

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: P936982

Luminaire Tested: SQ4-FB-050U-125D-B2750-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936982
REPORT IS A COMBINATION OF REPORTS P933472 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-B2750-1D-UNV-STD-W-4-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

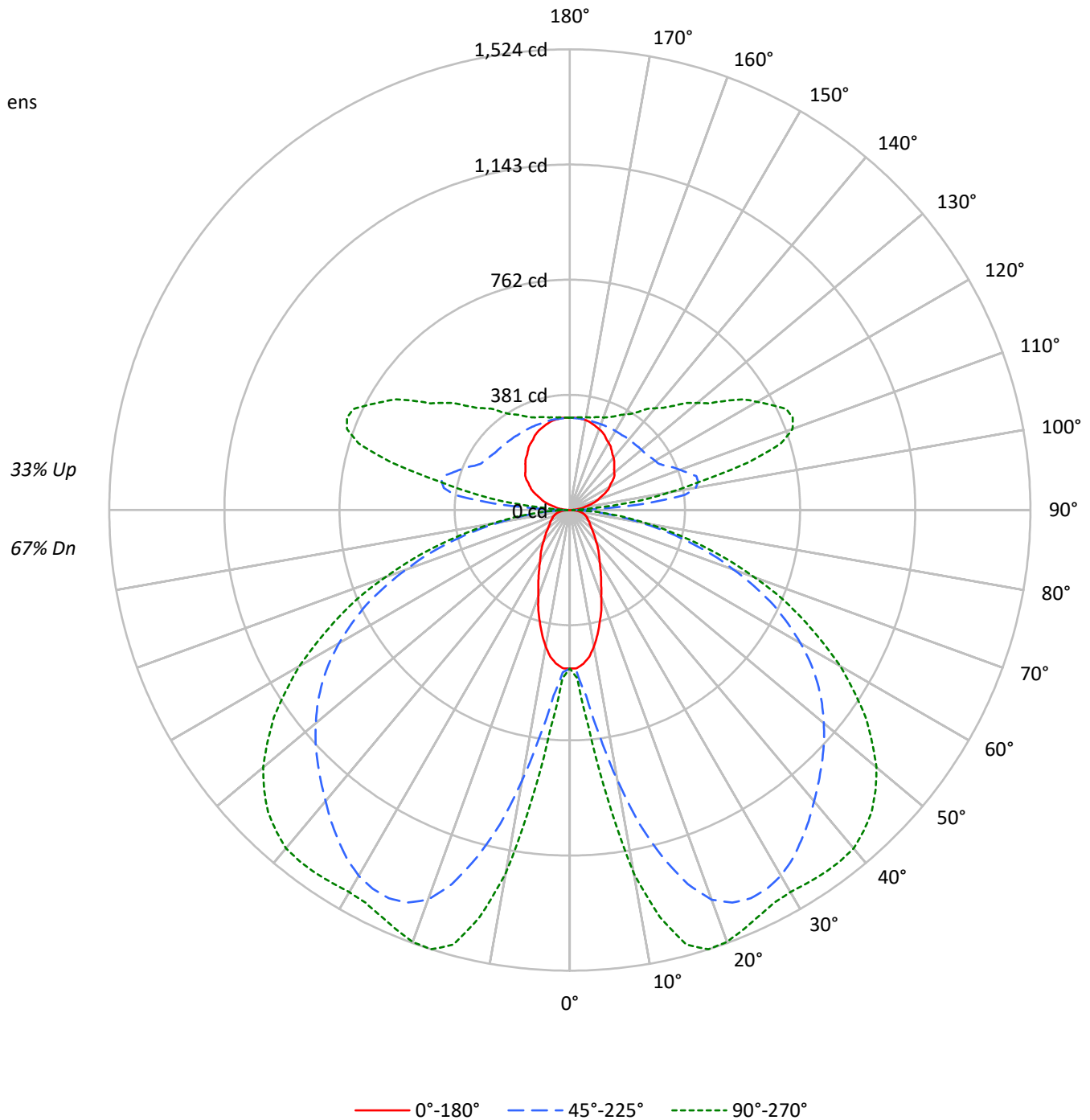
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6038.7 lumens
Efficiency: N/A
Efficacy: 107.8 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-Direct

Input Watts (W): 56
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	0
RCR																		
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4863	4863	4863
5°	4746	5617	6537
10°	4300	8182	10838
15°	3651	10681	13086
20°	2969	12370	13338
25°	2473	12935	13067
30°	2083	13006	13042
35°	1838	12779	13379
40°	1600	12489	13727
45°	1445	12273	13781
50°	1323	12076	13553
55°	1264	11792	12952
60°	1290	11259	12005
65°	1334	10455	10700
70°	1412	9100	9040
75°	1548	7401	7055
80°	1657	5113	4753
85°	1391	2698	2433

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13781 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	1.1
10°-20°	300.5	5.0
20°-30°	525.6	8.7
30°-40°	676.6	11.2
40°-50°	755.7	12.5
50°-60°	723.8	12.0
60°-70°	573.6	9.5
70°-80°	337.3	5.6
80°-90°	94.9	1.6
90°-100°	149.1	2.5
100°-110°	392.0	6.5
110°-120°	406.4	6.7
120°-130°	326.0	5.4
130°-140°	255.8	4.2
140°-150°	196.3	3.3
150°-160°	141.4	2.3
160°-170°	86.5	1.4
170°-180°	29.2	0.5
0°-30°	893.9	14.8
0°-40°	1570.5	26.0
0°-60°	3050.1	50.5
0°-90°	4055.9	67.2
90°-120°	947.5	15.7
90°-150°	1725.7	28.6
90°-180°	1983.0	32.8
0°-180°	6038.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	524	524	524	524	524	
5°	511	548	617	698	723	47
15°	383	706	1190	1443	1488	106
25°	244	800	1417	1480	1482	113
35°	165	765	1335	1411	1466	103
45°	113	610	1180	1352	1412	87
55°	81	388	1001	1163	1195	74
65°	64	206	743	836	848	63
75°	47	126	408	448	450	49
85°	17	39	101	111	113	18
90°	2	6	16	8	8	3
95°	20	77	257	132	90	22
105°	71	107	433	658	614	75
115°	125	152	347	692	790	124
125°	174	196	316	534	629	155
135°	208	229	306	431	488	161
145°	241	257	302	367	396	151
155°	273	280	302	332	341	125
165°	294	298	302	314	318	83
175°	306	306	304	308	308	29
180°	306	306	306	306	306	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	524.1	524.1	524.1	524.1	524.1	524.1	524.1	524.1	524.1	524.1	524.1
2.5°	524.1	524.1	527.5	529.2	532.6	534.3	537.6	541.0	551.1	552.8	556.2
5°	510.6	517.4	539.3	547.7	571.3	603.4	616.8	638.7	684.3	697.7	706.2
7.5°	490.4	505.6	559.6	573.0	632.0	716.2	751.7	798.9	871.3	906.7	935.3
10°	458.4	490.4	586.4	618.5	714.5	842.6	908.4	974.1	1083.6	1132.6	1151.1
12.5°	423.0	475.3	615.1	659.0	797.2	984.2	1063.4	1135.9	1260.6	1326.4	1336.4
15°	382.6	453.4	642.1	706.2	884.7	1102.2	1189.8	1279.2	1395.5	1442.6	1454.5
17.5°	347.2	436.5	667.4	734.8	952.2	1208.3	1297.7	1371.9	1466.2	1498.3	1506.6
20°	303.4	409.6	684.3	771.9	1023.0	1285.9	1371.9	1429.2	1493.2	1513.4	1516.8
22.5°	271.3	380.9	694.3	785.3	1070.2	1333.0	1405.6	1451.1	1494.9	1501.7	1503.3
25°	244.4	348.9	692.7	800.5	1110.6	1361.7	1417.4	1451.1	1476.4	1479.8	1479.8
27.5°	219.1	313.4	685.9	803.9	1140.9	1368.5	1412.3	1435.9	1447.7	1454.5	1454.5
30°	197.2	279.8	669.1	797.2	1154.5	1361.7	1397.1	1408.9	1420.7	1430.9	1435.9
32.5°	180.4	247.7	643.8	783.7	1156.2	1344.9	1370.2	1376.9	1393.8	1417.4	1425.8
35°	165.1	215.7	615.1	765.1	1146.0	1317.9	1334.7	1341.5	1375.2	1410.6	1422.4
37.5°	150.0	192.1	578.1	733.2	1130.9	1285.9	1297.7	1309.5	1361.7	1403.9	1417.4
40°	134.9	171.9	534.3	697.7	1107.3	1247.1	1257.3	1275.8	1344.9	1393.8	1407.2
42.5°	123.0	155.1	487.0	660.6	1076.9	1203.4	1218.5	1245.5	1324.7	1376.9	1392.1
45°	112.9	138.2	436.5	610.0	1038.1	1157.8	1179.8	1216.8	1301.1	1351.7	1365.1
47.5°	102.8	126.4	384.3	557.9	996.0	1112.3	1140.9	1183.1	1269.0	1317.9	1329.8
50°	94.4	114.6	332.0	502.2	950.5	1063.4	1097.2	1140.9	1228.6	1274.1	1289.3
52.5°	87.6	104.5	283.2	446.6	898.3	1012.8	1051.7	1097.2	1179.8	1223.6	1233.6
55°	80.9	96.0	241.0	387.6	844.3	958.9	1001.1	1044.9	1125.8	1162.8	1169.6
57.5°	77.5	89.3	205.6	332.0	787.0	898.3	945.5	985.9	1061.7	1090.4	1097.2
60°	72.5	84.3	178.7	284.9	724.7	841.0	881.5	921.9	985.9	1009.5	1014.5
62.5°	67.4	80.9	158.5	239.3	660.6	773.6	814.0	851.1	905.1	921.9	928.6
65°	64.0	77.5	143.2	205.6	594.9	702.8	743.2	775.3	819.1	835.9	839.3
67.5°	60.7	74.2	131.5	177.0	529.2	632.0	662.3	692.7	726.4	743.2	744.9
70°	55.6	70.8	121.3	156.8	461.7	551.1	576.4	608.4	635.3	643.8	648.9
72.5°	52.3	65.7	114.6	141.5	392.7	473.6	497.2	515.7	539.3	547.7	547.7
75°	47.2	59.0	107.9	126.4	321.9	387.6	407.9	426.4	444.9	448.3	443.2
77.5°	42.1	52.3	92.7	106.2	251.1	306.8	323.6	333.7	348.9	352.2	353.9
80°	35.4	45.5	72.5	82.6	182.0	225.8	237.6	246.0	259.6	259.6	262.9
82.5°	27.0	35.4	52.3	59.0	123.0	155.1	165.1	170.2	178.7	178.7	178.7
85°	16.8	21.9	33.7	38.7	74.2	94.4	101.1	102.8	109.6	111.3	111.3
87.5°	8.5	11.8	21.9	23.6	38.7	48.9	48.9	52.3	52.3	50.6	48.9
90°	2.1	3.7	5.4	5.8	9.1	13.4	15.6	13.8	10.4	7.8	7.8
92.5°	8.2	22.1	36.2	39.6	55.7	77.1	87.8	77.0	55.3	39.0	37.4
95°	19.7	45.2	70.8	77.2	137.0	216.8	256.8	229.1	173.8	132.4	127.7
97.5°	34.1	56.6	79.1	84.8	184.6	317.7	384.3	366.8	331.9	305.7	296.7
100°	45.1	65.5	86.1	91.1	201.9	349.6	423.5	424.8	427.4	429.3	418.6
102.5°	54.6	73.7	92.7	97.5	209.9	359.7	434.6	456.9	501.4	534.8	525.6
105°	70.6	86.8	102.9	107.0	215.7	360.9	433.4	483.3	583.1	658.0	653.1
107.5°	87.1	102.1	117.1	120.9	216.8	344.8	408.8	478.4	617.6	722.0	723.2
110°	98.1	111.7	125.3	128.7	215.2	330.6	388.2	466.0	621.7	738.4	743.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	109.0	121.9	134.9	138.1	215.2	318.1	369.5	449.2	608.5	728.0	735.8
115°	125.4	137.3	149.3	152.3	217.2	303.8	347.1	423.8	577.3	692.4	703.3
117.5°	141.6	152.5	163.3	166.0	221.3	294.9	331.8	401.0	539.4	643.3	655.4
120°	151.1	161.4	171.5	174.1	224.6	291.9	325.6	388.8	515.4	610.3	622.1
122.5°	160.4	170.7	181.0	183.6	229.3	290.3	320.8	377.8	491.8	577.3	588.8
125°	174.5	183.9	193.2	195.6	235.7	289.0	315.7	364.1	460.9	533.6	544.2
127.5°	186.0	195.5	205.0	207.4	242.0	288.3	311.4	353.0	436.0	498.4	507.4
130°	192.1	202.4	212.5	215.1	246.7	288.7	309.8	346.8	420.8	476.3	484.6
132.5°	198.5	208.8	218.9	221.5	250.5	289.0	308.4	341.4	407.7	457.4	464.8
135°	208.0	217.2	226.6	228.9	254.6	288.7	305.9	333.6	389.0	430.7	437.0
137.5°	217.6	226.8	236.1	238.3	260.8	290.5	305.5	328.9	375.8	410.9	416.2
140°	225.6	234.1	242.6	244.7	264.4	290.8	304.0	324.3	364.8	395.2	400.1
142.5°	231.8	239.6	247.4	249.4	267.6	291.8	304.0	321.8	357.4	384.1	388.2
145°	241.2	248.0	254.9	256.6	271.7	291.9	302.0	316.5	345.6	367.4	370.6
147.5°	250.7	257.4	263.9	265.6	277.8	293.9	302.0	313.4	336.3	353.5	356.2
150°	256.8	262.7	268.8	270.3	280.9	294.9	302.0	311.6	331.0	345.5	347.7
152.5°	263.1	267.7	272.3	273.4	283.0	295.6	302.0	310.3	326.8	339.1	340.7
155°	272.6	276.0	279.4	280.2	287.4	297.1	302.0	308.6	321.7	331.6	332.7
157.5°	279.6	282.9	286.2	286.9	291.9	298.6	302.0	307.1	317.3	325.0	325.8
160°	284.4	286.8	289.4	290.0	294.0	299.3	302.0	306.4	315.1	321.7	322.1
162.5°	289.0	290.9	292.8	293.3	296.2	300.1	302.0	305.7	313.0	318.6	319.0
165°	294.2	295.9	297.7	298.1	299.4	301.1	302.0	304.6	309.9	313.8	314.2
167.5°	298.9	299.7	300.5	300.7	301.8	303.3	304.0	305.8	309.3	311.8	312.0
170°	302.0	302.8	303.6	303.8	303.9	304.0	304.0	305.8	309.3	311.8	311.8
172.5°	303.6	303.8	304.0	304.0	304.0	304.0	304.0	305.4	308.1	310.2	310.0
175°	305.9	305.9	305.9	305.9	305.3	304.4	304.0	304.9	306.7	308.0	308.0
177.5°	305.9	305.9	305.9	305.9	305.4	304.8	304.5	305.2	306.6	307.6	307.4
180°	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	524.1	524.1
2.5°	559.6	556.2
5°	719.6	723.0
7.5°	969.1	967.4
10°	1205.0	1220.2
12.5°	1376.9	1380.3
15°	1481.5	1488.1
17.5°	1521.9	1523.6
20°	1523.6	1520.2
22.5°	1505.0	1501.7
25°	1483.0	1481.5
27.5°	1462.8	1464.5
30°	1454.5	1459.5
32.5°	1454.5	1462.8
35°	1457.8	1466.2
37.5°	1456.2	1466.2
40°	1449.4	1461.1
42.5°	1430.9	1439.2
45°	1402.2	1412.3
47.5°	1365.1	1371.9
50°	1317.9	1324.7
52.5°	1258.9	1260.6
55°	1188.1	1194.9
57.5°	1112.3	1114.0
60°	1028.1	1033.2
62.5°	938.7	938.7
65°	844.3	847.7
67.5°	746.6	755.1
70°	647.2	648.9
72.5°	549.4	549.4
75°	448.3	450.0
77.5°	352.2	352.2
80°	261.3	262.9
82.5°	180.4	183.7
85°	112.9	112.9
87.5°	52.3	47.2
90°	7.8	7.8
92.5°	31.3	25.0
95°	108.9	90.1
97.5°	261.0	225.2
100°	376.0	333.4
102.5°	489.1	452.7
105°	633.5	613.8
107.5°	727.9	732.7
110°	763.9	784.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	767.2	798.6
115°	746.8	790.3
117.5°	703.7	752.0
120°	668.9	715.8
122.5°	635.1	681.4
125°	586.7	629.4
127.5°	543.3	579.3
130°	517.8	551.0
132.5°	494.5	524.3
135°	462.7	488.3
137.5°	437.1	458.2
140°	419.7	439.3
142.5°	405.2	422.1
145°	383.5	396.2
147.5°	366.7	377.3
150°	356.3	364.8
152.5°	347.2	353.7
155°	336.9	341.2
157.5°	328.8	331.8
160°	323.9	325.6
162.5°	320.7	322.3
165°	316.0	317.8
167.5°	312.7	313.4
170°	311.8	311.8
172.5°	309.4	308.8
175°	308.0	308.0
177.5°	306.7	305.9
180°	305.9	305.9



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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	7.91	9.01	8.70	9.83	10.82	21.05	22.15	21.84	22.96	23.96
	3H	8.64	9.63	9.44	10.45	11.48	22.89	23.88	23.69	24.71	25.73
	4H	8.95	9.88	9.76	10.71	11.75	23.54	24.47	24.35	25.31	26.35
	6H	9.21	10.07	10.04	10.91	11.97	23.97	24.83	24.80	25.67	26.73
	8H	9.29	10.11	10.12	10.97	12.02	24.09	24.92	24.93	25.78	26.83
	12H	9.31	10.10	10.16	10.95	12.03	24.16	24.95	25.00	25.80	26.88
4H	2H	15.13	16.07	15.95	16.90	17.94	21.36	22.29	22.18	23.12	24.16
	3H	16.72	17.51	17.56	18.37	19.43	23.41	24.19	24.24	25.06	26.11
	4H	16.83	17.54	17.67	18.41	19.49	24.17	24.89	25.02	25.75	26.84
	6H	16.85	17.48	17.72	18.36	19.45	24.72	25.34	25.58	26.22	27.31
	8H	16.84	17.42	17.70	18.30	19.40	24.88	25.46	25.74	26.34	27.44
	12H	16.81	17.33	17.69	18.23	19.34	24.97	25.50	25.86	26.40	27.51
8H	4H	18.28	18.86	19.15	19.75	20.85	24.26	24.84	25.12	25.72	26.82
	6H	18.54	19.02	19.43	19.94	21.04	24.88	25.37	25.78	26.29	27.39
	8H	18.56	18.99	19.46	19.91	21.02	25.10	25.53	26.00	26.45	27.56
	12H	18.54	18.92	19.45	19.83	21.00	25.25	25.63	26.16	26.54	27.70
12H	4H	18.44	18.96	19.32	19.86	20.97	24.22	24.75	25.11	25.65	26.75
	6H	18.80	19.23	19.70	20.14	21.26	24.87	25.30	25.77	26.22	27.33
	8H	18.88	19.25	19.78	20.16	21.33	25.11	25.48	26.01	26.39	27.56