

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: P936503

Luminaire Tested: SQ4-FB-025U-100D-B40-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

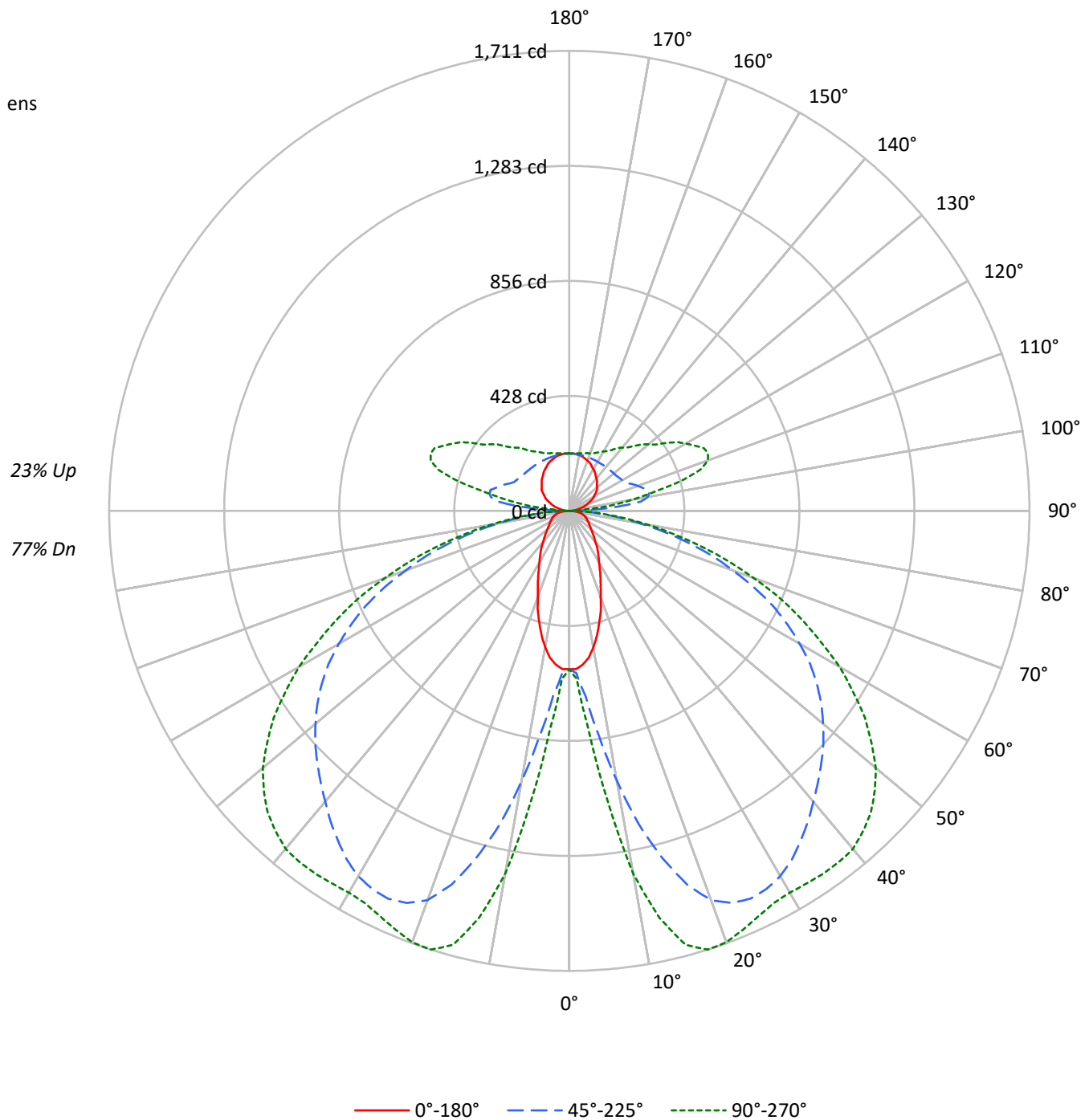
Test Method: LM-79-2019  
Report Number: P936503  
REPORT IS A COMBINATION OF REPORTS P933447 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-100D-B40-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5940.1 lumens  
Efficiency: N/A  
Efficacy: 102.1 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-Direct  
  
Input Watts (W): 58.2  
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				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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77			77
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66	63			63
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55	51			51
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45	42			42
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38	35			35
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33	30			30
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28	26			26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25	22			22
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22	20			20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	19	17			17
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17	16			16

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

	0°	45°	90°
0°	3641	3641	3641
5°	3556	4207	4894
10°	3224	6131	8114
15°	2740	8009	9798
20°	2229	9279	9986
25°	1859	9707	9782
30°	1567	9766	9764
35°	1385	9602	10016
40°	1206	9388	10277
45°	1091	9231	10317
50°	1000	9089	10147
55°	957	8882	9697
60°	979	8489	8986
65°	1016	7892	8010
70°	1081	6878	6768
75°	1193	5602	5281
80°	1292	3880	3559
85°	1127	2054	1821

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10317 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.1	1.3
10°-20°	337.5	5.7
20°-30°	590.2	9.9
30°-40°	759.8	12.8
40°-50°	848.7	14.3
50°-60°	812.9	13.7
60°-70°	644.2	10.8
70°-80°	378.8	6.4
80°-90°	106.0	1.8
90°-100°	104.2	1.8
100°-110°	274.0	4.6
110°-120°	284.1	4.8
120°-130°	227.9	3.8
130°-140°	178.8	3.0
140°-150°	137.2	2.3
150°-160°	98.8	1.7
160°-170°	60.5	1.0
170°-180°	20.4	0.3
0°-30°	1003.8	16.9
0°-40°	1763.7	29.7
0°-60°	3425.2	57.7
0°-90°	4554.3	76.7
90°-120°	662.2	11.1
90°-150°	1206.1	20.3
90°-180°	1386.0	23.3
0°-180°	5940.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	574	615	693	784	812	53
15°	430	793	1336	1620	1671	120
25°	274	899	1592	1662	1664	126
35°	186	859	1499	1584	1647	116
45°	127	685	1325	1518	1586	98
55°	91	435	1124	1306	1342	83
65°	72	231	835	939	952	71
75°	53	142	458	504	505	55
85°	19	44	114	125	127	20
90°	1	4	11	5	5	2
95°	14	54	179	92	63	15
105°	49	75	303	460	429	52
115°	88	106	243	484	552	87
125°	122	137	221	373	440	108
135°	145	160	214	301	341	112
145°	169	179	211	257	277	106
155°	190	196	211	232	238	88
165°	206	208	211	219	222	58
175°	214	214	212	215	215	20
180°	214	214	214	214	214	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6
2.5°	588.6	588.6	592.4	594.3	598.0	599.9	603.8	607.6	618.8	620.8	624.6
5°	573.5	581.0	605.7	615.1	641.6	677.6	692.7	717.3	768.4	783.6	793.0
7.5°	550.7	567.7	628.4	643.5	709.8	804.4	844.1	897.1	978.5	1018.2	1050.4
10°	514.7	550.7	658.7	694.6	802.5	946.3	1020.1	1094.0	1217.0	1271.9	1292.7
12.5°	475.0	533.7	690.8	740.0	895.2	1105.3	1194.2	1275.6	1415.7	1489.5	1500.9
15°	429.7	509.1	721.1	793.0	993.6	1237.8	1336.2	1436.5	1567.1	1620.1	1633.3
17.5°	389.9	490.2	749.5	825.2	1069.3	1357.1	1457.3	1540.6	1646.6	1682.5	1692.0
20°	340.6	459.9	768.4	866.9	1148.9	1444.1	1540.6	1605.0	1676.9	1699.6	1703.3
22.5°	304.7	427.7	779.8	881.9	1201.8	1497.1	1578.4	1629.5	1678.8	1686.3	1688.2
25°	274.5	391.7	777.8	899.0	1247.2	1529.2	1591.7	1629.5	1658.0	1661.7	1661.7
27.5°	246.0	352.0	770.3	902.8	1281.3	1536.8	1586.0	1612.5	1625.8	1633.3	1633.3
30°	221.5	314.2	751.4	895.2	1296.4	1529.2	1569.0	1582.2	1595.5	1606.8	1612.5
32.5°	202.6	278.2	722.9	880.0	1298.3	1510.3	1538.7	1546.2	1565.1	1591.7	1601.2
35°	185.5	242.3	690.8	859.2	1287.0	1480.1	1499.0	1506.5	1544.3	1584.2	1597.3
37.5°	168.5	215.7	649.2	823.3	1270.0	1444.1	1457.3	1470.6	1529.2	1576.5	1591.7
40°	151.4	193.0	599.9	783.6	1243.4	1400.5	1411.9	1432.7	1510.3	1565.1	1580.3
42.5°	138.2	174.1	546.9	741.9	1209.4	1351.3	1368.3	1398.6	1487.6	1546.2	1563.3
45°	126.8	155.2	490.2	685.1	1165.9	1300.2	1324.9	1366.5	1461.1	1517.9	1533.1
47.5°	115.5	141.9	431.6	626.5	1118.5	1249.1	1281.3	1328.6	1425.1	1480.1	1493.2
50°	106.0	128.7	372.8	564.0	1067.4	1194.2	1232.1	1281.3	1379.7	1430.8	1447.9
52.5°	98.5	117.4	317.9	501.6	1008.8	1137.5	1181.0	1232.1	1324.9	1374.1	1385.4
55°	90.8	107.9	270.6	435.3	948.2	1076.9	1124.2	1173.4	1264.2	1305.9	1313.5
57.5°	87.1	100.3	230.9	372.8	883.9	1008.8	1061.8	1107.2	1192.3	1224.5	1232.1
60°	81.4	94.6	200.6	319.8	813.9	944.4	989.9	1035.2	1107.2	1133.7	1139.3
62.5°	75.7	90.8	177.9	268.7	741.9	868.7	914.1	955.8	1016.3	1035.2	1042.9
65°	71.9	87.1	160.9	230.9	668.1	789.2	834.7	870.6	919.9	938.8	942.5
67.5°	68.1	83.3	147.6	198.7	594.3	709.8	743.8	777.8	815.8	834.7	836.6
70°	62.5	79.5	136.3	176.0	518.6	618.8	647.3	683.2	713.5	722.9	728.7
72.5°	58.6	73.8	128.7	159.0	441.0	531.8	558.3	579.1	605.7	615.1	615.1
75°	53.0	66.3	121.1	141.9	361.5	435.3	458.0	478.8	499.7	503.5	497.7
77.5°	47.3	58.6	104.1	119.3	282.0	344.5	363.4	374.7	391.7	395.6	397.5
80°	39.7	51.1	81.4	92.7	204.4	253.6	266.8	276.3	291.5	291.5	295.3
82.5°	30.3	39.7	58.6	66.3	138.2	174.1	185.5	191.2	200.6	200.6	200.6
85°	18.9	24.6	37.8	43.5	83.3	106.0	113.5	115.5	123.0	124.9	124.9
87.5°	9.5	13.3	24.6	26.5	43.5	54.9	54.9	58.6	58.6	56.8	54.9
90°	1.4	2.6	3.7	4.0	6.3	9.4	10.9	9.6	7.3	5.4	5.4
92.5°	5.7	15.5	25.2	27.7	39.0	54.0	61.4	53.8	38.6	27.2	26.2
95°	13.8	31.6	49.5	54.0	95.8	151.6	179.4	160.2	121.5	92.5	89.3
97.5°	23.8	39.5	55.3	59.2	129.0	222.0	268.5	256.3	232.0	213.6	207.4
100°	31.6	45.8	60.2	63.7	141.1	244.4	296.0	296.8	298.6	300.0	292.5
102.5°	38.2	51.6	64.8	68.2	146.7	251.4	303.7	319.3	350.4	373.8	367.4
105°	49.4	60.6	71.9	74.8	150.8	252.1	302.8	337.7	407.5	459.8	456.4
107.5°	60.8	71.3	81.8	84.5	151.6	240.9	285.6	334.3	431.7	504.6	505.5
110°	68.6	78.1	87.6	90.0	150.4	231.0	271.3	325.8	434.5	516.1	519.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	76.2	85.3	94.3	96.6	150.4	222.3	258.2	313.9	425.3	508.7	514.2
115°	87.7	96.1	104.4	106.5	151.8	212.3	242.6	296.2	403.5	483.9	491.5
117.5°	99.0	106.6	114.1	116.0	154.6	206.1	231.9	280.3	377.0	449.6	458.0
120°	105.6	112.8	119.9	121.7	157.0	204.1	227.6	271.8	360.2	426.6	434.8
122.5°	112.0	119.3	126.4	128.3	160.2	202.9	224.2	264.1	343.7	403.5	411.6
125°	122.0	128.5	135.1	136.8	164.7	202.1	220.7	254.5	322.2	372.9	380.4
127.5°	130.0	136.6	143.2	144.9	169.1	201.5	217.6	246.7	304.8	348.4	354.7
130°	134.3	141.4	148.5	150.3	172.4	201.8	216.5	242.4	294.0	332.8	338.6
132.5°	138.8	145.9	153.0	154.8	175.1	202.1	215.5	238.7	285.0	319.6	324.8
135°	145.4	151.8	158.3	160.0	177.9	201.9	213.8	233.2	272.0	301.0	305.5
137.5°	152.1	158.5	164.9	166.6	182.2	203.1	213.5	230.0	262.7	287.3	290.9
140°	157.7	163.6	169.5	171.0	184.9	203.3	212.5	226.6	255.0	276.2	279.6
142.5°	162.0	167.4	173.0	174.3	187.0	204.0	212.5	224.9	249.8	268.5	271.4
145°	168.6	173.3	178.1	179.3	189.9	204.0	211.1	221.2	241.5	256.8	259.0
147.5°	175.1	179.8	184.5	185.7	194.2	205.4	211.1	219.1	235.0	247.1	248.9
150°	179.4	183.6	187.9	189.0	196.3	206.2	211.1	217.8	231.3	241.4	243.0
152.5°	183.9	187.1	190.3	191.1	197.8	206.7	211.1	216.8	228.3	237.0	238.2
155°	190.5	192.9	195.3	195.9	200.9	207.7	211.1	215.6	224.8	231.7	232.4
157.5°	195.4	197.7	200.0	200.5	204.1	208.8	211.1	214.6	221.8	227.1	227.7
160°	198.7	200.5	202.3	202.7	205.5	209.2	211.1	214.1	220.2	224.8	225.1
162.5°	202.0	203.3	204.7	205.0	207.0	209.7	211.1	213.6	218.8	222.7	223.0
165°	205.6	206.8	208.0	208.3	209.2	210.5	211.1	212.9	216.6	219.4	219.6
167.5°	208.9	209.4	210.0	210.2	211.0	212.0	212.5	213.7	216.1	217.9	218.0
170°	211.1	211.6	212.2	212.3	212.4	212.5	212.5	213.7	216.1	217.9	217.9
172.5°	212.2	212.3	212.5	212.5	212.5	212.5	212.5	213.4	215.4	216.8	216.7
175°	213.8	213.8	213.8	213.8	213.3	212.8	212.5	213.1	214.3	215.3	215.3
177.5°	213.8	213.8	213.8	213.8	213.4	213.0	212.8	213.3	214.2	215.0	214.9
180°	213.8	213.8	213.8	213.8	213.8	213.8	213.8	213.8	213.8	213.8	213.8



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	588.6	588.6
2.5°	628.4	624.6
5°	808.1	811.9
7.5°	1088.2	1086.4
10°	1353.2	1370.2
12.5°	1546.2	1550.1
15°	1663.6	1671.2
17.5°	1709.1	1710.9
20°	1710.9	1707.2
22.5°	1690.1	1686.3
25°	1665.5	1663.6
27.5°	1642.8	1644.7
30°	1633.3	1639.0
32.5°	1633.3	1642.8
35°	1637.2	1646.6
37.5°	1635.2	1646.6
40°	1627.6	1640.9
42.5°	1606.8	1616.3
45°	1574.7	1586.0
47.5°	1533.1	1540.6
50°	1480.1	1487.6
52.5°	1413.8	1415.7
55°	1334.3	1341.9
57.5°	1249.1	1251.0
60°	1154.5	1160.1
62.5°	1054.2	1054.2
65°	948.2	951.9
67.5°	838.4	847.8
70°	726.8	728.7
72.5°	617.0	617.0
75°	503.5	505.3
77.5°	395.6	395.6
80°	293.4	295.3
82.5°	202.6	206.3
85°	126.8	126.8
87.5°	58.6	53.0
90°	5.4	5.4
92.5°	21.8	17.5
95°	76.1	63.0
97.5°	182.4	157.4
100°	262.8	233.0
102.5°	341.9	316.4
105°	442.7	429.0
107.5°	508.7	512.1
110°	533.9	548.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	536.1	558.1
115°	521.9	552.4
117.5°	491.8	525.5
120°	467.6	500.3
122.5°	443.9	476.2
125°	410.1	439.9
127.5°	379.8	404.9
130°	361.8	385.1
132.5°	345.6	366.4
135°	323.4	341.3
137.5°	305.6	320.2
140°	293.3	307.0
142.5°	283.2	295.0
145°	268.0	277.0
147.5°	256.3	263.7
150°	249.0	255.0
152.5°	242.7	247.2
155°	235.4	238.5
157.5°	229.8	231.9
160°	226.3	227.6
162.5°	224.1	225.3
165°	220.9	222.1
167.5°	218.6	219.1
170°	217.9	217.9
172.5°	216.2	215.8
175°	215.3	215.3
177.5°	214.3	213.8
180°	213.8	213.8



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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	7.62	8.86	8.30	9.56	10.39	20.79	22.02	21.47	22.73	23.55
	3H	8.35	9.47	9.05	10.18	11.04	22.65	23.76	23.34	24.48	25.34
	4H	8.67	9.72	9.38	10.45	11.32	23.31	24.36	24.02	25.09	25.96
	6H	8.94	9.91	9.66	10.65	11.54	23.75	24.73	24.48	25.46	26.35
	8H	9.02	9.95	9.75	10.70	11.59	23.88	24.81	24.62	25.57	26.46
	12H	9.05	9.94	9.79	10.69	11.61	23.96	24.85	24.70	25.60	26.52
4H	2H	14.87	15.93	15.59	16.65	17.52	21.10	22.16	21.82	22.88	23.76
	3H	16.47	17.36	17.20	18.12	19.01	23.18	24.06	23.91	24.83	25.72
	4H	16.58	17.39	17.33	18.15	19.07	23.96	24.76	24.70	25.53	26.45
	6H	16.62	17.32	17.38	18.11	19.03	24.52	25.22	25.28	26.01	26.93
	8H	16.60	17.26	17.37	18.05	18.99	24.69	25.34	25.45	26.13	27.07
	12H	16.58	17.17	17.37	17.98	18.93	24.79	25.39	25.58	26.19	27.14
8H	4H	18.06	18.71	18.83	19.50	20.44	24.05	24.71	24.82	25.49	26.43
	6H	18.32	18.86	19.12	19.69	20.63	24.69	25.24	25.49	26.07	27.01
	8H	18.34	18.83	19.15	19.65	20.61	24.92	25.40	25.73	26.23	27.19
	12H	18.33	18.76	19.14	19.57	20.59	25.08	25.51	25.89	26.32	27.34
12H	4H	18.22	18.81	19.01	19.62	20.57	24.02	24.61	24.81	25.42	26.37
	6H	18.58	19.07	19.39	19.89	20.85	24.68	25.17	25.49	25.99	26.95
	8H	18.67	19.10	19.48	19.91	20.93	24.93	25.36	25.74	26.17	27.19