

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: P936518

Luminaire Tested: SQ4-FB-025U-125D-840-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936518
REPORT IS A COMBINATION OF REPORTS P933440 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-125D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

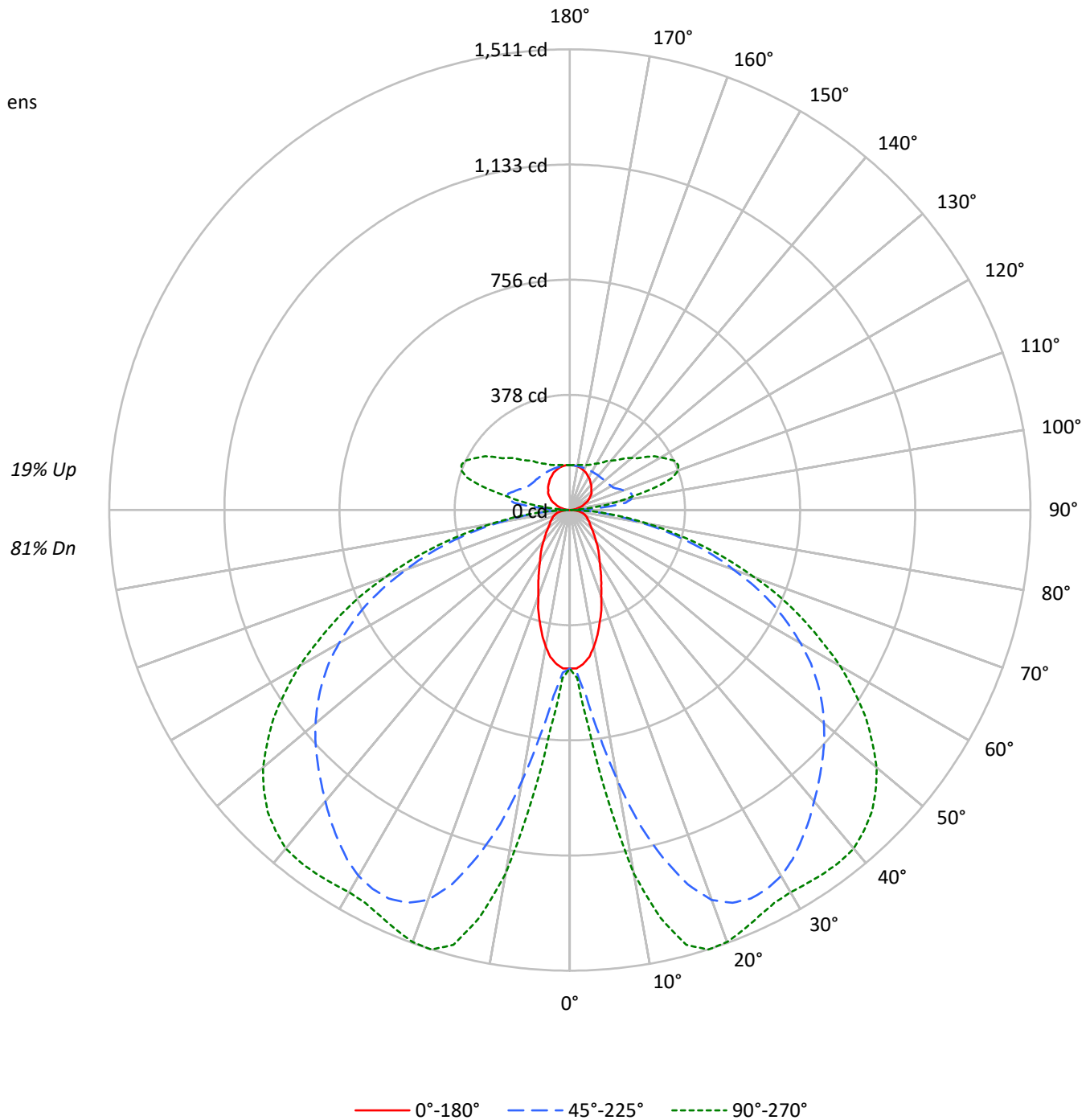
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4978.5 lumens
Efficiency: N/A
Efficacy: 100.4 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): 49.6
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: P936518
CATALOG NUMBER: SQ4-FB-025U-125D-840-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P936518

CATALOG NUMBER: SQ4-FB-025U-125D-840-1D-UNV-STD-W-4

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	50	30	10	0
RCR																					
0	114	114	114	114	110	110	110	110	100	100	100	92	92	92	84	84	84	84	84	84	81
1	104	99	94	90	99	95	91	87	87	84	81	80	77	75	73	71	70	70	70	70	66
2	94	85	78	72	89	82	75	70	75	70	66	69	65	61	63	60	57	57	57	57	54
3	85	74	66	59	81	71	64	58	65	59	54	60	55	51	55	51	48	48	48	48	45
4	77	65	56	49	74	63	54	48	58	51	45	53	47	43	49	44	40	40	40	40	37
5	71	58	49	42	67	55	47	41	51	44	39	47	41	36	43	38	34	34	34	34	32
6	65	51	42	36	62	49	41	35	46	39	33	42	36	31	39	34	30	30	30	30	27
7	60	46	37	31	57	45	36	30	41	34	29	38	32	27	35	30	26	26	26	26	24
8	55	42	33	27	53	40	32	27	37	30	25	35	29	24	32	27	23	23	23	23	21
9	52	38	30	24	49	37	29	24	34	27	23	32	26	22	29	24	20	20	20	20	18
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	18	18	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4824	4824	4824
5°	4708	5572	6485
10°	4266	8116	10751
15°	3621	10596	12982
20°	2945	12271	13231
25°	2454	12831	12962
30°	2066	12902	12937
35°	1824	12677	13271
40°	1587	12389	13617
45°	1434	12174	13671
50°	1314	11979	13444
55°	1253	11696	12848
60°	1279	11169	11908
65°	1323	10371	10614
70°	1399	9027	8968
75°	1535	7341	6998
80°	1643	5072	4715
85°	1383	2677	2413

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13671 cd/sqm



TEST NUMBER: P936518

CATALOG NUMBER: SQ4-FB-025U-125D-840-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.3	1.4
10°-20°	298.1	6.0
20°-30°	521.4	10.5
30°-40°	671.2	13.5
40°-50°	749.7	15.1
50°-60°	718.0	14.4
60°-70°	569.0	11.4
70°-80°	334.6	6.7
80°-90°	93.5	1.9
90°-100°	71.9	1.4
100°-110°	189.0	3.8
110°-120°	195.9	3.9
120°-130°	157.1	3.2
130°-140°	123.3	2.5
140°-150°	94.6	1.9
150°-160°	68.2	1.4
160°-170°	41.7	0.8
170°-180°	14.1	0.3
0°-30°	886.7	17.8
0°-40°	1557.9	31.3
0°-60°	3025.6	60.8
0°-90°	4022.7	80.8
90°-120°	456.8	9.2
90°-150°	831.9	16.7
90°-180°	956.0	19.2
0°-180°	4978.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	520	520	520	520	520	
5°	506	543	612	692	717	47
15°	380	700	1180	1431	1476	106
25°	242	794	1406	1468	1470	112
35°	164	759	1324	1399	1454	102
45°	112	605	1170	1341	1401	87
55°	80	384	993	1154	1185	73
65°	64	204	737	829	841	63
75°	47	125	405	445	446	49
85°	17	38	100	110	112	18
90°	1	3	8	4	4	2
95°	10	37	124	64	44	11
105°	34	52	209	317	296	36
115°	60	73	167	334	381	60
125°	84	94	152	257	303	75
135°	100	110	147	208	235	78
145°	116	124	146	177	191	73
155°	131	135	146	160	164	60
165°	142	144	146	151	153	40
175°	147	147	146	148	148	14
180°	147	147	147	147	147	



TEST NUMBER: P936518

CATALOG NUMBER: SQ4-FB-025U-125D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9
2.5°	519.9	519.9	523.2	524.9	528.3	530.0	533.3	536.7	546.7	548.3	551.7
5°	506.5	513.3	535.0	543.3	566.7	598.5	611.9	633.6	678.8	692.1	700.5
7.5°	486.5	501.5	555.1	568.4	626.9	710.5	745.6	792.5	864.3	899.4	927.8
10°	454.7	486.5	581.7	613.5	708.8	835.8	901.1	966.3	1074.9	1123.5	1141.8
12.5°	419.6	471.5	610.2	653.7	790.8	976.3	1054.9	1126.8	1250.5	1315.7	1325.7
15°	379.5	449.7	637.0	700.5	877.6	1093.3	1180.3	1268.9	1384.3	1431.0	1442.8
17.5°	344.4	433.0	662.1	728.9	944.5	1198.6	1287.3	1360.9	1454.4	1486.2	1494.5
20°	300.9	406.3	678.8	765.7	1014.8	1275.6	1360.9	1417.7	1481.2	1501.3	1504.6
22.5°	269.1	377.8	688.7	779.0	1061.6	1322.3	1394.3	1439.4	1482.9	1489.6	1491.2
25°	242.5	346.1	687.2	794.1	1101.7	1350.8	1406.0	1439.4	1464.5	1467.9	1467.9
27.5°	217.4	310.9	680.4	797.4	1131.8	1357.5	1401.0	1424.4	1436.1	1442.8	1442.8
30°	195.6	277.5	663.7	790.8	1145.2	1350.8	1385.9	1397.6	1409.3	1419.4	1424.4
32.5°	178.9	245.7	638.6	777.4	1146.9	1334.1	1359.2	1365.8	1382.6	1406.0	1414.3
35°	163.8	214.0	610.2	759.0	1136.8	1307.3	1324.0	1330.7	1364.1	1399.3	1411.0
37.5°	148.8	190.6	573.4	727.3	1121.8	1275.6	1287.3	1299.0	1350.8	1392.6	1406.0
40°	133.8	170.5	530.0	692.1	1098.4	1237.1	1247.2	1265.5	1334.1	1382.6	1395.9
42.5°	122.0	153.8	483.1	655.3	1068.2	1193.7	1208.7	1235.5	1314.0	1365.8	1380.9
45°	112.0	137.1	433.0	605.2	1029.8	1148.6	1170.3	1207.0	1290.6	1340.8	1354.2
47.5°	102.0	125.4	381.2	553.4	988.0	1103.4	1131.8	1173.6	1258.8	1307.3	1319.1
50°	93.7	113.7	329.3	498.1	942.8	1054.9	1088.4	1131.8	1218.7	1263.8	1279.0
52.5°	86.9	103.6	280.9	443.0	891.1	1004.7	1043.2	1088.4	1170.3	1213.8	1223.7
55°	80.2	95.2	239.1	384.5	837.5	951.2	993.0	1036.5	1116.7	1153.5	1160.2
57.5°	76.9	88.6	203.9	329.3	780.7	891.1	937.9	978.0	1053.2	1081.7	1088.4
60°	71.9	83.6	177.2	282.6	718.9	834.3	874.4	914.5	978.0	1001.4	1006.4
62.5°	66.9	80.2	157.2	237.4	655.3	767.4	807.5	844.2	897.8	914.5	921.1
65°	63.5	76.9	142.1	203.9	590.1	697.1	737.2	769.1	812.5	829.2	832.6
67.5°	60.2	73.6	130.4	175.6	524.9	626.9	657.0	687.2	720.5	737.2	738.9
70°	55.1	70.2	120.3	155.5	458.0	546.7	571.8	603.5	630.2	638.6	643.7
72.5°	51.9	65.2	113.7	140.4	389.6	469.8	493.2	511.6	535.0	543.3	543.3
75°	46.8	58.5	107.0	125.4	319.3	384.5	404.6	423.0	441.3	444.7	439.7
77.5°	41.8	51.9	92.0	105.3	249.1	304.3	321.0	331.0	346.1	349.4	351.0
80°	35.1	45.2	71.9	81.9	180.5	224.0	235.7	244.0	257.5	257.5	260.8
82.5°	26.8	35.1	51.9	58.5	122.0	153.8	163.8	168.8	177.2	177.2	177.2
85°	16.7	21.7	33.4	38.4	73.6	93.7	100.3	102.0	108.7	110.4	110.4
87.5°	8.4	11.7	21.7	23.4	38.4	48.5	48.5	51.9	51.9	50.2	48.5
90°	1.0	1.8	2.6	2.8	4.3	6.4	7.5	6.7	5.0	3.8	3.8
92.5°	4.0	10.7	17.4	19.1	26.9	37.2	42.4	37.1	26.7	18.8	18.0
95°	9.5	21.8	34.2	37.2	66.1	104.5	123.8	110.5	83.8	63.8	61.6
97.5°	16.4	27.3	38.1	40.9	89.0	153.1	185.2	176.9	160.0	147.3	143.0
100°	21.7	31.6	41.5	44.0	97.3	168.6	204.1	204.7	206.0	206.9	201.7
102.5°	26.3	35.5	44.8	47.0	101.2	173.4	209.5	220.2	241.7	257.8	253.3
105°	34.1	41.9	49.6	51.6	104.0	173.9	208.9	233.0	281.1	317.1	314.8
107.5°	42.0	49.2	56.5	58.3	104.5	166.2	197.0	230.6	297.7	348.1	348.7
110°	47.3	53.8	60.4	62.0	103.7	159.4	187.1	224.7	299.7	356.0	358.4



TEST NUMBER: P936518

CATALOG NUMBER: SQ4-FB-025U-125D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	52.6	58.8	65.0	66.6	103.7	153.3	178.1	216.6	293.3	350.9	354.7
115°	60.5	66.2	71.9	73.4	104.7	146.5	167.4	204.3	278.3	333.7	339.0
117.5°	68.3	73.5	78.7	80.0	106.7	142.2	160.0	193.4	260.0	310.1	316.0
120°	72.8	77.8	82.7	83.9	108.2	140.7	156.9	187.4	248.5	294.2	299.9
122.5°	77.3	82.2	87.1	88.4	110.5	139.9	154.6	182.1	237.0	278.2	283.8
125°	84.1	88.6	93.2	94.4	113.6	139.3	152.2	175.5	222.2	257.2	262.3
127.5°	89.6	94.3	98.8	100.0	116.7	138.9	150.1	170.1	210.2	240.3	244.6
130°	92.6	97.5	102.5	103.7	119.0	139.2	149.3	167.2	202.8	229.6	233.6
132.5°	95.7	100.7	105.6	106.8	120.7	139.3	148.6	164.6	196.5	220.5	224.1
135°	100.3	104.7	109.3	110.4	122.7	139.2	147.4	160.7	187.5	207.6	210.6
137.5°	104.9	109.4	113.8	114.9	125.7	140.0	147.2	158.5	181.1	198.1	200.7
140°	108.8	112.8	117.0	118.0	127.5	140.2	146.5	156.3	175.9	190.5	192.9
142.5°	111.7	115.5	119.3	120.2	129.0	140.7	146.5	155.1	172.3	185.2	187.2
145°	116.3	119.5	122.9	123.7	131.0	140.7	145.5	152.5	166.6	177.1	178.7
147.5°	120.8	124.0	127.3	128.0	133.9	141.7	145.5	151.1	162.1	170.4	171.7
150°	123.8	126.7	129.6	130.3	135.4	142.2	145.5	150.2	159.6	166.6	167.6
152.5°	126.9	129.0	131.2	131.8	136.3	142.5	145.5	149.5	157.5	163.5	164.3
155°	131.4	133.0	134.7	135.1	138.5	143.2	145.5	148.7	155.1	159.9	160.4
157.5°	134.8	136.3	137.9	138.3	140.7	144.0	145.5	148.0	152.9	156.6	157.0
160°	137.0	138.2	139.5	139.8	141.7	144.2	145.5	147.6	151.9	155.0	155.2
162.5°	139.3	140.2	141.2	141.4	142.8	144.6	145.5	147.3	150.9	153.5	153.7
165°	141.8	142.6	143.5	143.7	144.2	145.1	145.5	146.8	149.4	151.3	151.5
167.5°	144.1	144.4	144.8	144.9	145.4	146.1	146.5	147.3	149.0	150.3	150.4
170°	145.5	145.9	146.3	146.4	146.4	146.5	146.5	147.3	149.0	150.3	150.3
172.5°	146.3	146.4	146.5	146.5	146.5	146.5	146.5	147.2	148.5	149.5	149.4
175°	147.4	147.4	147.4	147.4	147.1	146.7	146.5	146.9	147.8	148.4	148.4
177.5°	147.4	147.4	147.4	147.4	147.2	146.9	146.7	147.0	147.7	148.2	148.1
180°	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4



TEST NUMBER: P936518

CATALOG NUMBER: SQ4-FB-025U-125D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	519.9	519.9
2.5°	555.1	551.7
5°	713.8	717.2
7.5°	961.3	959.6
10°	1195.3	1210.4
12.5°	1365.8	1369.2
15°	1469.6	1476.2
17.5°	1509.7	1511.3
20°	1511.3	1508.0
22.5°	1492.9	1489.6
25°	1471.1	1469.6
27.5°	1451.1	1452.8
30°	1442.8	1447.8
32.5°	1442.8	1451.1
35°	1446.1	1454.4
37.5°	1444.5	1454.4
40°	1437.7	1449.4
42.5°	1419.4	1427.7
45°	1390.9	1401.0
47.5°	1354.2	1360.9
50°	1307.3	1314.0
52.5°	1248.8	1250.5
55°	1178.6	1185.3
57.5°	1103.4	1105.1
60°	1019.8	1024.9
62.5°	931.2	931.2
65°	837.5	840.9
67.5°	740.6	749.0
70°	642.0	643.7
72.5°	545.0	545.0
75°	444.7	446.4
77.5°	349.4	349.4
80°	259.2	260.8
82.5°	178.9	182.2
85°	112.0	112.0
87.5°	51.9	46.8
90°	3.8	3.8
92.5°	15.0	12.1
95°	52.6	43.5
97.5°	125.8	108.6
100°	181.3	160.7
102.5°	235.7	218.2
105°	305.4	295.9
107.5°	350.9	353.2
110°	368.2	378.1



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CATALOG NUMBER: SQ4-FB-025U-125D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	369.8	384.9
115°	360.0	381.0
117.5°	339.2	362.5
120°	322.5	345.0
122.5°	306.1	328.4
125°	282.9	303.4
127.5°	261.9	279.2
130°	249.6	265.6
132.5°	238.4	252.7
135°	223.1	235.4
137.5°	210.7	220.9
140°	202.2	211.7
142.5°	195.3	203.4
145°	184.9	191.0
147.5°	176.8	181.9
150°	171.7	175.9
152.5°	167.4	170.5
155°	162.4	164.5
157.5°	158.5	160.0
160°	156.1	156.9
162.5°	154.5	155.3
165°	152.3	153.1
167.5°	150.7	151.1
170°	150.3	150.3
172.5°	149.1	148.8
175°	148.4	148.4
177.5°	147.8	147.4
180°	147.4	147.4



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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	8.88	10.18	9.51	10.83	11.58	22.02	23.32	22.65	23.97	24.72
	3H	9.62	10.80	10.26	11.46	12.24	23.88	25.05	24.52	25.71	26.50
	4H	9.94	11.05	10.60	11.72	12.52	24.53	25.64	25.20	26.32	27.11
	6H	10.21	11.24	10.89	11.93	12.74	24.97	26.00	25.65	26.69	27.50
	8H	10.29	11.28	10.98	11.98	12.79	25.10	26.08	25.79	26.79	27.60
	12H	10.33	11.27	11.02	11.96	12.81	25.18	26.12	25.87	26.81	27.66
4H	2H	16.12	17.24	16.79	17.91	18.70	22.35	23.46	23.01	24.13	24.93
	3H	17.73	18.67	18.41	19.38	20.19	24.42	25.35	25.10	26.06	26.88
	4H	17.85	18.70	18.54	19.41	20.26	25.19	26.05	25.89	26.76	27.60
	6H	17.88	18.63	18.60	19.37	20.22	25.75	26.49	26.46	27.23	28.08
	8H	17.87	18.57	18.60	19.30	20.17	25.91	26.61	26.63	27.34	28.21
	12H	17.85	18.48	18.60	19.24	20.11	26.02	26.65	26.76	27.41	28.28
8H	4H	19.32	20.01	20.04	20.75	21.62	25.29	25.99	26.01	26.72	27.59
	6H	19.58	20.16	20.33	20.94	21.81	25.93	26.51	26.68	27.29	28.15
	8H	19.61	20.12	20.37	20.90	21.79	26.15	26.67	26.91	27.44	28.33
	12H	19.60	20.05	20.36	20.82	21.77	26.31	26.76	27.07	27.53	28.47
12H	4H	19.48	20.11	20.22	20.87	21.74	25.27	25.89	26.01	26.65	27.53
	6H	19.84	20.36	20.61	21.14	22.02	25.92	26.44	26.68	27.22	28.10
	8H	19.94	20.39	20.70	21.16	22.10	26.16	26.62	26.93	27.39	28.33