

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: P937052

Luminaire Tested: SQ4-FB-075U-050D-930-1D-UNV-STD-W-8

Issue Date: 12/17/2024

**Test Information**

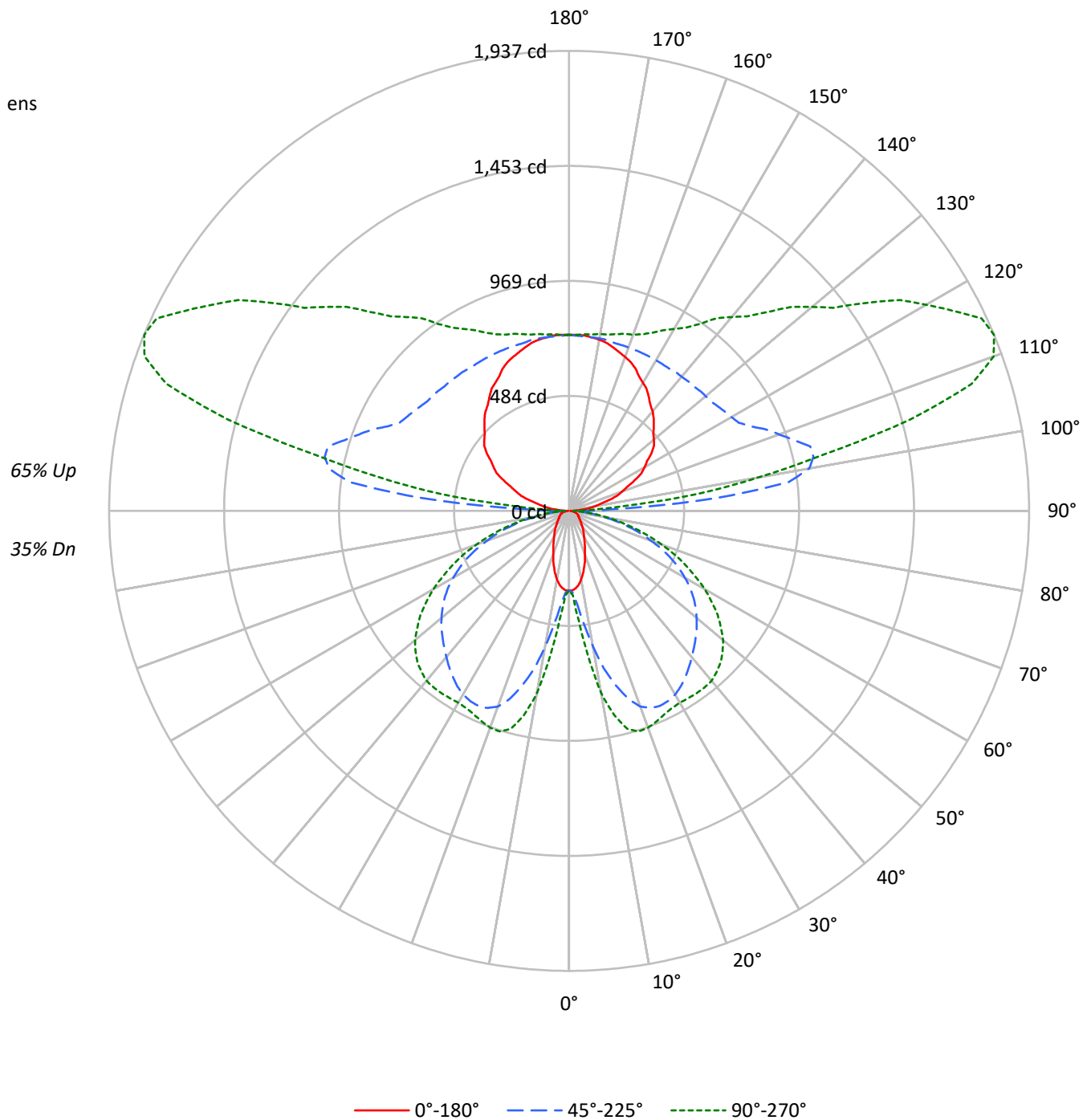
Test Method: LM-79-2019  
Report Number: P937052  
REPORT IS A COMBINATION OF REPORTS P933517 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-050D-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7402.9 lumens  
Efficiency: N/A  
Efficacy: 107.6 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-Indirect  
  
Input Watts (W): 68.8  
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35				35
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29				29
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23				23
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19				19
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16				16
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14				14
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12				12
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10				10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9				9
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8				8
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7				7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1554	1554	1554
5°	1518	1796	2089
10°	1377	2619	3463
15°	1170	3421	4182
20°	953	3964	4262
25°	795	4148	4175
30°	670	4175	4168
35°	592	4105	4275
40°	517	4015	4386
45°	468	3949	4404
50°	429	3890	4331
55°	411	3803	4139
60°	421	3636	3835
65°	438	3382	3419
70°	467	2949	2889
75°	517	2405	2254
80°	564	1667	1519
85°	503	884	778

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4404 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.3	0.6
10°-20°	192.0	2.6
20°-30°	335.9	4.5
30°-40°	432.4	5.8
40°-50°	483.0	6.5
50°-60°	462.6	6.2
60°-70°	366.6	5.0
70°-80°	215.6	2.9
80°-90°	62.7	0.8
90°-100°	361.6	4.9
100°-110°	950.6	12.8
110°-120°	985.7	13.3
120°-130°	790.7	10.7
130°-140°	620.4	8.4
140°-150°	476.2	6.4
150°-160°	342.9	4.6
160°-170°	209.8	2.8
170°-180°	70.9	1.0
0°-30°	571.3	7.7
0°-40°	1003.7	13.6
0°-60°	1949.2	26.3
0°-90°	2594.1	35.0
90°-120°	2297.9	31.0
90°-150°	4185.1	56.5
90°-180°	4809.0	65.0
0°-180°	7402.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	335	335	335	335	335	
5°	326	350	394	446	462	30
15°	244	451	760	922	951	68
25°	156	512	906	946	947	72
35°	106	489	853	902	937	66
45°	72	390	754	864	903	56
55°	52	248	640	743	764	47
65°	41	131	475	534	542	41
75°	30	81	261	286	288	32
85°	11	25	65	71	72	11
90°	5	14	38	19	19	5
95°	48	187	623	321	219	53
105°	171	259	1051	1596	1488	182
115°	304	369	842	1679	1917	300
125°	423	474	766	1294	1526	376
135°	504	555	742	1044	1184	390
145°	585	622	732	891	961	366
155°	661	680	732	804	827	304
165°	713	723	732	761	771	201
175°	742	742	737	747	747	70
180°	742	742	742	742	742	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	334.9	334.9	334.9	334.9	334.9	334.9	334.9	334.9	334.9	334.9	334.9
2.5°	334.9	334.9	337.1	338.2	340.3	341.4	343.6	345.8	352.2	353.2	355.4
5°	326.3	330.7	344.6	350.0	365.1	385.6	394.2	408.2	437.3	445.9	451.3
7.5°	313.4	323.1	357.6	366.2	403.9	457.7	480.4	510.5	556.8	579.4	597.8
10°	292.9	313.4	374.8	395.3	456.7	538.5	580.6	622.6	692.5	723.7	735.6
12.5°	270.4	303.7	393.1	421.1	509.4	629.0	679.7	725.9	805.6	847.6	854.1
15°	244.5	289.7	410.3	451.3	565.5	704.4	760.4	817.5	891.8	921.9	929.5
17.5°	221.9	279.0	426.6	469.6	608.5	772.2	829.3	876.7	937.0	957.5	962.9
20°	193.8	261.7	437.3	493.3	653.8	821.8	876.7	913.3	954.3	967.2	969.4
22.5°	173.4	243.4	443.7	501.9	683.9	852.0	898.2	927.4	955.3	959.7	960.7
25°	156.2	222.9	442.7	511.6	709.8	870.3	905.8	927.4	943.5	945.7	945.7
27.5°	140.0	200.3	438.4	513.8	729.2	874.5	902.6	917.7	925.2	929.5	929.5
30°	126.0	178.8	427.6	509.4	737.8	870.3	892.9	900.4	908.0	914.5	917.7
32.5°	115.2	158.4	411.5	500.8	738.8	859.5	875.7	879.9	890.7	905.8	911.2
35°	105.5	137.9	393.1	488.9	732.4	842.3	853.0	857.4	878.9	901.5	909.0
37.5°	95.9	122.8	369.5	468.6	722.7	821.8	829.3	836.9	870.3	897.2	905.8
40°	86.2	109.9	341.4	445.9	707.6	797.1	803.5	815.4	859.5	890.7	899.4
42.5°	78.6	99.1	311.2	422.2	688.3	769.0	778.7	795.9	846.6	879.9	889.6
45°	72.2	88.3	279.0	389.9	663.4	740.0	753.9	777.6	831.5	863.8	872.4
47.5°	65.7	80.8	245.6	356.5	636.5	710.9	729.2	756.1	811.0	842.3	849.8
50°	60.3	73.2	212.2	321.0	607.5	679.7	701.2	729.2	785.2	814.2	824.0
52.5°	56.0	66.8	180.9	285.4	574.1	647.3	672.1	701.2	753.9	782.0	788.4
55°	51.7	61.4	154.0	247.7	539.6	612.8	639.8	667.8	719.5	743.2	747.5
57.5°	49.5	57.1	131.4	212.2	503.0	574.1	604.3	630.1	678.5	696.8	701.2
60°	46.3	53.9	114.2	182.0	463.2	537.4	563.3	589.2	630.1	645.1	648.4
62.5°	43.1	51.7	101.3	153.0	422.2	494.4	520.2	544.0	578.4	589.2	593.5
65°	41.0	49.5	91.5	131.4	380.2	449.1	475.0	495.5	523.5	534.2	536.4
67.5°	38.8	47.4	84.0	113.1	338.2	403.9	423.3	442.7	464.2	475.0	476.0
70°	35.6	45.2	77.6	100.1	295.1	352.2	368.3	388.8	406.1	411.5	414.7
72.5°	33.4	42.0	73.2	90.5	250.9	302.7	317.7	329.6	344.6	350.0	350.0
75°	30.2	37.7	68.9	80.8	205.7	247.7	260.7	272.5	284.3	286.5	283.3
77.5°	26.9	33.4	59.3	67.9	160.5	196.0	206.8	213.3	222.9	225.1	226.2
80°	22.6	29.1	46.3	52.8	116.4	144.3	151.8	157.2	165.9	165.9	168.0
82.5°	17.3	22.6	33.4	37.7	78.6	99.1	105.5	108.8	114.2	114.2	114.2
85°	10.8	14.0	21.5	24.7	47.4	60.3	64.6	65.7	70.0	71.1	71.1
87.5°	5.4	7.5	14.0	15.1	24.7	31.2	31.2	33.4	33.4	32.3	31.2
90°	5.0	9.0	13.0	14.0	21.9	32.5	37.8	33.6	25.2	19.0	19.0
92.5°	19.9	53.8	87.7	96.1	135.1	187.1	213.1	186.8	134.1	94.6	90.8
95°	47.8	109.8	171.7	187.2	332.4	526.0	622.8	555.8	421.7	321.1	309.7
97.5°	82.6	137.3	192.0	205.6	447.8	770.6	932.0	889.6	804.8	741.3	719.6
100°	109.5	159.1	208.7	221.1	489.7	848.0	1027.0	1030.2	1036.4	1041.0	1015.2
102.5°	132.4	178.7	224.9	236.5	508.9	872.3	1053.9	1107.9	1215.9	1296.9	1274.8
105°	171.3	210.5	249.6	259.4	523.2	875.0	1051.0	1172.0	1414.0	1595.6	1583.7
107.5°	211.1	247.6	284.1	293.3	525.9	836.1	991.2	1160.0	1497.7	1750.9	1753.8
110°	238.0	270.9	303.9	312.1	521.9	801.6	941.4	1130.1	1507.6	1790.8	1803.1



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	264.3	295.7	327.1	335.0	522.0	771.4	896.1	1089.3	1475.7	1765.4	1784.4
115°	304.2	333.2	362.2	369.4	526.8	736.8	841.9	1027.9	1400.1	1679.2	1705.7
117.5°	343.5	369.9	396.2	402.8	536.7	715.2	804.5	972.4	1308.3	1560.2	1589.5
120°	366.4	391.1	416.0	422.1	544.6	707.9	789.6	943.0	1249.9	1480.1	1508.5
122.5°	388.8	413.9	438.8	445.1	556.1	704.1	778.1	916.3	1192.7	1400.0	1428.0
125°	423.2	446.0	468.7	474.4	571.5	700.9	765.7	883.1	1117.8	1293.9	1319.7
127.5°	451.0	474.1	497.1	502.8	587.0	699.2	755.2	856.0	1057.6	1208.8	1230.5
130°	466.0	490.7	515.5	521.7	598.2	700.3	751.3	841.0	1020.5	1155.0	1175.2
132.5°	481.4	506.2	531.0	537.2	607.4	700.9	747.8	828.1	988.7	1109.2	1127.3
135°	504.3	526.8	549.5	555.1	617.3	700.3	741.8	809.1	943.6	1044.5	1060.0
137.5°	527.7	550.1	572.4	578.0	632.3	704.6	740.8	797.6	911.4	996.7	1009.4
140°	547.2	567.7	588.3	593.4	641.4	705.4	737.3	786.5	884.7	958.4	970.3
142.5°	562.1	581.1	600.2	604.9	649.1	707.9	737.3	780.4	866.8	931.5	941.7
145°	585.0	601.6	618.1	622.3	659.0	707.9	732.3	767.7	838.3	891.2	898.9
147.5°	607.9	624.0	640.2	644.2	673.6	712.7	732.3	760.1	815.6	857.3	863.7
150°	622.8	637.4	652.0	655.6	681.2	715.3	732.3	755.8	802.7	837.9	843.1
152.5°	638.2	649.3	660.4	663.1	686.2	716.9	732.3	752.3	792.4	822.4	826.4
155°	661.1	669.3	677.5	679.6	697.2	720.6	732.3	748.2	780.1	804.0	806.6
157.5°	678.1	686.0	694.0	696.0	708.1	724.2	732.3	744.7	769.5	788.1	789.9
160°	689.5	695.7	701.9	703.4	713.1	725.9	732.3	742.9	764.2	780.1	781.2
162.5°	700.9	705.6	710.3	711.5	718.4	727.7	732.3	741.3	759.2	772.6	773.6
165°	713.4	717.6	721.8	722.9	726.0	730.2	732.3	738.8	751.6	761.2	762.3
167.5°	724.9	726.9	728.9	729.4	732.0	735.5	737.3	741.5	749.9	756.3	756.7
170°	732.3	734.3	736.4	736.8	737.0	737.2	737.3	741.5	749.9	756.3	756.3
172.5°	736.4	736.8	737.2	737.3	737.3	737.3	737.3	740.6	747.3	752.3	751.8
175°	741.8	741.8	741.8	741.8	740.3	738.3	737.3	739.4	743.7	746.8	746.8
177.5°	741.8	741.8	741.8	741.8	740.6	739.1	738.3	740.0	743.3	745.7	745.3
180°	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	334.9	334.9
2.5°	357.6	355.4
5°	459.9	462.0
7.5°	619.3	618.2
10°	770.1	779.8
12.5°	879.9	882.1
15°	946.7	951.1
17.5°	972.6	973.6
20°	973.6	971.5
22.5°	961.8	959.7
25°	947.8	946.7
27.5°	934.9	936.0
30°	929.5	932.8
32.5°	929.5	934.9
35°	931.6	937.0
37.5°	930.6	937.0
40°	926.3	933.8
42.5°	914.5	919.8
45°	896.1	902.6
47.5°	872.4	876.7
50°	842.3	846.6
52.5°	804.5	805.6
55°	759.3	763.7
57.5°	710.9	711.9
60°	657.0	660.2
62.5°	599.9	599.9
65°	539.6	541.8
67.5°	477.1	482.5
70°	413.6	414.7
72.5°	351.2	351.2
75°	286.5	287.6
77.5°	225.1	225.1
80°	166.9	168.0
82.5°	115.2	117.4
85°	72.2	72.2
87.5°	33.4	30.2
90°	19.0	19.0
92.5°	75.8	60.7
95°	264.2	218.6
97.5°	632.8	546.1
100°	911.9	808.5
102.5°	1186.3	1097.8
105°	1536.1	1488.5
107.5°	1765.3	1776.8
110°	1852.8	1902.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1860.5	1936.6
115°	1811.2	1916.7
117.5°	1706.5	1823.6
120°	1622.3	1736.0
122.5°	1540.2	1652.3
125°	1423.1	1526.4
127.5°	1317.7	1404.9
130°	1255.7	1336.2
132.5°	1199.4	1271.5
135°	1122.2	1184.3
137.5°	1060.3	1111.2
140°	1017.9	1065.4
142.5°	982.6	1023.6
145°	929.9	960.9
147.5°	889.3	915.0
150°	863.9	884.7
152.5°	842.0	857.8
155°	817.1	827.4
157.5°	797.2	804.5
160°	785.4	789.6
162.5°	777.6	781.6
165°	766.5	770.6
167.5°	758.4	760.2
170°	756.3	756.3
172.5°	750.3	748.8
175°	746.8	746.8
177.5°	743.6	741.8
180°	741.8	741.8



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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	0.99	1.75	2.06	2.83	4.30	14.17	14.93	15.23	16.01	17.47
	3H	1.68	2.37	2.76	3.46	4.94	16.00	16.68	17.08	17.77	19.25
	4H	1.98	2.63	3.07	3.72	5.21	16.64	17.29	17.73	18.38	19.87
	6H	2.22	2.82	3.32	3.91	5.42	17.06	17.66	18.16	18.75	20.26
	8H	2.29	2.86	3.39	3.97	5.46	17.18	17.75	18.28	18.86	20.36
	12H	2.30	2.85	3.41	3.95	5.47	17.25	17.79	18.35	18.89	20.41
4H	2H	8.19	8.84	9.29	9.93	11.42	14.43	15.08	15.52	16.17	17.66
	3H	9.75	10.29	10.85	11.41	12.91	16.46	17.01	17.57	18.12	19.63
	4H	9.84	10.34	10.95	11.44	12.97	17.23	17.73	18.34	18.83	20.36
	6H	9.84	10.28	10.96	11.40	12.92	17.76	18.19	18.88	19.32	20.83
	8H	9.82	10.22	10.93	11.34	12.87	17.92	18.32	19.04	19.44	20.97
	12H	9.77	10.14	10.90	11.26	12.80	18.01	18.37	19.14	19.50	21.04
8H	4H	11.28	11.68	12.39	12.80	14.33	17.28	17.68	18.40	18.80	20.33
	6H	11.51	11.85	12.65	13.01	14.54	17.90	18.24	19.04	19.40	20.93
	8H	11.53	11.82	12.67	12.96	14.51	18.12	18.41	19.27	19.55	21.10
	12H	11.49	11.75	12.64	12.89	14.47	18.26	18.52	19.41	19.65	21.24
12H	4H	11.41	11.78	12.55	12.91	14.45	17.23	17.59	18.36	18.72	20.26
	6H	11.77	12.06	12.91	13.20	14.75	17.89	18.18	19.03	19.32	20.87
	8H	11.84	12.09	12.98	13.23	14.81	18.11	18.37	19.26	19.50	21.09