

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: P936670

Luminaire Tested: SQ4-FB-050U-050D-935-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936670
REPORT IS A COMBINATION OF REPORTS P933469 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

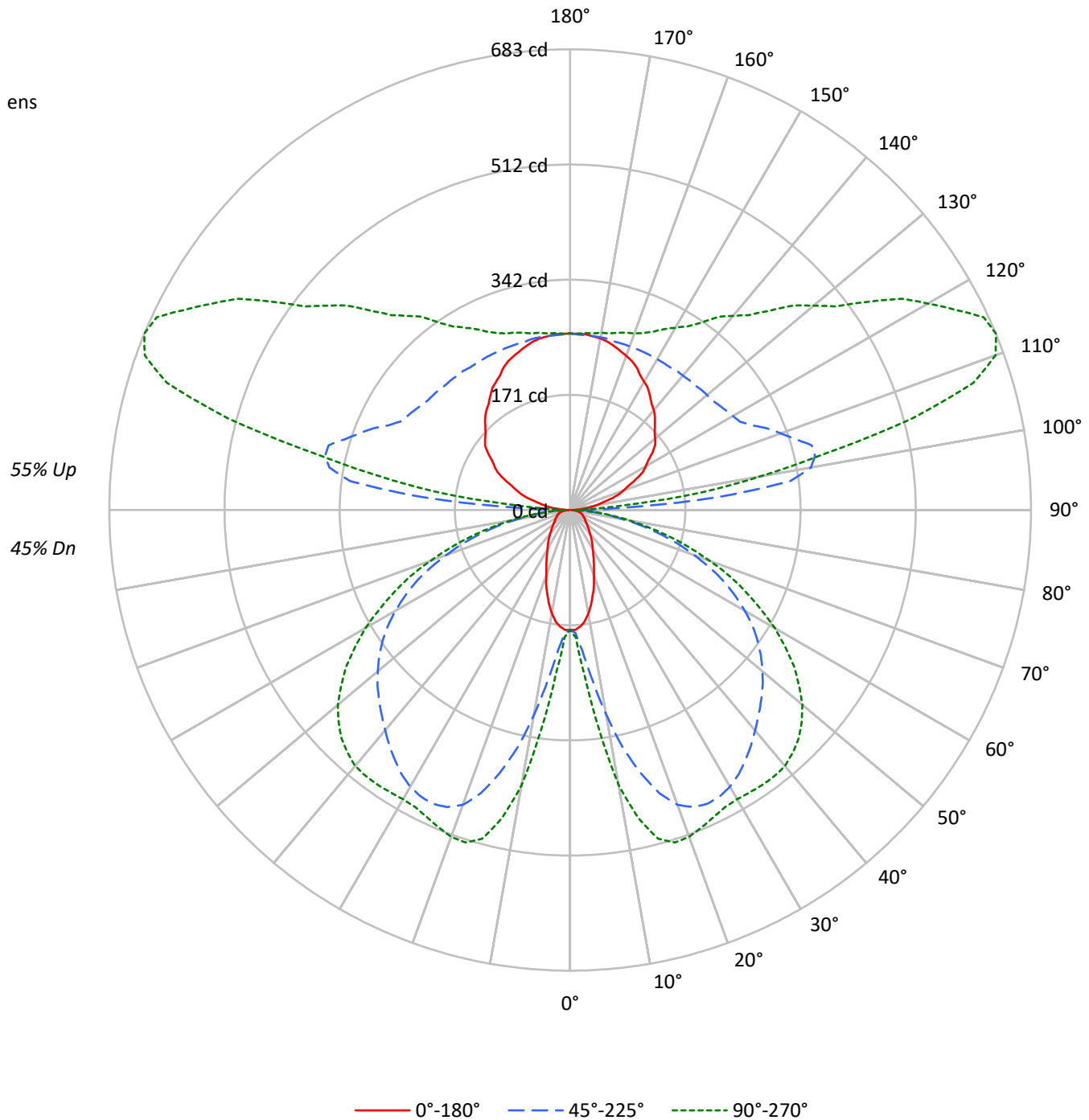
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3072.3 lumens
Efficiency: N/A
Efficacy: 108.2 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): 28.4
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

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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	81	77	70	67	65	57	55	53	45	43	42	37	37	37	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	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	66	56	49	43	47	41	37	38	34	31	30	27	25	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	18	18	18	18
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	22	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1649	1649	1649
5°	1610	1905	2217
10°	1459	2775	3676
15°	1239	3622	4438
20°	1007	4195	4523
25°	839	4387	4431
30°	707	4411	4423
35°	623	4334	4537
40°	543	4236	4655
45°	490	4162	4674
50°	449	4095	4597
55°	428	3999	4392
60°	436	3819	4070
65°	452	3545	3629
70°	477	3085	3066
75°	525	2509	2392
80°	562	1735	1613
85°	472	915	825

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4674 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.0	0.7
10°-20°	101.9	3.3
20°-30°	178.3	5.8
30°-40°	229.5	7.5
40°-50°	256.3	8.3
50°-60°	245.5	8.0
60°-70°	194.5	6.3
70°-80°	114.4	3.7
80°-90°	32.8	1.1
90°-100°	127.5	4.2
100°-110°	335.3	10.9
110°-120°	347.7	11.3
120°-130°	278.9	9.1
130°-140°	218.8	7.1
140°-150°	168.0	5.5
150°-160°	121.0	3.9
160°-170°	74.0	2.4
170°-180°	25.0	0.8
0°-30°	303.2	9.9
0°-40°	532.6	17.3
0°-60°	1034.4	33.7
0°-90°	1376.1	44.8
90°-120°	810.5	26.4
90°-150°	1476.2	48.0
90°-180°	1696.0	55.2
0°-180°	3072.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	178	178	178	178	178	
5°	173	186	209	237	245	16
15°	130	240	404	489	505	36
25°	83	272	481	502	502	38
35°	56	260	453	478	497	35
45°	38	207	400	458	479	30
55°	27	132	340	394	405	25
65°	22	70	252	284	288	21
75°	16	43	138	152	153	17
85°	6	13	34	38	38	6
90°	2	5	13	7	7	2
95°	17	66	220	113	77	19
105°	60	92	371	563	525	64
115°	107	130	297	592	676	106
125°	149	167	270	456	538	133
135°	178	196	262	368	418	138
145°	206	220	258	314	339	129
155°	233	240	258	284	292	107
165°	252	255	258	268	272	71
175°	262	262	260	263	263	25
180°	262	262	262	262	262	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7
2.5°	177.7	177.7	178.9	179.4	180.6	181.2	182.3	183.4	186.9	187.4	188.6
5°	173.2	175.5	182.9	185.7	193.7	204.7	209.2	216.7	232.1	236.6	239.5
7.5°	166.3	171.5	189.7	194.3	214.4	242.9	254.9	270.9	295.5	307.5	317.2
10°	155.5	166.3	198.9	209.8	242.3	285.8	308.1	330.4	367.6	384.1	390.4
12.5°	143.5	161.2	208.7	223.5	270.3	333.8	360.7	385.3	427.5	449.9	453.3
15°	129.8	153.8	217.8	239.5	300.1	373.8	403.5	433.8	473.3	489.2	493.2
17.5°	117.7	148.1	226.4	249.2	322.9	409.8	440.1	465.3	497.2	508.1	510.9
20°	102.9	138.9	232.1	261.8	346.9	436.1	465.3	484.7	506.4	513.2	514.4
22.5°	92.0	129.2	235.5	266.3	363.0	452.1	476.7	492.1	506.9	509.2	509.8
25°	82.9	118.3	234.9	271.5	376.7	461.8	480.7	492.1	500.7	501.8	501.8
27.5°	74.3	106.3	232.6	272.6	387.0	464.1	479.0	487.0	491.0	493.2	493.2
30°	66.9	94.9	226.9	270.3	391.5	461.8	473.8	477.8	481.8	485.3	487.0
32.5°	61.2	84.0	218.4	265.7	392.1	456.1	464.7	467.0	472.7	480.7	483.5
35°	56.0	73.2	208.7	259.5	388.7	447.0	452.7	455.0	466.4	478.4	482.4
37.5°	50.9	65.2	196.0	248.6	383.5	436.1	440.1	444.1	461.8	476.1	480.7
40°	45.8	58.3	181.2	236.6	375.6	422.9	426.4	432.6	456.1	472.7	477.3
42.5°	41.7	52.6	165.2	224.1	365.3	408.1	413.2	422.4	449.3	467.0	472.1
45°	38.3	46.9	148.1	206.9	352.0	392.7	400.1	412.7	441.3	458.4	463.0
47.5°	34.8	42.9	130.4	189.2	337.8	377.3	387.0	401.2	430.4	447.0	451.0
50°	32.0	38.9	112.6	170.3	322.4	360.7	372.1	387.0	416.7	432.1	437.2
52.5°	29.7	35.4	96.0	151.5	304.7	343.5	356.6	372.1	400.1	414.9	418.4
55°	27.4	32.5	81.7	131.5	286.4	325.2	339.5	354.3	381.8	394.4	396.7
57.5°	26.3	30.3	69.7	112.6	266.9	304.7	320.6	334.3	360.1	369.8	372.1
60°	24.5	28.5	60.6	96.6	245.8	285.2	299.0	312.7	334.3	342.3	344.1
62.5°	22.8	27.4	53.8	81.2	224.1	262.3	276.0	288.7	306.9	312.7	314.9
65°	21.7	26.3	48.6	69.7	201.8	238.3	252.0	262.9	277.8	283.5	284.7
67.5°	20.6	25.1	44.6	60.0	179.4	214.4	224.6	234.9	246.3	252.0	252.6
70°	18.8	24.0	41.2	53.2	156.6	186.9	195.4	206.4	215.5	218.4	220.1
72.5°	17.7	22.3	38.9	48.1	133.2	160.6	168.6	174.9	182.9	185.7	185.7
75°	16.0	20.0	36.6	42.9	109.1	131.5	138.3	144.6	150.9	152.0	150.3
77.5°	14.3	17.7	31.4	36.0	85.2	104.0	109.7	113.1	118.3	119.5	120.0
80°	12.0	15.4	24.5	28.0	61.8	76.6	80.6	83.4	88.0	88.0	89.2
82.5°	9.1	12.0	17.7	20.0	41.7	52.6	56.0	57.8	60.6	60.6	60.6
85°	5.7	7.4	11.4	13.1	25.1	32.0	34.3	34.8	37.1	37.7	37.7
87.5°	2.9	4.0	7.4	8.0	13.1	16.6	16.6	17.7	17.7	17.1	16.6
90°	1.8	3.2	4.6	4.9	7.8	11.5	13.4	11.8	8.9	6.6	6.6
92.5°	7.0	18.9	30.9	33.9	47.6	65.9	75.1	65.9	47.3	33.4	32.0
95°	16.9	38.7	60.6	66.0	117.2	185.5	219.6	196.0	148.7	113.2	109.2
97.5°	29.1	48.4	67.6	72.5	157.9	271.8	328.7	313.8	283.9	261.5	253.8
100°	38.6	56.1	73.6	78.0	172.7	299.1	362.3	363.4	365.6	367.2	358.1
102.5°	46.7	63.0	79.3	83.4	179.5	307.7	371.7	390.8	428.9	457.4	449.6
105°	60.4	74.2	88.0	91.5	184.5	308.7	370.7	413.4	498.8	562.8	558.7
107.5°	74.5	87.3	100.2	103.4	185.5	295.0	349.7	409.2	528.3	617.6	618.6
110°	83.9	95.5	107.2	110.1	184.1	282.8	332.1	398.7	531.8	631.7	636.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	93.2	104.3	115.4	118.2	184.1	272.1	316.1	384.3	520.5	622.7	629.5
115°	107.3	117.5	127.7	130.3	185.8	259.9	296.9	362.5	493.8	592.3	601.6
117.5°	121.2	130.4	139.7	142.0	189.3	252.3	283.8	343.0	461.4	550.3	560.6
120°	129.2	138.0	146.7	148.9	192.1	249.7	278.5	332.6	440.9	522.1	532.2
122.5°	137.2	146.0	154.8	157.0	196.1	248.4	274.4	323.2	420.7	493.8	503.7
125°	149.3	157.3	165.3	167.3	201.6	247.3	270.1	311.5	394.3	456.4	465.5
127.5°	159.1	167.2	175.3	177.4	207.0	246.7	266.4	301.9	373.0	426.3	434.0
130°	164.4	173.1	181.8	184.0	211.0	247.0	265.0	296.7	360.0	407.4	414.5
132.5°	169.8	178.6	187.3	189.5	214.3	247.3	263.8	292.1	348.7	391.2	397.6
135°	177.9	185.8	193.8	195.8	217.8	247.0	261.6	285.3	332.8	368.4	373.9
137.5°	186.2	194.0	201.9	203.9	223.1	248.5	261.3	281.3	321.5	351.5	356.1
140°	193.0	200.2	207.5	209.3	226.2	248.8	260.0	277.4	312.1	338.1	342.2
142.5°	198.3	205.0	211.6	213.3	228.9	249.6	260.0	275.3	305.7	328.5	332.1
145°	206.4	212.1	218.0	219.5	232.4	249.7	258.3	270.8	295.6	314.3	317.0
147.5°	214.4	220.2	225.8	227.2	237.6	251.4	258.3	268.1	287.7	302.4	304.7
150°	219.6	224.8	230.0	231.2	240.3	252.3	258.3	266.6	283.1	295.6	297.4
152.5°	225.1	229.0	232.9	233.9	242.1	252.9	258.3	265.4	279.5	290.1	291.5
155°	233.2	236.1	239.0	239.7	245.9	254.2	258.3	263.9	275.2	283.6	284.6
157.5°	239.2	242.0	244.8	245.5	249.7	255.4	258.3	262.7	271.4	278.0	278.7
160°	243.2	245.4	247.6	248.1	251.5	256.0	258.3	262.1	269.6	275.2	275.5
162.5°	247.3	248.9	250.5	250.9	253.4	256.7	258.3	261.5	267.8	272.6	272.9
165°	251.7	253.1	254.7	255.0	256.1	257.6	258.3	260.5	265.1	268.5	268.8
167.5°	255.7	256.4	257.0	257.2	258.2	259.4	260.0	261.6	264.5	266.8	266.9
170°	258.3	259.0	259.7	259.9	259.9	260.0	260.0	261.6	264.5	266.8	266.8
172.5°	259.7	259.9	260.0	260.0	260.0	260.0	260.0	261.2	263.5	265.3	265.1
175°	261.6	261.6	261.6	261.6	261.1	260.4	260.0	260.8	262.3	263.4	263.4
177.5°	261.6	261.6	261.6	261.6	261.2	260.7	260.5	261.1	262.2	263.1	262.9
180°	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	177.7	177.7
2.5°	189.7	188.6
5°	244.1	245.2
7.5°	328.6	328.1
10°	408.7	413.8
12.5°	467.0	468.1
15°	502.4	504.7
17.5°	516.1	516.7
20°	516.7	515.5
22.5°	510.4	509.2
25°	503.0	502.4
27.5°	496.1	496.7
30°	493.2	495.0
32.5°	493.2	496.1
35°	494.4	497.2
37.5°	493.8	497.2
40°	491.5	495.5
42.5°	485.3	488.1
45°	475.5	479.0
47.5°	463.0	465.3
50°	447.0	449.3
52.5°	426.9	427.5
55°	403.0	405.2
57.5°	377.3	377.8
60°	348.6	350.3
62.5°	318.4	318.4
65°	286.4	287.5
67.5°	253.2	256.0
70°	219.5	220.1
72.5°	186.3	186.3
75°	152.0	152.6
77.5°	119.5	119.5
80°	88.6	89.2
82.5°	61.2	62.3
85°	38.3	38.3
87.5°	17.7	16.0
90°	6.6	6.6
92.5°	26.8	21.4
95°	93.1	77.1
97.5°	223.2	192.6
100°	321.6	285.2
102.5°	418.4	387.2
105°	541.9	525.1
107.5°	622.6	626.7
110°	653.5	670.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	656.3	683.1
115°	638.8	676.1
117.5°	601.9	643.3
120°	572.2	612.3
122.5°	543.3	582.9
125°	501.9	538.4
127.5°	464.8	495.5
130°	443.0	471.3
132.5°	423.0	448.5
135°	395.8	417.7
137.5°	373.9	391.9
140°	359.0	375.8
142.5°	346.6	361.1
145°	328.0	338.9
147.5°	313.7	322.7
150°	304.8	312.1
152.5°	297.0	302.5
155°	288.2	291.9
157.5°	281.2	283.8
160°	277.1	278.5
162.5°	274.3	275.7
165°	270.3	271.9
167.5°	267.5	268.1
170°	266.8	266.8
172.5°	264.6	264.1
175°	263.4	263.4
177.5°	262.3	261.6
180°	261.6	261.6



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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	2.23	3.08	3.23	4.09	5.43	15.37	16.22	16.37	17.23	18.57
	3H	2.94	3.70	3.94	4.72	6.08	17.20	17.96	18.20	18.98	20.34
	4H	3.24	3.96	4.25	4.98	6.35	17.83	18.55	18.85	19.58	20.95
	6H	3.49	4.15	4.51	5.18	6.56	18.25	18.92	19.28	19.94	21.32
	8H	3.55	4.19	4.59	5.23	6.61	18.36	19.00	19.40	20.04	21.42
	12H	3.57	4.17	4.61	5.21	6.61	18.42	19.03	19.46	20.07	21.47
4H	2H	9.42	10.15	10.44	11.17	12.54	15.65	16.37	16.67	17.39	18.76
	3H	10.99	11.60	12.02	12.65	14.03	17.68	18.28	18.71	19.33	20.72
	4H	11.09	11.64	12.13	12.68	14.09	18.43	18.99	19.47	20.03	21.44
	6H	11.10	11.58	12.15	12.64	14.04	18.96	19.44	20.01	20.50	21.90
	8H	11.07	11.52	12.12	12.58	14.00	19.11	19.56	20.17	20.62	22.04
	12H	11.03	11.43	12.10	12.51	13.93	19.20	19.60	20.27	20.68	22.10
8H	4H	12.52	12.97	13.57	14.03	15.44	18.49	18.94	19.54	20.00	21.42
	6H	12.76	13.13	13.84	14.23	15.65	19.11	19.48	20.18	20.58	21.99
	8H	12.78	13.11	13.86	14.19	15.62	19.32	19.65	20.40	20.73	22.16
	12H	12.75	13.04	13.83	14.11	15.59	19.46	19.74	20.54	20.82	22.30
12H	4H	12.66	13.07	13.73	14.14	15.56	18.45	18.85	19.52	19.92	21.35
	6H	13.02	13.34	14.10	14.43	15.86	19.09	19.42	20.17	20.50	21.94
	8H	13.09	13.37	14.17	14.45	15.92	19.32	19.60	20.40	20.68	22.15