

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: P936451

Luminaire Tested: SQ4-FB-025U-100D-930-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936451
REPORT IS A COMBINATION OF REPORTS P933447 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-100D-930-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

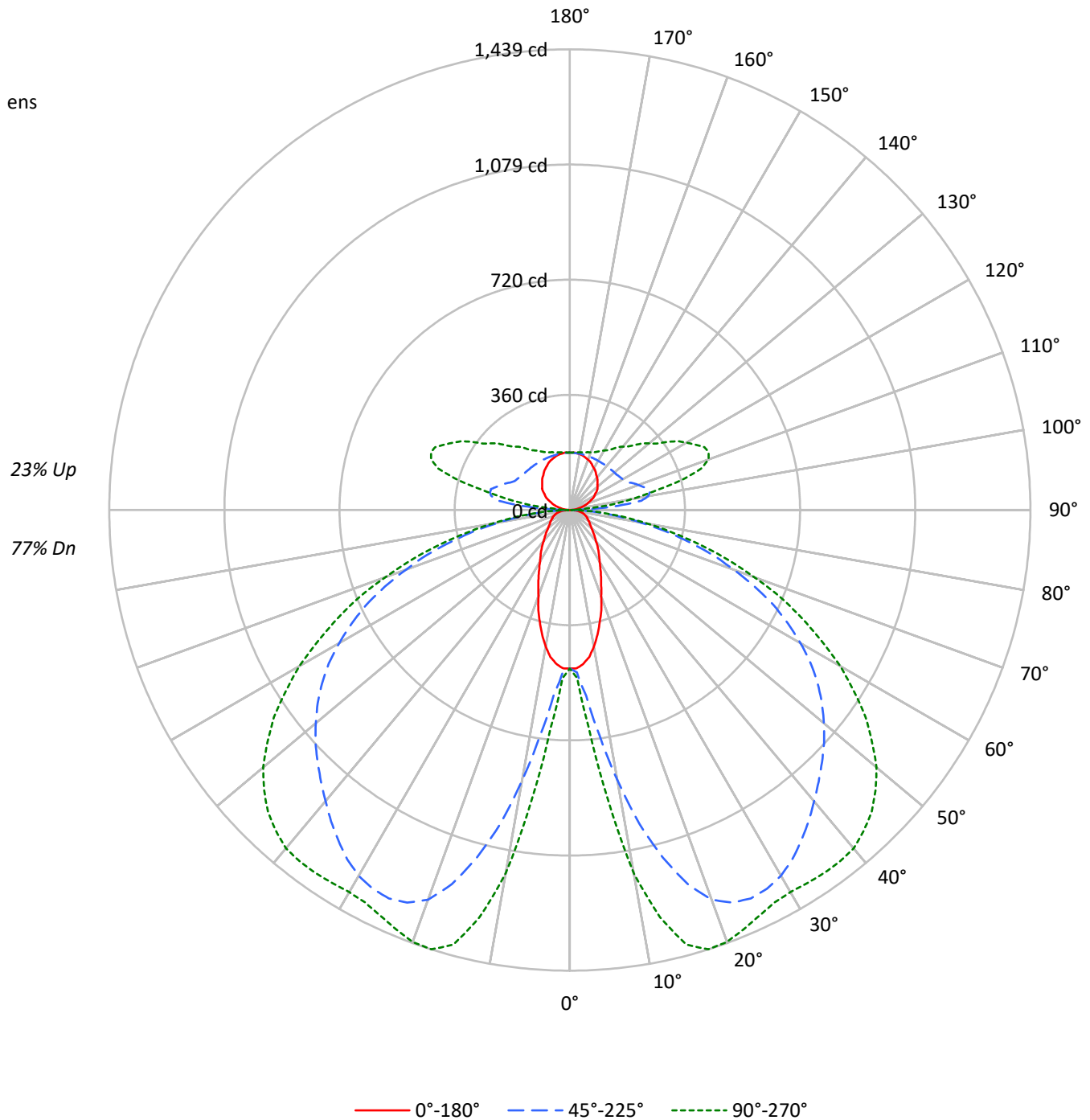
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4994.6 lumens
Efficiency: N/A
Efficacy: 85.8 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): 58.2
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

TEST NUMBER: P936451
CATALOG NUMBER: SQ4-FB-025U-100D-930-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P936451

CATALOG NUMBER: SQ4-FB-025U-100D-930-1D-UNV-STD-W-6

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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77				77
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66	63				63
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55	51				51
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45	42				42
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38	35				35
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33	30				30
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28	26				26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25	22				22
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22	20				20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	19	17				17
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17	16				16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3062	3062	3062
5°	2990	3537	4115
10°	2711	5156	6822
15°	2304	6735	8238
20°	1874	7802	8396
25°	1563	8163	8225
30°	1317	8211	8210
35°	1164	8073	8422
40°	1014	7894	8641
45°	917	7762	8675
50°	841	7642	8532
55°	805	7469	8154
60°	823	7137	7556
65°	855	6635	6735
70°	908	5783	5691
75°	1004	4711	4441
80°	1087	3263	2993
85°	948	1728	1531

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8675 cd/sqm



TEST NUMBER: P936451

CATALOG NUMBER: SQ4-FB-025U-100D-930-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.0	1.3
10°-20°	283.7	5.7
20°-30°	496.3	9.9
30°-40°	638.9	12.8
40°-50°	713.6	14.3
50°-60°	683.5	13.7
60°-70°	541.7	10.8
70°-80°	318.5	6.4
80°-90°	89.2	1.8
90°-100°	87.6	1.8
100°-110°	230.4	4.6
110°-120°	238.9	4.8
120°-130°	191.6	3.8
130°-140°	150.3	3.0
140°-150°	115.4	2.3
150°-160°	83.1	1.7
160°-170°	50.8	1.0
170°-180°	17.2	0.3
0°-30°	844.1	16.9
0°-40°	1483.0	29.7
0°-60°	2880.1	57.7
0°-90°	3829.4	76.7
90°-120°	556.8	11.1
90°-150°	1014.1	20.3
90°-180°	1165.0	23.3
0°-180°	4994.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	495	495	495	495	495	
5°	482	517	582	659	683	45
15°	361	667	1124	1362	1405	101
25°	231	756	1338	1397	1399	106
35°	156	722	1260	1332	1384	97
45°	107	576	1114	1276	1334	82
55°	76	366	945	1098	1128	70
65°	60	194	702	789	800	60
75°	45	119	385	423	425	47
85°	16	37	96	105	107	17
90°	1	3	9	5	5	2
95°	12	45	151	78	53	13
105°	42	63	255	387	361	44
115°	74	90	204	407	464	73
125°	102	115	186	314	370	91
135°	122	134	180	253	287	95
145°	142	151	178	216	233	89
155°	160	165	178	195	200	74
165°	173	175	178	184	187	49
175°	180	180	179	181	181	17
180°	180	180	180	180	180	



TEST NUMBER: P936451

CATALOG NUMBER: SQ4-FB-025U-100D-930-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	494.9	494.9	494.9	494.9	494.9	494.9	494.9	494.9	494.9	494.9	494.9
2.5°	494.9	494.9	498.1	499.7	502.8	504.4	507.7	510.9	520.3	522.0	525.2
5°	482.2	488.5	509.3	517.2	539.5	569.7	582.4	603.1	646.1	658.9	666.8
7.5°	463.1	477.4	528.4	541.1	596.8	676.4	709.8	754.3	822.8	856.2	883.2
10°	432.8	463.1	553.8	584.0	674.8	795.7	857.8	919.8	1023.3	1069.4	1086.9
12.5°	399.4	448.8	580.9	622.2	752.7	929.4	1004.2	1072.6	1190.4	1252.4	1262.0
15°	361.3	428.1	606.3	666.8	835.4	1040.8	1123.6	1207.9	1317.6	1362.2	1373.4
17.5°	327.9	412.2	630.2	693.9	899.1	1141.1	1225.4	1295.4	1384.5	1414.7	1422.7
20°	286.4	386.7	646.1	728.9	966.0	1214.2	1295.4	1349.5	1410.0	1429.1	1432.2
22.5°	256.2	359.7	655.6	741.6	1010.5	1258.8	1327.2	1370.2	1411.6	1417.9	1419.5
25°	230.8	329.4	654.0	755.9	1048.7	1285.8	1338.4	1370.2	1394.1	1397.2	1397.2
27.5°	206.9	296.0	647.7	759.1	1077.4	1292.2	1333.5	1355.9	1367.0	1373.4	1373.4
30°	186.2	264.2	631.8	752.7	1090.1	1285.8	1319.2	1330.4	1341.6	1351.0	1355.9
32.5°	170.3	233.9	607.9	740.0	1091.7	1269.9	1293.8	1300.1	1316.0	1338.4	1346.3
35°	155.9	203.7	580.9	722.5	1082.1	1244.5	1260.4	1266.7	1298.5	1332.0	1343.1
37.5°	141.6	181.4	545.9	692.3	1067.8	1214.2	1225.4	1236.5	1285.8	1325.6	1338.4
40°	127.3	162.3	504.4	658.9	1045.5	1177.6	1187.2	1204.7	1269.9	1316.0	1328.8
42.5°	116.2	146.4	459.9	623.9	1016.9	1136.2	1150.5	1176.0	1250.8	1300.1	1314.5
45°	106.6	130.5	412.2	576.1	980.3	1093.3	1114.0	1149.0	1228.5	1276.3	1289.1
47.5°	97.1	119.3	362.9	526.8	940.5	1050.3	1077.4	1117.1	1198.3	1244.5	1255.6
50°	89.1	108.2	313.5	474.3	897.5	1004.2	1036.0	1077.4	1160.1	1203.1	1217.4
52.5°	82.8	98.7	267.3	421.7	848.2	956.5	993.0	1036.0	1114.0	1155.4	1164.9
55°	76.4	90.7	227.6	366.0	797.3	905.5	945.3	986.6	1063.0	1098.0	1104.4
57.5°	73.2	84.3	194.2	313.5	743.2	848.2	892.8	931.0	1002.5	1029.6	1036.0
60°	68.4	79.6	168.7	268.9	684.3	794.1	832.3	870.5	931.0	953.2	958.0
62.5°	63.7	76.4	149.6	226.0	623.9	730.4	768.6	803.6	854.6	870.5	876.9
65°	60.5	73.2	135.3	194.2	561.8	663.6	701.8	732.0	773.4	789.3	792.5
67.5°	57.3	70.0	124.1	167.1	499.7	596.8	625.4	654.0	685.9	701.8	703.4
70°	52.5	66.8	114.6	148.0	436.0	520.3	544.3	574.5	599.9	607.9	612.7
72.5°	49.3	62.1	108.2	133.7	370.8	447.2	469.4	486.9	509.3	517.2	517.2
75°	44.6	55.7	101.8	119.3	303.9	366.0	385.1	402.6	420.1	423.3	418.5
77.5°	39.7	49.3	87.5	100.3	237.1	289.6	305.5	315.1	329.4	332.6	334.2
80°	33.4	43.0	68.4	78.0	171.8	213.3	224.4	232.3	245.1	245.1	248.3
82.5°	25.5	33.4	49.3	55.7	116.2	146.4	155.9	160.8	168.7	168.7	168.7
85°	15.9	20.7	31.8	36.6	70.0	89.1	95.5	97.1	103.4	105.0	105.0
87.5°	7.9	11.2	20.7	22.2	36.6	46.2	46.2	49.3	49.3	47.8	46.2
90°	1.2	2.2	3.1	3.4	5.3	7.9	9.2	8.1	6.1	4.6	4.6
92.5°	4.8	13.0	21.2	23.3	32.8	45.4	51.6	45.2	32.4	22.9	22.0
95°	11.6	26.6	41.6	45.4	80.5	127.4	150.9	134.7	102.1	77.8	75.1
97.5°	20.0	33.2	46.5	49.8	108.5	186.7	225.8	215.5	195.0	179.6	174.4
100°	26.6	38.5	50.6	53.6	118.7	205.5	248.8	249.6	251.1	252.2	246.0
102.5°	32.1	43.4	54.5	57.3	123.3	211.3	255.4	268.4	294.6	314.3	308.9
105°	41.5	51.0	60.5	62.9	126.8	212.0	254.6	283.9	342.6	386.6	383.8
107.5°	51.2	60.0	68.8	71.1	127.4	202.6	240.2	281.1	363.0	424.3	425.0
110°	57.7	65.7	73.6	75.6	126.5	194.2	228.1	273.9	365.4	433.9	436.9



TEST NUMBER: P936451

CATALOG NUMBER: SQ4-FB-025U-100D-930-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	64.1	71.7	79.3	81.2	126.5	186.9	217.1	263.9	357.6	427.8	432.3
115°	73.7	80.8	87.8	89.5	127.7	178.5	204.0	249.1	339.3	406.9	413.3
117.5°	83.3	89.6	96.0	97.6	130.0	173.3	195.0	235.7	317.0	378.1	385.1
120°	88.8	94.8	100.8	102.3	132.0	171.6	191.4	228.5	302.9	358.7	365.6
122.5°	94.2	100.3	106.3	107.8	134.7	170.6	188.5	222.0	289.0	339.3	346.1
125°	102.5	108.1	113.6	115.0	138.5	169.9	185.6	214.0	270.9	313.6	319.8
127.5°	109.3	114.8	120.4	121.8	142.2	169.4	183.0	207.4	256.3	292.9	298.2
130°	112.9	118.9	124.9	126.4	144.9	169.7	182.0	203.8	247.2	279.8	284.7
132.5°	116.7	122.7	128.6	130.2	147.2	169.9	181.2	200.7	239.6	268.8	273.1
135°	122.2	127.7	133.1	134.5	149.6	169.8	179.8	196.1	228.7	253.1	256.9
137.5°	127.9	133.3	138.7	140.0	153.2	170.8	179.6	193.4	220.9	241.5	244.6
140°	132.6	137.6	142.5	143.8	155.5	171.0	178.7	190.6	214.4	232.2	235.1
142.5°	136.2	140.8	145.4	146.5	157.2	171.5	178.7	189.1	210.1	225.7	228.2
145°	141.7	145.7	149.8	150.8	159.7	171.5	177.5	186.0	203.1	215.9	217.8
147.5°	147.3	151.2	155.1	156.1	163.2	172.7	177.5	184.2	197.6	207.7	209.3
150°	150.9	154.4	158.0	158.9	165.1	173.4	177.5	183.2	194.5	203.0	204.3
152.5°	154.7	157.3	160.0	160.7	166.3	173.8	177.5	182.3	192.0	199.3	200.3
155°	160.2	162.2	164.2	164.7	169.0	174.7	177.5	181.3	189.0	194.8	195.5
157.5°	164.3	166.2	168.1	168.6	171.6	175.5	177.5	180.4	186.5	191.0	191.4
160°	167.1	168.6	170.1	170.5	172.8	175.9	177.5	180.0	185.2	189.0	189.3
162.5°	169.8	171.0	172.1	172.4	174.1	176.3	177.5	179.6	184.0	187.3	187.5
165°	172.9	173.8	174.9	175.1	175.9	177.0	177.5	179.0	182.1	184.4	184.7
167.5°	175.6	176.1	176.6	176.7	177.4	178.3	178.7	179.7	181.7	183.2	183.3
170°	177.5	177.9	178.4	178.5	178.6	178.7	178.7	179.7	181.7	183.2	183.2
172.5°	178.4	178.5	178.7	178.7	178.7	178.7	178.7	179.5	181.1	182.3	182.2
175°	179.8	179.8	179.8	179.8	179.4	178.9	178.7	179.1	180.2	181.0	181.0
177.5°	179.8	179.8	179.8	179.8	179.5	179.1	178.9	179.3	180.1	180.8	180.7
180°	179.8	179.8	179.8	179.8	179.8	179.8	179.8	179.8	179.8	179.8	179.8



TEST NUMBER: P936451

CATALOG NUMBER: SQ4-FB-025U-100D-930-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	494.9	494.9
2.5°	528.4	525.2
5°	679.5	682.7
7.5°	915.0	913.5
10°	1137.9	1152.1
12.5°	1300.1	1303.3
15°	1398.8	1405.2
17.5°	1437.0	1438.6
20°	1438.6	1435.4
22.5°	1421.1	1417.9
25°	1400.4	1398.8
27.5°	1381.3	1382.9
30°	1373.4	1378.1
32.5°	1373.4	1381.3
35°	1376.6	1384.5
37.5°	1375.0	1384.5
40°	1368.6	1379.7
42.5°	1351.0	1359.1
45°	1324.1	1333.5
47.5°	1289.1	1295.4
50°	1244.5	1250.8
52.5°	1188.8	1190.4
55°	1122.0	1128.3
57.5°	1050.3	1051.9
60°	970.7	975.5
62.5°	886.4	886.4
65°	797.3	800.4
67.5°	705.0	712.9
70°	611.1	612.7
72.5°	518.8	518.8
75°	423.3	424.9
77.5°	332.6	332.6
80°	246.7	248.3
82.5°	170.3	173.4
85°	106.6	106.6
87.5°	49.3	44.6
90°	4.6	4.6
92.5°	18.3	14.7
95°	64.0	53.0
97.5°	153.4	132.3
100°	221.0	195.9
102.5°	287.5	266.0
105°	372.3	360.7
107.5°	427.8	430.6
110°	449.0	461.0



TEST NUMBER: P936451
CATALOG NUMBER: SQ4-FB-025U-100D-930-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	450.8	469.3
115°	438.8	464.5
117.5°	413.5	441.9
120°	393.1	420.7
122.5°	373.2	400.4
125°	344.8	369.9
127.5°	319.4	340.5
130°	304.3	323.8
132.5°	290.6	308.1
135°	271.9	287.0
137.5°	257.0	269.2
140°	246.6	258.2
142.5°	238.1	248.0
145°	225.3	232.9
147.5°	215.5	221.7
150°	209.3	214.4
152.5°	204.0	207.9
155°	197.9	200.5
157.5°	193.2	195.0
160°	190.3	191.4
162.5°	188.5	189.4
165°	185.7	186.8
167.5°	183.8	184.2
170°	183.2	183.2
172.5°	181.8	181.5
175°	181.0	181.0
177.5°	180.2	179.8
180°	179.8	179.8



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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	7.02	8.25	7.70	8.96	9.79	20.18	21.42	20.86	22.12	22.95
	3H	7.75	8.87	8.45	9.58	10.44	22.04	23.16	22.74	23.87	24.74
	4H	8.07	9.12	8.78	9.85	10.72	22.70	23.76	23.42	24.48	25.36
	6H	8.34	9.31	9.06	10.05	10.93	23.15	24.12	23.88	24.86	25.75
	8H	8.41	9.35	9.15	10.10	10.99	23.28	24.21	24.01	24.97	25.86
	12H	8.45	9.34	9.19	10.08	11.00	23.36	24.25	24.10	25.00	25.92
4H	2H	14.27	15.32	14.98	16.05	16.92	20.50	21.56	21.22	22.28	23.15
	3H	15.87	16.76	16.60	17.52	18.41	22.58	23.46	23.31	24.22	25.11
	4H	15.98	16.79	16.73	17.55	18.47	23.36	24.16	24.10	24.93	25.85
	6H	16.01	16.72	16.78	17.50	18.43	23.91	24.61	24.68	25.40	26.33
	8H	16.00	16.66	16.77	17.44	18.38	24.08	24.74	24.85	25.52	26.46
	12H	15.98	16.57	16.77	17.38	18.32	24.19	24.78	24.98	25.59	26.54
8H	4H	17.45	18.11	18.22	18.90	19.84	23.45	24.10	24.22	24.89	25.83
	6H	17.71	18.26	18.51	19.09	20.03	24.09	24.64	24.89	25.46	26.41
	8H	17.74	18.23	18.55	19.05	20.01	24.31	24.80	25.12	25.63	26.58
	12H	17.72	18.15	18.54	18.97	19.99	24.47	24.90	25.29	25.72	26.73
12H	4H	17.62	18.21	18.41	19.02	19.96	23.42	24.01	24.21	24.82	25.77
	6H	17.98	18.47	18.79	19.29	20.25	24.08	24.57	24.89	25.39	26.35
	8H	18.07	18.49	18.88	19.31	20.33	24.33	24.75	25.14	25.57	26.59