

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: P936815

Luminaire Tested: SQ4-FB-050U-100D-835-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936815
REPORT IS A COMBINATION OF REPORTS P933479 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-100D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

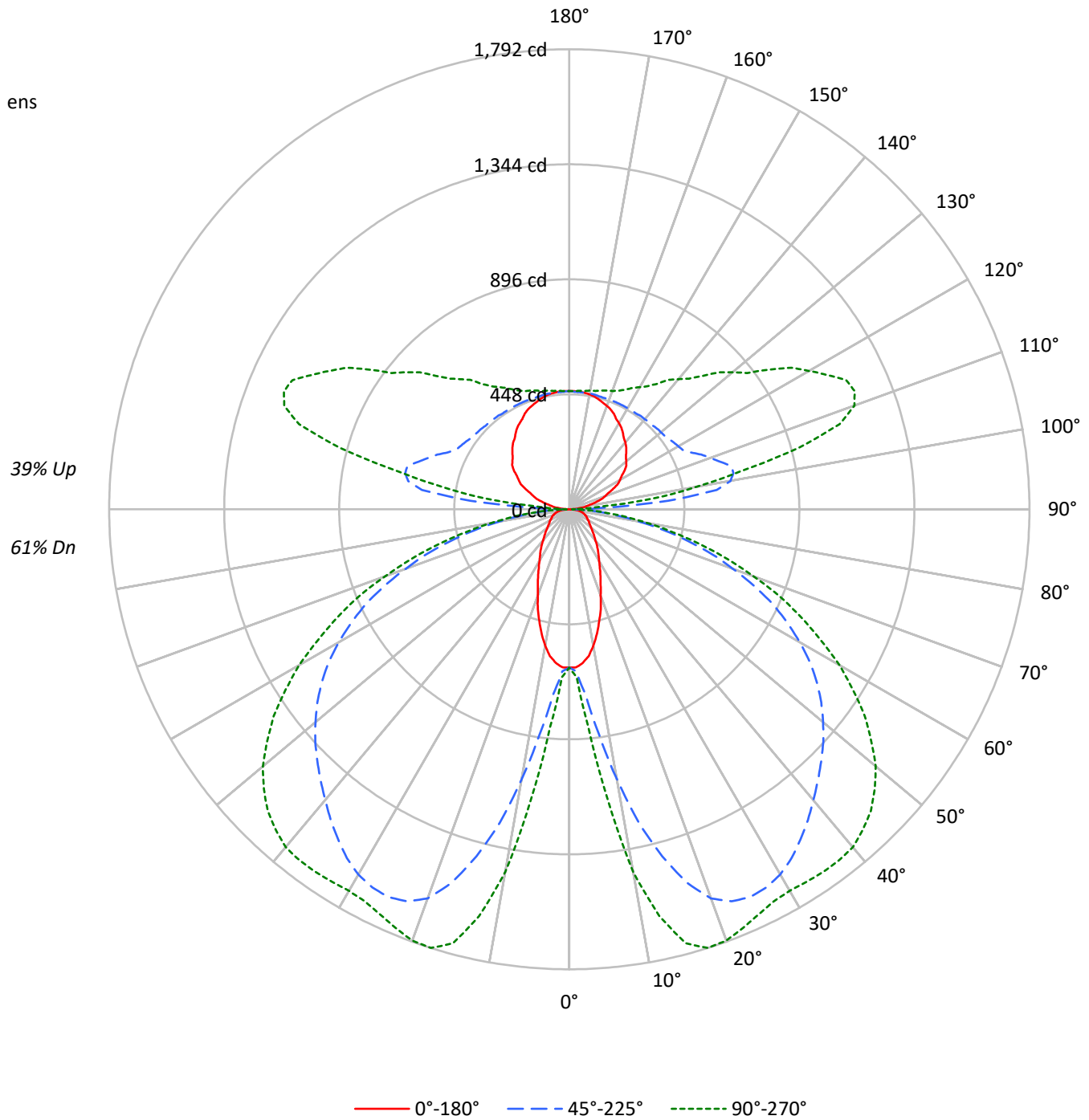
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7756.0 lumens
Efficiency: N/A
Efficacy: 114.4 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): 67.8
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	67	67	67	67	67	67	61
1	100	95	91	87	93	89	85	82	78	75	72	67	65	63	58	56	55	55	55	55	50
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	48	45	45	45	45	41
3	82	72	64	57	76	67	60	54	59	53	49	51	47	43	44	40	38	38	38	38	34
4	74	63	54	48	69	59	51	45	52	46	41	45	40	36	39	35	32	32	32	32	28
5	68	56	47	41	63	52	44	39	46	40	35	40	35	31	34	30	27	27	27	27	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	23	23	23	23	21
7	58	45	36	30	54	42	34	29	37	31	26	32	27	23	28	24	21	21	21	21	18
8	53	40	32	26	50	38	30	25	34	27	23	29	24	20	25	21	18	18	18	18	16
9	50	37	29	23	46	35	27	22	31	24	20	27	22	18	23	19	16	16	16	16	14
10	46	33	26	21	43	32	25	20	28	22	18	25	20	16	21	17	14	14	14	14	12

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	1.0
10°-20°	353.4	4.6
20°-30°	618.1	8.0
30°-40°	795.6	10.3
40°-50°	888.7	11.5
50°-60°	851.2	11.0
60°-70°	674.5	8.7
70°-80°	396.7	5.1
80°-90°	112.0	1.4
90°-100°	224.5	2.9
100°-110°	590.3	7.6
110°-120°	612.1	7.9
120°-130°	491.0	6.3
130°-140°	385.3	5.0
140°-150°	295.7	3.8
150°-160°	213.0	2.7
160°-170°	130.3	1.7
170°-180°	44.0	0.6
0°-30°	1051.1	13.6
0°-40°	1846.8	23.8
0°-60°	3586.6	46.2
0°-90°	4769.8	61.5
90°-120°	1427.0	18.4
90°-150°	2599.0	33.5
90°-180°	2986.0	38.5
0°-180°	7756.0	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°	3	9	24	12	12	4
95°	30	116	387	199	136	33
105°	106	161	653	991	924	113
115°	189	229	523	1043	1190	187
125°	263	295	476	804	948	233
135°	313	345	461	649	736	242
145°	363	386	455	553	597	228
155°	411	422	455	499	514	189
165°	443	449	455	473	479	125
175°	461	461	458	464	464	44
180°	461	461	461	461	461	



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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°	3.1	5.6	8.1	8.7	13.6	20.2	23.5	20.9	15.6	11.7	11.7
92.5°	12.4	33.4	54.4	59.7	83.9	116.2	132.3	115.9	83.2	58.7	56.4
95°	29.7	68.1	106.6	116.2	206.4	326.7	386.8	345.2	261.9	199.4	192.3
97.5°	51.3	85.3	119.2	127.7	278.1	478.6	578.8	552.5	499.8	460.3	446.8
100°	68.0	98.8	129.6	137.3	304.1	526.6	637.8	639.7	643.6	646.5	630.5
102.5°	82.2	111.0	139.7	146.9	316.1	541.7	654.5	688.0	755.1	805.4	791.7
105°	106.4	130.7	155.0	161.1	324.9	543.4	652.6	727.8	878.1	990.9	983.5
107.5°	131.1	153.8	176.4	182.1	326.6	519.2	615.5	720.3	930.0	1087.3	1089.1
110°	147.8	168.2	188.7	193.8	324.1	497.8	584.6	701.8	936.3	1112.1	1119.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	164.2	183.7	203.2	208.1	324.2	479.1	556.5	676.5	916.4	1096.3	1108.1
115°	188.9	206.9	224.9	229.4	327.2	457.6	522.8	638.4	869.5	1042.8	1059.2
117.5°	213.3	229.7	246.0	250.1	333.3	444.2	499.6	603.9	812.5	968.9	987.1
120°	227.5	242.9	258.3	262.2	338.2	439.6	490.3	585.6	776.2	919.1	936.8
122.5°	241.5	257.0	272.5	276.4	345.3	437.2	483.2	569.0	740.7	869.4	886.8
125°	262.8	276.9	291.1	294.6	354.9	435.3	475.5	548.4	694.2	803.5	819.5
127.5°	280.1	294.4	308.7	312.3	364.5	434.2	469.0	531.6	656.7	750.6	764.1
130°	289.4	304.8	320.2	324.0	371.5	434.8	466.5	522.2	633.7	717.3	729.8
132.5°	299.0	314.4	329.8	333.6	377.2	435.3	464.4	514.3	614.0	688.8	700.0
135°	313.2	327.2	341.2	344.7	383.4	434.9	460.7	502.5	586.0	648.6	658.3
137.5°	327.7	341.6	355.4	358.9	392.6	437.5	460.0	495.3	565.9	618.9	626.8
140°	339.8	352.6	365.3	368.5	398.3	438.0	457.9	488.4	549.4	595.1	602.5
142.5°	349.0	360.8	372.6	375.6	403.0	439.6	457.9	484.7	538.2	578.4	584.8
145°	363.3	373.6	383.9	386.5	409.3	439.6	454.8	476.7	520.5	553.4	558.2
147.5°	377.5	387.5	397.6	400.1	418.3	442.6	454.8	472.0	506.5	532.4	536.4
150°	386.8	395.9	404.9	407.2	423.1	444.2	454.8	469.4	498.5	520.3	523.5
152.5°	396.3	403.2	410.1	411.8	426.1	445.2	454.8	467.2	492.1	510.7	513.1
155°	410.6	415.7	420.7	422.0	432.9	447.5	454.8	464.7	484.5	499.3	500.9
157.5°	421.1	426.0	431.0	432.2	439.7	449.8	454.8	462.5	477.9	489.4	490.5
160°	428.2	432.0	435.8	436.8	442.8	450.8	454.8	461.4	474.6	484.5	485.1
162.5°	435.3	438.2	441.1	441.8	446.1	451.9	454.8	460.4	471.5	479.8	480.4
165°	443.0	445.6	448.2	448.9	450.9	453.5	454.8	458.8	466.7	472.7	473.4
167.5°	450.1	451.3	452.6	452.9	454.6	456.8	457.9	460.5	465.7	469.6	469.9
170°	454.8	456.0	457.3	457.6	457.7	457.8	457.9	460.5	465.7	469.6	469.6
172.5°	457.3	457.6	457.8	457.9	457.9	457.9	457.9	459.9	464.0	467.1	466.9
175°	460.7	460.7	460.7	460.7	459.8	458.5	457.9	459.2	461.8	463.7	463.7
177.5°	460.7	460.7	460.7	460.7	460.0	459.0	458.5	459.5	461.6	463.1	462.8
180°	460.7	460.7	460.7	460.7	460.7	460.7	460.7	460.7	460.7	460.7	460.7



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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°	11.7	11.7
92.5°	47.0	37.7
95°	164.0	135.7
97.5°	393.0	339.2
100°	566.3	502.1
102.5°	736.7	681.7
105°	954.0	924.4
107.5°	1096.2	1103.4
110°	1150.5	1181.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1155.4	1202.6
115°	1124.7	1190.3
117.5°	1059.8	1132.5
120°	1007.4	1078.1
122.5°	956.5	1026.1
125°	883.7	947.9
127.5°	818.3	872.5
130°	779.8	829.8
132.5°	744.8	789.6
135°	696.9	735.5
137.5°	658.5	690.1
140°	632.0	661.6
142.5°	610.2	635.6
145°	577.5	596.7
147.5°	552.3	568.2
150°	536.5	549.4
152.5°	522.9	532.7
155°	507.4	513.8
157.5°	495.1	499.6
160°	487.7	490.3
162.5°	482.9	485.4
165°	476.0	478.6
167.5°	471.0	472.1
170°	469.6	469.6
172.5°	465.9	465.0
175°	463.7	463.7
177.5°	461.8	460.7
180°	460.7	460.7



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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	6.63	7.66	7.48	8.53	9.62	19.80	20.82	20.64	21.70	22.79
	3H	7.35	8.27	8.21	9.16	10.28	21.65	22.57	22.50	23.45	24.57
	4H	7.66	8.53	8.53	9.42	10.55	22.29	23.17	23.17	24.06	25.19
	6H	7.92	8.72	8.80	9.62	10.76	22.73	23.54	23.61	24.43	25.58
	8H	7.99	8.76	8.88	9.67	10.82	22.85	23.62	23.75	24.54	25.68
	12H	8.01	8.75	8.91	9.65	10.82	22.92	23.66	23.82	24.57	25.74
4H	2H	13.86	14.73	14.74	15.62	16.75	20.09	20.97	20.97	21.85	22.98
	3H	15.44	16.18	16.33	17.10	18.24	22.15	22.88	23.04	23.80	24.95
	4H	15.55	16.22	16.45	17.13	18.30	22.92	23.59	23.82	24.50	25.68
	6H	15.57	16.15	16.48	17.09	18.26	23.46	24.04	24.38	24.98	26.16
	8H	15.55	16.09	16.47	17.02	18.21	23.63	24.17	24.55	25.10	26.29
	12H	15.51	16.00	16.45	16.95	18.15	23.73	24.22	24.67	25.17	26.36
8H	4H	17.00	17.54	17.92	18.48	19.66	22.99	23.54	23.91	24.47	25.66
	6H	17.25	17.70	18.20	18.68	19.86	23.63	24.08	24.57	25.05	26.24
	8H	17.27	17.67	18.23	18.64	19.84	23.85	24.25	24.80	25.21	26.41
	12H	17.25	17.60	18.21	18.56	19.81	24.00	24.35	24.96	25.31	26.56
12H	4H	17.15	17.64	18.09	18.59	19.79	22.96	23.45	23.89	24.40	25.59
	6H	17.51	17.91	18.46	18.88	20.08	23.61	24.01	24.57	24.98	26.18
	8H	17.59	17.94	18.55	18.90	20.15	23.85	24.20	24.81	25.16	26.41