

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: P938235

Luminaire Tested: SQ4-FB-150U-050D-92765-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938235  
REPORT IS A COMBINATION OF REPORTS P933629 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-150U-050D-92765-1D-UNV-STD-W-4-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

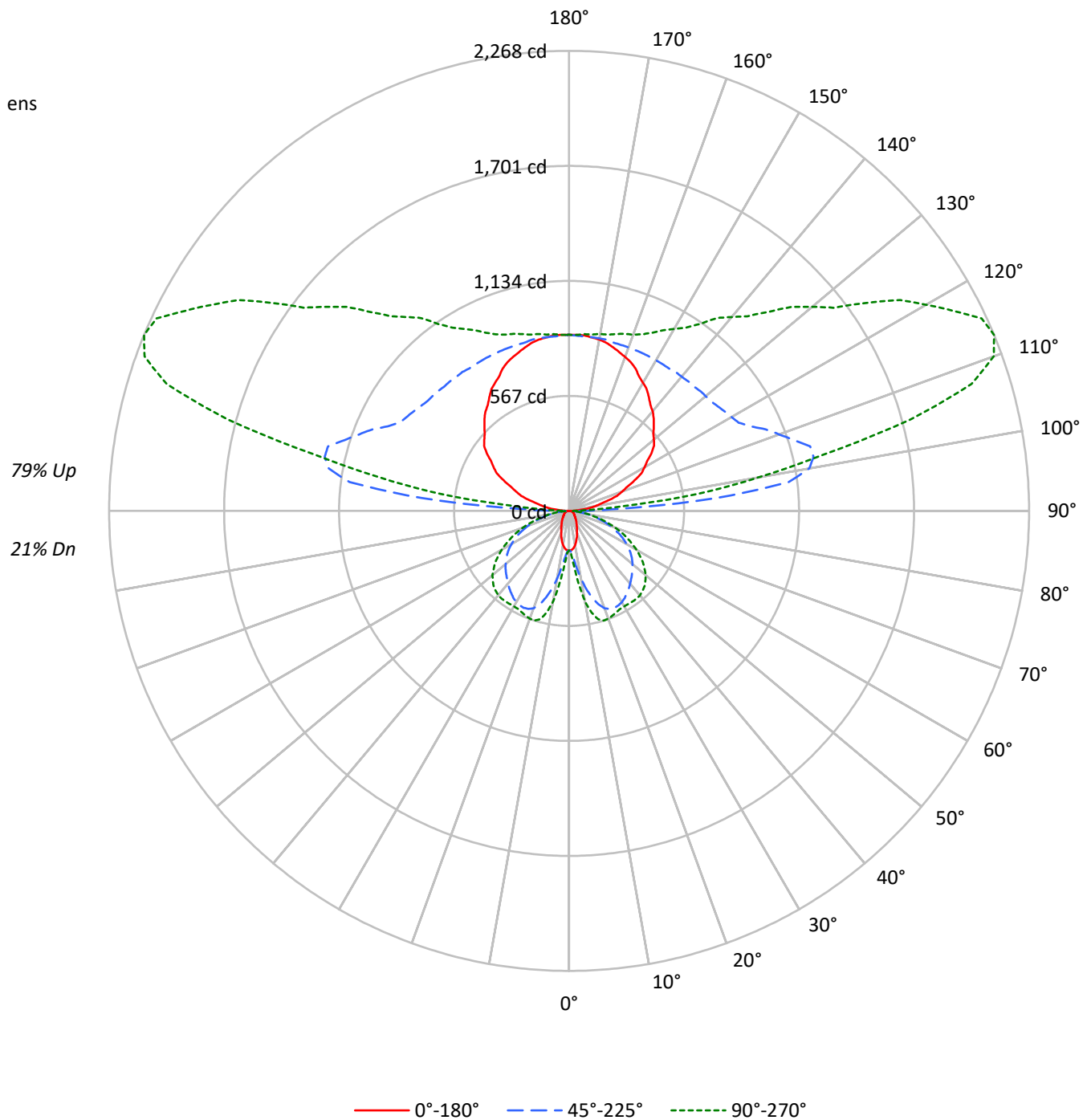
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7143.1 lumens  
Efficiency: N/A  
Efficacy: 128.5 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect

Input Watts (W): 55.6  
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

TEST NUMBER: P938235  
CATALOG NUMBER: SQ4-FB-150U-050D-92765-1D-UNV-STD-W-4-5000K

### 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	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	30	30	30	21
1	91	87	83	80	80	77	74	71	58	56	54	41	40	39	26	25	24	24	24	24	17
2	83	75	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	20	20	20	14
3	75	66	59	53	66	59	53	48	45	40	37	32	29	27	20	18	17	17	17	17	12
4	69	58	50	45	60	52	45	40	39	35	31	28	25	23	17	16	14	14	14	14	10
5	63	51	44	38	55	46	39	34	35	30	27	25	22	19	15	14	12	12	12	12	8
6	57	46	38	32	51	41	34	29	31	26	23	22	19	17	14	12	11	11	11	11	7
7	53	41	33	28	47	37	30	25	28	23	20	20	17	14	12	11	9	9	9	9	6
8	49	37	30	24	43	33	27	22	25	21	17	18	15	13	11	9	8	8	8	8	5
9	45	34	26	21	40	30	24	19	23	18	15	17	13	11	10	9	7	7	7	7	5
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	10	8	6	6	6	6	4

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

	0°	45°	90°
0°	1809	1809	1809
5°	1766	2090	2432
10°	1600	3044	4033
15°	1359	3974	4869
20°	1105	4602	4962
25°	920	4813	4862
30°	775	4839	4853
35°	684	4755	4978
40°	596	4647	5107
45°	538	4566	5128
50°	492	4493	5043
55°	470	4388	4818
60°	479	4190	4466
65°	496	3890	3981
70°	526	3385	3363
75°	577	2752	2624
80°	618	1902	1770
85°	522	1006	905

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5128 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.2	0.4
10°-20°	111.8	1.6
20°-30°	195.6	2.7
30°-40°	251.7	3.5
40°-50°	281.2	3.9
50°-60°	269.3	3.8
60°-70°	213.4	3.0
70°-80°	125.5	1.8
80°-90°	38.2	0.5
90°-100°	423.4	5.9
100°-110°	1113.2	15.6
110°-120°	1154.3	16.2
120°-130°	925.9	13.0
130°-140°	726.5	10.2
140°-150°	557.6	7.8
150°-160°	401.6	5.6
160°-170°	245.7	3.4
170°-180°	83.0	1.2
0°-30°	332.6	4.7
0°-40°	584.3	8.2
0°-60°	1134.8	15.9
0°-90°	1511.9	21.2
90°-120°	2690.9	37.7
90°-150°	4900.8	68.6
90°-180°	5631.0	78.8
0°-180°	7143.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	195	195	195	195	195	
5°	190	204	230	260	269	18
15°	142	263	443	537	554	40
25°	91	298	527	550	551	42
35°	61	285	497	525	546	38
45°	42	227	439	503	526	32
55°	30	144	372	433	444	27
65°	24	76	276	311	315	24
75°	18	47	152	167	167	18
85°	6	14	38	41	42	7
90°	6	16	44	22	22	5
95°	56	219	729	376	256	62
105°	201	304	1231	1868	1743	213
115°	356	433	986	1966	2244	352
125°	496	556	897	1515	1787	440
135°	590	650	869	1223	1387	457
145°	685	729	858	1044	1125	429
155°	774	796	858	942	969	356
165°	835	846	858	891	902	236
175°	869	869	863	874	874	82
180°	869	869	869	869	869	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	195.0	195.0	195.0	195.0	195.0	195.0	195.0	195.0	195.0	195.0	195.0
2.5°	195.0	195.0	196.3	196.8	198.2	198.8	200.0	201.2	205.1	205.6	206.9
5°	190.0	192.5	200.7	203.8	212.6	224.5	229.5	237.7	254.6	259.6	262.7
7.5°	182.5	188.2	208.2	213.2	235.2	266.5	279.7	297.2	324.2	337.3	348.0
10°	170.6	182.5	218.3	230.1	265.8	313.5	338.0	362.5	403.2	421.4	428.3
12.5°	157.4	176.8	228.9	245.2	296.6	366.2	395.7	422.7	469.0	493.5	497.3
15°	142.4	168.7	238.9	262.7	329.2	410.1	442.7	476.0	519.2	536.7	541.1
17.5°	129.2	162.5	248.4	273.4	354.3	449.6	482.9	510.4	545.5	557.5	560.5
20°	112.9	152.4	254.6	287.2	380.6	478.5	510.4	531.8	555.6	563.1	564.4
22.5°	100.9	141.7	258.4	292.2	398.2	496.0	523.0	539.9	556.2	558.7	559.3
25°	90.9	129.8	257.7	297.9	413.2	506.6	527.4	539.9	549.3	550.5	550.5
27.5°	81.5	116.7	255.2	299.1	424.5	509.1	525.5	534.3	538.7	541.1	541.1
30°	73.4	104.1	248.9	296.6	429.5	506.6	519.8	524.2	528.6	532.4	534.3
32.5°	67.1	92.2	239.6	291.5	430.2	500.3	509.8	512.3	518.6	527.4	530.4
35°	61.4	80.3	228.9	284.7	426.4	490.3	496.6	499.1	511.7	524.8	529.2
37.5°	55.8	71.5	215.1	272.7	420.7	478.5	482.9	487.3	506.6	522.3	527.4
40°	50.2	63.9	198.8	259.6	412.0	464.0	467.8	474.6	500.3	518.6	523.6
42.5°	45.8	57.7	181.2	245.8	400.7	447.7	453.3	463.4	492.9	512.3	517.9
45°	42.0	51.4	162.5	226.9	386.2	430.8	438.9	452.8	484.1	502.9	507.9
47.5°	38.2	47.0	143.0	207.6	370.6	413.9	424.5	440.2	472.2	490.3	494.7
50°	35.1	42.6	123.6	186.8	353.7	395.7	408.2	424.5	457.2	474.1	479.7
52.5°	32.6	38.9	105.3	166.2	334.3	376.9	391.3	408.2	438.9	455.2	459.0
55°	30.1	35.7	89.6	144.2	314.2	356.8	372.5	388.7	418.8	432.7	435.2
57.5°	28.9	33.3	76.5	123.6	292.8	334.3	351.7	366.8	395.0	405.7	408.2
60°	26.9	31.3	66.5	106.0	269.7	312.9	328.0	343.0	366.8	375.6	377.5
62.5°	25.1	30.1	59.0	89.1	245.8	287.8	302.8	316.7	336.7	343.0	345.5
65°	23.8	28.9	53.3	76.5	221.3	261.4	276.5	288.5	304.7	311.0	312.3
67.5°	22.6	27.6	48.9	65.8	196.8	235.2	246.4	257.7	270.2	276.5	277.1
70°	20.7	26.4	45.1	58.3	171.8	205.1	214.4	226.4	236.4	239.6	241.4
72.5°	19.4	24.5	42.6	52.7	146.1	176.2	185.0	191.9	200.7	203.8	203.8
75°	17.6	22.0	40.1	47.0	119.7	144.2	151.7	158.6	165.5	166.8	164.9
77.5°	15.7	19.4	34.5	39.5	93.5	114.1	120.4	124.1	129.8	131.0	131.7
80°	13.2	16.9	26.9	30.8	67.8	84.0	88.4	91.5	96.6	96.6	97.9
82.5°	10.0	13.2	19.4	22.0	45.8	57.7	61.4	63.4	66.5	66.5	66.5
85°	6.3	8.1	12.5	14.4	27.6	35.1	37.7	38.2	40.8	41.4	41.4
87.5°	3.2	4.4	8.1	8.8	14.4	18.2	18.2	19.4	19.4	18.8	18.2
90°	5.8	10.5	15.1	16.4	25.7	38.1	44.3	39.4	29.5	22.2	22.2
92.5°	23.3	62.9	102.6	112.5	158.2	219.0	249.5	218.6	157.0	110.8	106.4
95°	56.0	128.5	201.1	219.2	389.2	616.0	729.4	650.8	493.8	376.0	362.7
97.5°	96.7	160.8	224.8	240.8	524.3	902.4	1091.4	1041.7	942.5	868.1	842.6
100°	128.2	186.3	244.3	258.8	573.4	992.9	1202.7	1206.3	1213.6	1219.0	1188.8
102.5°	155.1	209.3	263.4	277.0	596.1	1021.4	1234.2	1297.4	1423.8	1518.7	1492.8
105°	200.6	246.5	292.3	303.8	612.7	1024.6	1230.6	1372.3	1655.8	1868.5	1854.6
107.5°	247.2	289.9	332.8	343.4	615.9	979.1	1160.7	1358.4	1753.8	2050.4	2053.7
110°	278.6	317.2	355.9	365.6	611.2	938.6	1102.4	1323.5	1765.5	2097.0	2111.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	309.6	346.4	383.2	392.4	611.4	903.4	1049.4	1275.6	1728.0	2067.3	2089.5
115°	356.2	390.1	424.1	432.6	617.0	862.9	985.8	1203.7	1639.6	1966.4	1997.4
117.5°	402.3	433.1	464.0	471.7	628.5	837.6	942.1	1138.8	1532.1	1827.1	1861.4
120°	429.0	458.1	487.1	494.4	637.7	829.0	924.6	1104.3	1463.7	1733.2	1766.5
122.5°	455.3	484.6	513.9	521.2	651.2	824.6	911.2	1073.0	1396.6	1639.4	1672.2
125°	495.6	522.2	549.0	555.6	669.2	820.9	896.7	1034.1	1309.0	1515.2	1545.4
127.5°	528.2	555.1	582.0	588.8	687.3	818.7	884.4	1002.5	1238.5	1415.5	1441.0
130°	545.7	574.7	603.6	610.9	700.6	820.0	879.7	984.8	1194.9	1352.5	1376.1
132.5°	563.7	592.8	621.8	629.1	711.2	820.9	875.6	969.7	1157.8	1298.9	1320.0
135°	590.5	617.0	643.4	650.0	722.9	820.0	868.6	947.4	1104.9	1223.1	1241.3
137.5°	617.9	644.1	670.3	676.8	740.4	825.2	867.5	934.1	1067.2	1167.2	1182.0
140°	640.7	664.9	689.0	695.0	751.1	826.0	863.4	920.9	1035.9	1122.2	1136.1
142.5°	658.2	680.5	702.7	708.3	760.0	828.9	863.4	914.0	1015.0	1090.8	1102.8
145°	685.0	704.5	723.8	728.7	771.7	829.0	857.6	898.9	981.5	1043.5	1052.6
147.5°	711.8	730.8	749.6	754.4	788.8	834.7	857.6	890.1	955.1	1003.9	1011.4
150°	729.4	746.5	763.5	767.8	797.7	837.6	857.6	885.1	939.9	981.2	987.2
152.5°	747.4	760.4	773.3	776.6	803.6	839.6	857.6	881.1	928.0	963.1	967.7
155°	774.2	783.8	793.4	795.8	816.4	843.9	857.6	876.3	913.6	941.5	944.6
157.5°	794.0	803.4	812.6	815.0	829.2	848.2	857.6	872.1	901.1	922.8	925.0
160°	807.4	814.7	822.0	823.8	835.1	850.1	857.6	870.0	894.9	913.5	914.7
162.5°	820.9	826.3	831.7	833.1	841.2	852.2	857.6	868.1	889.1	904.8	905.9
165°	835.4	840.3	845.3	846.5	850.2	855.2	857.6	865.1	880.1	891.3	892.6
167.5°	848.8	851.1	853.5	854.0	857.1	861.3	863.4	868.3	878.2	885.5	886.1
170°	857.6	859.9	862.3	862.8	863.0	863.3	863.4	868.3	878.2	885.5	885.5
172.5°	862.3	862.7	863.3	863.4	863.4	863.4	863.4	867.3	875.1	880.9	880.4
175°	868.6	868.6	868.6	868.6	866.8	864.5	863.4	865.8	870.8	874.5	874.5
177.5°	868.6	868.6	868.6	868.6	867.3	865.5	864.6	866.6	870.4	873.3	872.7
180°	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	195.0	195.0
2.5°	208.2	206.9
5°	267.8	269.0
7.5°	360.5	360.0
10°	448.4	454.0
12.5°	512.3	513.5
15°	551.2	553.7
17.5°	566.2	566.9
20°	566.9	565.6
22.5°	560.0	558.7
25°	551.9	551.2
27.5°	544.3	544.9
30°	541.1	543.1
32.5°	541.1	544.3
35°	542.4	545.5
37.5°	541.8	545.5
40°	539.2	543.6
42.5°	532.4	535.5
45°	521.7	525.5
47.5°	507.9	510.4
50°	490.3	492.9
52.5°	468.4	469.0
55°	442.1	444.5
57.5°	413.9	414.4
60°	382.5	384.4
62.5°	349.3	349.3
65°	314.2	315.4
67.5°	277.8	280.9
70°	240.8	241.4
72.5°	204.4	204.4
75°	166.8	167.4
77.5°	131.0	131.0
80°	97.2	97.9
82.5°	67.1	68.3
85°	42.0	42.0
87.5°	19.4	17.6
90°	22.2	22.2
92.5°	88.7	71.1
95°	309.3	255.9
97.5°	741.1	639.5
100°	1067.8	946.8
102.5°	1389.2	1285.5
105°	1798.8	1743.1
107.5°	2067.2	2080.7
110°	2169.5	2227.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2178.7	2267.8
115°	2120.9	2244.5
117.5°	1998.4	2135.4
120°	1899.7	2032.9
122.5°	1803.6	1934.9
125°	1666.4	1787.4
127.5°	1543.1	1645.2
130°	1470.4	1564.7
132.5°	1404.4	1488.9
135°	1314.1	1386.9
137.5°	1241.7	1301.2
140°	1191.8	1247.6
142.5°	1150.7	1198.6
145°	1088.9	1125.2
147.5°	1041.4	1071.5
150°	1011.6	1035.9
152.5°	986.1	1004.4
155°	956.8	968.9
157.5°	933.5	942.1
160°	919.7	924.6
162.5°	910.6	915.3
165°	897.5	902.5
167.5°	888.2	890.2
170°	885.5	885.5
172.5°	878.6	876.8
175°	874.5	874.5
177.5°	870.7	868.6
180°	868.6	868.6



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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	0.14	0.65	1.30	2.93	12.62	13.28	13.78	14.43	16.06
	3H	0.17	0.77	1.34	1.93	3.57	14.42	15.02	15.60	16.18	17.83
	4H	0.46	1.03	1.64	2.19	3.84	15.05	15.62	16.23	16.78	18.43
	6H	0.70	1.22	1.89	2.39	4.04	15.46	15.98	16.65	17.14	18.80
	8H	0.76	1.26	1.95	2.44	4.09	15.57	16.06	16.76	17.24	18.89
	12H	0.77	1.24	1.97	2.42	4.09	15.62	16.09	16.82	17.26	18.94
4H	2H	6.64	7.21	7.83	8.37	10.02	12.87	13.43	14.06	14.60	16.24
	3H	8.19	8.67	9.39	9.85	11.51	14.88	15.35	16.07	16.54	18.20
	4H	8.28	8.72	9.48	9.89	11.57	15.63	16.06	16.82	17.24	18.92
	6H	8.28	8.65	9.48	9.85	11.52	16.14	16.52	17.34	17.71	19.38
	8H	8.25	8.60	9.45	9.79	11.47	16.29	16.64	17.49	17.83	19.51
	12H	8.20	8.51	9.41	9.71	11.40	16.37	16.68	17.58	17.88	19.57
8H	4H	9.70	10.05	10.90	11.24	12.92	15.67	16.02	16.87	17.21	18.89
	6H	9.93	10.22	11.15	11.45	13.13	16.28	16.57	17.50	17.80	19.48
	8H	9.95	10.20	11.17	11.40	13.11	16.49	16.74	17.71	17.95	19.65
	12H	9.91	10.13	11.13	11.33	13.06	16.61	16.83	17.84	18.04	19.77
12H	4H	9.83	10.14	11.04	11.34	13.03	15.61	15.93	16.83	17.13	18.82
	6H	10.18	10.43	11.41	11.64	13.34	16.26	16.51	17.48	17.72	19.42
	8H	10.24	10.46	11.47	11.67	13.40	16.47	16.69	17.70	17.90	19.63