

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: P936275

Luminaire Tested: SQ4-FB-025U-050D-940-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

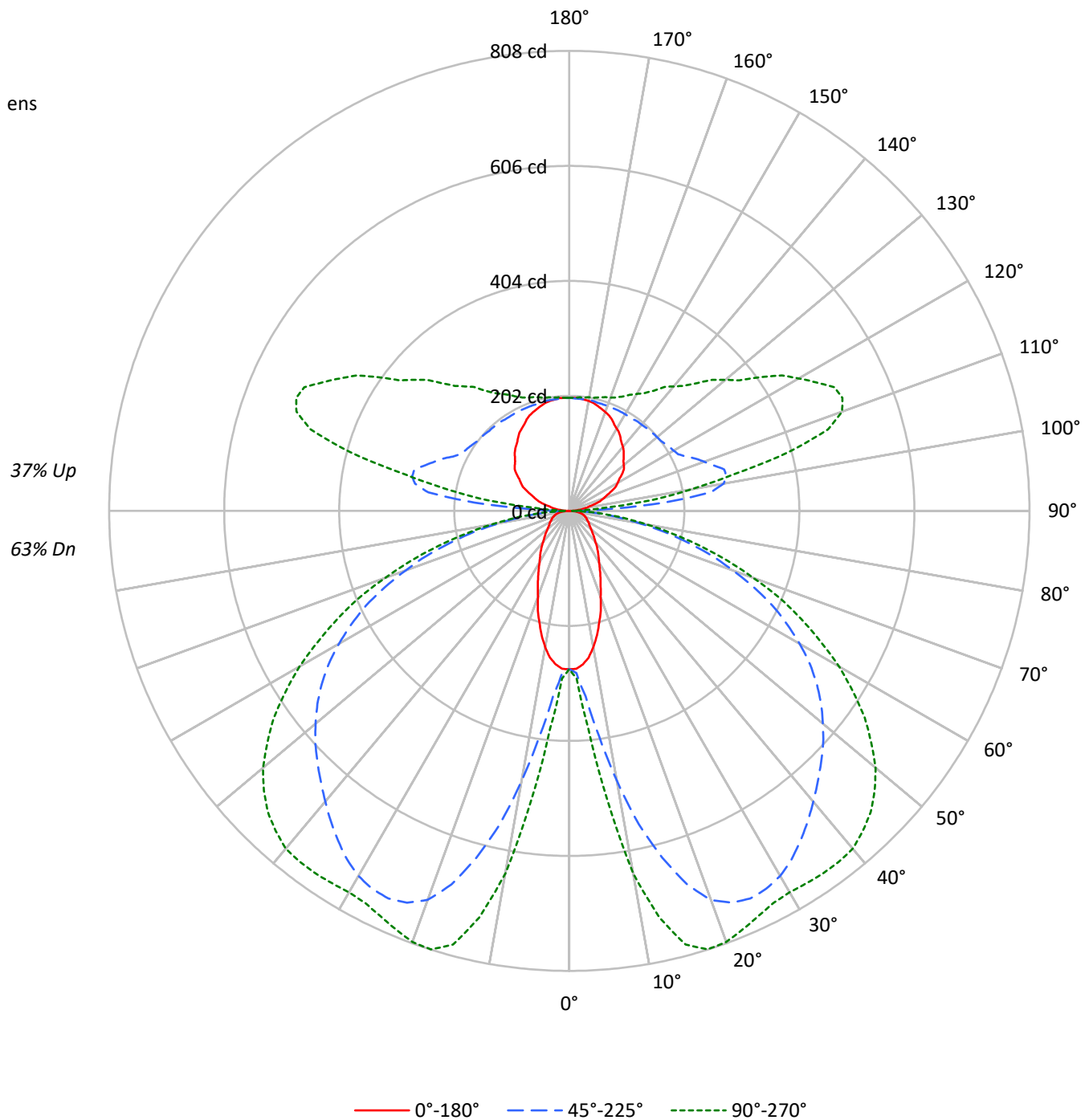
Test Method: LM-79-2019  
Report Number: P936275  
REPORT IS A COMBINATION OF REPORTS P933445 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-050D-940-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3438.3 lumens  
Efficiency: N/A  
Efficacy: 104.2 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 33  
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	63
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56	51
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46	42
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38	34
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32	29
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	28	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24	21
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21	18
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18	16
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16	14
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	13

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1719	1719	1719
5°	1679	1986	2310
10°	1522	2894	3829
15°	1292	3780	4624
20°	1052	4379	4713
25°	878	4581	4617
30°	739	4609	4608
35°	654	4531	4727
40°	569	4431	4850
45°	515	4356	4869
50°	472	4290	4789
55°	452	4192	4577
60°	463	4007	4241
65°	479	3724	3780
70°	510	3246	3194
75°	563	2643	2493
80°	609	1831	1679
85°	537	970	860

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4869 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.9	1.0
10°-20°	159.3	4.6
20°-30°	278.6	8.1
30°-40°	358.6	10.4
40°-50°	400.5	11.6
50°-60°	383.6	11.2
60°-70°	304.0	8.8
70°-80°	178.8	5.2
80°-90°	50.4	1.5
90°-100°	96.9	2.8
100°-110°	254.7	7.4
110°-120°	264.1	7.7
120°-130°	211.9	6.2
130°-140°	166.3	4.8
140°-150°	127.6	3.7
150°-160°	91.9	2.7
160°-170°	56.2	1.6
170°-180°	19.0	0.6
0°-30°	473.8	13.8
0°-40°	832.4	24.2
0°-60°	1616.5	47.0
0°-90°	2149.7	62.5
90°-120°	615.8	17.9
90°-150°	1121.5	32.6
90°-180°	1289.0	37.5
0°-180°	3438.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	278	278	278	278	278	
5°	271	290	327	370	383	25
15°	203	374	631	765	789	56
25°	130	424	751	784	785	60
35°	88	406	707	748	777	55
45°	60	323	625	716	748	46
55°	43	205	531	616	633	39
65°	34	109	394	443	449	34
75°	25	67	216	238	238	26
85°	9	20	54	59	60	9
90°	1	4	10	5	5	2
95°	13	50	167	86	59	14
105°	46	70	282	428	399	49
115°	82	99	226	450	514	81
125°	113	127	205	347	409	101
135°	135	149	199	280	317	105
145°	157	167	196	239	258	98
155°	177	182	196	215	222	81
165°	191	194	196	204	206	54
175°	199	199	198	200	200	19
180°	199	199	199	199	199	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8
2.5°	277.8	277.8	279.5	280.4	282.3	283.2	285.0	286.7	292.1	293.0	294.7
5°	270.7	274.2	285.8	290.3	302.8	319.8	326.9	338.5	362.7	369.8	374.3
7.5°	259.9	268.0	296.5	303.7	335.0	379.6	398.4	423.4	461.8	480.6	495.8
10°	243.0	259.9	310.8	327.8	378.7	446.6	481.5	516.3	574.4	600.2	610.1
12.5°	224.2	251.9	326.0	349.3	422.5	521.6	563.6	602.1	668.1	702.9	708.3
15°	202.7	240.3	340.3	374.3	469.0	584.1	630.6	678.0	739.6	764.6	770.9
17.5°	184.0	231.3	353.7	389.5	504.7	640.4	687.8	727.1	777.1	794.0	798.5
20°	160.8	217.0	362.7	409.1	542.2	681.5	727.1	757.5	791.4	802.1	803.9
22.5°	143.8	201.8	368.0	416.2	567.2	706.5	744.9	769.0	792.3	795.8	796.7
25°	129.6	184.9	367.1	424.3	588.7	721.7	751.2	769.0	782.4	784.2	784.2
27.5°	116.2	166.1	363.5	426.1	604.7	725.3	748.5	761.0	767.2	770.9	770.9
30°	104.5	148.3	354.6	422.5	611.8	721.7	740.5	746.7	752.9	758.4	761.0
32.5°	95.5	131.3	341.2	415.3	612.7	712.8	726.2	729.8	738.6	751.2	755.7
35°	87.6	114.4	326.0	405.5	607.4	698.5	707.4	711.0	728.9	747.6	753.8
37.5°	79.5	101.9	306.4	388.6	599.3	681.5	687.8	694.1	721.7	744.1	751.2
40°	71.5	91.1	283.2	369.8	586.9	660.9	666.4	676.1	712.8	738.6	745.8
42.5°	65.2	82.1	258.1	350.1	570.7	637.8	645.8	660.1	702.1	729.8	737.8
45°	59.9	73.3	231.3	323.3	550.2	613.6	625.2	644.9	689.5	716.3	723.5
47.5°	54.5	67.0	203.6	295.6	527.9	589.5	604.7	627.0	672.6	698.5	704.7
50°	50.0	60.7	176.0	266.1	503.8	563.6	581.5	604.7	651.2	675.2	683.3
52.5°	46.4	55.4	150.1	236.7	476.1	536.8	557.4	581.5	625.2	648.5	653.8
55°	42.9	50.9	127.7	205.4	447.5	508.2	530.6	553.8	596.6	616.3	619.9
57.5°	41.1	47.3	109.0	176.0	417.1	476.1	501.1	522.5	562.7	577.9	581.5
60°	38.5	44.7	94.7	151.0	384.1	445.7	467.2	488.6	522.5	535.0	537.7
62.5°	35.7	42.9	84.0	126.8	350.1	410.0	431.4	451.1	479.6	488.6	492.1
65°	33.9	41.1	75.9	109.0	315.3	372.4	393.9	410.9	434.1	443.0	444.8
67.5°	32.1	39.3	69.7	93.8	280.4	335.0	351.0	367.1	384.9	393.9	394.8
70°	29.5	37.5	64.3	83.0	244.7	292.1	305.5	322.4	336.7	341.2	343.9
72.5°	27.7	34.8	60.7	75.0	208.1	250.9	263.5	273.3	285.8	290.3	290.3
75°	25.0	31.3	57.2	67.0	170.6	205.4	216.1	226.0	235.8	237.6	234.9
77.5°	22.3	27.7	49.1	56.3	133.1	162.6	171.5	176.9	184.9	186.7	187.5
80°	18.7	24.2	38.5	43.8	96.4	119.7	125.9	130.4	137.6	137.6	139.3
82.5°	14.3	18.7	27.7	31.3	65.2	82.1	87.6	90.2	94.7	94.7	94.7
85°	9.0	11.6	17.8	20.5	39.3	50.0	53.6	54.5	58.1	59.0	59.0
87.5°	4.4	6.2	11.6	12.5	20.5	25.9	25.9	27.7	27.7	26.8	25.9
90°	1.3	2.4	3.5	3.7	5.9	8.7	10.1	9.0	6.7	5.1	5.1
92.5°	5.3	14.4	23.4	25.8	36.2	50.2	57.1	50.0	35.9	25.3	24.3
95°	12.8	29.4	46.0	50.2	89.1	140.9	166.9	148.9	113.0	86.0	83.0
97.5°	22.1	36.8	51.4	55.1	120.0	206.5	249.7	238.3	215.7	198.6	192.9
100°	29.4	42.6	55.9	59.2	131.2	227.2	275.2	276.0	277.7	278.9	272.0
102.5°	35.5	48.0	60.3	63.4	136.4	233.7	282.4	296.9	325.8	347.6	341.6
105°	45.9	56.4	66.9	69.5	140.2	234.4	281.6	314.0	378.9	427.6	424.4
107.5°	56.6	66.3	76.1	78.6	140.9	224.0	265.6	310.9	401.4	469.2	470.0
110°	63.8	72.6	81.4	83.6	139.9	214.8	252.3	302.9	404.0	479.9	483.2



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CATALOG NUMBER: SQ4-FB-025U-050D-940-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	70.9	79.3	87.6	89.8	139.9	206.7	240.1	291.9	395.4	473.0	478.1
115°	81.5	89.3	97.1	99.0	141.2	197.4	225.6	275.5	375.2	449.9	457.1
117.5°	92.1	99.1	106.1	107.9	143.8	191.6	215.6	260.6	350.6	418.1	425.9
120°	98.2	104.9	111.4	113.1	146.0	189.8	211.6	252.7	335.0	396.7	404.3
122.5°	104.2	110.9	117.6	119.3	149.0	188.7	208.5	245.5	319.6	375.2	382.7
125°	113.4	119.5	125.7	127.2	153.2	187.9	205.2	236.7	299.6	346.8	353.7
127.5°	120.9	127.0	133.2	134.7	157.3	187.4	202.4	229.4	283.4	323.9	329.8
130°	124.9	131.5	138.1	139.8	160.3	187.6	201.3	225.4	273.4	309.5	314.9
132.5°	129.0	135.7	142.3	143.9	162.8	187.9	200.4	221.9	265.0	297.2	302.0
135°	135.2	141.2	147.2	148.7	165.4	187.7	198.8	216.8	252.9	279.9	284.1
137.5°	141.5	147.4	153.4	154.9	169.4	188.9	198.6	213.8	244.3	267.1	270.5
140°	146.6	152.1	157.6	159.0	171.9	189.1	197.6	210.7	237.1	256.8	260.0
142.5°	150.6	155.7	160.8	162.1	173.9	189.7	197.6	209.1	232.3	249.6	252.4
145°	156.7	161.2	165.6	166.8	176.6	189.7	196.2	205.7	224.6	238.8	240.8
147.5°	162.9	167.2	171.6	172.6	180.5	191.0	196.2	203.7	218.5	229.7	231.4
150°	166.9	170.8	174.8	175.7	182.6	191.7	196.2	202.6	215.1	224.5	225.9
152.5°	171.0	174.0	177.0	177.7	183.9	192.2	196.2	201.6	212.3	220.4	221.5
155°	177.2	179.4	181.6	182.1	186.8	193.1	196.2	200.5	209.0	215.4	216.1
157.5°	181.7	183.8	185.9	186.5	189.8	194.1	196.2	199.5	206.2	211.2	211.7
160°	184.8	186.5	188.1	188.5	191.1	194.6	196.2	199.1	204.8	209.0	209.3
162.5°	187.8	189.1	190.3	190.7	192.5	195.0	196.2	198.6	203.4	207.1	207.3
165°	191.2	192.3	193.4	193.7	194.6	195.7	196.2	197.9	201.4	204.0	204.2
167.5°	194.2	194.7	195.3	195.4	196.2	197.1	197.6	198.7	201.0	202.6	202.7
170°	196.2	196.8	197.3	197.4	197.5	197.6	197.6	198.7	201.0	202.6	202.6
172.5°	197.3	197.4	197.6	197.6	197.6	197.6	197.6	198.5	200.2	201.6	201.5
175°	198.8	198.8	198.8	198.8	198.4	197.8	197.6	198.1	199.3	200.2	200.2
177.5°	198.8	198.8	198.8	198.8	198.5	198.0	197.8	198.3	199.2	199.9	199.8
180°	198.8	198.8	198.8	198.8	198.8	198.8	198.8	198.8	198.8	198.8	198.8



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	277.8	277.8
2.5°	296.5	294.7
5°	381.4	383.2
7.5°	513.6	512.7
10°	638.6	646.6
12.5°	729.8	731.5
15°	785.2	788.7
17.5°	806.6	807.5
20°	807.5	805.7
22.5°	797.6	795.8
25°	786.1	785.2
27.5°	775.3	776.2
30°	770.9	773.5
32.5°	770.9	775.3
35°	772.6	777.1
37.5°	771.8	777.1
40°	768.1	774.4
42.5°	758.4	762.8
45°	743.2	748.5
47.5°	723.5	727.1
50°	698.5	702.1
52.5°	667.2	668.1
55°	629.7	633.3
57.5°	589.5	590.4
60°	544.9	547.5
62.5°	497.5	497.5
65°	447.5	449.2
67.5°	395.7	400.1
70°	343.0	343.9
72.5°	291.2	291.2
75°	237.6	238.5
77.5°	186.7	186.7
80°	138.4	139.3
82.5°	95.5	97.3
85°	59.9	59.9
87.5°	27.7	25.0
90°	5.1	5.1
92.5°	20.2	16.3
95°	70.8	58.6
97.5°	169.6	146.3
100°	244.4	216.7
102.5°	317.9	294.2
105°	411.7	398.9
107.5°	473.0	476.1
110°	496.5	509.8





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CATALOG NUMBER: SQ4-FB-025U-050D-940-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	498.5	518.9
115°	485.3	513.6
117.5°	457.3	488.7
120°	434.8	465.2
122.5°	412.7	442.8
125°	381.3	409.0
127.5°	353.2	376.5
130°	336.5	358.0
132.5°	321.4	340.7
135°	300.7	317.4
137.5°	284.2	297.7
140°	272.7	285.5
142.5°	263.3	274.3
145°	249.2	257.5
147.5°	238.3	245.2
150°	231.5	237.1
152.5°	225.6	229.9
155°	218.9	221.7
157.5°	213.7	215.6
160°	210.5	211.6
162.5°	208.4	209.5
165°	205.4	206.5
167.5°	203.3	203.7
170°	202.6	202.6
172.5°	201.0	200.7
175°	200.2	200.2
177.5°	199.3	198.8
180°	198.8	198.8



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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	3.95	4.99	4.78	5.85	6.92	17.11	18.15	17.94	19.01	20.09
	3H	4.67	5.60	5.51	6.47	7.58	18.96	19.89	19.80	20.76	21.87
	4H	4.97	5.86	5.83	6.74	7.85	19.61	20.49	20.47	21.37	22.49
	6H	5.23	6.05	6.11	6.93	8.06	20.04	20.86	20.92	21.75	22.87
	8H	5.31	6.09	6.19	6.99	8.12	20.17	20.95	21.05	21.85	22.98
	12H	5.33	6.07	6.22	6.97	8.13	20.24	20.98	21.13	21.88	23.04
4H	2H	11.17	12.06	12.04	12.94	14.05	17.41	18.29	18.27	19.17	20.28
	3H	12.76	13.50	13.64	14.41	15.54	19.46	20.21	20.34	21.12	22.25
	4H	12.86	13.54	13.75	14.45	15.60	20.24	20.91	21.13	21.82	22.97
	6H	12.88	13.47	13.79	14.40	15.56	20.78	21.37	21.69	22.30	23.45
	8H	12.87	13.41	13.77	14.34	15.51	20.95	21.49	21.85	22.42	23.59
	12H	12.83	13.33	13.76	14.27	15.45	21.04	21.54	21.97	22.48	23.66
8H	4H	14.32	14.87	15.23	15.79	16.96	20.31	20.86	21.22	21.79	22.96
	6H	14.57	15.02	15.50	15.99	17.16	20.94	21.40	21.88	22.37	23.54
	8H	14.59	14.99	15.53	15.95	17.14	21.16	21.57	22.11	22.53	23.71
	12H	14.57	14.92	15.52	15.87	17.11	21.31	21.67	22.26	22.62	23.86
12H	4H	14.47	14.97	15.40	15.91	17.09	20.27	20.77	21.20	21.71	22.89
	6H	14.83	15.23	15.77	16.19	17.38	20.93	21.34	21.88	22.29	23.48
	8H	14.91	15.26	15.86	16.21	17.45	21.17	21.52	22.12	22.47	23.71