

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: P936415

Luminaire Tested: SQ4-FB-025U-100D-835-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936415
REPORT IS A COMBINATION OF REPORTS P933447 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-100D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

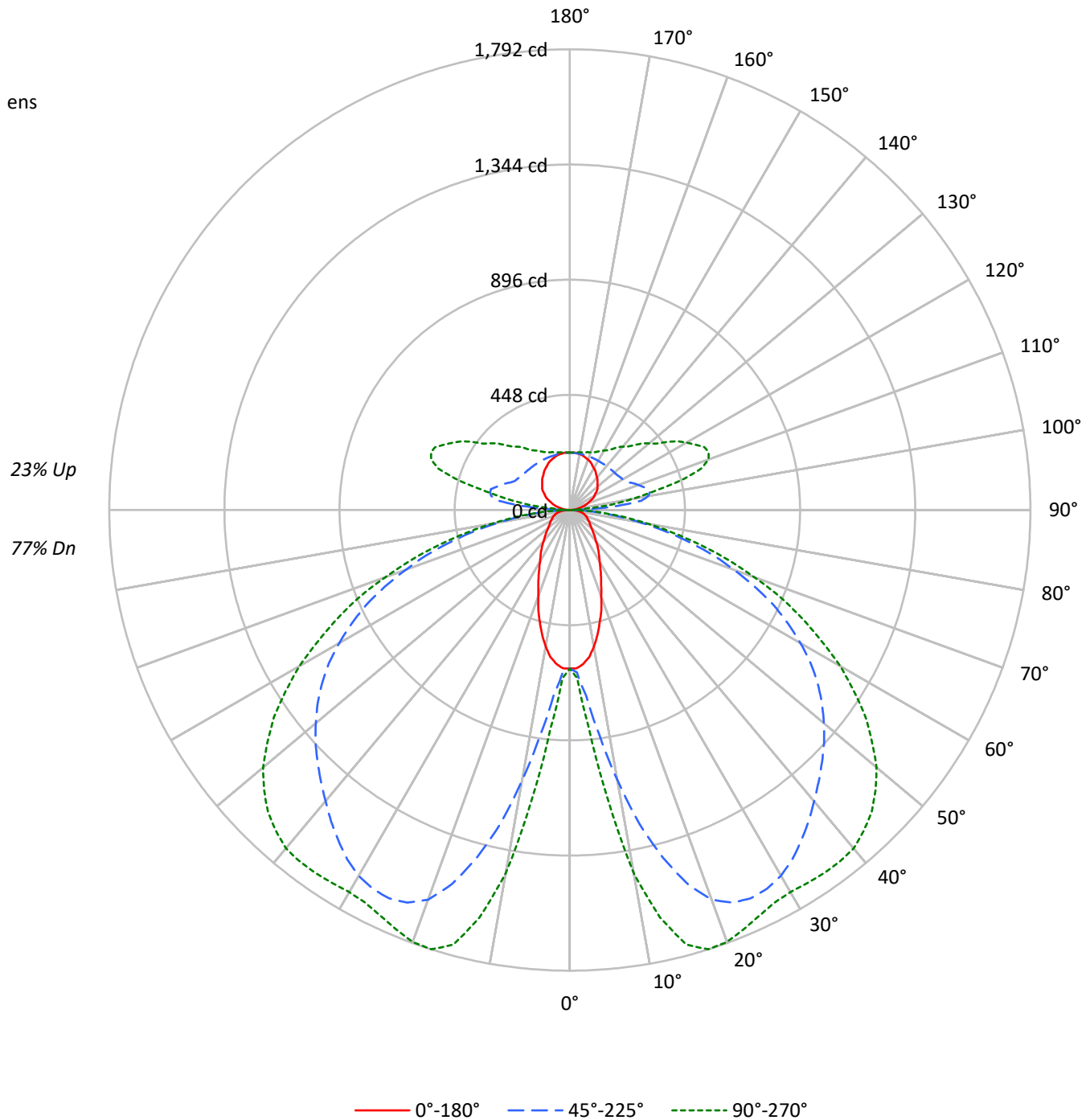
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6220.0 lumens
Efficiency: N/A
Efficacy: 106.9 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): 58.2
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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77				77
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66					63
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55					51
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45					42
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38					35
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33					30
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28					26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25					22
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22					20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	19					17
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17					16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3813	3813	3813
5°	3724	4405	5125
10°	3376	6421	8496
15°	2869	8387	10259
20°	2334	9716	10456
25°	1947	10165	10243
30°	1641	10226	10224
35°	1450	10054	10489
40°	1262	9830	10761
45°	1143	9666	10803
50°	1047	9518	10625
55°	1002	9301	10154
60°	1025	8889	9410
65°	1064	8264	8388
70°	1131	7202	7087
75°	1249	5867	5530
80°	1354	4063	3727
85°	1180	2152	1908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10803 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.7	1.3
10°-20°	353.4	5.7
20°-30°	618.1	9.9
30°-40°	795.6	12.8
40°-50°	888.7	14.3
50°-60°	851.2	13.7
60°-70°	674.5	10.8
70°-80°	396.7	6.4
80°-90°	111.1	1.8
90°-100°	109.1	1.8
100°-110°	286.9	4.6
110°-120°	297.5	4.8
120°-130°	238.6	3.8
130°-140°	187.2	3.0
140°-150°	143.7	2.3
150°-160°	103.5	1.7
160°-170°	63.3	1.0
170°-180°	21.4	0.3
0°-30°	1051.1	16.9
0°-40°	1846.8	29.7
0°-60°	3586.6	57.7
0°-90°	4768.9	76.7
90°-120°	693.4	11.1
90°-150°	1262.9	20.3
90°-180°	1451.0	23.3
0°-180°	6220.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	616	616	616	616	616	
5°	600	644	725	820	850	55
15°	450	830	1399	1696	1750	125
25°	287	941	1667	1740	1742	132
35°	194	900	1570	1659	1724	121
45°	133	717	1387	1589	1661	103
55°	95	456	1177	1367	1405	87
65°	75	242	874	983	997	75
75°	56	149	480	527	529	58
85°	20	46	119	131	133	21
90°	2	4	11	6	6	3
95°	14	56	188	97	66	16
105°	52	78	317	482	449	55
115°	92	112	254	507	578	91
125°	128	143	231	390	461	113
135°	152	168	224	315	357	118
145°	176	188	221	269	290	111
155°	200	205	221	243	250	92
165°	215	218	221	230	233	61
175°	224	224	222	225	225	21
180°	224	224	224	224	224	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3
2.5°	616.3	616.3	620.3	622.3	626.2	628.2	632.2	636.2	648.0	650.0	654.0
5°	600.5	608.4	634.2	644.1	671.8	709.5	725.3	751.1	804.6	820.5	830.4
7.5°	576.7	594.5	658.0	673.8	743.2	842.3	883.9	939.4	1024.6	1066.2	1099.9
10°	539.0	576.7	689.7	727.3	840.3	990.9	1068.2	1145.5	1274.3	1331.8	1353.6
12.5°	497.4	558.9	723.4	774.9	937.4	1157.4	1250.5	1335.7	1482.4	1559.7	1571.6
15°	449.9	533.1	755.1	830.4	1040.4	1296.1	1399.2	1504.2	1640.9	1696.4	1710.3
17.5°	408.3	513.3	784.8	864.1	1119.7	1421.0	1526.0	1613.2	1724.2	1761.8	1771.7
20°	356.7	481.6	804.6	907.7	1203.0	1512.1	1613.2	1680.6	1755.9	1779.7	1783.6
22.5°	319.1	447.9	816.5	923.5	1258.4	1567.6	1652.8	1706.3	1757.9	1765.8	1767.8
25°	287.4	410.2	814.5	941.4	1306.0	1601.3	1666.7	1706.3	1736.1	1740.0	1740.0
27.5°	257.6	368.6	806.6	945.3	1341.7	1609.2	1660.7	1688.5	1702.4	1710.3	1710.3
30°	231.9	329.0	786.8	937.4	1357.5	1601.3	1642.9	1656.8	1670.7	1682.5	1688.5
32.5°	212.1	291.3	757.0	921.5	1359.5	1581.5	1611.2	1619.1	1638.9	1666.7	1676.6
35°	194.2	253.7	723.4	899.7	1347.6	1549.8	1569.6	1577.5	1617.1	1658.8	1672.6
37.5°	176.4	225.9	679.8	862.1	1329.8	1512.1	1526.0	1539.9	1601.3	1650.8	1666.7
40°	158.5	202.1	628.2	820.5	1302.0	1466.5	1478.4	1500.2	1581.5	1638.9	1654.8
42.5°	144.7	182.3	572.7	776.9	1266.4	1415.0	1432.8	1464.5	1557.7	1619.1	1637.0
45°	132.8	162.5	513.3	717.4	1220.8	1361.5	1387.3	1430.9	1529.9	1589.4	1605.3
47.5°	120.9	148.6	451.9	656.0	1171.2	1308.0	1341.7	1391.2	1492.3	1549.8	1563.6
50°	111.0	134.8	390.4	590.6	1117.7	1250.5	1290.2	1341.7	1444.7	1498.2	1516.1
52.5°	103.1	122.9	332.9	525.2	1056.3	1191.1	1236.6	1290.2	1387.3	1438.8	1450.7
55°	95.1	113.0	283.4	455.8	992.9	1127.6	1177.2	1228.7	1323.8	1367.4	1375.4
57.5°	91.2	105.0	241.8	390.4	925.5	1056.3	1111.8	1159.4	1248.5	1282.2	1290.2
60°	85.2	99.1	210.1	334.9	852.2	988.9	1036.5	1084.0	1159.4	1187.1	1193.0
62.5°	79.3	95.1	186.3	281.4	776.9	909.6	957.2	1000.8	1064.2	1084.0	1092.0
65°	75.3	91.2	168.5	241.8	699.6	826.4	874.0	911.6	963.2	983.0	986.9
67.5°	71.3	87.2	154.6	208.1	622.3	743.2	778.8	814.5	854.2	874.0	876.0
70°	65.4	83.2	142.7	184.3	543.0	648.0	677.8	715.4	747.1	757.0	763.0
72.5°	61.4	77.3	134.8	166.5	461.8	556.9	584.6	606.4	634.2	644.1	644.1
75°	55.5	69.4	126.8	148.6	378.5	455.8	479.6	501.4	523.2	527.2	521.2
77.5°	49.5	61.4	109.0	124.9	295.3	360.7	380.5	392.4	410.2	414.2	416.2
80°	41.6	53.5	85.2	97.1	214.0	265.6	279.4	289.3	305.2	305.2	309.2
82.5°	31.7	41.6	61.4	69.4	144.7	182.3	194.2	200.2	210.1	210.1	210.1
85°	19.8	25.8	39.6	45.6	87.2	111.0	118.9	120.9	128.8	130.8	130.8
87.5°	9.9	13.9	25.8	27.7	45.6	57.5	57.5	61.4	61.4	59.5	57.5
90°	1.5	2.7	3.9	4.2	6.6	9.8	11.4	10.1	7.6	5.7	5.7
92.5°	6.0	16.2	26.4	29.0	40.8	56.5	64.3	56.3	40.4	28.5	27.4
95°	14.4	33.1	51.8	56.5	100.3	158.7	187.9	167.7	127.2	96.9	93.5
97.5°	24.9	41.4	57.9	62.0	135.1	232.5	281.2	268.4	242.9	223.7	217.2
100°	33.1	48.0	63.0	66.7	147.8	255.9	309.9	310.8	312.7	314.1	306.3
102.5°	40.0	54.0	67.9	71.4	153.6	263.2	318.0	334.3	366.9	391.4	384.7
105°	51.7	63.5	75.3	78.3	157.9	264.0	317.1	353.6	426.7	481.5	477.9
107.5°	63.7	74.7	85.7	88.5	158.7	252.3	299.1	350.1	452.0	528.4	529.3
110°	71.8	81.8	91.7	94.2	157.5	241.9	284.1	341.1	455.0	540.4	544.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	79.8	89.3	98.7	101.1	157.5	232.8	270.4	328.7	445.3	532.7	538.4
115°	91.8	100.6	109.3	111.5	159.0	222.3	254.0	310.2	422.5	506.7	514.7
117.5°	103.7	111.6	119.5	121.5	161.9	215.8	242.8	293.5	394.8	470.8	479.6
120°	110.6	118.1	125.5	127.4	164.4	213.7	238.3	284.6	377.2	446.7	455.3
122.5°	117.3	124.9	132.4	134.3	167.8	212.5	234.8	276.5	359.9	422.5	431.0
125°	127.7	134.6	141.5	143.2	172.5	211.6	231.1	266.5	337.4	390.5	398.3
127.5°	136.1	143.0	150.0	151.7	177.1	211.0	227.9	258.3	319.2	364.8	371.4
130°	140.6	148.1	155.5	157.4	180.5	211.3	226.7	253.8	307.9	348.5	354.6
132.5°	145.3	152.8	160.2	162.1	183.3	211.6	225.7	249.9	298.4	334.7	340.1
135°	152.2	159.0	165.8	167.5	186.3	211.4	223.9	244.2	284.8	315.2	319.9
137.5°	159.3	166.0	172.7	174.4	190.8	212.7	223.6	240.8	275.1	300.8	304.6
140°	165.1	171.3	177.5	179.1	193.6	212.9	222.5	237.3	267.0	289.2	292.8
142.5°	169.6	175.3	181.1	182.5	195.8	213.6	222.5	235.5	261.6	281.1	284.2
145°	176.5	181.5	186.5	187.8	198.9	213.6	221.0	231.6	252.9	268.9	271.2
147.5°	183.4	188.3	193.2	194.4	203.3	215.1	221.0	229.4	246.1	258.7	260.6
150°	187.9	192.3	196.8	197.9	205.6	215.9	221.0	228.1	242.2	252.8	254.4
152.5°	192.6	195.9	199.3	200.1	207.1	216.4	221.0	227.0	239.1	248.2	249.4
155°	199.5	202.0	204.5	205.1	210.4	217.5	221.0	225.8	235.4	242.6	243.4
157.5°	204.6	207.0	209.4	210.0	213.7	218.6	221.0	224.7	232.2	237.8	238.4
160°	208.1	210.0	211.8	212.3	215.2	219.1	221.0	224.2	230.6	235.4	235.7
162.5°	211.5	212.9	214.3	214.7	216.8	219.6	221.0	223.7	229.1	233.2	233.5
165°	215.3	216.5	217.8	218.1	219.1	220.4	221.0	222.9	226.8	229.7	230.0
167.5°	218.7	219.3	219.9	220.1	220.9	222.0	222.5	223.8	226.3	228.2	228.3
170°	221.0	221.6	222.2	222.3	222.4	222.5	222.5	223.8	226.3	228.2	228.2
172.5°	222.2	222.3	222.5	222.5	222.5	222.5	222.5	223.5	225.5	227.0	226.9
175°	223.9	223.9	223.9	223.9	223.4	222.8	222.5	223.1	224.4	225.4	225.4
177.5°	223.9	223.9	223.9	223.9	223.5	223.0	222.8	223.3	224.3	225.1	225.0
180°	223.9	223.9	223.9	223.9	223.9	223.9	223.9	223.9	223.9	223.9	223.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	616.3	616.3
2.5°	658.0	654.0
5°	846.2	850.2
7.5°	1139.5	1137.6
10°	1417.0	1434.8
12.5°	1619.1	1623.1
15°	1742.0	1749.9
17.5°	1789.6	1791.5
20°	1791.5	1787.6
22.5°	1769.7	1765.8
25°	1744.0	1742.0
27.5°	1720.2	1722.2
30°	1710.3	1716.2
32.5°	1710.3	1720.2
35°	1714.3	1724.2
37.5°	1712.3	1724.2
40°	1704.3	1718.2
42.5°	1682.5	1692.5
45°	1648.9	1660.7
47.5°	1605.3	1613.2
50°	1549.8	1557.7
52.5°	1480.4	1482.4
55°	1397.2	1405.1
57.5°	1308.0	1310.0
60°	1208.9	1214.8
62.5°	1103.9	1103.9
65°	992.9	996.8
67.5°	877.9	887.8
70°	761.0	763.0
72.5°	646.1	646.1
75°	527.2	529.1
77.5°	414.2	414.2
80°	307.2	309.2
82.5°	212.1	216.0
85°	132.8	132.8
87.5°	61.4	55.5
90°	5.7	5.7
92.5°	22.8	18.3
95°	79.7	66.0
97.5°	191.0	164.8
100°	275.2	244.0
102.5°	358.0	331.3
105°	463.6	449.2
107.5°	532.7	536.2
110°	559.1	574.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	561.4	584.4
115°	546.5	578.4
117.5°	515.0	550.3
120°	489.6	523.9
122.5°	464.8	498.6
125°	429.4	460.6
127.5°	397.7	424.0
130°	378.9	403.2
132.5°	361.9	383.7
135°	338.6	357.4
137.5°	320.0	335.3
140°	307.1	321.5
142.5°	296.5	308.9
145°	280.6	290.0
147.5°	268.4	276.1
150°	260.7	267.0
152.5°	254.1	258.9
155°	246.5	249.7
157.5°	240.6	242.8
160°	237.0	238.3
162.5°	234.7	235.9
165°	231.3	232.6
167.5°	228.9	229.4
170°	228.2	228.2
172.5°	226.4	226.0
175°	225.4	225.4
177.5°	224.4	223.9
180°	223.9	223.9



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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	7.78	9.02	8.46	9.72	10.55	20.95	22.18	21.63	22.89	23.71
	3H	8.51	9.63	9.21	10.34	11.20	22.81	23.92	23.50	24.64	25.50
	4H	8.83	9.88	9.54	10.61	11.48	23.47	24.52	24.18	25.25	26.12
	6H	9.10	10.07	9.82	10.81	11.70	23.91	24.89	24.64	25.62	26.51
	8H	9.18	10.11	9.91	10.86	11.75	24.04	24.97	24.78	25.73	26.62
	12H	9.21	10.10	9.95	10.85	11.77	24.12	25.01	24.86	25.76	26.68
4H	2H	15.03	16.09	15.75	16.81	17.68	21.26	22.32	21.98	23.04	23.92
	3H	16.63	17.52	17.36	18.28	19.17	23.34	24.22	24.07	24.99	25.88
	4H	16.74	17.55	17.49	18.31	19.23	24.12	24.92	24.86	25.69	26.61
	6H	16.78	17.48	17.54	18.27	19.19	24.68	25.38	25.44	26.17	27.09
	8H	16.76	17.42	17.53	18.21	19.15	24.84	25.50	25.61	26.29	27.23
	12H	16.74	17.33	17.53	18.14	19.09	24.95	25.55	25.74	26.35	27.30
8H	4H	18.22	18.87	18.99	19.66	20.60	24.21	24.87	24.98	25.65	26.59
	6H	18.48	19.02	19.28	19.85	20.79	24.85	25.40	25.65	26.23	27.17
	8H	18.50	18.99	19.31	19.81	20.77	25.08	25.56	25.89	26.39	27.35
	12H	18.49	18.92	19.30	19.73	20.75	25.24	25.67	26.05	26.48	27.50
12H	4H	18.38	18.97	19.17	19.78	20.72	24.18	24.77	24.97	25.58	26.53
	6H	18.74	19.23	19.55	20.05	21.01	24.84	25.33	25.65	26.15	27.11
	8H	18.83	19.26	19.64	20.07	21.09	25.09	25.52	25.90	26.33	27.35