

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: P937150

Luminaire Tested: SQ4-FB-075U-075D-930-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

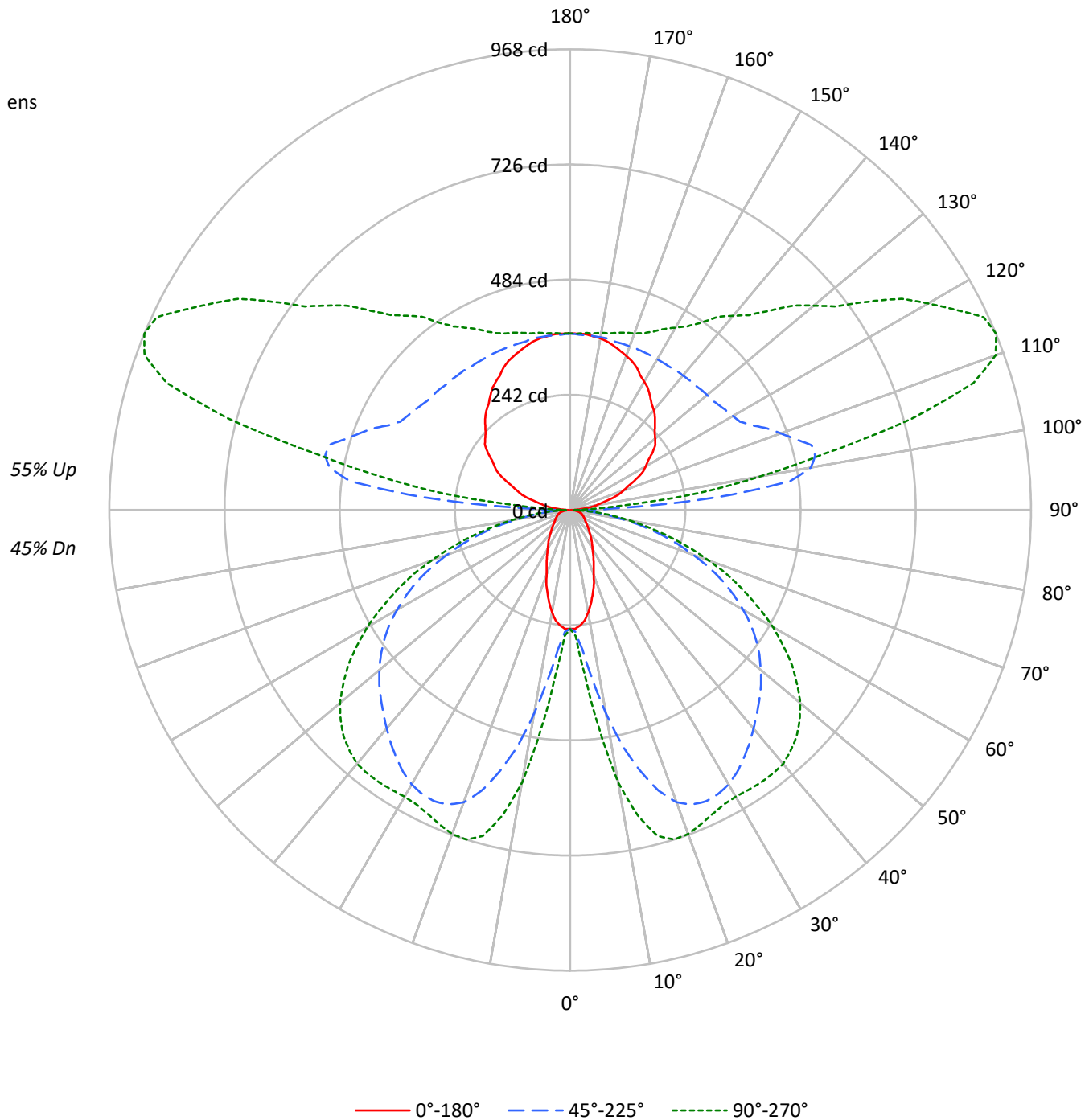
Test Method: LM-79-2019  
Report Number: P937150  
REPORT IS A COMBINATION OF REPORTS P933502 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-075D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4337.8 lumens  
Efficiency: N/A  
Efficacy: 102.3 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): 42.4  
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

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### Luminous Intensity Polar Plot





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**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	80	77	70	67	65	57	55	53	44	43	42	37	37	37	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	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	65	56	49	43	46	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	17	17	17	17
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	24	21	25	20	17	20	16	14	11	11	11	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10	10	10	10
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11	9	9	9	9

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

	0°	45°	90°
0°	2317	2317	2317
5°	2261	2676	3115
10°	2049	3898	5164
15°	1740	5089	6235
20°	1414	5893	6355
25°	1178	6163	6225
30°	993	6197	6214
35°	876	6089	6375
40°	762	5950	6541
45°	689	5847	6566
50°	631	5754	6458
55°	601	5618	6171
60°	614	5365	5719
65°	636	4981	5098
70°	673	4335	4308
75°	738	3525	3361
80°	791	2436	2265
85°	662	1286	1159

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6566 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.3	0.7
10°-20°	143.2	3.3
20°-30°	250.4	5.8
30°-40°	322.4	7.4
40°-50°	360.1	8.3
50°-60°	344.9	8.0
60°-70°	273.3	6.3
70°-80°	160.7	3.7
80°-90°	46.1	1.1
90°-100°	180.8	4.2
100°-110°	475.3	11.0
110°-120°	492.9	11.4
120°-130°	395.3	9.1
130°-140°	310.2	7.2
140°-150°	238.1	5.5
150°-160°	171.5	4.0
160°-170°	104.9	2.4
170°-180°	35.4	0.8
0°-30°	425.9	9.8
0°-40°	748.3	17.3
0°-60°	1453.3	33.5
0°-90°	1933.4	44.6
90°-120°	1149.0	26.5
90°-150°	2092.6	48.2
90°-180°	2404.0	55.4
0°-180°	4337.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	250	250	250	250	250	
5°	243	261	294	332	344	22
15°	182	336	567	687	709	51
25°	116	381	675	705	706	54
35°	79	365	636	672	699	49
45°	54	291	562	644	673	42
55°	38	185	477	554	569	35
65°	30	98	354	398	404	30
75°	22	60	194	214	214	24
85°	8	18	48	53	54	8
90°	2	7	19	10	10	3
95°	24	94	311	160	109	27
105°	86	130	526	798	744	91
115°	152	185	421	840	958	150
125°	212	237	383	647	763	188
135°	252	278	371	522	592	195
145°	292	311	366	446	480	183
155°	331	340	366	402	414	152
165°	357	361	366	381	385	101
175°	371	371	369	373	373	35
180°	371	371	371	371	371	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	249.7	249.7	249.7	249.7	249.7	249.7	249.7	249.7	249.7	249.7	249.7
2.5°	249.7	249.7	251.3	252.1	253.7	254.6	256.2	257.8	262.6	263.4	265.0
5°	243.3	246.5	257.0	261.0	272.2	287.5	293.9	304.3	326.0	332.4	336.5
7.5°	233.7	240.9	266.6	273.0	301.1	341.3	358.1	380.6	415.2	432.0	445.7
10°	218.4	233.7	279.4	294.7	340.5	401.5	432.8	464.1	516.3	539.6	548.4
12.5°	201.6	226.4	293.1	314.0	379.8	469.0	506.7	541.2	600.6	632.0	636.8
15°	182.3	216.0	305.9	336.5	421.6	525.2	566.9	609.5	664.9	687.4	693.0
17.5°	165.4	208.0	318.0	350.1	453.7	575.8	618.3	653.6	698.6	713.9	717.9
20°	144.5	195.1	326.0	367.8	487.4	612.7	653.6	680.9	711.5	721.1	722.7
22.5°	129.3	181.5	330.8	374.2	509.9	635.2	669.7	691.4	712.3	715.5	716.3
25°	116.4	166.2	330.0	381.4	529.2	648.8	675.3	691.4	703.4	705.0	705.0
27.5°	104.4	149.4	326.8	383.0	543.6	652.0	672.9	684.2	689.8	693.0	693.0
30°	94.0	133.3	318.8	379.8	550.1	648.8	665.7	671.3	676.9	681.7	684.2
32.5°	85.9	118.0	306.7	373.4	550.9	640.8	652.8	656.1	664.1	675.3	679.3
35°	78.7	102.8	293.1	364.6	546.0	627.9	636.0	639.2	655.2	672.1	677.7
37.5°	71.5	91.5	275.4	349.3	538.8	612.7	618.3	623.9	648.8	668.9	675.3
40°	64.2	81.9	254.6	332.4	527.6	594.2	599.0	607.9	640.8	664.1	670.5
42.5°	58.6	73.9	232.1	314.8	513.1	573.3	580.6	593.4	631.2	656.1	663.3
45°	53.8	65.8	208.0	290.7	494.6	551.7	562.1	579.8	619.9	644.0	650.4
47.5°	49.0	60.2	183.1	265.8	474.6	530.0	543.6	563.7	604.7	627.9	633.6
50°	45.0	54.6	158.2	239.3	452.9	506.7	522.8	543.6	585.4	607.1	614.3
52.5°	41.8	49.8	134.9	212.8	428.0	482.6	501.1	522.8	562.1	583.0	587.8
55°	38.5	45.8	114.8	184.7	402.3	456.9	477.0	497.9	536.4	554.1	557.3
57.5°	36.9	42.6	98.0	158.2	375.0	428.0	450.5	469.8	505.9	519.5	522.8
60°	34.5	40.2	85.1	135.7	345.3	400.7	420.0	439.2	469.8	481.0	483.4
62.5°	32.1	38.5	75.5	114.0	314.8	368.6	387.8	405.5	431.2	439.2	442.5
65°	30.5	36.9	68.3	98.0	283.5	334.9	354.1	369.4	390.3	398.3	399.9
67.5°	28.9	35.3	62.6	84.3	252.1	301.1	315.6	330.0	346.1	354.1	354.9
70°	26.5	33.7	57.8	74.7	220.0	262.6	274.6	289.9	302.7	306.7	309.2
72.5°	24.9	31.3	54.6	67.5	187.1	225.6	236.9	245.7	257.0	261.0	261.0
75°	22.5	28.1	51.4	60.2	153.4	184.7	194.3	203.2	212.0	213.6	211.2
77.5°	20.1	24.9	44.2	50.6	119.6	146.1	154.2	159.0	166.2	167.8	168.6
80°	16.9	21.7	34.5	39.3	86.7	107.6	113.2	117.2	123.7	123.7	125.3
82.5°	12.8	16.9	24.9	28.1	58.6	73.9	78.7	81.1	85.1	85.1	85.1
85°	8.0	10.4	16.1	18.5	35.3	45.0	48.2	49.0	52.2	53.0	53.0
87.5°	4.0	5.6	10.4	11.2	18.5	23.3	23.3	24.9	24.9	24.1	23.3
90°	2.5	4.5	6.5	7.0	11.0	16.3	19.0	16.9	12.6	9.5	9.5
92.5°	10.0	26.9	43.8	48.0	67.5	93.5	106.6	93.4	67.1	47.3	45.4
95°	23.9	54.9	85.9	93.6	166.2	263.0	311.4	277.8	210.8	160.5	154.8
97.5°	41.4	68.7	96.0	102.8	223.9	385.3	466.0	444.8	402.5	370.7	359.8
100°	54.8	79.5	104.3	110.5	244.8	424.0	513.5	515.0	518.2	520.5	507.6
102.5°	66.2	89.4	112.4	118.2	254.5	436.2	527.0	554.0	608.0	648.4	637.3
105°	85.6	105.2	124.8	129.7	261.6	437.6	525.5	586.0	707.0	797.8	791.8
107.5°	105.5	123.8	142.1	146.6	263.0	418.0	495.6	580.0	748.8	875.4	876.9
110°	119.0	135.5	152.0	156.1	261.0	400.8	470.7	565.1	753.8	895.3	901.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	132.2	147.9	163.6	167.5	261.1	385.8	448.1	544.7	737.8	882.7	892.2
115°	152.1	166.5	181.1	184.7	263.5	368.4	420.9	514.0	700.1	839.6	852.8
117.5°	171.8	184.9	198.1	201.4	268.4	357.6	402.2	486.2	654.1	780.1	794.7
120°	183.2	195.6	208.0	211.1	272.3	354.0	394.8	471.5	625.0	740.0	754.3
122.5°	194.4	206.9	219.4	222.5	278.0	352.0	389.1	458.1	596.3	700.0	714.0
125°	211.6	223.0	234.4	237.2	285.8	350.5	382.9	441.6	559.0	647.0	659.9
127.5°	225.6	237.0	248.5	251.4	293.5	349.6	377.7	428.1	528.9	604.4	615.3
130°	233.0	245.4	257.8	260.9	299.1	350.1	375.6	420.5	510.2	577.5	587.6
132.5°	240.7	253.1	265.5	268.6	303.7	350.5	373.9	414.0	494.4	554.6	563.6
135°	252.1	263.4	274.7	277.5	308.7	350.2	370.9	404.6	471.8	522.3	530.1
137.5°	263.9	275.0	286.2	289.0	316.1	352.4	370.4	398.9	455.7	498.3	504.7
140°	273.6	283.9	294.1	296.7	320.7	352.7	368.7	393.2	442.3	479.2	485.1
142.5°	281.0	290.5	300.0	302.4	324.5	354.0	368.7	390.3	433.4	465.7	470.9
145°	292.5	300.8	309.1	311.2	329.5	354.0	366.2	383.8	419.1	445.6	449.4
147.5°	303.9	312.0	320.1	322.1	336.8	356.4	366.2	380.1	407.8	428.6	431.9
150°	311.4	318.7	326.0	327.9	340.6	357.7	366.2	377.9	401.3	418.9	421.5
152.5°	319.1	324.7	330.2	331.6	343.1	358.5	366.2	376.2	396.2	411.2	413.1
155°	330.6	334.7	338.7	339.7	348.6	360.3	366.2	374.1	390.0	402.0	403.3
157.5°	339.0	343.0	347.1	348.0	354.0	362.2	366.2	372.4	384.7	394.0	394.9
160°	344.7	347.9	350.9	351.7	356.5	363.0	366.2	371.5	382.1	390.1	390.6
162.5°	350.5	352.8	355.2	355.7	359.2	363.8	366.2	370.7	379.6	386.3	386.8
165°	356.7	358.8	360.9	361.4	363.0	365.1	366.2	369.4	375.8	380.6	381.2
167.5°	362.4	363.4	364.4	364.6	366.0	367.8	368.7	370.7	375.0	378.1	378.4
170°	366.2	367.1	368.2	368.4	368.5	368.6	368.7	370.7	375.0	378.1	378.1
172.5°	368.2	368.4	368.6	368.7	368.7	368.7	368.7	370.3	373.6	376.1	376.0
175°	370.9	370.9	370.9	370.9	370.2	369.1	368.7	369.7	371.8	373.4	373.4
177.5°	370.9	370.9	370.9	370.9	370.3	369.5	369.1	369.9	371.6	372.9	372.7
180°	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	249.7	249.7
2.5°	266.6	265.0
5°	342.9	344.5
7.5°	461.7	460.9
10°	574.1	581.4
12.5°	656.1	657.7
15°	705.8	709.0
17.5°	725.1	725.9
20°	725.9	724.3
22.5°	717.1	715.5
25°	706.6	705.8
27.5°	697.0	697.8
30°	693.0	695.4
32.5°	693.0	697.0
35°	694.6	698.6
37.5°	693.8	698.6
40°	690.6	696.2
42.5°	681.7	685.8
45°	668.1	672.9
47.5°	650.4	653.6
50°	627.9	631.2
52.5°	599.8	600.6
55°	566.1	569.3
57.5°	530.0	530.8
60°	489.8	492.2
62.5°	447.3	447.3
65°	402.3	403.9
67.5°	355.7	359.7
70°	308.4	309.2
72.5°	261.8	261.8
75°	213.6	214.4
77.5°	167.8	167.8
80°	124.5	125.3
82.5°	85.9	87.5
85°	53.8	53.8
87.5°	24.9	22.5
90°	9.5	9.5
92.5°	37.9	30.4
95°	132.1	109.3
97.5°	316.5	273.1
100°	455.9	404.2
102.5°	593.1	548.9
105°	768.1	744.3
107.5°	882.7	888.4
110°	926.3	951.2





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	930.3	968.3
115°	905.6	958.4
117.5°	853.3	911.8
120°	811.1	868.0
122.5°	770.1	826.2
125°	711.5	763.2
127.5°	658.9	702.5
130°	627.9	668.1
132.5°	599.7	635.7
135°	561.1	592.2
137.5°	530.1	555.6
140°	508.9	532.7
142.5°	491.3	511.8
145°	464.9	480.4
147.5°	444.7	457.5
150°	431.9	442.4
152.5°	421.0	428.9
155°	408.5	413.7
157.5°	398.6	402.2
160°	392.7	394.8
162.5°	388.8	390.8
165°	383.3	385.4
167.5°	379.3	380.1
170°	378.1	378.1
172.5°	375.2	374.4
175°	373.4	373.4
177.5°	371.8	370.9
180°	370.9	370.9



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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	3.40	4.24	4.39	5.26	6.60	16.53	17.38	17.53	18.39	19.74
	3H	4.10	4.86	5.10	5.88	7.25	18.36	19.12	19.36	20.14	21.50
	4H	4.40	5.12	5.42	6.14	7.51	18.99	19.71	20.01	20.74	22.11
	6H	4.65	5.31	5.68	6.34	7.73	19.41	20.07	20.44	21.10	22.49
	8H	4.72	5.35	5.75	6.40	7.78	19.52	20.16	20.56	21.20	22.58
	12H	4.73	5.34	5.77	6.38	7.78	19.58	20.19	20.62	21.22	22.63
4H	2H	10.58	11.30	11.61	12.33	13.70	16.81	17.53	17.83	18.55	19.92
	3H	12.15	12.76	13.18	13.81	15.19	18.84	19.44	19.87	20.49	21.88
	4H	12.25	12.80	13.29	13.84	15.25	19.59	20.15	20.63	21.19	22.60
	6H	12.26	12.73	13.31	13.80	15.20	20.12	20.60	21.17	21.66	23.07
	8H	12.23	12.68	13.29	13.74	15.16	20.27	20.72	21.33	21.78	23.20
	12H	12.19	12.59	13.26	13.67	15.09	20.36	20.76	21.43	21.84	23.26
8H	4H	13.68	14.13	14.73	15.18	16.60	19.65	20.10	20.70	21.16	22.58
	6H	13.92	14.29	15.00	15.39	16.81	20.27	20.64	21.34	21.74	23.16
	8H	13.94	14.26	15.02	15.35	16.78	20.48	20.81	21.56	21.89	23.33
	12H	13.91	14.19	14.99	15.27	16.75	20.62	20.90	21.70	21.98	23.46
12H	4H	13.82	14.22	14.89	15.30	16.72	19.60	20.01	20.68	21.08	22.51
	6H	14.18	14.50	15.26	15.59	17.02	20.25	20.58	21.33	21.66	23.10
	8H	14.24	14.53	15.33	15.61	17.09	20.47	20.76	21.56	21.84	23.32