

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: P937152

Luminaire Tested: SQ4-FB-075U-075D-930-1D-UNV-STD-W-8

Issue Date: 12/17/2024

**Test Information**

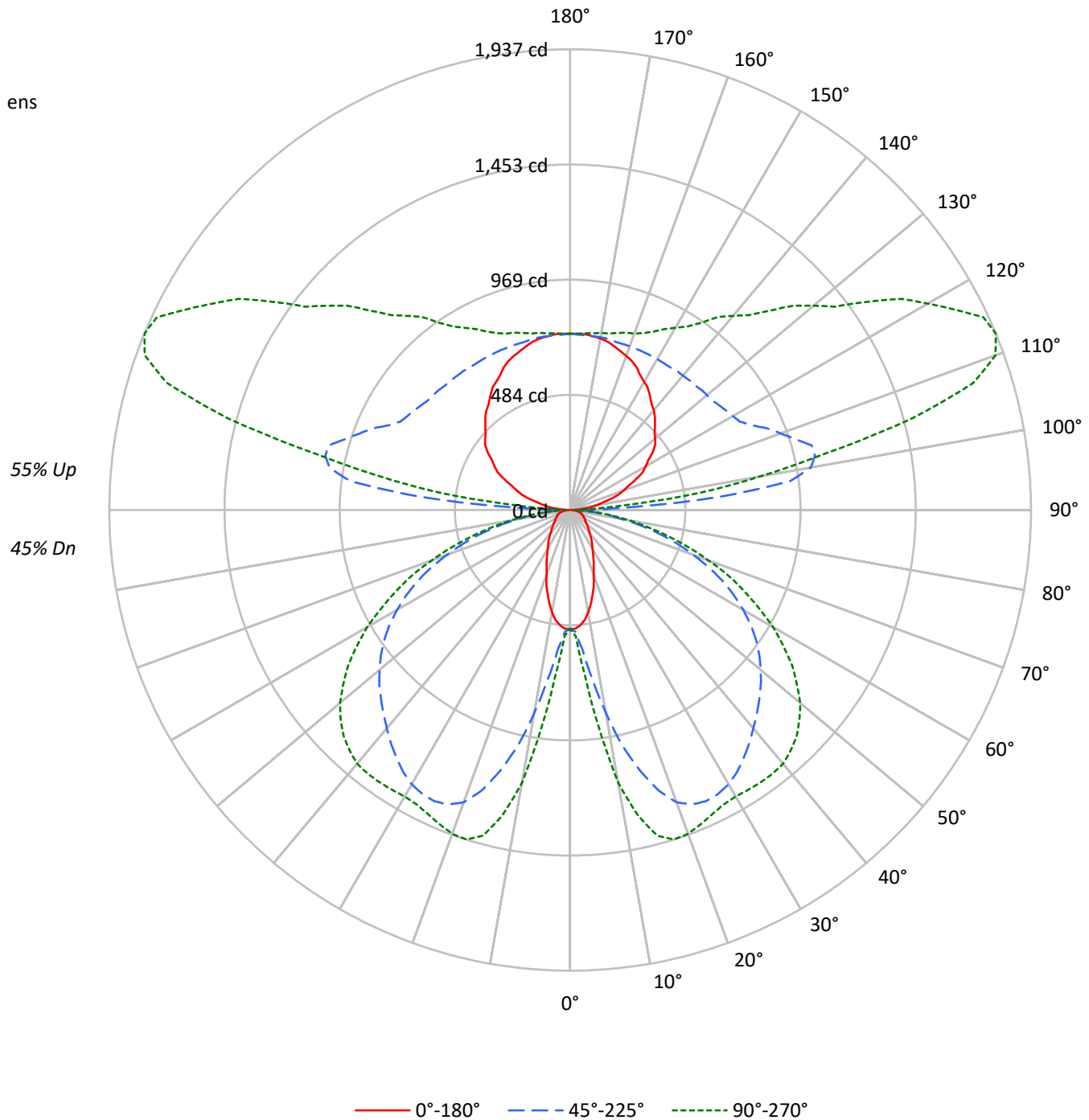
Test Method: LM-79-2019  
Report Number: P937152  
REPORT IS A COMBINATION OF REPORTS P933518 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-075D-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8675.6 lumens  
Efficiency: N/A  
Efficacy: 102.3 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 (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	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°	2317	2317	2317
5°	2264	2678	3115
10°	2053	3904	5164
15°	1745	5101	6236
20°	1421	5911	6355
25°	1185	6186	6226
30°	999	6225	6214
35°	884	6121	6375
40°	770	5988	6541
45°	697	5889	6567
50°	639	5800	6458
55°	613	5671	6172
60°	628	5421	5720
65°	652	5043	5098
70°	695	4398	4307
75°	771	3586	3361
80°	841	2486	2264
85°	750	1320	1159

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6567 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.6	0.7
10°-20°	286.4	3.3
20°-30°	500.9	5.8
30°-40°	644.8	7.4
40°-50°	720.2	8.3
50°-60°	689.8	8.0
60°-70°	546.6	6.3
70°-80°	321.4	3.7
80°-90°	92.1	1.1
90°-100°	361.6	4.2
100°-110°	950.6	11.0
110°-120°	985.7	11.4
120°-130°	790.7	9.1
130°-140°	620.4	7.2
140°-150°	476.2	5.5
150°-160°	342.9	4.0
160°-170°	209.8	2.4
170°-180°	70.9	0.8
0°-30°	851.9	9.8
0°-40°	1496.7	17.3
0°-60°	2906.7	33.5
0°-90°	3866.9	44.6
90°-120°	2297.9	26.5
90°-150°	4185.1	48.2
90°-180°	4809.0	55.4
0°-180°	8675.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	500	500	500	500	500	
5°	487	522	588	665	689	45
15°	365	673	1134	1375	1418	101
25°	233	763	1351	1410	1412	107
35°	157	729	1272	1344	1397	98
45°	108	581	1124	1288	1346	83
55°	77	369	954	1108	1139	70
65°	61	196	708	797	808	60
75°	45	120	389	427	429	47
85°	16	37	96	106	108	17
90°	5	14	38	19	19	5
95°	48	187	623	321	219	53
105°	171	259	1051	1596	1488	182
115°	304	369	842	1679	1917	300
125°	423	474	766	1294	1526	376
135°	504	555	742	1044	1184	390
145°	585	622	732	891	961	366
155°	661	680	732	804	827	304
165°	713	723	732	761	771	201
175°	742	742	737	747	747	70
180°	742	742	742	742	742	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5
2.5°	499.5	499.5	502.7	504.3	507.5	509.1	512.3	515.5	525.2	526.8	530.0
5°	486.6	493.0	513.9	522.0	544.4	574.9	587.8	608.7	652.0	664.9	672.9
7.5°	467.3	481.8	533.2	546.0	602.2	682.6	716.3	761.2	830.3	864.0	891.3
10°	436.8	467.3	558.9	589.4	680.9	803.0	865.6	928.3	1032.7	1079.3	1097.0
12.5°	403.1	452.9	586.2	627.9	759.6	938.0	1013.5	1082.5	1201.4	1264.0	1273.6
15°	364.6	432.0	611.9	672.9	843.2	1050.4	1133.9	1219.0	1329.8	1374.8	1386.1
17.5°	330.8	416.0	636.0	700.2	907.4	1151.6	1236.7	1307.4	1397.3	1427.8	1435.8
20°	289.1	390.3	652.0	735.5	974.9	1225.5	1307.4	1362.0	1423.0	1442.3	1445.5
22.5°	258.6	363.0	661.7	748.4	1019.9	1270.4	1339.5	1382.8	1424.6	1431.0	1432.6
25°	232.9	332.4	660.1	762.8	1058.4	1297.7	1350.7	1382.8	1406.9	1410.1	1410.1
27.5°	208.8	298.7	653.6	766.1	1087.3	1304.2	1345.9	1368.4	1379.6	1386.1	1386.1
30°	187.9	266.6	637.6	759.6	1100.2	1297.7	1331.5	1342.7	1353.9	1363.6	1368.4
32.5°	171.8	236.1	613.5	746.8	1101.8	1281.7	1305.8	1312.2	1328.2	1350.7	1358.8
35°	157.4	205.6	586.2	729.1	1092.2	1256.0	1272.0	1278.5	1310.6	1344.3	1355.5
37.5°	142.9	183.1	550.9	698.6	1077.7	1225.5	1236.7	1247.9	1297.7	1337.9	1350.7
40°	128.5	163.8	509.1	664.9	1055.2	1188.5	1198.2	1215.8	1281.7	1328.2	1341.1
42.5°	117.2	147.8	464.1	629.6	1026.3	1146.8	1161.2	1186.9	1262.4	1312.2	1326.6
45°	107.6	131.7	416.0	581.4	989.4	1103.4	1124.3	1159.6	1239.9	1288.1	1300.9
47.5°	98.0	120.4	366.2	531.6	949.2	1060.0	1087.3	1127.5	1209.4	1256.0	1267.2
50°	89.9	109.2	316.4	478.6	905.8	1013.5	1045.6	1087.3	1170.9	1214.2	1228.7
52.5°	83.5	99.6	269.8	425.6	856.0	965.3	1002.2	1045.6	1124.3	1166.0	1175.7
55°	77.1	91.5	229.7	369.4	804.6	913.9	954.0	995.8	1072.9	1108.2	1114.6
57.5°	73.9	85.1	195.9	316.4	750.0	856.0	901.0	939.6	1011.9	1039.2	1045.6
60°	69.1	80.3	170.2	271.4	690.6	801.4	839.9	878.5	939.6	962.1	966.9
62.5°	64.2	77.1	151.0	228.1	629.6	737.2	775.7	811.0	862.4	878.5	884.9
65°	61.0	73.9	136.5	195.9	566.9	669.7	708.2	738.8	780.5	796.6	799.8
67.5°	57.8	70.7	125.3	168.6	504.3	602.2	631.2	660.1	692.2	708.2	709.9
70°	53.0	67.5	115.6	149.4	440.0	525.2	549.3	579.8	605.5	613.5	618.3
72.5°	49.8	62.6	109.2	134.9	374.2	451.3	473.8	491.4	513.9	522.0	522.0
75°	45.0	56.2	102.8	120.4	306.7	369.4	388.7	406.3	424.0	427.2	422.4
77.5°	40.2	49.8	88.3	101.2	239.3	292.3	308.4	318.0	332.4	335.7	337.3
80°	33.7	43.4	69.1	78.7	173.4	215.2	226.4	234.5	247.3	247.3	250.5
82.5°	25.7	33.7	49.8	56.2	117.2	147.8	157.4	162.2	170.2	170.2	170.2
85°	16.1	20.9	32.1	36.9	70.7	89.9	96.4	98.0	104.4	106.0	106.0
87.5°	8.0	11.2	20.9	22.5	36.9	46.6	46.6	49.8	49.8	48.2	46.6
90°	5.0	9.0	13.0	14.0	21.9	32.5	37.8	33.6	25.2	19.0	19.0
92.5°	19.9	53.8	87.7	96.1	135.1	187.1	213.1	186.8	134.1	94.6	90.8
95°	47.8	109.8	171.7	187.2	332.4	526.0	622.8	555.8	421.7	321.1	309.7
97.5°	82.6	137.3	192.0	205.6	447.8	770.6	932.0	889.6	804.8	741.3	719.6
100°	109.5	159.1	208.7	221.1	489.7	848.0	1027.0	1030.2	1036.4	1041.0	1015.2
102.5°	132.4	178.7	224.9	236.5	508.9	872.3	1053.9	1107.9	1215.9	1296.9	1274.8
105°	171.3	210.5	249.6	259.4	523.2	875.0	1051.0	1172.0	1414.0	1595.6	1583.7
107.5°	211.1	247.6	284.1	293.3	525.9	836.1	991.2	1160.0	1497.7	1750.9	1753.8
110°	238.0	270.9	303.9	312.1	521.9	801.6	941.4	1130.1	1507.6	1790.8	1803.1



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	264.3	295.7	327.1	335.0	522.0	771.4	896.1	1089.3	1475.7	1765.4	1784.4
115°	304.2	333.2	362.2	369.4	526.8	736.8	841.9	1027.9	1400.1	1679.2	1705.7
117.5°	343.5	369.9	396.2	402.8	536.7	715.2	804.5	972.4	1308.3	1560.2	1589.5
120°	366.4	391.1	416.0	422.1	544.6	707.9	789.6	943.0	1249.9	1480.1	1508.5
122.5°	388.8	413.9	438.8	445.1	556.1	704.1	778.1	916.3	1192.7	1400.0	1428.0
125°	423.2	446.0	468.7	474.4	571.5	700.9	765.7	883.1	1117.8	1293.9	1319.7
127.5°	451.0	474.1	497.1	502.8	587.0	699.2	755.2	856.0	1057.6	1208.8	1230.5
130°	466.0	490.7	515.5	521.7	598.2	700.3	751.3	841.0	1020.5	1155.0	1175.2
132.5°	481.4	506.2	531.0	537.2	607.4	700.9	747.8	828.1	988.7	1109.2	1127.3
135°	504.3	526.8	549.5	555.1	617.3	700.3	741.8	809.1	943.6	1044.5	1060.0
137.5°	527.7	550.1	572.4	578.0	632.3	704.6	740.8	797.6	911.4	996.7	1009.4
140°	547.2	567.7	588.3	593.4	641.4	705.4	737.3	786.5	884.7	958.4	970.3
142.5°	562.1	581.1	600.2	604.9	649.1	707.9	737.3	780.4	866.8	931.5	941.7
145°	585.0	601.6	618.1	622.3	659.0	707.9	732.3	767.7	838.3	891.2	898.9
147.5°	607.9	624.0	640.2	644.2	673.6	712.7	732.3	760.1	815.6	857.3	863.7
150°	622.8	637.4	652.0	655.6	681.2	715.3	732.3	755.8	802.7	837.9	843.1
152.5°	638.2	649.3	660.4	663.1	686.2	716.9	732.3	752.3	792.4	822.4	826.4
155°	661.1	669.3	677.5	679.6	697.2	720.6	732.3	748.2	780.1	804.0	806.6
157.5°	678.1	686.0	694.0	696.0	708.1	724.2	732.3	744.7	769.5	788.1	789.9
160°	689.5	695.7	701.9	703.4	713.1	725.9	732.3	742.9	764.2	780.1	781.2
162.5°	700.9	705.6	710.3	711.5	718.4	727.7	732.3	741.3	759.2	772.6	773.6
165°	713.4	717.6	721.8	722.9	726.0	730.2	732.3	738.8	751.6	761.2	762.3
167.5°	724.9	726.9	728.9	729.4	732.0	735.5	737.3	741.5	749.9	756.3	756.7
170°	732.3	734.3	736.4	736.8	737.0	737.2	737.3	741.5	749.9	756.3	756.3
172.5°	736.4	736.8	737.2	737.3	737.3	737.3	737.3	740.6	747.3	752.3	751.8
175°	741.8	741.8	741.8	741.8	740.3	738.3	737.3	739.4	743.7	746.8	746.8
177.5°	741.8	741.8	741.8	741.8	740.6	739.1	738.3	740.0	743.3	745.7	745.3
180°	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	499.5	499.5
2.5°	533.2	530.0
5°	685.8	689.0
7.5°	923.5	921.9
10°	1148.4	1162.8
12.5°	1312.2	1315.4
15°	1411.8	1418.2
17.5°	1450.3	1451.9
20°	1451.9	1448.7
22.5°	1434.2	1431.0
25°	1413.4	1411.8
27.5°	1394.1	1395.7
30°	1386.1	1390.9
32.5°	1386.1	1394.1
35°	1389.3	1397.3
37.5°	1387.7	1397.3
40°	1381.2	1392.5
42.5°	1363.6	1371.6
45°	1336.3	1345.9
47.5°	1300.9	1307.4
50°	1256.0	1262.4
52.5°	1199.8	1201.4
55°	1132.3	1138.7
57.5°	1060.0	1061.6
60°	979.7	984.6
62.5°	894.5	894.5
65°	804.6	807.8
67.5°	711.5	719.5
70°	616.7	618.3
72.5°	523.6	523.6
75°	427.2	428.8
77.5°	335.7	335.7
80°	248.9	250.5
82.5°	171.8	175.1
85°	107.6	107.6
87.5°	49.8	45.0
90°	19.0	19.0
92.5°	75.8	60.7
95°	264.2	218.6
97.5°	632.8	546.1
100°	911.9	808.5
102.5°	1186.3	1097.8
105°	1536.1	1488.5
107.5°	1765.3	1776.8
110°	1852.8	1902.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1860.5	1936.6
115°	1811.2	1916.7
117.5°	1706.5	1823.6
120°	1622.3	1736.0
122.5°	1540.2	1652.3
125°	1423.1	1526.4
127.5°	1317.7	1404.9
130°	1255.7	1336.2
132.5°	1199.4	1271.5
135°	1122.2	1184.3
137.5°	1060.3	1111.2
140°	1017.9	1065.4
142.5°	982.6	1023.6
145°	929.9	960.9
147.5°	889.3	915.0
150°	863.9	884.7
152.5°	842.0	857.8
155°	817.1	827.4
157.5°	797.2	804.5
160°	785.4	789.6
162.5°	777.6	781.6
165°	766.5	770.6
167.5°	758.4	760.2
170°	756.3	756.3
172.5°	750.3	748.8
175°	746.8	746.8
177.5°	743.6	741.8
180°	741.8	741.8



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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	3.41	4.25	4.40	5.27	6.61	16.59	17.43	17.58	18.45	19.79
	3H	4.11	4.87	5.12	5.89	7.26	18.43	19.19	19.43	20.21	21.57
	4H	4.41	5.13	5.43	6.16	7.53	19.07	19.79	20.09	20.82	22.19
	6H	4.66	5.33	5.69	6.35	7.74	19.50	20.17	20.53	21.19	22.58
	8H	4.73	5.36	5.76	6.41	7.79	19.62	20.26	20.65	21.30	22.68
	12H	4.74	5.35	5.78	6.39	7.79	19.69	20.29	20.73	21.33	22.74
4H	2H	10.62	11.34	11.65	12.37	13.74	16.86	17.58	17.88	18.61	19.98
	3H	12.19	12.79	13.22	13.84	15.23	18.90	19.51	19.94	20.56	21.95
	4H	12.28	12.84	13.32	13.88	15.29	19.67	20.22	20.71	21.27	22.68
	6H	12.29	12.77	13.34	13.84	15.24	20.21	20.69	21.26	21.75	23.16
	8H	12.27	12.71	13.32	13.77	15.19	20.37	20.82	21.42	21.88	23.30
	12H	12.22	12.63	13.30	13.70	15.13	20.46	20.87	21.53	21.94	23.37
8H	4H	13.73	14.17	14.78	15.23	16.65	19.73	20.18	20.78	21.24	22.65
	6H	13.97	14.34	15.04	15.44	16.85	20.36	20.73	21.43	21.83	23.25
	8H	13.99	14.31	15.07	15.39	16.83	20.58	20.90	21.66	21.99	23.42
	12H	13.95	14.24	15.04	15.32	16.79	20.72	21.01	21.81	22.09	23.56
12H	4H	13.87	14.27	14.94	15.35	16.77	19.68	20.09	20.75	21.16	22.58
	6H	14.23	14.55	15.31	15.64	17.07	20.34	20.67	21.42	21.75	23.19
	8H	14.29	14.58	15.38	15.66	17.14	20.57	20.86	21.66	21.94	23.41