

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: P936277

Luminaire Tested: SQ4-FB-025U-050D-B2750-1D-UNV-STD-W-12-2700K

Issue Date: 12/17/2024

**Test Information**

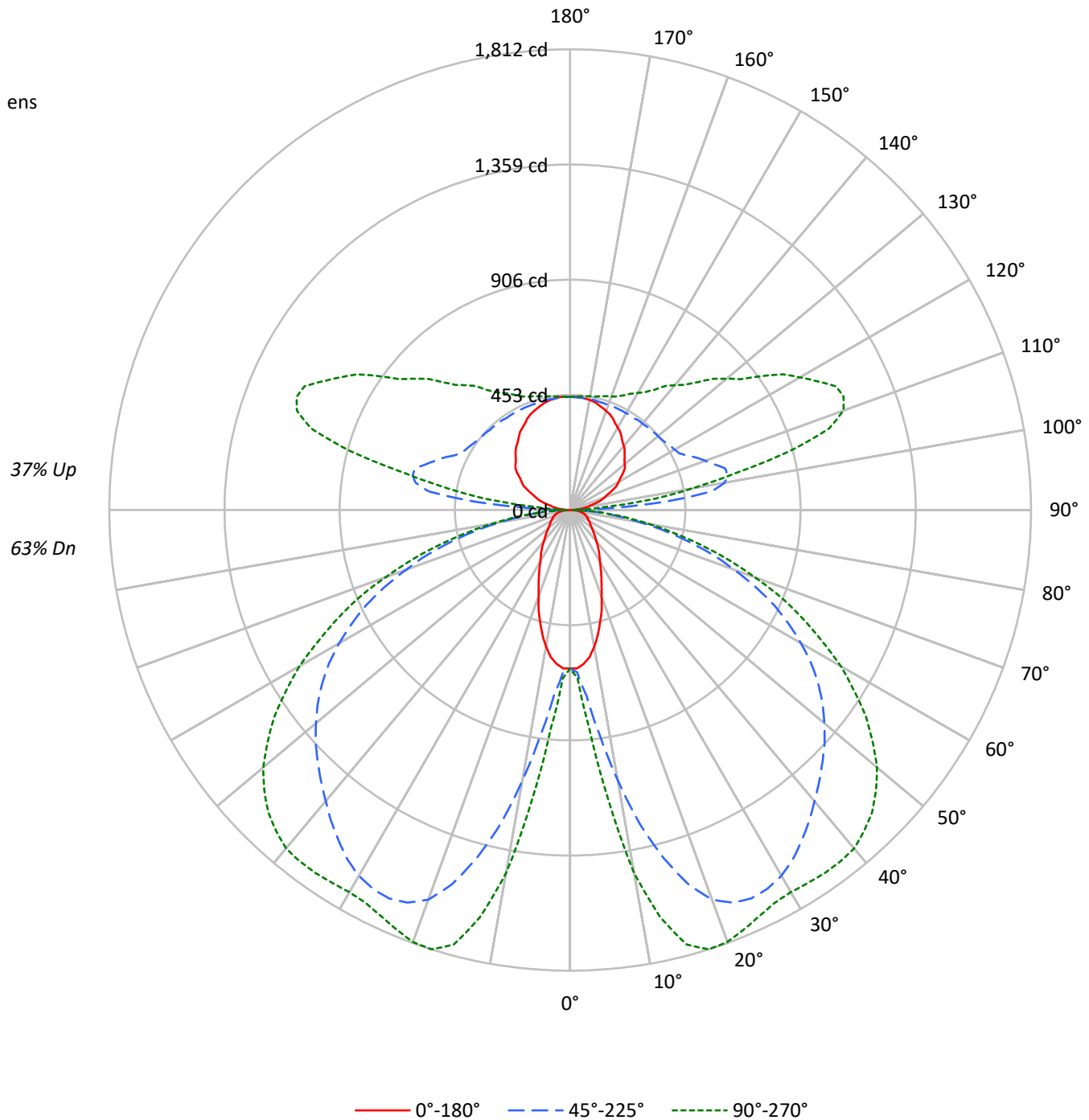
Test Method: LM-79-2019  
Report Number: P936277  
REPORT IS A COMBINATION OF REPORTS P933429 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-050D-B2750-1D-UNV-STD-W-12-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7714.0 lumens  
Efficiency: N/A  
Efficacy: 116.9 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 66  
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	63
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56	51
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46	42
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38	34
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32	29
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	28	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24	21
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21	18
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18	16
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16	14
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	13

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

	0°	45°	90°
0°	1928	1928	1928
5°	1884	2229	2591
10°	1710	3250	4296
15°	1454	4247	5187
20°	1184	4922	5287
25°	988	5152	5179
30°	834	5186	5169
35°	737	5101	5303
40°	643	4991	5441
45°	583	4910	5463
50°	535	4838	5372
55°	513	4732	5134
60°	526	4526	4758
65°	548	4213	4242
70°	584	3676	3583
75°	650	3000	2796
80°	716	2083	1884
85°	648	1107	965

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5463 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.6	1.0
10°-20°	357.3	4.6
20°-30°	625.0	8.1
30°-40°	804.6	10.4
40°-50°	898.7	11.6
50°-60°	860.7	11.2
60°-70°	682.1	8.8
70°-80°	401.1	5.2
80°-90°	113.1	1.5
90°-100°	217.4	2.8
100°-110°	571.4	7.4
110°-120°	592.5	7.7
120°-130°	475.3	6.2
130°-140°	372.9	4.8
140°-150°	286.2	3.7
150°-160°	206.1	2.7
160°-170°	126.1	1.6
170°-180°	42.6	0.6
0°-30°	1063.0	13.8
0°-40°	1867.5	24.2
0°-60°	3627.0	47.0
0°-90°	4823.4	62.5
90°-120°	1381.3	17.9
90°-150°	2515.8	32.6
90°-180°	2891.0	37.5
0°-180°	7714.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	623	623	623	623	623	
5°	607	651	734	830	860	56
15°	455	840	1415	1716	1770	127
25°	291	952	1685	1760	1762	134
35°	196	910	1587	1678	1744	123
45°	134	726	1403	1607	1680	104
55°	96	461	1190	1383	1421	88
65°	76	244	884	994	1008	75
75°	56	150	485	533	535	59
85°	20	46	120	132	134	21
90°	3	8	23	11	11	4
95°	29	112	374	193	131	32
105°	103	156	632	959	895	109
115°	183	222	506	1009	1152	181
125°	254	285	460	778	918	226
135°	303	334	446	628	712	235
145°	352	374	440	536	578	220
155°	397	408	440	483	497	183
165°	429	435	440	458	463	121
175°	446	446	443	449	449	42
180°	446	446	446	446	446	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	623.3	623.3	623.3	623.3	623.3	623.3	623.3	623.3	623.3	623.3	623.3
2.5°	623.3	623.3	627.3	629.3	633.3	635.2	639.3	643.3	655.4	657.4	661.3
5°	607.3	615.2	641.3	651.3	679.4	717.4	733.5	759.5	813.6	829.7	839.7
7.5°	583.2	601.2	665.3	681.4	751.6	851.8	893.8	950.0	1036.1	1078.2	1112.2
10°	545.1	583.2	697.4	735.5	849.7	1002.1	1080.2	1158.3	1288.6	1346.8	1368.8
12.5°	503.0	565.1	731.5	783.6	947.9	1170.4	1264.6	1350.8	1499.1	1577.3	1589.2
15°	455.0	539.1	763.5	839.7	1052.2	1310.6	1414.9	1521.1	1659.4	1715.5	1729.6
17.5°	412.8	519.0	793.6	873.8	1132.4	1436.9	1543.1	1631.3	1743.6	1781.6	1791.7
20°	360.8	487.0	813.6	917.9	1216.5	1529.2	1631.3	1699.5	1775.7	1799.7	1803.7
22.5°	322.7	452.9	825.7	933.9	1272.6	1585.2	1671.4	1725.6	1777.7	1785.6	1787.6
25°	290.6	414.8	823.7	952.0	1320.7	1619.3	1685.4	1725.6	1755.5	1759.6	1759.6
27.5°	260.6	372.8	815.6	956.0	1356.8	1627.4	1679.5	1707.4	1721.5	1729.6	1729.6
30°	234.5	332.7	795.6	947.9	1372.8	1619.3	1661.4	1675.5	1689.4	1701.5	1707.4
32.5°	214.4	294.6	765.5	931.9	1374.8	1599.3	1629.4	1637.3	1657.3	1685.4	1695.5
35°	196.4	256.6	731.5	909.8	1362.8	1567.2	1587.2	1595.3	1635.3	1677.5	1691.4
37.5°	178.4	228.5	687.4	871.8	1344.7	1529.2	1543.1	1557.1	1619.3	1669.4	1685.4
40°	160.4	204.4	635.2	829.7	1316.7	1483.0	1495.1	1517.1	1599.3	1657.3	1673.4
42.5°	146.3	184.4	579.2	785.6	1280.7	1431.0	1449.0	1481.1	1575.2	1637.3	1655.4
45°	134.3	164.3	519.0	725.5	1234.5	1376.8	1402.9	1447.0	1547.2	1607.2	1623.3
47.5°	122.2	150.3	457.0	663.3	1184.4	1322.7	1356.8	1406.8	1509.0	1567.2	1581.2
50°	112.2	136.3	394.8	597.2	1130.3	1264.6	1304.7	1356.8	1461.0	1515.1	1533.1
52.5°	104.2	124.3	336.6	531.1	1068.2	1204.5	1250.6	1304.7	1402.9	1455.0	1467.0
55°	96.2	114.2	286.5	460.9	1004.1	1140.3	1190.4	1242.5	1338.7	1382.8	1390.8
57.5°	92.2	106.2	244.5	394.8	935.9	1068.2	1124.3	1172.4	1262.5	1296.7	1304.7
60°	86.2	100.2	212.4	338.7	861.7	1000.1	1048.2	1096.2	1172.4	1200.5	1206.5
62.5°	80.2	96.2	188.3	284.6	785.6	919.9	968.0	1012.0	1076.2	1096.2	1104.3
65°	76.2	92.2	170.3	244.5	707.5	835.7	883.9	921.9	974.0	994.0	998.0
67.5°	72.1	88.1	156.3	210.5	629.3	751.6	787.6	823.7	863.7	883.9	885.8
70°	66.1	84.2	144.3	186.4	549.1	655.4	685.4	723.5	755.6	765.5	771.6
72.5°	62.2	78.2	136.3	168.3	466.9	563.1	591.2	613.2	641.3	651.3	651.3
75°	56.1	70.1	128.3	150.3	382.8	460.9	485.0	507.1	529.1	533.1	527.1
77.5°	50.1	62.2	110.3	126.3	298.6	364.7	384.8	396.8	414.8	418.8	420.8
80°	42.1	54.1	86.2	98.2	216.4	268.5	282.6	292.6	308.7	308.7	312.6
82.5°	32.1	42.1	62.2	70.1	146.3	184.4	196.4	202.4	212.4	212.4	212.4
85°	20.0	26.1	40.0	46.1	88.1	112.2	120.2	122.2	130.3	132.3	132.3
87.5°	10.1	14.0	26.1	28.1	46.1	58.2	58.2	62.2	62.2	60.2	58.2
90°	3.0	5.4	7.8	8.4	13.1	19.5	22.7	20.2	15.1	11.4	11.4
92.5°	12.0	32.3	52.7	57.8	81.2	112.4	128.1	112.2	80.6	56.9	54.6
95°	28.7	65.9	103.2	112.5	199.8	316.2	374.4	334.1	253.5	193.0	186.2
97.5°	49.7	82.6	115.4	123.6	269.1	463.2	560.2	534.8	483.9	445.6	432.6
100°	65.8	95.6	125.4	132.9	294.4	509.8	617.4	619.3	623.0	625.8	610.2
102.5°	79.6	107.4	135.2	142.1	306.0	524.4	633.6	666.0	730.9	779.6	766.2
105°	103.0	126.5	150.0	155.9	314.5	526.0	631.8	704.5	850.0	959.1	952.0
107.5°	126.9	148.8	170.8	176.3	316.1	502.6	595.8	697.3	900.3	1052.6	1054.3
110°	143.0	162.8	182.7	187.6	313.7	481.9	565.9	679.4	906.3	1076.5	1083.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	159.0	177.8	196.7	201.4	313.8	463.7	538.7	654.9	887.0	1061.2	1072.7
115°	182.9	200.3	217.7	222.1	316.7	442.9	506.1	617.9	841.6	1009.4	1025.3
117.5°	206.5	222.3	238.1	242.1	322.6	430.0	483.7	584.7	786.5	937.9	955.6
120°	220.2	235.2	250.1	253.8	327.4	425.5	474.6	566.8	751.4	889.7	906.9
122.5°	233.8	248.8	263.7	267.5	334.3	423.2	467.7	550.8	716.9	841.5	858.4
125°	254.4	268.1	281.9	285.3	343.6	421.4	460.3	530.8	671.9	777.8	793.3
127.5°	271.1	285.0	298.8	302.3	352.9	420.3	454.0	514.5	635.7	726.6	739.7
130°	280.1	295.0	310.0	313.6	359.7	420.9	451.6	505.6	613.4	694.3	706.5
132.5°	289.4	304.3	319.2	322.9	365.1	421.4	449.5	497.8	594.4	666.8	677.7
135°	303.2	316.7	330.3	333.7	371.1	421.0	445.9	486.3	567.2	627.9	637.2
137.5°	317.2	330.7	344.0	347.4	380.1	423.6	445.3	479.5	547.8	599.1	606.8
140°	328.9	341.2	353.7	356.8	385.6	424.0	443.2	472.7	531.8	576.1	583.3
142.5°	337.8	349.3	360.8	363.6	390.1	425.5	443.2	469.1	521.0	560.0	566.1
145°	351.7	361.6	371.6	374.1	396.1	425.5	440.2	461.4	503.9	535.6	540.3
147.5°	365.4	375.1	384.9	387.2	404.9	428.5	440.2	457.0	490.3	515.3	519.2
150°	374.4	383.2	391.9	394.1	409.5	430.0	440.2	454.4	482.6	503.7	506.8
152.5°	383.7	390.3	396.9	398.6	412.4	431.0	440.2	452.3	476.4	494.4	496.8
155°	397.4	402.3	407.3	408.5	419.0	433.2	440.2	449.8	469.0	483.4	485.0
157.5°	407.6	412.3	417.2	418.4	425.7	435.4	440.2	447.7	462.5	473.7	474.8
160°	414.5	418.2	422.0	422.9	428.7	436.3	440.2	446.6	459.4	468.9	469.5
162.5°	421.4	424.2	427.0	427.7	431.9	437.4	440.2	445.6	456.4	464.4	465.0
165°	428.9	431.4	434.0	434.6	436.4	438.9	440.2	444.1	451.8	457.6	458.2
167.5°	435.8	436.9	438.1	438.4	440.0	442.1	443.2	445.7	450.8	454.6	454.9
170°	440.2	441.4	442.6	442.9	443.0	443.1	443.2	445.7	450.8	454.6	454.6
172.5°	442.6	442.9	443.1	443.2	443.2	443.2	443.2	445.2	449.2	452.2	452.0
175°	445.9	445.9	445.9	445.9	445.0	443.8	443.2	444.5	447.0	448.9	448.9
177.5°	445.9	445.9	445.9	445.9	445.2	444.3	443.8	444.8	446.8	448.3	448.0
180°	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9	445.9



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	623.3	623.3
2.5°	665.3	661.3
5°	855.8	859.7
7.5°	1152.4	1150.4
10°	1432.9	1451.0
12.5°	1637.3	1641.3
15°	1761.6	1769.6
17.5°	1809.7	1811.7
20°	1811.7	1807.7
22.5°	1789.6	1785.6
25°	1763.6	1761.6
27.5°	1739.5	1741.6
30°	1729.6	1735.5
32.5°	1729.6	1739.5
35°	1733.5	1743.6
37.5°	1731.5	1743.6
40°	1723.5	1737.5
42.5°	1701.5	1711.5
45°	1667.4	1679.5
47.5°	1623.3	1631.3
50°	1567.2	1575.2
52.5°	1497.1	1499.1
55°	1412.9	1420.9
57.5°	1322.7	1324.7
60°	1222.5	1228.5
62.5°	1116.3	1116.3
65°	1004.1	1008.1
67.5°	887.8	897.8
70°	769.6	771.6
72.5°	653.4	653.4
75°	533.1	535.1
77.5°	418.8	418.8
80°	310.7	312.6
82.5°	214.4	218.4
85°	134.3	134.3
87.5°	62.2	56.1
90°	11.4	11.4
92.5°	45.6	36.6
95°	158.8	131.4
97.5°	380.5	328.3
100°	548.2	486.0
102.5°	713.0	659.8
105°	923.4	894.8
107.5°	1061.2	1068.1
110°	1113.7	1143.5





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1118.4	1164.1
115°	1088.7	1152.2
117.5°	1025.9	1096.2
120°	975.2	1043.5
122.5°	925.9	993.3
125°	855.4	917.5
127.5°	792.1	844.5
130°	754.9	803.3
132.5°	721.0	764.3
135°	674.6	711.9
137.5°	637.3	668.0
140°	611.8	640.4
142.5°	590.7	615.3
145°	559.0	577.6
147.5°	534.7	550.1
150°	519.3	531.8
152.5°	506.2	515.6
155°	491.1	497.4
157.5°	479.3	483.7
160°	472.1	474.6
162.5°	467.4	469.8
165°	460.7	463.2
167.5°	455.9	457.0
170°	454.6	454.6
172.5°	451.0	450.1
175°	448.9	448.9
177.5°	447.0	445.9
180°	445.9	445.9



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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	4.36	5.39	5.19	6.26	7.33	17.55	18.59	18.38	19.45	20.52
	3H	5.07	6.01	5.92	6.88	7.98	19.41	20.34	20.25	21.21	22.32
	4H	5.38	6.26	6.24	7.14	8.26	20.06	20.95	20.92	21.83	22.94
	6H	5.64	6.46	6.51	7.34	8.47	20.51	21.32	21.38	22.21	23.34
	8H	5.71	6.49	6.60	7.40	8.52	20.64	21.42	21.52	22.32	23.45
	12H	5.74	6.48	6.63	7.38	8.53	20.71	21.46	21.60	22.35	23.51
4H	2H	11.60	12.49	12.47	13.36	14.48	17.84	18.73	18.71	19.61	20.72
	3H	13.18	13.93	14.06	14.84	15.97	19.91	20.65	20.79	21.56	22.69
	4H	13.29	13.96	14.18	14.87	16.02	20.69	21.37	21.58	22.27	23.43
	6H	13.31	13.89	14.21	14.82	15.98	21.24	21.83	22.15	22.76	23.92
	8H	13.29	13.84	14.20	14.76	15.93	21.41	21.96	22.32	22.89	24.06
	12H	13.25	13.75	14.18	14.69	15.87	21.52	22.01	22.45	22.96	24.13
8H	4H	14.75	15.30	15.66	16.22	17.40	20.76	21.31	21.67	22.24	23.41
	6H	15.00	15.46	15.94	16.42	17.59	21.41	21.86	22.34	22.83	24.00
	8H	15.02	15.42	15.97	16.38	17.57	21.63	22.03	22.58	22.99	24.18
	12H	15.00	15.35	15.95	16.30	17.54	21.79	22.14	22.74	23.09	24.33
12H	4H	14.90	15.40	15.83	16.34	17.52	20.72	21.22	21.65	22.16	23.34
	6H	15.26	15.67	16.21	16.62	17.81	21.39	21.80	22.34	22.75	23.94
	8H	15.34	15.70	16.29	16.65	17.88	21.63	21.99	22.58	22.94	24.18