

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: P936472

Luminaire Tested: SQ4-FB-025U-100D-935-1D-UNV-STD-W-8

Issue Date: 12/17/2024

**Test Information**

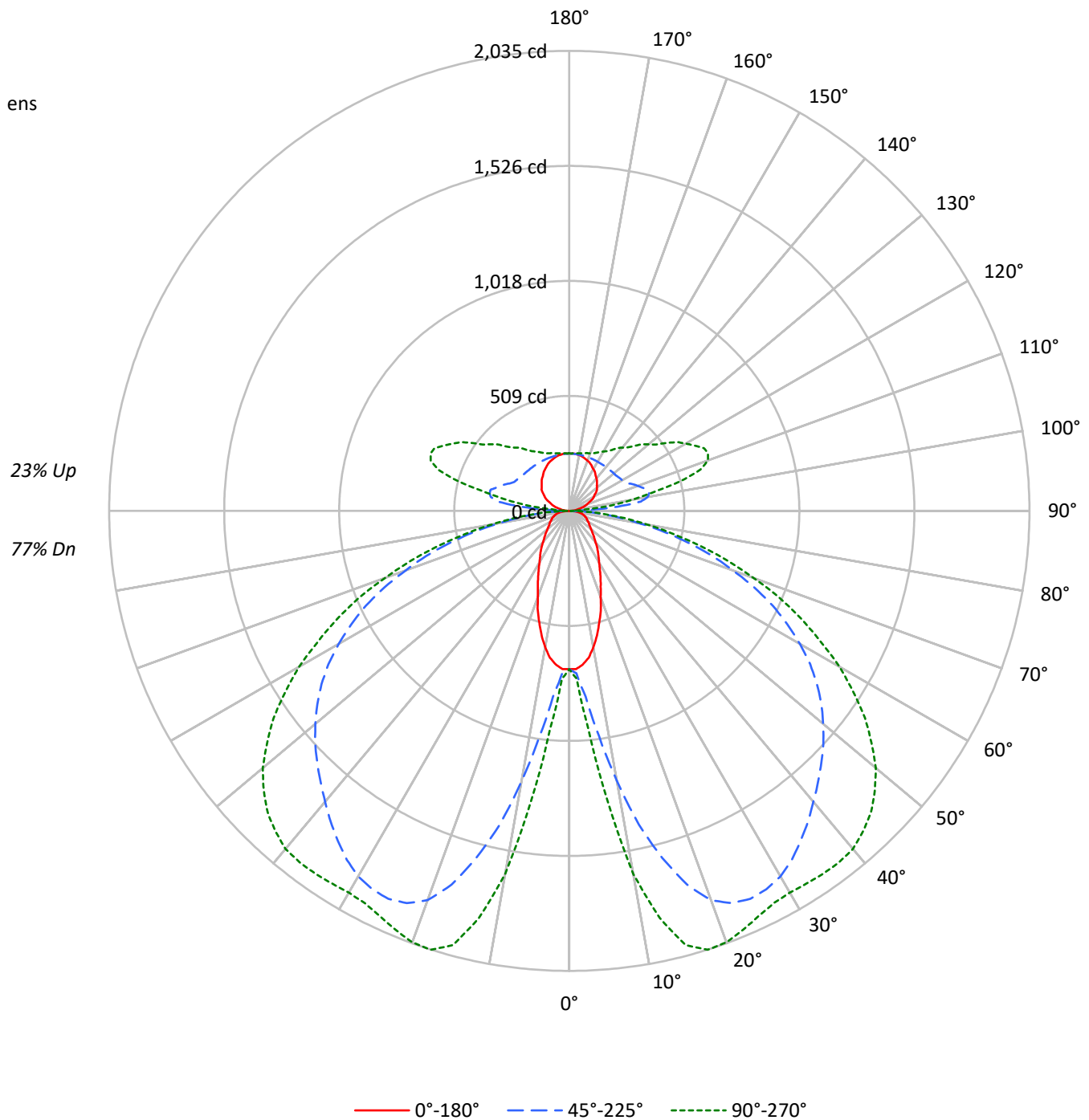
Test Method: LM-79-2019  
Report Number: P936472  
REPORT IS A COMBINATION OF REPORTS P933455 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-100D-935-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7066.5 lumens  
Efficiency: N/A  
Efficacy: 91.1 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): 77.6  
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

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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	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	20	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°	3249	3249	3249
5°	3174	3755	4367
10°	2879	5474	7240
15°	2447	7151	8742
20°	1992	8287	8909
25°	1662	8672	8728
30°	1401	8727	8712
35°	1239	8582	8937
40°	1079	8393	9170
45°	978	8256	9206
50°	897	8132	9053
55°	858	7950	8652
60°	879	7600	8018
65°	914	7070	7148
70°	974	6165	6038
75°	1079	5027	4713
80°	1180	3487	3176
85°	1048	1850	1626

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9206 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.6	1.3
10°-20°	401.4	5.7
20°-30°	702.2	9.9
30°-40°	903.9	12.8
40°-50°	1009.7	14.3
50°-60°	967.0	13.7
60°-70°	766.4	10.8
70°-80°	450.6	6.4
80°-90°	126.2	1.8
90°-100°	124.0	1.8
100°-110°	325.9	4.6
110°-120°	337.9	4.8
120°-130°	271.1	3.8
130°-140°	212.7	3.0
140°-150°	163.2	2.3
150°-160°	117.6	1.7
160°-170°	71.9	1.0
170°-180°	24.3	0.3
0°-30°	1194.2	16.9
0°-40°	2098.1	29.7
0°-60°	4074.8	57.7
0°-90°	5418.0	76.7
90°-120°	787.8	11.1
90°-150°	1434.7	20.3
90°-180°	1649.0	23.3
0°-180°	7066.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	700	700	700	700	700	
5°	682	732	824	932	966	63
15°	511	943	1590	1927	1988	142
25°	326	1070	1894	1977	1979	150
35°	221	1022	1783	1884	1959	138
45°	151	815	1576	1806	1887	117
55°	108	518	1337	1554	1596	98
65°	86	275	993	1117	1133	85
75°	63	169	545	599	601	66
85°	22	52	135	149	151	24
90°	2	5	13	6	6	3
95°	16	64	214	110	75	18
105°	59	89	360	547	510	62
115°	104	127	289	576	657	103
125°	145	163	262	444	523	129
135°	173	190	254	358	406	134
145°	201	213	251	306	329	126
155°	227	233	251	276	284	104
165°	245	248	251	261	264	69
175°	254	254	253	256	256	24
180°	254	254	254	254	254	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	700.3	700.3	700.3	700.3	700.3	700.3	700.3	700.3	700.3	700.3	700.3
2.5°	700.3	700.3	704.8	707.0	711.5	713.7	718.2	722.8	736.3	738.5	743.0
5°	682.2	691.2	720.5	731.8	763.3	806.1	824.1	853.4	914.1	932.2	943.4
7.5°	655.2	675.5	747.5	765.5	844.3	956.9	1004.2	1067.2	1164.1	1211.4	1249.6
10°	612.4	655.2	783.6	826.4	954.7	1125.7	1213.6	1301.4	1447.7	1513.1	1537.8
12.5°	565.1	634.9	821.8	880.4	1065.0	1314.9	1420.7	1517.6	1684.1	1772.0	1785.5
15°	511.1	605.7	857.9	943.4	1182.1	1472.5	1589.6	1708.9	1864.3	1927.3	1943.1
17.5°	463.8	583.2	891.6	981.7	1272.1	1614.4	1733.7	1832.7	1958.8	2001.6	2012.9
20°	405.3	547.2	914.1	1031.2	1366.7	1718.0	1832.7	1909.3	1994.9	2021.9	2026.4
22.5°	362.5	508.8	927.7	1049.2	1429.7	1781.0	1877.8	1938.6	1997.2	2006.1	2008.4
25°	326.5	466.0	925.4	1069.5	1483.8	1819.3	1893.6	1938.6	1972.4	1976.9	1976.9
27.5°	292.7	418.8	916.4	1074.0	1524.3	1828.3	1886.8	1918.4	1934.1	1943.1	1943.1
30°	263.4	373.8	893.8	1065.0	1542.3	1819.3	1866.6	1882.3	1898.1	1911.5	1918.4
32.5°	240.9	331.0	860.1	1046.9	1544.6	1796.8	1830.5	1839.6	1862.0	1893.6	1904.8
35°	220.7	288.2	821.8	1022.2	1531.0	1760.7	1783.2	1792.3	1837.3	1884.5	1900.3
37.5°	200.4	256.7	772.3	979.5	1510.8	1718.0	1733.7	1749.5	1819.3	1875.5	1893.6
40°	180.1	229.7	713.7	932.2	1479.2	1666.2	1679.6	1704.4	1796.8	1862.0	1880.0
42.5°	164.4	207.1	650.7	882.6	1438.8	1607.6	1627.9	1663.9	1769.7	1839.6	1859.8
45°	150.9	184.6	583.2	815.0	1387.0	1546.8	1576.1	1625.6	1738.2	1805.7	1823.8
47.5°	137.3	168.9	513.3	745.2	1330.7	1486.1	1524.3	1580.6	1695.4	1760.7	1776.5
50°	126.1	153.1	443.6	670.9	1269.9	1420.7	1465.8	1524.3	1641.4	1702.2	1722.4
52.5°	117.1	139.6	378.3	596.7	1200.0	1353.1	1404.9	1465.8	1576.1	1634.6	1648.1
55°	108.0	128.3	322.0	517.8	1128.0	1281.2	1337.4	1396.0	1504.0	1553.5	1562.6
57.5°	103.6	119.4	274.7	443.6	1051.5	1200.0	1263.1	1317.2	1418.5	1456.7	1465.8
60°	96.8	112.5	238.6	380.5	968.2	1123.5	1177.5	1231.6	1317.2	1348.7	1355.4
62.5°	90.1	108.0	211.6	319.8	882.6	1033.5	1087.5	1137.1	1209.1	1231.6	1240.6
65°	85.5	103.6	191.4	274.7	794.8	938.9	992.9	1035.7	1094.2	1116.8	1121.3
67.5°	81.0	99.1	175.6	236.4	707.0	844.3	884.9	925.4	970.4	992.9	995.2
70°	74.3	94.6	162.1	209.4	616.9	736.3	770.0	812.8	848.8	860.1	866.8
72.5°	69.8	87.8	153.1	189.1	524.6	632.7	664.2	689.0	720.5	731.8	731.8
75°	63.0	78.8	144.1	168.9	430.1	517.8	544.9	569.6	594.4	599.0	592.1
77.5°	56.3	69.8	123.8	141.9	335.5	409.8	432.3	445.8	466.0	470.6	472.9
80°	47.3	60.8	96.8	110.3	243.2	301.7	317.5	328.7	346.8	346.8	351.3
82.5°	36.0	47.3	69.8	78.8	164.4	207.1	220.7	227.4	238.6	238.6	238.6
85°	22.5	29.3	45.1	51.8	99.1	126.1	135.1	137.3	146.4	148.6	148.6
87.5°	11.2	15.8	29.3	31.5	51.8	65.3	65.3	69.8	69.8	67.6	65.3
90°	1.7	3.1	4.4	4.8	7.5	11.2	13.0	11.5	8.6	6.5	6.5
92.5°	6.8	18.4	30.1	33.0	46.3	64.2	73.0	64.0	46.0	32.5	31.2
95°	16.4	37.6	58.9	64.2	113.9	180.3	213.5	190.5	144.6	110.1	106.2
97.5°	28.4	47.1	65.8	70.5	153.4	264.1	319.5	305.0	276.0	254.2	246.7
100°	37.6	54.5	71.5	75.7	167.8	290.6	352.0	353.2	355.3	356.9	348.0
102.5°	45.4	61.3	77.1	81.0	174.5	299.1	361.3	379.8	416.8	444.6	437.0
105°	58.7	72.2	85.6	88.9	179.4	300.0	360.3	401.8	484.8	547.0	542.9
107.5°	72.3	84.9	97.4	100.5	180.3	286.6	339.8	397.6	513.4	600.2	601.3
110°	81.6	92.9	104.2	107.0	178.9	274.8	322.7	387.4	516.8	613.9	618.1



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	90.7	101.4	112.1	114.8	179.0	264.5	307.2	373.4	505.8	605.2	611.7
115°	104.3	114.2	124.1	126.6	180.6	252.6	288.6	352.4	480.0	575.7	584.7
117.5°	117.7	126.8	135.8	138.1	184.0	245.2	275.8	333.4	448.5	534.9	544.9
120°	125.6	134.1	142.6	144.8	186.8	242.7	270.7	323.2	428.5	507.4	517.1
122.5°	133.3	141.9	150.5	152.6	190.7	241.4	266.8	314.1	408.9	479.9	489.6
125°	145.1	152.9	160.7	162.6	196.0	240.3	262.5	302.7	383.2	443.6	452.4
127.5°	154.6	162.5	170.4	172.4	201.2	239.7	258.9	293.5	362.6	414.4	421.9
130°	159.8	168.3	176.7	178.8	205.1	240.1	257.6	288.3	349.8	395.9	402.8
132.5°	165.0	173.6	182.0	184.1	208.2	240.3	256.4	283.9	338.9	380.2	386.5
135°	172.9	180.6	188.4	190.3	211.6	240.1	254.3	277.4	323.5	358.1	363.4
137.5°	180.9	188.5	196.2	198.2	216.7	241.5	254.0	273.5	312.4	341.7	346.0
140°	187.5	194.6	201.7	203.5	219.9	241.8	252.8	269.7	303.3	328.5	332.6
142.5°	192.7	199.2	205.8	207.4	222.5	242.7	252.8	267.6	297.2	319.3	322.8
145°	200.6	206.3	211.9	213.3	226.0	242.7	251.1	263.2	287.4	305.5	308.2
147.5°	208.4	213.9	219.5	220.8	230.9	244.4	251.1	260.6	279.6	293.9	296.1
150°	213.5	218.5	223.5	224.8	233.5	245.2	251.1	259.1	275.2	287.2	289.0
152.5°	218.8	222.5	226.4	227.3	235.2	245.8	251.1	257.9	271.6	281.9	283.3
155°	226.6	229.4	232.3	232.9	239.0	247.1	251.1	256.5	267.4	275.6	276.5
157.5°	232.4	235.2	237.9	238.6	242.7	248.3	251.1	255.3	263.8	270.2	270.8
160°	236.3	238.5	240.6	241.1	244.4	248.9	251.1	254.7	262.0	267.4	267.8
162.5°	240.3	241.9	243.4	243.8	246.2	249.5	251.1	254.2	260.3	264.9	265.2
165°	244.6	246.1	247.5	247.8	249.0	250.4	251.1	253.3	257.6	261.0	261.3
167.5°	248.5	249.2	249.9	250.1	251.0	252.2	252.8	254.2	257.1	259.3	259.4
170°	251.1	251.8	252.4	252.6	252.7	252.8	252.8	254.2	257.1	259.3	259.3
172.5°	252.4	252.6	252.8	252.8	252.8	252.8	252.8	253.9	256.2	257.9	257.7
175°	254.3	254.3	254.3	254.3	253.8	253.1	252.8	253.5	254.9	256.0	256.0
177.5°	254.3	254.3	254.3	254.3	253.9	253.4	253.1	253.7	254.8	255.7	255.5
180°	254.3	254.3	254.3	254.3	254.3	254.3	254.3	254.3	254.3	254.3	254.3



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	700.3	700.3
2.5°	747.5	743.0
5°	961.4	965.9
7.5°	1294.6	1292.4
10°	1609.9	1630.1
12.5°	1839.6	1844.1
15°	1979.1	1988.1
17.5°	2033.1	2035.4
20°	2035.4	2030.9
22.5°	2010.6	2006.1
25°	1981.4	1979.1
27.5°	1954.3	1956.6
30°	1943.1	1949.9
32.5°	1943.1	1954.3
35°	1947.6	1958.8
37.5°	1945.4	1958.8
40°	1936.3	1952.1
42.5°	1911.5	1922.8
45°	1873.3	1886.8
47.5°	1823.8	1832.7
50°	1760.7	1769.7
52.5°	1681.9	1684.1
55°	1587.4	1596.4
57.5°	1486.1	1488.3
60°	1373.4	1380.2
62.5°	1254.1	1254.1
65°	1128.0	1132.6
67.5°	997.4	1008.7
70°	864.6	866.8
72.5°	734.0	734.0
75°	599.0	601.2
77.5°	470.6	470.6
80°	349.0	351.3
82.5°	240.9	245.5
85°	150.9	150.9
87.5°	69.8	63.0
90°	6.5	6.5
92.5°	26.0	20.8
95°	90.6	74.9
97.5°	216.9	187.2
100°	312.6	277.2
102.5°	406.7	376.3
105°	526.6	510.3
107.5°	605.2	609.1
110°	635.1	652.1





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	637.8	663.9
115°	620.9	657.1
117.5°	585.1	625.2
120°	556.1	595.1
122.5°	528.0	566.4
125°	487.9	523.3
127.5°	451.7	481.6
130°	430.4	458.0
132.5°	411.2	435.9
135°	384.7	406.0
137.5°	363.5	380.9
140°	348.9	365.3
142.5°	336.9	350.9
145°	318.8	329.4
147.5°	304.8	313.7
150°	296.2	303.3
152.5°	288.7	294.0
155°	280.1	283.6
157.5°	273.3	275.8
160°	269.2	270.7
162.5°	266.6	268.0
165°	262.8	264.2
167.5°	260.0	260.6
170°	259.3	259.3
172.5°	257.2	256.7
175°	256.0	256.0
177.5°	254.9	254.3
180°	254.3	254.3



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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	7.23	8.46	7.91	9.17	10.00	20.41	21.64	21.09	22.35	23.18
	3H	7.96	9.08	8.66	9.79	10.65	22.27	23.39	22.97	24.10	24.96
	4H	8.28	9.33	8.99	10.06	10.93	22.94	23.99	23.65	24.72	25.59
	6H	8.55	9.52	9.27	10.26	11.15	23.39	24.36	24.11	25.10	25.98
	8H	8.63	9.56	9.36	10.31	11.20	23.52	24.45	24.25	25.21	26.10
	12H	8.66	9.55	9.40	10.30	11.21	23.60	24.49	24.34	25.24	26.16
4H	2H	14.49	15.54	15.20	16.27	17.14	20.73	21.78	21.44	22.51	23.38
	3H	16.09	16.97	16.82	17.74	18.63	22.80	23.69	23.53	24.45	25.34
	4H	16.20	17.01	16.95	17.77	18.69	23.59	24.39	24.33	25.16	26.08
	6H	16.23	16.93	17.00	17.72	18.65	24.15	24.85	24.91	25.64	26.57
	8H	16.22	16.88	16.99	17.66	18.60	24.32	24.98	25.09	25.76	26.70
	12H	16.20	16.79	16.98	17.59	18.54	24.43	25.03	25.22	25.83	26.78
8H	4H	17.68	18.33	18.45	19.12	20.06	23.68	24.34	24.45	25.12	26.06
	6H	17.94	18.48	18.73	19.31	20.25	24.33	24.87	25.13	25.70	26.64
	8H	17.96	18.45	18.77	19.27	20.23	24.55	25.04	25.36	25.86	26.82
	12H	17.95	18.38	18.76	19.19	20.21	24.72	25.15	25.53	25.96	26.98
12H	4H	17.84	18.43	18.63	19.24	20.19	23.65	24.24	24.44	25.05	26.00
	6H	18.20	18.69	19.01	19.51	20.47	24.32	24.80	25.12	25.63	26.59
	8H	18.29	18.72	19.10	19.53	20.55	24.56	24.99	25.38	25.81	26.82