

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: P936914

Luminaire Tested: SQ4-FB-050U-125D-835-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936914
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-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

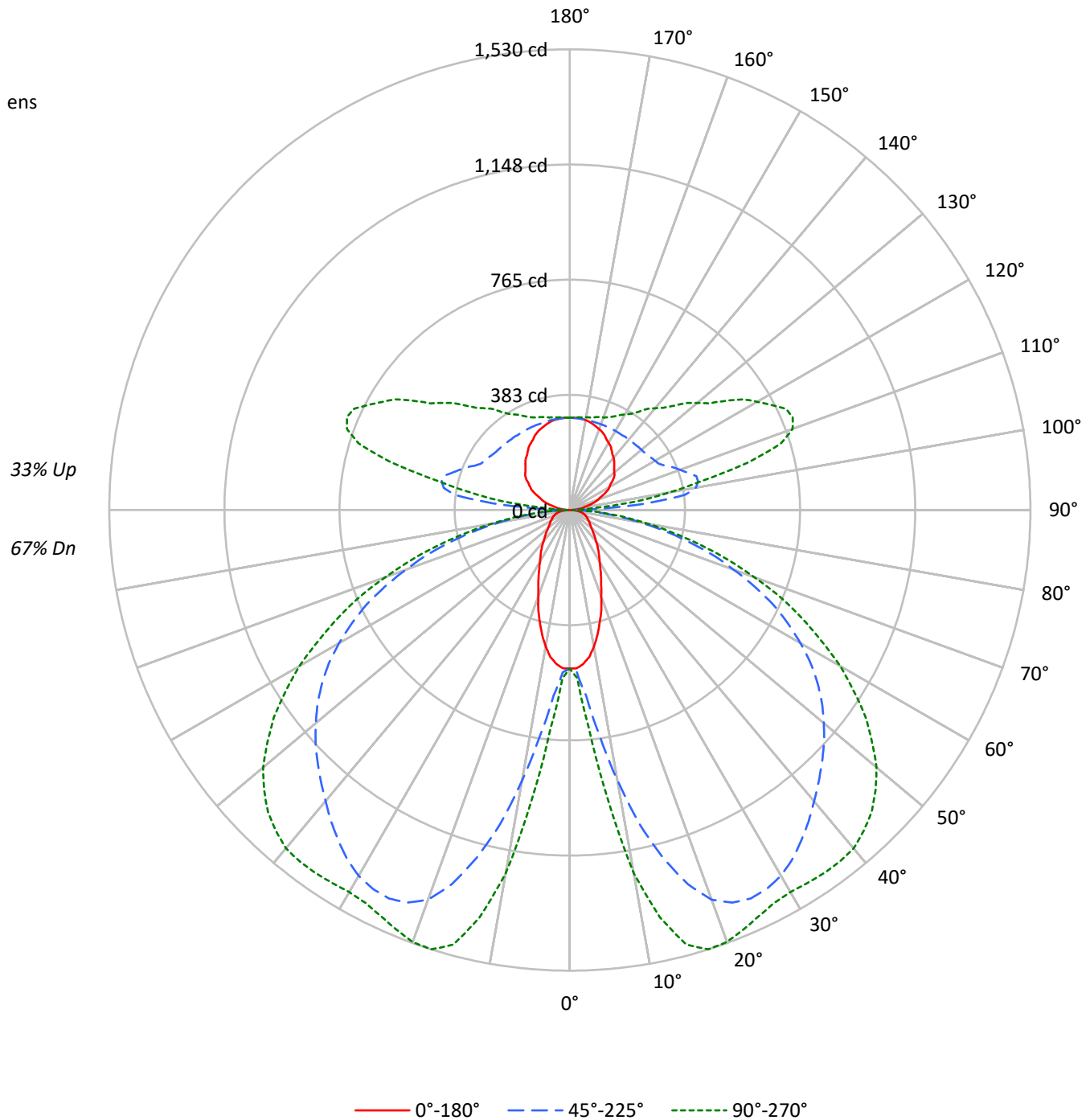
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6063.0 lumens
Efficiency: N/A
Efficacy: 108.3 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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	50	30	10	0
RCR																					
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67	67	67	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55	55	55	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45	45	45	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37	37	37	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31	31	31	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26	26	26	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23	23	23	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20	20	20	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17	17	17	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15	15	15	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14	14	14	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4883	4883	4883
5°	4765	5640	6564
10°	4317	8214	10882
15°	3665	10725	13139
20°	2981	12419	13391
25°	2484	12987	13119
30°	2091	13058	13094
35°	1846	12831	13432
40°	1606	12539	13782
45°	1452	12322	13837
50°	1329	12124	13608
55°	1268	11839	13004
60°	1295	11304	12052
65°	1340	10497	10743
70°	1417	9136	9077
75°	1554	7430	7083
80°	1661	5135	4773
85°	1399	2709	2443

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13837 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.1	1.1
10°-20°	301.7	5.0
20°-30°	527.7	8.7
30°-40°	679.3	11.2
40°-50°	758.8	12.5
50°-60°	726.7	12.0
60°-70°	575.9	9.5
70°-80°	338.7	5.6
80°-90°	95.3	1.6
90°-100°	149.7	2.5
100°-110°	393.6	6.5
110°-120°	408.1	6.7
120°-130°	327.3	5.4
130°-140°	256.8	4.2
140°-150°	197.1	3.3
150°-160°	142.0	2.3
160°-170°	86.9	1.4
170°-180°	29.3	0.5
0°-30°	897.5	14.8
0°-40°	1576.8	26.0
0°-60°	3062.3	50.5
0°-90°	4072.2	67.2
90°-120°	951.3	15.7
90°-150°	1732.6	28.6
90°-180°	1991.0	32.8
0°-180°	6063.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	526	526	526	526	526	
5°	513	550	619	700	726	47
15°	384	709	1195	1448	1494	107
25°	245	804	1423	1486	1487	113
35°	166	768	1340	1416	1472	104
45°	113	612	1184	1357	1418	88
55°	81	389	1005	1168	1200	74
65°	64	206	746	839	851	64
75°	47	127	410	450	452	50
85°	17	39	102	112	113	18
90°	2	6	16	8	8	3
95°	20	78	258	133	90	22
105°	71	107	435	661	616	75
115°	126	153	348	695	794	124
125°	175	196	317	536	632	156
135°	209	230	307	432	490	162
145°	242	258	303	369	398	152
155°	274	281	303	333	343	126
165°	295	299	303	315	319	83
175°	307	307	305	309	309	29
180°	307	307	307	307	307	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	526.2	526.2	526.2	526.2	526.2	526.2	526.2	526.2	526.2	526.2	526.2
2.5°	526.2	526.2	529.6	531.3	534.7	536.4	539.8	543.2	553.3	555.0	558.4
5°	512.7	519.5	541.5	549.9	573.6	605.8	619.3	641.3	687.0	700.5	709.0
7.5°	492.4	507.6	561.8	575.3	634.5	719.1	754.7	802.1	874.8	910.3	939.1
10°	460.2	492.4	588.8	621.0	717.4	846.0	912.0	978.0	1088.0	1137.1	1155.7
12.5°	424.7	477.2	617.6	661.6	800.4	988.2	1067.7	1140.5	1265.7	1331.7	1341.8
15°	384.1	455.2	644.7	709.0	888.3	1106.6	1194.6	1284.3	1401.1	1448.4	1460.3
17.5°	348.6	438.3	670.1	737.8	956.0	1213.2	1302.9	1377.4	1472.1	1504.3	1512.7
20°	304.6	411.2	687.0	775.0	1027.1	1291.1	1377.4	1434.9	1499.2	1519.5	1522.9
22.5°	272.4	382.4	697.1	788.5	1074.5	1338.4	1411.2	1456.9	1500.9	1507.7	1509.3
25°	245.4	350.3	695.5	803.7	1115.1	1367.2	1423.1	1456.9	1482.3	1485.7	1485.7
27.5°	220.0	314.7	688.7	807.1	1145.5	1374.0	1418.0	1441.7	1453.5	1460.3	1460.3
30°	198.0	280.9	671.8	800.4	1159.1	1367.2	1402.7	1414.6	1426.4	1436.6	1441.7
32.5°	181.1	248.7	646.4	786.8	1160.8	1350.3	1375.7	1382.4	1399.4	1423.1	1431.5
35°	165.8	216.6	617.6	768.2	1150.6	1323.2	1340.1	1346.9	1380.7	1416.3	1428.1
37.5°	150.6	192.9	580.4	736.1	1135.4	1291.1	1302.9	1314.8	1367.2	1409.5	1423.1
40°	135.4	172.6	536.4	700.5	1111.7	1252.1	1262.3	1280.9	1350.3	1399.4	1412.9
42.5°	123.5	155.7	489.0	663.3	1081.2	1208.2	1223.4	1250.5	1330.0	1382.4	1397.7
45°	113.4	138.8	438.3	612.5	1042.3	1162.5	1184.5	1221.7	1306.3	1357.1	1370.6
47.5°	103.2	126.9	385.8	560.1	1000.0	1116.8	1145.5	1187.9	1274.1	1323.2	1335.1
50°	94.8	115.1	333.3	504.2	954.3	1067.7	1101.6	1145.5	1233.5	1279.2	1294.5
52.5°	88.0	104.9	284.3	448.4	901.9	1016.9	1055.9	1101.6	1184.5	1228.5	1238.6
55°	81.2	96.4	242.0	389.2	847.7	962.8	1005.1	1049.1	1130.3	1167.5	1174.3
57.5°	77.8	89.7	206.4	333.3	790.2	901.9	949.3	989.9	1066.0	1094.8	1101.6
60°	72.8	84.6	179.4	286.0	727.6	844.4	885.0	925.6	989.9	1013.6	1018.6
62.5°	67.7	81.2	159.1	240.3	663.3	776.7	817.3	854.5	908.7	925.6	932.3
65°	64.3	77.8	143.8	206.4	597.3	705.6	746.2	778.4	822.4	839.3	842.7
67.5°	60.9	74.5	132.0	177.7	531.3	634.5	665.0	695.5	729.3	746.2	747.9
70°	55.8	71.1	121.8	157.4	463.6	553.3	578.7	610.8	637.9	646.4	651.5
72.5°	52.5	66.0	115.1	142.1	394.3	475.5	499.2	517.8	541.5	549.9	549.9
75°	47.4	59.2	108.3	126.9	323.2	389.2	409.5	428.1	446.7	450.1	445.0
77.5°	42.3	52.5	93.1	106.6	252.1	308.0	324.9	335.0	350.3	353.6	355.3
80°	35.5	45.7	72.8	82.9	182.7	226.7	238.6	247.0	260.6	260.6	264.0
82.5°	27.1	35.5	52.5	59.2	123.5	155.7	165.8	170.9	179.4	179.4	179.4
85°	16.9	22.0	33.8	38.9	74.5	94.8	101.5	103.2	110.0	111.7	111.7
87.5°	8.5	11.8	22.0	23.7	38.9	49.1	49.1	52.5	52.5	50.8	49.1
90°	2.1	3.7	5.4	5.8	9.1	13.5	15.7	13.9	10.4	7.8	7.8
92.5°	8.2	22.2	36.3	39.8	55.9	77.4	88.2	77.3	55.5	39.2	37.6
95°	19.8	45.4	71.1	77.5	137.6	217.7	257.8	230.0	174.5	132.9	128.2
97.5°	34.2	56.8	79.4	85.1	185.3	319.0	385.8	368.3	333.2	306.9	297.9
100°	45.3	65.8	86.4	91.5	202.7	351.0	425.2	426.5	429.1	431.0	420.3
102.5°	54.8	74.0	93.1	97.9	210.7	361.1	436.3	458.7	503.4	536.9	527.7
105°	70.9	87.1	103.3	107.4	216.6	362.3	435.1	485.2	585.4	660.6	655.7
107.5°	87.4	102.5	117.6	121.4	217.7	346.2	410.4	480.3	620.1	724.9	726.1
110°	98.5	112.1	125.8	129.2	216.1	331.9	389.8	467.9	624.2	741.4	746.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	109.4	122.4	135.4	138.7	216.1	319.4	371.0	451.0	610.9	730.9	738.8
115°	125.9	137.9	149.9	152.9	218.1	305.0	348.5	425.5	579.6	695.2	706.1
117.5°	142.2	153.1	164.0	166.7	222.2	296.1	333.1	402.6	541.6	645.9	658.0
120°	151.7	162.0	172.2	174.8	225.5	293.1	326.9	390.4	517.5	612.8	624.6
122.5°	161.0	171.4	181.7	184.3	230.2	291.5	322.1	379.3	493.8	579.6	591.2
125°	175.2	184.6	194.0	196.4	236.6	290.2	317.0	365.6	462.8	535.7	546.4
127.5°	186.7	196.3	205.8	208.2	243.0	289.5	312.7	354.4	437.8	500.4	509.4
130°	192.9	203.2	213.4	216.0	247.7	289.9	311.0	348.2	422.5	478.2	486.5
132.5°	199.3	209.6	219.8	222.4	251.5	290.2	309.6	342.8	409.3	459.2	466.7
135°	208.8	218.1	227.5	229.8	255.6	289.9	307.1	334.9	390.6	432.4	438.8
137.5°	218.5	227.7	237.0	239.3	261.8	291.7	306.7	330.2	377.3	412.6	417.9
140°	226.5	235.0	243.6	245.7	265.5	292.0	305.2	325.6	366.3	396.8	401.7
142.5°	232.7	240.6	248.4	250.4	268.7	293.0	305.2	323.1	358.8	385.6	389.8
145°	242.2	249.0	255.9	257.6	272.8	293.1	303.2	317.8	347.0	368.9	372.1
147.5°	251.7	258.4	265.0	266.7	278.9	295.1	303.2	314.7	337.7	354.9	357.6
150°	257.8	263.8	269.9	271.4	282.0	296.1	303.2	312.9	332.3	346.9	349.1
152.5°	264.2	268.8	273.4	274.5	284.1	296.8	303.2	311.5	328.1	340.5	342.1
155°	273.7	277.1	280.5	281.3	288.6	298.3	303.2	309.8	323.0	332.9	334.0
157.5°	280.7	284.0	287.3	288.1	293.1	299.8	303.2	308.3	318.6	326.3	327.1
160°	285.5	288.0	290.6	291.2	295.2	300.5	303.2	307.6	316.4	323.0	323.4
162.5°	290.2	292.1	294.0	294.5	297.4	301.3	303.2	306.9	314.3	319.9	320.3
165°	295.4	297.1	298.9	299.3	300.6	302.3	303.2	305.8	311.1	315.1	315.5
167.5°	300.1	300.9	301.7	301.9	303.0	304.5	305.2	307.0	310.5	313.1	313.3
170°	303.2	304.0	304.8	305.0	305.1	305.2	305.2	307.0	310.5	313.1	313.1
172.5°	304.8	305.0	305.2	305.2	305.2	305.2	305.2	306.6	309.3	311.4	311.2
175°	307.1	307.1	307.1	307.1	306.5	305.6	305.2	306.1	307.9	309.2	309.2
177.5°	307.1	307.1	307.1	307.1	306.6	306.0	305.7	306.4	307.8	308.8	308.6
180°	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	526.2	526.2
2.5°	561.8	558.4
5°	722.5	725.9
7.5°	973.0	971.3
10°	1209.8	1225.1
12.5°	1382.4	1385.8
15°	1487.4	1494.1
17.5°	1528.0	1529.7
20°	1529.7	1526.3
22.5°	1511.0	1507.7
25°	1489.0	1487.4
27.5°	1468.7	1470.4
30°	1460.3	1465.4
32.5°	1460.3	1468.7
35°	1463.7	1472.1
37.5°	1462.0	1472.1
40°	1455.2	1467.0
42.5°	1436.6	1445.0
45°	1407.8	1418.0
47.5°	1370.6	1377.4
50°	1323.2	1330.0
52.5°	1264.0	1265.7
55°	1192.9	1199.7
57.5°	1116.8	1118.5
60°	1032.2	1037.3
62.5°	942.5	942.5
65°	847.7	851.1
67.5°	749.6	758.1
70°	649.8	651.5
72.5°	551.6	551.6
75°	450.1	451.8
77.5°	353.6	353.6
80°	262.3	264.0
82.5°	181.1	184.4
85°	113.4	113.4
87.5°	52.5	47.4
90°	7.8	7.8
92.5°	31.4	25.1
95°	109.3	90.5
97.5°	262.0	226.1
100°	377.5	334.7
102.5°	491.1	454.5
105°	636.0	616.3
107.5°	730.8	735.6
110°	767.0	787.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	770.3	801.8
115°	749.8	793.5
117.5°	706.5	755.0
120°	671.6	718.7
122.5°	637.7	684.1
125°	589.1	631.9
127.5°	545.5	581.6
130°	519.9	553.2
132.5°	496.5	526.4
135°	464.6	490.3
137.5°	438.9	460.0
140°	421.4	441.1
142.5°	406.8	423.8
145°	385.0	397.8
147.5°	368.2	378.8
150°	357.7	366.3
152.5°	348.6	355.1
155°	338.3	342.6
157.5°	330.1	333.1
160°	325.2	326.9
162.5°	322.0	323.6
165°	317.3	319.1
167.5°	314.0	314.7
170°	313.1	313.1
172.5°	310.6	310.0
175°	309.2	309.2
177.5°	307.9	307.1
180°	307.1	307.1



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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	7.93	9.02	8.71	9.84	10.84	21.07	22.16	21.85	22.98	23.98
	3H	8.65	9.64	9.45	10.46	11.49	22.91	23.90	23.71	24.72	25.75
	4H	8.96	9.90	9.78	10.73	11.77	23.55	24.49	24.37	25.32	26.36
	6H	9.22	10.09	10.05	10.93	11.98	23.98	24.85	24.81	25.69	26.74
	8H	9.30	10.12	10.14	10.98	12.04	24.11	24.93	24.94	25.79	26.84
	12H	9.32	10.11	10.17	10.96	12.05	24.17	24.96	25.02	25.81	26.90
4H	2H	15.15	16.08	15.97	16.91	17.95	21.37	22.31	22.19	23.14	24.18
	3H	16.74	17.52	17.57	18.39	19.44	23.42	24.21	24.25	25.07	26.13
	4H	16.84	17.56	17.69	18.42	19.50	24.19	24.91	25.04	25.77	26.85
	6H	16.87	17.49	17.73	18.38	19.46	24.73	25.35	25.59	26.24	27.32
	8H	16.85	17.43	17.72	18.32	19.42	24.89	25.47	25.76	26.36	27.45
	12H	16.82	17.35	17.71	18.25	19.35	24.99	25.51	25.88	26.42	27.52
8H	4H	18.30	18.88	19.16	19.76	20.86	24.27	24.85	25.14	25.73	26.83
	6H	18.55	19.03	19.44	19.96	21.06	24.90	25.38	25.79	26.31	27.40
	8H	18.57	19.00	19.48	19.92	21.04	25.11	25.54	26.02	26.46	27.58
	12H	18.55	18.93	19.46	19.84	21.01	25.26	25.64	26.17	26.55	27.72
12H	4H	18.45	18.97	19.34	19.88	20.98	24.24	24.76	25.12	25.66	26.77
	6H	18.81	19.24	19.71	20.16	21.27	24.88	25.31	25.79	26.23	27.35
	8H	18.89	19.27	19.80	20.18	21.35	25.12	25.50	26.03	26.41	27.58