

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: P936319

Luminaire Tested: SQ4-FB-025U-075D-840-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

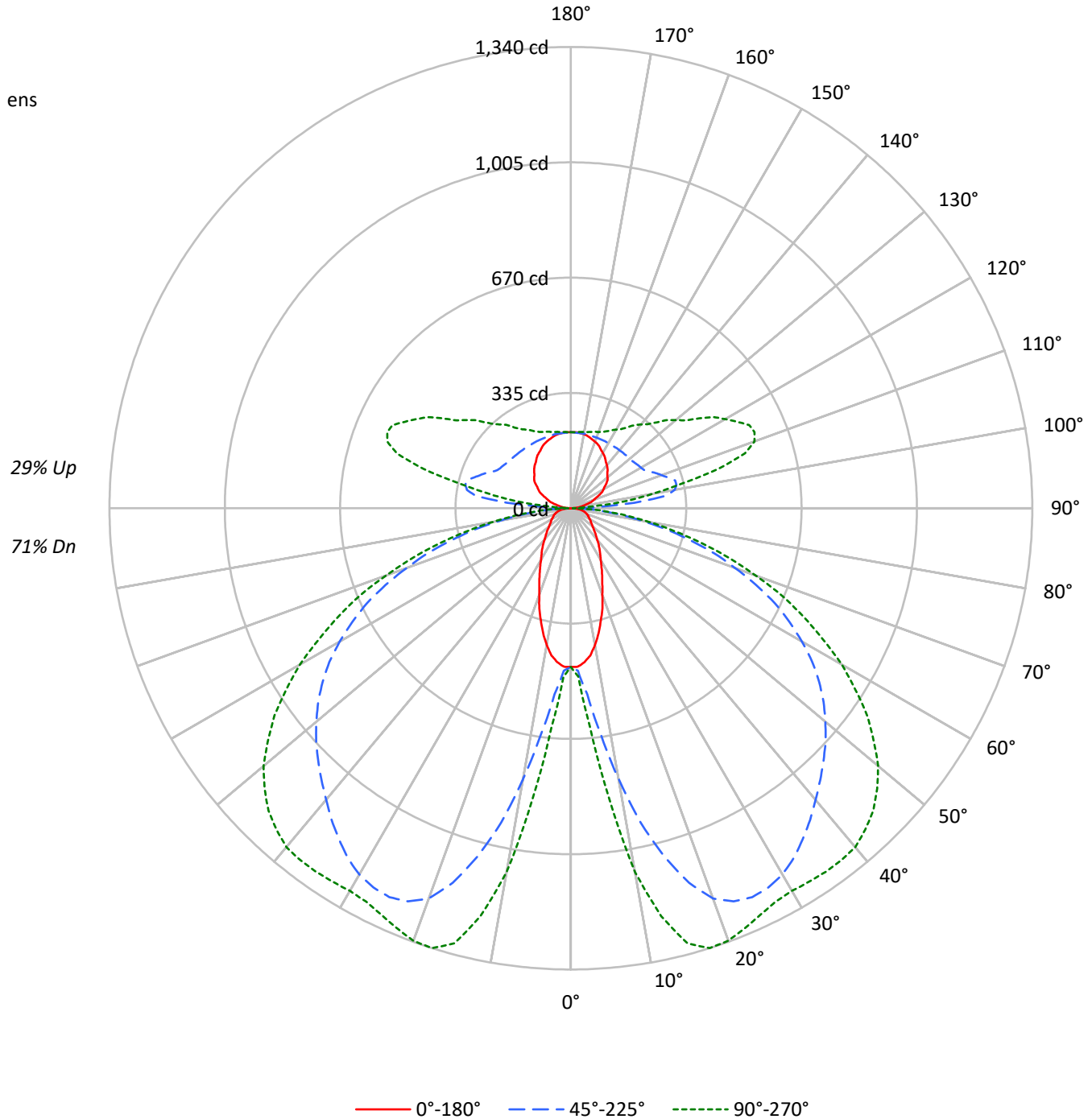
Test Method: LM-79-2019  
Report Number: P936319  
REPORT IS A COMBINATION OF REPORTS P933446 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-075D-840-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5000.2 lumens  
Efficiency: N/A  
Efficacy: 111.1 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): 45  
Input Voltage (V): NR  
Input Current (Ain): 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	0
RCR																		
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	71
1	102	97	93	89	96	92	88	85	82	79	77	74	71	69	66	64	62	58
2	92	84	77	71	87	79	73	68	71	66	62	64	60	57	57	54	51	48
3	83	73	65	58	79	69	62	56	62	56	51	56	51	47	50	46	43	39
4	76	64	55	49	71	61	53	47	55	48	43	49	44	39	44	40	36	33
5	69	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31	28
6	64	51	42	35	60	48	40	34	43	37	32	39	33	29	35	30	27	24
7	59	45	37	31	55	43	35	30	39	32	27	35	30	25	32	27	23	21
8	54	41	33	27	51	39	31	26	36	29	24	32	26	22	29	24	21	18
9	51	37	29	24	48	36	28	23	32	26	21	29	24	20	26	22	18	16
10	47	34	26	21	45	33	25	21	30	23	19	27	22	18	24	20	16	14

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

	0°	45°	90°
0°	2851	2851	2851
5°	2784	3295	3833
10°	2525	4801	6354
15°	2145	6271	7673
20°	1746	7266	7820
25°	1456	7602	7661
30°	1227	7648	7646
35°	1084	7519	7844
40°	945	7351	8048
45°	854	7228	8080
50°	783	7117	7946
55°	749	6955	7593
60°	766	6647	7037
65°	796	6180	6273
70°	846	5385	5300
75°	934	4386	4136
80°	1012	3039	2787
85°	882	1609	1426

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8080 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.6	1.2
10°-20°	264.2	5.3
20°-30°	462.2	9.2
30°-40°	595.0	11.9
40°-50°	664.6	13.3
50°-60°	636.5	12.7
60°-70°	504.4	10.1
70°-80°	296.6	5.9
80°-90°	83.2	1.7
90°-100°	107.8	2.2
100°-110°	283.4	5.7
110°-120°	293.9	5.9
120°-130°	235.7	4.7
130°-140°	185.0	3.7
140°-150°	142.0	2.8
150°-160°	102.2	2.0
160°-170°	62.6	1.3
170°-180°	21.1	0.4
0°-30°	786.1	15.7
0°-40°	1381.1	27.6
0°-60°	2682.2	53.6
0°-90°	3566.5	71.3
90°-120°	685.1	13.7
90°-150°	1247.8	25.0
90°-180°	1434.0	28.7
0°-180°	5000.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	461	461	461	461	461	
5°	449	482	542	614	636	41
15°	336	621	1046	1269	1309	94
25°	215	704	1246	1301	1303	99
35°	145	673	1174	1240	1289	91
45°	99	536	1037	1189	1242	77
55°	71	341	880	1023	1051	65
65°	56	181	654	735	745	56
75°	42	111	359	394	396	43
85°	15	34	89	98	99	16
90°	2	4	11	6	6	2
95°	14	56	186	96	65	16
105°	51	77	313	476	444	54
115°	91	110	251	501	572	90
125°	126	142	228	386	455	112
135°	150	166	221	311	353	116
145°	174	186	218	266	286	109
155°	197	203	218	240	247	91
165°	213	216	218	227	230	60
175°	221	221	220	223	223	21
180°	221	221	221	221	221	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9
2.5°	460.9	460.9	463.9	465.3	468.3	469.8	472.8	475.7	484.6	486.1	489.1
5°	449.0	455.0	474.2	481.6	502.4	530.6	542.4	561.7	601.7	613.5	621.0
7.5°	431.3	444.6	492.0	503.9	555.8	629.8	661.0	702.5	766.2	797.3	822.5
10°	403.1	431.3	515.7	543.9	628.4	741.0	798.8	856.6	952.9	995.9	1012.2
12.5°	372.0	417.9	540.9	579.5	701.0	865.5	935.1	998.9	1108.5	1166.4	1175.3
15°	336.4	398.7	564.6	621.0	778.0	969.2	1046.3	1124.9	1227.2	1268.7	1279.1
17.5°	305.3	383.8	586.9	646.2	837.3	1062.6	1141.2	1206.4	1289.4	1317.6	1325.0
20°	266.8	360.1	601.7	678.8	899.6	1130.9	1206.4	1256.8	1313.2	1330.9	1333.9
22.5°	238.6	334.9	610.6	690.6	941.1	1172.4	1236.1	1276.1	1314.6	1320.6	1322.0
25°	214.9	306.8	609.1	704.0	976.6	1197.6	1246.5	1276.1	1298.3	1301.3	1301.3
27.5°	192.7	275.7	603.2	706.9	1003.3	1203.5	1242.0	1262.8	1273.1	1279.1	1279.1
30°	173.4	246.0	588.4	701.0	1015.2	1197.6	1228.7	1239.1	1249.4	1258.3	1262.8
32.5°	158.6	217.9	566.1	689.1	1016.7	1182.7	1205.0	1210.9	1225.7	1246.5	1253.9
35°	145.2	189.7	540.9	672.8	1007.8	1159.0	1173.8	1179.8	1209.4	1240.5	1250.9
37.5°	131.9	168.9	508.3	644.7	994.4	1130.9	1141.2	1151.6	1197.6	1234.6	1246.5
40°	118.6	151.2	469.8	613.5	973.7	1096.7	1105.6	1121.9	1182.7	1225.7	1237.6
42.5°	108.2	136.3	428.3	580.9	947.0	1058.1	1071.5	1095.2	1165.0	1210.9	1224.2
45°	99.3	121.5	383.8	536.5	912.9	1018.1	1037.4	1070.0	1144.2	1188.7	1200.5
47.5°	90.4	111.2	337.9	490.5	875.9	978.1	1003.3	1040.4	1115.9	1159.0	1169.4
50°	83.0	100.8	292.0	441.6	835.8	935.1	964.8	1003.3	1080.4	1120.4	1133.8
52.5°	77.1	91.9	249.0	392.7	789.9	890.7	924.8	964.8	1037.4	1075.9	1084.8
55°	71.1	84.5	211.9	340.9	742.5	843.3	880.3	918.8	990.0	1022.6	1028.5
57.5°	68.2	78.5	180.8	292.0	692.1	789.9	831.4	867.0	933.7	958.9	964.8
60°	63.7	74.1	157.1	250.5	637.3	739.5	775.1	810.7	867.0	887.7	892.2
62.5°	59.3	71.1	139.3	210.4	580.9	680.2	715.8	748.4	795.8	810.7	816.6
65°	56.3	68.2	126.0	180.8	523.1	618.0	653.6	681.7	720.3	735.1	738.0
67.5°	53.4	65.2	115.6	155.6	465.3	555.8	582.4	609.1	638.7	653.6	655.0
70°	48.9	62.2	106.7	137.8	406.1	484.6	506.8	535.0	558.7	566.1	570.6
72.5°	45.9	57.8	100.8	124.5	345.3	416.4	437.2	453.5	474.2	481.6	481.6
75°	41.5	51.9	94.8	111.2	283.1	340.9	358.6	374.9	391.2	394.2	389.8
77.5°	37.0	45.9	81.5	93.4	220.8	269.7	284.5	293.4	306.8	309.7	311.2
80°	31.1	40.0	63.7	72.6	160.1	198.6	209.0	216.4	228.2	228.2	231.2
82.5°	23.7	31.1	45.9	51.9	108.2	136.3	145.2	149.7	157.1	157.1	157.1
85°	14.8	19.3	29.6	34.1	65.2	83.0	88.9	90.4	96.3	97.8	97.8
87.5°	7.4	10.4	19.3	20.7	34.1	43.0	43.0	45.9	45.9	44.5	43.0
90°	1.5	2.7	3.9	4.1	6.5	9.7	11.3	10.0	7.5	5.6	5.6
92.5°	5.9	16.0	26.1	28.7	40.3	55.8	63.5	55.6	39.9	28.2	27.1
95°	14.2	32.7	51.2	55.8	99.1	156.8	185.6	165.7	125.7	95.7	92.4
97.5°	24.6	40.9	57.2	61.3	133.5	229.7	277.8	265.2	240.0	221.0	214.6
100°	32.7	47.4	62.2	65.9	146.0	252.8	306.2	307.1	308.9	310.3	302.6
102.5°	39.5	53.4	67.1	70.5	151.8	260.0	314.2	330.3	362.5	386.7	380.1
105°	51.1	62.7	74.4	77.4	156.0	260.8	313.3	349.4	421.6	475.7	472.2
107.5°	62.9	73.8	84.7	87.4	156.8	249.3	295.5	345.9	446.6	522.1	522.9
110°	70.9	80.8	90.6	93.1	155.6	239.0	280.7	337.0	449.5	533.9	537.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	78.8	88.2	97.5	99.9	155.6	230.0	267.2	324.8	440.0	526.3	531.9
115°	90.7	99.4	108.0	110.2	157.1	219.6	251.0	306.5	417.4	500.6	508.5
117.5°	102.5	110.3	118.1	120.0	160.0	213.2	239.9	290.0	390.1	465.2	473.8
120°	109.3	116.7	124.0	125.9	162.4	211.1	235.4	281.2	372.7	441.3	449.8
122.5°	115.9	123.4	130.8	132.7	165.8	210.0	232.0	273.2	355.6	417.4	425.8
125°	126.2	133.0	139.8	141.5	170.4	209.1	228.3	263.3	333.4	385.8	393.5
127.5°	134.5	141.3	148.2	149.9	175.0	208.5	225.2	255.2	315.4	360.4	366.9
130°	138.9	146.3	153.6	155.5	178.3	208.8	224.0	250.8	304.2	344.3	350.3
132.5°	143.6	151.0	158.3	160.2	181.1	209.1	223.0	246.9	294.8	330.7	336.0
135°	150.4	157.1	163.8	165.5	184.1	208.9	221.2	241.3	281.4	311.4	316.1
137.5°	157.4	164.0	170.6	172.3	188.5	210.1	220.9	237.9	271.8	297.2	300.9
140°	163.1	169.2	175.4	177.0	191.3	210.3	219.8	234.5	263.8	285.7	289.3
142.5°	167.6	173.2	178.9	180.3	193.5	211.0	219.8	232.7	258.5	277.7	280.8
145°	174.4	179.3	184.3	185.5	196.5	211.0	218.3	228.8	249.9	265.7	267.9
147.5°	181.2	186.0	190.9	192.1	200.9	212.5	218.3	226.6	243.1	255.6	257.5
150°	185.6	190.0	194.4	195.5	203.1	213.3	218.3	225.4	239.3	249.8	251.3
152.5°	190.3	193.5	196.9	197.7	204.6	213.8	218.3	224.3	236.2	245.2	246.4
155°	197.1	199.6	202.0	202.6	207.9	214.9	218.3	223.1	232.6	239.7	240.5
157.5°	202.1	204.5	206.9	207.5	211.1	216.0	218.3	222.0	229.4	234.9	235.5
160°	205.6	207.5	209.3	209.8	212.6	216.5	218.3	221.5	227.8	232.6	232.9
162.5°	209.0	210.3	211.7	212.1	214.2	217.0	218.3	221.0	226.4	230.4	230.7
165°	212.7	213.9	215.2	215.5	216.5	217.8	218.3	220.2	224.1	226.9	227.2
167.5°	216.1	216.7	217.3	217.5	218.2	219.3	219.8	221.1	223.6	225.5	225.6
170°	218.3	218.9	219.5	219.6	219.7	219.8	219.8	221.1	223.6	225.5	225.5
172.5°	219.5	219.6	219.8	219.8	219.8	219.8	219.8	220.8	222.8	224.3	224.2
175°	221.2	221.2	221.2	221.2	220.7	220.1	219.8	220.4	221.7	222.7	222.7
177.5°	221.2	221.2	221.2	221.2	220.8	220.3	220.1	220.6	221.6	222.4	222.3
180°	221.2	221.2	221.2	221.2	221.2	221.2	221.2	221.2	221.2	221.2	221.2



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	460.9	460.9
2.5°	492.0	489.1
5°	632.8	635.8
7.5°	852.2	850.7
10°	1059.6	1073.0
12.5°	1210.9	1213.9
15°	1302.8	1308.7
17.5°	1338.3	1339.8
20°	1339.8	1336.9
22.5°	1323.5	1320.6
25°	1304.3	1302.8
27.5°	1286.5	1288.0
30°	1279.1	1283.5
32.5°	1279.1	1286.5
35°	1282.0	1289.4
37.5°	1280.5	1289.4
40°	1274.6	1285.0
42.5°	1258.3	1265.7
45°	1233.1	1242.0
47.5°	1200.5	1206.4
50°	1159.0	1165.0
52.5°	1107.1	1108.5
55°	1044.8	1050.7
57.5°	978.1	979.6
60°	904.0	908.5
62.5°	825.5	825.5
65°	742.5	745.4
67.5°	656.5	663.9
70°	569.1	570.6
72.5°	483.1	483.1
75°	394.2	395.7
77.5°	309.7	309.7
80°	229.7	231.2
82.5°	158.6	161.5
85°	99.3	99.3
87.5°	45.9	41.5
90°	5.6	5.6
92.5°	22.5	18.1
95°	78.7	65.2
97.5°	188.7	162.8
100°	271.9	241.1
102.5°	353.7	327.3
105°	458.0	443.8
107.5°	526.3	529.8
110°	552.4	567.2





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	554.7	577.4
115°	539.9	571.5
117.5°	508.8	543.7
120°	483.7	517.6
122.5°	459.2	492.6
125°	424.2	455.1
127.5°	392.9	418.9
130°	374.4	398.4
132.5°	357.6	379.1
135°	334.5	353.1
137.5°	316.2	331.3
140°	303.4	317.6
142.5°	292.9	305.2
145°	277.2	286.5
147.5°	265.2	272.8
150°	257.6	263.8
152.5°	251.1	255.8
155°	243.5	246.7
157.5°	237.7	239.9
160°	234.2	235.4
162.5°	231.9	233.1
165°	228.5	229.8
167.5°	226.2	226.6
170°	225.5	225.5
172.5°	223.7	223.3
175°	222.7	222.7
177.5°	221.7	221.2
180°	221.2	221.2



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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	6.38	7.53	7.12	8.30	9.23	19.55	20.70	20.29	21.47	22.40
	3H	7.11	8.15	7.86	8.93	9.88	21.40	22.44	22.16	23.22	24.18
	4H	7.42	8.40	8.19	9.19	10.16	22.06	23.04	22.83	23.83	24.80
	6H	7.68	8.60	8.47	9.39	10.37	22.50	23.41	23.28	24.21	25.19
	8H	7.76	8.63	8.56	9.45	10.43	22.63	23.49	23.42	24.31	25.30
	12H	7.79	8.62	8.59	9.43	10.44	22.70	23.53	23.50	24.34	25.35
4H	2H	13.62	14.61	14.40	15.40	16.36	19.86	20.84	20.63	21.63	22.60
	3H	15.22	16.04	16.01	16.87	17.85	21.92	22.75	22.71	23.57	24.56
	4H	15.33	16.08	16.13	16.90	17.91	22.70	23.45	23.50	24.27	25.29
	6H	15.35	16.01	16.17	16.85	17.87	23.25	23.91	24.07	24.75	25.77
	8H	15.34	15.95	16.16	16.79	17.83	23.42	24.03	24.24	24.87	25.91
	12H	15.31	15.86	16.16	16.73	17.76	23.52	24.08	24.37	24.94	25.98
8H	4H	16.79	17.40	17.62	18.25	19.28	22.78	23.40	23.61	24.24	25.27
	6H	17.05	17.56	17.90	18.44	19.47	23.42	23.93	24.28	24.82	25.85
	8H	17.07	17.52	17.93	18.40	19.45	23.64	24.10	24.51	24.98	26.03
	12H	17.05	17.45	17.92	18.32	19.43	23.80	24.20	24.67	25.07	26.17
12H	4H	16.95	17.50	17.79	18.36	19.40	22.75	23.31	23.60	24.17	25.21
	6H	17.31	17.76	18.17	18.64	19.69	23.41	23.86	24.27	24.74	25.79
	8H	17.39	17.79	18.26	18.66	19.77	23.65	24.05	24.52	24.92	26.03