

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: P936215

Luminaire Tested: SQ4-FB-025U-050D-835-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936215
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-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

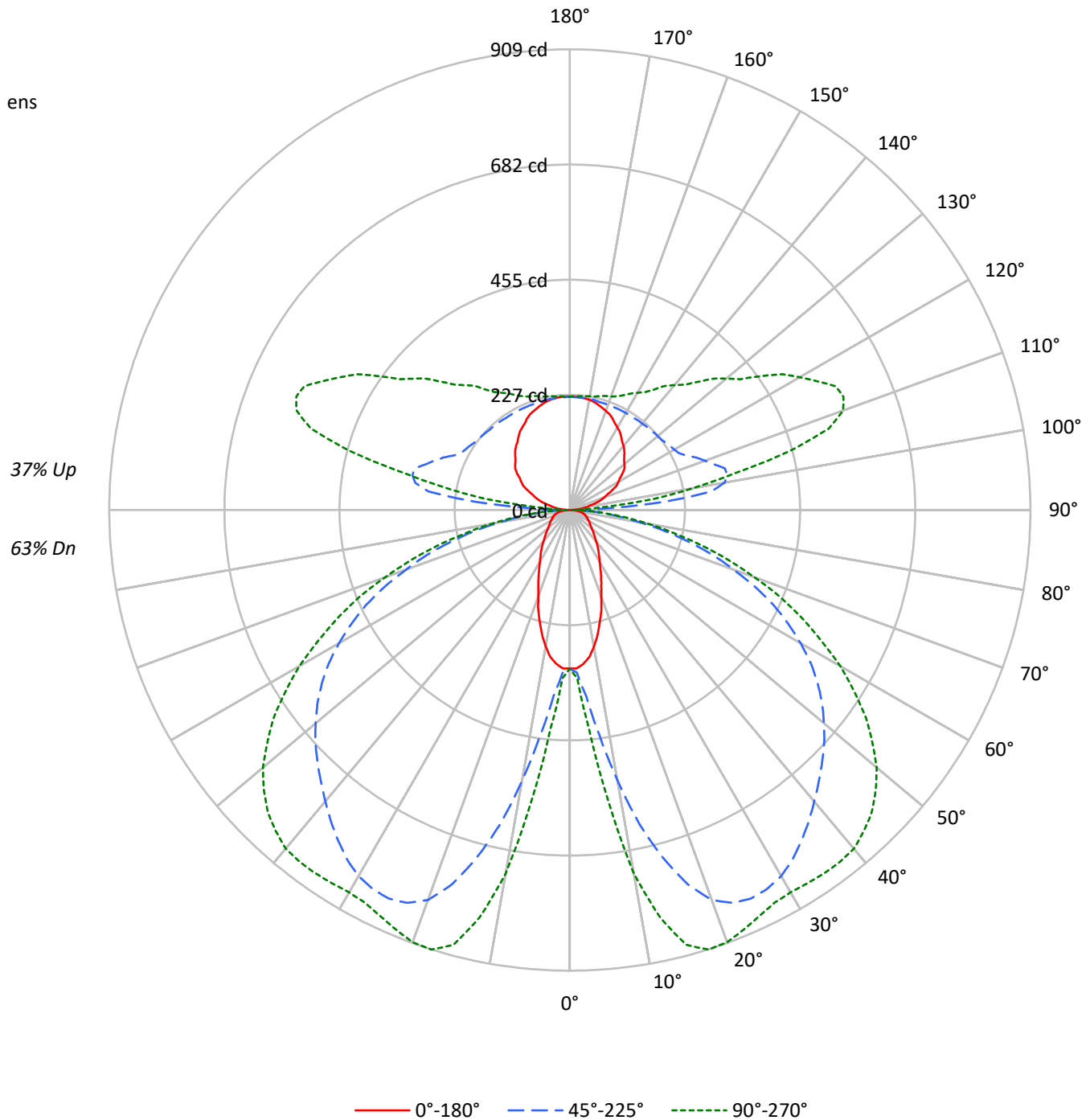
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3872.0 lumens
Efficiency: N/A
Efficacy: 117.3 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 (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	
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°	1935	1935	1935
5°	1890	2236	2601
10°	1714	3259	4312
15°	1456	4256	5207
20°	1185	4931	5307
25°	988	5159	5199
30°	833	5191	5189
35°	736	5103	5323
40°	641	4990	5462
45°	580	4906	5483
50°	531	4830	5393
55°	509	4721	5154
60°	521	4512	4776
65°	540	4194	4257
70°	574	3655	3597
75°	635	2977	2807
80°	687	2062	1891
85°	602	1093	968

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5483 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.5	1.0
10°-20°	179.3	4.6
20°-30°	313.7	8.1
30°-40°	403.8	10.4
40°-50°	451.0	11.6
50°-60°	432.0	11.2
60°-70°	342.4	8.8
70°-80°	201.3	5.2
80°-90°	56.8	1.5
90°-100°	109.1	2.8
100°-110°	286.9	7.4
110°-120°	297.5	7.7
120°-130°	238.6	6.2
130°-140°	187.2	4.8
140°-150°	143.7	3.7
150°-160°	103.5	2.7
160°-170°	63.3	1.6
170°-180°	21.4	0.6
0°-30°	533.5	13.8
0°-40°	937.3	24.2
0°-60°	1820.4	47.0
0°-90°	2420.8	62.5
90°-120°	693.4	17.9
90°-150°	1262.9	32.6
90°-180°	1451.0	37.5
0°-180°	3872.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	313	313	313	313	313	
5°	305	327	368	416	432	28
15°	228	422	710	861	888	64
25°	146	478	846	883	884	67
35°	99	457	797	842	875	62
45°	67	364	704	807	843	52
55°	48	231	598	694	713	44
65°	38	123	444	499	506	38
75°	28	75	243	268	269	29
85°	10	23	60	66	67	11
90°	2	4	11	6	6	2
95°	14	56	188	97	66	16
105°	52	78	317	482	449	55
115°	92	112	254	507	578	91
125°	128	143	231	390	461	113
135°	152	168	224	315	357	118
145°	176	188	221	269	290	111
155°	200	205	221	243	250	92
165°	215	218	221	230	233	61
175°	224	224	222	225	225	21
180°	224	224	224	224	224	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8
2.5°	312.8	312.8	314.8	315.8	317.9	318.9	320.9	322.9	328.9	329.9	331.9
5°	304.8	308.8	321.9	326.9	341.0	360.1	368.1	381.2	408.4	416.4	421.5
7.5°	292.7	301.8	333.9	342.0	377.2	427.5	448.6	476.8	520.0	541.2	558.3
10°	273.6	292.7	350.0	369.2	426.5	502.9	542.2	581.4	646.8	675.9	687.0
12.5°	252.5	283.7	367.1	393.3	475.8	587.4	634.7	678.0	752.4	791.6	797.6
15°	228.3	270.6	383.2	421.5	528.1	657.8	710.1	763.5	832.9	861.0	868.1
17.5°	207.2	260.5	398.3	438.6	568.3	721.2	774.5	818.8	875.1	894.2	899.2
20°	181.1	244.4	408.4	460.7	610.6	767.5	818.8	853.0	891.2	903.3	905.3
22.5°	161.9	227.3	414.4	468.7	638.7	795.6	838.9	866.0	892.2	896.2	897.2
25°	145.9	208.2	413.4	477.8	662.9	812.7	845.9	866.0	881.1	883.1	883.1
27.5°	130.8	187.1	409.4	479.8	681.0	816.8	842.9	857.0	864.0	868.1	868.1
30°	117.7	167.0	399.3	475.8	689.0	812.7	833.9	840.9	847.9	854.0	857.0
32.5°	107.6	147.9	384.2	467.7	690.0	802.7	817.8	821.8	831.8	845.9	851.0
35°	98.6	128.8	367.1	456.7	684.0	786.6	796.6	800.7	820.8	841.9	848.9
37.5°	89.5	114.7	345.0	437.6	674.9	767.5	774.5	781.6	812.7	837.9	845.9
40°	80.5	102.6	318.9	416.4	660.9	744.3	750.4	761.4	802.7	831.8	839.9
42.5°	73.4	92.5	290.7	394.3	642.7	718.2	727.2	743.3	790.6	821.8	830.8
45°	67.4	82.5	260.5	364.1	619.6	691.0	704.1	726.2	776.5	806.7	814.7
47.5°	61.4	75.4	229.3	332.9	594.5	663.9	681.0	706.1	757.4	786.6	793.6
50°	56.3	68.4	198.2	299.7	567.3	634.7	654.8	681.0	733.3	760.4	769.5
52.5°	52.3	62.4	169.0	266.6	536.1	604.5	627.7	654.8	704.1	730.3	736.3
55°	48.3	57.3	143.8	231.3	503.9	572.3	597.5	623.6	671.9	694.0	698.1
57.5°	46.3	53.3	122.7	198.2	469.7	536.1	564.3	588.4	633.7	650.8	654.8
60°	43.3	50.3	106.6	170.0	432.5	501.9	526.1	550.2	588.4	602.5	605.5
62.5°	40.2	48.3	94.6	142.8	394.3	461.7	485.8	508.0	540.1	550.2	554.2
65°	38.2	46.3	85.5	122.7	355.1	419.4	443.6	462.7	488.8	498.9	500.9
67.5°	36.2	44.3	78.5	105.6	315.8	377.2	395.3	413.4	433.5	443.6	444.6
70°	33.2	42.2	72.4	93.5	275.6	328.9	344.0	363.1	379.2	384.2	387.3
72.5°	31.2	39.2	68.4	84.5	234.4	282.6	296.7	307.8	321.9	326.9	326.9
75°	28.2	35.2	64.4	75.4	192.1	231.3	243.4	254.5	265.5	267.6	264.5
77.5°	25.1	31.2	55.3	63.4	149.9	183.1	193.1	199.2	208.2	210.2	211.2
80°	21.1	27.2	43.3	49.3	108.6	134.8	141.8	146.9	154.9	154.9	156.9
82.5°	16.1	21.1	31.2	35.2	73.4	92.5	98.6	101.6	106.6	106.6	106.6
85°	10.1	13.1	20.1	23.1	44.3	56.3	60.4	61.4	65.4	66.4	66.4
87.5°	5.0	7.0	13.1	14.1	23.1	29.2	29.2	31.2	31.2	30.2	29.2
90°	1.5	2.7	3.9	4.2	6.6	9.8	11.4	10.1	7.6	5.7	5.7
92.5°	6.0	16.2	26.4	29.0	40.8	56.5	64.3	56.3	40.4	28.5	27.4
95°	14.4	33.1	51.8	56.5	100.3	158.7	187.9	167.7	127.2	96.9	93.5
97.5°	24.9	41.4	57.9	62.0	135.1	232.5	281.2	268.4	242.9	223.7	217.2
100°	33.1	48.0	63.0	66.7	147.8	255.9	309.9	310.8	312.7	314.1	306.3
102.5°	40.0	54.0	67.9	71.4	153.6	263.2	318.0	334.3	366.9	391.4	384.7
105°	51.7	63.5	75.3	78.3	157.9	264.0	317.1	353.6	426.7	481.5	477.9
107.5°	63.7	74.7	85.7	88.5	158.7	252.3	299.1	350.1	452.0	528.4	529.3
110°	71.8	81.8	91.7	94.2	157.5	241.9	284.1	341.1	455.0	540.4	544.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	79.8	89.3	98.7	101.1	157.5	232.8	270.4	328.7	445.3	532.7	538.4
115°	91.8	100.6	109.3	111.5	159.0	222.3	254.0	310.2	422.5	506.7	514.7
117.5°	103.7	111.6	119.5	121.5	161.9	215.8	242.8	293.5	394.8	470.8	479.6
120°	110.6	118.1	125.5	127.4	164.4	213.7	238.3	284.6	377.2	446.7	455.3
122.5°	117.3	124.9	132.4	134.3	167.8	212.5	234.8	276.5	359.9	422.5	431.0
125°	127.7	134.6	141.5	143.2	172.5	211.6	231.1	266.5	337.4	390.5	398.3
127.5°	136.1	143.0	150.0	151.7	177.1	211.0	227.9	258.3	319.2	364.8	371.4
130°	140.6	148.1	155.5	157.4	180.5	211.3	226.7	253.8	307.9	348.5	354.6
132.5°	145.3	152.8	160.2	162.1	183.3	211.6	225.7	249.9	298.4	334.7	340.1
135°	152.2	159.0	165.8	167.5	186.3	211.4	223.9	244.2	284.8	315.2	319.9
137.5°	159.3	166.0	172.7	174.4	190.8	212.7	223.6	240.8	275.1	300.8	304.6
140°	165.1	171.3	177.5	179.1	193.6	212.9	222.5	237.3	267.0	289.2	292.8
142.5°	169.6	175.3	181.1	182.5	195.8	213.6	222.5	235.5	261.6	281.1	284.2
145°	176.5	181.5	186.5	187.8	198.9	213.6	221.0	231.6	252.9	268.9	271.2
147.5°	183.4	188.3	193.2	194.4	203.3	215.1	221.0	229.4	246.1	258.7	260.6
150°	187.9	192.3	196.8	197.9	205.6	215.9	221.0	228.1	242.2	252.8	254.4
152.5°	192.6	195.9	199.3	200.1	207.1	216.4	221.0	227.0	239.1	248.2	249.4
155°	199.5	202.0	204.5	205.1	210.4	217.5	221.0	225.8	235.4	242.6	243.4
157.5°	204.6	207.0	209.4	210.0	213.7	218.6	221.0	224.7	232.2	237.8	238.4
160°	208.1	210.0	211.8	212.3	215.2	219.1	221.0	224.2	230.6	235.4	235.7
162.5°	211.5	212.9	214.3	214.7	216.8	219.6	221.0	223.7	229.1	233.2	233.5
165°	215.3	216.5	217.8	218.1	219.1	220.4	221.0	222.9	226.8	229.7	230.0
167.5°	218.7	219.3	219.9	220.1	220.9	222.0	222.5	223.8	226.3	228.2	228.3
170°	221.0	221.6	222.2	222.3	222.4	222.5	222.5	223.8	226.3	228.2	228.2
172.5°	222.2	222.3	222.5	222.5	222.5	222.5	222.5	223.5	225.5	227.0	226.9
175°	223.9	223.9	223.9	223.9	223.4	222.8	222.5	223.1	224.4	225.4	225.4
177.5°	223.9	223.9	223.9	223.9	223.5	223.0	222.8	223.3	224.3	225.1	225.0
180°	223.9	223.9	223.9	223.9	223.9	223.9	223.9	223.9	223.9	223.9	223.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	312.8	312.8
2.5°	333.9	331.9
5°	429.5	431.5
7.5°	578.4	577.4
10°	719.2	728.2
12.5°	821.8	823.8
15°	884.2	888.2
17.5°	908.3	909.3
20°	909.3	907.3
22.5°	898.2	896.2
25°	885.2	884.2
27.5°	873.1	874.1
30°	868.1	871.1
32.5°	868.1	873.1
35°	870.1	875.1
37.5°	869.1	875.1
40°	865.0	872.1
42.5°	854.0	859.0
45°	836.9	842.9
47.5°	814.7	818.8
50°	786.6	790.6
52.5°	751.4	752.4
55°	709.1	713.2
57.5°	663.9	664.9
60°	613.6	616.6
62.5°	560.3	560.3
65°	503.9	505.9
67.5°	445.6	450.6
70°	386.3	387.3
72.5°	327.9	327.9
75°	267.6	268.6
77.5°	210.2	210.2
80°	155.9	156.9
82.5°	107.6	109.6
85°	67.4	67.4
87.5°	31.2	28.2
90°	5.7	5.7
92.5°	22.8	18.3
95°	79.7	66.0
97.5°	191.0	164.8
100°	275.2	244.0
102.5°	358.0	331.3
105°	463.6	449.2
107.5°	532.7	536.2
110°	559.1	574.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	561.4	584.4
115°	546.5	578.4
117.5°	515.0	550.3
120°	489.6	523.9
122.5°	464.8	498.6
125°	429.4	460.6
127.5°	397.7	424.0
130°	378.9	403.2
132.5°	361.9	383.7
135°	338.6	357.4
137.5°	320.0	335.3
140°	307.1	321.5
142.5°	296.5	308.9
145°	280.6	290.0
147.5°	268.4	276.1
150°	260.7	267.0
152.5°	254.1	258.9
155°	246.5	249.7
157.5°	240.6	242.8
160°	237.0	238.3
162.5°	234.7	235.9
165°	231.3	232.6
167.5°	228.9	229.4
170°	228.2	228.2
172.5°	226.4	226.0
175°	225.4	225.4
177.5°	224.4	223.9
180°	223.9	223.9



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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	4.36	5.40	5.19	6.26	7.33	17.52	18.56	18.36	19.42	20.50
	3H	5.08	6.01	5.92	6.88	7.99	19.37	20.31	20.22	21.18	22.28
	4H	5.38	6.27	6.25	7.15	8.26	20.02	20.91	20.88	21.78	22.90
	6H	5.64	6.46	6.52	7.35	8.47	20.46	21.27	21.33	22.16	23.29
	8H	5.72	6.50	6.60	7.40	8.53	20.58	21.36	21.46	22.26	23.39
	12H	5.74	6.48	6.63	7.38	8.54	20.65	21.40	21.54	22.29	23.45
4H	2H	11.59	12.47	12.45	13.35	14.46	17.82	18.70	18.69	19.58	20.70
	3H	13.17	13.91	14.05	14.82	15.95	19.88	20.62	20.76	21.53	22.66
	4H	13.27	13.95	14.17	14.86	16.01	20.65	21.33	21.54	22.23	23.39
	6H	13.30	13.88	14.20	14.81	15.97	21.19	21.78	22.10	22.71	23.87
	8H	13.28	13.83	14.19	14.75	15.92	21.36	21.91	22.27	22.83	24.00
	12H	13.24	13.74	14.17	14.68	15.86	21.46	21.95	22.39	22.90	24.07
8H	4H	14.73	15.28	15.64	16.20	17.38	20.72	21.27	21.63	22.20	23.37
	6H	14.98	15.44	15.92	16.40	17.57	21.36	21.81	22.29	22.78	23.95
	8H	15.00	15.41	15.95	16.36	17.55	21.58	21.98	22.52	22.94	24.13
	12H	14.98	15.34	15.93	16.29	17.52	21.73	22.08	22.68	23.03	24.27
12H	4H	14.88	15.38	15.81	16.32	17.50	20.69	21.18	21.62	22.13	23.30
	6H	15.24	15.65	16.19	16.60	17.79	21.34	21.75	22.29	22.70	23.89
	8H	15.32	15.68	16.27	16.63	17.86	21.58	21.94	22.53	22.89	24.12