

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: P937089

Luminaire Tested: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-6-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937089
REPORT IS A COMBINATION OF REPORTS P933509 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-6-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

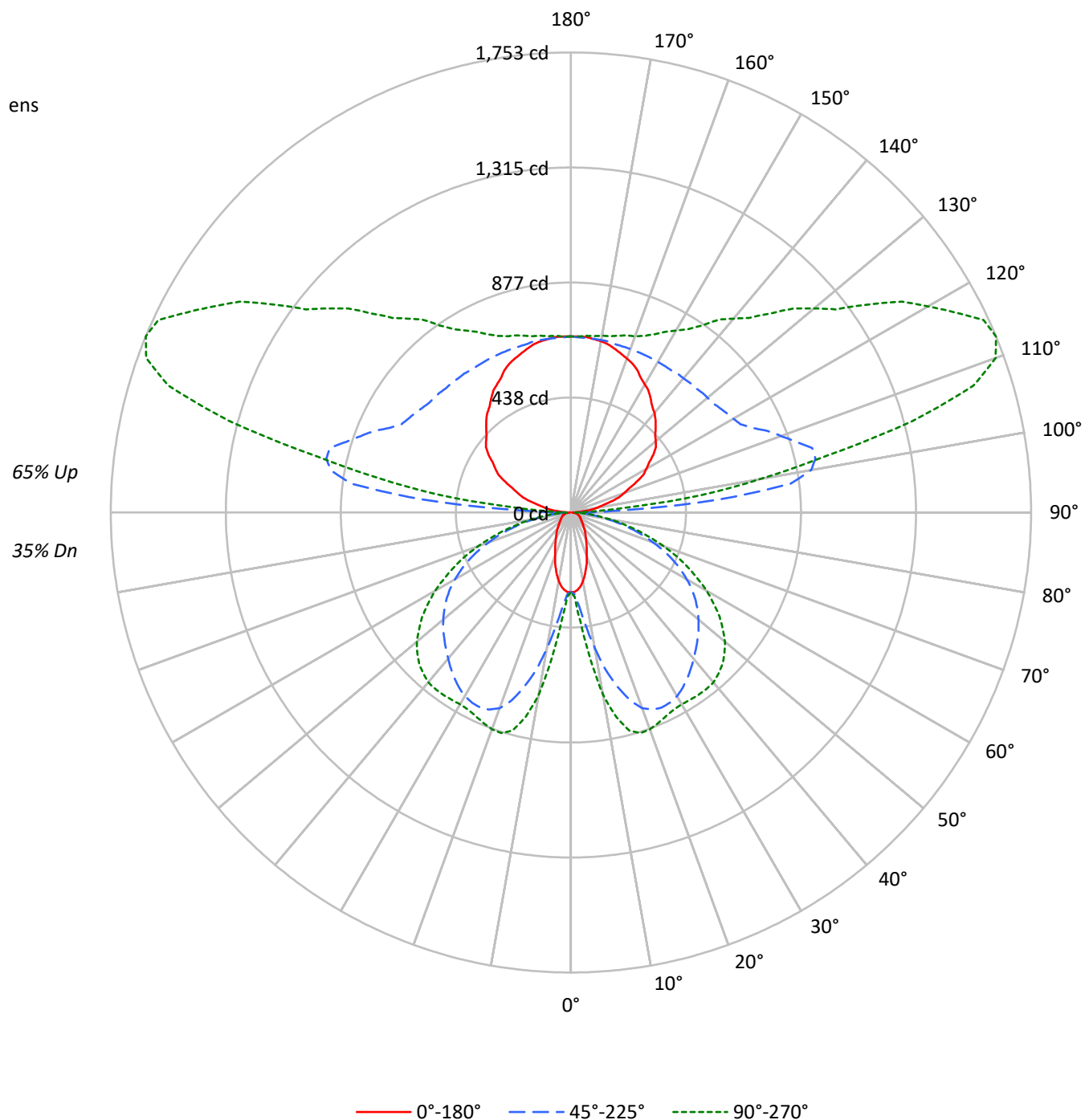
Lumens per Lamp: N/A
Luminaire Lumens: 6699.7 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 51.6
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: P937089

CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-6-3500K

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1875	1875	1875
5°	1832	2167	2520
10°	1660	3158	4178
15°	1410	4124	5046
20°	1148	4779	5143
25°	958	4999	5038
30°	807	5029	5028
35°	713	4944	5158
40°	621	4835	5293
45°	562	4754	5314
50°	515	4681	5225
55°	493	4575	4994
60°	505	4372	4628
65°	523	4064	4125
70°	557	3541	3486
75°	614	2886	2721
80°	664	1998	1832
85°	584	1059	938

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5314 cd/sqm

TEST NUMBER: P937089

CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-6-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	0.6
10°-20°	173.8	2.6
20°-30°	304.0	4.5
30°-40°	391.3	5.8
40°-50°	437.1	6.5
50°-60°	418.6	6.2
60°-70°	331.7	5.0
70°-80°	195.1	2.9
80°-90°	56.8	0.8
90°-100°	327.2	4.9
100°-110°	860.4	12.8
110°-120°	892.1	13.3
120°-130°	715.6	10.7
130°-140°	561.5	8.4
140°-150°	431.0	6.4
150°-160°	310.4	4.6
160°-170°	189.9	2.8
170°-180°	64.2	1.0
0°-30°	517.0	7.7
0°-40°	908.3	13.6
0°-60°	1764.0	26.3
0°-90°	2347.5	35.0
90°-120°	2079.7	31.0
90°-150°	3787.7	56.5
90°-180°	4352.0	65.0
0°-180°	6699.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	303	303	303	303	303	
5°	295	317	357	404	418	27
15°	221	408	688	834	861	62
25°	141	463	820	856	857	65
35°	96	442	772	816	848	60
45°	65	353	682	782	817	51
55°	47	224	579	672	691	43
65°	37	119	430	483	490	37
75°	27	73	236	259	260	29
85°	10	22	58	64	65	10
90°	4	13	34	17	17	4
95°	43	169	564	291	198	48
105°	155	235	951	1444	1347	164
115°	275	334	762	1520	1735	272
125°	383	429	693	1171	1382	340
135°	456	502	671	945	1072	353
145°	530	563	663	806	870	332
155°	598	615	663	728	749	275
165°	646	654	663	689	698	182
175°	671	671	667	676	676	64
180°	671	671	671	671	671	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1
2.5°	303.1	303.1	305.0	306.0	308.0	309.0	311.0	312.9	318.7	319.7	321.6
5°	295.4	299.2	311.9	316.8	330.4	348.9	356.7	369.4	395.7	403.5	408.4
7.5°	283.6	292.4	323.5	331.4	365.5	414.2	434.7	462.0	503.9	524.4	541.0
10°	265.1	283.6	339.2	357.8	413.3	487.3	525.4	563.4	626.7	654.9	665.7
12.5°	244.7	274.9	355.7	381.1	461.1	569.2	615.0	657.0	729.1	767.1	772.9
15°	221.2	262.2	371.3	408.4	511.7	637.4	688.1	739.8	807.1	834.3	841.2
17.5°	200.8	252.4	386.0	425.0	550.7	698.8	750.5	793.4	848.0	866.5	871.3
20°	175.5	236.8	395.7	446.4	591.7	743.7	793.4	826.6	863.6	875.3	877.2
22.5°	156.9	220.3	401.6	454.2	618.9	770.9	812.9	839.2	864.5	868.4	869.4
25°	141.4	201.7	400.6	463.0	642.4	787.5	819.7	839.2	853.8	855.7	855.7
27.5°	126.7	181.3	396.7	464.9	659.9	791.5	816.8	830.4	837.2	841.2	841.2
30°	114.1	161.8	386.9	461.1	667.6	787.5	808.0	814.8	821.6	827.5	830.4
32.5°	104.3	143.3	372.3	453.2	668.6	777.8	792.4	796.3	806.0	819.7	824.6
35°	95.5	124.8	355.7	442.5	662.8	762.2	771.9	775.9	795.4	815.8	822.6
37.5°	86.7	111.1	334.3	424.0	654.0	743.7	750.5	757.4	787.5	811.9	819.7
40°	78.0	99.4	309.0	403.5	640.4	721.2	727.1	737.8	777.8	806.0	813.9
42.5°	71.1	89.6	281.7	382.1	622.8	695.9	704.7	720.3	766.1	796.3	805.0
45°	65.3	79.9	252.4	352.8	600.4	669.6	682.3	703.7	752.4	781.7	789.4
47.5°	59.5	73.1	222.2	322.6	576.1	643.3	659.9	684.2	733.9	762.2	769.0
50°	54.6	66.3	192.1	290.4	549.7	615.0	634.5	659.9	710.6	736.8	745.6
52.5°	50.7	60.5	163.8	258.3	519.5	585.8	608.2	634.5	682.3	707.7	713.5
55°	46.8	55.5	139.3	224.1	488.3	554.6	579.0	604.3	651.1	672.5	676.5
57.5°	44.9	51.6	118.9	192.1	455.1	519.5	546.8	570.2	614.1	630.6	634.5
60°	42.0	48.7	103.3	164.7	419.1	486.3	509.8	533.1	570.2	583.8	586.7
62.5°	39.0	46.8	91.7	138.4	382.1	447.4	470.7	492.3	523.4	533.1	537.0
65°	37.0	44.9	82.8	118.9	344.1	406.4	429.8	448.4	473.6	483.4	485.4
67.5°	35.1	42.9	76.1	102.3	306.0	365.5	383.0	400.6	420.1	429.8	430.8
70°	32.2	40.9	70.2	90.6	267.1	318.7	333.3	351.8	367.4	372.3	375.3
72.5°	30.2	38.0	66.3	81.9	227.1	273.8	287.5	298.3	311.9	316.8	316.8
75°	27.3	34.1	62.4	73.1	186.1	224.1	235.9	246.6	257.3	259.3	256.3
77.5°	24.3	30.2	53.6	61.4	145.3	177.4	187.1	193.0	201.7	203.7	204.7
80°	20.4	26.4	42.0	47.8	105.2	130.6	137.4	142.3	150.1	150.1	152.0
82.5°	15.6	20.4	30.2	34.1	71.1	89.6	95.5	98.5	103.3	103.3	103.3
85°	9.8	12.7	19.5	22.4	42.9	54.6	58.5	59.5	63.4	64.3	64.3
87.5°	4.8	6.8	12.7	13.7	22.4	28.3	28.3	30.2	30.2	29.3	28.3
90°	4.5	8.0	11.7	12.6	19.8	29.4	34.2	30.4	22.9	17.2	17.2
92.5°	18.0	48.6	79.3	86.9	122.2	169.3	192.8	169.0	121.3	85.6	82.2
95°	43.2	99.3	155.3	169.4	300.8	476.1	563.7	503.0	381.6	290.6	280.3
97.5°	74.8	124.2	173.6	186.0	405.2	697.4	843.5	805.1	728.5	670.9	651.3
100°	99.1	144.0	188.9	200.1	443.2	767.4	929.6	932.4	938.0	942.2	918.8
102.5°	119.9	161.7	203.6	214.1	460.7	789.4	953.9	1002.7	1100.5	1173.7	1153.7
105°	155.0	190.5	226.0	234.8	473.6	792.0	951.2	1060.7	1279.8	1444.1	1433.3
107.5°	191.1	224.1	257.2	265.4	476.0	756.7	897.1	1049.9	1355.5	1584.7	1587.3
110°	215.4	245.3	275.0	282.5	472.3	725.5	852.0	1022.9	1364.5	1620.7	1632.0

TEST NUMBER: P937089

CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-6-3500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	239.2	267.6	296.1	303.2	472.5	698.2	811.1	985.9	1335.5	1597.7	1614.9
115°	275.3	301.6	327.7	334.3	476.8	666.9	761.9	930.3	1267.2	1519.8	1543.6
117.5°	310.9	334.7	358.5	364.5	485.8	647.3	728.1	880.1	1184.1	1412.1	1438.6
120°	331.6	354.1	376.5	382.1	492.9	640.7	714.6	853.5	1131.2	1339.5	1365.3
122.5°	351.9	374.5	397.2	402.8	503.3	637.3	704.3	829.3	1079.4	1267.0	1292.4
125°	382.9	403.6	424.2	429.4	517.3	634.4	693.0	799.2	1011.7	1171.0	1194.4
127.5°	408.2	429.1	449.8	455.0	531.2	632.8	683.5	774.7	957.2	1094.0	1113.8
130°	421.7	444.2	466.6	472.2	541.5	633.8	679.9	761.1	923.6	1045.4	1063.6
132.5°	435.7	458.1	480.5	486.1	549.7	634.4	676.7	749.4	894.9	1003.9	1020.2
135°	456.4	476.8	497.3	502.4	558.7	633.8	671.3	732.2	854.0	945.3	959.3
137.5°	477.6	497.8	518.0	523.1	572.2	637.7	670.5	721.9	824.8	902.0	913.6
140°	495.2	513.8	532.5	537.1	580.5	638.4	667.3	711.7	800.7	867.4	878.1
142.5°	508.7	526.0	543.2	547.5	587.4	640.6	667.3	706.3	784.4	843.0	852.3
145°	529.5	544.5	559.4	563.2	596.4	640.7	662.8	694.8	758.6	806.5	813.5
147.5°	550.1	564.7	579.4	583.0	609.6	645.1	662.8	687.9	738.2	775.9	781.7
150°	563.7	576.8	590.1	593.4	616.6	647.4	662.8	684.0	726.5	758.3	763.1
152.5°	577.6	587.7	597.7	600.2	621.0	648.8	662.8	680.9	717.2	744.4	748.0
155°	598.4	605.7	613.2	615.0	630.9	652.1	662.8	677.2	706.1	727.7	730.0
157.5°	613.7	620.9	628.1	629.9	640.9	655.5	662.8	674.0	696.4	713.3	714.9
160°	624.0	629.7	635.3	636.6	645.4	657.0	662.8	672.4	691.6	706.0	707.0
162.5°	634.4	638.7	642.8	643.9	650.2	658.6	662.8	670.9	687.1	699.3	700.2
165°	645.6	649.5	653.3	654.3	657.1	660.9	662.8	668.6	680.2	689.0	689.9
167.5°	656.0	657.9	659.6	660.1	662.5	665.7	667.3	671.0	678.7	684.4	684.8
170°	662.8	664.6	666.4	666.9	667.0	667.2	667.3	671.0	678.7	684.4	684.4
172.5°	666.4	666.8	667.2	667.3	667.3	667.3	667.3	670.3	676.3	680.8	680.4
175°	671.3	671.3	671.3	671.3	670.0	668.1	667.3	669.2	673.0	675.9	675.9
177.5°	671.3	671.3	671.3	671.3	670.3	668.9	668.2	669.8	672.8	675.0	674.6
180°	671.3	671.3	671.3	671.3	671.3	671.3	671.3	671.3	671.3	671.3	671.3

TEST NUMBER: P937089

CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-6-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	303.1	303.1
2.5°	323.5	321.6
5°	416.2	418.1
7.5°	560.5	559.5
10°	696.9	705.6
12.5°	796.3	798.3
15°	856.8	860.7
17.5°	880.1	881.1
20°	881.1	879.2
22.5°	870.4	868.4
25°	857.8	856.8
27.5°	846.0	847.0
30°	841.2	844.1
32.5°	841.2	846.0
35°	843.1	848.0
37.5°	842.2	848.0
40°	838.2	845.1
42.5°	827.5	832.4
45°	811.0	816.8
47.5°	789.4	793.4
50°	762.2	766.1
52.5°	728.1	729.1
55°	687.1	691.1
57.5°	643.3	644.3
60°	594.6	597.5
62.5°	542.9	542.9
65°	488.3	490.2
67.5°	431.8	436.6
70°	374.3	375.3
72.5°	317.7	317.7
75°	259.3	260.3
77.5°	203.7	203.7
80°	151.1	152.0
82.5°	104.3	106.2
85°	65.3	65.3
87.5°	30.2	27.3
90°	17.2	17.2
92.5°	68.5	54.9
95°	239.1	197.8
97.5°	572.8	494.3
100°	825.2	731.7
102.5°	1073.7	993.5
105°	1390.2	1347.2
107.5°	1597.7	1608.1
110°	1676.8	1721.6



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CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-6-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1683.8	1752.7
115°	1639.2	1734.7
117.5°	1544.5	1650.4
120°	1468.2	1571.1
122.5°	1393.9	1495.5
125°	1288.0	1381.5
127.5°	1192.6	1271.5
130°	1136.4	1209.3
132.5°	1085.5	1150.8
135°	1015.6	1071.9
137.5°	959.6	1005.7
140°	921.2	964.3
142.5°	889.3	926.4
145°	841.6	869.6
147.5°	804.9	828.1
150°	781.9	800.7
152.5°	762.1	776.4
155°	739.4	748.8
157.5°	721.5	728.1
160°	710.8	714.6
162.5°	703.8	707.4
165°	693.7	697.5
167.5°	686.4	688.0
170°	684.4	684.4
172.5°	679.1	677.6
175°	675.9	675.9
177.5°	673.0	671.3
180°	671.3	671.3

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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	1.63	2.40	2.70	3.47	4.94	14.80	15.56	15.87	16.64	18.11
	3H	2.33	3.02	3.41	4.10	5.59	16.63	17.31	17.70	18.40	19.88
	4H	2.62	3.28	3.71	4.36	5.85	17.26	17.92	18.35	19.00	20.49
	6H	2.87	3.47	3.97	4.56	6.06	17.68	18.29	18.78	19.37	20.88
	8H	2.94	3.51	4.04	4.61	6.11	17.80	18.37	18.90	19.48	20.97
	12H	2.95	3.49	4.06	4.59	6.11	17.86	18.41	18.97	19.50	21.03
4H	2H	8.83	9.48	9.92	10.57	12.06	15.06	15.71	16.16	16.80	18.29
	3H	10.39	10.93	11.49	12.05	13.55	17.09	17.64	18.20	18.75	20.26
	4H	10.48	10.98	11.59	12.08	13.61	17.85	18.35	18.96	19.46	20.98
	6H	10.48	10.92	11.60	12.04	13.56	18.38	18.81	19.50	19.94	21.46
	8H	10.46	10.86	11.57	11.98	13.51	18.54	18.94	19.66	20.06	21.59
	12H	10.41	10.78	11.54	11.90	13.44	18.62	18.99	19.76	20.12	21.66
8H	4H	11.91	12.31	13.03	13.43	14.97	17.91	18.31	19.02	19.42	20.96
	6H	12.15	12.48	13.29	13.64	15.17	18.53	18.86	19.66	20.02	21.55
	8H	12.17	12.46	13.31	13.60	15.15	18.74	19.03	19.89	20.17	21.72
	12H	12.13	12.39	13.28	13.52	15.11	18.88	19.13	20.03	20.27	21.86
12H	4H	12.05	12.41	13.18	13.54	15.08	17.85	18.22	18.99	19.35	20.89
	6H	12.41	12.70	13.55	13.84	15.39	18.51	18.80	19.65	19.94	21.49
	8H	12.47	12.73	13.62	13.86	15.45	18.73	18.99	19.88	20.12	21.71