

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: P936724

Luminaire Tested: SQ4-FB-050U-075D-927-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936724
REPORT IS A COMBINATION OF REPORTS P933486 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-927-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

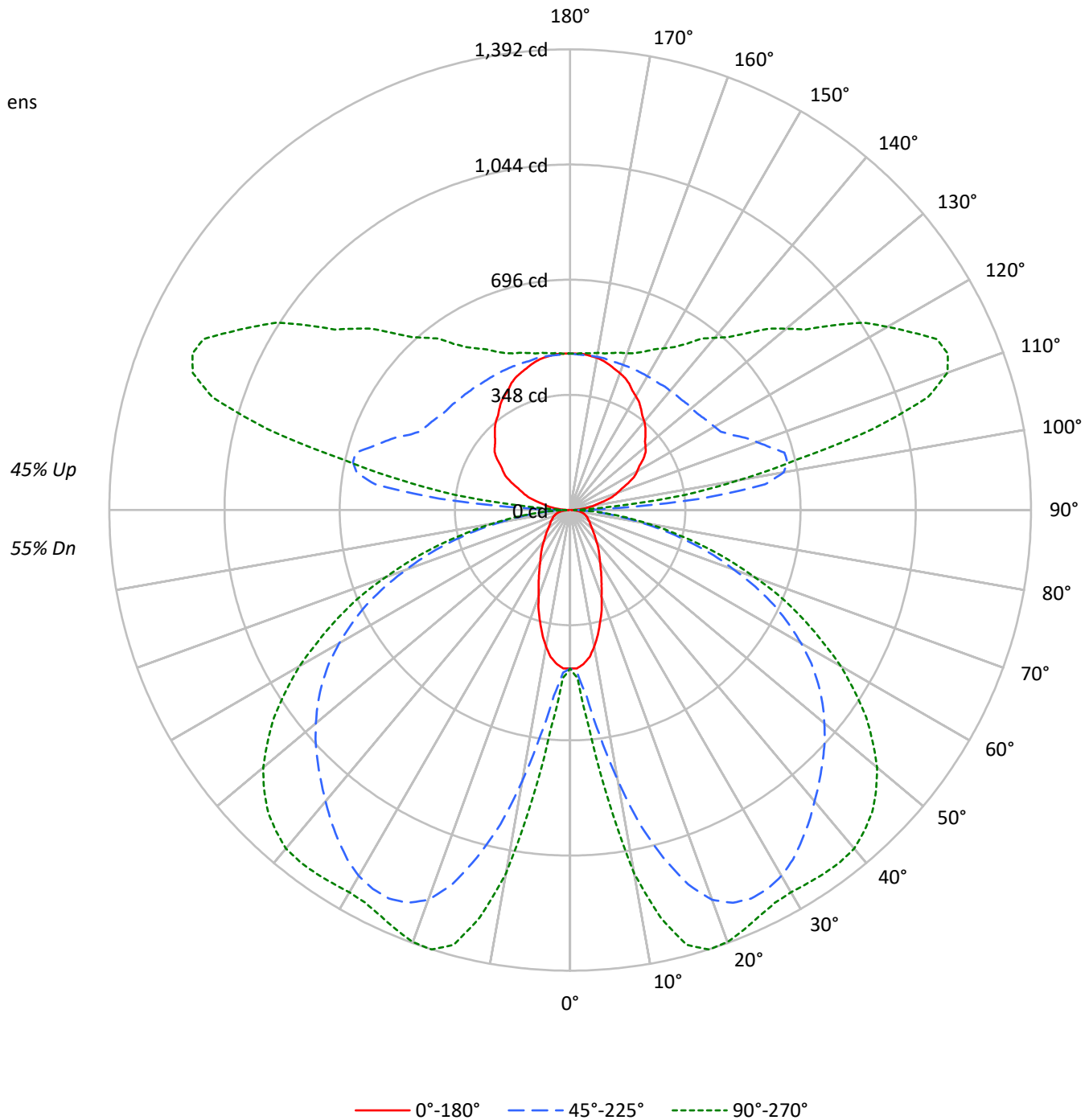
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6772.9 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 72.8
Input Voltage (V): NR
Input Current (Ain): 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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2222	2222	2222
5°	2171	2568	2987
10°	1969	3744	4952
15°	1674	4891	5980
20°	1362	5668	6094
25°	1137	5932	5970
30°	958	5969	5959
35°	847	5870	6113
40°	738	5741	6272
45°	669	5647	6297
50°	613	5562	6193
55°	587	5438	5918
60°	601	5198	5485
65°	625	4835	4889
70°	666	4217	4130
75°	738	3439	3223
80°	806	2384	2171
85°	717	1265	1112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6297 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.0	0.9
10°-20°	274.6	4.1
20°-30°	480.3	7.1
30°-40°	618.3	9.1
40°-50°	690.6	10.2
50°-60°	661.5	9.8
60°-70°	524.2	7.7
70°-80°	308.2	4.6
80°-90°	87.4	1.3
90°-100°	230.5	3.4
100°-110°	606.1	8.9
110°-120°	628.5	9.3
120°-130°	504.1	7.4
130°-140°	395.5	5.8
140°-150°	303.6	4.5
150°-160°	218.6	3.2
160°-170°	133.8	2.0
170°-180°	45.2	0.7
0°-30°	816.8	12.1
0°-40°	1435.1	21.2
0°-60°	2787.2	41.2
0°-90°	3707.0	54.7
90°-120°	1465.1	21.6
90°-150°	2668.3	39.4
90°-180°	3066.0	45.3
0°-180°	6772.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	479	479	479	479	479	
5°	467	500	564	638	661	43
15°	350	645	1087	1318	1360	97
25°	223	732	1295	1352	1354	103
35°	151	699	1220	1289	1340	94
45°	103	558	1078	1235	1291	80
55°	74	354	915	1063	1092	67
65°	58	188	679	764	775	58
75°	43	116	373	410	411	45
85°	15	35	92	102	103	16
90°	3	9	24	12	12	4
95°	30	119	397	205	139	34
105°	109	165	670	1017	949	116
115°	194	236	537	1071	1222	192
125°	270	302	488	825	973	240
135°	322	354	473	666	755	249
145°	373	397	467	568	613	234
155°	422	433	467	513	528	194
165°	455	461	467	485	491	128
175°	473	473	470	476	476	45
180°	473	473	473	473	473	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9
2.5°	478.9	478.9	482.0	483.6	486.6	488.2	491.3	494.3	503.6	505.1	508.2
5°	466.6	472.8	492.8	500.5	522.1	551.3	563.6	583.7	625.2	637.6	645.3
7.5°	448.1	462.0	511.3	523.6	577.5	654.5	686.8	730.0	796.2	828.5	854.7
10°	418.9	448.1	535.9	565.2	653.0	770.0	830.1	890.2	990.3	1035.0	1051.9
12.5°	386.5	434.3	562.1	602.1	728.4	899.4	971.8	1038.0	1152.0	1212.1	1221.3
15°	349.6	414.3	586.7	645.3	808.5	1007.2	1087.3	1168.9	1275.2	1318.3	1329.1
17.5°	317.2	398.9	609.8	671.4	870.1	1104.3	1185.9	1253.6	1339.9	1369.1	1376.8
20°	277.2	374.2	625.2	705.3	934.9	1175.1	1253.6	1306.0	1364.5	1383.0	1386.1
22.5°	247.9	348.0	634.5	717.6	978.0	1218.2	1284.4	1326.0	1366.1	1372.2	1373.8
25°	223.3	318.8	632.9	731.5	1014.9	1244.4	1295.2	1326.0	1349.1	1352.2	1352.2
27.5°	200.2	286.4	626.8	734.6	1042.7	1250.6	1290.6	1312.2	1322.9	1329.1	1329.1
30°	180.2	255.6	611.4	728.4	1055.0	1244.4	1276.7	1287.5	1298.3	1307.5	1312.2
32.5°	164.8	226.4	588.3	716.1	1056.5	1229.0	1252.1	1258.3	1273.7	1295.2	1302.9
35°	150.9	197.1	562.1	699.2	1047.3	1204.4	1219.8	1225.9	1256.7	1289.1	1299.8
37.5°	137.1	175.6	528.2	669.9	1033.4	1175.1	1185.9	1196.7	1244.4	1282.9	1295.2
40°	123.2	157.1	488.2	637.6	1011.9	1139.7	1148.9	1165.9	1229.0	1273.7	1286.0
42.5°	112.4	141.7	445.1	603.7	984.1	1099.6	1113.5	1138.1	1210.5	1258.3	1272.1
45°	103.2	126.3	398.9	557.5	948.7	1058.1	1078.1	1112.0	1189.0	1235.2	1247.5
47.5°	93.9	115.5	351.1	509.7	910.2	1016.5	1042.7	1081.2	1159.7	1204.4	1215.1
50°	86.2	104.7	303.4	458.9	868.6	971.8	1002.6	1042.7	1122.7	1164.3	1178.2
52.5°	80.1	95.5	258.7	408.1	820.8	925.6	961.0	1002.6	1078.1	1118.1	1127.4
55°	73.9	87.8	220.2	354.2	771.5	876.3	914.8	954.9	1028.8	1062.7	1068.8
57.5°	70.8	81.6	187.9	303.4	719.2	820.8	863.9	901.0	970.3	996.5	1002.6
60°	66.2	77.0	163.2	260.3	662.2	768.5	805.4	842.4	901.0	922.5	927.2
62.5°	61.6	73.9	144.8	218.7	603.7	706.9	743.8	777.7	827.0	842.4	848.5
65°	58.5	70.8	130.9	187.9	543.6	642.2	679.1	708.4	748.4	763.8	766.9
67.5°	55.4	67.8	120.1	161.7	483.6	577.5	605.2	632.9	663.7	679.1	680.7
70°	50.8	64.7	110.9	143.2	422.0	503.6	526.7	555.9	580.6	588.3	592.9
72.5°	47.7	60.1	104.7	129.4	358.8	432.7	454.3	471.2	492.8	500.5	500.5
75°	43.1	53.9	98.6	115.5	294.1	354.2	372.7	389.6	406.6	409.6	405.0
77.5°	38.5	47.7	84.7	97.0	229.5	280.3	295.7	304.9	318.8	321.9	323.4
80°	32.3	41.6	66.2	75.5	166.3	206.4	217.1	224.8	237.2	237.2	240.2
82.5°	24.6	32.3	47.7	53.9	112.4	141.7	150.9	155.5	163.2	163.2	163.2
85°	15.4	20.0	30.8	35.4	67.8	86.2	92.4	93.9	100.1	101.6	101.6
87.5°	7.7	10.8	20.0	21.6	35.4	44.7	44.7	47.7	47.7	46.2	44.7
90°	3.2	5.7	8.2	8.9	13.9	20.7	24.1	21.4	16.1	12.1	12.1
92.5°	12.7	34.3	55.9	61.3	86.2	119.3	135.8	119.0	85.5	60.3	57.9
95°	30.5	70.0	109.5	119.4	211.9	335.3	397.1	354.4	268.9	204.7	197.5
97.5°	52.7	87.5	122.4	131.1	285.4	491.3	594.2	567.2	513.1	472.6	458.8
100°	69.8	101.4	133.0	140.9	312.2	540.6	654.8	656.8	660.7	663.7	647.2
102.5°	84.5	114.0	143.4	150.8	324.5	556.2	672.0	706.4	775.2	826.8	812.7
105°	109.2	134.1	159.2	165.4	333.6	557.9	670.1	747.2	901.6	1017.3	1009.7
107.5°	134.6	157.8	181.1	187.0	335.3	533.1	631.9	739.6	954.9	1116.3	1118.2
110°	151.7	172.7	193.8	199.0	332.8	511.0	600.2	720.6	961.2	1141.7	1149.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	168.6	188.6	208.6	213.6	332.9	491.9	571.3	694.5	940.8	1125.5	1137.7
115°	194.0	212.4	230.9	235.5	336.0	469.9	536.8	655.4	892.7	1070.6	1087.4
117.5°	219.0	235.8	252.6	256.8	342.2	456.0	512.9	620.0	834.1	994.8	1013.4
120°	233.6	249.4	265.3	269.2	347.3	451.4	503.4	601.2	796.9	943.6	961.7
122.5°	247.9	263.8	279.7	283.7	354.5	448.9	496.1	584.2	760.5	892.6	910.4
125°	269.8	284.3	298.8	302.5	364.4	446.9	488.2	563.0	712.7	825.0	841.5
127.5°	287.6	302.2	316.9	320.6	374.2	445.8	481.5	545.8	674.3	770.7	784.6
130°	297.1	312.9	328.7	332.6	381.4	446.4	478.9	536.2	650.6	736.4	749.2
132.5°	306.9	322.7	338.6	342.5	387.2	446.9	476.8	528.0	630.4	707.2	718.6
135°	321.6	336.0	350.3	353.9	393.5	446.4	472.9	515.8	601.6	665.9	675.8
137.5°	336.5	350.7	365.0	368.5	403.1	449.2	472.3	508.6	581.1	635.5	643.6
140°	348.8	362.0	375.1	378.4	408.9	449.7	470.1	501.4	564.0	611.0	618.5
142.5°	358.4	370.4	382.6	385.6	413.8	451.3	470.1	497.6	552.6	593.9	600.4
145°	373.0	383.5	394.2	396.8	420.2	451.4	466.9	489.4	534.5	568.2	573.1
147.5°	387.5	397.9	408.2	410.7	429.4	454.5	466.9	484.6	520.0	546.5	550.6
150°	397.1	406.4	415.7	418.0	434.4	456.1	466.9	481.9	511.8	534.2	537.5
152.5°	406.9	414.0	421.0	422.8	437.5	457.1	466.9	479.7	505.2	524.4	526.9
155°	421.5	426.7	432.0	433.3	444.5	459.5	466.9	477.1	497.3	512.6	514.3
157.5°	432.3	437.4	442.4	443.8	451.5	461.8	466.9	474.8	490.6	502.4	503.6
160°	439.6	443.6	447.5	448.5	454.7	462.8	466.9	473.7	487.2	497.3	498.0
162.5°	446.9	449.9	452.8	453.6	458.1	464.0	466.9	472.6	484.1	492.6	493.3
165°	454.8	457.5	460.2	460.8	462.8	465.5	466.9	471.0	479.2	485.3	486.0
167.5°	462.2	463.4	464.7	465.0	466.7	468.9	470.1	472.8	478.2	482.2	482.5
170°	466.9	468.2	469.5	469.8	469.9	470.0	470.1	472.8	478.2	482.2	482.2
172.5°	469.5	469.8	470.0	470.1	470.1	470.1	470.1	472.2	476.5	479.6	479.4
175°	472.9	472.9	472.9	472.9	472.0	470.7	470.1	471.4	474.1	476.1	476.1
177.5°	472.9	472.9	472.9	472.9	472.2	471.2	470.7	471.8	473.9	475.5	475.2
180°	472.9	472.9	472.9	472.9	472.9	472.9	472.9	472.9	472.9	472.9	472.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	478.9	478.9
2.5°	511.3	508.2
5°	657.6	660.7
7.5°	885.6	884.0
10°	1101.2	1115.0
12.5°	1258.3	1261.3
15°	1353.7	1359.9
17.5°	1390.7	1392.2
20°	1392.2	1389.2
22.5°	1375.3	1372.2
25°	1355.3	1353.7
27.5°	1336.8	1338.3
30°	1329.1	1333.7
32.5°	1329.1	1336.8
35°	1332.2	1339.9
37.5°	1330.6	1339.9
40°	1324.5	1335.3
42.5°	1307.5	1315.2
45°	1281.4	1290.6
47.5°	1247.5	1253.6
50°	1204.4	1210.5
52.5°	1150.5	1152.0
55°	1085.8	1091.9
57.5°	1016.5	1018.0
60°	939.5	944.1
62.5°	857.8	857.8
65°	771.5	774.6
67.5°	682.2	689.9
70°	591.4	592.9
72.5°	502.0	502.0
75°	409.6	411.2
77.5°	321.9	321.9
80°	238.7	240.2
82.5°	164.8	167.9
85°	103.2	103.2
87.5°	47.7	43.1
90°	12.1	12.1
92.5°	48.3	38.7
95°	168.4	139.4
97.5°	403.5	348.2
100°	581.4	515.4
102.5°	756.3	699.9
105°	979.4	949.0
107.5°	1125.5	1132.8
110°	1181.2	1212.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1186.2	1234.7
115°	1154.7	1222.0
117.5°	1088.1	1162.7
120°	1034.3	1106.8
122.5°	982.0	1053.5
125°	907.3	973.2
127.5°	840.1	895.7
130°	800.6	851.9
132.5°	764.7	810.7
135°	715.5	755.1
137.5°	676.1	708.5
140°	648.9	679.2
142.5°	626.5	652.6
145°	592.9	612.6
147.5°	567.0	583.4
150°	550.8	564.0
152.5°	536.9	546.9
155°	520.9	527.5
157.5°	508.3	512.9
160°	500.7	503.4
162.5°	495.8	498.3
165°	488.6	491.3
167.5°	483.6	484.7
170°	482.2	482.2
172.5°	478.4	477.4
175°	476.1	476.1
177.5°	474.1	472.9
180°	472.9	472.9



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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	4.20	5.15	5.11	6.08	7.28	17.38	18.33	18.29	19.26	20.46
	3H	4.91	5.77	5.83	6.71	7.93	19.23	20.08	20.14	21.02	22.24
	4H	5.22	6.02	6.15	6.97	8.20	19.87	20.68	20.81	21.63	22.86
	6H	5.47	6.22	6.42	7.17	8.41	20.31	21.06	21.25	22.01	23.25
	8H	5.54	6.25	6.49	7.22	8.46	20.43	21.14	21.39	22.11	23.36
	12H	5.56	6.24	6.52	7.20	8.47	20.50	21.18	21.46	22.15	23.41
4H	2H	11.43	12.23	12.36	13.18	14.41	17.66	18.47	18.60	19.42	20.65
	3H	13.00	13.68	13.95	14.66	15.90	19.72	20.39	20.67	21.37	22.62
	4H	13.10	13.72	14.06	14.69	15.96	20.49	21.11	21.45	22.08	23.35
	6H	13.12	13.65	14.09	14.65	15.91	21.03	21.57	22.01	22.56	23.83
	8H	13.10	13.60	14.07	14.58	15.87	21.20	21.70	22.17	22.69	23.97
	12H	13.06	13.51	14.05	14.51	15.80	21.29	21.75	22.29	22.75	24.04
8H	4H	14.55	15.05	15.53	16.04	17.33	20.56	21.06	21.53	22.04	23.33
	6H	14.80	15.21	15.80	16.24	17.53	21.19	21.61	22.19	22.63	23.92
	8H	14.82	15.19	15.83	16.20	17.50	21.41	21.78	22.42	22.79	24.10
	12H	14.79	15.11	15.80	16.13	17.47	21.56	21.88	22.57	22.89	24.24
12H	4H	14.70	15.15	15.70	16.16	17.45	20.51	20.97	21.51	21.97	23.26
	6H	15.06	15.43	16.07	16.44	17.74	21.17	21.54	22.18	22.56	23.86
	8H	15.13	15.46	16.15	16.47	17.81	21.41	21.73	22.42	22.74	24.09