

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: P937060

Luminaire Tested: SQ4-FB-075U-050D-93050-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937060  
REPORT IS A COMBINATION OF REPORTS P933501 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-050D-93050-1D-UNV-STD-W-4-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

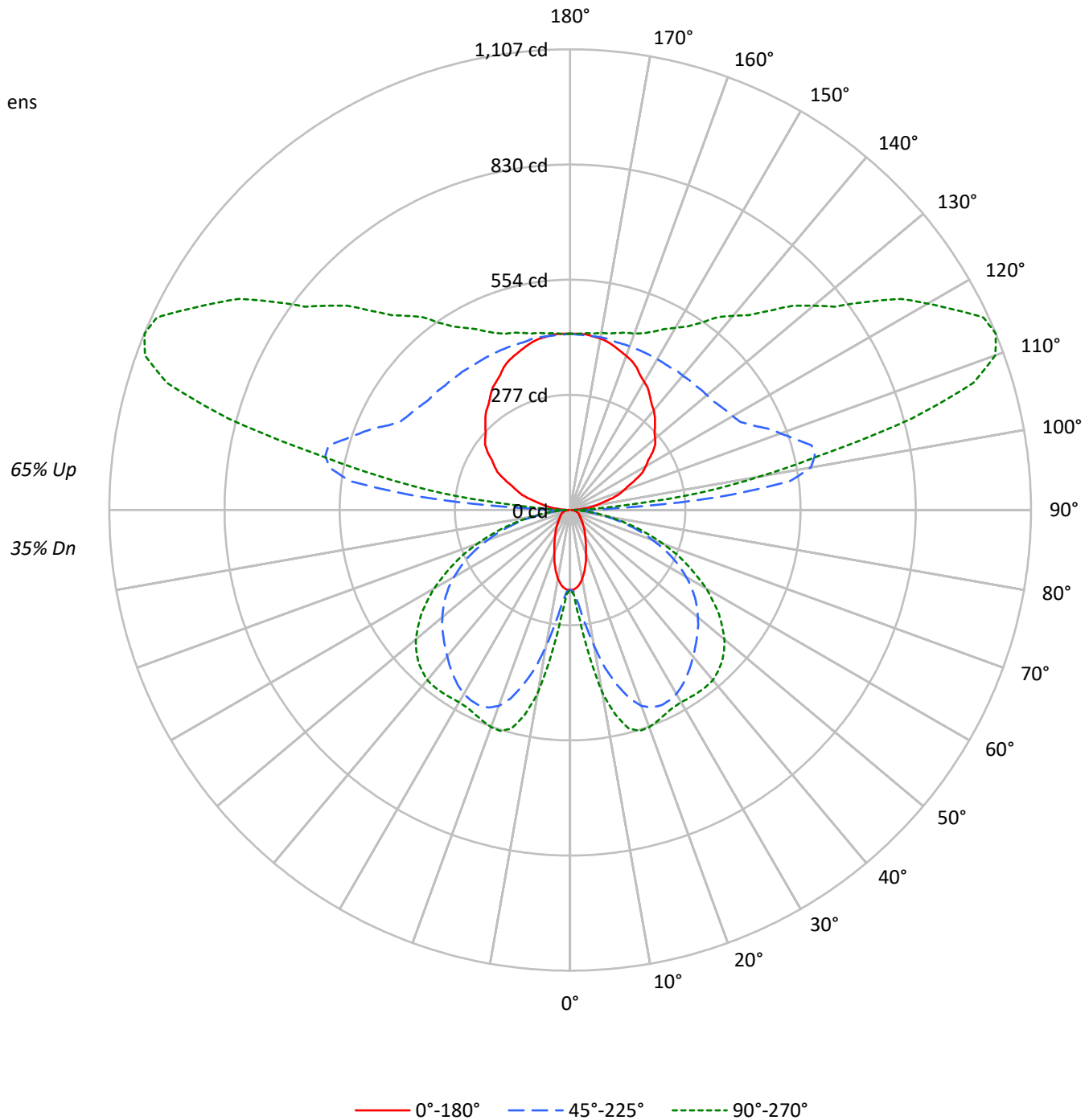
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4230.6 lumens  
Efficiency: N/A  
Efficacy: 123.0 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): 34.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P937060  
CATALOG NUMBER: SQ4-FB-075U-050D-93050-1D-UNV-STD-W-4-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P937060

CATALOG NUMBER: SQ4-FB-075U-050D-93050-1D-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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35			35
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29			29
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23			23
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19			19
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16			16
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14			14
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12			12
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10			10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9			9
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8			8
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7			7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1776	1776	1776
5°	1734	2052	2388
10°	1571	2989	3959
15°	1334	3902	4780
20°	1085	4519	4872
25°	904	4725	4774
30°	760	4750	4765
35°	671	4669	4887
40°	585	4562	5014
45°	527	4482	5034
50°	484	4411	4951
55°	461	4308	4732
60°	470	4113	4385
65°	488	3819	3908
70°	515	3323	3302
75°	567	2702	2577
80°	604	1868	1737
85°	505	988	888

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5034 cd/sqm



TEST NUMBER: P937060

CATALOG NUMBER: SQ4-FB-075U-050D-93050-1D-UNV-STD-W-4-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.8	0.6
10°-20°	109.8	2.6
20°-30°	192.0	4.5
30°-40°	247.2	5.8
40°-50°	276.1	6.5
50°-60°	264.4	6.3
60°-70°	209.5	5.0
70°-80°	123.2	2.9
80°-90°	35.8	0.8
90°-100°	206.6	4.9
100°-110°	543.2	12.8
110°-120°	563.2	13.3
120°-130°	451.8	10.7
130°-140°	354.5	8.4
140°-150°	272.1	6.4
150°-160°	195.9	4.6
160°-170°	119.9	2.8
170°-180°	40.5	1.0
0°-30°	326.5	7.7
0°-40°	573.7	13.6
0°-60°	1114.2	26.3
0°-90°	1482.8	35.0
90°-120°	1313.1	31.0
90°-150°	2391.5	56.5
90°-180°	2748.0	65.0
0°-180°	4230.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	191	191	191	191	191	
5°	187	200	225	255	264	17
15°	140	258	435	527	544	39
25°	89	292	518	540	541	41
35°	60	280	488	515	536	38
45°	41	223	431	494	516	32
55°	30	142	366	425	436	27
65°	23	75	272	305	310	23
75°	17	46	149	164	164	18
85°	6	14	37	41	41	6
90°	3	8	22	11	11	3
95°	27	107	356	183	125	30
105°	98	148	600	912	851	104
115°	174	211	481	960	1095	172
125°	242	271	438	739	872	215
135°	288	317	424	597	677	223
145°	334	356	418	509	549	209
155°	378	388	418	459	473	174
165°	408	413	418	435	440	115
175°	424	424	421	427	427	40
180°	424	424	424	424	424	



TEST NUMBER: P937060

CATALOG NUMBER: SQ4-FB-075U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	191.4	191.4	191.4	191.4	191.4	191.4	191.4	191.4	191.4	191.4	191.4
2.5°	191.4	191.4	192.7	193.3	194.6	195.2	196.4	197.6	201.3	201.9	203.2
5°	186.6	189.0	197.0	200.1	208.7	220.4	225.3	233.4	250.0	254.8	258.0
7.5°	179.1	184.7	204.4	209.3	230.9	261.6	274.6	291.8	318.3	331.2	341.7
10°	167.5	179.1	214.3	225.9	261.0	307.8	331.8	355.9	395.9	413.7	420.5
12.5°	154.5	173.6	224.7	240.7	291.2	359.6	388.5	415.0	460.5	484.5	488.2
15°	139.8	165.6	234.6	258.0	323.2	402.6	434.6	467.3	509.8	526.9	531.3
17.5°	126.8	159.5	243.8	268.4	347.8	441.4	474.1	501.2	535.6	547.3	550.3
20°	110.9	149.6	250.0	282.0	373.7	469.8	501.2	522.1	545.5	552.8	554.1
22.5°	99.1	139.1	253.7	286.9	390.9	486.9	513.5	530.1	546.0	548.5	549.1
25°	89.3	127.5	253.0	292.5	405.7	497.4	517.8	530.1	539.3	540.5	540.5
27.5°	80.0	114.5	250.5	293.7	416.8	499.9	515.9	524.6	528.9	531.3	531.3
30°	72.0	102.2	244.4	291.2	421.7	497.4	510.3	514.6	519.0	522.7	524.6
32.5°	65.9	90.5	235.2	286.2	422.3	491.2	500.5	503.0	509.1	517.8	520.8
35°	60.3	78.8	224.7	279.5	418.7	481.4	487.6	490.0	502.3	515.3	519.6
37.5°	54.8	70.2	211.2	267.8	413.1	469.8	474.1	478.4	497.4	512.8	517.8
40°	49.3	62.8	195.2	254.8	404.5	455.5	459.3	466.0	491.2	509.1	514.1
42.5°	45.0	56.6	177.9	241.4	393.4	439.6	445.1	455.0	483.9	503.0	508.5
45°	41.2	50.5	159.5	222.8	379.2	423.0	430.9	444.5	475.3	493.7	498.7
47.5°	37.5	46.2	140.4	203.8	363.9	406.4	416.8	432.1	463.6	481.4	485.7
50°	34.5	41.8	121.3	183.4	347.3	388.5	400.8	416.8	448.8	465.5	471.0
52.5°	32.0	38.2	103.4	163.2	328.2	370.0	384.1	400.8	430.9	446.9	450.7
55°	29.5	35.1	88.0	141.6	308.4	350.3	365.7	381.7	411.2	424.8	427.3
57.5°	28.4	32.7	75.1	121.3	287.5	328.2	345.3	360.1	387.8	398.3	400.8
60°	26.4	30.7	65.2	104.1	264.8	307.2	322.0	336.8	360.1	368.7	370.7
62.5°	24.6	29.5	57.9	87.5	241.4	282.6	297.3	310.9	330.6	336.8	339.2
65°	23.4	28.4	52.3	75.1	217.3	256.7	271.5	283.2	299.2	305.3	306.6
67.5°	22.2	27.1	48.0	64.6	193.3	230.9	241.9	253.0	265.3	271.5	272.1
70°	20.3	25.9	44.3	57.3	168.7	201.3	210.5	222.3	232.1	235.2	237.0
72.5°	19.1	24.0	41.8	51.8	143.4	173.0	181.6	188.4	197.0	200.1	200.1
75°	17.3	21.6	39.4	46.2	117.6	141.6	148.9	155.7	162.5	163.7	161.9
77.5°	15.4	19.1	33.9	38.8	91.8	112.1	118.2	121.9	127.5	128.7	129.3
80°	12.9	16.6	26.4	30.2	66.5	82.5	86.8	89.8	94.8	94.8	96.1
82.5°	9.8	12.9	19.1	21.6	45.0	56.6	60.3	62.2	65.2	65.2	65.2
85°	6.1	8.0	12.3	14.1	27.1	34.5	37.0	37.5	40.0	40.7	40.7
87.5°	3.1	4.3	8.0	8.6	14.1	17.9	17.9	19.1	19.1	18.4	17.9
90°	2.8	5.1	7.4	8.0	12.6	18.6	21.7	19.3	14.4	10.8	10.8
92.5°	11.4	30.7	50.0	54.9	77.2	106.9	121.8	106.7	76.6	54.1	51.9
95°	27.3	62.8	98.2	107.0	190.0	300.5	355.9	317.5	240.9	183.4	176.9
97.5°	47.3	78.5	109.7	117.5	255.9	440.3	532.5	508.3	459.9	423.6	411.2
100°	62.6	90.9	119.2	126.3	279.8	484.5	586.9	588.6	592.2	594.8	580.1
102.5°	75.7	102.1	128.5	135.1	290.8	498.5	602.3	633.1	694.8	741.0	728.4
105°	97.8	120.2	142.6	148.2	299.0	500.1	600.5	669.7	808.0	911.7	904.9
107.5°	120.6	141.5	162.3	167.6	300.5	477.8	566.4	662.9	855.8	1000.5	1002.1
110°	136.0	154.8	173.7	178.4	298.3	458.0	538.0	645.8	861.4	1023.2	1030.3



TEST NUMBER: P937060

CATALOG NUMBER: SQ4-FB-075U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	151.1	169.0	186.9	191.4	298.3	440.9	512.1	622.5	843.2	1008.7	1019.7
115°	173.8	190.3	206.9	211.1	301.1	421.0	481.1	587.4	800.0	959.5	974.6
117.5°	196.3	211.3	226.4	230.2	306.7	408.6	459.7	555.7	747.6	891.5	908.2
120°	209.4	223.6	237.7	241.3	311.2	404.5	451.1	538.9	714.2	845.7	862.0
122.5°	222.2	236.5	250.7	254.3	317.7	402.3	444.6	523.5	681.5	800.0	816.0
125°	241.8	254.8	267.9	271.1	326.6	400.6	437.6	504.6	638.8	739.4	754.2
127.5°	257.8	270.9	284.0	287.3	335.4	399.6	431.6	489.2	604.4	690.7	703.2
130°	266.3	280.4	294.6	298.2	341.8	400.1	429.3	480.6	583.1	660.0	671.5
132.5°	275.1	289.3	303.4	307.0	347.1	400.6	427.3	473.2	565.0	633.9	644.1
135°	288.2	301.0	313.9	317.2	352.8	400.2	423.9	462.3	539.2	596.9	605.8
137.5°	301.6	314.3	327.1	330.3	361.3	402.7	423.3	455.8	520.8	569.5	576.8
140°	312.7	324.4	336.2	339.1	366.5	403.1	421.3	449.4	505.5	547.6	554.4
142.5°	321.2	332.0	342.9	345.6	370.8	404.5	421.3	446.0	495.3	532.3	538.1
145°	334.2	343.8	353.2	355.6	376.5	404.5	418.5	438.7	478.9	509.2	513.6
147.5°	347.3	356.5	365.8	368.1	384.9	407.3	418.5	434.3	466.1	489.9	493.5
150°	355.9	364.2	372.6	374.7	389.3	408.7	418.5	431.9	458.7	478.8	481.7
152.5°	364.7	371.0	377.4	378.9	392.1	409.7	418.5	429.9	452.8	470.0	472.2
155°	377.8	382.5	387.1	388.3	398.4	411.8	418.5	427.6	445.7	459.4	460.9
157.5°	387.5	392.0	396.6	397.7	404.6	413.9	418.5	425.5	439.7	450.3	451.3
160°	394.0	397.5	401.0	402.0	407.5	414.8	418.5	424.5	436.7	445.8	446.4
162.5°	400.6	403.2	405.9	406.5	410.5	415.8	418.5	423.6	433.8	441.5	442.1
165°	407.6	410.0	412.4	413.1	414.9	417.3	418.5	422.1	429.5	435.0	435.6
167.5°	414.2	415.3	416.4	416.7	418.3	420.3	421.3	423.7	428.6	432.1	432.4
170°	418.5	419.6	420.8	421.0	421.1	421.2	421.3	423.7	428.6	432.1	432.1
172.5°	420.8	421.0	421.2	421.3	421.3	421.3	421.3	423.2	427.0	429.8	429.7
175°	423.9	423.9	423.9	423.9	423.1	421.9	421.3	422.5	424.9	426.7	426.7
177.5°	423.9	423.9	423.9	423.9	423.2	422.3	421.9	422.8	424.7	426.2	425.9
180°	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9



TEST NUMBER: P937060

CATALOG NUMBER: SQ4-FB-075U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	191.4	191.4
2.5°	204.4	203.2
5°	262.9	264.1
7.5°	354.0	353.4
10°	440.2	445.7
12.5°	503.0	504.2
15°	541.2	543.6
17.5°	555.9	556.6
20°	556.6	555.3
22.5°	549.8	548.5
25°	541.8	541.2
27.5°	534.4	535.0
30°	531.3	533.2
32.5°	531.3	534.4
35°	532.5	535.6
37.5°	531.9	535.6
40°	529.4	533.7
42.5°	522.7	525.7
45°	512.2	515.9
47.5°	498.7	501.2
50°	481.4	483.9
52.5°	459.9	460.5
55°	434.1	436.5
57.5°	406.4	406.9
60°	375.5	377.4
62.5°	342.9	342.9
65°	308.4	309.6
67.5°	272.7	275.8
70°	236.4	237.0
72.5°	200.7	200.7
75°	163.7	164.4
77.5°	128.7	128.7
80°	95.4	96.1
82.5°	65.9	67.1
85°	41.2	41.2
87.5°	19.1	17.3
90°	10.8	10.8
92.5°	43.3	34.7
95°	151.0	124.9
97.5°	361.7	312.1
100°	521.1	462.0
102.5°	677.8	627.2
105°	877.8	850.6
107.5°	1008.7	1015.3
110°	1058.7	1087.0





TEST NUMBER: P937060

CATALOG NUMBER: SQ4-FB-075U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1063.1	1106.6
115°	1035.0	1095.3
117.5°	975.1	1042.0
120°	927.0	991.9
122.5°	880.1	944.2
125°	813.2	872.2
127.5°	753.0	802.8
130°	717.5	763.5
132.5°	685.3	726.5
135°	641.3	676.8
137.5°	605.9	635.0
140°	581.6	608.8
142.5°	561.4	584.8
145°	531.3	549.1
147.5°	508.2	522.9
150°	493.6	505.6
152.5°	481.1	490.1
155°	466.8	472.8
157.5°	455.5	459.7
160°	448.8	451.1
162.5°	444.3	446.6
165°	438.0	440.4
167.5°	433.4	434.4
170°	432.1	432.1
172.5°	428.7	427.8
175°	426.7	426.7
177.5°	424.9	423.9
180°	423.9	423.9



TEST NUMBER: P937060

CATALOG NUMBER: SQ4-FB-075U-050D-93050-1D-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	1.44	2.20	2.51	3.28	4.75	14.58	15.34	15.65	16.42	17.89
	3H	2.14	2.82	3.22	3.91	5.39	16.39	17.08	17.47	18.16	19.65
	4H	2.43	3.09	3.52	4.17	5.66	17.02	17.68	18.11	18.76	20.25
	6H	2.68	3.28	3.78	4.37	5.87	17.44	18.04	18.54	19.13	20.63
	8H	2.74	3.32	3.85	4.42	5.92	17.55	18.12	18.65	19.23	20.72
	12H	2.76	3.30	3.86	4.40	5.92	17.61	18.15	18.71	19.25	20.77
4H	2H	8.62	9.27	9.71	10.35	11.85	14.84	15.49	15.94	16.58	18.07
	3H	10.18	10.72	11.28	11.84	13.34	16.86	17.41	17.97	18.52	20.02
	4H	10.27	10.77	11.38	11.87	13.40	17.61	18.12	18.72	19.22	20.74
	6H	10.27	10.71	11.39	11.83	13.35	18.14	18.57	19.25	19.69	21.21
	8H	10.25	10.65	11.36	11.77	13.30	18.29	18.69	19.40	19.81	21.34
	12H	10.20	10.57	11.33	11.69	13.23	18.37	18.73	19.50	19.86	21.40
8H	4H	11.69	12.10	12.81	13.21	14.75	17.67	18.07	18.78	19.19	20.72
	6H	11.93	12.27	13.07	13.43	14.96	18.28	18.61	19.42	19.77	21.30
	8H	11.95	12.24	13.09	13.38	14.93	18.49	18.78	19.63	19.92	21.47
	12H	11.91	12.17	13.06	13.31	14.89	18.62	18.88	19.77	20.01	21.60
12H	4H	11.83	12.20	12.96	13.32	14.86	17.62	17.98	18.75	19.11	20.65
	6H	12.19	12.48	13.33	13.62	15.17	18.26	18.55	19.41	19.69	21.24
	8H	12.25	12.51	13.40	13.64	15.23	18.48	18.74	19.63	19.87	21.46