

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: P937835

Luminaire Tested: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937835  
REPORT IS A COMBINATION OF REPORTS P933597 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-4-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

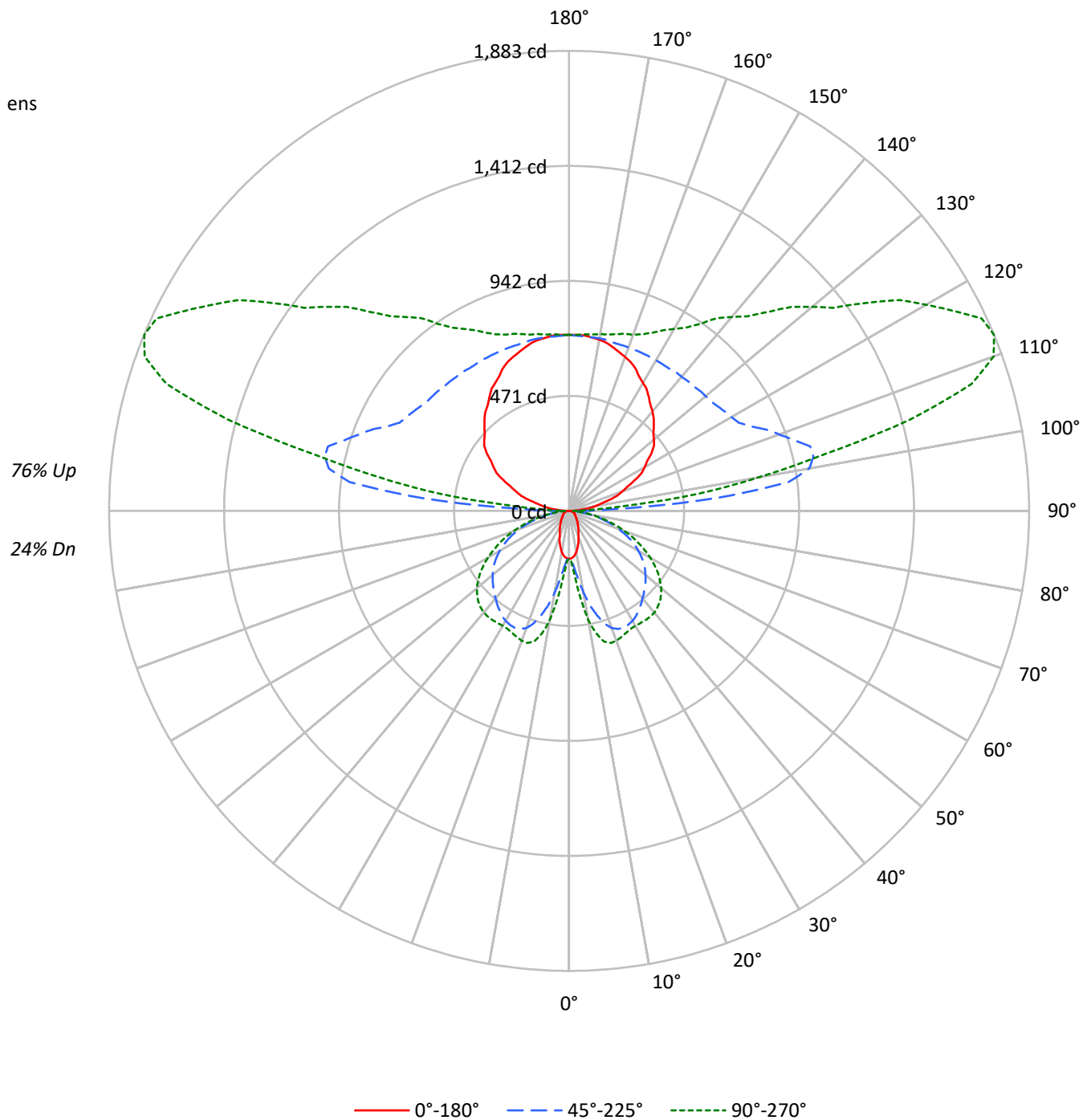
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6185.9 lumens  
Efficiency: N/A  
Efficacy: 130.0 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): 47.6  
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										
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24																				
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20																				
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16																				
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	22	20	19	13																				
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11																				
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10																				
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8																				
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7																				
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6																				
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6																				
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5																				

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

	0°	45°	90°
0°	1809	1809	1809
5°	1766	2090	2432
10°	1600	3044	4033
15°	1359	3974	4869
20°	1105	4602	4962
25°	920	4813	4862
30°	775	4839	4853
35°	684	4755	4978
40°	596	4647	5107
45°	538	4566	5128
50°	492	4493	5043
55°	470	4388	4818
60°	479	4190	4466
65°	496	3890	3981
70°	526	3385	3363
75°	577	2752	2624
80°	618	1902	1770
85°	522	1006	905

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5128 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.2	0.4
10°-20°	111.8	1.8
20°-30°	195.6	3.2
30°-40°	251.7	4.1
40°-50°	281.2	4.5
50°-60°	269.3	4.4
60°-70°	213.4	3.5
70°-80°	125.5	2.0
80°-90°	37.6	0.6
90°-100°	351.5	5.7
100°-110°	924.1	14.9
110°-120°	958.2	15.5
120°-130°	768.6	12.4
130°-140°	603.1	9.7
140°-150°	462.9	7.5
150°-160°	333.3	5.4
160°-170°	204.0	3.3
170°-180°	68.9	1.1
0°-30°	332.6	5.4
0°-40°	584.3	9.4
0°-60°	1134.8	18.3
0°-90°	1511.4	24.4
90°-120°	2233.8	36.1
90°-150°	4068.3	65.8
90°-180°	4675.0	75.6
0°-180°	6185.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	195	195	195	195	195	
5°	190	204	230	260	269	18
15°	142	263	443	537	554	40
25°	91	298	527	550	551	42
35°	61	285	497	525	546	38
45°	42	227	439	503	526	32
55°	30	144	372	433	444	27
65°	24	76	276	311	315	24
75°	18	47	152	167	167	18
85°	6	14	38	41	42	7
90°	5	14	37	18	18	4
95°	46	182	605	312	212	52
105°	166	252	1022	1551	1447	176
115°	296	359	818	1632	1863	292
125°	411	461	744	1258	1484	365
135°	490	540	721	1015	1151	379
145°	569	605	712	866	934	356
155°	643	661	712	782	804	295
165°	694	703	712	740	749	196
175°	721	721	717	726	726	68
180°	721	721	721	721	721	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	195.0	195.0	195.0	195.0	195.0	195.0	195.0	195.0	195.0	195.0	195.0
2.5°	195.0	195.0	196.3	196.8	198.2	198.8	200.0	201.2	205.1	205.6	206.9
5°	190.0	192.5	200.7	203.8	212.6	224.5	229.5	237.7	254.6	259.6	262.7
7.5°	182.5	188.2	208.2	213.2	235.2	266.5	279.7	297.2	324.2	337.3	348.0
10°	170.6	182.5	218.3	230.1	265.8	313.5	338.0	362.5	403.2	421.4	428.3
12.5°	157.4	176.8	228.9	245.2	296.6	366.2	395.7	422.7	469.0	493.5	497.3
15°	142.4	168.7	238.9	262.7	329.2	410.1	442.7	476.0	519.2	536.7	541.1
17.5°	129.2	162.5	248.4	273.4	354.3	449.6	482.9	510.4	545.5	557.5	560.5
20°	112.9	152.4	254.6	287.2	380.6	478.5	510.4	531.8	555.6	563.1	564.4
22.5°	100.9	141.7	258.4	292.2	398.2	496.0	523.0	539.9	556.2	558.7	559.3
25°	90.9	129.8	257.7	297.9	413.2	506.6	527.4	539.9	549.3	550.5	550.5
27.5°	81.5	116.7	255.2	299.1	424.5	509.1	525.5	534.3	538.7	541.1	541.1
30°	73.4	104.1	248.9	296.6	429.5	506.6	519.8	524.2	528.6	532.4	534.3
32.5°	67.1	92.2	239.6	291.5	430.2	500.3	509.8	512.3	518.6	527.4	530.4
35°	61.4	80.3	228.9	284.7	426.4	490.3	496.6	499.1	511.7	524.8	529.2
37.5°	55.8	71.5	215.1	272.7	420.7	478.5	482.9	487.3	506.6	522.3	527.4
40°	50.2	63.9	198.8	259.6	412.0	464.0	467.8	474.6	500.3	518.6	523.6
42.5°	45.8	57.7	181.2	245.8	400.7	447.7	453.3	463.4	492.9	512.3	517.9
45°	42.0	51.4	162.5	226.9	386.2	430.8	438.9	452.8	484.1	502.9	507.9
47.5°	38.2	47.0	143.0	207.6	370.6	413.9	424.5	440.2	472.2	490.3	494.7
50°	35.1	42.6	123.6	186.8	353.7	395.7	408.2	424.5	457.2	474.1	479.7
52.5°	32.6	38.9	105.3	166.2	334.3	376.9	391.3	408.2	438.9	455.2	459.0
55°	30.1	35.7	89.6	144.2	314.2	356.8	372.5	388.7	418.8	432.7	435.2
57.5°	28.9	33.3	76.5	123.6	292.8	334.3	351.7	366.8	395.0	405.7	408.2
60°	26.9	31.3	66.5	106.0	269.7	312.9	328.0	343.0	366.8	375.6	377.5
62.5°	25.1	30.1	59.0	89.1	245.8	287.8	302.8	316.7	336.7	343.0	345.5
65°	23.8	28.9	53.3	76.5	221.3	261.4	276.5	288.5	304.7	311.0	312.3
67.5°	22.6	27.6	48.9	65.8	196.8	235.2	246.4	257.7	270.2	276.5	277.1
70°	20.7	26.4	45.1	58.3	171.8	205.1	214.4	226.4	236.4	239.6	241.4
72.5°	19.4	24.5	42.6	52.7	146.1	176.2	185.0	191.9	200.7	203.8	203.8
75°	17.6	22.0	40.1	47.0	119.7	144.2	151.7	158.6	165.5	166.8	164.9
77.5°	15.7	19.4	34.5	39.5	93.5	114.1	120.4	124.1	129.8	131.0	131.7
80°	13.2	16.9	26.9	30.8	67.8	84.0	88.4	91.5	96.6	96.6	97.9
82.5°	10.0	13.2	19.4	22.0	45.8	57.7	61.4	63.4	66.5	66.5	66.5
85°	6.3	8.1	12.5	14.4	27.6	35.1	37.7	38.2	40.8	41.4	41.4
87.5°	3.2	4.4	8.1	8.8	14.4	18.2	18.2	19.4	19.4	18.8	18.2
90°	4.9	8.7	12.6	13.6	21.3	31.6	36.7	32.6	24.5	18.4	18.4
92.5°	19.3	52.3	85.2	93.4	131.3	181.9	207.1	181.5	130.4	92.0	88.3
95°	46.5	106.6	166.9	182.0	323.1	511.3	605.4	540.3	410.0	312.2	301.1
97.5°	80.3	133.4	186.6	199.8	435.2	749.0	905.9	864.7	782.3	720.6	699.5
100°	106.5	154.7	202.8	214.9	476.0	824.2	998.4	1001.4	1007.4	1011.9	986.8
102.5°	128.7	173.7	218.6	229.8	494.7	848.0	1024.5	1077.1	1182.0	1260.7	1239.2
105°	166.5	204.6	242.6	252.2	508.7	850.7	1021.6	1139.3	1374.6	1551.1	1539.5
107.5°	205.2	240.7	276.2	285.1	511.3	812.8	963.6	1127.7	1455.9	1702.0	1704.8
110°	231.3	263.4	295.4	303.4	507.4	779.3	915.2	1098.7	1465.6	1740.8	1752.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	257.0	287.5	318.0	325.7	507.5	749.9	871.1	1058.9	1434.5	1716.1	1734.6
115°	295.6	323.9	352.1	359.1	512.2	716.3	818.3	999.2	1361.0	1632.4	1658.0
117.5°	334.0	359.6	385.2	391.5	521.8	695.3	782.1	945.3	1271.8	1516.7	1545.1
120°	356.2	380.3	404.4	410.4	529.5	688.2	767.6	916.8	1215.0	1438.8	1466.5
122.5°	378.0	402.3	426.6	432.7	540.6	684.5	756.5	890.8	1159.4	1360.8	1388.1
125°	411.4	433.5	455.7	461.2	555.6	681.4	744.3	858.4	1086.6	1257.7	1282.9
127.5°	438.5	460.8	483.1	488.8	570.5	679.6	734.1	832.1	1028.1	1175.0	1196.2
130°	453.0	477.1	501.2	507.2	581.6	680.7	730.3	817.5	991.9	1122.8	1142.3
132.5°	468.0	492.1	516.2	522.2	590.5	681.4	726.9	805.0	961.2	1078.3	1095.8
135°	490.3	512.2	534.1	539.6	600.1	680.7	721.1	786.6	917.3	1015.4	1030.5
137.5°	513.0	534.7	556.4	561.9	614.6	685.0	720.1	775.3	885.9	968.8	981.2
140°	531.8	551.9	571.9	576.9	623.5	685.7	716.7	764.5	860.0	931.6	943.2
142.5°	546.3	564.8	583.4	588.0	630.9	688.1	716.7	758.7	842.5	905.4	915.4
145°	568.7	584.8	600.9	604.9	640.6	688.1	711.9	746.2	814.8	866.3	873.9
147.5°	590.9	606.6	622.3	626.3	654.8	692.8	711.9	738.9	792.9	833.4	839.6
150°	605.4	619.6	633.8	637.4	662.2	695.3	711.9	734.7	780.3	814.5	819.6
152.5°	620.5	631.2	642.0	644.7	667.1	696.9	711.9	731.3	770.3	799.5	803.3
155°	642.7	650.6	658.6	660.6	677.7	700.5	711.9	727.4	758.3	781.6	784.1
157.5°	659.2	666.9	674.6	676.5	688.3	704.0	711.9	723.9	748.0	766.1	767.9
160°	670.3	676.3	682.3	683.8	693.2	705.6	711.9	722.2	742.8	758.3	759.4
162.5°	681.4	685.9	690.5	691.6	698.3	707.4	711.9	720.6	738.0	751.1	752.1
165°	693.5	697.6	701.7	702.7	705.8	709.8	711.9	718.1	730.6	739.9	740.9
167.5°	704.7	706.5	708.5	709.0	711.6	715.1	716.7	720.8	729.0	735.1	735.6
170°	711.9	713.8	715.8	716.3	716.5	716.6	716.7	720.8	729.0	735.1	735.1
172.5°	715.8	716.2	716.6	716.7	716.7	716.7	716.7	719.9	726.4	731.2	730.8
175°	721.1	721.1	721.1	721.1	719.6	717.7	716.7	718.8	722.8	725.9	725.9
177.5°	721.1	721.1	721.1	721.1	720.0	718.4	717.7	719.3	722.5	725.0	724.5
180°	721.1	721.1	721.1	721.1	721.1	721.1	721.1	721.1	721.1	721.1	721.1



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	195.0	195.0
2.5°	208.2	206.9
5°	267.8	269.0
7.5°	360.5	360.0
10°	448.4	454.0
12.5°	512.3	513.5
15°	551.2	553.7
17.5°	566.2	566.9
20°	566.9	565.6
22.5°	560.0	558.7
25°	551.9	551.2
27.5°	544.3	544.9
30°	541.1	543.1
32.5°	541.1	544.3
35°	542.4	545.5
37.5°	541.8	545.5
40°	539.2	543.6
42.5°	532.4	535.5
45°	521.7	525.5
47.5°	507.9	510.4
50°	490.3	492.9
52.5°	468.4	469.0
55°	442.1	444.5
57.5°	413.9	414.4
60°	382.5	384.4
62.5°	349.3	349.3
65°	314.2	315.4
67.5°	277.8	280.9
70°	240.8	241.4
72.5°	204.4	204.4
75°	166.8	167.4
77.5°	131.0	131.0
80°	97.2	97.9
82.5°	67.1	68.3
85°	42.0	42.0
87.5°	19.4	17.6
90°	18.4	18.4
92.5°	73.7	59.1
95°	256.8	212.5
97.5°	615.2	530.9
100°	886.4	785.9
102.5°	1153.1	1067.2
105°	1493.3	1447.0
107.5°	1716.0	1727.2
110°	1801.0	1849.1





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1808.6	1882.6
115°	1760.6	1863.2
117.5°	1658.9	1772.7
120°	1576.9	1687.5
122.5°	1497.1	1606.2
125°	1383.3	1483.8
127.5°	1280.9	1365.7
130°	1220.6	1299.0
132.5°	1165.9	1236.0
135°	1090.9	1151.3
137.5°	1030.7	1080.1
140°	989.4	1035.7
142.5°	955.2	995.0
145°	904.0	934.1
147.5°	864.5	889.5
150°	839.8	860.0
152.5°	818.5	833.9
155°	794.2	804.3
157.5°	775.0	782.1
160°	763.5	767.6
162.5°	756.0	759.8
165°	745.1	749.2
167.5°	737.3	739.0
170°	735.1	735.1
172.5°	729.4	727.9
175°	725.9	725.9
177.5°	722.8	721.1
180°	721.1	721.1



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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	0.04	0.73	1.18	1.86	3.46	13.18	13.86	14.32	15.00	16.59
	3H	0.73	1.35	1.89	2.49	4.10	14.99	15.60	16.14	16.75	18.36
	4H	1.02	1.61	2.19	2.76	4.37	15.61	16.20	16.78	17.34	18.96
	6H	1.27	1.80	2.43	2.95	4.58	16.02	16.56	17.19	17.71	19.33
	8H	1.33	1.84	2.50	3.00	4.62	16.13	16.64	17.30	17.81	19.42
	12H	1.34	1.83	2.52	2.98	4.62	16.19	16.67	17.36	17.83	19.47
4H	2H	7.21	7.79	8.38	8.94	10.55	13.43	14.02	14.60	15.16	16.77
	3H	8.76	9.25	9.93	10.42	12.05	15.45	15.93	16.62	17.11	18.73
	4H	8.85	9.30	10.02	10.46	12.10	16.19	16.65	17.37	17.80	19.45
	6H	8.85	9.23	10.03	10.42	12.05	16.71	17.10	17.89	18.28	19.91
	8H	8.82	9.18	10.00	10.35	12.00	16.86	17.22	18.04	18.39	20.04
	12H	8.77	9.10	9.96	10.28	11.93	16.94	17.26	18.13	18.45	20.10
8H	4H	10.27	10.63	11.45	11.80	13.45	16.24	16.60	17.42	17.77	19.42
	6H	10.50	10.80	11.70	12.01	13.66	16.85	17.15	18.05	18.36	20.01
	8H	10.52	10.78	11.72	11.97	13.64	17.06	17.32	18.26	18.51	20.18
	12H	10.48	10.70	11.69	11.90	13.59	17.19	17.41	18.39	18.60	20.30
12H	4H	10.40	10.73	11.59	11.91	13.56	16.18	16.51	17.38	17.69	19.35
	6H	10.75	11.01	11.96	12.21	13.87	16.83	17.09	18.03	18.28	19.95
	8H	10.81	11.04	12.02	12.23	13.93	17.04	17.27	18.25	18.46	20.16