

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: P936931

Luminaire Tested: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936931
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-4-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

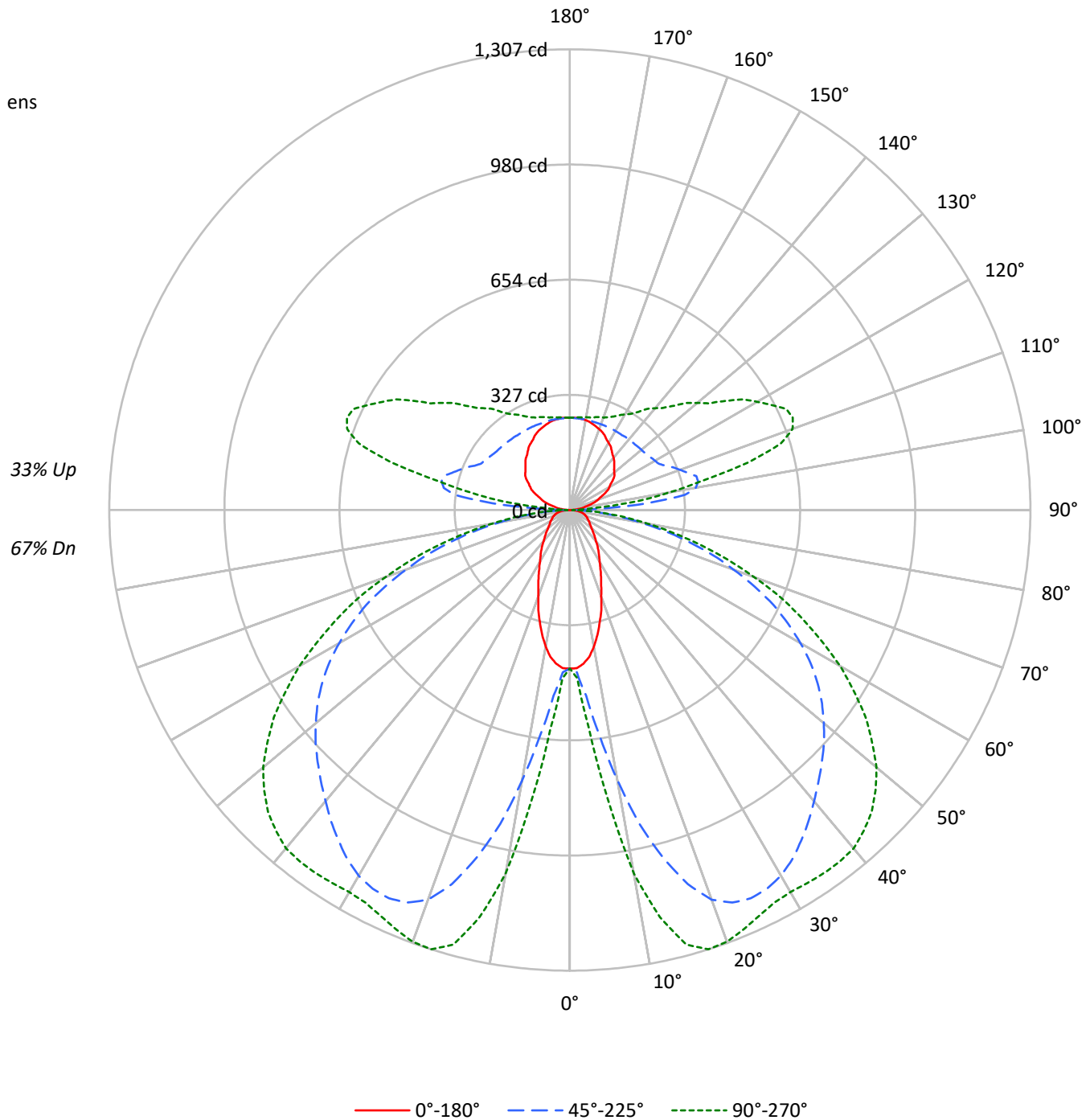
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5178.6 lumens
Efficiency: N/A
Efficacy: 92.5 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 (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: P936931
CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-4-2700K

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°	4170	4170	4170
5°	4070	4817	5606
10°	3688	7017	9294
15°	3131	9160	11223
20°	2546	10608	11438
25°	2121	11092	11205
30°	1786	11153	11184
35°	1576	10959	11473
40°	1372	10710	11772
45°	1241	10524	11819
50°	1135	10355	11623
55°	1084	10112	11107
60°	1106	9655	10294
65°	1144	8967	9175
70°	1211	7804	7753
75°	1328	6347	6050
80°	1418	4386	4077
85°	1192	2314	2088

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11819 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	1.1
10°-20°	257.7	5.0
20°-30°	450.7	8.7
30°-40°	580.2	11.2
40°-50°	648.1	12.5
50°-60°	620.7	12.0
60°-70°	491.9	9.5
70°-80°	289.3	5.6
80°-90°	81.4	1.6
90°-100°	127.8	2.5
100°-110°	336.1	6.5
110°-120°	348.5	6.7
120°-130°	279.6	5.4
130°-140°	219.4	4.2
140°-150°	168.4	3.3
150°-160°	121.3	2.3
160°-170°	74.2	1.4
170°-180°	25.1	0.5
0°-30°	766.6	14.8
0°-40°	1346.8	26.0
0°-60°	2615.6	50.5
0°-90°	3478.2	67.2
90°-120°	812.5	15.7
90°-150°	1479.9	28.6
90°-180°	1700.0	32.8
0°-180°	5178.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	449	449	449	449	449	
5°	438	470	529	598	620	40
15°	328	606	1020	1237	1276	91
25°	210	686	1216	1269	1270	97
35°	142	656	1145	1210	1257	88
45°	97	523	1012	1159	1211	75
55°	69	332	858	997	1025	63
65°	55	176	637	717	727	54
75°	40	108	350	384	386	42
85°	14	33	87	95	97	15
90°	2	5	13	7	7	2
95°	17	66	220	114	77	19
105°	61	92	372	564	526	64
115°	108	131	298	594	678	106
125°	150	168	271	458	540	133
135°	178	196	262	369	419	138
145°	207	220	259	315	340	130
155°	234	240	259	284	293	107
165°	252	256	259	269	273	71
175°	262	262	261	264	264	25
180°	262	262	262	262	262	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4
2.5°	449.4	449.4	452.3	453.8	456.7	458.2	461.1	464.0	472.6	474.0	476.9
5°	437.9	443.7	462.5	469.7	489.9	517.4	529.0	547.8	586.8	598.3	605.6
7.5°	420.6	433.6	479.8	491.4	541.9	614.2	644.6	685.1	747.2	777.5	802.1
10°	393.1	420.6	502.9	530.4	612.8	722.6	779.0	835.3	929.3	971.2	987.1
12.5°	362.7	407.6	527.5	565.1	683.6	844.0	912.0	974.1	1081.1	1137.4	1146.1
15°	328.1	388.8	550.7	605.6	758.7	945.2	1020.3	1097.0	1196.7	1237.1	1247.3
17.5°	297.7	374.4	572.4	630.2	816.5	1036.2	1112.8	1176.5	1257.4	1284.9	1292.0
20°	260.2	351.2	586.8	661.9	877.3	1102.8	1176.5	1225.6	1280.5	1297.8	1300.8
22.5°	232.7	326.6	595.4	673.5	917.8	1143.2	1205.3	1244.4	1282.0	1287.8	1289.1
25°	209.6	299.2	594.0	686.5	952.4	1167.8	1215.5	1244.4	1266.1	1269.0	1269.0
27.5°	187.9	268.8	588.2	689.4	978.4	1173.6	1211.2	1231.4	1241.5	1247.3	1247.3
30°	169.1	239.9	573.8	683.6	990.0	1167.8	1198.1	1208.2	1218.3	1227.0	1231.4
32.5°	154.7	212.4	552.1	672.0	991.5	1153.3	1175.0	1180.7	1195.3	1215.5	1222.7
35°	141.6	185.0	527.5	656.1	982.8	1130.2	1144.6	1150.4	1179.3	1209.7	1219.8
37.5°	128.6	164.8	495.7	628.7	969.8	1102.8	1112.8	1123.0	1167.8	1203.9	1215.5
40°	115.6	147.4	458.2	598.3	949.5	1069.5	1078.2	1094.1	1153.3	1195.3	1206.8
42.5°	105.5	133.0	417.7	566.5	923.5	1032.0	1044.9	1068.1	1136.0	1180.7	1193.8
45°	96.9	118.6	374.4	523.2	890.3	992.9	1011.7	1043.5	1115.7	1159.1	1170.7
47.5°	88.1	108.4	329.5	478.4	854.1	953.9	978.4	1014.6	1088.2	1130.2	1140.3
50°	81.0	98.3	284.7	430.7	815.1	912.0	940.9	978.4	1053.6	1092.6	1105.7
52.5°	75.2	89.6	242.8	383.0	770.3	868.6	901.9	940.9	1011.7	1049.3	1057.9
55°	69.4	82.3	206.7	332.4	724.0	822.4	858.5	896.1	965.4	997.2	1003.0
57.5°	66.5	76.6	176.3	284.7	674.9	770.3	810.8	845.5	910.5	935.1	940.9
60°	62.2	72.3	153.2	244.3	621.5	721.2	755.9	790.6	845.5	865.7	870.0
62.5°	57.8	69.4	135.9	205.2	566.5	663.4	698.1	729.9	776.1	790.6	796.3
65°	54.9	66.5	122.8	176.3	510.2	602.7	637.4	664.9	702.4	716.9	719.8
67.5°	52.0	63.6	112.7	151.8	453.8	541.9	568.0	594.0	622.9	637.4	638.8
70°	47.7	60.7	104.0	134.4	396.0	472.6	494.3	521.7	544.8	552.1	556.5
72.5°	44.8	56.4	98.3	121.4	336.8	406.1	426.4	442.3	462.5	469.7	469.7
75°	40.5	50.6	92.5	108.4	276.1	332.4	349.8	365.7	381.5	384.4	380.1
77.5°	36.1	44.8	79.5	91.1	215.3	263.1	277.5	286.1	299.2	302.0	303.5
80°	30.3	39.0	62.2	70.8	156.0	193.6	203.8	211.0	222.6	222.6	225.5
82.5°	23.1	30.3	44.8	50.6	105.5	133.0	141.6	146.0	153.2	153.2	153.2
85°	14.4	18.8	28.9	33.2	63.6	81.0	86.7	88.1	94.0	95.4	95.4
87.5°	7.3	10.1	18.8	20.2	33.2	41.9	41.9	44.8	44.8	43.4	41.9
90°	1.8	3.2	4.6	5.0	7.8	11.5	13.4	11.9	8.9	6.7	6.7
92.5°	7.0	19.0	31.0	34.0	47.7	66.1	75.3	66.0	47.4	33.5	32.1
95°	16.9	38.8	60.7	66.2	117.5	185.9	220.2	196.4	149.0	113.5	109.5
97.5°	29.2	48.5	67.8	72.7	158.3	272.5	329.5	314.6	284.6	262.1	254.4
100°	38.7	56.2	73.8	78.2	173.1	299.8	363.2	364.3	366.5	368.1	359.0
102.5°	46.8	63.2	79.5	83.6	180.0	308.4	372.7	391.8	430.0	458.6	450.7
105°	60.6	74.4	88.2	91.7	185.0	309.5	371.6	414.4	500.0	564.2	560.1
107.5°	74.7	87.5	100.4	103.7	185.9	295.7	350.5	410.2	529.6	619.2	620.2
110°	84.1	95.7	107.4	110.4	184.6	283.5	332.9	399.6	533.1	633.3	637.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	93.4	104.5	115.6	118.5	184.6	272.8	316.9	385.2	521.8	624.3	631.0
115°	107.5	117.8	128.0	130.6	186.3	260.5	297.7	363.4	495.1	593.8	603.1
117.5°	121.5	130.8	140.1	142.4	189.8	252.9	284.5	343.9	462.6	551.7	562.0
120°	129.6	138.4	147.1	149.3	192.6	250.3	279.2	333.5	442.0	523.4	533.5
122.5°	137.5	146.4	155.2	157.4	196.6	249.0	275.1	324.0	421.8	495.1	505.0
125°	149.6	157.7	165.7	167.8	202.1	247.9	270.8	312.3	395.3	457.6	466.7
127.5°	159.5	167.7	175.8	177.8	207.6	247.3	267.1	302.7	373.9	427.4	435.1
130°	164.8	173.6	182.3	184.5	211.6	247.6	265.6	297.4	360.9	408.4	415.5
132.5°	170.2	179.0	187.7	190.0	214.8	247.9	264.4	292.8	349.6	392.2	398.6
135°	178.3	186.3	194.3	196.3	218.3	247.6	262.3	286.0	333.6	369.3	374.8
137.5°	186.6	194.5	202.4	204.4	223.6	249.1	262.0	282.0	322.3	352.4	356.9
140°	193.5	200.7	208.1	209.9	226.8	249.4	260.7	278.1	312.9	338.9	343.1
142.5°	198.8	205.5	212.2	213.9	229.5	250.3	260.7	276.0	306.5	329.4	332.9
145°	206.9	212.7	218.6	220.0	233.0	250.3	259.0	271.4	296.4	315.1	317.8
147.5°	215.0	220.7	226.3	227.8	238.2	252.1	259.0	268.8	288.4	303.1	305.4
150°	220.2	225.3	230.5	231.8	240.9	252.9	259.0	267.3	283.8	296.3	298.2
152.5°	225.7	229.6	233.5	234.5	242.7	253.5	259.0	266.1	280.2	290.8	292.2
155°	233.8	236.7	239.6	240.3	246.5	254.8	259.0	264.6	275.9	284.3	285.3
157.5°	239.8	242.6	245.4	246.1	250.3	256.1	259.0	263.3	272.1	278.7	279.4
160°	243.9	246.0	248.2	248.7	252.1	256.7	259.0	262.7	270.2	275.9	276.2
162.5°	247.9	249.5	251.1	251.5	254.0	257.3	259.0	262.1	268.5	273.2	273.6
165°	252.3	253.8	255.3	255.6	256.8	258.2	259.0	261.2	265.7	269.1	269.5
167.5°	256.3	257.0	257.7	257.9	258.8	260.1	260.7	262.2	265.2	267.4	267.6
170°	259.0	259.7	260.3	260.5	260.6	260.7	260.7	262.2	265.2	267.4	267.4
172.5°	260.3	260.5	260.7	260.7	260.7	260.7	260.7	261.9	264.2	266.0	265.8
175°	262.3	262.3	262.3	262.3	261.8	261.0	260.7	261.4	263.0	264.1	264.1
177.5°	262.3	262.3	262.3	262.3	261.9	261.4	261.1	261.7	262.9	263.8	263.6
180°	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	449.4	449.4
2.5°	479.8	476.9
5°	617.1	620.0
7.5°	831.1	829.6
10°	1033.3	1046.4
12.5°	1180.7	1183.7
15°	1270.4	1276.2
17.5°	1305.1	1306.6
20°	1306.6	1303.7
22.5°	1290.6	1287.8
25°	1271.8	1270.4
27.5°	1254.5	1255.9
30°	1247.3	1251.6
32.5°	1247.3	1254.5
35°	1250.2	1257.4
37.5°	1248.7	1257.4
40°	1242.9	1253.0
42.5°	1227.0	1234.2
45°	1202.4	1211.2
47.5°	1170.7	1176.5
50°	1130.2	1136.0
52.5°	1079.6	1081.1
55°	1018.9	1024.7
57.5°	953.9	955.3
60°	881.6	886.0
62.5°	805.0	805.0
65°	724.0	726.9
67.5°	640.3	647.5
70°	555.0	556.5
72.5°	471.1	471.1
75°	384.4	385.9
77.5°	302.0	302.0
80°	224.0	225.5
82.5°	154.7	157.5
85°	96.9	96.9
87.5°	44.8	40.5
90°	6.7	6.7
92.5°	26.8	21.4
95°	93.4	77.3
97.5°	223.8	193.1
100°	322.4	285.9
102.5°	419.5	388.2
105°	543.2	526.4
107.5°	624.2	628.3
110°	655.1	672.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	657.9	684.8
115°	640.4	677.8
117.5°	603.4	644.9
120°	573.6	613.9
122.5°	544.7	584.3
125°	503.2	539.7
127.5°	465.9	496.8
130°	444.1	472.5
132.5°	424.1	449.6
135°	396.8	418.8
137.5°	374.9	392.9
140°	359.9	376.8
142.5°	347.5	362.0
145°	328.8	339.8
147.5°	314.5	323.5
150°	305.5	312.9
152.5°	297.7	303.3
155°	289.0	292.6
157.5°	281.9	284.5
160°	277.8	279.2
162.5°	275.0	276.4
165°	271.0	272.6
167.5°	268.2	268.8
170°	267.4	267.4
172.5°	265.3	264.8
175°	264.1	264.1
177.5°	263.0	262.3
180°	262.3	262.3



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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	7.38	8.48	8.16	9.29	10.29	20.52	21.61	21.30	22.43	23.43
	3H	8.10	9.09	8.90	9.92	10.94	22.36	23.35	23.16	24.17	25.20
	4H	8.41	9.35	9.23	10.18	11.22	23.01	23.94	23.82	24.77	25.81
	6H	8.68	9.54	9.50	10.38	11.43	23.44	24.30	24.26	25.14	26.19
	8H	8.75	9.57	9.59	10.43	11.49	23.56	24.38	24.39	25.24	26.30
	12H	8.78	9.56	9.62	10.42	11.50	23.63	24.41	24.47	25.27	26.35
4H	2H	14.60	15.53	15.42	16.37	17.41	20.82	21.76	21.64	22.59	23.63
	3H	16.19	16.97	17.02	17.84	18.90	22.87	23.66	23.71	24.52	25.58
	4H	16.30	17.01	17.14	17.87	18.96	23.64	24.36	24.49	25.22	26.30
	6H	16.32	16.94	17.18	17.83	18.91	24.18	24.80	25.04	25.69	26.78
	8H	16.30	16.89	17.17	17.77	18.87	24.34	24.92	25.21	25.81	26.91
	12H	16.27	16.80	17.16	17.70	18.81	24.44	24.97	25.33	25.87	26.97
8H	4H	17.75	18.33	18.62	19.21	20.31	23.72	24.30	24.59	25.19	26.29
	6H	18.00	18.49	18.90	19.41	20.51	24.35	24.83	25.24	25.76	26.86
	8H	18.03	18.45	18.93	19.37	20.49	24.57	25.00	25.47	25.91	27.03
	12H	18.01	18.38	18.91	19.29	20.46	24.71	25.09	25.62	26.00	27.17
12H	4H	17.90	18.43	18.79	19.33	20.44	23.69	24.21	24.57	25.11	26.22
	6H	18.26	18.69	19.17	19.61	20.72	24.34	24.77	25.24	25.68	26.80
	8H	18.34	18.72	19.25	19.63	20.80	24.57	24.95	25.48	25.86	27.03