67.5°	739.1	747.5
70°	640.7	642.4
72.5°	543.9	543.9
75°	443.8	445.5
77.5°	348.6	348.6
80°	258.6	260.3
82.5°	178.6	181.8
85°	111.8	111.8
87.5°	51.8	46.7
90°	3.7	3.7
92.5°	15.0	12.0
95°	52.5	43.4
97.5°	125.5	108.4
100°	180.9	160.4
102.5°	235.3	217.7
105°	304.8	295.3
107.5°	350.2	352.5
110°	367.5	377.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	369.1	384.1
115°	359.3	380.2
117.5°	338.5	361.8
120°	321.8	344.3
122.5°	305.5	327.7
125°	282.3	302.8
127.5°	261.4	278.6
130°	249.1	265.0
132.5°	237.9	252.2
135°	222.6	235.0
137.5°	210.3	220.5
140°	201.8	211.3
142.5°	194.9	203.0
145°	184.5	190.6
147.5°	176.4	181.5
150°	171.4	175.5
152.5°	167.0	170.2
155°	162.1	164.2
157.5°	158.2	159.6
160°	155.8	156.6
162.5°	154.2	155.0
165°	152.0	152.8
167.5°	150.4	150.8
170°	150.0	150.0
172.5°	148.8	148.5
175°	148.1	148.1
177.5°	147.5	147.1
180°	147.1	147.1



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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	8.87	10.18	9.51	10.83	11.58	22.01	23.32	22.65	23.97	24.72
	3H	9.61	10.79	10.26	11.45	12.23	23.87	25.05	24.51	25.71	26.49
	4H	9.93	11.04	10.60	11.72	12.51	24.52	25.64	25.19	26.31	27.10
	6H	10.21	11.24	10.88	11.92	12.73	24.97	26.00	25.64	26.68	27.49
	8H	10.29	11.27	10.98	11.98	12.79	25.09	26.08	25.78	26.78	27.59
	12H	10.32	11.26	11.02	11.96	12.80	25.17	26.11	25.86	26.81	27.65
4H	2H	16.12	17.23	16.78	17.90	18.70	22.34	23.45	23.01	24.13	24.92
	3H	17.73	18.66	18.41	19.37	20.19	24.41	25.35	25.09	26.06	26.87
	4H	17.84	18.69	18.54	19.41	20.25	25.19	26.04	25.88	26.75	27.60
	6H	17.88	18.62	18.59	19.36	20.21	25.74	26.48	26.46	27.22	28.07
	8H	17.87	18.56	18.59	19.30	20.16	25.91	26.60	26.63	27.34	28.20
	12H	17.85	18.47	18.59	19.23	20.10	26.01	26.64	26.76	27.40	28.27
8H	4H	19.31	20.01	20.03	20.74	21.61	25.29	25.98	26.01	26.72	27.58
	6H	19.58	20.15	20.33	20.93	21.80	25.92	26.50	26.68	27.28	28.15
	8H	19.60	20.12	20.37	20.90	21.78	26.14	26.66	26.91	27.44	28.32
	12H	19.59	20.05	20.36	20.82	21.76	26.30	26.75	27.07	27.52	28.47
12H	4H	19.48	20.10	20.22	20.86	21.73	25.26	25.89	26.00	26.65	27.52
	6H	19.84	20.35	20.60	21.13	22.02	25.91	26.43	26.68	27.21	28.09
	8H	19.93	20.38	20.70	21.15	22.10	26.16	26.61	26.92	27.38	28.33