

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: P936772

Luminaire Tested: SQ4-FB-050U-075D-935-1D-UNV-STD-W-8

Issue Date: 12/17/2024

**Test Information**

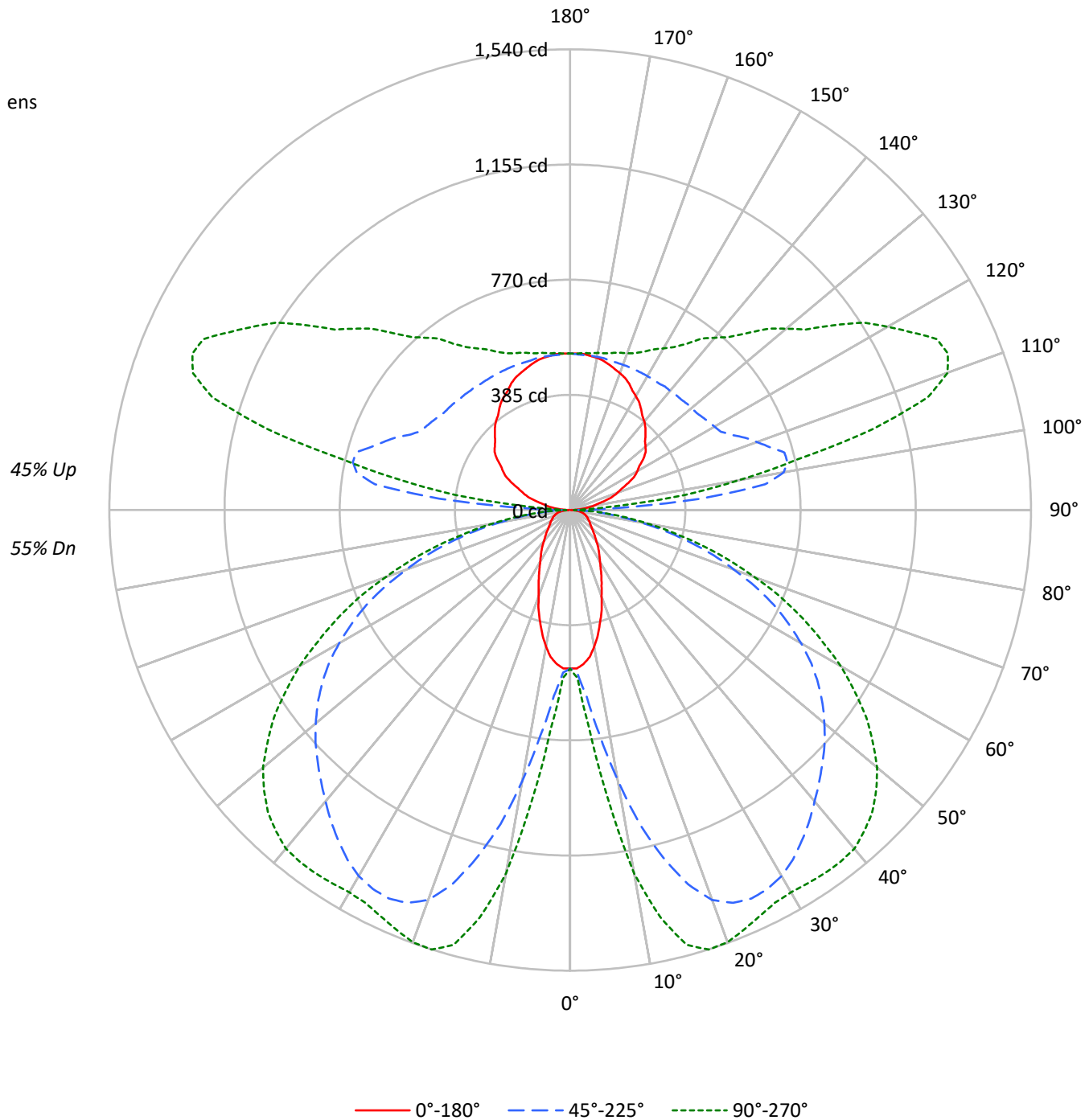
Test Method: LM-79-2019  
Report Number: P936772  
REPORT IS A COMBINATION OF REPORTS P933486 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-075D-935-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7494.2 lumens  
Efficiency: N/A  
Efficacy: 102.9 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): 72.8  
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	50	30	10	0
RCR																					
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	50	50	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	41	41	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	34	34	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	29	29	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	25	25	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	21	21	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	19	19	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	16	16	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	15	15	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	13	13	13	11

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

	0°	45°	90°
0°	2459	2459	2459
5°	2402	2842	3305
10°	2179	4143	5480
15°	1852	5412	6616
20°	1507	6272	6743
25°	1258	6563	6606
30°	1061	6605	6593
35°	938	6495	6764
40°	817	6353	6940
45°	740	6248	6967
50°	678	6154	6852
55°	650	6017	6548
60°	666	5752	6069
65°	693	5351	5409
70°	737	4666	4570
75°	817	3805	3567
80°	893	2639	2403
85°	792	1399	1230

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6967 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.6	0.9
10°-20°	303.8	4.1
20°-30°	531.4	7.1
30°-40°	684.1	9.1
40°-50°	764.2	10.2
50°-60°	731.9	9.8
60°-70°	580.0	7.7
70°-80°	341.0	4.6
80°-90°	96.7	1.3
90°-100°	255.1	3.4
100°-110°	670.6	8.9
110°-120°	695.4	9.3
120°-130°	557.8	7.4
130°-140°	437.7	5.8
140°-150°	335.9	4.5
150°-160°	241.9	3.2
160°-170°	148.0	2.0
170°-180°	50.0	0.7
0°-30°	903.8	12.1
0°-40°	1588.0	21.2
0°-60°	3084.0	41.2
0°-90°	4101.8	54.7
90°-120°	1621.1	21.6
90°-150°	2952.4	39.4
90°-180°	3392.0	45.3
0°-180°	7494.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	530	530	530	530	530	
5°	516	554	624	706	731	48
15°	387	714	1203	1459	1505	108
25°	247	809	1433	1496	1498	114
35°	167	774	1350	1426	1483	104
45°	114	617	1193	1367	1428	88
55°	82	392	1012	1176	1208	75
65°	65	208	752	845	857	64
75°	48	128	412	453	455	50
85°	17	39	102	112	114	18
90°	4	10	27	13	13	4
95°	34	132	439	226	154	37
105°	121	183	741	1126	1050	128
115°	215	261	594	1185	1352	212
125°	298	335	540	913	1077	265
135°	356	392	523	737	836	275
145°	413	439	517	629	678	259
155°	466	479	517	567	584	214
165°	503	510	517	537	544	142
175°	523	523	520	527	527	50
180°	523	523	523	523	523	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9
2.5°	529.9	529.9	533.4	535.1	538.5	540.2	543.6	547.0	557.2	558.9	562.3
5°	516.3	523.1	545.3	553.8	577.7	610.0	623.7	645.8	691.8	705.5	714.0
7.5°	495.9	511.2	565.7	579.4	639.0	724.2	760.0	807.7	881.0	916.8	945.7
10°	463.5	495.9	593.0	625.4	722.5	852.0	918.5	985.0	1095.8	1145.2	1163.9
12.5°	427.7	480.5	622.0	666.3	806.0	995.2	1075.3	1148.6	1274.7	1341.1	1351.4
15°	386.8	458.4	649.2	714.0	894.6	1114.5	1203.1	1293.4	1411.0	1458.7	1470.6
17.5°	351.0	441.3	674.8	742.9	962.8	1221.9	1312.2	1387.1	1482.6	1514.9	1523.5
20°	306.7	414.1	691.8	780.4	1034.4	1300.2	1387.1	1445.1	1509.8	1530.3	1533.7
22.5°	274.3	385.1	702.0	794.1	1082.1	1347.9	1421.2	1467.2	1511.5	1518.3	1520.1
25°	247.1	352.7	700.3	809.4	1123.0	1376.9	1433.1	1467.2	1492.8	1496.2	1496.2
27.5°	221.5	316.9	693.5	812.8	1153.7	1383.7	1428.0	1451.9	1463.8	1470.6	1470.6
30°	199.4	282.9	676.5	806.0	1167.3	1376.9	1412.7	1424.6	1436.6	1446.8	1451.9
32.5°	182.3	250.5	650.9	792.4	1169.0	1359.9	1385.4	1392.3	1409.3	1433.1	1441.7
35°	167.0	218.1	622.0	773.6	1158.8	1332.6	1349.7	1356.5	1390.5	1426.3	1438.3
37.5°	151.7	194.3	584.5	741.2	1143.5	1300.2	1312.2	1324.1	1376.9	1419.5	1433.1
40°	136.3	173.8	540.2	705.5	1119.6	1261.0	1271.3	1290.0	1359.9	1409.3	1422.9
42.5°	124.4	156.8	492.5	668.0	1088.9	1216.7	1232.1	1259.3	1339.4	1392.3	1407.6
45°	114.2	139.7	441.3	616.8	1049.7	1170.7	1192.9	1230.4	1315.6	1366.7	1380.3
47.5°	103.9	127.8	388.5	564.0	1007.1	1124.7	1153.7	1196.3	1283.2	1332.6	1344.5
50°	95.4	115.9	335.7	507.8	961.1	1075.3	1109.4	1153.7	1242.3	1288.3	1303.6
52.5°	88.6	105.6	286.3	451.6	908.2	1024.2	1063.4	1109.4	1192.9	1237.2	1247.4
55°	81.8	97.1	243.7	391.9	853.7	969.7	1012.3	1056.6	1138.4	1175.8	1182.7
57.5°	78.4	90.3	207.9	335.7	795.8	908.2	955.9	996.9	1073.6	1102.6	1109.4
60°	73.3	85.2	180.6	288.0	732.7	850.3	891.2	932.1	996.9	1020.8	1025.9
62.5°	68.2	81.8	160.2	242.0	668.0	782.1	823.0	860.5	915.0	932.1	938.9
65°	64.8	78.4	144.8	207.9	601.5	710.6	751.5	783.8	828.1	845.2	848.6
67.5°	61.3	75.0	132.9	178.9	535.1	639.0	669.7	700.3	734.4	751.5	753.2
70°	56.2	71.6	122.7	158.5	466.9	557.2	582.8	615.1	642.4	650.9	656.0
72.5°	52.8	66.5	115.9	143.1	397.0	478.8	502.7	521.4	545.3	553.8	553.8
75°	47.7	59.6	109.1	127.8	325.5	391.9	412.4	431.1	449.9	453.3	448.2
77.5°	42.6	52.8	93.7	107.4	253.9	310.1	327.2	337.4	352.7	356.1	357.8
80°	35.8	46.0	73.3	83.5	184.0	228.3	240.3	248.8	262.4	262.4	265.8
82.5°	27.3	35.8	52.8	59.6	124.4	156.8	167.0	172.1	180.6	180.6	180.6
85°	17.0	22.2	34.1	39.2	75.0	95.4	102.2	103.9	110.8	112.5	112.5
87.5°	8.5	11.9	22.2	23.9	39.2	49.4	49.4	52.8	52.8	51.1	49.4
90°	3.5	6.3	9.1	9.8	15.4	22.9	26.7	23.7	17.8	13.4	13.4
92.5°	14.1	37.9	61.9	67.8	95.3	132.0	150.3	131.7	94.6	66.7	64.1
95°	33.7	77.4	121.2	132.1	234.5	371.0	439.4	392.1	297.5	226.5	218.5
97.5°	58.3	96.8	135.4	145.0	315.8	543.6	657.5	627.6	567.8	523.0	507.6
100°	77.3	112.2	147.1	155.9	345.5	598.2	724.5	726.8	731.1	734.3	716.1
102.5°	93.5	126.1	158.6	166.8	359.0	615.4	743.5	781.6	857.8	914.9	899.3
105°	120.8	148.4	176.1	183.0	369.2	617.4	741.4	826.8	997.6	1125.7	1117.2
107.5°	148.9	174.7	200.4	206.9	371.0	589.8	699.2	818.3	1056.6	1235.2	1237.3
110°	167.8	191.1	214.4	220.2	368.2	565.5	664.1	797.3	1063.6	1263.3	1272.0



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	186.5	208.7	230.8	236.3	368.3	544.3	632.2	768.4	1041.0	1245.4	1258.8
115°	214.6	235.1	255.5	260.6	371.7	519.9	593.9	725.2	987.7	1184.6	1203.2
117.5°	242.3	260.9	279.5	284.1	378.6	504.6	567.5	686.0	923.0	1100.7	1121.3
120°	258.5	276.0	293.5	297.9	384.3	499.4	557.0	665.2	881.7	1044.1	1064.1
122.5°	274.3	291.9	309.5	314.0	392.3	496.7	548.9	646.4	841.4	987.6	1007.4
125°	298.5	314.6	330.7	334.7	403.2	494.5	540.2	623.0	788.6	912.8	931.1
127.5°	318.2	334.4	350.6	354.7	414.1	493.2	532.8	603.9	746.1	852.8	868.1
130°	328.7	346.2	363.7	368.1	422.0	494.0	529.9	593.2	719.9	814.8	829.0
132.5°	339.6	357.1	374.6	379.0	428.5	494.5	527.6	584.2	697.5	782.5	795.2
135°	355.8	371.7	387.6	391.6	435.5	494.0	523.3	570.8	665.7	736.8	747.8
137.5°	372.3	388.1	403.8	407.8	446.0	497.1	522.6	562.7	643.0	703.2	712.1
140°	386.0	400.5	415.0	418.7	452.5	497.6	520.1	554.8	624.1	676.1	684.4
142.5°	396.5	409.9	423.4	426.7	457.9	499.4	520.1	550.6	611.5	657.1	664.4
145°	412.7	424.4	436.1	439.0	464.9	499.4	516.7	541.5	591.4	628.7	634.1
147.5°	428.8	440.2	451.6	454.5	475.2	502.9	516.7	536.2	575.4	604.7	609.3
150°	439.4	449.7	460.0	462.6	480.6	504.6	516.7	533.2	566.3	591.1	594.8
152.5°	450.3	458.1	465.9	467.8	484.1	505.8	516.7	530.8	559.0	580.2	583.0
155°	466.4	472.2	478.0	479.4	491.9	508.4	516.7	527.9	550.3	567.2	569.1
157.5°	478.3	483.9	489.6	491.0	499.5	510.9	516.7	525.3	542.8	555.9	557.2
160°	486.4	490.8	495.2	496.3	503.1	512.1	516.7	524.2	539.1	550.3	551.1
162.5°	494.5	497.8	501.1	501.9	506.9	513.4	516.7	523.0	535.7	545.1	545.8
165°	503.3	506.3	509.2	509.9	512.1	515.1	516.7	521.2	530.2	537.0	537.8
167.5°	511.4	512.7	514.2	514.5	516.4	518.9	520.1	523.1	529.1	533.5	533.9
170°	516.7	518.0	519.5	519.8	519.9	520.1	520.1	523.1	529.1	533.5	533.5
172.5°	519.5	519.8	520.1	520.1	520.1	520.1	520.1	522.5	527.2	530.7	530.5
175°	523.3	523.3	523.3	523.3	522.3	520.8	520.1	521.6	524.6	526.8	526.8
177.5°	523.3	523.3	523.3	523.3	522.4	521.3	520.8	522.0	524.3	526.1	525.8
180°	523.3	523.3	523.3	523.3	523.3	523.3	523.3	523.3	523.3	523.3	523.3



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	529.9	529.9
2.5°	565.7	562.3
5°	727.6	731.0
7.5°	979.9	978.2
10°	1218.4	1233.8
12.5°	1392.3	1395.7
15°	1497.9	1504.7
17.5°	1538.8	1540.5
20°	1540.5	1537.1
22.5°	1521.8	1518.3
25°	1499.6	1497.9
27.5°	1479.2	1480.9
30°	1470.6	1475.7
32.5°	1470.6	1479.2
35°	1474.0	1482.6
37.5°	1472.3	1482.6
40°	1465.5	1477.5
42.5°	1446.8	1455.3
45°	1417.8	1428.0
47.5°	1380.3	1387.1
50°	1332.6	1339.4
52.5°	1273.0	1274.7
55°	1201.4	1208.2
57.5°	1124.7	1126.4
60°	1039.5	1044.6
62.5°	949.1	949.1
65°	853.7	857.1
67.5°	754.9	763.4
70°	654.3	656.0
72.5°	555.5	555.5
75°	453.3	455.0
77.5°	356.1	356.1
80°	264.1	265.8
82.5°	182.3	185.7
85°	114.2	114.2
87.5°	52.8	47.7
90°	13.4	13.4
92.5°	53.4	42.9
95°	186.3	154.2
97.5°	446.4	385.3
100°	643.3	570.3
102.5°	836.8	774.4
105°	1083.7	1050.1
107.5°	1245.4	1253.5
110°	1307.0	1342.0





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1312.5	1366.2
115°	1277.7	1352.1
117.5°	1204.0	1286.5
120°	1144.4	1224.7
122.5°	1086.6	1165.7
125°	1003.9	1076.8
127.5°	929.6	991.1
130°	885.8	942.7
132.5°	846.1	897.0
135°	791.7	835.6
137.5°	748.1	783.9
140°	718.0	751.5
142.5°	693.2	722.1
145°	656.0	677.9
147.5°	627.4	645.6
150°	609.4	624.1
152.5°	594.1	605.2
155°	576.4	583.7
157.5°	562.4	567.5
160°	554.1	557.0
162.5°	548.6	551.4
165°	540.7	543.7
167.5°	535.1	536.3
170°	533.5	533.5
172.5°	529.3	528.2
175°	526.8	526.8
177.5°	524.6	523.3
180°	523.3	523.3



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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	4.55	5.50	5.46	6.43	7.63	17.73	18.68	18.64	19.61	20.81
	3H	5.26	6.12	6.18	7.06	8.28	19.58	20.43	20.49	21.37	22.59
	4H	5.57	6.37	6.50	7.32	8.55	20.23	21.03	21.16	21.98	23.21
	6H	5.82	6.57	6.77	7.52	8.76	20.66	21.41	21.61	22.36	23.60
	8H	5.89	6.60	6.84	7.57	8.82	20.78	21.50	21.74	22.47	23.71
	12H	5.91	6.59	6.87	7.55	8.82	20.86	21.53	21.81	22.50	23.77
4H	2H	11.78	12.59	12.72	13.53	14.76	18.02	18.82	18.95	19.77	21.00
	3H	13.35	14.03	14.30	15.01	16.25	20.07	20.75	21.02	21.72	22.97
	4H	13.45	14.07	14.41	15.04	16.31	20.84	21.46	21.80	22.43	23.70
	6H	13.47	14.00	14.44	15.00	16.27	21.38	21.92	22.36	22.91	24.18
	8H	13.45	13.95	14.42	14.94	16.22	21.55	22.05	22.52	23.04	24.32
	12H	13.41	13.86	14.40	14.87	16.16	21.65	22.10	22.64	23.10	24.39
8H	4H	14.90	15.40	15.88	16.39	17.68	20.91	21.41	21.88	22.40	23.68
	6H	15.15	15.57	16.15	16.60	17.88	21.54	21.96	22.54	22.99	24.27
	8H	15.17	15.54	16.18	16.55	17.85	21.76	22.13	22.77	23.15	24.45
	12H	15.14	15.47	16.16	16.48	17.82	21.91	22.23	22.92	23.25	24.59
12H	4H	15.05	15.50	16.05	16.51	17.80	20.86	21.32	21.86	22.32	23.61
	6H	15.41	15.78	16.42	16.79	18.10	21.53	21.89	22.53	22.91	24.21
	8H	15.48	15.81	16.50	16.82	18.16	21.76	22.08	22.77	23.09	24.44