

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: P937018

Luminaire Tested: SQ4-FB-075U-050D-840-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

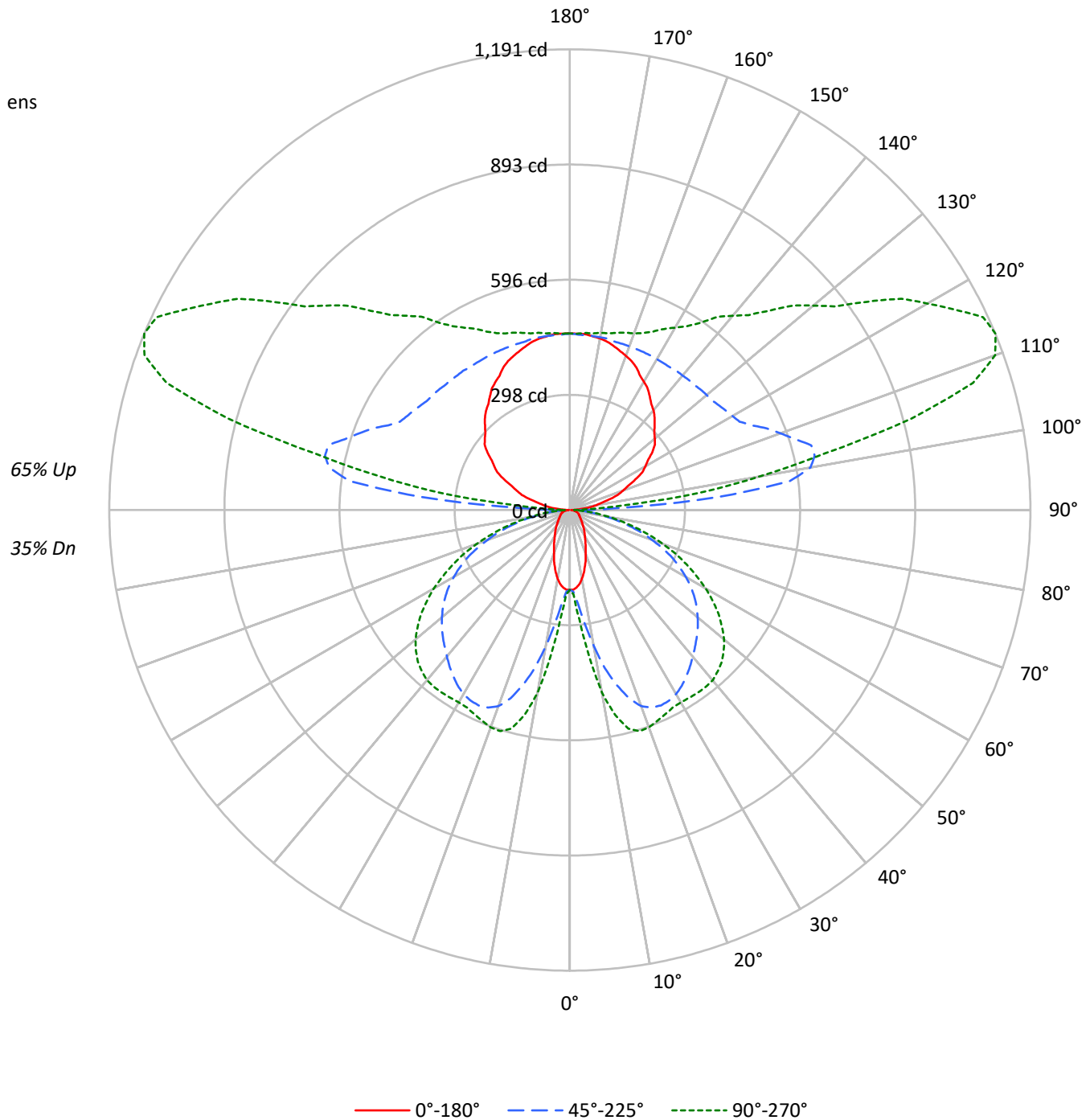
Test Method: LM-79-2019  
Report Number: P937018  
REPORT IS A COMBINATION OF REPORTS P933501 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-050D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4554.7 lumens  
Efficiency: N/A  
Efficacy: 132.4 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 (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

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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	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°	1912	1912	1912
5°	1867	2209	2571
10°	1691	3218	4263
15°	1436	4201	5147
20°	1168	4864	5245
25°	973	5087	5139
30°	820	5114	5129
35°	723	5026	5261
40°	630	4912	5398
45°	568	4827	5421
50°	520	4749	5331
55°	497	4637	5094
60°	507	4428	4721
65°	525	4112	4208
70°	553	3577	3555
75°	610	2910	2775
80°	651	2012	1869
85°	547	1062	957

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5421 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	26.7	0.6
10°-20°	118.2	2.6
20°-30°	206.7	4.5
30°-40°	266.1	5.8
40°-50°	297.2	6.5
50°-60°	284.7	6.2
60°-70°	225.6	5.0
70°-80°	132.7	2.9
80°-90°	38.6	0.8
90°-100°	222.5	4.9
100°-110°	584.8	12.8
110°-120°	606.4	13.3
120°-130°	486.4	10.7
130°-140°	381.7	8.4
140°-150°	292.9	6.4
150°-160°	211.0	4.6
160°-170°	129.1	2.8
170°-180°	43.6	1.0
0°-30°	351.6	7.7
0°-40°	617.6	13.6
0°-60°	1199.5	26.3
0°-90°	1596.4	35.0
90°-120°	1413.7	31.0
90°-150°	2574.7	56.5
90°-180°	2958.0	64.9
0°-180°	4554.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	206	206	206	206	206	
5°	201	215	243	274	284	19
15°	150	278	468	567	585	42
25°	96	315	557	582	583	44
35°	65	301	525	555	577	41
45°	44	240	464	532	556	34
55°	32	152	394	457	470	29
65°	25	81	292	329	333	25
75°	19	50	160	176	177	19
85°	7	15	40	44	44	7
90°	3	9	23	12	12	3
95°	29	115	383	198	134	33
105°	105	160	646	982	916	112
115°	187	227	518	1033	1179	185
125°	260	292	471	796	939	231
135°	310	342	456	643	729	240
145°	360	383	450	548	591	225
155°	407	418	450	495	509	187
165°	439	445	450	468	474	124
175°	456	456	454	459	459	43
180°	456	456	456	456	456	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	206.1	206.1	206.1	206.1	206.1	206.1	206.1	206.1	206.1	206.1	206.1
2.5°	206.1	206.1	207.5	208.1	209.5	210.1	211.4	212.7	216.8	217.4	218.7
5°	200.9	203.5	212.1	215.4	224.7	237.3	242.6	251.2	269.1	274.4	277.7
7.5°	192.9	198.9	220.0	225.4	248.6	281.7	295.6	314.2	342.6	356.6	367.8
10°	180.3	192.9	230.7	243.2	281.0	331.4	357.3	383.1	426.2	445.4	452.7
12.5°	166.4	186.9	242.0	259.2	313.5	387.1	418.2	446.8	495.8	521.7	525.6
15°	150.5	178.3	252.5	277.7	348.0	433.4	467.9	503.1	548.8	567.3	572.0
17.5°	136.5	171.7	262.5	289.0	374.5	475.2	510.4	539.5	576.6	589.2	592.5
20°	119.4	161.0	269.1	303.6	402.3	505.8	539.5	562.1	587.3	595.2	596.6
22.5°	106.7	149.8	273.1	308.8	420.9	524.2	552.8	570.7	587.9	590.5	591.2
25°	96.1	137.2	272.4	314.9	436.8	535.5	557.4	570.7	580.6	581.9	581.9
27.5°	86.2	123.3	269.7	316.2	448.7	538.2	555.5	564.7	569.4	572.0	572.0
30°	77.6	110.1	263.1	313.5	454.0	535.5	549.4	554.1	558.7	562.8	564.7
32.5°	70.9	97.4	253.2	308.2	454.7	528.9	538.9	541.5	548.1	557.4	560.7
35°	64.9	84.9	242.0	300.9	450.7	518.3	524.9	527.6	540.8	554.8	559.4
37.5°	59.0	75.6	227.3	288.3	444.7	505.8	510.4	515.0	535.5	552.1	557.4
40°	53.1	67.6	210.1	274.4	435.5	490.4	494.5	501.7	528.9	548.1	553.5
42.5°	48.4	61.0	191.6	259.8	423.6	473.3	479.2	489.9	521.0	541.5	547.5
45°	44.4	54.3	171.7	239.9	408.2	455.4	464.0	478.6	511.7	531.5	536.9
47.5°	40.4	49.7	151.2	219.4	391.7	437.5	448.7	465.2	499.1	518.3	522.9
50°	37.1	45.1	130.6	197.5	373.9	418.2	431.5	448.7	483.2	501.1	507.0
52.5°	34.5	41.1	111.3	175.7	353.3	398.4	413.6	431.5	464.0	481.2	485.2
55°	31.8	37.7	94.7	152.4	332.1	377.1	393.7	410.9	442.7	457.3	460.0
57.5°	30.5	35.2	80.8	130.6	309.5	353.3	371.8	387.7	417.5	428.8	431.5
60°	28.5	33.1	70.2	112.0	285.0	330.8	346.7	362.6	387.7	397.0	399.1
62.5°	26.5	31.8	62.3	94.2	259.8	304.2	320.1	334.7	355.9	362.6	365.2
65°	25.2	30.5	56.3	80.8	234.0	276.3	292.3	304.9	322.1	328.7	330.1
67.5°	23.9	29.1	51.7	69.6	208.1	248.6	260.4	272.4	285.6	292.3	292.9
70°	21.8	27.9	47.7	61.7	181.6	216.8	226.6	239.3	249.9	253.2	255.2
72.5°	20.6	25.9	45.1	55.7	154.4	186.2	195.5	202.8	212.1	215.4	215.4
75°	18.6	23.2	42.4	49.7	126.6	152.4	160.4	167.7	175.0	176.3	174.3
77.5°	16.6	20.6	36.5	41.8	98.8	120.6	127.3	131.2	137.2	138.5	139.2
80°	13.9	17.9	28.5	32.5	71.6	88.8	93.5	96.7	102.1	102.1	103.4
82.5°	10.6	13.9	20.6	23.2	48.4	61.0	64.9	67.0	70.2	70.2	70.2
85°	6.6	8.6	13.2	15.2	29.1	37.1	39.8	40.4	43.1	43.8	43.8
87.5°	3.4	4.6	8.6	9.3	15.2	19.3	19.3	20.6	20.6	19.9	19.3
90°	3.1	5.5	8.0	8.6	13.5	20.1	23.3	20.7	15.5	11.7	11.7
92.5°	12.3	33.1	53.8	59.1	83.1	115.1	131.1	114.9	82.5	58.2	55.9
95°	29.4	67.6	105.7	115.2	204.5	323.6	383.1	341.8	259.4	197.5	190.5
97.5°	50.9	84.5	118.1	126.5	275.5	474.0	573.3	547.3	495.2	456.1	442.7
100°	67.4	97.8	128.3	135.9	301.2	521.7	631.8	633.7	637.6	640.4	624.5
102.5°	81.5	110.0	138.3	145.4	313.1	536.7	648.4	681.6	748.0	797.8	784.2
105°	105.3	129.4	153.5	159.6	321.9	538.4	646.5	721.0	869.9	981.6	974.3
107.5°	129.8	152.3	174.8	180.4	323.6	514.4	609.8	713.6	921.3	1077.1	1078.9
110°	146.4	166.7	187.0	192.1	321.1	493.1	579.2	695.3	927.4	1101.6	1109.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	162.6	182.0	201.3	206.1	321.2	474.6	551.3	670.2	907.8	1086.0	1097.8
115°	187.1	204.9	222.8	227.2	324.2	453.3	517.9	632.4	861.3	1033.1	1049.3
117.5°	211.3	227.5	243.7	247.8	330.2	440.0	494.9	598.2	804.8	959.8	977.8
120°	225.5	240.7	255.9	259.7	335.0	435.5	485.7	580.2	769.0	910.5	928.0
122.5°	239.2	254.6	269.9	273.8	342.0	433.1	478.7	563.7	733.7	861.2	878.5
125°	260.3	274.4	288.4	291.9	351.6	431.3	471.1	543.3	687.7	796.0	811.9
127.5°	277.5	291.7	305.8	309.3	361.1	430.2	464.7	526.7	650.7	743.7	757.1
130°	286.7	301.9	317.1	321.0	368.0	430.8	462.2	517.4	627.8	710.6	722.9
132.5°	296.2	311.4	326.6	330.5	373.7	431.3	460.0	509.4	608.3	682.4	693.5
135°	310.2	324.1	338.0	341.5	379.8	430.9	456.4	497.8	580.5	642.6	652.2
137.5°	324.7	338.4	352.1	355.6	389.0	433.5	455.8	490.7	560.7	613.2	621.0
140°	336.6	349.3	361.9	365.1	394.6	433.9	453.6	483.8	544.2	589.5	596.9
142.5°	345.8	357.5	369.1	372.1	399.3	435.5	453.6	480.2	533.2	573.0	579.4
145°	359.8	370.1	380.3	382.8	405.4	435.5	450.5	472.3	515.6	548.2	553.0
147.5°	374.0	383.8	393.8	396.3	414.4	438.5	450.5	467.6	501.8	527.4	531.3
150°	383.1	392.1	401.1	403.4	419.1	440.1	450.5	465.0	493.8	515.4	518.6
152.5°	392.6	399.4	406.3	407.9	422.2	441.0	450.5	462.9	487.5	506.0	508.3
155°	406.8	411.8	416.7	418.0	428.9	443.3	450.5	460.3	479.9	494.6	496.2
157.5°	417.1	422.1	427.0	428.2	435.6	445.6	450.5	458.1	473.4	484.8	485.9
160°	424.1	428.0	431.8	432.7	438.7	446.6	450.5	457.0	470.2	480.0	480.6
162.5°	431.3	434.1	437.0	437.7	441.9	447.7	450.5	456.1	467.0	475.3	475.9
165°	438.9	441.4	444.0	444.7	446.7	449.2	450.5	454.5	462.4	468.3	469.0
167.5°	445.9	447.1	448.4	448.7	450.3	452.5	453.6	456.2	461.4	465.2	465.5
170°	450.5	451.7	453.0	453.3	453.4	453.5	453.6	456.2	461.4	465.2	465.2
172.5°	453.0	453.3	453.5	453.6	453.6	453.6	453.6	455.7	459.7	462.8	462.6
175°	456.4	456.4	456.4	456.4	455.5	454.2	453.6	454.9	457.4	459.4	459.4
177.5°	456.4	456.4	456.4	456.4	455.7	454.7	454.2	455.2	457.2	458.8	458.5
180°	456.4	456.4	456.4	456.4	456.4	456.4	456.4	456.4	456.4	456.4	456.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	206.1	206.1
2.5°	220.0	218.7
5°	283.1	284.3
7.5°	381.1	380.5
10°	473.9	479.9
12.5°	541.5	542.8
15°	582.6	585.3
17.5°	598.5	599.2
20°	599.2	597.8
22.5°	591.9	590.5
25°	583.3	582.6
27.5°	575.3	576.0
30°	572.0	574.0
32.5°	572.0	575.3
35°	573.3	576.6
37.5°	572.6	576.6
40°	570.0	574.6
42.5°	562.8	566.0
45°	551.4	555.5
47.5°	536.9	539.5
50°	518.3	521.0
52.5°	495.1	495.8
55°	467.3	469.9
57.5°	437.5	438.1
60°	404.3	406.3
62.5°	369.2	369.2
65°	332.1	333.4
67.5°	293.6	296.9
70°	254.5	255.2
72.5°	216.1	216.1
75°	176.3	177.0
77.5°	138.5	138.5
80°	102.8	103.4
82.5°	70.9	72.2
85°	44.4	44.4
87.5°	20.6	18.6
90°	11.7	11.7
92.5°	46.6	37.3
95°	162.5	134.5
97.5°	389.4	336.0
100°	561.0	497.4
102.5°	729.7	675.3
105°	945.0	915.8
107.5°	1086.0	1093.1
110°	1139.8	1170.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1144.6	1191.4
115°	1114.3	1179.2
117.5°	1049.8	1121.9
120°	998.0	1067.9
122.5°	947.5	1016.6
125°	875.5	939.0
127.5°	810.7	864.3
130°	772.5	822.0
132.5°	737.8	782.2
135°	690.4	728.6
137.5°	652.3	683.6
140°	626.2	655.4
142.5°	604.5	629.7
145°	572.1	591.1
147.5°	547.2	563.0
150°	531.4	544.3
152.5°	518.0	527.7
155°	502.6	509.0
157.5°	490.4	494.9
160°	483.1	485.7
162.5°	478.4	480.9
165°	471.6	474.1
167.5°	466.6	467.7
170°	465.2	465.2
172.5°	461.6	460.6
175°	459.4	459.4
177.5°	457.4	456.4
180°	456.4	456.4



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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	1.69	2.46	2.76	3.53	5.00	14.83	15.60	15.90	16.67	18.14
	3H	2.39	3.08	3.47	4.16	5.65	16.65	17.34	17.73	18.42	19.91
	4H	2.68	3.34	3.77	4.42	5.91	17.28	17.93	18.37	19.02	20.51
	6H	2.93	3.53	4.03	4.62	6.13	17.69	18.29	18.79	19.38	20.89
	8H	3.00	3.57	4.10	4.67	6.17	17.80	18.38	18.91	19.48	20.98
	12H	3.01	3.56	4.12	4.65	6.18	17.86	18.41	18.97	19.51	21.03
4H	2H	8.87	9.53	9.97	10.61	12.10	15.10	15.75	16.19	16.84	18.33
	3H	10.43	10.98	11.54	12.09	13.60	17.12	17.66	18.22	18.78	20.28
	4H	10.52	11.03	11.63	12.13	13.65	17.87	18.37	18.98	19.47	21.00
	6H	10.53	10.96	11.65	12.09	13.60	18.39	18.82	19.51	19.95	21.47
	8H	10.50	10.91	11.62	12.02	13.56	18.54	18.95	19.66	20.06	21.60
	12H	10.46	10.82	11.59	11.95	13.49	18.63	18.99	19.76	20.12	21.66
8H	4H	11.95	12.35	13.07	13.47	15.00	17.92	18.33	19.04	19.44	20.98
	6H	12.19	12.52	13.33	13.68	15.21	18.54	18.87	19.67	20.03	21.56
	8H	12.21	12.50	13.35	13.64	15.19	18.75	19.04	19.89	20.18	21.73
	12H	12.17	12.43	13.32	13.56	15.15	18.88	19.13	20.03	20.27	21.86
12H	4H	12.09	12.45	13.22	13.58	15.12	17.87	18.24	19.01	19.37	20.91
	6H	12.44	12.73	13.59	13.87	15.42	18.52	18.81	19.66	19.95	21.50
	8H	12.51	12.76	13.66	13.90	15.49	18.74	18.99	19.88	20.13	21.71