

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: P936626

Luminaire Tested: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-12-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936626
REPORT IS A COMBINATION OF REPORTS P933461 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-12-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

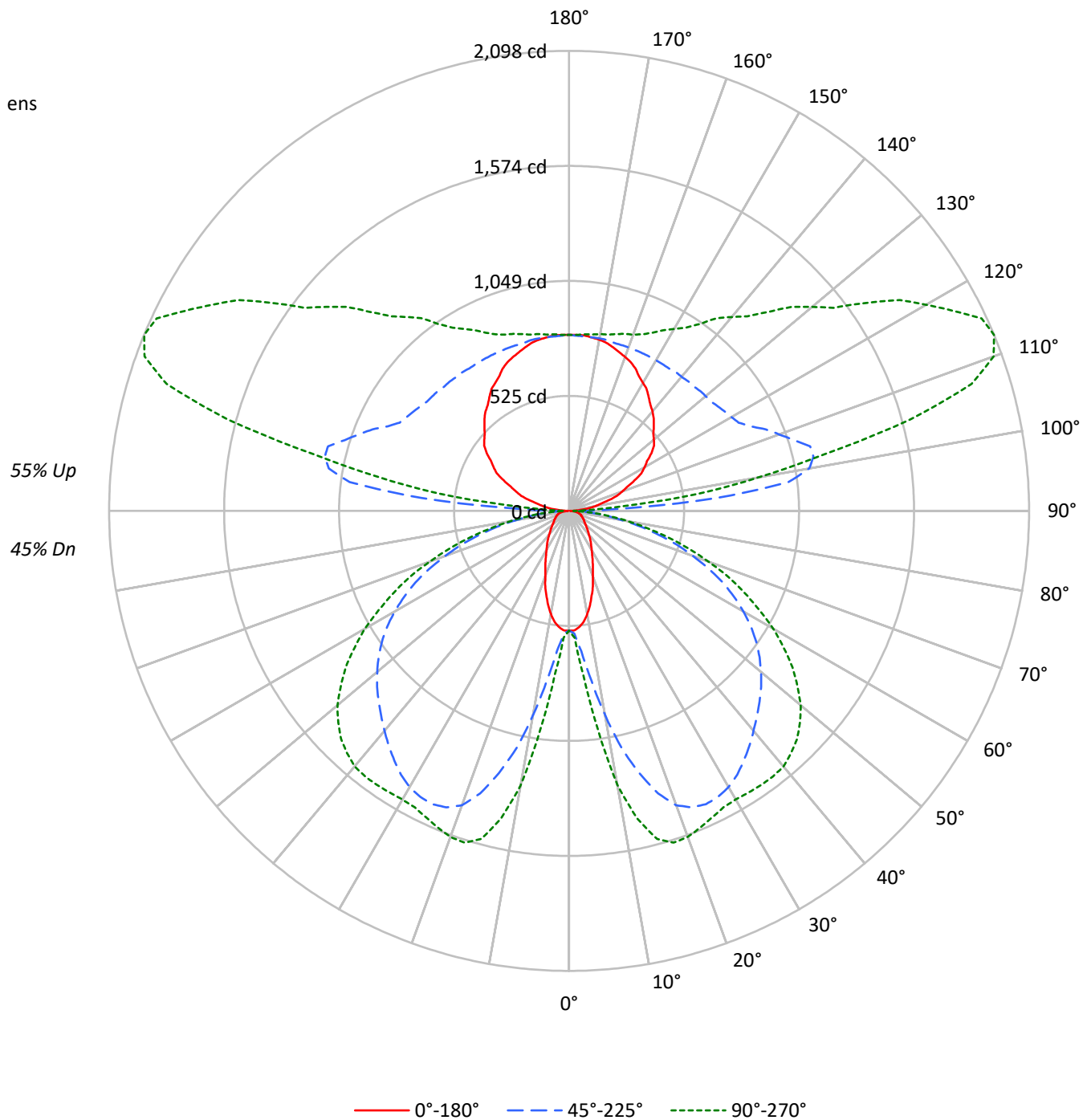
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9432.8 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 85.2
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	
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1688	1688	1688
5°	1650	1951	2269
10°	1497	2845	3761
15°	1273	3718	4542
20°	1037	4310	4629
25°	865	4511	4535
30°	730	4541	4526
35°	646	4466	4643
40°	563	4370	4764
45°	510	4299	4783
50°	468	4236	4703
55°	449	4143	4495
60°	460	3963	4166
65°	480	3688	3714
70°	512	3219	3137
75°	569	2626	2448
80°	628	1824	1649
85°	567	970	845

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4783 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.6	0.7
10°-20°	312.9	3.3
20°-30°	547.2	5.8
30°-40°	704.4	7.5
40°-50°	786.8	8.3
50°-60°	753.6	8.0
60°-70°	597.2	6.3
70°-80°	351.2	3.7
80°-90°	100.6	1.1
90°-100°	391.6	4.2
100°-110°	1029.6	10.9
110°-120°	1067.6	11.3
120°-130°	856.3	9.1
130°-140°	671.9	7.1
140°-150°	515.7	5.5
150°-160°	371.4	3.9
160°-170°	227.2	2.4
170°-180°	76.8	0.8
0°-30°	930.7	9.9
0°-40°	1635.1	17.3
0°-60°	3175.5	33.7
0°-90°	4224.6	44.8
90°-120°	2488.8	26.4
90°-150°	4532.7	48.1
90°-180°	5208.0	55.2
0°-180°	9432.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	546	546	546	546	546	
5°	532	570	642	726	753	49
15°	398	735	1239	1502	1549	111
25°	254	834	1476	1541	1542	117
35°	172	797	1390	1469	1527	107
45°	118	635	1228	1407	1470	91
55°	84	404	1042	1211	1244	77
65°	67	214	774	870	883	66
75°	49	132	425	467	468	51
85°	18	40	105	116	118	19
90°	5	15	41	20	20	6
95°	52	203	674	348	237	57
105°	186	281	1138	1728	1612	197
115°	330	400	912	1819	2076	325
125°	458	514	829	1401	1653	407
135°	546	601	803	1131	1283	423
145°	634	674	793	965	1041	397
155°	716	736	793	871	896	329
165°	773	783	793	824	835	218
175°	803	803	798	809	809	76
180°	803	803	803	803	803	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7	545.7
2.5°	545.7	545.7	549.2	551.0	554.4	556.2	559.8	563.2	573.8	575.5	579.0
5°	531.7	538.7	561.5	570.2	594.8	628.1	642.2	665.0	712.4	726.4	735.2
7.5°	510.6	526.4	582.5	596.6	658.0	745.8	782.6	831.7	907.2	944.0	973.8
10°	477.3	510.6	610.6	644.0	743.9	877.4	945.7	1014.2	1128.2	1179.2	1198.4
12.5°	440.4	494.8	640.4	686.0	829.9	1024.7	1107.2	1182.7	1312.5	1381.0	1391.4
15°	398.3	472.0	668.5	735.2	921.2	1147.5	1238.8	1331.8	1452.9	1502.0	1514.3
17.5°	361.5	454.4	694.8	765.0	991.4	1258.1	1351.0	1428.3	1526.6	1559.9	1568.7
20°	315.9	426.4	712.4	803.7	1065.1	1338.8	1428.3	1488.0	1554.7	1575.7	1579.2
22.5°	282.5	396.5	722.9	817.7	1114.2	1387.9	1463.4	1510.8	1556.4	1563.4	1565.1
25°	254.5	363.2	721.2	833.5	1156.3	1417.8	1475.7	1510.8	1537.0	1540.6	1540.6
27.5°	228.1	326.4	714.1	837.0	1187.9	1424.8	1470.4	1494.9	1507.2	1514.3	1514.3
30°	205.3	291.3	696.6	829.9	1201.9	1417.8	1454.6	1466.9	1479.1	1489.7	1494.9
32.5°	187.7	257.9	670.2	815.9	1203.7	1400.2	1426.6	1433.5	1451.1	1475.7	1484.5
35°	172.0	224.6	640.4	796.6	1193.2	1372.1	1389.7	1396.7	1431.8	1468.7	1480.9
37.5°	156.2	200.0	601.9	763.3	1177.3	1338.8	1351.0	1363.3	1417.8	1461.6	1475.7
40°	140.4	178.9	556.2	726.4	1152.8	1298.5	1309.0	1328.3	1400.2	1451.1	1465.1
42.5°	128.1	161.4	507.1	687.9	1121.3	1252.9	1268.6	1296.7	1379.1	1433.5	1449.3
45°	117.6	143.9	454.4	635.2	1080.9	1205.4	1228.3	1266.9	1354.6	1407.2	1421.2
47.5°	107.0	131.6	400.1	580.8	1037.0	1158.1	1187.9	1231.7	1321.2	1372.1	1384.4
50°	98.3	119.3	345.7	522.9	989.6	1107.2	1142.3	1187.9	1279.2	1326.5	1342.3
52.5°	91.2	108.8	294.7	465.0	935.3	1054.6	1094.9	1142.3	1228.3	1273.9	1284.4
55°	84.2	100.0	250.9	403.6	879.1	998.4	1042.3	1087.9	1172.1	1210.7	1217.7
57.5°	80.8	93.0	214.1	345.7	819.5	935.3	984.4	1026.5	1105.4	1135.3	1142.3
60°	75.4	87.7	186.0	296.6	754.5	875.6	917.7	959.8	1026.5	1051.1	1056.3
62.5°	70.2	84.2	164.9	249.1	687.9	805.4	847.5	886.1	942.2	959.8	966.8
65°	66.7	80.8	149.1	214.1	619.4	731.7	773.8	807.2	852.8	870.3	873.8
67.5°	63.1	77.2	136.8	184.3	551.0	658.0	689.6	721.2	756.2	773.8	775.6
70°	57.9	73.7	126.4	163.2	480.8	573.8	600.1	633.4	661.5	670.2	675.6
72.5°	54.4	68.5	119.3	147.4	408.8	493.0	517.6	536.9	561.5	570.2	570.2
75°	49.1	61.4	112.3	131.6	335.1	403.6	424.6	444.0	463.2	466.7	461.5
77.5°	43.9	54.4	96.5	110.6	261.4	319.3	336.9	347.4	363.2	366.7	368.4
80°	36.9	47.4	75.4	86.0	189.5	235.1	247.4	256.2	270.2	270.2	273.7
82.5°	28.1	36.9	54.4	61.4	128.1	161.4	172.0	177.2	186.0	186.0	186.0
85°	17.5	22.8	35.1	40.4	77.2	98.3	105.3	107.0	114.1	115.8	115.8
87.5°	8.8	12.3	22.8	24.6	40.4	50.9	50.9	54.4	54.4	52.7	50.9
90°	5.4	9.7	14.0	15.1	23.7	35.2	41.0	36.5	27.3	20.5	20.5
92.5°	21.5	58.2	94.9	104.0	146.2	202.6	230.7	202.2	145.2	102.5	98.4
95°	51.8	118.9	186.0	202.7	360.0	569.7	674.5	601.9	456.7	347.8	335.4
97.5°	89.5	148.7	207.9	222.7	484.9	834.5	1009.4	963.5	871.7	802.9	779.4
100°	118.6	172.3	225.9	239.4	530.4	918.3	1112.4	1115.7	1122.4	1127.5	1099.5
102.5°	143.4	193.5	243.6	256.1	551.2	944.8	1141.5	1199.9	1316.9	1404.6	1380.6
105°	185.5	227.9	270.2	280.9	566.6	947.7	1138.3	1269.3	1531.5	1728.1	1715.2
107.5°	228.6	268.2	307.7	317.6	569.6	905.6	1073.6	1256.4	1622.2	1896.4	1899.6
110°	257.8	293.4	329.2	338.1	565.3	868.2	1019.7	1224.1	1632.9	1939.5	1952.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	286.3	320.3	354.3	362.9	565.4	835.5	970.6	1179.8	1598.2	1912.0	1932.6
115°	329.5	360.8	392.2	400.1	570.7	798.1	911.8	1113.3	1516.4	1818.7	1847.3
117.5°	372.0	400.5	429.0	436.2	581.2	774.6	871.3	1053.2	1417.0	1689.8	1721.5
120°	396.9	423.7	450.5	457.2	589.8	766.8	855.2	1021.4	1353.7	1603.1	1633.8
122.5°	421.1	448.2	475.3	482.1	602.3	762.6	842.7	992.4	1291.7	1516.2	1546.6
125°	458.3	483.0	507.7	513.9	619.1	759.2	829.3	956.4	1210.6	1401.4	1429.4
127.5°	488.5	513.5	538.4	544.6	635.7	757.2	818.0	927.1	1145.4	1309.2	1332.8
130°	504.7	531.6	558.4	565.1	647.9	758.4	813.7	910.8	1105.2	1250.9	1272.7
132.5°	521.4	548.2	575.1	581.8	657.9	759.2	809.9	896.9	1070.9	1201.3	1220.8
135°	546.2	570.7	595.1	601.2	668.6	758.5	803.4	876.3	1022.0	1131.3	1148.1
137.5°	571.5	595.8	620.0	626.0	684.8	763.2	802.4	863.9	987.1	1079.5	1093.3
140°	592.5	614.9	637.1	642.7	694.7	763.9	798.5	851.7	958.2	1038.0	1050.9
142.5°	608.8	629.3	650.0	655.2	702.9	766.7	798.5	845.3	938.7	1008.9	1019.9
145°	633.5	651.5	669.5	674.0	713.8	766.7	793.2	831.4	907.9	965.2	973.5
147.5°	658.4	675.8	693.4	697.7	729.5	772.0	793.2	823.3	883.5	928.5	935.5
150°	674.5	690.3	706.2	710.1	737.8	774.7	793.2	818.6	869.3	907.4	913.1
152.5°	691.3	703.2	715.2	718.2	743.2	776.5	793.2	814.9	858.3	890.8	895.1
155°	716.0	724.9	733.8	736.0	755.1	780.5	793.2	810.5	844.9	870.8	873.6
157.5°	734.4	743.1	751.6	753.8	767.0	784.5	793.2	806.6	833.4	853.5	855.6
160°	746.8	753.5	760.2	761.9	772.4	786.2	793.2	804.7	827.6	844.9	846.0
162.5°	759.2	764.3	769.3	770.5	778.1	788.1	793.2	802.9	822.2	836.8	837.9
165°	772.7	777.2	781.8	782.9	786.3	790.9	793.2	800.2	814.0	824.4	825.6
167.5°	785.1	787.2	789.4	789.9	792.8	796.6	798.5	803.1	812.2	819.0	819.5
170°	793.2	795.3	797.5	798.0	798.2	798.4	798.5	803.1	812.2	819.0	819.0
172.5°	797.5	797.9	798.4	798.5	798.5	798.5	798.5	802.1	809.3	814.7	814.3
175°	803.4	803.4	803.4	803.4	801.7	799.6	798.5	800.8	805.4	808.8	808.8
177.5°	803.4	803.4	803.4	803.4	802.2	800.5	799.7	801.5	805.1	807.8	807.2
180°	803.4	803.4	803.4	803.4	803.4	803.4	803.4	803.4	803.4	803.4	803.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	545.7	545.7
2.5°	582.5	579.0
5°	749.3	752.7
7.5°	1008.9	1007.2
10°	1254.6	1270.4
12.5°	1433.5	1437.0
15°	1542.4	1549.3
17.5°	1584.5	1586.2
20°	1586.2	1582.7
22.5°	1566.9	1563.4
25°	1544.1	1542.4
27.5°	1523.0	1524.8
30°	1514.3	1519.5
32.5°	1514.3	1523.0
35°	1517.8	1526.6
37.5°	1516.0	1526.6
40°	1509.0	1521.3
42.5°	1489.7	1498.5
45°	1459.9	1470.4
47.5°	1421.2	1428.3
50°	1372.1	1379.1
52.5°	1310.8	1312.5
55°	1237.1	1244.0
57.5°	1158.1	1159.8
60°	1070.3	1075.6
62.5°	977.4	977.4
65°	879.1	882.6
67.5°	777.3	786.1
70°	673.8	675.6
72.5°	572.1	572.1
75°	466.7	468.5
77.5°	366.7	366.7
80°	272.0	273.7
82.5°	187.7	191.2
85°	117.6	117.6
87.5°	54.4	49.1
90°	20.5	20.5
92.5°	82.1	65.8
95°	286.0	236.7
97.5°	685.4	591.5
100°	987.6	875.7
102.5°	1284.8	1188.9
105°	1663.8	1612.2
107.5°	1911.9	1924.4
110°	2006.6	2060.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2015.1	2097.5
115°	1961.6	2076.0
117.5°	1848.3	1975.1
120°	1757.1	1880.2
122.5°	1668.1	1789.6
125°	1541.2	1653.2
127.5°	1427.2	1521.6
130°	1360.0	1447.2
132.5°	1299.0	1377.1
135°	1215.4	1282.8
137.5°	1148.4	1203.5
140°	1102.3	1153.9
142.5°	1064.3	1108.6
145°	1007.1	1040.7
147.5°	963.2	991.1
150°	935.6	958.2
152.5°	912.1	929.1
155°	884.9	896.2
157.5°	863.4	871.3
160°	850.7	855.2
162.5°	842.2	846.6
165°	830.2	834.7
167.5°	821.5	823.4
170°	819.0	819.0
172.5°	812.6	811.0
175°	808.8	808.8
177.5°	805.3	803.4
180°	803.4	803.4



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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	2.33	3.18	3.33	4.19	5.53	15.53	16.37	16.52	17.38	18.73
	3H	3.04	3.80	4.04	4.82	6.18	17.37	18.13	18.37	19.15	20.51
	4H	3.34	4.06	4.35	5.08	6.45	18.02	18.74	19.03	19.76	21.13
	6H	3.59	4.25	4.61	5.28	6.66	18.45	19.12	19.48	20.15	21.53
	8H	3.65	4.29	4.69	5.33	6.71	18.57	19.21	19.61	20.25	21.63
	12H	3.67	4.28	4.71	5.31	6.72	18.64	19.25	19.68	20.29	21.69
4H	2H	9.56	10.28	10.58	11.30	12.67	15.80	16.52	16.82	17.54	18.91
	3H	11.12	11.73	12.15	12.78	14.16	17.85	18.45	18.88	19.50	20.89
	4H	11.22	11.77	12.25	12.81	14.22	18.62	19.17	19.66	20.21	21.62
	6H	11.23	11.70	12.27	12.77	14.17	19.16	19.64	20.21	20.70	22.10
	8H	11.20	11.65	12.25	12.71	14.12	19.32	19.77	20.38	20.83	22.25
	12H	11.16	11.56	12.23	12.64	14.06	19.42	19.83	20.49	20.90	22.32
8H	4H	12.66	13.11	13.71	14.17	15.58	18.68	19.12	19.73	20.18	21.60
	6H	12.90	13.27	13.98	14.37	15.79	19.31	19.68	20.38	20.78	22.19
	8H	12.92	13.25	14.00	14.33	15.76	19.53	19.86	20.61	20.94	22.37
	12H	12.89	13.18	13.98	14.26	15.73	19.68	19.97	20.77	21.05	22.52
12H	4H	12.81	13.21	13.88	14.28	15.71	18.63	19.03	19.70	20.11	21.53
	6H	13.16	13.49	14.25	14.57	16.01	19.29	19.62	20.37	20.70	22.13
	8H	13.23	13.52	14.32	14.60	16.07	19.52	19.81	20.61	20.89	22.36