

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: P937971

Luminaire Tested: SQ4-FB-125U-075D-935-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

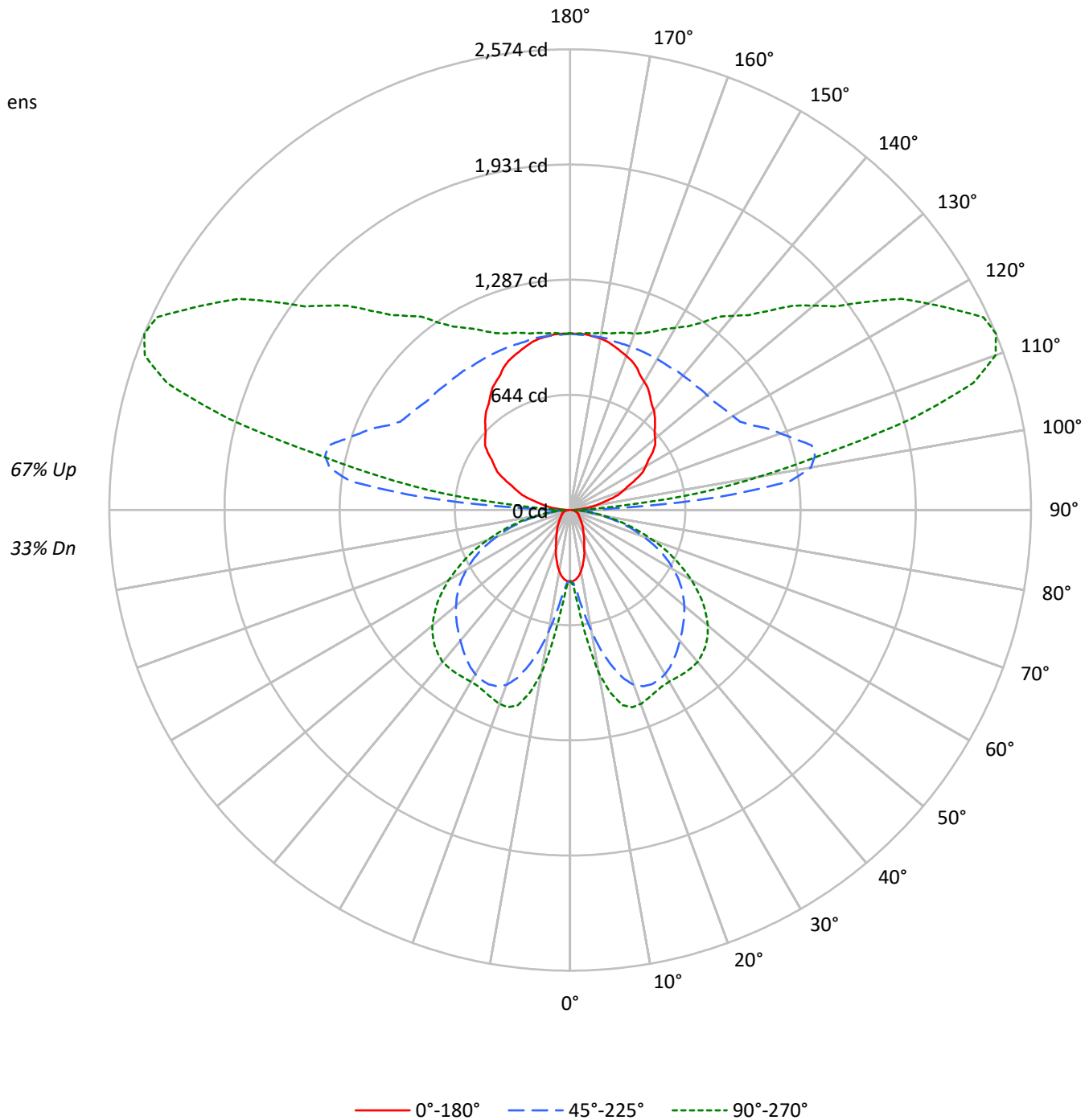
Test Method: LM-79-2019  
Report Number: P937971  
REPORT IS A COMBINATION OF REPORTS P933606 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-075D-935-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9469.9 lumens  
Efficiency: N/A  
Efficacy: 113.5 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 83.4  
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7

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

	0°	45°	90°
0°	2459	2459	2459
5°	2401	2841	3305
10°	2177	4140	5479
15°	1850	5408	6617
20°	1505	6266	6743
25°	1255	6556	6606
30°	1058	6595	6593
35°	935	6484	6764
40°	814	6339	6940
45°	737	6233	6967
50°	676	6137	6852
55°	646	5998	6548
60°	661	5732	6068
65°	687	5329	5409
70°	730	4644	4570
75°	806	3783	3566
80°	872	2621	2403
85°	763	1388	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°	51.4	0.5
10°-20°	227.9	2.4
20°-30°	398.6	4.2
30°-40°	513.1	5.4
40°-50°	573.1	6.1
50°-60°	548.9	5.8
60°-70°	435.0	4.6
70°-80°	255.8	2.7
80°-90°	74.8	0.8
90°-100°	480.6	5.1
100°-110°	1263.5	13.3
110°-120°	1310.1	13.8
120°-130°	1050.9	11.1
130°-140°	824.5	8.7
140°-150°	632.9	6.7
150°-160°	455.8	4.8
160°-170°	278.9	2.9
170°-180°	94.2	1.0
0°-30°	677.9	7.2
0°-40°	1191.0	12.6
0°-60°	2313.0	24.4
0°-90°	3078.6	32.5
90°-120°	3054.2	32.3
90°-150°	5562.5	58.7
90°-180°	6391.0	67.5
0°-180°	9469.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	387	415	468	529	548	36
15°	290	536	902	1094	1129	81
25°	185	607	1075	1122	1123	85
35°	125	580	1012	1070	1112	78
45°	86	463	895	1025	1071	66
55°	61	294	759	882	906	56
65°	49	156	564	634	643	48
75°	36	96	309	340	341	37
85°	13	29	77	84	86	14
90°	7	18	50	25	25	6
95°	64	249	828	427	290	71
105°	228	345	1397	2121	1978	241
115°	404	491	1119	2232	2548	399
125°	562	631	1018	1720	2029	499
135°	670	738	986	1388	1574	519
145°	777	827	973	1184	1277	487
155°	879	903	973	1069	1100	404
165°	948	961	973	1012	1024	268
175°	986	986	980	993	993	94
180°	986	986	986	986	986	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	397.5	397.5	397.5	397.5	397.5	397.5	397.5	397.5	397.5	397.5	397.5
2.5°	397.5	397.5	400.0	401.3	403.8	405.1	407.7	410.2	417.9	419.2	421.7
5°	387.2	392.3	409.0	415.4	433.2	457.5	467.7	484.4	518.9	529.1	535.5
7.5°	371.9	383.4	424.3	434.5	479.2	543.2	570.0	605.8	660.7	687.6	709.3
10°	347.6	371.9	444.7	469.0	541.9	639.0	688.8	738.7	821.8	858.8	872.9
12.5°	320.8	360.4	466.5	499.7	604.5	746.4	806.4	861.4	955.9	1005.9	1013.5
15°	290.1	343.8	486.9	535.5	670.9	835.8	902.3	970.1	1058.3	1094.1	1103.0
17.5°	263.3	331.0	506.1	557.2	722.1	916.3	984.1	1040.4	1111.9	1136.2	1142.6
20°	230.0	310.6	518.9	585.3	775.7	975.2	1040.4	1083.8	1132.4	1147.7	1150.3
22.5°	205.8	288.8	526.5	595.5	811.5	1011.0	1065.9	1100.4	1133.7	1138.8	1140.1
25°	185.3	264.5	525.3	607.0	842.2	1032.7	1074.9	1100.4	1119.6	1122.2	1122.2
27.5°	166.1	237.7	520.1	609.6	865.2	1037.8	1071.0	1088.9	1097.9	1103.0	1103.0
30°	149.5	212.1	507.4	604.5	875.4	1032.7	1059.5	1068.5	1077.4	1085.1	1088.9
32.5°	136.7	187.9	488.2	594.3	876.7	1019.9	1039.1	1044.2	1057.0	1074.9	1081.3
35°	125.2	163.6	466.5	580.2	869.0	999.5	1012.3	1017.4	1042.9	1069.8	1078.7
37.5°	113.7	145.7	438.4	555.9	857.5	975.2	984.1	993.1	1032.7	1064.7	1074.9
40°	102.2	130.4	405.1	529.1	839.6	945.7	953.4	967.4	1019.9	1057.0	1067.2
42.5°	93.3	117.6	369.3	501.0	816.6	912.5	924.0	944.4	1004.6	1044.2	1055.7
45°	85.6	104.8	331.0	462.6	787.2	878.0	894.6	922.7	986.7	1025.0	1035.3
47.5°	78.0	95.8	291.4	423.0	755.3	843.5	865.2	897.2	962.3	999.5	1008.4
50°	71.6	86.9	251.8	380.8	720.8	806.4	832.0	865.2	931.7	966.2	977.8
52.5°	66.5	79.2	214.7	338.7	681.2	768.1	797.5	832.0	894.6	927.8	935.5
55°	61.3	72.8	182.8	293.9	640.3	727.2	759.1	792.4	853.7	881.8	886.9
57.5°	58.8	67.7	155.9	251.8	596.8	681.2	717.0	747.6	805.1	826.9	832.0
60°	55.0	63.9	135.5	216.0	549.5	637.7	668.4	699.1	747.6	765.5	769.4
62.5°	51.1	61.3	120.1	181.5	501.0	586.6	617.3	645.4	686.3	699.1	704.2
65°	48.6	58.8	108.6	155.9	451.1	532.9	563.6	587.9	621.1	633.9	636.4
67.5°	46.0	56.2	99.7	134.2	401.3	479.2	502.3	525.3	550.8	563.6	564.9
70°	42.2	53.7	92.0	118.9	350.2	417.9	437.1	461.4	481.8	488.2	492.0
72.5°	39.6	49.8	86.9	107.4	297.8	359.1	377.0	391.1	409.0	415.4	415.4
75°	35.8	44.7	81.8	95.8	244.1	293.9	309.3	323.3	337.4	339.9	336.1
77.5°	32.0	39.6	70.3	80.5	190.4	232.6	245.4	253.0	264.5	267.1	268.4
80°	26.8	34.5	55.0	62.6	138.0	171.3	180.2	186.6	196.8	196.8	199.4
82.5°	20.4	26.8	39.6	44.7	93.3	117.6	125.2	129.1	135.5	135.5	135.5
85°	12.8	16.6	25.6	29.4	56.2	71.6	76.7	78.0	83.1	84.3	84.3
87.5°	6.4	8.9	16.6	17.9	29.4	37.1	37.1	39.6	39.6	38.3	37.1
90°	6.6	11.9	17.2	18.5	29.1	43.2	50.3	44.6	33.5	25.1	25.1
92.5°	26.5	71.5	116.5	127.7	179.5	248.6	283.2	248.2	178.2	125.8	120.7
95°	63.6	145.9	228.2	248.8	441.8	699.2	827.8	738.7	560.4	426.8	411.6
97.5°	109.8	182.4	255.1	273.2	595.0	1024.2	1238.7	1182.4	1069.8	985.3	956.5
100°	145.6	211.5	277.3	293.8	650.8	1127.0	1365.1	1369.2	1377.4	1383.6	1349.2
102.5°	176.0	237.5	299.0	314.3	676.5	1159.3	1400.8	1472.5	1616.1	1723.7	1694.3
105°	227.7	279.7	331.7	344.7	695.4	1163.1	1396.9	1557.7	1879.4	2120.7	2104.9
107.5°	280.6	329.0	377.6	389.7	699.0	1111.3	1317.4	1541.9	1990.6	2327.2	2331.0
110°	316.3	360.1	403.8	414.8	693.6	1065.3	1251.2	1502.1	2003.8	2380.1	2396.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	351.4	393.1	434.9	445.3	693.9	1025.3	1191.0	1447.7	1961.2	2346.3	2371.6
115°	404.3	442.8	481.4	491.0	700.3	979.4	1118.9	1366.3	1860.9	2231.9	2267.0
117.5°	456.6	491.6	526.5	535.3	713.3	950.6	1069.3	1292.5	1738.9	2073.8	2112.6
120°	487.0	520.0	552.9	561.1	723.9	940.9	1049.4	1253.4	1661.2	1967.2	2005.0
122.5°	516.8	550.1	583.3	591.5	739.1	935.8	1034.2	1217.9	1585.2	1860.7	1897.9
125°	562.4	592.7	623.0	630.6	759.6	931.7	1017.7	1173.7	1485.7	1719.8	1754.1
127.5°	599.5	630.1	660.6	668.3	780.2	929.3	1003.8	1137.8	1405.7	1606.6	1635.6
130°	619.3	652.3	685.2	693.4	795.1	930.6	998.5	1117.7	1356.2	1535.1	1561.9
132.5°	639.9	672.8	705.7	714.0	807.3	931.7	993.9	1100.6	1314.1	1474.2	1498.2
135°	670.3	700.3	730.2	737.7	820.5	930.8	985.9	1075.3	1254.1	1388.2	1408.9
137.5°	701.4	731.1	760.8	768.2	840.3	936.5	984.6	1060.1	1211.3	1324.7	1341.6
140°	727.2	754.5	781.9	788.7	852.4	937.5	980.0	1045.2	1175.8	1273.7	1289.6
142.5°	747.0	772.3	797.6	803.9	862.6	940.9	980.0	1037.3	1152.0	1238.0	1251.7
145°	777.4	799.5	821.6	827.1	875.9	940.9	973.3	1020.3	1114.1	1184.5	1194.8
147.5°	808.0	829.4	850.9	856.3	895.3	947.3	973.3	1010.2	1084.1	1139.5	1148.0
150°	827.8	847.2	866.6	871.4	905.4	950.7	973.3	1004.5	1066.9	1113.6	1120.6
152.5°	848.3	863.0	877.7	881.4	912.1	952.9	973.3	999.9	1053.2	1093.1	1098.3
155°	878.8	889.7	900.5	903.2	926.6	957.7	973.3	994.5	1036.9	1068.7	1072.2
157.5°	901.2	911.8	922.4	925.0	941.1	962.6	973.3	989.8	1022.7	1047.4	1049.8
160°	916.4	924.7	932.9	935.0	947.8	964.8	973.3	987.5	1015.7	1036.9	1038.2
162.5°	931.7	937.8	944.0	945.5	954.8	967.2	973.3	985.3	1009.0	1026.9	1028.3
165°	948.2	953.8	959.4	960.8	965.0	970.5	973.3	981.8	999.0	1011.8	1013.1
167.5°	963.4	966.1	968.7	969.4	972.9	977.6	980.0	985.6	996.8	1005.1	1005.7
170°	973.3	976.0	978.6	979.3	979.5	979.8	980.0	985.6	996.8	1005.1	1005.1
172.5°	978.6	979.2	979.8	980.0	980.0	980.0	980.0	984.4	993.2	999.8	999.3
175°	985.9	985.9	985.9	985.9	984.0	981.3	980.0	982.8	988.4	992.6	992.6
177.5°	985.9	985.9	985.9	985.9	984.4	982.3	981.2	983.5	987.9	991.2	990.6
180°	985.9	985.9	985.9	985.9	985.9	985.9	985.9	985.9	985.9	985.9	985.9



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	397.5	397.5
2.5°	424.3	421.7
5°	545.7	548.3
7.5°	734.8	733.6
10°	913.8	925.3
12.5°	1044.2	1046.8
15°	1123.4	1128.6
17.5°	1154.1	1155.4
20°	1155.4	1152.8
22.5°	1141.3	1138.8
25°	1124.7	1123.4
27.5°	1109.4	1110.7
30°	1103.0	1106.8
32.5°	1103.0	1109.4
35°	1105.6	1111.9
37.5°	1104.3	1111.9
40°	1099.2	1108.1
42.5°	1085.1	1091.5
45°	1063.4	1071.0
47.5°	1035.3	1040.4
50°	999.5	1004.6
52.5°	954.7	955.9
55°	901.0	906.1
57.5°	843.5	844.8
60°	779.6	783.4
62.5°	711.8	711.8
65°	640.3	642.8
67.5°	566.2	572.5
70°	490.8	492.0
72.5°	416.6	416.6
75°	339.9	341.2
77.5°	267.1	267.1
80°	198.1	199.4
82.5°	136.7	139.3
85°	85.6	85.6
87.5°	39.6	35.8
90°	25.1	25.1
92.5°	100.7	80.7
95°	351.0	290.4
97.5°	841.2	725.9
100°	1212.0	1074.6
102.5°	1576.6	1459.0
105°	2041.6	1978.4
107.5°	2346.2	2361.6
110°	2462.5	2528.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2472.8	2574.0
115°	2407.2	2547.5
117.5°	2268.2	2423.8
120°	2156.2	2307.3
122.5°	2047.0	2196.1
125°	1891.4	2028.8
127.5°	1751.5	1867.3
130°	1669.0	1776.0
132.5°	1594.1	1689.9
135°	1491.5	1574.2
137.5°	1409.2	1476.9
140°	1352.8	1416.0
142.5°	1306.0	1360.5
145°	1235.9	1277.1
147.5°	1182.1	1216.2
150°	1148.2	1175.8
152.5°	1119.2	1140.1
155°	1086.0	1099.8
157.5°	1059.5	1069.3
160°	1043.9	1049.4
162.5°	1033.6	1038.8
165°	1018.7	1024.3
167.5°	1008.0	1010.4
170°	1005.1	1005.1
172.5°	997.3	995.2
175°	992.6	992.6
177.5°	988.3	985.9
180°	985.9	985.9



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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	2.26	3.01	3.35	4.10	5.60	15.43	16.17	16.52	17.27	18.76
	3H	2.96	3.63	4.06	4.73	6.24	17.25	17.92	18.35	19.02	20.54
	4H	3.25	3.89	4.36	4.99	6.51	17.89	18.53	19.00	19.63	21.15
	6H	3.50	4.08	4.61	5.19	6.72	18.31	18.90	19.43	20.00	21.53
	8H	3.56	4.12	4.68	5.24	6.76	18.43	18.98	19.55	20.10	21.63
	12H	3.57	4.10	4.70	5.22	6.77	18.49	19.02	19.61	20.13	21.68
4H	2H	9.46	10.09	10.57	11.19	12.71	15.69	16.33	16.80	17.43	18.95
	3H	11.01	11.55	12.14	12.67	14.21	17.72	18.25	18.84	19.38	20.91
	4H	11.10	11.59	12.23	12.71	14.26	18.48	18.97	19.60	20.08	21.64
	6H	11.11	11.53	12.24	12.67	14.21	19.01	19.43	20.14	20.56	22.11
	8H	11.08	11.47	12.21	12.60	14.17	19.16	19.55	20.29	20.69	22.25
	12H	11.03	11.39	12.18	12.53	14.10	19.25	19.60	20.40	20.75	22.31
8H	4H	12.53	12.93	13.67	14.06	15.62	18.53	18.92	19.66	20.05	21.61
	6H	12.77	13.10	13.93	14.27	15.83	19.15	19.47	20.30	20.65	22.20
	8H	12.79	13.07	13.95	14.22	15.80	19.36	19.65	20.52	20.80	22.38
	12H	12.75	13.00	13.91	14.15	15.76	19.50	19.75	20.66	20.90	22.51
12H	4H	12.67	13.03	13.82	14.17	15.74	18.47	18.83	19.62	19.97	21.54
	6H	13.03	13.31	14.19	14.46	16.04	19.13	19.41	20.29	20.57	22.15
	8H	13.09	13.34	14.25	14.49	16.10	19.35	19.60	20.51	20.75	22.36