

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: P936650

Luminaire Tested: SQ4-FB-050U-050D-930-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936650
REPORT IS A COMBINATION OF REPORTS P933469 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

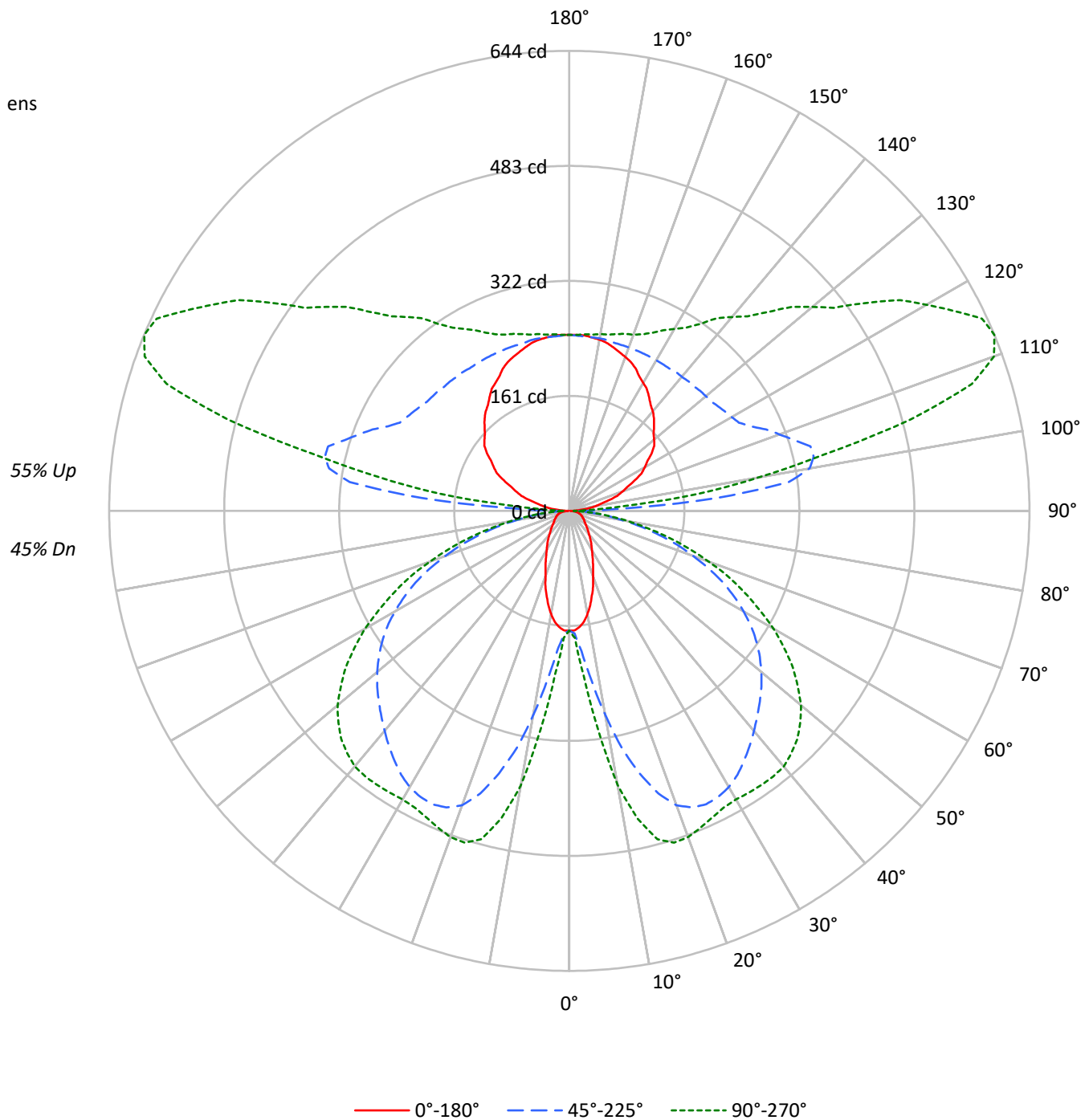
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2895.6 lumens
Efficiency: N/A
Efficacy: 102.0 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): 28.4
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45	45	45	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42	37	37	37	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	18	18	18	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1554	1554	1554
5°	1517	1795	2090
10°	1374	2616	3464
15°	1167	3414	4183
20°	949	3954	4263
25°	790	4135	4176
30°	665	4157	4169
35°	588	4085	4276
40°	511	3992	4387
45°	462	3923	4405
50°	423	3860	4332
55°	405	3769	4140
60°	411	3599	3837
65°	427	3341	3419
70°	449	2908	2889
75°	495	2364	2254
80°	529	1636	1521
85°	447	865	778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4405 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.7	0.7
10°-20°	96.0	3.3
20°-30°	168.0	5.8
30°-40°	216.3	7.5
40°-50°	241.6	8.3
50°-60°	231.4	8.0
60°-70°	183.4	6.3
70°-80°	107.8	3.7
80°-90°	30.9	1.1
90°-100°	120.2	4.2
100°-110°	316.0	10.9
110°-120°	327.7	11.3
120°-130°	262.9	9.1
130°-140°	206.2	7.1
140°-150°	158.3	5.5
150°-160°	114.0	3.9
160°-170°	69.8	2.4
170°-180°	23.6	0.8
0°-30°	285.7	9.9
0°-40°	502.0	17.3
0°-60°	974.9	33.7
0°-90°	1297.0	44.8
90°-120°	763.9	26.4
90°-150°	1391.3	48.0
90°-180°	1599.0	55.2
0°-180°	2895.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	168	168	168	168	168	
5°	163	175	197	223	231	15
15°	122	226	380	461	476	34
25°	78	256	453	473	474	36
35°	53	245	427	451	469	33
45°	36	195	377	432	451	28
55°	26	124	320	372	382	24
65°	20	66	238	267	271	20
75°	15	40	130	143	144	16
85°	5	12	32	36	36	6
90°	2	5	13	6	6	2
95°	16	62	207	107	73	18
105°	57	86	349	530	495	60
115°	101	123	280	558	637	100
125°	141	158	255	430	507	125
135°	168	184	247	347	394	130
145°	194	207	244	296	319	122
155°	220	226	244	267	275	101
165°	237	240	244	253	256	67
175°	247	247	245	248	248	23
180°	247	247	247	247	247	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5
2.5°	167.5	167.5	168.6	169.1	170.2	170.8	171.8	172.9	176.2	176.7	177.8
5°	163.2	165.4	172.4	175.1	182.6	192.9	197.1	204.2	218.7	223.0	225.7
7.5°	156.7	161.6	178.8	183.2	202.0	228.9	240.3	255.4	278.5	289.8	299.0
10°	146.5	156.7	187.5	197.7	228.4	269.3	290.4	311.4	346.4	362.0	367.9
12.5°	135.2	151.9	196.7	210.6	254.8	314.6	339.9	363.1	402.9	424.0	427.2
15°	122.3	144.9	205.2	225.7	282.8	352.3	380.3	408.9	446.1	461.1	464.9
17.5°	111.0	139.6	213.4	234.9	304.3	386.2	414.8	438.5	468.6	478.9	481.6
20°	97.0	130.9	218.7	246.8	327.0	411.1	438.5	456.8	477.3	483.7	484.9
22.5°	86.7	121.7	221.9	251.0	342.1	426.1	449.3	463.8	477.8	480.0	480.5
25°	78.1	111.5	221.4	255.9	355.0	435.2	453.1	463.8	471.9	473.0	473.0
27.5°	70.0	100.2	219.2	257.0	364.7	437.4	451.4	459.0	462.8	464.9	464.9
30°	63.0	89.5	213.8	254.8	369.0	435.2	446.5	450.3	454.1	457.4	459.0
32.5°	57.7	79.2	205.8	250.5	369.5	429.8	438.0	440.1	445.5	453.1	455.7
35°	52.8	69.0	196.7	244.6	366.3	421.3	426.6	428.8	439.6	450.9	454.7
37.5°	47.9	61.4	184.8	234.3	361.4	411.1	414.8	418.6	435.2	448.7	453.1
40°	43.1	54.9	170.8	223.0	354.0	398.6	401.9	407.8	429.8	445.5	449.8
42.5°	39.3	49.5	155.7	211.2	344.2	384.6	389.5	398.1	423.4	440.1	444.9
45°	36.1	44.2	139.6	195.0	331.8	370.1	377.1	389.0	415.9	432.0	436.4
47.5°	32.8	40.4	122.9	178.3	318.4	355.6	364.7	378.1	405.7	421.3	425.0
50°	30.2	36.6	106.2	160.5	303.9	339.9	350.7	364.7	392.7	407.3	412.1
52.5°	28.0	33.4	90.5	142.8	287.2	323.8	336.1	350.7	377.1	391.1	394.4
55°	25.9	30.7	77.0	123.9	269.9	306.5	320.0	334.0	359.8	371.7	373.9
57.5°	24.8	28.6	65.7	106.2	251.6	287.2	302.2	315.1	339.3	348.5	350.7
60°	23.1	26.9	57.1	91.1	231.7	268.8	281.8	294.7	315.1	322.6	324.3
62.5°	21.5	25.9	50.7	76.5	211.2	247.2	260.2	272.1	289.2	294.7	296.8
65°	20.5	24.8	45.8	65.7	190.2	224.6	237.5	247.8	261.8	267.2	268.3
67.5°	19.4	23.7	42.0	56.5	169.1	202.0	211.7	221.4	232.1	237.5	238.1
70°	17.7	22.6	38.8	50.1	147.6	176.2	184.2	194.5	203.1	205.8	207.4
72.5°	16.7	21.0	36.6	45.3	125.5	151.4	158.9	164.9	172.4	175.1	175.1
75°	15.1	18.9	34.4	40.4	102.9	123.9	130.3	136.3	142.2	143.3	141.6
77.5°	13.5	16.7	29.6	34.0	80.3	98.0	103.4	106.6	111.5	112.6	113.1
80°	11.3	14.5	23.1	26.4	58.2	72.2	76.0	78.6	82.9	82.9	84.1
82.5°	8.6	11.3	16.7	18.9	39.3	49.5	52.8	54.4	57.1	57.1	57.1
85°	5.4	7.0	10.8	12.4	23.7	30.2	32.4	32.8	35.0	35.6	35.6
87.5°	2.7	3.8	7.0	7.5	12.4	15.7	15.7	16.7	16.7	16.1	15.7
90°	1.7	3.0	4.3	4.7	7.3	10.8	12.6	11.2	8.4	6.3	6.3
92.5°	6.6	17.8	29.1	32.0	44.9	62.2	70.8	62.1	44.6	31.5	30.2
95°	15.9	36.5	57.1	62.2	110.5	174.8	207.0	184.7	140.1	106.7	102.9
97.5°	27.5	45.6	63.8	68.3	148.8	256.2	309.8	295.7	267.6	246.4	239.2
100°	36.4	52.8	69.4	73.5	162.8	281.9	341.4	342.5	344.6	346.1	337.5
102.5°	44.0	59.4	74.8	78.6	169.2	290.0	350.3	368.3	404.2	431.1	423.7
105°	56.9	69.9	82.9	86.2	173.9	290.9	349.4	389.6	470.1	530.5	526.5
107.5°	70.2	82.3	94.4	97.5	174.8	278.0	329.6	385.7	497.9	582.1	583.1
110°	79.1	90.0	101.0	103.7	173.5	266.5	313.0	375.7	501.2	595.3	599.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	87.8	98.3	108.7	111.4	173.5	256.5	297.9	362.2	490.6	586.9	593.3
115°	101.1	110.7	120.4	122.8	175.1	244.9	279.8	341.7	465.4	558.2	567.0
117.5°	114.2	122.9	131.7	133.9	178.4	237.8	267.5	323.3	434.9	518.7	528.4
120°	121.8	130.1	138.3	140.4	181.1	235.4	262.5	313.5	415.6	492.1	501.6
122.5°	129.3	137.6	145.9	148.0	184.9	234.1	258.6	304.6	396.5	465.4	474.7
125°	140.7	148.2	155.8	157.7	190.0	233.0	254.6	293.6	371.6	430.2	438.8
127.5°	149.9	157.6	165.3	167.2	195.1	232.5	251.1	284.6	351.6	401.8	409.0
130°	154.9	163.2	171.4	173.4	198.9	232.8	249.7	279.6	339.3	384.0	390.7
132.5°	160.0	168.3	176.5	178.6	202.0	233.0	248.6	275.3	328.7	368.7	374.8
135°	167.7	175.1	182.7	184.5	205.2	232.8	246.6	268.9	313.7	347.2	352.4
137.5°	175.5	182.8	190.3	192.2	210.2	234.2	246.3	265.2	303.0	331.3	335.6
140°	181.9	188.7	195.6	197.3	213.2	234.5	245.1	261.5	294.1	318.6	322.6
142.5°	186.9	193.2	199.5	201.1	215.8	235.3	245.1	259.4	288.1	309.6	313.0
145°	194.5	199.9	205.5	206.9	219.1	235.4	243.5	255.2	278.6	296.2	298.8
147.5°	202.1	207.5	212.8	214.2	224.0	237.0	243.5	252.7	271.2	285.0	287.2
150°	207.0	211.8	216.7	217.9	226.4	237.8	243.5	251.3	266.8	278.6	280.3
152.5°	212.2	215.8	219.5	220.4	228.1	238.3	243.5	250.1	263.5	273.4	274.7
155°	219.8	222.5	225.2	225.9	231.7	239.5	243.5	248.8	259.4	267.3	268.2
157.5°	225.4	228.1	230.7	231.3	235.4	240.7	243.5	247.6	255.8	262.0	262.7
160°	229.3	231.3	233.4	233.8	237.0	241.3	243.5	247.0	254.1	259.4	259.7
162.5°	233.0	234.6	236.1	236.5	238.8	241.9	243.5	246.4	252.4	256.9	257.2
165°	237.2	238.6	240.0	240.3	241.4	242.7	243.5	245.6	249.8	253.0	253.3
167.5°	241.0	241.6	242.3	242.4	243.3	244.5	245.1	246.5	249.3	251.4	251.6
170°	243.5	244.1	244.8	244.9	245.0	245.1	245.1	246.5	249.3	251.4	251.4
172.5°	244.8	244.9	245.1	245.1	245.1	245.1	245.1	246.2	248.4	250.1	249.9
175°	246.6	246.6	246.6	246.6	246.1	245.4	245.1	245.8	247.2	248.3	248.3
177.5°	246.6	246.6	246.6	246.6	246.2	245.7	245.5	246.0	247.2	248.0	247.8
180°	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	167.5	167.5
2.5°	178.8	177.8
5°	230.1	231.1
7.5°	309.7	309.2
10°	385.2	390.0
12.5°	440.1	441.2
15°	473.5	475.7
17.5°	486.5	487.0
20°	487.0	485.9
22.5°	481.1	480.0
25°	474.1	473.5
27.5°	467.6	468.1
30°	464.9	466.5
32.5°	464.9	467.6
35°	466.0	468.6
37.5°	465.4	468.6
40°	463.3	467.0
42.5°	457.4	460.0
45°	448.2	451.4
47.5°	436.4	438.5
50°	421.3	423.4
52.5°	402.4	402.9
55°	379.8	381.9
57.5°	355.6	356.1
60°	328.6	330.2
62.5°	300.1	300.1
65°	269.9	270.9
67.5°	238.7	241.3
70°	206.9	207.4
72.5°	175.6	175.6
75°	143.3	143.8
77.5°	112.6	112.6
80°	83.5	84.1
82.5°	57.7	58.7
85°	36.1	36.1
87.5°	16.7	15.1
90°	6.3	6.3
92.5°	25.2	20.2
95°	87.8	72.7
97.5°	210.4	181.6
100°	303.1	268.8
102.5°	394.4	365.0
105°	510.7	494.9
107.5°	586.8	590.7
110°	615.9	632.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	618.6	643.8
115°	602.1	637.2
117.5°	567.3	606.3
120°	539.3	577.1
122.5°	512.1	549.3
125°	473.0	507.4
127.5°	438.0	467.0
130°	417.5	444.2
132.5°	398.7	422.7
135°	373.1	393.7
137.5°	352.4	369.4
140°	338.4	354.2
142.5°	326.7	340.3
145°	309.2	319.4
147.5°	295.7	304.2
150°	287.2	294.1
152.5°	279.9	285.1
155°	271.7	275.1
157.5°	265.1	267.5
160°	261.1	262.5
162.5°	258.6	259.9
165°	254.8	256.2
167.5°	252.1	252.7
170°	251.4	251.4
172.5°	249.4	248.9
175°	248.3	248.3
177.5°	247.2	246.6
180°	246.6	246.6



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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	2.03	2.88	3.02	3.89	5.23	15.17	16.02	16.16	17.03	18.37
	3H	2.73	3.50	3.74	4.51	5.88	16.99	17.75	17.99	18.77	20.13
	4H	3.03	3.76	4.05	4.78	6.15	17.63	18.35	18.64	19.37	20.74
	6H	3.28	3.95	4.31	4.98	6.36	18.04	18.71	19.07	19.74	21.12
	8H	3.35	3.99	4.38	5.03	6.41	18.16	18.79	19.19	19.84	21.21
	12H	3.37	3.97	4.41	5.01	6.41	18.22	18.82	19.26	19.86	21.26
4H	2H	9.22	9.94	10.24	10.96	12.33	15.44	16.17	16.46	17.19	18.56
	3H	10.79	11.39	11.82	12.44	13.82	17.47	18.08	18.50	19.13	20.51
	4H	10.88	11.44	11.92	12.48	13.88	18.23	18.78	19.27	19.83	21.23
	6H	10.89	11.37	11.94	12.44	13.84	18.75	19.23	19.80	20.30	21.70
	8H	10.87	11.32	11.92	12.37	13.79	18.91	19.36	19.96	20.41	21.83
	12H	10.82	11.23	11.89	12.30	13.72	18.99	19.40	20.06	20.47	21.89
8H	4H	12.31	12.76	13.36	13.82	15.24	18.29	18.74	19.34	19.79	21.21
	6H	12.56	12.93	13.63	14.03	15.44	18.90	19.28	19.98	20.37	21.79
	8H	12.57	12.90	13.66	13.98	15.42	19.12	19.44	20.20	20.53	21.96
	12H	12.54	12.83	13.63	13.91	15.38	19.25	19.54	20.34	20.62	22.09
12H	4H	12.45	12.86	13.52	13.93	15.35	18.24	18.65	19.31	19.72	21.14
	6H	12.81	13.14	13.89	14.22	15.65	18.89	19.21	19.97	20.30	21.73
	8H	12.88	13.17	13.97	14.25	15.72	19.11	19.40	20.20	20.48	21.95