

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: P936974

Luminaire Tested: SQ4-FB-050U-125D-940-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936974
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-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

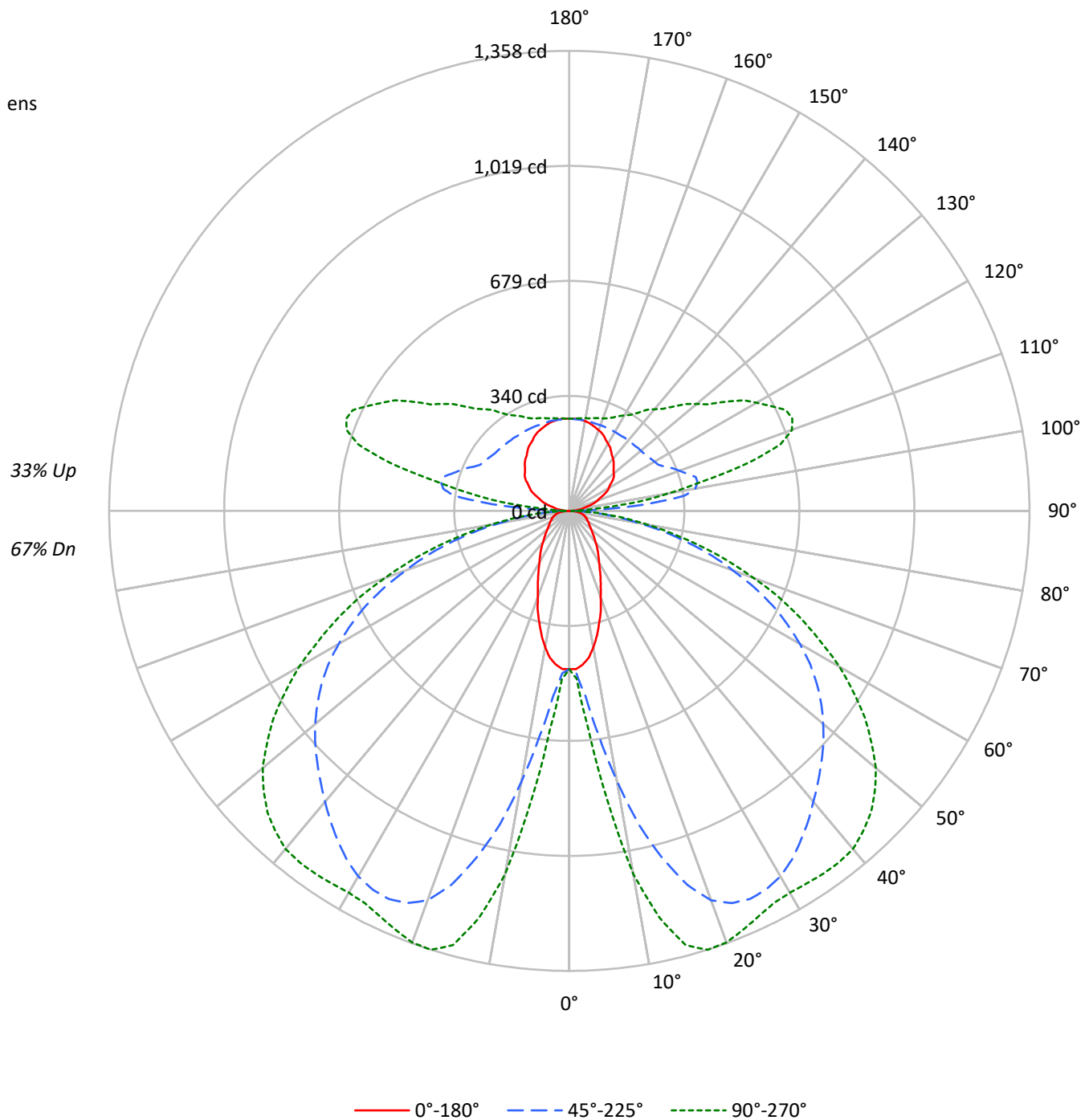
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5383.9 lumens
Efficiency: N/A
Efficacy: 96.1 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

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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	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°	4336	4336	4336
5°	4232	5008	5828
10°	3834	7295	9663
15°	3255	9523	11668
20°	2647	11028	11892
25°	2205	11532	11650
30°	1857	11596	11628
35°	1639	11394	11928
40°	1426	11134	12239
45°	1289	10941	12287
50°	1180	10766	12083
55°	1126	10513	11548
60°	1149	10038	10702
65°	1190	9321	9540
70°	1259	8113	8059
75°	1381	6597	6290
80°	1474	4560	4238
85°	1242	2405	2170

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12287 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.4	1.1
10°-20°	267.9	5.0
20°-30°	468.6	8.7
30°-40°	603.2	11.2
40°-50°	673.8	12.5
50°-60°	645.3	12.0
60°-70°	511.4	9.5
70°-80°	300.7	5.6
80°-90°	84.6	1.6
90°-100°	132.9	2.5
100°-110°	349.5	6.5
110°-120°	362.4	6.7
120°-130°	290.7	5.4
130°-140°	228.1	4.2
140°-150°	175.1	3.3
150°-160°	126.1	2.3
160°-170°	77.1	1.4
170°-180°	26.1	0.5
0°-30°	797.0	14.8
0°-40°	1400.2	26.0
0°-60°	2719.3	50.5
0°-90°	3616.1	67.2
90°-120°	844.8	15.7
90°-150°	1538.5	28.6
90°-180°	1768.0	32.8
0°-180°	5383.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	467	467	467	467	467	
5°	455	488	550	622	645	42
15°	341	630	1061	1286	1327	95
25°	218	714	1264	1319	1321	100
35°	147	682	1190	1258	1307	92
45°	101	544	1052	1205	1259	78
55°	72	346	892	1037	1065	66
65°	57	183	663	745	756	57
75°	42	113	364	400	401	44
85°	15	34	90	99	101	16
90°	2	5	14	7	7	3
95°	18	69	229	118	80	20
105°	63	95	386	587	547	67
115°	112	136	310	617	705	110
125°	156	174	282	476	561	138
135°	185	204	273	384	435	143
145°	215	229	269	328	353	135
155°	243	250	269	296	304	112
165°	262	266	269	280	283	74
175°	273	273	271	275	275	26
180°	273	273	273	273	273	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	467.3	467.3	467.3	467.3	467.3	467.3	467.3	467.3	467.3	467.3	467.3
2.5°	467.3	467.3	470.3	471.8	474.8	476.3	479.3	482.4	491.3	492.8	495.9
5°	455.3	461.3	480.9	488.3	509.4	538.0	549.9	569.5	610.1	622.0	629.6
7.5°	437.3	450.7	498.9	510.9	563.4	638.6	670.2	712.3	776.8	808.3	833.9
10°	408.7	437.3	522.9	551.4	637.1	751.2	809.9	868.5	966.1	1009.7	1026.3
12.5°	377.1	423.8	548.4	587.5	710.8	877.5	948.1	1012.8	1123.9	1182.5	1191.5
15°	341.1	404.2	572.5	629.6	788.8	982.7	1060.8	1140.5	1244.2	1286.2	1296.7
17.5°	309.6	389.2	595.0	655.2	848.9	1077.3	1157.0	1223.1	1307.2	1335.8	1343.3
20°	270.5	365.1	610.1	688.2	912.1	1146.5	1223.1	1274.2	1331.3	1349.3	1352.3
22.5°	241.9	339.6	619.0	700.2	954.2	1188.5	1253.1	1293.7	1332.8	1338.8	1340.3
25°	217.9	311.1	617.6	713.7	990.2	1214.1	1263.7	1293.7	1316.3	1319.3	1319.3
27.5°	195.4	279.5	611.6	716.7	1017.2	1220.1	1259.2	1280.2	1290.7	1296.7	1296.7
30°	175.8	249.4	596.6	710.8	1029.3	1214.1	1245.6	1256.2	1266.6	1275.7	1280.2
32.5°	160.8	220.8	574.0	698.7	1030.8	1199.1	1221.6	1227.6	1242.7	1263.7	1271.2
35°	147.2	192.3	548.4	682.2	1021.7	1175.0	1190.0	1196.0	1226.1	1257.7	1268.2
37.5°	133.7	171.3	515.4	653.7	1008.2	1146.5	1157.0	1167.5	1214.1	1251.6	1263.7
40°	120.2	153.3	476.3	622.0	987.2	1111.9	1120.9	1137.4	1199.1	1242.7	1254.7
42.5°	109.7	138.3	434.2	589.0	960.1	1072.9	1086.4	1110.4	1181.0	1227.6	1241.2
45°	100.7	123.3	389.2	543.9	925.6	1032.3	1051.8	1084.9	1160.0	1205.1	1217.1
47.5°	91.6	112.7	342.6	497.4	888.0	991.7	1017.2	1054.9	1131.4	1175.0	1185.6
50°	84.2	102.2	296.0	447.7	847.4	948.1	978.2	1017.2	1095.3	1135.9	1149.5
52.5°	78.1	93.2	252.5	398.2	800.9	903.0	937.6	978.2	1051.8	1090.9	1099.9
55°	72.1	85.6	214.9	345.6	752.8	855.0	892.5	931.6	1003.7	1036.7	1042.8
57.5°	69.1	79.7	183.3	296.0	701.7	800.9	843.0	879.0	946.6	972.2	978.2
60°	64.6	75.1	159.3	254.0	646.1	749.8	785.9	821.9	879.0	900.1	904.5
62.5°	60.1	72.1	141.3	213.4	589.0	689.7	725.8	758.8	806.9	821.9	827.9
65°	57.1	69.1	127.7	183.3	530.4	626.6	662.6	691.2	730.3	745.3	748.3
67.5°	54.1	66.2	117.2	157.8	471.8	563.4	590.5	617.6	647.6	662.6	664.1
70°	49.6	63.1	108.2	139.8	411.7	491.3	513.9	542.4	566.5	574.0	578.5
72.5°	46.6	58.6	102.2	126.2	350.1	422.2	443.3	459.8	480.9	488.3	488.3
75°	42.1	52.6	96.2	112.7	287.0	345.6	363.6	380.2	396.7	399.7	395.2
77.5°	37.6	46.6	82.7	94.7	223.9	273.5	288.5	297.5	311.1	314.0	315.5
80°	31.5	40.6	64.6	73.6	162.2	201.3	211.9	219.3	231.4	231.4	234.4
82.5°	24.1	31.5	46.6	52.6	109.7	138.3	147.2	151.8	159.3	159.3	159.3
85°	15.0	19.5	30.0	34.5	66.2	84.2	90.1	91.6	97.7	99.2	99.2
87.5°	7.5	10.5	19.5	21.0	34.5	43.6	43.6	46.6	46.6	45.1	43.6
90°	1.9	3.3	4.8	5.2	8.1	12.0	13.9	12.3	9.2	6.9	6.9
92.5°	7.3	19.7	32.2	35.3	49.6	68.7	78.3	68.6	49.3	34.8	33.4
95°	17.6	40.3	63.1	68.8	122.2	193.3	228.9	204.2	155.0	118.0	113.8
97.5°	30.4	50.4	70.5	75.6	164.5	283.3	342.6	327.1	295.9	272.5	264.5
100°	40.2	58.4	76.7	81.3	180.0	311.7	377.6	378.7	381.0	382.7	373.2
102.5°	48.7	65.7	82.7	86.9	187.1	320.7	387.4	407.3	447.0	476.8	468.6
105°	63.0	77.3	91.7	95.4	192.3	321.7	386.4	430.9	519.8	586.6	582.3
107.5°	77.6	91.0	104.4	107.8	193.3	307.4	364.4	426.5	550.6	643.7	644.8
110°	87.5	99.5	111.7	114.7	191.9	294.7	346.1	415.5	554.3	658.4	662.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	97.1	108.7	120.2	123.2	191.9	283.6	329.4	400.5	542.5	649.0	656.1
115°	111.8	122.5	133.1	135.8	193.7	270.8	309.5	377.8	514.7	617.3	627.0
117.5°	126.3	136.0	145.6	148.0	197.3	262.9	295.8	357.5	480.9	573.6	584.3
120°	134.7	143.9	152.9	155.2	200.2	260.3	290.3	346.7	459.5	544.2	554.6
122.5°	143.0	152.2	161.3	163.7	204.4	258.9	286.0	336.8	438.5	514.7	525.0
125°	155.6	163.9	172.3	174.4	210.1	257.7	281.5	324.7	411.0	475.7	485.2
127.5°	165.8	174.3	182.8	184.9	215.8	257.1	277.7	314.7	388.8	444.4	452.3
130°	171.3	180.4	189.5	191.8	220.0	257.4	276.2	309.2	375.2	424.6	432.0
132.5°	177.0	186.1	195.2	197.5	223.3	257.7	274.9	304.4	363.5	407.8	414.4
135°	185.4	193.7	202.0	204.1	227.0	257.4	272.7	297.4	346.9	384.0	389.7
137.5°	194.0	202.2	210.5	212.5	232.5	259.0	272.3	293.2	335.0	366.4	371.1
140°	201.1	208.7	216.3	218.2	235.8	259.3	271.0	289.1	325.3	352.4	356.7
142.5°	206.6	213.7	220.6	222.4	238.6	260.2	271.0	286.9	318.6	342.4	346.1
145°	215.1	221.1	227.2	228.7	242.2	260.3	269.2	282.2	308.1	327.6	330.4
147.5°	223.5	229.5	235.3	236.8	247.7	262.0	269.2	279.5	299.9	315.2	317.5
150°	228.9	234.3	239.7	241.0	250.4	262.9	269.2	277.9	295.1	308.0	310.0
152.5°	234.6	238.7	242.8	243.8	252.3	263.6	269.2	276.6	291.4	302.4	303.8
155°	243.0	246.1	249.1	249.8	256.3	264.9	269.2	275.1	286.8	295.6	296.6
157.5°	249.3	252.2	255.1	255.8	260.3	266.2	269.2	273.8	282.9	289.8	290.5
160°	253.5	255.7	258.1	258.6	262.1	266.8	269.2	273.1	281.0	286.8	287.2
162.5°	257.7	259.4	261.1	261.5	264.1	267.6	269.2	272.5	279.1	284.1	284.4
165°	262.3	263.8	265.4	265.8	266.9	268.4	269.2	271.6	276.3	279.8	280.2
167.5°	266.5	267.2	267.9	268.1	269.1	270.4	271.0	272.6	275.7	278.0	278.2
170°	269.2	270.0	270.7	270.8	270.9	271.0	271.0	272.6	275.7	278.0	278.0
172.5°	270.7	270.8	271.0	271.0	271.0	271.0	271.0	272.3	274.7	276.5	276.3
175°	272.7	272.7	272.7	272.7	272.2	271.4	271.0	271.8	273.4	274.6	274.6
177.5°	272.7	272.7	272.7	272.7	272.3	271.7	271.5	272.1	273.3	274.2	274.0
180°	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	467.3	467.3
2.5°	498.9	495.9
5°	641.6	644.6
7.5°	864.0	862.5
10°	1074.3	1087.9
12.5°	1227.6	1230.6
15°	1320.8	1326.8
17.5°	1356.9	1358.4
20°	1358.4	1355.4
22.5°	1341.8	1338.8
25°	1322.2	1320.8
27.5°	1304.2	1305.7
30°	1296.7	1301.3
32.5°	1296.7	1304.2
35°	1299.8	1307.2
37.5°	1298.3	1307.2
40°	1292.2	1302.7
42.5°	1275.7	1283.2
45°	1250.1	1259.2
47.5°	1217.1	1223.1
50°	1175.0	1181.0
52.5°	1122.4	1123.9
55°	1059.3	1065.3
57.5°	991.7	993.2
60°	916.6	921.1
62.5°	836.9	836.9
65°	752.8	755.8
67.5°	665.6	673.2
70°	577.0	578.5
72.5°	489.8	489.8
75°	399.7	401.2
77.5°	314.0	314.0
80°	232.9	234.4
82.5°	160.8	163.7
85°	100.7	100.7
87.5°	46.6	42.1
90°	6.9	6.9
92.5°	27.9	22.3
95°	97.1	80.4
97.5°	232.7	200.8
100°	335.2	297.2
102.5°	436.1	403.6
105°	564.8	547.3
107.5°	649.0	653.2
110°	681.1	699.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	684.0	712.0
115°	665.8	704.6
117.5°	627.4	670.4
120°	596.4	638.2
122.5°	566.3	607.5
125°	523.1	561.1
127.5°	484.4	516.5
130°	461.7	491.2
132.5°	440.9	467.4
135°	412.6	435.4
137.5°	389.7	408.5
140°	374.2	391.7
142.5°	361.2	376.3
145°	341.9	353.2
147.5°	327.0	336.4
150°	317.6	325.3
152.5°	309.6	315.3
155°	300.4	304.2
157.5°	293.1	295.8
160°	288.8	290.3
162.5°	285.9	287.4
165°	281.8	283.4
167.5°	278.8	279.5
170°	278.0	278.0
172.5°	275.8	275.3
175°	274.6	274.6
177.5°	273.4	272.7
180°	272.7	272.7



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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	7.52	8.61	8.30	9.43	10.43	20.65	21.75	21.44	22.57	23.56
	3H	8.24	9.23	9.04	10.05	11.08	22.49	23.48	23.29	24.31	25.34
	4H	8.55	9.48	9.36	10.32	11.35	23.14	24.08	23.96	24.91	25.95
	6H	8.81	9.68	9.64	10.52	11.57	23.57	24.44	24.40	25.28	26.33
	8H	8.89	9.71	9.72	10.57	11.63	23.69	24.52	24.53	25.38	26.43
	12H	8.91	9.70	9.76	10.55	11.63	23.76	24.55	24.61	25.40	26.48
4H	2H	14.73	15.67	15.55	16.50	17.54	20.96	21.89	21.78	22.73	23.76
	3H	16.32	17.11	17.16	17.97	19.03	23.01	23.79	23.84	24.66	25.72
	4H	16.43	17.15	17.28	18.01	19.09	23.78	24.49	24.62	25.36	26.44
	6H	16.46	17.08	17.32	17.96	19.05	24.32	24.94	25.18	25.83	26.91
	8H	16.44	17.02	17.30	17.90	19.00	24.48	25.06	25.34	25.94	27.04
	12H	16.41	16.93	17.29	17.83	18.94	24.58	25.10	25.46	26.00	27.11
8H	4H	17.89	18.47	18.75	19.35	20.45	23.86	24.44	24.72	25.32	26.42
	6H	18.14	18.62	19.03	19.55	20.65	24.49	24.97	25.38	25.89	26.99
	8H	18.16	18.59	19.06	19.51	20.62	24.70	25.13	25.61	26.05	27.16
	12H	18.14	18.52	19.05	19.43	20.60	24.85	25.23	25.76	26.14	27.30
12H	4H	18.04	18.56	18.92	19.46	20.57	23.82	24.35	24.71	25.25	26.36
	6H	18.40	18.83	19.30	19.74	20.86	24.47	24.90	25.38	25.82	26.94
	8H	18.48	18.86	19.39	19.77	20.93	24.71	25.08	25.61	25.99	27.16