

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: P936421

Luminaire Tested: SQ4-FB-025U-100D-927-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936421
REPORT IS A COMBINATION OF REPORTS P933431 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-100D-927-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

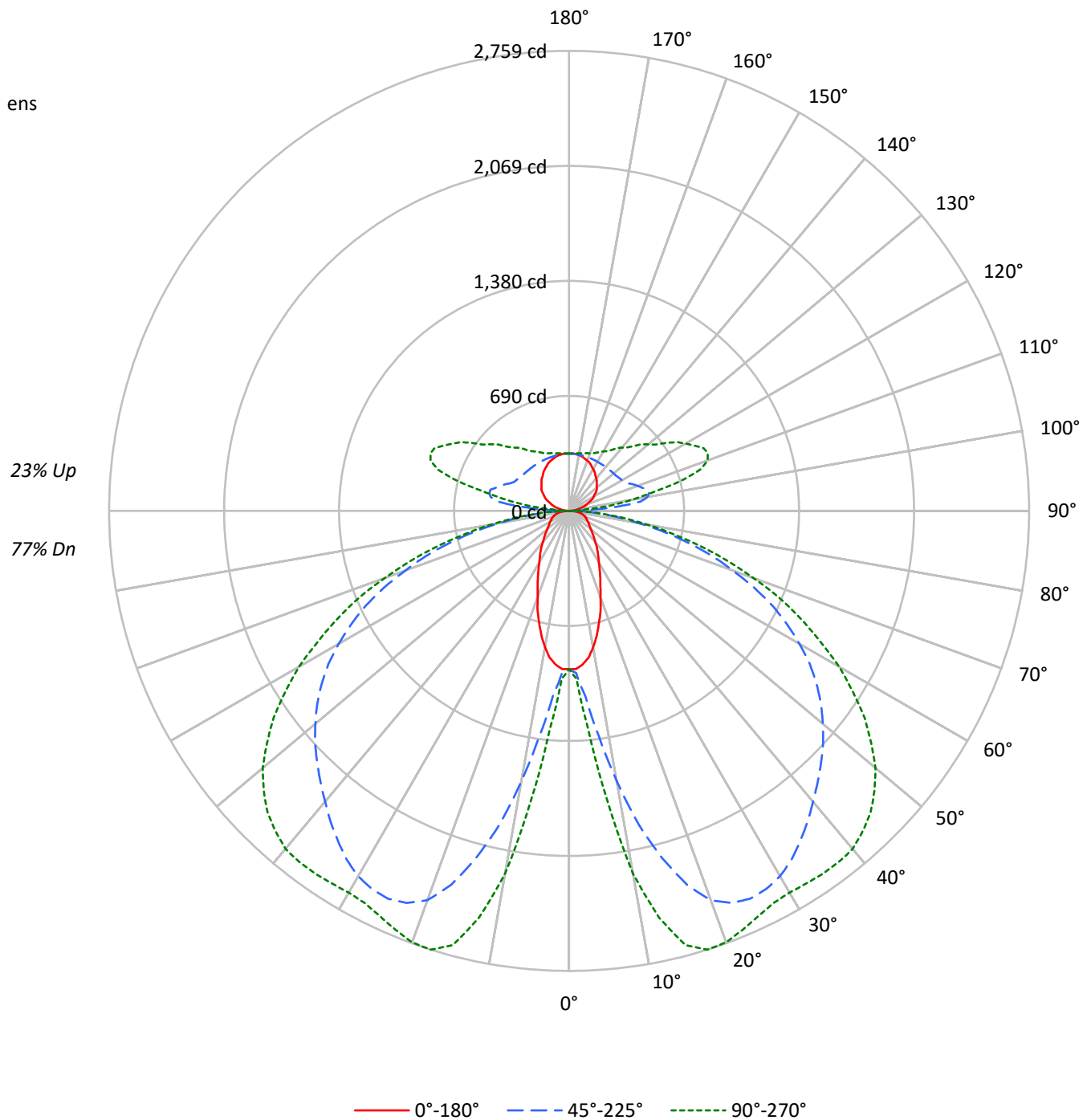
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9578.8 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 116.4
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

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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	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°	2936	2936	2936
5°	2869	3394	3946
10°	2603	4949	6542
15°	2214	6467	7900
20°	1803	7496	8051
25°	1504	7846	7887
30°	1269	7898	7872
35°	1123	7769	8076
40°	979	7600	8286
45°	887	7478	8319
50°	814	7368	8181
55°	781	7206	7819
60°	800	6893	7246
65°	834	6415	6459
70°	890	5598	5457
75°	991	4569	4258
80°	1090	3173	2869
85°	988	1686	1469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8319 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.8	1.3
10°-20°	544.2	5.7
20°-30°	951.8	9.9
30°-40°	1225.3	12.8
40°-50°	1368.6	14.3
50°-60°	1310.8	13.7
60°-70°	1038.8	10.8
70°-80°	610.8	6.4
80°-90°	171.0	1.8
90°-100°	168.0	1.8
100°-110°	441.8	4.6
110°-120°	458.1	4.8
120°-130°	367.4	3.8
130°-140°	288.3	3.0
140°-150°	221.3	2.3
150°-160°	159.4	1.7
160°-170°	97.5	1.0
170°-180°	32.9	0.3
0°-30°	1618.8	16.9
0°-40°	2844.0	29.7
0°-60°	5523.4	57.7
0°-90°	7344.0	76.7
90°-120°	1067.9	11.1
90°-150°	1944.9	20.3
90°-180°	2235.0	23.3
0°-180°	9578.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	949	949	949	949	949	
5°	925	992	1117	1264	1309	85
15°	693	1279	2155	2612	2695	193
25°	442	1450	2567	2680	2683	204
35°	299	1386	2417	2554	2655	187
45°	204	1105	2136	2448	2558	158
55°	146	702	1813	2106	2164	133
65°	116	372	1346	1514	1535	115
75°	86	229	739	812	815	89
85°	30	70	183	201	204	32
90°	2	6	18	9	9	4
95°	22	87	289	149	102	25
105°	80	120	488	742	692	84
115°	141	172	391	780	891	140
125°	197	220	356	601	709	175
135°	234	258	345	485	550	181
145°	272	289	340	414	446	170
155°	307	316	340	374	384	141
165°	332	336	340	354	358	94
175°	345	345	343	347	347	33
180°	345	345	345	345	345	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	949.2	949.2	949.2	949.2	949.2	949.2	949.2	949.2	949.2	949.2	949.2
2.5°	949.2	949.2	955.3	958.3	964.4	967.5	973.6	979.7	998.0	1001.1	1007.2
5°	924.8	936.9	976.7	991.9	1034.6	1092.6	1117.0	1156.7	1239.1	1263.5	1278.7
7.5°	888.1	915.6	1013.2	1037.7	1144.5	1297.1	1361.2	1446.6	1577.9	1641.9	1693.8
10°	830.1	888.1	1062.1	1120.0	1294.1	1526.0	1645.0	1764.1	1962.4	2050.9	2084.5
12.5°	766.1	860.6	1114.0	1193.3	1443.6	1782.3	1925.8	2057.1	2282.9	2401.9	2420.2
15°	692.8	821.0	1162.8	1278.7	1602.3	1996.0	2154.7	2316.5	2527.1	2612.5	2633.9
17.5°	628.7	790.5	1208.6	1330.6	1724.3	2188.3	2350.0	2484.3	2655.2	2713.2	2728.5
20°	549.3	741.7	1239.1	1397.8	1852.5	2328.6	2484.3	2588.0	2704.0	2740.7	2746.7
22.5°	491.3	689.8	1257.4	1422.2	1938.0	2414.1	2545.3	2627.8	2707.1	2719.3	2722.3
25°	442.5	631.8	1254.3	1449.7	2011.2	2466.0	2566.7	2627.8	2673.5	2679.6	2679.6
27.5°	396.8	567.6	1242.2	1455.8	2066.2	2478.2	2557.6	2600.3	2621.6	2633.9	2633.9
30°	357.0	506.7	1211.6	1443.6	2090.6	2466.0	2530.1	2551.5	2572.8	2591.1	2600.3
32.5°	326.6	448.6	1165.9	1419.2	2093.6	2435.5	2481.2	2493.5	2524.0	2566.7	2582.0
35°	299.1	390.6	1114.0	1385.6	2075.3	2386.6	2417.2	2429.4	2490.4	2554.5	2575.9
37.5°	271.7	348.0	1046.8	1327.6	2047.9	2328.6	2350.0	2371.4	2466.0	2542.3	2566.7
40°	244.2	311.3	967.5	1263.5	2005.2	2258.5	2276.7	2310.3	2435.5	2524.0	2548.4
42.5°	222.8	280.8	882.0	1196.3	1950.2	2179.1	2206.6	2255.4	2398.9	2493.5	2520.9
45°	204.5	250.2	790.5	1104.8	1880.0	2096.7	2136.4	2203.5	2356.1	2447.7	2472.1
47.5°	186.2	228.9	695.8	1010.2	1803.7	2014.3	2066.2	2142.4	2298.1	2386.6	2408.0
50°	170.9	207.5	601.2	909.5	1721.3	1925.8	1986.8	2066.2	2224.9	2307.3	2334.8
52.5°	158.7	189.2	512.7	808.8	1626.7	1834.2	1904.4	1986.8	2136.4	2215.8	2234.1
55°	146.5	173.9	436.4	701.9	1529.1	1736.6	1812.9	1892.2	2038.7	2105.9	2118.0
57.5°	140.4	161.8	372.4	601.2	1425.3	1626.7	1712.2	1785.4	1922.8	1974.6	1986.8
60°	131.2	152.6	323.5	515.7	1312.3	1522.9	1596.2	1669.4	1785.4	1828.1	1837.3
62.5°	122.0	146.5	286.9	433.4	1196.3	1400.9	1474.1	1541.2	1638.9	1669.4	1681.6
65°	116.0	140.4	259.4	372.4	1077.4	1272.7	1345.9	1403.9	1483.3	1513.7	1519.9
67.5°	109.9	134.3	238.1	320.5	958.3	1144.5	1199.4	1254.3	1315.4	1345.9	1349.0
70°	100.7	128.2	219.8	283.8	836.2	998.0	1043.8	1101.8	1150.6	1165.9	1175.0
72.5°	94.6	119.0	207.5	256.3	711.1	857.6	900.4	933.9	976.7	991.9	991.9
75°	85.5	106.8	195.3	228.9	582.9	701.9	738.6	772.2	805.7	811.8	802.6
77.5°	76.3	94.6	167.9	192.3	454.8	555.5	586.0	604.3	631.8	637.9	640.9
80°	64.1	82.4	131.2	149.5	329.6	408.9	430.4	445.6	470.0	470.0	476.1
82.5°	48.8	64.1	94.6	106.8	222.8	280.8	299.1	308.2	323.5	323.5	323.5
85°	30.5	39.7	61.1	70.2	134.3	170.9	183.1	186.2	198.4	201.4	201.4
87.5°	15.2	21.3	39.7	42.7	70.2	88.5	88.5	94.6	94.6	91.6	88.5
90°	2.3	4.2	6.0	6.5	10.2	15.1	17.6	15.6	11.7	8.8	8.8
92.5°	9.2	24.9	40.7	44.7	62.8	86.9	99.0	86.8	62.3	44.0	42.2
95°	22.2	51.0	79.8	87.0	154.5	244.5	289.4	258.3	196.0	149.2	143.9
97.5°	38.4	63.8	89.2	95.6	208.1	358.1	433.1	413.4	374.1	344.5	334.4
100°	50.9	73.9	96.9	102.7	227.6	394.1	477.3	478.8	481.6	483.8	471.8
102.5°	61.5	83.0	104.5	109.9	236.5	405.4	489.8	514.9	565.0	602.7	592.4
105°	79.6	97.8	116.0	120.5	243.2	406.6	488.4	544.6	657.1	741.5	736.0
107.5°	98.1	115.0	132.1	136.3	244.4	388.5	460.6	539.1	696.0	813.7	815.0
110°	110.6	125.9	141.2	145.1	242.6	372.5	437.5	525.2	700.6	832.2	838.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	122.9	137.4	152.1	155.7	242.6	358.5	416.5	506.3	685.8	820.4	829.3
115°	141.4	154.8	168.3	171.7	244.9	342.4	391.2	477.7	650.6	780.4	792.6
117.5°	159.6	171.9	184.1	187.2	249.4	332.4	373.9	452.0	608.1	725.1	738.7
120°	170.2	181.8	193.3	196.2	253.1	328.9	366.9	438.2	580.9	687.8	701.1
122.5°	180.7	192.3	203.9	206.8	258.4	327.2	361.6	425.8	554.2	650.6	663.6
125°	196.7	207.3	217.9	220.5	265.7	325.8	355.8	410.3	519.4	601.3	613.3
127.5°	209.6	220.3	231.0	233.7	272.8	324.9	351.0	397.8	491.5	561.7	571.9
130°	216.5	228.1	239.6	242.5	278.0	325.4	349.1	390.9	474.2	536.8	546.2
132.5°	223.8	235.2	246.8	249.6	282.3	325.8	347.5	384.8	459.5	515.5	523.9
135°	234.4	244.9	255.3	258.0	286.9	325.5	344.7	376.0	438.5	485.4	492.6
137.5°	245.2	255.6	266.0	268.6	293.8	327.5	344.3	370.7	423.5	463.2	469.1
140°	254.3	263.8	273.4	275.8	298.1	327.8	342.7	365.4	411.1	445.4	450.9
142.5°	261.2	270.0	278.9	281.1	301.6	328.9	342.7	362.7	402.8	432.9	437.7
145°	271.9	279.6	287.3	289.2	306.2	328.9	340.3	356.7	389.5	414.1	417.7
147.5°	282.5	290.0	297.5	299.4	313.0	331.3	340.3	353.3	379.1	398.4	401.4
150°	289.4	296.2	303.0	304.7	316.5	332.4	340.3	351.3	373.1	389.4	391.8
152.5°	296.6	301.8	306.8	308.2	318.9	333.2	340.3	349.7	368.3	382.2	384.1
155°	307.2	311.0	314.9	315.8	323.9	334.9	340.3	347.7	362.6	373.7	374.9
157.5°	315.1	318.8	322.6	323.5	329.1	336.6	340.3	346.1	357.6	366.2	367.1
160°	320.5	323.3	326.2	326.9	331.4	337.3	340.3	345.3	355.1	362.5	363.0
162.5°	325.8	327.9	330.1	330.6	333.9	338.2	340.3	344.5	352.8	359.1	359.5
165°	331.6	333.5	335.5	336.0	337.4	339.3	340.3	343.3	349.3	353.7	354.2
167.5°	336.9	337.8	338.7	339.0	340.2	341.8	342.7	344.6	348.5	351.4	351.7
170°	340.3	341.3	342.2	342.4	342.5	342.6	342.7	344.6	348.5	351.4	351.4
172.5°	342.2	342.4	342.6	342.7	342.7	342.7	342.7	344.2	347.3	349.6	349.4
175°	344.7	344.7	344.7	344.7	344.0	343.1	342.7	343.7	345.6	347.0	347.0
177.5°	344.7	344.7	344.7	344.7	344.2	343.5	343.1	343.9	345.4	346.6	346.3
180°	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	949.2	949.2
2.5°	1013.2	1007.2
5°	1303.2	1309.3
7.5°	1754.9	1751.8
10°	2182.2	2209.6
12.5°	2493.5	2499.6
15°	2682.7	2694.9
17.5°	2755.9	2759.0
20°	2759.0	2752.9
22.5°	2725.4	2719.3
25°	2685.8	2682.7
27.5°	2649.1	2652.2
30°	2633.9	2643.0
32.5°	2633.9	2649.1
35°	2639.9	2655.2
37.5°	2636.9	2655.2
40°	2624.7	2646.0
42.5°	2591.1	2606.4
45°	2539.2	2557.6
47.5°	2472.1	2484.3
50°	2386.6	2398.9
52.5°	2279.8	2282.9
55°	2151.6	2163.9
57.5°	2014.3	2017.3
60°	1861.7	1870.9
62.5°	1699.9	1699.9
65°	1529.1	1535.1
67.5°	1352.0	1367.3
70°	1171.9	1175.0
72.5°	994.9	994.9
75°	811.8	814.9
77.5°	637.9	637.9
80°	473.1	476.1
82.5°	326.6	332.6
85°	204.5	204.5
87.5°	94.6	85.5
90°	8.8	8.8
92.5°	35.3	28.3
95°	122.7	101.6
97.5°	294.1	253.8
100°	423.8	375.8
102.5°	551.2	510.1
105°	713.9	691.8
107.5°	820.4	825.7
110°	861.0	884.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	864.6	900.0
115°	841.7	890.7
117.5°	793.1	847.5
120°	753.9	806.7
122.5°	715.8	767.9
125°	661.3	709.3
127.5°	612.4	652.9
130°	583.6	621.0
132.5°	557.4	590.9
135°	521.5	550.4
137.5°	492.7	516.4
140°	473.0	495.1
142.5°	456.7	475.7
145°	432.1	446.5
147.5°	413.3	425.3
150°	401.5	411.1
152.5°	391.3	398.6
155°	379.7	384.5
157.5°	370.5	373.9
160°	365.0	366.9
162.5°	361.4	363.2
165°	356.2	358.1
167.5°	352.4	353.3
170°	351.4	351.4
172.5°	348.7	348.0
175°	347.0	347.0
177.5°	345.6	344.7
180°	344.7	344.7



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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	6.88	8.12	7.56	8.82	9.65	20.07	21.31	20.75	22.01	22.84
	3H	7.62	8.73	8.31	9.44	10.31	21.95	23.06	22.64	23.78	24.64
	4H	7.93	8.98	8.64	9.71	10.58	22.61	23.67	23.32	24.39	25.26
	6H	8.20	9.17	8.93	9.91	10.80	23.07	24.04	23.79	24.78	25.66
	8H	8.28	9.21	9.01	9.97	10.86	23.20	24.13	23.94	24.89	25.78
	12H	8.31	9.20	9.05	9.95	10.87	23.28	24.17	24.03	24.92	25.84
4H	2H	14.15	15.20	14.87	15.93	16.80	20.39	21.45	21.11	22.17	23.04
	3H	15.75	16.64	16.48	17.40	18.29	22.48	23.36	23.20	24.12	25.01
	4H	15.86	16.67	16.61	17.43	18.35	23.26	24.07	24.01	24.83	25.75
	6H	15.89	16.59	16.66	17.38	18.31	23.83	24.53	24.59	25.32	26.25
	8H	15.88	16.54	16.65	17.32	18.26	24.00	24.66	24.77	25.44	26.38
	12H	15.85	16.45	16.64	17.25	18.20	24.12	24.71	24.91	25.52	26.46
8H	4H	17.34	18.00	18.11	18.78	19.72	23.35	24.01	24.12	24.80	25.74
	6H	17.60	18.15	18.40	18.97	19.92	24.01	24.55	24.80	25.38	26.32
	8H	17.62	18.11	18.43	18.94	19.89	24.23	24.72	25.04	25.55	26.50
	12H	17.61	18.04	18.42	18.86	19.87	24.40	24.83	25.21	25.65	26.66
12H	4H	17.50	18.10	18.29	18.90	19.85	23.33	23.92	24.12	24.73	25.67
	6H	17.87	18.35	18.67	19.18	20.14	23.99	24.48	24.80	25.31	26.26
	8H	17.95	18.38	18.77	19.20	20.21	24.25	24.67	25.06	25.49	26.51