

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: P936837

Luminaire Tested: SQ4-FB-050U-100D-92765-1D-UNV-STD-W-6-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936837
REPORT IS A COMBINATION OF REPORTS P933479 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-100D-92765-1D-UNV-STD-W-6-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

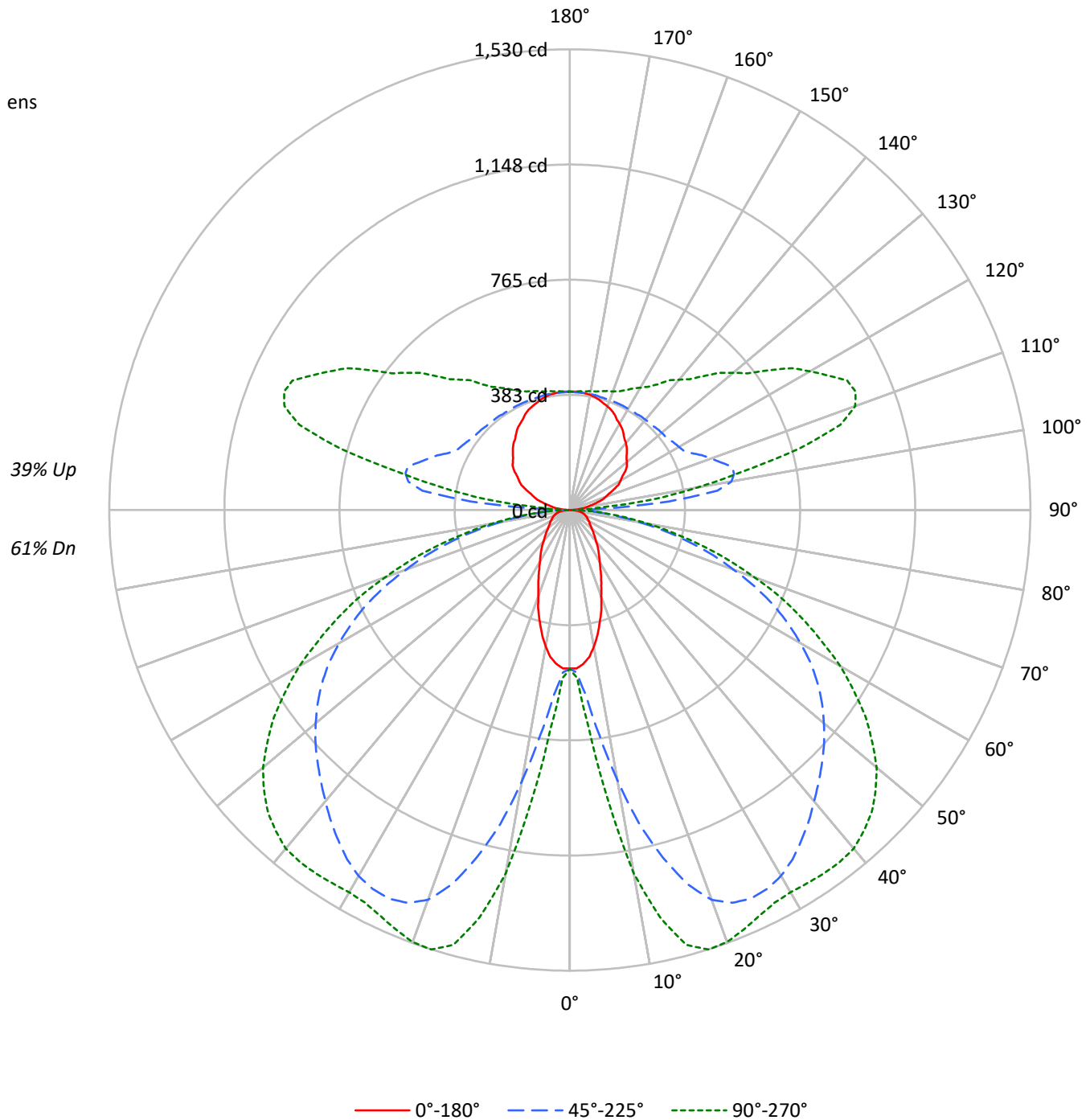
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6624.6 lumens
Efficiency: N/A
Efficacy: 97.7 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): 67.8
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: P936837
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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61
1	100	95	91	87	93	89	85	82	78	75	72	67	65	63	58	56	55	50
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	48	45	41
3	82	72	64	57	76	67	60	54	59	53	49	51	47	43	44	40	38	34
4	74	63	54	48	69	59	51	45	52	46	41	45	40	36	39	35	32	28
5	68	56	47	41	63	52	44	39	46	40	35	40	35	31	34	30	27	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	23	21
7	58	45	36	30	54	42	34	29	37	31	26	32	27	23	28	24	21	18
8	53	40	32	26	50	38	30	25	34	27	23	29	24	20	25	21	18	16
9	50	37	29	23	46	35	27	22	31	24	20	27	22	18	23	19	16	14
10	46	33	26	21	43	32	25	20	28	22	18	25	20	16	21	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3256	3256	3256
5°	3180	3763	4377
10°	2884	5484	7257
15°	2450	7163	8762
20°	1994	8299	8930
25°	1663	8682	8749
30°	1402	8734	8733
35°	1238	8587	8959
40°	1078	8396	9192
45°	976	8256	9228
50°	895	8129	9075
55°	855	7944	8672
60°	875	7592	8037
65°	909	7058	7164
70°	967	6151	6053
75°	1067	5010	4723
80°	1155	3470	3183
85°	1008	1839	1629

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9228 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.1	1.0
10°-20°	301.8	4.6
20°-30°	527.9	8.0
30°-40°	679.6	10.3
40°-50°	759.1	11.5
50°-60°	727.0	11.0
60°-70°	576.1	8.7
70°-80°	338.8	5.1
80°-90°	95.6	1.4
90°-100°	191.8	2.9
100°-110°	504.2	7.6
110°-120°	522.8	7.9
120°-130°	419.4	6.3
130°-140°	329.1	5.0
140°-150°	252.6	3.8
150°-160°	181.9	2.7
160°-170°	111.3	1.7
170°-180°	37.6	0.6
0°-30°	897.8	13.6
0°-40°	1577.4	23.8
0°-60°	3063.4	46.2
0°-90°	4074.0	61.5
90°-120°	1218.9	18.4
90°-150°	2219.9	33.5
90°-180°	2551.0	38.5
0°-180°	6624.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	526	526	526	526	526	
5°	513	550	620	701	726	47
15°	384	709	1195	1449	1495	107
25°	246	804	1424	1486	1488	113
35°	166	768	1341	1417	1473	104
45°	113	613	1185	1358	1418	88
55°	81	389	1006	1168	1200	74
65°	64	206	746	840	851	64
75°	47	127	410	450	452	50
85°	17	39	102	112	113	18
90°	3	7	20	10	10	3
95°	25	99	330	170	116	28
105°	91	138	557	846	790	96
115°	161	196	446	891	1017	159
125°	224	252	406	686	810	199
135°	268	294	394	554	628	207
145°	310	330	388	473	510	194
155°	351	360	388	426	439	161
165°	378	383	388	404	409	107
175°	394	394	391	396	396	37
180°	394	394	394	394	394	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	526.4	526.4	526.4	526.4	526.4	526.4	526.4	526.4	526.4	526.4	526.4
2.5°	526.4	526.4	529.8	531.5	534.9	536.6	540.0	543.4	553.5	555.2	558.6
5°	512.9	519.7	541.7	550.1	573.8	606.0	619.5	641.5	687.2	700.8	709.3
7.5°	492.6	507.8	562.0	575.5	634.8	719.4	755.0	802.4	875.1	910.7	939.5
10°	460.4	492.6	589.1	621.2	717.7	846.4	912.4	978.4	1088.4	1137.5	1156.1
12.5°	424.8	477.4	617.9	661.9	800.7	988.6	1068.1	1140.9	1266.2	1332.2	1342.3
15°	384.3	455.3	645.0	709.3	888.6	1107.0	1195.1	1284.8	1401.5	1448.9	1460.8
17.5°	348.7	438.4	670.3	738.1	956.4	1213.7	1303.4	1377.9	1472.7	1504.8	1513.3
20°	304.7	411.3	687.2	775.3	1027.5	1291.5	1377.9	1435.4	1499.8	1520.1	1523.4
22.5°	272.6	382.6	697.4	788.8	1074.8	1338.9	1411.7	1457.4	1501.5	1508.2	1509.9
25°	245.5	350.4	695.7	804.1	1115.5	1367.7	1423.6	1457.4	1482.9	1486.2	1486.2
27.5°	220.0	314.8	688.9	807.4	1146.0	1374.5	1418.5	1442.2	1454.1	1460.8	1460.8
30°	198.1	281.0	672.0	800.7	1159.5	1367.7	1403.2	1415.1	1427.0	1437.1	1442.2
32.5°	181.2	248.8	646.6	787.1	1161.2	1350.8	1376.2	1382.9	1399.8	1423.6	1432.0
35°	165.9	216.7	617.9	768.5	1151.0	1323.7	1340.6	1347.4	1381.2	1416.8	1428.6
37.5°	150.7	192.9	580.6	736.3	1135.8	1291.5	1303.4	1315.3	1367.7	1410.0	1423.6
40°	135.4	172.6	536.6	700.8	1112.1	1252.6	1262.7	1281.4	1350.8	1399.8	1413.4
42.5°	123.6	155.7	489.2	663.6	1081.7	1208.6	1223.8	1250.9	1330.5	1382.9	1398.2
45°	113.4	138.8	438.4	612.8	1042.7	1162.9	1184.9	1222.2	1306.7	1357.6	1371.1
47.5°	103.3	126.9	386.0	560.3	1000.4	1117.2	1146.0	1188.3	1274.6	1323.7	1335.5
50°	94.8	115.1	333.5	504.4	954.7	1068.1	1102.0	1146.0	1234.0	1279.7	1294.9
52.5°	88.1	105.0	284.3	448.6	902.2	1017.4	1056.2	1102.0	1184.9	1228.9	1239.1
55°	81.2	96.5	242.1	389.3	848.1	963.1	1005.5	1049.5	1130.7	1167.9	1174.8
57.5°	77.9	89.7	206.5	333.5	790.5	902.2	949.6	990.3	1066.4	1095.2	1102.0
60°	72.8	84.6	179.5	286.0	727.9	844.6	885.3	925.9	990.3	1013.9	1019.0
62.5°	67.7	81.2	159.1	240.4	663.6	776.9	817.6	854.8	909.0	925.9	932.7
65°	64.3	77.9	143.9	206.5	597.5	705.9	746.5	778.6	822.7	839.6	842.9
67.5°	60.9	74.5	132.0	177.7	531.5	634.8	665.2	695.7	729.6	746.5	748.2
70°	55.9	71.1	121.9	157.4	463.8	553.5	578.9	611.0	638.1	646.6	651.7
72.5°	52.4	66.0	115.1	142.2	394.4	475.7	499.3	517.9	541.7	550.1	550.1
75°	47.4	59.3	108.3	126.9	323.3	389.3	409.6	428.3	446.9	450.3	445.2
77.5°	42.3	52.4	93.1	106.7	252.2	308.1	325.0	335.2	350.4	353.8	355.5
80°	35.5	45.7	72.8	82.9	182.8	226.9	238.6	247.1	260.7	260.7	264.1
82.5°	27.1	35.5	52.4	59.3	123.6	155.7	165.9	171.0	179.5	179.5	179.5
85°	16.9	22.0	33.8	38.9	74.5	94.8	101.6	103.3	110.0	111.7	111.7
87.5°	8.5	11.9	22.0	23.7	38.9	49.1	49.1	52.4	52.4	50.8	49.1
90°	2.6	4.8	6.9	7.4	11.6	17.3	20.1	17.9	13.3	10.0	10.0
92.5°	10.6	28.5	46.5	51.0	71.7	99.2	113.0	99.0	71.1	50.1	48.2
95°	25.4	58.2	91.1	99.2	176.3	279.0	330.4	294.8	223.7	170.3	164.2
97.5°	43.8	72.9	101.8	109.1	237.5	408.8	494.4	471.9	426.9	393.2	381.6
100°	58.1	84.4	110.7	117.3	259.7	449.8	544.8	546.4	549.7	552.2	538.5
102.5°	70.2	94.8	119.3	125.5	270.0	462.7	559.0	587.6	645.0	687.9	676.2
105°	90.9	111.6	132.4	137.6	277.5	464.1	557.4	621.6	750.0	846.4	840.0
107.5°	112.0	131.4	150.7	155.5	279.0	443.5	525.7	615.2	794.3	928.7	930.2
110°	126.2	143.7	161.2	165.5	276.8	425.2	499.3	599.4	799.7	949.9	956.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	140.2	156.9	173.6	177.7	276.9	409.2	475.3	577.8	782.7	936.4	946.5
115°	161.3	176.7	192.1	195.9	279.5	390.8	446.5	545.3	742.7	890.7	904.7
117.5°	182.2	196.2	210.1	213.6	284.7	379.4	426.7	515.8	694.0	827.6	843.1
120°	194.3	207.5	220.6	224.0	288.9	375.5	418.8	500.2	663.0	785.0	800.1
122.5°	206.3	219.5	232.7	236.1	294.9	373.4	412.7	486.0	632.7	742.6	757.4
125°	224.5	236.5	248.6	251.6	303.1	371.8	406.1	468.4	592.9	686.3	700.0
127.5°	239.2	251.5	263.7	266.7	311.3	370.9	400.6	454.1	560.9	641.1	652.6
130°	247.2	260.3	273.5	276.7	317.3	371.4	398.5	446.0	541.3	612.7	623.3
132.5°	255.4	268.5	281.7	284.9	322.2	371.8	396.7	439.3	524.4	588.3	597.9
135°	267.5	279.5	291.4	294.4	327.5	371.5	393.5	429.2	500.5	554.0	562.3
137.5°	279.9	291.8	303.6	306.5	335.3	373.7	392.9	423.0	483.4	528.6	535.4
140°	290.2	301.2	312.0	314.7	340.2	374.1	391.1	417.2	469.3	508.3	514.6
142.5°	298.1	308.2	318.2	320.8	344.2	375.5	391.1	414.0	459.7	494.0	499.5
145°	310.3	319.1	327.9	330.1	349.6	375.5	388.5	407.2	444.6	472.7	476.8
147.5°	322.4	331.0	339.6	341.7	357.3	378.0	388.5	403.1	432.6	454.7	458.2
150°	330.4	338.1	345.8	347.8	361.4	379.4	388.5	400.9	425.8	444.4	447.1
152.5°	338.5	344.4	350.3	351.7	363.9	380.3	388.5	399.0	420.3	436.2	438.3
155°	350.7	355.1	359.3	360.4	369.8	382.2	388.5	396.9	413.8	426.5	427.8
157.5°	359.7	363.9	368.1	369.2	375.6	384.2	388.5	395.0	408.2	418.0	418.9
160°	365.7	369.0	372.2	373.1	378.2	385.0	388.5	394.1	405.4	413.8	414.3
162.5°	371.8	374.3	376.8	377.4	381.0	386.0	388.5	393.2	402.7	409.8	410.3
165°	378.4	380.6	382.8	383.4	385.1	387.3	388.5	391.9	398.6	403.7	404.3
167.5°	384.4	385.5	386.6	386.8	388.3	390.2	391.1	393.3	397.8	401.1	401.4
170°	388.5	389.5	390.6	390.8	390.9	391.0	391.1	393.3	397.8	401.1	401.1
172.5°	390.6	390.8	391.0	391.1	391.1	391.1	391.1	392.8	396.3	399.0	398.8
175°	393.5	393.5	393.5	393.5	392.7	391.6	391.1	392.2	394.4	396.1	396.1
177.5°	393.5	393.5	393.5	393.5	392.9	392.0	391.6	392.5	394.3	395.5	395.3
180°	393.5	393.5	393.5	393.5	393.5	393.5	393.5	393.5	393.5	393.5	393.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	526.4	526.4
2.5°	562.0	558.6
5°	722.8	726.2
7.5°	973.3	971.7
10°	1210.3	1225.5
12.5°	1382.9	1386.3
15°	1487.9	1494.6
17.5°	1528.5	1530.2
20°	1530.2	1526.8
22.5°	1511.6	1508.2
25°	1489.6	1487.9
27.5°	1469.3	1471.0
30°	1460.8	1465.9
32.5°	1460.8	1469.3
35°	1464.2	1472.7
37.5°	1462.5	1472.7
40°	1455.7	1467.6
42.5°	1437.1	1445.6
45°	1408.4	1418.5
47.5°	1371.1	1377.9
50°	1323.7	1330.5
52.5°	1264.5	1266.2
55°	1193.4	1200.1
57.5°	1117.2	1118.9
60°	1032.6	1037.6
62.5°	942.9	942.9
65°	848.1	851.4
67.5°	749.8	758.3
70°	650.0	651.7
72.5°	551.9	551.9
75°	450.3	451.9
77.5°	353.8	353.8
80°	262.4	264.1
82.5°	181.2	184.5
85°	113.4	113.4
87.5°	52.4	47.4
90°	10.0	10.0
92.5°	40.1	32.2
95°	140.1	115.9
97.5°	335.7	289.7
100°	483.7	428.9
102.5°	629.2	582.3
105°	814.8	789.6
107.5°	936.3	942.4
110°	982.7	1009.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	986.9	1027.2
115°	960.6	1016.7
117.5°	905.2	967.3
120°	860.4	920.8
122.5°	817.0	876.4
125°	754.8	809.6
127.5°	698.9	745.2
130°	666.0	708.8
132.5°	636.2	674.4
135°	595.2	628.2
137.5°	562.4	589.4
140°	539.8	565.1
142.5°	521.2	542.9
145°	493.3	509.7
147.5°	471.7	485.3
150°	458.2	469.3
152.5°	446.6	455.0
155°	433.4	438.9
157.5°	422.9	426.7
160°	416.6	418.8
162.5°	412.5	414.6
165°	406.6	408.8
167.5°	402.3	403.2
170°	401.1	401.1
172.5°	397.9	397.2
175°	396.1	396.1
177.5°	394.4	393.5
180°	393.5	393.5



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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	6.09	7.11	6.93	7.98	9.08	19.25	20.28	20.09	21.15	22.24
	3H	6.80	7.73	7.66	8.61	9.73	21.10	22.02	21.95	22.90	24.02
	4H	7.11	7.98	7.98	8.87	10.00	21.75	22.62	22.62	23.51	24.64
	6H	7.37	8.18	8.25	9.07	10.21	22.18	22.99	23.07	23.88	25.03
	8H	7.44	8.21	8.33	9.12	10.27	22.31	23.08	23.20	23.99	25.13
	12H	7.46	8.20	8.36	9.11	10.28	22.38	23.11	23.28	24.02	25.19
4H	2H	13.31	14.19	14.19	15.07	16.20	19.55	20.42	20.42	21.31	22.44
	3H	14.90	15.63	15.78	16.55	17.69	21.60	22.33	22.49	23.25	24.40
	4H	15.00	15.67	15.90	16.58	17.75	22.37	23.04	23.27	23.96	25.13
	6H	15.02	15.60	15.93	16.54	17.71	22.92	23.50	23.83	24.44	25.61
	8H	15.00	15.54	15.92	16.48	17.66	23.08	23.62	24.00	24.56	25.74
	12H	14.96	15.45	15.90	16.41	17.60	23.18	23.67	24.12	24.62	25.81
8H	4H	16.45	17.00	17.37	17.93	19.12	22.45	22.99	23.36	23.92	25.11
	6H	16.70	17.15	17.65	18.13	19.31	23.08	23.53	24.02	24.50	25.69
	8H	16.72	17.12	17.68	18.09	19.29	23.30	23.70	24.25	24.66	25.87
	12H	16.70	17.05	17.66	18.01	19.26	23.45	23.80	24.41	24.76	26.01
12H	4H	16.60	17.09	17.54	18.05	19.24	22.41	22.90	23.35	23.85	25.04
	6H	16.96	17.36	17.92	18.33	19.53	23.06	23.46	24.02	24.43	25.63
	8H	17.04	17.39	18.00	18.35	19.60	23.30	23.65	24.26	24.61	25.86