

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: P937674

Luminaire Tested: SQ4-FB-100U-100D-940-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937674
REPORT IS A COMBINATION OF REPORTS P933567 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-100D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

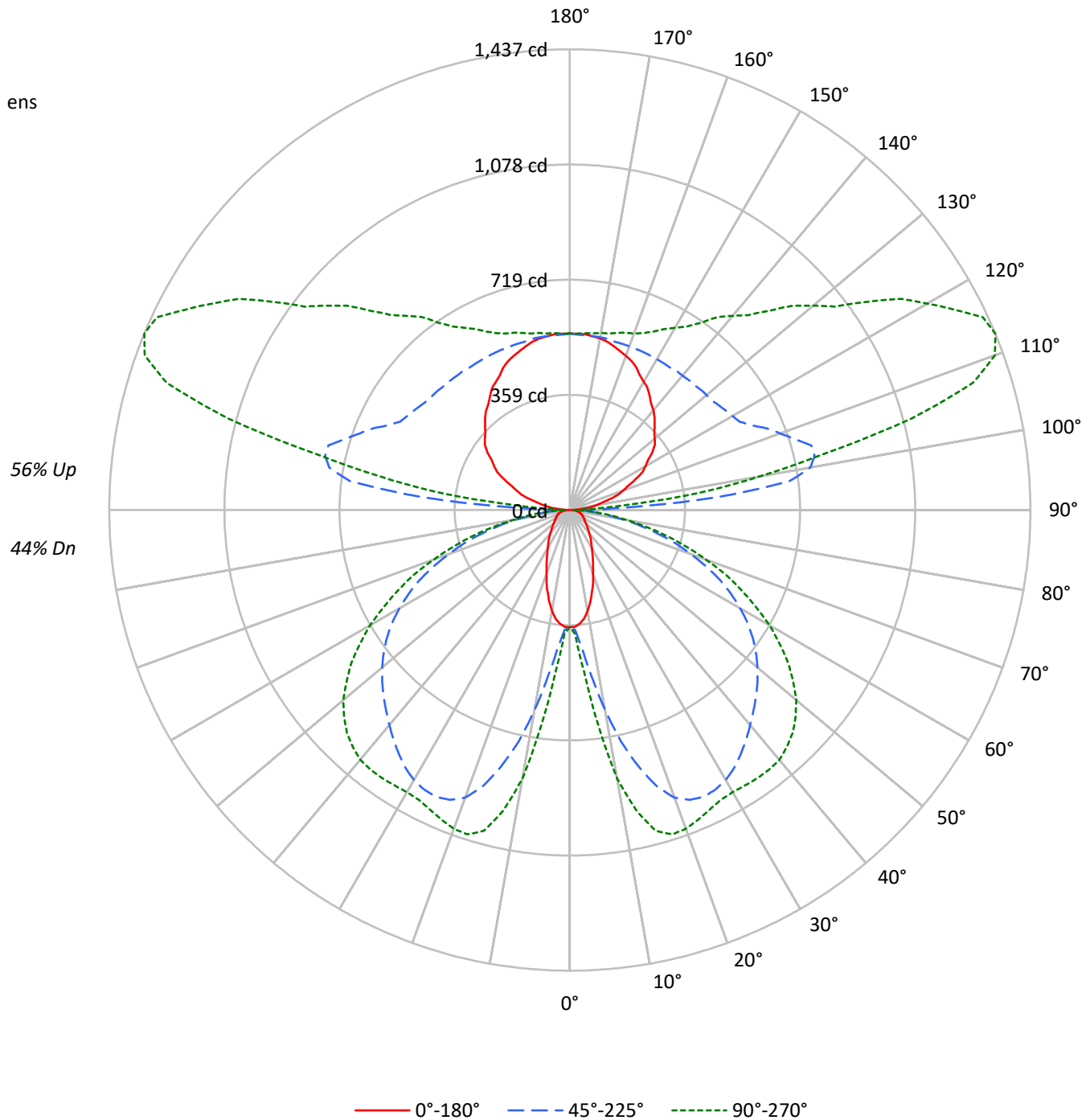
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6392.7 lumens
Efficiency: N/A
Efficacy: 110.2 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: General Diffuse

Input Watts (W): 58
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

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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44			44
1	96	91	87	84	88	84	80	77	69	67	65	56	55	53	44	43	42	36			36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	43	38	36	34	30			30
3	79	69	62	56	72	63	57	52	53	48	44	43	39	36	33	31	29	24			24
4	72	61	53	46	65	56	49	43	46	41	37	38	34	30	29	27	24	20			20
5	66	54	46	39	60	49	42	37	41	36	31	33	29	26	26	23	21	17			17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	20	18	15			15
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	21	18	16	13			13
8	51	39	31	26	47	36	29	24	30	24	20	25	20	17	19	16	14	11			11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10			10
10	44	32	25	20	41	30	23	19	25	20	16	21	16	14	16	13	11	9			9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3386	3386	3386
5°	3305	3910	4552
10°	2993	5696	7546
15°	2541	7437	9111
20°	2067	8612	9285
25°	1722	9004	9097
30°	1450	9055	9080
35°	1280	8898	9314
40°	1114	8695	9557
45°	1006	8544	9595
50°	921	8407	9436
55°	879	8210	9018
60°	897	7839	8358
65°	929	7278	7450
70°	982	6336	6293
75°	1079	5153	4912
80°	1151	3559	3309
85°	969	1879	1694

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9595 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.2	0.7
10°-20°	209.2	3.3
20°-30°	365.9	5.7
30°-40°	471.1	7.4
40°-50°	526.2	8.2
50°-60°	503.9	7.9
60°-70°	399.4	6.2
70°-80°	234.8	3.7
80°-90°	67.3	1.1
90°-100°	268.3	4.2
100°-110°	705.3	11.0
110°-120°	731.3	11.4
120°-130°	586.6	9.2
130°-140°	460.3	7.2
140°-150°	353.3	5.5
150°-160°	254.4	4.0
160°-170°	155.7	2.4
170°-180°	52.6	0.8
0°-30°	622.3	9.7
0°-40°	1093.4	17.1
0°-60°	2123.5	33.2
0°-90°	2825.1	44.2
90°-120°	1704.8	26.7
90°-150°	3105.0	48.6
90°-180°	3568.0	55.8
0°-180°	6392.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	365	365	365	365	365	
5°	356	381	429	486	503	33
15°	266	492	828	1004	1036	74
25°	170	557	987	1030	1031	78
35°	115	533	929	982	1021	72
45°	79	425	821	941	983	61
55°	56	270	697	810	832	51
65°	45	143	517	582	590	44
75°	33	88	284	312	313	34
85°	12	27	70	77	79	12
90°	4	10	28	14	14	4
95°	35	139	462	238	162	39
105°	127	192	780	1184	1104	135
115°	226	274	625	1246	1422	223
125°	314	352	568	960	1132	279
135°	374	412	550	775	879	289
145°	434	462	543	661	713	272
155°	490	504	543	596	614	225
165°	529	536	543	565	572	149
175°	550	550	547	554	554	52
180°	550	550	550	550	550	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	364.9	364.9	364.9	364.9	364.9	364.9	364.9	364.9	364.9	364.9	364.9
2.5°	364.9	364.9	367.3	368.4	370.7	372.0	374.3	376.6	383.7	384.9	387.2
5°	355.6	360.3	375.4	381.3	397.7	420.0	429.4	444.7	476.4	485.7	491.6
7.5°	341.4	352.0	389.6	399.0	440.0	498.7	523.3	556.2	606.6	631.3	651.2
10°	319.1	341.4	408.3	430.6	497.5	586.7	632.4	678.2	754.4	788.5	801.4
12.5°	294.5	330.9	428.3	458.7	555.0	685.3	740.4	790.9	877.7	923.4	930.4
15°	266.3	315.6	447.0	491.6	616.0	767.4	828.4	890.6	971.6	1004.4	1012.6
17.5°	241.7	303.9	464.6	511.6	663.0	841.3	903.5	955.1	1020.8	1043.1	1049.0
20°	211.2	285.1	476.4	537.4	712.3	895.3	955.1	995.0	1039.6	1053.7	1056.0
22.5°	188.9	265.2	483.4	546.7	745.0	928.1	978.6	1010.3	1040.7	1045.4	1046.6
25°	170.1	242.9	482.3	557.3	773.3	948.0	986.7	1010.3	1027.9	1030.2	1030.2
27.5°	152.6	218.3	477.6	559.7	794.3	952.7	983.3	999.7	1007.9	1012.6	1012.6
30°	137.3	194.7	465.8	555.0	803.7	948.0	972.7	980.9	989.1	996.2	999.7
32.5°	125.6	172.4	448.3	545.6	804.9	936.3	953.9	958.6	970.3	986.7	992.7
35°	115.0	150.2	428.3	532.7	797.9	917.6	929.3	934.0	957.4	982.1	990.3
37.5°	104.4	133.7	402.4	510.4	787.3	895.3	903.5	911.7	948.0	977.4	986.7
40°	93.9	119.7	372.0	485.7	770.9	868.3	875.3	888.3	936.3	970.3	979.7
42.5°	85.7	108.0	339.1	460.0	749.7	837.7	848.3	867.1	922.3	958.6	969.2
45°	78.6	96.2	303.9	424.7	722.7	806.1	821.3	847.2	905.8	941.0	950.4
47.5°	71.6	88.0	267.6	388.4	693.4	774.4	794.3	823.7	883.6	917.6	925.7
50°	65.7	79.8	231.1	349.7	661.7	740.4	763.9	794.3	855.4	887.0	897.6
52.5°	61.0	72.7	197.1	311.0	625.4	705.2	732.2	763.9	821.3	851.9	858.9
55°	56.3	66.9	167.8	269.9	587.9	667.6	697.0	727.4	783.8	809.6	814.3
57.5°	54.0	62.2	143.1	231.1	548.0	625.4	658.3	686.4	739.2	759.2	763.9
60°	50.4	58.7	124.4	198.3	504.6	585.5	613.7	641.8	686.4	702.9	706.3
62.5°	47.0	56.3	110.3	166.6	460.0	538.6	566.7	592.6	630.1	641.8	646.6
65°	44.6	54.0	99.7	143.1	414.2	489.3	517.4	539.7	570.3	582.0	584.3
67.5°	42.3	51.6	91.6	123.2	368.4	440.0	461.1	482.3	505.7	517.4	518.6
70°	38.7	49.3	84.4	109.1	321.5	383.7	401.3	423.6	442.3	448.3	451.7
72.5°	36.4	45.7	79.8	98.6	273.4	329.7	346.1	359.0	375.4	381.3	381.3
75°	32.9	41.0	75.1	88.0	224.1	269.9	284.0	296.9	309.7	312.1	308.6
77.5°	29.3	36.4	64.6	73.9	174.8	213.6	225.3	232.3	242.9	245.3	246.4
80°	24.6	31.7	50.4	57.5	126.7	157.3	165.4	171.3	180.7	180.7	183.0
82.5°	18.7	24.6	36.4	41.0	85.7	108.0	115.0	118.5	124.4	124.4	124.4
85°	11.7	15.3	23.4	27.0	51.6	65.7	70.4	71.6	76.3	77.4	77.4
87.5°	5.9	8.2	15.3	16.4	27.0	34.0	34.0	36.4	36.4	35.2	34.0
90°	3.7	6.7	9.6	10.3	16.3	24.2	28.1	25.0	18.7	14.0	14.0
92.5°	14.7	39.9	65.0	71.3	100.3	138.8	158.1	138.5	99.5	70.2	67.4
95°	35.4	81.4	127.4	138.9	246.6	390.2	462.0	412.3	312.8	238.3	229.8
97.5°	61.3	101.9	142.4	152.6	332.2	571.7	691.4	660.0	597.1	549.9	533.9
100°	81.3	118.0	154.8	164.0	363.4	629.1	762.0	764.3	768.8	772.3	753.1
102.5°	98.2	132.6	166.9	175.5	377.7	647.2	782.0	822.0	902.1	962.1	945.7
105°	127.1	156.1	185.1	192.4	388.2	649.2	779.8	869.5	1049.1	1183.8	1175.0
107.5°	156.6	183.7	210.8	217.6	390.2	620.3	735.4	860.6	1111.2	1299.1	1301.2
110°	176.5	201.0	225.5	231.6	387.2	594.7	698.4	838.4	1118.5	1328.5	1337.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	196.2	219.4	242.7	248.6	387.3	572.3	664.8	808.2	1094.7	1309.7	1323.8
115°	225.6	247.1	268.6	274.0	390.9	546.7	624.6	762.7	1038.8	1245.9	1265.4
117.5°	254.9	274.4	293.9	298.8	398.2	530.7	596.9	721.5	970.7	1157.6	1179.3
120°	271.8	290.2	308.6	313.2	404.0	525.3	585.8	699.7	927.3	1098.1	1119.2
122.5°	288.5	307.1	325.6	330.2	412.6	522.4	577.3	679.8	884.8	1038.6	1059.4
125°	314.0	330.9	347.7	352.0	424.0	520.0	568.1	655.2	829.3	959.9	979.1
127.5°	334.6	351.6	368.8	373.0	435.5	518.7	560.3	635.1	784.6	896.8	913.0
130°	345.7	364.1	382.5	387.1	443.8	519.6	557.4	624.0	757.1	856.9	871.8
132.5°	357.2	375.5	393.9	398.5	450.6	520.0	554.7	614.3	733.5	822.9	836.3
135°	374.2	390.9	407.7	411.9	458.0	519.6	550.4	600.3	700.0	774.9	786.4
137.5°	391.5	408.1	424.6	428.8	469.0	522.8	549.6	591.8	676.1	739.4	748.9
140°	405.9	421.2	436.5	440.3	475.9	523.3	547.0	583.4	656.3	711.0	719.8
142.5°	417.0	431.1	445.2	448.8	481.6	525.2	547.0	579.0	643.0	691.0	698.7
145°	434.0	446.3	458.6	461.7	488.9	525.3	543.4	569.6	621.9	661.1	666.9
147.5°	451.0	463.0	474.9	477.9	499.8	528.8	543.4	564.0	605.2	636.1	640.9
150°	462.0	472.9	483.7	486.4	505.4	530.8	543.4	560.8	595.5	621.6	625.4
152.5°	473.5	481.7	489.9	492.0	509.1	531.9	543.4	558.2	587.9	610.1	613.1
155°	490.5	496.6	502.7	504.2	517.3	534.7	543.4	555.2	578.8	596.5	598.4
157.5°	503.1	509.0	514.9	516.4	525.3	537.3	543.4	552.5	570.9	584.7	586.0
160°	511.6	516.2	520.7	521.9	529.1	538.6	543.4	551.3	567.0	578.8	579.6
162.5°	520.0	523.5	526.9	527.8	533.0	539.9	543.4	550.0	563.3	573.2	573.9
165°	529.2	532.4	535.5	536.3	538.7	541.8	543.4	548.2	557.7	564.8	565.6
167.5°	537.8	539.3	540.8	541.1	543.1	545.7	547.0	550.1	556.3	561.0	561.4
170°	543.4	544.8	546.3	546.7	546.7	546.9	547.0	550.1	556.3	561.0	561.0
172.5°	546.3	546.7	546.9	547.0	547.0	547.0	547.0	549.5	554.4	558.1	557.8
175°	550.4	550.4	550.4	550.4	549.2	547.7	547.0	548.6	551.7	554.0	554.0
177.5°	550.4	550.4	550.4	550.4	549.5	548.3	547.7	549.0	551.4	553.3	553.0
180°	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	364.9	364.9
2.5°	389.6	387.2
5°	501.0	503.4
7.5°	674.7	673.5
10°	839.0	849.5
12.5°	958.6	961.0
15°	1031.4	1036.0
17.5°	1059.6	1060.7
20°	1060.7	1058.3
22.5°	1047.8	1045.4
25°	1032.6	1031.4
27.5°	1018.4	1019.6
30°	1012.6	1016.1
32.5°	1012.6	1018.4
35°	1015.0	1020.8
37.5°	1013.7	1020.8
40°	1009.1	1017.3
42.5°	996.2	1002.0
45°	976.3	983.3
47.5°	950.4	955.1
50°	917.6	922.3
52.5°	876.5	877.7
55°	827.2	831.9
57.5°	774.4	775.6
60°	715.7	719.3
62.5°	653.6	653.6
65°	587.9	590.2
67.5°	519.8	525.7
70°	450.6	451.7
72.5°	382.6	382.6
75°	312.1	313.3
77.5°	245.3	245.3
80°	181.9	183.0
82.5°	125.6	127.9
85°	78.6	78.6
87.5°	36.4	32.9
90°	14.0	14.0
92.5°	56.2	45.0
95°	196.0	162.1
97.5°	469.5	405.2
100°	676.5	599.8
102.5°	880.1	814.5
105°	1139.7	1104.4
107.5°	1309.7	1318.2
110°	1374.5	1411.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1380.3	1436.8
115°	1343.7	1422.0
117.5°	1266.1	1353.0
120°	1203.6	1288.0
122.5°	1142.7	1225.9
125°	1055.7	1132.5
127.5°	977.7	1042.3
130°	931.6	991.4
132.5°	889.8	943.3
135°	832.5	878.7
137.5°	786.7	824.4
140°	755.2	790.4
142.5°	729.0	759.4
145°	689.9	712.9
147.5°	659.9	678.9
150°	640.9	656.3
152.5°	624.7	636.4
155°	606.1	613.9
157.5°	591.5	596.9
160°	582.7	585.8
162.5°	576.9	579.9
165°	568.7	571.8
167.5°	562.6	564.0
170°	561.0	561.0
172.5°	556.7	555.5
175°	554.0	554.0
177.5°	551.7	550.4
180°	550.4	550.4



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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	4.67	5.52	5.67	6.53	7.88	17.81	18.66	18.81	19.67	21.02
	3H	5.38	6.14	6.39	7.16	8.53	19.64	20.39	20.64	21.42	22.79
	4H	5.67	6.39	6.70	7.42	8.80	20.27	20.99	21.29	22.02	23.39
	6H	5.92	6.59	6.96	7.62	9.01	20.69	21.35	21.72	22.38	23.77
	8H	5.99	6.62	7.03	7.67	9.06	20.80	21.43	21.84	22.48	23.87
	12H	6.01	6.61	7.05	7.65	9.06	20.86	21.46	21.90	22.50	23.91
4H	2H	11.86	12.58	12.89	13.61	14.98	18.09	18.81	19.11	19.83	21.21
	3H	13.43	14.03	14.47	15.09	16.48	20.12	20.72	21.15	21.77	23.16
	4H	13.52	14.08	14.57	15.12	16.54	20.87	21.42	21.92	22.47	23.88
	6H	13.54	14.01	14.59	15.08	16.49	21.40	21.87	22.45	22.94	24.35
	8H	13.51	13.96	14.57	15.02	16.44	21.55	22.00	22.61	23.06	24.48
	12H	13.47	13.87	14.54	14.95	16.38	21.64	22.04	22.71	23.12	24.54
8H	4H	14.96	15.40	16.01	16.46	17.89	20.93	21.38	21.99	22.44	23.86
	6H	15.20	15.57	16.28	16.67	18.09	21.55	21.92	22.63	23.02	24.44
	8H	15.22	15.54	16.30	16.63	18.07	21.76	22.08	22.85	23.17	24.61
	12H	15.19	15.47	16.28	16.55	18.03	21.89	22.18	22.98	23.26	24.74
12H	4H	15.10	15.50	16.17	16.58	18.01	20.88	21.29	21.96	22.36	23.79
	6H	15.45	15.78	16.54	16.87	18.31	21.53	21.85	22.62	22.94	24.38
	8H	15.52	15.81	16.61	16.89	18.37	21.75	22.04	22.84	23.12	24.60