

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: P936975

Luminaire Tested: SQ4-FB-050U-125D-940-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936975
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-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

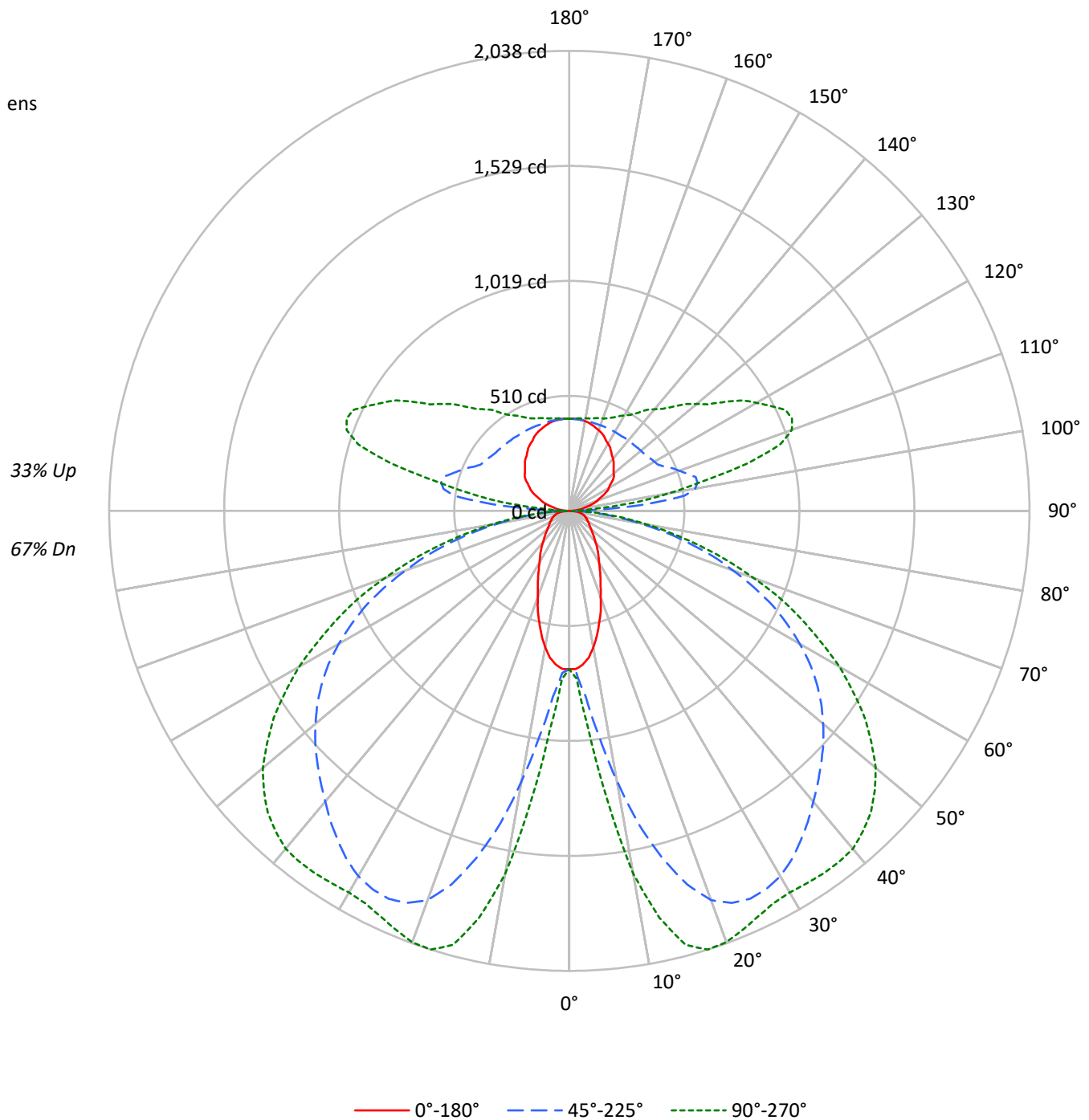
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8076.4 lumens
Efficiency: N/A
Efficacy: 96.1 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 (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	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°	4336	4336	4336
5°	4235	5011	5829
10°	3840	7303	9664
15°	3263	9539	11669
20°	2655	11051	11892
25°	2214	11561	11650
30°	1866	11631	11628
35°	1649	11435	11930
40°	1437	11181	12240
45°	1299	10993	12288
50°	1191	10825	12084
55°	1140	10579	11549
60°	1165	10110	10703
65°	1211	9398	9541
70°	1287	8191	8060
75°	1420	6673	6290
80°	1540	4622	4238
85°	1347	2447	2169

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12288 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.7	1.1
10°-20°	401.9	5.0
20°-30°	703.0	8.7
30°-40°	904.9	11.2
40°-50°	1010.8	12.5
50°-60°	968.1	12.0
60°-70°	767.2	9.5
70°-80°	451.1	5.6
80°-90°	126.9	1.6
90°-100°	199.4	2.5
100°-110°	524.2	6.5
110°-120°	543.6	6.7
120°-130°	436.0	5.4
130°-140°	342.1	4.2
140°-150°	262.6	3.3
150°-160°	189.1	2.3
160°-170°	115.7	1.4
170°-180°	39.1	0.5
0°-30°	1195.5	14.8
0°-40°	2100.5	26.0
0°-60°	4079.3	50.5
0°-90°	5424.6	67.2
90°-120°	1267.2	15.7
90°-150°	2307.9	28.6
90°-180°	2652.0	32.8
0°-180°	8076.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	683	733	825	933	967	63
15°	512	944	1591	1929	1990	142
25°	327	1071	1896	1979	1981	151
35°	221	1023	1785	1887	1961	138
45°	151	816	1578	1808	1889	117
55°	108	518	1339	1555	1598	99
65°	86	275	994	1118	1134	85
75°	63	169	546	600	602	66
85°	23	52	135	149	151	24
90°	3	8	21	10	10	4
95°	26	103	344	177	120	29
105°	94	143	580	880	821	100
115°	168	204	464	926	1057	166
125°	233	262	422	714	842	207
135°	278	306	409	576	653	215
145°	323	343	404	491	530	202
155°	365	375	404	443	456	168
165°	393	399	404	420	425	111
175°	409	409	407	412	412	39
180°	409	409	409	409	409	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0
2.5°	701.0	701.0	705.5	707.7	712.3	714.6	719.0	723.5	737.0	739.3	743.9
5°	683.0	692.0	721.3	732.6	764.1	806.9	825.0	854.3	915.2	933.2	944.5
7.5°	656.0	676.2	748.3	766.3	845.3	958.0	1005.3	1068.4	1165.3	1212.7	1251.0
10°	613.1	656.0	784.4	827.3	955.8	1127.0	1215.0	1302.9	1449.4	1514.8	1539.5
12.5°	565.7	635.6	822.7	881.3	1066.1	1316.4	1422.3	1519.2	1686.0	1774.0	1787.5
15°	511.7	606.3	858.8	944.5	1183.3	1474.2	1591.4	1710.8	1866.4	1929.4	1945.3
17.5°	464.3	583.8	892.6	982.7	1273.6	1616.2	1735.6	1834.8	1961.1	2003.9	2015.1
20°	405.7	547.7	915.2	1032.4	1368.2	1719.9	1834.8	1911.4	1997.1	2024.1	2028.6
22.5°	362.9	509.4	928.7	1050.4	1431.4	1782.9	1879.9	1940.7	1999.3	2008.4	2010.6
25°	326.9	466.6	926.5	1070.7	1485.4	1821.3	1895.7	1940.7	1974.6	1979.1	1979.1
27.5°	293.0	419.2	917.4	1075.2	1526.0	1830.3	1888.9	1920.5	1936.2	1945.3	1945.3
30°	263.7	374.2	894.8	1066.1	1544.1	1821.3	1868.6	1884.4	1900.1	1913.7	1920.5
32.5°	241.2	331.3	861.0	1048.1	1546.3	1798.7	1832.6	1841.5	1864.1	1895.7	1906.9
35°	220.9	288.5	822.7	1023.3	1532.8	1762.7	1785.2	1794.2	1839.3	1886.6	1902.5
37.5°	200.6	257.0	773.2	980.5	1512.4	1719.9	1735.6	1751.4	1821.3	1877.6	1895.7
40°	180.4	229.9	714.6	933.2	1480.9	1668.0	1681.5	1706.3	1798.7	1864.1	1882.1
42.5°	164.5	207.3	651.4	883.6	1440.3	1609.4	1629.7	1665.7	1771.6	1841.5	1861.9
45°	151.0	184.8	583.8	816.0	1388.5	1548.5	1577.8	1627.4	1740.1	1807.8	1825.8
47.5°	137.5	169.1	513.9	746.1	1332.2	1487.7	1526.0	1582.3	1697.3	1762.7	1778.5
50°	126.2	153.3	444.1	671.7	1271.3	1422.3	1467.4	1526.0	1643.2	1704.1	1724.3
52.5°	117.2	139.8	378.6	597.4	1201.4	1354.6	1406.5	1467.4	1577.8	1636.4	1650.0
55°	108.2	128.5	322.3	518.4	1129.3	1282.5	1338.9	1397.5	1505.7	1555.3	1564.3
57.5°	103.7	119.4	275.0	444.1	1052.6	1201.4	1264.5	1318.6	1420.1	1458.4	1467.4
60°	96.9	112.7	239.0	381.0	969.3	1124.7	1178.9	1233.0	1318.6	1350.2	1357.0
62.5°	90.1	108.2	211.9	320.0	883.6	1034.6	1088.7	1138.3	1210.4	1233.0	1242.0
65°	85.7	103.7	191.6	275.0	795.6	939.9	994.0	1036.8	1095.4	1118.0	1122.5
67.5°	81.2	99.2	175.8	236.7	707.7	845.3	885.9	926.5	971.5	994.0	996.3
70°	74.4	94.7	162.3	209.7	617.6	737.0	770.9	813.7	849.8	861.0	867.8
72.5°	69.9	87.9	153.3	189.3	525.2	633.4	664.9	689.7	721.3	732.6	732.6
75°	63.1	78.9	144.3	169.1	430.5	518.4	545.5	570.3	595.0	599.6	592.8
77.5°	56.4	69.9	124.0	142.0	335.8	410.3	432.8	446.3	466.6	471.1	473.4
80°	47.3	60.8	96.9	110.5	243.4	302.0	317.8	329.1	347.1	347.1	351.6
82.5°	36.1	47.3	69.9	78.9	164.5	207.3	220.9	227.7	239.0	239.0	239.0
85°	22.6	29.3	45.1	51.9	99.2	126.2	135.2	137.5	146.5	148.7	148.7
87.5°	11.3	15.8	29.3	31.5	51.9	65.4	65.4	69.9	69.9	67.7	65.4
90°	2.8	5.0	7.2	7.7	12.1	17.9	20.9	18.6	13.9	10.4	10.4
92.5°	11.0	29.7	48.3	53.0	74.5	103.2	117.5	102.9	73.9	52.1	50.1
95°	26.4	60.5	94.7	103.2	183.3	290.1	343.5	306.5	232.6	177.1	170.8
97.5°	45.6	75.7	105.8	113.4	247.0	425.0	514.0	490.6	443.8	408.7	396.8
100°	60.4	87.7	115.1	121.9	270.0	467.6	566.4	568.1	571.5	574.1	559.9
102.5°	73.0	98.6	124.1	130.4	280.7	481.0	581.2	610.9	670.5	715.2	703.0
105°	94.5	116.1	137.6	143.1	288.5	482.5	579.5	646.3	779.8	879.9	873.3
107.5°	116.4	136.6	156.6	161.7	290.0	461.0	546.6	639.6	825.8	965.5	967.1
110°	131.2	149.4	167.6	172.1	287.8	442.0	519.1	623.2	831.4	987.5	994.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	145.8	163.1	180.4	184.8	287.9	425.4	494.2	600.7	813.8	973.5	984.0
115°	167.7	183.7	199.7	203.7	290.6	406.3	464.2	566.9	772.1	926.0	940.6
117.5°	189.4	204.0	218.4	222.1	296.0	394.4	443.6	536.3	721.5	860.4	876.5
120°	202.0	215.7	229.4	232.8	300.3	390.4	435.4	520.0	689.3	816.2	831.9
122.5°	214.5	228.2	242.0	245.4	306.6	388.2	429.1	505.3	657.7	772.0	787.5
125°	233.4	245.9	258.5	261.6	315.2	386.5	422.2	487.0	616.4	713.5	727.7
127.5°	248.7	261.4	274.1	277.3	323.7	385.6	416.5	472.1	583.1	666.5	678.5
130°	257.0	270.7	284.3	287.7	329.9	386.1	414.3	463.7	562.7	637.0	648.1
132.5°	265.5	279.2	292.9	296.2	335.0	386.5	412.4	456.7	545.2	611.7	621.6
135°	278.1	290.6	303.0	306.1	340.5	386.2	409.1	446.2	520.4	576.0	584.6
137.5°	291.0	303.3	315.6	318.7	348.6	388.5	408.5	439.8	502.5	549.6	556.6
140°	301.7	313.1	324.4	327.2	353.7	388.9	406.6	433.7	487.9	528.4	535.0
142.5°	309.9	320.4	330.9	333.5	357.9	390.4	406.6	430.4	477.9	513.6	519.3
145°	322.6	331.8	340.9	343.2	363.5	390.4	403.9	423.3	462.2	491.4	495.7
147.5°	335.2	344.1	353.1	355.3	371.5	393.0	403.9	419.1	449.8	472.8	476.3
150°	343.5	351.6	359.6	361.6	375.7	394.4	403.9	416.8	442.7	462.0	464.9
152.5°	351.9	358.0	364.2	365.7	378.4	395.3	403.9	414.9	437.0	453.5	455.6
155°	364.6	369.1	373.6	374.7	384.4	397.4	403.9	412.7	430.2	443.4	444.8
157.5°	373.9	378.3	382.7	383.8	390.5	399.4	403.9	410.7	424.4	434.6	435.6
160°	380.2	383.6	387.0	387.9	393.2	400.3	403.9	409.7	421.4	430.2	430.8
162.5°	386.5	389.1	391.7	392.3	396.1	401.3	403.9	408.8	418.7	426.1	426.6
165°	393.4	395.7	398.0	398.6	400.4	402.7	403.9	407.4	414.4	419.8	420.4
167.5°	399.7	400.8	401.9	402.2	403.7	405.6	406.6	408.9	413.5	417.0	417.3
170°	403.9	404.9	406.1	406.3	406.4	406.5	406.6	408.9	413.5	417.0	417.0
172.5°	406.1	406.3	406.5	406.6	406.6	406.6	406.6	408.4	412.0	414.8	414.6
175°	409.1	409.1	409.1	409.1	408.3	407.1	406.6	407.8	410.1	411.8	411.8
177.5°	409.1	409.1	409.1	409.1	408.5	407.6	407.1	408.0	409.9	411.2	411.0
180°	409.1	409.1	409.1	409.1	409.1	409.1	409.1	409.1	409.1	409.1	409.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	701.0	701.0
2.5°	748.3	743.9
5°	962.5	967.0
7.5°	1296.1	1293.8
10°	1611.6	1632.0
12.5°	1841.5	1846.1
15°	1981.3	1990.4
17.5°	2035.4	2037.7
20°	2037.7	2033.2
22.5°	2012.8	2008.4
25°	1983.5	1981.3
27.5°	1956.5	1958.8
30°	1945.3	1952.0
32.5°	1945.3	1956.5
35°	1949.8	1961.1
37.5°	1947.5	1961.1
40°	1938.5	1954.2
42.5°	1913.7	1925.0
45°	1875.4	1888.9
47.5°	1825.8	1834.8
50°	1762.7	1771.6
52.5°	1683.7	1686.0
55°	1589.1	1598.1
57.5°	1487.7	1489.9
60°	1375.0	1381.7
62.5°	1255.5	1255.5
65°	1129.3	1133.8
67.5°	998.6	1009.8
70°	865.5	867.8
72.5°	734.8	734.8
75°	599.6	601.8
77.5°	471.1	471.1
80°	349.3	351.6
82.5°	241.2	245.7
85°	151.0	151.0
87.5°	69.9	63.1
90°	10.4	10.4
92.5°	41.7	33.5
95°	145.6	120.5
97.5°	349.0	301.2
100°	502.9	445.9
102.5°	654.2	605.3
105°	847.2	820.9
107.5°	973.4	979.8
110°	1021.6	1049.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1026.0	1067.9
115°	998.7	1057.0
117.5°	941.1	1005.7
120°	894.6	957.4
122.5°	849.4	911.2
125°	784.7	841.7
127.5°	726.7	774.8
130°	692.5	736.9
132.5°	661.4	701.2
135°	618.8	653.1
137.5°	584.7	612.8
140°	561.2	587.5
142.5°	541.9	564.4
145°	512.8	529.9
147.5°	490.4	504.6
150°	476.4	487.9
152.5°	464.3	473.0
155°	450.6	456.3
157.5°	439.6	443.6
160°	433.1	435.4
162.5°	428.8	431.0
165°	422.7	425.0
167.5°	418.2	419.2
170°	417.0	417.0
172.5°	413.7	412.9
175°	411.8	411.8
177.5°	410.1	409.1
180°	409.1	409.1



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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	7.53	8.62	8.31	9.44	10.44	20.69	21.79	21.48	22.60	23.60
	3H	8.25	9.24	9.05	10.06	11.09	22.54	23.53	23.34	24.35	25.38
	4H	8.56	9.49	9.37	10.32	11.36	23.19	24.13	24.01	24.96	26.00
	6H	8.82	9.68	9.65	10.52	11.58	23.63	24.50	24.46	25.34	26.39
	8H	8.89	9.72	9.73	10.58	11.63	23.76	24.58	24.60	25.44	26.50
	12H	8.92	9.71	9.77	10.56	11.64	23.83	24.62	24.68	25.47	26.55
4H	2H	14.76	15.69	15.58	16.53	17.57	20.99	21.93	21.81	22.76	23.80
	3H	16.35	17.13	17.18	18.00	19.06	23.05	23.84	23.89	24.70	25.76
	4H	16.45	17.17	17.30	18.03	19.12	23.83	24.54	24.67	25.41	26.49
	6H	16.48	17.10	17.34	17.99	19.07	24.38	25.00	25.24	25.89	26.97
	8H	16.46	17.04	17.33	17.93	19.03	24.54	25.12	25.41	26.01	27.11
	12H	16.43	16.96	17.32	17.86	18.96	24.65	25.17	25.53	26.07	27.18
8H	4H	17.92	18.50	18.78	19.38	20.48	23.91	24.49	24.77	25.37	26.47
	6H	18.17	18.65	19.06	19.58	20.68	24.55	25.03	25.44	25.95	27.05
	8H	18.19	18.62	19.10	19.54	20.65	24.77	25.20	25.67	26.11	27.23
	12H	18.17	18.55	19.08	19.46	20.63	24.92	25.30	25.83	26.21	27.38
12H	4H	18.07	18.60	18.96	19.50	20.60	23.87	24.40	24.76	25.30	26.41
	6H	18.43	18.86	19.33	19.78	20.89	24.53	24.96	25.44	25.88	26.99
	8H	18.51	18.89	19.42	19.80	20.97	24.77	25.15	25.68	26.06	27.23