

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: P938310

Luminaire Tested: SQ4-FB-150U-075D-830-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938310
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-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

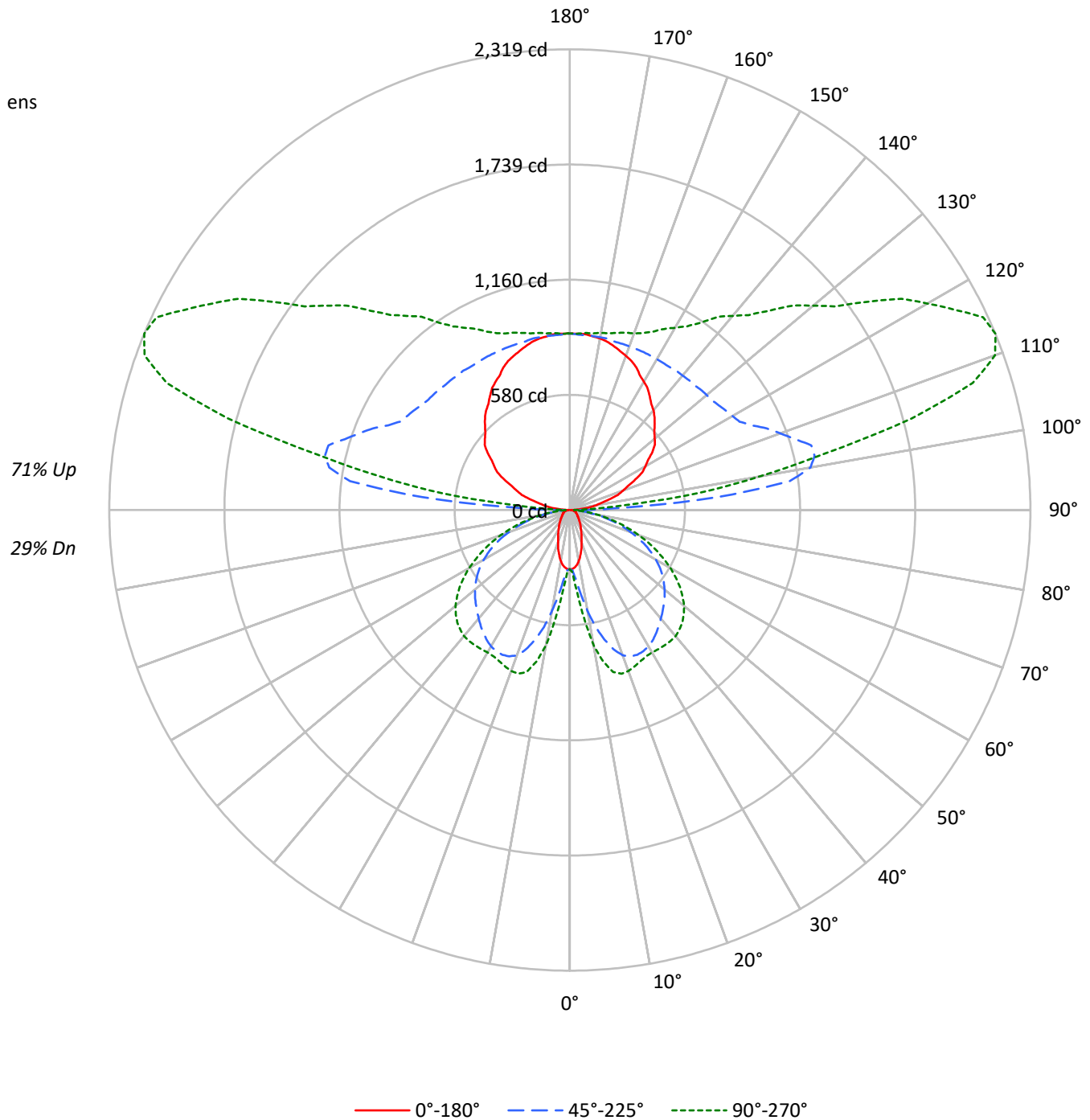
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8062.9 lumens
Efficiency: N/A
Efficacy: 126.8 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_{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	36	36	36	29				29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23				23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	19				19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16				16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	13				13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11				11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10				10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8				8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7				7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	6				6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6				6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2759	2759	2759
5°	2693	3186	3708
10°	2439	4641	6147
15°	2071	6059	7423
20°	1684	7017	7565
25°	1403	7337	7412
30°	1182	7378	7398
35°	1043	7250	7589
40°	908	7085	7787
45°	821	6961	7817
50°	750	6850	7688
55°	717	6689	7347
60°	731	6387	6809
65°	756	5931	6070
70°	800	5163	5128
75°	879	4199	4002
80°	941	2901	2696
85°	795	1532	1381

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7817 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.5	0.5
10°-20°	170.5	2.1
20°-30°	298.1	3.7
30°-40°	383.8	4.8
40°-50°	428.7	5.3
50°-60°	410.6	5.1
60°-70°	325.4	4.0
70°-80°	191.3	2.4
80°-90°	56.5	0.7
90°-100°	433.1	5.4
100°-110°	1138.6	14.1
110°-120°	1180.6	14.6
120°-130°	947.0	11.7
130°-140°	743.0	9.2
140°-150°	570.3	7.1
150°-160°	410.7	5.1
160°-170°	251.3	3.1
170°-180°	84.9	1.1
0°-30°	507.1	6.3
0°-40°	890.9	11.0
0°-60°	1730.2	21.5
0°-90°	2303.4	28.6
90°-120°	2752.2	34.1
90°-150°	5012.5	62.2
90°-180°	5759.0	71.4
0°-180°	8062.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	297	297	297	297	297	
5°	290	311	350	396	410	27
15°	217	401	675	818	844	60
25°	139	454	804	839	840	64
35°	94	434	757	800	832	59
45°	64	346	669	767	801	50
55°	46	220	568	660	678	42
65°	36	117	422	474	481	36
75°	27	72	231	254	255	28
85°	10	22	57	63	64	10
90°	6	17	45	23	23	6
95°	57	224	746	385	262	64
105°	205	311	1259	1911	1783	217
115°	364	442	1008	2011	2296	360
125°	507	568	917	1550	1828	450
135°	604	665	888	1251	1418	467
145°	701	745	877	1067	1151	439
155°	792	814	877	963	991	364
165°	854	866	877	912	923	241
175°	888	888	883	894	894	84
180°	888	888	888	888	888	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	297.3	297.3	297.3	297.3	297.3	297.3	297.3	297.3	297.3	297.3	297.3
2.5°	297.3	297.3	299.2	300.2	302.1	303.1	305.0	306.9	312.6	313.6	315.5
5°	289.7	293.5	305.9	310.7	324.1	342.2	349.9	362.3	388.1	395.8	400.6
7.5°	278.2	286.8	317.4	325.0	358.5	406.3	426.4	453.1	494.3	514.3	530.6
10°	260.0	278.2	332.7	350.9	405.3	478.0	515.3	552.6	614.7	642.4	652.9
12.5°	240.0	269.6	348.9	373.8	452.2	558.3	603.2	644.3	715.1	752.4	758.1
15°	217.0	257.2	364.2	400.6	501.9	625.2	674.9	725.6	791.6	818.3	825.0
17.5°	196.9	247.6	378.6	416.8	540.1	685.5	736.1	778.2	831.7	849.9	854.7
20°	172.1	232.3	388.1	437.8	580.3	729.4	778.2	810.7	847.0	858.5	860.4
22.5°	153.9	216.1	393.9	445.5	607.1	756.2	797.3	823.1	848.0	851.8	852.8
25°	138.6	197.9	392.9	454.1	630.0	772.4	804.0	823.1	837.5	839.4	839.4
27.5°	124.3	177.8	389.1	456.0	647.2	776.3	801.1	814.5	821.2	825.0	825.0
30°	111.9	158.7	379.5	452.2	654.9	772.4	792.5	799.2	805.9	811.6	814.5
32.5°	102.3	140.5	365.2	444.5	655.8	762.9	777.2	781.1	790.6	804.0	808.8
35°	93.7	122.4	348.9	434.0	650.1	747.6	757.2	761.0	780.1	800.2	806.9
37.5°	85.1	109.0	327.9	415.9	641.5	729.4	736.1	742.8	772.4	796.3	804.0
40°	76.5	97.5	303.1	395.8	628.1	707.4	713.2	723.7	762.9	790.6	798.3
42.5°	69.8	88.0	276.3	374.8	610.9	682.6	691.2	706.5	751.4	781.1	789.7
45°	64.1	78.4	247.6	346.1	588.9	656.8	669.2	690.2	738.0	766.7	774.4
47.5°	58.3	71.7	218.0	316.4	565.0	631.0	647.2	671.1	719.9	747.6	754.3
50°	53.5	65.0	188.3	284.9	539.2	603.2	622.4	647.2	696.9	722.7	731.3
52.5°	49.7	59.3	160.6	253.3	509.5	574.6	596.5	622.4	669.2	694.1	699.8
55°	45.9	54.5	136.7	219.9	479.0	544.0	567.9	592.7	638.6	659.6	663.5
57.5°	44.0	50.7	116.6	188.3	446.5	509.5	536.3	559.3	602.3	618.5	622.4
60°	41.1	47.8	101.3	161.6	411.1	477.0	500.0	522.9	559.3	572.6	575.5
62.5°	38.2	45.9	89.9	135.8	374.8	438.8	461.7	482.8	513.4	522.9	526.8
65°	36.3	44.0	81.3	116.6	337.5	398.7	421.6	439.8	464.6	474.2	476.1
67.5°	34.4	42.1	74.6	100.4	300.2	358.5	375.7	392.9	412.0	421.6	422.6
70°	31.5	40.2	68.8	88.9	261.9	312.6	327.0	345.1	360.4	365.2	368.1
72.5°	29.6	37.3	65.0	80.3	222.7	268.6	282.0	292.5	305.9	310.7	310.7
75°	26.8	33.5	61.2	71.7	182.6	219.9	231.4	241.9	252.4	254.3	251.4
77.5°	23.9	29.6	52.6	60.2	142.4	174.0	183.6	189.3	197.9	199.8	200.8
80°	20.1	25.8	41.1	46.8	103.2	128.1	134.8	139.6	147.2	147.2	149.1
82.5°	15.3	20.1	29.6	33.5	69.8	88.0	93.7	96.6	101.3	101.3	101.3
85°	9.6	12.4	19.1	22.0	42.1	53.5	57.4	58.3	62.1	63.1	63.1
87.5°	4.8	6.7	12.4	13.4	22.0	27.7	27.7	29.6	29.6	28.7	27.7
90°	5.9	10.7	15.5	16.7	26.3	39.0	45.3	40.2	30.2	22.7	22.7
92.5°	23.8	64.3	105.0	115.1	161.8	224.0	255.2	223.6	160.6	113.3	108.8
95°	57.3	131.4	205.6	224.2	398.1	630.0	746.0	665.7	505.1	384.6	370.9
97.5°	98.9	164.4	229.9	246.3	536.2	922.9	1116.2	1065.5	963.9	887.8	861.8
100°	131.2	190.5	249.9	264.7	586.5	1015.6	1230.1	1233.8	1241.3	1246.8	1215.8
102.5°	158.6	214.0	269.4	283.3	609.6	1044.7	1262.3	1326.9	1456.3	1553.3	1526.8
105°	205.2	252.1	298.9	310.7	626.7	1048.0	1258.7	1403.6	1693.6	1911.0	1896.8
107.5°	252.9	296.6	340.3	351.2	629.9	1001.4	1187.2	1389.4	1793.7	2097.1	2100.5
110°	285.0	324.5	364.0	373.9	625.1	960.0	1127.5	1353.6	1805.7	2144.8	2159.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	316.6	354.3	392.0	401.3	625.3	924.0	1073.3	1304.7	1767.4	2114.4	2137.1
115°	364.3	399.0	433.7	442.4	631.1	882.6	1008.3	1231.1	1676.9	2011.2	2042.9
117.5°	411.5	443.0	474.6	482.4	642.8	856.7	963.6	1164.7	1567.0	1868.7	1903.8
120°	438.8	468.5	498.2	505.6	652.3	847.9	945.7	1129.4	1497.0	1772.7	1806.7
122.5°	465.7	495.6	525.6	533.1	666.0	843.4	932.0	1097.5	1428.5	1676.7	1710.3
125°	506.9	534.1	561.5	568.2	684.5	839.6	917.1	1057.6	1338.8	1549.7	1580.7
127.5°	540.2	567.8	595.3	602.2	702.9	837.4	904.6	1025.3	1266.7	1447.8	1473.9
130°	558.1	587.7	617.4	624.8	716.5	838.7	899.8	1007.2	1222.2	1383.3	1407.4
132.5°	576.6	606.3	635.9	643.4	727.4	839.6	895.6	991.8	1184.2	1328.5	1350.1
135°	604.0	631.1	658.0	664.8	739.4	838.7	888.4	969.0	1130.1	1250.9	1269.6
137.5°	632.0	658.8	685.5	692.2	757.2	844.0	887.3	955.3	1091.6	1193.8	1209.0
140°	655.3	680.0	704.7	710.8	768.2	844.8	883.1	941.9	1059.5	1147.8	1162.0
142.5°	673.2	696.0	718.7	724.5	777.3	847.8	883.1	934.8	1038.1	1115.7	1127.9
145°	700.7	720.5	740.3	745.3	789.3	847.9	877.1	919.4	1003.9	1067.3	1076.6
147.5°	728.0	747.4	766.7	771.6	806.8	853.7	877.1	910.4	976.8	1026.7	1034.4
150°	746.0	763.5	780.9	785.3	815.9	856.7	877.1	905.2	961.4	1003.5	1009.7
152.5°	764.4	777.7	790.9	794.2	821.9	858.7	877.1	901.1	949.1	985.1	989.7
155°	791.9	801.7	811.5	813.9	835.0	863.1	877.1	896.2	934.4	963.0	966.1
157.5°	812.1	821.7	831.1	833.5	848.1	867.5	877.1	891.9	921.6	943.9	946.1
160°	825.8	833.2	840.7	842.5	854.1	869.5	877.1	889.8	915.3	934.3	935.5
162.5°	839.6	845.1	850.6	852.1	860.4	871.6	877.1	887.8	909.3	925.4	926.6
165°	854.5	859.4	864.5	865.8	869.6	874.6	877.1	884.8	900.2	911.6	912.9
167.5°	868.1	870.5	872.9	873.5	876.7	881.0	883.1	888.1	898.2	905.7	906.3
170°	877.1	879.5	881.9	882.5	882.7	883.0	883.1	888.1	898.2	905.7	905.7
172.5°	881.9	882.4	883.0	883.1	883.1	883.1	883.1	887.1	895.0	900.9	900.5
175°	888.4	888.4	888.4	888.4	886.6	884.2	883.1	885.5	890.6	894.4	894.4
177.5°	888.4	888.4	888.4	888.4	887.1	885.3	884.3	886.3	890.2	893.2	892.6
180°	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	297.3	297.3
2.5°	317.4	315.5
5°	408.2	410.1
7.5°	549.7	548.7
10°	683.5	692.1
12.5°	781.1	783.0
15°	840.3	844.1
17.5°	863.3	864.2
20°	864.2	862.3
22.5°	853.7	851.8
25°	841.3	840.3
27.5°	829.8	830.8
30°	825.0	827.9
32.5°	825.0	829.8
35°	826.9	831.7
37.5°	826.0	831.7
40°	822.2	828.9
42.5°	811.6	816.4
45°	795.4	801.1
47.5°	774.4	778.2
50°	747.6	751.4
52.5°	714.1	715.1
55°	674.0	677.8
57.5°	631.0	631.9
60°	583.2	586.0
62.5°	532.5	532.5
65°	479.0	480.9
67.5°	423.5	428.3
70°	367.1	368.1
72.5°	311.7	311.7
75°	254.3	255.3
77.5°	199.8	199.8
80°	148.2	149.1
82.5°	102.3	104.2
85°	64.1	64.1
87.5°	29.6	26.8
90°	22.7	22.7
92.5°	90.7	72.8
95°	316.3	261.8
97.5°	758.0	654.1
100°	1092.1	968.3
102.5°	1420.8	1314.8
105°	1839.8	1782.8
107.5°	2114.3	2128.1
110°	2219.0	2278.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2228.3	2319.4
115°	2169.3	2295.6
117.5°	2043.9	2184.1
120°	1943.0	2079.2
122.5°	1844.7	1979.0
125°	1704.4	1828.2
127.5°	1578.3	1682.7
130°	1503.9	1600.3
132.5°	1436.4	1522.8
135°	1344.0	1418.5
137.5°	1270.0	1330.8
140°	1219.0	1276.0
142.5°	1176.9	1225.9
145°	1113.7	1150.8
147.5°	1065.2	1096.0
150°	1034.7	1059.5
152.5°	1008.6	1027.3
155°	978.6	991.0
157.5°	954.8	963.6
160°	940.6	945.7
162.5°	931.3	936.1
165°	918.0	923.0
167.5°	908.4	910.5
170°	905.7	905.7
172.5°	898.6	896.8
175°	894.4	894.4
177.5°	890.5	888.4
180°	888.4	888.4



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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	2.13	2.84	3.24	3.96	5.50	15.27	15.98	16.38	17.10	18.64
	3H	2.82	3.46	3.95	4.59	6.15	17.08	17.72	18.20	18.84	20.41
	4H	3.11	3.73	4.25	4.85	6.41	17.71	18.32	18.84	19.44	21.01
	6H	3.36	3.92	4.50	5.04	6.62	18.12	18.68	19.26	19.81	21.38
	8H	3.42	3.96	4.57	5.10	6.67	18.23	18.76	19.37	19.90	21.48
	12H	3.43	3.94	4.58	5.08	6.67	18.28	18.79	19.43	19.93	21.52
4H	2H	9.30	9.91	10.44	11.03	12.60	15.52	16.13	16.67	17.26	18.82
	3H	10.86	11.37	12.00	12.51	14.09	17.54	18.05	18.69	19.20	20.78
	4H	10.94	11.41	12.10	12.55	14.15	18.29	18.76	19.44	19.90	21.50
	6H	10.95	11.35	12.10	12.51	14.10	18.81	19.21	19.97	20.37	21.96
	8H	10.92	11.30	12.08	12.45	14.06	18.96	19.34	20.12	20.49	22.10
	12H	10.87	11.21	12.04	12.37	13.99	19.04	19.38	20.21	20.54	22.15
8H	4H	12.37	12.74	13.52	13.89	15.50	18.34	18.72	19.50	19.87	21.47
	6H	12.60	12.91	13.78	14.11	15.71	18.95	19.26	20.13	20.45	22.06
	8H	12.62	12.89	13.80	14.06	15.69	19.16	19.43	20.34	20.60	22.23
	12H	12.58	12.82	13.77	13.99	15.64	19.29	19.53	20.47	20.70	22.35
12H	4H	12.50	12.84	13.67	14.00	15.62	18.29	18.63	19.46	19.79	21.40
	6H	12.85	13.13	14.04	14.30	15.92	18.93	19.20	20.11	20.38	22.00
	8H	12.92	13.16	14.10	14.33	15.98	19.15	19.38	20.33	20.55	22.21