

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: P937871

Luminaire Tested: SQ4-FB-125U-050D-935-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937871
REPORT IS A COMBINATION OF REPORTS P933605 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

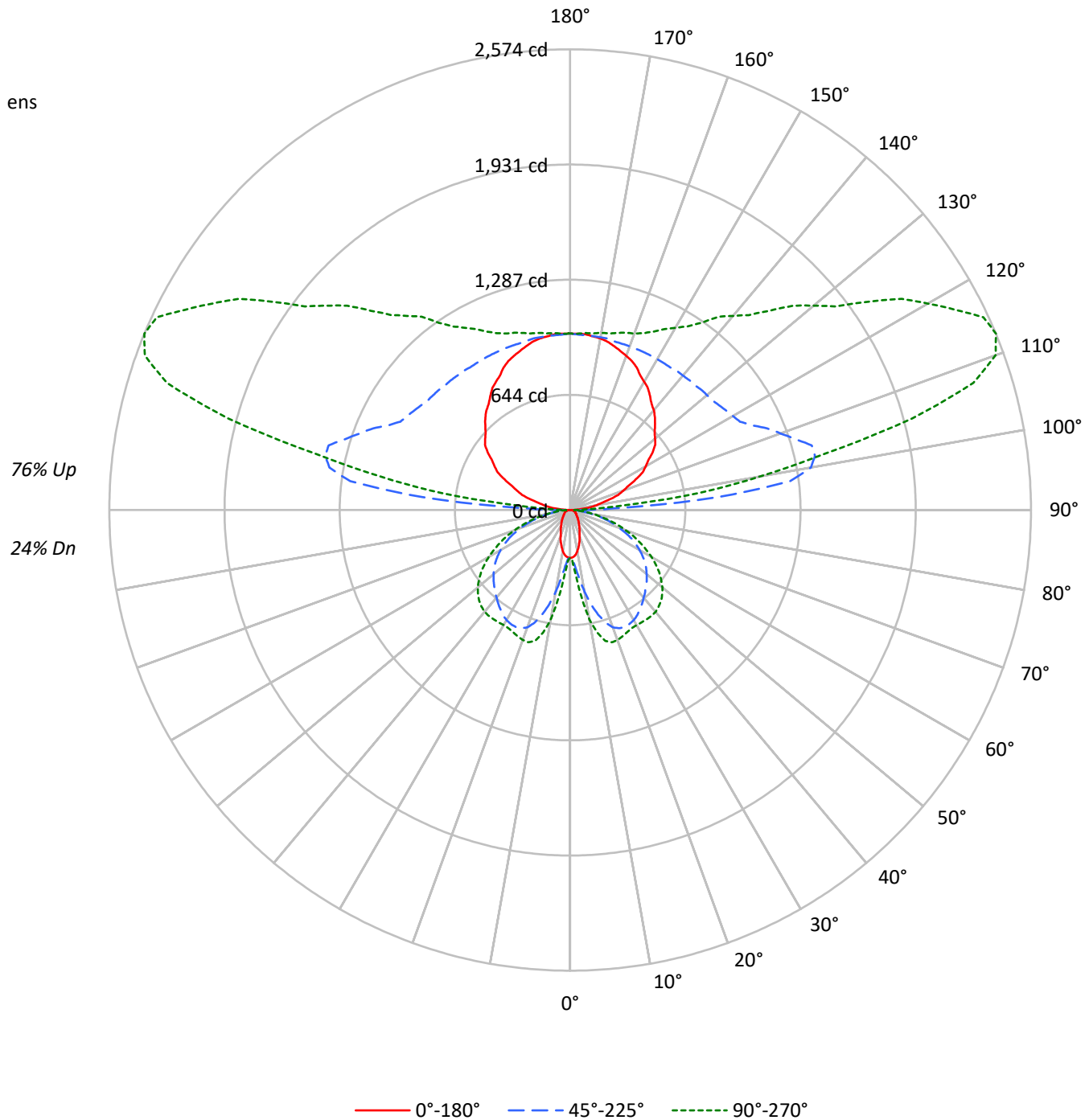
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8456.9 lumens
Efficiency: N/A
Efficacy: 118.4 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): 71.4
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

TEST NUMBER: P937871
CATALOG NUMBER: SQ4-FB-125U-050D-935-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P937871

CATALOG NUMBER: SQ4-FB-125U-050D-935-1D-UNV-STD-W-6

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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24				24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20				20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16				16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19	13				13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11				11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10				10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8				8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7				7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6				6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6				6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5				5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1649	1649	1649
5°	1610	1905	2216
10°	1460	2777	3674
15°	1240	3626	4436
20°	1010	4202	4521
25°	842	4395	4430
30°	710	4423	4421
35°	627	4347	4536
40°	546	4251	4654
45°	494	4180	4672
50°	453	4115	4595
55°	434	4022	4391
60°	444	3844	4069
65°	459	3573	3627
70°	489	3114	3065
75°	540	2537	2391
80°	586	1757	1612
85°	513	932	824

MAXIMUM LUMINANCE 45°-90°:

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



TEST NUMBER: P937871

CATALOG NUMBER: SQ4-FB-125U-050D-935-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.5	0.4
10°-20°	152.8	1.8
20°-30°	267.3	3.2
30°-40°	344.1	4.1
40°-50°	384.3	4.5
50°-60°	368.1	4.4
60°-70°	291.7	3.4
70°-80°	171.5	2.0
80°-90°	51.4	0.6
90°-100°	480.6	5.7
100°-110°	1263.5	14.9
110°-120°	1310.1	15.5
120°-130°	1050.9	12.4
130°-140°	824.5	9.7
140°-150°	632.9	7.5
150°-160°	455.8	5.4
160°-170°	278.9	3.3
170°-180°	94.2	1.1
0°-30°	454.5	5.4
0°-40°	798.6	9.4
0°-60°	1551.0	18.3
0°-90°	2065.6	24.4
90°-120°	3054.2	36.1
90°-150°	5562.5	65.8
90°-180°	6391.0	75.6
0°-180°	8456.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	266	266	266	266	266	
5°	260	278	314	355	368	24
15°	194	359	605	734	757	54
25°	124	407	721	752	753	57
35°	84	389	679	717	746	52
45°	57	310	600	687	718	44
55°	41	197	509	591	608	38
65°	32	104	378	425	431	32
75°	24	64	207	228	229	25
85°	9	20	52	57	57	9
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	



TEST NUMBER: P937871

CATALOG NUMBER: SQ4-FB-125U-050D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5
2.5°	266.5	266.5	268.2	269.1	270.9	271.7	273.4	275.1	280.2	281.1	282.8
5°	259.7	263.1	274.3	278.5	290.5	306.8	313.6	324.8	348.0	354.8	359.1
7.5°	249.4	257.1	284.5	291.4	321.4	364.2	382.2	406.2	443.0	461.1	475.7
10°	233.1	249.4	298.2	314.6	363.4	428.5	462.0	495.4	551.1	575.9	585.3
12.5°	215.1	241.7	312.8	335.1	405.4	500.5	540.8	577.7	641.0	674.4	679.6
15°	194.5	230.6	326.5	359.1	449.9	560.4	605.0	650.5	709.6	733.6	739.6
17.5°	176.5	221.9	339.4	373.7	484.2	614.5	659.9	697.6	745.6	761.9	766.1
20°	154.3	208.2	348.0	392.5	520.2	653.9	697.6	726.8	759.3	769.6	771.3
22.5°	137.9	193.7	353.1	399.3	544.2	677.9	714.7	737.8	760.2	763.6	764.4
25°	124.3	177.4	352.2	407.1	564.8	692.4	720.7	737.8	750.7	752.4	752.4
27.5°	111.4	159.4	348.8	408.8	580.2	695.9	718.2	730.2	736.1	739.6	739.6
30°	100.3	142.3	340.2	405.4	587.0	692.4	710.5	716.4	722.4	727.6	730.2
32.5°	91.7	126.0	327.3	398.5	587.9	683.9	696.8	700.2	708.7	720.7	725.1
35°	84.0	109.7	312.8	389.1	582.8	670.2	678.7	682.2	699.3	717.3	723.3
37.5°	76.3	97.7	293.9	372.8	575.0	653.9	659.9	665.9	692.4	713.9	720.7
40°	68.6	87.4	271.7	354.8	563.1	634.1	639.3	648.7	683.9	708.7	715.6
42.5°	62.5	78.8	247.7	335.9	547.6	611.9	619.6	633.3	673.6	700.2	707.8
45°	57.4	70.3	221.9	310.2	527.9	588.7	599.9	618.7	661.6	687.3	694.1
47.5°	52.3	64.2	195.4	283.6	506.5	565.6	580.2	601.6	645.3	670.2	676.1
50°	48.0	58.3	168.9	255.3	483.3	540.8	557.9	580.2	624.8	647.9	655.6
52.5°	44.6	53.2	144.0	227.1	456.8	515.0	534.8	557.9	599.9	622.2	627.3
55°	41.2	48.8	122.5	197.1	429.3	487.6	509.1	531.3	572.5	591.3	594.8
57.5°	39.4	45.4	104.5	168.9	400.2	456.8	480.8	501.3	539.9	554.5	557.9
60°	36.9	42.9	90.8	144.8	368.5	427.6	448.2	468.8	501.3	513.3	515.9
62.5°	34.3	41.2	80.6	121.7	335.9	393.4	413.9	432.8	460.2	468.8	472.2
65°	32.5	39.4	72.8	104.5	302.5	357.3	377.9	394.2	416.5	425.1	426.8
67.5°	30.8	37.7	66.9	90.0	269.1	321.4	336.8	352.2	369.3	377.9	378.8
70°	28.3	36.0	61.7	79.7	234.8	280.2	293.1	309.4	323.1	327.3	330.0
72.5°	26.6	33.4	58.3	72.0	199.7	240.8	252.8	262.2	274.3	278.5	278.5
75°	24.0	30.0	54.9	64.2	163.7	197.1	207.4	216.8	226.2	228.0	225.4
77.5°	21.4	26.6	47.1	54.0	127.7	156.0	164.5	169.7	177.4	179.1	179.9
80°	18.0	23.2	36.9	42.0	92.5	114.8	120.8	125.2	132.0	132.0	133.7
82.5°	13.7	18.0	26.6	30.0	62.5	78.8	84.0	86.6	90.8	90.8	90.8
85°	8.6	11.2	17.1	19.7	37.7	48.0	51.5	52.3	55.7	56.6	56.6
87.5°	4.3	6.0	11.2	12.0	19.7	24.9	24.9	26.6	26.6	25.7	24.9
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



TEST NUMBER: P937871

CATALOG NUMBER: SQ4-FB-125U-050D-935-1D-UNV-STD-W-6

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



TEST NUMBER: P937871

CATALOG NUMBER: SQ4-FB-125U-050D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	266.5	266.5
2.5°	284.5	282.8
5°	365.9	367.6
7.5°	492.8	491.9
10°	612.8	620.4
12.5°	700.2	701.9
15°	753.3	756.7
17.5°	773.9	774.7
20°	774.7	773.0
22.5°	765.3	763.6
25°	754.2	753.3
27.5°	743.9	744.7
30°	739.6	742.2
32.5°	739.6	743.9
35°	741.3	745.6
37.5°	740.5	745.6
40°	737.0	743.0
42.5°	727.6	731.9
45°	713.0	718.2
47.5°	694.1	697.6
50°	670.2	673.6
52.5°	640.2	641.0
55°	604.2	607.6
57.5°	565.6	566.5
60°	522.8	525.3
62.5°	477.4	477.4
65°	429.3	431.0
67.5°	379.7	383.9
70°	329.1	330.0
72.5°	279.4	279.4
75°	228.0	228.8
77.5°	179.1	179.1
80°	132.8	133.7
82.5°	91.7	93.4
85°	57.4	57.4
87.5°	26.6	24.0
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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CATALOG NUMBER: SQ4-FB-125U-050D-935-1D-UNV-STD-W-6

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	0.00	0.41	0.87	1.54	3.14	12.89	13.58	14.03	14.71	16.31
	3H	0.41	1.03	1.57	2.17	3.78	14.71	15.32	15.86	16.47	18.08
	4H	0.70	1.29	1.86	2.43	4.05	15.34	15.93	16.50	17.07	18.69
	6H	0.95	1.48	2.11	2.63	4.26	15.76	16.30	16.93	17.45	19.07
	8H	1.01	1.52	2.18	2.68	4.30	15.87	16.39	17.04	17.55	19.16
	12H	1.02	1.51	2.20	2.66	4.30	15.93	16.42	17.11	17.58	19.21
4H	2H	6.91	7.49	8.08	8.64	10.25	13.14	13.73	14.31	14.87	16.48
	3H	8.46	8.95	9.63	10.12	11.74	15.17	15.66	16.34	16.83	18.45
	4H	8.55	9.00	9.72	10.16	11.80	15.92	16.37	17.10	17.53	19.17
	6H	8.55	8.93	9.73	10.12	11.75	16.45	16.83	17.63	18.01	19.65
	8H	8.52	8.88	9.70	10.05	11.70	16.60	16.96	17.78	18.13	19.78
	12H	8.47	8.79	9.66	9.98	11.63	16.68	17.01	17.88	18.19	19.85
8H	4H	9.97	10.33	11.15	11.51	13.16	15.97	16.33	17.15	17.50	19.15
	6H	10.21	10.50	11.41	11.72	13.37	16.58	16.88	17.78	18.10	19.74
	8H	10.22	10.48	11.43	11.67	13.34	16.80	17.06	18.00	18.25	19.92
	12H	10.18	10.41	11.39	11.60	13.30	16.93	17.16	18.14	18.35	20.05
12H	4H	10.11	10.43	11.30	11.62	13.27	15.91	16.24	17.11	17.42	19.08
	6H	10.46	10.72	11.67	11.91	13.58	16.56	16.82	17.77	18.02	19.68
	8H	10.52	10.75	11.73	11.94	13.64	16.78	17.01	17.99	18.20	19.90