

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: P937167

Luminaire Tested: SQ4-FB-075U-075D-93050-1D-UNV-STD-W-8-4000K

Issue Date: 12/17/2024

**Test Information**

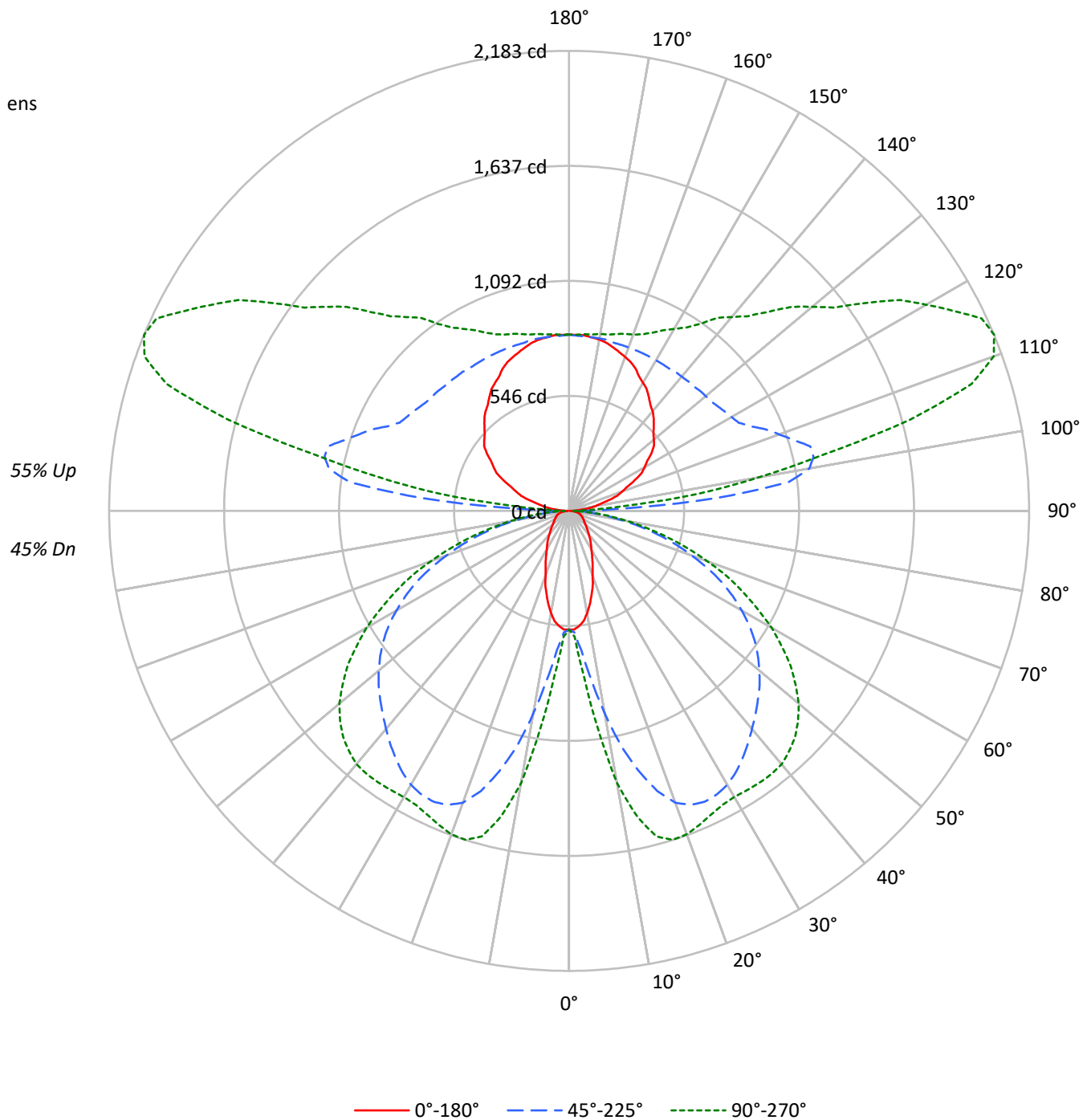
Test Method: LM-79-2019  
Report Number: P937167  
REPORT IS A COMBINATION OF REPORTS P933518 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-075D-93050-1D-UNV-STD-W-8-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9779.3 lumens  
Efficiency: N/A  
Efficacy: 115.3 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')  
CIE Type: General Diffuse  
  
Input Watts (W): 84.8  
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	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	80	77	70	67	65	57	55	53	44	43	42	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	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	65	56	49	43	46	41	37	38	34	31	30	27	24	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	17
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	24	21	25	20	17	20	16	14	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11	9

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2612	2612	2612
5°	2552	3019	3511
10°	2315	4401	5821
15°	1967	5750	7029
20°	1602	6663	7164
25°	1336	6973	7018
30°	1127	7017	7005
35°	996	6901	7186
40°	868	6749	7373
45°	786	6638	7402
50°	721	6538	7280
55°	691	6392	6957
60°	707	6111	6447
65°	736	5685	5747
70°	783	4957	4855
75°	868	4042	3789
80°	948	2804	2553
85°	843	1487	1307

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7402 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.8	0.7
10°-20°	322.8	3.3
20°-30°	564.6	5.8
30°-40°	726.8	7.4
40°-50°	811.8	8.3
50°-60°	777.6	8.0
60°-70°	616.2	6.3
70°-80°	362.3	3.7
80°-90°	103.9	1.1
90°-100°	407.6	4.2
100°-110°	1071.6	11.0
110°-120°	1111.1	11.4
120°-130°	891.2	9.1
130°-140°	699.3	7.2
140°-150°	536.7	5.5
150°-160°	386.5	4.0
160°-170°	236.5	2.4
170°-180°	79.9	0.8
0°-30°	960.2	9.8
0°-40°	1687.1	17.3
0°-60°	3276.5	33.5
0°-90°	4358.8	44.6
90°-120°	2590.3	26.5
90°-150°	4717.6	48.2
90°-180°	5421.0	55.4
0°-180°	9779.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	563	563	563	563	563	
5°	548	588	663	750	777	51
15°	411	758	1278	1550	1599	114
25°	262	860	1523	1590	1591	121
35°	177	822	1434	1515	1575	111
45°	121	655	1267	1452	1517	94
55°	87	416	1075	1249	1284	79
65°	69	221	798	898	911	68
75°	51	136	438	482	483	53
85°	18	42	109	120	121	19
90°	6	16	43	21	21	6
95°	54	211	702	362	246	60
105°	193	292	1185	1799	1678	205
115°	343	416	949	1893	2160	339
125°	477	535	863	1458	1721	423
135°	568	626	836	1177	1335	440
145°	659	702	826	1004	1083	413
155°	745	766	826	906	933	342
165°	804	815	826	858	869	227
175°	836	836	831	842	842	79
180°	836	836	836	836	836	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	563.0	563.0	563.0	563.0	563.0	563.0	563.0	563.0	563.0	563.0	563.0
2.5°	563.0	563.0	566.6	568.4	572.1	573.9	577.5	581.1	592.0	593.8	597.4
5°	548.5	555.8	579.3	588.4	613.7	648.1	662.6	686.1	735.0	749.5	758.5
7.5°	526.8	543.1	601.0	615.5	678.9	769.4	807.4	858.1	935.9	974.0	1004.7
10°	492.4	526.8	630.0	664.4	767.6	905.2	975.8	1046.5	1164.1	1216.6	1236.5
12.5°	454.4	510.5	660.8	707.8	856.3	1057.3	1142.4	1220.2	1354.2	1424.8	1435.7
15°	410.9	487.0	689.7	758.5	950.4	1184.0	1278.2	1374.1	1499.0	1549.7	1562.4
17.5°	372.9	468.9	716.9	789.3	1022.8	1298.1	1394.0	1473.7	1575.1	1609.5	1618.5
20°	325.9	439.9	735.0	829.1	1099.0	1381.4	1473.7	1535.2	1604.0	1625.8	1629.4
22.5°	291.5	409.1	745.9	843.6	1149.6	1432.1	1509.9	1558.8	1605.8	1613.1	1614.9
25°	262.5	374.7	744.0	859.9	1193.1	1462.8	1522.6	1558.8	1585.9	1589.6	1589.6
27.5°	235.3	336.7	736.8	863.5	1225.7	1470.1	1517.1	1542.5	1555.2	1562.4	1562.4
30°	211.8	300.5	718.7	856.3	1240.2	1462.8	1500.8	1513.5	1526.2	1537.1	1542.5
32.5°	193.7	266.1	691.5	841.8	1242.0	1444.7	1471.9	1479.1	1497.2	1522.6	1531.6
35°	177.4	231.7	660.8	821.9	1231.1	1415.8	1433.9	1441.1	1477.3	1515.3	1528.0
37.5°	161.1	206.4	620.9	787.5	1214.8	1381.4	1394.0	1406.7	1462.8	1508.1	1522.6
40°	144.8	184.7	573.9	749.5	1189.5	1339.7	1350.6	1370.5	1444.7	1497.2	1511.7
42.5°	132.2	166.5	523.2	709.6	1156.9	1292.7	1309.0	1337.9	1423.0	1479.1	1495.4
45°	121.3	148.4	468.9	655.3	1115.2	1243.8	1267.3	1307.1	1397.7	1452.0	1466.5
47.5°	110.4	135.8	412.8	599.2	1070.0	1194.9	1225.7	1270.9	1363.3	1415.8	1428.4
50°	101.4	123.1	356.6	539.5	1021.0	1142.4	1178.6	1225.7	1319.8	1368.7	1385.0
52.5°	94.1	112.2	304.1	479.7	964.9	1088.1	1129.7	1178.6	1267.3	1314.4	1325.2
55°	86.9	103.2	258.9	416.4	907.0	1030.2	1075.4	1122.5	1209.4	1249.2	1256.5
57.5°	83.3	95.9	220.9	356.6	845.4	964.9	1015.6	1059.1	1140.6	1171.4	1178.6
60°	77.8	90.5	191.9	305.9	778.4	903.4	946.8	990.2	1059.1	1084.5	1089.9
62.5°	72.4	86.9	170.2	257.1	709.6	830.9	874.4	914.2	972.1	990.2	997.5
65°	68.8	83.3	153.9	220.9	639.0	754.9	798.4	832.7	879.8	897.9	901.5
67.5°	65.2	79.7	141.2	190.1	568.4	678.9	711.5	744.0	780.2	798.4	800.2
70°	59.7	76.0	130.3	168.4	496.0	592.0	619.1	653.5	682.5	691.5	697.0
72.5°	56.1	70.6	123.1	152.1	421.8	508.7	534.0	554.0	579.3	588.4	588.4
75°	50.7	63.4	115.9	135.8	345.8	416.4	438.1	458.0	477.9	481.5	476.1
77.5°	45.3	56.1	99.6	114.1	269.7	329.5	347.6	358.4	374.7	378.4	380.2
80°	38.0	48.9	77.8	88.7	195.5	242.6	255.3	264.3	278.8	278.8	282.4
82.5°	29.0	38.0	56.1	63.4	132.2	166.5	177.4	182.8	191.9	191.9	191.9
85°	18.1	23.5	36.2	41.6	79.7	101.4	108.6	110.4	117.7	119.5	119.5
87.5°	9.1	12.7	23.5	25.3	41.6	52.5	52.5	56.1	56.1	54.3	52.5
90°	5.6	10.1	14.7	15.7	24.7	36.7	42.6	37.9	28.4	21.4	21.4
92.5°	22.4	60.6	98.8	108.3	152.3	210.9	240.2	210.5	151.2	106.6	102.4
95°	53.9	123.7	193.5	211.0	374.6	592.9	702.0	626.5	475.3	362.0	349.1
97.5°	93.1	154.8	216.4	231.8	504.7	868.6	1050.5	1002.7	907.2	835.6	811.2
100°	123.5	179.3	235.3	249.2	552.1	955.9	1157.7	1161.2	1168.2	1173.5	1144.3
102.5°	149.3	201.4	253.5	266.6	573.7	983.3	1188.0	1248.9	1370.6	1461.9	1436.9
105°	193.1	237.2	281.3	292.4	589.8	986.4	1184.7	1321.1	1593.9	1798.6	1785.2
107.5°	238.0	279.2	320.2	330.6	592.8	942.5	1117.3	1307.6	1688.2	1973.7	1977.0
110°	268.3	305.4	342.5	351.8	588.3	903.5	1061.2	1273.9	1699.4	2018.6	2032.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	298.0	333.4	368.8	377.6	588.4	869.6	1010.2	1227.9	1663.4	1990.0	2011.4
115°	342.9	375.6	408.2	416.4	593.9	830.6	949.0	1158.7	1578.2	1892.9	1922.7
117.5°	387.2	416.9	446.6	454.0	605.0	806.2	906.9	1096.1	1474.8	1758.7	1791.7
120°	413.0	440.9	468.9	475.8	613.9	798.0	890.0	1063.0	1409.0	1668.4	1700.4
122.5°	438.3	466.5	494.7	501.7	626.8	793.6	877.1	1032.9	1344.4	1578.1	1609.6
125°	477.0	502.7	528.3	534.8	644.2	790.1	863.1	995.4	1260.0	1458.5	1487.6
127.5°	508.4	534.4	560.3	566.8	661.7	788.1	851.3	964.9	1192.1	1362.5	1387.1
130°	525.3	553.1	581.1	588.1	674.3	789.4	846.9	948.0	1150.3	1302.0	1324.7
132.5°	542.6	570.6	598.6	605.6	684.7	790.1	842.9	933.4	1114.5	1250.3	1270.7
135°	568.4	593.9	619.4	625.7	695.9	789.4	836.2	912.0	1063.7	1177.3	1194.9
137.5°	594.9	620.0	645.2	651.5	712.7	794.3	835.0	899.1	1027.4	1123.5	1137.8
140°	616.8	639.9	663.1	668.9	723.0	795.1	831.1	886.5	997.2	1080.3	1093.7
142.5°	633.6	655.1	676.5	681.9	731.6	798.0	831.1	879.7	977.0	1050.0	1061.5
145°	659.4	678.1	696.8	701.5	742.9	798.0	825.5	865.3	944.9	1004.5	1013.2
147.5°	685.2	703.4	721.7	726.2	759.3	803.4	825.5	856.8	919.4	966.3	973.6
150°	702.0	718.5	735.0	739.1	767.8	806.3	825.5	851.9	904.8	944.4	950.3
152.5°	719.4	731.9	744.4	747.5	773.5	808.1	825.5	848.0	893.2	927.1	931.5
155°	745.2	754.5	763.7	766.0	785.9	812.3	825.5	843.4	879.4	906.3	909.2
157.5°	764.3	773.3	782.2	784.5	798.2	816.4	825.5	839.4	867.4	888.3	890.4
160°	777.3	784.2	791.2	792.9	803.8	818.3	825.5	837.5	861.4	879.4	880.5
162.5°	790.1	795.4	800.6	802.0	809.8	820.3	825.5	835.6	855.8	870.9	872.0
165°	804.1	808.9	813.6	814.8	818.4	823.2	825.5	832.7	847.2	858.1	859.3
167.5°	817.1	819.4	821.6	822.2	825.1	829.1	831.1	835.8	845.3	852.5	852.9
170°	825.5	827.8	830.0	830.6	830.8	831.0	831.1	835.8	845.3	852.5	852.5
172.5°	830.0	830.5	831.0	831.1	831.1	831.1	831.1	834.8	842.3	848.0	847.5
175°	836.2	836.2	836.2	836.2	834.5	832.2	831.1	833.5	838.3	841.8	841.8
177.5°	836.2	836.2	836.2	836.2	834.8	833.1	832.2	834.1	837.8	840.6	840.2
180°	836.2	836.2	836.2	836.2	836.2	836.2	836.2	836.2	836.2	836.2	836.2



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	563.0	563.0
2.5°	601.0	597.4
5°	773.0	776.6
7.5°	1041.0	1039.2
10°	1294.5	1310.8
12.5°	1479.1	1482.7
15°	1591.4	1598.6
17.5°	1634.8	1636.6
20°	1636.6	1633.0
22.5°	1616.7	1613.1
25°	1593.2	1591.4
27.5°	1571.5	1573.3
30°	1562.4	1567.8
32.5°	1562.4	1571.5
35°	1566.0	1575.1
37.5°	1564.2	1575.1
40°	1557.0	1569.6
42.5°	1537.1	1546.1
45°	1506.3	1517.1
47.5°	1466.5	1473.7
50°	1415.8	1423.0
52.5°	1352.4	1354.2
55°	1276.4	1283.6
57.5°	1194.9	1196.7
60°	1104.4	1109.8
62.5°	1008.3	1008.3
65°	907.0	910.6
67.5°	802.0	811.0
70°	695.2	697.0
72.5°	590.2	590.2
75°	481.5	483.4
77.5°	378.4	378.4
80°	280.6	282.4
82.5°	193.7	197.3
85°	121.3	121.3
87.5°	56.1	50.7
90°	21.4	21.4
92.5°	85.4	68.4
95°	297.8	246.4
97.5°	713.4	615.6
100°	1027.9	911.4
102.5°	1337.2	1237.4
105°	1731.5	1677.9
107.5°	1989.9	2002.8
110°	2088.5	2144.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2097.2	2183.0
115°	2041.6	2160.5
117.5°	1923.6	2055.6
120°	1828.7	1956.9
122.5°	1736.1	1862.5
125°	1604.1	1720.6
127.5°	1485.4	1583.7
130°	1415.4	1506.2
132.5°	1351.9	1433.2
135°	1265.0	1335.0
137.5°	1195.2	1252.6
140°	1147.4	1201.0
142.5°	1107.6	1153.8
145°	1048.2	1083.1
147.5°	1002.5	1031.4
150°	973.8	997.2
152.5°	949.2	966.9
155°	921.0	932.7
157.5°	898.6	906.9
160°	885.3	890.0
162.5°	876.6	881.1
165°	864.0	868.7
167.5°	854.9	856.9
170°	852.5	852.5
172.5°	845.8	844.1
175°	841.8	841.8
177.5°	838.2	836.2
180°	836.2	836.2



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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	3.83	4.67	4.82	5.68	7.03	17.00	17.85	18.00	18.86	20.21
	3H	4.53	5.29	5.53	6.31	7.68	18.84	19.60	19.85	20.62	21.99
	4H	4.83	5.55	5.85	6.57	7.94	19.49	20.21	20.50	21.23	22.60
	6H	5.08	5.74	6.11	6.77	8.16	19.92	20.58	20.94	21.61	22.99
	8H	5.14	5.78	6.18	6.82	8.20	20.04	20.67	21.07	21.72	23.10
	12H	5.16	5.77	6.20	6.80	8.21	20.10	20.71	21.14	21.75	23.15
4H	2H	11.04	11.76	12.06	12.78	14.16	17.28	18.00	18.30	19.02	20.39
	3H	12.60	13.21	13.64	14.26	15.65	19.32	19.92	20.35	20.98	22.36
	4H	12.70	13.25	13.74	14.30	15.70	20.09	20.64	21.13	21.68	23.09
	6H	12.71	13.19	13.76	14.25	15.66	20.62	21.10	21.68	22.17	23.57
	8H	12.69	13.13	13.74	14.19	15.61	20.79	21.23	21.84	22.29	23.71
	12H	12.64	13.05	13.71	14.12	15.54	20.88	21.28	21.95	22.36	23.78
8H	4H	14.14	14.59	15.19	15.65	17.07	20.15	20.59	21.20	21.65	23.07
	6H	14.38	14.75	15.46	15.85	17.27	20.77	21.14	21.85	22.25	23.66
	8H	14.40	14.73	15.48	15.81	17.25	20.99	21.32	22.08	22.40	23.84
	12H	14.37	14.66	15.46	15.74	17.21	21.14	21.42	22.23	22.50	23.98
12H	4H	14.28	14.69	15.36	15.76	17.19	20.10	20.50	21.17	21.58	23.00
	6H	14.64	14.97	15.73	16.05	17.49	20.76	21.08	21.84	22.17	23.60
	8H	14.71	15.00	15.80	16.08	17.55	20.99	21.27	22.07	22.35	23.83