

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: P936783

Luminaire Tested: SQ4-FB-050U-075D-B2750-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936783
REPORT IS A COMBINATION OF REPORTS P933470 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-B2750-1D-UNV-STD-W-4-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

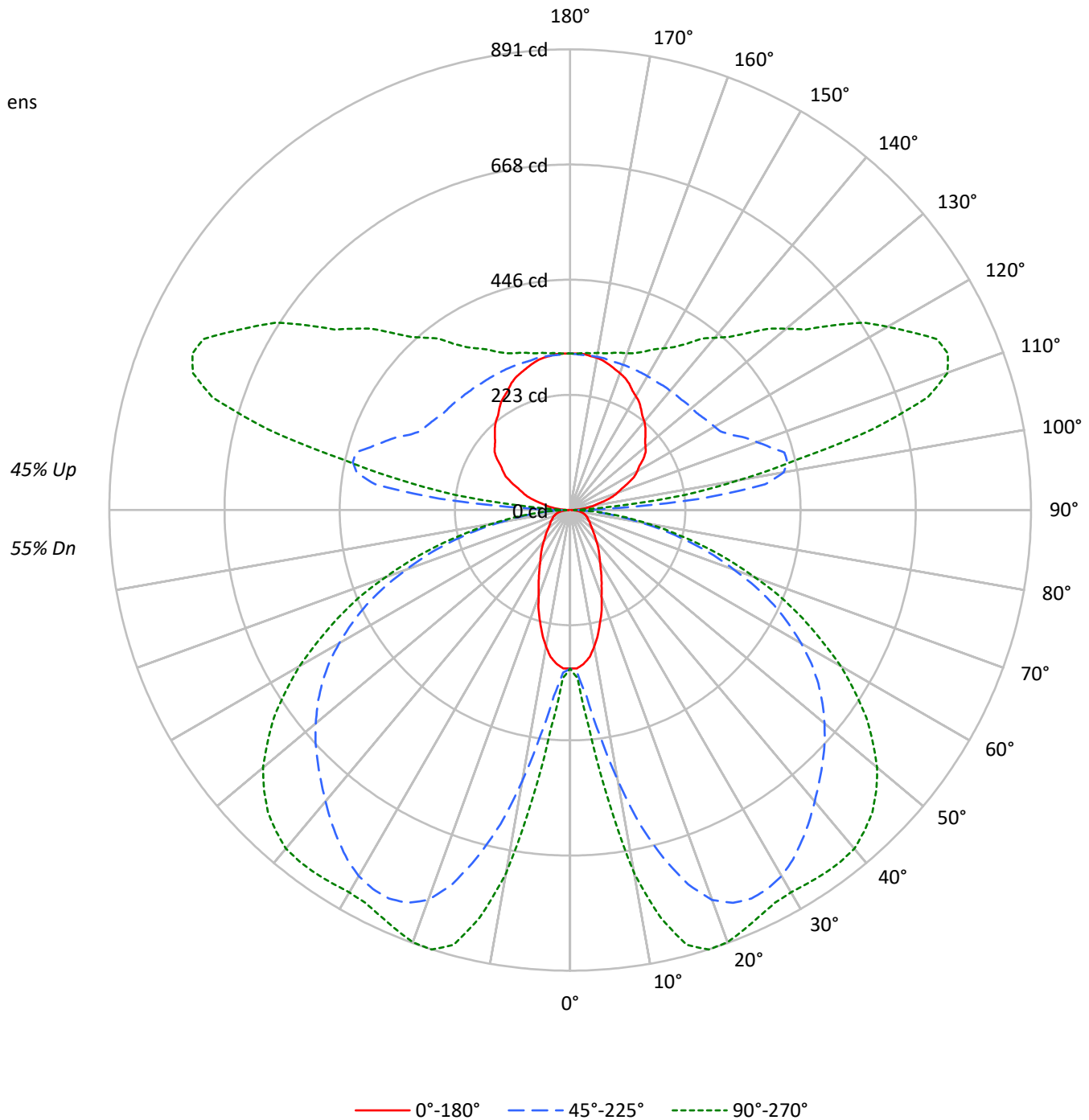
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4336.3 lumens
Efficiency: N/A
Efficacy: 119.1 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: General Diffuse

Input Watts (W): 36.4
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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2845	2845	2845
5°	2777	3286	3825
10°	2516	4787	6341
15°	2136	6249	7656
20°	1737	7237	7803
25°	1447	7567	7645
30°	1219	7609	7630
35°	1075	7477	7827
40°	936	7307	8032
45°	846	7180	8063
50°	774	7065	7929
55°	739	6899	7578
60°	754	6587	7022
65°	781	6117	6261
70°	825	5324	5288
75°	905	4329	4128
80°	969	2991	2781
85°	820	1580	1424

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8063 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	0.9
10°-20°	175.8	4.1
20°-30°	307.5	7.1
30°-40°	395.8	9.1
40°-50°	442.2	10.2
50°-60°	423.5	9.8
60°-70°	335.6	7.7
70°-80°	197.3	4.6
80°-90°	56.0	1.3
90°-100°	147.6	3.4
100°-110°	388.1	8.9
110°-120°	402.4	9.3
120°-130°	322.8	7.4
130°-140°	253.2	5.8
140°-150°	194.4	4.5
150°-160°	140.0	3.2
160°-170°	85.6	2.0
170°-180°	28.9	0.7
0°-30°	523.0	12.1
0°-40°	918.8	21.2
0°-60°	1784.4	41.2
0°-90°	2373.4	54.7
90°-120°	938.0	21.6
90°-150°	1708.4	39.4
90°-180°	1963.0	45.3
0°-180°	4336.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	307	307	307	307	307	
5°	299	320	361	408	423	28
15°	224	413	696	844	871	62
25°	143	468	829	866	867	66
35°	97	448	781	825	858	60
45°	66	357	690	791	826	51
55°	47	227	586	680	699	43
65°	38	120	435	489	496	37
75°	28	74	239	262	263	29
85°	10	23	59	65	66	10
90°	2	6	16	8	8	2
95°	20	76	254	131	89	22
105°	70	106	429	651	608	74
115°	124	151	344	686	782	123
125°	173	194	313	528	623	153
135°	206	227	303	426	483	159
145°	239	254	299	364	392	150
155°	270	277	299	328	338	124
165°	291	295	299	311	315	82
175°	303	303	301	305	305	29
180°	303	303	303	303	303	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	306.6	306.6	306.6	306.6	306.6	306.6	306.6	306.6	306.6	306.6	306.6
2.5°	306.6	306.6	308.6	309.6	311.6	312.6	314.5	316.5	322.4	323.4	325.4
5°	298.8	302.7	315.5	320.4	334.3	353.0	360.9	373.7	400.3	408.2	413.1
7.5°	286.9	295.8	327.4	335.2	369.8	419.0	439.8	467.4	509.8	530.5	547.2
10°	268.2	286.9	343.1	361.9	418.1	493.0	531.5	569.9	634.0	662.6	673.4
12.5°	247.5	278.1	359.9	385.5	466.4	575.8	622.2	664.6	737.5	776.0	781.9
15°	223.8	265.2	375.7	413.1	517.6	644.8	696.1	748.4	816.4	844.0	850.9
17.5°	203.1	255.4	390.5	429.9	557.1	707.0	759.2	802.6	857.8	876.6	881.5
20°	177.5	239.6	400.3	451.6	598.5	752.3	802.6	836.1	873.6	885.4	887.4
22.5°	158.7	222.8	406.2	459.5	626.1	779.9	822.3	848.9	874.6	878.5	879.5
25°	143.0	204.1	405.2	468.4	649.8	796.7	829.2	848.9	863.7	865.7	865.7
27.5°	128.2	183.4	401.3	470.3	667.5	800.6	826.3	840.1	847.0	850.9	850.9
30°	115.4	163.7	391.4	466.4	675.4	796.7	817.4	824.3	831.2	837.1	840.1
32.5°	105.5	144.9	376.7	458.5	676.4	786.8	801.6	805.6	815.4	829.2	834.2
35°	96.6	126.2	359.9	447.6	670.5	771.1	780.9	784.9	804.6	825.3	832.2
37.5°	87.8	112.4	338.2	428.9	661.6	752.3	759.2	766.1	796.7	821.3	829.2
40°	78.9	100.6	312.6	408.2	647.8	729.6	735.6	746.4	786.8	815.4	823.3
42.5°	72.0	90.7	285.0	386.5	630.1	704.0	712.9	728.7	775.0	805.6	814.4
45°	66.1	80.9	255.4	356.9	607.4	677.4	690.2	711.9	761.2	790.8	798.7
47.5°	60.1	74.0	224.8	326.4	582.7	650.8	667.5	692.2	742.5	771.1	778.0
50°	55.2	67.0	194.2	293.8	556.1	622.2	641.9	667.5	718.8	745.4	754.3
52.5°	51.3	61.1	165.6	261.3	525.5	592.6	615.3	641.9	690.2	715.8	721.8
55°	47.3	56.2	141.0	226.8	494.0	561.0	585.7	611.3	658.6	680.3	684.3
57.5°	45.4	52.3	120.3	194.2	460.5	525.5	553.1	576.8	621.2	637.9	641.9
60°	42.4	49.3	104.5	166.6	424.0	492.0	515.7	539.3	576.8	590.6	593.6
62.5°	39.4	47.3	92.7	140.0	386.5	452.6	476.2	497.9	529.5	539.3	543.3
65°	37.5	45.4	83.8	120.3	348.1	411.2	434.8	453.6	479.2	489.1	491.0
67.5°	35.5	43.4	76.9	103.5	309.6	369.8	387.5	405.2	425.0	434.8	435.8
70°	32.5	41.4	71.0	91.7	270.2	322.4	337.2	355.9	371.7	376.7	379.6
72.5°	30.6	38.5	67.0	82.8	229.7	277.1	290.9	301.7	315.5	320.4	320.4
75°	27.6	34.5	63.1	74.0	188.3	226.8	238.6	249.5	260.3	262.3	259.3
77.5°	24.6	30.6	54.2	62.1	146.9	179.5	189.3	195.2	204.1	206.1	207.1
80°	20.7	26.6	42.4	48.3	106.5	132.1	139.0	144.0	151.8	151.8	153.8
82.5°	15.8	20.7	30.6	34.5	72.0	90.7	96.6	99.6	104.5	104.5	104.5
85°	9.9	12.8	19.7	22.7	43.4	55.2	59.2	60.1	64.1	65.1	65.1
87.5°	4.9	6.9	12.8	13.8	22.7	28.6	28.6	30.6	30.6	29.6	28.6
90°	2.1	3.6	5.3	5.7	9.0	13.3	15.5	13.7	10.3	7.7	7.7
92.5°	8.1	21.9	35.8	39.2	55.1	76.3	87.0	76.2	54.7	38.7	37.1
95°	19.5	44.8	70.1	76.4	135.7	214.7	254.2	226.8	172.1	131.0	126.4
97.5°	33.7	56.0	78.3	83.9	182.7	314.5	380.4	363.1	328.5	302.6	293.7
100°	44.7	64.9	85.2	90.2	199.9	346.1	419.2	420.5	423.1	425.0	414.4
102.5°	54.0	73.0	91.8	96.5	207.8	356.0	430.2	452.3	496.4	529.4	520.3
105°	69.9	85.9	101.9	105.9	213.6	357.2	429.0	478.4	577.2	651.4	646.5
107.5°	86.2	101.1	116.0	119.7	214.7	341.4	404.7	473.6	611.4	714.8	715.9
110°	97.1	110.5	124.0	127.4	213.1	327.3	384.3	461.3	615.5	731.0	736.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	107.9	120.7	133.5	136.8	213.1	314.9	365.8	444.7	602.3	720.7	728.5
115°	124.1	136.0	147.8	150.8	215.0	300.7	343.6	419.5	571.5	685.5	696.2
117.5°	140.2	151.0	161.7	164.4	219.1	292.0	328.4	397.0	534.0	636.9	648.8
120°	149.6	159.7	169.8	172.4	222.3	289.0	322.3	384.9	510.3	604.2	615.9
122.5°	158.7	169.0	179.2	181.7	227.0	287.4	317.6	374.0	486.9	571.5	582.9
125°	172.7	182.0	191.3	193.7	233.3	286.1	312.6	360.5	456.3	528.2	538.8
127.5°	184.1	193.6	202.9	205.3	239.6	285.4	308.3	349.4	431.7	493.4	502.3
130°	190.2	200.4	210.4	213.0	244.2	285.8	306.6	343.3	416.6	471.5	479.7
132.5°	196.5	206.7	216.7	219.3	248.0	286.1	305.3	338.0	403.6	452.8	460.2
135°	205.9	215.0	224.3	226.6	252.0	285.8	302.8	330.2	385.1	426.3	432.7
137.5°	215.4	224.5	233.7	235.9	258.1	287.6	302.4	325.6	372.0	406.8	412.0
140°	223.3	231.7	240.2	242.3	261.8	287.9	300.9	321.0	361.2	391.2	396.1
142.5°	229.4	237.2	244.9	246.9	264.9	288.9	300.9	318.6	353.8	380.2	384.3
145°	238.8	245.5	252.3	254.0	269.0	289.0	299.0	313.4	342.1	363.7	366.9
147.5°	248.2	254.8	261.3	263.0	275.0	291.0	299.0	310.3	333.0	349.9	352.6
150°	254.2	260.1	266.1	267.6	278.1	292.0	299.0	308.5	327.6	342.0	344.2
152.5°	260.5	265.0	269.6	270.7	280.1	292.6	299.0	307.1	323.5	335.7	337.3
155°	269.9	273.2	276.6	277.4	284.6	294.1	299.0	305.5	318.5	328.2	329.3
157.5°	276.8	280.0	283.3	284.1	289.0	295.6	299.0	304.0	314.1	321.7	322.5
160°	281.5	284.0	286.5	287.1	291.1	296.3	299.0	303.3	312.0	318.5	318.9
162.5°	286.1	288.0	289.9	290.4	293.2	297.1	299.0	302.6	309.9	315.4	315.8
165°	291.3	292.9	294.7	295.1	296.4	298.1	299.0	301.5	306.7	310.7	311.1
167.5°	295.9	296.7	297.5	297.7	298.8	300.2	300.9	302.7	306.2	308.7	308.9
170°	299.0	299.7	300.5	300.7	300.8	300.9	300.9	302.7	306.2	308.7	308.7
172.5°	300.5	300.7	300.9	300.9	300.9	300.9	300.9	302.3	305.0	307.0	306.8
175°	302.8	302.8	302.8	302.8	302.2	301.3	300.9	301.8	303.6	304.9	304.9
177.5°	302.8	302.8	302.8	302.8	302.3	301.7	301.4	302.1	303.5	304.5	304.3
180°	302.8	302.8	302.8	302.8	302.8	302.8	302.8	302.8	302.8	302.8	302.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	306.6	306.6
2.5°	327.4	325.4
5°	421.0	423.0
7.5°	567.0	566.0
10°	705.0	713.9
12.5°	805.6	807.5
15°	866.7	870.6
17.5°	890.4	891.3
20°	891.3	889.4
22.5°	880.5	878.5
25°	867.7	866.7
27.5°	855.8	856.8
30°	850.9	853.9
32.5°	850.9	855.8
35°	852.9	857.8
37.5°	851.9	857.8
40°	848.0	854.9
42.5°	837.1	842.0
45°	820.4	826.3
47.5°	798.7	802.6
50°	771.1	775.0
52.5°	736.5	737.5
55°	695.1	699.1
57.5°	650.8	651.7
60°	601.5	604.4
62.5°	549.2	549.2
65°	494.0	496.0
67.5°	436.8	441.7
70°	378.6	379.6
72.5°	321.4	321.4
75°	262.3	263.3
77.5°	206.1	206.1
80°	152.8	153.8
82.5°	105.5	107.5
85°	66.1	66.1
87.5°	30.6	27.6
90°	7.7	7.7
92.5°	31.0	24.7
95°	107.8	89.2
97.5°	258.3	222.9
100°	372.2	330.0
102.5°	484.2	448.1
105°	627.1	607.7
107.5°	720.6	725.3
110°	756.3	776.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	759.5	790.6
115°	739.3	782.4
117.5°	696.6	744.4
120°	662.2	708.6
122.5°	628.8	674.5
125°	580.9	623.1
127.5°	537.9	573.5
130°	512.6	545.5
132.5°	489.5	519.0
135°	458.1	483.4
137.5°	432.8	453.6
140°	415.5	434.9
142.5°	401.1	417.9
145°	379.6	392.2
147.5°	363.0	373.5
150°	352.7	361.2
152.5°	343.7	350.1
155°	333.6	337.8
157.5°	325.5	328.4
160°	320.6	322.3
162.5°	317.5	319.1
165°	312.9	314.6
167.5°	309.6	310.3
170°	308.7	308.7
172.5°	306.3	305.7
175°	304.9	304.9
177.5°	303.6	302.8
180°	302.8	302.8



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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	5.05	5.99	5.95	6.93	8.13	18.18	19.13	19.09	20.06	21.26
	3H	5.76	6.61	6.68	7.55	8.78	20.01	20.87	20.93	21.81	23.03
	4H	6.06	6.87	6.99	7.82	9.05	20.65	21.46	21.59	22.41	23.64
	6H	6.32	7.06	7.26	8.01	9.26	21.08	21.82	22.02	22.77	24.02
	8H	6.39	7.10	7.34	8.07	9.31	21.19	21.90	22.15	22.87	24.12
	12H	6.41	7.09	7.37	8.05	9.32	21.26	21.93	22.22	22.90	24.17
4H	2H	12.25	13.05	13.18	14.00	15.23	18.47	19.28	19.41	20.22	21.46
	3H	13.82	14.50	14.77	15.48	16.72	20.51	21.19	21.46	22.16	23.41
	4H	13.92	14.54	14.88	15.51	16.78	21.27	21.89	22.23	22.86	24.13
	6H	13.94	14.48	14.91	15.47	16.74	21.80	22.34	22.77	23.33	24.60
	8H	13.92	14.42	14.89	15.41	16.69	21.96	22.46	22.93	23.45	24.73
	12H	13.88	14.33	14.87	15.34	16.63	22.05	22.50	23.04	23.51	24.80
8H	4H	15.37	15.87	16.34	16.85	18.14	21.34	21.84	22.31	22.83	24.11
	6H	15.61	16.03	16.61	17.06	18.34	21.96	22.37	22.96	23.40	24.69
	8H	15.63	16.00	16.64	17.02	18.32	22.17	22.54	23.18	23.56	24.86
	12H	15.60	15.93	16.62	16.94	18.28	22.31	22.64	23.33	23.65	24.99
12H	4H	15.51	15.96	16.50	16.97	18.26	21.30	21.75	22.29	22.75	24.04
	6H	15.87	16.24	16.88	17.25	18.55	21.94	22.31	22.95	23.33	24.63
	8H	15.94	16.26	16.96	17.28	18.62	22.17	22.49	23.18	23.50	24.85