

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: P937414

Luminaire Tested: SQ4-FB-100U-050D-835-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937414
REPORT IS A COMBINATION OF REPORTS P933565 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

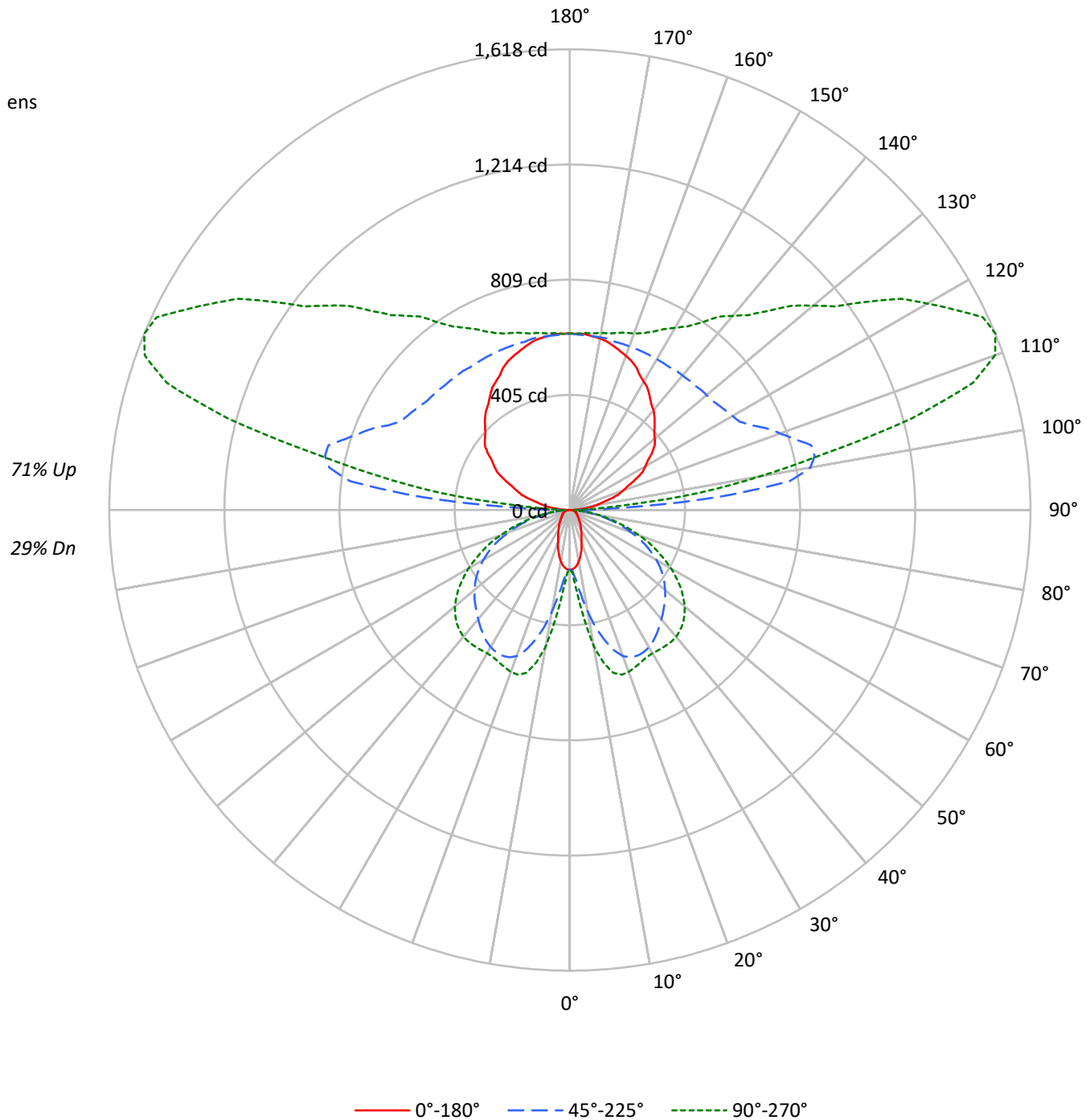
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5634.0 lumens
Efficiency: N/A
Efficacy: 136.7 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): 41.2
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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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29			
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	23			
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	19			
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16			
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	13			
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11			
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10			
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8			
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7			
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	7			
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	6			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1936	1936	1936
5°	1890	2236	2602
10°	1712	3257	4314
15°	1453	4252	5210
20°	1182	4924	5309
25°	985	5149	5201
30°	829	5177	5192
35°	731	5087	5325
40°	637	4972	5464
45°	575	4885	5486
50°	527	4806	5395
55°	503	4694	5155
60°	512	4482	4778
65°	531	4161	4259
70°	561	3622	3599
75°	617	2945	2808
80°	660	2036	1893
85°	555	1076	967

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5486 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.0	0.5
10°-20°	119.6	2.1
20°-30°	209.2	3.7
30°-40°	269.3	4.8
40°-50°	300.8	5.3
50°-60°	288.1	5.1
60°-70°	228.3	4.1
70°-80°	134.3	2.4
80°-90°	39.7	0.7
90°-100°	302.1	5.4
100°-110°	794.2	14.1
110°-120°	823.5	14.6
120°-130°	660.6	11.7
130°-140°	518.3	9.2
140°-150°	397.8	7.1
150°-160°	286.5	5.1
160°-170°	175.3	3.1
170°-180°	59.2	1.1
0°-30°	355.8	6.3
0°-40°	625.1	11.1
0°-60°	1214.1	21.5
0°-90°	1616.4	28.7
90°-120°	1919.9	34.1
90°-150°	3496.6	62.1
90°-180°	4018.0	71.3
0°-180°	5634.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	209	209	209	209	209	
5°	203	218	246	278	288	19
15°	152	281	474	574	592	42
25°	97	319	564	589	590	45
35°	66	305	531	562	584	41
45°	45	243	470	538	562	35
55°	32	154	398	463	476	29
65°	26	82	296	333	337	25
75°	19	50	162	178	179	20
85°	7	15	40	44	45	7
90°	4	12	32	16	16	4
95°	40	156	520	268	183	44
105°	143	217	878	1333	1244	152
115°	254	309	703	1403	1601	251
125°	354	396	640	1081	1275	314
135°	421	464	620	873	990	326
145°	489	520	612	744	803	306
155°	552	568	612	672	691	254
165°	596	604	612	636	644	168
175°	620	620	616	624	624	59
180°	620	620	620	620	620	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	208.6	208.6	208.6	208.6	208.6	208.6	208.6	208.6	208.6	208.6	208.6
2.5°	208.6	208.6	210.0	210.6	212.0	212.7	214.0	215.3	219.4	220.0	221.4
5°	203.3	206.0	214.7	218.0	227.4	240.2	245.5	254.3	272.4	277.7	281.1
7.5°	195.2	201.3	222.7	228.1	251.6	285.1	299.2	318.0	346.8	360.9	372.3
10°	182.5	195.2	233.5	246.2	284.4	335.4	361.6	387.8	431.4	450.8	458.2
12.5°	168.4	189.2	244.9	262.3	317.3	391.8	423.3	452.2	501.8	528.0	532.0
15°	152.3	180.5	255.6	281.1	352.2	438.7	473.6	509.2	555.5	574.2	578.9
17.5°	138.2	173.8	265.7	292.5	379.0	481.0	516.6	546.1	583.6	596.4	599.7
20°	120.8	163.0	272.4	307.3	407.2	511.9	546.1	568.9	594.4	602.4	603.8
22.5°	108.0	151.6	276.4	312.6	426.0	530.6	559.5	577.6	595.0	597.7	598.4
25°	97.3	138.9	275.7	318.7	442.1	542.0	564.2	577.6	587.7	589.0	589.0
27.5°	87.2	124.8	273.0	320.0	454.2	544.7	562.2	571.6	576.3	578.9	578.9
30°	78.5	111.4	266.3	317.3	459.5	542.0	556.1	560.8	565.5	569.6	571.6
32.5°	71.8	98.6	256.3	311.9	460.2	535.3	545.4	548.1	554.8	564.2	567.5
35°	65.7	85.9	244.9	304.6	456.2	524.6	531.3	534.0	547.4	561.5	566.2
37.5°	59.7	76.5	230.1	291.8	450.1	511.9	516.6	521.3	542.0	558.8	564.2
40°	53.7	68.4	212.7	277.7	440.8	496.4	500.5	507.8	535.3	554.8	560.2
42.5°	49.0	61.7	193.9	263.0	428.7	479.0	485.0	495.8	527.3	548.1	554.1
45°	44.9	55.0	173.8	242.8	413.2	460.9	469.6	484.4	517.9	538.0	543.4
47.5°	40.9	50.3	153.0	222.1	396.5	442.8	454.2	470.9	505.2	524.6	529.3
50°	37.6	45.6	132.2	199.9	378.4	423.3	436.7	454.2	489.1	507.2	513.2
52.5°	34.9	41.6	112.7	177.8	357.6	403.2	418.6	436.7	469.6	487.0	491.1
55°	32.2	38.2	95.9	154.3	336.1	381.7	398.5	415.9	448.1	462.9	465.6
57.5°	30.9	35.6	81.8	132.2	313.3	357.6	376.3	392.4	422.6	434.0	436.7
60°	28.8	33.5	71.1	113.4	288.5	334.8	350.9	367.0	392.4	401.8	403.9
62.5°	26.8	32.2	63.1	95.3	263.0	307.9	324.0	338.8	360.2	367.0	369.6
65°	25.5	30.9	57.0	81.8	236.8	279.7	295.8	308.6	326.0	332.7	334.1
67.5°	24.2	29.5	52.3	70.4	210.6	251.6	263.6	275.7	289.1	295.8	296.5
70°	22.1	28.2	48.3	62.4	183.8	219.4	229.4	242.2	252.9	256.3	258.3
72.5°	20.8	26.2	45.6	56.4	156.3	188.5	197.9	205.3	214.7	218.0	218.0
75°	18.8	23.5	42.9	50.3	128.1	154.3	162.3	169.7	177.1	178.4	176.4
77.5°	16.8	20.8	36.9	42.3	100.0	122.1	128.8	132.8	138.9	140.2	140.9
80°	14.1	18.1	28.8	32.9	72.5	89.9	94.6	97.9	103.3	103.3	104.7
82.5°	10.7	14.1	20.8	23.5	49.0	61.7	65.7	67.8	71.1	71.1	71.1
85°	6.7	8.7	13.4	15.4	29.5	37.6	40.3	40.9	43.6	44.3	44.3
87.5°	3.4	4.7	8.7	9.4	15.4	19.5	19.5	20.8	20.8	20.1	19.5
90°	4.2	7.5	10.8	11.6	18.3	27.2	31.6	28.1	21.1	15.8	15.8
92.5°	16.6	44.9	73.2	80.3	112.9	156.3	178.0	156.0	112.0	79.0	75.9
95°	39.9	91.7	143.5	156.4	277.7	439.4	520.3	464.3	352.3	268.3	258.8
97.5°	69.0	114.7	160.4	171.8	374.1	643.8	778.6	743.2	672.4	619.3	601.2
100°	91.5	132.9	174.3	184.7	409.2	708.5	858.1	860.7	865.8	869.7	848.1
102.5°	110.6	149.3	187.9	197.6	425.3	728.8	880.6	925.7	1015.9	1083.5	1065.0
105°	143.1	175.8	208.5	216.7	437.2	731.1	878.1	979.2	1181.4	1333.1	1323.2
107.5°	176.4	206.9	237.4	245.0	439.4	698.5	828.1	969.2	1251.3	1462.9	1465.3
110°	198.8	226.4	253.9	260.8	436.0	669.7	786.5	944.2	1259.6	1496.1	1506.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	220.9	247.1	273.3	279.9	436.2	644.5	748.7	910.1	1232.8	1474.9	1490.8
115°	254.1	278.3	302.5	308.6	440.2	615.7	703.4	858.9	1169.8	1403.0	1425.0
117.5°	287.0	309.0	331.0	336.5	448.4	597.6	672.2	812.5	1093.1	1303.6	1328.0
120°	306.1	326.8	347.5	352.7	455.0	591.5	659.7	787.9	1044.3	1236.6	1260.4
122.5°	324.9	345.8	366.7	371.9	464.6	588.3	650.1	765.5	996.4	1169.6	1193.0
125°	353.6	372.6	391.6	396.4	477.5	585.6	639.7	737.8	933.9	1081.0	1102.6
127.5°	376.8	396.0	415.3	420.1	490.4	584.1	631.0	715.2	883.6	1009.9	1028.1
130°	389.3	410.0	430.7	435.9	499.8	585.1	627.7	702.7	852.6	965.0	981.8
132.5°	402.2	422.9	443.6	448.8	507.4	585.6	624.7	691.8	826.0	926.7	941.8
135°	421.4	440.2	459.1	463.8	515.8	585.1	619.8	676.0	788.3	872.6	885.6
137.5°	440.9	459.6	478.2	482.9	528.2	588.7	618.9	666.4	761.4	832.7	843.3
140°	457.1	474.3	491.5	495.8	535.9	589.3	616.0	657.0	739.1	800.7	810.6
142.5°	469.6	485.5	501.4	505.4	542.3	591.4	616.0	652.0	724.1	778.2	786.8
145°	488.7	502.6	516.4	519.9	550.6	591.5	611.9	641.4	700.3	744.5	751.0
147.5°	507.9	521.4	534.8	538.2	562.8	595.5	611.9	635.1	681.5	716.3	721.7
150°	520.3	532.5	544.7	547.8	569.2	597.7	611.9	631.5	670.6	700.0	704.3
152.5°	533.2	542.4	551.7	554.0	573.3	599.0	611.9	628.6	662.0	687.1	690.4
155°	552.4	559.2	566.1	567.8	582.5	602.1	611.9	625.2	651.8	671.7	673.9
157.5°	566.5	573.2	579.8	581.5	591.6	605.1	611.9	622.2	642.9	658.4	659.9
160°	576.1	581.3	586.4	587.7	595.8	606.5	611.9	620.8	638.5	651.8	652.7
162.5°	585.6	589.5	593.4	594.4	600.2	608.0	611.9	619.4	634.3	645.5	646.3
165°	596.0	599.5	603.0	603.9	606.6	610.1	611.9	617.3	628.0	636.0	636.9
167.5°	605.6	607.3	609.0	609.4	611.6	614.5	616.0	619.5	626.5	631.8	632.2
170°	611.9	613.5	615.2	615.6	615.7	615.9	616.0	619.5	626.5	631.8	631.8
172.5°	615.2	615.6	615.9	616.0	616.0	616.0	616.0	618.8	624.3	628.5	628.2
175°	619.8	619.8	619.8	619.8	618.5	616.8	616.0	617.8	621.3	623.9	623.9
177.5°	619.8	619.8	619.8	619.8	618.8	617.5	616.8	618.2	621.0	623.1	622.7
180°	619.8	619.8	619.8	619.8	619.8	619.8	619.8	619.8	619.8	619.8	619.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	208.6	208.6
2.5°	222.7	221.4
5°	286.5	287.8
7.5°	385.7	385.1
10°	479.7	485.7
12.5°	548.1	549.4
15°	589.7	592.4
17.5°	605.8	606.5
20°	606.5	605.1
22.5°	599.1	597.7
25°	590.4	589.7
27.5°	582.3	583.0
30°	578.9	581.0
32.5°	578.9	582.3
35°	580.3	583.6
37.5°	579.6	583.6
40°	576.9	581.6
42.5°	569.6	572.9
45°	558.1	562.2
47.5°	543.4	546.1
50°	524.6	527.3
52.5°	501.1	501.8
55°	473.0	475.6
57.5°	442.8	443.4
60°	409.2	411.2
62.5°	373.7	373.7
65°	336.1	337.4
67.5°	297.2	300.5
70°	257.6	258.3
72.5°	218.7	218.7
75°	178.4	179.1
77.5°	140.2	140.2
80°	104.0	104.7
82.5°	71.8	73.1
85°	44.9	44.9
87.5°	20.8	18.8
90°	15.8	15.8
92.5°	63.3	50.7
95°	220.7	182.6
97.5°	528.7	456.3
100°	761.8	675.5
102.5°	991.1	917.2
105°	1283.4	1243.7
107.5°	1474.9	1484.5
110°	1547.9	1589.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1554.4	1618.0
115°	1513.2	1601.4
117.5°	1425.8	1523.6
120°	1355.4	1450.4
122.5°	1286.8	1380.5
125°	1188.9	1275.3
127.5°	1101.0	1173.8
130°	1049.1	1116.4
132.5°	1002.0	1062.3
135°	937.5	989.5
137.5°	885.9	928.4
140°	850.4	890.1
142.5°	821.0	855.2
145°	776.9	802.8
147.5°	743.1	764.5
150°	721.7	739.1
152.5°	703.5	716.7
155°	682.6	691.3
157.5°	666.1	672.2
160°	656.2	659.7
162.5°	649.7	653.0
165°	640.4	643.9
167.5°	633.6	635.1
170°	631.8	631.8
172.5°	626.9	625.6
175°	623.9	623.9
177.5°	621.3	619.8
180°	619.8	619.8



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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	0.91	1.63	2.03	2.74	4.29	14.05	14.77	15.17	15.88	17.43
	3H	1.61	2.25	2.73	3.37	4.93	15.87	16.51	16.99	17.63	19.19
	4H	1.90	2.51	3.03	3.63	5.20	16.49	17.10	17.63	18.23	19.79
	6H	2.14	2.71	3.29	3.83	5.41	16.90	17.47	18.05	18.59	20.17
	8H	2.21	2.74	3.35	3.88	5.45	17.01	17.55	18.16	18.69	20.26
	12H	2.22	2.73	3.37	3.86	5.46	17.07	17.58	18.22	18.71	20.31
4H	2H	8.09	8.70	9.23	9.82	11.38	14.31	14.92	15.45	16.04	17.61
	3H	9.64	10.15	10.79	11.30	12.88	16.33	16.84	17.47	17.99	19.56
	4H	9.73	10.20	10.88	11.34	12.94	17.08	17.55	18.23	18.68	20.28
	6H	9.73	10.14	10.89	11.30	12.88	17.60	18.00	18.75	19.16	20.75
	8H	9.71	10.08	10.86	11.23	12.84	17.75	18.12	18.90	19.28	20.88
	12H	9.66	10.00	10.83	11.16	12.77	17.82	18.17	19.00	19.33	20.94
8H	4H	11.15	11.53	12.31	12.68	14.29	17.13	17.50	18.28	18.65	20.26
	6H	11.39	11.70	12.56	12.89	14.50	17.74	18.05	18.91	19.24	20.84
	8H	11.40	11.68	12.59	12.85	14.47	17.95	18.22	19.13	19.39	21.01
	12H	11.37	11.61	12.55	12.77	14.43	18.07	18.31	19.26	19.48	21.14
12H	4H	11.29	11.63	12.46	12.79	14.40	17.07	17.41	18.24	18.58	20.19
	6H	11.64	11.91	12.82	13.09	14.71	17.72	17.99	18.90	19.16	20.78
	8H	11.70	11.94	12.89	13.11	14.77	17.93	18.17	19.12	19.34	21.00