

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: P938218

Luminaire Tested: SQ4-FB-150U-050D-840-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938218
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-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

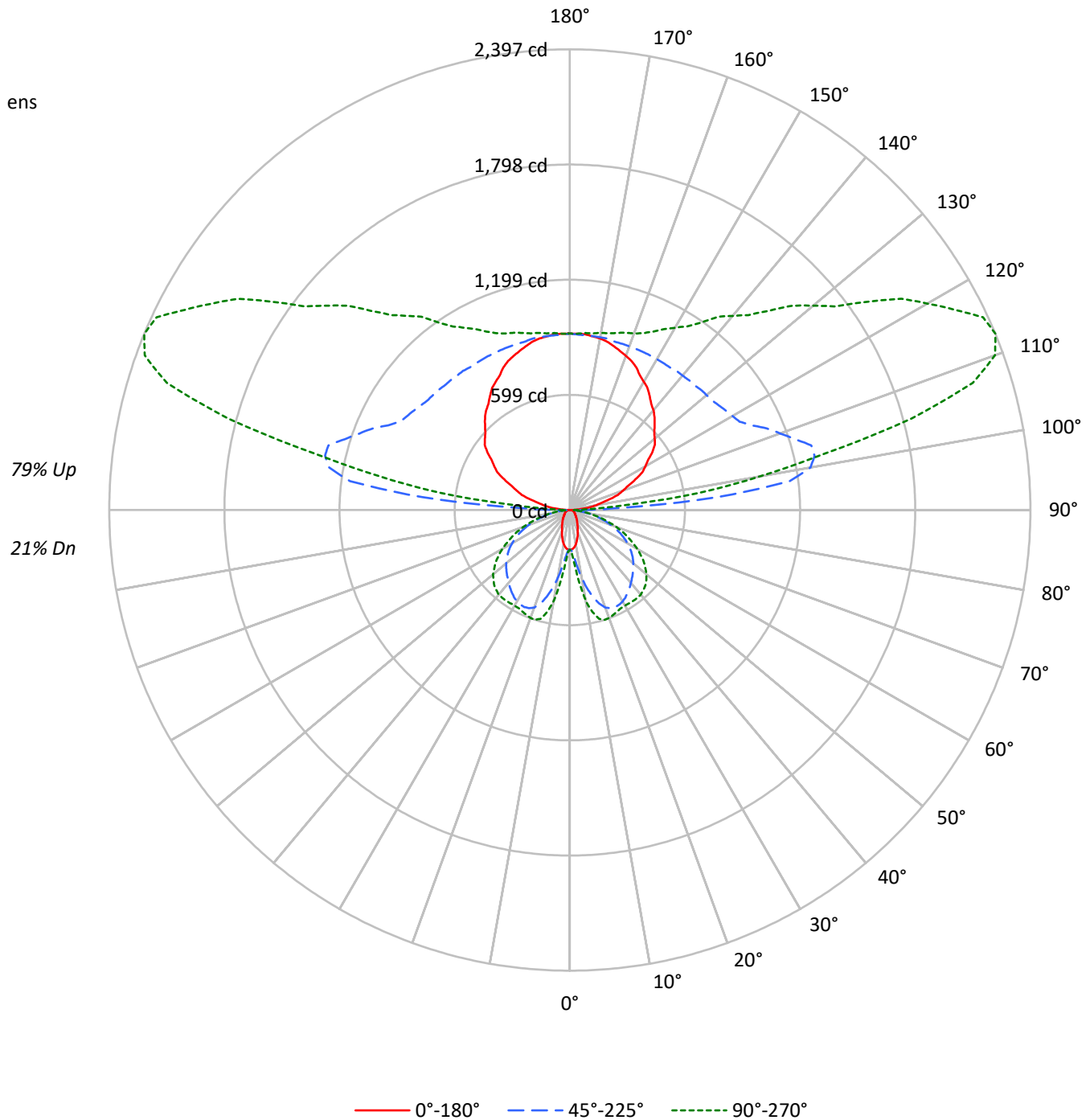
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7550.3 lumens
Efficiency: N/A
Efficacy: 135.8 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_{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	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°	1912	1912	1912
5°	1867	2209	2571
10°	1691	3218	4263
15°	1436	4201	5147
20°	1168	4864	5245
25°	973	5087	5139
30°	820	5114	5129
35°	723	5026	5261
40°	630	4912	5398
45°	568	4827	5421
50°	520	4749	5331
55°	497	4637	5094
60°	507	4428	4721
65°	525	4112	4208
70°	553	3577	3555
75°	610	2910	2775
80°	651	2012	1869
85°	547	1062	957

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5421 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.7	0.4
10°-20°	118.2	1.6
20°-30°	206.7	2.7
30°-40°	266.1	3.5
40°-50°	297.2	3.9
50°-60°	284.7	3.8
60°-70°	225.6	3.0
70°-80°	132.7	1.8
80°-90°	40.4	0.5
90°-100°	447.6	5.9
100°-110°	1176.7	15.6
110°-120°	1220.1	16.2
120°-130°	978.7	13.0
130°-140°	767.9	10.2
140°-150°	589.4	7.8
150°-160°	424.5	5.6
160°-170°	259.7	3.4
170°-180°	87.7	1.2
0°-30°	351.6	4.7
0°-40°	617.6	8.2
0°-60°	1199.5	15.9
0°-90°	1598.1	21.2
90°-120°	2844.3	37.7
90°-150°	5180.3	68.6
90°-180°	5952.0	78.8
0°-180°	7550.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	206	206	206	206	206	
5°	201	215	243	274	284	19
15°	150	278	468	567	585	42
25°	96	315	557	582	583	44
35°	65	301	525	555	577	41
45°	44	240	464	532	556	34
55°	32	152	394	457	470	29
65°	25	81	292	329	333	25
75°	19	50	160	176	177	19
85°	7	15	40	44	44	7
90°	6	17	47	23	23	6
95°	59	232	771	398	270	66
105°	212	321	1301	1975	1842	225
115°	376	457	1042	2079	2372	372
125°	524	587	948	1602	1889	465
135°	624	687	918	1293	1466	483
145°	724	770	906	1103	1189	454
155°	818	841	906	995	1024	376
165°	883	895	906	942	954	249
175°	918	918	913	924	924	87
180°	918	918	918	918	918	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	206.1	206.1	206.1	206.1	206.1	206.1	206.1	206.1	206.1	206.1	206.1
2.5°	206.1	206.1	207.5	208.1	209.5	210.1	211.4	212.7	216.8	217.4	218.7
5°	200.9	203.5	212.1	215.4	224.7	237.3	242.6	251.2	269.1	274.4	277.7
7.5°	192.9	198.9	220.0	225.4	248.6	281.7	295.6	314.2	342.6	356.6	367.8
10°	180.3	192.9	230.7	243.2	281.0	331.4	357.3	383.1	426.2	445.4	452.7
12.5°	166.4	186.9	242.0	259.2	313.5	387.1	418.2	446.8	495.8	521.7	525.6
15°	150.5	178.3	252.5	277.7	348.0	433.4	467.9	503.1	548.8	567.3	572.0
17.5°	136.5	171.7	262.5	289.0	374.5	475.2	510.4	539.5	576.6	589.2	592.5
20°	119.4	161.0	269.1	303.6	402.3	505.8	539.5	562.1	587.3	595.2	596.6
22.5°	106.7	149.8	273.1	308.8	420.9	524.2	552.8	570.7	587.9	590.5	591.2
25°	96.1	137.2	272.4	314.9	436.8	535.5	557.4	570.7	580.6	581.9	581.9
27.5°	86.2	123.3	269.7	316.2	448.7	538.2	555.5	564.7	569.4	572.0	572.0
30°	77.6	110.1	263.1	313.5	454.0	535.5	549.4	554.1	558.7	562.8	564.7
32.5°	70.9	97.4	253.2	308.2	454.7	528.9	538.9	541.5	548.1	557.4	560.7
35°	64.9	84.9	242.0	300.9	450.7	518.3	524.9	527.6	540.8	554.8	559.4
37.5°	59.0	75.6	227.3	288.3	444.7	505.8	510.4	515.0	535.5	552.1	557.4
40°	53.1	67.6	210.1	274.4	435.5	490.4	494.5	501.7	528.9	548.1	553.5
42.5°	48.4	61.0	191.6	259.8	423.6	473.3	479.2	489.9	521.0	541.5	547.5
45°	44.4	54.3	171.7	239.9	408.2	455.4	464.0	478.6	511.7	531.5	536.9
47.5°	40.4	49.7	151.2	219.4	391.7	437.5	448.7	465.2	499.1	518.3	522.9
50°	37.1	45.1	130.6	197.5	373.9	418.2	431.5	448.7	483.2	501.1	507.0
52.5°	34.5	41.1	111.3	175.7	353.3	398.4	413.6	431.5	464.0	481.2	485.2
55°	31.8	37.7	94.7	152.4	332.1	377.1	393.7	410.9	442.7	457.3	460.0
57.5°	30.5	35.2	80.8	130.6	309.5	353.3	371.8	387.7	417.5	428.8	431.5
60°	28.5	33.1	70.2	112.0	285.0	330.8	346.7	362.6	387.7	397.0	399.1
62.5°	26.5	31.8	62.3	94.2	259.8	304.2	320.1	334.7	355.9	362.6	365.2
65°	25.2	30.5	56.3	80.8	234.0	276.3	292.3	304.9	322.1	328.7	330.1
67.5°	23.9	29.1	51.7	69.6	208.1	248.6	260.4	272.4	285.6	292.3	292.9
70°	21.8	27.9	47.7	61.7	181.6	216.8	226.6	239.3	249.9	253.2	255.2
72.5°	20.6	25.9	45.1	55.7	154.4	186.2	195.5	202.8	212.1	215.4	215.4
75°	18.6	23.2	42.4	49.7	126.6	152.4	160.4	167.7	175.0	176.3	174.3
77.5°	16.6	20.6	36.5	41.8	98.8	120.6	127.3	131.2	137.2	138.5	139.2
80°	13.9	17.9	28.5	32.5	71.6	88.8	93.5	96.7	102.1	102.1	103.4
82.5°	10.6	13.9	20.6	23.2	48.4	61.0	64.9	67.0	70.2	70.2	70.2
85°	6.6	8.6	13.2	15.2	29.1	37.1	39.8	40.4	43.1	43.8	43.8
87.5°	3.4	4.6	8.6	9.3	15.2	19.3	19.3	20.6	20.6	19.9	19.3
90°	6.1	11.1	16.0	17.3	27.2	40.3	46.8	41.6	31.2	23.4	23.4
92.5°	24.6	66.5	108.5	119.0	167.2	231.5	263.7	231.1	166.0	117.1	112.4
95°	59.2	135.8	212.5	231.7	411.4	651.1	770.9	687.9	522.0	397.5	383.3
97.5°	102.3	169.9	237.6	254.5	554.2	953.8	1153.6	1101.1	996.2	917.6	890.7
100°	135.6	196.9	258.3	273.6	606.1	1049.6	1271.3	1275.1	1282.8	1288.5	1256.5
102.5°	163.9	221.2	278.4	292.7	630.0	1079.7	1304.6	1371.3	1505.0	1605.3	1577.9
105°	212.0	260.5	308.9	321.1	647.6	1083.0	1300.8	1450.6	1750.2	1975.0	1960.3
107.5°	261.3	306.5	351.7	363.0	651.0	1034.9	1226.9	1435.9	1853.8	2167.3	2170.8
110°	294.5	335.3	376.2	386.4	646.1	992.1	1165.2	1398.9	1866.1	2216.6	2231.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	327.2	366.2	405.1	414.8	646.3	954.9	1109.2	1348.3	1826.5	2185.2	2208.7
115°	376.5	412.4	448.3	457.2	652.2	912.1	1042.0	1272.3	1733.1	2078.6	2111.3
117.5°	425.2	457.8	490.4	498.5	664.3	885.3	995.8	1203.7	1619.4	1931.2	1967.5
120°	453.5	484.2	514.8	522.6	674.1	876.3	977.3	1167.2	1547.1	1832.0	1867.2
122.5°	481.3	512.2	543.2	550.9	688.3	871.6	963.2	1134.2	1476.3	1732.9	1767.5
125°	523.8	552.0	580.3	587.3	707.4	867.7	947.8	1093.0	1383.6	1601.5	1633.6
127.5°	558.3	586.8	615.2	622.3	726.5	865.4	934.8	1059.6	1309.1	1496.2	1523.2
130°	576.8	607.4	638.1	645.8	740.5	866.8	929.9	1041.0	1263.1	1429.6	1454.5
132.5°	595.9	626.6	657.2	664.9	751.8	867.7	925.6	1025.0	1223.8	1372.9	1395.3
135°	624.2	652.2	680.0	687.1	764.1	866.8	918.1	1001.4	1167.9	1292.8	1312.1
137.5°	653.2	680.8	708.5	715.4	782.6	872.2	917.0	987.3	1128.1	1233.7	1249.4
140°	677.3	702.8	728.3	734.6	794.0	873.1	912.6	973.4	1095.0	1186.2	1200.9
142.5°	695.7	719.3	742.8	748.7	803.3	876.2	912.6	966.1	1072.9	1153.0	1165.6
145°	724.1	744.7	765.1	770.2	815.7	876.3	906.5	950.2	1037.5	1103.0	1112.6
147.5°	752.4	772.4	792.4	797.4	833.8	882.3	906.5	940.9	1009.5	1061.1	1069.0
150°	770.9	789.0	807.0	811.5	843.2	885.3	906.5	935.5	993.5	1037.1	1043.5
152.5°	790.0	803.7	817.4	820.8	849.4	887.4	906.5	931.3	980.9	1018.0	1022.9
155°	818.4	828.5	838.6	841.2	862.9	892.0	906.5	926.2	965.7	995.2	998.5
157.5°	839.3	849.2	859.0	861.4	876.5	896.5	906.5	921.8	952.4	975.5	977.7
160°	853.4	861.1	868.8	870.7	882.7	898.6	906.5	919.6	945.9	965.6	966.9
162.5°	867.7	873.4	879.1	880.6	889.2	900.8	906.5	917.6	939.8	956.4	957.6
165°	883.1	888.2	893.4	894.7	898.7	903.9	906.5	914.4	930.3	942.2	943.4
167.5°	897.2	899.7	902.1	902.7	906.0	910.4	912.6	917.9	928.2	936.0	936.6
170°	906.5	909.0	911.4	912.0	912.2	912.5	912.6	917.9	928.2	936.0	936.0
172.5°	911.4	911.9	912.5	912.6	912.6	912.6	912.6	916.8	925.0	931.1	930.6
175°	918.1	918.1	918.1	918.1	916.3	913.8	912.6	915.2	920.4	924.4	924.4
177.5°	918.1	918.1	918.1	918.1	916.8	914.9	913.9	916.0	920.0	923.1	922.5
180°	918.1	918.1	918.1	918.1	918.1	918.1	918.1	918.1	918.1	918.1	918.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	206.1	206.1
2.5°	220.0	218.7
5°	283.1	284.3
7.5°	381.1	380.5
10°	473.9	479.9
12.5°	541.5	542.8
15°	582.6	585.3
17.5°	598.5	599.2
20°	599.2	597.8
22.5°	591.9	590.5
25°	583.3	582.6
27.5°	575.3	576.0
30°	572.0	574.0
32.5°	572.0	575.3
35°	573.3	576.6
37.5°	572.6	576.6
40°	570.0	574.6
42.5°	562.8	566.0
45°	551.4	555.5
47.5°	536.9	539.5
50°	518.3	521.0
52.5°	495.1	495.8
55°	467.3	469.9
57.5°	437.5	438.1
60°	404.3	406.3
62.5°	369.2	369.2
65°	332.1	333.4
67.5°	293.6	296.9
70°	254.5	255.2
72.5°	216.1	216.1
75°	176.3	177.0
77.5°	138.5	138.5
80°	102.8	103.4
82.5°	70.9	72.2
85°	44.4	44.4
87.5°	20.6	18.6
90°	23.4	23.4
92.5°	93.8	75.2
95°	326.9	270.5
97.5°	783.4	676.0
100°	1128.7	1000.7
102.5°	1468.4	1358.8
105°	1901.4	1842.5
107.5°	2185.1	2199.3
110°	2293.2	2354.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2302.9	2397.1
115°	2241.9	2372.5
117.5°	2112.3	2257.2
120°	2008.0	2148.8
122.5°	1906.4	2045.3
125°	1761.4	1889.4
127.5°	1631.1	1739.0
130°	1554.2	1653.9
132.5°	1484.5	1573.8
135°	1389.0	1466.0
137.5°	1312.5	1375.4
140°	1259.8	1318.7
142.5°	1216.3	1266.9
145°	1151.0	1189.4
147.5°	1100.8	1132.6
150°	1069.3	1095.0
152.5°	1042.3	1061.7
155°	1011.3	1024.2
157.5°	986.7	995.8
160°	972.1	977.3
162.5°	962.5	967.4
165°	948.7	953.9
167.5°	938.8	941.0
170°	936.0	936.0
172.5°	928.7	926.8
175°	924.4	924.4
177.5°	920.3	918.1
180°	918.1	918.1



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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	0.00	0.33	0.83	1.48	3.11	12.81	13.47	13.98	14.63	16.26
	3H	0.36	0.95	1.53	2.11	3.76	14.62	15.21	15.79	16.37	18.02
	4H	0.65	1.21	1.83	2.38	4.02	15.24	15.81	16.43	16.97	18.62
	6H	0.89	1.41	2.08	2.57	4.23	15.65	16.17	16.84	17.34	19.00
	8H	0.95	1.45	2.14	2.63	4.28	15.76	16.25	16.95	17.43	19.08
	12H	0.96	1.43	2.16	2.60	4.28	15.81	16.28	17.01	17.46	19.13
4H	2H	6.84	7.40	8.03	8.56	10.21	13.06	13.63	14.25	14.79	16.44
	3H	8.39	8.86	9.58	10.05	11.71	15.07	15.55	16.27	16.73	18.39
	4H	8.47	8.91	9.67	10.08	11.76	15.82	16.26	17.02	17.43	19.11
	6H	8.47	8.85	9.67	10.04	11.71	16.33	16.71	17.53	17.91	19.57
	8H	8.44	8.79	9.64	9.98	11.67	16.48	16.83	17.68	18.02	19.71
	12H	8.39	8.71	9.61	9.91	11.60	16.56	16.88	17.77	18.08	19.76
8H	4H	9.89	10.24	11.09	11.43	13.11	15.86	16.21	17.06	17.40	19.09
	6H	10.12	10.41	11.34	11.64	13.32	16.47	16.76	17.69	17.99	19.67
	8H	10.14	10.39	11.36	11.60	13.30	16.68	16.93	17.90	18.14	19.84
	12H	10.10	10.32	11.32	11.52	13.25	16.81	17.03	18.03	18.23	19.96
12H	4H	10.02	10.34	11.23	11.54	13.23	15.81	16.12	17.02	17.32	19.01
	6H	10.38	10.63	11.60	11.83	13.54	16.45	16.70	17.67	17.91	19.61
	8H	10.44	10.66	11.66	11.86	13.59	16.66	16.88	17.89	18.09	19.82