

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: P936595

Luminaire Tested: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-8-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936595
REPORT IS A COMBINATION OF REPORTS P933456 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-125D-B2750-1D-UNV-STD-W-8-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

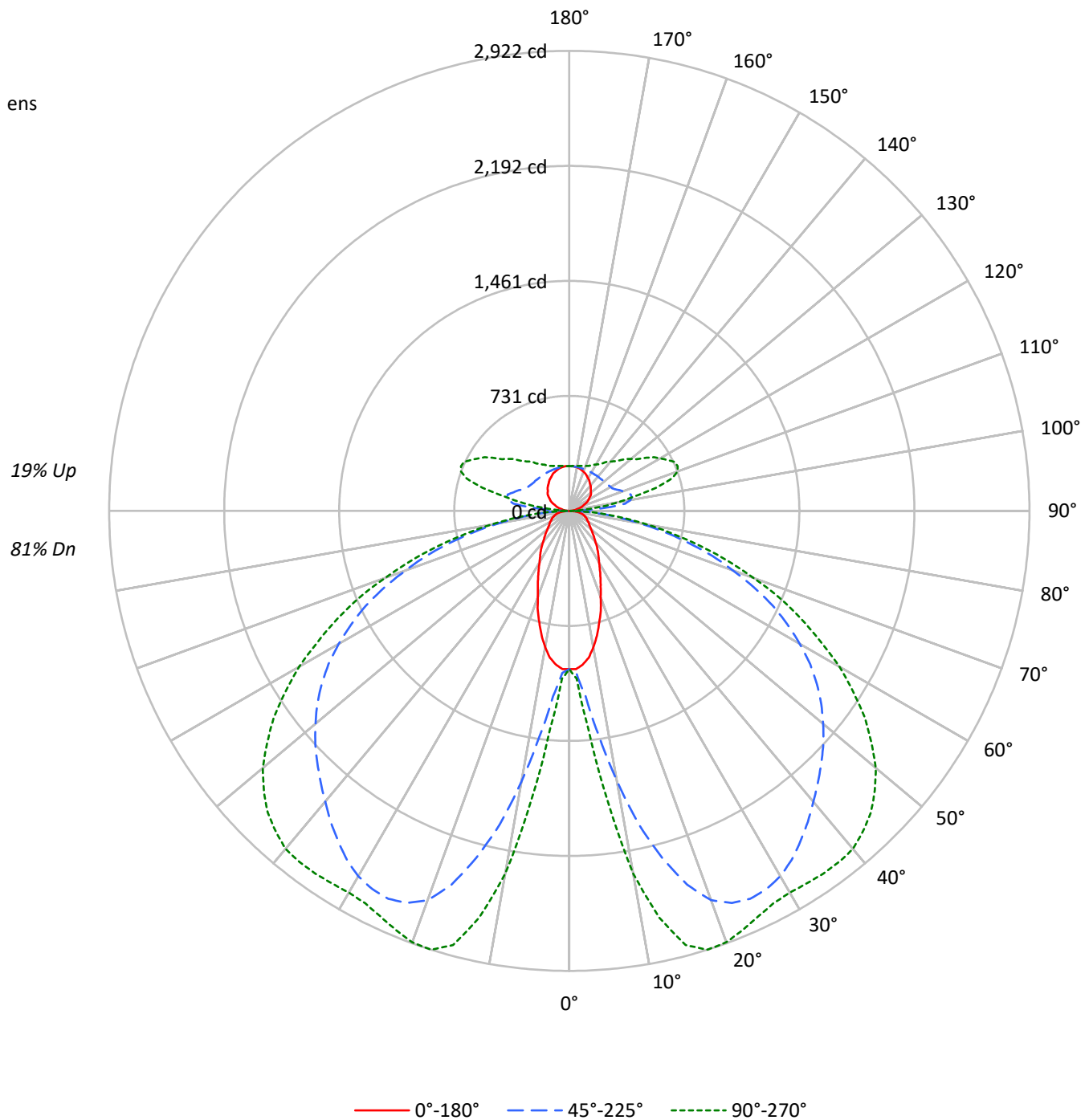
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9625.5 lumens
Efficiency: N/A
Efficacy: 97.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 99.2
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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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	50	30	10
RCR																				
0	114	114	114	114	110	110	110	110	100	100	100	92	92	92	84	84	84	84	81	
1	104	99	94	90	99	95	91	87	87	84	81	80	77	75	73	71	70	70	66	
2	94	85	78	72	89	82	75	70	75	70	66	69	65	61	63	60	57	57	54	
3	85	74	66	59	81	71	64	58	65	59	54	60	55	51	55	51	48	48	45	
4	77	65	56	49	74	63	54	48	58	51	45	53	47	43	49	44	40	40	37	
5	71	58	49	42	67	55	47	41	51	44	39	47	41	36	43	38	34	34	32	
6	65	51	42	36	62	49	41	35	46	39	33	42	36	31	39	34	30	30	27	
7	60	46	37	31	57	45	36	30	41	34	29	38	32	27	35	30	26	26	24	
8	55	42	33	27	53	40	32	27	37	30	25	35	29	24	32	27	23	23	21	
9	52	38	30	24	49	37	29	24	34	27	23	32	26	22	29	24	20	20	18	
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	18	16	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4664	4664	4664
5°	4556	5391	6269
10°	4133	7858	10393
15°	3512	10266	12550
20°	2860	11897	12790
25°	2385	12449	12530
30°	2012	12528	12506
35°	1779	12320	12830
40°	1550	12050	13164
45°	1404	11851	13216
50°	1287	11673	12997
55°	1233	11413	12421
60°	1262	10911	11511
65°	1313	10149	10261
70°	1399	8851	8669
75°	1550	7217	6765
80°	1694	5004	4558
85°	1504	2656	2333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13216 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.0	1.4
10°-20°	576.3	6.0
20°-30°	1008.1	10.5
30°-40°	1297.7	13.5
40°-50°	1449.4	15.1
50°-60°	1388.2	14.4
60°-70°	1100.2	11.4
70°-80°	646.9	6.7
80°-90°	180.8	1.9
90°-100°	138.9	1.4
100°-110°	365.3	3.8
110°-120°	378.8	3.9
120°-130°	303.8	3.2
130°-140°	238.4	2.5
140°-150°	183.0	1.9
150°-160°	131.8	1.4
160°-170°	80.6	0.8
170°-180°	27.2	0.3
0°-30°	1714.4	17.8
0°-40°	3012.1	31.3
0°-60°	5849.7	60.8
0°-90°	7777.7	80.8
90°-120°	883.0	9.2
90°-150°	1608.2	16.7
90°-180°	1848.0	19.2
0°-180°	9625.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1005	1005	1005	1005	1005	
5°	979	1050	1183	1338	1387	90
15°	734	1354	2282	2767	2854	204
25°	469	1535	2718	2838	2841	216
35°	317	1468	2560	2705	2812	198
45°	217	1170	2263	2592	2709	168
55°	155	744	1920	2230	2292	141
65°	123	394	1425	1603	1626	122
75°	90	242	782	860	863	95
85°	32	74	194	213	217	34
90°	2	5	14	7	7	4
95°	18	72	239	123	84	20
105°	66	100	404	613	572	70
115°	117	142	324	645	736	115
125°	163	182	294	497	587	144
135°	194	213	285	401	455	150
145°	225	239	281	342	369	141
155°	254	261	281	309	318	117
165°	274	278	281	292	296	77
175°	285	285	283	287	287	27
180°	285	285	285	285	285	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2
2.5°	1005.2	1005.2	1011.7	1015.0	1021.4	1024.6	1031.1	1037.6	1057.0	1060.2	1066.6
5°	979.4	992.3	1034.4	1050.5	1095.8	1157.2	1183.1	1225.1	1312.3	1338.1	1354.3
7.5°	940.6	969.7	1073.1	1099.0	1212.1	1373.8	1441.6	1532.1	1671.1	1739.0	1794.0
10°	879.2	940.6	1124.8	1186.2	1370.5	1616.1	1742.2	1868.3	2078.4	2172.1	2207.7
12.5°	811.3	911.5	1179.8	1263.8	1528.9	1887.7	2039.6	2178.5	2417.8	2543.8	2563.2
15°	733.7	869.5	1231.5	1354.3	1696.9	2113.9	2282.0	2453.3	2676.4	2766.8	2789.5
17.5°	665.8	837.2	1280.0	1409.3	1826.2	2317.6	2488.8	2631.1	2812.1	2873.5	2889.6
20°	581.8	785.5	1312.3	1480.3	1962.0	2466.3	2631.1	2740.9	2863.9	2902.6	2909.0
22.5°	520.4	730.5	1331.7	1506.2	2052.5	2556.7	2695.8	2783.0	2867.0	2880.0	2883.2
25°	468.7	669.1	1328.5	1535.4	2130.1	2611.7	2718.4	2783.0	2831.5	2838.0	2838.0
27.5°	420.2	601.2	1315.5	1541.8	2188.3	2624.6	2708.7	2753.9	2776.6	2789.5	2789.5
30°	378.2	536.5	1283.2	1528.9	2214.2	2611.7	2679.5	2702.2	2724.8	2744.2	2753.9
32.5°	345.9	475.1	1234.7	1503.0	2217.3	2579.4	2627.9	2640.8	2673.1	2718.4	2734.5
35°	316.8	413.7	1179.8	1467.5	2197.9	2527.7	2560.0	2572.9	2637.5	2705.4	2728.1
37.5°	287.6	368.4	1108.7	1406.0	2168.9	2466.3	2488.8	2511.5	2611.7	2692.5	2718.4
40°	258.6	329.7	1024.6	1338.1	2123.6	2391.9	2411.3	2446.8	2579.4	2673.1	2698.9
42.5°	236.0	297.4	934.2	1267.1	2065.5	2307.9	2337.0	2388.6	2540.6	2640.8	2669.9
45°	216.6	265.0	837.2	1170.1	1991.1	2220.6	2262.6	2333.7	2495.3	2592.3	2618.1
47.5°	197.2	242.4	737.0	1069.9	1910.3	2133.3	2188.3	2269.1	2433.9	2527.7	2550.3
50°	181.0	219.8	636.8	963.2	1823.0	2039.6	2104.2	2188.3	2356.4	2443.7	2472.7
52.5°	168.1	200.4	543.0	856.5	1722.8	1942.6	2017.0	2104.2	2262.6	2346.6	2366.0
55°	155.2	184.2	462.2	743.5	1619.4	1839.1	1920.0	2004.1	2159.2	2230.3	2243.2
57.5°	148.7	171.3	394.3	636.8	1509.5	1722.8	1813.4	1890.9	2036.3	2091.3	2104.2
60°	139.0	161.6	342.7	546.3	1389.9	1612.9	1690.4	1768.1	1890.9	1936.2	1945.8
62.5°	129.3	155.2	303.9	459.0	1267.1	1483.6	1561.2	1632.3	1735.7	1768.1	1781.0
65°	122.8	148.7	274.8	394.3	1141.0	1347.9	1425.4	1486.8	1570.9	1603.3	1609.7
67.5°	116.3	142.2	252.1	339.4	1015.0	1212.1	1270.2	1328.5	1393.2	1425.4	1428.7
70°	106.7	135.8	232.7	300.6	885.7	1057.0	1105.4	1166.8	1218.6	1234.7	1244.5
72.5°	100.2	126.1	219.8	271.5	753.1	908.3	953.6	989.1	1034.4	1050.5	1050.5
75°	90.5	113.2	206.9	242.4	617.4	743.5	782.2	817.8	853.3	859.8	850.1
77.5°	80.8	100.2	177.8	203.6	481.6	588.3	620.6	640.0	669.1	675.6	678.8
80°	67.9	87.3	139.0	158.3	349.1	433.1	455.7	472.0	497.7	497.7	504.2
82.5°	51.8	67.9	100.2	113.2	236.0	297.4	316.8	326.4	342.7	342.7	342.7
85°	32.3	42.0	64.7	74.3	142.2	181.0	194.0	197.2	210.1	213.3	213.3
87.5°	16.1	22.6	42.0	45.3	74.3	93.8	93.8	100.2	100.2	96.9	93.8
90°	1.9	3.4	5.0	5.3	8.4	12.5	14.5	12.9	9.6	7.3	7.3
92.5°	7.6	20.6	33.7	37.0	52.0	71.9	81.8	71.7	51.6	36.4	35.0
95°	18.3	42.1	66.0	71.9	127.7	202.1	239.3	213.5	162.1	123.4	119.0
97.5°	31.8	52.8	73.7	79.0	172.0	296.0	358.1	341.9	309.3	284.9	276.6
100°	42.1	61.1	80.1	84.9	188.1	325.8	394.6	395.8	398.2	400.0	390.1
102.5°	50.9	68.7	86.4	90.8	195.6	335.2	405.0	425.7	467.2	498.3	489.8
105°	65.8	80.9	96.0	99.7	201.1	336.3	403.9	450.4	543.4	613.1	608.5
107.5°	81.1	95.1	109.2	112.7	202.1	321.3	380.9	445.7	575.5	672.8	673.9
110°	91.5	104.1	116.8	119.9	200.5	308.0	361.8	434.2	579.3	688.1	692.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	101.6	113.6	125.7	128.7	200.6	296.4	344.4	418.6	567.0	678.3	685.7
115°	116.9	128.0	139.1	141.9	202.5	283.2	323.5	395.0	538.0	645.3	655.4
117.5°	132.0	142.1	152.2	154.8	206.3	274.8	309.1	373.7	502.7	599.5	610.8
120°	140.8	150.3	159.9	162.3	209.3	272.1	303.4	362.3	480.3	568.7	579.6
122.5°	149.4	159.0	168.7	171.0	213.7	270.6	299.0	352.1	458.3	538.0	548.7
125°	162.6	171.4	180.1	182.3	219.6	269.4	294.2	339.3	429.6	497.2	507.1
127.5°	173.3	182.1	191.0	193.2	225.6	268.6	290.2	329.0	406.4	464.5	472.9
130°	179.1	188.6	198.1	200.5	229.9	269.1	288.7	323.2	392.1	443.8	451.5
132.5°	185.0	194.5	204.0	206.4	233.4	269.4	287.4	318.2	379.9	426.2	433.2
135°	193.8	202.5	211.2	213.3	237.2	269.1	285.1	310.9	362.6	401.4	407.3
137.5°	202.7	211.3	219.9	222.1	243.0	270.7	284.7	306.6	350.2	383.0	387.8
140°	210.2	218.1	226.0	228.1	246.5	271.0	283.3	302.3	340.0	368.2	372.8
142.5°	216.0	223.3	230.6	232.4	249.4	272.1	283.3	300.0	333.1	357.9	361.8
145°	224.8	231.2	237.5	239.1	253.3	272.1	281.4	295.0	322.1	342.5	345.4
147.5°	233.6	239.8	246.0	247.5	258.8	273.9	281.4	292.1	313.4	329.4	331.9
150°	239.3	245.0	250.5	251.9	261.8	274.8	281.4	290.4	308.5	321.9	323.9
152.5°	245.2	249.4	253.7	254.8	263.7	275.5	281.4	289.1	304.5	316.0	317.5
155°	254.0	257.2	260.3	261.1	267.9	277.0	281.4	287.6	299.8	308.9	309.9
157.5°	260.5	263.6	266.6	267.4	272.1	278.3	281.4	286.2	295.7	302.8	303.5
160°	264.9	267.3	269.7	270.3	274.0	279.0	281.4	285.5	293.7	299.8	300.2
162.5°	269.3	271.1	272.8	273.3	276.0	279.6	281.4	284.9	291.8	296.9	297.3
165°	274.2	275.8	277.4	277.8	279.1	280.7	281.4	283.9	288.8	292.5	292.9
167.5°	278.6	279.3	280.1	280.3	281.3	282.7	283.3	285.0	288.2	290.6	290.8
170°	281.4	282.2	283.0	283.2	283.3	283.3	283.3	285.0	288.2	290.6	290.6
172.5°	283.0	283.2	283.3	283.3	283.3	283.3	283.3	284.6	287.2	289.1	288.9
175°	285.1	285.1	285.1	285.1	284.5	283.7	283.3	284.1	285.7	287.0	287.0
177.5°	285.1	285.1	285.1	285.1	284.6	284.0	283.7	284.4	285.6	286.6	286.4
180°	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1005.2	1005.2
2.5°	1073.1	1066.6
5°	1380.2	1386.7
7.5°	1858.5	1855.4
10°	2311.1	2340.2
12.5°	2640.8	2647.3
15°	2841.2	2854.1
17.5°	2918.8	2922.0
20°	2922.0	2915.5
22.5°	2886.5	2880.0
25°	2844.5	2841.2
27.5°	2805.6	2808.8
30°	2789.5	2799.2
32.5°	2789.5	2805.6
35°	2796.0	2812.1
37.5°	2792.7	2812.1
40°	2779.8	2802.4
42.5°	2744.2	2760.4
45°	2689.3	2708.7
47.5°	2618.1	2631.1
50°	2527.7	2540.6
52.5°	2414.5	2417.8
55°	2278.7	2291.7
57.5°	2133.3	2136.5
60°	1971.7	1981.4
62.5°	1800.4	1800.4
65°	1619.4	1625.9
67.5°	1431.9	1448.1
70°	1241.2	1244.5
72.5°	1053.7	1053.7
75°	859.8	863.0
77.5°	675.6	675.6
80°	501.0	504.2
82.5°	345.9	352.3
85°	216.6	216.6
87.5°	100.2	90.5
90°	7.3	7.3
92.5°	29.1	23.3
95°	101.5	83.9
97.5°	243.1	209.8
100°	350.4	310.7
102.5°	455.8	421.8
105°	590.3	571.9
107.5°	678.3	682.7
110°	711.9	731.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	714.9	744.1
115°	696.0	736.5
117.5°	655.8	700.8
120°	623.3	667.1
122.5°	591.8	634.9
125°	546.8	586.6
127.5°	506.3	539.9
130°	482.5	513.4
132.5°	460.9	488.6
135°	431.2	455.1
137.5°	407.4	427.0
140°	391.1	409.4
142.5°	377.6	393.3
145°	357.4	369.2
147.5°	341.7	351.6
150°	332.0	340.0
152.5°	323.6	329.6
155°	313.9	317.9
157.5°	306.4	309.1
160°	301.8	303.4
162.5°	298.8	300.3
165°	294.5	296.1
167.5°	291.5	292.1
170°	290.6	290.6
172.5°	288.3	287.7
175°	287.0	287.0
177.5°	285.7	285.1
180°	285.1	285.1



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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	8.78	10.08	9.41	10.73	11.48	21.96	23.26	22.59	23.91	24.66
	3H	9.52	10.69	10.16	11.35	12.14	23.83	25.01	24.47	25.67	26.45
	4H	9.83	10.95	10.50	11.62	12.41	24.49	25.61	25.16	26.28	27.07
	6H	10.11	11.14	10.79	11.82	12.63	24.95	25.98	25.62	26.66	27.47
	8H	10.19	11.17	10.88	11.88	12.69	25.08	26.06	25.77	26.77	27.58
	12H	10.22	11.16	10.92	11.86	12.70	25.16	26.10	25.86	26.80	27.65
4H	2H	16.05	17.16	16.71	17.83	18.63	22.28	23.40	22.95	24.07	24.86
	3H	17.65	18.59	18.33	19.30	20.11	24.37	25.30	25.05	26.01	26.83
	4H	17.77	18.62	18.46	19.33	20.17	25.15	26.01	25.85	26.72	27.56
	6H	17.80	18.55	18.52	19.28	20.14	25.72	26.46	26.44	27.20	28.05
	8H	17.79	18.49	18.51	19.22	20.09	25.89	26.59	26.61	27.32	28.19
	12H	17.77	18.40	18.51	19.16	20.03	26.01	26.64	26.75	27.40	28.27
8H	4H	19.25	19.94	19.97	20.68	21.55	25.25	25.95	25.97	26.68	27.55
	6H	19.51	20.09	20.26	20.87	21.74	25.90	26.48	26.65	27.26	28.13
	8H	19.54	20.05	20.30	20.83	21.71	26.13	26.64	26.89	27.42	28.31
	12H	19.53	19.98	20.29	20.75	21.69	26.29	26.75	27.06	27.52	28.46
12H	4H	19.41	20.04	20.16	20.80	21.67	25.23	25.85	25.97	26.61	27.48
	6H	19.78	20.29	20.54	21.07	21.96	25.89	26.41	26.65	27.19	28.07
	8H	19.87	20.32	20.63	21.09	22.04	26.14	26.60	26.91	27.37	28.31