

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: P936488

Luminaire Tested: SQ4-FB-025U-100D-B2750-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936488
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-B2750-1D-UNV-STD-W-6-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

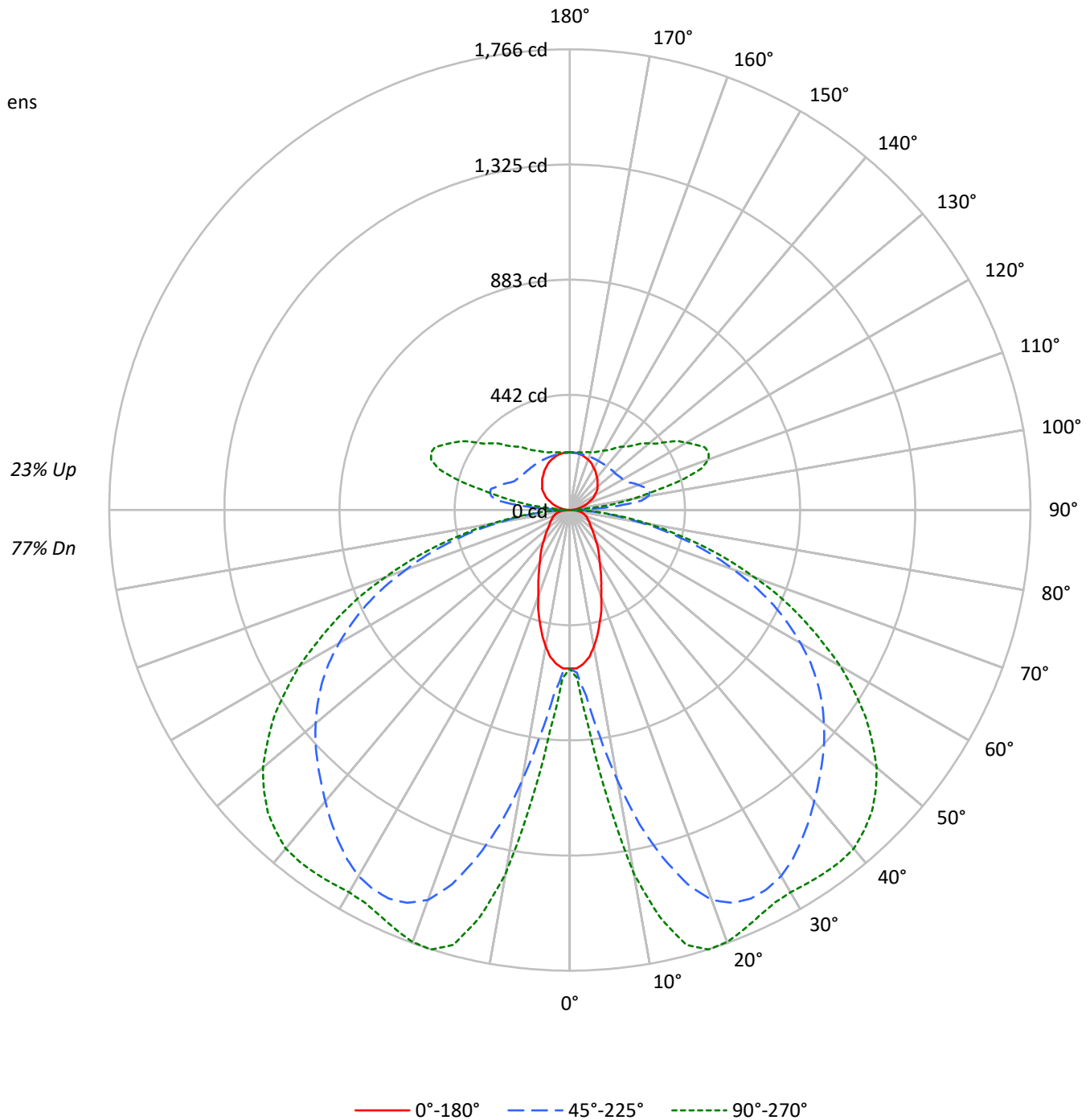
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6132.9 lumens
Efficiency: N/A
Efficacy: 105.4 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 (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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CATALOG NUMBER: SQ4-FB-025U-100D-B2750-1D-UNV-STD-W-6-3000K

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	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	20	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°	3759	3759	3759
5°	3671	4343	5053
10°	3329	6330	8377
15°	2828	8269	10115
20°	2301	9580	10310
25°	1919	10023	10100
30°	1618	10083	10081
35°	1430	9913	10342
40°	1245	9693	10611
45°	1126	9531	10652
50°	1032	9384	10476
55°	988	9171	10012
60°	1010	8764	9278
65°	1049	8148	8270
70°	1116	7101	6987
75°	1231	5785	5453
80°	1334	4007	3675
85°	1163	2121	1880

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10652 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.6	1.3
10°-20°	348.4	5.7
20°-30°	609.4	9.9
30°-40°	784.5	12.8
40°-50°	876.2	14.3
50°-60°	839.2	13.7
60°-70°	665.1	10.8
70°-80°	391.1	6.4
80°-90°	109.5	1.8
90°-100°	107.6	1.8
100°-110°	282.9	4.6
110°-120°	293.3	4.8
120°-130°	235.3	3.8
130°-140°	184.6	3.0
140°-150°	141.7	2.3
150°-160°	102.0	1.7
160°-170°	62.4	1.0
170°-180°	21.1	0.3
0°-30°	1036.4	16.9
0°-40°	1820.9	29.7
0°-60°	3536.4	57.7
0°-90°	4702.1	76.7
90°-120°	683.7	11.1
90°-150°	1245.2	20.3
90°-180°	1431.0	23.3
0°-180°	6132.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	608	608	608	608	608	
5°	592	635	715	809	838	55
15°	444	819	1380	1673	1725	123
25°	283	928	1643	1716	1718	131
35°	192	887	1548	1636	1700	120
45°	131	707	1368	1567	1638	101
55°	94	449	1161	1348	1385	85
65°	74	238	862	969	983	74
75°	55	146	473	520	522	57
85°	20	45	117	129	131	21
90°	2	4	11	6	6	3
95°	14	56	185	96	65	16
105°	51	77	313	475	443	54
115°	90	110	250	500	570	89
125°	126	141	228	385	454	112
135°	150	165	221	311	352	116
145°	174	185	218	265	286	109
155°	197	202	218	239	246	90
165°	212	215	218	226	229	60
175°	221	221	219	222	222	21
180°	221	221	221	221	221	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	607.7	607.7	607.7	607.7	607.7	607.7	607.7	607.7	607.7	607.7	607.7
2.5°	607.7	607.7	611.6	613.6	617.4	619.4	623.3	627.3	638.9	640.9	644.8
5°	592.1	599.9	625.3	635.1	662.4	699.6	715.1	740.6	793.3	809.0	818.8
7.5°	568.6	586.2	648.8	664.4	732.8	830.5	871.5	926.2	1010.3	1051.3	1084.5
10°	531.5	568.6	680.0	717.1	828.5	977.0	1053.2	1129.5	1256.5	1313.2	1334.6
12.5°	490.4	551.1	713.3	764.1	924.3	1141.2	1233.0	1317.0	1461.6	1537.9	1549.6
15°	443.6	525.6	744.5	818.8	1025.8	1278.0	1379.6	1483.1	1617.9	1672.7	1686.4
17.5°	402.6	506.1	773.8	852.0	1104.0	1401.1	1504.6	1590.6	1700.1	1737.1	1746.9
20°	351.7	474.9	793.3	895.0	1186.2	1490.9	1590.6	1657.1	1731.3	1754.8	1758.6
22.5°	314.6	441.6	805.1	910.6	1240.8	1545.7	1629.7	1682.4	1733.3	1741.1	1743.1
25°	283.4	404.5	803.1	928.2	1287.7	1578.9	1643.4	1682.4	1711.8	1715.6	1715.6
27.5°	254.0	363.4	795.3	932.1	1322.9	1586.7	1637.5	1664.9	1678.6	1686.4	1686.4
30°	228.7	324.4	775.8	924.3	1338.5	1578.9	1619.9	1633.6	1647.3	1658.9	1664.9
32.5°	209.1	287.2	746.4	908.6	1340.5	1559.4	1588.6	1596.4	1616.0	1643.4	1653.1
35°	191.5	250.1	713.3	887.1	1328.7	1528.1	1547.6	1555.4	1594.5	1635.6	1649.2
37.5°	173.9	222.7	670.3	850.0	1311.2	1490.9	1504.6	1518.3	1578.9	1627.7	1643.4
40°	156.3	199.3	619.4	809.0	1283.8	1446.0	1457.7	1479.2	1559.4	1616.0	1631.6
42.5°	142.7	179.7	564.7	766.0	1248.7	1395.2	1412.7	1444.0	1535.9	1596.4	1614.1
45°	130.9	160.2	506.1	707.4	1203.7	1342.4	1367.9	1410.9	1508.5	1567.1	1582.8
47.5°	119.2	146.5	445.6	646.8	1154.8	1289.7	1322.9	1371.7	1471.4	1528.1	1541.7
50°	109.4	132.9	384.9	582.3	1102.1	1233.0	1272.1	1322.9	1424.5	1477.2	1494.9
52.5°	101.7	121.2	328.2	517.8	1041.5	1174.4	1219.3	1272.1	1367.9	1418.7	1430.4
55°	93.8	111.4	279.4	449.4	979.0	1111.8	1160.7	1211.5	1305.3	1348.3	1356.1
57.5°	89.9	103.5	238.4	384.9	912.5	1041.5	1096.2	1143.2	1231.0	1264.2	1272.1
60°	84.0	97.7	207.2	330.2	840.3	975.1	1022.0	1068.8	1143.2	1170.5	1176.3
62.5°	78.2	93.8	183.7	277.5	766.0	896.9	943.8	986.8	1049.3	1068.8	1076.7
65°	74.2	89.9	166.1	238.4	689.8	814.8	861.8	898.8	949.7	969.2	973.1
67.5°	70.3	86.0	152.4	205.2	613.6	732.8	767.9	803.1	842.2	861.8	863.7
70°	64.5	82.0	140.7	181.7	535.4	638.9	668.3	705.4	736.6	746.4	752.3
72.5°	60.5	76.2	132.9	164.2	455.3	549.1	576.4	597.9	625.3	635.1	635.1
75°	54.7	68.4	125.0	146.5	373.2	449.4	472.9	494.4	515.9	519.8	513.9
77.5°	48.8	60.5	107.5	123.2	291.2	355.7	375.2	386.9	404.5	408.4	410.4
80°	41.0	52.8	84.0	95.7	211.0	261.9	275.5	285.2	300.9	300.9	304.9
82.5°	31.3	41.0	60.5	68.4	142.7	179.7	191.5	197.4	207.2	207.2	207.2
85°	19.5	25.4	39.0	45.0	86.0	109.4	117.2	119.2	127.0	129.0	129.0
87.5°	9.8	13.7	25.4	27.3	45.0	56.7	56.7	60.5	60.5	58.7	56.7
90°	1.5	2.7	3.8	4.1	6.5	9.7	11.2	10.0	7.5	5.6	5.6
92.5°	5.9	16.0	26.0	28.6	40.2	55.7	63.4	55.5	39.8	28.1	27.0
95°	14.2	32.6	51.1	55.7	98.9	156.5	185.3	165.4	125.4	95.5	92.2
97.5°	24.6	40.8	57.1	61.1	133.2	229.2	277.3	264.6	239.5	220.6	214.2
100°	32.6	47.3	62.1	65.8	145.7	252.3	305.6	306.4	308.3	309.7	302.0
102.5°	39.4	53.2	66.9	70.4	151.4	259.5	313.5	329.6	361.8	385.9	379.3
105°	51.0	62.6	74.2	77.2	155.7	260.3	312.7	348.6	420.7	474.8	471.2
107.5°	62.8	73.7	84.5	87.3	156.5	248.8	294.9	345.2	445.7	521.0	521.9
110°	70.8	80.7	90.4	92.9	155.3	238.5	280.1	336.3	448.6	532.8	536.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	78.7	88.0	97.3	99.7	155.3	229.5	266.6	324.1	439.1	525.2	530.9
115°	90.5	99.2	107.8	109.9	156.8	219.2	250.4	305.9	416.6	499.6	507.5
117.5°	102.2	110.0	117.8	119.8	159.6	212.8	239.4	289.4	389.3	464.2	472.9
120°	109.1	116.4	123.7	125.6	162.1	210.7	235.0	280.6	371.9	440.4	448.9
122.5°	115.7	123.2	130.5	132.4	165.5	209.5	231.5	272.6	354.9	416.6	425.0
125°	125.9	132.7	139.5	141.2	170.1	208.6	227.9	262.8	332.7	385.0	392.7
127.5°	134.2	141.0	147.9	149.6	174.6	208.0	224.7	254.7	314.7	359.7	366.2
130°	138.6	146.0	153.3	155.2	178.0	208.3	223.5	250.2	303.6	343.6	349.6
132.5°	143.3	150.7	158.0	159.8	180.7	208.6	222.5	246.4	294.2	330.0	335.3
135°	150.1	156.8	163.5	165.2	183.7	208.4	220.8	240.8	280.8	310.8	315.4
137.5°	157.1	163.7	170.3	172.0	188.1	209.7	220.5	237.4	271.2	296.6	300.3
140°	162.8	168.9	175.0	176.6	190.9	209.9	219.4	234.0	263.3	285.2	288.7
142.5°	167.2	172.8	178.6	179.9	193.1	210.6	219.4	232.2	257.9	277.2	280.2
145°	174.0	179.0	183.9	185.2	196.1	210.6	217.9	228.4	249.4	265.1	267.4
147.5°	180.8	185.7	190.5	191.7	200.5	212.1	217.9	226.2	242.7	255.1	257.0
150°	185.3	189.6	194.0	195.1	202.7	212.9	217.9	224.9	238.8	249.3	250.8
152.5°	189.9	193.2	196.5	197.3	204.2	213.4	217.9	223.8	235.8	244.7	245.9
155°	196.7	199.2	201.6	202.2	207.5	214.5	217.9	222.6	232.1	239.2	240.0
157.5°	201.7	204.1	206.5	207.1	210.7	215.5	217.9	221.6	228.9	234.5	235.1
160°	205.2	207.1	208.8	209.3	212.2	216.0	217.9	221.1	227.4	232.1	232.4
162.5°	208.5	209.9	211.3	211.7	213.8	216.5	217.9	220.6	225.9	229.9	230.2
165°	212.3	213.5	214.8	215.0	216.0	217.3	217.9	219.8	223.6	226.5	226.8
167.5°	215.6	216.2	216.8	217.0	217.8	218.9	219.4	220.7	223.1	225.0	225.1
170°	217.9	218.5	219.1	219.2	219.3	219.4	219.4	220.7	223.1	225.0	225.0
172.5°	219.1	219.2	219.4	219.4	219.4	219.4	219.4	220.4	222.3	223.8	223.7
175°	220.8	220.8	220.8	220.8	220.3	219.7	219.4	220.0	221.3	222.2	222.2
177.5°	220.8	220.8	220.8	220.8	220.4	219.9	219.7	220.2	221.2	221.9	221.8
180°	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	607.7	607.7
2.5°	648.8	644.8
5°	834.4	838.3
7.5°	1123.5	1121.7
10°	1397.2	1414.7
12.5°	1596.4	1600.4
15°	1717.6	1725.4
17.5°	1764.5	1766.4
20°	1766.4	1762.6
22.5°	1744.9	1741.1
25°	1719.6	1717.6
27.5°	1696.1	1698.1
30°	1686.4	1692.2
32.5°	1686.4	1696.1
35°	1690.3	1700.1
37.5°	1688.3	1700.1
40°	1680.4	1694.1
42.5°	1658.9	1668.8
45°	1625.8	1637.5
47.5°	1582.8	1590.6
50°	1528.1	1535.9
52.5°	1459.7	1461.6
55°	1377.6	1385.4
57.5°	1289.7	1291.7
60°	1192.0	1197.8
62.5°	1088.4	1088.4
65°	979.0	982.8
67.5°	865.6	875.4
70°	750.3	752.3
72.5°	637.1	637.1
75°	519.8	521.7
77.5°	408.4	408.4
80°	302.9	304.9
82.5°	209.1	213.0
85°	130.9	130.9
87.5°	60.5	54.7
90°	5.6	5.6
92.5°	22.5	18.0
95°	78.6	65.1
97.5°	188.3	162.5
100°	271.3	240.6
102.5°	353.0	326.7
105°	457.1	442.9
107.5°	525.2	528.7
110°	551.3	566.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	553.5	576.2
115°	538.8	570.3
117.5°	507.8	542.6
120°	482.7	516.6
122.5°	458.3	491.6
125°	423.4	454.2
127.5°	392.1	418.1
130°	373.6	397.6
132.5°	356.8	378.3
135°	333.9	352.4
137.5°	315.5	330.6
140°	302.8	317.0
142.5°	292.3	304.6
145°	276.7	285.9
147.5°	264.6	272.2
150°	257.1	263.3
152.5°	250.5	255.3
155°	243.0	246.2
157.5°	237.2	239.4
160°	233.7	235.0
162.5°	231.4	232.6
165°	228.1	229.3
167.5°	225.7	226.2
170°	225.0	225.0
172.5°	223.2	222.8
175°	222.2	222.2
177.5°	221.3	220.8
180°	220.8	220.8



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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	7.73	8.97	8.41	9.67	10.50	20.90	22.13	21.58	22.84	23.66
	3H	8.46	9.58	9.16	10.29	11.15	22.76	23.87	23.45	24.59	25.45
	4H	8.78	9.83	9.49	10.56	11.43	23.42	24.47	24.13	25.20	26.07
	6H	9.05	10.02	9.77	10.76	11.65	23.86	24.84	24.59	25.57	26.46
	8H	9.13	10.06	9.86	10.81	11.70	23.99	24.92	24.73	25.68	26.57
	12H	9.16	10.05	9.90	10.80	11.72	24.07	24.96	24.81	25.71	26.63
4H	2H	14.98	16.04	15.70	16.76	17.63	21.22	22.27	21.93	22.99	23.87
	3H	16.58	17.47	17.31	18.23	19.12	23.29	24.17	24.02	24.94	25.83
	4H	16.70	17.50	17.44	18.26	19.18	24.07	24.88	24.81	25.64	26.56
	6H	16.73	17.43	17.49	18.22	19.15	24.63	25.33	25.39	26.12	27.04
	8H	16.72	17.37	17.48	18.16	19.10	24.80	25.45	25.56	26.24	27.18
	12H	16.69	17.28	17.48	18.09	19.04	24.91	25.50	25.69	26.30	27.25
8H	4H	18.17	18.83	18.94	19.61	20.55	24.16	24.82	24.93	25.60	26.54
	6H	18.43	18.98	19.23	19.80	20.74	24.80	25.35	25.60	26.18	27.12
	8H	18.45	18.94	19.26	19.76	20.72	25.03	25.51	25.84	26.34	27.30
	12H	18.44	18.87	19.25	19.68	20.70	25.19	25.62	26.00	26.43	27.45
12H	4H	18.33	18.92	19.12	19.73	20.68	24.13	24.73	24.92	25.53	26.48
	6H	18.69	19.18	19.50	20.00	20.96	24.79	25.28	25.60	26.10	27.06
	8H	18.78	19.21	19.59	20.02	21.04	25.04	25.47	25.85	26.28	27.30