

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: P936934

Luminaire Tested: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936934
REPORT IS A COMBINATION OF REPORTS P933472 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

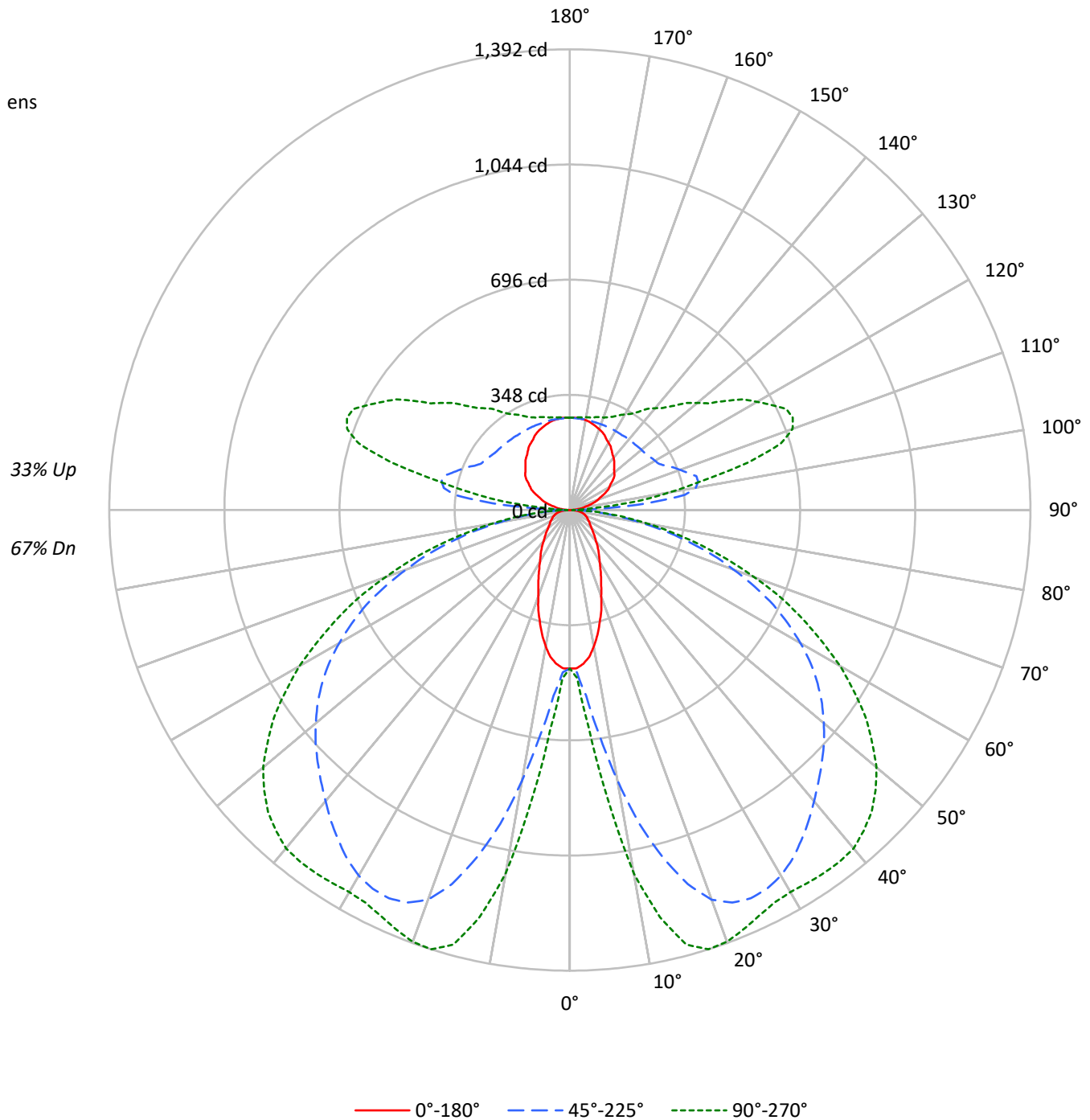
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5515.1 lumens
Efficiency: N/A
Efficacy: 98.5 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): 56
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

TEST NUMBER: P936934
CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-4-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P936934

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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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4442	4442	4442
5°	4335	5130	5970
10°	3927	7472	9898
15°	3334	9756	11952
20°	2712	11297	12181
25°	2259	11813	11934
30°	1902	11878	11911
35°	1679	11671	12219
40°	1462	11406	12536
45°	1321	11209	12587
50°	1208	11029	12378
55°	1154	10769	11829
60°	1178	10282	10964
65°	1219	9549	9772
70°	1290	8311	8256
75°	1413	6759	6443
80°	1512	4670	4341
85°	1275	2463	2224

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12587 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.9	1.1
10°-20°	274.4	5.0
20°-30°	480.0	8.7
30°-40°	617.9	11.2
40°-50°	690.2	12.5
50°-60°	661.1	12.0
60°-70°	523.9	9.5
70°-80°	308.1	5.6
80°-90°	86.7	1.6
90°-100°	136.2	2.5
100°-110°	358.0	6.5
110°-120°	371.2	6.7
120°-130°	297.8	5.4
130°-140°	233.6	4.2
140°-150°	179.3	3.3
150°-160°	129.1	2.3
160°-170°	79.0	1.4
170°-180°	26.7	0.5
0°-30°	816.4	14.8
0°-40°	1434.3	26.0
0°-60°	2785.6	50.5
0°-90°	3704.2	67.2
90°-120°	865.4	15.7
90°-150°	1576.0	28.6
90°-180°	1811.0	32.8
0°-180°	5515.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	479	479	479	479	479	
5°	466	500	563	637	660	43
15°	349	645	1087	1318	1359	97
25°	223	731	1294	1351	1353	103
35°	151	699	1219	1288	1339	94
45°	103	557	1078	1234	1290	80
55°	74	354	914	1062	1091	67
65°	58	188	679	764	774	58
75°	43	115	372	409	411	45
85°	15	35	92	102	103	16
90°	2	5	14	7	7	3
95°	18	70	234	121	82	20
105°	64	98	396	601	561	68
115°	114	139	317	632	722	113
125°	159	179	288	487	575	142
135°	190	209	279	393	446	147
145°	220	234	276	336	362	138
155°	249	256	276	303	312	114
165°	269	272	276	287	290	76
175°	279	279	278	281	281	27
180°	279	279	279	279	279	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	478.7	478.7	478.7	478.7	478.7	478.7	478.7	478.7	478.7	478.7	478.7
2.5°	478.7	478.7	481.7	483.3	486.4	487.9	491.0	494.1	503.3	504.8	507.9
5°	466.4	472.6	492.6	500.2	521.8	551.1	563.3	583.4	624.9	637.2	644.9
7.5°	447.9	461.7	511.0	523.3	577.2	654.1	686.5	729.6	795.8	828.0	854.2
10°	418.6	447.9	535.6	564.9	652.6	769.6	829.6	889.6	989.7	1034.3	1051.3
12.5°	386.3	434.1	561.8	601.8	728.1	898.9	971.2	1037.4	1151.3	1211.4	1220.6
15°	349.4	414.1	586.4	644.9	808.0	1006.6	1086.7	1168.2	1274.5	1317.5	1328.3
17.5°	317.1	398.7	609.5	671.1	869.6	1103.6	1185.2	1252.9	1339.1	1368.4	1376.0
20°	277.1	374.0	624.9	705.0	934.3	1174.4	1252.9	1305.2	1363.7	1382.2	1385.3
22.5°	247.8	347.8	634.1	717.2	977.4	1217.5	1283.7	1325.3	1365.3	1371.5	1372.9
25°	223.2	318.6	632.7	731.1	1014.3	1243.7	1294.5	1325.3	1348.4	1351.4	1351.4
27.5°	200.1	286.3	626.5	734.2	1042.0	1249.8	1289.9	1311.4	1322.2	1328.3	1328.3
30°	180.1	255.5	611.1	728.1	1054.4	1243.7	1275.9	1286.8	1297.5	1306.8	1311.4
32.5°	164.7	226.2	588.0	715.7	1055.9	1228.3	1251.4	1257.5	1272.9	1294.5	1302.1
35°	150.8	197.0	561.8	698.8	1046.6	1203.6	1219.0	1225.2	1255.9	1288.3	1299.1
37.5°	137.0	175.5	528.0	669.6	1032.8	1174.4	1185.2	1196.0	1243.7	1282.1	1294.5
40°	123.2	157.0	487.9	637.2	1011.2	1139.0	1148.2	1165.2	1228.3	1272.9	1285.2
42.5°	112.3	141.6	444.8	603.4	983.5	1099.0	1112.8	1137.5	1209.8	1257.5	1271.4
45°	103.2	126.3	398.7	557.2	948.1	1057.5	1077.5	1111.3	1188.3	1234.5	1246.7
47.5°	93.9	115.4	350.9	509.5	909.6	1015.9	1042.0	1080.6	1159.0	1203.6	1214.5
50°	86.2	104.7	303.2	458.6	868.1	971.2	1002.1	1042.0	1122.0	1163.6	1177.5
52.5°	80.0	95.4	258.6	407.9	820.4	925.0	960.5	1002.1	1077.5	1117.5	1126.7
55°	73.9	87.7	220.1	354.0	771.1	875.8	914.3	954.3	1028.2	1062.0	1068.2
57.5°	70.8	81.6	187.7	303.2	718.8	820.4	863.5	900.4	969.7	995.9	1002.1
60°	66.2	77.0	163.2	260.2	661.9	768.1	805.0	842.0	900.4	922.0	926.6
62.5°	61.6	73.9	144.7	218.6	603.4	706.5	743.4	777.3	826.6	842.0	848.1
65°	58.5	70.8	130.8	187.7	543.3	641.8	678.8	708.1	748.1	763.5	766.6
67.5°	55.4	67.8	120.1	161.6	483.3	577.2	604.9	632.7	663.4	678.8	680.3
70°	50.8	64.7	110.8	143.2	421.7	503.3	526.4	555.6	580.3	588.0	592.6
72.5°	47.8	60.0	104.7	129.3	358.7	432.5	454.1	471.0	492.6	500.2	500.2
75°	43.1	53.9	98.5	115.4	294.0	354.0	372.5	389.4	406.3	409.4	404.8
77.5°	38.5	47.8	84.7	97.0	229.3	280.2	295.5	304.7	318.6	321.6	323.2
80°	32.3	41.6	66.2	75.4	166.2	206.2	217.0	224.7	237.1	237.1	240.1
82.5°	24.7	32.3	47.8	53.9	112.3	141.6	150.8	155.5	163.2	163.2	163.2
85°	15.4	20.0	30.7	35.4	67.8	86.2	92.3	93.9	100.1	101.6	101.6
87.5°	7.7	10.7	20.0	21.6	35.4	44.7	44.7	47.8	47.8	46.2	44.7
90°	1.9	3.4	4.9	5.3	8.3	12.3	14.3	12.6	9.5	7.1	7.1
92.5°	7.5	20.2	33.0	36.2	50.8	70.4	80.2	70.3	50.5	35.7	34.2
95°	18.0	41.3	64.7	70.5	125.2	198.0	234.5	209.2	158.7	120.9	116.6
97.5°	31.1	51.7	72.2	77.4	168.6	290.2	350.9	335.0	303.1	279.2	271.0
100°	41.2	59.9	78.6	83.2	184.4	319.3	386.8	388.0	390.3	392.1	382.3
102.5°	49.8	67.3	84.7	89.1	191.7	328.5	396.9	417.3	457.9	488.4	480.0
105°	64.5	79.2	94.0	97.7	197.0	329.6	395.8	441.4	532.5	600.9	596.4
107.5°	79.5	93.2	107.0	110.4	198.0	314.9	373.3	436.9	564.1	659.4	660.5
110°	89.6	102.0	114.4	117.5	196.6	301.9	354.6	425.6	567.8	674.4	679.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	99.5	111.3	123.2	126.2	196.6	290.5	337.5	410.2	555.7	664.9	672.0
115°	114.5	125.4	136.4	139.1	198.4	277.4	317.0	387.1	527.2	632.4	642.3
117.5°	129.4	139.3	149.2	151.6	202.1	269.3	303.0	366.2	492.7	587.5	598.5
120°	138.0	147.4	156.6	159.0	205.1	266.6	297.4	355.1	470.7	557.4	568.2
122.5°	146.5	155.9	165.3	167.6	209.4	265.2	293.0	345.0	449.2	527.2	537.8
125°	159.4	167.9	176.5	178.7	215.2	264.0	288.4	332.6	421.0	487.3	497.0
127.5°	169.8	178.6	187.2	189.4	221.0	263.3	284.4	322.4	398.2	455.2	463.4
130°	175.5	184.8	194.1	196.5	225.3	263.7	282.9	316.7	384.3	435.0	442.5
132.5°	181.3	190.7	199.9	202.3	228.8	264.0	281.6	311.8	372.3	417.7	424.5
135°	189.9	198.4	206.9	209.0	232.5	263.7	279.3	304.6	355.3	393.3	399.1
137.5°	198.8	207.1	215.6	217.7	238.1	265.3	279.0	300.4	343.2	375.3	380.1
140°	206.0	213.8	221.6	223.5	241.5	265.6	277.6	296.2	333.2	360.9	365.4
142.5°	211.7	218.9	226.0	227.8	244.4	266.5	277.6	293.9	326.4	350.8	354.6
145°	220.3	226.5	232.8	234.3	248.1	266.6	275.8	289.1	315.6	335.6	338.5
147.5°	229.0	235.1	241.1	242.6	253.7	268.4	275.8	286.3	307.2	322.8	325.3
150°	234.5	240.0	245.5	246.9	256.5	269.3	275.8	284.6	302.3	315.6	317.6
152.5°	240.3	244.5	248.7	249.7	258.4	270.0	275.8	283.4	298.5	309.7	311.2
155°	249.0	252.1	255.2	255.9	262.5	271.3	275.8	281.8	293.8	302.8	303.8
157.5°	255.3	258.3	261.3	262.1	266.6	272.7	275.8	280.4	289.8	296.8	297.5
160°	259.7	262.0	264.3	264.9	268.5	273.3	275.8	279.8	287.8	293.8	294.2
162.5°	264.0	265.7	267.4	267.9	270.5	274.1	275.8	279.2	285.9	291.0	291.4
165°	268.7	270.3	271.9	272.3	273.4	275.0	275.8	278.2	283.0	286.6	287.0
167.5°	273.0	273.7	274.4	274.6	275.6	277.0	277.6	279.3	282.4	284.8	285.0
170°	275.8	276.5	277.3	277.4	277.5	277.6	277.6	279.3	282.4	284.8	284.8
172.5°	277.3	277.4	277.6	277.6	277.6	277.6	277.6	278.9	281.4	283.3	283.1
175°	279.3	279.3	279.3	279.3	278.8	278.0	277.6	278.4	280.1	281.3	281.3
177.5°	279.3	279.3	279.3	279.3	278.9	278.3	278.1	278.7	280.0	280.9	280.7
180°	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	478.7	478.7
2.5°	511.0	507.9
5°	657.2	660.3
7.5°	885.1	883.5
10°	1100.5	1114.4
12.5°	1257.5	1260.6
15°	1353.0	1359.1
17.5°	1389.9	1391.5
20°	1391.5	1388.4
22.5°	1374.5	1371.5
25°	1354.4	1353.0
27.5°	1336.0	1337.5
30°	1328.3	1333.0
32.5°	1328.3	1336.0
35°	1331.4	1339.1
37.5°	1329.9	1339.1
40°	1323.7	1334.4
42.5°	1306.8	1314.4
45°	1280.6	1289.9
47.5°	1246.7	1252.9
50°	1203.6	1209.8
52.5°	1149.8	1151.3
55°	1085.1	1091.3
57.5°	1015.9	1017.4
60°	938.9	943.6
62.5°	857.3	857.3
65°	771.1	774.2
67.5°	681.9	689.6
70°	591.1	592.6
72.5°	501.8	501.8
75°	409.4	411.0
77.5°	321.6	321.6
80°	238.6	240.1
82.5°	164.7	167.7
85°	103.2	103.2
87.5°	47.8	43.1
90°	7.1	7.1
92.5°	28.6	22.8
95°	99.4	82.3
97.5°	238.3	205.7
100°	343.4	304.5
102.5°	446.7	413.4
105°	578.5	560.6
107.5°	664.8	669.1
110°	697.7	716.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	700.7	729.3
115°	682.0	721.8
117.5°	642.7	686.8
120°	610.9	653.8
122.5°	580.1	622.3
125°	535.9	574.8
127.5°	496.2	529.0
130°	472.9	503.2
132.5°	451.6	478.8
135°	422.6	446.0
137.5°	399.2	418.4
140°	383.3	401.2
142.5°	370.0	385.5
145°	350.2	361.9
147.5°	334.9	344.6
150°	325.4	333.2
152.5°	317.1	323.0
155°	307.7	311.6
157.5°	300.3	303.0
160°	295.8	297.4
162.5°	292.9	294.4
165°	288.6	290.3
167.5°	285.6	286.3
170°	284.8	284.8
172.5°	282.5	282.0
175°	281.3	281.3
177.5°	280.1	279.3
180°	279.3	279.3



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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	7.60	8.69	8.38	9.51	10.51	20.74	21.83	21.52	22.65	23.65
	3H	8.32	9.31	9.12	10.13	11.16	22.58	23.57	23.38	24.39	25.42
	4H	8.63	9.57	9.45	10.40	11.44	23.22	24.16	24.04	24.99	26.03
	6H	8.89	9.76	9.72	10.60	11.65	23.66	24.52	24.48	25.36	26.41
	8H	8.97	9.80	9.81	10.65	11.71	23.78	24.60	24.61	25.46	26.51
	12H	9.00	9.78	9.84	10.64	11.72	23.85	24.63	24.69	25.49	26.57
4H	2H	14.82	15.75	15.64	16.58	17.62	21.04	21.98	21.86	22.81	23.85
	3H	16.41	17.19	17.24	18.06	19.11	23.09	23.88	23.93	24.74	25.80
	4H	16.51	17.23	17.36	18.09	19.18	23.86	24.58	24.71	25.44	26.52
	6H	16.54	17.16	17.40	18.05	19.13	24.40	25.02	25.26	25.91	27.00
	8H	16.52	17.10	17.39	17.99	19.09	24.56	25.14	25.43	26.03	27.13
	12H	16.49	17.02	17.38	17.92	19.02	24.66	25.18	25.55	26.09	27.19
8H	4H	17.97	18.55	18.83	19.43	20.53	23.94	24.52	24.81	25.41	26.51
	6H	18.22	18.71	19.12	19.63	20.73	24.57	25.05	25.46	25.98	27.08
	8H	18.24	18.67	19.15	19.59	20.71	24.79	25.21	25.69	26.13	27.25
	12H	18.22	18.60	19.13	19.51	20.68	24.93	25.31	25.84	26.22	27.39
12H	4H	18.12	18.65	19.01	19.55	20.65	23.91	24.43	24.79	25.33	26.44
	6H	18.48	18.91	19.38	19.83	20.94	24.56	24.99	25.46	25.90	27.02
	8H	18.56	18.94	19.47	19.85	21.02	24.79	25.17	25.70	26.08	27.25