

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: P936522

Luminaire Tested: SQ4-FB-025U-125D-927-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936522
REPORT IS A COMBINATION OF REPORTS P933440 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

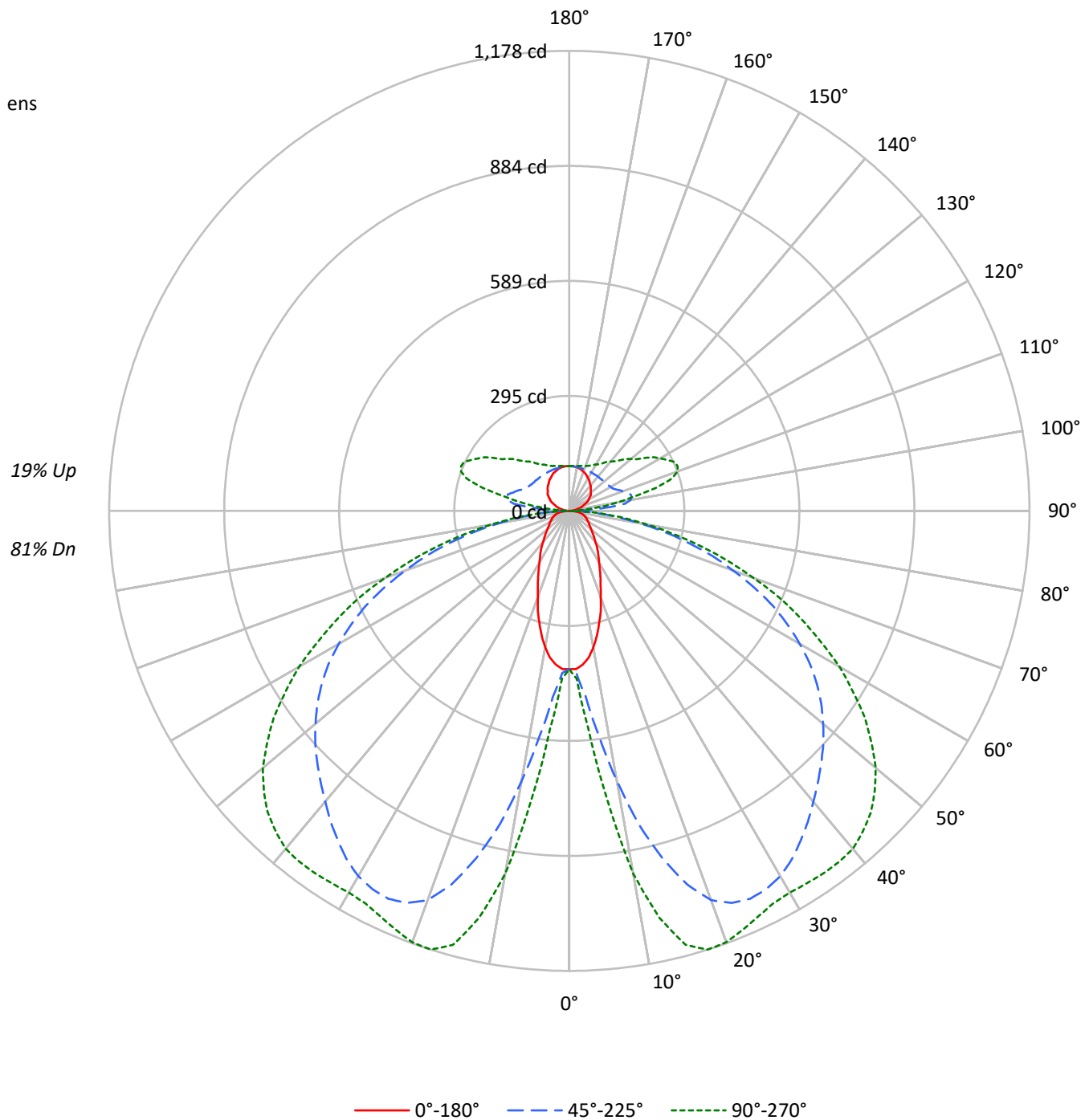
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3880.0 lumens
Efficiency: N/A
Efficacy: 78.2 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-Direct

Input Watts (W): 49.6
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	114	114	114	114	110	110	110	110	100	100	100	92	92	92	84	84	84	84	84	84	81
1	104	99	94	90	99	95	91	87	87	84	81	80	77	75	73	71	70	70	70	70	66
2	94	85	78	72	89	82	75	70	75	70	66	69	65	61	63	60	57	57	57	57	54
3	85	74	66	59	81	71	64	58	65	59	54	60	55	51	55	51	48	48	48	48	45
4	77	65	56	49	74	63	54	48	58	51	45	53	47	43	49	44	40	40	40	40	37
5	71	58	49	42	67	55	47	41	51	44	39	47	41	36	43	38	34	34	34	34	32
6	65	51	42	36	62	49	41	35	46	39	33	42	36	31	39	34	30	30	30	30	27
7	60	46	37	31	57	45	36	30	41	34	29	38	32	27	35	30	26	26	26	26	24
8	55	42	33	27	53	40	32	27	37	30	25	35	29	24	32	27	23	23	23	23	21
9	52	38	30	24	49	37	29	24	34	27	23	32	26	22	29	24	20	20	20	20	18
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	18	18	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3760	3760	3760
5°	3669	4343	5054
10°	3325	6325	8379
15°	2823	8258	10118
20°	2295	9563	10312
25°	1913	10000	10102
30°	1611	10055	10083
35°	1422	9880	10343
40°	1237	9655	10612
45°	1118	9488	10655
50°	1023	9335	10478
55°	976	9116	10014
60°	998	8704	9280
65°	1032	8083	8271
70°	1092	7035	6990
75°	1197	5721	5454
80°	1278	3953	3676
85°	1076	2087	1881

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10655 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.4	1.4
10°-20°	232.3	6.0
20°-30°	406.3	10.5
30°-40°	523.1	13.5
40°-50°	584.3	15.1
50°-60°	559.6	14.4
60°-70°	443.5	11.4
70°-80°	260.8	6.7
80°-90°	72.9	1.9
90°-100°	56.0	1.4
100°-110°	147.3	3.8
110°-120°	152.7	3.9
120°-130°	122.5	3.2
130°-140°	96.1	2.5
140°-150°	73.8	1.9
150°-160°	53.1	1.4
160°-170°	32.5	0.8
170°-180°	11.0	0.3
0°-30°	691.1	17.8
0°-40°	1214.1	31.3
0°-60°	2358.0	60.8
0°-90°	3135.1	80.8
90°-120°	356.0	9.2
90°-150°	648.3	16.7
90°-180°	745.0	19.2
0°-180°	3880.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	405	405	405	405	405	
5°	395	423	477	539	559	36
15°	296	546	920	1115	1150	82
25°	189	619	1096	1144	1145	87
35°	128	592	1032	1091	1134	80
45°	87	472	912	1045	1092	68
55°	62	300	774	899	924	57
65°	50	159	575	646	655	49
75°	36	98	315	347	348	38
85°	13	30	78	86	87	14
90°	1	2	6	3	3	2
95°	7	29	96	50	34	8
105°	27	40	163	247	231	28
115°	47	57	130	260	297	47
125°	66	74	119	200	236	58
135°	78	86	115	162	184	60
145°	91	96	113	138	149	57
155°	102	105	113	125	128	47
165°	110	112	113	118	119	31
175°	115	115	114	116	116	11
180°	115	115	115	115	115	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2
2.5°	405.2	405.2	407.8	409.1	411.7	413.0	415.6	418.3	426.0	427.4	430.0
5°	394.8	400.0	417.0	423.4	441.7	466.5	476.9	493.8	529.0	539.4	545.9
7.5°	379.1	390.9	432.6	443.0	488.6	553.7	581.1	617.6	673.6	700.9	723.1
10°	354.4	379.1	453.4	478.2	552.4	651.4	702.2	753.1	837.8	875.6	889.9
12.5°	327.0	367.4	475.6	509.4	616.3	760.9	822.1	878.2	974.6	1025.4	1033.2
15°	295.8	350.5	496.4	545.9	684.0	852.1	919.8	988.9	1078.8	1115.3	1124.4
17.5°	268.4	337.5	516.0	568.1	736.1	934.2	1003.2	1060.6	1133.5	1158.3	1164.8
20°	234.5	316.6	529.0	596.8	790.9	994.1	1060.6	1104.9	1154.4	1170.0	1172.6
22.5°	209.7	294.4	536.8	607.1	827.4	1030.6	1086.6	1121.8	1155.7	1160.9	1162.2
25°	189.0	269.7	535.5	618.8	858.6	1052.7	1095.8	1121.8	1141.4	1144.0	1144.0
27.5°	169.4	242.3	530.3	621.5	882.0	1058.0	1091.9	1110.1	1119.2	1124.4	1124.4
30°	152.5	216.3	517.3	616.3	892.5	1052.7	1080.1	1089.2	1098.3	1106.2	1110.1
32.5°	139.4	191.5	497.7	605.8	893.8	1039.7	1059.3	1064.4	1077.5	1095.8	1102.3
35°	127.7	166.8	475.6	591.5	886.0	1018.9	1031.9	1037.1	1063.1	1090.6	1099.6
37.5°	116.0	148.5	446.9	566.8	874.3	994.1	1003.2	1012.4	1052.7	1085.3	1095.8
40°	104.3	132.9	413.0	539.4	856.0	964.1	972.0	986.3	1039.7	1077.5	1087.9
42.5°	95.1	119.9	376.5	510.7	832.5	930.3	942.0	962.9	1024.1	1064.4	1076.2
45°	87.3	106.9	337.5	471.6	802.6	895.1	912.1	940.7	1005.9	1045.0	1055.4
47.5°	79.5	97.7	297.1	431.3	770.0	859.9	882.0	914.7	981.1	1018.9	1028.0
50°	73.0	88.6	256.6	388.2	734.8	822.1	848.2	882.0	949.8	985.0	996.8
52.5°	67.8	80.8	218.9	345.3	694.5	783.0	813.0	848.2	912.1	945.9	953.7
55°	62.5	74.2	186.3	299.7	652.7	741.4	773.9	807.8	870.3	899.0	904.2
57.5°	59.9	69.1	158.9	256.6	608.5	694.5	731.0	762.2	820.8	843.0	848.2
60°	56.1	65.1	138.1	220.2	560.3	650.2	681.4	712.7	762.2	780.5	784.3
62.5°	52.1	62.5	122.5	185.0	510.7	598.1	629.3	658.0	699.7	712.7	717.9
65°	49.5	59.9	110.7	158.9	459.9	543.3	574.6	599.4	633.2	646.3	648.9
67.5°	46.9	57.4	101.6	136.8	409.1	488.6	512.1	535.5	561.6	574.6	575.9
70°	43.0	54.7	93.8	121.2	357.0	426.0	445.6	470.3	491.2	497.7	501.7
72.5°	40.4	50.8	88.6	109.4	303.6	366.1	384.4	398.7	417.0	423.4	423.4
75°	36.5	45.6	83.4	97.7	248.9	299.7	315.3	329.6	344.0	346.6	342.7
77.5°	32.6	40.4	71.7	82.1	194.1	237.2	250.2	258.0	269.7	272.3	273.6
80°	27.3	35.2	56.1	63.8	140.7	174.6	183.7	190.2	200.7	200.7	203.3
82.5°	20.9	27.3	40.4	45.6	95.1	119.9	127.7	131.6	138.1	138.1	138.1
85°	13.0	16.9	26.0	30.0	57.4	73.0	78.2	79.5	84.7	86.0	86.0
87.5°	6.5	9.1	16.9	18.2	30.0	37.8	37.8	40.4	40.4	39.1	37.8
90°	0.8	1.4	2.0	2.2	3.4	5.0	5.9	5.2	3.9	2.9	2.9
92.5°	3.1	8.3	13.6	14.9	20.9	29.0	33.0	29.0	20.8	14.6	14.0
95°	7.4	17.0	26.6	29.0	51.5	81.5	96.5	86.1	65.3	49.7	48.0
97.5°	12.8	21.3	29.7	31.9	69.4	119.4	144.4	137.8	124.7	114.8	111.4
100°	16.9	24.6	32.3	34.3	75.8	131.4	159.1	159.5	160.5	161.2	157.2
102.5°	20.5	27.6	34.9	36.7	78.8	135.1	163.2	171.6	188.3	200.9	197.4
105°	26.6	32.6	38.7	40.2	81.1	135.5	162.8	181.6	219.1	247.2	245.3
107.5°	32.7	38.3	44.0	45.4	81.5	129.5	153.5	179.7	232.0	271.3	271.7
110°	36.9	42.0	47.0	48.4	80.9	124.2	145.8	175.1	233.5	277.4	279.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	41.0	45.8	50.7	51.9	80.9	119.5	138.8	168.8	228.6	273.5	276.4
115°	47.1	51.6	56.1	57.2	81.6	114.2	130.4	159.2	216.9	260.1	264.2
117.5°	53.2	57.3	61.4	62.4	83.2	110.8	124.7	150.7	202.7	241.7	246.2
120°	56.7	60.6	64.4	65.4	84.3	109.6	122.3	146.1	193.7	229.3	233.7
122.5°	60.2	64.1	67.9	68.9	86.1	109.0	120.5	141.9	184.7	216.8	221.1
125°	65.5	69.1	72.6	73.5	88.6	108.6	118.6	136.8	173.2	200.4	204.4
127.5°	69.8	73.5	77.0	77.9	90.9	108.3	117.0	132.6	163.9	187.3	190.7
130°	72.1	76.0	79.8	80.9	92.7	108.5	116.3	130.3	158.1	178.9	182.0
132.5°	74.6	78.5	82.3	83.2	94.1	108.6	115.8	128.3	153.2	171.9	174.6
135°	78.2	81.6	85.2	86.0	95.6	108.5	114.9	125.3	146.1	161.8	164.2
137.5°	81.8	85.2	88.7	89.6	97.9	109.1	114.7	123.5	141.1	154.4	156.4
140°	84.8	87.9	91.2	91.9	99.3	109.3	114.2	121.8	137.1	148.5	150.3
142.5°	87.1	90.0	92.9	93.7	100.6	109.6	114.2	120.9	134.3	144.3	145.9
145°	90.6	93.2	95.8	96.4	102.1	109.6	113.4	118.9	129.8	138.1	139.3
147.5°	94.2	96.6	99.2	99.8	104.3	110.4	113.4	117.7	126.4	132.8	133.8
150°	96.5	98.7	101.0	101.6	105.5	110.8	113.4	117.0	124.4	129.8	130.6
152.5°	98.9	100.6	102.3	102.7	106.3	111.0	113.4	116.5	122.7	127.4	128.1
155°	102.4	103.6	105.0	105.3	108.0	111.6	113.4	115.9	120.9	124.6	125.0
157.5°	105.0	106.3	107.5	107.8	109.6	112.2	113.4	115.3	119.2	122.0	122.4
160°	106.8	107.7	108.7	109.0	110.4	112.4	113.4	115.0	118.3	120.8	121.0
162.5°	108.6	109.3	110.0	110.2	111.3	112.7	113.4	114.8	117.6	119.7	119.8
165°	110.5	111.1	111.8	112.0	112.4	113.1	113.4	114.4	116.4	117.9	118.0
167.5°	112.3	112.6	112.9	113.0	113.3	113.9	114.2	114.8	116.1	117.1	117.2
170°	113.4	113.7	114.0	114.1	114.1	114.2	114.2	114.8	116.1	117.1	117.1
172.5°	114.0	114.1	114.2	114.2	114.2	114.2	114.2	114.7	115.7	116.5	116.4
175°	114.9	114.9	114.9	114.9	114.7	114.3	114.2	114.5	115.2	115.7	115.7
177.5°	114.9	114.9	114.9	114.9	114.7	114.5	114.3	114.6	115.1	115.5	115.4
180°	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	405.2	405.2
2.5°	432.6	430.0
5°	556.3	558.9
7.5°	749.2	747.9
10°	931.5	943.3
12.5°	1064.4	1067.1
15°	1145.3	1150.5
17.5°	1176.6	1177.9
20°	1177.9	1175.3
22.5°	1163.5	1160.9
25°	1146.5	1145.3
27.5°	1130.9	1132.2
30°	1124.4	1128.4
32.5°	1124.4	1130.9
35°	1127.0	1133.5
37.5°	1125.7	1133.5
40°	1120.5	1129.6
42.5°	1106.2	1112.6
45°	1084.0	1091.9
47.5°	1055.4	1060.6
50°	1018.9	1024.1
52.5°	973.3	974.6
55°	918.5	923.8
57.5°	859.9	861.2
60°	794.8	798.7
62.5°	725.7	725.7
65°	652.7	655.3
67.5°	577.2	583.7
70°	500.3	501.7
72.5°	424.7	424.7
75°	346.6	347.9
77.5°	272.3	272.3
80°	202.0	203.3
82.5°	139.4	142.0
85°	87.3	87.3
87.5°	40.4	36.5
90°	2.9	2.9
92.5°	11.7	9.4
95°	41.0	33.9
97.5°	98.0	84.6
100°	141.3	125.3
102.5°	183.7	170.0
105°	238.0	230.6
107.5°	273.5	275.3
110°	287.0	294.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	288.2	300.0
115°	280.6	296.9
117.5°	264.3	282.5
120°	251.3	268.9
122.5°	238.5	255.9
125°	220.5	236.5
127.5°	204.1	217.6
130°	194.5	207.0
132.5°	185.8	197.0
135°	173.9	183.5
137.5°	164.2	172.2
140°	157.6	165.0
142.5°	152.2	158.5
145°	144.1	148.8
147.5°	137.8	141.8
150°	133.8	137.1
152.5°	130.4	132.9
155°	126.6	128.2
157.5°	123.5	124.7
160°	121.7	122.3
162.5°	120.4	121.0
165°	118.7	119.4
167.5°	117.4	117.7
170°	117.1	117.1
172.5°	116.2	116.0
175°	115.7	115.7
177.5°	115.2	114.9
180°	114.9	114.9



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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	8.02	9.32	8.65	9.97	10.72	21.16	22.46	21.79	23.11	23.86
	3H	8.75	9.93	9.40	10.59	11.37	23.01	24.19	23.66	24.85	25.63
	4H	9.07	10.18	9.74	10.86	11.65	23.67	24.78	24.33	25.45	26.25
	6H	9.35	10.38	10.02	11.06	11.87	24.11	25.14	24.78	25.82	26.63
	8H	9.43	10.41	10.11	11.12	11.93	24.23	25.22	24.92	25.92	26.74
	12H	9.46	10.40	10.15	11.10	11.94	24.31	25.25	25.01	25.95	26.79
4H	2H	15.26	16.37	15.92	17.04	17.84	21.48	22.60	22.15	23.27	24.06
	3H	16.87	17.80	17.55	18.51	19.33	23.55	24.49	24.23	25.20	26.01
	4H	16.98	17.83	17.68	18.55	19.39	24.33	25.18	25.03	25.89	26.74
	6H	17.02	17.76	17.74	18.50	19.35	24.88	25.62	25.60	26.36	27.21
	8H	17.01	17.70	17.73	18.44	19.30	25.05	25.74	25.77	26.48	27.34
	12H	16.99	17.61	17.73	18.37	19.24	25.16	25.78	25.90	26.54	27.41
8H	4H	18.45	19.15	19.18	19.88	20.75	24.43	25.12	25.15	25.86	26.72
	6H	18.72	19.30	19.47	20.07	20.94	25.06	25.64	25.82	26.42	27.29
	8H	18.74	19.26	19.51	20.04	20.92	25.28	25.80	26.05	26.58	27.46
	12H	18.73	19.19	19.50	19.96	20.90	25.44	25.90	26.21	26.67	27.61
12H	4H	18.62	19.24	19.36	20.00	20.87	24.40	25.03	25.14	25.79	26.66
	6H	18.98	19.49	19.74	20.27	21.16	25.05	25.57	25.82	26.35	27.23
	8H	19.07	19.52	19.84	20.29	21.24	25.30	25.75	26.07	26.52	27.47