

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: P936911

Luminaire Tested: SQ4-FB-050U-125D-830-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936911
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-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

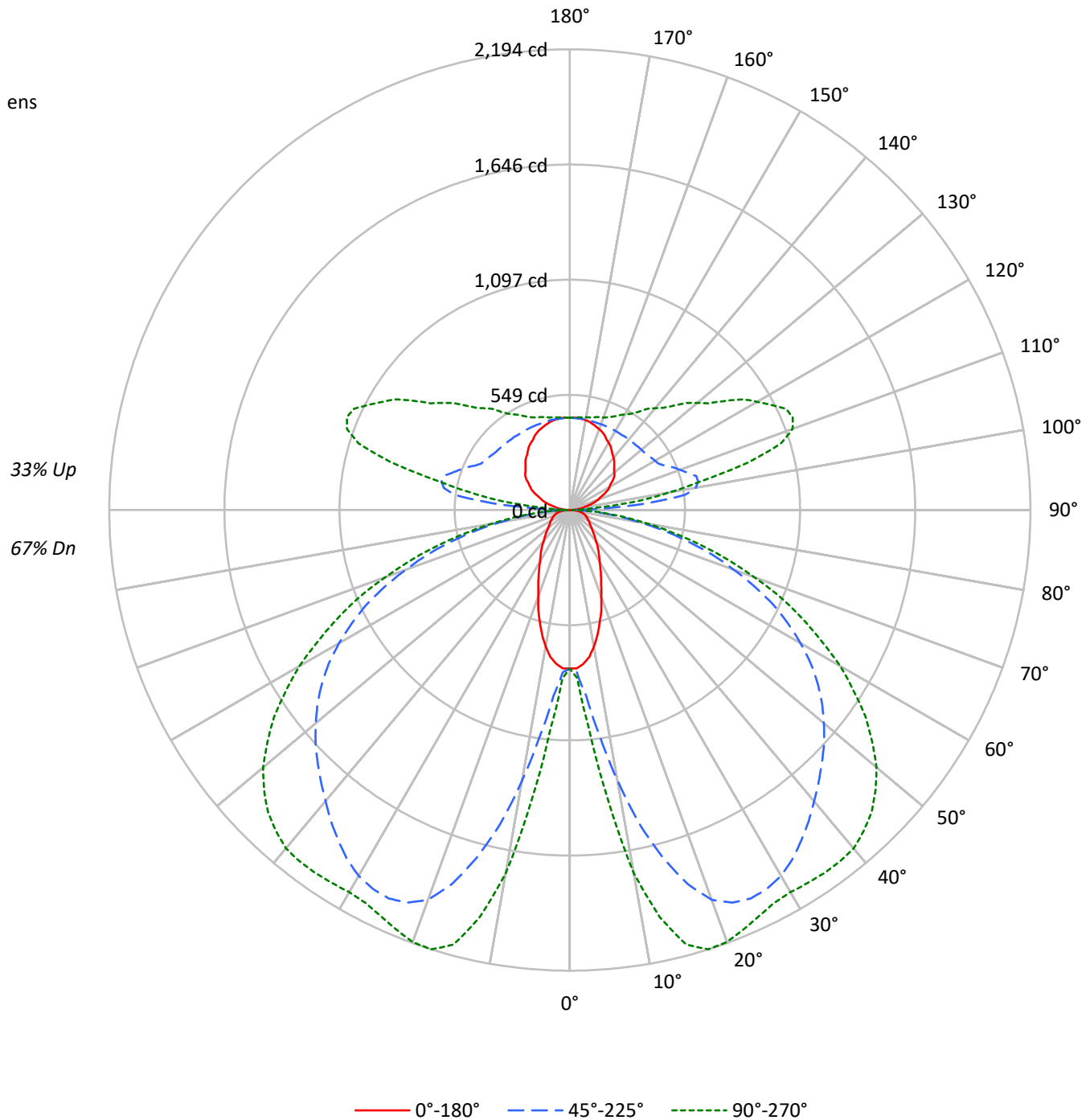
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8694.8 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°	4559	5394	6276
10°	4134	7862	10404
15°	3512	10269	12563
20°	2858	11897	12803
25°	2383	12447	12542
30°	2009	12522	12519
35°	1776	12311	12843
40°	1547	12037	13177
45°	1399	11835	13229
50°	1281	11654	13010
55°	1226	11389	12433
60°	1254	10884	11522
65°	1304	10118	10271
70°	1385	8818	8678
75°	1530	7184	6771
80°	1660	4977	4563
85°	1449	2635	2336

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13229 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.6	1.1
10°-20°	432.7	5.0
20°-30°	756.8	8.7
30°-40°	974.2	11.2
40°-50°	1088.2	12.5
50°-60°	1042.2	12.0
60°-70°	826.0	9.5
70°-80°	485.7	5.6
80°-90°	136.6	1.6
90°-100°	214.7	2.5
100°-110°	564.4	6.5
110°-120°	585.2	6.7
120°-130°	469.4	5.4
130°-140°	368.3	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°	1287.1	14.8
0°-40°	2261.3	26.0
0°-60°	4391.7	50.5
0°-90°	5840.0	67.2
90°-120°	1364.2	15.7
90°-150°	2484.6	28.6
90°-180°	2855.0	32.8
0°-180°	8694.8	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	1713	2077	2143	153
25°	352	1153	2041	2131	2133	162
35°	238	1102	1922	2031	2111	149
45°	163	878	1699	1946	2034	126
55°	116	558	1442	1674	1720	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	947	884	108
115°	181	219	500	997	1138	178
125°	251	282	455	768	906	223
135°	299	330	440	620	703	232
145°	347	370	435	529	570	218
155°	392	403	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°	754.7	754.7	754.7	754.7	754.7	754.7	754.7	754.7	754.7	754.7	754.7
2.5°	754.7	754.7	759.5	761.9	766.8	769.3	774.1	778.9	793.5	796.0	800.8
5°	735.3	745.0	776.6	788.7	822.6	868.7	888.1	919.7	985.3	1004.7	1016.8
7.5°	706.2	728.0	805.6	825.0	910.0	1031.3	1082.3	1150.3	1254.6	1305.5	1346.8
10°	660.0	706.2	844.4	890.6	1028.9	1213.4	1308.0	1402.6	1560.4	1630.7	1657.4
12.5°	609.1	684.3	885.7	948.8	1147.8	1417.2	1531.2	1635.5	1815.2	1909.8	1924.3
15°	550.8	652.8	924.5	1016.8	1274.0	1587.1	1713.2	1841.8	2009.3	2077.2	2094.2
17.5°	499.9	628.5	961.0	1058.0	1371.1	1739.9	1868.5	1975.3	2111.2	2157.3	2169.5
20°	436.8	589.7	985.3	1111.4	1473.0	1851.6	1975.3	2057.8	2150.0	2179.1	2184.0
22.5°	390.7	548.5	999.8	1130.9	1541.0	1919.5	2023.9	2089.3	2152.4	2162.2	2164.6
25°	351.9	502.3	997.4	1152.6	1599.2	1960.8	2040.9	2089.3	2125.8	2130.6	2130.6
27.5°	315.5	451.3	987.6	1157.5	1642.9	1970.4	2033.5	2067.5	2084.5	2094.2	2094.2
30°	283.9	402.9	963.4	1147.8	1662.3	1960.8	2011.7	2028.7	2045.6	2060.3	2067.5
32.5°	259.6	356.7	926.9	1128.4	1664.7	1936.5	1972.9	1982.6	2006.8	2040.9	2052.9
35°	237.9	310.6	885.7	1101.7	1650.2	1897.7	1921.9	1931.6	1980.2	2031.1	2048.1
37.5°	216.0	276.7	832.4	1055.6	1628.3	1851.6	1868.5	1885.5	1960.8	2021.4	2040.9
40°	194.2	247.5	769.3	1004.7	1594.3	1795.8	1810.3	1837.0	1936.5	2006.8	2026.2
42.5°	177.1	223.2	701.3	951.2	1550.6	1732.7	1754.5	1793.3	1907.3	1982.6	2004.4
45°	162.6	198.9	628.5	878.5	1494.8	1667.1	1698.6	1752.1	1873.4	1946.2	1965.6
47.5°	148.0	182.0	553.2	803.2	1434.2	1601.6	1642.9	1703.5	1827.3	1897.7	1914.7
50°	135.8	165.0	478.1	723.1	1368.6	1531.2	1579.8	1642.9	1769.1	1834.6	1856.4
52.5°	126.2	150.5	407.6	643.1	1293.4	1458.4	1514.2	1579.8	1698.6	1761.7	1776.3
55°	116.4	138.3	347.0	558.1	1215.7	1380.8	1441.5	1504.6	1621.0	1674.4	1684.1
57.5°	111.7	128.6	296.1	478.1	1133.2	1293.4	1361.3	1419.6	1528.8	1570.0	1579.8
60°	104.3	121.3	257.3	410.1	1043.5	1210.9	1269.2	1327.4	1419.6	1453.6	1460.9
62.5°	97.0	116.4	228.1	344.5	951.2	1113.8	1172.1	1225.5	1303.1	1327.4	1337.1
65°	92.3	111.7	206.3	296.1	856.6	1011.9	1070.1	1116.2	1179.3	1203.6	1208.5
67.5°	87.4	106.8	189.3	254.8	761.9	910.0	953.7	997.4	1045.9	1070.1	1072.6
70°	80.1	101.9	174.8	225.7	664.9	793.5	829.9	876.0	914.9	926.9	934.3
72.5°	75.2	94.6	165.0	203.8	565.4	681.9	715.9	742.5	776.6	788.7	788.7
75°	68.0	84.9	155.4	182.0	463.5	558.1	587.3	613.9	640.6	645.5	638.2
77.5°	60.7	75.2	133.5	152.9	361.6	441.7	466.0	480.5	502.3	507.2	509.6
80°	51.0	65.5	104.3	118.9	262.0	325.1	342.2	354.3	373.7	373.7	378.6
82.5°	38.8	51.0	75.2	84.9	177.1	223.2	237.9	245.1	257.3	257.3	257.3
85°	24.3	31.5	48.6	55.8	106.8	135.8	145.6	148.0	157.7	160.1	160.1
87.5°	12.1	17.0	31.5	33.9	55.8	70.4	70.4	75.2	75.2	72.8	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	79.5	56.1	53.9
95°	28.4	65.1	101.9	111.1	197.3	312.3	369.8	330.0	250.4	190.6	183.8
97.5°	49.0	81.5	114.0	122.1	265.9	457.5	553.3	528.2	477.8	440.0	427.1
100°	65.0	94.5	123.9	131.3	290.7	503.4	609.7	611.6	615.3	618.1	602.8
102.5°	78.6	106.1	133.6	140.4	302.2	517.9	625.7	657.7	721.9	770.0	756.9
105°	101.7	124.9	148.2	154.0	310.6	519.5	623.9	695.8	839.5	947.3	940.2
107.5°	125.3	147.0	168.6	174.1	312.2	496.4	588.4	688.6	889.1	1039.5	1041.2
110°	141.3	160.8	180.4	185.3	309.8	475.9	558.9	670.9	895.1	1063.2	1070.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	157.0	175.6	194.3	198.9	309.9	458.0	532.0	646.7	876.1	1048.1	1059.3
115°	180.6	197.8	215.0	219.3	312.8	437.5	499.8	610.3	831.2	996.9	1012.6
117.5°	203.9	219.6	235.2	239.1	318.6	424.7	477.6	577.3	776.8	926.3	943.7
120°	217.5	232.2	246.9	250.7	323.3	420.3	468.7	559.8	742.0	878.7	895.6
122.5°	230.9	245.7	260.5	264.2	330.1	418.0	461.9	544.0	708.1	831.1	847.8
125°	251.2	264.7	278.3	281.6	339.3	416.1	454.6	524.3	663.7	768.1	783.4
127.5°	267.8	281.4	295.1	298.6	348.5	415.1	448.4	508.2	627.8	717.6	730.5
130°	276.7	291.4	306.1	309.7	355.2	415.7	446.0	499.2	605.8	685.7	697.7
132.5°	285.8	300.6	315.3	318.9	360.6	416.1	444.0	491.7	587.0	658.5	669.2
135°	299.4	312.8	326.2	329.5	366.5	415.8	440.4	480.4	560.2	620.1	629.3
137.5°	313.3	326.6	339.8	343.1	375.3	418.2	439.8	473.5	541.0	591.7	599.2
140°	324.8	337.1	349.2	352.3	380.8	418.7	437.8	466.9	525.2	568.9	576.0
142.5°	333.6	344.9	356.2	359.1	385.3	420.3	437.8	463.4	514.5	553.0	559.1
145°	347.3	357.2	367.0	369.5	391.3	420.3	434.8	455.7	497.6	529.1	533.6
147.5°	360.9	370.4	380.1	382.5	399.9	423.1	434.8	451.2	484.2	509.0	512.8
150°	369.8	378.5	387.1	389.3	404.5	424.7	434.8	448.7	476.6	497.4	500.5
152.5°	378.9	385.5	392.1	393.7	407.4	425.6	434.8	446.6	470.4	488.2	490.5
155°	392.5	397.4	402.2	403.4	413.9	427.8	434.8	444.3	463.2	477.3	478.9
157.5°	402.6	407.3	412.0	413.2	420.4	430.0	434.8	442.2	456.9	467.9	468.9
160°	409.4	413.0	416.6	417.6	423.3	431.0	434.8	441.1	453.7	463.2	463.8
162.5°	416.1	418.9	421.7	422.4	426.5	432.0	434.8	440.1	450.8	458.7	459.3
165°	423.5	426.0	428.5	429.1	431.1	433.5	434.8	438.6	446.2	451.9	452.6
167.5°	430.3	431.4	432.7	433.0	434.6	436.7	437.8	440.2	445.2	448.9	449.2
170°	434.8	435.9	437.2	437.5	437.6	437.7	437.8	440.2	445.2	448.9	448.9
172.5°	437.2	437.5	437.7	437.8	437.8	437.8	437.8	439.7	443.6	446.5	446.4
175°	440.4	440.4	440.4	440.4	439.6	438.3	437.8	439.0	441.5	443.3	443.3
177.5°	440.4	440.4	440.4	440.4	439.8	438.8	438.3	439.3	441.3	442.7	442.4
180°	440.4	440.4	440.4	440.4	440.4	440.4	440.4	440.4	440.4	440.4	440.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	754.7	754.7
2.5°	805.6	800.8
5°	1036.2	1041.1
7.5°	1395.4	1392.9
10°	1735.0	1756.9
12.5°	1982.6	1987.4
15°	2133.0	2142.8
17.5°	2191.2	2193.7
20°	2193.7	2188.9
22.5°	2167.0	2162.2
25°	2135.4	2133.0
27.5°	2106.4	2108.7
30°	2094.2	2101.5
32.5°	2094.2	2106.4
35°	2099.1	2111.2
37.5°	2096.6	2111.2
40°	2086.9	2103.9
42.5°	2060.3	2072.4
45°	2019.0	2033.5
47.5°	1965.6	1975.3
50°	1897.7	1907.3
52.5°	1812.7	1815.2
55°	1710.8	1720.5
57.5°	1601.6	1604.0
60°	1480.3	1487.5
62.5°	1351.7	1351.7
65°	1215.7	1220.6
67.5°	1075.0	1087.2
70°	931.8	934.3
72.5°	791.1	791.1
75°	645.5	647.9
77.5°	507.2	507.2
80°	376.1	378.6
82.5°	259.6	264.5
85°	162.6	162.6
87.5°	75.2	68.0
90°	11.2	11.2
92.5°	44.9	36.0
95°	156.8	129.7
97.5°	375.7	324.3
100°	541.4	480.0
102.5°	704.3	651.7
105°	912.0	883.7
107.5°	1048.0	1054.9
110°	1099.9	1129.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1104.6	1149.7
115°	1075.2	1137.9
117.5°	1013.2	1082.7
120°	963.1	1030.7
122.5°	914.4	981.0
125°	844.8	906.2
127.5°	782.3	834.1
130°	745.5	793.3
132.5°	712.0	754.9
135°	666.2	703.1
137.5°	629.5	659.7
140°	604.2	632.5
142.5°	583.4	607.6
145°	552.1	570.4
147.5°	528.0	543.2
150°	512.9	525.2
152.5°	499.9	509.3
155°	485.1	491.2
157.5°	473.3	477.6
160°	466.2	468.7
162.5°	461.7	464.0
165°	455.1	457.5
167.5°	450.3	451.3
170°	448.9	448.9
172.5°	445.4	444.5
175°	443.3	443.3
177.5°	441.5	440.4
180°	440.4	440.4



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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	24.01	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	22.18	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	24.08	24.80	24.93	25.66	26.75
	6H	16.74	17.36	17.60	18.24	19.33	24.63	25.26	25.50	26.14	27.23
	8H	16.72	17.30	17.58	18.18	19.28	24.80	25.38	25.67	26.26	27.36
	12H	16.69	17.21	17.57	18.11	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	26.13	27.25
	8H	18.77	19.15	19.68	20.06	21.22	25.03	25.41	25.94	26.32	27.48