

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: P937475

Luminaire Tested: SQ4-FB-100U-050D-940-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937475
REPORT IS A COMBINATION OF REPORTS P933573 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

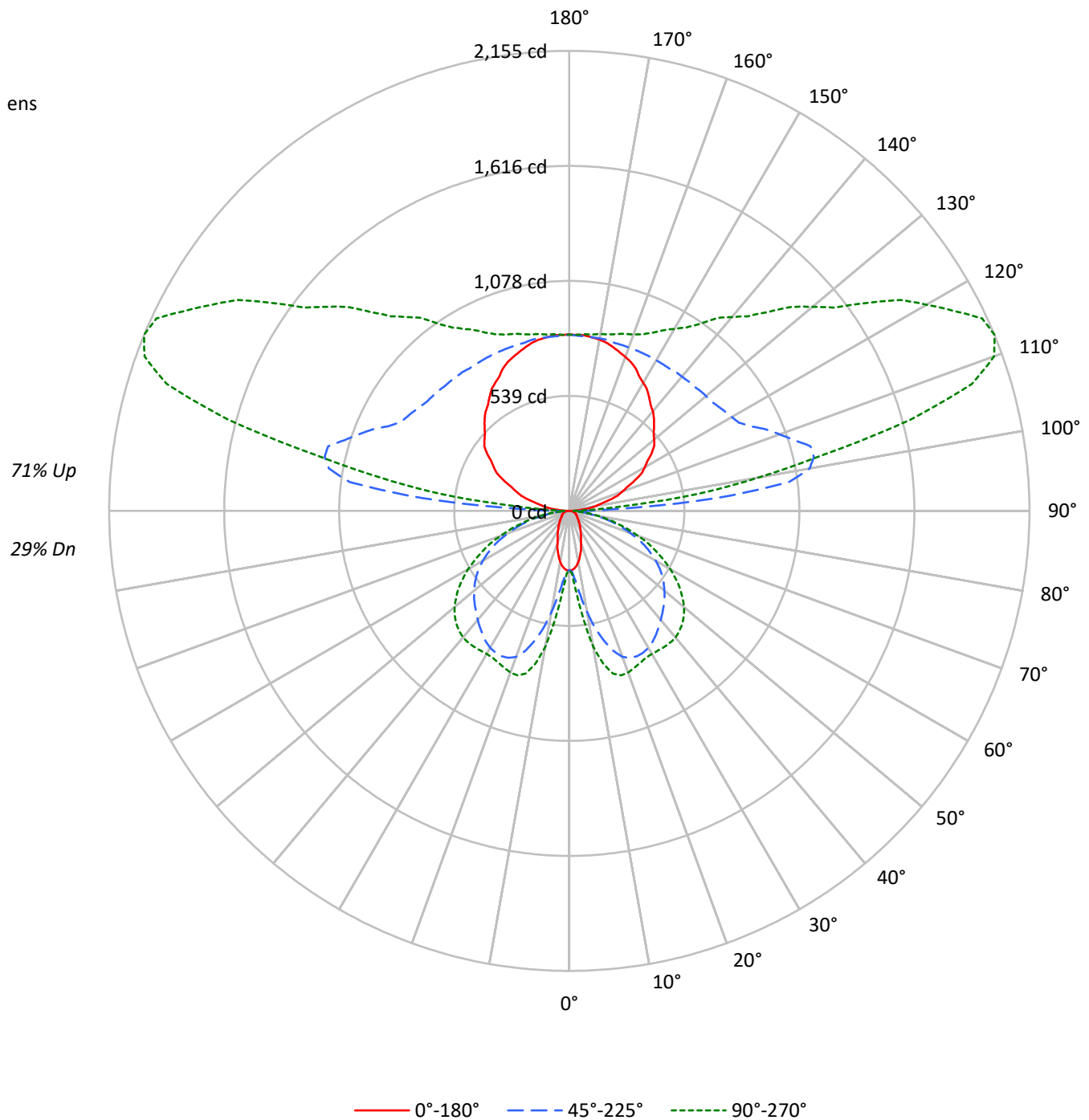
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7503.6 lumens
Efficiency: N/A
Efficacy: 121.4 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): 61.8
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				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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29			
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	23			
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	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	18	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	11	9	7			
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	6			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1719	1719	1719
5°	1679	1986	2310
10°	1522	2894	3829
15°	1292	3780	4624
20°	1052	4379	4713
25°	878	4581	4617
30°	739	4609	4608
35°	654	4531	4727
40°	569	4431	4850
45°	515	4356	4869
50°	472	4290	4789
55°	452	4192	4577
60°	463	4007	4241
65°	479	3724	3780
70°	510	3246	3194
75°	563	2643	2493
80°	609	1831	1679
85°	537	970	860

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4869 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.9	0.5
10°-20°	159.3	2.1
20°-30°	278.6	3.7
30°-40°	358.6	4.8
40°-50°	400.5	5.3
50°-60°	383.6	5.1
60°-70°	304.0	4.1
70°-80°	178.8	2.4
80°-90°	52.8	0.7
90°-100°	402.4	5.4
100°-110°	1057.9	14.1
110°-120°	1096.9	14.6
120°-130°	879.9	11.7
130°-140°	690.4	9.2
140°-150°	529.9	7.1
150°-160°	381.6	5.1
160°-170°	233.5	3.1
170°-180°	78.9	1.1
0°-30°	473.8	6.3
0°-40°	832.4	11.1
0°-60°	1616.5	21.5
0°-90°	2152.1	28.7
90°-120°	2557.3	34.1
90°-150°	4657.5	62.1
90°-180°	5352.0	71.3
0°-180°	7503.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	278	278	278	278	278	
5°	271	290	327	370	383	25
15°	203	374	631	765	789	56
25°	130	424	751	784	785	60
35°	88	406	707	748	777	55
45°	60	323	625	716	748	46
55°	43	205	531	616	633	39
65°	34	109	394	443	449	34
75°	25	67	216	238	238	26
85°	9	20	54	59	60	9
90°	6	16	42	21	21	5
95°	53	208	693	357	243	59
105°	191	289	1170	1776	1657	202
115°	338	411	937	1869	2133	334
125°	471	528	852	1440	1699	418
135°	561	618	826	1162	1318	434
145°	651	693	815	992	1069	408
155°	736	756	815	895	921	338
165°	794	804	815	847	858	224
175°	826	826	820	831	831	78
180°	826	826	826	826	826	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8
2.5°	277.8	277.8	279.5	280.4	282.3	283.2	285.0	286.7	292.1	293.0	294.7
5°	270.7	274.2	285.8	290.3	302.8	319.8	326.9	338.5	362.7	369.8	374.3
7.5°	259.9	268.0	296.5	303.7	335.0	379.6	398.4	423.4	461.8	480.6	495.8
10°	243.0	259.9	310.8	327.8	378.7	446.6	481.5	516.3	574.4	600.2	610.1
12.5°	224.2	251.9	326.0	349.3	422.5	521.6	563.6	602.1	668.1	702.9	708.3
15°	202.7	240.3	340.3	374.3	469.0	584.1	630.6	678.0	739.6	764.6	770.9
17.5°	184.0	231.3	353.7	389.5	504.7	640.4	687.8	727.1	777.1	794.0	798.5
20°	160.8	217.0	362.7	409.1	542.2	681.5	727.1	757.5	791.4	802.1	803.9
22.5°	143.8	201.8	368.0	416.2	567.2	706.5	744.9	769.0	792.3	795.8	796.7
25°	129.6	184.9	367.1	424.3	588.7	721.7	751.2	769.0	782.4	784.2	784.2
27.5°	116.2	166.1	363.5	426.1	604.7	725.3	748.5	761.0	767.2	770.9	770.9
30°	104.5	148.3	354.6	422.5	611.8	721.7	740.5	746.7	752.9	758.4	761.0
32.5°	95.5	131.3	341.2	415.3	612.7	712.8	726.2	729.8	738.6	751.2	755.7
35°	87.6	114.4	326.0	405.5	607.4	698.5	707.4	711.0	728.9	747.6	753.8
37.5°	79.5	101.9	306.4	388.6	599.3	681.5	687.8	694.1	721.7	744.1	751.2
40°	71.5	91.1	283.2	369.8	586.9	660.9	666.4	676.1	712.8	738.6	745.8
42.5°	65.2	82.1	258.1	350.1	570.7	637.8	645.8	660.1	702.1	729.8	737.8
45°	59.9	73.3	231.3	323.3	550.2	613.6	625.2	644.9	689.5	716.3	723.5
47.5°	54.5	67.0	203.6	295.6	527.9	589.5	604.7	627.0	672.6	698.5	704.7
50°	50.0	60.7	176.0	266.1	503.8	563.6	581.5	604.7	651.2	675.2	683.3
52.5°	46.4	55.4	150.1	236.7	476.1	536.8	557.4	581.5	625.2	648.5	653.8
55°	42.9	50.9	127.7	205.4	447.5	508.2	530.6	553.8	596.6	616.3	619.9
57.5°	41.1	47.3	109.0	176.0	417.1	476.1	501.1	522.5	562.7	577.9	581.5
60°	38.5	44.7	94.7	151.0	384.1	445.7	467.2	488.6	522.5	535.0	537.7
62.5°	35.7	42.9	84.0	126.8	350.1	410.0	431.4	451.1	479.6	488.6	492.1
65°	33.9	41.1	75.9	109.0	315.3	372.4	393.9	410.9	434.1	443.0	444.8
67.5°	32.1	39.3	69.7	93.8	280.4	335.0	351.0	367.1	384.9	393.9	394.8
70°	29.5	37.5	64.3	83.0	244.7	292.1	305.5	322.4	336.7	341.2	343.9
72.5°	27.7	34.8	60.7	75.0	208.1	250.9	263.5	273.3	285.8	290.3	290.3
75°	25.0	31.3	57.2	67.0	170.6	205.4	216.1	226.0	235.8	237.6	234.9
77.5°	22.3	27.7	49.1	56.3	133.1	162.6	171.5	176.9	184.9	186.7	187.5
80°	18.7	24.2	38.5	43.8	96.4	119.7	125.9	130.4	137.6	137.6	139.3
82.5°	14.3	18.7	27.7	31.3	65.2	82.1	87.6	90.2	94.7	94.7	94.7
85°	9.0	11.6	17.8	20.5	39.3	50.0	53.6	54.5	58.1	59.0	59.0
87.5°	4.4	6.2	11.6	12.5	20.5	25.9	25.9	27.7	27.7	26.8	25.9
90°	5.5	9.9	14.4	15.5	24.4	36.2	42.1	37.4	28.1	21.0	21.0
92.5°	22.2	59.9	97.5	106.9	150.3	208.1	237.1	207.8	149.2	105.2	101.1
95°	53.2	122.1	191.1	208.3	369.9	585.4	693.1	618.5	469.2	357.3	344.6
97.5°	92.0	152.8	213.7	228.8	498.3	857.5	1037.2	990.0	895.7	825.0	800.8
100°	121.9	177.1	232.2	246.0	545.0	943.6	1142.9	1146.4	1153.3	1158.5	1129.7
102.5°	147.4	198.9	250.3	263.2	566.5	970.8	1172.9	1233.0	1353.1	1443.3	1418.7
105°	190.6	234.2	277.8	288.7	582.4	973.9	1169.6	1304.3	1573.6	1775.6	1762.4
107.5°	234.9	275.5	316.2	326.3	585.3	930.4	1103.1	1291.0	1666.7	1948.5	1951.7
110°	264.8	301.5	338.2	347.4	580.8	892.1	1047.7	1257.7	1677.8	1992.8	2006.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	294.2	329.2	364.2	372.9	581.0	858.5	997.2	1212.2	1642.2	1964.6	1985.7
115°	338.5	370.7	403.0	411.1	586.3	820.0	936.8	1143.9	1558.2	1868.8	1898.2
117.5°	382.3	411.6	440.9	448.2	597.2	795.9	895.3	1082.2	1456.0	1736.3	1768.9
120°	407.8	435.4	462.9	469.8	606.1	787.8	878.7	1049.4	1391.0	1647.2	1678.8
122.5°	432.7	460.5	488.4	495.3	618.8	783.6	866.0	1019.8	1327.3	1557.9	1589.2
125°	470.9	496.3	521.7	528.0	636.1	780.1	852.1	982.7	1244.0	1440.0	1468.8
127.5°	502.0	527.6	553.2	559.6	653.2	778.1	840.5	952.6	1177.0	1345.2	1369.5
130°	518.6	546.2	573.7	580.7	665.8	779.3	836.1	935.9	1135.6	1285.4	1307.8
132.5°	535.7	563.3	590.9	597.8	675.9	780.1	832.1	921.6	1100.3	1234.4	1254.5
135°	561.2	586.3	611.5	617.8	687.0	779.3	825.5	900.3	1050.1	1162.4	1179.7
137.5°	587.2	612.1	637.1	643.3	703.7	784.2	824.4	887.7	1014.3	1109.2	1123.3
140°	608.9	631.8	654.7	660.4	713.8	784.9	820.5	875.2	984.5	1066.5	1079.7
142.5°	625.5	646.7	667.9	673.2	722.3	787.7	820.5	868.6	964.5	1036.6	1047.9
145°	651.0	669.5	687.9	692.6	733.4	787.8	815.0	854.3	932.8	991.7	1000.3
147.5°	676.5	694.4	712.4	716.9	749.6	793.2	815.0	845.9	907.7	954.1	961.2
150°	693.1	709.3	725.6	729.7	758.1	796.0	815.0	841.1	893.2	932.4	938.2
152.5°	710.3	722.7	734.9	738.0	763.7	797.9	815.0	837.3	881.9	915.3	919.6
155°	735.8	744.9	753.9	756.2	775.8	802.0	815.0	832.8	868.2	894.7	897.7
157.5°	754.6	763.5	772.3	774.5	788.0	806.0	815.0	828.8	856.4	877.1	879.1
160°	767.3	774.2	781.2	782.9	793.6	807.9	815.0	826.8	850.4	868.2	869.4
162.5°	780.1	785.3	790.4	791.7	799.5	809.9	815.0	825.0	844.9	859.9	860.9
165°	794.0	798.6	803.3	804.4	808.0	812.7	815.0	822.1	836.4	847.2	848.3
167.5°	806.7	808.9	811.1	811.6	814.6	818.6	820.5	825.2	834.5	841.6	842.1
170°	815.0	817.2	819.4	820.0	820.2	820.4	820.5	825.2	834.5	841.6	841.6
172.5°	819.4	819.9	820.4	820.5	820.5	820.5	820.5	824.2	831.6	837.1	836.7
175°	825.5	825.5	825.5	825.5	823.8	821.6	820.5	822.8	827.5	831.1	831.1
177.5°	825.5	825.5	825.5	825.5	824.2	822.6	821.7	823.5	827.2	829.9	829.4
180°	825.5	825.5	825.5	825.5	825.5	825.5	825.5	825.5	825.5	825.5	825.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	277.8	277.8
2.5°	296.5	294.7
5°	381.4	383.2
7.5°	513.6	512.7
10°	638.6	646.6
12.5°	729.8	731.5
15°	785.2	788.7
17.5°	806.6	807.5
20°	807.5	805.7
22.5°	797.6	795.8
25°	786.1	785.2
27.5°	775.3	776.2
30°	770.9	773.5
32.5°	770.9	775.3
35°	772.6	777.1
37.5°	771.8	777.1
40°	768.1	774.4
42.5°	758.4	762.8
45°	743.2	748.5
47.5°	723.5	727.1
50°	698.5	702.1
52.5°	667.2	668.1
55°	629.7	633.3
57.5°	589.5	590.4
60°	544.9	547.5
62.5°	497.5	497.5
65°	447.5	449.2
67.5°	395.7	400.1
70°	343.0	343.9
72.5°	291.2	291.2
75°	237.6	238.5
77.5°	186.7	186.7
80°	138.4	139.3
82.5°	95.5	97.3
85°	59.9	59.9
87.5°	27.7	25.0
90°	21.0	21.0
92.5°	84.3	67.6
95°	293.9	243.2
97.5°	704.3	607.7
100°	1014.7	899.7
102.5°	1320.1	1221.6
105°	1709.5	1656.6
107.5°	1964.6	1977.4
110°	2061.8	2117.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2070.5	2155.2
115°	2015.6	2133.1
117.5°	1899.2	2029.4
120°	1805.4	1931.9
122.5°	1714.0	1838.9
125°	1583.7	1698.7
127.5°	1466.5	1563.5
130°	1397.4	1487.0
132.5°	1334.8	1415.0
135°	1248.9	1318.1
137.5°	1180.0	1236.6
140°	1132.7	1185.7
142.5°	1093.6	1139.1
145°	1034.9	1069.3
147.5°	989.8	1018.4
150°	961.3	984.5
152.5°	937.1	954.6
155°	909.2	920.8
157.5°	887.2	895.3
160°	874.1	878.7
162.5°	865.4	869.8
165°	853.0	857.6
167.5°	844.0	846.0
170°	841.6	841.6
172.5°	835.0	833.3
175°	831.1	831.1
177.5°	827.4	825.5
180°	825.5	825.5



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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	0.51	1.23	1.63	2.34	3.88	13.67	14.39	14.79	15.50	17.05
	3H	1.20	1.85	2.33	2.97	4.53	15.50	16.14	16.62	17.26	18.82
	4H	1.50	2.11	2.63	3.23	4.79	16.13	16.74	17.26	17.86	19.43
	6H	1.74	2.30	2.88	3.43	5.00	16.55	17.11	17.69	18.24	19.81
	8H	1.80	2.34	2.95	3.48	5.05	16.66	17.20	17.81	18.34	19.91
	12H	1.81	2.32	2.96	3.46	5.05	16.72	17.23	17.87	18.37	19.96
4H	2H	7.70	8.31	8.84	9.43	11.00	13.93	14.54	15.07	15.66	17.23
	3H	9.25	9.76	10.40	10.91	12.49	15.96	16.47	17.10	17.62	19.19
	4H	9.34	9.81	10.49	10.95	12.54	16.71	17.18	17.86	18.32	19.92
	6H	9.34	9.75	10.50	10.91	12.49	17.24	17.64	18.40	18.80	20.39
	8H	9.32	9.69	10.47	10.84	12.45	17.40	17.77	18.55	18.92	20.53
	12H	9.26	9.61	10.44	10.77	12.38	17.48	17.82	18.65	18.98	20.59
8H	4H	10.77	11.15	11.92	12.30	13.90	16.76	17.14	17.92	18.29	19.90
	6H	11.00	11.32	12.18	12.51	14.11	17.38	17.69	18.56	18.89	20.49
	8H	11.02	11.29	12.20	12.46	14.09	17.60	17.87	18.78	19.04	20.66
	12H	10.98	11.22	12.17	12.39	14.04	17.73	17.97	18.92	19.14	20.79
12H	4H	10.90	11.25	12.08	12.41	14.02	16.71	17.05	17.88	18.21	19.82
	6H	11.26	11.53	12.44	12.70	14.33	17.36	17.63	18.54	18.81	20.43
	8H	11.32	11.56	12.51	12.73	14.38	17.58	17.82	18.77	18.99	20.64