

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: P937574

Luminaire Tested: SQ4-FB-100U-075D-940-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937574
REPORT IS A COMBINATION OF REPORTS P933566 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

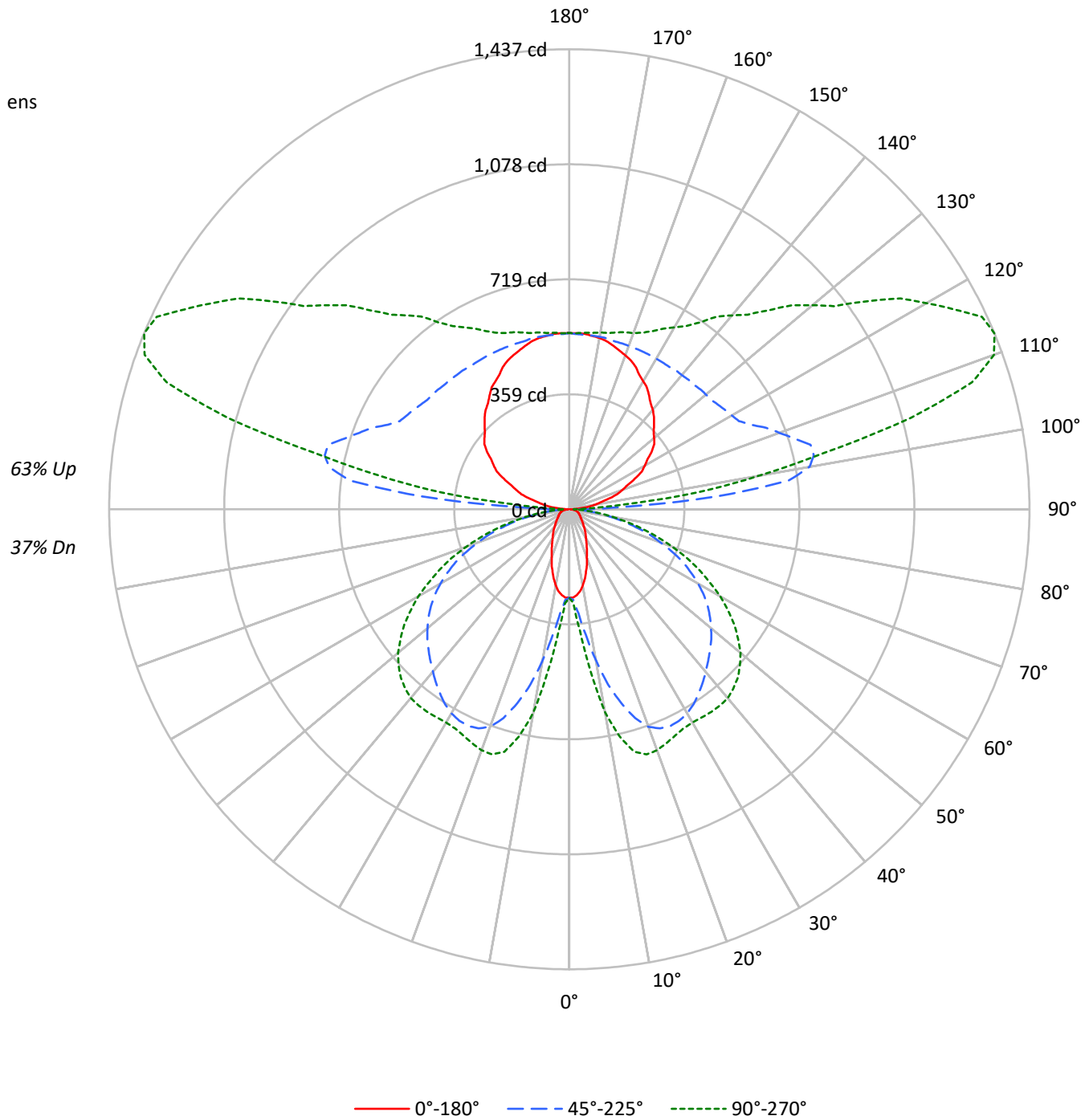
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5706.2 lumens
Efficiency: N/A
Efficacy: 116.0 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: Semi-Indirect

Input Watts (W): 49.2
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: P937574
CATALOG NUMBER: SQ4-FB-100U-075D-940-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P937574

CATALOG NUMBER: SQ4-FB-100U-075D-940-1D-UNV-STD-W-4

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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37				37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31				31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25				25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21				21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17				17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15				15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13				13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11				11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10				10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9				9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8				8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2563	2563	2563
5°	2501	2960	3445
10°	2266	4311	5710
15°	1924	5628	6895
20°	1564	6517	7028
25°	1304	6815	6885
30°	1097	6853	6872
35°	969	6734	7050
40°	842	6580	7233
45°	762	6466	7261
50°	697	6363	7141
55°	665	6213	6825
60°	680	5932	6324
65°	702	5509	5638
70°	744	4795	4763
75°	817	3899	3717
80°	871	2694	2504
85°	737	1423	1282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7261 cd/sqm



TEST NUMBER: P937574

CATALOG NUMBER: SQ4-FB-100U-075D-940-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.7	0.6
10°-20°	158.3	2.8
20°-30°	276.9	4.9
30°-40°	356.5	6.2
40°-50°	398.2	7.0
50°-60°	381.4	6.7
60°-70°	302.2	5.3
70°-80°	177.7	3.1
80°-90°	51.5	0.9
90°-100°	268.3	4.7
100°-110°	705.3	12.4
110°-120°	731.3	12.8
120°-130°	586.6	10.3
130°-140°	460.3	8.1
140°-150°	353.3	6.2
150°-160°	254.4	4.5
160°-170°	155.7	2.7
170°-180°	52.6	0.9
0°-30°	471.0	8.3
0°-40°	827.5	14.5
0°-60°	1607.1	28.2
0°-90°	2138.5	37.5
90°-120°	1704.8	29.9
90°-150°	3105.0	54.4
90°-180°	3568.0	62.5
0°-180°	5706.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	276	276	276	276	276	
5°	269	289	325	368	381	25
15°	202	372	627	760	784	56
25°	129	422	747	780	781	59
35°	87	403	703	743	773	54
45°	60	322	622	712	744	46
55°	43	204	528	613	630	39
65°	34	108	392	440	447	33
75°	25	67	215	236	237	26
85°	9	20	53	59	60	9
90°	4	10	28	14	14	4
95°	35	139	462	238	162	39
105°	127	192	780	1184	1104	135
115°	226	274	625	1246	1422	223
125°	314	352	568	960	1132	279
135°	374	412	550	775	879	289
145°	434	462	543	661	713	272
155°	490	504	543	596	614	225
165°	529	536	543	565	572	149
175°	550	550	547	554	554	52
180°	550	550	550	550	550	



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CATALOG NUMBER: SQ4-FB-100U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	276.2	276.2	276.2	276.2	276.2	276.2	276.2	276.2	276.2	276.2	276.2
2.5°	276.2	276.2	277.9	278.8	280.6	281.5	283.3	285.0	290.4	291.3	293.0
5°	269.1	272.6	284.2	288.6	301.0	317.9	325.0	336.6	360.5	367.6	372.1
7.5°	258.4	266.4	294.8	301.9	333.0	377.4	396.0	420.9	459.1	477.7	492.8
10°	241.5	258.4	309.0	325.9	376.5	444.0	478.6	513.3	571.0	596.7	606.5
12.5°	222.9	250.4	324.1	347.2	420.0	518.6	560.3	598.5	664.2	698.9	704.2
15°	201.6	238.9	338.3	372.1	466.2	580.8	626.9	674.0	735.3	760.1	766.3
17.5°	182.9	230.0	351.6	387.2	501.7	636.7	683.8	722.8	772.6	789.4	793.9
20°	159.8	215.8	360.5	406.7	539.0	677.5	722.8	753.0	786.8	797.4	799.2
22.5°	143.0	200.7	365.9	413.8	563.9	702.4	740.6	764.6	787.7	791.2	792.1
25°	128.8	183.8	365.0	421.8	585.2	717.5	746.8	764.6	777.9	779.7	779.7
27.5°	115.4	165.2	361.4	423.6	601.2	721.1	744.1	756.6	762.8	766.3	766.3
30°	103.9	147.4	352.5	420.0	608.3	717.5	736.2	742.4	748.6	753.9	756.6
32.5°	95.0	130.5	339.2	412.9	609.2	708.6	721.9	725.5	734.4	746.8	751.2
35°	87.0	113.7	324.1	403.2	603.8	694.4	703.3	706.8	724.6	743.3	749.5
37.5°	79.0	101.2	304.6	386.3	595.8	677.5	683.8	690.0	717.5	739.7	746.8
40°	71.0	90.6	281.5	367.6	583.4	657.1	662.4	672.2	708.6	734.4	741.5
42.5°	64.8	81.7	256.6	348.1	567.4	634.0	642.0	656.2	698.0	725.5	733.5
45°	59.5	72.8	230.0	321.5	547.0	610.1	621.6	641.1	685.5	712.2	719.3
47.5°	54.2	66.6	202.5	293.9	524.8	586.1	601.2	623.4	668.7	694.4	700.6
50°	49.7	60.4	174.9	264.6	500.8	560.3	578.1	601.2	647.4	671.3	679.3
52.5°	46.2	55.1	149.2	235.3	473.3	533.7	554.1	578.1	621.6	644.7	650.0
55°	42.6	50.6	127.0	204.2	444.9	505.3	527.5	550.6	593.2	612.7	616.3
57.5°	40.8	47.1	108.3	174.9	414.7	473.3	498.2	519.5	559.4	574.5	578.1
60°	38.2	44.4	94.1	150.1	381.8	443.1	464.4	485.7	519.5	531.9	534.6
62.5°	35.5	42.6	83.5	126.1	348.1	407.6	428.9	448.4	476.9	485.7	489.3
65°	33.7	40.8	75.5	108.3	313.5	370.3	391.6	408.5	431.6	440.4	442.2
67.5°	32.0	39.1	69.3	93.2	278.8	333.0	349.0	365.0	382.7	391.6	392.5
70°	29.3	37.3	63.9	82.6	243.3	290.4	303.7	320.6	334.8	339.2	341.9
72.5°	27.5	34.6	60.4	74.6	206.9	249.5	262.0	271.7	284.2	288.6	288.6
75°	24.9	31.1	56.8	66.6	169.6	204.2	214.9	224.7	234.4	236.2	233.5
77.5°	22.2	27.5	48.8	55.9	132.3	161.6	170.5	175.8	183.8	185.6	186.5
80°	18.6	24.0	38.2	43.5	95.9	119.0	125.2	129.6	136.8	136.8	138.5
82.5°	14.2	18.6	27.5	31.1	64.8	81.7	87.0	89.7	94.1	94.1	94.1
85°	8.9	11.5	17.8	20.4	39.1	49.7	53.3	54.2	57.7	58.6	58.6
87.5°	4.4	6.2	11.5	12.4	20.4	25.8	25.8	27.5	27.5	26.6	25.8
90°	3.7	6.7	9.6	10.3	16.3	24.2	28.1	25.0	18.7	14.0	14.0
92.5°	14.7	39.9	65.0	71.3	100.3	138.8	158.1	138.5	99.5	70.2	67.4
95°	35.4	81.4	127.4	138.9	246.6	390.2	462.0	412.3	312.8	238.3	229.8
97.5°	61.3	101.9	142.4	152.6	332.2	571.7	691.4	660.0	597.1	549.9	533.9
100°	81.3	118.0	154.8	164.0	363.4	629.1	762.0	764.3	768.8	772.3	753.1
102.5°	98.2	132.6	166.9	175.5	377.7	647.2	782.0	822.0	902.1	962.1	945.7
105°	127.1	156.1	185.1	192.4	388.2	649.2	779.8	869.5	1049.1	1183.8	1175.0
107.5°	156.6	183.7	210.8	217.6	390.2	620.3	735.4	860.6	1111.2	1299.1	1301.2
110°	176.5	201.0	225.5	231.6	387.2	594.7	698.4	838.4	1118.5	1328.5	1337.8



TEST NUMBER: P937574

CATALOG NUMBER: SQ4-FB-100U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	196.2	219.4	242.7	248.6	387.3	572.3	664.8	808.2	1094.7	1309.7	1323.8
115°	225.6	247.1	268.6	274.0	390.9	546.7	624.6	762.7	1038.8	1245.9	1265.4
117.5°	254.9	274.4	293.9	298.8	398.2	530.7	596.9	721.5	970.7	1157.6	1179.3
120°	271.8	290.2	308.6	313.2	404.0	525.3	585.8	699.7	927.3	1098.1	1119.2
122.5°	288.5	307.1	325.6	330.2	412.6	522.4	577.3	679.8	884.8	1038.6	1059.4
125°	314.0	330.9	347.7	352.0	424.0	520.0	568.1	655.2	829.3	959.9	979.1
127.5°	334.6	351.6	368.8	373.0	435.5	518.7	560.3	635.1	784.6	896.8	913.0
130°	345.7	364.1	382.5	387.1	443.8	519.6	557.4	624.0	757.1	856.9	871.8
132.5°	357.2	375.5	393.9	398.5	450.6	520.0	554.7	614.3	733.5	822.9	836.3
135°	374.2	390.9	407.7	411.9	458.0	519.6	550.4	600.3	700.0	774.9	786.4
137.5°	391.5	408.1	424.6	428.8	469.0	522.8	549.6	591.8	676.1	739.4	748.9
140°	405.9	421.2	436.5	440.3	475.9	523.3	547.0	583.4	656.3	711.0	719.8
142.5°	417.0	431.1	445.2	448.8	481.6	525.2	547.0	579.0	643.0	691.0	698.7
145°	434.0	446.3	458.6	461.7	488.9	525.3	543.4	569.6	621.9	661.1	666.9
147.5°	451.0	463.0	474.9	477.9	499.8	528.8	543.4	564.0	605.2	636.1	640.9
150°	462.0	472.9	483.7	486.4	505.4	530.8	543.4	560.8	595.5	621.6	625.4
152.5°	473.5	481.7	489.9	492.0	509.1	531.9	543.4	558.2	587.9	610.1	613.1
155°	490.5	496.6	502.7	504.2	517.3	534.7	543.4	555.2	578.8	596.5	598.4
157.5°	503.1	509.0	514.9	516.4	525.3	537.3	543.4	552.5	570.9	584.7	586.0
160°	511.6	516.2	520.7	521.9	529.1	538.6	543.4	551.3	567.0	578.8	579.6
162.5°	520.0	523.5	526.9	527.8	533.0	539.9	543.4	550.0	563.3	573.2	573.9
165°	529.2	532.4	535.5	536.3	538.7	541.8	543.4	548.2	557.7	564.8	565.6
167.5°	537.8	539.3	540.8	541.1	543.1	545.7	547.0	550.1	556.3	561.0	561.4
170°	543.4	544.8	546.3	546.7	546.7	546.9	547.0	550.1	556.3	561.0	561.0
172.5°	546.3	546.7	546.9	547.0	547.0	547.0	547.0	549.5	554.4	558.1	557.8
175°	550.4	550.4	550.4	550.4	549.2	547.7	547.0	548.6	551.7	554.0	554.0
177.5°	550.4	550.4	550.4	550.4	549.5	548.3	547.7	549.0	551.4	553.3	553.0
180°	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4



TEST NUMBER: P937574

CATALOG NUMBER: SQ4-FB-100U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	276.2	276.2
2.5°	294.8	293.0
5°	379.2	381.0
7.5°	510.6	509.7
10°	634.9	642.9
12.5°	725.5	727.3
15°	780.6	784.1
17.5°	801.9	802.8
20°	802.8	801.0
22.5°	793.0	791.2
25°	781.4	780.6
27.5°	770.8	771.7
30°	766.3	769.0
32.5°	766.3	770.8
35°	768.1	772.6
37.5°	767.2	772.6
40°	763.7	769.9
42.5°	753.9	758.4
45°	738.8	744.1
47.5°	719.3	722.8
50°	694.4	698.0
52.5°	663.3	664.2
55°	626.0	629.6
57.5°	586.1	587.0
60°	541.7	544.3
62.5°	494.6	494.6
65°	444.9	446.7
67.5°	393.4	397.8
70°	341.0	341.9
72.5°	289.5	289.5
75°	236.2	237.1
77.5°	185.6	185.6
80°	137.6	138.5
82.5°	95.0	96.8
85°	59.5	59.5
87.5°	27.5	24.9
90°	14.0	14.0
92.5°	56.2	45.0
95°	196.0	162.1
97.5°	469.5	405.2
100°	676.5	599.8
102.5°	880.1	814.5
105°	1139.7	1104.4
107.5°	1309.7	1318.2
110°	1374.5	1411.3



TEST NUMBER: P937574

CATALOG NUMBER: SQ4-FB-100U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1380.3	1436.8
115°	1343.7	1422.0
117.5°	1266.1	1353.0
120°	1203.6	1288.0
122.5°	1142.7	1225.9
125°	1055.7	1132.5
127.5°	977.7	1042.3
130°	931.6	991.4
132.5°	889.8	943.3
135°	832.5	878.7
137.5°	786.7	824.4
140°	755.2	790.4
142.5°	729.0	759.4
145°	689.9	712.9
147.5°	659.9	678.9
150°	640.9	656.3
152.5°	624.7	636.4
155°	606.1	613.9
157.5°	591.5	596.9
160°	582.7	585.8
162.5°	576.9	579.9
165°	568.7	571.8
167.5°	562.6	564.0
170°	561.0	561.0
172.5°	556.7	555.5
175°	554.0	554.0
177.5°	551.7	550.4
180°	550.4	550.4



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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	2.99	3.78	4.04	4.84	6.27	16.13	16.92	17.18	17.98	19.41
	3H	3.69	4.40	4.75	5.47	6.92	17.95	18.66	19.01	19.72	21.18
	4H	3.99	4.66	5.06	5.73	7.19	18.58	19.25	19.65	20.32	21.78
	6H	4.23	4.85	5.32	5.92	7.40	19.00	19.61	20.08	20.69	22.16
	8H	4.30	4.89	5.39	5.98	7.45	19.11	19.70	20.19	20.79	22.25
	12H	4.31	4.87	5.41	5.96	7.45	19.17	19.72	20.26	20.81	22.30
4H	2H	10.17	10.84	11.25	11.91	13.38	16.40	17.07	17.48	18.14	19.60
	3H	11.74	12.30	12.82	13.39	14.87	18.42	18.98	19.51	20.08	21.55
	4H	11.83	12.34	12.92	13.43	14.93	19.18	19.69	20.27	20.78	22.27
	6H	11.84	12.28	12.94	13.39	14.88	19.70	20.14	20.80	21.25	22.74
	8H	11.81	12.22	12.91	13.33	14.83	19.85	20.26	20.95	21.37	22.87
	12H	11.76	12.14	12.88	13.25	14.76	19.93	20.31	21.05	21.42	22.93
8H	4H	13.26	13.67	14.36	14.77	16.28	19.23	19.64	20.33	20.75	22.25
	6H	13.50	13.84	14.62	14.98	16.48	19.84	20.18	20.97	21.33	22.83
	8H	13.51	13.81	14.64	14.94	16.46	20.05	20.35	21.18	21.48	23.00
	12H	13.48	13.74	14.61	14.86	16.42	20.19	20.45	21.32	21.57	23.13
12H	4H	13.39	13.77	14.51	14.88	16.39	19.18	19.55	20.30	20.67	22.18
	6H	13.75	14.05	14.88	15.18	16.70	19.83	20.13	20.95	21.25	22.77
	8H	13.81	14.08	14.95	15.20	16.76	20.04	20.31	21.18	21.43	22.99