

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: P937143

Luminaire Tested: SQ4-FB-075U-075D-92765-1D-UNV-STD-W-8-2700K

Issue Date: 12/17/2024

**Test Information**

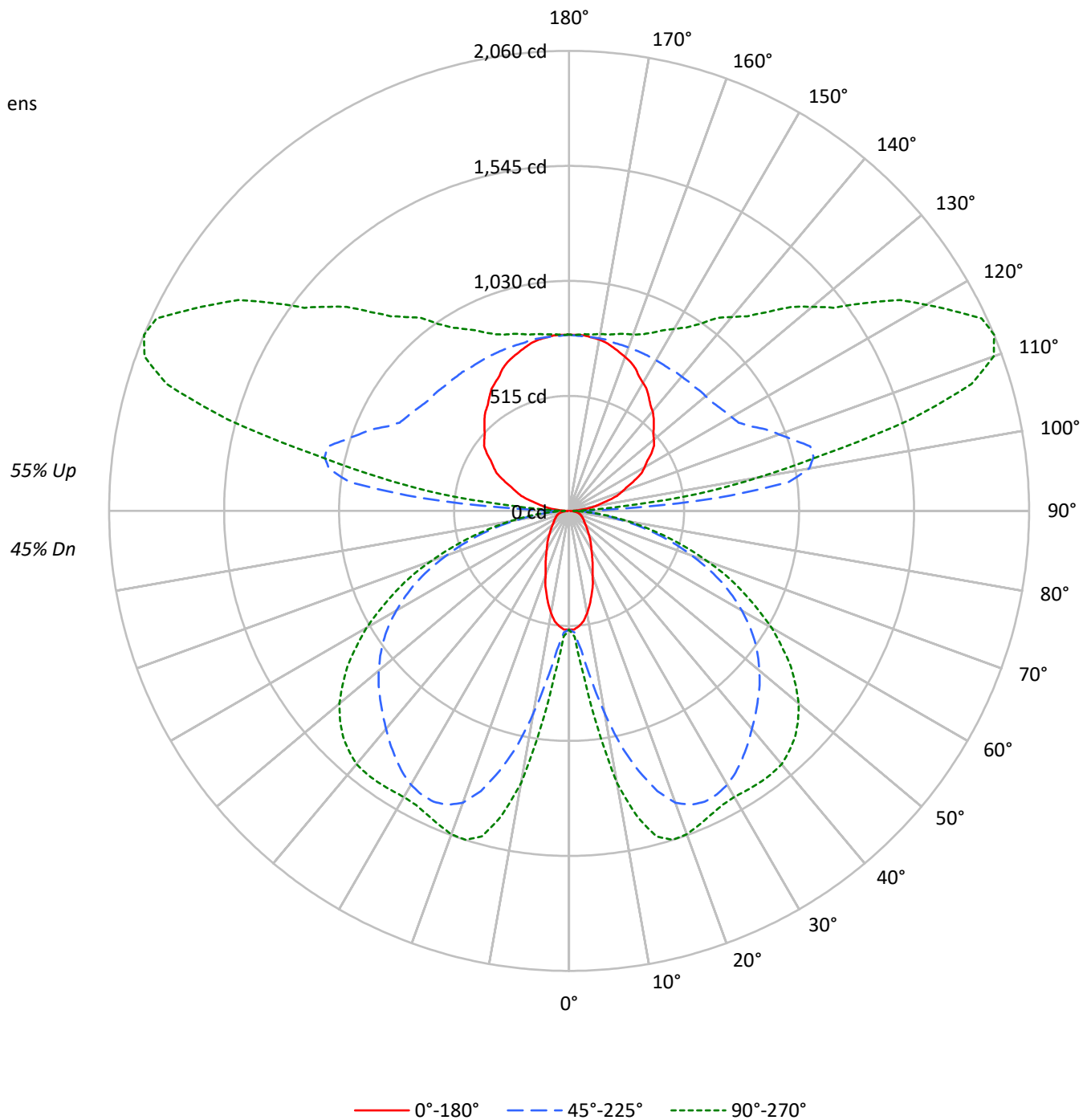
Test Method: LM-79-2019  
Report Number: P937143  
REPORT IS A COMBINATION OF REPORTS P933518 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-075D-92765-1D-UNV-STD-W-8-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9228.0 lumens  
Efficiency: N/A  
Efficacy: 108.8 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 (A<sub>in</sub>): 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°	2465	2465	2465
5°	2408	2849	3313
10°	2184	4153	5493
15°	1856	5426	6633
20°	1511	6288	6760
25°	1261	6580	6622
30°	1063	6621	6610
35°	940	6511	6781
40°	819	6368	6957
45°	742	6264	6985
50°	681	6170	6869
55°	652	6032	6565
60°	668	5766	6084
65°	694	5364	5423
70°	740	4678	4581
75°	819	3814	3575
80°	896	2646	2409
85°	796	1403	1234

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6985 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.7	0.7
10°-20°	304.6	3.3
20°-30°	532.8	5.8
30°-40°	685.8	7.4
40°-50°	766.1	8.3
50°-60°	733.7	8.0
60°-70°	581.4	6.3
70°-80°	341.9	3.7
80°-90°	98.0	1.1
90°-100°	384.6	4.2
100°-110°	1011.1	11.0
110°-120°	1048.5	11.4
120°-130°	841.0	9.1
130°-140°	659.9	7.2
140°-150°	506.5	5.5
150°-160°	364.8	4.0
160°-170°	223.2	2.4
170°-180°	75.4	0.8
0°-30°	906.1	9.8
0°-40°	1591.9	17.3
0°-60°	3091.7	33.5
0°-90°	4113.1	44.6
90°-120°	2444.2	26.5
90°-150°	4451.6	48.2
90°-180°	5115.0	55.4
0°-180°	9228.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	531	531	531	531	531	
5°	518	555	625	707	733	48
15°	388	716	1206	1462	1508	108
25°	248	811	1437	1500	1502	114
35°	167	776	1353	1430	1486	105
45°	114	618	1196	1370	1432	89
55°	82	393	1015	1179	1211	75
65°	65	208	753	847	859	64
75°	48	128	413	454	456	50
85°	17	39	102	113	114	18
90°	5	15	40	20	20	6
95°	51	199	662	342	232	56
105°	182	276	1118	1697	1583	193
115°	324	393	896	1786	2039	320
125°	450	505	814	1376	1624	400
135°	536	590	789	1111	1260	415
145°	622	662	779	948	1022	390
155°	703	723	779	855	880	323
165°	759	769	779	810	820	214
175°	789	789	784	794	794	75
180°	789	789	789	789	789	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	531.3	531.3	531.3	531.3	531.3	531.3	531.3	531.3	531.3	531.3	531.3
2.5°	531.3	531.3	534.7	536.4	539.8	541.5	544.9	548.4	558.6	560.3	563.7
5°	517.6	524.4	546.6	555.2	579.1	611.6	625.2	647.4	693.6	707.2	715.8
7.5°	497.1	512.5	567.1	580.8	640.6	726.0	761.9	809.7	883.2	919.0	948.1
10°	464.6	497.1	594.5	626.9	724.3	854.1	920.7	987.5	1098.5	1148.0	1166.8
12.5°	428.8	481.7	623.5	667.9	808.0	997.7	1078.0	1151.4	1277.9	1344.5	1354.7
15°	387.8	459.5	650.8	715.8	896.8	1117.3	1206.1	1296.7	1414.5	1462.4	1474.3
17.5°	351.9	442.4	676.5	744.8	965.2	1224.9	1315.4	1390.6	1486.3	1518.7	1527.3
20°	307.5	415.1	693.6	782.4	1037.0	1303.5	1390.6	1448.7	1513.6	1534.1	1537.5
22.5°	275.0	386.1	703.8	796.0	1084.8	1351.3	1424.8	1470.9	1515.3	1522.1	1523.8
25°	247.7	353.6	702.1	811.4	1125.8	1380.4	1436.7	1470.9	1496.5	1499.9	1499.9
27.5°	222.1	317.7	695.3	814.8	1156.6	1387.2	1431.6	1455.5	1467.5	1474.3	1474.3
30°	199.9	283.6	678.2	808.0	1170.2	1380.4	1416.2	1428.2	1440.1	1450.4	1455.5
32.5°	182.8	251.1	652.6	794.3	1171.9	1363.3	1388.9	1395.7	1412.8	1436.7	1445.3
35°	167.4	218.7	623.5	775.5	1161.7	1335.9	1353.0	1359.9	1394.0	1429.9	1441.9
37.5°	152.0	194.7	585.9	743.1	1146.3	1303.5	1315.4	1327.4	1380.4	1423.1	1436.7
40°	136.7	174.2	541.5	707.2	1122.4	1264.2	1274.4	1293.2	1363.3	1412.8	1426.5
42.5°	124.7	157.2	493.7	669.6	1091.7	1219.8	1235.2	1262.5	1342.8	1395.7	1411.1
45°	114.5	140.1	442.4	618.4	1052.4	1173.7	1195.9	1233.4	1318.9	1370.1	1383.8
47.5°	104.2	128.1	389.5	565.4	1009.7	1127.5	1156.6	1199.3	1286.4	1335.9	1347.9
50°	95.7	116.2	336.5	509.1	963.5	1078.0	1112.2	1156.6	1245.4	1291.5	1306.9
52.5°	88.8	105.9	287.0	452.7	910.5	1026.7	1066.0	1112.2	1195.9	1240.3	1250.5
55°	82.0	97.4	244.3	392.9	855.8	972.1	1014.8	1059.2	1141.2	1178.8	1185.6
57.5°	78.6	90.5	208.4	336.5	797.8	910.5	958.3	999.4	1076.3	1105.3	1112.2
60°	73.5	85.4	181.1	288.7	734.6	852.4	893.4	934.4	999.4	1023.3	1028.5
62.5°	68.3	82.0	160.6	242.6	669.6	784.1	825.1	862.7	917.3	934.4	941.2
65°	64.9	78.6	145.2	208.4	603.0	712.3	753.3	785.8	830.2	847.3	850.7
67.5°	61.5	75.2	133.2	179.4	536.4	640.6	671.3	702.1	736.3	753.3	755.0
70°	56.4	71.7	123.0	158.9	468.1	558.6	584.2	616.7	644.0	652.6	657.7
72.5°	53.0	66.6	116.2	143.5	398.0	480.0	503.9	522.7	546.6	555.2	555.2
75°	47.8	59.8	109.3	128.1	326.3	392.9	413.4	432.2	451.0	454.4	449.3
77.5°	42.7	53.0	94.0	107.6	254.5	310.9	328.0	338.2	353.6	357.0	358.7
80°	35.9	46.1	73.5	83.7	184.5	228.9	240.9	249.4	263.1	263.1	266.5
82.5°	27.3	35.9	53.0	59.8	124.7	157.2	167.4	172.5	181.1	181.1	181.1
85°	17.1	22.2	34.2	39.3	75.2	95.7	102.5	104.2	111.0	112.7	112.7
87.5°	8.5	12.0	22.2	23.9	39.3	49.5	49.5	53.0	53.0	51.2	49.5
90°	5.3	9.6	13.8	14.9	23.3	34.6	40.2	35.8	26.8	20.2	20.2
92.5°	21.2	57.2	93.3	102.2	143.7	199.0	226.7	198.7	142.6	100.6	96.6
95°	50.8	116.8	182.6	199.1	353.5	559.5	662.5	591.1	448.5	341.6	329.4
97.5°	87.9	146.1	204.2	218.7	476.3	819.6	991.3	946.2	856.1	788.5	765.5
100°	116.5	169.2	222.0	235.1	520.9	902.0	1092.4	1095.8	1102.3	1107.3	1079.8
102.5°	140.8	190.0	239.2	251.5	541.3	927.8	1121.0	1178.4	1293.3	1379.5	1355.9
105°	182.2	223.9	265.5	275.9	556.5	930.7	1117.9	1246.6	1504.0	1697.2	1684.5
107.5°	224.6	263.4	302.2	311.9	559.4	889.3	1054.3	1233.9	1593.0	1862.4	1865.5
110°	253.2	288.2	323.2	332.0	555.1	852.6	1001.4	1202.1	1603.6	1904.8	1917.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	281.2	314.6	348.0	356.3	555.3	820.6	953.2	1158.7	1569.6	1877.8	1898.0
115°	323.5	354.4	385.2	392.9	560.4	783.7	895.5	1093.4	1489.3	1786.2	1814.3
117.5°	365.4	393.4	421.4	428.4	570.9	760.8	855.8	1034.3	1391.6	1659.6	1690.7
120°	389.7	416.0	442.4	449.0	579.3	753.0	839.9	1003.1	1329.5	1574.3	1604.6
122.5°	413.6	440.2	466.8	473.4	591.5	748.9	827.7	974.6	1268.6	1489.1	1518.9
125°	450.1	474.4	498.6	504.6	607.9	745.6	814.4	939.3	1188.9	1376.3	1403.8
127.5°	479.8	504.3	528.7	534.9	624.4	743.7	803.3	910.5	1124.9	1285.7	1308.9
130°	495.7	522.0	548.4	554.9	636.3	744.9	799.1	894.5	1085.4	1228.6	1250.0
132.5°	512.0	538.4	564.8	571.4	646.1	745.6	795.4	880.8	1051.7	1179.8	1199.0
135°	536.4	560.4	584.5	590.5	656.7	744.9	789.0	860.6	1003.7	1111.0	1127.5
137.5°	561.3	585.1	608.8	614.8	672.5	749.5	787.9	848.4	969.4	1060.1	1073.6
140°	582.0	603.9	625.7	631.2	682.2	750.3	784.3	836.5	941.0	1019.4	1032.0
142.5°	597.9	618.1	638.4	643.4	690.4	753.0	784.3	830.1	921.9	990.8	1001.6
145°	622.2	639.9	657.5	661.9	701.0	753.0	779.0	816.5	891.6	947.9	956.1
147.5°	646.6	663.7	681.0	685.3	716.5	758.1	779.0	808.5	867.5	911.9	918.7
150°	662.5	678.0	693.6	697.4	724.6	760.9	779.0	803.9	853.8	891.2	896.7
152.5°	678.9	690.6	702.4	705.3	729.9	762.6	779.0	800.2	842.9	874.8	879.0
155°	703.2	711.9	720.6	722.8	741.6	766.5	779.0	795.9	829.8	855.2	858.0
157.5°	721.2	729.7	738.1	740.3	753.2	770.3	779.0	792.1	818.5	838.2	840.2
160°	733.4	740.0	746.6	748.2	758.5	772.1	779.0	790.2	812.9	829.8	830.9
162.5°	745.6	750.5	755.5	756.8	764.2	774.0	779.0	788.5	807.6	821.8	822.9
165°	758.8	763.2	767.8	768.9	772.2	776.7	779.0	785.8	799.5	809.7	810.8
167.5°	771.0	773.2	775.3	775.8	778.6	782.4	784.3	788.7	797.7	804.4	804.8
170°	779.0	781.1	783.2	783.7	783.9	784.2	784.3	788.7	797.7	804.4	804.4
172.5°	783.2	783.7	784.2	784.3	784.3	784.3	784.3	787.8	794.9	800.1	799.7
175°	789.0	789.0	789.0	789.0	787.4	785.3	784.3	786.5	791.0	794.3	794.3
177.5°	789.0	789.0	789.0	789.0	787.8	786.1	785.3	787.1	790.6	793.2	792.8
180°	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	531.3	531.3
2.5°	567.1	563.7
5°	729.4	732.8
7.5°	982.3	980.6
10°	1221.5	1236.9
12.5°	1395.7	1399.1
15°	1501.6	1508.5
17.5°	1542.6	1544.3
20°	1544.3	1540.9
22.5°	1525.6	1522.1
25°	1503.4	1501.6
27.5°	1482.9	1484.6
30°	1474.3	1479.4
32.5°	1474.3	1482.9
35°	1477.7	1486.3
37.5°	1476.0	1486.3
40°	1469.2	1481.1
42.5°	1450.4	1458.9
45°	1421.4	1431.6
47.5°	1383.8	1390.6
50°	1335.9	1342.8
52.5°	1276.2	1277.9
55°	1204.4	1211.2
57.5°	1127.5	1129.2
60°	1042.1	1047.2
62.5°	951.5	951.5
65°	855.8	859.3
67.5°	756.8	765.3
70°	656.0	657.7
72.5°	556.9	556.9
75°	454.4	456.1
77.5°	357.0	357.0
80°	264.8	266.5
82.5°	182.8	186.2
85°	114.5	114.5
87.5°	53.0	47.8
90°	20.2	20.2
92.5°	80.6	64.6
95°	281.0	232.5
97.5°	673.1	580.9
100°	969.9	860.0
102.5°	1261.8	1167.7
105°	1633.9	1583.3
107.5°	1877.7	1889.9
110°	1970.7	2023.4





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1978.9	2059.9
115°	1926.5	2038.7
117.5°	1815.2	1939.7
120°	1725.6	1846.5
122.5°	1638.2	1757.5
125°	1513.7	1623.6
127.5°	1401.6	1494.4
130°	1335.6	1421.3
132.5°	1275.7	1352.4
135°	1193.6	1259.8
137.5°	1127.8	1181.9
140°	1082.7	1133.3
142.5°	1045.2	1088.8
145°	989.1	1022.0
147.5°	945.9	973.3
150°	918.9	941.0
152.5°	895.6	912.4
155°	869.1	880.1
157.5°	848.0	855.8
160°	835.4	839.9
162.5°	827.1	831.4
165°	815.3	819.7
167.5°	806.7	808.6
170°	804.4	804.4
172.5°	798.1	796.5
175°	794.3	794.3
177.5°	790.9	789.0
180°	789.0	789.0



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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	3.62	4.47	4.62	5.48	6.83	16.80	17.65	17.80	18.66	20.00
	3H	4.33	5.09	5.33	6.11	7.47	18.64	19.40	19.65	20.42	21.79
	4H	4.62	5.35	5.64	6.37	7.74	19.28	20.01	20.30	21.03	22.40
	6H	4.87	5.54	5.90	6.57	7.95	19.71	20.38	20.74	21.41	22.79
	8H	4.94	5.58	5.98	6.62	8.00	19.83	20.47	20.87	21.51	22.89
	12H	4.96	5.56	6.00	6.60	8.01	19.90	20.51	20.94	21.54	22.95
4H	2H	10.84	11.56	11.86	12.58	13.95	17.07	17.80	18.10	18.82	20.19
	3H	12.40	13.01	13.44	14.06	15.44	19.12	19.72	20.15	20.77	22.16
	4H	12.50	13.05	13.54	14.09	15.50	19.88	20.44	20.93	21.48	22.89
	6H	12.51	12.98	13.56	14.05	15.45	20.42	20.90	21.47	21.97	23.37
	8H	12.48	12.93	13.54	13.99	15.41	20.59	21.03	21.64	22.09	23.51
	12H	12.44	12.84	13.51	13.92	15.34	20.68	21.08	21.75	22.16	23.58
8H	4H	13.94	14.39	14.99	15.45	16.87	19.94	20.39	21.00	21.45	22.87
	6H	14.18	14.55	15.26	15.65	17.07	20.57	20.94	21.65	22.04	23.46
	8H	14.20	14.53	15.28	15.61	17.05	20.79	21.12	21.88	22.20	23.64
	12H	14.17	14.45	15.26	15.53	17.01	20.94	21.22	22.02	22.30	23.78
12H	4H	14.08	14.49	15.15	15.56	16.99	19.90	20.30	20.97	21.37	22.80
	6H	14.44	14.77	15.52	15.85	17.29	20.56	20.88	21.64	21.97	23.40
	8H	14.51	14.80	15.60	15.88	17.35	20.78	21.07	21.87	22.15	23.63