

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: P938050

Luminaire Tested: SQ4-FB-125U-100D-930-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

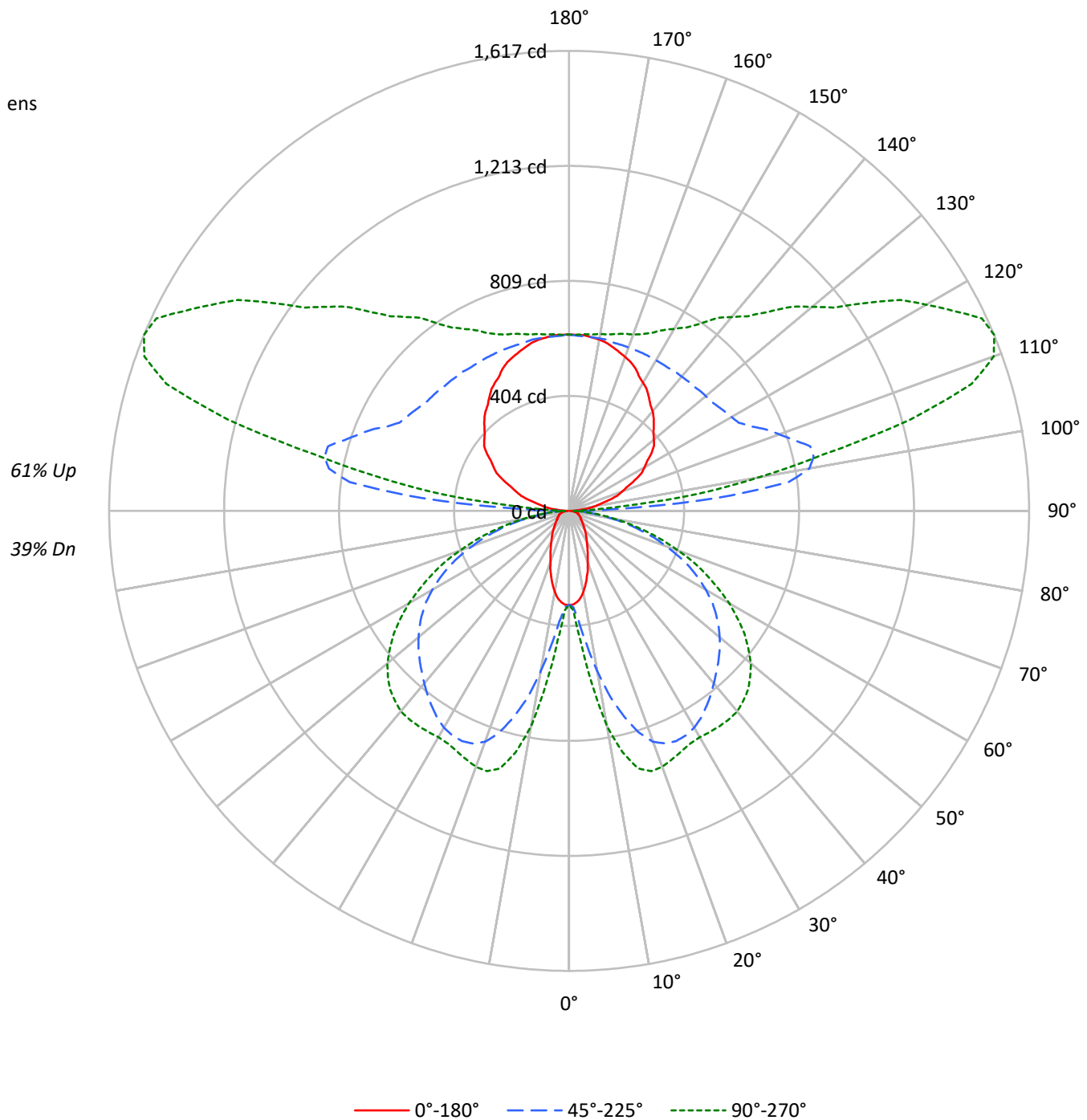
Test Method: LM-79-2019  
Report Number: P938050  
REPORT IS A COMBINATION OF REPORTS P933599 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-100D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6571.0 lumens  
Efficiency: N/A  
Efficacy: 102.0 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): 64.4  
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: P938050  
CATALOG NUMBER: SQ4-FB-125U-100D-930-1D-UNV-STD-W-4

### 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	50	30	10	0
RCR																					
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39			39
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32			32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26			26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21			21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18			18
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15			15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13			13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11			11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10			10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9			9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8			8

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

	0°	45°	90°
0°	3062	3062	3062
5°	2988	3536	4116
10°	2707	5151	6823
15°	2298	6725	8239
20°	1869	7788	8396
25°	1558	8143	8227
30°	1311	8188	8211
35°	1158	8046	8423
40°	1007	7862	8642
45°	910	7726	8677
50°	833	7602	8533
55°	795	7424	8155
60°	811	7089	7557
65°	840	6582	6737
70°	889	5729	5691
75°	974	4659	4441
80°	1039	3219	2992
85°	878	1700	1532

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8677 cd/sqm



TEST NUMBER: P938050

CATALOG NUMBER: SQ4-FB-125U-100D-930-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.7	0.6
10°-20°	189.2	2.9
20°-30°	330.9	5.0
30°-40°	426.0	6.5
40°-50°	475.8	7.2
50°-60°	455.7	6.9
60°-70°	361.2	5.5
70°-80°	212.4	3.2
80°-90°	61.4	0.9
90°-100°	302.0	4.6
100°-110°	793.9	12.1
110°-120°	823.2	12.5
120°-130°	660.3	10.0
130°-140°	518.1	7.9
140°-150°	397.7	6.1
150°-160°	286.4	4.4
160°-170°	175.2	2.7
170°-180°	59.2	0.9
0°-30°	562.8	8.6
0°-40°	988.7	15.0
0°-60°	1920.2	29.2
0°-90°	2555.1	38.9
90°-120°	1919.0	29.2
90°-150°	3495.1	53.2
90°-180°	4016.0	61.1
0°-180°	6571.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	330	330	330	330	330	
5°	322	345	388	439	455	30
15°	241	444	749	908	937	67
25°	154	504	892	932	933	71
35°	104	482	840	888	923	65
45°	71	384	743	851	889	55
55°	51	244	630	732	752	46
65°	40	129	468	526	534	40
75°	30	80	257	282	283	31
85°	11	24	64	70	71	11
90°	4	12	32	16	16	4
95°	40	156	520	268	182	44
105°	143	217	878	1332	1243	152
115°	254	308	703	1402	1601	251
125°	353	396	639	1080	1275	314
135°	421	464	620	872	989	326
145°	488	520	612	744	802	306
155°	552	568	612	672	691	254
165°	596	604	612	636	644	168
175°	620	620	616	624	624	59
180°	620	620	620	620	620	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0
2.5°	330.0	330.0	332.1	333.2	335.3	336.4	338.5	340.6	347.0	348.0	350.1
5°	321.5	325.8	339.5	344.8	359.7	379.8	388.3	402.1	430.8	439.2	444.5
7.5°	308.8	318.3	352.3	360.8	397.9	451.0	473.2	502.9	548.5	570.9	588.8
10°	288.6	308.8	369.2	389.4	449.8	530.5	571.9	613.3	682.2	713.0	724.7
12.5°	266.4	299.2	387.3	414.8	501.9	619.7	669.5	715.2	793.7	835.0	841.4
15°	240.8	285.4	404.2	444.5	557.0	694.0	749.1	805.3	878.6	908.3	915.7
17.5°	218.6	274.8	420.1	462.6	599.5	760.8	817.0	863.7	923.1	943.3	948.6
20°	191.0	257.8	430.8	486.0	644.1	809.6	863.7	899.8	940.1	952.8	954.9
22.5°	170.8	239.8	437.2	494.4	673.7	839.3	884.9	913.6	941.1	945.4	946.4
25°	153.9	219.6	436.1	504.0	699.3	857.3	892.3	913.6	929.5	931.6	931.6
27.5°	138.0	197.4	431.9	506.1	718.3	861.5	889.2	904.0	911.4	915.7	915.7
30°	124.1	176.1	421.3	501.9	726.8	857.3	879.6	887.0	894.5	900.8	904.0
32.5°	113.5	155.9	405.4	493.4	727.8	846.7	862.6	866.8	877.4	892.3	897.7
35°	104.0	135.8	387.3	481.7	721.5	829.7	840.3	844.6	865.8	888.1	895.5
37.5°	94.4	120.9	363.9	461.6	711.9	809.6	817.0	824.4	857.3	883.9	892.3
40°	84.9	108.2	336.4	439.2	697.1	785.2	791.5	803.2	846.7	877.4	885.9
42.5°	77.5	97.6	306.7	416.0	678.0	757.6	767.1	784.1	834.0	866.8	876.4
45°	71.1	87.0	274.8	384.1	653.6	729.0	742.7	766.1	819.1	850.9	859.5
47.5°	64.7	79.6	241.9	351.2	627.1	700.3	718.3	744.9	799.0	829.7	837.1
50°	59.4	72.2	209.0	316.2	598.4	669.5	690.7	718.3	773.5	802.1	811.7
52.5°	55.2	65.8	178.3	281.2	565.6	637.7	662.1	690.7	742.7	770.3	776.7
55°	50.9	60.5	151.8	244.0	531.6	603.7	630.3	657.8	708.8	732.1	736.4
57.5°	48.8	56.2	129.4	209.0	495.5	565.6	595.3	620.7	668.4	686.5	690.7
60°	45.6	53.1	112.5	179.3	456.3	529.4	555.0	580.4	620.7	635.6	638.7
62.5°	42.5	50.9	99.7	150.6	416.0	487.0	512.5	535.8	569.8	580.4	584.7
65°	40.3	48.8	90.2	129.4	374.5	442.5	467.9	488.1	515.7	526.3	528.4
67.5°	38.2	46.7	82.8	111.4	333.2	397.9	417.0	436.1	457.3	467.9	469.0
70°	35.0	44.6	76.4	98.7	290.7	347.0	362.9	383.0	400.0	405.4	408.5
72.5°	32.9	41.4	72.2	89.1	247.2	298.2	313.0	324.7	339.5	344.8	344.8
75°	29.7	37.1	67.9	79.6	202.7	244.0	256.8	268.4	280.1	282.3	279.0
77.5°	26.5	32.9	58.4	66.8	158.1	193.1	203.7	210.1	219.6	221.8	222.8
80°	22.2	28.7	45.6	52.0	114.6	142.2	149.6	154.9	163.4	163.4	165.5
82.5°	16.9	22.2	32.9	37.1	77.5	97.6	104.0	107.2	112.5	112.5	112.5
85°	10.6	13.8	21.2	24.4	46.7	59.4	63.7	64.7	69.0	70.0	70.0
87.5°	5.3	7.4	13.8	14.9	24.4	30.8	30.8	32.9	32.9	31.8	30.8
90°	4.2	7.5	10.8	11.6	18.3	27.1	31.6	28.0	21.0	15.8	15.8
92.5°	16.6	44.9	73.2	80.2	112.8	156.3	177.9	155.9	112.0	79.0	75.9
95°	39.9	91.6	143.4	156.3	277.6	439.2	520.1	464.1	352.2	268.2	258.6
97.5°	69.0	114.6	160.3	171.7	373.9	643.4	778.3	742.9	672.1	619.0	601.0
100°	91.5	132.9	174.3	184.6	409.0	708.1	857.7	860.3	865.5	869.3	847.7
102.5°	110.6	149.2	187.8	197.5	425.0	728.5	880.2	925.3	1015.5	1083.1	1064.6
105°	143.0	175.8	208.5	216.6	437.0	730.8	877.7	978.8	1180.9	1332.5	1322.5
107.5°	176.3	206.8	237.3	244.9	439.2	698.3	827.8	968.8	1250.8	1462.2	1464.6
110°	198.7	226.3	253.7	260.7	435.9	669.5	786.2	943.8	1259.1	1495.5	1505.9



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CATALOG NUMBER: SQ4-FB-125U-100D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	220.7	247.0	273.2	279.8	435.9	644.2	748.4	909.7	1232.4	1474.3	1490.2
115°	254.0	278.2	302.5	308.5	440.0	615.3	703.0	858.4	1169.2	1402.4	1424.4
117.5°	286.9	308.9	330.9	336.4	448.2	597.4	671.9	812.1	1092.6	1302.9	1327.4
120°	306.0	326.7	347.5	352.6	454.9	591.2	659.4	787.6	1043.8	1236.1	1259.8
122.5°	324.7	345.6	366.5	371.7	464.5	588.0	649.9	765.3	996.0	1169.1	1192.5
125°	353.4	372.4	391.5	396.2	477.3	585.4	639.4	737.5	933.5	1080.5	1102.1
127.5°	376.7	395.9	415.1	419.9	490.2	583.9	630.7	714.8	883.2	1009.5	1027.7
130°	389.1	409.9	430.6	435.7	499.6	584.8	627.4	702.3	852.1	964.6	981.3
132.5°	402.1	422.8	443.5	448.6	507.3	585.4	624.5	691.5	825.7	926.3	941.4
135°	421.2	440.0	458.8	463.6	515.5	584.8	619.5	675.7	788.1	872.3	885.3
137.5°	440.7	459.3	478.0	482.7	528.0	588.4	618.6	666.1	761.1	832.3	842.9
140°	456.9	474.1	491.3	495.6	535.7	589.1	615.7	656.8	738.8	800.4	810.3
142.5°	469.4	485.3	501.2	505.2	542.0	591.2	615.7	651.8	723.8	777.9	786.4
145°	488.5	502.4	516.2	519.7	550.3	591.2	611.6	641.0	700.0	744.2	750.7
147.5°	507.7	521.1	534.6	538.0	562.5	595.2	611.6	634.8	681.2	716.0	721.3
150°	520.1	532.3	544.5	547.6	568.9	597.4	611.6	631.2	670.3	699.7	704.1
152.5°	533.0	542.3	551.5	553.8	573.1	598.7	611.6	628.3	661.8	686.8	690.1
155°	552.1	559.0	565.8	567.5	582.2	601.8	611.6	624.9	651.5	671.5	673.6
157.5°	566.3	572.9	579.5	581.2	591.3	604.8	611.6	621.9	642.6	658.1	659.7
160°	575.8	581.0	586.2	587.5	595.5	606.2	611.6	620.4	638.1	651.5	652.4
162.5°	585.4	589.2	593.2	594.1	599.9	607.7	611.6	619.0	634.0	645.3	646.1
165°	595.7	599.3	602.8	603.7	606.3	609.8	611.6	616.9	627.6	635.7	636.5
167.5°	605.4	607.0	608.7	609.1	611.3	614.3	615.7	619.3	626.3	631.6	632.0
170°	611.6	613.3	614.9	615.3	615.5	615.7	615.7	619.3	626.3	631.6	631.6
172.5°	614.9	615.3	615.7	615.7	615.7	615.7	615.7	618.5	624.0	628.2	627.9
175°	619.5	619.5	619.5	619.5	618.2	616.5	615.7	617.5	621.0	623.6	623.6
177.5°	619.5	619.5	619.5	619.5	618.6	617.2	616.5	617.9	620.7	622.8	622.4
180°	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	330.0	330.0
2.5°	352.3	350.1
5°	453.1	455.2
7.5°	610.1	609.0
10°	758.7	768.1
12.5°	866.8	869.0
15°	932.7	936.9
17.5°	958.1	959.2
20°	959.2	957.0
22.5°	947.5	945.4
25°	933.7	932.7
27.5°	921.0	922.0
30°	915.7	918.9
32.5°	915.7	921.0
35°	917.8	923.1
37.5°	916.7	923.1
40°	912.5	919.9
42.5°	900.8	906.1
45°	882.8	889.2
47.5°	859.5	863.7
50°	829.7	834.0
52.5°	792.6	793.7
55°	748.0	752.3
57.5°	700.3	701.3
60°	647.2	650.4
62.5°	591.0	591.0
65°	531.6	533.7
67.5°	470.1	475.4
70°	407.4	408.5
72.5°	345.9	345.9
75°	282.3	283.3
77.5°	221.8	221.8
80°	164.5	165.5
82.5°	113.5	115.6
85°	71.1	71.1
87.5°	32.9	29.7
90°	15.8	15.8
92.5°	63.3	50.7
95°	220.6	182.5
97.5°	528.5	456.1
100°	761.5	675.2
102.5°	990.7	916.8
105°	1282.9	1243.1
107.5°	1474.2	1483.9
110°	1547.2	1588.6





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CATALOG NUMBER: SQ4-FB-125U-100D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1553.7	1617.3
115°	1512.5	1600.7
117.5°	1425.2	1522.9
120°	1354.7	1449.7
122.5°	1286.2	1379.9
125°	1188.4	1274.7
127.5°	1100.4	1173.3
130°	1048.6	1115.9
132.5°	1001.6	1061.8
135°	937.2	989.1
137.5°	885.5	927.9
140°	850.0	889.7
142.5°	820.6	854.8
145°	776.6	802.4
147.5°	742.7	764.1
150°	721.5	738.8
152.5°	703.2	716.4
155°	682.3	691.0
157.5°	665.8	671.9
160°	655.9	659.4
162.5°	649.5	652.8
165°	640.1	643.6
167.5°	633.4	634.9
170°	631.6	631.6
172.5°	626.6	625.3
175°	623.6	623.6
177.5°	621.0	619.5
180°	619.5	619.5



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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	3.77	4.56	4.81	5.61	7.03	16.91	17.70	17.95	18.75	20.17
	3H	4.47	5.18	5.52	6.24	7.68	18.73	19.44	19.78	20.50	21.94
	4H	4.76	5.44	5.83	6.51	7.95	19.36	20.04	20.42	21.10	22.54
	6H	5.01	5.64	6.08	6.70	8.16	19.77	20.40	20.85	21.46	22.92
	8H	5.08	5.67	6.15	6.76	8.21	19.89	20.48	20.96	21.56	23.02
	12H	5.09	5.66	6.17	6.73	8.21	19.94	20.51	21.03	21.59	23.06
4H	2H	10.95	11.63	12.02	12.69	14.14	17.17	17.85	18.24	18.92	20.36
	3H	12.51	13.08	13.59	14.17	15.63	19.20	19.77	20.28	20.86	22.31
	4H	12.61	13.13	13.69	14.21	15.69	19.95	20.48	21.04	21.56	23.03
	6H	12.61	13.06	13.71	14.17	15.64	20.48	20.93	21.57	22.03	23.50
	8H	12.59	13.01	13.68	14.10	15.59	20.63	21.05	21.72	22.14	23.63
	12H	12.54	12.92	13.65	14.03	15.53	20.71	21.09	21.82	22.20	23.69
8H	4H	14.04	14.46	15.13	15.55	17.04	20.01	20.43	21.10	21.52	23.01
	6H	14.28	14.62	15.39	15.76	17.25	20.62	20.97	21.74	22.11	23.59
	8H	14.29	14.60	15.41	15.72	17.22	20.83	21.14	21.96	22.26	23.76
	12H	14.26	14.53	15.38	15.64	17.18	20.97	21.24	22.09	22.35	23.89
12H	4H	14.17	14.55	15.28	15.66	17.16	19.96	20.34	21.07	21.45	22.94
	6H	14.53	14.84	15.65	15.95	17.46	20.61	20.91	21.73	22.03	23.53
	8H	14.60	14.86	15.72	15.98	17.52	20.82	21.09	21.95	22.21	23.75