

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: P937535

Luminaire Tested: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937535
REPORT IS A COMBINATION OF REPORTS P933566 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

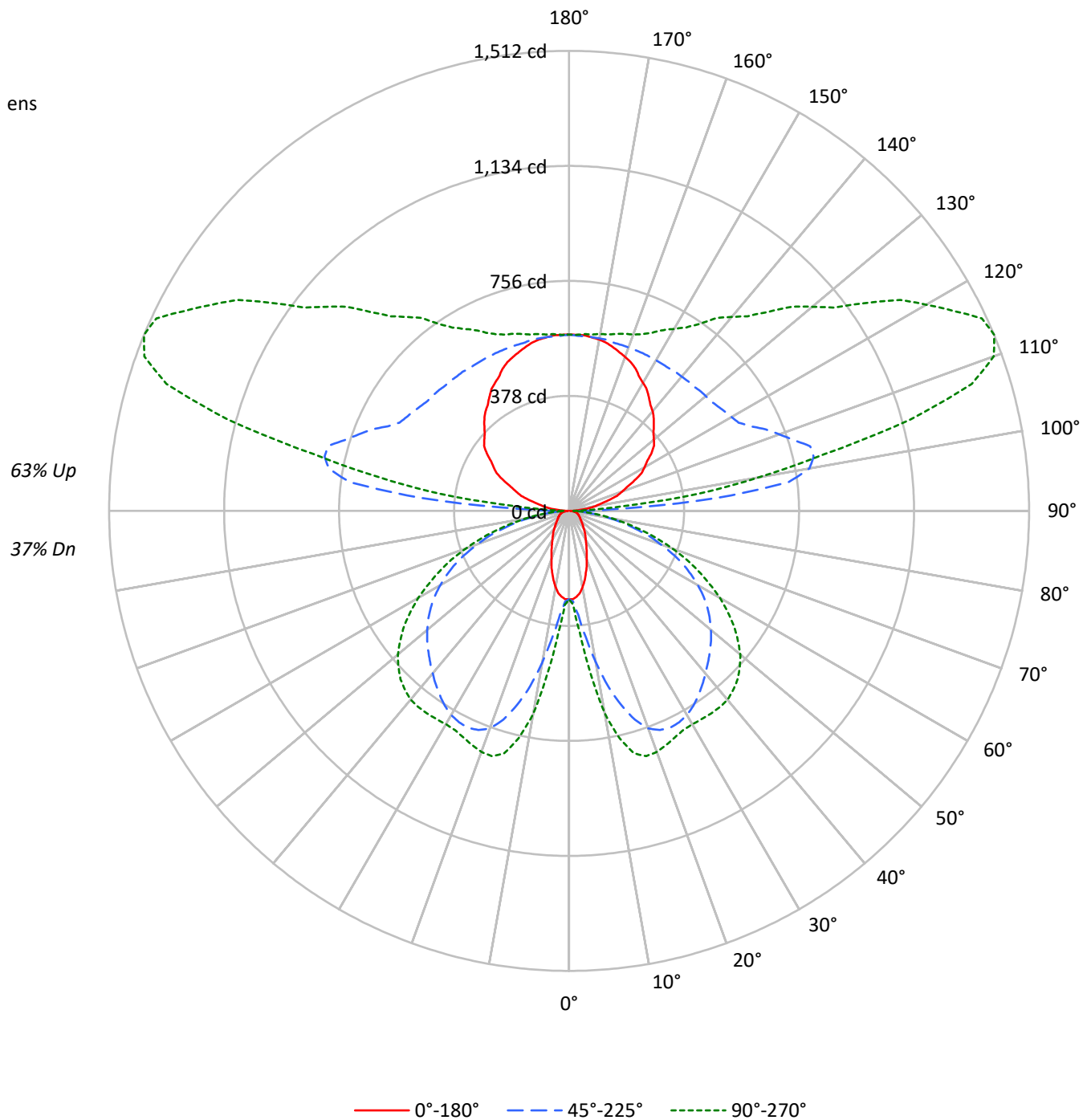
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6006.3 lumens
Efficiency: N/A
Efficacy: 122.1 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-Indirect

Input Watts (W): 49.2
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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CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-4-5000K

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	50	30	10	0
RCR																					
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37			37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31			31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25			25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21			21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17			17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15			15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13			13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11			11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10			10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9			9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8			8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2697	2697	2697
5°	2632	3115	3626
10°	2385	4538	6011
15°	2025	5924	7258
20°	1646	6861	7397
25°	1371	7174	7247
30°	1156	7214	7233
35°	1020	7088	7420
40°	887	6927	7614
45°	801	6806	7643
50°	733	6697	7517
55°	701	6540	7183
60°	715	6245	6658
65°	740	5799	5935
70°	782	5047	5014
75°	859	4104	3913
80°	917	2836	2636
85°	770	1497	1349

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7643 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.6	0.6
10°-20°	166.7	2.8
20°-30°	291.5	4.9
30°-40°	375.3	6.2
40°-50°	419.1	7.0
50°-60°	401.4	6.7
60°-70°	318.1	5.3
70°-80°	187.1	3.1
80°-90°	54.2	0.9
90°-100°	282.4	4.7
100°-110°	742.4	12.4
110°-120°	769.8	12.8
120°-130°	617.4	10.3
130°-140°	484.5	8.1
140°-150°	371.9	6.2
150°-160°	267.8	4.5
160°-170°	163.9	2.7
170°-180°	55.4	0.9
0°-30°	495.8	8.3
0°-40°	871.0	14.5
0°-60°	1691.6	28.2
0°-90°	2251.0	37.5
90°-120°	1794.5	29.9
90°-150°	3268.3	54.4
90°-180°	3755.0	62.5
0°-180°	6006.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	291	291	291	291	291	
5°	283	304	342	387	401	26
15°	212	392	660	800	825	59
25°	136	444	786	821	822	62
35°	92	424	740	782	813	57
45°	63	338	654	750	783	48
55°	45	215	555	645	663	41
65°	36	114	412	464	470	35
75°	26	70	226	249	250	27
85°	9	22	56	62	63	10
90°	4	11	30	15	15	4
95°	37	146	486	251	171	41
105°	134	203	821	1246	1162	142
115°	238	288	658	1311	1497	235
125°	330	370	598	1010	1192	293
135°	394	434	579	816	925	305
145°	457	486	572	696	750	286
155°	516	531	572	628	646	237
165°	557	564	572	594	602	157
175°	579	579	576	583	583	55
180°	579	579	579	579	579	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	290.7	290.7	290.7	290.7	290.7	290.7	290.7	290.7	290.7	290.7	290.7
2.5°	290.7	290.7	292.6	293.5	295.4	296.3	298.2	300.0	305.6	306.6	308.5
5°	283.2	287.0	299.1	303.8	316.9	334.6	342.1	354.3	379.5	387.0	391.6
7.5°	272.0	280.4	310.3	317.8	350.5	397.3	416.9	443.1	483.2	502.9	518.8
10°	254.2	272.0	325.3	343.0	396.3	467.4	503.8	540.3	601.0	628.1	638.4
12.5°	234.6	263.6	341.2	365.5	442.1	545.9	589.8	630.0	699.2	735.6	741.2
15°	212.2	251.4	356.1	391.6	490.7	611.3	659.9	709.4	773.9	800.1	806.7
17.5°	192.5	242.1	370.1	407.5	528.1	670.2	719.7	760.9	813.2	831.0	835.6
20°	168.2	227.1	379.5	428.1	567.4	713.2	760.9	792.6	828.1	839.4	841.2
22.5°	150.5	211.2	385.1	435.6	593.5	739.4	779.5	804.8	829.1	832.8	833.8
25°	135.5	193.5	384.2	444.0	616.0	755.2	786.1	804.8	818.8	820.7	820.7
27.5°	121.5	173.9	380.4	445.9	632.8	759.0	783.3	796.4	802.9	806.7	806.7
30°	109.4	155.2	371.1	442.1	640.3	755.2	774.9	781.4	788.0	793.6	796.4
32.5°	100.0	137.4	357.1	434.6	641.2	745.9	759.9	763.7	773.0	786.1	790.8
35°	91.6	119.6	341.2	424.4	635.6	730.9	740.3	744.0	762.7	782.3	788.9
37.5°	83.2	106.6	320.6	406.6	627.2	713.2	719.7	726.3	755.2	778.6	786.1
40°	74.8	95.3	296.3	387.0	614.1	691.7	697.3	707.6	745.9	773.0	780.5
42.5°	68.2	86.0	270.1	366.4	597.3	667.4	675.8	690.7	734.7	763.7	772.1
45°	62.6	76.6	242.1	338.4	575.8	642.1	654.3	674.9	721.6	749.6	757.1
47.5°	57.0	70.1	213.1	309.4	552.4	616.9	632.8	656.2	703.8	730.9	737.5
50°	52.3	63.6	184.1	278.5	527.2	589.8	608.5	632.8	681.4	706.6	715.1
52.5°	48.6	58.0	157.0	247.7	498.2	561.8	583.3	608.5	654.3	678.6	684.2
55°	44.9	53.3	133.7	215.0	468.3	531.8	555.2	579.5	624.4	644.9	648.7
57.5°	43.0	49.5	114.0	184.1	436.5	498.2	524.4	546.8	588.9	604.8	608.5
60°	40.2	46.7	99.1	158.0	401.9	466.4	488.9	511.3	546.8	559.9	562.7
62.5°	37.4	44.9	87.9	132.7	366.4	429.0	451.5	472.0	501.9	511.3	515.0
65°	35.5	43.0	79.5	114.0	330.0	389.8	412.2	430.0	454.3	463.6	465.5
67.5°	33.6	41.1	72.9	98.1	293.5	350.5	367.3	384.2	402.9	412.2	413.1
70°	30.8	39.3	67.3	86.9	256.1	305.6	319.7	337.4	352.4	357.1	359.9
72.5°	29.0	36.5	63.6	78.5	217.8	262.7	275.7	286.0	299.1	303.8	303.8
75°	26.2	32.7	59.8	70.1	178.5	215.0	226.2	236.5	246.8	248.6	245.8
77.5°	23.4	29.0	51.4	58.9	139.3	170.1	179.5	185.1	193.5	195.4	196.3
80°	19.6	25.2	40.2	45.8	100.9	125.3	131.8	136.5	143.9	143.9	145.8
82.5°	15.0	19.6	29.0	32.7	68.2	86.0	91.6	94.4	99.1	99.1	99.1
85°	9.3	12.2	18.7	21.5	41.1	52.3	56.1	57.0	60.8	61.7	61.7
87.5°	4.7	6.5	12.2	13.1	21.5	27.1	27.1	29.0	29.0	28.0	27.1
90°	3.9	7.0	10.1	10.8	17.1	25.4	29.5	26.3	19.7	14.8	14.8
92.5°	15.5	42.0	68.4	75.1	105.5	146.1	166.4	145.8	104.7	73.8	70.9
95°	37.3	85.7	134.1	146.2	259.6	410.7	486.3	434.0	329.3	250.8	241.9
97.5°	64.5	107.2	149.9	160.6	349.7	601.8	727.8	694.7	628.5	578.9	561.9
100°	85.5	124.2	162.9	172.6	382.5	662.2	802.1	804.5	809.3	812.9	792.7
102.5°	103.4	139.6	175.6	184.7	397.5	681.2	823.1	865.3	949.6	1012.8	995.5
105°	133.8	164.3	194.9	202.6	408.7	683.4	820.8	915.3	1104.3	1246.1	1236.8
107.5°	164.9	193.4	221.9	229.0	410.7	652.9	774.0	905.9	1169.6	1367.4	1369.6
110°	185.8	211.6	237.3	243.8	407.5	626.0	735.1	882.5	1177.4	1398.4	1408.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	206.5	231.0	255.5	261.6	407.7	602.4	699.8	850.7	1152.3	1378.6	1393.5
115°	237.5	260.1	282.7	288.5	411.5	575.5	657.5	802.8	1093.4	1311.4	1332.0
117.5°	268.3	288.8	309.4	314.5	419.1	558.6	628.3	759.4	1021.7	1218.5	1241.3
120°	286.1	305.5	324.8	329.7	425.3	552.9	616.6	736.5	976.1	1155.9	1178.1
122.5°	303.7	323.2	342.8	347.6	434.3	549.9	607.7	715.5	931.3	1093.2	1115.1
125°	330.5	348.3	366.0	370.5	446.3	547.4	597.9	689.6	872.9	1010.4	1030.6
127.5°	352.2	370.1	388.2	392.7	458.4	546.0	589.8	668.5	825.9	944.0	961.0
130°	363.9	383.2	402.6	407.4	467.2	546.9	586.7	656.8	796.9	902.0	917.7
132.5°	375.9	395.3	414.6	419.5	474.3	547.4	583.9	646.6	772.1	866.2	880.3
135°	393.9	411.5	429.1	433.5	482.1	546.9	579.3	631.9	736.8	815.6	827.8
137.5°	412.1	429.6	447.0	451.4	493.7	550.3	578.5	622.9	711.7	778.3	788.2
140°	427.3	443.3	459.4	463.4	500.9	550.8	575.8	614.1	690.8	748.4	757.7
142.5°	438.9	453.8	468.7	472.4	506.9	552.8	575.8	609.4	676.8	727.4	735.4
145°	456.8	469.8	482.7	486.0	514.6	552.9	571.9	599.5	654.6	695.9	702.0
147.5°	474.7	487.4	499.9	503.1	526.1	556.6	571.9	593.6	637.0	669.5	674.6
150°	486.3	497.7	509.1	512.0	532.0	558.7	571.9	590.3	626.8	654.3	658.3
152.5°	498.4	507.0	515.7	517.8	535.9	559.9	571.9	587.6	618.8	642.2	645.3
155°	516.3	522.7	529.1	530.7	544.5	562.8	571.9	584.4	609.2	627.8	629.9
157.5°	529.5	535.8	541.9	543.5	553.0	565.6	571.9	581.6	600.9	615.4	616.8
160°	538.5	543.3	548.1	549.3	556.9	566.9	571.9	580.3	596.8	609.2	610.1
162.5°	547.4	551.0	554.7	555.6	561.0	568.3	571.9	579.0	592.9	603.4	604.1
165°	557.1	560.4	563.6	564.5	567.0	570.3	571.9	577.0	587.0	594.5	595.3
167.5°	566.1	567.6	569.2	569.6	571.7	574.4	575.8	579.1	585.6	590.5	590.9
170°	571.9	573.4	575.0	575.4	575.5	575.7	575.8	579.1	585.6	590.5	590.5
172.5°	575.0	575.4	575.7	575.8	575.8	575.8	575.8	578.4	583.5	587.5	587.2
175°	579.3	579.3	579.3	579.3	578.1	576.5	575.8	577.5	580.7	583.2	583.2
177.5°	579.3	579.3	579.3	579.3	578.4	577.2	576.5	577.8	580.5	582.4	582.0
180°	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	290.7	290.7
2.5°	310.3	308.5
5°	399.1	401.0
7.5°	537.5	536.5
10°	668.3	676.7
12.5°	763.7	765.5
15°	821.6	825.3
17.5°	844.0	845.0
20°	845.0	843.1
22.5°	834.7	832.8
25°	822.5	821.6
27.5°	811.3	812.3
30°	806.7	809.5
32.5°	806.7	811.3
35°	808.5	813.2
37.5°	807.6	813.2
40°	803.8	810.4
42.5°	793.6	798.2
45°	777.7	783.3
47.5°	757.1	760.9
50°	730.9	734.7
52.5°	698.2	699.2
55°	659.0	662.7
57.5°	616.9	617.8
60°	570.2	573.0
62.5°	520.6	520.6
65°	468.3	470.2
67.5°	414.1	418.7
70°	358.9	359.9
72.5°	304.7	304.7
75°	248.6	249.6
77.5°	195.4	195.4
80°	144.9	145.8
82.5°	100.0	101.9
85°	62.6	62.6
87.5°	29.0	26.2
90°	14.8	14.8
92.5°	59.2	47.4
95°	206.3	170.7
97.5°	494.2	426.5
100°	712.1	631.4
102.5°	926.4	857.3
105°	1199.6	1162.5
107.5°	1378.6	1387.6
110°	1446.8	1485.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1452.9	1512.4
115°	1414.4	1496.8
117.5°	1332.7	1424.1
120°	1266.9	1355.7
122.5°	1202.8	1290.4
125°	1111.3	1192.0
127.5°	1029.1	1097.2
130°	980.6	1043.5
132.5°	936.6	992.9
135°	876.3	924.9
137.5°	828.1	867.8
140°	794.9	832.0
142.5°	767.4	799.4
145°	726.2	750.4
147.5°	694.6	714.6
150°	674.6	690.8
152.5°	657.6	669.9
155°	638.0	646.2
157.5°	622.6	628.3
160°	613.4	616.6
162.5°	607.3	610.4
165°	598.6	601.9
167.5°	592.2	593.6
170°	590.5	590.5
172.5°	586.0	584.8
175°	583.2	583.2
177.5°	580.7	579.3
180°	579.3	579.3



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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	3.17	3.95	4.22	5.01	6.45	16.31	17.10	17.36	18.15	19.59
	3H	3.87	4.57	4.93	5.64	7.10	18.13	18.83	19.19	19.90	21.36
	4H	4.17	4.83	5.24	5.91	7.37	18.76	19.43	19.83	20.50	21.96
	6H	4.41	5.03	5.49	6.10	7.58	19.17	19.79	20.26	20.86	22.34
	8H	4.48	5.07	5.56	6.16	7.62	19.29	19.87	20.37	20.96	22.43
	12H	4.49	5.05	5.58	6.14	7.63	19.34	19.90	20.44	20.99	22.48
4H	2H	10.35	11.02	11.43	12.09	13.55	16.58	17.25	17.65	18.32	19.78
	3H	11.91	12.47	13.00	13.57	15.05	18.60	19.16	19.69	20.26	21.73
	4H	12.01	12.52	13.10	13.61	15.10	19.35	19.87	20.44	20.96	22.45
	6H	12.01	12.46	13.11	13.57	15.06	19.88	20.32	20.98	21.43	22.92
	8H	11.99	12.40	13.09	13.50	15.01	20.03	20.44	21.13	21.54	23.05
	12H	11.94	12.32	13.06	13.43	14.94	20.11	20.48	21.23	21.60	23.11
8H	4H	13.43	13.85	14.54	14.95	16.46	19.41	19.82	20.51	20.92	22.43
	6H	13.67	14.02	14.80	15.16	16.66	20.02	20.36	21.14	21.51	23.01
	8H	13.69	13.99	14.82	15.12	16.64	20.23	20.53	21.36	21.66	23.18
	12H	13.66	13.92	14.79	15.04	16.60	20.36	20.63	21.50	21.75	23.31
12H	4H	13.57	13.95	14.69	15.06	16.57	19.36	19.73	20.48	20.85	22.36
	6H	13.93	14.23	15.06	15.35	16.88	20.00	20.30	21.13	21.43	22.95
	8H	13.99	14.26	15.13	15.38	16.94	20.22	20.49	21.36	21.61	23.17