

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: P936266

Luminaire Tested: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936266
REPORT IS A COMBINATION OF REPORTS P933453 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-8-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

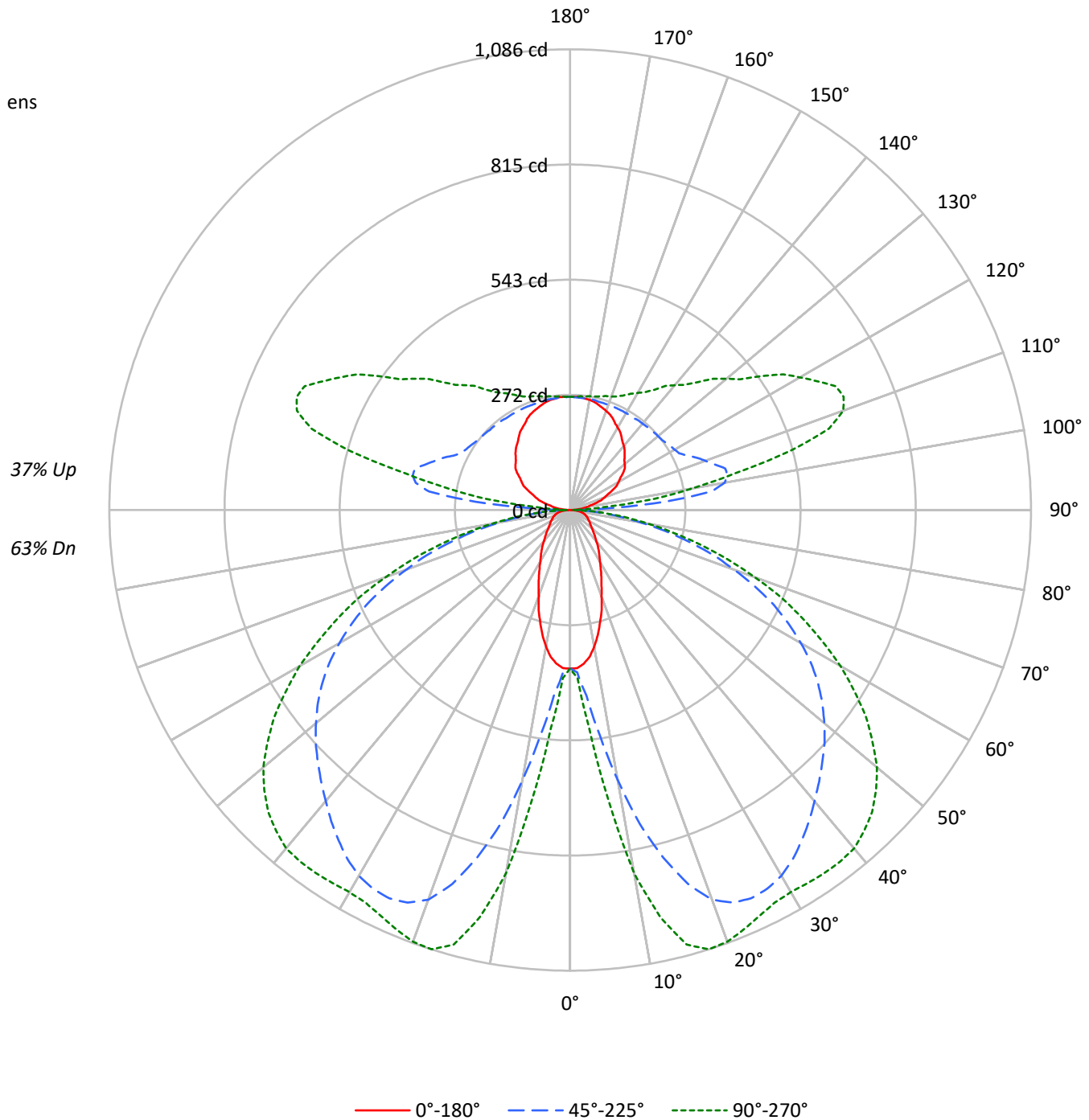
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4622.5 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 44
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

TEST NUMBER: P936266
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Luminous Intensity Polar Plot





TEST NUMBER: P936266

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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°	1732	1732	1732
5°	1693	2003	2329
10°	1535	2919	3861
15°	1305	3814	4663
20°	1062	4420	4751
25°	886	4625	4655
30°	747	4654	4647
35°	660	4577	4766
40°	576	4476	4891
45°	522	4403	4910
50°	478	4337	4829
55°	459	4240	4614
60°	470	4054	4276
65°	489	3771	3813
70°	521	3288	3220
75°	577	2681	2513
80°	629	1859	1693
85°	559	987	867

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4910 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.3	1.0
10°-20°	214.1	4.6
20°-30°	374.5	8.1
30°-40°	482.1	10.4
40°-50°	538.5	11.6
50°-60°	515.8	11.2
60°-70°	408.8	8.8
70°-80°	240.3	5.2
80°-90°	67.8	1.5
90°-100°	130.2	2.8
100°-110°	342.5	7.4
110°-120°	355.1	7.7
120°-130°	284.8	6.2
130°-140°	223.5	4.8
140°-150°	171.5	3.7
150°-160°	123.5	2.7
160°-170°	75.6	1.6
170°-180°	25.5	0.6
0°-30°	636.9	13.8
0°-40°	1119.0	24.2
0°-60°	2173.3	47.0
0°-90°	2890.2	62.5
90°-120°	827.8	17.9
90°-150°	1507.7	32.6
90°-180°	1732.0	37.5
0°-180°	4622.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	373	373	373	373	373	
5°	364	390	440	497	515	34
15°	273	503	848	1028	1060	76
25°	174	570	1010	1054	1056	80
35°	118	545	951	1005	1045	73
45°	80	435	841	963	1006	62
55°	58	276	713	829	851	53
65°	46	146	530	596	604	45
75°	34	90	291	319	321	35
85°	12	28	72	79	80	13
90°	2	5	14	7	7	2
95°	17	67	224	116	79	19
105°	62	94	379	575	536	65
115°	110	133	303	605	690	108
125°	152	171	276	466	550	135
135°	182	200	267	376	427	141
145°	211	224	264	321	346	132
155°	238	245	264	290	298	109
165°	257	260	264	274	278	73
175°	267	267	266	269	269	25
180°	267	267	267	267	267	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
2.5°	373.4	373.4	375.9	377.1	379.4	380.7	383.1	385.5	392.7	393.8	396.3
5°	363.9	368.7	384.3	390.3	407.1	429.9	439.5	455.1	487.6	497.2	503.2
7.5°	349.4	360.3	398.7	408.3	450.3	510.3	535.6	569.2	620.8	646.1	666.5
10°	326.6	349.4	417.9	440.8	509.2	600.4	647.3	694.1	772.1	806.9	820.2
12.5°	301.5	338.6	438.3	469.5	568.0	701.3	757.8	809.4	898.3	945.1	952.3
15°	272.6	323.0	457.5	503.2	630.5	785.4	847.9	911.4	994.3	1027.9	1036.3
17.5°	247.4	311.0	475.6	523.6	678.5	861.0	924.7	977.5	1044.7	1067.6	1073.6
20°	216.1	291.8	487.6	550.0	729.0	916.3	977.5	1018.3	1064.0	1078.4	1080.8
22.5°	193.3	271.4	494.7	559.6	762.5	949.9	1001.5	1034.0	1065.2	1070.0	1071.2
25°	174.1	248.5	493.6	570.4	791.4	970.3	1009.9	1034.0	1052.0	1054.4	1054.4
27.5°	156.1	223.4	488.8	572.8	813.0	975.1	1006.3	1023.2	1031.6	1036.3	1036.3
30°	140.5	199.4	476.8	568.0	822.6	970.3	995.5	1003.9	1012.3	1019.6	1023.2
32.5°	128.5	176.6	458.8	558.4	823.8	958.3	976.3	981.1	993.1	1009.9	1015.9
35°	117.6	153.7	438.3	545.2	816.6	939.1	951.1	955.9	979.9	1005.2	1013.5
37.5°	106.9	136.9	411.9	522.4	805.8	916.3	924.7	933.1	970.3	1000.3	1009.9
40°	96.1	122.5	380.7	497.2	788.9	888.7	895.8	909.1	958.3	993.1	1002.7
42.5°	87.7	110.5	347.0	470.8	767.4	857.4	868.3	887.4	943.9	981.1	991.9
45°	80.5	98.5	311.0	434.7	739.7	825.0	840.6	867.0	927.1	963.1	972.7
47.5°	73.2	90.1	273.8	397.5	709.7	792.6	813.0	843.0	904.3	939.1	947.5
50°	67.2	81.7	236.5	357.9	677.3	757.8	781.8	813.0	875.4	907.8	918.7
52.5°	62.4	74.5	201.7	318.2	640.1	721.7	749.4	781.8	840.6	871.9	879.0
55°	57.7	68.5	171.7	276.2	601.6	683.3	713.3	744.5	802.2	828.6	833.4
57.5°	55.2	63.7	146.5	236.5	560.8	640.1	673.7	702.6	756.5	777.0	781.8
60°	51.7	60.1	127.3	203.0	516.4	599.2	628.1	656.9	702.6	719.3	723.0
62.5°	48.1	57.7	112.9	170.6	470.8	551.2	580.0	606.5	644.9	656.9	661.7
65°	45.7	55.2	102.1	146.5	423.9	500.7	529.6	552.4	583.7	595.7	598.1
67.5°	43.2	52.8	93.6	126.1	377.1	450.3	471.9	493.6	517.6	529.6	530.7
70°	39.7	50.4	86.5	111.6	329.0	392.7	410.7	433.5	452.8	458.8	462.3
72.5°	37.2	46.8	81.7	100.9	279.8	337.4	354.3	367.4	384.3	390.3	390.3
75°	33.7	42.0	76.8	90.1	229.4	276.2	290.6	303.8	317.0	319.4	315.9
77.5°	30.0	37.2	66.1	75.7	179.0	218.5	230.5	237.8	248.5	251.0	252.2
80°	25.2	32.4	51.7	58.8	129.7	160.9	169.3	175.3	185.0	185.0	187.3
82.5°	19.2	25.2	37.2	42.0	87.7	110.5	117.6	121.3	127.3	127.3	127.3
85°	12.0	15.6	24.0	27.6	52.8	67.2	72.1	73.2	78.1	79.2	79.2
87.5°	6.0	8.4	15.6	16.8	27.6	34.8	34.8	37.2	37.2	36.0	34.8
90°	1.8	3.2	4.7	5.0	7.9	11.7	13.6	12.1	9.0	6.8	6.8
92.5°	7.2	19.3	31.6	34.6	48.7	67.4	76.7	67.2	48.3	34.1	32.8
95°	17.2	39.5	61.9	67.4	119.7	189.4	224.4	200.2	151.9	115.7	111.6
97.5°	29.8	49.5	69.1	74.0	161.2	277.5	335.7	320.5	290.0	267.1	259.3
100°	39.5	57.3	75.1	79.6	176.4	305.4	369.9	371.1	373.3	375.0	365.7
102.5°	47.7	64.4	81.0	85.1	183.4	314.3	379.7	399.1	438.0	467.2	459.2
105°	61.7	75.8	90.0	93.5	188.6	315.2	378.6	422.2	509.4	574.8	570.5
107.5°	76.0	89.2	102.3	105.6	189.4	301.2	357.1	417.8	539.5	630.7	631.8
110°	85.8	97.6	109.5	112.5	188.0	288.7	339.1	407.1	543.1	645.1	649.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	95.3	106.5	117.8	120.7	188.1	277.9	322.8	392.4	531.5	635.9	642.8
115°	109.6	120.0	130.4	133.0	189.8	265.5	303.2	370.3	504.4	605.0	614.5
117.5°	123.7	133.2	142.7	145.1	193.4	257.7	289.8	350.3	471.3	562.1	572.6
120°	132.0	140.9	149.9	152.1	196.3	255.1	284.4	339.7	450.3	533.2	543.4
122.5°	140.0	149.1	158.1	160.4	200.4	253.6	280.3	330.1	429.7	504.3	514.4
125°	152.5	160.7	168.9	170.9	205.9	252.6	275.8	318.1	402.7	466.1	475.4
127.5°	162.5	170.7	179.1	181.1	211.5	251.9	272.1	308.4	381.0	435.5	443.4
130°	167.9	176.8	185.7	187.9	215.5	252.3	270.7	303.0	367.6	416.1	423.3
132.5°	173.4	182.4	191.2	193.5	218.8	252.6	269.4	298.3	356.2	399.6	406.1
135°	181.7	189.8	198.0	200.0	222.4	252.3	267.3	291.5	339.9	376.3	381.9
137.5°	190.1	198.1	206.2	208.2	227.8	253.8	266.9	287.4	328.3	359.0	363.6
140°	197.1	204.5	211.9	213.8	231.1	254.1	265.6	283.4	318.7	345.2	349.5
142.5°	202.5	209.3	216.2	217.9	233.9	255.1	265.6	281.2	312.3	335.6	339.2
145°	210.8	216.8	222.7	224.2	237.4	255.1	263.8	276.6	302.0	321.1	323.8
147.5°	219.0	224.8	230.6	232.1	242.6	256.8	263.8	273.9	293.8	308.8	311.1
150°	224.4	229.6	234.8	236.2	245.4	257.7	263.8	272.3	289.2	301.8	303.7
152.5°	229.9	233.9	237.9	238.9	247.2	258.3	263.8	271.0	285.4	296.3	297.7
155°	238.2	241.1	244.1	244.8	251.1	259.6	263.8	269.6	281.0	289.6	290.5
157.5°	244.2	247.1	250.0	250.7	255.1	260.9	263.8	268.3	277.2	283.9	284.5
160°	248.4	250.6	252.8	253.4	256.9	261.5	263.8	267.7	275.3	281.0	281.4
162.5°	252.5	254.2	255.8	256.2	258.7	262.1	263.8	267.1	273.5	278.4	278.7
165°	257.0	258.6	260.1	260.4	261.6	263.1	263.8	266.2	270.7	274.2	274.6
167.5°	261.2	261.9	262.6	262.8	263.8	265.0	265.6	267.2	270.2	272.4	272.6
170°	263.8	264.6	265.3	265.5	265.5	265.6	265.6	267.2	270.2	272.4	272.4
172.5°	265.3	265.5	265.6	265.6	265.6	265.6	265.6	266.8	269.2	271.0	270.8
175°	267.3	267.3	267.3	267.3	266.7	266.0	265.6	266.4	267.9	269.0	269.0
177.5°	267.3	267.3	267.3	267.3	266.8	266.3	266.0	266.6	267.8	268.7	268.5
180°	267.3	267.3	267.3	267.3	267.3	267.3	267.3	267.3	267.3	267.3	267.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	373.4	373.4
2.5°	398.7	396.3
5°	512.7	515.2
7.5°	690.5	689.3
10°	858.6	869.4
12.5°	981.1	983.5
15°	1055.6	1060.4
17.5°	1084.4	1085.6
20°	1085.6	1083.1
22.5°	1072.4	1070.0
25°	1056.7	1055.6
27.5°	1042.3	1043.6
30°	1036.3	1040.0
32.5°	1036.3	1042.3
35°	1038.7	1044.7
37.5°	1037.6	1044.7
40°	1032.7	1041.2
42.5°	1019.6	1025.6
45°	999.2	1006.3
47.5°	972.7	977.5
50°	939.1	943.9
52.5°	897.0	898.3
55°	846.6	851.4
57.5°	792.6	793.8
60°	732.5	736.1
62.5°	668.9	668.9
65°	601.6	604.1
67.5°	532.0	538.0
70°	461.2	462.3
72.5°	391.5	391.5
75°	319.4	320.6
77.5°	251.0	251.0
80°	186.1	187.3
82.5°	128.5	130.9
85°	80.5	80.5
87.5°	37.2	33.7
90°	6.8	6.8
92.5°	27.3	21.8
95°	95.2	78.7
97.5°	227.9	196.7
100°	328.5	291.2
102.5°	427.3	395.5
105°	553.4	536.2
107.5°	635.9	640.1
110°	667.4	685.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	670.2	697.6
115°	652.5	690.5
117.5°	614.8	657.0
120°	584.4	625.4
122.5°	554.8	595.2
125°	512.7	549.9
127.5°	474.7	506.1
130°	452.3	481.3
132.5°	432.1	458.0
135°	404.2	426.6
137.5°	381.9	400.3
140°	366.6	383.8
142.5°	354.0	368.7
145°	335.0	346.1
147.5°	320.3	329.7
150°	311.2	318.7
152.5°	303.3	309.0
155°	294.3	298.0
157.5°	287.2	289.8
160°	282.9	284.4
162.5°	280.1	281.6
165°	276.1	277.6
167.5°	273.2	273.9
170°	272.4	272.4
172.5°	270.3	269.8
175°	269.0	269.0
177.5°	267.9	267.3
180°	267.3	267.3



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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	3.98	5.02	4.81	5.88	6.96	17.16	18.20	17.99	19.06	20.14
	3H	4.70	5.63	5.54	6.50	7.61	19.01	19.95	19.86	20.82	21.92
	4H	5.00	5.89	5.87	6.77	7.88	19.66	20.55	20.53	21.43	22.54
	6H	5.26	6.08	6.14	6.97	8.09	20.10	20.92	20.98	21.81	22.93
	8H	5.34	6.12	6.22	7.02	8.15	20.23	21.01	21.11	21.91	23.04
	12H	5.36	6.10	6.25	7.00	8.16	20.31	21.05	21.19	21.95	23.10
4H	2H	11.22	12.10	12.08	12.98	14.09	17.45	18.34	18.32	19.22	20.33
	3H	12.80	13.54	13.68	14.45	15.58	19.52	20.26	20.39	21.17	22.30
	4H	12.90	13.58	13.79	14.49	15.64	20.29	20.97	21.18	21.87	23.03
	6H	12.92	13.51	13.83	14.44	15.60	20.84	21.43	21.75	22.36	23.51
	8H	12.91	13.45	13.81	14.38	15.55	21.01	21.56	21.92	22.48	23.65
	12H	12.87	13.37	13.80	14.31	15.49	21.11	21.61	22.04	22.55	23.73
8H	4H	14.36	14.91	15.27	15.84	17.01	20.37	20.92	21.27	21.84	23.01
	6H	14.61	15.07	15.55	16.04	17.21	21.00	21.46	21.94	22.43	23.60
	8H	14.63	15.04	15.58	16.00	17.18	21.23	21.63	22.17	22.59	23.78
	12H	14.61	14.97	15.56	15.92	17.15	21.38	21.74	22.33	22.69	23.92
12H	4H	14.52	15.01	15.44	15.95	17.13	20.33	20.82	21.26	21.77	22.94
	6H	14.87	15.28	15.82	16.24	17.42	20.99	21.39	21.93	22.35	23.54
	8H	14.95	15.31	15.90	16.26	17.50	21.23	21.58	22.18	22.54	23.77