

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: P936423

Luminaire Tested: SQ4-FB-025U-100D-927-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936423
REPORT IS A COMBINATION OF REPORTS P933447 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

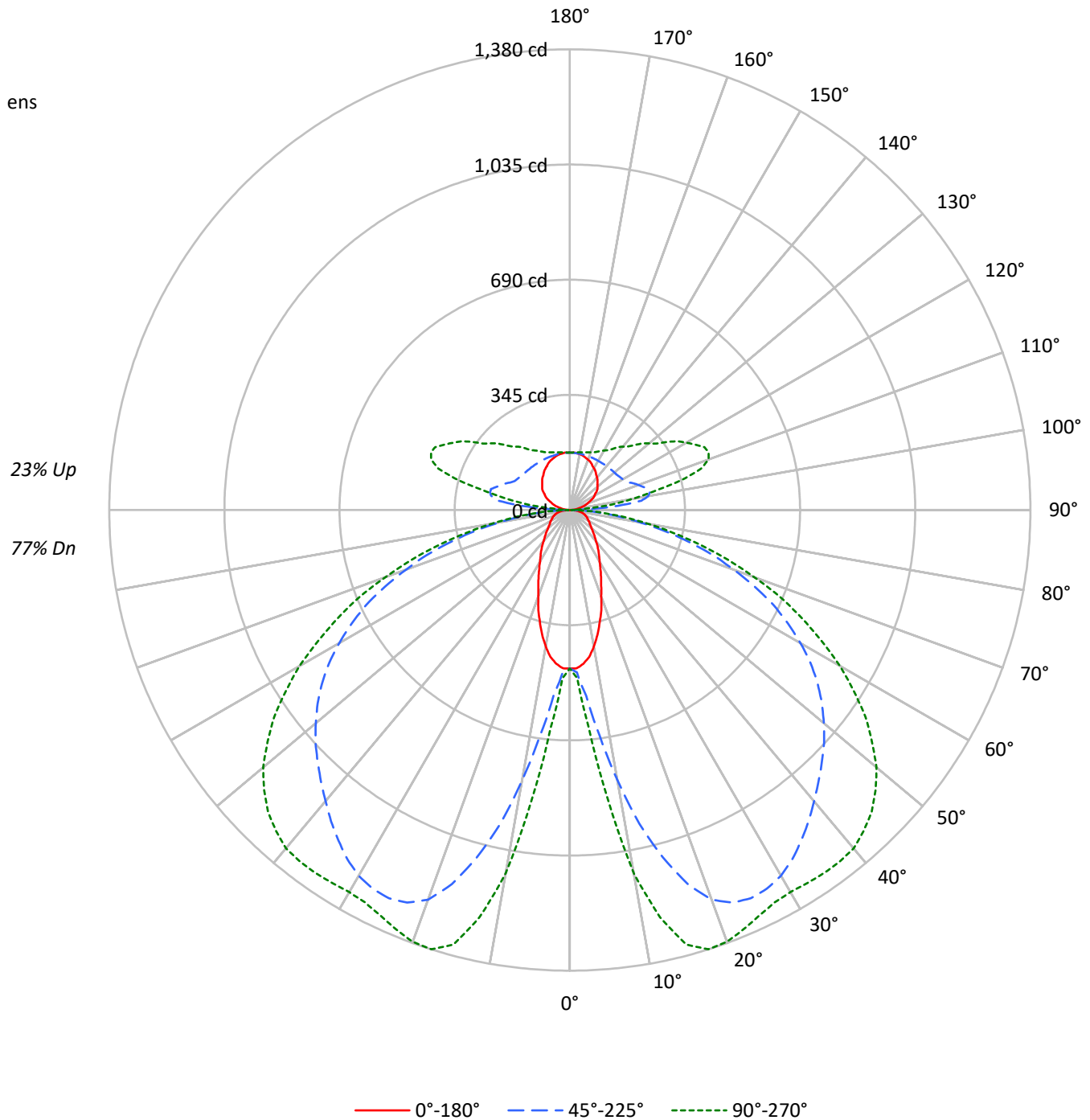
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4789.4 lumens
Efficiency: N/A
Efficacy: 82.3 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-Direct

Input Watts (W): 58.2
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

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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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77				77
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66	63				63
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55	51				51
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45	42				42
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38	35				35
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33	30				30
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28	26				26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25	22				22
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22	20				20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	19	17				17
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17	16				16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2936	2936	2936
5°	2867	3392	3946
10°	2599	4944	6542
15°	2209	6458	7899
20°	1797	7482	8051
25°	1499	7827	7887
30°	1264	7874	7872
35°	1116	7742	8076
40°	972	7570	8286
45°	880	7443	8318
50°	807	7329	8181
55°	771	7161	7818
60°	789	6844	7246
65°	820	6363	6458
70°	872	5545	5457
75°	961	4517	4258
80°	1042	3128	2870
85°	906	1658	1469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8318 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.4	1.3
10°-20°	272.1	5.7
20°-30°	475.9	9.9
30°-40°	612.6	12.8
40°-50°	684.3	14.3
50°-60°	655.4	13.7
60°-70°	519.4	10.8
70°-80°	305.4	6.4
80°-90°	85.5	1.8
90°-100°	84.0	1.8
100°-110°	220.9	4.6
110°-120°	229.0	4.8
120°-130°	183.7	3.8
130°-140°	144.2	3.0
140°-150°	110.6	2.3
150°-160°	79.7	1.7
160°-170°	48.8	1.0
170°-180°	16.5	0.3
0°-30°	809.4	16.9
0°-40°	1422.0	29.7
0°-60°	2761.7	57.7
0°-90°	3672.0	76.7
90°-120°	534.0	11.1
90°-150°	972.5	20.3
90°-180°	1117.0	23.3
0°-180°	4789.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	475	475	475	475	475	
5°	462	496	558	632	655	43
15°	346	639	1077	1306	1347	96
25°	221	725	1283	1340	1341	102
35°	150	693	1209	1277	1328	93
45°	102	552	1068	1224	1279	79
55°	73	351	906	1053	1082	67
65°	58	186	673	757	768	57
75°	43	114	369	406	407	45
85°	15	35	92	101	102	16
90°	1	3	9	4	4	2
95°	11	44	145	75	51	12
105°	40	60	244	371	346	42
115°	71	86	196	390	445	70
125°	98	110	178	301	355	87
135°	117	129	172	243	275	91
145°	136	145	170	207	223	85
155°	154	158	170	187	192	71
165°	166	168	170	177	179	47
175°	172	172	171	174	174	16
180°	172	172	172	172	172	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6
2.5°	474.6	474.6	477.6	479.2	482.2	483.7	486.8	489.9	499.0	500.5	503.6
5°	462.4	468.5	488.3	496.0	517.3	546.3	558.5	578.3	619.5	631.8	639.4
7.5°	444.1	457.8	506.7	518.8	572.3	648.6	680.6	723.3	788.9	821.0	846.9
10°	415.0	444.1	531.1	560.0	647.0	763.0	822.5	882.0	981.2	1025.5	1042.3
12.5°	383.0	430.4	557.0	596.7	721.8	891.2	962.9	1028.5	1141.4	1201.0	1210.1
15°	346.4	410.5	581.4	639.4	801.1	998.0	1077.4	1158.2	1263.5	1306.2	1316.9
17.5°	314.4	395.2	604.3	665.4	862.2	1094.2	1175.0	1242.2	1327.6	1356.6	1364.2
20°	274.7	370.8	619.5	698.9	926.3	1164.3	1242.2	1294.1	1352.0	1370.4	1373.4
22.5°	245.7	344.9	628.7	711.1	969.0	1207.1	1272.7	1313.9	1353.6	1359.7	1361.2
25°	221.3	315.9	627.2	724.9	1005.6	1233.0	1283.4	1313.9	1336.8	1339.8	1339.8
27.5°	198.4	283.8	621.1	727.9	1033.1	1239.1	1278.7	1300.1	1310.8	1316.9	1316.9
30°	178.6	253.3	605.8	721.8	1045.3	1233.0	1265.0	1275.7	1286.4	1295.5	1300.1
32.5°	163.3	224.3	582.9	709.6	1046.8	1217.8	1240.6	1246.7	1262.0	1283.4	1291.0
35°	149.5	195.3	557.0	692.8	1037.7	1193.3	1208.6	1214.7	1245.2	1277.3	1287.9
37.5°	135.8	173.9	523.4	663.8	1023.9	1164.3	1175.0	1185.7	1233.0	1271.1	1283.4
40°	122.0	155.6	483.7	631.8	1002.5	1129.2	1138.4	1155.2	1217.8	1262.0	1274.2
42.5°	111.4	140.4	441.0	598.2	975.1	1089.6	1103.3	1127.7	1199.4	1246.7	1260.5
45°	102.3	125.1	395.2	552.4	940.0	1048.4	1068.2	1101.8	1178.0	1223.8	1236.1
47.5°	93.1	114.4	348.0	505.1	901.8	1007.2	1033.1	1071.2	1149.1	1193.3	1204.0
50°	85.5	103.8	300.6	454.8	860.6	962.9	993.5	1033.1	1112.4	1153.6	1167.4
52.5°	79.4	94.6	256.3	404.4	813.4	917.1	952.2	993.5	1068.2	1107.9	1117.0
55°	73.2	87.0	218.2	351.0	764.5	868.3	906.4	946.1	1019.3	1052.9	1059.1
57.5°	70.2	80.9	186.2	300.6	712.6	813.4	856.1	892.7	961.3	987.3	993.5
60°	65.6	76.3	161.8	257.9	656.2	761.5	798.1	834.7	892.7	914.1	918.6
62.5°	61.1	73.2	143.5	216.7	598.2	700.4	737.0	770.6	819.4	834.7	840.8
65°	58.0	70.2	129.7	186.2	538.7	636.3	673.0	701.9	741.7	756.9	759.9
67.5°	54.9	67.1	119.0	160.2	479.2	572.3	599.7	627.2	657.7	673.0	674.5
70°	50.4	64.1	109.9	141.9	418.1	499.0	521.9	550.9	575.3	582.9	587.5
72.5°	47.3	59.5	103.8	128.2	355.6	428.8	450.1	466.9	488.3	496.0	496.0
75°	42.7	53.4	97.6	114.4	291.4	351.0	369.3	386.1	402.9	405.9	401.3
77.5°	38.1	47.3	83.9	96.2	227.4	277.7	293.0	302.1	315.9	318.9	320.5
80°	32.0	41.2	65.6	74.8	164.8	204.5	215.1	222.8	235.0	235.0	238.1
82.5°	24.4	32.0	47.3	53.4	111.4	140.4	149.5	154.2	161.8	161.8	161.8
85°	15.2	19.9	30.5	35.1	67.1	85.5	91.6	93.1	99.2	100.7	100.7
87.5°	7.6	10.7	19.9	21.3	35.1	44.3	44.3	47.3	47.3	45.8	44.3
90°	1.2	2.1	3.0	3.2	5.1	7.5	8.8	7.8	5.9	4.4	4.4
92.5°	4.6	12.5	20.3	22.3	31.4	43.5	49.5	43.4	31.1	21.9	21.1
95°	11.1	25.5	39.9	43.5	77.2	122.2	144.7	129.1	97.9	74.6	72.0
97.5°	19.2	31.9	44.6	47.7	104.0	179.0	216.5	206.7	187.0	172.2	167.2
100°	25.5	37.0	48.5	51.4	113.8	197.0	238.6	239.3	240.8	241.9	235.9
102.5°	30.8	41.6	52.3	55.0	118.3	202.7	244.9	257.4	282.5	301.4	296.2
105°	39.8	48.9	58.0	60.3	121.6	203.3	244.2	272.3	328.6	370.8	368.0
107.5°	49.0	57.5	66.0	68.1	122.2	194.3	230.3	269.6	348.0	406.9	407.6
110°	55.3	63.0	70.6	72.5	121.3	186.3	218.8	262.6	350.4	416.1	419.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	61.4	68.8	76.0	77.8	121.3	179.3	208.2	253.1	342.9	410.2	414.6
115°	70.7	77.5	84.2	85.9	122.4	171.2	195.6	238.9	325.3	390.2	396.3
117.5°	79.8	85.9	92.0	93.6	124.7	166.2	187.0	226.0	304.0	362.5	369.3
120°	85.2	90.9	96.6	98.1	126.6	164.5	183.5	219.1	290.4	344.0	350.6
122.5°	90.3	96.2	101.9	103.4	129.2	163.6	180.8	212.9	277.1	325.3	331.9
125°	98.3	103.6	109.0	110.3	132.8	162.9	177.9	205.2	259.8	300.7	306.7
127.5°	104.8	110.1	115.5	116.8	136.4	162.5	175.5	198.9	245.8	280.9	286.0
130°	108.3	114.0	119.7	121.2	139.0	162.7	174.6	195.4	237.1	268.3	273.0
132.5°	111.9	117.7	123.4	124.8	141.1	162.9	173.8	192.4	229.8	257.7	261.9
135°	117.2	122.4	127.7	129.0	143.5	162.8	172.4	188.0	219.3	242.7	246.3
137.5°	122.7	127.8	133.0	134.3	146.9	163.8	172.2	185.4	211.8	231.6	234.5
140°	127.1	131.9	136.7	137.9	149.1	163.9	171.3	182.7	205.6	222.7	225.5
142.5°	130.6	135.0	139.4	140.5	150.8	164.5	171.3	181.3	201.4	216.4	218.8
145°	135.9	139.8	143.6	144.6	153.2	164.5	170.2	178.3	194.7	207.1	208.8
147.5°	141.2	145.0	148.8	149.7	156.5	165.6	170.2	176.6	189.5	199.2	200.7
150°	144.7	148.1	151.5	152.4	158.3	166.2	170.2	175.6	186.5	194.7	195.9
152.5°	148.3	150.8	153.5	154.1	159.5	166.6	170.2	174.8	184.1	191.1	192.0
155°	153.6	155.5	157.5	157.9	162.0	167.5	170.2	173.9	181.3	186.8	187.4
157.5°	157.5	159.4	161.2	161.7	164.5	168.3	170.2	173.0	178.8	183.1	183.6
160°	160.2	161.7	163.1	163.5	165.7	168.7	170.2	172.6	177.6	181.3	181.5
162.5°	162.9	163.9	165.0	165.3	166.9	169.1	170.2	172.2	176.4	179.6	179.8
165°	165.8	166.7	167.7	167.9	168.7	169.7	170.2	171.6	174.6	176.9	177.1
167.5°	168.4	168.9	169.3	169.5	170.1	170.9	171.3	172.3	174.3	175.7	175.8
170°	170.2	170.6	171.1	171.2	171.2	171.3	171.3	172.3	174.3	175.7	175.7
172.5°	171.1	171.2	171.3	171.3	171.3	171.3	171.3	172.1	173.6	174.8	174.7
175°	172.4	172.4	172.4	172.4	172.0	171.6	171.3	171.8	172.8	173.6	173.6
177.5°	172.4	172.4	172.4	172.4	172.1	171.7	171.6	171.9	172.7	173.3	173.2
180°	172.4	172.4	172.4	172.4	172.4	172.4	172.4	172.4	172.4	172.4	172.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	474.6	474.6
2.5°	506.7	503.6
5°	651.6	654.7
7.5°	877.4	876.0
10°	1091.1	1104.8
12.5°	1246.7	1249.8
15°	1341.3	1347.4
17.5°	1378.0	1379.5
20°	1379.5	1376.5
22.5°	1362.7	1359.7
25°	1342.9	1341.3
27.5°	1324.6	1326.1
30°	1316.9	1321.5
32.5°	1316.9	1324.6
35°	1320.0	1327.6
37.5°	1318.5	1327.6
40°	1312.3	1323.0
42.5°	1295.5	1303.2
45°	1269.7	1278.7
47.5°	1236.1	1242.2
50°	1193.3	1199.4
52.5°	1139.9	1141.4
55°	1075.8	1081.9
57.5°	1007.2	1008.7
60°	930.9	935.4
62.5°	850.0	850.0
65°	764.5	767.5
67.5°	676.0	683.6
70°	586.0	587.5
72.5°	497.5	497.5
75°	405.9	407.4
77.5°	318.9	318.9
80°	236.5	238.1
82.5°	163.3	166.3
85°	102.3	102.3
87.5°	47.3	42.7
90°	4.4	4.4
92.5°	17.6	14.1
95°	61.4	50.8
97.5°	147.1	126.9
100°	211.9	187.9
102.5°	275.7	255.1
105°	357.0	345.9
107.5°	410.2	412.9
110°	430.5	442.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	432.3	450.0
115°	420.8	445.4
117.5°	396.6	423.7
120°	377.0	403.4
122.5°	357.9	383.9
125°	330.6	354.7
127.5°	306.2	326.5
130°	291.8	310.5
132.5°	278.7	295.4
135°	260.7	275.2
137.5°	246.4	258.2
140°	236.5	247.6
142.5°	228.3	237.9
145°	216.1	223.3
147.5°	206.7	212.6
150°	200.7	205.6
152.5°	195.7	199.4
155°	189.8	192.3
157.5°	185.3	187.0
160°	182.5	183.5
162.5°	180.7	181.6
165°	178.1	179.1
167.5°	176.3	176.6
170°	175.7	175.7
172.5°	174.3	174.0
175°	173.6	173.6
177.5°	172.8	172.4
180°	172.4	172.4



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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	6.87	8.11	7.55	8.81	9.64	20.04	21.27	20.72	21.98	22.81
	3H	7.61	8.72	8.30	9.44	10.30	21.90	23.01	22.59	23.73	24.59
	4H	7.92	8.97	8.63	9.70	10.57	22.56	23.61	23.27	24.34	25.21
	6H	8.19	9.17	8.92	9.90	10.79	23.00	23.98	23.73	24.71	25.60
	8H	8.27	9.20	9.01	9.96	10.85	23.13	24.06	23.87	24.82	25.71
	12H	8.30	9.19	9.04	9.94	10.86	23.21	24.10	23.95	24.85	25.77
4H	2H	14.12	15.18	14.84	15.90	16.78	20.36	21.41	21.07	22.14	23.01
	3H	15.73	16.61	16.45	17.37	18.26	22.43	23.32	23.16	24.08	24.97
	4H	15.84	16.64	16.58	17.41	18.33	23.21	24.02	23.96	24.78	25.70
	6H	15.87	16.57	16.63	17.36	18.29	23.77	24.47	24.53	25.26	26.18
	8H	15.86	16.51	16.62	17.30	18.24	23.94	24.59	24.70	25.38	26.32
	12H	15.83	16.42	16.62	17.23	18.18	24.05	24.64	24.84	25.45	26.39
8H	4H	17.31	17.97	18.08	18.75	19.69	23.30	23.96	24.07	24.74	25.68
	6H	17.57	18.12	18.37	18.94	19.88	23.94	24.49	24.74	25.32	26.26
	8H	17.59	18.08	18.40	18.90	19.86	24.17	24.65	24.98	25.48	26.44
	12H	17.58	18.01	18.39	18.82	19.84	24.33	24.76	25.14	25.57	26.59
12H	4H	17.47	18.06	18.26	18.87	19.82	23.27	23.87	24.06	24.67	25.62
	6H	17.83	18.32	18.64	19.14	20.10	23.93	24.42	24.74	25.25	26.20
	8H	17.92	18.35	18.73	19.17	20.18	24.18	24.61	24.99	25.42	26.44