

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: P936307

Luminaire Tested: SQ4-FB-025U-050D-B50-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936307
REPORT IS A COMBINATION OF REPORTS P933445 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-050D-B50-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

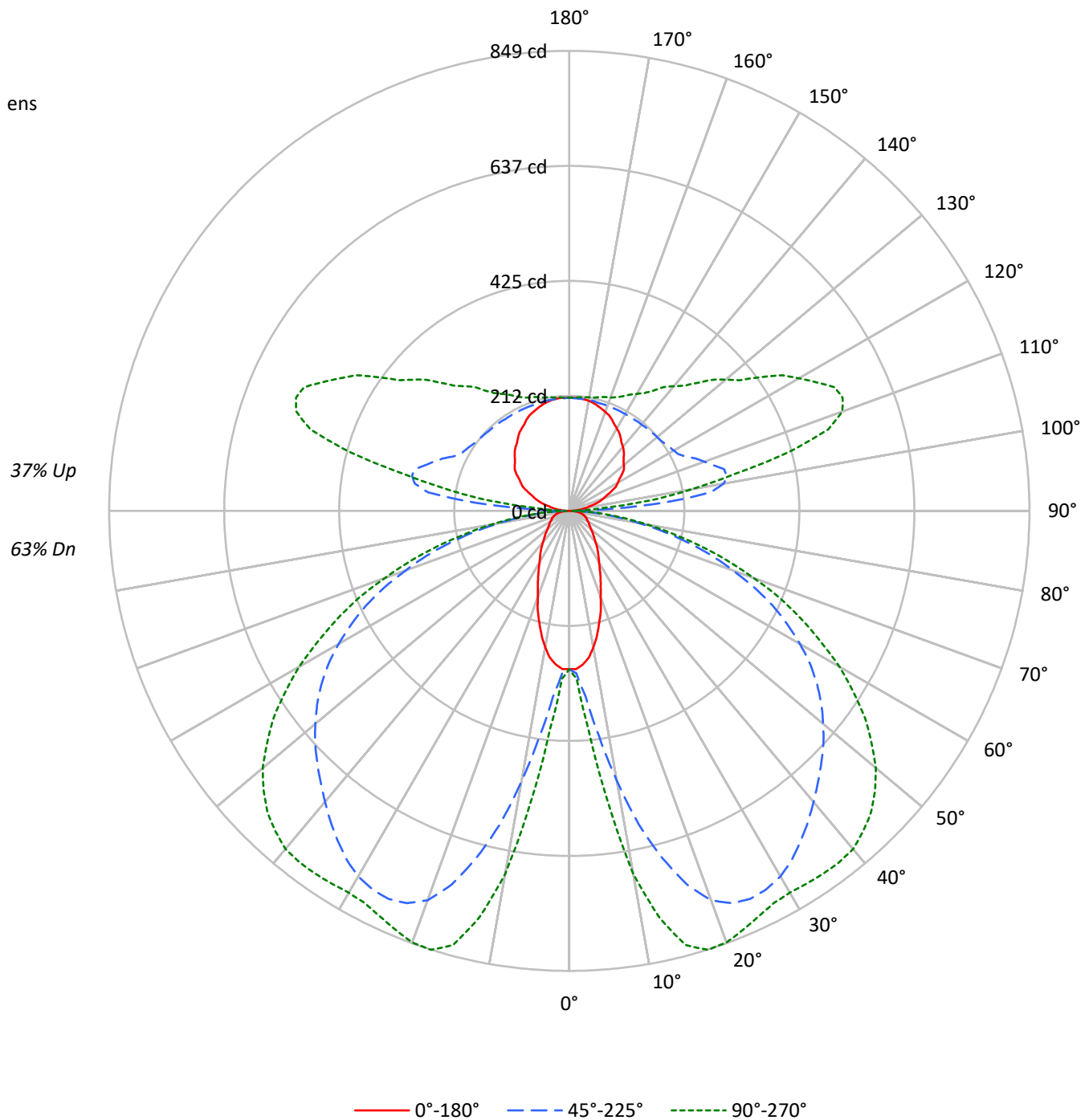
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3616.4 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 33
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				
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	68	68	68	63
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56	59	57	56	51
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46	51	48	46	42
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38	44	41	38	34
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32	39	35	32	29
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	28	35	31	28	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24	31	27	24	21
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21	28	24	21	18
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18	26	22	18	16
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16	24	19	16	14
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	22	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1808	1808	1808
5°	1765	2088	2429
10°	1600	3044	4027
15°	1359	3975	4864
20°	1107	4606	4957
25°	923	4819	4856
30°	778	4848	4847
35°	688	4766	4972
40°	599	4660	5101
45°	542	4582	5122
50°	496	4512	5037
55°	475	4410	4814
60°	486	4214	4461
65°	505	3917	3976
70°	536	3414	3359
75°	592	2780	2622
80°	641	1925	1766
85°	560	1021	905

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5122 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.8	1.0
10°-20°	167.5	4.6
20°-30°	293.0	8.1
30°-40°	377.2	10.4
40°-50°	421.3	11.6
50°-60°	403.5	11.2
60°-70°	319.8	8.8
70°-80°	188.0	5.2
80°-90°	53.0	1.5
90°-100°	101.9	2.8
100°-110°	267.9	7.4
110°-120°	277.8	7.7
120°-130°	222.9	6.2
130°-140°	174.9	4.8
140°-150°	134.2	3.7
150°-160°	96.7	2.7
160°-170°	59.1	1.6
170°-180°	20.0	0.6
0°-30°	498.3	13.8
0°-40°	875.5	24.2
0°-60°	1700.2	47.0
0°-90°	2261.1	62.5
90°-120°	647.6	17.9
90°-150°	1179.6	32.6
90°-180°	1355.0	37.5
0°-180°	3616.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	292	292	292	292	292	
5°	285	305	344	389	403	26
15°	213	394	663	804	830	59
25°	136	446	790	825	826	63
35°	92	427	744	786	817	57
45°	63	340	658	754	787	49
55°	45	216	558	648	666	41
65°	36	115	414	466	472	35
75°	26	70	227	250	251	28
85°	9	22	56	62	63	10
90°	1	4	11	5	5	2
95°	13	53	176	90	62	15
105°	48	73	296	450	420	51
115°	86	104	237	473	540	85
125°	119	134	216	365	430	106
135°	142	156	209	294	334	110
145°	165	175	206	251	271	103
155°	186	192	206	227	233	86
165°	201	204	206	214	217	57
175°	209	209	208	210	210	20
180°	209	209	209	209	209	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	292.2	292.2	292.2	292.2	292.2	292.2	292.2	292.2	292.2	292.2	292.2
2.5°	292.2	292.2	294.0	295.0	296.9	297.9	299.7	301.6	307.2	308.1	310.0
5°	284.7	288.4	300.7	305.3	318.5	336.3	343.8	356.0	381.4	388.9	393.7
7.5°	273.4	281.9	311.9	319.4	352.3	399.3	419.0	445.3	485.7	505.5	521.5
10°	255.5	273.4	326.9	344.8	398.4	469.7	506.4	543.0	604.1	631.3	641.7
12.5°	235.8	265.0	342.9	367.3	444.4	548.6	592.8	633.3	702.7	739.4	745.0
15°	213.2	252.7	357.9	393.7	493.2	614.4	663.2	713.1	777.9	804.2	810.8
17.5°	193.5	243.3	372.0	409.7	530.8	673.6	723.4	764.8	817.3	835.2	839.9
20°	169.1	228.3	381.4	430.3	570.3	716.8	764.8	796.7	832.4	843.7	845.6
22.5°	151.2	212.3	387.0	437.8	596.5	743.1	783.5	808.8	833.3	837.1	838.0
25°	136.3	194.5	386.1	446.3	619.1	759.1	790.1	808.8	822.9	824.8	824.8
27.5°	122.2	174.8	382.4	448.1	636.1	762.9	787.3	800.4	807.0	810.8	810.8
30°	109.9	156.0	372.9	444.4	643.5	759.1	778.9	785.4	791.9	797.6	800.4
32.5°	100.5	138.1	358.8	436.8	644.5	749.7	763.8	767.6	776.9	790.1	794.8
35°	92.1	120.3	342.9	426.6	638.9	734.7	744.0	747.9	766.6	786.3	792.9
37.5°	83.6	107.1	322.2	408.7	630.4	716.8	723.4	730.0	759.1	782.6	790.1
40°	75.2	95.8	297.9	388.9	617.3	695.2	700.9	711.1	749.7	776.9	784.5
42.5°	68.6	86.4	271.5	368.3	600.3	670.8	679.2	694.2	738.4	767.6	776.0
45°	63.0	77.1	243.3	340.1	578.7	645.4	657.6	678.3	725.3	753.5	760.9
47.5°	57.3	70.4	214.2	310.9	555.3	620.1	636.1	659.5	707.4	734.7	741.2
50°	52.6	63.9	185.1	279.9	529.9	592.8	611.6	636.1	684.9	710.2	718.7
52.5°	48.8	58.3	157.8	249.0	500.7	564.6	586.3	611.6	657.6	682.1	687.7
55°	45.1	53.5	134.3	216.0	470.6	534.5	558.1	582.4	627.6	648.2	652.0
57.5°	43.2	49.8	114.6	185.1	438.7	500.7	527.1	549.6	591.9	607.8	611.6
60°	40.4	47.0	99.6	158.8	404.0	468.8	491.4	513.9	549.6	562.7	565.5
62.5°	37.5	45.1	88.4	133.4	368.3	431.2	453.7	474.5	504.5	513.9	517.6
65°	35.7	43.2	79.9	114.6	331.7	391.7	414.3	432.2	456.5	466.0	467.8
67.5°	33.8	41.4	73.3	98.6	295.0	352.3	369.2	386.1	404.9	414.3	415.3
70°	31.0	39.4	67.6	87.3	257.4	307.2	321.3	339.1	354.2	358.8	361.7
72.5°	29.1	36.6	63.9	78.9	218.9	263.9	277.1	287.5	300.7	305.3	305.3
75°	26.3	32.9	60.1	70.4	179.4	216.0	227.3	237.7	248.0	249.9	247.0
77.5°	23.4	29.1	51.7	59.2	140.0	171.0	180.4	186.1	194.5	196.3	197.3
80°	19.7	25.4	40.4	46.0	101.4	125.9	132.4	137.2	144.7	144.7	146.5
82.5°	15.0	19.7	29.1	32.9	68.6	86.4	92.1	94.9	99.6	99.6	99.6
85°	9.4	12.2	18.8	21.6	41.4	52.6	56.4	57.3	61.1	62.0	62.0
87.5°	4.7	6.5	12.2	13.2	21.6	27.3	27.3	29.1	29.1	28.2	27.3
90°	1.4	2.5	3.6	3.9	6.2	9.2	10.6	9.4	7.1	5.3	5.3
92.5°	5.6	15.1	24.7	27.1	38.1	52.8	60.1	52.6	37.7	26.6	25.6
95°	13.4	30.9	48.4	52.8	93.7	148.2	175.5	156.6	118.8	90.5	87.3
97.5°	23.3	38.7	54.1	57.9	126.2	217.2	262.6	250.7	226.9	208.9	202.9
100°	30.9	44.8	58.8	62.3	138.0	239.0	289.4	290.3	292.1	293.4	286.1
102.5°	37.4	50.4	63.4	66.7	143.5	245.8	297.0	312.2	342.7	365.6	359.3
105°	48.3	59.3	70.3	73.1	147.5	246.6	296.2	330.3	398.5	449.7	446.4
107.5°	59.5	69.8	80.0	82.7	148.2	235.6	279.4	327.0	422.2	493.5	494.4
110°	67.1	76.4	85.6	88.0	147.1	225.9	265.3	318.6	425.0	504.7	508.2



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	74.5	83.4	92.2	94.4	147.1	217.4	252.6	307.0	415.9	497.5	502.9
115°	85.7	94.0	102.1	104.1	148.5	207.6	237.2	289.7	394.6	473.3	480.7
117.5°	96.9	104.2	111.6	113.5	151.2	201.6	226.8	274.1	368.7	439.7	447.9
120°	103.3	110.3	117.2	119.0	153.5	199.6	222.6	265.8	352.3	417.2	425.3
122.5°	109.6	116.7	123.7	125.4	156.7	198.5	219.3	258.3	336.1	394.6	402.6
125°	119.3	125.7	132.2	133.7	161.1	197.6	215.8	248.9	315.1	364.7	372.0
127.5°	127.1	133.6	140.1	141.7	165.4	197.1	212.9	241.3	298.1	340.7	346.9
130°	131.3	138.3	145.2	147.0	168.6	197.4	211.7	237.0	287.6	325.5	331.2
132.5°	135.7	142.7	149.6	151.4	171.2	197.6	210.8	233.4	278.7	312.6	317.7
135°	142.2	148.5	154.9	156.4	174.0	197.4	209.1	228.1	266.0	294.4	298.8
137.5°	148.8	155.0	161.3	162.9	178.2	198.7	208.8	224.9	256.9	280.9	284.5
140°	154.2	160.0	165.8	167.3	180.8	198.8	207.8	221.6	249.4	270.1	273.5
142.5°	158.4	163.7	169.1	170.5	182.9	199.5	207.8	220.0	244.3	262.5	265.4
145°	164.9	169.5	174.2	175.4	185.8	199.5	206.4	216.3	236.2	251.2	253.3
147.5°	171.3	175.9	180.4	181.6	189.9	200.9	206.4	214.3	229.9	241.6	243.4
150°	175.5	179.6	183.8	184.8	192.0	201.7	206.4	213.0	226.2	236.1	237.6
152.5°	179.9	183.0	186.1	186.9	193.4	202.1	206.4	212.0	223.3	231.8	232.9
155°	186.3	188.7	191.0	191.6	196.5	203.1	206.4	210.9	219.9	226.6	227.3
157.5°	191.1	193.3	195.6	196.1	199.6	204.2	206.4	209.9	216.9	222.1	222.7
160°	194.4	196.1	197.8	198.3	201.0	204.6	206.4	209.4	215.4	219.9	220.1
162.5°	197.5	198.8	200.2	200.5	202.5	205.1	206.4	208.9	214.0	217.8	218.1
165°	201.1	202.2	203.4	203.7	204.6	205.9	206.4	208.2	211.8	214.5	214.8
167.5°	204.3	204.8	205.4	205.6	206.3	207.3	207.8	209.0	211.4	213.1	213.2
170°	206.4	207.0	207.5	207.6	207.7	207.8	207.8	209.0	211.4	213.1	213.1
172.5°	207.5	207.6	207.8	207.8	207.8	207.8	207.8	208.7	210.6	212.0	211.9
175°	209.1	209.1	209.1	209.1	208.7	208.1	207.8	208.4	209.6	210.5	210.5
177.5°	209.1	209.1	209.1	209.1	208.7	208.3	208.1	208.6	209.5	210.2	210.2
180°	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	292.2	292.2
2.5°	311.9	310.0
5°	401.2	403.0
7.5°	540.2	539.3
10°	671.7	680.1
12.5°	767.6	769.4
15°	825.8	829.6
17.5°	848.4	849.3
20°	849.3	847.4
22.5°	838.9	837.1
25°	826.8	825.8
27.5°	815.5	816.4
30°	810.8	813.6
32.5°	810.8	815.5
35°	812.7	817.3
37.5°	811.7	817.3
40°	807.9	814.5
42.5°	797.6	802.3
45°	781.7	787.3
47.5°	760.9	764.8
50°	734.7	738.4
52.5°	701.8	702.7
55°	662.3	666.1
57.5°	620.1	621.0
60°	573.1	575.9
62.5°	523.3	523.3
65°	470.6	472.5
67.5°	416.2	420.9
70°	360.8	361.7
72.5°	306.3	306.3
75°	249.9	250.9
77.5°	196.3	196.3
80°	145.6	146.5
82.5°	100.5	102.4
85°	63.0	63.0
87.5°	29.1	26.3
90°	5.3	5.3
92.5°	21.3	17.1
95°	74.4	61.6
97.5°	178.4	153.9
100°	257.0	227.9
102.5°	334.4	309.4
105°	433.0	419.6
107.5°	497.5	500.8
110°	522.2	536.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	524.3	545.8
115°	510.4	540.2
117.5°	481.0	514.0
120°	457.3	489.3
122.5°	434.1	465.7
125°	401.1	430.2
127.5°	371.5	396.0
130°	353.9	376.6
132.5°	338.0	358.4
135°	316.3	333.8
137.5°	298.9	313.2
140°	286.8	300.3
142.5°	276.9	288.5
145°	262.1	270.9
147.5°	250.7	257.9
150°	243.5	249.4
152.5°	237.3	241.8
155°	230.2	233.2
157.5°	224.7	226.8
160°	221.4	222.6
162.5°	219.2	220.3
165°	216.0	217.2
167.5°	213.8	214.3
170°	213.1	213.1
172.5°	211.5	211.1
175°	210.5	210.5
177.5°	209.6	209.1
180°	209.1	209.1



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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	4.12	5.16	4.95	6.02	7.10	17.29	18.32	18.12	19.19	20.26
	3H	4.84	5.78	5.69	6.65	7.75	19.13	20.07	19.98	20.94	22.04
	4H	5.15	6.03	6.01	6.91	8.02	19.78	20.67	20.65	21.55	22.66
	6H	5.41	6.22	6.28	7.11	8.24	20.22	21.04	21.09	21.92	23.05
	8H	5.48	6.26	6.36	7.16	8.29	20.34	21.12	21.23	22.03	23.15
	12H	5.50	6.25	6.39	7.14	8.30	20.42	21.16	21.30	22.06	23.21
4H	2H	11.35	12.23	12.22	13.11	14.23	17.58	18.47	18.45	19.35	20.46
	3H	12.93	13.68	13.81	14.59	15.72	19.64	20.38	20.52	21.29	22.42
	4H	13.04	13.71	13.93	14.62	15.78	20.41	21.09	21.30	21.99	23.15
	6H	13.06	13.65	13.96	14.58	15.73	20.96	21.54	21.86	22.47	23.63
	8H	13.04	13.59	13.95	14.51	15.69	21.12	21.67	22.03	22.59	23.77
	12H	13.01	13.50	13.93	14.44	15.62	21.22	21.72	22.15	22.66	23.84
8H	4H	14.49	15.04	15.40	15.97	17.14	20.49	21.04	21.40	21.96	23.13
	6H	14.74	15.20	15.68	16.17	17.34	21.12	21.58	22.06	22.54	23.71
	8H	14.76	15.17	15.71	16.13	17.31	21.34	21.74	22.29	22.70	23.89
	12H	14.74	15.10	15.69	16.05	17.29	21.49	21.85	22.44	22.80	24.03
12H	4H	14.64	15.14	15.57	16.08	17.26	20.45	20.95	21.38	21.89	23.07
	6H	15.00	15.41	15.95	16.37	17.55	21.11	21.51	22.05	22.47	23.66
	8H	15.08	15.44	16.03	16.39	17.63	21.34	21.70	22.29	22.65	23.89