

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: P936294

Luminaire Tested: SQ4-FB-025U-050D-B2750-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936294
REPORT IS A COMBINATION OF REPORTS P933453 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-050D-B2750-1D-UNV-STD-W-8-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

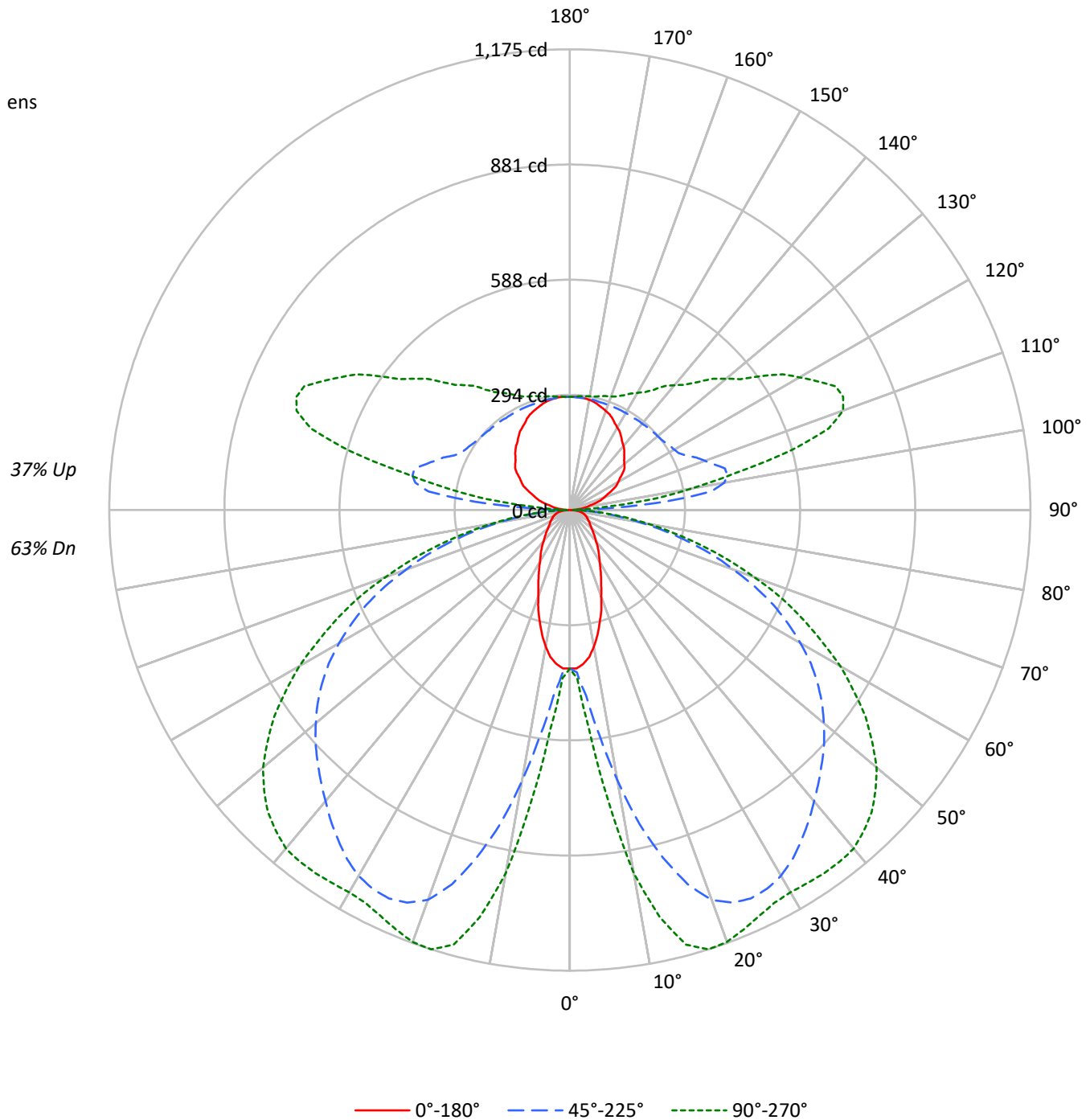
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5003.0 lumens
Efficiency: N/A
Efficacy: 113.7 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: Semi-Direct

Input Watts (W): 44
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: P936294
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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	63
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56	51
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46	42
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38	34
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32	29
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	28	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24	21
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21	18
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18	16
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16	14
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1875	1875	1875
5°	1832	2168	2521
10°	1662	3160	4179
15°	1413	4128	5046
20°	1150	4784	5143
25°	959	5006	5039
30°	808	5037	5029
35°	715	4954	5159
40°	623	4845	5294
45°	564	4765	5314
50°	518	4694	5226
55°	496	4589	4994
60°	508	4388	4628
65°	528	4081	4126
70°	563	3559	3486
75°	623	2902	2720
80°	681	2012	1832
85°	606	1068	938

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5314 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	1.0
10°-20°	231.7	4.6
20°-30°	405.3	8.1
30°-40°	521.8	10.4
40°-50°	582.8	11.6
50°-60°	558.2	11.2
60°-70°	442.4	8.8
70°-80°	260.1	5.2
80°-90°	73.4	1.5
90°-100°	141.0	2.8
100°-110°	370.6	7.4
110°-120°	384.3	7.7
120°-130°	308.3	6.2
130°-140°	241.9	4.8
140°-150°	185.7	3.7
150°-160°	133.7	2.7
160°-170°	81.8	1.6
170°-180°	27.6	0.6
0°-30°	689.4	13.8
0°-40°	1211.2	24.2
0°-60°	2352.2	47.0
0°-90°	3128.1	62.5
90°-120°	895.9	17.9
90°-150°	1631.8	32.6
90°-180°	1875.0	37.5
0°-180°	5003.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	404	404	404	404	404	
5°	394	422	476	538	558	36
15°	295	545	918	1112	1148	82
25°	188	617	1093	1141	1142	87
35°	127	590	1029	1088	1131	80
45°	87	470	910	1042	1089	67
55°	62	299	772	897	922	57
65°	49	158	573	645	654	49
75°	36	98	314	346	347	38
85°	13	30	78	86	87	14
90°	2	5	15	7	7	2
95°	19	73	243	125	85	21
105°	67	101	410	622	580	71
115°	119	144	328	655	747	117
125°	165	185	298	504	595	146
135°	197	216	289	407	462	152
145°	228	243	286	348	375	143
155°	258	265	286	314	323	118
165°	278	282	286	297	300	79
175°	289	289	288	291	291	27
180°	289	289	289	289	289	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	404.2	404.2	404.2	404.2	404.2	404.2	404.2	404.2	404.2	404.2	404.2
2.5°	404.2	404.2	406.8	408.1	410.7	412.0	414.6	417.3	425.0	426.3	428.9
5°	393.8	399.0	415.9	422.4	440.6	465.3	475.7	492.5	527.7	538.1	544.6
7.5°	378.2	389.9	431.5	441.9	487.4	552.3	579.7	616.1	671.9	699.2	721.3
10°	353.5	378.2	452.3	477.0	551.1	649.8	700.6	751.3	835.7	873.4	887.7
12.5°	326.3	366.5	474.4	508.1	614.7	759.0	820.2	876.0	972.2	1022.9	1030.6
15°	295.1	349.6	495.2	544.6	682.4	850.0	917.6	986.4	1076.2	1112.5	1121.6
17.5°	267.7	336.6	514.7	566.7	734.3	931.9	1000.8	1058.0	1130.7	1155.4	1161.9
20°	233.9	315.8	527.7	595.3	789.0	991.7	1058.0	1102.1	1151.6	1167.2	1169.8
22.5°	209.2	293.7	535.5	605.6	825.3	1028.1	1083.9	1119.1	1152.8	1158.1	1159.3
25°	188.5	269.0	534.2	617.3	856.5	1050.2	1093.0	1119.1	1138.6	1141.2	1141.2
27.5°	169.0	241.8	529.0	620.0	879.9	1055.3	1089.2	1107.4	1116.5	1121.6	1121.6
30°	152.0	215.8	516.0	614.7	890.3	1050.2	1077.4	1086.5	1095.6	1103.5	1107.4
32.5°	139.1	191.1	496.5	604.4	891.6	1037.1	1056.7	1061.8	1074.8	1093.0	1099.5
35°	127.3	166.4	474.4	590.0	883.8	1016.4	1029.4	1034.6	1060.6	1087.9	1096.9
37.5°	115.7	148.2	445.8	565.4	872.1	991.7	1000.8	1009.9	1050.2	1082.7	1093.0
40°	104.0	132.6	412.0	538.1	853.9	961.8	969.6	983.9	1037.1	1074.8	1085.3
42.5°	94.9	119.6	375.6	509.5	830.5	928.0	939.7	960.5	1021.6	1061.8	1073.6
45°	87.1	106.6	336.6	470.4	800.6	892.9	909.8	938.4	1003.4	1042.4	1052.7
47.5°	79.3	97.5	296.3	430.2	768.1	857.9	879.9	912.4	978.7	1016.4	1025.5
50°	72.8	88.4	256.0	387.3	733.0	820.2	846.1	879.9	947.5	982.6	994.3
52.5°	67.5	80.6	218.3	344.4	692.7	781.1	811.1	846.1	909.8	943.6	951.4
55°	62.4	74.1	185.9	298.9	651.2	739.5	772.0	805.8	868.2	896.8	902.0
57.5°	59.8	68.9	158.5	256.0	607.0	692.7	729.2	760.4	818.8	840.9	846.1
60°	55.9	65.0	137.8	219.7	558.9	648.6	679.8	711.0	760.4	778.5	782.5
62.5°	52.0	62.4	122.2	184.6	509.5	596.6	627.7	656.4	698.0	711.0	716.2
65°	49.4	59.8	110.5	158.5	458.8	542.0	573.2	597.9	631.7	644.7	647.3
67.5°	46.8	57.2	101.4	136.4	408.1	487.4	510.8	534.2	560.2	573.2	574.4
70°	42.9	54.6	93.6	120.8	356.1	425.0	444.5	469.2	490.0	496.5	500.4
72.5°	40.3	50.7	88.4	109.2	302.8	365.2	383.4	397.7	415.9	422.4	422.4
75°	36.4	45.4	83.1	97.5	248.3	298.9	314.5	328.8	343.1	345.7	341.9
77.5°	32.5	40.3	71.5	81.9	193.7	236.5	249.5	257.4	269.0	271.6	273.0
80°	27.3	35.1	55.9	63.7	140.4	174.1	183.2	189.7	200.2	200.2	202.7
82.5°	20.8	27.3	40.3	45.4	94.9	119.6	127.3	131.3	137.8	137.8	137.8
85°	13.0	16.9	26.0	29.8	57.2	72.8	78.0	79.3	84.5	85.8	85.8
87.5°	6.5	9.1	16.9	18.2	29.8	37.7	37.7	40.3	40.3	39.0	37.7
90°	1.9	3.5	5.0	5.4	8.5	12.7	14.7	13.1	9.8	7.4	7.4
92.5°	7.8	20.9	34.2	37.5	52.7	73.0	83.0	72.8	52.3	36.9	35.5
95°	18.6	42.7	67.0	73.0	129.6	205.0	242.8	216.7	164.4	125.2	120.7
97.5°	32.3	53.6	74.8	80.1	174.5	300.4	363.4	346.9	313.9	289.1	280.6
100°	42.7	62.0	81.3	86.1	190.9	330.5	400.4	401.7	404.1	405.9	395.8
102.5°	51.6	69.7	87.7	92.2	198.5	340.1	411.0	432.0	474.0	505.6	497.0
105°	66.8	82.1	97.4	101.2	204.1	341.2	409.8	457.0	551.4	622.1	617.4
107.5°	82.3	96.5	110.8	114.3	205.0	326.0	386.4	452.2	583.9	682.7	683.8
110°	92.8	105.6	118.5	121.7	203.5	312.5	367.1	440.6	587.8	698.2	703.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	103.1	115.3	127.5	130.6	203.6	300.8	349.4	424.7	575.3	688.3	695.7
115°	118.6	129.8	141.2	144.0	205.4	287.3	328.2	400.8	545.9	654.8	665.0
117.5°	133.9	144.2	154.5	157.1	209.3	278.9	313.7	379.2	510.1	608.3	619.8
120°	142.8	152.5	162.2	164.6	212.4	276.1	307.9	367.6	487.3	577.0	588.1
122.5°	151.6	161.3	171.1	173.5	216.9	274.5	303.4	357.3	465.0	545.8	556.8
125°	165.0	173.9	182.8	185.0	222.9	273.4	298.5	344.3	435.9	504.5	514.5
127.5°	175.9	184.8	193.8	196.0	228.9	272.6	294.5	333.8	412.4	471.3	479.8
130°	181.7	191.4	201.0	203.4	233.2	273.1	292.9	327.9	397.9	450.3	458.1
132.5°	187.7	197.4	207.0	209.4	236.8	273.4	291.6	322.9	385.5	432.5	439.5
135°	196.6	205.4	214.2	216.5	240.7	273.1	289.2	315.5	367.9	407.3	413.3
137.5°	205.7	214.4	223.2	225.4	246.5	274.7	288.9	311.0	355.3	388.6	393.5
140°	213.3	221.3	229.4	231.4	250.1	275.0	287.5	306.7	345.0	373.6	378.3
142.5°	219.2	226.6	234.0	235.9	253.1	276.1	287.5	304.4	338.0	363.2	367.2
145°	228.1	234.6	241.0	242.6	257.0	276.1	285.6	299.3	326.8	347.5	350.5
147.5°	237.0	243.3	249.6	251.2	262.6	277.9	285.6	296.4	318.0	334.2	336.7
150°	242.8	248.5	254.2	255.6	265.6	278.9	285.6	294.7	313.0	326.6	328.7
152.5°	248.8	253.1	257.5	258.5	267.5	279.6	285.6	293.3	308.9	320.6	322.2
155°	257.8	261.0	264.1	264.9	271.8	281.0	285.6	291.8	304.2	313.5	314.4
157.5°	264.3	267.4	270.5	271.3	276.1	282.4	285.6	290.4	300.0	307.3	307.9
160°	268.8	271.2	273.6	274.2	278.0	283.0	285.6	289.7	298.0	304.2	304.6
162.5°	273.3	275.1	276.8	277.3	280.0	283.7	285.6	289.1	296.0	301.3	301.6
165°	278.2	279.8	281.5	281.9	283.1	284.8	285.6	288.1	293.0	296.8	297.2
167.5°	282.7	283.4	284.2	284.4	285.5	286.8	287.5	289.1	292.4	294.9	295.1
170°	285.6	286.3	287.1	287.3	287.4	287.5	287.5	289.1	292.4	294.9	294.9
172.5°	287.1	287.3	287.5	287.5	287.5	287.5	287.5	288.8	291.4	293.3	293.1
175°	289.2	289.2	289.2	289.2	288.7	287.9	287.5	288.3	289.9	291.2	291.2
177.5°	289.2	289.2	289.2	289.2	288.8	288.2	287.9	288.6	289.8	290.8	290.6
180°	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2	289.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	404.2	404.2
2.5°	431.5	428.9
5°	554.9	557.6
7.5°	747.3	746.0
10°	929.3	941.0
12.5°	1061.8	1064.4
15°	1142.5	1147.7
17.5°	1173.7	1174.9
20°	1174.9	1172.3
22.5°	1160.7	1158.1
25°	1143.7	1142.5
27.5°	1128.1	1129.5
30°	1121.6	1125.6
32.5°	1121.6	1128.1
35°	1124.2	1130.7
37.5°	1123.0	1130.7
40°	1117.7	1126.9
42.5°	1103.5	1110.0
45°	1081.4	1089.2
47.5°	1052.7	1058.0
50°	1016.4	1021.6
52.5°	970.8	972.2
55°	916.3	921.5
57.5°	857.9	859.1
60°	792.8	796.7
62.5°	723.9	723.9
65°	651.2	653.8
67.5°	575.8	582.3
70°	499.1	500.4
72.5°	423.7	423.7
75°	345.7	347.0
77.5°	271.6	271.6
80°	201.5	202.7
82.5°	139.1	141.7
85°	87.1	87.1
87.5°	40.3	36.4
90°	7.4	7.4
92.5°	29.6	23.6
95°	103.0	85.2
97.5°	246.7	212.9
100°	355.5	315.2
102.5°	462.5	428.0
105°	598.9	580.3
107.5°	688.3	692.7
110°	722.3	741.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	725.4	755.0
115°	706.2	747.3
117.5°	665.4	711.1
120°	632.5	676.8
122.5°	600.5	644.2
125°	554.8	595.2
127.5°	513.8	547.8
130°	489.5	520.9
132.5°	467.6	495.7
135°	437.5	461.7
137.5°	413.4	433.2
140°	396.8	415.4
142.5°	383.1	399.0
145°	362.6	374.6
147.5°	346.7	356.8
150°	336.8	345.0
152.5°	328.3	334.4
155°	318.5	322.6
157.5°	310.9	313.7
160°	306.2	307.9
162.5°	303.2	304.8
165°	298.8	300.5
167.5°	295.7	296.4
170°	294.9	294.9
172.5°	292.5	292.0
175°	291.2	291.2
177.5°	289.9	289.2
180°	289.2	289.2



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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	4.25	5.29	5.09	6.15	7.23	17.43	18.47	18.27	19.33	20.41
	3H	4.97	5.91	5.82	6.78	7.88	19.29	20.22	20.13	21.09	22.20
	4H	5.28	6.16	6.14	7.04	8.15	19.94	20.82	20.80	21.70	22.82
	6H	5.54	6.36	6.41	7.24	8.37	20.38	21.20	21.25	22.08	23.21
	8H	5.61	6.39	6.49	7.29	8.42	20.51	21.29	21.39	22.19	23.32
	12H	5.64	6.38	6.52	7.28	8.43	20.58	21.32	21.47	22.22	23.37
4H	2H	11.49	12.38	12.36	13.25	14.37	17.73	18.61	18.60	19.49	20.61
	3H	13.08	13.82	13.95	14.73	15.86	19.79	20.53	20.67	21.44	22.57
	4H	13.18	13.86	14.07	14.76	15.92	20.57	21.24	21.46	22.15	23.30
	6H	13.20	13.79	14.10	14.72	15.87	21.12	21.70	22.02	22.63	23.79
	8H	13.18	13.73	14.09	14.65	15.83	21.28	21.83	22.19	22.76	23.93
	12H	13.15	13.64	14.08	14.59	15.76	21.38	21.88	22.31	22.82	24.00
8H	4H	14.64	15.19	15.55	16.11	17.28	20.64	21.19	21.55	22.11	23.29
	6H	14.89	15.34	15.82	16.31	17.48	21.28	21.73	22.21	22.70	23.87
	8H	14.91	15.31	15.85	16.27	17.46	21.50	21.91	22.45	22.86	24.05
	12H	14.89	15.24	15.84	16.19	17.43	21.65	22.01	22.60	22.96	24.20
12H	4H	14.79	15.29	15.72	16.23	17.41	20.60	21.10	21.53	22.04	23.22
	6H	15.15	15.55	16.09	16.51	17.70	21.26	21.67	22.21	22.63	23.81
	8H	15.23	15.58	16.18	16.53	17.77	21.50	21.86	22.45	22.81	24.05