

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: P936408

Luminaire Tested: SQ4-FB-025U-075D-B50-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936408
REPORT IS A COMBINATION OF REPORTS P933454 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-075D-B50-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

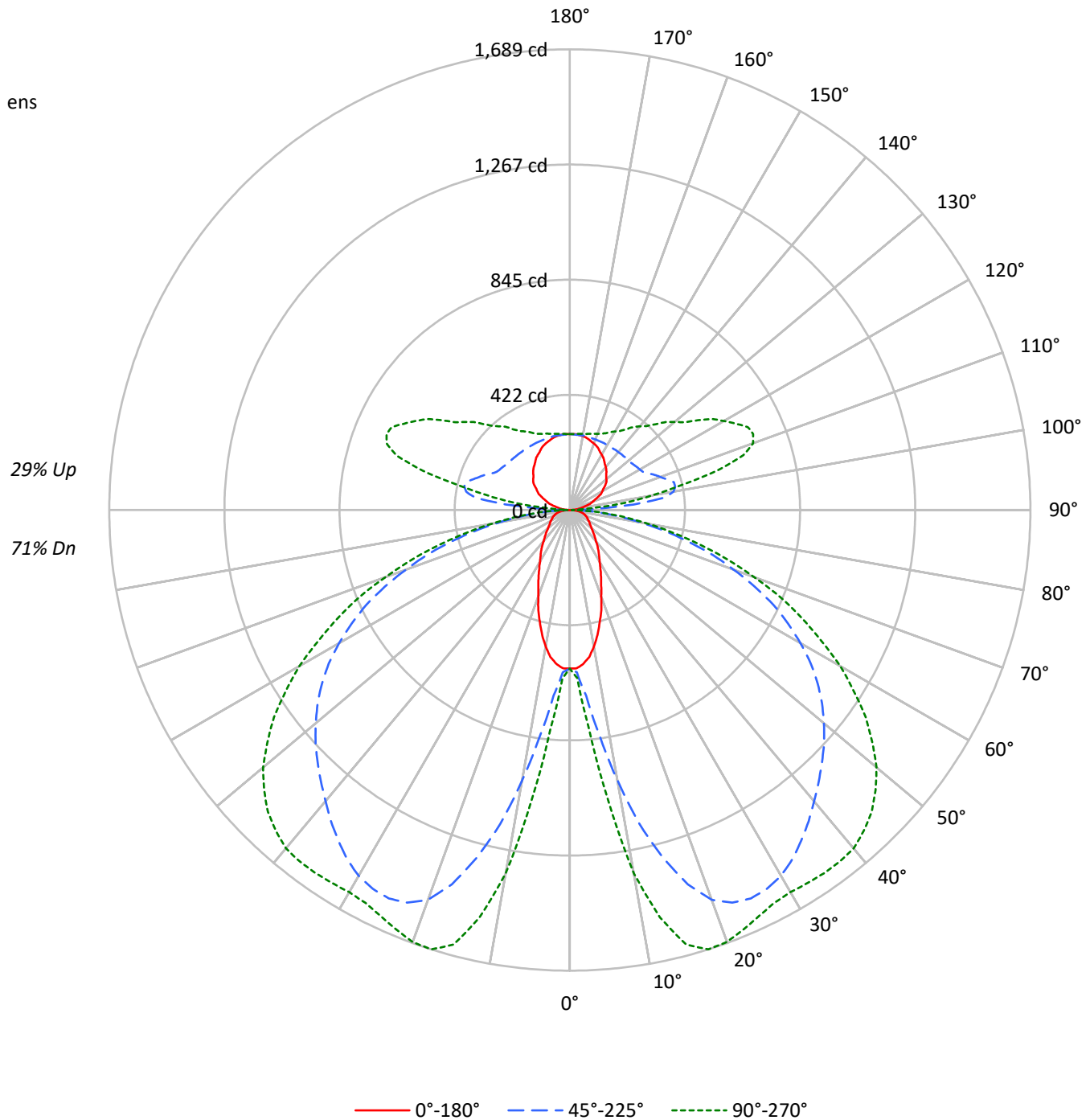
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6302.7 lumens
Efficiency: N/A
Efficacy: 105.0 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: Semi-Direct

Input Watts (W): 60
Input Voltage (V): NR
Input Current (Ain): 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	0
RCR																					
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	76	76	71
1	102	97	93	89	96	92	88	85	82	79	77	74	71	69	66	64	62	66	64	62	58
2	92	84	77	71	87	79	73	68	71	66	62	64	60	57	57	54	51	57	54	51	48
3	83	73	65	58	79	69	62	56	62	56	51	56	51	47	50	46	43	50	46	43	39
4	76	64	55	49	71	61	53	47	55	48	43	49	44	39	44	40	36	44	40	36	33
5	69	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31	39	34	31	28
6	64	51	42	35	60	48	40	34	43	37	32	39	33	29	35	30	27	35	30	27	24
7	59	45	37	31	55	43	35	30	39	32	27	35	30	25	32	27	23	32	27	23	21
8	54	41	33	27	51	39	31	26	36	29	24	32	26	22	29	24	21	29	24	21	18
9	51	37	29	24	48	36	28	23	32	26	21	29	24	20	26	22	18	26	22	18	16
10	47	34	26	21	45	33	25	21	30	23	19	27	22	18	24	20	16	24	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2695	2695	2695
5°	2633	3115	3623
10°	2388	4541	6007
15°	2030	5933	7253
20°	1652	6875	7392
25°	1379	7195	7242
30°	1163	7241	7228
35°	1028	7120	7415
40°	895	6964	7608
45°	811	6850	7638
50°	744	6747	7511
55°	713	6596	7179
60°	729	6306	6653
65°	759	5866	5930
70°	808	5116	5010
75°	896	4171	3910
80°	978	2893	2634
85°	871	1535	1349

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7638 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.1	1.2
10°-20°	333.1	5.3
20°-30°	582.6	9.2
30°-40°	750.0	11.9
40°-50°	837.7	13.3
50°-60°	802.3	12.7
60°-70°	635.8	10.1
70°-80°	373.9	5.9
80°-90°	104.9	1.7
90°-100°	135.9	2.2
100°-110°	357.3	5.7
110°-120°	370.4	5.9
120°-130°	297.1	4.7
130°-140°	233.1	3.7
140°-150°	179.0	2.8
150°-160°	128.9	2.0
160°-170°	78.9	1.3
170°-180°	26.6	0.4
0°-30°	990.8	15.7
0°-40°	1740.8	27.6
0°-60°	3380.8	53.6
0°-90°	4495.5	71.3
90°-120°	863.6	13.7
90°-150°	1572.8	25.0
90°-180°	1807.0	28.7
0°-180°	6302.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	581	581	581	581	581	
5°	566	607	684	773	801	52
15°	424	783	1319	1599	1650	118
25°	271	887	1571	1640	1642	125
35°	183	848	1480	1564	1625	114
45°	125	676	1308	1498	1566	97
55°	90	430	1110	1289	1324	82
65°	71	228	824	926	940	70
75°	52	140	452	497	499	55
85°	19	43	112	123	125	20
90°	2	5	14	7	7	3
95°	18	70	234	121	82	20
105°	64	98	395	600	559	68
115°	114	139	316	631	720	113
125°	159	178	288	486	574	141
135°	190	209	279	393	445	147
145°	220	234	275	335	361	138
155°	248	255	275	302	311	114
165°	268	272	275	286	290	76
175°	279	279	277	281	281	26
180°	279	279	279	279	279	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9
2.5°	580.9	580.9	584.7	586.6	590.3	592.2	595.9	599.6	610.8	612.7	616.4
5°	566.0	573.5	597.8	607.1	633.3	668.7	683.7	708.0	758.4	773.4	782.7
7.5°	543.6	560.4	620.2	635.1	700.5	793.9	833.1	885.4	965.8	1005.0	1036.7
10°	508.1	543.6	650.1	685.6	792.0	934.0	1006.9	1079.8	1201.2	1255.4	1275.9
12.5°	468.9	526.8	681.8	730.4	883.6	1091.0	1178.8	1259.1	1397.4	1470.2	1481.4
15°	424.0	502.5	711.7	782.7	980.7	1221.8	1318.9	1417.9	1546.8	1599.1	1612.2
17.5°	384.8	483.8	739.7	814.4	1055.4	1339.4	1438.5	1520.6	1625.3	1660.7	1670.1
20°	336.2	453.9	758.4	855.5	1134.0	1425.4	1520.6	1584.2	1655.1	1677.6	1681.3
22.5°	300.7	422.2	769.6	870.5	1186.3	1477.7	1558.0	1608.4	1657.0	1664.5	1666.3
25°	270.9	386.7	767.7	887.3	1231.1	1509.4	1571.1	1608.4	1636.5	1640.2	1640.2
27.5°	242.8	347.4	760.3	891.0	1264.7	1516.9	1565.5	1591.6	1604.7	1612.2	1612.2
30°	218.6	310.1	741.6	883.6	1279.7	1509.4	1548.7	1561.7	1574.8	1586.0	1591.6
32.5°	199.9	274.6	713.6	868.6	1281.5	1490.8	1518.8	1526.2	1544.9	1571.1	1580.4
35°	183.1	239.1	681.8	848.1	1270.3	1460.9	1479.5	1487.0	1524.4	1563.6	1576.7
37.5°	166.3	213.0	640.7	812.6	1253.5	1425.4	1438.5	1451.5	1509.4	1556.1	1571.1
40°	149.4	190.5	592.2	773.4	1227.4	1382.4	1393.6	1414.2	1490.8	1544.9	1559.9
42.5°	136.4	171.9	539.9	732.3	1193.7	1333.8	1350.7	1380.5	1468.3	1526.2	1543.1
45°	125.2	153.2	483.8	676.2	1150.8	1283.4	1307.7	1348.8	1442.2	1498.2	1513.2
47.5°	113.9	140.1	425.9	618.3	1104.1	1233.0	1264.7	1311.4	1406.7	1460.9	1473.9
50°	104.6	127.0	368.0	556.7	1053.6	1178.8	1216.2	1264.7	1361.9	1412.3	1429.1
52.5°	97.1	115.8	313.8	495.0	995.6	1122.8	1165.7	1216.2	1307.7	1356.3	1367.5
55°	89.7	106.5	267.1	429.6	935.9	1063.0	1109.7	1158.3	1247.9	1289.0	1296.5
57.5°	85.9	99.0	227.9	368.0	872.4	995.6	1047.9	1092.9	1176.9	1208.7	1216.2
60°	80.3	93.4	198.0	315.7	803.2	932.1	977.0	1021.8	1092.9	1119.0	1124.6
62.5°	74.7	89.7	175.6	265.3	732.3	857.4	902.2	943.3	1003.1	1021.8	1029.3
65°	71.0	85.9	158.8	227.9	659.4	779.0	823.8	859.3	907.8	926.5	930.3
67.5°	67.2	82.2	145.7	196.1	586.6	700.5	734.1	767.7	805.1	823.8	825.7
70°	61.6	78.5	134.5	173.7	511.8	610.8	638.9	674.3	704.2	713.6	719.2
72.5°	57.9	72.9	127.0	156.9	435.2	524.9	551.1	571.6	597.8	607.1	607.1
75°	52.3	65.4	119.6	140.1	356.8	429.6	452.1	472.6	493.2	496.9	491.3
77.5°	46.7	57.9	102.7	117.7	278.3	340.0	358.7	369.9	386.7	390.4	392.3
80°	39.2	50.4	80.3	91.5	201.7	250.3	263.4	272.7	287.7	287.7	291.4
82.5°	29.9	39.2	57.9	65.4	136.4	171.9	183.1	188.7	198.0	198.0	198.0
85°	18.7	24.3	37.4	43.0	82.2	104.6	112.1	113.9	121.4	123.3	123.3
87.5°	9.3	13.1	24.3	26.2	43.0	54.2	54.2	57.9	57.9	56.0	54.2
90°	1.9	3.4	4.9	5.2	8.2	12.2	14.2	12.6	9.4	7.1	7.1
92.5°	7.5	20.2	33.0	36.1	50.8	70.3	80.0	70.1	50.4	35.6	34.2
95°	17.9	41.2	64.5	70.3	124.9	197.6	234.1	208.8	158.5	120.7	116.4
97.5°	31.1	51.7	72.1	77.2	168.2	289.5	350.2	334.4	302.5	278.6	270.5
100°	41.2	59.8	78.4	83.0	184.0	318.6	385.9	387.1	389.5	391.3	381.5
102.5°	49.8	67.2	84.5	88.8	191.3	327.8	396.1	416.4	456.9	487.4	479.0
105°	64.4	79.1	93.9	97.5	196.7	328.9	395.0	440.5	531.4	599.6	595.1
107.5°	79.3	93.0	106.8	110.2	197.6	314.2	372.5	435.9	562.8	658.0	659.1
110°	89.5	101.8	114.2	117.3	196.1	301.2	353.8	424.7	566.6	672.9	677.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	99.4	111.1	122.9	125.9	196.2	289.9	336.8	409.4	554.5	663.4	670.6
115°	114.3	125.2	136.1	138.8	198.0	276.9	316.3	386.3	526.2	631.1	641.0
117.5°	129.1	139.0	148.9	151.4	201.7	268.8	302.3	365.5	491.7	586.4	597.4
120°	137.7	147.0	156.4	158.7	204.7	266.1	296.7	354.4	469.7	556.2	566.8
122.5°	146.1	155.5	164.9	167.3	209.0	264.6	292.4	344.4	448.2	526.1	536.7
125°	159.1	167.7	176.2	178.3	214.8	263.5	287.8	331.9	420.1	486.2	496.0
127.5°	169.5	178.1	186.8	188.9	220.6	262.7	283.8	321.8	397.5	454.3	462.5
130°	175.1	184.5	193.7	196.0	224.8	263.2	282.3	316.1	383.5	434.0	441.6
132.5°	180.9	190.3	199.5	201.8	228.3	263.5	281.0	311.2	371.5	416.8	423.7
135°	189.5	198.0	206.5	208.7	232.0	263.2	278.8	304.1	354.6	392.6	398.4
137.5°	198.3	206.7	215.1	217.2	237.6	264.8	278.4	299.8	342.5	374.5	379.3
140°	205.6	213.3	221.1	223.0	241.1	265.1	277.1	295.6	332.5	360.2	364.6
142.5°	211.3	218.4	225.6	227.3	244.0	266.1	277.1	293.4	325.8	350.1	353.9
145°	219.9	226.1	232.3	233.9	247.7	266.1	275.2	288.5	315.0	334.9	337.8
147.5°	228.5	234.5	240.6	242.1	253.1	267.9	275.2	285.7	306.5	322.1	324.6
150°	234.1	239.6	245.0	246.4	256.0	268.8	275.2	284.0	301.7	314.9	316.8
152.5°	239.9	244.0	248.2	249.2	257.9	269.5	275.2	282.7	297.8	309.1	310.6
155°	248.4	251.5	254.6	255.4	262.0	270.9	275.2	281.2	293.2	302.1	303.1
157.5°	254.8	257.8	260.8	261.5	266.1	272.2	275.2	279.9	289.2	296.2	296.8
160°	259.1	261.4	263.8	264.3	268.0	272.8	275.2	279.3	287.2	293.2	293.6
162.5°	263.4	265.2	266.8	267.3	269.9	273.5	275.2	278.6	285.3	290.4	290.8
165°	268.2	269.7	271.3	271.7	272.9	274.5	275.2	277.7	282.4	286.1	286.5
167.5°	272.4	273.2	273.9	274.1	275.2	276.5	277.1	278.7	281.9	284.2	284.4
170°	275.2	276.0	276.7	276.9	277.0	277.1	277.1	278.7	281.9	284.2	284.2
172.5°	276.7	276.9	277.1	277.1	277.1	277.1	277.1	278.3	280.9	282.7	282.5
175°	278.8	278.8	278.8	278.8	278.2	277.5	277.1	277.9	279.5	280.7	280.7
177.5°	278.8	278.8	278.8	278.8	278.3	277.8	277.5	278.1	279.4	280.3	280.1
180°	278.8	278.8	278.8	278.8	278.8	278.8	278.8	278.8	278.8	278.8	278.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	580.9	580.9
2.5°	620.2	616.4
5°	797.6	801.4
7.5°	1074.2	1072.3
10°	1335.7	1352.5
12.5°	1526.2	1530.0
15°	1642.1	1649.5
17.5°	1686.9	1688.8
20°	1688.8	1685.0
22.5°	1668.2	1664.5
25°	1643.9	1642.1
27.5°	1621.5	1623.4
30°	1612.2	1617.8
32.5°	1612.2	1621.5
35°	1615.9	1625.3
37.5°	1614.0	1625.3
40°	1606.6	1619.6
42.5°	1586.0	1595.4
45°	1554.3	1565.5
47.5°	1513.2	1520.6
50°	1460.9	1468.3
52.5°	1395.5	1397.4
55°	1317.0	1324.5
57.5°	1233.0	1234.8
60°	1139.6	1145.2
62.5°	1040.5	1040.5
65°	935.9	939.6
67.5°	827.5	836.9
70°	717.3	719.2
72.5°	609.0	609.0
75°	496.9	498.8
77.5°	390.4	390.4
80°	289.5	291.4
82.5°	199.9	203.6
85°	125.2	125.2
87.5°	57.9	52.3
90°	7.1	7.1
92.5°	28.5	22.8
95°	99.3	82.1
97.5°	237.8	205.2
100°	342.7	303.8
102.5°	445.8	412.5
105°	577.3	559.4
107.5°	663.4	667.7
110°	696.2	714.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	699.2	727.8
115°	680.7	720.3
117.5°	641.4	685.4
120°	609.6	652.4
122.5°	578.8	620.9
125°	534.8	573.7
127.5°	495.2	528.0
130°	471.9	502.1
132.5°	450.7	477.8
135°	421.7	445.1
137.5°	398.4	417.6
140°	382.5	400.4
142.5°	369.3	384.6
145°	349.5	361.1
147.5°	334.2	343.9
150°	324.7	332.5
152.5°	316.4	322.3
155°	307.0	310.9
157.5°	299.6	302.3
160°	295.1	296.7
162.5°	292.2	293.7
165°	288.0	289.6
167.5°	285.1	285.7
170°	284.2	284.2
172.5°	282.0	281.4
175°	280.7	280.7
177.5°	279.5	278.8
180°	278.8	278.8



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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	6.19	7.34	6.93	8.11	9.04	19.37	20.52	20.11	21.29	22.22
	3H	6.92	7.96	7.67	8.74	9.69	21.23	22.27	21.98	23.05	24.01
	4H	7.23	8.21	8.00	9.00	9.97	21.89	22.87	22.66	23.66	24.63
	6H	7.49	8.41	8.28	9.20	10.19	22.33	23.24	23.12	24.04	25.02
	8H	7.57	8.44	8.37	9.26	10.24	22.46	23.33	23.26	24.15	25.13
	12H	7.60	8.43	8.40	9.24	10.25	22.54	23.37	23.34	24.18	25.19
4H	2H	13.44	14.42	14.22	15.21	16.18	19.68	20.66	20.45	21.45	22.42
	3H	15.03	15.86	15.82	16.68	17.67	21.75	22.58	22.54	23.40	24.38
	4H	15.14	15.90	15.95	16.72	17.73	22.53	23.28	23.33	24.10	25.12
	6H	15.17	15.82	15.99	16.67	17.69	23.09	23.74	23.91	24.59	25.61
	8H	15.15	15.77	15.98	16.61	17.64	23.26	23.87	24.08	24.71	25.74
	12H	15.13	15.68	15.97	16.54	17.58	23.36	23.92	24.21	24.78	25.82
8H	4H	16.61	17.22	17.44	18.07	19.10	22.62	23.23	23.44	24.07	25.10
	6H	16.87	17.38	17.72	18.26	19.29	23.26	23.77	24.11	24.65	25.68
	8H	16.89	17.34	17.75	18.22	19.27	23.48	23.94	24.35	24.81	25.86
	12H	16.87	17.27	17.74	18.14	19.25	23.64	24.04	24.51	24.91	26.01
12H	4H	16.77	17.32	17.62	18.19	19.22	22.58	23.14	23.43	24.00	25.04
	6H	17.13	17.58	17.99	18.46	19.51	23.25	23.70	24.11	24.58	25.63
	8H	17.21	17.61	18.08	18.48	19.59	23.49	23.89	24.36	24.76	25.86