

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: P936936

Luminaire Tested: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-4-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936936
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-4-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

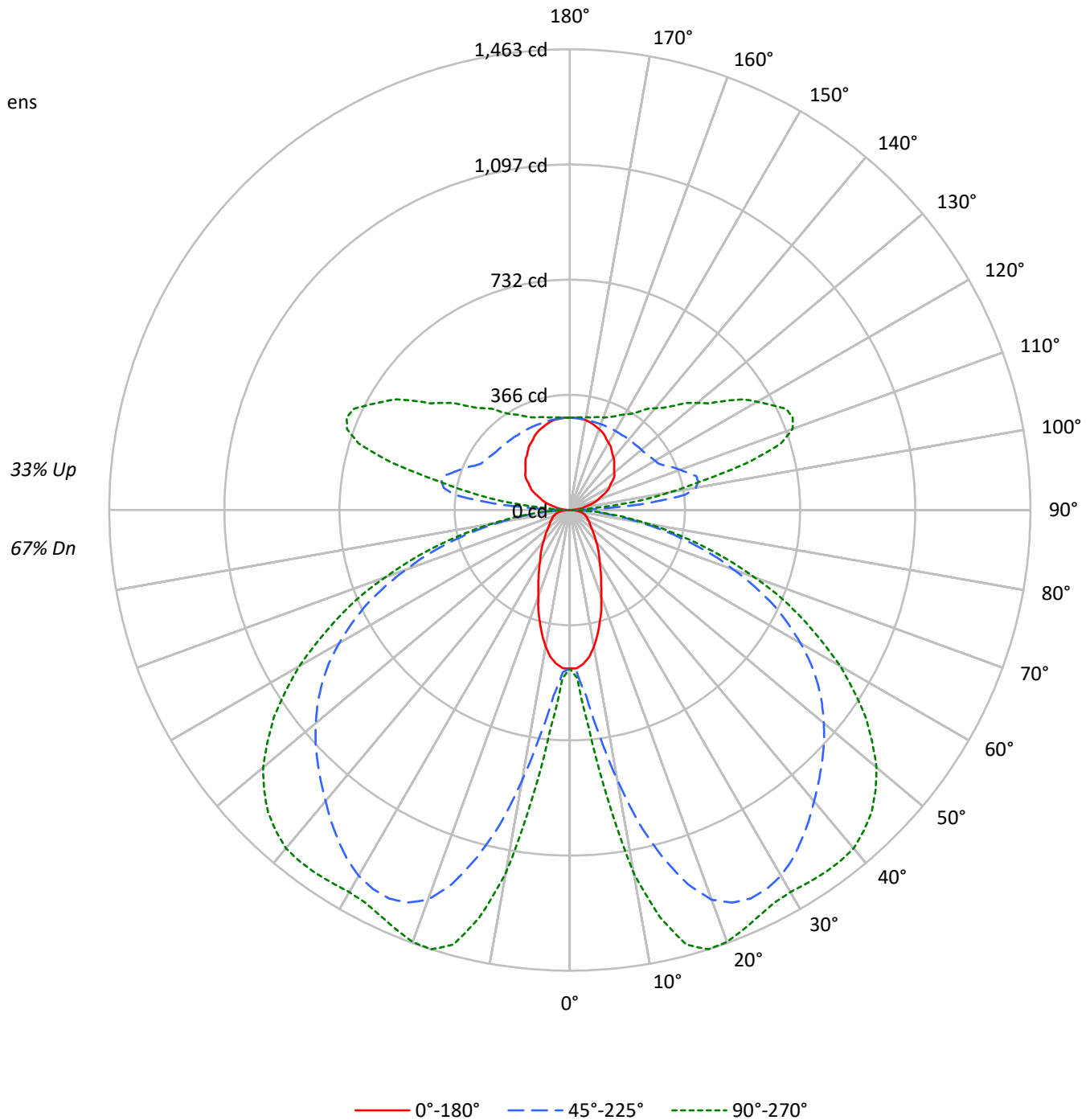
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5797.4 lumens
Efficiency: N/A
Efficacy: 103.5 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: P936936
CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-4-6500K

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	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°	4668	4668	4668
5°	4556	5393	6276
10°	4128	7854	10405
15°	3505	10255	12563
20°	2851	11876	12804
25°	2374	12418	12544
30°	1999	12486	12521
35°	1765	12269	12844
40°	1536	11990	13178
45°	1388	11782	13231
50°	1270	11593	13011
55°	1212	11321	12434
60°	1238	10809	11525
65°	1282	10037	10272
70°	1356	8735	8679
75°	1486	7105	6773
80°	1587	4909	4563
85°	1341	2592	2336

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13231 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.1	1.1
10°-20°	288.5	5.0
20°-30°	504.6	8.7
30°-40°	649.6	11.2
40°-50°	725.5	12.5
50°-60°	694.9	12.0
60°-70°	550.7	9.5
70°-80°	323.8	5.6
80°-90°	91.1	1.6
90°-100°	143.1	2.5
100°-110°	376.3	6.5
110°-120°	390.2	6.7
120°-130°	313.0	5.4
130°-140°	245.6	4.2
140°-150°	188.5	3.3
150°-160°	135.8	2.3
160°-170°	83.1	1.4
170°-180°	28.1	0.5
0°-30°	858.2	14.8
0°-40°	1507.7	26.0
0°-60°	2928.2	50.5
0°-90°	3893.8	67.2
90°-120°	909.6	15.7
90°-150°	1656.7	28.6
90°-180°	1904.0	32.8
0°-180°	5797.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	503	503	503	503	503	
5°	490	526	592	670	694	45
15°	367	678	1142	1385	1429	102
25°	235	768	1361	1421	1422	108
35°	158	734	1281	1354	1408	99
45°	108	586	1133	1298	1356	84
55°	78	372	961	1116	1147	71
65°	62	197	714	802	814	61
75°	45	121	392	430	432	47
85°	16	37	97	107	108	17
90°	2	6	15	8	8	3
95°	19	74	246	127	86	21
105°	68	103	416	632	589	72
115°	120	146	333	665	759	119
125°	168	188	303	512	604	149
135°	200	220	294	414	469	154
145°	232	246	290	353	380	145
155°	262	269	290	318	328	120
165°	282	286	290	301	305	80
175°	294	294	292	296	296	28
180°	294	294	294	294	294	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	503.1	503.1	503.1	503.1	503.1	503.1	503.1	503.1	503.1	503.1	503.1
2.5°	503.1	503.1	506.4	508.0	511.3	512.9	516.2	519.4	529.1	530.7	533.9
5°	490.2	496.7	517.8	525.8	548.5	579.3	592.2	613.2	656.9	669.8	677.9
7.5°	470.8	485.4	537.2	550.1	606.7	687.6	721.6	767.0	836.5	870.4	898.0
10°	440.0	470.8	563.0	593.8	686.0	808.9	872.0	935.2	1040.3	1087.3	1105.1
12.5°	406.1	456.3	590.5	632.6	765.3	944.9	1020.9	1090.5	1210.3	1273.4	1283.0
15°	367.3	435.3	616.5	677.9	849.4	1058.1	1142.3	1228.0	1339.7	1384.9	1396.3
17.5°	333.3	419.1	640.7	705.5	914.1	1160.1	1245.8	1317.1	1407.6	1438.4	1446.4
20°	291.3	393.2	656.9	741.0	982.1	1234.5	1317.1	1372.0	1433.5	1452.9	1456.2
22.5°	260.5	365.6	666.6	754.0	1027.4	1279.8	1349.4	1393.1	1435.2	1441.7	1443.2
25°	234.6	335.0	665.0	768.5	1066.3	1307.3	1360.8	1393.1	1417.4	1420.6	1420.6
27.5°	210.4	300.9	658.5	771.7	1095.3	1313.8	1355.9	1378.5	1389.8	1396.3	1396.3
30°	189.3	268.6	642.4	765.3	1108.3	1307.3	1341.3	1352.6	1363.9	1373.7	1378.5
32.5°	173.2	237.8	618.1	752.3	1109.9	1291.1	1315.4	1321.8	1338.1	1360.8	1368.8
35°	158.5	207.1	590.5	734.5	1100.2	1265.2	1281.4	1287.9	1320.2	1354.3	1365.5
37.5°	144.0	184.4	555.0	703.9	1085.7	1234.5	1245.8	1257.2	1307.3	1347.8	1360.8
40°	129.5	165.0	512.9	669.8	1063.0	1197.2	1207.0	1224.8	1291.1	1338.1	1351.0
42.5°	118.1	148.9	467.6	634.2	1033.8	1155.3	1169.8	1195.7	1271.7	1321.8	1336.5
45°	108.4	132.7	419.1	585.7	996.6	1111.6	1132.6	1168.2	1249.1	1297.6	1310.6
47.5°	98.7	121.3	368.9	535.6	956.2	1067.9	1095.3	1135.9	1218.3	1265.2	1276.6
50°	90.6	110.1	318.7	482.1	912.5	1020.9	1053.3	1095.3	1179.5	1223.2	1237.8
52.5°	84.1	100.3	271.8	428.8	862.4	972.4	1009.6	1053.3	1132.6	1174.7	1184.3
55°	77.6	92.2	231.4	372.2	810.6	920.6	961.1	1003.1	1080.8	1116.4	1122.9
57.5°	74.4	85.8	197.4	318.7	755.6	862.4	907.7	946.5	1019.3	1046.8	1053.3
60°	69.6	80.9	171.5	273.5	695.7	807.4	846.2	885.1	946.5	969.2	974.0
62.5°	64.7	77.6	152.1	229.8	634.2	742.7	781.5	817.1	868.9	885.1	891.5
65°	61.5	74.4	137.5	197.4	571.1	674.7	713.5	744.3	786.4	802.5	805.8
67.5°	58.2	71.2	126.2	169.9	508.0	606.7	635.9	665.0	697.4	713.5	715.1
70°	53.4	68.0	116.5	150.5	443.3	529.1	553.3	584.0	610.0	618.1	623.0
72.5°	50.2	63.1	110.1	135.9	377.0	454.7	477.3	495.1	517.8	525.8	525.8
75°	45.3	56.6	103.6	121.3	309.0	372.2	391.6	409.3	427.1	430.4	425.5
77.5°	40.4	50.2	89.0	101.9	241.1	294.5	310.7	320.3	335.0	338.1	339.7
80°	33.9	43.7	69.6	79.3	174.7	216.8	228.1	236.2	249.2	249.2	252.4
82.5°	25.9	33.9	50.2	56.6	118.1	148.9	158.5	163.4	171.5	171.5	171.5
85°	16.2	21.0	32.3	37.2	71.2	90.6	97.1	98.7	105.2	106.8	106.8
87.5°	8.1	11.3	21.0	22.7	37.2	46.9	46.9	50.2	50.2	48.6	46.9
90°	2.0	3.5	5.2	5.5	8.7	12.9	15.0	13.3	9.9	7.5	7.5
92.5°	7.8	21.2	34.7	38.1	53.5	74.0	84.3	73.9	53.1	37.5	36.0
95°	18.9	43.4	68.0	74.1	131.6	208.2	246.5	219.9	166.9	127.1	122.6
97.5°	32.7	54.3	75.9	81.4	177.2	305.0	368.9	352.2	318.6	293.5	284.8
100°	43.3	62.9	82.6	87.5	193.8	335.6	406.6	407.8	410.3	412.1	401.9
102.5°	52.4	70.8	89.0	93.6	201.5	345.3	417.2	438.6	481.3	513.4	504.6
105°	67.8	83.3	98.8	102.7	207.1	346.4	416.0	463.9	559.8	631.7	627.0
107.5°	83.6	98.0	112.4	116.1	208.2	331.0	392.4	459.3	592.9	693.1	694.3
110°	94.2	107.2	120.3	123.5	206.6	317.4	372.7	447.4	596.9	708.9	713.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	104.6	117.0	129.5	132.6	206.6	305.4	354.7	431.2	584.1	698.9	706.4
115°	120.4	131.9	143.3	146.2	208.5	291.6	333.2	406.9	554.2	664.7	675.2
117.5°	136.0	146.4	156.8	159.4	212.5	283.1	318.5	385.0	517.9	617.6	629.2
120°	145.1	154.9	164.7	167.1	215.6	280.3	312.6	373.3	494.8	586.0	597.2
122.5°	153.9	163.9	173.7	176.2	220.1	278.7	308.0	362.7	472.2	554.2	565.3
125°	167.5	176.5	185.5	187.8	226.2	277.5	303.1	349.6	442.5	512.2	522.5
127.5°	178.5	187.7	196.8	199.1	232.4	276.8	299.0	338.9	418.6	478.5	487.1
130°	184.4	194.3	204.1	206.5	236.8	277.2	297.4	332.9	404.0	457.3	465.2
132.5°	190.6	200.4	210.2	212.7	240.5	277.5	296.0	327.8	391.4	439.1	446.3
135°	199.7	208.5	217.5	219.7	244.4	277.2	293.6	320.2	373.5	413.5	419.6
137.5°	208.9	217.7	226.6	228.8	250.3	278.9	293.3	315.7	360.8	394.5	399.6
140°	216.6	224.7	232.9	234.9	253.9	279.2	291.8	311.3	350.3	379.4	384.1
142.5°	222.5	230.1	237.5	239.4	256.9	280.2	291.8	308.9	343.1	368.7	372.7
145°	231.6	238.1	244.7	246.3	260.8	280.3	289.9	303.9	331.8	352.7	355.8
147.5°	240.7	247.1	253.4	255.0	266.7	282.2	289.9	300.9	322.9	339.4	341.9
150°	246.5	252.2	258.1	259.5	269.6	283.1	289.9	299.2	317.7	331.7	333.8
152.5°	252.6	257.0	261.4	262.5	271.7	283.8	289.9	297.9	313.7	325.6	327.1
155°	261.7	265.0	268.2	269.0	276.0	285.2	289.9	296.2	308.9	318.3	319.4
157.5°	268.4	271.6	274.7	275.5	280.3	286.7	289.9	294.8	304.6	312.0	312.8
160°	273.0	275.4	277.9	278.4	282.3	287.3	289.9	294.1	302.5	308.9	309.2
162.5°	277.5	279.3	281.1	281.6	284.4	288.1	289.9	293.5	300.5	305.9	306.3
165°	282.5	284.1	285.8	286.2	287.4	289.1	289.9	292.4	297.5	301.3	301.7
167.5°	287.0	287.7	288.5	288.7	289.7	291.2	291.8	293.6	296.9	299.4	299.6
170°	289.9	290.7	291.4	291.6	291.7	291.8	291.8	293.6	296.9	299.4	299.4
172.5°	291.4	291.6	291.8	291.8	291.8	291.8	291.8	293.2	295.8	297.8	297.6
175°	293.6	293.6	293.6	293.6	293.1	292.2	291.8	292.7	294.4	295.7	295.7
177.5°	293.6	293.6	293.6	293.6	293.2	292.6	292.3	293.0	294.3	295.3	295.1
180°	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	503.1	503.1
2.5°	537.2	533.9
5°	690.8	694.1
7.5°	930.4	928.8
10°	1156.8	1171.4
12.5°	1321.8	1325.1
15°	1422.2	1428.6
17.5°	1461.1	1462.7
20°	1462.7	1459.4
22.5°	1444.8	1441.7
25°	1423.8	1422.2
27.5°	1404.4	1406.0
30°	1396.3	1401.2
32.5°	1396.3	1404.4
35°	1399.6	1407.6
37.5°	1398.0	1407.6
40°	1391.5	1402.7
42.5°	1373.7	1381.7
45°	1346.1	1355.9
47.5°	1310.6	1317.1
50°	1265.2	1271.7
52.5°	1208.6	1210.3
55°	1140.6	1147.1
57.5°	1067.9	1069.5
60°	987.0	991.9
62.5°	901.2	901.2
65°	810.6	813.8
67.5°	716.8	724.9
70°	621.3	623.0
72.5°	527.4	527.4
75°	430.4	432.0
77.5°	338.1	338.1
80°	250.8	252.4
82.5°	173.2	176.3
85°	108.4	108.4
87.5°	50.2	45.3
90°	7.5	7.5
92.5°	30.0	24.0
95°	104.5	86.5
97.5°	250.5	216.2
100°	361.0	320.0
102.5°	469.6	434.6
105°	608.1	589.3
107.5°	698.8	703.4
110°	733.4	753.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	736.6	766.7
115°	717.0	758.7
117.5°	675.6	721.9
120°	642.2	687.2
122.5°	609.8	654.1
125°	563.3	604.2
127.5°	521.6	556.1
130°	497.1	529.0
132.5°	474.7	503.3
135°	444.2	468.8
137.5°	419.7	439.8
140°	402.9	421.8
142.5°	389.0	405.2
145°	368.1	380.4
147.5°	352.1	362.2
150°	342.0	350.3
152.5°	333.3	339.5
155°	323.5	327.6
157.5°	315.6	318.5
160°	311.0	312.6
162.5°	307.9	309.4
165°	303.4	305.1
167.5°	300.2	300.9
170°	299.4	299.4
172.5°	297.0	296.4
175°	295.7	295.7
177.5°	294.4	293.6
180°	293.6	293.6



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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	7.77	8.87	8.56	9.68	10.68	20.91	22.01	21.70	22.82	23.82
	3H	8.50	9.48	9.29	10.31	11.34	22.75	23.74	23.55	24.56	25.59
	4H	8.81	9.74	9.62	10.57	11.61	23.40	24.33	24.21	25.17	26.20
	6H	9.07	9.93	9.90	10.77	11.83	23.83	24.69	24.66	25.53	26.59
	8H	9.14	9.97	9.98	10.83	11.88	23.95	24.77	24.79	25.63	26.69
	12H	9.17	9.96	10.01	10.81	11.89	24.02	24.81	24.86	25.66	26.74
4H	2H	14.99	15.93	15.81	16.76	17.80	21.21	22.15	22.03	22.98	24.02
	3H	16.58	17.37	17.41	18.23	19.29	23.27	24.05	24.10	24.92	25.97
	4H	16.69	17.40	17.53	18.27	19.35	24.03	24.75	24.88	25.61	26.70
	6H	16.71	17.33	17.57	18.22	19.31	24.57	25.20	25.44	26.08	27.17
	8H	16.70	17.28	17.56	18.16	19.26	24.74	25.32	25.60	26.20	27.30
	12H	16.66	17.19	17.55	18.09	19.20	24.83	25.36	25.72	26.26	27.37
8H	4H	18.14	18.72	19.01	19.61	20.71	24.12	24.70	24.98	25.58	26.68
	6H	18.40	18.88	19.29	19.80	20.90	24.74	25.23	25.64	26.15	27.25
	8H	18.42	18.85	19.32	19.76	20.88	24.96	25.39	25.86	26.30	27.42
	12H	18.40	18.78	19.31	19.69	20.85	25.11	25.48	26.01	26.39	27.56
12H	4H	18.29	18.82	19.18	19.72	20.83	24.08	24.60	24.97	25.51	26.61
	6H	18.65	19.08	19.56	20.00	21.12	24.73	25.16	25.63	26.08	27.19
	8H	18.73	19.11	19.64	20.02	21.19	24.96	25.34	25.87	26.25	27.42