

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: P937472

Luminaire Tested: SQ4-FB-100U-050D-935-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937472
REPORT IS A COMBINATION OF REPORTS P933581 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

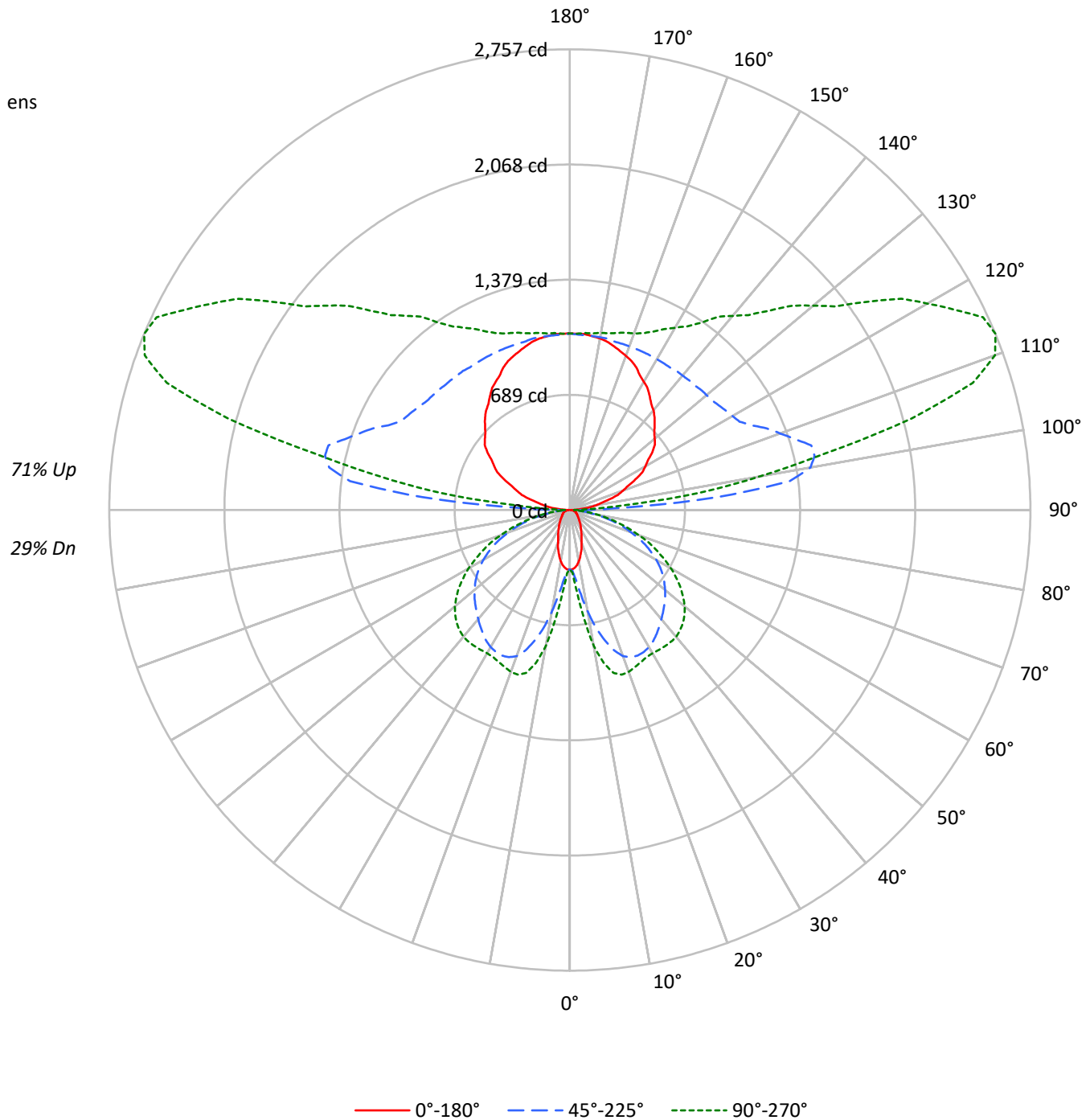
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9599.5 lumens
Efficiency: N/A
Efficacy: 116.5 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: Semi-Indirect

Input Watts (W): 82.4
Input Voltage (V): NR
Input Current (A_{in}): 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				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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29				29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	23				23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	19				19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16				16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	13				13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11				11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10				10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8				8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7				7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	7				7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	6				6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1649	1649	1649
5°	1611	1906	2216
10°	1461	2778	3675
15°	1242	3630	4437
20°	1011	4206	4521
25°	843	4402	4430
30°	711	4429	4422
35°	629	4356	4536
40°	548	4260	4654
45°	496	4190	4672
50°	455	4127	4595
55°	436	4035	4392
60°	447	3858	4070
65°	465	3589	3628
70°	494	3129	3065
75°	548	2552	2392
80°	599	1769	1611
85°	531	939	825

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4672 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.0	0.5
10°-20°	203.8	2.1
20°-30°	356.4	3.7
30°-40°	458.8	4.8
40°-50°	512.4	5.3
50°-60°	490.8	5.1
60°-70°	389.0	4.1
70°-80°	228.7	2.4
80°-90°	67.6	0.7
90°-100°	514.8	5.4
100°-110°	1353.4	14.1
110°-120°	1403.3	14.6
120°-130°	1125.6	11.7
130°-140°	883.2	9.2
140°-150°	677.9	7.1
150°-160°	488.2	5.1
160°-170°	298.7	3.1
170°-180°	100.9	1.1
0°-30°	606.1	6.3
0°-40°	1064.9	11.1
0°-60°	2068.2	21.5
0°-90°	2753.4	28.7
90°-120°	3271.5	34.1
90°-150°	5958.2	62.1
90°-180°	6846.0	71.3
0°-180°	9599.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	355	355	355	355	355	
5°	346	371	418	473	490	32
15°	259	479	807	978	1009	72
25°	166	543	961	1003	1004	76
35°	112	519	905	956	994	70
45°	77	414	800	916	958	59
55°	55	263	679	788	810	50
65°	44	139	504	567	575	43
75°	32	86	277	304	305	33
85°	11	26	69	75	77	12
90°	7	20	54	27	27	7
95°	68	266	887	457	311	76
105°	244	369	1496	2272	2119	258
115°	433	526	1198	2391	2729	428
125°	602	676	1090	1842	2173	535
135°	718	790	1056	1487	1686	555
145°	833	886	1043	1269	1368	522
155°	941	967	1043	1145	1178	432
165°	1016	1029	1043	1084	1097	287
175°	1056	1056	1050	1063	1063	100
180°	1056	1056	1056	1056	1056	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	355.4	355.4	355.4	355.4	355.4	355.4	355.4	355.4	355.4	355.4	355.4
2.5°	355.4	355.4	357.7	358.9	361.1	362.3	364.6	366.9	373.7	374.8	377.1
5°	346.3	350.9	365.7	371.4	387.4	409.1	418.2	433.1	464.0	473.1	478.8
7.5°	332.5	342.8	379.4	388.5	428.6	485.6	509.7	541.7	590.8	614.8	634.2
10°	310.8	332.5	397.7	419.4	484.5	571.4	616.0	660.6	734.8	767.9	780.5
12.5°	286.9	322.2	417.1	446.8	540.5	667.4	721.1	770.2	854.8	899.4	906.2
15°	259.4	307.4	435.4	478.8	600.0	747.4	806.8	867.3	946.2	978.2	986.2
17.5°	235.4	296.0	452.6	498.2	645.6	819.4	879.9	930.2	994.2	1015.9	1021.6
20°	205.7	277.7	464.0	523.4	693.7	871.9	930.2	969.1	1012.5	1026.2	1028.5
22.5°	183.9	258.2	470.8	532.5	725.6	904.0	953.0	984.0	1013.6	1018.2	1019.3
25°	165.7	236.5	469.7	542.8	753.1	923.4	961.1	984.0	1001.1	1003.4	1003.4
27.5°	148.6	212.6	465.1	545.1	773.7	927.9	957.6	973.7	981.7	986.2	986.2
30°	133.7	189.7	453.7	540.5	782.8	923.4	947.3	955.3	963.4	970.3	973.7
32.5°	122.3	168.0	436.6	531.4	783.9	911.9	929.1	933.6	945.0	961.1	966.8
35°	112.0	146.3	417.1	518.8	777.1	893.7	905.1	909.7	932.5	956.5	964.5
37.5°	101.7	130.3	392.0	497.1	766.8	871.9	879.9	888.0	923.4	951.9	961.1
40°	91.4	116.6	362.3	473.1	750.8	845.7	852.5	865.1	911.9	945.0	954.2
42.5°	83.4	105.1	330.2	448.0	730.2	816.0	826.3	844.5	898.3	933.6	943.9
45°	76.6	93.7	296.0	413.6	703.9	785.1	799.9	825.1	882.2	916.5	925.6
47.5°	69.7	85.7	260.5	378.3	675.4	754.3	773.7	802.2	860.5	893.7	901.7
50°	64.0	77.7	225.1	340.5	644.5	721.1	744.0	773.7	833.1	863.9	874.2
52.5°	59.4	70.9	192.0	302.8	609.1	686.8	713.1	744.0	799.9	829.7	836.5
55°	54.9	65.2	163.4	262.8	572.5	650.2	678.8	708.5	763.4	788.5	793.1
57.5°	52.6	60.6	139.4	225.1	533.7	609.1	641.1	668.6	719.9	739.4	744.0
60°	49.2	57.2	121.2	193.1	491.4	570.2	597.7	625.1	668.6	684.5	688.0
62.5°	45.8	54.9	107.4	162.3	448.0	524.6	551.9	577.1	613.7	625.1	629.7
65°	43.5	52.6	97.1	139.4	403.4	476.5	504.0	525.7	555.4	566.8	569.1
67.5°	41.2	50.3	89.1	120.0	358.9	428.6	449.1	469.7	492.5	504.0	505.1
70°	37.7	48.0	82.3	106.2	313.1	373.7	390.8	412.5	430.9	436.6	440.0
72.5°	35.4	44.6	77.7	96.0	266.2	321.1	337.1	349.7	365.7	371.4	371.4
75°	32.0	40.0	73.1	85.7	218.3	262.8	276.6	289.1	301.7	304.0	300.6
77.5°	28.5	35.4	62.9	72.0	170.3	208.0	219.4	226.3	236.5	238.8	240.0
80°	24.0	30.8	49.2	56.0	123.5	153.1	161.1	166.8	176.0	176.0	178.2
82.5°	18.3	24.0	35.4	40.0	83.4	105.1	112.0	115.4	121.2	121.2	121.2
85°	11.4	14.8	22.8	26.2	50.3	64.0	68.6	69.7	74.3	75.4	75.4
87.5°	5.7	8.0	14.8	16.0	26.2	33.1	33.1	35.4	35.4	34.3	33.1
90°	7.1	12.8	18.4	19.9	31.2	46.3	53.8	47.9	35.9	26.9	26.9
92.5°	28.4	76.6	124.8	136.8	192.3	266.3	303.3	265.8	190.9	134.7	129.3
95°	68.1	156.3	244.4	266.5	473.2	748.8	886.7	791.3	600.3	457.2	441.0
97.5°	117.7	195.4	273.3	292.7	637.5	1097.0	1326.8	1266.5	1145.9	1055.4	1024.5
100°	155.9	226.5	297.1	314.7	697.2	1207.2	1462.2	1466.6	1475.4	1482.1	1445.2
102.5°	188.5	254.3	320.2	336.6	724.5	1241.8	1500.5	1577.3	1731.1	1846.4	1814.8
105°	243.8	299.6	355.3	369.3	744.9	1245.8	1496.2	1668.5	2013.1	2271.6	2254.6
107.5°	300.5	352.5	404.4	417.5	748.7	1190.3	1411.2	1651.5	2132.2	2492.7	2496.8
110°	338.8	385.7	432.6	444.4	743.0	1141.2	1340.3	1609.0	2146.4	2549.4	2567.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	376.3	421.1	465.9	477.0	743.3	1098.3	1275.8	1550.8	2100.8	2513.3	2540.4
115°	433.1	474.3	515.6	525.9	750.1	1049.1	1198.5	1463.5	1993.3	2390.7	2428.3
117.5°	489.0	526.5	564.0	573.4	764.1	1018.2	1145.3	1384.4	1862.6	2221.2	2262.9
120°	521.7	557.0	592.2	601.0	775.4	1007.9	1124.1	1342.6	1779.5	2107.2	2147.6
122.5°	553.5	589.2	624.8	633.6	791.7	1002.4	1107.8	1304.5	1698.0	1993.1	2033.0
125°	602.4	634.9	667.4	675.5	813.7	997.9	1090.0	1257.2	1591.5	1842.1	1878.9
127.5°	642.2	674.9	707.7	715.9	835.6	995.4	1075.2	1218.7	1505.7	1720.9	1751.9
130°	663.4	698.6	733.9	742.8	851.7	996.9	1069.5	1197.2	1452.7	1644.4	1673.0
132.5°	685.3	720.6	755.9	764.8	864.7	997.9	1064.6	1178.9	1407.6	1579.1	1604.7
135°	718.0	750.1	782.3	790.3	878.9	997.0	1056.1	1151.8	1343.3	1487.0	1509.1
137.5°	751.3	783.1	814.9	822.9	900.1	1003.1	1054.6	1135.5	1297.5	1418.9	1437.1
140°	778.9	808.2	837.5	844.8	913.1	1004.2	1049.7	1119.6	1259.5	1364.4	1381.3
142.5°	800.2	827.3	854.4	861.1	924.0	1007.7	1049.7	1111.1	1234.0	1326.1	1340.7
145°	832.8	856.4	880.1	886.0	938.2	1007.8	1042.6	1092.9	1193.3	1268.7	1279.7
147.5°	865.4	888.4	911.4	917.2	959.0	1014.7	1042.6	1082.1	1161.2	1220.5	1229.6
150°	886.7	907.5	928.3	933.5	969.8	1018.3	1042.6	1076.0	1142.8	1192.9	1200.3
152.5°	908.7	924.4	940.2	944.1	976.9	1020.7	1042.6	1071.1	1128.1	1170.9	1176.5
155°	941.2	952.9	964.5	967.4	992.5	1025.9	1042.6	1065.3	1110.7	1144.7	1148.3
157.5°	965.3	976.6	988.1	990.9	1008.1	1031.1	1042.6	1060.2	1095.5	1122.0	1124.6
160°	981.7	990.5	999.3	1001.5	1015.2	1033.5	1042.6	1057.8	1088.0	1110.7	1112.2
162.5°	997.9	1004.6	1011.2	1012.9	1022.7	1035.9	1042.6	1055.4	1080.8	1100.0	1101.5
165°	1015.7	1021.6	1027.6	1029.1	1033.6	1039.6	1042.6	1051.7	1070.0	1083.7	1085.3
167.5°	1031.9	1034.8	1037.7	1038.3	1042.1	1047.1	1049.7	1055.6	1067.6	1076.6	1077.2
170°	1042.6	1045.4	1048.3	1049.0	1049.2	1049.5	1049.7	1055.6	1067.6	1076.6	1076.6
172.5°	1048.3	1048.9	1049.5	1049.7	1049.7	1049.7	1049.7	1054.4	1063.9	1071.0	1070.5
175°	1056.1	1056.1	1056.1	1056.1	1053.9	1051.1	1049.7	1052.6	1058.6	1063.1	1063.1
177.5°	1056.1	1056.1	1056.1	1056.1	1054.4	1052.2	1051.1	1053.5	1058.2	1061.8	1061.2
180°	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	355.4	355.4
2.5°	379.4	377.1
5°	487.9	490.2
7.5°	657.1	656.0
10°	817.1	827.4
12.5°	933.6	935.9
15°	1004.5	1009.1
17.5°	1031.9	1033.0
20°	1033.0	1030.7
22.5°	1020.5	1018.2
25°	1005.6	1004.5
27.5°	991.9	993.1
30°	986.2	989.7
32.5°	986.2	991.9
35°	988.5	994.2
37.5°	987.4	994.2
40°	982.8	990.8
42.5°	970.3	976.0
45°	950.8	957.6
47.5°	925.6	930.2
50°	893.7	898.3
52.5°	853.6	854.8
55°	805.7	810.3
57.5°	754.3	755.4
60°	697.1	700.5
62.5°	636.5	636.5
65°	572.5	574.8
67.5°	506.3	512.0
70°	438.9	440.0
72.5°	372.6	372.6
75°	304.0	305.1
77.5°	238.8	238.8
80°	177.1	178.2
82.5°	122.3	124.6
85°	76.6	76.6
87.5°	35.4	32.0
90°	26.9	26.9
92.5°	107.9	86.5
95°	376.1	311.2
97.5°	901.0	777.5
100°	1298.2	1151.1
102.5°	1688.8	1562.8
105°	2186.9	2119.2
107.5°	2513.2	2529.6
110°	2637.6	2708.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2648.7	2757.1
115°	2578.5	2728.8
117.5°	2429.6	2596.2
120°	2309.6	2471.5
122.5°	2192.7	2352.4
125°	2026.0	2173.1
127.5°	1876.0	2000.2
130°	1787.7	1902.3
132.5°	1707.5	1810.2
135°	1597.7	1686.2
137.5°	1509.5	1582.0
140°	1449.0	1516.7
142.5°	1399.0	1457.3
145°	1323.8	1367.9
147.5°	1266.2	1302.7
150°	1229.9	1259.5
152.5°	1198.8	1221.2
155°	1163.2	1178.0
157.5°	1134.9	1145.3
160°	1118.2	1124.1
162.5°	1107.1	1112.8
165°	1091.2	1097.2
167.5°	1079.7	1082.3
170°	1076.6	1076.6
172.5°	1068.2	1066.0
175°	1063.1	1063.1
177.5°	1058.6	1056.1
180°	1056.1	1056.1



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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	0.37	1.09	1.49	2.20	3.74	13.55	14.27	14.66	15.38	16.92
	3H	1.06	1.71	2.19	2.83	4.39	15.38	16.02	16.50	17.14	18.70
	4H	1.36	1.97	2.49	3.09	4.65	16.02	16.63	17.15	17.75	19.31
	6H	1.60	2.16	2.74	3.28	4.86	16.44	17.00	17.58	18.13	19.70
	8H	1.66	2.20	2.81	3.34	4.91	16.55	17.09	17.70	18.23	19.80
	12H	1.67	2.18	2.82	3.32	4.91	16.62	17.13	17.77	18.26	19.85
4H	2H	7.57	8.18	8.71	9.30	10.87	13.80	14.42	14.95	15.54	17.10
	3H	9.12	9.63	10.27	10.78	12.36	15.84	16.35	16.98	17.50	19.07
	4H	9.21	9.68	10.36	10.82	12.41	16.60	17.07	17.75	18.20	19.80
	6H	9.21	9.61	10.37	10.77	12.36	17.13	17.53	18.28	18.69	20.28
	8H	9.18	9.56	10.34	10.71	12.32	17.29	17.66	18.44	18.81	20.42
	12H	9.13	9.48	10.31	10.64	12.25	17.37	17.71	18.54	18.88	20.49
8H	4H	10.64	11.02	11.80	12.17	13.77	16.65	17.02	17.80	18.17	19.78
	6H	10.88	11.19	12.05	12.38	13.98	17.27	17.58	18.44	18.77	20.37
	8H	10.89	11.16	12.07	12.34	13.96	17.49	17.76	18.67	18.93	20.55
	12H	10.85	11.09	12.04	12.26	13.92	17.62	17.86	18.81	19.03	20.69
12H	4H	10.78	11.12	11.95	12.28	13.89	16.59	16.93	17.76	18.10	19.71
	6H	11.13	11.41	12.32	12.58	14.20	17.25	17.52	18.43	18.69	20.31
	8H	11.20	11.43	12.38	12.60	14.26	17.47	17.71	18.66	18.88	20.53