

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: P938331

Luminaire Tested: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938331  
REPORT IS A COMBINATION OF REPORTS P933630 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

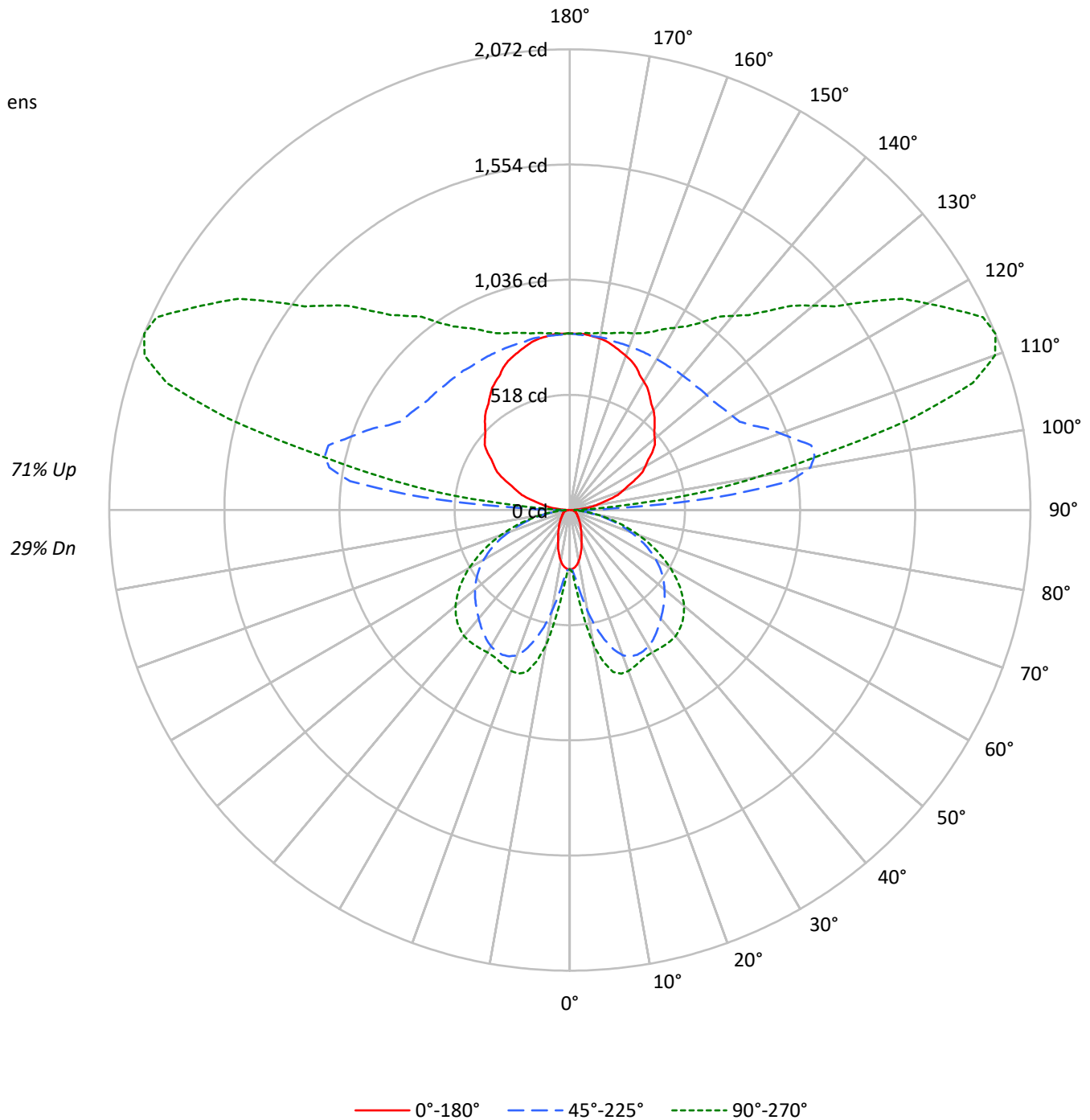
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7203.6 lumens  
Efficiency: N/A  
Efficacy: 113.3 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect

Input Watts (W): 63.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	0
RCR																		
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6

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

	0°	45°	90°
0°	2465	2465	2465
5°	2405	2847	3313
10°	2179	4147	5493
15°	1850	5413	6632
20°	1504	6269	6759
25°	1253	6555	6622
30°	1055	6592	6610
35°	932	6477	6781
40°	810	6330	6957
45°	732	6220	6985
50°	670	6119	6868
55°	640	5977	6565
60°	653	5706	6084
65°	677	5299	5423
70°	716	4612	4581
75°	784	3750	3576
80°	838	2591	2408
85°	704	1367	1232

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6985 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.4	0.5
10°-20°	152.3	2.1
20°-30°	266.4	3.7
30°-40°	342.9	4.8
40°-50°	383.0	5.3
50°-60°	366.8	5.1
60°-70°	290.7	4.0
70°-80°	170.9	2.4
80°-90°	50.5	0.7
90°-100°	386.9	5.4
100°-110°	1017.2	14.1
110°-120°	1054.8	14.6
120°-130°	846.0	11.7
130°-140°	663.8	9.2
140°-150°	509.5	7.1
150°-160°	367.0	5.1
160°-170°	224.5	3.1
170°-180°	75.9	1.1
0°-30°	453.0	6.3
0°-40°	795.9	11.0
0°-60°	1545.8	21.5
0°-90°	2058.0	28.6
90°-120°	2458.9	34.1
90°-150°	4478.3	62.2
90°-180°	5146.0	71.4
0°-180°	7203.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	266	266	266	266	266	
5°	259	278	313	354	366	24
15°	194	358	603	731	754	54
25°	124	406	718	750	751	57
35°	84	388	676	715	743	52
45°	57	309	598	685	716	44
55°	41	196	507	589	606	37
65°	32	104	377	424	430	32
75°	24	64	207	227	228	25
85°	8	20	51	56	57	9
90°	5	15	40	20	20	5
95°	51	200	666	344	234	57
105°	183	278	1124	1707	1593	194
115°	326	395	901	1797	2051	321
125°	453	508	819	1384	1633	402
135°	540	594	794	1118	1267	418
145°	626	666	784	954	1028	392
155°	708	727	784	860	885	325
165°	763	774	784	814	825	215
175°	794	794	789	799	799	75
180°	794	794	794	794	794	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	265.6	265.6	265.6	265.6	265.6	265.6	265.6	265.6	265.6	265.6	265.6
2.5°	265.6	265.6	267.3	268.2	269.9	270.8	272.5	274.2	279.3	280.2	281.9
5°	258.8	262.2	273.3	277.6	289.5	305.8	312.6	323.7	346.8	353.6	357.9
7.5°	248.6	256.2	283.6	290.4	320.3	363.0	380.9	404.9	441.6	459.5	474.0
10°	232.3	248.6	297.2	313.5	362.2	427.1	460.4	493.7	549.2	574.0	583.4
12.5°	214.4	240.9	311.8	334.0	404.0	498.8	539.0	575.7	638.9	672.2	677.3
15°	193.9	229.8	325.4	357.9	448.4	558.6	603.0	648.3	707.2	731.1	737.1
17.5°	176.0	221.2	338.2	372.4	482.6	612.4	657.7	695.3	743.1	759.3	763.6
20°	153.7	207.6	346.8	391.2	518.5	651.7	695.3	724.3	756.8	767.0	768.7
22.5°	137.5	193.0	351.9	398.0	542.4	675.6	712.3	735.4	757.6	761.0	761.9
25°	123.8	176.8	351.0	405.7	562.9	690.1	718.3	735.4	748.2	749.9	749.9
27.5°	111.0	158.9	347.6	407.4	578.2	693.6	715.8	727.7	733.7	737.1	737.1
30°	99.9	141.8	339.1	404.0	585.1	690.1	708.1	714.1	720.0	725.2	727.7
32.5°	91.4	125.6	326.3	397.2	585.9	681.6	694.4	697.8	706.4	718.3	722.6
35°	83.7	109.3	311.8	387.8	580.8	667.9	676.5	679.9	697.0	714.9	720.9
37.5°	76.0	97.4	293.0	371.5	573.1	651.7	657.7	663.7	690.1	711.5	718.3
40°	68.3	87.1	270.8	353.6	561.2	632.1	637.2	646.6	681.6	706.4	713.2
42.5°	62.4	78.6	246.8	334.8	545.8	609.8	617.5	631.2	671.3	697.8	705.5
45°	57.2	70.0	221.2	309.2	526.1	586.8	597.9	616.7	659.4	685.0	691.8
47.5°	52.1	64.1	194.7	282.7	504.8	563.7	578.2	599.6	643.2	667.9	673.9
50°	47.8	58.1	168.3	254.5	481.7	539.0	556.0	578.2	622.7	645.7	653.4
52.5°	44.4	53.0	143.5	226.3	455.3	513.3	533.0	556.0	597.9	620.1	625.2
55°	41.0	48.7	122.1	196.4	427.9	486.0	507.4	529.6	570.6	589.3	592.8
57.5°	39.3	45.3	104.2	168.3	398.9	455.3	479.2	499.7	538.1	552.6	556.0
60°	36.7	42.7	90.5	144.3	367.3	426.2	446.7	467.2	499.7	511.6	514.2
62.5°	34.2	41.0	80.3	121.3	334.8	392.0	412.5	431.3	458.7	467.2	470.6
65°	32.5	39.3	72.6	104.2	301.5	356.2	376.7	392.9	415.1	423.6	425.4
67.5°	30.7	37.6	66.6	89.7	268.2	320.3	335.7	351.0	368.1	376.7	377.5
70°	28.2	35.9	61.5	79.4	234.0	279.3	292.1	308.3	322.0	326.3	328.8
72.5°	26.5	33.3	58.1	71.7	199.0	240.0	252.0	261.4	273.3	277.6	277.6
75°	23.9	29.9	54.7	64.1	163.1	196.4	206.7	216.1	225.5	227.2	224.6
77.5°	21.4	26.5	47.0	53.8	127.3	155.5	164.0	169.1	176.8	178.5	179.4
80°	17.9	23.1	36.7	41.9	92.2	114.5	120.4	124.7	131.5	131.5	133.2
82.5°	13.7	17.9	26.5	29.9	62.4	78.6	83.7	86.3	90.5	90.5	90.5
85°	8.5	11.1	17.1	19.6	37.6	47.8	51.2	52.1	55.5	56.4	56.4
87.5°	4.3	6.0	11.1	12.0	19.6	24.8	24.8	26.5	26.5	25.6	24.8
90°	5.3	9.6	13.8	14.9	23.5	34.8	40.5	36.0	27.0	20.2	20.2
92.5°	21.3	57.5	93.8	102.8	144.5	200.1	228.0	199.8	143.5	101.2	97.2
95°	51.2	117.4	183.7	200.3	355.7	562.9	666.5	594.7	451.2	343.6	331.4
97.5°	88.4	146.9	205.4	220.0	479.1	824.6	997.3	951.9	861.2	793.2	770.0
100°	117.2	170.2	223.3	236.5	524.0	907.3	1099.0	1102.3	1109.0	1114.0	1086.3
102.5°	141.7	191.2	240.7	253.1	544.7	933.4	1127.8	1185.5	1301.1	1387.8	1364.1
105°	183.3	225.2	267.1	277.6	559.9	936.3	1124.5	1254.0	1513.1	1707.4	1694.7
107.5°	225.9	265.0	304.1	313.8	562.8	894.7	1060.7	1241.3	1602.6	1873.6	1876.7
110°	254.6	289.9	325.3	334.0	558.5	857.7	1007.4	1209.4	1613.3	1916.2	1929.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	282.9	316.5	350.2	358.6	558.7	825.5	958.9	1165.6	1579.0	1889.1	1909.4
115°	325.5	356.5	387.5	395.3	563.8	788.5	900.8	1099.9	1498.2	1796.9	1825.2
117.5°	367.6	395.8	424.0	431.0	574.3	765.4	860.9	1040.6	1400.0	1669.6	1700.9
120°	392.0	418.6	445.1	451.7	582.8	757.5	844.9	1009.1	1337.5	1583.8	1614.2
122.5°	416.0	442.8	469.6	476.3	595.1	753.5	832.7	980.5	1276.2	1498.1	1528.0
125°	452.9	477.2	501.6	507.7	611.6	750.1	819.4	944.9	1196.1	1384.5	1412.2
127.5°	482.7	507.3	531.9	538.0	628.0	748.1	808.2	916.1	1131.7	1293.5	1316.8
130°	498.6	525.1	551.6	558.3	640.2	749.3	803.9	899.9	1091.9	1235.9	1257.4
132.5°	515.1	541.7	568.2	574.8	649.9	750.1	800.1	886.1	1058.0	1186.9	1206.2
135°	539.6	563.8	587.9	594.0	660.6	749.3	793.7	865.7	1009.7	1117.6	1134.3
137.5°	564.7	588.6	612.5	618.5	676.6	754.0	792.7	853.5	975.2	1066.5	1080.1
140°	585.5	607.5	629.6	635.0	686.4	754.8	789.0	841.5	946.6	1025.5	1038.2
142.5°	601.5	621.8	642.1	647.3	694.5	757.4	789.0	835.2	927.5	996.8	1007.7
145°	626.0	643.8	661.4	665.9	705.2	757.5	783.7	821.4	896.9	953.5	961.8
147.5°	650.4	667.8	685.0	689.4	720.8	762.7	783.7	813.4	872.7	917.3	924.2
150°	666.5	682.1	697.7	701.6	728.9	765.4	783.7	808.8	858.9	896.6	902.1
152.5°	683.0	694.8	706.6	709.6	734.3	767.2	783.7	805.1	848.0	880.1	884.3
155°	707.5	716.3	725.0	727.2	746.0	771.1	783.7	800.7	834.8	860.4	863.2
157.5°	725.6	734.1	742.6	744.7	757.7	775.0	783.7	796.9	823.4	843.3	845.2
160°	737.8	744.5	751.1	752.7	763.1	776.8	783.7	795.0	817.7	834.7	835.8
162.5°	750.1	755.0	760.0	761.3	768.7	778.7	783.7	793.2	812.4	826.8	827.8
165°	763.4	767.9	772.4	773.5	776.9	781.4	783.7	790.5	804.2	814.5	815.6
167.5°	775.6	777.8	779.9	780.4	783.2	787.1	789.0	793.5	802.5	809.2	809.7
170°	783.7	785.8	787.9	788.4	788.6	788.9	789.0	793.5	802.5	809.2	809.2
172.5°	787.9	788.4	788.9	789.0	789.0	789.0	789.0	792.5	799.6	804.9	804.5
175°	793.7	793.7	793.7	793.7	792.1	790.0	789.0	791.2	795.7	799.1	799.1
177.5°	793.7	793.7	793.7	793.7	792.5	790.9	790.1	791.9	795.4	798.0	797.5
180°	793.7	793.7	793.7	793.7	793.7	793.7	793.7	793.7	793.7	793.7	793.7



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	265.6	265.6
2.5°	283.6	281.9
5°	364.7	366.4
7.5°	491.1	490.3
10°	610.7	618.4
12.5°	697.8	699.5
15°	750.8	754.2
17.5°	771.3	772.1
20°	772.1	770.4
22.5°	762.7	761.0
25°	751.6	750.8
27.5°	741.4	742.2
30°	737.1	739.7
32.5°	737.1	741.4
35°	738.8	743.1
37.5°	738.0	743.1
40°	734.6	740.5
42.5°	725.2	729.4
45°	710.6	715.8
47.5°	691.8	695.3
50°	667.9	671.3
52.5°	638.0	638.9
55°	602.2	605.6
57.5°	563.7	564.6
60°	521.0	523.6
62.5°	475.7	475.7
65°	427.9	429.6
67.5°	378.4	382.6
70°	328.0	328.8
72.5°	278.4	278.4
75°	227.2	228.1
77.5°	178.5	178.5
80°	132.4	133.2
82.5°	91.4	93.1
85°	57.2	57.2
87.5°	26.5	23.9
90°	20.2	20.2
92.5°	81.1	65.0
95°	282.6	233.9
97.5°	677.2	584.4
100°	975.8	865.1
102.5°	1269.4	1174.7
105°	1643.8	1592.9
107.5°	1889.0	1901.3
110°	1982.5	2035.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1990.9	2072.3
115°	1938.1	2051.0
117.5°	1826.1	1951.3
120°	1735.9	1857.6
122.5°	1648.1	1768.1
125°	1522.7	1633.3
127.5°	1410.1	1503.4
130°	1343.6	1429.8
132.5°	1283.3	1360.5
135°	1200.8	1267.4
137.5°	1134.6	1189.0
140°	1089.1	1140.0
142.5°	1051.5	1095.2
145°	995.1	1028.2
147.5°	951.7	979.2
150°	924.4	946.6
152.5°	901.1	917.8
155°	874.3	885.4
157.5°	853.0	860.9
160°	840.4	844.9
162.5°	832.1	836.4
165°	820.1	824.7
167.5°	811.6	813.5
170°	809.2	809.2
172.5°	802.9	801.3
175°	799.1	799.1
177.5°	795.6	793.7
180°	793.7	793.7



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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	1.74	2.45	2.85	3.57	5.11	14.87	15.59	15.99	16.70	18.25
	3H	2.43	3.07	3.56	4.20	5.76	16.69	17.33	17.81	18.45	20.01
	4H	2.72	3.33	3.86	4.46	6.02	17.32	17.93	18.45	19.05	20.62
	6H	2.97	3.53	4.11	4.65	6.23	17.73	18.29	18.87	19.41	20.99
	8H	3.03	3.57	4.18	4.71	6.28	17.84	18.37	18.98	19.51	21.08
	12H	3.04	3.55	4.19	4.69	6.28	17.89	18.40	19.04	19.53	21.13
4H	2H	8.91	9.52	10.05	10.64	12.21	15.13	15.74	16.27	16.87	18.43
	3H	10.46	10.98	11.61	12.12	13.70	17.15	17.66	18.30	18.81	20.39
	4H	10.55	11.02	11.70	12.16	13.76	17.90	18.37	19.05	19.51	21.11
	6H	10.56	10.96	11.71	12.12	13.71	18.42	18.82	19.57	19.98	21.57
	8H	10.53	10.91	11.69	12.06	13.66	18.57	18.94	19.72	20.10	21.70
	12H	10.48	10.82	11.65	11.98	13.59	18.65	18.99	19.82	20.15	21.76
8H	4H	11.98	12.35	13.13	13.50	15.11	17.95	18.32	19.10	19.48	21.08
	6H	12.21	12.52	13.39	13.72	15.32	18.56	18.87	19.73	20.06	21.67
	8H	12.23	12.50	13.41	13.67	15.29	18.77	19.04	19.95	20.21	21.84
	12H	12.19	12.43	13.38	13.60	15.25	18.90	19.14	20.08	20.31	21.96
12H	4H	12.11	12.45	13.28	13.61	15.22	17.89	18.23	19.07	19.40	21.01
	6H	12.46	12.74	13.65	13.91	15.53	18.54	18.81	19.72	19.98	21.61
	8H	12.53	12.76	13.71	13.93	15.59	18.75	18.99	19.94	20.16	21.82