

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: P938531

Luminaire Tested: SQ4-FB-150U-125D-92765-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

**Test Information**

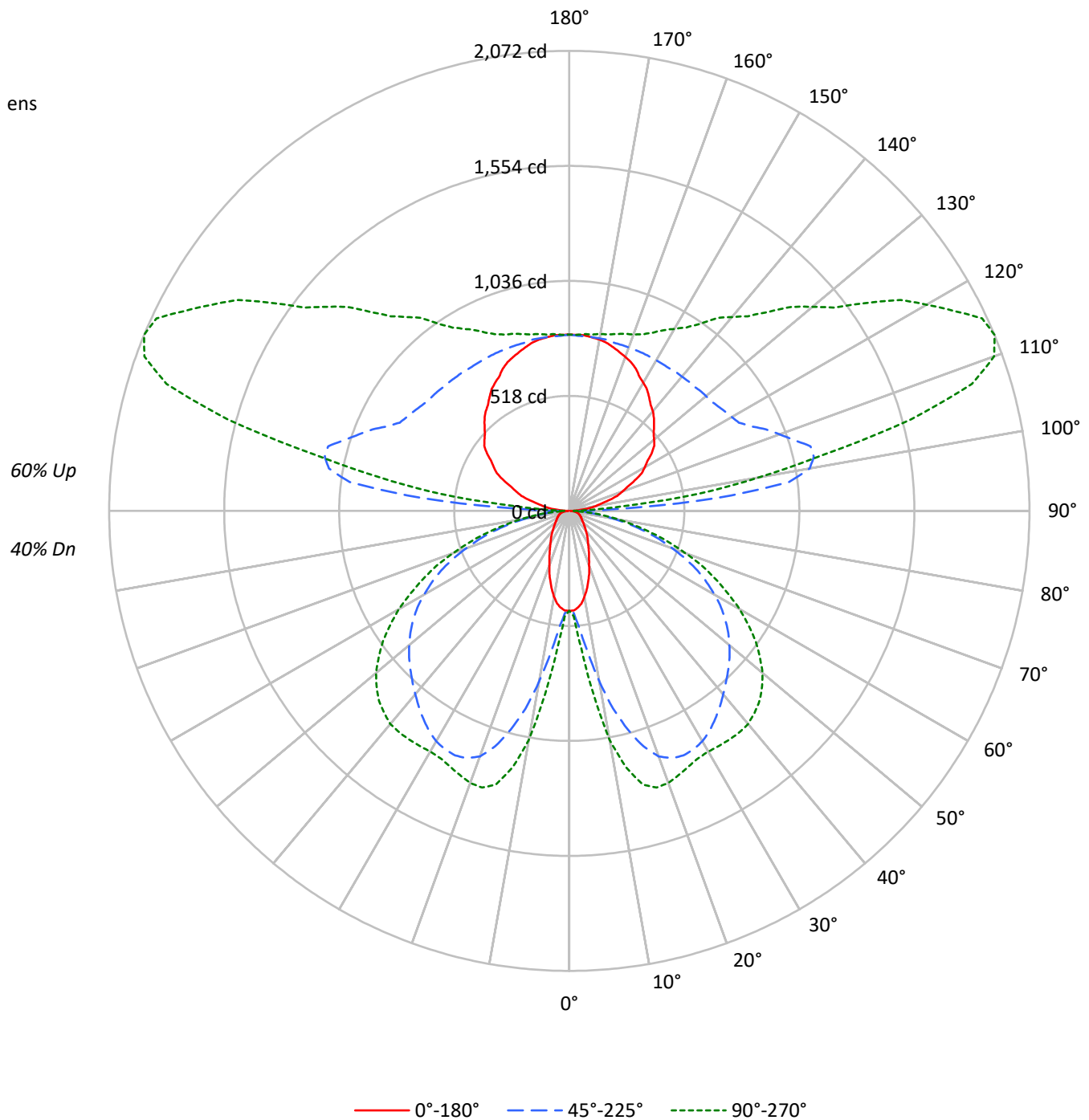
Test Method: LM-79-2019  
Report Number: P938531  
REPORT IS A COMBINATION OF REPORTS P933632 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-150U-125D-92765-1D-UNV-STD-W-4-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8625.9 lumens  
Efficiency: N/A  
Efficacy: 103.7 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: General Diffuse  
  
Input Watts (W): 83.2  
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

TEST NUMBER: P938531  
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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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39	33
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32	27
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23	19
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19	16
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17	14
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15	12
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13	10
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11	9
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10	8

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

	0°	45°	90°
0°	4170	4170	4170
5°	4070	4817	5606
10°	3688	7017	9294
15°	3131	9160	11223
20°	2546	10608	11438
25°	2121	11092	11205
30°	1786	11153	11184
35°	1576	10959	11473
40°	1372	10710	11772
45°	1241	10524	11819
50°	1135	10355	11623
55°	1084	10112	11107
60°	1106	9655	10294
65°	1144	8967	9175
70°	1211	7804	7753
75°	1328	6347	6050
80°	1418	4386	4077
85°	1192	2314	2088

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11819 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.1	0.7
10°-20°	257.7	3.0
20°-30°	450.7	5.2
30°-40°	580.2	6.7
40°-50°	648.1	7.5
50°-60°	620.7	7.2
60°-70°	491.9	5.7
70°-80°	289.3	3.4
80°-90°	83.4	1.0
90°-100°	386.9	4.5
100°-110°	1017.2	11.8
110°-120°	1054.8	12.2
120°-130°	846.0	9.8
130°-140°	663.8	7.7
140°-150°	509.5	5.9
150°-160°	367.0	4.3
160°-170°	224.5	2.6
170°-180°	75.9	0.9
0°-30°	766.6	8.9
0°-40°	1346.8	15.6
0°-60°	2615.6	30.3
0°-90°	3480.2	40.3
90°-120°	2458.9	28.5
90°-150°	4478.3	51.9
90°-180°	5146.0	59.7
0°-180°	8625.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	449	449	449	449	449	
5°	438	470	529	598	620	40
15°	328	606	1020	1237	1276	91
25°	210	686	1216	1269	1270	97
35°	142	656	1145	1210	1257	88
45°	97	523	1012	1159	1211	75
55°	69	332	858	997	1025	63
65°	55	176	637	717	727	54
75°	40	108	350	384	386	42
85°	14	33	87	95	97	15
90°	5	15	40	20	20	5
95°	51	200	666	344	234	57
105°	183	278	1124	1707	1593	194
115°	326	395	901	1797	2051	321
125°	453	508	819	1384	1633	402
135°	540	594	794	1118	1267	418
145°	626	666	784	954	1028	392
155°	708	727	784	860	885	325
165°	763	774	784	814	825	215
175°	794	794	789	799	799	75
180°	794	794	794	794	794	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4
2.5°	449.4	449.4	452.3	453.8	456.7	458.2	461.1	464.0	472.6	474.0	476.9
5°	437.9	443.7	462.5	469.7	489.9	517.4	529.0	547.8	586.8	598.3	605.6
7.5°	420.6	433.6	479.8	491.4	541.9	614.2	644.6	685.1	747.2	777.5	802.1
10°	393.1	420.6	502.9	530.4	612.8	722.6	779.0	835.3	929.3	971.2	987.1
12.5°	362.7	407.6	527.5	565.1	683.6	844.0	912.0	974.1	1081.1	1137.4	1146.1
15°	328.1	388.8	550.7	605.6	758.7	945.2	1020.3	1097.0	1196.7	1237.1	1247.3
17.5°	297.7	374.4	572.4	630.2	816.5	1036.2	1112.8	1176.5	1257.4	1284.9	1292.0
20°	260.2	351.2	586.8	661.9	877.3	1102.8	1176.5	1225.6	1280.5	1297.8	1300.8
22.5°	232.7	326.6	595.4	673.5	917.8	1143.2	1205.3	1244.4	1282.0	1287.8	1289.1
25°	209.6	299.2	594.0	686.5	952.4	1167.8	1215.5	1244.4	1266.1	1269.0	1269.0
27.5°	187.9	268.8	588.2	689.4	978.4	1173.6	1211.2	1231.4	1241.5	1247.3	1247.3
30°	169.1	239.9	573.8	683.6	990.0	1167.8	1198.1	1208.2	1218.3	1227.0	1231.4
32.5°	154.7	212.4	552.1	672.0	991.5	1153.3	1175.0	1180.7	1195.3	1215.5	1222.7
35°	141.6	185.0	527.5	656.1	982.8	1130.2	1144.6	1150.4	1179.3	1209.7	1219.8
37.5°	128.6	164.8	495.7	628.7	969.8	1102.8	1112.8	1123.0	1167.8	1203.9	1215.5
40°	115.6	147.4	458.2	598.3	949.5	1069.5	1078.2	1094.1	1153.3	1195.3	1206.8
42.5°	105.5	133.0	417.7	566.5	923.5	1032.0	1044.9	1068.1	1136.0	1180.7	1193.8
45°	96.9	118.6	374.4	523.2	890.3	992.9	1011.7	1043.5	1115.7	1159.1	1170.7
47.5°	88.1	108.4	329.5	478.4	854.1	953.9	978.4	1014.6	1088.2	1130.2	1140.3
50°	81.0	98.3	284.7	430.7	815.1	912.0	940.9	978.4	1053.6	1092.6	1105.7
52.5°	75.2	89.6	242.8	383.0	770.3	868.6	901.9	940.9	1011.7	1049.3	1057.9
55°	69.4	82.3	206.7	332.4	724.0	822.4	858.5	896.1	965.4	997.2	1003.0
57.5°	66.5	76.6	176.3	284.7	674.9	770.3	810.8	845.5	910.5	935.1	940.9
60°	62.2	72.3	153.2	244.3	621.5	721.2	755.9	790.6	845.5	865.7	870.0
62.5°	57.8	69.4	135.9	205.2	566.5	663.4	698.1	729.9	776.1	790.6	796.3
65°	54.9	66.5	122.8	176.3	510.2	602.7	637.4	664.9	702.4	716.9	719.8
67.5°	52.0	63.6	112.7	151.8	453.8	541.9	568.0	594.0	622.9	637.4	638.8
70°	47.7	60.7	104.0	134.4	396.0	472.6	494.3	521.7	544.8	552.1	556.5
72.5°	44.8	56.4	98.3	121.4	336.8	406.1	426.4	442.3	462.5	469.7	469.7
75°	40.5	50.6	92.5	108.4	276.1	332.4	349.8	365.7	381.5	384.4	380.1
77.5°	36.1	44.8	79.5	91.1	215.3	263.1	277.5	286.1	299.2	302.0	303.5
80°	30.3	39.0	62.2	70.8	156.0	193.6	203.8	211.0	222.6	222.6	225.5
82.5°	23.1	30.3	44.8	50.6	105.5	133.0	141.6	146.0	153.2	153.2	153.2
85°	14.4	18.8	28.9	33.2	63.6	81.0	86.7	88.1	94.0	95.4	95.4
87.5°	7.3	10.1	18.8	20.2	33.2	41.9	41.9	44.8	44.8	43.4	41.9
90°	5.3	9.6	13.8	14.9	23.5	34.8	40.5	36.0	27.0	20.2	20.2
92.5°	21.3	57.5	93.8	102.8	144.5	200.1	228.0	199.8	143.5	101.2	97.2
95°	51.2	117.4	183.7	200.3	355.7	562.9	666.5	594.7	451.2	343.6	331.4
97.5°	88.4	146.9	205.4	220.0	479.1	824.6	997.3	951.9	861.2	793.2	770.0
100°	117.2	170.2	223.3	236.5	524.0	907.3	1099.0	1102.3	1109.0	1114.0	1086.3
102.5°	141.7	191.2	240.7	253.1	544.7	933.4	1127.8	1185.5	1301.1	1387.8	1364.1
105°	183.3	225.2	267.1	277.6	559.9	936.3	1124.5	1254.0	1513.1	1707.4	1694.7
107.5°	225.9	265.0	304.1	313.8	562.8	894.7	1060.7	1241.3	1602.6	1873.6	1876.7
110°	254.6	289.9	325.3	334.0	558.5	857.7	1007.4	1209.4	1613.3	1916.2	1929.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	282.9	316.5	350.2	358.6	558.7	825.5	958.9	1165.6	1579.0	1889.1	1909.4
115°	325.5	356.5	387.5	395.3	563.8	788.5	900.8	1099.9	1498.2	1796.9	1825.2
117.5°	367.6	395.8	424.0	431.0	574.3	765.4	860.9	1040.6	1400.0	1669.6	1700.9
120°	392.0	418.6	445.1	451.7	582.8	757.5	844.9	1009.1	1337.5	1583.8	1614.2
122.5°	416.0	442.8	469.6	476.3	595.1	753.5	832.7	980.5	1276.2	1498.1	1528.0
125°	452.9	477.2	501.6	507.7	611.6	750.1	819.4	944.9	1196.1	1384.5	1412.2
127.5°	482.7	507.3	531.9	538.0	628.0	748.1	808.2	916.1	1131.7	1293.5	1316.8
130°	498.6	525.1	551.6	558.3	640.2	749.3	803.9	899.9	1091.9	1235.9	1257.4
132.5°	515.1	541.7	568.2	574.8	649.9	750.1	800.1	886.1	1058.0	1186.9	1206.2
135°	539.6	563.8	587.9	594.0	660.6	749.3	793.7	865.7	1009.7	1117.6	1134.3
137.5°	564.7	588.6	612.5	618.5	676.6	754.0	792.7	853.5	975.2	1066.5	1080.1
140°	585.5	607.5	629.6	635.0	686.4	754.8	789.0	841.5	946.6	1025.5	1038.2
142.5°	601.5	621.8	642.1	647.3	694.5	757.4	789.0	835.2	927.5	996.8	1007.7
145°	626.0	643.8	661.4	665.9	705.2	757.5	783.7	821.4	896.9	953.5	961.8
147.5°	650.4	667.8	685.0	689.4	720.8	762.7	783.7	813.4	872.7	917.3	924.2
150°	666.5	682.1	697.7	701.6	728.9	765.4	783.7	808.8	858.9	896.6	902.1
152.5°	683.0	694.8	706.6	709.6	734.3	767.2	783.7	805.1	848.0	880.1	884.3
155°	707.5	716.3	725.0	727.2	746.0	771.1	783.7	800.7	834.8	860.4	863.2
157.5°	725.6	734.1	742.6	744.7	757.7	775.0	783.7	796.9	823.4	843.3	845.2
160°	737.8	744.5	751.1	752.7	763.1	776.8	783.7	795.0	817.7	834.7	835.8
162.5°	750.1	755.0	760.0	761.3	768.7	778.7	783.7	793.2	812.4	826.8	827.8
165°	763.4	767.9	772.4	773.5	776.9	781.4	783.7	790.5	804.2	814.5	815.6
167.5°	775.6	777.8	779.9	780.4	783.2	787.1	789.0	793.5	802.5	809.2	809.7
170°	783.7	785.8	787.9	788.4	788.6	788.9	789.0	793.5	802.5	809.2	809.2
172.5°	787.9	788.4	788.9	789.0	789.0	789.0	789.0	792.5	799.6	804.9	804.5
175°	793.7	793.7	793.7	793.7	792.1	790.0	789.0	791.2	795.7	799.1	799.1
177.5°	793.7	793.7	793.7	793.7	792.5	790.9	790.1	791.9	795.4	798.0	797.5
180°	793.7	793.7	793.7	793.7	793.7	793.7	793.7	793.7	793.7	793.7	793.7



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	449.4	449.4
2.5°	479.8	476.9
5°	617.1	620.0
7.5°	831.1	829.6
10°	1033.3	1046.4
12.5°	1180.7	1183.7
15°	1270.4	1276.2
17.5°	1305.1	1306.6
20°	1306.6	1303.7
22.5°	1290.6	1287.8
25°	1271.8	1270.4
27.5°	1254.5	1255.9
30°	1247.3	1251.6
32.5°	1247.3	1254.5
35°	1250.2	1257.4
37.5°	1248.7	1257.4
40°	1242.9	1253.0
42.5°	1227.0	1234.2
45°	1202.4	1211.2
47.5°	1170.7	1176.5
50°	1130.2	1136.0
52.5°	1079.6	1081.1
55°	1018.9	1024.7
57.5°	953.9	955.3
60°	881.6	886.0
62.5°	805.0	805.0
65°	724.0	726.9
67.5°	640.3	647.5
70°	555.0	556.5
72.5°	471.1	471.1
75°	384.4	385.9
77.5°	302.0	302.0
80°	224.0	225.5
82.5°	154.7	157.5
85°	96.9	96.9
87.5°	44.8	40.5
90°	20.2	20.2
92.5°	81.1	65.0
95°	282.6	233.9
97.5°	677.2	584.4
100°	975.8	865.1
102.5°	1269.4	1174.7
105°	1643.8	1592.9
107.5°	1889.0	1901.3
110°	1982.5	2035.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1990.9	2072.3
115°	1938.1	2051.0
117.5°	1826.1	1951.3
120°	1735.9	1857.6
122.5°	1648.1	1768.1
125°	1522.7	1633.3
127.5°	1410.1	1503.4
130°	1343.6	1429.8
132.5°	1283.3	1360.5
135°	1200.8	1267.4
137.5°	1134.6	1189.0
140°	1089.1	1140.0
142.5°	1051.5	1095.2
145°	995.1	1028.2
147.5°	951.7	979.2
150°	924.4	946.6
152.5°	901.1	917.8
155°	874.3	885.4
157.5°	853.0	860.9
160°	840.4	844.9
162.5°	832.1	836.4
165°	820.1	824.7
167.5°	811.6	813.5
170°	809.2	809.2
172.5°	802.9	801.3
175°	799.1	799.1
177.5°	795.6	793.7
180°	793.7	793.7



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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	5.00	5.81	6.03	6.85	8.25	18.14	18.95	19.17	19.99	21.39
	3H	5.70	6.43	6.74	7.48	8.90	19.96	20.69	21.00	21.74	23.16
	4H	6.00	6.69	7.05	7.74	9.17	20.59	21.28	21.64	22.33	23.76
	6H	6.25	6.88	7.31	7.94	9.38	21.01	21.64	22.07	22.70	24.14
	8H	6.31	6.92	7.38	7.99	9.43	21.12	21.73	22.19	22.80	24.23
	12H	6.33	6.90	7.40	7.97	9.43	21.18	21.76	22.25	22.82	24.28
4H	2H	12.19	12.88	13.24	13.93	15.35	18.41	19.10	19.47	20.15	21.58
	3H	13.75	14.33	14.82	15.41	16.85	20.44	21.01	21.50	22.09	23.53
	4H	13.84	14.37	14.92	15.44	16.90	21.19	21.72	22.26	22.79	24.25
	6H	13.85	14.31	14.93	15.40	16.86	21.71	22.17	22.79	23.26	24.72
	8H	13.83	14.25	14.91	15.34	16.81	21.87	22.29	22.95	23.38	24.85
	12H	13.78	14.17	14.88	15.27	16.74	21.95	22.34	23.05	23.44	24.91
8H	4H	15.27	15.70	16.35	16.79	18.26	21.25	21.67	22.33	22.76	24.23
	6H	15.51	15.87	16.62	16.99	18.46	21.86	22.21	22.96	23.34	24.81
	8H	15.53	15.84	16.64	16.95	18.44	22.07	22.38	23.18	23.49	24.98
	12H	15.50	15.77	16.61	16.88	18.40	22.21	22.48	23.32	23.58	25.11
12H	4H	15.41	15.80	16.51	16.90	18.37	21.20	21.58	22.30	22.68	24.16
	6H	15.77	16.08	16.88	17.19	18.68	21.84	22.15	22.95	23.26	24.75
	8H	15.83	16.11	16.95	17.21	18.74	22.06	22.34	23.18	23.44	24.97