

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: P936961

Luminaire Tested: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936961
REPORT IS A COMBINATION OF REPORTS P933480 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-6-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

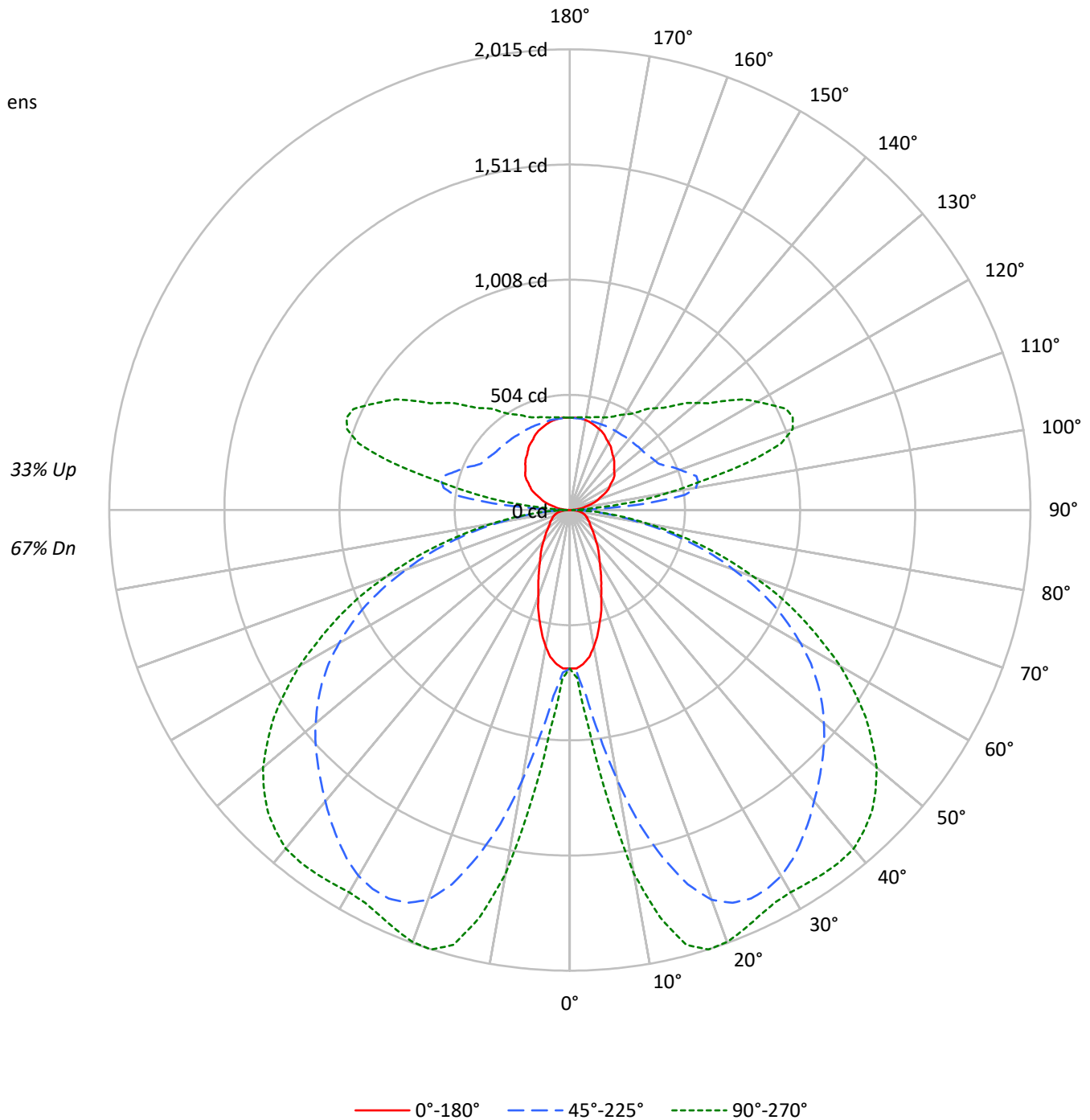
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7988.1 lumens
Efficiency: N/A
Efficacy: 95.1 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): 84
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				
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67	67	67	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55	55	55	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45	45	45	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37	37	37	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31	31	31	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26	26	26	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23	23	23	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20	20	20	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17	17	17	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15	15	15	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14	14	14	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4289	4289	4289
5°	4189	4956	5766
10°	3798	7223	9558
15°	3227	9434	11541
20°	2626	10930	11762
25°	2190	11435	11523
30°	1846	11504	11502
35°	1631	11310	11799
40°	1421	11059	12106
45°	1286	10874	12153
50°	1178	10707	11952
55°	1127	10463	11423
60°	1152	9999	10586
65°	1198	9296	9437
70°	1273	8102	7973
75°	1404	6599	6221
80°	1523	4571	4192
85°	1330	2422	2146

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12153 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.7	1.1
10°-20°	397.5	5.0
20°-30°	695.3	8.7
30°-40°	895.0	11.2
40°-50°	999.7	12.5
50°-60°	957.5	12.0
60°-70°	758.8	9.5
70°-80°	446.2	5.6
80°-90°	125.5	1.6
90°-100°	197.2	2.5
100°-110°	518.5	6.5
110°-120°	537.6	6.7
120°-130°	431.2	5.4
130°-140°	338.4	4.2
140°-150°	259.7	3.3
150°-160°	187.0	2.3
160°-170°	114.4	1.4
170°-180°	38.7	0.5
0°-30°	1182.5	14.8
0°-40°	2077.5	26.0
0°-60°	4034.8	50.5
0°-90°	5365.3	67.2
90°-120°	1253.4	15.7
90°-150°	2282.7	28.6
90°-180°	2623.0	32.8
0°-180°	7988.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	693	693	693	693	693	
5°	676	725	816	923	956	62
15°	506	934	1574	1908	1969	141
25°	323	1059	1875	1958	1960	149
35°	218	1012	1766	1866	1940	136
45°	149	807	1561	1788	1868	116
55°	107	513	1324	1538	1581	98
65°	85	272	983	1106	1121	84
75°	62	167	540	593	595	65
85°	22	51	134	147	149	24
90°	3	8	21	10	10	4
95°	26	102	340	175	119	29
105°	94	142	573	870	812	99
115°	166	202	459	916	1045	164
125°	231	259	418	706	832	205
135°	275	303	405	570	646	213
145°	319	340	400	486	524	200
155°	361	371	400	438	451	166
165°	389	394	400	415	420	110
175°	405	405	402	407	407	38
180°	405	405	405	405	405	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	693.3	693.3	693.3	693.3	693.3	693.3	693.3	693.3	693.3	693.3	693.3
2.5°	693.3	693.3	697.8	700.0	704.5	706.8	711.2	715.6	729.0	731.3	735.8
5°	675.5	684.5	713.4	724.6	755.8	798.1	815.9	844.9	905.2	923.0	934.2
7.5°	648.8	668.8	740.1	758.0	836.1	947.5	994.3	1056.8	1152.6	1199.4	1237.4
10°	606.4	648.8	775.8	818.2	945.3	1114.7	1201.7	1288.6	1433.6	1498.2	1522.7
12.5°	559.6	628.7	813.7	871.7	1054.5	1302.0	1406.8	1502.6	1667.6	1754.6	1767.9
15°	506.1	599.7	849.4	934.2	1170.4	1458.1	1574.0	1692.1	1846.0	1908.4	1924.0
17.5°	459.3	577.4	882.9	972.0	1259.7	1598.5	1716.6	1814.7	1939.6	1982.0	1993.1
20°	401.3	541.7	905.2	1021.1	1353.3	1701.1	1814.7	1890.5	1975.3	2002.0	2006.5
22.5°	359.0	503.9	918.5	1038.9	1415.7	1763.5	1859.4	1919.5	1977.5	1986.5	1988.6
25°	323.3	461.5	916.3	1059.0	1469.2	1801.4	1875.0	1919.5	1953.0	1957.5	1957.5
27.5°	289.8	414.6	907.4	1063.4	1509.4	1810.3	1868.2	1899.5	1915.0	1924.0	1924.0
30°	260.9	370.1	885.1	1054.5	1527.2	1801.4	1848.2	1863.8	1879.4	1892.8	1899.5
32.5°	238.5	327.7	851.6	1036.7	1529.4	1779.1	1812.5	1821.4	1843.7	1875.0	1886.1
35°	218.5	285.4	813.7	1012.2	1516.0	1743.4	1765.7	1774.6	1819.2	1866.0	1881.7
37.5°	198.4	254.2	764.7	969.8	1495.9	1701.1	1716.6	1732.3	1801.4	1857.1	1875.0
40°	178.4	227.4	706.8	923.0	1464.7	1649.8	1663.2	1687.7	1779.1	1843.7	1861.6
42.5°	162.7	205.1	644.3	873.9	1424.6	1591.8	1611.9	1647.5	1752.3	1821.4	1841.5
45°	149.4	182.8	577.4	807.1	1373.3	1531.6	1560.6	1609.7	1721.1	1788.0	1805.9
47.5°	136.0	167.2	508.3	737.9	1317.6	1471.4	1509.4	1565.0	1678.8	1743.4	1759.1
50°	124.8	151.6	439.2	664.3	1257.4	1406.8	1451.4	1509.4	1625.3	1685.5	1705.5
52.5°	115.9	138.2	374.5	590.8	1188.3	1339.8	1391.1	1451.4	1560.6	1618.5	1632.0
55°	107.0	127.1	318.8	512.8	1116.9	1268.5	1324.3	1382.3	1489.2	1538.3	1547.2
57.5°	102.6	118.1	272.0	439.2	1041.1	1188.3	1250.7	1304.2	1404.6	1442.4	1451.4
60°	95.8	111.5	236.4	376.8	958.7	1112.5	1166.0	1219.5	1304.2	1335.5	1342.1
62.5°	89.1	107.0	209.6	316.5	873.9	1023.3	1076.8	1125.9	1197.2	1219.5	1228.4
65°	84.8	102.6	189.5	272.0	787.0	929.7	983.2	1025.5	1083.5	1105.8	1110.3
67.5°	80.3	98.1	173.9	234.1	700.0	836.1	876.2	916.3	960.9	983.2	985.5
70°	73.6	93.6	160.6	207.4	610.9	729.0	762.5	804.8	840.5	851.6	858.4
72.5°	69.1	87.0	151.6	187.3	519.4	626.5	657.7	682.2	713.4	724.6	724.6
75°	62.4	78.0	142.7	167.2	425.8	512.8	539.5	564.0	588.5	593.0	586.4
77.5°	55.8	69.1	122.6	140.4	332.2	405.8	428.1	441.4	461.5	465.9	468.2
80°	46.8	60.2	95.8	109.3	240.7	298.7	314.3	325.5	343.3	343.3	347.8
82.5°	35.7	46.8	69.1	78.0	162.7	205.1	218.5	225.2	236.4	236.4	236.4
85°	22.3	29.0	44.6	51.3	98.1	124.8	133.8	136.0	144.9	147.1	147.1
87.5°	11.2	15.6	29.0	31.2	51.3	64.6	64.6	69.1	69.1	66.9	64.6
90°	2.7	4.9	7.1	7.6	11.9	17.7	20.6	18.4	13.7	10.3	10.3
92.5°	10.9	29.3	47.8	52.4	73.7	102.1	116.2	101.8	73.1	51.6	49.5
95°	26.1	59.8	93.6	102.1	181.3	286.9	339.7	303.2	230.0	175.1	168.9
97.5°	45.1	74.9	104.7	112.2	244.3	420.4	508.4	485.3	439.0	404.3	392.4
100°	59.7	86.8	113.8	120.6	267.1	462.5	560.2	561.8	565.3	567.8	553.8
102.5°	72.2	97.5	122.7	129.0	277.6	475.8	574.8	604.3	663.2	707.4	695.4
105°	93.5	114.8	136.1	141.5	285.4	477.3	573.2	639.2	771.2	870.3	863.8
107.5°	115.1	135.1	154.9	159.9	286.9	456.0	540.6	632.6	816.8	955.0	956.6
110°	129.8	147.7	165.7	170.2	284.7	437.2	513.5	616.4	822.4	976.8	983.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	144.2	161.3	178.5	182.8	284.7	420.8	488.8	594.2	804.9	962.9	973.2
115°	165.9	181.7	197.5	201.5	287.4	401.9	459.2	560.7	763.7	915.9	930.3
117.5°	187.3	201.7	216.1	219.7	292.7	390.1	438.8	530.4	713.6	851.0	867.0
120°	199.8	213.3	226.9	230.3	297.0	386.1	430.6	514.3	681.7	807.2	822.8
122.5°	212.1	225.7	239.3	242.8	303.3	384.0	424.4	499.8	650.6	763.6	778.9
125°	230.8	243.2	255.7	258.7	311.7	382.3	417.6	481.7	609.7	705.7	719.8
127.5°	246.0	258.6	271.1	274.3	320.1	381.4	411.9	466.9	576.8	659.3	671.1
130°	254.2	267.7	281.2	284.6	326.3	381.9	409.7	458.6	556.6	630.0	641.0
132.5°	262.6	276.1	289.7	293.0	331.3	382.3	407.9	451.7	539.3	605.0	614.8
135°	275.1	287.4	299.7	302.8	336.7	382.0	404.6	441.3	514.7	569.7	578.2
137.5°	287.8	300.0	312.1	315.2	344.8	384.3	404.0	435.0	497.0	543.6	550.5
140°	298.4	309.7	320.8	323.7	349.8	384.7	402.2	429.0	482.5	522.7	529.2
142.5°	306.5	316.9	327.3	329.9	354.0	386.1	402.2	425.7	472.7	508.0	513.6
145°	319.1	328.1	337.2	339.5	359.5	386.1	399.5	418.7	457.2	486.1	490.3
147.5°	331.6	340.3	349.2	351.4	367.4	388.7	399.5	414.6	444.9	467.6	471.1
150°	339.7	347.7	355.6	357.6	371.6	390.1	399.5	412.3	437.8	457.0	459.8
152.5°	348.1	354.1	360.2	361.7	374.2	391.0	399.5	410.3	432.2	448.5	450.7
155°	360.6	365.1	369.5	370.6	380.2	393.0	399.5	408.1	425.5	438.5	439.9
157.5°	369.9	374.2	378.5	379.6	386.2	395.1	399.5	406.2	419.7	429.8	430.8
160°	376.1	379.4	382.8	383.6	388.9	395.9	399.5	405.2	416.8	425.5	426.1
162.5°	382.3	384.9	387.4	388.0	391.8	396.9	399.5	404.4	414.1	421.4	421.9
165°	389.1	391.4	393.7	394.3	396.0	398.3	399.5	403.0	409.9	415.2	415.8
167.5°	395.3	396.4	397.5	397.8	399.3	401.2	402.2	404.5	409.0	412.5	412.7
170°	399.5	400.5	401.6	401.9	402.0	402.1	402.2	404.5	409.0	412.5	412.5
172.5°	401.6	401.9	402.1	402.2	402.2	402.2	402.2	403.9	407.5	410.3	410.1
175°	404.6	404.6	404.6	404.6	403.8	402.7	402.2	403.3	405.6	407.3	407.3
177.5°	404.6	404.6	404.6	404.6	404.0	403.1	402.7	403.6	405.4	406.7	406.5
180°	404.6	404.6	404.6	404.6	404.6	404.6	404.6	404.6	404.6	404.6	404.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	693.3	693.3
2.5°	740.1	735.8
5°	952.0	956.5
7.5°	1282.0	1279.7
10°	1594.0	1614.1
12.5°	1821.4	1825.9
15°	1959.7	1968.6
17.5°	2013.2	2015.4
20°	2015.4	2011.0
22.5°	1990.8	1986.5
25°	1961.9	1959.7
27.5°	1935.2	1937.4
30°	1924.0	1930.7
32.5°	1924.0	1935.2
35°	1928.5	1939.6
37.5°	1926.2	1939.6
40°	1917.3	1932.9
42.5°	1892.8	1904.0
45°	1854.9	1868.2
47.5°	1805.9	1814.7
50°	1743.4	1752.3
52.5°	1665.3	1667.6
55°	1571.7	1580.7
57.5°	1471.4	1473.6
60°	1360.0	1366.6
62.5°	1241.8	1241.8
65°	1116.9	1121.4
67.5°	987.6	998.8
70°	856.1	858.4
72.5°	726.8	726.8
75°	593.0	595.2
77.5°	465.9	465.9
80°	345.5	347.8
82.5°	238.5	243.0
85°	149.4	149.4
87.5°	69.1	62.4
90°	10.3	10.3
92.5°	41.3	33.1
95°	144.0	119.2
97.5°	345.2	297.9
100°	497.4	441.0
102.5°	647.0	598.7
105°	837.9	811.9
107.5°	962.8	969.1
110°	1010.5	1037.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1014.8	1056.2
115°	987.8	1045.4
117.5°	930.8	994.7
120°	884.8	946.9
122.5°	840.1	901.2
125°	776.2	832.5
127.5°	718.7	766.3
130°	684.9	728.8
132.5°	654.2	693.5
135°	612.1	646.0
137.5°	578.4	606.1
140°	555.1	581.1
142.5°	535.9	558.2
145°	507.2	524.1
147.5°	485.1	499.1
150°	471.2	482.5
152.5°	459.3	467.9
155°	445.6	451.3
157.5°	434.8	438.8
160°	428.3	430.6
162.5°	424.1	426.3
165°	418.1	420.4
167.5°	413.7	414.6
170°	412.5	412.5
172.5°	409.2	408.4
175°	407.3	407.3
177.5°	405.6	404.6
180°	404.6	404.6



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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	7.49	8.58	8.27	9.40	10.40	20.65	21.75	21.44	22.56	23.56
	3H	8.21	9.20	9.01	10.02	11.05	22.50	23.49	23.30	24.32	25.34
	4H	8.52	9.45	9.33	10.29	11.32	23.16	24.09	23.97	24.92	25.96
	6H	8.78	9.65	9.61	10.49	11.54	23.59	24.46	24.42	25.30	26.35
	8H	8.86	9.68	9.69	10.54	11.59	23.72	24.54	24.56	25.40	26.46
	12H	8.88	9.67	9.73	10.52	11.60	23.79	24.58	24.64	25.43	26.52
4H	2H	14.72	15.66	15.54	16.49	17.53	20.95	21.89	21.77	22.72	23.76
	3H	16.31	17.10	17.14	17.96	19.02	23.02	23.80	23.85	24.67	25.72
	4H	16.42	17.13	17.26	18.00	19.08	23.79	24.51	24.64	25.37	26.45
	6H	16.44	17.06	17.30	17.95	19.04	24.34	24.96	25.20	25.85	26.93
	8H	16.42	17.01	17.29	17.89	18.99	24.51	25.09	25.37	25.97	27.07
	12H	16.39	16.92	17.28	17.82	18.93	24.61	25.13	25.49	26.03	27.14
8H	4H	17.88	18.46	18.74	19.34	20.44	23.87	24.45	24.74	25.34	26.43
	6H	18.13	18.61	19.03	19.54	20.64	24.51	24.99	25.40	25.91	27.01
	8H	18.15	18.58	19.06	19.50	20.62	24.73	25.16	25.63	26.07	27.19
	12H	18.13	18.51	19.04	19.42	20.59	24.88	25.26	25.79	26.17	27.34
12H	4H	18.03	18.56	18.92	19.46	20.57	23.84	24.36	24.72	25.26	26.37
	6H	18.39	18.82	19.30	19.74	20.86	24.49	24.92	25.40	25.84	26.96
	8H	18.47	18.85	19.38	19.76	20.93	24.73	25.11	25.64	26.02	27.19