

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: P936302

Luminaire Tested: SQ4-FB-025U-050D-B40-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936302
REPORT IS A COMBINATION OF REPORTS P933437 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-050D-B40-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

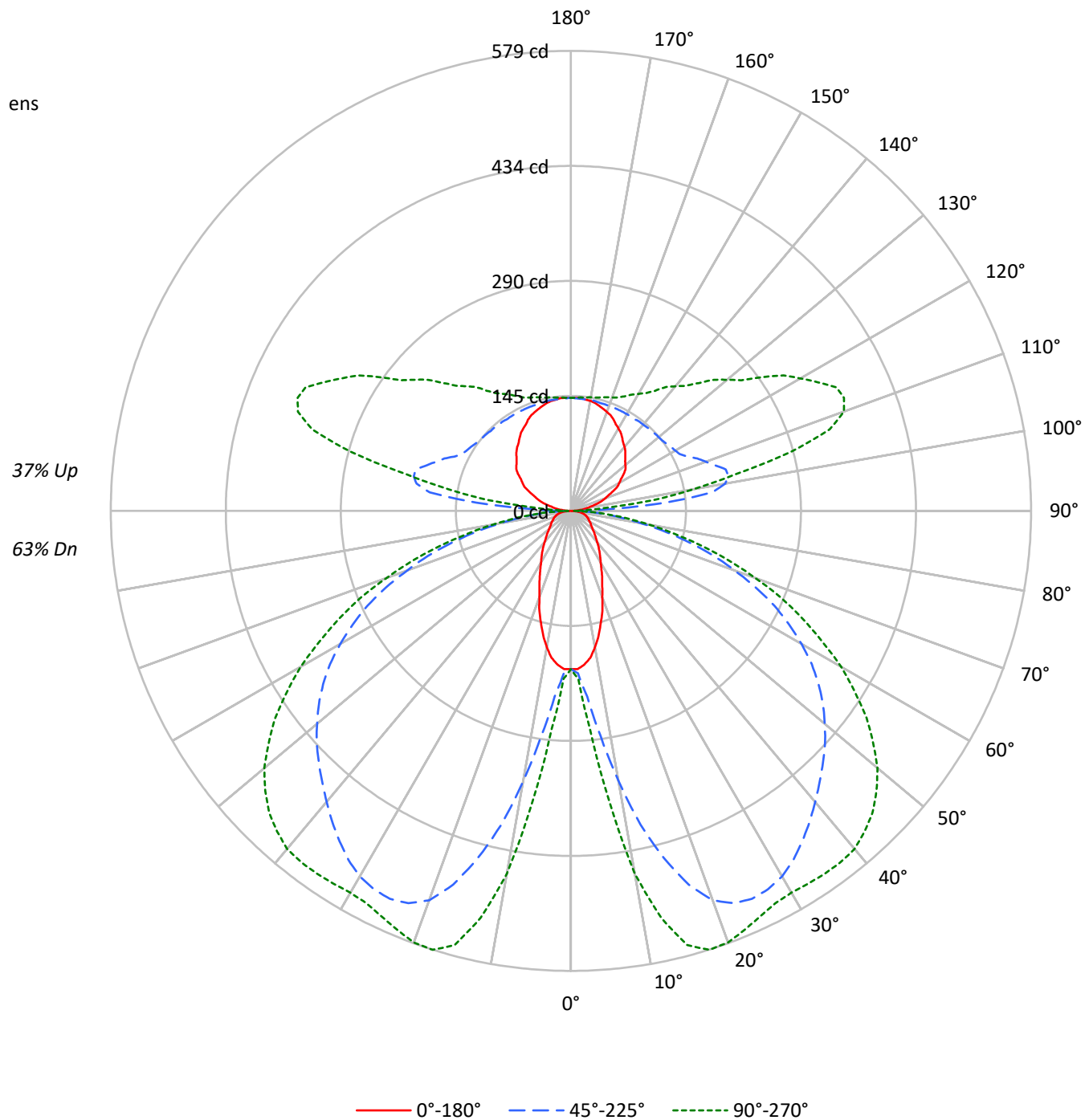
Lumens per Lamp: N/A
Luminaire Lumens: 2465.8 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 22
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
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32
5	68	56	47	41	64	52	45	39	46	40	35	40	35	31	35	31	28
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1848	1848	1848
5°	1805	2135	2485
10°	1635	3110	4120
15°	1388	4061	4975
20°	1129	4702	5070
25°	940	4917	4968
30°	792	4944	4958
35°	698	4858	5085
40°	609	4748	5218
45°	549	4666	5239
50°	503	4589	5153
55°	481	4483	4923
60°	489	4280	4563
65°	508	3974	4067
70°	536	3459	3437
75°	590	2812	2681
80°	632	1943	1808
85°	530	1028	924

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5239 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.8	1.0
10°-20°	114.2	4.6
20°-30°	199.8	8.1
30°-40°	257.2	10.4
40°-50°	287.3	11.7
50°-60°	275.2	11.2
60°-70°	218.1	8.8
70°-80°	128.2	5.2
80°-90°	36.2	1.5
90°-100°	69.5	2.8
100°-110°	182.7	7.4
110°-120°	189.4	7.7
120°-130°	151.9	6.2
130°-140°	119.2	4.8
140°-150°	91.5	3.7
150°-160°	65.9	2.7
160°-170°	40.3	1.6
170°-180°	13.6	0.6
0°-30°	339.8	13.8
0°-40°	597.0	24.2
0°-60°	1159.5	47.0
0°-90°	1541.9	62.5
90°-120°	441.5	17.9
90°-150°	804.1	32.6
90°-180°	924.0	37.5
0°-180°	2465.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	199	199	199	199	199	
5°	194	208	234	265	275	18
15°	145	268	452	548	566	40
25°	93	304	539	562	563	43
35°	63	291	507	536	557	39
45°	43	232	448	514	537	33
55°	31	147	381	442	454	28
65°	24	78	282	318	322	24
75°	18	48	155	170	171	19
85°	6	15	38	42	43	7
90°	1	3	7	4	4	1
95°	9	36	120	62	42	10
105°	33	50	202	307	286	35
115°	58	71	162	323	368	58
125°	81	91	147	249	293	72
135°	97	107	142	201	228	75
145°	112	120	141	171	185	70
155°	127	130	141	154	159	58
165°	137	139	141	146	148	39
175°	142	142	142	143	143	14
180°	142	142	142	142	142	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	199.2	199.2	199.2	199.2	199.2	199.2	199.2	199.2	199.2	199.2	199.2
2.5°	199.2	199.2	200.5	201.1	202.5	203.1	204.4	205.6	209.5	210.1	211.4
5°	194.2	196.7	205.0	208.2	217.2	229.4	234.5	242.9	260.1	265.2	268.5
7.5°	186.4	192.2	212.7	217.8	240.3	272.3	285.7	303.7	331.2	344.7	355.5
10°	174.3	186.4	223.0	235.1	271.6	320.3	345.3	370.3	412.0	430.5	437.6
12.5°	160.8	180.7	233.9	250.5	303.0	374.2	404.3	431.9	479.2	504.2	508.1
15°	145.4	172.4	244.1	268.5	336.4	419.0	452.3	486.3	530.5	548.4	552.8
17.5°	132.0	166.0	253.7	279.3	361.9	459.4	493.4	521.5	557.3	569.6	572.7
20°	115.4	155.7	260.1	293.5	388.9	488.9	521.5	543.3	567.7	575.3	576.6
22.5°	103.1	144.8	264.0	298.5	406.8	506.7	534.3	551.6	568.2	570.8	571.5
25°	92.9	132.6	263.3	304.4	422.2	517.6	538.8	551.6	561.3	562.5	562.5
27.5°	83.3	119.2	260.7	305.6	433.8	520.2	536.9	545.9	550.4	552.8	552.8
30°	75.0	106.4	254.3	303.0	438.8	517.6	531.1	535.6	540.1	544.0	545.9
32.5°	68.6	94.2	244.8	297.9	439.5	511.2	520.9	523.4	529.8	538.8	542.0
35°	62.7	82.0	233.9	290.9	435.7	501.0	507.4	510.0	522.8	536.2	540.7
37.5°	57.0	73.1	219.7	278.7	429.8	488.9	493.4	497.8	517.6	533.7	538.8
40°	51.3	65.3	203.1	265.2	421.0	474.1	478.0	484.9	511.2	529.8	535.0
42.5°	46.8	58.9	185.2	251.2	409.4	457.4	463.2	473.5	503.6	523.4	529.2
45°	42.9	52.5	166.0	231.9	394.6	440.2	448.5	462.6	494.6	513.8	518.9
47.5°	39.1	48.0	146.1	212.1	378.7	422.9	433.8	449.7	482.5	501.0	505.5
50°	35.9	43.5	126.3	190.9	361.4	404.3	417.0	433.8	467.1	484.4	490.1
52.5°	33.3	39.7	107.6	169.8	341.5	385.1	399.8	417.0	448.5	465.1	469.0
55°	30.8	36.5	91.6	147.4	321.0	364.5	380.6	397.2	427.9	442.1	444.6
57.5°	29.5	34.0	78.1	126.3	299.2	341.5	359.4	374.7	403.6	414.5	417.0
60°	27.5	32.0	67.9	108.3	275.5	319.7	335.1	350.5	374.7	383.7	385.7
62.5°	25.6	30.8	60.3	91.0	251.2	294.0	309.4	323.6	344.0	350.5	353.0
65°	24.4	29.5	54.4	78.1	226.1	267.1	282.5	294.7	311.3	317.7	319.1
67.5°	23.1	28.2	49.9	67.2	201.1	240.3	251.7	263.3	276.1	282.5	283.2
70°	21.1	26.9	46.1	59.6	175.5	209.5	219.1	231.3	241.5	244.8	246.7
72.5°	19.9	25.0	43.5	53.9	149.3	180.0	189.0	196.1	205.0	208.2	208.2
75°	18.0	22.4	41.0	48.0	122.3	147.4	155.0	162.1	169.1	170.4	168.5
77.5°	16.0	19.9	35.2	40.4	95.5	116.6	123.0	126.8	132.6	133.9	134.6
80°	13.5	17.3	27.5	31.4	69.2	85.9	90.3	93.5	98.7	98.7	100.0
82.5°	10.2	13.5	19.9	22.4	46.8	58.9	62.7	64.7	67.9	67.9	67.9
85°	6.4	8.3	12.8	14.7	28.2	35.9	38.5	39.1	41.6	42.3	42.3
87.5°	3.2	4.5	8.3	9.0	14.7	18.6	18.6	19.9	19.9	19.2	18.6
90°	1.0	1.7	2.5	2.7	4.2	6.2	7.3	6.5	4.9	3.6	3.6
92.5°	3.8	10.3	16.8	18.4	26.0	36.0	41.0	35.9	25.8	18.1	17.4
95°	9.2	21.1	33.0	36.0	63.9	101.0	119.7	106.8	81.0	61.7	59.5
97.5°	15.9	26.4	36.9	39.5	86.0	148.0	179.1	170.9	154.6	142.4	138.2
100°	21.0	30.6	40.1	42.5	94.1	162.9	197.3	197.9	199.1	200.0	195.0
102.5°	25.4	34.3	43.3	45.5	97.8	167.6	202.5	212.9	233.6	249.2	244.9
105°	32.9	40.5	47.9	49.9	100.6	168.1	201.9	225.2	271.7	306.6	304.3
107.5°	40.6	47.6	54.6	56.3	101.0	160.6	190.4	222.9	287.7	336.4	337.0
110°	45.7	52.0	58.4	60.0	100.3	154.0	180.9	217.2	289.7	344.1	346.5

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	50.8	56.8	62.8	64.4	100.3	148.2	172.2	209.3	283.5	339.2	342.8
115°	58.4	64.0	69.5	71.0	101.2	141.6	161.8	197.5	269.0	322.6	327.7
117.5°	66.0	71.1	76.1	77.4	103.1	137.4	154.6	186.9	251.4	299.8	305.4
120°	70.4	75.2	79.9	81.1	104.6	136.0	151.7	181.2	240.2	284.4	289.8
122.5°	74.7	79.5	84.2	85.5	106.8	135.2	149.5	176.0	229.1	268.9	274.3
125°	81.3	85.7	90.1	91.2	109.8	134.7	147.1	169.6	214.8	248.6	253.6
127.5°	86.6	91.1	95.5	96.6	112.8	134.3	145.1	164.5	203.2	232.3	236.5
130°	89.5	94.3	99.0	100.3	115.0	134.6	144.3	161.6	196.1	221.9	225.8
132.5°	92.5	97.3	102.1	103.2	116.7	134.7	143.6	159.1	189.9	213.2	216.6
135°	96.9	101.2	105.6	106.7	118.6	134.6	142.5	155.4	181.3	200.6	203.6
137.5°	101.4	105.7	110.0	111.1	121.5	135.3	142.3	153.2	175.1	191.5	194.0
140°	105.1	109.1	113.1	114.0	123.2	135.5	141.6	151.1	170.0	184.1	186.4
142.5°	108.0	111.6	115.3	116.2	124.7	136.0	141.6	149.9	166.6	179.0	181.0
145°	112.4	115.6	118.8	119.6	126.6	136.0	140.7	147.5	161.0	171.2	172.8
147.5°	116.8	119.9	123.0	123.8	129.4	136.9	140.7	146.0	156.7	164.7	166.0
150°	119.7	122.4	125.3	126.0	130.8	137.4	140.7	145.2	154.2	161.0	162.0
152.5°	122.6	124.7	126.8	127.4	131.8	137.7	140.7	144.5	152.2	158.1	158.8
155°	127.0	128.5	130.2	130.5	133.9	138.4	140.7	143.7	149.9	154.5	155.0
157.5°	130.3	131.8	133.3	133.7	136.0	139.1	140.7	143.1	147.8	151.4	151.7
160°	132.5	133.6	134.8	135.1	136.9	139.4	140.7	142.7	146.8	149.8	150.0
162.5°	134.7	135.5	136.5	136.7	138.0	139.8	140.7	142.4	145.8	148.4	148.6
165°	137.0	137.8	138.7	138.9	139.4	140.3	140.7	141.9	144.4	146.2	146.4
167.5°	139.2	139.6	140.0	140.1	140.6	141.2	141.6	142.4	144.0	145.3	145.4
170°	140.7	141.1	141.4	141.5	141.5	141.6	141.6	142.4	144.0	145.3	145.3
172.5°	141.4	141.5	141.6	141.6	141.6	141.6	141.6	142.3	143.5	144.5	144.4
175°	142.5	142.5	142.5	142.5	142.2	141.8	141.6	142.0	142.9	143.4	143.4
177.5°	142.5	142.5	142.5	142.5	142.3	142.0	141.8	142.1	142.8	143.2	143.2
180°	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	199.2	199.2
2.5°	212.7	211.4
5°	273.6	274.8
7.5°	368.3	367.8
10°	458.1	463.8
12.5°	523.4	524.7
15°	563.2	565.7
17.5°	578.5	579.2
20°	579.2	577.9
22.5°	572.1	570.8
25°	563.8	563.2
27.5°	556.1	556.8
30°	552.8	554.9
32.5°	552.8	556.1
35°	554.2	557.3
37.5°	553.5	557.3
40°	550.9	555.4
42.5°	544.0	547.1
45°	533.0	536.9
47.5°	518.9	521.5
50°	501.0	503.6
52.5°	478.6	479.2
55°	451.7	454.2
57.5°	422.9	423.4
60°	390.8	392.7
62.5°	356.9	356.9
65°	321.0	322.2
67.5°	283.8	287.0
70°	246.0	246.7
72.5°	208.9	208.9
75°	170.4	171.0
77.5°	133.9	133.9
80°	99.3	100.0
82.5°	68.6	69.8
85°	42.9	42.9
87.5°	19.9	18.0
90°	3.6	3.6
92.5°	14.5	11.7
95°	50.8	42.0
97.5°	121.6	105.0
100°	175.2	155.4
102.5°	227.9	210.9
105°	295.2	286.0
107.5°	339.2	341.4
110°	355.9	365.5

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	357.5	372.1
115°	348.0	368.2
117.5°	327.9	350.4
120°	311.7	333.5
122.5°	295.9	317.4
125°	273.4	293.3
127.5°	253.2	269.9
130°	241.2	256.7
132.5°	230.4	244.3
135°	215.6	227.6
137.5°	203.7	213.5
140°	195.5	204.7
142.5°	188.8	196.6
145°	178.7	184.6
147.5°	170.8	175.8
150°	166.0	170.0
152.5°	161.8	164.8
155°	157.0	159.0
157.5°	153.2	154.6
160°	150.9	151.7
162.5°	149.4	150.1
165°	147.3	148.0
167.5°	145.6	146.0
170°	145.3	145.3
172.5°	144.1	143.8
175°	143.4	143.4
177.5°	142.9	142.5
180°	142.5	142.5

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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	4.19	5.23	5.02	6.09	7.16	17.33	18.37	18.16	19.23	20.31
	3H	4.91	5.84	5.75	6.71	7.82	19.17	20.10	20.01	20.97	22.08
	4H	5.21	6.10	6.08	6.98	8.09	19.81	20.70	20.67	21.57	22.69
	6H	5.48	6.29	6.35	7.18	8.31	20.24	21.06	21.11	21.94	23.07
	8H	5.55	6.33	6.43	7.23	8.36	20.36	21.14	21.24	22.04	23.17
	12H	5.57	6.32	6.46	7.21	8.37	20.42	21.17	21.31	22.07	23.22
4H	2H	11.40	12.29	12.27	13.17	14.28	17.63	18.51	18.49	19.39	20.50
	3H	12.99	13.73	13.87	14.64	15.77	19.67	20.42	20.55	21.33	22.46
	4H	13.09	13.77	13.98	14.68	15.83	20.44	21.12	21.33	22.02	23.18
	6H	13.11	13.70	14.02	14.63	15.79	20.98	21.56	21.88	22.49	23.65
	8H	13.10	13.64	14.00	14.57	15.74	21.14	21.68	22.04	22.61	23.78
	12H	13.06	13.56	13.99	14.50	15.68	21.23	21.73	22.16	22.67	23.85
8H	4H	14.54	15.09	15.45	16.02	17.19	20.52	21.06	21.42	21.99	23.16
	6H	14.79	15.25	15.73	16.21	17.39	21.14	21.60	22.08	22.56	23.73
	8H	14.81	15.22	15.76	16.17	17.36	21.36	21.76	22.30	22.72	23.90
	12H	14.79	15.15	15.74	16.10	17.33	21.50	21.86	22.45	22.81	24.04
12H	4H	14.69	15.19	15.62	16.13	17.31	20.48	20.97	21.41	21.92	23.09
	6H	15.05	15.45	15.99	16.41	17.60	21.13	21.53	22.07	22.49	23.68
	8H	15.13	15.48	16.08	16.43	17.67	21.36	21.71	22.31	22.66	23.90