

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: P938232

Luminaire Tested: SQ4-FB-150U-050D-92765-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938232
REPORT IS A COMBINATION OF REPORTS P933629 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-050D-92765-1D-UNV-STD-W-4-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

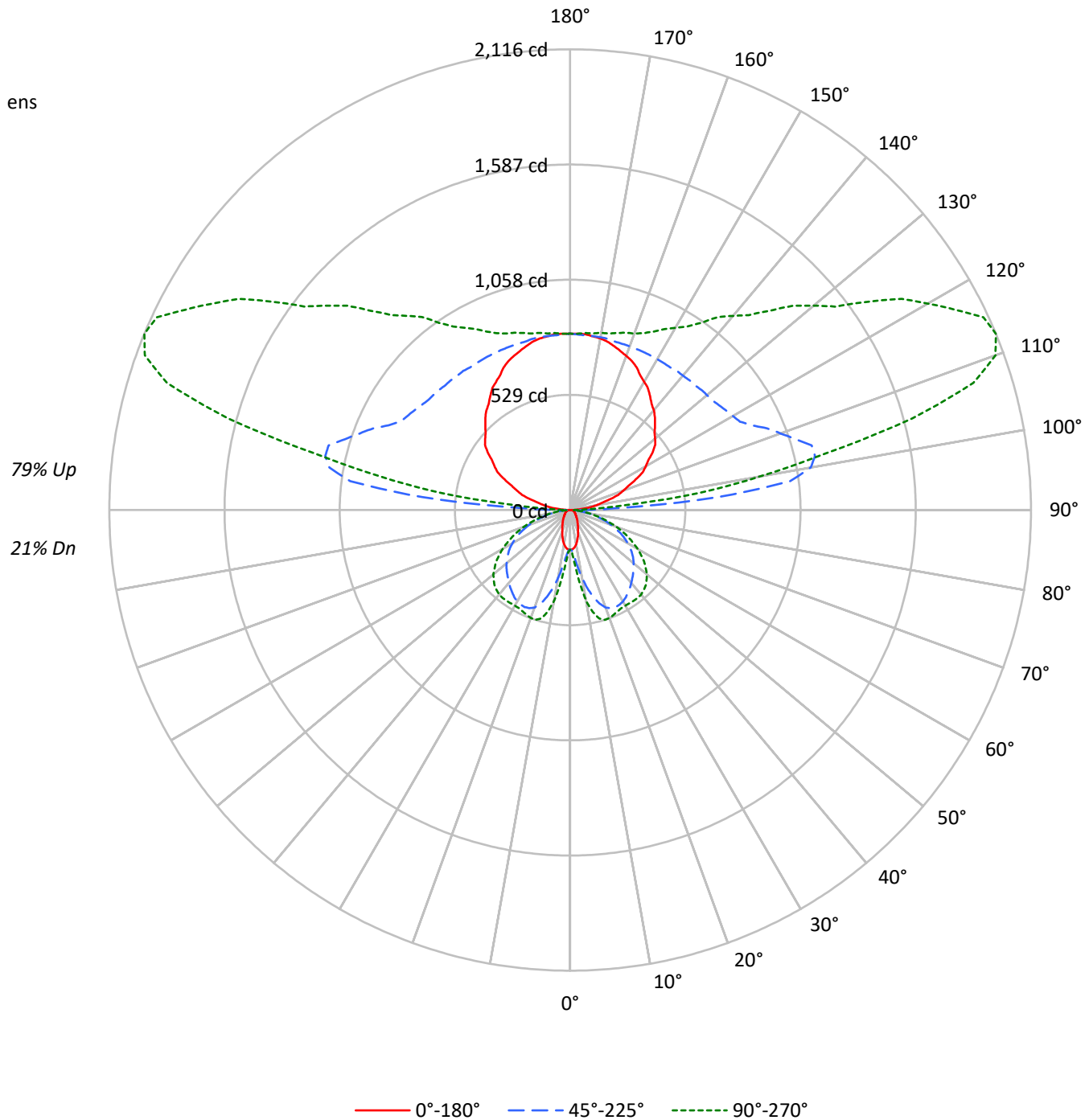
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6664.1 lumens
Efficiency: N/A
Efficacy: 119.9 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): 55.6
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

TEST NUMBER: P938232
CATALOG NUMBER: SQ4-FB-150U-050D-92765-1D-UNV-STD-W-4-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P938232

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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	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	21
1	91	87	83	80	80	77	74	71	58	56	54	41	40	39	26	25	24	17
2	83	75	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	14
3	75	66	59	53	66	59	53	48	45	40	37	32	29	27	20	18	17	12
4	69	58	50	45	60	52	45	40	39	35	31	28	25	23	17	16	14	10
5	63	51	44	38	55	46	39	34	35	30	27	25	22	19	15	14	12	8
6	57	46	38	32	51	41	34	29	31	26	23	22	19	17	14	12	11	7
7	53	41	33	28	47	37	30	25	28	23	20	20	17	14	12	11	9	6
8	49	37	30	24	43	33	27	22	25	21	17	18	15	13	11	9	8	5
9	45	34	26	21	40	30	24	19	23	18	15	17	13	11	10	9	7	5
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	10	8	6	4

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1688	1688	1688
5°	1648	1950	2270
10°	1493	2840	3762
15°	1267	3708	4543
20°	1030	4294	4630
25°	858	4490	4535
30°	724	4514	4528
35°	638	4436	4644
40°	555	4336	4765
45°	502	4260	4784
50°	460	4191	4704
55°	439	4093	4495
60°	446	3909	4167
65°	463	3628	3714
70°	490	3158	3137
75°	538	2567	2449
80°	576	1775	1651
85°	480	937	845

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4784 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.5	0.4
10°-20°	104.3	1.6
20°-30°	182.4	2.7
30°-40°	234.9	3.5
40°-50°	262.3	3.9
50°-60°	251.3	3.8
60°-70°	199.1	3.0
70°-80°	117.1	1.8
80°-90°	35.6	0.5
90°-100°	395.0	5.9
100°-110°	1038.6	15.6
110°-120°	1076.9	16.2
120°-130°	863.8	13.0
130°-140°	677.8	10.2
140°-150°	520.2	7.8
150°-160°	374.6	5.6
160°-170°	229.2	3.4
170°-180°	77.4	1.2
0°-30°	310.3	4.7
0°-40°	545.1	8.2
0°-60°	1058.7	15.9
0°-90°	1410.5	21.2
90°-120°	2510.5	37.7
90°-150°	4572.2	68.6
90°-180°	5254.0	78.8
0°-180°	6664.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	182	182	182	182	182	
5°	177	190	214	242	251	16
15°	133	245	413	501	517	37
25°	85	278	492	514	514	39
35°	57	266	463	490	509	36
45°	39	212	410	469	490	30
55°	28	135	348	404	415	26
65°	22	71	258	290	294	22
75°	16	44	142	156	156	17
85°	6	13	35	39	39	6
90°	5	15	41	21	21	5
95°	52	204	680	351	239	58
105°	187	283	1148	1743	1626	198
115°	332	404	920	1835	2094	328
125°	462	518	836	1414	1668	410
135°	551	606	810	1141	1294	426
145°	639	680	800	974	1050	400
155°	722	742	800	878	904	332
165°	779	790	800	832	842	220
175°	810	810	806	816	816	77
180°	810	810	810	810	810	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	181.9	181.9	181.9	181.9	181.9	181.9	181.9	181.9	181.9	181.9	181.9
2.5°	181.9	181.9	183.1	183.7	184.9	185.5	186.6	187.7	191.3	191.8	193.1
5°	177.3	179.6	187.2	190.1	198.3	209.5	214.1	221.8	237.5	242.2	245.1
7.5°	170.2	175.5	194.2	198.9	219.4	248.6	260.9	277.3	302.4	314.7	324.7
10°	159.1	170.2	203.6	214.7	248.0	292.5	315.3	338.2	376.2	393.1	399.6
12.5°	146.9	165.0	213.6	228.7	276.7	341.7	369.1	394.3	437.6	460.4	463.9
15°	132.8	157.4	222.9	245.1	307.1	382.6	413.0	444.0	484.4	500.7	504.8
17.5°	120.5	151.6	231.7	255.1	330.5	419.4	450.5	476.2	508.9	520.1	523.0
20°	105.3	142.1	237.5	268.0	355.1	446.4	476.2	496.1	518.3	525.3	526.5
22.5°	94.2	132.2	241.0	272.6	371.5	462.7	487.9	503.7	518.9	521.2	521.8
25°	84.8	121.1	240.4	277.9	385.5	472.6	492.0	503.7	512.5	513.6	513.6
27.5°	76.0	108.8	238.1	279.1	396.1	475.0	490.3	498.5	502.6	504.8	504.8
30°	68.5	97.1	232.2	276.7	400.7	472.6	484.9	489.0	493.1	496.7	498.5
32.5°	62.6	86.0	223.5	272.0	401.3	466.8	475.6	478.0	483.8	492.0	494.9
35°	57.3	74.9	213.6	265.6	397.8	457.5	463.3	465.7	477.4	489.6	493.7
37.5°	52.1	66.7	200.7	254.5	392.5	446.4	450.5	454.6	472.6	487.3	492.0
40°	46.8	59.6	185.5	242.2	384.4	432.9	436.5	442.8	466.8	483.8	488.5
42.5°	42.7	53.8	169.1	229.3	373.8	417.7	422.9	432.4	459.8	478.0	483.2
45°	39.2	48.0	151.6	211.7	360.3	401.9	409.5	422.4	451.6	469.2	473.9
47.5°	35.7	43.9	133.4	193.7	345.8	386.1	396.1	410.6	440.6	457.5	461.6
50°	32.8	39.8	115.3	174.3	330.0	369.1	380.8	396.1	426.5	442.3	447.5
52.5°	30.4	36.3	98.3	155.0	311.8	351.6	365.0	380.8	409.5	424.7	428.3
55°	28.1	33.3	83.6	134.6	293.1	332.9	347.5	362.7	390.8	403.7	406.0
57.5°	26.9	31.0	71.3	115.3	273.2	311.8	328.1	342.2	368.5	378.5	380.8
60°	25.1	29.2	62.0	98.9	251.6	292.0	306.0	320.0	342.2	350.4	352.2
62.5°	23.4	28.1	55.0	83.1	229.3	268.5	282.5	295.4	314.1	320.0	322.3
65°	22.2	26.9	49.7	71.3	206.5	243.9	257.9	269.1	284.3	290.1	291.3
67.5°	21.1	25.7	45.6	61.4	183.7	219.4	229.9	240.4	252.1	257.9	258.6
70°	19.3	24.6	42.1	54.4	160.3	191.3	200.0	211.2	220.5	223.5	225.2
72.5°	18.1	22.8	39.8	49.2	136.3	164.4	172.6	179.0	187.2	190.1	190.1
75°	16.4	20.5	37.4	43.9	111.7	134.6	141.5	148.0	154.4	155.6	153.8
77.5°	14.7	18.1	32.2	36.9	87.2	106.5	112.3	115.8	121.1	122.3	122.9
80°	12.3	15.8	25.1	28.7	63.2	78.4	82.5	85.4	90.1	90.1	91.3
82.5°	9.3	12.3	18.1	20.5	42.7	53.8	57.3	59.1	62.0	62.0	62.0
85°	5.8	7.6	11.7	13.4	25.7	32.8	35.1	35.7	38.0	38.6	38.6
87.5°	3.0	4.1	7.6	8.2	13.4	17.0	17.0	18.1	18.1	17.5	17.0
90°	5.4	9.8	14.1	15.3	24.0	35.6	41.3	36.7	27.6	20.7	20.7
92.5°	21.7	58.7	95.7	105.0	147.5	204.3	232.7	204.0	146.5	103.3	99.2
95°	52.2	119.9	187.6	204.5	363.1	574.7	680.4	607.2	460.7	350.8	338.3
97.5°	90.3	150.0	209.7	224.6	489.1	841.9	1018.2	971.9	879.3	809.9	786.1
100°	119.6	173.8	227.9	241.5	535.0	926.4	1122.0	1125.4	1132.2	1137.3	1109.1
102.5°	144.7	195.2	245.7	258.4	556.1	953.0	1151.4	1210.4	1328.4	1416.9	1392.7
105°	187.1	230.0	272.7	283.4	571.6	955.9	1148.1	1280.3	1544.8	1743.2	1730.2
107.5°	230.7	270.5	310.4	320.4	574.6	913.5	1082.9	1267.3	1636.2	1912.9	1916.0
110°	260.0	296.0	332.1	341.1	570.2	875.7	1028.5	1234.7	1647.1	1956.4	1969.9



TEST NUMBER: P938232

CATALOG NUMBER: SQ4-FB-150U-050D-92765-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	288.8	323.2	357.5	366.1	570.4	842.8	979.0	1190.1	1612.1	1928.7	1949.4
115°	332.3	364.0	395.6	403.6	575.6	805.1	919.7	1123.0	1529.6	1834.6	1863.4
117.5°	375.3	404.1	432.9	440.0	586.4	781.4	878.9	1062.4	1429.4	1704.6	1736.6
120°	400.3	427.4	454.4	461.2	595.0	773.4	862.6	1030.2	1365.5	1617.0	1648.1
122.5°	424.8	452.1	479.4	486.2	607.5	769.3	850.1	1001.1	1303.0	1529.5	1560.1
125°	462.4	487.2	512.1	518.3	624.4	765.8	836.5	964.7	1221.2	1413.6	1441.8
127.5°	492.8	517.9	543.0	549.3	641.2	763.8	825.1	935.3	1155.4	1320.6	1344.4
130°	509.1	536.1	563.2	570.0	653.6	765.0	820.8	918.8	1114.8	1261.8	1283.8
132.5°	525.9	553.0	580.1	586.9	663.5	765.8	816.9	904.6	1080.2	1211.8	1231.5
135°	551.0	575.6	600.2	606.4	674.4	765.0	810.4	883.9	1030.8	1141.1	1158.1
137.5°	576.5	600.9	625.3	631.4	690.7	769.8	809.3	871.4	995.7	1088.9	1102.8
140°	597.8	620.3	642.8	648.4	700.8	770.6	805.5	859.1	966.5	1047.0	1060.0
142.5°	614.1	634.8	655.6	660.8	709.1	773.3	805.5	852.7	946.9	1017.7	1028.8
145°	639.1	657.3	675.3	679.8	720.0	773.4	800.1	838.6	915.7	973.5	982.0
147.5°	664.1	681.8	699.4	703.8	735.9	778.7	800.1	830.4	891.0	936.6	943.5
150°	680.4	696.4	712.3	716.3	744.2	781.4	800.1	825.7	876.9	915.4	921.0
152.5°	697.3	709.4	721.4	724.5	749.7	783.3	800.1	822.0	865.8	898.5	902.8
155°	722.3	731.3	740.2	742.4	761.6	787.3	800.1	817.5	852.3	878.4	881.3
157.5°	740.8	749.5	758.1	760.3	773.6	791.3	800.1	813.6	840.6	861.0	863.0
160°	753.3	760.1	766.9	768.5	779.1	793.1	800.1	811.7	834.9	852.2	853.4
162.5°	765.8	770.9	775.9	777.2	784.8	795.0	800.1	809.9	829.5	844.1	845.2
165°	779.4	784.0	788.6	789.7	793.2	797.8	800.1	807.1	821.1	831.6	832.7
167.5°	791.9	794.1	796.3	796.8	799.7	803.6	805.5	810.1	819.3	826.2	826.7
170°	800.1	802.3	804.5	805.0	805.1	805.4	805.5	810.1	819.3	826.2	826.2
172.5°	804.5	804.9	805.4	805.5	805.5	805.5	805.5	809.2	816.4	821.8	821.4
175°	810.4	810.4	810.4	810.4	808.7	806.5	805.5	807.8	812.4	815.9	815.9
177.5°	810.4	810.4	810.4	810.4	809.2	807.5	806.6	808.5	812.0	814.7	814.2
180°	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	181.9	181.9
2.5°	194.2	193.1
5°	249.8	251.0
7.5°	336.3	335.8
10°	418.3	423.5
12.5°	478.0	479.1
15°	514.2	516.6
17.5°	528.3	528.9
20°	528.9	527.7
22.5°	522.4	521.2
25°	514.8	514.2
27.5°	507.8	508.4
30°	504.8	506.7
32.5°	504.8	507.8
35°	506.0	508.9
37.5°	505.4	508.9
40°	503.1	507.2
42.5°	496.7	499.6
45°	486.7	490.3
47.5°	473.9	476.2
50°	457.5	459.8
52.5°	437.0	437.6
55°	412.5	414.7
57.5°	386.1	386.7
60°	356.8	358.6
62.5°	325.9	325.9
65°	293.1	294.2
67.5°	259.2	262.0
70°	224.6	225.2
72.5°	190.7	190.7
75°	155.6	156.2
77.5°	122.3	122.3
80°	90.7	91.3
82.5°	62.6	63.7
85°	39.2	39.2
87.5°	18.1	16.4
90°	20.7	20.7
92.5°	82.8	66.4
95°	288.6	238.8
97.5°	691.4	596.6
100°	996.2	883.3
102.5°	1296.0	1199.3
105°	1678.2	1626.3
107.5°	1928.6	1941.1
110°	2024.1	2078.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2032.6	2115.7
115°	1978.7	2094.0
117.5°	1864.4	1992.2
120°	1772.3	1896.6
122.5°	1682.7	1805.2
125°	1554.7	1667.6
127.5°	1439.6	1534.9
130°	1371.8	1459.8
132.5°	1310.2	1389.1
135°	1226.0	1293.9
137.5°	1158.4	1214.0
140°	1111.9	1163.9
142.5°	1073.6	1118.2
145°	1015.9	1049.8
147.5°	971.6	999.7
150°	943.8	966.5
152.5°	920.0	937.1
155°	892.6	904.0
157.5°	870.9	878.9
160°	858.0	862.6
162.5°	849.5	853.9
165°	837.3	841.9
167.5°	828.6	830.5
170°	826.2	826.2
172.5°	819.7	818.1
175°	815.9	815.9
177.5°	812.3	810.4
180°	810.4	810.4



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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	0.00	0.00	0.40	1.05	2.68	12.37	13.04	13.54	14.19	15.82
	3H	0.00	0.52	1.10	1.68	3.32	14.18	14.78	15.36	15.94	17.58
	4H	0.21	0.78	1.39	1.94	3.59	14.81	15.38	15.99	16.54	18.19
	6H	0.45	0.97	1.64	2.14	3.80	15.22	15.74	16.41	16.90	18.56
	8H	0.51	1.01	1.71	2.19	3.84	15.32	15.82	16.52	17.00	18.65
	12H	0.52	1.00	1.72	2.17	3.84	15.38	15.85	16.57	17.02	18.70
4H	2H	6.40	6.97	7.59	8.13	9.78	12.63	13.19	13.82	14.35	16.00
	3H	7.95	8.43	9.15	9.61	11.27	14.64	15.11	15.83	16.30	17.96
	4H	8.04	8.47	9.23	9.65	11.33	15.39	15.82	16.58	17.00	18.67
	6H	8.04	8.41	9.24	9.61	11.28	15.90	16.27	17.10	17.47	19.14
	8H	8.01	8.36	9.21	9.55	11.23	16.05	16.40	17.25	17.59	19.27
	12H	7.96	8.27	9.17	9.47	11.16	16.13	16.44	17.34	17.64	19.33
8H	4H	9.46	9.80	10.65	10.99	12.68	15.43	15.78	16.63	16.97	18.65
	6H	9.69	9.98	10.91	11.21	12.89	16.04	16.32	17.25	17.56	19.24
	8H	9.70	9.95	10.93	11.16	12.86	16.25	16.50	17.47	17.70	19.41
	12H	9.66	9.88	10.89	11.09	12.82	16.37	16.59	17.60	17.80	19.53
12H	4H	9.59	9.90	10.80	11.10	12.79	15.37	15.69	16.59	16.89	18.58
	6H	9.94	10.19	11.16	11.40	13.10	16.02	16.27	17.24	17.48	19.18
	8H	10.00	10.22	11.23	11.43	13.16	16.23	16.45	17.46	17.66	19.39