

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: P937057

Luminaire Tested: SQ4-FB-075U-050D-93050-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937057
REPORT IS A COMBINATION OF REPORTS P933501 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-050D-93050-1D-UNV-STD-W-4-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

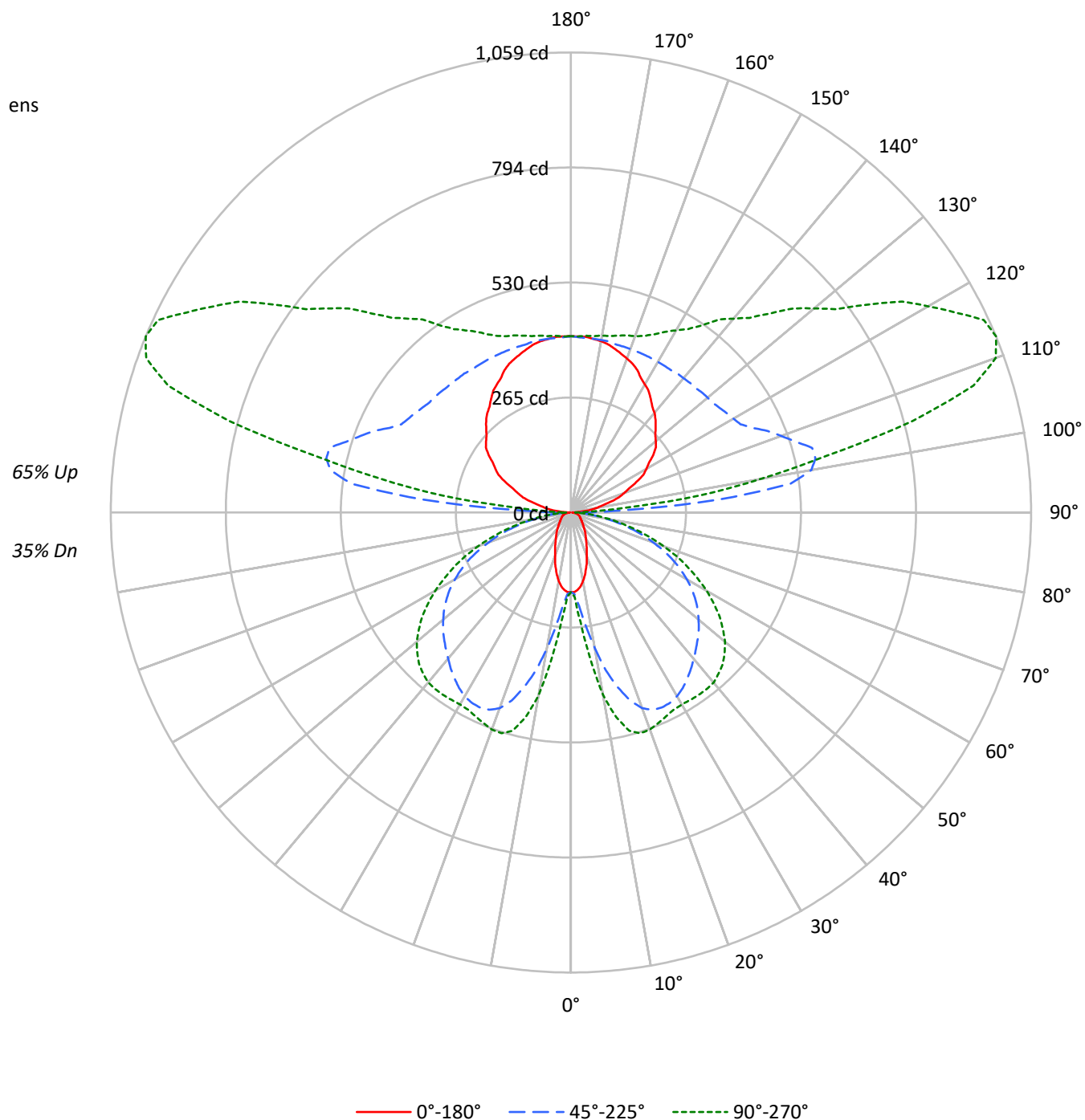
Lumens per Lamp: N/A
Luminaire Lumens: 4049.0 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 34.4
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

TEST NUMBER: P937057

CATALOG NUMBER: SQ4-FB-075U-050D-93050-1D-UNV-STD-W-4-3000K

Luminous Intensity Polar Plot



TEST NUMBER: P937057

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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	104	104	104	104	94	94	94	94	75	75	75		58	58	58		42	42	42	35
1	94	90	86	82	85	81	78	75	65	63	61		50	49	47		37	36	35	29
2	85	78	72	66	77	70	65	61	57	53	50		44	41	39		32	30	29	23
3	77	68	61	55	70	62	55	50	49	45	41		38	35	32		28	26	24	19
4	71	60	52	46	63	54	47	42	44	39	35		34	30	27		25	22	20	16
5	65	53	45	39	58	48	41	36	39	33	29		30	26	23		22	19	17	14
6	59	47	39	33	53	43	36	31	35	29	25		27	23	20		20	17	15	12
7	55	42	34	29	49	38	31	26	31	26	22		24	20	17		18	15	13	10
8	50	38	30	25	45	35	28	23	28	23	19		22	18	15		16	14	12	9
9	47	35	27	22	42	32	25	20	26	21	17		20	16	14		15	12	10	8
10	44	32	24	20	39	29	22	18	23	18	15		18	15	12		14	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1700	1700	1700
5°	1660	1963	2286
10°	1504	2861	3789
15°	1277	3735	4576
20°	1038	4324	4663
25°	865	4522	4568
30°	728	4547	4560
35°	642	4468	4677
40°	560	4367	4799
45°	504	4291	4818
50°	463	4222	4738
55°	442	4123	4528
60°	450	3937	4197
65°	467	3655	3740
70°	493	3181	3161
75°	541	2586	2466
80°	580	1788	1663
85°	489	945	849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4818 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.7	0.6
10°-20°	105.1	2.6
20°-30°	183.8	4.5
30°-40°	236.5	5.8
40°-50°	264.2	6.5
50°-60°	253.1	6.2
60°-70°	200.5	5.0
70°-80°	117.9	2.9
80°-90°	34.3	0.8
90°-100°	197.8	4.9
100°-110°	519.9	12.8
110°-120°	539.1	13.3
120°-130°	432.4	10.7
130°-140°	339.3	8.4
140°-150°	260.4	6.4
150°-160°	187.5	4.6
160°-170°	114.7	2.8
170°-180°	38.8	1.0
0°-30°	312.5	7.7
0°-40°	549.1	13.6
0°-60°	1066.3	26.3
0°-90°	1419.1	35.0
90°-120°	1256.7	31.0
90°-150°	2288.8	56.5
90°-180°	2630.0	65.0
0°-180°	4049.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	183	183	183	183	183	
5°	179	192	216	244	253	16
15°	134	247	416	504	520	37
25°	86	280	496	517	518	39
35°	58	268	467	493	513	36
45°	39	213	412	472	494	31
55°	28	136	350	407	418	26
65°	22	72	260	292	296	22
75°	16	44	142	157	157	17
85°	6	14	35	39	39	6
90°	3	8	21	10	10	3
95°	26	102	341	176	120	29
105°	94	142	575	873	814	99
115°	166	202	460	918	1048	164
125°	231	260	419	708	835	205
135°	276	304	406	571	648	213
145°	320	340	400	487	526	200
155°	362	372	400	440	452	166
165°	390	395	400	416	422	110
175°	406	406	403	408	408	39
180°	406	406	406	406	406	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	183.2	183.2	183.2	183.2	183.2	183.2	183.2	183.2	183.2	183.2	183.2
2.5°	183.2	183.2	184.4	185.0	186.2	186.8	188.0	189.1	192.7	193.2	194.5
5°	178.6	180.9	188.6	191.5	199.7	211.0	215.6	223.4	239.2	243.9	246.9
7.5°	171.4	176.8	195.6	200.3	221.0	250.4	262.8	279.3	304.6	317.0	327.0
10°	160.3	171.4	205.1	216.2	249.8	294.6	317.6	340.6	378.9	395.9	402.4
12.5°	147.9	166.2	215.1	230.4	278.7	344.1	371.8	397.2	440.7	463.7	467.3
15°	133.8	158.5	224.5	246.9	309.3	385.3	416.0	447.2	487.9	504.3	508.4
17.5°	121.4	152.6	233.4	256.9	332.9	422.5	453.7	479.6	512.6	523.8	526.7
20°	106.1	143.2	239.2	269.9	357.6	449.6	479.6	499.7	522.1	529.1	530.3
22.5°	94.9	133.2	242.8	274.6	374.2	466.0	491.4	507.3	522.6	525.0	525.6
25°	85.5	122.0	242.1	279.9	388.3	476.0	495.5	507.3	516.2	517.3	517.3
27.5°	76.6	109.6	239.8	281.1	398.9	478.4	493.8	502.0	506.2	508.4	508.4
30°	68.9	97.8	233.9	278.7	403.6	476.0	488.4	492.6	496.7	500.3	502.0
32.5°	63.1	86.6	225.1	273.9	404.2	470.2	479.0	481.4	487.3	495.5	498.4
35°	57.7	75.4	215.1	267.5	400.7	460.8	466.6	469.0	480.8	493.2	497.3
37.5°	52.4	67.2	202.1	256.3	395.3	449.6	453.7	457.9	476.0	490.8	495.5
40°	47.2	60.1	186.8	243.9	387.2	436.0	439.6	446.0	470.2	487.3	492.0
42.5°	43.0	54.2	170.3	231.0	376.5	420.7	426.0	435.5	463.1	481.4	486.7
45°	39.4	48.3	152.6	213.3	362.9	404.8	412.5	425.4	454.9	472.5	477.3
47.5°	35.9	44.2	134.4	195.1	348.2	388.9	398.9	413.6	443.7	460.8	464.9
50°	33.0	40.1	116.1	175.6	332.3	371.8	383.6	398.9	429.6	445.5	450.7
52.5°	30.7	36.5	99.0	156.2	314.1	354.1	367.7	383.6	412.5	427.7	431.3
55°	28.3	33.6	84.2	135.5	295.2	335.2	350.0	365.3	393.6	406.6	408.9
57.5°	27.1	31.3	71.8	116.1	275.2	314.1	330.5	344.6	371.2	381.2	383.6
60°	25.3	29.4	62.4	99.6	253.4	294.1	308.2	322.3	344.6	352.9	354.7
62.5°	23.5	28.3	55.4	83.7	231.0	270.4	284.6	297.6	316.4	322.3	324.6
65°	22.4	27.1	50.1	71.8	208.0	245.7	259.8	271.0	286.3	292.2	293.4
67.5°	21.3	25.9	45.9	61.8	185.0	221.0	231.5	242.1	253.9	259.8	260.4
70°	19.4	24.8	42.4	54.8	161.4	192.7	201.5	212.7	222.1	225.1	226.9
72.5°	18.3	23.0	40.1	49.5	137.3	165.6	173.8	180.3	188.6	191.5	191.5
75°	16.5	20.6	37.7	44.2	112.5	135.5	142.5	149.0	155.5	156.7	154.9
77.5°	14.8	18.3	32.4	37.2	87.8	107.2	113.1	116.6	122.0	123.1	123.8
80°	12.4	15.9	25.3	28.9	63.7	79.0	83.1	86.0	90.7	90.7	92.0
82.5°	9.4	12.4	18.3	20.6	43.0	54.2	57.7	59.5	62.4	62.4	62.4
85°	5.9	7.6	11.8	13.5	25.9	33.0	35.4	35.9	38.3	38.9	38.9
87.5°	3.0	4.1	7.6	8.3	13.5	17.1	17.1	18.3	18.3	17.7	17.1
90°	2.7	4.9	7.1	7.6	12.0	17.8	20.7	18.4	13.8	10.4	10.4
92.5°	10.9	29.4	47.9	52.5	73.9	102.3	116.6	102.1	73.3	51.7	49.7
95°	26.2	60.1	94.0	102.4	181.8	287.6	340.6	303.9	230.6	175.6	169.3
97.5°	45.2	75.1	105.0	112.4	244.9	421.4	509.7	486.5	440.2	405.4	393.6
100°	59.9	87.0	114.1	120.9	267.8	463.7	561.7	563.3	566.8	569.3	555.2
102.5°	72.5	97.8	123.0	129.3	278.3	477.1	576.4	605.9	665.0	709.2	697.1
105°	93.6	115.1	136.5	141.8	286.2	478.6	574.8	641.0	773.3	872.6	866.1
107.5°	115.4	135.4	155.4	160.4	287.6	457.2	542.1	634.4	819.0	957.5	959.1
110°	130.2	148.2	166.3	170.7	285.4	438.4	514.9	618.1	824.5	979.3	986.1

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	144.6	161.8	178.9	183.2	285.5	421.9	490.1	595.8	807.0	965.4	975.9
115°	166.4	182.2	198.1	202.0	288.2	403.0	460.4	562.2	765.7	918.4	932.8
117.5°	187.9	202.3	216.7	220.3	293.5	391.1	439.9	531.8	715.5	853.3	869.3
120°	200.4	214.0	227.5	230.9	297.8	387.2	431.8	515.7	683.6	809.4	825.0
122.5°	212.6	226.3	240.0	243.4	304.1	385.0	425.5	501.1	652.2	765.6	781.0
125°	231.4	243.9	256.4	259.5	312.6	383.4	418.8	483.0	611.4	707.6	721.8
127.5°	246.7	259.3	271.8	275.0	321.0	382.4	413.1	468.2	578.4	661.1	673.0
130°	254.9	268.4	281.9	285.4	327.2	382.9	410.9	460.0	558.1	631.7	642.7
132.5°	263.3	276.8	290.4	293.8	332.2	383.4	408.9	452.9	540.8	606.6	616.5
135°	275.8	288.1	300.5	303.5	337.6	383.0	405.7	442.5	516.1	571.2	579.8
137.5°	288.6	300.8	313.0	316.1	345.8	385.4	405.2	436.3	498.4	545.1	552.0
140°	299.2	310.5	321.7	324.5	350.8	385.7	403.2	430.1	483.8	524.1	530.6
142.5°	307.4	317.8	328.1	330.8	354.9	387.2	403.2	426.9	474.0	509.4	515.0
145°	319.9	329.0	338.1	340.3	360.4	387.2	400.5	419.8	458.4	487.4	491.6
147.5°	332.4	341.2	350.1	352.3	368.4	389.8	400.5	415.7	446.1	468.8	472.4
150°	340.6	348.6	356.6	358.6	372.6	391.2	400.5	413.3	439.0	458.2	461.0
152.5°	349.0	355.1	361.2	362.7	375.3	392.1	400.5	411.5	433.4	449.8	451.9
155°	361.6	366.1	370.5	371.6	381.3	394.1	400.5	409.2	426.6	439.7	441.1
157.5°	370.8	375.2	379.6	380.7	387.2	396.1	400.5	407.3	420.8	431.0	431.9
160°	377.1	380.5	383.8	384.7	390.0	397.0	400.5	406.3	418.0	426.7	427.2
162.5°	383.4	385.9	388.5	389.1	392.9	398.0	400.5	405.4	415.2	422.6	423.1
165°	390.1	392.4	394.7	395.3	397.1	399.4	400.5	404.0	411.0	416.3	416.9
167.5°	396.4	397.4	398.6	398.8	400.3	402.3	403.2	405.5	410.2	413.6	413.9
170°	400.5	401.6	402.7	403.0	403.1	403.1	403.2	405.5	410.2	413.6	413.6
172.5°	402.7	403.0	403.1	403.2	403.2	403.2	403.2	405.1	408.7	411.4	411.2
175°	405.7	405.7	405.7	405.7	404.9	403.8	403.2	404.4	406.7	408.4	408.4
177.5°	405.7	405.7	405.7	405.7	405.1	404.2	403.8	404.6	406.5	407.9	407.6
180°	405.7	405.7	405.7	405.7	405.7	405.7	405.7	405.7	405.7	405.7	405.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	183.2	183.2
2.5°	195.6	194.5
5°	251.6	252.8
7.5°	338.8	338.2
10°	421.3	426.6
12.5°	481.4	482.5
15°	517.9	520.3
17.5°	532.1	532.7
20°	532.7	531.5
22.5°	526.2	525.0
25°	518.5	517.9
27.5°	511.4	512.0
30°	508.4	510.3
32.5°	508.4	511.4
35°	509.7	512.6
37.5°	509.1	512.6
40°	506.7	510.8
42.5°	500.3	503.2
45°	490.2	493.8
47.5°	477.3	479.6
50°	460.8	463.1
52.5°	440.1	440.7
55°	415.4	417.7
57.5°	388.9	389.4
60°	359.4	361.2
62.5°	328.2	328.2
65°	295.2	296.3
67.5°	261.0	263.9
70°	226.3	226.9
72.5°	192.1	192.1
75°	156.7	157.3
77.5°	123.1	123.1
80°	91.3	92.0
82.5°	63.1	64.2
85°	39.4	39.4
87.5°	18.3	16.5
90°	10.4	10.4
92.5°	41.5	33.2
95°	144.5	119.5
97.5°	346.1	298.7
100°	498.7	442.1
102.5°	648.7	600.3
105°	840.1	814.1
107.5°	965.4	971.8
110°	1013.2	1040.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1017.5	1059.1
115°	990.5	1048.3
117.5°	933.3	997.3
120°	887.2	949.4
122.5°	842.3	903.7
125°	778.3	834.7
127.5°	720.6	768.3
130°	686.7	730.7
132.5°	655.9	695.4
135°	613.8	647.7
137.5°	579.9	607.7
140°	556.7	582.7
142.5°	537.3	559.7
145°	508.5	525.5
147.5°	486.4	500.5
150°	472.4	483.9
152.5°	460.5	469.1
155°	446.8	452.5
157.5°	436.0	439.9
160°	429.5	431.8
162.5°	425.3	427.5
165°	419.2	421.5
167.5°	414.8	415.8
170°	413.6	413.6
172.5°	410.3	409.5
175°	408.4	408.4
177.5°	406.7	405.7
180°	405.7	405.7

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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	1.28	2.05	2.35	3.12	4.59	14.42	15.19	15.49	16.27	17.73
	3H	1.98	2.67	3.06	3.75	5.24	16.24	16.93	17.32	18.01	19.50
	4H	2.27	2.93	3.36	4.01	5.50	16.87	17.52	17.96	18.61	20.10
	6H	2.52	3.12	3.62	4.21	5.71	17.28	17.89	18.38	18.97	20.48
	8H	2.59	3.16	3.69	4.26	5.76	17.40	17.97	18.50	19.07	20.57
	12H	2.60	3.15	3.71	4.24	5.77	17.45	18.00	18.56	19.10	20.62
4H	2H	8.46	9.12	9.56	10.20	11.69	14.69	15.34	15.78	16.43	17.92
	3H	10.02	10.57	11.13	11.68	13.19	16.71	17.26	17.81	18.37	19.87
	4H	10.12	10.62	11.22	11.72	13.24	17.46	17.96	18.57	19.07	20.59
	6H	10.12	10.55	11.24	11.68	13.19	17.98	18.41	19.10	19.54	21.06
	8H	10.10	10.50	11.21	11.62	13.15	18.14	18.54	19.25	19.66	21.19
	12H	10.05	10.41	11.18	11.54	13.08	18.22	18.58	19.35	19.71	21.25
8H	4H	11.54	11.94	12.66	13.06	14.59	17.52	17.92	18.63	19.03	20.57
	6H	11.78	12.11	12.92	13.27	14.80	18.13	18.46	19.27	19.62	21.15
	8H	11.80	12.09	12.94	13.23	14.78	18.34	18.63	19.48	19.77	21.32
	12H	11.76	12.02	12.91	13.15	14.74	18.47	18.73	19.62	19.86	21.45
12H	4H	11.68	12.04	12.81	13.17	14.71	17.46	17.83	18.60	18.96	20.50
	6H	12.03	12.33	13.18	13.46	15.01	18.11	18.40	19.25	19.54	21.09
	8H	12.10	12.35	13.25	13.49	15.08	18.33	18.58	19.48	19.72	21.31