

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: P936942

Luminaire Tested: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936942
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-92765-1D-UNV-STD-W-6-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

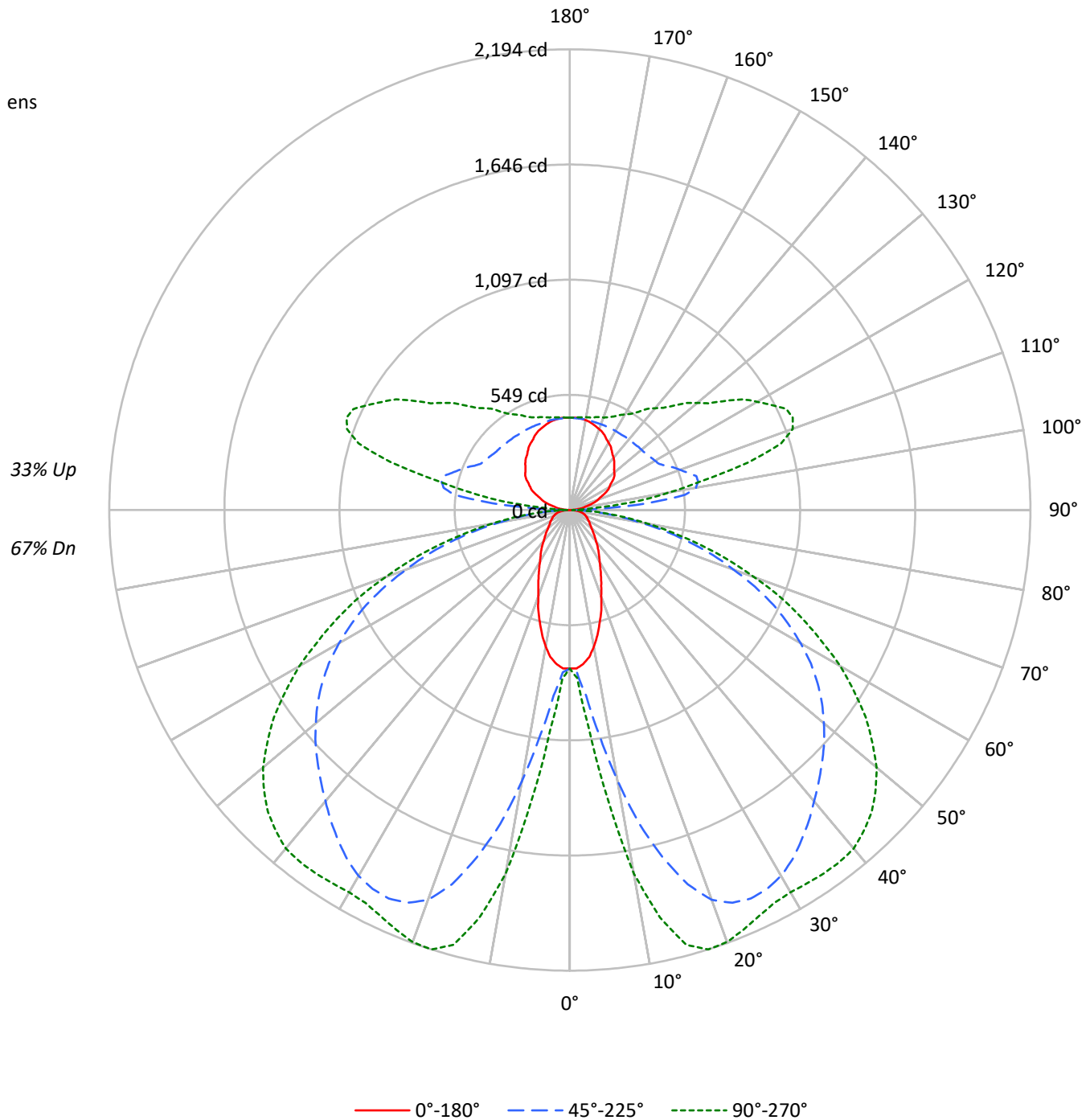
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8696.6 lumens
Efficiency: N/A
Efficacy: 103.5 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°	4669	4669	4669
5°	4560	5395	6277
10°	4135	7864	10406
15°	3513	10271	12565
20°	2859	11899	12805
25°	2384	12449	12545
30°	2009	12524	12521
35°	1776	12313	12846
40°	1547	12039	13180
45°	1399	11838	13231
50°	1282	11656	13012
55°	1227	11391	12436
60°	1254	10886	11524
65°	1304	10120	10274
70°	1385	8820	8679
75°	1530	7185	6773
80°	1660	4977	4565
85°	1449	2635	2336

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13231 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.6	1.1
10°-20°	432.8	5.0
20°-30°	757.0	8.7
30°-40°	974.4	11.2
40°-50°	1088.4	12.5
50°-60°	1042.4	12.0
60°-70°	826.1	9.5
70°-80°	485.8	5.6
80°-90°	136.6	1.6
90°-100°	214.7	2.5
100°-110°	564.5	6.5
110°-120°	585.3	6.7
120°-130°	469.5	5.4
130°-140°	368.4	4.2
140°-150°	282.7	3.3
150°-160°	203.6	2.3
160°-170°	124.6	1.4
170°-180°	42.1	0.5
0°-30°	1287.4	14.8
0°-40°	2261.8	26.0
0°-60°	4392.6	50.5
0°-90°	5841.2	67.2
90°-120°	1364.5	15.7
90°-150°	2485.1	28.6
90°-180°	2855.0	32.8
0°-180°	8696.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	755	755	755	755	755	
5°	735	789	888	1005	1041	68
15°	551	1017	1714	2078	2143	153
25°	352	1153	2041	2131	2134	162
35°	238	1102	1922	2032	2112	149
45°	163	879	1699	1947	2034	126
55°	116	558	1442	1675	1721	106
65°	92	296	1070	1204	1221	91
75°	68	182	587	646	648	71
85°	24	56	146	160	163	26
90°	3	8	22	11	11	4
95°	28	111	370	191	130	32
105°	102	154	624	948	884	108
115°	181	219	500	997	1138	178
125°	251	282	455	768	906	223
135°	300	330	440	620	703	232
145°	347	370	435	529	571	218
155°	393	404	435	477	491	180
165°	424	429	435	452	458	120
175°	440	440	438	443	443	42
180°	440	440	440	440	440	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	754.8	754.8	754.8	754.8	754.8	754.8	754.8	754.8	754.8	754.8	754.8
2.5°	754.8	754.8	759.7	762.1	767.0	769.4	774.2	779.1	793.6	796.1	801.0
5°	735.4	745.2	776.7	788.9	822.8	868.9	888.3	919.9	985.5	1004.9	1017.0
7.5°	706.3	728.1	805.8	825.2	910.2	1031.5	1082.5	1150.5	1254.8	1305.8	1347.1
10°	660.2	706.3	844.6	890.8	1029.2	1213.6	1308.3	1402.9	1560.7	1631.1	1657.8
12.5°	609.2	684.4	885.9	949.0	1148.0	1417.5	1531.5	1635.9	1815.5	1910.2	1924.7
15°	551.0	652.9	924.7	1017.0	1274.2	1587.4	1713.6	1842.2	2009.7	2077.6	2094.6
17.5°	500.0	628.6	961.2	1058.2	1371.4	1740.3	1868.9	1975.7	2111.7	2157.7	2169.9
20°	436.9	589.8	985.5	1111.7	1473.3	1852.0	1975.7	2058.2	2150.5	2179.5	2184.4
22.5°	390.8	548.6	1000.0	1131.1	1541.3	1919.8	2024.3	2089.8	2152.9	2162.6	2165.0
25°	352.0	502.4	997.6	1152.9	1599.5	1961.2	2041.3	2089.8	2126.2	2131.1	2131.1
27.5°	315.5	451.4	987.8	1157.8	1643.2	1970.8	2033.9	2068.0	2084.9	2094.6	2094.6
30°	284.0	402.9	963.6	1148.0	1662.6	1961.2	2012.1	2029.1	2046.1	2060.7	2068.0
32.5°	259.7	356.8	927.1	1128.6	1665.0	1936.9	1973.3	1983.0	2007.2	2041.3	2053.3
35°	237.9	310.7	885.9	1101.9	1650.5	1898.0	1922.3	1932.0	1980.6	2031.5	2048.5
37.5°	216.0	276.7	832.6	1055.8	1628.6	1852.0	1868.9	1885.9	1961.2	2021.8	2041.3
40°	194.2	247.6	769.4	1004.9	1594.6	1796.1	1810.6	1837.3	1936.9	2007.2	2026.7
42.5°	177.2	223.3	701.5	951.4	1550.9	1733.0	1754.8	1793.6	1907.7	1983.0	2004.8
45°	162.6	199.0	628.6	878.6	1495.1	1667.4	1699.0	1752.4	1873.8	1946.6	1966.0
47.5°	148.0	182.1	553.3	803.4	1434.5	1601.9	1643.2	1703.8	1827.7	1898.0	1915.1
50°	135.9	165.0	478.2	723.3	1368.9	1531.5	1580.1	1643.2	1769.4	1834.9	1856.7
52.5°	126.2	150.5	407.7	643.2	1293.6	1458.7	1514.5	1580.1	1699.0	1762.1	1776.7
55°	116.5	138.4	347.1	558.2	1216.0	1381.0	1441.7	1504.9	1621.3	1674.8	1684.4
57.5°	111.7	128.6	296.1	478.2	1133.5	1293.6	1361.6	1419.9	1529.1	1570.4	1580.1
60°	104.3	121.3	257.3	410.2	1043.7	1211.1	1269.4	1327.7	1419.9	1453.9	1461.2
62.5°	97.1	116.5	228.1	344.6	951.4	1114.1	1172.3	1225.7	1303.4	1327.7	1337.3
65°	92.3	111.7	206.3	296.1	856.7	1012.1	1070.4	1116.5	1179.6	1203.8	1208.7
67.5°	87.4	106.8	189.3	254.8	762.1	910.2	953.9	997.6	1046.1	1070.4	1072.8
70°	80.1	101.9	174.8	225.8	665.0	793.6	830.1	876.2	915.1	927.1	934.5
72.5°	75.3	94.7	165.0	203.9	565.5	682.1	716.0	742.7	776.7	788.9	788.9
75°	68.0	84.9	155.4	182.1	463.6	558.2	587.4	614.1	640.7	645.6	638.4
77.5°	60.7	75.3	133.5	152.9	361.6	441.8	466.0	480.6	502.4	507.3	509.7
80°	51.0	65.5	104.3	119.0	262.1	325.2	342.2	354.4	373.8	373.8	378.7
82.5°	38.8	51.0	75.3	84.9	177.2	223.3	237.9	245.2	257.3	257.3	257.3
85°	24.3	31.6	48.6	55.8	106.8	135.9	145.6	148.0	157.8	160.2	160.2
87.5°	12.1	17.0	31.6	33.9	55.8	70.4	70.4	75.3	75.3	72.9	70.4
90°	3.0	5.4	7.7	8.3	13.0	19.3	22.5	20.0	14.9	11.2	11.2
92.5°	11.9	31.9	52.0	57.1	80.2	111.1	126.5	110.8	79.6	56.1	53.9
95°	28.4	65.1	101.9	111.1	197.4	312.4	369.9	330.1	250.4	190.7	183.9
97.5°	49.1	81.6	114.0	122.1	265.9	457.6	553.4	528.3	477.9	440.1	427.2
100°	65.0	94.5	123.9	131.3	290.8	503.5	609.9	611.7	615.4	618.2	602.9
102.5°	78.6	106.1	133.6	140.5	302.3	518.0	625.8	657.9	722.0	770.1	757.0
105°	101.7	125.0	148.2	154.0	310.7	519.6	624.0	695.9	839.6	947.5	940.4
107.5°	125.4	147.1	168.7	174.1	312.3	496.5	588.5	688.7	889.3	1039.7	1041.4
110°	141.3	160.8	180.4	185.3	309.9	476.0	559.0	671.1	895.3	1063.4	1070.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	157.0	175.7	194.3	199.0	310.0	458.1	532.1	646.9	876.3	1048.3	1059.6
115°	180.6	197.8	215.0	219.4	312.9	437.6	499.9	610.4	831.4	997.1	1012.8
117.5°	204.0	219.6	235.2	239.1	318.7	424.7	477.7	577.4	776.9	926.5	943.9
120°	217.5	232.3	247.0	250.7	323.4	420.3	468.8	559.9	742.2	878.8	895.8
122.5°	230.9	245.7	260.6	264.3	330.2	418.0	462.0	544.1	708.3	831.3	848.0
125°	251.3	264.8	278.3	281.7	339.4	416.2	454.7	524.4	663.8	768.3	783.6
127.5°	267.8	281.5	295.2	298.6	348.5	415.2	448.5	508.3	627.9	717.7	730.6
130°	276.7	291.4	306.2	309.8	355.2	415.8	446.1	499.3	605.9	685.9	697.8
132.5°	285.9	300.6	315.4	319.0	360.7	416.2	444.1	491.8	587.1	658.6	669.3
135°	299.5	312.9	326.3	329.6	366.6	415.8	440.5	480.5	560.3	620.2	629.5
137.5°	313.3	326.6	339.8	343.2	375.4	418.3	439.8	473.6	541.1	591.8	599.3
140°	324.9	337.2	349.3	352.4	380.9	418.8	437.8	467.0	525.3	569.0	576.1
142.5°	333.7	345.0	356.3	359.1	385.3	420.3	437.8	463.5	514.6	553.1	559.2
145°	347.4	357.2	367.1	369.6	391.4	420.3	434.9	455.8	497.7	529.2	533.7
147.5°	361.0	370.5	380.2	382.6	400.0	423.2	434.9	451.3	484.3	509.1	512.9
150°	369.9	378.6	387.2	389.4	404.6	424.7	434.9	448.8	476.7	497.5	500.6
152.5°	378.9	385.5	392.1	393.8	407.4	425.7	434.9	446.7	470.5	488.3	490.6
155°	392.6	397.5	402.3	403.5	413.9	427.9	434.9	444.3	463.3	477.4	479.0
157.5°	402.7	407.3	412.1	413.3	420.4	430.1	434.9	442.2	457.0	468.0	469.0
160°	409.4	413.1	416.7	417.7	423.4	431.1	434.9	441.2	453.8	463.3	463.8
162.5°	416.2	419.0	421.8	422.4	426.6	432.1	434.9	440.2	450.8	458.8	459.4
165°	423.6	426.1	428.6	429.2	431.1	433.6	434.9	438.7	446.3	452.0	452.7
167.5°	430.4	431.5	432.8	433.1	434.7	436.8	437.8	440.3	445.3	449.0	449.3
170°	434.9	436.0	437.3	437.6	437.6	437.7	437.8	440.3	445.3	449.0	449.0
172.5°	437.3	437.6	437.7	437.8	437.8	437.8	437.8	439.8	443.7	446.6	446.4
175°	440.5	440.5	440.5	440.5	439.7	438.4	437.8	439.1	441.6	443.4	443.4
177.5°	440.5	440.5	440.5	440.5	439.8	438.9	438.4	439.4	441.4	442.8	442.5
180°	440.5	440.5	440.5	440.5	440.5	440.5	440.5	440.5	440.5	440.5	440.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	754.8	754.8
2.5°	805.8	801.0
5°	1036.4	1041.3
7.5°	1395.7	1393.2
10°	1735.4	1757.3
12.5°	1983.0	1987.8
15°	2133.5	2143.2
17.5°	2191.7	2194.2
20°	2194.2	2189.3
22.5°	2167.4	2162.6
25°	2135.8	2133.5
27.5°	2106.8	2109.2
30°	2094.6	2101.9
32.5°	2094.6	2106.8
35°	2099.5	2111.7
37.5°	2097.0	2111.7
40°	2087.4	2104.3
42.5°	2060.7	2072.8
45°	2019.4	2033.9
47.5°	1966.0	1975.7
50°	1898.0	1907.7
52.5°	1813.0	1815.5
55°	1711.1	1720.9
57.5°	1601.9	1604.3
60°	1480.6	1487.8
62.5°	1352.0	1352.0
65°	1216.0	1220.9
67.5°	1075.2	1087.4
70°	932.0	934.5
72.5°	791.2	791.2
75°	645.6	648.0
77.5°	507.3	507.3
80°	376.2	378.7
82.5°	259.7	264.6
85°	162.6	162.6
87.5°	75.3	68.0
90°	11.2	11.2
92.5°	44.9	36.0
95°	156.8	129.8
97.5°	375.8	324.3
100°	541.5	480.1
102.5°	704.4	651.8
105°	912.2	883.9
107.5°	1048.2	1055.1
110°	1100.1	1129.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1104.8	1149.9
115°	1075.4	1138.2
117.5°	1013.4	1082.9
120°	963.3	1030.9
122.5°	914.6	981.1
125°	845.0	906.4
127.5°	782.5	834.3
130°	745.6	793.4
132.5°	712.2	755.0
135°	666.4	703.3
137.5°	629.7	659.9
140°	604.3	632.6
142.5°	583.5	607.8
145°	552.2	570.6
147.5°	528.1	543.3
150°	513.0	525.3
152.5°	500.0	509.4
155°	485.2	491.3
157.5°	473.4	477.7
160°	466.3	468.8
162.5°	461.7	464.1
165°	455.1	457.6
167.5°	450.4	451.4
170°	449.0	449.0
172.5°	445.5	444.6
175°	443.4	443.4
177.5°	441.6	440.5
180°	440.5	440.5



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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	7.78	8.88	8.57	9.69	10.69	20.95	22.04	21.73	22.86	23.86
	3H	8.50	9.49	9.30	10.32	11.35	22.80	23.79	23.60	24.61	25.64
	4H	8.81	9.75	9.63	10.58	11.62	23.45	24.39	24.27	25.22	26.26
	6H	9.08	9.94	9.91	10.78	11.83	23.89	24.75	24.72	25.59	26.65
	8H	9.15	9.98	9.99	10.84	11.89	24.02	24.84	24.85	25.70	26.75
	12H	9.18	9.96	10.02	10.82	11.90	24.09	24.88	24.93	25.73	26.81
4H	2H	15.02	15.95	15.84	16.78	17.82	21.25	22.19	22.07	23.02	24.06
	3H	16.61	17.39	17.44	18.26	19.31	23.31	24.10	24.14	24.96	26.02
	4H	16.71	17.43	17.56	18.29	19.37	24.09	24.80	24.93	25.66	26.75
	6H	16.74	17.36	17.60	18.25	19.33	24.63	25.26	25.50	26.14	27.23
	8H	16.72	17.30	17.59	18.18	19.28	24.80	25.38	25.67	26.26	27.36
	12H	16.69	17.21	17.57	18.12	19.22	24.90	25.43	25.79	26.33	27.44
8H	4H	18.17	18.75	19.04	19.64	20.74	24.17	24.75	25.03	25.63	26.73
	6H	18.43	18.91	19.32	19.83	20.93	24.80	25.29	25.70	26.21	27.31
	8H	18.45	18.88	19.35	19.79	20.91	25.02	25.45	25.93	26.37	27.49
	12H	18.43	18.81	19.34	19.72	20.88	25.18	25.55	26.08	26.46	27.63
12H	4H	18.33	18.85	19.21	19.75	20.86	24.13	24.66	25.02	25.56	26.66
	6H	18.69	19.12	19.59	20.03	21.15	24.79	25.22	25.69	26.14	27.25
	8H	18.77	19.15	19.68	20.06	21.22	25.03	25.41	25.94	26.32	27.48