

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: P936735

Luminaire Tested: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

**Test Information**

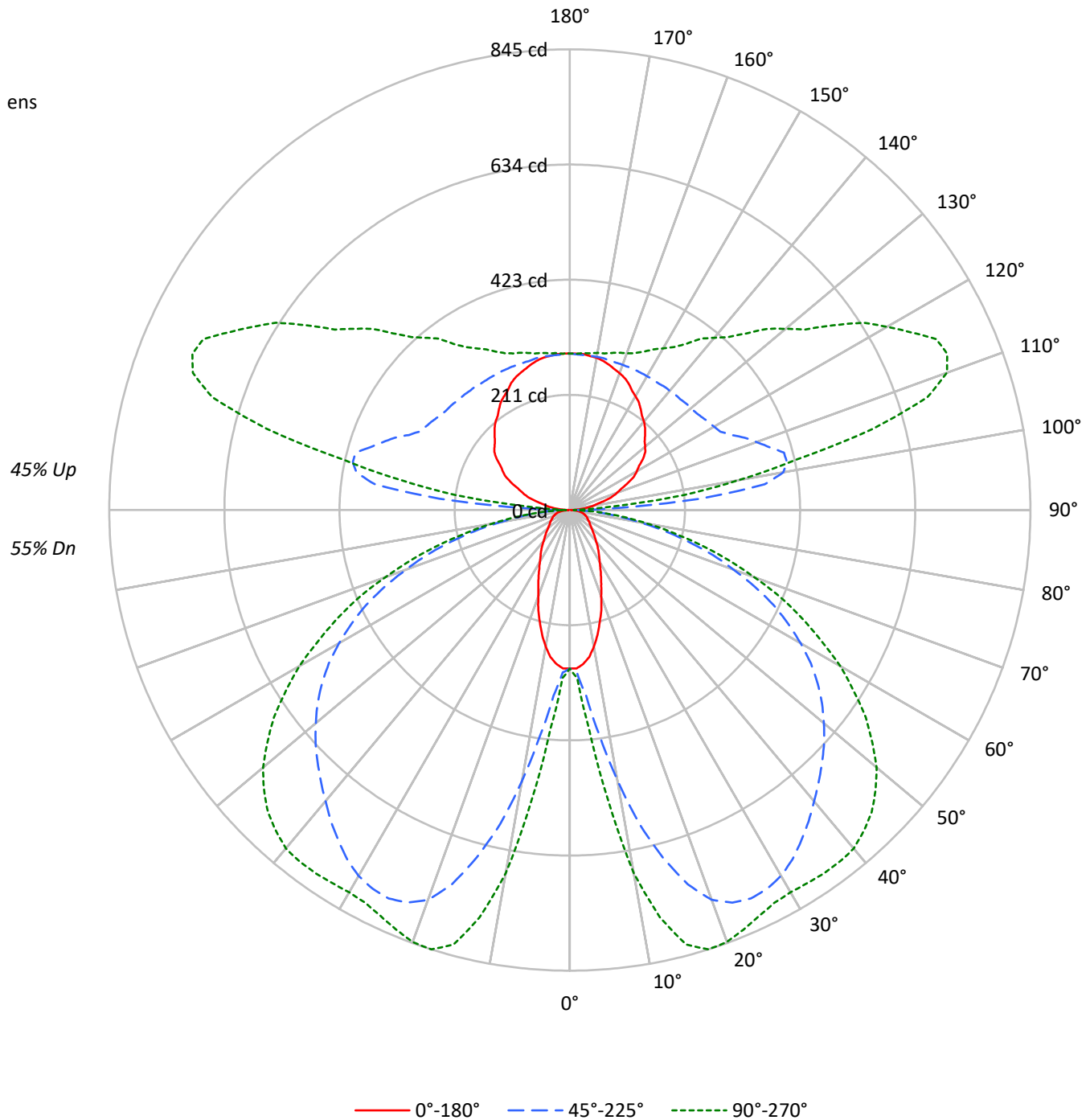
Test Method: LM-79-2019  
Report Number: P936735  
REPORT IS A COMBINATION OF REPORTS P933470 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-4-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4110.7 lumens  
Efficiency: N/A  
Efficacy: 112.9 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 (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

TEST NUMBER: P936735  
CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-4-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P936735

CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-4-5000K

**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	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°	2697	2697	2697
5°	2632	3115	3626
10°	2385	4538	6011
15°	2025	5924	7258
20°	1646	6861	7397
25°	1371	7174	7247
30°	1156	7214	7233
35°	1020	7088	7420
40°	887	6927	7614
45°	801	6806	7643
50°	733	6697	7517
55°	701	6540	7183
60°	715	6245	6658
65°	740	5799	5935
70°	782	5047	5014
75°	859	4104	3913
80°	917	2836	2636
85°	770	1497	1349

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7643 cd/sqm



TEST NUMBER: P936735

CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-4-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.6	0.9
10°-20°	166.7	4.1
20°-30°	291.5	7.1
30°-40°	375.3	9.1
40°-50°	419.1	10.2
50°-60°	401.4	9.8
60°-70°	318.1	7.7
70°-80°	187.1	4.6
80°-90°	53.1	1.3
90°-100°	139.9	3.4
100°-110°	367.9	8.9
110°-120°	381.4	9.3
120°-130°	306.0	7.4
130°-140°	240.1	5.8
140°-150°	184.3	4.5
150°-160°	132.7	3.2
160°-170°	81.2	2.0
170°-180°	27.4	0.7
0°-30°	495.8	12.1
0°-40°	871.0	21.2
0°-60°	1691.6	41.2
0°-90°	2249.9	54.7
90°-120°	889.2	21.6
90°-150°	1619.5	39.4
90°-180°	1861.0	45.3
0°-180°	4110.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	291	291	291	291	291	
5°	283	304	342	387	401	26
15°	212	392	660	800	825	59
25°	136	444	786	821	822	62
35°	92	424	740	782	813	57
45°	63	338	654	750	783	48
55°	45	215	555	645	663	41
65°	36	114	412	464	470	35
75°	26	70	226	249	250	27
85°	9	22	56	62	63	10
90°	2	5	15	7	7	2
95°	18	72	241	124	85	21
105°	66	100	407	618	576	70
115°	118	143	326	650	742	116
125°	164	184	296	501	591	145
135°	195	215	287	404	458	151
145°	226	241	283	345	372	142
155°	256	263	283	311	320	118
165°	276	280	283	294	298	78
175°	287	287	285	289	289	27
180°	287	287	287	287	287	



TEST NUMBER: P936735

CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	290.7	290.7	290.7	290.7	290.7	290.7	290.7	290.7	290.7	290.7	290.7
2.5°	290.7	290.7	292.6	293.5	295.4	296.3	298.2	300.0	305.6	306.6	308.5
5°	283.2	287.0	299.1	303.8	316.9	334.6	342.1	354.3	379.5	387.0	391.6
7.5°	272.0	280.4	310.3	317.8	350.5	397.3	416.9	443.1	483.2	502.9	518.8
10°	254.2	272.0	325.3	343.0	396.3	467.4	503.8	540.3	601.0	628.1	638.4
12.5°	234.6	263.6	341.2	365.5	442.1	545.9	589.8	630.0	699.2	735.6	741.2
15°	212.2	251.4	356.1	391.6	490.7	611.3	659.9	709.4	773.9	800.1	806.7
17.5°	192.5	242.1	370.1	407.5	528.1	670.2	719.7	760.9	813.2	831.0	835.6
20°	168.2	227.1	379.5	428.1	567.4	713.2	760.9	792.6	828.1	839.4	841.2
22.5°	150.5	211.2	385.1	435.6	593.5	739.4	779.5	804.8	829.1	832.8	833.8
25°	135.5	193.5	384.2	444.0	616.0	755.2	786.1	804.8	818.8	820.7	820.7
27.5°	121.5	173.9	380.4	445.9	632.8	759.0	783.3	796.4	802.9	806.7	806.7
30°	109.4	155.2	371.1	442.1	640.3	755.2	774.9	781.4	788.0	793.6	796.4
32.5°	100.0	137.4	357.1	434.6	641.2	745.9	759.9	763.7	773.0	786.1	790.8
35°	91.6	119.6	341.2	424.4	635.6	730.9	740.3	744.0	762.7	782.3	788.9
37.5°	83.2	106.6	320.6	406.6	627.2	713.2	719.7	726.3	755.2	778.6	786.1
40°	74.8	95.3	296.3	387.0	614.1	691.7	697.3	707.6	745.9	773.0	780.5
42.5°	68.2	86.0	270.1	366.4	597.3	667.4	675.8	690.7	734.7	763.7	772.1
45°	62.6	76.6	242.1	338.4	575.8	642.1	654.3	674.9	721.6	749.6	757.1
47.5°	57.0	70.1	213.1	309.4	552.4	616.9	632.8	656.2	703.8	730.9	737.5
50°	52.3	63.6	184.1	278.5	527.2	589.8	608.5	632.8	681.4	706.6	715.1
52.5°	48.6	58.0	157.0	247.7	498.2	561.8	583.3	608.5	654.3	678.6	684.2
55°	44.9	53.3	133.7	215.0	468.3	531.8	555.2	579.5	624.4	644.9	648.7
57.5°	43.0	49.5	114.0	184.1	436.5	498.2	524.4	546.8	588.9	604.8	608.5
60°	40.2	46.7	99.1	158.0	401.9	466.4	488.9	511.3	546.8	559.9	562.7
62.5°	37.4	44.9	87.9	132.7	366.4	429.0	451.5	472.0	501.9	511.3	515.0
65°	35.5	43.0	79.5	114.0	330.0	389.8	412.2	430.0	454.3	463.6	465.5
67.5°	33.6	41.1	72.9	98.1	293.5	350.5	367.3	384.2	402.9	412.2	413.1
70°	30.8	39.3	67.3	86.9	256.1	305.6	319.7	337.4	352.4	357.1	359.9
72.5°	29.0	36.5	63.6	78.5	217.8	262.7	275.7	286.0	299.1	303.8	303.8
75°	26.2	32.7	59.8	70.1	178.5	215.0	226.2	236.5	246.8	248.6	245.8
77.5°	23.4	29.0	51.4	58.9	139.3	170.1	179.5	185.1	193.5	195.4	196.3
80°	19.6	25.2	40.2	45.8	100.9	125.3	131.8	136.5	143.9	143.9	145.8
82.5°	15.0	19.6	29.0	32.7	68.2	86.0	91.6	94.4	99.1	99.1	99.1
85°	9.3	12.2	18.7	21.5	41.1	52.3	56.1	57.0	60.8	61.7	61.7
87.5°	4.7	6.5	12.2	13.1	21.5	27.1	27.1	29.0	29.0	28.0	27.1
90°	2.0	3.5	5.0	5.4	8.5	12.6	14.7	13.0	9.7	7.3	7.3
92.5°	7.7	20.8	33.9	37.2	52.3	72.3	82.4	72.3	51.9	36.6	35.1
95°	18.5	42.4	66.5	72.4	128.6	203.5	241.0	215.0	163.1	124.2	119.8
97.5°	32.0	53.1	74.2	79.5	173.2	298.2	360.6	344.3	311.4	286.9	278.4
100°	42.3	61.5	80.8	85.5	189.5	328.1	397.4	398.7	401.1	402.9	392.9
102.5°	51.2	69.2	87.0	91.5	196.9	337.5	407.8	428.7	470.5	501.8	493.2
105°	66.3	81.4	96.6	100.4	202.5	338.6	406.7	453.5	547.2	617.5	612.9
107.5°	81.7	95.8	109.9	113.5	203.5	323.6	383.6	448.9	579.6	677.6	678.7
110°	92.1	104.8	117.6	120.8	202.0	310.2	364.3	437.3	583.4	693.0	697.8



TEST NUMBER: P936735

CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	102.3	114.4	126.6	129.6	202.0	298.5	346.8	421.6	571.0	683.2	690.6
115°	117.7	128.9	140.1	142.9	203.9	285.1	325.7	397.7	541.8	649.8	660.0
117.5°	132.9	143.1	153.3	155.8	207.7	276.8	311.4	376.3	506.2	603.7	615.0
120°	141.8	151.4	161.0	163.4	210.8	274.0	305.6	364.9	483.7	572.8	583.8
122.5°	150.5	160.2	169.8	172.3	215.2	272.5	301.1	354.5	461.6	541.8	552.6
125°	163.8	172.5	181.3	183.6	221.2	271.3	296.3	341.7	432.6	500.7	510.7
127.5°	174.5	183.5	192.4	194.6	227.1	270.6	292.3	331.3	409.2	467.7	476.1
130°	180.3	189.9	199.5	201.9	231.5	271.0	290.7	325.5	394.9	447.0	454.7
132.5°	186.3	195.9	205.4	207.9	235.1	271.3	289.4	320.4	382.6	429.2	436.2
135°	195.2	203.9	212.6	214.8	238.9	271.0	287.0	313.0	365.1	404.2	410.1
137.5°	204.2	212.8	221.5	223.7	244.7	272.7	286.7	308.6	352.7	385.7	390.6
140°	211.7	219.7	227.7	229.7	248.2	272.9	285.3	304.3	342.4	370.9	375.5
142.5°	217.5	224.9	232.2	234.1	251.2	273.9	285.3	302.0	335.4	360.4	364.3
145°	226.4	232.7	239.2	240.8	255.0	274.0	283.4	297.0	324.3	344.8	347.8
147.5°	235.3	241.5	247.7	249.3	260.7	275.8	283.4	294.2	315.7	331.7	334.3
150°	241.0	246.6	252.3	253.7	263.6	276.8	283.4	292.5	310.6	324.2	326.3
152.5°	246.9	251.2	255.5	256.6	265.5	277.4	283.4	291.2	306.7	318.3	319.8
155°	255.8	259.0	262.2	262.9	269.8	278.8	283.4	289.6	301.9	311.2	312.2
157.5°	262.4	265.5	268.5	269.3	274.0	280.2	283.4	288.2	297.8	305.0	305.7
160°	266.9	269.2	271.6	272.2	275.9	280.9	283.4	287.5	295.7	301.9	302.3
162.5°	271.3	273.0	274.8	275.3	278.0	281.6	283.4	286.9	293.8	299.0	299.4
165°	276.1	277.7	279.4	279.8	281.0	282.6	283.4	285.8	290.8	294.5	294.9
167.5°	280.5	281.3	282.0	282.2	283.2	284.6	285.3	287.0	290.2	292.7	292.8
170°	283.4	284.2	284.9	285.1	285.2	285.3	285.3	287.0	290.2	292.7	292.7
172.5°	284.9	285.1	285.3	285.3	285.3	285.3	285.3	286.6	289.1	291.1	290.9
175°	287.0	287.0	287.0	287.0	286.5	285.6	285.3	286.1	287.8	289.0	289.0
177.5°	287.0	287.0	287.0	287.0	286.6	286.0	285.7	286.4	287.7	288.6	288.5
180°	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0



TEST NUMBER: P936735

CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	290.7	290.7
2.5°	310.3	308.5
5°	399.1	401.0
7.5°	537.5	536.5
10°	668.3	676.7
12.5°	763.7	765.5
15°	821.6	825.3
17.5°	844.0	845.0
20°	845.0	843.1
22.5°	834.7	832.8
25°	822.5	821.6
27.5°	811.3	812.3
30°	806.7	809.5
32.5°	806.7	811.3
35°	808.5	813.2
37.5°	807.6	813.2
40°	803.8	810.4
42.5°	793.6	798.2
45°	777.7	783.3
47.5°	757.1	760.9
50°	730.9	734.7
52.5°	698.2	699.2
55°	659.0	662.7
57.5°	616.9	617.8
60°	570.2	573.0
62.5°	520.6	520.6
65°	468.3	470.2
67.5°	414.1	418.7
70°	358.9	359.9
72.5°	304.7	304.7
75°	248.6	249.6
77.5°	195.4	195.4
80°	144.9	145.8
82.5°	100.0	101.9
85°	62.6	62.6
87.5°	29.0	26.2
90°	7.3	7.3
92.5°	29.3	23.5
95°	102.2	84.6
97.5°	244.9	211.3
100°	352.9	312.8
102.5°	459.0	424.8
105°	594.5	576.1
107.5°	683.1	687.6
110°	716.9	736.1





TEST NUMBER: P936735

CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	720.0	749.4
115°	700.8	741.7
117.5°	660.4	705.7
120°	627.7	671.8
122.5°	596.1	639.4
125°	550.6	590.6
127.5°	509.9	543.6
130°	486.0	517.1
132.5°	464.1	492.0
135°	434.3	458.3
137.5°	410.2	430.0
140°	393.9	412.3
142.5°	380.2	396.1
145°	359.9	371.8
147.5°	344.2	354.1
150°	334.3	342.4
152.5°	325.8	331.9
155°	316.2	320.2
157.5°	308.5	311.4
160°	304.0	305.6
162.5°	301.0	302.5
165°	296.6	298.3
167.5°	293.5	294.2
170°	292.7	292.7
172.5°	290.3	289.8
175°	289.0	289.0
177.5°	287.8	287.0
180°	287.0	287.0



TEST NUMBER: P936735  
 CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-4-5000K

**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	4.86	5.81	5.76	6.74	7.94	18.00	18.95	18.90	19.88	21.08
	3H	5.57	6.42	6.49	7.37	8.59	19.83	20.68	20.75	21.62	22.85
	4H	5.87	6.68	6.81	7.63	8.86	20.47	21.28	21.40	22.22	23.45
	6H	6.13	6.88	7.07	7.83	9.07	20.89	21.64	21.84	22.59	23.83
	8H	6.20	6.91	7.15	7.88	9.12	21.01	21.72	21.96	22.69	23.93
	12H	6.22	6.90	7.18	7.86	9.13	21.07	21.75	22.03	22.71	23.98
4H	2H	12.06	12.87	13.00	13.82	15.05	18.28	19.09	19.22	20.04	21.27
	3H	13.64	14.32	14.59	15.29	16.54	20.32	21.00	21.27	21.98	23.22
	4H	13.74	14.36	14.70	15.33	16.60	21.08	21.70	22.04	22.67	23.94
	6H	13.75	14.29	14.73	15.28	16.55	21.62	22.15	22.59	23.15	24.41
	8H	13.73	14.23	14.71	15.22	16.51	21.77	22.27	22.75	23.26	24.55
	12H	13.69	14.15	14.69	15.15	16.44	21.86	22.32	22.86	23.32	24.61
8H	4H	15.18	15.68	16.15	16.67	17.95	21.15	21.65	22.13	22.64	23.93
	6H	15.43	15.84	16.43	16.87	18.15	21.77	22.19	22.77	23.22	24.50
	8H	15.45	15.81	16.45	16.83	18.13	21.99	22.35	23.00	23.37	24.67
	12H	15.42	15.74	16.43	16.75	18.10	22.13	22.45	23.14	23.46	24.81
12H	4H	15.32	15.78	16.32	16.78	18.07	21.11	21.56	22.10	22.57	23.86
	6H	15.68	16.05	16.69	17.07	18.37	21.76	22.13	22.77	23.14	24.44
	8H	15.76	16.08	16.77	17.09	18.44	21.98	22.31	23.00	23.32	24.67