

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: P936652

Luminaire Tested: SQ4-FB-050U-050D-930-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936652
REPORT IS A COMBINATION OF REPORTS P933485 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

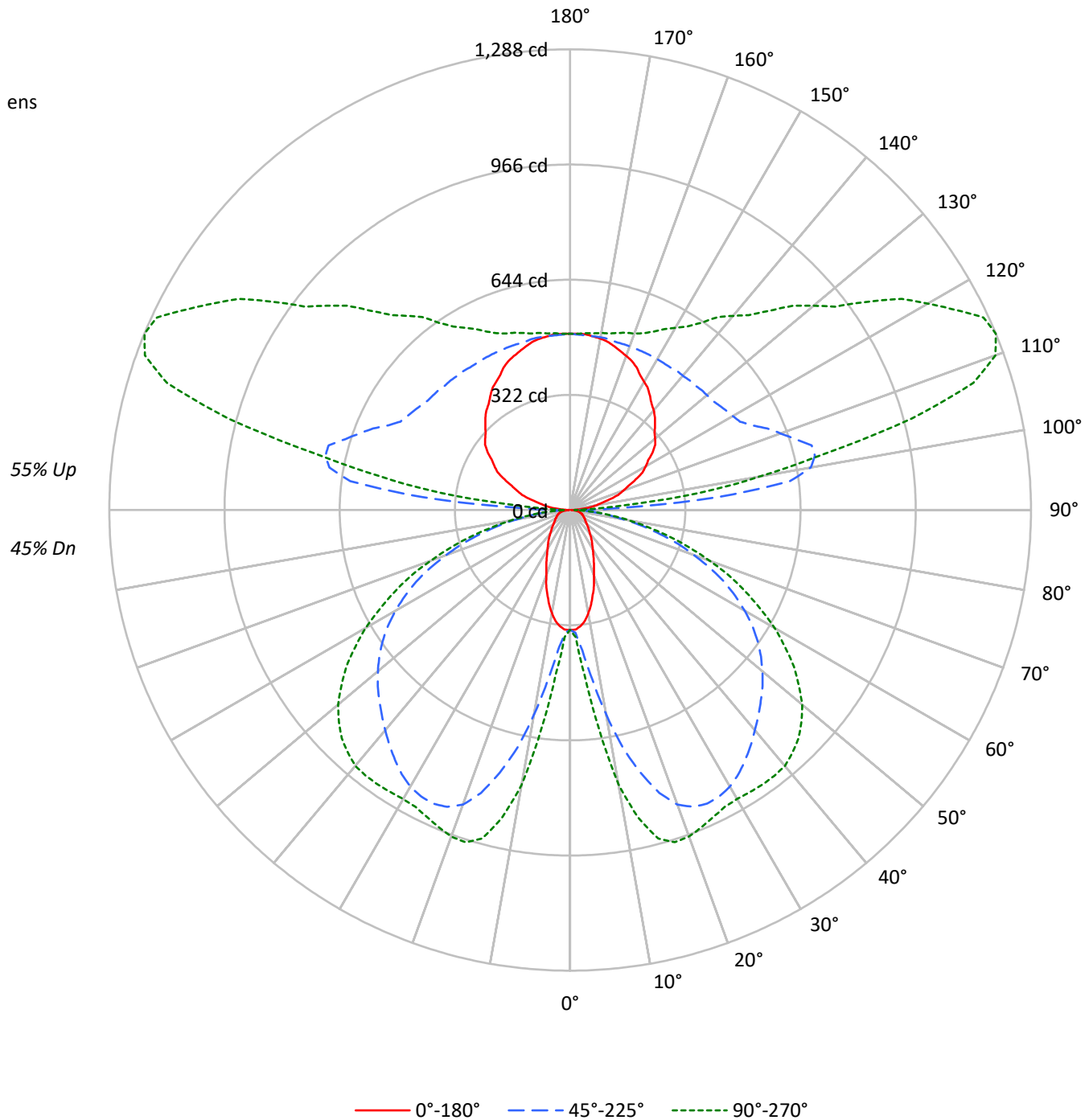
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5790.5 lumens
Efficiency: N/A
Efficacy: 101.9 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: General Diffuse

Input Watts (W): 56.8
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: P936652
CATALOG NUMBER: SQ4-FB-050U-050D-930-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P936652

CATALOG NUMBER: SQ4-FB-050U-050D-930-1D-UNV-STD-W-8

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45	45	45	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42	37	37	37	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	24	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	18	18	18	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1554	1554	1554
5°	1518	1796	2089
10°	1377	2619	3463
15°	1170	3421	4182
20°	953	3964	4262
25°	795	4148	4175
30°	670	4175	4168
35°	592	4105	4275
40°	517	4015	4386
45°	468	3949	4404
50°	429	3890	4331
55°	411	3803	4139
60°	421	3636	3835
65°	438	3382	3419
70°	467	2949	2889
75°	517	2405	2254
80°	564	1667	1519
85°	503	884	778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4404 cd/sqm



TEST NUMBER: P936652

CATALOG NUMBER: SQ4-FB-050U-050D-930-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.3	0.7
10°-20°	192.0	3.3
20°-30°	335.9	5.8
30°-40°	432.4	7.5
40°-50°	483.0	8.3
50°-60°	462.6	8.0
60°-70°	366.6	6.3
70°-80°	215.6	3.7
80°-90°	61.8	1.1
90°-100°	240.4	4.2
100°-110°	632.1	10.9
110°-120°	655.4	11.3
120°-130°	525.7	9.1
130°-140°	412.5	7.1
140°-150°	316.6	5.5
150°-160°	228.0	3.9
160°-170°	139.5	2.4
170°-180°	47.1	0.8
0°-30°	571.3	9.9
0°-40°	1003.7	17.3
0°-60°	1949.2	33.7
0°-90°	2593.2	44.8
90°-120°	1527.9	26.4
90°-150°	2782.6	48.1
90°-180°	3197.0	55.2
0°-180°	5790.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	335	335	335	335	335	
5°	326	350	394	446	462	30
15°	244	451	760	922	951	68
25°	156	512	906	946	947	72
35°	106	489	853	902	937	66
45°	72	390	754	864	903	56
55°	52	248	640	743	764	47
65°	41	131	475	534	542	41
75°	30	81	261	286	288	32
85°	11	25	65	71	72	11
90°	3	9	25	13	13	3
95°	32	124	414	214	145	35
105°	114	172	699	1061	990	121
115°	202	246	560	1116	1274	200
125°	281	315	509	860	1015	250
135°	335	369	493	694	788	259
145°	389	414	487	592	639	244
155°	440	452	487	535	550	202
165°	474	481	487	506	512	134
175°	493	493	490	496	496	47
180°	493	493	493	493	493	



TEST NUMBER: P936652

CATALOG NUMBER: SQ4-FB-050U-050D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	334.9	334.9	334.9	334.9	334.9	334.9	334.9	334.9	334.9	334.9	334.9
2.5°	334.9	334.9	337.1	338.2	340.3	341.4	343.6	345.8	352.2	353.2	355.4
5°	326.3	330.7	344.6	350.0	365.1	385.6	394.2	408.2	437.3	445.9	451.3
7.5°	313.4	323.1	357.6	366.2	403.9	457.7	480.4	510.5	556.8	579.4	597.8
10°	292.9	313.4	374.8	395.3	456.7	538.5	580.6	622.6	692.5	723.7	735.6
12.5°	270.4	303.7	393.1	421.1	509.4	629.0	679.7	725.9	805.6	847.6	854.1
15°	244.5	289.7	410.3	451.3	565.5	704.4	760.4	817.5	891.8	921.9	929.5
17.5°	221.9	279.0	426.6	469.6	608.5	772.2	829.3	876.7	937.0	957.5	962.9
20°	193.8	261.7	437.3	493.3	653.8	821.8	876.7	913.3	954.3	967.2	969.4
22.5°	173.4	243.4	443.7	501.9	683.9	852.0	898.2	927.4	955.3	959.7	960.7
25°	156.2	222.9	442.7	511.6	709.8	870.3	905.8	927.4	943.5	945.7	945.7
27.5°	140.0	200.3	438.4	513.8	729.2	874.5	902.6	917.7	925.2	929.5	929.5
30°	126.0	178.8	427.6	509.4	737.8	870.3	892.9	900.4	908.0	914.5	917.7
32.5°	115.2	158.4	411.5	500.8	738.8	859.5	875.7	879.9	890.7	905.8	911.2
35°	105.5	137.9	393.1	488.9	732.4	842.3	853.0	857.4	878.9	901.5	909.0
37.5°	95.9	122.8	369.5	468.6	722.7	821.8	829.3	836.9	870.3	897.2	905.8
40°	86.2	109.9	341.4	445.9	707.6	797.1	803.5	815.4	859.5	890.7	899.4
42.5°	78.6	99.1	311.2	422.2	688.3	769.0	778.7	795.9	846.6	879.9	889.6
45°	72.2	88.3	279.0	389.9	663.4	740.0	753.9	777.6	831.5	863.8	872.4
47.5°	65.7	80.8	245.6	356.5	636.5	710.9	729.2	756.1	811.0	842.3	849.8
50°	60.3	73.2	212.2	321.0	607.5	679.7	701.2	729.2	785.2	814.2	824.0
52.5°	56.0	66.8	180.9	285.4	574.1	647.3	672.1	701.2	753.9	782.0	788.4
55°	51.7	61.4	154.0	247.7	539.6	612.8	639.8	667.8	719.5	743.2	747.5
57.5°	49.5	57.1	131.4	212.2	503.0	574.1	604.3	630.1	678.5	696.8	701.2
60°	46.3	53.9	114.2	182.0	463.2	537.4	563.3	589.2	630.1	645.1	648.4
62.5°	43.1	51.7	101.3	153.0	422.2	494.4	520.2	544.0	578.4	589.2	593.5
65°	41.0	49.5	91.5	131.4	380.2	449.1	475.0	495.5	523.5	534.2	536.4
67.5°	38.8	47.4	84.0	113.1	338.2	403.9	423.3	442.7	464.2	475.0	476.0
70°	35.6	45.2	77.6	100.1	295.1	352.2	368.3	388.8	406.1	411.5	414.7
72.5°	33.4	42.0	73.2	90.5	250.9	302.7	317.7	329.6	344.6	350.0	350.0
75°	30.2	37.7	68.9	80.8	205.7	247.7	260.7	272.5	284.3	286.5	283.3
77.5°	26.9	33.4	59.3	67.9	160.5	196.0	206.8	213.3	222.9	225.1	226.2
80°	22.6	29.1	46.3	52.8	116.4	144.3	151.8	157.2	165.9	165.9	168.0
82.5°	17.3	22.6	33.4	37.7	78.6	99.1	105.5	108.8	114.2	114.2	114.2
85°	10.8	14.0	21.5	24.7	47.4	60.3	64.6	65.7	70.0	71.1	71.1
87.5°	5.4	7.5	14.0	15.1	24.7	31.2	31.2	33.4	33.4	32.3	31.2
90°	3.3	5.9	8.6	9.2	14.5	21.6	25.1	22.3	16.8	12.6	12.6
92.5°	13.2	35.7	58.3	63.9	89.9	124.4	141.6	124.1	89.1	62.9	60.4
95°	31.8	73.0	114.2	124.5	221.0	349.7	414.1	369.5	280.4	213.5	206.0
97.5°	54.9	91.2	127.6	136.7	297.7	512.3	619.7	591.5	535.1	492.9	478.4
100°	72.8	105.8	138.7	146.9	325.6	563.8	682.9	685.0	689.1	692.1	674.9
102.5°	88.1	118.8	149.5	157.2	338.4	580.0	700.8	736.7	808.5	862.3	847.6
105°	113.9	139.9	166.0	172.5	347.9	581.9	698.8	779.2	940.2	1060.9	1053.0
107.5°	140.4	164.6	188.9	195.0	349.6	555.9	659.0	771.3	995.8	1164.2	1166.1
110°	158.2	180.1	202.1	207.6	347.1	533.0	625.9	751.4	1002.4	1190.6	1198.9



TEST NUMBER: P936652

CATALOG NUMBER: SQ4-FB-050U-050D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	175.8	196.7	217.5	222.8	347.1	513.0	595.8	724.2	981.1	1173.7	1186.4
115°	202.3	221.5	240.8	245.6	350.3	490.0	559.8	683.5	930.9	1116.5	1134.0
117.5°	228.4	245.9	263.4	267.8	356.9	475.5	534.9	646.6	869.9	1037.4	1056.8
120°	243.6	260.1	276.6	280.7	362.2	470.7	525.0	627.0	831.0	984.1	1002.9
122.5°	258.5	275.1	291.7	295.9	369.7	468.1	517.4	609.2	793.0	930.8	949.5
125°	281.4	296.5	311.6	315.4	380.0	466.1	509.1	587.2	743.3	860.3	877.5
127.5°	299.9	315.2	330.4	334.3	390.3	464.9	502.1	569.2	703.2	803.7	818.2
130°	309.8	326.3	342.8	346.9	397.7	465.6	499.5	559.1	678.5	767.9	781.3
132.5°	320.1	336.5	353.1	357.2	403.8	466.1	497.2	550.6	657.4	737.5	749.4
135°	335.3	350.3	365.3	369.1	410.4	465.6	493.2	537.9	627.4	694.4	704.8
137.5°	350.9	365.8	380.6	384.3	420.4	468.5	492.6	530.4	606.0	662.7	671.1
140°	363.8	377.5	391.1	394.6	426.5	469.0	490.2	522.9	588.2	637.2	645.0
142.5°	373.7	386.3	399.0	402.1	431.5	470.6	490.2	518.9	576.3	619.4	626.2
145°	389.0	400.0	411.1	413.8	438.2	470.7	486.9	510.4	557.4	592.5	597.7
147.5°	404.1	414.9	425.7	428.3	447.8	473.9	486.9	505.4	542.3	570.0	574.2
150°	414.1	423.8	433.5	435.9	453.0	475.6	486.9	502.5	533.8	557.1	560.6
152.5°	424.4	431.8	439.1	440.9	456.3	476.7	486.9	500.3	526.8	546.8	549.5
155°	439.6	445.0	450.5	451.8	463.6	479.2	486.9	497.5	518.7	534.6	536.3
157.5°	450.8	456.1	461.4	462.8	470.8	481.6	486.9	495.1	511.6	524.0	525.2
160°	458.4	462.6	466.7	467.7	474.2	482.7	486.9	494.0	508.1	518.7	519.4
162.5°	466.1	469.2	472.2	473.0	477.7	483.9	486.9	492.9	504.8	513.8	514.4
165°	474.3	477.1	479.9	480.6	482.7	485.5	486.9	491.2	499.7	506.1	506.9
167.5°	482.0	483.2	484.6	484.9	486.7	489.0	490.2	493.0	498.7	502.8	503.2
170°	486.9	488.2	489.6	489.9	490.0	490.2	490.2	493.0	498.7	502.8	502.8
172.5°	489.6	489.9	490.2	490.2	490.2	490.2	490.2	492.5	496.9	500.2	499.9
175°	493.2	493.2	493.2	493.2	492.2	490.9	490.2	491.6	494.4	496.5	496.5
177.5°	493.2	493.2	493.2	493.2	492.4	491.4	490.9	492.0	494.2	495.9	495.5
180°	493.2	493.2	493.2	493.2	493.2	493.2	493.2	493.2	493.2	493.2	493.2



TEST NUMBER: P936652

CATALOG NUMBER: SQ4-FB-050U-050D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	334.9	334.9
2.5°	357.6	355.4
5°	459.9	462.0
7.5°	619.3	618.2
10°	770.1	779.8
12.5°	879.9	882.1
15°	946.7	951.1
17.5°	972.6	973.6
20°	973.6	971.5
22.5°	961.8	959.7
25°	947.8	946.7
27.5°	934.9	936.0
30°	929.5	932.8
32.5°	929.5	934.9
35°	931.6	937.0
37.5°	930.6	937.0
40°	926.3	933.8
42.5°	914.5	919.8
45°	896.1	902.6
47.5°	872.4	876.7
50°	842.3	846.6
52.5°	804.5	805.6
55°	759.3	763.7
57.5°	710.9	711.9
60°	657.0	660.2
62.5°	599.9	599.9
65°	539.6	541.8
67.5°	477.1	482.5
70°	413.6	414.7
72.5°	351.2	351.2
75°	286.5	287.6
77.5°	225.1	225.1
80°	166.9	168.0
82.5°	115.2	117.4
85°	72.2	72.2
87.5°	33.4	30.2
90°	12.6	12.6
92.5°	50.3	40.4
95°	175.6	145.3
97.5°	420.8	363.1
100°	606.3	537.5
102.5°	788.7	729.8
105°	1021.3	989.7
107.5°	1173.7	1181.4
110°	1231.8	1264.8



TEST NUMBER: P936652

CATALOG NUMBER: SQ4-FB-050U-050D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1237.0	1287.6
115°	1204.2	1274.4
117.5°	1134.7	1212.5
120°	1078.6	1154.2
122.5°	1024.1	1098.7
125°	946.2	1014.9
127.5°	876.2	934.1
130°	834.9	888.4
132.5°	797.5	845.4
135°	746.1	787.5
137.5°	705.0	738.8
140°	676.7	708.3
142.5°	653.3	680.5
145°	618.3	638.9
147.5°	591.3	608.4
150°	574.4	588.2
152.5°	559.9	570.4
155°	543.2	550.1
157.5°	530.1	534.9
160°	522.2	525.0
162.5°	517.1	519.7
165°	509.6	512.4
167.5°	504.3	505.5
170°	502.8	502.8
172.5°	498.9	497.9
175°	496.5	496.5
177.5°	494.4	493.2
180°	493.2	493.2



TEST NUMBER: P936652
 CATALOG NUMBER: SQ4-FB-050U-050D-930-1D-UNV-STD-W-8

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	2.04	2.89	3.03	3.90	5.24	15.22	16.07	16.21	17.08	18.42
	3H	2.75	3.51	3.75	4.53	5.89	17.06	17.82	18.06	18.84	20.20
	4H	3.04	3.77	4.06	4.79	6.16	17.70	18.43	18.72	19.45	20.82
	6H	3.29	3.96	4.32	4.99	6.37	18.13	18.80	19.16	19.83	21.21
	8H	3.36	4.00	4.39	5.04	6.42	18.25	18.89	19.29	19.93	21.31
	12H	3.38	3.98	4.42	5.02	6.42	18.32	18.93	19.36	19.96	21.37
4H	2H	9.26	9.98	10.28	11.00	12.37	15.49	16.22	16.52	17.24	18.61
	3H	10.82	11.43	11.85	12.48	13.86	17.54	18.14	18.57	19.19	20.58
	4H	10.92	11.47	11.96	12.51	13.92	18.30	18.86	19.34	19.90	21.31
	6H	10.93	11.40	11.98	12.47	13.87	18.84	19.32	19.89	20.39	21.79
	8H	10.90	11.35	11.95	12.41	13.82	19.00	19.45	20.05	20.51	21.93
	12H	10.86	11.26	11.93	12.34	13.76	19.10	19.50	20.17	20.57	22.00
8H	4H	12.36	12.81	13.41	13.87	15.28	18.36	18.81	19.41	19.87	21.29
	6H	12.60	12.97	13.68	14.07	15.49	18.99	19.36	20.07	20.46	21.88
	8H	12.62	12.95	13.70	14.03	15.46	19.21	19.54	20.29	20.62	22.05
	12H	12.59	12.87	13.67	13.95	15.43	19.36	19.64	20.44	20.72	22.19
12H	4H	12.50	12.91	13.57	13.98	15.40	18.32	18.72	19.38	19.79	21.21
	6H	12.86	13.19	13.94	14.27	15.70	18.97	19.30	20.06	20.38	21.82
	8H	12.93	13.22	14.02	14.29	15.77	19.20	19.49	20.29	20.57	22.04