

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: P936960

Luminaire Tested: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936960
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-93050-1D-UNV-STD-W-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

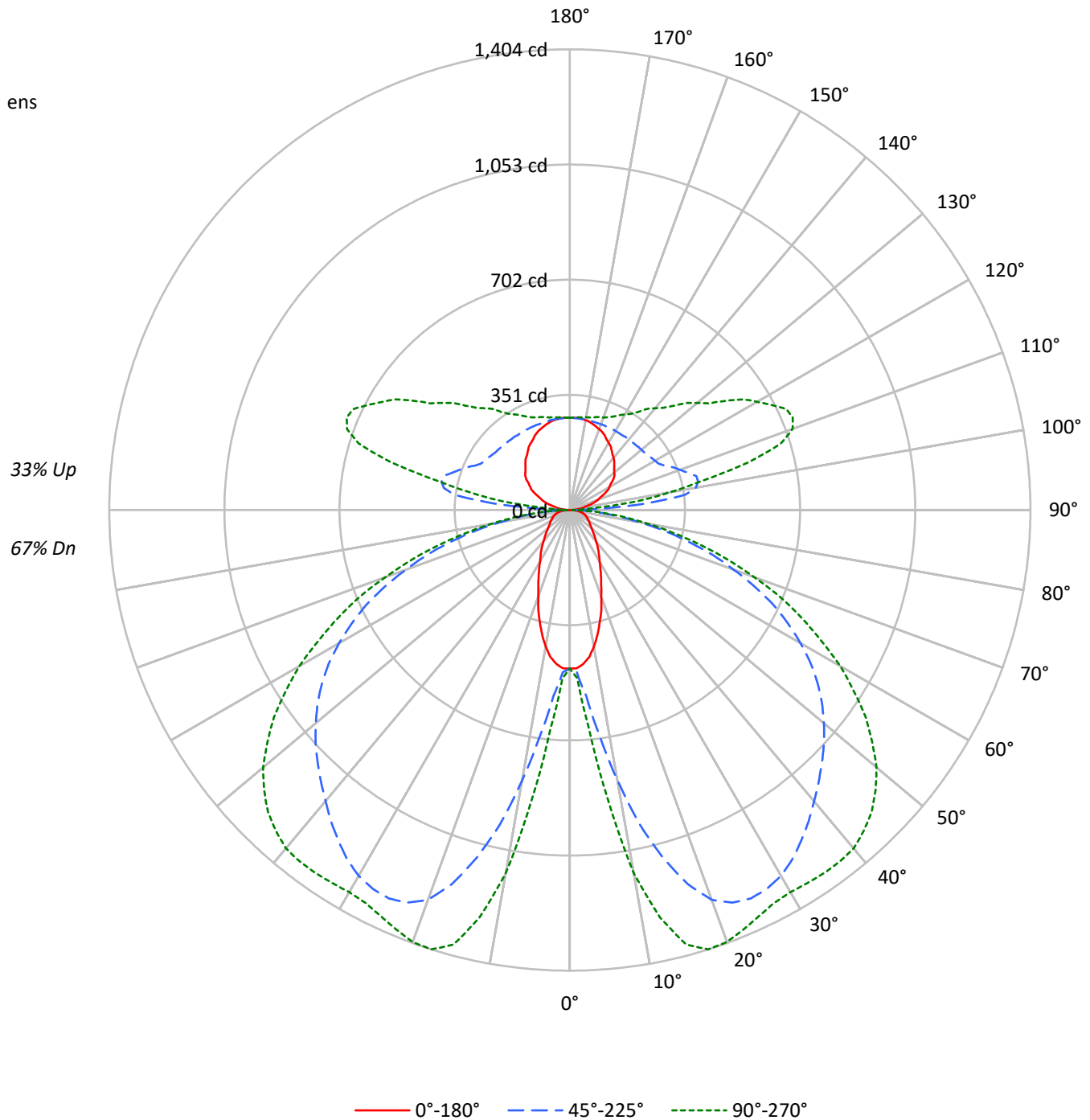
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5564.0 lumens
Efficiency: N/A
Efficacy: 99.4 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 (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

TEST NUMBER: P936960
CATALOG NUMBER: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-4-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P936960

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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°	4481	4481	4481
5°	4373	5175	6024
10°	3962	7538	9986
15°	3364	9842	12058
20°	2735	11397	12289
25°	2279	11918	12040
30°	1919	11984	12017
35°	1694	11775	12327
40°	1475	11507	12648
45°	1333	11308	12698
50°	1220	11126	12487
55°	1164	10865	11934
60°	1188	10374	11060
65°	1230	9633	9859
70°	1300	8385	8330
75°	1426	6819	6500
80°	1526	4713	4381
85°	1283	2485	2243

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12698 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.5	1.1
10°-20°	276.9	5.0
20°-30°	484.3	8.7
30°-40°	623.4	11.2
40°-50°	696.3	12.5
50°-60°	666.9	12.0
60°-70°	528.5	9.5
70°-80°	310.8	5.6
80°-90°	87.4	1.6
90°-100°	137.4	2.5
100°-110°	361.2	6.5
110°-120°	374.5	6.7
120°-130°	300.4	5.4
130°-140°	235.7	4.2
140°-150°	180.9	3.3
150°-160°	130.3	2.3
160°-170°	79.7	1.4
170°-180°	26.9	0.5
0°-30°	823.6	14.8
0°-40°	1447.0	26.0
0°-60°	2810.3	50.5
0°-90°	3737.0	67.2
90°-120°	873.0	15.7
90°-150°	1590.0	28.6
90°-180°	1827.0	32.8
0°-180°	5564.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	483	483	483	483	483	
5°	470	505	568	643	666	43
15°	352	651	1096	1329	1371	98
25°	225	738	1306	1363	1365	104
35°	152	705	1230	1300	1351	95
45°	104	562	1087	1245	1301	80
55°	74	357	922	1071	1101	68
65°	59	189	685	770	781	58
75°	44	116	376	413	415	46
85°	16	36	93	102	104	16
90°	2	5	14	7	7	3
95°	18	71	237	122	83	20
105°	65	99	399	606	566	69
115°	116	140	320	638	728	114
125°	161	180	291	492	580	143
135°	192	211	282	397	450	148
145°	222	236	278	338	365	139
155°	251	258	278	306	314	115
165°	271	275	278	289	293	76
175°	282	282	280	284	284	27
180°	282	282	282	282	282	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	482.9	482.9	482.9	482.9	482.9	482.9	482.9	482.9	482.9	482.9	482.9
2.5°	482.9	482.9	486.0	487.6	490.7	492.3	495.4	498.5	507.8	509.3	512.4
5°	470.5	476.7	496.9	504.6	526.4	555.9	568.3	588.5	630.5	642.8	650.6
7.5°	451.9	465.8	515.6	527.9	582.3	659.9	692.6	736.1	802.8	835.4	861.8
10°	422.3	451.9	540.3	569.9	658.4	776.4	836.9	897.5	998.5	1043.5	1060.6
12.5°	389.7	437.9	566.8	607.1	734.5	906.9	979.8	1046.6	1161.5	1222.1	1231.4
15°	352.5	417.7	591.6	650.6	815.2	1015.5	1096.3	1178.6	1285.8	1329.2	1340.1
17.5°	319.9	402.2	614.9	677.1	877.3	1113.3	1195.7	1264.0	1350.9	1380.5	1388.2
20°	279.5	377.4	630.5	711.2	942.6	1184.8	1264.0	1316.8	1375.8	1394.4	1397.6
22.5°	250.0	350.9	639.7	723.6	986.1	1228.2	1295.1	1337.0	1377.4	1383.6	1385.1
25°	225.2	321.5	638.3	737.6	1023.3	1254.7	1306.0	1337.0	1360.3	1363.4	1363.4
27.5°	201.9	288.8	632.0	740.7	1051.2	1260.9	1301.3	1323.0	1333.9	1340.1	1340.1
30°	181.7	257.8	616.5	734.5	1063.7	1254.7	1287.3	1298.2	1309.0	1318.4	1323.0
32.5°	166.2	228.2	593.2	722.0	1065.3	1239.2	1262.5	1268.6	1284.2	1306.0	1313.7
35°	152.2	198.8	566.8	705.0	1055.9	1214.3	1229.8	1236.0	1267.1	1299.7	1310.6
37.5°	138.2	177.0	532.6	675.5	1042.0	1184.8	1195.7	1206.6	1254.7	1293.5	1306.0
40°	124.3	158.4	492.3	642.8	1020.2	1149.0	1158.4	1175.5	1239.2	1284.2	1296.6
42.5°	113.3	142.9	448.8	608.7	992.2	1108.8	1122.7	1147.6	1220.5	1268.6	1282.7
45°	104.1	127.4	402.2	562.1	956.5	1066.8	1087.0	1121.1	1198.8	1245.4	1257.8
47.5°	94.7	116.5	354.0	514.0	917.7	1024.9	1051.2	1090.1	1169.2	1214.3	1225.2
50°	87.0	105.6	305.9	462.7	875.8	979.8	1010.9	1051.2	1132.0	1173.9	1188.0
52.5°	80.8	96.3	260.9	411.5	827.7	933.2	969.0	1010.9	1087.0	1127.4	1136.7
55°	74.5	88.5	222.1	357.2	777.9	883.6	922.4	962.8	1037.3	1071.4	1077.6
57.5°	71.4	82.3	189.4	305.9	725.2	827.7	871.2	908.4	978.3	1004.7	1010.9
60°	66.8	77.6	164.6	262.5	667.7	774.9	812.2	849.4	908.4	930.2	934.8
62.5°	62.1	74.5	146.0	220.5	608.7	712.8	750.0	784.2	833.9	849.4	855.6
65°	59.0	71.4	132.0	189.4	548.1	647.5	684.8	714.3	754.7	770.2	773.3
67.5°	55.9	68.4	121.1	163.1	487.6	582.3	610.3	638.3	669.3	684.8	686.3
70°	51.2	65.2	111.8	144.4	425.4	507.8	531.1	560.5	585.4	593.2	597.9
72.5°	48.2	60.6	105.6	130.4	361.8	436.4	458.1	475.2	496.9	504.6	504.6
75°	43.5	54.3	99.4	116.5	296.6	357.2	375.8	392.9	409.9	413.1	408.4
77.5°	38.8	48.2	85.4	97.8	231.4	282.7	298.2	307.4	321.5	324.5	326.1
80°	32.6	41.9	66.8	76.1	167.7	208.0	219.0	226.7	239.2	239.2	242.3
82.5°	24.9	32.6	48.2	54.3	113.3	142.9	152.2	156.8	164.6	164.6	164.6
85°	15.5	20.2	31.0	35.7	68.4	87.0	93.1	94.7	100.9	102.5	102.5
87.5°	7.8	10.8	20.2	21.7	35.7	45.1	45.1	48.2	48.2	46.6	45.1
90°	1.9	3.4	5.0	5.3	8.4	12.4	14.4	12.8	9.5	7.2	7.2
92.5°	7.5	20.4	33.3	36.5	51.3	71.0	80.9	70.9	50.9	36.0	34.5
95°	18.2	41.7	65.2	71.1	126.3	199.8	236.6	211.1	160.1	122.0	117.6
97.5°	31.4	52.1	72.9	78.1	170.0	292.7	354.0	338.0	305.8	281.6	273.4
100°	41.6	60.4	79.3	84.0	186.0	322.1	390.2	391.4	393.8	395.5	385.7
102.5°	50.3	67.9	85.4	89.8	193.4	331.4	400.4	420.9	462.0	492.7	484.3
105°	65.1	79.9	94.8	98.6	198.8	332.5	399.3	445.3	537.2	606.2	601.7
107.5°	80.2	94.1	107.9	111.4	199.8	317.7	376.6	440.8	569.1	665.2	666.3
110°	90.4	102.9	115.4	118.6	198.3	304.6	357.7	429.4	572.8	680.4	685.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	100.4	112.3	124.3	127.3	198.3	293.1	340.5	413.9	560.6	670.7	678.0
115°	115.5	126.6	137.6	140.3	200.1	279.9	319.8	390.5	531.9	638.0	648.0
117.5°	130.5	140.5	150.5	153.0	203.9	271.7	305.7	369.5	497.0	592.7	603.8
120°	139.2	148.7	158.0	160.4	206.9	269.0	300.0	358.3	474.9	562.4	573.2
122.5°	147.7	157.3	166.7	169.1	211.3	267.5	295.6	348.1	453.2	531.9	542.5
125°	160.8	169.4	178.0	180.2	217.1	266.3	290.9	335.5	424.7	491.6	501.4
127.5°	171.3	180.1	188.9	191.1	223.0	265.7	287.0	325.2	401.8	459.2	467.5
130°	177.0	186.5	195.8	198.2	227.3	266.0	285.4	319.5	387.7	438.8	446.5
132.5°	182.9	192.3	201.7	204.1	230.8	266.3	284.1	314.6	375.6	421.4	428.3
135°	191.6	200.1	208.8	210.9	234.6	266.0	281.8	307.3	358.5	396.8	402.7
137.5°	200.5	209.0	217.5	219.6	240.3	267.7	281.5	303.0	346.2	378.6	383.5
140°	207.9	215.7	223.6	225.5	243.6	268.0	280.1	298.8	336.2	364.1	368.6
142.5°	213.5	220.8	228.0	229.8	246.6	268.9	280.1	296.5	329.3	353.9	357.7
145°	222.3	228.5	234.8	236.4	250.3	269.0	278.2	291.6	318.4	338.5	341.5
147.5°	231.0	237.1	243.2	244.7	255.9	270.8	278.2	288.8	309.9	325.7	328.2
150°	236.6	242.1	247.7	249.1	258.8	271.7	278.2	287.1	305.0	318.3	320.4
152.5°	242.5	246.7	250.9	251.9	260.7	272.4	278.2	285.9	301.1	312.5	313.9
155°	251.2	254.3	257.4	258.1	264.8	273.7	278.2	284.3	296.4	305.5	306.5
157.5°	257.6	260.6	263.7	264.4	269.0	275.1	278.2	282.9	292.4	299.4	300.2
160°	262.0	264.3	266.7	267.2	270.9	275.8	278.2	282.3	290.4	296.4	296.8
162.5°	266.3	268.1	269.8	270.3	272.9	276.5	278.2	281.6	288.4	293.6	293.9
165°	271.1	272.6	274.3	274.7	275.9	277.4	278.2	280.6	285.5	289.2	289.5
167.5°	275.4	276.1	276.9	277.1	278.1	279.4	280.1	281.7	284.9	287.3	287.5
170°	278.2	279.0	279.7	279.9	280.0	280.1	280.1	281.7	284.9	287.3	287.3
172.5°	279.7	279.9	280.1	280.1	280.1	280.1	280.1	281.4	283.8	285.8	285.6
175°	281.8	281.8	281.8	281.8	281.3	280.4	280.1	280.9	282.6	283.8	283.8
177.5°	281.8	281.8	281.8	281.8	281.4	280.8	280.5	281.2	282.5	283.4	283.2
180°	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	482.9	482.9
2.5°	515.6	512.4
5°	663.0	666.2
7.5°	892.9	891.4
10°	1110.2	1124.3
12.5°	1268.6	1271.7
15°	1365.0	1371.1
17.5°	1402.2	1403.8
20°	1403.8	1400.7
22.5°	1386.6	1383.6
25°	1366.4	1365.0
27.5°	1347.8	1349.4
30°	1340.1	1344.8
32.5°	1340.1	1347.8
35°	1343.2	1350.9
37.5°	1341.7	1350.9
40°	1335.4	1346.3
42.5°	1318.4	1326.1
45°	1291.9	1301.3
47.5°	1257.8	1264.0
50°	1214.3	1220.5
52.5°	1160.0	1161.5
55°	1094.7	1101.0
57.5°	1024.9	1026.4
60°	947.2	951.9
62.5°	864.9	864.9
65°	777.9	781.1
67.5°	687.9	695.7
70°	596.3	597.9
72.5°	506.2	506.2
75°	413.1	414.6
77.5°	324.5	324.5
80°	240.7	242.3
82.5°	166.2	169.2
85°	104.1	104.1
87.5°	48.2	43.5
90°	7.2	7.2
92.5°	28.8	23.0
95°	100.3	83.1
97.5°	240.4	207.5
100°	346.4	307.2
102.5°	450.7	417.1
105°	583.7	565.6
107.5°	670.7	675.1
110°	703.9	722.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	706.9	735.8
115°	688.1	728.2
117.5°	648.4	692.9
120°	616.3	659.5
122.5°	585.2	627.8
125°	540.6	579.9
127.5°	500.6	533.7
130°	477.1	507.7
132.5°	455.6	483.1
135°	426.4	449.9
137.5°	402.8	422.1
140°	386.7	404.8
142.5°	373.3	388.9
145°	353.3	365.1
147.5°	337.9	347.6
150°	328.3	336.2
152.5°	319.9	325.9
155°	310.5	314.4
157.5°	302.9	305.7
160°	298.4	300.0
162.5°	295.5	297.0
165°	291.2	292.8
167.5°	288.2	288.8
170°	287.3	287.3
172.5°	285.0	284.5
175°	283.8	283.8
177.5°	282.6	281.8
180°	281.8	281.8



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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	7.63	8.72	8.41	9.54	10.54	20.77	21.86	21.55	22.68	23.68
	3H	8.35	9.34	9.15	10.16	11.19	22.61	23.60	23.41	24.42	25.45
	4H	8.66	9.60	9.48	10.43	11.47	23.25	24.19	24.07	25.02	26.06
	6H	8.92	9.79	9.75	10.63	11.68	23.69	24.55	24.51	25.39	26.44
	8H	9.00	9.83	9.84	10.68	11.74	23.81	24.63	24.64	25.49	26.54
	12H	9.03	9.81	9.87	10.67	11.75	23.88	24.66	24.72	25.52	26.60
4H	2H	14.85	15.78	15.67	16.62	17.65	21.07	22.01	21.89	22.84	23.88
	3H	16.44	17.22	17.27	18.09	19.14	23.12	23.91	23.96	24.77	25.83
	4H	16.54	17.26	17.39	18.12	19.21	23.89	24.61	24.74	25.47	26.55
	6H	16.57	17.19	17.43	18.08	19.16	24.43	25.05	25.29	25.94	27.03
	8H	16.55	17.13	17.42	18.02	19.12	24.59	25.17	25.46	26.06	27.16
	12H	16.52	17.05	17.41	17.95	19.05	24.69	25.22	25.58	26.12	27.22
8H	4H	18.00	18.58	18.86	19.46	20.56	23.97	24.55	24.84	25.44	26.54
	6H	18.25	18.74	19.15	19.66	20.76	24.60	25.08	25.49	26.01	27.11
	8H	18.27	18.70	19.18	19.62	20.74	24.82	25.24	25.72	26.16	27.28
	12H	18.25	18.63	19.16	19.54	20.71	24.96	25.34	25.87	26.25	27.42
12H	4H	18.15	18.68	19.04	19.58	20.68	23.94	24.46	24.82	25.36	26.47
	6H	18.51	18.94	19.41	19.86	20.97	24.59	25.02	25.49	25.93	27.05
	8H	18.59	18.97	19.50	19.88	21.05	24.82	25.20	25.73	26.11	27.28